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GEODETIC SATELLITE RESULTS DURING 1967

Edited by C. A. LUNDQUIST

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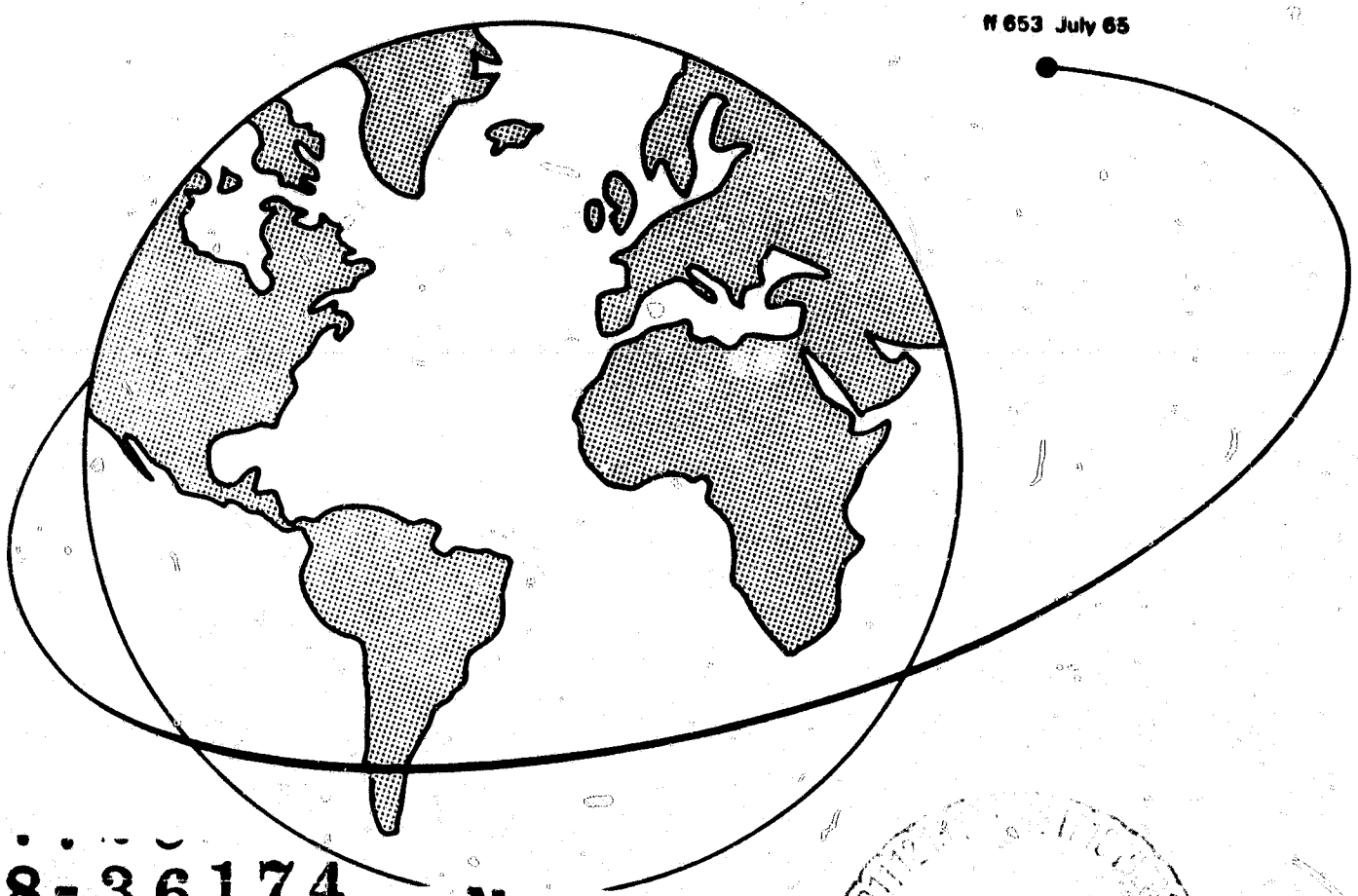

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GEODETIC SATELLITE RESULTS DURING 1967

edited by
Charles A. Lundquist

December 29, 1967

Smithsonian Institution
Astrophysical Observatory
Cambridge, Massachusetts 02138

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Charles A. Lundquist

ABSTRACT

International efforts in satellite geodesy now span a decade. In 1964, the newly organized National Geodetic Satellite Program of the United States incorporated many of the continuing geodetic investigations at the Smithsonian Astrophysical Observatory. This report gives the results at SAO from Geos 1 data and summarizes the SAO contributions to the geodetic satellite program as of the end of 1967, just prior to the initiation of a major solution for geodetic parameters planned for 1968.

EVOLUTION AND INTEGRATION OF GEODETIC RESEARCH AT SAO

Charles A. Lundquist

1. HISTORY

Opportunities for geodetic research by use of artificial satellites arrived with the birth of the space age (Whipple and Hynek, 1958), and efforts in satellite geodesy now span a decade. In 1964, the newly organized National Geodetic Satellite Program (NGSP) (Rosenberg, 1965) incorporated many of the continuing geodetic investigations at the Smithsonian Astrophysical Observatory (SAO). In this restated context, SAO retained the elements of international cooperation that have been so successful and essential to the broader research objectives of both SAO and collaborating scientific organizations around the world.

In connection with the NGSP, SAO adopted in 1965 a set of immediate objectives. In brief, these included:

A. Determination of improved coefficients through 8, 8 for a spherical harmonic representation of the geopotential, by use of Baker-Nunn data.

B. Comparison of other Geos 1 tracking data with orbits derived primarily from Baker-Nunn data.

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The 1966 Smithsonian Institution Standard Earth (Lundquist and Veis, 1966) was both a natural sequel to earlier results (e.g., Izsak, 1966; Veis, 1965) and a fulfillment of some of the SAO objectives established in 1965. Principally, it contains a geopotential representation in spherical harmonics through indices 8, 8 plus assorted higher terms, and it gives station coordinates in a geocentric system to an accuracy of about 15 m. Additionally, the report documents the procedures employed in the derivation of these principal results, and it includes an interpretation of them in conventional geodetic format.

The investigations reported here and in subsequent papers of this volume are of 1967 vintage. They are preliminary to a comprehensive solution for geodetic parameters planned at SAO for 1968, which will use digital computer programs (Gaposchkin, 1967) greatly improved in precision over those employed in 1966. It will also use a substantially enlarged and diversified data base. Observations of Geos 1 provide a particularly significant increment to the data base (Lundquist, 1968), and the assimilation of Geos 1 data, especially from electronic and laser tracking, was a major task during 1967. Individual analyses based on Geos 1 data at SAO were mostly completed by the end of 1967 (Gaposchkin, 1968, and this volume; Rolff, 1968, and this volume).

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SAO scientific investigations based on satellite observations begin from several distinct collections of data. One data class contains precisely reduced observations of any convenient satellite made simultaneously from two or more ground stations. A second contains numerous observations of individual satellites during intervals of several weeks, months, or years. A third comprises coordinated observations between various tracking systems and networks with the objective of establishing compatibility of various data types.

To be seen simultaneously from two or more stations, a satellite must be high enough so that it is above the horizon of each station. The mean altitude of Geos 1 is such that it may be visible simultaneously from stations separated by no more than about 4000 km. Hence, observations of Geos 1 and particularly of its flashing lights are most useful in regional programs, for example, in Europe. (The separations of the 12 Baker-Nunn sites in the primary SAO network are mostly greater than 4000 km.) Thus, many Baker-Nunn photographs of Geos 1 flashes were scheduled for potential simultaneity with other camera systems in the region of an SAO station. With this objective, the Baker-Nunn cameras obtained the vast number of successful photographs listed in the first column of Table 1.

Typically, only a fraction of these photographs are matched by like photographs from other sites. Where the successful simultaneous observations are useful for active programs of investigation, SAO has precisely reduced the data from the Baker-Nunn photographs. In North America, simultaneous observations between Agassiz station, Massachusetts, and Baker-Nunn camera sites in New Mexico, Florida, and Curaçao contribute to the determination of coordinates for Agassiz (Table 2). For stations in Europe, the observations in Table 2 are available. Laser range observations

simultaneous with Baker-Nunn photographs are also indicated in Table 2. The final papers in this volume list all these data. The paper by Lambeck and McGrath discusses the accuracy of the Baker-Nunn data.

Table 1. Geos 1 photographs

Date	Number of flash photographs	Number of flash photographs precisely reduced	Number of passive photographs precisely reduced	Number of laser observations
November 1965	757	754	458	---
December 1965	1636	258	176	---
January 1966	2457	541	87	10
February 1966	2445	174	75	23
March 1966	4167	393	187	54
April 1966	4297	574	229	70
May 1966	5506	137	70	109
June 1966	5041	6	28	---
July 1966	4653	3127	125	68
August 1966	4050	857	301	37
September 1966	4482	1127	113	20
October 1966	3223	2551	181	23
November 1966	1595	7	---	60
Total	44309	10496	2030	474

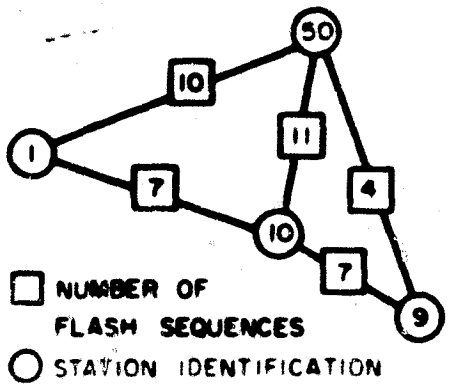
For the determination of the orbit of a particular satellite, observations well distributed in time and around the orbit are preferable. In the case of Geos 1, the great multiplicity of tracking systems generated a greater volume of data from more geographical sites than was obtained for any previous satellite. The number of Baker-Nunn observations increased substantially because flash sequences could be scheduled throughout the night during periods when photography with reflected sunlight was impossible. In fact, the number of successful photographs far exceeded the number that could be justified for precise measurement either on economic or on scientific grounds. This circumstance required adoption of criteria for the selection of films for precise reduction.

Table 2

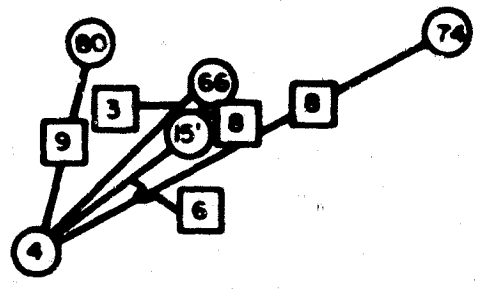
Flash simultaneous observations (November 1, 1967)

NETWORKS

NORTH AMERICAN



EUROPEAN



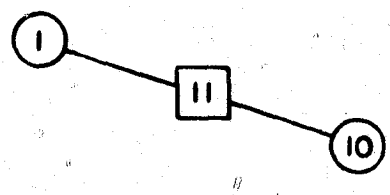
STATIONS

Code	Number	Name
1	9001	N. Mexico
4	9004	S. Fernando
9	9009	Curaçao
10	9010	Jupiter
50	9050	Agassiz
66	9066	Zimmerwald
74	9074	Riga
80	9080	Malvern
15'	8015	Haute Provence

LINES

Lines	Number of sequences	Number of flashes
15' → 4	6	41
15' → 66	8	55
1 → 50	10	58
4 → 66	3	20
4 → 74	8	48
4 → 80	9	54
9 → 50	4	21
10 → 50	11	56

Laser synthetic simultaneous observations (November 1, 1967)



STATIONS

Station	Name
10	New Mexico – Laser/Baker-Nunn
1	Jupiter – Baker-Nunn

Number of returns	Satellites
5	Geos 1
4	D1-D
1	BE-B
1	D1-C

The reduced simultaneous observations were equally useful for orbit determination, so these data were included in both the first and the second data classes. More recent reductions of simultaneous observations account for the greater number of flash observations in Table 1 beyond those in a table prepared earlier (Lundquist, 1968). Two requirements guided the selection of further films for orbit determination. First was the need for orbits in a contiguous sequence of many months duration and based on about 100 reasonably distributed observations per month. This density of observations could usually be obtained by reduction of one good photographic frame out of each set of several adjacent frames obtained by a Baker-Nunn camera, either by reflected light or of a flash sequence. However, when two or three sets of adjacent frames came from different areas of the sky during an individual pass over a station, one frame from each set was reduced. Because this was the conventional mode of reduction at SAO for several years, the result is called a "normal file" of data, which yields a "normal orbit." In practice, the normal Geos 1 files were composed chiefly of observations by reflected sunlight supplemented with flash observations selected for simultaneity or for distribution around the orbit. The SAO normal files also include the laser ranges from Organ Pass and, when appropriate, data from the several other tracking systems contribute to the normal orbits.

There is also a requirement for a few files of data having the maximum practical observation density for about a month per file. During these periods, typically five adjacent frames are reduced from each set and all the flashes of each sequence are measured. The intervals for such treatment were selected after success statistics reported from the field stations permitted the identification of periods of optimum distribution and density of observations. For this reason, these are called "select files" of data, and from them result "select orbits."

Figure 1 shows the periods during the electronic life of Geos 1 for which normal or select orbits exist. Subsequent papers in this volume (Miller and Caliri; Gaposchkin and Hubley) present the observations upon which these are based.

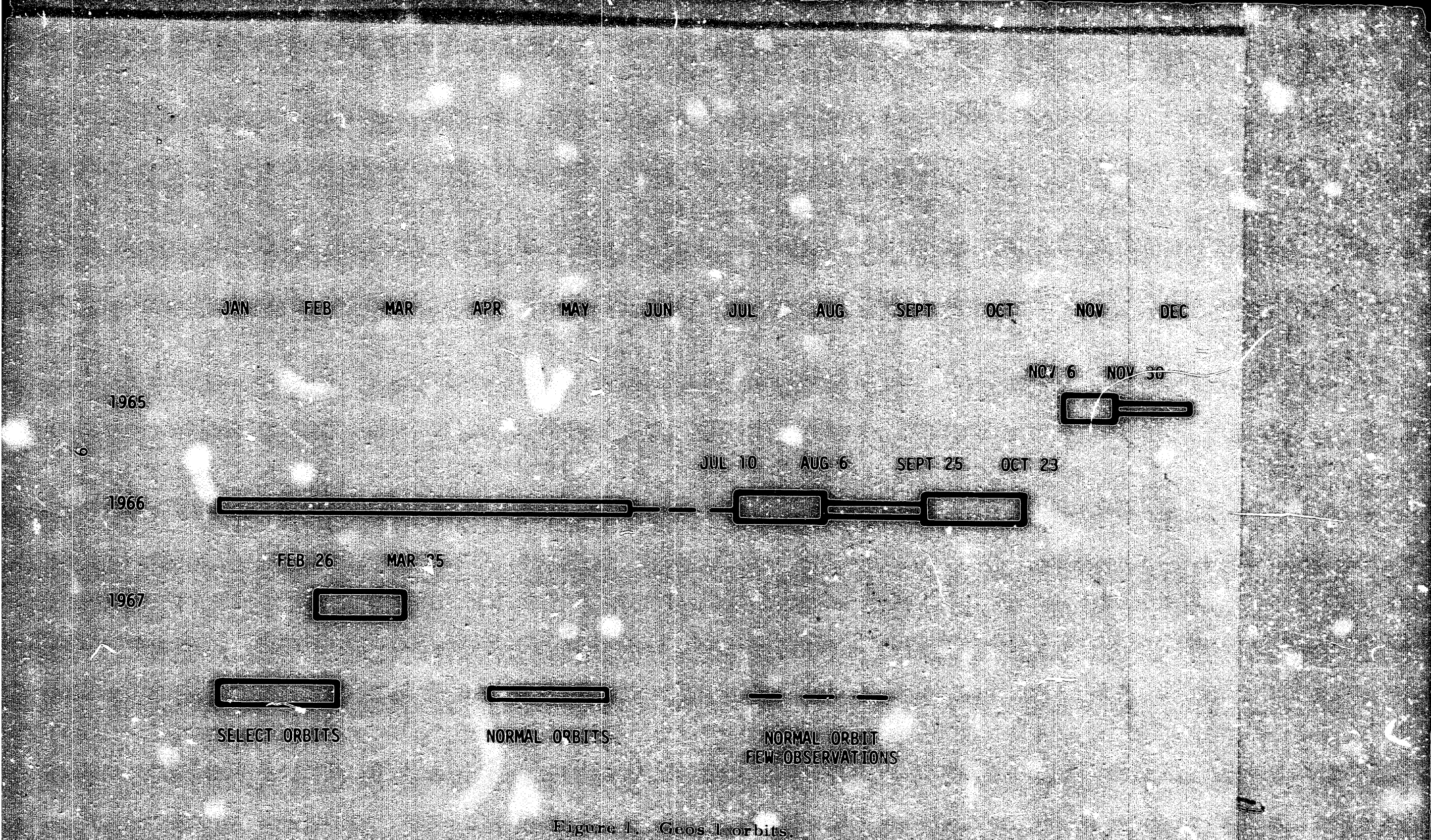


Figure 1. Geos 1 orbits.

Figure 1 also shows an additional select interval from spring 1967 that will be reduced by January 1968. This is one of several such intervals of observations made in the spring of 1967 of the five then-existing satellites with retroreflectors for laser tracking. These satellites were observed by the Baker-Nunn network and by a cooperating network of five laser stations. The latter encompassed three French stations at Haute Provence, France; Hammaguir, Algeria; and Stephanion, Greece; a NASA station at Greenbelt, Maryland; and the SAO station at Organ Pass, New Mexico.

The third class of data from Geos 1 is distinctly separated from the previous two, not by its content but rather by the unique opportunity provided by Geos 1 observations for the investigation of compatibility of virtually all important tracking systems and techniques. In their most direct form, these data arise from periods during which two or more tracking instruments were collocated at a station. For example, several camera systems were juxtaposed at the SAO Jupiter site from December 1965 through May 1966 (Berbert, 1967; Berbert, Reisch, and Stephenson, 1967; Horine, Latimer, LeConte, and Wolf, this volume). During this time they photographed the same Geos 1 flash sequences. As a second example, a laser system was operated adjacent to the Baker-Nunn at the Organ Pass station (Lehr, Maestre, and Anderson, 1967). Next in directness are Geos 1 passes over continental United States, which were intensively observed by many camera and electronic systems (Berbert, 1967; Berbert et al., 1967). Finally, there is the opportunity to blend several data types into the determination of normal or select orbits. SAO observing systems have participated extensively in these programs, and appropriate data reductions have been accomplished (Solomon, this volume). Gaposchkin (1968, and this volume) discusses the results of analyses based on diverse data.

3. STATION POSITIONS

Accurate coordinates for observing instruments are important results in satellite geodesy. From them follow geometrical relations, such as ties between survey datums. Accurate instrument coordinates are necessary also for productive analyses of satellite orbits.

Two independent methods and one combination method for refining station coordinates are employed at SAO. Substantial agreement between the methods is the strongest factor supporting confidence in the final results.

The first method uses simultaneous observations to derive interstation directions or the directions interconnecting a group of stations. Geos 1 data contributed to such investigations in several regions of the globe, particularly in the continental United States and in Europe. In these regions, coordinates of a number of additional sites have been determined in a common coordinate system derived from the global distribution of Baker-Nunn stations (Gaposchkin and Veis, 1967; Gaposchkin, 1968, and this volume). The multiplicity of sites in the North American and European datums provides information for statistically significant relations between the individual survey datums and a single well-defined global coordinate system (Rolff, 1968, and this volume).

The second method for deriving station positions depends on accurate orbits for the Geos 1 satellite. As a first step in an iterative process, the coordinates of the basic SAO Baker-Nunn network are held constant, so that the geometry of the orbit is fixed by the Baker-Nunn positions. Gaposchkin and Hubley present in a later paper in this volume details of the orbits obtained for Geos 1. Given such orbits as well as observations from a site whose position is desired, a differential improvement scheme yields the station coordinates that minimize the residuals between the observations and the orbit derived essentially from the Baker-Nunn data. The observations from the new site can be made by any instrument with an accuracy sufficient for geodetic objectives. This procedure for locating stations can be applied to an isolated site, for example, an island. Of course, it can also be applied to stations in local or global networks. The use of Geos 1 data in this way is discussed in a paper by Gaposchkin (1968, and this volume). Previous analyses have established for Baker-Nunn observations that the two methods just discussed have comparable accuracies (Köhnlein, 1966).

In analyses planned for 1968, coordinates of the primary Baker-Nunn sites and those of other instruments will be refined with the use of data from many satellites, including Geos 1. Uncertainties no greater than 10 m are anticipated.

4. ORBITS AND THE GEOPOTENTIAL

The normal or select orbits for Geos 1 are based primarily upon the geopotential representation (Gaposchkin, 1966) in the 1966 Smithsonian Institution Standard Earth (Lundquist and Veis, 1966). However, before accurate orbits are forthcoming, coefficients must be determined for the spherical harmonics with which the Geos 1 orbit is resonant. Such coefficients were reported earlier (Gaposchkin and Veis, 1967) and appear in this volume (Gaposchkin).

The refined Geos 1 orbits by themselves are not a sufficient supplement to those used in the 1966 geopotential solution to justify a new solution for the full geopotential representation. Nevertheless, the select Geos 1 orbits are significant in the collection of orbits prepared for the solution scheduled at SAO during 1968. Also significant are the orbits of the other two United States satellites with laser retroreflectors, particularly during periods of concentrated laser tracking. The same is true for the French satellites with retroreflectors (Kovalevsky, Barlier, and Stellmacher, 1967) and for several other satellites chosen because the inclinations of their orbits differed from those used in previous solutions.

The contiguous run of Geos 1 orbits, normal and select, during 1965 and 1966, in conjunction with similar long orbit sequences for other satellites, is useful for the refinement of coefficients of the zonal harmonics in the geopotential. Through J_{20}, this was done during 1967 (Kozai, this volume), and a further refinement will follow in 1968.

5. INTERPRETATIONS

Station positions and geopotential coefficients are direct products of satellite geodesy, but both are also intermediate results because they are prerequisite to other research. These further investigations and interpretations often involve information from other branches of science. It is at this stage that satellite geodesy must demonstrate its compatibility with neighboring fields.

In this vein, the representation of the gravitational potential of the earth derived from satellite dynamics should be compatible with measurements of gravity by earth-based instruments. Indeed, that this is the case was again demonstrated, but with greater satisfaction, during 1967 (Köhnlein, 1967, and this volume). Köhnlein began, on one hand, with a set of tesseral harmonic coefficients from the 1966 Smithsonian Institution Standard Earth, augmented by more recent "resonant" coefficients, and the 1967 Kozai zonal coefficients. On the other hand, he began his study with published sets of surface gravity values averaged over 300 nautical-mile squares. From these he derived a geopotential representation through 15, 15 that preserves the essential features of both the satellite and the surface information. This representation will in turn be an initial input to the major geopotential solution scheduled at SAO during 1968.

An equipotential surface obtained from a spherical harmonic representation of the earth s potential field should agree also with astrogeodetic geoids where they are known from surface surveys. This correspondence between satellite and surface information was examined by Veis (1967, and this volume). The correspondence involves selection of a consistent set of fundamental geodetic parameters. For values of these constants determined by Veis, the agreement is quite satisfactory between satellite-derived and astrogeodetic geoids.

This agreement is only one of several results lending confidence to the values given by Veis for a consistent set of fundamental geodetic parameters. Another result comes from an analysis of the simultaneous observations between the Baker-Nunn camera in Jupiter, Florida, and the Baker-Nunn camera and laser in Organ Pass, New Mexico. While these triple simultaneous observations are few in number, they do, nevertheless, give for the geocentric coordinate system a distance scale that is in substantial agreement with scale factors derived from other arguments (Veis, 1967, and this volume). Veis concludes that GM and hence the scale are known with an accuracy of about 2 parts per million.

The best coordinates available at this time for all stations are assembled in the Appendix at the end of this volume.

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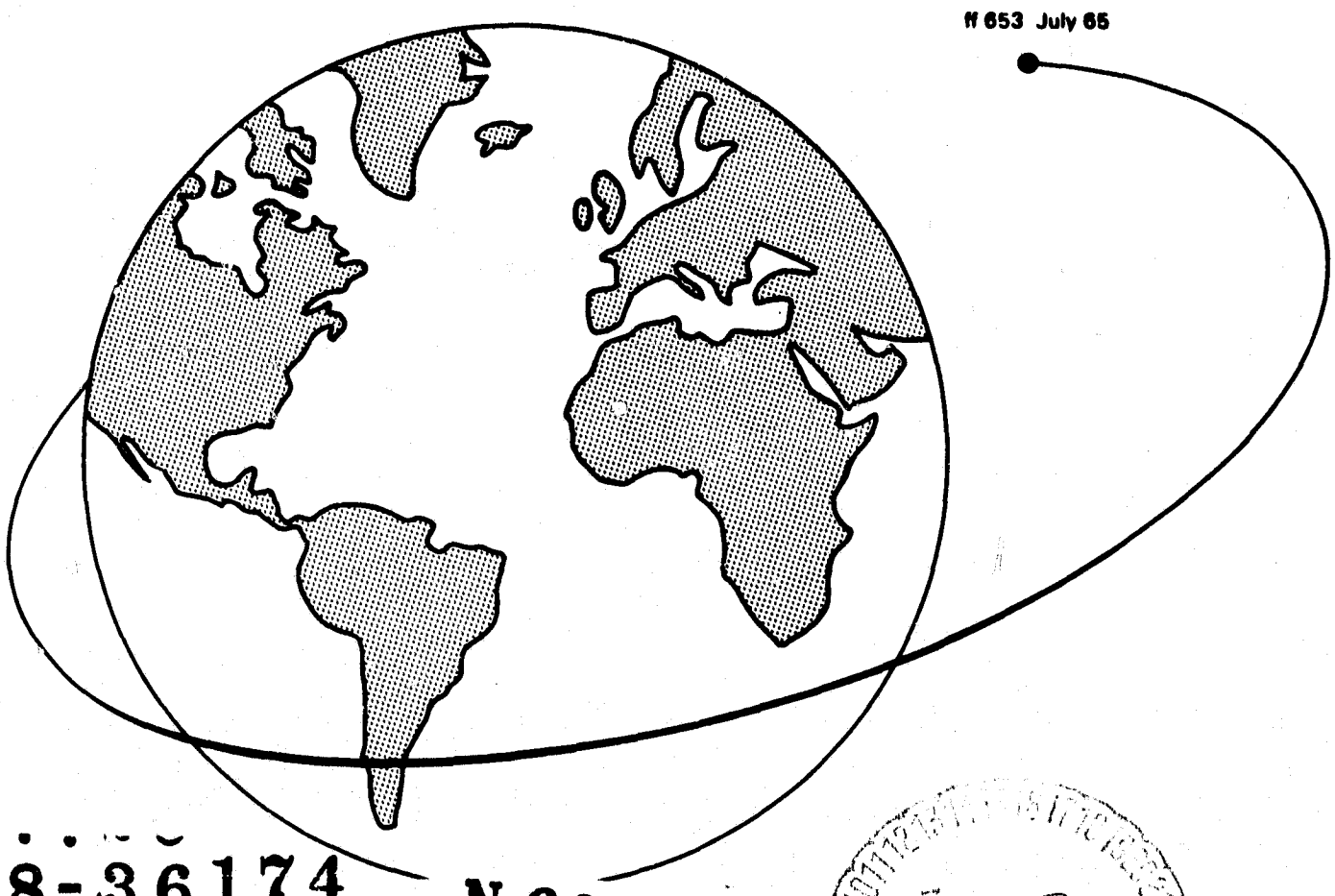

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SAO scientific investigations based on satellite observations begin from several distinct collections of data. One data class contains precisely reduced observations of any convenient satellite made simultaneously from two or more ground stations. A second contains numerous observations of individual satellites during intervals of several weeks, months, or years. A third comprises coordinated observations between various tracking systems and networks with the objective of establishing compatibility of various data types.

To be seen simultaneously from two or more stations, a satellite must be high enough so that it is above the horizon of each station. The mean altitude of Geos 1 is such that it may be visible simultaneously from stations separated by no more than about 4000 km. Hence, observations of Geos 1 and particularly of its flashing lights are most useful in regional programs, for example, in Europe. (The separations of the 12 Baker-Nunn sites in the primary SAO network are mostly greater than 4000 km.) Thus, many Baker-Nunn photographs of Geos 1 flashes were scheduled for potential simultaneity with other camera systems in the region of an SAO station. With this objective, the Baker-Nunn cameras obtained the vast number of successful photographs listed in the first column of Table 1.

Typically, only a fraction of these photographs are matched by like photographs from other sites. Where the successful simultaneous observations are useful for active programs of investigation, SAO has precisely reduced the data from the Baker-Nunn photographs. In North America, simultaneous observations between Agassiz station, Massachusetts, and Baker-Nunn camera sites in New Mexico, Florida, and Curaçao contribute to the determination of coordinates for Agassiz (Table 2). For stations in Europe, the observations in Table 2 are available. Laser range observations

simultaneous with Baker-Nunn photographs are also indicated in Table 2. The final papers in this volume list all these data. The paper by Lambeck and McGrath discusses the accuracy of the Baker-Nunn data.

Table 1. Geos 1 photographs

Date	Number of flash photographs	Number of flash photographs precisely reduced	Number of passive photographs precisely reduced	Number of laser observations
November 1965	757	754	458	---
December 1965	1636	258	176	---
January 1966	2457	541	87	10
February 1966	2445	174	75	23
March 1966	4167	383	187	54
April 1966	4297	574	229	70
May 1966	5506	137	70	109
June 1966	5041	6	28	---
July 1966	4653	3127	125	68
August 1966	4050	857	301	37
September 1966	4482	1127	113	20
October 1966	3223	2551	181	23
November 1966	1595	7	---	60
Total	44309	10496	2030	474

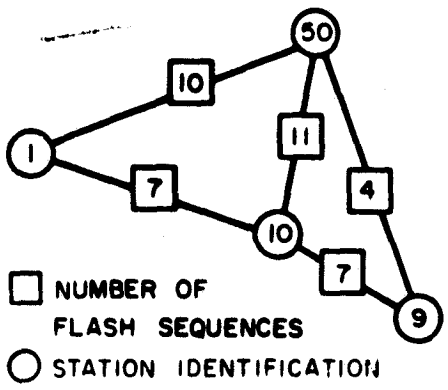
For the determination of the orbit of a particular satellite, observations well distributed in time and around the orbit are preferable. In the case of Geos 1, the great multiplicity of tracking systems generated a greater volume of data from more geographical sites than was obtained for any previous satellite. The number of Baker-Nunn observations increased substantially because flash sequences could be scheduled throughout the night during periods when photography with reflected sunlight was impossible. In fact, the number of successful photographs far exceeded the number that could be justified for precise measurement either on economic or on scientific grounds. This circumstance required adoption of criteria for the selection of films for precise reduction.

Table 2

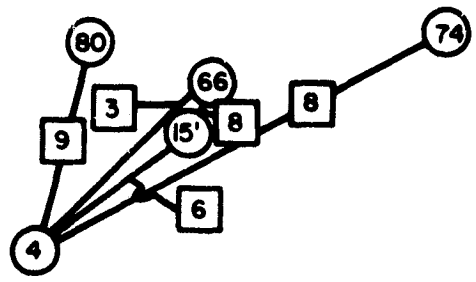
Flash simultaneous observations (November 1, 1967)

NETWORKS

NORTH AMERICAN



EUROPEAN



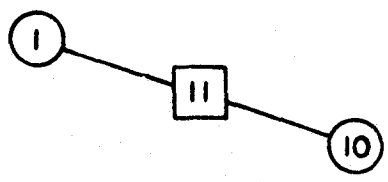
STATIONS

Code	Number	Name
1	9001	N. Mexico
4	9004	S. Fernando
9	9009	Curaçao
10	9010	Jupiter
50	9050	Agassiz
66	9066	Zimmerwald
74	9074	Riga
80	9080	Malvern
15'	8015	Haute Provence

LINES

Lines	Number of sequences	Number of flashes
15' → 4	6	41
15' → 66	8	55
1 → 50	10	58
4 → 66	3	20
4 → 74	8	48
4 → 80	9	54
9 → 50	4	21
10 → 50	11	56

Laser synthetic simultaneous observations (November 1, 1967)



STATIONS

Station	Name
10	New Mexico – Laser/Baker-Nunn
1	Jupiter – Baker-Nunn

Number of returns	Satellites
5	Geos 1
4	D1-D
1	BE-B
1	D1-C

The reduced simultaneous observations were equally useful for orbit determination, so these data were included in both the first and the second data classes. More recent reductions of simultaneous observations account for the greater number of flash observations in Table 1 beyond those in a table prepared earlier (Lundquist, 1968). Two requirements guided the selection of further films for orbit determination. First was the need for orbits in a contiguous sequence of many months duration and based on about 100 reasonably distributed observations per month. This density of observations could usually be obtained by reduction of one good photographic frame out of each set of several adjacent frames obtained by a Baker-Nunn camera, either by reflected light or of a flash sequence. However, when two or three sets of adjacent frames came from different areas of the sky during an individual pass over a station, one frame from each set was reduced. Because this was the conventional mode of reduction at SAO for several years, the result is called a "normal file" of data, which yields a "normal orbit." In practice, the normal Geos 1 files were composed chiefly of observations by reflected sunlight supplemented with flash observations selected for simultaneity or for distribution around the orbit. The SAO normal files also include the laser ranges from Organ Pass and, when appropriate, data from the several other tracking systems contribute to the normal orbits.

There is also a requirement for a few files of data having the maximum practical observation density for about a month per file. During these periods, typically five adjacent frames are reduced from each set and all the flashes of each sequence are measured. The intervals for such treatment were selected after success statistics reported from the field stations permitted the identification of periods of optimum distribution and density of observations. For this reason, these are called "select files" of data, and from them result "select orbits."

Figure 1 shows the periods during the electronic life of Geos 1 for which normal or select orbits exist. Subsequent papers in this volume (Miller and Caliri; Gaposchkin and Hubley) present the observations upon which these are based.

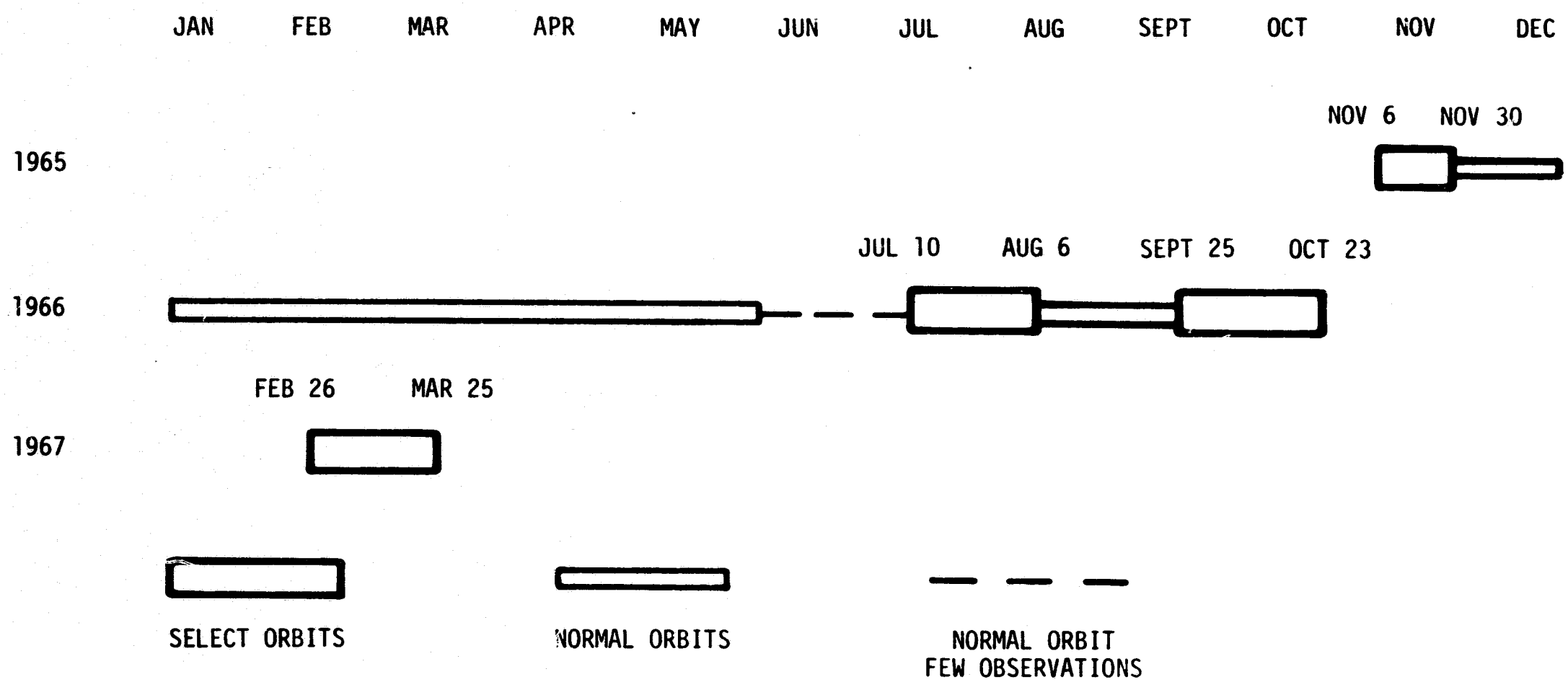


Figure 1. Geos 1 orbits.

Figure 1 also shows an additional select interval from spring 1967 that will be reduced by January 1968. This is one of several such intervals of observations made in the spring of 1967 of the five then-existing satellites with retroreflectors for laser tracking. These satellites were observed by the Baker-Nunn network and by a cooperating network of five laser stations. The latter encompassed three French stations at Haute Provence, France; Hammaguir, Algeria; and Stephanion, Greece; a NASA station at Greenbelt, Maryland; and the SAO station at Organ Pass, New Mexico.

The third class of data from Geos 1 is distinctly separated from the previous two, not by its content but rather by the unique opportunity provided by Geos 1 observations for the investigation of compatibility of virtually all important tracking systems and techniques. In their most direct form, these data arise from periods during which two or more tracking instruments were collocated at a station. For example, several camera systems were juxtaposed at the SAO Jupiter site from December 1965 through May 1966 (Berbert, 1967; Berbert, Reisch, and Stephenson, 1967; Horine, Latimer, LeConte, and Wolf, this volume). During this time they photographed the same Geos 1 flash sequences. As a second example, a laser system was operated adjacent to the Baker-Nunn at the Organ Pass station (Lehr, Maestre, and Anderson, 1967). Next in directness are Geos 1 passes over continental United States, which were intensively observed by many camera and electronic systems (Berbert, 1967; Berbert et al., 1967). Finally, there is the opportunity to blend several data types into the determination of normal or select orbits. SAO observing systems have participated extensively in these programs, and appropriate data reductions have been accomplished (Solomon, this volume). Gaposchkin (1968, and this volume) discusses the results of analyses based on diverse data.

3. STATION POSITIONS

Accurate coordinates for observing instruments are important results in satellite geodesy. From them follow geometrical relations, such as ties between survey datums. Accurate instrument coordinates are necessary also for productive analyses of satellite orbits.

Two independent methods and one combination method for refining station coordinates are employed at SAO. Substantial agreement between the methods is the strongest factor supporting confidence in the final results.

The first method uses simultaneous observations to derive interstation directions or the directions interconnecting a group of stations. Geos 1 data contributed to such investigations in several regions of the globe, particularly in the continental United States and in Europe. In these regions, coordinates of a number of additional sites have been determined in a common coordinate system derived from the global distribution of Baker-Nunn stations (Gaposchkin and Veis, 1967; Gaposchkin, 1968, and this volume). The multiplicity of sites in the North American and European datums provides information for statistically significant relations between the individual survey datums and a single well-defined global coordinate system (Rolff, 1968, and this volume).

The second method for deriving station positions depends on accurate orbits for the Geos 1 satellite. As a first step in an iterative process, the coordinates of the basic SAO Baker-Nunn network are held constant, so that the geometry of the orbit is fixed by the Baker-Nunn positions. Gaposchkin and Hubley present in a later paper in this volume details of the orbits obtained for Geos 1. Given such orbits as well as observations from a site whose position is desired, a differential improvement scheme yields the station coordinates that minimize the residuals between the observations and the orbit derived essentially from the Baker-Nunn data. The observations from the new site can be made by any instrument with an accuracy sufficient for geodetic objectives. This procedure for locating stations can be applied to an isolated site, for example, an island. Of course, it can also be applied to stations in local or global networks. The use of Geos 1 data in this way is discussed in a paper by Gaposchkin (1968, and this volume). Previous analyses have established for Baker-Nunn observations that the two methods just discussed have comparable accuracies (Köhnlein, 1966).

In analyses planned for 1968, coordinates of the primary Baker-Nunn sites and those of other instruments will be refined with the use of data from many satellites, including Geos 1. Uncertainties no greater than 10 m are anticipated.

4. ORBITS AND THE GEOPOTENTIAL

The normal or select orbits for Geos 1 are based primarily upon the geopotential representation (Gaposchkin, 1966) in the 1966 Smithsonian Institution Standard Earth (Lundquist and Veis, 1966). However, before accurate orbits are forthcoming, coefficients must be determined for the spherical harmonics with which the Geos 1 orbit is resonant. Such coefficients were reported earlier (Gaposchkin and Veis, 1967) and appear in this volume (Gaposchkin).

The refined Geos 1 orbits by themselves are not a sufficient supplement to those used in the 1966 geopotential solution to justify a new solution for the full geopotential representation. Nevertheless, the select Geos 1 orbits are significant in the collection of orbits prepared for the solution scheduled at SAO during 1968. Also significant are the orbits of the other two United States satellites with laser retroreflectors, particularly during periods of concentrated laser tracking. The same is true for the French satellites with retroreflectors (Kovalevsky, Barlier, and Stellmacher, 1967) and for several other satellites chosen because the inclinations of their orbits differed from those used in previous solutions.

The contiguous run of Geos 1 orbits, normal and select, during 1965 and 1966, in conjunction with similar long orbit sequences for other satellites, is useful for the refinement of coefficients of the zonal harmonics in the geopotential. Through J_{20}, this was done during 1967 (Kozai, this volume), and a further refinement will follow in 1968.

5. INTERPRETATIONS

Station positions and geopotential coefficients are direct products of satellite geodesy, but both are also intermediate results because they are prerequisite to other research. These further investigations and interpretations often involve information from other branches of science. It is at this stage that satellite geodesy must demonstrate its compatibility with neighboring fields.

In this vein, the representation of the gravitational potential of the earth derived from satellite dynamics should be compatible with measurements of gravity by earth-based instruments. Indeed, that this is the case was again demonstrated, but with greater satisfaction, during 1967 (Köhnlein, 1967, and this volume). Köhnlein began, on one hand, with a set of tesseral harmonic coefficients from the 1966 Smithsonian Institution Standard Earth, augmented by more recent "resonant" coefficients, and the 1967 Kozai zonal coefficients. On the other hand, he began his study with published sets of surface gravity values averaged over 300 nautical-mile squares. From these he derived a geopotential representation through 15, 15 that preserves the essential features of both the satellite ånd the surface information. This representation will in turn be an initial input to the major geopotential solution scheduled at SAO during 1968.

An equipotential surface obtained from a spherical harmonic representation of the earth's potential field should agree also with astrogeodetic geoids where they are known from surface surveys. This correspondence between satellite and surface information was examined by Veis (1967, and this volume). The correspondence involves selection of a consistent set of fundamental geodetic parameters. For values of these constants determined by Veis, the agreement is quite satisfactory between satellite-derived and astrogeodetic geoids.

This agreement is only one of several results lending confidence to the values given by Veis for a consistent set of fundamental geodetic parameters. Another result comes from an analysis of the simultaneous observations between the Baker-Nunn camera in Jupiter, Florida, and the Baker-Nunn camera and laser in Organ Pass, New Mexico. While these triple simultaneous observations are few in number, they do, nevertheless, give for the geocentric coordinate system a distance scale that is in substantial agreement with scale factors derived from other arguments (Veis, 1967, and this volume). Veis concludes that GM and hence the scale are known with an accuracy of about 2 parts per million.

The best coordinates available at this time for all stations are assembled in the Appendix at the end of this volume.

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INTERSTATION CONNECTIONS FROM GEOS 1 OPTICAL BEACON OBSERVATIONS

Jan Rolff

ABSTRACT

SAO has incorporated Geos 1 optical beacon observations from other agencies into its scientific programs. Useful observations were produced by five individual stations in Europe.

The accuracy of these observations is very promising, but more data are needed before definite results in interstation connections can be established.

INTERSTATION CONNECTIONS FROM GEOS 1 OPTICAL BEACON OBSERVATIONS

Jan Rolff

1. INTRODUCTION

In his paper in this volume, Dr. Lundquist states that scientific investigations at SAO are based upon three collections of data.

The third class, consisting of coordinated observations among various tracking systems, is a very challenging one from a scientific point of view. First, it leads to the intercomparison and consequently to the evaluation of each tracking system. Second, the use of stations with different types of tracking systems may lead to a higher concentration and a better distribution of observing sites in a certain area. Generally speaking, this cannot be provided by one tracking system alone.

As far as optical observations of Geos flashes are concerned, such a comparison and net improvement have occurred in two specific regions: the North American and the European continents.

Some background and results will be given on the intercomparison between SAO Baker-Nunn stations and stations of other agencies in these two areas.

2. EUROPE

At the end of 1965, no fewer than 14 stations were listed by NASA as the so-called international participants, all of them located in Western Europe. These stations had responded positively to NASA's initial invitation to participate in the Geos program.

During the first few months after the launch of Geos A, however, some of these stations had problems in obtaining useful photographs of the Geos flashes. This was not surprising, since most of these 14 stations had little previous experience in satellite photography.

It was expected that the problems encountered could be solved by the establishment of more direct contact with an organization experienced in satellite tracking. SAO obtained endorsement from NASA to establish this contact, mainly on an operational level.

We found that failures in turning out Geos flash observations meeting scientific standards were mainly due to inadequate instrumentation and, in some cases, to use of inadequate photographic emulsion.

Eventually, four stations in Western Europe produced significant observational data:

Haute Provence, France
Malvern, England
Zimmerwald, Switzerland
Delft, the Netherlands .

One of the scientific objectives at SAO is the location of the European Datum with respect to the SAO world net (Veis, 1967, and this volume). Previously, stations had been concentrated on the western side of the origin of the European Datum. Some stations east of Potsdam would be very helpful. Hence, SAO welcomed cooperation with participants in Eastern Europe and at the origin of the European Datum itself. These additions will give the much better distribution of stations needed to connect the European Datum to the world system.

Through the full cooperation of the USSR Astronomical Council, three stations, Potsdam, Riga, and Zvenigorod, undertook the necessary observations of Geos flashes. However, only Riga succeeded in initial efforts and produced useful observations (Lapuschka, 1967) (see also Table 1).

The next step was to study the reduction techniques applied at each of these stations. From past experience, we felt that complete information on reduction methods could be obtained only by visiting the stations. This resulted in a clear picture of the reduction methods used at the five successful European stations. With this information SAO was able to put the observations of these five stations into the same format as that of the Baker-Nunn observations.

Received so far are the following number of precisely reduced observations from the European participants:

115 Haute Provence
137 Zimmerwald
21 Riga
20 Malvern .

The data themselves, transformed to the standard SAO format, are presented by Gaposchkin and Hubley (this volume). Because of technical problems with its measuring machine, Delft has not yet sent any results.

The majority of these observations could be incorporated into SAO's most recent determinations of station coordinates, as well as into Geos 1 orbit determinations (Gaposchkin and Veis, 1967; Gaposchkin, 1968, and this volume; Gaposchkin and Hubley, this volume).

There were a few simultaneous observations between the Smithsonian astrophysical observing station in Spain and these international stations. Preliminary investigations indicate an agreement between results obtained from the dynamic method based on orbit determination and those obtained by the geometric method based on simultaneous observations.

Table 1. Instruments used

Station	Camera	Aperture (mm)	Focal length (mm)	Mirror diameter (mm)	Field (degrees)	Plate size	Tracking mode	Emulsion	Reference
Haute Provence	**Schmidt**	300	594	400	6.5 diameter	80 diameter	Sidereal	Kodak II AO	
Malvern	**Schmidt**	600	600		10 × 10	150 × 210	Stationary	Ilford HPS	Hewitt et al., 1968
Zimmerwald	**Schmidt**	390	1030	620	6.7 diameter	120 diameter	Sidereal	Ilford HPS	Schürer, 1966
Delft	**Maksutov**	210	1200		5 × 2.5	120 × 60	Sidereal	Kodak Royal X Pan	de Munck, 1967
Riga	**Refractor**	210	735		4.5 × 5	51 × 47	Stationary	Panchromatic T-10H800	Lapuschka, 1967
Agassiz	**Refractor**	225	900		5 × 6	100 × 125	Stationary	Kodak Royal X Pan	Horine et al., this volume

3. NORTH AMERICA

The SAO Agassiz station in Harvard, Massachusetts, equipped with a K-50 camera, successfully observed Geos flashes. Station coordinates could be determined by the dynamic method. The same was true for the USAF Baker-Nunn stations at Rosamund, California; Johnston Island, Pacific; and for the Royal Canadian Air Force site at Cold Lake, Canada. Simultaneous observations between Agassiz and the Smithsonian astrophysical observing stations in Las Cruces, New Mexico; Jupiter, Florida; and Curaçao, Netherlands Antilles, were in very good agreement with the results obtained from the dynamic method. Table 1 presents details on the instruments used at Agassiz. See Horine, Latimer, LeConte, and Wolf (this volume) for a further discussion on equipment.

As in the European group of stations, however, the number of simultaneous observations was still too small for the derivation of the most precise results.

4. CONCLUSIONS

It has been clearly demonstrated that only complete information on camera techniques and reduction methods will lead to correct interpretation of interstation connections.

The results obtained from the Geos 1 optical beacon have been very promising.

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DYNAMICAL DETERMINATION OF STATION LOCATIONS USING GEOS 1 DATA

E. M. Gaposchkin

ABSTRACT

The geodetic satellite Geos 1 is used to determine the location of the observing sites for the Goddard Range and Range Rate system, the Navy TRANET Doppler system, and some cooperating optical observatories. Geos 1 orbits are determined, one per month, for the first 10 months of the satellite. The coordinates are determined by the dynamical method and are expressed in the C6 system of SAO. Directions determined from simultaneous observations are used to verify some results. The coordinates determined are suitable for use as an initial set for a more comprehensive global solution using many satellites. The success of the study indicates that such a combination is indeed possible and desirable.

DYNAMICAL DETERMINATION OF STATION LOCATIONS USING GEOS 1 DATA

E. M. Gaposchkin

1. INTRODUCTION

For some years, SAO has been actively engaged in a geodesy program. This field of study is in the process of expansion through the acquisition of new sources of data, new methods of data analysis, and the combination of satellite geodesy with classical techniques.

Our most recent significant achievement was the publication in 1966 of the Smithsonian Institution Standard Earth (Lundquist and Veis, 1966), which was based entirely on Baker-Nunn camera observations. Before this work was accomplished, we had already recognized that a wider distribution of data and a greater variety of data types would improve geodetic results.

We are encouraged in the expansion of our program by the investigations currently pursued by the Applied Physics Laboratory (APL) of Johns Hopkins University and by the Naval Weapons Laboratory (NWL) with the use of electronic TRANET doppler data. It is reassuring that the geodetic results obtained by SAO, APL, and NWL are in reasonably good agreement. The combination of the data from these sources is a logical advance in geodetic studies. Moreover, additional sources of data are becoming available. Smaller observatories and geodetic institutes can participate in global geodetic investigations with an illuminated satellite. Newer electronic systems such as the Goddard Range and Range Rate (GRARR) and the SECOR systems are beginning to acquire data in fairly large amounts, and the laser tracking now being developed provides greater accuracy.

The first step in combining different kinds of data to solve the geodetic problem involves selection of additional data types, establishment of suitable variances, reduction to a uniform time and spatial reference system, and, as part of the previous item, adoption of an initial set of station locations. A geodetic satellite such as Geos 1 is ideal for these tasks. Each of the cooperating agencies has acquired data from this satellite, and its orbital characteristics are such that we can be reasonably confident in using a dynamical theory.

2. SCOPE AND GOALS OF THIS STUDY

First, and most important, we have used data from a variety of tracking systems (optical directions, range, and range rate) to determine station locations in a geocentric Cartesian coordinate system. Second, having performed this adjustment, we have obtained some measure of the validity, accuracy, and potential usefulness of these data-acquisition systems for future work.

Our approach to the problem is the so-called dynamical method, which is discussed in detail in the 1966 Smithsonian Institution Standard Earth. Some use will be made of simultaneous optical observations to ascertain the validity of the positions of the optical stations determined in our reference system.

3. REFERENCE SYSTEMS AND ORBITAL ACCURACIES

The 1966 Smithsonian Institution Standard Earth forms the basis for this analysis. The coordinate systems are briefly as follows: The inertial reference frame is referred to the equinox of 1950.0 and the equator of date. The terrestrial reference frame is referred to the mean pole of 1900.0 to 1905.0 and the longitude of the mean observatory at Greenwich. The coordinates of the SAO Baker-Nunn cameras expressed in this terrestrial system are the C6 coordinates of the Standard Earth. The relation between these two frames of reference is given by the measured values of the time UT1 and the position of the pole.

The usefulness of the dynamical method hinges exclusively upon the accuracy of the orbital ephemeris. This, in turn, depends on the accuracy of the orbit theory itself, which includes uncertainties in the earth gravity-field model adopted, and on the accuracy with which the orbital elements of the satellite can be determined. Unfortunately, Geos 1 is in an orbit that is resonant with some of the 12th-order tesseral harmonics. Therefore, before any attempt can be made to use the dynamical method, these harmonics must be determined quite accurately.

The important harmonics with which Geos 1 is resonant are $\ell, m = 12, 12$; 13, 12; 14, 12; and 15, 12. One satellite is not adequate for the determination of the eight numerical parameters. Fortunately, we have observations of another satellite, 1960 ι2, resonant with the same harmonics and of essentially different orbital characteristics. The required harmonics can be determined by the combined use of these two satellites.

Table 1 gives the orbital characteristics of Geos 1 and 1960 ι2, with other relevant information. The first step, then, is to determine the resonant gravity-field harmonics from optical observations of these two satellites. The harmonic coefficients determined in this way are shown, with additional geodetic information, in Table 2.

The question of the accuracy of the reference orbits can be answered, in part, by the range observations acquired by the SAO laser tracking system collocated with the SAO Baker-Nunn camera at Organ Pass, New Mexico (station 9001). The collocation eliminates any problem of possible timing-system differences or errors in the station coordinates. If we use the reference orbits computed without the laser observations and compare the computed ranges with the laser observations, we get a measure of the accuracy in an absolute sense of the orbit theory. The mean value of 20 m agrees quite well with previous estimates of the orbital accuracy and must be taken to be the accuracy we can expect.

Table 1. Characteristics of Geos 1 and 1960 ι2

	Geos 1	1960 ι2
a	8.073861 Mm	7.971380 Mm
e	0.070941	0.0114367
I	59.°38020	47.°231275
n	11.967616 rev day^{-1}	12.197092 rev day^{-1}
$\sqrt{\bar{C}^2_{\ell,m} + \bar{S}^2_{\ell,m}}$ (maximum amplitude)		
ℓ m		
12 12	60 m	7 m
13 12	490 m	360 m
14 12	90 m	26 m
15 12	310 m	630 m
Period of perturbation:	7.1 days	14.5 days

The mean elements of these reference orbits are plotted in Figure 1. We note that the semimajor axis has a consistent variation of not more than 10 m. The eccentricity and inclination show the long-period effect of the earth's oblateness; this effect has a period of 550 days. Including the laser observations in the orbit determination does not change the values of the elements to any significant extent, and the mean value of the range residuals computed with respect to these orbits is 10 m.

Table 2. Geodetic constants

Velocity of light	c	2.997925×10^{10} cm sec^{-1}
Gravitational constant times earth mass	GM	3.986013×10^{20} cm^3 sec^{-2}
Semimajor axis of the earth	a_e	6.378155×10^{6} m
Zonal harmonics	J_n	Kozai solution to J_{14}*
Tesseral harmonics	$\bar{C}_{\ell,m}\bar{S}_{\ell,m}$	M1 solution* with the following changes: $\bar{C}_{13,12} = -6.848 \times 10^{-8}$; $\bar{S}_{13,12} = 6.57 \times 10^{-8}$; $\bar{C}_{14,12} = 0.261 \times 10^{-8}$; $\bar{S}_{14,12} = -2.457 \times 10^{-8}$; $\bar{C}_{15,12} = -7.473 \times 10^{-8}$; $\bar{S}_{15,12} = -1.026 \times 10^{-8}$

*From Lundquist and Veis (1966).

As stated in Lundquist and Veis (1966), the internal consistency of the fundamental Baker-Nunn coordinates is 15 m. The orbital ephemeris is computed for 1-month arcs and has an accuracy of 20 m. Therefore, we cannot hope to determine the station positions to an accuracy better than 15 to 20 m.

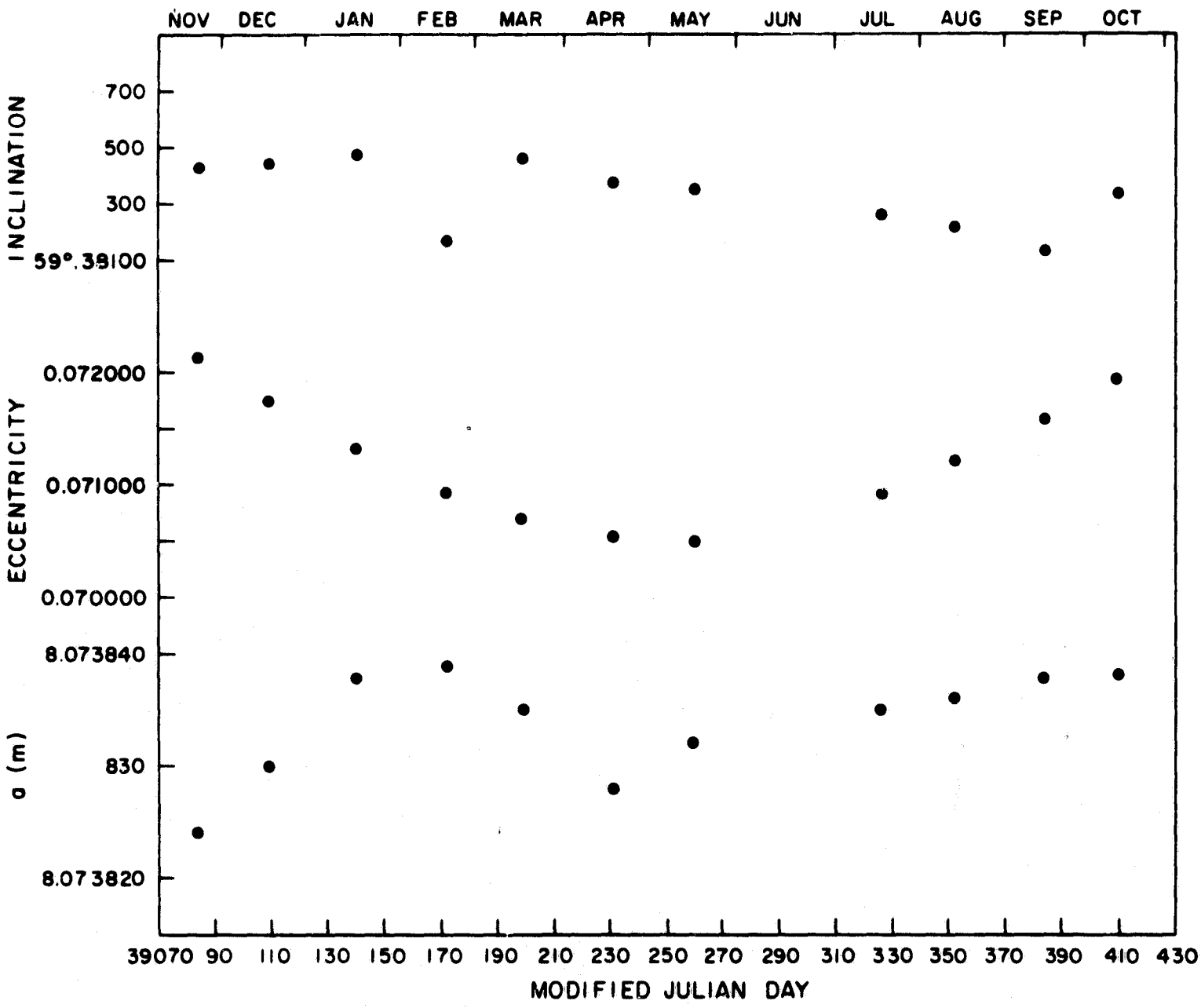

Figure 1. Mean inclination, eccentricity, and semimajor axis of Geos 1 for November 1965 to October 1966.

4. DETERMINATION OF THE LOCATIONS OF NINE MISCELLANEOUS OPTICAL SITES

The flashing light of Geos 1 was observed by several observatories. The coordination of the flashes removed the problems of mixed time systems. The observation of a flash sequence provided a set of points. We reduced each flash sequence to a synthetic observation for use in the dynamical determination of the station coordinates. These observations seemed to have an accuracy of nearly 1 arcsec.

The essential results are given in Table 3. The initial coordinates, the corrections, and the resulting coordinates are shown in the columns labeled X, Y, and Z, respectively. The numbers of synthetic observations are also given. For all stations except 9113, a direction to this previously unknown station from an SAO station had been determined by the use of simultaneous observations. In general, these directions are determined from other satellites as well. If the distance between the stations is known, this direction would suffice to determine the station coordinates uniquely. If we adopt the dynamically determined position to compute the distance, we can compute the location. The equivalent corrections from this method are also given in Table 3. This calculation is merely a consistency check.

In general, the agreement is good when there are sufficient observations. The coordinates for Rosamund seem well determined. The stations at Cold Lake, Harvestua, and Johnston Island were determined in the Standard Earth. In each case the data were few and were acquired from satellite geodetically less useful. The coordinates determined from Geos 1 for Cold Lake and Harvestua are preferable to the earlier results for the following reasons: Geos 1 is essentially a better satellite, more orbital arcs are used here, and the agreement with the directions is good. Nevertheless, the number of observations is marginal, and these coordinates can be considered only provisional.

Table 3. Dynamical determination of station coordinates (optical observations of Geos 1)

Station	X (m) dX (Mm)	Y (m) dY (Mm)	Z (m) dZ (Mm)	Correction from the direction between stations dx (m)	dy (m)	dz (m)	Stations	Number of synthetic observations
9113 Rosamund California	-2.450064 +28 -2.450036	-4.624412 -24 -4.624388	3.635023 11 3.635034					243
9114 Cold Lake Canada	-1.264846 -13 -1.264659	-3.466880 27 -3.466853	5.185464 -8 5.185456	-5	46	-3	9001, 9009, 9010, 9012	28
9115 Harvestua Norway	3.121265 1 3.121266	0.592600 20 0.592620	5.512684 18 5.512702	7	17	13	9004	34
9117 Johnston Island Pacific	-6.007395 72 -6.007323	-1.111893 80 -1.111813	1.825725 -10 1.825715	-22	39	-14	9012	17
9050 Agassiz Station Massachusetts	1.489724 23 1.489747	-4.467505 13 -4.467492	4.287291 -21 4.287270	12	12	-8	9001, 9009, 9010	41
9066 Zimmerwald Switzerland	4.331312 10 4.331322	0.567475 15 0.567490	4.633124 15 4.633139	11	25	-2	9004	109
9074 Riga Latvia	3.183913 -161 3.183752	1.421510 -51 1.421459	5.322773 -13 5.322760	-53	3	53	9004	15
9080 Malvern England	3.920160 34 3.920194	-0.134757 -2 -0.134759	5.021706 42 5.012748	25	14	30	9004	20
8015 Haute Provence France	4.578321 4 4.578325	0.457957 2 0.457959	4.403167 63 4.403230	13	13	52	9004	77

Since for Johnston Island the agreement between the direction and the dynamical determinations is poor, and since there are so few observations, this solution must be considered unreliable. The remaining stations are all new. Haute Provence and Zimmerwald are clearly well determined. Because of the small number of observations at Agassiz and Malvern, the determinations would have to be provisional, but the good agreement between the direction and the dynamical determinations is very encouraging. Riga is a first attempt.

5. DETERMINATION OF THE GRARR STATIONS

The GRARR system provides both distance and velocity measurements. Geos 1 was observed from three stations during the interval of our precise orbits. By far the largest number of data came from the station at Rosman, North Carolina.

We found that careful selection of data was necessary. We obtained the raw data directly from Goddard and developed our own reduction methods and rejection criteria. During that phase of the analysis we were in close contact with the Goddard intercomparison effort, and we were fortunate to be able to incorporate their findings into our analysis. We found polynomial fitting to short intervals (e. g., 20 sec) valuable for two reasons: First, the smoothed or synthetic points provided significantly better results for station-coordinate determination than did the raw data points used "en masse." Second, the standard error of the curve fit proved to be an excellent rejection criterion. We used virtually all the range-rate data available. For the range data, a rejection criterion of 8 m in the curve fit satisfactorily discriminated good from bad passes. The 8-m criterion should not be interpreted as the accuracy of the data; it is only a measure of the internal consistency of the data for a short interval.

Table 4 details the results of the determination of three stations. Five points per pass were used. Clearly, the combination solution depends on the adopted uncertainties of the two kinds of data, and these were taken at 30 m for range and 15 cm sec^{-1} for range rate. Furthermore, the relative number of data points is important. We rejected residuals at 100 m for range and

Table 4. Dynamical determination of station coordinates (GRARR)

Station	dX (Mm) X(m)	dY (Mm) Y(m)	dZ (Mm) Z(m)	dh (m)	Number of range observations	Number of range-rate observations	σ unit weight
4713 Rosman North Carolina	16 0.647192	-3 -5.178336	19 3.365152	15	4485	9764	0.90
4714 Madagascar	40 4.091419	-95 4.434122	-107 -2.066035	-6	124	1056	1.08
4715 Carnarvon Australia	-59 -2.328264	-34 5.299679	-4 -2.669395	-5	225	1358	1.11

	Range	Range Rate
Assumed accuracy	30 m	0.15 cm sec^{-1}
Rejection criterion	100 m	0.45 cm sec^{-1}

45 cm sec^{-1} for range rate. Since the correction for station 4714 was larger than the rejection criterion, we performed a second iteration to verify convergence.

The results for station 4713 are quite reasonable; the data set was good. The initial coordinates were given in the North American datum. In addition, the effective correction of 16 m in height agrees with the determination by Brown (1968) from short-arc studies. The Madagascar and Australian coordinates must be considered preliminary at this stage. The small number of data, the lack of a comparison, the high rejection rate of the data, and the lack of timing records all support this conclusion.

6. DETERMINATION OF THE TRANET DOPPLER STATIONS

The TRANET network provided data from 10 stations, generally 30 points per pass. The data were available through the entire period of precise orbits. The ionospheric correction had, of course, been applied. In addition, a preliminary frequency correction had been applied. These Doppler data were treated in the same way as the Goddard range-rate data.

Table 5 gives the corrections computed for the 10 sites. The initial coordinates were heterogeneous. As designated in Table 5, six stations were initially taken from an APL solution (H. Black, 1968, private communication); the remaining were taken from the Goddard directory. However, some comparisons are possible. Any solution for station coordinates computed solely with electronic data is indeterminate by one longitude. If the longitude of one station is fixed, a unique solution is possible. Therefore, for solutions to be compared, this rotation must be removed.

With several points given in two coordinate systems that differ by a rotation, this rotation can be determined. If we introduce the infinitesimal rotation (Goldstein, 1950, p. 124) $\mathcal{K}(d\Omega_1, d\Omega_2, d\Omega_3)$ such that

Table 5. Dynamical determination of station coordinates (TRANET)

Station	σ unit weight	Number of observations	dx (m)	dy (m)	dz (m)
7014* Anchorage, Alaska	0.93	9014	-50	5	-17
7017 Tafuna, American Samoa	1.07	6108	-55	342	109
7019* McMurdo Sound, Antartica	0.96	3263	-42	66	-102
7100* South Point, Hawaii	0.97	18088	-25	15	54
7103* Las Cruces, New Mexico	0.91	19890	-25	16	74
7106* Lasham, England	0.99	23615	-54	-38	42
7111* Johns Hopkins University Baltimore, Maryland	0.85	24595	-34	-76	-21
7739 Shemya, Alaska	0.71	4986	31	226	7
7742 Beltsville, Maryland	0.85	3533	-41	-42	-23
7745 Stoneville, Mississippi	0.89	4279	-66	-35	-27

Assumed accuracy = 15 cm sec^{-1}; rejection criterion = 45 cm sec^{-1}.

*Initial coordinates APL 3.5 solution.

$$\mathcal{R}(d\Omega_1,\ d\Omega_2,\ d\Omega_3) = \begin{bmatrix} 1 & d\Omega_3 & -d\Omega_2 \\ -d\Omega_3 & 1 & d\Omega_1 \\ d\Omega_2 & -d\Omega_1 & 1 \end{bmatrix} ,$$

we want to find $d\Omega_i$ such that

$$\bar{X}_j^{SAO} = \mathcal{R}(d\Omega_i)\ \bar{X}_j^{APL} \quad .$$

We have three candidates for such a computation and comparison: the APL 3.5 coordinates, a set of coordinates given by Anderle and Smith (1967), and a set attributed to Guier and Yionoulis (Anderle and Smith, 1967), designated as X_j^{APL}, X_j^{A}, and X_j^{GY}, respectively. In each case, the subset of stations is different. During the comparison, the determinations of X_{7017}^{SAO} and X_{7019}^{SAO} showed large disagreement and were therefore not included in the determination of the relative positions of the reference systems. Table 6 gives the relative rotations of the reference systems in seconds of arc and the standard error of the determination in meters. The rotation in terms of meters at the surface of the earth is also included.

The physical significance of the $d\Omega_3$ is a rotation in longitude and corresponds to the difference in the adopted longitude of the TRANET solutions and the longitude of the mean observatory; $d\Omega_1$ and $d\Omega_2$ would correspond to the differences in the adopted pole of the difference solutions. While SAO used observed values of the polar motion in its analysis, none of these data was used for the TRANET solutions (Black, 1968, private communication); hence, the resulting pole is defined by a mean of the data arcs used. The computed values are consistent in sign and magnitude with this interpretation. The differences in the values of GM used in the solutions are small, as evidenced by the values adopted (Lundquist and Veis, 1966; Black, 1968, private communication):

$\bar{X}_j^A$ GM = 3.986010×10^8 Mm^3 sec^{-2}

$\bar{X}_j^{SAO}$ GM = 3.986013×10^8 Mm^3 sec^{-2}

$\bar{X}_j^{GY}$ GM = 3.986015×10^8 Mm^3 sec^{-2} .

Table 6. Relation between the various reference systems: SAO C6 coordinates (SAO); APL 3.5 coordinates (APL); Anderle coordinates (A); Guier and Yionoulis coordinates (GY)

	$d\Omega_1$ (arcsec)	$d\Omega_2$ (arcsec)	$d\Omega_3$ (arcsec)	$a_e d\Omega_1$ (m)	$a_e d\Omega_2$ (m)	$a_e d\Omega_3$ (m)	σ (m)
SAO-APL	-0.02	0.42	1.24	0	13	41	41
SAO-GY	-0.93	0.35	2.11	-28	10	65	35
SAO-A	-0.85	0.36	0.91	-26	11	28	18
A-GY	-0.08	-0.03	0.94	-2	-1	29	13

The standard errors of 18 m for the Anderle solution relative to the SAO solution and of 35 m for the Guier and Yionoulis solution relative to the SAO solution are quite satisfactory in view of the 13-m agreement between the A and the GY (Table 6). If we consider that both the TRANET solutions also used other satellites and involved a further improvement of the frequency and tropospheric correction, their reliability is much enhanced. This is especially true for station 7019, which is at -77° latitude. Since Geos 1 is of 59° inclination, all the data used in our analysis were low passes to the north, which resulted in very poor geometry. The poor results from station 7017 cannot be attributed to its latitude. Table 7 provides the final coordinates determined from Geos 1.

Table 7. Final coordinates of the TRANET stations

Station	X_j^{SAO} X (Mm)	X_j^{SAO} Y (Mm)	X_j^{SAO} Z (Mm)	$X_j^{SAO} - X_j^A$ dx (m)	dy (m)	dz (m)
7014 Anchorage Alaska	-2.656183	-1.544326	5.570618	22	25	-23
7017 Tafuna American Samoa	-6.100005	-0.997366	-1.568560	19	-244	-73
7019 McMurdo Sound Antartica	-1.310712	0.310531	-6.213456	-11	25	-83
7100 South Point Hawaii	-5.504199	-2.224095	2.325278	-20	-3	-7
7103 Las Cruces New Mexico	-1.556251	-5.169461	3.387239	19	-23	10
7106 Lasham, England	4.005469	-0.071800	4.946720			
7111 Johns Hopkins University Baltimore, Maryland	1.122608	-4.823073	4.006486	11	-1	29
7739 Shemya, Alaska	-3.851550	0.397301	5.051523	-16	15	63
7742 Beltsville, Maryland	1.130731	-4.830861	3.994701	-4	-13	-8
7745 Stoneville, Mississippi	-0.085070	-5.327989	3.493425	-17	-14	-10

7. SUMMARY AND CONCLUSIONS

The geodetic satellite Geos 1 has been immensely successful in the determination of the locations of many new stations in the SAO C6 system. In some cases these coordinates are preliminary, in the sense that the determination is thought to be significantly worse than the 20-m accuracy that could be desired. Where stations had previously been determined by earlier and more comprehensive analysis, these results can be viewed as

a confirmation of our technique, and an adjustment or average may provide somewhat more realistic results. The values determined for the relation between the SAO and the TRANET systems are considerably more reliable than any of the individual determinations. In any case, the station coordinates determined here are suitable for an initial set to be used in future large-scale solutions. It is quite clear that it is desirable and feasible to combine the SAO Baker-Nunn observations, other optical observations of good quality, and GRARR, TRANET, and laser observations in a comprehensive global solution for station coordinates and the gravity field with the use of a wide variety of satellites.

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IMPROVED VALUES FOR COEFFICIENTS OF ZONAL SPHERICAL HARMONICS IN THE GEOPOTENTIAL

Yoshihide Kozai

ABSTRACT

Coefficients of zonal spherical harmonics up to the 20th order in the expression of the gravitational potential of the earth are derived from precisely reduced Baker-Nunn observations for 10 artificial satellites with inclinations between 28° and 96°.

IMPROVED VALUES FOR COEFFICIENTS OF ZONAL SPHERICAL HARMONICS IN THE GEOPOTENTIAL

Yoshihide Kozai

1. INTRODUCTION

A number of Baker-Nunn observations for several high-inclination satellites, such as 1965 89A (Geos 1) and 1964 64A (Explorer 22), have been precisely reduced in the past few years so that accurate orbital elements for long intervals of time can be derived from them. However, the secular motions and the amplitudes of the long-periodic perturbations derived from the time variations of the orbital elements for the high-inclination satellites were found to differ from the predicted values based on my coefficients (Kozai, 1964) for zonal harmonics in the geopotential. I found it necessary, therefore, to improve the coefficients once again.

In this paper 10 satellites are used as the basis for improving the coefficients (see Table 1). Of the 9 satellites used in a previous paper (Kozai, 1964), 1959 Eta, 1961 Nu, and 1962 Beta Upsilon are not dealt with here for the following reasons: The orbital elements of 1959 Eta are similar to those of 1959 α1, which is included in the present analysis; 1960 Nu, for which precisely reduced Baker-Nunn observations are available, has orbital elements almost identical, except for the eccentricity, to those of 1961 Nu, for which only field-reduced Baker-Nunn observations are available; and 1962 Beta Upsilon has only poor orbital elements.

In Table 1 the satellite designations used for the present analysis are given, as well as their anomalistic mean motions in revolutions per day, inclinations, eccentricities, and periods of observations. In addition to the orbital elements, Table 1 gives approximate values of the secular motions for the argument of perigee and the longitude of the ascending node. Also

Table 1. Satellites chosen with their mean orbital elements, secular motions, and amplitudes of the long-periodic perturbations with argument ω.

	Satellites	n	i	e	Periods (MJD)	$\dot{\omega}$	$\dot{\Omega}$	A_ω	$A_\Omega \times 10^2$	$A_i \times 10^3$	$A_e \times 10^4$
1	1960 ν_1	13.454	28.°33	0.0166	38924-39062	8.°265	-5.°065	1.°656	0.°16	-0.°85	4.80
2	1959 α_1	13.442	32.88	0.1660	36620-38530	5.258	-3.498	0.156	0.75	-6.98	4.62
		11.480	32.88	0.1642		5.293	-3.521	0.158	0.73	-6.92	4.62
3	1962 Alpha Epsilon	9.126	44.80	0.2422	37872-38026	1.986	-1.859	0.112	1.60	-7.75	5.22
4	1960 α_2	12.197	47.23	0.0114	37192-38576	2.978	-3.101	3.330	1.17	-0.40	6.63
5	1962 $\beta_{\mu 1}$	13.345	50.14	0.0070	37974-38574	2.963	-3.609	6.363	1.15	-0.26	7.84

shown are the amplitudes of the long-periodic perturbations with argument ω computed by use of my previous coefficients. For 1959 $\alpha 1$ and 1962 $\beta\tau 2$, upper and lower limits of the data are shown, since the orbital elements for these two satellites changed appreciably during the periods involved.

2. METHOD OF ANALYSIS

To improve the coefficients in the geopotential, I have used residuals (O-C) for the secular motions and the amplitudes of the long-periodic perturbations. The computed values are based on my previous coefficients (Kozai, 1964); that is,

$$\begin{aligned}
&J_2 = 1082.639, \pm 6 \quad J_3 = -2.546, \pm 20 \quad J_4 = -1.649, \pm 16 \quad J_5 = -0.210, \pm 25 \\
&J_6 = 0.646, \pm 30 \quad J_7 = -0.333, \pm 39 \quad J_8 = -0.270, \pm 50 \quad J_9 = -0.053, \pm 60 \\
&J_{10} = -0.054, \pm 50 \quad J_{11} = 0.302, \pm 35 \quad J_{12} = -0.357, \pm 47 \quad J_{13} = -0.114, \pm 84 \\
&J_{14} = 0.179, \pm 63
\end{aligned} \tag{1}$$

where the unit is 10^{-6}.

The value of J_2 given here is different from the original one in my previous paper, since it has been modified according to the changes in the values of the geocentric gravitation constant GM and the equatorial radius of the earth a_e, which are

$$\begin{aligned}
GM &= 3.98601 \times 10^{20} \text{ cm}^3 \text{ sec}^{-2} \\
&= (17.04353\, a_e^{3/2} \text{ rev day}^{-1})^2 \quad , \\
a_e &= 6.37816 \times 10^8 \text{ cm} \quad .
\end{aligned} \tag{2}$$

For 1962 Alpha Epsilon and 1961 Omicron, the same data as in my previous paper are also used here. For the other satellites, new analyses are made (Kozai, 1966).

The first step of the analysis is to derive mean orbital elements every 2 days from 4-day observations by use of SAO's Differential Orbit Improvement program. The data are mainly precisely reduced Baker-Nunn observations, except for the last 100 days for 1965 89A, when field-reduced Baker-Nunn observations are used.

Then secular and long-periodic perturbations due to the figure of the earth based on the coefficients (1), as well as lunisolar and solar-radiation perturbations, are evaluated at each epoch. Thus, the theoretical time variations of the orbital elements for the whole periods become known, and therefore, the residuals of the orbital elements can be computed. From these residuals, (O-C) for the secular motions and the amplitudes of long-periodic terms can be evaluated; they are listed with their mean errors in Tables 2 and 3.

3. DETERMINATION OF COEFFICIENTS

Table 2 gives equations of condition to improve coefficients of even-order harmonics, and Table 3 gives those of odd-order harmonics. In Table 2 equations for both the secular motions and the amplitudes of long-periodic terms with argument 2ω are given for several satellites.

In my previous paper, the weight reciprocally proportional to the square of the observed mean error for (O-C) was assigned to each of the equations of condition so that they could be solved by the method of least squares. However, since terms of spherical harmonics of higher than 21st order are neglected in the equations, the errors caused by neglected terms should be taken into account so that the weight can be computed. In this paper, the mean error of each equation is increased on the assumption that the values of J_{22} through J_{27} are 0.5×10^{-7}; this error is given under the column of the residual (v) in Tables 2 and 3. The weight is reciprocally proportional to the square of the error thus computed. In this way, the weights to the equations for low-inclination satellites have been reduced.

Table 2. Equations of condition for even-order harmonics

a) $\dot{\omega}$ (in 10^{-5} degrees per day)

	J_2	J_4	J_6	J_8	J_{10}	J_{12}	J_{14}	J_{16}	J_{18}	J_{20}	(O-C)	v
1	7623	-5477	-2224	6040	-3258	-1674	3727	-2042	-743	1977	17° ± 17°	44° ± 30°
2	4880	-1565	-2722	2484	412	-1913	931	670	-1052	245	3.2 ± 0.1	0 ± 4
3	1835	1039	-821	-643	398	340	-202	-177	105	94	16 ± 10	12 ± 10
4	2753	2686	-1224	-2302	316	1425	40	-763	-118	368	22 ± 5	3 ± 5
5	2740	4130	-333	-4065	-1361	2596	1847	-1187	-1601	304	60 ± 6	10 ± 10
6	605	2454	2145	40	-1393	-1098	-11	606	440	-12	-5 ± 2	0 ± 2
7	-640	1894	4418	4323	1623	-1623	-3290	-2732	-863	797	-39 ± 30	2 ± 30
8	-1026	468	2425	3319	2683	992	-839	-1998	-2117	-1336	-67 ± 14	-20 ± 15
9	-2340	-2482	-1455	16	1379	2313	2710	2622	2188	1573	0 ± 5	-65 ± 70
10	-903	-637	-331	-144	-53	-15	-2	2	2	-2	-40 ± 50	-40 ± 50

b) $\dot{\Omega}$ (in 10^{-6} degrees per day)

	J_2	J_4	J_6	J_8	J_{10}	J_{12}	J_{14}	J_{16}	J_{18}	J_{20}	(O-C)	v
1	-4670	5167	-2136	-945	1922	-1070	-157	702	-486	17	-125° ± 5°	-3° ± 25°
2	-3244	2548	-201	-1100	790	107	-524	276	142	-266	-9 ± 1	8 ± 17
3	-1716	300	511	-126	-207	60	96	-31	-47	16	4 ± 5	-4 ± 5
4	-2864	261	1168	-16	-480	-37	194	34	-76	-21	-11 ± 1	-1 ± 6
5	-3334	-188	1667	489	-747	-441	278	301	-69	-175	-42 ± 1	18 ± 15
6	-2076	-976	260	563	240	-92	-164	-64	33	51	-45 ± 3	1 ± 5
7	-2240	-2037	-808	331	811	656	219	-150	-292	-199	-4 ± 25	14 ± 25
8	-1583	-1578	-959	-226	324	566	512	270	-19	-230	7 ± 10	-15 ± 20
9	-997	-1299	-1253	-1026	-735	-454	-224	-58	45	96	28 ± 10	-2 ± 10
10	194	145	83	42	20	9	4	2	1	0	-10 ± 3	-9 ± 8

Table 3. Equations of condition for odd-order harmonics

a) A_e (in units of 10^{-6})

	J_3	J_5	J_7	J_9	J_{11}	J_{13}	J_{15}	J_{17}	J_{19}	J_{21}	(O-C)	v
1	-187	164	-19	-84	82	-21	-28	35	-13	-8	2 ± 2	2 ± 2
2	-193	95	48	-76	22	25	-26	3	12	-9	-3.1 ± 0.7	-0.8 ± 0.8
3	-215	-66	83	21	-30	-7	12	3	-5	-1	3 ± 3	4 ± 3
4	-271	-165	138	89	-53	-44	18	20	-6	-9	-2.6 ± 0.6	1.0 ± 1.2
5	-301	-311	136	220	-20	-126	-21	62	28	-21	-7.8 ± 0.8	-0.1 ± 2.0
6	-314	-1020	-489	164	321	131	-57	-93	-34	19	-19 ± 3	-1 ± 3
7	-370	1040	1460	909	67	-481	-546	-310	59	-361	0 ± 6	-2 ± 20
8	-354	225	521	485	269	29	-133	-184	-144	-61	-20 ± 4	1 ± 7
9	-394	-252	-85	38	107	131	124	101	71	43	-27 ± 2	3 ± 7
10	-293	-134	-51	-17	-5	-1	0	0	0	0	5 ± 2	0 ± 2

b) A_i (in 10^{-4} degrees) (coefficients are divided by 10^2)

	J_3	J_5	J_7	J_9	J_{11}	J_{13}	J_{15}	J_{17}	J_{19}	J_{21}	(O-C)	v
2	29	-14	-7	11	-3	-4	4	0	-2	1	0.1 ± 0.5	-0.2 ± 0.5
3	32	10	-12	-3	4	1	-2	0	1	0	4 ± 4	4 ± 4
4	2	1	-1	-1	0	0	0	0	0	0	-0.6 ± 0.6	-0.6 ± 0.6
5	1	1	0	-1	0	0	0	0	0	0	0 ± 1	0 ± 1
6	8	25	12	-4	-8	-3	1	2	1	0	-1 ± 2	-1 ± 2
7	1	-2	-3	-2	0	1	1	1	0	1	-1 ± 1	-1 ± 1
8	12	-7	-17	-16	-9	-1	4	6	5	2	-3 ± 5	-4 ± 5

Table 3 (Cont.)

c) A_ω (in 10^{-3} degrees) (coefficients are divided by 10^3)

	J_3	J_5	J_7	J_9	J_{11}	J_{13}	J_{15}	J_{17}	J_{19}	J_{21}	(O-C)	v
1	-654	575	-68	-293	289	-76	-98	123	-47	-29	4° ± 9°	5° ± 9°
2	-65	47	11	-42	22	13	-25	8	12	-13	-1.7 ± 0.3	0.6 ± 0.8
3	-51	-8	36	4	-21	-2	12	1	-7	0	0.3 ± 0.5	0.2 ± 0.5
4	-1362	-827	696	450	-268	-220	93	102	-29	-46	-24 ± 3	-6 ± 5
5	-2446	-2530	1100	1790	-166	-1020	-174	504	225	-175	-59 ± 4	3 ± 15
6	-250	-804	-389	151	291	119	-63	-101	-37	25	-9 ± 8	6 ± 8
8	-133	115	278	288	175	10	-130	-190	-160	-69	190 ± 200	190 ± 200
10	-1390	-639	-242	-81	-23	-5	0	1	1	1	60 ± 30	36 ± 30

d) A_Ω (in 10^{-4} degrees) (coefficients are divided by 10^2)

	J_3	J_5	J_7	J_9	J_{11}	J_{13}	J_{15}	J_{17}	J_{19}	J_{21}	(O-C)	v
1	-7	-7	21	-15	-4	16	-12	0	8	-7	0° ± 3°	2° ± 3°
2	-53	-97	137	-12	-96	73	17	-61	29	21	-2 ± 2	3 ± 3
3	-45	-195	-9	110	12	-57	-8	30	4	-15	16 ± 20	19 ± 20
4	-2	-15	-4	10	5	-5	-4	2	2	-1	0 ± 1	0 ± 1
5	-1	-13	-8	8	10	-2	-8	-1	5	3	-2 ± 1	-2 ± 1
6	-9	-646	-537	-96	196	202	57	-58	-72	-24	-10 ± 10	-3 ± 10
7	-1	-124	-127	-39	47	75	46	-1	-37	1	-9 ± 8	-6 ± 8
8	-12	-562	-629	-307	106	370	394	228	-8	-192	-50 ± 30	-12 ± 30
10	0	2	-2	1	1	0	0	0	0	0	3 ± 3	3 ± 3

In Tables 4 and 5, normal equations, whose solutions are given in units of 10^{-6}, are shown. The equations are solved 4 times with 7, 8, 9, and 10 unknowns, and the solutions are given with the sum of squares of residuals in the last column. In Table 6, the correlation matrices corresponding to these normal equations are given. Correlations are quite strong, especially for even-order harmonics.

For the even-order harmonics, the sum of the squares of the residuals has been reduced from 37.5 to 16.4 by inclusion of J_{20}; therefore, the 10-unknown solution is adopted. For odd-order harmonics, the 9-unknown solution is adopted, since inclusion of J_{21} means that the residual cannot be reduced.

The final solutions in units of 10^{-6} are

$$
\begin{array}{llll}
J_2 = 1082.639, \pm 7 & J_3 = -2.565, \pm 7 & J_4 = -1.608, \pm 21 & J_5 = -0.174, \pm 12 \\
J_6 = 0.542, \pm 41 & J_7 = -0.419, \pm 23 & J_8 = -0.128, \pm 64 & J_9 = -0.022, \pm 33 \\
J_{10} = -0.338, \pm 54 & J_{11} = 0.176, \pm 45 & J_{12} = 0.053, \pm 97 & J_{13} = -0.146, \pm 55 \\
J_{14} = -0.174, \pm 99 & J_{15} = -0.065, \pm 63 & J_{16} = 0.449, \pm 102 & J_{17} = -0.052, \pm 57 \\
J_{18} = -0.324, \pm 74 & J_{19} = -0.075, \pm 51 & J_{20} = 0.334. \pm 69 &
\end{array}
\qquad (3)
$$

The solutions for odd-order harmonics are thought to be quite reliable, as can be judged from Table 5. However, for even-order harmonics the solutions for higher than 8th order can be changed appreciably by the inclusion of new data in a future determination.

In Figure 1, the deviations of a geoid computed from (3) are given as functions of the geocentric latitude ϕ; the solid curve shows the geoid height in the Northern Hemisphere, and the broken curve, that in the Southern Hemisphere.

Table 4. Normal equations for even-order harmonics and their solutions (in units of 10^{-6})

J_2	J_4	J_6	J_8	J_{10}	J_{12}	J_{14}	J_{16}	J_{18}	J_{20}	(O-C)
684271	4999	-143572	-10385	22294	14422	-2332	-6327	7285	3894	6177.9
	160997	20672	-34776	5273	-4446	2538	12522	-1979	-3633	382.4
		108125	20850	-30938	174	8634	1530	2187	-2217	-1541.4
			39816	8062	-3203	1429	-535	-943	646	-1729.1
				33764	5114	-5699	-215	-1937	-754	-756.7
					14328	1399	-4639	195	-959	726.6
						6375	872	-2199	-336	358.7
							4091	-75	-845	-251.9
								2819	-9	-29.5
									1073	70.8
										218.0
0.001 ±6	0.02 ±2	-0.04 ±4	0.01 ±5	-0.08 ±6	0.08 ±5	0.02 ±4				39.3
0.002 ±9	0.01 ±3	-0.04 ±5	0.00 ±7	-0.07 ±9	0.07 ±9	0.03 ±7	-0.01 ±5			39.2
-0.001 ±10	0.03 ±3	-0.06 ±6	0.05 ±9	-0.13 ±11	0.15 ±12	-0.06 ±12	0.06 ±9	-0.07 ±8		37.5
-0.006 ±7	0.04 ±2	-0.10 ±4	0.14 ±6	-0.28 ±8	0.41 ±10	-0.35 ±10	0.45 ±10	-0.32 ±7	0.33 ±7	16.4

Table 5. Normal equations for odd-order harmonics and their sclutions (in units of 10^{-6})

J_3	J_5	J_7	J_9	J_{11}	J_{13}	J_{15}	J_{17}	J_{19}	J_{21}	(O-C)
306102	133353	-91195	-54095	3741	26933	7723	-18735	-3296	13251	4556.8
	268572	16091	-96834	-11067	16969	-5534	-2873	2848	3673	4035.6
		98523	30948	-34565	-27321	1657	11274	2508	-5205	-785.8
			65520	-7878	-23819	2153	4426	-1495	-3258	-1619.8
				26738	11571	-7965	-5377	-1152	-1086	-630.6
					17720	-964	-7271	-1048	1845	194.0
						5942	1053	-1014	1733	250.2
							6073	1644	-751	-169.2
								2066	-278	-89.1
									1414	259.0
										169.6
-0.025 ±9	0.053 ±14	-0.10 ±3	0.08 ±3	-0.14 ±3	0.03 ±3	-0.06 ±3				35.1
-0.017 ±8	0.031 ±12	-0.07 ±2	0.00 ±3	-0.08 ±3	-0.09 ±4	-0.02 ±3	-0.12 ±3			20.8
-0.019 ±7	0.036 ±12	-0.09 ±2	0.03 ±3	-0.13 ±5	-0.03 ±6	-0.07 ±6	-0.05 ±6	-0.08 ±5		19.2
-0.019 ±8	0.036 ±12	-0.09 ±2	0.03 ±3	-0.13 ±5	-0.03 ±6	-0.08 ±7	-0.04 ±6	-0.09 ±6	0.02 ±5	19.0

Table 6. Correlation matrices

	J_2	J_4	J_6	J_8	J_{10}	J_{12}	J_{14}	J_{16}	J_{18}	J_{20}
J_2	1.000	-0.968	0.976	-0.950	0.913	-0.823	0.715	-0.537	0.386	-0.152
J_4		1.000	-0.986	0.977	-0.944	0.853	-0.765	0.568	-0.453	0.170
J_6			1.000	-0.988	0.966	-0.889	0.802	-0.628	0.501	-0.215
J_8				1.000	-0.987	0.932	-0 865	0.707	-0.594	0.303
J_{10}					1.000	-0.968	0.923	-0.787	0.693	-0.392
J_{12}						1.000	-0.971	0.905	-0.805	0.577
J_{14}							1.000	-0.932	0.896	-0.614
J_{16}								1.000	-0.912	0.797
J_{18}									1.000	-0.716
J_{20}										1.000

	J_3	J_5	J_7	J_9	J_{11}	J_{13}	J_{15}	J_{17}	J_{19}	J_{21}
J_3	1.000	-0.926	0.893	-0.774	0.625	-0.463	0.300	-0.218	0.132	0.004
J_5		1.000	-0.935	0.908	-0.719	0.636	-0.411	0.406	-0.251	-0.055
J_7			1.000	-0.917	0.864	-0.715	0.581	-0.522	0.419	0.045
J_9				1.000	-0.895	0.887	-0.709	0.717	-0.547	0.123
J_{11}					1.000	-0.916	0.887	-0.816	0.754	-0.173
J_{13}						1.000	-0.887	0.931	-0.783	0.245
J_{15}							1.000	-0.916	0.902	-0.464
J_{17}								1.000	-0.886	0.361
J_{19}									1.000	-0.390
J_{21}										1.000

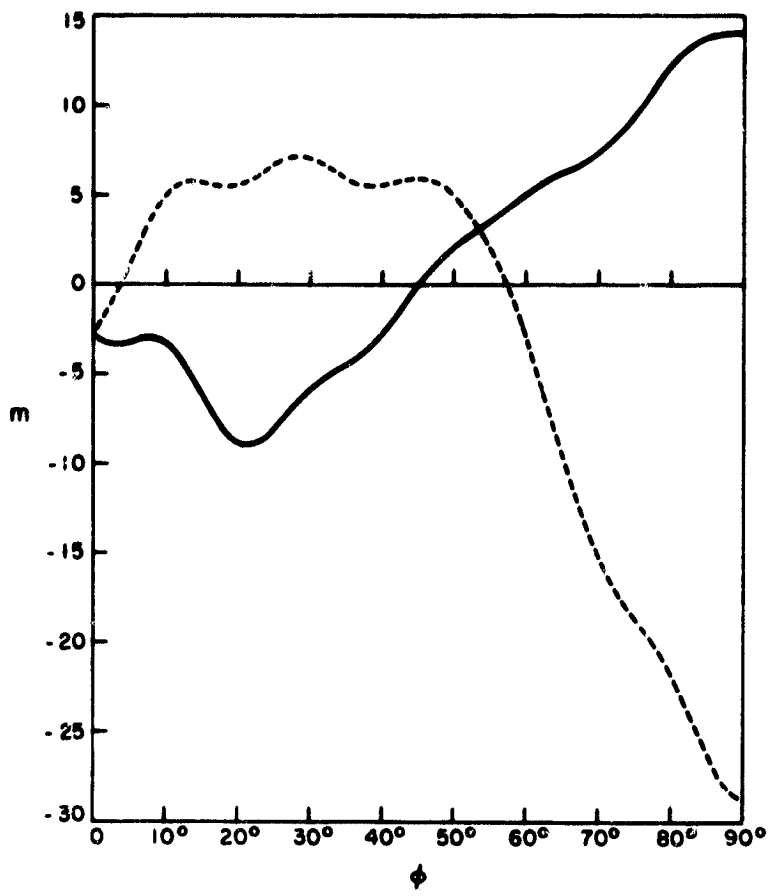

Figure 1. Geoid height.

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THE EARTH'S GRAVITATIONAL FIELD AS DERIVED FROM A COMBINATION OF SATELLITE DATA WITH GRAVITY ANOMALIES

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ABSTRACT

The harmonic coefficients of the earth's gravitational field are determined from a joint analysis of satellite gravity data with free-air gravity anomalies. The zonal coefficients are considered up to degree 20, whereas the nonzonal coefficients are fully determined up to 15, 15. The results are shown in geoid and gravity contour maps.

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1. INTRODUCTION

The earth's gravitational field can be derived either from the motion of artificial satellites or from the analysis of direct gravity measurements. Both methods have certain characteristics that would supplement each other if combined in a joint least-squares procedure. For example, in the satellite method, the variance of the harmonic coefficients generally increases with higher degree and higher order, while in the terrestrial method the short-periodic terms in the harmonic expansion can be more accurately determined. Hence, the simultaneous use of free-air gravity anomalies might be incorporated with some advantage into our iterative procedure (SAO's method, for example) of orbit determination and harmonic-coefficients analysis, of which the following combination method is only a special version.

2. COMBINATION METHOD

If we consider the geopotential in the form*

$$U = \frac{GM}{r}\left[1 + \sum_{n=2}^{\infty}\sum_{m=0}^{n}\left(\frac{a}{r}\right)^n (\overline{C}_{nm}\cos m\lambda + \overline{S}_{nm}\sin m\lambda)\,\overline{P}_{nm}(\sin\phi)\right]$$

$$+ \frac{r^2\omega^2}{2}\cos^2\phi \quad , \qquad (1)$$

*The notation is that used in the 1966 Smithsonian Institution Standard Earth (Lundquist and Veis, 1966).

we obtain the gravity anomalies, referred to a specific reference, from the approximate expression

$$\Delta g = g_0 \sum_{n=2}^{n_{max}} \sum_{m=0}^{n} (n-1)(\bar{C}_{nm} \cos m\lambda + \bar{S}_{nm} \sin m\lambda)\bar{P}_{nm}(\sin \phi) \quad , \tag{2}$$

where g_0 is the average gravity on the geoid. But equation (2) can be directly used for the determination of the harmonic coefficients if Δg is known all over the earth. The latter is known at the present time only for the relatively low-degree, low-order satellite field, while the surface gravity anomalies are known only over large areas in the Northern Hemisphere and hardly at all in the Southern Hemisphere. We therefore used two sets of gravity data covering the earth:

A. The low-degree, low-order set from satellites.

B. The free-air gravity anomalies, where available; in the areas where they were not available, the satellite anomalies were used again.

In the solution vector of the normal equations in case A we considered only the harmonic coefficients actually present, while in case B we solved for the same harmonics both in the surface anomalies and in the satellite anomalies. This method has the advantage that the orbital representation is very strong; at the same time the higher degree and higher order harmonics describe the free-air anomaly field where present, while in the unsurveyed areas their influence is forced to level out, i.e., to approach the satellite gravity field.

In the computer programs we provided for the possibility of filtering out the influence of certain harmonics, putting to zero the coefficients of the complementary terms discussed in case A and allowing for additive constants between surface gravity data and satellite gravity data, etc.

3. GRAVITY MATERIAL USED

The terrestrial gravity material was provided by W. M. Kaula (1966, private communication, magnetic tape) for 935 points representing areas, each of approximately 300 nautical-mile squares.* The coverage is limited to about the extent shown by Uotila (1962) in his free-air gravity-anomaly map. Gaposchkin's (1967) and Kozai's (this volume) coefficients were used for the computation of satellite anomalies, which fitted the terrestrial gravity better than any other published individual set (± 13.7 mgal). Hence, the combination solution should fall in between, and eventually be closer to, the terrestrial solution because the solution vector was extended fully up to 15, 15.

4. NUMERICAL SOLUTION

As already mentioned, we considered two sets of gravity anomalies. The first set consists of gravity anomalies derived from the Kozai-Gaposchkin coefficients for 5° × 5° all over the world; the second set is built up by two subsets: 1) the free-air gravity anomalies from Kaula, and 2) in the unsurveyed area, again the Kozai-Gaposchkin values. For both sets the solution vector ranges in the nonzonal case from 2, 2 up to 15, 15. Because the first set contains only the nonzonal Gaposchkin terms, we put to zero all the complementary coefficients in the observation equations. In the second set we consider the whole solution vector as outlined in Section 2. Choosing the same flattening, we also allow the Kaula anomalies to move by a constant amount relative to the Kozai-Gaposchkin anomalies, and we filter the 2, 2 term out of the second set before adjusting; this is done because the terrestrial anomalies have a very poor representation of this coefficient. The weighting is assumed to be equal to the area (on a unit sphere) represented by the anomalies in both the terrestrial and the satellite cases.

*A corresponding 5° × 5° version was also available.

In Table 1 we give the solution vector for the nonzonal harmonics. The coefficients decrease rapidly in magnitude from 2, 2 to about 8, 8; thereafter, they tend to oscillate with very slowly decreasing amplitude. This is easily seen from Figure 1, where we plot the amplitude $\bar{A}_{nm}$ of the slightly different version of equation (1):

$$U = \frac{GM}{r}\left[1 + \sum_{n=2}^{\infty}\sum_{m=0}^{n}\left(\frac{a}{r}\right)^n \bar{A}_{nm}\cos m(\lambda - \bar{\lambda}_{nm})\,\bar{P}_{nm}(\sin\phi)\right] + \frac{\omega^2 r^2}{2}\cos^2\phi \quad . \tag{3}$$

The filled circles represent the 15, 15 solution (Table 1); the open circles, the Gaposchkin $\bar{A}_{nm}$; and the crosses, a 15, 15 solution obtained from interpolated surface gravity anomalies based on Kaula's values. In most cases the combination solution is somewhere in the middle between the Gaposchkin and the purely terrestrial solutions, as expected. To get some idea of the accuracy obtained, we also plot the spread between the four satellite solutions of Anderle (1965), Gaposchkin (1967), Guier and Newton (1965), and Kaula (1966) (Figure 1). A direct comparison of the different satellite solutions* and the combination solution* with Kaula's free-air anomalies is shown in Figure 2: The discrepancy is lowest in Gaposchkin's case for the satellite solutions, while the combination solution 15, 15 drops further by about 3 mgal to 10.9. For comparison, the Kaula combination solution CA is indicated by dashed lines, which represents a full 7, 2 solution (Kaula, 1966).

Similarly, we can also solve for the zonal coefficients, using the same data as before. The results are shown in Figure 3 for the coefficients J_n (conventional zonal harmonics), with $n > 5$. Of course, the solution is not very strong, because of the poor distribution of the terrestrial data. However, the coefficients n = 16, 18, and 20 in Kozai's case seem to require large corrections, as shown in Figure 3. The vertical line again expresses the scatter of the latest available coefficients (Kozai, this volume; King-Hele and Cook, 1965; King-Hele, Cook, and Scott, 1967; Smith, 1963, 1965); if taken as whole sets, the zonal part of the geoid and the zonal gravity anomalies are shown along a meridian in Figure 4.

*Kozai's new solution (see this volume) was used for the zonal part.

Table 1. Combination solution: nonzonal harmonic coefficients (normalized)

n	m	$\times 10^6$ $\bar{C}_{nm}$	$\times 10^6$ $\bar{S}_{nm}$	n	m	$\times 10^6$ $\bar{C}_{nm}$	$\times 10^6$ $\bar{S}_{nm}$
2	2	2.38	-1.35	10	1	0.10	-0.07
3	1	1.71	0.23	10	2	-0.08	-0.06
3	2	0.84	-0.51	10	3	-0.08	-0.05
3	3	0.66	1.43	10	4	-0.06	-0.08
4	1	-0.47	-0.39	10	5	0.02	-0.02
4	2	0.35	0.48	10	6	-0.04	-0.01
4	3	0.92	-0.24	10	7	0.04	-0.05
4	4	0.04	0.30	10	8	0.04	-0.05
5	1	-0.06	-0.05	10	9	0.05	-0.04
5	2	0.53	-0.21	10	10	0.03	-0.02
5	3	-0.40	0.07	11	1	-0.03	0.02
5	4	-0.20	0.02	11	2	0.05	-0.05
5	5	0.18	-0.56	11	3	0.01	-0.08
6	1	-0.08	0.01	11	4	-0.03	0.00
6	2	0.01	-0.27	11	5	0.03	0.02
6	3	-0.04	0.03	11	6	-0.03	-0.02
6	4	-0.08	-0.48	11	7	0.03	-0.03
6	5	-0.26	-0.46	11	8	0.04	-0.02
6	6	-0.02	-0.16	11	9	0.03	0.01
7	1	0.17	0.11	11	10	-0.03	-0.01
7	2	0.32	0.16	11	11	0.10	0.06
7	3	0.18	0.00	12	1	-0.09	-0.07
7	4	-0.16	-0.04	12	2	-0.06	0.02
7	5	0.07	-0.01	12	3	0.03	0.02
7	6	-0.23	0.10	12	4	-0.05	0.01
7	7	0.07	0.06	12	5	0.02	0.01
8	1	-0.01	-0.01	12	6	-0.01	0.01
8	2	0.04	0.04	12	7	-0.04	-0.02
8	3	-0.03	0.00	12	8	0.00	0.01
8	4	-0.17	-0.02	12	9	-0.01	0.02
8	5	-0.09	0.09	12	10	-0.01	0.00
8	6	-0.01	0.30	12	11	-0.05	-0.02
8	7	0.02	0.04	12	12	-0.01	-0.01
8	8	-0.18	0.03	13	1	0.00	0.04
9	1	0.11	0.00	13	2	-0.03	0.01
9	2	0.03	0.05	13	3	0.00	0.03
9	3	-0.03	-0.01	13	4	-0.01	-0.02
9	4	0.07	0.02	13	5	0.03	-0.02
9	5	-0.04	0.04	13	6	-0.03	0.05
9	6	0.04	0.01	13	7	-0.02	0.00
9	7	0.04	-0.02	13	8	-0.02	-0.01
9	8	0.13	0.00	13	9	0.02	0.05
9	9	0.08	0.04	13	10	0.04	-0.02

Table 1 (Cont.)

n	m	$\times 10^6$ $\bar{C}_{nm}$	$\bar{S}_{nm}$	n	m	$\times 10^6$ $\bar{C}_{nm}$	$\bar{S}_{nm}$
13	11	-0.02	0.01	14	14	-0.04	0.02
13	12	-0.02	0.06	15	1	0.01	-0.01
13	13	-0.07	0.00	15	2	-0.02	-0.03
14	1	-0.01	0.02	15	3	0.02	0.03
14	2	-0.01	-0.04	15	4	0.00	0.01
14	3	0.06	-0.03	15	5	0.03	-0.02
14	4	0.00	0.00	15	6	0.03	-0.05
14	5	0.05	-0.03	15	7	0.03	0.04
14	6	0.01	-0.03	15	8	-0.06	0.00
14	7	0.03	0.02	15	9	0.00	0.04
14	8	-0.03	-0.03	15	10	0.02	0.01
14	9	0.03	0.07	15	11	0.01	0.01
14	10	0.04	0.01	15	12	-0.07	0.05
14	11	0.04	0.01	15	13	-0.05	-0.03
14	12	0.05	-0.03	15	14	0.01	-0.03
14	13	0.01	0.04	15	15	-0.02	-0.01

5. MAPS

The geoid and gravity-anomaly maps (Figures 5 and 6) are plotted by taking the above combination solution 15, 15 and Kozai's zonal coefficients up to 20. The fit toward the terrestrial anomalies could be slightly increased if the combination solution of the zonal part were used instead; in this case only the differences (see Figure 4) between the Kozai and the zonal combination solutions must be added, and in most instances they are very small. The nonzonal part in the maps represents a mean in the least-squares sense, wherever satellite and terrestrial data are available. In all the other areas the satellite solution is the determinate part. Hence, the high-degree, high-order coefficients, complementary to Gaposchkin's solution vector, rather represent lower limits of $\bar{A}_{nm}$ and will change with increasing amounts of free-air anomalies.

Gaposchkin and Veis (1967) recently published new values for some resonant terms, which, because of their greater reliability, can be substituted in the combination solution with some advantage:

$$\bar{C}_{13\,12} = -0.06769 \times 10^{-6} \qquad \bar{S}_{13\,12} = 0.06245 \times 10^{-6}$$
$$\bar{C}_{14\,12} = 0.00261 \times 10^{-6} \qquad \bar{S}_{14\,12} = -0.02457 \times 10^{-6}$$
$$\bar{C}_{15\,12} = -0.07473 \times 10^{-6} \qquad \bar{S}_{15\,12} = -0.01026 \times 10^{-6} \quad .$$

ACKNOWLEDGMENTS

I am indebted to Prof. Kaula and Dr. Strange for permission to use their gravity material. I also wish to thank Drs. Lundquist and Veis for valuable and inspiring discussions and Dr. Kozai for making available his zonal coefficients prior to publication.

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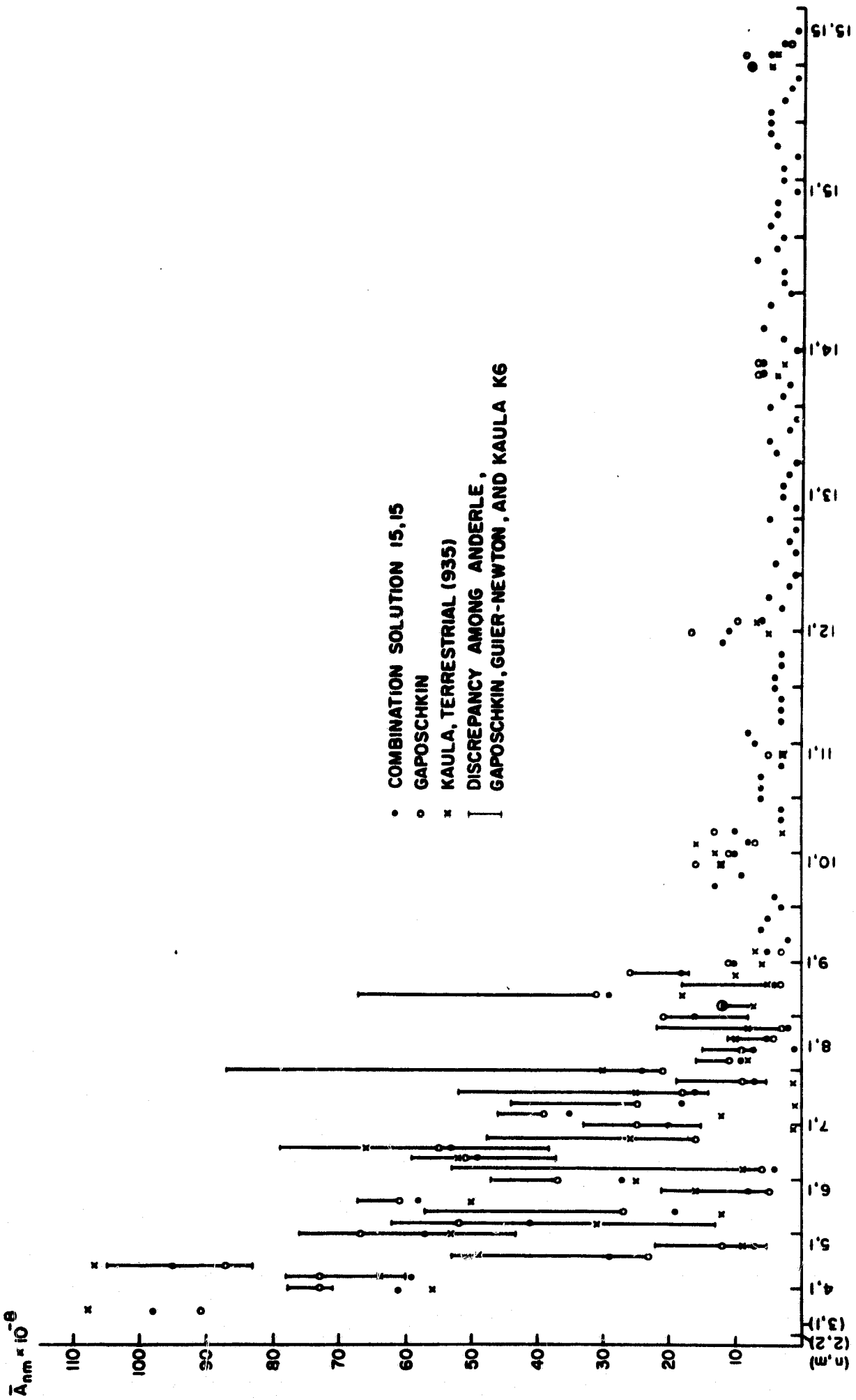

Figure 1. Amplitudes $\bar{A}_{nm}$ (normalized).

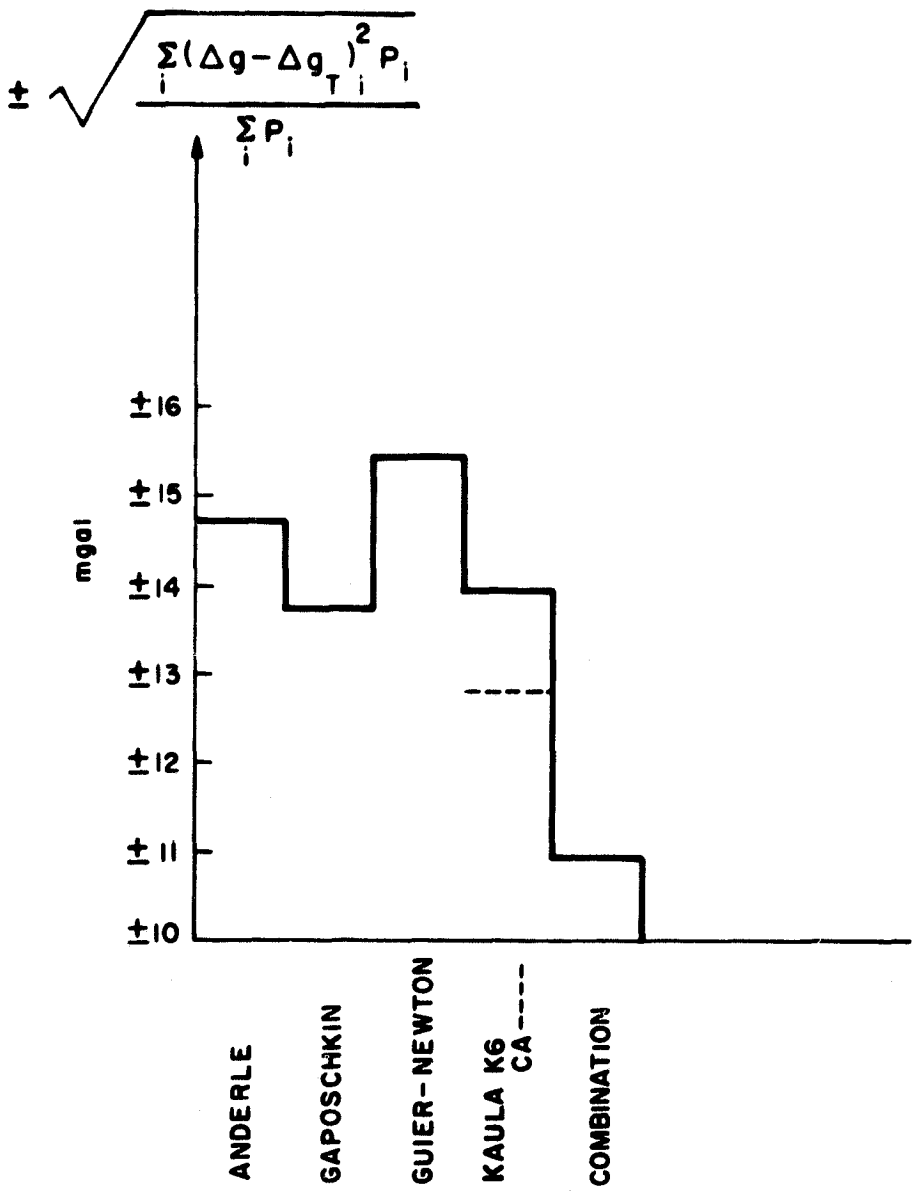

Figure 2. Spread of the gravity anomalies Δg relative to Kaula's terrestrial free-air gravity anomalies Δg_T. (The weight P is the area represented by an anomaly.)

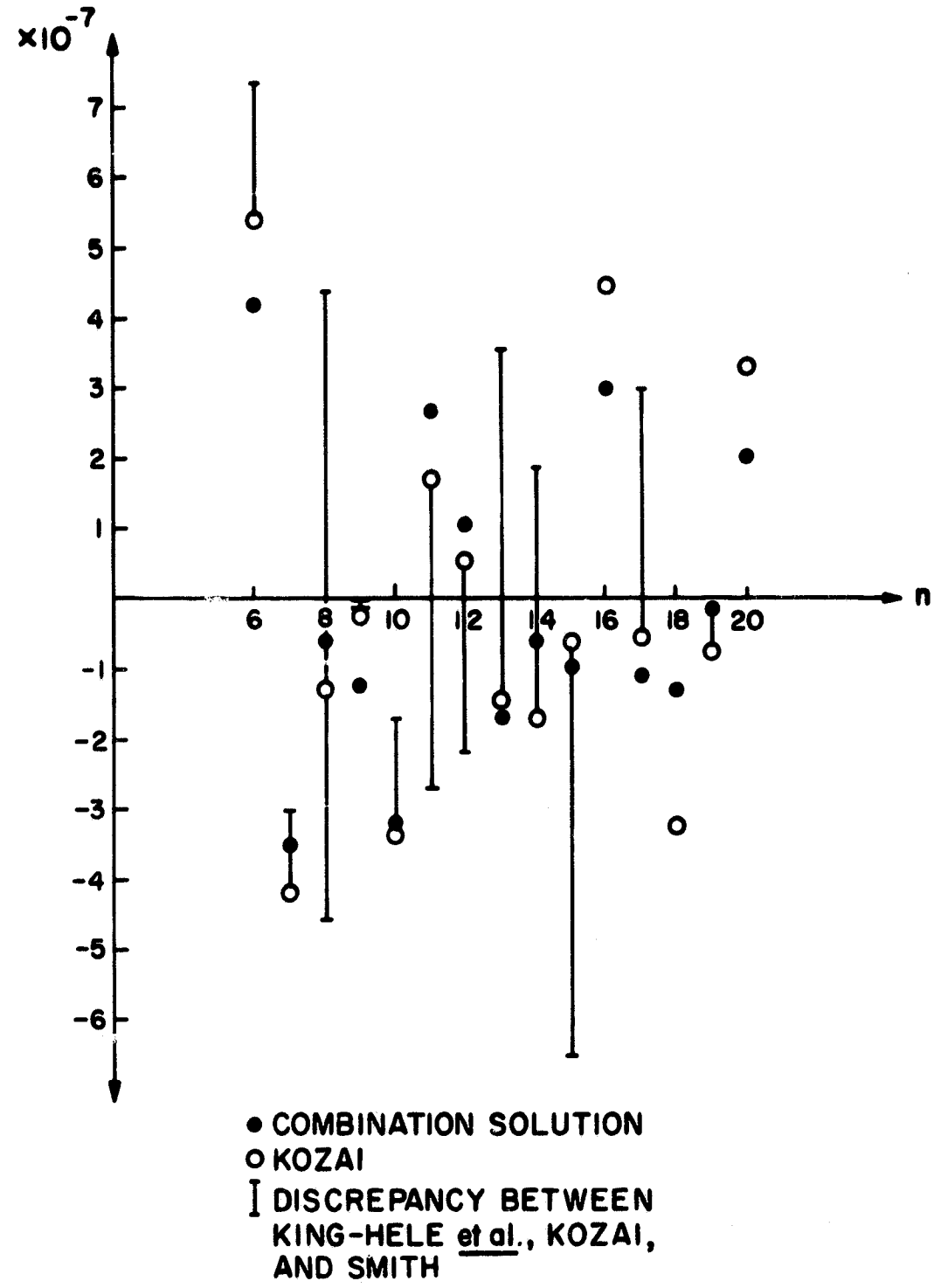

Figure 3. Zonal coefficients J_n (conventional).

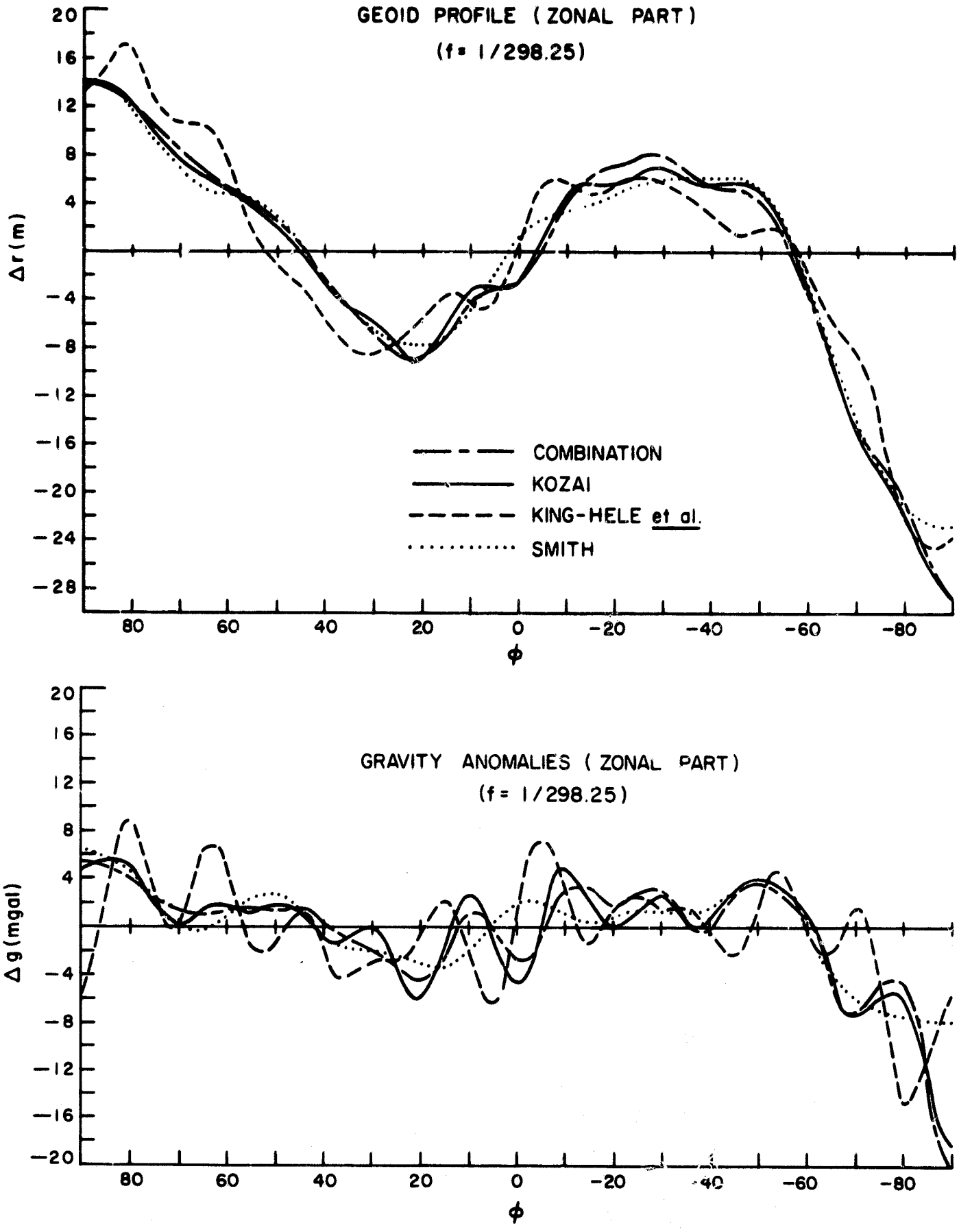

Figure 4. Zonal part of the geoid and of gravity anomalies along a meridian.

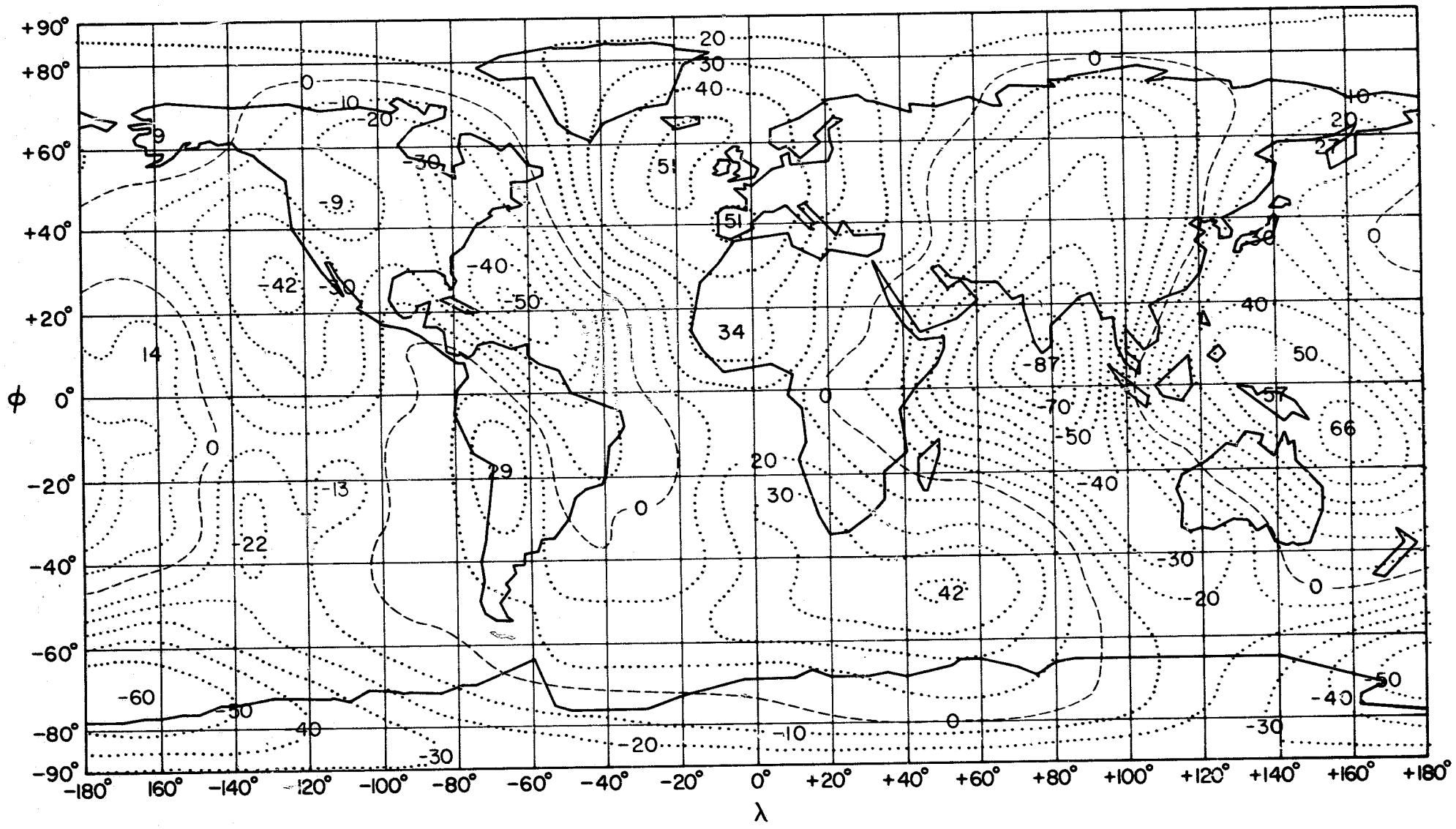

Figure 5. Geoid (combination 15, 15; Kozai 20) in meters (f = 1/298.25).

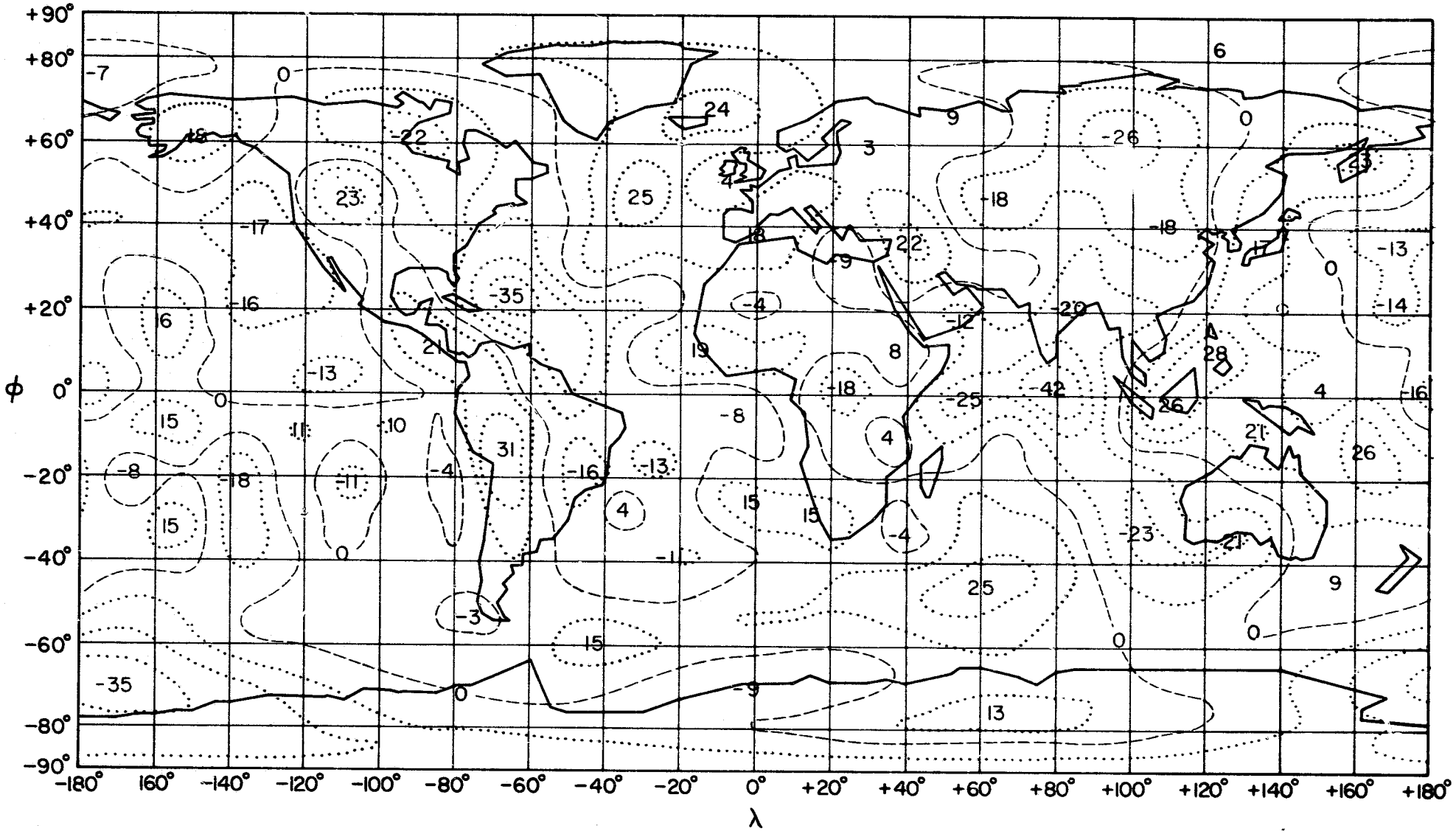

Figure 6. Gravity anomalies (combination 15, 15; Kozai 20) in mgal (f = 1/298.25).

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THE DETERMINATION OF THE RADIUS OF THE EARTH AND OTHER GEODETIC PARAMETERS AS DERIVED FROM OPTICAL SATELLITE DATA

George Veis

ABSTRACT

The availability of new geodetic data, together with some laser ranging to satellites and recent determinations of the value of GM, has allowed a new estimate of the semimajor axis of the earth's ellipsoid, based on the results of the 1966 Smithsonian Institution Standard Earth, to a high degree of accuracy. At the same time, a number of other geometric parameters have also been determined, giving a consistent set of parameters that define the geometric and dynamic properties of the earth.

THE DETERMINATION OF THE RADIUS OF THE EARTH AND OTHER GEODETIC PARAMETERS AS DERIVED FROM OPTICAL SATELLITE DATA

George Veis

1. INTRODUCTION

The geodetic parameters determined by SAO and published in the 1966 Smithsonian Institution Standard Earth (Lundquist and Veis, 1966) provide a consistent set of parameters for the definition of a global datum. The purposes of this paper are to give the results of a first attempt to improve the solution obtained a year ago and to present a better set of parameters that represent the latest results.

This new solution is based on some additional satellite and lunar-probe data obtained during the last year and on a combination of satellite data with results from surface geodesy, both geometric and physical.

2. DATA USED

The basic data used in the present analysis are the results published in the 1966 Smithsonian Institution Standard Earth. More recent work of SAO has also been incorporated. The determination by Kozai (this volume) of a new set of zonal harmonics up to J_{20} and the results of Köhnlein (1967, and this volume) for the determination of tesseral harmonics up to 15, 15, based on Gaposchkin's (1966) satellite data and surface gravity data supplied by W. M. Kaula (1966, private communication, magnetic tape), provide the basis of the generalized dynamic geoid.

The results of a new analysis by the Jet Propulsion Laboratory, California Institute of Technology, for the determination of GM and of the distances of three DSIF stations from the Ranger data (D. W. Trask, 1967, private communication) have been used for the determination of the scale.

Finally, a small number of simultaneous direction observations and range measurements from the Florida Baker-Nunn camera and from the New Mexico Baker-Nunn camera and laser have been used to provide another independent determination of the scale (Badekas and Veis, 1967).

The following geoidal maps have been used for the astrogeodetic geoids: North America (Fischer, 1959), South America (Fischer and Slutsky, 1966), Europe (Bomford, 1963), and India (Survey of India, 1957).

In the spring of 1967 the Survey of Canada tied the Cold Lake Baker-Nunn station (No. 9114) to the North American Datum (Gale, 1967). This result has been used to provide a better datum shift for the North American Datum.

3. DATUM SHIFTS

The datum shifts determined in the 1966 Smithsonian Institution Standard Earth were based on a weighted mean value from all stations belonging to the datum. This is more in agreement with standard geodetic practice and with the definition of a datum as a set of coordinates given to the fundamental point. However, for the purposes of determining the radius of the earth and of transforming astrogeodetic geoids, it is more appropriate to weight the result from each station only as a function of the variance in the determination of the coordinates from satellite data, independent of its distance from the datum origin. For a more elaborate discussion, see Veis (1965). Since the terrestrial coordinates determined in the Standard Earth have the same variance, all stations were given the same weight. Furthermore, only stations in the area of the astrogeodetic geoids were used for the datum shifts; the results are shown in Table 1.

Table 1. Datum shifts

Datum	Stations used	Δx^1	Δx^2	Δx^3
NAD	9001, 9010, 9114	- 27	+153	+188
EUR	9004, 9008, 9115	- 91	-131	-141
SAD	9007, 9009	-283	+113	-410
ARC	9002	-120	-142	-352
AND	9003	- 95	- 28	+ 81
JAP	9005	-149	+517	+698
IND	9006	+295	+708	+234
ARG	9011	-162	+118	+ 19
HAW	9012	+ 48	-267	-198

4. DATUM TILTS

A geodetic datum should be properly oriented if the Laplace equation has been satisfied at the origin and at all other Laplace stations, if the reduction of the measured quantities to the reference ellipsoid has been properly applied, and if all computations have been made rigorously. However, it seems that in many cases not all these conditions have been satisfied. As a result, an apparent rotation and/or tilt of the datum can be expected. If we adopt as a definition for the datum the set of coordinates given to a number of physical points (first-order triangulation net as a rule), which is actually much more realistic than the definition by a datum origin, this rotation and/or tilt is nothing more than a mathematical way of eliminating the linear part of the inconsistencies of the geometric properties of the net. Hence, it can be used as an adjustment parameter, even if it has no physical meaning. It is not the purpose of this paper to discuss the orientation of datums, but for this study, a tilt of the geoids is necessary to bring into agreement the results of astrogeodetic leveling with those of satellite geodesy.

For the three datums (NAD, EUR, SAD) where we have more than one station connected to a datum, the residuals of the datum shift determined from each station (on the assumption of a proper orientation) from the arithmetic mean are shown in Table 2.

Table 2. Datum-shift residuals

Datum	Station number	dx^1	dx^2	dx^3
NAD	9001	- 7	- 3	-13
	9010	+ 1	+ 2	- 9
	9114	+ 5	+ 1	+21
EUR	9004	+ 1	- 2	+ 7
	9008	- 2	-18	-27
	9115	0	+20	+19
SAD	9007	-11	- 2	+41
	9009	+11	+ 2	-40

These residuals indicate that the parallelism between the terrestrial and geodetic reference systems does not hold. It is true that these residuals are rather small, and it is a question whether they are significant. The accuracy of the relative positions in the terrestrial Standard Earth system for stations of the same datum is estimated to be ± 10 m; the accuracy of surface geodesy is not so good, and for the distances we have between the stations, we should expect uncertainties in the geodetic coordinates of the order of 20 m or more. However, if the horizontal control is so uncertain, it is not the same for the vertical control, where we expect that the accuracy should be of the order of a few meters (including the geoidal heights from astrogeodetic leveling). Accordingly, we decided to match the terrestrial and geodetic coordinates only in elevation. The components of the above residuals in the direction of the elevation are

NAD Station 9001 dH = - 3, Station 9010 dH = - 6, Station 9114 dH = +16,
EUR Station 9004 dH = + 7, Station 9008 dH = -24, Station 9115 dH = +17,
SAD Station 9007 dH = -13, Station 9009 dH = - 6.

If we wish to locate these three datums so that the terrestrial and the geodetic systems are consistent in elevation, we must apply a correction dH to the geoidal heights at the stations. If we further consider that this correction dH is due to a tilt, we can determine the tilts for the three datums (Table 3).

Table 3. Datum tilts

Datum	NAD	EUR	SAD
Total tilt	1!!5	2!!0	0!!5
Azimuth	4°	323°	6°
Meridian component	+1!!5	+1!!6	+0!!5
Prime vertical component	+0!!2	-1!!2	+0!!1
Elevation correction at origin	-2 m	+10 m	-7 m

It should be mentioned here that these tilts express the rotation of the datum reference ellipsoid not as a solid body but as the tilt of the reference surface. It is felt that since an astrogeodetic leveling is based on a two-dimensional method rather than on a vigorous three-dimensional one, this approach is more realistic.

With the use of the above tilts, the original astrogeodetic geoids can then be transformed to agree in orientation with the results obtained from the satellites for the geocentric terrestrial coordinates of the stations.

5. COMPARISON OF HEIGHTS

When the rectangular terrestrial coordinates for a number of stations have been determined, they can be converted into ellipsoidal terrestrial coordinates (φ, λ, h) on a reference ellipsoid. If the height of the station has also been determined by leveling, which to a good degree of accuracy corresponds to the height H above the geoid, the geoidal height at the station can be determined as $N = h - H$. If there are very many stations and if the reference

ellipsoid is correct, the mean value of N should be zero. Using this approach, we can calculate the size of the best fit ellipsoid by determining a correction to the reference ellipsoid so that the mean value of N is zero. If we assume that the flattening f is known, we can determine a correction to the semimajor axis a. However, to obtain a meaningful result, a great number of stations are required. An improvement can be made if we apply a correction for the geoidal height from a generalized geoid obtained from satellites, which will have to take into account most of the systematic part. If N_D is the geoidal height of a generalized geoid obtained by a dynamic method and N_G is the geometric geoidal height $N_G = h - H$, the correction Δa to the semimajor axis will be

$$\Delta a = N_G - N_D \quad .$$

This method has been used in the past by some investigators (e.g., Kaula, 1966). The disadvantage is that it does not take into account the high-frequency geoidal undulations that are not included in the generalized geoids.

Using as a reference an ellipsoid of a = 6,378,165 m and the generalized geoid of Köhnlein (1967), we have the results shown in Table 4.

The RMS value of one determination is ± 11 m, and the σ of the mean is ± 2.8 m. However, from an a priori estimate of the expected accuracy, based on the assumptions that $\sigma_H = \pm 2$ m, $\sigma_h = \pm 10$ m, and $\sigma_{N_D} = \pm 10$ m and that the RMS value of the difference between a detailed and a generalized geoid is ± 10 m (this has been estimated by a comparison of the heights of the astrogeodetic geoids with the generalized ones), the σ of one determination should be ± 18 m, and that of the mean, ± 4.5 m.

Accordingly, the semimajor axis as obtained from individual stations is

$$a = 6{,}378{,}145.3 \pm 5.0 \text{ m} \quad .$$

Table 4. Corrections to semimajor axis from geoidal heights

Station number	Geoidal height (H)	Terrestrial height (h)	N_G	N_D	$\Delta a = N_G - N_D$ *
9001	1651	1601	-50	-23	-27
9002	1544	1551	+ 7	+18	-11
9003	162	149	-13	+ 4	-17
9004	26	46	+20	+50	-30
9005	60	75	+15	+30	-15
9006	1927	1845	-82	-50	-32
9007	2451	2469	+18	+24	- 6
9008	1596	1551	-45	-13	-32
9009	7	-44	-51	-20	-31
9010	15	-25	-40	-32	- 8
9011	598	626	+28	+22	+ 6
9012	3034	3017	-17	+ 6	-23
9114	708	667	-41	-20	-21
9115†	576	588	+12	+41	-29
9117	+5	-5	-10	+ 9	-19

*Mean $\Delta a = -19.7 \pm 2.8$.

†Dynamical solution.

6. THE VALUE OF THE FLATTENING

The latest determination of the zonal harmonics by Kozai (this volume) gives the following value for the flattening of the earth's ellipsoid that best fits the geoid:

$$f = 1/298.255 \quad .$$

The value of $f = 1/298.25$, which is very close to the value based on Kozai's harmonics, has been used as the flattening of the reference ellipsoid. This new value is expected to be accurate to five units in the last digit, which corresponds to an error of only 0.3 m for the semiminor axis.

7. DETERMINATION OF THE SEMIMAJOR AXIS

The disadvantage of determining the semimajor axis from individual stations is the omission of the high-frequency geoidal undulations. This can be partly overcome by an adjustment of the heights of entire astrogeodetic geoids, rather than of individual heights, to the dynamic generalized geoid. Details of the method can be found in Veis (1965).

In the present analysis we have combined the geoidal heights with the information from the individual stations that were not corrected to any astrogeodetic datum, with the assumption that they represent an average area of 0.5 Mm^2. Also, the astrogeodetic geoids were used after the correction for the tilt had been applied as described earlier. Table 5 gives the results of this determination.

Table 5. Corrections to the semimajor axis

Location	Area (Mm^2)	Δa (m)
NAD	15.0	-17
EUR	7.5	-32
SAD	7.5	-19
IND	3.5	-30
Station 9002	0.5	-11
Station 9003*	0.5	-17
Station 9005	0.5	-15
Station 9011	0.5	+6
Station 9012	0.5	-23
Station 9117	0.5	-19

*After this analysis, an astrogeodetic geoid for Australia was presented by Mrs. I. Fischer. However, since it is quite flat, we do not expect any appreciable change in the above results.

The standard deviation of the mean is ± 6 m, which is a reasonable result. On the other hand, there is a rather good agreement between this result and that obtained from the individual heights. From these results we conclude that the best value for a is

$$a = 6{,}378{,}144.6 \pm 5 \text{ m} \quad .$$

Since the radii computed from the stations in Europe and in India seem to be smaller than this value, further investigation is necessary.

8. DETERMINATION OF THE SCALE

The scale of the Standard Earth solution is obtained from the GM value used to determine the semimajor axis of the orbits according to Kepler's third law. The relation used is that of Kozai's first-order theory (Kozai, 1959), namely,

$$n^2 a^3 = GM\left[1 - \frac{3}{2}\frac{J_2}{p^2}\left(1 - \frac{3}{2}\sin^2 i\right)\sqrt{1 - e^2}\right] \quad .$$

However, when a second-order theory is used (Kozai, 1962), the omitted terms in the above expression for the case of a zero eccentricity are

$$\epsilon = \frac{J_2^2}{p^4}\left(1.22 - 4.32\cos^2 i - 0.65\cos^4 i\right) \quad .$$

Accordingly, the effect in the scale will be $\epsilon/3$, and Figure 1 gives the error in the scale as a function of the orbital inclination i. With a weighted mean for ϵ based on the number of observations used from each satellite for the Standard Earth solution, we find that a correction of -0.12×10^{-6} must be applied.

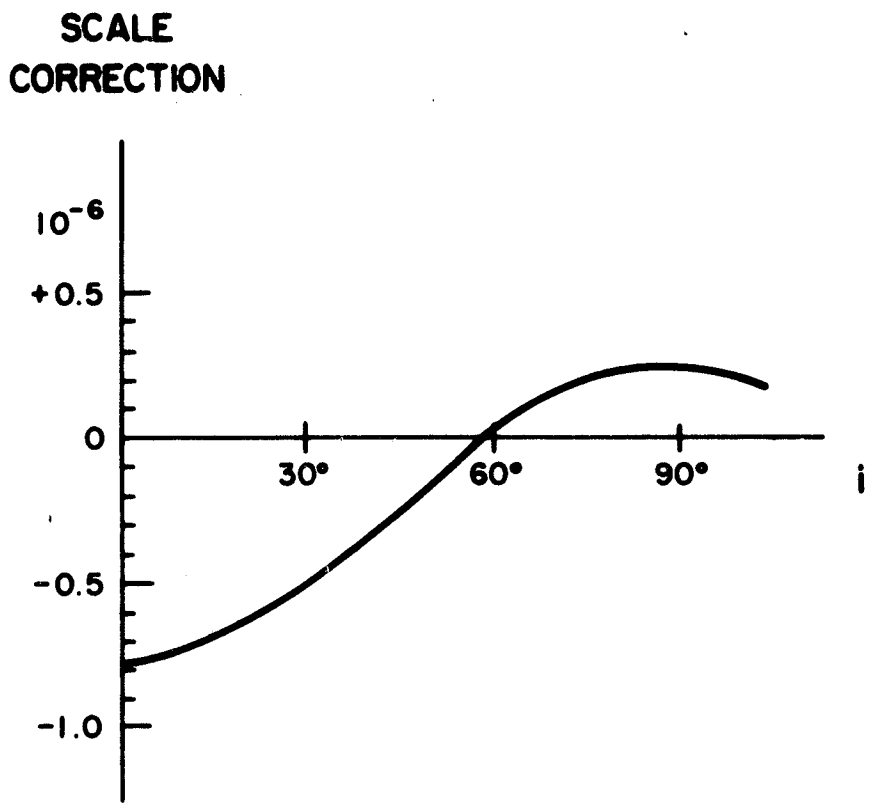

Figure 1. Scale correction as a function of the orbital inclination.

A 1967 JPL determination for the value of GM based on Ranger tracking data with corrected lunar ephemeris gives (Trask, 1967, private communication)

$$GM = 398,600.9 \pm 0.7 \text{ km}^3 \text{ sec}^{-2} \quad ,$$

which is a further change from the GM value used in the Standard Earth to define the C6 system. Accordingly, we have to apply a change of -0.33×10^{-6} to the C6 scale for the change of GM, or a total of -0.46×10^{-6} if we also take into account the effect of the omission of the second-order terms.

The corresponding standard deviation in the scale determined from GM is $\pm 0.60 \times 10^{-6}$. Assuming that there is no error in the adopted value for the velocity of light in vacuum, which means that we define the unit of length in terms of light-seconds, or

$$1 \text{ m} = 3.33564048 \times 10^{-9} \text{ light-sec} \quad ,$$

we find that we have to apply a correction of

$$-0.46 \pm 0.60 \times 10^{-6}$$

to the Standard Earth C6 coordinates.

The scale can also be determined by a comparison of the distances of stations from the earth's spin axis derived from the Ranger data with those of the Standard Earth. The result is

$$-0.8 \pm 2.0 \times 10^{-6} \quad .$$

A set of simultaneous observations of directions from the Baker-Nunn cameras in New Mexico and Florida, combined with laser observations from New Mexico, has provided an independent determination of the distance between the stations 9001 and 9010 in terms of light-seconds, and thus an independent determination of the scale of the Standard Earth system. This useful result (Badekas and Veis, 1967), based, unfortunately, on a small number of data, gives a correction of

$$+0.8 \pm 2.0 \times 10^{-6} \quad .$$

This value has also been used to derive the final result, since it is based on a completely different method.

Finally, the scale of the Standard Earth system can be determined from the result of ground surveys, namely, the distances between stations connected in the same datum. The scale of the existing triangulations was based on base lines measured with tapes; consequently, while we now define the unit of length in terms of light-seconds, the uncertainty of the velocity of light must be considered for the calculation of the uncertainty of the scale determined from ground surveys.

This ground-survey method gives the following results for the two major datums (NAD and EUR). Using five lines of a total length of 15.3 Mm (the Curaçao station has also been used for this purpose), we find that for all the lines the NAD distances are smaller than those obtained from the Standard Earth, and the correction for the NAD scale to bring it into the Standard Earth system is

$$+4.8 \times 10^{-6} \quad .$$

For the EUR, we find a scale correction of

$$-1.4 \times 10^{-6} \quad ,$$

based on three lines of 12.7 Mm.

If we accept the scale from the ground surveys as correct and include all nine reliable lines of a total length of 46.5 Mm, we find a correction to the Standard Earth scale of

$$-1.4 \times 10^{-6} \quad .$$

The values obtained from the various methods described above are shown in Table 6. The mean value then is

$$-0.40 \pm 0.55 \times 10^{-6} \quad .$$

We have adopted this mean value as the scale correction for the Standard Earth C6 system, and Table 7 gives the coordinates in the new C7 system. To agree with the new value for the scale, the semimajor axis for the earth should be corrected by

$$-2.6 \text{ m} \pm 3.5 \text{ m} \quad ;$$

that is,

$$a = 6,378,142 \pm 6 \text{ m} \quad .$$

Table 6. Scale corrections obtained by different methods

Method	Scale correction (ppm)	σ (ppm)	p (weight)
Orbits	-0.46	± 0.60	2.77
Distances from spin axis	-0.80	± 2.00	0.25
Laser	+0.80	± 2.00	0.25
Ground surveys	-1.40	± 6.00	0.03

Table 7. Coordinates of the Baker-Nunn stations in the C7 system

Station number	x	y	z
9001	-1.535758	-5.166993	3.401040
9002	5.056124	2.716484	-2.775815
9003	-3.983748	3.743099	-3.275592
9004	5.105591	-0.555232	3.769672
9005	-3.946695	3.366285	3.698841
9006	1.018205	5.471098	3.109613
9007	1.942768	-5.804075	-1.796960
9008	3.376881	4.403983	3.136253
9009	2.251819	-5.816912	1.327163
9010	0.976282	-5.601387	2.880241
9011	2.280574	-4.914567	-3.355456
9012	-5.466053	-2.404274	2.242169
9114	-1.264838	-3.466890	5.185473
9115	3.121274	0.592628	5.512693
9117	-6.007402	-1.111873	1.825725

9. THE DYNAMIC DETERMINATION OF a AND THE VALUE OF g_e

The values of GM, a, and g_e (the value of gravity at the equator) are related by the expression:

$$GM = a^2 g_e \left(1 - f + \frac{3}{2} m - \frac{15}{14} mf + \ldots\right) \quad ,$$

where f = the flattening, and

$$m = \frac{\omega^2 a}{g_e}, \text{ with } \omega \text{ the rotational velocity of the earth.}$$

This value for GM corresponds to the mass of the earth alone; if the atmosphere is to be taken into consideration, the expression becomes

$$GM' = a^2 g_e \left(1 - f + \frac{3}{2} m - \frac{15}{14} mf + \mu + \ldots\right) \quad ,$$

where μ is the relative mass of the atmosphere, 10^{-6}. It should be remembered that the GM determined from the motion of space objects also includes the mass of the atmosphere.

Figure 2 gives the relation among GM, a, and g_e, with and without the atmosphere. This diagram is based on f = 1/298.25, but a change to 1/298.255 will make a difference of only +0.02 $km^3\ sec^{-2}$.

If we take the value of g_e = 978,028.4 ± 1.5 mgal, which is here adopted, we find that a = 6,378,151 ± 8 m.

However, it seems that g_e should be increased to 978,032.6 mgal (Rapp, 1967), which is a more likely value. Hence, we obtain a = 6,378,138 m.

If, on the other hand, we adopt the value a = 6,378,142 ± 6 m, as determined from satellites, we have g_e = 978,031.2 ± 3.2 mgal, which is consistent with GM = 398,600.9 km^3 sec^{-2}. The corresponding value on an ellipsoid with f = 1/298.255 will be g_e = 978,031.1 ± 3.2 mgal.

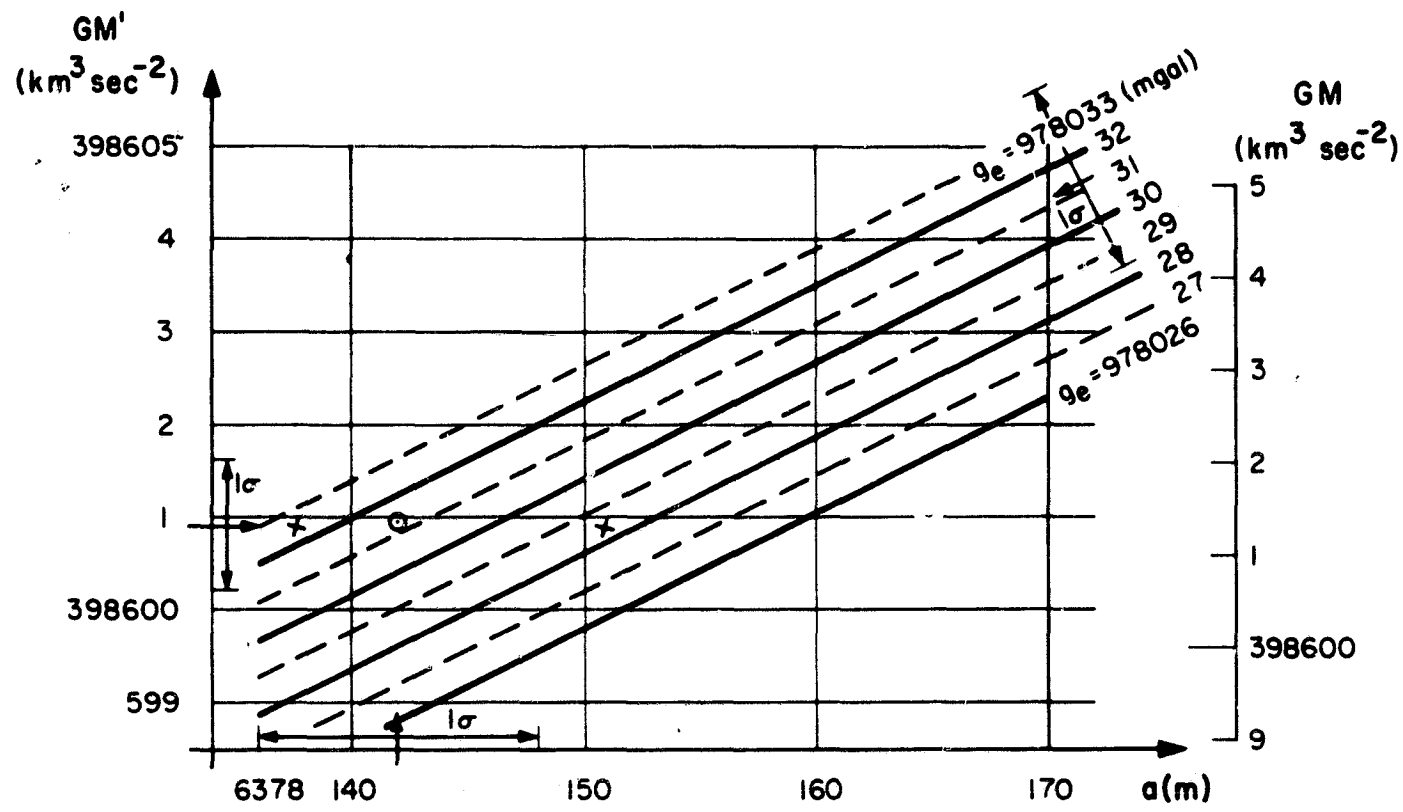

Figure 2. Relation between GM′ (or GM), a, and g_e with (or without) the atmosphere.

10. CONCLUSIONS

The results from the analysis of optical satellite data and radio lunar-probe data, combined with surface triangulations, leveling, and gravity measurements, provide the following best parameters for the earth's ellipsoid:

a = 6,378,142 ± 6 m,
1/f = 298.255 ± 0.005,
GM = 398,600.9 ± 0.7 km^3 sec^{-2},
g_e = 978,031.1 ± 3.2 mgal.

These results are based on a definition of the meter as

$$1\ m = 3.33564048 \times 10^{-9}\ \text{light-sec} \quad .$$

The orientation of this geocentric reference ellipsoid is defined with the x^3 axis directed toward the mean pole of 1900-1905 and with the $x^1 - x^3$ plane being 75°03'55."94 east of the mean astronomic meridian of the U.S. Naval Observatory.

The zonal harmonics and the tesseral harmonics, which describe the gravity field of the earth, are given below.

Zonal Harmonics, conventional definition (Kozai, this volume)

J_2	$= 1082.639 \times 10^{-6}$	J_3	$= -2.565 \times 10^{-6}$
J_4	$= -1.608$	J_5	$= -0.174$
J_6	$= 0.542$	J_7	$= -0.419$
J_8	$= -0.128$	J_9	$= -0.022$
J_{10}	$= -0.338$	J_{11}	$= 0.176$
J_{12}	$= 0.053$	J_{13}	$= -0.146$
J_{14}	$= 0.174$	J_{15}	$= -0.065$
J_{16}	$= 0.449$	J_{17}	$= -0.052$
J_{18}	$= -0.324$	J_{19}	$= -0.075$
J_{20}	$= 0.334$		

Tesseral Harmonics, normalized (Köhnlein, 1967)

n	m	$\times 10^6$ $\bar{C}_{nm}$	$\bar{S}_{nm}$	n	m	$\times 10^6$ $\bar{C}_{nm}$	$\bar{S}_{nm}$
2	2	2.38	-1.35	10	1	0.10	-0.07
3	1	1.71	0.23	10	2	-0.08	-0.06
3	2	0.84	-0.51	10	3	-0.08	-0.05
3	3	0.66	1.43	10	4	-0.06	-0.08
4	1	-0.47	-0.39	10	5	0.02	-0.02
4	2	0.35	0.48	10	6	-0.04	-0.01
4	3	0.92	-0.24	10	7	0.04	-0.05
4	4	0.04	0.30	10	8	0.04	-0.05
5	1	-0.06	-0.05	10	9	0.05	-0.04
5	2	0.53	-0.21	10	10	0.03	-0.02
5	3	-0.40	0.07	11	1	-0.03	0.02
5	4	-0.20	0.02	11	2	0.05	-0.05
5	5	0.18	-0.56	11	3	0.01	-0.08
6	1	-0.08	0.01	11	4	-0.03	0.00
6	2	0.01	-0.27	11	5	0.03	0.02
6	3	-0.04	0.03	11	6	-0.03	-0.02
6	4	0.08	-0.48	11	7	0.03	-0.03
6	5	-0.26	-0.46	11	8	0.04	-0.02
6	6	-0.02	-0.16	11	9	0.03	0.01
7	1	0.17	0.11	11	10	-0.03	-0.01
7	2	0.32	0.16	11	11	0.10	0.06
7	3	0.18	0.00	12	1	-0.09	-0.07
7	4	-0.16	-0.04	12	2	-0.06	0.02
7	5	0.07	-0.01	12	3	0.03	0.02
7	6	-0.23	0.10	12	4	-0.05	0.01
7	7	0.07	0.06	12	5	0.02	0.01
8	1	-0.01	-0.01	12	6	-0.01	0.01
8	2	0.04	0.04	12	7	-0.04	-0.02
8	3	-0.03	0.00	12	8	0.00	0.01
8	4	-0.17	-0.02	12	9	-0.01	0.02
8	5	-0.09	0.09	12	10	-0.01	0.00
8	6	-0.01	0.30	12	11	-0.05	-0.02
8	7	0.02	0.04	12	12	-0.01	-0.01
8	8	-0.18	0.03	13	1	0.00	0.04
9	1	0.11	0.00	13	2	-0.03	0.01
9	2	0.03	0.05	13	3	0.00	0.03
9	3	-0.03	-0.01	13	4	-0.01	-0.02
9	4	0.07	0.02	13	5	0.03	-0.02
9	5	-0.04	0.04	13	6	-0.03	0.05
9	6	0.04	0.01	13	7	-0.02	0.00
9	7	0.04	-0.02	13	8	-0.02	-0.01
9	8	0.13	0.00	13	9	0.02	0.05
9	9	0.08	0.04	13	10	0.04	-0.02

Tesseral Harmonics (Cont.)

n	m	$\times 10^6$ $\bar{C}_{nm}$	$\bar{S}_{nm}$	n	m	$\times 10^6$ $\bar{C}_{nm}$	$\bar{S}_{nm}$
13	11	-0.02	0.01	14	14	-0.04	0.02
13	12	-0.02	0.06	15	1	0.01	-0.01
13	13	-0.07	0.00	15	2	-0.02	-0.03
14	1	-0.01	0.02	15	3	0.02	0.03
14	2	-0.01	-0.04	15	4	0.00	0.01
14	3	0.06	-0.03	15	5	0.03	-0.02
14	4	0.00	0.00	15	6	0.03	-0.05
14	5	0.05	-0.03	15	7	0.03	0.04
14	6	0.01	-0.03	15	8	-0.06	0.00
14	7	0.03	0.02	15	9	0.00	0.04
14	8	-0.03	-0.03	15	10	0.02	0.01
14	9	0.03	0.07	15	11	0.01	0.01
14	10	0.04	0.01	15	12	-0.07	0.05
14	11	0.04	0.01	15	13	-0.05	-0.03
14	12	0.05	-0.03	15	14	0.01	-0.03
14	13	0.01	0.04	15	15	-0.02	-0.01

The following datum shifts can be used to locate the major datums in the above-defined reference system:

Datum	Stations used	Δx^1	Δx^2	Δx^3
NAD	9001, 9010, 9114	- 26	+155	+185
EUR	9004, 9008, 9115	- 93	-132	-143
SAD	9007, 9009	-284	+116	-410
ARC	9002	-130	-147	-347
AND	9003	- 88	- 36	+ 86
JAP	9005	-140	+510	+689
IND	9006	+293	+697	+228
ARG	9011	-167	+128	+ 25
HAW	9012	+ 59	-263	-203

When these values are expressed in polar coordinates, we have

Datum	Meridian component (arcsec)	Prime vertical component (arcsec)	Elevation (m)
NAD	- 0!'23	+1!'61	-28
EUR	+ 2.61	+3.45	+ 3
SAD	+12.87	+6.60	+14
ARC	+ 2.10	+2.50	+44
AND	- 3.00	-2.85	+10
JAP	-11.85	+9.63	+31
IND	- 1.35	+4.40	-64
ARG	+ 0.15	+2.85	+44
HAW	+11.85	-8.55	0

In addition, the following tilts have been determined:

Datum	Meridian component (arcsec)	Prime vertical component (arcsec)	Elevation correction (m)
NAD	+1!'5	+0!'2	- 2
EUR	+1.6	-1.2	+10
SAD	+0.5	+0.1	- 7

The geoids in North America, Europe, South America, and India, reduced to the new reference system, are given in Figures 3, 4, 5, and 6, while the generalized geoid is given in Figure 7.

The Cartesian rectangular coordinates of the Baker-Nunn stations in the C7 system are

Station	x	y	z
9001	-1.535758	-5.166993	3.401040
9002	5.056124	2.716484	-2.775815
9003	-3.983748	3.743099	-3.275592
9004	5.105591	-0.555232	3.769672
9005	-3.946695	3.366285	3.698841
9006	1.018205	5.471098	3.109613
9007	1.942768	-5.804075	-1.796960
9008	3.376881	4.403983	3.136253
9009	2.251819	-5.816912	1.327163
9010	0.976282	-5.601387	2.880241
9011	2.280574	-4.914567	-3.355456
9012	-5.466053	-2.404274	2.242169
9114	-1.264838	-3.466890	5.185473
9115	3.121274	0.592628	5.512693
9117	-6.007402	-1.111873	1.825725

The ellipsoidal coordinates of the same stations on an ellipsoid of a = 6,378,142 and f = 1/298.255 are

Station number	λ	φ	h
9001	253°26'48!'30	32°25'24!'71	1621 m
9002	28 14 51.47	-25 57 37.69	1571
9003	136 47 01.94	-31 06 04.18	169
9004	313 47 36.55	36 27 46.66	66
9005	139 32 16.39	35 40 23.00	95
9006	79 27 27.05	29 21 34.38	1866
9007	288 30 24.02	-16 27 58.04	2489
9008	52 31 11.18	29 38 13.59	1572
9009	291 09 43.96	12 05 24.92	-24
9010	279 53 12.95	27 01 14.21	-26
9011	294 53 36.10	-31 56 36.39	647
9012	203 44 33.22	20 42 25.64	3038
9114	249 57 22.79	54 44 34.01	688
9115	10 45 02.27	60 12 38.86	583
9117	190 29 09.10	16 44 38.31	14

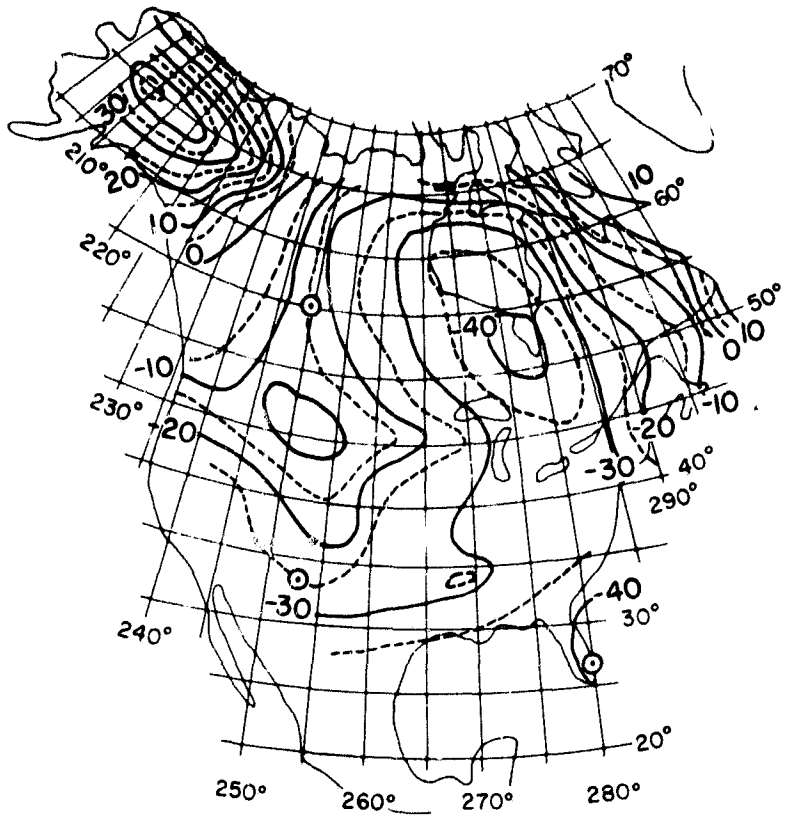

Figure 3. The astrogeodetic geoid (North America) in the C7 system.

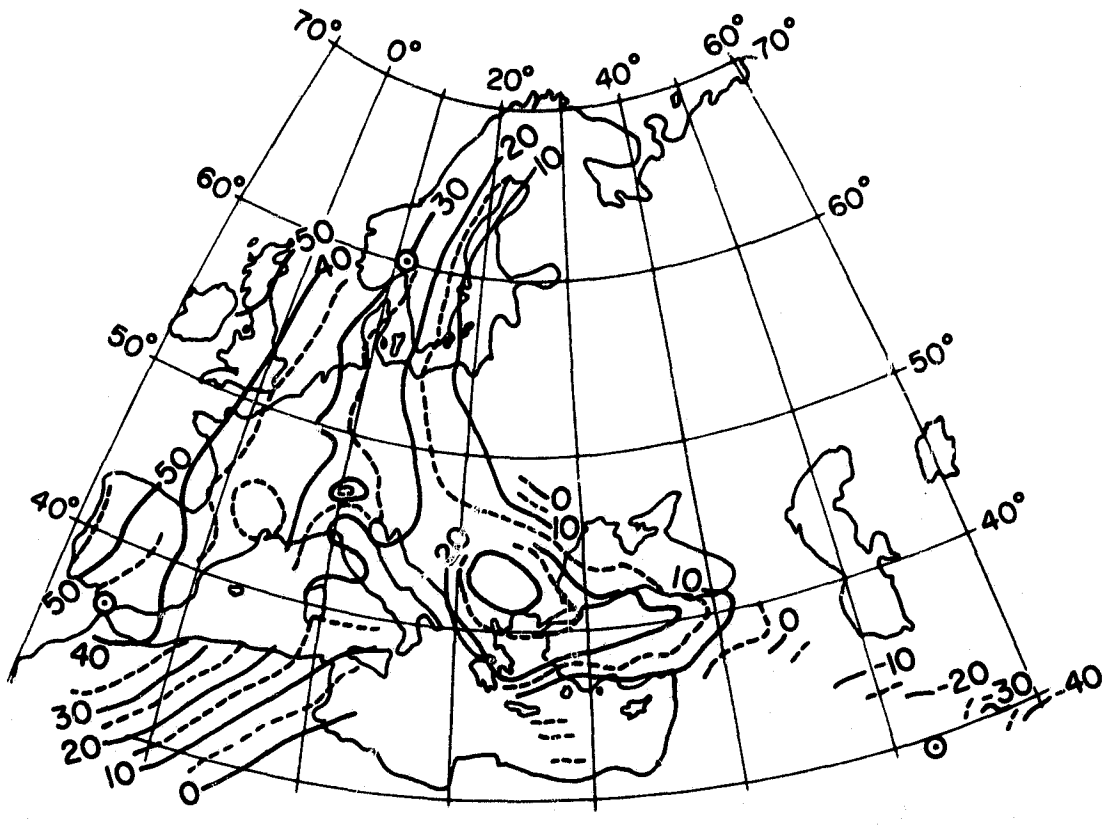

Figure 4. The astrogeodetic geoid (Europe) in the C7 system.

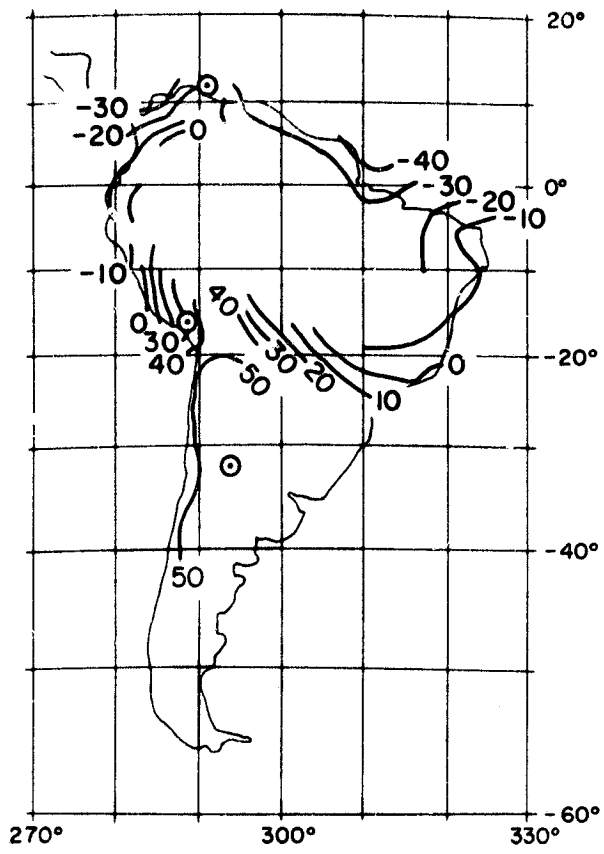

Figure 5. The astrogeodetic geoid (South America) in the C7 system.

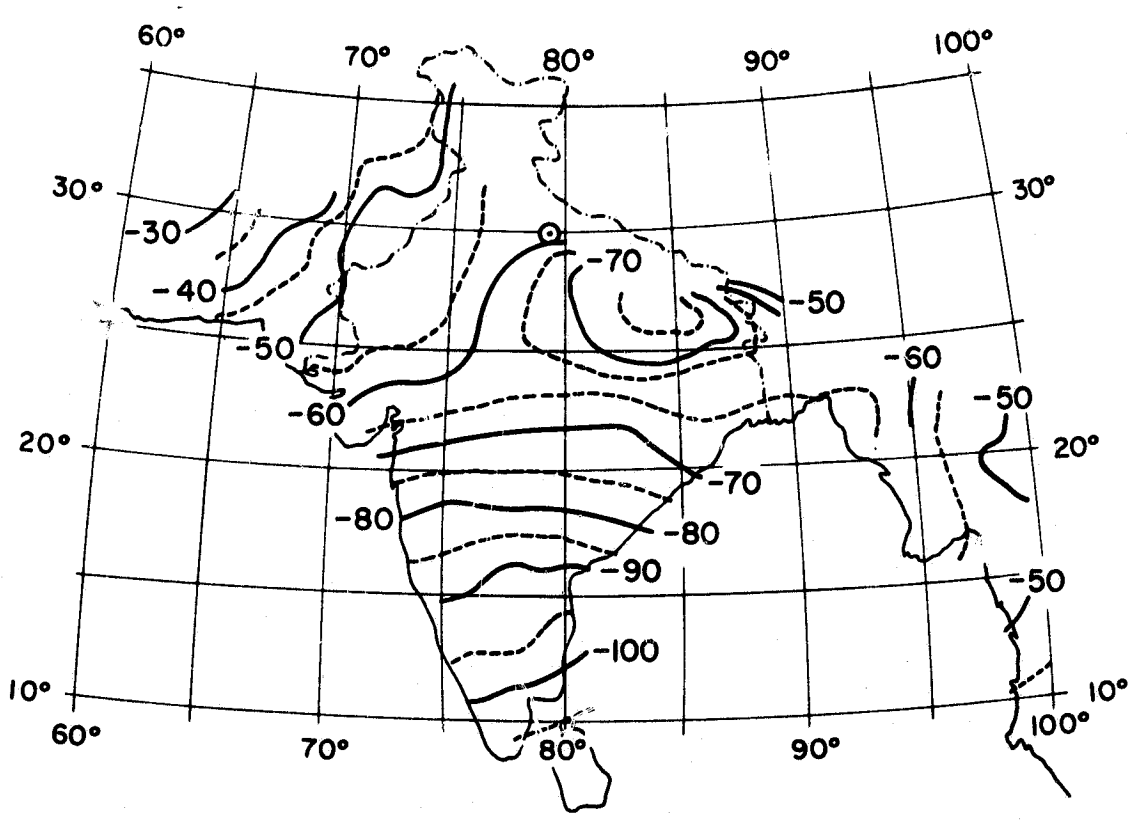

Figure 6. The astrogeodetic geoid (India) in the C7 system.

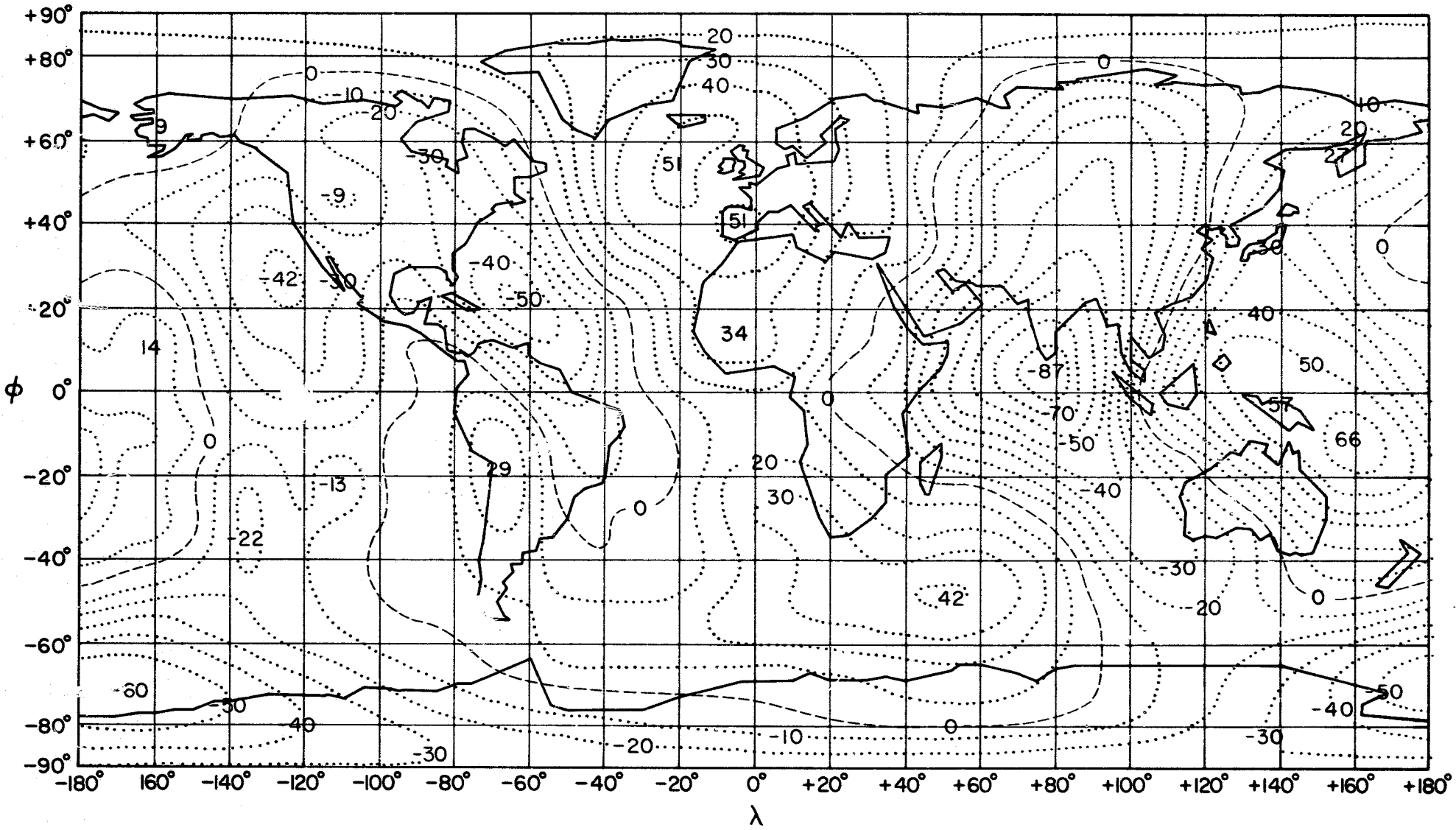

Figure 7. Generalized geoid.

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JUPITER, FLORIDA, INTERCOMPARISON EXPERIMENT

E. Horine, J. Latimer, D. LeConte, and M. Wolf

ABSTRACT

The instrumentation and operational procedures used in the photography of Geos 1 flashes with the Baker-Nunn and K-50 geodetic cameras at Jupiter, Florida, during the intercomparison experiment in 1966 are described. The six other optical systems participating in the test are summarized. Joint-observational data of the Baker-Nunn and K-50 geodetic cameras are analyzed.

JUPITER, FLORIDA, INTERCOMPARISON EXPERIMENT

E. Horine, J. Latimer, D. LeCompte, and M. Wolf

1. INTRODUCTION

The SAO observing station at Jupiter, Florida, was the scene of a field intercomparison experiment from November 1965 through May 1966. The purposes of this experiment were to test several optical systems and to calibrate their capability for the acquisition of high-quality Geos flash observations. This observing program was in support of NASA's National Geodetic Satellites Program Tracking Intercomparison (Berbert, 1967; Berbert, Reisch, and Stephenson, 1967). In addition to the SAO Baker-Nunn camera, the seven participating optical systems were

SAO K-50 geodetic camera
NASA MOTS 40-inch camera
NASA MOTS 24-inch camera
NASA PTH-100 camera
USAF PC-1000 camera
NASA Wild BC-4 camera
NASA Photometer .

This paper has three main objectives. The first is the documentation of the mode of operation of the Baker-Nunn and K-50 cameras. The Baker-Nunn, with its large aperture, could nearly always record the Geos flashes and was therefore regarded as a control or standard against which the other optical systems were compared. For this reason, its operation is described in detail.

The second objective is to describe briefly the other optical systems that were in operation at Jupiter. This material summarizes information the SAO station staff gathered as host for the test. It is not intended to be

definitive, and any errors in the description are ours. The scientific analysis of the results from the observations of the other systems is left to NASA (see, for example, Berbert et al., 1967).

Third, we analyze and document the results of the Baker-Nunn and K-50 mutual observations in an effort to give an indication of the quality of the K-50 observations.

2. PROCEDURES FOR THE PHOTOGRAPHY OF THE GEOS 1 FLASHING-LAMP SATELLITE WITH THE BAKER-NUNN CAMERA

2.1 The Baker-Nunn Camera

The optical system of the Baker-Nunn camera was designed by Dr. James G. Baker, and the mechanical system, by Joseph Nunn. The camera is a modified Super-Schmidt, F/1, consisting of a 31-inch spherical mirror and three corrector elements, two positive and one negative. The aperture and the focal length of the camera are both 500 mm. The field of view is 30° along the tracking axis and 5° along the perpendicular one, each frame being 12 inches long as photographed on 55.625-mm-wide film. The scale of the film is 2.39 μ arcsec^{-1}, and 80% of the light is placed on a 20-μ-diameter disk (Henize, 1960; Veis, 1963). The film used in the test was Estar-based, extended Red Royal-X.

The camera can be set in azimuth (0-360°), altitude (0-90°), and track angle (T.A.) (0-180°, measured along the path of the satellite; 90° is the culmination position). Oriented so that the satellite path lies along the long axis of the film, the camera is capable of tracking faint objects along this axis (from low T.A. to high T.A.) at an angular velocity preset within the range of 0 to 7000 arcsec sec^{-1}.

Film transport and shutter operation are controlled by a synchronous 60-cps electric motor that can be powered by the output of a power amplifier synchronized with an accurate 60-cps signal. The transport and shutter mechanisms are capable of being operated at "cycle rates" with periods of 2, 4, 8, 16, and 32 sec, the length of each exposure being 1/10 the cycle period. There are two exposures and two transports of film for each cycle (two advances per cycle) in normal operation. Another mode of operation is the "zero advances per cycle," in which the normal frequency and length of exposures are maintained without transport of film. A second, "chopper" shutter is provided for timing purposes. This shutter consists of two diametrically opposed blades continuously rotating so that a blade passes between the gross shutter and the film five times during an exposure, irrespective of cycle rate. The result, for the stationary mode of photography of a sunlit satellite, is a trailed image chopped five times against a star background of essentially point images. When the tracking mode is applied, the types of satellite and star images are reversed.

2.2 The Time Standard

The time standard at the Florida Baker-Nunn camera location is product ZA34675 of the Electronic Engineering Company (EECo) of Santa Ana, California (Electronic Engineering Company, 1965). It is a VLF timing system that uses the output of its 5-MHz Sulzer oscillator and provides a digital display by Nixie tubes that is presented on the film, together with the satellite image, by a slave clock upon a demand signal generated by points within the shutter mechanism of the camera. This display refers to the time of the middle of the center chop (demand position) of the satellite or star image; time is given in hours, minutes, seconds, and parts of seconds to 0.1 msec. At the demand time a strobe fires within the camera to illuminate a slit in front of the field. The slit image appears at the left end of each frame, in the normal viewing position, with a large, central break caused by the chopper shutter blade; it serves as the shutter calibrator (Zadunaisky, 1964). At the same time, a strobe fires in the slave clock, illuminating a data card with written information.

The EECo clock is originally set "on time" with a portable clock, Sulzer Model A5-2.5, that has been synchronized with the emitted WWV signal at NBS. Deviations from this on-time position are monitored on a counter in steps of 0.1 μsec by means of the VLF comparison. A record of the deviations, to the nearest half-microsecond, is provided by a chart recorder. The clock is also referred nightly to a received WWV signal, the Norrman clock (Electronic Engineering Company, 1965; Davis, 1958) originally used in connection with the Baker-Nunn camera, and the LORAN "C" signal transmitted from the U.S. Coast Guard, Jupiter LORAN station. It is normally kept within 100 μsec of the on-time position.

The EECo clock also provides an accurate 60-cps signal, which is used with an Electronic Development Corporation "Power Amplifier" to operate the synchronous 60-cps transport motor mentioned previously. The 60 cps of the clock can be phase-shifted to enable synchronization of the camera-shutter operation, and thereby the demand time, with a predetermined time.

2.3 Geos 1 Flash Photography

Geos 1 flash photography was conducted by use of the stationary camera mode, 8-sec cycle rate, and two advances per cycle. The gross shutter thus opened for 0.8 sec every 4 sec to receive the flashing light from the satellite that occurred at 4-sec intervals. Film was transported after each exposure. The demand time was adjusted by means of the 60-cps phase shifter so that the chopper shutter blades did not obscure the flash. Since the flash occurred precisely on the second, the demand time was offset from the second by an amount that ensured that both blades were clear of the film. This was 0.10 sec, and in practice, the camera shutter was synchronized so that the demand occurred at 59.90 sec, 03.90 sec, 07.90 sec, etc.

Predictions were received in the standard SAO 666 format. The predicted time was that of the center flash, i.e., 8 sec for a five-flash sequence and 12 sec for a seven-flash sequence.

Camera preparation began 10 min prior to the satellite transit. The camera was set to the predicted azimuth, altitude, and initial track angle. The angular velocity and final track angle were not required, since the stationary mode was used.

The timing shutter was synchronized. The advances-per-cycle control was placed in the "2" position 16 sec before the first flash. This allowed three tensioning frames, used in precision reduction, to pass through the camera (at 48, 52, and 56 sec) before the first flash. The flashes were observed in the apogee telescope attached to the camera during photography. Then, the camera was pointed toward a clear part of the sky, and the tracking angular velocity was set to 3000 arcsec sec^{-1}. The calibration frames were uced in precision reduction to determine the relationship between the gross and chopper shutters. If there were more flash sequences on the same transit, the calibration frames were left until after the transit was completed. One observer set the track angle and operated the camera controls; another set the azimuth and altitude and completed the observation record, which included the end frame count, an estimate of the portion of the field covered by clouds, the magnitude of the faintest star visible in the field, the humidity, the air temperature, the metal temperature, the wind speed and direction, the initials of the person controlling the camera, the cycle rate used (08), and the power source (either power amplifier or line power).

The processing of the film was as follows:

1. From two to four step wedges on the end of the film were exposed with a Kodak Model 60 sensitometer. The sensitometer contained a 3.0 neutral-density filter and a 21-step wedge with densities varying from 0.5 to 3.5.

2. The film was loaded onto a 100-ft capacity, 55.625-mm-wide Nikor reel.

3. The film was then developed in DK-60a for 11 min at a nominal 68°F.

4. It was placed in a stop bath, consisting of a 1.3% solution of acetic acid for 1 min.

5. The film was fixed in Kodak Rapid Fix for 5 min, or twice the clearing time.

6. Then it was fixed in a second bath of Rapid Fix for 5 min.

7. After being rinsed in water for 1 min, the film was placed in Hypo Clear solution for 5 min. In all the above tanks, agitation of the reel was performed every 60 sec.

8. It was washed in running water for 10 min and then placed in a 0.5% solution of Photo-Flo for 30 sec.

9. It was allowed to drain for 5 min at an angle of 45°.

10. The film was dried on a rotary film dryer for approximately 25 min.

3. THE SAO K-50 GEODETIC CAMERA

3.1 Description

The SAO K-50 geodetic camera (see Figure 1) consists of a K-50 aerial camera lens cone on an equatorial mount. It has an aperture of 228.6 mm and a focal length of 914 mm. There are two shutter systems, a gross shutter and a timing shutter. The gross shutter is located between the lens elements and is used for chopping star trails for preexposure and post-exposure calibration. The timing shutter is a chain-driven chopper powered by a synchronous motor.

The mount, a modified English polar mount, is equipped with sidereal drive. Testing has shown that while a 2-min exposure will yield star images of 45 to 50 μ, the sidereal drive is not of sufficient accuracy to be used during satellite photography; it is, however, convenient for focusing. Counterweights are used to balance the camera.

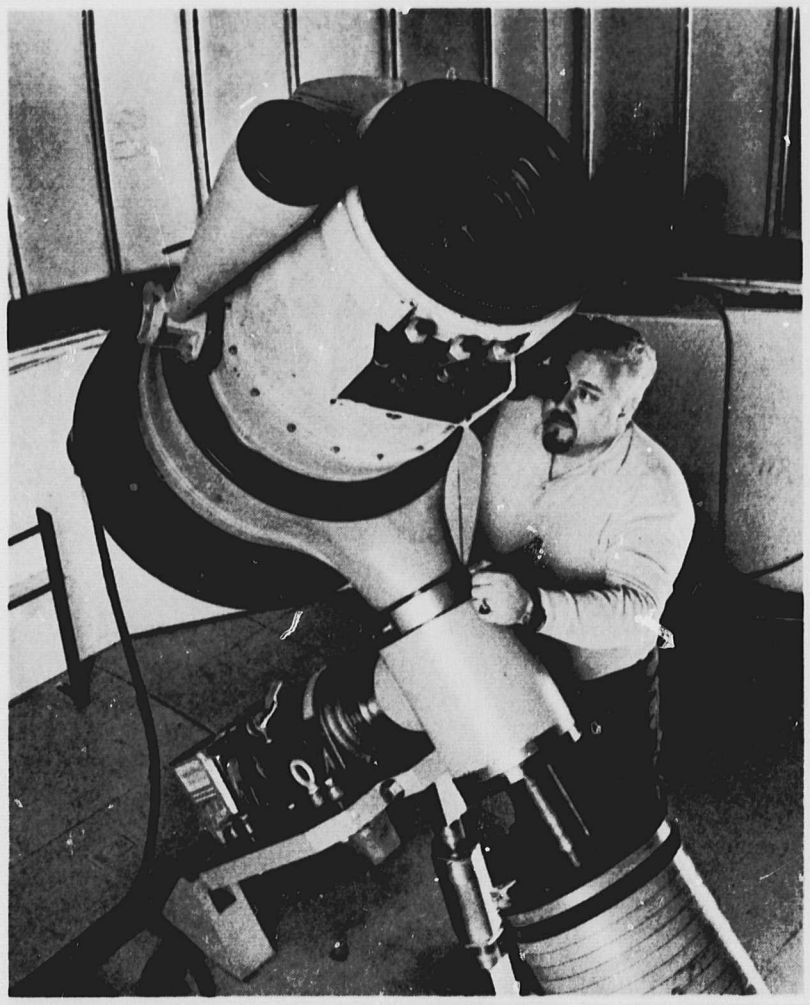


Figure 1. K-50 geodetic camera.

The camera can be fitted with backs accepting either 8- by 10-inch or 4- by 5-inch plates. Generally, the 4- by 5-inch back, which mounts the timing shutter, was used. This back can track fainter satellites by moving linearly in a direction perpendicular to the optical axis. It is driven by a variable speed motor and transmission, and it incorporates data presentation, calibration strobes, and time-of-day information. For Geos flash photography, the tracking feature of the back is not used.

Timing is based on a stable crystal oscillator that is fed to a synchronometer that divides the 100-kHz output of the oscillator to 1 pps and accumulates seconds, minutes, and hours.

The camera is controlled by a programmer, which uses a 1-pps output signal from the synchronometer to operate the gross shutter, clutches, calibration, and data-presentation strobes by automatic programming of sequences of 1-, 2-, 4-, 8-, 16-, or 32-sec exposures.

3.2 Geos Flash Photography Procedure

The camera was loaded with a Kodak Extended Red Royal X 4- by 5-inch plate, and the programmer was set for one 32-sec exposure with automatic precalibration and postcalibration exposures. The sequence included a precalibration exposure of 1 sec, a closed shutter for 13 sec, a 32-sec exposure for the flashes, a closed shutter for 13 sec, and a postcalibration exposure of 1 sec.

The Extended Red emulsion was developed for 9 min at 70°F in DK-60a with several seconds' agitation every minute. It was fixed in a two-bath Rapid Fix solution for about 20 min, placed in Hypo Clear solution for 2 min, and washed for 10 min in running water.

4. OTHER OPTICAL SYSTEMS

4.1 The MOTS 40-Inch Camera

The MOTS 40-inch focal-length camera has an aperture of 8 inches and a focal ratio of f/5.0 (see Veis, 1963; Hotter, 1967). Details of the camera and mount can be seen in Figure 2. The camera has a variable stop, but it was used at full aperture in the test. The basic construction of the camera consists of the optical cell and its elements, a straight tube, the variable stop, and a set of flat pressure springs to position the plateholder rigidly against the rear of the camera tube. The plateholder accepts an 8- by 10- by 1/16-inch glass plate and is equipped with a dark slide that is removed during the exposure and replaced immediately thereafter. The tube is nonrotatable and is mounted in a fork mounting equipped with sidereal drive. The two settings used are local hour angle (in degrees) and declination.

Declination is set manually by undoing a clamp lock on the declination axis using a T-shaped "key" and setting the desired declination on the declination-setting circle by means of moving the tube and refastening the clamp. Any desired declination can be set in a matter of a few seconds. The tube is short enough so that observations below the pole are possible. The hour-angle axis is also set manually, as the fork is connected to its driving gears via a light slip clutch. Manual setting of hour angle is necessary since the total drive limits are set by means of limit switches to about 5°. Coarse setting is done manually; fine setting, by means of the fast slew.

The shutter on this camera consists of a circular plate hinged at one edge so that it can pivot out and away from the lens system. The axis of rotation is perpendicular to the optical axis of the camera. Power is provided by a small 60-cycle synchronous motor. The arrangement is geared so that the "lid" flips out of the way in about 1 sec. Operation speed on closure takes about the same time. Limit switches actuate panel lights to indicate the shutter status.

The controller contains two enlarging photo timers, one to time the shutter and the other to time the drive-on period. Switches control the drive motors. Provision is made for both forward and reverse in either of two speeds: sidereal rate or fast slew.

The camera and its mount and control unit are housed in a fiberglas astronomical dome (see Figure 2a). The vertical sliding section and the dome itself are motor powered, enabling the open section to point in any desired direction.

The MOTS 40-inch camera used Kodak 038-01 emulsion on plates 8 by 10 by 1/16 inch. Diameters of the faintest star images retaining a hard core were 50 μ near the center and 100 μ or more at the edge. Focusing was achieved by means of a ground-glass back placed where the plateholder normally would fit.

Figure 2. NASA MOTS 40-inch camera.

(a) The dome of the MOTS 40-inch camera. Note the access door (extreme left), the horizontally sliding segment (right, with the NASA emblem), the vertically sliding segment (top), and the camera and control unit (inside dome).

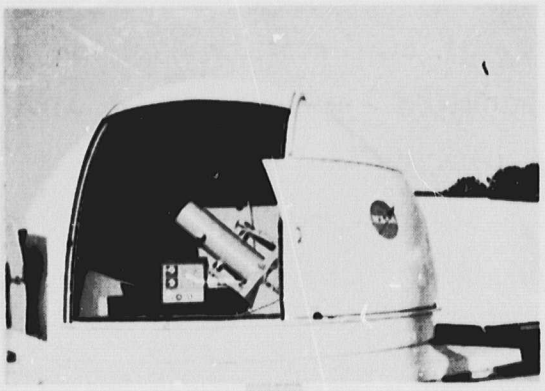
(b) A view inside the MOTS 40 dome. Visible in this photo are the control unit (left), the fork mount, the camera tube, the hour-angle setting circle (at the base of the fork), the declination setting circle (at the tip of the top fork prong), and the "T" key for declination lock (just to the left of the setting circle).

(c) Close-up of the fork and the tube. Note the plateholder (the dark slide has been partially removed), the setting-circle light (the small box below the plateholder), and the shutter drive and light cables (left).

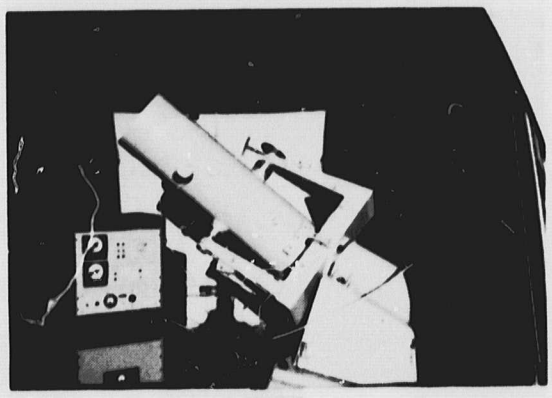
(d) A view down the camera tube mouth into the optics. The hour-angle setting circle (bottom right), the setting-circle light, and the shutter motor housing (the cylindrical projection on the camera tube) can be seen.

(e) Jupiter, Florida, Baker-Nunn observer Thomas F. Butler poses with the control unit of the MOTS 40. The camera tube and shutter motor housing (top right) are shown.

(f) Close-up of the control unit. Note the drive and shutter timers (top left), the drive speed and direction switches, the shutter-position indicator lights, and the drive and shutter power supply and voltage control (lower rack unit).



(a)



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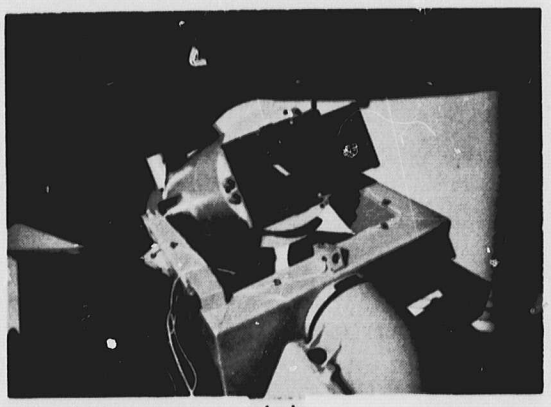

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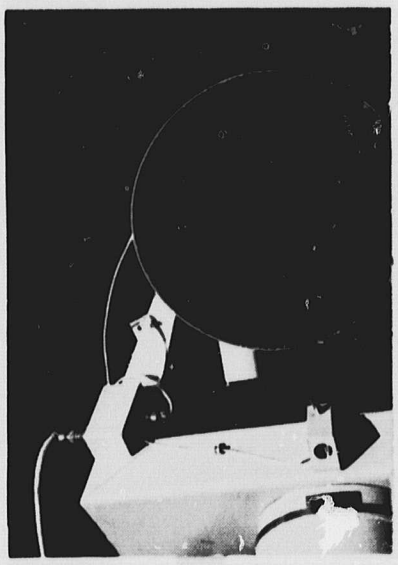

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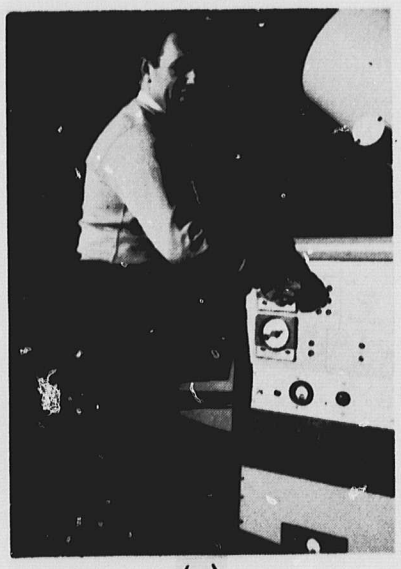


(e)

(f)

Figure 2. NASA MOTS 40-inch camera.

The first successful Geos flash plate with the MOTS 40 was taken on December 1, 1965. The plate was developed for 18 min in Acufine developer. The seven equispaced images that were recorded appeared to be almost at the limit of the camera's sensitivity. The images had diameters of 70, 52, 59, 60, 62, 55, and 69 μ. They had the same apparent density as that of a 9.0- to 9.5-mag star given a 35-sec exposure. The magnitude limit of the camera for a 35-sec exposure is roughly 10.0.

The procedure for photography yields two star images, each of 35-sec exposure, separated by 15 sec of diurnal motion. The second image has a 10-sec "tail." This duality of star images enables Geos flash images to be easily identified.

4.2 The MOTS 24-Inch Camera

All equipment and features of the MOTS 24-inch camera system are identical in every respect to the MOTS 40-inch camera system, with the exception of the optical system. The essential features of the optical system are

Focal length	24 inches
Aperture	4 inches
f/ratio	6.0 .

See Veis (1963) and Hotter (1967) for further information on this camera.

4.3 The PTH-100 Camera

The PTH-100 is a ballistic camera with a focal length of 40 inches; it is quite similar to the PC-1000. The full aperture is 8 inches or f/5.0, and the camera was stopped down to f/5.6.

The mounting of the PTH-100 can be seen in Figure 3. The setting axes are altitude, azimuth, and position angle. Details of the position-angle setting circle can be seen in Figure 3d. The addition of position angle to the usual altitude and azimuth settings allows the plate to be placed in any desired orientation in space. This enables the satellite to trail along any direction on the plate. A position angle of zero was used during the test.

There are three leveling screws and a leveling bubble on the base of the mount. The shutter consists of a single five-bladed "capping shutter," which is used for calibration of star exposures.

The controller unit consists of a WWV receiver, the controller itself, and a digital clock. The controller places the fiducial marks on the plate and gives the shutter the pulses required to give the proper calibration exposures. The fiducial marks are placed manually with a switch for precalibration and postcalibration. The capping shutter is controlled by means of a switch riding on the notched rim of a motor-driven "program disk." The disk rotates once in 65 sec, giving four exposures per revolution: 1 sec exposed, 20 sec closed, 1/2 sec exposed, 20 sec closed, 1/4 sec exposed, 20 sec closed, 1/8 sec exposed, and the remainder of the cycle closed. Two sequences are used for precalibration, separated from each other and from the satellite exposure by 20 sec. The shutter is opened and closed manually by means of a switch on the controller. It is opened for the satellite at T = 10 sec and closed at T = 30 sec. Postcalibration is similar to precalibration, again consisting of two sequences; but now the program disk goes in reverse, giving the shorter exposures first. A two-channel pen-and-ink recorder was used to record the times of operation of the capping shutter against WWV (seconds ticks).

Emulsion was 103F on a 190-mm by 250-mm by 1/4-inch plate. Processing was first carried out in D-19 for 4 min. Soon the processing time was increased to 6 min, and finally to 13 min.

Figure 3. The PTH-100 camera.

(a) The camera. Note the concrete plinth, the camera leveling screws (two visible), the sighting scope, the position-angle-axis locking knob (next to the scope), and the leveling bubble (small circle next to left-most leveling screw).

(b) Rear view of the PTH-100 camera. Shown are the scope, the data card slot (1/3 of the way down, center of the photo), the plateholder back, and the azimuth lock and leveling knobs (bottom left).

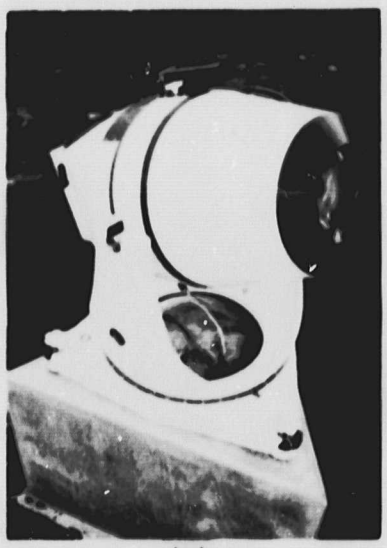
(c) The PTH-100 and its control unit. Note the control rack, the timing recorder (sitting on top of the control rack, next to the cables), and the control cable entering at the bottom of the camera.

(d) Side view of the PTH-100. Visible are the altitude setting circle, the altitude view hold (black circle above the knob), the altitude lock knob, the position-angle-axis setting circle, and the scope.

(e) High-angle shot of the PTH-100. The camera, the control unit, and the recorder can be seen.

(f) Control unit of the PTH-100. Note the WWV receiver (top), the shutter control unit (middle), and the digital clock (bottom).

(g) SAO observer Michael R. Wolf is shown setting up the digital clock for a Geos pass. The Baker-Nunn camera house is in the background.



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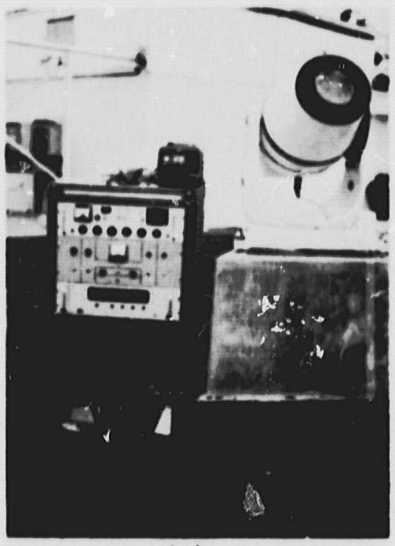

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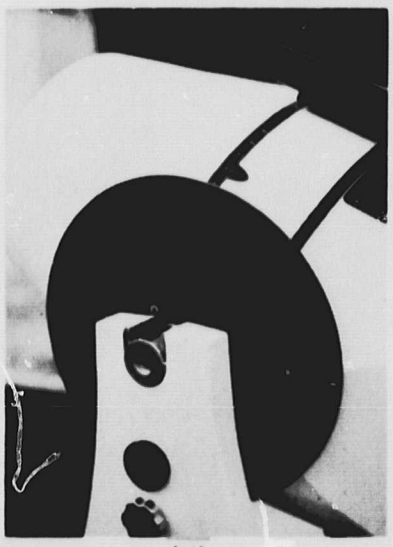

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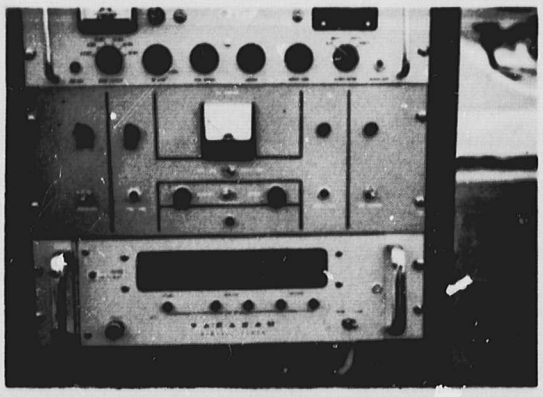

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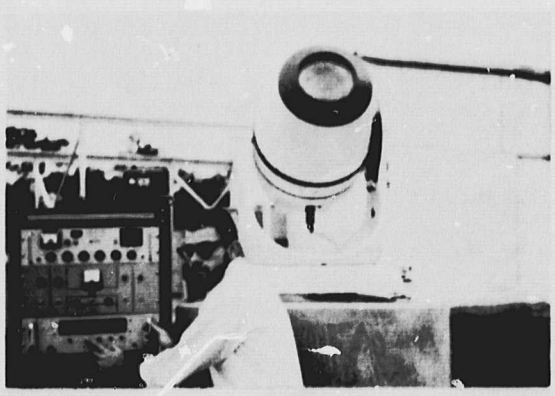


(g)

Figure 3. The PTH-100 camera.

The PTH-100 has an interesting feature: A four-density gray scale is exposed on the plate at the same time the fiducial marks are, thus providing an intensity calibration.

4.4 The PC-1000 Camera

The equipment and features of the PC-1000 camera are basically similar to those of the PTH-100, so they will not be described here. See Williams (1963) for a more complete description of this camera.

4.5 The Wild BC-4 Camera

The Wild BC-4 camera (see Taylor, 1963) is a complex ballistic camera that uses plates 190 mm × 250 mm. The f/2.6 lens has a focal length of 303.92 mm. The field of view is 33° × 33°. Figures 4 and 5 show details of the camera. (Note: This particular camera was a NASA, not a USCGS, BC-4 camera unit.)

The camera is provided with two basic shutters: a capping, or external, shutter (multibladed type, as seen in Figure 4b) and a chopping, or internal, shutter. The capping shutter is used for providing star calibration exposures and for photographing Geos, while the internal shutter is used for chopping satellite trails. The internal shutter is composed of a set of two disks pivoting at the edge and geared together, driven by a 500-cycle synchronous motor, and a third disk, which moves in front of the motor-driven ones. For this setup to act as a shutter, the two disks must be synchronized to be open when the third one is. For large corrections (> 200 msec), the power is switched on and off until the desired correction is obtained. The two-disk set has an electromagnetic pickup, similar to a magneto, to indicate its open position electrically. The third disk has a photoelectric device to do the same. These pulses are displayed simultaneously on an oscilloscope and phased together first by interrupting the power, then by making fine corrections by means of a motor-driven resolver; final corrections are made by hand adjusting the resolver. Only the capping shutter is used for Geos observations; the other shutters are opened and locked out of the way.

Star calibration exposures performed by the capping shutter are as follows: 60 sec exposed, 30 sec closed, 2 sec exposed, 30 sec closed, 1 sec exposed, 30 sec closed, 1/2 sec exposed, 30 sec closed, 1/4 sec exposed, and 30 sec closed. Postcalibration is the same as precalibration, but in the reverse order.

The system is equipped with a 30-channel chart recorder to record various system operations, e.g., 1-pps and 10-pps markers, fiducial marks, time of day, capping shutter command, and echo pulses.

Processing for the BC-4 plates is 13 min in D-19.

4.6 Photometer

Two photometers operated by Wolf Research, Inc. (see Moss, Hyman, Brooks, and Mollere, 1966) were located at the Florida station during the intercomparison test. Precise photometer readings of several bright stars along the path during the time of a Geos pass were taken. The purpose was to determine the extinction factor at various points along the satellite's path. The photometers were both of the same type: Pritchard photometers, made by Spectra of Hollywood, California. Both were mounted on the same tripod, with their optical axes parallel. They were equipped with various disks to set the beam width at fixed setting of 2°, 1°, 30', 15', and 7'. Fixed values of attenuation are provided for in the optical system (neutral-density filters). There were two sets of filters with each photometer, one called X and the other, Y. The first had settings of X1, X10, X100, and X1000; Y had settings of X1, X1000, and closed (opaque).

Calibration was carried out by use of calibrated light bulbs in addition to the regulated power supplies. The two sources available were 30.8 candlepower and 100 candlepower. Calibration was performed at a distance of 90 feet from the source to the photometer.

Figure 4. The Wild BC-4 camera.

(a) The camera is in the left foreground; the control van, in the right background.

(b) The bladed shutter of the camera is partially open; the shutter solenoids appear at the top.

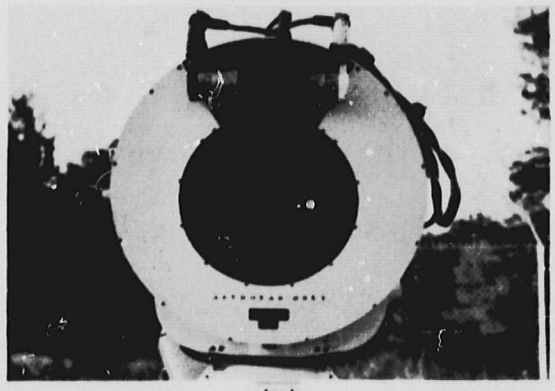
(c) The altitude setting circle and the leveling bubbles (horizontal cylinders at the top left and the bottom center) are shown.

(d) View of the BC-4 camera and the tripod mount.

(e) Photograph of the cable junction box and the leveling screw (at the right of the base, just above the mounting plate).

(f) Rear view of the BC-4. Note the plate-loading handle (extreme top right), the altitude lock (on top of the altitude bearing), and the azimuth lock (behind the cable at the bottom center).

(a)



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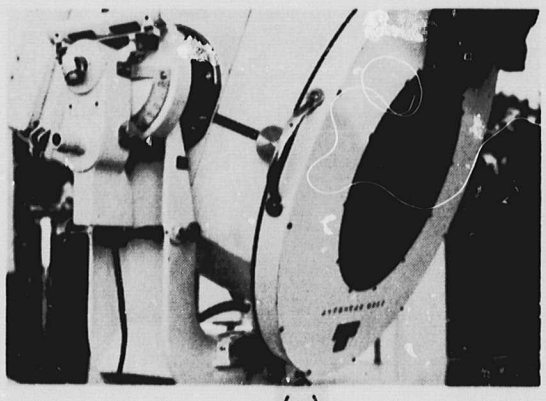

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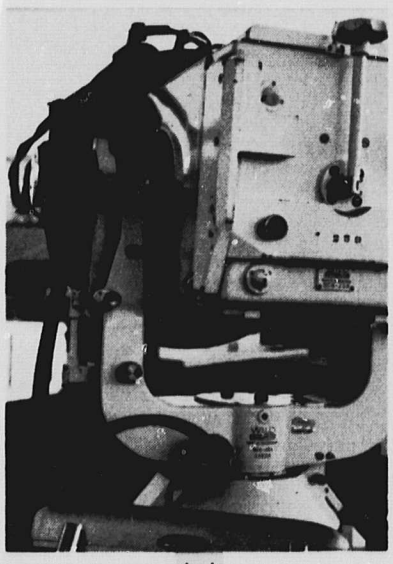

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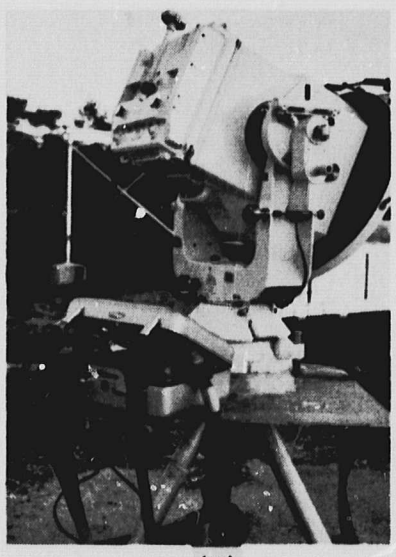


(f)

Figure 4. The Wild BC-4 camera.

Figure 5. The Wild BC-4 camera.

(a) Control unit of the BC-4 (inside the van). Note the Bendix observers controlling the camera during the actual run.

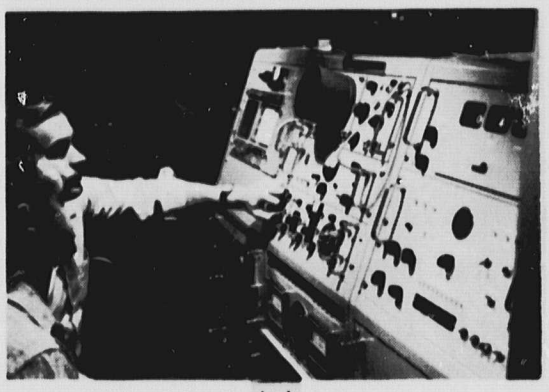
(b) Leveling screw of the BC-4.

(c) 30-channel electric spark recorder inside the BC-4 control van.

(d) Same as view (a).

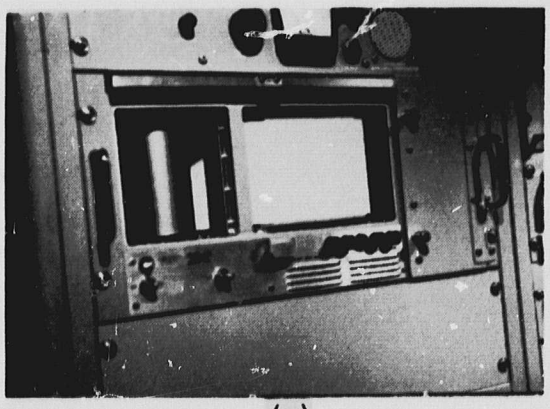
(e) Ronald Brooks (Wolf Research, Inc.) checks the image sizes on the small comparator.

(f) Photograph of the Bendix crew at work.



(a)

(b)



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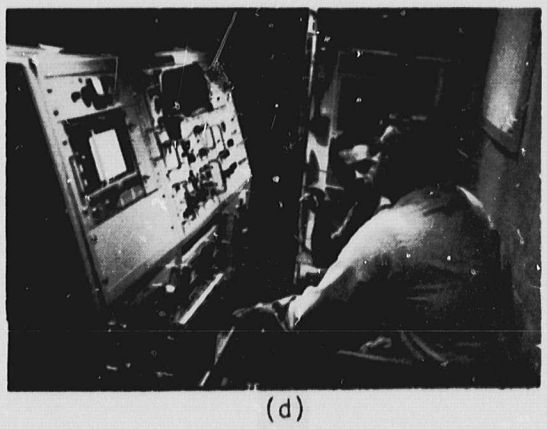

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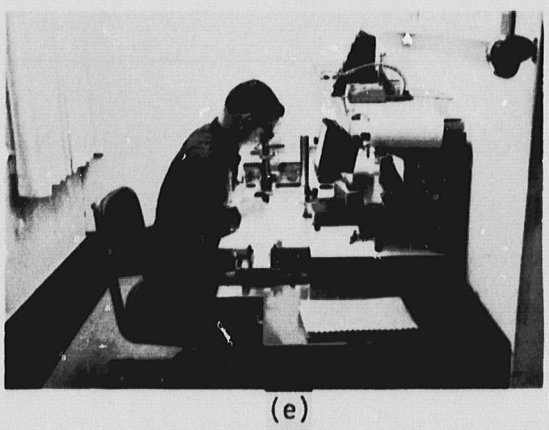

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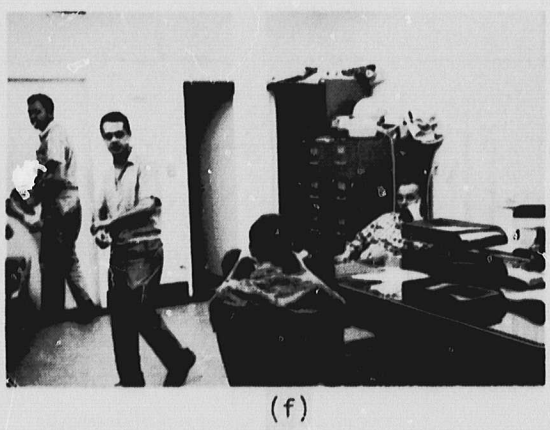

(f)

Figure 5. The Wild BC-4 camera.

5. DATA ANALYSIS; JUPITER K-50 AND BAKER-NUNN COMPARISON

As a result of the intercomparison experiment, 12 Geos flash sequences photographed simultaneously by the K-50 and the Baker-Nunn (B-N) cameras were reduced. The data derived appear in Table 1.

Table 1. Flashes photographed

Sequence number	Date (1966)	Time (UT)	Flashes observed	
			Baker-Nunn	K-50
1	February 9	0037	7	7
2	February 20	1030	7	7
3	February 20	1041	7	7
4	March 2	0907	7	7
5	March 12	0540	7	7
6	March 12	0545	7	7
7	March 20	0416	7	7
8	April 2	0103	7	7
9	April 13	0149	7	4
10	May 3	0336	7	7
11	May 3	0536	7	7
12	May 3	0541	7	6

The 164 flash images were measured; from these data, 12 pairs of synthetic simultaneous observations were derived. (A synthetic observation is a data point taken from second-order polynomials fitted by the least-squares method to the discrete actual observations. See Aardoom, Girnius, and Veis (1966)). The synthetic-observation technique is a method of smoothing data to yield further accuracy. This comparison between Baker-Nunn and K-50 synthetic observations is expected to agree more closely than would individual flash observations.

At the time of the test, the cameras were positioned in the Mercury datum as follows:

Baker-Nunn	K-50
ϕ = 27° 01'14!'68	ϕ = 27° 01'14!'52
λ = 279° 53'13!'81	λ = 279° 53'13!'43
H = 14.9 m	H = 13 m .

The relative locations of the cameras can be seen in Figure 6.

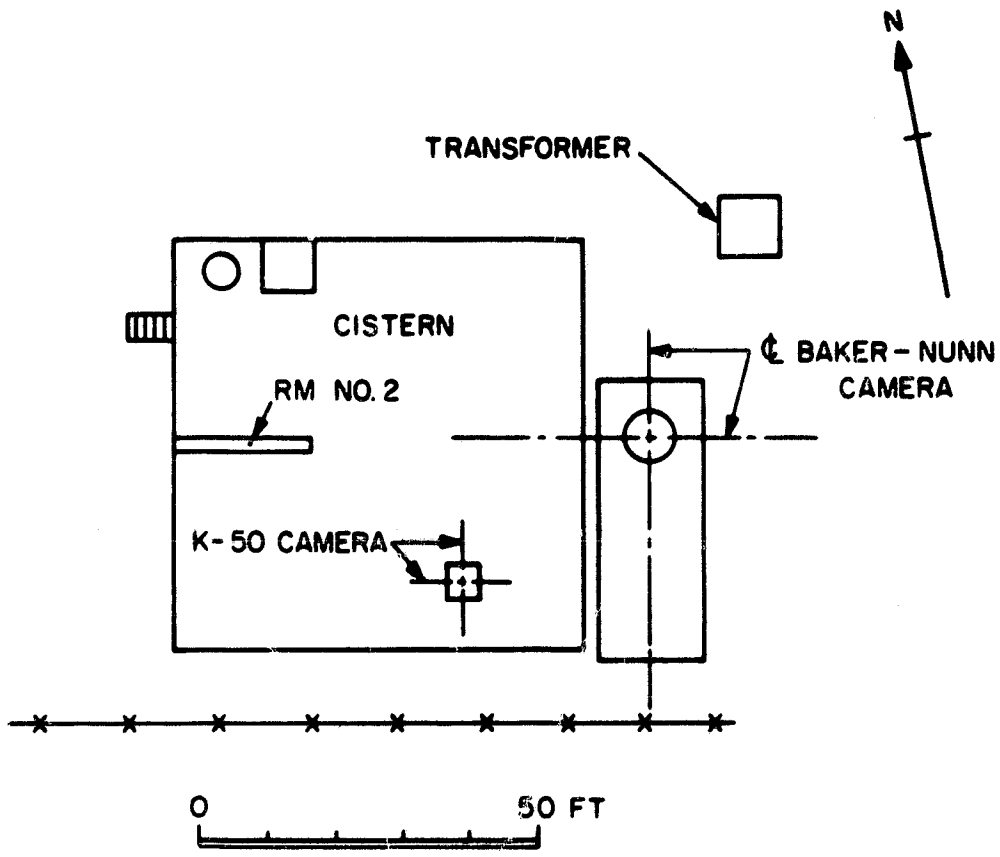

Figure 6. Location of the Baker-Nunn and K-50 cameras.

Because of the physical separation of the cameras, the eccentricity correction necessary to reduce either set of observations to an equivalent set valid for observations from the other camera was calculated and applied. This correction was in most instances less than 1 arcsec. The differences (in the α, δ coordinate system) are presented in Table 2.

Table 2. Differences between Baker-Nunn and K-50 observations (in arcsec)

Sequence	$\alpha_{(K-50)} - \alpha_{(B-N)}$	$\delta_{(K-50)} - \delta_{(B-N)}$
1	-0.55	-0.86
2	-0.21	-0.30
3	+0.73	-0.32
4	+0.10	-2.37
5	-0.02	-1.26
6	+1.97	-0.26
7	-0.59	-0.96
8	+2.60	+0.61
9	+1.58	+0.50
10	+1.11	-0.68
11	+1.20	-1.18
12	+0.06	+0.09

The average differences are

$$\alpha_{(K-50)} - \alpha_{(B-N)} = +0.67 \text{ arcsec} \quad , \quad \delta_{(K-50)} - \delta_{(B-N)} = -0.58 \text{ arcsec} \quad ,$$

and the standard deviations of the average differences (by use of Bessel's correction for a small number of measurements) are

$$\sigma_\alpha = 1.03 \text{ arcsec} \quad , \quad \sigma_\delta = 0.83 \text{ arcsec} \quad .$$

Owing to the small number of data, we have drawn no quantitative conclusions as to the relative accuracies of the K-50 and the Baker-Nunn camera systems.

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DATA PREPARATION AND EVALUATION FOR GEOS 1 TRACKING SYSTEMS

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ABSTRACT

We have investigated the preparation and use of data from the various tracking systems, particularly electronic systems, carried on Geos 1. We converted the data into a format usable at SAO, investigated the relative accuracies of the several tracking systems, and tested the various data together in determining orbits and station coordinates.

DATA PREPARATION AND EVALUATION FOR GEOS 1 TRACKING SYSTEMS

L. H. Solomon

1. DATA REDUCTION AT SAO

As a means of providing the large increase in data required by the current SAO geodetic program, we have investigated the use of data from various Geos 1 tracking systems, particularly electronic systems. We converted the data into a format usable at SAO, investigated the relative accuracies of the several tracking systems, and tested the various data together in determining orbits and station coordinates. In the following we outline the tracking material treated by SAO.

There are various ways to approach the evaluation of tracking systems. We can collocate two stations of different systems, e.g., ranging, Doppler, or angular measuring. Then we can remove all but purely instrumental errors from a direct comparison of the two systems. We can also treat the data from the different operating systems (i.e., several stations per system, operating independently), comparing the orbits derived from the data of each system separately and of the several systems taken together. This method introduces such difficulties as station weighting, station-coordinate errors, orbit-theory inaccuracies, and timing errors. However, since SAO has access to the data obtained from other systems and normally cannot easily move its stations, we have attempted in this study to use the orbital method.

1.1 SAO Baker-Nunn Optical

These data, produced by us, are used as a standard of comparison for the other tracking systems. The reduction and validation of the data are described by Lambeck (1968). Satellite angular positions are given in time (A_1), right ascension, and declination.

1.2 SAO Laser

Information from the laser system includes range data obtained by the original test system, described by Lehr, Maestre, and Anderson (1968).

1.3 SECOR

The data were taken directly from the National Space Science Data Center (NSSDC) and converted to the SAO format, i. e., UTC to A_1, and range.

1.4 TRANET (APL Doppler)

Data from this system are obtained from NSSDC. The data are given in the form of oscillator base frequency and observed frequency at 32-sec intervals during a satellite transit over an observing station. We convert these data to range rate ($\dot{r}$) by using the Doppler equation $\dot{r} = (\Delta f/f_0)c$ ($c = 299792.5$ km sec^{-1}). The given UT-C time is converted to A_1. For our preliminary work with this material, we neglected the troposphere correction, described by Hopfield (1963, 1965). Such neglect at low-elevation angles can yield range-rate errors up to a few centimeters per second or station-position errors up to several hundred meters on passes with poor station geometry. For our final processing of the TRANET data, a preliminary orbit will be used to compute topocentric satellite positions, from which the troposphere correction will be determined.

1.5 Goddard Range and Range Rate (GRARR)

The data from this system were obtained directly from Goddard Space Flight Center (GSFC) in an essentially raw form. Only very poorly transmitted data had been removed from those that SAO received.

The reduction process was generally derived in conjunction with the groups working at GSFC. Time was corrected from that of the tracking station to UT-C (WWV emitted), by use of propagation times provided by GSFC, and thence to A_1 (at the station) for consistency with other SAO work. The station time was obtained by the addition to satellite time of one-way signal propagation time.

Range was corrected for:

A. Tropospheric retardation (r = 2.17 m/sin (elevation)). The constant 2.17 is an average value taken from Central Radio Propagation Laboratory (CRPL) ray tracings.

B. Zero-set bias for each station (obtained from GSFC as a small time correction to be applied to the range time count). Current values are less than 10 m.

C. Mount correction (due to the linear difference in centers of the two-mount axes). The maximum value is 1.2 m.

D. Channel time, based on the different delays in the two channels of the satellite transponder. These are based on prelaunch calibration (best estimates) and are given as functions of frequency offset from base frequency. This correction is on the order of a few microseconds, or a few meters in range.

No ionosphere correction was made to the data used in the preliminary SAO studies. Such a correction will be applied to material to be used in future work by use of the ionosphere data and a correction procedure obtained from GSFC. Neglect of the ionosphere can introduce a 6-m range bias (worst case) at 30° elevation. The range data were smoothed after conversion when 40 sequential data points were taken and fitted by a cubic polynomial. Bad points were deleted before a synthetic observation (range) and time were obtained. Because of the omission of the ionosphere correction, all observations made at elevations less than 30° were deleted in actual use, although our conversion method should be accurate within 1 m to 10° elevation or less for all other corrections.

Range-rate data were converted directly from the raw received-frequency data by use of a modified Doppler equation (Kruger, 1965). No corrections were applied to the range-rate data in our preliminary processing. Failure to take the troposphere into account can introduce errors up to 2 cm sec^{-1} at 30° elevation. Neglect of the ionosphere yields errors less than 10 cm sec^{-1} (daytime) or 3 cm sec^{-1} (nighttime) at 30° elevation for satellites in orbits lower than that of Geos. Both troposphere and ionosphere corrections will be included in the final use of these data.

1.6 Minitrack

Minitrack data are obtained directly from GSFC in the form of time (UT-C) and direction cosines (ℓ, m). These are converted for SAO use to A_1 time and azimuth, altitude. An ionosphere correction has been applied to this material by means of ionospheric data and a formulation provided by GSFC (J. Siry, 1967, private communication). A tropospheric refraction has also been applied by use of an average value of refractive index for each station. An improvement in ionospheric refraction might be possible if, instead of the predicted ionospheric electron density, a posteriori measured values were used in the determination of the refractive index for each set of observations. A similar note would apply to the GRARR ionosphere corrections.

2. RESULTS OF THE EVALUATIONS

Once reduced to a usable format, the data were checked in various ways. The tests were made primarily to ensure proper conversion from the original data and to allow detection of any gross errors. We hope also to obtain reasonable estimates of relative system weights for future work in combining data sets and to gain some knowledge of any neglected systematic corrections (e.g., system or station biases). The tests and preliminary results are described below.

2.1 SAO Baker-Nunn Optical

From Lambeck (1968) the accuracy of a single reduced observation is taken as approximately 1.8 to 2.0 arcsec. Our experience has been that data of good quality will produce an orbit whose standard error is approximately equal to the assigned unit weight of one observation. This has conservatively been taken in the past to be 4 arcsec. Hence, we have assumed here that the optical reference orbits used to check other systems have a standard error of 4 arcsec or better.

For the evaluation of non-SAO tracking systems we had occasion to compute orbits over intervals of 10 and 3 days and the month including the launch. The mean residuals are given in Table 1.

Table 1. Baker-Nunn results

Orbit	Mean residual (arcsec)
1 month (November 8-30, 1965)	3.01*
10 days (November 24-December 3)	2.05
3 days (November 27-30)	1.90

*Includes many poor observations during the 5 days after November 8.

2.2 SAO Laser

The a priori precision of the laser system is limited now by the counter used to measure travel time of the light pulse. The 10-nsec counter limits the counting to about 3 m round trip, or approximately 1.5 m in range (Lehr, Maestre, and Anderson, 1968). Since the geopotential coefficients in the orbit theory used as a reference are estimated by Gaposchkin (1967, private communication; 1968, and this volume) to yield accuracy only to the 30-m level, we could perform only a consistency check on the laser observations. This

has been done as a comparison against reference orbits derived from optical observations only and in an orbit determination in which the laser observations were used with the optical data. Results of both comparisons indicate that the laser data have no systematic errors at the 30-m level. However, without direct comparisons either with orbits or with other data of equivalent precision, we cannot state that the actual accuracy of this system is the theoretical value.

2.3 SECOR

When the data were tested against the orbits, a variety of difficulties were encountered. Upon consultation with various other agencies, we decided that the problems were in the original data and we chose to forego use of the data until the problems were corrected and the data resubmitted to NSSDC. However, the precision of the data appeared to be on the order of 5 to 10 m, judging from the internal consistency of the residuals from orbit comparisons.

2.4 TRANET

The converted data were compared with range-rate data computed from the reference orbits. Residuals (O-C) were scanned pass by pass for internal smoothness and consistency, and the final set of residuals (after some poor data were removed) was used to compute corrections to the adopted station coordinates. Although it should have been possible to reduce the residuals for each pass to quite small values (1 to 2 cm sec^{-1} or less), we found many cases of larger residuals for entire passes and systematic variations of residuals during a single station pass. The apparent reason for this difficulty is that we neglected, in our initial processing, to solve for the oscillator base frequency as a constrained unknown, a policy followed by other users of these data. Hence, any small error in the adopted value of base frequency will appear as a "skewness" in the observed path of the satellite above the station. Variations in the rate of the station or satellite oscillator on the order of 1 part in 10^{10} will cause a systematic error in a satellite range rate of 3 cm sec^{-1}. If the station oscillators are not continuously frequency

controlled with reference to some good standard (such as the VLF radio station NBA or an equivalent VLF transmission), errors of this size may easily enter the system.

Other neglected effects possibly influencing the results are time errors and station-coordinate errors.

2.5 GRARR

Once the programs for format conversion were prepared, it was reasonable to begin tests for various stages of the conversion. These took the form of both internal consistency checks and tests against other systems.

As part of the reduction procedure we have taken the view that the number of data points produced by the GRARR system is very large and the same information might well be conveyed by a much smaller set of data, if assurance could be provided that no information would be lost in the transformation. One possible method, still to be finally tested, is to represent the data for each pass by a set of parameters, such as a set of orbital elements and equations representing the residuals. The method we used for the work described here was to take successive blocks of 40 observations in a pass and fit them with a cubic polynomial. Single observations with residuals $> 3\sigma$ were deleted from the fit. When the polynomial converged in a least-squares fit, it was used to determine a synthetic observation by interpolation. These synthetic observations, or a subset thereof, are used in the subsequent SAO analysis.

One internal consistency check is simply to examine the individual observation residuals from the cubic polynomial. Since a cubic seems to fit up to 100 sec of data with no evidence of systematic residuals, residuals from a 40-sec fit (data taken 1 point sec^{-1}) should be small and random. We found this prediction to be fulfilled in general; no systematic trends are now seen in the individual data points. An occasional large break in a pass occurs, leaving a gap in the data. When we fit a cubic to data of this sort, the resulting fit is generally poor and the arc is deleted, since a cubic will not describe the satellite path adequately for a time longer than 120 sec.

Another internal check on the data is an examination of the standard error of fit of each of the 40-point arcs. We expect that this is consistent with the a priori accuracy estimate of the tracking system and that the standard errors of all arcs in any pass should be roughly equal. In particular, if noisy data appear, they should affect all portions of a pass equally. For most cases this was true; values of σ range from 3 to 20 m or more. However, from early April 1966 to mid-1966, there was a large percentage of the range data for which the start of the pass was noisy ($\sigma \sim 20$ m at the start of the pass, $\sigma \sim 5$ to 10 m at the end of the pass). Perhaps inadequate warmup time of the ground station equipment accounts for this noise. No recent material seems to show this effect, nor do the range-rate observations.

Examination of the data in the above fashion gives us a fair idea of their precision and of the repeatability of a measurement, but it does not yield an estimate of the absolute accuracy of any single measure. To provide such an estimate and to produce some objective means of picking good observations from the general data set we examined the fit of these data to reference orbits and correlated residuals with the internal noise of the data.

We first computed residuals in range and range rate from a reference orbit derived from SAO observations only. The residuals for the Madagascar and Carnarvon sites seemed systematically poorer than those for Rosman, largely owing to errors in the original station coordinates and possibly owing to some contribution of the timing uncertainties at these distant stations. Furthermore, even at Rosman, each pass appeared to yield a distinct set of residuals varying systematically within the pass. The station coordinates were redetermined by Gaposchkin on the basis of these data; the corrections were found to be in reasonable agreement with other determinations (Gaposchkin, 1968, and this volume). However, even after correction of the coordinates and removal of the data with questionable timing, there are obvious differences in the residuals from pass to pass. We examined several individual passes obtained by the GRARR system during periods of high density of optical observation; these passes were also used by others (F. Lerch, 1968, private communication) for system testing. The passes were taken at the

Rosman site, and all showed good internal consistency. The comparison orbits were derived from tracking data covering intervals of 3 days, 10 days, and 1 month by use of optical data only, optical plus range data, and optical, range, and Minitrack data. The results are contained in Table 2. The qualifier (good, fair, degraded, poor) describes the general fit of data to the orbit; the number given is the maximum residual during each pass. Residuals of small and roughly equal size are considered good; those passes yielding skew residual curves and large residuals are considered poor. Both range and range-rate data show one poor pass out of five. For interval 1, Madagascar data show one poor pass out of two, and Carnarvon, two poor passes out of two. No matter how we treat them, the data do not fit; hence, we would reject the data in normal usage if it were possible for us to examine the complete data set in sufficient detail when making a general solution. The danger of using a set of single points for the orbit determination is that we may not be able to consider the station pass as a whole, thus allowing some bad data to affect the results.

These results also indicate that the fit of any particular pass to an orbit is dependent on the process of derivation of the orbit. The best fits, using the analytic techniques of SAO, appear when the data cover long intervals of time or when there are sufficient data over all parts of the orbit to define the satellite position accurately. The addition of range and minitrack data to the optical material can improve poor orbits for geodetic usefulness and thus satisfy the aims of the program for the extension of the data base.

When we attempt to use the GRARR data as a whole, it may be difficult to examine each individual pass; hence, we investigated results of using all the data, subject only to gross limitations on individual points.

The average range residual appears to be about 40 to 50 m. If we assume a 30-m uncertainty due to the orbit theory, then a contribution of some 30 to 40 m due to the ranging system itself, rather than the 15 m expected, is left. These values are taken from consideration of all range data on Geos 1, with no attempt at selection. Values of the range-rate residuals appeared to average about 0.14 m sec^{-1} on the same basis, compared to 0.10 m sec^{-1} as designed.

Table 2. Comparison of GRARR data with orbits.

Data	Interval (days)	Interval 1: Range (November 28-29) Pass 1	Pass 2	Pass 3	Interval 2: Range (December 21-22) Pass 1	Pass 2
Optical	30	good (29)*	good (28)	good (28)	good (14)	poor (58)
	10	good (29)	good (29)	poor (80)	good (-9)	poor (40)
	3	fair (32)	poor (55)	poor (56)	good (-10)	poor (64)
Optical and range	30	good (33)	good (24)	good (30)	good (9)	poor (48)
	10				good (8)	poor (45)
	3	good (33)	good (24)	good (27)	good (-3)	poor (56)
Optical, range, and Minitrack	10	good (31)	good (19)	good (32)		
	3	good (33)	good (20)	good (25)	slightly degraded (23)	poor (54)

Data	Interval (days)	Interval 1: Range Rate (November 28-29) Pass 1	Pass 2	Pass 3	Interval 2: Range Rate (December 21-22) Pass 1	Pass 2
Optical	30	good (-0.08)	good (-0.02)	good (-0.02)	poor (-0.16)	poor (-0.25)
	10	good (-0.08)	good (-0.03)	degraded (-0.34)	good (-0.06)	poor (-0.15)
	3	good (-0.09)	degraded (-0.22)	degraded (-0.21)	good (0.09)	poor (-0.28)
Optical and range	30	good (0.07)	good (-0.01)	good (0.06)	good (-0.09)	poor (-0.25)
	10				fair (-0.13)	poor (-0.19)
	3	good (-0.06)	good (-0.03)	good (0.05)	poor (-0.16)	poor (-0.21)
Optical, range, and Minitrack	10	good (-0.06)	good (0.02)	good (-0.05)		
	3	good (-0.06)	good (-0.03)	good (0.03)	poor (-0.17)	poor (-0.23)

*The numbers in parentheses are the maximum residuals during each pass.

We next examined the question of estimating a priori the accuracy of the range or range-rate data. For timing, a station clock must have been compared to WWV and been correct to +1 msec both before and after the observation; otherwise SAO deletes the data. For range rate, there appears to be no systematic correlation betweeen the range-rate residual and the standard error of the cubic fit. Furthermore, the σ of fit are all small ($\sim$ 0.05 to 0.10 m sec^{-1}), so we have no means of discriminating on the basis of the raw data themselves. For the range observation, we note a correlation between the σ of cubic fit and the residual (O-C) against the orbit, in the sense that a pass consisting of noisy data (σ = 10 to 20 m or larger) tends to have higher and more variable residuals ((O-C) varies by up to 50 m from one synthetic point to the next). The conclusion is that the range-data noise level indicates the absolute accuracy of the data to some extent. For purposes of station-position determination, we endeavored to use only those synthetic range data with σ = 8 m. In cases of sparse data, this criterion was relaxed, but not to the extent of including data with a high probability of error. No data with σ > 25 m were used in any further computations.

In our check on the range data, we attempted to use these data along with angular observations in orbit determination. We computed several orbits for Geos and OGO-2 for intervals ranging up to 30 days, using varying numbers of range points per pass. Generally the agreement of these orbits with orbits that were derived from optical observations only was quite good, and the fit of the precise optical data was not deteriorated perceptibly. Hence, we feel the combined data are quite useful, if weighted properly, in determining accurate orbits of high precision. Range-rate data could be tested only in an experimental orbit-determination program; indications are that they, too, perform as expected in orbit determination. One question remains, however: Is it necessary to determine an effective oscillator base frequency, as must be done for the TRANET Doppler data?

2.6 Minitrack

Once the ionosphere correction was applied, the accuracy of the correction was tested by an examination of the residuals of several hundred randomly selected Minitrack points from the SAO precise reference orbits. We found that the residuals in azimuth (no correction) were about equal to those in altitude (correction applied); the RMS residual in either coordinate was about 35 arcsec for the observations tested (neglecting a small number of obvious outliers). The observations from this system are thus assumed to have an accuracy of ~ 50 arcsec. The residuals do not appear to have any systematic trend; the mean is not far from 0, and it varies from set to set. Hence, SAO has used Minitrack observations to help in computing orbits where Baker-Nunn coverage was weak.

The Minitrack data have also been used in the derivation of orbits for which insufficient optical data were available (see Table 2). The results are essentially as indicated above and are especially encouraging, since when care is taken, the more precise optical and range observations appear to retain the expected small residuals. This was possible, for example, for orbits of OGO-2 (1965-81A).

3. GENERAL REMARKS

The study described illustrates several factors very emphatically: First, in this cooperative program the large variety of data types results in an equivalent number of data formats and time systems with consequent difficulties in combining data. Second, in pursuit of this analysis, different methods must be developed for each data type. This follows from the different approaches used for the acquisition of observations.and other geodetic parameters, and the combination of data will produce results equal to or better than the use of the same data separately.

Finally, it is feasible to intermix several types of data for the derivation of precise satellite orbits, but both factors of the previous paragraph must be overcome for the data to be used for scientific analysis. To the extent described above and in other papers in this volume, we have achieved this goal.

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REDUCTION AND ACCURACY OF BAKER-NUNN OBSERVATIONS OF GEOS 1

Kurt Lambeck and Leo J. McGrath, Jr.

ABSTRACT

The techniques employed in the reduction of Baker-Nunn observations of Geos are briefly discussed. An accuracy study of the observations has been carried out, and a summary of the results, as applicable to Geos observations, is presented.

REDUCTION AND ACCURACY OF BAKER-NUNN OBSERVATIONS OF GEOS 1

Kurt Lambeck and Leo J. McGrath, Jr.

1. INTRODUCTION

The characteristics of the Baker-Nunn camera and the operating mode applicable to Geos flash observations are summarized in this volume by Horine, Latimer, LeConte, and Wolf; the purpose of this paper is to describe briefly the reduction procedures used and to give estimates of the resulting accuracy of the flash observations.

2. REDUCTION PROCEDURE

Routine measurement and reduction procedures (see Haefner and Martin, 1966; Lambeck, 1968a) are used to compute satellite positions with times corresponding to the mean SAO smoothed preliminary A. 1 time* of the reference star exposures.

These preliminary observations (on cards) are used as input to a computer program that performs the following two tasks:

A. Reduction of nominal flash times (at the satellite) to A. 1 time at the camera by application of the following corrections:

1. On-board clock drift. The drift of the on-board clock (which controls the triggering of flashes) from WWV emitted is given in bulletins published by the Applied Physics Laboratory.
2. Delay between the flash trigger time and the 50% point of the integral of the flash intensity versus time curve. The adopted value of this delay is 0. 75 msec.
3. Light travel time from the satellite to the camera (range in megameters divided by 300). The times of all precisely reduced observations made at SAO, including passive (sunlit) observations of Geos, refer to the arrival of light at the camera. Our reductions of flash data are made to conform to this convention so that our data will be uniform.

*Miller and Caliri (this volume) present the equations by which smoothing is performed.

B. Correction of satellite positions (in right ascension) by an amount corresponding to the difference between the A. 1 flash time and the A. 1 preliminary observation time.

The preliminary position is corrected by applying precession from 1950. 0 to the date of observation, by correcting the right ascension by the amount of sidereal time between the mean A. 1 of the star images and the A. 1 times of the flash, and then by applying precession from the observation date back to 1950. 0.

The program then produces a "final" observation card that contains the corrected (1950. 0) position and the A. 1 flash time at the camera.

3. ACCURACY OF OBSERVATIONS

The major phenomena affecting the accuracy with which the satellite position can be determined are as follows: 1) measuring uncertainties in the stars and satellite positions, 2) limitations in the comparators used, 3) film distortions, 4) atmospheric effects, 5) deficiencies in the mathematical models employed, and 6) uncertainties in the definitions of the stellar framework itself.

Estimates of the magnitudes of these effects are summarized in Table 1; more details can be found in Lambeck (1968b).

Measuring accuracies for the passive and active observations are of the same order of magnitude for the satellite positions despite the different image characteristics, the standard deviation of the mean position being about 2 μ. Image motion caused by microturbulence in the atmosphere will be present in both observing modes, but the magnitudes vary. For active observations the standard deviation of this displacement is, on the average, about 1 arcsec in any direction, while for passive observations the average along-track displacement will also be about 1 arcsec and the average across-track displacement will be about 0. 5 arcsec (Lambeck, 1968c).

Time determination of the instant that the flash is triggered is of the order 0.1 msec, so no timing problems exist. The accuracy of time determination for the passive observations depends on the method of timekeeping at the two stations. Prior to 1965-1966, time was kept with the Norrman clocks and VHF radio signals, and the average uncertainty in time determination was of the order 1.5 to 2 msec. After these dates, time has been kept at each station with EECo clocks, portable quartz crystal clocks, and VLF signals; the average uncertainty in time determination is about 0.5 msec. Table 2 gives the dates at which the improved timing accuracy estimates were first being realized at the various stations.

Table 1. Summary of factors affecting the accuracy of Geos observations

Error source	Average magnitude		Remarks
Measuring accuracy of mean satellite position	(2 μ)	0.8 arcsec	
Comparator calibration errors	(0.5 μ)	0.2 arcsec	
Nonlinear film distortions and emulsion shifts	(2 μ)	0.8 arcsec	
Atmospheric effects:			
Image motion		1.1 arcsec	flash observation and along track for passive object
		0.5 arcsec	across track for passive object
Wandering		0.3 arcsec	
Parallactic refraction		0.1 arcsec	
Uncertainties in plate-constant determination		0.8 arcsec	
Total positional uncertainty		1.8 arcsec	flash observation and along track for passive object
		1.5 arcsec	across track for passive object
Timing errors		0.1 msec	flash observations
		1.5-2.0 msec	passive observations before timekeeping improvements
		0.5 msec	passive observations after timekeeping improvements

Table 2. Dates at which improved timing was first operational

Station name	Station number	Date
Organ Pass, New Mexico	9001	December 1966
Olifantsfontein, South Africa	9002	
San Fernando, Spain	9004	
Arequipa, Peru	9007	
Jupiter, Florida	9010	
Maui, Hawaii	9012	
Woomera, Australia	9023	
Debre Zeit, Ethiopia	9028	January 1967
Natal, Brazil	9029	April 1967
Comodoro Rivadavia, Argentina	9031	
Naini Tal, India	9006	October 1967
Athens, Greece	9091	December 1967

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GEOS 1 ORBITAL ELEMENTS AND OBSERVATIONS

Beatrice R. Miller and Peter J. Caliri

ABSTRACT

The first section of this paper lists the mean orbital elements of Geos 1 derived by use of the precisely reduced observations of Geos 1 and the SAO Differential Orbit Improvement Program written for the CDC 6400 computer.

The precisely reduced observations of Geos 1, presented in the second section, are a combination of passive, flash, and range observations taken by the Baker-Nunn cameras, the SAO K-50 cameras, and the SAO laser at Organ Pass, New Mexico.

GEOS 1 ORBITAL ELEMENTS AND OBSERVATIONS

Beatrice R. Miller and Peter J. Caliri

1. ORBITAL ELEMENTS BASED ON THE DOI PROGRAM

In this section we will present a listing of the orbital elements of Geos 1 that have been derived by use of the SAO Differential Orbit Improvement Program (DOI) (Gaposchkin, 1966; Veis, 1964). These elements are in the form that has been standard at SAO for such publications. Another form is in the following paper by Gaposchkin and Hubley.

As opposed to osculating elements, the elements presented here are mean elements, in the sense that the effects of the short-period perturbations due to the earth's oblateness have been eliminated.

SAO mean elements have been derived from precisely reduced observations covering several days and are given in the form of a table. The successive sets of elements are essentially independent of each other. They are dependent, however, in that high-order coefficients in the secular and in the long-periodic terms are generally considered as known and as constant for periods of several weeks or months, as dictated by convenience.

The times of epoch in the mean elements are reckoned in Julian Days, but for the sake of convenience the number 2400000.5 has been subtracted to provide an abbreviated notation, which we call Modified Julian Days, or MJD.

The units of the orbital elements are degrees for angular quantities, megameters for linear quantities, and revolutions for the mean anomaly M and its derivatives.

The tabulated values of the SAO mean elements give the values of argument of perigee ω, right ascension of the ascending node Ω, inclination i, eccentricity e, and mean anomaly M as functions of time $t = T - T_0$ (where T_0 is the reference epoch) expressed in days. The one- or two-digit number placed at the right of each value represents the standard error for that element and refers to the last digits given.

The same tabulation also gives the mean (anomalistic) motion n, the orbital acceleration $n'/2$ or $n'(dn/dt)$, and the semimajor axis a (in megameters). Of the last three columns, the one headed N indicates the number of observations used for the computation of a set of elements; the one headed D, the number of days used; and the one headed σ, the standard error of the representation of the observations relative to their assumed accuracy.

In our computer program, the inclination and the argument of perigee are referred to the true equator of date; the right ascension of the ascending node, however, is reckoned from the mean equinox of 1950.0 along the corresponding mean equator to the intersection with the moving true equator of date, and then along the true equator of date. To transform from right ascension of the node as determined by the DOI to right ascension of the node referred to the mean equinox of date, we use

$$\Omega^\circ = \Omega^\circ(\mathrm{DOI}) + 3^\circ.508 \times 10^{-5} (\mathrm{MJD} - 33281) \quad .$$

Tables 1, 2, and 3 show the station coordinates, the tesseral harmonics, and the zonal harmonics used in the calculations reported here. The values of the constants GM and J used in the orbit calculation are 274.53848 and 0.0660644, respectively. The orbital elements presented in Table 4, obtained by use of the DOI program written for the CDC 6400 computer (May 10, 1968, version), include the use of lunisolar perturbations and tesseral harmonics.

Table 1. Station coordinates

Station location	Station number	X (Mm)	Y (Mm)	Z (Mm)
Organ Pass, New Mexico	9001	-1.535759	-5.166995	3.401041
Olifantsfontein, South Africa	9002	5.056126	2.716485	-2.775816
Woomera, Australia	9003	-3.983750	3.743101	-3.275593
San Fernando, Spain	9004	5.105593	-0.555232	3.769674
Tokyo, Japan	9005	-3.946697	3.366286	3.698843
Naini Tal, India	9006	1.018205	5.471100	3.109614
Arequipa, Peru	9007	1.942769	-5.804078	-1.796961
Shiraz, Iran	9008	3.376882	4.403985	3.136254
Curaçao, Netherlands Antilles	9009	2.251820	-5.816915	1.327164
Jupiter, Florida	9010	0.976282	-5.601389	2.880242
Villa Dolores, Argentina	9011	2.280575	-4.914569	-3.355457
Maui, Hawaii	9012	-5.466055	-2.404275	2.242170
Island Lagoon, Australia	9023	-3.977738	3.725115	-3.303060
Debre Zeit, Ethiopia	9028	4.903764	3.965173	0.963880
Natal, Brazil	9029	5.186835	-3.653715	-0.654662
Comodoro Rivadavia, Argentina	9031	1.694041	-4.112350	-4.556824
Jupiter, Florida (K-50)	9049	0.976319	-5.601410	2.880311
Harvard, Massachusetts (K-50)	9050	1.489729	-4.467498	4.287289
Athens, Greece (K-50)	9051	4.606872	2.029723	3.903553
Rosamund, California	9113	-2.450036	-4.624388	3.635034
Cold Lake, Canada	9114	-1.264846	-3.466880	5.185464
Oslo, Norway	9115	3.121268	0.592616	5.512673
Johnston Island	9117	-6.007395	-1.111893	1.825725
Organ Pass, New Mexico (laser)	7901	-1.535759	-5.166995	3.401041

Table 2. Tesseral harmonics

C 2 2	2.3790E-06	S 2 2	-1.3510E-06	C 3 1	1.9360E-06	S 3 1	2.6600E-07
C 3 2	7.3400E-07	S 3 2	-5.3800E-07	C 3 3	5.6100E-07	S 3 3	1.6200E-06
C 4 1	-5.7200E-07	S 4 1	-4.6900E-07	C 4 2	3.3000E-07	S 4 2	6.6100E-07
C 4 3	8.5100E-07	S 4 3	-1.9000E-07	C 4 4	-5.3000E-08	S 4 4	2.3000E-07
C 5 1	-7.9000E-08	S 5 1	-1.0300E-07	C 5 2	6.3100E-07	S 5 2	-2.3200E-07
C 5 3	-5.2000E-07	S 5 3	7.0000E-09	C 5 4	-2.6500E-07	S 5 4	6.4000E-08
C 5 5	1.5600E-07	S 5 5	-5.9200E-07	C 6 1	-4.7000E-08	S 6 1	-2.7000E-08
C 6 2	6.9000E-08	S 6 2	-3.6600E-07	C 6 3	-5.4000E-08	S 6 3	3.1000E-08
C 6 4	-4.4000E-08	S 6 4	-5.1800E-07	C 6 5	-3.1300E-07	S 6 5	-4.5800E-07
C 6 6	-4.0000E-08	S 6 6	-1.5500E-07	C 7 1	1.9700E-07	S 7 1	1.5600E-07
C 7 2	3.6400E-07	S 7 2	1.6300E-07	C 7 3	2.5000E-07	S 7 3	1.8000E-08
C 7 4	-1.5200E-07	S 7 4	-1.0200E-07	C 7 5	7.6000E-08	S 7 5	5.4000E-08
C 7 6	-2.0900E-07	S 7 6	6.3000E-08	C 7 7	5.5000E-08	S 7 7	9.6000E-08
C 8 1	-7.5000E-08	S 8 1	6.5000E-08	C 8 2	2.6000E-08	S 8 2	3.9000E-08
C 8 3	-3.7000E-08	S 8 3	4.0000E-09	C 8 4	-2.1200E-07	S 8 4	-1.2000E-08
C 8 5	-5.3000E-08	S 8 5	1.1800E-07	C 8 6	-1.7000E-08	S 8 6	3.1800E-07
C 8 7	-8.7000E-09	S 8 7	3.1000E-08	C 8 8	-2.4800E-07	S 8 8	1.0200E-07
C 9 1	1.1700E-07	S 9 1	1.2000E-08	C 9 2	-4.0000E-09	S 9 2	3.5000E-08
C 10 1	1.0500E-07	S 10 1	-1.2600E-07	C 10 2	-1.0500E-07	S 10 2	-4.2000E-08
C 10 3	-6.5000E-08	S 10 3	3.0000E-08	C 10 4	-7.4000E-08	S 10 4	-1.1100E-07
C 11 1	-5.3000E-08	S 11 1	1.5000E-08	C 12 1	-1.6300E-07	S 12 1	-7.1000E-08
C 12 2	-1.0300E-07	S 12 2	-5.1000E-09	C 12 12	-3.1000E-08	S 12 12	8.0000E-10
C 13 12	-6.8480E-08	S 13 12	6.5700E-08	C 13 13	-5.9000E-08	S 13 13	7.7000E-08
C 14 1	-1.5000E-08	S 14 1	5.3000E-09	C 14 11	2.0000E-10	S 14 11	-1.0000E-10
C 14 12	2.6100E-09	S 14 12	-2.4570E-08	C 14 14	-1.4000E-08	S 14 14	-3.0000E-09
C 15 9	-9.0000E-10	S 15 9	-1.8000E-09	C 15 12	-7.4730E-08	S 15 12	-1.0260E-08
C 15 13	-5.8000E-08	S 15 13	-4.6000E-08	C 15 14	4.3000E-09	S 15 14	-2.1100E-08

Table 3. Zonal harmonics used in orbit calculation

J_2	1082.645
J_3	-2.546
J_4	-1.649
J_5	-0.210
J_6	0.646
J_7	-0.333
J_8	-0.270
J_9	-0.053
J_{10}	-0.054
J_{11}	0.302
J_{12}	-0.357
J_{13}	-0.114
J_{14}	0.179

2. PRECISELY REDUCED OBSERVATIONS

We present in Table 5 a list of the positions of Geos 1 obtained by the SAO Photoreduction Division from precise reduction of the films taken at the Baker-Nunn camera stations and the SAO K-50 camera stations and from the range observations obtained by the SAO laser at Organ Pass, New Mexico.

These observations can be independently checked by a determination of their residuals from the best obtainable orbits. In practice, however, this is not so simple, since the best orbits can be achieved only by the use of the same observations that are being checked. Thus, we compute orbits regularly from only the precisely reduced observations, and we evaluate those that deviate considerably from the orbits. Then the positions are used again to test whether or not their new residuals meet standards for publication.

Only orbits with a standard deviation σ of one observation not exceeding ±20 arcsec are used as reference; on the average, the standard deviation is only between ±5 and ±10 arcsec. All observations with residuals larger than ±10 arcsec are examined to find whether the error is due to the observation or to the poor accuracy of the orbit.

The laser observations are range observations that have been corrected by the method explained by Lehr, Maestre, and Anderson (1968).

The optical observations (both in position and in time) were reduced essentially by the method explained by Lassovszky (Lassovszky, Weston, Pardue, Bullis, and Zadunaisky, 1960; Haefner and Martin, 1966; Lambeck and McGrath, this volume). All the measurements have been made with two-screw Mann comparators.

Although the Baker-Nunn cameras are capable of achieving an accuracy better than ± 2 arcsec in the positions (Lassovszky, 1961; see also Lambeck and McGrath, this volume), all results may not be so accurate. Until every position can be given with its proper uncertainty as obtained from the reduction, a standard deviation of ±4 arcsec is assigned. This value of 4 arcsec is probably an upper limit to the standard deviation of a position.

The time accuracy of the observations depends primarily on the stability of the station clock and on the reception of the time signals. Uncertainties have been estimated according to these criteria; they vary from ±0.5 to ±20 msec, with an average value of ±2 msec (see Lambeck and McGrath, this volume, for more details).

The times given for the observation of the flashes are those of the arrival of the light-pulse at the camera, not of the emission at the satellite; this was done to ensure consistency with the passive observations.

In order to expedite processing of the observations, we have found it necessary to employ a "smoothed preliminary" A.1 time system in the reductions. We have derived the A.1 times reported for all observations in

this catalog by employing the following reductions from the WWV-emitted time system to our smoothed preliminary A. 1 system (t is in MJD):

For the period	A. 1-WWV emitted
September 1, 1965, to June 1, 1966	$3^s.875732 + 0.001296000\,(t - 38761.0)$
June 1, 1966, to January 1, 1967	$4^s.348772 + 0.002592000\,(t - 39126.0)$.

The format of the data printout is as follows:

The first column shows the year, month, and day of the observation.

The second column gives the time of the observation in hours, minutes, and seconds in the smoothed preliminary A. 1 system.

In column three the RMS (standard error) of the time is expressed in milliseconds.

Column four gives the topocentric right ascension expressed in hours, minutes, and seconds of time; and column five, the topocentric declination, in degrees, minutes, and seconds of arc. These positions refer to the mean equator and equinox of 1950. 0, in the fundamental system of the FK 4 (Fricke and Kopff, 1963). All satellite positions after August 31, 1962, have been reduced with the SAO Star Catalog (Staff, Smithsonian Astrophysical Observatory, 1966), which is in the FK 4 system. The positions have not been corrected for parallactic refraction; the correction will hardly ever exceed 2 arcsec. (The correction must be made when the data are used.)

In column six the standard error (RMS) of the position is given in seconds of arc.

Column seven presents the range measurement of the laser observations.

The eighth column gives the station number.

In column nine the film and the frame numbers are given.

The observation number assigned by SAO is presented in column 10.

These observations are available to qualified investigators either on punch cards or on the user's magnetic tape. All inquiries should be addressed to:

Data Division
Smithsonian Astrophysical Observatory
60 Garden Street
Cambridge, Massachusetts 02138

The observations presented in this report are the result of the work of many members of the staff of the Satellite-Tracking Program of the Smithsonian Astrophysical Observatory who contributed in different capacities. The final checking and preparation for publication were done by Mr. Peter Caliri, Data Division, and Mrs. Janice MacDonald and members of the Data Section, Photoreduction Division.

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Table 4. Mean orbital elements of Geos 1
November 1965-February 1966

T (MJD)	ω	Ω	i	e	M	n	n'/2	a	N	D	σ
39074.0	151.808 3	91.7779 0	59.3801 1	.072261 1	.492006 6	11.967657 3	-1.0E-7 14	8.073821	50	4	.63
39076.0	153.104 1	87.2838 1	59.3812 1	.072237 1	.427[illegible]	11.967658 3	7.2E-7 11	8.073821	53	4	.69
39078.0	154.3999 7	82.7903 0	59.3815 0	.072211 0	.362723 2	11.967667 2	-5.7E-7 10	8.073817	78	4	.54
39080.0	155.6963 4	78.2970 1	59.3819 1	.072185 1	.298080 3	11.967668 2	1.23E-7 81	8.073816	85	4	.69
39082.0	156.9977 9	73.8032 1	59.3828 1	.072155 1	.233409 3	11.967649 3	-8.2E-7 11	8.073825	100	4	.61
39084.0	158.2962 6	69.3105 1	59.3830 1	.072128 0	.168749 2	11.967666 2	-6.6AE-7 78	8.073817	112	4	.62
39086.0	159.5978 6	64.8168 1	59.3839 0	.072095 0	.104076 2	11.967657 2	-6.60E-7 70	8.073821	133	4	.58
39088.0	160.8935 4	60.3241 0	59.3842 0	.072067 0	.039415 1	11.967646 1	-2.18E-7 58	8.073826	274	4	.58
39090.0	162.1960 3	55.8310 0	59.3845 0	.072036 0	.974734 1	11.967646 1	-3.59E-7 29	8.073826	447	4	.51
39092.0	163.4958 2	51.3381 0	59.3846 0	.072006 0	.910098 1	11.967651 0	-5.32E-7 [illegible]8	8.073824	561	4	.36
39096.0	166.0938 6	42.3519 0	59.3849 0	.071945 1	.780701 2	11.967650 2	-6.09E-7 85	8.073824	99	4	.60
39098.0	167.3959 7	37.8590 1	59.3851 0	.071915 1	.716008 2	11.967639 2	-3.44E-7 81	8.073830	34	4	.44
39100.0	168.7007 4	33.3658 1	59.3852 1	.071883 2	.651306 3	11.967643 5	-9.0E-7 18	8.073828	21	4	.47
39102.0	170.0016 4	28.8728 1	59.3851 1	.071851 1	.586610 3	11.967642 2	3.0E-7 17	8.073828	31	4	.60
39104.0	171.305 1	24.3797 1	59.3850 1	.071820 2	.521908 4	11.967640 3	-3.3E-7 17	8.073829	43	4	.62
39106.0	172.606 1	19.8862 1	59.3849 1	.071790 1	.457210 3	11.967640 3	-4.4E-7 14	8.073829	39	4	.63
39108.0	173.909 9	15.3930 1	59.3845 3	.071764 3	.392503 3	11.967638 2	-4.4E-7 16	8.073831	21	4	.66
39110.0	175.2141 4	10.8998 1	59.3846 1	.071733 1	.327787 1	11.967636 1	-1.21E-7 97	8.073831	40	4	.51
39112.0	176.5172 2	6.4066 0	59.3846 0	.071700 1	.263075 1	11.967639 0	-2.19E-7 47	8.073830	83	4	.41
39114.0	177.9207 2	1.9133 0	59.3845 0	.071672 0	.198359 0	11.967636 0	-3.24E-7 39	8.073831	125	4	.47
39116.0	179.1258 2	357.4199 0	59.3845 0	.071644 0	.133638 1	11.967634 0	-2.07E-7 37	8.073832	106	4	.48
39118.0	180.4310 3	352.9266 0	59.3845 0	.071616 1	.068914 1	11.967634 1	-4.41E-7 88	8.073832	60	4	.51
39120.0	181.7370 4	348.4334 0	59.3847 0	.071589 0	.004184 1	11.967636 1	-1.0E-7 11	8.073831	69	4	.44
39122.0	183.0415 3	343.9402 0	59.3848 0	.071559 1	.939455 1	11.967630 1	-4.8E-7 10	8.073834	66	4	.66
39124.0	184.3473 4	339.4474 0	59.3850 1	.071530 1	.874719 1	11.967630 1	-4.26E-7 81	8.073834	36	4	.50
39126.0											
39128.0											
39130.0	188.2690 3	325.9684 0	59.3853 0	.071452 0	.680485 1	11.967626 0	-3.01E-7 07	8.073835	159	8	.66
39132.0	189.5760 7	321.4755 0	59.3855 0	.071424 0	.615730 2	11.967624 1	-4.37E-7 32	8.073836	89	8	.62
39134.0	190.8850 4	316.9827 0	59.3853 0	.071398 0	.550977 1	11.967622 0	-4.04E-7 10	8.073837	109	8	.59
39136.0	192.1969 5	312.4900 0	59.3852 0	.071373 0	.486208 1	11.967623 1	-8.4E-8 11	8.073837	111	8	.54
39138.0	193.5052 5	307.9972 0	59.3852 0	.071348 0	.421448 1	11.967621 1	-3.45E-7 16	8.073838	144	8	.68
39140.0	194.8161 4	303.5046 0	59.3851 0	.071321 0	.356678 1	11.967619 0	-4.17E-7 07	8.073838	240	8	.58
39142.0	196.1257 7	299.0122 0	59.3846 0	.071294 0	.291907 2	11.967615 1	-1.74E-7 07	8.073840	277	8	.50
39144.0	197.4403 4	294.5196 0	59.3846 0	.071272 0	.227123 1	11.967616 1	-1.26E-7 09	8.073840	261	8	.51
39146.0	198.7526 4	290.0271 0	59.3846 0	.071246 0	.162342 1	11.967616 0	-1.47E-7 08	8.073840	246	8	.57
39148.0	200.0634 4	285.5346 0	59.3839 0	.071219 0	.097565 1	11.967616 0	-2.79E-7 08	8.073840	182	8	.59
39150.0	201.3770 5	281.0420 1	59.3836 1	.071196 1	.032777 1	11.967614 1	-3.2E-8 27	8.073841	85	8	.56
39152.0	202.6924 6	276.5489 1	59.3836 1	.071170 1	.967985 1	11.967613 1	-2.5E-8 10	8.073841	84	8	.48
39154.0	204.0068 6	272.0560 1	59.3833 1	.071146 1	.903196 1	11.967614 1	-4.9E-8 24	8.073841	60	8	.44
39156.0	205.3217 6	267.5641 1	59.3822 1	.071120 1	.838404 1	11.967615 1	-1.42E-7 16	8.073840	39	8	.34
39158.0	206.6367 4	263.0708 1	59.3822 1	.071097 0	.773606 1	11.967614 0	-7.4E-8 19	8.073841	47	8	.29
39160.0	207.9547 4	258.5777 0	59.3819 1	.071074 0	.708811 1	11.967616 1	1.84E-7 14	8.073840	61	8	.33
39162.0	209.2714 4	254.0844 1	59.3820 1	.071050 0	.644015 1	11.967618 1	1.09E-7 11	8.073839	57	8	.35
39164.0	210.5862 5	249.5915 1	59.3816 1	.071026 0	.579225 1	11.967619 0	-1.02E-7 16	8.073838	87	8	.49
39166.0	211.9053 7	245.0984 1	59.3814 1	.071005 1	.514424 2	11.967615 1	-1.22E-7 30	8.073840	84	8	.74
39168.0	213.2251 2	240.6054 1	59.3811 2	.070984 1	.449619 4	11.967613 3	-8.1E-8 91	8.073841	64	8	.84
39170.0	214.5485 9	236.1128 1	59.3804 1	.070965 1	.384802 3	11.967612 1	1.18E-7 46	8.073841	54	8	.42
39172.0	215.867 2	231.6197 1	59.3808 1	.070939 2	.320004 5	11.967616 2	2.3E-8 24	8.073840	38	8	.39
39174.0	217.186 1	227.1267 1	59.3810 1	.070916 1	.255204 4	11.967607 2	1.58E-7 28	8.073844	65	8	.49
39176.0	218.506 1	222.6337 1	59.3813 1	.070896 1	.190398 3	11.967614 1	-7.6E-8 19	8.073840	95	8	.61
39178.0	219.8285 9	218.1407 0	59.3814 1	.070875 1	.125587 3	11.967615 1	-6.9E-8 22	8.073840	91	8	.63
39180.0	221.1496 7	213.6477 0	59.3817 1	.070854 1	.060779 2	11.967618 1	9.6E-8 14	8.073839	98	8	.59
39182.0	222.4689 6	209.1550 1	59.3822 1	.070832 1	.995978 2	11.967614 1	1.7E-8 21	8.073840	83	8	.58
39184.0											

March - June 1966

T (MJD)	ω	Ω	i	e	M	n	n'/2	a	N	D	σ
39186.0	225.1139 4	200.1701 1	59.3831 1	.070799 1	.866397 1	11.967619 1	3.69E-7 17	8.073838	112	8	.52
39188.0	226.4363 4	195.6778 1	59.3836 1	.070781 1	.801550 1	11.967621 1	2.59E-7 16	8.073837	121	8	.55
39190.0	227.7587 3	191.1856 1	59.3841 0	.070764 0	.736746 1	11.967622 1	1.76E-7 15	8.073837	137	8	.44
39192.0	229.0817 3	186.6934 1	59.3843 0	.070750 0	.671940 1	11.967618 0	4.08E-7 11	8.073839	144	8	.38
39194.0	230.4097 3	182.2009 0	59.3844 0	.070737 0	.607124 1	11.967620 0	5.39E-7 15	8.073838	160	8	.46
39196.0	231.7345 3	177.7078 0	59.3846 0	.070721 0	.542321 1	11.967626 0	1.98E-7 12	8.073835	138	8	.38
39198.0	233.0602 3	173.2164 1	59.3847 0	.070709 0	.477517 1	11.967627 0	2.37E-7 14	8.073835	161	8	.49
39200.0	234.3853 3	168.7241 0	59.3847 0	.070695 0	.412716 1	11.967627 0	3.78E-7 14	8.073835	159	8	.52
39202.0	235.7119 3	164.2320 1	59.3848 0	.070683 1	.347915 1	11.967627 0	3.81E-7 13	8.073835	164	8	.59
39204.0	237.0395 3	159.7395 0	59.3844 0	.070671 0	.283114 1	11.967629 0	3.20E-7 13	8.073834	174	8	.48
39206.0	238.3673 3	155.2474 0	59.3843 0	.070658 0	.218314 1	11.967632 1	2.54E-7 16	8.073833	148	8	.52
39208.0	239.6957 3	150.7551 0	59.3842 0	.070649 0	.153516 1	11.967631 1	4.26E-7 14	8.073833	162	8	.54
39210.0	241.0243 4	146.2629 0	59.3842 0	.070638 0	.088720 1	11.967632 1	4.17E-7 13	8.073833	145	8	.60
39212.0	242.3545 4	141.7701 0	59.3839 0	.070628 1	.023924 1	11.967632 1	2.66E-7 15	8.073832	141	8	.64
39214.0	243.6837 4	137.2775 0	59.3836 0	.070618 1	.959133 1	11.967634 1	1.94E-7 15	8.073831	182	8	.61
39216.0	245.0134 5	132.7847 0	59.3833 0	.070608 1	.894342 1	11.967631 1	1.24E-7 15	8.073833	160	8	.56
39218.0											
39220.0	247.6727 5	123.7990 1	59.3831 0	.070590 0	.764764 2	11.967639 1	1.33E-7 13	8.073829	131	8	.50
39222.0	249.0025 5	119.3060 0	59.3829 0	.070582 1	.699977 2	11.967640 1	4.6E-8 14	8.073829	153	8	.52
39224.0	250.3310 4	114.8130 0	59.3829 0	.070573 0	.635195 1	11.967642 1	6.4E-9 12	8.073828	187	8	.48
39226.0	251.6611 3	110.3200 0	59.3830 0	.070564 0	.570407 1	11.967640 1	1.9E-8 11	8.073829	241	8	.47
39228.0	252.9914 3	105.8272 0	59.3830 0	.070556 0	.505619 1	11.967641 0	4.78E-8 09	8.073828	310	8	.50
39230.0	254.3209 3	101.3344 0	59.3832 0	.070547 0	.440834 1	11.967639 0	-1.05E-8 80	8.073829	319	8	.52
39232.0	255.6519 3	96.8417 0	59.3832 0	.070538 1	.376044 1	11.967639 1	-6.99E-8 94	8.073829	317	8	.52
39234.0	256.9816 5	92.3491 0	59.3833 0	.070532 0	.311257 2	11.967641 1	-3.8E-8 10	8.073828	267	8	.58
39236.0	258.3142 3	87.8558 0	59.3841 0	.070523 1	.246463 1	11.967638 0	-7.8E-8 12	8.073830	187	8	.57
39238.0	259.6443 3	83.3628 0	59.3853 0	.070521 1	.181675 1	11.967640 0	-1.79E-7 11	8.073829	159	8	.52
39240.0	260.9750 2	78.8705 0	59.3856 0	.070515 1	.116883 1	11.967639 0	-2.57E-7 14	8.073829	136	8	.49
39242.0	262.3050 3	74.3785 1	59.3857 0	.070509 1	.052089 1	11.967638 1	-2.44E-7 16	8.073830	121	8	.45
39244.0	263.6348 3	69.8863 0	59.3859 0	.070507 1	.987295 1	11.967638 0	-2.87E-7 18	8.073830	101	8	.39
39246.0	264.9648 6	65.3941 1	59.3862 1	.070500 1	.922496 2	11.967635 1	-3.18E-7 27	8.073831	82	8	.48
39248.0	266.298 2	60.9020 1	59.3866 1	.070491 3	.857684 5	11.967631 2	-4.38E-7 34	8.073833	96	8	.62
39250.0	267.621 1	56.4095 1	59.3875 1	.070500 2	.792906 5	11.967631 2	-3.67E-7 16	8.073833	104	8	.30
39252.0	268.952 2	51.9178 1	59.3876 1	.070496 3	.728093 5	11.967634 3	-2.72E-7 15	8.073832	132	8	.46
39254.0	270.280 1	47.4252 1	59.3883 1	.070500 2	.663292 4	11.967630 2	-3.02E-7 13	8.073834	121	8	.29
39256.0	271.613 1	42.9333 1	59.3884 1	.070495 2	.598470 3	11.967629 1	-3.28E-7 13	8.073834	123	8	.23
39258.0	272.944 1	38.4404 1	59.3896 1	.070495 2	.533655 4	11.967635 2	-3.50E-7 10	8.073832	121	8	.28
39260.0	274.273 1	33.9485 1	59.3894 1	.070496 2	.468838 5	11.967623 2	-2.90E-7 12	8.073837	113	8	.29
39262.0	275.591 2	29.4565 2	59.3896 1	.070517 4	.404060 8	11.967642 3	-3.17E-7 16	8.073828	81	8	.32
39264.0	276.928 3	24.9642 2	59.3901 2	.070510 6	.339216 9	11.967629 3	-2.84E-7 14	8.073834	61	8	.39
39266.0	278.255 1	20.4720 2	59.3902 2	.070518 2	.274401 4	11.967626 1	-2.22E-7 19	8.073835	46	8	.43
39268.0	279.5822 6	15.9805 1	59.3895 2	.070524 1	.209584 2	11.967623 1	-1.61E-7 25	8.073837	35	8	.50
39270.0	280.9088 8	11.4883 1	59.3898 2	.070525 1	.144767 2	11.967626 1	-1.70E-7 56	8.073835	27	8	.47
39272.0	282.235 2	06.9961 2	59.3896 3	.070529 3	.079949 6	11.967628 2	-5.79E-7 13	8.073835	16	8	.69
39274.0	283.560 3	02.5041 2	59.3897 6	.070531 4	.015133 9	11.967626 2	-2.46E-7 66	8.073836	11	8	.74
39276.0											
39290.0											
39292.0	295.938 3	322.0707 4	59.3875 5	.070632 1	.431617 9	11.967616 2	-2.5E-8 47	8.073840	15	2	.87
39294.0											
39302.0											
39304.0	303.501 2	295.1163 5	59.3865 5	.07070 2	.042674 8	11.967619 3	1.10E-7 38	8.073838	17	8	.71
39306.0											

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T (MJD)	ω	Ω	i	e	M	n	n'/2	a	N	D	σ
39310.0											
39312.0	308.8158 4	277.1471 1	59.3858 1	.070790 4	.783372 2	11.967620 1	1.84E-7 14	8.073838	32	9	.29
39314.0											
39318.0	312.7918 2	263.6697 0	59.3840 0	.070833 0	.588954 1	11.967619 1	6.61E-7 10	8.073838	196	2	.47
39320.0	314.1155 2	259.1771 0	59.3838 0	.070853 0	.524155 1	11.967621 1	-7.4E-8 73	8.073838	310	2	.49
39322.0	315.4394 2	254.6846 0	59.3835 0	.070873 0	.459357 0	11.967625 1	2.73E-7 66	8.073836	320	2	.40
39324.0	316.7640 1	250.1920 0	59.3830 0	.070891 0	.394559 0	11.967626 1	4.35E-7 60	8.073835	384	2	.47
39326.0	318.0856 2	245.6992 0	59.3822 0	.070914 0	.329772 1	11.967630 1	5.02E-7 81	8.073833	236	2	.54
39328.0	319.4082 2	241.2062 0	59.3820 0	.070936 0	.264984 0	11.967628 1	-1.38E-9 65	8.073834	326	2	.50
39330.0	320.7329 2	236.7133 0	59.381[illegible] 0	.070956 0	.200191 0	11.967625 1	2.4E-7 69	8.073836	293	2	.42
39332.0	322.0540 1	232.2205 0	59.3814 0	.070978 0	.135408 0	11.967629 1	-2.18E-7 86	8.073834	243	2	.41
39334.0	323.3746 3	227.7276 0	59.3810 0	.071000 0	.070627 1	11.967636 3	-2.5E-7 14	8.073831	199	2	.43
39336.0	324.6962 2	223.2345 0	59.380[illegible] 0	.071022 0	.005845 1	11.967622 1	-1.8E-7 12	8.073837	262	2	.47
39338.0	326.0165 4	218.7413 0	59.3809 0	.071044 0	.941069 1	11.967626 2	-9.2E-8 15	8.073835	232	2	.51
39340.0	327.3357 2	214.2481 0	59.3809 0	.071069 0	.876293 1	11.967639 2	2.7E-7 30	8.073829	151	2	.43
39342.0	328.6579 2	209.7551 0	59.3809 0	.071092 0	.811509 1	11.967625 1	-9.9E-8 11	8.073836	364	2	.40
39344.0											
39346.0											
39348.0	332.6190 7	196.2762 0	59.3816 0	.071164 0	.617172 2	11.967624 1	7.9E-8 16	8.073836	120	8	.62
39350.0	333.9358 7	191.7833 0	59.3820 0	.071189 0	.552404 2	11.967624 1	1.23E-7 15	8.073836	149	8	.70
39352.0	335.2552 7	187.2904 0	59.3822 0	.071213 0	.487628 2	11.967619 1	-8.1E-8 19	8.073838	169	8	.75
39354.0	336.5741 5	182.7976 0	59.3823 0	.071237 0	.422852 2	11.967620 1	-2.11E-7 15	8.073838	161	8	.61
39356.0	337.8926 5	178.3049 0	59.3825 0	.071261 0	.358075 2	11.967620 1	-5.6E-8 17	8.073838	144	8	.61
39358.0	339.2103 5	173.8123 0	59.3827 0	.071285 0	.293300 1	11.967622 1	1.11E-7 15	8.073837	114	8	.49
39360.0	340.5272 6	169.3196 0	59.3828 0	.071309 0	.228528 2	11.967623 1	-1.22E-7 19	8.073836	93	8	.59
39362.0	341.8440 6	164.8269 1	59.3830 1	.071333 0	.163755 2	11.967623 1	-1.63E-7 16	8.073837	89	8	.58
39364.0	343.1587 6	160.3342 1	59.383[illegible] 1	.071358 0	.098987 2	11.967622 1	-4.7E-8 15	8.073837	86	8	.49
39366.0	344.4741 4	155.8415 1	59.3832 1	.071382 0	.034216 1	11.967621 1	-2.3E-8 15	8.073837	77	8	.40
39368.0	345.7878 4	151.3487 1	59.3833 1	.071407 0	.969449 1	11.967621 1	-1.23E-7 19	8.073838	66	8	.36
39370.0	347.1020 5	146.8558 1	59.3834 1	.071431 0	.904681 1	11.967618 1	-5.8E-8 24	8.073839	56	8	.34
39372.0	348.4136 5	142.3630 1	59.3832 1	.071456 0	.839919 1	11.967623 1	7.8E-8 22	8.073837	38	8	.29
39374.0	349.7253 6	137.8704 1	59.3828 1	.071480 0	.775157 2	11.967619 1	2.8E-8 23	8.073838	35	8	.37
39376.0	351.0377 9	133.3775 1	59.3825 1	.071504 1	.710393 3	11.967619 1	-3.9E-8 29	8.073838	28	8	.37
39378.0	352.349 1	[illegible]045 1	59.3824 1	.071530 1	.645633 4	11.967620 2	-9.5E-8 35	8.073838	22	8	.52
39380.0	353.658 2	124.[illegible] 1	59.3819 2	.071555 1	.580878 5	11.967618 2	-1.96E-7 34	8.073839	26	8	.59
39382.0	354.968 1	119.8984 1	59.3817 2	.071579 1	.516119 3	11.967616 1	4.3E-8 39	8.073840	23	8	.44
39384.0	356.2789 7	115.4049 1	59.3814 1	.071601 1	.451358 2	11.967618 1	7.8E-8 28	8.073839	25	8	.45
39386.0	357.5874 7	110.9112 1	59.3815 1	.071626 1	.386604 2	11.967623 1	3.1E-8 32	8.073836	26	8	.55
39388.0	358.8941 7	106.4175 1	59.3814 1	.071653 1	.321857 2	11.967625 1	-3.1E-8 34	8.073835	19	8	.50
39394.0	2.8135 1	92.9369 0	59.3810 0	.071730 0	.127617 0	11.967625 0	1.6E-7 10	8.073835	468	2	.56
39396.0	4.1182 1	88.4433 0	59.3811 0	.071757 0	.062877 0	11.967626 1	-1.89E-7 [illegible]	8.073835	415	2	.54
39398.0	5.4225 2	83.9496 0	59.3812 0	.071786 0	.998138 1	11.967624 1	-1.0E-7 10	8.073836	240	2	.56
39400.0	6.7258 1	79.4560 0	59.3815 0	.071811 0	.933401 0	11.967625 1	-1.06E-7 82	8.073836	346	2	.56
39402.0	8.0285 2	74.9625 0	59.3817 0	.071839 0	.868665 0	11.967624 2	-1.9E-7 10	8.073836	220	2	.48
39404.0	9.3361 3	70.4687 0	59.3823 0	.071869 0	.803916 1	11.967621 1	-5.46E-7 69	8.073838	222	2	.42
39406.0	10.6342 3	65.9757 0	59.3826 0	.071893 0	.739188 1	11.967621 1	2.18E-7 93	8.073838	214	2	.52
39408.0	11.9335 2	61.4824 0	59.3829 0	.071917 0	.674457 1	11.967628 1	-2.35E-7 80	8.073835	302	2	.48
39410.0	13.2402 3	56.9886 0	59.3834 0	.071944 0	.609705 1	11.967622 2	-5.27E-7 99	8.073837	236	2	.43
39412.0	14.5350 4	52.4954 0	59.3838 0	.071973 0	.544983 1	11.967625 2	-6.2E-7 19	8.073836	201	2	.58
39414.0	15.8362 4	48.0026 0	59.3846 0	.071999 0	.480236 1	11.967617 2	-4.5E-7 11	8.073840	177	2	.46
39416.0	17.1386 3	43.5095 0	59.3848 0	.072026 0	.415495 1	11.967620 2	-9.3E-7 13	8.073838	233	2	.39
39418.0	18.4373 3	39.0165 0	59.3850 0	.072053 0	.350758 1	11.967622 1	8.8E-7 14	8.073837	198	2	.45
39420.0	19.7353 3	34.5233 0	59.3852 0	.072080 0	.286022 1	11.967620 1	-7.4E-7 20	8.073838	158	2	.53
39422.0											
39446.0											
39448.0	37.8770 3	331.6164 1	59.3835 2	.072408 2	.379788 1	11.967629 1	3.12E-7 30	8.073834	64	8	.64

Table 5. Precisely reduced observations of Geos 1

November 8-13, 1965

6508901

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME	NO.	OBS.NO.
1965	11	8	10	16	41.8251	1	9	32	55.973	1	49	22.90	4		9001	6469	23	5929
	11	8	12	22	8.3230	1	6	37	10.789	47	53	31.88	4		9001	6481	01	7191
	11	8	12	22	12.3225	1	6	38	50.361	48	36	31.33	4		9001	6481	02	5930
	11	8	12	22	16.3219	1	6	40	32.531	49	19	28.73	4		9001	6481	03	7192
	11	8	12	22	20.3214	1	6	42	17.270	50	2	23.79	4		9001	6481	04	7193
	11	8	12	22	24.3208	1	6	44	5.347	50	45	15.14	4		9001	6481	05	7194
	11	8	12	22	28.3202	1	6	45	56.153	51	28	.81	4		9001	6481	06	7195
	11	8	23	56	6.9681	1	5	27	46.840	-28	35	40.01	4		9002	9316	06	5744
	11	8	23	56	10.9676	1	5	29	10.363	-28	2	35.91	4		9002	9316	07	7875
	11	8	23	56	14.9681	1	5	30	32.953	-27	29	30.83	4		9002	9316	08	7876
	11	8	23	56	18.9665	1	5	31	54.666	-26	56	28.02	4		9002	9316	09	7877
	11	8	23	56	22.9669	1	5	33	15.660	-26	23	19.37	4		9002	9316	10	7878
	11	8	23	56	26.9667	1		34	35.408	-25	50	12.88	4		9002	9316	11	7879
	11	8	23	56	30.9654	1	5	35	54.945	-25	17	6.59	4		9002	9316	12	7880
	11	8	23	56	34.9659	1	5	37	13.415	-24	43	56.89	4		9002	9316	13	7881
	11	9	8	15	16.9455	1	6	27	4.935	18	39	44.63	4		9009	1554	05	6217
	11	9	8	15	20.9451	1	6	28	24.523	19	17	27.76	4		9009	1554	06	9444
	11	9	8	15	24.9446	1	6	29	45.131	19	55	4.92	4		9009	1554	07	82A5
	11	9	8	15	28.9440	1	6	31	6.097	20	32	40.39	4		9009	1554	08	82A6
	11	9	8	15	32.9435	1	6	32	27.127	21	10	16.38	4		9009	1554	09	82A7
	11	9	8	18	.9467	1	8	58	5.963	- 0	3	12.11	4		9010	978	00	8348
	11	9	8	18	16.9496	1	9	3	34.981	1	42	28.83	4		9010	978	02	6205
	11	9	8	18	24.9526	1	9	6	21.107	2	35	9.08	4		9010	978	03	7694
	11	9	8	18	32.9549	1	9	9	9.104	3	27	51.25	4		9010	978	04	7695
	11	9	8	18	48.9605	1	9	14	48.858	5	12	51.89	4		9010	978	06	8349
	11	9	8	18	56.9623	1	9	17	40.990	6	5	3.58	4		9010	978	07	7697
	11	9	8	19	4.9645	1	9	20	34.238	6	57	9.34	4		9010	978	08	7698
	11	9	15	55	9.4161	1	5	40	20.007	-39	5	29.30	4		9023	746	16	6076
	11	9	18	24	33.3886	1	9	9	20.656	16	40	18.47	4		9005	4614	06	6148
	11	9	23	59	45.4056	1	4	31	29.657	-28	30	45.36	4		9002	9361	01	8259
	11	9	23	59	49.4049	1	4	33	6.144	-27	59	35.35	4		9002	9361	02	9057
	11	9	23	59	53.4044	1	4	34	41.773	-27	28	23.43	4		9002	9361	03	5745
	11	9	23	59	57.4041	1	4	36	16.386	-26	57	4.31	4		9002	9361	04	8261
	11	10	0	0	1.4022	1	4	37	50.491	-26	25	38.14	4		9002	9361	05	8262
	11	10	0	0	5.4020	1	4	39	23.779	-25	54	6.26	4		9002	9361	06	9058
	11	10	0	23	41.6188	3	7	48	29.885	20	49	11.89	4		9008	9419	14	6211
	11	10	8	22	56.1085	1	8	48	11.667	9	12	6.83	4		9010	993	19	6206
	11	10	10	25	3.1956	1	8	46	5.618	9	51	15.32	4		9001	6498	02	7804
	11	10	10	25	7.1954	1	8	47	51.346	10	20	27.85	4		9001	6498	03	7805
	11	10	10	25	11.1951	1	8	49	37.834	10	49	35.73	4		9001	6498	04	7806
	11	10	10	25	15.1950	1	8	51	25.081	11	18	42.57	4		9001	6498	05	5931
	11	10	10	25	19.1949	1	8	53	12.708	11	47	45.70	4		9001	6498	06	7807
	11	10	16	0	51.1102	1	5	27	27.995	-23	46	7.57	4		9023	770	13	6077
	11	10	21	58	5.8098	1	7	28	34.071	-49	7	28.08	4		9002	9405	06	5746
	11	11	6	7	36.4526	1	6	21	44.215	-26	15	1.78	4		9007	1356	06	6042
	11	11	8	27	.5097	1	8	14	4.342	13	29	3.73	4		9010	1014	08	6207
	11	11	16	2	14.7565	1	3	35	25.874	-41	24	25.43	4		9023	804	12	8279
	11	11	16	2	18.7559	1	3	37	34.881	-40	56	33.68	4		9023	804	13	8280
	11	11	16	2	22.7552	1	3	39	42.378	-40	28	31.15	4		9023	804	14	8281
	11	11	16	2	26.7544	1	3	41	48.706	-40	0	16.37	4		9023	804	15	8282
	11	11	16	2	30.7536	1	3	43	53.360	-39	31	47.80	4		9023	804	16	6078
	11	11	16	2	34.7530	1	3	45	56.621	-39	3	2.96	4		9023	804	17	8283
	11	12	8	30	44.7632	1	7	24	3.001	15	7	7.48	4		9010	1029	03	9059
	11	12	8	30	48.7625	1	7	25	46.150	15	42	33.51	4		9010	1029	04	8265
	11	12	8	30	52.7625	1	7	27	30.578	16	18	1.24	4		9010	1029	05	8266
	11	12	8	30	56.7626	1	7	29	15.347	16	53	31.60	4		9010	1029	06	8267
	11	12	8	31	.7626	1	7	31	1.762	17	28	58.97	4		9010	1029	07	6208
	11	12	8	31	4.7625	1	7	32	48.827	18	4	29.01	4		9010	1029	08	8268
	11	12	8	31	8.7623	1	7	34	36.874	18	39	53.31	4		9010	1029	09	8269
	11	12	10	34	52.3287	1	8	25	54.129	32	59	31.74	4		9001	6548	31	5932
	11	12	13	59	11.4774	1	7	9	52.659	-70	20	27.05	4		9023	842	08	8406
	11	12	13	59	15.4770	1	7	9	18.819	-69	52	44.23	4		9023	842	09	8407
	11	12	13	59	19.4767	1	7	8	47.284	-69	24	58.32	4		9023	842	10	8408
	11	12	13	59	23.4759	1	7	8	17.625	-68	57	12.01	4		9023	842	11	6079
	11	12	13	59	27.4757	1	7	7	49.558	-68	29	22.31	4		9023	842	12	8409
	11	12	13	59	31.4752	1	7	7	23.387	-68	1	29.35	4		9023	842	13	8410
	11	12	16	8	3.3491	1	3	43	36.465	-24	25	32.63	4		9023	850	12	6080
	11	12	16	9	53.5833	1	4	23	39.252	-10	40	16.32	4		9023	850	21	7815
	11	12	16	9	57.5826	1	4	24	58.622	-10	10	40.79	4		9023	850	22	7816
	11	12	16	10	1.5820	1	4	26	17.464	- 9	41	13.75	4		9023	850	23	8352
	11	12	16	10	5.5814	1	4	27	35.669	- 9	11	45.37	4		9023	850	24	8353
	11	12	16	10	9.5808	1	4	28	53.251	- 8	42	23.95	4		9023	850	25	8354
	11	12	16	10	13.5801	1	4	30	10.425	- 8	13	7.24	4		9023	850	26	8355
	11	12	16	10	17.5796	1	4	31	26.825	- 7	44	.41	4		9023	850	27	8356
	11	13	0	37	36.6089	1	5	44	1.697	47	10	17.54	4		9008	9493	06	6212
	11	13	10	41	24.4549	1	3	22	21.936	47	2	59.54	4		9010	1063	11	6209
	11	13	14	6	3.9661	1	6	31	24.309	-52	46	37.65	4		9023	888	03	9672
	11	13	14	6	7.9659	1	6	31	43.390	-52	16	30.25	4		9023	888	04	8412
	11	13	14	6	11.9657	1	6	32	2.459	-51	46	28.88	4		9023	888	05	8413
	11	13	14	6	15.9655	1	6	32	21.159	-51	16	28.79	4		9023	888	06	8414

November 13-17, 1965

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.	OBS.NO.
1965	11	13	14	6	19.9651	1	6	32	39.859	-50	46	27.43	4		9023	888 07	8415
	11	13	14	6	23.9650	1	6	32	58.629	-50	16	32.05	4		9023	888 08	8416
	11	13	14	6	27.9648	1	6	33	16.752	-49	46	29.63	4		9023	888 09	6031
	11	13	16	10	39.4298	1	2	27	39.040	-29	37	39.23	4		9023	893 12	7729
	11	13	16	10	43.4295	1	2	29	30.014	-29	13	32.45	4		9023	893 13	7730
	11	13	16	10	47.4294	1	2	31	20.356	-28	49	13.28	4		9023	893 14	7731
	11	13	16	10	51.4289	1	2	33	9.957	-28	24	44.93	4		9023	893 15	7732
	11	13	16	10	55.4286	1	2	34	58.918	-28	0	4.04	4		9023	893 16	6032
	11	14	0	42	43.5213	1	5	15	39.751	57	28	11.64	4		9008	9525 02	6213
	11	14	4	12	43.9511	1	7	22	25.860	-48	45	4.28	4		9007	1475 03	6043
	11	14	6	13	17.3281	1	1	35	26.057	-19	44	34.51	4		9011	3579 01	9893
	11	14	6	13	25.3283	1	1	38	15.413	-19	6	46.18	4		9011	3579 02	9894
	11	14	6	13	33.3285	1	1	41	3.684	-18	28	24.33	4		9011	3579 03	9895
	11	14	6	13	41.3287	1	1	43	50.838	-17	49	30.63	4		9011	3579 04	9896
	11	14	6	13	49.3286	1	1	46	37.395	-17	10	8.00	4		9011	3579 05	5917
	11	14	10	42	28.2513	1	6	25	48.535	37	0	18.12	4		9001	6613 02	5933
	11	14	10	42	32.2515	1	6	27	45.373	37	41	5.11	4		9001	6613 03	7808
	11	14	10	42	36.2514	1	6	29	44.315	38	21	50.76	4		9001	6613 04	7809
	11	14	10	42	40.2515	1	6	31	45.481	39	2	28.61	4		9001	6613 05	7810
	11	14	10	42	44.2515	1	6	33	49.260	39	43	8.19	4		9001	6613 06	7811
	11	14	10	42	48.2516	1	6	35	55.749	40	23	43.60	4		9001	6613 07	7812
	11	14	10	42	52.2514	1	6	38	4.466	41	4	8.36	4		9001	6613 08	8350
	11	14	10	42	56.2514	1	6	40	15.640	41	44	28.37	4		9001	6613 09	8351
	11	14	10	44	.2520	1	7	22	31.479	51	59	55.05	4		9001	6613 25	5934
	11	14	10	48	40.2564	1	13	6	38.957	65	13	9.06	4		9001	6613 58	5935
	11	14	12	2	44.9693	1	7	53	19.722	-59	44	6.70	4		9023	919 10	8386
	11	14	12	2	48.9689	1	7	52	6.952	-59	24	28.67	4		9023	919 11	6033
	11	14	12	2	52.9689	1	7	50	56.371	-59	4	48.24	4		9023	919 12	8387
	11	14	12	2	56.9691	1	7	49	47.008	-58	45	3.16	4		9023	919 13	9673
	11	14	12	3	.9690	1	7	48	40.070	-58	25	18.36	4		9023	919 14	9450
	11	14	12	3	4.9692	1	7	47	34.444	-58	5	31.51	4		9023	919 15	8388
	11	14	12	3	8.9692	1	7	46	30.707	-57	45	43.58	4		9023	919 16	8389
	11	14	14	9	49.7135	1	5	47	38.788	-57	3	34.48	4		9023	926 12	6660
	11	14	14	9	53.7132	1	5	48	29.389	-56	32	.58	4		9023	926 13	6661
	11	14	14	9	57.7125	1	5	49	19.360	-56	0	25.90	4		9023	926 14	6034
	11	14	14	10	1.7123	1	5	50	8.250	-55	28	50.27	4		9023	926 15	6662
	11	14	14	10	5.7118	1	5	50	55.934	-54	57	14.62	4		9023	926 16	6663
	11	14	14	10	9.7114	1	5	51	43.112	-54	25	34.84	4		9023	926 17	6664
	11	14	16	14	53.1469	1	2	3	47.384	-23	45	49.19	4		9023	932 15	6657
	11	14	16	14	57.1467	1	2	5	26.193	-23	23	8.07	4		9023	932 16	6035
	11	14	16	15	1.1467	1	2	7	4.234	-23	0	19.89	4		9023	932 17	6658
	11	14	16	15	5.1466	1	2	8	42.182	-22	37	26.78	4		9023	932 18	6659
	11	15	0	46	25.7306	1	4	18	28.445	51	59	9.18	4		9008	9556 04	6214
	11	15	2	7	19.7558	1	7	24	53.093	-59	4	16.18	4		9011	3601 01	6046
	11	15	2	7	27.7553	1	7	23	13.131	-58	16	52.94	4		9011	3601 02	5411
	11	15	2	7	35.7550	1	7	21	40.004	-57	29	27.61	4		9011	3601 03	4953
	11	15	2	7	43.7545	1	7	20	12.585	-56	42	4.73	4		9011	3601 04	4954
	11	15	4	49	34.7616	1	5	19	1.525	59	42	49.17	4		9004	2603 09	5937
	11	15	6	16	50.3910	1	1	10	42.082	-18	11	40.32	4		9011	3618 01	9628
	11	15	6	16	58.3916	1	1	13	15.275	-17	38	1.40	4		9011	3618 02	9629
	11	15	6	17	6.3924	1	1	15	47.936	-17	3	52.07	4		9011	3618 03	9982
	11	15	6	17	14.3932	1	1	18	19.556	-16	29	16.73	4		9011	3618 04	9630
	11	15	6	17	22.3936	1	1	20	50.493	-15	54	17.02	4		9011	3618 05	9631
	11	15	6	17	30.3942	1	1	23	20.779	-15	18	50.76	4		9011	3618 06	5919
	11	16	0	50	28.7332	1	3	40	26.601	49	20	12.21	4		9008	9587 02	6837
	11	16	4	17	2.7072	1	2	41	49.496	-51	52	11.68	4		9011	3655 06	5920
	11	16	14	19	54.2222	1	4	44	16.793	-41	59	55.43	4		9023	996 15	6036
	11	16	14	19	58.2219	1	4	45	34.847	-41	26	35.46	4		9023	996 16	6654
	11	16	14	20	2.2215	1	4	46	51.699	-40	1	10.65	4		9023	996 17	6655
	11	16	14	20	6.2212	1	4	48	7.635	-4	19	46.10	4		9023	996 18	6656
	11	16	14	53	31.8038	1	2	18	10.932	61	36	50.90	4		9012	2171 09	8275
	11	16	14	53	39.8017	1	2	15	43.528	62	25	18.44	4		9012	2171 10	8276
	11	16	14	53	47.7995	1	2	13	5.942	63	13	19.14	4		9012	2171 11	8277
	11	16	14	53	55.7971	1	2	10	17.703	64	0	59.60	4		9012	2171 12	6947
	11	16	14	54	3.7947	1	2	7	16.648	64	48	2.68	4		9012	2171 13	8278
	11	16	16	20	54.2502	1	0	39	29.641	-24	35	17.39	4		9023	999 12	7886
	11	16	16	21	2.2515	1	0	42	18.367	-24	4	35.20	4		9023	999 13	7887
	11	16	16	21	10.2526	1	0	45	6.595	-23	33	15.44	4		9023	999 14	7493
	11	16	16	21	18.2538	1	0	47	53.946	-23	1	20.54	4		9023	999 15	7494
	11	16	16	21	26.2549	1	0	50	40.698	-22	28	52.38	4		9023	999 16	7495
	11	16	16	21	34.2558	1	0	53	26.853	-21	55	56.85	4		9023	999 17	7496
	11	16	16	22	6.2591	1	1	4	23.393	-19	38	36.81	4		9023	999 19	7888
	11	16	16	22	14.2597	1	1	7	5.200	-19	2	55.45	4		9023	999 20	5761
	11	17	4	20	29.1377	1	1	30	7.410	-50	7	59.38	4		9011	3703 01	5921
	11	17	12	15	21.9977	1	7	23	34.884	-66	49	21.85	4		9023	1024 10	7497
	11	17	12	15	25.9973	1	7	22	1.043	-66	25	56.84	4		9023	1024 11	7498
	11	17	12	15	29.9970	1	7	20	30.633	-66	2	32.25	4		9023	1024 12	5762
	11	17	12	15	33.9966	1	7	19	4.312	-65	39	.36	4		9023	1024 13	8357
	11	17	12	15	37.9963	1	7	17	40.727	-65	15	20.46	4		9023	1024 14	7499
	11	17	12	15	41.9961	1	7	16	19.443	-64	51	41.08	4		9023	1024 15	9898

November 17-20, 1965

DATE Y	M	D	TIME (A-1) H	M	S	HMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	HMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1965	11	17	12	15	49.9959	1	7	15	1.598	-64	27	57.65	4		9023	1024	16	7500
	11	17	14	23	51.6698	1	3	52	49.121	-41	14	42.70	4		9023	1031	12	7588
	11	17	14	23	55.6693	1	3	54	31.501	-40	42	11.32	4		9023	1031	13	5763
	11	17	14	23	59.6690	1	3	56	12.142	-40	9	29.72	4		9023	1031	14	7589
	11	17	14	24	7.6680	1	3	59	29.564	-39	3	53.01	4		9023	1031	16	7590
	11	17	14	24	11.6676	1	4	1	5.634	-38	30	59.94	4		9023	1031	17	7591
	11	17	14	24	19.6669	1	4	4	14.326	-37	24	56.22	4		9023	1031	19	7592
	11	17	19	0	11.0609	1	3	42	13.956	62	19	41.17	4		9005	4753	12	6149
	11	17	22	26	25.2246	1	1	48	1.243	-41	33	23.24	4		9002	9478	01	5747
	11	17	22	26	55.0928	1	2	3	25.161	-38	42	54.98	4		9002	9478	09	8400
	11	17	22	27	1.5561	1	2	6	38.982	-38	4	11.48	4		9002	9478	10	8401
	11	17	22	27	5.5561	1	2	8	37.697	-37	39	55.00	4		9002	9478	11	8402
	11	17	22	27	9.5567	1	2	10	35.769	-37	15	15.74	4		9002	9478	12	8403
	11	17	22	27	13.5553	1	2	12	32.747	-36	50	26.49	4		9002	9478	13	8404
	11	17	22	27	17.5556	1	2	14	29.480	-36	25	17.99	4		9002	9478	14	8405
	11	18	0	11	12.4373	1	8	51	45.141	-70	4	11.65	4		9011	3728	06	6143
	11	18	2	20	20.3372	1	6	6	8.668	-63	14	35.74	4		9011	3744	05	5922
	11	18	4	22	16.5506	1	23	29	21.787	-51	5	46.51	4		9011	3755	01	6217
	11	18	4	22	24.5504	1	23	34	34.099	-50	51	12.84	4		9011	3755	02	6218
	11	18	4	22	32.5504	1	23	39	46.712	-50	35	31.00	4		9011	3755	03	5923
	11	18	4	22	40.5500	1	23	44	59.904	-50	18	38.27	4		9011	3755	04	6580
	11	18	4	22	48.5497	1	23	50	13.234	-50	0	33.42	4		9011	3755	05	6219
	11	18	4	22	56.5494	1	23	55	26.541	-49	41	18.64	4		9011	3755	06	6220
	11	18	4	23	4.5491	1	0	0	39.093	-49	20	49.39	4		9011	3755	07	6221
	11	18	4	24	44.8660	1	1	19	47.570	-74	27	57.56	4		9007	1539	05	6044
	11	18	8	56	4.2978	1	8	9	55.090	26	13	57.32	4		9001	6657	F1	2864
	11	18	8	56	8.2978	1	8	12	7.320	26	41	22.65	4		9001	6657	F2	2865
	11	18	8	56	12.2978	1	8	14	20.576	27	8	31.12	4		9001	6657	F3	2866
	11	18	8	56	16.2978	1	8	16	34.244	27	35	27.50	4		9001	6657	F4	2867
	11	18	8	56	20.2978	1	8	18	49.048	28	2	7.81	4		9001	6657	F5	2868
	11	18	8	56	24.2979	1	8	21	4.562	28	28	32.84	4		9001	6657	F6	2869
	11	18	8	56	28.2979	1	8	23	21.099	28	54	40.54	4		9001	6657	F7	2870
	11	18	16	27	52.7671	1	0	1	17.298	-21	9	14.37	4		9023	1054	01	7593
	11	18	16	28	.7672	1	0	3	35.057	-20	44	24.84	4		9023	1054	02	7594
	11	18	16	28	8.7671	1	0	5	52.555	-20	19	9.63	4		9023	1054	03	5764
	11	18	16	28	16.7670	1	0	8	9.628	-19	53	31.16	4		9023	1054	04	7595
	11	18	16	28	24.7669	1	0	10	26.069	-19	27	29.55	4		9023	1054	05	7596
	11	18	16	28	32.7668	1	0	12	42.169	-19	1	.13	4		9023	1054	06	7597
	11	18	16	28	40.7664	1	0	14	57.761	-18	34	10.14	4		9023	1054	07	7598
	11	18	16	28	48.7661	1	0	17	13.108	-18	6	55.55	4		9023	1054	08	7599
	11	18	20	24	14.5262	1	5	54	59.000	-71	27	50.70	4		9002	9501	01	8342
	11	18	20	24	22.5257	1	5	55	14.884	-70	34	25.38	4		9002	9501	02	5748
	11	18	20	24	30.5261	1	5	55	31.695	-69	40	36.48	4		9002	9501	03	8343
	11	18	20	24	38.5263	1	5	55	50.099	-68	46	31.73	4		9002	9501	04	8344
	11	18	20	24	46.5260	1	5	[illegible]	8.997	-67	52	11.72	4		9002	9501	05	8345
	11	18	22	26	40.1054	1	23	20	43.266	-48	31	25.31	4		9002	9506	01	7636
	11	18	22	26	48.1056	1	23	24	49.824	-48	17	14.67	4		9002	9506	02	7637
	11	18	22	26	56.1046	1	23	28	56.882	-48	2	11.95	4		9002	9506	03	5749
	11	18	22	27	4.1044	1	23	33	4.136	-47	46	21.46	4		9002	9506	04	8340
	11	18	22	27	12.1045	1	23	37	11.977	-47	29	38.50	4		9002	9506	05	7639
	11	18	22	27	20.1049	1	23	41	19.406	-47	12	5.98	4		9002	9506	06	9441
	11	18	22	27	28.1042	1	23	45	27.617	-46	53	38.18	4		9002	9506	07	8341
	11	19	2	24	.0194	1	5	16	19.734	-69	11	9.76	4		9011	3790	01	6222
	11	19	2	24	8.0192	1	5	17	47.636	-68	10	38.98	4		9011	3790	02	6223
	11	19	2	24	16.0191	1	5	19	10.802	-67	9	52.14	4		9011	3790	03	5924
	11	19	2	24	24.0185	1	[illegible]	20	29.363	-66	8	50.45	4		9011	3790	04	6224
	11	19	2	24	32.0184	1	5	21	44.457	-65	7	34.12	4		9011	3790	05	6225
	11	19	2	24	40.0181	1	5	22	56.000	-64	6	5.67	4		9011	3790	06	6226
	11	19	2	28	49.4079	1	7	4	55.937	-47	52	51.52	4		9007	1561	06	6045
	11	19	4	26	26.3452	1	23	21	19.388	-45	2	43.12	4		9011	3799	01	9632
	11	19	4	26	34.3453	1	23	25	41.312	-44	45	32.66	4		9011	3799	02	9633
	11	19	4	26	42.3451	1	23	30	3.338	-44	27	23.31	4		9011	3799	03	5925
	11	19	4	26	50.3448	1	23	34	25.851	-44	8	18.13	4		9011	3799	04	9897
	11	19	4	26	58.3447	1	23	38	48.382	-43	48	12.74	4		9011	3799	05	9635
	11	19	4	27	6.3444	1	23	43	10.817	-43	27	9.11	4		9011	3799	06	9636
	11	19	4	27	14.3441	1	23	47	33.186	-43	5	4.69	4		9011	3799	07	9637
	11	19	4	28	38.1956	1	0	13	57.111	-69	28	39.75	4		9007	1566	01	7196
	11	19	4	28	46.1953	1	0	21	17.212	-69	17	38.38	4		9007	1566	02	7197
	11	19	4	28	54.1953	1	0	28	34.269	-69	5	21.29	4		9007	1566	03	7369
	11	19	4	29	2.1952	1	0	35	48.344	-68	51	49.92	4		9007	1566	04	6046
	11	19	4	29	10.1946	1	0	42	59.064	-68	37	7.77	4		9007	1566	05	7370
	11	19	4	29	18.1949	1	0	50	6.636	-68	21	3.07	4		9007	1566	06	7371
	11	19	4	29	26.1948	1	0	57	9.010	-68	3	47.40	4		9007	1566	07	7372
	11	19	12	24	50.0137	1	6	19	10.772	-65	26	2.23	4		9023	1074	06	5765
	11	19	16	32	59.1606	1	0	12	14.807	-14	48	58.78	4		9023	1087	01	5766
	11	19	22	30	49.3368	1	23	15	8.626	-42	49	37.04	4		9002	9533	03	5750
	11	20	1	10	44.6559	1	1	14	28.464	64	8	31.35	4		9008	9669	02	7198
	11	20	1	10	52.6562	1	1	9	25.684	64	51	51.45	4		9008	9669	03	6216
	11	20	1	11	.6561	1	1	4	3.674	65	34	16.63	4		9008	9669	04	7199
	11	20	1	11	8.6563	1	0	58	21.637	66	15	46.76	4		9008	9669	05	7200

November 20-23, 1965

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.	OBS.NO.
1965	11	20	1	11	24.6564	1	0	45	53.987	67	35	30.13	4		9008	9669 07	7201
	11	20	1	11	32.6561	1	0	39	5.865	68	13	29.40	4		9008	9669 08	7373
	11	20	2	31	47.4929	1	6	51	52.560	-56	11	58.18	4		9007	1594 06	6047
	11	20	11	11	98.6601	1	1	17	38.412	72	53	51.49	4		9001	6701 02	5936
	11	20	12	29	4.2234	1	5	34	12.716	-67	31	51.61	4		9023	1105 01	7600
	11	20	12	29	8.2232	1	5	34	16.965	-67	2	24.28	4		9023	1105 02	5767
	11	20	12	29	12.2234	1	5	34	21.565	-66	32	48.25	4		9023	1105 03	7601
	11	20	12	29	16.2233	1	5	34	26.311	-66	3	12.44	4		9023	1105 04	7602
	11	20	12	29	20.2232	1	5	34	31.747	-65	33	33.55	4		9023	1105 05	7603
	11	20	12	29	24.2230	1	5	34	38.015	-65	3	52.43	4		9023	1105 06	7604
	11	20	12	29	28.2230	1	5	34	44.019	-64	34	4.31	4		9023	1105 07	7605
	11	20	12	29	32.2231	1	5	34	50.762	-64	4	14.48	4		9023	1105 08	7606
	11	20	14	32	15.1978	1	23	37	10.666	-46	51	50.68	4		9023	1117 01	8390
	11	20	14	32	23.1972	1	23	41	58.922	-46	29	35.29	4		9023	1117 02	5768
	11	20	14	32	31.1970	1	23	46	46.876	-46	6	15.85	4		9023	1117 03	8391
	11	20	14	32	39.1967	1	23	51	33.692	-45	41	45.34	4		9023	1117 04	8392
	11	20	14	32	47.1962	1	23	56	19.817	-45	16	2.27	4		9023	1117 05	8393
	11	20	14	32	55.1959	1	0	1	4.547	-44	49	14.73	4		9023	1117 06	9451
	11	20	14	33	3.1952	1	0	5	47.731	-44	21	20.87	4		9023	1117 07	8395
	11	20	18	27	45.1445	1	7	13	4.683	-60	13	35.24	4		9002	9544 02	8270
	11	20	18	27	53.1440	1	7	10	47.211	-59	35	49.07			9002	9544 03	9442
	11	20	18	28	1.1442	1	7	8	36.901	-58	57	47.66			9002	9544 04	5751
	11	20	18	28	9.1442	1	7	6	32.442	-58	19	35.64	4		9002	9544 05	8272
	11	20	18	28	17.1451	1	7	4	33.934	-57	41	19.24	4		9002	9544 06	8273
	11	20	18	28	33.1454	1	7	0	54.030	-56	24	22.77	4		9002	9544 08	8274
	11	20	20	32	42.6581	1	3	19	38.946	-72	35	11.82	4		9002	9550 05	5752
	11	21	4	35	15.8624	1	23	22	48.094	-32	55	41.37	4		9011	3828 02	4949
	11	21	4	35	23.8620	1	23	26	2.737	-32	32	1.10	4		9011	3828 03	5926
	11	21	4	35	31.8622	1	23	29	17.309	-32	7	41.59	4		9011	3828 04	4950
	11	21	4	35	39.8619	1	23	32	31.511	-31	42	39.02	4		9011	3828 05	4951
	11	21	9	15	57.3750	1	23	10	45.227	75	40	43.22	4		9010	1148 02	9670
	11	21	9	16	5.3736	1	22	57	59.217	76	1	34.31	4		9010	1148 03	9981
	11	21	9	16	13.3729	1	22	44	41.681	76	19	33.98	4		9010	1148 04	6210
	11	21	9	16	21.3729	1	22	30	56.455	76	34	24.44	4		9010	1148 05	9621
	11	21	9	16	29.3733	1	22	16	47.060	76	46	.65	4		9010	1148 06	9622
	11	21	9	16	37.3728	1	22	2	22.502	76	54	21.23	4		9010	1148 07	9623
	11	21	12	33	7.1531	1	4	34	56.278	-70	23	6.31	4		9023	1135 01	5769
	11	21	12	33	19.1528	1	4	38	36.635	-68	52	44.36	4		9023	1135 04	8396
	11	21	12	33	23.1529	1	4	39	44.643	-68	22	19.89	4		9023	1135 05	8397
	11	21	12	33	27.1528	1	4	40	50.381	-67	51	51.24	4		9023	1135 06	8398
	11	21	12	33	31.1527	1	4	41	53.816	-67	21	22.21	4		9023	1135 07	9452
	11	21	12	33	35.1526	1	4	42	56.182	-66	50	49.88	4		9023	1135 08	9453
	11	21	12	33	39.1526	1	4	43	56.119	-66	20	3.12	4		9023	1135 09	8399
	11	21	14	35	40.2478	1	23	2	47.449	-42	40	.11	4		9023	1145 04	4926
	11	21	14	35	44.2476	1	23	4	49.402	-42	30	49.40	4		9023	1145 05	5770
	11	21	14	35	48.2478	1	23	6	51.584	-42	21	26.65	4		9023	1145 06	4927
	11	21	14	35	52.2476	1	23	8	53.590	-42	11	50.52	4		9023	1145 07	4928
	11	21	14	35	56.2475	1	23	10	55.694	-42	2	2.71	4		9023	1145 08	4929
	11	22	0	31	37.5169	1	6	39	23.257	-62	43	11.38	4		9011	3833 03	4945
	11	22	0	31	45.5164	1	6	36	51.690	-61	57	2.83	4		9011	3833 04	4946
	11	22	0	31	53.5163	1	6	34	29.658	-61	10	45.78	4		9011	3833 05	5927
	11	22	0	32	1.5160	1	6	32	15.876	-60	24	22.44	4		9011	3833 06	4947
	11	22	0	32	9.5160	1	6	30	10.754	-59	37	48.55	4		9011	3833 07	4948
	11	22	2	35	29.6181	1	0	24	27.130	-70	40	23.78	4		9011	3848 01	7714
	11	22	2	35	37.6178	1	0	35	16.246	-70	14	19.29	4		9011	3848 02	7882
	11	22	2	35	53.6173	1	0	55	55.119	-69	14	30.30	4		9011	3848 04	6047
	11	22	2	36	1.6170	1	1	5	41.113	-68	40	50.04	4		9011	3848 05	7883
	11	22	2	36	9.6166	1	1	15	5.519	-68	4	54.01	4		9011	3848 06	7716
	11	22	2	38	28.8075	1	5	53	1.614	-70	42	28.28	4		9007	1634 03	7699
	11	22	2	38	36.8075	1	5	52	57.123	-69	57	28.41	4		9007	1634 05	7700
	11	22	2	38	44.8072	1	5	52	54.121	-69	12	8.27	4		9007	1634 04	7701
	11	22	2	38	52.8073	1	5	52	54.173	-68	26	31.99	4		9007	1634 05	7702
	11	22	2	39	.8071	1	5	52	56.485	-67	40	36.19	4		9007	1634 06	6048
	11	22	2	39	8.8074	1	5	53	.092	-66	54	23.35	4		9007	1634 07	7703
	11	22	4	39	8.6103	1	23	11	28.784	-29	5	44.45	4		9011	3858 02	6227
	11	22	4	39	16.6105	1	23	14	20.631	-28	42	40.89	4		9011	3858 03	6228
	11	22	4	39	24.6105	1	23	17	12.227	-28	19	1.40	4		9011	3858 04	6581
	11	22	4	39	32.6101	1	23	20	3.626	-27	54	48.42	4		9011	3858 05	6229
	11	22	4	39	40.6101	1	23	22	54.514	-27	29	58.26	4		9011	3858 06	6040
	11	22	4	39	48.6102	1	23	25	45.074	-27	4	37.44	4		9011	3858 07	6230
	11	22	4	39	56.6100	1	23	28	35.359	-26	38	40.18	4		9011	3858 08	6231
	11	22	5	23	40.4354	1	22	33	41.872	72	37	27.70	4		9004	2679 03	6145
	11	22	12	37	53.1263	1	3	41	11.713	-66	30	38.43	4		9023	1171 02	5771
	11	22	12	37	57.1262	1	3	43	17.363	-66	0	29.77	4		9023	1171 03	7501
	11	22	12	38	1.1262	1	3	45	18.920	-65	30	7.38	4		9023	1171 04	7502
	11	22	12	38	5.1261	1	3	47	16.260	-64	59	38.05	4		9023	1171 05	7503
	11	22	12	38	9.1261	1	3	49	10.458	-64	28	56.76	4		9023	1171 06	7504
	11	22	12	38	13.1260	1	3	51	.823	-63	58	3.68	4		9023	1171 07	7505
	11	22	12	38	17.1260	1	3	52	47.712	-63	27	7.43	4		9023	1171 08	7506
	11	23	5	6	4.3093	1	5	0	56.117	21	26	11.84	4		9009	1842 F1	3573

November 23-24, 1965

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1965	11	23	5	6	8.3093	1	5	2	21.997	22	1	10.65	4		9009	1842	F2	4321
	11	23	5	6	12.3093	1	5	3	47.728	22	56	8.03	4		9009	1842	F3	3575
	11	23	5	6	16.3093	1	5	5	14.818	23	10	57.80	4		9009	1842	F4	3576
	11	23	5	6	20.3093	1	5	6	42.123	23	45	36.99	4		9009	1842	F5	3577
	11	23	5	6	24.3093	1	5	8	9.955	24	20	9.18	4		9009	1842	F6	3578
	11	23	5	6	28.3093	1	5	9	38.471	24	54	33.36	4		9009	1842	F7	3579
	11	23	5	26	20.6738	1	0	41	31.802	64	58	14.21	4		9004	2713	04	5940
	11	23	7	5	4.3139	1	5	26	1.957	-28	43	46.99	4		9001	6738	F1	2899
	11	23	7	5	8.3139	1	5	27	.108	-28	26	26.35	4		9001	6738	F2	2900
	11	23	7	5	12.3138	1	5	27	58.542	-28	8	57.35	4		9001	6738	F3	2901
	11	23	7	5	16.3138	1	5	28	57.002	-27	51	20.38	4		9001	6738	F4	2902
	11	23	7	5	20.3137	1	5	29	55.970	-27	33	42.21	4		9001	6738	F5	2903
	11	23	7	5	24.3137	1	5	30	55.055	-27	15	55.45	4		9001	6738	F6	2904
	11	23	7	5	28.3136	1	5	31	54.237	-26	58	2.41	4		9001	6738	F7	2905
	11	23	7	8	4.3122	1	6	13	31.071	-13	59	5.73	4		9001	6738	F1	3404
	11	23	7	8	8.3122	1	6	14	40.890	-13	37	8.88	4		9001	6738	F2	3405
	11	23	7	8	12.3122	1	6	15	50.589	-13	14	59.42	4		9001	6738	F3	2908
	11	23	7	8	16.3121	1	6	17	.543	-12	52	52.21	4		9001	6738	F4	3406
	11	23	7	8	20.3121	1	6	18	10.989	-12	30	31.19	4		9001	6738	F5	2910
	11	23	7	8	24.3121	1	6	19	22.187	-12	8	10.77	4		9001	6738	F6	2911
	11	23	7	8	28.3121	1	6	20	33.094	-11	45	46.97	4		9001	6738	F7	2912
	11	23	7	11	4.3114	1	7	11	16.721	3	35	45.30	4		9001	6738	F1	2952
	11	23	7	11	8.3114	1	7	12	42.142	3	59	50.11	4		9001	6738	F2	2953
	11	23	7	11	12.3114	1	7	14	7.906	4	23	52.93	4		9001	6738	F3	2954
	11	23	7	11	16.3114	1	7	15	34.148	4	47	54.49	4		9001	6738	F4	2955
	11	23	7	11	20.3114	1	7	17	.835	5	11	51.79	4		9001	6738	F5	2956
	11	23	7	11	24.3114	1	7	18	27.636	5	35	50.51	4		9001	6738	F6	2957
	11	23	7	11	28.3114	1	7	19	54.921	5	59	45.84	4		9001	6738	F7	2958
	11	23	7	12	4.3147	1	1	43	28.600	42	3	16.88	4		9009	1844	F1	1800
	11	23	7	12	8.3147	1	1	43	24.955	42	26	41.01	4		9009	1844	F2	1801
	11	23	7	12	12.3147	1	1	43	20.890	42	50	6.56	4		9009	1844	F3	1802
	11	23	7	12	20.3147	1	1	43	11.772	43	36	54.44	4		9009	1844	F5	1803
	11	23	7	14	4.3148	1	1	38	22.029	53	41	45.39	4		9009	1844	F1	1804
	11	23	7	14	8.3148	1	1	38	3.220	54	4	41.34	4		9009	1844	F2	1805
	11	23	7	14	12.3149	1	1	37	43.264	54	27	36.43	4		9009	1844	F3	1806
	11	23	7	14	16.3149	1	1	37	22.599	54	50	27.06	4		9009	1844	F4	1807
	11	23	7	14	20.3149	1	1	37	.998	55	13	15.17	4		9009	1844	F5	1808
	11	23	7	14	24.3149	1	1	36	39.403	55	36	1.78	4		9009	1844	F6	1809
	11	23	7	14	28.3149	1	1	36	16.590	55	58	47.21	4		9009	1844	F7	1810
	11	23	18	42	44.0069	1	6	3	25.798	-54	4	11.57	4		9002	9561	01	7662
	11	23	18	42	52.0059	1	6	2	39.881	-53	15	54.46	4		9002	9561	02	7663
	11	23	18	43	.0068	1	6	1	56.364	-52	27	24.72	4		9002	9561	03	7664
	11	23	18	43	8.0060	1	6	1	16.053	-51	39	2.28	4		9002	9561	04	5753
	11	23	18	43	16.0064	1	6	0	38.837	-50	50	40.79	4		9002	9561	05	7665
	11	23	20	44	47.3940	1	23	46	38.418	-60	33	12.99	4		9002	9570	05	6064
	11	23	22	49	18.3662	1	23	31	28.656	-19	14	11.07	4		9002	9574	01	7666
	11	23	22	49	26.3653	1	23	33	30.851	-18	47	23.65	4		9002	9574	02	7667
	11	23	22	49	34.3657	1	23	35	32.348	-18	20	10.65	4		9002	9574	03	9671
	11	23	22	49	42.3662	1	23	37	33.518	-17	52	37.51	4		9002	9574	04	7669
	11	23	22	49	50.3657	1	23	39	34.112	-17	24	46.49	4		9002	9574	05	5755
	11	23	22	49	58.3659	1	23	41	34.087	-16	56	29.54	4		9002	9574	06	7670
	11	24	2	47	31.6429	1	3	47	55.047	-69	55	29.42	4		9007	1671	05	6049
	11	24	3	28	46.4194	1	15	54	38.527	72	56	41.81	4		9004	2737	04	5939
	11	24	3	28	54.4199	1	15	53	40.732	72	1	44.91	4		9004	2737	05	6647
	11	24	3	29	2.4204	1	15	52	52.427	71	7	45.82	4		9004	2737	06	6648
	11	24	3	29	10.4197	1	15	52	11.971	70	14	25.20	4		9004	2737	07	6649
	11	24	5	7	4.3127	1	5	3	15.843	-29	31	1.84	4		9010	1174	F1	3391
	11	24	5	7	8.3127	1	5	4	15.834	-29	11	54.49	4		9010	1174	F2	3392
	11	24	5	7	12.3127	1	5	5	16.111	-28	52	36.64	4		9010	1174	F3	3637
	11	24	5	7	16.3126	1	5	6	16.596	-28	33	12.66	4		9010	1174	F4	3394
	11	24	5	7	20.3126	1	5	7	17.101	-28	13	41.86	4		9010	1174	F5	3395
	11	24	5	7	24.3125	1	5	8	17.711	-27	53	58.26	4		9010	1174	F6	3396
	11	24	5	7	28.3125	1	5	9	18.439	-27	34	17.21	4		9010	1174	F7	3397
	11	24	5	9	4.3116	1	5	34	40.819	-19	1	50.47	4		9010	1174	F1	2041
	11	24	5	9	8.3116	1	5	35	47.121	-18	38	54.04	4		9010	1174	F2	2042
	11	24	5	9	12.3115	1	5	36	53.411	-18	15	57.15	4		9010	1174	F3	2043
	11	24	5	9	16.3115	1	5	38	.293	-17	52	44.45	4		9010	1174	F4	2044
	11	24	5	9	20.3115	1	5	39	7.351	-17	29	28.34	4		9010	1174	F5	2045
	11	24	5	9	24.3114	1	5	40	14.558	-17	6	4.05	4		9010	1174	F6	2656
	11	24	5	9	28.3114	1	5	41	22.037	-16	42	33.99	4		9010	1174	F7	2047
	11	24	5	12	4.3106	1	6	29	5.322	-	0	11	9.30	4	9010	1174	F1	2048
	11	24	5	12	8.3106	1	6	30	25.398		0	15	30.59	4	9010	1174	F2	2049
	11	24	5	12	12.3106	1	6	31	45.586		0	42	9.10	4	9010	1174	F3	2050
	11	24	5	12	16.3106	1	6	33	6.497		1	8	50.73	4	9010	1174	F4	2051
	11	24	5	12	20.3106	1	6	34	27.530		1	35	29.76	4	9010	1174	F5	2052
	11	24	5	12	24.3106	1	6	35	48.710		2	2	11.21	4	9010	1174	F6	2053
	11	24	5	12	28.3106	1	6	37	10.654		2	28	54.63	4	9010	1174	F7	2054
	11	24	7	10	4.3124	1	5	8	55.432	-23	22	15.18	4		9001	6773	F1	3537
	11	24	7	10	8.3124	1	5	9	58.060	-23	2	55.05	4		9001	6773	F2	3538
	11	24	7	10	12.3124	1	5	11	.810	-22	43	28.73	4		9001	6773	F3	3539

November 24-25, 1965

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1965	11	24	7	10	16.3123	1	5	12	4.162	-22	23	52.10	4		9001	6773	F4	4301
	11	24	7	10	20.3123	1	5	13	7.740	-22	4	8.91	4		9001	6773	F5	3541
	11	24	7	10	24.3122	1	5	14	11.291	-21	44	18.23	4		9001	6773	F6	3542
	11	24	7	12	4.3113	1	5	42	30.138	-12	45	25.27	4		9001	6773	F1	3543
	11	24	7	12	8.3112	1	5	43	42.677	-12	22	7.85	4		9001	6773	F2	5023
	11	24	7	12	12.3112	1	5	44	55.721	-11	58	48.01	4		9001	6773	F3	4303
	11	24	7	12	16.3112	1	5	46	9.195	-11	35	14.60	4		9001	6773	F4	3544
	11	24	7	12	20.3112	1	5	47	22.807	-11	11	39.97	4		9001	6773	F5	3545
	11	24	7	12	24.3111	1	5	48	37.012	-10	47	53.50	4		9001	6773	F6	3546
	11	24	7	12	28.3111	1	5	49	51.540	-10	24	3.20	4		9001	6773	F7	3547
	11	24	7	14	4.3105	1	6	21	51.019	-	0	20	3.19	4		9001	6773	F1	3548
	11	24	7	14	8.3105	1	6	23	16.764		0	6	7.96	4		9001	6773	F2	3549
	11	24	7	14	12.3105	1	6	24	43.025		0	32	22.63	4		9001	6773	F3	4304
	11	24	7	14	16.3105	1	6	26	9.761		0	58	41.58	4		9001	6773	F4	3550
	11	24	7	14	20.3105	1	6	27	36.918		1	25	1.13	4		9001	6773	F5	3551
	11	24	7	14	24.3104	1	6	29	4.948		1	51	24.87	4		9001	6773	F6	3552
	11	24	7	14	28.3104	1	6	30	33.208		2	17	51.11	4		9001	6773	F7	3553
	11	24	7	16	4.3103	1	7	8	27.603	12	51	39.60	4		9001	6773	F1	4305
	11	24	7	16	8.3103	1	7	10	8.918	13	17	29.96	4		9001	6773	F2	3555
	11	24	7	16	12.3103	1	7	11	50.858	13	43	15.31	4		9001	6773	F3	4306
	11	24	7	16	16.3103	1	7	13	33.359	14	8	55.39	4		9001	6773	F4	3556
	11	24	7	16	20.3103	1	7	15	16.163	14	34	30.44	4		9001	6773	F5	3557
	11	24	7	16	24.3103	1	7	16	59.670	14	59	57.30	4		9001	6773	F6	4307
	11	24	7	16	28.3103	1	7	18	43.624	15	25	17.30	4		9001	6773	F7	3558
	11	24	7	18	4.3099	1	3	6	29.201	42	28	8.71	4		9010	1175	F1	2604
	11	24	7	18	4.3106	1	8	2	46.502	24	48	3.20	4		9001	6773	F1	3663
	11	24	7	18	8.3098	1	3	7	5.441	43	4	48.36	4		9010	1175	F2	2605
	11	24	7	18	8.3106	1	8	4	42.119	25	9	9.51	4		9001	6773	F2	3664
	11	24	7	18	12.3098	1	3	7	42.164	43	41	29.79	4		9010	1175	F3	2606
	11	24	7	18	12.3106	1	8	6	37.957	25	29	58.15	4		9001	6773	F3	3665
	11	24	7	18	16.3098	1	3	8	19.510	44	18	14.05	4		9010	1175	F4	2607
	11	24	7	18	16.3107	1	8	8	34.463	25	50	39.55	4		9001	6773	F4	3666
	11	24	7	18	20.3098	1	3	8	57.089	44	55	2.52	4		9010	1175	F5	2608
	11	24	7	18	20.3107	1	8	10	31.320	26	11	1.74	4		9001	6773	F5	3667
	11	24	7	18	24.3098	1	3	9	35.321	45	31	49.19	4		9010	1175	F6	2609
	11	24	7	18	24.3107	1	8	12	28.440	26	31	14.82	4		9001	6773	F6	3668
	11	24	7	18	28.3098	1	3	10	13.778	46	8	45.02	4		9010	1175	F7	2610
	11	24	7	18	28.3107	1	8	14	26.092	26	51	12.42	4		9001	6773	F7	3669
	11	24	7	21	4.3102	1	3	49	31.745	69	39	31.17	4		9010	1175	F1	2841
	11	24	7	21	4.3121	1	9	33	22.339	36	56	31.33	4		9001	6773	F1	3670
	11	24	7	21	8.3102	1	3	51	16.763	70	9	10.16	4		9010	1175	F2	2959
	11	24	7	21	8.3121	1	9	35	24.520	36	46	34.86	4		9001	6773	F2	3671
	11	24	7	21	12.3102	1	3	53	6.778	70	42	39.51	4		9010	1175	F3	2843
	11	24	7	21	12.3121	1	9	37	26.154	36	56	20.76	4		9001	6773	F3	3672
	11	24	7	21	16.3103	1	3	55	1.873	71	15	56.23	4		9010	1175	F4	2844
	11	24	7	21	16.3122	1	9	39	27.804	37	5	53.99	4		9001	6773	F4	4308
	11	24	7	21	20.3103	1	3	57	2.094	71	49	.79	4		9010	1175	F5	2845
	11	24	7	21	20.3122	1	9	41	28.993	37	15	12.24	4		9001	6773	F5	3673
	11	24	7	21	24.3123	1	9	43	29.896	37	24	16.66	4		9001	6773	F6	3674
	11	24	7	21	28.3103	1	4	1	21.437	72	54	26.04	4		9010	1175	F7	2846
	11	24	7	21	28.3123	1	9	45	31.014	37	33	10.65	4		9001	6773	F7	3675
	11	24	14	49	46.8470	1	23	21	34.347	-22	40	26.46	4		9023	1209	02	5772
	11	25	0	45	41.0842	1	5	14	10.223	-60	28	42.24	4		9011	3890	01	4920
	11	25	0	45	49.0840	1	5	13	44.672	-59	30	30.88	4		9011	3890	03	4921
	11	25	0	45	53.0838	1	5	13	33.460	-59	1	24.80	4		9011	3890	04	4922
	11	25	0	45	57.0835	1	5	13	22.754	-58	32	18.04	4		9011	3890	05	1092
	11	25	0	46	1.0836	1	5	13	12.844	-58	3	16.93	4		9011	3890	06	4923
	11	25	0	46	5.0835	1	5	13	4.058	-57	34	11.36	4		9011	3890	07	4924
	11	25	0	46	9.0835	1	5	12	55.177	-57	5	12.31	4		9011	3890	08	4925
	11	25	2	48	30.1255	1	23	14	33.253	-50	18	17.01	4		9011	3902	01	8369
	11	25	2	48	38.1253	1	23	20	5.665	-49	53	11.01	4		9011	3902	02	9443
	11	25	2	48	46.1250	1	23	25	36.131	-49	26	41.17	4		9011	3902	03	1093
	11	25	2	48	54.1248	1	23	31	4.345	-48	58	49.42	4		9011	3902	04	8370
	11	25	2	49	2.1245	1	23	36	30.166	-48	29	31.71	4		9011	3902	05	8371
	11	25	2	49	10.1241	1	23	41	53.375	-47	58	52.01	4		9011	3902	06	9444
	11	25	2	49	18.1237	1	23	47	13.814	-47	26	50.19	4		9011	3902	07	8372
	11	25	2	49	26.1234	1	23	52	31.144	-46	53	24.90	4		9011	3902	08	8373
	11	25	4	55	24.7609	.	23	57	52.470	-	5	11	40.28	4	9011	3905	07	2146
	11	25	5	9	4.3125	1	2	12	21.323	-12	45	47.42	4		9009	1888	F1	2960
	11	25	5	9	8.3125	1	2	13	7.618	-12	21	5.80	4		9009	1888	F2	2301
	11	25	5	9	12.3124	1	2	13	53.589	-11	56	14.37	4		9009	1888	F3	2302
	11	25	5	9	16.3124	1	2	14	39.869	-11	31	9.98	4		9009	1888	F4	2303
	11	25	5	9	20.3124	1	2	15	26.152	-11	5	55.57	4		9009	1888	F5	2304
	11	25	5	9	24.3123	1	2	16	12.528	-10	40	29.64	4		9009	1888	F6	2305
	11	25	5	9	28.3123	1	2	16	58.824	-10	14	52.34	4		9009	1888	F7	2306
	11	25	5	11	4.3115	1	2	36	.360	0	58	14.94	4		9009	1888	F1	2307
	11	25	5	11	8.3115	1	2	36	49.356	1	28	39.96	4		9009	1888	F2	2308
	11	25	5	11	12.3114	1	2	37	38.662	1	59	16.26	4		9009	1888	F3	2309
	11	25	5	11	16.3114	1	2	38	28.112	2	30	4.75	4		9009	1888	F4	2310
	11	25	5	11	20.3114	1	2	39	17.501	3	1	1.00	4		9009	1888	F5	2311

November 25, 1965

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1965	11	25	5	11	24.3113	1	2	40	7.173	3	32	9.47	4		9009	1888	F6	2314
	11	25	5	11	28.3113	1	2	46	57.083	4	3	26.81	4		9009	1888	F7	2313
	11	25	5	13	4.3109	1	3	1	50.867	17	18	59.33	4		9009	1888	F1	2358
	11	25	5	13	8.3109	1	3	2	54.685	17	53	33.31	4		9009	1888	F2	2359
	11	25	5	13	12.3109	1	3	3	51.033	18	28	15.56	4		9009	1888	F3	23A0
	11	25	5	13	16.3109	1	3	4	47.565	19	3	1.48	4		9009	1888	F4	23A1
	11	25	5	13	20.3109	1	3	5	44.435	19	37	47.96	4		9009	1888	F5	23A2
	11	25	5	13	24.3109	1	3	6	41.714	20	12	42.09	4		9009	1888	F6	23A3
	11	25	5	13	28.3108	1	3	7	39.321	20	47	37.24	4		9009	1888	F7	23A4
	11	25	5	15	4.3109	1	3	32	55.972	34	47	33.10	4		9009	1888	F1	2365
	11	25	5	15	8.3109	1	3	34	5.887	35	22	.59	4		9009	1888	F2	23A6
	11	25	5	15	12.3109	1	3	35	16.514	35	56	23.90	4		9009	1888	F3	23A7
	11	25	5	15	16.3109	1	3	36	27.960	36	30	36.18	4		9009	1888	F4	23A8
	11	25	5	15	20.3109	1	3	37	39.805	37	4	45.74	4		9009	1888	F5	23A9
	11	25	5	15	24.3109	1	3	38	52.561	37	38	47.33	4		9009	1888	F6	2370
	11	25	5	15	28.3109	1	3	40	6.126	38	12	40.92	4		9009	1888	F7	2371
	11	25	5	17	4.3114	1	4	14	2.783	50	59	20.86	4		9009	1888	F1	2847
	11	25	5	17	8.3115	1	4	15	41.576	51	28	51.87	4		9009	1888	F2	2848
	11	25	5	17	12.3115	1	4	17	22.016	51	58	9.39	4		9009	1888	F3	29A6
	11	25	5	17	16.3115	1	4	19	3.623	52	27	13.08	4		9009	1888	F4	2850
	11	25	5	17	20.3115	1	4	20	46.713	52	56	1.97	4		9009	1888	F5	2851
	11	25	5	17	24.3116	1	4	22	31.564	53	24	38.35	4		9009	1888	F6	2852
	11	25	5	17	28.3116	1	4	24	17.851	53	52	59.96	4		9009	1888	F7	2853
	11	25	5	19	4.3125	1	5	16	18.884	63	55	20.62	4		9009	1888	F1	2854
	11	25	5	19	8.3125	1	5	18	58.557	64	16	55.45	4		9009	1888	F2	2855
	11	25	5	19	12.3126	1	5	21	40.454	64	38	8.94	4		9009	1888	F3	2856
	11	25	5	19	16.3126	1	5	24	25.509	64	59	6.55	4		9009	1888	F4	2943
	11	25	5	19	20.3126	1	5	27	13.351	65	19	47.49	4		9009	1888	F5	2857
	11	25	5	19	24.3127	1	5	30	4.937	65	40	3.97	4		9009	1888	F6	2858
	11	25	5	19	28.3127	1	5	32	58.263	66	0	5.10	4		9009	1888	F7	2859
	11	25	7	16	4.3121	1	5	7	49.293	-11	6	40.13	4		9001	6799	F1	3197
	11	25	7	16	8.3120	1	5	9	2.348	-10	42	21.58	4		9001	6799	F2	3198
	11	25	7	16	12.3120	1	5	10	15.345	-10	17	53.70	4		9001	6799	F3	3199
	11	25	7	16	16.3119	1	5	11	29.288	-	9	53 14.31	4		9001	6799	F4	3200
	11	25	7	16	24.3119	1	5	13	58.242	-	9	3 29.93	4		9001	6799	F6	3201
	11	25	7	16	28.3118	1	5	15	13.537	-	8	38 23.54	4		9001	6799	F7	5024
	11	25	7	18	4.3112	1	5	48	.755		2	7 30.82	4		9001	6799	F1	3203
	11	25	7	18	8.3111	1	5	49	30.067		2	35 55.86	4		9001	6799	F2	3204
	11	25	7	18	12.3111	1	5	51	.206		3	4 28.36	4		9001	6799	F3	3205
	11	25	7	18	16.3111	1	5	52	30.808		3	33 5.77	4		9001	6799	F4	3206
	11	25	7	18	20.3111	1	5	54	2.161		4	1 47.74	4		9001	6799	F5	3207
	11	25	7	18	24.3111	1	5	55	34.143		4	30 33.30	4		9001	6799	F6	3208
	11	25	7	18	28.3111	1	5	57	6.903		4	59 27.08	4		9001	6799	F7	3209
	11	25	7	20	4.3108	1	6	37	44.894	16	39	20.58	4		9001	6799	F1	3210
	11	25	7	20	8.3108	1	6	39	35.686	17	8	4.78	4		9001	6799	F2	3211
	11	25	7	20	12.3108	1	6	41	27.533	17	36	42.36	4		9001	6799	F3	3212
	11	25	7	20	16.3108	1	6	43	19.924	18	5	16.02	4		9001	6799	F4	3213
	11	25	7	20	20.3108	1	6	45	13.084	18	33	46.97	4		9001	6799	F5	3214
	11	25	7	20	24.3108	1	6	47	7.188	19	2	3.72	4		9001	6799	F6	3215
	11	25	7	20	28.3108	1	6	49	2.156	19	30	17.92	4		9001	6799	F7	3240
	11	25	7	22	4.3111	1	7	38	42.395	29	53	11.16	4		9001	6799	F1	3241
	11	25	7	22	8.3111	1	7	40	55.461	30	16	17.05	4		9001	6799	F2	3242
	11	25	7	22	12.3112	1	7	43	9.154			39 1.67	4		9001	6799	F3	3243
	11	25	7	22	16.3112	1	7	45	23.279			1 31.10	4		9001	6799	F4	3244
	11	25	7	22	20.3112	1	7	47	38.152	31	23	43.63	4		9001	6799	F5	3245
	11	25	7	22	24.3112	1	7	49	53.681	31	45	35.37	4		9001	6799	F6	3246
	11	25	7	22	28.3113	1	7	52	9.567	32	7	13.70	4		9001	6799	F7	3247
	11	25	7	24	4.3120	1	8	48	41.813	39	12	24.80	4		9001	6799	F1	3248
	11	25	7	24	8.3120	1	8	51	6.342	39	26	9.15	4		9001	6799	F2	3249
	11	25	7	24	12.3121	1	8	53	30.889	39	39	32.56	4		9001	6799	F3	3654
	11	25	7	24	16.3121	1	8	55	55.455	39	52	35.67	4		9001	6799	F4	3250
	11	25	7	24	20.3122	1	8	58	20.240	40	5	20.75	4		9001	6799	F5	3251
	11	25	7	24	24.3122	1	9	0	44.667	40	17	48.60	4		9001	6799	F6	3252
	11	25	7	24	28.3122	1	9	3	9.404	40	29	55.11	4		9001	6799	F7	3253
	11	25	12	49	54.1340	1	0	9	35.952	-58	56	27.73	4		9023	1238	01	5773
	11	25	12	49	58.1341	1	0	13	7.680	-58	39	26.36	4		9023	1238	02	9445
	11	25	12	50	2.1341	1	0	16	37.154	-58	21	59.53	4		9023	1238	03	9446
	11	25	12	50	6.1340	1	0	20	4.890	-58	4	4.06	4		9023	1238	04	8376
	11	25	12	50	10.1339	1	0	23	30.599	-57	45	39.86	4		9023	1238	05	9447
	11	25	12	50	14.1338	1	0	26	52.760	-57	26	53.81	4		9023	1238	06	8377
	11	25	12	50	18.1337	1	0	30	13.485	-57	7	37.27	4		9023	1238	07	8378
	11	25	12	50	22.1335	1	0	33	31.979	-56	47	52.71	4		9023	1238	08	8379
	11	25	14	54	32.1540	1	23	25	20.749	-16	38	27.94	4		9023	1244	01	83A0
	11	25	14	54	36.1540	1	23	26	29.819	-16	23	32.80	4		9023	1244	02	83A1
	11	25	14	54	40.1540	1	23	27	38.910	-16	8	27.87	4		9023	1244	03	83A2
	11	25	14	54	44.1538	1	23	28	47.388	-15	53	21.33	4		9023	1244	04	5774
	11	25	14	54	48.1538	1	23	29	56.051	-15	38	5.75	4		9023	1244	05	9446
	11	25	14	54	52.1538	1	23	31	4.973	-15	22	46.10	4		9023	1244	06	83A4
	11	25	14	54	56.1538	1	23	32	12.[illegible]	-15	7	21.04	4		9023	1244	07	83A5
	11	25	20	53	8.2868	1	23	3	4.382	-47	13	13.07	4		9002	9614	01	7671

November 25-26, 1965

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1965	11	25	20	53	12.2869	1	23	5	16.014	-47	1	42.09	4		9002	9614	02	7672
	11	25	20	53	16.2872	1	23	7	28.084	-46	49	55.19	4		9002	9614	03	5756
	11	25	20	53	20.2868	1	23	9	39.579	-46	37	55.63	4		9002	9614	04	7673
	11	25	20	53	24.2879	1	23	11	51.023	-46	25	39.47	4		9002	9614	05	7674
	11	25	20	53	28.2865	1	23	14	2.262	-46	13	9.36	4		9002	9614	06	7675
	11	25	20	53	32.2873	1	23	16	13.239	-46	0	21.42	4		9002	9614	07	7676
	11	26	0	50	26.7471	1	4	38	27.873	-58	4	31.12	4		9011	3915	01	7717
	11	26	0	50	34.7468	1	4	39	.948	-57	2	29.28	4		9011	3915	02	7718
	11	26	0	50	42.7465	1	4	39	33.687	-56	0	32.80	4		9011	3915	03	7719
	11	26	0	50	50.7462	1	4	40	6.604	-54	58	39.82	4		9011	3915	04	7720
	11	26	0	50	58.7462	1	4	40	39.231	-53	56	49.37	4		9011	3915	05	7721
	11	26	0	51	6.7460	1	4	41	12.084	-52	55	6.55	4		9011	3915	06	7722
	11	26	0	51	14.7459	1	4	41	44.393	-51	53	31.24	4		9011	3915	08	2147
	11	26	2	53	36.9110	1	23	30	14.167	-40	21	23.81	4		9011	3930	02	1096
	11	26	2	53	44.9105	1	23	34	41.615	-39	47	34.37	4		9011	3930	03	7884
	11	26	2	53	52.9101	1	23	39	6.931	-39	12	42.98	4		9011	3930	04	7724
	11	26	2	54	.9095	1	23	43	30.262	-38	36	43.76	4		9011	3930	05	7725
	11	26	2	54	8.9090	1	23	47	51.381	-37	59	39.40	4		9011	3930	06	7885
	11	26	2	54	16.9084	1	23	52	10.721	-37	21	23.49	4		9011	3930	07	7727
	11	26	2	54	24.9077	1	23	56	27.173	-36	42	9.89	4		9011	3930	08	7728
	11	26	5	13	4.3138	1	1	41	33.183	- 9	28	10.23	4		9009	1927	F1	3640
	11	26	5	13	8.3138	1	1	42	11.087	- 9	4	58.02	4		9009	1927	F2	3641
	11	26	5	13	12.3137	1	1	42	49.191	- 8	41	37.02	4		9009	1927	F3	3231
	11	26	5	13	16.3137	1	1	43	27.081	- 8	18	7.76	4		9009	1927	F4	3642
	11	26	5	13	20.3137	1	1	44	5.139	- 7	54	26.47	4		9009	1927	F5	3643
	11	26	5	15	4.3138	1	3	48	57.947	-26	42	40.91	4		9010	1193	F1	3750
	11	26	5	15	8.3138	1	3	49	55.771	-26	23	30.74	4		9010	1193	F2	3751
	11	26	5	15	12.3137	1	3	50	53.621	-26	4	11.19	4		9010	1193	F3	3752
	11	26	5	15	16.3137	1	3	51	52.101	-25	44	41.62	4		9010	1193	F4	4325
	11	26	5	15	20.3127	1	2	3	16.817		5	12	57.45	4		9009	1927	F5	3233
	11	26	5	15	20.3136	1	3	52	50.284	-25	25	1.69	4		9010	1193	F5	3754
	11	26	5	15	24.3136	1	3	53	49.105	-25	5	14.24	4		9010	1193	F6	3755
	11	26	5	15	28.3126	1	2	4	35.024		6	10	39.46	4		9009	1927	F7	3234
	11	26	5	15	28.3135	1	3	54	47.865	-24	45	16.74	4		9010	1193	F7	3756
	11	26	5	16	4.3131	1	4	3	48.417	-21	38	13.63	4		9010	1193	F1	3757
	11	26	5	16	8.3131	1	4	4	49.873	-21	16	34.36	4		9010	1193	F2	3758
	11	26	5	16	12.3130	1	4	5	51.559	-20	54	46.33	4		9010	1193	F3	3759
	11	26	5	16	16.3130	1	4	6	53.536	-20	32	48.90	4		9010	1193	F4	3760
	11	26	5	16	20.3129	1	4	7	55.798	-20	10	39.52	4		9010	1193	F5	3761
	11	26	5	16	24.3129	1	4	8	58.196	-19	48	20.28	4		9010	1193	F6	3762
	11	26	5	16	28.3128	1	4	10	1.118	-19	25	50.72	4		9010	1193	F7	3763
	11	26	5	17	4.3121	1	2	20	47.066		18	26	34.23	4		9009	1927	F1	3644
	11	26	5	17	8.3121	1	2	21	29.427		18	58	45.91	4		9009	1927	F2	3645
	11	26	5	17	12.3121	1	2	22	11.757		19	30	58.65	4		9009	1927	F3	3646
	11	26	5	17	16.3121	1	2	22	54.208		20	3	16.06	4		9009	1927	F4	3235
	11	26	5	17	20.3121	1	2	23	36.945		20	35	40.95	4		9009	1927	F5	3236
	11	26	5	17	24.3121	1	2	24	19.881		21	8	8.72	4		9009	1927	F6	3237
	11	26	5	17	28.3120	1	2	25	3.117		21	40	43.04	4		9009	1927	F7	3647
	11	26	5	18	4.3119	1	4	36	49.522	-	9	30	17.17	4		9010	1193	F1	3764
	11	26	5	18	8.3118	1	4	38	1.383	-	9	3	9.89	4		9010	1193	F2	3765
	11	26	5	18	12.3118	1	4	39	13.575	-	8	35	49.57	4		9010	1193	F3	3766
	11	26	5	18	16.3118	1	4	40	26.275	-	8	8	20.33	4		9010	1193	F4	3767
	11	26	5	18	20.3117	1	4	41	39.493	-	7	40	37.93	4		9010	1193	F5	3768
	11	26	5	18	24.3117	1	4	42	53.081	-	7	12	45.77	4		9010	1193	F6	3769
	11	26	5	18	28.3117	1	4	44	7.338	-	6	44	40.81	4		9010	1193	F7	3770
	11	26	5	19	4.3120	1	2	43	31.505		34	54	50.65	4		9009	1927	F1	3239
	11	26	5	19	8.3120	1	2	44	21.715		35	27	59.01	4		9009	1927	F2	3167
	11	26	5	19	12.3120	1	2	45	12.307		36	1	4.81	4		9009	1927	F3	3168
	11	26	5	19	16.3120	1	2	46	3.250		36	34	9.78	4		9009	1927	F4	3169
	11	26	5	19	20.3120	1	2	46	54.223		37	7	12.75	4		9009	1927	F5	3170
	11	26	5	19	24.3120	1	2	47	46.149		37	40	15.24	4		9009	1927	F6	3171
	11	26	5	19	28.3120	1	2	48	38.356		38	13	11.70	4		9009	1927	F7	3172
	11	26	5	21	4.3109	1	5	39	29.667		13	16	51.24	4		9010	1193	F1	3771
	11	26	5	21	4.3124	1	3	12	20.699		50	58	24.91	4		9009	1927	F1	3173
	11	26	5	21	8.3109	1	5	41	7.937		13	49	8.00	4		9010	1193	F2	3772
	11	26	5	21	8.3124	1	3	13	28.955		51	28	47.73	4		9009	1927	F2	3174
	11	26	5	21	12.3109	1	5	42	46.827		14	21	23.24	4		9010	1193	F3	3773
	11	26	5	21	12.3124	1	3	14	38.192		51	59	5.49	4		9009	1927	F3	3648
	11	26	5	21	16.3109	1	5	44	26.837		14	53	37.73	4		9010	1193	F4	3774
	11	26	5	21	16.3124	1	3	15	48.390		52	29	11.16	4		9009	1927	F4	3176
	11	26	5	21	20.3109	1	5	46	7.188		15	25	49.04	4		9010	1193	F5	3775
	11	26	5	21	20.3125	1	3	16	59.653		52	59	12.28	4		9009	1927	F5	4300
	11	26	5	21	24.3109	1	5	47	48.369		15	57	58.65	4		9010	1193	F6	3776
	11	26	5	21	24.3125	1	3	18	11.868		53	29	2.82	4		9009	1927	F6	3178
	11	26	5	21	28.3109	1	5	49	30.472		16	30	6.59	4		9010	1193	F7	3777
	11	26	5	21	28.3125	1	3	19	25.582		53	58	40.30	4		9009	1927	F7	3649
	11	26	5	23	4.3110	1	6	34	24.114		28	47	7.92	4		9010	1193	F1	3778
	11	26	5	23	4.3132	1	3	55	57.984		64	57	29.43	4		9009	1927	F1	3179
	11	26	5	23	8.3111	1	6	36	26.804		29	15	33.22	4		9010	1193	F2	3779
	11	26	5	23	8.3133	1	3	57	53.555		65	22	27.30	4		9009	1927	F2	3180

November 26-27, 1965

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DEC.(1950.0) °	′	″	RMS S	RANGE (MM)	STATION	FRAME NO.		ORS.NO.
1965	11	26	5	23	12.3111	1	6	38	30.508	29	43	46.07	4		9010	1193	F3	37A0
	11	26	5	23	12.3133	1	3	59	51.980	65	47	12.40	4		9009	1927	F3	3690
	11	26	5	23	16.3111	1	6	40	34.957	30	11	46.51	4		9010	1193	F4	37A1
	11	26	5	23	16.3133	1	4	1	53.124	66	11	46.73	4		90[illegible]	1927	F4	3181
	11	26	5	23	20.3111	1	6	42	40.240	30	39	30.52	4		9010	1193	F5	37A2
	11	26	5	23	20.3134	1	4	3	56.669	66	36	5.66	4		9009	1927	F5	3691
	11	26	5	23	24.3134	1	4	6	3.581	67	0	13.19	4		9009	1927	F6	3692
	11	26	5	23	28.3111	1	6	46	53.578	31	34	9.80	4		9010	1193	F7	37A3
	11	26	5	23	28.3135	1	4	8	13.373	67	24	5.81	4		9009	1927	F7	3183
	11	26	5	25	4.3118	1	7	41	38.682	40	56	10.86	4		9010	1193	F1	37A4
	11	26	5	25	8.3118	1	7	44	4.032	41	15	27.78	4		9010	1193	F2	37A5
	11	26	5	25	12.3119	1	7	46	30.286	41	34	23.48	4		9010	1193	F3	37A6
	11	26	5	25	16.3119	1	7	48	56.939	41	53	.81	4		9010	1193	F4	37A7
	11	26	5	25	20.3119	1	7	51	24.141	42	11	14.07	4		9010	1193	F5	37A8
	11	26	5	25	24.3120	1	7	53	51.739	42	29	8.82	4		9010	1193	F6	37A9
	11	26	5	25	28.3120	1	7	56	20.136	42	46	40.24	4		9010	1193	F7	3790
	11	26	5	28	4.3138	1	9	34	27.640	49	53	42.38	4		9010	1193	F1	3791
	11	26	5	28	8.3138	1	9	36	54.414	49	58	44.66	4		9010	1193	F2	3792
	11	26	5	28	12.3139	1	9	39	20.400	50	3	31.10	4		9010	1193	F3	3793
	11	26	5	28	16.3139	1	9	41	45.834	50	0	1.53	4		9010	1193	F4	3794
	11	26	5	28	20.3140	1	9	44	10.596	50	12	18.25	4		9010	1193	F5	3795
	11	26	5	28	24.3140	1	9	46	34.986	50	16	18.72	4		9010	1193	F6	3796
	11	26	5	28	28.3141	1	9	48	58.481	50	20	5.39	4		9010	1193	F7	3797
	11	26	7	22	4.3112	1	5	9	33.665	4	51	34.19	4		9001	6810	F1	3623
	11	26	7	22	4.3151	1	1	52	2.866	11	56	22.72	4		9010	1194	F1	865
	11	26	7	22	8.3112	1	5	11	2.143	5	22	2.76	4		9001	6810	F2	3624
	11	26	7	22	8.3150	1	1	52	14.689	12	18	55.34	4		9010	1194	F2	866
	11	26	7	22	12.3112	1	5	12	31.618	5	52	42.77	4		9001	6810	F3	3625
	11	26	7	22	12.3150	1	1	52	26.388	12	41	38.54	4		9010	1194	F3	867
	11	26	7	22	16.3111	1	5	14	1.778	6	23	28.26	4		9001	6810	F4	4314
	11	26	7	22	16.3150	1	1	52	37.979	13	4	29.08	4		9010	1194	F4	868
	11	26	7	22	20.3111	1	5	15	32.848	6	54	22.71	4		9001	6810	F5	3627
	11	26	7	22	20.3149	1	1	52	49.655	13	27	27.75	4		9010	1194	F5	869
	11	26	7	22	24.3111	1	5	17	4.567	7	25	24.50	4		9001	6810	F6	3628
	11	26	7	22	24.3149	1	1	53	1.267	13	50	34.81	4		9010	1194	F6	870
	11	26	7	22	28.3111	1	5	18	37.096	7	56	35.66	4		9001	6810	F7	3629
	11	26	7	22	28.3148	1	1	53	12.564	14	13	49.22	4		9010	1194	F7	871
	11	26	7	23	4.3145	1	1	54	49.308	17	49	14.76	4		9010	1194	F1	872
	11	26	7	23	8.3145	1	1	54	59.494	18	13	53.89	4		9010	1194	F2	873
	11	26	7	23	12.3144	1	1	55	9.642	18	38	41.09	4		9010	1194	F3	874
	11	26	7	23	16.3144	1	1	55	19.477	19	3	34.79	4		9010	1194	F4	875
	11	26	7	23	20.3144	1	1	55	29.004	19	28	38.83	4		9010	1194	F5	876
	11	26	7	23	24.3143	1	1	55	38.561	19	53	49.14	4		9010	1194	F6	877
	11	26	7	23	28.3143	1	1	55	48.248	20	19	10.87	4		9010	1194	F7	878
	11	26	7	25	4.3108	1	6	31	32.125	28	30	33.83	4		9001	68[illegible]	F1	3630
	11	26	7	25	8.3108	1	6	33	46.400	29	0	19.39	4		9001	6810	F2	3631
	11	26	7	25	12.3108	1	6	36	1.749	29	29	51.64	4		9001	6810	F3	3632
	11	26	7	25	16.3108	1	6	38	18.334	29	59	10.89	4		9001	6810	F4	4074
	11	26	7	25	20.3108	1	6	40	36.056	30	28	13.39	4		9001	6810	F5	3634
	11	26	7	25	24.3108	1	6	42	54.884	30	57	5.31	4		9001	6810	F6	3635
	11	26	7	25	28.3108	1	6	45	15.161	31	25	36.59	4		9001	6810	F7	3636
	11	26	7	28	4.3119	1	8	29	23.516	45	31	14.76	4		9001	6810	F1	3852
	11	26	7	28	4.3130	1	1	56	40.592	54	10	30.08	4		9010	1194	F1	1811
	11	26	7	28	8.3119	1	8	32	17.171	45	45	3.02	4		9001	6810	F2	4372
	11	26	7	28	8.3130	1	1	56	25.107	54	42	24.67	4		9010	1194	F2	1812
	11	26	7	28	12.3119	1	8	35	11.293	45	58	25.23	4		9001	6810	F3	3854
	11	26	7	28	12.3130	1	1	56	8.745	55	14	16.55	4		9010	1194	F3	1863
	11	26	7	28	16.3120	1	8	38	5.374	46	11	29.34	4		9001	6810	F4	4076
	11	26	7	28	16.3130	1	1	55	51.315	55	46	9.02	4		9010	1194	F4	1814
	11	26	7	28	20.3120	1	8	40	59.639	46	24	.52	4		9001	6810	F5	3856
	11	26	7	28	20.3130	1	1	55	32.378	56	18	2.26	4		9010	1194	F5	1815
	11	26	7	28	24.3120	1	8	43	53.843	46	36	14.05	4		9001	6810	F6	3857
	11	26	7	28	24.3130	1	1	55	13.313	56	49	52.96	4		9010	1194	F6	1816
	11	26	7	28	28.3121	1	8	46	48.263	46	47	58.97	4		9001	6810	F7	3858
	11	26	7	28	28.3130	1	1	54	52.573	57	21	41.99	4		9010	1194	F7	1817
	11	26	18	55	6.2483	1	4	25	12.095	-61	31	42.95	4		9002	9629	04	5757
	11	26	20	57	29.0654	1	22	55	4.674	-40	23	10.10	4		9002	9636	01	7677
	11	26	20	57	33.0639	1	22	56	55.412	-40	10	24.77	4		9002	9636	02	7678
	11	26	20	57	37.0648	1	22	58	45.654	-39	57	27.02	4		9002	9636	03	5758
	11	26	20	57	41.0651	1	23	0	35.942	-39	44	14.43	4		9002	9636	04	7679
	11	26	20	57	45.0646	1	23	2	26.073	-39	30	50.80	4		9002	9636	05	76A0
	11	26	20	57	49.0656	1	23	4	16.175	-39	17	11.02	4		9002	9636	06	8346
	11	27	0	55	.6025	1	3	59	5.910	-56	15	2.73	4		9011	3965	06	1857
	11	27	2	57	14.7835	1	22	57	32.709	-36	19	35.20	4		9011	3981	03	82A8
	11	27	2	57	22.7836	1	23	1	26.044	-35	50	6.32	4		9011	3981	04	82A9
	11	27	2	57	30.7835	1	23	5	18.850	-35	19	44.00	4		9011	3981	05	8290
	11	27	2	57	38.7833	1	23	9	10.444	-34	48	21.91	4		9011	39[illegible]	06	8291
	11	27	2	57	46.7830	1	23	13	.652	-34	16	10.63	4		9011	39[illegible]	07	1097
	11	27	2	57	54.7827	1	23	16	49.847	-33	43	1.11	4		9011	3981	08	8292
	11	27	2	59	3.6415	1	23	42	27.166	-63	6	35.37	4		9007	1744	10	8397

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1965	11	27	5	17	4.3161	1	1	16	14.817	- 6	35	21.18	4		9009	1958	F1	3639
	11	27	5	17	4.3167	1	2	46	41.348	-32	43	57.96	4		9010	1215	F1	3398
	11	27	5	17	8.3160	1	1	16	46.073	- 6	13	48.10	4		9009	1958	F2	3185
	11	27	5	17	8.3167	1	2	47	29.655	-32	28	59.11	4		9010	1215	F2	3399
	11	27	5	17	12.3160	1	1	17	17.203	- 5	52	5.07	4		9009	1958	F3	3186
	11	27	5	17	12.3166	1	2	48	18.151	-32	13	54.33	4		9010	1215	F3	2800
	11	27	5	17	16.3159	1	1	17	48.339	- 5	30	11.98	4		9009	1958	F4	3187
	11	27	5	17	16.3166	1	2	49	6.744	-31	58	43.08	4		9010	1215	F4	3638
	11	27	5	17	20.3159	1	1	18	19.445	- 5	8	11.44	4		9009	1958	F5	3188
	11	27	5	17	20.3165	1	2	49	55.463	-31	43	22.25	4		9010	1215	F5	2801
	11	27	5	17	24.3165	1	2	50	44.047	-31	27	54.12	4		9010	1215	F6	2802
	11	27	5	17	28.3158	1	1	19	21.583	- 4	23	48.03	4		9009	1958	F7	3189
	11	27	5	17	28.3164	1	2	51	33.111	-31	12	17.97	4		9010	1215	F7	3400
	11	27	5	18	4.3159	1	2	58	58.021	-28	46	42.56	4		9010	1215	F1	3401
	11	27	5	18	8.3158	1	2	59	48.086	-28	29	52.71	4		9010	1215	F2	2805
	11	27	5	18	12.3158	1	3	0	38.346	-28	12	54.89	4		9010	1215	F3	2806
	11	27	5	18	16.3157	1	3	1	28.651	-27	55	47.79	4		9010	1215	F4	2807
	11	27	5	18	20.3157	1	3	2	19.306	-27	38	35.78	4		9010	1215	F5	2808
	11	27	5	18	24.3156	1	3	3	9.786	-27	21	11.52	4		9010	1215	F6	2809
	11	27	5	18	28.3156	1	3	4	.719	-27	3	42.28	4		9010	1215	F7	2810
	11	27	5	19	4.3150	1	1	31	37.243	5	12	8.13	4		9009	1958	F1	3190
	11	27	5	19	8.3150	1	1	32	7.668	5	37	49.15	4		9009	1958	F2	3191
	11	27	5	19	12.3150	1	1	32	38.085	6	3	40.62	4		9009	1958	F3	3192
	11	27	5	19	16.3149	1	1	33	8.400	6	29	41.15	4		9009	1958	F4	3193
	11	27	5	19	20.3149	1	1	33	38.834	6	55	47.51	4		9009	1958	F5	3194
	11	27	5	19	24.3149	1	1	34	9.262	7	22	2.26	4		9009	1958	F6	3195
	11	27	5	19	28.3149	1	1	34	39.624	7	48	23.88	4		9009	1958	F7	3196
	11	27	5	21	4.3136	1	3	39	45.972	-13	32	39.37	4		9010	1215	F1	3402
	11	27	5	21	4.3143	1	1	46	50.725	18	57	54.98	4		9009	1958	F1	3216
	11	27	5	21	8.3136	1	3	40	46.539	-13	8	7.64	4		9010	1215	F2	2812
	11	27	5	21	8.3143	1	1	47	21.562	19	27	9.40	4		9009	1958	F2	3217
	11	27	5	21	12.3135	1	3	41	47.312	-12	43	25.68	4		9010	1215	F3	2813
	11	27	5	21	12.3143	1	1	47	52.411	19	56	31.48	4		9009	1958	F3	3218
	11	27	5	21	16.3135	1	3	42	48.676	-12	18	28.55	4		9010	1215	F4	2814
	11	27	5	21	16.3143	1	1	48	23.299	20	25	56.82	4		9009	1958	F4	3219
	11	27	5	21	20.3134	1	3	43	50.070	-11	53	17.89	4		9010	1215	F5	2815
	11	27	5	21	20.3143	1	1	48	54.144	20	55	29.53	4		9009	1958	F5	3220
	11	27	5	21	24.3134	1	3	44	51.978	-11	27	55.46	4		9010	1215	F6	2816
	11	27	5	21	24.3143	1	1	49	24.882	21	25	5.20	4		9009	1958	F6	3221
	11	27	5	21	28.3134	1	3	45	54.259	-11	2	22.45	4		9010	1215	F7	2817
	11	27	5	21	28.3142	1	1	49	55.885	21	54	43.82	4		9009	1958	F7	3222
	11	27	5	22	4.3130	1	3	55	32.574	- 7	2	38.46	4		9010	1215	F1	2818
	11	27	5	22	8.3130	1	3	56	38.907	- 6	34	53.64	4		9010	1215	F2	2819
	11	27	5	22	12.3129	1	3	57	45.776	- 6	7	.72	4		9010	1215	F3	2820
	11	27	5	22	16.3129	1	3	58	52.991	- 5	38	48.68	4		9010	1215	F4	2821
	11	27	5	22	20.3128	1	4	0	.672	- 5	10	28.66	4		9010	1215	F5	2822
	11	27	5	22	24.3128	1	4	1	9.050	- 4	41	53.38	4		9010	1215	F6	2823
	11	27	5	22	28.3128	1	4	2	17.845	- 4	13	4.65	4		9010	1215	F7	2824
	11	27	5	23	4.3141	1	2	2	39.256	34	8	1.54	4		9009	1958	F1	3223
	11	27	5	23	8.3141	1	2	3	12.347	34	35	53.72	4		9009	1958	F2	3224
	11	27	5	23	12.3141	1	2	3	45.430	35	6	42.98	4		9009	1958	F3	3225
	11	27	5	23	16.3141	1	2	4	18.645	35	37	37.85	4		9009	1958	F4	3226
	11	27	5	23	20.3141	1	2	4	52.072	36	8	28.92	4		9009	1958	F5	3227
	11	27	5	23	24.3141	1	2	5	25.726	36	39	20.47	4		9009	1958	F6	3228
	11	27	5	23	28.3141	1	2	5	59.274	37	10	12.62	4		9009	1958	F7	3229
	11	27	5	25	4.3143	1	2	20	27.839	49	21	13.46	4		9009	1958	F1	3559
	11	27	5	25	4.3178	1	7	18	.338	1	25	14.62	4		9001	6847	F1	3410
	11	27	5	25	8.3143	1	2	21	7.388	49	51	.42	4		9009	1958	F2	3560
	11	27	5	25	8.3178	1	7	19	2.390	1	42	27.71	4		9001	6847	F2	2937
	11	27	5	25	12.3143	1	2	21	47.191	50	20	37.96	4		9009	1958	F3	3561
	11	27	5	25	12.3178	1	7	20	.460	1	59	43.54	4		9001	6847	F3	3411
	11	27	5	25	16.3144	1	2	22	.532	50	50	12.90	4		9009	1958	F4	4309
	11	27	5	25	16.3178	1	7	21	7.185	2	16	49.01	4		9001	6847	F4	3412
	11	27	5	25	20.3144	1	2	23	8.045	51	19	40.85	4		9009	1958	F5	3563
	11	27	5	25	24.3144	1	2	23	49.179	51	49	7.98	4		9009	1958	F6	3564
	11	27	5	25	28.3144	1	2	24	30.731	52	18	26.13	4		9009	1958	F7	3565
	11	27	5	25	28.3178	1	7	24	15.275	3	8	4.94	4		9001	6847	F7	2939
	11	27	5	26	4.3118	1	5	20	54.421	25	35	3.59	4		9010	1215	F1	2825
	11	27	5	26	8.3118	1	5	22	46.521	26	9	27.95	4		9010	1215	F2	2826
	11	27	5	26	12.3118	1	5	24	40.104	26	43	45.28	4		9010	1215	F3	2827
	11	27	5	26	16.3118	1	5	26	34.565	27	17	54.67	4		9010	1215	F4	2828
	11	27	5	26	20.3118	1	5	28	30.360	27	51	57.54	4		9010	1215	F5	2829
	11	27	5	26	24.3118	1	5	30	27.478	28	25	51.68	4		9010	1215	F6	2830
	11	27	5	26	28.3118	1	5	32	25.622	28	59	37.74	4		9010	1215	F7	2831
	11	27	5	27	4.3150	1	2	43	52.925	63	30	12.47	4		9009	1958	F1	3566
	11	27	5	27	8.3150	1	2	44	51.550	63	56	41.65	4		9009	1958	F2	3567
	11	27	5	27	12.3150	1	2	45	51.065	64	23	.64	4		9009	1958	F3	4310
	11	27	5	27	16.3151	1	2	46	51.071	64	49	15.99	4		9009	1958	F4	3569
	11	27	5	27	20.3151	1	2	47	52.954	65	15	17.33	4		9009	1958	F5	3570
	11	27	5	27	24.3119	1	6	2	14.202	36	30	58.58	4		9010	1215	F6	2832

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1965	11	27	5	27	24.3151	1	2	48	55.977	65	41	15.79	4		9009	1958	F6	3571
	11	27	5	27	28.3120	1	6	4	31.735	37	1	23.02	4		9010	1215	F7	2961
	11	27	5	27	28.3152	1	2	50	.104	66	7	4.47	4		9009	1958	F7	3572
	11	27	5	31	4.3138	1	8	38	20.803	54	52	25.70	4		9010	1215	F1	2834
	11	27	5	31	8.3138	1	8	41	30.059	55	0	52.19	4		9010	1215	F2	2835
	11	27	5	31	12.3139	1	8	44	39.194	55	8	56.81	4		9010	1215	F3	2836
	11	27	5	31	16.3139	1	8	47	47.989	55	16	36.54	4		9010	1215	F4	2837
	11	27	5	31	20.3140	1	8	50	56.993	55	23	52.40	4		9010	1215	F5	2838
	11	27	5	31	24.3140	1	8	54	5.287	55	30	48.44	4		9010	1215	F6	2839
	11	27	5	31	28.3141	1	8	57	12.860	55	37	22.20	4		9010	1215	F7	3403
	11	27	7	28	4.3117	1	5	16	16.672	24	39	27.78	4		9001	6849	F1	2918
	11	27	7	28	8.3117	1	5	18	11.943	25	14	33.28	4		9001	6849	F2	2919
	11	27	7	28	12.3117	1	5	20	8.821	25	49	36.15	4		9001	6849	F3	2920
	11	27	7	28	16.3117	1	5	22	7.112	26	24	35.09	4		9001	6849	F4	2921
	11	27	7	28	20.3117	1	5	24	6.923	26	59	30.87	4		9001	6849	F5	2922
	11	27	7	28	24.3117	1	5	26	8.082	27	34	25.80	4		9001	6849	F6	2923
	11	27	7	28	28.3117	1	5	28	10.964	28	9	9.98	4		9001	6849	F7	2924
	11	27	7	30	4.3118	1	6	25	45.001	41	9	13.23	4		9001	6849	F1	2925
	11	27	7	30	8.3119	1	6	28	31.797	41	38	9.15	4		9001	6849	F2	2926
	11	27	7	30	12.3119	1	6	31	20.454	42	6	43.44	4		9001	6849	F3	2927
	11	27	7	30	16.3119	1	6	34	10.901	42	34	50.68	4		9001	6849	F4	2928
	11	27	7	30	20.3119	1	6	37	3.422	43	2	34.46	4		9001	6849	F5	3407
	11	27	7	30	24.3119	1	6	39	57.749	43	29	54.81	4		9001	6849	F6	2929
	11	27	7	30	28.3120	1	6	42	54.041	43	56	49.53	4		9001	6849	F7	3408
	11	27	12	58	56.8706	1	23	36	31.536	-42	54	41.48	4		9023	1268	01	7650
	11	27	12	59	.8705	1	23	38	55.009	-42	36	12.00	4		9023	1268	02	7651
	11	27	12	59	4.8704	1	23	41	18.006	-42	17	26.95	4		9023	1268	03	7652
	11	27	12	59	8.8703	1	23	43	39.825	-41	58	24.09	4		9023	1268	04	7653
	11	27	12	59	12.8701	1	23	46	1.276	-41	39	1.10	4		9023	1268	05	7654
	11	27	12	59	16.8700	1	23	48	21.550	-41	19	22.03	4		9023	1268	06	5775
	11	27	12	59	20.8700	1	23	50	41.512	-40	59	22.80	4		9023	1268	07	7655
	11	28	0	59	7.5652	1	3	7	56.907	-56	58	30.03	4		9011	4017	03	1091
	11	28	3	2	13.7185	1	23	6	44.361	-27	35	19.91	4		9011	4021	03	4955
	11	28	3	2	21.7185	1	23	10	.773	-27	1	23.82	4		9011	4021	04	1098
	11	28	3	2	29.7185	1	23	13	16.160	-26	26	41.60	4		9011	4021	05	4956
	11	28	3	2	37.7184	1	23	16	30.824	-25	51	14.90	4		9011	4021	06	4957
	11	28	3	2	45.7181	1	23	19	44.210	-25	15	13.11	4		9011	4021	07	4958
	11	28	3	2	53.7177	1	23	22	56.313	-24	38	25.61	4		9011	4021	08	4959
	11	28	3	3	1.7174	1	23	26	7.466	-24	1	1.06	4		9011	4021	09	4960
	11	28	3	3	38.4836	1	23	26	26.940	-55	37	43.13	4		9007	1763	04	7704
	11	28	3	3	46.4832	1	23	31	5.619	-55	14	23.75	4		9007	1763	05	7705
	11	28	3	3	54.4833	1	23	35	42.732	-54	49	59.03	4		9007	1763	06	7706
	11	28	3	4	2.4830	1	23	40	17.596	-54	24	41.50	4		9007	1763	07	8050
	11	28	3	4	10.4829	1	23	44	50.499	-53	58	18.92	4		9007	1763	08	7707
	11	28	3	46	20.1462	1	18	17	11.917	71	13	18.48	4		9004	2763	08	6146
	11	28	5	21	4.3190	1	2	14	56.014	-29	47	44.87	4		9010	1235	F1	1103
	11	28	5	21	4.3191	1	0	55	32.323	- 4	9	1.65	4		9009	1981	F1	2055
	11	28	5	21	8.3189	1	2	15	38.611	-29	32	56.00	4		9010	1235	F2	1104
	11	28	5	21	8.3191	1	0	55	57.998	- 3	48	59.06	4		9009	1981	F2	2056
	11	28	5	21	12.3188	1	2	16	21.282	-29	18	1.17	4		9010	1235	F3	1105
	11	28	5	21	12.3191	1	0	56	23.808	- 3	28	52.65	4		9009	1981	F3	2057
	11	28	5	21	16.3188	1	2	17	4.137	-29	2	58.43	4		9010	1235	F4	1106
	11	28	5	21	16.3190	1	0	56	49.524	- 3	8	39.38	4		9009	1981	F4	2964
	11	28	5	21	20.3187	1	2	17	47.004	-28	47	48.29	4		9010	1235	F5	1107
	11	28	5	21	20.3190	1	0	57	15.033	- 2	48	18.49	4		9009	1981	F5	2059
	11	28	5	21	24.3189	1	0	57	40.608	- 2	27	51.48	4		9009	1981	F6	2060
	11	28	5	21	28.3188	1	2	19	12.817	-28	17	10.96	4		9010	1235	F7	1108
	11	28	5	21	28.3189	1	0	58	6.244	- 2	7	17.02	4		9009	1981	F7	2965
	11	28	5	22	4.3204	1	5	22	21.659	-29	9	21.83	4		9001	6863	F1	5025
	11	28	5	22	8.3204	1	5	23	11.659	-28	53	1.49	4		9001	6863	F2	5505
	11	28	5	22	12.3204	1	5	24	1.763	-28	36	36.56	4		9001	6863	F3	3860
	11	28	5	22	16.3203	1	5	24	52.219	-28	20	9.51	4		9001	6863	F4	3861
	11	28	5	22	20.3203	1	5	25	42.569	-28	3	36.39	4		9001	6863	F5	3862
	11	28	5	22	24.3203	1	5	26	33.248	-27	47	1.20	4		9001	6863	F6	3863
	11	28	5	22	28.3202	1	5	27	23.597	-27	30	23.06	4		9001	6863	F7	3864
	11	28	5	23	4.3200	1	5	35	6.256	-24	57	50.16	4		9001	6863	F1	3865
	11	28	5	23	8.3199	1	5	35	58.190	-24	40	34.52	4		9001	6863	F2	3866
	11	28	5	23	12.3199	1	5	36	50.607	-24	23	19.79	4		9001	6863	F3	3867
	11	28	5	23	16.3199	1	5	37	42.541	-24	5	58.29	4		9001	6863	F4	3868
	11	28	5	23	20.3198	1	5	38	34.853	-23	48	32.24	4		9001	6863	F5	3869
	11	28	5	23	24.3198	1	5	39	27.669	-23	31	3.36	4		9001	6863	F6	3870
	11	28	5	23	28.3198	1	5	40	20.560	-23	13	36.73	4		9001	6863	F7	3871
	11	28	5	24	4.3165	1	2	48	39.645	-16	30	18.34	4		9010	1235	F1	1600
	11	28	5	24	4.3177	1	1	13	51.262	12	42	14.21	4		9009	1981	F1	2660
	11	28	5	24	8.3164	1	2	49	28.134	-16	8	59.51	4		9010	1235	F2	1110
	11	28	5	24	8.3177	1	1	14	14.032	13	7	12.56	4		9009	1981	F2	2063
	11	28	5	24	12.3164	1	2	50	16.591	-15	47	26.13	4		9010	1235	F3	1111
	11	28	5	24	12.3177	1	1	14	37.009	13	30	18.16	4		9009	1981	F3	2966
	11	28	5	24	16.3163	1	2	51	5.568	-15	28	44.00	4		9010	1235	F4	1112
	11	28	5	24	16.3176	1	1	14	59.925	13	57	27.15	4		9009	1981	F4	2967

November 28, 1965

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MN)	STATION	FRAME NO.		OBS.NO.
1965	11	28	5	24	20.3163	1	2	51	54.894	-15	3	51.17	4		9010	1235	F5	1113
	11	28	5	24	20.3176	1	1	15	22.864	14	22	44.74	4		9009	1981	F5	2641
	11	28	5	24	24.3162	1	2	52	44.072	-14	41	45.08	4		9010	1235	F6	1114
	11	28	5	24	24.3176	1	1	15	45.455	14	48	6.17	4		9009	1981	F6	2047
	11	28	5	24	28.3162	1	2	53	33.850	-14	19	30.10	4		9010	1235	F7	1115
	11	28	5	24	28.3176	1	1	16	8.183	15	13	37.13	4		9009	1981	F7	2048
	11	28	5	25	4.3174	1	1	19	30.359	19	7	7.54	4		9009	1981	F1	2049
	11	28	5	25	4.3192	1	6	2	14.962	-15	57	25.58	4		9001	6863	F1	3872
	11	28	5	25	8.3174	1	1	19	52.538	19	33	33.13	4		9009	1981	F2	2070
	11	28	5	25	8.3191	1	6	3	12.168	-15	38	42.65	4		9001	6863	F2	3873
	11	28	5	25	12.3173	1	1	20	14.616	19	59	57.42	4		9009	1981	F3	6357
	11	28	5	25	12.3191	1	6	4	9.335	-15	19	55.85	4		9001	6863	F3	3874
	11	28	5	25	16.3173	10	1	20	36.540	20	26	35.25	4		9009	1981	F4	2968
	11	28	5	25	16.3191	1	6	5	6.562	-15	1	7.02	4		9001	6863	F4	3875
	11	28	5	25	20.3173	1	1	20	58.650	20	53	11.99	4		9009	1981	F5	2969
	11	28	5	25	20.3191	1	6	6	4.255	-14	42	17.18	4		9001	6863	F5	4324
	11	28	5	25	24.3173	1	1	21	20.649	21	19	57.29	4		9009	1981	F6	2073
	11	28	5	25	28.3173	1	1	21	42.691	21	46	43.82	4		9009	1981	F7	3717
	11	28	5	26	4.3151	1	3	14	48.336	- 4	22	20.47	4		9010	1235	F1	1672
	11	28	5	26	8.3150	1	3	15	45.737	- 3	54	41.48	4		9010	1235	F2	1673
	11	28	5	26	12.3150	1	3	16	43.343	- 3	26	48.25	4		9010	1235	F3	1674
	11	28	5	26	16.3150	1	3	17	41.443	- 2	58	40.57	4		9010	1235	F4	1675
	11	28	5	26	20.3149	1	3	18	39.864	- 2	30	21.33	4		9010	1235	F5	1676
	11	28	5	26	24.3149	1	3	19	38.925	- 2	1	47.42	4		9010	1235	F6	1677
	11	28	5	26	28.3148	1	3	20	38.230	- 1	32	59.50	4		9010	1235	F7	1678
	11	28	5	27	4.3170	1	1	30	12.653	32	48	46.56	4		9009	1981	F1	5022
	11	28	5	27	8.3170	1	1	30	33.192	33	16	56.16	4		9009	1981	F2	3718
	11	28	5	27	12.3170	1	1	30	53.687	33	45	8.48	4		9009	1981	F3	4069
	11	28	5	27	16.3170	1	1	31	14.212	34	13	20.65	4		9009	1981	F4	3719
	11	28	5	27	20.3170	1	1	31	34.704	34	41	33.72	4		9009	1981	F5	3720
	11	28	5	27	24.3170	1	1	31	55.143	35	9	51.19	4		9009	1981	F6	3721
	11	28	5	27	28.3170	1	1	32	15.474	35	38	9.19	4		9009	1981	F7	3722
	11	28	5	28	4.3170	1	1	35	16.943	39	53	10.68	4		9009	1981	F1	3723
	11	28	5	28	8.3170	1	1	35	36.882	40	21	30.26	4		9009	1981	F2	3724
	11	28	5	28	12.3170	1	1	35	56.547	40	49	53.59	4		9009	1981	F3	3725
	11	28	5	28	16.3170	1	1	36	16.192	41	18	12.28	4		9009	1981	F4	3726
	11	28	5	28	20.3170	1	1	36	36.077	41	46	31.60	4		9009	1981	F5	3727
	11	28	5	28	24.3170	1	1	36	55.801	42	14	51.46	4		9009	1981	F6	3728
	11	28	5	28	28.3170	1	1	37	15.293	42	43	7.52	4		9009	1981	F7	3729
	11	28	5	29	4.3138	1	4	6	45.214	19	58	40.02	4		9010	1235	F1	1679
	11	28	5	29	8.3137	1	4	8	11.472	20	35	12.57	4		9010	1235	F2	1680
	11	28	5	29	12.3137	1	4	9	38.827	21	11	48.13	4		9010	1235	F3	1681
	11	28	5	29	16.3137	1	4	11	7.228	21	48	30.68	4		9010	1235	F4	1682
	11	28	5	29	20.3137	1	4	12	36.578	22	25	16.92	4		9010	1235	F5	1683
	11	28	5	29	24.3137	1	4	14	7.004	23	2	8.59	4		9010	1235	F6	1684
	11	28	5	29	28.3137	1	4	15	38.523	23	39	2.05	4		9010	1235	F7	1685
	11	28	5	30	4.3173	1	1	44	52.696	53	52	30.72	4		9009	1981	F1	3730
	11	28	5	30	8.3173	1	1	45	10.839	54	19	44.00	4		9009	1981	F2	4070
	11	28	5	30	12.3173	1	1	45	29.689	54	46	59.58	4		9009	1981	F3	3731
	11	28	5	30	16.3174	1	1	45	47.901	55	14	3.18	4		9009	1981	F4	3732
	11	28	5	30	20.3174	1	1	46	6.356	55	41	8.13	4		9009	1981	F5	3733
	11	28	5	30	24.3174	1	1	46	24.430	56	8	7.88	4		9009	1981	F6	3734
	11	28	5	30	28.3174	1	1	46	42.646	56	35	3.83	4		9009	1981	F7	4071
	11	28	5	31	4.3137	1	4	58	46.467	38	16	19.75	4		9010	1235	F1	4077
	11	28	5	31	4.3176	1	1	49	24.316	60	33	54.59	4		9009	1981	F1	3736
	11	28	5	31	8.3137	1	5	0	53.772	38	51	23.70	4		9010	1235	F2	3878
	11	28	5	31	8.3176	1	1	49	41.954	61	0	2.73	4		9009	1981	F2	3737
	11	28	5	31	12.3137	1	5	3	2.687	39	26	12.97	4		9010	1235	F3	3879
	11	28	5	31	12.3177	1	1	49	59.443	61	26	6.17	4		9009	1981	F3	3738
	11	28	5	31	16.3137	1	5	5	13.546	40	0	50.18	4		9010	1235	F4	3880
	11	28	5	31	16.3177	1	1	50	17.030	61	52	3.82	4		9009	1981	F4	3739
	11	28	5	31	20.3137	1	5	7	26.300	40	35	12.22	4		9010	1235	F5	3881
	11	28	5	31	20.3177	1	1	50	34.807	62	17	56.33	4		9009	1981	F5	3740
	11	28	5	31	24.3137	1	5	9	41.060	41	9	18.66	4		9010	1235	F6	4078
	11	28	5	31	24.3177	1	1	50	51.891	62	43	44.69	4		9009	1981	F6	3741
	11	28	5	31	28.3137	1	5	11	57.697	41	43	11.40	4		9010	1235	F7	3883
	11	28	5	31	28.3177	1	1	51	9.455	63	9	27.24	4		9009	1981	F7	3742
	11	28	5	33	4.3185	1	1	57	47.289	72	57	34.86	4		9009	1981	F1	3743
	11	28	5	33	8.3185	1	1	58	2.797	73	20	53.43	4		9009	1981	F2	3744
	11	28	5	33	12.3185	1	1	58	17.824	73	44	1.41	4		9009	1981	F3	3745
	11	28	5	33	16.3186	1	1	58	33.285	74	7	5.27	4		9009	1981	F4	3746
	11	28	5	33	20.3186	1	1	58	48.277	74	30	1.84	4		9009	1981	F5	3747
	11	28	5	33	24.3186	1	1	59	3.303	74	52	53.35	4		9009	1981	F6	3748
	11	28	5	33	28.3187	1	1	59	18.034	75	15	38.62	4		9009	1981	F7	3749
	11	28	5	34	4.3148	1	7	10	4.118	58	44	51.39	4		9010	1235	F1	3884
	11	28	5	34	8.3148	1	7	13	51.338	59	[illegible]	27.21	4		9010	1235	F2	3885
	11	28	5	34	12.3148	1	7	17	40.754	59	[illegible]	21.01	4		9010	1235	F3	3886
	11	28	5	34	16.3149	1	7	21	31.327	59	[illegible]	2.77	4		9010	1235	F4	3887
	11	28	5	34	20.3149	1	7	25	23.965	59	[illegible]	[illegible]	4		9010	1235	F5	4079
	11	28	5	34	24.3150	1	7	29	18.163	58	[illegible]	[illegible]	4		9010	1235	F6	4323

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1965	11	28	5	34	28.3150	1	7	33	13.912	60	16	19.49	4		9010	1235	F7	3890
	11	28	5	36	4.3161	1	9	9	59.035	63	14	38.42	4		9010	1235	F1	3891
	11	28	5	36	8.3162	1	9	13	54.426	63	16	10.67	4		9010	1235	F2	3892
	11	28	5	36	12.3162	1	9	17	47.720	63	17	19.27	4		9010	1235	F3	3893
	11	28	5	36	16.3163	1	9	21	39.655	63	18	3.63	4		9010	1235	F4	3894
	11	28	5	36	20.3163	1	9	25	29.664	63	18	24.29	4		9010	1235	F5	4080
	11	28	5	36	24.3164	1	9	29	17.721	63	18	22.68	4		9010	1235	F6	3896
	11	28	5	36	28.3164	1	9	33	4.161	63	17	57.37	4		9010	1235	F7	3897
	11	29	3	7	53.9179	1	23	5	25.771	-48	48	50.53	4		9007	1792	02	7708
	11	29	3	8	1.9181	1	23	9	14.589	-48	24	19.06	4		9007	1792	03	7709
	11	29	3	8	9.9190	1	23	13	2.807	-47	58	53.94	4		9007	1792	04	6051
	11	29	3	8	17.9180	1	23	16	49.378	-47	32	38.38	4		9007	1792	05	7710
	11	29	3	8	25.9178	1	23	20	35.087	-47	5	31.47	4		9007	1792	06	7711
	11	29	3	8	33.9178	1	23	24	19.398	-46	37	29.38	4		9007	1792	07	7712
	11	29	3	8	41.9172	1	23	28	2.739	-46	8	37.26	4		9007	1792	08	7713
	11	29	3	30	4.3170	1	6	4	20.708	36	16	8.33	4		9009	2023	F1	2860
	11	29	3	30	8.3170	1	6	6	.382	36	38	46.01	4		9009	2023	F2	2861
	11	29	3	30	12.3170	1	6	7	40.225	37	1	9.72	4		9009	2023	F3	2862
	11	29	3	30	16.3171	1	6	9	20.540	37	23	19.15	4		9009	2023	F4	2863
	11	29	3	30	20.3171	1	6	11	1.232	37	45	10.80	4		9009	2023	F5	2970
	11	29	3	30	24.3172	1	6	12	42.312	38	6	50.76	4		9009	2023	F6	2971
	11	29	3	30	28.3172	1	6	14	24.005	38	28	12.98	4		9009	2023	F7	2972
	11	29	5	27	12.3204	1	5	12	23.721	-24	18	49.95	4		9001	6877	F3	4022
	11	29	5	27	24.3203	1	5	14	46.442	-23	22	41.82	4		9001	6877	F6	4023
	11	29	5	30	4.3193	1	5	55	58.676	-10	20	12.28	4		9001	6877	F1	4024
	11	29	5	30	4.3198	1	1	1	24.498	25	8	16.85	4		9009	2024	F1	2945
	11	29	5	30	8.3193	1	5	57	3.951	- 9	59	27.34	4		9001	6877	F2	4025
	11	29	5	30	8.3198	1	1	1	38.749	25	33	3.90	4		9009	2024	F2	2946
	11	29	5	30	12.3193	1	5	58	9.265	- 9	38	38.34	4		9001	6877	F3	4026
	11	29	5	30	12.3197	1	1	1	53.185	25	57	58.43	4		9009	2024	F3	2947
	11	29	5	30	16.3193	1	5	59	15.242	- 9	17	50.07	4		9001	6877	F4	4027
	11	29	5	30	16.3197	1	1	2	7.430	26	22	49.89	4		9009	2024	F4	2948
	11	29	5	30	20.3192	1	6	0	21.323	- 8	57	.26	4		9001	6877	F5	4028
	11	29	5	30	20.3197	1	1	2	21.400	26	47	46.00	4		9009	2024	F5	2949
	11	29	5	30	24.3192	1	6	1	27.699	- 8	36	7.12	4		9001	6877	F6	4029
	11	29	5	30	24.3197	1	1	2	35.235	27	12	48.67	4		9009	2024	F6	2950
	11	29	5	30	28.3192	1	6	2	34.238	- 8	15	10.16	4		9001	6877	F7	4030
	11	29	5	30	28.3197	1	1	2	49.059	27	37	52.59	4		9009	2024	F7	2951
	11	29	5	31	4.3163	1	2	49	8.264	5	22	46.03	4		9010	1246	F1	2314
	11	29	5	31	4.3191	1	6	12	44.210	- 5	5	44.88	4		9001	6877	F1	4031
	11	29	5	31	8.3163	1	2	49	59.719	5	53	6.11	4		9010	1246	F2	2315
	11	29	5	31	8.3191	1	6	13	53.329	- 4	44	38.78	4		9001	6877	F2	4032
	11	29	5	31	12.3162	1	2	50	51.884	6	23	45.74	4		9010	1246	F3	2316
	11	29	5	31	12.3191	1	6	15	2.604	- 4	23	27.91	4		9001	6877	F3	4033
	11	29	5	31	16.3162	1	2	51	44.324	6	54	36.27	4		9010	1246	F4	2317
	11	29	5	31	16.3190	1	6	16	12.079	- 4	2	19.00	4		9001	6877	F4	4034
	11	29	5	31	20.3162	1	2	52	37.133	7	25	44.20	4		9010	1246	F5	2975
	11	29	5	31	20.3190	1	6	17	21.896	- 3	41	8.71	4		9001	6877	F5	4035
	11	29	5	31	24.3161	1	2	53	30.461	7	57	2.82	4		9010	1246	F6	2318
	11	29	5	31	24.3190	1	6	18	32.012	- 3	19	58.95	4		9001	6877	F6	4036
	11	29	5	31	28.3161	1	2	54	24.232	8	28	36.40	4		9010	1246	F7	2319
	11	29	5	31	28.3190	1	6	19	42.238	- 2	58	50.58	4		9001	6877	F7	4037
	11	29	5	32	4.3158	1	3	2	49.788	13	22	57.76	4		9010	1246	F1	2976
	11	29	5	33	4.3189	1	6	49	6.326	5	23	58.94	4		9001	6877	F1	4038
	11	29	5	33	4.3195	1	1	9	44.217	44	20	24.85	4		9009	2024	F1	3154
	11	29	5	33	8.3154	1	3	19	48.506	22	47	20.42	4		9010	1246	F2	2321
	11	29	5	33	8.3189	1	6	50	22.977	5	44	26.52	4		9001	6877	F2	4039
	11	29	5	33	8.3195	1	1	9	51.085	44	46	17.97	4		9009	2024	F2	3155
	11	29	5	33	12.3154	1	3	20	58.418	23	24	3.16	4		9010	1246	F3	2322
	11	29	5	33	12.3190	1	6	51	39.918	6	4	52.87	4		9001	6877	F3	4040
	11	29	5	33	12.3195	1	1	9	57.623	45	12	13.40	4		9009	2024	F3	3156
	11	29	5	33	16.3154	1	3	22	9.420	24	0	57.62	4		9010	1246	F4	2323
	11	29	5	33	16.3190	1	6	52	57.228	6	25	14.46	4		9001	6877	F4	4041
	11	29	5	33	16.3196	1	1	10	4.165	45	38	7.52	4		9009	2024	F4	3157
	11	29	5	33	20.3154	1	3	23	21.047	24	37	57.60	4		9010	1246	F5	2642
	11	29	5	33	20.3190	1	6	54	14.301	6	45	30.31	4		9001	6877	F5	4042
	11	29	5	33	20.3196	1	1	10	10.029	46	3	58.34	4		9009	2024	F5	3158
	11	29	5	33	24.3154	1	3	24	33.564	25	15	8.64	4		9010	1246	F6	2643
	11	29	5	33	24.3190	1	6	55	32.372	7	5	46.43	4		9001	6877	F6	4043
	11	29	5	33	24.3196	1	1	10	15.987	46	29	48.22	4		9009	2024	F6	3159
	11	29	5	33	28.3154	1	3	25	47.230	25	52	23.96	4		9010	1246	F7	2644
	11	29	5	33	28.3190	1	6	56	50.107	7	25	56.78	4		9001	6877	F7	4044
	11	29	5	33	28.3196	1	1	10	21.207	46	55	38.62	4		9009	2024	F7	3160
	11	29	5	34	4.3153	1	3	37	34.503	31	31	53.29	4		9010	1246	F1	1965
	11	29	5	34	4.3190	1	7	8	42.938	10	24	6.89	4		9001	6877	F1	4045
	11	29	5	34	4.3197	1	1	10	58.269	50	47	3.21	4		9009	2024	F1	3161
	11	29	5	34	8.3153	1	3	38	58.695	32	9	56.02	4		9010	1246	F2	1966
	11	29	5	34	8.3191	1	7	10	3.433	10	43	29.78	4		9001	6877	F2	4046
	11	29	5	34	8.3197	1	1	11	.989	51	12	33.72	4		9009	2024	F2	3162
	11	29	5	34	12.3192	1	3	40	24.245	32	47	59.63	4		9010	1246	F3	1967

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1965	11	29	5	34	12.3191	1	7	11	23.969	11	2	44.86	4		9001	6877	F3	4047
	11	29	5	34	12.3197	1	1	11	3.024	51	38	6.11	4		9009	2024	F3	3414
	11	29	5	34	16.3152	1	3	41	50.915	33	26	4.61	4		9010	1246	F4	1968
	11	29	5	34	16.3191	1	7	12	44.713	11	21	59.81	4		9001	6877	F4	4048
	11	29	5	34	16.3197	1	1	11	4.850	52	3	34.95	4		9009	2024	F4	3163
	11	29	5	34	20.3152	1	3	43	19.149	34	4	10.15	4		9010	1246	F5	1969
	11	29	5	34	20.3191	1	7	14	5.792	11	41	4.22	4		9001	6877	F5	4049
	11	29	5	34	20.3197	1	1	11	6.475	52	29	2.92	4		9009	20[illegible]	F5	3164
	11	29	5	34	24.3152	1	3	44	48.322	34	42	16.61	4		9010	1246	F6	1970
	11	29	5	34	24.3191	1	7	13	27.222	12	0	4.87	4		9001	6877	F6	4050
	11	29	5	34	24.3197	1	[illegible]		7.427	52	54	25.17	4		9009	2024	F6	3165
	11	29	5	34	28.3152	1	3	46	18.966	35	20	23.52	4		9010	1246	F7	2337
	11	29	5	34	28.3191	1	7	16	48.793	12	18	57.00	4		9001	6877	F7	4075
	11	29	5	34	28.3197	1	1	11	8.418	53	19	49.01	4		9009	2024	F7	3166
	11	29	5	35	4.3152	1	4	1	3.978	41	1	17.06	4		9010	1246	F1	1972
	11	29	5	35	8.3152	1	4	2	50.948	41	38	44.89	4		9010	1246	F2	1973
	11	29	5	35	12.3152	1	4	4	39.508	42	16	6.07	4		9010	1246	F3	1974
	11	29	5	35	16.3152	1	4	6	30.231	42	53	18.32	4		9010	1246	F4	1975
	11	29	5	35	20.3152	1	4	8	22.720	43	30	21.38	4		9010	1246	F5	1976
	11	29	5	35	24.3152	1	4	10	17.062	44	7	18.35	4		9010	1246	F6	1977
	11	29	5	35	28.3153	1	4	12	13.943	44	44	2.44	4		9010	1246	F7	1978
	11	29	5	36	12.3154	1	4	36	12.387	51	14	20.66	4		9010	1246	F3	1979
	11	29	5	36	12.3196	1	7	53	20.765	19	49	47.15	4		9001	6877	F3	4051
	11	29	5	36	12.3202	1	1	8	29.480	63	59	48.70	4		9009	2024	F3	3676
	11	29	5	36	16.3154	1	4	38	39.191	51	48	16.59	4		9010	1246	F4	1980
	11	29	5	36	16.3196	1	7	54	47.338	20	5	23.92	4		9001	6877	F4	4052
	11	29	5	36	16.3202	1	1	8	13.919	64	23	31.94	4		9009	2024	F4	3677
	11	29	5	36	20.3154	1	4	41	8.765	52	21	53.44	4		9010	1246	F5	1981
	11	29	5	36	20.3196	1	7	56	14.201	20	20	48.22	4		9001	6877	F5	4053
	11	29	5	36	20.3202	1	1	7	57.906	64	47	10.11	4		9009	2024	F5	3678
	11	29	5	36	24.3154	1	4	43	41.611	52	55	13.79	4		9010	1246	F6	1982
	11	29	5	36	24.3197	1	7	57	41.400	20	36	8.20	4		9001	6877	F6	4054
	11	29	5	36	24.3203	1	1	7	40.537	65	10	44.54	4		9009	2024	F6	3679
	11	29	5	36	28.3155	1	4	46	17.375	53	28	8.23	4		9010	1246	F7	1983
	11	29	5	36	28.3197	1	7	59	8.457	20	51	19.55	4		9001	6877	F7	4055
	11	29	5	36	28.3203	1	1	7	22.228	65	34	14.72	4		9009	2024	F7	3680
	11	29	5	37	4.3157	1	5	12	16.253	58	8	14.92	4		9010	1246	F1	1984
	11	29	5	37	4.3200	1	8	12	18.244	23	1	14.41	4		9001	6877	F1	4056
	11	29	5	37	4.3205	1	1	3	44.759	69	1	51.23	4		9009	2024	F1	4315
	11	29	5	37	8.3157	1	5	15	27.994	58	37	18.96	4		9010	1246	F2	1985
	11	29	5	37	8.3200	1	8	13	46.502	23	14	54.93	4		9001	6877	F2	4057
	11	29	5	37	8.3206	1	1	3	13.990	69	24	30.67	4		9009	2024	F2	4316
	11	29	5	37	12.3157	1	5	18	43.969	59	5	56.30	4		9010	1246	F3	1986
	11	29	5	37	12.3200	1	8	15	14.704	23	28	27.14	4		9001	6877	F3	4058
	11	29	5	37	12.3206	1	1	2	41.114	69	47	4.65	4		9009	2024	F3	4317
	11	29	5	37	16.3157	1	5	22	4.495	59	34	6.64	4		9010	1246	F4	1987
	11	29	5	37	16.3200	1	8	16	43.341	23	41	52.57	4		9001	6877	F4	4059
	11	29	5	37	16.3206	1	1	2	6.619	70	9	29.28	4		9009	2024	F4	4318
	11	29	5	37	20.3158	1	5	25	28.863	60	1	48.93	4		9010	1246	F5	1988
	11	29	5	37	20.3201	1	8	18	11.913	23	55	6.64	4		9001	6877	F5	4060
	11	29	5	37	20.3206	1	1	1	30.379	70	31	52.17	4		9009	2024	F5	4319
	11	29	5	37	24.3158	1	5	28	57.640	60	29	1.13	4		9010	1246	F6	1989
	11	29	5	37	24.3201	1	8	19	40.637	24	8	12.70	4		9001	6877	F6	4061
	11	29	5	37	24.3207	1	1	0	52.036	70	54	8.18	4		9009	2024	F6	4320
	11	29	5	37	28.3158	1	5	32	31.089	60	55	45.87	4		9010	1246	F7	1990
	11	29	5	37	28.3201	1	8	21	9.23[illegible]	24	21	10.03	4		9001	6877	F7	4062
	11	29	5	37	28.3207	1	1	0	11.79[illegible]	71	16	20.69	4		9009	2024	F7	3685
	11	29	5	38	4.3161	10	6	7	58.095	64	32	13.07	4		9010	1246	F1	2338
	11	29	5	38	8.3161	1	6	12	18.[illegible]49	64	53	25.10	4		9010	1246	F2	1991
	11	29	5	38	12.3162	1	6	16	[illegible].300	65	14	.85	4		9010	1246	F3	1992
	11	29	5	38	16.3162	1	6	21	12.749	65	33	59.20	4		9010	1246	F4	1993
	11	29	5	38	20.3162	1	6	25	47.155	65	53	19.35	4		9010	1246	F5	1994
	11	29	5	38	24.3163	1	6	30	26.246	66	12	3.06	4		9010	1246	F6	1995
	11	29	5	38	28.3163	1	6	35	10.228	66	30	4.83	4		9010	1246	F7	2339
	11	29	5	39	4.3167	1	7	20	51.683	68	42	22.32	4		9010	1246	F1	1997
	11	29	5	39	8.3167	1	7	26	14.028	68	53	36.00	4		9010	1246	F2	1998
	11	29	5	39	12.3168	1	7	31	39.112	69	4	10.14	4		9010	1246	F3	1999
	11	29	5	39	16.3168	1	7	37	6.406	69	14	.24	4		9010	1246	F4	2000
	11	29	5	39	20.3169	1	7	42	36.303	69	23	6.81	4		9010	1246	F5	2001
	11	29	5	39	24.3169	1	7	48	7.247	69	31	33.98	4		9010	1246	F6	1998
	11	29	5	39	28.3169	1	7	53	39.917	69	39	18.31	4		9010	1246	F7	1939
	11	29	5	40	4.3174	1	8	43	45.729	70	18	25.01	4		9010	1246	F1	1945
	11	29	5	40	8.3174	1	8	49	14.636	70	19	31.58	4		9010	1246	F2	1944
	11	29	5	40	16.3175	1	9	0	5.759	70	19	59.03	4		9010	1246	F4	1943
	11	29	5	40	20.3176	1	9	5	27.296	70	19	20.49	4		9010	1246	F5	1942
	11	29	5	40	24.3176	1	9	10	45.693	70	18	5.75	4		9010	1246	F6	1941
	11	29	5	40	28.3177	1	9	16	.748	70	16	22.33	4		9010	1246	F7	1940
	11	29	5	41	4.3181	1	10	0	17.649	69	38	37.70	4		9010	1246	F1	2658
	11	29	5	41	8.3182	1	10	4	50.447	69	32	17.78	4		9010	1246	F2	1946
	11	29	5	41	12.3182	1	10	9	18.291	69	25	35.77	4		9010	1246	F3	1947

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1965	11	29	5	41	16.3183	1	10	13	41.796	69	18	34.86	4		9010	1246	F4	1948
	11	29	5	41	20.3183	1	10	18	.090	69	11	12.57	4		9010	1246	F5	1949
	11	29	5	41	24.3184	1	10	22	13.288	69	3	30.78	4		9010	1246	F6	1950
	11	29	5	41	28.3184	1	10	26	22.076	68	55	30.15	4		9010	1246	F7	1951
	11	29	5	42	4.3189	1	11	0	6.453	67	32	11.65	4		9010	1246	F1	1952
	11	29	5	42	8.3190	1	11	3	28.478	67	21	54.70	4		9010	1246	F2	1953
	11	29	5	42	12.3190	1	11	6	46.320	67	11	27.60	4		9010	1246	F3	2340
	11	29	5	42	16.3191	1	11	10	.456	67	0	48.81	4		9010	1246	F4	1955
	11	29	5	42	20.3192	1	11	13	9.765	66	50	3.28	4		9010	1246	F5	1956
	11	29	5	42	24.3192	1	11	16	15.493	66	39	8.78	4		9010	1246	F6	1957
	11	29	5	42	28.3193	1	11	19	16.982	66	28	6.72	4		9010	1246	F7	1958
	11	29	5	43	4.3198	1	11	43	48.611	64	44	20.72	4		9010	1246	F1	1959
	11	29	5	43	8.3199	1	11	46	14.990	64	32	26.28	4		9010	1246	F2	2659
	11	29	5	43	12.3199	1	11	48	38.758	64	20	26.17	4		9010	1246	F3	19A0
	11	29	5	43	16.3200	1	11	50	59.447	64	8	26.63	4		9010	1246	F4	19A1
	11	29	5	43	20.3200	1	11	53	17.929	63	56	22.19	4		9010	1246	F5	19A2
	11	29	5	43	24.3201	1	11	55	33.098	63	44	17.24	4		9010	1246	F6	19A3
	11	29	5	43	28.3202	1	11	57	45.354	63	32	8.27	4		9010	1246	F7	19A4
	11	29	19	7	9.4738	1	0	59	4.575	-62	3	5.63	4		9002	9663	01	76A2
	11	29	19	7	13.4743	1	1	2	9.881	-61	39	56.16	4		9002	9663	02	76A3
	11	29	19	7	17.4740	1	1	5	11.501	-61	16	26.82	4		9002	9663	03	76A4
	11	29	19	7	21.4745	1	1	8	10.108	-60	52	31.75	4		9002	9663	04	76A5
	11	29	19	7	25.4747	1	1	11	5.133	-60	28	17.01	4		9002	9663	05	76A6
	11	29	19	7	29.4738	1	1	13	57.196	-60	3	39.62	4		9002	9663	06	76A7
	11	29	19	7	33.4745	1	1	16	45.749	-59	38	44.57	4		9002	9663	07	5759
	11	30	3	32	4.3197	1	5	39	18.691	- 9	12	4.57	4		9010	1253	F1	2251
	11	30	3	32	8.3169	1	4	32	28.834	28	5	6.25	4		9009	2074	F2	2913
	11	30	3	32	8.3197	1	5	40	24.050	- 8	49	3.33	4		9010	1253	F2	2252
	11	30	3	32	12.3169	1	4	34	1.082	28	36	44.75	4		9009	2074	F3	2914
	11	30	3	32	12.3197	1	5	41	29.58.	- 8	26	1.89	4		9010	1253	F3	2253
	11	30	3	32	16.3169	1	4	35	33.976	29	8	8.56	4		9009	2074	F4	2915
	11	30	3	32	20.3170	1	4	37	7.378	29	39	21.77	4		9009	2074	F5	2916
	11	30	3	32	24.3170	1	4	38	41.478	30	10	23.08	4		9009	2074	F6	4313
	11	30	3	32	28.3170	1	4	40	16.098	30	41	10.63	4		9009	2074	F7	2917
	11	30	5	43	4.3179	1	5	56	32.997	73	54	19.26	4		9010	1254	F1	2657
	11	30	5	43	8.3179	1	6	2	55.578	74	12	51.43	4		9010	1254	F2	1818
	11	30	5	43	12.3180	1	6	9	29.164	74	30	38.18	4		9010	1254	F3	1819
	11	30	5	43	16.3180	1	6	16	13.642	74	47	30.01	4		9010	1254	F4	1820
	11	30	5	43	20.3180	1	6	23	9.746	75	3	32.91	4		9010	1254	F5	1821
	11	30	5	43	24.3181	1	6	30	16.368	75	18	43.24	4		9010	1254	F6	1822
	11	30	5	43	28.3181	1	6	37	34.328	75	32	56.78	4		9010	1254	F7	1823
	11	30	7	44	4.3170	1	4	51	17.649	68	7	21.58	4		9001	6916	F1	2940
	11	30	7	44	8.3170	1	4	55	41.637	68	37	51.14	4		9001	6916	F2	2941
	11	30	7	44	12.3170	1	5	0	17.184	69	7	46.54	4		9001	6916	F3	3653
	11	30	7	44	16.3170	1	5	5	2.378	69	37	10.41	4		9001	6916	F4	3413
	11	30	7	44	20.3171	1	5	9	59.809	70	5	49.23	4		9001	6916	F5	2943
	11	30	7	44	24.3171	1	5	15	8.317	70	33	53.70	4		9001	6916	F6	2944
	11	30	11	8	51.6296	1	2	42	28.666	-52	23	45.03	4		9023	1282	02	7656
	11	30	11	8	55.6297	1	2	43	55.628	-51	50	18.03	4		9023	1282	03	7657
	11	30	11	8	59.6296	1	2	45	20.747	-51	16	44.40	4		9023	1282	04	7658
	11	30	11	9	3.6295	1	2	46	44.086	-50	43	5.89	4		9023	1282	05	7659
	11	30	11	9	7.6292	1	2	48	5.756	-50	9	24.58	4		9023	1282	06	6037
	11	30	11	9	11.6295	1	2	49	25.887	-49	35	40.52	4		9023	1282	07	7660
	11	30	11	9	15.6293	1	2	50	44.452	-49	1	52.58	4		9023	1282	08	7661
	11	30	13	12	6.1170	1	22	59	31.883	-22	34	57.16	4		9023	1289	04	6038
	11	30	13	12	10.1172	1	23	1	1.953	-22	16	36.39	4		9023	1289	05	9899
	11	30	13	12	14.1171	1	23	2	31.906	-21	58	12.30	4		9023	1289	06	542
	11	30	13	12	18.1170	1	23	4	1.182	-21	39	33.19	4		9023	1289	07	9900
	11	30	13	12	22.1170	1	23	5	30.535	-21	20	44.56	4		9023	1289	08	7646
	11	30	13	12	26.1170	1	23	6	59.526	-21	1	54.25	4		9023	1289	09	7647
	11	30	13	12	30.1170	1	23	8	28.104	-20	42	55.78	4		9023	1289	10	9901
	11	30	13	12	34.1168	1	23	9	56.931	-20	23	42.50	4		9023	1289	11	9983
	11	30	17	31	4.3214	1	3	17	19.551	-30	57	56.35	4		9006	2008	F1	3901
	11	30	17	31	8.3213	1	3	18	15.318	-30	41	7.28	4		9006	2008	F2	3902
	11	30	17	31	12.3213	1	3	19	11.408	-30	24	6.71	4		9006	2008	F3	3903
	11	30	17	31	16.3212	1	3	20	7.691	-30	7	3.61	4		9006	2008	F4	3904
	11	30	17	31	20.3212	1	3	21	3.864	-29	49	49.96	4		9006	2008	F5	4311
	11	30	17	31	24.3211	1	3	22	.576	-29	32	27.61	4		9006	2008	F6	3905
	11	30	17	31	28.3211	1	3	22	57.553	-29	15	1.78	4		9006	2008	F7	3906
	11	30	19	11	11.7293	1	23	57	35.146	-57	37	51.07	4		9002	9692	01	8347
	11	30	19	11	15.7288	1	0	0	37.809	-57	18	25.71	4		9002	9692	02	7688
	11	30	19	11	19.7295	1	0	3	37.963	-56	58	40.40	4		9002	9692	03	7689
	11	30	19	11	23.7281	1	0	6	36.148	-56	38	29.77	4		9002	9692	04	7690
	11	30	19	11	27.7290	1	0	9	32.181	-56	17	55.24	4		9002	9692	05	7691
	11	30	19	11	31.7281	1	0	12	26.201	-55	57	.93	4		9002	9692	06	7692
	11	30	19	11	35.7288	1	0	15	18.393	-55	35	43.76	4		9002	9692	09	6024
	11	30	19	11	39.7287	1	0	18	8.111	-55	14	3.37	4		9002	9692	08	7693
	11	30	19	21	4.3200	1	3	37	46.772	13	27	.59	4		9002	9693	F1	2973
	11	30	19	21	8.3200	1	3	38	34.105	13	49	4.56	4		9002	9693	F2	2612
	11	30	19	21	12.3200	1	3	39	21.296	14	10	58.32	4		9002	9693	F3	2613

November 30-December 9, 1965

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO
1965	11	30	19	21	16.3201	1	3	40	8.154	14	32	47.89	4		9002	9693	F4	2614
	11	30	19	21	20.3201	1	3	40	54.867	14	54	18.95	4		9002	9693	F5	2974
	11	30	19	21	24.3202	1	3	41	41.602	15	15	42.20	4		9002	9693	F6	2615
	11	30	19	21	28.3202	1	3	42	28.000	15	36	59.69	4		9002	9693	F7	2616
	11	30	19	43	4.3190	1	1	41	27.794	40	28	50.45	4		9006	2009	F1	3907
	11	30	19	43	8.3190	1	1	41	39.037	41	1	54.48	4		9006	2009	F2	3908
	11	30	19	43	12.3190	1	1	41	50.495	41	35	5.92	4		9006	2009	F3	4072
	11	30	19	43	16.3189	1	1	42	1.751	42	8	27.24	4		9006	2009	F4	3910
	11	30	19	43	20.3189	1	1	42	12.928	42	41	47.22	4		9006	2009	F5	4312
	11	30	19	43	24.3189	1	1	42	23.328	43	15	20.48	4		9006	2009	F6	3912
	11	30	21	17	5.6167	1	23	9	34.598	- 9	42	13.88	4		9002	9699	08	6025
	12	1	1	12	51.8258	1	1	8	49.947	-39	1	19.94	4		9011	4071	05	1686
	12	1	1	52	4.3191	1	14	28	3.227	87	32	31.54	4		9004	2794	F1	7537
	12	1	1	52	8.3191	1	14	27	.985	86	59	36.45	4		9004	2794	F2	7538
	12	1	1	52	12.3192	1	14	26	15.885	86	26	51.91	4		9004	2794	F3	7539
	12	1	1	52	16.3192	1	14	25	51.029	85	54	18.91	4		9004	2794	F4	7540
	12	1	1	52	20.3192	1	14	25	32.155	85	21	58.55	4		9004	2794	F5	7541
	12	1	1	52	24.3193	1	14	25	19.732	84	49	50.66	4		9004	2794	F6	7542
	12	1	1	52	28.3193	1	14	25	12.980	84	17	54.78	4		9004	2794	F7	7543
	12	1	11	13	24.1816	1	1	59	52.153	-47	35	31.09	4		9023	1307	05	8467
	12	2	1	13	44.1910	1	22	21	33.652	-51	50	50.40	4		9011	4106	18	7854
	12	2	3	21	47.4469	1	23	13	50.440	- 0	24	25.81	4		9011	4117	05	1687
	12	2	7	50	4.3195	1	4	29	56.379	50	32	21.13	4		9113	5084	F1	271
	12	2	7	50	8.3195	1	4	32	45.309	51	7	59.58	4		9113	5084	F2	272
	12	2	7	50	12.3195	1	4	35	38.105	51	43	21.27	4		9113	5084	F3	273
	12	2	7	50	16.3195	1	4	38	34.708	52	18	24.70	4		9113	5084	F4	274
	12	2	7	50	20.3195	1	4	41	35.962	52	53	5.49	4		9113	5084	F5	275
	12	2	11	17	12.1921	1	0	57	20.673	-47	9	17.42	4		9023	1330	07	8448
	12	2	11	23	44.1839	1	3	3	30.251	2	54	25.54	4		9023	1331	09	7851
	12	2	19	20	36.3851	1	23	22	36.737	-39	25	24.88	4		9002	9756	05	7635
	12	2	19	28	48.1860	1	2	19	34.063	17	6	46.42	4		9002	9757	04	359
	12	3	1	20	40.2695	1	23	36	30.181	-31	44	58.16	4		9011	4149	05	6983
	12	3	5	45	4.3250	1	4	51	54.982	-12	47	48.54	4		9113	5156	F1	7401
	12	3	5	45	8.3249	1	4	53	3.184	-12	26	56.99	4		9113	5156	F2	7402
	12	3	5	45	12.3249	1	4	54	11.620	-12	6	4.06	4		9113	5156	F3	7403
	12	3	5	45	16.3249	1	4	55	20.517	-11	45	2.83	4		9113	5156	F4	7404
	12	3	5	45	20.3249	1	4	56	29.558	-11	23	59.45	4		9113	5156	F5	7405
	12	3	5	45	24.3248	1	4	57	39.115	-11	2	49.81	4		9113	5156	F6	7406
	12	3	5	45	28.3248	1	4	58	48.979	-10	41	37.46	4		9113	5156	F7	7407
	12	3	7	59	4.3236	1	10	41	36.241	71	43	58.55	4		9113	5158	F1	75A0
	12	3	7	59	8.3236	1	10	46	32.406	71	27	50.84	4		9113	5158	F2	75A1
	12	3	7	59	12.3237	1	10	51	18.600	71	11	26.55	4		9113	5158	F3	75A2
	12	3	7	59	16.3237	1	10	55	53.689	70	54	42.38	4		9113	5158	F4	75A3
	12	3	7	59	20.3238	1	11	0	19.600	70	37	47.73	4		9113	5158	F5	75A4
	12	3	7	59	24.3238	1	11	4	36.288	70	20	37.99	4		9113	5158	F6	75A5
	12	3	7	59	28.3239	1	11	8	44.254	70	3	16.97	4		9113	5158	F7	75A6
	12	3	19	25	56.1804	1	23	26	21.163	-26	34	55.92	4		9002	9773	04	6975
	12	4	1	25	8.9899	1	23	17	43.437	-24	10	17.60	4		9011	4184	05	16A8
	12	4	11	26	48.1913	1	0	10	44.037	-27	39	30.17	4		9023	1371	07	9034
	12	4	19	30	8.1830	1	23	2	48.709	-20	52	44.37	4		9002	9802	04	7636
	12	5	6	21	44.0684	1	0	13	6.797	75	23	48.17	4		9004	2898	07	8475
	12	5	12	23	4.5020	1	19	38	50.432	69	8	16.29	4		9001	7070	03	7595
	12	5	19	34	40.1895	1	22	50	24.749	-14	5	23.41	4		9002	9834	06	7637
	12	5	20	25	45.4735	1	18	48	15.996	73	6	57.26	4		9005	4889	04	9378
	12	6	1	35	20.8426	1	23	13	47.719	- 4	26	19.09	4		9011	4204	03	16A9
	12	6	5	55	4.3265	1	2	44	47.694	-18	51	15.34	4		9113	5328	F1	77A1
	12	6	5	55	8.3264	1	2	45	45.715	-18	32	1.55	4		9113	5328	F2	9423
	12	6	5	55	12.3264	1	2	46	44.117	-18	12	42.88	4		9113	5328	F3	77A2
	12	6	5	55	16.3263	1	2	47	42.955	-17	53	8.93	4		9113	5328	F4	77A3
	12	6	5	55	20.3263	1	2	48	41.924	-17	33	29.97	4		9113	5328	F5	77A4
	12	6	5	55	24.3262	1	2	49	41.447	-17	13	41.28	4		9113	5328	F6	77A5
	12	6	5	55	28.3262	1	2	50	41.161	-16	53	47.35	4		9113	5328	F7	9424
	12	6	11	36	20.1947	1	23	36	13.082	- 9	38	38.[illegible]	4		9023	1413	04	8470
	12	6	12	27	25.1532	1	19	45	20.041	71	23	39.42	4		9001	7115	08	1678
	12	6	12	30	57.1541	1	17	2	48.930	47	3	23.71	4		9001	7115	37	2076
	12	7	1	39	16.1876	1	22	50	48.881	- 2	36	30.37	4		9011	4250	03	1690
	12	7	1	41	27.2842	1	23	28	41.411	-23	35	26.03	4		9007	1849	05	8898
	12	7	11	40	48.1949	1	23	16	40.585	- 3	57	46.36	4		9023	1444	07	8471
	12	8	1	45	2.2889	1	22	59	10.542	7	43	.65	4		9011	4272	10	1691
	12	8	11	44	9.2082	1	22	40	18.818	- 5	11	36.72	4		9023	1478	05	8472
	12	8	17	50	1.5263	1	2	6	42.601	14	43	38.71	4		9002	9880	03	8443
	12	8	19	50	13.1721	1	22	47	14.525	9	53	35.18	4		9002	9886	08	9032
	12	8	20	38	22.0164	1	22	13	33.067	89	17	56.72	4		9005	4959	04	9379
	12	9	1	50	57.2181	1	22	55	40.156	- 6	32	24.76	4		9007	1874	04	16A2
	12	9	4	12	4.3318	1	4	20	45.168	-10	23	22.42	4		9114	4689	F1	9475
	12	9	4	12	8.3318	1	4	21	51.141	-10	9	27.55	4		9114	4689	F2	9476
	12	9	4	12	12.3318	1	4	22	57.695	- 9	55	29.33	4		9114	4689	F3	9477
	12	9	4	12	16.3317	1	4	24	4.744	- 9	41	20.47	4		9114	4689	F4	77A6
	12	9	4	12	20.3317	1	4	25	12.123	- 9	27	24.89	4		9114	4689	F5	77A7
	12	9	4	12	24.3316	1	4	26	19.703	- 9	13	19.28	4		9114	4689	F6	9478

December 9-17, 1965

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1965	12	9	4	12	28.3316	1	4	27	27.589	- 8	59	7.78	4		9114	4689	F7	7748
	12	9	6	15	4.3290	1	2	55	47.912	- 0	42	52.39	4		9114	4695	F1	8224
	12	9	11	48	39.7659	1	22	29	6.269	- 0	26	24.99	4		9023	1514	04	8473
	12	9	17	52	6.2036	1	0	58	53.290	5	8	40.58	4		9002	9911	03	9033
	12	9	19	53	19.3901	1	22	22	25.272	6	46	9.13	4		9002	9917	04	9331
	12	10	1	56	12.4135	1	22	49	27.049	3	8	58.37	4		9007	1892	03	2140
	12	10	4	14	4.3345	1	3	32	5.373	-16	19	2.70	4		9114	4712	F1	6483
	12	10	4	14	8.3344	1	3	33	2.948	-16	6	9.53	4		9114	4712	F2	6484
	12	10	4	14	12.3344	1	3	34	.879	-15	53	11.99	4		9114	4712	F3	6485
	12	10	4	14	16.3344	1	3	34	59.138	-15	40	9.94	4		9114	4712	F4	6486
	12	10	4	14	20.3343	1	3	35	57.744	-15	27	4.81	4		9114	4712	F5	6487
	12	10	4	14	24.3343	1	3	36	56.875	-15	13	57.15	4		9114	4712	F6	6488
	12	10	4	14	28.3342	1	3	37	55.778	-15	0	45.87	4		9114	4712	F7	6489
	12	10	4	18	4.3322	1	4	40	48.128	- 1	56	12.47	4		9114	4713	F1	6490
	12	10	4	18	8.3322	1	4	42	9.819	- 1	40	32.32	4		9114	4713	F2	6491
	12	10	4	18	12.3322	1	4	43	32.570	- 1	24	59.32	4		9114	4713	F3	6492
	12	10	4	18	16.3321	1	4	44	55.257	- 1	9	10.58	4		9114	4713	F4	6493
	12	10	4	18	20.3321	1	4	46	18.739	- 0	53	37.90	4		9114	4713	F5	6940
	12	10	4	18	24.3321	1	4	47	42.528	- 0	37	53.31	4		9114	4713	F6	6495
	12	10	4	18	28.3320	1	4	49	7.106	- 0	22	3.41	4		9114	4713	F7	6496
	12	10	11	52	59.2981	1	22	16	47.293	2	43	49.60	4		9023	1542	05	7852
	12	11	2	1	25.5782	1	22	42	38.496	11	9	4.11	4		9007	1906	06	1684
	12	11	6	26	4.3308	1	4	5	32.128	75	29	20.43	4		9113	5481	F1	7567
	12	11	6	26	8.3308	1	4	13	4.832	75	52	36.19	4		9113	5481	F2	7568
	12	11	6	26	12.3308	1	4	21	.018	76	14	52.02	4		9113	5481	F3	7569
	12	11	6	26	16.3309	1	4	29	17.445	76	36	1.98	4		9113	5481	F4	7570
	12	11	6	26	20.3309	1	4	37	55.256	76	56	5.34	4		9113	5481	F5	7571
	12	11	6	26	24.3309	1	4	46	56.573	77	14	57.98	4		9113	5481	F6	7572
	12	11	6	26	28.3310	1	4	56	19.299	77	32	31.63	4		9113	5481	F7	7573
	12	11	16	9	56.9823	1	2	48	8.062	-32	37	24.50	4		9008	287	04	9355
	12	11	17	58	3.9414	1	23	4	57.131	- 4	0	2.96	4		9002	9949	05	7600
	12	12	0	50	9.4398	1	17	9	39.388	61	29	18.99	4		9008	296	05	9356
	12	12	2	5	17.3267	1	22	22	50.944	11	9	21.10	4		9007	1929	02	1685
	12	12	6	10	26.7073	1	2	5	10.770	-32	28	14.64	4		9012	2573	04	7638
	12	12	10	14	45.7657	1	2	56	1.818	-28	52	29.85	4		9005	4980	07	9380
	12	12	12	5[illegible]	32.0280	1	13	25	44.515	53	52	22.47	4		9001	7211	06	7596
	12	12	16	14	6.0364	1	2	18	59.798	-31	42	6.52	4		9008	316	07	9357
	12	12	18	52	32.7725	1	16	13	43.143	60	49	21.84	4		9003	4989	07	9381
	12	12	22	53	48.9659	1	16	57	21.535	60	57	54.60	4		9006	2292	03	8895
	12	13	0	54	47.2411	1	16	46	33.289	61	33	32.01	4		9008	336	04	9358
	12	13	6	14	27.0700	1	1	25	.628	-31	12	45.11	4		9012	2594	02	7639
	12	13	8	18	26.0187	1	22	55	47.467	- 5	30	10.80	4		9012	2595	03	7640
	12	13	14	18	.3061	1	2	13	51.943	-29	6	46.70	4		9006	2313	05	8896
	12	13	20	20	34.7586	1	1	52	15.246	-28	58	38.34	4		9004	3049	04	8476
	12	13	22	59	.7498	1	16	17	13.080	56	11	42.43	4		9006	2320	08	8897
	12	14	0	16	8.1893	1	0	56	27.411	-23	21	40.74	4		9009	2465	07	9340
	12	14	0	19	56.2083	1	2	2	4.722	5	50	3.95	4		9009	2466	05	6978
	12	14	0	58	50.1970	1	16	39	59.844	66	39	28.33	4		9008	366	02	7643
	12	14	2	21	8.1907	1	23	44	36.308	-17	32	44.78	4		9010	1394	03	917
	12	14	16	23	14.6689	1	1	26	16.277	-24	15	47.72	4		9008	390	05	7644
	12	15	1	4	37.0549	1	15	29	21.417	54	41	50.22	4		9008	401	09	7645
	12	15	16	30	26.6760	1	1	39	24.987	- 3	40	54.28	4		9008	424	05	7646
	12	16	0	30	28.2056	1	1	10	45.047	33	14	51.27	4		9009	2513	30	7853
	12	16	1	8	10.2738	1	14	59	3.885	66	4	9.69	4		9008	431	02	7647
	12	16	10	32	45.0787	1	1	24	48.491	-16	23	1.92	4		9005	5042	06	9946
	12	16	14	32	30.1215	1	3	46	54.336	- 8	5	44.42	4		9008	440	02	8100
	12	16	16	31	54.4768	1	0	23	31.846	-16	30	28.67	4		9008	449	03	8101
	12	16	18	37	12.1423	1	22	46	54.235	9	31	2.08	4		9008	457	03	7650
	12	16	20	33	58.0065	1	0	36	55.646	-18	15	23.00	4		9004	3072	03	9332
	12	17	1	13	32.4859	1	13	58	17.321	53	9	24.28	4		9008	463	14	7634
	12	17	2	41	4.3430	1	3	0	42.723	- 9	57	53.25	4		9114	4846	F1	8273
	12	17	2	45	4.3414	1	4	18	58.417	5	5	1.59	4		9114	4848	F1	8276
	12	17	2	45	8.3414	1	4	20	30.217	5	20	15.36	4		9114	4848	F2	8277
	12	17	2	45	12.3414	1	4	22	2.570	5	35	27.62	4		9114	4848	F3	8278
	12	17	2	45	16.3413	1	4	23	35.247	5	50	36.11	4		9114	4848	F4	8279
	12	17	2	45	20.3413	1	4	25	8.446	6	5	43.86	4		9114	4848	F5	8280
	12	17	2	45	24.3413	1	4	26	42.012	6	20	52.04	4		9114	4848	F6	8281
	12	17	2	45	28.3413	1	4	28	16.143	6	35	53.50	4		9114	4848	F7	8282
	12	17	2	48	4.3412	1	5	34	25.762	15	28	45.11	4		9114	4849	F1	283
	12	17	4	38	51.3966	1	5	1	24.585	24	28	49.99	4		9012	2640	05	8099
	12	17	4	46	4.3392	1	2	6	46.049	9	34	39.52	4		9114	4861	F1	7108
	12	17	4	46	8.3392	1	2	8	7.221	9	55	54.91	4		9114	4861	F2	7109
	12	17	4	46	12.3391	1	2	9	29.203	10	17	23.04	4		9114	4861	F3	7110
	12	17	4	46	16.3391	1	2	10	52.277	10	38	55.90	4		9114	4861	F4	711[illegible]
	12	17	4	52	4.3374	1	5	58	49.677	42	8	43.30	4		9114	4862	F1	7105
	12	17	4	52	8.3374	1	6	2	43.386	42	17	50.81	4		9114	4862	F2	7106
	12	17	4	52	12.3374	1	6	6	37.287	42	26	27.13	4		9114	4862	F3	7107
	12	17	6	33	55.1326	1	23	33	47.883	0	17	33.34	4		9012	2650	03	7642
	12	17	6	59	12.3374	1	10	24	34.767	57	56	57.39	4		9114	4867	F3	7415
	12	17	6	59	16.3374	1	10	27	47.147	57	23	10.35	4		9114	4867	F4	7416

December 17-20, 1965

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		ORS.NO.
1965	12	17	6	59	20.3374	1	10	30	52.226	56	49	26.00	4		9114	4867	F5	7417
	12	17	6	59	24.3375	1	10	33	50.110	56	15	47.62	4		9114	4867	F6	7418
	12	17	6	59	28.3375	1	10	36	41.471	55	42	13.34	4		9114	4867	F7	7419
	12	17	10	37	12.4083	1	0	57	48.311	-12	3	5.70	4		9005	5065	07	1681
	12	17	15	18	10.5067	1	14	41	48.678	50	26	58.64	4		9012	2665	02	7601
	12	17	18	36	18.9538	1	23	54	28.490	-11	41	59.52	4		9008	480	04	1692
	12	17	18	43	1.2143	1	22	36	32.179	18	21	22.89	4		9008	482	06	1693
	12	18	2	47	4.3427	1	3	19	31.255	- 1	16	43.21	4		9114	4893	F1	8321
	12	18	2	47	8.3426	1	3	20	52.995	- 1	0	40.88	4		9114	4893	F2	8322
	12	18	2	47	12.3426	1	3	22	15.479	- 0	44	38.71	4		9114	4893	F3	8323
	12	18	2	47	16.3426	1	3	23	38.497	- 0	28	30.11	4		9114	4893	F4	8324
	12	18	2	47	20.3425	1	3	25	1.909	- 0	12	24.77	4		9114	4893	F5	8325
	12	18	2	47	24.3425	1	3	26	25.707	0	3	44.05	4		9114	4893	F6	8326
	12	18	2	47	28.3425	1	3	27	50.284	0	19	54.75	4		9114	4893	F7	8327
	12	18	2	52	4.3418	1	5	25	52.472	17	48	46.74	4		9114	4894	F1	8328
	12	18	2	52	8.3418	1	5	27	49.884	18	0	49.40	4		9114	4894	F2	8329
	12	18	2	52	12.3418	1	5	29	47.481	18	12	42.01	4		9114	4894	F3	8330
	12	18	2	52	16.3418	1	5	31	45.524	18	24	27.80	4		9114	4894	F4	8331
	12	18	2	52	20.3418	1	5	33	43.463	18	36	3.77	4		9114	4894	F5	8332
	12	18	2	52	24.3418	1	5	35	41.785	18	47	30.52	4		9114	4894	F6	8333
	12	18	7	3	4.3383	1	10	6	36.047	62	48	25.60	4		9114	4911	F1	226
	12	18	7	3	8.3384	1	10	10	43.248	62	12	15.37	4		9114	4911	F2	227
	12	18	7	3	12.3384	1	10	14	39.102	61	35	58.48	4		9114	4911	F3	228
	12	18	7	3	16.3384	1	10	18	24.181	60	59	36.39	4		9114	4911	F4	229
	12	18	7	3	20.3385	1	10	21	59.501	60	23	13.71	4		9114	4911	F5	230
	12	18	7	3	24.3385	1	10	25	25.899	59	46	48.34	4		9114	4911	F6	231
	12	18	7	3	28.3385	1	10	28	43.035	59	10	20.03	4		9114	4911	F7	232
	12	18	8	41	47.9542	1	3	41	57.515	- 3	28	14.27	4		9005	5075	05	9383
	12	18	9	9	4.3378	1	11	16	42.538	48	20	33.16	4		9114	4913	F1	8225
	12	18	10	41	27.2275	1	0	27	40.584	- 8	28	32.22	4		9005	5083	05	9384
	12	18	11	14	4.3376	1	9	51	1.531	16	22	37.56	4		9114	4921	F1	6582
	12	18	11	14	12.3377	1	9	57	11.952	15	6	54.61	4		9114	4921	F3	6583
	12	18	14	39	56.1790	1	3	0	22.064	- 8	51	4.60	4		9008	492	03	1113
	12	18	14	40	4.1790	1	3	2	26.882	- 8	8	30.71	4		9008	492	04	1114
	12	18	14	40	12.1793	1	3	4	32.178	- 7	25	47.44	4		9008	492	05	2028
	12	18	14	40	20.1792	1	3	6	38.856	- 6	43	2.88	4		9008	492	06	1115
	12	18	14	40	28.1796	1	3	8	46.054	- 6	0	13.68	4		9008	492	07	1116
	12	18	14	40	36.1800	1	3	10	54.265	- 5	17	20.37	4		9008	492	08	1117
	12	18	14	40	39.3388	1	23	51	58.545	- 5	24	8.60	4		9006	2436	03	1107
	12	18	14	40	43.3386	1	23	52	45.124	- 4	59	54.39	4		9006	2436	04	1108
	12	18	14	40	44.1803	1	3	13	2.990	- 4	34	27.66	4		9008	492	09	1118
	12	18	14	40	47.3386	1	23	53	32.079	- 4	35	27.92	4		9006	2436	05	1109
	12	18	14	40	51.3388	1	23	54	19.353	- 4	10	49.82	4		9006	2436	06	1110
	12	18	14	40	55.3389	1	23	55	6.886	- 3	45	58.59	4		9006	2436	07	1111
	12	18	14	40	59.3387	1	23	55	54.570	- 3	20	57.38	4		9006	2436	08	4903
	12	18	14	41	3.3389	1	23	56	42.726	- 2	55	42.21	4		9006	2436	09	1112
	12	18	15	22	22.8897	1	13	41	54.900	52	21	21.74	4		9012	2673	03	7602
	12	18	16	41	40.3429	1	23	36	37.447	- 1	23	42.68	4		9008	503	04	1695
	12	18	16	47	7.8105	1	22	27	14.641	22	7	29.07	4		9006	2440	06	8904
	12	18	18	43	6.3522	1	3	11	2.032	- 6	7	36.08	4		9004	3118	05	9373
	12	18	18	48	26.4712	1	22	24	53.537	24	50	24.16	4		9008	507	03	8098
	12	18	20	44	.6225	1	23	59	21.686	- 3	38	30.19	4		9004	3130	04	9374
	12	18	23	22	34.2040	1	13	5	35.474	31	36	49.31	4		9006	2445	04	8905
	12	19	2	45	.2101	1	1	1	.453	4	59	59.14	4		9001	7290	28	6961
	12	19	2	46	56.2093	1	1	41	10.052	20	13	37.36	4		9001	7290	1	6962
	12	19	2	48	.2093	1	2	9	18.293	29	2	51.44	4		9001	7290	04	6963
	12	19	2	50	.2114	1	3	18	32.293	44	0	55.82	4		9001	7290	04	6964
	12	19	14	44	58.8269	1	2	53	23.559	- 1	28	32.66	4		9008	522	07	7609
	12	19	16	46	29.3543	1	23	13	29.571	5	44	5.03	4		9008	532	02	7610
	12	19	16	53	6.2636	1	22	13	52.177	31	15	48.12	4		9006	2464	06	8906
	12	19	23	22	54.6087	1	14	50	43.152	38	1	43.01	4		9008	537	02	8900
	12	19	23	27	.0630	1	12	9	17.432	23	4	22.16	4		9006	2468	06	8907
	12	20	0	45	52.2130	1	22	14	29.556	28	50	54.19	4		9009	2600	07	6980
	12	20	2	48	16.2110	1	0	10	33.427	2	12	13.39	4		9001	7324	05	6965
	12	20	2	49	12.2110	1	0	24	27.751	8	53	15.81	4		9001	7324	04	6966
	12	20	2	50	12.2108	1	0	41	35.516	16	46	14.17	4		9001	7324	03	6967
	12	20	2	51	12.2113	1	1	1	53.612	25	15	12.17	4		9001	7324	04	6968
	12	20	2	52	.2110	1	1	21	13.274	32	15	28.96	4		9001	7324	04	6969
	12	20	2	53	16.2109	1	1	59	42.370	43	5	32.87	4		9001	7324	06	6970
	12	20	2	54	24.2114	1	2	45	23.713	51	39	.46	4		9001	7324	09	6971
	12	20	2	55	16.2102	1	3	29	17.499	56	53	48.79	4		9001	7324	05	8521
	12	20	4	53	27.0279	1	22	25	5.921	22	8	48.71	4		9001	7327	06	7597
	12	20	5	1	4.3414	1	1	58	32.659	32	52	37.82	4		9114	4930	F1	65A4
	12	20	5	1	8.3413	1	2	0	36.551	33	22	38.29	4		9114	4930	F2	65A5
	12	20	5	1	12.3413	1	2	2	43.400	33	52	45.89	4		9114	4930	F3	65A6
	12	20	5	1	16.3413	1	2	4	53.023	34	22	59.34	4		9114	4930	F4	65A7
	12	20	5	1	20.3412	1	2	7	5.095	34	53	19.33	4		9114	4930	F5	65A8
	12	20	5	1	24.3412	1	2	9	20.253	35	23	45.65	4		9114	4930	F6	65A9
	12	20	5	1	28.3412	1	2	11	38.033	35	54	15.71	4		9114	4930	F7	6590
	12	20	5	6	4.3410	1	7	19	58.347	55	15	35.25	4		9114	4931	F1	6754

December 20-22, 1965

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1965	12	20	5	[illegible]	8.3411	1	7	24	55.369	55	4	52.16	4		9114	4931	F2	6755
	12	20	5	[illegible]	12.3411	1	7	29	46.986	54	53	29.21	4		9114	4931	F3	6756
	12	20	5	6	16.3411	1	7	34	33.899	54	41	24.67	4		9114	4931	F4	6757
	12	20	5	6	20.3411	1	7	39	15.243	54	28	48.80	4		9114	4931	F5	6758
	12	20	5	6	24.3412	1	7	43	51.729	54	15	37.04	4		9114	4931	F6	6759
	12	20	5	6	28.3412	1	7	48	23.095	54	1	49.93	4		9114	4931	F7	6760
	12	20	7	12	4.3408	1	10	31	50.504	60	18	51.31	4		9114	4942	F1	6761
	12	20	7	12	8.3409	1	10	34	50.466	59	38	12.59	4		9114	4942	F2	6762
	12	20	7	12	12.3409	1	10	37	42.328	58	57	44.65	4		9114	4942	F3	6763
	12	20	7	12	16.3409	1	10	40	26.575	58	17	20.96	4		9114	4942	F4	6764
	12	20	7	12	20.3410	1	10	43	3.485	57	37	6.02	4		9114	4942	F5	6765
	12	20	7	12	24.3410	1	10	45	34.217	56	57	3.26	4		9114	4942	F6	6766
	12	20	7	12	28.3410	1	10	47	58.560	56	17	11.37	4		9114	4942	F7	6767
	12	20	9	18	4.3401	1	10	51	40.417	39	7	55.65	4		9114	4949	F1	8513
	12	20	9	18	8.3402	1	10	54	1.181	38	22	4.37	4		9114	4949	F2	8514
	12	20	9	32	40.2189	1	14	3	23.898	31	55	42.10	4		9009	2618	05	9341
	12	20	11	25	56.2223	1	11	3	47.778	55	14	31.05	4		9001	7336	12	357
	12	20	11	27	8.2234	1	12	0	59.319	35	7	49.86	4		9001	7336	03	7850
	12	20	11	29	4.2191	1	12	49	37.634	4	55	28.20	4		9001	7336	02	6974
	12	20	12	49	23.5127	1	3	1	[illegible].532	5	25	22.01	4		9006	2475	09	8908
	12	20	14	49	11.4066	1	2	29	16.611	2	1	12.69	4		9008	555	08	8901
	12	20	16	52	3.6060	1	22	56	29.830	17	23	54.06	4		9008	565	05	8902
	12	21	2	55	.2107	1	0	12	50.428	25	21	16.13	4		9001	7350	26	351
	12	21	3	22	4.3431	1	22	2	2.827	84	6	54.20	4		9004	3134	F1	7544
	12	21	3	22	8.3431	1	21	43	41.348	84	31	44.62	4		9004	3134	F2	7545
	12	21	3	22	12.3430	1	21	22	11.040	84	54	14.92	4		9004	3134	F3	7546
	12	21	3	22	16.3430	1	20	57	11.203	85	13	52.75	4		9004	3134	F4	7547
	12	21	3	22	20.3429	1	20	28	36.513	85	29	37.09	4		9004	3134	F5	7548
	12	21	3	22	24.3429	1	19	56	39.187	85	40	38.76	4		9004	3134	F6	7689
	12	21	3	22	28.3428	1	19	22	13.750	85	46	20.36	4		9004	3134	F7	7549
	12	21	3	28	48.2141	1	13	42	37.050	16	0	23.47	4		9004	3135	08	9375
	12	21	4	59	49.7317	1	22	10	14.822	33	57	36.99	4		9001	7355	04	7598
	12	21	9	28	4.3426	1	7	21	57.818	81	44	51.94	4		9010	1463	F1	57[illegible]
	12	21	9	28	8.3425	1	7	39	35.736	81	40	51.86	4		9010	1463	F2	45[illegible]
	12	21	9	28	12.3424	1	7	57	6.014	81	34	1.25	4		9010	1463	F3	4556
	12	21	9	28	16.3424	1	8	14	21.384	81	24	16.32	4		9010	1463	F4	4557
	12	21	9	28	20.3423	1	8	31	7.088	81	11	36.09	4		9010	1463	F5	4558
	12	21	9	28	24.3423	1	8	47	18.428	80	56	4.54	4		9010	1463	F6	4559
	12	21	9	28	28.3422	1	9	2	46.307	80	37	52.08	4		9010	1463	F7	4560
	12	21	9	30	4.3411	1	12	4	16.748	64	24	41.03	4		9010	1463	F1	5296
	12	21	9	30	8.3411	1	12	7	28.112	63	29	13.19	4		9010	1463	F2	4589
	12	21	9	30	12.3410	1	12	10	30.807	62	32	57.10	4		9010	1463	F3	4590
	12	21	9	30	16.3410	1	12	13	25.212	61	35	50.07	4		9010	1463	F4	4591
	12	21	9	30	20.3410	1	12	16	11.691	60	37	52.70	4		9010	1463	F5	5046
	12	21	9	30	24.3409	1	12	18	51.127	59	39	9.20	4		9010	1463	F6	5047
	12	21	9	30	28.3409	1	12	21	23.818	58	39	42.43	4		9010	1463	F7	4592
	12	21	9	33	4.3410	1	13	18	30.364	16	56	36.93	4		9010	1463	F1	4593
	12	21	9	33	8.3411	1	13	19	27.182	15	58	13.91	4		9010	1463	F2	4594
	12	21	9	33	12.3411	1	13	20	23.207	15	0	28.60	4		9010	1463	F3	4595
	12	21	9	33	16.3411	1	13	21	18.783	14	3	24.55	4		9010	1463	F4	4596
	12	21	9	33	20.3412	1	13	22	13.425	13	7	5.93	4		9010	1463	F5	4597
	12	21	9	33	24.3412	1	13	23	7.609	12	11	28.28	4		9010	1463	F6	4598
	12	21	9	33	28.3413	1	13	24	1.000	11	16	34.45	4		9010	1463	F7	4599
	12	21	11	30	16.2270	1	9	[illegible]	48.154	46	18	53.12	4		9001	7358	07	352
	12	21	14	52	46.4788	1	1	47	42.114	1	46	2.19	4		9008	585	02	7611
	12	21	16	57	38.3933	1	22	37	44.916	28	35	32.69	4		9008	595	09	7612
	12	21	19	34	27.0872	1	10	9	58.306	-10	58	30.58	4		9005	5121	04	9385
	12	21	23	33	22.5976	1	14	10	58.014	19	5	49.04	4		9008	601	03	8287
	12	22	1	37	9.1805	1	10	6	34.827	-13	30	38.80	4		9008	608	05	8424
	12	22	5	36	21.9304	1	9	14	24.603	-15	9	32.05	4		9004	3161	05	9376
	12	22	9	32	4.3438	1	5	55	20.849	72	28	34.23	4		9010	1482	F1	4637
	12	22	9	32	8.3437	1	6	3	9.377	72	32	34.58	4		9010	1482	F2	4638
	12	22	9	32	12.3437	1	6	11	8.644	72	35	34.42	4		9010	1482	F3	4639
	12	22	9	32	16.3436	1	6	19	18.160	72	37	23.63	4		9010	1482	F4	4640
	12	22	9	32	20.3435	1	6	27	37.859	72	38	2.73	4		9010	1482	F5	4641
	12	22	9	32	24.3435	1	6	36	5.740	72	37	26.44	4		9010	1482	F6	4642
	12	22	9	32	28.3434	1	6	44	41.522	72	35	25.91	4		9010	1482	F7	4643
	12	22	9	36	4.3414	1	11	52	1.850	32	42	1.30	4		9010	1482	F1	4644
	12	22	9	36	8.3414	1	11	54	22.345	31	29	57.74	4		9010	1482	F2	4645
	12	22	9	36	12.3414	1	11	56	39.725	30	17	52.61	4		9010	1482	F3	4646
	12	22	9	36	16.3414	1	11	58	53.852	29	5	54.53	4		9010	1482	F4	4647
	12	22	9	36	20.3414	1	12	1	4.662	27	53	58.66	4		9010	1482	F5	4648
	12	22	9	36	24.3414	1	12	3	12.404	26	42	23.96	4		9010	1482	F6	4649
	12	22	9	36	28.3414	1	12	5	17.345	25	31	2.85	4		9010	1482	F7	4650
	12	22	9	38	4.3422	1	12	44	43.951	0	12	50.33	4		9010	1482	F1	4651
	12	22	9	38	8.3423	1	12	46	3.758	- 0	39	40.67	4		9010	1482	F2	4652
	12	22	9	40	17.2519	1	11	5	18.617	37	25	35.01	4		9009	2653	02	9342
	12	22	15	40	14.5347	1	9	16	44.769	8	39	44.68	4		9012	2692	05	7603
	12	22	17	1	41.4885	1	22	13	30.497	28	9	4.93	4		9008	619	03	8289
	12	22	23	38	25.8848	1	13	52	31.826	8	59	10.42	4		9008	622	05	8290

December 23-27, 1965

DATE Y	M	D	TIME (A-1) H	M	S	HMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) °	′	″	HMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1965	12	23	4	58	.3409	1	0	9	46.007	21	10	28.49	4		9012	2695	17	7604
	12	23	7	29	4.3443	1	10	14	45.535	59	7	25.89	4		9114	4975	F1	8515
	12	23	9	31	4.3438	1	9	47	24.254	26	28	28.92	4		9114	4988	F1	7112
	12	23	9	31	8.3439	1	9	50	7.573	25	46	27.15	4		9114	4988	F2	7113
	12	23	9	31	12.3439	1	9	52	47.366	25	4	38.88	4		9114	4988	F3	7114
	12	23	9	31	16.3439	1	9	55	23.177	24	23	12.32	4		9114	4988	F4	7115
	12	23	9	31	20.3440	1	9	57	55.672	23	42	1.30	4		9114	4988	F5	7116
	12	23	9	31	24.3440	1	10	0	24.311	23	1	10.20	4		9114	4988	F6	7117
	12	23	9	31	28.3441	1	10	2	49.844	22	20	42.41	4		9114	4988	F7	7118
	12	23	9	45	24.2257	1	10	25	15.583	11	20	14.32	4		9009	2684	04	9347
	12	23	11	6	12.1799	1	22	40	55.904	29	7	28.89	4		9005	5129	06	8341
	12	23	13	41	15.5829	1	14	16	45.820	27	4	5.59	4		9012	2707	02	7605
	12	23	15	1	56.3893	1	0	52	14.905	16	26	15.63	4		9008	638	03	8292
	12	23	15	44	23.6504	1	8	30	.744	1	18	4.62	4		9012	2716	03	7606
	12	23	17	6	26.0455	1	21	54	16.277	31	50	44.34	4		9008	651	02	8732
	12	24	1	44	59.3896	1	8	29	16.287	-14	55	54.92	4		9008	658	02	8293
	12	24	9	42	4.3451	1	7	12	29.328	45	54	15.63	4		9010	1509	F1	4737
	12	24	9	42	8.3451	1	7	16	36.996	45	25	43.08	4		9010	1509	F2	4738
	12	24	9	42	12.3450	1	7	20	44.898	44	56	2.96	4		9010	1509	F3	4739
	12	24	9	42	16.3450	10	7	24	52.523	44	25	15.19	4		9010	1509	F4	4740
	12	24	9	42	20.3449	1	7	29	.354	43	53	18.49	4		9010	1509	F5	4741
	12	24	9	42	24.3449	1	7	33	7.480	43	20	6.27	4		9010	1509	F6	4742
	12	24	9	42	28.3448	1	7	37	14.822	42	45	42.62	4		9010	1509	F7	4743
	12	24	9	46	4.3444	10	10	38	35.750	- 8	28	18.54	4		9010	1509	F1	4561
	12	24	9	46	8.3445	1	10	41	1.670	- 9	23	24.63	4		9010	1509	F2	4562
	12	24	9	46	12.3445	1	10	43	25.949	-10	17	34.30	4		9010	1509	F3	4563
	12	24	9	46	16.3446	1	10	45	48.329	-11	10	53.60	4		9010	1509	F4	4564
	12	24	9	46	20.3446	1	10	48	9.079	-12	3	16.48	4		9010	1509	F5	4565
	12	24	9	46	24.3446	1	10	50	28.399	-12	54	47.61	4		9010	1509	F6	4566
	12	24	9	46	28.3447	10	10	52	45.870	-13	45	25.31	4		9010	1509	F7	4567
	12	24	11	46	25.6933	1	9	49	20.123	-23	21	18.06	4		9001	7378	03	7599
	12	24	13	46	20.9514	1	13	57	.453	14	55	32.30	4		9012	2719	05	7607
	12	24	15	48	46.1702	1	8	3	32.792	- 6	30	58.19	4		9012	2728	04	9348
	12	24	19	46	54.1638	1	8	24	26.920	-19	13	10.31	4		9005	5136	02	642
	12	25	9	10	25.6566	1	0	39	46.709	16	55	25.59	4		9005	5145	05	8893
	12	25	11	14	56.4261	1	21	58	33.550	32	13	56.65	4		9005	5154	05	8894
	12	25	15	10	15.7607	1	23	28	23.078	23	55	15.24	4		9008	665	02	8294
	12	25	17	17	11.4734	1	21	15	39.727	44	48	39.71	4		9008	667	04	8295
	12	25	21	18	16.2180	1	21	47	8.662	37	11	24.91	4		9004	3188	05	9[illegible]
	12	26	1	54	17.0877	1	8	3	49.237	-25	59	51.98	4		9008	678	02	8296
	12	26	5	11	13.0785	1	22	10	25.772	34	9	17.41	4		9012	2733	07	9349
	12	26	13	56	25.8640	1	13	7	5.924	-11	9	22.66	4		9012	2743	06	9350
	12	26	15	15	20.6861	1	23	1	21.321	34	12	57.08	4		9008	689	03	8476
	12	26	15	57	16.3229	1	7	24	37.450	-13	53	26.02	4		9012	2753	06	9351
	12	27	1	15	40.2222	1	23	56	50.297	18	59	51.04	4		9001	7419	03	7631
	12	27	1	19	.2205	1	1	32	18.564	46	12	58.53	4		9001	7420	03	353
	12	27	3	21	40.2240	1	21	24	17.478	40	27	24.14	4		9001	7430	04	7632
	12	27	5	15	30.1440	1	21	37	28.865	35	14	17.70	4		9012	2759	05	9352
	12	27	7	48	4.3510	1	0	13	25.596	85	20	5.91	4		9010	1526	F1	4744
	12	27	7	48	8.3509	1	0	12	.230	85	50	22.16	4		9010	1526	F2	4745
	12	27	7	48	12.3508	1	0	10	6.918	86	21	1.08	4		9010	1526	F3	4746
	12	27	7	48	16.3508	1	0	7	29.672	86	52	4.76	4		9010	1526	F4	5249
	12	27	7	48	20.3507	1	0	3	32.208	87	23	24.44	4		9010	1526	F5	4747
	12	27	7	48	24.3507	1	23	57	31.580	87	55	2.96	4		9010	1526	F6	4748
	12	27	7	48	28.3506	1	23	46	57.876	88	26	55.97	4		9010	1526	F7	4749
	12	27	7	50	4.3494	1	12	41	55.653	76	25	47.58	4		9010	1526	F1	4750
	12	27	7	50	8.3494	1	12	42	1.049	75	42	13.79	4		9010	1526	F2	4751
	12	27	7	50	12.3493	1	12	42	7.503	74	58	9.39	4		9010	1526	F3	4752
	12	27	7	50	16.3493	1	12	42	15.353	74	13	40.93	4		9010	1526	F4	5028
	12	27	7	50	20.3492	10	12	42	24.515	73	28	38.07	4		9010	1526	F5	5029
	12	27	7	50	24.3492	10	12	42	34.399	72	43	10.98	4		9010	1526	F6	4754
	12	27	7	50	28.3492	1	12	42	45.256	71	57	14.45	4		9010	1526	F7	4755
	12	27	7	55	4.3494	1	13	5	34.900	12	17	31.45	4		9010	1526	F1	4756
	12	27	7	55	8.3494	1	13	5	58.768	11	33	30.10	4		9010	1526	F2	4757
	12	27	7	55	12.3494	1	13	6	22.931	10	49	54.15	4		9010	1526	F3	4758
	12	27	7	55	16.3495	1	13	6	46.928	10	6	49.94	4		9010	1526	F4	5030
	12	27	7	55	20.3495	1	13	7	11.254	9	24	15.45	4		9010	1526	F5	4759
	12	27	7	55	24.3496	1	13	7	35.431	8	42	6.03	4		9010	1526	F6	4760
	12	27	7	55	28.3496	1	13	7	59.907	8	0	31.55	4		9010	1526	F7	4761
	12	27	8	1	8.2288	1	13	50	16.291	- 6	46	23.00	4		9009	2734	06	9343
	12	27	9	19	52.5386	1	23	44	39.331	33	29	.46	4		9005	5169	09	8899
	12	27	9	52	4.3522	10	5	4	7.154	31	44	31.05	4		9010	1527	F1	4668
	12	27	9	52	8.3521	10	5	5	55.076	31	30	3.14	4		9010	1527	F2	4669
	12	27	9	52	12.3520	10	5	7	43.104	31	15	16.11	4		9010	1527	F3	4670
	12	27	9	52	16.3520	10	5	9	31.499	31	0	11.76	4		9010	1527	F4	4671
	12	27	9	52	20.3519	10	5	11	20.572	30	44	42.54	4		9010	1527	F5	4672
	12	27	9	52	24.3519	10	5	13	9.820	30	28	54.56	4		9010	1527	F6	4673
	12	27	9	52	28.3518	1	5	14	59.951	30	12	51.11	4		9010	1527	F7	4674
	12	27	9	55	4.3499	1	6	30	19.486	14	24	17.99	4		9010	1527	F1	4675
	12	27	9	55	8.3498	1	6	32	19.427	13	51	2.62	4		9010	1527	F2	4676

December 27-31, 1965

UATL Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1965	12	27	9	55	12.3498	1	6	34	19.198	13	17	27.12	4		9010	1527	F3	4677
	12	27	9	55	16.3498	1	6	36	19.265	12	43	18.95	4		9010	1527	F4	5027
	12	27	9	55	20.3497	10	6	38	19.756	12	8	50.56	4		9010	1527	F5	4679
	12	27	9	55	24.3497	1	6	40	19.865	11	33	54.09	4		9010	1527	F6	4680
	12	27	9	55	28.3497	1	6	42	20.192	10	58	31.13	4		9010	1527	F7	4681
	12	27	10	2	8.9122	1	7	29	43.164	-12	58	24.81	4		9009	2742	06	9344
	12	27	23	15	52.7360	1	20	57	7.348	33	51	23.38	4		9009	2743	09	9345
	12	28	1	20	36.2229	1	23	30	58.538	29	1	12.00	4		9001	7458	03	7683
	12	28	1	21	56.2226	1	0	2	16.195	40	44	8.48	4		9001	7459	05	354
	12	28	3	27	24.2297	1	21	0	30.876	49	2	43.31	4		9001	7470	04	1679
	12	28	3	32	48.2233	1	17	4	9.698	78	32	32.85	4		9001	7471	17	345
	12	28	7	58	4.3493	1	12	18	21.327	24	49	41.94	4		9010	1530	F1	4762
	12	28	7	58	8.3493	1	12	19	13.868	23	50	8.81	4		9010	1530	F2	5031
	12	28	7	58	12.3493	1	12	20	6.435	22	51	5.00	4		9010	1530	F3	4764
	12	28	7	58	16.3493	1	12	20	58.083	21	52	28.21	4		9010	1530	F4	4765
	12	28	7	58	20.3494	1	12	21	48.980	20	54	24.79	4		9010	1530	F5	4766
	12	28	7	58	24.3494	1	12	22	39.446	19	56	55.48	4		9010	1530	F6	4767
	12	28	7	58	28.3494	1	12	23	29.060	18	59	58.58	4		9010	1530	F7	4768
	12	28	19	26	32.2186	1	22	25	50.318	37	19	29.22	4		9004	3201	06	8302
	12	28	23	20	55.3899	1	20	37	34.789	38	24	15.43	4		9009	2766	07	9346
	12	29	1	29	52.2231	1	2	7	22.913	71	34	20.14	4		9001	7495	44	356
	12	29	2	17	10.8536	1	14	27	44.519	5	49	6.61	4		9002	244	08	8465
	12	29	5	25	16.9967	1	20	48	9.419	43	28	6.92	4		9012	2788	06	9353
	12	29	8	10	27.7577	1	12	53	52.616	-31	34	25.94	4		9009	2781	06	6981
	12	29	13	27	51.6996	1	21	38	48.620	42	7	27.51	4		9006	2658	05	8909
	12	29	15	28	46.0630	1	21	22	28.344	42	22	46.30	4		9008	758	03	8298
	12	29	17	33	.7222	1	1	21	16.275	7	53	25.81	4		9115	3424	09	4334
	12	30	1	33	56.2250	1	0	31	46.149	74	38	45.80	4		9001	7526	16	358
	12	30	2	18	56.7496	1	12	45	10.124	28	18	24.91	4		9002	278	03	8466
	12	30	3	37	12.2280	1	20	21	47.466	53	51	20.15	4		9001	7537	03	1680
	12	30	15	34	18.8872	1	20	55	27.838	51	6	15.85	4		9008	780	05	8299
	12	31	5	34	19.3525	1	20	10	17.001	44	33	36.29	4		9012	2820	06	9354
	12	31	9	37	47.5894	1	21	29	1.553	46	56	44.81	4		9005	5187	03	8300
	12	31	11	46	7.8494	1	19	55	4.758	60	28	40.26	4		9005	5192	05	8301
	12	31	13	37	19.4081	1	20	44	8.213	48	7	49.77	4		9006	2708	04	643
	12	31	14	15	4.3530	1	11	3	18.382	- 2	6	8.67	4		9117	8320	F1	7408
	12	31	14	15	8.3531	1	11	5	22.109	- 3	11	28.93	4		9117	8320	F2	7409
	12	31	14	15	12.3531	1	11	7	24.255	- 4	15	49.01	4		9117	8320	F3	7410
	12	31	14	15	16.3531	1	11	9	25.070	- 5	19	10.27	4		9117	8320	F4	7411
	12	31	14	15	20.3532	1	11	11	24.624	- 6	21	26.41	4		9117	8320	F5	7412
	12	31	14	15	24.3532	1	11	13	23.004	- 7	22	37.86	4		9117	8320	F6	7413
	12	31	14	15	28.3533	1	11	15	19.987	- 8	22	46.18	4		9117	8320	F7	7414
	12	31	18	28	8.5773	1	14	8	46.924		8	48	19.06	4		9023	2118	04	8474
	12	31	21	48	1.9654	1	20	17	39.692	55	41	13.84	4		9004	3266	05	8427

January 1-2, 1966

6508901

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	1	1	8	5	4.3575	1	21	31	41.930	87	19	1.00	4		9001	7549	F1	8464
	1	1	8	5	8.3575	1	21	1	23.381	87	48	5.12	4		9001	7549	F2	8465
	1	1	8	5	12.3574	1	20	14	30.461	88	13	49.07	4		9001	7549	F3	8466
	1	1	8	5	16.3574	1	19	1	51.488	88	32	40.01	4		9001	7549	F4	8467
	1	1	8	5	20.3573	1	17	24	10.034	88	39	2.77	4		9001	7549	F5	8468
	1	1	8	5	24.3573	1	15	48	40.935	88	29	50.65	4		9001	7549	F6	8469
	1	1	8	5	28.3572	1	14	39	40.743	88	8	21.29	4		9001	7549	F7	8470
	1	1	8	9	4.3559	1	11	56	51.626	45	59	20.62	4		9001	7549	F1	8471
	1	1	8	9	8.3559	1	11	57	1.762	45	6	11.40	4		9001	7549	F2	8472
	1	1	8	9	12.3559	1	11	57	12.049	44	13	8.17	4		9001	7549	F3	8473
	1	1	8	11	4.3566	1	12	3	52.793	21	4	5.68	4		9001	7549	F1	8474
	1	1	8	11	8.3566	1	12	4	9.804	20	19	41.40	4		9001	7549	F2	8475
	1	1	8	11	12.3566	1	12	4	27.011	19	35	38.01	4		9001	7549	F3	8476
	1	1	8	11	16.3567	1	12	4	44.280	18	52	5.86	4		9001	7549	F4	8477
	1	1	8	11	20.3567	1	12	5	1.874	18	8	57.58	4		9001	7549	F5	8478
	1	1	8	11	24.3568	1	12	5	19.464	17	26	14.66	4		9001	7549	F6	8479
	1	1	8	11	28.3568	1	12	5	37.259	16	43	59.54	4		9001	7549	F7	8480
	1	1	9	43	14.3627	1	21	0	30.379	55	36	3.96	4		9005	5207	06	4175
	1	1	13	42	5.4380	1	20	20	26.290	50	19	58.84	4		9006	2739	04	4269
	1	1	18	32	5.7804	1	13	42	12.729	7	44	5.07	4		9023	2170	07	4290
	1	2	6	4	4.3630	1	15	15	52.015	69	59	39.46	4		9001	7584	F1	8579
	1	2	6	4	8.3630	1	15	11	9.441	69	45	58.90	4		9001	7584	F2	8580
	1	2	6	4	12.3630	1	15	6	31.981	69	31	38.78	4		9001	7584	F3	8581
	1	2	6	4	16.3630	1	15	2	.830	69	16	55.37	4		9001	7584	F4	8582
	1	2	6	4	20.3630	1	14	57	35.603	69	1	16.53	4		9001	7584	F5	8583
	1	2	6	4	24.3629	1	14	53	16.466	68	45	23.21	4		9001	7584	F6	8584
	1	2	6	4	28.3629	1	14	49	2.811	68	28	56.28	4		9001	7584	F7	8585
	1	2	6	14	16.3617	1	12	55	4.437	81	51	44.05	4		9009	2842	F4	8568
	1	2	6	14	20.3617	1	12	53	16.240	81	25	3.19	4		9009	2842	F5	8569
	1	2	6	14	24.3616	1	12	51	39.200	80	58	4.48	4		9009	2842	F6	8570
	1	2	6	14	28.3615	1	12	50	13.312	80	30	45.30	4		9009	2842	F7	8571
	1	2	6	16	4.3603	1	12	39	39.624	67	59	13.44	4		9009	2842	F1	8572
	1	2	6	16	8.3603	1	12	39	41.303	67	23	43.28	4		9009	2842	F2	8573
	1	2	6	16	12.3602	1	12	39	43.568	66	47	54.57	4		9009	2842	F3	8574
	1	2	6	16	16.3602	1	12	39	47.164	66	11	45.00	4		9009	2842	F4	8575
	1	2	6	16	20.3601	1	12	39	51.256	65	35	13.42	4		9009	2842	F5	8576
	1	2	6	16	24.3601	1	12	39	56.978	64	58	24.09	4		9009	2842	F6	8577
	1	2	6	16	28.3601	1	12	40	3.242	64	21	12.54	4		9009	2842	F7	8578
	1	2	8	9	4.3600	1	1	19	59.234	81	10	47.56	4		9001	7588	F1	8481
	1	2	8	9	8.3599	1	1	28	14.998	81	38	9.32	4		9001	7588	F2	8482
	1	2	8	9	12.3599	1	1	37	32.826	82	5	11.00	4		9001	7588	F3	8483
	1	2	8	9	16.3598	1	1	48	1.217	82	31	46.49	4		9001	7588	F4	8484
	1	2	8	9	20.3597	1	1	59	56.314	82	57	39.87	4		9001	7588	F5	8485
	1	2	8	9	24.3597	1	2	13	31.926	83	22	41.18	4		9001	7588	F6	8486
	1	2	8	9	28.3596	1	2	29	3.700	83	46	30.39	4		9001	7588	F7	8487
	1	2	8	11	4.3585	1	9	59	.762	76	40	49.64	4		9001	7588	F1	8488
	1	2	8	11	8.3584	1	10	3	59.920	75	55	28.25	4		9001	7588	F2	8489
	1	2	8	11	12.3584	1	10	8	33.628	75	9	14.85	4		9001	7588	F3	8490
	1	2	8	11	16.3583	1	10	12	44.696	74	22	14.98	4		9001	7588	F4	8491
	1	2	8	11	20.3583	1	10	16	36.391	73	34	27.34	4		9001	7588	F5	8492
	1	2	8	11	24.3583	1	10	20	10.083	72	45	57.10	4		9001	7588	F6	8493
	1	2	8	11	28.3582	1	10	23	29.005	71	56	43.10	4		9001	7588	F7	8494
	1	2	8	13	4.3578	1	11	6	28.762	49	41	19.78	4		9001	7588	F1	8495
	1	2	8	13	8.3578	1	11	7	32.521	48	41	49.07	4		9001	7588	F2	8496
	1	2	8	13	12.3578	1	11	8	34.490	47	42	12.68	4		9001	7588	F3	8497
	1	2	8	13	16.3578	1	11	9	34.661	46	42	34.95	4		9001	7588	F4	8498
	1	2	8	13	20.3578	1	11	10	33.886	45	42	51.96	4		9001	7588	F5	8499
	1	2	8	13	24.3578	1	11	11	31.182	44	43	14.02	4		9001	7588	F6	8500
	1	2	8	13	28.3578	1	11	12	27.302	43	43	33.32	4		9001	7588	F7	8501
	1	2	8	15	4.3583	1	11	30	35.777	21	8	39.30	4		9001	7588	F1	8502
	1	2	8	15	4.3594	10	4	59	35.270	33	29	43.58	4		9010	1575	F1	5032
	1	2	8	15	8.3583	1	11	31	13.998	20	17	33.38	4		9001	7588	F2	8503
	1	2	8	15	8.3593	1	5	2	4.507	33	6	49.56	4		9010	1575	F2	5033
	1	2	8	15	12.3583	1	11	31	52.004	19	26	55.84	4		9001	7588	F3	8504
	1	2	8	15	12.3593	10	5	4	34.036	32	43	23.58	4		9010	1575	F3	4569
	1	2	8	15	16.3584	1	11	32	29.388	18	36	54.72	4		9001	7588	F4	8505
	1	2	8	15	16.3592	10	5	7	4.210	32	19	20.13	4		9010	1575	F4	4570
	1	2	8	15	20.3584	1	11	33	6.826	17	47	24.03	4		9001	7588	F5	8506
	1	2	8	15	20.3591	10	5	9	34.836	31	54	40.42	4		9010	1575	F5	5034
	1	2	8	15	24.3585	1	11	33	43.878	16	58	28.26	4		9001	7588	F6	8507
	1	2	8	15	24.3591	10	5	12	5.939	31	29	24.58	4		9010	1575	F6	5035
	1	2	8	15	28.3585	1	11	34	20.550	16	10	7.83	4		9001	7588	F7	8508
	1	2	8	15	28.3590	1	5	14	37.495	31	3	27.82	4		9010	1575	F7	4571
	1	2	8	19	4.3578	10	7	32	16.612	- 6	51	57.75	4		9010	1575	F1	5036
	1	2	8	19	8.3578	1	7	34	41.054	- 7	42	15.26	4		9010	1575	F2	4572
	1	2	8	19	12.3578	10	7	37	4.688	- 8	32	24.05	4		9010	1575	F3	5037
	1	2	8	19	16.3578	10	7	39	28.270	- 9	22	13.30	4		9010	1575	F4	5038
	1	2	8	19	20.3578	10	7	41	51.174	-10	11	49.31	4		9010	1575	F5	5039
	1	2	8	19	24.3578	1	7	44	13.280	-11	1	7.32	4		9010	1575	F6	4573
	1	2	8	19	28.3579	10	7	46	34.985	-11	50	8.52	4		9010	1575	F7	4653

January 2-8, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	1	2	9	47	46.8785	1	20	33	17.280	56	19	28.78	4		9005	5235	03	4368
	1	2	11	55	35.5941	1	19	30	52.479	62	13	58.80	4		9005	5241	06	4369
	1	2	13	46	54.2943	1	19	58	41.596	52	20	21.24	4		9006	2786	04	3972
	1	2	15	48	54.9782	3	19	40	13.623	57	44	36.31	4		9008	872	06	4122
	1	3	19	55	16.2328	1	19	56	30.320	57	16	47.73	4		9004	3283	03	4260
	1	3	22	2	44.2349	1	19	44	39.414	61	35	4.63	4		9004	3289	04	3986
	1	4	1	55	1.0022	1	21	56	40.342	82	44	.90	4		9113	118	06	1244
	1	4	6	13	4.3680	1	15	3	37.955	73	1	56.56	4		9001	7660	F1	8509
	1	4	6	13	4.3684	1	12	50	10.797	57	23	55.27	4		9113	143	F1	9300
	1	4	6	13	8.3680	1	14	57	44.787	72	46	8.59	4		9001	7660	F2	8510
	1	4	6	13	8.3684	1	12	48	26.981	56	57	21.38	4		9113	143	F2	9301
	1	4	6	13	12.3680	1	14	52	.575	72	29	34.57	4		9001	7660	F3	8511
	1	4	6	13	12.3684	1	12	46	46.023	56	30	35.81	4		9113	143	F3	9302
	1	4	6	13	16.3679	1	14	46	25.643	72	12	15.63	4		9001	7660	F4	8512
	1	4	6	13	16.3685	1	12	45	8.540	56	3	50.16	4		9113	143	F4	9303
	1	4	6	13	20.3679	1	14	41	1.429	71	54	15.13	4		9001	7660	F5	8513
	1	4	6	13	20.3685	1	12	43	33.193	55	36	52.90	4		9113	143	F5	9304
	1	4	6	13	24.3679	1	14	35	46.882	71	35	28.50	4		9001	7660	F6	8514
	1	4	6	13	24.3685	1	12	42	1.141	55	9	52.13	4		9113	143	F6	9305
	1	4	6	13	28.3679	1	14	30	41.400	71	16	4.66	4		9001	7660	F7	8515
	1	4	6	13	28.3685	1	12	40	31.848	54	42	50.81	4		9113	143	F7	9306
	1	4	6	15	4.3675	1	13	9	8.000	61	5	5.90	4		9001	7660	F1	8516
	1	4	6	15	8.3675	1	13	7	.680	60	35	29.16	4		9001	7660	F2	8517
	1	4	6	15	12.3675	1	13	4	57.958	60	2	42.31	4		9001	7660	F3	8518
	1	4	6	15	16.3675	1	13	2	59.121	59	35	47.94	4		9001	7660	F4	8519
	1	4	6	15	20.3675	1	13	1	4.394	59	5	34.75	4		9001	7660	F5	8520
	1	4	6	15	24.3675	1	12	59	13.974	58	35	14.28	4		9001	7660	F6	8521
	1	4	6	15	28.3675	1	12	57	26.816	58	4	46.11	4		9001	7660	F7	8522
	1	4	9	57	15.0149	1	19	44	50.610	59	20	52.39	4		9005	5267	05	4370
	1	4	13	56	46.0012	1	19	37	39.188	56	31	4.12	4		9006	2784	03	3973
	1	4	17	58	33.0863	1	0	2	55.925	25	50	56.52	4		9115	28	10	4133
	1	4	20	6	8.5062	1	1	31	12.022	51	57	41.00	4		9115	29	17	4134
	1	5	1	58	4.2412	1	19	34	44.277	56	14	26.81	4		9001	7682	04	3993
	1	5	2	0	4.3699	1	18	26	25.907	86	1	54.25	4		9113	172	F1	9888
	1	5	2	0	8.3699	1	18	6	48.210	86	23	51.46	4		9113	172	F2	9308
	1	5	2	0	12.3699	1	17	42	57.194	86	43	44.21	4		9113	172	F3	9309
	1	5	2	0	16.3699	1	17	14	13.236	87	0	59.34	4		9113	172	F4	9310
	1	5	2	0	20.3700	1	16	40	15.112	87	14	47.69	4		9113	172	F5	9311
	1	5	2	0	24.3700	1	16	1	16.187	87	24	12.19	4		9113	172	F6	9312
	1	5	2	0	28.3700	1	15	18	46.043	87	28	37.03	4		9113	172	F7	9313
	1	5	6	25	12.3666	1	6	57	49.416	- 1	26	21.13	4		9050	444	F3	3000
	1	5	6	25	16.3666	1	7	0	18.158	- 2	4	34.77	4		9050	444	F4	3001
	1	5	6	25	20.3666	1	7	2	45.414	- 2	42	39.71	4		9050	444	F5	3002
	1	5	6	25	24.3666	1	7	5	11.647	- 3	20	40.61	4		9050	444	F6	3003
	1	5	6	25	28.3666	1	7	7	36.629	- 3	58	20.14	4		9050	444	F7	3004
	1	5	6	44	43.9906	1	13	38	.640	9	41	54.21	4		9011	4834	05	4263
	1	5	12	26	4.3694	1	8	11	45.280	83	41	21.43	4		9117	31	F1	289
	1	5	12	26	8.3694	1	8	24	48.484	83	20	36.43	4		9117	31	F2	290
	1	5	12	26	12.3693	1	8	36	40.012	82	58	28.16	4		9117	31	F3	291
	1	5	12	26	16.3692	1	8	47	32.903	82	35	7.56	4		9117	31	F4	3246
	1	5	12	26	20.3692	1	8	57	28.323	82	10	33.45	4		9117	31	F5	293
	1	5	12	31	4.3669	1	11	41	52.995	27	8	38.31	4		9117	32	F1	294
	1	5	12	31	8.3669	1	11	42	43.756	26	11	.53	4		9117	32	F2	295
	1	5	12	31	12.3669	1	11	43	34.277	25	13	40.75	4		9117	32	F3	296
	1	5	12	31	16.3669	1	11	44	24.194	24	16	26.61	4		9117	32	F4	297
	1	5	12	31	20.3669	1	11	45	13.958	23	19	29.40	4		9117	32	F5	298
	1	5	12	31	24.3669	1	11	46	3.286	22	22	47.88	4		9117	32	F6	299
	1	5	12	31	28.3670	1	11	46	52.171	21	26	22.80	4		9117	32	F7	3247
	1	5	12	33	4.3677	1	12	5	27.050	1	1	22.42	4		9117	33	F1	280
	1	5	12	33	8.3677	3	12	6	11.862	0	16	52.42	4		9117	33	F2	3730
	1	5	12	33	16.3678	1	12	7	41.074	- 1	10	29.56	4		9117	33	F4	281
	1	5	12	33	20.3679	1	12	8	25.478	- 1	53	22.68	4		9117	33	F5	282
	1	5	12	33	24.3679	1	12	9	10.045	- 2	35	43.10	4		9117	33	F6	3248
	1	5	12	33	28.3680	1	12	9	54.530	- 3	17	23.12	4		9117	33	F7	283
	1	5	18	49	45.3947	1	11	39	13.803	-33	55	9.42	4		9023	2229	09	3997
	1	6	0	47	44.4590	1	13	35	32.991	- 6	42	6.74	4		9002	445	06	4261
	1	6	2	3	4.2425	1	19	10	58.394	58	45	12.38	4		9001	7719	05	3994
	1	6	6	46	5.4052	1	13	44	56.179	- 6	41	13.29	4		9007	2181	04	3944
	1	6	8	49	28.4045	1	7	32	53.451	-51	40	51.36	4		9007	2188	08	3945
	1	6	18	52	28.0589	1	9	22	45.294	-15	45	18.86	4		9023	2263	07	4534
	1	7	8	54	6.7292	1	6	44	2.549	-54	14	23.69	4		9007	2221	03	3946
	1	8	0	56	27.6349	1	12	54	37.357	-27	47	17.67	4		9002	483	03	3988
	1	8	2	13	31.8782	1	18	9	52.156	64	52	16.41	4		9001	7799	03	3996
	1	8	6	55	41.7157	1	13	48	48.781	-31	57	40.96	4		9007	2236	04	3947
	1	8	6	58	19.7406	1	13	20	32.745	-13	21	58.05	4		9011	4900	04	3936
	1	8	8	57	56.7003	1	6	12	13.963	-47	10	32.91	4		9007	2243	08	3948
	1	8	12	41	4.3741	1	6	16	8.628	48	16	19.37	4		9117	80	F1	3249
	1	8	12	41	8.3740	1	6	19	55.876	47	40	54.26	4		9117	80	F2	329
	1	8	12	41	12.3740	1	6	23	41.865	47	4	17.54	4		9117	80	F3	330
	1	8	12	41	16.3739	1	6	27	27.120	46	26	25.89	4		9117	80	F4	331

January 8-14, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	1	8	12	41	20.3739	1	6	31	11.623	45	47	26.01	4		9117	80	F5	332
	1	8	12	41	24.3738	1	6	34	54.366	45	7	11.29	4		9117	80	F6	333
	1	8	12	41	28.3738	1	6	38	36.252	44	25	39.85	4		9117	80	F7	334
	1	8	12	46	4.3741	1	9	51	57.981	-26	1	42.13	4		9117	81	F1	425
	1	8	12	46	8.3741	1	9	54	.363	-26	45	40.07	4		9117	81	F2	426
	1	8	12	46	12.3742	1	9	56	1.774	-27	28	42.03	4		9117	81	F3	427
	1	8	12	46	16.3743	1	9	58	2.225	-28	10	50.63	4		9117	81	F4	428
	1	8	12	46	20.3743	1	10	0	1.644	-28	52	6.66	4		9117	81	F5	429
	1	8	12	46	24.3744	1	10	2	.646	-29	32	23.16	4		9117	81	F6	430
	1	8	12	46	28.3744	1	10	3	58.855	-30	11	53.19	4		9117	81	F7	3250
	1	9	1	1	32.8736	1	13	7	59.660	-48	33	46.73	4		9002	503	06	3989
	1	9	6	59	56.4460	1	13	31	31.606	-42	47	52.92	4		9007	2262	04	4264
	1	9	7	3	5.1227	1	13	23	53.526	-27	46	29.67	4		9011	4933	06	4535
	1	9	9	1	50.5310	1	5	52	40.405	-42	2	42.65	4		9007	2267	09	4265
	1	10	7	5	12.3800	1	10	52	40.126	-10	7	13.00	4		9011	4959	13	4513
	1	10	7	7	8.3770	1	12	45	.742	-37	15	16.91	4		9011	4960	05	3937
	1	11	1	10	28.1126	1	11	31	13.533	-73	30	26.28	4		9002	539	08	4366
	1	11	4	43	4.3820	1	3	47	13.087	37	31	43.23	4		9050	450	F1	3005
	1	11	4	43	8.3820	1	3	50	59.992	37	9	11.52	4		9050	450	F2	3006
	1	11	4	43	12.3820	1	3	54	47.114	36	45	55.95	4		9050	450	F3	3007
	1	11	4	43	16.3820	1	3	58	34.557	36	21	49.24	4		9050	450	F4	3008
	1	11	4	43	20.3820	1	4	2	22.009	35	56	52.52	4		9050	450	F5	3009
	1	11	4	43	24.3820	1	4	6	9.406	35	31	5.80	4		9050	450	F6	3010
	1	11	4	43	28.3820	1	4	9	56.616	35	4	34.01	4		9050	450	F7	3011
	1	11	4	48	4.3827	1	7	32	37.179	-10	14	23.90	4		9050	451	F1	3012
	1	11	4	48	8.3827	1	7	34	32.659	-10	48	3.10	4		9050	451	F2	3013
	1	11	4	48	12.3827	1	7	36	26.823	-11	21	13.83	4		9050	451	F3	3014
	1	11	7	11	49.1856	1	12	36	49.146	-53	35	10.46	4		9011	4987	07	3938
	1	11	10	33	4.0353	1	15	9	49.584	72	39	.29	4		9005	5409	04	4266
	1	11	17	12	37.4723	1	13	19	2.227	-37	59	2.64	4		9023	2309	07	3961
	1	12	4	45	4.3871	1	1	59	4.223	37	37	44.38	4		9050	453	F1	3202
	1	12	4	45	8.3871	1	2	1	40.452	37	30	56.59	4		9050	453	F2	3203
	1	12	4	45	12.3871	1	2	4	18.378	37	23	50.92	4		9050	453	F3	3204
	1	12	4	45	16.3871	1	2	6	57.694	37	16	21.13	4		9050	453	F4	3205
	1	12	4	45	20.3871	1	2	9	38.322	37	8	31.66	4		9050	453	F5	3206
	1	12	4	45	24.3871	1	2	12	20.044	37	0	12.44	4		9050	453	F6	3207
	1	12	4	45	28.3871	1	2	15	3.523	36	51	28.06	4		9050	453	F7	3208
	1	12	4	49	12.3850	1	5	4	45.900	14	33	39.23	4		9050	455	F3	3209
	1	12	4	49	16.3850	1	5	7	41.158	13	55	22.23	4		9050	455	F4	3210
	1	12	4	49	20.3850	1	5	10	35.345	13	16	48.43	4		9050	455	F5	3211
	1	12	4	49	24.3850	1	5	13	28.342	12	38	4.39	4		9050	455	F6	3212
	1	12	4	49	28.3850	1	5	16	20.264	11	59	2.97	4		9050	455	F7	3213
	1	12	4	51	8.3855	1	6	21	11.345	- 4	22	1.86	4		9050	456	F2	3022
	1	12	4	51	12.3855	1	6	23	29.929	- 4	59	14.09	4		9050	456	F3	3023
	1	12	4	51	16.3855	1	6	25	46.973	- 5	36	6.09	4		9050	456	F4	3024
	1	12	4	51	20.3855	1	6	28	3.163	- 6	12	43.55	4		9050	456	F5	3025
	1	12	4	51	24.3855	1	6	30	17.606	- 6	48	57.78	4		9050	456	F6	3026
	1	12	6	39	4.3899	1	0	20	19.233	30	10	36.46	4		9114	41	F1	3127
	1	12	6	39	8.3899	1	0	22	2.247	30	13	49.06	4		9114	41	F2	3128
	1	12	6	39	12.3898	1	0	23	46.306	30	16	55.94	4		9114	41	F3	3129
	1	12	6	39	16.3898	1		5	31.274	30	19	58.28	4		9114	41	F4	3130
	1	12	6	39	20.3897	1	0	27	17.789	30	22	50.78	4		9114	41	F5	3131
	1	12	6	39	24.3896	1	0	29	5.298	30	25	37.01	4		9114	41	F6	3132
	1	12	6	39	28.3896	1	0	30	53.921	30	28	16.25	4		9114	41	F7	3133
	1	12	6	46	4.3862	1	4	51	44.988	11	52	30.73	4		9114	42	F1	3743
	1	12	6	46	8.3862	1	4	54	27.362	11	24	58.36	4		9114	42	F2	3744
	1	12	6	46	12.3862	1	4	57	8.594	10	57	21.83	4		9114	42	F3	3745
	1	12	6	46	16.3862	1	4	59	48.569	10	29	35.28	4		9114	42	F4	3746
	1	12	6	46	20.3862	1	5	2	27.364	10	1	42.23	4		9114	42	F5	3747
	1	12	6	46	24.3863	1	5	5	5.012	9	33	49.70	4		9114	42	F6	3748
	1	12	6	46	28.3863	1	5	7	41.468	9	5	49.39	4		9114	42	F7	3749
	1	12	6	48	4.3869	1	6	3	59.506	- 1	57	39.60	4		9114	43	F1	3750
	1	12	6	48	8.3869	1	6	6	4.399	- 2	23	56.46	4		9114	43	F2	3751
	1	12	6	48	12.3870	1	6	8	8.112	- 2	50	8.94	4		9114	43	F3	3752
	1	12	6	48	16.3870	1	6	10	10.515	- 3	16	8.33	4		9114	43	F4	3753
	1	12	6	48	20.3870	1	6	12	11.921	- 3	41	57.60	4		9114	43	F5	3754
	1	12	6	48	24.3871	1	6	14	11.960	- 4	7	40.23	4		9114	43	F6	3755
	1	12	6	48	28.3871	1	6	16	10.856	- 4	33	7.38	4		9114	43	F7	3756
	1	12	23	15	47.6739	1	13	53	57.734	-25	3	28.43	4		9002	562	04	3991
	1	13	1	18	39.3896	1	6	23	52.954	-71	21	33.95	4		9002	573	04	3992
	1	13	4	52	4.3893	1	2	20	45.559	70	11	20.83	4		9010	1597	F1	1448
	1	13	4	52	8.3892	1	2	26	46.951	70	16	10.29	4		9010	1597	F2	1449
	1	13	4	52	12.3891	1	2	32	56.428	70	20	12.66	4		9010	1597	F3	1450
	1	13	4	52	16.3891	1	2	39	14.620	70	23	34.35	4		9010	1597	F4	1451
	1	13	4	52	20.3890	1	2	45	40.152	70	26	18.11	4		9010	1597	F5	1452
	1	13	4	52	24.3889	1	2	52	12.754	70	28	7.92	4		9010	1597	F6	1453
	1	13	4	52	28.3889	1	2	58	52.357	70	29	7.02	4		9010	1597	F7	1454
	1	13	7	20	2.1853	1	9	12	7.371	-67	45	44.73	4		9011	5025	06	3939
	1	13	17	21	.3008	1	11	54	8.937	-61	12	19.84	4		9023	2364	03	3962
	1	14	5	21	14.1731	1	13	30	22.079	-17	49	2.97	4		9011	5059	04	3940

January 14-15, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	1	14	10	45	56.7805	1	16	20	12.936	73	25	59.62	4		9005	5431	08	4129
	1	14	11	1	4.3912	1	5	21	50.165	68	25	27.04	4		9117	218	F1	431
	1	14	11	1	8.3911	1	5	27	38.374	68	6	30.15	4		9117	218	F2	432
	1	14	11	1	12.3910	1	5	33	23.220	67	46	36.05	4		9117	218	F3	433
	1	14	11	1	16.3910	1	5	39	4.098	67	25	34.49	4		9117	218	F4	434
	1	14	11	1	20.3909	1	5	44	40.585	67	3	29.74	4		9117	218	F5	435
	1	14	11	1	24.3909	1	5	50	13.631	66	40	24.04	4		9117	218	F6	436
	1	14	11	1	28.3908	1	5	55	41.364	66	16	10.81	4		9117	218	F7	437
	1	14	11	3	4.3895	1	7	41	34.775	50	55	3.77	4		9117	219	F1	2012
	1	14	11	3	8.3895	1	7	44	59.470	50	2	20.03	4		9117	219	F2	2013
	1	14	11	3	12.3895	1	7	48	20.222	49	8	32.19	4		9117	219	F3	2014
	1	14	11	3	16.3894	1	7	51	36.650	48	13	34.27	4		9117	219	F4	2015
	1	14	11	3	20.3894	1	7	54	49.354	47	17	37.06	4		9117	219	F5	2016
	1	14	11	3	24.3894	1	7	57	58.016	46	20	34.91	4		9117	219	F6	2017
	1	14	11	3	28.3893	1	8	1	3.509	45	22	29.48	4		9117	219	F7	2018
	1	14	11	5	4.3890	1	9	0	38.257	18	38	51.59	4		9117	220	F1	2019
	1	14	11	5	8.3890	1	9	2	39.267	17	28	51.31	4		9117	220	F2	2020
	1	14	11	5	12.3891	1	9	4	38.623	16	19	7.34	4		9117	220	F3	2021
	1	14	11	5	16.3891	1	9	6	36.384	15	9	39.26	4		9117	220	F4	2022
	1	14	11	5	20.3891	1	9	8	32.647	14	0	32.99	4		9117	220	F5	2023
	1	14	11	5	24.3891	1	9	10	27.353	12	51	52.27	4		9117	220	F6	2024
	1	14	11	5	28.3891	1	9	12	20.541	11	43	40.41	4		9117	220	F7	2025
	1	14	11	7	4.3900	1	9	51	50.822	-11	53	55.83	4		9117	221	F1	2026
	1	14	11	7	8.3900	1	9	53	18.482	-12	42	13.27	4		9117	221	F2	2027
	1	14	11	7	12.3901	1	9	54	45.526	-13	29	40.06	4		9117	221	F3	3563
	1	14	11	7	16.3902	1	9	56	12.025	-14	16	13.01	4		9117	221	F4	2029
	1	14	11	7	20.3902	1	9	57	37.732	-15	1	55.49	4		9117	221	F5	3564
	1	14	11	7	24.3903	1	9	59	2.979	-15	46	47.93	4		9117	221	F6	3565
	1	14	11	7	28.3903	1	10	0	27.509	-16	30	51.92	4		9117	221	F7	2032
	1	14	17	25	56.0560	1	12	11	12.370	-75	17	59.64	4		9023	2397	03	3963
	1	15	5	2	4.3939	1	10	4	20.986	21	4	41.34	4		9001	7990	F1	7818
	1	15	5	2	8.3940	1	10	4	33.993	20	24	47.08	4		9001	7990	F2	7819
	1	15	5	2	8.3946	1	4	20	43.969	- 2	30	1.84	4		9050	490	F2	3027
	1	15	5	2	12.3940	1	10	4	47.079	19	45	16.27	4		9001	7990	F3	7820
	1	15	5	2	12.3946	1	4	22	38.361	- 2	58	54.52	4		9050	490	F3	3028
	1	15	5	2	16.3941	1	10	5	.256	19	6	4.76	4		9001	7990	F4	7821
	1	15	5	2	16.3946	1	4	24	32.361	- 3	27	52.51	4		9050	490	F4	3029
	1	15	5	2	20.3941	1	10	5	13.839	18	27	11.15	4		9001	7990	F5	7822
	1	15	5	2	20.3946	1	4	26	25.980	- 3	56	52.09	4		9050	490	F5	3030
	1	15	5	2	24.3941	1	10	5	27.568	17	48	42.99	4		9001	7990	F6	7823
	1	15	5	2	24.3946	1	4	28	19.624	- 4	25	52.75	4		9050	490	F6	3031
	1	15	5	2	28.3942	1	10	5	41.747	17	10	31.61	4		9001	7990	F7	7824
	1	15	5	2	28.3946	1	4	30	12.718	- 4	54	55.38	4		9050	490	F7	3032
	1	15	5	25	31.7979	1	13	28	46.063	-25	19	36.21	4		9011	5098	04	3941
	1	15	15	26	3.0231	1	13	13	7.409	-14	50	35.82	4		9023	2428	03	3964
	1	15	18	53	13.4028	1	5	49	16.817	35	29	31.35	4		9115	79	09	4135

January 16-18, 1966

4508901

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	1	16	3	1	4.3975	1	11	41	56.296	75	54	12.15	4		9010	1631	F1	5250
	1	16	3	1	8.3975	1	11	37	38.960	75	24	32.07	4		9010	1631	F2	4694
	1	16	3	1	12.3974	1	11	33	37.973	74	54	22.15	4		9010	1631	F3	4695
	1	16	3	1	16.3974	1	11	29	51.800	74	23	43.31	4		9010	1631	F4	4696
	1	16	3	1	20.3974	1	11	26	19.673	73	52	28.77	4		9010	1631	F5	4697
	1	16	3	1	24.3973	1	11	23	.536	73	20	48.28	4		9010	1631	F6	5251
	1	16	3	1	28.3973	1	11	19	52.294	72	48	42.44	4		9010	1631	F7	4698
	1	16	3	3	4.3967	1	10	39	49.169	58	16	8.22	4		9010	1631	F1	4659
	1	16	3	3	8.3967	1	10	39	.351	57	36	39.40	4		9010	1631	F2	4660
	1	16	3	3	12.3967	1	10	38	13.915	56	56	59.11	4		9010	1631	F3	4661
	1	16	3	3	16.3967	1	10	37	29.194	56	17	9.09	4		9010	1631	F4	4662
	1	16	3	3	20.3967	1	10	36	47.235	55	37	8.19	4		9010	1631	F5	5040
	1	16	3	3	24.3967	1	10	36	6.815	54	56	57.70	4		9010	1631	F6	5041
	1	16	3	3	28.3967	1	10	35	28.386	54	16	41.87	4		9010	1631	F7	4663
	1	16	3	5	4.3967	1	10	27	9.417	37	51	50.23	4		9010	1631	F1	5252
	1	16	3	5	8.3967	1	10	27	1.113	37	11	.67	4		9010	1631	F2	4664
	1	16	3	5	12.3967	1	10	26	53.706	36	30	19.07	4		9010	1631	F3	4665
	1	16	3	5	16.3967	1	10	26	46.927	35	49	40.53	4		9010	1631	F4	4666
	1	16	3	5	20.3967	1	10	26	40.632	35	9	13.39	4		9010	1631	F5	4667
	1	16	3	5	24.3967	1	10	26	34.972	34	28	52.13	4		9010	1631	F6	4701
	1	16	3	5	28.3967	1	10	26	30.224	33	48	34.69	4		9010	1631	F7	4702
	1	16	3	7	4.3974	1	10	27	4.395	18	35	40.39	4		9010	1631	F1	4703
	1	16	3	7	8.3974	1	10	27	10.991	18	0	21.45	4		9010	1631	F2	4704
	1	16	3	7	12.3974	1	10	27	18.109	17	25	17.05	4		9010	1631	F3	4705
	1	16	3	7	16.3975	1	10	27	25.241	16	50	29.79	4		9010	1631	F4	5253
	1	16	3	7	20.3975	1	10	27	32.683	16	15	56.32	4		9010	1631	F5	4706
	1	16	3	7	24.3976	1	10	27	40.510	15	41	36.55	4		9010	1631	F6	5254
	1	16	3	7	28.3976	1	10	27	48.728	15	7	32.21	4		9010	1631	F7	4707
	1	16	11	11	4.3949	1	4	52	45.484	36	32	43.69	4		9117	276	F1	2033
	1	16	11	11	8.3949	1	4	55	47.141	35	52	.46	4		9117	276	F2	2034
	1	16	11	11	12.3948	1	4	58	48.486	35	10	11.31	4		9117	276	F3	2035
	1	16	11	13	4.3940	1	6	20	7.253	8	58	2.88	4		9117	277	F1	2036
	1	16	11	13	8.3940	1	6	22	51.953	7	51	13.70	4		9117	277	F2	2037
	1	17	5	7	4.3989	1	9	34	41.389	37	1	46.70	4		9113	727	F1	9500
	1	17	5	7	8.3989	1	9	34	47.393	36	17	12.33	4		9113	727	F2	9501
	1	17	5	7	12.3989	1	9	34	53.196	35	32	58.54	4		9113	727	F3	9502
	1	17	5	7	16.3989	1	9	35	.045	34	48	57.63	4		9113	727	F4	9503
	1	17	5	7	20.3990	1	9	35	6.901	34	5	8.25	4		9113	727	F5	9504
	1	17	5	7	24.3990	1	9	35	14.109	33	21	35.60	4		9113	727	F6	9505
	1	17	5	7	28.3990	1	9	35	21.617	32	38	14.75	4		9113	727	F7	9506
	1	17	5	10	4.3993	1	2	50	13.451	30	32	44.24	4		9010	1653	F1	4708
	1	17	5	10	8.3993	1	2	52	25.785	30	9	52.71	4		9010	1653	F2	4709
	1	17	5	10	12.3992	1	2	54	38.422	29	46	30.24	4		9010	1653	F3	4710
	1	17	5	10	16.3992	1	2	56	51.444	29	22	39.76	4		9010	1653	F4	4711
	1	17	5	10	20.3991	1	2	59	4.773	28	58	10.22	4		9010	1653	F5	4712
	1	17	5	10	24.3990	1	3	1	18.361	28	33	13.98	4		9010	1653	F6	4713
	1	17	5	10	28.3990	1	3	3	32.440	28	7	40.88	4		9010	1653	F7	5042
	1	17	5	12	4.3980	1	3	57	59.264	15	11	23.08	4		9010	1653	F1	4715
	1	17	5	12	8.3980	1	4	0	16.120	14	32	17.24	4		9010	1653	F2	4716
	1	17	5	12	12.3980	1	4	2	32.903	13	52	40.58	4		9010	1653	F3	4717
	1	17	5	12	16.3979	1	4	4	49.498	13	12	36.94	4		9010	1653	F4	4718
	1	17	5	12	20.3979	1	4	7	6.411	12	32	5.25	4		9010	1653	F5	4719
	1	17	5	12	24.3979	1	4	9	22.729	11	51	.19	4		9010	1653	F6	4720
	1	17	5	12	28.3979	1	4	11	39.465	11	9	33.41	4		9010	1653	F7	4721
	1	17	7	14	4.3990	1	6	40	43.134	-24	27	39.68	4		9113	734	F1	601
	1	17	7	14	8.3990	1	6	42	35.140	-24	58	42.14	4		9113	734	F2	602
	1	17	7	14	12.3991	1	6	44	26.194	-25	29	17.66	4		9113	734	F3	603
	1	17	7	14	16.3991	1	6	46	16.511	-25	59	30.69	4		9113	734	F4	604
	1	17	7	14	20.3992	1	6	48	6.158	-26	29	12.64	4		9113	734	F5	605
	1	17	7	14	24.3992	1	6	49	54.836	-26	58	31.55	4		9113	734	F6	606
	1	17	7	14	28.3993	1	6	51	42.948	-27	27	27.21	4		9113	734	F7	607
	1	17	10	58	47.2809	1	18	4	9.830	73	41	2.80	4		9005	5478	06	4130
	1	17	15	35	28.6874	1	13	43	32.070	-34	30	29.80	4		9023	2466	04	4262
	1	18	3	8	4.4025	1	22	22	19.798	83	21	9.12	4		9010	1675	F1	5043
	1	18	3	8	8.3996	1	2	32	11.234	41	38	34.59	4		9050	496	F2	3033
	1	18	3	8	8.4024	1	22	28	15.542	83	46	47.26	4		9010	1675	F2	4723
	1	18	3	8	12.3996	1	2	36	4.531	41	20	25.21	4		9050	496	F3	3034
	1	18	3	8	12.4024	1	22	35	10.482	84	12	26.14	4		9010	1675	F3	4724
	1	18	3	8	16.3996	1	2	39	58.139	41	1	23.91	4		9050	496	F4	3035
	1	18	3	8	16.4023	1	22	43	7.724	84	38	5.68	4		9010	1675	F4	4725
	1	18	3	8	20.3996	1	2	43	52.399	40	41	36.49	4		9050	496	F5	3036
	1	18	3	8	20.4023	1	22	52	32.879	85	3	34.51	4		9010	1675	F5	5044
	1	18	3	8	24.3996	1	2	47	46.927	40	21	3.05	4		9050	496	F6	3037
	1	18	3	8	24.4022	1	23	3	44.702	85	28	45.98	4		9010	1675	F6	4726
	1	18	3	8	28.3996	1	2	51	41.836	39	59	36.06	4		9050	496	F7	3038
	1	18	3	8	28.4021	1	23	17	22.615	85	53	29.59	4		9010	1675	F7	4727
	1	18	3	10	4.4009	1	8	23	27.190	79	45	53.99	4		9010	1675	F1	4728
	1	18	3	10	8.4008	1	8	26	44.919	79	8	2.49	4		9010	1675	F2	4729
	1	18	3	10	12.3989	1	4	29	34.027	26	2	50.13	4		9050	497	F3	3039
	1	18	3	10	12.4008	1	8	29	45.517	78	29	43.33	4		9010	1675	F3	4730

January 18-19, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	1	18	3	10	16.3989	1	4	33	.078	25	21	29.12	4		9050	497	F4	3040
	1	18	3	10	16.4007	1	8	32	32.183	77	50	51.77	4		9010	1675	F4	4791
	1	18	3	10	20.3989	1	4	36	23.985	24	39	36.14	4		9050	497	F5	3041
	1	18	3	10	20.4007	1	8	35	4.363	77	11	27.36	4		9010	1675	F5	4792
	1	18	3	10	24.3989	1	4	39	45.872	23	57	14.57	4		9050	497	F6	3042
	1	18	3	10	24.4007	1	8	37	25.113	76	31	34.51	4		9010	1675	F6	4793
	1	18	3	10	28.3989	1	4	43	5.852	23	14	27.46	4		9050	497	F7	3043
	1	18	3	10	28.4006	1	8	39	37.044	75	51	13.08	4		9010	1675	F7	4794
	1	18	3	12	4.3999	1	9	9	.757	57	28	4.05	4		9010	1675	F1	4795
	1	18	3	12	8.3998	1	9	9	47.928	56	37	19.01	4		9010	1675	F2	4796
	1	18	3	12	12.3998	1	9	10	33.782	55	46	15.42	4		9010	1675	F3	4600
	1	18	3	12	16.3998	1	9	11	18.979	54	54	54.52	4		9010	1675	F4	4601
	1	18	3	12	20.3998	1	9	12	3.567	54	3	19.26	4		9010	1675	F5	4602
	1	18	3	12	24.3998	1	9	12	46.644	53	11	25.90	4		9010	1675	F6	4603
	1	18	3	12	28.3998	1	9	13	29.219	52	19	19.05	4		9010	1675	F7	4604
	1	18	3	14	4.3998	1	9	28	10.080	31	6	42.63	4		9010	1675	F1	4605
	1	18	3	14	8.3998	1	9	28	43.048	30	14	48.31	4		9010	1675	F2	4606
	1	18	3	14	12.3998	1	9	29	15.736	29	23	4.19	4		9010	1675	F3	4607
	1	18	3	14	16.3998	1	9	29	48.268	28	31	42.25	4		9010	1675	F4	4608
	1	18	3	14	20.3999	1	9	30	20.846	27	40	33.22	4		9010	1675	F5	4609
	1	18	3	14	24.3999	1	9	30	53.038	26	49	43.01	4		9010	1675	F6	4610
	1	18	3	14	28.3999	1	9	31	25.073	25	59	10.48	4		9010	1675	F7	4611
	1	18	3	16	4.4007	1	9	43	48.754	7	41	40.69	4		9010	1675	F1	4612
	1	18	3	16	8.4008	1	9	44	18.940	7	1	22.67	4		9010	1675	F2	4613
	1	18	3	16	12.4008	1	9	44	49.467	6	21	33.72	4		9010	1675	F3	4614
	1	18	3	16	16.4009	1	9	45	19.702	5	42	9.25	4		9010	1675	F4	4615
	1	18	3	16	20.4009	1	9	45	50.075	5	3	10.54	4		9010	1675	F5	5045
	1	18	3	16	24.4009	1	9	46	20.413	4	24	38.53	4		9010	1675	F6	4616
	1	18	3	16	28.4010	1	9	46	50.550	3	46	36.81	4		9010	1675	F7	4617
	1	18	7	15	4.4003	1	4	22	24.680	2	2	2.06	4		9113	767	F1	2659
	1	18	7	15	8.4003	1	4	24	42.631	1	22	7.69	4		9113	767	F2	2660
	1	18	7	15	12.4003	1	4	26	59.960	0	42	6.70	4		9113	767	F3	2661
	1	18	7	15	16.4003	1	4	29	16.531	0	2	2.39	4		9113	767	F4	2662
	1	18	7	15	20.4003	1	4	31	33.001	- 0	38	3.00	4		9113	767	F5	2663
	1	18	7	15	24.4003	1	4	33	48.783	- 1	18	12.29	4		9113	767	F6	2664
	1	18	7	15	28.4004	1	4	36	4.037	- 1	58	23.42	4		9113	767	F7	2665
	1	18	9	15	4.4021	1	10	13	59.786	57	53	30.71	4		9117	334	F1	9115
	1	18	9	15	8.4020	1	10	13	59.028	57	13	34.34	4		9117	334	F2	9116
	1	18	9	15	12.4020	1	10	13	58.882	56	33	15.11	4		9117	334	F3	9117
	1	18	9	15	16.4020	1	10	13	59.821	55	52	45.42	4		9117	334	F4	9118
	1	18	9	15	20.4020	1	10	14	1.678	55	12	.67	4		9117	334	F5	9119
	1	18	9	15	24.4019	1	10	14	3.990	54	30	59.24	4		9117	334	F6	9120
	1	18	9	15	28.4019	1	10	14	7.380	53	49	46.64	4		9117	334	F7	9121
	1	18	9	17	4.4016	1	10	18	7.168	36	29	43.51	4		9117	335	F1	9122
	1	18	9	17	8.4016	1	10	18	22.235	35	45	18.24	4		9117	335	F2	9123
	1	18	9	17	12.4016	1	10	18	37.787	35	0	55.62	4		9117	335	F3	9124
	1	18	9	17	16.4016	1	10	18	53.658	34	16	29.05	4		9117	335	F4	9125
	1	18	9	17	20.4016	1	10	19	9.745	33	32	6.70	4		9117	335	F5	9126
	1	18	9	17	24.4016	1	10	19	26.314	32	47	46.13	4		9117	335	F6	9429
	1	18	9	17	28.4016	1	10	19	43.063	32	3	27.89	4		9117	335	F7	9127
	1	18	9	19	4.4021	1	10	27	42.059	15	0	41.73	4		9117	336	F1	9227
	1	18	9	19	8.4021	1	10	28	4.672	14	20	38.27	4		9117	336	F2	9228
	1	18	9	19	12.4021	1	10	28	27.628	13	40	54.04	4		9117	336	F3	9229
	1	18	9	19	16.4021	1	10	28	50.576	13	1	23.74	4		9117	336	F4	9230
	1	18	9	19	20.4022	1	10	29	14.117	12	22	13.64	4		9117	336	F5	9231
	1	18	9	19	24.4022	1	10	29	37.447	11	43	16.47	4		9117	336	F6	9232
	1	18	9	19	28.4022	1	10	30	1.023	11	4	34.66	4		9117	336	F7	9233
	1	18	15	39	52.2726	1	13	53	25.327	-43	32	48.37	4		9023	2510	07	3966
	1	18	17	42	16.2710	1	4	27	38.411	-63	33	57.50	4		9023	2520	04	3967
	1	19	3	8	4.4069	1	10	27	25.374	58	3	11.94	4		9113	810	F1	596
	1	19	3	8	8.4069	1	10	25	50.360	57	36	1.88	4		9113	810	F2	597
	1	19	3	8	12.4069	1	10	24	18.899	57	8	51.65	4		9113	810	F3	598
	1	19	3	8	16.4069	1	10	22	49.947	56	41	30.77	4		9113	810	F4	599
	1	19	3	8	20.4070	1	10	21	23.541	56	14	11.08	4		9113	810	F5	600
	1	19	3	10	4.4047	1	0	42	21.453	40	5	22.75	4		9050	514	F1	3044
	1	19	3	10	8.4047	1	0	44	54.332	40	1	30.14	4		9050	514	F2	3045
	1	19	3	10	12.4047	1	0	47	28.687	39	57	14.20	4		9050	514	F3	3046
	1	19	3	10	16.4047	1	0	50	4.915	39	52	42.11	4		9050	514	F4	3047
	1	19	3	10	20.4047	1	0	52	42.394	39	47	52.59	4		9050	514	F5	3048
	1	19	3	10	24.4047	1	0	55	21.180	39	42	38.13	4		9050	514	F6	3049
	1	19	3	10	28.4047	1	0	58	1.970	39	37	3.98	4		9050	514	F7	3050
	1	19	3	12	4.4054	1	23	21	39.960	76	24	34.88	4		9010	1678	F1	4618
	1	19	3	12	8.4053	1	23	26	41.571	76	43	5.76	4		9010	1678	F2	4619
	1	19	3	12	12.4052	1	23	32	.892	77	1	34.96	4		9010	1678	F3	4620
	1	19	3	12	16.4052	1	23	37	39.180	77	19	47.94	4		9010	1678	F4	4621
	1	19	3	12	20.4051	1	23	43	36.066	77	37	51.83	4		9010	1678	F5	4622
	1	19	3	12	24.4050	1	23	49	55.815	77	55	42.31	4		9010	1678	F6	5295
	1	19	3	12	28.4050	1	23	56	37.280	78	13	12.97	4		9010	1678	F7	4623
	1	19	3	14	4.4035	1	4	42	3.561	79	48	48.01	4		9010	1678	F1	4624
	1	19	3	14	8.4035	1	4	54	16.637	79	30	11.99	4		9010	1678	F2	4625

January 19-20, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (KM)	STATION	FRAME NO.		OBS.NO.
1966	1	19	3	14	12.4023	1	3	51	14.046	7	38	46.21	4		9050	516	F3	3051
	1	19	3	14	12.4034	1	5	5	56.410	79	9	48.98	4		9010	1678	F3	4626
	1	19	3	14	16.4023	1	3	54	18.368	20	2	21.12	4		9050	516	F4	3052
	1	19	3	14	16.4034	1	5	17	2.463	78	47	35.10	4		9010	1678	F4	4627
	1	19	3	14	20.4023	1	3	57	21.400	19	25	28.81	4		9050	516	F5	3053
	1	19	3	14	20.4033	1	5	27	34.907	78	23	36.94	4		9010	1678	F5	4628
	1	19	[illegible]		24.4023	1	4	0	23.453	18	48	13.73	4		9050	516	F6	3054
	1	19	3	[illegible]	24.4033	1	5	37	32.635	77	58	4.72	4		9010	1678	F6	4629
	1	19	3	14	28.4023	1	4	3	24.513	18	10	38.19	4		9050	516	F7	3055
	1	19	3	14	28.4032	1	5	46	58.798	77	30	59.06	4		9010	1678	F7	4630
	1	19	3	16	4.4022	1	7	48	20.134	61	8	47.89	4		9010	1678	F1	4631
	1	19	3	16	8.4022	1	7	50	58.086	60	17	28.53	4		9010	1678	F2	4632
	1	19	3	16	12.4021	1	7	53	30.161	59	25	31.25	4		9010	1678	F3	4633
	1	19	3	16	16.4021	1	7	55	56.177	58	32	53.63	4		9010	1678	F4	4634
	1	19	3	16	20.4021	1	7	58	17.090	57	39	40.88	4		9010	1678	F5	4635
	1	19	3	16	24.4021	1	8	0	33.520	56	45	55.30	4		9010	1678	F6	4636
	1	19	3	16	28.4020	1	8	2	45.124	55	51	32.50	4		9010	1678	F7	4574
	1	19	3	18	4.4019	1	8	40	34.125	32	28	22.03	4		9010	1678	F1	4575
	1	19	3	18	4.4037	1	6	13	12.913	-15	22	54.52	4		9050	518	F1	3056
	1	19	3	18	8.4019	1	8	41	44.737	31	29	2.17	4		9010	1678	F2	4576
	1	19	3	18	12.4019	1	8	42	54.223	30	29	48.56	4		9010	1678	F3	4577
	1	19	3	18	12.4037	1	6	16	49.788	-16	22	9.52	4		9050	518	F3	3057
	1	19	3	18	16.4019	1	8	44	2.694	29	30	53.48	4		9010	1678	F4	4578
	1	19	3	18	16.4037	1	6	18	36.690	-16	51	13.60	4		9050	518	F4	3058
	1	19	3	18	20.4019	1	8	45	9.783	28	32	8.28	4		9010	1678	F5	4579
	1	19	3	18	20.4037	1	6	20	22.418	-17	19	57.44	4		9050	518	F5	3059
	1	19	3	18	24.4019	1	8	46	16.024	27	33	43.13	4		9010	1678	F6	45A0
	1	19	3	18	24.4037	1	6	22	7.320	-17	48	19.88	4		9050	518	F6	3060
	1	19	3	18	28.4020	1	8	47	21.036	26	35	32.41	4		9010	1678	F7	45A1
	1	19	3	18	28.4037	1	6	23	51.077	-18	16	21.38	4		9050	518	F7	3061
	1	19	3	20	4.4027	1	9	9	43.154	5	37	13.73	4		9010	1678	F1	45A2
	1	19	3	20	8.4028	1	9	10	32.361	4	51	42.54	4		9010	1678	F2	45A3
	1	19	3	20	12.4028	1	9	11	21.540	4	6	49.67	4		9010	1678	F3	45A4
	1	19	3	20	16.4029	1	9	12	10.250	3	22	27.59	4		9010	1678	F4	45A5
	1	19	3	20	20.4029	1	9	12	58.360	2	38	43.85	4		9010	1678	F5	45A6
	1	19	3	20	24.4030	1	9	13	46.184	1	55	34.66	4		9010	1678	F6	45A7
	1	19	3	20	28.4030	1	9	14	33.776	1	12	58.30	4		9010	1678	F7	45A8
	1	19	7	17	4.4046	1	2	53	11.874	15	8	11.15	4		9113	828	F1	564
	1	19	7	17	8.4046	1	2	55	13.684	14	40	29.25	4		9113	828	F2	313
	1	19	7	17	12.4046	1	2	57	15.606	14	12	24.11	4		9113	828	F3	314
	1	19	7	17	16.4046	1	2	59	17.703	13	44	2.30	4		9113	828	F4	315
	1	19	7	17	20.4045	1	3	1	19.785	13	15	15.59	4		9113	828	F5	316
	1	19	7	17	24.4045	1	3	3	21.593	12	46	13.40	4		9113	828	F6	317
	1	19	7	17	28.4045	1	3	5	23.793	12	16	47.88	4		9113	828	F7	318
	1	19	16	9	23.9194	1	17	41	1.836	76	28	11.75	4		9006	3144	03	4270
	1	19	16	44	.2760	1	13	52	58.385	-52	38	35.61	4		9023	2564	06	3968
	1	19	17	45	23.5908	1	4	36	54.878	-49	21	3.82	4		9023	2568	03	4291
	1	20	7	21	4.4079	1	2	39	52.715	11	17	10.23	4		9113	857	F1	2666
	1	20	7	21	8.4079	1	2	41	36.980	10	[illegible]	44.41	4		9113	857	F2	2667
	1	20	7	21	12.4079	1	2	43	21.263	10	26	3.34	4		9113	857	F3	2668
	1	20	7	21	16.4078	3	2	45	5.489	10	0	11.41	4		9113	857	F4	3742
	1	20	7	21	20.4078	1	2	46	49.663	9	34	1.00	4		9113	857	F5	2669
	1	20	7	21	24.4078	1	2	[illegible]	33.944	9	7	38.44	4		9113	857	F6	2670
	1	20	7	21	28.4078	1	2	50	18.344	8	41	1.09	4		9113	857	F7	2671
	1	20	9	8	34.2807	1	12	9	28.968	71	42	25.86	4		9005	5516	05	4131
	1	20	9	23	4.4058	1	7	42	30.108	67	19	29.60	4		9117	410	F1	9234
	1	20	9	23	8.4058	1	7	45	36.537	66	39	41.68	4		9117	410	F2	9235
	1	20	9	23	12.4058	1	7	48	35.865	65	59	8.03	4		9117	410	F3	9236
	1	20	9	23	16.4057	1	7	51	29.590	65	17	52.28	4		9117	410	F4	9237
	1	20	9	23	20.4057	1	7	54	17.790	64	35	54.23	4		9117	410	F5	9238
	1	20	9	23	24.4056	1	7	56	59.828	63	53	15.27	4		9117	410	F6	9239
	1	20	9	23	28.4056	1	7	59	36.659	63	9	54.72	4		9117	410	F7	9240
	1	20	9	25	4.4048	1	8	45	21.286	42	42	43.78	4		9117	411	F1	9514
	1	20	9	25	8.4048	1	8	46	47.584	41	45	11.60	4		9117	411	F2	9515
	1	20	9	25	12.4048	1	8	48	12.560	40	47	23.59	4		9117	411	F3	9516
	1	20	9	25	16.4048	1	8	49	36.120	39	49	14.77	4		9117	411	F4	9517
	1	20	9	25	20.4048	1	8	50	58.354	38	50	49.69	4		9117	411	F5	9518
	1	20	9	25	24.4048	1	8	52	19.620	37	52	8.80	4		9117	411	F6	9519
	1	20	9	25	28.4048	1	8	53	39.279	36	53	9.77	4		9117	411	F7	9520
	1	20	9	27	4.4050	1	9	21	10.904	13	27	21.18	4		9117	412	F1	9521
	1	20	9	27	8.4050	1	9	22	11.738	12	32	7.04	4		9117	412	F2	9522
	1	20	9	27	12.4050	1	9	23	12.462	11	37	21.93	4		9117	412	F3	9523
	1	20	9	27	16.4050	1	9	24	12.306	10	43	6.39	4		9117	412	F4	9524
	1	20	9	27	20.4051	1	9	25	12.143	9	49	20.70	4		9117	412	F5	9525
	1	20	9	27	24.4051	1	9	26	11.416	8	56	4.22	4		9117	412	F6	9526
	1	20	9	27	28.4051	1	9	27	10.437	8	3	21.16	4		9117	412	F7	9527
	1	20	9	29	4.4062	1	9	49	24.136	-10	7	54.04	4		9117	413	F1	9507
	1	20	9	29	8.4063	1	9	50	17.126	-10	46	5.06	4		9117	413	F2	9508
	1	20	9	29	12.4063	1	9	51	10.595	-11	23	37.03	4		9117	413	F3	9977
	1	20	9	29	16.4064	1	9	52	3.472	-12	0	40.86	4		9117	413	F4	9510

January 20-26, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	1	20	9	29	20.4064	1	9	52	56.128	-12	37	11.47	4		9117	413	F5	9511
	1	20	9	29	24.4065	1	9	53	48.908	-13	13	9.64	4		9117	413	F6	9512
	1	20	9	29	28.4065	1	9	54	41.663	-13	48	33.16	4		9117	413	F7	9513
	1	21	5	50	39.2167	1	7	45	6.635	-80	54	36.22	4		9011	5204	05	[illegible]2
	1	21	15	52	.2779	1	13	12	12.615	-73	13	24.57	4		9023	2611	03	.6
	1	22	3	25	4.4138	1	9	11	10.044	28	3	27.21	4		9113	947	F1	3121
	1	22	3	25	8.4139	1	9	11	4.172	27	32	2.83	4		9113	947	F2	3122
	1	22	3	25	12.4139	1	9	10	58.647	27	0	48.70	4		9113	947	F3	3123
	1	22	3	25	16.4140	1	9	10	53.686	26	29	45.79	4		9113	947	F4	3124
	1	22	3	25	20.4140	1	9	10	49.071	25	58	55.25	4		9113	947	F5	3125
	1	22	3	25	24.4140	1	9	10	45.056	25	28	18.14	4		9113	947	F6	3126
	1	22	9	18	2.4558	1	11	22	4.671	71	38	4.63	4		9005	5550	07	4294
	1	22	15	21	19.6453	3	10	53	58.684	64	47	34.78	4		9008	1265	04	4127
	1	22	15	56	20.2828	1	13	16	56.385	-82	33	23.39	4		9023	2666	04	3969
	1	23	3	22	59.4390	1	13	7	39.674	82	41	21.23	4		9113	1009	07	3274
	1	23	3	28	4.4149	1	8	56	53.559	38	35	46.53	4		9113	1006	F1	319
	1	23	3	28	8.4149	1	8	56	43.737	37	57	29.09	4		9113	1006	F2	320
	1	23	3	28	12.4150	1	8	56	34.263	37	19	24.38	4		9113	1006	F3	4001
	1	23	3	28	16.4150	1	8	56	25.716	36	41	29.63	4		9113	1006	F4	565
	1	23	3	28	20.4150	1	8	56	17.622	36	3	46.80	4		9113	1006	F5	321
	1	23	3	28	24.4150	1	8	[illegible]	10.242	35	26	13.57	4		9113	1006	F6	322
	1	23	3	28	28.4151	1	8	56	3.627	34	48	48.81	4		9113	1006	F7	323
	1	23	5	29	4.4132	1	1	58	44.339	45	38	8.39	4		9113	1017	F1	3114
	1	23	5	29	8.4132	1	2	2	30.656	45	19	43.84	4		9113	1017	F2	3115
	1	23	5	29	12.4131	1	2	6	17.356	45	0	33.27	4		9113	1017	F3	3116
	1	23	5	29	16.4131	1	2	10	4.990	44	40	29.24	4		9113	1017	F4	3117
	1	23	5	29	20.4130	1	2	13	53.018	44	19	40.48	4		9113	1017	F5	3118
	1	23	5	29	24.4130	1	2	17	41.103	43	57	55.90	4		9113	1017	F6	3119
	1	23	5	29	28.4129	1	2	21	29.768	43	35	24.54	4		9113	1017	F7	3120
	1	23	9	39	4.4117	1	5	56	51.809	2	38	25.74	4		9117	478	F1	268
	1	23	9	39	8.4117	1	5	59	27.887	1	30	49.54	4		9117	478	F2	269
	1	23	9	39	12.4117	1	6	2	3.051	0	23	22.41	4		9117	478	F3	270
	1	23	9	39	16.4117	1	6	4	37.062	- 0	43	42.75	4		9117	478	F4	271
	1	23	9	39	20.4117	1	6	7	10.278	- 1	50	26.79	4		9117	478	F5	272
	1	23	9	39	24.4118	1	6	9	42.378	- 2	56	47.77	4		9117	478	F6	578
	1	23	9	39	28.4118	1	6	12	13.546	- 4	2	41.14	4		9117	478	F7	273
	1	23	9	41	4.4127	1	7	8	14.111	-26	38	30.47	4		9117	479	F1	274
	1	23	9	41	8.4127	1	7	10	23.874	-27	24	.63	4		9117	479	F2	275
	1	23	9	41	12.4128	1	7	12	33.410	-28	8	30.89	4		9117	479	F3	276
	1	23	9	41	16.4128	1	7	14	42.035	-28	52	10.55	4		9117	479	F4	277
	1	23	9	41	20.4129	1	7	16	49.915	-29	34	55.49	4		9117	479	F5	278
	1	23	9	41	24.4129	1	7	18	57.342	-30	16	55.81	4		9117	479	F6	579
	1	23	9	41	28.4130	1	7	21	3.882	-30	57	57.73	4		9117	479	F7	279
	1	23	13	24	9.0993	1	11	18	45.822	68	34	4.18	4		9006	3222	05	3975
	1	23	15	25	40.7897	3	10	48	21.277	66	44	52.46	4		9008	1288	04	4124
	1	24	6	3	2.0918	1	3	27	35.559	-64	51	31.40	4		9011	5253	07	3943
	1	24	9	26	1.9639	1	12	49	51.910	78	51	11.60	4		9005	5584	02	4267
	1	24	13	29	26.1389	1	10	31	34.627	65	44	37.12	4		9006	3246	05	3976
	1	24	16	4	56.2858	1	1	18	42.114	-82	50	19.66	4		9023	2739	04	3970
	1	25	5	36	4.4204	1	0	45	35.220	35	0	34.03	4		9113	1138	F1	569
	1	25	5	36	8.4203	1	0	47	51.873	34	47	20.80	4		9113	1138	F2	486
	1	25	5	36	12.4203	1	0	50	9.370	34	33	47.48	4		9113	1138	F3	3245
	1	25	5	36	16.4202	1	0	52	27.654	34	19	46.80	4		9113	1138	F4	488
	1	25	5	36	20.4202	1	0	54	46.306	34	5	27.31	4		9113	1138	F5	489
	1	25	5	36	24.4201	1	0	57	5.765	33	50	38.28	4		9113	1138	F6	490
	1	25	5	36	28.4201	1	0	59	25.914	33	35	28.96	4		9113	1138	F7	491
	1	26	1	38	4.4245	1	8	56	13.159	41	1	37.16	4		9001	8158	F1	7825
	1	26	1	38	8.4208	1	1	44	52.754	34	2	36.79	4		9050	537	F2	3062
	1	26	1	38	8.4246	1	8	55	46.637	40	30	47.94	4		9001	8158	F2	7826
	1	26	1	38	12.4208	1	1	48	13.299	33	38	53.33	4		9050	537	F3	3063
	1	26	1	38	12.4246	1	8	55	20.535	40	0	12.32	4		9001	8158	F3	7827
	1	26	1	38	16.4208	1	1	51	33.894	33	14	29.30	4		9050	537	F4	3064
	1	26	1	38	16.4246	1	8	54	55.655	39	29	36.08	4		9001	8158	F4	7828
	1	26	1	38	20.4208	1	1	54	54.556	32	49	27.61	4		9050	537	F5	3065
	1	26	1	38	20.4246	1	8	54	31.530	38	59	2.50	4		9001	8158	F5	7829
	1	26	1	38	24.4208	1	1	58	14.891	32	23	43.86	4		9050	537	F6	3066
	1	26	1	38	24.4246	1	8	54	8.435	38	28	34.01	4		9001	8158	F6	7830
	1	26	1	38	28.4208	1	2	1	35.007	31	57	21.63	4		9050	537	F7	3067
	1	26	1	38	28.4247	1	8	53	46.172	37	58	12.55	4		9001	8158	F7	7831
	1	26	3	37	4.4217	1	4	10	35.005	81	23	33.65	4		9113	1187	F1	261
	1	26	3	37	8.4216	1	4	24	11.087	80	56	58.78	4		9113	1187	F2	262
	1	26	3	37	12.4216	1	4	36	38.629	80	28	26.75	4		9113	1187	F3	263
	1	26	3	37	[illegible].4215	1	[illegible]	48	2.436	79	58	5.52	4		9113	1187	F4	264
	1	26	3	37	[illegible].4215	1	4	58	29.369	79	26	7.27	4		9113	1187	F5	265
	1	26	3	37	24.4215	1	5	8	1.368	78	52	45.18	4		9113	1187	F6	266
	1	26	3	37	28.4214	1	5	16	45.749	78	17	57.24	4		9113	1187	F7	570
	1	26	3	43	4.4218	1	7	51	6.308	10	49	46.37	4		9113	1188	F1	575
	1	26	3	43	8.4219	1	7	51	42.705	10	10	35.45	4		9113	1188	F2	325
	1	26	3	43	12.4219	1	7	52	18.997	9	31	48.82	4		9113	1188	F3	326
	1	26	3	43	16.4220	1	7	52	54.824	8	53	34.08	4		9113	1188	F4	576

January 26 - February 7, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DEC (1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME	NO.	OBS.NO.
1966	1	26	3	43	20.4220	1	7	53	30.862	8	15	43.00	4		9113	1188	F5	3291
	1	26	3	43	24.4221	1	7	54	6.259	7	38	19.76	4		9113	1188	F6	327
	1	26	3	43	28.4221	1	7	54	41.595	7	1	23.04	4		9113	1188	F7	328
	1	26	14	9	34.9816	1	12	54	57.989	-49	57	20.17	4		9023	2791	07	1247
	1	26	16	11	58.9924	1	3	3	54.639	-60	53	29.25	4		9023	2793	04	4292
	1	27	3	43	24.4339	1								1.9187200	7901			5001
	1	27	3	44	24.4300	1								1.6798720	7901			5002
	1	27	13	42	23.7592	1	9	38	53.599	74	45	25.26	4		9006	3283	06	4271
	1	27	16	16	30.8076	1	2	39	11.850	-60	16	56.19	4		9023	2819	08	4293
	1	27	21	45	44.4106	1	0	22	31.145	30	1	49.85	4		9004	3542	05	3987
	1	28	5	47	23.4142	1	9	39	48.975	75	21	42.83	4		9012	3413	04	3982
	1	28	13	46	25.1935	1	8	59	58.869	80	58	8.63	4		9006	3315	04	3978
	1	29	3	51	14.4403	1								2.2749050	7901			5003
	1	29	3	52	14.4391	1								2.0266220	7901			5005
	1	29	3	53	14.4366	1								1.8231060	7901			5007
	1	29	3	54	14.4354	1								1.6822610	7901			5009
	1	29	5	51	30.8497	1	8	38	10.852	80	50	28.33	4		9012	3444	03	3983
	1	29	15	53	8.3106	1	23	50	52.784	35	48	58.60	4		9006	3351	03	3979
	1	30	7	59	55.6599	1	0	48	8.393	27	23	58.99	4		9012	3475	04	3984
	1	30	13	56	4.4952	1	5	7	30.251	74	16	11.67	4		9006	3377	04	3980
	1	30	15	59	4.3077	1	0	36	20.649	23	33	49.45	4		9006	3383	03	1248
	1	30	15	59	55.3008	3	6	17	1.958	32	38	30.57	4		9008	1440	09	1249
	1	30	22	26	5.7541	1	2	22	1.051	-53	39	56.54	4		9002	859	08	4289
	1	31	0	2	4.4364	1	8	3	57.055	18	39	38.28	4		9010	1744	07	7677
	1	31	1	56	34.4414	1								2.0106110	7901			5011
	1	31	1	57	34.4428	1								1.8666820	7901			5013
	1	31	1	58	34.4407	1								1.7885330	7901			5015
	1	31	1	59	34.4400	1								1.7860280	7901			5017
	1	31	8	5	18.2737	1	1	7	19.936	15	5	5.42	4		9012	3501	04	4536
	1	31	14	1	.3136	1	4	13	22.378	64	38	47.72	4		9006	3401	04	3981
	1	31	14	30	8.3055	1	1	14	50.254	-82	48	32.05	4		9023	2927	07	3971
	1	31	16	4	48.3159	1	1	7	18.601	9	40	23.27	4		9006	3413	03	4295
	2	1	1	59	24.4455	1								2.2186650	7901			5019
	2	1	2	0	24.4455	1								1.9807850	7901			5021
	2	1	2	1	24.4427	1								1.7869990	7901			5023
	2	1	2	3	24.4439	1								1.6001590	7901			5025
	2	1	2	4	24.4434	1								1.6329580	7901			5027
	2	1	2	5	24.4426	1								1.7489190	7901			5029
	2	1	2	7	24.4361	1	1	52	45.365	10	3	47.72	4		9010	1793	F6	2822
	2	1	2	7	28.4360	1	1	54	45.828	9	25	46.42	4		9010	1793	F7	3328
	2	1	6	5	51.6330	1	3	24	55.441	66	4	57.43	4		9012	3525	04	4275
	2	2	6	9	13.8900	1	1	14	25.087	61	19	46.05	4		9012	3554	04	3949
	2	2	12	34	32.3126	1	11	21	49.906	-46	0	10.45	4		9023	2973	04	4059
	2	2	14	8	11.1170	1	0	35	5.670	55	21	26.98	4		9004	3471	08	7282
	2	2	14	10	3.3116	1	2	30	52.647	43	20	44.51	4		9006	3473	02	3999
	2	2	14	11	31.3135	1	3	45	42.279	25	19	4.53	4		9006	3474	05	7875
	2	2	14	14	59.3278	1	5	37	53.903	-18	31	47.30	4		9006	3476	34	7284
	2	2	14	37	13.4934	1	2	9	23.548	-59	33	27.12	4		9023	2980	08	4060
	2	3	2	9	24.4485	1								1.7883740	7901			5031
	2	3	2	10	34.4497	1								1.5629010	7901			5033
	2	3	2	37	47.3704	1	10	50	5.124	-71	54	56.18	4		9011	5453	06	3952
	2	3	6	16	20.3249	1	3	0	59.011	27	58	47.56	4		9012	3577	04	3950
	2	3	14	41	7.4114	1	2	3	30.956	-53	24	16.28	4		9023	3009	07	4061
	2	4	2	14	4.4501	1								1.7467000	7901			5035
	2	4	2	16	34.4489	1								1.4690550	7901			5037
	2	4	2	17	34.4493	1								1.5197010	7901			5039
	2	4	2	18	4.4497	1								1.5797800	7901			5041
	2	4	2	18	34.4502	1								1.6601060	7901			5043
	2	4	2	19	4.4509	1								1.7579650	7901			5044
	2	4	19	5	41.4107	1	20	0	17.200	-59	8	10.55	4		9023	3046	04	4032
	2	4	20	18	52.4739	1	1	2	7.599	6	6	51.07	4		9004	3687	05	4273
	2	5	2	18	44.4532	1								1.7876390	7901			5046
	2	5	2	19	14.4540	1								1.7116330	7901			5047
	2	5	2	19	44.4537	1								1.6539770	7901			5048
	2	5	2	20	14.4538	1								1.6167930	7901			5049
	2	5	2	20	44.4525	1								1.6016450	7901			5050
	2	5	2	21	14.4523	1								1.6092880	7901			5051
	2	5	2	22	14.4545	1								1.6912120	7901			5052
	2	5	2	22	44.4544	1								1.7625450	7901			5053
	2	5	2	21	44.4507	1								1.6395180	7901			5054
	2	6	0	25	4.4476	1	2	34	7.421	21	3	57.14	4		9010	1853	F1	2824
	2	6	0	25	8.4476	1	2	36	57.544	20	11	42.98	4		9010	1852	F2	2825
	2	6	0	25	12.4476	1	2	39	46.713	19	18	59.28	4		9010	1852	F3	2826
	2	6	0	25	16.4476	1	2	42	34.552	18	25	46.78	4		9010	1852	F4	2827
	2	6	0	25	20.4476	1	2	45	20.974	17	32	10.03	4		9010	1852	F5	2828
	2	6	0	25	24.4476	1	2	48	6.102	16	38	14.04	4		9010	1852	F6	3329
	2	6	0	25	28.4476	1	2	50	49.866	15	43	56.95	4		9010	1852	F7	2829
	2	6	0	44	.3299	1	8	46	22.889	- 6	32	26.53	4		9011	5521	07	3953
	2	7	2	21	4.4553	1	23	55	43.159	9	52	32.76	4		9114	139	F1	8209
	2	7	2	21	8.4552	1	23	57	35.509	9	35	4.90	4		9114	139	F2	9417

February 7-16, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	2	7	2	21	12.4552	1	23	59	27.797	9	17	28.31	4		9114	139	F3	8211
	2	7	2	21	16.4552	1	0	1	19.771	8	59	42.21	4		9114	139	F4	8212
	2	7	2	21	20.4552	1	0	3	12.018	8	41	49.66	4		9114	139	F5	8213
	2	7	2	21	24.4552	1	0	5	4.061	8	23	46.33	4		9114	139	F6	8214
	2	7	2	21	28.4552	1	0	6	55.717	8	5	34.30	4		9114	139	F7	8215
	2	7	2	25	4.4558	1	1	39	53.640	- 9	58	4.90	4		9114	140	F1	8216
	2	7	2	25	8.4558	1	1	41	26.032	-10	18	12.51	4		9114	140	F2	8217
	2	7	2	25	12.4558	1	1	42	58.085	-10	38	12.46	4		9114	140	F3	8218
	2	7	2	25	16.4558	1	1	44	29.270	-10	58	13.46	4		9114	140	F4	8219
	2		2	25	20.4559	1	1	46	.422	-11	18	11.26	4		9114	140	F5	8220
	2	7	2	25	24.4559	1	1	47	31.022	-11	38	4.34	4		9114	140	F6	8221
	2	7	2	25	28.4559	1	1	49	.935	-11	57	52.40	4		9114	140	F7	8222
	2	7	10	47	53.4271	1	8	2	17.845	6	47	22.45	4		9023	3074	03	4033
	2	8	19	24	3.5856	1	17	56	12.990	-57	17	56.22	4		9023	3118	05	4034
	2	9	0	37	4.4580	1	0	37	44.074	5	42	20.61	4		9010	1892	F1	2830
	2	9	0	37	4.4580	1	0	37	44.240	5	42	19.97	4		9049	73	F4	0
	2	9	0	37	8.4579	1	0	39	27.349	5	7	23.57	4		9010	1892	F2	2831
	2	9	0	37	8.4579	1	0	39	27.171	5	7	24.93	4		9049	73	F5	1
	2	9	0	37	12.4579	1	0	41	10.651	4	32	13.12	4		9010	1892	F3	2832
	2	9	0	37	12.4579	1	0	41	10.501	4	32	12.33	4		9049	73	F6	2
	2	9	0	37	16.4579	1	0	42	53.744	3	56	49.46	4		9010	1892	F4	2833
	2	9	0	37	16.4579	1	0	42	53.530	3	56	52.80	4		9049	73	F7	3
	2	9	0	37	20.4579	1	0	44	36.776	3	21	7.66	4		9010	1892	F5	2834
	2	9	0	37	20.4579	1	0	44	36.713	3	21	6.76	4		9049	73	F8	4
	2	9	0	37	24.4579	1	0	46	19.941	2	45	16.39	4		9010	1892	F6	2835
	2	9	0	37	24.4579	1	0	46	19.615	2	45	15.61	4		9049	73	F9	5
	2	9	0	37	28.4579	1	0	48	2.860	2	9	8.12	4		9010	1892	F7	2836
	2	9	0	37	28.4579	1	0	48	2.655	2	9	13.37	4		9049	73	F0	6
	2	9	7	21	10.6459	1	19	37	37.690	-60	37	23.76	4		9011	5552	03	3954
	2	10	2	42	4.4591	1	1	49	41.674	-21	7	58.82	4		9113	1804	F1	3252
	2	10	2	42	8.4591	3	1	51	20.003	-21	38	22.93	4		9113	1804	F2	5525
	2	10	2	42	12.4592		1	52	57.591	-22	8	34.76	4		9113	1804	F3	3253
	2	10	2	42	16.4592		1	54	35.341	-22	38	34.71	4		9113	1804	F4	3254
	2	10	2	42	20.4592	1	1	56	12.712	-23	8	23.65	4		9113	1804	F5	3255
	2	10	2	42	24.4593	1	1	57	49.404	-23	37	56.47	4		9113	1804	F6	3256
	2	10	6	43	4.4601	1	23	56	11.346	17	51	8.48	4		9117	844	F1	392
	2	10	6	43	8.4600	1	23	57	31.819	17	23	46.79	4		9117	844	F2	393
	2	10	6	43	12.4600	1	23	58	52.489	16	56	1.96	4		9117	844	F3	394
	2	10	6	43	16.4599	1	0	0	13.088	16	27	59.23	4		9117	844	F4	395
	2	10	6	43	20.4599	1	0	1	33.646	15	59	37.61	4		9117	844	F5	4012
	2	10	6	43	24.4598	1	0	2	54.156	15	30	50.48	4		9117	844	F6	396
	2	10	6	43	28.4598	1	0	4	14.700	15	1	46.71	4		9117	844	F7	397
	2	10	6	45	4.4590	1	0	36	28.744	1	41	21.06	4		9117	843	F1	3A5
	2	10	6	45	8.4590	1	0	37	49.185	1	4	5.80	4		9117	843	F2	3A6
	2	10	6	45	12.4589	1	0	39	9.918	0	26	32.33	4		9117	843	F3	3A7
	2	10	6	45	16.4589	1	0	40	30.490	- 0	11	15.31	4		9117	843	F4	3A8
	2	10	6	45	20.4589	1	0	41	51.041	- 0	49	19.58	4		9117	843	F5	3A9
	2	10	6	45	24.4589	1	0	43	11.268	- 1	27	36.43	4		9117	843	F6	390
	2	10	6	45	28.4589	1	0	44	32.131	- 2	6	9.37	4		9117	843	F7	391
	2	10	6	48	4.4589	1	1	37	16.216	-28	24	8.58	4		9117	845	F1	2672
	2	10	6	48	8.4589	1	1	38	38.725	-29	3	26.26	4		9117	845	F2	2673
	2	10	6	48	12.4589	1	1	40	1.066	-29	42	32.44	4		9117	845	F3	2674
	2	10	6	48	16.4590	1	1	41	23.823	-30	21	28.12	4		9117	845	F4	2675
	2	10	6	48	20.4590	1	1	42	46.516	-31	0	8.98	4		9117	845	F5	2676
	2	10	6	48	24.4590	1	1	44	9.445	-31	38	33.30	4		9117	845	F6	2677
	2	10	6	48	28.4590	1	1	45	32.567	-32	16	44.78	4		9117	845	F7	2678
	2	11	2	41	4.4651	1	23	22	2.396	13	51	32.39	4		9113	1858	F1	3257
	2	11	2	41	8.4651	1	23	23	40.247	13	28	41.08	4		9113	1858	F2	3258
	2	11	2	41	12.4651	1	23	25	17.984	13	5	34.38	4		9113	1858	F3	3258
	2	11	2	41	16.4651	1	23	26	55.823	12	42	12.72	4		9113	1858	F4	3259
	2	11	2	41	20.4650	1	23	28	33.566	12	18	34.75	4		9113	1858	F5	3260
	2	11	2	41	24.4650	1	23	30	11.388	11	54	44.73	4		9113	1858	F6	3261
	2	11	2	41	28.4650	1	23	31	49.249	11	30	44.02	4		9113	1858	F7	4000
	2	11	2	45	4.4646	1	0	57	30.360	-14	2	39.77	4		9113	1859	F1	3012
	2	11	2	45	8.4646	1	0	59	1.145	-14	32	29.03	4		9113	1859	F2	3013
	2	11	2	45	12.4646	1	1	0	31.920	-15	2	15.50	4		9113	1859	F3	3014
	2	11	2	45	16.4646	1	1	2	2.403	-15	31	59.63	4		9113	1859	F4	3015
	2	11	2	45	20.4647	1	1	3	32.591	-16	1	37.90	4		9113	1859	F5	3016
	2	11	2	45	24.4647	1	1	5	2.650	-16	31	6.70	4		9113	1859	F6	3017
	2	11	2	45	28.4647	1	1	6	32.376	-17	0	36.82	4		9113	1859	F7	3018
	2	11	9	41	17.3476	1	17	42	41.289	-34	36	19.99	4		9007	2701	03	4006
	2	12	9	44	48.3348	1	16	55	42.272	-40	17	18.25	4		9007	2729	07	4007
	2	12	16	2	.7109	1	19	1	28.536	- 2	35	1.95	4		9012	3654	08	3951
	2	13	9	47	42.8667	1	15	36	9.519	-50	51	52.70	4		9007	2742	06	4008
	2	14	10	4	6.6175	1	17	41	30.968	-13	56	3.39	4		9009	3761	05	4009
	2	14	12	12	11.0048	1	19	5	56.768	- 2	53	20.46	4		9001	8604	04	4373
	2	15	12	15	36.3442	1	18	43	36.798	- 4	10	46.62	4		9001	8654	05	4049
	2	16	0	18	12.6541	1	18	29	56.954	4	42	28.03	4		9006	3641	06	4000
	2	16	2	2	18.5909	1	17	8	33.494	12	51	23.35	4		9002	1011	02	7281
	2	16	7	54	16.3454	1	15	36	52.191	-41	26	37.59	4		9011	3668	05	3955

February 16-23, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (NM)	STATION	FRAME NO.		OBS.NO.
1966	2	16	10	7	30.4135	1	15	1	31.250	-42	11	52.63	4		9009	3811	07	4010
	2	17	0	14	28.3410	1	16	1	.375	-35	42	39.15	4		9006	3664	08	7285
	2	17	10	18	4.4815	1	17	21	29.671	-20	39	36.21	4		9010	2005	F1	3202
	2	17	10	18	8.4815	1	17	22	23.689	-20	18	16.79	4		9010	2005	F2	3203
	2	17	10	18	12.4815	1	17	23	17.655	-19	56	52.93	4		9010	2005	F3	3204
	2	17	10	18	16.4815	1	17	24	11.956	-19	35	24.93	4		9010	2005	F4	3205
	2	17	10	18	20.4814	1	17	25	6.325	-19	13	53.72	4		9010	2005	F5	3206
	2	17	10	18	24.4814	1	17	26	.892	-18	52	21.41	4		9010	2005	F6	3207
	2	17	10	18	28.4814	1	17	26	55.453	-18	30	43.23	4		9010	2005	F7	4312
	2	17	12	24	28.3509	1	18	19	41.946		3	36 40.48	4		9001	8715	06	4050
	2	18	0	22	36.2298	1	16	27	52.268	-13	22	10.92	4		9006	3687	04	4001
	2	18	2	11	33.5890	1	16	25	7.352		24	56 6.97	4		9002	1040	04	4051
	2	18	10	30	4.4885	1	17	36	55.204	-	0	38 4.16	4		9050	636	F1	3068
	2	18	10	30	8.4885	1	17	38	9.738	-	0	17 25.72	4		9050	636	F2	3069
	2	18	10	30	12.4885	1	17	39	24.701		0	3 8.27	4		9050	636	F3	3070
	2	18	10	30	16.4885	1	17	40	39.966		0	23 46.74	4		9050	636	F4	3071
	2	18	10	30	20.4885	1	17	41	55.555		0	44 27.24	4		9050	636	F5	3072
	2	18	10	30	24.4885	1	17	43	11.739		1	5 12.50	4		9050	636	F6	3073
	2	18	10	30	28.4885	1	17	44	28.058		1	25 51.02	4		9050	636	F7	3074
	2	18	10	33	4.4881	1	18	39	24.070		14	44 37.20	4		9050	637	F1	3075
	2	18	10	33	8.4881	1	18	40	56.770		15	4 7.54	4		9050	637	F2	3076
	2	18	10	33	12.4881	1	18	42	29.690		15	23 35.31	4		9050	637	F3	3077
	2	18	10	33	16.4881	1	18	44	3.147		15	42 54.97	4		9050	637	F4	3078
	2	18	10	33	20.4881	1	18	45	37.077		16	2 7.56	4		9050	637	F5	3079
	2	18	10	33	24.4881	1	18	47	11.246		16	21 18.07	4		9050	637	F6	3080
	2	18	10	33	28.4881	1	18	48	45.804		16	40 18.46	4		9050	637	F7	3081
	2	18	20	26	51.7210	1	16	7	46.665	-16	2	29.70	4		9005	5979	05	4274
	2	19	16	1	36.3534	1	17	29	31.344	-52	6	59.36	4		9023	3223	05	4035
	2	19	22	30	39.9408	1	18	13	43.707	-	4	18 42.22	4		9006	3730	07	4002
	2	20	8	13	21.9864	1	13	26	41.676	-	2	12 46.24	4		9011	5731	06	3956
	2	20	10	30	4.4894	1	15	42	39.125	-17	48	39.40	4		9010	2041	F1	3209
	2	20	10	30	4.4894	1	15	42	39.150	-17	48	39.40	4		9049	90	F4	7
	2	20	10	30	8.4894	1	15	43	43.427	-17	24	22.52	4		9010	2041	F2	3210
	2	20	10	30	8.4894	1	15	43	43.409	-17	24	21.61	4		9049	90	F5	8
	2	20	10	30	12.4894	1	15	44	47.859	-16	59	58.55	4		9010	2041	F3	3211
	2	20	10	30	12.4894	1	15	44	47.930	-16	59	59.46	4		9049	90	F6	9
	2	20	10	30	16.4893	1	15	45	52.628	-16	35	25.06	4		9010	2041	F4	3212
	2	20	10	30	16.4893	1	15	45	52.726	-16	35	25.25	4		9049	90	F7	10
	2	20	10	30	20.4893	1	15	46	57.504	-16	10	45.10	4		9010	2041	F5	4313
	2	20	10	30	20.4893	1	15	46	57.553	-16	10	42.41	4		9049	90	F8	11
	2	20	10	30	24.4893	1	15	48	2.714	-15	45	52.07	4		9010	2041	F6	3495
	2	20	10	30	24.4893	1	15	48	2.753	-15	45	57.62	4		9049	90	F9	12
	2	20	10	30	28.4892	1	15	49	8.028	-15	20	57.32	4		9010	2041	F7	3214
	2	20	10	30	28.4892	1	15	49	8.262	-15	21	.63	4		9049	90	F0	13
	2	20	10	41	4.4910	1	19	53	56.673		44	55 26.30	4		9010	2041	F1	3215
	2	20	10	41	4.4910	1	19	53	56.963		44	55 20.61	4		9049	92	F4	14
	2	20	10	41	8.4911	1	19	55	52.201		45	4 30.09	4		9010	2041	F2	3216
	2	20	10	41	8.4911	1	19	55	51.989		45	4 27.81	4		9049	92	F5	15
	2	20	10	41	12.4911	1	19	57	46.829		45	13 20.37	4		9010	2041	F3	3217
	2	20	10	41	12.4911	1	19	57	47.005		45	13 21.27	4		9049	92	F6	16
	2	20	10	41	16.4912	1	19	59	42.008		45	22 3.99	4		9010	2041	F4	3218
	2	20	10	41	16.4912	1	19	59	42.248		45	22 1.95	4		9049	92	F7	17
	2	20	10	41	20.4912	1	20	1	36.896		45	30 34.19	4		9010	2041	F5	3219
	2	20	10	41	20.4912	1	20	1	37.137		45	30 32.85	4		9049	92	F8	18
	2	20	10	41	24.4913	1	20	3	31.914		45	38 49.01	4		9010	2041	F6	3220
	2	20	10	41	24.4913	1	20	3	31.759		45	38 49.26	4		9049	92	F9	19
	2	20	10	41	28.4913	1	20	5	26.448		45	46 57.81	4		9010	2041	F7	3221
	2	20	10	41	28.4913	1	20	5	26.689		45	46 57.99	4		9049	92	F0	20
	2	21	16	10	27.4374	1	16	46	49.467	-53	11	8.61	4		9023	3275	03	4036
	2	22	0	20	20.5081	1	16	17	24.507	-	7	44 23.88	4		9002	1104	05	4042
	2	22	2	28	22.8418	1	14	10	20.117		38	29 40.95	4		9002	1115	04	4053
	2	22	8	34	50.8194	1	16	37	19.678	-	1	13 33.33	4		9009	3940	07	4011
	2	22	8	43	4.4984	1	17	35	41.062	-	5	48 29.94	4		9050	674	F1	3214
	2	22	8	43	8.4984	1	17	36	40.188	-	5	31 50.71	4		9050	674	F2	3215
	2	22	8	43	12.4984	1	17	37	39.305	-	5	15 12.57	4		9050	674	F3	3216
	2	22	8	43	16.4984	1	17	38	39.456	-	4	58 32.52	4		9050	674	F4	3217
	2	22	8	43	20.4984	1	17	39	39.530	-	4	41 54.44	4		9050	674	F5	3218
	2	22	16	15	18.2384	1	16	13	31.396	-49	29	35.27	4		9023	3289	03	4037
	2	22	18	21	28.3669	1	12	22	51.573	-	9	59 35.19	4		9023	3300	05	4038
	2	23	2	29	20.3790	1	12	43	4.063		24	23 47.04	4		9002	1124	06	4054
	2	23	4	11	48.8734	1	17	39	30.627	-58	38	55.60	4		9011	5774	06	3957
	2	23	4	51	4.4980	1	18	59	21.278		25	56 44.28	4		9004	3962	F1	7550
	2	23	4	51	8.4980	1	19	0	54.349		26	11 11.46	4		9004	3962	F2	7551
	2	23	4	51	12.4980	1	19	2	27.424		26	25 31.41	4		9004	3962	F3	7552
	2	23	4	51	16.4981	1	19	4	.753		26	39 39.50	4		9004	3962	F4	7553
	2	23	4	51	20.4981	1	19	5	34.162		26	53 39.10	4		9004	3962	F5	7554
	2	23	4	51	24.4981	1	19	7	7.775		27	7 29.16	4		9004	3962	F6	7555
	2	23	4	51	28.4981	1	19	8	41.473		27	21 9.31	4		9004	3962	F7	7556
	2	23	6	19	20.3606	1	14	46	33.968	-44		0 32.86	4		9011	5778	03	3958
	2	23	8	24	12.3625	1	11	10	43.284	-	2	39 28.94	4		9011	5789	04	3959

February 23 - March 2, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	2	23	8	47	4.4996	1	17	18	50.190	- 4	38	29.87	4		9050	694	F1	30A2
	2	23	8	47	8.4996	1	17	19	54.658	- 4	20	48.50	4		9050	694	F2	30A3
	2	23	8	47	12.4996	1	17	20	58.841	- 4	3	1.40	4		9050	694	F3	30A4
	2	23	8	47	16.4996	1	17	22	3.282	- 3	45	13.03	4		9050	694	F4	30A5
	2	23	8	47	20.4996	1	17	23	7.955	- 3	27	22.89	4		9050	694	F5	30A6
	2	23	8	47	24.4996	1	17	24	13.006	- 3	9	37.37	4		9050	694	F6	30A7
	2	23	8	47	28.4996	1	17	25	18.199	- 2	51	48.30	4		9050	694	F7	30A8
	2	23	12	51	4.4966	1	17	44	3.107	29	47	3.29	4		9113	2755	F1	3000
	2	23	12	51	12.4966	1	17	47	53.506	30	31	10.24	4		9113	2755	F3	3001
	2	23	12	51	16.4966	1	17	49	49.732	30	52	51.85	4		9113	2755	F4	36A1
	2	23	12	51	20.4966	1	17	51	46.495	31	14	21.36	4		9113	2755	F5	36A2
	2	23	12	51	24.4967	1	17	53	43.920	31	35	40.43	4		9113	2755	F6	3003
	2	23	12	51	28.4967	1	17	55	41.832	31	56	43.55	4		9113	2755	F7	3004
	2	23	16	20	4.8553	1	15	39	11.712	-43	33	48.24	4		9023	3317	04	4039
	2	23	18	25	40.3597	1	11	48	43.796	- 4	57	34.52	4		9023	3322	03	4272
	2	24	0	31	2.8945	1	15	43	25.442	12	54	51.78	4		9002	1145	04	4065
	2	24	2	30	.3650	1	11	13	20.614	4	49	44.67	4		9002	1153	08	4096
	2	24	4	16	28.5299	1	17	19	47.546	-58	19	26.62	4		9011	5807	03	39A0
	2	24	4	50	44.3619	1	17	2	7.547	8	12	5.64	4		9004	3970	06	4046
	2	24	16	24	32.3628	1	15	0	22.262	-42	55	5.21	4		9023	3338	05	4041
	2	25	0	36	20.3651	1	15	26	16.500	22	27	21.75	4		9002	1173	05	4296
	2	25	0	52	22.8792	1	16	28	30.075	14	41	36.28	4		9008	1953	06	6901
	2	25	14	21	28.1189	1	17	9	50.331	-57	7	52.13	4		9023	3363	04	4042
	2	25	22	55	55.7049	1	16	19	22.765	17	0	27.71	4		9006	3857	08	4003
	2	26	8	55	16.3628	1	16	34	32.302	6	0	53.79	4		9010	2075	05	4012
	2	26	13	2	4.7113	1	15	16	15.885	34	38	2.23	4		9113	2816	05	72A9
	2	26	13	9	4.5072	1	20	42	28.266	62	29	5.22	4		9113	2817	F1	3005
	2	26	13	9	12.5073	1	20	48	57.173	62	20	23.86	4		9113	2817	F3	3007
	2	26	13	9	16.5074	1	20	52	8.325	62	15	36.75	4		9113	2817	F4	3008
	2	26	13	9	20.5074	1	20	55	16.901	62	10	46.51	4		9113	2817	F5	3009
	2	26	13	9	24.5075	1	20	58	23.776	62	5	22.26	4		9113	2817	F6	3010
	2	26	13	9	28.5075	1	21	1	28.061	61	59	58.43	4		9113	2817	F7	3011
	2	26	14	25	37.2512	1	17	4	47.958	-60	0	54.23	4		9023	3388	04	4043
	2	26	22	28	10.7978	1	18	8	18.001	-74	54	57.42	4		9002	1207	05	4057
	2	27	8	56	.6888	1	13	7	19.572	22	36	41.03	4		9009	4079	04	72A8
	2	27	9	0	4.5093	1	14	54	13.287	-13	31	31.98	4		9050	725	F1	3089
	2	27	9	0	8.5077	1	14	28	12.806	53	40	56.28	4		9009	4079	F2	7832
	2	27	9	0	8.5093	1	14	55	12.380	-13	12	52.58	4		9050	725	F2	3090
	2	27	9	0	12.5071	1	16	22	34.040	15	27	24.26	4		9010	2108	F3	7837
	2	27	9	0	12.5077	1	14	29	56.149	54	5	6.98	4		9009	4079	F3	7833
	2	27	9	0	12.5093	1	14	56	12.019	-12	54	5.21	4		9050	725	F3	3091
	2	27	9	0	16.5071	1	16	24	.578	15	54	9.87	4		9010	2108	F4	8254
	2	27	9	0	16.5093	1	14	57	11.796	-12	35	12.14	4		9050	725	F4	3092
	2	27	9	0	20.5071	1	16	25	27.660	16	20	51.32	4		9010	2108	F5	8255
	2	27	9	0	20.5078	1	14	33	25.941	54	52	57.05	4		9009	4079	F5	7834
	2	27	9	0	20.5093	1	14	58	12.023	-12	16	18.27	4		9050	725	F5	3093
	2	27	9	0	24.5071	1	16	26	55.033	16	47	23.87	4		9010	2108	F6	7840
	2	27	9	0	24.5079	1	14	35	13.091	55	16	27.28	4		9009	4079	F6	7835
	2	27	9	0	24.5093	1	14	59	12.436	-11	57	9.89	4		9050	725	F6	3094
	2	27	9	0	28.5079	1	14	37	.792	55	39	45.05	4		9009	4079	F7	7836
	2	27	9	0	28.5093	1	15	0	13.247	-11	37	57.57	4		9050	725	F7	3095
	2	27	21	0	32.9193	1	17	9	30.441	- 0	0	34.40	4		9006	3864	04	4004
	2	27	22	31	33.1441	1	20	18	49.645	-82	25	5.94	4		9002	1231	05	4537
	2	28	4	30	52.8627	1	23	3	24.932	-82	35	25.99	4		9011	5862	06	4276
	2	28	8	59	24.3669	1	14	14	10.934	-15	25	58.41	4		9010	2117	08	4013
	2	28	9	4	28.3723	1	15	52	39.244	21	13	41.86	4		9010	2118	10	4014
	2	28	11	4	56.7105	1	16	26	22.828	3	5	28.38	4		9113	2938	03	7290
	2	28	11	5	8.3789	1	15	14	59.283	10	50	52.90	4		9001	8976	05	7279
	2	28	11	10	.3795	1	17	29	8.039	42	2	2.61	4		9001	H977	[illegible]	72A0
	2	28	14	32	21.9953	1	18	48	59.496	-76	34	8.93	4		9023	3441		4044
	2	28	19	9	59.3674	1	15	23	7.566	30	23	13.73	4		9005	6050	04	3998
	2	28	21	5	27.8631	1	17	7	59.826	6	9	.23	4		9006	3891	05	4005
	2	28	23	7	12.5004	1	13	56	37.010	20	34	45.69	4		9006	3896	06	72A6
	2	28	23	10	52.5039	1	15	28	7.894	49	35	20.81	4		9006	3896	32	72A7
	3	1	4	34	28.7309	1	1	59	22.800	-77	48	11.62	4		9011	5893	04	5259
	3	1	9	9	48.3825	1	12	57	39.073	63	1	31.92	4		9009	4120	04	3996
	3	1	11	11	52.7249	1	17	5	12.768	22	31	25.21	4		9113	2972	05	7641
	3	1	14	36	12.4753	1	20	30	20.091	-81	24	51.57	4		9023	3475	03	1645
	3	1	19	15	20.4673	1	15	17	5.085	43	34	10.80	4		9005	6057	05	4117
	3	2	9	7	4.5152	1	12	52	6.223	-12	24	23.97	4		9010	2163	F1	3722
	3	2	9	7	4.5152	1	12	52	6.217	-12	24	21.15	4		9049	109	F0	6
	3	2	9	7	8.5151	1	12	52	59.359	-12	0	10.01	4		9010	2163	F2	3723
	3	2	9	7	8.5151	1	12	52	59.488	-12	0	9.61	4		9049	109	F9	5
	3	2	9	7	12.5151	1	12	53	52.833	-11	35	47.10	4		9010	2163	F3	3724
	3	2	9	7	12.5151	1	12	53	52.837	-11	35	47.18	4		9049	109	F8	4
	3	2	9	7	16.5150	1	12	54	46.326	-11	11	11.46	4		9010	2163	F4	3725
	3	2	9	7	16.5150	1	12	54	46.407	-11	11	13.30	4		9049	109	F7	3
	3	2	9	7	20.5150	1	12	55	40.234	-10	46	25.48	4		9010	2163	F5	3726
	3	2	9	7	20.5150	1	12	55	40.309	-10	46	28.46	4		9049	109	F6	2
	3	2	9	7	24.5150	1	12	56	34.213	-10	21	30.68	4		9010	2163	F6	3727

March 2-7, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (NM)	STATION	FRAME NO.		OBS.NO.
1966	3	2	9	7	24.5150	1	12	56	34.215	-10	21	33.24	4		9049	109	F5	1
	3	2	9	7	28.5149	1	12	57	28.408	- 9	56	26.16	4		9010	2163	F7	3728
	3	2	9	7	28.5149	1	12	57	28.502	- 9	56	26.15	4		9049	109	F4	0
	3	2	14	39	39.7425	1	0	31	16.146	-79	45	31.93	4		9023	3517	04	1646
	3	3	2	41	30.6173	1	16	31	14.454	-89	14	17.18	4		9011	5957	05	5260
	3	3	5	22	34.6646	1	13	56	6.721	54	6	36.98	4		9004	4142	02	1636
	3	3	9	16	24.3874	1	11	17	57.376	49	31	55.52	4		9009	4188	09	2378
	3	4	2	45	39.9632	1	16	27	.332	-62	19	54.79	4		9011	5995	07	5261
	3	4	5	27	.8438	1	13	14	29.682	56	42	25.35	4		9004	4191	03	1641
	3	4	9	15	4.5245	1	15	45	1.093	-15	57	17.22	4		9113	3134	F1	3757
	3	4	9	15	8.5245	1	15	45	50.243	-15	39	36.51	4		9113	3134	F2	3758
	3	4	9	15	12.5245	1	15	46	39.272	-15	21	56.18	4		9113	3134	F3	2811
	3	4	9	15	16.5245	1	15	47	28.972	-15	4	17.22	4		9113	3134	F4	2812
	3	4	9	15	28.5245	1	15	49	57.721	-14	11	3.86	4		9113	3134	F7	3759
	3	4	9	21	12.3883	1	10	53	39.613	51	14	19.50	4		9009	4224	09	2379
	3	4	9	23	4.5248	1	16	6	30.882	- 4	25	51.66	4		9114	585	F1	1985
	3	4	9	23	8.5248	1	16	7	32.342	- 4	12	10.62	4		9114	585	F2	1986
	3	4	9	23	12.5248	1	16	8	34.325	- 3	58	27.36	4		9114	585	F3	1987
	3	4	9	23	16.5[illegible]	1	16	9	36.487	- 3	44	42.20	4		9114	585	F4	1988
	3	4	9	23	20.52[illegible]	1	16	10	38.690	- 3	30	58.29	4		9114	585	F5	1989
	3	4	9	23	24.5247	1	16	11	40.945	- 3	17	15.83	4		9114	585	F6	1990
	3	4	9	23	28.5247	1	16	12	43.828	- 3	3	32.64	4		9114	585	F7	1991
	3	4	11	24	44.5284	1								2.4140540	7901			5065
	3	4	11	25	44.5288	1								2.4955830	7901			5067
	3	4	11	26	44.5300	1								2.5352540	7901			5069
	3	4	11	27	44.5304	1								2.6494460	7901			5061
	3	4	13	23	16.1663	1	17	11	37.513	54	36	5.02	4		9012	3798	05	3705
	3	4	15	25	24.1905	1	11	3	30.859	56	0	9.84	4		9012	3804	03	3706
	3	5	2	48	25.6367	1	18	3	13.927	-73	44	29.06	4		9011	6039	04	4215
	3	5	5	32	22.6714	1	12	48	31.003	65	22	16.02	4		9004	4227	03	1642
	3	5	7	23	11.7592	1	15	44	16.964	58	48	15.76	4		9009	4249	06	2380
	3	5	9	23	4.5263	1	16	24	13.313	3	25	7.13	4		9113	3188	F1	3763
	3	5	9	23	8.5263	1	16	25	16.317	3	43	25.63	4		9113	3188	F2	3764
	3	5	9	23	12.5263	1	16	26	19.440	4	1	38.82	4		9113	3188	F3	3765
	3	5	9	23	16.5263	1	16	27	22.835	4	19	48.36	4		9113	3188	F4	3766
	3	5	9	23	20.5264	1	16	28	26.534	4	37	53.68	4		9113	3188	F5	2816
	3	5	9	23	24.5264	1	16	29	30.179	4	55	54.26	4		9113	3188	F6	3767
	3	5	9	23	28.5264	1	16	30	34.009	5	13	58.64	4		9113	3188	F7	3768
	3	5	9	25	51.0167	1	10	32	42.557	51	41	40.25	4		9009	4258	03	2381
	3	5	9	29	4.5268	1	16	27	15.895	3	47	22.26	4		9114	609	F1	2817
	3	5	9	29	8.5268	1	16	28	29.249	4	1	28.85	4		9114	609	F2	3769
	3	5	9	29	12.5268	1	16	29	42.788	4	15	35.33	4		9114	609	F3	2818
	3	5	9	29	16.5267	1	16	30	56.631	4	29	42.05	4		9114	609	F4	3770
	3	5	9	29	20.5267	1	16	32	11.085	4	43	42.12	4		9114	609	F5	3771
	3	5	9	29	24.5267	1	16	33	25.274	4	57	42.31	4		9114	609	F6	3772
	3	5	9	29	28.5267	1	16	34	40.044	5	11	40.03	4		9114	609	F7	2819
	3	5	9	34	16.5270	1	18	14	31.272	19	15	45.58	4		9114	610	F4	4209
	3	5	9	34	20.5270	1	18	16	.189	19	24	12.39	4		9114	610	F5	4744
	3	5	9	34	24.5271	1	18	17	29.000	19	32	34.64	4		9114	610	F6	4211
	3	5	9	34	28.5271	1	18	18	57.870	19	40	46.92	4		9114	610	F7	4746
	3	5	11	27	4.5332	1								2.6027640	7901			5063
	3	5	11	28	4.5340	1								2.5563280	7901			5065
	3	5	11	29	4.5341	1								2.5473390	7901			5067
	3	5	11	30	4.5339	1								2.5761320	7901			5069
	3	5	11	31	4.5354	1								2.6413490	7901			5071
	3	5	11	32	4.5352	1								2.7402390	7901			5073
	3	5	11	33	4.5362	1								2.8691230	7901			5075
	3	5	11	33	34.5371	1								2.9435470	7901			5077
	3	5	11	36	4.5383	1								3.3955550	7901			5079
	3	5	12	50	12.6148	1	16	36	41.659	-63	31	26.61	4		9023	3645	09	544
	3	5	13	28	24.9629	1	17	25	8.786	63	12	39.36	4		9012	3826	06	3707
	3	5	15	30	36.0447	1	10	36	.578	59	22	47.21	4		9012	3837	03	4326
	3	5	17	31	12.8616	1	17	46	25.904	41	10	50.70	4		9005	6083	07	4745
	3	6	1	27	55.1983	1	17	0	59.140	10	21	50.59	4		9004	4258	06	2978
	3	6	2	52	56.7979	1	17	38	31.862	-76	34	41.47	4		9011	6069	08	5726
	3	6	5	36	33.4328	1	12	3	28.056	63	51	38.06	4		9004	4268	04	1643
	3	6	9	29	44.5382	1								2.7012010	7901			5081
	3	6	11	32	4.5364	1								2.7468120	7901			5082
	3	6	11	34	4.5382	1								2.7181750	7901			5084
	3	6	11	35	4.5363	1								2.7559680	7901			5086
	3	6	11	35	34.5365	1								2.7874240	7901			5088
	3	6	11	36	34.5393	1								2.8740880	7901			5089
	3	6	11	37	34.5375	1								2.9897790	7901			5091
	3	6	11	38	4.5407	1								3.0574650	7901			5092
	3	6	11	38	34.5397	1								3.1311050	7901			5094
	3	6	11	39	4.5384	1								3.2102690	7901			5096
	3	6	11	39	34.5412	1								3.2945340	7901			5098
	3	6	12	53	37.7236	1	17	27	3.041	-70	46	23.30	4		9023	3683	06	1647
	3	6	21	35	52.1570	1	18	6	16.831	57	30	.24	4		9006	4056	05	2749
	3	7	1	33	12.3911	1	17	13	47.315	17	12	19.99	4		9004	4290	06	6616

March 7-11, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (KM)	STATION	FRAME NO.		OBS.NO.
1966	3	7	2	56	59.2149	1	18	26	6.721	-81	55	56.32	4		9011	6101	02	5727
	3	7	3	37	44.3910	1	17	15	53.343	54	46	20.61	4		9004	4296	06	6617
	3	7	9	28	4.5299	1	14	54	57.212	- 8	41	4.83	4		9113	3255	F1	4745
	3	7	9	28	8.5299	1	14	56	2.898	- 8	19	5.56	4		9113	3255	F2	4102
	3	7	9	28	12.5299	1	14	57	8.847	- 7	56	59.94	4		9113	3255	F3	4103
	3	7	9	28	16.5299	3	14	58	15.236	- 7	34	58.88	4		9113	3255	F4	5510
	3	7	9	28	20.5299	1	14	59	21.290	- 7	12	53.21	4		9113	3255	F5	4104
	3	7	9	28	24.5298	1	15	0	28.063	- 6	50	46.29	4		9113	3255	F6	4105
	3	7	9	28	28.5298	1	15	1	35.062	- 6	28	37.08	4		9113	3255	F7	4106
	3	7	9	36	4.5311	1	17	34	46.457	29	38	28.73	4		9113	3256	F1	5504
	3	7	9	36	8.5312	1	17	36	17.015	29	50	19.18	4		9113	3256	F2	3760
	3	7	9	36	12.5312	1	17	37	48.191	30	2	2.93	4		9113	3256	F3	3761
	3	7	9	36	16.5312	3	17	39	19.324	30	13	38.71	4		9113	3256	F4	6337
	3	7	9	36	20.5313	1	17	40	50.049	30	25	.17	4		9113	3256	F5	2815
	3	7	9	36	24.5313	1	17	42	21.012	30	36	9.57	4		9113	3256	F6	5505
	3	7	9	36	28.5314	1	17	43	52.234	30	47	20.70	4		9113	3256	F7	3762
	3	7	12	57	45.7358	1	17	43	55.508	-74	47	23.51	4		9023	3713	04	6613
	3	7	23	40	41.6688	1	17	34	48.509	68	25	5.56	4		9008	2263	08	4746
	3	8	9	38	4.5408	1								2.4148020	7901			5100
	3	8	9	39	4.5399	1								2.5312650	7901			5102
	3	8	9	39	24.5408	1								2.5775400	7901			5104
	3	8	9	39	44.5397	1								2.6271930	7901			5106
	3	8	9	40	4.5423	1								2.6800480	7901			5108
	3	8	9	41	4.5428	1								2.8557640	7901			5110
	3	8	9	41	44.5436	1								2.9853980	7901			5112
	3	8	9	42	44.5451	1								3.1952290	7901			5114
	3	8	13	1	31.4567	1	19	21	49.563	-79	41	7.12	4		9023	3744	08	1637
	3	8	13	41	53.5119	1	16	1	50.467	80	54	53.19	4		9012	3870	05	3708
	3	8	19	40	.4031	1	17	28	56.016	29	3	.66	4		9006	4079	09	2750
	3	9	5	37	4.5363	1	15	16	50.523	- 6	26	59.59	4		9050	786	F1	3247
	3	9	5	37	8.5363	1	15	17	51.295	- 6	9	45.72	4		9050	786	F2	3248
	3	9	5	37	12.5363	1	15	18	52.235	- 5	52	23.29	4		9050	786	F3	3249
	3	9	7	41	39.5991	1	17	13	43.692	22	33	42.92	4		9001	9159	04	6610
	3	9	7	47	4.5323	1	16	48	49.508	50	25	41.71	4		9050	794	F1	3250
	3	9	7	47	8.5323	1	16	52	.892	50	38	33.26	4		9050	794	F2	3251
	3	9	7	47	12.5323	1	16	55	13.218	50	51	2.15	4		9050	794	F3	3252
	3	9	7	47	16.5323	1	16	58	26.135	51	3	4.98	4		9050	794	F4	3253
	3	9	7	47	20.5323	1	17	1	39.776	51	14	44.14	4		9050	794	F5	3254
	3	9	7	47	24.5323	1	17	4	54.195	51	25	57.35	4		9050	794	F6	3255
	3	9	7	47	28.5323	1	17	8	8.784	51	36	45.81	4		9050	794	F7	3256
	3	9	9	43	4.5440	1								2.4448970	7901			5115
	3	9	9	44	34.5456	1								2.6628810	7901			5117
	3	9	9	48	4.5338	1	11	45	17.806	44	51	9.22	4		9050	800	F1	3257
	3	9	9	48	8.5338	1	11	45	40.495	45	19	10.69	4		9050	800	F2	3258
	3	9	9	48	12.5338	1	11	46	3.653	45	47	18.31	4		9050	800	F3	3259
	3	9	9	48	16.5338	1	11	46	26.746	46	15	34.44	4		9050	800	F4	3260
	3	9	9	48	20.5338	1	11	46	50.336	46	43	56.81	4		9050	800	F5	3261
	3	9	9	48	24.5338	1	11	47	14.012	47	12	26.21	4		9050	800	F6	3262
	3	9	9	48	28.5338	1	11	47	37.864	47	41	2.31	4		9050	800	F7	3263
	3	9	9	52	4.5332	1	12	27	35.700	75	11	57.48	4		9050	801	F1	3264
	3	9	9	52	8.5332	1	12	29	22.151	75	42	54.25	4		9050	801	F2	3265
	3	9	9	52	12.5332	1	12	31	14.789	76	13	50.12	4		9050	801	F3	3266
	3	9	9	52	16.5332	1	12	33	15.250	76	44	38.83	4		9050	801	F4	3267
	3	9	9	52	20.5332	1	12	35	23.439	77	15	23.08	4		9050	801	F5	3268
	3	9	9	52	24.5332	1	12	37	41.814	77	46	1.34	4		9050	801	F6	3269
	3	9	9	52	28.5332	1	12	40	11.225	78	16	35.01	4		9050	801	F7	3270
	3	9	11	50	4.5344	1	17	19	30.531	82	55	4.70	4		9113	3390	F1	7061
	3	9	11	50	8.5344	1	17	33	46.971	82	56	19.28	4		9113	3390	F2	7062
	3	9	11	50	12.5345	1	17	48	2.356	82	56	3.84	4		9113	3390	F3	7063
	3	9	11	50	16.5345	1	18	2	9.299	82	54	12.79	4		9113	3390	F4	7064
	3	9	11	50	20.5345	1	18	16	.217	82	50	51.42	4		9113	3390	F5	7065
	3	9	11	50	24.5346	1	18	29	34.778	82	46	.18	4		9113	3390	F6	7066
	3	9	11	50	28.5346	1	18	42	41.776	82	39	47.90	4		9113	3390	F7	7067
	3	9	13	5	36.5452	1	21	28	21.877	-82	29	1.42	4		9023	3776	06	1648
	3	9	23	49	24.6724	1	16	39	6.824	79	43	58.52	4		9008	2329	05	4123
	3	10	1	7	43.7736	1	15	7	4.449	-52	51	52.77	4		9011	6176	07	4218
	3	10	3	51	4.3982	1	16	29	35.297	73	41	10.76	4		9004	4395	04	1644
	3	10	9	49	4.5465	1								2.6900390	7901			5119
	3	10	9	49	34.5493	1								2.7760640	7901			5120
	3	10	9	50	34.5491	1								2.9650730	7901			5121
	3	10	9	51	4.5476	1								3.0669110	7901			5123
	3	10	9	51	34.5514	1								3.1729900	7901			5125
	3	10	9	53	4.5540	1								3.5121100	7901			5127
	3	10	13	9	2.6516	1	0	34	42.669	-76	44	30.83	4		9023	3807	03	1638
	3	10	17	53	30.7114	1	17	41	13.442	73	9	6.85	4		9009	6097	04	4119
	3	10	21	53	17.3441	1	17	28	18.478	81	8	12.81	4		9006	4118	05	2751
	3	10	23	56	14.3834	1	9	28	59.573	62	49	18.13	4		9006	4127	02	6375
	3	11	1	10	54.3464	1	15	34	2.631	-61	56	36.89	4		9011	6200	04	4219
	3	11	7	50	40.4097	1	9	47	21.358	74	30	24.12	4		9009	4382	02	2677
	3	11	7	51	4.4062	1	17	30	2.864	33	7	4.73	4		9001	9205	04	6611

March 11-14, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (KM)	STATION	FRAME NO.		OBS.NO.
1966	3	11	7	53	8.4076	1	17	35	16.440	73	8	52.49	4		9010	2310	02	3696
	3	11	9	49	4.5371	1	14	40	49.869	36	55	51.71	4		9113	3505	F1	7068
	3	11	9	49	8.5372	1	14	42	55.806	35	21	49.16	4		9113	3505	F2	7069
	3	11	9	49	12.5372	1	14	45	2.187	35	47	39.08	4		9113	3505	F3	7070
	3	11	9	49	16.5372	1	14	47	10.284	36	13	11.49	4		9113	3505	F4	7071
	3	11	9	49	20.5372	1	14	49	18.983	36	38	33.24	4		9113	3505	F5	7072
	3	11	9	49	24.5372	1	14	51	28.831	37	3	41.79	4		9113	3505	F6	7073
	3	11	9	49	28.5372	1	14	53	39.877	37	28	29.43	4		9113	3505	F7	7074
	3	11	9	52	4.5469	1								2.5469270	7901			5129
	3	11	9	52	34.5491	1								2.6087750	7901			5131
	3	11	9	53	4.5498	1								2.6782570	7901			5133
	3	11	9	53	34.5518	1								2.7547570	7901			5135
	3	11	9	54	4.5499	1								2.8376960	7901			5137
	3	11	9	54	34.5501	1								2.9263790	7901			5139
	3	11	9	55	4.5528	1								3.0203780	7901			5141
	3	11	9	55	34.5535	1								3.1191100	7901			5142
	3	11	13	54	5.0259	1	9	40	33.282	77	16	13.26	4		9012	3908	04	3709
	3	11	19	16	5.5356	1	15	17	16.912	-59	59	59.26	4		9002	1523	08	521
	3	11	21	57	57.3225	1	18	4	59.077	85	37	55.06	4		9006	4145	06	2752
	3	11	23	58	57.6094	1	9	42	7.347	53	50	22.56	4		9006	4153	06	2753
	3	12	1	14	28.6563	1	16	5	2.270	-69	2	55.92	4		9011	6221	06	4220
	3	12	4	0	12.4049	1	15	30	29.217	83	21	15.53	4		9004	4454	08	7807
	3	12	5	40	4.5424	1	13	15	59.750	-28	47	25.06	4		9010	2321	F1	3501
	3	12	5	40	4.5424	1	13	15	59.780	-28	47	25.03	4		9049	141	F4	0
	3	12	5	40	8.5424	1	13	16	58.532	-28	25	53.78	4		9010	2321	F2	3502
	3	12	5	40	8.5424	1	13	16	58.677	-28	25	54.97	4		9049	141	F5	1
	3	12	5	40	12.5424	1	13	17	57.542	-28	4	16.66	4		9010	2321	F3	3503
	3	12	5	40	12.5424	1	13	17	57.584	-28	4	18.06	4		9049	141	F6	2
	3	12	5	40	16.5423	1	13	18	56.446	-27	42	35.12	4		9010	2321	F4	3504
	3	12	5	40	16.5423	1	13	18	56.554	-27	42	35.85	4		9049	141	F7	3
	3	12	5	40	20.5423	1	13	19	55.540	-27	20	43.33	4		9010	2321	F5	3505
	3	12	5	40	20.5423	1	13	19	55.555	-27	20	43.88	4		9049	141	F8	4
	3	12	5	40	24.5423	1	13	20	54.757	-26	58	49.74	4		9010	2321	F6	3506
	3	12	5	40	24.5423	1	13	20	54.716	-26	58	49.88	4		9049	141	F9	5
	3	12	5	40	28.5423	1	13	21	53.780	-26	36	45.59	4		9010	2321	F7	3507
	3	12	5	40	28.5423	1	13	21	53.938	-26	36	47.22	4		9049	141	F0	6
	3	12	5	45	4.5412	1	14	35	8.611	1	27	40.37	4		9010	2321	F1	4314
	3	12	5	45	4.5412	1	14	35	8.660	1	27	38.80	4		9049	142	F4	7
	3	12	5	45	8.5412	1	14	36	17.990	1	52	43.69	4		9010	2321	F2	4315
	3	12	5	45	8.5412	1	14	36	18.033	1	52	40.28	4		9049	142	F5	8
	3	12	5	45	12.5412	1	14	37	27.590	2	17	40.56	4		9010	2321	F3	3508
	3	12	5	45	12.5412	1	14	37	27.785	2	17	40.15	4		9049	142	F6	9
	3	12	5	45	16.5412	1	14	38	37.498	2	42	36.59	4		9010	2321	F4	3509
	3	12	5	45	16.5412	1	14	38	37.619	2	42	39.19	4		9049	142	F7	10
	3	12	5	45	20.5412	1	14	39	47.351	3	7	31.93	4		9010	2321	F5	3600
	3	12	5	45	20.5412	1	14	39	47.561	3	7	31.67	4		9049	142	F8	11
	3	12	5	45	24.5412	1	14	40	57.751	3	32	22.10	4		9010	2321	F6	3601
	3	12	5	45	24.5412	1	14	40	57.887	3	32	19.91	4		9049	142	F9	12
	3	12	5	45	28.5412	1	14	42	8.233	3	57	7.92	4		9010	2321	F7	3602
	3	12	5	45	28.5412	1	14	42	8.270	3	57	7.27	4		9049	142	F0	13
	3	12	7	44	4.5447	1	14	26	13.326	-16	28	16.74	4		9113	3566	F1	45
	3	12	7	44	8.5447	1	14	27	5.591	-16	9	36.47	4		9113	3566	F2	46
	3	12	7	44	12.5446	1	14	27	57.671	-15	50	58.89	4		9113	3566	F3	539
	3	12	7	44	16.5446	1	14	28	50.521	-15	32	18.59	4		9113	3566	F4	540
	3	12	7	44	20.5446	1	14	29	42.749	-15	13	35.38	4		9113	3566	F5	48
	3	12	7	44	24.5446	1	14	30	35.603	-14	54	51.22	4		9113	3566	F6	49
	3	12	7	44	28.5446	1	14	31	28.473	-14	36	3.31	4		9113	3566	F7	50
	3	12	9	57	4.5523	1								2.7129290	7901			5144
	3	12	9	57	34.5532	1								2.7775450	7901			5146
	3	12	9	59	4.5528	1								3.0106100	7901			5148
	3	12	10	0	4.5560	1								3.1934390	7901			5150
	3	12	13	59	19.6089	1	8	23	39.165	78	38	58.10	4		9012	3934	08	4327
	3	12	19	19	8.5944	1	15	58	40.283	-70	25	43.21	4		9002	1558	06	549
	3	12	22	1	41.3544	1	11	6	6.511	86	6	53.09	4		9006	4170	07	2754
	3	13	0	5	28.8854	1	9	5	25.877	62	28	20.32	4		9006	4181	05	2755
	3	13	1	18	42.6252	1	16	0	20.279	-72	51	35.13	4		9011	6247	05	4221
	3	13	2	1	42.4107	1	18	27	19.975	50	31	51.36	4		9004	4483	06	6618
	3	13	2	2	37.6345	1	15	9	51.933	22	5	53.17	4		9115	664	09	1856
	3	13	4	6	49.9182	1	14	19	34.290	38	26	49.91	4		9115	672	07	1857
	3	13	10	0	34.5551	1								2.7467780	7901			5152
	3	13	10	1	34.5556	1								2.8413780	7901			5153
	3	13	18	6	32.0487	1	14	48	48.743	86	35	39.24	4		9005	6129	02	4120
	3	13	19	23	4.5795	1	16	14	50.462	-76	11	5.75	4		9002	1588	07	550
	3	13	22	5	53.4142	1	8	56	54.793	82	54	24.53	4		9006	4199	08	2756
	3	14	8	0	4.5485	1	16	8	56.778	24	48	31.19	4		9113	3642	F1	51
	3	14	8	0	8.5485	1	16	10	22.992	25	2	57.15	4		9113	3642	F2	52
	3	14	8	0	12.5485	1	16	11	48.961	25	17	7.47	4		9113	3642	F3	53
	3	14	8	0	16.5486	1	16	13	15.325	25	31	14.99	4		9113	3642	F4	54
	3	14	8	0	20.5486	1	16	14	41.494	25	45	8.56	4		9113	3642	F5	55
	3	14	8	0	24.5486	1	16	16	7.911	25	58	57.79	4		9113	3642	F6	56

March 14-18, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.	OBS.NO.
1966	3	14	14	5	2.9563	1	8	53	30.514	60	27	3.60	4		40	3984 06	3710
	3	14	19	26	13.3107	1	20	0	24.744	-82	32	37.54	4		9002	1614 05	522
	3	14	22	10	.4184	1	8	23	22.172	78	53	43.61	4		9006	4224 06	2757
	3	15	1	26	35.825M	1	18	19	25.240	-84	52	38.49	4		9011	6294 06	4224
	3	15	2	10	32.0960	1	14	27	13.374	25	29	5.03	4		9115	722 09	1858
	3	15	7	58	4.5493	1	13	47	16.456	- 2	43	45.56	4		9113	3689 F1	9700
	3	15	7	58	8.5493	1	13	48	29.135	- 2	19	53.78	4		9113	3689 F2	9701
	3	15	7	58	12.5493	1	13	49	42.173	- 1	56	6.92	4		9113	3689 F3	9702
	3	15	7	58	16.5493	1	13	50	55.553	- 1	32	16.79	4		9113	3689 F4	9703
	3	15	7	58	20.5493	1	13	52	9.232	- 1	8	21.55	4		9113	3689 F5	9704
	3	15	7	58	24.5493	1	13	53	23.457	- 0	44	31.61	4		9113	3689 F6	9705
	3	15	7	58	28.5493	1	13	54	37.639	- 0	20	37.85	4		9113	3689 F7	9706
	3	15	8	4	4.5502	1	15	56	15.421	28	50	28.81	4		9113	3690 F1	9707
	3	15	8	4	8.5503	1	15	57	52.908	29	5	24.23	4		9113	3690 F2	9708
	3	15	8	4	12.5503	1	15	59	30.378	29	20	7.80	4		9113	3690 F3	9709
	3	15	8	4	16.5503	1	16	1	7.876	29	34	37.76	4		9113	3690 F4	9710
	3	15	8	4	20.5504	1	16	2	45.454	29	49	.70	4		9113	3690 F5	9711
	3	15	8	4	24.5504	1	16	4	23.406	30	3	10.43	4		9113	3690 F6	9712
	3	15	8	4	28.5504	1	16	6	1.567	30	17	9.45	4		9113	3690 F7	9713
	3	15	10	9	54.1883	1	15	21	59.187	75	30	34.61	4		9113	3695 05	6621
	3	15	12	17	56.8655	1	7	50	39.494	71	14	2.60	4		9001	9313 03	1649
	3	15	19	30	31.8574	1	22	53	47.256	-84	26	1.22	4		9002	1639 05	523
	3	15	22	14	46.5189	1	7	31	38.597	78	3	5.63	4		9006	4255 06	2979
	3	16	1	30	52.3268	1	0	38	27.358	-87	33	30.53	4		9011	6317 06	4223
	3	16	2	13	32.4332	1	18	3	20.832	66	32	55.90	4		9004	4588 04	6619
	3	16	2	14	54.1363	1	14	17	.632	28	53	52.36	4		9115	758 10	1859
	3	16	4	17	16.4393	1	8	36	53.017	77	57	11.39	4		9004	4595 06	6620
	3	16	8	7	4.5516	1	15	12	56.384	29	7	9.29	4		9113	3752 F1	247
	3	16	8	7	8.5517	1	15	14	43.894	29	25	48.48	4		9113	3752 F2	248
	3	16	8	7	12.5517	1	15	16	31.302	29	44	19.52	4		9113	3752 F3	249
	3	16	8	7	16.5517	1	15	18	19.348	30	2	34.26	4		9113	3752 F4	250
	3	16	8	7	20.5518	1	15	20	7.490	30	20	40.63	4		9113	3752 F5	251
	3	16	8	7	24.5518	1	15	21	56.219	30	39	27.69	4		9113	3752 F6	252
	3	16	8	7	28.5518	1	15	23	44.990	30	56	7.02	4		9113	3752 F7	253
	3	16	10	7	4.5517	1	10	32	33.124	27	43	7.78	4		9113	3763 F1	2631
	3	16	10	7	8.5517	1	10	33	7.458	28	12	5.85	4		9113	3763 F2	2632
	3	16	10	7	12.5516	1	10	33	42.282	28	41	11.26	4		9113	3763 F3	2633
	3	16	10	7	16.5516	1	10	34	17.897	29	10	23.74	4		9113	3763 F4	2634
	3	16	10	7	20.5516	1	10	34	52.991	29	39	42.54	4		9113	3763 F5	2635
	3	16	10	7	24.5516	1	10	35	28.666	30	9	7.45	4		9113	3763 F6	2636
	3	16	10	7	28.5516	1	10	36	5.135	30	38	40.72	4		9113	3763 F7	2637
	3	16	10	15	4.5525	1	16	29	19.859	81	28	37.26	4		9113	3764 F1	2638
	3	16	10	15	8.5525	1	16	41	9.044	81	28	46.74	4		9113	3764 F2	2639
	3	16	10	15	12.5526	1	16	52	54.760	81	27	40.38	4		9113	3764 F3	2640
	3	16	10	15	16.5526	1	17	4	30.215	81	25	18.78	4		9113	3764 F4	2641
	3	16	10	15	20.5526	1	17	15	55.576	81	21	44.36	4		9113	3764 F5	2642
	3	16	10	15	24.5527	1	17	27	4.111	81	16	58.91	4		9113	3764 F6	2643
	3	16	10	15	28.5527	1	17	37	58.505	81	11	2.87	4		9113	3764 F7	2644
	3	16	19	35	12.4162	1	2	48	20.221	-84	2	26.83	4		9002	1669 06	524
	3	16	22	18	13.1751	1	8	4	31.995	71	39	49.49	4		9006	4266 06	2758
	3	17	8	10	4.5533	1	14	19	9.677	28	26	36.38	4		9113	3796 F1	2645
	3	17	8	10	8.5533	1	14	21	2.698	28	50	5.40	4		9113	3796 F2	2646
	3	17	8	10	12.5533	1	14	22	56.597	29	13	20.01	4		9113	3796 F3	2647
	3	17	8	10	16.5533	1	14	24	51.103	29	36	24.25	4		9113	3796 F4	2648
	3	17	8	10	20.5533	1	14	26	46.187	29	59	15.32	4		9113	3796 F5	2649
	3	17	8	10	24.5534	1	14	28	41.848	30	21	50.73	4		9113	3796 F6	2650
	3	17	8	10	28.5534	1	14	30	37.947	30	44	18.18	4		9113	3796 F7	4706
	3	17	8	15	4.5558	1	16	57	39.982	46	22	32.89	4		9113	3797 F1	2652
	3	17	8	15	8.5558	1	16	59	47.315	46	27	28.96	4		9113	3797 F2	2653
	3	17	8	15	12.5559	1	17	1	54.310	46	32	23.93	4		9113	3797 F3	2654
	3	17	8	15	16.5559	1	17	4	.835	46	37	3.21	4		9113	3797 F4	2655
	3	17	8	15	20.5560	1	17	6	7.025	46	41	29.95	4		9113	3797 F5	2656
	3	17	8	15	24.5560	1	17	8	12.689	46	45	49.94	4		9113	3797 F6	2657
	3	17	8	15	28.5561	1	17	10	17.821	46	49	47.88	4		9113	3797 F7	2658
	3	17	10	19	4.5552	1	13	42	10.358	84	29	43.30	4		9113	3801 F1	3601
	3	17	10	19	8.5552	1	13	57	11.058	84	46	5.08	4		9113	3801 F2	3602
	3	17	10	19	12.5552	1	14	13	44.316	85	0	57.87	4		9113	3801 F3	3603
	3	17	10	19	16.5553	1	14	31	45.546	85	14	8.16	4		9113	3801 F4	3604
	3	17	10	19	20.5553	1	14	51	18.251	85	25	18.52	4		9113	3801 F5	3605
	3	17	10	19	24.5553	1	15	12	11.947	85	34	23.79	4		9113	3801 F6	3606
	3	17	10	19	28.5554	1	15	34	16.681	85	41	7.81	4		9113	3801 F7	3607
	3	17	11	36	14.5883	1	15	41	1.328	-85	57	25.21	4		9023	3908 03	2372
	3	17	12	16	38.2335	1	14	53	32.704	88	54	30.80	4		9012	4030 05	4328
	3	17	23	37	29.2697	1	13	56	.156	-52	50	56.87	4		9011	6329 07	4224
	3	18	0	15	4.5570	1	15	48	22.068	32	59	57.43	4		9004	4655 F1	7557
	3	18	0	15	8.5571	1	15	50	8.933	33	13	7.52	4		9004	4655 F2	7558
	3	18	0	15	12.5571	1	15	51	55.874	33	26	4.72	4		9004	4655 F3	7559
	3	18	0	15	16.5571	1	15	53	43.038	33	38	44.31	4		9004	4655 F4	7560
	3	18	0	15	20.5572	1	15	55	29.931	33	51	16.16	4		9004	4655 F5	7561
	3	18	0	15	24.5572	1	15	57	17.081	34	3	40.75	4		9004	4655 F6	7562

March 18-21, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	3	18	0	15	26.5572	1	15	59	4.449	34	15	43.18	4		9004	4655	F7	7563
	3	18	1	38	57.6294	1	3	19	52.192	-72	49	27.25	4		9011	6342	06	4225
	3	18	4	25	57.2305	1	8	6	55.891	73	48	53.86	4		9004	4669	03	545
	3	18	8	14	4.5554	1	13	45	3.281	32	57	10.29	4		9113	3848	F1	3608
	3	18	8	14	8.5554	1	13	47	5.751	33	22	56.57	4		9113	3848	F2	3609
	3	18	8	14	12.5554	1	13	49	9.426	33	48	27.80	4		9113	3848	F3	4741
	3	18	8	14	16.5554	1	13	51	14.123	34	13	46.02	4		9113	3848	F4	3610
	3	18	8	14	20.5554	1	13	53	19.717	34	38	47.34	4		9113	3848	F5	3611
	3	18	8	14	24.5554	1	13	55	25.907	35	3	38.26	4		9113	3848	F6	4742
	3	18	8	14	28.5555	1	13	57	33.108	35	28	11.19	4		9113	3848	F7	3612
	3	18	10	25	4.5588	1	21	55	12.585	84	29	13.54	4		9113	3857	F1	2867
	3	18	10	25	8.5589	1	21	56	52.382	84	5	41.59	4		9113	3857	F2	2868
	3	18	10	25	12.5589	1	21	58	23.229	83	42	14.64	4		9113	3857	F3	2869
	3	18	10	25	16.5589	1	21	59	43.423	83	18	52.46	4		9113	3857	F4	2870
	3	18	10	25	20.5590	1	22	0	56.231	82	55	36.47	4		9113	3857	F5	2871
	3	18	10	25	24.5590	1	22	2	2.321	82	32	26.04	4		9113	3857	F6	2872
	3	18	10	25	28.5590	1	22	3	2.440	82	9	24.02	4		9113	3857	F7	2873
	3	19	1	42	53.1471	1	3	20	18.467	-64	40	14.47	4		9011	6379	06	4226
	3	19	4	30	54.1624	1	7	29	3.135	74	54	24.25	4		9004	4715	06	546
	3	19	20	29	3.5857	1	21	22	49.081	80	25	36.06	4		9006	4314	05	2759
	3	19	22	31	40.6199	1	7	31	27.119	67	57	13.28	4		9006	4318	02	2376
	3	19	23	45	47.6060	1	13	34	13.913	-58	52	24.87	4		9011	6403	04	5048
	3	20	1	47	34.3654	1	4	3	59.774	-57	52	21.00	4		9011	6414	05	6376
	3	20	4	16	4.5614	1	13	48	9.241	15	9	42.99	4		9010	2418	F1	3729
	3	20	4	16	4.5614	1	13	48	9.314	15	9	41.64	4		9049	167	F4	14
	3	20	4	16	8.5614	1	13	49	31.181	15	34	6.85	4		9010	2418	F2	3730
	3	20	4	16	8.5614	1	13	49	31.433	15	34	5.71	4		9049	167	F5	15
	3	20	4	16	12.5615	1	13	50	53.497	15	58	22.58	4		9010	2418	F3	3731
	3	20	4	16	12.5615	1	13	50	53.590	15	58	19.40	4		9049	167	F6	16
	3	20	4	16	16.5615	1	13	52	15.946	16	22	26.76	4		9010	2418	F4	3732
	3	20	4	16	16.5615	1	13	52	15.707	16	22	26.94	4		9049	167	F7	17
	3	20	4	16	20.5615	1	13	53	38.368	16	46	23.58	4		9010	2418	F5	3733
	3	20	4	16	20.5615	1	13	53	38.422	16	46	23.81	4		9049	167	F8	18
	3	20	4	16	24.5615	1	13	55	1.363	17	10	13.12	4		9010	2418	F6	3734
	3	20	4	16	24.5615	1	13	55	1.422	17	10	12.59	4		9049	167	F9	19
	3	20	4	16	28.5615	1	13	56	24.509	17	33	52.88	4		9010	2418	F7	3735
	3	20	4	16	28.5615	1	13	56	24.477	17	33	50.41	4		9049	167	F0	20
	3	20	8	22	4.5602	1	12	17	9.444	40	26	24.69	4		9113	3942	F1	2874
	3	20	8	22	8.5602	1	12	19	9.742	40	57	11.62	4		9113	3942	F2	2875
	3	20	8	22	12.5602	1	12	21	12.023	41	27	50.52	4		9113	3942	F3	2876
	3	20	8	22	16.5602	1	12	23	15.741	41	58	17.82	4		9113	3942	F4	2877
	3	20	8	22	20.5602	1	12	25	21.356	42	28	33.52	4		9113	3942	F5	2878
	3	20	8	22	28.5602	1	12	29	37.360	43	28	25.18	4		9113	3942	F7	2879
	3	20	8	28	13.2577	1	17	17	13.468	63	6	24.37	4		9113	3943	11	6622
	3	20	17	50	8.9269	1	13	42	15.861	-63	27	46.31	4		9002	1764	04	526
	3	20	20	32	31.7125	1	23	50	40.049	86	1	22.09	4		9006	4338	05	2760
	3	21	6	21	4.5657	1	13	48	1.894	5	0	57.51	4		9113	4005	F1	4002
	3	21	6	21	8.5657	1	13	49	14.042	5	21	59.06	4		9113	4005	F2	4003
	3	21	6	21	12.5657	1	13	50	26.276	5	43	1.36	4		9113	4005	F3	4004
	3	21	6	21	16.5657	1	13	51	38.839	6	3	57.37	4		9113	4005	F4	4005
	3	21	6	21	20.5657	1	13	52	51.538	6	24	49.31	4		9113	4005	F5	4006
	3	21	6	21	24.5657	1	13	54	4.398	6	45	39.86	4		9113	4005	F6	4007
	3	21	6	21	28.5657	1	13	55	17.543	7	6	23.07	4		9113	4005	F7	4743
	3	21	6	26	4.5672	1	15	26	36.812	26	39	41.75	4		9113	4006	F1	4009
	3	21	6	26	8.5672	1	15	28	.659	26	52	.98	4		9113	4006	F2	4010
	3	21	6	26	12.5672	1	15	29	24.485	27	4	14.77	4		9113	4006	F3	4011
	3	21	6	26	16.5673	1	15	30	48.611	27	16	19.43	4		9113	4006	F4	4741
	3	21	6	26	20.5673	1	15	32	12.710	27	28	16.82	4		9113	4006	F5	4742
	3	21	6	26	24.5673	1	15	33	36.578	27	40	4.20	4		9113	4006	F6	4743
	3	21	6	26	28.5674	1	15	35	.632	27	51	40.84	4		9113	4006	F7	4744
	3	21	8	28	4.5633	1	12	34	36.994	57	25	59.01	4		9113	4010	F1	3262
	3	21	8	28	12.5633	1	12	40	31.764	58	17	30.30	4		9113	4010	F3	3264
	3	21	8	28	16.5633	1	12	43	34.585	58	42	41.61	4		9113	4010	F4	3265
	3	21	8	28	20.5633	1	12	46	40.949	59	7	37.16	4		9113	4010	F5	4345
	3	21	8	28	24.5634	1	12	49	50.581	59	32	2.88	4		9113	4010	F6	3267
	3	21	8	28	28.5634	1	12	53	3.650	59	56	7.97	4		9113	4010	F7	3268
	3	21	8	35	5.9024	1	7	30	35.778	65	20	9.23	4		9010	2457	04	2383
	3	21	11	52	56.4321	1	4	4	15.989	-63	5	28.43	4		9023	4022	05	537
	3	21	17	54	19.0761	1	13	14	59.735	-67	41	39.01	4		9002	1798	05	527
	3	21	19	57	.4275	1	4	49	12.282	-45	29	41.03	4		9002	1804	04	528
	3	21	20	35	46.1159	1	6	16	27.793	83	16	39.45	4		9006	4381	05	2761
	3	21	22	29	3.6389	1	13	10	49.294	-1	42	10.00	4		9115	829	07	1860
	3	21	22	29	4.5705	1	15	31	48.464	23	20	14.42	4		9004	4780	F1	7523
	3	21	22	29	8.5705	1	15	33	1.550	23	31	6.52	4		9004	4780	F2	7524
	3	21	22	29	12.5706	1	15	34	15.218	23	41	48.19	4		9004	4780	F3	7525
	3	21	22	29	16.5706	1	15	35	28.866	23	52	25.84	4		9004	4780	F4	7526
	3	21	22	29	20.5706	1	15	36	42.471	24	2	55.66	4		9004	4780	F5	7527
	3	21	22	29	24.5707	1	15	37	56.050	24	13	17.75	4		9004	4780	F6	7528
	3	21	22	29	28.5707	1	15	39	9.395	24	23	33.53	4		9004	4780	F7	7529
	3	21	22	37	26.3720	1	4	26	.828	82	50	20.02	4		9008	2612	07	4175

March 21-26, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	3	21	23	54	38.6438	1	12	27	19.684	-61	13	29.41	4		9011	6461	07	5049
	3	22	0	35	4.5677	1	17	27	59.902	58	53	1.24	4		9004	4790	F1	7530
	3	22	0	35	8.5677	1	17	30	44.078	58	48	32.13	4		9004	4790	F2	7531
	3	22	0	35	12.5678	1	17	33	28.458	58	43	55.44	4		9004	4790	F3	7532
	3	22	0	35	16.5678	1	17	36	6.864	58	39	2.70	4		9004	4790	F4	7533
	3	22	0	35	20.5679	1	17	38	45.120	58	34	2.28	4		9004	4790	F5	7687
	3	22	0	35	24.5679	1	17	41	21.844	58	28	50.69	4		9004	4790	F6	7535
	3	22	0	35	28.5680	1	17	43	57.278	58	23	31.27	4		9004	4790	F7	7688
	3	22	1	56	35.5377	1	4	38	34.377	-61	19	36.67	4		9011	6470	06	4229
	3	22	2	35	4.5674	1	9	9	14.181	61	41	42.25	4		9004	4792	F1	7516
	3	22	2	35	8.5674	1	9	9	2.582	62	9	21.68	4		9004	4792	F2	7517
	3	22	2	35	12.5674	1	9	8	50.519	62	37	3.12	4		9004	4792	F3	7518
	3	22	2	35	16.5674	1	9	8	37.031	63	4	46.59	4		9004	4792	F4	7519
	3	22	2	35	20.5674	1	9	8	22.849	63	32	28.78	4		9004	4792	F5	7520
	3	22	2	35	24.5674	1	9	8	7.560	64	0	10.82	4		9004	4792	F6	7521
	3	22	2	35	28.5674	1	9	7	51.504	64	27	52.02	4		9004	4792	F7	7522
	3	22	2	40	4.5683	1	23	46	13.198	83	58	22.22	4		9004	4792	F1	7690
	3	22	2	40	8.5684	1	23	39	18.715	83	37	5.14	4		9004	4792	F2	7691
	3	22	2	40	12.5684	1	23	33	10.723	83	15	36.94	4		9004	4792	F3	7566
	3	22	2	40	16.5684	1	23	27	40.331	82	53	53.12	4		9004	4792	F4	7567
	3	22	2	40	20.5685	1	23	22	46.558	82	32	3.34	4		9004	4792	F5	7568
	3	22	2	40	24.5685	1	23	18	22.624	82	10	7.37	4		9004	4792	F6	7569
	3	22	2	40	28.5685	1	23	14	22.161	81	48	5.07	4		9004	4792	F7	7570
	3	22	2	40	39.8855	1	13	3	32.952	42	42	33.75	4		9115	838	11	1861
	3	22	4	24	4.5651	1	12	42	46.964	23	25	24.63	4		9010	2486	F1	5800
	3	22	4	24	8.5651	1	12	44	26.964	23	54	36.15	4		9010	2486	F2	5801
	3	22	4	24	12.5651	1	12	46	7.337	24	23	34.24	4		9010	2486	F3	5802
	3	22	4	24	12.5672	1	11	19	48.327	- 8	22	29.15	4		9050	929	F3	3271
	3	22	4	24	16.5651	1	12	47	48.390	24	52	21.48	4		9010	2486	F4	5803
	3	22	4	24	16.5672	1	11	20	50.559	- 8	1	27.16	4		9050	929	F4	3272
	3	22	4	24	20.5652	1	12	49	30.034	25	20	59.69	4		9010	2486	F5	5804
	3	22	4	24	20.5672	1	11	21	53.045	- 7	40	21.10	4		9050	929	F5	3273
	3	22	4	24	24.5652	1	12	51	12.142	25	49	23.68	4		9010	2486	F6	5805
	3	22	4	24	24.5672	1	11	22	55.870	- 7	19	2.70	4		9050	929	F6	3274
	3	22	4	24	28.5652	1	12	52	54.828	26	17	36.38	4		9010	2486	F7	5806
	3	22	4	24	28.5672	1	11	23	59.360	- 6	57	44.51	4		9050	929	F7	3275
	3	22	4	45	37.6746	1	5	45	57.820	76	50	22.17	4		9004	4803	04	547
	3	22	17	58	36.4307	1	12	23	.336	-71	4	.37	4		9002	1831	09	2977
	3	22	20	0	52.4320	1	4	35	13.243	-39	7	57.64	4		9002	1840	05	529
	3	22	23	58	29.3301	1	11	38	47.818	-68	24	25.88	4		9011	6491	04	4330
	3	23	2	1	5.6994	1	4	47	53.013	-33	7	59.74	4		9011	6503	06	3714
	3	23	2	3	26.2935	1	5	49	13.267	-64	39	49.38	4		9007	3133	02	1849
	3	23	4	51	46.1445	1	2	59	55.983	76	48	30.15	4		9004	4840	04	548
	3	23	6	38	12.4340	1	14	39	53.587	21	16	42.71	4		9114	696	08	4335
	3	23	8	39	2.9145	1	13	13	52.628	77	52	31.14	4		9113	4124	09	6623
	3	23	10	0	28.6498	1	12	20	27.069	-51	44	54.15	4		9023	4064	05	538
	3	23	12	2	16.4370	1	4	52	16.658	-44	12	56.70	4		9023	4075	06	539
	3	23	12	5	12.4341	1	7	11	3.850	-24	13	26.69	4		9023	4076	07	6614
	3	23	18	2	55.0740	1	10	56	48.648	-73	14	37.70	4		9002	1861	07	530
	3	23	20	6	24.4345	1	5	12	46.704	-27	25	20.82	4		9002	1866	08	531
	3	24	0	3	15.9688	1	10	27	3.612	-63	22	20.32	4		9011	6532	04	4331
	3	24	0	43	4.5721	1	17	18	42.748	69	39	7.92	4		9004	4862	F1	7509
	3	24	0	43	8.5721	1	17	22	56.022	69	30	28.89	4		9004	4862	F2	7510
	3	24	0	43	12.5722	1	17	27	4.433	69	21	31.89	4		9004	4862	F3	7511
	3	24	0	43	16.5722	1	17	31	7.641	69	12	18.21	4		9004	4862	F4	7512
	3	24	0	43	20.5722	1	17	35	6.198	69	2	49.72	4		9004	4862	F5	7513
	3	24	0	43	24.5723	1	17	39	.243	68	53	2.55	4		9004	4862	F6	7514
	3	24	0	43	28.5723	1	17	42	49.168	68	43	.37	4		9004	4862	F7	7515
	3	24	2	6	51.7277	1	5	33	13.219	-18	57	59.95	4		9011	6539	06	4332
	3	24	10	5	1.8811	1	11	44	20.905	-50	9	54.26	4		9023	4095	10	540
	3	24	12	7	8.4417	1	5	11	47.568	-33	2	41.71	4		9023	4105	07	541
	3	24	14	44	55.6645	1	17	15	32.016	68	9	13.32	4		9005	6228	02	4121
	3	24	18	7	4.4697	1	8	50	47.773	-73	46	57.11	4		9002	1896	05	532
	3	24	20	50	32.2893	1	3	23	11.881	78	40	10.22	4		9006	4450	07	2762
	3	24	22	48	53.5931	1	6	38	56.657	70	38	27.07	4		9008	2675	04	4126
	3	25	0	7	33.7299	1	9	5	48.579	-61	16	23.52	4		9011	6544	08	4333
	3	25	2	11	44.8952	1	5	41	50.293	- 9	50	24.99	4		9011	6551	05	3716
	3	25	5	0	22.3571	1	3	51	46.833	78	27	10.14	4		9004	4920	02	2373
	3	25	8	53	52.4520	1	16	47	27.906	59	48	10.47	4		9114	704	03	3699
	3	25	10	9	13.0092	1	11	0	29.564	-51	52	59.65	4		9023	4126	03	542
	3	25	12	12	2.3917	1	5	25	14.397	-21	54	24.30	4		9023	4133	07	543
	3	25	20	16	16.6233	1	5	32	57.184	- 9	25	39.23	4		9002	1921	08	533
	3	26	0	12	38.2816	1	8	32	30.935	-46	17	25.32	4		9011	6579	04	1843
	3	26	0	14	41.3689	1	11	57	15.048	-54	10	45.99	4		9007	3194	05	1850
	3	26	2	15	46.3744	1	5	28	23.683	- 6	48	44.51	4		9011	6584	05	1844
	3	26	6	43	4.5773	1	12	9	38.301	35	13	58.64	4		9113	4184	F1	254
	3	26	6	43	8.5773	1	12	11	43.608	35	42	1.71	4		9113	4184	F2	255
	3	26	6	43	12.5773	1	12	13	50.357	36	9	53.17	4		9113	4184	F3	256
	3	26	6	43	16.5773	1	12	15	58.123	36	37	26.92	4		9113	4184	F4	257
	3	26	6	43	20.5773	1	12	18	7.187	37	4	46.48	4		9113	4184	F5	258

March 26-30, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (NM)	STATION	FRAME NO.		OBS.NO.
1966	3	26	6	43	24.5773	1	12	20	17.353	37	31	54.76	4		9113	4184	F6	250
	3	26	6	43	28.5773	1	12	22	28.808	37	58	46.54	4		9113	4184	F7	540
	3	26	6	48	59.9172	1	16	9	18.167	55	56	2.25	4		9113	4185	04	7809
	3	26	10	13	34.8884	1	10	5	42.076	-50	7	50.46	4		9023	4198	02	1639
	3	26	11	5	4.5836	1	23	46	6.166	63	38	26.92	4		9113	4208	F1	1980
	3	26	11	5	8.5836	1	23	44	46.148	63	19	47.21	4		9113	4208	F2	1981
	3	26	11	5	12.5836	1	23	43	28.151	63	1	2.57	4		9113	4208	F3	3308
	3	26	11	5	16.5836	1	23	42	12.784	62	42	17.10	4		9113	4208	F4	1982
	3	26	11	5	20.5836	1	23	40	59.624	62	23	27.96	4		9113	4208	F5	3683
	3	26	11	5	24.5837	1	23	39	48.301	62	4	44.67	4		9113	4208	F6	1983
	3	26	11	5	28.5837	1	23	38	38.805	61	43	58.53	4		9113	4208	F7	1984
	3	26	12	16	41.3842	1	5	26	59.734	-13	20	13.92	4		9023	4169	05	1640
	3	26	20	21	50.7257	1	5	49	12.522	1	23	44.82	4		9002	1953	04	534
	3	27	0	17	4.6286	1	7	41	51.003	-36	58	45.32	4		9011	6605	08	1845
	3	27	0	18	47.2024	1	11	10	59.229	-57	28	34.41	4		9007	3216	04	1851
	3	27	2	21	15.5197	1	5	45	42.402	3	9	39.30	4		9011	6613	03	1846
	3	27	2	21	37.2318	1	5	22	11.861	-26	44	10.31	4		9007	3221	06	1852
	3	27	5	11	16.8466	1	0	43	2.491	74	15	26.35	4		9004	5000	03	2374
	3	27	6	53	4.5811	1	16	3	56.610	61	30	36.07	4		9113	4249	F1	3269
	3	27	6	53	8.5811	1	16	7	8.904	61	28	32.97	4		9113	4249	F2	3270
	3	27	6	53	12.5812	1	16	10	19.727	61	26	9.18	4		9113	4249	F3	3271
	3	27	6	53	16.5812	1	16	13	29.399	61	23	30.01	4		9113	4249	F4	3272
	3	27	6	53	20.5813	1	16	16	35.964	61	20	36.95	4		9113	4249	F5	3273
	3	27	6	53	24.5813	1	16	19	41.470	61	17	29.63	4		9113	4249	F6	3274
	3	27	6	53	28.5814	1	16	22	44.764	61	14	7.93	4		9113	4249	F7	3275
	3	27	8	59	4.5827	1	23	48	35.252	83	35	1.88	4		9113	4259	F1	4065
	3	27	8	59	8.5827	1	23	39	48.009	83	17	35.19	4		9113	4259	F2	4066
	3	27	8	59	12.5827	1	23	31	48.544	82	59	36.79	4		9113	4259	F3	4067
	3	27	8	59	16.5827	1	23	24	31.879	82	41	15.24	4		9113	4259	F4	4068
	3	27	8	59	20.5828	1	23	17	50.420	82	22	30.41	4		9113	4259	F5	4069
	3	27	8	59	24.5828	1	23	11	46.408	82	3	26.13	4		9113	4259	F6	4070
	3	27	8	59	28.5828	1	23	6	12.299	81	44	7.71	4		9113	4259	F7	4071
	3	27	10	53	25.8386	1	6	12	21.509	76	41	41.39	4		9012	4248	05	4082
	3	27	12	21	36.7424	1	5	33	29.284	-4	33	44.19	4		9023	4199	03	1652
	3	28	0	23	59.4260	1	10	25	.901	-48	20	28.98	4		9007	3234	06	1853
	3	28	2	26	31.6771	1	5	25	27.163	-16	51	15.99	4		9007	3237	03	1854
	3	28	7	1	48.4486	1	15	44	12.499	45	26	37.12	4		9114	734	02	3700
	3	28	9	3	56.4444	1	12	31	48.348	61	43	22.64	4		9114	743	03	3701
	3	28	10	23	36.4487	1	8	51	9.984	-22	28	18.08	4		9023	4217	03	1693
	3	28	10	56	31.2721	1	6	29	10.525	68	40	17.49	4		9012	4273	07	4379
	3	28	12	27	19.5791	1	5	52	54.895	7	20	54.95	4		9023	4226	04	1654
	3	28	18	27	.4471	1	6	58	40.101	-16	27	13.79	4		9002	1998	05	535
	3	28	19	0	59.2713	1	4	35	25.791	85	6	44.43	4		9006	4496	05	2763
	3	28	23	19	26.0626	1	0	49	48.236	69	43	31.63	4		9006	4510	05	2764
	3	29	0	26	25.3690	1	6	48	52.420	-12	9	45.35	4		9011	6649	03	1847
	3	29	2	32	55.0707	1	5	51	3.741	0	48	20.94	4		9007	3255	05	1855
	3	29	4	50	4.5857	1	12	27	14.910	5	51	44.23	4		9113	4371	F1	4317
	3	29	4	50	8.5857	1	12	28	32.038	6	14	25.85	4		9113	4371	F2	4318
	3	29	4	50	12.5857	1	12	29	49.630	6	37	7.60	4		9113	4371	F3	4319
	3	29	4	50	16.5857	1	12	31	7.244	6	59	45.36	4		9113	4371	F4	4320
	3	29	4	50	20.5857	1	12	32	25.175	7	22	17.91	4		9113	4371	F5	4321
	3	29	4	50	28.5857	1	12	35	1.990	8	7	13.90	4		9113	4371	F7	4322
	3	29	4	55	4.5872	1	14	13	47.144	28	59	7.65	4		9113	4372	F1	4323
	3	29	4	55	8.5872	1	14	15	17.670	29	11	53.26	4		9113	4372	F2	4324
	3	29	4	55	12.5872	1	14	16	48.748	29	24	30.16	4		9113	4372	F3	4325
	3	29	4	55	16.5873	1	14	18	19.827	29	36	58.84	4		9113	4372	F4	4326
	3	29	4	55	20.5873	1	14	19	50.813	29	49	13.38	4		9113	4372	F5	4327
	3	29	4	55	24.5873	1	14	21	21.896	30	1	22.24	4		9113	4372	F6	4328
	3	29	4	55	28.5874	1	14	22	53.045	30	13	18.93	4		9113	4372	F7	4747
	3	29	5	18	10.3264	1	5	35	8.052	83	34	32.65	4		9004	5071	05	2375
	3	29	7	0	4.5852	1	13	57	8.650	72	45	48.40	4		9113	4382	F1	4203
	3	29	7	0	12.5853	1	14	9	25.266	72	56	55.10	4		9113	4382	F3	4204
	3	29	7	0	16.5854	1	14	15	36.150	73	1	28.41	4		9113	4382	F4	4205
	3	29	7	0	20.5854	1	14	21	45.897	73	8	15.33	4		9113	4382	F5	4206
	3	29	7	0	24.5854	1	14	27	56.233	73	8	20.47	4		9113	4382	F6	4207
	3	29	7	0	28.5855	1	14	34	5.607	73	10	45.83	4		9113	4382	F7	4208
	3	29	9	6	4.5879	1	5	43	42.108	77	57	4.26	4		9113	4395	F1	4197
	3	29	9	6	8.5880	1	5	38	16.816	78	14	18.65	4		9113	4395	F2	4198
	3	29	9	6	12.5880	1	5	32	37.545	78	30	58.01	4		9113	4395	F3	4199
	3	29	9	6	16.5880	3	5	26	42.058	78	47	10.89	4		9113	4395	F4	5511
	3	29	9	6	20.5880	1	5	20	29.600	79	2	50.96	4		9113	4395	F5	4200
	3	29	9	6	24.5880	1	5	13	56.889	79	18	.15	4		9113	4395	F6	4201
	3	29	9	6	28.5880	1	5	7	7.923	79	32	34.47	4		9113	4395	F7	4202
	3	29	10	58	20.0918	1	6	46	36.469	54	59	27.30	4		9012	4303	04	5050
	3	29	15	4	33.8092	1	7	46	8.374	81	55	2.43	4		9005	6255	03	4172
	3	29	18	32	24.4494	1	6	56	53.352	1	9	23.03	4		9002	2020	04	2646
	3	29	19	4	30.8655	1	5	50	29.844	78	48	29.02	4		9006	4524	05	2765
	3	29	23	25	.5532	1	0	3	14.744	65	25	29.79	4		9006	4534	07	2766
	3	30	7	3	48.8019	1	12	8	41.699	75	54	12.96	4		9113	4428	01	7808
	3	30	9	12	4.5910	1	2	46	47.115	80	2	33.75	4		9113	4436	F1	149

March 30 - April 1, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	3	30	9	12	8.5911	1	2	38	.943	80	2	35.69	4		9113	4436	F2	150
	3	30	9	12	12.5911	1	2	29	16.808	80	1	39.16	4		9113	4436	F3	151
	3	30	9	12	16.5911	1	2	20	39.228	79	59	52.41	4		9113	4436	F4	152
	3	30	9	12	20.5911	1	2	11	58.949	79	57	10.24	4		9113	4436	F5	153
	3	30	9	12	24.5911	1	2	3	29.287	79	53	37.38	4		9113	4436	F6	154
	3	30	9	12	28.5911	1	1	55	6.135	79	49	14.94	4		9113	4436	F7	155
	3	30	10	31	24.4562	1	6	51	11.666	-16	59	34.03	4		9023	4268	04	5725
	3	30	11	24	38.6118	1	0	18	55.226	70	56	12.82	4		9001	9616	03	1650
	3	30	18	36	52.4546	1	6	30	59.380	7	28	19.82	4		9002	2037	04	536
	3	30	23	29	52.9247	1	23	37	33.350	64	14	38.37	4		9006	4548	05	2747
	3	31	0	35	9.1421	1	5	58	31.128	0	59	21.85	4		9011	6670	06	1848
	3	31	0	43	20.4558	1	9	26	13.546	-43	12	42.79	4		9009	4822	03	2987
	3	31	5	4	58.4248	1	14	7	39.880	60	30	42.33	4		9001	9644	05	7640
	3	31	5	5	4.5920	1	14	47	45.458	43	0	40.44	4		9113	4486	F1	156
	3	31	5	5	8.5920	1	14	49	39.913	43	7	1.34	4		9113	4486	F2	157
	3	31	5	5	12.5921	1	14	51	35.735	43	13	11.80	4		9113	4486	F3	158
	3	31	5	5	16.5921	1	14	53	31.515	43	19	8.51	4		9113	4486	F4	159
	3	31	5	5	20.5922	1	14	55	26.926	43	24	55.84	4		9113	4486	F5	160
	3	31	5	5	24.5922	1	14	57	21.762	43	30	31.67	4		9113	4486	F6	161
	3	31	5	5	28.5923	1	14	59	16.810	43	35	55.49	4		9113	4486	F7	162
	3	31	7	7	24.4584	1	7	21	6.129	61	55	52.50	4		9001	9648	05	6612
	3	31	7	9	4.5910	1	12	56	20.781	82	42	10.83	4		9113	4497	F1	7136
	3	31	7	9	8.5910	1	13	9	44.303	82	50	44.22	4		9113	4497	F2	7136
	3	31	7	9	12.5911	1	13	23	33.095	82	57	47.48	4		9113	4497	F3	7137
	3	31	7	9	16.5911	1	13	37	40.395	83	3	17.38	4		9113	4497	F4	7138
	3	31	7	9	20.5911	1	13	52	3.618	83	7	13.55	4		9113	4497	F5	7139
	3	31	7	9	24.5912	1	14	6	34.271	83	9	31.35	4		9113	4497	F6	7140
	3	31	7	9	28.5912	1	14	21	6.027	83	10	14.84	4		9113	4497	F7	7141
	3	31	7	13	52.4588	1	14	57	55.943	56	8	33.03	4		9114	808	04	3702
	3	31	9	17	.4605	1	11	48	50.462	65	12	26.59	4		9114	817	06	3703
	3	31	9	17	4.5939	1	1	57	35.866	78	41	22.21	4		9113	4505	F1	7142
	3	31	9	17	8.5939	1	1	50	12.649	78	36	46.32	4		9113	4505	F2	7143
	3	31	9	17	12.5939	1	1	42	55.008	78	31	26.70	4		9113	4505	F3	7144
	3	31	9	17	16.5939	3	1	35	47.233	78	25	24.62	4		9113	4505	F4	7778
	3	31	9	17	20.5939	1	1	28	46.798	78	18	45.33	4		9113	4505	F5	7145
	3	31	9	17	24.5940	1	1	21	56.159	78	11	21.65	4		9113	4505	F6	7146
	3	31	9	17	28.5940	1	1	15	14.995	78	3	19.44	4		9113	4505	F7	7147
	3	31	9	20	48.4631	1	18	0	2.755	65	37	6.66	4		9114	818	02	3704
	3	31	10	36	37.6600	1	6	46	.312	- 0	51	37.15	4		9023	4291	03	5258
	3	31	11	29	36.3791	1	23	44	41.232	69	35	44.76	4		9001	9673	03	1651
	4	1	0	39	3.6124	1	5	29	32.965	2	30	1.12	4		9011	6681	05	5068
	4	1	0	52	40.4549	1	10	18	46.489	2	30	26.37	4		9009	4855	04	5552
	4	1	5	4	4.5948	1	10	27	2.307	- 6	28	15.40	4		9114	851	F1	3404
	4	1	5	4	8.5947	1	10	28	3.838	- 6	11	54.54	4		9114	851	F2	3405
	4	1	5	4	12.5947	1	10	29	5.532	- 5	55	26.49	4		9114	851	F3	3406
	4	1	5	4	16.5946	1	10	30	7.606	- 5	38	57.28	4		9114	851	F4	3407
	4	1	5	4	20.5946	1	10	31	9.939	- 5	22	24.68	4		9114	851	F5	3408
	4	1	5	4	24.5946	1	10	32	13.071	- 5	5	46.41	4		9114	851	F6	3409
	4	1	5	4	28.5945	1	10	33	16.673	- 4	49	3.51	4		9114	851	F7	3410
	4	1	5	10	4.5933	1	14	44	3.442	67	20	15.28	4		9001	9695	F1	4885
	4	1	5	10	4.5941	1	8	3	58.880	35	5	2.51	4		9050	1038	F1	3276
	4	1	5	10	8.5933	1	14	48	12.318	67	19	43.24	4		9001	9695	F2	5313
	4	1	5	10	8.5941	1	8	4	12.790	35	28	55.10	4		9050	1038	F2	3277
	4	1	5	10	12.5934	1	14	52	18.978	67	18	46.68	4		9001	9695	F3	5314
	4	1	5	10	12.5941	1	8	4	26.888	35	52	51.96	4		9050	1038	F3	3278
	4	1	5	10	16.5934	1	14	56	22.908	67	17	27.78	4		9001	9695	F4	5315
	4	1	5	10	16.5941	1	8	4	41.319	36	16	56.08	4		9050	1038	F4	3279
	4	1	5	10	20.5935	1	15	0	25.465	67	15	47.22	4		9001	9695	F5	5316
	4	1	5	10	24.5935	1	15	4	25.711	67	13	46.97	4		9001	9695	F6	5317
	4	1	5	10	28.5935	1	15	8	23.314	67	11	26.17	4		9001	9695	F7	4887
	4	1	5	12	4.5926	1	13	34	59.465	28	43	14.58	4		9114	853	F1	4361
	4	1	5	12	8.5926	1	13	37	8.372	28	55	59.69	4		9114	853	F2	4362
	4	1	5	12	12.5926	1	13	39	18.002	29	8	32.82	4		9114	853	F3	4363
	4	1	5	12	16.5926	1	13	41	28.390	29	20	55.88	4		9114	853	F4	3412
	4	1	5	12	20.5926	1	13	43	38.310	29	33	2.73	4		9114	853	F5	3413
	4	1	5	12	24.5927	1	13	45	48.859	29	45	3.77	4		9114	853	F6	3414
	4	1	5	12	28.5927	1	13	47	59.753	29	56	46.81	4		9114	853	F7	3415
	4	1	5	15	4.5936	1	15	13	20.392	34	45	5.45	4		9114	854	F1	3289
	4	1	5	15	8.5936	1	15	15	27.228	34	48	13.29	4		9114	854	F2	3290
	4	1	5	15	12.5937	1	15	17	33.746	34	51	12.29	4		9114	854	F3	3291
	4	1	5	15	16.5937	1	15	19	39.634	34	53	58.32	4		9114	854	F4	3292
	4	1	5	15	20.5937	1	15	21	45.321	34	56	31.83	4		9114	854	F5	3293
	4	1	5	15	28.5938	1	15	25	54.619	35	1	7.68	4		9114	854	F7	3294
	4	1	6	57	5.3443	1	10	40	7.526	9	18	1.19	4		9012	4355	04	5339
	4	1	7	13	4.5935	1	9	44	51.474	83	20	51.65	4		9113	4562	F1	4091
	4	1	7	13	8.5936	1	9	51	58.121	83	44	59.24	4		9113	4562	F2	4092
	4	1	7	13	12.5936	1	9	59	58.790	84	8	34.47	4		9113	4562	F3	4093
	4	1	7	13	16.5936	1	10	9	4.732	84	31	36.56	4		9113	4562	F4	4094
	4	1	7	13	20.5937	1	10	19	24.889	84	54	4.06	4		9113	4562	F5	4756
	4	1	7	13	24.5937	1	10	31	17.023	85	15	39.11	4		9113	4562	F6	4757

April 1-8, 1966

Y	M	D	TIME H	M	S (A-1)	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME	NO.	OMS.NO.
1966	4	1	7	13	28.5937	1	10	44	[illegible].470	89	36	17.21	4		9113	4562	F7	4798
	4	1	10	40	28.4582	1	6	2	4[illegible].615	0	39	41.00	4		9023	4317	04	4890
	4	1	13	7	50.3393	1	9	29	51.682	47	28	43.50	4		9005	6298	04	5816
	4	1	15	1	46.3410	1	11	52	21.756	12	42	59.67	4		9006	4576	12	5778
	4	1	15	16	30.2808	1	6	36	26.536	69	14	50.15	4		9005	6303	06	4882
	4	1	19	16	38.8661	1	5	48	54.199	67	58	31.[illegible]0	4		9006	4589	10	5777
	4	1	21	11	59.2785	1	11	41	46.288	10	32	36.66	4		9115	901	04	5848
	4	1	21	17	26.9243	1	14	16	6.941	28	57	41.91	4		9115	902	04	5849
	4	1	23	20	50.3384	1	13	53	3.268	47	46	22.65	4		9115	912	05	5850
	4	2	0	43	6.9379	1	5	9	43.909	4	34	51.78	4		9011	6696	02	5049
	4	2	1	3	4.5962	1	12	28	52.886	13	26	6.55	4		9010	2569	F1	3947
	4	2	1	3	4.5962	1	12	28	53.142	13	26	10.82	4		9049	208	F0	6
	4	2	1	3	8.5962	1	12	30	2.3[illegible]	13	46	28.79	4		9010	2569	F2	3948
	4	2	1	3	8.5962	1	12	30	2.595	13	46	31.62	4		9049	208	F9	5
	4	2	1	3	12.5963	1	12	31	11.706	14	6	41.39	4		9010	2569	F3	3949
	4	2	1	3	12.5963	1	12	31	12.008	14	6	43.89	4		9049	208	F8	4
	4	2	1	3	16.5963	1	12	32	21.529	14	26	48.42	4		9010	2569	F4	3950
	4	2	1	3	16.5963	1	12	32	21.712	14	26	48.50	4		9049	208	F7	3
	4	2	1	3	20.5963	1	12	33	31.295	14	46	46.27	4		9010	2569	F5	3951
	4	2	1	3	20.5963	1	12	33	31.511	14	46	45.68	4		9049	208	F6	2
	4	2	1	3	24.5963	1	12	34	41.427	15	6	33.62	4		9010	2569	F6	3952
	4	2	1	3	24.5963	1	12	34	41.450	15	6	36.91	4		9049	208	F5	1
	4	2	1	3	28.5964	1	12	35	51.359	15	26	14.75	4		9010	2569	F7	3953
	4	2	1	3	28.5964	1	12	35	51.587	15	26	17.62	4		9049	208	F4	0
	4	3	0	59	.4602	1	8	2	34.330	- 6	49	48.68	4		9009	4928	02	6647
	4	3	5	13	4.5959	1	11	4	19.662	44	17	4.42	4		9113	4692	F1	4097
	4	3	5	13	8.5959	1	11	6	47.049	44	43	43.16	4		9113	4692	F2	4098
	4	3	5	13	12.5959	1	11	9	15.816	45	10	5.32	4		9113	4692	F3	4099
	4	3	5	13	16.5959	1	11	11	46.242	45	36	.22	4		9113	4692	F4	4100
	4	3	5	13	20.5960	1	11	14	18.012	46	1	42.27	4		9113	4692	F5	4101
	4	3	5	13	24.5960	1	11	16	51.683	46	27	2.84	4		9113	4692	F6	4102
	4	3	5	13	28.5960	1	11	19	26.704	46	52	1.40	4		9113	4692	F7	4103
	4	3	9	13	10.0746	1	6	23	36.041	49	57	9.58	4		9012	4433	04	5340
	4	4	1	2	24.4614	1	7	5	42.740	- 8	30	58.31	4		9009	4951	04	5554
	4	4	9	18	1[illegible].2591	1	6	3	28.392	52	58	34.18	4		9012	4466	04	5341
	4	4	10	52	44.1835	1	4	52	32.559	7	49	17.95	4		9023	4386	10	6340
	4	4	15	13	38.7813	1	10	0	17.653	23	19	4.11	4		9006	4665	01	6348
	4	4	16	55	50.0551	1	7	44	22.738	16	35	16.75	4		9002	2073	04	5816
	4	4	17	21	29.0341	1	6	45	36.131	59	56	42.63	4		9006	4669	06	5775
	4	4	23	24	48.0440	1	7	16	.247	60	36	56.49	4		9004	5263	04	4845
	4	5	1	11	4.6986	1	7	35	47.953	35	6	7.98	4		9009	4985	05	5555
	4	5	5	22	54.6148	1								2.8310450	7901			5155
	4	5	7	14	46.2124	1	7	54	51.206	35	6	32.89	4		9012	4495	04	5342
	4	5	17	19	37.1663	1	9	12	39.083	39	36	35.31	4		9008	2954	04	4790
	4	6	1	14	40.3849	1	6	44	41.088	31	19	38.05	4		9009	5002	04	5556
	4	6	3	16	24.6134	1								2.5[illegible]160	7901			5156
	4	6	3	17	24.6151	1								2.3[illegible]20	7901			5157
	4	6	7	19	7.2253	1	7	13	24.284	37	48	28.59	4		9012	4525	04	5343
	4	6	9	49	4.6091	1	22	10	21.838	59	14	.19	4		9113	4852	F1	4558
	4	6	9	49	8.6091	1	22	9	23.482	58	52	44.30	4		9113	4852	F2	4559
	4	6	9	49	12.6091	1	22	8	27.094	58	31	23.02	4		9113	4852	F3	4560
	4	6	9	49	16.6091	3	22	7	32.886	58	9	58.18	4		9113	4852	F4	5508
	4	6	9	49	20.6092	1	22	6	39.713	57	48	34.09	4		9113	4852	F5	4561
	4	6	9	49	24.6092	1	22	5	48.125	57	27	13.02	4		9113	4852	F6	4562
	4	6	9	49	28.6092	1	22	4	57.858	57	5	56.43	4		9113	4852	F7	4563
	4	6	11	59	4.6115	1								2.0947490	7901			5158
	4	6	23	4	28.6566	1	6	37	1.523	28	10	8.37	4		9011	6764	04	5070
	4	7	1	19	40.4733	1	6	18	11.504	37	53	47.48	4		9009	5022	04	5557
	4	7	1	22	20.4678	1	9	32	21.890	29	11	50.32	4		9010	2589	02	5080
	4	7	3	21	44.6175	1								2.3252480	7901			5159
	4	7	3	22	44.6149	1								2.2316270	7901			5160
	4	7	5	34	4.6084	1	12	20	47.128	81	34	20.01	4		9113	4898	F1	4629
	4	7	5	34	8.6085	1	12	32	39.274	81	40	5.32	4		9113	4898	F2	4630
	4	7	5	34	12.6085	1	12	44	45.156	81	44	26.56	4		9113	4898	F3	4631
	4	7	5	34	16.6085	3	12	56	56.777	81	47	33.24	4		9113	4898	F4	5507
	4	7	5	34	20.6086	1	13	9	11.397	81	49	17.85	4		9113	4898	F5	4632
	4	7	5	34	24.6086	1	13	21	24.540	81	49	39.87	4		9113	4898	F6	4633
	4	7	5	34	28.6086	1	13	33	32.868	81	48	42.62	4		9113	4898	F7	5697
	4	7	17	36	12.7139	1	5	22	31.436	65	8	59.19	4		9006	4691	09	5774
	4	7	21	42	35.1385	1	13	47	44.709	45	42	42.03	4		9115	924	07	6383
	4	7	23	39	1.6434	1	8	56	30.727	23	44	50.44	4		9115	928	04	6356
	4	7	23	43	49.3388	1	10	42	38.938	46	55	55.48	4		9115	929	05	5852
	4	7	23	48	50.5919	1	15	46	55.587	53	37	10.70	4		9115	930	07	5853
	4	8	1	23	56.4810	1	5	49	21.417	37	55	17.06	4		9009	5050	04	5558
	4	8	1	45	45.3034	1	10	3	27.697	34	41	37.10	4		9115	934	06	6125
	4	8	1	50	45.5371	1	12	57	.509	49	29	7.61	4		9115	935	05	6648
	4	8	3	30	4.6171	1								2.2387660	7901			5161
	4	8	3	32	4.6202	1								2.4496130	7901			5162
	4	8	5	38	4.6112	1	9	27	17.269	83	17	7.83	4		9113	4923	F1	3723
	4	8	5	38	8.6112	1	9	36	59.336	83	38	27.13	4		9113	4923	F2	3724

April 8-10, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME	NO.	OBS.NO.
1966	4	8	5	38	12.6112	1	9	47	45.769	83	58	56.06	4		9113	4923	F3	3725
	4	8	5	38	16.6113	1	9	59	42.114	84	18	31.08	4		9113	4923	F4	3726
	4	8	5	38	20.6113	1	10	12	56.818	84	36	46.88	4		9113	4923	F5	3727
	4	8	5	38	24.6113	1	10	27	41.483	84	54	13.45	4		9113	4923	F6	3728
	4	8	7	28	54.2308	1	6	13	17.298	47	46	15.72	4		9012	4575	04	5344
	4	8	9	56	4.6133	1	22	39	22.037	71	5	35.02	4		9113	4941	F1	4635
	4	8	9	56	8.6133	1	22	36	46.322	70	44	14.93	4		9113	4941	F2	4636
	4	8	9	56	12.6133	1	22	34	17.132	70	22	50.08	4		9113	4941	F3	4637
	4	8	9	56	16.6133	1	22	31	52.922	70	1	12.57	4		9113	4941	F4	4638
	4	8	9	56	20.6133	1	22	29	34.326	69	39	25.04	4		9113	4941	F5	4639
	4	8	9	56	24.6133	1	22	27	20.388	69	17	28.06	4		9113	4941	F6	4640
	4	8	9	56	28.6133	1	22	25	11.709	68	55	23.41	4		9113	4941	F7	4641
	4	8	10	0	4.6138	1	21	33	37.395	47	45	10.92	4		9113	4942	F1	4765
	4	8	10	0	8.6138	1	21	33	16.775	47	21	45.62	4		9113	4942	F2	4766
	4	8	10	0	12.6138	1	21	32	56.778	46	58	21.02	4		9113	4942	F3	4767
	4	8	10	0	16.6138	1	21	32	37.076	46	35	3.30	4		9113	4942	F4	4768
	4	8	10	0	20.6138	1	21	32	18.528	46	11	46.42	4		9113	4942	F5	4769
	4	8	10	0	24.6138	1	21	32	.603	45	48	30.54	4		9113	4942	F6	4770
	4	8	10	0	28.6139	1	21	31	42.819	45	25	21.61	4		9113	4942	F7	4771
	4	8	14	6	19.3385	1	22	10	40.516	54	40	24.81	4		9012	4592	04	5345
	4	8	15	32	6.1891	1	7	33	49.034	50	15	58.02	4		9006	4729	04	5773
	4	9	0	5	33.5341	1	21	16	30.289	61	19	32.31	4		9008	3024	04	4791
	4	9	1	25	4.6127	1	6	35	2.183	- 8	11	44.17	4		9010	2602	F1	3954
	4	9	1	25	8.6127	1	6	35	47.783	- 7	46	28.18	4		9010	2602	F2	3955
	4	9	1	25	12.6126	1	6	36	33.371	- 7	21	.74	4		9010	2602	F3	3956
	4	9	1	25	16.6126	1	6	37	18.953	- 6	55	23.43	4		9010	2602	F4	3957
	4	9	1	25	20.6126	1	6	38	4.930	- 6	29	31.79	4		9010	2602	F5	3958
	4	9	1	25	24.6125	1	6	38	51.010	- 6	3	30.27	4		9010	2602	F6	3959
	4	9	1	25	28.6125	1	6	39	37.153	- 5	37	18.25	4		9010	2602	F7	3960
	4	9	1	28	42.8439	1	5	28	15.438	40	45	18.79	4		9009	5076	04	6345
	4	9	1	30	56.4741	1	8	2	36.653	39	14	43.50	4		9010	2602	05	1112
	4	9	3	34	52.6149	1	11	19	41.234	42	2	20.92	4		9113	4972	06	1113
	4	9	3	36	4.6221	1								2.4545030	7901			5163
	4	9	3	37	4.6122	1	10	42	5.279	66	58	17.73	4		9001	9913	F1	4803
	4	9	3	37	4.6166	1	5	35	38.994	48	18	58.14	4		9010	2618	F1	4810
	4	9	3	37	8.6123	1	10	46	24.572	67	15	36.13	4		9001	9913	F2	4804
	4	9	3	37	8.6162	1	6	42	3.526	23	35	36.12	4		9050	1135	F2	32A0
	4	9	3	37	8.6166	1	5	35	23.164	48	40	44.03	4		9010	2618	F2	4811
	4	9	3	37	12.6123	1	10	50	48.651	67	32	26.29	4		9001	9913	F3	4805
	4	9	3	37	12.6166	1	5	35	6.771	49	2	32.47	4		9010	2618	F3	4812
	4	9	3	37	16.6124	1	10	55	16.490	67	48	41.31	4		9001	9913	F4	4806
	4	9	3	37	16.6162	1	6	42	28.684	24	14	46.78	4		9050	1135	F4	32A1
	4	9	3	37	16.6166	1	5	34	49.719	49	24	23.08	4		9010	2618	F4	4813
	4	9	3	37	20.6124	1	10	59	48.301	68	4	23.94	4		9001	9913	F5	4807
	4	9	3	37	20.6162	1	6	42	41.287	24	34	30.13	4		9050	1135	F5	32A2
	4	9	3	37	20.6165	1	5	34	32.359	49	46	11.14	4		9010	2618	F5	4814
	4	9	3	37	24.6124	1	11	4	24.815	68	19	36.10	4		9001	9913	F6	4808
	4	9	3	37	24.6162	1	6	42	53.646	24	54	23.15	4		9050	1135	F6	32A3
	4	9	3	37	24.6165	1	5	34	14.115	50	8	3.45	4		9010	2618	F6	4815
	4	9	3	37	28.6125	1	11	9	5.394	68	34	9.33	4		9001	9913	F7	4809
	4	9	3	37	28.6162	1	6	43	6.153	25	14	21.84	4		9050	1135	F7	32A4
	4	9	3	37	28.6165	1	5	33	55.415	50	29	53.26	4		9010	2618	F7	4816
	4	9	3	40	4.6141	1	14	26	9.806	70	42	31.97	4		9001	9913	F1	4817
	4	9	3	40	4.6145	1	6	50	39.863	39	34	14.42	4		9050	1136	F1	32A5
	4	9	3	40	4.6165	1	5	9	46.878	64	30	32.25	4		9010	2618	F1	4824
	4	9	3	40	8.6142	1	14	30	29.567	70	36	22.52	4		9001	9913	F2	4818
	4	9	3	40	8.6145	1	6	50	51.439	39	58	29.57	4		9050	1136	F2	32A6
	4	9	3	40	8.6165	1	5	8	41.530	64	51	20.24	4		9010	2618	F2	4825
	4	9	3	40	12.6142	1	14	34	45.222	70	29	49.28	4		9001	9913	F3	4819
	4	9	3	40	12.6145	1	6	51	1.271	40	22	46.33	4		9050	1136	F3	32A7
	4	9	3	40	12.6166	1	5	7	34.715	65	12	4.74	4		9010	2618	F3	4826
	4	9	3	40	16.6143	1	14	38	56.570	70	23	.52	4		9001	9913	F4	4820
	4	9	3	40	16.6145	1	6	51	11.531	40	47	12.36	4		9050	1136	F4	32A8
	4	9	3	40	16.6166	1	5	6	25.375	65	32	44.[illegible]	4		9010	2618	F4	4827
	4	9	3	40	20.6143	1	14	43	3.331	70	15	50.19	4		9001	9913	F5	4821
	4	9	3	40	20.6145	1	6	51	22.290	41	11	47.95	4		9050	1136	F5	32A9
	4	9	3	40	20.6166	1	5	5	14.350	65	53	21.27	4		9010	2618	F5	4828
	4	9	3	40	24.6144	1	14	47	5.196	70	8	30.77	4		9001	9913	F6	4822
	4	9	3	40	24.6145	1	6	51	32.616	41	36	28.46	4		9050	1136	F6	32A0
	4	9	3	40	24.6166	1	5	4	.260	66	13	48.49	4		9010	2618	F6	4829
	4	9	3	40	28.6144	1	14	51	2.961	70	0	53.66	4		9001	9913	F7	4823
	4	9	3	40	28.6145	1	6	51	42.872	42	1	13.39	4		9050	1136	F7	32A1
	4	9	3	40	28.6166	1	5	2	43.358	66	34	14.77	4		9010	2618	F7	5601
	4	9	5	32	15.8420	1	11	50	34.339	50	1	44.47	4		9012	4603	04	5346
	4	9	10	7	36.4772	1	14	32	36.177	71	44	33.25	4		9010	2636	06	5081
	4	9	15	36	8.7020	1	6	49	6.066	48	55	39.66	4		9006	4740	03	5771
	4	9	23	12	36.7753	1	3	53	12.177	6	45	11.29	4		9011	6787	03	5071
	4	10	0	9	45.5732	1	20	34	47.472	63	37	37.73	4		9008	3036	04	4792
	4	10	1	32	56.4866	1	5	8	56.474	39	51	38.85	4		9009	5115	04	5560
	4	10	3	40	34.6273	1								2.5650050	7901			5164

April 10-13, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	4	10	8	0	4.6205	1	21	22	39.602	61	24	33.67	4		9113	4998	F1	5339
	4	10	8	0	8.6205	1	21	21	36.749	61	7	51.22	4		9113	4998	F2	5340
	4	10	8	0	12.6205	1	21	20	35.305	60	49	10.44	4		9113	4998	F3	5341
	4	10	8	0	16.6205	1	21	19	35.676	60	30	30.11	4		9113	4998	F4	5342
	4	10	8	0	20.6205	1	21	18	37.947	60	11	46.79	4		9113	4998	F5	5343
	4	10	8	0	24.6206	1	21	17	41.637	59	53	1.37	4		9113	4998	F6	5344
	4	10	8	0	28.6206	1	21	16	46.435	59	34	22.43	4		9113	4998	F7	5345
	4	10	8	15	58.0830	1	22	4	16.562	50	16	50.70	4		9009	5114	03	5561
	4	10	10	2	4.6186	1	4	8	46.262	81	40	42.85	4		9113	5012	F1	4533
	4	10	10	2	8.6186	1	3	59	17.222	81	52	8.97	4		9113	5012	F2	4534
	4	10	10	2	12.6186	1	3	49	20.948	82	2	38.72	4		9113	5012	F3	4535
	4	10	10	2	16.6186	1	3	38	55.756	82	12	15.81	4		9113	5012	F4	4536
	4	10	10	2	20.6185	1	3	28	2.274	82	20	48.92	4		9113	5012	F5	4537
	4	10	10	2	24.6185	1	3	16	42.882	82	28	15.74	4		9113	5012	F6	4538
	4	10	10	2	28.6185	1	3	4	58.096	82	34	36.39	4		9113	5012	F7	4539
	4	10	17	18	25.7525	1	4	0	34.279	13	2	13.60	4		9002	2174	04	5817
	4	10	17	51	42.7011	1	3	50	24.143	70	47	10.79	4		9006	4767	04	5770
	4	10	20	4	5.5762	1	23	21	29.892	71	41	21.47	4		9006	4770	04	5769
	4	10	21	56	1.8188	1	14	14	35.519	51	54	54.73	4		9115	961	04	6126
	4	10	22	13	29.6149	1	20	23	51.941	62	2	53.81	4		9006	4781	02	6645
	4	10	23	36	17.0895	1	9	39	56.259	60	12	48.09	4		9009	5126	04	5562
	4	10	23	57	45.2402	1	11	12	59.069	52	20	55.92	4		9115	976	04	6127
	4	11	2	4	44.3990	1	13	50	3.887	41	15	.23	4		9115	992	04	6128
	4	11	2	9	9.8536	1	16	45	30.269	22	10	42.52	4		9115	993	04	6129
	4	11	3	38	34.6285	1								2.8163700	7901			5165
	4	11	3	40	34.6291	1								2.6160310	7901			5166
	4	11	3	47	34.6310	1								3.0448050	7901			5167
	4	11	3	52	4.6387	1								3.9634280	7901			5168
	4	11	8	12	8.6163	1	17	8	2.629	57	32	.47	4		9050	1166	F2	3292
	4	11	8	12	12.6163	1	17	11	29.997	57	0	34.70	4		9050	1166	F3	3293
	4	11	8	12	16.6163	1	17	14	52.406	56	28	41.47	4		9050	1166	F4	3294
	4	11	8	12	20.6163	1	17	18	9.988	55	56	23.08	4		9050	1166	F5	3295
	4	11	8	12	24.6163	1	17	21	22.933	55	23	40.70	4		9050	1166	F6	3296
	4	11	8	17	4.6175	1	19	19	57.611	13	50	25.46	4		9050	1167	F1	3297
	4	11	8	17	8.6175	1	19	20	53.444	13	19	35.51	4		9050	1167	F2	3298
	4	11	8	17	12.6175	1	19	21	48.849	12	48	54.99	4		9050	1167	F3	3299
	4	11	8	17	16.6175	1	19	22	43.508	12	18	32.79	4		9050	1167	F4	3300
	4	11	8	17	20.6175	1	19	23	37.683	11	48	20.77	4		9050	1167	F5	3301
	4	11	8	17	24.6175	1	19	24	31.315	11	18	23.78	4		9050	1167	F6	3302
	4	11	8	17	28.6175	1	19	25	24.367	10	48	43.10	4		9050	1167	F7	3303
	4	11	10	11	34.6315	1								2.8622220	7901			5170
	4	11	10	14	4.6199	1	20	50	56.754	42	4	4.16	4		9113	5075	F1	5346
	4	11	10	14	8.6199	1	20	50	56.528	41	35	45.04	4		9113	5075	F2	5347
	4	11	10	14	12.6199	1	20	50	56.301	41	7	31.80	4		9113	5075	F3	5348
	4	11	10	14	16.6199	1	20	50	56.059	40	39	18.33	4		9113	5075	F4	5349
	4	11	10	14	20.6199	1	20	50	57.319	40	11	15.41	4		9113	5075	F5	5350
	4	11	10	14	24.6200	1	20	50	57.822	39	43	16.95	4		9113	5075	F6	5351
	4	11	10	14	28.6200	1	20	50	59.095	39	15	23.84	4		9113	5075	F7	5352
	4	11	10	16	34.6302	1								2.6062910	7901			5171
	4	11	14	19	37.8737	1	20	35	59.232	56	19	26.37	4		9012	4639	04	5347
	4	11	17	57	.2344	1	3	11	5.054	72	24	14.02	4		9006	4793	04	5767
	4	11	20	9	53.3902	1	22	23	56.637	67	26	10.43	4		9006	4795	02	5768
	4	11	22	18	34.9505	1	19	45	33.243	55	29	40.58	4		9006	4804	04	5766
	4	11	23	38	19.1416	1	7	29	57.517	51	41	34.97	4		9009	5149	04	5563
	4	12	2	15	20.8226	1	17	17	5.055	9	8	27.39	4		9115	1037	12	6130
	4	12	3	56	4.6226	1	6	14	40.805	57	19	27.88	4		9050	1174	F1	3304
	4	12	3	56	8.6226	1	6	14	24.647	57	43	59.85	4		9050	1174	F2	3305
	4	12	3	56	16.6226	1	6	13	49.669	58	33	15.49	4		9050	1174	F4	3306
	4	12	3	56	20.6226	1	6	13	30.687	58	58	.99	4		9050	1174	F5	3307
	4	12	3	56	24.6226	1	6	13	10.949	59	22	51.96	4		9050	1174	F6	3308
	4	12	5	39	41.0603	1	6	59	47.003	32	57	12.43	4		9012	4648	04	5348
	4	12	8	21	4.6198	1	18	47	26.437	12	17	47.54	4		9050	1190	F1	3309
	4	12	8	21	4.6239	1	20	53	45.165	75	33	53.86	4		9009	5165	F1	4888
	4	12	8	21	8.6198	1	18	48	35.307	11	45	49.17	4		9050	1190	F2	3310
	4	12	8	21	8.6239	1	20	54	5.622	75	12	1.63	4		9009	5165	F2	4889
	4	12	8	21	12.6198	1	18	49	43.404	11	14	7.88	4		9050	1190	F3	3311
	4	12	8	21	12.6238	1	20	54	26.479	74	50	1.46	4		9009	5165	F3	4890
	4	12	8	21	16.6198	1	18	50	50.938	10	42	39.38	4		9050	1190	F4	3312
	4	12	8	21	16.6238	1	20	54	46.738	74	27	52.70	4		9009	5165	F4	4891
	4	12	8	21	20.6198	1	18	51	57.474	10	11	20.97	4		9050	1190	F5	3313
	4	12	8	21	20.6237	1	20	55	7.549	74	5	36.16	4		9009	5165	F5	4892
	4	12	8	21	24.6237	1	20	55	28.491	73	43	13.63	4		9009	5165	F6	4893
	4	12	8	21	28.6236	1	20	55	48.913	73	20	44.65	4		9009	5165	F7	5318
	4	12	11	51	34.4627	1	6	16	50.590	62	1	10.13	4		9005	6367	04	5328
	4	12	14	25	2.7210	1	20	3	55.845	46	23	11.18	4		9012	4684	04	5349
	4	12	22	22	37.3508	1	18	44	18.924	56	46	5.88	4		9006	4828	04	5765
	4	12	23	40	12.5560	1	5	55	12.556	34	42	8.48	4		9009	5173	04	5564
	4	13	0	8	16.5028	1	13	3	35.161	54	19	53.40	4		9115	1050	07	6131
	4	13	1	49	4.6242	1	5	36	43.547	50	42	7.39	4		9010	2705	F1	3961
	4	13	1	49	8.6242	1	5	36	55.728	51	10	25.08	4		9010	2705	F2	3962

April 13-15, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	4	13	1	49	12.6242	1	5	37	7.459	51	38	42.19	4		9010	2705	F3	3963
	4	13	1	49	12.6242	1	5	37	7.599	51	38	39.66	4		9049	237	F7	3
	4	13	1	49	16.6242	1	5	37	19.058	52	6	58.57	4		9010	2705	F4	3964
	4	13	1	49	16.6242	1	5	37	19.391	52	7	.83	4		9049	237	F6	2
	4	13	1	49	20.6242	1	5	37	30.947	52	35	11.47	4		9010	2705	F5	3965
	4	13	1	49	20.6242	1	5	37	31.021	52	35	11.97	4		9049	237	F5	1
	4	13	1	49	24.6242	1	5	37	42.214	53	3	26.49	4		9010	2705	F6	3966
	4	13	1	49	24.6242	1	5	37	42.310	53	3	29.41	4		9049	237	F4	0
	4	13	1	49	28.6242	1	5	37	53.446	53	31	38.15	4		9010	2705	F7	3967
	4	13	8	16	4.6240	1	11	37	7.697	56	39	38.09	4		9050	1226	F1	3314
	4	13	8	16	8.6240	1	11	40	2.749	56	45	34.24	4		9050	1226	F2	3315
	4	13	8	16	12.6240	1	11	43	.224	56	51	14.70	4		9050	1226	F3	3316
	4	13	8	16	16.6240	1	11	45	59.972	56	56	45.55	4		9050	1226	F4	3317
	4	13	8	16	20.6240	1	11	49	2.133	57	1	56.87	4		9050	1226	F5	3318
	4	13	8	16	.6240	1	11	52	6.395	57	6	52.14	4		9050	1226	F6	3319
	4	13	8	16	28.6240	1	11	55	14.172	57	11	45.02	4		9050	1226	F7	3320
	4	13	8	25	4.6234	1	20	30	53.095	43	28	37.03	4		9010	2719	F1	5049
	4	13	8	25	4.6261	1	19	14	6.591	78	48	6.08	4		9009	5192	F1	5042
	4	13	8	25	8.6222	1	18	13	20.938	9	46	54.08	4		9050	1228	F2	3321
	4	13	8	25	8.6234	1	20	31	14.614	42	54	22.67	4		9010	2719	F2	5050
	4	13	8	25	8.6260	1	19	16	58.113	78	28	14.10	4		9009	5192	F2	5043
	4	13	8	25	12.6222	1	18	14	41.602	9	14	51.24	4		9050	1228	F3	3322
	4	13	8	25	12.6234	1	20	31	36.276	42	20	4.69	4		9010	2719	F3	5051
	4	13	8	25	12.6260	1	19	19	41.786	78	8	9.46	4		9009	5192	F3	5044
	4	13	8	25	16.6222	1	18	16	1.196	8	42	57.14	4		9050	1228	F4	3323
	4	13	8	25	16.6234	1	20	31	57.800	41	45	49.00	4		9010	2719	F4	5052
	4	13	8	25	16.6259	1	19	22	18.195	77	47	48.59	4		9009	5192	F4	5045
	4	13	8	25	20.6222	1	18	17	19.995	8	11	17.07	4		9050	1228	F5	3324
	4	13	8	25	20.6234	1	20	32	19.378	41	11	32.25	4		9010	2719	F5	5319
	4	13	8	25	20.6259	1	19	24	49.140	77	27	13.43	4		9009	5192	F5	5046
	4	13	8	25	24.6234	1	20	32	40.946	40	37	19.55	4		9010	2719	F6	5602
	4	13	8	25	24.6258	1	19	27	14.724	77	6	27.07	4		9009	5192	F6	5047
	4	13	8	25	28.6234	1	20	33	2.534	40	3	5.21	4		9010	2719	F7	5320
	4	13	8	25	28.6258	1	19	29	33.027	76	45	29.78	4		9009	5192	F7	5048
	4	13	8	29	.4976	1	20	35	22.551	53	28	24.12	4		9009	5194	04	5565
	4	13	10	21	34.6322	1								2.4018810	7901			5172
	4	13	10	22	34.6315	1								2.2829510	7901			5173
	4	13	10	24	34.6324	1								2.1832340	7901			5174
	4	13	10	25	4.6303	1								2.1901740	7901			5175
	4	13	10	26	34.6331	1								2.2877900	7901			5176
	4	13	10	29	4.6349	1								2.6703370	7901			5177
	4	13	15	52	25.2517	1	9	51	51.034	66	36	9.39	4		9008	3062	04	4793
	4	13	23	44	49.6247	1	5	21	48.196	38	26	8.20	4		9009	5202	04	5566
	4	14	3	51	4.6257	1	6	11	34.405	24	10	43.26	4		9113	5098	F1	4528
	4	14	3	51	8.6257	1	6	12	11.080	24	40	41.45	4		9113	5098	F2	4529
	4	14	3	51	12.6257	1	6	12	48.178	25	10	40.81	4		9113	5098	F3	4759
	4	14	3	51	16.6256	3	6	13	25.579	25	40	49.26	4		9113	5098	F4	5572
	4	14	3	51	20.6256	1	6	14	3.529	26	11	9.63	4		9113	5098	F5	4530
	4	14	3	51	24.6256	1	6	14	41.429	26	41	37.53	4		9113	5098	F6	4531
	4	14	3	51	28.6256	1	6	15	19.663	27	12	11.23	4		9113	5098	F7	4532
	4	14	3	58	4.6260	1	9	26	24.777	77	16	23.28	4		9113	5099	F1	4891
	4	14	3	58	8.6260	3	9	33	15.009	77	34	55.07	4		9113	5099	F2	5504
	4	14	3	58	12.6260	1	9	40	23.546	77	52	45.48	4		9113	5099	F3	4892
	4	14	3	58	16.6261	3	9	47	50.164	78	9	48.17	4		9113	5099	F4	5505
	4	14	3	58	20.6261	1	9	55	34.034	78	26	1.41	4		9113	5099	F5	4893
	4	14	3	58	24.6261	1	10	3	36.122	78	41	25.44	4		9113	5099	F6	4894
	4	14	3	58	28.6262	1	10	11	56.058	78	55	54.70	4		9113	5099	F7	4895
	4	14	4	2	49.4946	1	11	49	.290	52	22	34.63	4		9114	879	01	7292
	4	14	5	48	52.2435	1	5	44	39.179	41	57	53.81	4		9012	4698	04	5350
	4	14	8	33	52.4983	1	19	56	12.481	48	58	8.69	4		9009	5224	04	5567
	4	14	10	23	34.6365	1								2.7414020	7901			5178
	4	14	10	26	4.6340	1								2.2665250	7901			5179
	4	14	10	31	34.6331	1								2.2063090	7901			5180
	4	14	12	26	43.6660	1	21	27	21.072	55	3	47.70	4		9012	4727	05	5748
	4	14	15	55	6.9453	1	7	35	33.025	60	28	11.75	4		9008	3096	04	4794
	4	14	16	0	37.6809	1	4	30	14.409	62	39	27.49	4		9006	4848	07	5744
	4	14	18	2	21.0183	1	4	13	29.006	65	31	38.72	4		9008	3108	07	5014
	4	14	20	24	25.0701	1	21	11	14.995	65	2	56.80	4		9006	4858	04	5763
	4	14	22	29	32.7038	1	15	26	3.067	59	17	54.12	4		9006	4870	02	4170
	4	14	23	48	47.6187	1	4	48	38.709	36	24	22.37	4		9009	5229	05	5568
	4	15	2	18	46.3013	1	11	52	2.856	32	33	50.10	4		9115	1073	06	6384
	4	15	2	50	53.6985	1	22	2	25.234	15	52	49.51	4		9002	2233	04	5818
	4	15	4	3	4.6276	1	8	37	44.015	34	27	41.84	4		9114	915	F1	3868
	4	15	4	3	8.6276	1	8	39	31.205	34	53	35.44	4		9114	915	F2	3869
	4	15	4	3	12.6275	1	8	41	20.211	35	19	28.33	4		9114	915	F3	3870
	4	15	4	3	16.6275	1	8	43	11.070	35	45	26.79	4		9114	915	F4	3871
	4	15	4	3	20.6275	1	8	45	3.442	36	11	23.24	4		9114	915	F5	3872
	4	15	4	3	24.6275	1	8	46	57.914	36	37	22.07	4		9114	915	F6	3873
	4	15	4	3	28.6274	1	8	48	54.037	37	3	21.39	4		9114	915	F7	3874
	4	15	4	8	4.6274	1	12	40	57.268	57	27	20.18	4		9114	916	F1	3875

April 15-16, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		ORS.NO.
1966	4	15	4	8	8.6274	1	12	45	19.588	57	28	29.15	4		9114	916	F2	3876
	4	15	4	8	12.6274	1	12	49	41.192	57	29	7.76	4		9114	916	F3	3877
	4	15	4	8	16.6275	1	12	54	1.567	57	29	8.74	4		9114	916	F4	3878
	4	15	4	8	20.6275	1	12	58	20.742	57	28	39.97	4		9114	916	F5	3879
	4	15	4	8	24.6275	1	13	2	38.470	57	27	34.62	4		9114	916	F6	3880
	4	15	4	8	28.6275	1	13	6	54.674	57	25	57.93	4		9114	916	F7	3884
	4	15	5	53	44.2718	1	5	14	44.555	46	28	30.40	4		9012	4743	04	5351
	4	15	8	21	4.6318	1	21	34	6.301	70	52	36.31	4		9113	5186	F1	4896
	4	15	8	21	8.6317	1	21	31	35.963	70	31	46.10	4		9113	5186	F2	4897
	4	15	8	21	12.6317	1	21	29	11.539	70	10	44.40	4		9113	5186	F3	4898
	4	15	8	21	16.6317	1	21	26	51.951	69	49	36.48	4		9113	5186	F4	4899
	4	15	8	21	20.6317	1	21	24	37.285	69	28	16.39	4		9113	5186	F5	4900
	4	15	8	21	24.6317	1	21	22	28.062	69	6	50.13	4		9113	5186	F6	4901
	4	15	8	21	28.6317	1	21	20	23.654	68	45	15.53	4		9113	5186	F7	4902
	4	15	8	26	4.6326	1	20	25	27.489	42	34	22.46	4		9113	5187	F1	5419
	4	15	8	26	8.6326	1	20	25	15.073	42	12	22.75	4		9113	5187	F2	5420
	4	15	8	26	12.6326	1	20	25	2.963	41	50	23.68	4		9113	5187	F3	5421
	4	15	8	26	16.6326	1	20	24	51.588	41	28	31.14	4		9113	5187	F4	5422
	4	15	8	26	20.6327	1	20	24	40.102	41	6	43.72	4		9113	5187	F5	5423
	4	15	8	26	24.6327	1	20	24	29.224	40	44	57.58	4		9113	5187	F6	5424
	4	15	8	26	28.6327	1	20	24	18.984	40	23	10.69	4		9113	5187	F7	5965
	4	15	8	47	38.2685	1	21	50	26.231	23	36	39.19	4		9007	3490	07	4869
	4	15	10	23	4.6288	1	12	51	58.241	37	32	38.48	4		9114	960	F1	3295
	4	15	10	23	4.6311	1	9	21	10.423	71	38	53.90	4		9113	5201	F1	5426
	4	15	10	23	8.6288	1	12	54	36.479	37	25	21.13	4		9114	960	F2	3296
	4	15	10	23	8.6311	1	9	23	44.162	71	56	4.44	4		9113	5201	F2	5427
	4	15	10	23	12.6288	1	12	57	15.033	37	17	44.16	4		9114	960	F3	3297
	4	15	10	23	12.6310	1	9	26	22.252	72	13	20.06	4		9113	5201	F3	5428
	4	15	10	23	16.6287	1	12	59	53.971	37	9	50.78	4		9114	960	F4	4015
	4	15	10	23	16.6310	1	9	29	6.995	72	30	39.66	4		9113	5201	F4	5429
	4	15	10	23	20.6287	1	13	2	32.946	37	1	35.15	4		9114	960	F5	3298
	4	15	10	23	20.6309	1	9	31	58.398	72	47	55.08	4		9113	5201	F5	5430
	4	15	10	23	24.6287	1	13	5	12.564	36	53	3.53	4		9114	960	F6	3299
	4	15	10	23	24.6309	1	9	34	55.572	73	5	8.71	4		9113	5201	F6	5431
	4	15	10	23	28.6287	1	13	7	52.048	36	44	10.70	4		9114	960	F7	3300
	4	15	10	23	28.6308	1	9	37	59.956	73	22	21.64	4		9113	5201	F7	5432
	4	15	10	27	4.6281	1	15	22	8.266	21	37	36.44	4		9114	961	F1	3301
	4	15	10	27	8.6281	1	15	24	15.643	21	14	56.51	4		9114	961	F2	3302
	4	15	10	27	12.6282	1	15	26	21.867	20	52	14.99	4		9114	961	F3	3303
	4	15	10	27	16.6282	1	15	28	27.133	20	29	25.23	4		9114	961	F4	3304
	4	15	10	27	20.6282	1	15	30	31.769	20	6	30.11	4		9114	961	F5	3305
	4	15	10	27	24.6282	1	15	32	34.844	19	43	28.52	4		9114	961	F6	3306
	4	15	10	27	28.6282	1	15	34	37.151	19	20	26.60	4		9114	961	F7	3307
	4	15	12	31	10.0246	1	21	9	33.835	55	59	52.94	4		9012	4766	04	5352
	4	15	15	57	27.9923	1	6	6	26.869	46	8	40.60	4		9008	3139	04	4797
	4	15	20	20	2.4435	1	23	16	40.044	73	32	15.07	4		9008	3156	04	5331
	4	15	20	29	28.4775	1	20	38	49.359	62	11	8.41	4		9006	4887	04	4121
	4	15	22	30	19.6914	1	20	18	30.667	63	19	33.78	4		9008	3160	04	4799
	4	15	22	36	15.6501	1	16	29	58.667	34	36	34.36	4		9006	4900	06	4122
	4	16	0	36	53.0612	1	15	57	44.203	29	9	2.29	4		9008	3170	04	4800
	4	16	2	8	8.6316	1	5	58	12.504	60	12	11.61	4		9050	1255	F2	3325
	4	16	2	8	12.6316	1	5	58	23.409	60	41	12.20	4		9050	1255	F3	3326
	4	16	2	8	16.6316	1	5	58	34.279	61	10	14.26	4		9050	1255	F4	3327
	4	16	2	8	20.6316	1	5	58	42.605	61	39	23.43	4		9050	1255	F5	3328
	4	16	2	8	24.6316	1	5	58	52.380	62	8	35.84	4		9050	1255	F6	3329
	4	16	2	8	28.6316	1	5	59	2.324	62	37	49.00	4		9050	1255	F7	3330
	4	16	2	54	54.0300	1	21	36	26.579	15	25	27.71	4		9002	2252	04	5819
	4	16	4	35	25.5697	1	14	58	30.218	24	12	58.89	4		9004	5505	01	4846
	4	16	6	16	4.6351	1	23	48	36.065	77	52	55.64	4		9113	5240	F1	4246
	4	16	6	16	8.6351	1	23	41	46.711	77	49	.01	4		9113	5240	F2	4247
	4	16	6	16	12.6352	1	23	35	2.116	77	44	30.18	4		9113	5240	F3	4248
	4	16	6	16	16.6352	1	23	28	21.662	77	39	19.70	4		9113	5240	F4	5512
	4	16	6	16	20.6352	1	23	21	48.968	77	33	30.09	4		9113	5240	F5	4249
	4	16	6	16	24.6352	1	23	15	23.098	77	27	5.05	4		9113	5240	F6	4250
	4	16	6	16	28.6352	1	23	9	4.918	77	20	3.70	4		9113	5240	F7	4251
	4	16	8	29	4.6325	1	12	3	23.431	42	21	3.27	4		9050	1275	F1	3331
	4	16	8	29	4.6330	1	20	39	13.080	68	35	5.20	4		9001	165	F1	4655
	4	16	8	29	8.6325	1	12	5	33.569	42	17	19.73	4		9050	1275	F2	3332
	4	16	8	29	8.6330	1	20	38	6.302	68	8	11.68	4		9001	165	F2	5100
	4	16	8	29	12.6325	1	12	7	43.893	42	13	18.48	4		9050	1275	F3	3333
	4	16	8	29	12.6330	1	20	37	2.948	67	41	20.37	4		9001	165	F3	4656
	4	16	8	29	16.6325	1	12	9	55.187	42	9	10.67	4		9050	1275	F4	3334
	4	16	8	29	16.6330	1	20	36	1.871	67	14	17.29	4		9001	165	F4	4657
	4	16	8	29	20.6325	1	12	12	7.040	42	4	45.50	4		9050	1275	F5	3335
	4	16	8	29	20.6330	1	20	35	3.922	66	47	11.17	4		9001	165	F5	4658
	4	16	8	29	24.6330	1	20	34	8.331	66	20	.45	4		9001	165	F6	4659
	4	16	8	29	28.6330	1	20	33	15.007	65	52	43.92	4		9001	165	F7	4660
	4	16	8	37	12.6304	1	16	27	23.785	1	56	55.46	4		9050	1277	F3	3338
	4	16	8	37	16.6304	1	16	28	59.905	1	28	2.89	4		9050	1277	F4	3339
	4	16	8	37	20.6304	1	16	30	35.136	0	59	15.52	4		9050	1277	F5	3340

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	4	16	8	37	24.6304	1	16	32	10.095	0	30	36.54	4		9050	1277	F6	3341
	4	16	8	37	28.6304	1	16	33	44.283	0	2	6.40	4		9050	1277	F7	3342
	4	16	10	30	34.6454	1								3.1144400	7901			51A1
	4	16	10	32	4.6305	1	16	14	45.204	68	11	10.43	4		9113	5271	F1	4252
	4	16	10	32	4.6427	1								2.7334350	7901			51A2
	4	16	10	32	8.6304	1	16	19	20.267	67	46	.12	4		9113	5271	F2	4253
	4	16	10	32	12.6304	1	16	23	47.511	67	20	14.60	4		9113	5271	F3	4254
	4	16	10	32	16.6304	1	16	28	6.848	66	53	50.25	4		9113	5271	F4	4255
	4	16	10	32	20.6303	1	16	32	19.144	66	26	50.21	4		9113	5271	F5	4256
	4	16	10	32	24.6303	1	16	36	24.532	65	59	20.67	4		9113	5271	F6	4257
	4	16	10	32	28.6303	1	16	40	22.954	65	31	12.79	4		9113	5271	F7	4258
	4	16	10	33	34.6403	1								2.3933500	7901			51A3
	4	16	10	34	4.6414	1								2.2929220	7901			51A4
	4	16	10	34	34.6419	1								2.2007130	7901			51A5
	4	16	10	36	34.6398	1								1.9388820	7901			51A6
	4	16	10	39	4.6390	1								1.9308870	7901			51A7
	4	16	10	40	4.6383	1								2.0340250	7901			51A8
	4	16	10	40	34.6401	1								2.1055070	7901			51A9
	4	16	10	41	4.6410	1								2.1886630	7901			5190
	4	16	10	41	34.6388	1								2.2822410	7901			5191
	4	16	10	42	4.6400	1								2.3850670	7901			5192
	4	16	10	42	34.6409	1								2.4960170	7901			5193
	4	16	14	5	43.8879	1	8	34	35.707	80	42	39.34	4		9006	4904	06	4123
	4	16	16	31	5.8171	1	18	51	56.326	71	15	50.04	4		9005	6391	04	6352
	4	16	20	34	13.1637	1	20	6	48.858	60	47	43.87	4		9006	4925	03	4124
	4	16	22	34	45.1894	1	19	38	41.874	64	1	48.71	4		9008	3204	04	4801
	4	17	0	41	7.6597	1	15	24	23.766	21	53	48.49	4		9008	3218	04	4802
	4	17	4	39	49.4900	1	14	43	39.256	17	11	29.67	4		9004	5544	06	4847
	4	17	6	3	12.9839	1	4	22	50.364	50	41	22.55	4		9012	4821	04	5749
	4	17	8	28	4.6366	1	23	57	4.566	82	6	58.68	4		9113	5327	F1	5701
	4	17	8	28	8.6365	1	23	46	1.792	81	58	57.24	4		9113	5327	F2	5970
	4	17	8	28	12.6365	1	23	35	17.942	81	49	42.40	4		9113	5327	F3	4564
	4	17	8	28	16.6365	1	23	25	1.274	81	39	28.70	4		9113	5327	F4	5099
	4	17	8	28	20.6365	1	23	15	6.884	81	28	6.61	4		9113	5327	F5	4566
	4	17	8	28	24.6365	1	23	5	40.349	81	15	45.15	4		9113	5327	F6	4567
	4	17	8	28	28.6364	1	22	56	37.811	81	2	30.28	4		9113	5327	F7	4568
	4	17	8	33	4.6360	1	20	9	31.150	53	38	28.05	4		9113	5328	F1	4569
	4	17	8	33	8.6361	1	20	9	8.228	53	12	7.59	4		9113	5328	F2	4570
	4	17	8	33	12.6361	1	20	8	46.430	52	45	46.86	4		9113	5328	F3	4571
	4	17	8	33	16.6361	1	20	8	25.389	52	19	28.76	4		9113	5328	F4	4572
	4	17	8	33	20.6361	1	20	8	4.843	51	53	11.45	4		9113	5328	F5	4573
	4	17	8	33	24.6361	1	20	7	45.564	51	26	53.42	4		9113	5328	F6	4574
	4	17	8	33	28.6361	1	20	7	26.967	51	0	37.77	4		9113	5328	F7	4575
	4	17	8	55	56.5089	1	21	4	1.749	22	29	17.42	4		9007	3521	06	47A5
	4	17	9	1	36.6755	1	21	43	13.458	11	38	26.25	4		9011	6914	05	5072
	4	17	10	40	4.6320	1	17	49	54.513	31	46	7.15	4		9113	5347	F1	4576
	4	17	10	40	8.6320	1	17	51	30.219	31	5	46.40	4		9113	5347	F2	4577
	4	17	10	40	12.6320	1	17	53	4.534	30	25	30.51	4		9113	5347	F3	4578
	4	17	10	40	16.6320	1	17	54	37.432	29	45	11.88	4		9113	5347	F4	4579
	4	17	10	40	20.6320	1	17	56	8.978	29	4	58.80	4		9113	5347	F5	45A0
	4	17	10	40	24.6321	1	17	57	39.218	28	24	47.01	4		9113	5347	F6	45A1
	4	17	10	40	28.6321	1	17	59	8.161	27	44	38.69	4		9113	5347	F7	45A2
	4	17	12	40	30.0313	1	20	17	23.658	54	25	3.26	4		9012	4839	04	5353
	4	17	14	26	56.9621	1	22	48	13.703	77	33	44.33	4		9005	6421	02	6353
	4	17	16	16	9.2073	1	3	5	27.678	69	16	33.01	4		9006	4950	05	4125
	4	17	18	29	42.2486	1	21	48	13.912	69	12	15.29	4		9006	4955	08	4126
	4	17	20	38	33.8884	1	19	28	10.499	61	54	2.99	4		9006	4960	05	4127
	4	17	22	44	39.9075	1	15	13	53.575	20	51	57.00	4		9006	4970	06	4128
	4	18	3	3	24.5094	1	20	35	25.972	7	42	1.23	4		9002	2293	06	5870
	4	18	6	42	4.6358	1	18	19	30.444	16	20	39.45	4		9050	1309	F1	3343
	4	18	6	42	4.6404	1	20	48	31.598	71	0	7.67	4		9009	5271	F1	4661
	4	18	6	42	8.6358	1	18	20	24.102	15	50	1.59	4		9050	1309	F2	3344
	4	18	6	42	8.6404	1	20	47	58.710	70	39	14.70	4		9009	5271	F2	4662
	4	18	6	42	12.6358	1	18	21	17.095	15	19	43.44	4		9050	1309	F3	3345
	4	18	6	42	12.6403	1	20	47	27.180	70	18	12.06	4		9009	5271	F3	4663
	4	18	6	42	16.6358	1	18	22	9.635	14	49	31.38	4		9050	1309	F4	3346
	4	18	6	42	16.6403	1	20	46	57.225	69	57	1.77	4		9009	5271	F4	4664
	4	18	6	42	20.6358	1	18	23	1.130	14	19	35.50	4		9050	1309	F5	3347
	4	18	6	42	20.6402	1	20	46	28.889	69	35	48.37	4		9009	5271	F5	4665
	4	18	6	42	24.6358	1	18	23	52.546	13	49	50.78	4		9050	1309	F6	3348
	4	18	6	42	24.6402	1	20	46	2.383	69	14	26.35	4		9009	5271	F6	4666
	4	18	6	42	28.6358	1	18	24	43.378	13	20	21.73	4		9050	1309	F7	3349
	4	18	6	42	28.6402	1	20	45	37.000	68	52	59.34	4		9009	5271	F7	4667
	4	18	8	33	4.6350	1	14	0	56.950	50	27	35.77	4		9114	1002	F1	5541
	4	18	8	33	4.6386	1	22	16	47.733	82	44	45.02	4		9113	5379	F1	45A3
	4	18	8	33	8.6350	1	14	4	44.758	50	10	38.07	4		9114	1002	F2	5542
	4	18	8	33	8.6386	1	22	7	12.609	82	27	5.77	4		9113	5379	F2	45A4
	4	18	8	33	12.6350	1	14	8	30.067	49	53	10.62	4		9114	1002	F3	5543
	4	18	8	33	12.6386	1	21	58	21.252	82	8	42.16	4		9113	5379	F3	45A5
	4	18	8	33	16.6350	1	14	12	13.341	49	35	11.58	4		9114	1002	F4	5544

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.	OBS.NO.
1966	4	18	8	33	16.6385	1	21	50	7.041	81	49	26.12	4		9113	5379 F4	45A6
	4	18	8	33	20.6350	1	14	15	53.796	49	16	43.17	4		9114	1002 F5	5545
	4	18	8	33	20.6385	1	21	42	29.251	81	29	35.45	4		9113	5379 F5	45A7
	4	18	8	33	24.6350	1	14	19	32.061	48	57	45.65	4		9114	1002 F6	5546
	4	18	8	33	24.6385	1	21	35	29.078	81	9	2.49	4		9113	5379 F6	45A8
	4	18	8	33	28.6350	1	14	23	7.722	48	38	24.59	4		9114	1002 F7	5547
	4	18	8	33	28.6385	1	21	28	59.694	80	47	58.13	4		9113	5379 F7	45A9
	4	18	8	35	34.6529	1								3.0892350	7901		5194
	4	18	8	37	4.6357	1	16	37	4.034	25	20	45.63	4		9114	1003 F1	5548
	4	18	8	37	4.6488	1								2.8802890	7901		5195
	4	18	8	37	8.6358	1	16	38	39.652	24	53	48.00	4		9114	1003 F2	5549
	4	18	8	37	12.6358	1	16	40	13.877	24	26	59.62	4		9114	1003 F3	5550
	4	18	8	37	16.6358	1	16	41	46.857	24	0	14.25	4		9114	1003 F4	5551
	4	18	8	37	20.6359	1	16	43	18.462	23	33	36.05	4		9114	1003 F5	5552
	4	18	8	37	24.6359	1	16	44	49.003	23	7	4.02	4		9114	1003 F6	5553
	4	18	8	37	28.6359	1	16	46	18.217	22	40	40.56	4		9114	1003 F7	5554
	4	18	8	39	4.6383	1	19	48	35.474	42	52	26.94	4		9113	5380 F1	4259
	4	18	8	39	4.6488	1								2.7092160	7901		5196
	4	18	8	39	8.6383	1	19	48	33.757	42	25	8.13	4		9113	5380 F2	4260
	4	18	8	39	12.6383	1	19	48	32.072	41	57	53.23	4		9113	5380 F3	4261
	4	18	8	39	16.6383	1	19	48	30.591	41	30	43.82	4		9113	5380 F4	4262
	4	18	8	39	20.6384	1	19	48	30.028	41	3	33.25	4		9113	5380 F5	4263
	4	18	8	39	24.6384	1	19	48	29.537	40	36	32.52	4		9113	5380 F6	4264
	4	18	8	39	28.6384	1	19	48	29.386	40	9	38.13	4		9113	5380 F7	4265
	4	18	8	39	34.6464	1								2.6888480	7901		5197
	4	18	8	41	4.6492	1								2.6862630	7901		5198
	4	18	8	42	34.6475	1								2.7717500	7901		5199
	4	18	8	45	4.6522	1								3.0896200	7901		5200
	4	18	14	10	35.7180	1	4	50	25.184	54	30	46.59	4		9006	4974 04	4179
	4	18	18	35	7.7974	1	21	11	49.104	66	8	27.48	4		9006	4985 05	4130
	4	18	19	6	6.8929	1	21	25	38.465	15	10	56.54	4		9023	4680 04	5327
	4	18	20	35	44.0950	1	21	19	28.446	68	44	34.68	4		9008	3243 04	4803
	4	18	20	43	32.4619	1	18	49	13.704	56	49	56.42	4		9006	4987 04	4131
	4	18	22	43	42.7322	1	17	54	15.095	61	34	22.59	4		9008	3248 04	4870
	4	18	22	48	57.4103	1	14	49	44.794	14	3	11.48	4		9006	4999 06	4132
	4	19	6	12	48.9675	1	3	43	22.866	53	34	2.32	4		9012	4862 04	5354
	4	19	6	46	4.6380	1	17	47	36.426	15	1	36.26	4		9050	1336 F1	3350
	4	19	6	46	8.6380	1	17	48	42.885	14	29	51.47	4		9050	1336 F2	3351
	4	19	6	46	12.6380	1	17	49	48.803	13	58	16.34	4		9050	1336 F3	3352
	4	19	6	46	16.6380	1	17	50	53.836	13	26	53.88	4		9050	1336 F4	3353
	4	19	6	46	20.6380	1	17	51	58.002	12	55	46.67	4		9050	1336 F5	3354
	4	19	6	46	24.6380	1	17	53	1.495	12	24	48.60	4		9050	1336 F6	3355
	4	19	8	46	4.6387	1	19	7	1.090	39	1	32.29	4		9001	212 F1	5053
	4	19	8	46	4.6401	1	13	55	29.702	13	29	12.06	4		9050	1340 F1	3356
	4	19	8	46	4.6412	1	19	36	26.204	24	18	49.36	4		9113	5425 F1	5060
	4	19	8	46	8.6387	1	19	7	34.136	38	26	30.32	4		9001	212 F2	5054
	4	19	8	46	8.6401	1	13	57	4.116	13	8	54.54	4		9050	1340 F2	3357
	4	19	8	46	8.6412	1	19	36	38.146	23	53	23.80	4		9113	5425 F2	5061
	4	19	8	46	12.6387	1	19	8	6.499	37	51	22.92	4		9001	212 F3	5055
	4	19	8	46	12.6401	1	13	58	38.540	12	48	28.18	4		9050	1340 F3	3358
	4	19	8	46	12.6412	1	19	36	50.161	23	28	2.65	4		9113	5425 F3	5062
	4	19	8	46	16.6387	1	19	8	38.797	37	16	22.59	4		9001	212 F4	5603
	4	19	8	46	16.6401	1	14	0	12.624	12	27	55.30	4		9050	1340 F4	3359
	4	19	8	46	16.6413	1	19	37	2.327	23	2	52.65	4		9113	5425 F4	5605
	4	19	8	46	20.6387	1	19	9	10.680	36	41	27.85	4		9001	212 F5	5057
	4	19	8	46	20.6401	1	14	1	46.461	12	7	14.51	4		9050	1340 F5	3360
	4	19	8	46	20.6413	1	19	37	15.056	22	37	45.96	4		9113	5425 F5	5064
	4	19	8	46	24.6387	1	19	9	42.545	36	6	39.54	4		9001	212 F6	5604
	4	19	8	46	24.6401	1	14	3	20.067	11	46	23.87	4		9050	1340 F6	3361
	4	19	8	46	24.6413	1	19	37	27.065	22	12	52.26	4		9113	5425 F6	5606
	4	19	8	46	28.6387	1	19	10	14.444	35	31	55.96	4		9001	212 F7	5059
	4	19	8	46	28.6401	1	14	4	53.782	11	25	27.02	4		9050	1340 F7	3362
	4	19	8	46	28.6414	1	19	37	39.227	21	48	2.39	4		9113	5425 F7	5065
	4	19	8	50	4.6403	1	19	35	17.210	7	47	44.36	4		9001	212 F1	5173
	4	19	8	50	4.6404	1	15	22	17.020	- 9	7	35.85	4		9050	1341 F1	3343
	4	19	8	50	8.6403	1	19	35	43.222	7	21	36.38	4		9001	212 F2	5705
	4	19	8	50	8.6404	1	15	23	35.015	- 9	30	32.32	4		9050	1341 F2	3344
	4	19	8	50	12.6404	1	15	24	52.506	- 9	53	30.49	4		9050	1341 F3	3345
	4	19	8	50	12.6404	1	19	36	9.319	6	55	39.69	4		9001	212 F3	6333
	4	19	8	50	16.6404	1	15	26	9.989	-10	16	25.50	4		9050	1341 F4	3346
	4	19	8	50	16.6404	1	19	36	35.308	6	29	55.62	4		9001	212 F4	5176
	4	19	8	50	20.6404	1	15	27	27.288	-10	39	13.48	4		9050	1341 F5	3347
	4	19	8	50	20.6405	1	19	37	.910	6	4	21.78	4		9001	212 F5	5177
	4	19	8	50	24.6404	1	15	28	43.946	-11	2	9.67	4		9050	1341 F6	3348
	4	19	8	50	24.6405	1	19	37	26.884	5	38	57.71	4		9001	212 F6	5178
	4	19	8	50	28.6404	1	15	30	.622	-11	24	54.47	4		9050	1341 F7	3349
	4	19	8	50	28.6406	1	19	37	52.962	5	13	44.53	4		9001	212 F7	5179
	4	19	18	39	3.9022	1	21	18	22.185	69	48	31.57	4		9006	5023 04	4133
	4	19	20	30	45.1822	1	14	8	37.639	50	57	24.08	4		9115	1171 04	6133
	4	19	20	40	36.0935	1	20	54	22.294	68	4	32.84	4		9008	3268 04	5332

April 19-23, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	4	19	20	47	33.0753	1	17	48	57.348	58	42	47.39	4		9006	5027	06	4134
	4	19	22	48	35.6804	1	17	12	58.724	54	14	18.33	4		9008	3275	04	4871
	4	19	22	53	19.3081	1	14	32	13.616	7	45	19.68	4		9006	5037	07	4135
	4	20	0	45	2.2863	1	16	8	3.041	6	8	36.73	4		9115	1196	04	6134
	4	20	0	54	1.3022	1	14	24	25.261	3	58	44.30	4		9008	3289	04	4872
	4	20	3	12	8.5194	1	19	5	47.806	- 9	25	21.03	4		9002	2338	04	5821
	4	20	6	53	24.5141	1	19	30	57.602	58	39	34.80	4		9009	5332	07	5569
	4	20	8	59	20.5174	1	14	50	13.863	15	8	34.77	4		9009	5338	04	5570
	4	20	12	53	41.8072	1	18	1	40.857	52	43	35.71	4		9012	4905	04	6382
	4	20	14	20	14.3625	1	3	57	55.974	58	39	34.47	4		9006	5044	03	4136
	4	20	14	59	17.5656	1	14	30	28.687	0	42	30.23	4		9012	4917	04	5836
	4	20	18	44	21.5653	1	20	40	12.626	67	1	29.29	4		9006	5060	02	4137
	4	20	20	34	45.3761	1	13	52	16.108	52	35	28.64	4		9115	1200	04	6135
	4	20	22	57	16.3071	1	14	10	18.357	5	10	5.09	4		9006	5075	06	4138
	4	21	3	12	56.5196	1	16	49	1.572	20	54	24.41	4		9002	2355	04	7673
	4	21	3	15	52.5197	1	17	48	55.518	- 9	37	18.17	4		9002	2356	04	5822
	4	21	3	17	36.5201	1	18	52	35.712	-37	26	52.66	4		9002	2355	14	6646
	4	21	8	58	16.5125	1	14	28	13.226	16	26	37.96	4		9010	2825	20	7291
	4	21	9	5	.5188	1	14	49	38.288	- 2	30	49.80	4		9009	5360	04	5337
	4	21	9	13	8.5248	1	18	8	7.211	1	33	49.75	4		9007	3580	07	7293
	4	21	10	51	29.0158	1	20	26	17.809	56	33	20.90	4		9012	4936	04	5837
	4	21	12	58	46.2999	1	17	24	10.430	42	18	57.89	4		9012	4943	04	5838
	4	21	14	25	23.1359	1	3	31	45.671	61	51	17.37	4		9006	5082	04	4867
	4	21	15	3	13.0000	1	14	10	11.726	- 0	55	53.93	4		9012	4956	04	5839
	4	21	18	49	30.0220	1	20	8	7.131	64	23	59.70	4		9006	5091	04	4868
	4	21	20	39	53.2979	1	14	28	59.681	49	19	50.25	4		9115	1235	04	6136
	4	21	20	51	40.6827	1	19	42	26.522	57	5	5.51	4		9008	3321	04	4873
	4	21	20	56	41.7641	1	16	13	8.096	46	46	12.97	4		9006	5095	03	5772
	4	22	7	2	24.5222	1	17	45	58.529	55	40	5.22	4		9009	5382	04	5338
	4	22	10	55	4.5127	1	20	16	31.048	62	29	12.41	4		9012	4976	04	5840
	4	22	13	2	50.6815	1	16	20	32.207	39	0	40.96	4		9012	4984	04	5841
	4	22	15	7	32.1752	1	13	59	.610	- 4	31	.20	4		9012	4992	04	5842
	4	22	18	54	29.7793	1	19	38	11.117	62	1	44.80	4		9006	5120	05	6349
	4	22	19	23	8.5266	1	19	24	13.923	- 2	49	37.51	4		9023	4725	02	6646
	4	22	22	49	57.2941	1	14	47	11.812	34	26	27.36	4		9115	1259	06	6137
	4	22	23	1	4.8187	1	14	31	35.937	38	58	2.33	4		9008	3362	04	4874
	4	23	1	20	12.5198	1	20	34	26.615	16	15	52.82	4		9002	2387	05	5823
	4	23	2	59	34.5787	1	13	29	40.259	32	28	53.43	4		9004	5762	01	4848
	4	23	3	24	38.8589	1	16	7	50.308	-24	19	46.78	4		9002	2390	04	5824
	4	23	7	18	35.6198	1	20	52	56.456	12	25	11.99	4		9007	3617	03	6645
	4	23	7	22	50.4890	1	20	59	35.038	13	49	6.99	4		9011	6938	01	5073
	4	23	8	57	34.6595	1								2.6629930	7901			5201
	4	23	8	58	4.6609	1								2.5515860	7901			5202
	4	23	8	59	4.6582	1								2.3475370	7901			5203
	4	23	8	59	34.6575	1								2.2568200	7901			5204
	4	23	9	1	34.6563	1								1.9955420	7901			5205
	4	23	9	3	4.6560	1								1.9362700	7901			5206
	4	23	9	3	34.6561	1								1.9462540	7901			5207
	4	23	9	4	34.6563	1								2.0104450	7901			5208
	4	23	9	5	4.6587	1								2.0634360	7901			5209
	4	23	9	5	34.6573	1								2.1291520	7901			5210
	4	23	13	3	9.3692	1	13	4	40.134	54	55	55.60	4		9012	5017	04	5843
	4	23	14	36	16.2468	1	2	21	11.810	69	19	15.26	4		9006	5138	04	5082
	4	23	18	50	1.1776	1	21	39	49.903	72	54	3.19	4		9008	3386	04	4875
	4	23	18	59	23.1591	1	19	7	31.460	59	42	21.13	4		9006	5152	04	5083
	4	23	20	59	32.9822	1	18	41	48.384	65	43	25.24	4		9008	3392	04	4876
	4	23	21	1	40.5429	1	12	25	1.732	51	34	33.44	4		9006	5160	03	5084
	4	23	23	2	15.0266	1	12	16	38.489	45	48	13.11	4		9008	3402	04	4877

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6508901

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	4	24	1	28	4.5239	1	21	57	24.399	-18	11	55.85	4		9002	2404	04	5825
	4	24	3	29	41.3947	1	15	29	16.032	-37	1	51.10	4		9002	2412	04	5826
	4	24	7	24	5.0068	1	21	0	13.396	- 0	40	35.45	4		9007	3645	04	47A6
	4	24	7	27	9.1223	1	20	45	34.213	10	55	32.47	4		9011	6967	03	5074
	4	24	15	0	13.3895	1	16	47	49.508	73	8	6.32	4		9005	6489	04	5329
	4	24	17	27	43.3072	1	20	49	14.668	14	17	54.86	4		9023	4761	05	4854
	4	24	19	2	42.4268	1	18	27	44.356	68	40	15.14	4		9006	5187	01	50A5
	4	24	21	2	26.4366	1	17	12	25.285	77	20	9.17	4		9008	3431	04	4878
	4	24	21	4	31.3248	1	11	29	6.424	47	35	24.42	4		9006	5191	01	50A6
	4	25	1	29	20.5266	1	19	57	38.629	2	48	35.11	4		9002	2425	04	5827
	4	25	3	33	16.7932	1	14	56	20.868	-29	43	48.58	4		9002	2431	04	5828
	4	25	7	30	.5086	1	21	24	33.491	-19	34	.12	4		9007	3677	04	47A7
	4	25	7	32	6.3475	1	20	47	39.282	1	38	12.06	4		9011	6991	02	5075
	4	25	9	33	7.7745	1	15	1	50.203	-54	44	47.39	4		9007	36A9	04	47A8
	4	25	9	36	16.1549	1	15	55	6.348	-42	56	7.69	4		9011	7000	07	5076
	4	25	11	6	15.6083	1	18	8	39.590	80	8	21.95	4		9012	5048	04	5P44
	4	25	16	59	4.4238	1	20	40	22.687	70	25	20.33	4		9006	5217	02	4837
	4	25	17	33	10.7088	1	21	4	32.443	3	26	40.41	4		9023	4788	04	4855
	4	25	21	5	47.9212	1	13	42	29.126	80	33	51.32	4		9008	3467	04	4879
	4	25	21	8	50.0857	1	11	29	54.913	41	25	29.71	4		9006	5230	03	4839
	4	25	23	9	2.0148	1	11	22	43.093	37	46	45.75	4		9008	3475	04	48A0
	4	26	1	36	7.5950	1	21	10	5.851	-32	12	37.32	4		9002	2453	04	5829
	4	26	2	46	24.4090	1	2	18	41.818	68	16	14.71	4		9001	279	04	5551
	4	26	3	9	31.2972	1	11	48	3.440	27	1	48.47	4		9004	5844	01	4849
	4	26	3	36	46.9313	1	14	35	18.202	-23	26	31.00	4		9002	2458	04	5830
	4	26	5	11	4.6553	1	16	48	8.035	17	28	15.93	4		9050	1363	F1	3376
	4	26	5	11	4.6577	1	18	55	48.767	42	51	47.45	4		9010	2848	F1	4910
	4	26	5	11	8.6553	1	16	49	11.464	16	56	42.77	4		9050	1363	F2	3377
	4	26	5	11	8.6577	1	18	55	52.185	42	23	17.60	4		9010	2848	F2	4911
	4	26	5	11	12.6553	1	16	50	14.764	16	25	29.97	4		9050	1363	F3	3378
	4	26	5	11	12.6577	1	18	55	56.071	41	54	45.15	4		9010	2848	F3	4912
	4	26	5	11	16.6577	1	18	56	.339	41	26	18.70	4		9010	2848	F4	4913
	4	26	5	11	20.6553	1	16	52	18.927	15	23	27.94	4		9050	1363	F5	3379
	4	26	5	11	20.6577	1	18	56	4.454	40	57	49.81	4		9010	2848	F5	4914
	4	26	5	11	24.6553	1	16	53	19.672	14	52	47.87	4		9050	1363	F6	33A0
	4	26	5	11	24.6578	1	18	56	9.180	40	29	23.09	4		9010	2848	F6	4915
	4	26	5	11	28.6553	1	16	54	20.157	14	22	19.57	4		9050	1363	F7	33A1
	4	26	5	11	28.6578	1	18	56	14.350	40	0	59.69	4		9010	2848	F7	4916
	4	26	7	5	4.6716	1								3.0155720	7901			5211
	4	26	7	7	4.6567	1	17	20	14.562	73	20	30.26	4		9001	306	F1	4917
	4	26	7	7	4.6682	1								2.7346090	7901			5212
	4	26	7	7	8.6567	1	17	21	50.385	72	50	27.38	4		9001	306	F2	4918
	4	26	7	7	8.6589	1	11	13	42.951	30	6	54.88	4		9050	1367	F2	3370
	4	26	7	7	12.6566	1	17	23	22.211	72	20	14.80	4		9001	306	F3	5101
	4	26	7	7	12.6589	1	11	15	22.332	29	57	44.44	4		9050	1367	F3	3371
	4	26	7	7	16.6566	1	17	24	49.928	71	49	51.37	4		9001	306	F4	4920
	4	26	7	7	16.6589	1	11	17	1.156	29	48	23.36	4		9050	1367	F4	3372
	4	26	7	7	20.6566	1	17	26	13.662	71	19	20.51	4		9001	306	F5	5102
	4	26	7	7	20.6589	1	11	18	40.366	29	38	46.78	4		9050	1367	F5	3373
	4	26	7	7	24.6566	1	17	27	35.305	70	48	37.28	4		9001	306	F6	4921
	4	26	7	7	24.6589	1	11	20	19.843	29	29	3.95	4		9050	1367	F6	3374
	4	26	7	7	28.6565	1	17	28	52.862	70	17	47.42	4		9001	306	F7	5321
	4	26	7	7	28.6589	1	11	21	59.317	29	19	10.63	4		9050	1367	F7	3375
	4	26	7	7	34.6672	1								2.6832730	7901			5213
	4	26	7	11	4.6562	1	18	7	38.150	40	18	44.64	4		9001	306	F1	52A4
	4	26	7	11	4.6567	1	12	9	21.297	53	30	36.34	4		9010	2850	F1	5291
	4	26	7	11	8.6562	1	18	8	7.100	39	45	.85	4		9001	306	F2	5706
	4	26	7	11	8.6573	1	12	53	38.514	15	26	44.73	4		9050	1368	F2	33A2
	4	26	7	11	12.6562	1	18	8	35.746	39	11	21.38	4		9001	306	F3	52A6
	4	26	7	11	12.6566	1	12	14	46.567	53	10	42.79	4		9010	2850	F3	5292
	4	26	7	11	12.6573	1	12	55	15.493	15	6	38.83	4		9050	1368	F3	33A3
	4	26	7	11	16.6562	1	18	9	4.015	38	37	45.04	4		9001	306	F4	52A7
	4	26	7	11	16.6573	1	12	56	52.106	14	46	27.02	4		9050	1368	F4	33A4
	4	26	7	11	20.6563	1	18	9	32.345	38	4	15.12	4		9001	306	F5	52A8
	4	26	7	11	20.6565	1	12	20	12.121	52	49	30.41	4		9010	2850	F5	5707
	4	26	7	11	20.6573	1	12	58	28.410	14	26	2.25	4		9050	1368	F5	33A5
	4	26	7	11	24.6563	1	18	10	.143	37	30	48.82	4		9001	306	F6	52A9
	4	26	7	11	24.6564	1	12	22	55.189	52	38	19.67	4		9010	2850	F6	5294
	4	26	7	11	24.6573	1	13	0	4.544	14	5	35.76	4		9050	1368	F6	33A6
	4	26	7	11	28.6563	1	18	10	28.024	36	57	26.39	4		9001	306	F7	52A0
	4	26	7	11	28.6564	1	12	25	38.354	52	26	49.99	4		9010	2850	F7	5295
	4	26	7	11	28.6573	1	13	1	40.420	13	44	54.13	4		9050	1368	F7	33A7
	4	26	7	37	55.0797	1	21	26	35.242	-17	56	48.28	4		9011	7025	05	5077
	4	26	9	11	4.6695	1								2.7514010	7901			5216
	4	26	9	11	34.6701	1								2.6526970	7901			5217
	4	26	9	38	27.4933	1	14	7	33.292	-62	46	.12	4		9007	3700	04	5330
	4	26	9	40	17.3826	1	15	10	54.714	-39	56	10.68	4		9011	7030	05	5078
	4	26	11	9	54.7701	1	14	41	44.207	83	10	44.46	4		9012	5080	04	5845
	4	26	17	4	8.9983	1	20	10	20.473	69	4	56.17	4		9006	5253	03	4840
	4	26	17	38	55.7054	1	21	36	43.591	-11	49	38.37	4		9023	4809	04	4856

April 26 - May 3, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	4	26	19	42	4.5307	1	16	15	59.263	-57	57	29.89	4		9023	4813	04	4857
	4	26	23	5	41.1754	1	13	8	52.313	29	17	48.67	4		9115	1284	08	6649
	4	27	1	41	29.8844	1	21	52	3.662	-50	39	56.02	4		9002	2464	04	5831
	4	27	7	10	4.6727	1								2.7938260	7901			5218
	4	27	7	11	4.6724	1								2.6371950	7901			5219
	4	27	7	11	34.6710	1								2.5702810	7901			5220
	4	27	7	15	4.6693	1								2.3752540	7901			5221
	4	27	7	15	34.6697	1								2.3914800	7901			5222
	4	27	11	13	44.5351	1	11	56	37.335	79	19	56.20	4		9012	5116	04	5846
	4	27	17	9	56.9231	1	19	24	44.211	63	35	22.31	4		9006	5286	07	4841
	4	27	17	44	4.5327	1	22	1	33.186	-24	3	17.26	4		9023	4835	04	4858
	4	27	19	10	32.8465	1	19	22	21.178	66	27	32.72	4		9008	3521	04	4881
	4	27	19	12	40.9680	1	10	49	46.241	74	58	9.34	4		9006	5296	03	6379
	4	27	19	47	40.5308	1	14	45	9.054	-75	25	45.71	4		9023	4840	04	4859
	4	27	23	17	34.7265	1	11	24	55.257	28	0	45.78	4		9008	3532	04	4882
	4	28	1	46	30.4995	1	22	37	12.028	-63	19	6.18	4		9002	2470	04	5832
	4	28	7	15	34.6717	1								2.4978590	7901			5223
	4	28	7	16	34.6725	1								2.3602450	7901			5224
	4	28	7	17	4.6712	1								2.3057110	7901			5225
	4	28	7	17	34.6697	1								2.2617790	7901			5226
	4	28	7	18	4.6703	1								2.2291490	7901			5227
	4	28	9	16	43.9621	1	19	21	15.365	55	15	36.47	4		9012	5148	04	5847
	4	28	17	14	58.0494	1	18	59	34.923	61	25	40.99	4		9006	5322	04	4842
	4	28	17	49	12.5338	1	22	36	3.808	-35	53	36.05	4		9023	4862	04	4860
	4	28	19	17	10.6821	1	10	56	13.417	68	52	.99	4		9006	5325	05	6380
	4	28	21	12	49.1465	1	14	55	34.944	25	52	20.59	4		9115	1292	04	6650
	4	28	21	21	40.2109	1	11	29	6.306	25	42	21.11	4		9006	5333	02	4843
	4	28	23	18	51.2438	1	14	41	47.147	1	14	6.71	4		9115	1310	09	6140
	4	29	1	50	53.2055	1	22	49	34.772	-73	13	12.87	4		9002	2482	04	5833
	4	29	7	52	44.7843	1	23	3	44.419	-57	1	22.49	4		9011	7050	06	5079
	4	29	19	20	40.7013	1	10	10	49.420	62	20	29.44	4		9006	5357	02	4844
	4	29	19	56	8.5354	1	13	0	8.547	-65	54	42.06	4		9023	4888	04	4861
	4	30	1	20	56.5410	1	10	20	26.424	46	28	36.78	4		9004	6007	05	6644
	4	30	17	22	15.7480	1	18	27	37.768	74	4	24.71	4		9006	5388	03	6380
	4	30	23	21	16.5401	1	11	17	24.207	82	10	7.72	4		9004	6032	03	6640
	5	1	7	30	34.6778	1								2.0811010	7901			5228
	5	2	5	35	4.6704	1	14	6	18.633	47	53	22.11	4		9010	2926	F1	4397
	5	2	5	35	8.6704	1	14	8	53.495	47	22	52.34	4		9010	2926	F2	4398
	5	2	5	35	12.6704	1	14	11	26.097	46	52	2.87	4		9010	2926	F3	4399
	5	2	5	35	16.6703	1	14	13	57.216	46	20	40.05	4		9010	2926	F4	4400
	5	2	5	35	20.6703	1	14	16	26.416	45	48	56.78	4		9010	2926	F5	4401
	5	2	5	35	24.6703	1	14	18	54.056	45	16	47.54	4		9010	2926	F6	4402
	5	2	5	35	28.6703	1	14	21	20.022	44	44	11.10	4		9010	2926	F7	4966
	5	2	7	32	34.6823	1								2.4927640	7901			5229
	5	2	7	33	4.6841	1								2.4008420	7901			5230
	5	2	7	33	34.6807	1								2.3171620	7901			5231
	5	2	17	30	8.3340	1	15	23	47.025	82	32	3.43	4		9006	5447	05	3172
	5	3	3	24	16.9966	1	19	35	36.650	72	20	58.65	4		9001	492	06	4885
	5	3	3	36	4.6765	1	17	54	22.627	43	29	56.92	4		9010	2945	F1	4967
	5	3	3	36	4.6765	1	17	54	22.706	43	29	56.57	4		9049	313	F0	39
	5	3	3	36	8.6765	1	17	54	24.001	43	2	37.58	4		9010	2945	F2	4403
	5	3	3	36	8.6765	1	17	54	24.347	43	2	35.64	4		9049	313	F9	38
	5	3	3	36	12.6765	1	17	54	25.943	42	35	14.28	4		9010	2945	F3	4404
	5	3	3	36	12.6765	1	17	54	25.868	42	35	14.66	4		9049	313	F8	37
	5	3	3	36	16.6765	1	17	54	27.667	42	7	53.67	4		9010	2945	F4	4405
	5	3	3	36	16.6765	1	17	54	28.045	42	7	53.12	4		9049	313	F7	36
	5	3	3	36	20.6765	1	17	54	30.166	41	40	38.34	4		9010	2945	F5	4968
	5	3	3	36	20.6765	1	17	54	30.164	41	40	35.43	4		9049	313	F6	35
	5	3	3	36	24.6765	1	17	54	33.004	41	13	18.69	4		9010	2945	F6	4969
	5	3	3	36	24.6765	1	17	54	32.811	41	13	19.34	4		9049	313	F5	34
	5	3	3	36	28.6765	1	17	54	35.858	40	46	7.53	4		9010	2945	F7	4970
	5	3	3	36	28.6765	1	17	54	35.819	40	46	5.96	4		9049	313	F4	33
	5	3	5	36	4.6752	1	11	7	44.250	55	54	11.29	4		9010	2949	F1	4261
	5	3	5	36	4.6752	1	11	7	44.618	55	54	9.98	4		9049	317	F4	40
	5	3	5	36	8.6752	1	11	10	35.717	55	45	18.48	4		9010	2949	F2	4262
	5	3	5	36	8.6752	1	11	10	35.788	55	45	20.23	4		9049	317	F5	41
	5	3	5	36	12.6751	1	11	13	27.070	55	36	6.46	4		9010	2949	F3	4263
	5	3	5	36	12.6751	1	11	13	27.134	55	36	7.18	4		9049	317	F6	42
	5	3	5	36	16.6751	1	11	16	18.740	55	26	35.00	4		9010	2949	F4	4264
	5	3	5	36	16.6751	1	11	16	19.200	55	26	33.52	4		9049	317	F7	43
	5	3	5	36	20.6750	1	11	19	10.722	55	16	41.88	4		9010	2949	F5	4265
	5	3	5	36	20.6750	1	11	19	10.739	55	16	39.44	4		9049	317	F8	44
	5	3	5	36	24.6750	1	11	22	2.562	55	6	26.00	4		9010	2949	F6	4266
	5	3	5	36	24.6750	1	11	22	2.897	55	6	26.80	4		9049	317	F9	45
	5	3	5	36	28.6749	1	11	24	54.759	54	55	48.71	4		9010	2949	F7	5340
	5	3	5	36	28.6749	1	11	24	54.809	54	55	47.13	4		9049	317	F0	46
	5	3	5	41	4.6725	1	14	17	36.312	26	22	53.95	4		9010	2949	F1	4961
	5	3	5	41	4.6725	1	14	17	36.169	26	22	53.70	4		9049	318	F9	19
	5	3	5	41	8.6725	1	14	19	33.220	25	45	6.28	4		9010	2949	F2	4962
	5	3	5	41	8.6725	1	14	19	33.446	25	45	5.79	4		9049	318	F8	18

May 3-8, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	5	3	5	41	12.6725	1	14	21	29.311	25	7	2.62	4		9010	2949	F3	4267
	5	3	5	41	12.6725	1	14	21	29.395	25	7	4.12	4		9049	318	F7	17
	5	3	5	41	16.6725	1	14	23	24.532	24	28	51.63	4		9010	2949	F4	4983
	5	3	5	41	16.6725	1	14	23	24.523	24	28	49.72	4		9049	318	F6	16
	5	3	5	41	20.6725	1	14	25	18.554	23	50	22.97	4		9010	2949	F5	4984
	5	3	5	41	20.6725	1	14	25	18.635	23	50	24.03	4		9049	318	F5	15
	5	3	5	41	24.6725	1	14	27	11.881	23	11	43.50	4		9010	2949	F6	4985
	5	3	5	41	24.6725	1	14	27	11.916	23	11	45.50	4		9049	318	F4	14
	5	3	5	41	28.6725	1	14	29	4.237	22	32	58.53	4		9010	2949	F7	4270
	5	3	7	37	8.6731	1	13	45	28.172	40	31	13.00	4		9113	5894	F2	3795
	5	3	7	37	12.6731	1	13	47	55.013	39	59	1.05	4		9113	5894	F3	3796
	5	3	7	37	28.6730	1	13	57	24.914	37	47	4.34	4		9113	5894	F7	3797
	5	3	9	35	20.7544	1	15	6	46.506	81	49	40.10	4		9012	5244	03	3874
	5	3	13	32	48.8770	1	12	4	25.334	74	8	11.39	4		9005	6507	07	4013
	5	4	5	40	8.6791	1	17	14	34.234	27	6	22.31	4		9113	5954	F2	3139
	5	4	5	40	12.6791	1	17	14	48.553	26	40	14.37	4		9113	5954	F3	5312
	5	4	5	40	16.6791	1	17	15	2.675	26	14	7.01	4		9113	5954	F4	3141
	5	4	5	40	20.6792	3	17	15	17.053	25	48	14.95	4		9113	5954	F5	7695
	5	4	5	40	28.6792	1	17	15	45.970	24	56	47.09	4		9113	5954	F7	5086
	5	5	5	39	34.6917	1								2.7308360	7901			5232
	5	5	5	40	4.6923	1								2.6461710	7901			5233
	5	5	5	40	34.6911	1								2.5686310	7901			5234
	5	5	5	40	52.8714	1	16	34	30.504	53	12	37.33	4		9113	6042	07	1114
	5	5	5	41	34.6915	1								2.4378850	7901			5235
	5	5	5	42	34.6902	1								2.3446820	7901			5236
	5	5	5	43	4.6891	1								2.3138080	7901			5237
	5	5	5	44	4.6883	1								2.2860960	7901			5238
	5	5	5	45	4.6879	1								2.3052930	7901			5239
	5	5	5	45	34.6911	1								2.3323840	7901			5240
	5	5	17	42	9.1487	1	9	52	16.895	70	40	35.63	4		9006	5548	05	4016
	5	6	3	41	4.6873	1	17	13	18.612	43	36	34.20	4		9113	6094	F1	4226
	5	6	3	41	8.6873	1	17	13	5.413	43	16	20.40	4		9113	6094	F2	4227
	5	6	3	41	12.6873	1	17	12	53.096	42	56	11.35	4		9113	6094	F3	4228
	5	6	3	41	16.6873	1	17	12	41.263	42	36	5.10	4		9113	6094	F4	4229
	5	6	3	41	20.6874	1	17	12	29.840	42	15	59.66	4		9113	6094	F5	4230
	5	6	3	41	24.6874	1	17	12	18.280	41	56	.65	4		9113	6094	F6	4231
	5	6	3	41	28.6874	1	17	12	7.264	41	36	5.02	4		9113	6094	F7	4232
	5	6	5	51	4.6844	1	16	49	31.454	7	51	54.45	4		9113	6123	F1	4233
	5	6	5	51	8.6844	1	16	49	57.974	7	27	36.51	4		9113	6123	F2	4754
	5	6	5	51	12.6844	1	16	50	24.408	7	3	19.48	4		9113	6123	F3	4235
	5	6	5	51	16.6845	1	16	50	51.053	6	39	20.46	4		9113	6123	F4	4236
	5	6	5	51	20.6845	1	16	51	17.517	6	15	25.86	4		9113	6123	F5	5694
	5	6	5	51	24.6846	1	16	51	43.756	5	51	41.43	4		9113	6123	F6	5695
	5	6	5	51	28.6846	1	16	52	10.401	5	28	9.21	4		9113	6123	F7	5696
	5	6	7	45	52.5670	1	18	5	7.873	57	46	58.25	4		9012	5323	06	3875
	5	6	7	48	54.0557	1	11	43	33.739	27	23	1.03	4		9113	6142	05	2327
	5	6	17	47	57.3776	1	11	9	38.016	62	10	42.54	4		9006	5568	09	4017
	5	7	5	46	4.7013	1								3.0966260	7901			5241
	5	7	5	46	34.6971	1								2.9776140	7901			5242
	5	7	5	47	4.6990	1								2.8623620	7901			5243
	5	7	5	47	34.6962	1								2.7514840	7901			5244
	5	7	5	48	4.6976	1								2.6456160	7901			5245
	5	7	5	48	34.6940	1								2.5454960	7901			5246
	5	7	5	49	34.6931	1								2.3657720	7901			5247
	5	7	5	50	4.6930	1								2.2879930	7901			5248
	5	7	5	50	34.6942	1								2.2195610	7901			5249
	5	7	5	51	4.6944	1								2.1614880	7901			5250
	5	7	5	51	34.6942	1								2.1146650	7901			5251
	5	7	5	52	4.6930	1								2.0800040	7901			5252
	5	7	5	52	34.6912	1								2.0581830	7901			5253
	5	7	5	53	4.6939	1								2.0496920	7901			5254
	5	7	5	53	34.6929	1								2.0547710	7901			5255
	5	8	5	51	4.7002	1								2.9431840	7901			5256
	5	8	5	51	12.6873	1	12	29	21.638	68	51	45.01	4		9113	6243	F3	5087
	5	8	5	51	16.6873	3	12	34	7.003	68	31	4.30	4		9113	6243	F4	7696
	5	8	5	51	20.6873	1	12	38	45.949	68	9	47.37	4		9113	6243	F5	4357
	5	8	5	51	28.6872	1	12	47	44.417	67	25	26.69	4		9113	6243	F7	4358
	5	8	5	51	34.6994	1								2.8268230	7901			5257
	5	8	5	52	4.6987	1								2.7149170	7901			5258
	5	8	5	53	4.6973	1								2.5072910	7901			5259
	5	8	5	53	34.6967	1								2.4131700	7901			5260
	5	8	5	54	4.6961	1								2.3267170	7901			5261
	5	8	5	54	34.6956	1								2.2489200	7901			5262
	5	8	5	55	4.6951	1								2.1807930	7901			5263
	5	8	5	55	34.6948	1								2.1233900	7901			5264
	5	8	5	56	4.6945	1								2.0776830	7901			5265
	5	8	5	56	34.6942	1								2.0445520	7901			5266
	5	8	5	58	4.6874	1	15	46	56.201	12	13	57.43	4		9113	6244	F1	4241
	5	8	5	58	8.6874	1	15	47	44.538	11	42	57.79	4		9113	6244	F2	5088
	5	8	5	58	16.6875	1	15	49	19.365	10	41	30.87	4		9113	6244	F4	4243

May 8-13, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME	NO.	OBS.NO.
1966	5	8	5	58	20.6875	1	15	50	6.362	10	11	7.35	4		9113	6244	F5	4758
	5	8	5	58	28.6876	1	15	51	39.325	9	10	56.66	4		9113	6244	F7	4245
	5	8	17	52	11.2592	1	15	39	21.627	78	45	46.80	4		9008	3680	02	2078
	5	8	23	55	28.2483	1	9	44	57.792	35	24	35.14	4		9004	6325	04	3878
	5	9	5	58	12.6888	1	13	46	43.085	45	15	27.41	4		9113	6279	F3	4359
	5	9	5	58	16.6888	1	13	48	52.659	44	40	44.32	4		9113	6279	F4	3143
	5	9	5	58	20.6887	1	13	51	.097	44	5	45.83	4		9113	6279	F5	3144
	5	9	5	58	28.6887	1	13	55	8.699	42	55	17.23	4		9113	6279	F7	4360
	5	9	5	59	34.6979	1								2.2019210	7901			5267
	5	9	6	0	4.6974	1								2.1482770	7901			5268
	5	9	6	0	34.6972	1								2.1064940	7901			5269
	5	9	7	57	4.6948	1	9	30	44.044	28	57	36.38	4		9113	6296	F1	4759
	5	9	7	57	8.6947	1	9	32	5.610	28	47	41.09	4		9113	6296	F2	4511
	5	9	7	57	12.6947	1	9	33	27.289	28	37	27.82	4		9113	6296	F3	4760
	5	9	7	57	16.6946	1	9	34	48.826	28	27	13.91	4		9113	6296	F4	4761
	5	9	7	57	20.6946	1	9	36	10.736	28	16	46.10	4		9113	6296	F5	4762
	5	9	7	57	24.6945	1	9	37	32.044	28	6	15.85	4		9113	6296	F6	4763
	5	9	7	57	28.6945	1	9	38	54.112	27	55	32.24	4		9113	6296	F7	4764
	5	9	8	4	4.6923	1	11	48	49.247	- 1	42	12.28	4		9113	6297	F1	4515
	5	9	8	4	8.6923	1	11	50	1.393	- 2	5	33.86	4		9113	6297	F2	4516
	5	9	8	4	12.6923	1	11	51	12.752	- 2	28	57.74	4		9113	6297	F3	4517
	5	9	8	4	16.6923	1	11	52	24.262	- 2	52	22.64	4		9113	6297	F4	4518
	5	9	8	4	20.6923	1	11	53	35.681	- 3	15	54.10	4		9113	6297	F5	4519
	5	9	8	4	28.6923	1	11	55	57.865	- 4	2	51.97	4		9113	6297	F7	4520
	5	9	17	56	36.7985	1	13	59	9.114	78	9	16.80	4		9008	3689	03	2079
	5	9	20	0	25.1124	1	9	47	12.478	38	31	5.85	4		9008	3696	05	2080
	5	10	0	0	14.4229	1	9	55	10.530	28	38	12.85	4		9004	6358	02	3879
	5	10	6	3	57.0891	1	13	46	19.088	27	21	56.51	4		9113	6342	06	2328
	5	10	8	0	52.5626	1	15	5	50.574	79	5	1.98	4		9012	5379	06	3876
	5	10	18	0	29.1925	1	11	37	5.016	77	22	48.36	4		9008	3718	02	2081
	5	10	20	4	50.1244	1	9	47	21.705	32	19	28.19	4		9008	3726	03	2082
	5	11	0	5	24.3575	1	10	11	14.468	20	29	7.59	4		9004	6386	07	4749
	5	11	4	3	4.7074	1								2.5967760	7901			5270
	5	11	4	4	4.7050	1								2.5584400	7901			5271
	5	11	4	4	34.7044	1								2.5541260	7901			5272
	5	11	4	6	34.7056	1								2.6369280	7901			5274
	5	11	4	7	4.7084	1								2.6816830	7901			5275
	5	11	4	7	34.7082	1								2.7353500	7901			5276
	5	11	4	8	34.7070	1								2.8673680	7901			5277
	5	11	6	6	4.6940	1	11	59	19.458	39	12	40.02	4		9113	6398	F1	4521
	5	11	6	6	8.6940	1	12	1	46.335	38	44	28.29	4		9113	6398	F2	4522
	5	11	6	6	12.6939	1	12	4	11.682	38	15	57.89	4		9113	6398	F3	4523
	5	11	6	6	16.6939	1	12	6	36.021	37	47	7.12	4		9113	6398	F4	4524
	5	11	6	6	20.6939	1	12	8	58.792	37	17	55.84	4		9113	6398	F5	4525
	5	11	6	6	24.6939	1	12	11	20.312	36	48	26.00	4		9113	6398	F6	4526
	5	11	6	6	28.6939	1	12	13	40.733	36	18	36.54	4		9113	6398	F7	4527
	5	11	6	7	34.7054	1								2.5435550	7901			5278
	5	11	12	3	10.9051	1	11	48	45.122	66	19	26.28	4		9005	6597	06	4014
	5	11	14	6	42.7710	1	9	48	29.892	25	55	2.85	4		9005	6601	02	3149
	5	11	18	4	53.5311	1	10	44	47.390	71	59	2.50	4		9008	3753	03	2083
	5	11	20	9	14.0932	1	9	46	55.161	26	39	48.87	4		9008	3761	06	2084
	5	12	4	3	34.7110	1								2.9699190	7901			5279
	5	12	4	5	4.7100	1								2.7098650	7901			5281
	5	12	4	6	4.7090	1								2.5704140	7901			5282
	5	12	4	7	4.7084	1								2.4644020	7901			5284
	5	12	4	9	4.7059	1								2.3717330	7901			5286
	5	12	4	9	34.7095	1								2.3757020	7901			5287
	5	12	4	10	4.7076	1								2.3907570	7901			5288
	5	12	4	11	4.7083	1								2.4533670	7901			5289
	5	12	4	12	4.7083	1								2.5566680	7901			5290
	5	12	6	10	4.6970	1	11	19	41.646	34	9	34.83	4		9113	6462	F1	3146
	5	12	6	10	8.6970	1	11	21	56.733	33	44	.81	4		9113	6462	F2	3147
	5	12	6	10	12.6969	1	11	24	11.005	33	18	12.74	4		9113	6462	F3	3148
	5	12	6	10	16.6969	1	11	26	24.223	32	52	5.94	4		9113	6462	F4	3149
	5	12	6	10	20.6969	1	11	28	36.879	32	25	40.61	4		9113	6462	F5	3150
	5	12	6	10	24.6969	1	11	30	48.871	31	58	59.78	4		9113	6462	F6	3151
	5	12	6	10	28.6969	1	11	33	.129	31	31	57.71	4		9113	6462	F7	3152
	5	12	6	10	34.7132	1								2.9289940	7901			5291
	5	12	6	11	4.7091	1								2.8538850	7901			5292
	5	12	6	12	4.7094	1								2.7274200	7901			5293
	5	12	6	12	34.7096	1								2.6773420	7901			5294
	5	12	6	13	34.7084	1								2.6064880	7901			5295
	5	12	6	14	4.7085	1								2.5865980	7901			5296
	5	12	16	9	25.0403	1	11	46	10.540	67	42	59.93	4		9006	5587	07	3175
	5	12	16	10	10.0779	1	16	28	6.309	35	57	29.42	4		9008	3776	07	2085
	5	13	0	13	56.5577	1	10	2	41.940	12	29	23.26	4		9004	6432	03	3881
	5	13	4	8	34.7141	1								2.7701500	7901			5297
	5	13	4	9	4.7116	1								2.6772650	7901			5298
	5	13	4	9	34.7109	1								2.5907370	7901			5299
	5	13	4	10	4.7099	1								2.5113480	7901			5300

May 13-19, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	5	13	4	10	34.7089	1								2.4398800	7901			5301
	5	13	4	11	34.7098	1								2.3238930	7901			5302
	5	13	4	12	4.7092	1								2.2809060	7901			5303
	5	13	4	12	34.7096	1								2.2488460	7901			5304
	5	13	4	13	4.7106	1								2.2282560	7901			5305
	5	13	4	14	4.7096	1								2.2228680	7901			5306
	5	13	4	14	34.7077	1								2.2382750	7901			5307
	5	13	4	15	4.7074	1								2.2655560	7901			5308
	5	13	4	16	4.7109	1								2.3541140	7901			5309
	5	13	4	16	34.7086	1								2.4140550	7901			5310
	5	13	4	17	4.7116	1								2.4839190	7901			5311
	5	13	4	18	4.7125	1								2.6491210	7901			5312
	5	13	6	11	4.5722	1	17	1	17.776	56	33	51.09	4		9012	5422	05	3877
	5	13	16	12	38.1711	1	9	53	14.432	64	58	32.54	4		9006	5604	04	3176
	5	13	16	13	59.7931	1	16	12	44.776	38	49	6.99	4		9008	3812	08	2086
	5	13	18	13	40.2493	1	9	53	25.671	58	20	41.98	4		9008	3821	04	2087
	5	13	18	18	12.5767	1	9	57	21.724	16	50	14.81	4		9006	5611	06	3177
	5	14	4	12	34.7155	1								2.7914540	7901			5313
	5	14	4	13	34.7134	1								2.5917160	7901			5314
	5	14	4	14	4.7144	1								2.5011550	7901			5315
	5	14	4	14	34.7127	1								2.4178910	7901			5316
	5	14	4	16	34.7119	1								2.1753470	7901			5317
	5	14	4	17	4.7100	1								2.1416420	7901			5318
	5	14	4	17	34.7130	1								2.1201420	7901			5319
	5	14	4	18	4.7094	1								2.1113100	7901			5320
	5	14	4	19	2.5833	1	15	16	44.525	15	38	53.13	4		9'13	6580	08	3570
	5	14	4	21	4.7143	1								2.3208450	7901			5321
	5	14	14	22	3.4209	1	16	14	17.061	12	17	54.33	4		9006	5629	06	4018
	5	14	16	17	25.2418	1	9	55	13.444	56	45	21.10	4		9006	5639	04	3179
	5	14	18	18	6.8427	1	9	41	52.732	50	40	.40	4		9008	3856	02	2088
	5	14	18	24	26.2902	1	10	21	20.047	4	13	16.52	4		9006	5645	04	3180
	5	15	4	16	4.7210	1								2.9693240	7901			5323
	5	15	4	16	34.7193	1								2.8553400	7901			5324
	5	15	4	17	4.7195	1								2.7457950	7901			5325
	5	15	4	17	34.7187	1								2.6413510	7901			5326
	5	15	4	18	4.7171	1								2.5427240	7901			5327
	5	15	4	20	4.7136	1								2.2233540	7901			5328
	5	15	4	20	34.7148	1								2.1669470	7901			5329
	5	15	4	26	34.7143	1								2.4526110	7901			5330
	5	15	6	26	4.7065	1	11	30	16.191	- 3	49	21.31	4		9113	6681	F1	3153
	5	15	6	26	8.7065	1	11	31	34.255	- 4	15	16.28	4		9113	6681	F2	3154
	5	15	6	26	12.7065	1	11	32	52.057	- 4	41	6.92	4		9113	6681	F3	3155
	5	15	6	26	16.7065	1	11	34	9.563	- 5	7	1.37	4		9113	6681	F4	3156
	5	15	6	26	20.7066	1	11	35	26.726	- 5	32	46.15	4		9113	6681	F5	3157
	5	15	6	26	24.7066	1	11	36	43.904	- 5	58	39.97	4		9113	6681	F6	3158
	5	15	6	26	28.7066	1	11	38	.515	- 6	24	26.25	4		9113	6681	F7	3159
	5	15	16	19	40.2099	1	15	15	24.224	60	52	1.74	4		9008	3874	04	2982
	5	15	16	22	45.2982	1	10	15	40.436	45	23	49.08	4		9006	5671	10	3181
	5	15	18	22	51.0957	1	9	42	51.890	41	50	15.37	4		9008	3883	06	2090
	5	15	22	22	2.1260	1	9	24	50.118	32	20	39.11	4		9004	6527	02	3882
	5	16	14	27	12.7188	1	15	26	21.353	30	16	23.99	4		9006	5692	03	4440
	5	16	16	27	15.2248	1	10	1	51.928	36	57	57.23	4		9006	5702	06	3182
	5	16	20	29	21.9186	1	14	36	37.405	9	33	30.55	4		9004	6553	03	3883
	5	16	22	27	17.8709	1	9	41	34.407	22	23	52.98	4		9004	6562	03	3884
	5	17	4	28	4.7092	1	12	26	36.153	37	31	40.91	4		9113	6805	F1	2843
	5	17	4	28	8.7092	1	12	28	36.123	36	57	2.23	4		9113	6805	F2	2844
	5	17	4	28	16.7092	1	12	32	30.263	35	47	24.13	4		9113	6805	F4	2845
	5	17	4	28	20.7092	1	12	34	25.114	35	12	24.10	4		9113	6805	F5	2846
	5	17	4	28	24.7092	1	12	36	18.342	34	37	12.15	4		9113	6805	F6	3704
	5	17	4	28	28.7092	1	12	38	10.098	34	1	57.93	4		9113	6805	F7	2848
	5	17	12	29	51.7694	1	9	51	27.210	22	51	19.22	4		9005	6728	04	4015
	5	17	18	32	18.4597	1	9	41	6.995	24	32	24.96	4		9008	3950	07	2091
	5	17	22	32	52.2878	1	9	59	37.779	10	59	51.72	4		9004	6542	06	4886
	5	18	4	32	34.7244	1								2.5335690	7901			5331
	5	18	4	33	34.7220	1								2.4208440	7901			5332
	5	18	4	34	34.7215	1								2.3497490	7901			5333
	5	18	4	36	4.7213	1								2.3299940	7901			5334
	5	18	4	36	34.7230	1								2.3473790	7901			5335
	5	18	12	34	27.4761	1	9	46	38.150	15	55	3.70	4		9005	6757	06	3170
	5	18	18	36	45.2567	1	9	33	49.234	18	10	38.67	4		9006	3984	02	2092
	5	18	22	37	35.7596	1	9	57	6.144	4	43	21.43	4		9004	6622	04	4277
	5	19	6	40	4.7213	1	9	46	16.781	0	21	42.07	4		9113	6978	F1	2849
	5	19	6	40	8.7213	1	9	47	12.771	0	4	6.12	4		9113	6978	F2	2850
	5	19	6	40	12.7213	1	9	48	8.414	- 0	13	28.19	4		9113	6978	F3	2851
	5	19	6	40	16.7213	3	9	49	3.755	- 0	31	7.82	4		9113	6978	F4	5516
	5	19	6	40	20.7213	1	9	49	59.412	- 0	48	49.68	4		9113	6978	F5	2852
	5	19	6	40	24.7213	1	9	50	54.861	- 1	6	36.80	4		9113	6978	F6	2853
	5	19	6	40	28.7213	1	9	51	49.773	- 1	24	23.46	4		9113	6978	F7	2854
	5	19	12	39	2.7252	1	9	42	2.117	9	49	13.60	4		9005	6783	04	3171
	5	19	14	37	31.1529	1	13	6	1.308	47	13	12.67	4		9006	5785	06	4278

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	5	20	14	41	18.6155	1	12	0	37.109	47	37	15.60	4		9006	5813	07	4279
	5	22	2	49	34.7312	1								2.2030980	7901			5336
	5	22	2	50	34.7313	1								2.3215590	7901			5337
	5	22	2	51	34.7348	1								2.4791630	7901			5338
	5	22	2	52	34.7368	1								2.6690920	7901			5339
	5	22	4	54	4.7255	1	11	26	3.283	-20	12	44.74	4		9113	7095	F1	2855
	5	22	4	54	8.7255	1	11	27	11.610	-20	35	41.53	4		9113	7095	F2	3705
	5	22	4	54	12.7255	1	11	28	19.683	-20	58	32.00	4		9113	7095	F3	2857
	5	22	4	54	16.7256	1	11	29	27.328	-21	21	15.85	4		9113	7095	F4	2858
	5	22	4	54	20.7256	1	11	30	34.931	-21	43	50.25	4		9113	7095	F5	2859
	5	22	4	54	24.7256	1	11	31	42.293	-22	6	18.64	4		9113	7095	F6	2860
	5	22	4	54	28.7257	1	11	32	49.385	-22	28	41.74	4		9113	7095	F7	2861
	5	22	14	50	16.5868	1	10	45	25.835	32	22	55.83	4		9006	5869	03	4280
	5	23	0	57	20.6036	1	12	14	45.489	35	0	30.15	4		9009	5909	44	7675
	5	23	1	0	20.6061	1	13	23	54.329	4	41	48.70	4		9009	5909	41	7676
	5	23	9	42	15.3868	1	5	3	36.301	-61	28	52.91	4		9011	7642	04	3866
	5	23	14	54	50.0390	1	10	19	18.950	23	26	27.02	4		9006	5891	07	4281
	5	24	2	58	34.7388	1								2.2915950	7901			5340
	5	24	3	0	4.7403	1								2.4969000	7901			5341
	5	24	9	47	27.9130	1	4	9	57.781	-56	26	1.53	4		9011	7674	04	3869
	5	24	14	58	32.8910	1	9	37	16.326	20	54	26.25	4		9006	5908	03	4672
	5	25	3	50	25.8736	1	5	41	48.770	-71	21	20.97	4		9002	3012	04	4282
	5	25	9	51	56.6446	1	5	41	17.125	-57	3	51.87	4		9011	7709	05	3870
	5	25	15	3	15.6517	1	9	25	40.167	12	9	48.12	4		9006	5941	05	4673
	5	25	19	52	15.0596	1	4	12	34.727	-57	10	9.88	4		9023	5457	05	3871
	5	26	15	7	24.2108	1	9	5	.489	8	2	39.39	4		9006	5965	08	4674
	5	26	19	56	37.9502	1	3	52	15.550	-58	59	5.85	4		9023	5487	04	3872
	5	27	1	21	32.6134	1	12	11	31.037	26	14	21.26	4		9007	4422	11	6381
	5	27	17	24	.6071	1	14	39	17.737	33	31	37.21	4		9002	3085	04	4283
	5	31	9	40	44.5926	1	14	23	45.649	24	24	48.61	4		9023	5615	07	3873
	6	1	2	18	34.8822	1	2	49	4.417	-48	22	46.79	4		9002	3230	07	8342
	6	1	18	18	39.5196	1	2	44	26.343	-48	25	44.59	4		9023	5661	04	8872
	6	10	18	28	44.2711	1	7	23	39.268	-45	15	47.45	4		9002	3409	06	8818
	6	11	0	25	13.3336	1	7	26	25.968	-37	21	29.85	4		9007	4865	05	8347
	6	13	3	12	35.8649	1	18	56	39.430	25	44	17.53	4		9002	3461	04	8343
	6	15	13	30	10.5027	1	0	59	11.888	-10	52	13.12	4		9012	6200	05	8354
	6	16	8	51	52.8891	1	17	35	36.056	-79	48	23.95	4		9023	5950	04	8823
	6	17	16	53	41.1459	1	6	31	15.322	-42	45	47.84	4		9002	3537	02	8344
	6	19	23	4	40.0224	1	6	13	11.315	-47	14	23.75	4		9011	8148	03	8356
	6	19	23	52	15.7428	1	0	19	28.292	13	45	55.74	4		9008	5003	03	8348
	6	20	23	56	9.7872	1	23	42	43.199	17	36	12.51	4		9008	5034	07	9069
	6	22	10	5	12.8083	1	1	43	58.019	20	12	9.57	4		9113	8997	F3	5417
	6	22	10	5	4.8082	1	1	41	18.587	19	42	24.21	4		9113	8997	F1	5415
	6	22	10	5	24.8084	1	1	47	56.923	20	55	35.53	4		9113	8997	F6	5964
	6	22	10	5	16.8083	3	1	45	17.931	20	26	51.04	4		9113	8997	F4	5352
	6	22	10	5	8.8083	1	1	42	38.756	19	57	23.10	4		9113	8997	F2	5963
	6	22	10	5	28.8085	1	1	49	16.663	21	9	47.05	4		9113	8997	F7	5418
	6	23	0	5	18.4338	1	22	49	35.991	39	20	44.95	4		9008	5093	04	8349
	6	23	10	1	56.7347	1	23	2	14.143	-19	10	25.43	4		9113	9067	04	8193
	6	24	10	9	11.1252	1	23	47	47.988	5	15	13.49	4		9113	9137	06	8194
	6	25	0	14	12.7454	1	21	12	13.608	55	24	27.28	4		9008	5155	05	8350
	6	25	10	14	44.3824	1	0	6	36.555	19	55	52.78	4		9113	9204	03	8195
	6	26	0	18	34.9119	1	20	9	23.621	59	3	44.09	4		9008	5197	03	8351
	6	26	2	16	19.0993	1	23	57	1.677	8	35	34.09	4		9004	7512	02	8345
	6	26	10	12	32.7521	1	20	49	41.719	-25	59	4.52	4		9113	9269	14	8196
	6	26	10	22	.4048	1	1	34	48.557	40	48	49.80	4		9113	9271	03	8197
	6	27	0	23	4.0549	1	19	12	5.681	61	32	27.91	4		9008	5236	06	8352
	6	27	2	21	15.2396	1	0	2	32.368	18	7	13.01	4		9004	7541	01	8819
	6	27	10	22	7.1516	1	22	42	6.486	25	19	8.07	4		9113	9344	04	8198
	6	28	2	25	55.7607	1	0	2	38.754	26	58	12.14	4		9004	7569	06	8820
	6	28	10	28	16.2674	1	23	34	7.491	47	32	18.86	4		9113	9417	05	8199
	6	28	12	25	37.1507	1	0	8	31.491	55	50	54.84	4		9012	6484	01	8355
	6	30	0	32	26.5773	1	17	21	18.808	30	16	30.63	4		9008	5349	01	8353
	6	30	8	34	5.7817	1	0	27	58.691	20	39	38.17	4		9113	9536	03	8879
	7	1	8	34	7.1876	1	22	41	44.959	0	59	46.16	4		9113	9607	04	8697
	7	1	10	33	49.6870	1	23	53	20.658	23	15	20.31	4		9012	6525	02	8260
	7	2	8	39	34.8361	1								1.7213030	7901			5343
	7	2	8	40	4.8361	1								1.7619800	7901			5344
	7	2	8	40	34.8382	1								1.8197040	7901			5345
	7	4	2	51	32.2737	1	20	21	1.455	68	27	56.35	4		9004	7754	01	1218
	7	4	8	48	8.8484	1	22	17	55.694	29	20	4.72	4		9113	9813	04	8698
	7	4	10	53	32.2377	1	17	29	32.565	65	33	56.07	4		9113	9831	04	8082
	7	4	10	59	8.8388	1	6	1	5.223	73	35	45.33	4		9113	9832	F2	6013
	7	4	10	59	12.8389	1	6	1	10.780	73	14	18.34	4		9113	9832	F3	7218
	7	4	10	59	16.8389	1	6	1	16.615	72	52	56.06	4		9113	9832	F4	6015
	7	4	10	59	20.8390	3	6	1	23.807	72	31	43.03	4		9113	9832	F5	6353
	7	4	10	59	24.8390	1	6	1	30.332	72	10	43.24	4		9113	9832	F6	6016
	7	4	10	59	28.8391	1	6	1	37.013	71	49	52.17	4		9113	9832	F7	7219
	7	5	2	55	41.2772	1	18	57	50.633	68	58	24.92	4		9004	7792	03	1219
	7	5	8	51	34.8448	1								1.8427090	7901			5346

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.	OBS.NO.
1966	7	5	8	52	4.8437	1								1.8415190	7901		5347
	7	5	8	53	4.8459	1								1.8902310	7901		5348
	7	5	8	53	34.8451	1								1.9385970	7901		5349
	7	5	8	54	4.8447	1								2.0013860	7901		5350
	7	5	8	54	34.8478	1								2.0771550	7901		5351
	7	5	8	55	4.8478	1								2.1643960	7901		5352
	7	5	8	55	34.8461	1								2.2616440	7901		5353
	7	5	8	56	4.8465	1								2.3675310	7901		5354
	7	6	3	0	20.6533	1	17	58	39.314	72	4	25.55	4		9004	7830 06	1220
	7	6	12	57	42.5818	1	15	36	15.035	54	35	37.76	4		9012	6624 03	8261
	7	7	8	57	12.8347	1	18	14	22.233	10	41	57.55	4		9113	21 06	8083
	7	7	11	7	5.7933	1	15	53	17.144	64	58	54.12	4		9113	38 06	8084
	7	9	5	6	56.7213	1	23	27	30.000	50	59	44.98	4		9010	3785 02	1023
	7	9	7	7	4.8545	1								2.0085080	7901		5355
	7	9	7	7	34.8563	1								2.1138720	7901		5356
	7	9	7	8	4.8562	1								2.2285620	7901		5357
	7	10	2	52	12.8469	1	18	1	42.572	11	57	20.74	4		9007	5666 F3	5856
	7	10	2	52	4.8468	1	17	57	22.867	10	2	47.89	4		9007	5666 F1	5854
	7	10	2	52	24.8470	1	18	8	1.625	14	41	21.12	4		9007	5666 F6	6498
	7	10	2	52	16.8469	1	18	3	50.260	12	53	2.66	4		9007	5666 F4	5857
	7	10	2	52	8.8469	1	17	59	33.497	11	0	35.22	4		9007	5666 F2	5855
	7	10	2	52	28.8471	1	18	10	5.450	15	33	56.03	4		9007	5666 F7	5860
	7	10	2	48	20.8472	1	15	0	53.759	-48	28	35.33	4		9007	5666 F5	5851
	7	10	2	48	12.8473	1	14	52	21.790	-49	44	14.75	4		9007	5666 F3	5849
	7	10	2	48	24.8472	1	15	5	6.907	-47	48	44.53	4		9007	5666 F6	5852
	7	10	2	48	4.8474	1	14	43	43.541	-50	54	44.71	4		9007	5666 F1	5847
	7	10	2	48	16.8473	1	14	56	38.650	-49	7	5.84	4		9007	5666 F4	5850
	7	10	2	48	28.8471	1	15	9	18.262	-47	7	36.22	4		9007	5666 F7	5853
	7	10	2	48	8.8474	1	14	48	3.477	-50	20	8.74	4		9007	5666 F2	5848
	7	10	2	52	20.8470	1	18	5	56.610	13	47	43.23	4		9007	5666 F5	5858
	7	10	3	3	4.8506	1	21	56	30.319	29	23	7.43	4		9009	6918 F1	6954
	7	10	3	3	24.8509	1	22	3	53.413	31	19	11.02	4		9009	6918 F6	5166
	7	10	3	3	16.8508	1	22	0	56.245	30	33	53.66	4		9009	6918 F4	6955
	7	10	3	3	8.8507	1	21	57	59.066	29	47	9.05	4		9009	6918 F2	5163
	7	10	3	3	28.8510	1	22	5	21.926	31	41	16.63	4		9009	6918 F7	5167
	7	10	3	3	20.8509	1	22	2	24.864	30	56	44.66	4		9009	6918 F5	5165
	7	10	3	3	12.8507	1	21	59	7.955	30	10	40.95	4		9009	6918 F3	5164
	7	10	5	1	20.8503	1	17	5	58.570	-27	28	29.66	4		9010	3788 F5	110
	7	10	5	1	12.8504	1	17	3	24.112	-28	21	13.33	4		9010	3788 F3	108
	7	10	5	1	24.8502	1	17	7	16.384	-27	1	30.62	4		9010	3788 F6	111
	7	10	5	1	4.8505	1	17	0	50.855	-29	12	28.64	4		9010	3788 F1	106
	7	10	5	1	16.8503	1	17	4	41.254	-27	55	.56	4		9010	3788 F4	109
	7	10	5	1	28.8501	1	17	8	34.701	-26	34	10.70	4		9010	3788 F7	112
	7	10	5	1	8.8504	1	17	2	7.392	-28	47	1.08	4		9010	3788 F2	508
	7	10	5	4	20.8481	1	18	13	44.031	0	12	45.58	4		9010	3788 F5	116
	7	10	5	4	20.8508	1	15	28	29.988	38	58	56.93	4		9009	6922 F5	9590
	7	10	5	4	12.8482	1	18	10	10.211	- 1	21	53.96	4		9010	3788 F3	115
	7	10	5	4	12.8508	1	15	27	30.184	37	43	11.15	4		9009	6922 F3	9588
	7	10	5	4	24.8481	1	18	15	32.315	1	0	39.68	4		9010	3788 F6	510
	7	10	5	4	4.8482	1	18	6	40.695	- 2	54	47.70	4		9010	3788 F1	113
	7	10	5	4	4.8508	1	15	26	30.477	36	27	5.82	4		9009	6922 F1	9586
	7	10	5	4	24.8508	1	15	28	59.719	39	36	45.08	4		9009	6922 F6	9591
	7	10	5	4	16.8481	1	18	11	56.606	- 0	34	48.68	4		9010	3788 F4	509
	7	10	5	4	16.8508	1	15	28	.025	38	21	6.96	4		9009	6922 F4	9589
	7	10	5	4	28.8480	1	18	17	21.863	1	49	3.90	4		9010	3788 F7	118
	7	10	5	4	8.8482	1	18	8	24.914	- 2	8	34.28	4		9010	3788 F2	114
	7	10	5	4	8.8508	1	15	27	.277	37	5	8.31	4		9009	6922 F2	9587
	7	10	5	4	28.8509	1	15	29	29.499	40	14	26.99	4		9009	6922 F7	9592
	7	10	5	6	20.8478	1	19	17	3.292	25	44	27.10	4		9010	3788 F5	167
	7	10	5	6	20.8515	1	15	43	9.141	56	52	37.97	4		9009	6922 F5	9718
	7	10	5	6	12.8478	1	19	12	9.377	24	2	52.80	4		9010	3788 F3	165
	7	10	5	6	12.8514	1	15	42	10.926	55	45	57.90	4		9009	6922 F3	9716
	7	10	5	6	4.8478	1	19	7	21.868	22	20	15.32	4		9010	3788 F1	163
	7	10	5	6	24.8478	1	19	19	32.941	26	34	45.39	4		9010	3788 F6	511
	7	10	5	6	4.8513	1	15	41	12.896	54	38	25.96	4		9009	6922 F1	9714
	7	10	5	6	24.8515	1	15	43	38.186	57	25	42.05	4		9009	6922 F6	9719
	7	10	5	6	16.8478	1	19	14	35.452	24	53	48.33	4		9010	3788 F4	166
	7	10	5	6	16.8514	1	15	42	40.180	56	19	23.22	4		9009	6922 F4	9717
	7	10	5	6	8.8478	1	19	9	44.779	23	11	39.52	4		9010	3788 F2	164
	7	10	5	6	28.8478	1	19	22	4.166	27	24	41.94	4		9010	3788 F7	512
	7	10	5	6	8.8514	1	15	41	41.865	55	12	17.06	4		9009	6922 F2	9715
	7	10	5	6	28.8515	1	15	44	7.413	57	58	32.10	4		9009	6922 F7	9720
	7	10	5	8	20.8486	1	20	44	51.111	46	52	45.30	4		9010	3788 F5	172
	7	10	5	8	20.8526	1	15	58	16.811	71	50	49.20	4		9009	6922 F5	9725
	7	10	5	8	12.8485	1	20	38	9.910	45	47	25.97	4		9010	3788 F3	170
	7	10	5	8	12.8525	1	15	57	11.821	70	56	56.86	4		9009	6922 F3	9723
	7	10	5	8	4.8484	1	20	31	35.403	44	39	5.09	4		9010	3788 F1	168
	7	10	5	8	24.8486	1	20	48	14.221	47	24	16.98	4		9010	3788 F6	173
	7	10	5	8	4.8524	1	15	56	7.694	70	2	17.11	4		9009	6922 F1	9721
	7	10	5	8	24.8527	1	15	58	49.831	72	17	24.71	4		9009	6922 F6	9726

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.	OBS.NO.
1966	7	10	5	8	16.8485	1	20	41	29.812	46	20	30.43	4		9010	3788 F4	171
	7	10	5	8	16.8526	1	15	57	44.229	71	23	58.74	4		9009	6922 F4	9724
	7	10	5	8	8.8484	1	20	34	51.845	45	13	37.15	4		9010	3788 F2	169
	7	10	5	8	28.8486	1	20	51	38.953	47	54	59.82	4		9010	3788 F7	174
	7	10	5	8	8.8525	1	15	56	39.885	70	29	40.50	4		9009	6922 F2	9722
	7	10	5	8	28.8527	1	15	59	23.174	72	43	49.19	4		9009	6922 F7	9727
	7	10	5	11	20.8510	1	23	27	28.654	59	14	58.03	4		9010	3788 F5	173
	7	10	5	11	12.8509	1	23	20	34.710	59	5	57.24	4		9010	3788 F3	171
	7	10	5	11	4.8507	1	23	13	35.029	58	55	15.94	4		9010	3788 F1	119
	7	10	5	11	24.8511	1	23	30	53.081	59	18	54.15	4		9010	3788 F6	174
	7	10	5	11	16.8509	1	23	24	2.498	59	10	39.69	4		9010	3788 F4	122
	7	10	5	11	8.8509	1	23	17	9.601	59	0	49.97	4		9010	3788 F2	170
	7	10	5	11	28.8511	1	23	34	15.878	59	22	24.78	4		9010	3788 F7	125
	7	10	7	4	20.8501	1	17	32	22.726	-16	28	37.86	4		9001	1990 F5	2429
	7	10	7	4	12.8502	1	17	29	52.819	-17	28	25.92	4		9001	1990 F3	2427
	7	10	7	4	24.8500	1	17	33	38.624	-15	58	6.77	4		9001	1990 F6	2430
	7	10	7	4	4.8503	1	17	27	25.085	-18	26	45.69	4		9001	1990 F1	2424
	7	10	7	4	16.8501	1	17	31	7.539	-16	58	45.60	4		9001	1990 F4	2428
	7	10	7	4	28.8500	1	17	34	54.960	-15	27	13.85	4		9001	1990 F7	2431
	7	10	7	4	8.8502	1	17	28	38.635	-17	57	46.39	4		9001	1990 F2	2426
	7	10	7	8	20.8482	1	19	15	34.132	25	30	46.67	4		9001	1990 F5	2436
	7	10	7	8	12.8482	1	19	10	48.327	23	53	37.74	4		9001	1990 F3	2434
	7	10	7	8	4.8482	1	19	6	10.180	22	15	59.43	4		9001	1990 F1	2432
	7	10	7	8	24.8482	1	19	18	.011	26	19	7.22	4		9001	1990 F6	2437
	7	10	7	8	16.8482	1	19	13	10.395	24	42	18.30	4		9001	1990 F4	2435
	7	10	7	8	8.8482	1	19	8	28.407	23	4	55.16	4		9001	1990 F2	2433
	7	10	7	8	28.8482	1	19	20	27.906	27	7	18.07	4		9001	1990 F7	2438
	7	10	7	10	4.8551	1								1.7383430	7901		5358
	7	10	7	10	12.8486	1	20	37	28.682	45	30	2.24	4		9001	1990 F3	2793
	7	10	7	10	4.8486	1	20	30	37.255	44	19	30.96	4		9001	1990 F1	2791
	7	10	7	10	8.8486	1	20	34	2.189	44	55	9.63	4		9001	1990 F2	2792
	7	10	7	10	16.8487	1	20	40	57.809	46	4	14.87	4		9001	1990 F4	2794
	7	10	7	10	20.8487	1	20	44	29.249	46	37	38.69	4		9001	1990 F5	2795
	7	10	7	10	24.8487	1	20	48	2.776	47	10	21.30	4		9001	1990 F6	2796
	7	10	7	10	28.8488	1	20	51	38.567	47	42	15.56	4		9001	1990 F7	2797
	7	10	7	10	34.8556	1								1.8122200	7901		5359
	7	10	7	11	34.8581	1								2.0005410	7901		5360
	7	10	7	12	34.8602	1								2.2306400	7901		5361
	7	10	7	13	4.8506	1	23	26	12.829	58	50	55.58	4		9001	1990 F1	2758
	7	10	7	13	8.8507	1	23	30	3.468	58	55	21.21	4		9001	1990 F2	2759
	7	10	7	13	12.8508	1	23	33	52.242	58	59	15.80	4		9001	1990 F3	2760
	7	10	7	13	16.8508	1	23	37	39.011	59	2	44.98	4		9001	1990 F4	2761
	7	10	7	13	20.8509	3	23	41	23.926	59	5	44.14	4		9001	1990 F5	6242
	7	10	7	13	24.8509	1	23	45	7.064	59	8	15.85	4		9001	1990 F6	2762
	7	10	7	13	28.8510	1	23	48	47.836	59	10	25.65	4		9001	1990 F7	2763
	7	10	9	12	4.8531	1	15	52	15.361	33	58	24.35	4		9001	1996 F1	2164
	7	10	9	12	8.8530	1	15	52	12.740	34	28	1.01	4		9001	1996 F2	2165
	7	10	9	12	12.8530	1	15	52	9.885	34	57	44.47	4		9001	1996 F3	2166
	7	10	9	12	16.8530	1	15	52	6.630	35	27	36.43	4		9001	1996 F4	2167
	7	10	9	12	20.8530	1	15	52	2.900	35	57	30.54	4		9001	1996 F5	2168
	7	10	9	12	24.8530	1	15	51	58.697	36	27	29.92	4		9001	1996 F6	2169
	7	10	9	12	28.8529	1	15	51	53.800	36	57	38.99	4		9001	1996 F7	1405
	7	10	9	16	4.8527	1	15	26	34.095	64	52	18.04	4		9001	1996 F1	1406
	7	10	9	16	8.8527	1	15	25	19.140	65	22	11.35	4		9001	1996 F2	1407
	7	10	9	16	12.8527	1	15	24	1.124	65	51	56.94	4		9001	1996 F3	2170
	7	10	9	16	16.8527	1	15	22	38.348	66	21	37.54	4		9001	1996 F4	1409
	7	10	9	16	20.8527	1	15	21	12.720	66	51	3.93	4		9001	1996 F5	1410
	7	10	9	16	24.8528	1	15	19	42.864	67	20	24.55	4		9001	1996 F6	1411
	7	10	9	16	28.8528	1	15	18	8.737	67	49	36.27	4		9001	1996 F7	1412
	7	10	9	18	4.8524	3	2	59	3.185	80	51	13.17	4		9113	140 F1	3737
	7	10	9	18	4.8533	1	14	2	8.318	78	17	22.81	4		9001	1996 F1	2851
	7	10	9	18	8.8524	3	3	4	35.788	80	28	18.82	4		9113	140 F2	3738
	7	10	9	18	8.8533	1	13	56	12.238	78	38	49.53	4		9001	1996 F2	2852
	7	10	9	18	12.8533	1	13	49	52.703	78	59	34.91	4		9001	1996 F3	2853
	7	10	9	18	16.8533	1	13	43	11.707	79	19	41.50	4		9001	1996 F4	2854
	7	10	9	18	20.8534	1	13	36	5.331	79	39	7.25	4		9001	1996 F5	2855
	7	10	9	18	24.8534	1	13	28	35.197	79	57	43.26	4		9001	1996 F6	2856
	7	10	9	18	28.8534	1	13	20	36.399	80	15	33.36	4		9001	1996 F7	2857
	7	10	9	21	4.8548	1	7	19	52.502	77	23	14.76	4		9001	1996 F1	2858
	7	10	9	21	8.8549	1	7	16	7.850	77	5	14.74	4		9001	1996 F2	2859
	7	10	9	21	12.8549	1	7	12	35.097	76	47	8.59	4		9001	1996 F3	2860
	7	10	9	21	16.8550	1	7	9	14.024	76	28	59.26	4		9001	1996 F4	2861
	7	10	9	21	20.8550	1	7	6	3.330	76	10	40.14	4		9001	1996 F5	2862
	7	10	9	21	24.8550	1	7	3	2.735	75	52	26.05	4		9001	1996 F6	2863
	7	10	9	21	28.8551	1	7	0	11.188	75	33	59.78	4		9001	1996 F7	2864
	7	10	11	3	4.8527	1	15	17	25.957	- 2	36	23.35	4		9012	6728 F1	522
	7	10	11	3	8.8527	1	15	17	55.689	- 2	7	56.87	4		9012	6728 F2	523
	7	10	11	3	12.8526	1	15	18	25.225	- 1	39	8.50	4		9012	6728 F3	524
	7	10	11	3	16.8526	1	15	18	54.734	- 1	10	11.22	4		9012	6728 F4	139
	7	10	11	3	20.8525	1	15	19	24.350	- 0	40	56.97	4		9012	6728 F5	140

July 10-11, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.	OBS.NO.
1966	7	10	11	3	24.8525	1	15	19	53.660	- 0	11	27.69	4		9012	6728 F6	141
	7	10	11	3	28.8524	1	15	20	23.013	0	18	15.69	4		9012	6728 F7	142
	7	10	11	5	4.8516	1	15	31	43.880	13	25	4.73	4		9012	6728 F1	143
	7	10	11	5	8.8515	1	15	32	11.392	14	0	47.92	4		9012	6728 F2	144
	7	10	11	5	12.8515	1	15	32	38.859	14	36	46.00	4		9012	6728 F3	525
	7	10	11	5	16.8515	1	15	33	6.110	15	12	56.65	4		9012	6728 F4	146
	7	10	11	5	20.8514	1	15	33	33.592	15	49	17.41	4		9012	6728 F5	147
	7	10	11	5	24.8514	1	15	34	.766	16	25	53.72	4		9012	6728 F6	526
	7	10	11	5	28.8514	1	15	34	27.951	17	2	37.29	4		9012	6728 F7	527
	7	10	11	7	4.8510	1	15	45	3.178	32	33	10.20	4		9012	6728 F1	175
	7	10	11	7	8.8510	1	15	45	28.871	33	13	17.13	4		9012	6728 F2	176
	7	10	11	7	12.8510	1	15	45	54.798	33	53	25.19	4		9012	6728 F3	528
	7	10	11	7	16.8510	1	15	46	20.495	34	33	37.19	4		9012	6728 F4	178
	7	10	11	7	20.8510	1	15	46	46.400	35	13	48.85	4		9012	6728 F5	529
	7	10	11	7	24.8510	1	15	47	12.170	35	53	58.58	4		9012	6728 F6	557
	7	10	11	7	28.8510	1	15	47	37.761	36	34	17.76	4		9012	6728 F7	530
	7	10	11	11	4.8520	1	16	11	7.043	70	5	12.69	4		9012	6728 F1	531
	7	10	11	11	8.8521	1	16	11	35.834	70	37	3.66	4		9012	6728 F2	532
	7	10	11	11	12.8521	1	16	12	5.852	71	8	44.31	4		9012	6728 F3	180
	7	10	11	11	16.8521	1	16	12	35.682	71	40	3.04	4		9012	6728 F4	3241
	7	10	11	11	20.8522	1	16	13	6.193	72	11	12.99	4		9012	6728 F5	534
	7	10	11	11	24.8522	1	16	13	37.055	72	42	10.04	4		9012	6728 F6	535
	7	10	11	11	28.8523	1	16	14	8.126	73	12	51.35	4		9012	6728 F7	536
	7	10	12	47	4.8485	1	13	44	35.797	-19	30	41.54	4		9023	6287 F1	7473
	7	10	12	47	8.8485	1	13	47	53.269	-18	47	6.60	4		9023	6287 F2	6811
	7	10	12	47	12.8485	1	13	51	10.462	-18	2	55.38	4		9023	6287 F3	7474
	7	10	12	47	16.8484	1	13	54	26.657	-17	18	1.30	4		9023	6287 F4	6812
	7	10	12	47	20.8484	1	13	57	42.571	-16	32	28.15	4		9023	6287 F5	7475
	7	10	12	47	24.8484	1	14	0	57.849	-15	46	21.80	4		9023	6287 F6	7476
	7	10	12	47	28.8484	1	14	4	12.417	-14	59	37.20	4		9023	6287 F7	7477
	7	10	12	51	4.8497	1	16	30	6.446	25	44	40.79	4		9023	6287 F1	6815
	7	10	12	51	8.8497	1	16	32	12.800	26	17	15.10	4		9023	6287 F2	7478
	7	10	12	51	12.8498	1	16	34	17.650	26	49	23.62	4		9023	6287 F3	6817
	7	10	12	51	16.8499	1	16	36	21.593	27	20	54.39	4		9023	6287 F4	6818
	7	10	12	51	20.8499	1	16	38	24.173	27	51	25.04	4		9023	6287 F5	6819
	7	10	12	51	24.8500	1	16	40	25.779	28	22	24.12	4		9023	6287 F6	6820
	7	10	12	51	28.8500	1	16	42	26.439	28	52	24.76	4		9023	6287 F7	6821
	7	10	18	48	4.8491	1	19	22	.197	-42	21	58.92	4		9002	4175 F1	6591
	7	10	18	48	8.8491	1	19	22	35.154	-41	16	18.69	4		9002	4175 F2	6592
	7	10	18	48	12.8491	1	19	23	9.743	-40	10	45.05	4		9002	4175 F3	6593
	7	10	18	48	16.8491	1	19	23	43.766	-39	5	23.19	4		9002	4175 F4	6964
	7	10	18	48	20.8491	1	19	24	17.747	-38	0	9.36	4		9002	4175 F5	6594
	7	10	18	48	24.8491	1	19	24	51.362	-36	55	11.21	4		9002	4175 F6	6965
	7	10	18	48	28.8491	1	19	25	24.381	-35	50	26.73	4		9002	4175 F7	6596
	7	10	20	52	4.8516	1	13	57	47.869	5	31	52.16	4		9002	4178 F1	7469
	7	10	20	52	8.8516	1	13	59	36.411	6	8	45.99	4		9002	4178 F2	6967
	7	10	20	52	12.8516	1	14	1	24.826	6	45	39.47	4		9002	4178 F3	6597
	7	10	20	52	16.8516	1	14	3	13.147	7	22	38.79	4		9002	4178 F4	6598
	7	10	20	52	20.8516	1	14	5	1.181	7	59	44.85	4		9002	4178 F5	6599
	7	10	20	52	24.8516	1	14	6	49.095	8	36	46.56	4		9002	4178 F6	6600
	7	10	20	52	28.8516	1	14	8	36.859	9	13	52.74	4		9002	4178 F7	6601
	7	10	23	9	4.8527	1	20	54	50.784	- 5	13	.67	4		9004	7950 F1	5232
	7	10	23	9	8.8527	1	20	56	28.698	- 4	42	35.17	4		9004	7950 F2	5233
	7	10	23	9	12.8527	1	20	58	7.017	- 4	12	8.87	4		9004	7950 F3	5234
	7	10	23	9	16.8527	1	20	59	45.997	- 3	41	43.39	4		9004	7950 F4	5235
	7	10	23	9	20.8527	1	21	1	24.744	- 3	11	24.60	4		9004	7950 F5	6933
	7	10	23	9	24.8527	1	21	3	4.084	- 2	41	4.32	4		9004	7950 F6	6934
	7	10	23	9	28.8527	1	21	4	43.395	- 2	10	43.90	4		9004	7950 F7	5238
	7	10	23	13	4.8536	1	22	38	58.668	21	23	56.69	4		9004	7950 F1	5239
	7	10	23	13	8.8537	1	22	40	45.756	21	43	46.23	4		9004	7950 F2	5240
	7	10	23	13	12.8537	1	22	42	32.833	22	3	19.67	4		9004	7950 F3	5241
	7	10	23	13	16.8537	1	22	44	19.579	22	22	39.42	4		9004	7950 F4	5242
	7	10	23	13	20.8538	1	22	46	6.351	22	41	39.00	4		9004	7950 F5	6935
	7	10	23	13	24.8538	1	22	47	53.047	23	0	2[illegible].96	4		9004	7950 F6	6936
	7	10	23	13	28.8538	1	22	49	39.740	23	18	48.71	4		9004	7950 F7	6937
	7	11	2	53	4.8499	1	14	34	47.515	-30	35	40.03	4		9007	5701 F1	6173
	7	11	2	53	4.8529	1	14	38	36.683	20	23	12.11	4		9011	8637 F1	438
	7	11	2	53	8.8498	1	14	37	56.857	-29	47	59.44	4		9007	5701 F2	6174
	7	11	2	53	8.8529	1	14	40	26.345	20	55	17.86	4		9011	8637 F2	439
	7	11	2	53	12.8498	1	14	41	5.902	-28	59	19.74	4		9007	5701 F3	6175
	7	11	2	53	12.8529	1	14	42	15.724	21	27	21.96	4		9011	8637 F3	440
	7	11	2	53	16.8498	1	14	44	14.305	-28	9	33.75	4		9007	5701 F4	6176
	7	11	2	53	16.8529	1	14	44	4.785	21	59	5.18	4		9011	8637 F4	441
	7	11	2	53	20.8497	1	14	47	22.059	-27	18	48.65	4		9007	5701 F5	6177
	7	11	2	53	20.8530	1	14	45	53.204	22	30	33.53	4		9011	8637 F5	442
	7	11	2	53	24.8497	1	14	50	29.345	-26	27	.95	4		9007	5701 F6	6178
	7	11	2	53	24.8530	1	14	47	41.285	23	1	57.69	4		9011	8637 F6	443
	7	11	2	53	28.8496	1	14	53	35.734	-25	34	10.72	4		9007	5701 F7	6179
	7	11	2	53	28.8530	1	14	49	29.123	23	33	3.23	4		9011	8637 F7	444
	7	11	2	58	4.8512	1	17	49	8.892	36	30	31.85	4		9007	5701 F1	6180

July 11-12, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	7	11	2	58	8.8512	1	17	51	9.507	37	2	48.33	4		9007	5701	F2	6181
	7	11	2	58	12.8513	1	17	53	9.677	37	34	26.12	4		9007	5701	F3	6182
	7	11	2	58	16.8514	1	17	55	9.101	38	5	20.79	4		9007	5701	F4	6183
	7	11	2	58	20.8514	1	17	57	7.916	38	35	40.80	4		9007	5701	F5	6184
	7	11	2	58	24.8515	1	17	59	6.135	39	5	25.06	4		9007	5701	F6	6185
	7	11	2	58	28.8516	1	18	1	3.667	39	34	36.62	4		9007	5701	F7	6186
	7	11	9	17	4.8564	1	15	36	45.458	39	11	49.67	4		9001	2003	F1	1413
	7	11	9	17	8.8564	1	15	36	33.341	39	39	44.25	4		9001	2003	F2	1414
	7	11	9	17	12.8563	1	15	36	20.435	40	7	46.82	4		9001	2003	F3	1415
	7	11	9	17	16.8563	1	15	36	7.148	40	35	48.96	4		9001	2003	F4	1416
	7	11	9	17	20.8563	1	15	35	53.147	41	3	59.52	4		9001	2003	F5	1417
	7	11	9	17	24.8563	1	15	35	38.269	41	32	9.66	4		9001	2003	F6	1418
	7	11	9	17	28.8563	1	15	35	23.308	42	0	25.41	4		9001	2003	F7	1419
	7	11	9	19	4.8560	1	15	25	9.045	53	28	59.75	4		9001	2003	F1	1420
	7	11	9	19	8.8560	1	15	24	30.182	53	57	48.80	4		9001	2003	F2	1421
	7	11	9	19	12.8560	1	15	23	49.993	54	26	34.92	4		9001	2003	F3	1422
	7	11	9	19	16.8560	1	15	23	7.870	54	55	18.92	4		9001	2003	F4	2171
	7	11	9	19	20.8560	1	15	22	24.347	55	24	2.13	4		9001	2003	F5	1424
	7	11	9	19	24.8560	1	15	21	39.209	55	52	42.82	4		9001	2003	F6	2172
	7	11	9	19	28.8560	1	15	20	52.499	56	21	21.84	4		9001	2003	F7	1426
	7	11	9	21	4.8561	1	14	50	18.120	67	26	33.90	4		9001	2003	F1	1427
	7	11	9	21	8.8561	1	14	48	18.842	67	52	45.73	4		9001	2003	F2	1428
	7	11	9	21	12.8562	1	14	46	13.965	68	18	42.99	4		9001	2003	F3	1429
	7	11	9	21	16.8562	1	14	44	5.015	68	44	35.84	4		9001	2003	F4	1430
	7	11	9	21	20.8562	1	14	41	49.484	69	10	10.30	4		9001	2003	F5	1431
	7	11	9	21	24.8562	1	14	39	28.323	69	35	35.44	4		9001	2003	F6	2173
	7	11	9	21	28.8562	1	14	37	1.072	70	0	47.18	4		9001	2003	F7	1433
	7	11	9	23	4.8567	1	12	50	16.862	78	20	5.57	4		9001	2003	F1	1434
	7	11	9	23	8.8567	1	12	43	1.393	78	34	3.88	4		9001	2003	F2	1435
	7	11	9	23	12.8567	1	12	35	28.843	78	47	19.08	4		9001	2003	F3	1436
	7	11	9	23	16.8568	1	12	27	40.630	78	59	40.16	4		9001	2003	F4	1437
	7	11	9	23	20.8568	1	12	19	36.337	79	11	8.01	4		9001	2003	F5	1438
	7	11	9	23	24.8568	1	12	11	16.407	79	21	39.97	4		9001	2003	F6	1439
	7	11	9	23	28.8568	1	12	2	44.602	79	31	16.56	4		9001	2003	F7	1440
	7	11	9	25	4.8576	1	8	36	40.449	78	24	40.95	4		9001	2003	F1	1441
	7	11	9	25	8.8576	1	8	30	31.506	78	12	5.60	4		9001	2003	F2	1442
	7	11	9	25	12.8577	1	8	24	36.728	77	58	59.92	4		9001	2003	F3	2174
	7	11	9	25	16.8577	1	8	18	58.515	77	45	29.74	4		9001	2003	F4	1444
	7	11	9	25	20.8578	1	8	13	34.037	77	31	37.05	4		9001	2003	F5	2175
	7	11	9	25	24.8578	1	8	8	23.549	77	17	23.41	4		9001	2003	F6	1446
	7	11	9	25	28.8578	1	8	3	26.061	77	2	47.65	4		9001	2003	F7	1447
	7	11	18	49	4.8529	1	12	18	54.779	-79	36	12.73	4		9002	4209	F1	6318
	7	11	18	49	8.8528	1	12	34	22.753	-79	38	29.79	4		9002	4209	F2	6319
	7	11	18	49	12.8528	1	12	50	9.886	-79	38	3.63	4		9002	4209	F3	6320
	7	11	18	49	16.8527	1	13	6	9.557	-79	34	46.78	4		9002	4209	F4	6321
	7	11	18	49	20.8526	1	13	22	10.232	-79	28	30.37	4		9002	4209	F5	6322
	7	11	18	49	24.8526	1	13	38	7.713	-79	19	16.06	4		9002	4209	F6	6323
	7	11	18	49	28.8525	1	13	53	46.796	-79	6	50.47	4		9002	4209	F7	6324
	7	11	18	53	4.8512	1	18	34	23.317	-26	53	11.22	4		9002	4209	F1	6325
	7	11	18	53	8.8512	1	18	35	44.955	-25	42	40.55	4		9002	4209	F2	6326
	7	11	18	53	12.8512	1	18	37	5.252	-24	32	47.27	4		9002	4209	F3	6327
	7	11	18	53	16.8513	1	18	38	23.689	-23	23	33.72	4		9002	4209	F4	7470
	7	11	18	53	20.8513	1	18	39	40.579	-22	15	1.25	4		9002	4209	F5	6328
	7	11	18	53	24.8513	1	18	40	55.680	-21	7	13.80	4		9002	4209	F6	6329
	7	11	18	53	28.8514	1	18	42	9.627	-20	0	10.93	4		9002	4209	F7	6330
	7	11	23	17	4.8554	1	22	25	30.368	26	2	47.66	4		9004	7966	F1	7740
	7	11	23	17	8.8555	1	22	27	34.925	26	23	30.48	4		9004	7966	F2	7741
	7	11	23	17	12.8555	1	22	29	39.392	26	43	50.08	4		9004	7966	F3	7742
	7	11	23	17	16.8554	1	22	31	43.548	27	3	48.96	4		9004	7966	F4	7743
	7	11	23	17	20.8556	1	22	33	47.632	27	23	26.78	4		9004	7966	F5	7744
	7	11	23	17	24.8556	1	22	35	51.795	27	42	46.38	4		9004	7966	F6	7745
	7	11	23	17	28.8557	1	22	37	55.770	28	1	42.13	4		9004	7966	F7	7746
	7	12	0	48	4.8534	1	10	16	7.666	-72	24	2.96	4		9011	8664	F1	374
	7	12	0	48	8.8534	1	10	24	13.898	-72	42	10.81	4		9011	8664	F2	375
	7	12	0	48	12.8533	1	10	32	44.157	-72	59	24.18	4		9011	8664	F3	376
	7	12	0	48	16.8532	1	10	41	42.778	-73	15	35.26	4		9011	8664	F4	377
	7	12	0	48	20.8532	1	10	51	6.743	-73	30	37.28	4		9011	8664	F5	553
	7	12	0	48	24.8531	1	11	0	56.653	-73	44	24.42	4		9011	8664	F6	554
	7	12	0	48	28.8530	1	11	11	15.243	-73	56	34.51	4		9011	8664	F7	555
	7	12	0	52	4.8515	1	17	44	54.258	-30	57	19.05	4		9011	8664	F1	378
	7	12	0	52	8.8515	1	17	46	59.089	-29	42	26.10	4		9011	8664	F2	379
	7	12	0	52	12.8515	1	17	49	.124	-28	28	5.44	4		9011	8664	F3	3A0
	7	12	0	52	16.8516	1	17	50	57.816	-27	14	28.18	4		9011	8664	F4	3A1
	7	12	0	52	20.8516	1	17	52	52.161	-26	1	29.26	4		9011	8664	F5	3A2
	7	12	0	52	24.8516	1	17	54	43.142	-24	49	18.12	4		9011	8664	F6	3A3
	7	12	0	52	28.8516	1	17	56	31.096	-23	37	52.37	4		9011	8664	F7	3A4
	7	12	1	19	4.8541	1	17	14	46.798	50	8	33.74	4		9004	7975	F1	7374
	7	12	1	19	8.8541	1	17	16	4.823	50	53	8.73	4		9004	7975	F2	7375
	7	12	1	19	12.8541	1	17	17	25.317	51	37	38.53	4		9004	7975	F3	7376
	7	12	1	19	16.8541	1	17	18	47.923	52	21	59.17	4		9004	7975	F4	7377

July 12, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (KM)	STATION	FRAME NO.	OBS.NO.
1966	7	12	1	19	20.8541	1	17	20	12.685	53	6	16.02	4		9004	7975 F5	7378
	7	12	1	19	24.8541	1	17	21	39.407	53	50	27.03	4		9004	7975 F6	7379
	7	12	1	19	28.8541	1	17	23	9.059	54	34	27.45	4		9004	7975 F7	9377
	7	12	1	24	4.8563	1	1	52	4.034	78	19	54.83	4		9004	7975 F1	73A1
	7	12	1	24	8.8564	1	1	58	30.053	78	0	23.03	4		9004	7975 F2	73A2
	7	12	1	24	12.8564	1	2	4	32.048	77	40	34.35	4		9004	7975 F3	73A3
	7	12	1	24	16.8565	1	2	10	13.467	77	20	27.87	4		9004	7975 F4	9378
	7	12	1	24	20.8565	1	2	15	34.012	77	0	9.83	4		9004	7975 F5	73A4
	7	12	1	24	24.8566	1	2	20	37.358	76	39	41.01	4		9004	7975 F6	73A5
	7	12	1	24	28.8567	1	2	25	22.781	76	19	5.39	4		9004	7975 F7	73A6
	7	12	3	13	4.8574	1	21	57	29.668	11	6	24.81	4		9010	3807 F1	5348
	7	12	3	13	8.8574	1	21	58	48.789	11	30	37.03	4		9010	3807 F2	5349
	7	12	3	13	12.8575	1	22	0	8.071	11	54	30.84	4		9010	3807 F3	5350
	7	12	3	13	16.8575	1	22	1	27.248	12	18	16.25	4		9010	3807 F4	5351
	7	12	3	13	20.8575	1	22	2	46.534	12	41	47.35	4		9010	3807 F5	5352
	7	12	3	13	24.8576	1	22	4	5.695	13	5	6.83	4		9010	3807 F6	5353
	7	12	3	13	28.8576	1	22	5	25.044	13	28	8.87	4		9010	3807 F7	5354
	7	12	5	11	4.8550	1	16	12	59.297	- 5	52	47.49	4		9010	3814 F1	7324
	7	12	5	11	8.8550	1	16	13	54.674	- 5	17	24.58	4		9010	3814 F2	7325
	7	12	5	11	12.8549	1	16	14	50.372	- 4	41	36.37	4		9010	3814 F3	7326
	7	12	5	11	16.8549	1	16	15	46.397	- 4	5	25.91	4		9010	3814 F4	7327
	7	12	5	11	24.8548	1	16	17	39.464	- 2	51	40.91	4		9010	3814 F6	7857
	7	12	5	11	28.8548	1	16	18	36.587	- 2	14	10.36	4		9010	3814 F7	7329
	7	12	5	13	4.8539	1	16	43	53.470	14	57	10.93	4		9010	3814 F1	8462
	7	12	5	13	8.8539	1	16	45	4.537	15	45	7.49	4		9010	3814 F2	8463
	7	12	5	13	12.8538	1	16	46	16.479	16	33	31.15	4		9010	3814 F3	8464
	7	12	5	13	16.8538	1	16	47	29.325	17	22	10.80	4		9010	3814 F4	8465
	7	12	5	13	20.8538	1	16	48	42.869	18	11	9.06	4		9010	3814 F5	8466
	7	12	5	13	24.8538	1	16	49	57.542	19	0	24.77	4		9010	3814 F6	8467
	7	12	5	13	28.8537	1	16	51	13.029	19	49	58.72	4		9010	3814 F7	8468
	7	12	5	15	4.8536	1	17	27	34.658	40	16	10.08	4		9010	3814 F1	8469
	7	12	5	15	8.8536	1	17	29	26.317	41	6	33.93	4		9010	3814 F2	8470
	7	12	5	15	12.8536	1	17	31	19.957	41	56	43.18	4		9010	3814 F3	9349
	7	12	5	15	16.8536	1	17	33	15.843	42	46	33.44	4		9010	3814 F4	8471
	7	12	5	15	20.8537	1	17	35	14.397	43	36	10.47	4		9010	3814 F5	8472
	7	12	5	15	24.8537	1	17	37	15.156	44	25	28.86	4		9010	3814 F6	8473
	7	12	5	15	28.8537	1	17	39	18.426	45	14	24.43	4		9010	3814 F7	8474
	7	12	5	17	4.8543	1	18	46	22.888	62	25	18.18	4		9010	3814 F1	67A2
	7	12	5	17	8.8544	1	18	50	10.801	63	0	39.04	4		9010	3814 F2	67A3
	7	12	5	17	12.8544	1	18	54	5.641	63	35	13.96	4		9010	3814 F3	67A4
	7	12	5	17	16.8544	1	18	58	7.036	64	9	5.84	4		9010	3814 F4	67A5
	7	12	5	17	20.8545	1	19	2	14.979	64	42	14.69	4		9010	3814 F5	67A6
	7	12	5	17	24.8545	1	19	6	30.208	65	14	33.24	4		9010	3814 F6	67A7
	7	12	5	17	28.8546	1	19	10	52.454	65	46	8.76	4		9010	3814 F7	6957
	7	12	7	21	4.8599	1	14	56	21.477	49	21	44.76	4		9010	3818 F1	67A8
	7	12	7	21	8.8599	1	14	55	47.149	49	46	53.18	4		9010	3818 F2	67A9
	7	12	7	21	12.8599	1	14	55	11.621	50	11	58.68	4		9010	3818 F3	6790
	7	12	7	21	16.8599	1	14	54	35.005	50	37	1.81	4		9010	3818 F4	6791
	7	12	7	21	20.8599	1	14	53	57.922	51	2	3.46	4		9010	3818 F5	6792
	7	12	7	21	24.8599	1	14	53	18.785	51	27	7.29	4		9010	3818 F6	6793
	7	12	7	21	28.8599	1	14	52	39.302	51	52	5.41	4		9010	3818 F7	6794
	7	12	7	23	4.8600	1	14	29	15.044	61	35	11.33	4		9010	3818 F1	9408
	7	12	7	23	8.8600	1	14	27	52.318	61	58	25.54	4		9010	3818 F2	9409
	7	12	7	23	12.8600	1	14	26	27.076	62	21	32.10	4		9010	3818 F3	9410
	7	12	7	23	16.8600	1	14	24	58.963	62	44	33.43	4		9010	3818 F4	9350
	7	12	7	23	20.8600	1	14	23	28.309	63	7	25.60	4		9010	3818 F5	9351
	7	12	7	23	24.8600	1	14	21	55.127	63	30	13.31	4		9010	3818 F6	9005
	7	12	7	23	28.8600	1	14	20	18.513	63	52	49.74	4		9010	3818 F7	9006
	7	12	7	25	4.8604	1	13	22	9.795	71	59	37.50	4		9010	3818 F1	9007
	7	12	7	25	8.8605	1	13	18	39.870	72	16	44.69	4		9010	3818 F2	9008
	7	12	7	25	12.8605	1	13	15	3.194	72	33	32.64	4		9010	3818 F3	9009
	7	12	7	25	16.8605	1	13	11	20.208	72	49	59.91	4		9010	3818 F4	9010
	7	12	7	25	20.8605	1	13	7	29.972	73	6	2.29	4		9010	3818 F5	9011
	7	12	7	25	24.8605	1	13	3	32.870	73	21	44.70	4		9010	3818 F6	9012
	7	12	7	25	28.8606	1	12	59	29.648	73	37	5.25	4		9010	3818 F7	9013
	7	12	10	50	4.8541	1	18	33	17.934	-81	18	6.09	4		9023	6332 F1	6828
	7	12	10	50	8.8541	1	18	35	7.637	-80	24	52.49	4		9023	6332 F2	74A0
	7	12	10	50	12.8540	1	18	36	43.581	-79	30	50.75	4		9023	6332 F3	74A1
	7	12	10	50	16.8540	1	18	38	7.400	-78	36	.79	4		9023	6332 F4	74A2
	7	12	10	50	20.8539	1	18	39	23.042	-77	40	34.93	4		9023	6332 F5	6830
	7	12	10	50	24.8539	1	18	40	31.644	-76	44	20.80	4		9023	6332 F6	74A3
	7	12	10	50	28.8539	1	18	41	34.571	-75	47	27.01	4		9023	6332 F7	74A4
	7	12	10	54	4.8541	1	19	8	24.432	-19	2	52.72	4		9023	6332 F1	6822
	7	12	10	54	8.8541	1	19	8	47.973	-18	9	36.75	4		9023	6332 F2	6823
	7	12	10	54	12.8541	1	19	9	11.670	-17	17	2.08	4		9023	6332 F3	6824
	7	12	10	54	16.8542	1	19	9	35.499	-16	25	12.10	4		9023	6332 F4	6825
	7	12	10	54	20.8542	1	19	9	59.141	-15	34	7.38	4		9023	6332 F5	7479
	7	12	10	54	24.8543	1	19	10	22.860	-14	43	43.43	4		9023	6332 F6	6826
	7	12	10	54	28.8543	1	19	10	46.549	-13	54	8.10	4		9023	6332 F7	6827
	7	12	11	17	20.8584	1	14	58	17.529	47	4	.68	4		9012	6805 F5	8975

July 12-13, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	7	12	11	17	24.8584	1	14	58	8.353	47	35	31.25	4		9012	6805	F6	A976
	7	12	11	17	28.8584	1	14	57	58.251	48	6	57.52	4		9012	6805	F7	A977
	7	12	12	57	4.8556	1	14	0	40.603	9	19	33.85	4		9023	6335	F1	72A4
	7	12	12	57	8.8556	1	14	2	45.948	9	57	2.79	4		9023	6335	F2	72A5
	7	12	12	57	12.8556	1	14	4	51.120	10	34	29.69	4		9023	6335	F3	74A8
	7	12	12	57	16.8556	1	14	6	56.068	11	11	49.03	4		9023	6335	F4	72A7
	7	12	12	57	20.8556	1	14	9	.700	11	48	59.85	4		9023	6335	F5	72A8
	7	12	12	57	24.8556	1	14	11	4.801	12	26	7.14	4		9023	6335	F6	72A9
	7	12	12	57	28.8557	1	14	13	8.375	13	3	7.31	4		9023	6335	F7	7290
	7	12	18	55	4.8538	1	15	15	25.220	-59	16	48.84	4		9002	4237	F1	6968
	7	12	18	55	8.8537	1	15	21	36.871	-58	28	12.34	4		9002	4237	F2	6331
	7	12	18	55	12.8537	1	15	27	37.778	-57	37	41.93	4		9002	4237	F3	6332
	7	12	18	55	16.8537	1	15	33	27.877	-56	45	24.18	4		9002	4237	F4	6969
	7	12	18	55	20.8536	1	15	39	8.212	-55	51	17.85	4		9002	4237	F5	6334
	7	12	18	55	24.8536	1	15	44	37.643	-54	55	20.70	4		9002	4237	F6	6970
	7	12	18	55	28.8536	1	15	49	57.461	-53	57	44.63	4		9002	4237	F7	6335
	7	12	19	21	4.8571	1	16	7	52.592	60	5	48.65	4		9006	6635	F1	9353
	7	12	19	21	8.8571	1	16	8	21.119	60	45	3.47	4		9006	6635	F2	9075
	7	12	19	21	12.8571	1	16	8	50.845	61	24	7.18	4		9006	6635	F3	9076
	7	12	19	21	16.8571	1	16	9	20.814	62	3	4.76	4		9006	6635	F4	9077
	7	12	19	21	20.8572	1	16	9	51.224	62	41	48.33	4		9006	6635	F5	9645
	7	12	19	21	24.8572	1	16	10	21.149	63	20	17.73	4		9006	6635	F6	9354
	7	12	19	21	28.8572	1	16	10	52.596	63	58	43.23	4		9006	6635	F7	9355
	7	12	21	16	4.8594	1	15	25	8.773	7	36	22.95	4		9008	5767	F1	A246
	7	12	21	16	8.8594	1	15	25	27.772	8	4	20.24	4		9008	5767	F2	A247
	7	12	21	16	12.8593	1	15	25	46.562	8	32	32.80	4		9008	5767	F3	93A1
	7	12	21	16	16.8593	1	15	26	5.755	9	0	52.82	4		9008	5767	F4	A248
	7	12	21	16	20.8593	1	15	26	23.978	9	29	29.25	4		9008	5767	F5	A249
	7	12	21	16	24.8592	1	15	26	42.527	9	58	18.66	4		9008	5767	F6	A250
	7	12	21	16	28.8592	1	15	27	.704	10	27	20.93	4		9008	5767	F7	A251
	7	12	21	20	4.8578	1	15	40	19.545	41	15	20.28	4		9008	5768	F1	A252
	7	12	21	20	8.8578	1	15	40	29.594	41	53	16.00	4		9008	5768	F2	A253
	7	12	21	20	12.8578	1	15	40	38.837	42	31	12.06	4		9008	5768	F3	A254
	7	12	21	20	16.8578	1	15	40	48.361	43	9	13.08	4		9008	5768	F4	A255
	7	12	21	20	20.8578	1	15	40	57.277	43	47	13.28	4		9008	5768	F5	A256
	7	12	21	20	24.8577	1	15	41	5.992	44	25	19.18	4		9008	5768	F6	A257
	7	12	21	20	28.8577	1	15	41	14.394	45	3	22.81	4		9008	5768	F7	A258
	7	12	23	19	4.8564	1	20	55	23.789	17	32	17.32	4		9004	7993	F1	7733
	7	12	23	19	8.8565	1	20	57	42.797	18	5	51.98	4		9004	7993	F2	7734
	7	12	23	19	12.8565	1	21	0	2.204	18	39	6.10	4		9004	7993	F3	7735
	7	12	23	19	16.8565	1	21	2	22.323	19	12	7.01	4		9004	7993	F4	7736
	7	12	23	19	20.8565	1	21	4	43.218	19	44	42.78	4		9004	7993	F5	7737
	7	12	23	19	24.8565	1	21	7	4.289	20	16	55.80	4		9004	7993	F6	7738
	7	12	23	19	28.8565	1	21	9	25.974	20	48	51.90	4		9004	7993	F7	9379
	7	13	0	55	4.8582	1	20	59	54.288	-76	36	33.33	4		9007	5752	F1	7162
	7	13	0	55	8.8582	1	20	56	20.094	-76	3	51.05	4		9007	5752	F2	7163
	7	13	0	55	12.8581	1	20	53	.975	-75	30	33.90	4		9007	5752	F3	7164
	7	13	0	55	16.8581	1	20	49	56.489	-74	56	39.90	4		9007	5752	F4	7165
	7	13	0	55	20.8580	1	20	47	5.590	-74	22	20.10	4		9007	5752	F5	7166
	7	13	0	55	24.8580	1	20	44	25.674	-73	47	25.06	4		9007	5752	F6	7167
	7	13	0	55	28.8580	1	20	41	57.689	-73	12	3.37	4		9007	5752	F7	7168
	7	13	1	23	4.8573	1	16	30	23.578	47	42	25.11	4		9004	7999	F1	7535
	7	13	1	23	8.8573	1	16	31	.837	48	24	10.12	4		9004	7999	F2	7536
	7	13	1	23	12.8573	1	16	31	38.559	49	6	5.57	4		9004	7999	F3	7537
	7	13	1	23	16.8573	1	16	32	17.199	49	47	59.52	4		9004	7999	F4	7538
	7	13	1	23	20.8573	1	16	32	56.203	50	29	53.06	4		9004	7999	F5	7539
	7	13	1	23	24.8573	1	16	33	36.018	51	11	48.07	4		9004	7999	F6	7540
	7	13	1	23	28.8573	1	16	34	16.221	51	53	41.40	4		9004	7999	F7	93A0
	7	13	1	29	4.8597	1	3	33	1.342	78	13	6.20	4		9004	7999	F1	7542
	7	13	1	29	8.8597	1	3	35	30.465	77	48	35.48	4		9004	7999	F2	93A1
	7	13	1	29	12.8598	1	3	37	50.988	77	24	15.96	4		9004	7999	F3	93A2
	7	13	1	29	16.8598	1	3	40	1.294	77	0	8.35	4		9004	7999	F4	7543
	7	13	1	29	20.8599	1	3	42	4.055	76	36	5.85	4		9004	7999	F5	7544
	7	13	1	29	24.8599	1	3	44	.085	76	12	13.73	4		9004	7999	F6	7545
	7	13	1	29	28.8600	1	3	45	50.089	75	48	31.86	4		9004	7999	F7	93A3
	7	13	3	6	4.8574	1	15	41	43.979	38	23	30.24	4		9007	5755	F1	7169
	7	13	3	6	8.8574	1	15	43	34.918	38	57	46.61	4		9007	5755	F2	7170
	7	13	3	6	12.8575	1	15	45	25.597	39	31	31.20	4		9007	5755	F3	7335
	7	13	3	6	16.8575	1	15	47	16.366	40	4	53.91	4		9007	5755	F4	7171
	7	13	3	6	20.8576	1	15	49	7.123	40	37	48.38	4		9007	5755	F5	7172
	7	13	3	6	24.8576	1	15	50	58.133	41	10	14.20	4		9007	5755	F6	7173
	7	13	3	6	28.8577	1	15	52	48.670	41	42	18.48	4		9007	5755	F7	7174
	7	13	3	11	4.8591	1	19	29	52.873	-33	16	5.63	4		9010	3839	F1	335
	7	13	3	11	8.8590	1	19	31	17.132	-32	46	58.34	4		9010	3839	F2	336
	7	13	3	11	12.8590	1	19	32	41.787	-32	17	44.33	4		9010	3839	F3	337
	7	13	3	11	16.8590	1	19	34	6.568	-31	48	13.40	4		9010	3839	F4	338
	7	13	3	11	20.8589	1	19	35	30.978	-31	18	29.66	4		9010	3839	F5	339
	7	13	3	11	24.8589	1	19	36	55.907	-30	48	36.15	4		9010	3839	F6	340
	7	13	3	11	28.8589	1	19	38	20.816	-30	18	29.10	4		9010	3839	F7	341
	7	13	3	16	4.8585	1	21	19	55.575	7	45	3.48	4		9010	3839	F1	342
	7	13	3	16	8.8585	1	21	21	27.194	8	15	25.69	4		9010	3839	F2	343
	7	13	3	16	12.8585	1	21	22	59.343	8	45	26.66	4		9010	3839	F3	344
	7	13	3	16	16.8585	1	21	24	31.205	9	15	13.24	4		9010	3839	F4	345
	7	13	3	16	20.8586	1	21	26	3.315	9	44	48.54	4		9010	3839	F5	543
	7	13	3	16	24.8586	1	21	27	35.291	10	14	4.30	4		9010	3839	F6	346
	7	13	3	16	28.8586	1	21	29	7.452	10	43	7.11	4		9010	3839	F7	347
	7	13	3	18	4.8595	1	22	6	8.942	20	57	45.28	4		9010	3839	F1	348

July 13, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	7	13	3	18	8.8595	1	22	7	41.685	21	19	50.13	4		9010	3839	F2	349
	7	13	3	18	12.8595	1	22	9	14.332	21	41	34.31	4		9010	3839	F3	350
	7	13	3	18	16.8596	1	22	10	46.614	22	3	1.51	4		9010	3839	F4	351
	7	13	3	18	20.8596	1	22	12	19.252	22	24	12.69	4		9010	3839	F5	352
	7	13	3	18	24.8597	1	22	13	51.785	22	45	5.38	4		9010	3839	F6	353
	7	13	3	18	28.8597	1	22	15	24.233	23	5	43.60	4		9010	3839	F7	354
	7	13	5	15	8.8584	1	20	4	21.094	-14	54	52.02	4		9001	2018	F2	4477
	7	13	5	15	12.8584	1	20	5	55.840	-14	22	24.19	4		9001	2018	F3	4576
	7	13	5	15	16.8584	1	20	7	30.864	-13	49	49.96	4		9001	2018	F4	4577
	7	13	5	15	20.8584	1	20	9	6.549	-13	17	12.00	4		9001	2018	F5	4978
	7	13	5	15	24.8584	1	20	10	42.036	-12	44	24.89	4		9001	2018	F6	4202
	7	13	5	15	28.8583	1	20	12	17.773	-12	11	31.70	4		9001	2018	F7	4203
	7	13	5	17	4.8582	1	20	51	50.252	1	3	53.41	4		9001	2018	F1	4475
	7	13	5	17	8.8582	1	20	53	31.896	1	36	24.24	4		9001	2018	F2	5060
	7	13	5	17	12.8582	1	20	55	13.623	2	8	47.81	4		9001	2018	F3	5355
	7	13	5	17	16.8582	1	20	56	55.718	2	41	6.94	4		9001	2018	F4	4477
	7	13	5	17	20.8582	1	20	58	38.096	3	13	12.91	4		9001	2018	F5	5061
	7	13	5	17	24.8583	1	21	0	20.559	3	45	10.13	4		9001	2018	F6	4479
	7	13	5	17	28.8583	1	21	2	3.359	4	17	1.98	4		9001	2018	F7	44A0
	7	13	5	19	4.8568	1	16	28	56.954	39	27	40.81	4		9010	3841	F1	58
	7	13	5	19	4.8588	1	21	43	50.569	15	58	37.10	4		9001	2018	F1	44A1
	7	13	5	19	8.8568	1	16	30	3.545	40	15	36.74	4		9010	3841	F2	59
	7	13	5	19	8.8588	1	21	45	36.556	16	24	35.65	4		9001	2018	F2	44A2
	7	13	5	19	12.8568	1	16	31	11.823	41	3	27.47	4		9010	3841	F3	60
	7	13	5	19	12.8588	1	21	47	22.065	16	50	25.47	4		9001	2018	F3	44A3
	7	13	5	19	16.8568	1	16	32	19.767	41	51	18.89	4		9010	3841	F4	61
	7	13	5	19	16.8588	1	21	49	8.062	17	15	55.57	4		9001	2018	F4	44A4
	7	13	5	19	20.8568	1	16	33	29.702	42	39	2.33	4		9010	3841	F5	62
	7	13	5	19	24.8589	1	21	52	39.941	18	6	1.25	4		9001	2018	F6	44A6
	7	13	5	19	24.8568	1	16	34	40.931	43	26	38.68	4		9010	3841	F6	63
	7	13	5	19	20.8589	1	21	50	53.770	17	41	6.74	4		9001	2018	F5	44A5
	7	13	5	19	28.8568	1	16	35	53.056	44	14	11.69	4		9010	3841	F7	64
	7	13	5	19	28.8589	1	21	54	25.447	18	30	34.21	4		9001	2018	F7	44A7
	7	13	5	22	4.8578	1	17	58	19.980	71	21	18.10	4		9010	3841	F1	65
	7	13	5	22	8.8578	1	18	2	17.879	71	54	17.21	4		9010	3841	F2	66
	7	13	5	22	12.8579	1	18	6	27.228	72	26	34.89	4		9010	3841	F3	67
	7	13	5	22	16.8579	1	18	10	48.000	72	58	20.21	4		9010	3841	F4	68
	7	13	5	22	20.8580	1	18	15	21.646	73	29	23.46	4		9010	3841	F5	69
	7	13	5	22	24.8580	1	18	20	8.428	73	59	48.90	4		9010	3841	F6	70
	7	13	5	22	28.8581	1	18	25	9.018	74	29	31.26	4		9010	3841	F7	71
	7	13	7	21	4.8571	1	16	44	18.644	38	29	51.24	4		9001	2025	F1	2520
	7	13	7	21	8.8571	1	16	45	24.994	39	16	49.18	4		9001	2025	F2	2521
	7	13	7	21	12.8571	1	16	46	32.730	40	3	52.85	4		9001	2025	F3	2522
	7	13	7	21	16.8571	1	16	47	41.942	40	50	55.51	4		9001	2025	F4	2523
	7	13	7	21	20.8571	1	16	48	52.329	41	38	2.34	4		9001	2025	F5	2524
	7	13	7	21	24.8571	1	16	50	4.106	42	25	3.94	4		9001	2025	F6	2525
	7	13	7	21	28.8571	1	16	51	17.322	43	12	9.06	4		9001	2025	F7	2526
	7	13	7	23	4.8573	1	17	31	33.018	61	18	10.58	4		9001	2025	F1	2527
	7	13	7	23	8.8574	1	17	33	55.717	62	0	4.74	4		9001	2025	F2	2528
	7	13	7	23	12.8574	1	17	36	23.897	62	41	32.72	4		9001	2025	F3	2529
	7	13	7	23	16.8574	1	17	38	56.894	63	22	33.58	4		9001	2025	F4	3326
	7	13	7	23	20.8574	1	17	41	36.290	64	3	12.71	4		9001	2025	F5	2530
	7	13	7	23	24.8575	1	17	44	21.852	64	43	25.58	4		9001	2025	F6	2531
	7	13	7	23	28.8575	1	17	47	13.655	65	23	9.38	4		9001	2025	F7	2532
	7	13	7	25	4.8583	1	19	55	32.548	78	7	58.69	4		9001	2025	F1	2837
	7	13	7	25	8.8584	1	20	4	54.599	78	28	28.45	4		9001	2025	F2	2838
	7	13	7	25	12.8584	1	20	14	43.925	78	47	39.62	4		9001	2025	F3	2839
	7	13	7	25	16.8585	1	20	24	59.050	79	5	27.13	4		9001	2025	F4	2840
	7	13	7	25	20.8585	1	20	35	39.301	79	21	47.87	4		9001	2025	F5	2841
	7	13	7	25	24.8586	1	20	46	44.602	79	36	40.01	4		9001	2025	F6	2842
	7	13	7	25	28.8586	1	20	58	12.872	79	49	57.37	4		9001	2025	F7	3327
	7	13	10	54	4.8565	1	13	23	57.984	-80	26	46.19	4		9023	6355	F1	4587
	7	13	10	54	8.8564	1	13	43	35.988	-80	10	45.90	4		9023	6355	F2	4588
	7	13	10	54	12.8564	1	14	2	25.216	-79	50	25.81	4		9023	6355	F3	4589
	7	13	10	54	16.8563	1	14	20	13.726	-79	25	59.00	4		9023	6355	F4	4590
	7	13	10	54	20.8563	1	14	36	55.937	-78	57	44.02	4		9023	6355	F5	4591
	7	13	10	54	24.8562	1	14	52	30.626	-78	25	44.90	4		9023	6355	F6	4592
	7	13	10	54	28.8562	1	15	6	54.699	-77	50	25.33	4		9023	6355	F7	4593
	7	13	10	58	4.8559	1	18	23	13.202	-18	24	33.07	4		9023	6355	F1	4594
	7	13	10	58	8.8559	1	18	24	13.954	-17	22	56.44	4		9023	6355	F2	4595
	7	13	10	58	12.8560	1	18	25	13.428	-16	22	17.75	4		9023	6355	F3	4596
	7	13	10	58	16.8560	1	18	26	11.864	-15	22	34.91	4		9023	6355	F4	5442
	7	13	10	58	24.8561	1	18	28	5.878	-13	26	1.44	4		9023	6355	F6	4598

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.	OBS.NO.
1966	7	13	10	58	28.8561	1	18	29	1.331	-12	29	10.99	4		9023	6355 F7	4599
	7	13	18	57	4.8584	1	11	7	31.792	-58	4	2.40	4		9002	4280 F1	6665
	7	13	18	57	8.8584	1	11	11	59.035	-58	1	54.78	4		9002	4280 F2	6972
	7	13	18	57	12.8583	1	11	16	30.764	-57	59	8.80	4		9002	4280 F3	6667
	7	13	18	57	16.8582	1	11	21	7.397	-57	55	39.64	4		9002	4280 F4	6668
	7	13	18	57	20.8581	1	11	25	46.501	-57	51	29.70	4		9002	4280 F5	6973
	7	13	18	57	24.8581	1	11	30	30.556	-57	46	33.06	4		9002	4280 F6	6669
	7	13	18	57	28.8580	1	11	35	18.428	-57	40	48.73	4		9002	4280 F7	7472
	7	13	18	59	4.8566	1	13	41	52.508	-49	49	.46	4		9002	4280 F1	6670
	7	13	18	59	8.8565	1	13	47	9.458	-49	13	39.08	4		9002	4280 F2	6974
	7	13	18	59	12.8565	1	13	52	24.491	-48	32	38.79	4		9002	4280 F3	6672
	7	13	18	59	16.8564	1	13	57	36.685	-47	51	57.68	4		9002	4280 F4	6673
	7	13	18	59	20.8564	1	14	2	46.423	-47	9	41.46	4		9002	4280 F5	6674
	7	13	18	59	24.8563	1	14	7	53.628	-46	25	39.98	4		9002	4280 F6	6675
	7	13	18	59	28.8563	1	14	12	56.979	-45	40	6.11	4		9002	4280 F7	6676
	7	13	19	1	4.8558	1	15	54	44.732	-20	39	44.56	4		9002	4280 F1	6677
	7	13	19	1	8.8558	1	15	58	8.548	-19	27	23.18	4		9002	4280 F2	6678
	7	13	19	1	12.8558	1	16	1	28.267	-18	15	.13	4		9002	4280 F3	6679
	7	13	19	1	16.8558	1	16	4	44.639	-17	2	43.16	4		9002	4280 F4	7337
	7	13	19	1	20.8558	1	16	7	57.368	-15	50	35.81	4		9002	4280 F5	6680
	7	13	19	1	24.8559	1	16	11	6.241	-14	38	41.20	4		9002	4280 F6	6975
	7	13	19	1	28.8559	1	16	14	11.986	-13	27	4.53	4		9002	4280 F7	7338
	7	13	19	3	4.8568	1	17	14	15.500	11	16	2.45	4		9002	4280 F1	6683
	7	13	19	3	8.8568	1	17	16	17.442	12	5	18.75	4		9002	4280 F2	6684
	7	13	19	3	12.8569	1	17	18	17.576	12	53	35.56	4		9002	4280 F3	6685
	7	13	19	3	16.8569	1	17	20	15.557	13	40	53.18	4		9002	4280 F4	6686
	7	13	19	3	20.8570	1	17	22	12.373	14	27	14.56	4		9002	4280 F5	6687
	7	13	19	3	24.8570	1	17	24	7.436	15	12	34.09	4		9002	4280 F6	6688
	7	13	19	3	28.8571	1	17	26	.664	15	56	57.82	4		9002	4280 F7	6689
	7	13	19	20	4.8574	1	19	37	18.904	20	59	49.75	4		9008	5791 F1	8293
	7	13	19	20	8.8575	1	19	39	51.690	21	45	25.[illegible]	4		9008	5791 F2	9363
	7	13	19	20	12.8575	1	19	42	25.923	22	30	35.21	4		9008	5791 F3	8295
	7	13	19	20	16.8575	1	19	45	.943	23	15	24.58	4		9008	5791 F4	8296
	7	13	19	20	20.8575	1	19	47	37.499	23	59	48.48	4		9008	5791 F5	8297
	7	13	19	20	24.8575	1	19	50	15.404	24	43	45.06	4		9008	5791 F6	8298
	7	13	19	20	28.8575	1	19	52	53.808	25	27	13.23	4		9008	5791 F7	8299
	7	13	19	22	4.8583	1	21	1	27.982	39	57	32.17	4		9008	5792 F1	8300
	7	13	19	22	8.8583	1	21	4	29.437	40	25	43.96	4		9008	5792 F2	8301
	7	13	19	22	12.8584	1	21	7	31.559	40	53	16.70	4		9008	5792 F3	8302
	7	13	19	22	16.8584	1	21	10	34.024	41	20	8.40	4		9008	5792 F4	8303
	7	13	19	22	20.8584	1	21	13	36.856	41	46	20.59	4		9008	5792 F5	8304
	7	13	19	22	24.8585	1	21	16	40.601	42	11	54.37	4		9008	5792 F6	8305
	7	13	19	22	28.8585	1	21	19	44.186	42	36	51.14	4		9008	5792 F7	8306
	7	14	0	59	4.8566	1	13	59	5.567	-37	35	56.83	4		9011	8715 F1	445
	7	14	0	59	8.8566	1	14	3	58.659	-36	43	53.70	4		9011	8715 F2	446
	7	14	0	59	12.8566	1	14	8	48.229	-35	50	23.08	4		9011	8715 F3	447
	7	14	0	59	16.8566	1	14	13	34.394	-34	55	29.21	4		9011	8715 F4	448
	7	14	0	59	24.8565	1	14	22	55.220	-33	1	48.71	4		9011	8715 F6	450
	7	14	0	59	28.8565	1	14	27	29.774	-32	3	9.09	4		9011	8715 F7	556
	7	14	3	7	4.8600	1	13	46	25.430	8	14	9.56	4		9007	5784 F1	9060
	7	14	3	7	8.8600	1	13	47	56.655	8	54	12.50	4		9007	5784 F2	9061
	7	14	3	7	12.8600	1	13	49	28.323	9	34	21.73	4		9007	5784 F3	9062
	7	14	3	7	16.8600	1	13	50	59.831	10	14	32.31	4		9007	5784 F4	9063
	7	14	3	7	20.8600	1	13	52	31.077	10	54	46.16	4		9007	5784 F5	9064
	7	14	3	7	24.8600	1	13	54	2.503	11	35	4.90	4		9007	5784 F6	9065
	7	14	3	16	4.8603	1	19	12	40.666	-25	33	58.04	4		9010	3862 F1	6728
	7	14	3	16	8.8602	1	19	14	18.388	-24	59	52.80	4		9010	3862 F2	6958
	7	14	3	16	12.8602	1	19	15	56.119	-24	25	28.17	4		9010	3862 F3	6729
	7	14	3	16	16.8602	1	19	17	33.987	-23	50	45.89	4		9010	3862 F4	6730
	7	14	3	16	20.8601	1	19	19	12.624	-23	15	53.40	4		9010	3862 F5	6731
	7	14	3	16	24.8601	1	19	20	51.072	-22	40	43.82	4		9010	3862 F6	6732
	7	14	3	16	28.8601	1	19	22	29.831	-22	5	15.67	4		9010	3862 F7	6733
	7	14	3	18	4.8597	1	20	3	.345	- 6	59	52.92	4		9010	3862 F1	6734
	7	14	3	18	8.8596	1	20	4	44.294	- 6	20	52.13	4		9010	3862 F2	6735
	7	14	3	18	12.8596	1	20	6	28.331	- 5	41	53.41	4		9010	3862 F3	6736
	7	14	3	18	16.8596	1	20	8	12.664	- 5	2	55.65	4		9010	3862 F4	6737
	7	14	3	18	20.8596	1	20	9	57.278	- 4	23	58.58	4		9010	3862 F5	6738
	7	14	3	18	24.8596	1	20	11	41.985	- 3	45	4.04	4		9010	3862 F6	6739
	7	14	3	18	28.8596	1	20	13	26.950	- 3	6	10.96	4		9010	3862 F7	6740
	7	14	3	20	4.8599	1	20	56	20.192	11	41	33.95	4		9010	3862 F[illegible]	6701
	7	14	3	20	8.8600	1	20	58	9.269	12	15	31.59	4		9010	3862 F2	6702
	7	14	3	20	12.8600	1	20	59	58.401	12	49	9.36	4		9010	3862 F3	6703
	7	14	3	20	16.8600	1	21	1	47.903	13	22	30.42	4		9010	3862 F4	6704
	7	14	3	20	20.8600	1	21	3	37.250	13	55	31.20	4		9010	3862 F5	6705
	7	14	3	20	24.8601	1	21	5	26.781	14	28	8.09	4		9010	3862 F6	6706
	7	14	3	20	28.8601	1	21	7	16.570	15	0	28.51	4		9010	3862 F7	6707
	7	14	3	23	4.8617	1	22	18	41.184	31	16	16.84	4		9010	3862 F1	6708
	7	14	3	23	8.8618	1	22	20	29.518	31	34	5.48	4		9010	3862 F2	6709
	7	14	3	23	12.8618	1	22	22	17.628	31	51	40.32	4		9010	3862 F3	6710
	7	14	3	23	16.8619	1	22	24	5.528	32	8	52.64	4		9010	3862 F4	6711

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	7	14	3	23	20.8619	1	22	25	53.190	32	25	44.71	4		9010	3862	F5	6712
	7	14	3	23	24.8620	1	22	27	40.778	32	42	20.72	4		9010	3862	F6	6713
	7	14	3	23	28.8620	1	22	29	28.161	32	58	36.02	4		9010	3862	F7	6714
	7	14	5	19	4.8601	1	19	27	19.857	-14	16	33.78	4		9001	2047	F1	4103
	7	14	5	19	4.8619	1	15	13	39.303	- 0	7	39.22	4		9010	3865	F1	7387
	7	14	5	19	8.8601	1	19	29	4.596	-13	41	26.89	4		9001	2047	F2	9059
	7	14	5	19	8.8618	1	15	14	9.010	0	22	13.09	4		9010	3865	F2	7388
	7	14	5	19	12.8601	1	19	30	49.986	-13	6	10.51	4		9001	2047	F3	4105
	7	14	5	19	12.8618	1	15	14	38.791	0	52	23.20	4		9010	3865	F3	7389
	7	14	5	19	16.8601	1	19	32	35.645	-12	30	41.46	4		9001	2047	F4	4979
	7	14	5	19	16.8617	1	15	15	8.511	1	22	49.35	4		9010	3865	F4	7390
	7	14	5	19	20.8601	1	19	34	21.785	-11	55	.72	4		9001	2047	F5	4976
	7	14	5	19	20.8617	1	15	15	37.981	1	53	32.28	4		9010	3865	F5	7391
	7	14	5	19	24.8600	1	19	36	8.238	-11	19	11.43	4		9001	2047	F6	4108
	7	14	5	19	24.8616	1	15	16	7.750	2	24	34.80	4		9010	3865	F6	7392
	7	14	5	19	28.8600	1	19	37	55.155	-10	43	12.28	4		9001	2047	F7	4109
	7	14	5	19	28.8616	1	15	16	37.567	2	55	49.92	4		9010	3865	F7	7393
	7	14	5	21	4.8598	1	20	22	45.662	4	3	11.37	4		9001	2047	F1	4971
	7	14	5	21	4.8607	1	15	28	33.155	16	52	35.49	4		9010	3865	F1	7394
	7	14	5	21	8.8598	1	20	24	42.758	4	39	47.03	4		9001	2047	F2	4972
	7	14	5	21	8.8606	1	15	29	3.390	17	30	56.39	4		9010	3865	F2	7395
	7	14	5	21	12.8598	1	20	26	40.170	5	16	18.91	4		9001	2047	F3	5057
	7	14	5	21	12.8606	1	15	29	33.702	18	9	33.05	4		9010	3865	F3	7396
	7	14	5	21	16.8598	1	20	28	37.838	5	52	39.66	4		9001	2047	F4	4973
	7	14	5	21	16.8606	1	15	30	4.067	18	48	25.68	4		9010	3865	F4	7397
	7	14	5	21	20.8598	1	20	30	36.004	6	28	51.57	4		9001	2047	F5	4102
	7	14	5	21	20.8606	1	15	30	34.461	19	27	32.27	4		9010	3865	F5	7398
	7	14	5	21	24.8598	1	20	32	34.488	7	4	49.13	4		9001	2047	F6	5058
	7	14	5	21	24.8605	1	15	31	4.807	20	6	55.35	4		9010	3865	F6	7399
	7	14	5	21	28.8605	1	15	31	35.384	20	46	30.14	4		9010	3865	F7	7400
	7	14	5	23	4.8601	1	15	44	22.748	37	33	38.29	4		9010	3865	F1	7237
	7	14	5	23	8.8601	1	15	44	56.983	38	17	6.78	4		9010	3865	F2	7238
	7	14	5	23	12.8601	1	15	45	31.333	39	0	37.54	4		9010	3865	F3	7239
	7	14	5	23	16.8601	1	15	46	5.965	39	44	8.49	4		9010	3865	F4	7240
	7	14	5	23	20.8601	1	15	46	40.853	40	27	46.27	4		9010	3865	F5	7241
	7	14	5	23	24.8601	1	15	47	15.933	41	11	18.47	4		9010	3865	F6	7242
	7	14	5	23	28.8601	1	15	47	51.672	41	54	54.04	4		9010	3865	F7	7243
	7	14	5	25	4.8603	1	16	4	22.723	58	56	34.67	4		9010	3865	F1	7244
	7	14	5	25	8.8604	1	16	5	12.668	59	37	13.08	4		9010	3865	F2	7245
	7	14	5	25	12.8604	1	16	6	4.094	60	17	33.58	4		9010	3865	F3	7246
	7	14	5	25	16.8604	1	16	6	56.676	60	57	44.64	4		9010	3865	F4	7247
	7	14	5	25	20.8604	1	16	7	50.170	61	37	39.66	4		9010	3865	F5	9352
	7	14	5	25	24.8605	1	16	8	45.042	62	17	20.87	4		9010	3865	F6	7249
	7	14	5	25	28.8605	1	16	9	41.641	62	56	46.80	4		9010	3865	F7	7250
	7	14	5	27	4.8613	1	16	46	5.957	77	19	3.55	4		9010	3865	F1	7507
	7	14	5	27	8.8613	1	16	48	47.818	77	51	2.07	4		9010	3865	F2	7508
	7	14	5	27	12.8614	1	16	51	41.364	78	22	39.32	4		9010	3865	F3	7509
	7	14	5	27	16.8614	1	16	54	47.462	78	53	51.14	4		9010	3865	F4	7510
	7	14	5	27	20.8614	1	16	58	8.996	79	24	50.64	4		9010	3865	F5	7511
	7	14	5	27	24.8615	1	17	1	46.623	79	55	17.07	4		9010	3865	F6	7512
	7	14	5	27	28.8615	1	17	5	43.503	80	25	23.39	4		9010	3865	F7	7513
	7	14	5	29	4.8627	1	0	29	24.523	86	22	18.65	4		9010	3865	F1	7514
	7	14	5	29	8.8627	1	0	49	31.267	86	6	21.85	4		9010	3865	F2	7515
	7	14	5	29	12.8628	1	1	6	52.560	85	49	4.05	4		9010	3865	F3	7516
	7	14	5	29	16.8628	1	1	21	47.762	85	30	44.63	4		9010	3865	F4	7517
	7	14	5	29	20.8629	1	1	34	42.440	85	11	33.70	4		9010	3865	F5	7518
	7	14	5	29	24.8630	1	1	45	58.005	84	51	55.40	4		9010	3865	F6	7519
	7	14	5	29	28.8630	1	1	55	47.068	84	31	47.04	4		9010	3865	F7	7520
	7	14	7	32	4.8733	1								2.9818320	7901			5362
	7	14	9	34	4.8655	1	14	21	26.763	62	7	59.87	4		9001	2059	F1	2627
	7	14	9	34	8.8655	1	14	19	49.274	62	29	50.33	4		9001	2059	F2	2628
	7	14	9	34	12.8655	1	14	18	9.408	62	51	36.04	4		9001	2059	F3	2629
	7	14	9	34	16.8655	1	14	16	27.036	63	13	11.21	4		9001	2059	F4	2630
	7	14	9	34	20.8655	1	14	14	40.956	63	34	43.68	4		9001	2059	F5	2631
	7	14	9	34	24.8655	1	14	12	51.612	63	56	8.59	4		9001	2059	F6	2632
	7	14	9	34	28.8655	1	14	10	59.107	64	17	25.58	4		9001	2059	F7	2633
	7	14	11	4	4.8594	1	18	6	45.469	9	49	22.10	4		9023	6380	F1	7278
	7	14	11	4	8.8595	1	18	7	52.218	10	27	30.73	4		9023	6380	F2	7279
	7	14	11	4	12.8596	1	18	8	58.110	11	4	50.85	4		9023	6380	F3	7485
	7	14	11	4	16.8596	1	18	10	3.220	11	41	29.50	4		9023	6380	F4	7486
	7	14	11	4	20.8597	1	18	11	7.496	12	17	24.45	4		9023	6380	F5	7281
	7	14	11	4	24.8598	1	18	12	10.988	12	52	36.35	4		9023	6380	F6	7487
	7	14	11	4	28.8598	1	18	13	13.670	13	27	6.15	4		9023	6380	F7	7283
	7	14	19	3	4.8596	1	12	48	54.497	-38	55	17.30	4		9002	4319	F1	6356
	7	14	19	3	8.8595	1	12	52	49.489	-38	21	29.25	4		9002	4319	F2	6357
	7	14	19	3	12.8595	1	12	56	44.598	-37	46	36.98	4		9002	4319	F3	6978
	7	14	19	3	16.8594	1	13	0	39.542	-37	10	31.80	4		9002	4319	F4	6359
	7	14	19	3	20.8594	1	13	4	34.514	-36	33	18.19	4		9002	4319	F5	6360
	7	14	19	3	24.8593	1	13	8	29.041	-35	54	50.17	4		9002	4319	F6	6361
	7	14	19	3	28.8593	1	13	12	23.781	-35	15	11.94	4		9002	4319	F7	6362

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	H.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	7	14	19	5	4.8587	1	14	41	1.733	-14	3	9.96	4		9002	4319	F1	6363
	7	14	19	5	8.8587	1	14	44	23.562	-13	0	43.03	4		9002	4319	F2	6364
	7	14	19	5	12.8587	1	14	47	43.631	-11	57	57.95	4		9002	4319	F3	6365
	7	14	19	5	16.8587	1	14	51	1.415	-10	55	4.07	4		9002	4319	F4	6366
	7	14	19	5	20.8587	1	14	54	17.444	-	9	51	57.90	4		9002	4319	F5	6367
	7	14	19	5	24.8587	1	14	57	31.551	-	8	49	47.22	4		9002	4319	F6	6979
	7	14	19	5	28.8587	1	15	0	43.647	-	7	45	38.94	4		9002	4319	F7	6369
	7	14	19	7	4.8594	1	16	7	46.855	15	15	1.88	4		9002	4319	F1	6370
	7	14	19	7	8.8594	1	16	10	11.775	16	3	18.82	4		9002	4319	F2	6371
	7	14	19	7	12.8595	1	16	12	34.991	16	50	43.42	4		9002	4319	F3	6372
	7	14	19	7	16.8595	1	16	14	56.554	17	37	16.66	4		9002	4319	F4	6373
	7	14	19	7	20.8596	1	16	17	16.615	18	23	1.96	4		9002	4319	F5	6374
	7	14	19	7	24.8596	1	16	19	35.059	19	7	49.73	4		9002	4319	F6	6375
	7	14	19	7	28.8597	1	16	21	52.005	19	51	52.08	4		9002	4319	F7	6376
	7	14	19	25	4.8647	1	15	2	12.180	19	46	13.71	4		9006	6652	F1	4605
	7	14	19	25	8.8646	1	15	2	20.553	20	15	2.48	4		9006	6652	F2	5413
	7	14	19	25	12.8646	1	15	2	28.830	20	43	59.44	4		9006	6652	F3	5414
	7	14	19	25	16.8646	1	15	2	36.611	21	13	7.27	4		9006	6652	F4	5415
	7	14	19	27	4.8639	1	15	4	26.599	35	10	31.35	4		9006	6652	F1	5416
	7	14	19	27	8.8639	1	15	4	25.958	35	43	10.70	4		9006	6652	F2	5417
	7	14	19	27	12.8639	1	15	4	24.696	36	15	54.51	4		9006	6652	F3	5418
	7	14	19	27	16.8638	1	15	4	23.177	36	48	40.45	4		9006	6652	F4	5419
	7	14	19	27	20.8638	1	15	4	21.200	37	21	33.74	4		9006	6652	F5	4606
	7	14	19	27	24.8638	1	15	4	18.714	37	54	28.85	4		9006	6652	F6	5420
	7	14	19	27	28.8638	1	15	4	15.641	38	27	30.65	4		9006	6652	F7	4607
	7	14	19	29	4.8637	1	15	0	6.640	51	51	17.77	4		9006	6652	F1	4608
	7	14	19	29	8.8637	1	14	59	46.296	52	24	46.55	4		9006	6652	F2	5056
	7	14	19	29	12.8637	1	14	59	25.270	52	58	14.37	4		9006	6652	F3	5421
	7	14	19	29	16.8637	1	14	59	2.456	53	31	37.17	4		9006	6652	F4	5422
	7	14	19	29	20.8637	1	14	58	39.187	54	5	.35	4		9006	6652	F5	4609
	7	14	19	29	24.8637	1	14	58	13.899	54	38	18.66	4		9006	6652	F6	4610
	7	14	19	29	28.8637	1	14	57	48.151	55	11	29.80	4		9006	6652	F7	5423
	7	14	19	31	4.8640	1	14	38	5.987	67	59	42.20	4		9006	6652	F1	4856
	7	14	19	31	8.8640	1	14	36	41.389	68	29	51.25	4		9006	6652	F2	4857
	7	14	19	31	12.8641	1	14	35	12.020	68	59	54.89	4		9006	6652	F3	4858
	7		19	31	16.8641	1	14	33	39.105	69	29	46.24	4		9006	6652	F4	4859
	7	14	19	31	20.8641	1	14	32	.218	69	59	27.37	4		9006	6652	F5	4860
	7	14	19	31	24.8641	1	14	30	16.148	70	28	50.60	4		9006	6652	F6	5347
	7	14	19	31	28.8641	1	14	28	26.920	70	58	4.59	4		9006	6652	F7	6377
	7	14	23	28	4.8608	1	20	17	47.262	37	25	28.05	4		9004	8026	F1	8965
	7	14	23	28	8.8608	1	20	21	1.869	37	59	55.89	4		9004	8026	F2	8966
	7	14	23	28	12.8608	1	20	24	17.680	38	33	45.00	4		9004	8026	F3	8967
	7	14	23	28	16.8609	1	20	27	35.288	39	6	54.58	4		9004	8026	F4	9340
	7	14	23	28	20.8609	1	20	30	54.368	39	39	23.62	4		9004	8026	F5	9341
	7	14	23	28	24.8609	1	20	34	14.974	40	11	13.68	4		9004	8026	F6	9342
	7	14	23	28	28.8609	1	20	37	37.188	40	42	24.02	4		9004	8026	F7	9343
	7	15	1	4	4.8595	1	14	2	53.418	-15	41	43.24	4		9011	8751	F1	8196
	7	15	1	4	4.8616	1	16	11	1.340	-77	55	50.11	4		9007	5812	F1	8435
	7	15	1	4	8.8595	1	14	6	29.003	-14	45	55.90	4		9011	8751	F2	8197
	7	15	1	4	8.8616	1	16	18	55.367	-77	23	41.76	4		9007	5812	F2	9345
	7	15	1	4	12.8595	1	14	10	2.612	-13	49	42.46	4		9011	8751	F3	8198
	7	15	1	4	12.8615	1	16	26	19.598	-76	50	19.45	4		9007	5812	F3	8436
	7	15	1	4	16.8595	1	14	13	34.213	-12	53	9.23	4		9011	8751	F4	8199
	7	15	1	4	16.8615	1	16	33	15.336	-76	15	43.44	4		9007	5812	F4	8437
	7	15	1	4	20.8595	1	14	17	3.983	-11	56	21.32	4		9011	8751	F5	8200
	7	15	1	4	20.8614	1	16	39	44.897	-75	39	57.85	4		9007	5812	F5	8438
	7	15	1	4	24.8595	1	14	20	31.729	-10	59	21.38	4		9011	8751	F6	8201
	7	15	1	4	24.8614	1	16	45	51.123	-75	3	4.60	4		9007	5812	F6	8439
	7	15	1	4	28.8595	1	14	23	57.367	-10	2	10.50	4		9011	8751	F7	8202
	7	15	1	4	28.8613	1	16	51	35.138	-74	25	[illegible].18	4		9007	5812	F7	8440
	7	15	1	8	4.8601	1	18	50	29.105	-22	16	54.10	4		9007	5812	F1	9877
	7	15	1	8	8.8601	1	18	51	32.115	-21	12	59.65	4		9007	5812	F2	8441
	7	15	1	8	12.8601	1	18	52	34.299	-20	9	32.04	4		9007	5812	F3	8442
	7	15	1	8	16.8602	1	18	53	35.893	-19	6	33.80	4		9007	5812	F4	8443
	7	15	1	8	20.8602	1	18	54	36.740	-18	4	5.63	4		9007	5812	F5	8444
	7	15	1	8	24.8602	1	18	55	36.984	-17	2	10.51	4		9007	5812	F6	8445
	7	15	1	8	28.8602	1	18	56	36.431	-16	0	48.76	4		9007	5812	F7	8446
	7	15	3	18	4.8617	1	14	58	26.860	-	1	22	27.76	4	9009	6989	F1	507
	7	15	3	18	4.8637	1	17	36	8.456	-39	32	2.20	4		9010	3890	F1	9528
	7	15	3	18	8.8616	1	14	59	34.389	-	0	37	11.67	4	9009	6989	F2	101
	7	15	3	18	8.8637	1	17	37	44.778	-39	7	21.59	4		9010	3890	F2	9529
	7	15	3	18	12.8616	1	15	0	42.162	0	8	32.75	4		9009	6989	F3	102
	7	15	3	18	12.8636	1	17	39	21.717	-38	42	25.56	4		9010	3890	F3	9530
	7	15	3	18	16.8636	1	17	40	58.322	-38	17	10.85	4		9010	3890	F4	9531
	7	15	3	18	20.8615	1	15	2	58.394	1	41	25.29	4		9009	6989	F5	103
	7	15	3	18	20.8635	1	17	42	35.386	-37	51	28.52	4		9010	3890	F5	9532
	7	15	3	18	24.8615	1	15	4	6.743	2	28	32.79	4		9009	6989	F6	104
	7	15	3	18	24.8634	1	17	44	12.652	-37	25	32.86	4		9010	3890	F6	9533
	7	15	3	18	28.8615	1	15	5	15.561	3	16	4.01	4		9009	6989	F7	105
	7	15	3	18	28.8634	1	17	45	50.506	-36	59	15.84	4		9010	3890	F7	9534

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (NM)	STATION	FRAME NO.		OBS.NO.
1966	7	15	3	21	4.8617	1	18	53	34.628	-19	8	12.99	4		9010	3890	F1	9535
	7	15	3	21	8.8617	1	18	55	26.511	-14	27	26.72	4		9010	3890	F2	9536
	7	15	3	21	12.8617	1	18	57	19.007	-13	46	26.19	4		9010	3890	F3	9537
	7	15	3	21	16.8616	1	18	59	11.726	-13	5	3.73	4		9010	3890	F4	9538
	7	15	3	21	20.8616	1	19	1	9.098	-12	23	27.57	4		9010	3890	F5	9539
	7	15	3	21	24.8616	1	19	2	58.625	-11	41	36.58	4		9010	3890	F6	9540
	7	15	3	21	28.8616	1	19	4	52.843	-10	59	32.20	4		9010	3890	F7	9541
	7	15	3	24	4.8616	1	20	24	35.393	16	38	23.99	4		9010	3890	F1	9688
	7	15	3	24	8.8617	1	20	26	45.479	17	16	36.72	4		9010	3890	F2	9689
	7	15	3	24	12.8617	1	20	28	56.069	17	54	30.66	4		9010	3890	F3	9690
	7	15	3	24	16.8617	1	20	31	6.781	18	31	54.76	4		9010	3890	F4	9691
	7	15	3	24	20.8617	1	20	33	17.743	19	8	53.53	4		9010	3890	F5	9692
	7	15	3	24	24.8618	1	20	35	29.149	19	45	23.32	4		9010	3890	F6	513
	7	15	3	24	28.8618	1	20	37	40.581	20	21	33.06	4		9010	3890	F7	9694
	7	15	3	26	4.8627	1	21	31	1.683	32	23	14.34	4		9010	3890	F1	9695
	7	15	3	26	8.8628	1	21	33	15.565	32	47	12.41	4		9010	3890	F2	9696
	7	15	3	26	12.8628	1	21	35	29.260	33	10	42.87	4		9010	3890	F3	9697
	7	15	3	26	16.8629	1	21	37	42.932	33	33	45.91	4		9010	3890	F4	9878
	7	15	3	26	20.8629	1	21	39	56.598	33	56	18.78	4		9010	3890	F5	9879
	7	15	3	26	24.8630	1	21	42	9.905	34	18	26.95	4		9010	3890	F6	9698
	7	15	3	26	28.8630	1	21	44	23.468	34	40	7.75	4		9010	3890	F7	9699
	7	15	5	24	4.8648	1	14	58	11.299	9	7	32.58	4		9010	3899	F1	9593
	7	15	5	24	8.8648	1	14	58	32.012	9	38	6.43	4		9010	3899	F2	9594
	7	15	5	24	12.8648	1	14	58	52.288	10	8	55.71	4		9010	3899	F3	9595
	7	15	5	24	16.8647	1	14	59	12.849	10	39	56.78	4		9010	3899	F4	9596
	7	15	5	24	20.8647	1	14	59	33.176	11	11	9.79	4		9010	3899	F5	9597
	7	15	5	24	24.8646	1	14	59	53.524	11	42	38.10	4		9010	3899	F6	9598
	7	15	5	24	28.8646	1	15	0	13.672	12	14	21.53	4		9010	3899	F7	9599
	7	15	5	27	4.8621	1	20	56	.103	26	22	41.84	4		9001	2070	F1	2615
	7	15	5	27	4.8636	1	15	11	44.000	35	24	26.67	4		9010	3899	F1	9600
	7	15	5	27	8.8622	1	20	58	28.579	26	53	46.72	4		9001	2070	F2	2616
	7	15	5	27	8.8636	1	15	11	58.932	36	3	4.54	4		9010	3899	F2	9601
	7	15	5	27	12.8622	1	21	0	57.313	27	24	23.09	4		9001	2070	F3	2617
	7	15	5	27	12.8636	1	15	12	13.674	36	41	46.07	4		9010	3899	F3	9602
	7	15	5	27	16.8622	1	21	3	26.195	27	54	29.73	4		9001	2070	F4	2618
	7	15	5	27	16.8636	1	15	12	28.037	37	20	32.85	4		9010	3899	F4	9603
	7	15	5	27	20.8623	1	21	5	55.452	28	24	8.19	4		9001	2070	F5	2619
	7	15	5	27	20.8636	1	15	12	42.296	37	59	21.91	4		9010	3899	F5	9604
	7	15	5	27	24.8636	1	15	12	56.554	38	38	18.09	4		9010	3899	F6	9605
	7	15	5	27	28.8636	1	15	13	10.348	39	17	12.88	4		9010	3899	F7	9606
	7	15	5	29	4.8634	1	22	10	56.851	38	20	38.51	4		9001	2070	F1	2620
	7	15	5	29	4.8637	1	15	17	28.277	54	50	38.80	4		9010	3899	F1	9855
	7	15	5	29	8.8634	1	22	13	25.117	38	37	9.71	4		9001	2070	F2	2621
	7	15	5	29	8.8637	1	15	17	34.886	55	28	47.30	4		9010	3899	F2	9856
	7	15	5	29	12.8635	1	22	15	52.440	38	53	18.80	4		9001	2070	F3	2622
	7	15	5	29	12.8637	1	15	17	40.847	56	6	47.87	4		9010	3899	F3	9857
	7	15	5	29	16.8636	1	22	18	19.846	39	9	4.07	4		9001	2070	F4	2623
	7	15	5	29	16.8637	1	15	17	46.661	56	44	38.92	4		9010	3899	F4	9858
	7	15	5	29	20.8636	1	22	20	46.804	39	24	21.34	4		9001	2070	F5	2624
	7	15	5	29	20.8637	1	15	17	51.725	57	22	25.29	4		9010	3899	F5	9859
	7	15	5	29	24.8637	1	22	23	13.269	39	39	16.37	4		9001	2070	F6	2625
	7	15	5	29	24.8637	1	15	17	56.559	58	0	.59	4		9010	3899	F6	9860
	7	15	5	29	28.8637	1	22	25	39.233	39	53	44.63	4		9001	2070	F7	2626
	7	15	5	29	28.8637	1	15	18	.590	58	37	30.98	4		9010	3899	F7	9861
	7	15	5	31	4.8643	1	15	15	14.667	72	44	45.69	4		9010	3899	F1	9862
	7	15	5	31	8.8644	1	15	14	49.085	73	17	30.01	4		9010	3899	F2	9863
	7	15	5	31	12.8644	1	15	14	20.448	73	50	1.76	4		9010	3899	F3	9864
	7	15	5	31	16.8644	1	15	13	48.969	74	22	21.21	4		9010	3899	F4	9865
	7	15	5	31	20.8645	1	15	13	14.512	74	54	24.92	4		9010	3899	F5	9866
	7	15	5	31	24.8645	1	15	12	37.298	75	26	18.61	4		9010	3899	F6	9867
	7	15	5	31	28.8645	1	15	11	54.981	75	57	55.74	4		9010	3899	F7	9868
	7	15	5	34	4.8662	1	5	20	33.127	85	41	26.07	4		9010	3899	F1	9931
	7	15	5	34	8.8663	1	5	13	24.408	85	19	33.19	4		9010	3899	F2	9932
	7	15	5	34	12.8663	1	5	7	24.284	84	57	37.24	4		9010	3899	F3	9933
	7	15	5	34	16.8664	1	5	2	17.267	84	35	33.44	4		9010	3899	F4	9934
	7	15	5	34	20.8664	1	4	57	51.961	84	13	36.12	4		9010	3899	F5	9935
	7	15	5	34	24.8665	1	4	54	5.217	83	51	43.59	4		9010	3899	F6	9936
	7	15	5	34	28.8665	1	4	50	44.202	83	29	49.00	4		9010	3899	F7	514
	7	15	7	28	4.8641	1	15	26	33.065	25	50	23.18	4		9001	2075	F1	2844
	7	15	7	28	8.8641	1	15	26	50.451	26	26	8.45	4		9001	2075	F2	2845
	7	15	7	28	12.8640	1	15	27	8.118	27	2	10.88	4		9001	2075	F3	2846
	7	15	7	28	16.8640	1	15	27	25.587	27	38	20.85	4		9001	2075	F4	2847
	7	15	7	28	20.8640	1	15	27	43.041	28	14	44.36	4		9001	2075	F5	2848
	7	15	7	28	24.8640	1	15	28	.378	28	51	19.14	4		9001	2075	F6	2849
	7	15	7	28	28.8639	1	15	28	17.599	29	28	4.67	4		9001	2075	F7	2850
	7	15	7	33	4.8641	1	15	41	16.679	73	44	22.85	4		9001	2075	F1	3040
	7	15	7	33	8.8641	1	15	41	11.325	74	19	30.04	4		9001	2075	F2	3041
	7	15	7	33	12.8641	1	15	41	4.521	74	54	25.99	4		9001	2075	F3	3042
	7	15	7	33	16.8642	1	15	40	55.446	75	29	7.47	4		9001	2075	F4	3043
	7	15	7	33	20.8642	1	15	40	44.956	76	3	39.67	4		9001	2075	F5	3044

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	7	15	7	33	24.8642	1	15	40	32.207	76	37	56.67	4		9001	2075	F6	3045
	7	15	7	33	28.8643	1	15	40	16.594	77	12	1.04	4		9001	2075	F7	3120
	7	15	7	36	4.8658	1		26	57.286	83	28	22.55	4		9001	2075	F1	4302
	7	15	7	36	8.8659	1	4	25	43.373	83	3	11.53	4		9001	2075	F2	3048
	7	15	7	36	12.8659	1	4	24	40.785	82	38	12.65	4		9001	2075	F3	4303
	7	15	7	36	16.8660	1	4	23	47.980	82	13	22.36	4		9001	2075	F4	3121
	7	15	7	36	20.8660	1	4	23	1.271	81	48	43.67	4		9001	2075	F5	3051
	7	15	7	36	24.8661	1	4	22	22.383	81	24	12.61	4		9001	2075	F6	3052
	7	15	17	6	4.8642	1	19	39	41.738	-29	34	3.34	4		9002	4352	F1	6336
	7	15	17	6	8.8642	1	19	39	24.051	-28	50	34.77	4		9002	4352	F2	6337
	7	15	17	6	12.8642	1	19	39	6.995	-28	7	21.96	4		9002	4352	F3	6338
	7	15	17	6	16.8643	1	19	38	50.957	-27	24	24.59	4		9002	4352	F4	6339
	7	15	17	6	20.8643	1	19	38	35.889	-26	41	41.42	4		9002	4352	F5	6340
	7	15	17	6	24.8643	1	19	38	21.686	-25	59	14.40	4		9002	4352	F6	6971
	7	15	17	6	28.8644	1	19	38	8.371	-25	17	8.58	4		9002	4352	F7	7471
	7	15	19	8	4.8623	1	13	2	48.509	-20	5	15.00	4		9002	4361	F1	5814
	7	15	19	8	8.8623	1	13	5	47.621	-19	21	10.61	4		9002	4361	F2	5815
	7	15	19	8	12.8623	1	13	8	46.380	-18	36	21.38	4		9002	4361	F3	5816
	7	15	19	8	16.8622	1	13	11	44.740	-17	50	50.20	4		9002	4361	F4	5817
	7	15	19	8	20.8622	1	13	14	42.948	-17	4	36.33	4		9002	4361	F5	5818
	7	15	19	8	24.8622	1	13	17	40.680	-16	17	44.98	4		9002	4361	F6	5819
	7	15	19	8	28.8622	1	13	20	38.269	-15	30	11.71	4		9002	4361	F7	5820
	7	15	19	12	4.8632	1	15	41	14.037	28	3	28.00	4		9002	4361	F1	6349
	7	15	19	12	8.8632	1	15	43	24.473	28	39	40.73	4		9002	4361	F2	6350
	7	15	19	12	12.8633	1	15	45	33.565	29	15	14.44	4		9002	4361	F3	6351
	7	15	19	12	16.8633	1	15	47	41.791	29	50	13.29	4		9002	4361	F4	6352
	7	15	19	12	20.8634	1	15	49	49.622	30	24	33.56	4		9002	4361	F5	6353
	7	15	19	12	24.8634	1	15	51	56.002	30	58	22.63	4		9002	4361	F6	6354
	7	15	19	12	28.8635	1	15	54	1.686	31	31	34.60	4		9002	4361	F7	6355
	7	15	23	33	4.8636	1	20	20	6.725	51	35	46.05	4		9004	A044	F1	A958
	7	15	23	33	8.8636	1	20	24	16.875	52	3	40.70	4		9004	A044	F2	A959
	7	15	23	33	12.8636	1	20	28	29.836	52	30	44.83	4		9004	A044	F3	A960
	7	15	23	33	16.8637	1	20	32	45.449	52	56	56.57	4		9004	A044	F4	A961
	7	15	23	33	20.8637	1	20	37	3.496	53	22	19.04	4		9004	A044	F5	A962
	7	15	23	33	24.8638	1	20	41	23.256	53	46	47.72	4		9004	A044	F6	A963
	7	15	23	33	28.8638	1	20	45	45.778	54	10	26.77	4		9004	A044	F7	A964
	7	15	23	38	4.8663	1	15	12	39.503	66	2	8.45	4		9051	85	F1	0
	7	15	23	38	8.8663	1	15	11	42.541	66	36	6.70	4		9051	85	F2	1
	7	15	23	38	12.8663	1	15	10	41.907	67	10	.23	4		9051	85	F3	2
	7	15	23	38	16.8663	1	15	9	37.803	67	43	49.92	4		9051	85	F4	3
	7	15	23	38	20.8663	1	15	8	29.607	68	17	32.49	4		9051	85	F5	4
	7	16	1	11	4.8619	1	17	9	2.954	-39	27	43.07	4		9007	5844	F1	9138
	7	16	1	11	4.8638	1	15	17	30.504	23	39	39.67	4		9011	8786	F1	8203
	7	16	1	11	8.8619	1	17	11	42.133	-38	17	.76	4		9007	5844	F2	9346
	7	16	1	11	8.8639	1	15	19	43.076	24	14	33.07	4		9011	8786	F2	9366
	7	16	1	11	12.8619	1	17	14	17.621	-37	5	27.80	4		9007	5844	F3	9347
	7	16	1	11	12.8639	1	15	21	54.572	24	48	52.88	4		9011	8786	F3	8204
	7	16	1	11	16.8619	1	17	16	49.713	-35	53	40.71	4		9007	5844	F4	9139
	7	16	1	11	16.8640	1	15	24	4.859	25	22	41.30	4		9011	8786	F4	8205
	7	16	1	11	20.8618	1	17	19	18.365	-34	41	10.64	4		9007	5844	F5	9642
	7	16	1	11	20.8640	1	15	26	14.008	25	55	58.19	4		9011	8786	F5	8206
	7	16	1	11	24.8618	1	17	21	43.683	-33	28	19.00	4		9007	5844	F6	9140
	7	16	1	11	24.8641	1	15	28	21.974	26	28	42.62	4		9011	8786	F6	8207
	7	16	1	11	28.8618	1	17	24	5.911	-32	15	5.67	4		9007	5844	F7	9141
	7	16	1	11	28.8641	1	15	30	29.179	27	0	57.35	4		9011	8786	F7	8208
	7	16	3	25	4.8638	1	18	1	50.531	-12	42	19.92	4		9010	3925	F1	9903
	7	16	3	25	8.8637	1	18	3	45.669	-11	59	12.93	4		9010	3925	F2	9904
	7	16	3	25	12.8637	1	18	5	41.700	-11	15	41.35	4		9010	3925	F3	9905
	7	16	3	25	16.8637	1	18	7	38.335	-10	31	44.43	4		9010	3925	F4	9906
	7	16	3	25	20.8636	1	18	9	35.675	- 9	47	23.67	4		9010	3925	F5	9907
	7	16	3	25	24.8636	1	18	11	33.822	- 9	2	35.36	4		9010	3925	F6	9908
	7	16	3	25	28.8636	1	18	13	32.821	- 8	17	28.95	4		9010	3925	F7	9909
	7	16	3	30	4.8645	1	21	1	56.858	39	44	42.37	4		9010	3925	F1	9910
	7	16	3	30	8.8646	1	21	4	43.321	40	9	34.15	4		9010	3925	F2	9911
	7	16	3	30	12.8646	1	21	7	29.673	40	33	45.83	4		9010	3925	F3	9912
	7	16	3	30	16.8647	1	21	10	16.142	40	57	22.91	4		9010	3925	F4	9913
	7	16	3	30	20.8647	1	21	13	2.553	41	20	24.67	4		9010	3925	F5	9914
	7	16	3	30	24.8648	1	21	15	48.872	41	42	49.02	4		9010	3925	F6	9915
	7	16	3	30	28.8648	1	21	18	35.501	42	4	43.12	4		9010	3925	F7	9916
	7	16	3	32	4.8662	1	22	23	36.220	48	16	30.72	4		9010	3925	F1	9917
	7	16	3	32	8.8663	1	22	26	12.001	48	26	30.78	4		9010	3925	F2	9918
	7	16	3	32	12.8663	1	22	28	46.737	48	36	6.96	4		9010	3925	F3	9919
	7	16	3	32	16.8664	1	22	31	21.037	48	45	23.22	4		9010	3925	F4	9920
	7	16	3	32	20.8665	1	22	33	54.325	48	54	17.07	4		9010	3925	F5	9921
	7	16	3	32	24.8665	1	22	36	27.042	49	2	49.35	4		9010	3925	F6	9922
	7	16	3	32	28.8666	1	22	38	58.644	49	11	1.60	4		9010	3925	F7	9923
	7	16	5	30	4.8674	1	14	46	6.400	25	3	19.46	4		9010	3928	F1	9260
	7	16	5	30	8.8674	1	14	46	15.050	25	35	45.06	4		9010	3928	F2	9261
	7	16	5	30	12.8674	1	14	46	23.356	26	8	17.40	4		9010	3928	F3	9262
	7	16	5	30	16.8674	1	14	46	31.559	26	40	59.77	4		9010	3928	F4	9263

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	7	16	5	30	20.8673	1	14	46	39.288	27	12	0.57	4		9010	3928	F5	9264
	7	16	5	30	24.8673	1	14	46	46.596	27	44	7.06	4		9010	3928	F6	9265
	7	16	5	30	28.8673	1	14	46	54.206	28	19	52.54	4		9010	3928	F7	9646
	7	16	5	30	34.8717	1								1.7230720	7901			5363
	7	16	5	31	4.8720	1								1.7808240	7901			5364
	7	16	5	31	34.8745	1								1.8550110	7901			5365
	7	16	5	32	4.8646	1	21	3	29.844	40	21	26.68	4		9001	2100	F1	4299
	7	16	5	32	4.8739	1								1.9435930	7901			5366
	7	16	5	32	4.8670	1	14	48	7.340	42	3	3.37	4		9010	3928	F1	9266
	7	16	5	32	8.8646	1	21	6	34.297	40	46	15.94	4		9001	2100	F2	4300
	7	16	5	32	8.8670	1	14	48	5.237	42	38	8.40	4		9010	3928	F2	9267
	7	16	5	32	12.8647	1	21	9	38.712	41	10	28.47	4		9001	2100	F3	3028
	7	16	5	32	12.8670	1	14	48	2.658	43	13	12.60	4		9010	3928	F3	9268
	7	16	5	32	16.8647	1	21	12	43.657	41	34	3.92	4		9001	2100	F4	3029
	7	16	5	32	16.8670	1	14	47	59.249	43	48	17.29	4		9010	3928	F4	9647
	7	16	5	32	20.8648	1	21	15	49.000	41	57	1.61	4		9001	2100	F5	3030
	7	16	5	32	20.8670	1	14	47	55.355	44	23	22.46	4		9010	3928	F5	9270
	7	16	5	32	24.8648	1	21	18	54.009	42	19	22.19	4		9001	2100	F6	3031
	7	16	5	32	24.8670	1	14	47	51.033	44	58	28.78	4		9010	3928	F6	9271
	7	16	5	32	28.8648	1	21	21	59.768	42	41	1.79	4		9001	2100	F7	3032
	7	16	5	32	28.8670	1	14	47	46.155	45	33	35.00	4		9010	3928	F7	9272
	7	16	5	32	34.8750	1								2.0445590	7901			5367
	7	16	5	33	34.8774	1								2.2762670	7901			5368
	7	16	5	34	4.8661	1	22	34	37.300	48	36	8.79	4		9001	2100	F1	4301
	7	16	5	34	4.8671	1	14	41	43.4[illegible]	59	23	20.65	4		9010	3928	F1	9542
	7	16	5	34	8.8662	1	22	37	30.180	48	44	55.31	4		9001	2100	F2	3034
	7	16	5	34	12.8662	1	22	40	22.509	66	53	16.16	4		9001	2100	F3	5424
	7	16	5	34	12.8672	1	14	40	43.680	60	30	12.89	4		9010	3928	F3	9543
	7	16	5	34	16.8663	1	22	43	13.434	49	1	14.94	4		9001	2100	F4	3036
	7	16	5	34	16.8672	1	14	40	11.032	61	3	27.20	4		9010	3928	F4	9544
	7	16	5	34	20.8664	1	22	46	3.432	49	8	47.35	4		9001	2100	F5	3037
	7	16	5	34	20.8672	1	14	39	36.607	61	36	34.46	4		9010	3928	F5	9545
	7	16	5	34	24.8664	1	22	48	52.456	49	16	.43	4		9001	2100	F6	3038
	7	16	5	34	28.8665	1	22	51	40.471	49	22	47.18	4		9001	2100	F7	3039
	7	16	5	34	28.8672	1	14	38	22.477	62	42	24.93	4		9010	3928	F7	9546
	7	16	5	37	4.8684	1	13	3	33.150	81	13	59.79	4		9010	3928	F1	9547
	7	16	5	37	8.8684	1	12	56	17.515	81	35	14.80	4		9010	3928	F2	9548
	7	16	5	37	12.8684	1	12	48	27.595	81	55	46.87	4		9010	3928	F3	9549
	7	16	5	37	16.8685	1	12	39	57.026	82	15	30.80	4		9010	3928	F4	9550
	7	16	5	37	20.8685	1	12	30	45.582	82	34	26.63	4		9010	3928	F5	9551
	7	16	5	37	24.8685	1	12	20	47.628	82	52	23.97	4		9010	3928	F6	9552
	7	16	5	37	28.8686	1	12	10	2.706	83	9	15.39	4		9010	3928	F7	9553
	7	16	7	34	4.8669	1	15	7	47.139	42	3	22.31	4		9001	2111	F1	3188
	7	16	7	34	8.8669	1	15	7	46.587	42	39	6.01	4		9001	2111	F2	3189
	7	16	7	34	12.8669	1	15	7	46.035	43	14	53.83	4		9001	2111	F3	3190
	7	16	7	34	16.8669	1	15	7	44.548	43	50	46.06	4		9001	2111	F4	4304
	7	16	7	34	20.8669	1	15	7	42.793	44	26	42.19	4		9001	2111	F5	3192
	7	16	7	34	24.8669	1	15	7	40.428	45	2	39.97	4		9001	2111	F6	3193
	7	16	7	34	28.8669	1	15	7	37.735	45	38	43.06	4		9001	2111	F7	3194
	7	16	7	37	4.8671	1	14	52	30.012	68	43	21.46	4		9001	2112	F1	3195
	7	16	7	37	8.8671	1	14	51	27.179	69	16	51.42	4		9001	2112	F2	3196
	7	16	7	37	12.8671	1	14	50	19.976	69	50	11.56	4		9001	2112	F3	3197
	7	16	7	37	16.8672	1	14	49	8.291	70	23	19.57	4		9001	2112	F4	3198
	7	16	7	37	20.8672	1	14	47	52.520	70	56	17.07	4		9001	2112	F5	3199
	7	16	7	37	24.8672	1	14	46	31.638	71	29	1.45	4		9001	2112	F6	3200
	7	16	7	37	28.8672	1	14	45	5.111	72	1	33.26	4		9001	2112	F7	3201
	7	16	7	40	4.8685	1	8	6	28.911	85	8	36.70	4		9001	2113	F1	3378
	7	16	7	40	8.8685	1	7	48	46.260	84	56	4.79	4		9001	2113	F2	3379
	7	16	7	40	12.8686	1	7	32	38.299	84	41	56.36	4		9001	2113	F3	4307
	7	16	7	40	16.8686	1	7	18	5.094	84	26	24.67	4		9001	2113	F4	3381
	7	16	7	40	20.8686	1	7	5	.602	84	9	43.60	4		9001	2113	F5	3382
	7	16	7	40	24.8687	1	6	53	14.998	83	52	7.80	4		9001	2113	F6	3383
	7	16	7	40	28.8687	1	6	42	38.780	83	33	43.21	4		9001	2113	F7	3384
	7	16	9	24	4.8669	1	14	36	8.398	-10	10	53.51	4		9012	6855	F1	190
	7	16	9	24	8.8669	1	14	36	50.291	- 9	40	41.08	4		9012	6855	F2	191
	7	16	9	24	12.8668	1	14	37	32.284	- 9	10	4.57	4		9012	6855	F3	192
	7	16	9	24	16.8668	1	14	38	14.018	- 8	39	10.00	4		9012	6855	F4	558
	7	16	9	24	20.8667	1	14	38	56.043	- 8	7	50.01	4		9012	6855	F5	559
	7	16	9	24	24.8667	1	14	39	38.217	- 7	36	12.43	4		9012	6855	F6	560
	7	16	9	24	28.8666	1	14	40	20.125	- 7	4	11.70	4		9012	6855	F7	561
	7	16	9	26	4.8656	1	14	57	27.032	7	33	9.10	4		9012	6855	F1	195
	7	16	9	26	8.8656	1	14	58	10.916	8	14	11.84	4		9012	6855	F2	196
	7	16	9	26	12.8655	1	14	58	55.461	8	55	44.32	4		9012	6855	F3	197
	7	16	9	26	16.8655	1	14	59	39.647	9	37	34.90	4		9012	6855	F4	198
	7	16	9	26	20.8655	1	15	0	23.985	10	19	39.63	4		9012	6855	F5	199
	7	16	9	26	24.8654	1	15	1	8.882	11	2	14.75	4		9012	6855	F6	200
	7	16	9	26	28.8654	1	15	1	53.671	11	45	2.49	4		9012	6855	F7	201
	7	16	9	28	4.8650	1	15	21	5.688	30	9	55.31	4		9012	6855	F1	451
	7	16	9	28	8.8650	1	15	21	58.108	30	58	.65	4		9012	6855	F2	452
	7	16	9	28	12.8650	1	15	22	50.896	31	46	7.06	4		9012	6855	F3	453

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	7	16	9	28	16.8650	1	15	23	44.243	32	34	14.71	4		9012	6855	F4	3242
	7	16	9	28	20.8650	1	15	24	38.038	33	22	23.88	4		9012	6855	F5	3590
	7	16	9	28	24.8650	1	15	25	32.317	34	10	31.86	4		9012	6855	F6	456
	7	16	9	28	28.8650	1	15	26	27.366	34	58	39.18	4		9012	6855	F7	3591
	7	16	9	32	4.8664	1	16	52	13.421	72	30	15.69	4		9012	6855	F1	457
	7	16	9	32	8.8664	1	16	55	30.061	73	1	31.09	4		9012	6855	F2	458
	7	16	9	32	12.8665	1	16	58	54.743	73	32	11.85	4		9012	6855	F3	459
	7	16	9	32	16.8665	1	17	2	29.108	74	2	24.31	4		9012	6855	F4	3592
	7	16	9	32	20.8666	1	17	6	13.628	74	32	8.69	4		9012	6855	F5	461
	7	16	9	32	24.8666	1	17	10	8.576	75	1	17.09	4		9012	6855	F6	462
	7	16	9	32	28.8667	1	17	14	15.260	75	29	54.04	4		9012	6855	F7	3593
	7	16	9	46	4.8715	1	11	56	23.730	73	18	17.36	4		9001	2129	F1	3577
	7	16	9	46	8.8715	1	11	51	33.905	73	26	59.03	4		9001	2129	F2	3578
	7	16	9	46	12.8716	1	11	46	39.356	73	35	11.19	4		9001	2129	F3	3579
	7	16	9	46	16.8716	1	11	41	40.910	73	42	50.51	4		9001	2129	F4	3580
	7	16	9	46	20.8716	1	11	36	37.195	73	50	1.45	4		9001	2129	F5	3581
	7	16	9	46	24.8716	1	11	31	30.144	73	56	43.56	4		9001	2129	F6	3582
	7	16	9	46	28.8716	1	11	26	19.024	74	2	55.73	4		9001	2129	F7	3583
	7	16	11	7	4.8639	1	11	51	43.777	-44	41	8.83	4		9023	6402	F1	5861
	7	16	11	7	8.8638	1	11	56	18.782	-44	17	30.47	4		9023	6402	F2	6504
	7	16	11	7	12.8637	1	12	0	54.562	-43	52	38.47	4		9023	6402	F3	5863
	7	16	11	7	16.8637	1	12	5	31.550	-43	26	29.37	4		9023	6402	F4	6505
	7	16	11	7	20.8636	1	12	10	9.338	-42	59	6.96	4		9023	6402	F5	5865
	7	16	11	7	24.8636	1	12	14	47.575	-42	30	26.96	4		9023	6402	F6	5866
	7	16	11	7	28.8635	1	12	19	26.805	-42	0	29.98	4		9023	6402	F7	5867
	7	16	11	11	4.8634	1	15	44	36.050	6	41	3.47	4		9023	6402	F1	5868
	7	16	11	11	8.8634	1	15	47	10.349	7	32	38.04	4		9023	6402	F2	5869
	7	16	11	11	12.8634	1	15	49	42.223	8	23	19.02	4		9023	6402	F3	5870
	7	16	11	11	16.8635	1	15	52	11.787	9	13	5.21	4		9023	6402	F4	5871
	7	16	11	11	20.8635	1	15	54	39.188	10	1	57.64	4		9023	6402	F5	5872
	7	16	11	11	24.8636	1	15	57	4.461	10	49	57.88	4		9023	6402	F6	5873
	7	16	11	11	28.8636	1	15	59	27.376	11	37	7.66	4		9023	6402	F7	5874
	7	16	17	7	4.8660	1	19	55	20.117	-70	38	36.96	4		9002	4388	F1	4318
	7	16	17	7	8.8659	1	19	52	32.539	-69	53	26.63	4		9002	4388	F2	3649
	7	16	17	7	12.8659	1	19	49	55.734	-69	7	38.32	4		9002	4388	F3	4319
	7	16	17	7	16.8659	1	19	47	30.511	-68	21	13.56	4		9002	4388	F4	3650
	7	16	17	7	20.8658	1	19	45	14.821	-67	34	15.97	4		9002	4388	F5	3651
	7	16	17	11	4.8661	1	19	13	35.058	-19	31	34.46	4		9002	4388	F1	3654
	7	16	17	11	8.8661	1	19	13	38.391	-18	45	52.44	4		9002	4388	F2	4999
	7	16	17	11	12.8662	1	19	13	42.052	-18	0	40.07	4		9002	4388	F3	3655
	7	16	17	11	16.8662	1	19	13	46.151	-17	15	54.32	4		9002	4388	F4	3656
	7	16	17	11	20.8662	1	19	13	51.072	-16	31	37.41	4		9002	4388	F5	3657
	7	16	17	11	24.8663	1	19	13	56.127	-15	47	44.22	4		9002	4388	F6	3658
	7	16	17	11	28.8663	1	19	14	2.014	-15	4	21.63	4		9002	4388	F7	3659
	7	16	19	11	4.8664	1	11	58	32.873	-22	11	4.80	4		9002	4398	F1	4177
	7	16	19	11	8.8663	1	12	0	53.060	-21	40	54.29	4		9002	4398	F2	4178
	7	16	19	11	12.8663	1	12	3	13.544	-21	10	15.46	4		9002	4398	F3	4179
	7	16	19	11	16.8663	1	12	5	34.399	-20	38	58.06	4		9002	4398	F4	4180
	7	16	19	11	20.8662	1	12	7	55.194	-20	7	7.10	4		9002	4398	F5	4181
	7	16	19	11	24.8662	1	12	10	16.295	-19	34	45.19	4		9002	4398	F6	4182
	7	16	19	11	28.8661	1	12	12	37.838	-19	1	47.43	4		9002	4398	F7	4183
	7	16	19	15	4.8658	1	14	17	19.388	18	55	55.18	4		9002	4398	F1	4184
	7	16	19	15	8.8658	1	14	19	28.939	19	37	32.12	4		9002	4398	F2	4185
	7	16	19	15	12.8658	1	14	21	37.810	20	18	47.29	4		9002	4398	F3	4186
	7	16	19	15	16.8659	1	14	23	46.308	20	59	39.87	4		9002	4398	F4	4187
	7	16	19	15	20.8659	1	14	25	54.239	21	40	7.64	4		9002	4398	F5	4188
	7	16	19	15	24.8659	1	14	28	1.801	22	20	16.01	4		9002	4398	F6	4189
	7	16	19	15	28.8660	1	14	30	8.882	22	59	54.57	4		9002	4398	F7	4190
	7	16	23	38	4.8665	1	20	28	50.628	63	45	39.67	4		9004	8048	F1	9178
	7	16	23	38	8.8666	1	20	34	32.174	64	5	30.41	4		9004	8048	F2	9179
	7	16	23	38	12.8666	1	20	40	17.728	64	24	17.37	4		9004	8048	F3	9180
	7	16	23	38	16.8667	1	20	46	7.198	64	42	4.56	4		9004	8048	F4	9344
	7	16	23	38	20.8667	1	20	52	.020	64	58	47.14	4		9004	8048	F5	9181
	7	16	23	38	24.8668	1	20	57	56.255	65	14	30.02	4		9004	8048	F6	9182
	7	16	23	38	28.8668	1	21	3	54.183	65	29	9.06	4		9004	8048	F7	9183
	7	17	1	15	4.8643	1	15	31	17.700	-35	23	45.96	4		9007	5873	F1	9067
	7	17	1	15	4.8671	1	14	31	36.796	24	24	37.48	4		9011	8816	F1	8485
	7	17	1	15	8.8643	1	15	34	50.194	-34	17	28.99	4		9007	5873	F2	9068
	7	17	1	15	8.8672	1	14	33	41.997	24	58	11.61	4		9011	8816	F2	8486
	7	17	1	15	12.8643	1	15	38	19.721	-33	10	3.58	4		9007	5873	F3	9069
	7	17	1	15	12.8672	1	14	35	46.268	25	31	23.09	4		9011	8816	F3	8487
	7	17	1	15	16.8642	1	15	41	45.869	-32	1	36.17	4		9007	5873	F4	9070
	7	17	1	15	16.8672	1	14	37	49.973	26	4	9.12	4		9011	8816	F4	8488
	7	17	1	15	20.8642	1	15	45	0.912	-30	52	8.88	4		9007	5873	F5	9071
	7	17	1	15	20.8673	1	14	39	52.800	26	36	34.04	4		9011	8816	F5	8489
	7	17	1	15	24.8642	1	15	48	28.839	-29	41	48.27	4		9007	5873	F6	9072
	7	17	1	15	24.8673	1	14	41	55.139	27	8	34.93	4		9011	8816	F6	8490
	7	17	1	15	28.8642	1	15	51	45.663	-28	30	35.00	4		9007	5873	F7	9073
	7	17	1	15	28.8674	1	14	43	56.838	27	40	9.71	4		9011	8816	F7	8491
	7	17	3	27	4.8678	1	16	18	59.245	-27	16	29.63	4		9010	3960	F1	544

July 17, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	7	17	3	27	8.8677	1	16	20	24.640	-26	47	38.40	4		9010	3960	F2	345
	7	17	3	27	12.8676	1	16	21	50.605	-26	18	19.74	4		9010	3960	F3	545
	7	17	3	27	16.8676	1	16	23	17.059	-25	48	36.95	4		9010	3960	F4	356
	7	17	3	27	20.8675	1	16	24	43.947	-25	18	26.73	4		9010	3960	F5	357
	7	17	3	27	24.8675	1	16	26	11.569	-24	47	50.85	4		9010	3960	F6	358
	7	17	3	27	28.8674	1	16	27	39.437	-24	16	48.63	4		9010	3960	F7	359
	7	17	3	29	4.8662	1	17	6	7.926	- 9	20	1.31	4		9010	3960	F1	72
	7	17	3	29	8.8662	1	17	7	53.846	- 8	36	5.68	4		9010	3960	F2	73
	7	17	3	29	12.8662	1	17	9	40.764	- 7	51	27.71	4		9010	3960	F3	74
	7	17	3	29	16.8661	1	17	11	28.459	- 7	6	26.29	4		9010	3960	F4	516
	7	17	3	29	20.8661	1	17	13	17.258	- 6	20	50.71	4		9010	3960	F5	76
	7	17	3	29	24.8660	1	17	15	6.967	- 5	34	45.76	4		9010	3960	F6	77
	7	17	3	29	28.8660	1	17	16	57.894	- 4	48	10.37	4		9010	3960	F7	78
	7	17	3	32	4.8657	1	18	45	5.881	28	30	29.00	4		9010	3960	F1	517
	7	17	3	32	8.8657	1	18	47	50.889	29	18	50.17	4		9010	3960	F2	79
	7	17	3	32	12.8657	1	18	50	37.573	30	6	38.88	4		9010	3960	F3	80
	7	17	3	32	16.8657	1	18	53	25.943	30	53	51.13	4		9010	3960	F4	81
	7	17	3	32	20.8657	1	18	56	15.940	31	40	30.51	4		9010	3960	F5	82
	7	17	3	32	24.8658	1	18	59	7.423	32	26	32.60	4		9010	3960	F6	83
	7	17	3	32	28.8658	1	19	2	.870	33	11	57.75	4		9010	3960	F7	518
	7	17	3	34	4.8667	1	20	18	47.147	47	41	27.39	4		9010	3960	F1	5685
	7	17	3	34	8.8667	1	20	22	14.380	48	8	3.90	4		9010	3960	F2	477
	7	17	3	34	12.8668	1	20	25	42.581	48	33	52.86	4		9010	3960	F3	478
	7	17	3	34	16.8668	1	20	29	11.378	48	58	55.56	4		9010	3960	F4	479
	7	17	3	34	20.8669	1	20	32	41.056	49	23	13.46	4		9010	3960	F5	480
	7	17	3	34	24.8669	1	20	36	11.487	49	46	51.25	4		9010	3960	F6	547
	7	17	3	34	28.8670	1	20	39	42.364	50	9	40.56	4		9010	3960	F7	548
	7	17	3	36	4.8683	1	22	3	52.796	56	4	13.59	4		9010	3960	F1	481
	7	17	3	36	8.8684	1	22	7	14.929	56	12	5.79	4		9010	3960	F2	482
	7	17	3	36	12.8685	1	22	10	36.239	56	19	31.16	4		9010	3960	F3	483
	7	17	3	36	16.8685	1	22	13	56.416	56	26	30.04	4		9010	3960	F4	549
	7	17	3	36	20.8686	1	22	17	15.178	56	33	1.68	4		9010	3960	F5	550
	7	17	3	36	24.8686	1	22	20	32.686	56	39	10.94	4		9010	3960	F6	551
	7	17	3	36	28.8687	1	22	23	48.641	56	44	54.80	4		9010	3960	F7	552
	7	17	5	30	4.8676	1	16	45	17.335	-15	40	6.94	4		9001	2147	F1	3255
	7	17	5	30	8.8675	1	16	46	41.806	-15	7	15.08	4		9001	2147	F2	3256
	7	17	5	30	12.8675	1	16	48	7.217	-14	33	56.58	4		9001	2147	F3	3257
	7	17	5	30	16.8674	1	16	49	33.215	-14	0	9.61	4		9001	2147	F4	3258
	7	17	5	30	20.8674	1	16	51	.089	-13	25	58.24	4		9001	2147	F5	3259
	7	17	5	30	24.8673	1	16	52	27.712	-12	51	18.73	4		9001	2147	F6	3260
	7	17	5	30	28.8673	1	16	53	56.206	-12	16	9.87	4		9001	2147	F7	3261
	7	17	5	33	34.8725	1								1.5807080	7901			5369
	7	17	5	34	4.8711	1	14	29	30.393	24	12	31.53	4		9010	3966	F1	7420
	7	17	5	34	4.8731	1								1.5887370	7901			5370
	7	17	5	34	4.8660	1	18	42	27.617	28	27	51.77	4		9001	2147	F1	3262
	7	17	5	34	8.8711	1	14	29	33.953	24	41	19.54	4		9010	3966	F2	7421
	7	17	5	34	8.8660	1	18	45	12.914	29	15	5.71	4		9001	2147	F2	3263
	7	17	5	34	12.8711	1	14	29	37.279	25	10	15.54	4		9010	3966	F3	7422
	7	17	5	34	12.8660	1	18	48	.146	30	1	58.23	4		9001	2147	F3	3264
	7	17	5	34	16.8710	1	14	29	40.388	25	39	18.74	4		9010	3966	F4	7423
	7	17	5	34	16.8660	1	18	50	49.516	30	48	26.32	4		9001	2147	F4	3265
	7	17	5	34	20.8710	1	14	29	43.168	26	8	28.88	4		9010	3966	F5	7458
	7	17	5	34	20.8660	1	18	53	40.962	31	34	22.92	4		9001	2147	F5	3266
	7	17	5	34	24.8710	1	14	29	45.667	26	37	46.94	4		9010	3966	F6	7425
	7	17	5	34	24.8661	1	18	56	34.492	32	19	52.75	4		9001	2147	F6	3267
	7	17	5	34	28.8710	1	14	29	47.777	27	7	7.32	4		9010	3966	F7	7426
	7	17	5	34	28.8661	1	18	59	30.471	33	4	55.08	4		9001	2147	F7	4305
	7	17	5	34	34.8733	1								1.6179520	7901			5371
	7	17	5	35	4.8725	1								1.6670910	7901			5372
	7	17	5	35	34.8732	1								1.7343230	7901			5373
	7	17	5	36	4.8706	1	14	28	43.260	39	19	49.19	4		9010	3966	F1	7427
	7	17	5	36	4.8734	1								1.8174810	7901			5374
	7	17	5	36	4.8668	1	20	20	3.006	47	48	8.32	4		9001	2147	F1	3228
	7	17	5	36	8.8705	1	14	28	34.696	39	51	9.93	4		9010	3966	F2	7428
	7	17	5	36	8.8668	1	20	23	47.058	48	15	29.42	4		9001	2147	F2	3229
	7	17	5	36	12.8705	1	14	28	25.416	40	22	33.83	4		9010	3966	F3	7429
	7	17	5	36	12.8668	1	20	27	32.165	48	42	3.59	4		9001	2147	F3	3230
	7	17	5	36	16.8705	1	14	28	15.555	40	54	1.59	4		9010	3966	F4	7430
	7	17	5	36	16.8669	1	20	31	18.593	49	7	49.70	4		9001	2147	F4	3231
	7	17	5	36	20.8705	1	14	28	5.323	41	25	28.80	4		9010	3966	F5	7431
	7	17	5	36	20.8669	1	20	35	6.355	49	32	49.74	4		9001	2147	F5	3232
	7	17	5	36	24.8705	1	14	27	54.174	41	56	59.46	4		9010	3966	F6	7432
	7	17	5	36	24.8670	1	20	38	55.269	49	57	3.66	4		9001	2147	F6	3233
	7	17	5	36	28.8705	1	14	27	42.814	42	28	32.75	4		9010	3966	F7	7433
	7	17	5	36	28.8670	1	20	42	45.389	50	20	29.22	4		9001	2147	F7	4306
	7	17	5	36	34.8740	1								1.9143340	7901			5375
	7	17	5	37	4.8782	1								2.0227660	7901			5376
	7	17	5	37	34.8768	1								2.1408370	7901			5377
	7	17	5	38	4.8705	1	14	18	53.434	55	3	6.83	4		9010	3966	F1	7434
	7	17	5	38	4.8683	1	22	15	30.164	56	8	51.04	4		9001	2147	F1	3234

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Y	M	D	H	M	S	MS	H	M	S	D	M	S	S	(MM)				
1966	7	17	5	38	4.8779	1								2.2669330	7901			5378
	7	17	5	38	8.8705	1	14	18	17.633	55	34	.79	4		9010	3966	F2	7435
	7	17	5	38	8.8683	1	22	19	13.143	56	15	37.17	4		9001	2147	F2	3235
	7	17	5	38	12.8705	1	14	17	40.432	56	4	52.12	4		9010	3966	F3	7436
	7	17	5	38	12.8684	1	22	22	54.596	56	21	53.55	4		9001	2147	F3	3236
	7	17	5	38	16.8705	1	14	17	1.450	56	35	37.04	4		9010	3966	F4	7437
	7	17	5	38	16.8684	1	22	26	34.538	56	27	39.64	4		9001	2147	F4	3237
	7	17	5	38	20.8705	1	14	16	21.187	57	6	18.22	4		9010	3966	F5	7438
	7	17	5	38	20.8685	1	22	30	12.717	56	32	56.34	4		9001	2147	F5	3238
	7	17	5	38	24.8705	1	14	15	39.276	57	36	52.98	4		9010	3966	F6	7439
	7	17	5	38	24.8686	1	22	33	49.352	56	37	46.01	4		9001	2147	F6	3239
	7	17	5	38	28.8706	1	14	14	55.205	58	7	21.26	4		9010	3966	F7	7440
	7	17	5	38	28.8686	1	22	37	24.241	56	42	7.55	4		9001	2147	F7	3240
	7	17	5	39	4.8781	1								2.5375480	7901			5379
	7	17	5	41	4.8714	1	13	1	10.423	75	48	41.68	4		9010	3966	F1	9883
	7	17	5	41	8.8714	1	12	56	59.901	76	10	37.15	4		9010	3966	F2	7442
	7	17	5	41	12.8714	1	12	52	35.730	76	32	7.25	4		9010	3966	F3	7443
	7	17	5	41	16.8715	1	12	47	58.977	76	53	12.02	4		9010	3966	F4	7444
	7	17	5	41	20.8715		12	43	7.845	77	13	48.63	4		9010	3966	F5	7445
	7	17	5	41	24.8715	1	12	38	.561	77	33	51.01	4		9010	3966	F6	7446
	7	17	5	41	28.8716	1	12	32	38.299	77	53	23.87	4		9010	3966	F7	7447
	7	17	5	43	4.8725	1	9	0	30.761	81	36	8.31	4		9010	3966	F1	7448
	7	17	5	43	8.8725	1	8	50	23.389	81	32	26.77	4		9010	3966	F2	7449
	7	17	5	43	12.8726	1	8	40	29.550	81	27	47.15	4		9010	3966	F3	7450
	7	17	5	43	16.8726	1	8	30	49.549	81	22	10.81	4		9010	3966	F4	7859
	7	17	5	43	20.8726	1	8	21	28.950	81	15	40.49	4		9010	3966	F5	7452
	7	17	5	43	24.8727	1	8	12	26.015	81	8	17.53	4		9010	3966	F6	7453
	7	17	5	43	28.8727	1	8	3	42.101	81	0	8.89	4		9010	3966	F7	7454
	7	17	7	37	12.8707	1	14	49	1.467	32	42	24.04	4		9001	2154	F3	3603
	7	17	7	37	16.8706	1	14	48	59.958	33	13	4.97	4		9001	2154	F4	3604
	7	17	7	37	20.8706	1	14	48	57.719	33	43	59.65	4		9001	2154	F5	3605
	7	17	7	37	24.8706	1	14	48	55.246	34	15	.70	4		9001	2154	F6	3606
	7	17	7	37	28.8706	1	14	48	52.452	34	46	4.34	4		9001	2154	F7	3607
	7	17	7	41	4.8703	1	14	26	16.603	63	54	3.31	4		9001	2154	F1	3608
	7	17	7	41	8.8703	1	14	25	7.800	64	25	26.10	4		9001	2154	F2	3609
	7	17	7	41	12.8703	1	14	23	54.531	64	56	43.80	4		9001	2154	F3	3610
	7	17	7	41	16.8703	1	14	22	38.197	65	27	54.18	4		9001	2154	F4	3611
	7	17	7	41	20.8703	1	14	21	18.484	65	58	56.00	4		9001	2154	F5	3612
	7	17	7	41	24.8703	1	14	19	54.981	66	29	48.26	4		9001	2154	F6	3613
	7	17	7	41	28.8704	1	14	18	27.761	67	0	28.42	4		9001	2154	F7	3614
	7	17	7	43	4.8709	1	13	6	11.815	78	4	44.14	4		9001	2154	F1	3615
	7	17	7	43	8.8709	1	13	0	25.458	78	27	40.92	4		9001	2154	F2	3616
	7	17	7	43	12.8709	1	12	54	17.092	78	50	.77	4		9001	2154	F3	3617
	7	17	7	43	16.8709	1	12	47	45.451	79	11	40.92	4		9001	2154	F4	3618
	7	17	7	43	20.8710	1	12	40	47.210	79	32	39.87	4		9001	2154	F5	3619
	7	17	7	43	24.8710	1	12	33	23.070	79	52	52.54	4		9001	2154	F6	3620
	7	17	7	43	28.8710	1	12	25	29.994	80	12	13.59	4		9001	2154	F7	3621
	7	17	7	45	4.8719	1	7	44	48.626	81	32	23.61	4		9001	2154	F1	3897
	7	17	7	45	8.8719	1	7	35	30.935	81	19	34.00	4		9001	2154	F2	3898
	7	17	7	45	12.8719	1	7	26	44.586	81	5	51.25	4		9001	2154	F3	3899
	7	17	7	45	20.8720	1	7	10	43.409	80	36	37.37	4		9001	2154	F5	3901
	7	17	7	45	24.8721	1	7	3	25.211	80	21	5.04	4		9001	2154	F6	3902
	7	17	7	45	28.8721	1	6	56	33.893	80	5	3.60	4		9001	2154	F7	3903
	7	17	9	7	4.8681	1	20	37	24.429	-69	25	25.48	4		9023	6434	F1	7092
	7	17	9	7	8.8681	1	20	32	45.402	-68	47	.38	4		9023	6434	F2	7093
	7	17	9	7	12.8680	1	20	28	19.737	-68	7	45.47	4		9023	6434	F3	7094
	7	17	9	7	16.8680	1	20	24	10.944	-67	27	43.15	4		9023	6434	F4	7095
	7	17	9	7	20.8680	1	20	20	13.388	-66	47	6.39	4		9023	6434	F5	7489
	7	17	9	7	24.8680	1	20	16	30.287	-66	5	46.39	4		9023	6434	F6	7096
	7	17	9	7	28.8679	1	20	12	58.529	-65	23	51.77	4		9023	6434	F7	7097
	7	17	9	32	4.8686	1	14	43	7.163	28	53	23.54	4		9012	6893	F1	8978
	7	17	9	32	8.8686	1	14	43	36.373	29	35	31.96	4		9012	6893	F2	9367
	7	17	9	32	12.8685	1	14	44	6.179	30	17	44.33	4		9012	6893	F3	8980
	7	17	9	32	16.8685	1	14	44	35.660	31	0	4.52	4		9012	6893	F4	8981
	7	17	9	32	20.8685	1	14	45	5.385	31	42	26.95	4		9012	6893	F5	8982
	7	17	9	32	24.8685	1	14	45	34.[illegible]	32	24	54.50	4		9012	6893	F6	8983
	7	17	9	32	28.8685	1	14	46	4[illegible]	33	7	26.33	4		9012	6893	F7	8984
	7	17	11	12	4.8664	1	12	20	18.660	-27	15	14.85	4		9023	6449	F1	6187
	7	17	11	12	8.8664	1	12	23	51.853	-26	36	44.15	4		9023	6449	F2	6188
	7	17	11	12	12.8664	1	12	27	24.657	-25	57	17.24	4		9023	6449	F3	6189
	7	17	11	12	16.8663	1	12	30	57.398	-25	16	54.37	4		9023	6449	F4	6190
	7	17	11	12	20.8663	1	12	34	29.984	-24	35	38.29	4		9023	6449	F5	9430
	7	17	11	12	24.8663	1	12	38	2.198	-23	53	25.15	4		9023	6449	F6	6191
	7	17	11	12	28.8662	1	12	41	33.893	-23	10	24.89	4		9023	6449	F7	6192
	7	17	11	16	4.8670	1	15	22	20.859	20	48	58.41	4		9023	6449	F1	6193
	7	17	11	16	8.8671	1	15	24	37.757	21	24	59.36	4		9023	6449	F2	6194
	7	17	11	16	12.8671	1	15	26	53.214	22	4	20.71	4		9023	6449	F3	9431
	7	17	11	16	16.8672	1	15	29	7.461	22	41	2.38	4		9023	6449	F4	6195
	7	17	11	16	20.8672	1	15	31	20.195	23	17	6.54	4		9023	6449	F5	6196
	7	17	11	16	24.8673	1	15	33	31.694	23	52	31.07	4		9023	6449	F6	6197

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	7	17	11	16	28.8673	1	15	35	41.444	24	27	20.50	4		9023	6449	F7	6198
	7	17	17	10	4.8688	1	20	44	24.206	-89	17	25.11	4		9002	4438	F1	5468
	7	17	17	10	8.8688	1	19	31	51.622	-88	42	17.84	4		9002	4438	F2	5469
	7	17	17	10	12.8687	1	19	5	35.492	-88	3	42.04	4		9002	4438	F3	5470
	7	17	17	10	16.8687	1	18	52	28.685	-87	23	41.63	4		9002	4438	F4	5471
	7	17	17	10	20.8686	1	18	44	48.335	-86	42	53.38	4		9002	4438	F5	5472
	7	17	17	10	24.8686	1	18	39	50.144	-86	1	19.48	4		9002	4438	F6	5473
	7	17	17	10	28.8685	1	18	36	20.433	-85	18	59.36	4		9002	4438	F7	5474
	7	17	17	14	4.8673	1	18	35	53.182	-34	17	4.77	4		9002	4438	F1	5475
	7	17	17	14	8.8673	1	18	36	13.677	-33	15	32.48	4		9002	4438	F2	5476
	7	17	17	14	12.8673	1	18	36	34.330	-32	14	20.26	4		9002	4438	F3	5477
	7	17	17	14	16.8673	1	18	36	55.304	-31	13	31.42	4		9002	4438	F4	5478
	7	17	17	14	20.8674	1	18	37	16.073	-30	13	9.61	4		9002	4438	F5	5479
	7	17	17	14	24.8674	1	18	37	37.298	-29	13	8.52	4		9002	4438	F6	54A0
	7	17	17	14	28.8674	1	18	37	58.470	-28	13	39.25	4		9002	4438	F7	54A1
	7	17	19	19	4.8694	1	13	39	42.400	19	16	56.29	4		9002	4449	F1	6476
	7	17	19	19	8.8694	1	13	41	32.541	19	54	16.92	4		9002	4449	F2	5A06
	7	17	19	19	12.8694	1	13	43	22.597	20	31	25.82	4		9002	4449	F3	5A09
	7	17	19	19	16.8694	1	13	45	12.122	21	8	23.04	4		9002	4449	F4	6501
	7	17	19	19	20.8695	1	13	47	1.555	21	45	4.50	4		9002	4449	F5	A977
	7	17	19	19	24.8695	1	13	48	51.039	22	21	32.85	4		9002	4449	F6	5A12
	7	17	19	19	28.8695	1	13	50	40.120	22	57	48.04	4		9002	4449	F7	5A13
	7	17	21	35	4.8707	1	20	13	59.503	- 1	42	44.62	4		9004	B058	F1	A233
	7	17	21	35	8.8708	1	20	15	38.536	- 1	13	1.68	4		9004	B058	F2	A234
	7	17	21	35	12.8708	1	20	17	17.694	- 0	43	23.53	4		9004	B05A	F3	A235
	7	17	21	35	16.8708	1	20	18	57.010	- 0	13	49.49	4		9004	B05A	F4	A236
	7	17	21	35	20.8708	1	20	20	36.549	0	15	39.52	4		9004	B05A	F5	A237
	7	17	21	35	24.8708	1	20	22	16.532	0	45	.20	4		9004	B05A	F6	A238
	7	17	21	35	28.8708	1	20	23	56.504	1	14	19.69	4		9004	B05A	F7	A239
	7	17	21	39	4.8721	1	21	56	48.728	22	52	37.98	4		9004	B05A	F1	A240
	7	17	21	39	8.8721	1	21	58	31.831	23	9	53.70	4		9004	B05A	F2	A241
	7	17	21	39	12.8722	1	22	0	14.670	23	26	57.82	4		9004	B05A	F3	A242
	7	17	21	39	16.8722	1	22	1	57.863	23	43	44.15	4		9004	B05A	F4	A243
	7	17	21	39	20.8723	1	22	3	40.601	24	0	19.10	4		9004	B05A	F5	A244
	7	17	21	39	24.8723	1	22	5	23.383	24	16	37.79	4		9004	B05A	F6	A245
	7	17	21	39	28.8723	1	22	7	5.749	24	32	34.67	4		9004	B058	F7	9A49
	7	18	1	18	4.8679	1	13	17	29.680	-39	21	41.39	4		9007	5903	F1	92A6
	7	18	1	18	8.8678	1	13	20	59.355	-38	41	31.83	4		9007	5903	F2	92A7
	7	18	1	18	12.8678	1	13	24	28.654	-38	0	11.65	4		9007	5903	F3	92A8
	7	18	1	18	16.8677	1	13	27	57.273	-37	17	41.27	4		9007	5903	F4	92A9
	7	18	1	18	20.8677	1	13	31	25.367	-36	33	56.30	4		9007	5903	F5	92A0
	7	18	1	18	24.8676	1	13	34	52.906	-35	49	3.54	4		9007	5903	F6	92A1
	7	18	1	18	28.8676	1	13	38	19.714	-35	2	56.90	4		9007	5903	F7	92A2
	7	18	1	21	4.8671	1	15	38	15.644	9	40	21.20	4		9007	5903	F1	9293
	7	18	1	21	8.8671	1	15	40	53.857	6	44	56.65	4		9007	5903	F2	9294
	7	18	1	21	12.8671	1	15	43	30.688	7	48	53.10	4		9007	5903	F3	9295
	7	18	1	21	16.8672	1	15	46	6.304	8	52	3.64	4		9007	5903	F4	9296
	7	18	1	21	20.8672	1	15	48	40.176	9	54	28.90	4		9007	5903	F5	9297
	7	18	1	21	24.8672	1	15	51	13.275	10	56	3.03	4		9007	5903	F6	9298
	7	18	1	21	28.8673	1	15	53	44.978	11	56	45.46	4		9007	5903	F7	9299
	7	18	3	33	4.8690	1	16	12	30.400	- 5	30	46.30	4		9010	3993	F1	5166
	7	18	3	33	8.8690	1	16	13	57.097	- 4	47	39.16	4		9010	3993	F2	5169
	7	18	3	33	12.8690	1	16	15	24.587	- 4	3	55.36	4		9010	3993	F3	5170
	7	18	3	33	16.8689	1	16	16	52.872	- 3	19	41.48	4		9010	3993	F4	5171
	7	18	3	33	20.8689	1	16	18	21.841	- 2	34	52.72	4		9010	3993	F5	5172
	7	18	3	33	24.8688	1	16	19	52.012	- 1	49	28.49	4		9010	3993	F6	5173
	7	18	3	33	28.8688	1	16	21	22.785	- 1	3	36.15	4		9010	3993	F7	6956
	7	18	3	35	4.8682	1	17	3	26.821	19	32	22.88	4		9010	3994	F1	176
	7	18	3	35	8.8682	1	17	5	29.697	20	27	28.80	4		9010	3994	F2	177
	7	18	3	35	12.8682	1	17	7	34.29	21	22	37.65	4		9010	3994	F3	178
	7	18	3	35	16.8682	1	17	9	40.64	22	17	49.85	4		9010	3994	F4	179
	7	18	3	35	20.8682	1	17	11	48.719	23	13	2.93	4		9010	3994	F5	130
	7	18	3	35	24.8682	1	17	13	58.811	24	8	10.86	4		9010	3994	F6	131
	7	18	3	35	28.8682	1	17	16	10.604	25	3	16.28	4		9010	3994	F7	132
	7	18	3	40	4.8706	1	21	30	35.140	64	14	6.26	4		9010	3995	F1	9938
	7	18	3	40	8.8707	1	21	35	15.478	64	21	3.42	4		9010	3995	F2	9939
	7	18	3	40	12.8708	1	21	39	54.266	64	27	23.46	4		9010	3995	F3	9940
	7	18	3	40	16.8708	1	21	44	31.229	64	33	7.83	4		9010	3995	F4	9941
	7	18	3	40	20.8709	1	21	49	6.641	64	38	13.86	4		9010	3995	F5	9942
	7	18	3	40	24.8709	1	21	53	40.572	64	42	46.22	4		9010	3995	F6	9943
	7	18	3	40	28.8710	1	21	58	12.174	64	46	45.70	4		9010	3995	F7	9944
	7	18	5	39	4.8744	1	14	16	10.729	30	5	9.48	4		9010	4000	F1	360
	7	18	5	39	8.8744	1	14	16	6.575	30	32	21.23	4		9010	4000	F2	361
	7	18	5	39	12.8744	1	14	16	1.865	30	59	36.45	4		9010	4000	F3	362
	7	18	5	39	16.8744	1	14	15	57.151	31	26	59.36	4		9010	4000	F4	363
	7	18	5	39	20.8744	1	14	15	51.533	31	54	25.31	4		9010	4000	F5	364

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (NM)	STATION	FRAME NO.	OBS.NO.
1966	7	18	5	39	24.8743	1	14	15	45.735	32	21	54.64	4		9010	4000 F6	365
	7	18	5	39	28.8743	1	14	15	39.431	32	49	29.53	4		9010	4000 F7	366
	7	18	5	41	4.8740	1	14	10	30.989	44	7	16.53	4		9010	4001 F1	367
	7	18	5	41	8.8740	1	14	10	10.039	44	35	53.08	4		9010	4001 F2	368
	7	18	5	41	12.8740	1	14	9	48.366	45	4	32.96	4		9010	4001 F3	369
	7	18	5	41	16.8740	1	14	9	25.897	45	33	9.78	4		9010	4001 F4	370
	7	18	5	41	20.8740	1	14	9	2.532	46	1	50.84	4		9010	4001 F5	371
	7	18	5	41	24.8740	1	14	8	38.159	46	30	27.93	4		9010	4001 F6	372
	7	18	5	41	28.8740	1	14	8	13.094	46	59	8.05	4		9010	4001 F7	373
	7	18	5	43	4.8740	1	13	52	19.862	58	16	28.30	4		9010	4002 F1	9648
	7	18	5	43	8.8740	1	13	51	21.058	58	43	51.29	4		9010	4002 F2	9649
	7	18	5	43	12.8740	1	13	50	20.700	59	11	14.07	4		9010	4002 F3	9650
	7	18	5	43	16.8740	1	13	49	17.306	59	38	27.25	4		9010	4002 F4	9651
	7	18	5	43	20.8741	1	13	48	11.840	60	5	32.27	4		9010	4002 F5	9652
	7	18	5	43	24.8741	1	13	47	4.201	60	32	29.82	4		9010	4002 F6	9653
	7	18	5	43	28.8741	1	13	45	54.764	60	59	24.04	4		9010	4002 F7	9654
	7	18	7	29	8.8704	1	17	33	47.999	-35	31	20.41	4		9012	6919 F2	9368
	7	18	7	29	12.8704	1	17	35	38.494	-34	56	50.58	4		9012	6919 F3	9369
	7	18	7	29	16.8703	1	17	37	29.025	-34	21	52.67	4		9012	6919 F4	9370
	7	18	7	29	20.8703	1	17	39	19.822	-33	46	25.95	4		9012	6919 F5	9371
	7	18	7	29	24.8702	1	17	41	10.732	-33	10	33.52	4		9012	6919 F6	9372
	7	18	7	29	28.8702	1	17	43	1.956	-32	34	10.85	4		9012	6919 F7	9373
	7	18	7	42	4.8739	1	14	33	23.972	37	17	51.51	4		9001	2183 F1	3280
	7	18	7	42	8.8739	1	14	33	12.803	37	46	42.36	4		9001	2183 F2	3281
	7	18	7	42	12.8739	1	14	33	1.832	38	15	35.30	4		9001	2183 F3	3282
	7	18	7	42	16.8739	1	14	32	49.545	38	44	37.63	4		9001	2183 F4	3283
	7	18	7	42	20.8738	1	14	32	37.125	39	13	43.72	4		9001	2183 F5	3284
	7	18	7	42	24.8738	1	14	32	24.136	39	42	52.75	4		9001	2183 F6	3285
	7	18	7	42	28.8738	1	14	32	10.369	40	12	6.53	4		9001	2183 F7	3286
	7	18	7	47	4.8739	1	13	9	51.763	73	11	12.91	4		9001	2185 F1	4309
	7	18	7	47	12.8739	1	13	2	16.271	73	57	55.02	4		9001	2185 F3	3275
	7	18	7	47	16.8739	1	12	58	11.911	74	20	40.33	4		9001	2185 F4	3276
	7	18	7	47	20.8740	1	12	53	56.841	74	43	3.98	4		9001	2185 F5	3277
	7	18	7	47	24.8740	1	12	49	29.476	75	4	59.50	4		9001	2185 F6	3278
	7	18	7	47	28.8740	1	12	44	48.329	75	26	24.28	4		9001	2185 F7	3279
	7	18	7	49	4.8747	1	9	37	12.682	80	16	47.33	4		9001	2186 F1	3268
	7	18	7	49	8.8747	1	9	27	22.555	80	16	12.81	4		9001	2186 F2	3269
	7	18	7	49	12.8747	1	9	17	36.338	80	14	33.83	4		9001	2186 F3	3270
	7	18	7	49	16.8748	1	9	7	58.587	80	11	48.90	4		9001	2186 F4	3271
	7	18	7	49	20.8748	1	8	58	30.847	80	8	6.35	4		9001	2186 F5	3272
	7	18	7	49	24.8748	1	8	49	12.576	80	3	15.88	4		9001	2186 F6	3273
	7	18	7	49	28.8749	1	8	40	7.959	79	57	29.68	4		9001	2186 F7	4308
	7	18	9	10	4.8708	1	0	19	44.972	-82	41	5.97	4		9023	6482 F1	4868
	7	18	9	10	8.8708	1	23	58	42.100	-82	42	14.34	4		9023	6482 F2	4869
	7	18	9	10	12.8707	1	23	37	26.734	-82	39	30.41	4		9023	6482 F3	4870
	7	18	9	10	16.8707	1	23	16	24.268	-82	32	52.37	4		9023	6482 F4	4871
	7	18	9	10	20.8706	1	22	55	53.793	-82	22	25.79	4		9023	6482 F5	5443
	7	18	9	10	24.8706	1	22	36	14.438	-82	8	12.58	4		9023	6482 F6	4872
	7	18	9	10	28.8705	1	22	17	40.767	-81	50	25.09	4		9023	6482 F7	5444
	7	18	9	14	8.8697	1	18	47	37.128	-37	15	5.95	4		9023	6482 F2	5446
	7	18	9	14	12.8698	1	18	47	17.753	-36	21	33.38	4		9023	6482 F3	5447
	7	18	9	14	16.8698	1	18	46	59.572	-35	28	15.39	4		9023	6482 F4	6980
	7	18	9	14	20.8698	1	18	46	42.793	-34	35	20.69	4		9023	6482 F5	4874
	7	18	9	14	24.8698	1	18	46	27.108	-33	42	46.68	4		9023	6482 F6	5449
	7	18	9	14	28.8699	1	18	46	12.674	-32	50	39.39	4		9023	6482 F7	5450
	7	18	9	35	4.8726	1	14	11	4.478	18	34	48.05	4		9012	6927 F1	9415
	7	18	9	35	8.8725	1	14	11	23.310	19	9	31.25	4		9012	6927 F2	8447
	7	18	9	35	12.8725	1	14	11	41.895	19	44	23.25	4		9012	6927 F3	8448
	7	18	9	35	16.8725	1	14	12	.437	20	19	23.51	4		9012	6927 F4	9416
	7	18	9	35	20.8725	1	14	12	18.585	20	54	36.34	4		9012	6927 F5	8450
	7	18	9	35	24.8724	1	14	12	36.758	21	29	55.10	4		9012	6927 F6	8451
	7	18	9	35	28.8724	1	14	12	54.707	22	5	25.13	4		9012	6927 F7	8452
	7	18	9	37	4.8721	1	14	19	2.849	36	50	43.64	4		9012	6927 F1	8453
	7	18	9	37	8.8721	1	14	19	15.433	37	28	26.49	4		9012	6927 F2	8454
	7	18	9	37	12.8721	1	14	19	27.461	38	6	5.85	4		9012	6927 F3	8455
	7	18	9	37	16.8721	1	14	19	39.382	38	43	45.76	4		9012	6927 F4	8456
	7	18	9	37	20.8721	1	14	19	50.917	39	21	27.67	4		9012	6927 F5	8457
	7	18	9	37	24.8721	1	14	20	2.053	39	59	10.71	4		9012	6927 F6	8458
	7	18	9	37	28.8721	1	14	20	12.718	40	36	51.94	4		9012	6927 F7	8459
	7	18	9	40	4.8727	1	14	21	5.365	63	56	38.11	4		9012	6927 F1	8460
	7	18	9	40	8.8728	1	14	20	50.947	64	29	27.21	4		9012	6927 F2	8461
	7	18	11	16	4.8699	1	11	54	14.500	-19	55	42.31	4		9023	6493 F1	6252
	7	18	11	16	8.8699	1	11	57	3.085	-19	21	2.75	4		9023	6493 F2	6253
	7	18	11	16	12.8699	1	11	59	51.895	-18	45	49.20	4		9023	6493 F3	6254
	7	18	11	16	16.8698	1	12	2	40.644	-18	10	2.11	4		9023	6493 F4	6255
	7	18	11	16	20.8698	1	12	5	29.482	-17	33	31.79	4		9023	6493 F5	6981
	7	18	11	16	24.8698	1	12	8	18.468	-16	56	25.29	4		9023	6493 F6	6982
	7	18	11	16	28.8697	1	12	11	7.415	-16	18	47.95	4		9023	6493 F7	6983
	7	18	11	20	4.8702	1	14	31	22.229	22	15	28.91	4		9023	6493 F1	6984
	7	18	11	20	8.8702	1	14	33	36.035	22	52	1.39	4		9023	6493 F2	6257

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	7	18	11	20	12.8703	1	14	35	49.246	23	28	7.04	4		9023	6493	F3	69A5
	7	18	11	20	16.8703	1	14	38	1.234	24	3	36.00	4		9023	6493	F4	69A6
	7	18	11	20	20.8704	1	14	40	12.453	24	38	48.78	4		9023	6493	F5	6258
	7	18	11	20	24.8704	1	14	42	22.966	25	13	22.36	4		9023	6493	F6	6259
	7	18	11	20	28.8705	1	14	44	32.162	25	47	30.92	4		9023	6493	F7	6260
	7	18	17	15	4.8703	1	14	6	31.568	-80	43	22.47	4		9002	4484	F1	69A7
	7	18	17	15	8.8703	1	14	22	8.682	-80	15	30.45	4		9002	4484	F2	69A8
	7	18	17	15	28.8700	1	15	23	19.775	-77	17	24.40	4		9002	4484	F7	6991
	7	18	17	19	4.8694	1	17	55	20.852	-19	18	43.52	4		9002	4484	F1	5176
	7	18	17	19	8.8694	1	17	56	18.655	-18	15	7.60	4		9002	4484	F2	5177
	7	18	17	19	12.8695	1	17	57	15.761	-17	12	19.06	4		9002	4484	F3	5178
	7	18	17	19	16.8695	1	17	58	12.092	-16	10	21.70	4		9002	4484	F4	5179
	7	18	17	19	20.8695	1	17	59	7.607	-15	9	15.92	4		9002	4484	F5	51A0
	7	18	17	19	24.8696	1	18	0	2.117	-14	8	59.18	4		9002	4484	F6	51A1
	7	18	21	38	4.8726	1	19	21	22.823	- 7	39	54.97	4		9004	8081	F1	4850
	7	18	17	19	28.8696	1	18	0	56.174	-13	9	32.89	4		9002	4484	F7	51A2
	7	18	21	38	8.8725	1	19	23	9.438	- 7	6	55.79	4		9004	8081	F2	4851
	7	18	21	38	12.8725	1	19	24	56.290	- 6	33	54.57	4		9004	8081	F3	4852
	7	18	21	38	16.8725	1	19	26	43.636	- 6	0	45.53	4		9004	8081	F4	5335
	7	18	21	38	20.8725	1	19	28	31.298	- 5	27	36.5	4		9004	8081	F5	5336
	7	18	21	38	24.8725	3	19	30	19.204	- 4	54	20.33	4		9004	8081	F6	6233
	7	18	21	38	28.8725	1	19	32	7.902	- 4	21	8.74	4		9004	8081	F7	5337
	7	18	21	42	4.8732	1	21	17	14.631	22	21	36.04	4		9004	8081	F1	5338
	7	18	21	42	8.8733	1	21	19	15.726	22	44	7.09	4		9004	8081	F2	4853
	7	18	21	42	12.8733	1	21	21	16.605	23	6	14.80	4		9004	8081	F3	5339
	7	18	21	42	16.8733	1	21	23	17.493	23	28	7.79	4		9004	8081	F4	4854
	7	18	21	42	20.8734	1	21	25	18.274	23	49	36.66	4		9004	8081	F5	6940
	7	18	21	42	24.8734	3	21	27	19.196	24	10	46.12	4		9004	8081	F6	6240
	7	18	21	42	28.8734	3	21	29	19.811	24	31	38.28	4		9004	8081	F7	6239
	7	18	23	17	4.8693	1	16	44	21.433	-41	30	54.58	4		9011	8871	F1	8492
	7	18	23	17	8.8694	1	16	46	36.549	-40	14	20.41	4		9011	8871	F2	8493
	7	18	23	17	12.8694	1	16	48	46.899	-38	57	43.94	4		9011	8871	F3	8494
	7	18	23	17	16.8694	1	16	50	52.837	-37	41	22.22	4		9011	8871	F4	8495
	7	18	23	17	20.8694	1	16	52	54.274	-36	25	15.10	4		9011	8871	F5	8496
	7	18	23	17	24.8694	1	16	54	51.795	-35	9	29.84	4		9011	8871	F6	8497
	7	18	23	17	28.8694	1	16	56	45.841	-33	54	7.12	4		9011	8871	F7	8498
	7	18	23	44	4.8716	1	16	14	47.456	47	1	39.97	4		9004	8087	F1	5838
	7	18	23	44	8.8716	1	16	16	9.749	47	48	29.57	4		9004	8087	F2	5835
	7	18	23	44	12.8716	1	16	17	33.942	48	35	19.15	4		9004	8087	F3	5836
	7	18	23	44	16.8716	1	16	19	.790	49	22	.37	4		9004	8087	F4	5837
	7	18	23	44	20.8716	1	16	20	29.994	50	8	38.78	4		9004	8087	F5	5838
	7	18	23	44	24.8716	1	16	22	1.177	50	55	14.12	4		9004	8087	F6	5839
	7	18	23	44	28.8717	1	16	23	35.035	51	41	39.19	4		9004	8087	F7	5840
	7	18	23	47	4.8725	1	18	51	57.850	77	13	42.85	4		9004	8087	F1	5841
	7	18	23	47	8.8725	1	19	0	58.068	77	38	44.00	4		9004	8087	F2	5842
	7	18	23	47	12.8726	1	19	10	29.054	78	2	20.28	4		9004	8087	F3	5843
	7	18	23	47	16.8726	1	19	20	30.146	78	24	34.19	4		9004	8087	F4	5844
	7	18	23	47	20.8727	1	19	31	3.201	78	45	15.61	4		9004	8087	F5	5845
	7	18	23	47	24.8727	1	19	42	6.912	79	4	21.74	4		9004	8087	F6	6939
	7	18	23	47	28.8727	1	19	53	40.222	79	21	45.82	4		9004	8087	F7	5846
	7	18	23	50	4.8747	1	1	42	35.421	72	41	32.00	4		9004	8087	F1	6244
	7	18	23	50	8.8747	1	1	45	43.807	72	21	12.13	4		9004	8087	F2	6245
	7	18	23	50	12.8748	1	1	48	43.903	72	0	47.68	4		9004	8087	F3	6246
	7	18	23	50	16.8748	1	1	51	36.782	71	40	28.21	4		9004	8087	F4	6247
	7	18	23	50	20.8749	1	1	54	22.776	71	20	6.75	4		9004	8087	F5	6941
	7	18	23	50	24.8749	1	1	57	.840	70	59	52.54	4		9004	8087	F6	6248
	7	18	23	50	28.8750	1	1	59	33.546	70	39	46.44	4		9004	8087	F7	6249
	7	19	1	25	4.8702	1	14	28	47.518	9	28	15.63	4		9007	5928	F1	9142
	7	19	1	25	8.8702	1	14	31	14.213	10	26	12.70	4		9007	5928	F2	9143
	7	19	1	25	12.8702	1	14	33	40.512	11	23	50.02	4		9007	5928	F3	9144
	7	19	1	25	16.8702	1	14	36	6.451	12	21	2.52	4		9007	5928	F4	9145
	7	19	1	25	20.8702	1	14	38	31.645	13	17	49.12	4		9007	5928	F5	9146
	7	19	1	25	24.8703	1	14	40	56.567	14	14	6.47	4		9007	5928	F6	9147
	7	19	1	25	28.8703	1	14	43	20.624	15	9	54.65	4		9007	5928	F7	914A
	7	19	1	50	4.8764	1	14	25	48.462	53	20	4.74	4		9004	8090	F1	93A4
	7	19	1	50	8.8764	1	14	25	2.291	53	46	15.45	4		9004	8090	F2	93A5
	7	19	1	50	12.8763	1	14	24	14.655	54	12	31.45	4		9004	8090	F3	9870
	7	19	1	50	16.8763	1	14	23	25.391	54	38	48.07	4		9004	8090	F4	9871
	7	19	1	50	20.8763	1	14	22	34.948	55	5	4.41	4		9004	8090	F5	9872
	7	19	1	50	24.8763	1	14	21	42.808	55	31	19.25	4		9004	8090	F6	93A7
	7	19	1	50	28.8763	1	14	20	48.348	55	57	34.01	4		9004	8090	F7	9873
	7	19	3	37	4.8721	1	15	25	52.028	- 1	53	54.69	4		9010	4029	F1	99A4
	7	19	3	37	8.8720	1	15	26	56.682	- 1	13	9.87	4		9010	4029	F2	99A5
	7	19	3	37	12.8720	1	15	28	1.782	- 0	31	57.41	4		9010	4029	F3	99A6
	7	19	3	37	16.8719	1	15	29	7.661	0	9	49.50	4		9010	4029	F4	99A7
	7	19	3	37	20.8719	1	15	30	13.947	0	51	59.20	4		9010	4029	F5	99A8
	7	19	3	37	24.8718	1	15	31	20.842	1	34	48.49	4		9010	4029	F6	99A9
	7	19	3	37	28.8718	1	15	32	28.304	2	18	4.79	4		9010	4029	F7	9990
	7	19	3	39	4.8711	1	16	3	24.319	21	50	37.01	4		9010	4030	F1	9991
	7	19	3	39	8.8711	1	16	4	54.421	22	43	49.73	4		9010	4030	F2	9992

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DATE Y	M	D	TIME (2-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (KM)	STATION	FRAME NO.		OBS.NO.
1966	7	19	3	39	12.8711	1	16	6	25.866	23	37	14.48	4		9010	4030	F3	9903
	7	19	3	39	16.8711	1	16	7	58.572	24	30	55.55	4		9010	4030	F4	9904
	7	19	3	39	20.8711	1	16	9	32.200	25	24	37.46	4		9010	4030	F5	9905
	7	19	3	39	24.8711	1	16	11	8.535	26	18	36.56	4		9010	4030	F6	9906
	7	19	3	39	28.8710	1	16	12	45.730	27	12	37.36	4		9010	4030	F7	9907
	7	19	3	41	4.8712	1	17	1	48.776	48	12	44.43	4		9010	4031	F1	9945
	7	19	3	41	8.8712	1	17	4	25.542	49	0	56.98	4		9010	4031	F2	9946
	7	19	3	41	12.8713	1	17	7	5.788	49	48	35.04	4		9010	4031	F3	9947
	7	19	3	41	16.8713	1	17	9	50.086	50	35	43.36	4		9010	4031	F4	9948
	7	19	3	41	20.8713	1	17	12	37.786	51	22	10.19	4		9010	4031	F5	9949
	7	19	3	41	24.8713	1	17	15	29.454	52	8	3.68	4		9010	4031	F6	9950
	7	19	3	41	28.8714	1	17	18	25.744	52	53	22.41	4		9010	4031	F7	9951
	7	19	3	44	4.8731	1	20	27	46.445	71	47	48.11	4		9010	4032	F1	519
	7	19	3	44	8.8731	1	20	34	30.857	71	58	6.20	4		9010	4032	F2	9952
	7	19	3	44	12.8732	1	20	41	17.921	72	7	31.28	4		9010	4032	F3	9953
	7	19	3	44	16.8732	1	20	48	6.175	72	15	54.51	4		9010	4032	F4	520
	7	19	3	44	20.8733	1	20	54	55.215	72	23	27.53	4		9010	4032	F5	9955
	7	19	3	44	24.8733	1	21	1	43.811	72	30	.49	4		9010	4032	F6	9956
	7	19	3	44	28.8734	1	21	8	32.720	72	35	37.44	4		9010	4032	F7	9957
	7	19	5	39	4.8727	1	15	39	3.292	- 0	11	34.27	4		9001	2201	F1	33A5
	7	19	5	41	34.8785	1								1.6947390	7901			53A0
	7	19	7	33	16.8725	1	16	37	21.429	-32	18	40.90	4		9012	6950	F4	8527
	7	19	7	33	4.8727	1	16	31	49.338	-34	0	.77	4		9012	6950	F1	9413
	7	19	7	33	8.8726	1	16	33	39.750	-33	26	45.27	4		9012	6950	F2	8525
	7	19	7	33	20.8724	1	16	39	13.100	-31	43	50.16	4		9012	6950	F5	8528
	7	19	7	33	12.8725	1	16	35	30.384	-32	53	.53	4		9012	6950	F3	9414
	7	19	7	33	24.8724	1	16	41	4.712	-31	8	26.60	4		9012	6950	F6	8529
	7	19	7	33	28.8723	1	16	42	57.032	-30	32	28.58	4		9012	6950	F7	8530
	7	19	9	15	28.8720	1	18	25	4.883	-81	13	.87	4		9023	6497	F7	6992
	7	19	9	44	12.8761	1	13	47	58.756	60	3	43.44	4		9012	6960	F3	8516
	7	19	9	44	16.8761	1	13	47	24.367	60	34	10.12	4		9012	6960	F4	8517
	7	19	9	44	20.8761	1	13	46	48.497	61	4	31.14	4		9012	6960	F5	8518
	7	19	9	44	24.8761	1	13	46	10.494	61	34	46.86	4		9012	6960	F5	8519
	7	19	9	44	28.8761	1	13	45	30.851	62	4	47.68	4		9012	6960	F7	8520
	7	19	17	20	4.8719	1	13	47	20.090	-67	8	6.86	4		9002	4521	F1	4271
	7	19	17	20	8.8719	1	13	55	16.503	-66	31	25.12	4		9002	4521	F2	4272
	7	19	17	20	12.8718	1	14	2	58.707	-65	52	37.81	4		9002	4521	F3	4273
	7	19	17	20	16.8718	1	14	10	26.665	-65	11	43.07	4		9002	4521	F4	6503
	7	19	17	20	20.8717	1	14	17	39.413	-64	28	46.89	4		9002	4521	F5	4275
	7	19	17	20	24.8717	1	14	24	37.712	-63	43	50.64	4		9002	4521	F6	4276
	7	19	17	20	28.8716	1	14	31	21.716	-62	56	52.55	4		9002	4521	F7	4277
	7	19	21	46	4.8749	1	20	59	20.195	27	34	25.89	4		9004	8112	F1	8155
	7	19	21	46	8.8749	1	21	1	43.012	27	58	12.78	4		9004	8112	F2	8156
	7	19	21	46	12.8750	1	21	4	5.706	28	21	34.50	4		9004	8112	F3	8157
	7	19	21	46	16.8750	1	21	6	28.421	28	44	30.54	4		9004	8112	F4	8158
	7	19	21	46	20.8750	1	21	8	50.730	29	7	.26	4		9004	8112	F5	8159
	7	19	21	46	24.8751	1	21	11	13.689	29	29	5.91	4		9004	8112	F6	8160
	7	19	21	46	28.8751	1	21	13	35.768	29	50	42.69	4		9004	8112	F7	8161
	7	19	23	21	4.8715	1	15	14	11.817	-39	52	23.11	4		9011	8915	F1	6520
	7	19	23	21	8.8715	1	15	18	10.198	-38	37	35.56	4		9011	8915	F2	6521
	7	19	23	21	12.8715	1	15	22	1.091	-37	22	13.68	4		9011	8915	F3	6522
	7	19	23	21	16.8715	1	15	25	44.403	-36	6	21.34	4		9011	8915	F4	6523
	7	19	23	21	20.8715	1	15	29	20.525	-34	50	11.44	4		9011	8915	F5	6524
	7	19	23	21	24.8715	1	15	32	50.313	-33	33	41.68	4		9011	8915	F6	6525
	7	19	23	21	28.8715	1	15	36	13.540	-32	17	4.42	4		9011	8915	F7	6526
	7	19	23	48	4.8748	1	15	29	41.948	44	54	30.65	4		9004	8123	F1	8356
	7	19	23	48	8.8748	1	15	30	23.124	45	38	19.41	4		9004	8123	F2	8359
	7	19	23	48	12.8747	1	15	31	5.009	46	22	8.44	4		9004	8123	F3	8360
	7	19	23	48	16.8747	1	15	31	47.834	47	6	3.53	4		9004	8123	F4	8361
	7	19	23	48	20.8747	1	15	32	31.386	47	50	.16	4		9004	8123	F5	8362
	7	19	23	48	24.8747	1	15	33	15.719	48	33	58.58	4		9004	8123	F6	8363
	7	19	23	53	4.8764	1	0	32	50.926	84	5	18.91	4		9004	8123	F1	9874
	7	19	23	53	8.8764	1	0	45	55.967	83	43	27.36	4		9004	8123	F2	9875
	7	19	23	53	12.8765	1	0	57	29.909	83	20	43.84	4		9004	8123	F3	9388
	7	19	23	53	16.8765	1	1	7	42.313	82	57	21.46	4		9004	8123	F4	8365
	7	19	23	53	20.8766	1	1	16	50.180	82	33	29.65	4		9004	8123	F5	8366
	7	19	23	53	24.8766	1	1	24	56.660	82	9	16.40	4		9004	8123	F6	8367
	7	19	23	53	28.8767	1	1	32	13.431	81	44	45.09	4		9004	8123	F7	8368
	7	20	1	31	4.8745	1	14	36	21.740	34	28	15.12	4		9007	5955	F1	5457
	7	20	1	31	8.8745	1	14	38	19.940	35	6	49.02	4		9007	5955	F2	5458
	7	20	1	31	12.8746	1	14	40	18.139	35	44	54.17	4		9007	5955	F3	5459
	7	20	1	31	16.8746	1	14	42	16.360	36	22	26.52	4		9007	5955	F4	5460
	7	20	1	31	20.8747	1	14	44	14.390	36	59	29.76	4		9007	5955	F5	6499
	7	20	1	31	24.8747	1	14	46	12.339	37	35	58.87	4		9007	5955	F6	5462
	7	20	1	31	28.8747	1	14	48	10.326	38	12	1.15	4		9007	5955	F7	5463
	7	20	1	37	4.8767	1	18	48	18.240	-29	33	11.00	4		9010	4050	F1	9193
	7	20	1	37	8.8767	1	18	49	41.632	-29	2	39.41	4		9010	4050	F2	9194
	7	20	1	37	12.8766	1	18	51	4.853	-28	31	54.67	4		9010	4050	F3	9655
	7	20	1	37	16.8766	1	18	52	28.507	-28	0	59.13	4		9010	4050	F4	9195
	7	20	1	37	20.8766	1	18	53	51.685	-27	29	52.45	4		9010	4050	F5	9656

July 20, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	7	20	1	37	24.8766	1	18	55	19.076	-26	58	41.24	4		9010	4050	F6	9197
	7	20	1	37	28.8765	1	18	56	38.806	-26	27	8.51	4		9010	4050	F7	9198
	7	20	1	41	4.8763	1	20	14	9.482		3	19	31.05	4		9010	4051	F1	9924
	7	20	1	41	8.8763	1	20	15	38.144		3	50	37.83	4		9010	4051	F2	9925
	7	20	1	41	12.8763	1	20	17	6.817		4	21	30.53	4		9010	4051	F3	9926
	7	20	1	41	16.8763	1	20	18	35.729		4	52	16.32	4		9010	4051	F4	9927
	7	20	1	41	20.8764	1	20	20	4.476		5	22	47.40	4		9010	4051	F5	9928
	7	20	1	41	24.8764	1	20	21	33.290		5	53	5.35	4		9010	4051	F6	9929
	7	20	1	41	28.8764	1	20	23	2.316		6	23	8.73	4		9010	4051	F7	9930
	7	20	1	56	4.8792	1	13	50	18.784	62	49	44.49	4		9004	8135	F1	7607
	7	20	1	56	8.8792	1	13	48	39.692	63	13	45.45	4		9004	8135	F2	7608
	7	20	1	56	12.8792	1	13	46	56.615	63	37	45.96	4		9004	8135	F3	7609
	7	20	1	56	16.8792	1	13	45	10.199	64	1	35.82	4		9004	8135	F4	7610
	7	20	1	56	20.8792	1	13	43	20.063	64	25	20.76	4		9004	8135	F5	9391
	7	20	1	56	24.8792	1	13	41	26.306	64	48	55.53	4		9004	8135	F6	7612
	7	20	1	56	28.8792	1	13	39	28.395	65	12	29.26	4		9004	8135	F7	7613
	7	20	2	1	4.8799	1	7	31	43.824	74	24	2.69	4		9004	8135	F1	7614
	7	20	2	1	4.8810	1	15	17	16.558	58	1	12.98	4		9051	98	F1	0
	7	20	2	1	8.8799	1	7	27	7.637	74	9	49.05	4		9004	8135	F2	7615
	7	20	2	1	12.8800	1	7	22	40.411	73	55	9.64	4		9004	8135	F3	7616
	7	20	2	1	12.8809	1	15	16	8.127	58	41	38.28	4		9051	98	F3	1
	7	20	2	1	16.8800	1	7	18	23.378	73	40	15.15	4		9004	8135	F4	7617
	7	20	2	1	16.8809	1	15	15	32.297	59	1	55.65	4		9051	98	F4	2
	7	20	2	1	20.8800	1	7	14	14.811	73	24	53.09	4		9004	8135	F5	7618
	7	20	2	1	20.8809	1	15	14	55.060	59	22	15.12	4		9051	98	F5	3
	7	20	2	1	24.8800	1	7	10	14.093	73	9	22.29	4		9004	8135	F6	7619
	7	20	2	1	24.8808	1	15	14	16.861	59	42	38.61	4		9051	98	F6	4
	7	20	2	1	28.8801	1	7	6	23.768	72	53	33.68	4		9004	8135	F7	7620
	7	20	2	1	28.8808	1	15	13	36.885	60	3	4.11	4		9051	98	F7	5
	7	20	3	40	4.8762	1	14	36	49.767	- 7	25	19.40	4		9010	4057	F1	7790
	7	20	3	40	8.8761	1	14	37	32.955	- 6	53	51.43	4		9010	4057	F2	7791
	7	20	3	40	12.8761	1	14	38	16.334	- 6	22	.30	4		9010	4057	F3	7792
	7	20	3	40	16.8760	1	14	38	59.815	- 5	49	46.14	4		9010	4057	F4	7793
	7	20	3	40	20.8759	1	14	39	43.525	- 5	17	10.21	4		9010	4057	F5	7794
	7	20	3	40	24.8759	1	14	40	27.425	- 4	44	10.34	4		9010	4057	F6	7795
	7	20	3	40	28.8758	1	14	41	11.393	- 4	10	48.79	4		9010	4057	F7	7796
	7	20	3	42	4.8748	1	14	59	54.464		11	11	44.68	4		9010	4058	F1	7797
	7	20	3	42	8.8748	1	15	0	45.103		11	55	14.88	4		9010	4058	F2	7798
	7	20	3	42	12.8747	1	15	1	36.062		12	39	12.49	4		9010	4058	F3	7799
	7	20	3	42	16.8747	1	15	2	27.564		13	23	30.66	4		9010	4058	F4	7800
	7	20	3	42	20.8747	1	15	3	19.730		14	8	11.73	4		9010	4058	F5	7801
	7	20	3	42	24.8746	1	15	4	11.990		14	53	15.39	4		9010	4058	F6	7802
	7	20	3	42	28.8746	1	15	5	4.333		15	38	41.84	4		9010	4058	F7	7803
	7	20	5	45	4.8828	1									1.9199030	7901			53A1
	7	20	5	45	34.8845	1									1.8691150	7901			53A2
	7	20	5	46	34.8822	1									1.8191290	7901			53A3
	7	20	5	46	48.7712	1	15	58	19.876		43	24	59.34	4		9001	2226	04	1209
	7	20	5	47	4.8834	1									1.8211400	7901			53A4
	7	20	5	48	4.8850	1									1.8782590	7901			53A5
	7	20	5	49	4.8751	1	17	22	5.823		68	47	9.64	4		9001	2227	F1	35A4
	7	20	5	49	4.8842	1									1.9994920	7901			53A6
	7	20	5	49	8.8751	1	17	26	29.686		69	23	26.17	4		9001	2227	F2	35A5
	7	20	5	49	12.8752	1	17	31	4.825		69	58	59.50	4		9001	2227	F3	35A6
	7	20	5	49	16.8752	1	17	35	52.647		70	33	45.91	4		9001	2227	F4	35A7
	7	20	5	49	20.8752	1	17	40	53.967		71	7	42.86	4		9001	2227	F5	35A8
	7	20	5	49	24.8753	1	17	46	9.396		71	40	55.49	4		9001	2227	F6	35A9
	7	20	5	49	28.8753	1	17	51	39.929		72	13	18.13	4		9001	2227	F7	3500
	7	20	5	50	4.8864	1									2.1731030	7901			53A7
	7	20	5	53	4.8808	1	13	2	36.216		62	45	50.61	4		9010	4062	F1	7455
	7	20	5	53	8.8808	1	13	0	55.426		63	7	21.78	4		9010	4062	F2	7456
	7	20	5	53	12.8808	1	12	59	11.454		63	28	39.71	4		9010	4062	F3	7457
	7	20	5	53	16.8808	1	12	57	24.425		63	49	54.28	4		9010	4062	F4	7458
	7	20	5	53	20.8808	1	12	55	34.551		64	10	56.84	4		9010	4062	F5	7459
	7	20	5	53	24.8808	1	12	53	41.312		64	31	50.70	4		9010	4062	F6	7460
	7	20	5	53	28.8808	1	12	51	45.032		64	52	32.61	4		9010	4062	F7	7461
	7	20	5	53	34.4900	1									3.0297450	7901			53A8
	7	20	7	40	56.6172	1	17	26	25.623		16	51	27.91	4		9012	6989	03	9068
	7	20	7	57	4.8193	1	5	46	50.798		79	33	30.58	4		9113	918	F1	566
	7	20	7	57	8.8193	3	5	41	51.827		79	12	54.56	4		9113	918	F2	3734
	7	20	7	57	12.8194	3	5	37	15.272		78	52	8.69	4		9113	918	F3	3735
	7	20	7	57	16.8194	3	5	32	57.979		78	31	12.67	4		9113	918	F4	3736
	7	20	7	57	20.8794	1	5	28	58.053		78	10	13.12	4		9113	918	F5	284
	7	20	7	57	24.8795	1	5	25	13.689		77	49	8.57	4		9113	918	F6	285
	7	20	7	57	28.8795	1	5	21	44.255		77	28	.88	4		9113	918	F7	567
	7	20	9	20	52.7410	1	16	29	3.528	-66	16	1.35	4			9023	6534	03	3548
	7	20	9	23	4.8735	1	17	25	54.132	-27	19	27.37	4			9023	6535	F1	4600
	7	20	9	23	8.8735	1	17	26	50.749	-26	12	59.29	4			9023	6535	F2	4601
	7	20	9	23	12.8736	1	17	27	46.070	-25	7	19.95	4			9023	6535	F3	4602
	7	20	9	23	16.8736	1	17	28	40.605	-24	2	24.47	4			9023	6535	F4	4603
	7	20	9	23	20.8736	1	17	29	33.676	-22	58	17.83	4			9023	6535	F5	4604

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (NM)	STATION	FRAME NO.		OBS.NO.
1966	7	20	9	44	57.6963	1	13	39	54.577	31	33	41.67	4		9012	6995	06	9353
	7	20	9	46	56.1956	1	13	36	3.949	46	17	11.63	4		9012	6996	04	A2A9
	7	20	9	51	18.4684	1	12	12	36.613	74	48	7.87	4		9012	6997	03	8270
	7	20	11	25	21.1562	1	12	0	38.216	- 0	25	18.67	4		9023	6548	03	1203
	7	20	11	28	54.1356	1	13	37	58.306	28	51	3.78	4		9023	6549	04	1204
	7	20	17	22	4.8767	1	9	28	46.330	-60	42	.3	4		9002	4556	F1	4278
	7	20	17	22	8.8766	1	9	32	58.170	-60	46	15.10	4		9002	4556	F2	4279
	7	20	17	22	12.8765	1	9	37	15.462	-60	50	1.16	4		9002	4556	F3	42A0
	7	20	17	22	16.8764	1	9	41	38.247	-60	53	22.77	4		9002	4556	F4	42A1
	7	20	17	22	20.8764	1	9	46	6.262	-60	56	10.34	4		9002	4556	F5	42A2
	7	20	17	22	24.8763	1	9	50	39.792	-60	58	27.80	4		9002	4556	F6	42A3
	7	20	17	22	28.8762	1	9	55	18.812	-61	0	11.63	4		9002	4556	F7	42A4
	7	20	17	26	4.8735	1	14	43	59.380	-32	19	33.52	4		9002	4557	F1	5A21
	7	20	17	26	8.8735	1	14	47	53.211	-31	7	36.08	4		9002	4557	F2	5A22
	7	20	17	26	12.8735	1	14	51	42.134	-29	54	49.00	4		9002	4557	F3	5A23
	7	20	17	26	16.8735	1	14	55	25.980	-28	41	29.56	4		9002	4557	F4	5A24
	7	20	17	26	20.8735	1	14	59	5.254	-27	27	31.90	4		9002	4557	F5	5A25
	7	20	17	26	24.8735	1	15	2	39.996	-26	13	11.41	4		9002	4557	F6	5A26
	7	20	17	26	28.8735	1	15	6	10.148	-24	58	25.72	4		9002	4557	F7	5A27
	7	20	21	46	4.8764	1	18	5	53.721	- 3	2	9.00	4		9004	8154	F1	90A6
	7	20	21	46	8.8764	1	18	7	54.778	- 2	23	.82	4		9004	8154	F2	90A7
	7	20	21	46	12.8764	1	18	9	56.701	- 1	43	42.93	4		9004	8154	F3	90A8
	7	20	21	46	16.8763	1	18	11	59.681	- 1	4	9.08	4		9004	8154	F4	90A9
	7	20	21	46	20.8763	1	18	14	3.503	- 0	24	27.46	4		9004	8154	F5	90B0
	7	20	21	46	24.8763	1	18	16	8.738	0	15	30.79	4		9004	8154	F6	90B1
	7	20	21	46	28.8763	1	18	18	14.573	0	55	35.51	4		9004	8154	F7	90B2
	7	20	21	49	4.8763	1	19	53	8.726	26	18	55.54	4		9004	8154	F1	90B3
	7	20	21	49	8.8764	1	19	55	52.653	26	52	7.69	4		9004	8154	F2	90B4
	7	20	21	49	12.8764	1	19	58	37.273	27	24	52.18	4		9004	8154	F3	90B5
	7	20	21	49	16.8764	1	20	1	22.273	27	57	5.76	4		9004	8154	F4	90B6
	7	20	21	49	20.8764	1	20	4	8.290	28	28	46.89	4		9004	8154	F5	90B9
	7	20	21	49	24.8765	1	20	6	54.743	28	59	58.16	4		9004	8154	F6	90B8
	7	20	21	49	28.8765	1	20	9	41.561	29	30	35.88	4		9004	8154	F7	90B9
	7	20	21	52	4.8782	1	21	59	10.526	42	32	26.72	4		9004	8154	F1	91B9
	7	20	21	52	8.8782	1	22	1	50.952	42	42	51.69	4		9004	8154	F2	91B0
	7	20	21	52	12.8783	1	22	4	30.152	-2	53	45.96	4		9004	8154	F3	9638
	7	20	21	52	16.8784	1	22	7	8.828	43	2	28.01	4		9004	8154	F4	9202
	7	20	21	52	20.8784	1	22	9	46.750	43	11	39.98	4		9004	8154	F5	9203
	7	20	21	52	24.8785	1	22	12	23.777	43	20	31.35	4		9004	8154	F6	9204
	7	20	21	52	28.8785	1	22	14	59.528	43	29	4.46	4		9004	8154	F7	9205
	7	20	23	28	4.8764	1	18	36	50.207	-42	33	25.84	4		9007	5977	F1	9830
	7	20	23	28	8.8764	1	18	37	6.562	-41	38	41.97	4		9007	5977	F2	9834
	7	20	23	28	12.8764	1	18	37	23.570	-40	43	55.13	4		9007	5977	F3	9832
	7	20	23	28	16.8764	1	18	37	40.909	-39	49	4.63	4		9007	5977	F4	9833
	7	20	23	28	20.8764	1	18	37	58.384	-38	54	12.67	4		9007	5977	F5	9834
	7	20	23	28	24.8764	1	18	38	16.344	-37	59	18.44	4		9007	5977	F6	9835
	7	20	23	28	28.8764	1	18	38	34.780	-37	4	24.46	4		9007	5977	F7	9835
	7	20	23	30	4.8768	1	18	47	8.892	-15	59	32.94	4		9007	5978	F1	9836
	7	20	23	30	8.8768	1	18	47	32.813	-15	10	53.00	4		9007	5978	F2	9837
	7	20	23	30	12.8768	1	18	47	57.185	-14	22	35.34	4		9007	5978	F3	506
	7	20	23	30	16.8769	1	18	48	21.451	-13	34	49.31	4		9007	5978	F4	9838
	7	20	23	30	20.8769	1	18	48	46.011	-12	47	28.71	4		9007	5978	F5	9839
	7	20	23	30	24.8769	1	18	49	10.853	-12	0	35.78	4		9007	5978	F6	9840
	7	20	23	30	28.8770	1	18	49	35.894	-11	14	9.73	4		9007	5978	F7	9842
	7	20	23	52	4.8781	1	14	56	6.857	42	25	12.12	4		9004	8163	F1	77A9
	7	20	23	52	8.8781	1	14	56	23.041	43	4	56.52	4		9004	8163	F2	77B0
	7	20	23	52	12.8781	1	14	56	39.094	43	44	51.57	4		9004	8163	F3	7771
	7	20	23	52	16.8780	1	14	56	55.268	44	24	50.47	4		9004	8163	F4	7772
	7	20	23	52	20.8780	1	14	57	11.229	45	4	55.60	4		9004	8163	F5	7773
	7	20	23	52	24.8780	1	14	57	27.055	45	45	7.34	4		9004	8163	F6	7774
	7	20	23	52	28.8780	1	14	57	42.996	46	25	21.08	4		9004	8163	F7	7775
	7	20	23	56	4.8786	1	15	7	57.338	81	32	44.19	4		9004	8163	F1	7776
	7	20	23	56	8.8786	1	15	7	49.549	82	7	27.04	4		9004	8163	F2	7777
	7	20	23	56	12.8787	1	15	7	39.219	82	41	56.63	4		9004	8163	F3	7778
	7	20	23	56	16.8787	1	15	7	22.399	83	16	13.48	4		9004	8163	F4	7779
	7	20	23	56	20.8787	1	15	7	3.348	83	50	17.09	4		9004	8163	F5	9392
	7	20	23	56	24.8788	1	15	6	35.016	84	24	3.80	4		9004	8163	F6	77A1
	7	20	23	56	28.8788	1	15	6	.179	84	57	36.35	4		9004	8163	F7	77A2
	7	21	0	1	8.8814	1	13	29	35.926	67	52	51.15	4		9051	103	F2	10
	7	21	0	1	12.8814	1	13	27	5.243	68	15	52.30	4		9051	103	F3	9
	7	21	0	1	16.8814	1	13	24	28.723	68	38	43.79	4		9051	103	F4	8
	7	21	0	1	20.8814	1	13	21	46.415	69	1	22.47	4		9051	103	F5	7
	7	21	0	1	24.8814	1	13	18	57.682	69	23	50.98	4		9051	103	F6	6
	7	21	1	32	4.8775	1	12	34	54.678	2	27	40.97	4		9007	5989	F1	5444
	7	21	1	32	8.8775	1	12	36	32.212	3	8	57.34	4		9007	5989	F2	5445
	7	21	1	32	12.8775	1	12	38	9.722	3	50	27.53	4		9007	5989	F3	5446
	7	21	1	32	20.8775	1	12	41	24.632	5	13	54.87	4		9007	5989	F5	5447
	7	21	1	32	24.8774	3	12	43	2.126	5	55	54.51	4		9007	5989	F6	6[illegible]7
	7	21	1	36	4.8786	1	14	13	8.091	41	53	26.69	4		9007	5990	F1	9314
	7	21	1	36	8.8786	1	14	13	26.427	42	24	59.42	4		9007	5990	F2	9315

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (KM)	STATION	FRAME NO.		OBS.NO.
1966	7	21	1	36	12.8787	1	14	15	24.746	42	56	9.46	4		9007	5990	F3	9316
	7	21	1	36	16.8787	1	14	17	3.043	43	26	56.44	4		9007	5990	F4	9317
	7	21	1	36	20.8788	1	14	18	41.561	43	57	29.39	4		9007	5990	F5	9318
	7	21	1	36	24.8788	1	14	20	20.373	44	27	34.69	4		9007	5990	F6	9319
	7	21	1	36	28.8789	1	14	21	59.108	44	57	23.74	4		9007	5990	F7	9320
	7	21	3	42	4.8795	1	17	35	36.901	-33	39	41.84	4		9001	2260	F1	3287
	7	21	3	42	8.8794	1	17	37	9.122	-33	16	2.82	4		9001	2260	F2	3288
	7	21	3	42	12.8794	1	17	38	41.549	-32	48	9.47	4		9001	2260	F3	3289
	7	21	3	42	16.8793	1	17	40	14.748	-32	21	58.38	4		9001	2260	F4	3290
	7	21		42	20.8793	1	17	41	47.753	-31	55	29.59	4		9001	2260	F5	3291
	7	21	3	42	24.8792	1	17	43	21.318	-31	28	44.96	4		9001	2260	F6	4310
	7	21	3	42	28.8792	1	17	44	55.001	-31	1	46.34	4		9001	2260	F7	3292
	7	21	3	44	4.8783	1	18	24	5.950	-18	53	36.35	4		9001	2261	F1	3393
	7	21	3	44	8.8782	1	18	25	48.258	-18	20	5.17	4		9001	2261	F2	3394
	7	21	3	44	12.8782	1	18	27	31.077	-17	46	19.54	4		9001	2261	F3	3494
	7	21	3	44	16.8782	1	18	29	14.205	-17	12	21.94	4		9001	2261	F4	3395
	7	21	3	44	20.8781	1	18	30	57.608	-16	38	10.46	4		9001	2261	F5	3396
	7	21	3	44	24.8781	1	18	32	41.616	-16	3	48.0[illegible]	4		9001	2261	F6	3397
	7	21	3	44	28.8781	1	18	34	25.723	-15	29	11.3[illegible]	4		9001	2261	F7	3398
	7	21	3	47	4.8776	1	19	46	47.763		7	57 .7	4		9001	2262	F1	3399
	7	21	3	47	8.8779	1	19	48	45.370		8	31 30.9[illegible]	4		9001	2262	F2	3400
	7	21	3	47	12.8779	1	19	50	43.153		9	5 50.65	4		9001	2262	F3	3401
	7	21	3	47	16.8779	1	19	52	41.275		9	39 51.99	4		9001	2262	F4	3402
	7	21	3	47	20.8779	1	19	54	39.595		10	13 39.81	4		9001	2262	F5	3403
	7	21	3	47	24.8779	1	19	56	38.292		10	47 10.89	4		9001	2262	F6	3404
	7	21	3	47	28.8779	1	19	58	37.015		11	20 29.10	4		9001	2262	F7	3405
	7	21	3	49	4.8786	1	20	46	48.340		23	2 21.54	4		9001	2263	F1	3672
	7	21	3	49	8.8787	1	20	48	49.265		23	27 6.39	4		9001	2263	F2	3673
	7	21	3	49	12.8787	1	20	50	50.494		23	51 29.84	4		9001	2263	F3	3624
	7	21	3	49	16.8787	1	20	52	51.470		24	15 29.91	4		9001	2263	F4	3625
	7	21	3	49	20.8788	1	20	54	52.728		24	39 8.67	4		9001	2263	F5	3626
	7	21	3	49	24.8788	1	20	56	53.600		25	2 25.79	4		9001	2263	F6	3627
	7	21	3	49	28.8789	1	20	58	54.345		25	25 16.75	4		9001	2263	F7	3628
	7	21	3	51	4.8800	1	21	46	24.186		32	46 50.76	4		9001	2264	F1	3629
	7	21	3	51	8.8801	1	21	48	19.757		33	1 .74	4		9001	2264	F2	4311
	7	21	3	51	12.8801	1	21	50	14.941		33	14 57.45	4		9001	2264	F3	3630
	7	21	3	51	16.8802	1	21	52	9.822		33	28 29.16	4		9001	2264	F4	3631
	7	21	3	51	20.8802	3	21	54	4.205		33	41 48.86	4		9001	2264	F5	6241
	7	21	3	51	24.8803	1	21	55	58.449		33	54 46.72	4		9001	2264	F6	3632
	7	21	3	51	28.8803	1	21	57	52.245		34	7 31.22	4		9001	2264	F7	3633
	7	21	5	54	20.8095	1	16	46	44.316		78	43 .64	4		9001	2273	10	1214
	7	21	7	41	4.8782	1	14	43	1.284	-24	55	21.37	4		9012	7033	F1	9374
	7	21	7	41	8.8782	1	14	44	18.716	-24	23	56.28	4		9012	7033	F2	8572
	7	21	7	41	12.8781	1	14	45	36.454	-23	52	1.[illegible]	4		9012	7033	F3	8573
	7	21	7	41	16.8781	1	14	46	54.690	-23	19	3[illegible].84	4		9012	7033	F4	9375
	7	21	7	41	20.8780	1	14	48	13.175	-22	46	38.26	4		9012	7033	F5	9376
	7	21	7	41	24.8779	1	14	49	32.086	-22	13	5.83	4		9012	7033	F6	9411
	7	21	7	41	28.8779	1	14	50	51.371	-21	39	5.64	4		9012	7033	F7	9412
	7	21	7	44	40.8805	1	16	7	9.211		17	4 47.60	4		9012	7034	02	8271
	7	21	9	52	20.5096	1	13	13	24.504		52	36 25.10	4		9012	7039	03	8272
	7	21	10	8	4.8840	1	9	14	33.817		75	10 17.01	4		9113	1003	F1	10
	7	21	10	8	8.8840	1	9	8	42.744		75	5 1.97	4		9113	1003	F2	11
	7	21	10	8	12.8840	1	9	2	56.479		74	51 13.84	4		9113	1003	F3	12
	7	21	10	8	16.8840	3	8	57	14.756		74	52 [illegible].54	4		9113	1003	F4	3741
	7	21	10	8	20.8840	1	8	51	38.428		74	45 47.11	4		9113	1003	F5	13
	7	21	10	8	24.8840	1	8	46	8.457		74	38 16.81	4		9113	1003	F6	14
	7	21	10	8	28.8840	1	8	40	45.576		74	30 8.83	4		9113	1003	F7	15
	7	21	11	29	26.8834	1	11	46	14.027		2	28 14.09	4		9023	6578	03	1205
	7	21	11	31	18.5366	1	12	32	58.238		16	30 17.29	4		9023	6579	04	1206
	7	21	17	28	4.8777	1	11	20	34.647	-45	52	1.92	4		9002	4587	F1	5828
	7	21	17	28	8.8776	1	11	24	46.552	-45	27	32.86	4		9002	4587	F2	5829
	7	21	17	28	12.8775	1	11	28	59.444	-45	1	58.42	4		9002	4587	F3	5830
	7	21	17	28	16.8775	1	11	33	13.305	-44	35	14.38	4		9002	4587	F4	5831
	7	21	17	28	20.8774	1	11	37	27.485	-44	7	15.47	4		9002	4587	F5	5832
	7	21	17	28	24.8774	1	11	41	42.437	-43	38	12.00	4		9002	4587	F6	5833
	7	21	17	28	28.8773	1	11	45	57.652	-43	7	52.42	4		9002	4587	F7	5834
	7	21	17	30	4.8764	1	13	24	45.431	-24	32	35.09	4		9002	4588	F1	5985
	7	21	17	30	8.8764	1	13	28	32.966	-23	31	16.04	4		9002	4588	F2	5986
	7	21	17	30	12.8764	1	13	32	18.054	-22	29	12.18	4		9002	4588	F3	5987
	7	21	17	30	16.8764	1	13	36	1.083	-21	26	18.13	4		9002	4588	F4	5988
	7	21	17	30	20.8764	1	13	39	41.605	-20	22	38.89	4		9002	4588	F5	5989
	7	21	17	30	24.8764	1	13	43	20.117	-19	18	21.21	4		9002	4588	F6	5990
	7	21	17	30	28.8763	1	13	46	56.003	-18	13	29.35	4		9002	4588	F7	5991
	7	21	17	32	4.8767	1	15	1	23.497		7	25 15.53	4		9002	4589	F1	5992
	7	21	17	32	8.8768	1	15	4	1.322		8	22 8.40	4		9002	4589	F2	5993
	7	21	17	32	12.8768	1	15	6	37.167		9	18 3.87	4		9002	4589	F3	5994
	7	21	17	32	16.8769	1	15	9	10.956		10	13 7.97	4		9002	4589	F4	5995
	7	21	17	32	20.8769	1	15	11	42.798		11	7 12.21	4		9002	4589	F5	5996
	7	21	17	32	24.8770	1	15	14	12.712		12	0 21.62	4		9002	4589	F6	5997
	7	21	17	32	28.8770	1	15	16	40.760		12	52 34.08	4		9002	4589	F7	6997

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	7	21	21	50	4.8787	1	17	19	52.435	0	0	17.94	4		9004	8186	F1	7547
	7	21	21	50	8.8787	1	17	21	49.634	0	41	42.07	4		9004	8186	F2	7548
	7	21	21	50	12.8787	1	17	23	47.971	1	23	27.10	4		9004	8186	F3	7549
	7	21	21	50	16.8786	1	17	25	47.692	2	5	29.69	4		9004	8186	F4	7550
	7	21	21	50	20.8786	1	17	27	48.476	2	47	53.97	4		9004	8186	F5	7551
	7	21	21	50	24.8786	1	17	29	50.834	3	30	33.35	4		9004	8186	F6	7552
	7	21	21	50	28.8786	1	17	31	54.558	4	13	33.31	4		9004	8186	F7	7553
	7	21	21	53	4.8784	1	19	12	15.712	32	21	3.68	4		9004	8186	F1	7554
	7	21	21	53	8.8785	1	19	15	22.583	32	58	19.03	4		9004	8186	F2	7555
	7	21	21	53	8.8823	1	14	35	50.219	16	12	23.35	4		9051	106	F2	11
	7	21	21	53	12.8785	1	19	18	30.857	33	35	.25	4		9004	8186	F3	7556
	7	21	21	53	12.8823	1	14	36	5.668	16	40	44.98	4		9051	106	F3	12
	7	21	21	53	16.8785	1	19	21	40.600	34	11	5.71	4		9004	8186	F4	7557
	7	21	21	53	16.8822	1	14	36	20.515	17	9	21.41	4		9051	106	F4	13
	7	21	21	53	20.8785	1	19	24	51.474	34	46	34.28	4		9004	8186	F5	8334
	7	21	21	53	20.8822	1	14	36	35.542	17	38	13.95	4		9051	106	F5	14
	7	21	21	53	24.8786	1	19	28	4.177	35	21	22.20	4		9004	8186	F6	7558
	7	21	21	53	24.8822	1	14	36	50.270	18	7	17.97	4		9051	106	F6	15
	7	21	21	53	28.8786	1	19	31	17.836	35	55	36.37	4		9004	8186	F7	7559
	7	21	21	53	28.8821	1	14	37	5.343	18	36	37.06	4		9051	106	F7	16
	7	21	21	59	8.8807	1	14	45	44.765	70	2	7.91	4		9051	107	F2	21
	7	21	21	59	12.8808	1	14	45	23.414	70	39	54.05	4		9051	107	F3	20
	7	21	21	59	16.8808	1	14	44	58.705	71	17	28.35	4		9051	107	F4	19
	7	21	21	59	20.8808	1	14	44	31.953	71	54	54.15	4		9051	107	F5	18
	7	21	21	59	24.8808	1	14	44	2.445	72	32	12.07	4		9051	107	F6	17
	7	21	23	29	4.8800	1	14	58	58.685	-82	17	.57	4		9007	6020	F1	9321
	7	21	23	29	8.8800	1	15	10	33.478	-81	49	25.84	4		9007	6020	F2	9643
	7	21	23	29	12.8799	1	15	21	2.853	-81	20	23.08	4		9007	6020	F3	9644
	7	21	23	29	16.8799	1	15	30	35.052	-80	49	56.16	4		9007	6020	F4	9322
	7	21	23	29	20.8798	1	15	39	17.506	-80	18	20.18	4		9007	6020	F5	9323
	7	21	23	29	24.8797	1	15	47	14.508	-79	45	30.22	4		9007	6020	F6	9324
	7	21	23	29	28.8797	1	15	54	30.767	-79	11	32.18	4		9007	6020	F7	9325
	7	21	23	32	8.7503	1	17	40	26.414	-45	41	8.64	4		9007	6021	05	8372
	7	21	23	34	4.8783	1	18	8	11.678	-15	17	16.13	4		9007	6022	F1	9579
	7	21	23	34	8.8783	1	18	9	.621	-14	19	17.38	4		9007	6022	F2	95A0
	7	21	23	34	12.8784	1	18	9	49.163	-13	21	53.86	4		9007	6022	F3	95A1
	7	21	23	34	16.8784	1	18	10	37.542	-12	25	7.19	4		9007	6022	F4	95A2
	7	21	23	34	20.8784	1	18	11	25.549	-11	28	54.19	4		9007	6022	F5	95A3
	7	21	23	34	24.8785	1	18	12	13.270	-10	33	24.36	4		9007	6022	F6	95A4
	7	21	23	34	28.8785	1	18	13	.819	- 9	38	29.14	4		9007	6022	F7	95A5
	7	21	23	56	4.8815	1	14	31	16.469	39	59	25.69	4		9004	8198	F1	77A3
	7	21	23	56	8.8814	1	14	31	18.838	40	35	11.24	4		9004	8198	F2	77A4
	7	21	23	56	12.8814	3	14	31	20.700	41	11	6.15	4		9004	8198	F3	9772
	7	21	23	56	16.8814	3	14	31	22.288	41	47	5.96	4		9004	8198	F4	9773
	7	21	23	56	20.8814	1	14	31	23.078	42	23	12.46	4		9004	8198	F5	9393
	7	21	23	56	24.8814	3	14	31	24.076	42	59	26.60	4		9004	8198	F6	9774
	7	21	23	56	28.8814	3	14	31	24.230	43	35	49.87	4		9004	8198	F7	9775
	7	22	0	0	4.8815	1	13	59	1.195	76	22	32.63	4		9004	8198	F1	9394
	7	22	0	0	8.8815	1	13	56	30.309	76	55	42.11	4		9004	8198	F2	9395
	7	22	0	0	12.8815	3	13	53	45.125	77	28	35.33	4		9004	8198	F3	9776
	7	22	0	0	16.8815	1	13	50	43.695	78	1	11.89	4		9004	8198	F4	77A7
	7	22	0	0	20.8816	1	13	47	26.466	78	33	26.73	4		9004	8198	F5	77A8
	7	22	0	0	24.8816	1	13	43	49.613	79	5	26.29	4		9004	8198	F6	77A9
	7	22	0	0	28.8816	3	13	39	49.718	79	37	0.00	4		9004	8198	F7	9777
	7	22	0	3	21.8752	1	4	24	33.058	77	51	59.96	4		9004	8198	33	6377
	7	22	0	5	8.8843	1	13	39	47.866	64	48	23.87	4		9051	109	F2	26
	7	22	0	5	12.8842	1	13	37	55.226	65	11	22.58	4		9051	109	F3	25
	7	22	0	5	16.8842	1	13	35	58.656	65	34	17.46	4		9051	109	F4	24
	7	22	0	5	20.8842	1	13	33	57.826	65	57	4.67	4		9051	109	F5	23
	7	22	0	5	24.8842	1	13	31	52.548	66	19	46.37	4		9051	109	F6	22
	7	22	1	34	28.7547	1	11	40	55.018	- 8	27	3.31	4		9007	6031	04	8373
	7	22	1	38	4.8813	1	12	52	14.214	22	52	36.82	4		9007	6032	F1	7119
	7	22	1	38	8.8813	1	12	53	32.217	23	28	43.32	4		9007	6032	F2	7120
	7	22	1	38	12.8813	1	12	54	50.116	24	4	44.07	4		9007	6032	F3	7121
	7	22	1	38	16.8813	1	12	56	8.016	24	40	37.26	4		9007	6032	F4	7122
	7	22	1	38	20.8813	1	12	57	25.856	25	16	24.43	4		9007	6032	F5	7123
	7	22	1	38	24.8813	1	12	58	43.496	25	52	4.11	4		9007	6032	F6	7124
	7	22	1	38	28.8814	1	13	0	1.580	26	27	32.63	4		9007	6032	F7	7125
	7	22	1	47	4.8794	1	18	19	43.827	-10	26	43.23	4		9010	4094	F1	81A0
	7	22	1	47	8.8793	1	18	21	39.338	- 9	44	13.45	4		9010	4094	F2	81A1
	7	22	1	47	12.8793	1	18	23	34.936	- 9	1	33.44	4		9010	4094	F3	81A2
	7	22	1	47	16.8793	1	18	25	31.185	- 8	18	45.62	4		9010	4094	F4	81A3
	7	22	1	47	20.8793	1	18	27	27.532	- 7	35	48.80	4		9010	4094	F5	81A4
	7	22	1	47	24.8793	1	18	29	24.531	- 6	52	46.27	4		9010	4094	F6	9364
	7	22	1	47	28.8793	1	18	31	21.854	- 6	9	36.10	4		9010	4094	F7	81A5
	7	22	1	49	4.8794	1	19	19	58.275	10	50	36.11	4		9010	4095	F1	81A6
	7	22	1	49	8.8794	1	19	22	3.582	11	30	35.92	4		9010	4095	F2	81A7
	7	22	1	49	12.8794	1	19	24	9.171	12	10	15.75	4		9010	4095	F3	81A8
	7	22	1	49	16.8794	1	19	26	14.976	12	49	33.30	4		9010	4095	F4	81A9
	7	22	1	49	20.8794	1	19	28	21.048	13	28	32.99	4		9010	4095	F5	9365

July 22, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	7	22	1	49	24.8795	1	19	30	27.267	14	7	6.31	4		9010	4095	F6	8191
	7	22	1	49	28.8795	1	19	32	33.902	14	45	19.90	4		9010	4095	F7	8192
	7	22	1	51	4.8803	1	20	23	52.056	27	49	14.40	4		9010	4096	F1	97A6
	7	22	1	51	8.8804	1	20	26	.486	28	16	.97	4		9010	4096	F2	97A7
	7	22	1	51	12.8804	1	20	28	9.526	28	42	18.14	4		9010	4096	F3	98A0
	7	22	1	53	4.8819	1	21	27	6.436	38	0	20.95	4		9010	4097	F1	6304
	7	22	1	53	8.8819	1	21	29	8.521	38	14	34.98	4		9010	4097	F2	6305
	7	22	1	53	12.8820	1	21	31	10.197	38	28	32.06	4		9010	4097	F3	6306
	7	22	1	53	16.8821	1	21	33	11.756	38	42	5.27	4		9010	4097	F4	6307
	7	22	1	53	20.8821	1	21	35	13.046	38	55	14.47	4		9010	4097	F5	6308
	7	22	1	53	24.8822	1	21	37	13.393	39	8	10.57	4		9010	4097	F6	6309
	7	22	1	53	28.8822	1	21	39	13.455	39	20	43.20	4		9010	4097	F7	6310
	7	22	2	5	4.8851	1	13	37	52.275	62	32	31.72	4		9004	8207	F1	6921
	7	22	2	5	8.8851	1	13	36	15.369	62	54	26.20	4		9004	8207	F2	6922
	7	22	2	5	12.8850	1	13	34	34.997	63	16	16.38	4		9004	8207	F3	6923
	7	22	2	5	16.8850	1	13	32	51.459	63	38	.68	4		9004	8207	F4	6924
	7	22	2	5	20.8850	1	13	31	4.808	63	59	39.73	4		9004	8207	F5	6925
	7	22	2	5	24.8850	1	13	29	14.941	64	21	17.50	4		9004	8207	F6	6926
	7	22	2	5	28.8850	1	13	27	21.306	64	42	44.70	4		9004	8207	F7	6927
	7	22	2	10	4.8852	1	7	46	20.572	74	8	51.16	4		9004	8207	F1	6928
	7	22	2	10	8.8852	1	7	41	29.688	73	56	12.40	4		9004	8207	F2	6929
	7	22	2	10	12.8852	1	7	36	47.435	73	43	9.36	4		9004	8207	F3	6930
	7	22	2	10	16.8852	1	7	32	12.875	73	29	42.85	4		9004	8207	F4	6931
	7	22	2	10	20.8853	1	7	27	46.981	73	15	52.29	4		9004	8207	F5	9779
	7	22	2	10	24.8853	1	7	23	29.903	73	1	44.80	4		9004	8207	F6	6932
	7	22	2	10	28.8853	1	7	19	20.422	72	47	11.47	4		9004	8207	F7	7330
	7	22	3	59	4.8836	1	3	42	7.416	85	59	57.79	4		9010	4100	F1	6311
	7	22	3	59	12.8837	1	3	33	22.816	85	12	41.06	4		9010	4100	F3	6313
	7	22	3	59	16.8837	1	3	30	8.005	84	49	10.45	4		9010	4100	F4	6314
	7	22	3	59	20.8838	1	3	27	24.266	84	25	50.63	4		9010	4100	F5	6315
	7	22	3	59	24.8838	1	3	25	.994	84	2	40.53	4		9010	4100	F6	6316
	7	22	3	59	28.8839	1	3	23	2.742	83	39	38.65	4		9010	4100	F7	6317
	7	22	5	59	4.8819	1	14	51	16.163	81	27	43.64	4		9001	2285	F1	33A6
	7	22	5	59	8.8819	1	14	51	32.850	82	1	12.42	4		9001	2285	F2	33A7
	7	22	5	59	12.8820	1	14	51	48.706	82	34	23.98	4		9001	2285	F3	33A8
	7	22	5	59	16.8820	1	14	52	4.880	83	7	20.38	4		9001	2285	F4	33A9
	7	22	5	59	20.8821	1	14	52	21.911	83	40	4.30	4		9001	2285	F5	33B0
	7	22	5	59	24.8821	1	14	52	37.701	84	12	31.78	4		9001	2285	F6	33B1
	7	22	5	59	28.8821	1	14	52	52.656	84	44	39.69	4		9001	2285	F7	33B2
	7	22	6	1	8.8832	1	2	59	38.964	83	11	3.72	4		9001	2285	F2	3904
	7	22	6	1	12.8833	1	2	59	55.231	82	45	10.51	4		9001	2285	F3	3905
	7	22	6	1	16.8833	1	3	0	9.009	82	19	28.05	4		9001	2285	F4	3906
	7	22	6	1	20.8834	1	3	0	25.916	81	53	58.94	4		9001	2285	F5	3907
	7	22	6	1	24.8834	1	3	0	40.245	81	28	43.09	4		9001	2285	F6	3908
	7	22	6	1	28.8835	1	3	0	56.909	81	3	39.41	4		9001	2285	F7	3909
	7	22	7	46	4.8805	1	14	17	57.376	-11	19	44.75	4		9012	7042	F1	8991
	7	22	7	46	8.8805	1	14	18	59.853	-10	42	18.96	4		9012	7042	F2	8992
	7	22	7	46	12.8804	1	14	20	2.737	-10	4	23.99	4		9012	7042	F3	8993
	7	22	7	46	16.8804	1	14	21	5.904	- 9	25	53.69	4		9012	7042	F4	8994
	7	22	7	46	20.8803	1	14	22	9.367	- 8	46	57.30	4		9012	7042	F5	8995
	7	22	7	46	24.8803	1	14	23	13.157	- 8	7	23.94	4		9012	7042	F6	8996
	7	22	7	46	28.8802	1	14	24	17.176	- 7	27	18.11	4		9012	7042	F7	8997
	7	22	8	4	4.8861	1	12	56	36.940	63	36	57.88	4		9001	2291	F1	3910
	7	22	8	4	8.8861	1	12	54	39.745	63	57	23.39	4		9001	2291	F2	3911
	7	22	8	4	12.8861	1	12	52	39.457	64	17	45.98	4		9001	2291	F3	3912
	7	22	8	4	16.8861	1	12	50	35.628	64	37	51.26	4		9001	2291	F4	3913
	7	22	8	4	20.8861	1	12	48	28.315	64	57	55.58	4		9001	2291	F5	3914
	7	22	8	4	24.8861	1	12	46	17.065	65	17	44.96	4		9001	2291	F6	4979
	7	22	8	4	28.8861	1	12	44	2.711	65	37	28.70	4		9001	2291	F7	3915
	7	22	9	28	4.8790	1	10	49	31.602	-61	25	34.48	4		9023	6598	F1	7098
	7	22	9	28	8.8790	1	10	56	34.954	-61	14	33.42	4		9023	6598	F2	7099
	7	22	9	28	12.8789	1	11	3	41.250	-61	1	55.97	4		9023	6598	F3	7100
	7	22	9	28	16.8788	1	11	10	50.914	-60	47	34.48	4		9023	6598	F4	7101
	7	22	9	28	20.8788	1	11	18	3.108	-60	31	29.62	4		9023	6598	F5	7102
	7	22	9	28	24.8787	1	11	25	15.996	-60	13	37.76	4		9023	6598	F6	7103
	7	22	9	28	28.8787	1	11	32	29.527	-59	53	54.64	4		9023	6598	F7	7104
	7	22	9	30	4.8778	1	14	3	38.293	-42	0	25.68	4		9023	6600	F1	7265
	7	22	9	30	8.8777	1	14	8	26.622	-40	53	13.53	4		9023	6600	F2	7266
	7	22	9	30	12.8777	1	14	13	6.954	-39	44	49.48	4		9023	6600	F3	7267
	7	22	9	30	16.8777	1	14	17	40.120	-38	35	18.92	4		9023	6600	F4	7861
	7	22	9	30	20.8777	1	14	22	6.180	-37	24	40.50	4		9023	6600	F5	7268
	7	22	9	30	24.8777	1	14	26	21.168	-36	13	14.20	4		9023	6600	F6	7269
	7	22	9	30	28.8777	1	14	30	37.032	-35	0	55.81	4		9023	6600	F7	7270
	7	22	9	32	4.8782	1	15	44	38.621	- 6	23	14.44	4		9023	6601	F1	7271
	7	22	9	32	8.8782	1	15	46	53.898	- 5	20	41.13	4		9023	6601	F2	7272
	7	22	9	32	12.8782	1	15	49	6.078	- 4	19	11.17	4		9023	6601	F3	7862
	7	22	9	32	16.8783	1	15	51	15.949	- 3	18	44.68	4		9023	6601	F4	7274
	7	22	9	32	20.8783	1	15	53	22.800	- 2	19	37.23	4		9023	6601	F5	7275
	7	22	9	32	24.8784	1	15	55	27.466	- 1	21	25.72	4		9023	6601	F6	7276
	7	22	9	32	28.8784	1	15	57	29.174	- 0	24	24.75	4		9023	6601	F7	7277

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	7	22	10	12	4.8877	1	13	23	17.092	70	3	35.56	4		9001	2306	F1	4980
	7	22	10	12	8.8876	1	13	20	40.438	70	19	19.48	4		9001	2306	F2	3916
	7	22	10	12	12.8876	1	13	17	59.531	70	34	51.38	4		9001	2306	F3	3917
	7	22	10	12	16.8876	1	13	15	14.367	[illegible]	50	17.18	4		9001	2306	F4	3918
	7	22	10	12	20.8876	1	13	12	22.710	71	5	29.98	4		9001	2306	F5	3919
	7	22	10	12	24.8876	1	13	9	25.499	71	20	39.35	4		9001	2306	F6	3920
	7	22	10	12	28.8875	1	13	6	23.121	71	35	28.55	4		9001	2306	F7	3921
	7	22	10	14	4.8871	1	11	20	45.996	76	5	1.41	4		9001	2307	F1	3922
	7	22	10	14	8.8871	1	11	14	56.347	76	10	55.90	4		9001	2307	F2	3923
	7	22	10	14	12.8871	1	11	9	2.091	76	16	18.74	4		9001	2307	F3	3924
	7	22	10	14	16.8871	1	11	3	2.929	76	21	3.05	4		9001	2307	F4	3925
	7	22	17	32	4.8808	1	10	54	2.860	-35	52	1.31	4		9002	4621	F1	6290
	7	22	17	32	8.8808	1	10	57	8.831	-35	26	25.65	4		9002	4621	F2	6291
	7	22	17	32	12.8807	1	11	0	15.505	-34	59	58.98	4		9002	4621	F3	6292
	7	22	17	32	16.8807	1	11	3	22.948	-34	32	41.87	4		9002	4621	F4	6293
	7	22	17	32	20.8806	1	11	6	31.313	-34	4	37.22	4		9002	4621	F5	6294
	7	22	17	32	24.8806	1	11	9	40.099	-33	35	42.02	4		9002	4621	F6	6295
	7	22	17	32	28.8805	1	11	12	49.254	-33	5	51.96	4		9002	4621	F7	6296
	7	22	17	36	4.8797	1	13	56	58.646	10	52	1.33	4		9002	4622	F1	6297
	7	22	17	36	8.8797	1	13	59	36.626	11	44	8.83	4		9002	4622	F2	6298
	7	22	17	36	12.8798	1	14	2	13.689	12	35	45.53	4		9002	4622	F3	6299
	7	22	17	36	16.8798	1	14	4	49.231	13	26	41.93	4		9002	4622	F4	6300
	7	22	17	36	20.8798	1	14	7	23.780	14	17	4.14	4		9002	4622	F5	6301
	7	22	17	36	24.8799	1	14	9	57.061	15	6	48.15	4		9002	4622	F6	6302
	7	22	17	36	28.8799	1	14	12	29.406	15	55	51.10	4		9002	4622	F7	6303
	7	22	17	38	4.8811	1	15	7	37.110	32	6	2.74	4		9002	4623	F1	6602
	7	22	17	38	8.8812	1	15	9	41.862	32	38	14.41	4		9002	4623	F2	6603
	7	22	17	38	12.8812	1	15	11	45.376	33	9	46.12	4		9002	4623	F3	6604
	7	22	17	38	16.8813	1	15	13	48.124	33	40	44.51	4		9002	4623	F4	6605
	7	22	17	38	20.8813	1	15	15	49.915	34	11	11.43	4		9002	4623	F5	6606
	7	22	17	38	24.8814	1	15	17	50.894	34	41	3.55	4		9002	4623	F6	6607
	7	22	17	38	28.8815	1	15	19	50.814	35	10	21.12	4		9002	4623	F7	6608
	7	22	21	55	4.8807	3	17	0	14.398	14	26	56.04	4		9004	8224	F1	9784
	7	22	21	55	8.8807	1	17	2	20.881	15	14	29.80	4		9004	8224	F2	8162
	7	22	21	55	12.8807	3	17	4	29.237	16	2	17.12	4		9004	8224	F3	9785
	7	22	21	55	16.8807	1	17	6	39.474	16	50	20.47	4		9004	8224	F4	8163
	7	22	21	55	20.8807	1	17	8	51.798	17	38	31.55	4		9004	8224	F5	8164
	7	22	21	55	24.8807	1	17	11	5.647	18	26	45.47	4		9004	8224	F6	8165
	7	22	21	55	28.8806	1	17	13	21.922	19	15	15.69	4		9004	8224	F7	8166
	7	22	21	58	4.8810	3	19	13	48.766	47	24	1.30	4		9004	8225	F1	9781
	7	22	21	58	8.8811	1	19	17	47.504	47	55	12.65	4		9004	8225	F2	9134
	7	22	21	58	12.8811	1	19	21	48.727	48	25	39.41	4		9004	8225	F3	9135
	7	22	21	58	16.8811	1	19	25	52.343	48	55	7.89	4		9004	8225	F4	9136
	7	22	21	58	20.8812	3	19	29	57.867	49	23	48.19	4		9004	8225	F5	9782
	7	22	21	58	24.8812	1	19	34	5.504	49	51	34.28	4		9004	8225	F6	9137
	7	22	21	58	28.8812	3	19	38	15.260	50	18	28.58	4		9004	8225	F7	9783
	7	22	22	0	4.8823	1	21	22	32.235	56	53	40.00	4		9004	8226	F1	9405
	7	22	22	0	4.8840	1	14	24	34.729	38	14	20.65	4		9051	112	F1	33
	7	22	22	0	8.8824	1	21	26	47.037	57	0	41.13	4		9004	8226	F2	8194
	7	22	22	0	8.8840	1	14	24	34.854	38	47	54.27	4		9051	112	F2	32
	7	22	22	0	12.8824	1	21	31	.943	57	7	5.09	4		9004	8226	F3	8195
	7	22	22	0	12.8840	1	14	24	34.586	39	21	39.32	4		9051	112	F3	31
	7	22	22	0	16.8825	3	21	35	13.032	57	12	52.71	4		9004	8226	F4	9768
	7	22	22	0	16.8841	1	14	24	33.629	39	55	26.95	4		9051	112	F4	30
	7	22	22	0	20.8825	3	21	39	22.254	57	18	2.13	4		9004	8226	F5	9769
	7	22	22	0	20.8841	1	14	24	32.511	40	29	28.68	4		9051	112	F5	29
	7	22	22	0	24.8826	3	21	43	31.240	57	22	40.75	4		9004	8226	F6	9770
	7	22	22	0	24.8841	1	14	24	30.899	41	3	33.84	4		9051	112	F6	28
	7	22	22	0	28.8827	3	21	47	36.723	57	26	44.57	4		9004	8226	F7	9771
	7	22	22	0	28.8841	1	14	24	29.049	41	37	52.82	4		9051	112	F7	27
	7	22	23	32	44.7511	1	11	40	41.537	-21	16	40.15	4		9011	8955	02	1015
	7	22	23	35	4.8805	1	15	16	21.228	-63	4	44.51	4		9007	6050	F1	7126
	7	22	23	35	4.8805	1	13	29	10.809	7	10	59.80	4		9011	8956	F1	6527
	7	22	23	35	8.8805	1	15	20	52.282	-62	16	42.49	4		9007	6050	F2	7468
	7	22	23	35	8.8806	1	13	31	55.996	7	59	30.40	4		9011	8956	F2	6528
	7	22	23	35	12.8805	1	15	25	13.951	-61	27	18.70	4		9007	6050	F3	7127
	7	22	23	35	12.8806	1	13	34	39.527	8	47	36.97	4		9011	8956	F3	6529
	7	22	23	35	16.8804	1	15	29	27.411	-60	36	42.95	4		9007	6050	F4	7128
	7	22	23	35	16.8806	1	13	37	21.690	9	35	14.92	4		9011	8956	F4	6530
	7	22	23	35	20.8804	1	15	33	31.565	-59	44	51.03	4		9007	6050	F5	7129
	7	22	23	35	20.8806	1	13	40	2.627	10	22	24.32	4		9011	8956	F5	6531
	7	22	23	35	24.8803	1	15	37	28.264	-58	51	44.73	4		9007	6050	F6	7130
	7	22	23	35	24.8807	1	13	42	42.010	11	9	5.89	4		9011	8956	F6	6532
	7	22	23	35	28.8803	1	15	41	17.446	-57	57	27.21	4		9007	6050	F7	7131
	7	22	23	35	28.8807	1	13	45	20.104	11	55	13.06	4		9011	8956	F7	6533
	7	22	23	38	4.8799	1	17	12	15.525	-13	32	37.46	4		9007	6051	F1	90A0
	7	22	23	38	8.8799	1	17	13	46.434	-12	24	44.86	4		9007	6051	F2	90A1
	7	22	23	38	12.8800	1	17	15	15.830	-11	17	37.52	4		9007	6051	F3	90A2
	7	22	23	38	16.8800	1	17	16	[illegible].033	-10	11	16.31	4		9007	6051	F4	9356
	7	22	23	38	20.8800	1	17	18	11.070	- 9	5	38.90	4		9007	6051	F5	90A3

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	7	22	23	38	24.8801	1	17	19	37.121	- 8	0	56.05	4		9007	6051	F6	9084
	7	22	23	38	28.8801	1	17	21	1.891	- 6	57	5.02	4		9007	6051	F7	9085
	7	23	0	3	4.8843	3	13	54	42.993	63	3	19.26	4		9004	8231	F1	9762
	7	23	0	3	8.8843	3	13	53	41.511	63	37	2.62	4		9004	8231	F2	9763
	7	23	0	3	12.8843	3	13	52	37.676	64	10	37.93	4		9004	8231	F3	9764
	7	23	0	3	16.8843	1	13	51	30.008	64	44	10.03	4		9004	8231	F4	8193
	7	23	0	3	20.8844	3	13	50	18.774	65	17	34.44	4		9004	8231	F5	9765
	7	23	0	3	24.8844	3	13	49	4.038	65	50	51.53	4		9004	8231	F6	9766
	7	23	0	3	28.8844	3	13	47	45.268	66	24	2.32	4		9004	8231	F7	9767
	7	23	0	8	4.8862	1	5	0	43.024	76	20	13.14	4		9004	8232	F1	6240
	7	23	0	8	8.8863	3	4	57	43.315	75	58	26.05	4		9004	8232	F2	6242
	7	23	0	8	12.8863	1	4	54	52.676	75	36	38.89	4		9004	8232	F3	6241
	7	23	0	8	16.8864	3	4	52	12.801	75	14	56.43	4		9004	8232	F4	6243
	7	23	0	8	20.8864	3	4	49	42.418	74	53	9.60	4		9004	8232	F5	6244
	7	23	0	8	24.8864	3	4	47	19.982	74	31	25.23	4		9004	8232	F6	6245
	7	23	0	8	28.8865	3	4	45	6.556	74	9	42.20	4		9004	8232	F7	6246
	7	23	3	52	4.8823	1	16	55	30.556	-15	20	45.05	4		9001	2319	F1	3926
	7	23	3	52	8.8823	1	16	57	18.833	-14	43	55.24	4		9001	2319	F2	3927
	7	23	3	52	12.8822	1	16	59	7.872	-14	6	39.78	4		9001	2319	F3	3928
	7	23	3	52	16.8822	1	17	0	57.798	-13	29	2.24	4		9001	2319	F4	3929
	7	23	3	52	20.8821	1	17	2	48.420	-12	50	55.57	4		9001	2319	F5	3930
	7	23	3	52	24.8821	1	17	4	40.131	-12	12	23.40	4		9001	2319	F6	3931
	7	23	3	52	28.8821	1	17	6	32.571	-11	33	29.26	4		9001	2319	F7	4981
	7	23	3	53	34.8888	1								1.7105370	7901			5390
	7	23	3	54	4.8888	1								1.6749570	7901			5391
	7	23	3	54	4.8815	1	17	56	22.073	5	42	41.56	4		9001	2320	F1	3933
	7	23	3	54	8.8815	1	17	58	39.269	6	28	35.49	4		9001	2320	F2	3934
	7	23	3	54	12.8815	1	18	0	58.036	7	14	30.59	4		9001	2320	F3	3935
	7	23	3	54	16.8814	1	18	3	17.894	8	0	27.21	4		9001	2320	F4	3936
	7	23	3	54	20.8814	1	18	5	38.573	8	46	26.02	4		9001	2320	F5	3937
	7	23	3	54	24.8814	1	18	8	.444	9	32	21.88	4		9001	2320	F6	3938
	7	23	3	54	28.8814	1	18	10	23.480	10	18	17.05	4		9001	2320	F7	3939
	7	23	3	54	34.8894	1								1.6600870	7901			5392
	7	23	3	55	4.8913	1								1.6663650	7901			5393
	7	23	3	55	34.8891	1								1.6934290	7901			5394
	7	23	3	56	4.8817	1	19	12	51.998	27	24	53.90	4		9001	2320	F1	3940
	7	23	3	56	8.8817	1	19	15	40.175	28	2	15.78	4		9001	2320	F2	3941
	7	23	3	56	12.8817	1	19	18	29.060	28	39	8.06	4		9001	2320	F3	3942
	7	23	3	56	16.8818	1	19	21	18.702	29	15	23.65	4		9001	2320	F4	3943
	7	23	3	56	20.8818	1	19	24	9.310	29	51	2.23	4		9001	2320	F5	3944
	7	23	3	56	24.8818	1	19	27	.533	30	26	8.51	4		9001	2320	F6	3945
	7	23	3	56	28.8819	1	19	29	52.350	31	0	31.94	4		9001	2320	F7	3946
	7	23	3	57	34.8907	1								1.9804480	7901			5395
	7	23	3	58	4.8829	1	20	40	31.652	41	39	19.28	4		9001	2321	F1	4204
	7	23	3	58	8.8829	1	20	43	28.830	41	58	20.18	4		9001	2321	F2	4205
	7	23	3	58	12.8830	1	20	46	25.755	42	16	44.80	4		9001	2321	F3	4206
	7	23	3	58	16.8830	1	20	49	22.259	42	34	38.77	4		9001	2321	F4	4207
	7	23	3	58	20.8831	1	20	52	18.537	42	51	57.74	4		9001	2321	F5	4208
	7	23	3	59	4.8929	1								2.3284330	7901			5396
	7	23	5	57	4.8851	1	14	2	11.418	22	0	16.76	4		9001	2329	F1	4209
	7	23	5	57	8.8851	1	14	2	22.388	22	32	41.09	4		9001	2329	F2	4210
	7	23	5	57	12.8851	1	14	2	33.047	23	5	21.06	4		9001	2329	F3	4211
	7	23	5	57	16.8850	1	14	2	43.503	23	38	7.23	4		9001	2329	F4	4212
	7	23	5	57	20.8850	1	14	2	53.812	24	11	13.25	4		9001	2329	F5	4213
	7	23	5	57	24.8850	1	14	3	3.864	24	44	27.34	4		9001	2329	F6	4214
	7	23	5	57	28.8849	1	14	3	13.821	25	17	49.84	4		9001	2329	F7	4215
	7	23	5	59	4.8844	1	14	5	52.881	39	30	27.25	4		9001	2330	F1	4832
	7	23	5	59	8.8844	1	14	5	55.501	40	7	41.21	4		9001	2330	F2	4833
	7	23	5	59	12.8844	1	14	5	57.570	40	45	.16	4		9001	2330	F3	4834
	7	23	5	59	16.8844	1	14	5	59.310	41	22	22.65	4		9001	2330	F4	4835
	7	23	5	59	20.8844	1	14	6	1.180	41	59	55.12	4		9001	2330	F5	4836
	7	23	5	59	24.8843	1	14	6	1.548	42	37	24.61	4		9001	2330	F6	4837
	7	23	5	59	28.8843	1	14	6	2.289	43	15	6.83	4		9001	2330	F7	5357
	7	23	6	2	4.8845	1	13	54	53.032	67	33	59.88	4		9001	2331	F1	4838
	7	23	6	2	8.8845	1	13	54	1.838	68	9	30.90	4		9001	2331	F2	4839
	7	23	6	2	12.8846	1	13	53	6.576	68	44	44.56	4		9001	2331	F3	4840
	7	23	6	2	16.8846	1	13	52	8.506	69	19	52.70	4		9001	2331	F4	4841
	7	23	6	2	20.8846	1	13	51	5.631	69	54	47.62	4		9001	2331	F5	5062
	7	23	6	2	24.8846	1	13	49	59.417	70	29	28.13	4		9001	2331	F6	5358
	7	23	6	2	28.8846	1	13	48	47.388	71	4	2.51	4		9001	2331	F7	5063
	7	23	6	5	4.8859	1	7	2	33.854	85	37	42.93	4		9001	2332	F1	4163
	7	23	6	5	8.8860	1	6	42	14.122	85	24	40.86	4		9001	2332	F2	4164
	7	23	6	5	12.8860	1	6	24	4.862	85	9	40.83	4		9001	2332	F3	4165
	7	23	6	5	16.8861	1	6	7	57.436	84	53	9.21	4		9001	2332	F4	4166
	7	23	6	5	20.8861	1	5	53	38.335	84	35	21.46	4		9001	2332	F5	4167
	7	23	6	5	24.8861	1	5	40	58.486	84	16	32.51	4		9001	2332	F6	4168
	7	23	6	5	28.8862	1	5	29	45.501	83	56	51.48	4		9001	2332	F7	4169
	7	23	7	52	4.8827	1	14	0	51.049	42	9	46.38	4		9012	7076	F1	9100
	7	23	9	32	4.8820	1	10	16	29.475	10	11	20.51	4		9023	6630	F1	4285
	7	23	9	32	8.8819	1	10	21	12.893	9	57	32.54	4		9023	6630	F2	4286

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.	OBS.NO.
1966	7	23	9	32	12.8819	1	10	25	58.805	-49	42	58.79	4		9023	6630	F3 4287
	7	23	9	32	16.8818	1	10	30	47.211	-49	27	7.54	4		9023	6630	F4 4288
	7	23	9	32	20.8817	1	10	35	38.197	-49	10	12.45	4		9023	6630	F5 4289
	7	23	9	32	24.8817	1	10	40	31.324	-48	52	4.27	4		9023	6630	F6 4290
	7	23	9	32	28.8816	1	10	45	26.481	-48	32	43.34	4		9023	6630	F7 4291
	7	23	9	34	4.8806	1	12	43	59.103	-33	41	58.61	4		9023	6631	F1 4292
	7	23	9	34	8.8806	1	12	48	33.965	-32	46	33.15	4		9023	6631	F2 4293
	7	23	9	34	12.8805	1	12	53	5.745	-31	49	52.89	4		9023	6631	F3 4294
	7	23	9	34	16.8805	1	12	57	33.872	-30	52	2.05	4		9023	6631	F4 4295
	7	23	9	34	20.8805	1	13	1	58.874	-29	53	2.09	4		9023	6631	F5 4296
	7	23	9	34	24.8805	1	13	6	20.426	-28	52	59.08	4		9023	6631	F6 4297
	7	23	9	34	28.8805	1	13	10	38.417	-27	51	53.81	4		9023	6631	F7 4298
	7	23	9	36	4.8807	1	14	35	53.925	-	1	57 44.48	4		9023	6632	F1 6993
	7	23	9	36	8.8808	1	14	38	45.283	-	0	57 30.48	4		9023	6632	F2 54A3
	7	23	9	36	12.8808	1	14	41	33.583		0	1 51.30	4		9023	6632	F3 54A4
	7	23	9	36	16.8808	1	14	44	19.249		1	0 21.90	4		9023	6632	F4 54A5
	7	23	9	36	20.8809	1	14	47	1.938		1	57 58.62	4		9023	6632	F5 54A6
	7	23	9	36	24.8809	1	14	49	42.094		2	54 41.98	4		9023	6632	F6 6994
	7	23	9	36	28.8810	1	14	52	19.284		3	50 30.96	4		9023	6632	F7 6995
	7	23	9	38	4.8823	1	15	44	17.747		21	32 51.97	4		9023	6633	F1 54A9
	7	23	9	38	8.8824	1	15	46	5.583		22	6 51.15	4		9023	6633	F2 6996
	7	23	9	38	12.8824	1	15	47	52.072		22	40 6.54	4		9023	6633	F3 5490
	7	23	9	38	16.8825	1	15	49	37.065		23	13 43.15	4		9023	6633	F4 5491
	7	23	9	38	20.8826	1	15	51	20.773		23	44 40.04	4		9023	6633	F5 5492
	7	23	9	38	24.8826	1	15	53	3.315		24	16 .45	4		9023	6633	F6 5493
	7	23	9	38	28.8827	1	15	54	44.559		24	46 41.73	4		9023	6633	F7 5494
	7	23	10	17	8.8900	1	13	12	7.843		72	42 29.86	4		9001	2352	F2 4842
	7	23	10	17	16.8899	1	13	5	36.968		73	12 44.71	4		9001	2352	F4 4843
	7	23	10	19	4.8894	1	10	45	34.833		77	46 19.72	4		9001	2353	F1 4170
	7	23	10	19	8.8894	1	10	38	39.358		77	49 1.70	4		9001	2353	F2 4171
	7	23	10	19	12.8894	1	10	31	41.704		77	51 .13	4		9001	2353	F3 4172
	7	23	10	19	16.8894	1	10	24	39.814		77	52 19.13	4		9001	2353	F4 4173
	7	23	10	19	20.8894	1	10	17	37.549		77	52 50.91	4		9001	2353	F5 4174
	7	23	10	19	24.8894	1	10	10	33.963		77	52 36.99	4		9001	2353	F6 4175
	7	23	10	19	28.8893	1	10	3	29.687		77	51 45.79	4		9001	2353	F7 4176
	7	23	17	36	4.8843	1	10	37	46.145	-27	51	20.38	4		9002	4657	F1 6609
	7	23	17	36	8.8842	1	10	40	11.558	-27	25	28.35	4		9002	4657	F2 6610
	7	23	17	36	12.8842	1	10	42	37.472	-26	59	4.74	4		9002	4657	F3 6611
	7	23	17	36	16.8841	1	10	45	3.847	-26	32	4.99	4		9002	4657	F4 6612
	7	23	17	36	20.8841	1	10	47	30.683	-26	4	24.89	4		9002	4657	F5 6998
	7	23	17	36	24.8840	1	10	49	57.907	-25	36	11.08	4		9002	4657	F6 6613
	7	23	17	36	28.8840	1	10	52	25.380	-25	7	16.22	4		9002	4657	F7 6614
	7	23	17	41	4.8835	1	13	39	49.845		23	53 31.20	4		9002	4658	F1 6715
	7	23	17	41	8.8836	1	13	42	1.350		24	33 37.04	4		9002	4658	F2 6716
	7	23	17	41	12.8836	1	13	44	11.876		25	13 11.66	4		9002	4658	F3 6717
	7	23	17	41	16.8836	1	13	46	22.142		25	52 17.50	4		9002	4658	F4 6718
	7	23	17	41	20.8837	1	13	48	31.845		26	30 50.44	4		9002	4658	F5 6719
	7	23	17	41	24.8837	1	13	50	40.836		27	8 57.22	4		9002	4658	F6 6720
	7	23	17	41	28.8838	1	13	52	49.467		27	46 31.83	4		9002	4658	F7 6999
	7	23	22	7	4.8868	1	13	52	10.055		60	32 57.59	4		9051	118	F1 40
	7	23	22	7	8.8868	1	13	51	15.599		61	6 9.37	4		9051	118	F2 39
	7	23	22	7	12.8868	1	13	50	18.399		61	39 16.01	4		9051	118	F3 38
	7	23	22	7	16.8868	1	13	49	18.868		62	12 22.20	4		9051	118	F4 37
	7	23	22	7	20.8868	1	13	48	16.359		62	45 22.84	4		9051	118	F5 36
	7	23	22	7	24.8868	1	13	47	10.722		63	18 22.80	4		9051	118	F6 35
	7	23	22	7	28.8868	1	13	46	1.820		63	51 16.89	4		9051	118	F7 34
	7	23	23	36	4.8845	1	10	47	56.205	-20	29	22.85	4		9011	8978	F1 8307
	7	23	23	36	8.8844	1	10	50	34.184	-19	58	32.44	4		9011	8978	F2 8308
	7	23	23	36	12.8844	1	10	53	12.162	-19	27	7.85	4		9011	8978	F3 8309
	7	23	23	36	16.8843	1	10	55	50.637	-18	55	7.30	4		9011	8978	F4 8310
	7	23	23	36	20.8843	1	10	58	29.370	-18	22	31.42	4		9011	8978	F5 8311
	7	23	23	36	24.8843	1	11	1	8.276	-17	49	23.31	4		9011	8978	F6 8312
	7	23	23	36	28.8842	1	11	3	47.416	-17	15	39.70	4		9011	8978	F7 8313
	7	23	23	40	4.8823	1	14	23	23.323	-45	49	2.97	4		9007	6081	F1 8475
	7	23	23	40	4.8843	1	13	20	26.756		19	41 11.14	4		9011	8979	F1 8314
	7	23	23	40	8.8823	1	14	27	23.666	-44	50	24.16	4		9007	6081	F2 8476
	7	23	23	40	8.8844	1	13	22	42.124		20	19 1.43	4		9011	8979	F2 8315
	7	23	23	40	12.8823	1	14	31	20.061	-43	50	17.81	4		9007	6081	F3 8477
	7	23	23	40	12.8844	1	13	24	56.420		20	56 26.43	4		9011	8979	F3 8316
	7	23	23	40	16.8822	1	14	35	12.297	-42	48	48.50	4		9007	6081	F4 8478
	7	23	23	40	16.8844	1	13	27	10.254		21	33 25.71	4		9011	8979	F4 8317
	7	23	23	40	20.8822	1	14	39	.068	-41	45	57.92	4		9007	6081	F5 9357
	7	23	23	40	20.8845	1	13	29	23.105		22	10 .11	4		9011	8979	F5 8318
	7	23	23	40	24.8821	1	14	42	43.726	-40	41	51.11	4		9007	6081	F6 9358
	7	23	23	40	24.8845	1	13	31	35.049		22	46 10.87	4		9011	8979	F6 8319
	7	23	23	40	28.8821	1	14	46	23.808	-39	36	25.01	4		9007	6081	F7 8479
	7	23	23	40	28.8846	1	13	33	46.378		23	21 53.24	4		9011	8979	F7 8320
	7	23	23	43	4.8825	1	16	29	31.936		6	59 10.06	4		9007	6082	F1 84A0
	7	23	23	43	8.8825	1	16	31	27.667		7	58 42.98	4		9007	6082	F2 84A1
	7	23	23	43	12.8826	1	16	33	22.294		8	57 1.61	4		9007	6082	F3 84A2

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.	OBS.NO.
1966	7	23	23	43	16.8826	1	16	35	15.404	9	54	18.85	4		9007	6082 F4	84R3
	7	23	23	43	20.8827	1	16	37	7.009	10	50	24.35	4		9007	6082 F5	9359
	7	23	23	43	24.8827	1	16	38	57.517	11	45	26.40	4		9007	6082 F6	9360
	7	23	23	43	28.8828	1	16	40	46.724	12	39	18.02	4		9007	6082 F7	84R4
	7	24	3	56	34.8947	1								1.7906830	7901		5397
	7	24	3	57	34.8936	1								1.6354080	7901		5398
	7	24	3	58	4.8838	1	17	3	13.902	9	41	40.66	4		9001	2367 F1	4216
	7	24	3	58	8.8837	1	17	5	28.879	10	31	22.64	4		9001	2367 F2	4217
	7	24	3	58	12.8837	1	17	7	45.265	11	21	16.01	4		9001	2367 F3	4218
	7	24	3	58	16.8837	1	17	10	3.287	12	11	19.33	4		9001	2367 F4	4219
	7	24	3	58	20.8837	1	17	12	22.973	13	1	27.10	4		9001	2367 F5	4220
	7	24	3	58	24.8837	1	17	14	44.261	13	51	42.45	4		9001	2367 F6	4221
	7	24	4	0	4.8838	1	18	23	22.806	33	50	35.77	4		9001	2368 F1	3406
	7	24	4	0	8.8839	1	18	26	32.162	34	32	50.81	4		9001	2368 F2	3407
	7	24	4	0	12.8839	1	18	29	43.281	35	14	30.10	4		9001	2368 F3	3408
	7	24	4	0	16.8839	1	18	32	56.164	35	55	21.44	4		9001	2368 F4	3409
	7	24	4	0	20.8839	1	18	36	10.621	36	35	35.60	4		9001	2368 F5	3410
	7	24	4	0	24.8840	1	18	39	27.166	37	16	5.98	4		9001	2368 F6	3411
	7	24	4	0	28.8840	1	18	42	45.300	37	56	51.16	4		9001	2368 F7	3412
	7	24	4	0	34.8907	1								1.6646480	7901		5400
	7	24	4	1	34.8938	1								1.8320520	7901		5401
	7	24	4	2	4.8849	1	20	8	44.383	49	30	25.99	4		9001	2369 F1	3413
	7	24	4	2	8.8850	1	20	12	28.554	49	49	42.80	4		9001	2369 F2	3414
	7	24	4	2	12.8850	1	20	16	13.089	50	8	15.42	4		9001	2369 F3	3415
	7	24	4	2	16.8851	1	20	19	57.514	50	26	4.66	4		9001	2369 F4	3416
	7	24	4	2	20.8851	1	20	23	41.640	50	43	14.05	4		9001	2369 F5	3417
	7	24	4	2	24.8852	1	20	27	25.773	50	59	40.71	4		9001	2369 F6	3418
	7	24	4	2	28.8852	1	20	31	9.570	51	15	27.08	4		9001	2369 F7	3419
	7	24	4	2	34.8930	1								2.0519830	7901		5402
	7	24	4	4	4.8866	1	21	55	37.203	54	39	47.45	4		9001	2370 F1	3241
	7	24	4	4	8.8867	1	21	58	48.905	54	42	30.09	4		9001	2370 F2	3242
	7	24	4	4	12.8868	1	22	1	59.092	54	44	45.42	4		9001	2370 F3	3243
	7	24	4	4	16.8868	1	22	5	6.855	54	46	42.64	4		9001	2370 F4	3244
	7	24	4	4	20.8869	1	22	8	12.673	54	48	12.93	4		9001	2370 F5	3245
	7	24	4	4	24.8870	1	22	11	16.586	54	49	31.73	4		9001	2370 F6	3246
	7	24	4	4	28.8870	1	22	14	18.780	54	50	30.52	4		9001	2370 F7	3247
	7	24	6	1	4.8887	1	13	45	2.880	21	34	36.67	4		9001	2379 F1	3696
	7	24	6	1	8.8887	1	13	45	7.989	22	3	36.99	4		9001	2379 F2	3697
	7	24	6	1	12.8886	1	13	45	13.399	22	32	44.20	4		9001	2379 F3	3698
	7	24	6	1	16.8886	1	13	45	18.204	23	2	4.49	4		9001	2379 F4	49A2
	7	24	6	1	20.8886	1	13	45	22.789	23	31	30.40	4		9001	2379 F5	3700
	7	24	6	1	24.8885	1	13	45	27.090	24	1	5.69	4		9001	2379 F6	3701
	7	24	6	1	28.8885	1	13	45	30.917	24	30	53.39	4		9001	2379 F7	3702
	7	24	6	3	4.8852	1	15	5	27.209	47	26	40.56	4		9113	1182 F1	4
	7	24	6	3	4.8879	1	13	45	25.442	37	9	48.34	4		9001	2380 F1	3703
	7	24	6	3	8.8852	1	15	6	31.244	48	13	50.99	4		9113	1182 F2	5
	7	24	6	3	8.8879	1	13	45	19.848	37	42	55.98	4		9001	2380 F2	49A3
	7	24	6	3	12.8852	1	15	7	36.492	49	0	56.53	4		9113	1182 F3	3740
	7	24	6	3	12.8879	1	13	45	13.711	38	16	16.34	4		9001	2380 F3	3705
	7	24	6	3	16.8852	1	15	8	43.650	49	48	3.05	4		9113	1182 F4	6
	7	24	6	3	16.8878	1	13	45	7.238	38	49	40.72	4		9001	2380 F4	49A4
	7	24	6	3	20.8852	1	15	9	52.646	50	35	2.82	4		9113	1182 F5	7
	7	24	6	3	20.8878	1	13	45	.126	39	23	9.46	4		9001	2380 F5	3706
	7	24	6	3	24.8852	1	15	11	3.099	51	22	2.40	4		9113	1182 F6	8
	7	24	6	3	24.8878	1	13	44	52.278	39	56	42.42	4		9001	2380 F6	49A5
	7	24	6	3	28.8852	1	15	2	15.350	52	8	55.79	4		9113	1182 F7	9
	7	24	6	3	28.8878	1	13	44	43.923	40	30	25.10	4		9001	2380 F7	3707
	7	24	6	5	4.8876	1	13	37	26.999	54	12	35.73	4		9001	2381 F1	4248
	7	24	6	5	8.8876	1	13	36	55.311	54	46	52.81	4		9001	2381 F2	5476
	7	24	6	5	12.8876	1	13	36	21.958	55	21	13.26	4		9001	2381 F3	4249
	7	24	6	5	16.8876	1	13	35	47.224	55	55	25.01	4		9001	2381 F4	4250
	7	24	6	5	20.8876	1	13	35	10.666	56	29	36.23	4		9001	2381 F5	4251
	7	24	6	5	24.8876	1	13	34	32.800	57	3	45.07	4		9001	2381 F6	4252
	7	24	6	5	28.8876	1	13	33	53.060	57	37	48.39	4		9001	2381 F7	4253
	7	24	6	7	4.8879	1	13	3	39.716	70	40	42.29	4		9001	2382 F1	4254
	7	24	6	7	8.8879	1	13	1	26.190	71	11	6.80	4		9001	2382 F2	4255
	7	24	6	7	12.8880	1	12	59	5.411	71	41	16.37	4		9001	2382 F3	4256
	7	24	6	7	16.8880	1	12	56	36.824	72	11	9.83	4		9001	2382 F4	4257
	7	24	6	7	20.8880	1	12	53	59.581	72	40	43.02	4		9001	2382 F5	4258
	7	24	6	7	24.8880	1	12	51	12.448	73	10	3.54	4		9001	2382 F6	4259
	7	24	6	7	28.8881	1	12	48	15.913	73	39	1.53	4		9001	2382 F7	4260
	7	24	6	9	4.8882	1	1	17	49.147	74	30	50.00	4		9113	1183 F1	2A6
	7	24	6	9	4.8888	1	9	58	42.581	82	25	25.77	4		9001	2383 F1	4236
	7	24	6	9	8.8888	1	9	45	22.019	82	34	30.12	4		9001	2383 F2	4237
	7	24	6	9	12.8883	3	1	23	12.851	73	47	4.79	4		9113	1183 F3	3732
	7	24	6	9	12.8888	1	9	31	35.339	82	42	.32	4		9001	2383 F3	4238
	7	24	6	9	16.8884	3	1	25	43.602	73	25	28.46	4		9113	1183 F4	3733
	7	24	6	9	16.8889	1	9	17	28.403	82	47	43.24	4		9001	2383 F4	4239
	7	24	6	9	20.8885	1	1	28	5.785	73	3	53.41	4		9113	1183 F5	568
	7	24	6	9	20.8889	1	9	3	8.364	82	51	40.54	4		9001	2383 F5	4240

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	7	24	6	9	24.8885	1	1	30	23.254	72	42	25.19	4		9113	1183	F6	287
	7	24	6	9	24.8889	1	8	48	41.124	82	53	53.85	4		9001	2383	F6	4241
	7	24	6	9	28.8886	1	1	32	33.805	72	21	3.54	4		9113	1183	F7	288
	7	24	6	9	28.8890	1	8	34	12.566	82	54	23.41	4		9001	2383	F7	4242
	7	24	6	11	4.8900	1	5	2	12.786	77	34	23.52	4		9001	2384	F1	4243
	7	24	6	11	8.8900	1	4	58	27.712	77	15	12.60	4		9001	2384	F2	4244
	7	24	6	11	12.8901	1	4	54	56.165	76	55	53.27	4		9001	2384	F3	4245
	7	24	6	11	16.8901	1	4	51	36.121	76	36	31.26	4		9001	2384	F4	4246
	7	24	6	11	20.8901	1	4	48	28.086	76	17	5.41	4		9001	2384	F5	5425
	7	24	6	11	24.8902	1	4	45	30.117	75	57	41.28	4		9001	2384	F6	4247
	7	24	6	11	28.8902	1	4	42	41.651	75	38	11.19	4		9001	2384	F7	4578
	7	24	7	56	4.8863	1	13	32	32.030	14	4	14.84	4		9012	7093	F1	9101
	7	24	7	56	8.8863	1	13	33	24.926	14	44	47.63	4		9012	7093	F2	9102
	7	24	7	56	12.8863	1	13	33	57.824	15	25	43.76	4		9012	7093	F3	9103
	7	24	7	56	16.8863	1	13	34	30.430	16	6	49.10	4		9012	7093	F4	9104
	7	24	7	56	20.8862	1	13	35	3.259	16	48	16.80	4		9012	7093	F5	9105
	7	24	7	56	24.8862	1	13	35	36.144	17	29	56.46	4		9012	7093	F6	9106
	7	24	7	56	28.8862	1	13	36	8.900	18	11	51.65	4		9012	7093	F7	9107
	7	24	9	36	4.8852	1	9	59	4.601	-40	21	31.86	4		9023	6653	F1	3745
	7	24	9	36	8.8851	1	10	2	33.591	-40	4	7.92	4		9023	6653	F2	3746
	7	24	9	36	12.8850	1	10	6	4.265	-39	45	58.74	4		9023	6653	F3	3747
	7	24	9	36	16.8850	1	10	9	36.716	-39	26	55.80	4		9023	6653	F4	3748
	7	24	9	36	20.8849	1	10	13	10.464	-39	7	5.98	4		9023	6653	F5	3749
	7	24	9	36	24.8849	1	10	16	45.575	-38	46	24.06	4		9023	6653	F6	3750
	7	24	9	36	28.8848	1	10	20	22.235	-38	24	52.22	4		9023	6653	F7	3751
	7	24	9	38	4.8838	1	11	50	29.797	-24	49	55.94	4		9023	6654	F1	3752
	7	24	9	38	8.8837	1	11	54	14.323	-24	3	12.62	4		9023	6654	F2	3753
	7	24	9	38	12.8837	1	11	57	58.107	-23	15	33.32	4		9023	6654	F3	3754
	7	24	9	38	16.8837	1	12	1	40.913	-22	26	59.07	4		9023	6654	F4	3755
	7	24	9	38	20.8837	1	12	5	22.577	-21	37	33.68	4		9023	6654	F5	4320
	7	24	9	38	24.8836	1	12	9	3.178	-20	47	16.54	4		9023	6654	F6	3756
	7	24	9	38	28.8836	1	12	12	43.232	-19	56	17.46	4		9023	6654	F7	3757
	7	24	9	42	4.8850	1	14	48	15.204	24	40	24.80	4		9023	6655	F1	4095
	7	24	9	42	8.8851	1	14	50	21.575	25	14	22.68	4		9023	6655	F2	4096
	7	24	9	42	12.8852	1	14	52	26.105	25	47	41.95	4		9023	6655	F3	4097
	7	24	9	42	16.8852	1	14	54	29.566	26	20	27.91	4		9023	6655	F4	4098
	7	24	9	42	20.8853	1	14	56	31.384	26	52	34.00	4		9023	6655	F5	4099
	7	24	9	42	24.8853	1	14	58	32.564	27	24	4.51	4		9023	6655	F6	4100
	7	24	9	42	28.8854	1	15	0	31.844	27	54	57.38	4		9023	6655	F7	4101
	7	24	17	45	4.8870	1	12	56	46.452	23	56	12.16	4		9002	4683	F1	6721
	7	24	17	45	8.8870	1	12	58	40.394	24	33	18.06	4		9002	4683	F2	6722
	7	24	17	45	12.8871	1	13	0	34.422	25	10	4.72	4		9002	4683	F3	6723
	7	24	17	45	16.8871	1	13	2	27.757	25	46	30.59	4		9002	4683	F4	6724
	7	24	17	45	20.8871	1	13	4	20.898	26	22	43.14	4		9002	4683	F5	6725
	7	24	17	45	24.8872	1	13	6	14.018	26	58	31.13	4		9002	4683	F6	6726
	7	24	17	45	28.8872	1	13	8	6.686	27	33	56.73	4		9002	4683	F7	6727
	7	24	23	43	4.8859	1	11	57	38.745	-47	15	9.54	4		9007	6112	F1	6506
	7	24	23	43	4.8875	1	12	11	51.703	11	0	45.44	4		9011	9006	F1	8968
	7	24	23	43	8.8858	1	12	1	30.192	-46	43	42.38	4		9007	6112	F2	6507
	7	24	23	43	8.8875	1	12	13	57.570	11	38	22.18	4		9011	9006	F2	8969
	7	24	23	43	12.8858	1	12	5	21.615	-46	11	7.25	4		9007	6112	F3	6508
	7	24	23	43	12.8875	1	12	16	2.382	12	15	51.95	4		9011	9006	F3	8970
	7	24	23	43	16.8857	1	12	9	12.450	-45	37	19.39	4		9007	6112	F4	6509
	7	24	23	43	16.8875	1	12	18	7.397	12	53	18.58	4		9011	9006	F4	8971
	7	24	23	43	20.8857	1	12	13	3.470	-45	2	21.01	4		9007	6112	F5	6510
	7	24	23	43	20.8875	1	12	20	11.926	13	30	34.34	4		9011	9006	F5	8972
	7	24	23	43	24.8856	1	12	16	53.628	-44	26	9.27	4		9007	6112	F6	6511
	7	24	23	43	24.8875	1	12	22	16.432	14	7	43.24	4		9011	9006	F6	8973
	7	24	23	43	28.8855	1	12	20	43.401	-43	48	45.35	4		9007	6112	F7	6512
	7	24	23	43	28.8876	1	12	24	20.231	14	44	40.48	4		9011	9006	F7	8974
	7	24	23	47	4.8849	1	15	13	27.090	12	10	10.42	4		9007	6113	F1	6513
	7	24	23	47	8.8850	1	15	15	54.837	13	10	28.85	4		9007	6113	F2	6514
	7	24	23	47	12.8850	1	15	18	21.278	14	9	48.31	4		9007	6113	F3	6515
	7	24	23	47	16.8851	1	15	20	46.196	15	8	1.36	4		9007	6113	F4	6516
	7	24	23	47	20.8851	1	15	23	9.694	16	5	18.58	4		9007	6113	F5	6517
	7	24	23	47	24.8851	1	15	25	32.044	17	1	25.68	4		9007	6113	F6	6518
	7	24	23	47	28.8852	1	15	27	53.186	17	56	34.86	4		9007	6113	F7	6519
	7	25	0	12	4.8906	1	13	11	47.602	62	28	42.18	4		9004	8240	F1	9206
	7	25	0	12	8.8906	1	13	10	17.346	62	57	10.50	4		9004	8240	F2	9207
	7	25	0	12	12.8906	1	13	8	43.271	63	25	33.41	4		9004	8240	F3	9208
	7	25	0	12	16.8906	1	13	7	5.601	63	53	44.83	4		9004	8240	F4	9639
	7	25	0	12	20.8906	1	13	5	23.897	64	21	54.14	4		9004	8240	F5	9210
	7	25	0	12	24.8906	1	13	3	38.708	64	49	56.54	4		9004	8240	F6	9211
	7	25	0	12	28.8906	1	13	1	48.401	65	17	46.62	4		9004	8240	F7	9212
	7	25	0	17	4.8920	1	5	58	25.525	75	12	48.84	4		9004	8241	F1	7621
	7	25	0	17	8.8920	1	5	54	8.194	74	55	26.45	4		9004	8241	F2	7622
	7	25	0	17	12.8920	1	5	50	1.478	74	37	46.80	4		9004	8241	F3	7623
	7	25	0	17	16.8921	1	5	46	6.014	74	19	54.90	4		9004	8241	F4	7624
	7	25	0	17	20.8921	1	5	42	20.500	74	1	55.84	4		9004	8241	F5	7625
	7	25	0	17	24.8921	1	5	38	46.093	73	43	39.64	4		9004	8241	F6	7626

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	7	25	0	17	28.8922	1	5	35	20.644	73	25	19.52	4		9004	8241	F7	9396
	7	25	4	2	4.8932	1								1.5941440	7901			5403
	7	25	4	3	4.8928	1								1.5318850	7901			5404
	7	25	4	4	4.8863	1	17	20	24.650	39	16	17.28	4		9001	2403	F1	4229
	7	25	4	4	8.8863	1	17	23	33.789	40	4	2.55	4		9001	2403	F2	4230
	7	25	4	4	12.8863	1	17	26	46.205	40	51	9.60	4		9001	2403	F3	4231
	7	25	4	4	16.8863	1	17	30	1.737	41	37	44.27	4		9001	2403	F4	4232
	7	25	4	4	20.8863	1	17	33	20.424	42	23	31.36	4		9001	2403	F5	4233
	7	25	4	4	24.8864	1	17	36	42.834	43	8	39.17	4		9001	2403	F6	4234
	7	25	4	4	28.8864	1	17	40	8.394	43	53	3.21	4		9001	2403	F7	4235
	7	25	6	9	4.8910	1	19	20	24.408	50	30	13.66	4		9001	2408	F1	3248
	7	25	6	9	8.8910	1	13	19	50.334	51	1	32.88	4		9001	2408	F2	3249
	7	25	6	9	12.8910	1	13	19	14.964	51	32	55.06	4		9001	2408	F3	3250
	7	25	6	9	16.8909	1	13	18	38.348	52	4	11.88	4		9001	2408	F4	3251
	7	25	6	9	20.8909	1	13	18	.092	52	35	30.88	4		9001	2408	F5	3252
	7	25	6	9	24.8909	1	13	17	20.486	53	6	45.24	4		9001	2408	F6	3253
	7	25	6	9	28.8909	1	13	16	39.232	53	38	1.44	4		9001	2408	F7	3254
	7	25	8	16	4.8931	1	12	23	9.626	67	1	18.07	4		9113	1281	F1	16
	7	25	8	16	8.8931	1	12	20	33.064	67	22	11.34	4		9113	1281	F2	17
	7	25	8	16	12.8931	1	12	17	52.062	67	42	54.27	4		9113	1281	F3	18
	7	25	8	16	16.8931	1	12	15	5.310	68	3	19.90	4		9113	1281	F4	19
	7	25	8	16	20.8931	1	12	12	12.995	68	23	32.72	4		9113	1281	F5	20
	7	25	8	16	24.8931	1	12	9	15.546	68	43	34.11	4		9113	1281	F6	21
	7	25	8	16	28.8931	1	12	6	11.653	69	3	13.05	4		9113	1281	F7	22
	7	25	8	23	4.8950	1	7	22	26.321	71	13	36.55	4		9001	3419	F1	4222
	7	25	8	23	8.8951	1	7	18	46.569	71	2	13.64	4		9001	3419	F2	4223
	7	25	8	23	12.8951	1	7	15	11.473	70	50	34.26	4		9001	3419	F3	4224
	7	25	8	23	16.8951	1	7	11	41.224	70	38	39.19	4		9001	3419	F4	4225
	7	25	8	23	20.8951	1	7	8	16.249	70	26	29.73	4		9001	3419	F5	4226
	7	25	8	23	24.8951	1	7	4	56.466	70	14	2.73	4		9001	3419	F6	4227
	7	25	8	23	28.8951	1	7	1	40.717	70	1	20.35	4		9001	3419	F7	4228
	7	25	9	42	4.8872	1	11	15	40.514	-17	30	52.71	4		9023	6681	F1	4102
	7	25	9	42	8.8872	1	11	18	39.601	-16	50	28.67	4		9023	6681	F2	4103
	7	25	9	42	12.8871	1	11	21	38.437	-16	9	20.83	4		9023	6681	F3	4104
	7	25	9	42	16.8871	1	11	24	37.053	-15	27	42.79	4		9023	6681	F4	4105
	7	25	9	42	20.8871	1	11	27	36.016	-14	45	25.63	4		9023	6681	F5	4106
	7	25	9	42	24.8871	1	11	30	34.183	-14	2	32.73	4		9023	6681	F6	4107
	7	25	9	42	28.8870	1	11	33	32.366	-13	19	6.59	4		9023	6681	F7	4108
	7	25	9	44	4.8870	1	12	41	57.595	5	34	36.41	4		9023	6682	F1	6768
	7	25	9	44	8.8870	1	12	44	38.543	6	22	14.05	4		9023	6682	F2	6769
	7	25	9	44	12.8870	1	12	47	18.497	7	9	31.72	4		9023	6682	F3	6770
	7	25	9	44	16.8870	1	12	49	57.853	7	56	36.21	4		9023	6682	F4	6771
	7	25	9	44	20.8871	1	12	52	35.778	8	43	24.44	4		9023	6682	F5	6772
	7	25	9	44	24.8871	1	12	55	12.906	9	29	48.55	4		9023	6682	F6	6773
	7	25	9	44	28.8871	1	12	57	49.021	10	15	55.30	4		9023	6682	F7	6774
	7	25	9	46	4.8881	1	13	55	.080	26	21	49.25	4		9023	6683	F1	6775
	7	25	9	46	8.8881	1	13	57	10.077	26	55	32.64	4		9023	6683	F2	6776
	7	25	9	46	12.8882	1	13	59	18.846	27	28	43.54	4		9023	6683	F3	6777
	7	25	9	46	16.8882	1	14	1	26.865	28	1	25.27	4		9023	6683	F4	6778
	7	25	9	46	20.8883	1	14	3	33.583	28	33	35.21	4		9023	6683	F5	6779
	7	25	9	46	24.8883	1	14	5	39.823	29	5	12.75	4		9023	6683	F6	6780
	7	25	9	46	28.8884	1	14	7	44.606	29	36	23.00	4		9023	6683	F7	6781
	7	25	10	27	4.8944	1	13	4	38.523	77	48	31.79	4		9001	2431	F1	4986
	7	25	10	27	8.8944	1	12	59	51.773	78	3	58.18	4		9001	2431	F2	4139
	7	25	10	27	12.8944	1	12	54	47.925	78	19	9.93	4		9001	2431	F3	4140
	7	25	10	27	16.8943	1	12	49	30.552	78	34	.03	4		9001	2431	F4	4141
	7	25	10	27	20.8943	1	12	43	57.906	78	48	28.53	4		9001	2431	F5	4987
	7	25	10	27	24.8943	1	12	38	9.357	79	2	30.98	4		9001	2431	F6	4988
	7	25	14	36	4.8955	1	6	11	16.139	70	40	31.80	4		9012	7107	F1	25
	7	25	14	36	8.8955	1	6	9	53.968	70	20	51.48	4		9012	7107	F2	26
	7	25	14	36	12.8955	1	6	8	35.057	70	1	1.39	4		9012	7107	F3	27
	7	25	14	36	16.8955	1	6	7	18.567	69	41	11.40	4		9012	7107	F4	28
	7	25	14	36	20.8955	1	6	6	5.023	69	21	12.17	4		9012	7107	F5	29
	7	25	14	36	24.8955	1	6	4	54.754	9	1	9.60	4		9012	7107	F6	30
	7	25	14	36	28.8954	1	6	3	45.398	68	41	1.03	4		9012	7107	F7	31
	7	25	14	38	4.8951	1	5	45	34.104	60	17	52.16	4		9012	7108	F1	32
	7	25	14	38	8.8951	1	5	45	5.797	59	56	17.57	4		9012	7108	F2	33
	7	25	14	38	12.8951	1	5	44	37.948	59	34	38.35	4		9012	7108	F3	34
	7	25	14	38	16.8951	1	5	44	10.649	59	12	54.02	4		9012	7108	F4	35
	7	25	14	38	20.8951	1	5	43	45.069	58	51	11.30	4		9012	7108	F5	36
	7	25	14	38	24.8951	1	5	43	20.400	58	29	23.89	4		9012	7108	F6	37
	7	25	14	38	28.8951	1	5	42	56.043	58	7	35.34	4		9012	7108	F7	38
	7	25	14	43	4.8953	1	5	35	44.830	32	47	12.59	4		9012	7110	F1	39
	7	25	14	43	8.8953	1	5	35	48.940	32	25	49.23	4		9012	7110	F2	40
	7	25	14	43	12.8954	1	5	35	53.590	32	4	21.67	4		9012	7110	F3	537
	7	25	14	43	16.8954	1	5	35	58.407	31	43	4.16	4		9012	7110	F4	41
	7	25	14	43	20.8954	1	5	36	3.483	31	21	45.08	4		9012	7110	F5	538
	7	25	14	43	24.8954	1	5	36	8.602	31	0	29.90	4		9012	7110	F6	43
	7	25	14	43	28.8954	1	5	36	13.866	30	39	17.30	4		9012	7110	F7	44
	7	25	22	5	4.8910	1	14	20	28.326	1	44	49.55	4		9004	8255	F1	4581

July 25-26, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (NM)	STATION	FRAME NO.		OBS.NO.
1966	7	25	22	5	8.8910	1	14	21	7.070	2	16	4.79	4		9004	8255	F2	4582
	7	25	22	5	12.8909	1	14	21	46.137	2	47	41.64	4		9004	8255	F3	5341
	7	25	22	5	16.8909	1	14	22	25.288	3	19	34.95	4		9004	8255	F4	5342
	7	25	22	5	20.8908	1	14	23	4.831	3	51	55.07	4		9004	8255	F5	5343
	7	25	22	5	24.8908	1	14	23	44.707	4	24	32.22	4		9004	8255	F6	5344
	7	25	22	5	28.8907	1	14	24	24.756	4	57	31.99	4		9004	8255	F7	4583
	7	25	22	9	4.8891	1	15	14	16.111	43	19	42.39	4		9004	8256	F1	4584
	7	25	22	9	8.8891	1	15	15	42.089	44	8	49.73	4		9004	8256	F2	6942
	7	25	22	9	12.8891	1	15	17	9.400	44	57	58.02	4		9004	8256	F3	6943
	7	25	22	9	16.8891	1	15	18	39.208	45	47	7.34	4		9004	8256	F4	6944
	7	25	22	9	20.8891	1	15	20	11.248	46	36	13.08	4		9004	8256	F5	6945
	7	25	22	9	24.8891	1	15	21	45.854	47	25	12.76	4		9004	8256	F6	4585
	7	25	22	9	28.8891	1	15	23	22.538	48	14	12.52	4		9004	8256	F7	4586
	7	25	22	11	4.8894	1	16	23	13.074	66	35	32.91	4		9004	8257	F1	7251
	7	25	22	11	8.8894	1	16	27	8.887	67	16	3.25	4		9004	8257	F2	7252
	7	25	22	11	12.8894	1	16	31	15.312	67	55	56.60	4		9004	8257	F3	7253
	7	25	22	11	16.8895	1	16	35	33.966	68	35	6.59	4		9004	8257	F4	7254
	7	25	22	11	20.8895	1	16	40	5.252	69	13	38.28	4		9004	8257	F5	7255
	7	25	22	11	24.8895	1	16	44	49.679	69	51	24.25	4		9004	8257	F6	7256
	7	25	22	11	28.8896	1	16	49	48.418	70	28	25.28	4		9004	8257	F7	7257
	7	25	22	15	4.8921	1	0	25	36.727	72	11	50.18	4		9004	8258	F1	6279
	7	25	22	15	8.8921	1	0	29	4.854	71	51	47.86	4		9004	8258	F2	6946
	7	25	22	15	12.8922	1	0	32	22.963	71	31	46.72	4		9004	8258	F3	6947
	7	25	22	15	16.8922	1	0	35	34.114	71	11	47.28	4		9004	8258	F4	6948
	7	25	22	15	20.8923	1	0	38	36.385	70	51	49.77	4		9004	8258	F5	6280
	7	25	22	15	24.8924	1	0	41	31.719	70	31	58.32	4		9004	8258	F6	6281
	7	25	22	15	28.8924	1	0	44	19.580	70	12	3.22	4		9004	8258	F7	6282
	7	25	23	49	4.8878	1	12	39	10.100	-14	44	30.35	4		9007	6144	F1	6690
	7	25	23	49	8.8878	1	12	41	57.376	-13	46	37.68	4		9007	6144	F2	6691
	7	25	23	49	12.8878	1	12	44	44.220	-12	48	4.88	4		9007	6144	F3	6692
	7	25	23	49	16.8877	1	12	47	30.545	-11	48	48.29	4		9007	6144	F4	6693
	7	25	23	49	20.8877	1	12	50	16.598	-10	48	58.05	4		9007	6144	F5	7462
	7	25	23	49	24.8877	1	12	53	2.015	- 9	48	37.42	4		9007	6144	F6	6695
	7	25	23	49	28.8877	1	12	55	47.035	- 8	47	46.01	4		9007	6144	F7	6696
	7	26	0	17	4.8937	1	12	43	50.017	65	25	59.05	4		9004	8265	F1	6283
	7	26	0	17	8.8937	1	12	41	43.855	65	51	33.16	4		9004	8265	F2	6284
	7	26	0	17	12.8937	1	12	39	33.006	66	16	56.06	4		9004	8265	F3	6285
	7	26	0	17	16.8937	1	12	37	17.365	66	42	10.77	4		9004	8265	F4	6286
	7	26	0	17	20.8937	1	12	34	56.016	67	7	17.57	4		9004	8265	F5	6287
	7	26	0	17	24.8937	1	12	32	29.531	67	32	8.17	4		9004	8265	F6	6288
	7	26	0	17	28.8937	1	12	29	56.502	67	56	46.96	4		9004	8265	F7	6289
	7	26	0	21	4.8946	1	6	56	43.989	76	23	46.89	4		9004	8266	F1	4407
	7	26	0	21	8.8946	1	6	50	42.733	76	11	20.44	4		9004	8266	F2	4408
	7	26	0	21	12.8946	1	6	44	53.486	75	58	27.96	4		9004	8266	F3	4409
	7	26	0	21	16.8947	1	6	39	17.106	75	44	59.38	4		9004	8266	F4	4410
	7	26	0	21	20.8947	1	6	33	53.761	75	31	6.32	4		9004	8266	F5	4411
	7	26	0	21	24.8947	1	6	28	42.392	75	16	42.63	4		9004	8266	F6	4412
	7	26	0	21	28.8947	1	6	23	41.923	75	2	3.52	4		9004	8266	F7	4413
	7	26	4	8	4.8890	1	16	10	10.944	42	15	33.04	4		9001	2445	F1	4144
	7	26	4	8	4.8985	1								1.6024220	7901			5405
	7	26	4	8	8.8890	1	16	12	45.360	43	7	17.18	4		9001	2445	F2	4145
	7	26	4	8	12.8890	1	16	15	23.078	43	58	38.17	4		9001	2445	F3	4146
	7	26	4	8	16.8890	1	16	18	4.572	44	49	36.24	4		9001	2445	F4	4147
	7	26	4	8	20.8890	1	16	20	49.982	45	40	7.80	4		9001	2445	F5	4148
	7	26	4	8	24.8890	1	16	23	39.473	46	30	7.76	4		9001	2445	F6	4149
	7	26	4	8	28.8891	1	16	26	32.954	47	19	41.67	4		9001	2445	F7	4150
	7	26	4	8	34.8989	1								1.6318050	7901			5406
	7	26	4	9	4.8988	1								1.6809570	7901			5407
	7	26	4	10	4.8898	1	18	2	55.185	63	33	10.30	4		9001	2446	F1	4766
	7	26	4	10	8.8898	1	18	8	17.090	64	2	18.64	4		9001	2446	F2	4767
	7	26	4	10	12.8898	1	18	13	47.049	64	30	29.41	4		9001	2446	F3	4768
	7	26	4	10	16.8899	1	18	19	23.793	64	57	33.59	4		9001	2446	F4	4769
	7	26	4	10	20.8899	1	18	25	7.227	65	23	27.63	4		9001	2446	F5	4770
	7	26	4	10	24.8900	1	18	30	57.448	65	48	18.63	4		9001	2446	F6	4771
	7	26	4	10	28.8900	1	18	36	54.293	66	12	3.07	4		9001	2446	F7	4772
	7	26	4	12	4.8912	1	21	14	27.144	70	12	49.06	4		9001	2447	F1	4773
	7	26	4	12	8.8913	1	21	20	39.948	70	10	48.40	4		9001	2447	F2	4774
	7	26	4	12	12.8914	1	21	26	46.086	70	8	4.33	4		9001	2447	F3	5427
	7	26	4	12	16.8914	1	21	32	45.872	70	4	38.34	4		9001	2447	F4	5356
	7	26	4	12	20.8915	1	21	38	40.115	70	0	30.27	4		9001	2447	F5	4777
	7	26	4	12	24.8915	1	21	44	26.483	69	55	46.06	4		9001	2447	F6	4778
	7	26	4	12	28.8916	1	21	50	6.866	69	50	24.31	4		9001	2447	F7	4779
	7	26	4	12	34.9017	1								2.4108940	7901			5408
	7	26	4	13	4.9036	1								2.5484380	7901			5409
	7	26	6	11	4.8949	1	13	18	23.285	33	22	59.01	4		9001	2450	F1	3637
	7	26	6	11	8.8949	1	13	18	12.635	33	49	44.11	4		9001	2450	F2	3638
	7	26	6	11	12.8949	1	13	18	1.702	34	16	37.82	4		9001	2450	F3	3639
	7	26	6	11	16.8948	1	13	17	50.136	34	43	38.00	4		9001	2450	F4	3640
	7	26	6	11	20.8948	1	13	17	38.008	35	10	43.22	4		9001	2450	F5	3641
	7	26	6	11	24.8948	1	13	17	25.542	35	37	50.42	4		9001	2450	F6	3642

July 26-27, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	7	26	6	11	28.8948	1	13	17	12.340	36	5	3.35	4		9001	2450	F7	3643
	7	26	6	14	4.8942	1	12	58	8.336	54	28	.69	4		9001	2451	F1	4990
	7	26	6	14	12.8942	1	12	56	19.861	55	24	58.87	4		9001	2451	F3	3645
	7	26	6	14	16.8942	1	12	55	22.803	55	53	25.84	4		9001	2451	F4	3646
	7	26	6	14	20.8942	1	12	54	23.777	56	21	43.90	4		9001	2451	F5	3647
	7	26	6	14	24.8942	1	12	53	22.325	56	50	.09	4		9001	2451	F6	4316
	7	26	6	14	28.8942	1	12	52	19.014	57	18	20.79	4		9001	2451	F7	4317
	7	26	6	16	4.8944	1	12	11	53.349	68	3	52.76	4		9001	2452	F1	4068
	7	26	6	16	8.8944	1	12	9	18.195	68	28	39.04	4		9001	2452	F2	4069
	7	26	6	16	12.8944	1	12	6	37.674	68	53	10.21	4		9001	2452	F3	4070
	7	26	6	16	16.8944	1	12	3	49.812	69	17	24.70	4		9001	2452	F4	4071
	7	26	6	16	20.8944	1	12	0	55.454	69	41	24.16	4		9001	2452	F5	4072
	7	26	6	16	24.8944	1	11	57	54.499	70	5	4.50	4		9001	2452	F6	4073
	7	26	6	16	28.8944	1	11	54	46.573	70	28	27.40	4		9001	2452	F7	4074
	7	26	6	19	4.8954	1	7	50	34.592	78	10	28.36	4		9001	2453	F1	4075
	7	26	6	19	8.8954	1	7	42	52.104	78	5	54.76	4		9001	2453	F2	4076
	7	26	6	19	12.8954	1	7	35	19.196	78	0	34.77	4		9001	2453	F3	4077
	7	26	6	19	16.8955	1	7	27	54.627	77	54	27.46	4		9001	2453	F4	4078
	7	26	6	19	20.8955	1	7	20	41.024	77	47	29.49	4		9001	2453	F5	4079
	7	26	6	19	24.8955	1	7	13	37.689	77	39	52.97	4		9001	2453	F6	4080
	7	26	9	45	20.8911	1	10	25	43.394	-17	57	15.83	4		9023	6704	F5	8503
	7	26	9	45	24.8911	1	10	28	7.013	-17	27	8.50	4		9023	6704	F6	8504
	7	26	9	45	28.8910	1	10	30	30.484	-16	56	26.71	4		9023	6704	F7	8505
	7	26	9	49	4.8908	1	12	37	30.393	17	53	46.89	4		9023	6705	F1	8506
	7	26	9	49	8.8908	1	12	39	40.998	18	31	52.53	4		9023	6705	F2	8507
	7	26	9	49	12.8908	1	12	41	51.314	19	9	48.87	4		9023	6705	F3	8508
	7	26	9	49	16.8909	1	12	44	.803	19	47	22.51	4		9023	6705	F4	8509
	7	26	9	49	20.8909	1	12	46	9.700	20	24	34.08	4		9023	6705	F5	8510
	7	26	9	49	24.8909	1	12	48	18.170	21	1	20.99	4		9023	6705	F6	8511
	7	26	9	49	28.8910	1	12	50	25.732	21	37	53.46	4		9023	6705	F7	8512
	7	26	14	40	4.8976	1	5	44	44.566	74	52	57.70	4		9012	7134	F1	8998
	7	26	14	40	8.8976	1	5	43	19.848	74	32	20.89	4		9012	7134	F2	8999
	7	26	14	40	12.8975	1	5	41	58.495	74	11	41.53	4		9012	7134	F3	9000
	7	26	14	40	16.8975	1	5	40	41.330	73	50	51.25	4		9012	7134	F4	9001
	7	26	14	40	20.8975	1	5	39	27.747	73	29	59.17	4		9012	7134	F5	9002
	7	26	14	40	24.8975	1	5	38	17.909	73	9	1.74	4		9012	7134	F6	9003
	7	26	14	40	28.8974	1	5	37	10.789	72	47	56.92	4		9012	7134	F7	9004
	7	26	14	44	4.8967	1	5	15	42.491	52	13	4.88	4		9012	7136	F1	6741
	7	26	14	44	8.8967	1	5	15	39.941	51	49	4.09	4		9012	7136	F2	6742
	7	26	14	44	12.8967	1	5	15	37.701	51	25	4.19	4		9012	7136	F3	6743
	7	26	14	44	16.8967	1	5	15	35.733	51	1	4.68	4		9012	7136	F4	6959
	7	26	14	44	20.8967	1	5	15	34.289	50	37	1.62	4		9012	7136	F5	6744
	7	26	14	44	24.8967	1	5	15	33.042	50	13	.39	4		9012	7136	F6	6745
	7	26	14	44	28.8966	1	5	15	32.102	49	48	58.97	4		9012	7136	F7	6746
	7	26	14	46	4.8967	1	5	16	38.181	40	11	45.41	4		9012	7137	F1	464
	7	26	14	46	8.8967	1	5	16	43.707	39	47	50.48	4		9012	7137	F2	4342
	7	26	14	46	12.8967	1	5	16	49.750	39	23	56.71	4		9012	7137	F3	3594
	7	26	14	46	16.8967	1	5	16	56.092	39	0	8.98	4		9012	7137	F4	467
	7	26	14	46	20.8967	1	5	17	2.419	38	36	13.63	4		9012	7137	F5	3595
	7	26	14	46	24.8967	1	5	17	8.896	38	12	22.99	4		9012	7137	F6	3596
	7	26	14	46	28.8967	1	5	17	15.550	37	48	35.91	4		9012	7137	F7	3597
	7	26	14	50	4.8977	1	5	26	54.671	17	29	48.53	4		9012	7138	F1	9108
	7	26	14	50	8.8977	1	5	27	8.485	17	8	51.59	4		9012	7138	F2	9109
	7	26	14	50	12.8977	1	5	27	22.744	16	47	58.98	4		9012	7138	F3	9110
	7	26	14	50	16.8978	1	5	27	36.724	16	27	10.51	4		9012	7138	F4	9111
	7	26	14	50	20.8978	1	5	27	50.873	16	6	27.73	4		9012	7138	F5	9112
	7	26	14	50	24.8978	1	5	28	5.183	15	45	47.24	4		9012	7138	F6	9113
	7	26	14	50	28.8978	1	5	28	19.780	15	25	12.11	4		9012	7138	F7	9114
	7	26	22	14	4.8922	1	14	41	37.419	53	7	15.22	4		9004	8281	F1	4414
	7	26	22	14	8.8922	1	14	42	38.919	53	53	22.44	4		9004	8281	F2	4415
	7	26	22	14	12.8922	1	14	43	42.127	54	39	26.06	4		9004	8281	F3	4416
	7	26	22	14	16.8922	1	14	44	47.287	55	25	21.18	4		9004	8281	F4	4417
	7	26	22	14	20.8922	1	14	45	54.136	56	11	14.49	4		9004	8281	F5	4418
	7	26	22	14	24.8922	1	14	47	2.716	56	56	58.19	4		9004	8281	F6	4419
	7	26	22	14	28.8922	1	14	48	13.745	57	42	35.08	4		9004	8281	F7	4420
	7	26	22	16	4.8927	1	15	37	53.932	74	47	5.60	4		9004	8282	F1	6949
	7	26	22	16	8.8927	1	15	41	45.929	75	25	22.64	4		9004	8282	F2	6161
	7	26	22	16	12.8928	1	15	45	56.378	76	3	8.01	4		9004	8282	F3	9406
	7	26	22	16	16.8928	1	15	50	25.888	76	40	19.93	4		9004	8282	F4	6162
	7	26	22	16	20.8928	1	15	55	16.887	77	16	59.89	4		9004	8282	F5	6163
	7	26	22	16	24.8929	1	16	0	33.909	77	52	59.94	4		9004	8282	F6	6164
	7	26	22	16	28.8929	1	16	6	18.452	78	28	22.98	4		9004	8282	F7	6165
	7	26	22	18	4.8938	1	22	53	47.202	83	42	49.63	4		9004	8283	F1	7258
	7	26	22	18	8.8939	1	23	8	39.215	83	23	37.02	4		9004	8283	F2	7259
	7	26	22	18	12.8939	1	23	21	59.677	83	3	10.16	4		9004	8283	F3	7260
	7	26	22	18	16.8940	1	23	33	57.887	82	41	39.00	4		9004	8283	F4	7261
	7	26	22	18	20.8940	1	23	44	42.214	82	19	18.33	4		9004	8283	F5	7262
	7	26	22	18	24.8941	1	23	54	24.235	81	56	22.52	4		9004	8283	F6	7263
	7	26	22	18	28.8941	1	0	3	9.218	81	32	54.28	4		9004	8283	F7	7264
	7	27	0	21	4.8968	1	12	46	23.118	61	55	34.38	4		9004	8295	F1	7303

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	7	27	0	21	8.8968	1	12	44	45.417	62	20	20.81	4		9004	8295	F2	7304
	7	27	0	21	12.8968	1	12	43	4.087	62	45	2.81	4		9004	8295	F3	7305
	7	27	0	21	16.8968	1	12	41	19.518	63	9	42.28	4		9004	8295	F4	7306
	7	27	0	21	20.8968	1	12	39	30.884	63	34	10.20	4		9004	8295	F5	7307
	7	27	0	21	24.8968	1	12	37	39.177	63	58	34.25	4		9004	8295	F6	7308
	7	27	0	21	28.8968	1	12	35	42.766	64	22	50.91	4		9004	8295	F7	7309
	7	27	0	26	4.8975	1	6	29	38.384	74	12	35.15	4		9004	8296	F1	7310
	7	27	0	26	8.8976	1	6	24	57.950	73	58	21.89	4		9004	8296	F2	7311
	7	27	0	26	12.8976	1	6	20	27.544	73	43	44.47	4		9004	8296	F3	7312
	7	27	0	26	16.8976	1	6	16	6.063	73	28	45.68	4		9004	8296	F4	7313
	7	27	0	26	20.8977	1	6	11	54.156	73	13	33.91	4		9004	8296	F5	7314
	7	27	0	26	24.8977	1	6	7	50.874	72	58	2.52	4		9004	8296	F6	7315
	7	27	0	26	28.8977	1	6	3	56.393	72	42	13.39	4		9004	8296	F7	7316
	7	27	2	32	4.9030	1	8	36	39.278	78	28	41.94	4		9004	8309	F1	7291
	7	27	2	32	8.9030	1	8	28	40.607	78	21	51.74	4		9004	8309	F2	7291
	7	27	2	32	12.9030	1	8	20	52.009	78	14	8.13	4		9004	8309	F3	7292
	7	27	2	32	16.9030	1	8	13	13.385	78	5	36.54	4		9004	8309	F4	7293
	7	27	2	32	20.9030	1	8	5	47.412	77	56	13.62	4		9004	8309	F5	7294
	7	27	2	32	24.9030	1	7	58	32.512	77	46	6.27	4		9004	8309	F6	7295
	7	27	2	32	28.9030	1	7	51	29.745	77	35	12.45	4		9004	8309	F7	9876
	7	27	14	42	4.9061	1	8	43	28.116	88	26	9.14	4		9012	7171	F1	6747
	7	27	14	42	8.9060	1	8	3	56.549	88	17	7.29	4		9012	7171	F2	6748
	7	27	14	42	12.9060	1	7	31	33.889	88	5	34.84	4		9012	7171	F3	6749
	7	27	14	42	16.9060	1	7	5	27.096	87	52	0.00	4		9012	7171	F4	6750
	7	27	14	42	20.9059	1	6	44	34.720	87	37	6.27	4		9012	7171	F5	6751
	7	27	14	42	24.9059	1	6	27	47.267	87	21	3.81	4		9012	7171	F6	6752
	7	27	14	42	28.9059	1	6	14	6.309	87	4	14.81	4		9012	7171	F7	6753
	7	27	14	46	4.9043	1	4	44	31.660	67	43	44.22	4		9012	7172	F1	471
	7	27	14	46	8.9042	1	4	44	31.761	67	19	48.53	4		9012	7172	F2	3598
	7	27	14	46	12.9042	1	4	44	32.353	66	55	48.31	4		9012	7172	F3	473
	7	27	14	46	16.9042	1	4	44	32.972	66	31	41.93	4		9012	7172	F4	474
	7	27	14	46	20.9042	1	4	44	34.483	66	7	32.37	4		9012	7172	F5	475
	7	27	14	46	24.9042	1	4	44	36.177	65	43	17.17	4		9012	7172	F6	3599
	7	27	14	46	28.9041	1	4	44	39.242	65	18	59.74	4		9012	7172	F7	5066
	7	27	14	48	4.9038	1	4	47	12.475	55	18	35.67	4		9012	7173	F1	5A2
	7	27	14	48	8.9038	1	4	47	22.126	54	52	59.80	4		9012	7173	F2	5A3
	7	27	14	48	12.9038	1	4	47	31.669	54	27	15.38	4		9012	7173	F3	5A4
	7	27	14	48	16.9038	1	4	47	41.198	54	1	36.54	4		9012	7173	F4	5A5
	7	27	14	48	20.9037	1	4	47	51.472	53	35	54.77	4		9012	7173	F5	5A6
	7	27	14	48	24.9037	1	4	48	1.655	53	10	8.62	4		9012	7173	F6	5A7
	7	27	14	48	28.9037	1	4	48	11.794	52	44	21.94	4		9012	7173	F7	5A8
	7	27	14	50	4.9037	1	4	53	1.264	42	20	7.34	4		9012	7174	F1	5A9
	7	27	14	50	8.9037	1	4	53	14.838	41	54	7.39	4		9012	7174	F2	590
	7	27	14	50	12.9037	1	4	53	28.609	41	28	1.58	4		9012	7174	F3	591
	7	27	14	50	16.9037	1	4	53	42.308	41	1	58.76	4		9012	7174	F4	592
	7	27	14	50	20.9037	1	4	53	55.990	40	35	59.42	4		9012	7174	F5	593
	7	27	14	50	24.9037	1	4	54	10.188	40	9	57.63	4		9012	7174	F6	594
	7	27	14	50	28.9037	1	4	54	24.135	39	43	57.20	4		9012	7174	F7	595
	7	27	22	18	4.9008	1	13	59	18.021	49	56	41.09	4		9004	8326	F1	6166
	7	27	22	18	8.9007	1	13	59	37.721	50	39	24.87	4		9004	8326	F2	6167
	7	27	22	18	12.9007	1	13	59	57.561	51	22	14.01	4		9004	8326	F3	6168
	7	27	22	18	16.9007	1	14	0	17.425	52	4	59.83	4		9004	8326	F4	6169
	7	27	22	18	20.9007	1	14	0	37.632	52	47	46.60	4		9004	8326	F5	6170
	7	27	22	18	24.9007	1	14	0	57.846	53	30	36.56	4		9004	8326	F6	6171
	7	27	22	18	28.9007	1	14	1	17.882	54	13	25.79	4		9004	8326	F7	6172
	7	27	22	22	4.9019	1	16	8	30.041	89	8	23.98	4		9004	8327	F1	7297
	7	27	22	22	8.9019	1	18	26	2.602	89	32	6.29	4		9004	8327	F2	7298
	7	27	22	22	12.9020	1	22	47	36.247	89	28	15.08	4		9004	8327	F3	7299
	7	27	22	22	16.9020	1	0	31	23.158	89	2	31.47	4		9004	8327	F4	7300
	7	27	22	22	20.9021	1	1	8	2.335	88	32	48.30	4		9004	8327	F5	7301
	7	27	22	22	24.9021	1	1	25	43.671	88	2	13.56	4		9004	8327	F6	7302
	7	27	22	22	28.9021	1	1	36	5.492	87	31	33.45	4		9004	8327	F7	7332
	7	28	0	25	4.9052	1	12	49	2.458	58	48	3.67	4		9004	8337	F1	7747
	7	28	0	25	8.9052	1	12	47	45.244	59	11	53.06	4		9004	8337	F2	7748
	7	28	0	25	12.9052	1	12	46	24.921	59	35	44.34	4		9004	8337	F3	7749
	7	28	0	25	16.9052	1	12	45	3.036	59	59	31.82	4		9004	8337	F4	7750
	7	28	0	25	20.9051	1	12	43	38.019	60	23	18.36	4		9004	8337	F5	7751
	7	28	0	25	24.9051	1	12	42	10.155	60	46	57.09	4		9004	8337	F6	7752
	7	28	0	25	28.9051	1	12	40	39.319	61	10	32.47	4		9004	8337	F7	7753
	7	28	0	30	4.9054	1	7	19	32.093	75	19	10.50	4		9004	8338	F1	7754
	7	28	0	30	8.9055	1	7	13	36.911	75	9	47.01	4		9004	8338	F2	7755
	7	28	0	30	12.9055	1	7	7	51.750	74	59	43.50	4		9004	8338	F3	7756
	7	28	0	30	16.9055	1	7	2	15.180	74	49	7.92	4		9004	8338	F4	7757
	7	28	0	30	20.9055	1	6	56	47.188	74	38	.38	4		9004	8338	F5	7758
	7	28	0	30	24.9055	1	6	51	29.416	74	26	20.76	4		9004	8338	F6	7759
	7	28	0	30	28.9056	1	6	46	20.912	74	14	16.61	4		9004	8338	F7	7760
	7	28	2	11	4.9013	1	13	23	32.534	7	44	25.08	4		9010	4147	F1	9789
	7	28	2	11	8.9012	1	13	24	8.280	8	22	51.88	4		9010	4147	F2	9790
	7	28	2	11	12.9012	1	13	24	44.283	9	1	46.91	4		9010	4147	F3	9791
	7	28	2	11	16.9011	1	13	25	20.296	9	41	2.16	4		9010	4147	F4	9792

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	7	28	2	11	20.9011	1	13	25	56.417	10	20	37.94	4		9010	4147	F5	9793
	7	28	2	11	24.9011	1	13	26	32.803	11	0	35.01	4		9010	4147	F6	9963
	7	28	2	11	28.9010	1	13	27	9.376	11	40	54.71	4		9010	4147	F7	9964
	7	28	4	16	4.8956	1	14	11	56.028	40	59	34.48	4		9001	2472	F1	3708
	7	28	4	16	8.8956	1	14	12	48.656	41	47	59.65	4		9001	2472	F2	3709
	7	28	4	16	12.8956	1	14	13	42.338	42	36	30.22	4		9001	2472	F3	3710
	7	28	4	16	16.8956	1	14	14	36.886	43	25	.44	4		9001	2472	F4	3711
	7	28	4	16	20.8956	1	14	15	32.472	44	13	30.59	4		9001	2472	F5	3712
	7	28	4	16	24.8956	1	14	16	29.291	45	2	.96	4		9001	2472	F6	3713
	7	28	4	16	28.8956	1	14	17	26.953	45	50	33.86	4		9001	2472	F7	3714
	7	28	4	16	34.9044	1								1.9079910	7901			5411
	7	28	4	19	4.8963	1	15	32	44.650	74	42	37.81	4		9001	2473	F1	3715
	7	28	4	19	8.8964	1	15	37	7.375	75	19	11.46	4		9001	2473	F2	3716
	7	28	4	19	12.8964	1	15	41	49.178	75	55	10.17	4		9001	2473	F3	3717
	7	28	4	19	16.8964	1	15	46	50.956	76	30	26.18	4		9001	2473	F4	3718
	7	28	4	19	20.8965	1	15	52	14.859	77	5	.19	4		9001	2473	F5	3719
	7	28	4	19	24.8965	1	15	58	4.075	77	38	53.57	4		9001	2473	F6	3720
	7	28	4	19	28.8965	1	16	4	20.784	78	12	.01	4		9001	2473	F7	3721
	7	28	4	21	4.8976	1	22	5	45.042	83	11	56.89	4		9001	2474	F1	4151
	7	28	4	21	8.8977	1	22	20	5.005	82	56	57.88	4		9001	2474	F2	4152
	7	28	4	21	12.8978	1	22	33	14.062	82	40	37.54	4		9001	2474	F3	4153
	7	28	4	21	16.8978	1	22	45	22.594	82	23	16.87	4		9001	2474	F4	4154
	7	28	4	21	20.8979	1	22	56	28.062	82	4	55.25	4		9001	2474	F5	4155
	7	28	4	21	24.8979	1	23	6	39.401	81	45	49.59	4		9001	2474	F6	4156
	7	28	4	21	28.8980	1	23	15	58.688	81	26	7.22	4		9001	2474	F7	4157
	7	28	6	22	4.9013	1	12	45	35.676	48	19	42.85	4		9001	2480	F1	461
	7	28	6	22	8.9013	1	12	44	55.573	48	44	13.30	4		9001	2480	F2	4158
	7	28	6	22	12.9013	1	12	44	14.387	49	8	48.29	4		9001	2480	F3	5064
	7	28	6	22	16.9012	1	12	43	32.069	49	33	19.10	4		9001	2480	F4	4159
	7	28	6	22	20.9012	1	12	42	48.132	49	57	46.77	4		9001	2480	F5	4160
	7	28	6	22	24.9012	1	12	42	3.642	50	22	20.11	4		9001	2480	F6	4161
	7	28	6	22	28.9012	1	12	41	17.117	50	47	1.46	4		9001	2480	F7	4162
	7	28	6	24	4.9010	1	12	14	31.198	60	27	49.19	4		9001	2481	F1	5431
	7	28	6	24	8.9010	1	12	12	57.590	60	51	12.08	4		9001	2481	F2	4763
	7	28	6	24	12.9010	1	12	11	20.807	61	14	34.54	4		9001	2481	F3	5432
	7	28	6	24	16.9010	1	12	9	40.648	61	37	44.07	4		9001	2481	F4	5433
	7	28	6	24	20.9010	1	12	7	58.168	62	0	48.23	4		9001	2481	F5	4764
	7	28	6	24	24.9010	1	12	6	11.873	62	23	50.64	4		9001	2481	F6	5434
	7	28	6	24	28.9010	1	12	4	22.204	62	46	40.95	4		9001	2481	F7	4765
	7	28	6	26	4.9012	1	10	58	57.253	70	55	58.96	4		9001	2482	F1	5377
	7	28	6	26	8.9012	1	10	55	3.094	71	12	47.08	4		9001	2482	F2	5378
	7	28	6	26	12.9012	1	10	51	2.529	71	29	15.11	4		9001	2482	F3	4761
	7	28	6	26	16.9012	1	10	46	55.245	71	45	16.26	4		9001	2482	F4	5379
	7	28	6	26	20.9012	1	10	42	41.132	72	0	51.67	4		9001	2482	F5	5380
	7	28	6	26	24.9012	1	10	38	20.374	72	16	2.28	4		9001	2482	F6	5429
	7	28	6	26	28.9013	1	10	33	51.804	72	30	45.45	4		9001	2482	F7	5430
	7	28	6	28	4.9011	1	4	7	8.041	71	35	15.74	4		9113	1468	F1	9998
	7	28	6	28	8.9012	1	4	5	15.224	71	15	27.48	4		9113	1468	F2	9999
	7	28	6	28	12.9012	1	4	3	26.751	70	55	37.42	4		9113	1468	F3	0
	7	28	6	28	16.9013	3	4	1	43.045	70	35	52.38	4		9113	1468	F4	3739
	7	28	6	28	20.9013	1	4	0	5.093	70	16	10.34	4		9113	1468	F5	1
	7	28	6	28	24.9013	1	3	58	30.474	69	56	28.58	4		9113	1468	F6	2
	7	28	6	28	28.9014	1	3	57	.501	69	36	55.08	4		9113	1468	F7	3
	7	28	8	41	4.9029	1	11	21	28.617	82	47	31.50	4		9010	4165	F1	9796
	7	28	8	41	8.9028	1	11	11	15.918	82	54	49.24	4		9010	4165	F2	9965
	7	28	8	41	16.9028	1	10	49	47.664	83	6	41.54	4		9010	4165	F4	9966
	7	28	8	41	20.9028	1	10	38	33.776	83	11	10.31	4		9010	4165	F5	9800
	7	28	8	41	24.9027	1	10	27	3.352	83	14	37.00	4		9010	4165	F6	9967
	7	28	8	41	28.9027	1	10	15	20.099	83	17	.51	4		9010	4165	F7	9802
	7	28	8	44	4.9018	1	5	45	38.105	74	29	13.78	4		9010	4166	F1	9803
	7	28	8	44	8.9018	1	5	43	24.333	74	7	55.03	4		9010	4166	F2	9804
	7	28	8	44	12.9018	1	5	41	16.358	73	46	26.38	4		9010	4166	F3	9805
	7	28	8	44	16.9017	1	5	39	13.831	73	24	48.03	4		9010	4166	F4	9806
	7	28	8	44	20.9017	1	5	37	16.509	73	3	.99	4		9010	4166	F5	9807
	7	28	8	44	24.9017	1	5	35	24.877	72	41	8.15	4		9010	4166	F6	9808
	7	28	8	44	28.9017	1	5	33	38.841	72	19	7.38	4		9010	4166	F7	9968
	7	28	8	49	4.9015	1	4	53	44.866	44	57	15.01	4		9010	4167	F1	9969
	7	28	8	49	8.9016	1	4	53	40.404	44	33	19.81	4		9010	4167	F2	9810
	7	28	8	49	12.9016	1	4	53	35.911	44	9	26.72	4		9010	4167	F3	9970
	7	28	8	49	16.9016	1	4	53	31.925	43	45	34.65	4		9010	4167	F4	9812
	7	28	8	49	20.9016	1	4	53	28.580	43	21	45.02	4		9010	4167	F5	9813
	7	28	8	49	24.9016	1	4	53	25.312	42	57	58.44	4		9010	4167	F6	546
	7	28	8	49	28.9016	1	4	53	22.242	42	34	14.00	4		9010	4167	F7	9815
	7	28	8	52	4.9024	1	4	54	46.297	27	47	19.77	4		9010	4168	F1	9816
	7	28	8	52	8.9024	1	4	54	52.551	27	25	46.71	4		9010	4168	F2	9817
	7	28	8	52	12.9024	1	4	54	58.754	27	4	19.90	4		9010	4168	F3	9882
	7	28	8	52	16.9024	1	4	55	4.936	26	42	56.04	4		9010	4168	F4	9819
	7	28	8	52	20.9025	1	4	55	11.852	26	21	36.49	4		9010	4168	F5	9820
	7	28	8	52	28.9025	1	4	55	25.254	25	39	9.64	4		9010	4168	F7	9822
	7	28	14	46	4.9035	1	16	49	38.156	86	27	2.05	4		9012	7210	F1	202

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	7	28	14	46	8.9035	1	19	4	12.646	86	40	31.13	4		9012	7210	F2	203
	7	28	14	46	12.9035	1	19	20	55.644	86	53	2.28	4		9012	7210	F3	204
	7	28	14	46	20.9034	3	20	1	27.674	87	14	49.01	4		9012	7210	F5	3731
	7	28	14	46	24.9033	1	20	25	44.609	87	23	26.44	4		9012	7210	F6	205
	7	28	14	46	28.9033	1	20	52	35.457	87	30	15.33	4		9012	7210	F7	206
	7	28	14	52	4.9007	1	4	8	11.278	58	17	52.50	4		9012	7211	F1	207
	7	28	14	52	8.9007	1	4	8	43.341	57	51	.95	4		9012	7211	F2	208
	7	28	14	52	12.9007	1	4	9	15.155	57	24	5.83	4		9012	7211	F3	209
	7	28	14	52	16.9007	1	4	9	46.454	56	57	5.25	4		9012	7211	F4	210
	7	28	14	52	20.9006	1	4	10	17.509	56	30	2.15	4		9012	7211	F5	211
	7	28	14	52	24.9006	1	4	10	48.610	56	2	53.56	4		9012	7211	F6	212
	7	28	14	52	28.9006	1	4	11	19.338	55	35	4[illegible]	4		9012	7211	F7	213
	7	28	14	54	4.9004	1	4	22	31.959	44	29	4.97	4		9012	7212	F1	214
	7	28	14	54	8.9004	1	4	22	58.296	44	0	55.16	4		9012	7212	F2	215
	7	28	14	54	12.9004	1	4	23	23.979	43	32	44.72	4		9012	7212	F3	216
	7	28	14	54	16.9004	1	4	23	50.015	43	4	34.13	4		9012	7212	F4	217
	7	28	14	54	20.9004	1	4	24	16.023	42	36	24.68	4		9012	7212	F5	218
	7	28	14	54	24.9004	1	4	24	41.865	42	8	13.42	4		9012	7212	F6	219
	7	28	14	54	28.9004	1	4	25	7.507	41	40	.99	4		9012	7212	F7	220
	7	28	14	58	4.9010	1	4	47	9.249	17	11	37.69	4		9012	7213	F1	300
	7	28	14	58	8.9011	1	4	47	33.355	16	46	19.15	4		9012	7213	F2	301
	7	28	14	58	12.9011	1	4	47	57.562	16	21	7.51	4		9012	7213	F3	302
	7	28	14	58	16.9011	1	4	48	21.702	15	56	1.38	4		9012	7213	F4	303
	7	28	14	58	20.9011	1	4	48	45.872	15	31	.43	4		9012	7213	F5	304
	7	28	14	58	24.9012	1	4	49	9.909	15	6	4.85	4		9012	7213	F6	305
	7	28	14	58	28.9012	1	4	49	34.129	14	41	17.10	4		9012	7213	F7	306
	7	28	15	0	4.9019	1	4	59	20.783	5	16	41.80	4		9012	7214	F1	307
	7	28	15	0	8.9019	1	4	59	45.575	4	54	30.32	4		9012	7214	F2	308
	7	28	15	0	12.9020	1	5	0	10.231	4	32	26.52	4		9012	7214	F3	3243
	7	28	15	0	16.9020	1	5	0	35.149	4	10	29.00	4		9012	7214	F4	3244
	7	28	15	0	20.9020	1	5	0	59.941	3	48	36.46	4		9012	7214	F5	310
	7	28	15	0	24.9021	1	5	1	24.986	3	26	52.67	4		9012	7214	F6	311
	7	28	15	0	28.9021	1	5	1	50.063	3	5	10.74	4		9012	7214	F7	562
	7	28	22	25	4.8994	1	13	4	43.483	75	23	51.34	4		9004	8365	F1	6795
	7	28	22	25	8.8994	1	13	2	41.379	75	59	5.72	4		9004	8365	F2	6796
	7	28	22	25	12.8995	1	13	0	27.777	76	34	.66	4		9004	8365	F3	7333
	7	28	22	25	16.8995	1	12	58	2.457	77	8	44.07	4		9004	8365	F4	6798
	7	28	22	25	20.8995	1	12	55	22.442	77	43	5.71	4		9004	8365	F5	6799
	7	28	22	25	24.8995	1	12	52	27.633	78	17	10.88	4		9004	8365	F6	6800
	7	28	22	25	28.8996	1	12	49	12.718	78	50	54.71	4		9004	8365	F7	6801
	7	29	0	4	4.8993	1	12	3	31.792	27	45	39.85	4		9007	6181	F1	6697
	7	29	0	4	8.8993	1	12	4	54.248	28	22	24.09	4		9007	6181	F2	7463
	7	29	0	4	12.8993	1	12	6	16.978	28	58	59.10	4		9007	6181	F3	9407
	7	29	0	4	16.8993	1	12	7	39.820	29	35	21.67	4		9007	6181	F4	7464
	7	29	0	4	20.8994	1	12	9	2.613	30	11	33.57	4		9007	6181	F5	7465
	7	29	0	4	24.8994	1	12	10	25.439	30	47	31.19	4		9007	6181	F6	7466
	7	29	0	4	28.8994	1	12	11	48.256	31	23	14.70	4		9007	6181	F7	7467
	7	29	0	31	4.9030	1	12	2	15.470	67	7	45.84	4		9004	8372	F1	6802
	7	29	0	31	8.9030	1	11	59	38.751	67	28	24.05	4		9004	8372	F2	6803
	7	29	0	31	12.9030	1	11	56	57.988	67	48	54.68	4		9004	8372	F3	6804
	7	29	0	31	16.9030	1	11	54	10.701	68	9	9.68	4		9004	8372	F4	6805
	7	29	0	31	20.9030	1	11	51	18.315	68	29	13.57	4		9004	8372	F5	6806
	7	29	0	31	24.9030	1	11	48	20.091	68	49	6.52	4		9004	8372	F6	6807
	7	29	0	31	28.9030	1	11	45	16.159	69	8	39.33	4		9004	8372	F7	7334
	7	29	0	35	4.9034	1	6	45	8.547	73	48	51.[illegible]	4		9004	8373	F1	7317
	7	29	0	35	8.9034	1	6	40	15.980	73	36	24.77	4		9004	8373	F2	7318
	7	29	0	35	12.9034	1	6	35	32.157	73	23	31.24	4		9004	8373	F3	7319
	7	29	0	35	16.9034	1	6	30	56.553	73	10	16.58	4		9004	8373	F4	7320
	7	29	0	35	20.9034	1	6	26	28.930	72	56	39.49	4		9004	8373	F5	7321
	7	29	0	35	24.9034	1	6	22	9.672	72	42	38.29	4		9004	8373	F6	7322
	7	29	0	35	28.9035	1	6	17	58.369	72	28	18.02	4		9004	8373	F7	7323
	7	29	2	41	4.9027	1	8	31	25.155	81	45	42.75	4		9004	8382	F1	9640
	7	29	2	41	8.9027	1	8	19	56.332	81	38	47.08	4		9004	8382	F2	9397
	7	29	2	41	12.9027	1	8	8	48.613	81	30	31.19	4		9004	8382	F3	9398
	7	29	2	41	16.9027	1	7	58	2.147	81	21	6.23	4		9004	8382	F4	7627
	7	29	2	41	20.9027	1	7	47	39.369	81	10	27.96	4		9004	8382	F5	9399
	7	29	2	41	24.9027	1	7	37	41.866	80	58	50.52	4		9004	8382	F6	9400
	7	29	2	41	28.9027	1	7	28	10.444	80	46	2.32	4		9004	8382	F7	9641
	7	29	8	39	4.9054	1	10	12	29.781	75	24	36.69	4		9001	2485	F1	3420
	7	29	8	39	8.9054	1	10	6	52.032	75	30	12.49	4		9001	2485	F2	3421
	7	29	8	39	12.9054	1	10	1	9.237	75	35	20.46	4		9001	2485	F3	3422
	7	29	8	39	16.9054	1	9	55	22.619	75	39	55.00	4		9001	2485	F4	3497
	7	29	8	39	20.9053	1	9	49	32.425	75	43	51.31	4		9001	2485	F5	3423
	7	29	8	39	24.9053	1	9	43	38.121	75	47	13.31	4		9001	2485	F6	3424
	7	29	8	39	28.9053	1	9	37	40.526	75	49	57.45	4		9001	2485	F7	3425
	7	29	8	41	4.9052	1	7	22	7.414	73	56	53.28	4		9001	2486	F1	4109
	7	29	8	41	8.9052	1	7	17	29.993	73	45	33.78	4		9001	2486	F2	4110
	7	29	8	41	12.9052	1	7	12	58.572	73	33	46.81	4		9001	2486	F3	4111
	7	29	8	41	16.9052	1	7	8	35.479	73	21	41.03	4		9001	2486	F4	4112
	7	29	8	41	20.9052	1	7	4	18.259	73	9	10.58	4		9001	2486	F5	4997

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	7	29	8	41	24.9052	1	7	0	7.628	72	56	14.59	4		9001	2486	F6	4113
	7	29	8	41	28.9052	1	6	56	3.255	72	43	4.37	4		9001	2486	F7	4998
	7	29	8	46	4.9048	1	10	45	59.955	86	6	34.02	4		9010	4187	F1	7521
	7	29	8	46	4.9060	1	4	55	7.481	51	40	27.88	4		9001	2487	F1	4115
	7	29	8	46	8.9048	1	10	25	19.822	86	10	58.27	4		9010	4187	F2	7840
	7	29	8	46	8.9060	1	4	54	31.879	51	21	5.73	4		9001	2487	F2	4116
	7	29	8	46	12.9047	1	10	3	59.406	86	13	25.78	4		9010	4187	F3	7523
	7	29	8	46	12.9060	1	4	53	57.727	51	1	42.94	4		9001	2487	F3	4117
	7	29	8	46	16.9047	1	9	42	18.264	86	13	50.90	4		9010	4187	F4	7524
	7	29	8	46	16.9060	1	4	53	24.391	50	42	19.65	4		9001	2487	F4	4118
	7	29	8	46	20.9047	1	9	20	36.880	86	12	7.93	4		9010	4187	F5	7525
	7	29	8	46	20.9061	1	4	52	51.524	50	21	1.99	4		9001	2487	F5	4119
	7	29	8	46	24.9046	1	8	59	23.212	86	8	24.24	4		9010	4187	F6	7526
	7	29	8	46	24.9061	1	4	52	20.203	50	3	44.74	4		9001	2487	F6	4120
	7	29	8	46	28.9046	1	8	38	57.590	86	2	42.99	4		9010	4187	F7	7527
	7	29	8	46	28.9061	1	4	51	48.692	49	44	32.47	4		9001	2487	F7	4121
	7	29	8	52	4.9032	1	4	32	41.390	53	59	51.11	4		9010	4188	F1	7528
	7	29	8	52	8.9032	1	4	32	37.113	53	33	39.94	4		9010	4188	F2	7529
	7	29	8	52	12.9032	1	4	32	35.089	53	7	30.53	4		9010	4188	F3	7530
	7	29	8	52	16.9032	1	4	32	32.874	52	41	20.94	4		9010	4188	F4	7531
	7	29	8	52	20.9032	1	4	32	31.180	52	15	11.02	4		9010	4188	F5	7532
	7	29	8	52	24.9032	1	4	32	29.298	51	49	2.24	4		9010	4188	F6	7533
	7	29	8	52	28.9032	1	4	32	28.131	51	22	53.30	4		9010	4188	F7	7534
	7	29	8	54	4.9034	1	4	33	30.986	41	1	10.70	4		9010	4189	F1	9823
	7	29	8	54	8.9034	1	4	33	36.472	40	35	42.08	4		9010	4189	F2	9824
	7	29	8	54	12.9034	1	4	33	42.009	40	10	15.29	4		9010	4189	F3	9825
	7	29	8	54	16.9034	1	4	33	48.250	39	44	52.49	4		9010	4189	F4	9826
	7	29	8	54	20.9035	1	4	33	54.382	39	19	30.16	4		9010	4189	F5	9971
	7	29	8	54	24.9035	1	4	34	.956	38	54	13.88	4		9010	4189	F6	9828
	7	29	8	54	28.9035	1	4	34	7.600	38	29	.28	4		9010	4189	F7	9829
	7	29	8	58	4.9048	1	4	43	23.492	17	28	32.91	4		9010	4190	F1	9273
	7	29	8	58	8.9048	1	4	43	36.059	17	7	29.17	4		9010	4190	F2	9274
	7	29	8	58	12.9048	1	4	43	49.496	16	46	28.37	4		9010	4190	F3	9275
	7	29	8	58	16.9048	1	4	44	2.776	16	25	31.82	4		90	4190	F4	9276
	7	29	8	58	20.9049	1	4	44	16.235	16	4	41.23	4		90	4190	F5	9884
	7	29	8	58	24.9049	1	4	44	29.604	15	43	56.82	4		9010	4190	F6	9277
	7	29	8	58	28.9049	1	4	44	43.347	15	23	12.33	4		9010	4190	F7	9278
	7	29	10	46	4.9035	1	17	53	1.516	83	15	7.75	4		9001	2496	F1	4421
	7	29	10	46	8.9034	1	18	1	10.919	83	34	15.30	4		9001	2496	F2	4422
	7	29	10	46	12.9034	1	18	10	11.415	83	53	.40	4		9001	2496	F3	4423
	7	29	10	46	16.9034	1	18	20	11.143	84	11	12.56	4		9001	2496	F4	4991
	7	29	10	46	20.9033	1	18	31	18.526	84	28	47.35	4		9001	2496	F5	4425
	7	29	10	46	24.9033	1	18	43	41.243	84	45	35.71	4		9001	2496	F6	4579
	7	29	10	46	28.9033	1	18	57	27.695	85	1	36.89	4		9001	2496	F7	4427
	7	29	10	48	4.9025	1	1	48	30.105	81	56	40.89	4		9001	2497	F1	4428
	7	29	10	48	8.9025	1	1	34	35.829	81	32	34.97	4		9001	2497	F2	4429
	7	29	10	48	12.9024	1	2	0	9.480	81	8	5.87	4		9001	2497	F3	4992
	7	29	10	48	16.9024	1	2	5	17.320	80	43	14.83	4		9001	2497	F4	4993
	7	29	10	48	20.9024	1	2	10	.225	80	18	4.53	4		9001	2497	F5	4994
	7	29	10	48	24.9024	1	2	14	28.160	79	52	35.04	4		9001	2497	F6	4995
	7	29	10	48	28.9023	1	2	18	25.115	79	26	47.70	4		9001	2497	F7	4996
	7	29	10	51	4.9017	1	3	23	30.201	60	41	40.57	4		9001	2498	F1	5359
	7	29	10	51	8.9017	1	3	24	16.930	60	11	5.85	4		9001	2498	F2	5360
	7	29	10	51	12.9017	1	3	25	2.840	59	40	29.02	4		9001	2498	F3	4845
	7	29	10	51	16.9017	1	3	25	48.353	59	9	50.12	4		9001	2498	F4	4846
	7	29	10	51	20.9017	1	3	26	32.353	58	39	9.89	4		9001	2498	F5	5361
	7	29	10	51	24.9017	1	3	27	15.435	58	8	25.27	4		9001	2498	F6	5362
	7	29	10	51	28.9017	1	3	27	57.818	57	37	42.46	4		9001	2498	F7	5363
	7	29	10	53	4.9018	1	3	42	2.030	45	20	16.60	4		9001	2499	F1	5364
	7	29	10	53	8.9018	1	3	42	32.078	44	49	12.16	4		9001	2499	F2	5365
	7	29	10	53	12.9018	1	3	43	1.846	44	19	32.82	4		9001	2499	F3	5366
	7	29	10	53	16.9018	1	3	43	31.145	43	49	18.26	4		9001	2499	F4	4847
	7	29	10	53	20.9018	1	3	44	.528	43	19	3.47	4		9001	2499	F5	4848
	7	29	10	53	24.9018	1	3	44	29.584	42	48	55.56	4		9001	2499	F6	4849
	7	29	10	53	28.9018	1	3	44	58.083	42	18	48.39	4		9001	2499	F7	5367
	7	29	10	55	4.9023	1	3	55	27.218	30	41	13.24	4		9001	2500	F1	4756
	7	29	10	55	8.9023	1	3	55	51.481	30	13	24.97	4		9001	2500	F2	5368
	7	29	10	55	12.9023	1	3	56	15.839	29	45	40.73	4		9001	2500	F3	5369
	7	29	10	55	16.9023	1	3	56	40.109	29	18	2.93	4		9001	2500	F4	5370
	7	29	10	55	20.9024	1	3	57	4.197	28	50	33.98	4		9001	2500	F5	4757
	7	29	10	55	24.9024	1	3	57	28.155	28	23	10.97	4		9001	2500	F6	5371
	7	29	10	55	28.9024	1	3	57	51.945	27	55	54.55	4		9001	2500	F7	5372
	7	29	22	26	4.9025	1	13	8	4.179	43	45	50.24	4		9004	8405	F1	6950
	7	29	22	26	8.9025	1	13	7	52.711	44	20	40.60	4		9004	8405	F2	6951
	7	29	22	26	12.9025	1	13	7	40.571	44	55	38.81	4		9004	8405	F3	6952
	7	29	22	26	16.9025	1	13	7	27.637	45	30	44.33	4		9004	8405	F4	6953
	7	29	22	26	20.9025	1	13	7	13.890	46	5	53.24	4		9004	8405	F5	6342
	7	29	22	26	24.9024	1	13	6	59.343	46	41	5.88	4		9004	8405	F6	6343
	7	29	22	30	4.9027	1	11	43	50.640	77	59	40.07	4		9004	8406	F1	6344
	7	29	22	30	12.9028	3	11	32	6.874	78	54	55.13	4		9004	8406	F3	9780

July 29-30, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	7	29	22	30	16.9028	1	11	25	29.987	79	21	32.35	4		9004	8406	F4	6345
	7	29	22	30	20.9028	1	11	18	22.015	79	47	25.61	4		9004	8406	F5	6346
	7	29	22	30	24.9028	1	11	10	37.425	80	12	32.86	4		9004	8406	F6	6347
	7	29	22	30	28.9029	1	11	2	13.843	80	36	43.81	4		9004	8406	F7	6348
	7	30	0	39	4.9059	1	7	30	39.930	75	7	7.98	4		9004	8412	F1	8167
	7	30	0	39	8.9059	1	7	24	40.723	74	59	17.84	4		9004	8412	F2	8168
	7	30	0	39	12.9059	1	7	18	40.847	74	50	49.80	4		9004	8412	F3	8169
	7	30	0	39	16.9059	1	7	13	6.223	74	41	47.75	4		9004	8412	F4	8170
	7	30	0	39	20.9059	1	7	7	27.429	74	32	7.31	4		9004	8412	F5	9401
	7	30	0	39	24.9059	1	7	1	59.559	74	22	2.47	4		9004	8412	F6	8172
	7	30	0	39	28.9060	1	6	56	38.330	74	11	19.45	4		9004	8412	F7	8173
	7	30	2	20	4.9031	1	12	39	46.884	18	16	45.61	4		9010	4196	F1	9279
	7	30	2	20	8.9031	1	12	39	59.867	18	50	32.18	4		9010	4196	F2	9280
	7	30	2	20	12.9030	1	12	40	12.870	19	24	28.74	4		9010	4196	F3	9281
	7	30	2	20	16.9030	1	12	40	25.193	19	58	40.12	4		9010	4196	F4	9282
	7	30	2	20	20.9029	1	12	40	37.345	20	33	2.15	4		9010	4196	F5	9283
	7	30	2	20	24.9029	1	12	40	49.328	21	7	38.30	4		9010	4196	F6	9284
	7	30	2	20	28.9029	1	12	41	1.227	21	42	27.13	4		9010	4196	F7	9285
	7	30	2	46	4.9049	1	6	44	13.315	82	24	10.86	4		9004	8420	F1	8174
	7	30	2	46	8.9049	1	6	34	21.006	82	6	25.40	4		9004	8420	F2	8175
	7	30	2	46	12.9049	1	6	25	13.269	81	47	48.00	4		9004	8420	F3	9402
	7	30	2	46	16.9049	1	6	16	43.814	81	28	18.89	4		9004	8420	F4	9403
	7	30	2	46	20.9049	1	6	8	53.700	81	8	9.89	4		9004	8420	F5	8177
	7	30	2	46	24.9048	1	6	1	38.592	80	47	23.38	4		9004	8420	F6	8178
	7	30	2	46	28.9048	1	5	54	55.160	80	26	2.63	4		9004	8420	F7	9404
	7	30	4	25	4.9023	1	13	4	42.280	46	20	57.43	4		9001	2508	F1	3426
	7	30	4	25	8.9022	1	13	4	41.379	47	0	54.21	4		9001	2508	F2	3427
	7	30	4	25	16.9022	1	13	4	37.758	48	20	53.15	4		9001	2508	F4	3428
	7	30	4	25	20.9022	1	13	4	34.849	49	0	51.53	4		9001	2508	F5	3429
	7	30	4	25	24.9022	1	13	4	31.659	49	40	54.94	4		9001	2508	F6	3430
	7	30	4	25	28.9022	1	13	4	27.285	50	20	58.69	4		9001	2508	F7	3431
	7	30	4	27	4.9024	1	12	57	28.652	66	2	43.85	4		9001	2509	F1	5373
	7	30	4	27	8.9025	1	12	56	50.000	66	40	25.40	4		9001	2509	F2	4756
	7	30	4	27	12.9025	1	12	56	8.206	67	17	54.84	4		9001	2509	F3	5374
	7	30	4	27	16.9025	1	12	55	24.060	67	55	14.50	4		9001	2509	F4	4759
	7	30	4	27	20.9025	1	12	54	36.023	68	32	23.11	4		9001	2509	F5	5375
	7	30	4	27	24.9025	1	12	53	44.983	69	9	18.66	4		9001	2509	F6	6962
	7	30	4	27	28.9026	1	12	52	50.472	69	45	59.79	4		9001	2509	F7	5376
	7	30	8	42	4.9083	1	12	4	.431	71	52	11.92	4		9001	2521	F1	4488
	7	30	8	42	8.9082	1	12	0	52.233	72	7	18.11	4		9001	2521	F2	4489
	7	30	8	42	12.9082	1	11	57	37.589	72	22	22.65	4		9001	2521	F3	4490
	7	30	8	42	16.9082	1	11	54	17.934	72	37	4.12	4		9001	2521	F4	4491
	7	30	8	42	20.9082	1	11	50	49.113	72	51	38.82	4		9001	2521	F5	4492
	7	30	8	42	24.9081	1	11	47	15.113	73	5	57.02	4		9001	2521	F6	4493
	7	30	8	42	28.9081	1	11	43	35.434	73	19	59.25	4		9001	2521	F7	4494
	7	30	8	44	4.9077	1	9	37	31.626	77	0	23.13	4		9001	2522	F1	4495
	7	30	8	44	8.9077	1	9	30	55.738	77	2	42.49	4		9001	2522	F2	6500
	7	30	8	44	12.9077	1	9	24	18.937	77	4	30.23	4		9001	2522	F3	4497
	7	30	8	44	16.9077	1	9	17	38.501	77	5	27.80	4		9001	2522	F4	4498
	7	30	8	44	20.9077	1	9	10	58.250	77	5	44.30	4		9001	2522	F5	4499
	7	30	8	44	24.9077	1	9	4	16.957	77	5	24.27	4		9001	2522	F6	4500
	7	30	8	44	28.9076	1	8	57	35.804	77	4	21.00	4		9001	2522	F7	4501
	7	30	8	50	4.9072	1	15	21	34.097	85	32	10.67	4		9010	4220	F1	9554
	7	30	8	50	8.9072	1	15	20	26.896	85	53	3.87	4		9010	4220	F2	9555
	7	30	8	50	12.9072	1	15	19	5.283	86	13	59.97	4		9010	4220	F3	9556
	7	30	8	50	16.9071	1	15	17	24.566	86	34	59.24	4		9010	4220	F4	9972
	7	30	8	50	20.9071	1	15	15	16.035	86	56	2.53	4		9010	4220	F5	9557
	7	30	8	50	24.9070	1	15	12	31.749	87	17	15.10	4		9010	4220	F6	9558
	7	30	8	50	28.9070	1	15	8	53.562	87	38	26.06	4		9010	4220	F7	9559
	7	30	8	52	4.9062	1	3	54	44.539	83	17	41.02	4		9010	4221	F1	521
	7	30	8	52	8.9062	1	3	54	24.299	82	53	54.83	4		9010	4221	F2	9560
	7	30	8	52	12.9062	1	3	54	6.128	82	30	1.94	4		9010	4221	F3	9561
	7	30	8	52	16.9061	1	3	53	52.432	82	6	.05	4		9010	4221	F4	9562
	7	30	8	52	20.9061	1	3	53	40.057	81	41	57.28	4		9010	4221	F5	9563
	7	30	8	52	24.9061	1	3	53	31.657	81	17	47.28	4		9010	4221	F6	9973
	7	30	8	52	28.9060	1	3	53	24.976	80	53	34.51	4		9010	4221	F7	9565
	7	30	8	57	4.9051	1	4	4	39.006	50	5	17.02	4		9010	4223	F1	9728
	7	30	8	57	8.9051	1	4	4	53.385	49	37	15.07	4		9010	4223	F2	9729
	7	30	8	57	12.9051	1	4	5	7.902	49	9	11.07	4		9010	4223	F3	9974
	7	30	8	57	16.9051	1	4	5	22.581	48	41	6.75	4		9010	4223	F4	9730
	7	30	8	57	20.9051	1	4	5	37.197	48	13	2.74	4		9010	4223	F5	9731
	7	30	8	57	24.9051	1	4	5	51.885	47	45	1.96	4		9010	4223	F6	9732
	7	30	8	57	28.9051	1	4	6	6.542	47	16	58.99	4		9010	4223	F7	9733
	7	30	9	0	4.9055	1	4	16	17.140	29	36	20.14	4		9010	4224	F1	9734
	7	30	9	0	8.9056	1	4	16	33.463	29	10	26.15	4		9010	4224	F2	9735
	7	30	9	0	12.9056	1	4	16	49.998	28	44	34.08	4		9010	4224	F3	9975
	7	30	9	0	16.9056	1	4	17	6.629	28	18	48.79	4		9010	4224	F4	9736
	7	30	9	0	20.9056	1	4	17	23.122	27	53	13.03	4		9010	4224	F5	9737
	7	30	9	0	24.9057	1	4	17	39.799	27	27	37.64	4		9010	4224	F6	9976
	7	30	9	0	28.9057	1	4	17	56.573	27	2	9.23	4		9010	4224	F7	9738

July 30-31, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	7	30	10	50	4.9061	1	18	18	43.148	78	4	30.34	4		9001	2531	F1	4611
	7	30	10	50	8.9060	1	18	24	10.139	78	20	19.02	4		9001	2531	F2	4612
	7	30	10	50	12.9060	1	18	29	52.747	78	35	46.98	4		9001	2531	F3	4613
	7	30	10	50	16.9059	1	18	35	52.282	78	50	55.84	4		9001	2531	F4	4614
	7	30	10	50	20.9059	1	18	42	10.745	79	5	44.12	4		9001	2531	F5	4615
	7	30	10	50	24.9058	1	18	48	47.840	79	20	9.16	4		9001	2531	F6	4616
	7	30	10	50	28.9058	1	18	55	44.518	79	34	6.72	4		9001	2531	F7	5428
	7	30	10	52	4.9049	1	23	4	5.953	80	46	4.31	4		9001	2532	F1	4617
	7	30	10	52	8.9049	1	23	14	13.499	80	34	34.65	4		9001	2532	F2	4618
	7	30	10	52	12.9049	1	23	24	.023	80	21	58.84	4		9001	2532	F3	4619
	7	30	10	52	16.9048	1	23	33	22.711	80	8	22.86	4		9001	2532	F4	4620
	7	30	10	52	20.9048	1	23	42	24.181	79	53	49.97	4		9001	2532	F5	4621
	7	30	10	52	24.9048	1	23	51	3.345	79	38	18.68	4		9001	2532	F6	4622
	7	30	10	52	28.9047	1	23	59	17.239	79	21	54.28	4		9001	2532	F7	4623
	7	30	10	54	4.9041	1	1	55	33.588	70	0	34.19	4		9001	2533	F1	3432
	7	30	10	54	8.9041	1	1	58	15.267	69	32	44.19	4		9001	2533	F2	3433
	7	30	10	54	12.9041	1	2	0	50.982	69	4	41.86	4		9001	2533	F3	3434
	7	30	10	54	16.9041	1	2	3	20.887	68	36	21.70	4		9001	2533	F4	3435
	7	30	10	54	20.9040	1	2	5	45.660	68	7	53.24	4		9001	2533	F5	3436
	7	30	10	54	24.9040	1	2	8	5.565	67	39	14.82	4		9001	2533	F6	3437
	7	30	10	54	28.9040	1	2	10	21.061	67	10	19.03	4		9001	2533	F7	3438
	7	30	10	56	4.9037	1	2	48	32.710	54	54	54.38	4		9001	2534	F1	5245
	7	30	10	56	8.9037	1	2	49	41.686	54	23	6.91	4		9001	2534	F2	5246
	7	30	10	56	12.9037	1	2	50	49.366	53	51	17.90	4		9001	2534	F3	5247
	7	30	10	56	16.9037	1	2	51	55.675	53	19	23.86	4		9001	2534	F4	5248
	7	30	10	56	20.9037	1	2	53	.415	52	47	27.69	4		9001	2534	F5	5249
	7	30	10	56	24.9037	1	2	54	4.186	52	15	32.82	4		9001	2534	F6	5250
	7	30	10	56	28.9037	1	2	55	6.509	51	43	33.45	4		9001	2534	F7	5251
	7	30	10	58	4.9039	1	3	15	36.376	38	57	41.47	4		9001	2535	F1	6943
	7	30	10	58	8.9039	1	3	16	19.236	38	26	16.14	4		9001	2535	F2	5252
	7	30	10	58	12.9039	1	3	17	1.512	37	54	56.54	4		9001	2535	F3	5253
	7	30	10	58	16.9039	1	3	17	43.797	37	23	41.97	4		9001	2535	F4	5254
	7	30	10	58	20.9039	1	3	18	25.065	36	52	26.91	4		9001	2535	F5	5255
	7	30	10	58	24.9039	1	3	19	5.895	36	21	22.33	4		9001	2535	F6	5256
	7	30	10	58	28.9040	1	3	19	46.668	35	50	21.57	4		9001	2535	F7	5257
	7	30	10	58	34.9142	1								2.6557090	7901			5412
	7	30	10	59	4.9143	1								2.6959570	7901			5413
	7	30	11	0	4.9045	1	3	34	15.472	23	57	6.00	4		9001	2536	F1	47A0
	7	30	11	0	8.9045	1	3	34	48.400	23	28	54.79	4		9001	2536	F2	47A1
	7	30	11	0	12.9045	1	3	35	20.825	23	0	48.72	4		9001	2536	F3	47A2
	7	30	11	0	16.9045	1	3	35	53.412	22	32	52.83	4		9001	2536	F4	47A3
	7	30	11	0	20.9046	1	3	36	25.435	22	5	7.66	4		9001	2536	F5	47A4
	7	30	11	0	24.9046	1	3	36	57.568	21	37	27.02	4		9001	2536	F6	47A5
	7	30	11	0	28.9046	1	3	37	29.277	21	9	54.19	4		9001	2536	F7	47A6
	7	30	22	29	4.9063	1	12	55	4.541	33	32	53.77	4		9004	8441	F1	9566
	7	30	22	29	8.9063	1	12	54	57.799	34	2	30.42	4		9004	8441	F2	9567
	7	30	22	29	12.9062	1	12	54	50.648	34	32	19.81	4		9004	8441	F3	9568
	7	30	22	29	16.9062	1	12	54	42.862	35	2	14.29	4		9004	8441	F4	9569
	7	30	22	29	20.9062	1	12	54	34.884	35	32	15.30	4		9004	8441	F5	9570
	7	30	22	29	24.9062	1	12	54	26.310	36	2	24.28	4		9004	8441	F6	9958
	7	30	22	29	28.9061	1	12	54	16.593	36	32	38.39	4		9004	8441	F7	9572
	7	30	22	31	4.9057	1	12	47	6.954	49	11	12.76	4		9004	8442	F1	9573
	7	30	22	31	8.9056	1	12	46	37.870	49	43	45.93	4		9004	8442	F2	9959
	7	30	22	31	12.9056	1	12	46	6.865	50	16	23.56	4		9004	8442	F3	9574
	7	30	22	31	16.9056	1	12	45	35.188	50	49	3.59	4		9004	8442	F4	9575
	7	30	22	31	20.9056	1	12	45	1.585	51	21	44.05	4		9004	8442	F5	9576
	7	30	22	31	24.9056	1	12	44	26.708	51	54	29.51	4		9004	8442	F6	9577
	7	30	22	31	28.9056	1	12	43	51.100	52	27	15.12	4		9004	8442	F7	9960
	7	30	22	33	4.9055	1	12	18	35.369	65	26	20.04	4		9004	8443	F1	9179
	7	30	22	33	8.9056	1	12	16	50.888	65	57	44.02	4		9004	8443	F2	91A0
	7	30	22	33	12.9056	1	12	15	2.124	66	29	3.24	4		9004	8443	F3	91A1
	7	30	22	33	16.9056	1	12	13	7.482	67	0	11.51	4		9004	8443	F4	91A2
	7	30	22	33	20.9056	1	12	11	7.906	67	31	9.28	4		9004	8443	F5	91A3
	7	30	22	33	24.9056	1	12	9	2.461	68	1	57.26	4		9004	8443	F6	91A4
	7	30	22	33	28.9056	1	12	6	50.218	68	32	32.36	4		9004	8443	F7	91A5
	7	30	22	37	4.9069	1	5	8	17.911	78	17	6.20	4		9004	8444	F1	91A6
	7	30	22	37	8.9069	1	5	2	10.555	77	59	26.81	4		9004	8444	F2	91A7
	7	30	22	37	12.9070	1	4	56	24.497	77	41	15.78	4		9004	8444	F3	91A8
	7	30	22	37	16.9070	1	4	50	56.760	77	22	48.02	4		9004	8444	F4	91A9
	7	30	22	37	20.9070	1	4	45	48.776	77	3	57.34	4		9004	8444	F5	91B0
	7	30	22	37	24.9071	1	4	40	56.832	76	44	55.02	4		9004	8444	F6	91B1
	7	30	22	37	28.9071	1	4	36	20.681	76	25	32.29	4		9004	8444	F7	91B2
	7	31	0	44	4.9085	1	6	50	29.063	74	12	39.75	4		9004	8452	F1	6470
	7	31	0	44	8.9086	1	6	45	17.983	74	0	57.63	4		9004	8452	F2	6471
	7	31	0	44	12.9086	1	6	40	14.958	73	48	50.25	4		9004	8452	F3	6472
	7	31	0	44	16.9086	1	6	35	20.343	73	36	15.15	4		9004	8452	F4	6473
	7	31	0	44	20.9086	1	6	30	34.933	73	23	13.68	4		9004	8452	F5	6474
	7	31	0	44	24.9086	1	6	25	56.475	73	9	44.65	4		9004	8452	F6	6475
	7	31	0	44	28.9086	1	6	21	26.419	72	55	53.41	4		9004	8452	F7	6476
	7	31	2	52	8.9069	1	4	8	51.091	74	7	25.10	4		9004	8462	F2	6477

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	7	31	2	52	12.9069	1	4	7	40.944	73	39	9.79	4		9004	8462	F3	6478
	7	31	2	52	16.9068	1	4	6	35.089	73	10	49.02	4		9004	8462	F4	6479
	7	31	2	52	20.9068	1	4	5	33.970	72	42	24.90	4		9004	8462	F5	64R0
	7	31	2	52	24.9068	1	4	4	36.260	72	14	3.65	4		9004	8462	F6	64R1
	7	31	2	52	28.9068	1	4	3	42.370	71	45	35.14	4		9004	8462	F7	64R2
	7	31	4	26	4.9069	1	12	41	30.493	18	31	29.17	4		9001	2541	F1	47R7
	7	31	4	26	8.9068	1	12	41	37.075	19	0	41.98	4		9001	2541	F2	47R8
	7	31	4	26	12.9068	1	12	41	43.865	19	30	6.54	4		9001	2541	F3	47R9
	7	31	4	26	16.9067	1	12	41	50.386	19	59	47.94	4		9001	2541	F4	47R0
	7	31	4	26	20.9067	1	12	41	56.276	20	29	37.81	4		9001	2541	F5	4791
	7	31	4	26	24.9067	1	12	42	2.509	20	59	38.36	4		9001	2541	F6	4792
	7	31	4	26	28.9066	1	12	42	8.013	21	29	49.13	4		9001	2541	F7	4793
	7	31	4	32	4.9059	1	12	6	34.654	69	35	59.15	4		9001	2542	F1	40R1
	7	31	4	32	8.9059	1	12	4	35.248	70	8	21.02	4		9001	2542	F2	40R2
	7	31	4	32	12.9059	1	12	2	28.674	70	40	24.20	4		9001	2542	F3	40R3
	7	31	4	32	16.9059	1	12	0	15.360	71	12	14.20	4		9001	2542	F4	40R4
	7	31	4	32	20.9060	1	11	57	53.349	71	43	47.55	4		9001	2542	F5	40R5
	7	31	4	32	24.9060	1	11	55	23.668	72	15	6.19	4		9001	2542	F6	40R6
	7	31	4	35	4.9073	1	5	39	7.287	82	11	20.99	4		9001	2543	F1	40R8
	7	31	4	35	8.9073	1	5	28	20.937	81	58	.83	4		9001	2543	F2	40R9
	7	31	4	35	12.9074	1	5	18	12.798	81	43	40.82	4		9001	2543	F3	4090
	7	31	4	35	16.9074	1	5	8	46.776	81	28	31.65	4		9001	2543	F4	4091
	7	31	4	35	20.9075	1	4	59	58.763	81	12	35.80	4		9001	2543	F5	4092
	7	31	4	35	24.9075	1	4	51	45.079	80	56	.06	4		9001	2543	F6	4093
	7	31	4	35	28.9076	1	4	44	5.870	80	38	54.00	4		9001	2543	F7	4094
	7	31	8	54	4.9097	1	17	8	45.372	81	30	5.87	4		9010	4230	F1	9841
	7	31	8	54	8.9097	1	17	13	7.873	81	47	55.66	4		9010	4230	F2	9842
	7	31	8	54	12.9097	1	17	17	49.112	82	5	43.91	4		9010	4230	F3	9843
	7	31	8	54	16.9096	1	17	22	55.869	82	23	30.36	4		9010	4230	F4	9844
	7	31	8	54	20.9096	1	17	28	25.792	82	41	6.58	4		9010	4230	F5	9845
	7	31	8	54	24.9095	1	17	34	24.276	82	58	32.69	4		9010	4230	F6	9846
	7	31	8	54	28.9095	1	17	40	55.025	83	15	45.24	4		9010	4230	F7	9847
	7	31	8	56	4.9086	1	0	12	24.416	85	3	8.46	4		9010	4231	F1	9848
	7	31	8	56	8.9085	1	0	25	46.776	84	47	24.15	4		9010	4231	F2	9849
	7	31	8	56	12.9085	1	0	37	5?.113	84	30	44.78	4		9010	4231	F3	9850
	7	31	8	56	16.9085	1	0	48	49.662	84	13	10.18	4		9010	4231	F4	9851
	7	31	8	56	20.9084	1	0	58	47.895	83	54	52.79	4		9010	4231	F5	9852
	7	31	8	56	24.9084	1	1	7	51.995	83	35	50.55	4		9010	4231	F6	9853
	7	31	8	56	28.9084	1	1	16	8.679	83	16	10.24	4		9010	4231	F7	9854
	7	31	9	0	4.9071	1	3	17	51.430	59	56	50.11	4		9010	4232	F1	9213
	7	31	9	0	8.9071	1	3	18	36.018	59	27	42.42	4		9010	4232	F2	9214
	7	31	9	0	12.9071	1	3	19	19.441	58	58	30.80	4		9010	4232	F3	9215
	7	31	9	0	16.9071	1	3	20	2.621	58	29	15.47	4		9010	4232	F4	9216
	7	31	9	0	20.9070	1	3	20	44.740	57	59	57.22	4		9010	4232	F5	9217
	7	31	9	0	24.9070	1	3	21	26.428	57	30	35.00	4		9010	4232	F6	9218
	7	31	9	0	28.9070	1	3	22	7.482	57	1	11.68	4		9010	4232	F7	9886
	7	31	9	3	4.9070	1	3	43	21.639	37	40	7.96	4		9010	4233	F1	9220
	7	31	9	3	8.9070	1	3	43	49.202	37	10	43.92	4		9010	4233	F2	9221
	7	31	9	3	12.9071	1	3	44	16.428	36	41	24.10	4		9010	4233	F3	9222
	7	31	9	3	16.9071	1	3	44	44.047	36	12	8.11	4		9010	4233	F4	9657
	7	31	9	3	20.9071	1	3	45	11.194	35	42	56.70	4		9010	4233	F5	9224
	7	31	9	3	24.9071	1	3	45	38.179	35	13	47.13	4		9010	4233	F6	9225
	7	31	9	3	28.9071	1	3	46	5.009	34	44	41.32	4		9010	4233	F7	9226
	7	31	11	2	4.9059	1	2	35	19.862	39	28	43.91	4		9001	2576	F1	4863
	7	31	11	2	8.9059	1	2	36	23.326	38	55	53.93	4		9001	2576	F2	5436
	7	31	11	2	12.9059	1	2	37	26.442	38	23	9.27	4		9001	2576	F3	5437
	7	31	11	2	16.9059	1	2	38	28.285	37	50	24.22	4		9001	2576	F4	5438
	7	31	11	2	20.9059	1	2	39	29.426	37	17	43.28	4		9001	2576	F5	5439
	7	31	11	2	24.9059	1	2	40	29.804	36	45	5.31	4		9001	2576	F6	5440
	7	31	11	2	28.9060	1	2	41	29.827	36	12	30.37	4		9001	2576	F7	4867
	7	31	11	4	4.9064	1	3	2	6.917	23	35	58.76	4		9001	2577	F1	4431
	7	31	11	4	8.9064	1	3	2	52.166	23	5	53.83	4		9001	2577	F2	4432
	7	31	11	4	12.9064	1	3	3	36.847	22	35	54.68	4		9001	2577	F3	4433
	7	31	11	4	16.9065	1	3	4	21.219	22	6	7.80	4		9001	2577	F4	4434
	7	31	11	4	20.9065	1	3	5	5.166	21	36	22.79	4		9001	2577	F5	4435
	7	31	11	4	24.9065	1	3	5	48.899	21	6	51.69	4		9001	2577	F6	4436
	7	31	11	4	28.9065	1	3	6	32.100	20	37	26.56	4		9001	2577	F7	4437
	7	31	11	6	4.9073	1	3	22	21.845	9	37	28.22	4		9001	2578	F1	5435
	7	31	11	6	8.9073	1	3	22	58.525	9	11	57.74	4		9001	2578	F2	4438
	7	31	11	6	12.9074	1	3	23	34.880	8	46	40.21	4		9001	2578	F3	4439
	7	31	11	6	16.9074	1	3	24	10.878	8	21	25.15	4		9001	2578	F4	4440
	7	31	11	6	20.9075	1	3	24	46.808	7	56	19.88	4		9001	2578	F5	4441
	7	31	11	6	24.9075	1	3	25	22.739	7	31	28.04	4		9001	2578	F6	6502
	7	31	11	6	28.9075	1	3	25	58.422	7	6	44.33	4		9001	2578	F7	4442
	7	31	22	37	4.9087	1	12	9	51.389	61	14	4.64	4		9004	8486	F1	7148
	7	31	22	37	8.9087	1	12	8	24.830	61	43	43.36	4		9004	8486	F2	7149
	7	31	22	37	12.9087	1	12	6	55.463	62	13	18.16	4		9004	8486	F3	7150
	7	31	22	37	16.9087	1	12	5	22.603	62	42	48.42	4		9004	8486	F4	7151
	7	31	22	37	20.9087	1	12	3	45.749	63	12	7.05	4		9004	8486	F5	7152
	7	31	22	37	24.9087	1	12	2	4.217	63	41	19.44	4		9004	8486	F6	7153

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	7	31	22	37	28.9087	1	12	0	19.573	64	10	28.45	4		9004	8486	F7	7154
	7	31	22	42	4.9101	1	4	56	10.800	75	15	1.67	4		9004	8487	F1	7155
	7	31	22	42	8.9101	1	4	51	43.277	74	57	29.95	4		9004	8487	F2	7156
	7	31	22	42	12.9101	1	4	47	27.166	74	39	42.18	4		9004	8487	F3	7157
	7	31	22	42	16.9102	1	4	43	23.463	74	21	38.79	4		9004	8487	F4	7158
	7	31	22	42	20.9102	1	4	39	30.478	74	3	26.97	4		9004	8487	F5	7159
	7	31	22	42	24.9103	1	4	35	48.183	73	44	57.49	4		9004	8487	F6	7160
	7	31	22	42	28.9103	1	4	32	14.889	73	26	25.50	4		9004	8487	F7	7161
	8	1	0	48	4.9110	1	7	35	19.949	75	52	40.39	4		9004	8495	F1	4857
	8	1	0	48	8.9110	1	7	28	53.399	75	45	47.56	4		9004	8495	F2	4858
	8	1	0	48	12.9110	1	7	22	34.859	75	38	9.93	4		9004	8495	F3	4859
	8	1	0	48	16.9110	1	7	16	21.589	75	29	49.44	4		9004	8495	F4	4860
	8	1	0	48	24.9110	1	7	4	21.167	75	11	19.22	4		9004	8495	F6	5068
	8	1	0	48	28.9110	1	6	58	33.449	75	1	8.68	4		9004	8495	F7	4862
	8	1	2	55	4.9094	1	3	15	16.925	85	50	30.69	4		9004	8503	F1	4863
	8	1	2	55	8.9094	1	3	14	57.974	85	22	20.77	4		9004	8503	F2	4864
	8	1	2	55	12.9094	1	3	14	43.912	84	54	6.88	4		9004	8503	F3	4865
	8	1	2	55	16.9093	1	3	14	32.323	84	25	47.65	4		9004	8503	F4	4866
	8	1	2	55	20.9093	1	3	14	26.725	83	57	29.53	4		9004	8503	F5	4867
	8	1	2	55	24.9093	1	3	14	20.401	83	28	51.61	4		9004	8503	F6	4868
	8	1	2	58	43.7022	1	3	22	34.165	58	43	9.99	4		9004	8504	04	6870
	8	1	4	34	4.9090	1	12	18	22.935	48	33	36.98	4		9001	2588	F1	9326
	8	1	4	34	8.9090	1	12	17	52.257	49	6	16.85	4		9001	2588	F2	9327
	8	1	4	34	12.9090	1	12	17	19.977	49	39	1.29	4		9001	2588	F3	9328
	8	1	4	34	16.9090	1	12	16	46.607	50	11	42.20	4		9001	2588	F4	9329
	8	1	4	34	20.9090	1	12	16	11.913	50	44	24.77	4		9001	2588	F5	9330
	8	1	4	34	24.9090	1	12	15	35.691	51	17	8.87	4		9001	2588	F6	9331
	8	1	4	34	28.9089	1	12	14	57.974	51	49	50.08	4		9001	2588	F7	9332
	8	1	4	36	4.9090	1	11	49	28.608	64	36	20.71	4		9001	2589	F1	9333
	8	1	4	36	8.9091	1	11	47	46.867	65	6	48.89	4		9001	2589	F2	9334
	8	1	4	36	12.9091	1	11	46	.163	65	37	5.25	4		9001	2589	F3	9335
	8	1	4	36	16.9091	1	11	44	9.269	66	7	17.59	4		9001	2589	F4	9336
	8	1	4	36	20.9091	1	11	42	13.577	66	37	13.28	4		9001	2589	F5	9337
	8	1	4	36	24.9091	1	11	40	12.244	67	6	57.82	4		9001	2589	F6	9338
	8	1	4	36	28.9091	1	11	38	5.134	67	36	30.22	4		9001	2589	F7	9339
	8	1	4	39	4.9101	1	7	43	38.458	80	26	28.89	4		9001	2590	F1	9149
	8	1	4	39	8.9101	1	7	32	58.987	80	27	49.97	4		9001	2590	F2	9150
	8	1	4	39	12.9102	1	7	22	19.942	80	27	53.84	4		9001	2590	F3	9151
	8	1	4	39	16.9102	1	7	11	45.539	80	26	40.45	4		9001	2590	F4	9152
	8	1	4	39	20.9102	1	7	1	20.021	80	24	11.56	4		9001	2590	F5	9153
	8	1	4	39	24.9103	1	6	51	4.414	80	20	31.20	4		9001	2590	F6	9418
	8	1	4	39	28.9103	1	6	41	2.719	80	15	45.15	4		9001	2590	F7	9419
	8	1	6	46	4.9130	1	8	41	16.451	73	15	2.40	4		9001	2597	F1	9154
	8	1	6	46	8.9130	1	8	36	7.403	73	17	29.58	4		9001	2597	F2	9420
	8	1	6	46	12.9130	1	8	30	58.180	73	19	23.63	4		9001	2597	F3	9421
	8	1	6	46	16.9130	1	8	25	48.139	73	20	42.42	4		9001	2597	F4	9155
	8	1	6	46	20.9130	1	8	20	36.779	73	21	31.75	4		9001	2597	F5	9156
	8	1	6	46	24.9130	1	8	15	26.180	73	21	47.39	4		9001	2597	F6	9422

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	8	1	6	46	28.9130	1	8	10	15.735	73	21	33.44	4		9001	2597	F7	9158
	8	1	8	53	4.9124	1	10	8	56.999	80	0	46.96	4		9001	2607	F1	3854
	8	1	8	53	8.9124	1	10	0	28.176	80	6	53.46	4		9001	2607	F2	3855
	8	1	8	53	12.9124	1	9	51	49.729	80	12	21.84	4		9001	2607	F3	3856
	8	1	8	53	16.9123	1	9	42	59.004	80	16	47.63	4		9001	2607	F4	3857
	8	1	8	53	20.9123	1	9	34	.772	80	20	19.09	4		9001	2607	F5	3858
	8	1	8	53	24.9123	1	9	24	55.427	80	22	57.99	4		9001	2607	F6	3859
	8	1	8	53	28.9123	1	9	15	42.626	80	24	35.12	4		9001	2607	F7	3860
	8	1	8	55	4.9119	1	6	12	59.455	76	43	16.10	4		9001	2608	F1	3861
	8	1	8	55	8.9119	1	6	8	9.102	76	25	56.26	4		9001	2608	F2	3862
	8	1	8	55	12.9119	1	6	3	29.991	76	8	11.28	4		9001	2608	F3	3863
	8	1	8	55	16.9119	1	5	59	4.481	75	50	7.99	4		9001	2608	F4	3864
	8	1	8	55	20.9119	1	5	54	48.860	75	31	38.16	4		9001	2608	F5	3865
	8	1	8	55	24.9119	1	5	50	45.630	75	12	54.73	4		9001	2608	F6	3866
	8	1	8	55	28.9119	1	5	46	51.806	74	53	49.97	4		9001	2608	F7	3867
	8	1	8	58	4.9118	1	4	32	.693	60	26	52.07	4		9001	2609	F1	4072
	8	1	8	58	8.9118	1	4	31	9.928	60	3	9.95	4		9001	2609	F2	4073
	8	1	8	58	12.9118	1	4	30	20.502	59	39	40.48	4		9001	2609	F3	4074
	8	1	8	58	16.9118	1	4	29	33.224	59	16	3.59	4		9001	2609	F4	4075
	8	1	8	58	20.9118	1	4	28	46.762	58	52	33.26	4		9001	2609	F5	4746
	8	1	8	58	24.9118	1	4	28	2.238	58	28	53.44	4		9001	2609	F6	4077
	8	1	8	58	28.9118	1	4	27	19.337	58	5	19.31	4		9001	2609	F7	4078
	8	1	9	2	4.9128	1	4	9	46.153	37	37	2.90	4		9001	2611	F1	492
	8	1	9	2	8.9128	1	4	9	40.829	37	15	42.50	4		9001	2611	F2	493
	8	1	9	2	12.9129	1	4	9	35.329	36	54	30.60	4		9001	2611	F3	494
	8	1	9	2	16.9129	1	4	9	30.817	36	33	20.82	4		9001	2611	F4	495
	8	1	9	2	20.9129	1	4	9	26.280	36	12	12.47	4		9001	2611	F5	496
	8	1	9	2	24.9129	1	4	9	22.172	35	51	12.04	4		9001	2611	F6	497
	8	1	9	2	28.9130	1	4	9	18.496	35	30	14.11	4		9001	2611	F7	498
	8	1	9	4	4.9137	1	4	8	58.005	27	28	4.91	4		9001	2612	F1	2679
	8	1	9	4	8.9137	1	4	8	59.527	27	8	57.48	4		9001	2612	F2	4346
	8	1	9	4	12.9138	1	4	9	1.401	26	49	50.39	4		9001	2612	F3	2681
	8	1	9	4	16.9138	1	4	9	3.566	26	30	51.89	4		9001	2612	F4	2682
	8	1	9	4	20.9138	1	4	9	6.039	26	11	48.48	4		9001	2612	F5	2683
	8	1	9	4	24.9139	1	4	9	8.403	25	52	52.42	4		9001	2612	F6	2684
	8	1	9	4	28.9139	1	4	9	10.733	25	34	5.77	4		9001	2612	F7	2685
	8	1	10	59	4.9108	1	19	32	22.113	69	39	16.93	4		9001	2627	F1	2686
	8	1	10	59	8.9107	1	19	36	39.725	69	45	47.19	4		9001	2627	F2	2687
	8	1	10	59	12.9107	1	19	41	1.318	69	52	1.02	4		9001	2627	F3	4347
	8	1	10	59	16.9107	1	19	45	26.923	69	57	47.87	4		9001	2627	F4	4399
	8	1	10	59	20.9106	1	19	49	57.225	70	3	17.13	4		9001	2627	F5	2689
	8	1	10	59	24.9106	1	19	54	31.355	70	8	23.81	4		9001	2627	F6	2690
	8	1	10	59	28.9105	1	19	59	9.126	70	13	2.87	4		9001	2627	F7	4400
	8	1	11	1	4.9095	1	22	2	.749	69	37	7.12	4		9001	2628	F1	2691
	8	1	11	1	8.9095	1	22	7	9.045	69	28	30.57	4		9001	2628	F2	4401
	8	1	11	1	12.9095	1	22	12	15.925	69	19	15.86	4		9001	2628	F3	2693
	8	1	11	1	16.9094	1	22	17	19.775	69	9	27.24	4		9001	2628	F4	2694
	8	1	11	1	20.9094	1	22	22	20.881	68	59	6.39	4		9001	2628	F5	2695
	8	1	11	1	24.9093	1	22	27	19.762	68	48	2.52	4		9001	2628	F6	4402
	8	1	11	1	28.9093	1	22	32	15.025	68	36	27.28	4		9001	2628	F7	4403
	8	1	11	3	4.9086	1	0	10	36.334	61	18	23.85	4		9001	2629	F1	4404
	8	1	11	3	8.9086	1	0	13	50.796	60	54	22.73	4		9001	2629	F2	4405
	8	1	11	3	12.9086	1	0	17	1.207	60	30	2.65	4		9001	2629	F3	2699
	8	1	11	3	16.9085	1	0	20	7.630	60	5	17.55	4		9001	2629	F4	2700
	8	1	11	3	20.9085	1	0	23	11.105	59	40	9.21	4		9001	2629	F5	4406
	8	1	11	3	24.9085	1	0	26	10.527	59	14	38.31	4		9001	2629	F6	2701
	8	1	11	3	28.9085	1	0	29	5.727	58	48	50.62	4		9001	2629	F7	4407
	8	1	11	6	4.9081	1	1	49	15.273	39	0	23.29	4		9001	2630	F1	4408
	8	1	11	6	12.9081	1	1	52	6.317	37	54	21.52	4		9001	2630	F3	2703
	8	1	11	6	19.3398	1	3	14	1.306	24	15	.70	4		9113	1629	F 04	7659
	8	1	11	6	20.9081	1	1	54	52.673	36	48	10.53	4		9001	2630	F5	4410
	8	1	11	6	24.9081	1	1	56	13.859	36	15	6.34	4		9001	2630	F6	4745
	8	1	11	6	28.9081	1	1	57	34.282	35	42	2.08	4		9001	2630	F7	4412
	8	1	11	6	34.9171	1								2.3474970	7901			5414
	8	1	11	8	4.9085	1	2	25	3.868	22	41	27.93	4		9001	2631	F1	4420
	8	1	11	8	12.9085	1	2	27	1.878	21	38	46.97	4		9001	2631	F3	3543
	8	1	11	8	16.9085	1	2	28	.043	21	7	37.44	4		9001	2631	F4	2740
	8	1	11	8	20.9086	1	2	28	57.592	20	36	35.27	4		9001	2631	F5	2741
	8	1	11	8	24.9086	1	2	29	54.473	20	5	39.60	4		9001	2631	F6	3544
	8	1	11	8	28.9086	1	2	30	51.296	19	34	51.83	4		9001	2631	F7	4421
	8	1	11	10	4.9093	1	2	51	10.302	8	1	30.32	4		9001	2632	F1	4422
	8	1	11	10	8.9093	1	2	51	56.295	7	34	40.16	4		9001	2632	F2	4748
	8	1	11	10	12.9094	1	2	52	42.156	7	8	1.51	4		9001	2632	F3	2744
	8	1	11	10	16.9094	1	2	53	27.602	6	41	30.02	4		9001	2632	F4	2745
	8	1	11	10	20.9095	1	2	54	12.895	6	15	9.92	4		9001	2632	F5	2746
	8	1	11	10	24.9095	1	2	54	57.753	5	48	58.47	4		9001	2632	F6	4424
	8	1	11	10	28.9095	1	2	55	42.407	5	23	.27	4		9001	2632	F7	4425
	8	1	20	37	4.9078	1	16	41	51.251	73	1	55.26	4		9004	8517	F1	3019
	8	1	20	37	8.9079	1	16	49	24.826	73	31	25.37	4		9004	8517	F2	3020

August 1-2, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	8	1	20	37	12.9079	1	16	57	17.827	73	59	34.23	4		9004	8517	F3	3021
	8	1	20	37	16.9079	1	17	5	33.130	74	26	26.66	4		9004	8517	F4	3022
	8	1	20	37	20.9080	1	17	14	10.366	74	51	46.66	4		9004	8517	F5	3023
	8	1	20	37	24.9080	1	17	23	8.604	75	15	41.86	4		9004	8517	F6	3024
	8	1	20	37	28.9081	1	17	32	29.383	75	38	1.04	4		9004	8517	F7	3025
			20	40	4.9101	3	23	7	4.070	71	41	48.36	4		9004	8518	F1	5526
			20	40	8.9101	1	23	10	53.242	71	22	18.39	4		9004	8518	F2	3026
	8	1	20	40	12.9102	1	23	14	33.063	71	2	50.41	4		9004	8518	F3	3027
	8	1	20	40	16.9102	1	23	18	4.242	70	43	22.27	4		9004	8518	F4	5069
	8	1	20	40	20.9103	1	23	21	25.718	70	23	50.54	4		9004	8518	F5	3028
	8	1	20	40	24.9104	1	23	24	39.574	70	4	19.37	4		9004	8518	F6	3029
	8	1	20	40	28.9104	1	23	27	46.153	69	44	52.84	4		9004	8518	F7	3030
	8	1	22	42	4.9118	1	11	41	38.501	64	24	9.86	4		9004	8527	F1	4642
	8	1	22	42	8.9118	1	11	39	36.838	64	50	45.53	4		9004	8527	F2	4643
	8	1	22	42	12.9118	1	11	37	30.027	65	17	10.12	4		9004	8527	F3	5070
	8	1	22	42	16.9118	1	11	35	18.898	65	43	27.69	4		9004	8527	F4	4645
	8	1	22	42	20.9118	1	11	33	2.456	66	9	34.61	4		9004	8527	F5	4646
	8	1	22	42	24.9118	1	11	30	41.091	66	35	31.59	4		9004	8527	F6	4647
	8	1	22	42	28.9118	1	11	28	13.524	67	1	13.84	4		9004	8527	F7	4648
	8	1	22	46	4.9127	1	5	56	42.825	76	19	39.48	4		9004	8528	F1	4649
	8	1	22	46	8.9127	1	5	50	30.326	76	7	27.29	4		9004	8528	F2	4650
	8	1	22	46	12.9128	1	5	44	30.747	75	54	46.71	4		9004	8528	F3	4651
	8	1	22	46	16.9128	1	5	38	43.321	75	41	32.85	4		9004	8528	F4	4652
	8	1	22	46	20.9128	1	5	33	9.620	75	27	45.43	4		9004	8528	F5	5071
	8	1	22	46	24.9128	1	5	27	47.310	75	13	33.10	4		9004	8528	F6	4654
	8	1	22	46	28.9129	1	5	22	38.240	74	58	49.65	4		9004	8528	F7	5072
	8	2	0	53	4.9135	1	6	47	41.257	75	31	45.49	4		9004	8537	F1	3276
	8	2	0	53	8.9135	1	6	41	53.500	75	20	3.71	4		9004	8537	F2	3277
	8	2	0	53	12.9135	1	6	36	14.907	75	7	43.61	4		9004	8537	F3	3278
	8	2	0	53	16.9135	1	6	30	45.890	74	54	54.68	4		9004	8537	F4	3279
	8	2	0	53	20.9135	1	6	25	28.272	74	41	32.30	4		9004	8537	F5	3280
	8	2	0	53	24.9135	1	6	20	19.744	74	27	40.20	4		9004	8537	F6	3281
	8	2	0	53	28.9135	1	6	15	19.176	74	13	18.72	4		9004	8537	F7	3282
	8	2	0	58	4.9147	1	4	3	39.431	51	17	13.72	4		9004	8538	F1	36A9
	8	2	0	58	8.9147	1	4	3	7.014	50	56	49.41	4		9004	8538	F2	32A3
	8	2	0	58	12.9148	1	4	2	35.215	50	36	33.83	4		9004	8538	F3	32A4
	8	2	0	58	16.9148	1	4	2	4.281	50	16	17.01	4		9004	8538	F4	32A5
	8	2	0	58	20.9148	1	4	1	34.248	49	56	.90	4		9004	8538	F5	32A6
	8	2	0	58	24.9148	1	4	1	5.280	49	35	50.25	4		9004	8538	F6	32A7
	8	2	0	58	28.9149	1	4	0	36.747	49	15	42.08	4		9004	8538	F7	42AA
	8	2	3	1	4.9112	1	2	12	31.626	74	22	59.66	4		9004	8546	F1	4869
	8	2	3	1	8.9112	1	2	14	27.214	73	52	54.35	4		9004	8546	F2	5073
	8	2	3	1	12.9112	1	2	16	17.262	73	22	41.85	4		9004	8546	F3	5074
	8	2	3	1	16.9112	1	2	18	2.845	72	52	21.72	4		9004	8546	F4	5300
	8	2	3	1	20.9111	1	2	19	41.813	72	21	53.46	4		9004	8546	F5	5301
	8	2	3	1	24.9111	1	2	21	17.752	71	51	24.99	4		9004	8546	F6	4874
	8	2	3	1	28.9111	1	2	22	47.592	71	20	43.53	4		9004	8546	F7	5302
	8	2	3	3	40.7813	1	2	52	36.484	54	5	1.87	4		9004	8547	05	7643
	8	2	3	30	56.3237	1	5	2	54.111	9	31	10.10	4		9002	4850	03	6131
	8	2	4	33	35.0772	1	12	42	53.682	16	14	19.65	4		9113	1644	05	6361
	8	2	4	39	48.9197	1	12	39	11.641	76	52	57.26	4		9113	1646	03	6919
	8	2	6	33	17.5537	.	11	51	27.525	48	29	49.59	4		9012	7258	02	6AA1
	8	2	8	58	30.4556	.	4	51	35.861	67	46	57.85	4		9113	1688	02	7AA2
	8	2	9	4	4.9136	1	20	21	16.645	75	58	47.06	4		9010	4261	F1	234
	8	2	9	4	8.9136	1	20	27	24.494	76	1	30.70	4		9010	4261	F2	235
	8	2	9	4	12.9135	1	20	33	37.888	76	3	45.02	4		9010	4261	F3	236
	8	2	9	4	16.9135	1	20	39	54.136	76	5	23.23	4		9010	4261	F4	237
	8	2	9	4	20.9134	1	20	46	14.964	76	6	26.80	4		9010	4261	F5	238
	8	2	9	4	24.9134	1	20	52	37.925	76	6	57.17	4		9010	4261	F6	239
	8	2	9	4	28.9133	1	20	59	3.620	76	6	49.67	4		9010	4261	F7	240
	8	2	9	7	4.9119	1	0	27	38.683	68	14	4.45	4		9010	4262	F1	573
	8	2	9	7	8.9118	1	0	31	6.034	67	52	2.95	4		9010	4262	F2	241
	8	2	9	7	12.9118	1	0	34	28.414	67	29	35.55	4		9010	4262	F3	242
	8	2	9	7	16.9118	1	0	37	45.023	67	6	48.21	4		9010	4262	F4	243
	8	2	9	7	20.9117	1	0	40	57.345	66	43	39.57	4		9010	4262	F5	244
	8	2	9	7	24.9117	1	0	44	4.977	66	20	9.28	4		9010	4262	F6	245
	8	2	9	7	28.9117	1	0	47	7.574	65	56	23.03	4		9010	4262	F7	246
	8	2	9	9	4.9111	1	1	42	34.212	55	3	55.44	4		9010	4263	F1	2830
	8	2	9	9	8.9111	1	1	44	19.530	54	33	58.68	4		9010	4263	F2	2831
	8	2	9	9	12.9111	1	1	46	2.719	54	3	56.69	4		9010	4263	F3	2832
	8	2	9	9	16.9111	1	1	47	43.870	53	33	40.80	4		9010	4263	F4	2833
	8	2	9	9	20.9111	1	1	49	22.871	53	3	17.81	4		9010	4263	F5	2834
	8	2	9	9	24.9111	3	1	51	.571	52	32	42.07	4		9010	4263	F6	5518
	8	2	9	9	28.9111	1	1	52	36.356	52	2	.64	4		9010	4263	F7	2835
	8	2	9	11	4.9109	1	2	24	1.973	39	13	39.25	4		9010	4264	F1	2836
	8	2	9	11	8.9109	1	2	25	7.242	38	40	52.05	4		9010	4264	F2	2837
	8	2	9	11	12.9109	1	2	26	11.813	38	8	6.23	4		9010	4264	F3	2838
	8	2	9	11	16.9109	1	2	27	15.486	37	35	20.07	4		9010	4264	F4	2839
	8	2	9	11	20.9109	1	2	28	18.263	37	2	32.57	4		9010	4264	F5	3690
	8	2	9	11	24.9109	1	2	29	20.209	36	29	45.20	4		9010	4264	F6	2841

August 2-3, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	8	2	9	11	28.9109	1	2	30	21.850	35	56	59.80	4		9010	4264	F7	2842
	8	2	9	15	4.9119	1	3	13	42.084	8	21	11.85	4		9010	4266	F1	2783
	8	2	9	15	8.9120	1	3	14	21.882	7	54	5.66	4		9010	4266	[illegible]	2784
	8	2	9	15	12.9120	1	3	15	1.441	7	27	7.61	4		9010	4266		3783
	8	2	9	15	16.9120	1	3	15	40.779	7	0	19.36	4		9010	4266	[illegible]4	3784
	8	2	9	15	20.9121	1	3	16	19.958	6	33	37.07	4		9010	4266	F5	2785
	8	2	9	15	24.9121	1	3	16	59.072	6	7	5.00	4		9010	4266	F6	2786
	8	2	9	15	28.9121	1	3	17	37.878	5	40	45.34	4		9010	4266	F7	2787
	8	2	13	5	4.9161	1	4	54	22.799	74	2	6.00	4		9012	7279	F1	6229
	8	2	13	5	8.9161	1	4	52	46.178	73	41	53.47	4		9012	7279	F2	6230
	8	2	13	5	12.9160	1	4	51	14.171	73	21	36.24	4		9012	7279	F3	6231
	8	2	13	5	16.9160	1	4	49	44.954	73	1	12.17	4		9012	7279	F4	6232
	8	2	13	5	20.9160	1	4	48	21.626	72	40	44.53	4		9012	7279	F5	6233
	8	2	13	5	24.9160	1	4	46	59.025	72	20	8.80	4		9012	7279	F6	6234
	8	2	13	5	28.9160	1	4	45	43.319	71	59	22.23	4		9012	7279	F7	6235
	8	2	13	7	4.9155	1	4	26	26.164	63	18	32.56	4		9012	7280	F1	5858
	8	2	13	7	8.9155	1	4	25	58.149	62	56	1.89	4		9012	7280	F2	6263
	8	2	13	7	12.9155	1	4	25	31.397	62	33	27.13	4		9012	7280	F3	5860
	8	2	13	7	16.9155	1	4	25	5.827	62	10	45.75	4		9012	7280	F4	5861
	8	2	13	7	20.9155	1	4	24	40.249	61	48	10.16	4		9012	7280	F5	6264
	8	2	13	7	24.9155	1	4	24	15.855	61	25	24.76	4		9012	7280	F6	5862
	8	2	13	7	28.9155	1	4	23	53.644	61	2	40.58	4		9012	7280	F7	5863
	8	2	13	9	4.9153	1	4	18	25.296	51	46	13.56	4		9012	7281	F1	4728
	8	2	13	9	8.9153	1	4	18	19.080	51	22	45.25	4		9012	7281	F2	4729
	8	2	13	9	12.9153	1	4	18	13.101	50	59	17.52	4		9012	7281	F3	4730
	8	2	13	9	16.9153	1	4	18	7.197	50	35	45.11	4		9012	7281	F4	4731
	8	2	13	9	20.9153	1	4	18	2.347	50	12	16.32	4		9012	7281	F5	4752
	8	2	13	9	24.9153	1	4	17	57.537	49	48	45.22	4		9012	7281	F6	4753
	8	2	13	9	28.9153	1	4	17	53.344	49	25	13.82	4		9012	7281	F7	4754
	8	2	13	11	4.9153	1	4	17	47.230	40	1	42.74	4		9012	7282	F1	3693
	8	2	13	11	8.9154	1	4	17	50.099	39	38	23.82	4		9012	7282	F2	4755
	8	2	13	11	16.9154	1	4	17	56.926	38	51	51.87	4		9012	7282	F4	4752
	8	2	13	11	20.9154	1	4	18	.582	38	28	36.29	4		9012	7282	F5	3792
	8	2	13	11	24.9154	1	4	18	5.034	38	5	22.25	4		9012	7282	F6	3793
	8	2	13	11	28.9154	1	4	18	9.388	37	42	13.54	4		9012	7282	F7	3794
	8	2	20	38	4.9104	1	13	27	31.114	37	42	12.26	4		9004	8558	F1	5075
	8	2	20	38	8.9104	1	13	28	19.093	38	29	37.32	4		9004	8558	F2	5076
	8	2	20	38	12.9104	1	13	29	8.157	39	17	13.31	4		9004	8558	F3	5077
	8	2	20	38	16.9103	1	13	29	57.812	40	4	58.52	4		9004	8558	F4	5078
	8	2	20	38	20.9103	1	13	30	46.757	40	52	50.97	4		9004	8558	F5	4875
	8	2	20	38	24.9103	1	13	31	40.133	41	40	56.15	4		9004	8558	F6	4876
	8	2	20	38	28.9103	1	13	32	32.931	42	29	5.48	4		9004	8558	F7	4877
	8	2	20	41	4.9107	1	14	39	51.730	72	44	25.02	4		9004	8559	F1	3845
	8	2	20	41	8.9107	1	14	43	43.859	73	24	55.85	4		9004	8559	F2	3846
	8	2	20	41	12.9107	1	14	47	51.131	74	4	51.72	4		9004	8559	F3	3847
	8	2	20	41	16.9108	1	14	52	16.665	74	44	13.38	4		9004	8559	F4	3848
	8	2	20	41	20.9108	1	14	57	1.503	75	22	54.10	4		9004	8559	F5	3849
	8	2	20	41	24.9108	1	15	2	8.508	76	0	57.39	4		9004	8559	F6	4748
	8	2	20	41	28.9109	1	15	7	39.020	76	38	18.18	4		9004	8559	F7	3850
	8	2	20	44	4.9126	1	23	31	39.030	77	46	36.18	4		9004	8560	F1	3851
	8	2	20	44	8.9126	3	23	36	9.226	77	22	10.09	4		9004	8560	F2	5523
	8	2	20	44	12.9127	1	23	40	20.757	76	57	49.39	4		9004	8560	F3	4749
	8	2	20	44	16.9128	1	23	44	16.165	76	33	23.75	4		9004	8560	F4	3852
	8	2	20	44	20.9128	3	23	47	56.088	76	9	7.27	4		9004	8560	F5	5524
	8	2	20	44	24.9129	1	23	51	23.222	75	44	54.12	4		9004	8560	F6	3853
	8	2	20	44	28.9129	3	23	54	36.861	75	20	44.21	4		9004	8560	F7	6338
	8	2	22	46	4.9149	1	11	43	2.812	60	49	56.80	4		9004	8568	F1	4859
	8	2	22	46	8.9149	1	11	41	27.704	61	15	32.57	4		9004	8568	F2	6250
	8	2	22	46	12.9149	1	11	39	49.234	61	41	11.34	4		9004	8568	F3	5303
	8	2	22	46	16.9149	1	11	38	6.875	62	6	37.07	4		9004	8568	F4	4861
	8	2	22	46	20.9149	1	11	36	21.941	62	31	56.30	4		9004	8568	F5	4862
	8	2	22	46	24.9149	1	11	34	32.405	62	57	11.54	4		9004	8568	F6	5304
	8	2	22	46	28.9149	1	11	32	39.517	63	22	19.09	4		9004	8568	F7	5305
	8	2	22	51	4.9157	1	5	28	58.508	74	4	17.82	4		9004	8569	F1	4865
	8	2	22	51	8.9158	1	5	24	10.795	73	50	14.61	4		9004	8569	F2	4866
	8	2	22	51	12.9158	1	5	19	33.749	73	35	44.57	4		9004	8569	F3	5306
	8	2	22	51	16.9158	1	5	15	5.696	73	20	57.46	4		9004	8569	F4	4868
	8	2	22	51	20.9158	1	5	10	46.601	73	5	42.96	4		9004	8569	F5	4869
	8	2	22	51	24.9159	1	5	6	37.092	72	50	16.20	4		9004	8569	F6	4870
	8	2	22	51	28.9159	1	5	2	35.651	72	34	31.41	4		9004	8569	F7	5307
	8	3	0	57	4.9160	1	7	35	52.854	77	42	32.49	4		9004	8578	F1	4980
	8	3		57	8.9159	1	7	28	17.605	77	36	4.24	4		9004	8578	F2	4981
	8	3	0	57	12.9159	1	7	20	49.778	77	28	45.50	4		9004	8578	F3	4982
	8	3	0	57	16.9159	1	7	13	33.570	77	20	40.41	4		9004	8578	F4	4983
	8	3	0	57	20.9159	1	7	6	24.718	77	11	45.15	4		9004	8578	F5	5596
	8	3	0	57	24.9159	1	6	59	27.245	77	1	59.75	4		9004	8578	F6	4985
	8	3	0	57	28.9159	1	6	52	41.297	76	51	36.31	4		9004	8578	F7	4986
	8	3	3	35	20.3595	1	4	41	46.648	5	24	55.14	4		9002	4870	05	6192
	8	3	4	42	37.2128	1	12	17	2.183	60	32	41.78	4		9113	1703	03	6363
	8	3	4	44	56.2993	1	10	48	51.549	80	16	35.93	4		9113	1704	03	6364

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (KM)	STATION	FRAME NO.		OBS.NO.
1966	8	3	9	3	-.6083	1	4	30	53.334	68	16	30.14	4		9113	1726	04	63A5
	8	3	9	9	4.9156	1	21	3	3.891	70	3	19.13	4		9010	4287	F1	37A5
	8	3	9	9	8.9156	1	21	7	39.076	70	0	6.72	4		9010	4287	F2	37A6
	8	3	9	9	12.9155	1	21	12	16.404	69	56	25.46	4		9010	4287	F3	37A7
	8	3	9	9	16.9155	1	21	16	53.283	69	52	18.79	4		9010	4287	F4	37A8
	8	3	9	9	20.9154	1	21	21	29.524	69	47	44.08	4		9010	4287	F5	37A9
	8	3	9	9	24.9154	1	21	26	5.852	69	42	42.36	4		9010	4287	F6	37B0
	8	3	9	9	28.9153	1	21	30	41.761	69	37	11.46	4		9010	4287	F7	4727
	8	3	9	11	4.9144	1	23	12	13.001	65	3	12.17	4		9010	4288	F1	5005
	8	3	9	11	8.9143	1	23	15	52.331	64	46	5.61	4		9010	4288	F2	5006
	8	3	9	11	12.9143	1	23	19	29.366	64	28	30.79	4		9010	4288	F3	5007
	8	3	9	11	16.9143	1	23	23	3.109	64	10	31.99	4		9010	4288	F4	5008
	8	3	9	11	20.9142	1	23	26	33.540	63	52	9.79	4		9010	4288	F5	5009
	8	3	9	11	24.9142	1	23	30	.342	63	33	20.30	4		9010	4288	F6	5010
	8	3	9	11	28.9142	1	23	33	24.700	63	14	8.21	4		9010	4288	F7	5011
	8	3	9	16	4.9131	1	1	54	34.606	30	12	53.96	4		9010	4289	F1	5012
	8	3	9	16	8.9131	1	1	55	47.285	29	39	34.29	4		9010	4289	F2	5013
	8	3	9	16	12.9131	1	1	56	58.751	29	6	14.02	4		9010	4289	F3	5014
	8	3	9	16	16.9131	1	1	58	9.622	28	32	57.83	4		9010	4289	F4	5015
	8	3	9	16	20.9131	1	1	59	19.738	27	59	39.31	4		9010	4289	F5	5016
	8	3	9	16	24.9132	1	2	0	29.374	27	26	26.97	4		9010	4289	F6	5017
	8	3	9	16	28.9132	1	2	1	38.099	26	53	13.89	4		9010	4289	F7	5018
	8	3	11	10	48.4102	1	0	57	22.679	51	43	47.57	4		9113	1746	04	6366
	8	3	15	21	17.1650	1	2	59	53.038	21	59	16.99	4		9117	2864	13	8836
	8	3	15	26	13.6614	1	3	55	25.923	-12	35	12.15	4		9117	2865	07	8837
	8	4	0	58	4.9193	1	12	22	42.138	67	59	25.45	4		9004	8620	F1	9674
	8	4	0	58	8.9192	1	12	20	53.624	68	19	42.31	4		9004	8620	F2	9675
	8	4	0	58	12.9192	1	12	19	1.683	68	39	50.22	4		9004	8620	F3	9676
	8	4	0	58	16.9192	1	12	17	4.346	68	59	59.82	4		9004	8620	F4	9677
	8	4	0	58	20.9191	1	12	15	2.904	69	20	9.49	4		9004	8620	F5	9678
	8	4	0	58	24.9191	1	12	12	56.840	69	40	13.42	4		9004	8620	F6	9679
	8	4	0	58	28.9191	1	12	10	45.927	70	0	9.23	4		9004	8620	F7	98A7
	8	4	1	2	4.9182	1	6	34	38.753	77	54	44.18	4		9004	8621	F1	96A1
	8	4	1	2	8.9182	1	6	27	37.709	77	41	52.24	4		9004	8621	F2	96A2
	8	4	1	2	12.9182	1	6	20	51.682	77	28	18.07	4		9004	8621	F3	96A3
	8	4	1	2	16.9182	1	6	14	19.520	77	14	5.73	4		9004	8621	F4	96A4
	8	4	1	2	20.9182	1	6	8	3.206	76	59	11.98	4		9004	8621	F5	96A5
	8	4	1	2	24.9182	1	6	1	59.527	76	43	49.30	4		9004	8621	F6	96A6
	8	4	1	2	28.9182	1	5	56	12.352	76	27	47.73	4		9004	8621	F7	96A7
	8	4	1	8	4.9193	1	3	37	53.795	45	21	14.33	4		9004	8622	F1	418
	8	4	1	8	8.9193	1	3	37	37.354	44	59	33.35	4		9004	8622	F2	419
	8	4	1	8	12.9194	1	3	37	21.241	44	37	55.97	4		9004	8622	F3	420
	8	4	1	8	16.9194	1	3	37	5.763	44	16	21.94	4		9004	8622	F4	421
	8	4	1	8	20.9194	1	3	36	50.878	43	54	55.08	4		9004	8622	F5	422
	8	4	1	8	24.9195	1	3	36	36.142	43	33	32.02	4		9004	8622	F6	423
	8	4	1	8	28.9195	1	3	36	22.128	43	12	12.16	4		9004	8622	F7	424
	8	4	3	12	47.9128	1	1	43	26.770	48	2	39.30	4		9004	8634	03	6A72
	8	4	3	39	16.8094	1	4	6	22.876	3	45	29.26	4		9002	48A7	05	6914
	8	4	3	42	4.9151	1	5	13	30.596	-17	14	11.49	4		9002	48AB	F1	1992
	8	4	3	42	8.9151	1	5	15	17.694	-17	42	40.96	4		9002	48AB	F2	1993
	8	4	3	42	12.9151	1	5	17	5.152	-18	10	59.26	4		9002	48AB	F3	1994
	8	4	3	42	16.9151	1	5	18	52.991	-18	39	8.11	4		9002	48AB	F4	1995
	8	4	3	42	20.9152	1	5	20	41.727	-19	7	4.46	4		9002	48AB	F5	36A4
	8	4	3	42	24.9152	1	5	22	30.758	-19	34	51.55	4		9002	48AB	F6	36A5
	8	4	3	42	28.9152	1	5	24	20.431	-20	2	21.50	4		9002	48AB	F7	36A6
	8	4	4	47	43.5956	1	11	36	26.492	65	32	48.74	4		9113	1764	03	6367
	8	4	4	51	58.0687	1	3	54	8.012	77	17	35.52	4		9113	1765	03	76A0
	8	4	7	11	4.9195	1	4	11	33.684	62	28	6.22	4		9010	4292	F1	4341
	8	4	7	11	8.9195	1	4	10	49.609	62	4	38.65	4		9010	4292	F2	4500
	8	4	7	11	12.9195	1	4	10	6.605	61	41	9.25	4		9010	4292	F3	4501
	8	4	7	11	16.9195	1	4	9	25.863	61	17	38.27	4		9010	4292	F4	4502
	8	4	7	11	20.9195	1	4	8	46.129	60	54	4.54	4		9010	4292	F5	4503
	8	4	7	11	24.9195	1	4	8	7.883	60	30	27.54	4		9010	4292	F6	4504
	8	4	7	11	28.9195	1	4	7	30.782	60	6	53.51	4		9010	4292	F7	50A2
	8	4	7	16	4.9202	1	3	53	41.252	33	18	33.50	4		9010	4293	F1	4505
	8	4	7	16	8.9202	1	3	53	42.742	32	56	36.96	4		9010	4293	F2	4506
	8	4	7	16	12.9202	1	3	53	44.406	32	34	43.92	4		9010	4293	F3	4507
	8	4	7	16	16.9202	1	3	53	46.386	32	12	52.25	4		9010	4293	F4	4508
	8	4	7	16	20.9203	1	3	53	48.408	31	51	7.50	4		9010	4293	F5	4509
	8	4	7	16	24.9203	1	3	53	50.969	31	29	23.47	4		9010	4293	F6	50A3
	8	4	7	16	28.9203	1	3	53	53.646	31	7	42.60	4		9010	4293	F7	50A4
	8	4	9	8	44.4850	1	3	46	58.456	61	39	39.62	4		9113	1803	03	78A3
	8	4	9	13	4.9183	1	20	33	6.935	63	57	2.57	4		9010	4303	F1	5369
	8	4	9	13	8.9183	1	20	36	33.143	63	54	15.28	4		9010	4303	F2	5370
	8	4	9	13	9.6311	1	3	30	2.345	34	35	42.99	4		9113	1804	05	6369
	8	4	9	13	12.9182	1	20	40	.479	63	51	9.07	4		9010	4303	F3	5371
	8	4	9	13	16.9182	1	20	43	28.007	63	47	45.56	4		9010	4303	F4	5372
	8	4	9	13	20.9181	1	20	46	56.448	63	43	59.19	4		9010	4303	F5	5373
	8	4	9	13	24.9181	1	20	50	28.204	63	39	53.62	4		9010	4303	F6	5374
	8	4	9	13	28.9181	1	20	53	59.962	63	35	30.38	4		9010	4303	F7	5375

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (KM)	STATION	FRAME NO.		OBS.NO.
1966	8	4	9	15	4.9170	1	22	16	11.752	59	59	59.76	4		9010	4304	F1	5376
	8	4	9	15	8.9170	1	22	19	26.058	59	46	14.97	4		9010	4304	F2	5377
	8	4	9	15	12.9169	1	22	22	39.434	59	32	7.03	4		9010	430	F3	5378
	8	4	9	15	16.9169	1	22	25	51.548	59	17	36.08	4		9010	4304	F4	5949
	8	4	9	15	20.9169	1	22	29	2.564	59	2	42.70	4		9010	4304	F5	5379
	8	4	9	15	24.9168	1	22	32	11.283	58	47	25.91	4		9010	4304	F6	5380
	8	4	9	15	28.9168	1	22	35	18.970	58	31	47.57	4		9010	4304	F7	5950
	8	4	9	17	4.9160	1	23	41	52.643	50	26	40.94	4		9010	4305	F1	5382
	8	4	9	17	8.9160	1	23	44	17.383	50	2	12.23	4		9010	4305	F2	5383
	8	4	9	17	12.9160	1	23	46	40.372	49	37	26.21	4		9010	4305	F3	5384
	8	4	9	17	16.9160	1	23	49	1.640	49	12	24.30	4		9010	4305	F4	5385
	8	4	9	17	20.9159	1	23	51	21.773	48	46	58.45	4		9010	4305	F5	5386
	8	4	9	17	24.9159	1	23	53	39.741	48	21	20.53	4		9010	4305	F6	5387
	8	4	9	17	28.9159	1	23	55	56.21'	47	55	20.62	4		9010	4305	F7	5951
	8	4	9	20	4.9154	1	1	6	51.646	28	14	59.25	4		9010	4306	F1	5389
	8	4	9	20	8.9154	1	1	8	18.529	27	42	4.66	4		9010	4306	F2	5390
	8	4	9	20	12.9154	1	1	9	44.551	27	9	9.56	4		9010	4306	F3	5391
	8	4	9	20	16.9154	1	1	11	9.518	26	36	13.44	4		9010	4306	F4	5392
	8	4	9	20	20.9154	1	1	12	33.765	26	3	13.15	4		9010	4306	F5	5393
	8	4	9	20	24.9154	1	1	15	57.221	25	30	10.07	4		9010	4306	F6	5394
	8	4	9	20	28.9155	1	1	15	20.089	24	57	8.46	4		9010	4306	F7	5395
	8	4	9	23	4.9161	1	2	0	44.745	4	15	20.81	4		9010	4307	F1	5396
	8	4	9	23	8.9161	1	2	1	44.399	3	45	50.98	4		9010	4307	F2	5397
	8	4	9	23	12.9162	1	2	2	44.160	3	16	34.77	4		9010	4307	F3	5398
	8	4	9	23	16.9162	1	2	3	43.466	2	47	24.25	4		9010	4307	F4	5399
	8	4	9	23	20.9162	1	2	4	41.979	2	18	27.52	4		9010	4307	F5	5400
	8	4	9	23	24.9163	1	2	5	40.301	1	49	40.91	4		9010	4307	F6	5401
	8	4	9	23	28.9163	1	2	6	38.493	1	20	58.53	4		9010	4307	F7	5402
	8	4	13	11	4.9215	1	16	31	22.955	87	31	44.48	4		9012	7357	F1	4992
	8	4	13	11	8.9215	1	16	44	21.295	87	48	53.53	4		9012	7357	F2	5686
	8	4	13	11	12.9214	1	17	1	21.078	88	5	33.59	4		9012	7357	F3	4994
	8	4	13	11	16.9214	1	17	23	52.671	88	21	31.01	4		9012	7357	F4	5687
	8	4	13	11	20.9213	1	17	54	48.590	88	36	19.15	4		9012	7357	F5	4995
	8	4	13	11	24.9213	1	18	37	51.809	88	48	55.39	4		9012	7357	F6	4996
	8	4	13	11	28.9213	1	19	36	44.887	88	58	9.91	4		9012	7357	F7	4997
	8	4	13	13	4.9204	1	2	39	6.658	82	9	8.38	4		9012	7358	F1	4998
	8	4	13	13	8.9203	1	2	40	38.147	81	47	46.06	4		9012	7358	F2	4999
	8	4	13	13	12.9203	1	2	42	1.171	81	26	15.36	4		9012	7358	F3	5000
	8	4	13	13	16.9203	1	2	43	14.570	81	4	35.93	4		9012	7358	F4	5688
	8	4	13	13	20.9202	1	2	44	32.982	80	42	55.75	4		9012	7358	F5	5002
	8	4	13	13	24.9202	1	2	45	41.980	80	21	4.96	4		9012	7358	F6	6265
	8	4	13	13	28.9202	1	2	46	48.152	79	59	9.87	4		9012	7358	F7	5004
	8	4	13	16	4.9191	1	3	10	36.869	64	29	57.46	4		9012	7359	F1	5128
	8	4	13	16	8.9191	1	3	11	2.466	64	4	22.74	4		9012	7359	F2	5129
	8	4	13	16	12.9191	1	3	11	26.856	63	38	43.72	4		9012	7359	F3	5130
	8	4	13	16	16.9[illegible]	1	3	11	51.478	63	13	2.51	4		9012	7359	F4	5131
	8	4	13	16	20.[illegible]	1	3	12	15.961	62	47	14.14	4		9012	7359	F5	6266
	8	4	13	16	24.9190	1	3	12	40.635	62	21	24.01	4		9012	7359	F6	5133
	8	4	13	16	28.9190	1	3	13	4.674	61	55	26.84	4		9012	7359	F7	6267
	8	4	13	18	4.9187	1	3	22	6.410	51	14	58.70	4		9012	7360	F1	5135
	8	4	13	18	8.9186	1	3	22	27.813	50	47	43.76	4		9012	7360	F2	5692
	8	4	13	18	12.9186	1	3	22	49.139	50	20	25.08	4		9012	7360	F3	5137
	8	4	13	18	16.9186	1	3	23	10.680	49	53	4.75	4		9012	7360	F4	5138
	8	4	13	18	20.9186	1	3	23	32.200	49	25	41.45	4		9012	7360	F5	5693
	8	4	13	18	24.9186	1	3	23	53.428	48	58	21.02	4		9012	7360	F6	5140
	8	4	13	18	28.9186	1	3	24	14.345	48	30	57.81	4		9012	7360	F7	5141
	8	4	13	20	4.9186	1	3	32	38.249	37	30	56.85	4		9012	7361	F1	5262
	8	4	13	20	8.9186	1	3	32	59.150	37	3	30.32	4		9012	7361	F2	5263
	8	4	13	20	12.9186	1	3	33	19.983	36	36	9.66	4		9012	7361	F3	5264
	8	4	13	20	16.9186	1	3	33	40.809	36	8	50.07	4		9012	7361	F4	5955
	8	4	13	20	20.9186	1	3	34	1.540	35	41	32.23	4		9012	7361	F5	5956
	8	4	13	20	24.9186	1	3	34	22.603	35	14	14.10	4		9012	7361	F6	5267
	8	4	13	20	28.9186	1	3	34	43.448	34	47	.83	4		9012	7361	F7	5268
	8	4	15	26	49.0635	1	2	38	58.981	8	3	57.02	4		9117	2904	05	8838
	8	4	15	29	43.9419	1	3	17	32.313	-12	54	39.30	4		9117	2905	04	8839
	8	4	19	39	4.9208	1	3	59	55.298	25	37	17.33	4		9023	6874	F1	4219
	8	4	19	39	8.9208	1	4	0	55.016	25	18	35.83	4		9023	6874	F2	4220
	8	4	19	39	12.9207	1	4	1	55.301	24	59	44.54	4		9023	6874	F3	4221
	8	4	19	39	16.9207	1	4	2	55.719	24	40	54.19	4		9023	6874	F4	4222
	8	4	19	39	20.9207	1	4	3	56.333	24	21	55.65	4		9023	6874	F5	4223
	8	4	19	39	24.9206	1	4	4	56.937	24	2	52.79	4		9023	6874	F6	4224
	8	4	19	39	28.9206	1	4	5	58.088	23	43	43.87	4		9023	6874	F7	4225
	8	4	19	41	4.9199	1	4	31	24.965	15	39	52.86	4		9023	6875	F1	2887
	8	4	19	41	8.9199	1	4	32	31.577	15	18	45.36	4		9023	6875	F2	2888
	8	4	19	41	12.9199	1	4	33	37.999	14	57	36.26	4		9023	6875	F3	2889
	8	4	19	41	16.9198	1	4	34	45.098	14	36	22.33	4		9023	6875	F4	2890
	8	4	19	41	20.9198	1	4	35	52.480	14	15	6.37	4		9023	6875	F5	2891
	8	4	19	41	24.9198	1	4	36	59.638	13	53	46.17	4		9023	6875	F6	2892
	8	4	19	41	28.9198	1	4	38	7.753	13	32	21.79	4		9023	6875	F7	2893
	8	4	19	43	4.9194	1	5	6	29.350	4	45	4.26	4		9023	6876	F1	4217

August 4-5, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	8	4	19	43	8.9194	1	5	7	43.624	4	22	42.62	4		9023	6876	F2	4213
	8	4	19	43	12.9194	1	5	8	58.139	4	0	25.85	4		9023	6876	F3	4214
	8	4	19	43	16.9194	1	5	10	12.716	3	38	5.94	4		9023	6876	F4	4215
	8	4	19	43	20.9193	1	5	11	27.772	3	15	46.51	4		9023	6876	F5	4216
	8	4	19	43	24.9193	1	5	12	43.297	2	53	28.69	4		9023	6876	F6	4217
	8	4	19	43	28.9193	1	5	13	58.757	2	31	8.96	4		9023	6876	F7	4218
	8	4	20	53	4.9185	1	2	14	57.004	80	17	18.46	4		9004	8643	F1	4079
	8	4	20	53	8.9186	1	2	12	1.242	79	50	55.15	4		9004	8643	F2	40A0
	8	4	20	53	12.9186	1	2	9	21.019	79	24	33.85	4		9004	8643	F3	40A1
	8	4	20	53	16.9187	1	2	6	56.228	78	58	20.87	4		9004	8643	F4	40A2
	8	4	20	53	20.9187	1	2	4	45.620	78	32	17.87	4		9004	8643	F5	40A3
	8	4	20	53	24.9188	1	2	2	45.946	78	6	25.09	4		9004	8643	F6	4419
	8	4	20	53	28.9188	1	2	0	57.713	77	40	34.37	4		9004	8643	F7	40A4
	8	4	22	56	8.9207	1	10	55	33.725	66	37	19.81	4		9004	8654	F2	40A5
	8	4	22	56	12.9207	1	10	52	55.530	66	58	24.28	4		9004	8654	F3	40A6
	8	4	22	56	16.9207	1	10	50	10.885	67	19	12.89	4		9004	8654	F4	4747
	8	4	22	56	20.9207	1	10	47	23.144	67	39	50.76	4		9004	8654	F5	40A8
	8	4	22	56	24.9207	1	10	44	27.888	68	0	16.76	4		9004	8654	F6	40A9
	8	4	22	56	28.9207	1	10	41	27.064	68	20	23.95	4		9004	8654	F7	4000
	8	4	23	0	4.9211	1	5	45	15.120	73	30	50.08	4		9004	8655	F1	5597
	8	4	23	0	8.9211	1	5	40	19.985	73	18	42.06	4		9004	8655	F2	49A8
	8	4	23	0	12.9212	1	5	35	32.739	73	6	7.84	4		9004	8655	F3	5598
	8	4	23	0	16.9212	1	5	30	53.738	72	53	11.84	4		9004	8655	F4	530A
	8	4	23	0	20.9212	1	5	26	22.340	72	39	48.20	4		9004	8655	F5	5599
	8	4	23	0	24.9212	1	5	21	58.965	72	26	3.47	4		9004	8655	F6	4990
	8	4	23	0	28.9212	1	5	17	43.718	72	11	57.42	4		9004	8655	F7	4991
	8	5	1	6	4.9206	1	7	32	5.462	80	47	37.33	4		9004	8664	F1	2727
	8	5	1	6	8.9206	1	7	21	40.189	80	41	9.66	4		9004	8664	F2	4707
	8	5	1	6	12.9206	1	7	11	28.913	80	33	31.14	4		9004	8664	F3	2728
	8	5	1	6	16.9206	1	7	1	35.333	80	24	48.68	4		9004	8664	F4	2729
	8	5	1	6	20.9206	1	6	51	59.810	80	14	58.32	4		9004	8664	F5	2730
	8	5	1	6	24.9206	1	6	42	44.113	80	4	6.00	4		9004	8664	F6	2731
	8	5	1	6	28.9206	1	6	33	49.522	79	52	15.31	4		9004	8664	F7	2732
	8	5	1	8	48.7858	1	4	4	56.464	67	43	26.01	4		9004	8665	04	7644
	8	5	1	11	4.9209	1	3	32	51.057	53	38	33.73	4		9004	8666	F1	2713
	8	5	1	11	8.9209	1	3	32	22.821	53	14	8.91	4		9004	8666	F2	2714
	8	5	1	11	12.9209	1	3	31	55.421	52	49	46.81	4		9004	8666	F3	2715
	8	5	1	11	16.9209	1	3	31	29.010	52	25	27.34	4		9004	8666	F4	2716
	8	5	1	11	20.9209	1	3	31	3.330	52	1	16.15	4		9004	8666	F5	2717
	8	5	1	11	24.9210	1	3	30	39.054	51	37	2.25	4		9004	8666	F6	2718
	8	5	1	11	28.9210	1	3	30	15.052	51	12	55.28	4		9004	8666	F7	2719
	8	5	3	10	4.9203	1	17	42	55.503	67	29	38.79	4		9004	8675	F1	2720
	8	5	3	10	8.9202	1	17	46	18.544	67	42	25.58	4		9004	8675	F2	2721
	8	5	3	10	12.9202	1	17	49	46.569	67	55	1.45	4		9004	8675	F3	2722
	8	5	3	10	16.9202	1	17	53	19.463	68	7	34.12	4		9004	8675	F4	2723
	8	5	3	10	20.9201	1	17	56	57.379	68	19	46.97	4		9004	8675	F5	2724
	8	5	3	10	24.9201	1	18	0	41.068	68	31	52.61	4		9004	8675	F6	2725
	8	5	3	10	28.9200	1	18	4	29.952	68	43	42.20	4		9004	8675	F7	2726
	8	5	3	16	54.0580	1	0	57	.560	47	5	11.81	4		9004	8676	03	8339
	8	5	3	40	4.9191	1	2	25	49.042	22	59	39.98	4		9002	4908	F1	1996
	8	5	3	40	8.9190	1	2	26	55.418	22	37	13.79	4		9002	4908	F2	1997
	8	5	3	40	12.9190	1	2	28	1.823	22	14	37.01	4		9002	4908	F3	1998
	8	5	3	40	16.9189	1	2	29	8.824	21	51	48.75	4		9002	4908	F4	1999
	8	5	3	40	20.9189	1	2	30	15.787	21	28	47.89	4		9002	4908	F5	36A7
	8	5	3	40	24.9188	1	2	31	23.190	21	5	35.53	4		9002	4908	F6	36A8
	8	5	3	40	28.9188	1	2	32	31.114	20	42	7.97	4		9002	4908	F7	2002
	8	5	3	46	4.9170	1	4	37	55.679	-21	57	36.38	4		9002	4910	F1	398
	8	5	3	46	8.9170	1	4	39	54.727	-22	29	31.12	4		9002	4910	F2	399
	8	5	3	46	12.9170	1	4	41	54.602	-23	1	8.36	4		9002	4910	F3	400
	8	5	3	46	16.9170	1	4	43	55.242	-23	32	37.91	4		9002	4910	F4	571
	8	5	3	46	20.9170	1	4	45	56.719	-24	3	51.76	4		9002	4910	F5	401
	8	5	3	46	24.9170	1	4	47	59.466	-24	34	55.42	4		9002	4910	F6	402
	8	5	3	46	28.9171	1	4	50	2.520	-25	5	46.62	4		9002	4910	F7	403
	8	5	4	53	34.3497	1	10	9	40.147	73	58	26.54	4		9113	1837	03	6370
	8	5	9	8	42.7640	1	10	46	41.864	84	8	57.72	4		9113	1875	04	6371
	8	5	9	11	4.9214	1	16	4	22.740	84	4	36.95	4		9001	2647	F1	4426
	8	5	9	11	8.9214	1	16	10	55.237	84	26	23.68	4		9001	2647	F2	4427
	8	5	9	11	12.9213	1	16	18	25.953	84	48	.26	4		9001	2647	F3	3549
	8	5	9	11	16.9213	1	16	27	2.194	85	9	26.13	4		9001	2647	F4	2749
	8	5	9	11	20.9212	1	16	37	.608	85	30	27.88	4		9001	2647	F5	4428
	8	5	9	11	24.9212	1	16	48	37.449	85	51	2.95	4		9001	2647	F6	2750
	8	5	9	11	28.9212	1	17	2	23.507	86	11	1.99	4		9001	2647	F7	2751
	8	5	9	12	59.9258	1	3	23	12.761	63	34	45.71	4		9113	1876	04	6372
	8	5	9	13	4.9205	1	1	30	36.368	82	20	15.04	4		9001	2648	F1	4709
	8	5	9	13	8.9204	1	1	34	43.184	81	54	4.80	4		9001	2648	F2	3773
	8	5	9	13	12.9204	1	1	38	25.962	81	27	41.04	4		9001	2648	F3	2822
	8	5	9	13	16.9204	1	1	41	48.208	81	1	7.57	4		9001	2648	F4	3774
	8	5	9	13	20.9204	1	1	44	54.951	80	34	21.22	4		9001	2648	F5	3775
	8	5	9	13	24.9203	1	1	47	46.260	80	7	20.85	4		9001	2648	F6	3776
	8	5	9	13	28.9203	1	1	50	23.520	79	40	12.07	4		9001	2648	F7	3777

August 5, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	8	5	9	15	4.9315	1								2.8388930	7901			5415
	8	5	9	16	4.9198	1	2	33	26.881	60	38	31.93	4		9001	2649	F1	3778
	8	5	9	16	4.9220	1	19	35	38.095	58	15	41.93	4		9010	4321	F1	5403
	8	5	9	16	8.9198	1	2	34	.632	60	8	.68	4		9001	2649	F2	2826
	8	5	9	16	8.9220	1	19	38	10.263	58	15	26.44	4		9010	4321	F2	5404
	8	5	9	16	12.9198	1	2	34	33.640	59	37	28.39	4		9001	2649	F3	3779
	8	5	9	16	12.9219	1	19	40	41.969	58	15	.09	4		9010	4321	F3	5405
	8	5	9	16	16.9197	1	2	35	6.124	59	6	54.79	4		9001	2649	F4	3780
	8	5	9	16	20.9197	1	2	35	37.853	58	36	18.50	4		9001	2649	F5	2828
	8	5	9	16	20.9218	1	19	45	49.102	58	13	31.13	4		9010	4321	F5	5406
	8	5	9	16	24.9197	1	2	36	9.619	58	5	43.93	4		9001	2649	F6	3781
	8	5	9	16	24.9218	1	19	48	23.657	58	12	26.54	4		9010	4321	F6	5407
	8	5	9	16	28.9197	1	2	36	40.648	57	35	9.86	4		9001	2649	F7	3782
	8	5	9	16	28.9217	1	19	50	58.979	58	11	11.22	4		9010	4321	F7	5952
	8	5	9	17	10.2077	1	3	14	25.279	39	58	22.24	4		9113	1877	03	6373
	8	5	9	17	34.9311	1								2.8068200	7901			5416
	8	5	9	18	4.9198	1	2	47	23.210	45	24	42.96	4		9001	2650	F1	4429
	8	5	9	18	4.9206	1	20	56	4.477	56	29	12.98	4		9010	4322	F1	5953
	8	5	9	18	8.9199	1	2	47	47.083	44	54	43.93	4		9001	2650	F2	4430
	8	5	9	18	8.9205	1	20	58	50.884	56	21	38.43	4		9010	4322	F2	5409
	8	5	9	18	12.9199	1	2	48	10.940	44	24	49.96	4		9001	2650	F3	4431
	8	5	9	18	12.9205	1	21	1	37.217	56	13	44.93	4		9010	4322	F3	5410
	8	5	9	18	16.9199	1	2	48	34.074	43	54	58.32	4		9001	2650	F4	4432
	8	5	9	18	16.9204	1	21	4	23.488	56	5	32.75	4		9010	4322	F4	5411
	8	5	9	18	20.9199	1	2	48	57.525	43	25	11.64	4		9001	2650	F5	4433
	8	5	9	18	20.9204	1	21	7	9.902	55	57	6.11	4		9010	4322	F5	5412
	8	5	9	18	24.9199	1	2	49	20.914	42	55	27.21	4		9001	2650	F6	4434
	8	5	9	18	24.9203	1	21	9	55.995	55	48	18.18	4		9010	4322	F6	5413
	8	5	9	18	28.9199	1	2	49	43.776	42	25	50.89	4		9001	2650	F7	4435
	8	5	9	18	28.9203	1	21	12	41.969	55	39	14.21	4		9010	4322	F7	5414
	8	5	9	19	34.9312	1								2.9309650	7901			5417
	8	5	9	21	4.9188	1	22	53	16.479	45	37	55.56	4		9010	4323	F1	5527
	8	5	9	21	4.9208	1	3	3	31.477	24	22	47.24	4		9001	2651	F1	4496
	8	5	9	21	8.9188	1	22	55	34.020	45	16	7.87	4		9010	4323	F2	5528
	8	5	9	21	8.9208	1	3	3	51.561	23	57	13.56	4		9001	2651	F2	4497
	8	5	9	21	12.9188	1	22	57	50.189	44	54	1.97	4		9010	4323	F3	5529
	8	5	9	21	12.9208	1	3	4	11.621	23	31	51.48	4		9001	2651	F3	4498
	8	5	9	21	16.9188	1	23	0	5.648	44	31	40.23	4		9010	4323	F4	5530
	8	5	9	21	16.9209	1	3	4	31.739	23	6	32.58	4		9001	2651	F4	4499
	8	5	9	21	20.9187	1	23	2	19.883	44	9	.25	4		9010	4323	F5	5531
	8	5	9	21	20.9209	1	3	4	51.584	22	41	21.84	4		9001	2651	F5	4440
	8	5	9	21	24.9187	1	23	4	33.842	43	46	4.29	4		9010	4323	F6	5532
	8	5	9	21	24.9209	1	3	5	11.728	22	16	21.55	4		9001	2651	F6	4441
	8	5	9	21	28.9187	1	23	6	46.025	43	22	48.37	4		9010	4323	F7	5533
	8	5	9	21	28.9210	1	3	5	31.627	21	51	24.15	4		9001	2651	F7	4749
	8	5	9	24	4.9181	1	0	19	47.962	25	11	28.80	4		9010	4324	F1	5534
	8	5	9	24	4.9224	1	3	18	22.801	7	15	47.71	4		9001	2652	F1	3386
	8	5	9	24	8.9181	1	0	21	21.399	24	40	8.49	4		9010	4324	F2	5535
	8	5	9	24	8.9225	1	3	18	42.573	6	55	42.33	4		9001	2652	F2	4750
	8	5	9	24	12.9181	1	0	22	54.757	24	8	42.62	4		9010	4324	F3	5536
	8	5	9	24	12.9225	1	3	19	2.353	6	35	46.05	4		9001	2652	F3	4444
	8	5	9	24	16.9181	1	0	24	27.538	23	37	17.78	4		9010	4324	F4	5537
	8	5	9	24	16.9226	1	3	19	22.095	6	15	55.83	4		9001	2652	F4	4445
	8	5	9	24	20.9181	1	0	25	59.663	23	5	44.36	4		9010	4324	F5	5538
	8	5	9	24	20.9226	1	3	19	42.198	5	56	10.77	4		9001	2652	F5	4446
	8	5	9	24	24.9181	1	0	27	30.938	22	34	5.48	4		9010	4324	F6	5539
	8	5	9	24	24.9226	1	3	20	1.851	5	36	31.67	4		9001	2652	F6	4447
	8	5	9	24	28.9181	1	0	29	1.410	22	2	26.05	4		9010	4324	F7	5540
	8	5	9	24	28.9227	1	3	20	21.635	5	17	.49	4		9001	2652	F7	4448
	8	5	9	36	4.9206	1	2	27	25.096	35	35	12.15	4		9007	6267	F1	4710
	8	5	9	36	8.9205	1	2	28	30.673	35	13	49.53	4		9007	[illegible]	F2	2753
	8	5	9	36	12.9205	1	2	29	36.277	34	52	23.50	4		9007	6267	F3	5079
	8	5	9	36	16.9204	1	2	30	41.940	34	30	44.89	4		9007	6267	F4	2755
	8	5	9	36	20.9204	1	2	31	47.685	34	8	58.73	4		9007	6267	F5	5080
	8	5	9	36	24.9204	1	2	32	53.375	33	47	.97	4		9007	6267	F6	4713
	8	5	9	36	28.9203	1	2	33	59.414	33	24	53.52	4		9007	6267	F7	2758
	8	5	9	40	4.9187	1	3	36	12.728	9	30	19.80	4		9007	6268	F1	4714
	8	5	9	40	4.9223	1	2	27	21.297	33	37	33.98	4		9011	9083	F1	6251
	8	5	9	40	8.9187	1	3	37	26.778	8	59	56.29	4		9007	6268	F2	4715
	8	5	9	40	8.9222	1	2	28	19.096	33	21	59.90	4		9011	9083	F2	6252
	8	5	9	40	12.9187	1	3	38	40.798	8	29	31.38	4		9007	6268	F3	4013
	8	5	9	40	12.9222	1	2	29	16.982	33	6	17.94	4		9011	9083	F3	6253
	8	5	9	40	16.9187	1	3	39	55.031	7	59	.39	4		9007	6268	F4	4716
	8	5	9	40	16.9221	1	2	30	15.348	32	50	29.68	4		9011	9083	F4	6254
	8	5	9	40	20.9187	1	3	41	9.580	7	28	22.29	4		9007	6268	F5	4717
	8	5	9	40	20.9221	1	2	31	13.782	32	34	35.68	4		9011	9083	F5	6255
	8	5	9	40	24.9187	1	3	42	24.726	6	57	43.68	4		9007	6268	F6	4014
	8	5	9	40	24.9220	1	2	32	12.596	32	18	33.69	4		9011	9083	F6	6256
	8	5	9	40	28.9186	1	3	43	39.532	6	26	58.63	4		9007	6268	F7	5081
	8	5	9	40	28.9220	1	2	33	11.386	32	2	26.34	4		9011	9083	F7	6257

August 5-6, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (KM)	STATION	FRAME NO.		OBS.NO.
1966	8	5	11	16	4.9220	1	19	48	12.909	47	27	38.65	4		9001	2659	F1	4449
	8	5	11	16	5.3847	1	21	4	.891	58	6	12.46	4		9113	1901	04	6374
	8	5	11	16	8.9219	1	19	50	18.195	47	23	41.07	4		9001	2659	F2	4450
	8	5	11	16	12.9219	1	19	52	23.858	47	19	29.74	4		9001	2659	F3	4451
	8	5	11	16	16.9218	1	19	54	30.311	47	15	7.89	4		9001	2659	F4	4452
	8	5	11	16	20.9218	1	19	56	36.616	47	10	32.40	4		9001	2659	F5	4453
	8	5	11	16	24.9217	1	19	58	43.785	47	5	46.08	4		9001	2659	F6	4454
	8	5	11	16	28.9217	1	20	0	50.889	47	0	45.99	4		9001	2659	F7	3394
	8	5	11	18	4.9206	1	20	52	56.823	43	55	3.96	4		9001	2660	F1	4413
	8	5	11	18	8.9206	1	20	55	8.358	43	44	20.49	4		9001	2660	F2	4414
	8	5	11	18	12.9206	1	20	57	19.520	43	33	26.19	4		9001	2660	F3	4415
	8	5	11	18	16.9205	1	20	59	31.145	43	22	18.20	4		9001	2660	F4	4416
	8	5	11	18	20.9205	1	21	1	41.949	43	10	46.76	4		9001	2660	F5	2711
	8	5	11	18	24.9205	1	21	3	52.769	42	59	5.81	4		9001	2660	F6	4417
	8	5	11	18	28.9204	1	21	6	4.092	42	47	9.73	4		9001	2660	F7	4418
	8	5	11	20	6.5208	1	23	55	33.436	37	5	33.33	4		9113	1902	03	7661
	8	5	11	23	34.9296	1								2.4798230	T901			5418
	8	5	11	28	44.5811	1	2	21	54.031	-18	49	23.03	4		9113	1904	03	7814
	8	5	13	17	16.9226	1	23	59	54.886	82	20	30.59	4		9012	7402	F4	6383
	8	5	13	17	20.9225	1	0	7	15.391	82	4	44.63	4		9012	7402	F5	5957
	8	5	13	17	24.9225	1	0	14	9.555	81	48	24.83	4		9012	7402	F6	5269
	8	5	13	17	28.9224	1	0	20	38.176	81	31	33.96	4		9012	7402	F7	5270
	8	5	13	21	4.9208	1	2	27	43.956	60	38	12.38	4		9012	7403	F1	5180
	8	5	13	21	8.9208	1	2	28	40.090	60	10	59.86	4		9012	7403	F2	5958
	8	5	13	21	12.9208	1	2	29	35.607	59	43	38.63	4		9012	7403	F3	5959
	8	5	13	21	16.9207	1	2	30	29.982	59	16	14.69	4		9012	7403	F4	5183
	8	5	13	21	20.9207	1	2	31	23.477	58	48	44.67	4		9012	7403	F5	6384
	8	5	13	21	24.9207	1	2	32	16.157	58	21	8.13	4		9012	7403	F6	5185
	8	5	13	21	28.9207	1	2	33	7.951	57	53	24.86	4		9012	7403	F7	5961
	8	5	13	23	4.9204	1	2	50	46.604	46	25	25.92	4		9012	7404	F1	5187
	8	5	13	23	8.9204	1	2	51	24.880	45	56	.38	4		9012	7404	F2	5188
	8	5	13	23	12.9204	1	2	52	2.889	45	26	36.45	4		9012	7404	F3	5189
	8	5	13	23	16.9204	1	2	52	40.544	44	57	12.13	4		9012	7404	F4	5190
	8	5	13	23	20.9204	1	2	53	18.027	44	27	44.06	4		9012	7404	F5	5191
	8	5	13	23	24.9204	1	2	53	55.278	43	58	10.91	4		9012	7404	F6	5962
	8	5	13	23	28.9203	1	2	54	31.944	43	28	40.44	4		9012	7404	F7	5192
	8	5	19	48	4.9209	1	5	4	21.006	- 3	2	46.70	4		9023	6901	F1	2881
	8	5	19	48	8.9208	1	5	5	48.269	- 3	27	16.00	4		9023	6901	F2	2882
	8	5	19	48	12.9208	1	5	7	16.091	- 3	51	41.61	4		9023	6901	F3	3696
	8	5	19	48	16.9208	1	5	8	44.220	- 4	16	1.11	4		9023	6901	F4	2883
	8	5	19	48	20.9208	1	5	10	12.973	- 4	40	25.12	4		9023	6901	F5	2884
	8	5	19	48	24.9208	1	5	11	41.438	- 5	4	40.17	4		9023	6901	F6	2885
	8	5	19	48	28.9208	1	5	13	10.471	- 5	28	54.37	4		9023	6901	F7	2886
	8	5	19	52	4.9217	1	6	41	.165	-24	24	51.34	4		9023	6902	F1	5864
	8	5	19	52	8.9217	1	6	42	43.881	-24	41	15.96	4		9023	6902	F2	5865
	8	5	19	52	12.9218	1	6	44	27.835	-24	57	23.69	4		9023	6902	F3	5866
	8	5	19	52	16.9218	1	6	46	11.920	-25	13	16.02	4		9023	6902	F4	5867
	8	5	19	52	20.9218	1	6	47	55.956	-25	29	7.77	4		9023	6902	F5	5868
	8	5	19	52	24.9219	1	6	49	40.180	-25	44	41.19	4		9023	6902	F6	5869
	8	5	19	52	28.9219	1	6	51	24.457	-25	59	59.72	4		9023	6902	F7	5870
	8	5	20	54	4.9200	1	11	36	22.616	68	40	49.25	4		9004	A692	F1	2733
	8	5	20	54	8.9200	1	11	34	34.999	69	24	3.64	4		9004	A692	F2	2734
	8	5	20	54	12.9200	1	11	32	40.432	69	59	5.70	4		9004	A692	F3	2735
	8	5	20	54	16.9201	1	11	30	39.242	70	33	56.06	4		9004	A692	F4	2736
	8	5	20	54	20.9201	1	11	28	29.833	71	8	33.15	4		9004	A692	F5	2737
	8	5	20	54	24.9201	1	11	26	12.266	71	42	54.52	4		9004	A692	F6	4708
	8	5	20	54	28.9201	3	11	23	45.235	72	17	.29	4		9004	A692	F7	3729
	8	5	20	58	4.9219	1	2	48	53.906	76	48	20.67	4		9004	A693	F1	4336
	8	5	20	58	8.9219	1	2	45	40.570	76	25	18.35	4		9004	A693	F2	4750
	8	5	20	58	12.9220	1	2	42	39.542	76	2	14.21	4		9004	A693	F3	4337
	8	5	20	58	16.9220	1	2	39	50.619	75	39	12.75	4		9004	A693	F4	4751
	8	5	20	58	20.9220	1	2	37	12.982	75	16	10.41	4		9004	A693	F5	4338
	8	5	20	58	24.9221	1	2	34	44.896	74	53	13.94	4		9004	A693	F6	4339
	8	5	20	58	28.9221	1	2	32	24.818	74	30	17.90	4		9004	A693	F7	4340
	8	5	23	4	4.9237	1	6	31	7.167	74	41	11.03	4		9004	A707	F1	4329
	8	5	23	4	8.9237	1	6	25	10.389	74	33	53.34	4		9004	A707	F2	4330
	8	5	23	4	12.9237	1	6	19	19.546	74	25	53.85	4		9004	A707	F3	4331
	8	5	23	4	16.9237	1	6	13	35.852	74	17	20.93	4		9004	A707	F4	43
	8	5	23	4	20.9237	1	6	7	59.028	74	8	9.89	4		9004	A707	F5	43
	8	5	23	4	24.9237	1	6	2	30.184	73	58	27.15	4		9004	A707	F6	4334
	8	5	23	4	28.9237	1	5	57	8.402	73	48	8.81	4		9004	A707	F7	4335
	8	5	23	7	4.9246	1	3	54	44.794	63	13	3.83	4		9004	A708	F1	4871
	8	5	23	7	8.9246	1	3	53	9.013	62	54	12.35	4		9004	A708	F2	4872
	8	5	23	7	12.9246	1	3	51	35.904	62	35	21.35	4		9004	A708	F3	4873
	8	5	23	7	16.9247	1	3	50	6.408	62	16	25.38	4		9004	A708	F4	4874
	8	5	23	7	20.9247	1	3	48	38.948	61	57	31.52	4		9004	A708	F5	4875
	8	5	23	7	24.9247	1	3	47	13.751	61	38	35.69	4		9004	A708	F6	4876
	8	5	23	7	28.9248	1	3	45	51.657	61	19	37.10	4		9004	A708	F7	4877
	8	6	1	7	4.9243	1	12	52	36.912	68	45	19.55	4		9004	A715	F1	4878
	8	6	1	7	8.9243	1	12	51	27.789	69	6	34.83	4		9004	A715	F2	4879

August 6, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	8	6	1	7	12.9242	1	12	50	15.470	69	27	47.25	4		9004	8715	F3	4880
	8	6	1	7	16.9242	1	12	48	59.643	69	49	1.33	4		9004	8715	F4	4881
	8	6	1	7	20.9242	1	12	47	40.538	70	10	24.16	4		9004	8715	F5	4882
	8	6	1	7	24.9241	1	12	46	17.445	70	31	46.52	4		9004	8715	F6	4883
	8	6	1	7	28.9241	1	12	44	50.853	70	53	0.29	4		9004	8715	F7	5309
	8	6	1	11	4.9228	1	5	57	27.122	81	28	38.47	4		9004	8716	F1	4878
	8	6	1	11	8.9228	1	5	47	59.653	81	12	18.67	4		9004	8716	F2	5954
	8	6	1	11	12.9228	1	5	39	6.192	80	55	4.05	4		9004	8716	F3	4879
	8	6	1	11	16.9228	1	5	30	47.625	80	37	1.90	4		9004	8716	F4	4880
	8	6	1	11	20.9228	1	5	22	59.794	80	18	13.65	4		9004	8716	F5	4881
	8	6	1	11	24.9228	1	5	15	41.040	79	58	44.73	4		9004	8716	F6	5310
	8	6	1	11	28.9228	1	5	8	52.101	79	38	38.48	4		9004	8716	F7	4883
	8	6	1	17	4.9234	1	3	10	38.418	43	56	53.51	4		9004	8718	F1	4884
	8	6	1	17	8.9234	1	3	10	31.837	43	32	38.30	4		9004	8718	F2	4885
	8	6	1	17	12.9235	1	3	10	25.201	43	8	19.93	4		9004	8718	F3	4886
	8	6	1	17	16.9235	1	3	10	18.994	42	44	10.00	4		9004	8718	F4	4887
	8	6	1	17	20.9235	1	3	10	13.601	42	20	5.98	4		9004	8718	F5	4888
	8	6	1	17	24.9235	1	3	10	8.316	41	56	8.39	4		9004	8718	F6	4889
	8	6	1	17	28.9236	1	3	10	3.051	41	32	16.23	4		9004	8718	F7	4890
	8	6	3	21	4.6202	1	0	11	27.752	44	10	22.81	4		9004	8728	04	6875
	8	6	3	46	4.9202	1	2	18	15.577	7	48	26.05	4		9002	4925	F1	404
	8	6	3	46	8.9202	1	2	19	28.747	7	19	.45	4		9002	4925	F2	405
	8	6	3	46	12.9201	1	2	20	42.252	6	49	17.56	4		9002	4925	F3	406
	8	6	3	46	16.9201	1	2	21	56.148	6	19	19.73	4		9002	4925	F4	407
	8	6	3	46	20.9201	1	2	23	10.474	5	49	8.96	4		9002	4925	F5	572
	8	6	3	46	24.9200	1	2	24	25.790	5	18	42.62	4		9002	4925	F6	409
	8	6	3	46	28.9200	1	2	25	41.519	4	48	.61	4		9002	4925	F7	410
	8	6	3	50	4.9191	1	3	53	16.318	-26	51	9.95	4		9002	4926	F1	499
	8	6	3	50	8.9191	1	3	55	22.020	-27	26	45.04	4		9002	4926	F2	500
	8	6	3	50	12.9191	1	3	57	28.692	-28	2	8.41	4		9002	4926	F3	501
	8	6	3	50	16.9191	1	3	59	37.177	-28	37	18.35	4		9002	4926	F4	502
	8	6	3	50	20.9191	1	4	1	46.605	-29	12	15.43	4		9002	4926	F5	503
	8	6	3	50	24.9191	1	4	3	57.168	-29	47	.66	4		9002	4926	F6	504
	8	6	3	50	28.9192	1	4	6	9.093	-30	21	33.57	4		9002	4926	F7	505
	8	6	9	15	11.0741	1	3	10	33.126	80	23	27.61	4		9113	1963	04	6625
	8	6	9	19	21.8818	1	2	51	18.416	49	37	41.66	4		9113	1964	04	6626
	8	6	9	27	4.9235	1	2	51	20.931	11	40	45.66	4		9001	2662	F1	411
	8	6	9	27	8.9236	1	2	51	46.794	11	17	13.49	4		9001	2662	F2	412
	8	6	9	27	12.9236	1	2	52	12.584	10	53	50.63	4		9001	2662	F3	413
	8	6	9	27	16.9237	1	2	52	38.250	10	30	36.05	4		9001	2662	F4	414
	8	6	9	27	20.9237	1	2	53	4.008	10	7	26.47	4		9001	2662	F5	415
	8	6	9	27	24.9237	1	2	53	29.393	9	44	32.05	4		9001	2662	F6	416
	8	6	9	27	28.9238	1	2	53	55.017	9	21	38.62	4		9001	2662	F7	417
	8	6	9	40	4.9229	1	1	42	49.402	34	3	54.10	4		9007	6285	F1	3555
	8	6	9	40	8.9228	1	1	43	55.586	33	42	56.29	4		9007	6285	F2	4719
	8	6	9	40	12.9228	1	1	45	1.558	33	21	44.20	4		9007	6285	F3	4720
	8	6	9	40	16.9227	1	1	46	7.877	33	0	23.36	4		9007	6285	F4	4721
	8	6	9	40	20.9227	1	1	47	14.167	32	38	51.88	4		9007	6285	F5	4722
	8	6	9	40	24.9226	1	1	48	20.279	32	17	5.00	4		9007	6285	F6	3557
	8	6	9	40	28.9226	1	1	49	26.813	31	55	12.82	4		9007	6285	F7	4723
	8	6	9	44	4.9207	1	2	53	26.219	7	17	43.21	4		9007	6286	F1	4724
	8	6	9	44	4.9247	1	1	52	46.259	32	7	29.17	4		9011	9101	F1	6258
	8	6	9	44	8.9207	1	2	54	43.986	6	45	17.57	4		9007	6286	F2	3558
	8	6	9	44	8.9246	1	1	53	41.391	31	52	8.08	4		9011	9101	F2	6259
	8	6	9	44	12.9207	1	2	56	1.954	6	12	40.25	4		9007	6286	F3	3559
	8	6	9	44	12.9245	1	1	54	36.575	31	36	39.76	4		9011	9101	F3	6260
	8	6	9	44	16.9207	1	2	57	20.365	5	39	57.80	4		9007	6286	F4	3560
	8	6	9	44	16.9245	1	1	55	32.476	31	21	4.10	4		9011	9101	F4	6261
	8	6	9	44	20.9207	1	2	58	39.332	5	7	6.98	4		9007	6286	F5	3561
	8	6	9	44	20.9244	1	1	56	28.347	31	5	19.58	4		9011	9101	F5	5723
	8	6	9	44	24.9206	1	2	59	58.374	4	34	9.25	4		9007	6286	F6	4725
	8	6	9	44	24.9244	1	1	57	24.007	30	49	28.36	4		9011	9101	F6	5724
	8	6	9	44	28.9206	1	3	1	17.735	4	1	2.02	4		9007	6286	F7	4726
	8	6	9	44	28.9243	1	1	58	20.431	30	33	30.93	4		9011	9101	F7	6262
	8	6	9	50	28.7973	1	3	48	38.768	- 4	30	43.94	4		9011	9102	02	7876
	8	6	9	53	4.9203	1	5	4	21.427	-24	37	40.12	4		9011	9103	F1	6272
	8	6	9	53	8.9204	1	5	6	35.918	-25	6	11.30	4		9011	9103	F2	6273
	8	6	9	53	12.9204	1	5	8	50.961	-25	34	29.32	4		9011	9103	F3	6274
	8	6	9	53	16.9204	1	5	11	7.191	-26	2	30.27	4		9011	9103	F4	6275
	8	6	9	53	20.9204	1	5	13	24.115	-26	30	15.56	4		9011	9103	F5	6276
	8	6	9	53	24.9204	1	5	15	42.055	-26	57	47.90	4		9011	9103	F6	6277
	8	6	9	53	28.9204	1	5	18	.514	-27	25	.51	4		9011	9103	F7	6278
	8	6	11	17	13.9533	1	18	42	2.629	53	49	31.49	4		9113	1977	04	6627
	8	6	11	22	58.1957	1	22	34	47.560	40	32	27.92	4		9113	1978	04	6628
	8	6	13	27	17.8747	1	3	45	17.347	39	12	39.23	4		9117	2952	07	8840
	8	6	13	29	46.7963	1	2	39	7.447	26	44	52.41	4		9012	7435	07	6918
	8	6	19	48	4.9240	1	3	15	43.902	19	32	16.03	4		9023	6925	F1	2003
	8	6	19	48	8.9239	1	3	16	54.455	19	10	26.61	4		9023	6925	F2	3697
	8	6	19	48	12.9239	1	3	18	5.250	18	48	25.58	4		9023	6925	F3	3698
	8	6	19	48	16.9238	1	3	19	16.399	18	26	16.02	4		9023	6925	F4	3699

August 6-8, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	8	6	19	48	20.9238	1	3	20	28.147	18	3	57.96	4		9023	6925	F5	3700
	8	6	19	48	24.9238	1	3	21	39.965	17	41	31.85	4		9023	6925	F6	3701
	8	6	19	48	28.9237	1	3	22	52.003	17	18	58.64	4		9023	6925	F7	3702
	8	6	19	51	8.7928	1	4	16	3[illegible].211	0	36	9[illegible].03	4		9023	6926	07	7661
	8	6	19	54	4.9227	1	5	30	17.414	-18	44	4[illegible].41	4		9023	6927	F1	2005
	8	6	19	54	8.9227	1	5	32	8.810	-19	8	39.72	4		9023	6927	F2	2006
	8	6	19	54	12.9227	1	5	34	.244	-19	32	25.85	4		9023	6927	F3	2007
	8	6	19	54	16.9227	1	5	35	52.325	-19	56	.86	4		9023	6927	F4	2008
	8	6	19	54	20.9227	1	5	37	44.994	-20	19	24.03	4		9023	6927	F5	2009
	8	6	19	54	24.9227	1	5	39	37.716	-20	42	33.75	4		9023	6927	F6	3703
	8	6	19	54	28.9228	1	5	41	31.040	-21	5	35.69	4		9023	6927	F7	2011
	8	6	20	58	4.9232	1	11	18	38.817	63	58	51.89	4		9004	8738	F1	5019
	8	6	20	58	8.9232	3	11	17	2.892	64	31	55.02	4		9004	8738	F2	5499
	8	6	20	58	12.9232	1	11	15	22.683	65	4	50.53	4		9004	8738	F3	5020
	8	6	20	58	16.9232	3	11	13	37.766	65	37	35.95	4		9004	8738	F4	5500
	8	6	20	58	20.9232	3	11	11	47.812	66	10	12.31	4		9004	8738	F5	5501
	8	6	20	58	24.9232	3	11	9	52.119	66	42	41.08	4		9004	8738	F6	5502
	8	6	20	58	28.9232	3	11	7	50.959	67	14	58.60	4		9004	8738	F7	5503
	8	6	21	2	4.9245	1	4	8	27.856	78	32	17.53	4		9004	8739	F1	5021
	8	6	21	2	8.9246	1	4	1	54.207	78	14	26.28	4		9004	8739	F2	5022
	8	6	21	2	12.9246	1	3	55	42.748	77	56	10.93	4		9004	8739	F3	5023
	8	6	21	2	16.9246	1	3	49	53.236	77	37	31.09	4		9004	8739	F4	5024
	8	6	21	2	20.9247	1	3	44	22.445	77	18	26.64	4		9004	8739	F5	5025
	8	6	21	2	24.9247	1	3	39	11.746	76	59	5.31	4		9004	8739	F6	5026
	8	6	21	2	28.9248	1	3	34	18.564	76	39	22.04	4		9004	8739	F7	5027
	8	6	21	4	4.9258	1	2	30	17.238	68	21	57.65	4		9004	8740	F1	5067
	8	6	21	4	8.9259	3	2	28	54.609	68	1	33.36	4		9004	8740	F2	5520
	8	6	21	4	12.9259	1	2	27	35.958	67	41	6.53	4		9004	8740	F3	4739
	8	6	21	4	16.9260	3	2	26	20.060	67	20	47.10	4		9004	8740	F4	5521
	8	6	21	4	20.9260	1	2	25	8.683	67	0	32.61	4		9004	8740	F5	4740
	8	6	21	4	24.9260	3	2	23	57.101	66	40	25.45	4		9004	8740	F6	5497
	8	6	21	4	28.9261	3	2	22	50.065	66	20	19.93	4		9004	8740	F7	5498
	8	6	23	5	4.9264	1	10	53	44.113	66	6	25.61	4		9004	8751	F1	3395
	8	6	23	5	8.9264	1	10	51	20.984	66	26	33.14	4		9004	8751	F2	3396
	8	6	23	5	12.9264	1	10	48	52.759	66	46	27.30	4		9004	8751	F3	3397
	8	6	23	5	16.9264	1	10	46	19.543	67	5	13.91	4		9004	8751	F4	4348
	8	6	23	5	20.9264	1	10	43	41.551	67	25	50.65	4		9004	8751	F5	4349
	8	6	23	5	24.9264	1	10	40	58.891	67	45	11.22	4		9004	8751	F6	4350
	8	6	23	5	28.9264	1	10	38	10.646	68	4	30.58	4		9004	8751	F7	4351
	8	6	23	9	4.9264	1	5	51	21.603	73	45	35.21	4		9004	8752	F1	4352
	8	6	23	9	8.9264	1	5	46	10.102	73	34	19.82	4		9004	8752	F2	4353
	8	6	23	9	12.9264	1	5	41	7.820	73	22	38.09	4		9004	8752	F3	3399
	8	6	23	9	16.9264	1	5	36	12.864	73	10	26.95	4		9004	8752	F4	3400
	8	6	23	9	20.9264	1	5	31	25.431	72	57	46.69	4		9004	8752	F5	3401
	8	6	23	9	24.9264	1	5	26	46.478	72	44	43.66	4		9004	8752	F6	3402
	8	6	23	9	28.9264	1	5	22	15.155	72	31	11.35	4		9004	8752	F7	3403
	8	6	23	12	4.9272	1	3	41	26.985	60	57	59.23	4		9004	8753	F1	4732
	8	6	23	12	8.9273	1	3	40	7.962	60	38	32.57	4		9004	8753	F2	5085
	8	6	23	12	12.9273	1	3	38	50.326	60	19	8.45	4		9004	8753	F3	4733
	8	6	23	12	16.9273	1	3	37	35.475	59	59	40.45	4		9004	8753	F4	4734
	8	6	23	12	20.9273	1	3	36	23.030	59	40	16.36	4		9004	8753	F5	4735
	8	6	23	12	24.9274	1	3	35	12.453	59	20	47.15	4		9004	8753	F6	4736
	8	6	23	12	28.9274	1	3	34	3.301	59	1	24.17	4		9004	8753	F7	4737
	8	7	1	18	36.2781	1	3	1	13.534	63	22	59.39	4		9004	8763	03	6876
	8	7	1	48	6.1768	1	4	45	3.232	11	23	12.75	4		9002	4940	03	6134
	8	7	5	4	55.7762	1	5	57	4.545	75	48	6.01	4		9113	2002	04	6630
	8	7	7	11	24.6383	1	7	37	16.536	75	43	41.01	4		9113	2024	04	7663
	8	7	9	15	4.1740	1	14	23	59.966	70	17	49.73	4		9113	2042	04	6632
	8	7	9	19	23.1922	1	1	21	13.345	82	39	37.68	4		9113	2043	03	6633
	8	7	9	23	41.8373	1	2	22	59.937	49	58	18.21	4		9113	2044	04	6634
	8	7	9	32	28.7922	1	23	8	51.514	14	47	14.71	4		9010	4333	04	7302
	8	7	11	21	42.5495	1	18	56	51.471	49	0	21.23	4		9113	2061	04	6635
	8	7	17	28	25.0394	1	0	14	42.319	34	15	16.61	4		9005	7101	04	7312
	8	7	19	55	48.8003	1	3	59	23.941	- 6	53	18.48	4		9023	6947	04	7652
	8	8	1	51	33.8606	1	4	18	22.922	13	31	28.36	4		9002	4957	03	6135
	8	8	3	30	1.6602	1	23	9	48.157	30	50	29.51	4		9004	8819	01	6877
	8	8	7	15	39.6226	1	8	7	58.705	76	37	1.55	4		9113	2103	05	6636
	8	8	7	22	8.6804	1	3	14	39.392	50	3	10.08	4		9113	2104	04	6637
	8	8	7	48	46.1423	1	4	20	57.694	15	51	5.75	4		9007	6319	05	7317
	8	8	7	55	18.7949	1	4	48	40.172	7	18	55.39	4		9011	9121	04	6961
	8	8	9	25	1.0063	1	0	47	28.443	73	10	48.09	4		9113	2124	04	6638
	8	8	9	35	58.0308	1	2	44	46.974	- 0	55	5.04	4		9113	2126	06	6639
	8	8	9	58	45.5964	1	2	29	6.075	-13	4	27.38	4		9011	9129	04	6564
	8	8	11	26	.6744	1	19	3	40.665	44	8	45.71	4		9113	2138	03	6571
	8	8	11	30	17.1277	1	21	13	33.601	33	45	56.51	4		9113	2139	03	6572
	8	8	13	30	37.5036	1	2	9	22.344	72	53	14.01	4		9117	3057	05	8841
	8	8	13	32	36.3133	1	2	31	23.641	61	8	46.94	4		9117	3058	03	8842
	8	8	13	34	43.7405	1	2	47	38.356	47	13	39.49	4		9117	3059	04	8843
	8	8	15	49	38.1185	1	0	27	19.212	-23	0	23.58	4		9117	3075	05	8844
	8	8	19	59	28.8003	1	3	12	6.080	- 7	27	38.94	4		9023	6967	06	6948

August 9-14, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME	NO.	OBS.NO.
1966	8	9	1	55	55.2083	1	4	0	45.061	10	44	2.00	4		9002	4973	06	6136
	8	9	7	19	5.1846	1	9	58	51.879	75	12	7.70	4		9113	2176	01	6573
	8	9	7	23	32.4844	1	3	53	29.327	67	5	53.70	4		9113	2177	02	6574
	8	9	7	28	4.2222	1	2	56	25.613	42	18	50.27	4		9113	2178	03	6575
	8	9	7	53	37.4355	1	4	11	59.454	10	50	16.48	4		9007	6342	09	7877
	8	9	7	59	10.1223	1	4	29	36.628	6	58	15.40	4		9011	9144	04	6565
	8	9	9	24	20.3335	1	15	42	35.662	69	8	17.21	4		9113	2196	02	6576
	8	9	9	29	57.6146	1	0	6	14.368	67	11	13.75	4		9113	2197	02	6577
	8	9	9	35	59.6181	1	1	54	28.604	20	0	12.87	4		9113	2198	03	6578
	8	9	11	33	55.4024	1	20	45	11.488	30	28	.64	4		9113	2216	03	6579
	8	9	11	38	15.9532	1	22	28	16.332	8	32	59.60	4		9113	2217	03	65A0
	8	9	11	42	17.2643	1	23	40	49.156	-14	28	5.59	4		9113	2218	01	65A1
	8	9	13	41	4.8039	1	0	7	17.219	28	2	17.14	4		9012	7562	02	68A2
	8	10	7	23	43.6802	1	10	7	6.343	76	40	32.24	4		9113	2261	01	65A2
	8	10	7	28	3.5342	1	3	35	56.492	67	52	7.24	4		9113	2262	03	65A3
	8	10	7	32	13.8249	1	2	46	1.325	43	28	33.79	4		9113	2263	02	65A4
	8	10	7	45	56.8053	1	2	4	29.854	- 4	22	59.06	4		9010	4398	02	7303
	8	10	7	57	51.6056	1	3	53	3.992	8	28	7.15	4		9007	6370	09	7878
	8	10	9	28	45.9056	1	16	14	44.502	66	27	11.17	4		9113	2277	03	65A5
	8	10	9	35	41.6104	1	0	3	48.606	53	45	28.58	4		9113	2279	01	6971
	8	10	11	34	25.7249	1	19	9	16.185	35	15	44.14	4		9113	2297	01	76A2
	8	10	11	38	57.3470	1	20	54	54.100	22	10	59.59	4		9113	2298	03	65A8
	8	10	11	42	59.3531	1	22	17	13.838	1	59	43.95	4		9113	2299	01	65A9
	8	10	13	46	8.8097	1	23	42	51.678	16	1	2.47	4		9012	7608	04	8340
	8	10	18	3	59.0528	1	4	19	35.606	7	35	4.62	4		9023	6984	03	6949
	8	11	2	4	24.8283	1	3	9	58.264	4	27	39.81	4		9002	5012	06	6137
	8	11	7	27	46.9897	1	11	2	30.582	75	41	28.27	4		9113	2341	05	5752
	8	11	7	32	5.2858	1	3	28	6.098	71	40	11.81	4		9113	2342	05	5753
	8	11	7	36	24.7394	1	2	32	52.501	44	36	44.81	4		9113	2343	05	6385
	8	11	8	1	58.5255	1	3	27	58.717	6	16	45.72	4		9007	6394	07	7318
	8	11	8	7	1.1748	1	3	42	3.767	5	1	30.11	4		9011	9175	03	6916
	8	11	9	44	13.4066	1	0	51	.154	16	16	14.14	4		9113	2362	04	76A4
	8	11	9	48	8.5656	1	1	36	21.977	- 7	47	4.89	4		9113	2363	06	5756
	8	11	11	48	7.1452	1	22	13	51.472	- 5	39	50.89	4		9113	2387	05	5757
	8	11	11	52	18.3708	1	23	13	49.284	-25	32	58.09	4		9113	2388	[illegible]	5758
	8	11	20	12	.8095	1	1	6	25.410	-20	36	12.59	4		9023	7012	07	6950
	8	12	2	9	12.8091	1	2	49	33.663	- 4	7	53.77	4		9002	5033	03	6138
	8	12	3	47	2.8578	1	21	35	5.248	10	20	51.76	4		9004	9000	01	6878
	8	12	5	42	21.2695	1	2	39	40.966	51	32	28.87	4		9010	4459	04	7650
	8	12	5	44	35.9224	1	2	37	22.269	37	39	48.97	4		9010	4460	03	6943
	8	12	7	32	14.3562	1	11	37	24.690	76	12	16.67	4		9113	2428	04	5759
	8	12	7	36	32.4859	1	2	57	1.028	73	5	27.06	4		9113	2429	06	5760
	8	12	7	40	31.6580	1	2	16	29.327	46	14	4.19	4		9113	2430	04	5761
	8	12	9	40	52.5569	1	19	48	58.360	60	41	52.80	4		9113	2444	05	6386
	8	12	9	44	59.3774	1	22	58	29.842	39	42	17.82	4		9113	2445	05	5763
	8	12	9	51	51.2931	1	1	3	55.518	- 8	38	44.46	4		9113	2446	06	5764
	8	12	10	10	40.8132	1	23	7	5.398	-25	54	39.16	4		9007	6415	04	7319
	8	12	11	45	46.1357	1	20	8	22.278	19	49	37.00	4		9113	2464	04	6387
	8	12	11	53	8.6029	1	22	8	25.251	-11	40	11.46	4		9113	2466	04	6388
	8	12	13	54	34.5431	1	22	32	20.043	6	1	38.94	4		9012	7647	03	68A4
	8	13	2	11	4.9384	1	1	23	19.857	9	28	7.58	4		9002	5055	F1	2768
	8	13	2	11	8.9383	1	1	24	32.043	8	59	52.41	4		9002	5055	F2	2769
	8	13	2	11	12.9383	1	1	25	44.733	8	31	24.53	4		9002	5055	F3	2770
	8	13	2	11	16.9383	1	1	26	57.566	8	2	41.30	4		9002	5055	F4	2771
	8	13	2	11	20.9382	1	1	28	10.950	7	33	44.44	4		9002	5055	F5	3613
	8	13	2	11	24.9382	1	1	29	25.450	7	4	54.74	4		9002	5055	F6	2773
	8	13	2	11	28.9382	1	1	30	39.956	6	35	9.52	4		9002	5055	F7	2774
	8	13	2	15	4.9373	1	2	54	43.349	-23	34	39.39	4		9002	5056	F1	2775
	8	13	2	15	8.9373	1	2	56	40.727	-24	8	50.63	4		9002	5056	F2	3614
	8	13	2	15	12.9373	1	2	58	39.160	-24	42	52.20	4		9002	5056	F3	2777
	8	13	2	15	16.9373	1	3	0	38.316	-25	16	42.13	4		9002	5056	F4	2778
	8	13	2	15	20.9373	1	3	2	39.062	-25	50	26.29	4		9002	5056	F5	2779
	8	13	2	15	24.9373	1	3	4	40.710	-26	23	57.31	4		9002	5056	F6	2780
	8	13	2	15	28.9373	1	3	6	43.263	-26	57	14.94	4		9002	5056	F7	2781
	8	13	3	52	13.6045	1	21	36	50.438	1	54	50.84	4		9004	9060	06	6879
	8	13	5	32	46.0730	1	18	48	54.480	72	5	27.13	4		9114	1602	05	6159
	8	13	5	38	12.0377	1	23	55	.316	37	24	40.59	4		9114	1603	07	6160
	8	13	7	36	19.5428	1	12	26	23.905	74	19	35.70	4		9113	2508	06	5767
	8	13	7	45	3.5184	1	1	55	50.886	45	2	4.58	4		9113	2510	06	5768
	8	13	9	42	40.8145	1	17	47	22.311	55	32	47.97	4		9113	2529	07	5769
	8	13	9	47	46.5940	1	21	30	44.222	43	45	40.91	4		9113	2530	04	5770
	8	13	10	13	12.0700	1	22	34	38.118	-15	25	38.85	4		9007	6433	05	7879
	8	13	11	53	30.9046	1	1	31	35.811	37	8	39.06	4		9012	7686	02	7645
	8	13	15	48	37.3063	1	23	49	53.578	43	37	14.55	4		9005	7190	08	7309
	8	13	18	16	7.1889	1	3	14	12.458	2	22	18.04	4		9023	7043	05	6951
	8	14	0	13	9.8788	1	3	42	23.556	11	50	13.10	4		9002	5072	03	6139
	8	14	1	51	8.8164	1	23	1	58.085	34	52	22.37	4		9004	9102	06	6930
	8	14	5	37	7.3469	1	5	32	23.810	74	17	9.66	4		9113	2574	03	7134
	8	14	5	39	20.0562	1	3	23	31.004	66	17	59.60	4		9113	2575	05	7142
	8	14	7	48	26.0563	1	1	27	42.554	52	1	33.92	4		9113	2593	03	7143

August 14-17, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (KM)	STATION	FRAME	NO.	OBS.NO.
1966	8	14	7	50	43.4166	1	1	36	33.780	35	21	1.76	4		9113	2596	05	7164
	8	14	7	51	4.9515	1								2.4997120	7901			5419
	8	14	7	52	4.9517	1								2.5253600	7901			5420
	8	14	7	53	.1810	1	1	45	29.608	20	55	50.69	4		9113	2595	07	7135
	8	14	7	53	4.9521	1								2.5889250	7901			5421
	8	14	7	53	34.9524	1								2.6340770	7901			5422
	8	14	7	54	4.9528	1								2.6875230	7901			5423
	8	14	8	16	9.0745	1	2	17	30.735	-20	5	28.77	4		9007	6447	04	6557
	8	14	8	19	39.7317	1	2	13	59.351	- 6	45	55.33	4		9011	9197	04	6586
	8	14	9	50	58.6648	1	20	26	16.549	42	23	26.39	4		9113	2607	03	7136
	8	14	9	55	4.0021	1	22	30	27.649	17	35	17.95	4		9113	2608	04	7137
	8	14	9	58	4.3494	1	23	30	40.093	- 2	52	8.27	4		9113	2609	03	7138
	8	14	10	15	31.4886	1	22	9	56.541	- 6	38	38.17	4		9007	6453	04	6558
	8	14	11	52	44.4332	1	22	29	54.123	69	46	30.44	4		9012	7727	02	6886
	8	14	13	56	37.4918	1	20	1	40.763	28	34	25.64	4		9012	7737	03	6887
	8	14	18	20	40.8145	1	2	55	8.903	- 3	50	45.88	4		9023	7067	04	6952
	8	14	20	25	26.4360	1	23	32	27.824	-34	16	2.26	4		9023	7075	05	6953
	8	14	23	48	46.4485	1	1	35	45.443	58	7	52.37	4		9004	9135	02	6880
	8	15	0	19	5.3910	1	3	53	5.314	1	13	32.50	4		9002	5090	04	6140
	8	15	1	52	21.6139	1	20	35	38.820	48	55	10.03	4		9004	9151	03	7646
	8	15	5	40	51.9431	1	6	45	37.590	75	52	44.72	4		9113	2646	05	7139
	8	15	5	45	5.1855	1	2	41	36.250	60	33	33.55	4		9113	2647	04	7665
	8	15	6	18	21.4072	1	4	8	38.512	- 5	10	40.03	4		9007	6463	10	6559
	8	15	6	20	17.3677	1	3	43	42.665	8	16	15.49	4		9011	9214	06	6567
	8	15	8	22	40.7427	1	2	37	24.264	-44	50	51.63	4		9007	6468	07	6560
	8	15	8	25	32.2570	1	2	20	37.367	-26	29	34.24	4		9011	9219	05	6568
	8	15	9	50	45.0256	1	17	46	37.107	45	41	32.79	4		9113	2680	04	7145
	8	15	9	55	20.6537	1	20	13	24.275	35	28	6.00	4		9113	2681	06	7146
	8	15	9	59	26.5640	1	22	4	2.419	11	49	16.79	4		9113	2682	07	7147
	8	15	11	55	41.5198	1	20	15	34.992	68	55	.86	4		9012	7778	01	7294
	8	15	14	0	9.1329	1	19	44	56.632	26	12	14.02	4		9012	7788	02	7295
	8	15	20	29	31.6670	1	22	53	47.656	-33	35	2.84	4		9023	7087	05	6954
	8	16	0	25	18.8520	1	4	15	25.423	-12	31	28.67	4		9002	5110	08	6141
	8	16	1	55	16.8630	1	19	21	5.227	47	3	49.61	4		9004	9199	03	7810
	8	16	3	52	.3073	1	2	55	.661	60	8	56.21	4		9010	4545	05	7304
	8	16	5	44	56.0966	1	7	37	7.677	76	33	53.29	4		9113	2731	05	7148
	8	16	5	45	35.9489	1	18	11	39.503	65	21	2.01	4		9114	1629	06	6161
	8	16	5	47	6.9677	1	4	4	41.870	73	28	12.77	4		9113	2732	06	7149
	8	16	5	49	13.8510	1	2	37	52.237	62	56	25.80	4		9113	2733	05	7326
	8	16	5	50	.9246	1	22	47	24.992	40	37	57.67	4		9114	1630	05	6162
	8	16	5	54	.8026	1	23	50	38.059	16	58	11.35	4		9114	1631	07	6163
	8	16	6	26	41.3687	1	4	7	45.630	- 4	18	15.95	4		9011	9238	04	6569
	8	16	7	49	17.5092	1	14	20	17.744	69	17	53.49	4		9113	2756	04	7325
	8	16	7	52	9.2489	1	18	11	51.705	80	51	9.98	4		9113	2757	02	6590
	8	16	7	54	51.0417	1	23	17	7.049	68	55	34.38	4		9113	2758	01	6591
	8	16	8	30	20.9041	1	1	55	11.723	-37	51	57.61	4		9011	9240	05	6570
	8	16	9	57	23.1794	1	2	33	2.344	60	25	3.15	4		9012	7810	02	7296
	8	16	9	57	26.0763	1	18	59	42.367	36	56	37.35	4		9113	2771	02	6592
	8	16	9	58	54.4123	1	19	3	39.264	27	47	10.02	4		9001	2966	02	6869
	8	16	11	59	.5396	1	19	2	31.939	63	53	11.63	4		9012	7820	05	7297
	8	16	16	26	31.1911	1	3	52	4.625	2	36	4.21	4		9023	7112	07	6955
	8	16	20	31	19.2893	1	22	30	6.887	-17	47	14.33	4		9023	7123	08	7653
	8	16	21	47	4.9472	1	18	56	2.749	77	46	24.38	4		9080	4101	F1	0
	8	16	21	47	4.9515	1	5	40	2.108	76	11	24.15	4		9004	9225	F1	7458
	8	16	21	47	8.9472	1	19	8	52.081	77	38	4.91	4		9080	4101	F2	1
	8	16	21	47	8.9515	1	5	33	.682	76	6	17.58	4		9004	9225	F2	7459
	8	16	21	47	12.9472	1	19	21	22.987	77	27	35.53	4		9080	4101	F3	2
	8	16	21	47	12.9515	1	5	26	5.052	76	0	27.92	4		9004	9225	F3	7460
	8	16	21	47	16.9472	1	19	33	32.628	77	15	1.01	4		9080	4101	F4	3
	8	16	21	47	16.9515	1	5	19	16.865	75	53	43.33	4		9004	9225	F4	7498
	8	16	21	47	20.9472	1	19	45	16.950	77	0	30.21	4		9080	4101	F5	4
	8	16	21	47	20.9515	1	5	12	35.059	75	46	16.88	4		9004	9225	F5	7461
	8	16	21	47	24.9472	1	19	56	34.077	76	44	7.60	4		9080	4101	F6	5
	8	16	21	47	24.9515	1	5	5	59.581	75	38	5.20	4		9004	9225	F6	7462
	8	16	21	47	28.9472	1	20	7	24.130	76	26	1.18	4		9080	4101	F7	6
	8	16	21	47	28.9515	1	4	59	33.404	75	39	9.23	4		9004	9225	F7	7463
	8	16	21	55	4.9511	1	0	9	15.034	23	38	58.10	4		9080	4102	F1	14
	8	16	21	55	8.9512	1	0	9	42.735	23	19	35.21	4		9080	4102	F2	15
	8	16	21	55	12.9512	1	0	10	10.554	23	0	22.72	4		9080	4102	F3	16
	8	16	21	55	16.9513	1	0	10	37.695	22	41	17.87	4		9080	4102	F4	17
	8	16	21	55	20.9513	1	0	11	4.788	22	22	23.24	4		9080	4102	F5	18
	8	16	21	55	24.9514	1	0	11	31.638	22	3	35.25	4		9080	4102	F6	19
	8	16	21	55	28.9514	1	0	11	58.265	21	44	53.58	4		9080	4102	F7	20
	8	17	0	31	.0299	1	4	36	11.824	-24	21	.19	4		9002	5135	04	6142
	8	17	1	58	56.7775	1	18	51	49.475	42	23	14.45	4		9004	9248	04	6932
	8	17	2	34	6.2902	1	0	22	1.802	-61	32	51.26	4		9002	5140	04	6143
	8	17	5	49	13.3647	1	8	12	51.869	77	19	45.31	4		9113	2820	03	6593
	8	17	5	51	14.9277	1	4	20	46.787	76	18	15.28	4		9113	2821	02	6594
	8	17	5	53	21.4841	1	2	32	1.674	65	42	25.96	4		9113	2822	01	6595
	8	17	6	32	22.7999	1	4	27	34.834	-14	45	.18	4		9011	9258	04	7657

August 17-21, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (KM)	STATION	FRAME NO.	OBS.NO.
1966	8	17	7	53	34.8968	1	14	49	10.506	66	22	25.91	4		9113	2836 02	6506
	8	17	7	57	20.8460	1	19	42	35.695	74	57	21.67	4		9113	2837 03	6507
	8	17	7	58	4.9829	1								3.0427130	7901		5424
	8	17	7	58	34.9822	1								2.9382770	7901		5425
	8	17	8	0	4.9803	1								2.8571530	7901		5426
	8	17	8	0	39.2492	1	23	13	3.722	55	10	9.05	4		9113	2838 02	6508
	8	17	8	1	4.9593	1								2.9027260	7901		5427
	8	17	8	1	34.9589	1								2.4374520	7901		5428
	8	17	8	33	3.1679	1	1	56	52.603	-67	44	25.35	4		9007	6508 03	6561
	8	17	8	36	6.0127	1	2	4	59.059	-57	10	9.83	4		9011	9263 03	6459
	8	17	10	0	16.8217	1	2	20	.363	70	28	.49	4		9012	7852 03	7298
	8	17	10	2	24.7662	1	19	14	39.851	29	33	.29	4		9113	2858 02	6509
	8	17	13	58	8.1806	1	0	31	22.775	69	9	51.00	4		9005	7204 07	7310
	8	17	21	52	4.9451	1	20	16	36.176	73	19	21.36	4		9080	4202 F1	7
	8	17	21	52	4.9493	1	4	44	59.783	76	24	50.49	4		9004	9274 F1	7444
	8	17	21	52	8.9451	1	20	24	49.518	72	57	17.65	4		9080	4202 F2	8
	8	17	21	52	8.9493	1	4	38	19.285	76	13	46.61	4		9004	9274 F2	7445
	8	17	21	52	12.9451	1	20	32	42.712	72	34	4.31	4		9080	4202 F3	9
	8	17	21	52	12.9493	1	4	31	50.333	76	1	57.74	4		9004	9274 F3	7446
	8	17	21	52	16.9451	1	20	40	15.230	72	9	50.22	4		9080	4202 F4	10
	8	17	21	52	16.9493	1	4	25	33.004	75	49	32.68	4		9004	9274 F4	7447
	8	17	21	52	20.9451	1	20	47	27.584	71	44	36.80	4		9080	4202 F5	11
	8	17	21	52	20.9493	1	4	19	26.373	75	36	23.17	4		9004	9274 F5	7448
	8	17	21	52	24.9451	1	20	54	20.749	71	18	27.92	4		9080	4202 F6	12
	8	17	21	52	24.9493	1	4	13	31.752	75	22	37.86	4		9004	9274 F6	7449
	8	17	21	52	28.9451	1	21	0	54.945	70	51	29.18	4		9080	4202 F7	13
	8	17	21	52	28.9493	1	4	7	47.779	75	8	17.10	4		9004	9274 F7	7450
	8	18	0	35	55.4154	1	4	45	19.607	-33	6	17.28	4		9002	5152 03	6144
	8	18	2	2	5.1756	1	18	14	45.093	39	12	56.28	4		9004	9295 02	6933
	8	18	2	38	59.9262	1	23	25	9.925	-67	21	5.47	4		9002	5157 05	6145
	8	18	5	53	5.5399	1	9	29	5.546	76	12	24.45	4		9113	2912 03	6600
	8	18	5	57	5.6241	1	2	35	55.543	71	7	42.79	4		9113	2913 01	6601
	8	18	6	1	43.0849	1	1	32	58.990	62	43	51.97	4		9113	2914 03	6602
	8	18	6	37	2.0361	1	4	29	43.550	-21	16	23.72	4		9011	9282 01	6460
	8	18	7	58	57.5625	1	15	58	50.039	66	22	22.24	4		9113	2929 03	6603
	8	18	8	3	37.0875	1	21	26	23.966	61	9	39.19	4		9113	2930 01	6604
	8	18	8	38	21.9758	1	1	30	30.580	-76	41	39.68	4		9007	6529 07	6562
	8	18	8	41	.2910	1	1	32	34.537	-67	3	5.87	4		9011	9285 03	7881
	8	18	16	38	19.2706	1	4	36	24.191	-17	55	23.09	4		9023	7156 04	6956
	8	18	18	41	50.6222	1	3	9	25.757	-61	25	30.49	4		9023	7159 09	7654
	8	18	21	56	4.9570	1	5	39	36.929	78	52	48.72	4		9004	9305 F1	74A4
	8	18	21	56	8.9570	1	5	30	39.728	78	48	9.28	4		9004	9305 F2	74A5
	8	18	21	56	12.9570	1	5	21	50.431	78	42	26.74	4		9004	9305 F3	74A6
	8	18	21	56	16.9570	1	5	13	10.105	78	35	42.20	4		9004	9305 F4	74A7
	8	18	21	56	20.9570	1	5	4	40.650	78	27	58.22	4		9004	9305 F5	74A8
	8	18	21	56	24.9569	1	4	56	21.816	78	19	16.99	4		9004	9305 F6	74A9
	8	18	21	56	28.9569	1	4	48	17.213	78	9	37.71	4		9004	9305 F7	74A0
	8	19	0	5	16.8233	1	22	22	43.050	62	17	26.09	4		9004	9316 03	6934
	8	19	0	41	29.2378	1	5	19	43.320	-43	42	33.53	4		9002	5178 05	6146
	8	19	2	6	13.3658	1	18	12	14.189	34	33	36.39	4		9004	9330 02	7647
	8	19	6	3	4.9702	1								3.0419890	7901		5429
	8	19	6	3	34.9676	1								2.9935640	7901		5430
	8	19	6	7	4.9668	1								2.8768790	7901		5431
	8	19	6	7	34.9669	1								2.8934550	7901		5432
	8	19	6	8	4.9671	1								2.9181730	7901		5433
	8	19	6	8	34.9673	1								2.9507970	7901		5434
	8	19	6	42	52.4019	1	5	7	39.549	-32	54	32.10	4		9011	9305 04	6461
	8	19	8	3	3.6498	1	16	7	49.570	61	21	16.68	4		9113	3016 03	6605
	8	19	8	5	41.6390	1	18	32	45.737	63	9	15.43	4		9113	3017 01	6606
	8	19	8	8	38.6590	1	21	16	30.549	51	10	32.67	4		9113	3018 03	6607
	8	19	8	9	4.9680	1								2.7269560	7901		5435
	8	19	8	43	35.0319	1	0	23	11.043	-83	12	19.02	4		9007	6559 05	6915
	8	19	10	7	18.2983	1	23	37	14.328	83	25	53.19	4		9012	7920 03	7299
	8	19	10	10	20.8392	1	18	55	7.244	22	23	23.74	4		9113	3024 03	6608
	8	19	16	42	59.1255	1	4	42	8.673	-24	1	13.01	4		9023	7172 23	6957
	8	19	18	47	9.7755	1	3	48	37.782	-73	5	57.12	4		9023	7176 06	6958
	8	20	0	45	42.9224	1	5	16	37.515	-50	28	14.59	4		9002	5190 05	6147
	8	20	6	47	54.7516	1	5	32	4.619	-40	51	47.68	4		9011	9330 03	6917
	8	20	8	7	2.5272	1	16	10	9.951	56	14	49.48	4		9113	3084 01	6609
	8	20	8	10	1.7287	1	18	24	42.591	56	29	37.30	4		9113	3085 03	6888
	8	20	8	12	47.9965	1	20	34	44.095	45	49	15.04	4		9113	3086 03	6889
	8	20	8	47	39.4802	1	21	45	5.847	-80	28	31.27	4		9007	6587 06	7655
	8	20	10	12	13.4279	1	22	0	58.410	79	27	56.17	4		9012	7977 02	7300
	8	20	14	9	6.3289	1	18	46	26.201	73	5	48.83	4		9005	7212 06	7311
	8	20	16	48	8.9939	1	5	3	29.910	-32	9	37.91	4		9023	7196 03	6959
	8	20	18	51	18.8409	1	2	10	55.313	-78	8	22.29	4		9023	7200 05	6960
	8	21	6	7	47.4092	1	11	0	27.174	85	46	41.77	4		9113	3145 03	6890
	8	21	6	12	9.3188	1	0	32	6.854	61	54	51.70	4		9113	3146 03	7815
	8	21	6	16	29.4676	1	0	41	48.776	30	32	43.01	4		9113	3147 03	6891
	8	21	8	11	42.3569	1	16	35	.992	51	51	6.48	4		9113	3163 04	6892

August 21-28, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (KM)	STATION	FRAME NO.		OBS.NO.
1966	8	21	8	15	48.5186	1	19	18	11.955	45	18	36.32	4		9113	3164	03	6893
	8	21	8	51	15.1984	1	20	44	43.318	-75	14	50.24	4		9007	6616	05	7656
	8	21	8	54	11.6339	1	21	50	40.462	-70	18	51.59	4		9011	9359	02	6643
	8	21	10	16	14.0721	1	19	59	42.583	76	47	22.95	4		9012	8024	02	7301
	8	22	0	14	28.8332	1	17	8	35.224	57	32	48.18	4		9004	9471	07	7648
	8	22	2	56	16.7004	1	20	34	9.141	-62	2	35.57	4		9002	5245	04	6148
	8	22	4	8	26.5992	1	2	33	54.219	68	26	10.41	4		9113	3202	03	6894
	8	22	6	12	4.1434	1	13	35	47.350	83	36	40.01	4		9113	3226	03	6895
	8	22	6	16	23.0069	1	23	49	47.980	63	17	49.84	4		9113	3227	03	6896
	8	22	6	17	4.9736	1								2.6092540	7901			5436
	8	22	6	17	34.9718	1								2.5493820	7901			5437
	8	22	6	18	34.9736	1								2.4562400	7901			5438
	8	22	6	19	34.9718	1								2.4017780	7901			5439
	8	22	6	20	43.5216	1	0	19	33.405	29	48	7.87	4		9113	3228	03	7646
	8	22	6	21	4.9706	1								2.3975140	7901			5440
	8	22	8	15	53.6081	1	16	40	19.757	47	0	35.64	4		9113	3237	04	7647
	8	22	8	17	56.1129	1	17	47	58.900	44	57	26.08	4		9113	3238	03	7648
	8	22	8	20	6.0416	1	19	2	58.899	38	33	10.45	4		9113	3239	03	7649
	8	22	8	55	10.0516	1	20	27	.932	-68	11	54.97	4		9007	6637	04	6563
	8	22	8	58	51.9208	1	20	54	21.603	-70	42	17.54	4		9011	9387	04	6464
	8	22	19	0	38.4504	1	20	57	36.193	-84	59	6.46	4		9023	7240	09	7305
	8	23	0	18	40.8344	1	17	7	27.386	51	42	20.30	4		9004	9522	03	7649
	8	23	4	10	42.8748	1	5	15	48.516	76	7	55.13	4		9113	3281	03	6898
	8	23	4	12	53.8517	1	2	26	1.818	69	31	15.74	4		9113	3282	03	7670
	8	23	4	14	56.7871	1	1	25	44.465	58	45	27.39	4		9113	3283	03	6899
	8	23	6	14	28.3661	1	13	3	2.259	70	19	38.57	4		9113	3303	04	6900
	8	23	6	17	10.0187	1	16	52	39.218	82	34	45.60	4		9113	3304	03	6901
	8	23	6	22	3.1720	1	23	23	40.649	51	47	52.96	4		9113	3305	03	7671
	8	23	9	4	1.7872	1	19	39	26.721	-73	26	47.48	4		9011	9396	05	6465
	8	24	0	22	48.5902	1	17	4	13.309	46	10	23.77	4		9004	9578	04	6937
	8	24	4	14	9.8025	1	7	12	55.498	76	5	18.10	4		9113	3351	05	7880
	8	24	4	18	32.0542	1	1	31	45.430	64	22	24.51	4		9113	3352	04	7321
	8	24	4	22	51.6292	1	0	43	52.035	39	59	14.01	4		9113	3353	05	7322
	8	24	6	19	14.8324	1	13	52	42.292	69	39	11.08	4		9113	3373	04	7323
	8	24	6	20	52.3354	1	18	21	1.275	31	4	8.52	4		9114	1646	05	6164
	8	24	6	22	17.3488	1	18	35	19.466	77	6	51.68	4		9113	3374	05	7324
	8	24	6	22	54.7634	1	19	33	43.968	22	27	31.23	4		9114	1647	04	6165
	8	24	8	24	41.4702	1	16	58	45.750	37	28	14.68	4		9113	3391	08	5771
	8	24	9	7	44.0407	1	19	54	6.945	-66	56	31.82	4		9011	9422	06	6466
	8	24	14	25	11.5296	1	17	8	4.346	49	11	25.56	4		9005	7307	07	7313
	8	25	1	7	51.4369	1	7	15	33.023	-82	48	57.38	4		9002	5308	04	6149
	8	25	4	18	33.2948	1	7	41	59.275	76	59	15.86	4		9113	3437	04	6150
	8	25	4	22	40.8701	1	1	23	17.073	67	14	39.05	4		9113	3438	05	6151
	8	25	4	24	52.5020	1	0	45	18.675	53	41	55.49	4		9113	3439	05	6152
	8	25	6	23	47.3106	1	14	31	8.259	66	50	25.85	4		9113	3453	05	6153
	8	25	6	27	10.9904	1	18	53	3.041	70	4	57.34	4		9113	3454	05	6922
	8	25	6	31	25.2369	1	22	14	35.780	41	8	13.28	4		9113	3455	04	6923
	8	25	8	29	35.0310	1	17	16	48.604	31	54	9.90	4		9113	3471	04	6154
	8	25	8	32	24.2293	1	18	21	20.324	23	37	13.41	4		9113	3472	03	6155
	8	25	9	12	7.3419	1	19	38	32.156	-65	1	2.94	4		9011	9447	06	6467
	8	25	12	25	58.4988	1	21	36	7.933	81	7	29.34	4		9005	7342	07	7314
	8	25	19	13	16.8647	1	19	4	9.173	-72	25	47.34	4		9023	7305	02	7306
	8	25	20	24	.8407	1	1	14	10.989	65	28	2.95	4		9004	9641	02	6938
	8	26	6	31	27.6134	1	18	18	40.373	63	55	37.94	4		9113	3637	05	6156
	8	26	6	31	34.9859	1								3.1501390	7901			5441
	8	26	6	32	4.9881	1								3.0445850	7901			5442
	8	26	6	33	34.9852	1								2.7592580	7901			5443
	8	26	6	34	4.9857	1								2.6764870	7901			5444
	8	26	6	35	34.9815	1								2.4742290	7901			5445
	8	26	6	35	38.7734	1	21	31	31.885	37	48	50.86	4		9113	3638	02	6157
	8	26	19	16	44.5595	1	19	33	6.416	-64	59	47.67	4		9023	7328	05	7307
	8	27	0	35	51.7608	1	17	14	35.755	30	29	27.52	4		9004	9691	03	6939
	8	27	9	20	26.9471	1	19	24	22.036	-59	40	41.26	4		9011	9486	03	7658
	8	27	19	21	32.2086	1	19	4	30.215	-65	24	20.12	4		9023	7353	14	7812
	8	27	20	37	4.9797	1	23	57	55.383	39	55	34.22	4		9004	9719	F1	7502
	8	27	20	37	8.9797	1	23	57	48.405	39	31	23.66	4		9004	9719	F2	7503
	8	27	20	37	12.9797	1	23	57	42.025	39	7	22.95	4		9004	9719	F3	7504
	8	27	20	37	16.9798	1	23	57	36.053	38	43	25.91	4		9004	9719	F4	7505
	8	27	20	37	20.9798	1	23	57	30.096	38	19	38.09	4		9004	9719	F5	7506
	8	27	20	37	24.9798	1	23	57	25.011	37	55	53.58	4		9004	9719	F6	7507
	8	27	20	37	28.9798	1	23	57	19.869	37	32	13.65	4		9004	9719	F7	7508
	8	28	0	40	27.1024	1	17	21	40.315	25	17	13.70	4		9004	9748	03	6940
	8	28	6	43	33.0369	1	19	57	31.591	32	2	8.32	4		9113	3781	16	7816
	8	28	20	35	4.9810	1	2	43	32.009	83	19	30.91	4		9004	9776	F1	7471
	8	28	20	35	8.9810	1	2	30	24.918	83	2	39.45	4		9004	9776	F2	7472
	8	28	20	35	12.9810	1	2	18	18.677	82	44	32.23	4		9004	9776	F3	7499
	8	28	20	35	16.9810	1	2	7	10.224	82	25	10.07	4		9004	9776	F4	7474
	8	28	20	35	20.9810	1	1	57	.487	82	4	45.22	4		9004	9776	F5	7500
	8	28	20	35	24.9810	1	1	47	40.766	81	43	22.54	4		9004	9776	F6	7476
	8	28	20	35	28.9809	1	1	39	6.901	81	21	9.60	4		9004	9776	F7	7501

August 28 - September 9, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (KM)	STATION	FRAME NO.		OBS.NO.
1966	8	28	20	41	4.9815	1	23	41	30.709	41	53	55.76	4		9004	9777	F1	7478
	8	28	20	41	8.9815	1	23	41	28.425	41	27	30.27	4		9004	9777	F2	7479
	8	28	20	41	12.9815	1	23	41	26.078	41	1	12.62	4		9004	9777	F3	7480
	8	28	20	41	16.9816	1	23	41	23.829	40	34	59.40	4		9004	9777	F4	7481
	8	28	20	41	20.9816	1	23	41	22.362	40	8	52.32	4		9004	9777	F5	7482
	8	28	20	41	28.9816	1	23	41	20.133	39	17	1.87	4		9004	9777	F7	7483
	8	29	0	45	2.4916	1	17	27	11.150	20	23	29.17	4		9004	9802	04	6941
	8	29	4	47	20.9623	1	23	29	39.385	19	54	1.98	4		9113	3845	06	6158
	8	29	10	40	13.0085	1	0	1	40.159	61	8	37.37	4		9005	7416	08	7813
	8	29	20	40	4.9831	1	0	8	22.299	82	26	11.35	4		9004	9826	F1	7493
	8	29	20	40	8.9831	1	0	3	52.651	81	57	16.96	4		9004	9826	F2	7494
	8	29	20	40	12.9831	1	23	59	54.220	81	28	8.80	4		9004	9826	F3	7495
	8	29	20	40	16.9831	1	23	56	23.208	80	58	46.64	4		9004	9826	F4	7496
	8	29	20	40	20.9831	1	23	53	15.246	80	29	11.90	4		9004	9826	F5	7497
	8	29	20	40	24.9831	1	23	50	25.718	79	59	27.65	4		9004	9826	F6	7509
	8	29	20	40	28.9830	1	23	47	51.288	79	29	31.78	4		9004	9826	F7	7457
	8	30	4	48	34.9922	1								2.3270600	7901			5447
	8	30	4	49	34.9913	1								2.2931310	7901			5448
	8	30	4	50	4.9916	1								2.2927460	7901			5449
	8	30	4	51	4.9919	1								2.3250380	7901			5450
	8	30	4	51	34.9911	1								2.3571930	7901			5451
	8	30	12	47	3.6166	1	16	54	20.433	55	56	7.71	4		9005	7440	06	7315
	8	30	20	50	4.9855	1	22	58	13.762	38	32	39.07	4		9004	9877	F1	7440
	8	30	20	50	8.9856	1	22	58	31.578	38	3	3.24	4		9004	9877	F2	7451
	8	30	20	50	12.9856	1	22	58	49.911	37	33	34.05	4		9004	9877	F3	7452
	8	30	20	50	16.9856	1	22	59	7.777	37	4	13.18	4		9004	9877	F4	7453
	8	30	20	50	20.9856	1	22	59	25.698	36	35	4.07	4		9004	9877	F5	7454
	8	30	20	50	24.9857	1	22	59	43.474	36	6	4.19	4		9004	9877	F6	7455
	8	30	20	50	28.9857	1	23	0	1.529	35	37	4.96	4		9004	9877	F7	7456
	8	30	22	42	30.8563	1	16	24	15.296	46	50	38.44	4		9004	9895	04	7811
	8	31	12	51	39.8164	1	16	59	59.078	48	27	31.39	4		9005	7473	07	7316
	8	31	22	54	.7208	1	17	0	11.992	37	58	39.43	4		9004	9945	03	6942
	9	1	4	54	35.0002	1								2.5986420	7901			5452
	9	1	4	55	5.0007	1								2.5185920	7901			5453
	9	1	4	55	34.9999	1								2.4465430	7901			5454
	9	1	4	56	34.9959	1								2.3293340	7901			5455
	9	1	4	57	4.9977	1								2.2855440	7901			5456
	9	1	4	57	34.9973	1								2.2524260	7901			5457
	9	1	4	58	4.9955	1								2.2304540	7901			5458
	9	1	7	34	39.9893	1	15	55	34.084	-75	12	3.36	4		9011	9524	05	A102
	9	1	22	58	14.0578	1	16	52	41.705	32	21	13.20	4		9004	6	07	A0AA
	9	2	5	4	4.9987	1								2.2952470	7901			5459
	9	2	7	42	57.3594	1	17	28	31.608	-70	1	22.60	4		9011	9556	07	A103
	9	2	17	44	45.7630	1	15	0	55.697	-76	24	27.00	4		9023	7453	08	A703
	9	2	20	58	52.8661	1	19	7	52.667	67	0	57.13	4		9004	43	06	A0A9
	9	3	5	5	5.0032	1								2.5209670	7901			54A0
	9	3	5	5	35.0039	1								2.4761880	7901			54A1
	9	3	5	8	5.0037	1								2.4058450	7901			54A2
	9	3	7	3	31.8980	1	21	57	36.434	73	33	25.93	4		9012	A285	03	A210
	9	3	17	47	44.8711	1	17	13	10.372	-70	58	18.73	4		9023	74A6	03	A214
	9	4	3	1	35.0098	1								2.8680740	7901			54A3
	9	4	3	3	35.0067	1								2.6494950	7901			54A5
	9	4	3	4	5.0063	1								2.6165000	7901			54A6
	9	4	3	4	35.0086	1								2.5928940	7901			54A7
	9	4	3	6	5.0052	1								2.5804740	7901			54A8
	9	4	3	7	5.0082	1								2.6207800	7901			54A9
	9	4	3	8	35.0063	1								2.7488970	7901			5470
	9	4	3	9	5.0076	1								2.8079790	7901			5471
	9	4	5	5	12.5360	1	16	44	32.434	52	7	1.77	4		9113	4353	04	A228
	9	4	5	10	41.0224	1	19	58	35.774	17	54	28.69	4		9113	4355	03	A229
	9	4	9	11	4.8712	1	16	37	55.745	35	19	34.97	4		9012	A34A	10	91A5
	9	4	17	52	12.6873	1	17	4	22.881	-69	17	49.75	4		9023	7517	03	AA33
	9	5	3	11	23.7011	1	22	28	3.062	26	20	50.05	4		9113	4427	04	A231
	9	5	3	13	27.4276	1	22	35	32.590	14	16	32.26	4		9113	442A	03	A230
	9	5	21	13	49.122A	1	18	22	16.028	- 5	59	52.10	4		9115	1369	13	9073
	9	6	3	9	38.1018	1	21	4	9.429	73	22	54.07	4		9113	4500	01	A232
	9	6	5	57	16.0628	1	11	20	43.244	-78	22	31.74	4		9011	9671	03	A200
	9	6	17	20	35.7024	1	22	52	20.007	57	31	5.31	4		9028	259	02	A224
	9	7	3	11	57.1890	1	15	17	55.817	81	28	6.28	4		9113	4711	03	A105
	9	7	3	14	46.3270	1	20	21	40.580	65	56	47.36	4		9113	4712	03	A106
	9	7	5	22	45.9716	1	18	15	27.386	8	14	22.14	4		9113	4635	03	A104
	9	7	6	1	34.0046	1	12	19	8.422	-77	19	31.52	4		9011	9717	04	A201
	9	7	11	18	42.6669	1	17	22	14.173	42	35	48.18	4		9005	7527	03	A092
	9	8	5	26	23.7755	1	17	42	6.205	7	39	4.18	4		9113	4734	03	A107
	9	8	5	28	32.8119	1	18	23	10.983	- 4	18	40.39	4		9113	4735	03	A108
	9	8	6	5	42.2629	1	13	18	51.289	-76	12	12.85	4		9011	9750	03	A202
	9	8	7	32	10.6411	1	22	10	41.533	11	28	57.53	4		9117	3786	05	9074
	9	8	11	24	36.0370	1	17	51	56.335	26	14	17.22	4		9005	7542	07	A093
	9	9	6	9	11.5379	1	15	7	11.026	-74	5	59.73	4		9011	9761	03	AA3[illegible]
	9	9	16	10	24.7949	1	13	0	16.529	-77	13	55.25	4		9023	763A	04	A215

September 9-25, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME	NO.	OBS.NO.
1966	9	9	21	31	7.8310	1	17	10	31.791	12	24	58.44	4		9004	345	03	A080
	9	10	17	37	56.8813	1	19	38	19.828	55	2	52.93	4		9028	294	02	A225
	9	10	19	38	18.1581	1	21	8	19.829	- 8	7	24.92	4		9004	370	04	A699
	9	10	19	42	46.1566	1	17	1	13.347	14	3	2.25	4		9028	301	02	A226
	9	11	6	16	41.8670	1	16	34	38.618	-66	37	41.45	4		9011	9801	03	A892
	9	12	7	42	9.5662	1	17	1	35.414	44	22	46.92	4		9117	3971	05	A460
	9	12	7	44	58.4667	1	18	14	41.817	27	28	53.19	4		9117	3972	06	A461
	9	12	16	23	5.5335	1	14	34	39.986	-71	49	58.25	4		9023	7886	03	A834
	9	13	9	46	53.6097	1	20	7	38.968	28	48	9.65	4		9012	8499	02	A701
	9	13	15	49	36.8973	1	16	53	32.937	- 1	44	19.27	4		9006	6824	04	A095
	9	13	23	59	15.2897	1	22	17	16.575	30	46	11.95	4		9007	7041	03	[illegible]355
	9	14	4	27	38.7924	1	9	[illegible]	51.217	-74	39	30.33	4		9011	9880	07	A203
	9	14	5	52	28.2814	1	19	46	20.958	13	41	52.22	4		9012	8543	03	A212
	9	14	7	50	58.9509	1	16	22	23.662	29	21	12.39	4		9117	4017	06	[illegible]46
	9	14	7	55	26.0407	1	17	45	52.651	2	12	16.72	4		9117	4018	06	[illegible]16
	9	14	7	59	32.7436	1	18	51	6.628	-25	36	14.01	4		9117	4019	04	[illegible]17
	9	14	17	57	48.8963	1	17	45	19.331	15	10	57.60	4		9028	350	02	[illegible]227
	9	15	0	6	52.6141	1	21	24	27.409	33	9	12.18	4		9011	9892	06	A204
	9	15	3	55	53.3767	1	18	3	46.573	-15	54	28.85	4		9113	5321	06	A457
	9	15	5	55	41.1439	1	18	44	25.706	17	14	34.71	4		9012	8583	03	A702
	9	15	10	9	48.8989	1	22	7	38.053	24	19	[illegible].09	4		9023	7733	03	A216
	9	15	15	58	23.3552	1	16	31	33.417	- 7	45	[illegible].27	4		9006	6848	08	A096
	9	16	1	59	12.8944	1	16	35	16.489	- 2	2	2.67	4		9010	5130	05	A101
	9	16	8	50	54.0691	1	11	17	6.376	-64	28	9.73	4		9011	9914	05	A205
	9	17	3	58	3.1347	1	15	36	.326	10	21	5.68	4		9113	5584	05	A458
	9	17	4	0	35.7403	1	16	21	18.144	- 1	39	23.91	4		9113	5585	04	A459
	9	17	18	55	27.9887	1	11	26	59.758	-65	58	57.77	4		9023	7808	03	A217
	9	18	2	6	35.0441	1								2.8720300	7901			5472
	9	18	12	30	55.4508	1	18	59	.824	-31	1	49.52	4		9023	7825	03	A21A
	9	18	14	39	56.0423	1	16	44	45.601	-57	55	52.88	4		9023	7830	04	A219
	9	19	14	10	12.9159	1	16	6	22.092	3	25	45.31	4		9006	6917	04	A097
	9	20	14	15	9.3909	1	16	0	34.856	- 3	34	56.96	4		9006	6946	07	9070
	9	20	14	49	41.4401	1	16	3	42.971	-60	41	3.66	4		9023	7887	02	A220
	9	20	19	9	44.9025	1	[illegible]	25	57.272	-62	40	36.37	4		9023	7895	03	A221
	9	20	20	44	37.8432	1	16	34	50.142	-53	49	8.52	4		9002	5907	07	A0A6
	9	21	7	6	42.4231	1	11	7	31.864	-65	23	10.34	4		9011	9953	03	A206
	9	21	9	16	16.6555	1	10	6	34.181	-49	22	31.50	4		9007	7165	04	9072
	9	21	14	19	18.6948	1	15	44	2.265	- 5	41	33.18	4		9006	6979	05	A830
	9	22	7	10	45.4392	1	11	23	.025	-69	4	6.14	4		9011	9994	04	A207
	9	22	9	21	21.1776	1	9	39	44.953	-43	20	25.44	4		9007	7191	05	A100
	9	23	17	16	22.6475	1	10	31	23.715	-64	7	22.96	4		9023	7981	05	A222
	9	24	1	22	20.2395	1	9	41	44.069	-53	58	17.38	4		9002	5990	03	A0A7
	9	24	2	59	56.8447	1	16	5	55.248	-55	51	23.84	4		9011	57	03	A208
	9	24	7	20	50.1389	1	9	44	36.927	-64	42	46.92	4		9011	62	04	A209
	9	24	16	54	5.0499	1	22	47	22.352	-42	46	.66	4		9002	5998	F1	27A2
	9	24	16	54	9.0500	1	22	49	31.492	-43	0	31.12	4		9002	5998	F2	27A3
	9	24	16	54	13.0500	1	22	51	41.119	-43	14	50.77	4		9002	5998	F3	27A4
	9	24	16	54	17.0501	1	22	53	50.539	-43	28	47.04	4		9002	5998	F4	27A5
	9	24	16	54	21.0501	1	22	56	.644	-43	42	33.19	4		9002	5998	F5	27A6
	9	24	16	54	25.0501	1	22	58	10.717	-43	55	57.76	4		9002	5998	F6	3615
	9	24	16	54	29.0502	1	23	0	20.994	-44	9	11.28	4		9002	5998	F7	5311
	9	24	17	21	3.5810	1	10	9	9.193	-64	2	31.56	4		9023	A027	02	AA35
	9	25	0	45	5.0531	3	16	13	16.150	1	59	17.80	4		9007	7258	F1	6339
	9	25	0	45	9.0531	3	16	13	42.718	1	38	21.97	4		9007	7258	F2	6340
	9	25	0	45	13.0530	1	16	14	8.921	1	17	15.89	4		9007	7258	F3	6341
	9	25	0	45	17.0530	1	16	14	35.084	0	56	3.30	4		9007	7258	F4	6342
	9	25	0	45	21.0529	1	16	15	1.061	0	34	43.67	4		9007	7258	F5	6343
	9	25	0	45	25.0529	1	16	15	27.316	0	13	20.55	4		9007	7258	F6	6344
	9	25	0	45	29.0529	1	16	15	53.214	- 0	8	14.67	4		9007	7258	F7	6345
	9	25	0	48	5.0517	1	16	32	25.168	-15	39	53.61	4		9007	7259	F1	6346
	9	25	0	48	9.0517	1	16	32	49.863	-16	5	59.51	4		9007	7259	F2	6347
	9	25	0	48	13.0517	1	16	33	14.923	-16	32	12.04	4		9007	7259	F3	6348
	9	25	0	48	17.0516	3	16	33	39.825	-16	58	33.23	4		9007	7259	F4	7694
	9	25	0	48	21.0516	1	16	34	4.715	-17	24	58.38	4		9007	7259	F5	6349
	9	25	0	48	25.0516	1	16	34	29.922	-17	51	28.07	4		9007	7259	F6	6350
	9	25	0	48	29.0516	1	16	34	54.776	-18	18	6.40	4		9007	7259	F7	6351
	9	25	0	51	5.0511	1	16	51	15.487	-36	34	33.71	4		9007	7260	F1	6166
	9	25	0	51	9.0511	1	16	51	41.290	-37	3	37.68	4		9007	7260	F2	6167
	9	25	0	51	13.0511	1	16	52	7.138	-37	32	43.92	4		9007	7260	F3	6168
	9	25	0	51	17.0511	1	16	52	33.169	-38	1	45.99	4		9007	7260	F4	6169
	9	25	0	51	21.0511	1	16	52	59.129	-38	30	53.80	4		9007	7260	F5	6170
	9	25	0	51	25.0511	1	16	53	25.150	-39	0	.24	4		9007	7260	F6	6171
	9	25	0	51	29.0511	1	16	53	51.418	-39	29	6.71	4		9007	7260	F7	6172
	9	25	0	53	5.0510	1	17	17	41.779	-15	11	11.62	4		9011	85	F1	62A2
	9	25	0	53	5.0513	1	17	4	48.925	-51	3	27.92	4		9007	7261	F1	6173
	9	25	0	53	9.0510	1	17	18	7.632	-15	37	13.91	4		9011	85	F2	62A3
	9	25	0	53	9.0513	1	17	5	18.562	-51	31	58.17	4		9007	7261	F2	6174
	9	25	0	53	13.0510	1	17	18	33.072	-16	3	33.53	4		9011	85	F3	62A4
	9	25	0	53	13.0513	1	17	5	47.912	-52	0	20.71	4		9007	7261	F3	6175
	9	25	0	53	17.0509	1	17	18	58.704	-16	30	.43	4		9011	85	F4	62A5

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	9	25	0	53	17.0513	1	17	6	17.849	-52	28	47.13	4		9007	7261	F4	6176
	9	25	0	53	21.0509	1	17	19	24.325	-16	56	39.42	4		9011	85	F5	7036
	9	25	0	53	21.0513	1	17	6	47.473	-52	57	5.41	4		9007	7261	F5	6177
	9	25	0	53	25.0509	1	17	19	50.176	-17	23	26.42	4		9011	85	F6	6287
	9	25	0	53	25.0513	1	17	7	17.107	-53	25	17.03	4		9007	7261	F6	6178
	9	25	0	53	29.0508	1	17	20	16.190	-17	50	23.00	4		9011	85	F7	6288
	9	25	0	53	29.0513	1	17	7	47.910	-53	53	32.23	4		9007	7261	F7	6179
	9	25	0	55	5.0501	1	17	31	20.460	-29	29	13.74	4		9011	86	F1	6289
	9	25	0	55	5.0518	1	17	21	33.092	-66	46	51.77	4		9007	7262	F1	8845
	9	25	0	55	9.0501	1	17	31	50.378	-30	0	26.62	4		9011	86	F2	6290
	9	25	0	55	9.0519	1	17	22	13.843	-65	12	55.97	4		9007	7262	F2	8846
	9	25	0	55	13.0500	1	17	32	20.610	-30	31	49.38	4		9011	86	F3	6291
	9	25	0	55	13.0519	1	17	22	54.909	-65	38	56.36	4		9007	7262	F3	8847
	9	25	0	55	17.0500	1	17	32	51.059	-31	3	17.61	4		9011	86	F4	6292
	9	25	0	55	17.0519	1	17	23	36.740	-66	4	50.22	4		[illegible]	7262	F4	8848
	9	25	0	55	21.0500	1	17	33	21.549	-31	34	55.81	4		9011	86	F5	7037
	9	25	0	55	21.0519	1	17	24	18.705	-66	30	37.09	4		9007	7262	F5	8849
	9	25	0	55	25.0500	1	17	33	52.703	-32	6	42.50	4		9011	86	F6	6294
	9	25	0	55	25.0520	1	17	25	1.872	-66	56	16.52	4		9007	7262	F6	8850
	9	25	0	55	29.0499	1	17	34	23.856	-32	38	38.92	4		9011	86	F7	7038
	9	25	0	55	29.0520	1	17	25	45.991	-67	21	51.37	4		9007	7262	F7	8851
	9	25	0	57	5.0496	1	17	48	41.466	-46	1	46.85	4		9011	87	F1	7780
	9	25	0	57	5.0527	1	17	50	32.915	-77	1	33.72	4		9007	7263	F1	9046
	9	25	0	57	9.0496	1	17	49	33.394	-46	36	24.94	4		9011	87	F2	6482
	9	25	0	57	9.0528	1	17	52	9.397	-77	24	10.80	4		9007	7263	F2	11
	9	25	0	57	13.0496	1	17	50	6.091	-47	11	5.63	4		9011	87	F3	6483
	9	25	0	57	13.0528	1	17	53	42.589	-77	46	44.82	4		9007	7263	F3	1119
	9	25	0	57	17.0496	1	17	50	49.006	-47	45	47.18	4		9011	87	F4	6484
	9	25	0	57	17.0529	1	17	55	23.442	-78	9	7.21	4		9007	7263	F4	8852
	9	25	0	57	21.0495	1	17	51	33.281	-48	20	36.47	4		9011	87	F5	7040
	9	25	0	57	21.0529	1	17	57	11.746	-78	31	18.86	4		9007	7263	F5	1120
	9	25	0	57	25.0495	1	17	52	17.651	-48	55	25.54	4		9011	87	F6	6486
	9	25	0	57	25.0529	1	17	59	2.845	-78	53	25.04	4		9007	7263	F6	8854
	9	25	0	57	29.0495	1	17	53	3.103	-49	30	16.92	4		9011	87	F7	6487
	9	25	0	57	29.0530	1	18	1	1.222	-79	15	24.57	4		9007	7263	F7	8855
	9	25	0	59	5.0496	1	18	17	6.620	-63	24	34.39	4		9011	88	F1	6488
	9	25	0	59	9.0496	1	18	18	28.954	-63	58	37.91	4		9011	88	F2	7041
	9	25	0	59	13.0496	1	18	19	54.572	-64	32	40.24	4		9011	88	F3	6490
	9	25	0	59	17.0496	1	18	21	22.926	-65	6	30.52	4		9011	88	F4	6491
	9	25	0	59	21.0496	1	18	22	53.868	-65	40	14.95	4		9011	88	F5	6492
	9	25	0	59	25.0497	1	18	24	28.863	-66	13	51.03	4		9011	88	F6	6493
	9	25	0	59	29.0497	1	18	26	6.691	-66	47	21.75			9011	88	F7	7042
	9	25	1	3	5.0512	1	2	34	19.452	-82	19	2.53			9011	89	F1	5739
	9	25	1	3	9.0512	1	2	43	52.161	-82	0	45.12	4		9011	89	F2	5740
	9	25	1	3	13.0513	1	2	52	38.959	-81	41	57.02	4		9011	89	F3	5741
	9	25	1	3	17.0513	1	3	0	45.748	-81	22	36.98	4		9011	89	F4	5742
	9	25	1	3	21.0514	1	3	8	14.012	-81	2	50.94	4		9011	89	F5	5743
	9	25	1	3	25.0514	1	3	15	9.260	-80	42	43.49	4		9011	89	F6	5744
	9	25	1	3	29.0514	1	3	21	34.307	-80	22	16.47	4		9011	89	F7	5745
	9	25	9	32	5.0484	1	5	45	59.944	-71	10	12.87	4		9007	7277	F1	8856
	9	25	9	32	9.0483	1	5	50	58.186	-70	33	38.29	4		9007	7277	F2	8857
	9	25	9	32	13.0483	1	5	55	43.932	-69	56	3.93	4		9007	7277	F3	9325
	9	25	9	32	17.0482	1	6	0	18.878	-69	17	25.90	4		9007	7277	F4	8858
	9	25	9	32	21.0482	1	6	4	42.542	-68	37	47.33	4		9007	7277	F5	8860
	9	25	9	32	25.0481	1	6	8	56.177	-67	57	14.07	4		9007	7277	F6	8861
	9	25	9	32	29.0481	1	6	12	59.997	-67	15	39.86	4		9007	7277	F7	8862
	9	25	9	36	5.0472	1	8	3	29.360	-13	18	47.58	4		9007	7278	F1	8863
	9	25	9	36	9.0472	1	8	4	40.936	-12	16	31.90	4		9007	7278	F2	8864
	9	25	9	36	13.0472	1	8	5	52.175	-11	14	47.49	4		9007	7278	F3	8865
	9	25	9	36	17.0473	1	8	7	2.574	-10	13	45.40	4		9007	7278	F4	8866
	9	25	9	36	21.0473	1	8	8	12.193	-	9	13	22.16	4	9007	7278	F5	8867
	9	25	9	36	25.0473	1	8	9	21.142	-	8	13	35.17	4	9007	7278	F6	8868
	9	25	9	36	29.0474	1	8	10	29.815	-	7	13	31.18		9007	7278	F7	8869
	9	25	10	51	5.0529	1	17	17	8.200		3	41	56.66	4	9023	8048	F1	5028
	9	25	10	51	9.0529	1	17	17	40.520		3	20	50.21	4	9023	8048	F2	5088
	9	25	10	51	13.0528	1	17	18	12.957		2	59	21.18	4	9023	8048	F3	5030
	9	25	10	51	17.0528	1	17	18	45.699		2	37	59.90	4	9023	8048	F4	5031
	9	25	10	51	21.0527	1	17	19	18.322		2	16	20.24	4	9023	8048	F5	5032
	9	25	10	51	25.0527	1	17	19	51.146		1	54	36.45	4	9023	8048	F6	5033
	9	25	10	51	29.0526	1	17	20	24.122		1	32	35.21	4	9023	8048	F7	5034
	9	25	10	53	5.0516	1	17	34	20.938	-	8	7	19.96	4	9023	8049	F1	5035
	9	25	10	53	9.0515	1	17	34	58.157	-	8	33	49.64	4	9023	8049	F2	5036
	9	25	10	53	13.0515	1	17	35	35.607	-	9	0	30.47	4	9023	8049	F3	5037
	9	25	10	53	17.0515	1	17	36	13.386	-	9	27	19.68	4	9023	8049	F4	5038
	9	25	10	53	21.0514	1	17	36	51.322	-	9	54	22.92	4	9023	8049	F5	5089
	9	25	10	53	25.0514	1	17	37	29.500	-10	21	39.69	4		9023	8049	F6	5040
	9	25	10	53	29.0513	1	17	38	7.779	-10	49	5.66	4		9023	8049	F7	5041
	9	25	10	55	5.0506	1	17	55	7.208	-22	45	10.78	4		9023	8050	F1	5990
	9	25	10	55	9.0505	1	17	55	54.548	-23	17	20.71	4		9023	8050	F2	5143
	9	25	10	55	13.0505	1	17	56	42.320	-23	49	38.93	4		9023	8050	F3	5991

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DATE Y	M	D	TIME (A-1) H	M	S	HMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	HMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	9	25	10	55	17.0505	1	17	57	31.007	-24	22	12.45	4		9023	8050	F4	5145
	9	25	10	55	21.0505	1	17	58	19.902	-24	54	49.93	4		9023	8050	F5	5146
	9	25	10	55	25.0504	1	17	59	9.219	-25	27	38.05	4		9023	8050	F6	5902
	9	25	10	55	29.0504	1	17	59	59.547	-26	0	40.56	4		9023	8050	F7	5148
	9	25	10	58	5.0500	1	18	43	41.319	-48	46	37.43	4		9023	8051	F1	5149
	9	25	10	58	9.0500	1	18	45	14.946	-49	22	7.55	4		9023	8051	F2	5150
	9	25	10	58	13.0500	1	18	46	50.534	-49	57	28.06	4		9023	8051	F3	5903
	9	25	10	58	17.0500	1	18	48	28.244	-50	32	47.96	4		9023	8051	F4	5904
	9	25	10	58	21.0500	1	18	50	8.032	-51	8	.17	4		9023	8051	F5	5905
	9	25	10	58	25.0500	1	18	51	49.938	-51	43	4.50	4		9023	8051	F6	5906
	9	25	10	58	29.0500	1	18	53	34.629	-52	18	4.35	4		9023	8051	F7	5907
	9	25	11	0	5.0503	1	19	52	3.378	-65	19	15.99	4		9023	8052	F1	7022
	9	25	11	0	9.0504	1	19	55	27.861	-65	48	12.18	4		9023	8052	F2	7023
	9	25	11	0	13.0504	1	19	59	1.012	-66	16	48.07	4		9023	8052	F3	5885
	9	25	11	0	17.0504	1	20	2	38.987	-66	44	54.74	4		9023	8052	F4	7024
	9	25	11	0	21.0504	1	20	6	24.881	-67	12	34.22	4		9023	8052	F5	5886
	9	25	11	0	25.0505	1	20	10	17.241	-67	39	44.96	4		9023	8052	F6	5887
	9	25	11	0	29.0505	1	20	14	17.915	-68	6	34.72	4		9023	8052	F7	5888
	9	25	11	2	5.0512	1	22	37	12.004	-75	36	4.97	4		9023	8053	F1	5889
	9	25	11	2	9.0513	1	22	45	3.793	-75	44	23.99	4		9023	8053	F2	5890
	9	25	11	2	13.0513	1	22	52	58.111	-75	51	39.94	4		9023	8053	F3	5891
	9	25	11	2	17.0513	1	23	0	58.695	-75	57	57.43	4		9023	8053	F4	5892
	9	25	11	2	21.0514	1	23	9	2.413	-76	3	14.88	4		9023	8053	F5	7025
	9	25	11	2	25.0514	1	23	17	6.995	-76	7	36.77	4		9023	8053	F6	5894
	9	25	13	4	56.9186	1	15	49	8.924	-57	54	7.25	4		9023	8062	08	5465
	9	25	13	7	5.0543	1	14	44	18.684	-69	26	.45	4		9023	8063	F1	5896
	9	25	13	7	9.0543	1	14	41	2.592	-69	44	52.37	4		9023	8063	F2	5897
	9	25	13	7	13.0543	1	14	37	39.802	-70	3	24.52	4		9023	8063	F3	5898
	9	25	13	7	17.0543	1	14	34	11.262	-70	21	38.71	4		9023	8063	F4	5899
	9	25	13	7	21.0543	1	14	30	34.253	-70	39	34.76	4		9023	8063	F5	5900
	9	25	13	7	25.0543	1	14	26	52.546	-70	57	15.16	4		9023	8063	F6	7026
	9	25	13	7	29.0543	1	14	23	1.618	-71	14	29.86	4		9023	8063	F7	5902
	9	25	16	48	29.0550	1	15	51	1.942	-21	3	6.72	4		9028	509	F7	7108
	9	25	16	48	5.0561	1	16	32	44.191	-45	46	38.91	4		9028	510	F1	7109
	9	25	16	48	9.0562	1	16	33	20.719	-46	6	22.16	4		9028	510	F2	7110
	9	25	16	48	13.0562	1	16	33	57.468	-46	26	2.77	4		9028	510	F3	7111
	9	25	16	48	17.0562	1	16	34	34.244	-46	45	42.32	4		9028	510	F4	7112
	9	25	16	48	21.0563	1	16	35	10.943	-47	5	11.66	4		9028	510	F5	7113
	9	25	16	48	25.0563	1	16	35	47.736	-47	24	42.98	4		9028	510	F6	7114
	9	25	16	48	29.0563	1	16	36	24.668	-47	44	12.02	4		9028	510	F7	7115
	9	25	16	58	5.0520	1	22	20	24.936	-48	59	48.78	4		9002	6040	F1	3160
	9	25	16	58	9.0520	1	22	22	58.889	-49	14	56.49	4		9002	6040	F2	3161
	9	25	16	58	13.0520	1	22	25	34.039	-49	29	46.13	4		9002	6040	F3	3706
	9	25	16	58	17.0521	1	22	28	9.461	-49	44	17.69	4		9002	6040	F4	3162
	9	25	16	58	21.0521	1	22	30	45.593	-49	58	28.28	4		9002	6040	F5	3707
	9	25	16	58	25.0522	1	22	33	21.744	-50	12	18.96	4		9002	6040	F6	3164
	9	25	16	58	29.0522	1	22	35	58.845	-50	25	49.37	4		9002	6040	F7	3165
	9	25	17	25	15.3153	1	10	3	58.372	-67	34	13.62	4		9023	8070	01	5466
	9	25	17	25	19.3152	1	10	0	34.254	-67	4	56.86	4		9023	8070	02	5467
	9	25	17	25	23.3151	1	9	57	17.427	-66	35	20.95	4		9023	8070	03	6394
	9	25	17	25	27.3151	1	9	54	8.928	-66	5	16.08	4		9023	8070	04	5468
	9	25	17	25	31.3149	1	9	51	7.947	-65	34	49.25	4		9023	8070	05	5469
	9	25	17	25	35.3150	1	9	48	14.292	-65	4	.52	4		9023	8070	06	5470
	9	25	17	25	39.3149	1	9	45	27.137	-64	32	43.21	4		9023	8070	07	5471
	9	25	19	0	5.0537	1	16	27	55.882	-50	21	43.94	4		9002	6053	F1	5353
	9	25	19	0	9.0537	1	16	27	45.693	-50	49	32.36	4		9002	6053	F2	5354
	9	25	19	0	13.0537	1	16	27	35.666	-51	17	18.24	4		9002	6053	F3	5355
	9	25	19	0	17.0537	1	16	27	24.322	-51	45	.82	4		9002	6053	F4	5356
	9	25	19	0	21.0537	1	16	27	12.214	-52	12	48.11	4		9002	6053	F5	5971
	9	25	19	0	25.0537	1	16	26	59.846	-52	40	39.74	4		9002	6053	F6	5358
	9	25	19	0	29.0537	1	16	26	46.651	-53	8	26.83	4		9002	6053	F7	5359
	9	25	19	2	5.0538	1	16	16	44.711	-64	10	55.18	4		9002	6054	F1	5972
	9	25	19	2	9.0538	1	16	16	2.362	-64	38	6.81	4		9002	6054	F2	5973
	9	25	19	2	13.0538	1	16	15	18.056	-65	5	7.25	4		9002	6054	F3	5974
	9	25	19	2	17.0539	1	16	14	32.637	-65	32	7.43	4		9002	6054	F4	5975
	9	25	19	2	21.0539	1	16	13	43.950	-65	59	4.56	4		9002	6054	F5	5360
	9	25	19	2	25.0539	1	16	12	53.646	-66	25	59.54	4		9002	6054	F6	5361
	9	25	19	2	29.0539	1	16	12	1.106	-66	52	47.87	4		9002	6054	F7	5976
	9	25	19	4	5.0543	1	15	30	15.604	-77	1	50.82	4		9002	6055	F1	5362
	9	25	19	4	9.0543	1	15	27	1.924	-77	25	8.35	4		9002	6055	F2	5363
	9	25	19	4	13.0544	1	15	23	35.716	-77	48	10.41	4		9002	6055	F3	5364
	9	25	19	4	17.0544	1	15	19	54.359	-78	10	55.74	4		9002	6055	F4	5365
	9	25	19	4	21.0544	1	15	15	59.387	-78	33	26.38	4		9002	6055	F5	5366
	9	25	19	4	25.0544	1	15	11	49.323	-78	55	35.56	4		9002	6055	F6	5367
	9	25	19	4	29.0545	3	15	7	21.017	-79	17	25.80	4		9002	6055	F7	6359
	9	25	19	29	5.0497	1	0	18	18.560	-57	44	18.51	4		9023	8083	F1	5903
	9	25	19	29	9.0496	1	0	22	56.373	-57	39	53.32	4		9023	8083	F2	5904
	9	25	19	29	13.0495	1	0	27	38.106	-57	34	42.40	4		9023	8083	F3	5905
	9	25	19	29	17.0495	1	0	32	23.134	-57	28	45.61	4		9023	8083	F4	5906
	9	25	19	29	21.0494	1	0	37	11.656	-57	22	2.57	4		9023	8083	F5	5907

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	9	25	19	29	25.0493	1	0	42	2.957	-57	14	26.29	4		9023	8083	F6	5908
	9	25	19	29	29.0493	1	0	46	57.973	-57	6	.32	4		9023	8083	F7	5909
	9	25	19	31	5.0480	1	2	50	32.353	-48	1	40.84	4		9023	8084	F1	6062
	9	25	19	31	9.0480	1	2	55	28.623	-47	22	11.72	4		9023	8084	F2	7027
	9	25	19	31	13.0479	1	3	0	21.952	-46	41	15.36	4		9023	8084	F3	6064
	9	25	19	31	17.0479	1	3	5	12.261	-45	58	55.83	4		9023	8084	F4	6065
	9	25	19	31	21.0478	1	3	9	59.449	-45	15	11.39	4		9023	8084	F5	6066
	9	25	19	31	25.0478	1	3	14	43.280	-44	29	56.81	4		9023	8084	F6	6067
	9	25	19	31	29.0478	1	3	19	23.186	-43	43	25.88	4		9023	8084	F7	6068
	9	25	19	34	5.0478	1	5	33	7.774	-	3	59 18.90	4		9023	8085	F1	6069
	9	25	19	34	9.0478	1	5	35	30.363	-	3	0 24.55	4		9023	8085	F2	6070
	9	25	19	34	13.0479	1	5	37	50.351	-	2	2 12.84	4		9023	8085	F3	6071
	9	25	19	34	17.0479	1	5	40	8.117	-	1	4 53.60	4		9023	8085	F4	6072
	9	25	19	34	21.0479	1	5	42	23.609	-	0	8 19.97	4		9023	8085	F5	6073
	9	25	19	34	25.0480	1	5	44	37.073		0	47 21.94	4		9023	8085	F6	6074
	9	25	19	34	29.0480	1	5	46	48.371		1	42 10.27	4		9023	8085	F7	6075
	9	26	0	48	5.0574	1	15	46	27.614		4	45 11.01	4		9007	7285	F1	8704
	9	26	0	48	9.0573	1	15	48	49.896		4	27 8.30	4		9007	7285	F2	8705
	9	26	0	48	13.0573	1	15	49	12.676		4	9 8.01	4		9007	7285	F3	8706
	9	26	0	48	17.0572	1	15	49	35.019		3	50 59.63	4		9007	7285	F4	8707
	9	26	0	48	21.0572	1	15	49	57.671		3	32 39.52	4		9007	7285	F5	8708
	9	26	0	48	25.0572	1	15	50	20.238		3	14 15.77	4		9007	7285	F6	8709
	9	26	0	48	29.0571	1	15	50	42.653		2	55 53.29	4		9007	7285	F7	8710
	9	26	0	50	5.0563	1	15	59	18.891	-	4	55 15.55	4		9007	7286	F1	8711
	9	26	0	50	9.0562	1	15	59	39.491	-	5	16 5.20	4		9007	7286	F2	8712
	9	26	0	50	13.0562	1	16	0	.284	-	5	37 3.10	4		9007	7286	F3	8713
	9	26	0	50	17.0562	1	16	0	20.650	-	5	58 4.27	4		9007	7286	F4	8714
	9	26	0	50	21.0561	1	16	0	40.950	-	6	19 12.09	4		9007	7286	F5	8715
	9	26	0	50	25.0561	1	16	1	1.440	-	6	40 27.53	4		9007	7286	F6	8716
	9	26	0	50	29.0561	1	16	1	21.550	-	7	1 46.23	4		9007	7286	F7	8717
	9	26	0	53	5.0551	1	16	13	37.951	-22	6	4.20	4		9007	7287	F1	6180
	9	26	0	53	9.0550	1	16	13	55.114	-22	31	1.06	4		9007	7287	F2	6181
	9	26	0	53	13.0550	1	16	14	12.625	-22	55	56.46	4		9007	7287	F3	6182
	9	26	0	53	17.0550	1	16	14	30.088	-23	21	1.36	4		9007	7287	F4	6183
	9	26	0	53	21.0550	1	16	14	47.250	-23	46	9.73	4		9007	7287	F5	6184
	9	26	0	53	25.0550	1	16	15	4.161	-24	11	20.09	4		9007	7287	F6	6185
	9	26	0	53	29.0550	1	16	15	21.042	-24	36	36.72	4		9007	7287	F7	6186
	9	26	0	55	5.0547	1	16	21	44.582	-35	0	27.04	4		9007	7288	F1	6187
	9	26	0	55	9.0547	1	16	21	59.660	-35	26	59.35	4		9007	7288	F2	6188
	9	26	0	55	13.0547	1	16	22	14.329	-35	53	34.68	4		9007	7288	F3	6189
	9	26	0	55	17.0547	1	16	22	28.832	-36	20	11.75	4		9007	7288	F4	6190
	9	26	0	55	21.0547	1	16	22	43.423	-36	46	53.89	4		9007	7288	F5	6191
	9	26	0	55	25.0546	1	16	22	57.561	-37	13	33.57	4		9007	7288	F6	6192
	9	26	0	55	29.0546	1	16	23	12.203	-37	40	17.28	4		9007	7288	F7	6193
	9	26	0	58	9.0548	1	16	30	56.418	-55	27	39.58	4		9007	7289	F2	6651
	9	26	0	58	13.0548	1	16	31	4.453	-55	53	47.66	4		9007	7289	F3	6652
	9	26	0	58	17.0549	1	16	31	12.275	-56	19	56.80	4		9007	7289	F4	7209
	9	26	0	58	21.0549	1	16	31	20.049	-56	46	.67	4		9007	7289	F5	6654
	9	26	0	58	25.0549	1	16	31	27.114	-57	12	.28	4		9007	7289	F6	6655
	9	26	0	58	29.0549	1	16	31	33.679	-57	37	57.05	4		9007	7289	F7	6656
	9	26	1	1	5.0558	1	16	30	.498	-73	36	51.15	4		9007	7290	F1	6657
	9	26	1	1	9.0558	1	16	29	40.740	-73	59	46.68	4		9007	7290	F2	6658
	9	26	1	1	13.0558	1	16	29	20.312	-74	22	37.55	4		9007	7290	F3	7210
	9	26	1	1	17.0559	1	16	28	56.943	-74	45	24.45	4		9007	7290	F4	6660
	9	26	1	1	21.0559	1	16	28	32.554	-75	8	4.80	4		9007	7290	F5	6661
	9	26	1	1	25.0559	1	16	28	5.560	-75	30	42.61	4		9007	7290	F6	7211
	9	26	1	1	29.0560	1	16	27	35.945	-75	53	11.25	4		9007	7290	F7	7767
	9	26	1	29	5.0521	1	9	57	54.554	-76	13	4.84	4		9002	6075	F1	5968
	9	26	1	29	9.0521	1	9	53	8.735	-75	41	44.93	4		9002	6075	F2	5977
	9	26	1	29	13.0520	1	9	48	41.441	-75	9	36.81	4		9002	6075	F3	5978
	9	26	1	29	17.0520	1	9	44	32.690	-74	36	52.93	4		9002	6075	F4	5979
	9	26	1	29	21.0520	1	9	40	39.171	-74	3	38.73	4		9002	6075	F5	5980
	9	26	1	29	25.0519	1	9	37	1.488	-73	29	46.09	4		9002	6075	F6	5981
	9	26	1	29	29.0519	1	9	33	35.887	-72	55	20.90	4		9002	6075	F7	5982
	9	26	1	31	5.0513	1	8	51	22.517	-57	5	47.98	4		9002	6076	F1	6769
	9	26	1	31	9.0512	1	8	50	32.868	-56	22	14.00	4		9002	6076	F2	6770
	9	26	1	31	13.0512	1	8	49	45.923	-55	38	46.47	4		9002	6076	F3	7776
	9	26	1	31	17.0512	1	8	49	1.168	-54	54	58.39	4		9002	6076	F4	7777
	9	26	1	31	21.0512	1	8	48	18.996	-54	10	59.57	4		9002	6076	F5	6772
	9	26	1	31	25.0512	1	8	47	38.495	-53	26	53.44	4		9002	6076	F6	6773
	9	26	1	31	29.0512	1	8	47	.184	-52	42	31.59	4		9002	6076	F7	7778
	9	26	1	33	5.0512	1	8	39	3.696	-34	42	1.17	4		9002	6077	F1	3166
	9	26	1	33	9.0512	1	8	38	56.838	-33	57	36.28	4		9002	6077	F2	3167
	9	26	1	33	13.0513	1	8	38	50.598	-33	13	20.93	4		9002	6077	F3	3168
	9	26	1	33	17.0513	1	8	38	45.275	-32	29	13.37	4		9002	6077	F4	3708
	9	26	1	33	21.0513	1	8	38	40.471	-31	45	13.10	4		9002	6077	F5	3170
	9	26	1	33	25.0513	1	8	38	36.294	-31	1	32.07	4		9002	6077	F6	3171
	9	26	1	33	29.0513	1	8	38	32.892	-30	17	54.24	4		9002	6077	F7	3172
	9	26	7	29	5.0516	1	8	45	26.669	-75	8	9.40	4		9011	121	F1	5746
	9	26	7	29	9.0516	1	8	42	28.811	-74	26	28.04	4		9011	121	F2	5747

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (NM)	STATION	FRAME NO.		OBS.NO.
1966	9	26	7	29	13.0515	1	8	39	45.339	-73	44	16.06	4		9011	121	F3	5748
	9	26	7	29	17.0515	1	8	37	16.353	-73	1	31.97	4		9011	121	F4	7043
	9	26	7	29	21.0515	1	8	34	57.674	-72	18	19.87	4		9011	121	F5	5749
	9	26	7	29	25.0514	1	8	32	51.278	-71	34	49.37	4		9011	121	F6	5750
	9	26	7	29	29.0514	1	8	30	54.980	-70	50	43.30	4		9011	121	F7	5751
	9	26	7	31	5.0510	1	8	9	50.540	-51	40	50.54	4		9011	122	F1	7049
	9	26	7	31	9.0510	1	8	9	31.473	-50	50	43.86	4		9011	122	F2	7050
	9	26	7	31	13.0510	1	8	9	14.019	-50	0	35.67	4		9011	122	F3	7051
	9	26	7	31	17.0510	1	8	8	57.794	-49	10	23.02	4		9011	122	F4	7052
	9	26	7	31	21.0510	1	8	8	42.796	-48	20	10.48	4		9011	122	F5	7053
	9	26	7	31	25.0510	1	8	8	29.327	-47	30	1.10	4		9011	122	F6	7054
	9	26	7	31	29.0511	1	8	8	16.639	-46	39	48.54	4		9011	122	F7	7055
	9	26	7	33	5.0515	1	8	7	23.782	-27	21	50.18	4		9011	123	F1	7056
	9	26	7	33	9.0515	1	8	7	29.065	-26	36	51.92	4		9011	123	F2	7057
	9	26	7	33	13.0515	1	8	7	34.329	-25	52	13.07	4		9011	123	F3	7058
	9	26	7	33	17.0516	1	8	7	40.306	-25	7	52.30	4		9011	123	F4	7059
	9	26	7	33	21.0516	1	8	7	46.876	-24	23	55.29	4		9011	123	F5	7060
	9	26	7	33	25.0516	1	8	7	53.159	-23	40	21.72	4		9011	123	F6	7061
	9	26	7	33	29.0517	1	8	8	.202	-22	57	5.52	4		9011	123	F7	7062
	9	26	9	39	5.0489	1	6	26	30.292	-29	11	21.41	4		9007	7315	F1	6663
	9	26	9	39	9.0489	1	6	28	58.849	-27	57	24.86	4		9007	7315	F2	6664
	9	26	9	39	13.0489	1	6	31	25.072	-26	43	7.75	4		9007	7315	F3	6665
	9	26	9	39	17.0489	1	6	33	48.816	-25	28	36.05	4		9007	7315	F4	6666
	9	26	9	39	21.0489	1	6	36	9.811	-24	13	52.15	4		9007	7315	F5	7212
	9	26	9	39	25.0489	1	6	38	28.563	-22	58	59.94	4		9007	7315	F6	7213
	9	26	9	41	5.0495	1	7	26	42.644	5	43	22.00	4		9007	7316	F1	6667
	9	26	9	41	9.0496	1	7	28	21.012	6	41	21.07	4		9007	7316	F2	6668
	9	26	9	41	13.0496	1	7	29	58.540	7	38	15.66	4		9007	7316	F3	6669
	9	26	9	41	17.0497	1	7	31	35.030	8	34	6.80	4		9007	7316	F4	6670
	9	26	9	41	21.0497	1	7	33	10.527	9	28	58.10	4		9007	7316	F5	6671
	9	26	9	41	25.0497	1	7	34	45.134	10	22	48.56	4		9007	7316	F6	6672
	9	26	9	41	29.0498	1	7	36	18.977	11	15	39.60	4		9007	7316	F7	6673
	9	26	10	55	5.0562	1	16	52	16.265	1	37	51.45	4		9023	8090	F1	6268
	9	26	10	55	9.0562	1	16	52	42.347	1	17	43.75	4		9023	8090	F2	6269
	9	26	10	55	13.0561	1	16	53	7.973	0	57	26.23	4		9023	8090	F3	6270
	9	26	10	55	17.0561	1	16	53	33.944	0	37	1.88	4		9023	8090	F4	6271
	9	26	10	55	21.0560	1	16	53	59.990	0	16	30.13	4		9023	8090	F5	6272
	9	26	10	55	25.0560	1	16	54	25.985	- 0	4	11.84	4		9023	8090	F6	6273
	9	26	10	55	29.0559	1	16	54	52.050	- 0	25	6.22	4		9023	8090	F7	6274
	9	26	10	57	5.0549	1	17	5	37.242	- 9	31	48.37	4		9023	8091	F1	6275
	9	26	10	57	9.0548	1	17	6	5.140	- 9	56	36.14	4		9023	8091	F2	6276
	9	26	10	57	13.0548	1	17	6	33.495	-10	21	37.21	4		9023	8091	F3	7028
	9	26	10	57	17.0547	1	17	7	1.700	-10	46	45.63	4		9023	8091	F4	6278
	9	26	10	57	21.0547	1	17	7	29.887	-11	12	8.23	4		9023	8091	F5	7029
	9	26	10	57	25.0547	1	17	7	58.222	-11	37	39.83	4		9023	8091	F6	6280
	9	26	10	57	29.0546	1	17	8	26.822	-12	3	20.28	4		9023	8091	F7	6281
	9	26	10	59	5.0538	1	17	20	37.015	-23	12	53.03	4		9023	8092	F1	6194
	9	26	10	59	9.0538	1	17	21	9.981	-23	43	4.85	4		9023	8092	F2	6195
	9	26	10	59	13.0537	1	17	21	43.077	-24	13	20.57	4		9023	8092	F3	6196
	9	26	10	59	17.0537	1	17	22	16.575	-24	43	48.58	4		9023	8092	F4	6197
	9	26	10	59	21.0537	1	17	22	49.919	-25	14	23.07	4		9023	8092	F5	6198
	9	26	10	59	25.0537	1	17	23	23.889	-25	45	7.97	4		9023	8092	F6	7030
	9	26	10	59	29.0536	1	17	23	58.304	-26	16	3.04	4		9023	8092	F7	7031
	9	26	11	1	5.0532	1	17	39	26.939	-39	22	1.96	4		9023	8093	F1	6201
	9	26	11	1	9.0531	1	17	40	11.509	-39	56	19.52	4		9023	8093	F2	6202
	9	26	11	1	13.0531	1	17	40	56.567	-40	30	36.70	4		9023	8093	F3	6203
	9	26	11	1	17.0531	1	17	41	42.292	-41	4	59.78	4		9023	8093	F4	6204
	9	26	11	1	21.0531	1	17	42	28.891	-41	39	32.53	4		9023	8093	F5	6205
	9	26	11	1	25.0531	1	17	43	16.360	-42	14	7.79	4		9023	8093	F6	7032
	9	26	11	1	29.0531	1	17	44	4.184	-42	48	45.46	4		9023	8093	F7	6207
	9	26	11	3	5.0530	1	18	8	17.979	-56	48	1.99	4		9023	8094	F1	6469
	9	26	11	3	9.0530	1	18	9	36.452	-57	22	42.03	4		9023	8094	F2	6470
	9	26	11	3	13.0531	1	18	10	56.939	-57	57	18.31	4		9023	8094	F3	6471
	9	26	11	3	17.0531	1	18	12	19.622	-58	31	47.11	4		9023	8094	F4	8027
	9	26	11	3	21.0531	1	18	13	44.358	-59	6	12.03	4		9023	8094	F5	6473
	9	26	11	3	25.0531	1	18	15	11.838	-59	40	30.01	4		9023	8094	F6	7223
	9	26	11	3	29.0531	1	18	16	41.822	-60	14	45.78	4		9023	8094	F7	7224
	9	26	11	5	5.0535	1	19	13	39.828	-73	4	44.93	4		9023	8095	F1	6476
	9	26	11	5	9.0535	1	19	17	31.141	-73	33	35.10	4		9023	8095	F2	6477
	9	26	11	5	13.0535	1	19	21	33.463	-74	2	6.37	4		9023	8095	F3	7225
	9	26	11	5	17.0536	1	19	25	47.753	-74	30	8.[illegible]	4		9023	8095	F4	6479
	9	26	11	5	21.0536	1	19	30	17.647	-74	57	46.[illegible]	4		9023	8095	F5	7226
	9	26	11	5	25.0536	1	19	35	.130	-75	25	.71	4		9023	8095	F6	7033
	9	26	11	5	29.0536	1	19	39	58.053	-75	51	39.19	4		9023	8095	F7	6481
	9	26	11	8	5.0550	1	2	18	34.249	-79	31	38.76	4		9023	8096	F1	6731
	9	26	11	8	9.0551	1	2	25	35.814	-79	14	46.11	4		9023	8096	F2	6732
	9	26	11	8	13.0551	1	2	32	11.590	-78	57	33.75	4		9023	8096	F3	6733
	9	26	11	8	17.0552	1	2	38	26.419	-78	40	1.77	4		9023	8096	F4	6734
	9	26	11	8	21.0552	1	2	44	21.096	-78	22	5.44	4		9023	8096	F5	6735
	9	26	11	8	25.0552	1	2	49	55.430	-78	3	54.35	4		9023	8096	F6	6736

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	9	26	11	8	29.0553	1	2	55	13.479	-77	45	31.90	4		9023	8096	F7	6737
	9	26	13	9	47.9416	1	15	28	9.249	-59	16	31.33	4		9023	8106	01	76A0
	9	26	13	9	55.9415	1	15	25	11.701	-59	58	45.88	4		9023	8106	03	5472
	9	26	13	9	59.9415	1	15	23	39.674	-60	19	44.87	4		9023	8106	04	5473
	9	26	13	10	3.9415	1	15	22	4.386	-60	40	45.97	4		9023	8106	05	5474
	9	26	13	10	11.9415	1	15	18	46.310	-61	22	23.12	4		9023	8106	07	5475
	9	26	13	10	15.9415	1	15	17	2.682	-61	43	8.04	4		9023	8106	08	5476
	9	26	16	46	5.0588	1	15	18	45.548	-13	38	48.65	4		9028	614	F1	7116
	9	26	16	46	9.0588	1	15	19	18.714	-13	59	12.51	4		9028	614	F2	7117
	9	26	16	46	13.0588	1	15	19	51.516	-14	19	36.51	4		9028	614	F3	7118
	9	26	16	46	17.0588	1	15	20	24.345	-14	40	.40	4		9028	614	F4	7119
	9	26	16	46	21.0588	1	15	20	57.154	-15	0	27.10	4		9028	614	F5	7120
	9	26	16	46	25.0588	1	15	21	29.730	-15	20	53.84	4		9028	614	F6	77A2
	9	26	16	46	29.0588	1	15	22	2.351	-15	41	18.14	4		9028	614	F7	7121
	9	26	16	55	5.0536	1	18	24	57.807	-	3	42	44.17	4		9002	6090	F1	6767
	9	26	16	55	9.0535	1	18	26	3.616	-	4	13	11.32	4		9002	6090	F2	7770
	9	26	16	55	13.0535	1	18	27	9.779	-	4	43	47.06	4		9002	6090	F3	7771
	9	26	16	55	17.0535	1	18	28	16.263	-	5	14	32.71	4		9002	6090	F4	7772
	9	26	16	55	21.0535	1	18	29	23.410	-	5	45	30.52	4		9002	6090	F5	7773
	9	26	16	55	25.0534	1	18	30	31.185	-	6	16	35.89	4		9002	6090	F6	7774
	9	26	16	55	29.0534	1	18	31	39.340	-	6	47	51.34	4		9002	6090	F7	7775
	9	26	16	59	5.0530	1	19	51	5.008	-36	30	8.36	4		9002	6091	F1	5570
	9	26	16	59	9.0530	1	19	53	.810	-37	1	26.05	4		9002	6091	F2	5571
	9	26	16	59	13.0531	1	19	54	57.820	-37	32	34.72	4		9002	6091	F3	5572
	9	26	16	59	17.0531	1	19	56	56.142	-38	3	30.18	4		9002	6091	F4	5573
	9	26	16	59	21.0531	1	19	58	55.697	-38	34	13.89	4		9002	6091	F5	5574
	9	26	16	59	25.0531	1	20	0	56.610	-39	4	45.26	4		9002	6091	F6	5575
	9	26	16	59	29.0531	1	20	2	59.066	-39	34	53.11	4		9002	6091	F7	59A3
	9	26	17	[illegible]	5.0554	1	23	20	16.441	-60	45	24.90	4		9002	6093	F1	5577
	9	26	17	4	9.0555	1	23	23	36.853	-60	50	30.82	4		9002	6093	F2	5578
	9	26	17	4	13.0555	1	23	26	56.938	-60	55	19.08	4		9002	6093	F3	5579
	9	26	17	4	17.0556	1	23	30	16.857	-60	59	46.31	4		9002	6093	F4	59A4
	9	26	17	4	21.0556	1	23	33	35.568	-61	3	49.51	4		9002	6093	F5	59A5
	9	26	17	4	25.0557	1	23	36	53.838	-61	7	38.70	4		9002	6093	F6	55A2
	9	26	17	4	29.0557	1	23	40	12.190	-61	11	7.43	4		9002	6093	F7	59A6
	9	26	17	27	5.0553	1	15	5	13.098	-78	18	35.81	4		9023	8110	F1	6738
	9	26	17	27	9.0552	1	14	56	39.616	-78	30	29.18	4		9023	8110	F2	6739
	9	26	17	27	13.0552	1	14	47	41.713	-78	41	25.99	4		9023	8110	F3	6740
	9	26	17	27	17.0551	1	14	38	23.788	-78	51	19.29	4		9023	8110	F4	6741
	9	26	17	27	21.0551	1	14	28	44.134	-79	0	10.57	4		9023	8110	F5	6742
	9	26	17	27	25.0550	1	14	18	46.586	-79	7	48.98	4		9023	8110	F6	7227
	9	26	17	27	29.0550	1	14	8	27.286	-79	14	6.89	4		9023	8110	F7	6744
	9	26	17	29	5.0541	1	10	21	52.374	-74	25	23.81	4		9023	8111	F1	6694
	9	26	17	29	9.0540	1	10	16	9.147	-73	58	8.19	4		9023	8111	F2	6695
	9	26	17	29	13.0540	1	10	10	42.760	-73	30	7.87	4		9023	8111	F3	6696
	9	26	17	29	17.0540	1	10	5	33.184	-73	1	23.92	4		9023	8111	F4	7228
	9	26	17	29	21.0540	1	10	0	40.829	-72	31	53.69	4		9023	8111	F5	6697
	9	26	17	29	25.0539	1	9	56	1.788	-72	1	41.08	4		9023	8111	F6	8798
	9	26	17	29	29.0539	1	9	51	38.191	-71	30	56.87	4		9023	8111	F7	6698
	9	26	17	31	5.0535	1	8	51	39.754	-57	3	59.16	4		9023	8112	F1	6699
	9	26	17	31	9.0535	1	8	50	20.033	-56	24	29.29	4		9023	8112	F2	6700
	9	26	17	31	13.0535	1	8	49	3.834	-55	44	48.23	4		9023	8112	F3	6701
	9	26	17	31	17.0535	1	8	47	50.703	-55	5	2.30	4		9023	8112	F4	7229
	9	26	17	31	21.0535	1	8	46	40.492	-54	25	7.29	4		9023	8112	F5	6702
	9	26	17	31	25.0535	1	8	45	32.816	-53	45	1.86	4		9023	8112	F6	6703
	9	26	17	31	29.0535	1	8	44	28.722	-53	4	58.48	4		9023	8112	F7	6704
	9	26	17	33	5.0537	1	8	28	36.915	-36	59	40.29	4		9023	8113	F1	6976
	9	26	17	33	9.0537	1	8	28	14.921	-36	20	22.34	4		9023	8113	F2	6977
	9	26	17	33	13.0537	1	8	27	53.548	-35	41	13.40	4		9023	8113	F3	6978
	9	26	17	33	17.0537	1	8	27	33.740	-35	2	13.96	4		9023	8113	F4	6979
	9	26	17	33	21.0538	1	8	27	14.420	-34	23	20.27	4		9023	8113	F5	6980
	9	26	17	33	25.0538	1	8	26	56.296	-33	44	43.20	4		9023	8113	F6	6981
	9	26	17	33	29.0538	1	8	26	38.935	-33	6	15.21	4		9023	8113	F7	6982
	9	26	18	59	5.0589	1	16	8	30.871	-18	27	5.76	4		9002	6107	F1	59B7
	9	26	18	59	9.0588	1	16	8	37.787	-18	47	18.02	4		9002	6107	F2	5271
	9	26	18	59	13.0588	1	16	8	44.006	-19	7	40.08	4		9002	6107	F3	5272
	9	26	18	59	17.0588	1	16	8	50.270	-19	28	9.66	4		9002	6107	F4	5273
	9	26	18	59	21.0587	1	16	8	56.540	-19	48	37.83	4		9002	6107	F5	5274
	9	26	18	59	25.0587	1	16	9	2.096	-20	9	12.10	4		9002	6107	F6	5275
	9	26	18	59	29.0587	1	16	9	8.055	-20	29	59.32	4		9002	6107	F7	5276
	9	26	19	1	5.0580	1	16	10	32.267	-29	12	8.82	4		9002	6108	F1	5277
	9	26	19	1	9.0579	1	16	10	33.089	-29	34	59.54	4		9002	6108	F2	5278
	9	26	19	1	13.0579	1	16	10	33.750	-29	57	54.33	4		9002	6108	F3	5279
	9	26	19	1	21.0579	1	16	10	34.418	-30	43	49.07	4		9002	6108	F5	52A1
	9	26	19	1	25.0578	1	16	10	34.434	-31	6	53.52	4		9002	6108	F6	52A2
	9	26	19	1	29.0578	1	16	10	34.057	-31	30	4.95	4		9002	6108	F7	52A3
	9	26	19	3	5.0573	1	16	8	56.445	-41	7	10.13	4		9002	6109	F1	5436
	9	26	19	3	9.0573	1	16	8	47.658	-41	31	54.10	4		9002	6109	F2	5437
	9	26	19	3	13.0573	1	16	8	38.737	-41	56	43.89	4		9002	6109	F3	5438
	9	26	19	3	17.0573	1	16	8	29.212	-42	21	39.27	4		9002	6109	F4	5439

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	9	26	19	3	21.0573	1	16	8	18.915	-42	46	40.40	4		9002	6109	F5	5440
	9	26	19	3	25.0573	1	16	8	8.844	-43	11	37.99	4		9002	6109	F6	5441
	9	26	19	3	29.0573	1	16	7	57.875	-43	36	42.46	4		9002	6109	F7	5442
	9	26	19	5	5.0571	1	16	0	26.890	-53	46	37.90	4		9002	6110	F1	5443
	9	26	19	5	9.0571	1	15	59	58.225	-54	12	12.65	4		9002	6110	F2	5444
	9	26	19	5	13.0571	1	15	59	28.473	-54	37	46.45	4		9002	6110	F3	5445
	9	26	19	5	17.0571	1	15	58	57.619	-55	3	19.75	4		9002	6110	F4	5446
	9	26	19	5	21.0571	1	15	58	25.778	-55	28	57.77	4		9002	6110	F5	5447
	9	26	19	5	25.0571	1	15	57	52.448	-55	54	27.84	4		9002	6110	F6	5448
	9	26	19	5	29.0571	1	15	57	18.341	-56	20	2.99	4		9002	6110	F7	5449
	9	26	19	7	5.0572	1	15	35	19.398	-66	21	47.21	4		9002	6111	F1	5912
	9	26	19	7	9.0572	1	15	33	54.689	-66	46	1.49	4		9002	6111	F2	5913
	9	26	19	7	13.0572	1	15	32	28.135	-67	10	10.43	4		9002	6111	F3	5914
	9	26	19	7	17.0572	1	15	30	56.234	-67	34	12.40	4		9002	6111	F4	5915
	9	26	19	7	21.0572	1	15	29	21.841	-67	58	6.54	4		9002	6111	F5	7071
	9	26	19	7	25.0572	1	15	27	44.132	-68	21	59.49	4		9002	6111	F6	5917
	9	26	19	7	29.0572	1	15	26	1.893	-68	45	40.80	4		9002	6111	F7	5918
	9	26	19	9	5.0577	1	14	13	26.447	-77	17	9.98	4		9002	6112	F1	5919
	9	26	19	9	9.0577	1	14	8	22.049	-77	34	44.91	4		9002	6112	F2	5920
	9	26	19	9	13.0577	1	14	3	5.805	-77	51	55.21	4		9002	6112	F3	5921
	9	26	19	9	17.0577	1	13	57	34.453	-78	8	30.35	4		9002	6112	F4	5922
	9	26	19	9	21.0577	1	13	51	45.836	-78	24	43.88	4		9002	6112	F5	5923
	9	26	19	9	25.0578	1	13	45	43.857	-78	40	18.23	4		9002	6112	F6	5924
	9	26	19	9	29.0578	1	13	39	24.533	-78	55	21.60	4		9002	6112	F7	5925
	9	26	19	34	5.0518	1	0	57	27.605	-45	13	37.43	4		9023	8127	F1	69A3
	9	26	19	34	9.0517	1	1	1	16.444	-44	54	2.42	4		9023	8127	F2	69A4
	9	26	19	34	13.0517	1	1	5	5.844	-44	33	38.34	4		9023	8127	F3	69A5
	9	26	19	34	17.0516	1	1	8	56.664	-44	12	15.06	4		9023	8127	F4	69A6
	9	26	19	34	21.0515	1	1	12	48.306	-43	49	58.83	4		9023	8127	F5	69A7
	9	26	19	34	25.0515	1	1	16	40.779	-43	26	48.08	4		9023	8127	F6	69A8
	9	26	19	34	29.0514	1	1	20	33.747	-43	2	37.42	4		9023	8127	F7	69A9
	9	26	19	36	5.0505	1	2	53	5.149	-28	8	25.15	4		9023	8128	F1	6990
	9	26	19	36	9.0505	1	2	56	44.830	-27	18	12.42	4		9023	8128	F2	6991
	9	26	19	36	13.0504	1	3	0	22.667	-26	27	7.04	4		9023	8128	F3	6992
	9	26	19	36	17.0504	1	3	3	58.960	-25	35	10.25	4		9023	8128	F4	6993
	9	26	19	36	21.0504	1	3	7	33.549	-24	42	23.64	4		9023	8128	F5	6994
	9	26	19	36	25.0504	1	3	11	6.123	-23	48	50.12	4		9023	8128	F6	6995
	9	26	19	36	29.0504	1	3	14	37.123	-22	54	32.72	4		9023	8128	F7	7779
	9	26	19	38	5.0505	1	4	29	3.441	0	13	30.48	4		9023	8129	F1	6996
	9	26	19	38	9.0505	1	4	31	44.440	1	9	15.12	4		9023	8129	F2	6997
	9	26	19	38	13.0506	1	4	34	23.457	2	4	26.57	4		9023	8129	F3	6998
	9	26	19	38	17.0506	1	4	37	.574	2	59	2.85	4		9023	8129	F4	6999
	9	26	19	38	21.0506	1	4	39	35.978	3	53	6.04	4		9023	8129	F5	7000
	9	26	19	38	25.0507	1	4	42	9.405	4	46	29.13	4		9023	8129	F6	7001
	9	26	19	38	29.0507	1	4	44	41.141	5	39	19.03	4		9023	8129	F7	7002
	9	26	19	40	5.0519	1	5	37	16.760	23	9	37.99	4		9023	8130	F1	70A2
	9	26	19	40	9.0519	1	5	39	11.015	23	44	35.57	4		9023	8130	F2	70A3
	9	26	19	40	13.0520	1	5	41	4.155	24	18	56.67	4		9023	8130	F3	70A4
	9	26	19	40	17.0520	1	5	42	55.963	24	52	39.97	4		9023	8130	F4	70A5
	9	26	19	40	21.0521	1	5	44	46.890	25	25	48.26	4		9023	8130	F5	70A6
	9	26	19	40	25.0522	1	5	46	36.433	25	58	17.44	4		9023	8130	F6	70A7
	9	26	19	40	29.0522	1	5	48	24.715	26	30	15.55	4		9023	8130	F7	70A8

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	9	27	0	55	5.0596	1	15	46	28.514	-11	1	20.96	4		9007	7323	F1	6674
	9	27	0	55	9.0595	1	15	46	43.809	-11	21	41.01	4		9007	7323	F2	6675
	9	27	0	55	13.0595	1	15	46	59.331	-11	42	6.87	4		9007	7323	F3	7214
	9	27	0	55	17.0595	1	15	47	14.542	-12	2	33.24	4		9007	7323	F4	6676
	9	27	0	55	21.0594	1	15	47	29.786	-12	23	6.12	4		9007	7323	F5	6677
	9	27	0	55	25.0594	1	15	47	44.944	-12	43	42.07	4		9007	7323	F6	6678
	9	27	0	55	29.0594	1	15	47	59.945	-13	4	25.13	4		9007	7323	F7	6679
	9	27	0	57	5.0588	1	15	53	27.363	-21	43	54.16	4		9007	7324	F1	66A0
	9	27	0	57	9.0588	1	15	53	39.603	-22	6	29.92	4		9007	7324	F2	66A1
	9	27	0	57	13.0587	1	15	53	51.835	-22	29	3.84	4		9007	7324	F3	66A2
	9	27	0	57	17.0587	1	15	54	3.688	-22	51	42.48	4		9007	7324	F4	66A3
	9	27	0	57	21.0587	1	15	54	15.790	-23	14	25.36	4		9007	7324	F5	66A4
	9	27	0	57	25.0587	1	15	54	27.474	-23	37	13.94	4		9007	7324	F6	7215
	9	27	0	57	29.0587	1	15	54	38.903	-24	0	4.87	4		9007	7324	F7	66A6
	9	27	0	59	5.0583	1	15	58	34.395	-33	25	21.90	4		9007	7325	F1	66A7
	9	27	0	59	9.0583	1	15	58	42.221	-33	49	25.94	4		9007	7325	F2	66A8
	9	27	0	59	13.0583	1	15	58	49.941	-34	13	41.59	4		9007	7325	F3	66A9
	9	27	0	59	17.0583	1	15	58	57.596	-34	37	55.57	4		9007	7325	F4	6690
	9	27	0	59	21.0583	1	15	59	5.081	-35	2	4.88	4		9007	7325	F5	7216
	9	27	0	59	25.0583	1	15	59	11.778	-35	26	23.95	4		9007	7325	F6	6692
	9	27	0	59	29.0583	1	15	59	18.376	-35	50	43.55	4		9007	7325	F7	6693
	9	27	1	2	5.0582	1	16	0	31.332	-51	49	50.84	4		9007	7326	F1	6962
	9	27	1	2	9.0583	1	16	0	26.470	-52	14	18.85	4		9007	7326	F2	6963
	9	27	1	2	13.0583	1	16	0	21.204	-52	38	48.35	4		9007	7326	F3	6964
	9	27	1	2	17.0583	1	16	0	15.699	-53	3	11.60	4		9007	7326	F4	6965
	9	27	1	2	21.0583	1	16	0	9.351	-53	27	38.43	4		9007	7326	F5	6966
	9	27	1	2	29.0583	1	15	59	55.143	-54	16	21.25	4		9007	7326	F7	6968
	9	27	1	4	5.0586	1	15	53	39.406	-63	48	5.15	4		9007	7327	F1	6969
	9	27	1	4	9.0586	1	15	53	11.979	-64	11	14.72	4		9007	7327	F2	6970
	9	27	1	4	13.0587	1	15	52	43.819	-64	34	22.15	4		9007	7327	F3	6971
	9	27	1	4	17.0587	1	15	52	14.408	-64	57	18.91	4		9007	7327	F4	6972
	9	27	1	4	21.0587	1	15	51	44.473	-65	20	20.21	4		9007	7327	F5	7768
	9	27	1	4	25.0587	1	15	51	12.135	-65	43	9.39	4		9007	7327	F6	7769
	9	27	1	4	29.0587	1	15	50	38.909	-66	5	54.09	4		9007	7327	F7	6975
	9	27	1	6	5.0593	1	15	26	35.618	-74	47	25.26	4		9007	7328	F1	7095
	9	27	1	6	9.0594	1	15	24	53.937	-75	7	53.58	4		9007	7328	F2	7237
	9	27	1	6	13.0594	1	15	23	7.962	-75	28	7.17	4		9007	7328	F3	7097
	9	27	1	6	17.0594	1	15	21	15.927	-75	48	17.07	4		9007	7328	F4	7238
	9	27	1	6	21.0594	1	15	19	18.658	-76	8	19.40	4		9007	7328	F5	7239
	9	27	1	6	25.0595	1	15	17	14.520	-76	28	7.52	4		9007	7328	F6	7240
	9	27	1	6	29.0595	1	15	15	4.101	-76	47	50.70	4		9007	7328	F7	7241
	9	27	1	33	5.0543	1	9	12	3.987	-83	38	46.52	4		9002	6132	F1	55A4
	9	27	1	33	9.0542	1	9	4	28.927	-83	5	33.52	4		9002	6132	F2	55A5
	9	27	1	33	13.0542	1	8	58	2.133	-82	31	35.06	4		9002	6132	F3	5998
	9	27	1	33	17.0541	1	8	52	29.096	-81	56	42.79	4		9002	6132	F4	55A6
	9	27	1	33	21.0541	1	8	47	40.056	-81	21	26.77	4		9002	6132	F5	5999
	9	27	1	33	25.0540	1	8	43	26.885	-80	45	25.69	4		9002	6132	F6	6000
	9	27	1	33	29.0540	1	8	39	46.044	-80	8	47.43	4		9002	6132	F7	6001
	9	27	1	35	5.0531	1	8	9	43.439	-63	5	55.01	4		9002	6133	F1	6717
	9	27	1	35	9.0531	1	8	9	25.781	-62	18	6.46	4		9002	6133	F2	6718
	9	27	1	35	13.0530	1	8	9	9.761	-61	29	55.56	4		9002	6133	F3	6719
	9	27	1	35	17.0530	1	8	8	55.835	-60	41	27.11	4		9002	6133	F4	6720
	9	27	1	35	21.0530	1	8	8	43.333	-59	52	37.58	4		9002	6133	F5	6721
	9	27	1	35	25.0530	1	8	8	32.257	-59	3	29.29	4		9002	6133	F6	7221
	9	27	1	35	29.0530	1	8	8	22.947	-58	14	5.45	4		9002	6133	F7	6723
	9	27	1	37	5.0528	1	8	9	14.897	-37	36	9.69	4		9002	6134	F1	6724
	9	27	1	37	9.0528	1	8	9	24.600	-36	44	19.14	4		9002	6134	F2	6725
	9	27	1	37	13.0528	1	8	9	34.749	-35	52	32.36	4		9002	6134	F3	6726
	9	27	1	37	17.0528	1	8	9	45.772	-35	0	54.07	4		9002	6134	F4	6727
	9	27	1	37	21.0528	1	8	9	56.614	-34	9	28.85	4		9002	6134	F5	6728
	9	27	1	37	25.0529	1	8	10	8.064	-33	18	14.77	4		9002	6134	F6	6729
	9	27	1	37	29.0529	1	8	10	19.894	-32	27	8.77	4		9002	6134	F7	6730
	9	27	1	39	5.0535	1	8	16	30.646	-13	32	44.21	4		9002	6135	F1	55A7
	9	27	1	39	9.0536	1	8	16	49.046	-12	50	10.93	4		9002	6135	F2	55A8
	9	27	1	39	13.0536	1	8	17	7.635	-12	8	9.02	4		9002	6135	F3	55A9
	9	27	1	39	17.0537	1	8	17	26.276	-11	26	31.96	4		9002	6135	F4	5590
	9	27	1	39	21.0537	1	8	17	45.234	-10	45	18.86	4		9002	6135	F5	5591
	9	27	1	39	25.0538	1	8	18	4.464	-10	4	29.04	4		9002	6135	F6	5592
	9	27	1	39	29.0538	1	8	18	23.809	- 9	24	9.19	4		9002	6135	F7	5593
	9	27	9	41	5.0525	1	3	4	35.746	-51	36	22.97	4		9007	7353	F1	7101
	9	27	9	41	9.0525	1	3	8	43.150	-51	2	11.65	4		9007	7353	F2	7102
	9	27	9	41	13.0524	1	3	12	49.308	-50	26	42.45	4		9007	7353	F3	7103
	9	27	9	41	17.0524	1	3	16	54.176	-49	49	59.99	4		9007	7353	F4	7104
	9	27	9	41	21.0523	1	3	20	57.667	-49	12	1.92	4		9007	7353	F5	7105
	9	27	9	41	25.0522	1	3	25	.131	-48	32	43.01	4		9007	7353	F6	7106
	9	27	9	41	29.0522	1	3	29	.498	-47	52	5.80	4		9007	7353	F7	7107
	9	27	9	43	5.0513	1	4	55	25.010	-24	53	28.39	4		9007	7354	F1	8598
	9	27	9	43	9.0513	1	4	58	34.426	-23	41	18.53	4		9007	7354	F2	8599
	9	27	9	43	13.0513	1	5	1	41.364	-22	28	21.42	4		9007	7354	F3	8600
	9	27	9	43	17.0513	1	5	4	46.515	-21	14	44.48	4		9007	7354	F4	8601

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	9	27	9	43	21.0513	1	5	7	49.341	-20	0	33.02	4		9007	7354	F5	8801
	9	27	9	43	25.0512	1	5	10	50.194	-18	45	47.25	4		9007	7354	F6	8803
	9	27	9	43	29.0512	1	5	13	48.914	-17	30	38.60	4		9007	7354	F7	8804
	9	27	10	59	5.0596	1	16	30	54.035	- 0	10	11.28	4		9023	8138	F1	70A9
	9	27	10	59	9.0596	1	16	31	14.678	- 0	29	9.53	4		9023	8138	F2	70B0
	9	27	10	59	13.0595	1	16	31	35.546	- 0	48	14.18	4		9023	8138	F3	7230
	9	27	10	59	17.0595	1	16	31	56.033	- 1	7	31.80	4		9023	8138	F4	7091
	9	27	10	59	21.0594	1	16	32	16.357	- 1	26	51.98	4		9023	8138	F5	7231
	9	27	10	59	25.0594	1	16	32	37.146	- 1	46	21.31	4		9023	8138	F6	7093
	9	27	10	59	29.0593	1	16	32	57.553	- 2	5	57.98	4		9023	8138	F7	7232
	9	27	11	1	5.0583	1	16	41	10.326	-10	36	43.60	4		9023	8139	F1	9077
	9	27	11	1	9.0582	1	16	41	31.087	-10	59	50.56	4		9023	8139	F2	9078
	9	27	11	1	13.0582	1	16	41	51.547	-11	23	1.81	4		9023	8139	F3	9079
	9	27	11	1	17.0581	1	16	42	12.076	-11	46	23.39	4		9023	8139	F4	90A0
	9	27	11	1	25.0581	1	16	42	53.609	-12	33	29.89	4		9023	8139	F6	90A2
	9	27	11	1	29.0580	1	16	43	13.960	-12	57	23.04	4		9023	8139	F7	90A3
	9	27	11	3	5.0572	1	16	51	38.353	-23	15	.35	4		9023	8140	F1	90A4
	9	27	11	3	9.0571	1	16	52	.012	-23	42	42.95	4		9023	8140	F2	90A5
	9	27	11	3	13.0571	1	16	52	21.414	-24	10	36.91	4		9023	8140	F3	90A6
	9	27	11	3	17.0571	1	16	52	43.200	-24	38	36.46	4		9023	8140	F4	90A7
	9	27	11	3	21.0570	1	16	53	4.726	-25	6	45.19	4		9023	8140	F5	90A8
	9	27	11	3	25.0570	1	16	53	26.674	-25	35	4.85	4		9023	8140	F6	90A9
	9	27	11	3	29.0570	1	16	53	48.550	-26	3	32.92	4		9023	8140	F7	90A0
	9	27	11	5	5.0564	1	17	2	59.548	-38	9	35.96	4		9023	8141	F1	8870
	9	27	11	5	9.0564	1	17	3	24.230	-38	41	23.73	4		9023	8141	F2	8871
	9	27	11	5	13.0564	1	17	3	49.228	-39	13	27.84	4		9023	8141	F3	8872
	9	27	11	5	17.0564	1	17	4	13.852	-39	45	27.84	4		9023	8141	F4	8873
	9	27	11	5	21.0564	1	17	4	38.632	-40	17	42.30	4		9023	8141	F5	8874
	9	27	11	5	25.0563	1	17	5	4.336	-40	50	1.11	4		9023	8141	F6	8875
	9	27	11	5	29.0563	1	17	5	29.510	-41	22	24.70	4		9023	8141	F7	8876
	9	27	11	7	5.0561	1	17	17	1.989	-54	40	35.79	4		9023	8142	F1	8877
	9	27	11	7	9.0561	1	17	17	35.943	-55	14	21.17	4		9023	8142	F2	8878
	9	27	11	7	13.0561	1	17	18	10.283	-55	48	3.77	4		9023	8142	F3	8879
	9	27	11	7	17.0561	1	17	18	44.834	-56	21	48.39	4		9023	8142	F4	8880
	9	27	11	7	21.0561	1	17	19	20.530	-56	55	32.17	4		9023	8142	F5	8881
	9	27	11	7	25.0561	1	17	19	56.855	-57	29	18.61	4		9023	8142	F6	8882
	9	27	11	7	29.0561	1	17	20	33.435	-58	3	1.67	4		9023	8142	F7	8883
	9	27	11	9	5.0564	1	17	41	5.629	-71	17	27.82	4		9023	8143	F1	8718
	9	27	11	9	9.0564	1	17	42	22.998	-71	49	28.75	4		9023	8143	F2	8719
	9	27	11	9	13.0564	1	17	43	42.149	-72	21	23.95	4		9023	8143	F3	8720
	9	27	11	9	17.0564	1	17	45	5.807	-72	53	13.02	4		9023	8143	F4	8721
	9	27	11	9	21.0565	1	17	46	32.597	-73	24	55.74	4		9023	8143	F5	8722
	9	27	11	9	25.0565	1	17	48	5.032	-73	56	26.48	4		9023	8143	F6	8723
	9	27	11	9	29.0565	1	17	49	41.739	-74	27	50.49	4		9023	8143	F7	8724
	9	27	11	11	5.0571	1	19	59	42.036	-85	47	1.14	4		9023	8144	F1	8725
	9	27	11	11	9.0572	1	20	18	35.558	-86	7	37.85	4		9023	8144	F2	8726
	9	27	11	11	13.0572	1	20	40	46.812	-86	26	23.55	4		9023	8144	F3	8727
	9	27	11	11	17.0572	1	21	6	42.776	-86	42	43.73	4		9023	8144	F4	8728
	9	27	11	11	21.0573	1	21	36	40.428	-86	56	6.65	4		9023	8144	F5	8729
	9	27	11	11	25.0573	1	22	10	29.838	-87	5	58.51	4		9023	8144	F6	8730
	9	27	11	11	29.0573	1	22	47	13.954	-87	11	35.54	4		9023	8144	F7	8731
	9	27	13	14	36.9325	1	15	9	40.351	-60	16	56.45	4		9023	8155	04	6414
	9	27	13	14	40.9323	1	15	8	.689	-60	36	30.19	4		9023	8155	05	76A6
	9	27	13	14	44.9323	1	15	6	18.668	-60	55	52.67	4		9023	8155	06	5826
	9	27	13	14	48.9323	1	15	4	33.171	-61	15	17.19	4		9023	8155	07	6924
	9	27	13	14	52.9322	1	15	2	45.317	-61	34	36.01	4		9023	8155	08	6416
	9	27	13	14	56.9323	1	15	0	54.183	-61	53	45.24	4		9023	8155	09	5827
	9	27	16	56	5.0582	1	17	7	15.134	13	6	28.64	4		9002	6148	F1	5708
	9	27	16	56	9.0581	1	17	7	59.057	12	44	49.67	4		9002	6148	F2	6324
	9	27	16	56	13.0581	1	17	8	42.975	12	22	59.86	4		9002	6148	F3	5710
	9	27	16	56	17.0580	1	17	9	27.293	12	1	1.87	4		9002	6148	F4	5711
	9	27	16	56	21.0580	1	17	10	11.336	11	38	53.18	4		9002	6148	F5	6325
	9	27	16	56	25.0579	1	17	10	56.019	11	16	34.60	4		9002	6148	F6	6326
	9	27	16	56	29.0579	1	17	11	40.526	10	54	.79	4		9002	6148	F7	5714
	9	27	16	58	5.0569	1	17	30	32.435	0	59	13.50	4		9002	6149	F1	5715
	9	27	16	58	9.0569	1	17	31	22.794	0	32	1.33	4		9002	6149	F2	5716
	9	27	16	58	13.0568	1	17	32	13.338	0	4	41.78	4		9002	6149	F3	5717
	9	27	16	58	17.0568	1	17	33	4.119	- 0	22	47.81	4		9002	6149	F4	5718
	9	27	16	58	21.0568	1	17	33	54.969	- 0	50	33.23	4		9002	6149	F5	6327
	9	27	16	58	25.0567	1	17	34	46.479	- 1	18	29.85	4		9002	6149	F6	6328
	9	27	16	58	29.0567	1	17	35	38.346	- 1	46	37.60	4		9002	6149	F7	5721
	9	27	17	1	5.0557	1	18	14	49.218	-22	19	45.26	4		9002	6150	F1	6445
	9	27	17	1	9.0557	1	18	16	.757	-22	54	10.70	4		9002	6150	F2	6446
	9	27	17	1	13.0557	1	18	17	13.191	-23	28	37.48	4		9002	6150	F3	6447
	9	27	17	1	17.0557	1	18	18	26.709	-24	3	2.65	4		9002	6150	F4	6448
	9	27	17	1	21.0557	1	18	19	40.734	-24	37	33.53	4		9002	6150	F5	6449
	9	27	17	1	25.0557	1	18	20	55.347	-25	12	10.89	4		9002	6150	F6	6450
	9	27	17	1	29.0557	1	18	22	11.134	-25	46	51.60	4		9002	6150	F7	6451
	9	27	17	3	5.0556	1	18	57	29.079	-39	35	54.41	4		9002	6151	F1	6452
	9	27	17	3	9.0556	1	18	59	12.650	-40	9	27.68	4		9002	6151	F2	6453

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	9	27	17	3	13.0556	1	19	0	57.573	-40	43	.44	4		9002	6151	F3	6456
	9	27	17	3	17.0556	1	19	2	49.967	-41	16	18.56	4		9002	6151	F4	6455
	9	27	17	3	21.0557	1	19	4	31.629	-41	49	28.61	4		9002	6151	F5	6456
	9	27	17	3	25.0557	1	19	6	21.460	-42	22	30.13	4		9002	6151	F6	6457
	9	27	17	3	29.0557	1	19	8	12.614	-42	55	17.72	4		9002	6151	F7	6458
	9	27	17	5	5.0561	1	20	2	18.651	-54	52	5.98	4		9002	6152	F1	5725
	9	27	17	5	9.0561	1	20	5	2.476	-55	18	15.59	4		9002	6152	F2	5726
	9	27	17	5	13.0562	1	20	7	48.813	-55	44	2.43	4		9002	6152	F3	5727
	9	27	17	5	17.0562	1	20	10	38.222	-56	9	27.42	4		9002	6152	F4	5728
	9	27	17	5	21.0562	1	20	13	29.632	-56	34	24.90	4		9002	6152	F5	5729
	9	27	17	5	25.0563	1	20	16	24.717	-56	59	7.46	4		9002	6152	F6	5730
	9	27	17	5	29.0563	1	20	19	20.973	-57	23	20.94	4		9002	6152	F7	5731
	9	27	17	7	5.0571	1	21	44	27.063	-64	56	25.62	4		9002	6153	F1	5732
	9	27	17	7	9.0572	1	21	48	33.605	-65	9	28.57	4		9002	6153	F2	5733
	9	27	17	7	13.0572	1	21	52	41.250	-65	21	55.00	4		9002	6153	F3	5734
	9	27	17	7	17.0572	1	21	56	51.841	-65	33	54.29	4		9002	6153	F4	5735
	9	27	17	7	21.0573	1	22	1	4.335	-65	45	25.01	4		9002	6153	F5	5736
	9	27	17	7	25.0573	1	22	5	18.398	-65	56	19.77	4		9002	6153	F6	5737
	9	27	17	7	29.0574	1	22	9	34.099	-66	6	49.11	4		9002	6153	F7	5738
	9	27	17	32	5.0569	1	14	39	51.326	-82	28	38.10	4		9023	8160	F1	85A6
	9	27	17	32	9.0569	1	14	24	30.598	-82	38	47.80	4		9023	8160	F2	85A7
	9	27	17	32	13.0568	1	14	8	23.618	-82	46	56.26	4		9023	8160	F3	85A8
	9	27	17	32	17.0568	1	13	51	31.895	-82	52	57.18	4		9023	8160	F4	85A9
	9	27	17	32	21.0567	1	13	34	7.502	-82	56	23.30	4		9023	8160	F5	9047
	9	27	17	32	25.0567	1	13	16	25.049	-82	57	18.69	4		9023	8160	F6	8591
	9	27	17	32	29.0566	1	12	58	31.907	-82	55	34.77	4		9023	8160	F7	8592
	9	27	17	34	5.0557	1	9	1	48.047	-72	50	21.90	4		9023	8161	F1	9327
	9	27	17	34	9.0557	1	8	58	23.208	-72	12	24.88	4		9023	8161	F2	8594
	9	27	17	34	13.0557	1	8	55	11.984	-71	34	.67	4		9023	8161	F3	8799
	9	27	17	34	17.0556	1	8	52	12.861	-70	55	8.26	4		9023	8161	F4	8800
	9	27	17	34	21.0556	1	8	49	26.181	-70	15	41.36	4		9023	8161	F5	8596
	9	27	17	34	25.0556	1	8	46	49.584	-69	35	50.79	4		9023	8161	F6	8597
	9	27	17	34	29.0555	1	8	44	22.708	-68	55	35.12	4		9023	8161	F7	9049
	9	27	17	36	5.0552	1	8	13	49.419	-51	22	49.59	4		9023	8162	F1	7571
	9	27	17	36	9.0552	1	8	13	13.647	-50	36	55.66	4		9023	8162	F2	7572
	9	27	17	36	13.0552	1	8	12	39.952	-49	50	59.54	4		9023	8162	F3	7573
	9	27	17	36	17.0552	1	8	12	7.835	-49	5	2.14	4		9023	8162	F4	7574
	9	27	17	36	21.0552	1	8	11	37.501	-48	19	.70	4		9023	8162	F5	7575
	9	27	17	36	25.0552	1	8	11	8.911	-47	33	.27	4		9023	8162	F6	7576
	9	27	17	36	29.0552	1	8	10	41.857	-46	47	2.63	4		9023	8162	F7	7577
	9	27	17	38	5.0556	1	8	5	23.707	-28	58	11.74	4		9023	8163	F1	7578
	9	27	17	38	9.0557	1	8	5	20.665	-28	16	11.19	4		9023	8163	F2	7579
	9	27	17	38	13.0557	1	8	5	17.700	-27	34	30.23	4		9023	8163	F3	75A0
	9	27	17	38	17.0557	1	8	5	15.511	-26	53	2.95	4		9023	8163	F4	75A1
	9	27	17	38	21.0558	1	8	5	13.744	-26	11	49.83	4		9023	8163	F5	75A2
	9	27	17	38	25.0558	1	8	5	12.903	-25	31	.02	4		9023	8163	F6	75A3
	9	27	17	38	29.0558	1	8	5	12.274	-24	50	24.51	4		9023	8163	F7	75A4
	9	27	19	6	5.0612	1	15	55	11.735	-33	27	32.34	4		9002	6167	F1	6076
	9	27	19	6	9.0612	1	15	55	6.017	-33	49	13.26	4		9002	6167	F2	7034
	9	27	19	6	13.0612	1	15	54	59.902	-34	11	1.79	4		9002	6167	F3	6078
	9	27	19	6	17.0611	1	15	54	53.819	-34	32	47.44	4		9002	6167	F4	6079
	9	27	19	6	21.0611	1	15	54	46.723	-34	54	46.94	4		9002	6167	F5	60A0
	9	27	19	6	25.0611	1	15	54	39.945	-35	16	46.21	4		9002	6167	F6	60A1
	9	27	19	6	29.0611	1	15	54	32.440	-35	38	46.11	4		9002	6167	F7	60A2
	9	27	19	8	5.0606	1	15	49	27.470	-44	43	7.97	4		9002	6168	F1	60A3
	9	27	19	8	9.0606	1	15	49	8.762	-45	6	17.07	4		9002	6168	F2	60A4
	9	27	19	8	13.0606	1	15	48	48.579	-45	29	33.83	4		9002	6168	F3	60A5
	9	27	19	8	17.0606	1	15	48	28.058	-45	52	51.83	4		9002	6168	F4	60A6
	9	27	19	8	21.0606	1	15	48	7.675	-46	16	11.76	4		9002	6168	F5	60A7
	9	27	19	8	25.0606	1	15	47	45.968	-46	39	29.92	4		9002	6168	F6	60A8
	9	27	19	8	29.0606	1	15	47	23.640	-47	2	52.76	4		9002	6168	F7	60A9
	9	27	19	10	5.0604	1	15	34	2.871	-56	27	28.36	4		9002	6169	F1	6431
	9	27	19	10	9.0604	1	15	33	15.736	-56	50	56.39	4		9002	6169	F2	6432
	9	27	19	10	13.0604	1	15	32	26.704	-57	14	18.06	4		9002	6169	F3	6433
	9	27	19	10	17.0604	1	15	31	36.362	-57	37	45.05	4		9002	6169	F4	6434
	9	27	19	10	21.0604	1	15	30	44.079	-58	1	9.38	4		9002	6169	F5	6435
	9	27	19	10	25.0604	1	15	29	50.623	-58	24	29.26	4		9002	6169	F6	6436
	9	27	19	10	29.0604	1	15	28	55.873	-58	47	47.55	4		9002	6169	F7	6437
	9	27	19	12	5.0605	1	14	55	27.891	-67	47	37.88	4		9002	6170	F1	7035
	9	27	19	12	9.0605	1	14	53	25.744	-68	8	48.57	4		9002	6170	F2	6439
	9	27	19	12	13.0605	1	14	51	18.989	-68	29	55.08	4		9002	6170	F3	6440
	9	27	19	12	17.0605	1	14	49	6.907	-68	50	47.85	4		9002	6170	F4	6441
	9	27	19	12	21.0605	1	14	46	51.329	-69	11	34.83	4		9002	6170	F5	6442
	9	27	19	12	25.0605	1	14	44	30.316	-69	32	9.30	4		9002	6170	F6	6443
	9	27	19	12	29.0606	1	14	42	4.280	-69	52	29.85	4		9002	6170	F7	6444
	9	27	19	38	5.0550	1	0	36	21.378	-36	33	56.43	4		9023	8179	F1	75A5
	9	27	19	38	9.0550	1	0	39	17.398	-36	12	57.16	4		9023	8179	F2	75A6
	9	27	19	38	13.0549	1	0	42	13.650	-35	51	15.97	4		9023	8179	F3	75A7
	9	27	19	38	17.0548	1	0	45	11.107	-35	28	59.26	4		9023	8179	F4	75A8
	9	27	19	38	21.0548	1	0	48	8.865	-35	5	52.12	4		9023	8179	F5	75A9

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	9	27	19	38	25.0547	1	0	51	7.438	-34	42	7.79	4		9023	8179	F6	7590
	9	27	19	38	29.0547	1	0	54	6.824	-34	17	41.98	4		9023	8179	F7	7591
	9	27	19	40	5.0537	1	2	7	13.489	-20	42	7.97	4		9023	8180	F1	7592
	9	27	19	40	9.0537	1	2	10	15.093	-19	58	40.20	4		9023	8180	F2	7593
	9	27	19	40	13.0537	1	2	13	16.389	-19	14	36.13	4		9023	8180	F3	8884
	9	27	19	40	17.0536	1	2	16	16.916	-18	29	54.42	4		9023	8180	F4	7594
	9	27	19	40	21.0536	1	2	19	17.249	-17	44	31.17	4		9023	8180	F5	7595
	9	27	19	40	25.0536	1	2	22	17.081	-16	58	34.11	4		9023	8180	F6	7596
	9	27	19	40	29.0536	1	2	25	15.981	-16	11	59.89	4		9023	8180	F7	7597
	9	27	19	42	5.0536	1	3	32	42.744		3	55 38.02	4		9023	8181	F1	3238
	9	27	19	42	9.0536	1	3	35	18.644		4	45 49.30	4		9023	8181	F2	3239
	9	27	19	42	13.0536	1	3	37	53.570		5	35 46.76	4		9023	8181	F3	3240
	9	27	19	42	17.0536	1	3	40	27.460		6	25 21.92	4		9023	8181	F4	3241
	9	27	19	42	21.0537	1	3	43	.194		7	14 39.15	4		9023	8181	F5	3242
	9	27	19	42	25.0537	1	3	45	31.964		8	3 31.06	4		9023	8181	F6	3243
	9	27	19	42	29.0537	1	3	48	2.196		8	52 1.17	4		9023	8181	F7	3244
	9	28	1	2	5.0623	1	15	38	59.888	-26	32	27.57	4		9007	7365	F1	8605
	9	28	1	2	9.0622	1	15	39	6.421	-26	53	44.78	4		9007	7365	F2	8606
	9	28	1	2	13.0622	1	15	39	12.668	-27	15	2.90	4		9007	7365	F3	8607
	9	28	1	2	17.0622	1	15	39	18.627	-27	36	22.74	4		9007	7365	F4	8608
	9	28	1	2	21.0622	1	15	39	24.519	-27	57	50.48	4		9007	7365	F5	8609
	9	28	1	2	25.0622	1	15	39	30.135	-28	19	20.28	4		9007	7365	F6	8610
	9	28	1	2	29.0622	1	15	39	35.611	-28	40	49.22	4		9007	7365	F7	8611
	9	28	1	4	5.0619	1	15	40	45.043	-37	29	4.24	4		9007	7366	F1	8612
	9	28	1	4	9.0619	1	15	40	45.104	-37	51	30.21	4		9007	7366	F2	8613
	9	28	1	4	13.0618	1	15	40	44.780	-38	13	56.66	4		9007	7366	F3	8614
	9	28	1	4	17.0618	1	15	40	44.104	-38	36	24.91	4		9007	7366	F4	8615
	9	28	1	4	21.0618	1	15	40	43.062	-38	58	52.76	4		9007	7366	F5	8616
	9	28	1	4	25.0618	1	15	40	41.917	-39	21	24.79	4		9007	7366	F6	8617
	9	28	1	4	29.0618	1	15	40	40.461	-39	43	56.54	4		9007	7366	F7	8618
	9	28	1	6	5.0609	1	16	18	26.036	-21	35	28.94	4		9011	141	F1	6208
	9	28	1	6	5.0618	1	15	38	20.255	-48	47	57.38	4		9007	7367	F1	8619
	9	28	1	6	9.0609	1	16	18	32.823	-21	57	26.64	4		9011	141	F2	6209
	9	28	1	6	9.0618	1	15	38	9.112	-49	10	35.72	4		9007	7367	F2	8620
	9	28	1	6	13.0609	1	16	18	38.957	-22	19	24.21	4		9011	141	F3	6210
	9	28	1	6	13.0618	1	15	37	57.593	-49	33	17.31	4		9007	7367	F3	8621
	9	28	1	6	17.0608	1	16	18	45.104	-22	41	34.53	4		9011	141	F4	6211
	9	28	1	6	17.0618	1	15	37	45.342	-49	55	56.81	4		9007	7367	F4	8622
	9	28	1	6	21.0608	1	16	18	51.048	-23	3	48.40	4		9011	141	F5	6212
	9	28	1	6	21.0618	1	15	37	32.747	-50	18	34.23	4		9007	7367	F5	8623
	9	28	1	6	25.0608	1	16	18	56.722	-23	26	10.09	4		9011	141	F6	6213
	9	28	1	6	25.0618	1	15	37	19.605	-50	41	13.10	4		9007	7367	F6	8624
	9	28	1	6	29.0607	1	16	19	2.793	-23	48	40.59	4		9011	141	F7	6214
	9	28	1	6	29.0618	1	15	37	6.005	-51	3	48.65	4		9007	7367	F7	8625
	9	28	1	8	5.0600	1	16	20	18.776	-33	21	55.86	4		9011	142	F1	6215
	9	28	1	8	5.0620	1	15	28	6.598	-59	58	52.50	4		9007	7368	F1	7150
	9	28	1	8	9.0599	1	16	20	19.162	-33	47	9.31	4		9011	142	F2	6216
	9	28	1	8	9.0620	1	15	27	32.711	-60	20	37.51	4		9007	7368	F2	7151
	9	28	1	8	13.0599	1	16	20	19.101	-34	12	31.74	4		9011	142	F3	6217
	9	28	1	8	13.0620	1	15	26	57.879	-60	42	26.20	4		9007	7368	F3	8029
	9	28	1	8	17.0599	1	16	20	18.869	-34	38	4.55	4		9011	142	F4	6218
	9	28	1	8	17.0620	1	15	26	21.838	-61	4	8.39	4		9007	736[illegible]	F4	7153
	9	28	1	8	21.0598	1	16	20	18.946	-35	3	37.08	4		9011	142	F5	6219
	9	28	1	8	21.0620	1	15	25	44.391	-61	25	51.44	4		9007	7368	F5	8030
	9	28	1	8	25.0598	1	16	20	18.016	-35	29	19.94	4		9011	142	F6	6220
	9	28	1	8	25.0620	1	15	25	6.316	-61	47	25.75	4		9007	7368	F6	8031
	9	28	1	8	29.0598	1	16	20	17.129	-35	55	2.69	4		9011	142	F7	6221
	9	28	1	8	29.0620	1	15	24	25.988	-62	8	53.32	4		9007	7368	F7	7156
	9	28	1	13	5.0591	1	15	50	45.660	-68	13	26.82	4		9011	144	F1	6509
	9	28	1	13	9.0591	1	15	49	18.653	-68	41	38.16	4		9011	144	F2	6510
	9	28	1	13	13.0591	1	15	47	48.005	-69	9	44.40	4		9011	144	F3	6511
	9	28	1	13	17.0591	1	15	46	11.938	-69	37	45.62	4		9011	144	F4	6512
	9	28	1	13	21.0591	1	15	44	30.860	-70	5	41.16	4		9011	144	F5	77A7
	9	28	1	13	25.0591	1	15	42	45.324	-70	33	23.25	4		9011	144	F6	6513
	9	28	1	13	29.0591	1	15	40	54.194	-71	1	4.72	4		9011	144	F7	77A8
	9	28	1	15	5.0595	1	13	59	48.927	-80	51	12.42	4		9011	145	F1	6515
	9	28	1	15	9.0595	1	13	51	8.146	-81	9	49.23	4		9011	145	F2	6516
	9	28	1	15	13.0595	1	13	41	53.858	-81	27	34.60	4		9011	145	F3	6517
	9	28	1	15	17.0596	1	13	32	.940	-81	44	21.15	4		9011	145	F4	6518
	9	28	1	15	21.0596	1	13	21	28.998	-81	59	58.66	4		9011	145	F5	6519
	9	28	1	15	25.0596	1	13	10	18.302	-82	14	33.03	4		9011	145	F6	70A1
	9	28	1	15	29.0596	1	12	58	26.908	-82	27	43.06	4		9011	145	F7	6521
	9	28	1	37	5.0565	1	1	20	50.956	-86	30	31.41	4		9002	6188	F1	6774
	9	28	1	37	9.0565	1	1	57	53.526	-86	27	12.84	4		9002	6188	F2	6775
	9	28	1	37	13.0564	1	2	33	33.489	-86	18	30.29	4		9002	6188	F3	6776
	9	28	1	37	17.0564	1	3	6	12.358	-86	4	47.72	4		9002	6188	F4	6777
	9	28	1	37	21.0563	1	3	35	12.780	-85	46	42.08	4		9002	6188	F5	6778
	9	28	1	37	25.0563	1	4	0	20.020	-85	24	53.63	4		9002	6188	F6	6779
	9	28	1	37	29.0562	1	4	21	53.665	-84	59	59.32	4		9002	6188	F7	67A0
	9	28	1	39	5.0551	1	6	50	5.912	-68	51	56.19	4		9002	6189	F1	67A1

September 28, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (NM)	STATION	FRAME NO.		OBS.NO.
1966	9	28	1	39	9.0550	1	6	51	57.220	-68	2	21.49	4		9002	6189	F2	6782
	9	28	1	39	13.0550	1	6	53	42.684	-67	12	9.38	4		9002	6189	F3	6783
	9	28	1	39	17.0550	1	6	55	23.225	-66	21	24.42	4		9002	6189	F4	6784
	9	28	1	39	21.0549	1	6	56	59.263	-65	30	5.59	4		9002	6189	F5	6785
	9	28	1	39	25.0549	1	6	58	31.048	-64	38	10.48	4		9002	6189	F6	6786
	9	28	1	39	29.0549	1	6	59	59.822	-63	45	42.68	4		9002	6189	F7	6787
	9	28	1	41	5.0545	1	7	24	43.070	-40	44	44.03	4		9002	6190	F1	8738
	9	28	1	41	9.0545	1	7	25	30.121	-39	44	37.45	4		9002	6190	F2	8739
	9	28	1	41	13.0545	1	7	26	16.315	-38	44	28.78	4		9002	6190	F3	8740
	9	28	1	41	17.0545	1	7	27	1.458	-37	44	28.40	4		9002	6190	F4	8741
	9	28	1	41	21.0545	1	7	27	46.566	-36	44	30.52	4		9002	6190	F5	8742
	9	28	1	41	25.0545	1	7	28	30.841	-35	44	39.41	4		9002	6190	F6	8743
	9	28	1	41	29.0545	1	7	29	14.906	-34	44	55.79	4		9002	6190	F7	8744
	9	28	1	43	5.0551	1	7	44	55.645	-12	34	59.34	4		9002	6191	F1	6705
	9	28	1	43	9.0552	1	7	45	31.827	-11	45	41.04	4		9002	6191	F2	6706
	9	28	1	43	13.0552	1	7	46	7.801	-10	56	57.98	4		9002	6191	F3	6707
	9	28	1	43	17.0552	1	7	46	43.821	-10	8	47.90	4		9002	6191	F4	6708
	9	28	1	43	21.0553	1	7	47	19.789	- 9	21	16.14	4		9002	6191	F5	6709
	9	28	1	43	25.0553	1	7	47	55.232	- 8	3[illegible]	13.85	4		9002	6191	F6	7233
	9	28	1	43	29.0554	1	7	48	30.823	- 7	47	46.67	4		9002	6191	F7	6710
	9	28	1	51	8.8705	1	9	5	37.100	-27	31	28.36	4		9028	674	01	5450
	9	28	1	51	12.8704	1	9	6	35.633	-27	11	37.21	4		9028	674	02	5451
	9	28	1	51	16.8704	1	9	7	33.925	-26	31	44.28	4		9028	674	03	5452
	9	28	1	51	20.8704	1	9	8	32.178	-25	51	46.41	4		9028	674	04	5453
	9	28	1	51	24.8704	1	9	9	30.875	-25	11	46.37	4		9028	674	05	5454
	9	28	1	51	28.8704	1	9	10	29.167	-24	31	43.23	4		9028	674	06	5455
	9	28	9	43	45.5987	1	1	3	29.775	-49	11	2.44	4		9007	7400	01	6002
	9	28	11	3	5.0631	1	16	12	38.279	- 1	42	39.72	4		9023	8184	F1	5976
	9	28	11	3	9.0631	1	16	12	54.797	- 2	0	24.49	4		9023	8184	F2	5977
	9	28	11	3	13.0630	1	16	13	11.469	- 2	18	25.22	4		9023	8184	F3	7044
	9	28	11	3	17.0630	1	16	13	27.661	- 2	36	32.19	4		9023	8184	F4	5979
	9	28	11	3	21.0629	1	16	13	44.192	- 2	54	35.14	4		9023	8184	F5	5980
	9	28	11	3	25.0629	1	16	14	.244	- 3	12	49.00	4		9023	8184	F6	8028
	9	28	11	3	29.0628	1	16	14	16.844	- 3	31	12.34	4		9023	8184	F7	5932
	9	28	11	5	5.0618	1	16	20	32.945	-11	26	11.23	4		9023	8185	F1	5156
	9	28	11	5	9.0617	1	16	20	48.151	-11	47	30.37	4		9023	8185	F2	5157
	9	28	11	5	13.0617	1	16	21	3.044	-12	8	56.83	4		9023	8185	F3	5702
	9	28	11	5	17.0616	1	16	21	18.256	-12	30	32.63	4		9023	8185	F4	5158
	9	28	11	5	21.0616	1	16	21	32.772	-12	52	12.70	4		9023	8185	F5	5159
	9	28	11	5	25.0616	1	16	21	47.936	-13	13	55.17	4		9023	8185	F6	5703
	9	28	11	5	29.0615	1	16	22	2.909	-13	35	55.27	4		9023	8185	F7	5160
	9	28	11	7	5.0606	1	16	27	41.710	-23	2	2.69	4		9023	8186	F1	5161
	9	28	11	7	9.0606	1	16	27	55.201	-23	27	21.90	4		9023	8186	F2	5162
	9	28	11	7	13.0605	1	16	28	8.314	-23	52	44.94	4		9023	8186	F3	5163
	9	28	11	7	17.0605	1	16	28	21.699	-24	18	18.67	4		9023	8186	F4	5164
	9	28	11	7	21.0605	1	16	28	34.414	-24	44	2.36	4		9023	8186	F5	5165
	9	28	11	7	25.0605	1	16	28	47.918	-25	9	48.15	4		9023	8186	F6	5166
	9	28	11	7	29.0604	1	16	29	.898	-25	35	49.07	4		9023	8186	F7	5167
	9	28	11	9	5.0598	1	16	33	50.392	-36	38	5.34	4		9023	8187	F1	2340
	9	28	11	9	9.0598	1	16	34	1.410	-37	7	10.98	4		9023	8187	F2	7781
	9	28	11	9	13.0597	1	16	34	11.918	-37	36	26.41	4		9023	8187	F3	5935
	9	28	11	9	17.0597	1	16	34	23.050	-38	5	47.61	4		9023	8187	F4	6236
	9	28	11	9	21.0597	1	16	34	33.702	-38	35	17.48	4		9023	8187	F5	6237
	9	28	11	9	25.0597	1	16	34	43.891	-39	4	53.33	4		9023	8187	F6	2341
	9	28	11	9	29.0597	1	16	34	54.064	-39	34	37.84	4		9023	8187	F7	2342
	9	28	11	11	5.0594	1	16	38	18.499	-51	52	42.88	4		9023	8188	F1	6018
	9	28	11	11	9.0594	1	16	38	24.332	-52	24	14.49	4		9023	8188	F2	6019
	9	28	11	11	13.0594	1	16	38	29.459	-52	55	50.68	4		9023	8188	F3	6020
	9	28	11	11	17.0593	1	16	38	35.280	-53	27	29.96	4		9023	8188	F4	6021
	9	28	11	11	25.0593	1	16	38	45.803	-54	30	52.45	4		9023	8188	F6	6023
	9	28	11	11	29.0593	1	16	38	50.625	-55	2	35.13	4		9023	8188	F7	6024
	9	28	11	13	5.0594	1	16	38	23.878	-67	44	.25	4		9023	8189	F1	6025
	9	28	11	13	9.0594	1	16	38	13.660	-68	15	22.84	4		9023	8189	F2	6026
	9	28	11	13	13.0594	1	16	38	3.328	-68	46	39.63	4		9023	8189	F3	6027
	9	28	11	13	17.0595	1	16	37	50.194	-69	17	58.01	4		9023	8189	F4	7046
	9	28	11	13	21.0595	1	16	37	36.669	-69	49	8.81	4		9023	8189	F5	6029
	9	28	11	13	25.0595	1	16	37	21.365	-70	20	16.26	4		9023	8189	F6	6030
	9	28	11	13	29.0595	1	16	37	5.051	-70	51	25.21	4		9023	8189	F7	6031
	9	28	11	16	5.0604	1	11	8	55.536	-88	24	17.54	4		9023	8190	F1	6095
	9	28	11	16	9.0604	1	10	5	42.152	-88	21	4.30	4		9023	8190	F2	6096
	9	28	11	16	13.0604	1	9	10	47.121	-88	10	57.89	4		9023	8190	F3	6097
	9	28	11	16	17.0605	1	8	27	28.846	-87	55	58.11	4		9023	8190	F4	6098
	9	28	11	16	21.0605	1	7	54	34.382	-87	37	30.72	4		9023	8190	F5	6099
	9	28	11	16	25.0605	1	7	29	41.492	-87	16	49.69	4		9023	8190	F6	7067
	9	28	11	16	29.0606	1	7	10	45.119	-86	54	57.49	4		9023	8190	F7	6101
	9	28	17	0	5.0613	1	16	36	22.580	10	18	6.20	4		9002	6202	F1	6711
	9	28	17	0	9.0613	1	16	36	59.177	9	57	13.01	4		9002	6202	F2	7234
	9	28	17	0	13.0612	1	16	37	35.875	9	36	13.69	4		9002	6202	F3	6712
	9	28	17	0	17.0612	1	16	38	12.448	9	15	1.06	4		9002	6202	F4	6713
	9	28	17	0	21.0611	1	16	38	49.243	8	53	38.38	4		9002	6202	F5	6714

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	9	28	17	0	25.0611	1	16	39	25.928	8	32	5.66	4		9002	6202	F6	6715
	9	28	17	0	29.0610	1	16	40	2.857	8	10	23.28	4		9002	6202	F7	6716
	9	28	17	2	5.0600	1	16	55	26.634	- 1	20	46.88	4		9002	6203	F1	6788
	9	28	17	2	9.0600	1	16	56	6.965	- 1	46	48.85	4		9002	6203	F2	6789
	9	28	17	2	13.0599	1	16	56	47.615	- 2	13	.87	4		9002	6203	F3	6790
	9	28	17	2	17.0599	1	16	57	28.352	- 2	39	23.14	4		9002	6203	F4	6791
	9	28	17	2	21.0598	1	16	58	9.512	- 3	5	55.97	4		9002	6203	F5	6792
	9	28	17	2	25.0598	1	16	58	50.474	- 3	32	41.08	4		9002	6203	F6	6793
	9	28	17	2	29.0598	1	16	59	32.092	- 3	59	39.39	4		9002	6203	F7	6794
	9	28	17	5	5.0587	1	17	30	14.937	-23	47	20.66	4		9002	6204	F1	6795
	9	28	17	5	9.0587	1	17	31	10.065	-24	20	54.08	4		9002	6204	F2	6796
	9	28	17	5	13.0587	1	17	32	6.207	-24	54	30.15	4		9002	6204	F3	6797
	9	28	17	5	17.0587	1	17	33	2.491	-25	28	9.79	4		9002	6204	F4	6798
	9	28	17	5	21.0586	1	17	33	59.649	-26	2	2.09	4		9002	6204	F5	6799
	9	28	17	5	25.0586	1	17	34	57.395	-26	35	58.37	4		9002	6204	F6	7235
	9	28	17	5	29.0586	1	17	35	55.444	-27	9	58.10	4		9002	6204	F7	7236
	9	28	17	13	13.0610	1	23	37	34.610	-74	19	3.74	4		9002	6206	F3	6240
	9	28	17	13	17.0611	1	23	43	30.527	-74	17	3.12	4		9002	6206	F4	6241
	9	28	17	40	9.0570	1	7	37	18.549	-55	34	23.96	4		9023	8200	F2	5168
	9	28	17	40	13.0570	1	7	37	11.483	-54	42	34.24	4		9023	8200	F3	5169
	9	28	17	40	17.0570	1	7	37	5.421	-53	50	39.54	4		9023	8200	F4	5704
	9	28	17	40	21.0570	1	7	37	.201	-52	58	34.85	4		9023	8200	F5	5170
	9	28	17	40	25.0570	1	7	36	56.310	-52	6	29.64	4		9023	8200	F6	5171
	9	28	17	40	29.0570	1	7	36	53.054	-51	14	17.34	4		9023	8200	F7	5172
	9	28	17	42	17.0573	1	7	39	28.686	-28	15	46.96	4		9023	8201	F4	6037
	9	28	23	13	5.0598	1	21	54	42.595	-60	54	25.18	4		9011	155	F1	6758
	9	28	23	13	9.0598	1	21	58	46.500	-61	7	48.63	4		9011	155	F2	7265
	9	28	23	13	13.0598	1	22	2	52.878	-61	20	34.42	4		9011	155	F3	7266
	9	28	23	13	17.0599	1	22	7	.041	-61	32	48.85	4		9011	155	F4	6761
	9	28	23	13	21.0599	1	22	11	9.265	-61	44	34.48	4		9011	155	F5	6762
	9	28	23	13	25.0600	1	22	15	19.948	-61	55	40.08	4		9011	155	F6	7267
	9	28	23	13	29.0600	1	22	19	30.566	-62	6	19.74	4		9011	155	F7	7789
	9	29	1	12	5.0655	1	15	10	34.378	-56	27	26.22	4		9007	7411	F1	6495
	9	29	1	12	9.0655	1	15	9	59.943	-56	47	51.76	4		9007	7411	F2	6496
	9	29	1	12	13.0655	1	15	9	25.290	-57	8	21.26	4		9007	7411	F3	6497
	9	29	1	12	17.0655	1	15	8	48.715	-57	28	45.95	4		9007	7411	F4	6498
	9	29	1	12	25.0655	1	15	7	33.655	-58	9	27.20	4		9007	7411	F6	7074
	9	29	1	12	29.0655	1	15	6	53.854	-58	29	43.67	4		9007	7411	F7	6501
	9	29	1	42	5.0582	1	2	15	41.634	-77	56	48.70	4		9002	6219	F1	6242
	9	29	1	42	9.0581	1	2	27	29.630	-77	41	37.22	4		9002	6219	F2	6243
	9	29	1	42	25.0579	1	3	11	17.839	-76	20	58.39	4		9002	6219	F6	7047
	9	29	1	42	29.0578	1	3	21	16.525	-75	56	2.56	4		9002	6219	F7	5941
	9	29	1	44	5.0568	1	5	41	.913	-58	42	2.80	4		9002	6220	F1	5942
	9	29	1	44	9.0567	1	5	44	10.798	-57	44	46.68	4		9002	6220	F2	7048
	9	29	1	44	13.0567	1	5	47	12.994	-56	46	39.93	4		9002	6220	F3	5944
	9	29	1	44	17.0567	1	5	50	8.741	-55	47	37.70	4		9002	6220	F4	5945
	9	29	1	44	21.0567	1	5	52	58.337	-54	47	53.90	4		9002	6220	F5	5946
	9	29	1	44	25.0566	1	5	55	41.878	-53	47	22.31	4		9002	6220	F6	5947
	9	29	1	44	29.0566	1	5	58	19.164	-52	46	7.47	4		9002	6220	F7	5948
	9	29	1	46	5.0565	1	6	43	13.919	-26	22	52.45	4		9002	6221	F1	5789
	9	29	1	46	9.0565	1	6	44	36.457	-25	17	14.70	4		9002	6221	F2	5790
	9	29	1	46	13.0566	1	6	45	57.958	-24	11	54.21	4		9002	6221	F3	5791
	9	29	1	46	17.0566	1	6	47	17.545	-23	7	3.67	4		9002	6221	F4	5792
	9	29	1	46	21.0566	1	6	48	35.988	-22	2	41.23	4		9002	6221	F5	5793
	9	29	1	46	25.0566	1	6	49	53.372	-20	58	49.08	4		9002	6221	F6	5794
	9	29	1	46	29.0566	1	6	51	8.873	-19	55	31.67	4		9002	6221	F7	5795
	9	29	1	48	5.0576	1	7	16	52.057	1	56	1.23	4		9002	6222	F1	7003
	9	29	1	48	9.0577	1	7	17	48.208	2	41	19.93	4		9002	6222	F2	7004
	9	29	1	48	13.0577	1	7	18	43.905	3	25	49.04	4		9002	6222	F3	7005
	9	29	1	48	17.0578	1	7	19	39.064	4	9	36.07	4		9002	6222	F4	7006
	9	29	1	48	21.0578	1	7	20	33.473	4	52	45.87	4		9002	6222	F5	7007
	9	29	1	48	25.0579	1	7	21	27.807	5	35	7.57	4		9002	6222	F6	7008
	9	29	1	48	29.0579	1	7	22	21.982	6	16	50.17	4		9002	6222	F7	7009
	9	29	1	55	27.4939	1	8	39	25.963	-26	2	36.14	4		9028	705	03	5456
	9	29	7	47	5.0606	1	8	38	50.599	-40	8	36.62	4		9007	7428	F1	6502
	9	29	7	47	9.0606	1	8	38	43.935	-39	28	30.79	4		9007	7428	F2	6503
	9	29	7	47	13.0606	1	8	38	37.812	-38	48	18.71	4		9007	7428	F3	7075
	9	29	7	47	17.0606	1	8	38	32.429	-38	8	11.13	4		9007	7428	F4	6505
	9	29	7	47	21.0606	1	8	38	27.799	-37	28	2.18	4		9007	7428	F5	7076
	9	29	7	47	25.0606	1	8	38	23.844	-36	47	52.13	4		9007	7428	F6	6507
	9	29	7	47	29.0606	1	8	38	20.725	-36	7	41.75	4		9007	7428	F7	7077
	9	29	7	49	5.0609	1	8	39	46.424	-20	25	13.03	4		9007	7429	F1	6826
	9	29	7	49	9.0609	1	8	39	55.831	-19	47	38.09	4		9007	7429	F2	6827
	9	29	7	49	13.0610	1	8	40	4.930	-19	10	12.16	4		9007	7429	F3	6828
	9	29	7	49	17.0610	1	8	40	15.250	-18	32	57.03	4		9007	7429	F4	6829
	9	29	7	49	21.0610	1	8	40	25.541	-17	55	55.70	4		9007	7429	F5	6830
	9	29	7	49	25.0610	1	8	40	35.897	-17	19	7.21	4		9007	7429	F6	6831
	9	29	7	49	29.0611	1	8	40	47.096	-16	42	31.50	4		9007	7429	F7	6832
	9	29	17	40	9.0618	1	19	43	23.062	-77	8	38.93	4		9023	8217	F2	7242
	9	29	17	40	13.0618	1	19	45	56.840	-77	35	44.62	4		9023	8217	F3	6033

September 29-30, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (KM)	STATION	FRAME NO.		OBS.NO.
1966	9	29	17	40	17.0617	1	19	48	41.172	-78	3	.81	4		9023	8217	F4	6034
	9	29	17	40	21.0616	1	19	51	38.921	-78	30	29.92	4		9023	8217	F5	6035
	9	29	17	40	25.0616	1	19	54	52.583	-78	58	21.24	4		9023	8217	F6	7069
	9	29	17	40	29.0615	1	19	58	26.407	-79	26	22.08	4		9023	8217	F7	6036
	9	29	17	42	5.0602	1	4	10	49.583	-84	51	3.62	4		9023	8218	F1	8435
	9	29	17	42	9.0601	1	4	29	.092	-84	18	52.04	4		9023	8218	F2	8436
	9	29	17	42	13.0601	1	4	44	9.753	-83	44	28.79	4		9023	8218	F3	8437
	9	29	17	42	17.0600	1	4	56	59.700	-83	8	22.94	4		9023	8218	F4	8438
	9	29	17	42	21.0600	1	5	7	54.119	-82	30	44.97	4		9023	8218	F5	8439
	9	29	17	42	25.0599	1	5	17	16.180	-81	51	48.51	4		9023	8218	F6	8440
	9	29	17	42	29.0599	1	5	25	20.421	-81	11	42.16	4		9023	8218	F7	8441
	9	29	17	44	5.0591	1	6	36	9.618	-81	31	59.24	4		9023	8219	F1	8442
	9	29	17	44	9.0591	1	6	37	23.407	-80	36	4.60	4		9023	8219	F2	8443
	9	29	17	44	13.0590	1	6	38	35.221	-59	39	47.80	4		9023	8219	F3	8444
	9	29	17	44	17.0590	1	6	39	43.811	-58	43	14.79	4		9023	8219	F4	8445
	9	29	17	44	21.0590	1	6	40	50.884	-57	46	10.43	4		9023	8219	F5	8446
	9	29	17	44	25.0590	1	6	41	54.873	-56	48	55.86	4		9023	8219	F6	8447
	9	29	17	44	29.0590	1	6	42	56.976	-55	51	19.22	4		9023	8219	F7	8448
	9	29	17	46	5.0590	1	7	1	45.626	-32	26	53.96	4		9023	8220	F1	6038
	9	29	17	46	9.0591	1	7	2	23.725	-31	30	17.79	4		9023	8220	F2	6039
	9	29	17	46	13.0591	1	7	3	1.019	-30	34	4.24	4		9023	8220	F3	6040
	9	29	17	46	17.0591	1	7	3	38.406	-29	38	9.47	4		9023	8220	F4	6041
	9	29	17	46	21.0591	1	7	4	15.070	-28	42	39.45	4		9023	8220	F5	6042
	9	29	17	46	25.0592	1	7	4	51.343	-27	47	34.62	4		9023	8220	F6	6043
	9	29	17	46	29.0592	1	7	5	27.395	-26	52	58.86	4		9023	8220	F7	6044
	9	29	17	48	5.0601	1	7	18	39.926	- 7	35	7.74	4		9023	8221	F1	6296
	9	29	17	48	9.0602	1	7	19	11.105	- 6	53	42.89	4		9023	8221	F2	6297
	9	29	17	48	13.0602	1	7	19	42.123	- 6	12	51.18	4		9023	8221	F3	6298
	9	29	17	48	17.0603	1	7	20	12.953	- 5	32	31.82	4		9023	8221	F4	6299
	9	29	17	48	21.0603	1	7	20	43.566	- 4	52	42.14	4		9023	8221	F5	6300
	9	29	17	48	25.0604	1	7	21	14.469	- 4	13	28.63	4		9023	8221	F6	7070
	9	29	17	48	29.0604	1	7	21	44.969	- 3	34	40.02	4		9023	8221	F7	6301
	9	29	23	14	5.0614	1	18	38	35.028	-45	12	16.25	4		9011	162	F1	6763
	9	29	23	14	9.0614	1	18	40	27.879	-45	46	40.68	4		9011	162	F2	6764
	9	29	23	14	13.0614	1	18	42	23.258	-46	20	52.32	4		9011	162	F3	6765
	9	29	23	14	17.0614	1	18	44	21.077	-46	55	1.20	4		9011	162	F4	6766
	9	29	23	14	21.0614	3	18	46	20.608	-47	29	5.45	4		9011	162	F5	7702
	9	29	23	14	25.0614	3	18	48	22.421	-48	2	47.89	4		9011	162	F6	7703
	9	29	23	14	29.0614	10	18	50	26.933	-48	36	28.83	4		9011	162	F7	9363
	9	29	23	16	5.0618	1	19	55	39.511	-60	46	9.47	4		9011	163	F1	6837
	9	29	23	16	13.0619	1	20	2	46.272	-61	37	40.84	4		9011	163	F3	6838
	9	29	23	16	17.0619	1	20	6	26.922	-62	2	39.37	4		9011	163	F4	6839
	9	29	23	16	21.0619	1	20	10	11.984	-62	27	14.38	4		9011	163	F5	6840
	9	29	23	16	25.0619	1	20	14	2.790	-62	51	17.95	4		9011	163	F6	6841
	9	29	23	16	29.0620	1	20	17	57.155	-63	14	53.51	4		9011	163	F7	7249
	9	29	23	18	5.0627	1	22	15	41.894	-69	38	43.25	4		9011	164	F1	6842
	9	29	23	18	9.0628	1	22	21	21.752	-69	46	10.65	4		9011	164	F2	7270
	9	29	23	18	13.0628	1	22	27	3.062	-69	52	53.67	4		9011	164	F3	6844
	9	29	23	18	17.0629	10	22	32	45.117	-69	59	6.15	4		9011	164	F4	9364
	9	29	23	18	21.0629	1	22	38	27.761	-70	4	26.06	4		9011	164	F5	6845
	9	29	23	18	25.0629	1	22	44	10.955	-70	9	8.12	4		9011	164	F6	7271
	9	29	23	18	29.0630	1	22	49	54.155	-70	13	8.25	4		9011	164	F7	6847
	9	30	1	59	46.4501	1	8	3	23.189	-22	54	33.32	4		9028	746	04	5457
	9	30	1	59	50.4502	1	8	5	8.978	-21	59	39.93	4		9028	746	05	6389
	9	30	1	59	54.4500	1	8	6	54.701	-21	4	32.70	4		9028	746	06	5459
	9	30	1	59	58.4502	1	8	8	39.939	-20	9	11.58	4		9028	746	07	5460
	9	30	2	0	2.4504	1	8	10	24.694	-19	13	40.42	4		9028	746	08	5461
	9	30	2	0	6.4505	1	8	12	9.516	-18	17	58.45	4		9028	746	09	5462
	9	30	7	48	5.0634	1	8	28	32.754	-74	13	25.09	4		9007	7462	F1	6833
	9	30	7	48	9.0634	1	8	27	7.438	-73	40	26.97	4		9007	7462	F2	6834
	9	30	7	48	13.0634	1	8	25	49.036	-73	7	10.66	4		9007	7462	F3	8037
	9	30	7	48	17.0633	1	8	24	36.781	-72	33	29.91	4		9007	7462	F4	7786
	9	30	7	48	21.0633	1	8	23	29.619	-71	59	25.55	4		9007	7462	F5	7264
	9	30	7	48	25.0632	1	8	22	25.604	-71	25	1.50	4		9007	7462	F6	8038
	9	30	7	48	29.0632	1	8	21	27.459	-70	50	11.86	4		9007	7462	F7	6836
	9	30	7	51	5.0621	1	8	11	37.264	-44	3	27.85	4		9007	7463	F1	6801
	9	30	7	51	9.0621	1	8	11	43.548	-43	17	26.49	4		9007	7463	F2	6802
	9	30	7	51	13.0621	1	8	11	50.785	-42	31	21.96	4		9007	7463	F3	6803
	9	30	7	51	17.0620	1	8	11	58.677	-41	45	10.11	4		9007	7463	F4	6804
	9	30	7	51	29.0620	1	8	12	24.802	-39	26	2.77	4		9007	7463	F7	6806
	9	30	7	53	5.0622	1	8	18	9.300	-21	4	18.31	4		9007	7464	F1	6807
	9	30	7	53	9.0623	1	8	18	27.779	-20	20	12.91	4		9007	7464	F2	6808
	9	30	7	53	13.0623	1	8	18	46.624	-19	36	27.70	4		9007	7464	F3	6809
	9	30	7	53	17.0623	1	8	19	5.572	-18	52	51.41	4		9007	7464	F4	8032
	9	30	7	53	21.0623	1	8	19	24.651	-18	9	32.05	4		9007	7464	F5	6811
	9	30	7	53	25.0624	1	8	19	44.569	-17	26	26.92	4		9007	7464	F6	7785
	9	30	7	53	29.0624	1	8	20	4.159	-16	43	37.96	4		9007	7464	F7	6812
	9	30	17	9	5.0674	1	15	52	58.347	0	25	20.02	4		9002	6241	F1	7010
	9	30	17	9	9.0674	1	15	53	22.561	0	4	33.54	4		9002	6241	F2	7011
	9	30	17	9	13.0673	1	15	53	46.840	- 0	16	20.01	4		9002	6241	F3	7012

September 30, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	9	30	17	9	17.0673	1	15	54	11.159	- 0	37	19.27	4		9002	6241	F4	7013
	9	30	17	9	21.0672	1	15	54	35.213	- 0	58	29.69	4		9002	6241	F5	7014
	9	30	17	9	25.0672	1	15	54	59.625	- 1	19	49.56	4		9002	6241	F6	7015
	9	30	17	9	29.0672	1	15	55	23.938	- 1	41	14.81	4		9002	6241	F7	7016
	9	30	17	12	5.0657	1	16	11	23.283	-17	25	57.88	4		9002	6242	F1	8061
	9	30	17	12	9.0657	1	16	11	48.487	-17	53	2.87	4		9002	6242	F2	8062
	9	30	17	12	13.0657	1	16	12	13.814	-18	20	17.91	4		9002	6242	F3	8063
	9	30	17	12	17.0656	1	16	12	39.269	-18	47	39.05	4		9002	6242	F4	8064
	9	30	17	12	21.0656	1	16	13	4.837	-19	15	8.85	4		9002	6242	F5	8065
	9	30	17	12	25.0656	1	16	13	30.344	-19	42	50.27	4		9002	6242	F6	8066
	9	30	17	12	29.0656	1	16	13	55.978	-20	10	37.47	4		9002	6242	F7	8067
	9	30	17	14	5.0650	1	16	24	38.858	-31	55	51.89	4		9002	6243	F1	8054
	9	30	17	14	9.0650	1	16	25	7.417	-32	26	40.07	4		9002	6243	F2	8055
	9	30	17	14	13.0650	1	16	25	35.295	-32	57	30.77	4		9002	6243	F3	8056
	9	30	17	14	17.0650	1	16	26	4.256	-33	28	31.56	4		9002	6243	F4	8057
	9	30	17	14	21.0650	1	16	26	33.147	-33	59	35.82	4		9002	6243	F5	8058
	9	30	17	14	25.0650	1	16	27	2.330	-34	30	46.44	4		9002	6243	F6	8059
	9	30	17	14	29.0650	1	16	27	31.420	-35	1	59.76	4		9002	6243	F7	8060
	9	30	17	16	5.0648	1	16	40	25.786	-47	48	58.37	4		9002	6244	F1	5796
	9	30	17	16	9.0648	1	16	41	2.186	-48	21	17.00	4		9002	6244	F2	5797
	9	30	17	16	13.0648	1	16	41	39.142	-48	53	38.38	4		9002	6244	F3	5798
	9	30	17	16	17.0648	1	16	42	16.450	-49	25	56.90	4		9002	6244	F4	5799
	9	30	17	16	21.0648	1	16	42	54.336	-49	58	13.18	4		9002	6244	F5	5800
	9	30	17	16	25.0648	1	16	43	32.413	-50	30	28.69	4		9002	6244	F6	5801
	9	30	17	16	29.0648	1	16	44	11.219	-51	2	46.15	4		9002	6244	F7	5802
	9	30	17	18	5.0651	1	17	3	32.123	-63	42	38.08	4		9002	6245	F1	6329
	9	30	17	18	9.0651	1	17	4	34.355	-64	13	19.83	4		9002	6245	F2	5803
	9	30	17	18	13.0651	1	17	5	38.843	-64	43	56.29	4		9002	6245	F3	5804
	9	30	17	18	17.0651	1	17	6	44.505	-65	14	26.59	4		9002	6245	F4	5805
	9	30	17	18	21.0651	1	17	7	52.101	-65	44	42.57	4		9002	6245	F5	5806
	9	30	17	18	25.0651	1	17	9	1.698	-66	14	56.85	4		9002	6245	F6	5807
	9	30	17	18	29.0652	1	17	10	12.961	-66	45	5.88	4		9002	6245	F7	7063
	9	30	17	20	5.0658	1	17	8	25.919	-78	1	32.69	4		9002	6246	F1	7064
	9	30	17	20	9.0658	1	18	1	58.241	-78	27	13.35	4		9002	6246	F2	7065
	9	30	17	20	13.0658	1	18	5	44.763	-78	52	35.17	4		9002	6246	F3	6090
	9	30	17	20	17.0659	1	18	9	47.778	-79	17	40.72	4		9002	6246	F4	6091
	9	30	17	20	21.0659	1	18	14	6.913	-79	42	25.92	4		9002	6246	F5	6092
	9	30	17	20	25.0659	1	18	18	43.963	-80	6	52.29	4		9002	6246	F6	7066
	9	30	17	20	29.0660	1	18	23	44.364	-80	30	59.09	4		9002	6246	F7	6094
	9	30	17	22	5.0669	1	0	4	18.059	-85	24	.49	4		9002	6247	F1	6330
	9	30	17	22	9.0669	1	0	22	14.536	-85	14	54.05	4		9002	6247	F2	6331
	9	30	17	22	13.0669	1	0	38	50.423	-85	4	14.88	4		9002	6247	F3	5809
	9	30	17	22	17.0670	1	0	54	11.131	-84	52	20.58	4		9002	6247	F4	5810
	9	30	17	22	21.0670	1	1	8	18.053	-84	39	13.25	4		9002	6247	F5	5811
	9	30	17	22	25.0671	1	1	21	9.602	-84	25	5.61	4		9002	6247	F6	6332
	9	30	17	22	29.0671	1	1	32	55.680	-84	10	12.17	4		9002	6247	F7	5812
	9	30	17	44	5.0645	1	20	28	9.465	-70	27	56.56	4		9023	A227	F1	9060
	9	30	17	44	9.0644	1	20	31	12.478	-70	48	35.92	4		9023	A227	F2	A449
	9	30	17	44	13.0644	1	20	34	23.374	-71	9	23.49	4		9023	A227	F3	A450
	9	30	17	44	17.0643	1	20	37	43.906	-71	30	16.36	4		9023	A227	F4	A451
	9	30	17	44	21.0642	1	20	41	13.271	-71	51	13.01	4		9023	A227	F5	A452
	9	30	17	44	25.0642	1	20	44	52.541	-72	12	10.27	4		9023	A227	F6	9061
	9	30	17	44	29.0641	1	20	48	44.357	-72	33	9.07	4		9023	A227	F7	A453
	9	30	17	46	5.0626	1	0	4	50.281	-79	10	25.89	4		9023	A228	F1	7071
	9	30	17	46	9.0625	1	0	18	43.726	-79	12	34.78	4		9023	A228	F2	6303
	9	30	17	46	13.0625	1	0	32	54.011	-79	12	26.55	4		9023	A228	F3	77A3
	9	30	17	46	17.0624	1	0	47	13.809	-79	9	50.44	4		9023	A228	F4	77A4
	9	30	17	46	21.0623	1	1	1	37.589	-79	4	50.47	4		9023	A228	F5	6304
	9	30	17	46	25.0623	1	1	15	58.475	-78	57	15.58	4		9023	A228	F6	6305
	9	30	17	46	29.0622	1	1	30	8.534	-78	47	9.26	4		9023	A228	F7	6306
	9	30	17	48	5.0612	1	4	57	5.626	-64	32	32.21	4		9023	A229	F1	9052
	9	30	17	48	9.0611	1	5	1	11.338	-63	39	13.14	4		9023	A229	F2	A454
	9	30	17	48	13.0611	1	5	5	6.159	-62	44	55.23	4		9023	A229	F3	A455
	9	30	17	48	17.0611	1	5	8	48.786	-61	49	42.51	4		9023	A229	F4	A456
	9	30	17	48	21.0611	1	5	12	21.819	-60	53	38.93	4		9023	A229	F5	9053
	9	30	17	48	29.0610	1	5	18	59.403	-38	59	3.76	4		9023	A229	F7	9055
	9	30	17	50	5.0609	1	6	9	42.004	-33	41	44.74	4		9023	A230	F1	6307
	9	30	17	50	9.0609	1	6	11	8.013	-32	37	37.18	4		9023	A230	F2	6308
	9	30	17	50	13.0609	1	6	12	31.677	-31	33	51.44	4		9023	A230	F3	6309
	9	30	17	50	17.0609	1	6	13	53.673	-30	30	22.63	4		9023	A230	F4	6310
	9	30	17	50	21.0609	1	6	15	13.773	-29	27	14.28	4		9023	A230	F5	6311
	9	30	17	50	25.0610	1	6	16	32.364	-28	24	30.09	4		9023	A230	F6	6312
	9	30	17	50	29.0610	1	6	17	49.231	-27	22	14.63	4		9023	A230	F7	6313
	9	30	17	52	5.0619	1	6	42	51.716	- 5	26	54.84	4		9023	A231	F1	6314
	9	30	17	52	9.0619	1	6	43	44.254	- 4	40	41.87	4		9023	A231	F2	6315
	9	30	17	52	13.0620	1	6	44	36.325	- 3	55	7.01	4		9023	A231	F3	6316
	9	30	17	52	17.0620	1	6	45	27.727	- 3	10	13.10	4		9023	A231	F4	6317
	9	30	17	52	21.0621	1	6	46	18.880	- 2	26	2.07	4		9023	A231	F5	6318
	9	30	17	52	25.0621	1	6	47	9.207	- 1	42	28.86	4		9023	A231	F6	7072
	9	30	17	52	29.0622	1	6	47	59.351	- 0	59	39.79	4		9023	A231	F7	6319

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		ORB.NO.
1966	9	30	23	16	5.0654	1	17	12	46.573	-28	31	42.45	4		9011	186	F1	7192
	9	30	23	16	9.0653	1	17	13	38.062	-29	4	53.96	4		9011	186	F2	7190
	9	30	23	16	13.0653	1	17	14	29.973	-29	38	15.43	4		9011	186	F3	7193
	9	30	23	16	17.0653	1	17	15	22.768	-30	11	44.19	4		9011	186	F4	7194
	9	30	23	16	21.0653	1	17	16	15.950	-30	45	20.26	4		9011	186	F5	7195
	9	30	23	16	25.0653	1	17	17	9.945	-31	19	5.34	4		9011	186	F6	7791
	9	30	23	16	29.0652	1	17	18	4.691	-31	52	58.15	4		9011	186	F7	7792
	9	30	23	18	9.0650	1	17	45	54.152	-46	25	41.45	4		9011	187	F2	7128
	9	30	23	18	13.0650	1	17	47	17.156	-47	0	56.58	4		9011	187	F3	7793
	9	30	23	18	17.0650	1	17	48	41.912	-47	36	9.74	4		9011	187	F4	7130
	9	30	23	18	21.0650	1	17	50	8.118	-48	11	21.27	4		9011	187	F5	7794
	9	30	23	18	25.0650	1	17	51	36.123	-48	46	26.73	4		9011	187	F6	7132
	9	30	23	18	29.0650	1	17	53	5.756	-49	21	32.16	4		9011	187	F7	7133
	9	30	23	20	5.0652	1	18	42	13.471	-62	44	33.79	4		9011	188	F1	8068
	9	30	23	20	9.0652	1	18	45	2.931	-63	15	21.09	4		9011	188	F2	8069
	9	30	23	20	13.0652	1	18	47	57.155	-63	45	51.47	4		9011	188	F3	8682
	9	30	23	20	17.0653	1	18	50	56.880	-64	16	6.49	4		9011	188	F4	8070
	9	30	23	20	21.0653	1	18	54	1.870	-64	45	57.18	4		9011	188	F5	8071
	9	30	23	20	25.0653	1	18	57	13.438	-65	15	30.27	4		9011	188	F6	1122
	9	30	23	20	29.0653	1	19	0	30.776	-65	44	39.46	4		9011	188	F7	8072
	9	30	23	22	5.0660	1	21	1	41.229	-74	51	36.33	4		9011	189	F1	8073
	9	30	23	22	9.0660	1	21	8	52.521	-75	5	41.32	4		9011	189	F2	8074
	9	30	23	22	13.0660	1	21	16	12.787	-75	18	49.21	4		9011	189	F3	8075
	9	30	23	22	17.0661	1	21	23	43.515	-75	30	57.26	4		9011	189	F4	8076
	9	30	23	22	21.0661	1	21	31	23.211	-75	42	14.43	4		9011	189	F5	8077
	9	30	23	22	25.0662	1	21	39	10.677	-75	52	29.60	4		9011	189	F6	8078
	9	30	23	22	29.0662	1	21	47	5.551	-76	1	47.79	4		9011	189	F7	8079
	9	30	23	24	5.0672	1	0	50	7.299	-75	5	1.70	4		9011	190	F1	6848
	9	30	23	24	9.0672	1	0	56	.890	-74	53	31.48	4		9011	190	F2	7272
	9	30	23	24	13.0673	1	1	1	43.945	-74	41	39.55	4		9011	190	F3	6849
	9	30	23	24	17.0673	1	1	7	16.272	-74	29	25.53	4		9011	190	F4	7273
	9	30	23	24	21.0674	1	1	12	37.613	-74	16	39.90	4		9011	190	F5	7274
	9	30	23	24	25.0674	1	1	17	48.777	-74	3	34.47	4		9011	190	F6	6850
	9	30	23	24	29.0674	1	1	22	49.656	-73	50	15.73	4		9011	190	F7	6851
	10	1	17	18	5.0692	1	15	54	51.292	-30	58	54.36	4		9002	6299	F1	8779
	10	1	1	23	5.0699	1	15	28	38.373	-45	12	39.70	4		9011	201	F1	4007
	10	1	1	23	9.0699	1	15	28	10.234	-45	34	49.15	4		9011	201	F2	4008
	10	1	1	23	13.0699	1	15	27	41.873	-45	57	5.13	4		9011	201	F3	4009
	10	1	1	23	17.0698	1	15	27	13.062	-46	19	22.41	4		9011	201	F4	4010
	10	1	1	23	21.0698	1	15	26	43.502	-46	41	43.16	4		9011	201	F5	4011
	10	1	1	23	25.0698	1	15	26	12.748	-47	4	4.54	4		9011	201	F6	4012
	10	1	1	23	29.0698	1	15	25	41.433	-47	26	32.17	4		9011	201	F7	4013
	10	1	1	25	5.0694	1	15	7	27.012	-56	33	42.72	4		9011	202	F1	4014
	10	1	1	25	9.0694	1	15	6	23.032	-56	56	37.05	4		9011	202	F2	4015
	10	1	1	25	13.0693	1	15	5	17.706	-57	19	38.26	4		9011	202	F3	4016
	10	1	1	25	17.0693	1	15	4	10.135	-57	42	29.24	4		9011	202	F4	4017
	10	1	1	25	21.0693	1	15	3	.653	-58	5	24.52	4		9011	202	F5	6135
	10	1	1	25	25.0693	1	15	1	49.731	-58	28	14.25	4		9011	202	F6	6136
	10	1	1	25	29.0693	1	15	0	35.822	-58	51	.21	4		9011	202	F7	6137
	10	1	1	27	5.0692	1	14	16	25.656	-67	37	43.35	4		9011	203	F1	6138
	10	1	1	27	9.0692	1	14	13	45.349	-67	58	4.43	4		9011	203	F2	7174
	10	1	1	27	13.0692	1	14	10	59.265	-68	18	15.28	4		9011	203	F3	6139
	10	1	1	27	17.0692	1	14	8	8.338	-68	38	6.73	4		9011	203	F4	4024
	10	1	1	50	5.0642	1	23	54	26.198	-59	16	29.63	4		9002	6282	F1	8641
	10	1	1	50	9.0641	1	23	58	51.611	-59	10	10.15	4		9002	6282	F2	8642
	10	1	1	50	13.0641	1	0	3	19.913	-59	3	9.84	4		9002	6282	F3	8643
	10	1	1	50	17.0640	1	0	7	51.101	-58	55	23.66	4		9002	6282	F4	8644
	10	1	1	50	21.0639	1	0	12	24.657	-58	46	53.63	4		9002	6282	F5	8645
	10	1	1	50	25.0639	1	0	17	1.152	-58	37	39.61	4		9002	6282	F6	8646
	10	1	1	50	29.0638	1	0	21	39.192	-58	27	32.83	4		9002	6282	F7	8647
	10	1	1	52	5.0624	1	2	16	49.938	-49	14	25.37	4		9002	6283	F1	8648
	10	1	1	52	9.0624	1	2	21	27.093	-48	35	48.30	4		9002	6283	F2	8649
	10	1	1	52	13.0623	1	2	26	1.042	-47	55	53.06	4		9002	6283	F3	8650
	10	1	1	52	17.0623	1	2	30	33.251	-47	14	30.29	4		9002	6283	F4	8651
	10	1	1	52	21.0622	1	2	35	2.596	-46	31	43.77	4		9002	6283	F5	8652
	10	1	1	52	25.0622	1	2	39	29.149	-45	47	36.28	4		9002	6283	F6	8653
	10	1	1	52	29.0621	1	2	43	53.338	-45	1	59.36	4		9002	6283	F7	8654
	10	1	1	54	5.0616	1	4	13	32.283	-21	0	8.16	4		9002	6284	F1	8408
	10	1	1	54	9.0616	1	4	16	36.888	-19	50	51.57	4		9002	6284	F2	8806
	10	1	1	54	13.0616	1	4	19	38.461	-18	41	19.29	4		9002	6284	F3	8410
	10	1	1	54	17.0616	1	4	22	37.336	-17	31	53.82	4		9002	6284	F4	8807
	10	1	1	54	21.0616	1	4	25	33.549	-16	22	19.38	4		9002	6284	F5	8412
	10	1	1	54	25.0616	1	4	28	26.660	-15	12	57.57	4		9002	6284	F6	8413
	10	1	1	54	29.0617	1	4	31	17.284	-14	3	41.73	4		9002	6284	F7	8808
	10	1	1	56	5.0624	1	5	28	1.892	10	37	50.32	4		9002	6285	F1	8414
	10	1	1	56	9.0625	1	5	30	14.472	11	28	49.79	4		9002	6285	F2	8415
	10	1	1	56	13.0625	1	5	32	11.926	12	18	48.94	4		9002	6285	F3	8809
	10	1	1	56	17.0626	1	5	34	8.373	13	7	50.66	4		9002	6285	F4	8417
	10	1	1	56	21.0626	1	5	36	3.480	13	56	3.08	4		9002	6285	F5	8418
	10	1	1	56	25.0627	1	5	37	57.152	14	43	17.62	4		9002	6285	F6	8419

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	10	1	1	56	29.0627	1	5	39	44.599	15	29	36.55	4		9002	6285	F7	8470
	10	1	7	54	5.0648	1	7	18	27.899	-60	53	28.27	4		9007	7504	F1	A123
	10	1	7	54	9.0648	1	7	19	13.443	-60	7	12.43	4		9007	7504	F2	A124
	10	1	7	54	13.0647	1	7	19	59.250	-59	20	29.04	4		9007	7504	F3	A125
	10	1	7	54	17.0647	1	7	20	43.387	-58	33	18.10	4		9007	7504	F4	A126
	10	1	7	54	21.0647	1	7	21	27.480	-57	45	35.94	4		9007	7504	F5	A127
	10	1	7	54	25.0646	1	7	22	10.800	-56	57	31.36	4		9007	7504	F6	A128
	10	1	7	54	29.0646	1	7	22	53.834	-56	9	1.63	4		9007	7504	F7	86A5
	10	1	7	56	5.0642	1	7	38	28.450	-35	10	49.74	4		9007	7505	F1	86A6
	10	1	7	56	9.0642	1	7	39	5.053	-34	16	18.18	4		9007	7505	F2	A130
	10	1	7	56	13.0642	1	7	39	41.671	-33	21	48.98	4		9007	7505	F3	A131
	10	1	7	56	17.0642	1	7	40	18.030	-32	27	11.10	4		9007	7505	F4	A132
	10	1	7	56	21.0642	1	7	40	54.435	-31	32	45.87	4		9007	7505	F5	A133
	10	1	7	56	25.0642	1	7	41	30.561	-30	38	21.12	4		9007	7505	F6	A134
	10	1	7	56	29.0642	1	7	42	6.803	-29	44	.97	4		9007	7505	F7	A135
	10	1	7	58	5.0647	1	7	56	27.885	- 9	14	25.23	4		9007	7506	F1	86A4
	10	1	7	58	9.0648	1	7	57	3.830	- 8	27	51.84	4		9007	7506	F2	79A5
	10	1	7	58	13.0648	1	7	57	39.682	- 7	41	46.14	4		9007	7506	F3	79A6
	10	1	7	58	17.0648	1	7	58	15.782	- 6	56	8.77	4		9007	7506	F4	79A7
	10	1	7	58	21.0649	1	7	58	51.956	- 6	10	57.66	4		9007	7506	F5	79A8
	10	1	7	58	25.0649	1	7	59	27.662	- 5	26	15.73	4		9007	7506	F6	79A9
	10	1	7	58	29.0650	1	8	0	3.942	- 4	42	3.80	4		9007	7506	F7	79A0
	10	1	17	12	5.0723	1	15	27	35.035		3	19	15.61	4		9002	6296	F1	A523
	10	1	17	12	9.0723	1	15	27	55.328		3	1	29.68	4		9002	6296	F2	A524
	10	1	17	12	13.0722	1	15	28	15.137		2	43	37.20	4		9002	6296	F3	A525
	10	1	17	12	17.0722	1	15	28	34.905		2	25	35.41	4		9002	6296	F4	A526
	10	1	17	12	21.0721	1	15	28	55.124		2	7	33.59	4		9002	6296	F5	A527
	10	1	17	12	25.0721	1	15	29	14.952		1	49	20.21	4		9002	6296	F6	A528
	10	1	17	12	29.0720	1	15	29	34.965		1	31	1.03	4		9002	6296	F7	A529
	10	1	17	14	5.0710	1	15	37	18.178	-	6	20	36.88	4		9002	6297	F1	A530
	10	1	17	14	9.0710	1	15	37	36.984	-	6	41	43.21	4		9002	6297	F2	A531
	10	1	17	14	13.0709	1	15	37	55.744	-	7	2	56.38	4		9002	6297	F3	A532
	10	1	17	14	17.0709	1	15	38	14.395	-	7	24	13.80	4		9002	6297	F4	A533
	10	1	17	14	21.0709	1	15	38	33.020	-	7	45	42.61	4		9002	6297	F5	A534
	10	1	17	14	25.0708	1	15	38	51.675	-	8	7	15.42	4		9002	6297	F6	A535
	10	1	17	14	29.0708	1	15	39	10.181	-	8	28	53.34	4		9002	6297	F7	A536
	10	1	17	16	5.0700	1	15	46	22.930	-17	45	42.65	4		9002	6298	F1	A772
	10	1	17	16	9.0699	1	15	46	40.442	-18	10	28.26	4		9002	6298	F2	A773
	10	1	17	16	13.0699	1	15	46	57.850	-18	35	21.57	4		9002	6298	F3	A774
	10	1	17	16	17.0699	1	15	47	15.389	-19	0	16.46	4		9002	6298	F4	A775
	10	1	17	16	21.0698	1	15	47	32.707	-19	25	22.24	4		9002	6298	F5	A776
	10	1	17	16	25.0698	1	15	47	50.165	-19	50	41.38	4		9002	6298	F6	A777
	10	1	17	16	29.0698	1	15	48	7.476	-20	16	1.50	4		9002	6298	F7	A778
	10	1	17	18	9.0692	1	15	55	7.689	-31	27	3.55	4		9002	6299	F2	A7A0
	10	1	17	18	13.0692	1	15	55	24.104	-31	55	13.12	4		9002	6299	F3	A7A1
	10	1	17	18	17.0691	1	15	55	40.498	-32	23	31.80	4		9002	6299	F4	A7A2
	10	1	17	18	21.0691	1	15	55	56.689	-32	51	58.96	4		9002	6299	F5	A7A3
	10	1	17	18	25.0691	1	15	56	12.612	-33	20	26.49	4		9002	6299	F6	A7A4
	10	1	17	18	29.0691	1	15	56	28.568	-33	49	2.79	4		9002	6299	F7	A7A5
	10	1	17	20	5.0688	1	16	2	43.246	-45	36	26.07	4		9002	6300	F1	A906
	10	1	17	20	9.0688	1	16	2	58.233	-46	6	32.64	4		9002	6300	F2	A907
	10	1	17	20	13.0688	1	16	3	13.233	-46	36	42.97	4		9002	6300	F3	A908
	10	1	17	20	17.0688	1	16	3	28.262	-47	6	54.30	4		9002	6300	F4	A909
	10	1	17	20	21.0688	1	16	3	42.808	-47	37	9.01	4		9002	6300	F5	A910
	10	1	17	20	25.0688	1	16	3	58.009	-48	7	20.78	4		9002	6300	F6	A911
	10	1	17	20	29.0688	1	16	4	12.624	-48	37	33.76	4		9002	6300	F7	A912
	10	1	17	22	5.0689	1	16	9	48.163	-60	42	40.30	4		9002	6301	F1	9340
	10	1	17	22	9.0689	1	16	10	1.456	-61	12	31.49	4		9002	6301	F2	1132
	10	1	17	22	13.0689	1	16	10	14.329	-61	42	23.19	4		9002	6301	F3	9342
	10	1	17	22	17.0689	1	16	10	26.970	-62	12	11.12	4		9002	6301	F4	9343
	10	1	17	22	21.0689	1	16	10	40.086	-62	41	52.87	4		9002	6301	F5	1133
	10	1	17	22	25.0690	1	16	10	52.531	-63	11	33.51	4		9002	6301	F6	9344
	10	1	17	22	29.0690	1	16	11	4.421	-63	41	9.25	4		9002	6301	F7	9345
	10	1	17	25	5.0698	1	16	15	5.444	-81	51	37.49	4		9002	6302	F1	8905
	10	1	17	25	9.0699	1	16	14	53.866	-82	17	34.29	4		9002	6302	F2	A669
	10	1	17	25	13.0699	1	16	14	37.954	-82	43	23.20	4		9002	6302	F3	A670
	10	1	17	25	17.0699	1	16	14	16.901	-83	9	5.58	4		9002	6302	F4	A671
	10	1	17	25	21.0699	1	16	13	53.819	-83	34	40.63	4		9002	6302	F5	A672
	10	1	17	25	25.0700	1	16	13	24.559	-84	0	6.21	4		9002	6302	F6	A673
	10	1	17	25	29.0700	1	16	12	50.252	-84	25	26.30	4		9002	6302	F7	A674
	10	1	17	49	5.0669	1	21	45	50.012	-67	27	35.36	4		9023	A252	F1	A541
	10	1	17	49	9.0668	1	21	50	19.610	-67	40	36.91	4		9023	A252	F2	A542
	10	1	17	49	13.0667	1	21	54	57.840	-67	53	21.14	4		9023	A252	F3	AA16
	10	1	17	49	17.0667	1	21	59	46.248	-68	5	50.14	4		9023	A252	F4	A543
	10	1	17	49	21.0666	1	22	4	42.801	-68	17	56.51	4		9023	A252	F5	A544
	10	1	17	49	25.0665	1	22	9	49.677	-68	29	45.91	4		9023	A252	F6	A545
	10	1	17	49	29.0665	1	22	15	6.348	-68	41	6.06	4		9023	A252	F7	A546
	10	1	17	51	5.0650	1	1	8	17.400	-69	5	3.39	4		9023	A253	F1	2490
	10	1	17	51	9.0649	1	1	16	29.068	-68	49	39.42	4		9023	A253	F2	2491
	10	1	17	51	13.0649	1	1	24	37.817	-68	32	36.89	4		9023	A253	F3	2492

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	10	1	17	51	17.0648	1	1	32	41.959	-68	13	48.19	4		9023	A253	F4	2493
	10	1	17	51	21.0648	1	1	40	40.279	-67	53	17.42	4		9023	A253	F5	2494
	10	1	17	51	25.0647	1	1	48	32.182	-67	31	1.42	4		9023	A253	F6	2495
	10	1	17	51	29.0647	1	1	56	17.228	-67	7	.60	4		9023	A253	F7	2496
	10	1	17	53	5.0638	1	4	13	50.928	-49	29	33.08	4		9023	A254	F1	9235
	10	1	17	53	9.0638	1	4	17	41.746	-48	29	4.03	4		9023	A254	F2	9236
	10	1	17	53	13.0637	1	4	21	25.026	-47	27	41.75	4		9023	A254	F3	9237
	10	1	17	53	17.0637	1	4	25	2.303	-46	25	26.68	4		9023	A254	F4	9238
	10	1	17	53	21.0637	1	4	28	32.625	-45	22	23.77	4		9023	A254	F5	9239
	10	1	17	53	25.0637	1	4	31	57.107	-44	18	35.10	4		9023	A254	F6	9240
	10	1	17	53	29.0637	1	4	35	15.491	-43	14	5.90	4		9023	A254	F7	9241
	10	1	17	56	5.0645	1	5	56	52.345	-	2	30	4.92	4		9023	A255	F1	564
	10	1	17	56	9.0646	1	5	58	14.999	-	1	39	40.73	4		9023	A255	F2	565
	10	1	17	56	13.0646	1	5	59	36.499	-	0	50	8.60	4		9023	A255	F3	566
	10	1	17	56	17.0647	1	6	0	56.776	-	0	1	30.27	4		9023	A255	F4	567
	10	1	17	56	21.0647	1	6	2	16.033		0	46	27.84	4		9023	A255	F5	568
	10	1	17	56	25.0648	1	6	3	34.216		1	33	35.52	4		9023	A255	F6	569
	10	1	17	56	29.0648	1	6	4	51.208		2	19	52.74	4		9023	A255	F7	570
	10	1	21	12	5.0727	3	14	56	7.861	-25	39	22.04	4		9029	27	F1	8885
	10	1	21	12	9.0727	3	14	56	25.499	-26	1	.51	4		9029	27	F2	8886
	10	1	21	12	13.0727	3	14	56	42.267	-26	22	37.90	4		9029	27	F3	8887
	10	1	21	12	17.0727	3	14	56	59.298	-26	44	17.08	4		9029	27	F4	8888
	10	1	21	12	21.0727	3	14	57	16.180	-27	5	55.08	4		9029	27	F5	8889
	10	1	21	12	25.0727	3	14	57	33.028	-27	27	39.81	4		9029	27	F6	8890
	10	1	21	12	29.0727	3	14	57	49.780	-27	49	23.31	4		9029	27	F7	8891
	10	1	21	16	5.0729	3	15	9	48.859	-47	27	34.27	4		9029	29	F1	8892
	10	1	21	16	9.0729	3	15	9	57.750	-47	49	1.67	4		9029	29	F2	8893
	10	1	21	16	17.0729	3	15	10	15.949	-48	31	50.57	4		9029	29	F4	8894
	10	1	21	16	21.0729	3	15	10	24.513	-48	53	11.64	4		9029	29	F5	8895
	10	1	21	16	25.0730	3	15	10	33.157	-49	14	31.93	4		9029	29	F6	8896
	10	1	23	15	5.0715	1	16	1	18.480	2	37	37.89	4		9011	210	F1	4025
	10	1	23	15	9.0714	1	16	1	43.378	2	18	20.03	4		9011	210	F2	4026
	10	1	23	15	13.0714	1	16	2	9.027	1	58	54.07	4		9011	210	F3	4027
	10	1	23	15	17.0713	1	16	2	33.883	1	39	20.37	4		9011	210	F4	4028
	10	1	23	15	21.0713	1	16	2	59.151	1	19	40.36	4		9011	210	F5	4029
	10	1	23	15	25.0712	1	16	3	24.728	0	59	52.79	4		9011	210	F6	4030
	10	1	23	15	29.0712	1	16	3	49.599	0	39	50.37	4		9011	210	F7	4031
	10	1	23	18	5.0695	1	16	21	5.432	-14	14	55.36	4		9011	211	F1	4032
	10	1	23	18	9.0695	1	16	21	33.729	-14	41	8.23	4		9011	211	F2	4033
	10	1	23	18	13.0694	1	16	22	2.486	-15	7	31.41	4		9011	211	F3	4034
	10	1	23	18	17.0694	1	16	22	30.883	-15	33	59.76	4		9011	211	F4	4035
	10	1	23	18	21.0694	1	16	23	.104	-16	0	42.24	4		9011	211	F5	4036
	10	1	23	18	25.0693	1	16	23	28.784	-16	27	36.37	4		9011	211	F6	4037
	10	1	23	18	29.0693	1	16	23	58.008	-16	54	35.32	4		9011	211	F7	4038
	10	1	23	20	5.0686	1	16	36	34.483	-28	34	24.54	4		9011	212	F1	3351
	10	1	23	20	9.0685	1	16	37	8.890	-29	5	32.35	4		9011	212	F2	3352
	10	1	23	20	13.0685	1	16	37	43.868	-29	36	54.66	4		9011	212	F3	3353
	10	1	23	20	17.0685	1	16	38	19.009	-30	8	23.25	4		9011	212	F4	3354
	10	1	23	20	21.0685	1	16	38	54.724	-30	39	59.42	4		9011	212	F5	3355
	10	1	23	20	25.0684	1	16	39	30.409	-31	11	45.81	4		9011	212	F6	3356
	10	1	23	20	29.0684	1	16	40	6.573	-31	43	39.94	4		9011	212	F7	3357
	10	1	23	25	5.0683	1	18	2	41.917	-70	18	2.50	4		9011	214	F1	3358
	10	1	23	25	9.0684	1	18	5	33.389	-70	48	38.90	4		9011	214	F2	3359
	10	1	23	25	13.0684	1	18	8	32.389	-71	19	1.56	4		9011	214	F3	3360
	10	1	23	25	17.0684	1	18	11	39.037	-71	48	59.99	4		9011	214	F4	3361
	10	1	23	25	21.0684	1	18	14	55.476	-72	18	43.32	4		9011	214	F5	3362
	10	1	23	25	25.0684	1	18	18	21.003	-72	48	11.52	4		9011	214	F6	4087
	10	1	23	25	29.0685	1	18	21	56.336	-73	17	18.73	4		9011	214	F7	4088
	10	1	23	27	5.0692	1	21	24	57.861	-81	56	47.27	4		9011	215	F1	4089
	10	1	23	27	9.0692	1	21	38	20.616	-82	5	13.68	4		9011	215	F2	4090
	10	1	23	27	13.0692	1	21	52	3.438	-82	12	.59	4		9011	215	F3	3339
	10	1	23	27	17.0693	1	22	6	3.217	-82	17	11.85	4		9011	215	F4	3340
	10	1	23	27	21.0693	1	22	20	12.303	-82	20	36.35	4		9011	215	F5	3341
	10	1	23	27	25.0693	1	22	34	23.948	-82	22	14.38	4		9011	215	F6	3342
	10	1	23	27	29.0694	1	22	48	38.725	-82	22	14.18	4		9011	215	F7	3343
	10	2	5	47	5.0703	1	15	23	30.498	-77	42	22.45	4		9011	234	F1	3344
	10	2	5	47	9.0702	1	15	17	13.967	-78	0	57.26	4		9011	234	F2	3345
	10	2	5	47	13.0702	1	15	10	34.111	-78	19	15.43	4		9011	234	F3	3346
	10	2	5	47	17.0701	1	15	3	27.346	-78	36	58.70	4		9011	234	F4	3347
	10	2	5	47	21.0701	1	14	55	52.675	-78	54	3.33	4		9011	234	F5	3348
	10	2	5	47	25.0700	1	14	47	51.603	-79	10	30.44	4		9011	234	F6	3349
	10	2	5	47	29.0700	1	14	39	19.904	-79	26	15.15	4		9011	234	F7	3350
	10	2	5	50	5.0685	1	8	34	20.831	-70	55	48.61	4		9011	235	F1	3563
	10	2	5	50	9.0685	1	8	30	57.093	-70	20	49.21	4		9011	235	F2	3564
	10	2	5	50	13.0685	1	8	27	42.462	-69	45	31.05	4		9011	235	F3	3565
	10	2	5	50	17.0684	1	8	24	41.303	-69	9	37.43	4		9011	235	F4	3566
	10	2	5	50	21.0684	1	8	21	48.033	-68	33	20.67	4		9011	235	F5	3567
	10	2	5	50	25.0684	1	8	19	4.960	-67	56	36.74	4		9011	235	F6	3568
	10	2	5	50	29.0684	1	8	16	30.174	-67	19	34.10	4		9011	235	F7	3569
	10	2	5	52	5.0681	1	7	41	35.797	-51	14	.30	4		9011	236	F1	3570

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	10	2	5	52	9.0681	1	7	40	50.181	-50	32	4.12	4		9011	236	F2	3571
	10	2	5	52	13.0681	1	7	40	6.487	-49	50	2.68	4		9011	236	F3	3572
	10	2	5	52	17.0681	1	7	39	24.991	-49	8	5.51	4		9011	236	F4	3573
	10	2	5	52	21.0681	1	7	38	44.856	-48	26	3.85	4		9011	236	F5	3574
	10	2	5	52	25.0681	1	7	38	6.413	-47	44	3.45	4		9011	236	F6	3575
	10	2	5	52	29.0681	1	7	37	30.453	-47	2	5.84	4		9011	236	F7	3576
	10	2	5	54	5.0686	1	7	29	10.334	-30	42	7.46	4		9011	237	F1	3186
	10	2	5	54	9.0686	1	7	29	.912	-30	3	21.45	4		9011	237	F2	3187
	10	2	5	54	13.0686	1	7	28	52.625	-29	24	48.57	4		9011	237	F3	3188
	10	2	5	54	17.0686	1	7	28	44.025	-28	46	28.97	4		9011	237	F4	3189
	10	2	5	54	21.0687	1	7	28	36.597	-28	8	18.25	4		9011	237	F5	3190
	10	2	5	54	25.0687	1	7	28	29.910	-27	30	23.04	4		9011	237	F6	3191
	10	2	5	54	29.0687	1	7	28	23.476	-26	52	47.08	4		9011	237	F7	3192
	10	2	7	53	5.0681	1	23	2	20.823	-46	34	30.24	4		9011	249	F1	3193
	10	2	7	53	9.0680	1	23	5	22.504	-46	26	30.03	4		9011	249	F2	3194
	10	2	7	53	13.0680	1	23	8	26.078	-46	17	58.99	4		9011	249	F3	3195
	10	2	7	53	17.0679	1	23	11	30.971	-46	8	58.96	4		9011	249	F4	3196
	10	2	7	53	21.0678	1	23	14	38.090	-45	59	31.80	4		9011	249	F5	3197
	10	2	7	53	25.0678	1	23	17	46.459	-45	49	30.30	4		9011	249	F6	3198
	10	2	7	53	29.0677	1	23	20	56.730	-45	38	55.61	4		9011	249	F7	3199
	10	2	7	55	5.0663	1	0	43	22.997	-37	59	2.53	4		9011	250	F1	3295
	10	2	7	55	9.0663	1	0	46	58.769	-37	29	34.08	4		9011	250	F2	3296
	10	2	7	55	13.0662	1	0	50	34.533	-36	59	10.99	4		9011	250	F3	3297
	10	2	7	55	17.0662	1	0	54	9.878	-36	27	55.16	4		9011	250	F4	3298
	10	2	7	55	21.0662	1	0	57	45.767	-35	55	37.63	4		9011	250	F5	3299
	10	2	7	55	25.0661	1	1	1	21.898	-35	22	22.70	4		9011	250	F6	3300
	10	2	7	55	29.0661	1	1	4	56.986	-34	48	9.47	4		9011	250	F7	3301
	10	2	8	0	5.0666	1	4	24	10.093		20	43 20.90	4		9011	252	F1	3302
	10	2	8	0	9.0667	1	4	26	12.051		21	20 51.86	4		9011	252	F2	3303
	10	2	8	0	13.0667	1	4	28	12.820		21	57 45.51	4		9011	252	F3	3304
	10	2	8	0	17.0668	1	4	30	12.023		22	33 58.56	4		9011	252	F4	3305
	10	2	8	0	21.0669	1	4	32	10.618		23	9 36.16	4		9011	252	F5	3306
	10	2	8	0	25.0669	1	4	34	7.784		23	44 32.56	4		9011	252	F6	3307
	10	2	8	0	29.0670	1	4	36	3.674		24	18 58.75	4		9011	252	F7	3308
	10	2	11	29	5.0730	1	15	5	9.146	-52	50	.62	4		9023	A26A	F1	571
	10	2	11	29	9.0730	1	15	4	24.279	-53	13	23.57	4		9023	A26A	F2	572
	10	2	11	29	13.0730	1	15	3	38.146	-53	36	43.74	4		9023	A26A	F3	573
	10	2	11	29	17.0730	1	15	2	50.382	-54	0	6.96	4		9023	A26A	F4	574
	10	2	11	29	21.0730	1	15	2	1.461	-54	23	28.02	4		9023	A26A	F5	575
	10	2	11	29	25.0730	1	15	1	10.847	-54	46	50.74	4		9023	A26A	F6	576
	10	2	11	29	29.0730	1	15	0	18.605	-55	10	15.88	4		9023	A26A	F7	577
	10	2	11	32	5.0728	1	13	53	42.666	-69	43	44.82	4		9023	A269	F1	1779
	10	2	11	32	9.0728	1	13	50	37.679	-70	3	32.06	4		9023	A269	F2	1780
	10	2	11	32	13.0728	1	13	47	26.561	-70	23	2.78	4		9023	A269	F3	1781
	10	2	11	32	17.0728	1	13	44	8.017	-70	42	19.76	4		9023	A269	F4	1782
	10	2	11	32	21.0728	1	13	40	43.577	-71	1	21.51	4		9023	A269	F5	1783
	10	2	11	32	25.0728	1	13	37	11.078	-71	20	2.59	4		9023	A269	F6	1784
	10	2	11	32	29.0728	1	13	33	33.303	-71	38	24.80	4		9023	A269	F7	1785
	10	2	14	11	43.8874	1	8	43	29.018	-20	6	22.91	4		9012	B950	01	5783
	10	2	14	11	47.8873	1	8	44	44.301	-19	31	21.27	4		9012	B950	02	5784
	10	2	14	11	51.8873	1	8	45	59.378	-18	56	18.26	4		9012	B950	03	5785
	10	2	14	11	55.8873	1	8	47	14.752	-18	21	15.11	4		9012	B950	04	5786
	10	2	14	11	59.8874	1	8	48	30.003	-17	46	14.43	4		9012	B950	05	5787
	10	2	14	12	3.8873	1	8	49	45.259	-17	11	9.17	4		9012	B950	06	5788
	10	2	15	49	5.0713	1	10	54	3.350	-75	17	46.46	4		9023	A279	F1	1786
	10	2	15	49	9.0713	1	10	46	53.133	-75	4	36.74	4		9023	A279	F2	1787
	10	2	15	49	13.0713	1	10	39	53.868	-74	50	26.67	4		9023	A279	F3	1788
	10	2	15	49	17.0713	1	10	33	4.912	-74	35	15.95	4		9023	A279	F4	1789
	10	2	15	49	21.0712	1	10	26	28.363	-74	19	19.67	4		9023	A279	F5	1790
	10	2	15	49	25.0712	1	10	20	3.139	-74	2	22.27	4		9023	A279	F6	3173
	10	2	15	49	29.0712	1	10	13	50.706	-73	44	36.87	4		9023	A279	F7	7173
	10	2	15	51	5.0707	1	8	36	54.508	-63	30	47.93	4		9023	A280	F1	2497
	10	2	15	51	9.0706	1	8	34	30.193	-62	59	53.10	4		9023	A280	F2	2498
	10	2	15	51	13.0706	1	8	32	11.797	-62	28	42.01	4		9023	A280	F3	2499
	10	2	15	51	17.0706	1	8	29	59.188	-61	57	13.29	4		9023	A280	F4	2500
	10	2	15	51	21.0706	1	8	27	50.761	-61	25	29.28	4		9023	A280	F5	2501
	10	2	15	51	25.0706	1	8	25	47.001	-60	53	30.36	4		9023	A280	F6	2502
	10	2	15	51	29.0706	1	8	23	48.097	-60	21	21.97	4		9023	A280	F7	3150
	10	2	15	53	5.0706	1	7	52	35.259	-46	48	28.33	4		9023	A281	F1	2443
	10	2	15	53	9.0706	1	7	51	46.221	-46	13	52.04	4		9023	A281	F2	3526
	10	2	15	53	13.0706	1	7	50	59.166	-45	39	14.37	4		9023	A281	F3	3527
	10	2	15	53	17.0706	1	7	50	13.720	-45	4	41.45	4		9023	A281	F4	2446
	10	2	15	53	21.0706	1	7	49	29.882	-44	30	4.58	4		9023	A281	F5	3528
	10	2	15	53	25.0706	1	7	48	47.138	-43	55	37.72	4		9023	A281	F6	2448
	10	2	15	53	29.0707	1	7	48	5.975	-43	21	10.98	4		9023	A281	F7	2449
	10	2	17	24	5.0722	1	15	33	50.914	-43	13	17.14	4		9002	6325	F1	8675
	10	2	17	24	9.0722	1	15	33	53.521	-43	40	54.84	4		9002	6325	F2	8676
	10	2	17	24	13.0722	1	15	33	55.272	-44	8	33.28	4		9002	6325	F3	8677
	10	2	17	24	17.0722	1	15	33	56.623	-44	36	18.25	4		9002	6325	F4	8678
	10	2	17	24	21.0722	1	15	33	58.175	-45	4	1.16	4		9002	6325	F5	8679

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	10	2	17	24	25.0722	1	15	33	58.948	-45	31	48.87	4		9002	6325	F6	86A0
	10	2	17	24	29.0722	1	15	33	59.477	-45	59	39.89	4		9002	6325	F7	86A1
	10	2	17	26	5.0722	1	15	32	7.800	-57	13	2.32	4		9002	6326	F1	93A6
	10	2	17	26	9.0722	1	15	31	55.889	-57	41	4.87	4		9002	6326	F2	93A7
	10	2	17	26	13.0722	1	15	31	43.410	-58	9	6.93	4		9002	6326	F3	93A8
	10	2	17	26	17.0722	1	15	31	30.112	-58	37	6.70	4		9002	6326	F4	93A9
	10	2	17	26	21.0722	1	15	31	15.676	-59	5	7.11	4		9002	6326	F5	9390
	10	2	17	26	25.0722	1	15	31	1.211	-59	33	6.83	4		9002	6326	F6	9391
	10	2	17	26	29.0722	1	15	30	45.013	-60	0	58.19	4		9002	6326	F7	9392
	10	2	17	28	5.0725	1	15	17	34.561	-70	56	7.96	4		9002	6327	F1	9393
	10	2	17	28	9.0725	1	15	16	34.664	-71	22	31.74	4		9002	6327	F2	9394
	10	2	17	28	13.0725	1	15	15	31.055	-71	48	49.10	4		9002	6327	F3	9395
	10	2	17	28	17.0725	1	15	14	25.404	-72	14	57.55	4		9002	6327	F4	9396
	10	2	17	28	21.0725	1	15	13	15.058	-72	41	4.19	4		9002	6327	F5	9397
	10	2	17	28	25.0726	1	15	12	.578	-73	6	58.36	4		9002	6327	F6	9398
	10	2	17	28	29.0726	1	15	10	41.757	-73	32	53.34	4		9002	6327	F7	9399
	10	2	17	55	5.0677	1	0	6	32.737	-59	33	53.65	4		9023	A288	F1	2450
	10	2	17	55	9.0677	1	0	12	2.176	-59	22	35.49	4		9023	A288	F2	2451
	10	2	17	55	13.0676	1	0	17	33.473	-59	10	10.33	4		9023	A288	F3	2452
	10	2	17	55	17.0675	1	0	23	7.036	-58	56	36.59	4		9023	A288	F4	3529
	10	2	17	55	21.0675	1	0	28	41.893	-58	41	57.46	4		9023	A288	F5	2454
	10	2	17	55	25.0674	1	0	34	17.699	-58	26	5.75	4		9023	A288	F6	3530
	10	2	17	55	29.0674	1	0	39	53.741	-58	9	2.05	4		9023	A288	F7	2456
	10	2	17	57	5.0663	1	2	45	10.105	-44	27	58.83	4		9023	A289	F1	3A52
	10	2	17	57	9.0663	1	2	49	36.732	-43	36	24.89	4		9023	A289	F2	3A53
	10	2	17	57	13.0663	1	2	53	58.846	-42	43	34.86	4		9023	A289	F3	3A54
	10	2	17	57	17.0662	1	2	58	16.520	-41	49	31.40	4		9023	A289	F4	3A55
	10	2	17	57	21.0662	1	3	2	29.178	-40	54	22.25	4		9023	A289	F5	3A56
	10	2	17	57	25.0662	1	3	6	37.631	-39	58	4.74	4		9023	A289	F6	3A57
	10	2	17	57	29.0662	1	3	10	41.311	-39	0	44.13	4		9023	A289	F7	3A58
	10	2	17	59	5.0662	1	4	27	46.302	-13	26	55.59	4		9023	A290	F1	3A59
	10	2	17	59	9.0662	1	4	30	16.350	-12	23	30.94	4		9023	A290	F2	3A60
	10	2	17	59	13.0663	1	4	32	43.838	-11	20	43.98	4		9023	A290	F3	3A61
	10	2	17	59	17.0663	1	4	35	8.365	-10	18	26.29	4		9023	A290	F4	6131
	10	2	17	59	21.0663	1	4	37	30.655	- 9	16	44.85	4		9023	A290	F5	3A62
	10	2	17	59	25.0664	1	4	39	50.664	- 8	15	45.37	4		9023	A290	F6	3A63
	10	2	17	59	29.0664	1	4	42	7.970	- 7	15	24.34	4		9023	A290	F7	3A64
	10	2	18	1	5.0675	1	5	27	26.646	12	50	55.08	4		9023	A291	F1	4053
	10	2	18	1	9.0676	1	5	29	1.097	13	31	5.41	4		9023	A291	F2	6132
	10	2	18	1	13.0676	1	5	30	34.392	14	10	27.55	4		9023	A291	F3	4055
	10	2	18	1	17.0677	1	5	32	6.603	14	49	10.04	4		9023	A291	F4	4056
	10	2	18	1	21.0678	1	5	33	37.705	15	27	11.00	4		9023	A291	F5	4057
	10	2	18	1	25.0678	1	5	35	7.876	16	4	30.45	4		9023	A291	F6	4058
	10	2	18	1	29.0679	1	5	36	36.741	16	41	5.58	4		9023	A291	F7	4059
	10	2	23	23	9.0723	1	16	1	24.330	-21	43	11.60	4		9011	261	F2	3A70
	10	2	23	23	13.0723	1	16	1	44.916	-22	9	39.88	4		9011	261	F3	3A71
	10	2	23	23	17.0723	1	16	2	5.906	-22	36	28.87	4		9011	261	F4	3A72
	10	2	23	23	21.0722	1	16	2	26.716	-23	3	23.65	4		9011	261	F5	3A73
	10	2	23	23	25.0722	1	16	2	47.449	-23	30	32.13	4		9011	261	F6	3A74
	10	2	23	23	29.0722	1	16	3	8.905	-23	57	44.12	4		9011	261	F7	3A75
	10	2	23	30	5.0715	1	17	4	20.122	-76	5	30.25	4		9011	264	F1	3A76
	10	2	23	30	9.0716	1	17	6	17.256	-76	36	2.74	4		9011	264	F2	3A77
	10	2	23	30	13.0716	1	17	8	22.252	-77	6	30.21	4		9011	264	F3	3A78
	10	2	23	30	17.0716	1	17	10	32.774	-77	36	41.21	4		9011	264	F4	3A79
	10	2	23	30	21.0716	1	17	12	53.940	-78	6	46.20	4		9011	264	F5	3A80
	10	2	23	30	25.0717	1	17	15	26.796	-78	36	42.73	4		9011	264	F6	3A81
	10	2	23	30	29.0717	1	17	18	8.927	-79	6	23.46	4		9011	264	F7	3A82
	10	2	23	54	5.0712	1	9	24	45.953	-77	43	37.51	4		9002	6347	F1	A979
	10	2	23	54	9.0711	1	9	18	36.693	-77	17	.57	4		9002	6347	F2	A9A0
	10	2	23	54	13.0711	1	9	12	51.822	-76	49	35.50	4		9002	6347	F3	A9A1
	10	2	23	54	17.0711	1	9	7	27.001	-76	21	26.17	4		9002	6347	F4	A9A2
	10	2	23	54	21.0710	1	9	2	24.274	-75	52	33.28	4		9002	6347	F5	A9A3
	10	2	23	54	25.0710	1	8	57	39.829	-75	22	59.42	4		9002	6347	F6	A9A4
	10	2	23	54	29.0709	1	8	53	12.894	-74	52	50.09	4		9002	6347	F7	A9A5
	10	2	23	56	5.0702	1	7	57	25.135	-60	32	33.49	4		9002	6348	F1	A9A6
	10	2	23	56	9.0702	1	7	56	18.867	-59	52	31.56	4		9002	6348	F2	A9A7
	10	2	23	56	13.0702	1	7	55	14.407	-59	12	15.49	4		9002	6348	F3	A9A8
	10	2	23	56	17.0702	1	7	54	13.806	-58	31	42.27	4		9002	6348	F4	A9A9
	10	2	23	56	21.0702	1	7	53	16.063	-57	50	59.81	4		9002	6348	F5	A990
	10	2	23	56	25.0702	1	7	52	20.816	-57	10	1.09	4		9002	6348	F6	A991
	10	2	23	56	29.0701	1	7	51	28.591	-56	28	50.92	4		9002	6348	F7	9075
	10	2	23	58	5.0701	1	7	39	40.430	-39	26	56.90	4		9002	6349	F1	3709
	10	2	23	58	9.0701	1	7	39	26.954	-38	44	3.11	4		9002	6349	F2	3710
	10	2	23	58	13.0701	1	7	39	14.219	-38	1	15.32	4		9002	6349	F3	3711
	10	2	23	58	17.0701	1	7	39	2.518	-37	18	36.17	4		9002	6349	F4	3712
	10	2	23	58	21.0701	1	7	38	51.680	-36	35	58.47	4		9002	6349	F5	3713
	10	2	23	58	25.0701	1	7	38	41.756	-35	53	26.18	4		9002	6349	F6	3714
	10	2	23	58	29.0701	1	7	38	32.343	-35	11	4.00	4		9002	6349	F7	3715
	10	3	0	0	5.0707	1	7	37	54.908	-19	6	3.52	4		9002	6350	F1	9346
	10	3	0	0	21.0708	1	7	38	15.208	-16	38	19.24	4		9002	6350	F5	9104

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (NM)	STATION	FRAME NO.		OBS.NO.
1966	10	3	0	0	25.0709	1	7	38	21.441	-16	2	2.94	4		9002	6350	F6	9105
	10	3	0	0	29.0709	1	7	38	28.136	-15	26	3.95	4		9002	6350	F7	9106
	10	3	1	59	5.0695	1	0	1	54.212	-37	10	29.74	4		9002	6365	F1	9107
	10	3	1	59	9.0695	1	0	4	33.219	-36	48	41.47	4		9002	6365	F2	9108
	10	3	1	59	13.0694	1	0	7	12.409	-36	26	9.16	4		9002	6365	F3	9109
	10	3	1	59	17.0693	1	0	9	52.402	-36	3	6.11	4		9002	6365	F4	9110
	10	3	1	59	21.0693	1	0	12	32.948	-35	39	16.73	4		9002	6365	F5	9111
	10	3	1	59	25.0692	1	0	15	13.976	-35	14	52.46	4		9002	6365	F6	9112
	10	3	1	59	29.0692	1	0	17	55.237	-34	49	44.90	4		9002	6365	F7	9113
	10	3	2	1	5.0681	1	1	23	59.897	-21	4	21.00	4		9002	6366	F1	1134
	10	3	2	1	9.0680	1	1	26	45.795	-20	20	21.04	4		9002	6366	F2	9115
	10	3	2	1	13.0680	1	1	29	31.436	-19	35	39.94	4		9002	6366	F3	1135
	10	3	2	1	17.0680	1	1	32	16.791	-18	50	16.67	4		9002	6366	F4	9117
	10	3	2	1	21.0680	1	1	35	2.146	-18	4	3.45	4		9002	6366	F5	1136
	10	3	2	1	25.0679	1	1	37	46.838	-17	17	17.01	4		9002	6366	F6	1137
	10	3	2	1	29.0679	1	1	40	31.809	-16	29	47.52	4		9002	6366	F7	1138
	10	3	2	12	24.8158	1	4	39	55.906	-	2	57 13.62	4		9028	825	04	6334
	10	3	8	1	5.0699	1	2	8	13.731	-71	16	10.58	4		9007	7541	F1	8328
	10	3	8	1	9.0699	1	2	14	53.200	-70	58	32.38	4		9007	7541	F2	7991
	10	3	8	1	13.0698	1	2	21	27.645	-70	39	51.46	4		9007	7541	F3	7992
	10	3	8	1	17.0697	1	2	27	56.519	-70	20	1.71	4		9007	7541	F4	7993
	10	3	8	1	21.0697	1	2	34	20.388	-69	58	57.43	4		9007	7541	F5	7994
	10	3	8	1	25.0696	1	2	40	37.216	-69	36	52.09	4		9007	7541	F6	7995
	10	3	8	1	29.0695	1	2	46	48.225	-69	13	33.31	4		9007	7541	F7	7996
	10	3	8	4	5.0678	1	5	25	44.305	-38	47	48.63	4		9007	7542	F1	8627
	10	3	8	4	9.0678	1	5	28	15.028	-37	40	10.59	4		9007	7542	F2	8628
	10	3	8	4	13.0677	1	5	30	42.671	-36	31	47.57	4		9007	7542	F3	8629
	10	3	8	4	21.0677	1	5	35	29.428	-34	13	12.91	4		9007	7542	F5	1123
	10	3	8	4	25.0677	1	5	37	48.924	-33	3	12.11	4		9007	7542	F6	8631
	10	3	8	4	29.0677	1	5	40	5.827	-31	52	44.43	4		9007	7542	F7	9057
	10	3	8	6	5.0680	1	6	25	20.116	-	3	59 52.50	4		9007	7543	F1	9058
	10	3	8	6	9.0680	1	6	26	55.394	-	2	56 39.34	4		9007	7543	F2	8634
	10	3	8	6	13.0681	1	6	28	29.432	-	1	54 22.73	4		9007	7543	F3	8635
	10	3	8	6	17.0681	1	6	30	3.035	-	0	52 52.16	4		9007	7543	F4	8636
	10	3	8	6	21.0681	1	6	31	35.350		0	7 43.79	4		9007	7543	F5	8904
	10	3	8	6	25.0682	1	6	33	6.797		1	7 25.49	4		9007	7543	F6	8637
	10	3	8	6	29.0682	1	6	34	37.167		2	6 15.35	4		9007	7543	F7	8638
	10	3	17	27	5.0760	1	15	12	19.285	-34	45	10.23	4		9002	6378	F1	7171
	10	3	17	27	9.0760	1	15	12	19.383	-35	9	22.28	4		9002	6378	F2	7172
	10	3	17	27	13.0760	1	15	12	18.832	-35	33	39.97	4		9002	6378	F3	7173
	10	3	17	27	17.0759	1	15	12	18.281	-35	58	6.47	4		9002	6378	F4	7174
	10	3	17	27	21.0759	1	15	12	17.274	-36	22	29.30	4		9002	6378	F5	7175
	10	3	17	27	29.0759	1	15	12	14.391	-37	11	34.27	4		9002	6378	F7	7176
	10	3	23	26	5.0764	1	15	34	48.567	-15	25	52.13	4		9011	280	F1	9413
	10	3	23	26	9.0764	1	15	35	3.099	-15	48	10.09	4		9011	280	F2	9414
	10	3	23	26	13.0763	1	15	35	17.439	-16	10	33.67	4		9011	280	F3	9415
	10	3	23	26	17.0763	1	15	35	31.367	-16	33	2.20	4		9011	280	F4	9416
	10	3	23	26	21.0762	1	15	35	45.645	-16	55	45.35	4		9011	280	F5	9417
	10	3	23	26	25.0762	1	15	35	59.675	-17	18	26.34	4		9011	280	F6	9410
	10	3	23	28	5.0753	1	15	41	33.612	-27	30	58.94	4		9011	281	F1	3833
	10	3	23	28	9.0753	1	15	41	46.302	-27	57	8.00	4		9011	281	F2	3834
	10	3	23	28	17.0753	1	15	42	10.748	-28	49	58.39	4		9011	281	F4	3835
	10	3	23	28	21.0752	1	15	42	23.132	-29	16	35.61	4		9011	281	F5	3836
	10	3	23	28	25.0752	1	15	42	35.305	-29	43	16.10	4		9011	281	F6	3837
	10	3	23	28	29.0752	1	15	42	47.400	-30	10	9.40	4		9011	281	F7	3838
	10	3	23	34	5.0745	1	15	47	20.723	-72	28	12.44	4		9011	284	F1	603
	10	3	23	34	9.0745	1	15	46	55.771	-72	58	39.60	4		9011	284	F2	604
	10	3	23	34	13.0745	1	15	46	30.458	-73	29	8.41	4		9011	284	F3	2363
	10	3	23	34	17.0746	1	15	45	59.164	-73	59	21.69	4		9011	284	F4	605
	10	3	23	34	21.0746	1	15	45	27.427	-74	29	34.43	4		9011	284	F5	606
	10	3	23	34	25.0746	1	15	44	50.855	-74	59	44.86	4		9011	284	F6	607
	10	3	23	34	29.0746	1	15	44	12.913	-75	29	47.96	4		9011	284	F7	608
	10	3	23	36	5.0751	1	14	14	14.796	-86	45	41.47	4		9011	285	F1	2364
	10	3	23	36	9.0752	1	13	55	49.950	-87	9	.20	4		9011	285	F2	2365
	10	3	23	36	13.0752	1	13	31	47.304	-87	30	43.75	4		9011	285	F3	2366
	10	3	23	36	17.0752	1	13	0	3.584	-87	50	11.43	4		9011	285	F4	2367
	10	3	23	36	21.0753	1	12	18	37.045	-88	6	13.03	4		9011	285	F5	2368
	10	3	23	36	25.0753	1	11	26	5.242	-88	17	24.44	4		9011	285	F6	2369
	10	3	23	36	29.0753	1	10	25	13.656	-88	21	57.44	4		9011	285	F7	2370
	10	3	23	38	5.0762	1	4	58	31.812	-79	44	20.02	4		9011	286	F1	1759
	10	3	23	38	9.0762	1	4	57	21.131	-79	20	44.82	4		9011	286	F2	1760
	10	3	23	38	13.0762	1	4	56	18.868	-78	57	14.50	4		9011	286	F3	1761
	10	3	23	38	17.0763	1	4	55	21.790	-78	33	48.92	4		9011	286	F4	1762
	10	3	23	38	21.0763	1	4	54	30.530	-78	10	35.08	4		9011	286	F5	1763
	10	3	23	38	25.0764	1	4	53	42.880	-77	47	22.23	4		9011	286	F6	1764
	10	3	23	58	5.0734	1	9	23	46.630	-84	52	12.65	4		9002	6392	F1	7177
	10	3	23	58	9.0733	1	9	8	45.209	-84	26	51.38	4		9002	6392	F2	7178
	10	3	23	58	13.0733	1	8	55	49.858	-83	59	55.88	4		9002	6392	F3	7179
	10	3	23	58	17.0732	1	8	44	41.730	-83	31	43.35	4		9002	6392	F4	7180
	10	3	23	58	21.0732	1	8	35	.183	-83	2	23.09	4		9002	6392	F5	8329

October 3-4, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (NM)	STATION	FRAME NO.	OBS.NO.
1966	10	3	23	58	25.0731	1	8	26	32.090	-82	31	56.33	4		9002	6392	F6	7181
	10	3	23	58	29.0731	1	8	19	9.020	-82	0	41.07	4		9002	6392	F7	7182
	10	4	0	0	5.0721	1	7	18	29.263	-66	42	49.19	4		9002	6393	F1	7798
	10	4	0	0	9.0721	1	7	17	45.568	-65	59	12.73	4		9002	6393	F2	7183
	10	4	0	0	13.0721	1	7	17	5.539	-65	15	15.38	4		9002	6393	F3	7799
	10	4	0	0	17.0720	1	7	16	28.405	-64	30	59.74	4		9002	6393	F4	7185
	10	4	0	0	21.0720	1	7	15	54.187	-63	46	21.60	4		9002	6393	F5	7186
	10	4	0	0	25.0720	1	7	15	22.069	-63	1	23.10	4		9002	6393	F6	7187
	10	4	0	0	29.0720	1	7	14	52.945	-62	16	4.57	4		9002	6393	F7	7188
	10	4	0	2	5.0717	1	7	10	47.012	-43	2	4.98	4		9002	6394	F1	7836
	10	4	0	2	9.0717	1	7	10	49.009	-42	12	35.85	4		9002	6394	F2	7837
	10	4	0	2	13.0717	1	7	10	51.531	-41	23	10.42	4		9002	6394	F3	7838
	10	4	0	2	17.0717	1	7	10	54.773	-40	33	43.66	4		9002	6394	F4	7839
	10	4	0	2	21.0717	1	7	10	59.019	-39	44	24.64	4		9002	6394	F5	7840
	10	4	0	2	25.0717	1	7	11	3.289	-38	55	7.33	4		9002	6394	F6	7841
	10	4	0	2	29.0717	1	7	11	8.363	-38	5	54.39	4		9002	6394	F7	8687
	10	4	2	3	5.0729	1	23	47	4.902	-29	46	38.78	4		9002	6407	F1	7843
	10	4	2	3	9.0729	1	23	49	11.207	-29	24	10.96	4		9002	6407	F2	7844
	10	4	2	3	13.0728	1	23	51	18.216	-29	1	14.37	4		9002	6407	F3	8330
	10	4	2	3	17.0728	1	23	53	25.378	-28	37	44.45	4		9002	6407	F4	7845
	10	4	2	3	21.0727	1	23	55	32.936	-28	13	42.62	4		9002	6407	F5	7846
	10	4	2	3	25.0727	1	23	57	40.981	-27	49	14.25	4		9002	6407	F6	7847
	10	4	2	3	29.0726	1	23	59	48.896	-27	24	11.71	4		9002	6407	F7	7848
	10	4	2	5	5.0716	1	0	52	12.785	-14	40	52.45	4		9002	6408	F1	8913
	10	4	2	5	9.0716	1	0	54	25.335	-14	2	18.41	4		9002	6408	F2	8914
	10	4	2	5	13.0715	1	0	56	37.694	-13	23	10.16	4		9002	6408	F3	8915
	10	4	2	5	17.0715	1	0	58	50.511	-12	43	30.14	4		9002	6408	F4	8916
	10	4	2	5	21.0715	1	1	1	3.033	-12	3	26.30	4		9002	6408	F5	8917
	10	4	2	5	25.0714	1	1	3	15.418	-11	22	48.89	4		9002	6408	F6	8918
	10	4	2	5	29.0714	1	1	5	28.023	-10	41	46.54	4		9002	6408	F7	8919
	10	4	2	7	5.0712	1	1	57	55.129	7	20	.07	4		9002	6409	F1	8920
	10	4	2	7	9.0712	1	2	0	3.871	8	6	5[illegible]2	4		9002	6409	F2	8921
	10	4	2	7	13.0712	1	2	2	12.146	8	53	4[illegible]9	4		9002	6409	F3	8922
	10	4	2	7	17.0712	1	2	4	20.432	9	40	1[illegible]0	4		9002	6409	F4	8923
	10	4	2	7	21.0712	1	2	6	28.391	10	26	56.44	4		9002	6409	F5	9347
	10	4	2	7	25.0712	1	2	8	35.963	11	13	22.98	4		9002	6409	F6	8925
	10	4	2	7	29.0712	1	2	10	43.825	11	59	42.28	4		9002	6409	F7	9348
	10	4	5	55	5.0753	1	17	59	56.765	-72	13	14.95	4		9011	295	F1	1765
	10	4	5	55	9.0753	1	18	0	7.781	-72	37	9.07	4		9011	295	F2	1766
	10	4	5	55	13.0752	1	18	0	19.262	-73	1	20.24	4		9011	295	F3	1767
	10	4	5	55	17.0751	1	18	0	30.623	-73	25	45.07	4		9011	295	F4	1768
	10	4	5	55	21.0751	1	18	0	41.063	-73	50	22.70	4		9011	295	F5	1769
	10	4	5	55	25.0750	1	18	0	52.580	-74	15	21.87	4		9011	295	F6	1770
	10	4	5	55	29.0749	1	18	1	1.568	-74	40	36.82	4		9011	295	F7	1771
	10	4	5	58	5.0728	1	[illegible]	27	27.479	-84	31	20.66	4		9011	296	F1	1772
	10	4	5	58	9.0728	1	6	26	32.502	-83	51	29.44	4		9011	296	F2	1773
	10	4	5	58	13.0727	1	6	25	51.841	-83	11	5.09	4		9011	296	F3	1774
	10	4	5	58	17.0727	1	6	25	20.298	-82	30	15.16	4		9011	296	F4	1775
	10	4	5	58	21.0726	1	6	24	57.744	-81	48	59.72	4		9011	296	F5	1776
	10	4	5	58	25.0726	1	6	24	39.062	-81	7	15.40	4		9011	296	F6	1777
	10	4	5	58	29.0726	1	6	24	26.148	-80	25	5.79	4		9011	296	F7	1778
	10	4	6	1	5.0717	1	6	31	39.700	-48	9	6.13	4		9011	297	F1	537
	10	4	6	1	9.0717	1	6	31	57.282	-47	15	8.75	4		9011	297	F2	538
	10	4	6	1	13.0717	1	6	32	15.093	-46	21	13.63	4		9011	297	F3	539
	10	4	6	1	17.0717	1	6	32	33.226	-45	27	19.43	4		9011	297	F4	540
	10	4	6	1	21.0717	1	6	32	51.315	-44	33	26.55	4		9011	297	F5	541
	10	4	6	1	25.0717	1	6	33	9.649	-43	39	42.15	4		9011	297	F6	542
	10	4	6	1	29.0717	1	6	33	27.667	-42	45	57.96	4		9011	297	F7	543
	10	4	6	3	5.0722	1	6	41	14.446	-22	28	17.[illegible]	4		9011	298	F1	544
	10	4	6	3	9.0723	1	6	41	34.921	-21	41	58.76	4		9011	298	F2	545
	10	4	6	3	13.0723	1	6	41	55.395	-20	56	.60	4		9011	298	F3	546
	10	4	6	3	17.0724	1	6	42	15.816	-20	10	31.92	4		9011	298	F4	2371
	10	4	6	3	21.0724	1	6	42	36.594	-19	25	23.38	4		9011	298	F5	547
	10	4	6	3	25.0724	1	6	42	57.389	-18	40	49.53	4		9011	298	F6	548
	10	4	6	3	29.0725	1	6	43	18.313	-17	56	38.19	4		9011	298	F7	549
	10	4	8	1	5.0747	1	22	52	32.211	-33	6	34.77	4		9011	312	F1	550
	10	4	8	1	9.0746	1	22	54	35.927	-32	53	.73	4		9011	312	F2	551
	10	4	8	1	13.0746	1	22	56	40.057	-32	39	8.47	4		9011	312	F3	552
	10	4	8	1	17.0745	1	22	58	44.576	-32	24	48.89	4		9011	312	F4	553
	10	4	8	1	21.0744	1	23	0	49.932	-32	10	6.33	4		9011	312	F5	554
	10	4	8	1	25.0744	1	23	2	55.825	-31	55	6.40	4		9011	312	F6	555
	10	4	8	1	29.0743	1	23	5	2.493	-31	39	42.99	4		9011	312	F	556
	10	4	8	3	5.0731	1	23	58	5.214	-23	18	23.50	4		9011	313	F[illegible]	557
	10	4	8	3	9.0730	1	0	0	22.856	-22	51	32.26	4		9011	313	F2	558
	10	4	8	3	13.0730	1	0	2	40.452	-22	24	7.95	4		9011	313	F3	559
	10	4	8	3	17.0730	1	0	4	58.241	-21	56	17.79	4		9011	313	F4	560
	10	4	8	3	21.0729	1	0	7	16.345	-21	27	55.44	4		9011	313	F5	561
	10	4	8	3	25.0729	1	0	9	34.579	-20	59	4.42	4		9011	313	F6	562
	10	4	8	3	29.0728	1	0	11	53.224	-20	29	41.59	4		9011	313	F7	563
	10	4	8	5	5.0722	1	1	7	29.729	- 6	25	19.35	4		9011	314	F1	2398

October 4-5, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (NM)	STATION	FRAME NO.		OBS.NO.
1966	10	4	8	5	9.0722	1	1	9	47.623	- 9	45	19.16	4		9011	314	F2	2399
	10	4	8	5	13.0722	1	1	12	5.063	- 9	4	57.56	4		9011	314	F3	2400
	10	4	8	5	17.0722	1	1	14	22.693	- 4	24	20.69	4		9011	314	F4	2401
	10	4	8	5	21.0722	1	1	16	39.734	- 3	43	35.68	4		9011	314	F5	2402
	10	4	8	5	25.0721	1	1	18	56.930	- 3	2	29.12	4		9011	314	F6	2403
	10	4	8	5	29.0721	1	1	21	13.140	- 2	21	18.31	4		9011	314	F7	2404
	10	4	8	7	5.0723	1	2	14	1.373	14	19	2.99	4		9011	315	F1	2405
	10	4	8	7	9.0724	1	2	16	7.749	14	59	10.61	4		9011	315	F2	3249
	10	4	8	7	13.0724	1	2	18	13.750	15	39	9.92	4		9011	315	F3	2407
	10	4	8	7	29.0725	1	2	24	28.795	17	37	10.77	4		9011	315	F6	2408
	10	4	8	7	29.0725	1	2	26	32.806	18	16	.81	4		9011	315	F7	2409
	10	4	12	26	56.7711	1	9	39	59.969	16	20	24.42	4		9113	7613	06	6429
	10	4	12	28	23.5713	1	10	32	58.508	25	54	20.92	4		9113	7614	04	5857
	10	4	15	59	5.0747	1	8	21	45.962	-75	2	38.25	4		9023	A317	F1	6143
	10	4	15	59	9.0747	1	8	17	12.257	-74	29	10.32	4		9023	A317	F2	4060
	10	4	15	59	13.0746	1	8	12	55.555	-73	55	5.30	4		9023	A317	F3	4061
	10	4	15	59	17.0746	1	8	8	56.761	-73	20	22.77	4		9023	A317	F4	6134
	10	4	15	59	21.0746	1	8	5	13.962	-72	45	6.02	4		9023	A317	F5	4063
	10	4	15	59	25.0746	1	8	1	44.077	-72	9	20.33	4		9023	A317	F6	4064
	10	4	15	59	29.0745	1	7	58	28.197	-71	33	2.41	4		9023	A317	F7	4065
	10	4	16	1	5.0741	1	7	17	34.749	-55	20	50.46	4		9023	A318	F1	609
	10	4	16	1	9.0741	1	7	16	45.880	-54	37	37.96	4		9023	A318	F2	610
	10	4	16	1	13.0741	1	7	15	59.314	-53	54	20.58	4		9023	A318	F3	611
	10	4	16	1	17.0741	1	7	15	15.082	-53	10	55.39	4		9023	A318	F4	612
	10	4	16	1	21.0741	1	7	14	33.056	-52	27	28.38	4		9023	A318	F5	613
	10	4	16	1	25.0741	1	7	13	52.990	-51	43	54.10	4		9023	A318	F6	614
	10	4	16	1	29.0741	1	7	13	15.243	-51	0	20.29	4		9023	A318	F7	615
	10	4	16	3	5.0744	1	7	4	58.465	-33	45	49.75	4		9023	A319	F1	616
	10	4	16	3	9.0744	1	7	4	50.282	-33	4	17.18	4		9023	A319	F2	2374
	10	4	16	3	13.0744	1	7	4	42.496	-32	23	.04	4		9023	A319	F3	617
	10	4	16	3	17.0744	1	7	4	35.529	-31	41	53.80	4		9023	A319	F4	618
	10	4	16	3	21.0745	1	7	4	29.152	-31	1	2.14	4		9023	A319	F5	2375
	10	4	16	3	25.0745	1	7	4	23.321	-30	20	20.87	4		9023	A319	F6	2376
	10	4	16	3	29.0745	1	7	4	18.293	-29	39	53.90	4		9023	A319	F7	2377
	10	4	18	2	5.0748	1	22	35	16.379	-44	6	9.23	4		9023	A330	F1	2417
	10	4	18	2	9.0748	1	22	37	56.109	-43	57	54.38	4		9023	A330	F2	2418
	10	4	18	2	13.0747	1	22	40	37.444	-43	49	12.03	4		9023	A330	F3	2419
	10	4	18	2	17.0746	1	22	43	19.925	-43	40	.81	4		9023	A330	F4	2420
	10	4	18	2	21.0746	1	22	46	3.806	-43	30	29.50	4		9023	A330	F5	2421
	10	4	18	2	25.0745	1	22	48	49.148	-43	20	24.85	4		9023	A330	F6	2422
	10	4	18	2	29.0744	1	22	51	35.798	-43	9	56.15	4		9023	A330	F7	2423
	10	4	18	4	5.0730	1	0	3	50.242	-36	5	34.60	4		9023	A331	F1	2424
	10	4	18	4	9.0730	1	0	7	1.061	-35	39	17.23	4		9023	A331	F2	2425
	10	4	18	4	13.0729	1	0	10	12.326	-35	12	15.35	4		9023	A331	F3	3174
	10	4	18	4	17.0729	1	0	13	23.950	-34	44	25.36	4		9023	A331	F4	2426
	10	4	18	4	21.0728	1	0	16	35.820	-34	15	45.39	4		9023	A331	F5	2427
	10	4	18	4	25.0728	1	0	19	48.204	-33	46	18.34	4		9023	A331	F6	2428
	10	4	18	4	29.0727	1	0	23	.659	-33	16	1.22	4		9023	A331	F7	2429
	10	4	18	6	5.0720	1	1	39	1.410	-17	7	54.12	4		9023	A332	F1	23A5
	10	4	18	6	9.0720	1	1	42	3.702	-16	18	46.27	4		9023	A332	F2	23A6
	10	4	18	6	13.0720	1	1	45	5.495	-15	29	6.55	4		9023	A332	F3	23A7
	10	4	18	6	17.0720	1	1	48	6.093	-14	38	57.97	4		9023	A332	F4	23A8
	10	4	18	6	21.0719	1	1	51	5.638	-13	48	27.64	4		9023	A332	F5	23A9
	10	4	18	6	25.0719	1	1	54	4.472	-12	57	30.19	4		9023	A332	F6	2390
	10	4	18	6	29.0719	1	1	57	1.805	-12	6	9.54	4		9023	A332	F7	2391
	10	4	22	23	59.7429	1	8	42	26.524	- 9	44	50.47	4		9006	7323	02	5492
	10	4	22	24	3.7431	1	8	44	3.514	- 9	10	45.64	4		9006	7323	03	5493
	10	4	22	24	7.7428	1	8	45	40.535	- 8	36	50.57	4		9006	7323	04	5494
	10	4	22	24	11.7427	1	8	47	17.417	- 8	2	57.77	4		9006	7323	05	6398
	10	4	22	24	15.7433	1	8	48	54.769	- 7	29	4.57	4		9006	7323	06	6399
	10	4	22	24	19.7428	1	8	50	31.861	- 6	55	20.43	4		9006	7323	07	6400
	10	5	0	3	5.0748	1	5	11	48.315	-82	54	27.63	4		9002	6436	F1	9210
	10	5	0	3	9.0748	1	5	17	42.358	-82	18	13.58	4		9002	6436	F2	9211
	10	5	0	3	13.0747	1	5	22	50.405	-81	41	13.78	4		9002	6436	F3	9212
	10	5	0	3	17.0747	1	5	27	24.254	-81	3	38.92	4		9002	6436	F4	9349
	10	5	0	3	21.0746	1	5	31	27.180	-80	25	21.22	4		9002	6436	F5	9350
	10	5	0	3	25.0746	1	5	35	4.198	-79	46	29.08	4		9002	6436	F6	9214
	10	5	0	3	29.0745	1	5	38	19.428	-79	6	59.83	4		9002	6436	F7	9215
	10	5	0	5	5.0736	1	6	13	26.622	-60	39	11.64	4		9002	6437	F1	9216
	10	5	0	5	9.0736	1	6	16	18.074	-59	46	58.82	4		9002	6437	F2	9217
	10	5	0	5	13.0736	1	6	17	8.990	-58	54	24.97	4		9002	6437	F3	9218
	10	5	0	5	17.0736	1	6	17	58.451	-58	1	24.50	4		9002	6437	F4	9219
	10	5	0	5	21.0735	1	6	18	46.727	-57	8	1.16	4		9002	6437	F5	9220
	10	5	0	5	25.0735	1	6	19	33.657	-56	14	18.08	4		9002	6437	F6	9221
	10	5	0	5	29.0735	1	6	20	20.241	-55	20	11.47	4		9002	6437	F7	9222
	10	5	0	7	5.0734	1	6	35	49.202	-32	52	22.44	4		9002	6438	F1	8300
	10	5	0	7	9.0734	1	6	36	23.222	-31	56	34.31	4		9002	6438	F2	8815
	10	5	0	7	13.0735	1	6	36	57.282	-31	0	59.93	4		9002	6438	F3	8301
	10	5	0	7	17.0735	1	6	37	31.030	-30	5	38.50	4		9002	6438	F4	8302
	10	5	0	7	21.0735	1	6	38	4.470	-29	10	35.81	4		9002	6438	F5	8303

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DATE Y	M	D	TIME (A-1) M	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	10	5	0	7	25.0735	1	6	38	37.849	-28	15	50.96	4		9002	6438	F6	8304
	10	5	0	7	29.0735	1	6	39	10.979	-27	21	23.95	4		9002	6438	F7	8305
	10	5	0	9	5.0743	1	6	51	56.632	-	7	40 10.11	4		9002	6439	F1	8306
	10	5	0	9	9.0744	1	6	52	27.934	-	6	57 2.45	4		9002	6439	F2	8307
	10	5	0	9	13.0744	1	6	52	58.889	-	6	44 25.69	4		9002	6439	F3	8308
	10	5	0	9	17.0744	1	6	53	30.195	-	5	32 20.30	4		9002	6439	F4	8309
	10	5	0	9	21.0745	1	6	54	1.236	-	4	50 45.22	4		9002	6439	F5	8310
	10	5	0	9	25.0745	1	6	54	32.368	-	4	9 40.68	4		9002	6439	F6	8311
	10	5	0	9	29.0746	1	6	55	3.376	-	3	29 8.43	4		9002	6439	F7	8312
	10	5	2	7	5.0765	1	23	36	49.767	-23	50	39.88	4		9002	6450	F1	3214
	10	5	2	7	9.0764	1	23	38	34.563	-23	28	23.81	4		9002	6450	F2	3215
	10	5	2	7	13.0764	1	23	40	19.139	-23	5	46.03	4		9002	6450	F3	3216
	10	5	2	7	17.0763	1	23	42	4.283	-22	42	42.03	4		9002	6450	F4	3217
	10	5	2	7	21.0763	1	23	43	49.659	-22	19	16.72	4		9002	6450	F5	3218
	10	5	2	7	25.0762	1	23	45	35.180	-21	55	27.25	4		9002	6450	F6	3219
	10	5	2	7	29.0762	1	23	47	20.707	-21	31	12.48	4		9002	6450	F7	3220
	10	5	2	12	5.0750	1	1	50	33.208	19	13	14.07	4		9002	6451	F1	3221
	10	5	2	12	9.0750	1	1	52	18.237	19	52	33.97	4		9002	6451	F2	3222
	10	5	2	12	13.0750	1	1	54	3.489	20	31	39.31	4		9002	6451	F3	3223
	10	5	2	12	17.0750	1	1	55	48.292	21	10	35.13	4		9002	6451	F4	3224
	10	5	2	12	21.0750	1	1	57	33.023	21	49	19.04	4		9002	6451	F5	3225
	10	5	2	12	25.0751	1	1	59	17.502	22	27	48.85	4		9002	6451	F6	3226
	10	5	2	12	29.0751	1	2	1	2.352	23	6	4.04	4		9002	6451	F7	3227
	10	5	2	21	42.6368	1	2	50	29.990	26	12	6.20	4		9028	889	06	5628
	10	5	2	21	46.6370	1	2	51	51.228	27	16	47.92	4		9028	889	07	5629
	10	5	2	21	50.6371	1	2	53	13.475	28	21	31.96	4		9028	889	08	5630
	10	5	2	21	54.6373	1	2	54	36.860	29	26	6.99	4		9028	889	09	5631
	10	5	2	21	58.6374	1	2	56	.724	30	30	29.58	4		9028	889	10	5632
	10	5	11	44	39.5048	1	13	49	52.776	-62	16	8.75	4		9023	8353	03	5477
	10	5	11	44	47.5044	1	13	46	1.447	-62	52	17.01	4		9023	8353	04	5478
	10	5	11	45	3.5044	1	13	37	40.071	-64	3	12.52	4		9023	8353	06	5479
	10	5	11	45	11.5044	1	13	33	9.881	-64	37	57.36	4		9023	8353	07	6396
	10	5	11	45	19.5046	1	13	28	25.074	-65	11	59.27	4		9023	8353	08	6397
	10	5	14	24	22.3041	1	7	17	27.049	-11	42	11.48	4		9012	9002	02	5668
	10	5	14	24	26.3040	1	7	19	48.891	-10	47	8.02	4		9012	9002	03	5669
	10	5	14	24	30.3039	1	7	22	10.531	-	9	51 58.83	4		9012	9002	04	5670
	10	5	14	24	34.3038	1	7	24	32.731	-	8	56 35.45	4		9012	9002	05	5671
	10	5	14	24	38.3038	1	7	26	55.291	-	8	1 2.89	4		9012	9002	06	5672
	10	5	14	24	42.3037	1	7	29	17.743	-	7	5 23.48	4		9012	9002	07	5673
	10	5	14	24	46.3037	1	7	31	40.965	-	6	9 39.27	4		9012	9002	08	5674
	10	5	16	1	5.0784	1	16	41	15.471	-80	5	22.16	4		9023	A363	F1	2392
	10	5	16	1	9.0783	1	16	37	41.231	-80	31	54.79	4		9023	A363	F2	3175
	10	5	16	1	13.0782	1	16	33	38.503	-80	58	38.51	4		9023	A363	F3	2393
	10	5	16	1	17.0782	1	16	29	9.729	-8	25	20.43	4		9023	A363	F4	2394
	10	5	16	1	21.0781	1	16	24	3.792	-81	52	7.74	4		9023	A363	F5	2395
	10	5	16	1	25.0781	1	16	18	16.500	-82	18	53.79	4		9023	A363	F6	2396
	10	5	16	1	29.0780	1	16	11	41.097	-82	45	35.52	4		9023	A363	F7	2397
	10	5	16	3	5.0769	1	7	47	35.844	-82	2	18.74	4		9023	A364	F1	1713
	10	5	16	3	9.0768	1	7	40	36.463	-81	26	58.17	4		9023	A364	F2	1714
	10	5	16	3	13.0768	1	7	34	30.498	-80	50	51.26	4		9023	A364	F3	3176
	10	5	16	3	17.0768	1	7	29	8.355	-80	13	58.35	4		9023	A364	F4	1715
	10	5	16	3	21.0767	1	7	24	25.207	-79	36	26.74	4		9023	A364	F5	1716
	10	5	16	3	25.0767	1	7	20	12.047	-78	58	19.83	4		9023	A364	F6	1717
	10	5	16	3	29.0766	1	7	16	27.457	-78	19	36.66	4		9023	A364	F7	1718
	10	5	18	6	5.0781	1	22	31	32.994	-37	24	35.08	4		9023	A374	F1	1706
	10	5	18	6	9.0780	1	22	33	45.224	-37	13	16.61	4		9023	A374	F2	1707
	10	5	18	6	13.0780	1	22	35	58.354	-37	1	38.07	4		9023	A374	F3	1708
	10	5	18	6	17.0779	1	22	38	12.359	-36	49	38.08	4		9023	A374	F4	1709
	10	5	18	6	21.0779	1	22	40	26.932	-36	37	12.15	4		9023	A374	F5	1710
	10	5	18	6	25.0778	1	22	42	42.572	-36	24	21.81	4		9023	A374	F6	1711
	10	5	18	6	29.0777	1	22	44	58.888	-36	11	11.38	4		9023	A374	F7	1712
	10	5	18	8	5.0764	1	23	42	56.256	-28	33	28.60	4		9023	A375	F1	9365
	10	5	18	8	9.0763	1	23	45	27.926	-28	7	45.66	4		9023	A375	F2	9366
	10	5	18	8	13.0763	1	23	47	59.851	-27	41	23.46	4		9023	A375	F3	9367
	10	5	18	8	17.0763	1	23	50	31.947	-27	14	33.01	4		9023	A375	F4	9368
	10	5	18	8	21.0762	1	23	53	4.843	-26	47	3.96	4		9023	A375	F5	9369
	10	5	18	8	25.0762	1	23	55	37.681	-26	18	59.06	4		9023	A375	F6	9370
	10	5	18	8	29.0761	1	23	58	10.993	-25	50	15.09	4		9023	A375	F7	9371
	10	5	18	10	5.0754	1	0	59	50.793	-11	27	27.85	4		9023	A376	F1	9372
	10	5	18	10	9.0754	1	1	2	23.493	-10	45	5.44	4		9023	A376	F2	9373
	10	5	18	10	13.0753	1	1	4	55.739	-10	2	18.50	4		9023	A376	F3	9374
	10	5	18	10	17.0753	1	1	7	27.487	-	9	19 11.42	4		9023	A376	F4	9375
	10	5	18	10	21.0753	1	1	9	59.087	-	8	35 40.24	4		9023	A376	F5	9376
	10	5	18	10	25.0753	1	1	12	30.428	-	7	51 52.13	4		9023	A376	F6	9377
	10	5	18	10	29.0753	1	1	15	1.170	-	7	7 43.64	4		9023	A376	F7	9378
	10	5	18	12	5.0754	1	2	12	45.308	11	0	6.63	4		9023	A377	F1	A7A6
	10	5	18	12	9.0755	1	2	15	1.880	11	44	1.16	4		9023	A377	F2	A7A7
	10	5	18	12	13.0755	1	2	17	17.988	12	27	36.90	4		9023	A377	F3	A7A8
	10	5	18	12	17.0755	1	2	19	33.208	13	10	55.57	4		9023	A377	F4	A7A9
	10	5	18	12	21.0755	1	2	21	47.869	13	53	53.56	4		9023	A377	F5	A7A0

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	10	5	18	12	25.0756	1	2	24	1.832	14	36	31.70	4		9023	A377	F6	A701
	10	5	18	12	29.0756	1	2	24	15.068	14	18	51.40	4		9023	A377	F7	A702
	10	5	18	14	5.0766	1	3	16	5.380	30	6	34.38	4		9023	A378	F1	A703
	10	5	18	14	9.0766	1	3	18	1.455	30	37	59.55	4		9023	A378	F2	A704
	10	5	18	14	13.0767	1	3	19	57.196	31	8	56.83	4		9023	A378	F3	0352
	10	5	18	14	17.0768	1	3	21	52.121	31	39	28.03	4		9023	A378	F4	A705
	10	5	18	14	21.0768	1	3	23	46.474	32	9	29.28	4		9023	A378	F5	A706
	10	5	18	14	25.0769	1	3	25	40.080	32	39	11.35	4		9023	A378	F6	9063
	10	5	18	14	29.0769	1	3	27	33.105	33	8	26.94	4		9023	A378	F7	A707
	10	6	0	6	5.0781	1	21	30	4.290	-78	49	59.60	4		9002	6460	F1	3116
	10	6	0	6	9.0781	1	21	38	42.129	-79	5	34.64	4		9002	6460	F2	3117
	10	6	0	6	13.0780	1	21	47	51.319	-79	20	31.65	4		9002	6460	F3	3118
	10	6	0	6	17.0779	1	21	57	34.281	-79	34	40.74	4		9002	6460	F4	3119
	10	6	0	6	21.0779	1	22	7	49.041	-79	47	48.77	4		9002	6460	F5	3120
	10	6	0	6	25.0778	1	22	18	38.367	-80	0	.98	4		9002	6460	F6	3121
	10	6	0	6	29.0777	1	22	30	2.112	-80	11	2.42	4		9002	6460	F7	3122
	10	6	0	12	5.0754	1	6	0	52.762	-19	3	41.12	4		9002	6461	F1	3716
	10	6	0	12	9.0755	1	6	1	55.114	-18	4	56.35	4		9002	6461	F2	3717
	10	6	0	12	13.0755	1	6	2	56.606	-17	6	49.68	4		9002	6461	F3	3718
	10	6	0	12	17.0755	1	6	3	57.552	-16	9	13.31	4		9002	6461	F4	3719
	10	6	0	12	21.0756	1	6	4	57.402	-15	12	13.43	4		9002	6461	F5	3720
	10	6	0	12	25.0756	1	6	5	56.781	-14	15	52.56	4		9002	6461	F6	3721
	10	6	0	12	29.0756	1	6	6	55.513	-13	20	7.22	4		9002	6461	F7	3722
	10	6	0	14	5.0767	1	6	27	50.265	5	37	4.00	4		9002	6462	F1	3123
	10	6	0	14	9.0768	1	6	28	37.938	6	16	19.44	4		9002	6462	F2	3124
	10	6	0	14	13.0769	1	6	29	25.255	6	54	55.96	4		9002	6462	F3	3523
	10	6	0	14	17.0769	1	6	30	12.865	7	32	55.45	4		9002	6462	F4	3125
	10	6	0	14	21.0770	1	6	30	59.413	8	10	19.85	4		9002	6462	F5	3522
	10	6	0	14	25.0770	1	6	31	46.342	8	47	12.73	4		9002	6462	F6	3126
	10	6	0	14	29.0771	1	6	32	33.014	9	23	26.11	4		9002	6462	F7	3127
	10	6	2	14	5.0787	1	0	36	44.417	1	46	20.41	4		9002	6467	F1	3257
	10	6	2	14	9.0786	1	0	38	13.989	2	19	54.29	4		9002	6467	F2	3258
	10	6	2	14	13.0786	1	0	39	43.316	2	53	37.61	4		9002	6467	F3	4078
	10	6	2	14	17.0786	1	0	41	13.259	3	27	31.48	4		9002	6467	F4	3260
	10	6	2	14	21.0786	1	0	42	42.902	4	1	33.39	4		9002	6467	F5	4079
	10	6	2	14	25.0786	1	0	44	12.409	4	35	44.49	4		9002	6467	F6	3261
	10	6	2	14	29.0786	1	0	45	41.701	5	10	5.98	4		9002	6467	F7	4080
	10	6	2	24	35.9668	1	1	49	59.624	10	33	8.95	4		9028	911	04	5633
	10	6	2	24	39.9668	1	1	50	44.066	11	23	2.61	4		9028	911	05	5634
	10	6	2	24	43.9668	1	1	51	28.537	12	13	15.57	4		9028	911	06	5635
	10	6	2	24	47.9668	1	1	52	13.156	13	3	48.24	4		9028	911	07	5636
	10	6	2	24	51.9667	1	1	52	57.631	13	54	48.90	4		9028	911	08	6401
	10	6	2	24	55.9668	1	1	53	42.140	14	46	12.81	4		9028	911	09	6402
	10	6	4	1	30.7987	1	8	57	48.807	-68	2	57.10	4		9011	324	03	6116
	10	6	4	1	38.7980	1	8	50	27.126	-67	20	2.68	4		9011	324	04	6117
	10	6	4	1	46.7978	1	8	43	31.053	-66	35	23.16	4		9011	324	05	6118
	10	6	4	1	54.7984	1	8	37	.142	-65	49	16.20	4		9011	324	06	6119
	10	6	4	2	2.7982	1	8	30	53.513	-65	1	42.10	4		9011	324	07	6120
	10	6	6	6	5.0777	1	22	21	15.674	-75	34	54.67	4		9011	327	F1	2410
	10	6	6	6	9.0776	1	22	30	42.693	-75	43	38.48	4		9011	327	F2	2411
	10	6	6	6	13.0776	1	22	40	30.420	-75	51	5.89	4		9011	327	F3	2412
	10	6	6	6	17.0775	1	22	50	35.670	-75	57	14.54	4		9011	327	F4	2413
	10	6	6	6	21.0774	1	23	0	56.768	-76	1	53.45	4		9011	327	F5	2414
	10	6	6	6	25.0774	1	23	11	34.415	-76	4	58.78	4		9011	327	F6	2415
	10	6	6	6	29.0773	1	23	22	24.437	-76	6	23.75	4		9011	327	F7	2416
	10	6	6	8	5.0762	1	3	7	57.950	-66	59	23.34	4		9011	328	F1	3839
	10	6	6	8	9.0761	1	3	13	51.238	-66	14	54.41	4		9011	328	F2	4082
	10	6	6	8	13.0761	1	3	19	28.287	-65	29	6.03	4		9011	328	F3	3840
	10	6	6	8	17.0760	1	3	24	50.750	-64	41	58.86	4		9011	328	F4	3841
	10	6	6	8	21.0760	1	3	29	59.535	-63	53	37.18	4		9011	328	F5	3842
	10	6	6	8	25.0760	1	3	34	55.358	-63	4	5.62	4		9011	328	F6	3843
	10	6	6	8	29.0759	1	3	39	37.988	-62	13	28.81	4		9011	328	F7	3844
	10	6	6	10	5.0756	1	4	51	59.221	-38	6	48.92	4		9011	329	F1	3845
	10	6	6	10	9.0756	1	4	53	56.345	-37	1	55.96	4		9011	329	F2	3846
	10	6	6	10	13.0756	1	4	55	50.775	-35	57	6.98	4		9011	329	F3	3847
	10	6	6	10	17.0756	1	4	57	41.890	-34	52	20.26	4		9011	329	F4	3848
	10	6	6	10	21.0756	1	4	59	30.232	-33	47	41.87	4		9011	329	F5	3849
	10	6	6	10	25.0756	1	5	1	16.298	-32	43	15.72	4		9011	329	F6	3850
	10	6	6	10	29.0757	1	5	2	59.530	-31	39	.81	4		9011	329	F7	3851
	10	6	6	12	5.0764	1	5	35	16.602	- 8	23	28.23	4		9011	330	F1	29A1
	10	6	6	12	9.0764	1	5	36	21.489	- 7	33	29.62	4		9011	330	F2	29A2
	10	6	6	12	13.0765	1	5	37	25.620	- 6	44	11.48	4		9011	330	F3	29A3
	10	6	6	12	17.0765	1	5	38	28.966	- 5	55	39.33	4		9011	330	F4	29A4
	10	6	6	12	21.0766	1	5	39	31.200	- 5	7	48.71	4		9011	330	F5	29A5
	10	6	6	12	25.0766	1	5	40	32.871	- 4	20	42.44	4		9011	330	F6	29A6
	10	6	6	12	29.0767	1	5	41	33.859	- 3	34	14.94	4		9011	330	F7	29A7
	10	6	8	14	5.0794	1	0	49	7.262	7	36	59.84	4		9011	340	F1	29A8
	10	6	8	14	9.0794	1	0	50	44.015	8	9	26.05	4		9011	340	F2	29A9
	10	6	8	14	13.0794	1	0	52	20.265	8	42	2.08	4		9011	340	F3	2990
	10	6	8	14	17.0794	1	0	53	56.779	9	14	33.30	4		9011	340	F4	2991

October 6-7, 1966

DATE Y	M	D	TIME (A-1) M	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (KM)	STATION	FRAME NO.		OBS.NO.
1966	10	6	8	14	21.0794	1	0	55	32.997	9	47	12.09	4		9011	340	F5	2992
	10	6	8	14	25.0794	1	0	57	8.986	10	19	53.40	4		9011	340	F6	2993
	10	6	8	14	29.0794	1	0	58	44.595	10	52	33.27	4		9011	340	F7	2994
	10	6	12	31	9.7049	1	5	50	35.245	-16	55	37.43	4		9113	7703	05	9652
	10	6	12	33	20.7874	1	7	20	30.097	9	57	17.82	4		9113	7704	05	9653
	10	6	12	36	56.2016	1	10	37	14.682	42	9	16.05	4		9113	7705	05	9654
	10	6	16	5	5.0809	1	18	14	44.341	-75	48	22.69	4		9023	8403	F1	8927
	10	6	16	5	9.0808	1	18	16	4.535	-76	14	7.76	4		9023	8403	F2	8928
	10	6	16	5	13.0808	1	18	17	29.164	-76	40	8.16	4		9023	8403	F3	8929
	10	6	16	5	17.0807	1	18	19	.838	-77	6	24.71	4		9023	8403	F4	8930
	10	6	16	5	21.0806	1	18	20	36.591	-77	33	3.03	4		9023	8403	F5	8044
	10	6	16	5	25.0806	1	18	22	20.101	-77	59	51.37	4		9023	8403	F6	8931
	10	6	16	5	29.0805	1	18	24	11.724	-78	27	2.38	4		9023	8403	F7	8932
	10	6	16	7	5.0792	1	2	16	34.733	-87	26	39.32	4		9023	8404	F1	8933
	10	6	16	7	9.0791	1	2	55	44.999	-87	1	49.37	4		9023	8404	F2	8934
	10	6	16	7	13.0791	1	3	25	8.083	-86	32	46.09	4		9023	8404	F3	8935
	10	6	16	7	17.0790	1	3	47	19.641	-86	0	46.97	4		9023	8404	F4	8936
	10	6	16	7	21.0790	1	4	4	26.443	-85	26	48.77	4		9023	8404	F5	8937
	10	6	16	7	25.0789	1	4	17	57.114	-84	51	14.42	4		9023	8404	F6	8938
	10	6	16	7	29.0789	1	4	28	48.714	-84	14	23.34	4		9023	8404	F7	8939
	10	6	16	9	5.0780	1	5	40	34.515	-66	13	8.15	4		9023	8405	F1	8992
	10	6	16	9	9.0780	1	5	41	36.825	-65	21	51.79	4		9023	8405	F2	8993
	10	6	16	9	13.0779	1	5	42	36.219	-64	30	13.34	4		9023	8405	F3	8994
	10	6	16	9	17.0779	1	5	43	33.909	-63	38	9.83	4		9023	8405	F4	8995
	10	6	16	9	21.0779	1	5	44	29.953	-62	45	44.36	4		9023	8405	F5	8996
	10	6	16	9	25.0779	1	5	45	23.581	-61	52	55.76	4		9023	8405	F6	8997
	10	6	16	9	29.0779	1	5	46	15.376	-60	59	49.51	4		9023	8405	F7	8998
	10	6	16	11	5.0777	1	6	2	6.865	-38	51	25.67	4		9023	8406	F1	8999
	10	6	16	11	9.0778	1	6	2	39.553	-37	56	10.81	4		9023	8406	F2	9000
	10	6	16	11	13.0778	1	6	3	12.030	-37	1	9.12	4		9023	8406	F3	9001
	10	6	16	11	17.0778	1	6	3	43.909	-36	6	15.33	4		9023	8406	F4	9002
	10	6	16	11	21.0778	1	6	4	15.690	-35	11	38.79	4		9023	8406	F5	9003
	10	6	16	11	25.0778	1	6	4	47.045	-34	17	14.93	4		9023	8406	F6	9004
	10	6	16	11	29.0778	1	6	5	18.227	-33	23	11.13	4		9023	8406	F7	9005
	10	6	16	13	5.0786	1	6	16	58.535	-13	41	20.72	4		9023	8407	F1	2653
	10	6	16	13	9.0786	1	6	17	26.408	-12	57	50.86	4		9023	8407	F2	2654
	10	6	16	13	17.0787	1	6	18	22.081	-11	32	23.95	4		9023	8407	F4	2656
	10	6	16	13	13.0787	1	6	17	54.227	-12	14	53.63	4		9023	8407	F3	2655
	10	6	16	13	21.0788	1	6	18	49.816	-10	50	24.19	4		9023	8407	F5	2657
	10	6	16	13	25.0788	1	6	19	17.487	-10	8	54.26	4		9023	8407	F6	2658
	10	6	16	13	29.0788	1	6	19	45.249	- 9	27	53.30	4		9023	8407	F7	2659
	10	6	18	12	5.0799	1	23	28	34.603	-22	30	39.11	4		9023	8417	F1	2660
	10	6	18	12	9.0798	1	23	30	39.102	-22	5	53.11	4		9023	8417	F2	2661
	10	6	18	12	13.0798	1	23	32	43.946	-21	40	40.64	4		9023	8417	F3	2662
	10	6	18	12	17.0798	1	23	34	48.918	-21	15	5.83	4		9023	8417	F4	2663
	10	6	18	12	21.0797	1	23	36	54.263	-20	49	1.35	4		9023	8417	F5	2664
	10	6	18	12	25.0797	1	23	38	59.674	-20	22	27.98	4		9023	8417	F6	2665
	10	6	18	12	29.0796	1	23	41	5.207	-19	55	29.92	4		9023	8417	F7	2666
	10	6	18	14	5.0789	1	0	31	48.843	- 7	2	13.06	4		9023	8418	F1	9148
	10	6	18	14	9.0789	1	0	33	55.433	- 6	25	20.67	4		9023	8418	F2	9149
	10	6	18	14	13.0789	1	0	36	1.955	- 5	48	11.49	4		9023	8418	F3	9150
	10	6	18	14	17.0789	1	0	38	8.420	- 5	10	44.02	4		9023	8418	F4	9151
	10	6	18	14	21.0789	1	0	40	14.902	- 4	33	3.16	4		9023	8418	F5	9152
	10	6	18	14	25.0788	1	0	42	20.991	- 3	55	4.96	4		9023	8418	F6	9153
	10	6	18	14	29.0788	1	0	44	26.997	- 3	16	53.03	4		9023	8418	F7	9154
	10	6	18	16	5.0789	1	1	33	45.917	12	33	24.83	4		9023	8419	F1	9155
	10	6	18	16	9.0789	1	1	35	45.610	13	12	40.67	4		9023	8419	F2	9156
	10	6	18	16	13.0789	1	1	37	44.961	13	51	47.19	4		9023	8419	F3	9157
	10	6	18	16	17.0789	1	1	39	44.057	14	30	48.49	4		9023	8419	F4	9158
	10	6	18	16	21.0790	1	1	41	42.750	15	9	31.31	4		9023	8419	F5	9159
	10	6	18	16	25.0790	1	1	43	41.162	15	48	9.45	4		9023	8419	F6	9160
	10	6	18	16	29.0790	1	1	45	39.010	16	26	31.97	4		9023	8419	F7	9161
	10	6	18	18	5.0798	1	2	31	1.476	30	25	38.27	4		9023	8420	F1	9020
	10	6	18	18	9.0799	1	2	32	50.252	30	56	36.40	4		9023	8420	F2	9021
	10	6	18	18	13.0799	1	2	34	38.612	31	27	15.44	4		9023	8420	F3	9022
	10	6	18	18	17.0799	1	2	36	26.806	31	57	33.07	4		9023	8420	F4	9023
	10	6	18	18	21.0800	1	2	38	14.577	32	27	32.57	4		9023	8420	F5	9024
	10	6	18	18	25.0800	1	2	40	1.880	32	57	10.13	4		9023	8420	F6	9025
	10	6	18	18	29.0801	1	2	41	48.775	33	26	26.89	4		9023	8420	F7	9026
	10	6	23	43	5.0846	1	14	46	53.491	-41	37	23.00	4		9011	348	F1	3155
	10	6	23	43	9.0845	1	14	46	38.477	-42	0	53.90	4		9011	348	F2	3156
	10	6	23	43	13.0845	1	14	46	23.419	-42	24	30.56	4		9011	348	F3	3157
	10	6	23	43	17.0845	1	14	46	7.936	-42	48	11.17	4		9011	348	F4	3158
	10	6	23	43	21.0845	1	14	45	51.510	-43	11	55.10	4		9011	348	F5	3159
	10	6	23	43	25.0845	1	14	45	34.154	-43	35	40.85	4		9011	348	F6	3160
	10	6	23	43	29.0844	1	14	45	16.631	-43	59	33.54	4		9011	348	F7	3229
	10	7	0	11	5.0797	1	23	0	27.558	-71	56	14.76	4		9002	6490	F1	3263
	10	7	0	11	9.0797	1	23	7	41.147	-71	57	20.57	4		9002	6490	F2	3264
	10	7	0	11	13.0796	1	23	15	3.074	-71	57	27.59	4		9002	6490	F3	3265
	10	7	0	11	17.0795	1	23	22	31.473	-71	56	30.08	4		9002	6490	F4	3266

October 7, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	10	7	0	11	21.0795	1	23	30	6.100	-71	54	33.95	4		9002	6490	F5	3267
	10	7	0	11	25.0794	1	23	37	46.778	-71	51	29.19	4		9002	6490	F6	3268
	10	7	0	11	29.0793	1	23	45	31.371	-71	47	13.75	4		9002	6490	F7	3269
	10	7	0	13	5.0780	1	2	37	39.684	-63	4	32.40	4		9002	6491	F1	578
	10	7	0	13	9.0780	1	2	43	.202	-62	24	16.83	4		9002	6491	F2	579
	10	7	0	13	13.0779	1	2	48	37.538	-61	42	39.05	4		9002	6491	F3	580
	10	7	0	13	17.0779	1	2	53	52.158	-60	59	40.83	4		9002	6491	F4	581
	10	7	0	13	21.0778	1	2	58	56.140	-60	16	17.41	4		9002	6491	F5	582
	10	7	0	13	25.0778	1	3	3	55.491	-59	29	31.41	4		9002	6491	F6	583
	10	7	0	13	29.0777	1	3	8	43.792	-58	42	28.58	4		9002	6491	F7	584
	10	7	0	27	34.5566	1	8	5	1.359	5	51	10.38	4		9028	925	03	5637
	10	7	0	27	38.5567	1	8	6	33.378	6	36	17.25	4		9028	925	04	5638
	10	7	0	27	42.5567	1	8	8	5.062	7	20	55.88	4		9028	925	05	5639
	10	7	0	27	46.5568	1	8	9	36.942	8	5	4.31	4		9028	925	06	5640
	10	7	0	27	50.5569	1	8	11	8.543	8	48	37.07	4		9028	925	07	5641
	10	7	0	27	54.5570	1	8	12	39.970	9	31	35.72	4		9028	925	08	5642
	10	7	2	27	6.7086	1	1	11	14.200	-	2	32	52.28	4		9028	933	04	5646
	10	7	2	27	10.7086	1	1	11	47.205	-	1	58	22.32	4		9028	933	05	5647
	10	7	2	27	14.7086	1	1	12	19.871	-	1	23	32.95	4		9028	933	06	5648
	10	7	2	27	18.7088	1	1	12	52.619	-	0	48	23.88	4		9028	933	07	5649
	10	7	2	27	22.7087	1	1	13	25.173	-	0	12	49.12	4		9028	933	08	5650
	10	7	2	27	26.7086	1	1	13	57.204		0	23	2.87	4		9028	933	09	5651
	10	7	4	4	32.9483	1	10	52	10.125	-75	17	19.61	4		9011	362	03	6121
	10	7	4	4	36.9482	1	10	44	55.592	-75	10	23.84	4		9011	362	04	6122
	10	7	4	4	40.9480	1	10	37	43.999	-75	2	33.39	4		9011	362	05	6123
	10	7	4	4	44.9479	1	10	30	39.713	-74	53	45.22	4		9011	362	06	6124
	10	7	4	4	48.9477	1	10	23	41.213	-74	44	.13	4		9011	362	07	6125
	10	7	4	7	5.0827	1	7	54	22.665	-62	26	1.43	4		9011	363	F1	3161
	10	7	4	7	9.0827	1	7	52	7.408	-61	56	44.75	4		9011	363	F2	3162
	10	7	4	7	13.0827	1	7	49	56.738	-61	27	19.71	4		9011	363	F3	3163
	10	7	4	7	17.0827	1	7	47	50.686	-60	57	36.65	4		9011	363	F4	3164
	10	7	4	7	21.0827	1	7	45	48.893	-60	27	45.77	4		9011	363	F5	3165
	10	7	4	7	25.0827	1	7	43	51.806	-59	57	41.29	4		9011	363	F6	3166
	10	7	4	7	29.0827	1	7	41	57.731	-59	27	25.50	4		9011	363	F7	3167
	10	7	6	11	5.0794	1	23	32	21.232	-66	31	43.37	4		9011	367	F1	3323
	10	7	6	11	9.0794	1	23	39	21.533	-66	23	27.69	4		9011	367	F2	3324
	10	7	6	11	13.0793	1	23	46	23.457	-66	13	51.89	4		9011	367	F3	3325
	10	7	6	11	17.0793	1	23	53	27.125	-66	2	52.64	4		9011	367	F4	3326
	10	7	6	11	25.0792	1	0	7	35.938	-65	38	50.69	4		9011	367	F6	3328
	10	7	6	11	29.0791	1	0	14	40.512	-65	21	36.47	4		9011	367	F7	3329
	10	7	6	14	5.0778	1	3	36	25.647	-36	49	4.63	4		9011	368	F1	4072
	10	7	6	14	9.0778	1	3	39	30.661	-35	44	8.53	4		9011	368	F2	3331
	10	7	6	14	13.0778	1	3	42	30.959	-34	38	56.41	4		9011	368	F3	3332
	10	7	6	14	17.0778	1	3	45	26.885	-33	33	24.52	4		9011	368	F4	3333
	10	7	6	14	21.0778	1	3	48	18.527	-32	27	40.15	4		9011	368	F5	3334
	10	7	6	14	25.0778	1	3	51	6.002	-31	21	44.92	4		9011	368	F6	4073
	10	7	6	14	29.0778	1	3	53	49.853	-30	15	44.39	4		9011	368	F7	3336
	10	7	6	17	5.0792	1	5	6	43.457	6	30	55.70	4		9011	369	F1	4074
	10	7	6	17	9.0792	1	5	8	3.010	7	12	58.09	4		9011	369	F2	4075
	10	7	6	17	13.0793	1	5	9	21.818	7	54	16.78	4		9011	369	F3	4076
	10	7	6	17	17.0793	1	5	10	39.697	8	34	53.17	4		9011	369	F4	3727
	10	7	6	17	21.0794	1	5	11	56.412	9	14	47.10	4		9011	369	F5	3728
	10	7	6	17	25.0795	1	5	13	12.185	9	54	1.86	4		9011	369	F6	3729
	10	7	6	17	29.0795	1	5	14	27.533	10	32	31.97	4		9011	369	F7	3730
	10	7	9	51	5.0853	1	7	37	35.594	-81	37	37.07	4		9023	8429	F1	9065
	10	7	9	51	9.0853	1	7	28	39.161	-81	23	48.36	4		9023	8429	F2	9028
	10	7	9	51	13.0854	1	7	20	11.695	-81	9	22.25	4		9023	8429	F3	9029
	10	7	9	51	17.0854	1	7	12	13.666	-80	54	12.36	4		9023	8429	F4	9030
	10	7	9	51	21.0854	1	7	4	45.336	-80	38	30.97	4		9023	8429	F5	9031
	10	7	9	51	25.0855	1	6	57	44.974	-80	22	15.12	4		9023	8429	F6	9032
	10	7	9	51	29.0855	1	6	51	8.963	-80	5	31.22	4		9023	8429	F7	9033
	10	7	12	40	37.3632	1	10	1	37.405	50	13	42.26	4		9113	9076	06	5665
	10	7	14	33	26.6891	1	5	48	25.035	14	56	9.27	4		9012	9025	02	5675
	10	7	14	33	28.6919	1	5	50	2.038	15	33	22.69	4		9012	9025	03	6928
	10	7	14	33	30.6920	1	5	51	39.407	16	10	32.72	4		9012	9025	04	6929
	10	7	14	33	32.6919	1	5	53	17.373	16	47	35.40	4		9012	9025	05	5676
	10	7	14	33	34.6919	1	5	54	56.015	17	24	31.95	4		9012	9025	06	6473
	10	7	14	33	36.6919	1	5	56	35.030	18	1	24.03	4		9012	9025	07	5677
	10	7	16	11	5.0816	1	22	2	57.381	-80	27	35.91	4		9023	8453	F1	7862
	10	7	16	11	9.0815	1	22	16	42.252	-80	38	52.14	4		9023	8453	F2	7863
	10	7	16	11	13.0815	1	22	31	8.239	-80	48	19.85	4		9023	8453	F3	7864
	10	7	16	11	17.0814	1	22	46	14.575	-80	55	37.60	4		9023	8453	F4	7865
	10	7	16	11	21.0814	1	23	1	54.030	-81	0	46.63	4		9023	8453	F5	7866
	10	7	16	11	25.0813	1	23	18	.279	-81	3	24.91	4		9023	8453	F6	7867
	10	7	16	11	29.0813	1	23	34	25.756	-81	3	31.61	4		9023	8453	F7	8693
	10	7	16	13	5.0801	1	3	52	30.421	-69	39	26.12	4		9023	8454	F1	7868
	10	7	16	13	9.0801	1	3	57	7.644	-68	51	50.34	4		9023	8454	F2	7869
	10	7	16	13	13.0801	1	4	1	29.361	-68	3	19.03	4		9023	8454	F3	7870
	10	7	16	13	17.0800	1	4	5	37.407	-67	13	52.71	4		9023	8454	F4	7871
	10	7	16	13	21.0800	1	4	9	32.230	-66	23	30.13	4		9023	8454	F5	7872

October 7-8, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	10	7	16	13	25.0800	1	4	13	15.063	-65	32	18.83	4		9023	8454	F6	7A73
	10	7	16	13	29.0799	1	4	16	46.356	-64	40	20.54	4		9023	8454	F7	8802
	10	7	16	15	5.0796	1	5	9	46.046	-41	9	29.95	4		9023	8455	F1	8233
	10	7	16	15	9.0796	1	5	10	28.527	-40	7	33.24	4		9023	8455	F2	8234
	10	7	16	15	13.0796	1	5	11	50.796	-39	5	39.30	4		9023	8455	F3	8235
	10	7	16	15	17.0796	1	5	13	11.357	-38	5	51.70	4		9023	8455	F4	8236
	10	7	16	15	21.0796	1	5	14	29.911	-37	2	8.75	4		9023	8455	F5	8237
	10	7	16	15	25.0796	1	5	15	46.730	-36	0	36.80	4		9023	8455	F6	8238
	10	7	16	15	29.0797	1	5	17	1.818	-34	59	14.60	4		9023	8455	F7	8239
	10	7	16	17	5.0803	1	5	41	9.388	-12	29	17.62	4		9023	8456	F1	8240
	10	7	16	17	9.0804	1	5	41	59.476	-11	40	.28	4		9023	8456	F2	8241
	10	7	16	17	13.0804	1	5	42	49.246	-10	51	21.40	4		9023	8456	F3	8242
	10	7	16	17	17.0804	1	5	43	38.344	-10	3	17.74	4		9023	8456	F4	8243
	10	7	16	17	21.0805	1	5	44	26.953	- 9	15	54.27	4		9023	8456	F5	8244
	10	7	16	17	25.0805	1	5	45	15.013	- 8	29	6.87	4		9023	8456	F6	8245
	10	7	16	17	29.0806	1	5	46	2.785	- 7	42	58.06	4		9023	8456	F7	8246
	10	7	18	17	5.0829	1	23	44	40.317	-11	15	49.48	4		9023	8468	F1	8375
	10	7	18	17	9.0829	1	23	46	26.861	-10	47	28.98	4		9023	8468	F2	8376
	10	7	18	17	13.0829	1	23	48	13.653	-10	18	51.33	4		9023	8468	F3	8377
	10	7	18	17	17.0828	1	23	50	.163	- 9	49	54.04	4		9023	8468	F4	8378
	10	7	18	17	21.0828	1	23	51	46.644	- 9	20	37.17	4		9023	8468	F5	8379
	10	7	18	17	25.0828	1	23	53	33.391	- 8	51	5.18	4		9023	8468	F6	83A0
	10	7	18	17	29.0828	1	23	55	20.031	- 8	21	16.21	4		9023	8468	F7	83A1
	10	7	18	19	5.0824	1	0	37	46.737		4	44	55.24	4		9023	8469	F1	83A2
	10	7	18	19	9.0824	1	0	39	31.643		5	19	45.46	4		9023	8469	F2	83A3
	10	7	18	19	13.0824	1	0	41	16.394		5	54	37.04	4		9023	8469	F3	83A4
	10	7	18	19	17.0824	1	0	43	1.370		6	29	35.19	4		9023	8469	F4	83A5
	10	7	18	19	21.0824	1	0	44	45.859		7	4	34.52	4		9023	8469	F5	83A6
	10	7	18	19	25.0824	1	0	46	30.294		7	39	38.68	4		9023	8469	F6	83A7
	10	7	18	19	29.0824	1	0	48	14.444		8	14	47.12	4		9023	8469	F7	8803
	10	7	18	21	5.0827	1	1	29	6.435	22		4	16.77	4		9023	8470	F1	8421
	10	7	18	21	9.0828	1	1	30	46.112	22	37	18.26	4		9023	8470	F2	8422
	10	7	18	21	13.0828	1	1	32	25.654	23	10	12.46	4		9023	8470	F3	8423
	10	7	18	21	17.0828	1	1	34	4.990	23	42	53.04	4		9023	8470	F4	8424
	10	7	18	21	21.0829	1	1	35	44.452	24	15	25.05	4		9023	8470	F5	8425
	10	7	18	21	25.0829	1	1	37	23.288	24	47	38.21	4		9023	8470	F6	8426
	10	7	18	21	29.0829	1	1	39	1.850	25	19	45.75	4		9023	8470	F7	8427
	10	7	23	51	5.0870	1	13	53	6.239	-62	21	.23	4		9011	391	F1	3731
	10	7	23	51	9.0870	1	13	51	34.913	-62	43	47.25	4		9011	391	F2	3732
	10	7	23	51	13.0870	1	13	50	.596	-63	6	33.86	4		9011	391	F3	3733
	10	7	23	51	17.0870	1	13	48	22.507	-63	29	10.35	4		9011	391	F4	3734
	10	7	23	51	25.0870	1	13	44	58.977	-64	14	11.65	4		9011	391	F6	6123
	10	7	23	51	29.0870	1	13	43	11.969	-64	36	34.99	4		9011	391	F7	3736
	10	6	0	15	5.0825	1	22	29	29.501	-62	24	25.11	4		9002	6513	F1	5A5
	10	8	0	15	9.0824	1	22	33	57.950	-62	23	2.32	4		9002	6513	F2	5A6
	10	8	0	15	13.0824	1	22	38	29.505	-62	21	5.82	4		9002	6513	F3	5A7
	10	8	0	15	17.0823	1	22	43	4.996	-62	18	31.86	4		9002	6513	F4	5A8
	10	8	0	15	21.0822	1	22	47	44.184	-62	15	21.53	4		9002	6513	F5	5A9
	10	8	0	15	25.0822	1	22	52	27.007	-62	11	33.01	4		9002	6513	F6	590
	10	8	0	15	29.0821	1	22	57	13.300	-62	7	1.82	4		9002	6513	F7	591
	10	8	0	17	5.0806	1	1	0	9.710	-55	45	43.65	4		9002	6514	F1	9223
	10	8	0	17	9.0806	1	1	5	12.867	-55	15	37.64	4		9002	6514	F2	9224
	10	8	0	17	13.0805	1	1	10	13.419	-54	44	8.75	4		9002	6514	F3	9225
	10	8	0	17	17.0805	1	1	15	11.842	-54	11	22.65	4		9002	6514	F4	9226
	10	8	0	17	21.0804	1	1	20	7.202	-53	37	13.95	4		9002	6514	F5	9227
	10	8	0	17	25.0804	1	1	24	59.870	-53	1	44.83	4		9002	6514	F6	9228
	10	8	0	19	5.0796	1	3	7	18.775	-31	13	19.43	4		9002	6515	F1	9229
	10	8	0	19	9.0796	1	3	10	36.018	-30	7	17.10	4		9002	6515	F2	9230
	10	8	0	19	13.0795	1	3	13	49.593	-29	0	44.16	4		9002	6515	F3	1143
	10	8	0	19	17.0795	1	3	16	59.643	-27	53	25.10	4		9002	6515	F4	9231
	10	8	0	19	21.0795	1	3	20	6.711	-26	45	54.22	4		9002	6515	F5	9232
	10	8	0	19	25.0795	1	3	23	10.367	-25	37	50.64	4		9002	6515	F6	9233
	10	8	0	19	29.0795	1	3	26	10.997	-24	29	27.30	4		9002	6515	F7	9234
	10	8	0	21	5.0800	1	4	25	17.505		1	44	56.18	4		9002	6516	F1	2430
	10	8	0	21	9.0801	1	4	27	18.714		2	42	29.74	4		9002	6516	F2	2431
	10	8	0	21	13.0801	1	4	29	18.498		3	39	5.63	4		9002	6516	F3	2432
	10	8	0	21	17.0801	1	4	31	16.487		4	34	48.25	4		9002	6516	F4	2433
	10	8	0	21	21.0802	1	4	33	13.209		5	29	36.53	4		9002	6516	F5	3172
	10	8	0	21	25.0802	1	4	35	8.190		6	23	31.28	4		9002	6516	F6	2434
	10	8	0	21	29.0803	1	4	37	1.562		7	16	32.31	4		9002	6516	F7	2435
	10	8	9	55	5.0881	1	9	25	9.648	-80	13	31.65	4		9023	8475	F1	8655
	10	8	9	55	9.0881	1	9	15	38.545	-80	11	4.98	4		9023	8475	F2	8656
	10	8	9	55	13.0881	1	9	6	14.599	-80	7	44.32	4		9023	8475	F3	8657
	10	8	9	55	17.0881	1	8	56	59.855	-80	3	17.30	4		9023	8475	F4	9059
	10	8	9	55	21.0882	1	8	47	55.719	-79	57	54.41	4		9023	8475	F5	8659
	10	8	9	55	25.0882	1	8	39	5.230	-79	51	35.54	4		9023	8475	F6	8660
	10	8	9	55	29.0882	1	8	30	27.049	-79	44	27.46	4		9023	8475	F7	8661
	10	8	10	37	5.0831	1	7	3	14.599	-19	27	14.73	4		9001	4153	F1	7733
	10	8	10	37	9.0831	1	7	5	21.316	-18	49	15.02	4		9001	4153	F2	7734
	10	8	10	37	13.0831	1	7	7	28.543	-18	10	59.74	4		9001	4153	F3	8331

October 8-9, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	10	8	10	37	17.0831	1	7	9	36.439	-17	32	29.01	4		9001	4153	F4	7736
	10	8	10	37	21.0830	1	7	11	44.882	-16	53	58.48	4		9001	4153	F5	7737
	10	8	10	37	25.0830	1	7	13	53.474	-16	14	31.47	4		9001	4153	F6	8392
	10	8	10	37	29.0830	1	7	16	2.782	-15	35	13.72	4		9001	4153	F7	8393
	10	8	10	39	5.0828	1	8	9	47.297		0	45	53.57	4		9001	4154	F1	8688
	10	8	10	39	9.0828	1	8	12	5.748		1	26	21.25	4		9001	4154	F2	7741
	10	8	10	39	13.0828	1	8	14	24.354		2	6	34.90	4		9001	4154	F3	7742
	10	8	10	39	17.0828	1	8	16	43.064		2	46	40.33	4		9001	4154	F4	7743
	10	8	10	39	21.0828	1	8	19	2.189		3	26	30.59	4		9001	4154	F5	7744
	10	8	10	39	25.0828	1	8	21	21.202		4	6	2.47	4		9001	4154	F6	7745
	10	8	10	39	29.0828	1	8	23	40.567		4	45	22.41	4		9001	4154	F7	7746
	10	8	10	41	5.0835	1	9	19	27.777	18	34	8.37	4		9001	4155	F1	7849
	10	8	10	41	9.0835	1	9	21	45.617	19	2	58.28	4		9001	4155	F2	7850
	10	8	10	41	13.0836	1	9	24	3.411	19	31	14.73	4		9001	4155	F3	7851
	10	8	10	41	17.0836	1	9	26	20.749	19	59	5.56	4		9001	4155	F4	7852
	10	8	10	41	21.0837	1	9	28	37.501	20	26	21.33	4		9001	4155	F5	7853
	10	8	10	41	25.0837	1	9	30	54.295	20	53	13.17	4		9001	4155	F6	7854
	10	8	10	41	29.0838	1	9	33	10.334	21	19	29.68	4		9001	4155	F7	7855
	10	8	12	39	59.6933	1	4	24	57.408	-	0	29	27.18	4		9113	7833	06	5656
	10	8	14	38	22.6442	1	5	4	12.459		38	2	12.95	4		9012	9048	02	5678
	10	8	14	38	24.6459	1	5	5	58.590		38	37	46.47	4		9012	9048	03	5679
	10	8	14	38	26.6459	1	5	7	46.288		39	13	10.94	4		9012	9048	04	56A0
	10	8	14	38	28.6460	1	5	9	35.062		39	48	19.17	4		9012	9048	05	56A1
	10	8	14	38	30.6460	1	5	11	24.899		40	23	4.01	4		9012	9048	06	56A2
	10	8	14	38	32.6460	1	5	13	16.235		40	57	34.50	4		9012	9048	07	56A3
	10	8	14	38	34.6460	1	5	15	8.471		41	31	43.94	4		9012	9048	08	56A4
	10	8	16	14	5.0852	1	20	16	42.028	-68	15	21.06	4		9023	8497	F1	8642
	10	8	16	14	9.0851	1	20	20	40.319	-68	30	35.32	4		9023	8497	F2	8643
	10	8	16	14	13.0851	1	20	24	46.098	-68	45	45.98	4		9023	8497	F3	8644
	10	8	16	14	17.0850	1	20	29	1.621	-69	0	43.73	4		9023	8497	F4	8645
	10	8	16	14	21.0849	1	20	33	26.496	-69	15	34.94	4		9023	8497	F5	8646
	10	8	16	14	25.0849	1	20	38	.460	-69	30	10.18	4		9023	8497	F6	8647
	10	8	16	14	29.0848	1	20	42	43.985	-69	44	30.76	4		9023	8497	F7	9040
	10	8	16	16	5.0833	1	23	34	12.631	-72	23	3.21	4		9023	8498	F1	8759
	10	8	16	16	9.0832	1	23	43	14.324	-72	15	35.78	4		9023	8498	F2	8760
	10	8	16	16	13.0832	1	23	52	16.774	-72	6	29.77	4		9023	8498	F3	8761
	10	8	16	16	17.0831	1	0	1	17.979	-71	55	43.35	4		9023	8498	F4	8762
	10	8	16	16	21.0831	1	0	10	17.314	-71	43	12.28	4		9023	8498	F5	9041
	10	8	16	16	25.0830	1	0	19	12.149	-71	29	.95	4		9023	8498	F6	8763
	10	8	16	16	29.0830	1	0	28	2.313	-71	13	3.33	4		9023	8498	F7	8764
	10	8	16	18	5.0819	1	3	6	2.609	-56	38	52.16	4		9023	8499	F1	8765
	10	8	16	18	9.0819	1	3	10	18.528	-55	45	7.41	4		9023	8499	F2	8766
	10	8	16	18	13.0819	1	3	14	25.884	-54	50	19.04	4		9023	8499	F3	8767
	10	8	16	18	17.0819	1	3	18	25.034	-53	54	32.39	4		9023	8499	F4	8768
	10	8	16	18	21.0818	1	3	22	15.795	-52	57	48.73	4		9023	8499	F5	8769
	10	8	16	18	29.0818	1	3	29	35.79	-51	1	34.56	4		9023	8499	F7	8771
	10	8	16	21	5.0822	1	4	54	33.679	-10	28	25.89	4		9023	8500	F1	8968
	10	8	16	21	9.0823	1	4	55	56.185	-	9	33	49.51	4		9023	8500	F2	8969
	10	8	16	21	13.0823	1	4	57	17.358	-	8	39	55.66	4		9023	8500	F3	8970
	10	8	16	21	17.0823	1	4	58	37.356	-	7	46	51.90	4		9023	8500	F4	8971
	10	8	16	21	21.0824	1	4	59	56.008	-	6	54	29.24	4		9023	8500	F5	8972
	10	8	16	21	25.0824	1	5	1	13.593	-	6	2	55.97	4		9023	8500	F6	8973
	10	8	16	21	29.0825	1	5	2	29.794	-	5	12	3.76	4		9023	8500	F7	8974
	10	8	22	18	17.0866	1	7	5	28.475	-47	28	57.79	4		9002	6567	F4	8537
	10	8	22	18	21.0866	1	7	4	48.896	-46	53	5.62	4		9002	6567	F5	8538
	10	8	22	18	25.0866	1	7	4	10.746	-46	17	2.23	4		9002	6567	F6	8539
	10	8	22	18	29.0866	1	7	3	34.230	-45	41	3.29	4		9002	6567	F7	8540
	10	9	0	21	5.0836	1	0	1	45.808	-45	59	43.42	4		9002	6553	F1	2436
	10	9	0	21	9.0835	1	0	5	34.221	-45	32	45.75	4		9002	6553	F2	2437
	10	9	0	21	13.0834	1	0	9	22.708	-45	4	44.15	4		9002	6553	F3	2438
	10	9	0	21	17.0834	1	0	13	11.212	-44	35	40.88	4		9002	6553	F4	2439
	10	9	0	21	21.0833	1	0	16	59.667	-44	5	36.49	4		9002	6553	F5	2440
	10	9	0	21	25.0833	1	0	20	47.892	-43	34	30.80	4		9002	6553	F6	2441
	10	9	0	21	29.0832	1	0	24	35.865	-43	2	20.25	4		9002	6553	F7	2442
	10	9	0	23	5.0824	1	1	51	13.942	-24	41	27.80	4		9002	6554	F1	3088
	10	9	0	23	9.0824	1	1	54	32.717	-23	43	5.66	4		9002	6554	F2	3089
	10	9	0	23	13.0823	1	1	57	49.874	-22	44	1.90	4		9002	6554	F3	3090
	10	9	0	23	17.0823	1	2	1	4.985	-21	44	14.15	4		9002	6554	F4	3091
	10	9	0	23	21.0823	1	2	4	18.579	-20	43	48.01	4		9002	6554	F5	3092
	10	9	0	23	25.0823	1	2	7	30.343	-19	42	48.10	4		9002	6554	F6	3093
	10	9	0	23	29.0823	1	2	10	40.193	-18	41	15.24	4		9002	6554	F7	3094
	10	9	0	25	5.0826	1	3	17	35.690		6	5	40.77	4		9002	6555	F1	3095
	10	9	0	25	9.0826	1	3	20	1.673		7	2	25.88	4		9002	6555	F2	3096
	10	9	0	25	13.0827	1	3	22	25.880		7	58	27.63	4		9002	6555	F3	3097
	10	9	0	25	17.0827	1	3	24	48.977		8	53	43.22	4		9002	6555	F4	3098
	10	9	0	25	21.0827	1	3	27	10.469		9	48	10.94	4		9002	6555	F5	3099
	10	9	0	25	25.0828	1	3	29	30.447		10	41	53.63	4		9002	6555	F6	3100
	10	9	0	25	29.0828	1	3	31	49.010		11	34	44.49	4		9002	6555	F7	3101
	10	9	4	12	40.9598	1	13	29	9.690	-79	13	47.61	4		9011	420	03	6126
	10	9	4	12	44.9594	1	13	20	25.628	-79	27	34.92	4		9011	420	04	6127

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	10	9	4	12	48.9592	1	13	11	13.950	-79	40	24.41	4		9011	420	05	7682
	10	9	4	12	52.9591	1	13	1	34.769	-79	52	18.47	4		9011	420	06	7683
	10	9	4	12	56.9590	1	12	51	26.983	-80	3	6.77	4		9011	420	07	7684
	10	9	4	15	5.0867	1	7	49	38.868	-72	57	48.01	4		9011	421	F1	3710
	10	9	4	15	9.0867	1	7	45	26.331	-72	26	35.39	4		9011	421	F2	3711
	10	9	4	15	13.0867	1	7	41	27.872	-71	54	53.61	4		9011	421	F3	3712
	10	9	4	15	17.0867	1	7	37	42.433	-71	22	38.14	4		9011	421	F4	3713
	10	9	4	15	21.0866	1	7	34	10.136	-70	49	53.98	4		9011	421	F5	3714
	10	9	4	15	25.0866	1	7	30	48.432	-70	16	39.07	4		9011	421	F6	3715
	10	9	4	15	29.0866	1	7	27	37.489	-69	43	1.19	4		9011	421	F7	3716
	10	9	6	22	5.0833	1	1	15	9.293	-25	20	47.11	4		9011	428	F1	3717
	10	9	6	22	5.0860	1	3	44	36.399	-78	4	43.06	4		9007	7576	F1	1184
	10	9	6	22	9.0833	1	1	18	34.187	-24	29	55.66	4		9011	428	F2	3718
	10	9	6	22	9.0859	1	3	50	46.831	-77	35	29.48	4		9007	7576	F2	9169
	10	9	6	22	13.0833	1	1	21	57.215	-23	38	21.37	4		9011	428	F3	3719
	10	9	6	22	13.0859	1	3	56	35.678	-77	5	28.86	4		9007	7576	F3	9170
	10	9	6	22	17.0833	1	1	25	18.784	-22	46	9.19	4		9011	428	F4	3720
	10	9	6	22	17.0858	1	4	2	3.858	-76	34	35.06	4		9007	7576	F4	9171
	10	9	6	22	21.0833	1	1	28	38.460	-21	53	19.55	4		9011	428	F5	3721
	10	9	6	22	21.0857	1	4	7	13.394	-76	2	56.20	4		9007	7576	F5	9172
	10	9	6	22	25.0832	1	1	31	56.304	-20	59	54.12	4		9011	428	F6	3722
	10	9	6	22	25.0857	1	4	12	6.329	-75	30	28.83	4		9007	7576	F6	9173
	10	9	6	22	29.0832	1	1	35	12.213	-20	5	57.91	4		9011	428	F7	3723
	10	9	6	22	29.0856	1	4	16	43.229	-74	57	19.98	4		9007	7576	F7	9174
	10	9	6	24	5.0835	1	2	44	15.582	2	5	3.33	4		9011	429	F1	1147
	10	9	6	24	5.0845	1	5	23	7.017	-58	11	46.44	4		9007	7577	F1	9175
	10	9	6	24	9.0835	1	2	46	45.212	2	57	21.67	4		9011	429	F2	1148
	10	9	6	24	9.0845	1	5	24	51.625	-57	21	42.22	4		9007	7577	F2	9176
	10	9	6	24	13.0835	1	2	49	13.373	3	49	6.05	4		9011	429	F3	1149
	10	9	6	24	13.0844	1	5	26	33.268	-56	31	.92	4		9007	7577	F3	9177
	10	9	6	24	17.0836	1	2	51	39.705	4	40	15.77	4		9011	429	F4	1150
	10	9	6	24	17.0844	1	5	28	12.709	-55	39	44.71	4		9007	7577	F4	9178
	10	9	6	24	21.0836	1	2	54	4.546	5	30	51.72	4		9011	429	F5	2339
	10	9	6	24	25.0837	1	2	56	27.417	6	20	49.47	4		9011	429	F6	1151
	10	9	6	24	25.0843	1	5	31	23.756	-53	55	25.81	4		9007	7577	F6	9179
	10	9	6	24	29.0837	1	2	58	48.527	7	10	11.90	4		9011	429	F7	1152
	10	9	6	24	29.0843	1	5	32	56.312	-53	2	26.66	4		9007	7577	F7	9180
	10	9	6	26	5.0840	1	6	2	37.096	-29	53	24.71	4		9007	7578	F1	8940
	10	9	6	26	5.0849	1	3	48	15.579	23	37	18.56	4		9011	430	F1	1153
	10	9	6	26	9.0840	1	6	3	39.092	-28	53	25.05	4		9007	7578	F2	8941
	10	9	6	26	9.0849	1	3	50	3.839	24	10	30.87	4		9011	430	F2	1154
	10	9	6	26	13.0840	1	6	4	40.515	-27	53	29.44	4		9007	7578	F3	8942
	10	9	6	26	13.0850	1	3	51	51.182	24	43	11.45	4		9011	430	F3	1155
	10	9	6	26	17.0840	1	6	5	41.210	-26	53	39.07	4		9007	7578	F4	8943
	10	9	6	26	17.0851	1	3	53	37.574	25	15	17.35	4		9011	430	F4	1156
	10	9	6	26	21.0840	1	6	6	41.385	-25	53	56.70	4		9007	7578	F5	8944
	10	9	6	26	21.0851	1	3	55	22.859	25	46	47.22	4		9011	430	F5	1157
	10	9	6	26	25.0840	1	6	7	41.038	-24	54	26.14	4		9007	7578	F6	8945
	10	9	6	26	25.0852	1	3	57	7.132	26	17	49.37	4		9011	430	F6	1158
	10	9	6	26	29.0840	1	6	8	40.091	-23	55	5.87	4		9007	7578	F7	8946
	10	9	6	26	29.0853	1	3	58	50.449	26	48	18.48	4		9011	430	F7	1159
	10	9	9	54	5.0908	1	14	8	8.236	-52	49	3.30	4		9023	8519	F1	8428
	10	9	9	54	9.0908	1	14	7	28.432	-53	12	39.59	4		9023	8519	F2	8429
	10	9	9	54	13.0908	1	14	6	47.070	-53	36	19.59	4		9023	8519	F3	8430
	10	9	9	54	17.0907	1	14	6	4.362	-53	59	59.87			9023	8519	F4	8431
	10	9	9	54	21.0907	1	14	5	20.683	-54	23	42.27	4		9023	8519	F5	8432
	10	9	9	54	25.0907	1	14	4	35.287	-54	47	22.50	4		9023	8519	F6	8810
	10	9	9	54	29.0907	1	14	3	49.164	-55	11	5.22	4		9023	8519	F7	8434
	10	9	9	57	5.0906	1	13	2	44.276	-70	4	28.27	4		9023	8520	F1	8975
	10	9	9	57	9.0906	1	12	59	51.069	-70	25	8.77	4		9023	8520	F2	2357
	10	9	9	57	13.0906	1	12	56	51.992	-70	45	33.13	4		9023	8520	F3	9338
	10	9	9	57	17.0906	1	12	53	45.257	-71	5	39.24	4		9023	8520	F4	8977
	10	9	9	57	21.0906	1	12	50	31.242	-71	25	34.62	4		9023	8520	F5	8978
	10	9	9	57	25.0906	1	12	47	10.045	-71	45	14.96	4		9023	8520	F6	9339
	10	9	9	57	29.0906	1	12	43	42.750	-72	4	37.33	4		9023	8520	F7	9076
	10	9	9	59	5.0909	1	10	33	[illegible].450	-77	35	58.85	4		9023	8521	F1	9270
	10	9	9	59	9.0909	1	10	26	4.506	-77	41	50.79	4		9023	8521	F2	9271
	10	9	9	59	13.0909	1	10	18	36.354	-77	46	48.51	4		9023	8521	F3	9272
	10	9	9	59	17.0909	1	10	11	2.713	-77	50	57.95	4		9023	8521	F4	9273
	10	9	9	59	21.0909	1	10	3	26.009	-77	54	19.02	4		9023	8521	F5	9274
	10	9	9	59	25.0910	1	9	55	46.564	-77	56	48.28	4		9023	8521	F6	9275
	10	9	9	59	29.0910	1	9	48	5.156	-77	58	21.87	4		9023	8521	F7	9276
	10	9	10	43	5.0844	1	7	37	30.297	4	21	31.82	4		9001	4186	F1	7856
	10	9	10	43	9.0844	1	7	40	15.979	5	8	45.63	4		9001	4186	F2	7857
	10	9	10	43	13.0844	1	7	43	2.396	5	55	41.63	4		9001	4186	F3	7858
	10	9	10	43	17.0844	1	7	45	49.201	6	42	24.08	4		9001	4186	F4	7859
	10	9	10	43	21.0844	1	7	48	36.563	7	28	46.48	4		9001	4186	F5	7860
	10	9	10	43	25.0845	1	7	51	24.397	8	14	52.56	4		9001	4186	F6	8334
	10	9	10	43	29.0845	1	7	54	12.706	9	0	34.05	4		9001	4186	F7	7861
	10	9	12	45	30.6071	1	4	9	5.062	25	31	31.79	4		9113	7914	05	5657

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (KM)	STATION	FRAME NO.		OBS.NO.
1966	10	9	14	15	5.0891	1	8	39	52.489	-71	54	51.45	4		9023	8540	F1	40A1
	10	9	14	15	9.0891	1	8	35	3.931	-71	33	6.20	4		9023	8540	F2	1141
	10	9	14	15	13.0891	1	8	30	26.388	-71	10	45.89	4		9023	8540	F3	927A
	10	9	14	15	17.0891	1	8	25	58.367	-70	47	55.97	4		9023	8540	F4	9279
	10	9	14	15	21.0890	1	8	21	40.659	-70	24	22.94	4		9023	8540	F5	92A0
	10	9	14	15	25.0890	1	8	17	32.116	-70	0	27.75	4		9023	8540	F6	92A1
	10	9	14	15	29.0890	1	8	13	33.979	-69	35	51.84	4		9023	8540	F7	92A2
	10	9	14	17	5.0887	1	7	11	59.512	-58	0	56.10	4		9023	8541	F1	792
	10	9	14	17	9.0887	1	7	10	25.848	-57	29	2.30	4		9023	8541	F2	2399
	10	9	14	17	13.0887	1	7	8	54.896	-56	56	57.83	4		9023	8541	F3	793
	10	9	14	17	17.0887	1	7	7	26.882	-56	24	46.65	4		9023	8541	F4	794
	10	9	14	17	21.0887	1	7	6	2.546	-55	52	27.80	4		9023	8541	F5	795
	10	9	14	17	25.0887	1	7	4	40.582	-55	20	.12	4		9023	8541	F6	796
	10	9	14	17	29.0887	1	7	3	21.544	-54	47	27.53	4		9023	8541	F7	797
	10	9	16	20	5.0860	1	22	39	19.556	-63	5	45.15	4		9023	8546	F1	798
	10	9	16	20	9.0859	1	22	44	59.425	-63	0	52.57	4		9023	8546	F2	799
	10	9	16	20	13.0859	1	22	50	42.785	-62	55	4.74	4		9023	8546	F3	7A0
	10	9	16	20	17.0858	1	22	56	29.638	-62	48	16.19	4		9023	8546	F4	23A0
	10	9	16	20	21.0858	1	23	2	19.264	-62	40	26.98	4		9023	8546	F5	7A2
	10	9	16	20	25.0857	1	23	8	11.870	-62	31	36.92	4		9023	8546	F6	23A1
	10	9	16	20	29.0856	1	23	14	6.895	-62	21	42.20	4		9023	8546	F7	23A2
	10	9	16	22	5.0845	1	1	30	56.709	-51	53	49.83	4		9023	8547	F1	9341
	10	9	16	22	9.0844	1	1	35	52.505	-51	10	12.57	4		9023	8547	F2	9121
	10	9	16	22	13.0844	1	1	40	42.733	-50	25	12.26	4		9023	8547	F3	9122
	10	9	16	22	17.0844	1	1	45	27.455	-49	38	52.64	4		9023	8547	F4	9123
	10	9	16	22	21.0843	1	1	50	7.054	-48	51	15.28	4		9023	8547	F5	9124
	10	9	16	22	25.0843	1	1	54	41.101	-48	2	16.99	4		9023	8547	F6	9125
	10	9	16	22	29.0843	1	1	59	9.384	-47	12	7.51	4		9023	8547	F7	1142
	10	9	16	24	5.0840	1	3	22	33.206	-22	55	27.74	4		9023	8548	F1	9127
	10	9	16	24	9.0841	1	3	25	11.643	-21	50	29.64	4		9023	8548	F2	9128
	10	9	16	24	13.0841	1	3	27	46.996	-20	45	43.39	4		9023	8548	F3	9129
	10	9	16	24	17.0841	1	3	30	19.191	-19	41	16.83	4		9023	8548	F4	9130
	10	9	16	24	21.0841	1	3	32	48.812	-18	37	5.14	4		9023	8548	F5	9131
	10	9	16	24	25.0841	1	3	35	15.299	-17	33	14.77	4		9023	8548	F6	9132
	10	9	16	24	29.0841	1	3	37	38.861	-16	29	45.64	4		9023	8548	F7	9133
	10	9	16	26	5.0851	1	4	24	12.894	5	36	55.30	4		9023	8549	F1	32A1
	10	9	16	26	9.0851	1	4	25	48.445	6	22	33.70	4		9023	8549	F2	40A3
	10	9	16	26	13.0852	1	4	27	22.350	7	7	23.74	4		9023	8549	F3	32A3
	10	9	16	26	17.0852	1	4	28	55.345	7	51	27.03	4		9023	8549	F4	40A4
	10	9	16	26	21.0853	1	4	30	27.128	8	34	45.79	4		9023	8549	F5	40A5
	10	9	16	26	25.0853	1	4	31	57.669	9	17	19.07	4		9023	8549	F6	32A6
	10	9	16	26	29.0854	1	4	33	27.142	9	59	10.01	4		9023	8549	F7	32A7
	10	9	22	19	5.0895	1	8	52	23.671	-78	46	45.15	4		9002	6580	F1	30A1
	10	9	22	19	9.0895	1	8	44	59.712	-78	24	48.04	4		9002	6580	F2	30A2
	10	9	22	19	13.0894	1	8	38	2.165	-78	1	58.14	4		9002	6580	F3	30A3
	10	9	22	19	17.0894	1	8	31	27.375	-77	38	10.95	4		9002	6580	F4	30A4
	10	9	22	19	21.0893	1	8	25	15.301	-77	13	37.58	4		9002	6580	F5	30A5
	10	9	22	19	25.0893	1	8	19	24.343	-76	48	14.93	4		9002	6580	F6	30A6
	10	9	22	19	29.0893	1	8	13	55.168	-76	22	15.43	4		9002	6580	F7	30A7
	10	9	22	21	5.0885	1	7	3	50.304	-63	26	12.70	4		9002	6581	F1	30A8
	10	9	22	21	9.0885	1	7	2	24.578	-62	49	18.17	4		9002	6581	F2	30A9
	10	9	22	21	13.0885	1	7	1	2.850	-62	12	10.72	4		9002	6581	F3	3070
	10	9	22	21	17.0884	1	6	59	45.149	-61	34	46.76	4		9002	6581	F4	3071
	10	9	22	21	21.0884	1	6	58	30.899	-60	57	6.75	4		9002	6581	F5	3072
	10	9	22	21	25.0884	1	6	57	20.204	-60	19	11.61	4		9002	6581	F6	3073
	10	9	22	21	29.0884	1	6	56	12.281	-59	41	6.37	4		9002	6581	F7	3074
	10	9	22	23	5.0882	1	6	40	21.203	-43	40	47.52	4		9002	6582	F1	3574
	10	9	22	23	9.0882	1	6	40	.714	-42	59	50.75	4		9002	6582	F2	3048
	10	9	22	23	13.0882	1	6	39	41.338	-42	18	55.13	4		9002	6582	F3	3049
	10	9	22	23	17.0882	1	6	39	23.226	-41	38	5.17	4		9002	6582	F4	3050
	10	9	22	23	21.0882	1		39	6.031	-40	57	10.90	4		9002	6582	F5	3051
	10	9	22	23	25.0882	1	6	38	49.964	-40	16	21.83	4		9002	6582	F6	3052
	10	9	22	23	29.0882	1	6	38	34.776	-39	35	33.40	4		9002	6582	F7	3053
	10	9	22	25	5.0887	1	6	36	6.169	-23	49	54.50	4		9002	6583	F1	3054
	10	9	22	25	9.0887	1	6	36	6.816	-23	12	31.87	4		9002	6583	F2	3055
	10	9	22	25	13.0887	1	6	36	8.057	-22	35	28.87	4		9002	6583	F3	3056
	10	9	22	25	17.0888	1	6	36	10.055	-21	58	40.55	4		9002	6583	F4	3057
	10	9	22	25	21.0888	1	6	36	12.190	-21	21	56.24	4		9002	6583	F5	3058
	10	9	22	25	25.0888	1	6	36	14.886	-20	45	32.17	4		9002	6583	F6	3059
	10	9	22	25	29.0888	1	6	36	17.902	-20	9	19.39	4		9002	6583	F7	30A0

6508901

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.	OBS.NO.
1966	10	10	0	25	5.0868	1	23	27	15.336	-36	40	6.83	4		9002	6588 F1	3102
	10	10	0	25	9.0867	1	23	30	7.729	-36	13	26.45	4		9002	6588 F2	3103
	10	10	0	25	13.0867	1	23	33	.753	-35	45	58.73	4		9002	6588 F3	3104
	10	10	0	25	17.0866	1	23	35	53.995	-35	17	44.57	4		9002	6588 F4	3105
	10	10	0	25	21.0865	1	23	38	47.717	-34	48	45.73	4		9002	6588 F5	3106
	10	10	0	25	25.0865	1	23	41	41.794	-34	19	2.33	4		9002	6588 F6	3107
	10	10	0	25	29.0864	1	23	44	35.762	-33	48	28.22	4		9002	6588 F7	3108
	10	10	0	27	5.0855	1	0	54	9.173	-17	31	6.21	4		9002	6589 F1	3109
	10	10	0	27	9.0855	1	0	56	59.204	-16	40	53.00	4		9002	6589 F2	3110
	10	10	0	27	13.0855	1	0	59	48.937	-15	49	58.66	4		9002	6589 F3	3111
	10	10	0	27	17.0855	1	1	2	37.934	-14	58	27.95	4		9002	6589 F4	3112
	10	10	0	27	21.0855	1	1	5	26.239	-14	6	25.11	4		9002	6589 F5	3113
	10	10	0	27	25.0855	1	1	8	14.044	-13	13	49.83	4		9002	6589 F6	3114
	10	10	0	27	29.0854	1	1	11	1.148	-12	20	49.51	4		9002	6589 F7	3115
	10	10	0	29	5.0856	1	2	14	.796	9	40	1.74	4		9002	6590 F1	3247
	10	10	0	29	9.0856	1	2	16	27.374	10	32	45.38	4		9002	6590 F2	3248
	10	10	0	29	13.0856	1	2	18	53.293	11	25	2.10	4		9002	6590 F3	2995
	10	10	0	29	17.0856	1	2	21	18.288	12	16	48.14	4		9002	6590 F4	2996
	10	10	0	29	21.0857	1	2	23	42.406	13	8	4.07	4		9002	6590 F5	2997
	10	10	0	29	25.0857	1	2	26	5.560	13	58	46.58	4		9002	6590 F6	2998
	10	10	0	29	29.0857	1	2	28	27.839	14	48	55.88	4		9002	6590 F7	2999
	10	10	0	31	5.0868	1	3	21	7.927	31	42	53.76	4		9002	6591 F1	3000
	10	10	0	31	9.0869	1	3	23	9.578	32	17	13.42	4		9002	6591 F2	3001
	10	10	0	31	13.0869	1	3	25	10.970	32	50	57.25	4		9002	6591 F3	3002
	10	10	0	31	17.0870	1	3	27	11.414	33	24	3.45	4		9002	6591 F4	3003
	10	10	0	31	21.0871	1	3	29	10.997	33	56	37.76	4		9002	6591 F5	3004
	10	10	0	31	25.0871	1	3	31	9.751	34	28	36.54	4		9002	6591 F6	3005
	10	10	0	31	29.0872	1	3	33	8.298	35	0	2.67	4		9002	6591 F7	3006
	10	10	4	16	48.9632	1	15	12	46.247	-78	58	39.23	4		9011	467 04	5644
	10	10	4	18	5.0895	1	11	18	45.013	-84	14	24.97	4		9011	468 F1	7172
	10	10	4	18	9.0894	1	10	57	18.937	-84	12	10.81	4		9011	468 F2	3806
	10	10	4	18	13.0894	1	10	36	9.417	-84	6	47.50	4		9011	468 F3	3807
	10	10	4	18	17.0894	1	10	15	33.523	-83	58	21.63	4		9011	468 F4	3808
	10	10	4	18	21.0893	1	9	55	55.461	-83	47	2.71	4		9011	468 F5	3809
	10	10	4	18	25.0893	1	9	37	29.511	-83	32	54.98	4		9011	468 F6	3810
	10	10	4	18	29.0892	1	9	20	14.590	-83	16	13.26	4		9011	468 F7	3811
	10	10	4	22	5.0881	1	6	10	3.697	-48	40	22.22	4		9011	469 F1	3812
	10	10	4	22	9.0881	1	6	9	43.542	-47	55	11.10	4		9011	469 F2	3813
	10	10	4	22	13.0881	1	6	9	24.928	-47	1[illegible]	.91	4		9011	469 F3	3814
	10	10	4	22	17.0881	1	6	9	7.672	-46	24	51.14	4		9011	469 F4	3815
	10	10	4	22	21.0881	1	6	8	51.081	-45	39	46.15	4		9011	469 F5	3816
	10	10	4	22	25.0881	1	6	8	35.748	-44	54	43.35	4		9011	469 F6	3817
	10	10	4	22	29.0881	1	6	8	21.796	-44	9	41.97	4		9011	469 F7	3818
	10	10	6	25	5.0870	1	23	43	54.667	-28	16	42.47	4		9011	472 F1	6128
	10	10	6	25	9.0869	1	23	46	53.551	-27	42	46.90	4		9011	472 F2	6129
	10	10	6	25	13.0869	1	23	49	52.474	-27	8	7.80	4		9011	472 F3	3803
	10	10	6	25	17.0869	1	23	52	51.289	-26	32	51.05	4		9011	472 F4	6130
	10	10	6	25	21.0868	1	23	55	50.050	-25	56	48.03	4		9011	472 F5	3804
	10	10	6	25	25.0868	1	23	58	48.475	-25	19	59.74	4		9011	472 F6	3805
	10	10	6	25	29.0868	1	0	1	46.530	-24	42	31.43	4		9011	472 F7	4077
	10	10	6	28	5.0865	1	1	49	29.965	5	30	17.52	4		9011	473 F1	4000
	10	10	6	28	5.0866	1	3	39	17.527	-60	4	3.68	4		9007	7600 F1	8947
	10	10	6	28	9.0865	1	3	42	56.892	-59	18	7.59	4		9007	7600 F2	8948
	10	10	6	28	9.0866	1	1	51	57.348	6	18	6.65	4		9011	473 F2	4001
	10	10	6	28	13.0865	1	3	46	30.824	-58	31	9.86	4		9007	7600 F3	8949
	10	10	6	28	13.0866	1	1	54	23.804	7	5	33.92	4		9011	473 F3	4002
	10	10	6	28	17.[illegible]	1	3	49	59.027	-57	43	7.56	4		9007	7600 F4	8950
	10	10	6	28	17.0[illegible]	1	1	56	49.059	7	52	45.46	4		9011	473 F4	4003
	10	10	6	28	21.0864	1	3	53	21.641	-56	54	6.20	4		9007	7600 F5	8951
	10	10	6	28	21.0866	1	1	59	13.264	8	39	29.97	4		9011	473 F5	4004
	10	10	6	28	25.0864	1	3	56	38.930	-56	4	4.87	4		9007	7600 F6	8952
	10	10	6	28	25.0867	1	2	1	36.627	9	25	54.21	4		9011	473 F6	4005
	10	10	6	28	29.0863	1	3	59	51.794	-55	12	57.34	4		9007	7600 F7	8953
	10	10	6	30	5.0857	1	4	58	30.539	-30	37	37.00	4		9007	7601 F1	9006
	10	10	6	30	5.0877	1	2	55	47.138	26	6	41.65	4		9011	474 F1	3795
	10	10	6	30	9.0857	1	5	0	24.189	-29	29	16.23	4		9007	7601 F2	9007
	10	10	6	30	9.0878	1	2	57	45.004	26	39	53.68	4		9011	474 F2	3796
	10	10	6	30	13.0857	1	5	2	16.212	-28	20	50.19	4		9007	7601 F3	9008
	10	10	6	30	13.0878	1	2	59	41.729	27	12	42.48	4		9011	474 F3	3797
	10	10	6	30	17.0857	1	5	4	6.172	-27	12	16.50	4		9007	7601 F4	9009
	10	10	6	30	17.0879	1	3	1	37.780	27	45	1.10	4		9011	474 F4	3798
	10	10	6	30	21.0857	1	5	5	54.689	-26	3	38.73	4		9007	7601 F5	9010
	10	10	6	30	21.0879	1	3	3	32.773	28	16	45.31	4		9011	474 F5	3799
	10	10	6	30	25.0857	1	5	7	41.439	-24	55	.12	4		9007	7601 F6	9011
	10	10	6	30	25.0880	1	3	5	27.294	28	48	4.92	4		9011	474 F6	3800
	10	10	6	30	29.0858	1	5	9	26.341	-23	46	25.54	4		9007	7601 F7	9330
	10	10	6	30	29.0880	1	3	7	20.707	29	18	51.23	4		9011	474 F7	3801
	10	10	6	32	5.0863	1	5	45	29.895	1	32	27.37	4		9007	7602 F1	9013
	10	10	6	32	9.0864	1	5	46	48.808	2	27	7.91	4		9007	7602 F2	9014
	10	10	6	32	13.0864	1	5	48	7.179	3	21	4.30	4		9007	7602 F3	9015

October 10-11, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	10	10	6	32	17.0865	1	5	49	24.961	4	14	6.48	4		9007	7602	F4	9331
	10	10	6	32	21.0865	1	5	50	42.345	5	6	18.63	4		9007	7602	F5	9017
	10	10	6	32	25.0866	1	5	51	58.768	5	57	41.99	4		9007	7602	F6	9018
	10	10	6	32	29.0866	1	5	53	14.804	6	48	13.97	4		9007	7602	F7	9332
	10	10	10	43	5.0887	1	4	26	16.790	-33	32	41.37	4		9001	4212	F1	7196
	10	10	10	43	9.0887	1	4	28	4.163	-33	7	.52	4		9001	4212	F2	7197
	10	10	10	43	13.0886	1	4	29	53.156	-32	40	53.39	4		9001	4212	F3	7198
	10	10	10	43	17.0885	1	4	31	42.891	-32	14	16.03	4		9001	4212	F4	7199
	10	10	10	43	21.0885	1	4	33	33.745	-31	47	12.35	4		9001	4212	F5	7200
	10	10	10	43	25.0884	1	4	35	25.299	-31	19	39.25	4		9001	4212	F6	7201
	10	10	10	43	29.0883	3	4	37	18.268	-30	51	36.98	4		9001	4212	F7	7693
	10	10	10	45	5.0870	1	5	28	26.724	-16	41	55.36	4		9001	4213	F1	6102
	10	10	10	45	5.0936	1								1.6028460	7901			5473
	10	10	10	45	9.0869	1	5	30	51.623	-15	58	16.01	4		9001	4213	F2	7243
	10	10	10	45	13.0869	1	5	33	18.502	-15	13	55.60	4		9001	4213	F3	6103
	10	10	10	45	17.0869	1	5	35	46.539	-14	28	53.35	4		9001	4213	F4	6104
	10	10	10	45	21.0868	1	5	38	16.182	-13	43	10.04	4		9001	4213	F5	6105
	10	10	10	45	25.0868	1	5	40	47.568	-12	56	41.74	4		9001	4213	F6	7244
	10	10	10	45	29.0867	1	5	43	20.451	-12	9	36.78	4		9001	4213	F7	H033
	10	10	10	45	31.4946	1	7	27	22.577	-13	51	59.77	4		9113	7985	05	5458
	10	10	10	45	35.0934	1								1.5087290	7901			5474
	10	10	10	46	5.0917	1								1.4369330	7901			5475
	10	10	10	46	35.0942	1								1.3909330	7901			5476
	10	10	10	47	5.0862	1	6	52	47.705	9	7	3..30	4		9001	4214	F1	6107
	10	10	10	47	5.0935	1								1.3733090	7901			5477
	10	10	10	47	9.0862	1	6	56	1.903	10	3	.29	4		9001	4214	F2	7246
	10	10	10	47	13.0862	1	6	59	17.237	10	58	16.22	4		9001	4214	F3	6109
	10	10	10	47	17.0862	1	7	2	34.334	11	53	12.97	4		9001	4214	F4	7247
	10	10	10	47	21.0862	1	7	5	52.759	12	47	53.23	4		9001	4214	F5	7248
	10	10	10	47	25.0862	1	7	9	12.492	13	42	8.12	4		9001	4214	F6	6112
	10	10	10	47	29.0862	1	7	12	33.462	14	35	55.26	4		9001	4214	F7	8034
	10	10	10	47	35.0938	1								1.3850940	7901			5478
	10	10	10	48	5.0946	1								1.4254950	7901			5479
	10	10	10	48	21.6360	1	8	52	4.594	9	41	54.01	4		9113	7986	02	5813
	10	10	10	48	35.0951	1								1.4920940	7901			5480
	10	10	10	49	5.0869	1	8	37	19.590	32	24	30.58	4		9001	4215	F1	6522
	10	10	10	49	5.0940	1								1.5814560	7901			54A1
	10	10	10	49	9.0870	1	8	40	55.289	32	57	26.63	4		9001	4215	F2	6523
	10	10	10	49	13.0870	1	8	44	30.051	33	29	22.41	4		9001	4215	F3	6524
	10	10	10	49	17.0871	1	8	48	4.934	34	0	22.28	4		9001	4215	F4	6525
	10	10	10	49	21.0871	1	8	51	39.114	34	30	22.48	4		9001	4215	F5	6526
	10	10	10	49	25.0872	1	8	55	12.833	34	59	27.64	4		9001	4215	F6	6527
	10	10	10	49	29.0872	1	8	58	45.634	35	27	34.33	4		9001	4215	F7	7249
	10	10	10	49	35.0941	1								1.6898640	7901			54A2
	10	10	10	50	5.0943	1								1.8137910	7901			54A3
	10	10	22	25	5.0904	1	6	28	27.557	-69	39	12.06	4		9002	6624	F1	3365
	10	10	22	25	9.0904	1	6	27	13.689	-68	59	29.05	4		9002	6624	F2	3366
	10	10	22	25	13.0904	1	6	26	4.556	-68	19	21.54	4		9002	6624	F3	3367
	10	10	22	25	17.0903	1	6	25	.329	-67	38	57.97	4		9002	6624	F4	3368
	10	10	22	25	21.0903	1	6	23	59.952	-66	58	14.40	4		9002	6624	F5	3369
	10	10	22	25	25.0903	1	6	23	4.043	-66	17	10.98	4		9002	6624	F6	3370
	10	10	22	25	29.0902	1	6	22	11.480	-65	35	41.49	4		9002	6624	F7	3371
	10	10	22	29	9.0902	1	6	14	7.718	-24	7	45.71	4		9002	6626	F2	7275
	10	10	22	29	13.0902	1	6	14	18.145	-23	24	47.70	4		9002	6626	F3	7795
	10	10	22	29	17.0902	1	6	14	29.012	-22	42	9.50	4		9002	6626	F4	6852
	10	10	22	29	25.0903	1	6	14	51.500	-21	17	35.49	4		9002	6626	F6	6854
	10	11	0	31	5.0890	1	0	14	22.479	-11	28	38.13	4		9002	6630	F1	7796
	10	11	0	31	9.0890	1	0	16	40.862	-10	45	21.68	4		9002	6630	F2	6856
	10	11	0	31	13.0889	1	0	18	59.086	-10	1	34.28	4		9002	6630	F3	6857
	10	11	0	31	17.0889	1	0	21	17.111	- 9	17	23.19	4		9002	6630	F4	6858
	10	11	0	31	21.0889	1	0	23	35.093	- 8	32	45.43	4		9002	6630	F5	6859
	10	11	0	31	25.0889	1	0	25	52.719	- 7	47	43.78	4		9002	6630	F6	6860
	10	11	0	31	29.0889	1	0	28	10.491	- 7	2	19.87	4		9002	6630	F7	6861
	10	11	0	33	5.0889	1	1	21	59.868	12	1	41.00	4		9002	6631	F1	6862
	10	11	0	33	9.0889	1	1	24	10.307	12	48	51.93	4		9002	6631	F2	6863
	10	11	0	33	13.0889	1	1	26	20.711	13	35	48.44	4		9002	6631	F3	6864
	10	11	0	33	17.0889	1	1	28	30.446	14	22	31.25	4		9002	6631	F4	6865
	10	11	0	33	21.0890	1	1	30	39.990	15	8	55.88	4		9002	6631	F5	6866
	10	11	0	33	25.0890	1	1	32	49.169	15	55	.98	4		9002	6631	F6	6867
	10	11	0	33	29.0890	1	1	34	57.752	16	40	48.22	4		9002	6631	F7	6868
	10	11	0	35	5.0899	1	2	24	29.112	32	53	4.55	4		9002	6632	F1	8109
	10	11	0	35	9.0899	1	2	26	27.857	33	27	41.77	4		9002	6632	F2	8110
	10	11	0	35	13.0900	1	2	28	26.140	34	1	49.26	4		9002	6632	F3	8111
	10	11	0	35	17.0900	1	2	30	24.609	34	35	25.40	4		9002	6632	F4	8112
	10	11	0	35	21.0901	1	2	32	22.469	35	8	35.41	4		9002	6632	F5	8113
	10	11	0	35	25.0901	1	2	34	19.742	35	41	17.47	4		9002	6632	F6	8114
	10	11	0	35	29.0902	1	2	36	16.891	36	13	28.61	4		9002	6632	F7	8115
	10	11	4	35	5.0889	3	2	11	4.198	-50	41	2.12	4		9029	136	F1	8897
	10	11	4	35	9.0889	3	2	14	23.828	-50	4	57.04	4		9029	136	F2	8898
	10	11	4	35	13.0888	3	2	17	42.498	-49	27	46.30	4		9029	136	F3	8899

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (NM)	STATION	FRAME NO.		OBS.NO.
1966	10	11	4	35	17.0888	3	2	21	.063	-48	49	35.35	4		9029	136	F4	A900
	10	11	4	35	21.0887	3	2	24	16.739	-48	10	17.37	4		9029	136	F5	A901
	10	11	4	35	25.0886	3	2	27	32.756	-47	29	50.51	4		9029	136	F6	A902
	10	11	4	35	29.0886	3	2	30	47.160	-46	48	15.91	4		9029	136	F7	A903
	10	11	6	30	13.0908	1	23	33	31.412	-65	53	18.00	4		9007	7631	F3	1128
	10	11	6	30	17.0907	1	23	38	24.351	-65	44	3.38	4		9007	7631	F4	1129
	10	11	6	30	21.0907	1	23	43	18.043	-65	34	5.65	4		9007	7631	F5	1130
	10	11	6	30	25.0906	1	23	48	13.439	-65	23	24.54	4		9007	7631	F6	2343
	10	11	6	30	29.0905	1	23	53	9.004	-65	11	59.57	4		9007	7631	F7	1131
	10	11	6	32	5.0890	1	1	47	37.475	-55	56	59.79	4		9007	7632	F1	91A8
	10	11	6	32	9.0889	1	1	51	56.390	-55	20	9.56	4		9007	7632	F2	91A9
	10	11	6	32	13.0889	1	1	56	12.454	-54	42	5.19	4		9007	7632	F3	9190
	10	11	6	32	17.0888	1	2	0	25.226	-54	2	45.34	4		9007	7632	F4	9191
	10	11	6	32	21.0888	1	2	4	35.018	-53	22	13.15	4		9007	7632	F5	9192
	10	11	6	32	25.0887	1	2	8	41.621	-52	40	20.46	4		9007	7632	F6	1126
	10	11	6	32	29.0887	1	2	12	44.771	-51	57	15.89	4		9007	7632	F7	1127
	10	11	6	34	5.0879	1	3	34	20.681	-28	36	9.13	4		9007	7633	F1	91A1
	10	11	6	34	9.0879	1	3	37	8.946	-27	25	10.31	4		9007	7633	F2	91A2
	10	11	6	34	13.0879	1	3	39	55.106	-26	13	42.37	4		9007	7633	F3	91A3
	10	11	6	34	17.0878	1	3	42	38.869	-25	1	43.22	4		9007	7633	F4	91A4
	10	11	6	34	21.0878	1	3	45	20.347	-23	49	12.83	4		9007	7633	F5	91A5
	10	11	6	34	25.0878	1	3	47	59.517	-22	36	21.01	4		9007	7633	F6	91A6
	10	11	6	34	29.0878	1	3	50	36.364	-21	23	12.77	4		9007	7633	F7	1125
	10	11	6	36	5.0883	1	4	44	17.755		6	26	50.16	4	9007	7634	F1	592
	10	11	6	36	9.0883	1	4	46	13.803		7	27	8.08	4	9007	7634	F2	593
	10	11	6	36	13.0884	1	4	48	8.784		8	26	26.69	4	9007	7634	F3	594
	10	11	6	36	17.0884	1	4	50	2.423		9	24	46.82	4	9007	7634	F4	595
	10	11	6	36	21.0885	1	4	51	55.036		10	22	5.87	4	9007	7634	F5	2344
	10	11	6	36	25.0885	1	4	53	46.455		11	18	21.99	4	9007	7634	F6	2345
	10	11	6	36	29.0886	1	4	55	37.054		12	13	37.37	4	9007	7634	F7	597
	10	11	8	52	1.2214	1	8	46	50.986		47	28	24.01	4	9010	562A	02	5645
	10	11	10	50	29.9084	1	7	30	56.048	-	3	21	34.73	4	9113	A03A	03	5A14
	10	11	10	53	27.9488	1	9	16	42.883		21	35	18.96	4	9113	A039	03	5A15
	10	11	12	54	56.2734	1	2	36	47.072		47	10	33.33	4	9113	A052	03	5A16
	10	11	12	59	11.0055	1	14	20	20.573		77	59	1.28	4	9113	A053	01	5A17
	10	11	16	27	5.0930	1	21	16	37.539	-47		4	51.33	4	9023	8570	F1	3288
	10	11	16	27	9.0930	1	21	19	15.333	-47		0	7.96	4	9023	8570	F2	3289
	10	11	16	27	13.0929	1	21	21	54.608	-46	54	59.87	4		9023	8570	F3	3290
	10	11	16	27	17.0928	1	21	24	35.695	-46	49	34.98	4		9023	8570	F4	3291
	10	11	16	27	21.0928	1	21	27	18.492	-46	43	49.37	4		9023	8570	F5	3292
	10	11	16	27	25.0927	1	21	30	2.247	-46	37	34.15	4		9023	8570	F6	3293
	10	11	16	27	29.0926	1	21	32	48.006	-46	31	3.77	4		9023	8570	F7	3294
	10	11	16	29	5.0911	1	22	46	5.097	-41	23	22.91	4		9023	8571	F1	2379
	10	11	16	29	9.0911	1	22	49	22.402	-41		2	50.34	4	9023	8571	F2	1719
	10	11	16	29	13.0910	1	22	52	40.191	-40	41	34.06	4		9023	8571	F3	1720
	10	11	16	29	17.0910	1	22	55	58.823	-40	19	30.98	4		9023	8571	F4	1721
	10	11	16	29	21.0909	1	22	59	18.204	-39	56	43.46	4		9023	8571	F5	1722
	10	11	16	29	25.0909	1	23	2	38.171	-39	33	8.04	4		9023	8571	F6	1723
	10	11	16	29	29.0908	1	23	5	58.734	-39	8	44.74	4		9023	8571	F7	1724
	10	11	16	31	5.0899	1	0	26	7.798	-25	8	57.41	4		9023	8572	F1	1725
	10	11	16	31	9.0898	1	0	29	22.014	-24	23	32.45	4		9023	8572	F2	1726
	10	11	16	31	13.0898	1	0	32	35.182	-23	37	20.29	4		9023	8572	F3	1727
	10	11	16	31	17.0898	1	0	35	47.545	-22	50	26.82	4		9023	8572	F4	1728
	10	11	16	31	21.0898	1	0	38	58.492	-22		2	51.02	4	9023	8572	F5	1729
	10	11	16	31	25.0898	1	0	42	8.760	-21	14	37.62	4		9023	8572	F6	1730
	10	11	16	31	29.0897	1	0	45	17.713	-20	25	44.55	4		9023	8572	F7	1731
	10	11	16	33	5.0898	1	1	54	21.327		0	39	4.02	4	9023	8573	F1	2535
	10	11	16	33	9.0898	1	1	56	56.503		1	31	18.17	4	9023	8573	F2	2536
	10	11	16	33	13.0898	1	1	59	30.089		2	23	11.58	4	9023	8573	F3	2537
	10	11	16	33	17.0899	1	2	2	2.365		3	14	39.81	4	9023	8573	F4	2538
	10	11	16	33	21.0899	1	2	4	33.128		4	5	45.84	4	9023	8573	F5	2539
	10	11	16	33	25.0899	1	2	7	2.563		4	56	23.44	4	9023	8573	F6	3177
	10	11	16	33	29.0899	1	2	9	30.463		5	46	35.16	4	9023	8573	F7	2540
	10	11	16	35	5.0910	1	3	2	15.814		23	0	17.62	4	9023	8574	F1	2541
	10	11	16	35	9.0910	1	3	4	12.986		23	35	48.69	4	9023	8574	F2	2542
	10	11	16	35	13.0911	1	3	6	9.536		24	10	48.59	4	9023	8574	F3	2543
	10	11	16	35	17.0911	1	3	8	4.554		24	45	11.10	4	9023	8574	F4	2544
	10	11	16	35	21.0912	1	3	9	58.947		25	19	2.58	4	9023	8574	F5	2545
	10	11	16	35	25.0912	1	3	11	52.442		25	52	17.44	4	9023	8574	F6	2546
	10	11	16	35	29.0913	1	3	13	44.648		26	25	1.76	4	9023	8574	F7	2547
	10	12	0	33	5.0937	1	22	50	36.113	-22	36	24.38	4		9002	6636	F1	8116
	10	12	0	33	9.0937	1	22	52	26.552	-22	11	5.58	4		9002	6636	F2	86A3
	10	12	0	33	13.0936	1	22	54	17.058	-21	45	19.70	4		9002	6636	F3	8118
	10	12	0	33	17.0936	1	22	56	7.827	-21	19	7.67	4		9002	6636	F4	8119
	10	12	0	33	21.0935	1	22	57	58.776	-20	52	30.31	4		9002	6636	F5	8120
	10	12	0	33	25.0935	1	22	59	49.603	-20	25	31.53	4		9002	6636	F6	8121
	10	12	0	33	29.0934	1	23	1	41.146	-19	58	1.79	4		9002	6636	F7	8122
	10	12	0	38	5.0927	1	1	9	43.685		23	30	53.93	4	9002	6637	F1	3372
	10	12	0	38	9.0927	1	1	11	31.596		24	9	31.58	4	9002	6637	F2	3373
	10	12	0	38	13.0928	1	1	13	19.435		24	47	52.14	4	9002	6637	F3	3374

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DEL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	10	12	0	38	17.0928	1	1	15	7.141	25	25	56.82	4		9002	6637	F4	3375
	10	12	0	38	21.0928	1	1	16	54.494	26	3	45.81	4		9002	6637	F5	3376
	10	12	0	38	25.0928	1	1	18	41.608	26	41	15.17	4		9002	6637	F6	3377
	10	12	0	38	29.0929	1	1	20	28.952	27	18	24.97	4		9002	6637	F7	3378
	10	12	2	21	59.7666	1	8	20	31.955	-68	39	54.21	4		9011	510	01	5846
	10	12	2	22	1.7663	1	8	12	07.963	-68	5	25.74	4		9011	510	02	5847
	10	12	2	22	9.7664	1	8	5	20.968	-67	29	14.35	4		9011	510	03	6976
	10	12	2	22	17.7665	1	7	58	29.348	-66	51	33.06	4		9011	510	04	5848
	10	12	2	22	25.7671	1	7	51	53.858	-66	12	20.51	4		9011	510	05	5850
	10	12	4	25	5.0953	1	17	45	58.757	-72	47	17.75	4		9011	514	F1	1166
	10	12	4	25	9.0952	1	17	47	43.962	-73	10	42.86	4		9011	514	F2	1167
	10	12	4	25	13.0952	1	17	49	34.348	-73	34	17.51	4		9011	514	F3	1168
	10	12	4	25	17.0951	1	17	51	31.077	-73	58	5.77	4		9011	514	F4	1169
	10	12	4	25	21.0950	1	17	53	34.041	-74	22	11.62	4		9011	514	F5	1170
	10	12	4	25	25.0950	1	17	55	44.998	-74	46	27.99	4		9011	514	F6	1171
	10	12	4	25	29.0949	1	17	58	2.972	-75	10	55.90	4		9011	514	F7	1172
	10	12	4	31	5.0917	1	4	52	40.023	-43	19	40.30	4		9011	515	F1	11A0
	10	12	4	31	9.0917	1	4	53	32.418	-42	22	41.23	4		9011	515	F2	11A1
	10	12	4	31	13.0917	1	4	54	23.974	-41	25	43.37	4		9011	515	F3	3170
	10	12	4	31	17.0917	1	4	55	14.212	-40	28	51.25	4		9011	515	F4	11A2
	10	12	4	31	21.0917	1	4	56	3.327	-39	32	6.98	4		9011	515	F5	11A3
	10	12	4	31	25.0918	1	4	56	51.905	-38	35	32.49	4		9011	515	F6	11A4
	10	12	4	31	29.0918	1	4	57	39.469	-37	39	8.11	4		9011	515	F7	11A5
	10	12	6	32	5.0946	1	22	31	25.041	-22	38	5.09	4		9011	523	F1	3A65
	10	12	6	32	9.0945	1	22	33	22.580	-22	15	30.10	4		9011	523	F2	3A66
	10	12	6	32	13.0945	1	22	35	20.170	-21	52	32.55	4		9011	523	F3	3A67
	10	12	6	32	17.0944	1	22	37	17.946	-21	29	11.92	4		9011	523	F4	6174
	10	12	6	32	21.0944	1	22	39	16.243	-21	5	26.32	4		9011	523	F5	3A69
	10	12	6	32	25.0943	1	22	41	14.520	-20	41	16.85	4		9011	523	F6	3A70
	10	12	6	32	29.0943	1	22	43	13.111	-20	16	45.66	4		9011	523	F7	3871
	10	12	6	34	5.0935	1	23	31	10.177	-	8	32	3.55	4		9011	524	F1	3A72
	10	12	6	34	9.0935	1	23	33	10.507	-	7	58	15.30	4		9011	524	F2	3873
	10	12	6	34	13.0935	1	23	35	10.551	-	7	24	8.03	4		9011	524	F3	3874
	10	12	6	34	17.0935	1	23	37	10.595	-	6	49	43.50	4		9011	524	F4	3875
	10	12	6	34	21.0934	1	23	39	10.654	-	6	15	3.23	4		9011	524	F5	3876
	10	12	6	34	25.0934	1	23	41	10.406	-	5	40	5.11	4		9011	524	F6	3877
	10	12	6	34	29.0934	1	23	43	10.195	-	5	4	52.29	4		9011	524	F7	3878
	10	12	6	36	5.0918	1	0	27	33.571	-47	7	5.46	4		9007	7673	F1	598
	10	12	6	36	5.0933	1	0	30	46.688	9	48	49.90	4		9011	525	F1	4039
	10	12	6	36	9.0917	1	0	31	3.097	-46	35	5.29	4		9007	7673	F2	599
	10	12	6	36	9.0934	1	0	32	11.720	10	26	34.72	4		9011	525	F2	4040
	10	12	6	36	13.0917	1	0	34	33.049	-46	2	8.38	4		9007	7673	F3	600
	10	12	6	36	13.0934	1	0	34	6.392	11	4	21.01	4		9011	525	F3	4041
	10	12	6	36	17.0916	1	0	38	2.344	-45	28	7.30	4		9007	7673	F4	2346
	10	12	6	36	17.0934	1	0	36	1.028	11	42	1.60	4		9011	525	F4	4042
	10	12	6	36	21.0916	1	0	41	31.423	-44	52	59.64	4		9007	7673	F5	601
	10	12	6	36	21.0934	1	0	37	55.153	12	19	35.23	4		9011	525	F5	4043
	10	12	6	36	25.0915	1	0	44	59.915	-44	16	47.91	4		9007	7673	F6	2347
	10	12	6	36	25.0934	1	0	39	49.057	12	57	6.79	4		9011	525	F6	4044
	10	12	6	36	29.0915	1	0	48	27.738	-43	39	24.50	4		9007	7673	F7	2348
	10	12	6	36	29.0934	1	0	41	42.736	13	34	28.10	4		9011	525	F7	4045
	10	12	6	38	5.0905	1	2	7	14.431	-22	49	26.10	4		9007	7674	F1	9256
	10	12	6	38	5.0941	1	1	25	38.145	27	32	10.16	4		9011	526	F1	4046
	10	12	6	38	9.0905	1	2	10	17.076	-21	43	34.55	4		9007	7674	F2	9257
	10	12	6	38	9.0941	1	1	27	23.889	28	3	53.75	4		9011	526	F2	4047
	10	12	6	38	13.0905	1	2	13	18.535	-20	36	47.01	4		9007	7674	F3	9258
	10	12	6	38	13.0942	1	1	29	9.291	28	35	17.51	4		9011	526	F3	6175
	10	12	6	38	17.0904	1	2	16	18.684	-19	29	15.46	4		9007	7674	F4	9259
	10	12	6	38	17.0942	1	1	30	54.358	29	6	24.14	4		9011	526	F4	4049
	10	12	6	38	21.0904	1	2	19	17.697	-18	21	.55	4		9007	7674	F5	9260
	10	12	6	38	21.0943	1	1	32	39.610	29	37	14.08	4		9011	526	F5	6176
	10	12	6	38	25.0904	1	2	22	15.282	-17	12	6.64	4		9007	7674	F6	9261
	10	12	6	38	25.0943	1	1	34	23.945	30	7	47.14	4		9011	526	F6	6177
	10	12	6	38	29.0904	1	2	25	11.562	-16	2	34.35	4		9007	7674	F7	9262
	10	12	6	38	29.0943	1	1	36	7.986	30	37	59.56	4		9011	526	F7	4052
	10	12	6	40	5.0907	1	3	29	20.498	11	41	20.00	4		9007	7675	F1	9263
	10	12	6	40	9.0907	1	3	31	45.861	12	43	35.34	4		9007	7675	F2	9264
	10	12	6	40	13.0908	1	3	34	10.473	13	44	57.21	4		9007	7675	F3	9265
	10	12	6	40	17.0908	1	3	36	33.882	14	45	15.99	4		9007	7675	F4	9266
	10	12	6	40	21.0908	1	3	38	56.111	15	44	36.36	4		9007	7675	F5	9267
	10	12	6	40	25.0909	1	3	41	17.493	16	42	58.43	4		9007	7675	F6	9268
	10	12	6	40	29.0909	1	3	43	37.716	17	40	19.48	4		9007	7675	F7	9269
	10	12	8	53	5.0904	1	4	34	48.806	18	39	31.31	4		9010	5641	F1	7891
	10	12	8	53	9.0904	1	4	37	53.888	19	54	22.08	4		9010	5641	F2	7892
	10	12	8	53	13.0904	1	4	41	3.051	21	9	19.48	4		9010	5641	F3	7893
	10	12	8	53	17.0904	1	4	44	15.884	22	24	20.94	4		9010	5641	F4	7894
	10	12	8	53	21.0904	1	4	47	32.895	23	39	16.66	4		9010	5641	F5	7895
	10	12	8	53	25.0904	1	4	50	53.918	24	54	2.36	4		9010	5641	F6	7896
	10	12	8	53	29.0904	1	4	54	19.329	26	8	33.51	4		9010	5641	F7	7897
	10	12	8	55	5.0910	1	6	40	8.547	50	56	6.93	4		9010	5642	F1	7598

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MN)	STATION	FRAME NO.		ORS.NO.
1966	10	12	8	55	9.0910	1	6	45	33.360	51	39	13.69	4		9010	5642	F2	7599
	10	12	8	55	13.0911	1	6	51	2.409	52	20	39.47	4		9010	5642	F3	7600
	10	12	8	55	17.0911	1	6	56	34.930	53	0	19.01	4		9010	5642	F4	7601
	10	12	8	55	21.0912	1	7	2	11.367	53	38	16.24	4		9010	5642	F5	7602
	10	12	8	55	25.0912	1	7	7	50.769	54	14	29.46	4		9010	5642	F6	7603
	10	12	8	55	29.0913	1	7	13	33.841	54	49	3.00	4		9010	5642	F7	7604
	10	12	10	53	5.0920	1	3	32	21.315	- 9	33	11.05	4		9001	4234	F1	6529
	10	12	10	53	9.0919	1	3	34	3.917	- 8	48	.72	4		9001	4234	F2	6530
	10	12	10	53	13.0919	1	3	35	47.700	- 8	1	56.15	4		9001	4234	F3	7250
	10	12	10	53	17.0918	1	3	37	33.574	- 7	14	56.39	4		9001	4234	F4	7251
	10	12	10	53	21.0918	1	3	39	21.089	- 6	26	56.92	4		9001	4234	F5	6533
	10	12	10	53	25.0917	1	3	41	10.177	- 5	37	58.38	4		9001	4234	F6	6534
	10	12	10	53	29.0917	1	3	43	1.460	- 4	48	3.39	4		9001	4234	F7	7252
	10	12	10	54	47.0621	1	7	9	19.481		2	41	54.72	4		9113	8127	03	5818
	10	12	10	55	5.0955	1									1.1876080	7901			5484
	10	12	10	56	5.0907	1	5	36	40.393	37	39	16.16	4		9001	4235	F1	6536
	10	12	10	56	9.0907	3	5	39	3.587	38	45	15.63	4		9001	4235	F2	7698
	10	12	10	56	11.5151	1	8	9	52.030	17	35	31.66	4		9113	8128	01	5819
	10	12	10	56	13.0908	3	5	43	33.285	39	50	7.46	4		9001	4235	F3	7699
	10	12	10	56	17.0908	3	5	48	8.893	40	53	50.28	4		9001	4235	F4	7700
	10	12	10	56	21.0908	1	5	52	50.949	41	56	15.07	4		9001	4235	F5	7253
	10	12	10	56	25.0908	1	5	57	39.372	42	57	19.13	4		9001	4235	F6	7254
	10	12	10	56	29.0908	3	6	2	34.628	43	57	1.70	4		9001	4235	F7	7701
	10	12	10	57	5.0980	1									1.2995620	7901			5485
	10	12	10	58	5.0919	1	8	27	7.348	59	11	42.08	4			9001	4236	F1	7255
	10	12	10	58	5.0993	1									1.5192730	7901			5486
	10	12	10	58	9.0919	1	8	33	39.308	59	27	58.53	4			9001	4236	F2	6539
	10	12	10	58	13.0920	1	8	40	8.758	59	42	40.19	4			9001	4236	F3	8035
	10	12	10	58	17.0920	1	8	46	36.310	59	55	52.87	4			9001	4236	F4	6541
	10	12	10	58	21.0921	1	8	53	1.050	60	7	38.03	4			9001	4236	F5	7257
	10	12	10	58	25.0922	1	8	59	22.216	60	18	5.18	4			9001	4236	F6	6542
	10	12	10	58	29.0922	3	9	5	40.035	60	27	12.45	4			9001	4236	F7	7692
	10	12	10	58	35.0976	1									1.6541870	7901			5487
	10	12	10	59	5.1016	1									1.8007330	7901			5488
	10	12	10	59	9.5396	1	10	11	45.368	34	56	53.34	4			9113	8129	01	5820
	10	12	12	59	56.0508	1	1	48	3.901	57	13	9.83	4			9113	8148	04	6428
	10	12	14	53	5.0948	1	0	57	21.364	17	36	32.44	4			9012	9069	F1	4067
	10	12	14	53	9.0948	1	0	57	28.203	18	18	27.52	4			9012	9069	F2	4068
	10	12	14	53	13.0947	1	0	57	34.735	19	0	38.05	4			9012	9069	F3	3271
	10	12	14	53	17.0947	1	0	57	40.383	19	43	10.11	4			9012	9069	F4	3272
	10	12	14	53	21.0947	1	0	57	45.899	20	25	58.10	4			9012	9069	F5	3273
	10	12	14	53	25.0946	1	0	57	50.902	21	9	5.90	4			9012	9069	F6	3273
	10	12	14	53	29.0946	1	0	57	55.219	21	52	26.94	4			9012	9069	F7	3274
	10	12	14	55	5.0943	1	0	56	34.793	40	13	35.27	4			9012	9070	F1	4070
	10	12	14	55	9.0943	1	0	56	21.391	41	0	40.82	4			9012	9070	F2	3275
	10	12	14	55	13.0943	1	0	56	6.586	41	47	45.81	4			9012	9070	F3	3276
	10	12	14	55	17.0943	1	0	55	50.976	42	34	51.41	4			9012	9070	F4	3277
	10	12	14	55	21.0943	1	0	55	33.783	43	21	51.47	4			9012	9070	F5	3278
	10	12	14	55	25.0943	1	0	55	15.856	44	8	49.63	4			9012	9070	F6	3279
	10	12	14	55	29.0943	1	0	54	56.449	44	55	44.10	4			9012	9070	F7	3280
	10	12	16	37	5.0930	1	1	3	53.073	4	2	10.12	4			9023	8616	F1	2327
	10	12	16	37	9.0930	1	1	6	16.970	4	48	44.91	4			9023	8616	F2	6053
	10	12	16	37	13.0930	1	1	8	39.830	5	35	17.49	4			9023	8616	F3	6054
	10	12	16	37	17.0930	1	1	11	2.198	6	21	30.68	4			9023	8616	F4	2330
	10	12	16	37	21.0930	1	1	13	24.011	7	7	35.03	4			9023	8616	F5	3253
	10	12	16	37	25.0931	1	1	15	44.637	7	52	24.02	4			9023	8616	F6	2331
	10	12	16	37	29.0931	1	1	18	4.797	8	38	56.41	4			9023	8616	F7	2332
	10	12	16	39	5.0939	1	2	10	9.100	24	57	34.89	4			9023	8617	F1	2333
	10	12	16	39	9.0940	1	2	12	9.625	25	32	42.48	4			9023	8617	F2	2334
	10	12	16	39	13.0940	1	2	14	9.236	26	7	20.67	4			9023	8617	F3	3254
	10	12	16	39	17.0941	1	2	16	8.256	26	41	31.84	4			9023	8617	F4	4086
	10	12	16	39	21.0941	1	2	18	6.717	27	15	11.65	4			9023	8617	F5	3255
	10	12	16	39	25.0942	1	2	20	4.137	27	48	24.27	4			9023	8617	F6	3256
	10	12	16	39	29.0942	1	2	22	1.341	28	21	12.05	4			9023	8617	F7	2338
	10	13	0	55	5.0957	1	2	20	21.715	72	23	24.15	4			9028	1055	F1	8040
	10	13	0	55	9.0958	1	2	22	40.756	72	58	12.56	4			9028	1055	F2	8041
	10	13	0	55	13.0958	1	2	25	5.932	73	32	26.90	4			9028	1055	F3	8042
	10	13	0	55	17.0959	1	2	27	37.949	74	6	11.04	4			9028	1055	F4	8043
	10	13	0	55	21.0960	1	2	30	16.057	74	39	25.56	4			9028	1055	F5	8044
	10	13	0	55	25.0960	1	2	33	1.726	75	12	6.92	4			9028	1055	F6	8045
	10	13	0	55	29.0961	1	2	35	56.149	75	44	16.98	4			9028	1055	F7	8046
	10	13	4	31	5.0960	1	20	36	27.870	-76	38	.22	4			9011	564	F1	3142
	10	13	4	31	9.0959	1	20	45	11.960	-76	52	14.02	4			9011	564	F2	3143
	10	13	4	31	13.0959	1	20	54	20.565	-77	5	32.25	4			9011	564	F3	3144
	10	13	4	31	17.0958	1	21	3	55.979	-77	17	48.72	4			9011	564	F4	3145
	10	13	4	31	21.0958	1	21	13	56.539	-77	29	.69	4			9011	564	F5	3146
	10	13	4	31	25.0957	1	21	24	22.472	-77	38	52.88	4			9011	564	F6	3278
	10	13	4	31	29.0956	1	21	35	13.177	-77	47	29.09	4			9011	564	F7	3147
	10	13	4	35	5.0937	1	3	40	14.770	-45	25	48.69	4			9011	565	F1	3148
	10	13	4	35	9.0937	1	3	52	14.721	-44	24	17.70	4			9011	565	F2	3149

October 13, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (NM)	STATION	FRAME NO.		OBS.NO.
1966	10	13	4	35	13.0937	1	3	54	11.448	-43	22	32.38	4		9011	565	F3	3190
	10	13	4	35	17.0937	1	3	56	4.344	-42	20	40.69	4		9011	565	F4	3191
	10	13	4	35	21.0937	1	3	57	54.360	-41	18	44.16	4		9011	565	F5	3192
	10	13	4	35	25.0937	1	3	59	41.502	-40	16	40.06	4		9011	565	F6	3511
	10	13	4	35	29.0937	1	4	1	25.753	-39	14	36.65	4		9011	565	F7	3194
	10	13	5	1	5.0935	1	2	54	32.032	44	10	6.20	4		9004	1115	F1	7189
	10	13	5	1	9.0935	1	2	55	49.438	45	18	1.81	4		9004	1115	F2	7190
	10	13	5	1	13.0935	1	2	57	9.173	46	26	4.56	4		9004	1115	F3	7191
	10	13	5	1	17.0935	1	2	58	31.740	47	34	16.22	4		9004	1115	F4	7797
	10	13	5	1	21.0935	1	2	59	57.842	48	42	30.96	4		9004	1115	F5	7193
	10	13	5	1	25.0935	1	3	1	26.772	49	50	47.46	4		9004	1115	F6	7194
	10	13	5	1	29.0935	1	3	2	59.396	50	58	59.76	4		9004	1115	F7	7195
	10	13	6	38	5.0972	1	23	13	31.599	-	5	9 34.01	4		9011	572	F1	3070
	10	13	6	38	9.0972	1	23	15	13.173	-	4	39 32.39	4		9011	572	F2	3071
	10	13	6	38	13.0971	1	23	16	54.792	-	4	9 16.44	4		9011	572	F3	3072
	10	13	6	38	17.0971	1	23	18	36.303	-	3	38 48.79	4		9011	572	F4	3073
	10	13	6	38	21.0971	1	23	20	17.752	-	3	8 6.88	4		9011	572	F5	3074
	10	13	6	38	25.0971	1	23	21	59.011	-	2	37 13.79	4		9011	572	F6	3075
	10	13	6	38	29.0971	1	23	23	40.369	-	2	6 3.92	4		9011	572	F7	3076
	10	13	6	40	5.0970	1	0	3	49.534	11	0	25.63	4		9011	573	F1	3077
	10	13	6	40	9.0970	1	0	5	22.079	11	33	59.77	4		9011	573	F2	3078
	10	13	6	40	13.0970	1	0	7	.534	12	7	28.63	4		9011	573	F3	3079
	10	13	6	40	17.0970	1	0	8	38.695	12	41	1.64	4		9011	573	F4	3080
	10	13	6	40	21.0970	1	0	10	16.607	13	14	28.21	4		9011	573	F5	3081
	10	13	6	40	25.0970	1	0	11	54.590	13	47	54.89	4		9011	573	F6	3082
	10	13	6	40	29.0970	1	0	13	32.387	14	21	13.32	4		9011	573	F7	3083
	10	13	6	42	5.0976	1	0	51	44.283	27	9	10.02	4		9011	574	F1	3309
	10	13	6	42	9.0976	1	0	53	17.784	27	39	9.38	4		9011	574	F2	3310
	10	13	6	42	13.0976	1	0	54	50.869	28	8	58.00	4		9011	574	F3	3311
	10	13	6	42	17.0977	1	0	56	23.574	28	38	31.81	4		9011	574	F4	3312
	10	13	6	42	21.0977	1	0	57	56.207	29	7	53.10	4		9011	574	F5	3313
	10	13	6	42	25.0977	1	0	59	28.752	29	37	6.36	4		9011	574	F6	3314
	10	13	6	42	29.0978	1	1	1	1.396	30	6	6.87	4		9011	574	F7	3315
	10	13	8	56	9.0937	1	2	50	9.763	6	12	59.74	4		9010	5658	F2	7605
	10	13	8	56	13.0937	1	2	51	44.366	7	15	29.53	4		9010	5658	F3	7606
	10	13	8	56	17.0936	1	2	53	20.798	8	19	2.83	4		9010	5658	F4	7607
	10	13	8	56	21.0936	1	2	54	58.969	9	23	33.90	4		9010	5658	F5	7608
	10	13	8	56	25.0936	1	2	56	38.993	10	29	7.56	4		9010	5658	F6	7609
	10	13	8	56	29.0935	1	2	58	21.038	11	35	40.34	4		9010	5658	F7	7610
	10	13	10	58	5.0942	1	3	1	4.406	7	2	47.32	4		9001	4256	F1	6543
	10	13	10	58	9.0941	1	3	2	33.454	8	0	32.19	4		9001	4256	F2	6544
	10	13	10	58	13.0941	1	3	4	4.338	8	59	16.89	4		9001	4256	F3	6545
	10	13	10	58	17.0940	1	3	5	37.165	9	58	59.77	4		9001	4256	F4	6546
	10	13	10	58	21.0940	1	3	7	11.565	10	59	43.03	4		9001	4256	F5	6547
	10	13	10	58	25.0939	1	3	8	48.136	12	1	27.91	4		9001	4256	F6	6548
	10	13	10	58	29.0939	1	3	10	26.669	13	4	8.50	4		9001	4256	F7	6549
	10	13	11	0	5.0934	1	4	5	29.270	41	33	.22	4		9001	4257	F1	6550
	10	13	11	0	9.0934	1	4	8	45.533	42	46	18.50	4		9001	4257	F2	6551
	10	13	11	0	13.0935	1	4	12	8.950	43	59	1.63	4		9001	4257	F3	6552
	10	13	11	0	17.0935	1	4	15	39.376	45	11	11.35	4		9001	4257	F4	6553
	10	13	11	0	21.0935	1	4	19	18.024	46	22	14.48	4		9001	4257	F5	6554
	10	13	11	0	25.0935	1	4	23	4.456	47	33	8.24	4		9001	4257	F6	6555
	10	13	11	0	29.0935	1	4	26	59.271	48	43	14.73	4		9001	4257	F7	8324
	10	13	11	1	5.0993	1								1.2968260	7901			5489
	10	13	11	1	35.1016	1								1.3783650	7901			5490
	10	13	11	2	5.0943	1	7	3	36.891	69	2	45.63	4		9001	4258	F1	6745
	10	13	11	2	5.1031	1								1.4822070	7901			5491
	10	13	11	2	9.0944	1	7	13	10.304	69	27	54.08	4		9001	4258	F2	7078
	10	13	11	2	13.0944	1	7	22	54.414	69	50	38.13	4		9001	4258	F3	6746
	10	13	11	2	17.0945	1	7	32	46.731	70	10	59.18	4		9001	4258	F4	6747
	10	13	11	2	21.0945	1	7	42	47.011	70	28	58.73	4		9001	4258	F5	7758
	10	13	11	2	25.0946	1	7	52	52.101	70	44	38.89	4		9001	4258	F6	7759
	10	13	11	2	29.0946	1	8	2	59.848	70	58	.37	4		9001	4258	F7	6790
	10	13	11	3	5.1044	1								1.7394790	7901			5492
	10	13	11	3	35.1021	1								1.8858180	7901			5493
	10	13	11	4	5.1067	1								2.0404530	7901			5494
	10	13	11	4	35.1050	1								2.2014110	7901			5495
	10	13	14	31	5.0983	1	17	9	39.457	-81	39	9.00	4		9023	8642	F1	3200
	10	13	14	31	9.0982	1	17	11	33.079	-82	8	5.64	4		9023	8642	F2	3201
	10	13	14	31	13.0982	1	17	13	40.068	-82	37	19.73	4		9023	8642	F3	3202
	10	13	14	31	17.0981	1	17	16	4.909	-83	6	50.40	4		9023	8642	F4	3203
	10	13	14	31	21.0981	1	17	18	49.937	-83	36	40.13	4		9023	8642	F5	3204
	10	13	14	31	25.0980	1	17	22	2.483	-84	6	49.64	4		9023	8642	F6	3205
	10	13	14	31	29.0980	1	17	25	52.105	-84	37	12.87	4		9023	8642	F7	3206
	10	13	14	33	5.0968	1	4	28	37.317	-80	58	39.10	4		9023	8643	F1	3207
	10	13	14	33	9.0967	1	4	30	37.413	-80	17	57.99	4		9023	8643	F2	3208
	10	13	14	33	13.0967	1	4	32	24.744	-79	36	53.72	4		9023	8643	F3	3209
	10	13	14	33	17.0967	1	4	34	2.566	-78	55	18.32	4		9023	8643	F4	3210
	10	13	14	33	21.0966	1	4	35	29.139	-78	13	22.29	4		9023	8643	F5	3211
	10	13	14	33	25.0966	1	4	36	52.128	-77	30	49.09	4		9023	8643	F6	3212

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	10	13	14	33	29.0965	1	4	38	8.147	-76	47	52.14	4		9023	8643	F7	9213
	10	13	14	35	5.0959	1	4	55	40.896	-57	40	21.81	4		9023	8644	F1	9283
	10	13	14	35	9.0959	1	4	56	11.745	-56	48	38.77	4		9023	8644	F2	9284
	10	13	14	35	13.0959	1	4	56	41.510	-55	56	43.46	4		9023	8644	F3	9285
	10	13	14	35	17.0959	1	4	57	11.600	-55	4	35.43	4		9023	8644	F4	9286
	10	13	14	35	21.0959	1	4	57	40.815	-54	12	14.95	4		9023	8644	F5	9287
	10	13	14	35	25.0959	1	4	58	10.368	-53	19	49.01	4		9023	8644	F6	9288
	10	13	14	35	29.0959	1	4	58	39.262	-52	27	13.82	4		9023	8644	F7	9289
	10	13	16	37	9.0979	1	22	14	15.952	-27	6	47.79	4		9023	8650	F1	9290
	10	13	16	37	9.0978	1	22	16	23.452	-26	45	18.33	4		9023	8650	F2	9291
	10	13	16	37	13.0978	1	22	18	31.425	-26	23	18.46	4		9023	8650	F3	9292
	10	13	16	37	17.0977	1	22	20	39.580	-26	0	54.71	4		9023	8650	F4	9293
	10	13	16	37	21.0977	1	22	22	48.126	-25	38	1.31	4		9023	8650	F5	9294
	10	13	16	37	25.0976	1	22	24	56.829	-25	14	43.88	4		9023	8650	F6	9295
	10	13	16	37	29.0976	1	22	27	5.952	-24	50	57.34	4		9023	8650	F7	9296
	10	13	16	39	5.0967	1	23	19	37.227	-13	1	58.13	4		9023	8651	F1	9311
	10	13	16	39	9.0967	1	23	21	49.136	-12	26	53.72	4		9023	8651	F2	9312
	10	13	16	39	13.0966	1	23	24	1.234	-11	51	25.60	4		9023	8651	F3	9313
	10	13	16	39	17.0966	1	23	26	13.043	-11	15	30.76	4		9023	8651	F4	9314
	10	13	16	39	21.0966	1	23	28	24.875	-10	39	15.86	4		9023	8651	F5	9315
	10	13	16	39	25.0966	1	23	30	36.550	-10	2	38.70	4		9023	8651	F6	9316
	10	13	16	39	29.0966	1	23	32	48.399	- 9	25	40.83	4		9023	8651	F7	9317
	10	13	16	41	5.0964	1	0	24	25.849	6	31	59.69	4		9023	8652	F1	9318
	10	13	16	41	9.0964	1	0	26	31.434	7	13	3.18	4		9023	8652	F2	9319
	10	13	16	41	13.0964	1	0	28	36.595	7	54	.76	4		9023	8652	F3	9320
	10	13	16	41	17.0964	1	0	30	41.193	8	34	57.96	4		9023	8652	F4	9321
	10	13	16	41	21.0964	1	0	32	45.606	9	15	49.80	4		9023	8652	F5	1146
	10	13	16	41	25.0965	1	0	34	49.629	9	56	32.96	4		9023	8652	F6	9323
	10	13	16	41	29.0965	1	0	36	53.330	10	37	10.14	4		9023	8652	F7	9324
	10	13	16	43	5.0971	1	1	24	17.320	25	43	39.57	4		9023	8653	F1	619
	10	13	16	43	9.0972	1	1	26	10.436	26	17	37.74	4		9023	8653	F2	620
	10	13	16	43	13.0972	1	1	28	3.352	26	51	14.35	4		9023	8653	F3	621
	10	13	16	43	17.0973	1	1	29	55.658	27	24	29.79	4		9023	8653	F4	622
	10	13	16	43	21.0973	1	1	31	47.310	27	57	23.57	4		9023	8653	F5	623
	10	13	16	43	25.0974	1	1	33	38.852	28	29	57.06	4		9023	8653	F6	624
	10	13	16	43	29.0974	1	1	35	30.118	29	2	6.02	4		9023	8653	F7	625
	10	13	19	4	27.7059	1	4	9	59.146	70	22	53.98	4		9005	7787	05	6114
	10	14	2	29	58.5862	1	9	22	56.498	-74	53	25.91	4		9011	599	03	5837
	10	14	2	30	6.5852	1	9	9	34.025	-74	32	57.24	4		9011	599	04	5838
	10	14	2	30	14.5850	1	8	56	42.727	-74	8	55.41	4		9011	599	05	5839
	10	14	2	30	22.5854	1	8	44	26.452	-73	41	45.59	4		9011	599	06	5840
	10	14	2	30	30.5849	1	8	32	47.359	-73	11	34.21	4		9011	599	07	6420
	10	14	4	39	5.0959	1	2	30	35.244	-44	56	5.76	4		9011	605	F1	3316
	10	14	4	39	9.0959	1	2	33	53.929	-43	55	52.05	4		9011	605	F2	3317
	10	14	4	39	13.0959	1	2	37	7.430	-42	54	59.04	4		9011	605	F3	3318
	10	14	4	39	17.0959	1	2	40	15.297	-41	53	31.49	4		9011	605	F4	3319
	10	14	4	39	21.0959	1	2	43	18.342	-40	51	33.45	4		9011	605	F5	3320
	10	14	4	39	25.0958	1	2	46	17.124	-39	49	5.66	4		9011	605	F6	3321
	10	14	4	39	29.0958	1	2	49	10.770	-38	46	11.58	4		9011	605	F7	3322
	10	14	4	42	5.0968	1	4	4	1.021	- 0	38	3.22	4		9011	606	F1	3879
	10	14	4	42	9.0969	1	4	5	20.225	0	7	35.01	4		9011	606	F2	3880
	10	14	4	42	13.0969	1	4	6	38.617	0	53	26.90	4		9011	606	F3	3881
	10	14	4	42	17.0970	1	4	7	55.873	1	38	38.21	4		9011	606	F4	3882
	10	14	4	42	21.0970	1	4	9	12.129	2	23	8.02	4		9011	606	F5	3883
	10	14	4	42	25.0971	1	4	10	27.559	3	6	47.09	4		9011	606	F6	3884
	10	14	4	42	29.0971	1	4	11	41.890	3	49	50.52	4		9011	606	F7	3885
	10	14	5	5	5.0968	1	2	3	30.593	41	11	27.03	4		9004	1123	F1	8335
	10	14	5	5	9.0967	1	2	3	46.306	42	11	22.77	4		9004	1123	F2	7801
	10	14	5	5	13.0967	1	2	4	1.803	43	11	36.46	4		9004	1123	F3	7802
	10	14	5	5	17.0967	1	2	4	17.172	44	12	8.42	4		9004	1123	F4	7803
	10	14	5	5	21.0967	1	2	4	32.566	45	12	53.68	4		9004	1123	F5	7804
	10	14	5	5	25.0967	1	2	4	47.620	46	13	54.08	4		9004	1123	F6	7805
	10	14	5	5	29.0967	1	2	5	2.430	47	15	6.07	4		9004	1123	F7	8336
	10	14	5	10	5.0989	1	14	33	31.665	74	59	18.60	4		9004	1124	F1	7747
	10	14	5	10	9.0990	1	14	33	33.876	74	26	48.94	4		9004	1124	F2	7748
	10	14	5	10	13.0991	1	14	33	37.389	73	54	48.00	4		9004	1124	F3	7749
	10	14	5	10	17.0991	1	14	33	42.666	73	23	15.30	4		9004	1124	F4	7750
	10	14	5	10	21.0992	1	14	33	47.135	72	52	3.51	4		9004	1124	F5	7751
	10	14	5	10	25.0992	1	14	33	53.801	72	21	17.31	4		9004	1124	F6	7752
	10	14	5	10	29.0993	1	14	33	59.680	71	50	55.80	4		9004	1124	F7	7753
	10	14	6	44	5.1007	1	23	43	11.772	11	49	53.80	4		9011	614	F1	3886
	10	14	6	44	9.1007	1	23	44	36.474	12	19	50.24	4		9011	614	F2	3887
	10	14	6	44	13.1007	1	23	46	1.152	12	49	44.77	4		9011	614	F3	3888
	10	14	6	44	17.1007	1	23	47	25.592	13	19	37.39	4		9011	614	F4	3889
	10	14	6	44	21.1007	1	23	48	49.896	13	49	30.48	4		9011	614	F5	3890
	10	14	6	44	25.1007	1	23	50	13.906	14	19	25.99	4		9011	614	F6	3891
	10	14	6	44	29.1007	1	23	51	38.302	14	49	18.97	4		9011	614	F7	3892
	10	14	9	0	5.0994	1	7	19	46.119	- 7	20	18.24	4		9001	4271	F1	6751
	10	14	9	0	9.0994	1	7	21	37.021	- 6	45	33.62	4		9001	4271	F2	6752
	10	14	9	0	13.0994	1	7	23	28.063	- 6	10	51.25	4		9001	4271	F3	6753

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	10	14	9	0	17.0994	1	7	25	18.987	- 5	36	15.55	4		9001	4271	F4	6754
	10	14	9	0	21.0994	1	7	27	10.109	- 5	1	42.73	4		9001	4271	F5	6755
	10	14	9	0	25.0994	1	7	29	1.498	- 4	27	19.81	4		9001	4271	F6	6756
	10	14	9	0	29.0994	1	7	30	53.080	- 3	52	57.57	4		9001	4271	F7	7240
	10	14	9	2	5.0998	1	8	15	46.385		8	54	33.52	4		9001	4272	F1	6813
	10	14	9	2	9.0998	1	8	17	38.362		9	23	19.92	4		9001	4272	F2	8036
	10	14	9	2	13.0999	1	8	19	30.518		9	51	44.92	4		9001	4272	F3	7242
	10	14	9	2	17.0999	1	8	21	22.509	10	19	51.74	4		9001	4272	F4	6816
	10	14	9	2	21.0999	1	8	23	14.369	10	47	40.31	4		9001	4272	F5	7417
	10	14	9	2	25.1000	1	8	25	6.140	11	15	9.74	4		9001	4272	F6	6818
	10	14	9	2	29.1000	1	8	26	57.957	11	42	15.98	4		9001	4272	F7	7243
	10	14	11	2	5.0974	1	2	12	7.375	9	35	30.11	4		9001	4277	F1	6819
	10	14	11	2	9.0973	1	2	12	58.267	10	27	48.56	4		9001	4277	F2	6820
	10	14	11	2	13.0973	1	2	13	49.482	11	20	55.18	4		9001	4277	F3	6821
	10	14	11	2	17.0972	1	2	14	41.679	12	14	47.45	4		9001	4277	F4	6822
	10	14	11	2	21.0972	1	2	15	34.624	13	9	40.19	4		9001	4277	F5	6823
	10	14	11	2	25.0971	1	2	16	28.141	14	5	16.48	4		9001	4277	F6	6824
	10	14	11	2	29.0971	1	2	17	22.691	15	1	46.84	4		9001	4277	F7	6825
	10	14	11	4	5.0965	1	2	45	35.000	41	12	31.66	4		9001	4278	F1	7706
	10	14	11	4	9.0965	1	2	47	10.820	42	23	36.13	4		9001	4278	F2	7707
	10	14	11	4	13.0965	1	2	48	49.644	43	34	48.55	4		9001	4278	F3	7708
	10	14	11	4	17.0965	1	2	50	31.952	44	45	57.51	4		9001	4278	F4	7709
	10	14	11	4	21.0965	1	2	52	17.786	45	57	3.34	4		9001	4278	F5	8321
	10	14	11	4	25.0965	1	2	54	7.752	47	8	7.47	4		9001	4278	F6	7711
	10	14	11	4	29.0965	1	2	56	1.342	48	18	58.01	4		9001	4278	F7	7712
	10	14	11	7	5.0978	1	7	57	43.618	81	10	10.92	4		9001	4279	F1	8322
	10	14	11	7	9.0978	1	8	17	45.829	81	13	44.97	4		9001	4279	F2	7714
	10	14	11	7	13.0979	1	8	37	34.995	81	13	31.42	4		9001	4279	F3	7715
	10	14	11	7	17.0979	1	8	56	54.826	81	9	34.32	4		9001	4279	F4	7716
	10	14	11	7	21.0980	1	9	15	30.628	81	2	14.82	4		9001	4279	F5	7717
	10	14	11	7	25.0981	1	9	33	17.189	80	51	50.50	4		9001	4279	F6	8323
	10	14	11	7	29.0981	1	9	49	58.682	80	38	33.00	4		9001	4279	F7	7718
	10	14	22	58	21.0995	1	7	9	16.006	23	6	28.49	4		9028	1108	F5	8051
	10	14	22	58	25.0995	1	7	11	6.492	23	43	52.07	4		9028	1108	F6	8052
	10	14	22	58	29.0996	1	7	12	56.46[illegible]	24	20	32.02	4		9028	1108	F7	8053
	10	15	1	8	13.1000	1	8	58	50.262	29	18	5.65	4		9051	654	F3	4
	10	15	1	8	17.1000	1	9	1	47.103	29	39	12.49	4		9051	654	F4	3
	10	15	1	8	21.1001	1	9	4	43.936	29	59	40.34	4		9051	654	F5	2
	10	15	1	8	25.1001	1	9	7	38.525	30	19	32.19	4		9051	654	F6	1
	10	15	1	8	29.1002	1	9	10	32.702	30	38	48.80	4		9051	654	F7	0
	10	15	5	10	9.0999	1	1	22	33.829	52	19	.92	4		9004	1126	F2	7754
	10	15	5	10	13.0999	1	1	21	53.908	53	13	29.86	4		9004	1126	F3	7755
	10	15	5	10	17.0999	1	1	21	11.136	54	7	59.76	4		9004	1126	F4	7756
	10	15	5	10	21.0999	1	1	20	25.158	55	2	27.88	4		9004	1126	F5	7757
	10	15	5	10	25.0999	1	1	19	36.257	55	56	56.30	4		9004	1126	F6	8694
	10	15	5	10	29.0999	1	1	18	44.273	56	51	18.97	4		9004	1126	F7	7759
	10	15	11	5	5.1016	1	1	28	34.423	0	58	47.75	4		9001	4301	F1	7938
	10	15	11	5	17.1014	1	1	29	49.512	2	51	13.63	4		9001	4301	F4	7939
	10	15	11	5	21.1014	1	1	30	14.802	3	29	47.11	4		9001	4301	F5	7940
	10	15	11	5	25.1013	1	1	30	39.376	4	9	.48	4		9001	4301	F6	7941
	10	15	11	5	29.1012	1	1	31	4.582	4	48	47.88	4		9001	4301	F7	7942
	10	15	11	7	5.1001	1	1	41	4.922	23	51	50.10	4		9001	4302	F1	7943
	10	15	11	7	9.1001	1	1	41	30.357	24	47	26.51	4		9001	4302	F2	7944
	10	15	11	7	13.1001	1	1	41	55.830	25	43	40.26	4		9001	4302	F3	7945
	10	15	11	7	17.1000	1	1	42	21.330	26	40	26.52	4		9001	4302	F4	7946
	10	15	11	7	21.1000	1	1	42	47.014	27	37	50.48	4		9001	4302	F5	7947
	10	15	11	7	25.1000	1	1	43	12.756	28	35	45.83	4		9001	4302	F6	7948
	10	15	11	7	29.1000	1	1	43	38.653	29	34	12.90	4		9001	4302	F7	7949
	10	15	11	9	5.0997	1	1	54	55.659	54	35	57.38	4		9001	4303	F1	7950
	10	15	11	9	9.0997	1	1	55	28.151	55	39	18.54	4		9001	4303	F2	7951
	10	15	11	9	13.0997	1	1	56	1.381	56	42	25.38	4		9001	4303	F3	7952
	10	15	11	9	17.0998	1	1	56	35.469	57	45	19.32	4		9001	4303	F4	7953
	10	15	11	9	21.0998	1	1	57	10.144	58	47	56.58	4		9001	4303	F5	7954
	10	15	11	9	25.0998	1	1	57	45.922	59	50	14.35	4		9001	4303	F6	7955
	10	15	11	9	29.0998	1	1	58	22.465	60	52	12.48	4		9001	4303	F7	7956
	10	15	13	1	29.5854	1	6	37	46.971	8	41	11.61	4		9117	4954	09	8320
	10	15	14	46	5.1001	1	3	52	32.516	-18	21	27.76	4		9023	8726	F1	626
	10	15	14	46	9.1001	1	3	53	54.410	-17	24	22.39	4		9023	8726	F2	627
	10	15	14	46	13.1001	1	3	55	14.823	-16	27	51.69	4		9023	8726	F3	628
	10	15	14	46	17.1001	1	3	56	33.899	-15	31	56.66	4		9023	8726	F4	629
	10	15	14	46	21.1002	1	3	57	51.713	-14	36	39.80	4		9023	8726	F5	630
	10	15	14	46	25.1002	1	3	59	8.429	-13	42	2.47	4		9023	8726	F6	631
	10	15	14	46	29.1003	1	4	0	23.737	-12	48	1.60	4		9023	8726	F7	632
	10	15	23	12	5.1032	1	0	9	15.555	57	6	37.48	4		9006	7599	F1	1732
	10	15	23	12	9.1033	1	0	7	34.504	57	48	28.23	4		9006	7599	F2	2380
	10	15	23	12	13.1033	1	0	5	49.279	58	30	9.31	4		9006	7599	F3	1733
	10	15	23	12	17.1033	1	0	3	58.379	59	11	29.45	4		9006	7599	F4	1734
	10	15	23	12	21.1033	1	0	2	2.294	59	52	30.81	4		9006	7599	F5	1735
	10	15	23	12	25.1033	1	0	0	1.179	60	33	16.44	4		9006	7599	F6	1736
	10	15	23	12	29.1033	1	23	57	54.432	61	13	43.23	4		9006	7599	F7	1737

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	10	16	1	11	13.1011	1	7	47	32.600	29	44	30.87	4		9051	665	F3	26
	10	16	1	11	17.1012	1	7	51	24.598	30	18	31.87	4		9051	665	F4	25
	10	16	1	11	21.1012	1	7	55	16.434	30	51	36.09	4		9051	665	F5	24
	10	16	1	11	25.1013	1	7	59	8.131	31	23	43.55	4		9051	665	F6	23
	10	16	1	11	29.1013	1	8	2	59.562	31	54	51.27	4		9051	665	F7	27
	10	16	3	11	5.1011	1	7	30	24.906	31	58	25.68	4		9004	1134	F1	7760
	10	16	3	11	9.1011	1	7	34	31.986	32	35	38.42	4		9004	1134	F2	7761
	10	16	3	11	13.1012	1	7	38	39.153	33	11	44.33	4		9004	1134	F3	7762
	10	16	3	11	17.1012	1	7	42	46.467	33	46	[illegible].14	4		9004	1134	F4	7763
	10	16	3	11	21.1012	1	7	46	53.888	34	20	41.76	4		9004	1134	F5	7764
	10	16	3	11	29.1013	1	7	55	8.617	35	25	8.26	4		9004	1134	F7	7766
	10	16	3	13	5.1026	1	9	28	11.421	43	12	6.54	4		9004	1135	F1	7898
	10	16	3	13	9.1027	1	9	31	40.384	43	21	28.43	4		9004	1135	F2	7899
	10	16	3	13	9.1029	1	1	18	30.515	36	48	3.44	4		9051	666	F2	7
	10	16	3	13	13.1028	1	9	35	6.682	43	30	13.79	4		9004	1135	F3	7900
	10	16	3	13	13.1028	1	1	18	11.225	37	35	44.63	4		9051	666	F3	8
	10	16	3	13	17.1028	1	9	38	30.849	43	38	20.62	4		9004	1135	F4	8695
	10	16	3	13	17.1028	1	1	17	50.605	38	23	43.46	4		9051	666	F4	9
	10	16	3	13	21.1028	1	1	17	28.719	39	12	1.41	4		9051	666	F5	10
	10	16	3	13	21.1029	1	9	41	52.518	43	45	51.21	4		9004	1135	F5	7902
	10	16	3	13	25.1028	1	1	17	5.552	40	0	38.63	4		9051	666	F6	11
	10	16	3	13	25.1030	1	9	45	11.396	43	52	50.99	4		9004	1135	F6	7903
	10	16	3	13	29.1027	1	1	16	40.345	40	49	27.66	4		9051	666	F7	12
	10	16	3	13	29.1030	1	9	48	26.092	43	59	16.90	4		9004	1135	F7	7904
	10	16	5	17	5.1037	1	22	3	27.900	78	23	9.43	4		9004	1141	F1	7905
	10	16	5	17	9.1037	1	21	51	20.268	78	44	40.84	4		9004	1141	F2	7906
	10	16	5	17	13.1038	1	21	38	33.059	79	3	55.04	4		9004	1141	F3	7907
	10	16	5	17	17.1038	1	21	25	8.916	79	20	48.39	4		9004	1141	F4	8337
	10	16	5	17	21.1039	1	21	11	11.388	79	35	13.00	4		9004	1141	F5	7908
	10	16	5	17	25.1039	1	20	56	45.282	79	47	6.90	4		9004	1141	F6	8805
	10	16	5	17	29.1039	1	20	41	56.800	79	56	18.16	4		9004	1141	F7	7909
	10	16	7	4	5.1031	1	5	18	40.408	-27	24	11.69	4		9010	5690	F1	7611
	10	16	7	4	9.1031	1	5	20	48.010	-26	45	25.39	4		9010	5690	F2	7612
	10	16	7	4	13.1030	1	5	22	56.187	-26	6	12.19	4		9010	5690	F3	7613
	10	16	7	4	17.1030	1	5	25	4.720	-25	26	27.90	4		9010	5690	F4	7614
	10	16	7	4	21.1029	1	5	27	13.653	-24	46	17.47	4		9010	5690	F5	7615
	10	16	7	4	25.1029	1	5	29	23.120	-24	5	39.55	4		9010	5690	F6	7616
	10	16	7	4	29.1029	1	5	31	32.970	-23	24	30.59	4		9010	5690	F7	7617
	10	16	7	8	5.1029	1	7	36	35.406	16	28	42.20	4		9010	5691	F1	7157
	10	16	7	8	9.1030	1	7	38	57.527	17	5	18.75	4		9010	5691	F2	7158
	10	16	7	8	13.1030	1	7	41	19.638	17	41	17.96	4		9010	5691	F3	7159
	10	16	7	8	17.1030	1	7	43	41.402	18	16	42.65	4		9010	5691	F4	7160
	10	16	7	8	21.1031	1	7	46	3.100	18	51	31.55	4		9010	5691	F5	7161
	10	16	7	8	25.1031	1	7	48	24.478	19	25	46.11	4		9010	5691	F6	7162
	10	16	7	8	29.1032	1	7	50	45.883	19	59	21.80	4		9010	5691	F7	7163
	10	16	9	7	5.1027	1	5	45	7.890	-14	26	53.46	4		9001	4323	F1	7957
	10	16	9	7	5.1049	1	0	45	.308	1	54	7.85	4		9010	[illegible]	F1	7164
	10	16	9	7	9.1027	1	5	47	32.321	-13	43	55.71	4		9001	4323	F2	7958
	10	16	9	7	9.1048	1	0	45	15.129	2	28	33.39	4		9010	5694	F2	7165
	10	16	9	7	13.1027	1	5	49	57.577	-13	0	32.48	4		9001	4323	F3	7959
	10	16	9	7	13.1048	1	0	45	29.958	3	3	26.13	4		9010	5694	F3	7166
	10	16	9	7	17.1027	1	5	52	23.437	-12	16	50.70	4		9001	4323	F4	7960
	10	16	9	7	17.1047	1	0	45	44.415	3	38	44.30	4		9010	5694	F4	7167
	10	16	9	7	21.1026	1	5	54	50.274	-11	32	49.53	4		9001	4323	F5	7961
	10	16	9	7	21.1047	1	0	45	58.840	4	14	29.68	4		9010	5694	F5	7168
	10	16	9	7	25.1026	1	5	57	17.879	-10	48	33.08	4		9001	4323	F6	7962
	10	16	9	7	25.1046	1	0	46	12.851	4	50	36.26	4		9010	5694	F6	7169
	10	16	9	7	29.1026	1	5	59	46.340	-10	3	54.95	4		9001	4323	F7	7963
	10	16	9	7	29.1045	1	0	46	26.493	5	27	9.10	4		9010	5694	F7	7170
	10	16	9	9	5.1025	1	7	2	14.747	8	6	12.57	4		9001	4324	F1	7964
	10	16	9	9	5.1035	1	0	50	18.968	22	18	52.08	4		9010	5695	F1	8375
	10	16	9	9	9.1025	1	7	4	56.850	8	49	30.47	4		9001	4324	F2	7965
	10	16	9	9	9.1035	1	0	50	23.707	23	6	28.08	4		9010	5695	F2	7720
	10	16	9	9	13.1026	1	7	7	39.415	9	32	28.50	4		9001	4324	F3	7966
	10	16	9	9	13.1035	1	0	50	28.039	23	54	31.13	4		9010	5695	F3	7721
	10	16	9	9	17.1026	1	7	10	21.792	10	15	2.02	4		9001	4324	F4	7967
	10	16	9	9	17.1034	1	0	50	31.634	24	42	52.13	4		9010	5695	F4	7722
	10	16	9	9	21.1026	1	7	13	4.577	10	57	7.28	4		9001	4324	F5	7968
	10	16	9	9	21.1034	1	0	50	34.887	25	31	38.51	4		9010	5695	F5	7723
	10	16	9	9	25.1026	1	7	15	47.560	11	38	47.89	4		9001	4324	F6	7969
	10	16	9	9	25.1034	1	0	50	37.208	26	20	45.09	4		9010	5695	F6	7724
	10	16	9	9	29.1026	1	7	18	30.590	12	19	52.92	4		9001	4324	F7	7470
	10	16	9	9	29.1034	1	0	50	39.572	27	10	16.74	4		9010	5695	F7	7725
	10	16	9	11	5.1031	1	0	47	24.976	48	7	55.75	4		9010	5696	F1	7726
	10	16	9	11	5.1035	1	8	23	17.933	25	53	33.53	4		9001	4325	F1	8136
	10	16	9	11	9.1031	1	0	47	2.418	49	1	17.87	4		9010	5696	F2	7727
	10	16	9	11	9.1035	1	8	25	55.791	26	19	39.16	4		9001	4325	F2	8137
	10	16	9	11	13.1031	1	0	46	38.073	49	54	33.28	4		9010	5696	F3	8326
	10	16	9	11	13.1036	1	8	28	32.809	26	45	5.50	4		9001	4325	F3	8138
	10	16	9	11	17.1031	1	0	46	12.047	50	47	44.11	4		9010	5696	F4	7729

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	10	16	9	11	17.1036	1	8	31	9.531	27	9	58.84	4		9001	4325	F4	8139
	10	16	9	11	21.1031	1	0	45	43.942	51	40	44.48	4		9010	5696	F5	8327
	10	16	9	11	21.1037	1	8	33	49.301	27	34	14.25	4		9001	4325	F5	8140
	10	16	9	11	25.1031	1	0	45	13.989	52	33	36.35	4		9010	5696	F6	7731
	10	16	9	11	25.1038	1	8	36	20.814	27	57	55.07	4		9001	4325	F6	8141
	10	16	9	11	29.1031	1	0	44	41.922	53	26	19.35	4		9010	5696	F7	7732
	10	16	9	11	29.1038	1	8	38	55.773	28	21	1.41	4		9001	4325	F7	8142
	10	16	9	13	5.1037	1	0	11	23.690	72	51	13.74	4		9010	5697	F1	7817
	10	16	9	13	9.1038	1	0	8	20.220	73	33	47.27	4		9010	5697	F2	7818
	10	16	9	13	13.1036	1	0	5	.608	74	15	42.17	4		9010	5697	F3	7819
	10	16	9	13	17.1038	1	0	1	24.669	74	56	57.87	4		9010	5697	F4	7820
	10	16	9	13	21.1039	1	23	57	28.583	75	37	29.85	4		9010	5697	F5	7821
	10	16	9	13	25.1039	1	23	53	10.163	76	17	21.70	4		9010	5697	F6	7822
	10	16	9	13	29.1040	1	23	48	27.231	76	56	24.29	4		9010	5697	F7	7823
	10	16	11	10	5.1043	1	1	6	51.961	12	16	44.91	4		9001	4331	F1	8143
	10	16	11	10	9.1042	1	1	7	1.721	12	56	56.55	4		9001	4331	F2	8144
	10	16	11	10	13.1042	1	1	7	10.583	13	37	31.29	4		9001	4331	F3	8145
	10	16	11	10	17.1041	1	1	7	19.547	14	18	40.44	4		9001	4331	F4	8146
	10	16	11	10	21.1041	1	1	7	28.180	15	0	14.64	4		9001	4331	F5	8147
	10	16	11	10	25.1040	1	1	7	36.266	15	42	20.32	4		9001	4331	F6	8148
	10	16	11	10	29.1040	1	1	7	44.321	16	24	56.38	4		9001	4331	F7	8149
	10	16	11	16	5.1041	1	21	20	31.946	84	32	28.63	4		9001	4333	F1	8247
	10	16	11	16	9.1042	1	20	53	26.709	84	46	52.50	4		9001	4333	F2	8248
	10	16	11	16	13.1042	1	20	24	31.157	84	56	15.33	4		9001	4333	F3	8249
	10	16	11	16	17.1043	1	19	54	35.862	85	0	31.52	4		9001	4333	F4	8250
	10	16	11	16	21.1043	1	19	24	41.927	84	59	34.45	4		9001	4333	F5	8251
	10	16	11	16	25.1044	1	18	55	55.964	84	53	38.39	4		9001	4333	F6	8252
	10	16	11	16	29.1044	1	18	28	56.983	84	43	6.43	4		9001	4333	F7	8253
	10	16	12	39	35.9749	1	8	35	38.296	-74	58	15.57	4		9023	8757	05	5821
	10	16	12	39	39.9748	1	8	29	8.250	-74	44	49.33	4		9023	8757	06	5822
	10	16	12	39	43.9748	1	8	22	47.959	-74	30	27.59	4		9023	8757	07	5823
	10	16	12	39	47.9748	1	8	16	38.110	-74	15	21.84	4		9023	8757	08	5824
	10	16	20	49	5.1064	1	5	36	9.227	-37	40	45.18	4		9002	6676	F1	3549
	10	16	20	49	9.1065	1	5	35	56.895	-37	2	8.71	4		9002	6676	F2	3550
	10	16	20	49	13.1065	1	5	35	45.445	-36	23	37.99	4		9002	6676	F3	3551
	10	16	20	49	17.1065	1	5	35	34.908	-35	45	16.03	4		9002	6676	F4	3552
	10	16	20	49	21.1065	1	5	35	24.673	-35	6	56.35	4		9002	6676	F5	3553
	10	16	20	49	25.1065	1	5	35	15.272	-34	28	45.98	4		9002	6676	F6	3554
	10	16	20	49	29.1065	1	5	35	6.738	-33	50	33.26	4		9002	6676	F7	3555
	10	16	22	52	5.1035	1	23	43	13.933	-25	44	55.84	4		9002	6683	F1	3556
	10	16	22	52	9.1034	1	23	46	14.079	-24	59	6.28	4		9002	6683	F2	3557
	10	16	22	52	13.1034	1	23	49	13.792	-24	12	28.27	4		9002	6683	F3	3558
	10	16	22	52	17.1034	1	23	52	12.846	-23	25	3.24	4		9002	6683	F4	3559
	10	16	22	52	21.1033	1	23	55	11.235	-22	36	50.10	4		9002	6683	F5	3560
	10	16	22	52	25.1033	1	23	58	8.960	-21	47	52.11	4		9002	6683	F6	3561
	10	16	22	52	29.1033	1	0	1	6.154	-20	58	10.93	4		9002	6683	F7	3562
	10	16	22	56	5.1042	1	2	17	8.682	25	41	17.36	4		9002	6684	F1	3034
	10	16	22	56	9.1042	1	2	19	12.990	26	20	31.45	4		9002	6684	F2	3035
	10	16	22	56	13.1043	1	2	21	16.675	26	59	3.24	4		9002	6684	F3	3036
	10	16	22	56	17.1043	1	2	23	19.318	27	36	57.68	4		9002	6684	F4	3037
	10	16	22	56	21.1044	1	2	25	21.263	28	14	13.18	4		9002	6684	F5	3038
	10	16	22	56	25.1045	1	2	27	22.460	28	50	52.33	4		9002	6684	F6	3039
	10	16	22	56	29.1045	1	2	29	22.909	29	26	51.37	4		9002	6684	F7	3040
	10	16	23	16	5.1066	1	23	55	5.692	51	59	8.63	4		9006	7628	F1	1738
	10	16	23	16	9.1066	1	23	53	39.020	52	36	51.87	4		9006	7628	F2	1739
	10	16	23	16	13.1066	1	23	52	8.297	53	14	22.00	4		9006	7628	F3	1740
	10	16	23	16	21.1066	1	23	48	58.249	54	28	59.45	4		9006	7628	F5	1742
	10	16	23	16	25.1066	1	23	47	17.443	55	5	57.54	4		9006	7628	F6	1743
	10	16	23	16	29.1067	1	23	45	33.186	55	42	49.91	4		9006	7628	F7	1744
	10	17	3	15	5.1032	1	6	42	46.415	40	56	7.52	4		9004	1165	F1	7910
	10	17	3	15	9.1032	1	6	47	56.185	41	38	59.76	4		9004	1165	F2	7911
	10	17	3	15	13.1032	1	6	53	8.718	42	20	20.92	4		9004	1165	F3	7912
	10	17	3	15	17.1033	1	6	58	23.584	43	0	6.96	4		9004	1165	F4	7913
	10	17	3	15	21.1033	1	7	3	40.218	43	38	24.56	4		9004	1165	F5	7914
	10	17	3	15	25.1033	1	7	8	58.823	44	15	6.54	4		9004	1165	F6	7915
	10	17	3	15	29.1034	1	7	14	18.824	44	50	13.75	4		9004	1165	F7	7916
	10	17	3	20	13.1058	1	23	48	55.945	68	2	9.80	4		9051	677	F3	7
	10	17	3	20	17.1058	1	23	44	46.433	68	42	13.44	4		9051	677	F4	8
	10	17	3	20	21.1058	1	23	40	21.774	69	21	41.77	4		9051	677	F5	9
	10	17	3	20	25.1058	1	23	35	41.227	70	0	29.22	4		9051	677	F6	10
	10	17	3	20	29.1058	1	23	30	42.747	70	38	31.52	4		9051	677	F7	11
	10	17	4	55	5.1051	1	1	50	28.158	20	23	9.21	4		9011	644	F1	2639
	10	17	4	55	9.1051	1	1	52	30.002	21	0	35.71	4		9011	644	F2	2640
	10	17	4	55	13.1052	1	1	54	30.405	21	37	32.20	4		9011	644	F3	2641
	10	17	4	55	17.1052	1	1	56	30.017	22	13	50.84	4		9011	644	F4	2642
	10	17	4	55	21.1053	1	1	58	28.745	22	49	40.39	4		9011	644	F5	2643
	10	17	4	55	25.1053	1	2	0	26.427	23	24	56.47	4		9011	644	F6	2644
	10	17	4	55	29.1054	1	2	2	23.234	23	59	40.00	4		9011	644	F7	2645
	10	17	5	20	5.1064	1	23	47	15.636	63	50	48.02	4		9004	1169	F1	7917
	10	17	5	20	9.1064	1	23	44	2.788	64	29	24.25	4		9004	1169	F2	7918

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (NM)	STATION	FRAME NO.	OBS.NO.
1966	10	17	5	20	13.1064	1	23	40	40.359	65	7	53.12	4		9004	1169 F3	7919
	10	17	5	20	17.1065	1	23	37	7.891	65	45	13.16	4		9004	1169 F4	7920
	10	17	5	20	21.1065	1	23	33	27.208	66	22	23.39	4		9004	1169 F5	7921
	10	17	5	20	25.1065	1	23	29	28.875	66	59	3.00	4		9004	1169 F6	7922
	10	17	5	20	29.1065	1	23	25	21.433	67	35	6.98	4		9004	1169 F7	7923
	10	17	7	8	5.1050	1	4	25	22.641	-26	46	32.53	4		9010	5718 F1	7824
	10	17	7	8	9.1050	1	4	27	40.839	-26	6	18.35	4		9010	5718 F2	7825
	10	17	7	8	13.1049	1	4	30	.048	-25	25	22.72	4		9010	5718 F3	7826
	10	17	7	8	17.1049	1	4	32	20.061	-24	43	43.74	4		9010	5718 F4	7827
	10	17	7	8	21.1048	1	4	34	41.130	-24	1	26.61	4		9010	5718 F5	7828
	10	17	7	10	5.1041	1	5	41	28.969	- 2	13	19.13	4		9010	5719 F1	7829
	10	17	7	10	9.1041	1	5	44	15.683	- 1	17	44.98	4		9010	5719 F2	7830
	10	17	7	10	13.1041	1	5	47	3.239	- 0	22	6.46	4		9010	5719 F3	7831
	10	17	7	10	17.1041	1	5	49	51.707	0	33	33.82	4		9010	5719 F4	7832
	10	17	7	10	21.1041	1	5	52	40.870	1	29	15.45	4		9010	5719 F5	7833
	10	17	7	10	25.1041	1	5	55	30.602	2	24	52.85	4		9010	5719 F6	7834
	10	17	7	10	29.1041	1	5	58	21.358	3	20	22.86	4		9010	5719 F7	7835
	10	17	7	12	5.1046	10	7	9	13.861	23	17	42.75	4		9010	5720 F1	745
	10	17	7	12	9.1046	1	7	12	14.068	23	58	48.45	4		9010	5720 F2	746
	10	17	7	12	13.1046	1	7	15	14.265	24	39	1.24	4		9010	5720 F3	747
	10	17	7	12	17.1047	1	7	18	14.252	25	18	22.34	4		9010	5720 F4	748
	10	17	7	12	21.1047	1	7	21	14.231	25	56	50.81	4		9010	5720 F5	749
	10	17	7	12	25.1048	1	7	24	13.770	26	34	29.28	4		9010	5720 F6	750
	10	17	7	12	29.1048	1	7	27	13.323	27	11	14.59	4		9010	5720 F7	751
	10	17	9	10	5.1053	1	4	20	6.079	-23	5	2.40	4		9001	4346 F1	8254
	10	17	9	10	9.1053	1	4	22	21.672	-22	27	29.54	4		9001	4346 F2	8255
	10	17	9	10	13.1052	1	4	24	38.879	-21	49	11.93	4		9001	4346 F3	8256
	10	17	9	10	17.1052	1	4	26	57.036	-21	10	16.19	4		9001	4346 F4	8257
	10	17	9	10	21.1051	1	4	29	16.867	-20	30	45.11	4		9001	4346 F5	8258
	10	17	9	10	25.1051	1	4	31	37.737	-19	50	30.86	4		9001	4346 F6	8259
	10	17	9	10	29.1050	1	4	33	59.975	-19	9	41.02	4		9001	4346 F7	8804
	10	17	9	12	5.1043	1	5	38	8.224	0	8	6.79	4		9001	4347 F1	8745
	10	17	9	12	5.1078	1	0	27	14.899	12	4	9.91	4		9010	5724 F1	8547
	10	17	9	12	9.1042	1	5	41	6.731	1	1	35.17	4		9001	4347 F2	8746
	10	17	9	12	9.1077	1	0	27	17.261	12	39	55.04	4		9010	5724 F2	8548
	10	17	9	12	13.1042	1	5	44	6.519	1	55	15.27	4		9001	4347 F3	8747
	10	17	9	12	13.1077	1	0	27	19.141	13	15	53.35	4		9010	5724 F3	8549
	10	17	9	12	17.1042	1	5	47	7.750	2	48	59.90	4		9001	4347 F4	8748
	10	17	9	12	17.1076	1	0	27	20.549	13	52	12.96	4		9010	5724 F4	8550
	10	17	9	12	21.1042	1	5	50	10.316	3	42	49.37	4		9001	4347 F5	8749
	10	17	9	12	21.1076	1	0	27	21.722	14	28	54.86	4		9010	5724 F5	8551
	10	17	9	12	25.1042	1	5	53	14.380	4	36	40.30	4		9001	4347 F6	8750
	10	17	9	12	25.1076	1	0	27	22.229	15	5	58.93	4		9010	5724 F6	8552
	10	17	9	12	29.1042	1	5	56	19.377	5	30	26.23	4		9001	4347 F7	8751
	10	17	9	12	29.1075	1	0	27	22.237	15	43	17.64	4		9010	5724 F7	8553
	10	17	9	14	5.1046	1	7	15	18.977	24	58	17.67	4		9001	4348 F1	8752
	10	17	9	14	5.1068	1	0	24	20.802	32	11	29.30	4		9010	5725 F1	9400
	10	17	9	14	9.1046	1	7	18	43.614	25	38	4.50	4		9001	4348 F2	8753
	10	17	9	14	13.1047	1	7	22	8.080	26	17	4.00	4		9001	4348 F3	8754
	10	17	9	14	13.1067	1	0	23	45.077	33	40	32.58	4		9010	5725 F3	9402
	10	17	9	14	17.1047	1	7	25	32.671	26	55	2.49	4		9001	4348 F4	8755
	10	17	9	14	17.1067	1	0	23	25.685	34	25	20.88	4		9010	5725 F4	9403
	10	17	9	14	21.1047	1	7	28	56.970	27	32	9.48	4		9001	4348 F5	8756
	10	17	9	14	21.1067	1	0	23	5.191	35	10	18.59	4		9010	5725 F5	9404
	10	17	9	14	25.1048	1	7	32	21.349	28	8	20.61	4		9001	4348 F6	8757
	10	17	9	14	25.1067	1	0	22	43.562	35	55	26.50	4		9010	5725 F6	9405
	10	17	9	14	29.1048	1	7	35	45.418	28	43	40.04	4		9001	4348 F7	8758
	10	17	9	14	29.1067	1	0	22	20.793	36	40	41.73	4		9010	5725 F7	9406
	10	17	9	16	5.1061	1	8	53	53.495	38	34	40.42	4		9001	4349 F1	9034
	10	17	9	16	5.1066	1	0	4	48.669	54	57	14.73	4		9010	5726 F1	9407
	10	17	9	16	9.1062	1	8	56	54.666	38	49	59.11	4		9001	4349 F2	9035
	10	17	9	16	9.1066	1	0	3	33.856	55	41	46.08	4		9010	5726 F2	9408
	10	17	9	16	13.1062	1	8	59	54.552	39	4	41.16	4		9001	4349 F3	9036
	10	17	9	16	13.1067	1	0	2	15.755	56	26	6.59	4		9010	5726 F3	9409
	10	17	9	16	17.1063	1	9	2	52.979	39	18	42.42	4		9001	4349 F4	9037
	10	17	9	16	17.1067	1	0	0	54.021	57	10	11.54	4		9010	5726 F4	1140
	10	17	9	16	21.1064	1	9	5	49.697	39	32	9.73	4		9001	4349 F5	9038
	10	17	9	16	21.1067	1	23	59	28.203	57	54	.01	4		9010	5726 F5	9410
	10	17	9	16	25.1064	1	9	8	45.035	39	45	4.81	4		9001	4349 F6	9039
	10	17	9	16	25.1067	1	23	57	58.190	58	37	34.12	4		9010	5726 F6	9411
	10	17	9	16	29.1065	1	9	11	38.822	39	57	25.15	4		9001	4349 F7	9040
	10	17	9	16	29.1067	1	23	56	23.851	59	20	47.52	4		9010	5726 F7	9412
	10	17	9	18	5.1074	1	22	39	16.970	74	25	36.26	4		9010	5727 F1	9134
	10	17	9	18	9.1074	1	22	33	17.304	74	55	6.79	4		9010	5727 F2	9135
	10	17	9	18	13.1075	1	22	26	55.972	75	23	37.07	4		9010	5727 F3	1144
	10	17	9	18	17.1075	1	22	20	10.936	75	51	9.93	4		9010	5727 F4	9137
	10	17	9	18	21.1076	1	22	13	3.712	76	17	38.57	4		9010	5727 F5	9138
	10	17	9	18	25.1076	1	22	5	31.321	76	42	59.75	4		9010	5727 F6	9139
	10	17	9	18	29.1076	1	21	57	33.316	77	7	10.13	4		9010	5727 F7	1145
	10	17	11	15	5.1072	1	0	45	7.889	22	24	21.99	4		9001	4354 F1	9041

October 17-18, 1966

DATE Y	M	D	TIME (A-1) M	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	10	17	11	15	9.1071	1	0	45	.494	23	5	6.73	4		9001	4354	F2	9033
	10	17	11	15	13.1071	1	0	44	52.612	23	46	12.68	4		9001	4354	F3	9042
	10	17	11	15	17.1071	1	0	44	44.163	24	27	38.03	4		9001	4354	F4	9043
	10	17	11	15	21.1070	1	0	44	34.791	25	9	25.14	4		9001	4354	F5	9034
	10	17	11	15	25.1070	1	0	44	24.604	25	51	34.17	4		9001	4354	F6	9044
	10	17	11	15	29.1070	1	0	44	13.661	26	34	3.45	4		9001	4354	F7	9045
	10	17	11	18	5.1064	1	0	18	50.769	56	59	47.97	4		9001	4355	F1	8954
	10	17	11	18	9.1064	1	0	17	28.976	57	47	4.59	4		9001	4355	F2	8955
	10	17	11	18	13.1064	1	0	15	53.296	58	34	14.91	4		9001	4355	F3	8956
	10	17	11	18	17.1064	1	0	14	12.961	59	21	4.95	4		9001	4355	F4	8957
	10	17	11	18	21.1064	1	0	12	26.750	60	7	41.58	4		9001	4355	F5	8958
	10	17	11	18	25.106[illegible]	1	0	10	35.114	60	54	2.85	4		9001	4355	F6	8959
	10	17	11	18	[illegible]	1	0	8	37.124	61	40	[illegible].69	4		9001	4355	F7	8960
	10	17	11	21	5.1077	1	19	5	12.977	80	22	[illegible].35	4		9001	4356	F1	8961
	10	17	11	21	9.1078	1	18	51	24.121	80	17	7.46	4		9001	4356	F2	8962
	10	17	11	21	13.1078	1	18	38	5.168	80	9	19.89	4		9001	4356	F3	8963
	10	17	11	21	17.1079	1	18	25	16.819	79	59	38.78	4		9001	4356	F4	8964
	10	17	11	21	21.1079	1	18	13	6.309	79	48	10.42	4		9001	4356	F5	8965
	10	17	11	21	25.1080	1	18	1	29.236	79	35	10.24	4		9001	4356	F6	8966
	10	17	11	21	29.1080	1	17	50	30.897	79	20	41.62	4		9001	4356	F7	8967
	10	17	17	12	21.4558	1	3	14	42.932	-20	9	54.39	4		9005	7800	03	6115
	10	17	19	22	7.7940	1	23	25	42.072	67	1	1.80	4		9005	7807	03	7681
	10	18	2	46	18.4558	1	15	23	45.701	-78	0	19.30	4		9011	665	03	5841
	10	18	2	46	26.4547	1	15	21	14.913	-78	52	9.23	4		9011	665	04	5842
	10	18	2	46	34.4557	1	15	18	8.677	-79	44	47.31	4		9011	665	05	5843
	10	18	2	46	42.4553	1	15	14	15.649	-80	38	21.99	4		9011	665	06	5844
	10	18	2	46	50.4547	1	15	9	20.317	-81	32	49.16	4		9011	665	07	6421
	10	18	2	52	5.1080	1	4	37	6.637	-45	15	59.84	4		9011	666	F1	2646
	10	18	2	52	9.1080	1	4	37	13.256	-44	27	48.30	4		9011	666	F2	2647
	10	18	2	52	13.1080	1	4	37	20.508	-43	39	39.35	4		9011	666	F3	2648
	10	18	2	52	17.1080	1	4	37	28.310	-42	51	36.40	4		9011	666	F4	2649
	10	18	2	52	21.1080	1	4	37	36.297	-42	3	37.02	4		9011	666	F5	2650
	10	18	2	52	25.1081	1	4	37	44.874	-41	15	42.79	4		9011	666	F6	2651
	10	18	2	52	29.1081	1	4	37	53.720	-40	27	59.47	4		9011	666	F7	2652
	10	18	4	54	5.1084	1	22	4	48.038	-27	6	16.25	4		9011	672	F1	3007
	10	18	4	54	9.1083	1	22	7	17.958	-26	38	58.53	4		9011	672	F2	3008
	10	18	4	54	13.1083	1	22	9	47.911	-26	11	8.11	4		9011	672	F3	3009
	10	18	4	54	17.1082	1	22	12	18.329	-25	42	38.33	4		9011	672	F4	3010
	10	18	4	54	21.1082	1	22	14	48.634	-25	13	40.12	4		9011	672	F5	3011
	10	18	4	54	25.1082	1	22	17	19.367	-24	44	6.26	4		9011	672	F6	3012
	10	18	4	54	29.1081	1	22	19	49.822	-24	13	56.64	4		9011	672	F7	3013
	10	18	4	59	5.1060	1	2	32	31.716	-38	2	34.28	4		9007	7724	F1	733
	10	18	4	59	9.1060	1	2	35	24.497	-36	58	40.40	4		9007	7724	F2	734
	10	18	4	59	13.1060	1	2	38	14.255	-35	53	53.77	4		9007	7724	F3	735
	10	18	4	59	17.1059	1	2	41	1.477	-34	48	19.58	4		9007	7724	F4	2349
	10	18	4	59	21.1059	1	2	43	45.789	-33	41	57.52	4		9007	7724	F5	2350
	10	18	4	59	25.1059	1	2	46	27.709	-32	34	52.11	4		9007	7724	F6	738
	10	18	4	59	29.1059	1	2	49	6.976	-31	27	9.76	4		9007	7724	F7	2351
	10	18	5	3	5.1074	1	4	32	27.452	22	35	47.82	4		9007	7725	F1	739
	10	18	5	3	9.1075	1	4	33	56.089	23	14	43.08	4		9007	7725	F2	2352
	10	18	5	3	13.1076	1	4	35	23.859	23	52	56.27	4		9007	7725	F3	2353
	10	18	5	3	17.1076	1	4	36	51.135	24	30	23.93	4		9007	7725	F4	2354
	10	18	5	3	21.1077	1	4	38	17.915	25	7	11.14	4		9007	7725	F5	2355
	10	18	5	3	25.1078	1	4	39	44.374	25	43	9.81	4		9007	7725	F6	743
	10	18	5	3	29.1078	1	4	41	10.212	26	18	29.75	4		9007	7725	F7	2356
	10	18	7	15	5.1060	1	5	31	2.737	18	13	18.32	4		9010	5745	F1	9141
	10	18	7	15	9.1060	1	5	34	35.880	19	15	10.49	4		9010	5745	F2	9142
	10	18	7	15	13.1060	1	5	38	10.634	20	16	22.14	4		9010	5745	F3	9143
	10	18	7	15	17.1060	1	5	41	46.840	21	16	46.09	4		9010	5745	F4	9144
	10	18	7	15	21.1061	1	5	45	24.959	22	16	21.87	4		9010	5745	F5	9145
	10	18	7	15	25.1061	1	5	49	4.328	23	14	59.87	4		9010	5745	F6	9146
	10	18	7	15	29.1061	1	5	52	45.501	24	12	44.19	4		9010	5745	F7	9147
	10	18	7	17	5.1071	1	7	25	32.832	41	31	17.49	4		9010	5746	F1	2313
	10	18	7	17	9.1071	1	7	29	26.145	41	59	42.21	4		9010	5746	F2	3251
	10	18	7	17	13.1072	1	7	33	18.651	42	27	.11	4		9010	5746	F3	3252
	10	18	7	17	17.1073	1	7	37	10.182	42	53	14.98	4		9010	5746	F4	2316
	10	18	7	17	21.1073	1	7	41	1.135	43	18	29.37	4		9010	5746	F5	2317
	10	18	7	17	25.1074	1	7	44	50.586	43	42	41.21	4		9010	5746	F6	2318
	10	18	7	17	29.1074	1	7	48	39.246	44	5	52.24	4		9010	5746	F7	2319
	10	18	9	13	9.1085	1	2	57	40.181	-28	8	21.90	4		9001	4380	F2	9098
	10	18	9	13	13.1085	1	2	59	25.014	-27	39	27.02	4		9001	4380	F3	9099
	10	18	9	13	17.1084	1	3	1	10.949	-27	9	58.39	4		9001	4380	F4	9100
	10	18	9	13	21.1083	1	3	2	58.302	-26	39	56.63	4		9001	4380	F5	9101
	10	18	9	13	25.1083	1	3	4	46.581	-26	9	15.29	4		9001	4380	F6	9102
	10	18	9	13	29.1082	1	3	6	36.475	-25	38	2.49	4		9001	4380	F7	9103
	10	18	9	15	5.1068	1	3	58	9.139	- 9	30	52.04	4		9001	4381	F1	9091
	10	18	9	15	9.1068	1	4	0	40.955	- 8	40	18.85	4		9001	4381	F2	9092
	10	18	9	15	13.1067	1	4	3	15.361	- 7	48	55.34	4		9001	4381	F3	9093
	10	18	9	15	17.1067	1	4	5	51.434	- 6	56	41.27	4		9001	4381	F4	9094
	10	18	9	15	21.1067	1	4	8	29.877	- 6	3	34.76	4		9001	4381	F5	9095

October 18-19, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	10	18	9	15	25.1066	1	4	11	10.693	- 5	9	41.79	4		9001	4381	F6	9096
	10	18	9	15	29.1066	1	4	13	53.623	- 4	15	.19	4		9001	4381	F7	9097
	10	18	9	18	5.1104	1	0	6	11.040	30	2	36.69	4		9010	5749	F1	2320
	10	18	9	18	9.1104	1	0	5	49.187	30	40	46.58	4		9010	5749	F2	2321
	10	18	9	18	13.1104	1	0	5	26.576	31	19	8.93	4		9010	5749	F3	2322
	10	18	9	18	17.1103	1	0	5	3.049	31	57	39.47	4		9010	5749	F4	2323
	10	18	9	18	21.1103	1	0	4	38.612	32	36	15.93	4		9010	5749	F5	2324
	10	18	9	18	25.1103	1	0	4	12.770	33	15	5.26	4		9010	5749	F6	2325
	10	18	9	18	29.1103	1	0	3	46.356	33	54	4.10	4		9010	5749	F7	2326
	10	18	9	20	5.1080	10	8	41	51.921	47	20	4.12	4		9001	4383	F1	9182
	10	18	9	20	5.1101	1	23	45	48.751	49	48	57.38	4		9010	5750	F1	8554
	10	18	9	20	9.1081	1	8	45	47.237	47	31	28.35	4		9001	4383	F2	9197
	10	18	9	20	9.1101	1	23	44	39.462	50	28	32.76	4		9010	5750	F2	8553
	10	18	9	20	13.1082	1	8	49	40.159	47	42	12.52	4		9001	4383	F3	9198
	10	18	9	20	13.1101	1	23	43	26.957	51	7	56.51	4		9010	5750	F3	8556
	10	18	9	20	17.1082	1	8	53	30.056	47	52	5.20	4		9001	4383	F4	9199
	10	18	9	20	17.1101	1	23	42	12.067	51	47	18.14	4		9010	5750	F4	8557
	10	18	9	20	21.1083	1	8	57	17.859	48	1	22.42	4		9001	4383	F5	9200
	10	18	9	20	21.1101	1	23	40	54.571	52	26	28.08	4		9010	5750	F5	8558
	10	18	9	20	25.1084	1	9	1	2.807	48	9	54.12	4		9001	4383	F6	9201
	10	18	9	20	25.1101	1	23	39	33.507	53	5	29.31	4		9010	5750	F6	8559
	10	18	9	20	29.1084	1	9	4	44.858	48	17	48.04	4		9001	4383	F7	9202
	10	18	9	20	29.1101	1	23	38	9.556	53	44	21.35	4		9010	5750	F7	8560
	10	18	11	21	5.1099	1	0	14	48.898	41	10	32.42	4		9001	4387	F1	9203
	10	18	11	21	9.1099	1	0	14	2.710	41	52	20.39	4		9001	4387	F2	9204
	10	18	11	21	13.1099	1	0	13	14.708	42	34	18.65	4		9001	4387	F3	9335
	10	18	11	21	17.1098	1	0	12	24.669	43	16	21.85	4		9001	4387	F4	9206
	10	18	11	21	21.1098	1	0	11	32.882	43	58	32.79	4		9001	4387	F5	9336
	10	18	11	21	25.1098	1	0	10	38.784	44	40	43.37	4		9001	4387	F6	9337
	10	18	11	21	29.1098	1	0	9	42.652	45	22	56.47	4		9001	4387	F7	9209
	10	18	11	23	5.1098	1	23	30	36.966	61	55	8.85	4		9001	4388	F1	7202
	10	18	11	23	9.1098	1	23	27	56.697	62	33	42.95	4		9001	4388	F2	7203
	10	18	11	23	13.1099	1	23	25	8.390	63	12	.63	4		9001	4388	F3	7204
	10	18	11	23	17.1099	1	23	22	12.543	63	49	47.22	4		9001	4388	F4	7205
	10	18	11	23	21.1099	1	23	19	8.424	64	27	10.55	4		9001	4388	F5	7206
	10	18	11	23	25.1099	1	23	15	55.348	65	4	6.20	4		9001	4388	F6	7207
	10	18	11	23	29.1099	1	23	12	33.780	65	40	32.44	4		9001	4388	F7	7208
	10	18	11	25	9.1106	1	20	32	59.681	76	23	29.08	4		9001	4389	F2	7997
	10	18	11	25	13.1107	1	20	23	15.740	76	33	8.38	4		9001	4389	F3	7998
	10	18	11	25	17.1107	1	20	13	22.659	76	41	10.72	4		9001	4389	F4	7999
	10	18	11	25	21.1108	1	20	3	24.556	76	47	38.99	4		9001	4389	F5	8000
	10	18	11	25	25.1108	1	19	53	22.125	76	52	31.27	4		9001	4389	F6	8001
	10	18	11	25	29.1108	1	19	43	19.782	76	55	43.08	4		9001	4389	F7	8002
	10	18	17	16	5.1094	1	2	20	42.916	-18	35	7.44	4		9005	7823	F1	9242
	10	18	17	16	9.1093	1	2	22	2.451	-18	4	27.82	4		9005	7823	F2	9243
	10	18	17	16	13.1092	1	2	23	22.856	-17	33	11.37	4		9005	7823	F3	9244
	10	18	17	16	17.1091	1	2	24	44.304	-17	1	20.15	4		9005	7823	F4	9245
	10	18	17	16	21.1091	1	2	26	6.690	-16	28	52.74	4		9005	7823	F5	9246
	10	18	17	16	25.1090	1	2	27	30.338	-15	55	49.80	4		9005	7823	F6	9247
	10	18	17	16	29.1089	1	2	28	55.090	-15	22	.82	4		9005	7823	F7	9248
	10	18	19	27	6.4931	1	22	25	22.934	69	18	34.50	4		9005	7831	02	5480
	10	18	19	27	10.4931	1	22	19	55.143	69	45	21.34	4		9005	7831	03	5481
	10	18	19	27	14.4932	1	22	14	13.696	70	11	19.62	4		9005	7831	04	5482
	10	18	19	27	18.4932	1	22	8	19.654	70	36	20.40	4		9005	7831	05	5483
	10	18	19	27	22.4933	1	22	2	11.730	71	0	21.35	4		9005	7831	06	5484
	10	18	19	27	26.4932	1	21	55	48.763	71	23	26.55	4		9005	7831	07	5485
	10	19	4	58	5.1119	1	21	48	10.056	-21	14	22.75	4		9011	675	F1	3014
	10	19	4	58	9.1118	1	21	50	13.832	-20	48	32.82	4		9011	675	F2	3015
	10	19	4	58	13.1118	1	21	52	17.388	-20	22	19.92	4		9011	675	F3	3016
	10	19	4	58	17.1117	1	21	54	21.465	-19	55	41.62	4		9011	675	F4	3017
	10	19	4	58	21.1117	1	21	56	25.317	-19	28	37.24	4		9011	675	F5	3018
	10	19	4	58	25.1117	1	21	58	29.464	-19	1	8.03	4		9011	675	F6	3019
	10	19	4	58	29.1116	1	22	0	33.778	-18	33	17.00	4		9011	675	F7	4064
	10	19	5	3	5.1115	1	0	18	39.573	22	47	2.45	4		9011	676	F1	3677
	10	19	5	3	9.1115	1	0	20	29.686	23	21	27.54	4		9011	676	F2	3678
	10	19	5	3	13.1115	3	0	22	19.527	23	55	29.83	4		9011	676	F3	3679
	10	19	5	3	17.1116	3	0	24	8.497	24	29	14.07	4		9011	676	F4	36A0
	10	19	5	3	21.1116	3	0	25	57.991	25	2	42.19	4		9011	676	F5	36A1
	10	19	5	3	25.1116	3	0	27	46.673	25	35	52.76	4		9011	676	F6	36A2
	10	19	5	3	29.1117	1	0	29	34.759	26	8	45.23	4		9011	676	F7	36A3
	10	19	7	17	5.1089	1	2	50	56.241	- 8	38	4.17	4		9010	5770	F1	85A1
	10	19	7	17	9.1089	1	2	53	8.729	- 7	42	34.00	4		9010	5770	F2	85A2
	10	19	7	17	13.1089	1	2	55	23.107	- 6	45	52.68	4		9010	5770	F3	85A3
	10	19	7	17	17.1088	1	2	57	39.479	- 5	48	7.68	4		9010	5770	F4	85A4
	10	19	7	17	21.1088	1	2	59	58.294	- 4	49	15.52	4		9010	5770	F5	85A5
	10	19	7	17	25.1087	1	3	2	19.193	- 3	49	15.89	4		9010	5770	F6	85A6
	10	19	7	17	29.1087	1	3	4	42.454	- 2	48	13.66	4		9010	5770	F7	85A7
	10	19	7	19	5.1082	1	4	16	30.143	25	22	49.36	4		9010	5771	F1	763
	10	19	7	19	9.1082	1	4	20	13.402	26	35	9.48	4		9010	5771	F2	764
	10	19	7	19	13.1082	1	4	24	.958	27	46	45.82	4		9010	5771	F3	2372

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	10	19	7	19	17.1082	1	4	27	52.255	28	57	43.02	4		9010	5771	F4	766
	10	19	7	19	21.1082	1	4	31	47.754	30	7	48.14	4		9010	5771	F5	767
	10	19	7	19	25.1083	1	4	35	47.514	31	17	.86	4		9010	5771	F6	768
	10	19	7	19	29.1083	1	4	39	51.568	32	25	10.14	4		9010	5771	F7	769
	10	19	7	21	5.1092	1	6	36	21.271	52	25	12.34	4		9010	5772	F1	770
	10	19	7	21	9.1092	1	6	41	45.282	52	55	2.22	4		9010	5772	F2	2373
	10	19	7	21	13.1093	1	6	47	10.108	53	23	17.84	4		9010	5772	F3	772
	10	19	7	21	17.1094	1	6	52	35.035	53	50	2.16	4		9010	5772	F4	773
	10	19	7	21	21.1094	1	6	58	.439	54	15	20.83	4		9010	5772	F5	774
	10	19	7	21	25.1095	1	7	3	25.934	54	39	9.20	4		9010	5772	F6	775
	10	19	7	21	29.1095	1	7	8	50.529	55	1	37.01	4		9010	5772	F7	776
	10	19	9	18	5.1102	1	2	28	37.332	-16	37	38.41	4		9001	4411	F1	8003
	10	19	9	18	9.1102	1	2	30	16.311	-15	59	34.03	4		9001	4411	F2	8004
	10	19	9	18	13.1101	1	2	31	56.406	-15	20	41.33	4		9001	4411	F3	8005
	10	19	9	18	17.1101	1	2	33	38.060	-14	41	.79	4		9001	4411	F4	8006
	10	19	9	18	21.1100	1	2	35	21.284	-14	0	26.75	4		9001	4411	F5	8007
	10	19	9	18	25.1099	1	2	37	6.004	-13	19	4.71	4		9001	4411	F6	8008
	10	19	9	18	29.1099	1	2	38	52.399	-12	36	48.30	4		9001	4411	F7	8009
	10	19	9	20	5.1087	1	3	31	56.216		9	10	12.83	4		9001	4412	F1	8010
	10	19	9	20	9.1087	1	3	34	42.894		10	16	42.41	4		9001	4412	F2	8011
	10	19	9	20	13.1087	1	3	37	33.403		11	23	59.09	4		9001	4412	F3	8012
	10	19	9	20	17.1086	1	3	40	27.337		12	31	56.71	4		9001	4412	F4	8013
	10	19	9	20	21.1086	1	3	43	24.945		13	40	31.51	4		9001	4412	F5	8014
	10	19	9	20	25.1086	1	3	46	26.267		14	49	45.27	4		9001	4412	F6	8015
	10	19	9	20	29.1086	1	3	49	31.462		15	59	27.79	4		9001	4412	F7	8016
	10	19	9	23	5.1093	1	6	52	7.051		53	14	11.16	4		9001	4413	F1	8017
	10	19	9	23	5.1137	1	23	45	48.402		36	51	26.04	4		9010	5777	F1	1792
	10	19	9	23	9.1093	1	6	58	8.830		53	42	7.39	4		9001	4413	F2	8018
	10	19	9	23	9.1137	1	23	45	10.748		37	26	20.53	4		9010	5777	F2	1793
	10	19	9	23	13.1094	1	7	4	11.463		54	8	23.55	4		9001	4413	F3	8019
	10	19	9	23	13.1137	1	23	44	31.739		38	1	24.33	4		9010	5777	F3	1794
	10	19	9	23	17.1094	1	7	10	14.283		54	32	59.98	4		9001	4413	F4	8020
	10	19	9	23	17.1137	1	23	43	51.763		38	36	31.17	4		9010	5777	F4	1795
	10	19	9	23	21.1095	1	7	16	17.293		54	55	57.40	4		9001	4413	F5	8689
	10	19	9	23	21.1137	1	23	43	9.709		39	11	37.25	4		9010	5777	F5	1796
	10	19	9	23	25.1096	1	7	22	19.470		55	17	21.09	4		9001	4413	F6	8690
	10	19	9	23	29.1096	1	7	28	20.779		55	37	13.14	4		9001	4413	F7	8691
	10	19	9	23	29.1136	1	23	41	42.236		40	22	3.87	4		9010	5777	F7	1798
	10	19	9	25	5.1136	1	23	14	22.067		54	19	27.81	4		9010	5778	F1	1799
	10	19	9	25	9.1136	1	23	12	41.327		54	53	6.04	4		9010	5778	F2	1800
	10	19	9	25	17.1136	1	23	9	10.909		55	59	37.93	4		9010	5778	F4	1802
	10	19	9	25	21.1136	1	23	7	19.726		56	32	34.39	4		9010	5778	F5	1803
	10	19	9	25	25.1136	1	23	5	25.614		57	5	22.46	4		9010	5778	F6	3178
	10	19	9	25	29.1136	1	23	3	27.347		57	37	52.48	4		9010	5778	F7	1805
	10	19	11	13	5.1117	1	4	19	56.720	-38	57	14.45	4		9012	9085	F1	3691
	10	19	11	13	9.1116	1	4	21	59.049	-38	22	7.83	4		9012	9085	F2	3692
	10	19	11	13	13.1116	1	4	24	2.064	-37	46	29.36	4		9012	9085	F3	3693
	10	19	11	13	17.1115	1	4	26	4.962	-37	10	23.99	4		9012	9085	F4	3694
	10	19	11	13	21.1115	1	4	28	7.966	-36	33	39.22	4		9012	9085	F5	3695
	10	19	11	23	5.1110	1	0	55	58.064		25	27	34.67	4		9113	8736	F1	2287
	10	19	11	23	9.1110	1	0	56	5.145		26	17	41.18	4		9113	8736	F2	2288
	10	19	11	23	13.1109	1	0	56	11.645		27	8	19.16	4		9113	8736	F3	2289
	10	19	11	23	17.1109	1	0	56	17.918		27	59	29.00	4		9113	8736	F4	2290
	10	19	11	23	21.1109	1	0	56	23.717		28	51	7.91	4		9113	8736	F5	2291
	10	19	11	23	25.1108	1	0	56	29.000		29	43	16.05	4		9113	8736	F6	2292
	10	19	11	23	29.1108	1	0	56	33.674		30	35	56.77	4		9113	8736	F7	2293
	10	19	11	26	5.1131	1	23	47	13.650		47	25	.44	4		9001	4420	F1	8021
	10	19	11	26	9.1131	1	23	46	.206		48	2	23.50	4		9001	4420	F2	8022
	10	19	11	26	13.1131	1	23	44	43.694		48	39	46.67	4		9001	4420	F3	8023
	10	19	11	26	17.1131	1	23	43	24.528		49	17	11.91	4		9001	4420	F4	8024
	10	19	11	26	21.1131	1	23	42	2.707		49	54	29.46	4		9001	4420	F5	8025
	10	19	11	26	25.1131	1	23	40	37.695		50	31	44.91	4		9001	4420	F6	8026
	10	19	11	26	29.1131	1	23	39	9.818		51	8	56.66	4		9001	4420	F7	8692
	10	19	11	28	5.1132	1	22	41	36.371		65	0	58.65	4		9001	4421	F1	8150
	10	19	11	28	9.1133	1	22	37	52.811		65	31	10.83	4		9001	4421	F2	8151
	10	19	11	28	13.1133	1	22	34	.334		66	0	55.47	4		9001	4421	F3	8152
	10	19	11	28	17.1133	1	22	29	59.388		66	30	2.55	4		9001	4421	F4	8153
	10	19	11	28	21.1133	1	22	25	48.838		66	58	31.57	4		9001	4421	F5	8154
	10	19	11	28	25.1133	1	22	21	28.258		67	26	26.02	4		9001	4421	F6	8155
	10	19	11	28	29.1134	1	22	16	57.749		67	53	41.08	4		9001	4421	F7	8156
	10	19	12	51	50.3786	1	13	27	45.224	-82	15	12.34	4		9023	8848	03	5828
	10	19	12	51	54.3785	1	13	19	13.961	-82	37	26.39	4		9023	8848	04	5829
	10	19	12	51	58.3785	1	13	9	39.396	-82	59	14.14	4		9023	8848	05	5830
	10	19	12	52	2.3784	1	12	58	56.093	-83	20	17.99	4		9023	8848	06	5831
	10	19	13	19	5.1121	1	23	59	8.036		22	37	33.03	4		9012	9090	F1	3696
	10	19	13	19	9.1120	1	23	59	13.525		23	23	41.17	4		9012	9090	F2	3697
	10	19	13	19	13.1120	1	23	59	18.511		24	10	6.39	4		9012	9090	F3	3698
	10	19	13	19	17.1120	1	23	59	22.929		24	56	46.52	4		9012	9090	F4	3699
	10	19	13	19	21.1120	1	23	59	26.913		25	43	45.74	4		9012	9090	F5	3700
	10	19	13	19	25.1120	1	23	59	30.212		26	30	59.21	4		9012	9090	F6	3701

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	10	19	13	19	29.1119	1	23	59	33.035	27	18	27.98	4		9012	9090	F7	3702
	10	19	13	21	5.1118	1	23	56	49.141	46	55	24.45	4		9012	9091	F1	3703
	10	19	13	21	9.1118	1	23	56	29.191	47	44	21.35	4		9012	9091	F2	3704
	10	19	13	21	13.1118	1	23	56	7.814	48	33	9.16	4		9012	9091	F3	3705
	10	19	13	21	17.1118	1	23	55	44.724	49	21	47.63	4		9012	9091	F4	3706
	10	19	13	21	21.1119	1	23	55	20.131	50	10	16.15	4		9012	9091	F5	3707
	10	19	13	21	25.1119	1	23	54	54.112	50	58	34.57	4		9012	9091	F6	3708
	10	19	13	21	29.1119	1	23	54	26.215	51	46	37.42	4		9012	9091	F7	3709
	10	19	17	21	5.1113	1	1	59	26.963	- 5	56	31.78	4		9005	7846	F1	9249
	10	19	17	21	9.1112	1	1	56	35.471	- 5	16	24.36	4		9005	7846	F2	9250
	10	19	17	21	13.1112	1	1	57	45.316	- 4	35	31.68	4		9005	7846	F3	9251
	10	19	17	21	17.1111	1	1	58	55.955	- 3	53	48.76	4		9005	7846	F4	9252
	10	19	17	21	21.1110	1	2	0	7.695	- 3	11	16.39	4		9005	7846	F5	9253
	10	19	17	21	25.1110	1	2	1	20.554	- 2	27	54.66	4		9005	7846	F6	9254
	10	19	17	21	29.1109	1	2	2	34.573	- 1	43	43.83	4		9005	7846	F7	9255
	10	19	19	31	21.1318	1	22	25	23.532	66	10	55.27	4		9005	7854	03	5486
	10	19	19	31	25.1316	1	22	20	58.514	66	36	52.69	4		9005	7854	04	5487
	10	19	19	31	29.1316	1	22	16	22.254	67	2	22.56	4		9005	7854	05	6004
	10	19	19	31	33.1317	1	22	11	38.165	67	27	3.03	4		9005	7854	06	5488
	10	19	19	31	37.1318	1	22	6	43.580	67	50	57.68	4		9005	7854	07	6005
	10	19	19	31	41.1318	1	22	1	38.962	68	14	17.44	4		9005	7854	08	5490
	10	19	19	31	45.1317	1	21	56	24.013	68	36	49.06	4		9005	7854	09	5491
	10	20	1	24	5.1117	1	1	43	53.756	5	57	32.16	4		9051	700	F1	10
	10	20	1	24	5.1138	1	7	19	36.766	8	8	15.90	4		9004	1214	F1	8275
	10	20	1	24	9.1118	1	1	44	48.176	6	43	9.53	4		9051	700	F2	9
	10	20	1	24	9.1138	1	7	21	46.254	8	38	35.90	4		9004	1214	F2	8276
	10	20	1	24	13.1118	1	1	45	43.363	7	29	32.21	4		9051	700	F3	8
	10	20	1	24	13.1138	1	7	23	56.057	9	8	38.93	4		9004	1214	F3	8277
	10	20	1	24	17.1119	1	1	46	39.552	8	16	48.00	4		9051	700	F4	7
	10	20	1	24	17.1138	1	7	26	5.541	9	38	21.79	4		9004	1214	F4	8278
	10	20	1	24	21.1119	1	1	47	36.624	9	4	52.08	4		9051	700	F5	6
	10	20	1	24	21.1139	1	7	28	14.863	10	7	44.11	4		9004	1214	F5	8279
	10	20	1	24	25.1139	1	7	30	24.378	10	36	47.39	4		9004	1214	F6	8280
	10	20	1	24	29.1139	1	7	32	33.671	11	5	28.85	4		9004	1214	F7	8281
	10	20	1	29	9.1118	1	7	34	39.545	77	24	13.65	4		9051	703	F2	24
	10	20	1	29	13.1118	1	7	50	52.718	77	26	47.39	4		9051	702	F3	10
	10	20	1	29	13.1118	1	7	50	52.856	77	26	46.36	4		9051	703	F3	23
	10	20	1	29	17.1117	1	8	6	50.677	77	25	46.05	4		9051	702	F4	11
	10	20	1	29	17.1117	1	8	6	50.693	77	25	46.27	4		9051	703	F4	22
	10	20	1	29	21.1117	1	8	22	25.558	77	21	24.65	4		9051	702	F5	12
	10	20	1	29	21.1117	1	8	22	25.431	77	21	24.73	4		9051	703	F5	21
	10	20	1	29	25.1116	1	8	37	30.748	77	13	58.15	4		9051	702	F6	13
	10	20	1	29	25.1116	1	8	37	30.857	77	13	56.97	4		9051	703	F6	20
	10	20	1	29	29.1116	1	8	52	.829	77	3	36.23	4		9051	702	F7	14
	10	20	3	27	5.1111	1	2	19	7.460	53	10	42.98	4		9004	1219	F1	8282
	10	20	3	27	9.1111	1	2	21	22.737	54	21	1.20	4		9004	1219	F2	8283
	10	20	3	27	13.1111	1	2	23	45.497	55	30	57.27	4		9004	1219	F3	8284
	10	20	3	27	17.1111	1	2	26	15.058	56	40	34.19	4		9004	1219	F4	8285
	10	20	3	27	21.1111	1	2	28	52.194	57	49	42.96	4		9004	1219	F5	8286
	10	20	3	27	25.1111	1	2	31	38.474	58	58	20.92	4		9004	1219	F6	8811
	10	20	3	27	29.1112	1	2	34	33.514	60	6	24.98	4		9004	1219	F7	8288
	10	20	9	26	5.1112	1	3	54	16.233	49	9	26.15	4		9001	4441	F1	8157
	10	20	9	26	9.1112	1	3	59	2.655	50	15	50.38	4		9001	4441	F2	8158
	10	20	9	26	13.1113	1	4	3	59.509	51	20	53.60	4		9001	4441	F3	8159
	10	20	9	26	17.1113	1	4	8	7.067	52	24	27.80	4		9001	4441	F4	8160
	10	20	9	26	21.1113	1	4	14	25.543	53	26	28.87	4		9001	4441	F5	8161
	10	20	9	26	25.1113	1	4	19	55.077	54	26	55.82	4		9001	4441	F6	8162
	10	20	9	26	29.1114	1	4	25	36.667	55	25	38.32	4		9001	4441	F7	8163
	10	20	9	28	5.1125	1	7	36	33.205	68	28	14.55	4		9001	4442	F1	8164
	10	20	9	28	9.1126	1	7	45	25.496	68	34	.59	4		9001	4442	F2	8165
	10	20	9	28	13.1126	1	7	54	10.643	68	37	59.52	4		9001	4442	F3	8166
	10	20	9	28	17.1127	1	8	2	47.842	68	40	20.33	4		9001	4442	F4	8167
	10	20	9	28	21.1127	1	8	11	16.651	68	41	.19	4		9001	4442	F5	8168
	10	20	9	28	25.1128	1	8	19	35.577	68	40	12.56	4		9001	4442	F6	8169
	10	20	9	28	29.1129	1	8	27	43.501	68	37	58.40	4		9001	4442	F7	8170
	10	20	11	17	5.1137	1	3	17	52.604	-38	46	13.45	4		9012	9100	F1	2503
	10	20	11	17	9.1136	1	3	20	5.951	-38	12	4.89	4		9012	9100	F2	2504
	10	20	11	17	13.1135	1	3	22	19.513	-37	37	17.74	4		9012	9100	F3	2505
	10	20	11	17	17.1135	1	3	24	33.730	-37	1	50.78	4		9012	9100	F4	2506
	10	20	11	17	21.1134	1	3	26	48.795	-36	25	40.41	4		9012	9100	F5	3230
	10	20	11	17	25.1134	1	3	29	4.128	-35	48	50.35	4		9012	9100	F6	2507
	10	20	11	17	29.1133	1	3	31	20.254	-35	11	15.19	4		9012	9100	F7	2508
	10	20	11	32	5.1164	1	22	46	47.263	60	10	2.86	4		9001	4447	F1	8171
	10	20	11	32	9.1164	1	22	43	58.991	60	39	41.68	4		9001	4447	F2	8172
	10	20	11	32	13.1164	1	22	41	7.722	61	8	56.73	4		9001	4447	F3	8173
	10	20	11	32	17.1164	1	22	38	9.093	61	37	51.43	4		9001	4447	F4	8174
	10	20	11	32	21.1165	1	22	35	4.967	62	6	22.26	4		9001	4447	F5	8175
	10	20	11	32	25.1165	1	22	31	53.966	62	34	32.43	4		9001	4447	F6	8176
	10	20	11	32	29.1165	1	22	28	37.510	63	2	15.68	4		9001	4447	F7	8177
	10	20	12	56	.7909	1	15	40	17.195	-80	10	5.16	4		9023	8881	02	5659

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	10	20	12	56	4.7909	1	15	40	33.408	-80	37	12.34	4		9023	8881	03	6403
	10	20	12	56	8.7908	1	15	40	47.814	-81	4	41.10	4		9023	8881	04	6404
	10	20	12	56	12.7907	1	15	41	3.064	-81	32	26.02	4		9023	8881	05	6405
	10	20	12	56	16.7907	1	15	41	17.739	-82	0	24.38	4		9023	8881	06	6406
	10	20	12	56	20.7906	1	15	41	32.677	-82	28	48.73	4		9023	8881	07	76A5
	10	20	12	56	24.7907	1	15	41	47.290	-82	57	24.87	4		9023	8881	08	6407
	10	20	21	3	5.1146	1	0	13	4.113	-72	10	54.12	4		9002	6719	F1	3041
	10	20	21	3	9.1146	1	0	20	17.343	-71	42	56.30	4		9002	6719	F2	3042
	10	20	21	3	13.1145	1	0	27	16.350	-71	13	32.92	4		9002	6719	F3	3043
	10	20	21	3	17.1145	1	0	34	.234	-70	42	43.19	4		9002	6719	F4	3044
	10	20	21	3	21.1144	1	0	40	30.287	-70	10	38.37	4		9002	6719	F5	3045
	10	20	21	3	25.1144	1	0	46	46.887	-69	37	19.59	4		9002	6719	F6	3046
	10	0	21	3	29.1143	1	0	52	49.671	-69	2	44.08	4		9002	6719	F7	3047
	10	20	21	9	5.1147	1	3	57	33.820	6	16	13.66	4		9002	6721	F1	3075
	10	20	21	9	9.1148	1	3	58	32.225	6	56	43.43	4		9002	6721	F2	3076
	10	20	21	9	13.1148	1	3	59	30.175	7	36	36.30	4		9002	6721	F3	3077
	10	20	21	9	17.1149	1	4	0	27.699	8	15	51.40	4		9002	6721	F4	3078
	10	20	21	9	21.1150	1	4	1	24.851	8	54	29.94	4		9002	6721	F5	3079
	10	20	21	9	25.1150	1	4	2	21.437	9	32	31.47	4		9002	6721	F6	30A0
	10	20	21	9	29.1151	1	4	3	17.866	10	10	.63	4		9002	6721	F7	30A1
	10	20	21	14	5.1160	1	4	32	27.323	-47	24	31.32	4		9028	1185	F1	7AA4
	10	20	21	14	9.1159	1	4	34	1.309	-46	47	53.80	4		9028	1185	F2	7AA5
	10	20	21	14	13.1159	1	4	35	35.018	-46	10	49.53	4		9028	1185	F3	7AA6
	10	20	21	14	17.1158	1	4	37	8.159	-45	33	20.21	4		9028	1185	F4	7AA7
	10	20	21	14	21.1158	1	4	38	40.971	-44	55	33.29	4		9028	1185	F5	7AA8
	10	20	21	14	25.1158	1	4	40	13.147	-44	17	15.03	4		9028	1185	F6	7AA9
	10	20	21	14	29.1157	1	4	41	44.921	-43	38	34.43	4		9028	1185	F7	7AA0
	10	21	1	28	5.1153	1	7	2	51.357	12	6	20.84	4		9004	1248	F1	1692
	10	21	1	28	9.1152	1	1	9	34.522	8	39	32.46	4		9051	720	F2	15
	10	21	1	28	9.1154	1	7	5	25.625	12	40	20.95	4		9004	1248	F2	1693
	10	21	1	28	13.1152	1	1	10	5.261	9	21	34.93	4		9051	720	F3	14
	10	21	1	28	13.1154	1	7	8	.279	13	13	53.72	4		9004	1248	F3	1694
	10	21	1	28	17.1151	1	1	10	36.655	10	4	21.50	4		9051	720	F4	13
	10	21	1	28	17.1154	1	7	10	34.335	13	46	58.84	4		9004	1248	F4	1695
	10	21	1	28	21.1151	1	1	11	7.890	10	47	44.32	4		9051	720	F5	12
	10	21	1	28	21.1154	1	7	13	8.519	14	19	40.12	4		9004	1248	F5	2358
	10	21	1	28	25.1150	1	1	11	39.520	11	31	53.17	4		9051	720	F6	11
	10	21	1	28	25.1155	1	7	15	42.657	14	51	46.96	4		9004	1248	F6	1697
	10	21	1	28	29.1155	1	7	18	16.539	15	23	32.50	4		9004	1248	F7	1698
	10	21	1	32	13.1139	1	2	10	16.022	69	10	44.16	4		9051	722	F7	19
	10	21	1	32	17.1139	1	2	13	15.283	70	13	24.34	4		9051	722	F6	18
	10	21	1	32	21.1139	1	2	16	29.641	71	15	19.51	4		9051	722	F5	17
	10	21	1	32	25.1140	1	2	20	2.062	72	16	28.75	4		9051	722	F4	16
	10	21	3	31	5.1142	1	1	11	52.639	49	31	41.29	4		9004	1252	F1	1699
	10	21	3	31	9.1142	1	1	12	20.516	50	36	30.09	4		9004	1252	F2	1700
	10	21	3	31	13.1142	1	1	12	48.917	51	41	19.19	4		9004	1252	F3	1701
	10	21	3	31	17.1142	1	1	13	17.729	52	46	12.09	4		9004	1252	F4	1702
	10	21	3	31	21.1142	1	1	13	46.951	53	51	10.51	4		9004	1252	F5	1703
	10	21	3	31	25.1142	1	1	14	16.796	54	55	59.16	4		9004	1252	F6	1704
	10	21	3	31	29.1142	1	1	14	47.505	56	0	47.11	4		9004	1252	F7	1705
	10	21	3	33	5.1147	1	1	37	13.905	80	15	43.22	4		9004	1253	F1	2470
	10	21	3	33	9.1148	1	1	39	39.518	81	9	29.84	4		9004	1253	F2	2471
	10	21	3	33	13.1148	1	1	42	32.920	82	2	38.94	4		9004	1253	F3	2472
	10	21	3	33	17.1149	1	1	46	1.561	82	55	1.40	4		9004	1253	F4	2473
	10	21	3	33	21.1149	1	1	50	20.229	83	46	40.68	4		9004	1253	F5	2474
	10	21	3	33	25.1149	1	1	55	49.435	84	37	29.56	4		9004	1253	F6	2475
	10	21	3	33	29.1150	1	2	3	11.184	85	27	26.86	4		9004	1253	F7	2476
	10	21	3	35	5.1162	1	13	9	5.033	77	18	39.61	4		9004	1254	F1	2477
	10	21	3	35	9.1163	1	13	10	4.234	76	43	14.60	4		9004	1254	F2	2478
	10	21	3	35	13.1164	1	13	10	59.886	76	8	19.13	4		9004	1254	F3	2479
	10	21	3	35	17.1164	1	13	11	52.205	75	33	57.16	4		9004	1254	F4	24A0
	10	21	3	35	21.1165	1	13	12	40.398	75	0	2.85	4		9004	1254	F5	24A1
	10	21	3	35	25.1165	1	13	13	26.531	74	26	34.23	4		9004	1254	F6	24A2
	10	21	3	35	29.1166	1	13	14	9.953	73	53	40.40	4		9004	1254	F7	24A3
	10	21	9	27	5.1146	1	3	46	56.922	- 7	0	36.33	4		9113	8882	F1	2294
	10	21	9	27	9.1145	1	3	49	34.865	- 6	10	38.48	4		9113	8882	F2	2295
	10	21	9	27	13.1145	1	3	52	15.099	- 5	19	56.91	4		9113	8882	F3	2296
	10	21	9	27	17.1145	1	3	54	57.601	- 4	28	26.47	4		9113	8882	F4	2297
	10	21	9	27	21.1144	10	3	57	42.658	- 3	36	19.61	4		9113	8882	F5	2298
	10	21	9	27	25.1144	1	4	0	30.133	- 2	43	17.02	4		9113	8882	F6	2299
	10	21	9	27	29.1144	1	4	3	19.774	- 1	49	45.48	4		9113	8882	F7	2300
	10	21	10	56	1.2952	1	7	21	4.572	-70	57	8.73	4		9023	8902	01	56A0
	10	21	10	56	5.2951	1	7	16	33.490	-70	43	13.83	4		9023	8902	02	56A1
	10	21	10	56	9.2951	1	7	12	8.215	-70	28	45.35	4		9023	8902	03	56A2
	10	21	10	56	13.2950	1	7	7	50.024	-70	13	53.39	4		9023	8902	04	56A3
	10	21	10	56	17.2950	1	7	3	36.373	-69	58	30.77	4		9023	8902	05	56A4
	10	21	10	56	21.2949	1	6	59	30.209	-69	42	39.71	4		9023	8902	06	56A5
	10	21	10	56	25.2949	1	6	55	29.932	-69	26	18.13	4		9023	8902	07	56A6
	10	21	11	22	5.1151	1	2	42	32.979	-26	38	6.04	4		9012	9115	F1	2509
	10	21	11	22	9.1150	1	2	44	51.017	-25	52	51.76	4		9012	9115	F2	2510

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	10	21	11	22	13.1149	1	2	47	12.016	-25	6	35.63	4		9012	9115	F3	2511
	10	21	11	22	17.1149	1	2	49	33.700	-24	19	24.89	4		9012	9115	F4	2512
	10	21	11	22	21.1148	1	2	51	56.908	-23	31	14.12	4		9012	9115	F5	2513
	10	21	11	22	25.1148	1	2	54	21.080	-22	41	57.94	4		9012	9115	F6	2514
	10	21	11	22	29.1147	1	2	56	46.556	-21	51	42.21	4		9012	9115	F7	2515
	10	21	11	24	5.1140	1	4	2	9.506	2	57	12.82	4		9012	9116	F1	2484
	10	21	11	24	9.1140	1	4	5	12.075	4	7	22.48	4		9012	9116	F2	2485
	10	21	11	24	13.1140	1	4	8	16.139	5	17	49.59	4		9012	9116	F3	3231
	10	21	11	24	17.1140	1	4	11	21.700	6	28	17.50	4		9012	9116	F4	2486
	10	21	11	24	21.1140	1	4	14	28.928	7	38	43.20	4		9012	9116	F5	3232
	10	21	11	24	25.1140	1	4	17	37.669	8	49	3.76	4		9012	9116	F6	2487
	10	21	11	24	29.1140	1	4	20	48.035	9	59	17.18	4		9012	9116	F7	7171
	10	21	11	37	5.1180	1	18	59	3.173	78	1	53.41	4		9113	8895	F1	8289
	10	21	11	37	9.1181	1	18	47	21.484	77	59	40.61	4		9113	8895	F2	8696
	10	21	11	37	13.1181	1	18	35	52.775	77	55	33.51	4		9113	8895	F3	8290
	10	21	11	37	17.1181	1	18	24	39.433	77	49	40.93	4		9113	8895	F4	8291
	10	21	11	37	21.1182	1	18	13	45.268	77	42	6.27	4		9113	8895	F5	8292
	10	21	12	59	49.5425	'	16	43	5.081	-73	46	42.57	4		9023	8911	01	6424
	10	21	12	59	53.5424	.	16	45	27.948	-74	9	9.34	4		9023	8911	02	6425
	10	21	12	59	57.5422	1	16	47	59.844	-74	31	47.74	4		9023	8911	03	6426
	10	21	13	0	1.5422	1	16	50	39.392	-74	54	28.50	4		9023	8911	04	5772
	10	21	13	0	5.5422	1	16	53	27.745	-75	17	25.73	4		9023	8911	05	5773
	10	21	13	0	9.5421	1	16	56	26.176	-75	40	30.20	4		9023	8911	06	5774
	10	21	13	0	13.5420	1	16	59	35.962	-76	3	43.25	4		9023	8911	07	6427
	10	21	23	33	5.1175	1	7	30	11.367	23	9	44.80	4		9051	726	F1	10
	10	21	23	33	9.1176	1	7	33	7.524	23	37	11.07	4		9051	725	F2	24
	10	21	23	33	9.1176	1	7	33	7.402	23	37	15.10	4		9051	726	F2	9
	10	21	23	33	13.1176	1	7	36	3.115	24	4	5.85	4		9051	725	F3	23
	10	21	23	33	13.1176	1	7	36	2.869	24	4	7.50	4		9051	726	F3	8
	10	21	23	33	17.1177	1	7	38	57.930	24	30	22.35	4		9051	725	F4	22
	10	21	23	33	17.1177	1	7	38	57.936	24	30	21.83	4		9051	[illegible]	F4	7
	10	21	23	33	21.1177	1	7	41	52.369	24	56	1.57	4		9051	725	F5	21
	10	21	23	33	21.1177	1	7	41	52.328	24	56	.41	4		9051	726	F5	6
	10	21	23	33	25.1177	1	7	44	46.182	25	21	2.76	4		9051	725	F6	20
	10	21	23	33	25.1177	1	7	44	46.209	25	20	59.24	4		9051	726	F6	5
	10	22	3	12	9.1188	1	4	45	14.647	-38	20	19.56	4		9007	7757	F2	1746
	10	22	3	12	13.1188	1	4	45	34.578	-37	34	35.80	4		9007	7757	F3	1747
	10	22	3	12	17.1188	1	4	45	55.246	-36	48	46.21	4		9007	7757	F4	1748
	10	22	3	12	21.1188	1	4	46	15.533	-36	2	55.29	4		9007	7757	F5	1749
	10	22	3	12	25.1188	1	4	46	36.387	-35	17	7.15	4		9007	7757	F6	1750
	10	22	3	12	29.1188	1	4	46	57.510	-34	31	13.38	4		9007	7757	F7	1751
	10	22	5	15	5.1185	1	22	28	13.112	-11	17	6.79	4		9007	7759	F1	1752
	10	22	5	15	9.1185	1	22	29	54.262	-10	37	14.51	4		9007	7759	F2	1753
	10	22	5	15	13.1185	1	22	31	35.411	-	9	56 56.17	4		9007	7759	F3	1754
	10	22	5	15	17.1184	1	22	33	16.785	-	9	16 8.40	4		9007	7759	F4	1755
	10	22	5	15	21.1184	1	22	34	58.243	-	8	34 50.07	4		9007	7759	F5	1756
	10	22	5	15	25.1184	1	22	36	39.740	-	7	53 4.99	4		9007	7759	F6	1757
	10	22	5	15	29.1183	1	22	38	20.982	-	7	10 55.00	4		9007	7759	F7	1758
	10	22	5	19	9.1186	1	0	13	25.193	35	14	14.81	4		9007	7760	F2	2523
	10	22	5	19	13.1186	1	0	15	12.695	35	55	9.90	4		9007	7760	F3	2524
	10	22	5	19	17.1186	1	0	17	.107	36	35	39.78	4		9007	7760	F4	2525
	10	22	5	19	21.1187	1	0	18	47.962	37	15	39.38	4		9007	7760	F5	2526
	10	22	5	19	25.1187	1	0	20	36.004	37	55	12.94	4		9007	7760	F6	2527
	10	22	5	19	29.1188	1	0	22	24.275	38	34	23.27	4		9007	7760	F7	2528
	10	22	9	30	9.1179	1	2	19	38.871	-13	44	58.32	4		9113	8951	F2	8293
	10	22	9	30	13.1178	1	2	21	24.889	-13	5	43.66	4		9113	8951	F3	8294
	10	22	9	30	17.1177	1	2	23	12.474	-12	25	36.15	4		9113	8951	F4	8295
	10	22	9	30	25.1176	1	2	26	52.778	-11	2	51.14	4		9113	8951	F6	8296
	10	22	9	30	29.1175	1	2	28	45.600	-10	20	11.83	4		9113	8951	F7	8297
	10	22	9	33	5.1175	1	0	50	1.994	30	46	2.30	4		9001	4454	F1	7924
	10	22	9	33	9.1175	1	0	50	37.347	31	48	48.02	4		9001	4454	F2	7925
	10	22	9	33	13.1174	1	0	51	13.115	32	52	6.95	4		9001	4454	F3	7926
	10	22	9	33	17.1174	1	0	51	49.289	33	55	54.23	4		9001	4454	F4	7927
	10	22	9	33	21.1174	1	0	52	25.928	35	0	8.72	4		9001	4454	F5	7928
	10	22	9	33	25.1174	1	0	53	3.405	36	4	52.01	4		9001	4454	F6	7929
	10	22	9	33	29.1174	1	0	53	41.239	37	10	.77	4		9001	4454	F7	7930
	10	22	9	36	5.1179	1	1	48	16.557	78	14	32.96	4		9001	4455	F1	7931
	10	22	9	36	5.1180	1	8	20	31.949	55	21	14.11	4		9113	8952	F1	8812
	10	22	9	36	9.1179	1	1	52	46.922	79	6	45.50	4		9001	4455	F2	7932
	10	22	9	36	9.1181	1	8	25	38.092	55	25	3.10	4		9113	8952	F2	8813
	10	22	9	36	13.1180	1	1	57	56.547	79	58	.70	4		9001	4455	F3	7933
	10	22	9	36	13.1181	1	8	30	39.641	55	28	1.85	4		9113	8952	F3	8814
	10	22	9	36	17.1180	1	2	3	54.113	80	48	16.13	4		9001	4455	F4	7934
	10	22	9	36	17.1182	10	8	35	36.390	55	30	8.40	4		9113	8952	F4	1139
	10	22	9	36	21.1181	1	2	10	54.407	81	37	27.95	4		9001	4455	F5	7935
	10	22	9	36	21.1183	1	8	40	27.503	55	31	28.38	4		9113	8952	F5	8298
	10	22	9	36	25.1181	1	2	19	10.377	82	25	25.41	4		9001	4455	F6	7936
	10	22	9	36	25.1183	1	8	45	13.289	55	32	4.95	4		9113	8952	F6	8299
	10	22	9	36	29.1182	1	2	29	10.091	83	12	2.88	4		9001	4455	F7	7937
	10	22	9	36	29.1184	1	8	49	53.671	55	31	53.97	4		9113	8952	F7	9062

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DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	10	22	11	1	46.9407	1	6	1	43.056	-66	21	54.05	4		9023	8934	01	5776
	10	22	11	1	50.9407	1	5	58	51.119	-65	58	56.17	4		9023	8934	02	5777
	10	22	11	1	54.9407	1	5	56	4.491	-65	35	44.09	4		9023	8934	03	5778
	10	22	11	1	58.9409	1	5	53	23.235	-65	12	13.38	4		9023	8934	04	5779
	10	22	11	2	2.9408	1	5	50	46.394	-64	48	22.09	4		9023	8934	05	5780
	10	22	11	2	6.9406	1	5	48	15.613	-64	24	20.47	4		9023	8934	06	5781
	10	22	11	2	10.9406	1	5	45	48.613	-64	0	4.78	4		9023	8934	07	5782
	10	22	11	25	9.1186	1	1	8	24.030	-30	44	43.71	4		9012	9133	F2	2516
	10	22	11	25	13.1185	1	1	10	2.142	-30	12	11.76	4		9012	9133	F3	2517
	10	22	11	25	17.1185	1	1	11	41.078	-29	38	58.56	4		9012	9133	F4	2518
	10	22	11	25	21.1184	1	1	13	20.813	-29	4	57.66	4		9012	9133	F5	2519
	10	22	11	25	25.1183	1	1	15	1.483	-28	30	13.14	4		9012	9133	F6	2520
	10	22	11	25	29.1183	1	1	16	42.755	-27	54	44.05	4		9012	9133	F7	2521
	10	22	11	27	5.1169	1	2	3	15.487	-	8	52 24.03	4		9012	9134	F1	3233
	10	22	11	27	9.1168	1	2	5	30.558	-	7	50 45.31	4		9012	9134	F2	3234
	10	22	11	27	13.1168	1	2	7	47.691	-	6	47 57.16	4		9012	9134	F3	3235
	10	22	11	29	5.1163	1	3	28	5.674		27	47 9.90	4		9012	9135	F1	3512
	10	22	11	29	9.1163	1	3	31	41.176		29	1 24.19	4		9012	9135	F2	3513
	10	22	11	29	13.1164	1	3	35	20.167		30	14 44.92	4		9012	9135	F3	3514
	10	22	11	29	17.1164	1	3	39	2.736		31	27 3.83	4		9012	9135	F4	3515
	10	22	11	29	21.1164	1	3	42	49.248		32	38 17.90	4		9012	9135	F5	2283
	10	22	11	29	25.1164	1	3	46	38.886		33	48 21.58	4		9012	9135	F6	2284
	10	22	11	29	29.1165	1	3	50	32.753		34	57 8.10	4		9012	9135	F7	3516
	10	22	13	4	28.4328	1	17	45	56.087	-70	51	57.36	4		9023	8941	02	6409
	10	22	13	4	32.4328	1	17	49	39.047	-71	9	32.37	4		9023	8941	03	6410
	10	22	13	4	36.4328	1	17	53	31.765	-71	27	7.52	4		9023	8941	04	6411
	10	22	13	4	40.4327	1	17	57	33.681	-71	44	40.45	4		9023	8941	05	5667
	10	22	13	4	44.4327	1	18	1	46.409	-72	2	2.91	4		9023	8941	06	6412
	10	22	13	4	48.4326	1	18	6	10.356	-72	19	26.71	4		9023	8941	07	6413
	10	22	3	12	5.1186	1	4	44	54.536	-39	6	1.29	4		9007	7757	F1	1745
	10	23	1	4	47.1548	1	6	50	47.221	-77	27	22.54	4		9011	716	02	6927
	10	23	1	4	51.1548	1	6	43	33.283	-77	6	52.35	4		9011	716	03	5852
	10	23	1	4	55.1546	1	6	36	41.366	-76	45	23.74	4		9011	716	04	6422
	10	23	1	4	59.1541	1	6	30	8.415	-76	23	.71	4		9011	716	05	5853
	10	23	1	5	3.1534	1	6	23	55.841	-75	59	53.62	4		9011	716	06	5854
	10	23	1	34	5.1189	1	4	22	54.843	-	1	40 20.69	4		9004	1266	F1	7971
	10	23	1	34	9.1188	1	4	25	53.158	-	0	49 15.39	4		9004	1266	F2	7972
	10	23	1	34	13.1188	1	4	28	53.590		0	2 16.24	4		9004	1266	F3	7973
	10	23	1	34	17.1188	1	4	31	56.123		0	54 12.17	4		9004	1266	F4	7974
	10	23	1	34	21.1188	1	4	35	.701		1	46 26.38	4		9004	1266	F5	7975
	10	23	1	34	25.1187	1	4	38	7.479		2	39 3.86	4		9004	1266	F6	7976
	10	23	1	34	29.1187	1	4	41	16.489		3	31 54.65	4		9004	1266	F7	7977
	10	23	1	37	5.1193	1	7	4	30.297		33	18 13.32	4		9004	1267	F1	7978
	10	23	1	37	9.1194	1	7	8	22.685		33	47 31.24	4		9004	1267	F2	8338
	10	23	1	37	13.1194	1	7	12	14.348		34	15 45.63	4		9004	1267	F3	7979
	10	23	1	37	17.1195	1	7	16	5.156		34	43 5.85	4		9004	1267	F4	79A0
	10	23	1	37	21.1195	1	7	19	54.808		35	9 24.80	4		9004	1267	F5	79A1
	10	23	1	37	25.1196	1	7	23	44.002		35	34 50.19	4		9004	1267	F6	79A2
	10	23	1	37	29.1196	1	7	27	31.627		35	59 16.58	4		9004	1267	F7	79A3
	10	23	3	12	5.1193	1	22	49	52.332	-40	36	31.95	4		9011	722	F1	36A4
	10	23	3	12	5.1228	1	1	53	9.486	-82	38	58.00	4		9007	7785	F1	2529
	10	23	3	12	9.1193	1	22	53	47.212	-39	56	47.04	4		9011	722	F2	36A5
	10	23	3	12	9.1228	1	2	0	41.241	-82	13	38.32	4		9007	7785	F2	2530
	10	23	3	12	13.1193	1	22	57	40.083	-39	15	59.02	4		9011	722	F3	36A6
	10	23	3	12	13.1227	1	2	7	32.605	-81	47	35.73	4		9007	7785	F3	3245
	10	23	3	12	17.1192	1	23	1	31.022	-38	34	8.02	4		9011	722	F4	4071
	10	23	3	12	17.1226	1	2	13	48.694	-81	20	53.56	4		9007	7785	F4	2531
	10	23	3	12	21.1192	1	23	5	20.254	-37	51	23.11	4		9011	722	F5	36A8
	10	23	3	12	21.1226	1	2	19	33.541	-80	53	33.12	4		9007	7785	F5	2532
	10	23	3	12	25.1192	1	23	9	6.840	-37	7	36.23	4		9011	722	F6	36A9
	10	23	3	12	25.1225	1	2	24	50.858	-80	25	33.89	4		9007	7785	F6	2533
	10	23	3	12	29.1191	1	23	12	51.942	-36	22	49.41	4		9011	722	F7	3690
	10	23	3	12	29.1225	1	2	29	44.735	-79	57	2.67	4		9007	7785	F7	2534
	10	23	3	17	5.1203	1	4	14	33.056	-29	21	21.25	4		9007	7786	F1	2457
	10	23	3	17	9.1203	1	4	15	18.420	-28	28	17.25	4		9007	7786	F2	2458
	10	23	3	17	13.1203	1	4	16	3.237	-27	35	16.00	4		9007	7786	F3	2459
	10	23	3	17	17.1204	1	4	16	48.178	-26	42	25.76	4		9007	7786	F4	24A0
	10	23	3	17	21.1204	1	4	17	32.693	-25	49	44.20	4		9007	7786	F5	3171
	10	23	3	17	25.1204	1	4	18	17.005	-24	57	7.19	4		9007	7786	F6	24A1
	10	23	3	17	29.1204	1	4	19	1.087	-24	4	43.50	4		9007	7786	F7	24A2
	10	23	5	20	5.1219	1	22	25	34.764		2	23 25.93	4		9007	7789	F1	24A3
	10	23	5	20	9.1219	1	22	26	55.726		3	2 41.62	4		9007	7789	F2	24A4
	10	23	5	20	13.1219	1	22	28	16.873		3	42 15.17	4		9007	7789	F3	24A5
	10	23	5	20	17.1218	1	22	29	38.198		4	21 59.40	4		9007	7789	F4	24A6
	10	23	5	20	21.1218	1	22	30	59.144		5	1 56.56	4		9007	7789	F5	24A7
	10	23	5	20	25.1218	1	22	32	20.382		5	42 9.20	4		9007	7789	F6	24A8
	10	23	5	20	29.1218	1	22	33	41.531		6	22 29.49	4		9007	7789	F7	24A9
	10	23	7	30	5.1225	1	3	31	29.613	-36	30	16.20	4		9001	4470	F1	8178
	10	23	7	30	9.1224	1	3	35	23.465	-36	4	22.24	4		9001	4470	F2	8179
	10	23	7	30	13.1224	1	3	35	17.994	-35	38	3.96	4		9001	4470	F3	81A0

October 23 - November 16, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.		OBS.NO.
1966	10	23	7	30	17.1223	1	3	37	13.122	-35	11	22.02	4		9001	4470	F4	A1A1
	10	23	7	30	21.1223	1	3	39	8.726	-34	44	17.57	4		9001	4470	F5	A1A2
	10	23	7	30	25.1222	1	3	41	5.576	-34	16	43.54	4		9001	4470	F6	A1A3
	10	23	7	32	5.1210	1	4	33	25.180	-20	30	55.34	4		9001	4471	F1	A1A5
	10	23	7	32	9.1210	1	4	35	40.194	-19	52	16.38	4		9001	4471	F2	A1A6
	10	23	7	32	13.1210	1	4	37	55.668	-19	13	14.56	4		9001	4471	F3	A1A7
	10	23	7	32	17.1209	1	4	40	12.163	-18	33	47.08	4		9001	4471	F4	A1A8
	10	23	7	32	21.1209	1	4	42	29.271	-17	53	57.47	4		9001	4471	F5	A1A9
	10	23	7	32	25.1209	1	4	44	47.038	-17	13	44.78	4		9001	4471	F6	A1A0
	10	23	7	32	29.1208	1	4	47	5.566	-16	33	10.49	4		9001	4471	F7	A1B1
	10	23	7	34	5.1205	1	5	45	33.932	0	46	42.71	4		9001	4472	F1	A3A8
	10	23	7	34	9.1205	1	6	48	6.344	1	30	26.43	4		9001	4472	F2	A3A9
	10	23	7	34	13.1205	1	5	50	39.291	2	14	6.78	4		9001	4472	F3	A3A0
	10	23	7	34	17.1205	1	5	53	12.520	2	57	31.27	4		9001	4472	F4	A3B1
	10	23	7	34	21.1205	1	5	55	46.161	3	40	39.87	4		9001	4472	F5	A3B2
	10	23	7	34	25.1206	1	5	58	19.917	4	23	37.38	4		9001	4472	F6	A3B3
	10	23	7	34	29.1206	1	6	0	54.179	5	6	15.78	4		9001	4472	F7	A3B4
	10	23	7	36	5.1212	1	7	2	59.205	20	2	50.63	4		9001	4473	F1	A3B5
	10	23	7	36	9.1212	1	7	5	32.746	20	33	33.85	4		9001	4473	F2	A3B6
	10	23	7	36	13.1213	1	7	8	5.923	21	3	43.10	4		9001	4473	F3	A3B7
	10	23	7	36	17.1213	1	7	10	38.997	21	33	13.85	4		9001	4473	F4	A3B8
	10	23	7	36	21.1214	1	7	13	11.674	22	2	11.27	4		9001	4473	F5	A3B9
	10	23	7	36	25.1214	1	7	15	43.657	22	30	31.44	4		9001	4473	F6	A4A0
	10	23	7	36	29.1215	1	7	18	15.465	22	58	18.64	4		9001	4473	F7	A4A1
	10	23	9	38	5.1206	1	0	10	48.877	43	6	1.76	4		9001	4475	F1	A4A2
	10	23	9	38	9.1206	1	0	10	40.273	44	4	16.67	4		9001	4475	F2	A4A3
	10	23	9	38	13.1206	1	0	10	30.650	45	2	38.28	4		9001	4475	F3	A4A4
	10	23	9	38	17.1206	1	0	10	20.203	46	1	8.93	4		9001	4475	F4	A4A5
	10	23	9	38	21.1206	1	0	10	7.916	46	59	49.61	4		9001	4475	F5	A4A6
	10	23	9	38	25.1206	1	0	9	54.565	47	58	26.15	4		9001	4475	F6	A4A7
	10	23	9	41	5.1215	10	22	24	21.589	83	5	21.74	4		9001	4476	F1	9358
	10	23	9	41	9.1215	10	22	9	14.588	83	41	39.95	4		9001	4476	F2	9359
	10	23	9	41	13.1216	10	21	51	13.662	84	15	32.10	4		9001	4476	F3	93A0
	10	23	9	41	17.1216	10	21	29	40.612	84	46	24.03	4		9001	4476	F4	93A1
	10	23	9	41	21.1216	1	21	4	2.846	85	13	28.04	4		9001	4476	F5	A639
	10	23	9	41	25.1217	1	20	33	52.635	85	35	53.88	4		9001	4476	F6	A640
	10	23	11	6	1.5516	1	5	59	06.944	-69	10	37.31	4		9023	8961	03	A676
	10	23	11	6	5.5515	1	5	56	10.591	-68	46	47.32	4		9023	8961	04	5A33
	10	23	11	6	9.5514	1	5	52	52.330	-68	22	36.34	4		9023	8961	05	5A34
	10	23	11	6	13.5514	1	5	49	41.818	-67	58	2.43	4		9023	8961	06	6417
	10	23	11	6	17.5515	1	5	46	37.295	-67	33	11.22	4		9023	8961	07	6975
	10	23	11	6	21.5513	1	5	43	38.998	-67	7	49.97	4		9023	8961	08	6419
	10	23	11	32	5.1193	1	1	20	9.995	12	46	30.89	4		9012	9146	F1	22A5
	10	23	11	32	9.1192	1	1	22	6.098	14	0	19.11	4		9012	9146	F2	3517
	10	23	11	32	13.1192	1	1	24	4.620	15	14	53.69	4		9012	9146	F3	3518
	10	23	11	32	17.1192	1	1	26	5.343	16	30	9.53	4		9012	9146	F4	3519
	10	23	11	32	21.1192	1	1	28	8.261	17	46	7.66	4		9012	9146	F5	3520
	10	23	11	32	25.1192	1	1	30	13.603	19	2	42.45	4		9012	9146	F6	22A6
	10	23	11	32	29.1191	1	1	32	21.671	20	19	43.61	4		9012	9146	F7	3521
	10	23	19	14	5.1246	1	4	35	18.898	-41	21	57.02	4		9002	6777	F1	30A2
	10	23	19	14	9.1246	1	4	35	2.082	-40	44	56.12	4		9002	6777	F2	30A3
	10	23	19	14	13.1246	1	4	34	45.861	-40	7	57.32	4		9002	6777	F3	30A4
	10	23	19	14	17.1246	1	4	34	30.522	-39	31	3.82	4		9002	6777	F4	30A5
	10	23	19	14	21.1246	1	4	34	16.123	-38	54	9.58	4		9002	6777	F5	3525
	10	23	19	14	25.1246	1	4	34	2.805	-38	17	17.58	4		9002	6777	F6	30A6
	10	23	19	14	29.1246	1	4	33	49.907	-37	40	29.61	4		9002	6777	F7	30A7
	10	23	21	16	5.1222	1	21	43	58.730	-41	33	49.47	4		9002	6784	F1	3178
	10	23	21	16	9.1221	1	21	47	12.727	-41	6	56.06	4		9002	6784	F2	3179
	10	23	21	16	13.1221	1	21	50	26.456	-40	39	8.45	4		9002	6784	F3	3130
	10	23	21	16	17.1220	1	21	53	40.324	-40	10	32.99	4		9002	6784	F4	3131
	10	23	21	16	21.1220	1	21	56	54.085	-39	41	7.17	4		9002	6784	F5	3132
	10	23	21	16	25.1219	1	22	0	8.299	-39	10	47.27	4		9002	6784	F6	3133
	10	23	21	16	29.1219	1	22	3	22.017	-38	39	40.82	4		9002	6784	F7	3134
	10	23	21	21	5.1216	1	1	13	24.422	18	51	42.89	4		9002	6785	F1	3135
	10	23	21	21	9.1217	1	1	15	31.608	19	36	8.11	4		9002	6785	F2	3136
	10	23	21	21	13.1217	1	1	17	37.558	20	19	52.98	4		9002	6785	F3	3137
	10	23	21	21	17.1218	1	1	19	42.877	21	2	56.83	4		9002	6785	F4	3138
	10	23	21	21	21.1218	1	1	21	46.910	21	45	11.60	4		9002	6785	F5	3139
	10	23	21	21	25.1219	1	1	23	50.059	22	27	.42	4		9002	6785	F6	3140
	10	23	21	21	29.1219	1	1	25	52.364	23	8	2.21	4		9002	6785	F7	3141
	10	23	23	41	9.1213	1	6	46	35.614	38	57	7.68	4		9051	757	F2	28
	10	23	23	41	13.1213	1	6	51	14.811	39	26	34.50	4		9051	756	F3	30
	10	23	23	41	13.1213	1	6	51	14.963	39	26	31.68	4		9051	757	F3	27
	10	23	23	41	17.1214	1	6	55	53.684	39	54	41.16	4		9051	756	F4	29
	10	23	23	41	17.1214	1	6	55	53.589	39	54	41.14	4		9051	757	F4	26
	10	23	23	41	21.1214	1	7	0	31.636	40	21	32.79	4		9051	756	F5	28
	10	23	23	41	21.1214	1	7	0	31.837	40	21	32.61	4		9051	757	F5	25
	10	23	23	41	25.1215	1	7	5	8.965	40	47	13.62	4		9051	756	F6	27
	10	23	23	41	29.1215	1	7	9	45.152	41	11	40.38	4		9051	756	F7	26
	11	16	5	9	5.1821	1	1	2	20.913	86	40	58.20	4		9113	614	F1	2667

November 16-23, 1966

DATE Y	M	D	TIME (A-1) H	M	S	RMS MS	R.A.(1950.0) H	M	S	DECL.(1950.0) D	M	S	RMS S	RANGE (MM)	STATION	FRAME NO.	OBS.NO.
1966	11	16	5	9	9.1822	1	1	57	49.886	87	5	42.05	4		9113	614 F2	2648
	11	16	5	9	13.1822	1	1	5	4.687	87	17	30.63	4		9113	614 F3	2649
	11	16	5	9	17.1823	10	4	14	43.031	87	14	22.04	4		9113	614 F4	2670
	11	16	5	9	21.1823	1	5	15	39.766	86	57	39.65	4		9113	614 F5	2671
	11	16	5	9	25.1824	1	6	3	2.210	86	31	12.16	4		9113	614 F6	2672
	11	16	5	9	29.1824	1	6	38	18.009	85	58	33.50	4		9113	614 F7	2673
	11	16	11	31	5.1943	1								2.3323270	7901		5502
	11	16	11	32	35.1927	1								2.1270830	7901		5503
	11	16	11	37	35.1962	1								2.3454530	7901		5505
	11	17	11	36	5.1980	1								2.1299960	7901		5506
	11	17	11	37	5.1948	1								1.9964850	7901		5507
	11	17	11	38	5.1959	1								1.9201620	7901		5508
	11	17	11	38	35.1970	1								1.9056300	7901		5509
	11	17	11	39	5.1947	1								1.9073610	7901		5510
	11	17	11	39	35.1949	1								1.9252060	7901		5511
	11	17	11	40	5.1957	1								1.9586280	7901		5512
	11	17	11	40	35.1972	1								2.0087580	7901		5513
	11	17	11	41	5.1967	1								2.0684390	7901		5514
	11	17	11	41	35.1952	1								2.1423920	7901		5515
	11	17	11	42	5.1955	1								2.2273050	7901		5516
	11	17	11	42	35.1983	1								2.3218320	7901		5517
	11	17	11	43	5.1983	1								2.4247360	7901		5518
	11	18	11	43	35.1978	1								1.8189260	7901		5519
	11	18	11	44	5.1969	1								1.8394000	7901		5520
	11	18	11	44	35.1976	1								1.8760970	7901		5521
	11	18	11	45	5.1980	1								1.9280440	7901		5522
	11	18	11	45	35.1986	1								1.9938820	7901		5523
	11	18	11	46	35.1977	1								2.1614540	7901		5524
	11	18	11	47	5.1995	1								2.2603050	7901		5525
	11	18	11	47	35.2000	1								2.3674020	7901		5526
	11	19	11	44	35.2013	1								2.0885440	7901		5527
	11	19	11	46	5.2014	1								1.8696960	7901		5528
	11	19	11	46	35.1980	1								1.8258060	7901		5529
	11	19	11	47	5.1996	1								1.7985300	7901		5530
	11	19	11	51	5.2014	1								2.1597040	7901		5531
	11	19	11	52	5.2037	1								2.3710730	7901		5533
	11	19	11	52	35.2025	1								2.4875230	7901		5534
	11	19	11	53	5.2052	1								2.6097470	7901		5535
	11	20	11	48	5.2073	1								2.2957570	7901		5536
	11	20	11	48	35.2038	1								2.1933530	7901		5537
	11	20	11	49	35.2032	1								2.0205770	7901		5539
	11	20	11	50	5.2025	1								1.9529690	7901		5540
	11	20	11	50	35.2043	1								1.8996740	7901		5541
	11	20	11	51	35.2012	1								1.8404070	7901		5542
	11	20	11	52	5.2013	1								1.8357780	7901		5543
	11	20	11	52	35.2036	1								1.8480120	7901		5544
	11	20	11	53	5.2018	1								1.8767040	7901		5545
	11	20	11	53	35.2014	1								1.9209740	7901		5546
	11	20	11	54	5.2037	1								1.9796730	7901		5547
	11	20	11	54	35.2029	1								2.0514270	7901		5548
	11	20	11	55	5.2031	1								2.1348090	7901		5549
	11	20	11	56	5.2064	1								2.3308530	7901		5550
	11	20	11	57	35.2082	1								2.6795620	7901		5551
	11	20	11	58	5.2093	1								2.8063490	7901		5552
	11	20	11	58	35.2081	1								2.9370900	7901		5553
	11	22	1	24	5.2034	1								1.5043460	7901		5554
	11	22	1	25	5.2035	1								1.5234940	7901		5556
	11	22	12	0	35.2100	1								2.1418350	7901		5557
	11	22	12	2	5.2096	1								2.2124420	7901		5558
	11	22	12	2	35.2123	1								2.2619210	7901		5559
	11	22	12	3	5.2124	1								2.3232150	7901		5560
	11	22	12	3	35.2109	1								2.3953350	7901		5561
	11	22	12	5	5.2135	1								2.6659990	7901		5562
	11	22	12	5	35.2154	1								2.7710140	7901		5563
	11	22	12	6	5.2133	1								2.8819660	7901		5564
	11	23	10	2	5.2122	1								2.2483700	7901		5565

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LONG-ARC ORBITAL ANALYSIS OF GEOS 1

E. M. Gaposchkin and Paul D. Hubley

ABSTRACT

Numerical results of orbits computed for 30-day arcs are presented. We have found that such orbits are sufficiently accurate to use for geodetic purposes.

LONG-ARC ORBITAL ANALYSIS OF GEOS 1

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The usual method of representing orbital elements is described by Gaposchkin (1966), and the results given in this form are tabulated in the previous paper in this volume by Miller and Caliri. The Geos 1 satellite is unusually good for orbital analysis and has been used in orbit calculation for longer intervals. Whereas the analysis by Miller and Caliri was performed on data covering an interval of time of 4 to 8 days, we have succeeded in computing orbits covering intervals of 30 days. The orbits computed in this way are as accurate as are the shorter arcs, and they have been used in the preliminary geodetic studies described by Gaposchkin (this volume).

Also, our orbit computation program being developed for future determination of station coordinates and gravity-field parameters has been considerably extended. The analytical theory has been extended to include the second-order short-period oblateness perturbations (Kozai, 1966). For Geos 1 the amplitude of these perturbations is about 5 m. The reduction of the observations for precession and nutation has been extended to the full precession terms described in the SAO Star Catalog (Staff, Smithsonian Astrophysical Observatory, 1966). From the Explanatory Supplement to the Astronomical Ephemeris and the American Ephemeris and Nautical Almanac, all the nutation terms whose maximum of the ignored terms was less than 0.5 m on the equator were taken. This revision of the precession and nutation terms is to some extent a change in the coordinate system. It is more rigorously related to the equinox of 1950.0 and the equator of date.

The data included in the orbit calculation consist of the Baker-Nunn data described by Miller and Caliri (this volume), augmented by the SAO laser data discussed in the same paper. In addition, a significant amount of data

from other cameras became available. These data were used in the geodetic study described by Gaposchkin (this volume). The station coordinates determined in the C6 coordinate system allowed these observations to be used in the determination of the reference orbits. The actual observations used are presented in Table 1.

In general, the orbits are computed for the calendar month. This separation is arbitrary. The laser data can be used to establish the accuracy of the orbits, since they have an accuracy much higher than that of the orbital theory. The laser data should have an accuracy of 1.5 m (Lehr, Maestre, and Anderson, 1968). Because of the harmonic coefficients used, the orbital analysis cannot be better than 20 m and is probably not that good. For this reason, the laser data cannot be assigned their expected accuracy. The laser data were used in the orbit computation with an uncertainty of 10 m. Table 2 gives $\sqrt{(\text{residuals}^2)/n}$ for each month.

Table 2. Laser residuals

Month (1966)	$\sqrt{(\text{residuals}^2)/n}$ (m)	Number used (n)
January	18	8
February	6	23
March	6	53
April	10	68
May	9	108
July	17	65
August	13	29
September	18	19

Clearly, we achieved what we sought, i. e., 10-m agreement with the analytical theory. Gaposchkin (this volume) describes another comparison of the laser data. The orbits in that case were computed with the operational DOI program and without the laser data. We feel that the orbits using the improved analytical theory and the laser data are marginally better; thus, these are the orbital elements listed here.

The general description of the orbital elements given by Gaposchkin (1966) applies here.

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1966. Smithsonian Astrophysical Observatory Star Catalog. Smithsonian Institution Publ. 4652, Smithsonian Institution, Washington, D. C., 4 parts.

Table 1. Geos results, constants, and data

Orbital elements for the interval November 8-30, 1965, at epoch 39084.0. The standard error of unit weight is 1.31 with 326 observed quantities used.

$$\omega = 159.^\circ 188875 + 0.^\circ 655679\,(T - T_0) - 4.^\circ 5883\text{E-}05\,(T - T_0)^2 + 1.^\circ 00851\text{E+}00 \cos\omega - 6.^\circ 69776\text{E-}02 \sin 2\omega - 1.^\circ 79815\text{E-}03 \cos 3\omega$$

$$\Omega = 69.^\circ 343499 - 2.^\circ 246215\,(T - T_0) - 8.^\circ 0183\text{E-}06\,(T - T_0)^2 + 3.^\circ 76032\text{E-}02 \cos\omega - 1.^\circ 90190\text{E-}03 \sin 2\omega - 4.^\circ 29739\text{E-}05 \cos 3\omega$$

$$i = 59.^\circ 385620 - 3.^\circ 05268\text{E-}03 \sin\omega - 1.^\circ 94064\text{E-}04 \cos 2\omega + 5.^\circ 43594\text{E-}06 \sin 3\omega$$

$$e = 0.07162894 - 0.0000031285\,(T - T_0) + 1.24988\text{E-}03 \sin\omega + 7.94572\text{E-}05 \cos 2\omega - 2.22567\text{E-}06 \sin 3\omega$$

$$M = 0.1662725 + 11.9676505\,(T - T_0) - 2.1366\text{E-}07\,(T - T_0)^2 - 2.3027\text{E-}09\,(T - T_0)^3 - 2.79513\text{E-}03 \cos\omega + 1.80358\text{E-}04 \sin 2\omega + 4.94645\text{E-}06 \cos 3\omega$$

Orbital elements for the interval December 1-31, 1965, at epoch 39109.0. The standard error of unit weight is 0.71 with 340 observed quantities used.

$$\omega = 175.^\circ 555417 + 0.^\circ 654210\,(T - T_0) - 3.^\circ 0359\text{E-}05\,(T - T_0)^2 + 1.^\circ 00951\text{E+}00 \cos\omega - 6.^\circ 69455\text{E-}02 \sin 2\omega - 1.^\circ 79571\text{E-}03 \cos 3\omega$$

$$\Omega = 13.^\circ 183424 - 2.^\circ 246577\,(T - T_0) + 3.^\circ 0489\text{E-}07\,(T - T_0)^2 + 3.^\circ 75479\text{E-}02 \cos\omega - 1.^\circ 89709\text{E-}03 \sin 2\omega - 4.^\circ 28163\text{E-}05 \cos 3\omega$$

$$i = 59.^\circ 384866 - 3.^\circ 04901\text{E-}03 \sin\omega - 1.^\circ 93563\text{E-}04 \cos 2\omega + 5.^\circ 41665\text{E-}06 \sin 3\omega$$

$$e = 0.07157753 - 0.0000009290\,(T - T_0) + 1.24975\text{E-}03 \sin\omega + 7.93395\text{E-}05 \cos 2\omega - 2.22023\text{E-}06 \sin 3\omega$$

$$M = 0.3573910 + 11.9676381\,(T - T_0) - 2.2649\text{E-}07\,(T - T_0)^2 - 8.1844\text{E-}10\,(T - T_0)^3 - 2.79792\text{E-}03 \cos\omega + 1.80284\text{E-}04 \sin 2\omega + 4.93985\text{E-}06 \cos 3\omega$$

Orbital elements for the interval January 1-31, 1966, at epoch 39140.0. The standard error of unit weight is 1.27 with 248 observed quantities used.

$$\omega = 195.^\circ822533 + 0.^\circ653543\,(T - T_0) - 3.^\circ3199\text{E-}06\,(T - T_0)^2 + 1.^\circ00967\text{E+}00\cos\omega - 6.^\circ69490\text{E-}02\sin 2\omega - 1.^\circ79556\text{E-}03\cos 3\omega$$

$$\Omega = -56.^\circ458028 - 2.^\circ246441\,(T - T_0) - 5.^\circ8703\text{E-}06\,(T - T_0)^2 + 3.^\circ75472\text{E-}02\cos\omega - 1.^\circ89669\text{E-}03\sin 2\omega - 4.^\circ28042\text{E-}05\cos 3\omega$$

$$i = 59.^\circ384169 - 0.^\circ0001114823\,(T - T_0) - 3.^\circ04866\text{E-}03\sin\omega - 1.^\circ93523\text{E-}04\cos 2\omega + 5.^\circ41474\text{E-}06\sin 3\omega$$

$$e = 0.07159340 + 0.0000016525\,(T - T_0) + 1.24979\text{E-}03\sin\omega + 7.93345\text{E-}05\cos 2\omega - 2.21976\text{E-}06\sin 3\omega$$

$$M = -0.6461098 + 11.9676196\,(T - T_0) - 2.4529\text{E-}07\,(T - T_0)^2 + 3.8948\text{E-}09\,(T - T_0)^3 - 2.79836\text{E-}03\cos\omega + 1.80295\text{E-}04\sin 2\omega + 4.93945\text{E-}06\cos 3\omega$$

Orbital elements for the interval February 1-28, 1966, at epoch 39172.0. The standard error of unit weight is 0.60 with 141 observed quantities used.

$$\omega = 216.^\circ738129 + 0.^\circ653563\,(T - T_0) + 1.^\circ00802\text{E+}00\cos\omega - 6.^\circ68573\text{E-}02\sin 2\omega - 1.^\circ79575\text{E-}03\cos 3\omega$$

$$\Omega = -128.^\circ348207 - 2.^\circ246767\,(T - T_0) + 3.^\circ75099\text{E-}02\cos\omega - 1.^\circ89875\text{E-}03\sin 2\omega - 4.^\circ28593\text{E-}05\cos 3\omega$$

$$i = 59.^\circ379491 - 3.^\circ05097\text{E-}03\sin\omega - 1.^\circ93703\text{E-}04\cos 2\omega + 5.^\circ42820\text{E-}06\sin 3\omega$$

$$e = 0.07166295 + 0.0000023111\,(T - T_0) + 1.24908\text{E-}03\sin\omega + 7.93032\text{E-}05\cos 2\omega - 2.22233\text{E-}06\sin 3\omega$$

$$M = 0.3175931 + 11.9676157\,(T - T_0) + 1.5687\text{E-}08\,(T - T_0)^2 - 7.6644\text{E-}10\,(T - T_0)^3 - 2.79374\text{E-}03\cos\omega + 1.80035\text{E-}04\sin 2\omega + 4.93979\text{E-}06\cos 3\omega$$

Orbital elements for the interval March 1-31, 1966, at epoch 39199.0. The standard error of unit weight is 0.96 with 463 observed quantities used.

$$\omega = 234.^{\circ}372290 + 0.^{\circ}653436\,(T - T_0) + 2.^{\circ}5489\text{E-}05\,(T - T_0)^2 + 1.^{\circ}00715\text{E+}00 \cos\omega - 6.^{\circ}69249\text{E-}02 \sin 2\omega - 1.^{\circ}79892\text{E-}03 \cos 3\omega$$

$$\Omega = -189.^{\circ}006062 - 2.^{\circ}246569\,(T - T_0) + 3.^{\circ}0694\text{E-}06\,(T - T_0)^2 + 3.^{\circ}75934\text{E-}02 \cos\omega - 1.^{\circ}90453\text{E-}03 \sin 2\omega - 4.^{\circ}30527\text{E-}05 \cos 3\omega$$

$$i = 59.^{\circ}382021 - 0.^{\circ}0000806928\,(T - T_0) - 3.^{\circ}05518\text{E-}03 \sin\omega - 1.^{\circ}94316\text{E-}04 \cos 2\omega + 5.^{\circ}44997\text{E-}06 \sin 3\omega$$

$$e = 0.07173999 + 0.0000036799\,(T - T_0) + 1.24945\text{E-}03 \sin\omega + 7.94674\text{E-}05 \cos 2\omega - 2.22883\text{E-}06 \sin 3\omega$$

$$M = 0.4433216 + 11.9676253\,(T - T_0) + 2.4928\text{E-}07\,(T - T_0)^2 + 1.0844\text{E-}09\,(T - T_0)^3 - 2.79134\text{E-}03 \cos\omega + 1.80205\text{E-}04 \sin 2\omega + 4.94841\text{E-}06 \cos 3\omega$$

Orbital elements for the interval April 1-30, 1966, at epoch 39231.0. The standard error of unit weight is 0.91 with 534 observed quantities used.

$$\omega = 255.^{\circ}277545 + 0.^{\circ}652538\,(T - T_0) + 7.^{\circ}9752\text{E-}06\,(T - T_0)^2 + 1.^{\circ}00593\text{E+}00 \cos\omega - 6.^{\circ}69410\text{E-}02 \sin 2\omega - 1.^{\circ}80128\text{E-}03 \cos 3\omega$$

$$\Omega = -260.^{\circ}902001 - 2.^{\circ}246868\,(T - T_0) + 8.^{\circ}2776\text{E-}06\,(T - T_0)^2 + 3.^{\circ}76399\text{E-}02 \cos\omega - 1.^{\circ}90948\text{E-}03 \sin 2\omega - 4.^{\circ}32129\text{E-}05 \cos 3\omega$$

$$i = 59.^{\circ}380527 + 0.^{\circ}0001545732\,(T - T_0) - 3.^{\circ}05907\text{E-}03 \sin\omega - 1.^{\circ}94825\text{E-}04 \cos 2\omega + 5.^{\circ}47070\text{E-}06 \sin 3\omega$$

$$e = 0.07182213 + 0.0000009582\,(T - T_0) + 1.24946\text{E-}03 \sin\omega + 7.95747\text{E-}05 \cos 2\omega - 2.23447\text{E-}06 \sin 3\omega$$

$$M = 0.4076362 + 11.9676412\,(T - T_0) - 7.8371\text{E-}08\,(T - T_0)^2 - 5.0846\text{E-}09\,(T - T_0)^3 - 2.78793\text{E-}03 \cos\omega + 1.80234\text{E-}04 \sin 2\omega + 4.95477\text{E-}06 \cos 3\omega$$

Orbital elements for the interval May 1-31, 1966, at epoch 39259.0.
The standard error of unit weight is 0.90 with 264 observed quantities used.

$$\omega = 273.^{\circ}536262 + 0.^{\circ}651111\,(T - T_0) - 2.^{\circ}8022E\text{-}06\,(T - T_0)^2 + 1.^{\circ}00606E{+}00\cos\omega - 6.^{\circ}69031E\text{-}02\sin 2\omega - 1.^{\circ}80008E\text{-}03\cos 3\omega$$

$$\Omega = -323.^{\circ}807028 - 2.^{\circ}246442\,(T - T_0) - 9.^{\circ}0951E\text{-}06\,(T - T_0)^2 + 3.^{\circ}76032E\text{-}02\cos\omega - 1.^{\circ}90750E\text{-}03\sin 2\omega - 4.^{\circ}31449E\text{-}05\cos 3\omega$$

$$i = 59.^{\circ}385048 - 3.^{\circ}05773E\text{-}03\sin\omega - 1.^{\circ}94610E\text{-}04\cos 2\omega + 5.^{\circ}46393E\text{-}06\sin 3\omega$$

$$e = 0.07182530 + 0.0000008311\,(T - T_0) + 1.24923E\text{-}03\sin\omega + 7.95076E\text{-}05\cos 2\omega - 2.23228E\text{-}06\sin 3\omega$$

$$M = 0.5014457 + 11.9676305\,(T - T_0) - 2.7698E\text{-}07\,(T - T_0)^2 + 6.6581E\text{-}10\,(T - T_0)^3 - 2.78829E\text{-}03\cos\omega + 1.80137E\text{-}04\sin 2\omega + 4.95149E\text{-}06\cos 3\omega$$

Orbital elements for the interval July 10-31, 1966, at epoch 39326.0.
The standard error of unit weight is 1.33 with 1183 observed quantities used.

$$\omega = 317.^{\circ}278499 + 0.^{\circ}653877\,(T - T_0) + 1.^{\circ}7637E\text{-}05\,(T - T_0)^2 + 1.^{\circ}00674E{+}00\cos\omega - 6.^{\circ}69306E\text{-}02\sin 2\omega - 1.^{\circ}79972E\text{-}03\cos 3\omega$$

$$\Omega = 245.^{\circ}669707 - 2.^{\circ}246675\,(T - T_0) - 7.^{\circ}4148E\text{-}06\,(T - T_0)^2 + 3.^{\circ}76095E\text{-}02\cos\omega - 1.^{\circ}90622E\text{-}03\sin 2\omega - 4.^{\circ}31076E\text{-}05\cos 3\omega$$

$$i = 59.^{\circ}380491 - 0.^{\circ}0001655468\,(T - T_0) - 3.^{\circ}05651E\text{-}03\sin\omega - 1.^{\circ}94489E\text{-}04\cos 2\omega + 5.^{\circ}45703E\text{-}06\sin 3\omega$$

$$e = 0.07175328 - 0.0000017881\,(T - T_0) + 1.24945E\text{-}03\sin\omega + 7.95042E\text{-}05\cos 2\omega - 2.23075E\text{-}06\sin 3\omega$$

$$M = -0.6679964 + 11.9676259\,(T - T_0) + 1.5179E\text{-}07\,(T - T_0)^2 - 5.4952E\text{-}09\,(T - T_0)^3 - 1.6981E\text{-}10\,(T - T_0)^4 - 2.79018E\text{-}03\cos\omega + 1.80216E\text{-}04\sin 2\omega + 4.95059E\text{-}06\cos 3\omega$$

Orbital elements for the interval August 1-31, 1966, at epoch 39352.0. The standard error of unit weight is 0.88 with 871 observed quantities used.

$$\omega = 334.^{\circ}293498 + 0.^{\circ}655535\,(T - T_0) + 6.^{\circ}3390\text{E-}05\,(T - T_0)^2 + 1.^{\circ}00696\text{E+}00\cos\omega - 6.^{\circ}68619\text{E-}02\sin 2\omega - 1.^{\circ}79756\text{E-}03\cos 3\omega$$

$$\Omega = 187.^{\circ}255018 - 2.^{\circ}246579\,(T - T_0) + 8.^{\circ}3569\text{E-}06\,(T - T_0)^2 + 3.^{\circ}75423\text{E-}02\cos\omega - 1.^{\circ}90267\text{E-}03\sin 2\omega - 4.^{\circ}29850\text{E-}05\cos 3\omega$$

$$i = 59.^{\circ}380792 + 0.^{\circ}0001356583\,(T - T_0) - 3.^{\circ}05411\text{E-}03\sin\omega - 1.^{\circ}94103\text{E-}04\cos 2\omega + 5.^{\circ}44496\text{E-}06\sin 3\omega$$

$$e = 0.07170152 - 0.0000021111\,(T - T_0) + 1.24903\text{E-}03\sin\omega + 7.93822\text{E-}05\cos 2\omega - 2.22682\text{E-}06\sin 3\omega$$

$$M = 0.4902895 + 11.9676230\,(T - T_0) - 2.5750\text{E-}07\,(T - T_0)^2 - 2.1882\text{E-}09\,(T - T_0)^3 + 2.6603\text{E-}11\,(T - T_0)^4 - 2.79078\text{E-}03\cos\omega + 1.80037\text{E-}04\sin 2\omega + 4.94465\text{E-}06\cos 3\omega$$

Orbital elements for the interval September 1-30, 1966, at epoch 39383.0. The standard error of unit weight is 1.40 with 493 observed quantities used.

$$\omega = 354.^{\circ}609562 + 0.^{\circ}654976\,(T - T_0) - 2.^{\circ}5423\text{E-}05\,(T - T_0)^2 + 1.^{\circ}00870\text{E+}00\cos\omega - 6.^{\circ}68819\text{E-}02\sin 2\omega - 1.^{\circ}79532\text{E-}03\cos 3\omega$$

$$\Omega = 117.^{\circ}613451 - 2.^{\circ}246692\,(T - T_0) - 1.^{\circ}6894\text{E-}06\,(T - T_0)^2 + 3.^{\circ}75134\text{E-}02\cos\omega - 1.^{\circ}89735\text{E-}03\sin 2\omega - 4.^{\circ}28173\text{E-}05\cos 3\omega$$

$$i = 59.^{\circ}381577 - 0.^{\circ}0000073842\,(T - T_0) - 3.^{\circ}04965\text{E-}03\sin\omega - 1.^{\circ}93569\text{E-}04\cos 2\omega + 5.^{\circ}42089\text{E-}06\sin 3\omega$$

$$e = 0.07163405 - 0.0000017952\,(T - T_0) + 1.24929\text{E-}03\sin\omega + 7.92954\text{E-}05\cos 2\omega - 2.22067\text{E-}06\sin 3\omega$$

$$M = -0.5134539 + 11.9676214\,(T - T_0) + 1.1714\text{E-}07\,(T - T_0)^2 + 1.7862\text{E-}09\,(T - T_0)^3 - 1.2437\text{E-}10\,(T - T_0)^4 - 2.79566\text{E-}03\cos\omega + 1.80108\text{E-}04\sin 2\omega + 4.93867\text{E-}06\cos 3\omega$$

Orbital elements for the interval October 1-31, 1966, at epoch 39414.0. The standard error of unit weight is 1.48 with 730 observed quantities used.

$$\omega = 14.^{\circ}897095 + 0.^{\circ}654188\,(T - T_0) - 9.^{\circ}1968\text{E-}06\,(T - T_0)^2 + 1.^{\circ}00927\text{E+}00\cos\omega - 6.^{\circ}69656\text{E-}02\sin 2\omega - 1.^{\circ}79664\text{E-}03\cos 3\omega$$

$$\Omega = 47.^{\circ}967284 - 2.^{\circ}246419\,(T - T_0) + 9.^{\circ}7461\text{E-}06\,(T - T_0)^2 + 3.^{\circ}75727\text{E-}02\cos\omega - 1.^{\circ}89876\text{E-}03\sin 2\omega - 4.^{\circ}28727\text{E-}05\cos 3\omega$$

$$i = 59.^{\circ}385142 + 0.^{\circ}0002254933\,(T - T_0) - 3.^{\circ}05023\text{E-}03\sin\omega - 1.^{\circ}93741\text{E-}04\cos 2\omega + 5.^{\circ}42292\text{E-}06\sin 3\omega$$

$$e = 0.07161212 + 0.0000002895\,(T - T_0) + 1.24986\text{E-}03\sin\omega + 7.93873\text{E-}05\cos 2\omega - 2.22210\text{E-}06\sin 3\omega$$

$$M = 0.4828471 + 11.9676190\,(T - T_0) - 1.7624\text{E-}07\,(T - T_0)^2 + 6.1396\text{E-}09\,(T - T_0)^3 + 3.2701\text{E-}10\,(T - T_0)^4 - 2.79724\text{E-}03\cos\omega + 1.80334\text{E-}04\sin 2\omega + 4.94235\text{E-}06\cos 3\omega$$

Table 1. Geos results, constants, and data

Tesseral Harmonics

C 2 2 2.3790E-06	S 2 2 -1.3510E-06	C 3 1 1.9360E-06	S 3 1 2.6600F-07
C 3 2 7.3400E-07	S 3 2 -5.3800E-07	C 3 3 5.6100E-07	S 3 3 1.6200F-06
C 4 1 -5.7200E-07	S 4 1 -4.6900E-07	C 4 2 3.3000E-07	S 4 2 6.6100F-07
C 4 3 8.5100E-07	S 4 3 -1.9000E-07	C 4 4 -5.3000E-08	S 4 4 2.3000F-07
C 5 1 -7.9000E-08	S 5 1 -1.0300E-07	C 5 2 6.3100E-07	S 5 2 -2.3200F-07
C 5 3 -5.2000E-07	S 5 3 7.0000E-09	C 5 4 -2.6500E-07	S 5 4 6.4000E-08
C 5 5 1.5600E-07	S 5 5 -5.9200E-07	C 6 1 -4.7000E-08	S 6 1 -2.7000F-08
C 6 2 6.9000E-08	S 6 2 -3.6600E-07	C 6 3 -5.4000E-08	S 6 3 3.1000E-08
C 6 4 -4.4000E-08	S 6 4 -5.1800E-07	C 6 5 -3.1300E-07	S 6 5 -4.5800F-07
C 6 6 -4.0000E-08	S 6 6 -1.5500E-07	C 7 1 1.9700E-07	S 7 1 1.5600F-07
C 7 2 3.6400E-07	S 7 2 1.6300E-07	C 7 3 2.5000E-07	S 7 3 1.8000F-08
C 7 4 -1.5200E-07	S 7 4 -1.0200E-07	C 7 5 7.6000E-08	S 7 5 5.4000F-08
C 7 6 -2.0900E-07	S 7 6 6.3000E-08	C 7 7 5.5000E-08	S 7 7 9.6000F-08
C 8 1 -7.5000E-08	S 8 1 6.5000E-08	C 8 2 2.6000E-08	S 8 2 3.9000F-08
C 8 3 -3.7000E-08	S 8 3 4.0000E-09	C 8 4 -2.1200E-07	S 8 4 -1.2000F-08
C 8 5 -5.3000E-08	S 8 5 1.1800E-07	C 8 6 -1.7000E-08	S 8 6 3.1800F-07
C 8 7 -8.7000E-09	S 8 7 3.1000E-08	C 8 8 -2.4800E-07	S 8 8 1.0200E-07
C 9 1 1.1700E-07	S 9 1 1.2000E-08	C 9 2 -4.0000E-09	S 9 2 3.5000F-08
C10 1 1.0500E-07	S10 1 -1.2600E-07	C10 2 -1.0500E-07	S10 2 -4.2000F-08
C10 3 -6.5000E-08	S10 3 3.0000E-08	C10 4 -7.4000E-08	S10 4 -1.1100E-07
C11 1 -5.3000E-08	S11 1 1.5000E-08	C12 1 -1.6300E-07	S12 1 -7.1000E-08
C12 2 -1.0300E-07	S12 2 -5.1000E-09	C1212 -3.1000E-08	S1212 8.0000E-10
C1312 -6.8480E-08	S1312 6.5700E-08	C1313 -5.9000E-08	S1313 7.7000E-08
C14 1 -1.5000E-08	S14 1 5.3000E-09	C1411 2.0000E-10	S1411 -1.0000E-10
C1412 2.6100E-09	S1412 -2.4570E-08	C1414 -1.4000E-08	S1414 -3.0000E-09
C15 9 -9.0000E-10	S15 9 -1.8000E-09	C1512 -7.4730E-08	S1512 -1.0260E-08
C1513 -5.8000E-08	S1513 -4.6000E-08	C1514 4.3000E-09	S1514 -2.1100E-08

Zonal Harmonics to J14

0.00 .001082645 -2.546E-06 -1.649E-06 -2.100E-07 6.460E-07 -3.330E-07
-2.700E-07 -5.300E-08 -5.400E-08 3.020E-07 -3.570F-07
-1.140E-07 1.790E-07

GM	7.53713800E+04	(REV**2)	(MM**3)	(DAYS**-2)
AE	6.37815500	(MM)		

Geos Observations for Station 8015

650890170529	8015660312015816540O	171737484049094444401043	45766
650890170536	8015660313015516542I	124835618013545027201044	45789
650890170543	8015660313040616542Q	115710233073295408401043	45791
650890170550	8015660314015916544Q	121622155015420822401043	45812
650890170557	8015660314020616544G	162712036059243128201044	45812
650890170564	8015660314041116545B	112305466078003019401043	45814
650890170571	8015660315021016547I	154649304064020194401043	45835
650890170578	8015660315041016550Z	104205925040113449401043	45837
650890170585	8015660316021416549Z	145209271067390770201044	45858
650890170592	8015660317001116552B	143717658022501582401043	45880
650890170599	8015660317001616554G	171219777039434235201044	45880
650890170606	8015660317021216553S	110227098025111960401043	45882
650890170612	8015660317021816552Y	134426866069395351201044	45882
650890170619	8015660318001516554Q	141058580026273571401043	45903
650890170626	8015660318001916545B	162857502042343770201044	45903
650890170633	8015660318022216555Z	123336569069463836401043	45905
650890170642	8015660320002024551O	115416553013264826202044	45950
650890170646	8015660320002716560G	155347238052341042401043	45951
650890170653	8015660320023116560B	110810170073354784401043	45953
650890170666	8015660322024016566S	095143771074433445201044	46001
650890170675	8015660323003924558B	140847463066492224202044	46023
650890170680	8015660323223916571I	150457767033541633401043	46045
650890170687	8015660324004316569Q	125434094068430775401043	46047
650890170722	8015660326005116575Q	104152995068104219401043	46096
650890170701	8015660327225716581I	152147927057215971201044	46144
650890170708	8015660328205316574O	131438423013301615401043	46167
650890170708	8015660328205316585S	131438435013301615401043	46167
650890170712	8015660328225404574Z	100342484020162537202044	46169
650890170714	8015660328225416583I	100712915021420290201044	46169
650890170607	8015660520231240728S	164832534071245976299044	51045
650890170176	8015660709231016849Y	215724721014585094201044	48757
650890170183	8015660710011016850O	173319959012585242201044	48759
650890170196	8015660710231316851S	210017665011270301201044	48773
650890170204	8015660710231816853G	235928347036355573201044	48773
650890170211	8015660711231716853I	202821553015000127201044	48788
650890170218	8015660711232316856S	003004718042254588201044	48788
650890170017	8015660712012414854G	181951731069293640201044	48789
650890170024	8015660713012316859Z	163305182022012644201044	48804
650890170245	8015660713232416858I	183710354012145156201044	48817
650890170252	8015660713233016860O	233154526052550323201044	48817
650890170031	8015660715213316866I	220358229018563082201044	48844
650890170266	8015660715233316863S	174101463026355081201044	48845
650890170273	8015660716213316867S	195226565-02440367201044	48857
650890170280	8015660716213816868Y	222407912026522043201044	48857
650890170294	8015660717213516870I	183113562-15001415201044	48870
650890170301	8015660721215316879Z	165340006010042827201044	48926
650890170315	8015660722000016881Z	150945297049185786201044	48927
650890170045	8015660722021016882I	133827657080463199201044	48928
650890170336	8015660722215816881S	163807898022105795201044	48939
650890170343	8015660723000316884I	145237225038523885201044	48940
650890170052	8015660723000816884O	135820614081161275201044	48940
650890170385	8015660724021918887S	141716292082023109201044	48954
650890170392	8015660724220916886S	163623726056440086201044	48965
650890170073	8015660725001716889Z	125108796080125836201044	48966
650890170420	8015660725022316890S	151452404078365614202044	48967
650890170434	8015660725221116890O	150657358033363652202044	48978
650890170441	8015660725221516889S	173129035075391812201044	48978
650890170455	8015660726022816892I	155905242082272405202044	48981
650890170101	8015660810212016933S	105006004074350416201044	49206
650890170108	8015660810232716933S	145809842081180307201044	49207
650890170483	8015660811013216934S	182408184051342166201044	49209
650890170490	8015660811013916933O	230948619021395688201044	49209

Geos Observations for Station 8015 (Cont.)

650890170504	8015660811233116936 4	151606495076385304201044	49223
650890170511	8015660811234116937 9	012617045021542731201044	49223
650890170517	8015660812014214935 6	220745582025332176201044	49224
650890170525	8015660812213616940 6	013945466049470431201044	49237
650890170531	8015660812234518939 8	010528587021333770201044	49238
650890170121	8015660813014018940 6	181409938042140585201044	49238
650890170544	8015660813014716938 8	220527840016023627201044	49238
650890170134	8015660819000116955 7	170627784048022509201044	49348
650890170127	8015660819000716953 9	211018054026580886201044	49348
650890170141	8015660820220416959 7	141217970067335154201044	49387
650890170571	8015660822221516955 2	173722878065501329201044	49428
650890170578	8015660822222116955 2	222925419027541287201044	49428
650890170585	8015660823002116955 4	184044019022141076210044	49430
650890170148	8015660823221616957 7	143242537054305029201044	49449
650890170155	8015660825222616962 9	155342268049172149201044	49492
650890170606	8015661022013817111 0	094544978042061682201044	51045

Geos Observations for Station 9066

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650890170003 9066651208222020326207572104305110219440104343655
650890170007 9066651209002010327201230168604154399740104343657
650890170013 9066651214203416335002275314800540289340104343805
650890170020 9066651214224216334001041826305232298740104343807
650890170027 9066651215050016334205374238003912373740104343814
650890170034 9066651215204516335306345714804918000840104343830
650890170041 9066651215224616335600333636805014004840104343832
650890170048 9066651216030016334802474963207109257640104343836
650890170060 9066651219230612341022490830407247586640104343928
650890170065 9066651220011212340823521982707336014340104343930
650890170071 9066651220031816339205235963905423076240104343932
650890170080 9066651222211116344802338096990485913614010434396
650890170086 9066651223032914345404162857003618367540104344002
650890170094 9066660104175816365602243083960572713634010430000000044270
650890170103 9066660104221116366502239163270713749854010430000000044270
650890170110 9066660105180216368602201430360554106894010430000000044280
650890170117 9066660105180716369107402586207255338640104300000000044290
650890170124 9066660105201016369302005193540763545804010430000000044290
650890170131 9066660105221616368502337577940753206664010430000000044290
650890170138 9066660107201916374402001039880772729574010430000000044330
650890170144 9066660107222514373201111278190704024834010430000000044330
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Geos Observations for Station 9066 (Cont.)

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Geos Observations for Station 9074

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Geos Observations for Station 9080

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APPENDIX

COMPENDIUM OF SATELLITE-TRACKING STATION COORDINATES

			Terrestrial coordinates in the C6 system*			Terrestrial coordinates in the C7 system†		
	Station	Camera	X (Mm)	Y (Mm)	Z (Mm)	X (Mm)	Y (Mm)	Z (Mm)
9001	Organ Pass, New Mexico	Baker-Nunn	-1.535759	-5.166995	3.401041	-1.535758	-5.166993	3.401040
9002	Olifantsfontein, South Africa	Baker-Nunn	5.056126	2.716485	-2.775816	5.056124	2.716484	-2.775815
9003	Woomera, Australia	Baker-Nunn	-3.983750	3.743101	-3.275593	-3.983748	3.743099	-3.275592
9004	San Fernando, Spain	Baker-Nunn	5.105593	-0.555232	3.769674	5.105591	-0.555232	3.769672
9005	Tokyo, Japan	Baker-Nunn	-3.946697	3.366286	3.698843	-3.946695	3.366285	3.698841
9006	Naini Tal, India	Baker-Nunn	1.018205	5.471100	3.109614	1.018205	5.471098	3.109613
9007	Arequipa, Peru	Baker-Nunn	1.942769	-5.804078	-1.796961	1.942768	-5.804075	-1.796960
9008	Shiraz, Iran	Baker-Nunn	3.376982	4.403985	3.136254	3.376981	4.403983	3.136253
9009	Curaçao, Netherlands Antilles	Baker-Nunn	2.251820	-5.816915	1.327164	2.251819	-5.816912	1.327163
9010	Jupiter, Florida	Baker-Nunn	0.976282	-5.601389	2.880242	0.976282	-5.601387	2.880241
9011	Villa Dolores, Argentina	Baker-Nunn	2.280575	-4.914569	-3.355457	2.280574	-4.914567	-3.355456
9012	Maui, Hawaii	Baker-Nunn	-5.466055	-2.404275	2.242170	-5.466053	-2.404274	2.242169
9023	Island Lagoon, Australia	Baker-Nunn	-3.977738	3.725115	-3.303060	-3.977732	3.725109	-3.303055
9113	Rosamund, California	Baker-Nunn	-2.450036	-4.624388	3.635034	-2.450032	-4.624381	3.635028
9114	Cold Lake, Canada	Baker-Nunn	-1.264859	-3.466853	5.185456	-1.264857	-3.466847	5.185448
9115	Harvestua, Norway	Baker-Nunn	3.121266	0.592620	5.512702	3.121261	0.592619	5.512694
9117	Johnston Island	Baker-Nunn	-6.007323	-1.111813	1.825715	-6.007313	-1.111811	1.825712
9050	Agassiz Station, Massachusetts	K-50	1.489747	-4.467492	4.287270	1.489745	-4.467485	4.287263
9066	Zimmerwald, Switzerland	Schmidt	4.331322	0.567490	4.633139	4.331315	0.567489	4.633132
9074	Riga, Latvia	Refractor	(3.183752)‡	(1.421459)	(5.322760)	(3.183747)	(1.421457)	(5.322751)
9080	Malvern, England	Schmidt	3.920194	-0.134759	5.012748	3.920188	-0.134759	5.012740
8015	Haute Provence, France	Schmidt	4.578325	0.457959	4.403230	4.578318	0.457958	4.403223
4713	Rosman, North Carolina	GRARR	0.647192	-5.178336	3.365152	0.647191	-5.178328	3.365147
4714	Madagascar	GRARR	(4.091419)	(4.434122)	(-2.066035)	(4.091412)	(4.434115)	(-2.066032)
4715	Carnarvon, Australia	GRARR	(-2.328264)	(5.299679)	(-2.669395)	(-2.328260)	(5.299671)	(-2.669391)
7014	Anchorage, Alaska	TRANET	-2.656183	-1.544326	5.570618	-2.656179	-1.544324	5.570609
7017	Tafuna, American Samoa	TRANET	(-6.100005)	(-0.997366)	(-1.508560)	(-6.099995)	(-0.997364)	(-1.508557)
7019	McMurdo Sound, Antartica	TRANET	(-1.310712)	(0.310531)	(-6.213456)	(-1.310710)	(0.310531)	(-6.213446)
7100	South Point, Hawaii	TRANET	-5.504199	-2.224095	2.325278	-5.504190	-2.224091	2.325274
7103	Las Cruces, New Mexico	TRANET	-1.556251	-5.169461	3.387239	-1.556249	-5.169453	3.387234
7106	Lasham, England	TRANET	4.005469	-0.071800	4.946720	4.005463	-0.071800	4.946712
7111	Johns Hopkins University Baltimore, Maryland	TRANET	1.122608	-4.823073	4.006486	1.122606	-4.823065	4.006480
7739	Shemya, Alaska	TRANET	-3.851550	0.397301	5.051523	-3.851544	0.397300	5.051515
7742	Beltsville, Maryland	TRANET	1.130731	-4.830861	3.994701	1.130729	-4.830853	3.994695
7745	Stoneville, Mississippi	TRANET	-0.085070	-5.327989	3.493425	-0.085070	-5.327980	3.493419

*The C6 system is defined in the 1966 Smithsonian Institution Standard Earth.

†The C7 system is defined by Veis (this volume).

‡The coordinates in parentheses are considered unreliable, however, since they form part of the results, they are given here for completeness. See Gaposchkin (this volume) for a discussion of the accuracies.

BIOGRAPHICAL NOTES

CHARLES A. LUNDQUIST joined the Smithsonian Astrophysical Observatory as Assistant Director for Science in 1962. In this position, he is responsible for organizing and coordinating current research projects, as well as seeking new directions for future research.

From 1956 to 1960 he was Chief of the Physics and Astrophysics Section, Research Projects Laboratory, Army Ballistic Missile Agency; and from 1960 to 1962 he held concurrent positions as Director of the Supporting Research Office, and Chief of the Physics and Astrophysics Branch of the Research Projects Division at the Marshall Space Flight Center.

Dr. Lundquist received his undergraduate degree from South Dakota State College in 1949 and his doctorate in 1954 from the University of Kansas.

PETER J. CALIRI received his B.S. in 1961 from Suffolk University. He has also attended Northeastern University.

Mr. Caliri came to SAO in 1962 as an astrometric computer in the Photoreduction Division. In 1963, he was promoted to data analyst, and in 1965 he became a mathematician in the Data Division. Mr. Caliri's fields of investigation are photoreduction observations and laser predictions.

E. M. GAPOSCHKIN graduated in Electrical Engineering from Tufts University in 1957. He received a Degree of Numerical Analysis in 1959 from Cambridge University in England and is now working toward a doctorate in geophysics at Harvard University.

Since joining the staff at Smithsonian in 1959, Mr. Gaposchkin has held positions as programmer and Division Chief of the Computations Division, and is now a mathematician in the Research and Analysis Department. He has helped to develop the basic computer program used in all analyses of satellite motion.

His main interests include satellite geodesy and geophysics and applied mathematics.

EDWARD A. HORINE attended New Mexico State University. He worked for Harvard as a research assistant in the Harvard Meteor Program from 1956 to 1959 and joined SAO in the same year as an observer. Mr. Horine was assigned to Argentina and Florida, where he held the post of station manager. In 1966, he became a master observer and was assigned to the Arequipa, Peru, station where he is currently working.

PAUL D. HUBLEY received his B.A. in psychology from Bowdoin College in 1963 and his M.A. in mathematics from Boston University in 1968.

Mr. Hubley came to SAO in 1965 as an astrometric computer and was promoted to mathematician in the Data Division in 1966. His fields of investigation include computations pertaining to geodetic research and orbital analysis.

WALTER KÖHNLEIN received his degrees from the Technological Institute in Munich and the Technological Institute in Braunschweig, Germany, in 1958 and 1962, respectively.

He worked for a year at Ohio State University, Columbus, Ohio, before joining SAO in 1963, where his work included studies of the figure of the earth and its gravitational field by means of artificial satellites.

Dr. Köhnlein left Smithsonian in 1967 to study pure theoretical physics at the University of Freiburg, Germany.

YOSHIHIDE KOZAI received his degree from Tokyo University in 1958. He has been associated with the Tokyo Astronomical Observatory since 1952 and has held concurrent positions as staff astronomer with that observatory and consultant to SAO since 1958.

Dr. Kozai specializes in celestial mechanics, his research at SAO being primarily in the determination of zonal coefficients in the earth's gravitational potential by use of precisely reduced Baker-Nunn observations. He is also interested in the seasonal variations of the earth's potential.

KURT LAMBECK graduated in geodesy from the University of New South Wales, Australia, in 1963. He studied at the Geodetic Institute, Delft, Holland, in 1964 and at the National Technical University of Athens in 1965. He also studied at the Department of Surveying and Geodesy, Oxford University, England, and was Consultant Geodesist with the Smithsonian Astrophysical Observatory during the summer of 1966.

Dr. Lambeck received his D. Phil. in geodesy from Oxford in 1967. He joined SAO in the same year and is currently working as a geodesist.

JAMES LATIMER received an S. B. in physics from Massachusetts Institute of Technology in 1963.

Mr. Latimer became a member of the SAO staff in 1963; he served as an observer in Argentina and Tokyo before coming to Cambridge. Currently, he is administrative assistant to the manager, Data-Processing Department.

DAVID O. LeCONTE received his B.Sc. in physics from the University of Edinburgh in 1964. He has worked at the Royal Observatory and was a technical assistant in optical tracking at the University College of Wales in 1962 and 1963. He joined SAO in the following year, and as of 1967 has been working as a timing engineer in the Satellite-Tracking and Data-Acquisition Department.

LEO J. McGRATH, JR., received his A.B. from Harvard University in 1958.

Mr. McGrath joined SAO in 1958 as an observer and was assigned to the Florida Smithsonian astrophysical observing station until 1960. He worked as Section Head of the Computations Division and later as an Administrative Assistant in the Office of the Director prior to 1961. Since that time, Mr. McGrath has been Manager of the Photoreduction Division, where his general field of investigation has been data reduction.

BEATRICE R. MILLER received her B.S. in 1941 from State Teachers College in Bridgewater, Massachusetts. Mrs. Miller worked as a techer from 1942 to 1946 in Holliston and in Hanover, Massachusetts. She was a mathematician at the Massachusetts Institute of Technology until 1949.

Mrs. Miller joined SAO as a mathematician in 1959. Since 1967, she has been Manager of the Data Division.

JAN ROLFF received his degrees in geodesy from the Technological University, Delft, the Netherlands, in 1946 and 1953.

He is now Executive Director of the Central Bureau for Satellite Geodesy. He has held this position since 1964, when the Bureau was established at the Smithsonian Astrophysical Observatory at the request of the International Union of Geodesy and Geophysics and the International Committee on Space Research. He is also an active participant in the Observatory's own program of geodetic research.

L. H. SOLOMON received the B. A. degree from Brooklyn College in 1957 and the M. S. degree from Cornell University in 1966.

Prior to his affiliation with Smithsonian Astrophysical Observatory in 1959, Mr. Solomon held a teaching assistantship at Cornell University. Currently, he is an astronomer for SAO's satellite-tracking program.

Mr. Solomon's research is directed toward the application of photographic photometry with the Baker-Nunn cameras to observations of flare stars and other variable stars. His research also includes the investigation of methods of optical satellite tracking and general analysis of combinations of different satellite-tracking systems.

GEORGE VEIS received his degrees from the National Technical University in Athens, Greece, and Ohio State University in 1951 and 1958, respectively.

Since 1958, Dr. Veis has held concurrent positions as consultant to SAO and Professor of Land Surveying at the National Technical University. His research at the Observatory has been concerned with problems of optical satellite tracking for geodetic purposes.

MICHAEL WOLF received his S. B. from the Massachusetts Institute of Technology in 1964 and joined SAO in the same year as an observer. He is currently the SAO representative at the Tokyo astrophysical observing station.

NOTICE

This series of Special Reports was instituted under the supervision of Dr. F. L. Whipple, Director of the Astrophysical Observatory of the Smithsonian Institution, shortly after the launching of the first artificial earth satellite on October 4, 1957. Contributions come from the Staff of the Observatory.

First issued to ensure the immediate dissemination of data for satellite tracking, the reports have continued to provide a rapid distribution of catalogs of satellite observations, orbital information, and preliminary results of data analyses prior to formal publication in the appropriate journals. The Reports are also used extensively for the rapid publication of preliminary or special results in other fields of astrophysics.

The Reports are regularly distributed to all institutions participating in the U. S. space research program and to individual scientists who request them from the Publications Division, Distribution Section, Smithsonian Astrophysical Observatory, Cambridge, Massachusetts 02138.