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SUMMARY OF JIMSONDE TEMPERATURE PROFILES--PART II: PROGRAMS, DATA COMMENTS

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Final Report

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16. ABSTRACT <p>This summary documents Jimsonde temperature profiles for the Eastern Test Range, Cape Kennedy, Florida, and the White Sands Missile Range, New Mexico. Profile information for 1970-1974 includes data summaries and formats, composite listings, frequency distributions, etc., for use in establishing and interpreting natural environment criteria for aeronautical vehicle design and engineering operations. Magnetic tapes of the data summarized are available from the Atmospheric Sciences Division, Space Sciences Laboratory, Marshall Space Flight Center, Alabama. This summary — Part II — concerns Jimsonde temperature profiles. Similar publications — Parts I and III — document, respectively, Jimsphere wind profiles and data from the NASA 150-Meter Ground Winds Tower Facility at Kennedy Space Center, Florida.</p> <p>(Part I of this report was published as CR-161664.)</p>					
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SECTION 1 - INTRODUCTION

To establish natural environmental criteria for atmospheric research studies, aeronautical vehicle safety and operational problems, etc., requires extensive collections of meteorological data. Because of a requirement to develop and evaluate descriptions of environmental parameters the National Aeronautics and Space Administration - George C. Marshall Space Flight Center has operated and/or directed since 1964 atmospheric measuring programs at MSFC, other NASA and military installations, and national test ranges. The results of these data acquisition programs were voluminous data inventories. Thus, it became necessary to survey these inventories and develop a retrieval system to facilitate use of the data in statistical analyses and climatological studies. Products of the effort are three publications:

- Part I Summary of Jimsphere Wind Profiles
- Part II Summary of Jimsonde Temperature Profiles
- Part III Summary of the NASA 150-Meter Ground Winds Tower Facility, Kennedy Space Center, Florida

This report, Part II, concerns data summaries, computer formats, frequency distributions, composite listings, etc., of the Jimsonde temperature profiles acquisition program. Contents of Part II include master data in sections 2 and 3 and computer program to interrogate the master files in section 4.

General Comments

During 1970-1974 a total of 136 Jimsonde temperature profiles were acquired at the Eastern Test Range (ETR), Cape Kennedy, Florida and White Sands Missile Range (WSMR), New Mexico. Sites, periods of record, number of profiles and frequency distributions of these acquisitions are given in sections 2 and 3. Jimsonde temperature profile data consist of values averaged over an approximate 50-meter layer and printed out in 25-meter increments,

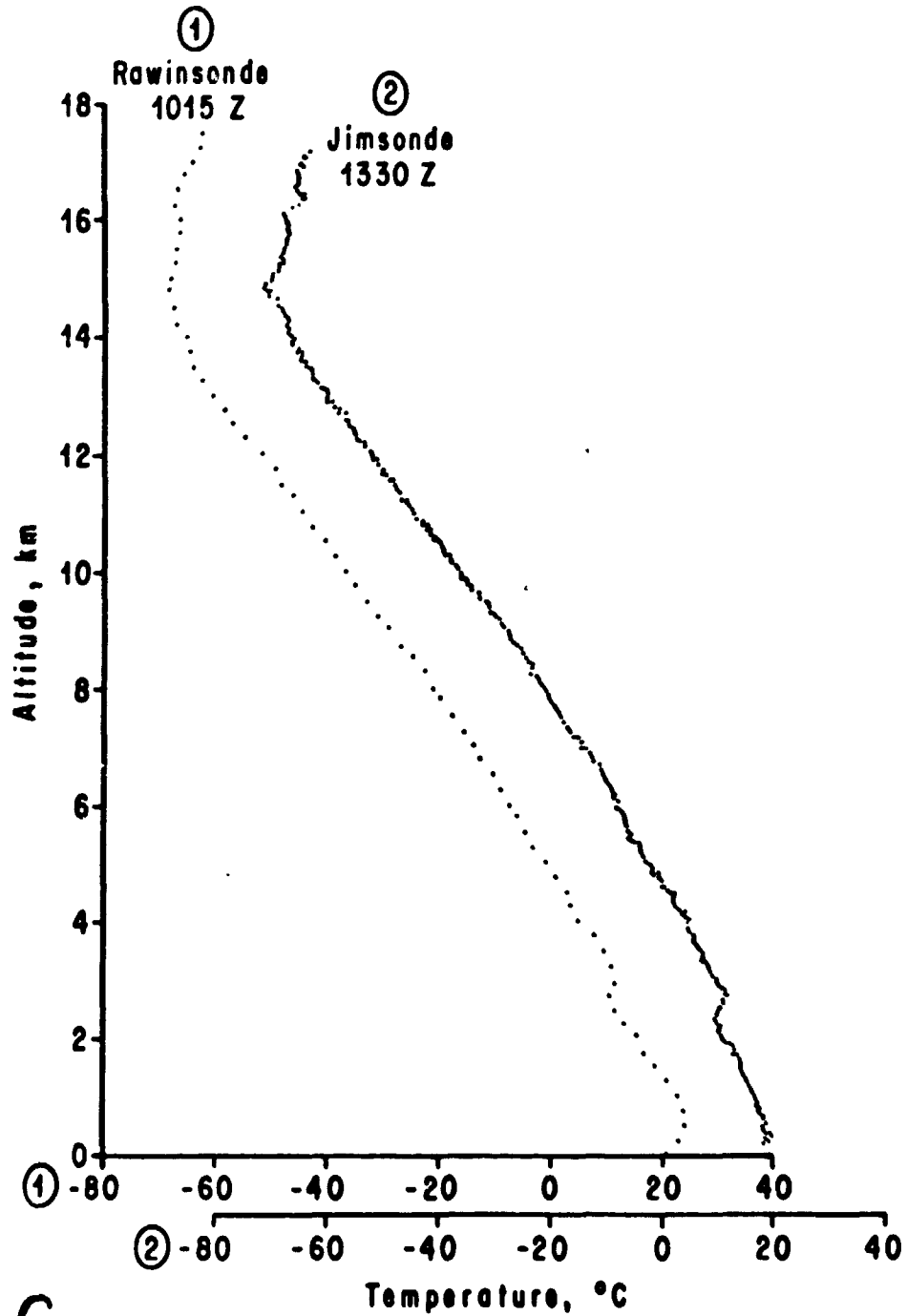
thus providing an overlap of 25 meters for adjacent data points. Jimsonde data were received at MSFC from the two sites as TAER - an acronym for time, azimuth, elevation and range - data. The TAER data averaging, editing, converting and reducing to detailed temperature profiles were consistent with the Jimsphere wind profile procedures to ensure quality and compatibility. The illustrations at the end of this section are samples of Jimsonde temperature and Jimsphere wind profile data obtained on July 2, 1970, at Cape Kennedy, Florida.

For concise and compact storage all Jimsonde files were transferred during retrieval system development from 7-track 800 bits per inch (EPI) to 9-track 6250 BPI. Detailed information pertaining to the data files for each site is given in sections 2 and 3. Tables 1 and 2 show the distribution of profiles according to month and year of record.

Composite reports consisting of date and time of balloon release, end-of-test time, test, balloon, sensor and file numbers are contained in Appendices A and B. Appendix C contains the source listing of the interrogation program. Jimsonde data are available on magnetic tape from the Chief, Atmospheric Sciences Division (ES81), Space Sciences Laboratory, Marshall Space Flight Center, Alabama 35812.

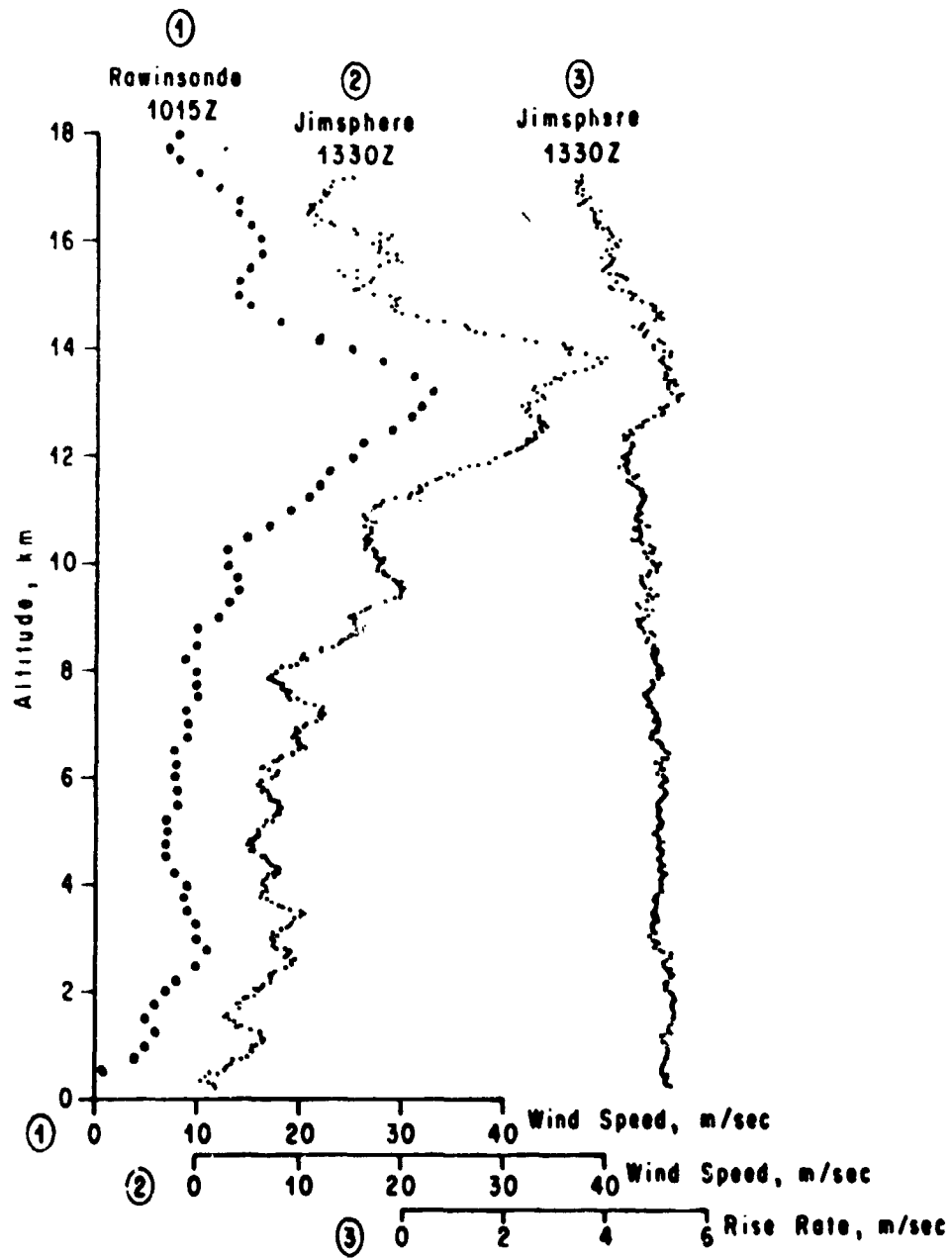
Recommendation

It is recommended that each magnetic tape file of Jimsonde data be recopied every two years to ensure file integrity.



C

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SECTION 2 -- EASTERN TEST RANGE (ETR), CAPE KENNEDY,
FLORIDA, JIMSONDE TEMPERATURE PROFILES

Data Summary for ETR Jimsonde

There is only one file of ETR Jimsonde Temperature Profiles.
A composite report of this file is found in Appendix A.

Number of Profiles	Period of Coverage		Historical		In-House File
	From	To	File 1	File 2	
99	June 6, 1970	July 13, 1972	70761	70762	20639

To create a copy of the ETR Jimsonde, use the following run set up sample.

```

@RUN      COPY,ACCOUNT NR.,NAME&BIN,SUP TIME,PAGES
@ASG,T    IN,U9S,REEL NUMBER (70761,70762, or 20639)
@ASG,T    OUT,U9S,SAVE04.  Description of file
@REWIND   IN.
@COPY,MN  IN.,OUT.,99
@MARK     OUT.
@FIN
    
```

Current Data Format

- I. **Mode:** 7094 non-FORTRAN binary
- Sequence:** Data sorted chronologically (year, month, day, and hour)
- Record:** 15 records per file
- File:** N files per tape
- EOF:** Tapes contain an end of file after each file and a double end of file at the end of the tape.

- II. **Record 1:**
 279 words of identification
 See Item IV for description.

- Record 2:**
 801 words containing altitudes (FPS-16) 0 thorough 20000 meters in 25 meter increments

Record 3:

801 words containing the Zonal Wind Component (FPS-16) for each of the altitudes defined in record 2.

Record 4:

801 words containing the Meridional Wind Component (FPS-16) for each of the altitudes defined in record 2.

Record 5:

801 words containing the Scalar Wind Speed (FPS-16) for each of the altitudes defined in record 2.

Record 6:

801 words containing the wind direction (FPS-16) for each of the altitudes defined in record 2.

Record 7:

801 words containing the rise rate (FPS-16) for each of the altitudes defined in record 2.

Record 8:

801 words containing the time in seconds (FPS-16) for each of the altitudes defined in record 2.

Record 9:

801 words containing the temperature in degrees F (Jimsonde) for each of the altitudes defined in record 2.

Record 10:

801 words containing the altitudes (RAOB) 0 through 20000 meters in 250 meter increments. Missing altitudes are 1×10^6 .

Record 11:

801 words containing the wind direction (RAOB) for each of the altitudes defined in record 10.

Record 12:

801 words containing the wind speed (RAOB) for each of the altitudes defined in record 10.

Record 13:

801 words containing the temperature in degrees C (RAOB) for each of the altitudes defined in record 10.

Record 14:

801 words containing the pressure in Mb (RAOB) for each of the altitudes defined in record 10.

Record 15:

801 words containing the density in g/m^{-3} (RAOB) for each of the altitudes defined in record 10.

- III. 1. Wind components and speeds are in meters/second.
2. Wind direction is in degrees.
3. All missing data is flagged as 1×10^6 .

IV. Description of Record 1

<u>Word Number</u>	<u>Contents</u>
1	FPS-16 Test Number
2	FPS-16 Balloon Number
3	FPS-16 Year of Release
4	FPS-16 Month of Release
5	FPS-16 Day of Release
6	FPS-16 Hour of Release
7	FPS-16 Range Code
8	FPS-16 Site Code
9	FPS-16 Balloon Type Code
10	FPS-16 Radar Number
11	FPS-16 Tracking Code
12-18	Not used
19	RAOB Station Number
20	RAOB Year of Release
21	RAOB Month of Release
22	RAOB Day of Release
23	RAOB Hour of Release
24-29	Not used
30	Jimsonde Month of Release
31	Jimsonde Day of Release
32	Jimsonde Year of Release
33	Jimsonde Hour of Release
34	Jimsonde Thermister Number
35	Jimsonde Ground Reference Temperature
36	Jimsonde Calibration Frequency at Start
37	Jimsonde Carrier Frequency at Start
38	Jimsonde FPS-16 Test Number
39	Jimsonde Hour Test Ends
40	Jimsonde Sensor Number
41	Jimsonde Signal Frequency at Start
42	Jimsonde Carrier Frequency at End
43-279	Not used

Table 1. Distribution of Jimsonde Temperature Profiles for Eastern Test Range

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Totals
1970	-	-	-	-	-	1	10	7	8	10	7	8	51
1971	4	4	2	-	-	3	3	2	-	1	-	2	21
1972	2	8	5	6	3	-	3	-	-	-	-	-	27
Total	6	12	7	6	3	4	16	9	8	11	7	10	99

SECTION 3 - WHITE SANDS MISSILE RANGE (WSMR), NEW MEXICO,
JIMSONDE TEMPERATURE PROFILES

Data Summary for WSMR Jimsonde

There is only one file of WSMR Jimsonde Temperature Profiles.
A composite report of this file is found in Appendix B.

Number of Profiles	Period of Coverage		Historical		In-House File
	From	To	File 1	File 2	
37	November 8, 1972	December 19, 1974	70758	70759	01981

To create a copy of the WSMR Jimsonde, use the following run setup sample.

```
@RUN      COPY,ACCOUNT NR.,NAME&BIN,SUP TIME,PAGES
@ASG,T    IN,U9S,REEL NUMBER (70758,70759,or 01981)
@ASG,T    OUT,U9S,SAVE04. Description of File
@REWIND   IN.
@COPY,MN  IN.,OUT ,37
@MARK     OUT.
@FIN
```

Current Data Format

- I. Mode: 7094 non-FORTRAN binary
 - Sequence: Data sorted chronologically (year, month, day, and hour)
 - Record: 15 records per file
 - File: N files per tape
 - EOF: Tapes contain an end of file after each file and a double end of file at the end of the tape.

- II. Record 1:
 - 279 words of identification
 - See Item IV for description

- Record 2:
 - 801 words containing altitudes (FPS-16) 0 through 20000 meters in 25 meter increments

Record 3:

801 words containing the Zonal Wind Component (FPS-16) for each of the altitudes defined in record 2.

Record 4:

801 words containing the Meridional Wind Component (FPS-16) for each of the altitudes defined in record 2.

Record 5:

801 words containing the Scalar Wind Speed (FPS-16) for each of the altitudes defined in record 2.

Record 6:

801 words containing the wind direction (FPS-16) for each of the altitudes defined in record 2.

Record 7:

801 words containing the rise rate (FPS-16) for each of the altitudes defined in record 2.

Record 8:

801 words containing the time in seconds (FPS-16) for each of the altitudes defined in record 2.

Record 9:

801 words containing the temperature in degrees F (Jimsonde) for each of the altitudes defined in record 2.

Record 10:

801 words containing the altitudes (RAOB) 0 through 20000 meters in 250 meter increments. Missing altitudes are 1×10^6 .

Record 11:

801 words containing the wind direction (RAOB) for each of the altitudes defined in record 10.

Record 12:

801 words containing the wind speed (RAOB) for each of the altitudes defined in record 10.

Record 13:

801 words containing the temperature in degrees C (RAOB) for each of the altitudes defined in record 10.

Record 14:

801 words containing the pressure in Mb (RAOB) for each of the altitudes defined in record 10.

Record 15:

801 words containing the density in g/m^{-3} (RAOB) for each of the altitudes defined in record 10.

- III. 1. Wind components and speeds are in meters/second.
2. Wind direction is in degrees.
3. All missing data is flagged as 1×10^6 .

IV. Description of Record 1

<u>Word Number</u>	<u>Contents</u>
1	FPS-16 Test Number
2	FPS-16 Balloon Number
3	FPS-16 Year of Release
4	FPS-16 Month of Release
5	FPS-16 Day of Release
6	FPS-16 Hour of Release
7	FPS-16 Range Code
8	FPS-16 Site Code
9	RPS-16 Balloon Type Code
10	FPS-16 Radar Number
11	FPS-16 Tracking Code
12-18	Not used
19	RAOB Station Number
20	RAOB Year of Release
21	RAOB Month of Release
22	RAOB Day of Release
23	RAOB Hour of Release
24-29	Not used
30	Jimsonde Month of Release
31	Jimsonde Day of Release
32	Jimsonde Year of Release
33	Jimsonde Hour of Release
34	Jimsonde Thermistor Number
35	Jimsonde Ground Reference Temperature
36	Jimsonde Calibration Frequency at Start
37	Jimsonde Carrier Frequency at Start
38	Jimsonde FPS-16 Test Number
39	Jimsonde Hour Test Ends
40	Jimsonde Sensor Number
41	Jimsonde Signal Frequency at Start
42	Jimsonde Carrier Frequency at End
43-279	Not used

Table 2. Distribution of Jimsonde Temperature Profiles for
White Sands Missile Range

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Totals
1972	-	-	-	-	-	-	-	-	-	-	1	-	1
1973	2	2	-	1	2	-	-	-	-	-	-	-	7
1974	-	2	3	-	1	6	5	4	3	-	3	2	29
Total	2	4	3	1	3	6	5	4	3	-	4	2	37

SECTION 4 - PROGRAM TO INTERROGATE JIMSONDE MASTER FILES

Program Summary

This program uses the Current Data Format for input. The file description of the Current Data Format is found in Sections 1 and 2. This program produces a composite report with the following information: test number, balloon number, date of release, release hour, hour test ends, sensor number, and the file number. The composite reports are contained in Appendices A and B. The data listed are available from the Atmospheric Sciences Division.

The program source listing is found in Appendix C.

To execute the program, use the following job setup.

```
@RUN      JSONDE,ACCOUNT NR.,NAME&BIN,SUP TIME,PAGES
@FOR,IS   MAINDK,MAINDK
```

Place source card deck here.

```
@PREP
@MAP,IS   A,B
LIB SYSS*MSFC$.
@ASG,T    1,U9S, REEL NUMBER TO BE INTERROGATED
@XQT      B
@PMD,E
@FREE     1.
@FIN
```

APPENDIX A

A Composite Report of All Eastern Test Range (ETR) Jimsonde
Temperature Profiles

***** FPS-16 ***** JIMSONDE *****
 TEST BALLOON RELEASE RELEASE RELEASE RELEASE RELEASE RELEASE RELEASE RELEASE RELEASE RELEASE
 NUMBER NUMBER YY MM DD HOUR MM DD YY HOUR MM DD YY HOUR MM DD YY HOUR MM DD YY HOUR MM DD YY HOUR MM DD YY HOUR MM DD YY HOUR MM DD YY

1680	1	70	6	15	1330	6	15	70	1330	1430	168	1
6388	1	70	7	1	1428	7	1	70	1430	1530	134	2
5770	1	70	7	6	1344	7	6	70	1345	1445	134	3
8255	1	70	7	7	1329	7	7	70	1330	1430	127	4
145	1	70	7	9	1330	7	9	70	1332	1432	150	5
7073	1	70	7	13	1345	7	13	70	1345	1443	155	6
2144	1	70	7	14	1330	7	14	70	1330	1430	129	7
1855	1	70	7	15	1400	7	15	70	1400	1500	137	8
5792	1	70	7	17	1349	7	17	70	1350	1451	156	9
8110	1	70	7	29	1345	7	29	70	1350	1450	161	10
6559	1	70	7	30	1331	7	30	70	1330	1430	158	11
5066	1	70	8	6	1355	8	6	70	1355	1455	157	12
8874	1	70	8	7	1345	8	7	70	1345	1445	223	13
1461	1	70	8	10	1345	8	10	70	1345	1445	211	14
5374	1	70	8	14	1344	8	14	70	1344	1445	135	15
9289	1	70	8	24	1345	8	24	70	1345	1445	201	16
7788	1	70	8	26	1345	8	26	70	1345	1445	153	17
4815	1	70	8	27	1329	8	27	70	1330	1430	147	18
6856	1	70	9	3	1430	9	3	70	1430	1530	212	19
2973	1	70	9	4	1350	9	4	70	1350	1450	203	20
2346	1	70	9	15	1331	9	15	70	1331	1431	226	21
7466	1	70	9	22	1346	9	22	70	1346	1446	126	22
2742	1	70	9	25	1300	11	12	70	1300	0	209	23
7185	1	70	9	28	1345	9	28	70	1345	1445	219	24
7185	1	70	9	28	1345	10	1	70	1345	1445	282	25
9263	1	70	9	30	1345	9	30	70	1345	1445	280	26
384	1	70	10	7	1345	10	7	70	1345	1440	291	27
7561	1	70	10	8	1400	10	8	70	1400	1500	290	28
1982	1	70	10	15	1400	10	15	70	1400	1500	296	29
1836	1	70	10	16	1345	10	16	70	1345	1445	274	30
7896	1	70	10	19	1348	10	19	70	1348	1448	297	31
1126	1	70	10	27	1345	10	22	70	1345	1445	320	32
1893	1	70	10	26	1400	10	26	70	1400	1500	315	33
5601	1	70	10	27	1447	10	27	70	1447	1547	319	34
9291	1	70	10	28	1445	10	28	70	1445	1545	169	35
9250	1	70	10	29	1445	10	29	70	1445	1545	277	36
268	1	70	11	4	1445	11	4	70	1445	1545	238	37
2734	1	70	11	12	1445	11	12	70	1445	1545	300	38
4644	1	70	11	18	1445	11	18	70	1445	1545	307	39
7916	1	70	11	20	1445	11	20	70	1445	1547	310	40
3595	1	70	11	23	1455	11	23	70	1455	1555	311	41
4306	1	70	11	24	1415	11	24	70	1415	1515	314	42
9680	1	70	11	25	1445	11	25	70	1445	1545	316	43
7666	1	70	12	1	1400	12	1	70	1400	1500	342	44
4024	1	70	12	3	1452	12	3	70	1452	1552	344	45

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***** FPS-16 ***** JIMSONDE *****

TEST NUMBER	BALLOON NUMBER	RELEASE YY MM DD	DATE YY MM DD	RELEASE HOUR	RELEASE MM DD YY	HOJR	TEST	ENDS	NUMBER	SENSOR NUMBER	FILF NUMBER
4897	1	70 12 17	1445	12 17 70	1445	1545	171	46			
4621	1	70 12 21	1445	12 21 70	1445	1546	170	47			
3777	1	70 12 22	1445	12 22 70	1445	1545	151	48			
6663	1	70 12 24	1445	12 24 70	1445	1545	176	49			
5798	1	70 12 29	1445	12 29 70	1445	1545	194	50			
4273	1	70 12 30	1445	12 30 70	1445	1545	178	51			
5774	1	71 1 6	1450	1 6 71	1450	1550	242	52			
6583	1	71 1 7	1445	1 7 71	1445	1530	243	53			
895	1	71 1 12	1445	1 12 71	1445	1545	247	54			
4348	1	71 1 15	1500	1 15 71	1500	1600	248	55			
4425	1	71 2 9	1445	2 9 71	1445	1545	270	56			
4672	1	71 2 17	1455	2 17 71	1455	1555	581	57			
4450	1	71 2 18	1445	2 18 71	1445	1545	597	58			
5763	1	71 2 25	1455	2 25 71	1455	1555	304	59			
1573	1	71 3 5	1470	3 5 71	1470	1500	328	60			
1593	1	71 3 9	1445	3 9 71	1445	1545	331	61			
7724	1	71 6 1	1423	6 1 71	1423	1523	529	62			
8652	1	71 6 3	1415	6 3 71	1415	1515	557	63			
6764	1	71 6 18	1450	6 18 71	1450	1550	530	64			
4122	1	71 7 14	1530	7 14 71	1530	1630	673	65			
5775	1	71 7 22	1315	7 22 71	1315	1415	667	66			
9447	1	71 7 23	1415	7 23 71	1415	1515	656	67			
143	1	71 8 10	1515	8 10 71	1515	1615	654	68			
2492	1	71 8 20	1415	8 20 71	1415	1515	645	69			
1307	1	71 10 21	1415	10 21 71	1415	1519	735	70			
4016	1	71 12 7	1515	12 7 71	1515	1554	438	71			
6654	1	71 12 23	1515	12 23 71	1515	1630	616	72			
8656	1	72 1 13	1525	1 13 72	1525	1641	611	73			
2427	1	72 1 24	1515	1 24 72	1515	1630	719	74			
4795	1	72 2 1	1515	2 1 72	1515	1631	820	75			
4635	1	72 2 2	1445	2 2 72	1445	1600	815	76			
4144	1	72 2 7	1516	2 7 72	1516	999999	737	77			
4752	1	72 2 10	1515	2 10 72	1515	1630	817	78			
2355	1	72 2 14	1550	2 14 72	1550	1705	812	79			
2757	1	72 2 15	1515	2 15 72	1515	1630	822	80			
4354	1	72 2 17	1515	2 17 72	1515	1630	895	81			
2671	1	72 2 23	1515	2 23 72	1515	1630	843	82			
5420	1	72 3 7	1525	3 7 72	1525	1626	722	83			
4041	1	72 3 10	1645	3 10 72	1645	1805	717	84			
4193	1	72 3 17	1545	3 17 72	1545	1700	885	85			
6177	1	72 3 20	1515	3 20 72	1515	1645	889	86			
7234	1	72 3 21	1515	3 21 72	1515	1630	897	87			
4745	1	72 4 3	1525	4 3 72	1525	1640	715	88			
5946	1	72 4 5	1525	4 5 72	1525	1640	886	89			
2954	1	72 4 14	1515	4 14 72	1515	1631	851	90			

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***** FPS-16 ***** JIMSONDE *****

TEST NUMBER	RELEASE DATE		RELEASE DATE		RELEASE HOJR	HOUR	SENSOR NUMBER	FILE NUMBER
	YY	MM	DD	MM				
0037	72	4	17	1515	1515	1630	858	91
7350	72	4	20	1518	1518	1633	849	92
90	72	4	21	1515	1515	1630	856	93
5784	72	5	1	1430	1430	1546	879	94
6272	72	5	4	1430	1430	1545	862	95
7746	72	5	17	1430	1430	1545	873	96
1541	72	7	3	1430	1430	1530	414	97
9020	72	7	10	1432	1432	1547	409	98
5762	72	7	13	1700	1700	1845	429	99

APPENDIX B

A Composite Report of All White Sands Missile Range (WSMR)
Jimsonde Temperature Profiles

***** FPS-16 ***** JIMSONDE *****

TEST BALLOON RELEASE DATE RELEASE DATE RELEASE HOUR SENSOR FILE
 NUMBER YY MM DD HOUR MM DD YY HOUR YESI ENDS NUMBER NUMBER

16	1	72	11	8	1330	11	8	72	1330	1430	1148	1
33	1	73	1	19	2030	1	19	73	2030	2100	1163	2
36	1	73	1	31	1745	1	31	73	1745	1830	1059	3
37	1	73	2	2	1432	2	2	73	1431	1532	1054	4
40	1	73	2	2	1630	2	2	73	1630	1720	1053	5
66	1	73	4	27	1730	4	27	73	1730	1902	1064	6
69	1	73	5	4	1600	5	4	73	1630	1705	1061	7
75	1	73	5	16	1700	5	16	73	1700	1805	1167	8
145	1	74	2	4	1645	2	4	74	1645	1745	1077	9
142	1	74	2	22	2000	2	22	74	2030	2100	23243	10
153	1	74	3	11	1930	3	11	74	1930	2030	23245	11
155	1	74	3	19	1615	3	18	74	1615	1715	23248	12
157	1	74	3	29	1545	3	29	74	1545	1645	23252	13
162	1	74	5	31	1645	5	31	74	1645	1745	23256	14
164	1	74	6	5	1900	6	5	74	1900	2000	1172	15
165	1	74	6	7	1615	6	7	74	1615	1715	23257	16
167	1	74	6	13	1600	6	13	74	1630	1700	23258	17
168	1	74	6	20	1630	6	20	74	1630	1730	23259	18
169	1	74	6	25	1745	6	25	74	1745	1840	23227	19
170	1	74	6	27	1645	6	27	74	1645	1745	23226	20
171	1	74	7	1	1530	7	1	74	1530	1630	23222	21
172	1	74	7	3	1800	7	3	74	1830	1900	23230	22
173	1	74	7	9	1800	7	9	74	1830	1900	23231	23
174	1	74	7	11	1500	7	11	74	1530	1600	23223	24
175	1	74	7	16	1800	7	16	74	1830	1900	23225	25
181	1	74	8	6	1630	6	6	74	1630	1730	23235	26
183	1	74	8	13	1715	8	13	74	1715	1815	23236	27
184	1	74	8	15	1700	8	15	74	1730	1800	23238	28
188	1	74	8	29	1630	8	29	74	1630	1730	2327	29
190	1	74	9	10	1600	9	10	74	1630	1700	23211	30
191	1	74	9	17	1700	9	17	74	1730	1800	2321	31
193	1	74	9	26	1630	9	26	74	1630	1730	2323	32
200	1	74	11	12	1700	11	12	74	1700	1800	23214	33
201	1	74	11	14	1700	11	14	74	1730	1800	23215	34
202	1	74	11	20	1930	11	20	74	1930	2030	23216	35
206	1	74	12	17	1600	12	17	74	1630	1700	23220	36
207	1	74	12	19	1730	12	19	74	1730	1815	1097	37

ORIGINAL PAGE IS
 OF POOR QUALITY

APPENDIX C

Source Listing of Program to Interrogate Jimsonde Master Files

SCOP IS MAINDA MAINDA
MSA E3 -03/16/78-21:18:46 (1.0)

MAIN PROGRAM

STORAGE USED: CODE(1) 000232; DATA(0) 002333; BLANK COMMON(2) 000000

EXTERNAL REFERENCES (BLOCK, NAME)

0003 PEELMU
0004 SCLOCK
0005 MOCODS
0006 MTRAM
0007 MIMIRS
0010 MIOJS
0011 MIOZS
0012 MUDUS
0013 MIOIS
0014 MSTOP5

STORAGE ASSIGNMENT (BLOCK, TYPE, RELATIVE LOCATION, NAME)

0000	002130	IF	0000	002127	IOF	0000	002143	2F	0001	00074	200L	0001	000033	25L
0000	002164	3F	0001	000132	300L	0000	002175	4F	0001	000142	400L	0001	000151	450L
0000	002209	SF	0001	000210	500L	0000	002217	6F	0001	000224	600L	0001	000226	900L
0000	R 000427	A	0000	R 002112	COATE	0000	R 002114	ESEC	0000	R 002115	E60SEC	0000	R 002073	FILE1
0000	I 002126	I	0000	I 000000	IA	0000	I 002070	IDATE	0000	I 002121	IEOF	0000	I 002124	IER1
0000	I 002125	IER2	0000	I 002075	MON	0000	I 002122	NFILE	0000	I 002117	NLINES	0000	I 002116	NMO
0000	I 002120	MPAGE	0000	I 002123	NREC	0000	R 002111	REEL1	0000	R 002113	TIME			

00101	10	DIMENSION	IA1279												000000
00103	20	DIMENSION	A16011												000001
00104	30	DIMENSION	IDATE(1)												000001
00105	40	DIMENSION	IDATE(1)												000001
00106	50	DIMENSION	MON(1)												000001
00107	60	DATA MON	'JAN', 'FEB', 'MAR', 'APR', 'MAY', 'JUN', 'JUL', 'AUG', 'SEP', 'OC												000001
00107	70	IT	'NOV', 'DEC'												000001
00111	80	DATA FILE	1/1												000001
00113	90	CALL REELMU	(FILE, REEL)												000001
00114	100	CALL SCLOCK	(COATE, TIME, ESEC, E60SEC)												000005
00115	110	DECODE	(10, COATE) IDATE												070013
00120	120	FORMAT	(312)												000023
00121	130	MNO	= IDATE(1)												000023
00122	140	NLINES	= 0												000025
00123	150	MPAGE	= 1												000026
00124	160	IEOF	= 0												000030
00125	170	NFILE	= 0												000031
00126	180	CONTINUE													000033
00127	190	NFILE	= NFILE + 1												000033
00130	200	NREC	= 0												000035
00131	210	CONTINUE													000036

ORIGINAL PAGE
OF POOR QUALITY

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00132 220
00132 230
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00134 390
00134 400
00140 410
00140 420
00145 430
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00145 470
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00146 490
00147 500
00150 510
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00154 690
00154 700
00163 710
00163 720
00163 730
00163 740
00163 750
00163 760
00163 770

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C NREC = NREC + 1
C
C READ FIRST 279 WORDS FIRST POINT BINARY
C
C
C
C CALL MTRAN(1,2,279,14,IER1,22)
C IF (IER1.EQ. 279) GO TO 200
C
C
C CHECK FOR END OF FILE
C
C
C IF (IER1.EQ. -2) GO TO 300
C
C
C WRITE ERROR CODE, RECORD NUMBER AND FILE NUMBER
C
C
C
C WRITE (6,1) IER1, NREC, NFILE
C 1 FORMAT(1M), 'ERROR = ', IS, ' ON RECORD ', IS, ' OF FILE
C 1, IS)
C
C WIPE OUT ERROR CODE
C
C
C CALL MTRAN (1,2,301,4,IER2,22)
C 200 CONTINUE
C NREC = NREC + 1
C
C READ RECORDS 2 THRU 15 INTO ARRAY A (801 WORDS)
C
C
C CALL MTRAN (1,2,301,4,IER2,22)
C IF (IER2.EQ. 801) GO TO 600
C
C END OF FILE CHECK FOR RECORDS 2 THRU 15
C
C
C IF (IER2.EQ. -2) GO TO 400
C
C
C WRITE ERROR CODE (FOR RECORDS 2-15), RECORD NUMBER AND FILE NUMBER
C
C
C
C WRITE (6,2) IER2, NREC, NFILE
C 2 FORMAT(1M), 'ERROR ON RECORDS 2 THRU 15 ERROR CODE = ', IS, '
C 1 ON RECORD ', IS, ' OF FILE ', IS)
C
C
C WIPE OUT ERROR CODE
C
C

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00164 790 CALL NTRAW (1,21)
00165 790 GO TO 200
00166 800 300 CONTINUE
00166 810
00166 820
00166 830 C WRITE ERROR MESSAGE FOR END OF FILE ON 1ST RECORD
00166 840 C
00166 850
00166 860
00167 870 IF (IEOF .NE. 0) GO TO 900
00171 880 WRITE (6,3)
00173 890 3 FORMAT (1M1, '***ERROR FOUND END OF FILE ON RECORD NR 1***')
00174 900 GO TO 25
00175 910 400 CONTINUE
00175 920 C
00175 930 C CHECK FOR DOUBLE END OF FILE
00175 940 C
00175 950 C
00176 960 IF (IEOF .NE. 0) GO TO 900
00200 970 IF (MOD(INLINES,45) .EQ. 0) GO TO 500
00202 980 450 CONTINUE
00202 990 C
00202 1000 C
00202 1010 C WRITE OUT RECORD FROM ARRAY IA
00202 1020 C
00202 1030 C
00203 1040 * WRITE (6,4) (IA(I),I=1,61) (IA(I),I=30,33), IA(39), IA(40), NFILE
00212 1050 * FORMAT(IH ,2I6,I7,2I3,I7,16,2I3,I7,2I10,I6)
00213 1060 * NLINES = NLINES + 1
00214 1070 * IEOF = 1
00214 1080 C
00214 1090 C
00214 1100 C CHECK FOR NUMBER OF RECORDS PER FILE AND WRITE MSG IF NE 15 PER FILE
00214 1110 C
00214 1120 C
00214 1130 IF (NREC .EQ. 16) GO TO 25
00215 1140 C
00215 1150 C
00215 1160 C EXCEPTION TO 15 RECORDS PER FILE
00215 1170 C
00215 1180 C
00217 1190 WRITE(6,5) NFILE, NREC
00223 1200 5 FORMAT(1M0, ' FILE NUMBER ', I5, ' CONTAINS ', I5, ' RECORDS')
00224 1210 GO TO 25
00225 1220 500 CONTINUE
00225 1230 C
00225 1240 C
00225 1250 C WRITE HEADINGS IF LINE COUNT = 0 OR 45
00225 1260 C
00225 1270 C
00226 1280 WRITE (6,6) MONIM(0), IDATE(2), IDATE(3), REEL1, MPAGE
00230 1290 6 FORMAT(1M1, 'RUN DATE ',A3,I3, ' 19',I2,4X, 'JIMSONDE DATA',7X, 'INPUT
00235 1300 1 PEEL NR ',A6,7X, 'PAGE ',I3//
00235 1310 21X, ' ***** FPS-16 *****',2X, '***** JIMSONDE
00235 1320 3 *****/18X, 'RELEASE',12X, 'RELEASE',/
00235 1330 42X, 'TEST BALLOON DATE',5X, 'RELEASE DATE',5X, 'HO

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00235	1340	SUR	SENSOR	FILE/						000222	
00235	1350	62X	NUMBER	NUMBER	YY	MM	DD	HOUR	'4X	'4X	'TEST
00235	1350	7	ENDS	NUMBER	NUMBER	///				000222	
00236	1370		GO	TO	450					000222	
00237	1390		600	CONTINUE						000224	
00240	1370		IEOF	=	0					000224	
00241	1400		GO	TO	200					000224	
00242	1410		900	CONTINUE						000226	
00243	1420		STOP							000226	
00244	1430		END							000231	

END OF COMPILATION NO DIAGNOSTICS.

APREP
 FURPUR 27R3AE33 SL73R1 03/16/78 21:19:09
 END PREP.