NASA

Technical Memorandum 82170

TOMS Near Realtime System Design Document

E. Puccinelli
Information Management Branch

AUGUST 1981

National Aeronautics and Space Administration

Goddard Space Flight Center
Greenbelt, Maryland 20771

TOMS NEAR REALTIME SYSTEM

DESIGN DOCUMENT

E. Puccinelli

Information Management Branch

August 1981

GODDARD SPACE FLIGHT CENTER

GREENBELT, MARYLAND 20771

CONTENTS

CONTENTS (Continued)

FIGURES

TOMS NEAR REALTIME SYSTEM

DESIGN DOCUMENT

SECTION 1. GENERAL

1.1 Purpose. The System Design Document for the TOMS (Total Ozone Mapping Spectrometer) Near Realtime System is written to fulfill the following objectives:

a. To provide detailed definition of the system functions.

b. To record the system history from a development and data processing point-of-view. Data Analysis will be the subject of future documentation.

1.2 Project References. Listed below are references pertinent to this document.

1.2.1 C. Madrid, editor, "The NIMBUS 7 User's Guide." Prepared by the LANDSAT/ NIMBUS Project, Goddard Space Flight Center, National Aeronautics and Space Administration, August 1978.

1.2.2 J. Green, NIMBUS G Flight Operations Software System (FOSS) Definition Report, General Electric Space Division, Valley Forge, Pa., 4/27/77.

1.2.3 L. Bowlin, S. Stowe, "TOMS Near Realtime Data Processing Operations Manual," Systems and Applied Sciences Corporation, Riverdale, Md., June 81.

1.2.4 Author unknown, "System Memo #1, Nimbus F Tape Formats," Rev. A, 1/31/73, General Electric Memo for NIMBUS Project at Goddard Space Flight Center.

1.2.5 M. Hopkins, "ERB-6 Reprocessing Project Data Processing Subsystem Stack DT Program Specifications," prepared for GSFC Code 931 by Research and Data Systems, Inc., January 1981.

1.2.6 L. Bowlin, L. Basiley, "TOMREL Maintenance Manual," prepared for GSFC Code 931 by Systems and Applied Sciences Corporation, July 1981.

1.2.7 P. Smith, "User's Guide for the Total Ozone Mapping Spectrometer's Interim Data Program TOMALL," prepared for GSFC Code 931 by Systems and Applied Sciences Corporation, June 1980.

1.3 Terms and Abbreviations. The following is a list of terms and abbreviations used in this document.

DT	Data Tape
ERB	Earth Radiation Budget
FAA	Federal Aviation Administration
FOV	Field of View
GMT	Greenwhich Mean Time
GSFC	Goddard Space Flight Center
ILT	Image Location Tape
ILTC	Image Location Tape (fixed)
METOCC	Meteorological Operations Control Center
NOPS	NIMBUS Observation Processing System
NSSDC	National Space Science Data Center Goddard Space Flight Center Code 601 Greenbelt, MD 20771
RUT-T	Raw Unit Tape – TOMS
SACC	Science and Applications Computing Center
SDT	Stack Data Tape
TDT	Telemetry Data Tape
TOMS	Total Ozone Mapping Spectrometer
UFO	User Formatted Output

SECTION 2. REQUIREMENTS

2.1 System Description. The objective of the TOMS (Total Ozone Mapping Spectrometer) Near Realtime System is to demonstrate that NIMBUS 7 TOMS ozone data can be used as an aide in helping airlines meet FAA regulations concerning acceptable ozone levels within aircraft cabins. In doing this, the feasibility of processing meteorological satellite data in "near" real time will also be demonstrated.

This demonstration may be regarded as consisting of two main parts.

1. Collection, processing and delivery of data within a short enough time period to be useful for flight routing.

2. Analysis to ascertain that in fact the data is useful for flight routing in order to avoid high ozone concentrations. In addition the data will be analyzed to see if it is useful for precise location of the jet stream and of clear air turbulence.

This document concerns itself solely with part 1. Results of the data analysis will be presented in a separate document.

Within the context of part 1 the system addresses three main functional requirements.

1. Collect and process TOMS data to give daily coverage of the North American continent and Hawaii. See figure 5.3-1.

   1a. Deliver map products of each orbit of data within 6 hours of ground receipt to Northwest Airlines meteorologists in Minneapolis, Minn.

   2a. Deliver daily a map showing a composite of all orbits processed that same day.

2. Operate the system from 3/1/81 through 5/15/81.

In order to satisfy these functional requirements the TOMS Near Realtime System was designed to consist of three main subsystems. See figure 2-1.

The general philosophy adopted in order to implement the system by 3/1/81 (starting date was November 1980) was to reuse as much as possible the existing NIMBUS 7 TOMS data processing system. See reference 1.2.1 page 193 for details of that system.

2.1.1 Data Receipt Subsystem. The basic function of this subsystem is to capture the spacecraft data, merge predictive spacecraft ephemeris with it, do some basic quality control and produce the results on a computer compatible digital tape. See reference 1.2.2 for details. In addition the subsystem also produces time correction data (relationship between spacecraft clock times and GMT.)

This subsystem satisfied the collection requirements for the system. The tape product produced was simply a copy of that which would have normally been produced for the existing TOMS data processing system. The chief effects our requirements had on the existing system were to cause some instances of special scheduling of data dumps from the satellite as well as scheduling the data tapes to be made within 2 hours of ground receipt. No new software or hardware was required. This occasional special scheduling and increased tape production rate was maintained for our demonstration period of 3/1/81 through 5/15/81 for the four orbits each day which contained daylight data of the North American continent and Hawaii.

2.1.2 Data Processing Subsystem. The basic processing steps performed by this subsystem are:

1. Reformatting and time correction of the raw satellite data after preliminary quality control.

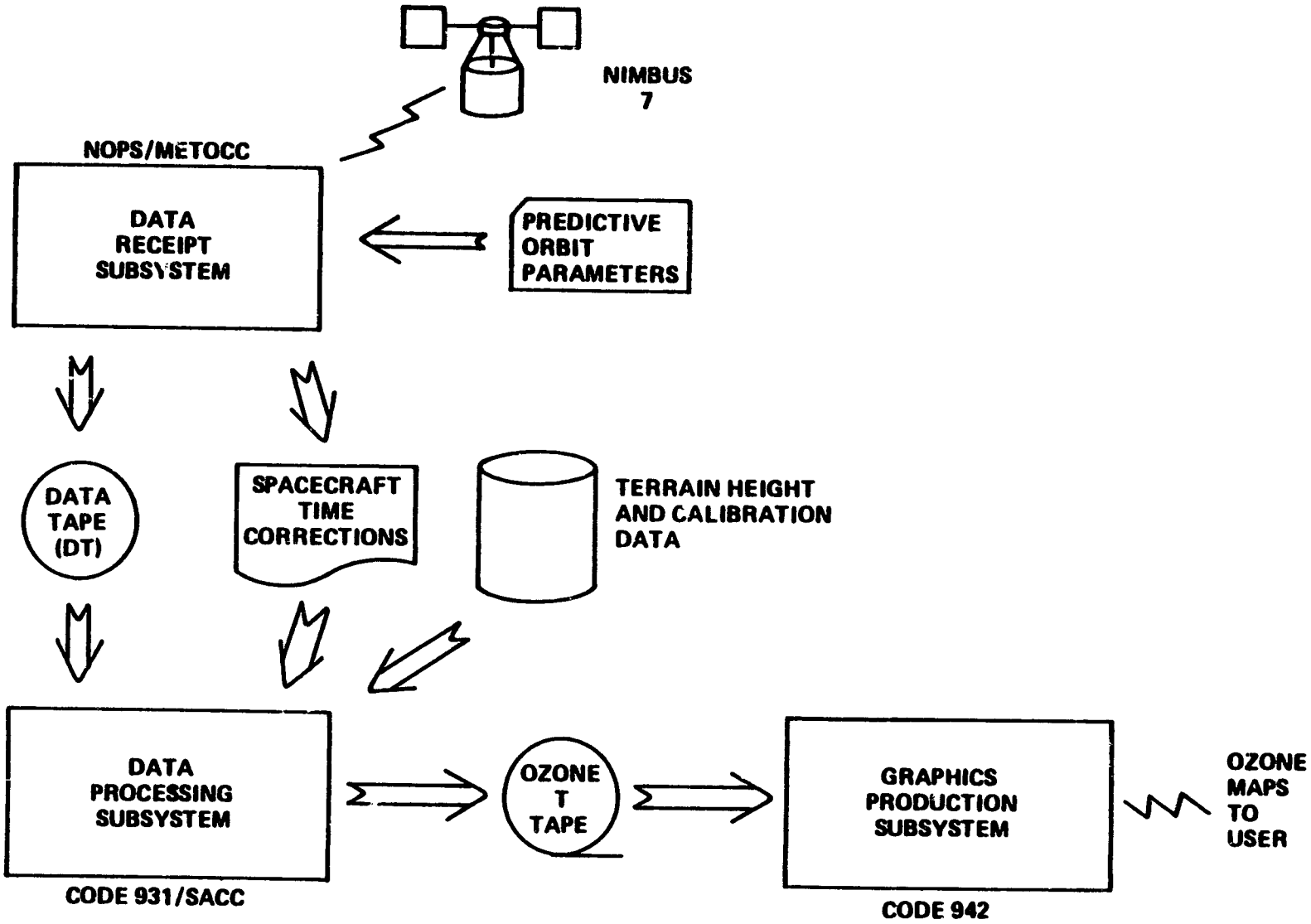


Figure 2-1. TOMS Near Realtime System Overview

2. Stripping of the TOMS experiment data from the entire satellite data stream.

3. Determining the earth location of TOMS data based on nominal attitude (pitch= roll=yaw=0) and predictive ephemeris.

4. Computing sun angle values necessary for determining ozone. These values are measured at each field-of-view and are based on solar ephemeris and spacecraft ephemeris.

5. Calibration of the TOMS instrument data.

6. Production of ozone measurements in scientific units.

7. Formatting of the data (ozone scientific units and locations) for use in graphics production and analysis.

See reference 1.2.3 for details.

This subsystem satisfied the processing requirements for the system. A new software program had to be written which replaced the existing NIMBUS-7 processing steps that generate UFO and ILT tapes. These tapes are normally generated on the NOPS CDC 3300 computer. Since that computer was not available for use in a priority mode, the entire process was transferred to the SACC IBM 360/91 computer where subsequent processing was already being done. Thus steps 1, 2 and 3 listed above were implemented by new software. Steps 4-7 were accomplished using copies of the software already developed for the usual NIMBUS 7 TOMS processing. The new software was combined with the copied software into one multi-step computer run and priority execution was allowed by SACC in order to meet the time requirement.

2.1.3 Graphics Production Subsystem. This subsystem provided the basic functions of reformatting the data into the required map products and delivering those products to Northwest Airlines Meteorological offices in Minneapolis, Minnesota.

Modifications to existing software were made to produce a Lambert mapped projection of the total ozone data. A symbol scale was generated which provided 16 levels, 25 Dobson units per level, for the range of 200 to 600 Dobson units. Scaled mapped data were transmitted to Northwest Airlines after receipt of each single orbit Ozone T data tape. In addition, single orbit and daily composite four orbit images were displayed on a local terminal for evaluation and archiving. An 8 X 10 inch color photo was also generated for each daily composite. On "known" clear air turbulence days, the total ozone daily composite images were regenerated using a symbol scale of 16 levels, 5 Dobson units per level, for the range of 350 to 430 Dobson units and transmitted to Northwest Airlines for analysis.

To meet the time limit requirements, the Sensor Evaluation Branch granted priority processing time on their computer and data transmission equipment as well as establishing a special work schedule for operations personnel. In addition to satisfying the basic functional requirements as described above, this subsystem provided visual quality control on the map products before transmission. Contact R. Sullivan of Code 942 for details.

2.2 Accuracy. To implement the system within the available 4 months the accuracy requirements were specified as follows:

"Output products from the TOMS Near Realtime System should be identical to those which would be produced by the usual NIMBUS 7 TOMS Processing with the possible exception of minor location differences due to use of predictive spacecraft ephemeris and assumed nominal attitude."

Preliminary studies comparing predictive and definitive spacecraft ephemeris showed that the resulting differences in location of ozone data should not effect the proposed study. The historical accurate control of the spacecraft attitude by the on board Attitude Control System (ACS) was relied upon to make the simplifying assumption that attitude in each axis was a constant zero degrees.

Comparing TOMS data processed through this system with the same data processed through the existing NIMBUS 7 TOMS data processing system showed that differences in ozone values never exceeded two percent. See reference 1.2.3 for details.

2.3 Timing. There is a 6 hour (maximum) throughput time per orbit requirement. Therefore, each subsystem was allocated 2 hours to process each orbit of data. To satisfy this requirement special priorities were established on the computers used by the three subsystems.

2.4 Flexibility. The software is not readily adaptable to changes in modes of operation and operating environment. This type of flexibility was not designed into the system due to time and cost constraints.

SECTION 3. ENVIRONMENT

3.1 Equipment. The following subsections describe the equipment utilized by each subsystem.

3.1.1 Data Receipt Subsystem Equipment. This subsystem utilizes the METOCC PDP 11 and CDC 924 computers.

3.1.2 Data Processing Subsystem Equipment. This subsystem utilizes the GSFC SACC computers (IBM 360/91 and 360/75).

3.1.3 Graphics Production Subsystem Equipment. This subsystem utilizes the Sensor Evaluation Branch's Hewlett Packard 1000 computer, a COMTAL imaging system, two HP2635 line printer/terminal (one located in Minneapolis) and two RACAL-VADIC modem for transmission of the data over telephone lines from the central processor to the printer terminals.

3.2 Support Software. A description of the support software for the Data Receipt Subsystem and Graphics Production Subsystem is available from the NOPS and the Sensor Evaluation Branch respectively. The support software for the Data Processing Subsystem is documented in reference 1.2.6.

3.3 Interfaces. The following subsections describe the system interfaces. See figure 2-1.

3.3.1 Data Receipt Interfaces. The data receipt subsystem interfaces with the Data Processing Subsystem via 7 track, 556 BPI tape (DT). See figure 2-1.

3.3.2 Data Processing Interfaces. This subsystem interfaces with the Graphics Production subsystem via 9 track, 800 BPI tape (OZONE-T) and with the Data Receipt Subsystem via 7 track, 556 BPI tape (DT). See figure 2-1.

3.3.3 Graphics Production Interfaces. This subsystem interfaces with the user (Northwest Airlines) via telephone using modems. The output map products are generated on a

line printer. The subsystem also interfaces with the Data Processing subsystem via 800 BPI tape (OZONE-T). See figure 2-1.

SECTION 4. DESIGN DETAILS

4.1 System Logical Flow. Figure 4.1-1 shows the logical flow of the system.

4.2 System Data. Included in this paragraph is a description of the input, intermediate, and output data.

4.2.1 Inputs. The system's input data are the predictive orbit parameters, the spacecraft data, solar ephemeris tables, terrain height tables, calibration tables and time correction data.

4.2.2 Intermediate Data. Intermediate data consists of data passed from computer program to computer program which is neither a system input or a system output product. There are seven major programs in the system and data is passed between them via the medium of magnetic tapes. All but one of these intermediate data product magnetic tapes are identical in format to those defined in the normal NIMBUS 7 TOMS PROCESSING SYSTEM. These tape formats are named:

a. Data Tape (DT)

b. Stacked Data Tape (SDT)

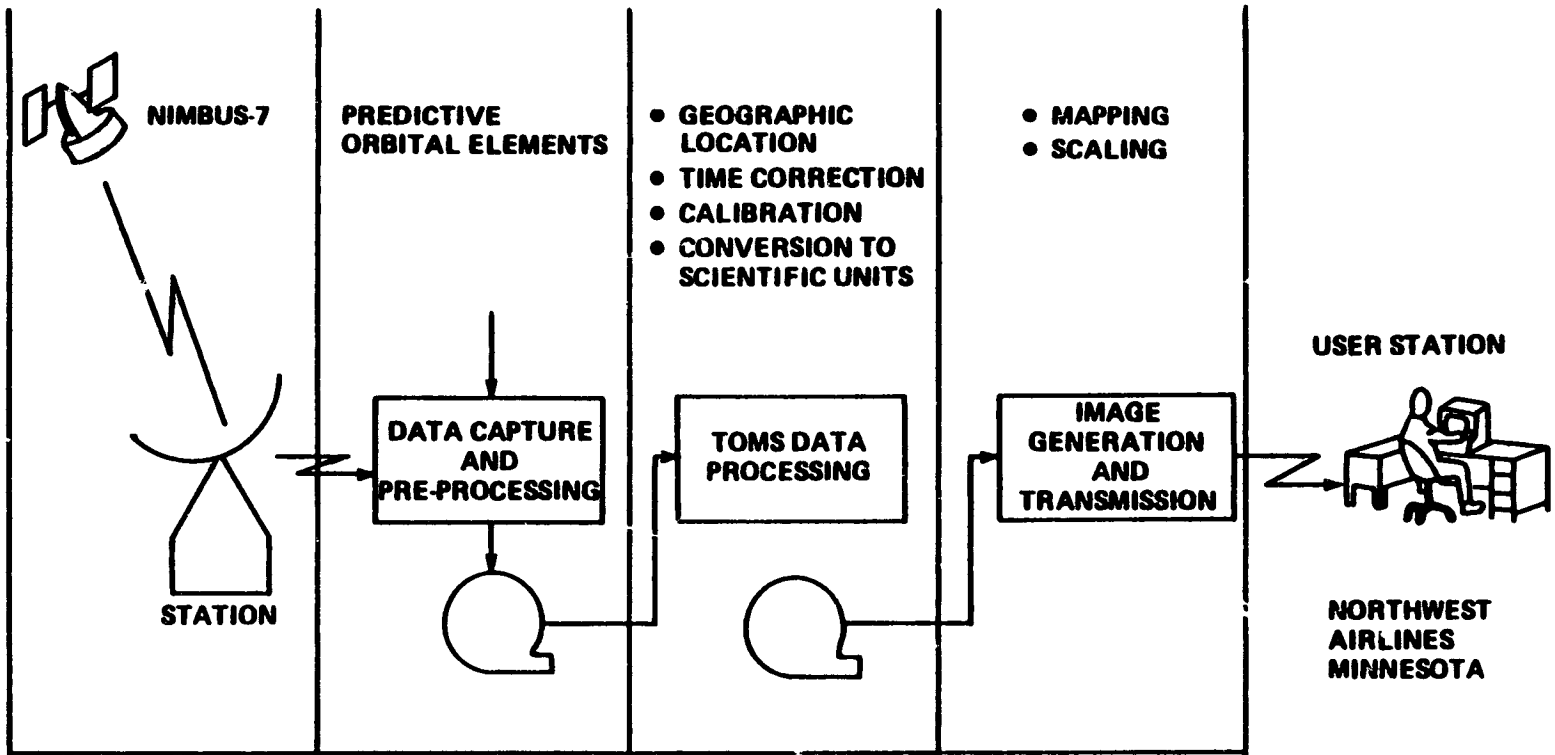
c. SBUV/TOMS User Formatted Output Tape (SBUV/TOMS UFO)

d. SBUV/TOMS Image Location Tape (SBUV/TOMS ILT)

e. SBUV/TOMS Fixed Image Location Tape (SBUV/TOMS ILTC)

f. TOMS Raw Unit Tape (RUT-T)

The DT contains all NIMBUS 7 data for one playback (approximately one orbit of data) as well as predictive spacecraft ephemeris. See reference 1.2.4.



COMPUTERS USED	PDP 11 CDC 924	IBM 360/91 & 75	HP 1000
PROPOSED TIME LINE	2 HOURS	2 HOURS	2 HOURS
ACTUAL TIME	1 HOUR	20 MINUTES	15 MINUTES
RESPONSIBILITY OVERALL CODE 960	NIMBUS PROJECT	CODE 931	CODE 942

Figure 4.1.1. TOMS Data Flow

The SDT contains reformatted, quality controlled, time corrected NIMBUS 7 data as well as spacecraft ephemeris data. It is identical in format to that defined in the NIMBUS-6 ERB Reprocessing Project. See reference 1.2.5.

The SBUV/TOMS UFO tape contains only the TOMS data in the desired longitude range (equator to North Pole). See reference 1.2.6.

The SBUV/TOMS ILT tape contains locations for each TOMS field-of-view. See reference 1.2.6.

The SBUV/TOMS ILTC appends to the ILT various solar orientation angles measured at each field-of-view. See reference 1.2.6.

The TOMS RUT tape contains the calibrated radiance data along with the location of each data value. See reference 1.2.7.

4.2.3 Output. The System outputs are:

a. Lambert projection maps showing ozone concentrations (both single orbit and daily composites). Figures 4.2.3-1 and 4.2.3-2 show reductions of actual products as received by Northwest Airlines. Figure 4.2.3-3 shows a single orbit map with latitude and longitude lines overlayed as well as the ozone values of the various gray levels.

b Ozone T tapes which contain total ozone profiles. See reference 1.2.7.

4.3 Program Descriptions. The programs comprising the TOMS Near Realtime System are described in the following subsections.

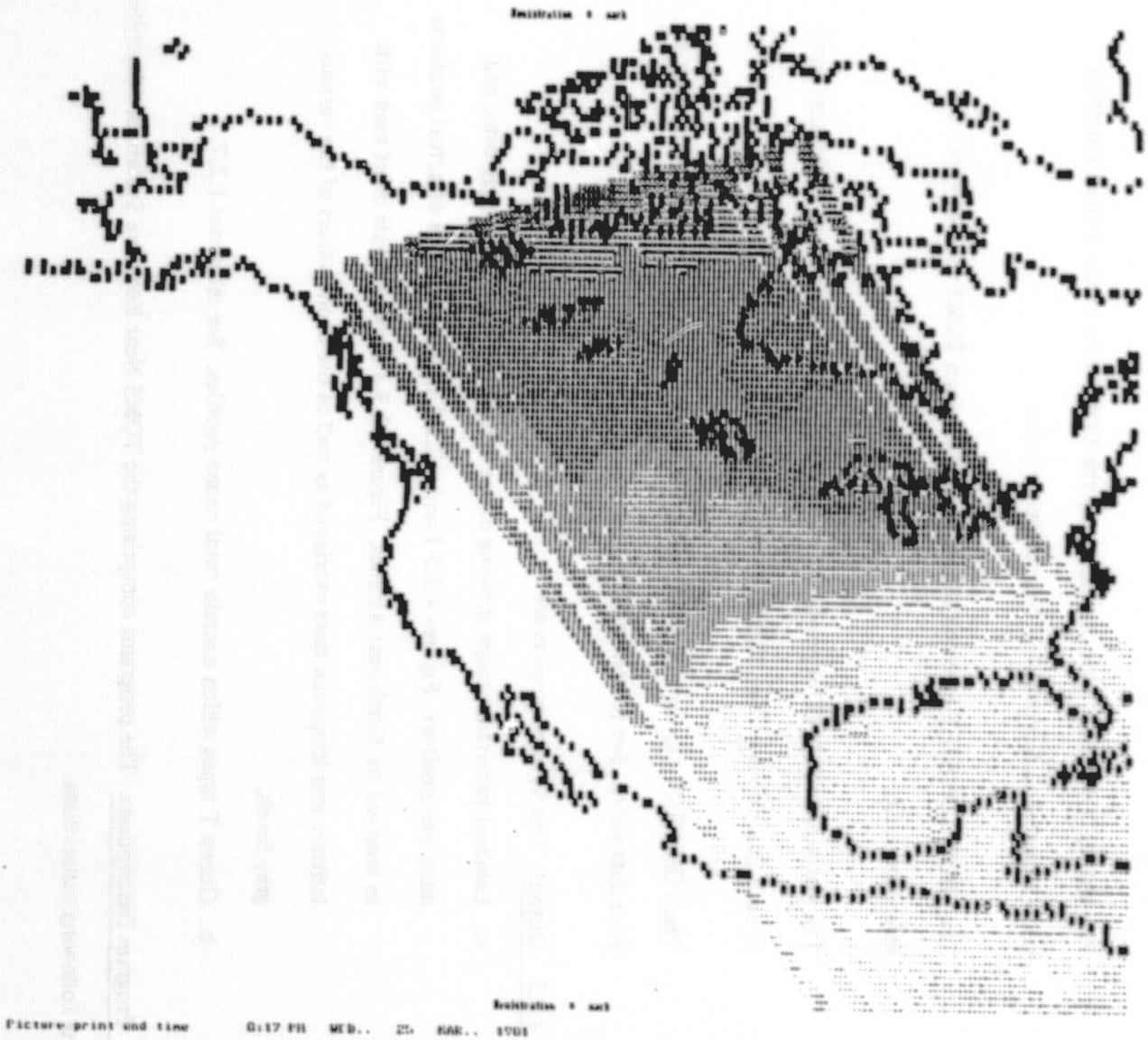


Figure 4.1.3-1. Sample Single Orbit Map Product

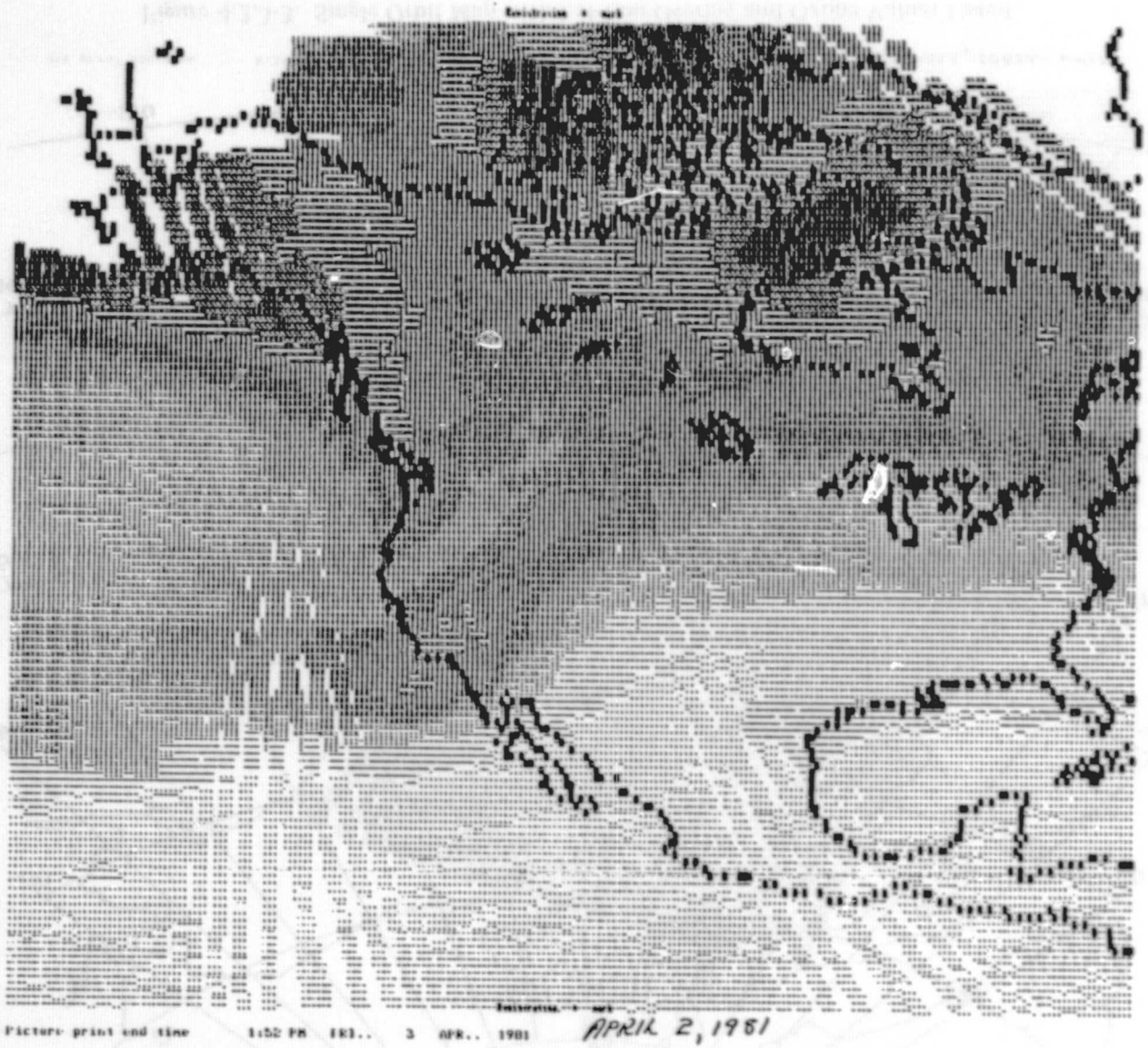


Figure 4.2.3-2. Sample Composite Map Product Data From April 2, 1981

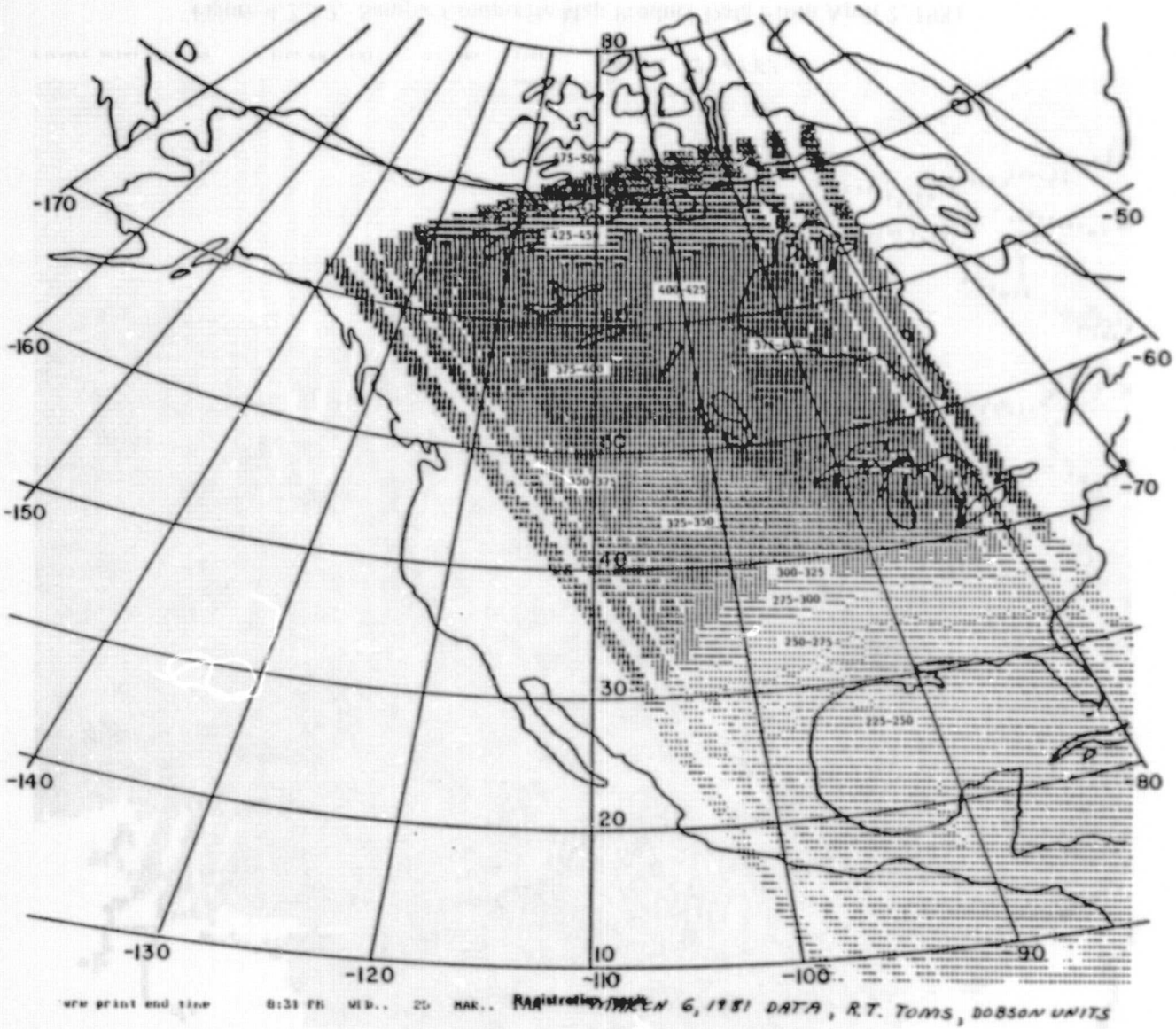


Figure 4.2.3-3. Single Orbit Map with Lat-Lon Overlay and Ozone Values Listed

4.3.1 Data Receipt Subsystem Programs. There are three main programs used in this subsystem. Their main functions are to capture, decommutate, add necessary flag words and predictive spacecraft ephemeris and quality control the data. See figure 4.3.1-1 and reference 1.2.4 for details.

4.3.2 Data Processing Subsystem Programs. There are five main programs used in this subsystem. They are the Stack Data Tape Program, TOMREL Program, ILT FIX Program, INGEST Program and TOMALL Program. In aggregate, their function is to time correct the satellite data, strip out the TOMS data and then select only that data from equator to North Pole, determine locations of each field-of-view, calibrate the instrument data and produce total ozone profiles. See figure 4.3.2-1 and references 1.2.5 through 1.2.7 for details.

4.3.3 Graphics Production Subsystem. There is one main program used in this subsystem. It is called the WMAPD Program. Its main function is to produce a gray scale Lambert Projection map showing ozone concentrations. See figure 4.3.3-1. Contact R. Sullivan Code 942 for details.

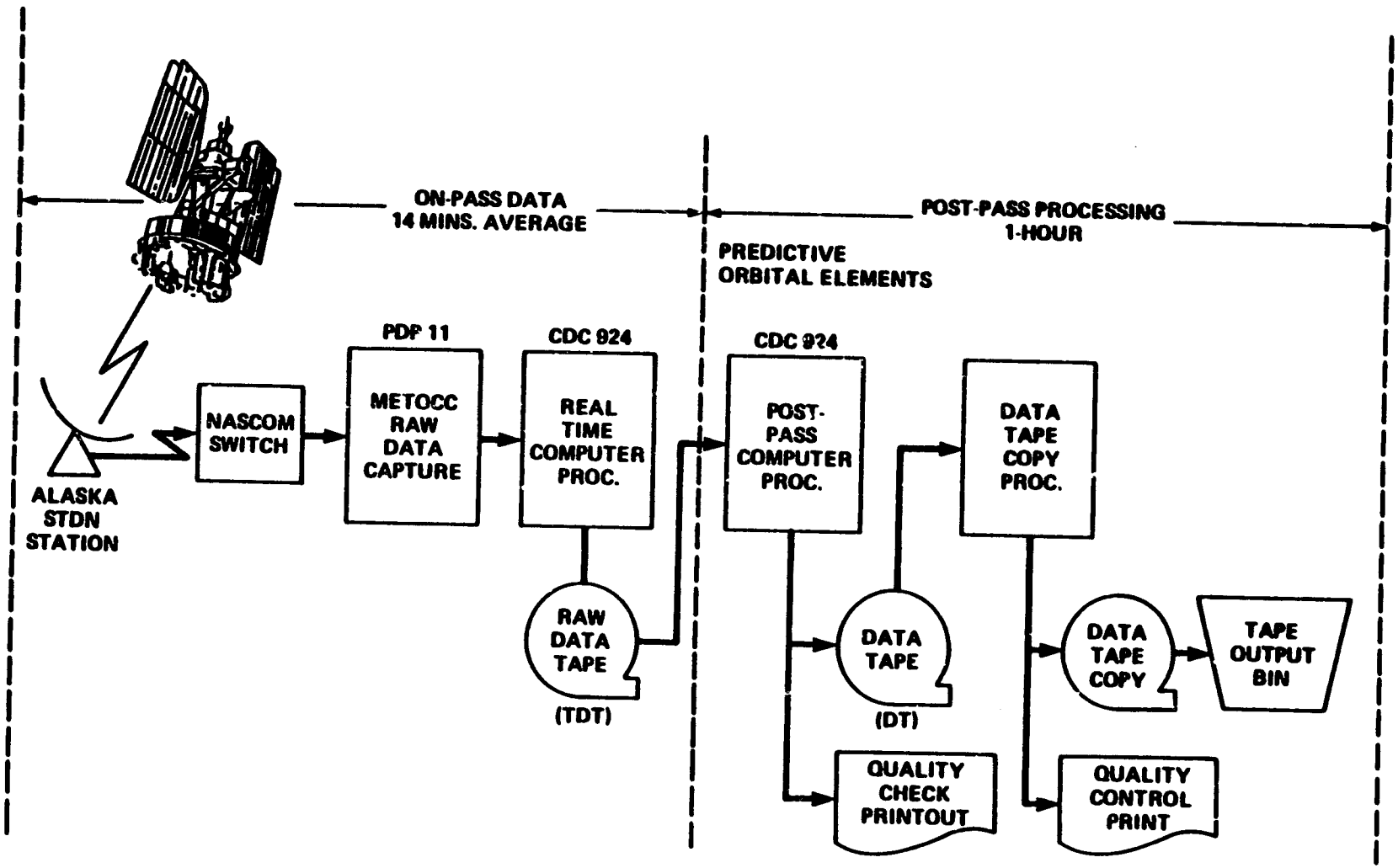


Figure 4.3.1-1. METOCC TOMS Data Acquisition and Processing Profile

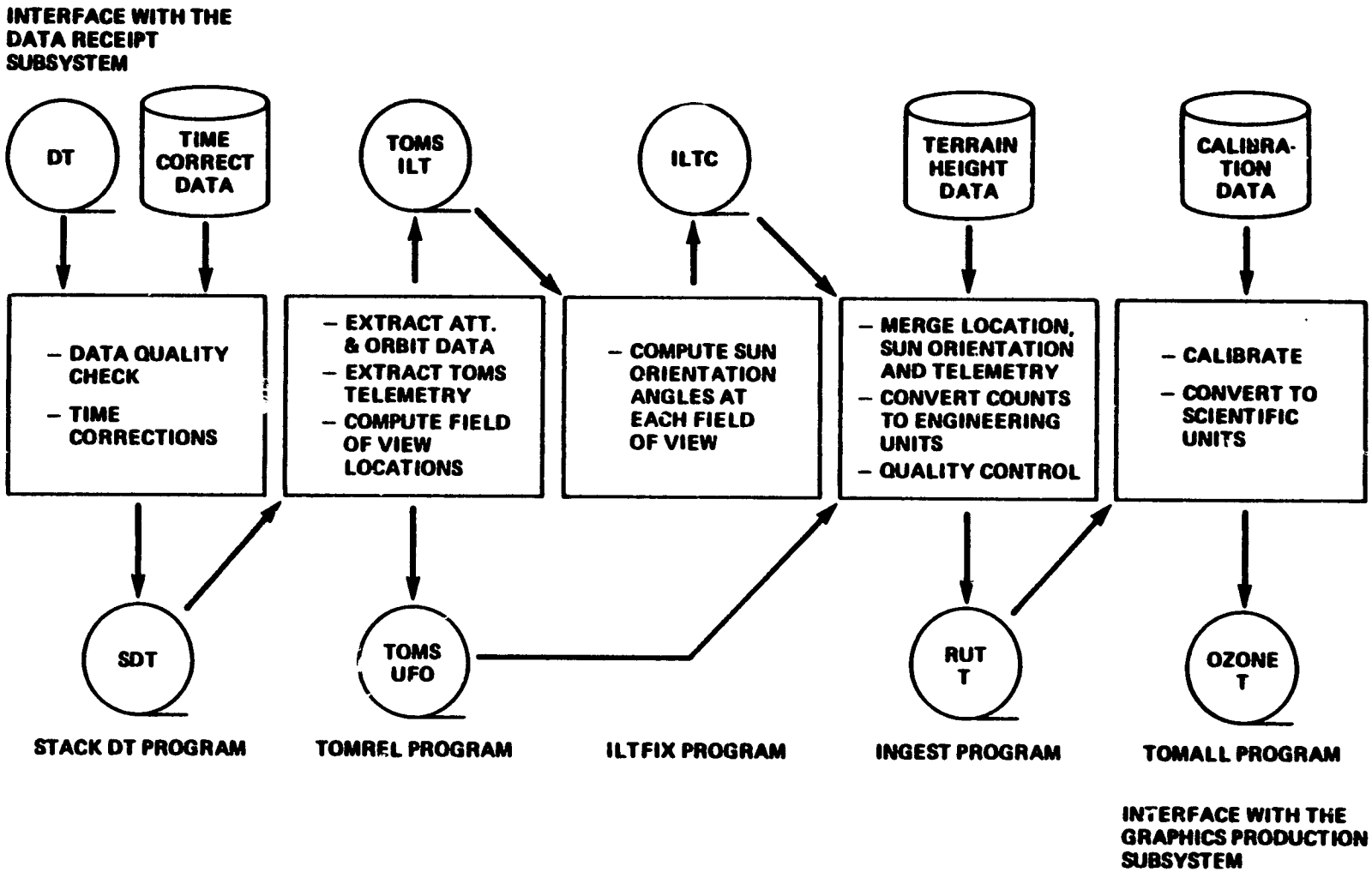


Figure 4.3.2-1. Data Processing Subsystem Detailed Processing Flow

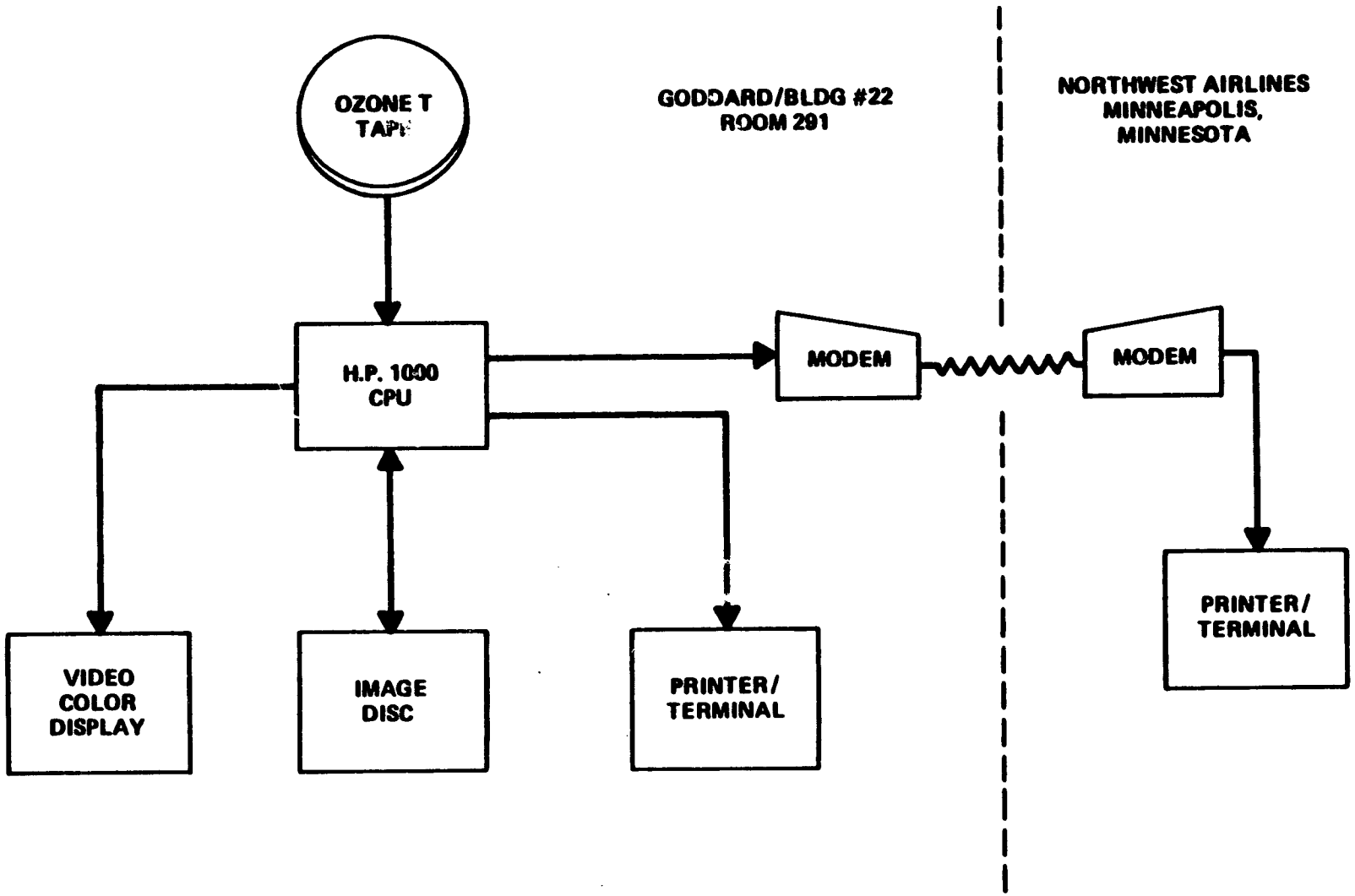


Figure 4.3.3-1. Graphics Processing and Display

SECTION 5. SYSTEM HISTORY

5.1 Definition and Design. System requirements were presented to Code 931 in a meeting in November 1980 by A. Krueger and R. Hudson of Code 963 along with a proposed design. Within the next few weeks the author showed that it would be feasible to design, implement and operate the Data Processing Subsystem. Work was begun immediately. This involved establishing schedules, interfaces among the three component subsystems, defining the responsibility of each, estimating cost and time schedules, and design and implementation of the Data Processing Subsystem. See figure 5.1-1 for the time schedule. The resulting design has been described in section 4.

5.2 Operations. The system was successfully able to meet the requirement of producing ozone maps within 6 hours of ground receipt of satellite data because the operation of each subsystem's computers was run in a priority mode. It is even more important to recognize that despite having priority access to the computers involved, the operations would not have been successful had it not been for the high degree of integrity and responsibility displayed by the operators.

Beginning with the Data Receipt Subsystem, that group established priority production of the required data tapes (DT's). In addition they modified the scheduling for the ground receipt of NIMBUS 7 data at Alaska so that our time requirements could be met.

The Data Processing Subsystem operations not only involved executing the functions of that subsystem but the operator was also required to pick up input tapes from the Data Receipt Subsystem, deliver output tapes to the Graphics Production Subsystem and be responsible for the overall flow and accounting of data between subsystems.

On weekends the requirement for delivering data within six hours of ground receipt were relaxed due to budget constraints. Saturday and Sunday data were processed and delivered to the Graphic Production Subsystem by noon on Monday.

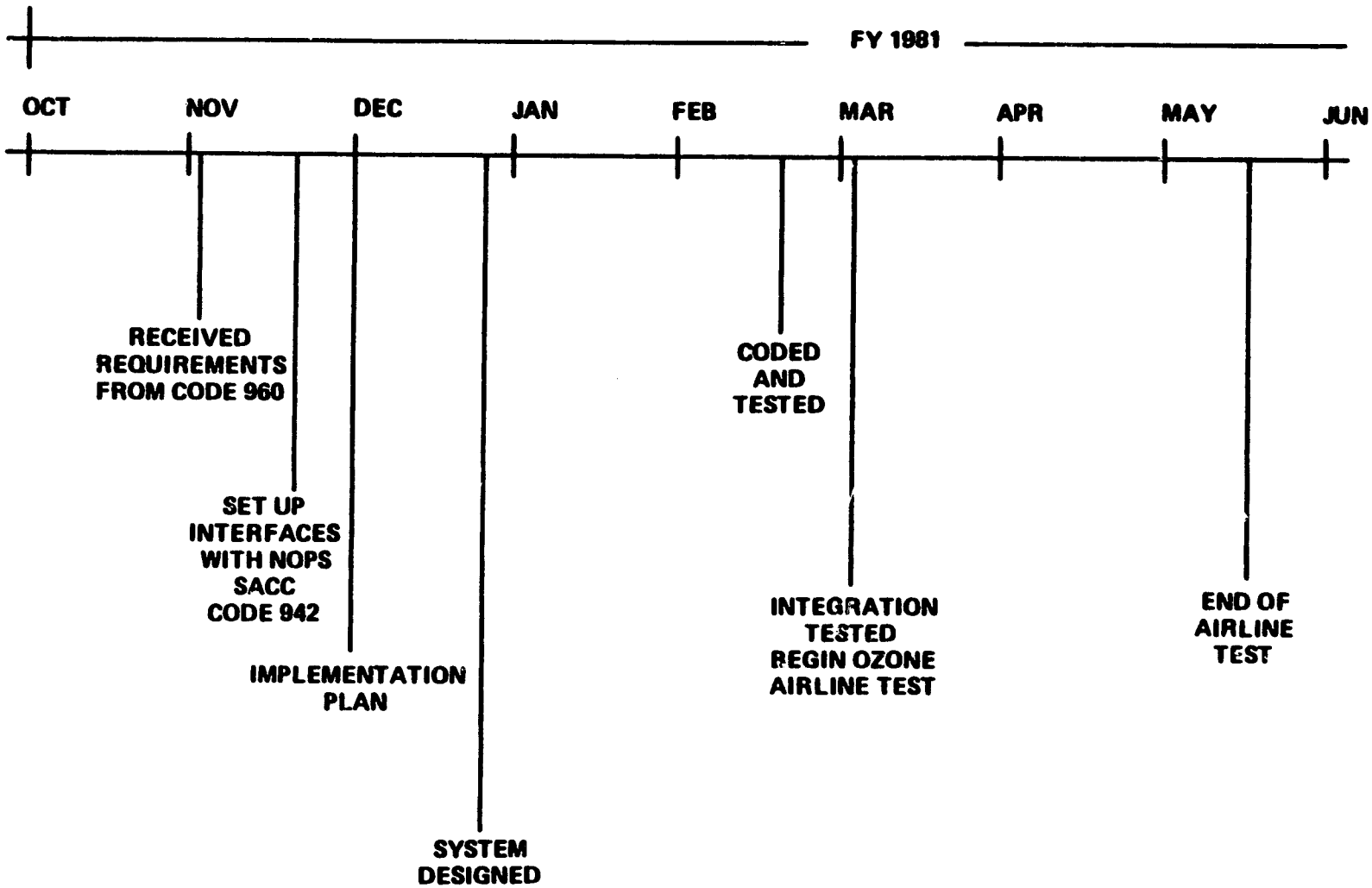


Figure 5.1-1. TOM3 Near Real Time Processing Schedule

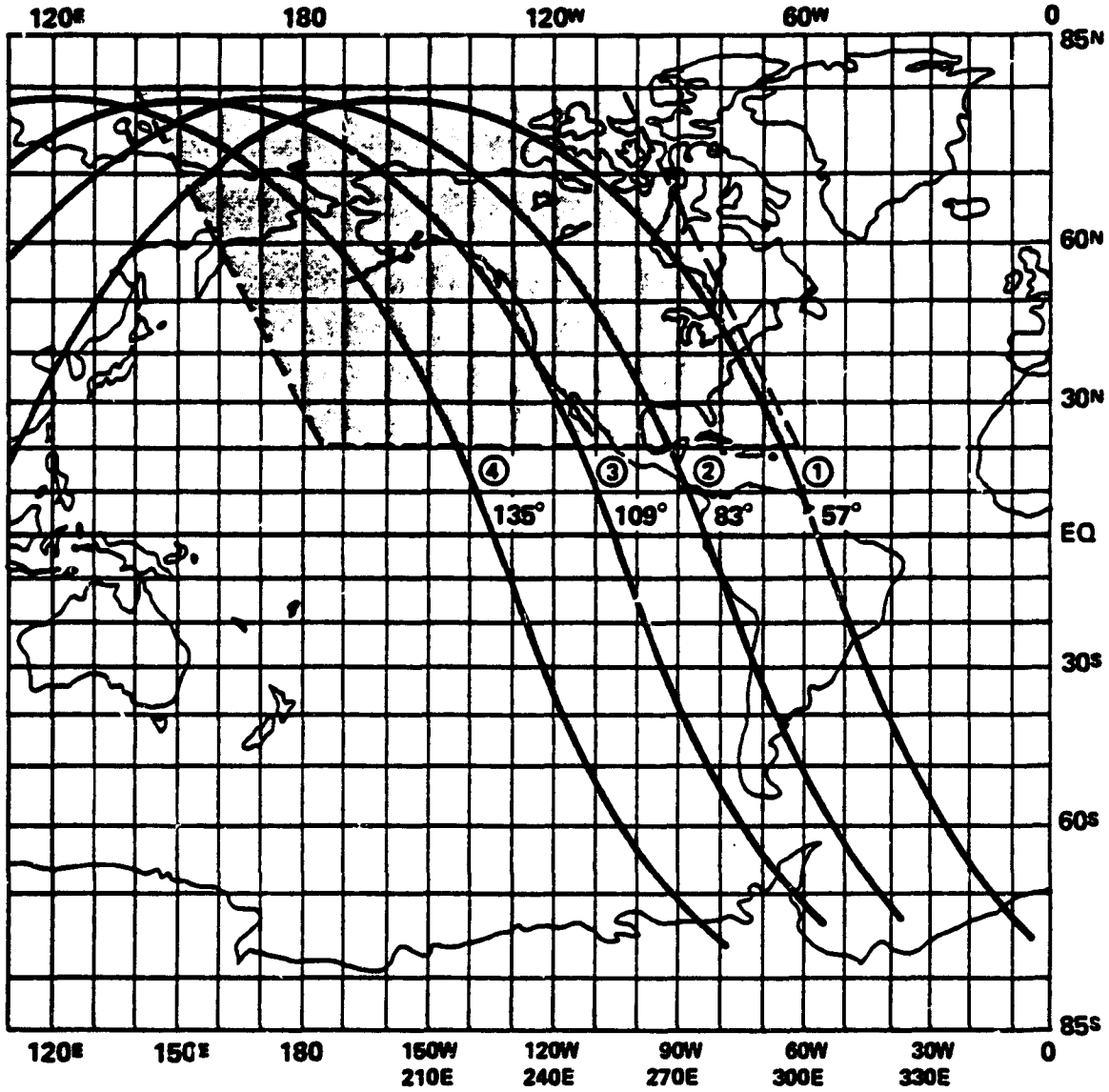
The Graphics Production Subsystem operations were specially set up to help meet our time requirements. The operator hours were set so that he would be available during the hours when the first through fourth orbits would be received (typically noon to 8 p.m.). In addition, this subsystem collected the Ozone T tapes delivered to them so that they could be archived. See section 5.4.

5.3 Log of Data Processed. The data processed ran from March 1, 1981 through May 15, 1981. The goal was to process those orbits of NIMBUS 7 which would produce coverage of the North American continent and Hawaii. See figure 5.3-1. The algorithm used to select the orbits was to process the first four orbits of the day whose ascending nodes were west of 51 W longitude. Because of the daily precession of the orbit on some days three orbits were sufficient to give the required coverage. See appendix A for a description of the orbits processed. It would be noted that during the course of operations three modifications were made to the Data Processing Subsystem software to correct minor problems. Each of those problems would occur only under certain rare circumstances and thus processing of most of the orbits was unaffected. Eight of the 297 orbits processed from March 1, 1981 through May 15, 1981 were reprocessed on May 21 to remove small blocks of bad data. The modifications made occurred on March 27, April 15 and April 30. Each modification is documented in reference 1.2.3. The reprocessed orbits are identified in appendix B.

The log kept by the Data Processing Subsystem operator is shown in appendix B. This log records the details of the processing of each orbit.

5.4 Archival. The products archived for future reference include:

a. All of the NIMBUS 7 Data recorded by NOPS which were used for this project. Each week of data (28 orbits) in the period March 1, 1981 through May 15, 1981 was stacked onto one single high density tape using the STACKDT program described in section 4.3 and in references 1.2.3, 1.2.5 and 1.2.6. The eleven stacked tapes generated are archived at NSSDC. A copy of these eleven tapes is also stored in the Information Management Branch tape library. Note that each orbit of data on these stacked tapes has been processed by the



DATA DAY TO START WITH 1ST ORBIT WITH ASCENDING NODE MORE WESTERLY THAN 51° WEST

Figure 5.3-1. Typical 4 Orbit Coverage

same program which comprises the first step of the Data Processing Subsystem. Therefore, if this data ever needs to be reprocessed through the system, step one of the Data Processing Subsystem should be skipped.

b. All of the OZONE-T tapes output by the system. (These contain the ozone profiles.) The original OZONE-T tapes which each contain a single data file are being stacked onto fewer tapes each of which will contain multiple data files. The archival site will be selected by A. Krueger.

c. All of the printer generated Lamuert projection maps (both single orbit and daily four orbit composites) as well as the color photographs of each daily composite. The archival site will be selected by A. Krueger.

d. All of the SACC IBM 360 computer printouts from the jobs which created the OZONE-T tapes from the DT's. These, as well as the jobs which created the stacked tapes referred to as archival item a. above, are archived at the Federal Records Warehouse. They may be accessed by contacting the Information Management Branch librarian, J. Cleveland.

e. All software and input data sets which comprise the Data Processing Subsystem. These are archived both at the Goddard Program Library and the Information Management Branch Library.

5.5 Conclusions. The TOMS Near Realtime System has demonstrated that it is feasible to process TOMS data quickly enough to deliver map products to an end user within 6 hours of ground receipt of the satellite data. See figure 5.5-1.

Based on the experience gained during this demonstration period it should be quite possible to modify the existing system to reduce the delivery time even further. There are many possible ways to do this. The two most significant changes which could be made are:

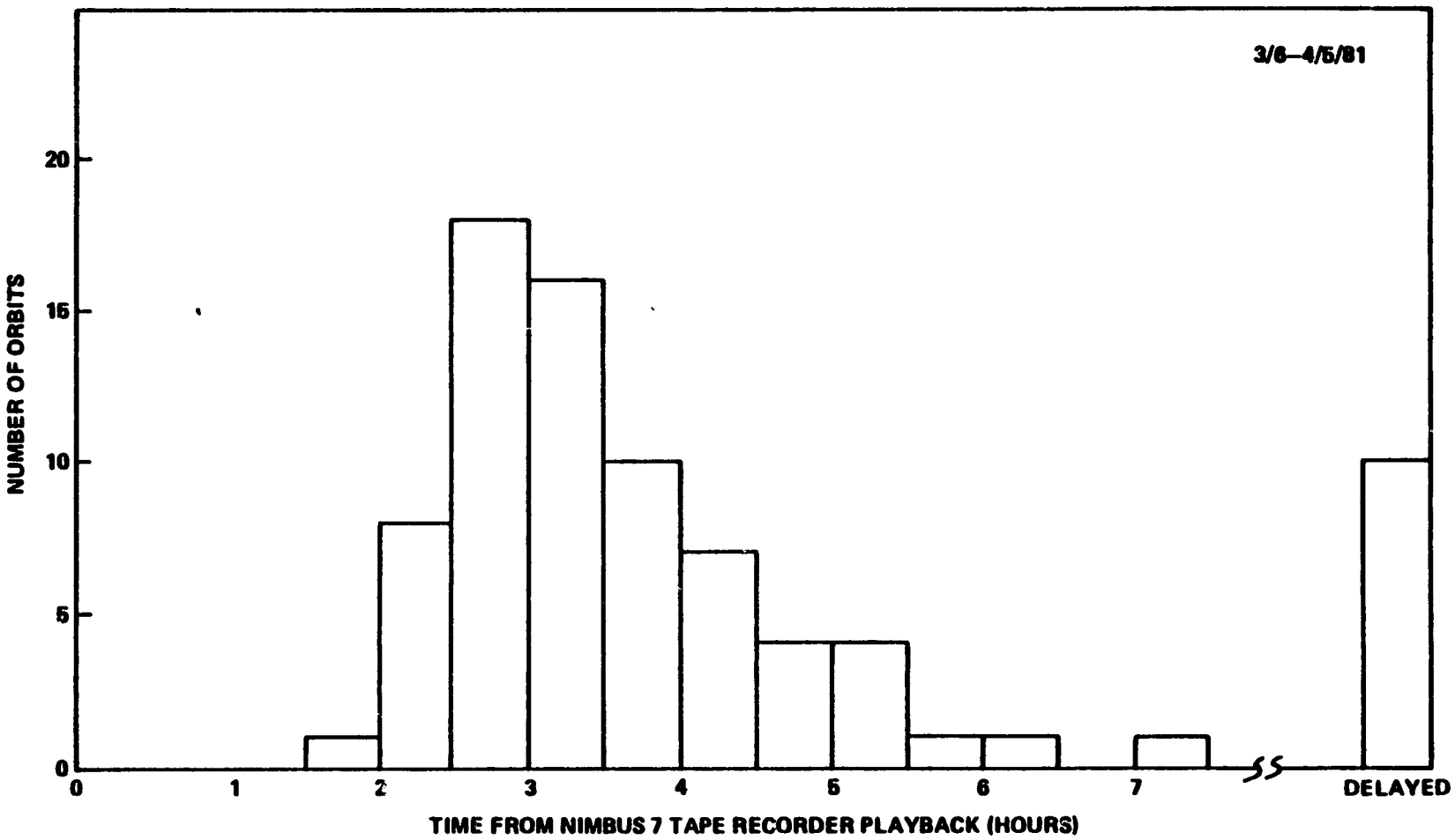


Figure 5.5-1. Delivery Time Performance

1. Combine the Data Processing Subsystem and the Graphics Production Subsystem so that their functions are all executed on one computer.

2. Combine the five distinct job steps in the Data Processing Subsystem so that transmission of data between steps is done by using computer memory only.

APPENDIX A

DATA LOG

JULIAN DAY	DAY OF WEEK	DATE YYMMDD	LOCAL HH MM	ORBIT NO.	GEOG. LONG. OF ASCEND. NODE	DATE PROCESSED	NOTES
60	SUN	81/3/1	10:55	11877	W61.01	3/2	
60	SUN	81/3/1	12:39	11878	W87.06	3/2	
60	SUN	81/3/1	14:23	11879	W113.11	3/2	
60	SUN	81/3/1	16:07	11880	W139.16	3/2	
61	MON	81/3/2	11:13	11891	W65.70	3/2	
61	MON	81/3/2	12:58	11892	W91.75	3/2	
61	MON	81/3/2	14:42	11893	W117.79	3/2	
61	MON	81/3/2	16:26	11894	W143.84	3/2	
62	TUES	81/3/3	11:32	11905	W70.38	3/3	
62	TUES	81/3/3	13:16	11906	W96.43	3/3	
62	TUES	81/3/3	15:01	11907	W122.48	3/3	B
62	TUES	81/3/3	16:45	11908	W148.53		A
63	WED	81/3/4	11:51	11919	W75.07	3/4	
63	WED	81/3/4	13:35	11920	W101.12	3/4	
63	WED	81/3/4	15:19	11921	W127.16	3/4	
63	WED	81/3/4	17:03	11922	W153.21	3/4	
64	THURS	81/3/5	10:25	11932	W53.70	3/5	
64	THURS	81/3/5	12:10	11933	W79.75	3/5	
64	THURS	81/3/5	13:54	11934	W105.80	3/5	
64	THURS	81/3/5	15:38	11935	W131.85	-	A

Note B - Reprocessed 5/21 to correct small block of bad data
Note A - Not processed. First 3 orbits gave desired coverage

JULIAN DAY	DAY OF WEEK	DATE YYMMDD	LOCAL HH MM	ORBIT NO.	GEOG. LONG. OF ASCEND. NODE	DATE PROCESSED	NOTES
65	FRI	81/3/6	10:44	11946	W58.39	3/6	
65	FRI	81/3/6	12:28	11947	W84.44	3/6	
65	FRI	81/3/6	14:13	11948	W110.49	3/6	
65	FRI	81/3/6	15:57	11949	W136.53	3/6	
66	SAT	81/3/7	11:03	11960	W63.07	3/9	
66	SAT	81/3/7	12:47	11961	W89.12	3/9	
66	SAT	81/3/7	14:31	11962	W115.17	3/9	
66	SAT	81/3/7	16:16	11963	W141.22	-	A
67	SUN	81/3/8	11:22	11974	W67.76	3/9	
67	SUN	81/3/8	13:06	11975	W93.81	3/9	
67	SUN	81/3/8	14:50	11976	W119.85	3/9	
67	SUN	81/3/8	16:34	11977	W145.90	3/9	
68	MON	81/3/9	11:40	11988	W72.44	3/9	
68	MON	81/3/9	13:25	11989	W98.49	3/9	
68	MON	81/3/9	15:09	11990	W124.54	3/9	
68	MON	81/3/9	16:53	11991	W150.59	3/9	
69	TUES	81/3/10	10:15	12001	W51.08	3/10	
69	TUES	81/3/10	11:59	12002	W77.13	3/10	
69	TUES	81/3/10	13:43	12003	W103.18	3/10	
69	TUES	81/3/10	15:25	12004	W129.22	3/10	

JULIAN DAY	DAY OF WEEK	DATE YYMMDD	LOCAL HH MM	ORBIT NO.	GEOG. LONG. OF ASCEND. NODE	DATE PROCESSED	NOTES
70	WED	81/3/11	10:34	12015	W55.76	3/11	
70	WED	81/3/11	12:18	12016	W81.81	3/11	
70	WED	81/3/11	14:02	12017	W107.86	3/11	
70	WED	81/3/11	15:46	12018	W133.91	3/11	
71	THURS	81/3/12	10:52	12029	W60.45	3/12	
71	THURS	81/3/12	12:37	12030	W86.50	3/12	
71	THURS	81/3/12	14:21	12031	W112.54	3/12	B
71	THURS	81/3/12	16:05	12032	W138.59	3/12	
72	FRI	81/3/13	11:11	12043	W65.13	3/13	
72	FRI	81/3/13	12:55	12044	W91.18	3/13	
72	FRI	81/3/13	14:40	12045	W117.23	3/13	
72	FRI	81/3/13	16:24	12046	W143.28	-	A
73	SAT	81/3/14	11:30	12057	W69.82	3/16	
73	SAT	81/3/14	13:14	12058	W95.86	3/16	
73	SAT	81/3/14	14:58	12059	W121.91	3/31	C
73	SAT	81/3/14	16:42	12060	W147.96	3/31	C
74	SUN	81/3/15	11:49	12071	W74.50	3/16	
74	SUN	81/3/15	13:33	12072	W100.55	3/16	
74	SUN	81/3/15	15:17	12073	W126.60	3/16	
74	SUN	81/3/15	17:01	12074	W152.65	3/16	B

Note C - Not processed until date shown due to error in software. The error did not effect other orbits.

JULIAN DAY	DAY OF WEEK	DATE YYMMDD	LOCAL HH MM	ORBIT NO.	GEOG. LONG. OF ASCEND. NODE	DATE PROCESSED	NOTES
75	MON	81/3/16	10:23	12084	W53.14	3/16	
75	MON	81/3/16	11:17	12085	W79.19	3/16	
75	MON	81/3/16	13:52	12086	W105.23	3/25	C
75	MON	81/3/16	15:36	12087	W131.28	3/25	C
76	TUES	81/3/17	10:42	12098	W57.82	3/17	
76	TUES	81/3/17	12:26	12099	W83.87	3/17	
76	TUES	81/3/17	14:10	12100	W109.92	3/17	
76	TUES	81/3/17	15:54	12101	W135.97	3/31	C
77	WED	81/3/18	11:01	12112	W62.50	3/18	
77	WED	81/3/18	12:45	12113	W88.55	3/18	
77	WED	81/3/18	14:29	12114	W114.60	3/18	
77	WED	81/3/18	16:13	12115	W140.65	3/18	
78	THURS	81/3/19	11:17	12126	W67.19	3/19	
78	THURS	81/3/19	13:04	12127	W93.24	3/19	
78	THURS	81/3/19	14:48	12128	W119.28	3/19	
78	THURS	81/3/19	16:32	12129	W145.33	3/31	C
79	FRI	81/3/20	11:38	12140	W71.87	3/20	
79	FRI	81/3/20	13:22	12141	W97.97	3/20	
79	FRI	81/3/20	15:07	12142	W123.97	3/20	
79	FRI	81/3/20	16:51	12143	W150.02	3/20	

JULIAN DAY	DAY OF WEEK	DATE YYMMDD	LOCAL HH MM	ORBIT NO.	GEOG. LONG. OF ASCEND. NODE	DATE PROCESSED	NOTES
80	SAT	81/3/21	11:57	12154	W76.56	3/23	
80	SAT	81/3/21	13:41	12155	W102.60	3/23	
80	SAT	81/3/21	15:25	12156	W128.65	3/23	
80	SAT	81/3/21	17:09	12157	W154.70	3/23	
81	SUN	81/3/22	10:31	12167	W55.19	3/23	
81	SUN	81/3/22	12:16	12168	W81.24	3/23	
81	SUN	81/3/22	14:00	12169	W107.29	3/23	
81	SUN	81/3/22	15:44	12170	W133.34	3/23	
82	MON	81/3/23	10:50	12181	W59.87	3/23	
82	MON	81/3/23	12:34	12182	W85.92	3/23	
82	MON	81/3/23	14:19	12183	W111.97	3/23	
82	MON	81/3/23	16:03	12184	W138.02	3/23	
83	TUES	81/3/24	11:09	12195	W64.56	3/24	
83	TUES	81/3/24	12:53	12196	W90.61	3/24	
83	TUES	81/3/24	14:37	12197	W116.65	3/24	
83	TUES	81/3/24	16:21	12198	W142.70	3/24	
84	WED	81/3/25	11:28	12209	W69.24	3/25	
84	WED	81/3/25	13:12	12210	W95.29	3/25	
84	WED	81/3/25	14:56	12211	W121.34	3/25	B
84	WED	81/3/25	16:40	12212	W147.39	3/25	

JULIAN DAY	DAY OF WEEK	DATE YYMMDD	LOCAL HH MM	ORBIT NO.	GEOG. LONG. OF ASCEND. NODE	DATE PROCESSED	NOTES
85	THURS	81/3/26	11:46	12223	W73.92	3/26	
85	THURS	81/3/26	13:31	12224	W99.97	"	
85	THURS	81/3/26	15:15	12225	W126.02	"	
85	THURS	81/3/26	16:59	12226	W152.07	"	
86	FRI	81/3/27	10:21	12236	W52.56	3/27	
86	FRI	81/3/27	12:05	12237	W78.61	"	
86	FRI	81/3/27	13:49	12238	W104.66	"	
86	FRI	81/3/27	15:33	12239	W130.70	"	
87	SAT	81/3/28	10:40	12250	W57.24	3/27	
87	SAT	81/3/28	12:24	12251	W83.29	"	
87	SAT	81/3/28	14:08	12252	W109.34	"	
87	SAT	81/3/28	15:52	12253	W135.39	"	
88	SUN	81/3/29	10:58	12264	W61.93	3/30	
88	SUN	81/3/29	12:43	12265	W87.97	"	
88	SUN	81/3/29	14:27	12266	W114.02	"	
88	SUN	81/3/29	16:11	12267	W140.07	"	
89	MON	81/3/30	11:17	12278	W66.61	3/30	
89	MON	81/3/30	13:01	12279	W92.66	"	
89	MON	81/3/30	14:45	12280	W118.70	"	
89	MON	81/3/30	16:30	12281	W144.75	"	
90	TUES	81/3/31	11:36	12292	W71.29	3/31	
90	TUES	81/3/31	13:20	12293	W97.34	"	
90	TUES	81/3/31	15:04	12294	W123.39	"	
90	TUES	81/3/31	16:48	12295	W149.44		C

JULIAN DAY	DAY OF WEEK	DATE YYMMDD	LOCAL HH MM	ORBIT NO.	GEOG. LONG. OF ASCEND. NODE	DATE PROCESSED	NOTES
91	WED	81/4/1	11:54	12306	W75.90	4/1	
91	WED	81/4/1	13:38	12307	W101.94	"	
91	WED	81/4/1	15:23	12308	W127.99	"	
91	WED	81/4/1	17:07	12309	W154.04	"	
92	THURS	81/4/2	10:29	12319	W54.53	4/2	
92	THURS	81/4/2	12:13	12320	W80.57	"	
92	THURS	81/4/2	13:57	12321	W106.62	"	
92	THURS	81/4/2	15:41	12322	W132.67	"	
93	FRI	81/4/3	10:47	12333	W59.21	4/3	
93	FRI	81/4/3	12:32	12334	W85.25	"	
93	FRI	81/4/3	14:16	12335	W111.30	"	B
93	FRI	81/4/3	16:00	12336	W137.35	"	
94	SAT	81/4/4	11:06	12347	W63.89	4/6	
94	SAT	81/4/4	12:50	12348	W89.93	"	
94	SAT	81/4/4	14:35	12349	W115.98	"	
94	SAT	81/4/4	16:19	12350	W142.03	"	
95	SUN	81/4/5	11:25	12361	W68.57	4/6	
95	SUN	81/4/5	13:09	12362	W94.61	"	
95	SUN	81/4/5	14:53	12363	W120.66	"	
95	SUN	81/4/5	16:37	12364	W146.71	"	

JULIAN DAY	DAY OF WEEK	DATE YYMMDD	LOCAL HH MM	ORBIT NO.	GEOG. LONG. OF ASCEND. NODE	DATE PROCESSED	NOTES
96	MON	81/4/6	11:44	12375	W73.25	4/6	
96	MON	81/4/6	13:28	12376	W99.29	"	
96	MON	81/4/6	15:12	12377	W125.34	"	
96	MON	81/4/6	16:56	12378	W151.39	"	
97	TUES	81/4/7	10:18	12388	W51.88	4/7	
97	TUES	81/4/7	12:02	12389	W77.93	"	
97	TUES	81/4/7	13:47	12390	W103.97	"	
97	TUES	81/4/7	15:31	12391	W130.02	"	
98	WED	81/4/8	10:37	12402	W56.56	4/8	
98	WED	81/4/8	12:21	12403	W82.60	"	
98	WED	81/4/8	14:05	12404	W108.65	"	
98	WED	81/4/8	15:49	12405	W134.70	"	
99	THURS	81/4/9	15:56	12416	W61.24	4/9	
99	THURS	81/4/9	12:40	12417	W87.28	"	
99	THURS	81/4/9	14:24	12418	W113.33	"	
99	THURS	81/4/9	16:08	12419	W139.88	"	
100	FRI	81/4/10	11:14	12430	W65.92	4/10	
100	FRI	81/4/10	12:58	12431	W91.96	"	
100	FRI	81/4/10	14:43	12432	W118.01	"	
100	FRI	81/4/10	16:27	12433	W144.06	"	

JULIAN DAY	DAY OF WEEK	DATE YYMMDD	LOCAL HH MM	ORBIT NO.	GEOG. LONG. OF ASCEND. NODE	DATE PROCESSED	NOTES
101	SAT	81/4/11	11:33	12444	W70.59	4/13	
101	SAT	81/4/11	13:17	12445	W96.64	"	
101	SAT	81/4/11	15:01	12446	W122.69	"	
101	SAT	81/4/11	16:46	12447	W148.74	-	A
102	SUN	81/4/12	11:52	12458	W75.27	4/13	
102	SUN	81/4/12	13:36	12459	W101.32	"	
102	SUN	81/4/12	15:20	12460	W127.37	"	B
102	SUN	81/4/12	17:04	12461	W153.42	"	
103	MON	81/4/13	11:26	12471	W53.90	4/13	
103	MON	81/4/13	12:10	12472	W79.95	"	
103	MON	81/4/13	13:55	12473	W106.00	"	
103	MON	81/4/13	15:39	12474	W132.05	"	
104	TUES	81/4/14	10:45	12485	W58.58	4/14	
104	TUES	81/4/14	12:29	12486	W84.63	"	B
104	TUES	81/4/14	14:13	12487	W110.68	"	B
104	TUES	81/4/14	15:58	12488	W136.73	"	
105	WED	81/4/15	11:04	12499	W63.26	4/15	
105	WED	81/4/15	12:48	12500	W89.31	"	
105	WED	81/4/15	14:32	12501	W115.36	"	
105	WED	81/4/15	16:16	12502	W141.41	"	

JULIAN DAY	DAY OF WEEK	DATE YYMMDD	LOCAL HH MM	ORBIT NO.	GEOG. LONG. OF ASCEND. NODE	DATE PROCESSED	NOTES
106	THURS	81/4/16	11:22	12513	W67.94	4/16	
106	THURS	81/4/16	13:07	12514	W93.99	"	
106	THURS	81/4/16	14:51	12515	W120.04	"	
106	THURS	81/4/16	16:35	12516	W146.08	4/17	D
107	FRI	81/4/17	11:41	12527	W72.62	4/17	
107	FRI	81/4/17	13:25	12528	W98.67	"	
107	FRI	81/4/17	15:09	12529	W124.71	"	
107	FRI	81/4/17	16:54	12530	W150.76	"	
108	SAT	81/4/18	11:16	12540	W51.25	4/20	
108	SAT	81/4/18	12:00	12541	W77.30	"	
108	SAT	81/4/18	13:44	12542	W103.34	"	
108	SAT	81/4/18	15:28	12543	W129.39	"	
109	SUN	81/4/19	10:34	12554	W55.93	4/20	
109	SUN	81/4/19	12:19	12555	W81.97	"	
109	SUN	81/4/19	14:03	12556	W108.02	"	
109	SUN	81/4/19	15:47	12557	W134.07	"	
110	MON	81/4/20	10:53	12568	W60.60	4/20	
110	MON	81/4/20	12:37	12569	W86.65	"	
110	MON	81/4/20	14:21	12570	W112.70	"	
110	MON	81/4/20	16:06	12571	W138.75	"	

Note D - Delay caused by computer failure

JULIAN DAY	DAY OF WEEK	DATE YYMMDD	LOCAL HH MM	ORBIT NO.	GEOG. LONG. OF ASCEND. NODE	DATE PROCESSED	NOTES
111	TUES	81/4/21	11:12	12582	W65.28	4/21	
111	TUES	81/4/21	12:56	12583	W91.33	"	
111	TUES	81/4/21	14:40	12584	W117.38	"	
111	TUES	81/4/21	16:24	12585	W143.43	"	
112	WED	81/4/22	11:30	12596	W69.96	4/22	
112	WED	81/4/22	13:15	12597	W96.01	"	
112	WED	81/4/22	14:59	12598	W122.06	"	
112	WED	81/4/22	16:43	12599	W148.10	-	A
113	THURS	81/4/23	11:49	12610	W74.64	4/23	
113	THURS	81/4/23	13:33	12611	W100.69	"	
113	THURS	81/4/23	15:18	12612	W126.73	"	
113	THURS	81/4/23	17:02	12613	W152.78	"	
114	FRI	81/4/24	10:24	12623	W53.27	4/24	
114	FRI	81/4/24	12:08	12624	W79.32	"	
114	FRI	81/4/24	13:52	12625	W105.36	"	
114	FRI	81/4/24	15:36	12626	W131.41	"	
115	SAT	81/4/25	10:42	12637	W57.95	4/27	
115	SAT	81/4/25	12:27	12638	W83.99	"	
115	SAT	81/4/25	14:11	12639	W110.04	"	
115	SAT	81/4/25	15:55	12640	W136.09	"	

JULIAN DAY	DAY OF WEEK	DATE YYMMDD	LOCAL HH MM	ORBIT NO.	GEOG. LONG. OF ASCEND. NODE	DATE PROCESSED	NOTES
116	SUN	81/4/26	11:01	12651	W62.62	4/27	
116	SUN	81/4/26	12:45	12652	W88.67	"	
116	SUN	81/4/26	14:29	12653	W114.72	"	
116	SUN	81/4/26	16:14	12654	W140.77	"	
117	MON	81/4/27	11:20	12665	W67.30	4/27	
117	MON	81/4/27	13:04	12666	W93.35	"	
117	MON	81/4/27	14:48	12667	W119.40	"	
117	MON	81/4/27	16:32	12668	W145.44	"	
118	TUES	81/4/28	11:39	12679	W71.98	4/28	
118	TUES	81/4/28	13:23	12680	W98.03	"	
118	TUES	81/4/28	15:07	12681	W124.07	"	
118	TUES	81/4/28	16:51	12682	W150.12	"	
119	WED	81/4/29	11:57	12693	W76.65	4/29	
119	WED	81/4/29	13:41	12694	W102.70	"	
119	WED	81/4/29	15:26	12695	W128.75	"	
119	WED	81/4/29	17:10	12696	W154.80	-	A
120	THURS	81/4/30	10:32	12706	W55.28	4/30	
120	THURS	81/4/30	12:16	12707	W81.33	"	
120	THURS	81/4/30	14:00	12708	W107.38	5/1	E
120	THURS	81/4/30	15:44	12709	W133.43	"	

Note E - Delayed due to equipment failure at ground station

JULIAN DAY	DAY OF WEEK	DATE YYMMDD	LOCAL HH MM	ORBIT NO.	GEOG. LONG. OF ASCEND. NODE	DATE PROCESSED	NOTES
121	FRI	81/5/1	10:50	12720	W59.91	5/4	E
121	FRI	81/5/1	12:34	12721	W85.96	"	E
121	FRI	81/5/1	14:19	12722	W112.01	"	E
121	FRI	81/5/1	16:03	12723	W138.05	"	E
122	SAT	81/5/2	11:09	12734	W64.59	5/4	
122	SAT	81/5/2	12:53	12735	W90.63	"	
122	SAT	81/5/2	14:37	12736	W116.68	"	
122	SAT	81/5/2	16:22	12737	W142.73	"	
123	SUN	81/5/3	11:28	12748	W69.26	5/4	
123	SUN	81/5/3	13:12	12749	W95.31	"	
123	SUN	81/5/3	14:56	12750	W121.35	"	
123	SUN	81/5/3	16:40	12751	W147.40	"	
124	MON	81/5/4	11:46	12762	W73.93	5/4	
124	MON	81/5/4	13:31	12763	W99.98	"	
124	MON	81/5/4	15:15	12764	W126.03	"	
124	MON	81/5/4	16:59	12765	W152.08	"	
125	TUES	81/5/5	10:21	12775	W52.56	5/5	
125	TUES	81/5/5	12:05	12776	W78.61	"	
125	TUES	81/5/5	13:49	12777	W104.65	"	
125	TUES	81/5/5	15:33	12778	W130.70	"	

JULIAN DAY	DAY OF WEEK	DATE YYMMDD	LOCAL HH MM	ORBIT NO.	GEOG. LONG. OF ASCEND. NODE	DATE PROCESSED	NOTES
126	WED	81/5/6	10:40	12789	W57.23	5/6	
126	WED	81/5/6	12:24	12790	W83.28	"	
126	WED	81/5/6	14:08	12791	W109.33	"	
126	WED	81/5/6	15:52	12792	W135.38	"	
127	THURS	81/5/7	10:58	12803	W61.91	5/7	
127	THURS	81/5/7	12:42	12804	W87.95	"	
127	THURS	81/5/7	14:27	12805	W114.00	"	
127	THURS	81/5/7	16:11	12806	W140.05	"	
128	FRI	81/5/8	11:17	12817	W66.58	5/8	
128	FRI	81/5/8	13:01	12818	W92.63	"	
128	FRI	81/5/8	14:45	12819	W118.67	"	
128	FRI	81/5/8	16:30	12820	W144.72	"	
129	SAT	81/5/9	11:36	12831	W71.25	5/11	
129	SAT	81/5/9	13:20	12832	W97.30	"	
129	SAT	81/5/9	15:04	12833	W123.35	"	
129	SAT	81/5/9	16:48	12834	W149.40	"	
130	SUN	81/5/10	11:54	12845	W75.93	5/11	
130	SUN	81/5/10	13:39	12846	W101.97	"	
130	SUN	81/5/10	15:23	12847	W128.02	"	
130	SUN	81/5/10	17:07	12848	W154.07	"	

JULIAN DAY	DAY OF WEEK	DATE YYMMDD	LOCAL HH MM	ORBIT NO.	GEOG. LONG. OF ASCEND. NODE	DATE PROCESSED	NOTES
131	MON	81/5/11	10:29	12858	W54.55	5/15	F
131	MON	81/5/11	12:13	12859	W80.60	5/15	F
131	MON	81/5/11	13:57	12860	W106.65	5/11	
131	MON	81/5/11	15:41	12861	W132.69	5/11	
132	TUES	81/5/12	10:47	12872	W59.22	5/13	G
132	TUES	81/5/12	12:32	12873	W85.27	"	G
132	TUES	81/5/12	14:16	12874	W111.32	"	G
132	TUES	81/5/12	16:00	12875	W137.37	"	G
133	WED	81/5/13	11:06	12886	W63.90	5/13	
133	WED	81/5/13	12:50	12887	W89.94	"	
133	WED	81/5/13	14:35	12888	W115.99	"	
133	WED	81/5/13	16:19	12889	W142.04	"	
134	THURS	81/5/14	11:25	12900	W68.57	5/14	
134	THURS	81/5/14	13:09	12901	W94.62	"	
134	THURS	81/5/14	14:53	12902	W120.66	"	
134	THURS	81/5/14	16:37	12903	W146.71	"	
135	FRI	81/5/15	11:44	12914	W73.24	5/15	
135	FRI	81/5/15	13:28	12915	W99.29	"	
135	FRI	81/5/15	15:12	12916	W125.34	"	
135	FRI	81/5/15	16:56	12917	W151.38	"	

Note F - Unresolved error in software caused delay. Error was not reproducible. Data processed normally on date shown.

Note G - Delay due to time spent analyzing output to assure good data. (See note F)

APPENDIX B

OPERATOR'S LOG

Date: 3/2/81
Operator: JB

	PLAYBACK	11877	11878	11879	11880
	Generation Date on DT	3/1	3/1	3/1	3/1
T	DT Start Time	14/35/35	16/17/15	17/58/55	19/40/01
I	DT End Time	16/16/27	17/57/31	19/39/21	20/23/07
M	P.U. of DT	825 1/2	825 1/2	825 1/2	825 1/2
E	Time of Processing Job Submission	841 1/2	841 1/2	841 1/2	841 1/2
S	P.U. of Printout	1100	1100	1100	1100
	Time of Delivery for Viewing	1123	1123	1123	1123
	Transmission Time	1334	1400	1423	1444
P	Computer Used	75	75	91	91
R	Input Drive	—	—	—	—
D	STACK RC/LF	0/0	0/0	0/0	0/0
C	TOMREL RC/LF	0/0	0/0	0/0	0/0
E	ILTFIX RC/LF	0/0	0/0	0/0	0/0
S	INGEST RC/LF	0/0	0/0	0/0	0/0
S	OZONE RC/FF	0/0	0/0	0/0	0/0
T	TAPESCAN DEN	2	2	2	2
N	COMMENTS	OK	OK	OK	OK
G					

Date: 3/2/81
Operator: JB

	PLAYBACK	11891	11892	11893	11894
	Generation Date on DT	3/2	3/2	3/2	3/2
T	DT Start Time	14/54/19	16/37/15	18/18/19	20/01/15
I	DT End Time	16/35/07	18/17/37	20/00/27	22/42/05
M	P.U. of DT	1303	1410	1635	1810
E	Time of Processing Job Submission	1309	1415	1700	1815
S	P.U. of Printout	1334	1517	1749	1848
	Time of Delivery for Viewing	1343	1527	1758	1900
	Transmission Time	1507	1534	1805	1917
P	Computer Used	91	91	91	91
R	Input Drive	—	—	—	—
D	STACK RC/LF	0/0	0/0	0/0	0/0
C	TOMREL RC/LF	0/0	0/0	0/0	0/0
E	ILTFIX RC/LF	0/0	0/0	0/0	0/0
S	INGEST RC/LF	0/0	0/0	0/0	0/0
S	OZONE RC/FF	0/0	0/0	0/0	0/0
T	TAPESCAN DEN	2	2	2	2
N	COMMENTS	OK	OK	OK	OK
G					

Date: 3/3/81
Operator: JB

	PLAYBACK		11905	11906	11907	11908			
	Generation date on DT		3/3	3/3	3/3	3/3			
T	DT Start Time		15/12/27	16/55/07	18/33/31	20/09/23			
I	DT End Time		16/55/07	18/18/23	20/15/55	22/01/15			
M	P.U. of DT		1246	1440	1620	1810			
E	Time of Processing Job Submission		1251	1450	1629	1820			
S	P.U. of Printout		1354	1523	1720	1850			
	Time of Delivery for Imaging		1405	1535	1730	—			
	Transmission Time		1929	1740	1756	—			
P	Computer Used		91	91	91	91			
R	Input Drive		—	—	—	—			
O	STACK	RC/EF	0/0	0/0	0/0	0/0			
C	TOMREL	RC/EF	0/0	0/0	0/0	0/0			
E	ILTFIX	RC/EF	0/0	0/0	0/0	0/0			
S	INGEST	RC/EF	0/0	0/0	0/0	146/			
S	OZONE	RC/EF	0/0	0/0	0/0				
I	TAPESCAN	PEN	2	2	2				
N G	COMMENTS		ok	ok	ok	USER 46 Ingest 30 orbits Provided full coverage			

Date: 3/4/81
Operator: JB

	PLAYBACK		11919	11920	11921	11922			
	Generation date on DT		3/4/81	3/4/81	3/4/81	3/4/81			
T	DT Start Time		15/20/51	17/13/15	18/57/31	20/27/15			
I	DT End Time		17/13/27	18/54/19	20/20/27	22/20/27			
M	P.U. of DT		13:58	15:43	16:50	18:32			
E	Time of Processing Job Submission		14:38	15:53	17:00	18:39			
S	P.U. of Printout		15:05	16:19	17:33	19:05			
	Time of Delivery for Imaging		15:19	16:30	17:42	1400 3/5			
	Transmission Time		1633	1709	1801	1511 3/5			
P	Computer Used		91	91	91	91			
R	Input Drive								
O	STACK	RC/EF	Ø/Ø	Ø/Ø	Ø/Ø	Ø/Ø			
C	TOMREL	RC/EF	Ø/Ø	Ø/Ø	Ø/Ø	Ø/Ø			
E	ILTFIX	RC/EF	Ø/Ø	Ø/Ø	Ø/Ø	Ø/Ø			
S	INGEST	RC/EF	Ø/Ø	Ø/Ø	Ø/Ø	Ø/Ø			
S	OZONE	RC/EF	Ø/Ø	Ø/Ø	Ø/Ø	16/			
I	TAPESCAN	PEN	2	2	2	2			
N G	COMMENTS					maybe tried to read Eq of Neg No. ??	I Have Tapscan of Rat		

Partial orbit Delivered

Have full coverage

Date: 3/5/81
Operator: [illegible]

		PLAYBACK	11933	11934	11935	11932			
TIMES		Generation date on DT	3/5/81	3/5/81	3/5/81	3/5/81			
		DT Start Time	15/34/27	17/14/19	19/04/59	[illegible]/05			
		DT End Time	17/11/21	18/17/15	20/56/27	[illegible]/41			
		P.U. of DT	13:25	15:10	17:10	17:10			
		Time of Processing Job Submission	13:38	15 20	17:15	17:18			
		P.U. of Printout	1428	15 48	1751	1743			
		Time of Delivery for Imaging	14:35	1600	18:13	—			
		Transmission Time	1603	1634	1926	—			
PROCESSING		Computer Used	91	91	91	91			
		Input Drive	OD4	OD3	OD1	OD3			
	STACK	RC/EF	0/0	0/0	0/0	0/0			
	TOMREL	RC/EF	0/0	0/0	0/0	0/0			
	ILTFIX	RC/EF	0/0	0/0	0/0	0/0			
	INGEST	RC/EF	0/0	0/0	0/0	U44			
	OZONE	RC/EF	0/0	0/0	0/0				
	TAPESCAN	PEN	2	2	2	2			
		COMMENTS				Bombed probably time seq. (Salvaged from NOPS with some other orbit) ORBIT NOT Reprocessed. Had full coverage			

Date: 3/6/81
Operator: [illegible]

		PLAYBACK	11946	11947	11949	11999			
TIMES		Generation date on DT	3/6/81	3/6/81	3/6/81	3/6/81			
		DT Start Time	14/26/35	16/07/23	17/49/05	19/[illegible]/59			
		DT End Time	16/04/[illegible]	17/49/47	19/24/27	21/15/23			
		P.U. of DT	12:00	14:23	1710	1710			
		Time of Processing Job Submission	12:08	14:42	1726	1726			
		P.U. of Printout	13:00	15:10	1800	18:13			
		Time of Delivery for Imaging	13:22	15:18	18:28	1828			
		Transmission Time	1344 / 644 pm / 1344	349 / [illegible] / 1549	1944	1944			
PROCESSING		Computer Used	91	91	91	91			
		Input Drive	OC1	OD0	OC0	OC1			
	STACK	RC/EF	0/0	0/0	0/0	0/0			
	TOMREL	RC/EF	0/0	0/0	0/0	0/0			
	ILTFIX	RC/EF	0/0	0/0	0/0	0/0			
	INGEST	RC/EF	0/0	0/0	0/0	0/0			
	OZONE	RC/EF	0/0	0/0	0/0	0/0			
	TAPESCAN	PEN	2	2	2	2			
		COMMENTS	ok	ok	ok	ok			

Date: 3/7/81
Operator: JB

	PLAYBACK	11960	11961	11962	11963			
TIMES	Generation date on DT	3/7/81	3/7/81	3/7/81	3/7/81			
	DT Start Time	14/44/27	14/26/01	18/04/11	19/22/45			
	DT End Time	16/25/15	18/03/27	19/50/32	21/17/15			
	P.U. of DT	1800	1800	1800	1800			
	Time of Processing Job Submission	1827	1827	1827	1827			
	P.U. of Printout	1924	1939	1939	2001			
	Time of Delivery for Imaging	845 3/9	845 3/9	845 3/9	[illegible]			
	Transmission Time	902	914	938	—			
PROCESSING	Computer Used	91	91	91	91			
	Input Drive	0D0	0C1	0C0	0D0			
	STACK RC/EF	0/0	0/0	0/0	0/0			
	TOMREL RC/EF	0/0	0/0	0/0	0/0			
	ILTFIX RC/EF	0/0	0/0	0/0	0/0			
	INGEST RC/EF	0/0	0/0	0/0	0/0			
	OZONE RC/EF	0/0	0/0	0/0	16/			
	TAPESCAN DEN	2	2	2	2			
	COMMENTS	OK	OK	OK	3 orbits provide full coverage			

Date: 3/9/81
Operator: JB

	PLAYBACK	11974	11975	11977	11977			
TIMES	Generation date on DT	3/8/81	3/8/81	3/8/81	3/8/81			
	DT Start Time	[illegible]	[illegible]	[illegible]	[illegible]			
	DT End Time	16/44/11	18/22/56	20/01/07	21/39/11			
	P.U. of DT	815 3/9	815 3/9	815 3/9	815 3/9			
	Time of Processing Job Submission	910	910	910	845			
	P.U. of Printout	929	[illegible]	929	1014			
	Time of Delivery for Imaging	1045	1045	1045	1045			
	Transmission Time	1146	1207	1230	1259			
PROCESSING	Computer Used	91	91	91	75			
	Input Drive	0C1	0D0	0D1	0D0			
	STACK RC/EF	0/0	0/0	0/0	0/0			
	TOMREL RC/EF	0/0	0/0	0/0	0/0			
	ILTFIX RC/EF	0/0	0/0	0/0	0/0			
	INGEST RC/EF	0/0	0/0	0/0	0/0			
	OZONE RC/EF	0/0	0/0	0/0	0/0			
	TAPESCAN DEN	2	2	2	2			
	COMMENTS	OK	OK	OK	OK			

Date: 3/9/81
Operator: JB

	PLAYBACK	11988	11989	11990	11991			
TIMES	Generation date on DT	3/9	3/9	3/9	3/9			
	DT Start Time	15/24/13	17/02/50	18/44/01	20/24/09			
	DT End Time	17/02/19	18/44/01	20/24/58	22/09/51			
	P.U. of DT	1310	1452	1650	1815			
	Time of Processing Job Submission	1318	1510	1703	1830			
	P.U. of Printout	1424	1549	1747	1903			
	Time of Delivery for Imaging	1435	1556	1800	1909			
	Transmission Time	1522	1658	1821	1955			
PROCESSING	Computer Used	91	91	91	91			
	Input Drive	0D0	0D0	0C1	0D0			
	STACK RC/EF	0/0	0/0	0/0	0/0			
	TOMREL RC/EF	0/0	0/0	0/0	0/0			
	ILTFIX RC/EF	0/0	0/0	0/0	0/0			
	INGEST RC/EF	0/0	0/0	0/0	0/0			
	OZONE RC/EF	0/0	0/0	0/0	0/0			
	TAPESCAN PLN	2	2	2	2			
	COMMENTS	OK	OK	OK	OK			

B-5

ATTACHMENT C
TOMS NEAR REAL-TIME PROGRAM CHECKLIST

Date: 3/10/81
OPERATOR: JB

	PLAYBACK	12001	12002	12003	12004			
TIMES	Generation date on DT	3/10	3/10	3/10	3/10			
	DT Start Time	03/58/19	15/40/41	17/20/11	19/03/07			
	DT End Time	15/39/23	17/19/39	18/02/19	20/17/23			
	P.U. of DT	1810	1515	1715	1715			
	Time of Processing Job Submission	1820	1520	1728	1728			
	P.U. of Printout	1837	1720	1739	1739			
	Time of Delivery for Imaging	1845	1735	1745	1745			
	Transmission Time	1900	1826	1837	1849			
PROCESSING	Computer Used	91	91	91	91			
	Input Drive	—	—	—	—			
	STACK RC/EF	0/0	0/0	0/0	0/0			
	TOMREL RC/EF	0/0	0/0	0/0	0/0			
	ILTFIX RC/EF	0/0	0/0	0/0	0/0			
	INGEST RC/EF	0/0	0/0	0/0	0/0			
	OZONE RC/EF	0/0	0/0	0/0	0/0			
	TAPESCAN PLN	2	2	2	2			
	COMMENTS	OK	OK	OK	OK			

APPENDIX [illegible]

TOMS NEAR REALTIME PROGRAM CHECK[illegible]

Date 3-11-81
OPERATOR SHS

	PLAYBACK	12215	12015	12016	12017	12017	12018	2015
TIMES	Generation date on DT	3-11-81	3-11-81	3-11-81	3-11-81	3-11-81	3-11-81	3-11-8[illegible]
	DT Start Time	141607	141607	155219	173923	173923	192115	1921[illegible]
	DT End Time	155731	1557[illegible]	1739[illegible]	192011	192011	210235	2102[illegible]
	P.U. of DT	11:59	11:59	14:[illegible]	1600	1600	1710	1710
	Time of Processing Job Submission	12:13	12:45	1500	1610	1729	17[illegible]	1745
	P.U. of Printout	—	13:22	15:39	—	1825	1744	185[illegible]
	Time of Delivery for Imaging	—	13:42	1550	—	1835	—	—
	Transmission Time	—	[illegible]	[illegible]	—	1841	—	—
PROCESSING	Computer Used	91	91	91	91	91	91	91
	Input Drive						ØDØ	ØCØ
	STACK RC/EF	—	0/[illegible]	0/[illegible]	—	0/[illegible]	[illegible]	[illegible]
	TOMREL RC/EF	—	0/	0/	—	0/	[illegible]	—
	ILTFIX RC/EF	—	0/	0/	—	0/	[illegible]	—
	INGEST RC/EF	—	0/	0/	—	0/	[illegible]	—
	OZONE RC/EF	—	0/	0/	—	0/	[illegible]	—
	TAPESCAN PEN	—	2	2	—	2	[illegible]	—
	COMMENTS	Printer went down hence no printout		system went down before submission	HASP went down during [illegible] T.on		Cancel Ephemeris checks on DT	Equip checks Tapescan use [illegible]

APPENDIX [illegible]

TOMS NEAR REALTIME PROGRAM CHEC[illegible]

Date 3-11-81
OPERATOR SHS

	PLAYBACK	12018						
TIMES	Generation date on DT	3-11-81						
	DT Start Time	19415						
	DT End Time	210235						
	P.U. of DT	ORIGINAL 1810						
	Time of Processing Job Submission	1820						
	P.U. of Printout	1840						
	Time of Delivery for Imaging	1915						
	Transmission Time	1928						
PROCESSING	Computer Used	91						
	Input Drive	ØCØ						
	STACK RC/EF	[illegible]						
	TOMREL RC/EF	0/						
	ILTFIX RC/EF	0/						
	INGEST RC/EF	0/						
	OZONE RC/EF	0/						
	TAPESCAN PEN	2						
	COMMENTS	ORIG DT OK						

Date: 3/12/91
Operator: YB

	PLAYBACK	12029	12030	12031	12032
TIMES	Generation date on PT	31/12/91	3/12	3/12	3/12
	PT Start Time	14/39/15	16/18/23	17/57/15	19/38/03
	PT End Time	16/09/23	17/57/11	19/18/07	21/20/21
	P.V. of PT	1300	1907	1603	1753
	Time of Processing Job submission	1310	1440	1610	1803
	P.V. of Printout	1457	1530	1715	1835
	Time of Delivery for Imaging	1505	1535	1730	1845
	Transmission Time	1528	1607	1824	1935
PROCESSING	Computer Used	91	91	91	91
	Input Drive	OC1	ODD	ODD	OD1
	STACK RC/EF	0/0	0/0	0/0	0/0
	TOMREL RC/EF	0/0	0/0	0/0	0/0
	ILTFIX RC/EF	0/0	0/0	0/0	0/0
	INGEST RC/EF	0/0	0/0	0/0	0/0
	OZONE RC/EF	0/0	0/0	0/0	0/0
	TAPESCAN PIN	2	2	2	2
	COMMENTS	OK 91 Down 30 min	OK	OK	OK

Date: 3/13/91
Operator: YB

	PLAYBACK	12043	12044	12045	12046
TIMES	Generation date on PT	3/13	3/13	3/13	3/13
	PT Start Time	14/52/11	16/18/31	18/04/15	19/53/51
	PT End Time	16/39/35	18/15/39	19/58/35	21/40/27
	P.V. of PT	1240	1420	1650	1800
	Time of Processing Job Submission	1248	1428	1703	1820
	P.V. of Printout	1309	1454	1743	1840
	Time of Delivery for Imaging	1320	1509	1800	—
	Transmission Time	1447	1538	1830	—
PROCESSING	Computer Used	91	91	91	91
	Input Drive	OC1	OD1	ODD	OC0
	STACK RC/EF	0/0	0/0	0/0	0/0
	TOMREL RC/EF	0/0	0/0	0/0	0/0
	ILTFIX RC/EF	0/0	0/0	0/0	0/0
	INGEST RC/EF	0/0	0/0	0/0	0/0
	OZONE RC/EF	0/0	0/0	0/0	0/0
	TAPESCAN PIN	2	2	2	2
	COMMENTS	OK	OK	OK	Some problems 3 outputs Provide full coverage

Date: 3/14/91
Operator: GB

	PLAYBACK	12057	12058	12059	12060			
TIMES	Generation date on DT	3/14	3/14	3/14	3/14			
	DT Start Time	15/10/35	16/52/11	18/32/59	20/15/23			
	DT End Time	16/51/07	18/32/47	20/14/51	21/57/29			
	P.V. of DT	1800	1800	1800	1800			
	Time of Processing Job Submission	1820	1820	1820	1820			
	P.V. of Printout	900 3/16	900 3/16	800 3/16	800 3/16			
	Time of Delivery for Imaging	810 3/16	810 3/16	810 3/16	810 3/16			
	Transmission Time	936 3/16	916 3/16	1807 3/16	1823 3/16			
PROCESSING	Computer Used	91	91	91	91			
	Input Drive	DC1	DC0	DD0	DD1			
	STACK RC/EF	0/0	0/0	0/0	0/0			
	TOMREL RC/EF	0/0	0/0	0/0	0/0			
	ILTFIX RC/EF	0/0	0/0	0/0	0/0			
	INGEST RC/EF	0/0	0/0	0/0	0/0			
	OZONE RC/EF	0/0	0/0	16/	16/			
	TAPESCAN DEN	2	2	2	2			
	COMMENTS	OK	OK	Can't read log + Neg No.	Can't read log + Neg No.			

Resubmitted 3/31 and Transmitted to NW.

Date: 3/16/91
Operator: GB

	PLAYBACK	12071	12072	12073	12074			
TIMES	Generation date on DT	3/15	3/15	3/15	3/15			
	DT Start Time	05/10/07	17/10/19	18/52/20	20/31/31			
	DT End Time	17/00/19	18/51/28	20/09/4	23/09/05			
	P.V. of DT	1800	1800	1800	1800			
	Time of Processing Job Submission	805	805	805	805			
	P.V. of Printout	1040	1030	1130	1130			
	Time of Delivery for Imaging	1200	1200	1200	1200			
	Transmission Time	1251	1303	1315	1340			
PROCESSING	Computer Used	91	91	91	91			
	Input Drive							
	STACK RC/EF	0/0	0/0	0/0	0/0			
	TOMREL RC/EF	0/0	0/0	0/0	0/0			
	ILTFIX RC/EF	0/0	0/0	0/0	0/0			
	INGEST RC/EF	0/0	0/0	0/0	0/0			
	OZONE RC/EF	0/0	0/0	0/0	16/			
	TAPESCAN DEN	2	2	2	2			
	COMMENTS	OK	OK	OK	log of Neg. Resubmitted 3/16 OK 5/14			

Date: 3/16/81
Operator: GB

PLAYBACK	12085	12086	12087	12088			
TIMES: Generation date on DT	3/16	3/16	3/16	3/16			
DT Start Time	15/17/07	17/25/18	19/10/19	20/57/15			
DT End Time	17/22/27	19/10/19	20/53/15	22/36/23			
P.V. of DT	1345	1501	1651	1830			
Time of Processing Job Submission	1355	1510	1657	1843			
P.V. of Printout	[illegible]	1610	1756	—			
Time of Delivery for Imaging	1490	1630	—	—			
Transmission Time	1545	1645	1336 3/25	1350 3/25			
PROCESSING: Computer Used	91	91	91	91			
Input Drive	OD1	OCO	OC1	OCO			
STACK RC/EF	0/0	0/0	0/0	0/0			
TOMREL RC/EF	0/0	0/0	0/0	0/0			
ILTFIX RC/EF	0/0	0/0	0/0	0/0			
INGEST RC/EF	0/0	0/0	0/0	0/0			
OZONE RC/EF	0/0	0/0	16/	16/			
TAPESCAN PEN	2	2	2	2			
COMMENTS	OK	OK	Seq. Seq.	Seq. Seq.			
			Reruns on 3/25	Reruns on 3/25			

Date: 3/17/81
Operator: GB

PLAYBACK	12098	12099	12100	12101	12101		
TIMES: Generation date on DT	3/17	3/17	3/17	3/17	3/17		
DT Start Time	19/23/07	16/05/15	17/49/17	17/49/17	17/58/11		
DT End Time	16/05/15	17/49/17	19/28/27	20/07/27	22/15/23		
P.V. of DT	1222	1325	1610	1610	1710		
Time of Processing Job Submission	1232	1333	1630	1648	1720		
P.V. of Printout	1300	1407	1633	1659	—		
Time of Delivery for Imaging	1312	1410	—	1708	—		
Transmission Time	1351	1441	—	1711	1858 3/31		
PROCESSING: Computer Used	91	91	91	91	91		
Input Drive	ODO	OCO	OCO	OD1	OC1		
STACK RC/EF	0/0	0/0	819	0/0	0/0		
TOMREL RC/EF	0/0	0/0		0/0	0/0		
ILTFIX RC/EF	0/0	0/0		0/0	0/0		
INGEST RC/EF	0/0	0/0		0/0	0/0		
OZONE RC/EF	0/0	0/0		0/0	16/		
TAPESCAN PEN	2	2	2	2	2		
COMMENTS	OK	OK	Bad DT	OK	Same Thing. Resubmitted 3/31 and Transmitted to N.W.		

Date: 3/16/81
Operator: GR

	PLAYBACK	12112	12113	12112	12113	12114	12115
TIMES	Generation date on DT	3/18	3/18	"	"	3/18	3/18
	DT Start Time	14/22/35	16/23/23	"	"	18/05/31	19/17/55
	DT End Time	16/23/23	18/05/31	"	"	14/47/33	21/32/19
	P.U. of DT	1230	1430	"	"	1643	1830
	Time of Processing Job Submission	1242	1445	1650	1650	1650	1840
	P.U. of Printout	1420	1525	1744	1750	1742	1906
	Time of Delivery for Imaging	1430	1535	1800	1800	1800	1910
	Transmission Time	—	—	1843	1856	1903	1926
PROCESSING	Computer Used	91	91	91	91	91	91
	Input Drive	0D1	0C0	0C0	0D1	0D0	0D2
	STACK RC/EF	0/0	0/0	0/0	0/0	0/0	0/0
	TOMREL RC/EF	0/0	0/0	0/0	0/0	0/0	0/0
	ILTFIX RC/EF	0/0	0/0	0/0	0/0	0/0	0/0
	INGEST RC/EF	0/0	0/0	0/0	0/0	0/0	6/0
	OZONE RC/EF	0/0	0/0	0/0	0/0	0/0	0/0
	TAPESCAN PLN	2	2	2	2	2	2
	COMMENTS	OK 91 down 55 min BAD DATA	OK BAD DATA	OK	OK	OK	OK

Date: 3/19/81
Operator: GR

	PLAYBACK	12126	12127	12128	12129
TIMES	Generation date on DT	3/19	3/19	3/19	3/19
	DT Start Time	14/30/35	16/51/31	18/23/23	20/05/19
	DT End Time	16/51/31	18/23/19	20/05/15	01/49/31
	P.U. of DT	1225	1409	1610	1810
	Time of Processing Job Submission	1635	1635	1635	1822
	P.U. of Printout	1730	1735	1735	1920
	Time of Delivery for Imaging	1742	1742	1742	—
	Transmission Time	1850	1903	1930	1900 3/20
PROCESSING	Computer Used	91	91	91	91
	Input Drive	0D1	0C2	0C0	0D0
	STACK RC/EF	0/0	0/0	0/0	0/0
	TOMREL RC/EF	0/0	0/0	0/0	0/0
	ILTFIX RC/EF	0/0	0/0	0/0	0/0
	INGEST RC/EF	0/0	0/0	0/0	0/0
	OZONE RC/EF	0/0	0/0	0/0	16/
	TAPESCAN PLN	2	2	2	2
	COMMENTS	OK 91 up & down from 1700 to 1600	OK	OK	Some Prob. Reconstructed 3/31 and Transmitted to N.W.

Date: 3/20/81
Operator: gB

	PLAYBACK	12140	12141	12142	12143			
TIMES	Generation date on DT	3/20	3/20	3/20	3/20			
	DT Start Time	13/18/03	17/00/27	18/41/15	20/20/27			
	DT End Time	17/00/27	18/40/11	20/24/18	22/07/39			
	P.U. of DT	1243	1450	1650	1732			
	Time of Processing Job Submission	1253	1700	1700	1739			
	P.U. of Printout	1630	1742	1743	1020			
	Time of Delivery for Imaging	1640	1759	1758	1930			
	Transmission Time	1700	1832	2030	2041			
PROCESSING	Computer Used	91	91	91	91			
	Input Drive	OD1	OC2	ODO	OC1			
	STACK RC/EF	0/0	0/0	0/0	0/0			
	TOMREL RC/EF	0/0	0/0	0/0	0/0			
	ILTFIX RC/EF	0/0	0/0	0/0	0/0			
	INGEST RC/EF	0/0	0/0	0/0	0/0			
	OZONE RC/EF	0/0	0/0	0/0	0/0			
	TAPESCAN PLN	2	2	2	2			
	COMMENTS	OK 91 down 2½ hrs.	OK	OK	OK			

Date: 3/21/81
Operator: [illegible]

	PLAYBACK	[illegible]	12155	[illegible]	12157			
TIMES	Generation date on DT	3/21	3/21	3/21	3/21			
	DT Start Time	[illegible]	[illegible]	[illegible]	[illegible]			
	DT End Time	17/17/15	[illegible]	[illegible]	[illegible]			
	P.U. of DT	2030	2000	2020	2100			
	Time of Processing Job Submission	[illegible]	[illegible]	[illegible]	2030			
	P.U. of Printout	800 3/21	800 3/21	800 3/21	800 3/21			
	Time of Delivery for Imaging	[illegible]	115 3/22	[illegible]	[illegible]			
	Transmission Time	938 3/23	1059 3/22	1112 3/22	1124 3/2[illegible]			
PROCESSING	Computer Used	91	91	91	91			
	Input Drive	OD1	OC1	OC2	OD0			
	STACK RC/EF	0/0	0/0	0/0	0/0			
	TOMREL RC/EF	0/0	0/0	0/0	0/0			
	ILTFIX RC/EF	0/0	0/0	0/0	0/0			
	INGEST RC/EF	0/0	0/0	0/0	0/0			
	OZONE RC/EF	0/0	0/0	0/0	0/0			
	TAPESCAN PLN	2	2	2	2			
	COMMENTS	OK	OK	OK	OK			

Date: 3/22/[illegible]
Operator: [illegible]

	PLAYBACK		[illegible]	[illegible]	[illegible]	[illegible]			
	Generation date on DT		[illegible]	[illegible]	[illegible]	3/22			
T	DT Start Time		[illegible]/15	[illegible]	[illegible]	[illegible]			
I	DT End Time		15/55/23	[illegible]	[illegible]	[illegible]			
M	P.V. of DT		[illegible]	[illegible]	[illegible]	[illegible]			
E	Time of Processing Job Submission		[illegible]	[illegible]	[illegible]	[illegible]			
S	P.V. of Printout		[illegible]	[illegible]	[illegible]	[illegible]			
	Time of Delivery for Imaging		955	955	955	955			
	Transmission Time		1236 [illegible]	1298 [illegible]	1301 [illegible]	1312 [illegible]			
P	Computer Used		91	91	91	91			
R	Input Drive		OC1	[illegible]	[illegible]	OC1			
O	STACK	RC/EF	[illegible]	[illegible]	[illegible]	[illegible]			
C	TOMREL	RC/EF	0/0	0/0	0/0	0/0			
E	ILTFIX	RC/EF	0/0	0/0	0/0	0/0			
S	INGEST	RC/EF	0/0	0/0	0/0	0/0			
S	OZONE	RC/EF	0/0	0/0	0/0	0/0			
I	TAPESCAN	PEN	2	2	2	2			
N	COMMENTS		OK	OK	OK	OK			
G									

PRI 2 PRI 3

Date: 3/23/81
Operator: [illegible]

	PLAYBACK		12181	12183	12184	12185			
	Generation date on DT		3/23	3/23	3/23	3/23			
T	DT Start Time		14/31/23	16/09/09	17/54/19	19/36/59			
I	DT End Time		16/13/31	17/52/59	19/37/15	21/09/03			
M	P.V. of DT		1500	1500	1700	1905			
E	Time of Processing Job Submission		1515	1515	1710	1915			
S	P.V. of Printout		1611	1618	1750	2000			
	Time of Delivery for Imaging		1625	1625	1800	2010			
	Transmission Time		1715	1726	1831	2023			
P	Computer Used		91	91	91	91			
R	Input Drive		OC2	ODO	OC1	OCO			
O	STACK	RC/EF	0/0	0/0	0/0	0/0			
C	TOMREL	RC/EF	0/0	0/0	0/0	0/0			
E	ILTFIX	RC/EF	0/0	0/0	0/0	0/0			
S	INGEST	RC/EF	0/0	0/0	0/0	0/0			
S	OZONE	RC/EF	0/0	0/0	0/0	0/0			
I	TAPESCAN	PEN	2	2	2	2			
N	COMMENTS		OK	OK	OK	OK			
G									

Date: 3/24/81
Operator: KR

	PLAYBACK	12195	12196	12197	12198
	Generation date on DT	3/24	3/24	3/24	3/24
T	DT Start Time	14/20/19	16/11/39	19/13/11	21/55/07
I	DT End Time	16/31/23	18/14/27	21/55/07	24/38/19
M	P.U. of DT	1240	1425	1625	1910
E	Time of Processing Job Submission	1250	1435	1709	1930
S	P.U. of Printout	1334	1600	1750	2015
	Time of Delivery for Imaging	1345	1615	1800	2030
	Transmission Time	1455	1619	1935	2145
P	Computer Used	91	91	91	91
R	Input Drive	OD1	OC0	OC0	OD0
D	STACK RC/EF	0/0	0/0	0/0	0/0
C	TOMREL RC/EF	0/0	0/0	0/0	0/0
E	ILTFIX RC/EF	0/0	0/0	0/0	0/0
S	INGEST RC/EF	0/0	0/0	0/0	0/0
S	OZONE RC/EF	0/0	0/0	0/0	0/0
I	TAPESCAN DEN	2	2	2	2
N	COMMENTS	OK	OK	OK 91 DOWN 1hr.	OK
G					

Date: 3/25/81
Operator: KR

	PLAYBACK	12209	12210	12211	12212
	Generation date on DT	3/25	3/25	3/25	3/25
T	DT Start Time	15/07/39	16/54/03	18/14/23	20/0/15
I	DT End Time	16/49/03	18/31/39	20/11/31	21/58/15
M	P.U. of DT	1240	1428	1620	1750
E	Time of Processing Job Submission	1252	1435	1632	1800
S	P.U. of Printout	1323	1509	1705	1930
	Time of Delivery for Imaging	1343	1520	1715	1890
	Transmission Time	1447	1543	1753	1912
P	Computer Used	91	91	91	91
R	Input Drive	OC0	OC2	OD2	OD0
D	STACK RC/EF	0/0	0/0	0/0	0/0
C	TOMREL RC/EF	0/0	0/0	0/0	0/0
E	ILTFIX RC/EF	0/0	0/0	0/0	0/0
S	INGEST RC/EF	0/0	0/0	0/0	0/0
S	OZONE RC/EF	0/0	0/0	0/0	0/0
I	TAPESCAN DEN	2	2	2	2
N	COMMENTS	OK	OK	OK	OK
G					

Date: 3/26/91
Operator: YB

	PLAYBACK		12223	12224	12225	12226
TIMES	Generation date on DT		3/26	3/24	3/26	3/26
	DT Start Time		15/26/03	17/07/35	18/49/15	20/32/10
	DT End Time		17/07/23	18/49/31	20/32/27	22/15/23
	P.U. of DT		1320	1500	1625	1805
	Time of Processing Job Submission		1390	1510	1635	1816
	P.U. of Printout		1605	1345	1747	1842
	Time of Delivery for Imaging		1515	1555	1759	1856
	Transmission Time		1543	1622	1803	1925
PROCESS	Computer Used		075	75	91	91
	Input Drive		0C3	0C1	0D0	0D0
	STACK	RC/EF	0/0	0/0	0/0	0/0
	TOMREL	RC/EF	0/0	0/0	0/0	0/0
	ILTFIX	RC/EF	0/0	0/0	0/0	0/0
	INGEST	RC/EF	0/0	0/0	0/0	0/0
	OZONE	RC/EF	0/0	0/0	0/0	0/0
	TAPESCAN	DEN	2	2	2	2
	COMMENTS		OK	OK	OK	OK

Date: 3/27/91
Operator: YB

	PLAYBACK		12236	12237	12238	12239
TIMES	Generation date on DT		3/27	3/27	3/27	3/27
	DT Start Time		14/02/01	15/44/27	17/24/19	19/07/07
	DT End Time		15/43/39	17/27/07	19/06/51	20/51/23
	P.U. of DT		1145	1315	1510	1800
	Time of Processing Job Submission		1158	1350	1521	1810
	P.U. of Printout		1230	1415	1737	1842
	Time of Delivery for Imaging		1242	1425	1750	1855
	Transmission Time		1256	1454	1810	1920
PROCESS	Computer Used		91	91	91	91
	Input Drive		0D2	0C0	0C0	0D2
	STACK	RC/EF	0/0	0/0	0/0	0/0
	TOMREL	RC/EF	0/0	0/0	0/0	0/0
	ILTFIX	RC/EF	0/0	0/0	0/0	0/0
	INGEST	RC/EF	0/0	0/0	0/0	0/0
	OZONE	RC/EF	0/0	0/0	0/0	0/0
	TAPESCAN	DEN	2	2	2	2
	COMMENTS		OK Prod2	OK Prod2 91 down 30 min.	OK Prod2	OK Prod2

APPENDIX F

TOMS NEAR REAL-TIME PROGRAM CHECKLIST

Date 3/28/81

OPERATOR JR

	PLAYBACK	12250	12251	12252	12253
TIMES	Generation date on DT	3/28	3/28	3/28	3/28
	DT Start Time	14/21/15	14/03/07	17/41/03	19/26/19
	DT End Time	14/03/23	17/45/15	19/26/17	21/08/33
	P.V. of DT	1800	1800	1800	1800
	Time of Processing Job Submission	1815	1815	1915	1815
	P.V. of Printout	800 3/30	800 3/30	800 3/30	800 3/30
	Time of Delivery for Imaging	815 3/30	815 3/30	815 3/30	815 3/30
	Transmission Time	1116	1136	1148	1218
PROCESS	Computer Used	91	91	91	91
	Input Drive	ODD	OC2	OD1	OD2
	STACK RC/EF	0/0	0/0	0/0	0/0
	TOMREL RC/EF	0/0	0/0	0/0	0/0
	ILTFIX RC/EF	0/0	0/0	0/0	0/0
	INGEST RC/EF	0/0	0/0	0/0	0/0
	OZONE RC/EF	0/0	0/0	0/0	0/0
	TAPESCAN PEN	2	2	2	2
	COMMENTS	OK prod2	OK prod2	OK prod2	OK prod2

APPENDIX F

TOMS NEAR REAL-TIME PROGRAM CHECKLIST

Date 3/30/81

OPERATOR JR

	PLAYBACK	12264	12265	12266	12267
TIMES	Generation date on DT	3/29	3/29	3/29	3/29
	DT Start Time	14/39/07	16/24/85	18/03/07	19/45/15
	DT End Time	16/20/27	18/03/07	19/45/31	21/26/25
	P.V. of DT	820 3/30	820 3/30	820 3/30	820 3/30
	Time of Processing Job Submission	851 3/30	851 3/30	851 3/30	851 3/30
	P.V. of Printout	915	917	923	935
	Time of Delivery for Imaging	950	950	950	950
	Transmission Time	1249	1317	1340	1401
PROCESS	Computer Used	91	91	91	91
	Input Drive	OCO	ODO	OD2	OD3
	STACK RC/EF	0/0	0/0	0/0	0/0
	TOMREL RC/EF	0/0	0/0	0/0	0/0
	ILTFIX RC/EF	0/0	0/0	0/0	0/0
	INGEST RC/EF	0/0	0/0	0/0	0/0
	OZONE RC/EF	0/0	0/0	0/0	0/0
	TAPESCAN PEN	2	2	2	2
	COMMENTS	OK prod2	OK prod2	OK prod2	OK prod2

Date: 3/30/81
Operator: JR

	PLAYBACK	12278	12279	12280	12281			
T	Generation date on DT	3/30	3/30	3/30	3/30			
I	DT Start Time	14/53/03	16/39/07	19/50/[illegible]	20/07/39			
M	DT End Time	16/38/51	18/28/27	20/03/[illegible]	20/46/19			
E	P.U. of DT	1230	1400	1642	1830			
S	Time of Processing Job Submission	1240	1420	1654	1839			
	P.U. of Printout	1310	1445	1810	1923			
	Time of Delivery for Imaging	1325	1455	1820	1935			
	Transmission Time	1602	1619	1827	1946			
P	Computer Used	91	91	91	91			
R	Input Drive	OD3	OCO	ODO	OC2			
O	STACK RC/EF	0/0	0/0	0/0	0/0			
C	TOMREF RC/EF	0/0	0/0	0/0	0/0			
E	ILTFIX RC/EF	0/0	0/0	0/0	0/0			
S	INGEST RC/EF	0/0	0/0	0/0	0/0			
S	OZONE RC/EF	0/0	0/0	0/0	0/0			
I	TAPESCAN PEN	2	2	2	2			
N G	COMMENTS	OK Prod 2	OK Prod 2	OK Prod 2	OK Prod 2			

Date: 3/31/81
Operator: JR

	PLAYBACK	12292	12293	12294	12295			
T	Generation date on DT	3/31	3/31	3/31	3/31			
I	DT Start Time	15/14/10	14/58/03	18/58/23	20/24/03			
M	DT End Time	16/58/05	19/39/23	20/20/10	22/05/31			
E	P.U. of DT	1300	1430	1630	1810			
S	Time of Processing Job Submission	1312	1440	1640	1820			
	P.U. of Printout	1355	1512	1730	1832			
	Time of Delivery for Imaging	1405	1522	1740	—			
	Transmission Time	1456	1549	1755	—			
P	Computer Used	91	91	91	91			
R	Input Drive	OD2	OC1	OD2	ODO			
O	STACK RC/EF	0/0	0/0	0/0	0/0			
C	TOMREF RC/EF	0/0	0/0	0/0	0/0			
E	ILTFIX RC/EF	0/0	0/0	0/0	0/0			
S	INGEST RC/EF	0/0	0/0	0/0	0/46			
S	OZONE RC/EF	0/0	0/0	0/0				
I	TAPESCAN PEN	2	2	2				
N G	COMMENTS	OK Prod 2	OK Prod 2	OK Prod 2	U46 INGEST Prod 2. 3 orbits Avoided full coverage			

Date: 4/1/81
Operator: YB

	PLAYBACK	12305	12306	12307	12308
	Generation date on DT	4/1/81	4/1/81	4/1/81	4/1/81
T	DT Start Time	03/53/15	05/35/09	07/14/11	08/56/10
I	DT End Time	05/29/19	07/15/25	08/57/15	10/40/27
M	P.U. of DT	1230	1410	1542	1649
E	Time of Processing Job Submission	1250	1422	1554	1700
S	P.U. of Printout	1340	1528	1632	1732
	Time of Delivery for Imaging	1350	1540	1648	1742
	Transmission Time	1423	1551	1704	1747
P	Computer Used	91	91	91	91
R	Input Drive	OC2	ODO	OCO	OC1
D	STACK RC/EFI	0/0	0/0	0/0	0/0
C	TOMREL RC/EFI	0/0	0/0	0/0	0/0
E	ILTFIX RC/EFI	0/0	0/0	0/0	0/0
S	INGEST RC/EFI	0/0	0/0	0/0	0/0
S	OZONE RC/EFI	0/0	0/0	0/0	0/0
T	TAPESCAN DEN	2	2	2	2
N	COMMENTS	OK Prod2.	OK Prod2	OK Prod2	OK Prod2
G					

Date: 4/2/81
Operator: YB

	PLAYBACK	12319	12320	12321	12322
	Generation date on DT	4/2/81	4/2/81	4/2/81	4/2/81
T	DT Start Time	14/04/21	15/51/55	17/34/17	19/12/43
I	DT End Time	15/52/27	17/34/17	19/13/23	20/59/23
M	P.U. of DT	1150	1325	1505	1635
E	Time of Processing Job Submission	1200	1338	1512	1643
S	P.U. of Printout	1238	1405	1550	1812
	Time of Delivery for Imaging	1250	1416	1600	1820
	Transmission Time	1524	1544	1712	1846
P	Computer Used	91	91	91	91
R	Input Drive	OD1	OD2	OC2	ODO
D	STACK RC/EFI	0/0	0/0	0/0	0/0
C	TOMREL RC/EFI	0/0	0/0	0/0	0/0
E	ILTFIX RC/EFI	0/0	0/0	0/0	0/0
S	INGEST RC/EFI	0/0	0/0	0/0	0/0
S	OZONE RC/EFI	0/0	0/0	0/0	0/0
T	TAPESCAN DEN	2	2	2	2
N	COMMENTS	OK Prod2	OK Prod2	OK Prod2	OK Prod2
G					

Date: 4/3/81
Operator: JB

	PLAYBACK	12333	12334	12335	12336			
TIMES	Generation date on DT	4/3	4/3	4/3	4/3			
	DT Start Time	14/29/15	16/14/39	17/54/39	19/33/47			
	DT End Time	16/10/37	17/54/51	19/35/39	21/10/07			
	P.U. of DT	1215	1345	1540	1730			
	Time of Processing Job Submission	1444	1358	1550	1745			
	P.U. of Printout	1308	1427	1650	1817			
	Time of Delivery for Imaging	1320	1440	1700	1830			
	Transmission Time	1405	1558	1723	1901			
PROCESSING	Computer Used	91	91	91	91			
	Input Drive	OCO	ODO	OCO	OD1			
	STACK (RC/EF)	0/0	0/0	0/0	0/0			
	TOMREL (RC/EF)	0/0	0/0	0/0	0/0			
	ILTFIX (RC/EF)	0/0	0/0	0/0	0/0			
	INGEST (RI/EF)	0/0	0/0	0/0	0/0			
	OZONE (RC/EF)	0/0	0/0	0/0	0/0			
	TAPESCAN (PEN)	2	2	2	2			
	COMMENTS	OK Prod2 91 Down ½ hr.	OK Prod2	OK Prod2	OK Prod2			

Date: 4/4/81
Operator: JB

	PLAYBACK	12347	12348	12349	12350			
TIMES	Generation date on DT	4/4	4/4	4/4	4/4			
	DT Start Time	14/15/09	16/02/50	18/04/09	19/33/31			
	DT End Time	16/02/19	18/10/19	19/53/55	21/36/27			
	P.U. of DT	1830	1830	1830	1830			
	Time of Processing Job Submission	1895	1895	1895	1895			
	P.U. of Printout	800 4/6	800 4/6	800 4/6	800 4/6			
	Time of Delivery for Imaging	815 4/6	815 4/6	815 4/6	815 4/6			
	Transmission Time	939	953	—	1006			
PROCESSING	Computer Used	91	91	91	91			
	Input Drive	OCO	OD1	OD2	OC1			
	STACK (RC/EF)	0/0	0/0	0/0	0/0			
	TOMREL (RC/EF)	0/0	0/0	0/0	0/0			
	ILTFIX (RC/EF)	0/0	0/0	0/0	0/0			
	INGEST (RI/EF)	0/0	0/0	0/0	0/0			
	OZONE (RC/EF)	0/0	0/0	0/0	0/0			
	TAPESCAN (PEN)	2	2	2	2			
	COMMENTS	OK Prod2	OK Prod2 DOUBLE ORBIT	OK Prod2 Duplicate orbit of 12347	OK Prod2			

Full coverage

Date: 4/6/81
Operator: YB

PLAYBACK	12361	12362	12363	12364			
Generation date on DT	4/5	4/5	4/5	4/5			
DT Start Time	17/22/02	15/23/07	17/23/11	20/10/19			
DT End Time	16/23/02	16/23/07	20/10/23	22/59/19			
P.V. of DT	800 %	800 %	800 %	800 %			
Time of Processing Job Submission	915	815	815	815			
P.V. of Printout	859	903	908	909			
Time of Delivery for Imaging	930	930	930	930			
Transmission Time	1208	1222	1453	1510			
Computer Used	91	91	91	91			
Input Drive	OC1	OCO	OD1	OD3			
STACK RC/EF	0/0	0/0	0/0	0/0			
TOMREF RC/EF	0/0	0/0	0/0	0/0			
ILTFIX RC/EF	0/0	0/0	0/0	0/0			
INGEST RC/EF	0/0	0/0	0/0	0/0			
OZONE RC/EF	0/0	0/0	0/0	0/0			
TAPESCAN PEN	2	2	2	2			
COMMENTS	OK	OK	OK	OK			
	Prod2	Prod2	Prod2	Prod2			

Date: 4/6/81
Operator: YB

PLAYBACK	12375	12376	12376	12376	12377	7	12378
Generation date on DT	4/6	4/6	4/6	4/6	4/6	4/6	4/6
DT Start Time	15/23/19	17/06/00	"	"	18/22/07	"	20/04/15
DT End Time	17/05/31	18/22/23	"	"	20/20/31	"	22/12/42
P.V. of DT	1320	1500	"	"	1645	"	1600
Time of Processing Job Submission	1333	1507	1520	1540	1655	1722	1815
P.V. of Printout	1415	—	—	1617	—	1846	1855
Time of Delivery for Imaging	1430	—	—	1630	—	1910	1910
Transmission Time	1551	—	—	1655	—	1934	1937
Computer Used	91	91	91	91	91	91	91
Input Drive	OC1	OCO	OC1	OC1	OD1	OCO	OD1
STACK RC/EF	0/0	5001	500	0/0		0/0	0/0
TOMREF RC/EF	0/0			0/0		0/0	0/0
ILTFIX RC/EF	0/0			0/0		0/0	0/0
INGEST RC/EF	0/0			0/0		0/0	0/0
OZONE RC/EF	0/0			0/0		0/0	0/0
TAPESCAN PEN	2			2		2	2
COMMENTS	OK			OK	Cancelled by oper. excessive data checks	OK	OK
	Prod2	Prod2	Prod2	Prod2		Prod2	Prod2

Original DT. gone bad due to B. Barnett

Date: 4/7/91
Operator: GB

	PLAYBACK	12388	12389	12390	12391
TIMES	Generation date on DT	4/7	4/7	4/7	4/7
	DT Start Time	14/00/27	15/12/35	17/24/41	19/05/15
	DT End Time	15/43/19	17/24/07	19/05/31	20/46/21
	P.V. of DT	1200	1330	1500	1630
	Time of Processing Job Submission	1215	1440	1520	1640
	P.V. of Printout	1255	1420	1617	1730
	Time of Delivery for Imagery	1305	1430	1628	1745
	Transmission Time	1329	1622	1648	1842
PROCESSING	Computer Used	91	91	91	91
	Input Drive	OC1	OD1	OCO	OC1
	STACK RC/EFI	0/0	0/0	0/0	0/0
	TOMREL RC/EFI	0/0	0/0	0/0	0/0
	ILTFIX RC/EFI	0/0	0/0	0/0	0/0
	INGEST RC/EFI	0/0	0/0	0/0	0/0
	OZONE RC/EFI	0/0	0/0	0/0	0/0
	TAPESCAN PLN	2	2	2	2
COMMENTS		OK Prod2	OK Prod2	OK Prod2	OK Prod2

Date: 4/8/91
Operator: GB

	PLAYBACK	12402	12403	12404	12405
TIMES	Generation date on DT	4/8	4/8	4/8	4/8
	DT Start Time	14/18/09	16/00/59	17/40/09	19/22/31
	DT End Time	15/59/23	17/42/15	19/22/07	21/04/35
	P.V. of DT	1145	1340	1545	1700
	Time of Processing Job Submission	1204	1350	1555	1712
	P.V. of Printout	1235	1440	1634	1757
	Time of Delivery for Imagery	1245	1450	1648	1810
	Transmission Time	1305	1504	1706	1828
PROCESSING	Computer Used	91	91	91	91
	Input Drive	OCO	OC1	OCO	OCO
	STACK RC/EFI	0/0	0/0	0/0	0/0
	TOMREL RC/EFI	0/0	0/0	0/0	0/0
	ILTFIX RC/EFI	0/0	0/0	0/0	0/0
	INGEST RC/EFI	0/0	0/0	0/0	0/0
	OZONE RC/EFI	0/0	0/0	0/0	0/0
	TAPESCAN PLN	2	2	2	2
COMMENTS		OK Prod2	OK Prod2	OK Prod2	OK Prod2

Date: 4/9/81
Operator: JB

PLAYBACK	12416	12417	12418	12419
TIMES: Generation date on DT	4/9	4/9	4/9	4/9
TIMES: DT Start Time	14/27/15	16/20/27	18/00/13	19/42/03
TIMES: DT End Time	16/28/35	18/04/33	19/40/27	21/25/11
TIMES: P.V. of DT	1230	1410	1650	1730
TIMES: Time of Processing Job Submission	1240	1423	1600	1742
TIMES: P.V. of Printout	1332	1506	1631	1805
TIMES: Time of Delivery for Imaging	1345	1517	1645	1815
TIMES: Transmission Time	1415	1546	1656	1840
PRDCESSING: Computer Used	91	91	91	91
PRDCESSING: Input Drive	OC1	0D0	OC0	OD1
PRDCESSING: STACK RC/EF	0/0	0/0	0/0	0/0
PRDCESSING: TOMREF RC/EF	0/0	0/0	0/0	0/0
PRDCESSING: ILTFIX RC/EF	0/0	0/0	0/0	0/0
PRDCESSING: INGEST RC/EF	0/0	0/0	0/0	0/0
PRDCESSING: OZONE RC/EF	0/0	0/0	0/0	0/0
PRDCESSING: TAPESCAN PEN	2	2	2	2
PRDCESSING: COMMENTS	OK Prod2	OK Prod2	OK Prod2	OK Prod2

Date: 4/10/81
Operator: JB

PLAYBACK	12430	12430	12431	12433	12433	12432
TIMES: Generation date on DT	4/10	4/10	4/10	4/10	4/10	4/10
TIMES: DT Start Time	07/01/39	12/35/23	14/25/13	20/00/15	09/44/11	12/16/59
TIMES: DT End Time	10/29/27	14/41/07	16/16/27	21/41/23	09/54/17	20/00/27
TIMES: P.V. of DT	1420	1615	1615	1820	1820	1930
TIMES: Time of Processing Job Submission	1430	1625	1625	1830	1830	1998
TIMES: P.V. of Printout	1506	1655	1750	1858	1842	2005
TIMES: Time of Delivery for Imaging	1518	—	1806	1910	1910	2015
TIMES: Transmission Time	1755	—	1805	1959	—	2058
PRDCESSING: Computer Used	91	91	91	91	91	91
PRDCESSING: Input Drive	OC1	OC0	OC1	0D1	0D1	0D0
PRDCESSING: STACK RC/EF	0/0	[illegible]	0/0	0/0	0/0	0/0
PRDCESSING: TOMREF RC/EF	0/0	/	0/0	0/0	0/0	0/0
PRDCESSING: ILTFIX RC/EF	0/0	/	0/0	0/0	0/0	0/0
PRDCESSING: INGEST RC/EF	0/0	/	0/0	0/0	0/0	0/0
PRDCESSING: OZONE RC/EF	0/0	/	0/0	0/0	0/0	0/0
PRDCESSING: TAPESCAN PEN	2		2	2	2	2
PRDCESSING: COMMENTS	OK Prod2	ABND SOC6 Not Good Region	OK Prod2	OK Prod2	? 8 min.? Not Good Region	OK Prod2

Date: 9/11/81
Operator: YB

	PLAYBACK	12444	12445	12446	12447	12447
TIMES	Generation date on DT	9/11	9/11	9/11	9/11	9/11
	DT Start Time	15/12/59	16/35/55	18/37/15	20/20/11	"
	DT End Time	15/55/39	17/26/22	20/09/19	22/02/35	"
	P.V. of DT	1900	1900	1900	1900	"
	Time of Processing Job Submission	1920	1920	1920	1920	2130
	P.V. of Printout	800 9/13	800 9/13	800 9/13	800 9/13	800 9/13
	Time of Delivery for Imaging	815 9/13	365/13	815 9/13	—	—
	Transmission Time	1236	1249	1303		
PARAMETERS	Computer Used	91	91	91	91	91
	Input Drive	OC1	OCO	OD2	OCO	ODO
	STACK RC/EF	0/0	0/0	0/0	0/0	0/0
	TOMREF RC/EF	0/0	0/0	0/0	0/0	0/0
	ILTFIX RC/EF	0/0	0/0	0/0	0/0	0/0
	INGEST RC/EF	0/0	0/0	0/0	ABN	ABN
	OZONE RC/EF	0/0	0/0	0/0		
	TOPRECAV PEN	2	2	2	2	2
COMMENTS		OK Prod2	OK Prod2	OK Prod2	USER 46 ABEND 3 orbits provided full coverage	USER 46 ABEND

Date: 4/13/81
Operator: YB

	PLAYBACK	12458	12459	12460	12461
TIMES	Generation date on DT	4/12	4/12	4/12	4/12
	DT Start Time	15/27/07	17/17/15	19/55/07	21/37/15
	DT End Time	17/12/40	19/55/23	21/37/15	23/24/59
	P.V. of DT	815 9/11	815 9/11	815 9/11	815 9/11
	Time of Processing Job Submission	830	830	830	830
	P.V. of Printout	920	922	923	928
	Time of Delivery for Imaging	940	940	940	940
	Transmission Time	1426	1442	1458	1515
PARAMETERS	Computer Used	91	91	91	91
	Input Drive	OCO	OD1	OC1	OCO
	STACK RC/EF	0/0	0/0	0/0	0/0
	TOMREF RC/EF	0/0	0/0	0/0	0/0
	ILTFIX RC/EF	0/0	0/0	0/0	0/0
	INGEST RC/EF	0/0	0/0	0/0	0/0
	OZONE RC/EF	0/-	0/0	0/0	0/0
	TOPRECAV PEN	2	2	2	2
COMMENTS		OK Prod2	OK Prod2	OK Prod2	OK Prod2

Date: 9/13/81
Operator: JB

PLAYBACK	12471	12472	12472	12472	12473	12474
TIMES: Generation date on DT	9/13	9/13	9/13	9/13	9/13	9/13
DT Start Time	9/08/25	13/51/55	"	"	17/22/11	19/12/59
DT End Time	5/49/15	17/31/07	"	"	19/13/11	20/51/27
P.U. of DT	1240	1405	"	"	1610	1720
Time of Processing Job Submission	1252	1419	1445	1500	1618	1734
P.U. of Printout	1320	—	—	1555	1656	1800
Time of Delivery for Imaging	1342	—	—	1605	1703	1815
Transmission Time	1602			1813	1825	1960
PROCESSING: Computer Used	91	91	91	91	91	91
Input Drive	000	001	000	001	001	000
STACK RC/EFI	0/0			0/0	0/0	0/0
TOMREL RC/EFI	0/0			0/0	0/0	0/0
ILTFIX RC/EFI	0/0			0/0	0/0	0/0
INGEST RC/EFI	0/0			0/0	0/0	0/0
OZONE RC/EFI	0/0			0/0	0/0	0/0
TAPESCAN PLN	2			2	2	2
COMMENTS	OK Prod2	excessive DATA Checks ON DT	excessive DATA Checks ON DT	Submitted Original DT OK Prod2	OK Prod2	OK Prod2

Date: 9/14/81
Operator: JB

PLAYBACK	12485	12486	12487	12488
TIMES: Generation date on DT	9/19	9/19	9/19	9/19
DT Start Time	14/27/03	15/09/01	17/49/15	19/21/23
DT End Time	16/03/23	17/49/15	19/20/51	21/19/55
P.U. of DT	1248	1400	1515	1710
Time of Processing Job Submission	1257	1410	1521	1720
P.U. of Printout	1345	1455	1548	1749
Time of Delivery for Imaging	1356	1505	1559	1800
Transmission Time	1429	1515	1615	1859
PROCESSING: Computer Used	91	91	91	91
Input Drive	001	000	000	000
STACK RC/EFI	0/0	0/0	0/0	0/0
TOMREL RC/EFI	0/0	0/0	0/0	0/0
ILTFIX RC/EFI	0/0	0/0	0/0	0/0
INGEST RC/EFI	0/0	0/0	0/0	0/0
OZONE RC/EFI	0/0	0/0	0/0	0/0
TAPESCAN PLN	2	2	2	2
COMMENTS	OK Prod2	OK Prod2	OK Prod2	OK Prod2

Date: 4/15/91
Operator: JB

PLAYBACK	12499	12500	12501	12502
TIMES: Generation date on DT	4/15	4/15	4/15	4/15
TIMES: DT Start Time	14/45/12	16/27/07	18/08/11	19/50/03
TIMES: DT End Time	16/25/19	18/08/27	19/50/19	21/30/55
TIMES: P.V. of DT	1222	1458	1610	1820
TIMES: Time of Processing Job Submission	1652	1745	1715	1832
TIMES: P.V. of Printout	1723	1740	1740	1905
TIMES: Time of Delivery for Imaging	1735	1755	1755	1915
TIMES: Transmission Time	1839	1849	1901	2124
PROCESSING: Computer Used	75	91	91	91
PROCESSING: Input Drive	0D2	0C1	0D0	0C0
PROCESSING: STACK RC/EF	0/0	0/0	0/0	0/0
PROCESSING: TOMREF RC/EF	0/0	0/0	0/0	0/0
PROCESSING: ILTFIX RC/EF	0/0	0/0	0/0	0/0
PROCESSING: INGEST RC/EF	0/0	0/0	0/0	0/0
PROCESSING: OZONE RC/EF	0/0	0/0	0/0	0/0
PROCESSING: TAPESCAN DEN	2	2	2	2
COMMENTS	OK Prod 2 91 & 75 Both Down Till 1700	OK Prod 2	OK Prod 2	OK Prod 3

Date: 4/16/91
Operator: JB

PLAYBACK	12513	12514	12515	12516
TIMES: Generation date on DT	4/16	4/16	4/16	4/16
TIMES: DT Start Time	15/03/07	16/49/33	18/26/19	
TIMES: DT End Time	16/49/43	18/25/47	20/09/31	
TIMES: P.V. of DT	1225	1430	1620	
TIMES: Time of Processing Job Submission	1233	1440	1630	
TIMES: P.V. of Printout	1350	1556	1728	
TIMES: Time of Delivery for Imaging	1400	1605	1738	
TIMES: Transmission Time	1416	1637	1748	
PROCESSING: Computer Used	91	91	91	
PROCESSING: Input Drive	0C0	0C1	0C0	
PROCESSING: STACK RC/EF	0/0	0/0	0/0	
PROCESSING: TOMREF RC/EF	0/0	0/0	0/0	
PROCESSING: ILTFIX RC/EF	0/0	0/0	0/0	
PROCESSING: INGEST RC/EF	0/0	0/0	0/0	
PROCESSING: OZONE RC/EF	0/0	0/0	0/0	
PROCESSING: TAPESCAN DEN	2	2	2	
COMMENTS	OK Prod 3	OK Prod 3	OK Prod 3	Power Out Bldg 1 unable to get 4th ORBIT

Date: 4/17/81
Operator: JB

	PLAYBACK	12516	12527	12529	12529	12530			
TIMES	Generation date on DT	4/16	4/17	4/17	4/17	4/17			
	DT Start Time	20/09/15	15/11/07	17/03/07	15/09/11	20/19/23			
	DT End Time	21/52/27	17/02/19	18/47/27	20/27/23	21/09/47			
	P.U. of DT	1750	1300	1428	1610	1835			
	Time of Processing Job Submission	1200 4/17	1310	1435	1619	1845			
	P.U. of Printout	1330 4/17	1500	1555	1746	1830 4/20			
	Time of Delivery for Imaging	14:18 4/17	14:18	1518	1710	1938			
	Transmission Time	1455 4/17	1551	1603	1723	911 4/20			
PROCESS	Computer Used	91	91	91	91	91			
	Input Drive	0C0	0D0	0C1	0C0	0C0			
	STACK RC/EF	0/0	0/0	0/0	0/0	0/0			
	TOMREL RC/EF	0/0	0/0	0/0	0/0	0/0			
	ILTFIX RC/EF	0/0	0/0	0/0	0/0	0/0			
	INGEST RI/IE	0/0	0/0	0/0	0/0	0/0			
	OZONE RC/FI	0/0	0/0	0/0	0/0	0/0			
	TAPESCAN PEN	2	2	2	2	2			
	COMMENTS	OK Prod3	OK Prod3	OK Prod3	OK Prod3	OK Prod3			

Date: 4/18/81
Operator: JB

	PLAYBACK	12540	12541	12542	12543			
TIMES	Generation date on DT	4/18	4/18	4/18	4/18			
	DT Start Time	13/45/47	15/49/11	17/22/35	19/03/07			
	DT End Time	15/38/35	17/20/01	18/03/23	20/46/19			
	P.U. of DT	1800	1800	1800	1800			
	Time of Processing Job Submission	1815	1815	1815	1815			
	P.U. of Printout	800 4/20	800 4/20	800 4/20	800 4/20			
	Time of Delivery for Imaging	815 4/20	815 4/20	815 4/20	815 4/20			
	Transmission Time	1152	1200	1213	1225			
PROCESS	Computer Used	91	91	91	91			
	Input Drive	0C0	0C0	0D0	0C0			
	STACK RC/EF	0/0	0/0	0/0	0/0			
	TOMREL RC/EF	0/0	0/0	0/0	0/0			
	ILTFIX RC/EF	0/0	0/0	0/0	0/0			
	INGEST RI/IE	0/0	0/0	0/0	0/0			
	OZONE RC/FI	0/0	0/0	0/0	0/0			
	TAPESCAN PEN	2	2	2	2			
	COMMENTS	OK Prod3	OK Prod3	OK Prod3	OK Prod3			

Date: 9/20/61
Operator: JB

PLAYBACK		12554	12555	12556	12557
TIMES	Generation date on DT	4/19	4/19	4/19	4/19
	DT Start Time	19/16/43	15/58/03	17/40/11	19/20/59
	DT End Time	15/57/15	17/38/37	19/41/31	21/04/11
	P.U. of DT	800	800	800	800
	Time of Processing Job Submission	830	830	830	830
	P.U. of Printout	1200	1200	1200	1200
	Time of Delivery for Imaging	1000	1000	1000	1000
	Transmission Time	1236	1246	1259	1310
PROCESSING	Computer Used	71	91	91	91
	Input Drive	0C0	0C1	0D0	0D1
	STACK RC/LFI	0/0	0/0	0/0	0/0
	TOMREL RC/LFI	0/0	0/0	0/0	0/0
	ILTFIX RC/LFI	0/0	0/0	0/0	0/0
	INGEST RC/LFI	0/0	0/0	0/0	0/0
	OZONE RC/LFI	0/0	0/0	0/0	0/0
	TAPESCAN PLN	2	2	2	2
	COMMENTS	OK Prod 3	OK Prod 3	OK Prod 3	OK Prod 3

Date: 9/20/61
Operator: JB

PLAYBACK		12568	12569	12570	12571
TIMES	Generation date on DT	9/20	9/20	9/20	9/20
	DT Start Time	11/10/02	16/16/59	17/58/03	19/40/11
	DT End Time	16/15/37	17/55/55	19/40/27	21/24/07
	P.U. of DT	1300	1425	1550	1730
	Time of Processing Job Submission	1308	1438	1606	1740
	P.U. of Printout	1600	1630	1900	1900
	Time of Delivery for Imaging	1348	1530	1646	1815
	Transmission Time	1422	1557	1740	1841
PROCESSING	Computer Used	91	91	91	91
	Input Drive	0C1	0C0	0C0	0C0
	STACK RC/LFI	0/0	0/0	0/0	0/0
	TOMREL RC/LFI	0/0	0/0	0/0	0/0
	ILTFIX RC/LFI	0/0	0/0	0/0	0/0
	INGEST RC/LFI	0/0	0/0	0/0	0/0
	OZONE RC/LFI	0/0	0/0	0/0	0/0
	TAPESCAN PLN	2	2	2	2
	COMMENTS	OK Prod 3	OK Prod 3	OK Prod 3	OK Prod 3

Date: 9/21/91
Operator: JB

PLAYBACK	12582	12583	12584	12585
TIMES: Generation date on DT	9/21	9/21	9/21	9/21
TIMES: DT Start Time	14/53/21	16/34/55	18/15/23	19/58/03
TIMES: DT End Time	16/53/37	18/15/13	19/58/19	21/41/15
TIMES: P.U. of DT	1225	1405	1550	1735
TIMES: Time of Processing Job Submission	1236	1415	1600	1744
TIMES: P.U. of Printout	1420	1600	1735	1840
TIMES: Time of Delivery for Imaging	1328	1530	1700	1905
TIMES: Transmission Time	1330	1543	1714	1822
PROCESS: Computer Used	91	91	91	91
PROCESS: Input Drive	OC1	OCO	OCO	OCO
PROCESS: STACK RC/EF	0/0	0/0	0/0	0/0
PROCESS: TOMREL RC/EF	0/0	0/0	0/0	0/0
PROCESS: ILTFIX RC/EF	0/0	0/0	0/0	0/0
PROCESS: INGEST RC/EF	0/0	0/0	0/0	0/0
PROCESS: OZONE RC/EF	0/0	0/0	0/0	0/0
PROCESS: TAPESCAN DEN	2	2	2	2
COMMENTS	OK Prod3	OK Prod3	OK Prod3	OK Prod3

Date: 9/22/91
Operator: JB

PLAYBACK	12596	12597	12598	12599
TIMES: Generation date on DT	9/22	9/22	9/22	9/22
TIMES: DT Start Time	15/16/35	16/52/47	17/33/15	20/16/41
TIMES: DT End Time	16/51/39	16/52/41	16/41/27	22/00/43
TIMES: P.U. of DT	1250	1430	1615	1800
TIMES: Time of Processing Job Submission	1303	1438	1625	1806
TIMES: P.U. of Printout	1442	1600	1756	1940
TIMES: Time of Delivery for Imaging	1320	1520	1710	—
TIMES: Transmission Time	1354	1528	1738	
PROCESS: Computer Used	91	91	91	91
PROCESS: Input Drive	OCO	OC1	OD2	OCO
PROCESS: STACK RC/EF	0/0	0/0	0/0	0/0
PROCESS: TOMREL RC/EF	0/0	0/0	0/0	0/0
PROCESS: ILTFIX RC/EF	0/0	0/0	0/0	0/0
PROCESS: INGEST RC/EF	0/0	0/0	0/0	0/0
PROCESS: OZONE RC/EF	0/0	0/0	0/0	
PROCESS: TAPESCAN DEN	2	2	2	
COMMENTS	OK Prod3	OK Prod3	OK Prod3	3 orbits Provided full Coverage

Date: 4/23/81
Operator: YB

PLAYBACK		12610	12611	12612	12613			
TIMES	Generation date on DT	4/23	4/23	4/23	4/23			
	DT Start Time	15/[illegible]	17/11/07	[illegible]/39	20/15/[illegible]			
	DT End Time	17/19/51	18/52/27	[illegible]/35	22/[illegible]/55			
	P.U. of DT	1300	1440	1730	1818			
	Time of Processing Job Submission	1304	1448	1740	1826			
	P.U. of Printout	1449	1700	1900	1920			
	Time of Delivery for Imaging	1340	1535	1810	1910			
	Transmission Time	1350	1548	1825	1915			
PROCESSING	Computer Used	91	91	91	91			
	Input Drive	0C0	0C2	0C0	0C0			
	STACK RC/EFI	0/0	0/0	0/0	0/0			
	TOMREL RC/EFI	0/0	0/0	0/0	0/0			
	ILTFIX RC/EFI	0/0	0/0	0/0	0/0			
	INGEST RC/EFI	0/0	0/0	0/0	0/0			
	OZONE RC/EFI	0/0	0/0	0/0	0/0			
	TAPESCAN PEN	2	[illegible]	2	2			
	COMMENTS	OK Prod3	OK Prod3	OK Prod3	OK Prod3			

Date: 4/24/81
Operator: YB

PLAYBACK		12623	12624	12625	12626			
TIMES	Generation date on DT	4/24	4/24	4/24	4/24			
	DT Start Time	13/55/02	15/[illegible]	17/[illegible]/27	[illegible]/11/59			
	DT End Time	15/43/55	17/[illegible]/27	[illegible]	[illegible]/55/[illegible]			
	P.U. of DT	1150	1340	1500	1650			
	Time of Processing Job Submission	1200	1351	1510	1656			
	P.U. of Printout	1449	1508	1625	1900			
	Time of Delivery for Imaging	1240	1430	1550	1718			
	Transmission Time	1257	1432	1555	1731			
PROCESSING	Computer Used	91	91	91	91			
	Input Drive	0D1	0C0	0C1	0C0			
	STACK RC/EFI	0/0	0/0	0/0	0/0			
	TOMREL RC/EFI	0/0	0/0	0/0	0/0			
	ILTFIX RC/EFI	0/0	0/0	0/0	0/0			
	INGEST RC/EFI	0/0	0/0	0/0	0/0			
	OZONE RC/EFI	0/0	0/0	0/0	0/0			
	TAPESCAN PEN	2	2	2	2			
	COMMENTS	OK Prod3	OK Prod3	OK Prod3	OK Prod3			

Date: 9/25/81
Operator: JB

	PLAYBACK		12637	12636	12639	12640			
T	Generation date on DT		9/25	9/25	9/25	9/25			
I	DT Start Time		[illegible]	[illegible]	[illegible]	[illegible]			
M	DT End Time		16/03/15	[illegible]	[illegible]	[illegible]			
E	P.U. of DT		1730	1730	1730	1735			
S	Time of Processing Job Submission		1800	1800	1800	1800			
	P.U. of Printout		805 9/27	805 9/27	805 9/27	805 9/27			
	Time of Delivery for Imaging		840	840	840	840			
	Transmission Time		1029	1042	1055	1107			
P	Computer Used		91	91	91	91			
R	Input Drive		0D2	0C1	0C0	0C1			
O	STACK	RC/EFI	0/0	0/0	0/0	0/0			
C	TOMREL	RC/EFI	0/0	0/0	0/0	0/0			
E	ILTFIX	RC/EFI	0/0	0/0	0/0	0/0			
S	INGEST	RC/EFI	0/0	0/0	0/0	0/0			
S	OZONE	RC/EFI	0/0	0/0	0/0	0/0			
I	TAPESCAN	PLN	2	2	2	2			
N	COMMENTS		OK	OK	OK	OK			
G			Prod 3	Prod 3	Prod 3	Prod 3			

Date: 9/27/81
Operator: JB

	PLAYBACK		12651	12652	12653	12659			
T	Generation date on DT		9/26	9/26	9/26	9/26			
I	DT Start Time		[illegible]	[illegible]	[illegible]	[illegible]			
M	DT End Time		[illegible]	[illegible]	[illegible]	[illegible]			
E	P.U. of DT		800	800	900	800			
S	Time of Processing Job Submission		830	830	830	830			
	P.U. of Printout		1000	1000	1000	1000			
	Time of Delivery for Imaging		1010	1010	1010	1010			
	Transmission Time		1120	1132	1152	1205			
P	Computer Used		91	91	91	91			
R	Input Drive		0C1	0C0	0D2	0D0			
O	STACK	RC/EFI	0/0	0/0	0/0	0/0			
C	TOMREL	RC/EFI	0/0	0/0	0/0	0/0			
E	ILTFIX	RC/EFI	0/0	0/0	0/0	0/0			
S	INGEST	RC/EFI	0/0	0/0	0/0	0/0			
S	OZONE	RC/EFI	0/0	0/0	0/0	0/0			
I	TAPESCAN	PLN	2	2	2	2			
N	COMMENTS		OK	OK	OK	OK			
G			Prod 3	Prod 3	Prod 3	Prod 3			

Date: 9/27/81
Operator: YB

						2nd	1st	3rd
	PLAYBACK	12665	"	"	"	12666	12665	12667
	Generation date on DT	9/27	"	"	"	9/27	9/27	9/27
T	DT Start Time	[illegible]	"	"	"	[illegible]	[illegible]	[illegible]
I	DT End Time	[illegible]	"	"	"	[illegible]	[illegible]	[illegible]
M	P.U. of DT	1330	"	"	"	1536	1730	1736
E	Time of Processing Job Submission	1340	1400	1430	1455	1540	1740	1740
S	P.U. of Printout	1400	1430	1455	1525	1810	1920	1930
	Time of Delivery for Imaging	—	—	—	—	1620	1820	1820
	Transmission Time					1728	1830	1840
P	Computer Used	91	91	91	91	91	91	91
R	Input Drive	OCO	OD2	OC1	OCO	OC6	OCO	OC2
O	STACK RC/EFI	0/0	0/0	0/0	0/0	0/0	0/0	0/0
C	TOMREL RC/EFI	S001	S001	S001	S001	0/0	0/0	0/0
E	ILTFIX RC/EFI					✓/0	0/0	0/0
S	INGEST RC/EFI					0/0	0/0	0/0
S	OZONE RC/EFI					0/0	0/0	0/0
I	TAPESCAN DEN					2	2	2
N G	COMMENTS	ABEND S001	ABEND S001	ABEND S001 Submitted orig DT	ABEND S001 Submitted orig DT	OK Prod3	OK Prod3 Resubmitted New copy of DT	OK Prod3

Gave DT & Orig Back to B. Barnett

Date: 9/27/81
Operator: YB

		4th						
	PLAYBACK	12668						
	Generation date on DT	9/27						
T	DT Start Time	[illegible]						
I	DT End Time	[illegible]						
M	P.U. of DT	1837						
E	Time of Processing Job Submission	1842						
S	P.U. of Printout	1905						
	Time of Delivery for Imaging	1915						
	Transmission Time	1950						
P	Computer Used	91						
R	Input Drive	OC1						
O	STACK RC/EFI	0/0						
C	TOMREL RC/EFI	0/0						
E	ILTFIX RC/EFI	0/0						
S	INGEST RC/EFI	0/0						
S	OZONE RC/EFI	0/0						
I	TAPESCAN DEN	2						
N G	COMMENTS	OK Prod3						

Date: 9/28/81
Operator: [illegible]

	PLAYBACK	12679	12681	12681	12682		
T	Generation date on DT	9/28	9/28	9/28	9/28		
I	DT Start Time	15/19/39	17/00/59	18/42/51	20/23/43		
M	DT End Time	17/00/23	18/41/23	20/25/31	22/08/11		
E	P.U. of DT	1938	1730	2135	2147		
S	Time of Processing Job Submission	1950	1740	2153	2153		
	P.U. of Printout	1930	1930	930 9/29	930 9/29		
	Time of Delivery for Imaging	1535	1830	2238	2238		
	Transmission Time	1550	1840	1102 9/29	1114 9/29		
P	Computer Used	91	91	91	91		
R	Input Drive	OCO	OC1	OCO	OC1		
O	STACK (RC/EF)	0/0	0/0	0/0	0/0		
C	TOMREL (RC/EF)	0/0	0/0	0/0	0/0		
E	ILTFIX (RC/EF)	0/0	0/0	0/0	0/0		
S	INGEST (RC/EF)	0/0	0/0	0/0	0/0		
S	OZONE (RC/EF)	0/0	0/0	0/6	0/6		
I	TAPESCAN (DEV)	2	2	2	2		
N	COMMENTS	OK Prod3	OK Prod3	OK Prod3	OK Prod3		
G	Groundstation	ULA	GDS	HAW	HAW		

ULA Down after 1700 GMT for monthly maintenance

Date: 9/29/81
Operator: [illegible]

	PLAYBACK	12692	12693	12694	12695	12695		
T	Generation date on DT	9/29	9/20	9/29	9/29	9/29		
I	DT Start Time	03/53/[illegible]	05/37/[illegible]	17/[illegible]/03	18/52/55	"		
M	DT End Time	05/24/[illegible]	07/19/35	19/00/[illegible]	20/42/[illegible]	"		
E	P.U. of DT	1140	1353	1605	1800	"		
S	Time of Processing Job Submission	1150	1400	1612	1805	1920		
	P.U. of Printout	1300	1640	1820	1930	2050		
	Time of Delivery for Imaging	—	1510	1700	—	1940		
	Transmission Time	—	1522	1734	[illegible]	1955		
P	Computer Used	91	91	91	91	91		
R	Input Drive	OCO	OCO	OCO	ODO	OCO		
O	STACK (RC/EF)	0/0	0/0	0/0	0/0	0/0		
C	TOMREL (RC/EF)	0/0	0/0	0/0	0/0	0/0		
E	ILTFIX (RC/EF)	0/0	0/0	0/0	0/0	0/0		
S	INGEST (RC/EF)	0/0	0/0	0/0	0/0	0/0		
S	OZONE (RC/EF)	0/0	0/0	0/0	0/0	0/0		
I	TAPESCAN (DEV)	2	2	2	2	2		
N	COMMENTS	Prod3 Nothing on OZone Tape; Rerun 1 mounted tape drive 2 without DT	OK Prod3	Prod3	Prod3 Nothing on OZone Tape	OK Prod3		
G								

OZone Tape was not mounted for OZone step. It wasn't mounted until tapescan step. Then, nothing on it.

12692 ORBIT out of Region. HAVE full coverage

12692 submitted total of 4 times..

Date: 4/30/91
Operator: YB

PLAYBACK	12706	12707	12709	12708
TIMES: Generation date on DT	4/30	4/30	4/30	
TIMES: DT Start Time	04/13/21	05/05/21	05/05/21	
TIMES: DT End Time	05/05/21	05/22/27	05/05/21	
TIMES: P.V. of DT	1247	1430	1755	
TIMES: Time of Processing Job submission	1205	1436	1800	
TIMES: P.V. of Printout	1415	1555	1943	
TIMES: Time of Delivery for Imaging	1350	1520	1900	
TIMES: Transmission Time	1359	1530	1920	
PROCESSING: Computer Used	91	91	91	
PROCESSING: Input Drive	OC1	OC0	OC0	
PROCESSING: STACK (RC 27)	0/0	0/0	0/0	
PROCESSING: TOMREL (RC 181)	0/0	0/0	0/0	
PROCESSING: ILTFIX (RC 14)	0/0	0/0	0/0	
PROCESSING: INGEST (RC 22)	0/0	0/0	0/0	
PROCESSING: OZONE (RC 77)	0/0	0/0	0/0	
PROCESSING: TAPESCAN	PLN 2	2	2	
COMMENTS	OK Prod 13	OK Prod 15	OK Prod 14	Playback Delayed 6 hours OR more. Will process if Necessary

ULA HAD POWER OUT when Nimbus went by and was unable to retrieve data at that time.

Date: 5/1/91
Operator: YB

PLAYBACK	12708
TIMES: Generation date on DT	4/30
TIMES: DT Start Time	05/05/21
TIMES: DT End Time	05/05/21
TIMES: P.V. of DT	1800
TIMES: Time of Processing Job submission	1810
TIMES: P.V. of Printout	1900
TIMES: Time of Delivery for Imaging	1913
TIMES: Transmission Time	1956
PROCESSING: Computer Used	91
PROCESSING: Input Drive	OC0
PROCESSING: STACK (RC 27)	0/0
PROCESSING: TOMREL (RC 181)	0/0
PROCESSING: ILTFIX (RC 14)	0/0
PROCESSING: INGEST (RC 22)	0/0
PROCESSING: OZONE (RC 77)	0/0
PROCESSING: TAPESCAN	PLN 2
COMMENTS	OK Prod 4 — Power out in ULA will retrieve from 5/2

Date: 5/2/81
Operator: JB

PLAYBACK	12720	12721	12722	12723
TIMES: Generation date on DT	5/1	5/1	5/1	5/1
TIMES: DT Start Time				
TIMES: DT End Time				
TIMES: P.V. of DT	1830	1830	1830	1830
TIMES: Time of Processing Job submission	1845	1845	1845	1845
TIMES: P.V. of Printout	2000	2000	2000	2000
TIMES: Time of Delivery for Imaging	815	815	815	815
TIMES: Transmission Time	1350	1406	1419	1432
PROCESSING: Computer Used	91	91	91	91
PROCESSING: Input Drive	001	000	001	000
PROCESSING: STACK	0/0	0/0	0/0	0/0
PROCESSING: TOMREL	0/0	0/0	0/0	0/0
PROCESSING: ILTFIX	0/0	0/0	0/0	0/0
PROCESSING: INGEST	0/0	0/0	0/0	0/0
PROCESSING: OZONE	0/0	0/0	0/0	0/0
PROCESSING: TAPESCAN	2	2	2	2
COMMENTS	OK Ready	OK Ready	OK Ready	OK Ready

Date: 5/2/81
Operator: JB

PLAYBACK	12735	12736	12737
TIMES: Generation date on DT	5/2	5/2	5/2
TIMES: DT Start Time			
TIMES: DT End Time			
TIMES: P.V. of DT	1830	1830	1835
TIMES: Time of Processing Job submission	1845	1845	1845
TIMES: P.V. of Printout	2000	2000	2000
TIMES: Time of Delivery for Imaging	815	815	815
TIMES: Transmission Time	1454	1506	1521
PROCESSING: Computer Used	91	91	91
PROCESSING: Input Drive	000	001	000
PROCESSING: STACK	0/0	0/0	0/0
PROCESSING: TOMREL	0/0	0/0	0/0
PROCESSING: ILTFIX	0/0	0/0	0/0
PROCESSING: INGEST	0/0	0/0	0/0
PROCESSING: OZONE	0/0	0/0	0/0
PROCESSING: TAPESCAN	2	2	2
COMMENTS	OK Ready	OK Ready	OK Ready

Date: 5/9/91
Operator: JB

PLAYBACK	12734	12748	12749	12750	12751		
TIMES: Generation date to DT	5/2	5/3	5/3	5/3	5/3		
TIMES: DT Start Time	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
TIMES: DT End Time	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
TIMES: P.V. of DT	800 5/1	800 5/1	800 5/1	800 5/1	800 5/1		
TIMES: Time of Processing Job submission	830	830	830	830	830		
TIMES: P.V. of Printout	1000	1000	1000	1000	1000		
TIMES: Time of Delivery for Imagery	1015	1015	1015	1015	1015		
TIMES: Transmission Time	1493 5/1	1531	1543	1559	1606		
PROCESSING: Computer Used	91	91	91	91	91		
PROCESSING: Input Drive	OC1	OC0	OD0	OC1	OD1		
PROCESSING: STACK SR/LI	0/0	0/0	0/0	0/0	0/0		
PROCESSING: TOMREL SR/ISI	0/0	0/0	0/0	0/0	0/0		
PROCESSING: ILTFIX SR/LH	0/0	0/0	0/0	0/0	0/0		
PROCESSING: INGEST DI/SH	0/0	0/0	0/0	0/0	0/0		
PROCESSING: OZONE SH/SI	0/0	0/0	0/0	0/0	0/0		
PROCESSING: TAPESCAN DEN	2	2	2	2	2		
COMMENTS	OK Ready	OK Ready	OK Ready	OK Ready	OK Ready		

Date: 5/9/91
Operator: JB

PLAYBACK	12762	12767	12771	12765			
TIMES: Generation date to DT	5/9	5/9	5/9	5/9			
TIMES: DT Start Time	[illegible]	[illegible]	[illegible]	[illegible]			
TIMES: DT End Time	[illegible]	[illegible]	[illegible]	[illegible]			
TIMES: P.V. of DT	0900	0530	1730	0900			
TIMES: Time of Processing Job submission	0910	0540	1732	0905			
TIMES: P.V. of Printout	0948	1615	1825	2013			
TIMES: Time of Delivery for Imagery	0959	1628	1835	2020			
TIMES: Transmission Time	1616	1712	1844	2038			
PROCESSING: Computer Used	91	91	91	91			
PROCESSING: Input Drive	OC0	OC0	OD2	OC0			
PROCESSING: STACK SR/LI	0/0	0/0	0/0	0/0			
PROCESSING: TOMREL SR/ISI	0/0	0/0	0/0	0/0			
PROCESSING: ILTFIX SR/LH	0/0	0/0	0/0	0/0			
PROCESSING: INGEST DI/SH	0/0	0/0	0/0	0/0			
PROCESSING: OZONE SH/SI	0/0	0/0	0/0	0/0			
PROCESSING: TAPESCAN DEN	2	2	2	2			
COMMENTS	OK Ready	OK Ready	OK Ready	OK Ready			

Date: 5/5/81
Operator: JB

		PLAYBACK	12775	12776	12777	12778			
		Generation date on DT	5/5	5/5	5/5	5/5			
T		DT Start Time	[illegible]	[illegible]	[illegible]	[illegible]			
I		DT End Time	[illegible]	[illegible]	[illegible]	[illegible]			
M		P.U. of DT	1255	[illegible]20	1630	1731			
E		Time of Processing Job Submission	1303	1510	1638	1737			
S		P.U. of Printout	1340	1716	1719	1806			
		Time of Delivery for Imaging	1350	1726	1726	1812			
		Transmission Time	1931	1749	1759	1842			
P		Computer Used	91	91	91	91			
R		Input Drive	0C0	0C0	0C0	0C0			
O	STACK		0/0	0/0	0/0	0/0			
C	TOMREL		0/0	0/0	0/0	0/0			
E	ILTFIX		0/0	0/0	0/0	0/0			
S	INGEST		0/0	0/0	0/0	0/0			
S	OZONE		0/0	0/0	0/0	0/0			
I	TAPESCAN		2	2	2	2			
N	COMMENTS		OK Ready	OK Ready	OK Ready	OK Ready			
G									

Date: 5/6/81
Operator: JB

		PLAYBACK	12789	12790	12791	12792			
		Generation date on DT	5/6	5/6	5/6	5/6			
T		DT Start Time	[illegible]	[illegible]	[illegible]	[illegible]			
I		DT End Time	[illegible]	[illegible]	[illegible]	[illegible]			
M		P.U. of DT	1250	1455	1620	1755			
E		Time of Processing Job Submission	1257	1500	1628	1809			
S		P.U. of Printout	1353	1538	1708	1840			
		Time of Delivery for Imaging	1400	1547	1720	1850			
		Transmission Time	1425	1608	1943	1955			
P		Computer Used	91	91	91	91			
R		Input Drive	0C0	0C0	0C1	0C0			
O	STACK		0/0	0/0	0/0	0/0			
C	TOMREL		0/0	0/0	0/0	0/0			
E	ILTFIX		0/0	0/0	0/0	0/0			
S	INGEST		0/0	0/0	0/0	0/0			
S	OZONE		0/0	0/0	0/0	0/0			
I	TAPESCAN		2	2	2	2			
N	COMMENTS		OK Ready	OK Ready	OK Ready	OK Ready			
G									

Date: 5/7/81
Computer: GB

	PLAYBACK	12803	12804	12805	12806			
T	Generation date on DT	5/7	5/7	5/7	5/7			
I	DT Start Time	[illegible]	[illegible]	[illegible]	[illegible]			
M	DT End Time	[illegible]	[illegible]	[illegible]	[illegible]			
E	P.U. of DT	1334	1538	1630	1947			
S	Time of Processing Job Submission	1344	1543	1830	1957			
	P.U. of Printout	1420	1610	1919	2049			
	Time of Delivery for Imaging	1432	1620	1930	2059			
	Transmission Time	1453	1706	1942	2110			
P	Computer Used	91	91	91	91			
R	Input Drive	OCO	OCO	OC1	OCO			
O	STACK (RC/EF)	0/0	0/0	0/0	0/0			
C	TOMREL (RC/EF)	0/0	0/0	0/0	0/0			
E	ILTFIX (RC/EF)	0/0	0/0	0/0	0/0			
S	INGEST (RC/EF)	0/0	0/0	0/0	0/0			
S	OZONE (RC/EF)	0/0	0/0	0/0	0/0			
I	TAPESCAN (PLN)	2	2	2	2			
N G	COMMENTS	OK Prod 4	OK Prod 4	OK Prod 4 91 down 2 hrs.	OK Prod 4 2 hrs to get DT			

Date: 5/8/81
Computer: GB

	PLAYBACK	12817	12818	12819	12820			
T	Generation date on DT	5/8	5/8	5/8	5/8			
I	DT Start Time	[illegible]	[illegible]	[illegible]	[illegible]			
M	DT End Time	[illegible]	[illegible]	[illegible]	[illegible]			
E	P.U. of DT	1343	1530	1650	1915			
S	Time of Processing Job Submission	1352	1540	1655	1925			
	P.U. of Printout	1432	1616	1745	2045			
	Time of Delivery for Imaging	1440	1625	1755	2052			
	Transmission Time	1458	1643	1803	1130 5/12			
P	Computer Used	91	91	91	91			
R	Input Drive	OCO	OCO	OD2	OC8			
O	STACK (RC/EF)	0/0	0/0	0/0	0/0			
C	TOMREL (RC/EF)	0/0	3/0	0/0	0/0			
E	ILTFIX (RC/EF)	0/0	-/0	0/0	0/0			
S	INGEST (RC/EF)	0/0	0/0	0/0	0/0			
S	OZONE (RC/EF)	0/0	0/0	3/0	0/0			
I	TAPESCAN (PLN)	2	2	2	2			
N G	COMMENTS	OK Prod 4	OK Prod 4	OK Prod 4	OK Prod 4			

Date: 5/9/81
Operator: YB

	PLAYBACK		12831	12832	12833	12834
TIMES	Generation date on DT		5/9	5/9	5/9	5/9
	DT Start Time		15/04/10	16/58/19	17/38/07	20/21/37
	DT End Time		16/56/27	18/39/28	20/10/[illegible]	22/04/39
	P.U. of DT		1900	1900	1900	1900
	Time of Processing Job Submission		1915	1915	1915	1915
	P.U. of Printout		800 5/10	800 5/10	800 5/10	800 5/10
	Time of Delivery for Imaging		895	845	895	845
	Transmission Time		1047 5/10	1100 5/10	1110 5/10	1120 5/10
PROCESSING	Computer Used		91	91	91	91
	Input Drive		OCO	OCO	ODO	OCO
	STACK	RC/EF	0/0	0/0	0/0	0/0
	TOMREL	RC/EF	0/0	0/0	0/0	0/0
	ILTFIX	RC/EF	0/0	0/0	0/0	0/0
	INGEST	RC/EF	0/0	0/0	0/0	0/0
	OZONE	RC/EF	0/0	0/0	0/0	0/0
	TAPESCAN	DEV	2	2	2	2
	COMMENTS		ok Prod 4	ok Prod 4	ok Prod 4	ok Prod 4

Date: 5/11/81
Operator: YB

	PLAYBACK		12845	12846	12847	12848
TIMES	Generation date on DT		5/10	5/10	5/10	5/10
	DT Start Time		15/34/19	17/10/11	18/57/05	[illegible]/40/19
	DT End Time		17/15/07	18/57/31	20/40/27	21/23/23
	P.U. of DT		815 5/10	815 5/10	815 5/10	815 5/10
	Time of Processing Job Submission		900	906	900	906
	P.U. of Printout		1023	1035	1048	1048
	Time of Delivery for Imaging		1100	1100	1100	1100
	Transmission Time		1159	1210	1222	1235
PROCESSING	Computer Used		75	91	91	91
	Input Drive		OD2	OCO	ODO	OCO
	STACK	RC/EF	0/0	0/0	0/0	0/0
	TOMREL	RC/EF	0/0	0/0	0/0	0/0
	ILTFIX	RC/EF	0/0	0/0	0/0	0/0
	INGEST	RC/EF	0/0	0/0	0/0	0/0
	OZONE	RC/EF	0/0	0/0	0/0	0/0
	TAPESCAN	DEV	2	2	2	2
	COMMENTS		ok Prod 4	ok Prod 4	ok Prod 4	ok Prod 4

Date: 5/11/81
Operator: [illegible]

			Rt3	RT2		
	PLAYBACK		12858	12859	12860	12861
T	Generation date on DT		5/11	5/11	5/11	5/11
I	DT Start Time		14/11/07	15/52/11	17/39/03	19/19/51
M	DT End Time		15/51/23	17/33/15	19/15/23	20/58/19
E	P.U. of DT		1345	1435	1600	1930
S	Time of Processing Job Submission		1357	1445	1700	1940
	P.U. of Printout		1440	1600	1808	2023
	Time of Delivery for Imaging		5/15	5/15	1815	2030
	Transmission Time		1706 5/15	1717 5/15	1814	2050
P	Computer Used		91	91	91	91
R	Input Drive		OCO	OC1	OCO	OCO
O	STACK	RC/EF	0/0	0/0	0/0	0/0
C	TOMREL	RC/EF	0/0	0/0	0/0	0/0
E	ILTFIX	RC/EF	0/0	0/0	0/0	0/0
S	INGEST	RC/EF	0/0	0/0	0/0	0/0
S	OZONE	RC/EF	16/	16/	0/0	0/0
I	TAPESCAN	PEN	2	2	2	2
N	COMMENTS		Submitted 3 times w/different tape; Resubmitted 5/15 Run ok	[illegible]; Resubmitted 2nd time R16 again	ok Prod4	ok Prod4
G						

Date: 5/12/81
Operator: [illegible]

	PLAYBACK		12872	12873	12874	12875
T	Generation date on DT		5/12	5/12	5/12	5/12
I	DT Start Time		14/28/59	16/10/19	17/51/07	19/34/35
M	DT End Time		16/09/15	17/52/11	19/34/51	21/17/15
E	P.U. of DT		1315	1500	1700	1830
S	Time of Processing Job Submission		1325	1510	1750	1900
	P.U. of Printout		1400	1553	1848	1938
	Time of Delivery for Imaging		1800	1800	1900	1800
	Transmission Time		1910 5/14	1811 5/13	2029 5/13	1830 5/14
P	Computer Used		91	91	91	91
R	Input Drive		OCO	OC1	OCO	OD2
O	STACK	RC/EF	0/0	0/0	0/0	0/0
C	TOMREL	RC/EF	0/0	0/0	0/0	0/0
E	ILTFIX	RC/EF	0/0	0/0	0/0	0/0
S	INGEST	RC/EF	0/0	0/0	0/0	0/0
S	OZONE	RC/EF	16/	16/	0/0	16/
I	TAPESCAN	PEN	2	2	3	2
N	COMMENTS		R16 Ozone	R16 Ozone	ok Prod4	R16 Ozone
G						

TAPESCAN SHOWED DATA on R16's
So Delivery was made

Date: 5/13/81
Operator: JB

	PLAYBACK	12886	12887	12888	12889
TIMES	Generation Date on DT	5/13	5/13	5/13	5/13
	DT Start Time	11/57/22	11/58/43	12/00/19	12/01/39
	DT End Time	11/58/27	12/00/59	12/01/38	12/02/38
	P.V. of DT	1325	1600	1800	1800
	Time of Processing Job Submission	1340	1620	1810	1810
	P.V. of Printout	1530	1700	1908	1908
	Time of Delivery for Imagine	1540	1710	1915	1915
	Transmission Time	1733	1848	2030	2054
PROCESSING	Computer Used	91	91	91	91
	Input Drive	000	000	000	000
	STACK RC/LE	0/0	0/0	0/0	0/0
	TOMREL RC/LE	0/0	0/0	0/0	0/0
	ILTFIX RC/LE	0/0	0/0	0/0	0/0
	INGEST RC/LE	0/0	0/0	0/0	0/0
	OZONE RC/LE	0/0	0/0	0/0	0/0
	TAPESCAN DEN	2	2	2	2
	COMMENTS	OK Prod2	OK Prod2	OK Prod2	OK Prod2

Date: 5/14/81
Operator: JB

	PLAYBACK	12900	12901	12902	12903
TIMES	Generation Date on DT	5/14	5/14	5/14	5/14
	DT Start Time	15/06/19	15/06/35	15/06/19	20/10/38
	DT End Time	15/06/35	15/25/17	20/10/38	20/50/38
	P.V. of DT	1400	1600	1720	1840
	Time of Processing Job Submission	1420	1605	1728	1848
	P.V. of Printout	1541	1720	1752	1933
	Time of Delivery for Imagine	1550	1730	1800	1949
	Transmission Time	1705	1836	1845	2006
PROCESSING	Computer Used	91	91	91	91
	Input Drive	000	000	000	000
	STACK RC/LE	0/0	0/0	0/0	0/0
	TOMREL RC/LE	0/0	0/0	0/0	0/0
	ILTFIX RC/LE	0/0	0/0	0/0	0/0
	INGEST RC/LE	0/0	0/0	0/0	0/0
	OZONE RC/LE	0/0	0/0	0/0	0/0
	TAPESCAN DEN	2	2	2	2
	COMMENTS	OK Prod4	OK Prod4	OK Prod4	OK Prod4

Date: 5/15/81
Operator: JB

	PLAYBACK		12914	12915	12916	12917			
	Generation Date on DT		5/15	5/15	5/15	5/15			
T	DT Start Time		15/29/55	17/05/15	18/46/02	20/20/15			
I	DT End Time		17/04/29	18/47/07	20/19/31	22/11/15			
M	P.U. of DT		1500	1706	1840	1855			
E	Time of Processing Job Submission		1742	1713	1900	1909			
S	P.U. of Printout		1822	1810	1942	1942			
	Time of Delivery for Imaging		1830	1820	1950	1950			
	Transmission Time		1853	1905	2039	2051			
P	Computer Used		91	75	91	91			
R	Input Drive		OCO	OD3	OCO	OC1			
O	STACK	RC/LFL	0/0	0/0	0/0	0/0			
C	TOMREL	RC/LFL	0/0	0/0	0/0	0/0			
E	ILTFIX	RC/LFL	0/0	0/0	0/0	0/0			
S	INGEST	RC/LFL	0/0	0/0	0/0	0/0			
S	OZONE	RC/LFL	0/0	0/0	0/0	0/0			
I	TAPESCAN	DEV	2	2	2	2			
N	COMMENTS		OK Prod 4	OK Prod 4	OK Prod 4	OK Prod 4			
G									