#595

Earth Sc.

NIMBUS 7

GARP (FGGE/ERB-M)	78-098A-07J	595	78-098A-07J	ESRB-00034
GARP (FGGE/ERB-Z)	78-098A-07K	595	78-098A-07K	ESRB-00014
GARP (FGGE/SMMR-LO)	78-098A-08T	595	78-098A-08T	ESAD-00240
GARP (FGGE/SMMR-LO)	78-098A-08U	595	78-098A-08U	ESAD-00175
GARP (FGGE/SMMR-30)	78-098A-08V	595	78-098A-08V	ESAD-00055
GARP (FGGE/SBUV)	78-098A-09S			

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    a. Associated Documents

    b. Core Catalog Materials

---

1. INTRODUCTION:

The documentation for this data set was originally on paper, kept in NSSDC's Data Set Catalogs (DSCs). The paper documentation in the Data Set Catalogs have been made into digital images, and then collected into a single PDF file for each Data Set Catalog. The inventory information in these DSCs is current as of July 1, 2004. This inventory information is now no longer maintained in the DSCs, but is now managed in the inventory part of the NSSDC information system. The information existing in the DSCs is now not needed for locating the data files, but we did not remove that inventory information.

The offline tape datasets have now been migrated from the original magnetic tape to Archival Information Packages (AIP's).

A prior restoration may have been done on data sets, if a requestor of this data set has questions; they should send an inquiry to the request office to see if additional information exists.

2. ERRATA/CHANGE LOG:

NOTE: Changes are made in a text box, and will show up that way when displayed on screen with a PDF reader.

When printing, special settings may be required to make the text box appear on the printed output.

Version	Date	Person	Page	Description of Change
01				
02				

3 LINKS TO RELEVANT INFORMATION IN THE ONLINE NSSDC INFORMATION SYSTEM:

http://nssdc.gsfc.nasa.gov/nmc/

[NOTE: This link will take you to the main page of the NSSDC Master Catalog. There you will be able to perform searches to find additional information]

4. CATALOG MATERIALS:

a. Associated Documents To find associated documents you will need to know the document ID number and then click here.
http://nssdcftp.gsfc.nasa.gov/miscellaneous/documents/

b. Core Catalog Materials

THIS DATA SET CATALOG CONSISTS OF SIX NIMBUS 7 DATA SETS.

GARP (FGGE/ERB-M) RADATION BUDGET PARAMETERS

78-098A-07J ESRB-00034

GARP (FGGE/ERB-Z) SOLAR IRRADIANCE ZONALLY AVERAGED INSOLATION

78-098A-07K ESRB-00014

GARP (FGGE/SMMR-LO) SEA SURFACE TEMPERATURE

78-098A-08T ESAD-00240

GARP (FGGE/SMMR-LO) TOTAL ATMOSPHERIC WATER VAPOR

78-098A-08U ESAD-00175

GARP (FGGE/SMMR-30) SEA ICE CONCENTRATION

78-098A-08V ESAD-00175

GARP (FGGE/SBUV) TOTAL OZONE PROFILES

78-098A-09S ESAD-00055

REQ. AGENT	RAND NO.	ACQ. AGENT
DAD	V0249	CYN

NIMBUS 7

GARP (FGGE/ERB-M) RADIATION BUDGET

PARAMETERS ON MAGNETIC TAPE

78-098A-07J ESRB-00034

THIS DATA SET CATALOG CONSISTS OF ONE MAGNETIC TAPE. THE TAPE IS 9-TRACK, 1600 BPI, BINARY AND WAS CREATED ON AN IBM 360 COMPUTER. THE TAPE HAS AN EBCDIC HEADER FILE FOLLOWED BY BINARY DATA FILES. THE D NUMBER AND THE TIME SPAN IS AS FOLLOWS:

D#	FILES	TIME SPAN
D-63114	18	12/02/78 - 11/29/79

INVENTORY OF FGGE TAPES FOR WDC-B
(all tapes are 9-track, 800bpi)

Sequence No.	Time Span of Data
FGGE/ERB-M	
UA2101	12/02/78 - 5/31/79
UA2102	6/01/79 - 11/29/79
FGGE/ERB-Z	
UA2201	12/01/78 - 11/30/79
FGGE/SBUV	
UA2301	12/01/78 - 12/31/78
UA2302	1/01/79 - 1/31/79
UA2303	2/01/79 - 2/28/79
UA2304	3/01/79 - 3/31/79
UA2305	4/01/79 - 4/30/79
UA2306	5/01/79 - 5/31/79
UA2307	6/01/79 - 6/30/79
UA2308	7/01/79 - 7/31/79
UA2309	8/01/79 - 8/31/79
UA2310	9/01/79 - 9/30/79
UA2311	10/01/79 - 10/31/79
UA2312	11/01/79 - 11/30/79
FGGE/SMMR-LO (Sea Surface Temperature)	
UA0601	12/01/78 - 5/31/79
UA0602	6/01/79 - 11/30/79
FGGE/SMMR-LO (Total Atmospheric Water Vapor)	
UA0701	12/01/78 - 12/31/78
UA0702	1/01/79 - 1/31/79
UA0703	2/01/79 - 2/28/79
UA0704	3/01/79 - 3/31/79
UA0705	4/01/79 - 4/30/79
UA0706	5/01/79 - 5/31/79
UA0707	6/01/79 - 6/30/79
UA0708	7/01/79 - 7/31/79
UA0709	8/01/79 - 8/31/79
UA0710	9/01/79 - 9/30/79
UA0711	10/01/79 - 10/31/79
UA0712	11/01/79 - 11/30/79

FGGE/SMMR-30

UA0801	12/01/78 - 12/10/78
UA0802	12/11/78 - 12/20/78
UA0803	12/21/78 - 12/31/78
UA0804	1/01/79 - 1/10/79
UA0805	1/11/79 - 1/20/79
UA0806	1/21/79 - 1/31/79
UA0807	2/01/79 - 2/10/79
UA0808	2/11/79 - 2/20/79
UA0809	2/21/79 - 2/28/79
UA0810	3/01/79 - 3/10/79
UA0811	3/11/79 - 3/20/79
UA0812	3/21/79 - 3/28/79
UA0813	4/01/79 - 4/10/79
UA0814	4/11/79 - 4/20/79
UA0815	4/21/79 - 4/30/79
UA0816	5/01/79 - 5/10/79
UA0817	5/11/79 - 5/20/79
UA0818	5/21/79 - 5/31/79
UA0819	6/01/79 - 6/10/79
UA0820	6/11/79 - 6/20/79
UA0821	6/21/79 - 6/30/79
UA0822	7/03/79 - 7/10/79
UA0823	7/11/79 - 7/20/79
UA0824	7/21/79 - 7/31/79
UA0825	8/01/79 - 8/10/79
UA0826	8/11/79 - 8/20/79
UA0827	8/21/79 - 8/31/79
UA0828	9/01/79 - 9/10/79
UA0829	9/11/79 - 9/20/79
UA0830	9/21/79 - 9/30/79
UA0831	10/01/79 - 10/10/79
UA0832	10/11/79 - 10/20/79
UA0833	10/21/79 - 10/31/79
UA0834	11/01/79 - 11/10/79
UA0835	11/11/79 - 11/20/79
UA0836	11/21/79 - 11/30/79

B R I E F D E S C R I P T I O N

GARP(FGGE/ERB-M) Radn Budget Parm
78-098A-07J

The FGGE/ERB-M dataset contains 27 Earth Radiation Budget (ERB) parameters extracted and reformatted from the Nimbus-7 ERB-MATRIX dataset in accordance with the First GARP (Global Atmospheric Research Program) Global Experiment (FGGE) Level III International Exchange Format Specification. The dataset consists of four types of files: a test file, a header file, a grid-descriptor file which contains information about the ERB scanning channel target number and associated latitude limits and longitude intervals, and the data files. The FGGE/ERB-M dataset consists of one tape covering the FGGE period from December 1, 1978 through November 30, 1979.

M A T E R I A L S F O R D I S T R I B U T I O N

78-098A-07J
GARP(FGGE/ERB-M) Radn Budget Parm

FGGE/ERBM tape specification and shipping letter description, NASA CR 170547 (3/83), B42237-000A.

A C K N O W L E D G E M E N T S

When using the data in any reports, publications, or presentations, please acknowledge the National Space Science Data Center and the following individuals or groups:

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Dr. H. L. Kyle, Nasa/Gsfc, Dr. Herbert Jacobowitz, Noaa/Nesdis, And Members Of The Erb Nimbus Experiment And Information Processing Teams

NASA CR 170547

78-098A-07J
B 42237

FGGE/ERBM TAPE SPECIFICATION AND SHIPPING LETTER DESCRIPTION

MARCH 1983

NASA
National Aeronautics and
Space Administration

Goddard Space Flight Center
Greenbelt, Maryland 20771

FGGE/ERBM TAPE SPECIFICATION AND SHIPPING LETTER DESCRIPTION

Systems & Applied Sciences Corp.
5809 Annapolis Road
Hyattsville, Maryland 20784

Contract No. 27393
SSD-T-8237-002-82

FGGE/ERBM TAPE SPECIFICATION AND SHIPPING LETTER DESCRIPTION

Systems and Applied Sciences Corporation
5809 Annapolis Road
Hyattsville, Maryland 20784

Contract No. NAS5-26753

SSD-T-8237-002-82

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1. INTRODUCTION

The Nimbus-7 FGGE/ERBM tape contains 27 ERB parameters which are extracted and reformatted from the Nimbus-7 ERB-MATRIX tape, in accordance with the FGGE level III International Exchange Format Specification.

There are four types of files on a FGGE/ERBM tape. The first file on the tape is a test file. The second file on the tape is a tape-header file which describes the data set characteristics and the contents of the tape. The third is the grid-descriptor file which contains the information of the ERB scanning channel target number and their associated latitude limits and longitude intervals. The remaining one or more files are data files. Single end-of-file (EOF) tape mark will be written after each file, and two (2) EOF marks will be written after the last data file on the tape.

All files are made up of one or more physical records. Each physical record contains 4240 bytes.

2. DATA SET PRODUCTION

2.1 General Description

The FGGE/ERBM computer program converts the terrestrial parameters retrieved from the Nimbus-7 ERB experiment (Table 2-1) into the FGGE level-III format. There are four programs for this conversion. They are TAPCAT, ERBM-2C, ERBM-DP and COPY800*. In the following sections, these four programs are briefly described.

*ERBM-2C program generates 1600 bpi tapes that will be sent to WDC-A and COPY800 program copies 1600 bpi tape to 800 bpi tapes that will be sent to WDC-B.

2.2 TAPCAT PROGRAM

2.2.1 General Description

The TAPCAT Program updates the ERBM.TAPES file as new ERB-Matrix tapes become available. The program obtains the Nimbus tape sequence number, data start time, and data stop time from the tape. These are inserted with the tape library slot number into the ERBM.TAPES file. The file is sorted by data start time, and is listed for user convenience.

2.2.2 Data Flow Chart

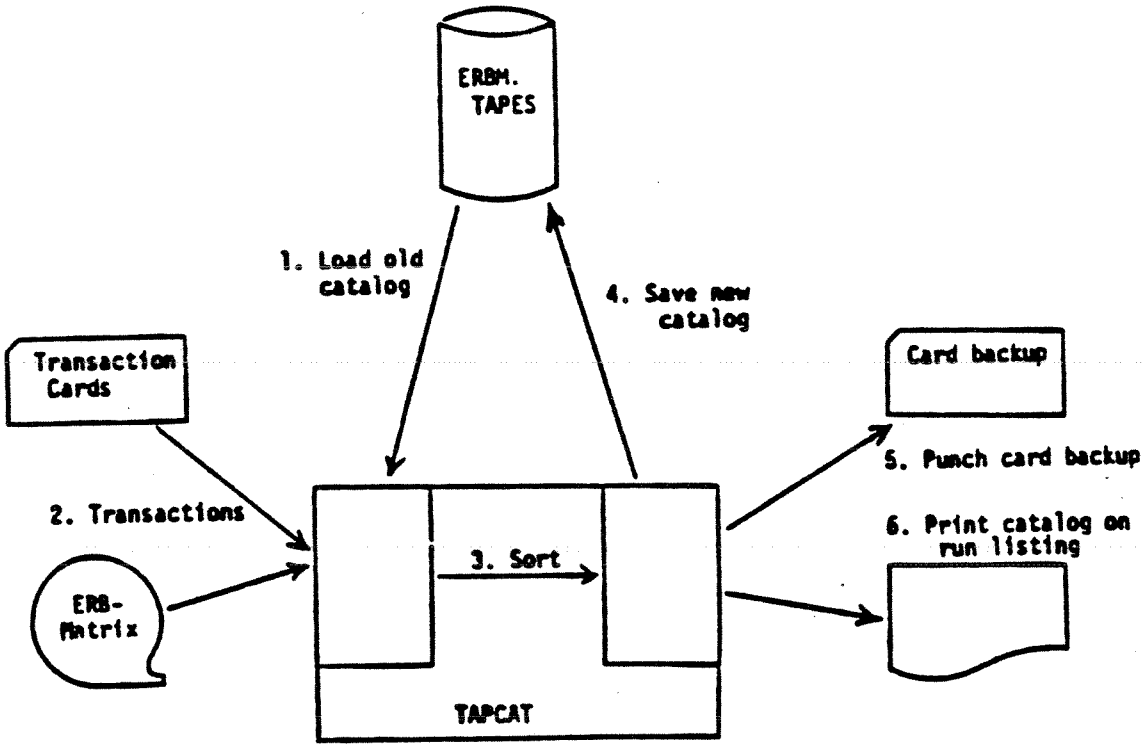

Figure 2-1. TAPCAT Data and Control Flow

TABLE 2-1

ERB Parameters

PARAMETERS	DESCRIPTIONS
1	Data Population of WFOV Observations - A.N.
2	Data Population of WFOV Observations - D.N.
3	L.W. Terrestrial Flux from WFOV Observations - A.N.
4	L.W. Terrestrial Flux from WFOV Observations - D.N.
5	Computed Maximum Reflected Energy (0.2-4.0 μm) for WFOV - A.N.
6	Computed Maximum Reflected Energy (0.2-4.0 μm) for WFOV - D.N.
7	Computed Maximum Reflected Energy (0.7-3.0 μm) for WFOV - A.N.
8	Computed Maximum Reflected Energy (0.7-3.0 μm) for WFOV - D.N.
9	Reflected Energy from WFOV Observations (0.2-4.0 μm) - A.N.
10	Reflected Energy from WFOV Observations (0.2-4.0 μm) - D.N.
11	Reflected Energy from WFOV Observations (0.7-3.0 μm) - A.N.
12	Reflected Energy from WFOV Observations (0.7-3.0 μm) - D.N.
13	Earth Albedo from WFOV Observations (0.2-4.0 μm) Using Solar Zenith Angle Correction
14	Earth Albedo from WFOV Observations (0.2-0.7 μm) Using Solar Zenith Angle Correction
15	Earth Albedo from WFOV Observations (0.7-3.0 μm) Using Solar Zenith Angle Correction
16	Net Radiation from WFOV Observations

TABLE 2-1 (continued)

ERB Parameters

PARAMETERS	DESCRIPTIONS
17	S.W. Data Population of NFOV Observations - A.N.
18	S.W. Data Population of NFOV Observations - D.N.
19	L.W. Terrestrial Flux from NFOV Observations - A.N.
20	L.W. Terrestrial Flux from NFOV Observations - D.N.
21	Average L.W. Terrestrial Flux from NFOV Observations (Weighted Average of A.N. and D.N. Data)
22	Earth Albedo from NFOV Observations
23	Net Radiation from NFOV Observations
24	L.W. Data Population of NFOV Observations - A.N.
25	L.W. Data Population of NFOV Observations - D.N.
*26	Data Population of WFOV Averaged L.W. Flux (Incremented on a Daily Basis)
*27	Data Population of NFOV Averaged L.W. Flux (Incremented on a Daily Basis)
*28	Averaged L.W. Terrestrial Flux from WFOV Observations (Average of A.N. and D.N. Data)
*29	Normalized Dispersion of L.W. Terrestrial Flux from WFOV Observations Based on Parameters 3 and 4
*30	Normalized Dispersion of Earth Albedo from WFOV Observations (0.2-4.0 μm) Based on Parameter 13 Daily Values
*31	Standard Deviation of Net Radiation from WFOV Observations
*32	Normalized Dispersion of Averaged L.W. Terrestrial Flux from NFOV Observations Based on Parameter 21
*33	Normalized Dispersion of Earth Albedo from NFOV Observations

TABLE 2-1 (Cont'd)

ERB Parameters

PARAMETER #	DESCRIPTIONS
*34	Standard Deviation of Net Radiation from NFOV Observations
*35	Minimum Earth Albedo from NFOV Observations
36	Average Solar Insolation
37	Earth Albedo from WFOV Observations (0.2-4.0 μm) NOT Using Solar Zenith Angle Correction in Calculations

A.N. = Ascending Node
D.N. = Descending Node

*These parameters will not be on the FGGE/ERBM tapes.

2.2.3 I/O Units List

2 - tape label input

4 - disk file ERBM.TAPES

5 - card input

6 - printer output

7 - punch card output

12 - ERB Matrix data records

2.3 ERBM-2C PROGRAM

2.3.1 General Description

The ERBM-2C Program determines the time span desired for the data, correlates this with the available data, and mounts the required ERB-MATRIX tapes. The selected terrestrial parameter (see Table 2-1) are converted to the FGGE level III International Exchange Format, and are stored on an intermediate tape in 1-month files. When the end of the desired data is reached, the final output tape is mounted.

The program writes a test file, a tape header file, and a grid descriptor file on the output tape, and then copies the data files from the intermediate tape to the output tape.

2.3.2 Data Flow Chart

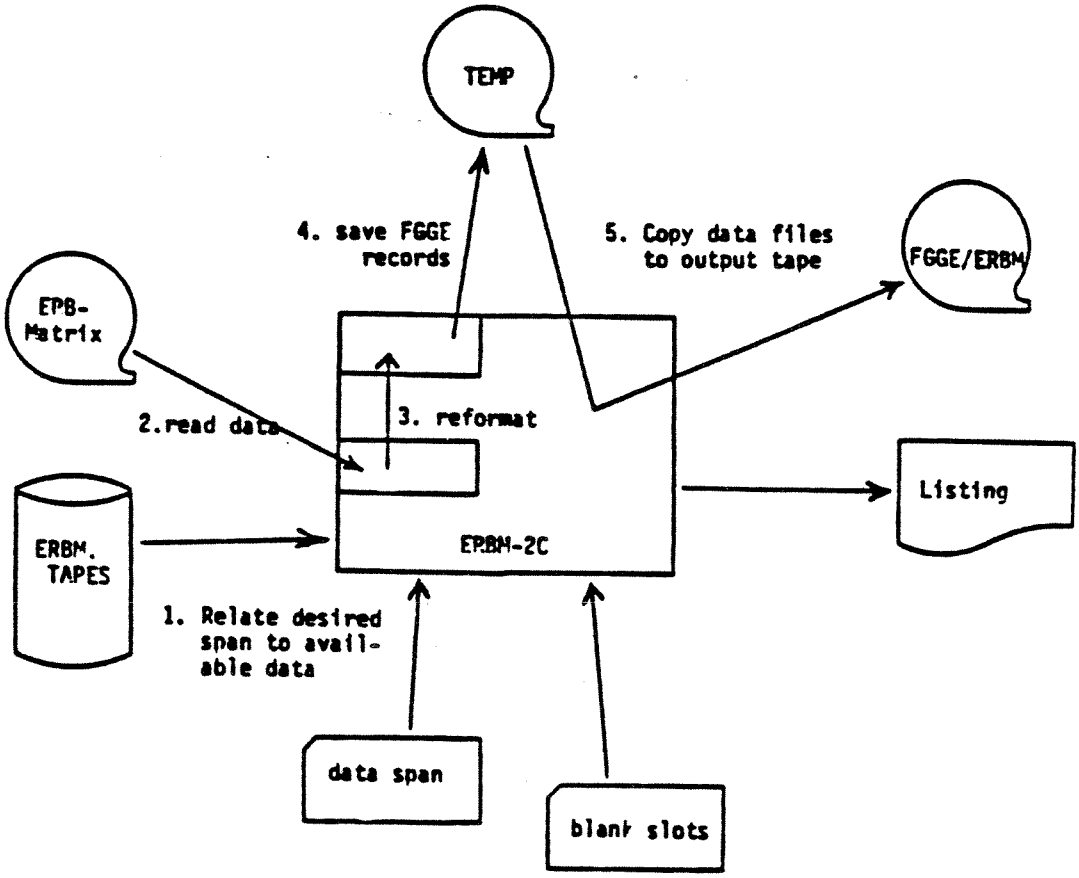

Figure 2-2. ERBM-2C Data and Control Flow.

2.3.3 I/O Units List

UNIT	DEVICE	LRECL/BLKSIZE(BYTES)	
1	9T/6250*	6300	ERB-Matrix tape label(IN)
2	9T/6250*	4240	temp. tape - data (OUT/IN)
5	card reader	80	data cards
6	printer		
8	unit 17	4240	final output tape data files
10	disk	80/800	ERBM.CLIST(TABLES), ERBM.CLIST(HDRFILE) (IN)
15	unit 1	4908/14724	ERB-Matrix data record (IN)
17	9T/6250*	80/4240	final output tape

*9 Track 6250 BPI computer compatible tape.

2.4 ERBM-DP PROGRAM

2.4.1 General Description

The ERBM-DP Program creates the shipping documentation and optional diagnostic information for the FGGE/ERBM data tapes. Statistics showing record counts and data element counts are compiled for comparison to the 2C printout. Special print options are available for detailed analysis of the data. All the output tapes (the 6250 BPI tapes are retained at GSFC, the 1600 BPI tapes are shipped to WDC-A, and the 800 BPI tapes are shipped to WDC-B) are processed separately through this program.

2.4.2 Data Flow Chart

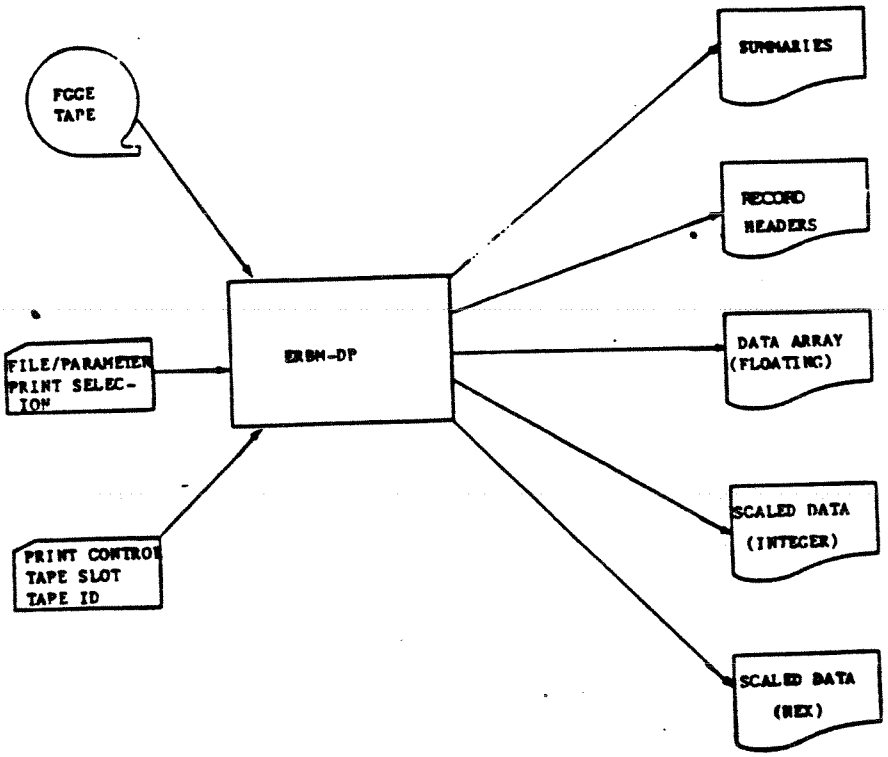

Figure 2-3. FGGE/ERBM-DP DATA FLOW

2.4.3 I/O Units List

Unit	Device	lrecl/blksize	
1	9T/1600BPI	4240	FGGE/ERBM tape input
5	card reader		data card*
6	printer		data summaries, error messages
8	printer		tape header, grid descriptor, data record headers
9	printer		data array dump: floating, de-scaled
10	printer		data array dump: integer, scaled
11	printer		data array dump: hex, scaled

* Data card specifies print level and parameter numbers to be dumped.

Print level = 0: unit 6
1: units 6 and 8
2: units 6, 8, and 9
3: units 6, 8, 9, and 10
4: units 6, 8, 9, 10, and 11

2.5 COPY800 PROGRAM

2.5.1 General Description

The COPY800 Program converts a 1600 BPI format FGGE/ERBM tape into an 800 BPI format FGGE/ERBM tape. The number of records in the test file is reduced to cover about 20 meters of the tape. The tape header is changed to state "800 BPI" instead of "1600 BPI" or "6250 BPI".

2.5.2 Data Flow Chart

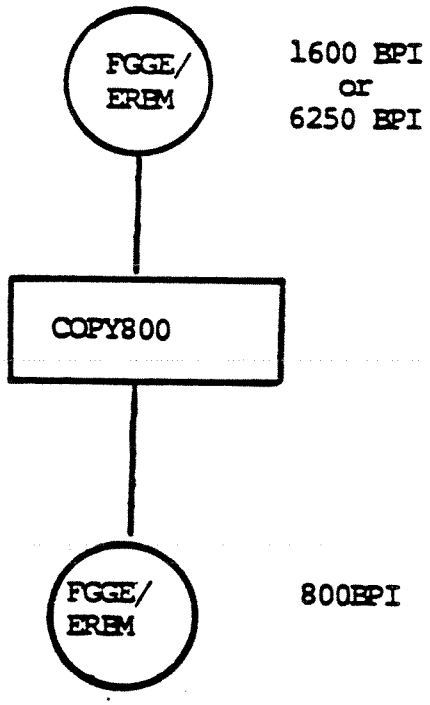

Figure 2-4. COPY800 Data Flow

2.5.3 I/O Units List

UNIT	DEVICE	
1	9 Track/1600 BPI or 9 Track/6250 BPI	FGGE/ERBM tape (IN)
2	9Track/800 BPI	FGGE/ERBM tape (OUT)
6	Printer	

3. FGGE/ERBM TAPE DESCRIPTION

3.1 Tape Specification

3.1.1 Physical tape characteristics

The physical characteristics of the FGGE/ERBM tape are described in the following:

Density:	800 BPI	1600 BPI	6250 BPI
Mode of Recording:	NRZI	PE	PE
Recording code:			
Header File and			
Grid Descriptor File:	EBCDIC	EBCDIC	EBCDIC
Test File and Data File:	Binary	Binary	Binary
Number of tracks:	9	9	9
Parity:	ODD	ODD	ODD

3.1.2 Tape Organization

The gross format of the FGGE/ERBM tape is shown in Figure 3-1. The first file on the tape is a test file and the second file is a tape header file. The third file on the tape is a grid-descriptor file and the remaining one or more files are data files. Single EOF tape mark is written after each file and 2 EOF tape marks are written after the last file on the tape.

Beginning of Tape

TEST FILE
EOF
TAPE HEADER FILE
EOF
GRID DESCRIPTOR FILE
EOF
DATA FILE 1
EOF
DATA FILE 2
EOF
EOF
DATA FILE N
EOF
EOF
UNUSED TAPE

ENDING OF TAPE

FIGURE 3-1 TAPE GROSS FORMAT

3.2 FILE SPECIFICATION

There are four types of files on a FGGE/ERBM tape. The first file on the tape is a test file. The second file on the tape is a tape header file. The third file on the tape is grid-descriptor file. The remaining files are the data files. Each of these files type is described in the following.

3.2.1 Test File

The test file contains 258 physical records on 1600 BPI tapes and 150 physical records on 800 BPI tapes. Each physical record contains 53 logical records. Each logical record contains 80 bytes. Each byte contains a hexadecimal FF (binary 11111111).

3.2.2 Tape-Header File

The tape-header file contains 4 physical records. Each physical record contains 53 logical records. Each logical record contains 80 bytes. Each byte contains an EBCDIC coded character.

The tape-header file contains information describing the data-set characteristics and the contents of the tape.

The contents of each of these logical records of the first physical record are shown in the Figure 3-2.

LOGICAL RECORD CONTENTS

```
FGGE2C20007811160078113018
004240
FORMAT(20A4)
0123456789=:> STUVWXYZ,)-JKLMNOPQR*;;+ABCDEFGHI.):<
9 TRACK, 1600 BPI
BINARY DATA, ODD PARITY
IBM 360/91
NASA / GODDARD SPACE FLIGHT CENTER        U.S.A.
FORMAT(1060A4)


THIS TAPE CONTAINS SELECTED TERRESTRIAL PARAMETERS FROM THE NIMBUS-7
EARTH RADIATION BUDGET EXPERIMENT.

PROCESSED FOR FGGE ON:  MON MAR 22,1982

SCIENTIST:    GARY N WOLFORD
ADDRESS:      NASA / GODDARD SPACE FLIGHT CENTER
              GREENBELT, MARYLAND     20771
              UNITED STATES OF AMERICA        (U.S.A.)

                 ******************************

THIS TAPE FOLLOWS THE FGGE LEVEL-3 FORMATS INSTEAD OF THE LEVEL-2 FORMATS.

WARNING:    THE FILL FLAG FOR THE ARRAY OF PACKED INTEGERS  Q(I) IS DEFINED
            AS THE VALUE  B'1000000000000000' = X'8000' = -32768.
            THE USER'S PROGRAM SHOULD CHECK FOR THIS FILL FLAG -BEFORE-
            UNPACKING THE  Q(I),  AS THE UNPACKING PRODUCES UNPREDICTABLE
            RESULTS WHEN PERFORMED ON THE FILL FLAG.

(*****************************************************************************:
```

FIGURE 3-2. TAPE-HEADER FILE-FIRST THIRTY-FOUR LOGICAL RECORDS

Record 1: The first logical record contains the project name (FGGE2C), the procedure code (2000), and the beginning and ending synoptic time of data on the tape.

The times are variable data and contain the major synoptic times of the first and the last data files on the tape. There are two-byte fields for the year (YF,YL), the month (MF,ML), the day (DF,DL), and the hour (HF,HL) of the first and last major synoptic times. (The character F indicates the first major synoptic time and L indicates the last major synoptic time.) The year field represents the last two digits of the year. As an example, 1981 would be represented by an EBCDIC-coded 81. The month values range from 01 to 12. The day values range from 01 to 31. The hour values are either 00, 06, 12 or 18.

Record 2: The second logical record contains the BLOCKSIZE of the physical record in the file of the tape.

Record 3: The third logical record contains the FORTRAN format of the first 80 bytes (e.g., 20A4).

Record 4: The fourth logical record contains the translation table which will be stored exactly as shown in Figure 3-2.

Record 5-6: The fifth and sixth logical records contains the information on the physical tape characteristics.

Record 7: The seventh logical record contains the name of the the computer used to generate level III data.

Record 8: The eighth logical record contains the name of the center and country providing the data set.

Record 9: The ninth logical record contains the FORTRAN format to read level III data.

Record 10-11: The tenth and eleventh logical records are filled with binary coded blanks.

Record 12-13: The twelth and thirteenth logical records contains the name of the data set.

Record 14: The fourteenth logical record is filled with binary coded blanks.

Record 15: The fifteenth logical record contains the date the tape was created.

Record 16: The sixteenth logical record is filled with binary coded blank.

Record 17-20: The seventeenth logical record through the twentieth logical record contain the name of the responsible scientist and full address of the responsible scientist.

Record 21-36: The twenty-first logical record through the thirty-sixth logical record contain the comments concerning representation of the data values (particularly fill data) in the data records.

Record 37-53: The thirty-seventh logical record through the fifty-third logical record contain part of the card image listing of Table 1 in Appendix III of THE FORMATS FOR THE INTERNATIONAL EXCHANGE OF LEVEL III DATA SETS DURING THE FGGE in Appendix III.

The second physical record through the fourth physical record contain the remaining part of the card image listing of TABLE I, the card image listing of TABLE III, TABLE VII, TABLE VIII, and TABLE XI of the FORMATS FOR THE INTERNATIONAL EXCHANGE OF LEVEL III DATA SETS DURING THE FGGE.

3.2.3 Grid Descriptor File

The grid descriptor file contains information on the ERB scanning channel target numbers and their associated latitude limits and longitude intervals. This information is listed in Figure 3-3. The Grid descriptor file contains EBCDIC coded characters.

3.2.4 Data File

There are two types of logical records in a data file. Each of these logical record types is described in the following.

3.2.4.1 Header Logical Record

The first logical record of each physical record of the data file is the header logical record. The description is shown in Figure 3-4. Bytes 49 through 50 contain the scaled value of the first data point. Bytes 79 through 80 contain the scaled value of the sixteenth data point.

3.2.4.2 Data Logical Record

Following the header logical record are data logical records. Each data logical record contains forty scaled value data points. The last data logical record only contains fourteen scaled value data points. The remaining 52 bytes of the last data logical record are filled with zeroes. One physical record format is shown in Figure 3.5.

THE ERB NUMBERING SYSTEM ASSIGNS A NUMBER, BETWEEN 1 AND 2070, TO EACH TARGET AREA STARTING FROM THE SOUTH POLE.
FOR EACH LATITUDE BAND THE LONGITUDE INTERVALS START AT THE 0 DEGREE MERIDIAN AND PROGRESS WEST BY THE INCREMENTS LISTED.
WITHIN EACH LATITUDE BELT THE TARGET NUMBERS INCREASE WESTWARD FROM THE 0.0 DEG MERIDIAN AND CONTINUE TO INCREASE WITHIN THE ADJACENT LATITUDE BELT TO THE NORTH

TARGET NO.	LATITUDE LIMITS		LONGITUDE INTERVAL
1-3	POLE	85.5	120.0
4-12	85.5	81.0	40.0
13-28	81.0	76.5	22.5
29-48	76.5	72.0	18.0
49-78	72.0	67.5	12.0
79-114	67.5	63.0	10.0
115-154	63.0	58.5	9.0
155-199	58.5	54.0	8.0
200-247	54.0	49.5	7.5
248-307	49.5	45.0	6.0
308-367	45.0	40.5	6.0
368-427	40.5	36.0	6.0
428-499	36.0	31.5	5.0
500-571	31.5	27.0	5.0
572-643	27.0	22.5	5.0
644-715	22.5	18.0	5.0
716-795	18.0	13.5	4.5
796-875	13.5	9.0	4.5
876-955	9.0	4.5	4.5
956-1035	4.5	EQUATOR	4.5
1036-1115	EQUATOR	4.5	4.5
1116-1195	4.5	9.0	4.5
1196-1275	9.0	13.5	4.5
1276-1355	13.5	18.0	4.5
1356-1427	18.0	22.5	5.0
1428-1499	22.5	27.0	5.0
1500-1571	27.0	31.5	5.0
1572-1643	31.5	36.0	5.0
1644-1703	36.0	40.5	6.0
1704-1763	40.5	45.0	6.0
1764-1823	45.0	49.5	6.0
1824-1871	49.5	54.0	7.5
1872-1916	54.0	58.5	8.0
1917-1956	58.5	63.0	9.0
1957-1992	63.0	67.5	10.0
1993-2022	67.5	72.0	12.0
2023-2042	72.0	76.5	18.0
2043-2058	76.5	81.0	22.5
2059-2067	81.0	85.5	40.0
2068-2070	85.5	POLE	120.0

Fig. 3-3. Grid Descriptor File

Bits	No. of Bits	Parameter	Description	Remarks*	Value
1 - 12	12	Q	Data type	See Table I	7D1-7DF,7ED,7E1-7E9, 7F(HEX
13 - 24	12	S_1	Type of Surface 1	See Table I	TD0 (HEX)
25 - 32	8	F_1	Time	See Table III	E (HEX)
33 - 36	4	T_1	Time marker 1	See Table III	B (HEX)
37 - 56	20	C_1	Numerical value of surface 1		
57 - 64	8	E_1	Exponent of 10 for C_1		
65 - 68	4	M	Level-difference marker	See Table IV	0
69 - 76	8	X	Exception marker	See Table V	255 (DEC)
77 - 88	12	S_2	Type of surface 2	See Table I	0
89 - 96	8	F_2	Time marker 2	See Table III	0
97 - 100	4	N	Spectral quantity marker	See Table II	0
101 - 120	20	C_2	Numerical value of surface 2		
121 - 128	8	E_2	Exponent of 10 for C_2		
129 - 136	8	CD	Climatological marker	See Table VI	0
137 - 144	8	CM	Climatological marker	See Table VI	0
145 - 152	8	KS	Method marker	See Table VIII	241-247 (DEC)
153 - 160	8	K	Grid-type marker	See Table VII	FE (HEX)
161 - 176	16		Unused	Set to zero	
177 - 192	16	NW	Number of 32-bit words in record		
193 - 200	8	JJ	Year	78 = 1978	
201 - 208	8	MM	Month	1-12 (Jan.-Dec.)	
209 - 216	8	YY	Day of month	1-31	
217 - 224	8	GG	Initial hour	GMT	
225 - 232	8	R	Run marker	See Table IX	FF (HEX)
233 - 240	8	G	Generating code	Reserved for Natl. use	
241 - 256	16	J	Number of data values in the array	Starting at bit 385	
257 - 272	16	B	Number of 8-bit bytes in the record		
273 - 288	16	Z	Logical checksum (optional)	See Appendix D	
289 - 320	32	A	Mid-range value	See Appendix B	
321 - 336	16		Unused	Set to zero	
337 - 352	16	N	Scaling value	See Appendix B	
353 - 384	32		Unused	Set to zero	
385 - 400	16	Q_1	Scaled value 1		
401 - 416	16	Q_2	Scaled value 2		
.	.	.	.		
.	.	.	.		
.	.	.	.		
625 - 640	16	Q_{16}	Scaled value 16		

Figure 3-4 Header Logical Record

*Refer to the APPENDIX 11, APPENDIX A. of "FGGE DATA MANAGEMENT PLAN". Specific values for these parameters are listed in Table 3-1 through 3-10.

Word				
1	data type Q	type of surface 1 S1		time F1
2	time marker 1 T	numerical value of surface 1 C1		exponent of 10 for C1 E1
3	level-difference marker M	exception marker X	type of surface 2 S2	time marker 2 F2
4	spectral quality marker N	numerical value of surface 2 C2		exponent of 10 for C2 E2
5	climatological marker CD	climatological marker CM	method marker KS	grid-type marker K
6	unused		no. of 32-bit words in record NW	
7	year JJ	month MM	day of month YY	initial hour GG
8	run marker R	generating code G	no. of data values in the array J	
9	no. of 8-bit bytes in the record B		logical checksum (optional) Z	
10	mid-range value A			
11	unused N		scaling value	
12	unused			
13	scaled value 1 Q1		scaled value 2 Q2	
14	scaled value 3 Q3		scaled value 4 Q4	
. . . .	⋮		⋮	
1047	scaled value 2069 Q2069		scaled value 2070 Q2070	
1048	zero filled spares			
. 1060				

Fig. 3-5. Physical Record

Table 3-1. Q and S Parameters and Surfaces (1)

Number Hex	Number DEC	Abbreviation	Parameter Name	Standard Unit
.	.	.	.	.
.	.	.	.	.
.	.	.	.	.
			Nimbus 7 ERB Reference Surface	
7DO	2000	-ERBSU	Upper Troposphere	
			Nimbus-7 ERB Wide Field of View Parameters (Daily and Monthly World Grids)	
7D1	2001	-WPOPA	Data Population - Ascending Node (AN)	Dimensionle
7D2	2002	-WPOPD	Data Population - Descending Node (DN)	Dimensionle
7D3	2003	-WLWFA	Long Wave Terrestrial Flux - AN	$W-m^{-2}$
7D4	2004	-WLWFD	Long Wave Terrestrial Flux - DN	$W-m^{-2}$
7D5	2005	-CMR1A	Computed Maximum Reflected Energy (.2-4 μ m) - AN	$W-m^{-2}$
7D6	2006	-CMR1D	Computed Maximum Reflected Energy (.2-4 μ m) - DN	$W-m^{-2}$
7D7	2007	-CMR3A	Computed Maximum Reflected Energy (.7-3 μ m) - AN	$W-m^{-2}$
7D8	2008	-CMR3D	Computed Maximum Reflected Energy (.7-3 μ m) - DN	$W-m^{-2}$
7D9	2009	-RFE1A	Reflected Energy (.2-4 μ m) - AN	$W-m^{-2}$
7DA	2010	-RFE1D	Reflected Energy (.2-4 μ m) - DN	$W-m^{-2}$
7DB	2011	-RFE3A	Reflected Energy (.7-3 μ m) - AN	$W-m^{-2}$
7DC	2012	-RFE3D	Reflected Energy (.7-3 μ m) - DN	$W-m^{-2}$
7DD	2013	-WALB1	Earth Albedo (.2-4 μ m)	Percent
7DE	2014	-WALB2	Earth Albedo (.2 - .7 μ m)	Percent
7DF	2015	-WALB3	Earth Albedo (.7-3 μ m)	Percent
7ED	2016	-WNETR	Net Radiation	$W-m^{-2}$
			Nimbus-7 ERB Narrow Field of View Parameters (Daily and Monthly World Grids)	
7E1	2017	-NSWPA	Short Wave Data Population - AN	Dimensionle
7E2	2018	-NSWPD	Short Wave Data Population - DN	Dimensionle
7E3	2019	-NLWFA	Long Wave Terrestrial Flux - AN	$W-m^{-2}$
7E4	2020	-NLWFD	Long Wave Terrestrial Flux - DN	$W-m^{-2}$
7E6	2022	-NFALB	Earth Albedo	Percent
7E7	2023	-NNETR	Net Radiation	$W-m^{-2}$
7E8	2024	-NLWPA	Long Wave Data Population - AN	Dimensionle
7E9	2025	-NLWPD	Long Wave Data Population - DN	Dimensionle
			Nimbus-7 ERB Miscellaneous Parameters	
7F4	2036	-SOLIN	Average Solar Insolation - Daily/Monthly World Grid	$W-m^{-2}$
7F5	2037	-WALBU	Uncorrected Earth Albedo (.2-4 μ m) -	Percent

Refer "FGGE DATA MANAGEMENT PLAN" Appendix II, Appendix A, TABLE I.

TABLE 3-2: N spectral quantity marker(1)

N	Meaning
0	Not to be assigned (gridded data implied)

TABLE 3-3: Time Marker T(2)

T(Hex)	Meaning	F1	F2
0	Indicate the field is instantaneous, e.g. a 500-mb height forecast =	Forecast hour hour (tau)	0
B	Indicate the field is formed from instantaneous values of the same parameter	Maximum number of orbits contributing to average.	0

TABLE 3-4: M level difference marker(3)

M	Meaning
0	Indicates S_2 and L_2 are not applicable

(1) Refer "FGGE DATA MANAGEMENT PLAN" APPENDIX II, APPENDIX A, TABLE II

(2) Refer TABLE III of the above document

(3) Refer TABLE IV of the above document

TABLE 3-5: X exception marker[1]

X(DEC)	Meaning
255	Not applicable. The exception marker (x) does not apply for these data or when the value of x is greater than 254.

TABLE 3-6: CM and CD climatology marker[2]

(Month-Hour)

CM	Meaning
00	Not applicable

(Day of Month)

CD	Meaning
00	Not applicable

(1) Refer "FGGE DATA MANAGEMENT PLAN" Appendix II, Appendix A, TABLE V.

(2) Refer TABLE VI of the above document.

TABLE 3-7. K grid-type marker[1]

K Hex	Dec	Grid Description
FE	254	2070 elements equal area World Grid composed of 4.5 degree latitude bands starting at the South Pole and with different longitude increments in each band (120 degrees at the poles to 4.5 degrees at the equator) to obtain approximately 500 km x 500 km grid elements

TABLE 3-8. KS method marker[2]

KS	Meaning
241	Field formed by count of number of events
242	Field formed from radiances or sums and differences of radiances in different spectral intervals without solar zenith angle and/or solar insolation correction.
243	Field formed from radiances or sums and differences of radiances in different spectral intervals with solar zenith angle and/or solar insolation correction.
244	Field formed from irradiances unweighted by degree of illumination.
246	Field formed from ratio of irradiances without solar zenith angle and/or solar insolation correction.
247	Field formed from ratio of irradiances with solar zenith angle and/or solar insolation correction.

(1) Refer "FGGE DATA MANAGEMENT PLAN" Appendix II, Appendix A, TABLE VII.

(2) Refer TABLE VIII of the above document.

TABLE 3-9: R run marker[1]

R(HEX)	Meaning
FF	Not applicable

TABLE 3-10. Codes for FGGE Data Producers[2]
(Extension for N-7 ERB Level II-C)

Code Figure	Meaning
0031	Level IIIA Data (WMC Washington)
0032	Level IIIA Data (WMC Moscow)
0033	Level IIIA Data (WMC Melbourne)
0331	Level IIIB Producer 1
0332	Level IIIB Producer 2
2000	Level IIC ERB Data (U.S.A. Experimental Data Producer)

(1) Refer "FGGE DATA MANAGEMENT PLAN" Appendix II, Appendix A, TABLE IX.

(2) Refer TABLE XI of the above document.

4. SHIPPING LETTER DESCRIPTION

The shipping letter of a FGGE/ERBM tape is the printout of the ERBM-DP Program with option 0. There are five major parts in the shipping letter.

The first part contains information on the tape identifier, slot number, and the printout option.

The second part contains the information on the characteristics and the contents of the tape.

The third part contains tables describing parameter definition, time, grid, method, and data procedure markers.

The fourth part contains the grid information.

The fifth part contains statistics,the count of the available daily/ monthly records and the counts of non-fill data and non-zero populations for 27 parameters. A sample shipping letter is included in the following pages.

```
                    E R B - N - D P    P R O G R A M
                    ************************
                    *                      *
                    *  FGGE TAPE   UA1100  *
                    *                      *
                    ************************

          TAPE DESIGNATOR    UA1100
          SLOT NUMBER        BL6055
          PRINT LEVEL          0
               SUMMARY PRINTOUT              = ON
               RECORD HEADER PRINT           = OFF
               DATA DUMP (FLOATING)          = OFF
               SCALED DATA DUMP (INTEGER)    = OFF
               SCALED DATA DUMP (HEX)        = OFF


END FILE 1  -  TEST FILE:      258 BLOCKS.     0 I/O ERRORS.     0 DATA ERRORS


TAPE HEADER:
          FGGE2C2000781116007811301B
          004240
          FORMAT(20A4)
          0123456789=:> STUVWXYZ.)-JKLMNOPQR*';+ABCDEFGH(.)_<
          9 TRACK. 1600 BPI
          BINARY DATA. ODD PARITY
          IBM 360/91
          NASA / GODDARD SPACE FLIGHT CENTER          U.S.A.
          FORMAT(1060A4)

          THIS TAPE CONTAINS SELECTED TERRESTRIAL PARAMETERS FROM THE NIMBUS-7
          EARTH RADIATION BUDGET EXPERIMENT.

          PROCESSED FOR FGGE ON:  MON MAR 22.1982

          SCIENTIST:    GARY N WOLFORD
          ADDRESS:      NASA / GODDARD SPACE FLIGHT CENTER
                        GREENBELT, MARYLAND      20771
                        UNITED STATES OF AMERICA          (U.S.A.)

                          ******************************

          THIS TAPE FOLLOWS THE FGGE LEVEL-3 FORMATS INSTEAD OF THE LEVEL-2 FORMATS.

          WARNING:    THE FILL FLAG FOR THE ARRAY OF PACKED INTEGERS  Q(I) IS DEFINED
                      AS THE VALUE  B'1000000000000000' = X'8000' = -32768.
                      THE USER'S PROGRAM SHOULD CHECK FOR THIS FILL FLAG -BEFORE-
                      UNPACKING THE  Q(I),  AS THE UNPACKING PRODUCES UNPREDICTABLE
                      RESULTS WHEN PERFORMED ON THE FILL FLAG.

          ***********************************************************************
```

TABLES I
Q AND S PARAMETERS AND SURFACES
(EXTENSION FOR N-7 ERB LEVEL II-C)

NUMBER HEX	NUMBER DEC	ABBR.	PARAMETER NAME	STANDARD UNIT
7D0	2000	-ERBSU	N-7 ERB REFERENCE SURFACE UPPER TROPOSPHERE	M
			N-7 ERB WIDE FIELD OF VIEW PARAMETERS (DAILY AND MONTHLY WORLD GRIDS)	
7D1	2001	-WPOPA	DATA POPULATION-ASCENDING NODE (AN)	DIMENSIONLESS
7D2	2002	-WPOPD	DATA POPULATION-DESCENDING NODE (DN)	DIMENSIONLESS
7D3	2003	-WLWFA	LONG WAVE TERRESTIAL FLUX - AN	W/(M**2)
7D4	2004	-WLWFD	LONG WAVE TERRESTIAL FLUX - DN	W/(M**2)
7D5	2005	-CMR1A	COMPUTED MAXIMUM REFLECTED ENERGY(.2-4UM)-AN	W/(M**2)
7D6	2006	-CMR1D	COMPUTED MAXIMUM REFLECTED ENERGY(.2-4UM)-DN	W/(M**2)
7D7	2007	-CMR3A	COMPUTED MAXIMUM REFLECTED ENERGY(.7-3UM)-AN	W/(M**2)
7D8	2008	-CMR3D	COMPUTED MAXIMUM REFLECTED ENERGY(.7-3UM)-DN	W/(M**2)
7D9	2009	-RFE1A	REFLECTED ENERGY(.2-4UM)-AN	W/(M**2)
7DA	2010	-RFE1D	REFLECTED ENERGY(.2-4UM)-DN	W/(M**2)
7DB	2011	-RFE3A	REFLECTED ENERGY(.7-3UM)-AN	W/(M**2)
7DC	2012	-RFE3D	REFLECTED ENERGY(.7-3UM)-DN	W/(M**2)
7DD	2013	-WALB1	EARTH ALBEDO(.2-4UM)	PERCENT
7DE	2014	-WALB2	EARTH ALBEDO(.2-.7UM)	PERCENT
7DF	2015	-WALB3	EARTH ALBEDO(.7-3UM)	PERCENT
7E0	2016	-WNETR	NET RADIATION	W/(M**2)
			N-7 ERB NARROW FIELD OF VIEW PARAMETERS (DAILY AND MONTHLY WORLD GRIDS)	
7E1	2017	-NSWPA	SHORT WAVE DATA POPULATION - AN	DIMENSIONLESS
7E2	2018	-NSWPD	SHORT WAVE DATA POPULATION - DN	DIMENSIONLESS
7E3	2019	-NLWFA	LONG WAVE TERRESTIAL FLUX - AN	W/(M**2)
7E4	2020	-NLWFD	LONG WAVE TERRESTIAL FLUX - DN	W/(M**2)
7E6	2022	-NFALB	EARTH ALBEDO	PERCENT
7E7	2023	-NNETR	NET RADIATION	W/(M**2)
7E8	2024	-NLWPA	LONG WAVE DATA POPULATION - AN	DIMENSIONLESS
7E9	2025	-NLWPD	LONG WAVE DATA POPULATION - DN	DIMENSIONLESS
			N-7 ERB MISCELLANEOUS PARAMETERS	
7F4	2036	-SOLIN	AVERAGE SOLAR INSOLATION-DAILY/MONTHLY WORLD GRID	W/(M**2)
7F5	2037	-WALBU	UNCORRECTED EARTH ALBEDO(.2-4UM) - MONTHLY WORLD GRID	PERCENT

TABLES III
TIME MARKER T (4 BITS)
(EXTENSION FOR N-7 ERB LEVEL II-C)

T	MEANING	F1	F2
4	INDICATES THE FIELD IS FORMED FROM A NUMBER OF FIELDS OF THE SAME PARAMETER TO OBTAIN AVERAGE OR NORMAL VALUES. IF THE AVERAGE APPLIES TO A NUMBER OF DAYS, F1 IS USED TO INDICATE THIS NUMBER; AND IF THE AVERAGE APPLIES TO A NUMBER OF YEARS, F2 IS USED TO INDICATE THAT NUMBER.	DAYS USED IN AVERAGE OR 0	0 OR YEARS USED IN AVERAGE
11	INDICATES THE FIELD IS FORMED FROM A NUMBER OF INSTANTANEOUS VALUES OF THE SAME PARAMETER.	MAXIMUM NUMBER OF ORBITS CONTRIBUTING TO AVERAGE.	0
12	INDICATES THE FIELD IS FORMED FROM OTHER PARAMETER FIELDS. EACH OF THESE OTHER PARAMETER FIELDS IS FORMED FROM A NUMBER OF FIELDS OF EACH PARAMETER TO OBTAIN AVERAGE OR NORMAL VALUES. IF THE AVERAGE APPLIES TO A NUMBER OF DAYS F1 IS USED TO INDICATE THIS NUMBER; AND IF THE AVERAGE APPLIES TO A NUMBER OF YEARS, F2 IS USED TO INDICATE THAT NUMBER.	DAYS USED IN AVERAGE OR 0	0 OR YEARS USED IN AVERAGE.

TABLE VII
K GRID-TYPE MARKER (8 BITS)
(EXTENSION FOR N-7 ERB LEVEL II-C)

HEX	K DEC	GRID DESCRIPTION
FE	254	2070 ELEMENT EQUAL AREA WORLD GRID 4.5 DEGREE LATITUDE BANDS STARTING AT THE SOUTH POLE AND WITH DIFFERENT LONGITUDE INCREMENTS IN EACH BAND(120 DEGREES AT THE POLES TO 4.5 DEGREES AT THE EQUATOR) TO OBTAIN APPROXIMATELY 500KM X 500KM GRID ELEMENTS.

TABLE VIII
KS METHOD MARKER (8 BITS)
(EXTENSION FOR N-7 ERB LEVELE II-C)

KS	MEANING
241	FIELD FORMED BY COUNT OF NUMBER OF EVENTS.
242	FIELD FORMED FROM RADIANCES OF SUMS AND DIFFERENCES OF RADIANCES IN DIFFERENT SPECTRAL INTERVALS WITHOUT SOLAR ZENITH ANGLE AND/OR SOLAR INSOLATION CORRECTION.
243	FIELD FORMED FROM RADIANCES OR SUMS AND DIFFERENCES OF RADIANCES IN DIFFERENT SPECTRAL INTERVALS WITH SOLAR ZENITH ANGLE AND/OR SOLAR INSOLATION CORRECTION.
244	FIELD FORMED FROM IRRADIANCES UNWEIGHTED BY DEGREE OF ILLUMINATION.
245	FIELD FORMED FROM IRRADIANCES WEIGHTED BY DEGREE OF ILLUMINATION.
246	FIELD FORMED FROM RATIO OF IRRADIANCES WITHOUT SOLAR ZENITH ANGLE AND/OR SOLAR INSOLATION CORRECTION.
247	FIELD FORMED FROM RATIO OF IRRADIANCES WITH SOLAR ZENITH ANGLE AND/OR SOLAR INSOLATION CORRECTION.

TABLE XI
CODES FOR FGGE DATA PRODUCERS
(EXTENSION FOR N-7 ERB LEVEL II-C)

CODE FIGURE	MEANING
0031	LEVEL IIIA DATA (WMC WASHINGTON)
0032	LEVEL IIIA DATA (WMC MOSCOW)
0033	LEVEL IIIA DATA (WMC MELBOURNE)
0231	LEVEL IIIB PRODUCER 1
0232	LEVEL IIIB PRODUCER 2
2000	LEVEL IIC ERB DATA (U.S.A. EXPERIMENTAL SATELLITE DATA PRODUCER)

****

END FILE 2 - TAPE HEADER FILE: 4 BLOCKS. 0 I/O ERRORS

GRID DESCRIPTOR FILE:

THE ERB NUMBERING SYSTEM ASSIGNS A NUMBER, BETWEEN 1 AND 2070, TO EACH TARGET AREA STARTING FROM THE SOUTH POLE.
FOR EACH LATITUDE BAND THE LONGITUDE INTERVALS START AT THE 0 DEGREE MERIDIAN AND PROGRESS WEST BY THE INCREMENTS LISTED.
WITHIN EACH LATITUDE BELT THE TARGET NUMBERS INCREASE WESTWARD FROM THE 0.0 DEG MERIDIAN AND CONTINUE TO INCREASE WITHIN THE ADJACENT LATITUDE BELT TO THE NORTH

TARGET NO.	LATITUDE LIMITS		LONGITUDE INTERVAL
1-3	POLE	85.5	120.0
4-12	85.5	81.0	40.0
13-28	81.0	76.5	22.5
29-48	76.5	72.0	18.0
49-78	72.0	67.5	12.0
79-114	67.5	63.0	10.0
115-154	63.0	58.5	9.0
155-199	58.5	54.0	8.0
200-247	54.0	49.5	7.5
248-307	49.5	45.0	6.0
308-367	45.0	40.5	6.0
368-427	40.5	36.0	6.0
428-499	36.0	31.5	5.0
500-571	31.5	27.0	5.0
572-643	27.0	22.5	5.0
644-715	22.5	18.0	5.0
716-796	18.0	13.5	4.5
796-875	13.5	9.0	4.5
876-955	9.0	4.5	4.5
956-1035	4.5	EQUATOR	4.5
1036-1115	EQUATOR	4.5	4.5
1116-1195	4.5	9.0	4.5
1196-1275	9.0	13.5	4.5
1276-1355	13.5	18.0	4.5
1356-1427	18.0	22.5	5.0
1428-1499	22.5	27.0	5.0
1500-1571	27.0	31.5	5.0
1572-1643	31.5	36.0	5.0
1644-1703	36.0	40.5	6.0
1704-1763	40.5	45.0	6.0
1764-1823	45.0	49.5	6.0
1824-1871	49.5	54.0	7.5
1872-1916	54.0	58.5	8.0
1917-1956	58.5	63.0	9.0
1957-1992	63.0	67.5	10.0
1993-2022	67.5	72.0	12.0
2023-2042	72.0	76.5	18.0
2043-2058	76.5	81.0	22.5
2059-2067	81.0	85.5	40.0
2068-2070	85.5	POLE	120.0

END FILE 3 - GRID DESCRIPTOR FILE: 1 BLOCKS. 0 I/O ERRORS

ERBMATRIX COUNT OF AVAILABLE DAILY/MONTHLY RECORDS FOR 1978 1 NOVEMBER

DAY #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2001 POPI WFOV - AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2002 POPI WFOF - DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2003 L.W.TERR.FLUX WFOV-AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2004 L.W.TERR.FLUX WFOV-DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2005 MAX REFL.ENERGY(.2-4UM)-AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2006 MAX REFL.ENERGY(.2-4UM)-DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2007 MAX REFL.ENERGY(.7-3)-AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2008 MAX REFL.ENERGY(.7-3)-DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2009 REFL.ENERGY WFOV(.2-4)-AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2010 REFL.ENERGY WFOV(.2-4)-DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2011 REFL.ENERGY WFOV(.7-3)-AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2012 REFL.ENERGY WFOV(.7-3)-DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2013 ALBEDO WFOV(.2-4)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2014 ALBEDO WFOV(.2-.7)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2015 ALBEDO WFOV(.7-3)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2016 NET RADIATION WFOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2017 S.W.POP.NFOV -AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2018 S.W.POP.NFOV -DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2019 L.W.TERR.FLUX NFOV-AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2020 L.W.TERR.FLUX NFOV-DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2021 L.W.TERR.FLUX NFOV-AN+DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2022 ALBEDO NFOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2023 NET RADIATION NFOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2024 L.W.POP.NFOV -AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2025 L.W.POP.NFOV -DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2036 AVG.SOLAR INSOLATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2037 ALBEDO WFOV(.2-4) UNCORRECTED	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

DAY #	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	MONTHLY
2001 POPI WFOV - AN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2002 POPI WFOF - DN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2003 L.W.TERR.FLUX WFOV-AN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2004 L.W.TERR.FLUX WFOV-DN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2005 MAX REFL.ENERGY(.2-4UM)-AN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2006 MAX REFL.ENERGY(.2-4UM)-DN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2007 MAX REFL.ENERGY(.7-3)-AN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2008 MAX REFL.ENERGY(.7-3)-DN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2009 REFL.ENERGY WFOV(.2-4)-AN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2010 REFL.ENERGY WFOV(.2-4)-DN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2011 REFL.ENERGY WFOV(.7-3)-AN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2012 REFL.ENERGY WFOV(.7-3)-DN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2013 ALBEDO WFOV(.2-4)	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2014 ALBEDO WFOV(.2-.7)	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2015 ALBEDO WFOV(.7-3)	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2016 NET RADIATION WFOV	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2017 S.W.POP.NFOV -AN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2018 S.W.POP.NFOV -DN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2019 L.W.TERR.FLUX NFOV-AN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2020 L.W.TERR.FLUX NFOV-DN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2021 L.W.TERR.FLUX NFOV-AN+DN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2022 ALBEDO NFOV	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2023 NET RADIATION NFOV	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2024 L.W.POP.NFOV -AN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2025 L.W.POP.NFOV -DN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2036 AVG.SOLAR INSOLATION	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2037 ALBEDO WFOV(.2-4) UNCORRECTED	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

ERB-MATRIX COUNT OF NON-FILL DATA AND NON-ZERO POPULATIONS FOR 1978 1 NOVEMBER

DAY #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2001 POP: WFOV - AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	319
2002 POP: WFOF - DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	231
2003 L.W.TERR.FLUX WFOV-AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	319
2004 L.W.TERR.FLUX WFOV-DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	231
2005 MAX REFL.ENERGY(.2-4UM)-AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	319
2006 MAX REFL.ENERGY(.2-4UM)-DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	231
2007 MAX REFL.ENERGY(.7-3)-AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	319
2008 MAX REFL.ENERGY(.7-3)-DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	231
2009 REFL.ENERGY WFOV(.2-4)-AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	319
2010 REFL.ENERGY WFOV(.2-4)-DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	231
2011 REFL.ENERGY WFOV(.7-3)-AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	319
2012 REFL.ENERGY WFOV(.7-3)-DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	231
2013 ALBEDO WFOV(.2-4)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	294
2014 ALBEDO WFOV(.2-.7)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	294
2015 ALBEDO WFOV(.7-3)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	294
2016 NET RADIATION WFOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	319
2017 S.W.POP.NFOV -AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1202
2018 S.W.POP.NFOV -DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	121
2019 L.W.TERR.FLUX NFOV-AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1288
2020 L.W.TERR.FLUX NFOV-DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1206
2021 L.W.TERR.FLUX NFOV-AN+DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	439
2022 ALBEDO NFOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1185
2023 NET RADIATION NFOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	413
2024 L.W.POP.NFOV -AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1288
2025 L.W.POP.NFOV -DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1206
2036 AVG.SOLAR INSOLATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2070
2037 ALBEDO WFOV(.2-4) UNCORRECTED	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

DAY #	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	MONTHLY
2001 POP: WFOV - AN	189	199	0	594	649	656	0	597	634	651	0	593	601	642	0	2042
2002 POP: WFOF - DN	142	185	0	473	556	526	0	477	545	492	0	471	499	530	0	1804
2003 L.W.TERR.FLUX WFOV-AN	189	199	0	594	649	656	0	597	634	651	0	593	601	642	0	2042
2004 L.W.TERR.FLUX WFOV-DN	142	185	0	473	556	526	0	477	545	492	0	471	499	530	0	1804
2005 MAX REFL.ENERGY(.2-4UM)-AN	189	199	0	594	649	656	0	597	634	651	0	593	601	642	0	2042
2006 MAX REFL.ENERGY(.2-4UM)-DN	142	185	0	473	556	526	0	477	545	492	0	471	499	530	0	1804
2007 MAX REFL.ENERGY(.7-3)-AN	189	199	0	594	649	656	0	597	634	651	0	593	601	642	0	2042
2008 MAX REFL.ENERGY(.7-3)-DN	142	185	0	473	556	526	0	477	545	492	0	471	499	530	0	1804
2009 REFL.ENERGY WFOV(.2-4)-AN	189	199	0	594	649	656	0	597	634	651	0	593	601	642	0	2042
2010 REFL.ENERGY WFOV(.2-4)-DN	142	185	0	473	556	526	0	477	545	492	0	471	499	530	0	1804
2011 REFL.ENERGY WFOV(.7-3)-AN	189	199	0	594	649	656	0	597	634	651	0	593	601	642	0	2042
2012 REFL.ENERGY WFOV(.7-3)-DN	142	185	0	473	556	526	0	477	545	492	0	471	499	530	0	1804
2013 ALBEDO WFOV(.2-4)	172	177	0	542	589	599	0	543	577	554	0	542	553	590	0	1976
2014 ALBEDO WFOV(.2-.7)	172	177	0	542	589	599	0	543	577	554	0	542	553	590	0	1976
2015 ALBEDO WFOV(.7-3)	172	177	0	542	589	599	0	543	577	554	0	542	553	590	0	1976
2016 NET RADIATION WFOV	189	199	0	594	649	656	0	597	634	651	0	593	601	642	0	2042
2017 S.W.POP.NFOV -AN	1775	1561	0	1702	1850	1688	0	1536	1649	1599	0	1615	1581	1410	0	2022
2018 S.W.POP.NFOV -DN	192	197	0	177	179	179	0	172	174	172	0	163	164	162	0	262
2019 L.W.TERR.FLUX NFOV-AN	1830	1615	0	1763	1904	1746	0	1622	1736	1665	0	1704	1665	1500	0	2070
2020 L.W.TERR.FLUX NFOV-DN	1775	1684	0	1755	1899	1754	0	1754	1687	1600	0	1754	1675	1588	0	2070
2021 L.W.TERR.FLUX NFOV-AN+DN	1564	1342	0	1488	1735	1507	0	1406	1438	1316	0	1478	1371	1188	0	2070
2022 ALBEDO NFOV	1789	1531	0	1680	1823	1669	0	1535	1649	1599	0	1615	1581	1410	0	1992
2023 NET RADIATION NFOV	1561	1338	0	1486	1732	1502	0	1400	1430	1309	0	1469	1363	1177	0	2070
2024 L.W.POP.NFOV -AN	1830	1615	0	1763	1904	1746	0	1622	1736	1665	0	1704	1665	1500	0	2070
2025 L.W.POP.NFOV -DN	1775	1684	0	1755	1899	1754	0	1754	1687	1600	0	1754	1675	1588	0	2070
2036 AVG.SOLAR INSOLATION	2070	2070	0	2070	2070	2070	0	2070	2070	2070	0	2070	2070	2070	0	2070
2037 ALBEDO WFOV(.2-4) UNCORRECTED	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1976

Appendix A. Abbreviations and Acronyms

A.N.:	Ascending Node
BPI:	Bits per Inch
D.N.:	Descending Node
EOF:	End-of-File
ERB:	Earth Radiation Budget
ERBM:	ERB MATRIX
FGGE:	First GARP Global Experiment
GSFC:	Goddard Space Flight Center
NASA:	National Aeronautics and Space Administration
NFOV:	Narrow Field of View
NRZI:	Non Return to Zero Inverse
S.W.	Short Wave
WDC-A:	World Data Center-A
WDC-B:	Word Data Cener-B Moscow
WFOV:	Wide Field of View
WMC:	World Meteorological Center

Appendix B. Sample Run Printout

TAPCAT SAMPLE OUTPUT

```
INPUT >>NEW  MXT2
   ANIMBUS-7 NOMS SPEC NO T134031 SO NO AA83201-3 FRB  SACC TO IPC  START 1978 320 000000 TO 1978 334 023360 GEN 1982 049 050614
** WARNING - TAPE HEADER TIME DOES NOT MATCH DATA TIME
          ACTUAL START=    78  320     0: 0: 0
          ACTUAL STOP =    78  334     0: 0: 0

DISK FILE UPDATED


TAPE LIST FOR NIMBUS FORMAT  AA

INIT AA
ADD  L2618 AATOTH1 78/320:    0 78/334:    0          1978 NOV 16   0: 0: 0   1978 NOV 30   0: 0: 0              1
ADD  MXT2  AA83201 78/320:    0 78/334:    0          1978 NOV 16   0: 0: 0   1978 NOV 30   0: 0: 0              2
                                                                                          WARNING - DATA GAP BETWEEN TAPES
ADD  L2619 AATOTH2 78/353:    0 78/364:    0          1978 DEC 16   0: 0: 0   1978 DEC 30   0: 0: 0              3
                                                                                          WARNING - DATA GAP BETWEEN TAPES
ADD  L2614 AA00000 79/ 79:    0 79/ 83:    0          1979 MAR 20   0: 0: 0   1979 MAR 24   0: 0: 0              4

END OF CATALOG.                    4 TAPES.
```

LRBM-2C SAMPLE OUTPUT

```
>>>78 NOV - 78 NOV

DATA TAPES TO BE USED:
        MXT2     AA83201          78  NOV 16 -    78  NOV 30

MOUNT SLOT # MXT2

INT TAPE >>>BL6949
NEXT OUTPUT SLOT IS # BL6055
OUTPUT FILE      1

** DATA VALUE OUTSIDE EXPECTED RANGE:  PARAMETER=   6    TARGET=   17   SCALED VALUE=     3168    VALUE=  0.3167998E 03

FILE INREC ID  YR/DAY  MON/DAY  PARM FILL RANGE SCALE    N   AVG            NMIN   NMAX     BIAS    SLOPE
   2    6  31  78/320   11/16     6  1839    1     0    8  0.158400E 03      0   3168      0.0     10.0

** DATA VALUE OUTSIDE EXPECTED RANGE:  PARAMETER=  10    TARGET=   16   SCALED VALUE=     2006    VALUE=  0.2006000E 03

** DATA VALUE OUTSIDE EXPECTED RANGE:  PARAMETER=  10    TARGET=   17   SCALED VALUE=     2252    VALUE=  0.2252000E 03

FILE INREC ID  YR/DAY  MON/DAY  PARM FILL RANGE SCALE    N   AVG            NMIN   NMAX     BIAS    SLOPE
   2   10  31  78/320   11/16    10  1839    2     0    7  0.112600E 03      0   2252      0.0     10.0

** DATA VALUE OUTSIDE EXPECTED RANGE:  PARAMETER=  19    TARGET= 1162   SCALED VALUE=      970    VALUE=  0.9700000E 02

FILE INREC ID  YR/DAY  MON/DAY  PARM FILL RANGE SCALE    N   AVG            NMIN   NMAX     BIAS    SLOPE
   2   19  31  78/320   11/16    19   782    1     0    7  0.209400E 03    970   3218      0.0     10.0

** DATA VALUE OUTSIDE EXPECTED RANGE:  PARAMETER=  22    TARGET=  144   SCALED VALUE=     1132    VALUE=  0.1132000E 01

FILE INREC ID  YR/DAY  MON/DAY  PARM FILL RANGE SCALE    N   AVG            NMIN   NMAX     BIAS    SLOPE
   2   22  31  78/320   11/16    22   885    1     0    0  0.615000E 00     98   1132      0.0   1000.0

** DATA VALUE OUTSIDE EXPECTED RANGE:  PARAMETER=  23    TARGET=  104   SCALED VALUE=    -2204    VALUE= -0.2204000E 03

** DATA VALUE OUTSIDE EXPECTED RANGE:  PARAMETER=  23    TARGET=  144   SCALED VALUE=    -2910    VALUE= -0.2910000E 03

** DATA VALUE OUTSIDE EXPECTED RANGE:  PARAMETER=  23    TARGET= 1973   SCALED VALUE=    -2053    VALUE= -0.2053000E 03

** DATA VALUE OUTSIDE EXPECTED RANGE:  PARAMETER=  23    TARGET= 1974   SCALED VALUE=    -2044    VALUE= -0.2044000E 03

** DATA VALUE OUTSIDE EXPECTED RANGE:  PARAMETER=  23    TARGET= 2007   SCALED VALUE=    -2124    VALUE= -0.2124000E 03

FILE INREC ID  YR/DAY  MON/DAY  PARM FILL RANGE SCALE    N   AVG            NMIN   NMAX     BIAS    SLOPE
   2   23  31  78/320   11/16    23  1657    7     0    8 -0.563500E 02  -2910   1783      0.0     10.0

** DATA VALUE OUTSIDE EXPECTED RANGE:  PARAMETER=  10    TARGET=   21   SCALED VALUE=     2030    VALUE=  0.2030000E 03

FILE INREC ID  YR/DAY  MON/DAY  PARM FILL RANGE SCALE    N   AVG            NMIN   NMAX     BIAS    SLOPE
   2   36  31  78/321   11/17    10  1928    1     0    7  0.101500E 03      0   2030      0.0     10.0

** DATA VALUE OUTSIDE EXPECTED RANGE:  PARAMETER=  22    TARGET= 1967   SCALED VALUE=     1246    VALUE=  0.1245999E 01

FILE INREC ID  YR/DAY  MON/DAY  PARM FILL RANGE SCALE    N   AVG            NMIN   NMAX     BIAS    SLOPE
   2   48  31  78/321   11/17    22   321    1     0    0  0.672999E 00    190   1246      0.0   1000.0

** DATA VALUE OUTSIDE EXPECTED RANGE:  PARAMETER=  23    TARGET= 2007   SCALED VALUE=    -2044    VALUE= -0.2044000E 03

FILE INREC ID  YR/DAY  MON/DAY  PARM FILL RANGE SCALE    N   AVG            NMIN   NMAX     BIAS    SLOPE
   2   49  31  78/321   11/17    23   509    1     0    8 -0.980000E 01  -2044   1848      0.0     10.0

** DATA VALUE OUTSIDE EXPECTED RANGE:  PARAMETER=   4    TARGET= 1915   SCALED VALUE=     5413    VALUE=  0.5412998E 03

FILE INREC ID  YR/DAY  MON/DAY  PARM FILL RANGE SCALE    N   AVG            NMIN   NMAX     BIAS    SLOPE
   2   56  31  78/322   11/18     4  1885    1     0    8  0.351500E 03   1617   5413      0.0     10.0

** DATA VALUE OUTSIDE EXPECTED RANGE:  PARAMETER=   6    TARGET=   16   SCALED VALUE=     3151    VALUE=  0.3150999E 03

FILE INREC ID  YR/DAY  MON/DAY  PARM FILL RANGE SCALE    N   AVG            NMIN   NMAX     BIAS    SLOPE
   2   [illegible]  31  78/322   11/18     6  1885    1     0    8  0.157[illegible]E 03      0   3151      0.0     10.0
```

FILE	INPEC	YR/DAY	MON/DAY	PARM	FILL	RANGE	SCALE	N	AVG	NMIN	NMAX	BIAS	SLOPE
8	44 33	78/320	11/32	16	28	1	0	8	-0.223500E 02	-2060	1613	0.0	10.0

END OF OUTPUT FILE 1 : TAPGMT= 78 320 0 78 334 86400

ERB-MATRIX COUNT OF AVAILABLE DAILY/MONTHLY RECORDS FOR 1978 : NOVEMBER

DAY #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 POP: WFOV - AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2 POP: WFOV - DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3 L.W.TERR.FLUX WFOV-AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4 L.W.TERR.FLUX WFOV-DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5 MAX REFL.ENERGY(.2-4UM)-AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6 MAX REFL.ENERGY(.2-4)-DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7 MAX REFL.ENERGY(.7-3)-AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8 MAX REFL.ENERGY(.7-3)-DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
9 REFL.ENERGY WFOV(.2-4)-AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
10 REFL.ENERGY WFOV(.2-4)-DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11 REFL.ENERGY WFOV(.7-3)-AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12 REFL.ENERGY WFOV(.7-3)-DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
13 ALBEDO WFOV(.2-4)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
14 ALBEDO WFOV(.2-.7)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
15 ALBEDO WFOV(.7-3)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
16 NET RADIATION WFOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
17 S.W.POP.NFOV -AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
18 S.W.POP.NFOV -DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
19 L.W.TERR.FLUX NFOV-AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
20 L.W.TERR.FLUX NFOV-DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
21 L.W.TERR.FLUX NFOV-AN+DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
22 ALBEDO NFOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
23 NET RADIATION NFOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
24 L.W.POP.NFOV -AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
25 L.W.POP.NFOV -DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
26 L.W.POP.WFOV INCR.DAILY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27 L.W.POP.NFOV INCR.DAILY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28 L.W.TERR.FLUX WFOV AN+DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29 N.DISP.L.W.TERR.FLUX WFOV AN+DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30 N.DISP.ALBEDO WFOV(.2-4)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31 STD.DEV.NET RAD.WFOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32 N.DISP.L.W.TERR.FLUX NFOV AN+DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33 N.DISP.ALBEDO NFOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34 STD.DEV NET RADIATION NFOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35 MIN.ALBEDO NFOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36 AVG SOLAR INSOLATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
37 ALBEDO WFOV(.2-4) UNCORRECTED	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

DAY #	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	MONTHLY
1 POP: WFOV - AN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2 POP: WFOV - DN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
3 L.W.TERR.FLUX WFOV-AN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
4 L.W.TERR.FLUX WFOV-DN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
5 MAX REFL.ENERGY(.2-4UM)-AN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
6 MAX REFL.ENERGY(.2-4)-DN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
7 MAX REFL.ENERGY(.7-3)-AN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
8 MAX REFL.ENERGY(.7-3)-DN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
9 REFL.ENERGY WFOV(.2-4)-AN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
10 REFL.ENERGY WFOV(.2-4)-DN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
11 REFL.ENERGY WFOV(.7-3)-AN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
12 REFL.ENERGY WFOV(.7-3)-DN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
13 ALBEDO WFOV(.2-4)	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
14 ALBEDO WFOV(.2-.7)	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
15 ALBEDO WFOV(.7-3)	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
16 NET RADIATION WFOV	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
17 S.W.POP.NFOV -AN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
18 S.W.POP.NFOV -DN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
19 L.W.TERR.FLUX NFOV-AN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
20 L.W.TERR.FLUX NFOV-DN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
21 L.W.TERR.FLUX NFOV-AN+DN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
22 ALBEDO NFOV	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
23 NET RADIATION NFOV	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
24 L.W.POP.NFOV -AN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
25 L.W.POP.NFOV -DN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
26 L.W.POP.WFOV INCR.DAILY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

28 L.W.TERR.FLUX WFOV AN+DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
29 N.DISP.L.W.TERR.FLUX WFOV AN+DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
30 N.DISP.ALBEDO WFOV(.2-4)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
31 STD.DEV.NET RAD.WFOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
32 N.DISP.L.W.TERR.FLUX NFOV AN+DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
33 N.DISP.ALBEDO NFOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
34 STD.DEV NET RADIATION NFOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
35 MIN.ALBEDO NFOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
36 AVG SOLAR INSOLATION	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
37 ALBEDO WFOV(.2-4) UNCORRECTED	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

ERB-MATRIX COUNT OF NON-FILL DATA AND NON-ZERO POPULATIONS FOR 1978 : NOVEMBER

DAY #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 POP: WFOV - AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	319
2 POP: WFOV - DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	231
3 L.W.TERR.FLUX WFOV-AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	319
4 L.W.TERR.FLUX WFOV-DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	231
5 MAX REFL.ENERGY(.2-4UM)-AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	319
6 MAX REFL.ENERGY(.2-4)-DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	231
7 MAX REFL.ENERGY(.7-3)-AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	319
8 MAX REFL.ENERGY(.7-3)-DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	231
9 REFL.ENERGY WFOV(.2-4)-AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	319
10 REFL.ENERGY WFOV(.2-4)-DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	231
11 REFL.ENERGY WFOV(.7-3)-AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	319
12 REFL.ENERGY WFOV(.7-3)-DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	231
13 ALBEDO WFOV(.2-4)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	294
14 ALBEDO WFOV(.2-.7)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	294
15 ALBEDO WFOV(.7-3)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	294
16 NET RADIATION WFOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	319
17 S.W.POP.NFOV -AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1202
18 S.W.POP.NFOV -DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	121
19 L.W.TERR.FLUX NFOV-AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1200
20 L.W.TERR.FLUX NFOV-DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1206
21 L.W.TERR.FLUX NFOV-AN+DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	439
22 ALBEDO NFOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1185
23 NET RADIATION NFOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	413
24 L.W.POP.NFOV -AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1288
25 L.W.POP.NFOV -DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1206
26 L.W.POP.WFOV INCR.DAILY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27 L.W.POP.NFOV INCR.DAILY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28 L.W.TERR.FLUX WFOV AN+DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29 N.DISP.L.W.TERR.FLUX WFOV AN+DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30 N.DISP.ALBEDO WFOV(.2-4)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31 STD.DEV.NET RAD.WFOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32 N.DISP.L.W.TERR.FLUX NFOV AN+DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33 N.DISP.ALBEDO NFOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34 STD.DEV NET RADIATION NFOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35 MIN.ALBEDO NFOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36 AVG SOLAR INSOLATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2070
37 ALBEDO WFOV(.2-4) UNCORRECTED	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

DAY #	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	MONTHLY
1 POP: WFOV - AN	189	199	0	594	649	656	0	597	634	651	0	593	601	642	0	2042
2 POP: WFOV - DN	142	185	0	473	556	526	0	477	545	492	0	471	499	530	0	1804
3 L.W.TERR.FLUX WFOV-AN	189	199	0	594	649	656	0	597	634	651	0	593	601	642	0	2042
4 L.W.TERR.FLUX WFOV-DN	142	185	0	473	556	526	0	477	545	492	0	471	499	530	0	1804
5 MAX REFL.ENERGY(.2-4UM)-AN	189	199	0	594	649	656	0	597	634	651	0	593	601	642	0	2042
6 MAX REFL.ENERGY(.2-4)-DN	142	185	0	473	556	526	0	477	545	492	0	471	499	530	0	1804
7 MAX REFL.ENERGY(.7-3)-AN	189	199	0	594	649	656	0	597	634	651	0	593	601	642	0	2042
8 MAX REFL.ENERGY(.7-3)-DN	142	185	0	473	556	526	0	477	545	492	0	471	499	530	0	1804
9 REFL.ENERGY WFOV(.2-4)-AN	189	199	0	594	649	656	0	597	634	651	0	593	601	642	0	2042
10 REFL.ENERGY WFOV(.2-4)-DN	142	185	0	473	556	526	0	477	545	492	0	471	499	530	0	1804
11 REFL.ENERGY WFOV(.7-3)-AN	189	199	0	594	649	656	0	597	634	651	0	593	601	642	0	2042
12 REFL.ENERGY WFOV(.7-3)-DN	142	185	0	473	556	526	0	477	545	492	0	471	499	530	0	1804
13 ALBEDO WFOV(.2-4)	172	177	0	542	589	599	0	543	577	594	0	542	553	590	0	1976
14 ALBEDO WFOV(.2-.7)	172	177	0	542	589	599	0	543	577	594	0	542	553	590	0	1976
15 ALBEDO WFOV(.7-3)	172	177	0	542	589	599	0	543	577	594	0	542	553	590	0	1976
16 NET RADIATION WFOV	189	199	0	594	649	656	0	597	634	651	0	593	601	642	0	2042
17 S.W.POP.NFOV -AN	1775	1561	0	1702	1850	1688	0	1536	1649	1599	0	1615	1501	1410	0	2022
18 S.W.POP.NFOV -DN	192	197	0	177	179	179	0	172	174	172	0	163	164	162	0	202
19 L.W.TERR.FLUX NFOV-AN	1830	1615	0	1763	1934	1748	0	1622	1736	1665	0	1704	1665	1500	0	2070
20 L.W.TERR.FLUX NFOV-DN	1775	1684	0	1755	1899	1754	0	1754	1687	1600	0	1754	1677	1588	0	2070
21 L.W.TERR.FLUX NFOV-AN+DN	1564	1342	0	1400	1735	1507	0	1406	1430	1316	0	1470	1371	1166	0	2070

22 ALBEDO NFOV	1749	1531	0	1680	1623	1664	0	1535	1649	1599	0	1615	1581	1410	0	1[illegible]								
23 NET RADIATION NFOV	1561	1338	0	1486	1732	1502	0	1400	1430	1309	0	1469	1363	1177	0	2070								
24 L.W.POP.NFOV -AN	1830	1615	0	1763	1904	1748	0	1622	1736	1685	0	1704	1669	1500	0	2070								
25 L.W.POP.NFOV -DN	1775	1684	0	1755	1899	1754	0	1754	1687	1603	0	1754	1678	1588	0	2070								
26 L.W.POP.NFOV INCR.DAILY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0								
27 L.W.POP.NFOV INCR.DAILY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0								
28 L.W.TERR.FLUX NFOV AN+DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0								
29 N.DISP.L.W.TERR.FLUX NFOV AN+DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0								
30 N.DISP.ALBEDO NFOV(.2-4)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0								
31 STD.DEV.NET RAD.NFOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0								
32 N.DISP.L.W.TERR.FLUX NFOV AN+DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0								
33 N.DISP.ALBEDO NFOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0								
34 STD.DEV.NET RADIATION NFOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0								
35 MIN.ALBEDO NFOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0								
36 AVG SOLAR INSOLATION	2070	2070	0	2070	2070	2070	0	2070	2070	2070	0	2070	2070	2070	0	2070								
37 ALBEDO NFOV(.2-4) UNCORRECTED	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1976								

ERR-MATRIX COUNT OF DATA RANGE ERRORS FOR 1978 1 NOVEMBER

DAY #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 POP: NFCV - AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2 POP: NFCV - DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3 L.W.TERR.FLUX NFOV-AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4 L.W.TERR.FLUX NFOV-DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5 MAX EFFL.ENERGY(.2-4UM)-AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6 MAX EFFL.ENERGY(.2-4)-DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7 MAX EFFL.ENERGY(.7-3)-AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8 MAX EFFL.ENERGY(.7-3)-DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9 REFL.ENERGY NFCV(.2-4)-AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
10 REFL.ENERGY NFOV(.2-4)-DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11 REFL.ENERGY NFOV(.7-3)-AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12 REFL.ENERGY NFOV(.7-3)-DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13 ALBEDO NFOV(.2-4)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14 ALBEDO NFOV(.2-.7)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15 ALBEDO NFOV(.7-3)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16 NET RADIATION NFOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17 S.W.POP.NFOV -AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18 S.W.POP.NFOV -DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
19 L.W.TERR.FLUX NFOV-AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20 L.W.TERR.FLUX NFOV-DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21 L.W.TERR.FLUX NFOV-AN+DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
22 ALBEDO NFOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
23 NET RADIATION NFOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24 L.W.POP.NFOV -AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25 L.W.POP.NFOV -DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26 L.W.POP.NFOV INCR.DAILY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27 L.W.POP.NFOV INCR.DAILY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28 L.W.TERR.FLUX NFOV AN+DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29 N.DISP.L.W.TERR.FLUX NFOV AN+DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30 N.DISP.ALBEDO NFOV(.2-4)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31 STD.DEV.NET RAD.NFOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32 N.DISP.L.W.TERR.FLUX NFOV AN+DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33 N.DISP.ALBEDO NFOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34 STD.DEV.NET RADIATION NFOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35 MIN.ALBEDO NFOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36 AVG SOLAR INSOLATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37 ALBEDO NFOV(.2-4) UNCORRECTED	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

DAY #	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	MONTHLY
1 POP: NFCV - AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2 POP: NFCV - DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3 L.W.TERR.FLUX NFOV-AN	0	0	0	2	4	4	0	0	3	3	0	0	6	5	0	11
4 L.W.TERR.FLUX NFOV-DN	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
5 MAX EFFL.ENERGY(.2-4UM)-AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 MAX EFFL.ENERGY(.2-4)-DN	0	1	0	1	0	0	0	1	0	0	0	2	1	0	0	0
7 MAX EFFL.ENERGY(.7-3)-AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8 MAX EFFL.ENERGY(.7-3)-DN	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
9 REFL.ENERGY NFOV(.2-4)-AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10 REFL.ENERGY NFOV(.2-4)-DN	1	1	0	1	0	0	0	3	2	2	0	11	6	10	0	1
11 REFL.ENERGY NFOV(.7-3)-AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12 REFL.ENERGY NFOV(.7-3)-DN	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0
13 ALBEDO NFOV(.2-4)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14 ALBEDO NFOV(.2-.7)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

16 NET RADIATION WFOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
17 S.W.POP.NFOV -AN	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
18 S.W.POP.NFOV -DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19 L.W.TERR.FLUX NFOV-AN	0	1	0	0	1	0	0	0	0	0	0	3	0	0	0	0
20 L.W.TERR.FLUX NFOV-DN	0	1	0	2	0	0	0	0	0	0	0	1	0	0	0	0
21 L.W.TERR.FLUX NFOV-AN+DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22 ALBEDO NFOV	1	0	0	0	1	1	0	2	6	11	0	19	14	15	0	0
23 NET RADIATION WFOV	1	5	0	2	3	6	0	5	7	2	0	2	1	0	0	0
24 L.W.POP.NFOV -AN	0	0	0	1	10	3	0	0	0	0	0	2	0	0	0	0
25 L.W.POP.NFOV -DN	0	0	0	1	4	0	0	0	0	0	0	0	0	0	0	0
26 L.W.POP.WFOV INCR.DAILY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27 L.W.POP.NFOV INCR.DAILY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28 L.W.TERR.FLUX WFOV AN+DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29 N.DISP.L.W.TERR.FLUX WFOV AN+DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30 N.DISP.ALBEDO WFOV(.2-4)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31 STD.DEV.NET RAD.WFOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32 N.DISP.L.W.TERR.FLUX NFOV AN+DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33 N.DISP.ALBEDO NFOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34 STD.DEV NET RADIATION NFOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35 MIN.ALBEDO NFOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36 AVG SOLAR INSOLATION	0	0	0	0	0	0	0	0	1	14	0	216	820	322	0	0
37 ALBEDO WFOV(.2-4) UNCORRECTED	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

RANGE ERROR SUMMARY: 1978 NOVEMBER

PARM #	EXPECTED RANGE	DAY	OBSERVED RANGE MIN	MAX	ERROR COUNT
3	100. 300.	20	152.9	305.3	2
		21	154.4	320.5	4
		22	153.8	322.9	4
		25	154.0	303.0	3
		26	153.8	308.4	3
		29	159.2	315.1	6
		30	160.5	316.7	5
		32	157.9	311.3	11
4	100. 300.	18	141.3	541.3	1
		21	150.3	335.8	1
6	0. 300.	16	0.0	316.8	1
		18	0.0	315.1	1
		20	0.0	309.9	1
		24	0.0	339.7	1
		28	0.0	356.8	2
		29	0.0	324.1	1
13	0. 200.	16	0.0	225.2	2
		17	0.0	203.0	1
		18	0.0	224.0	1
		20	0.0	220.1	1
		24	0.0	242.1	3
		25	0.0	200.7	2
		26	0.0	205.2	2
		28	0.0	255.6	11
		29	0.0	226.4	8
		30	0.0	215.0	10
		32	0.0	203.2	1
12	0. 100.	24	0.0	106.7	1
		28	0.0	111.7	2
15	0. 1.	20	0.1	1.1	1
		22	0.1	1.0	1
		24	0.1	1.1	1
		25	0.1	1.1	2
		26	0.1	1.0	4
		28	0.1	1.1	3
		29	0.1	1.2	4
		30	0.1	1.2	3
16	-200. 200.	32	-206.0	161.3	1
17	0. 800.	20	0.0	628.0	1
19	100. 401.	16	97.0	321.8	1
		18	54.6	348.3	1
		21	91.5	356.8	1
		28	94.8	349.8	3
27	100. 400.	18	89.6	377.5	1
		20	94.4	307.4	2
		28	94.8	308.1	1
29	0. 1.	16	0.1	1.1	1
		17	0.1	1.2	1

			24	0.1	1.1	2
			25	0.1	1.1	6
			26	0.1	1.3	11
			28	0.1	1.5	19
			29	0.1	1.3	14
			30	0.1	2.0	15
23	-200.	200.	16	-291.0	178.3	7
			17	-204.4	184.8	1
			18	-201.1	226.5	5
			20	-194.0	203.9	2
			21	-218.9	204.9	3
			22	-210.0	204.6	6
			24	-208.0	221.3	6
			25	-211.1	208.2	7
			26	-203.2	206.2	2
			28	-202.8	195.2	2
			29	-198.7	206.4	1
			30	-215.2	197.2	9
24	0.	600.	20	0.0	628.0	1
			21	0.0	695.0	10
			22	0.0	670.0	3
			28	0.0	620.0	2
25	0.	600.	20	0.0	623.0	1
			21	0.0	685.0	4
36	0.	500.	25	0.0	500.3	1
			26	0.0	504.8	16
			28	0.0	513.4	216
			29	0.0	517.5	220
			30	0.0	521.4	332

END OF CRB-MATRIX PROCESSING
END OF CRB-MATRIX PROCESSING
END OF CRB-MATRIX PROCESSING
END OF CRB-MATRIX PROCESSING

ERBM-DP SAMPLE RUN OUTPUT

```
                    E R B - M - D P    P R O G R A M

                    ************************
                    *                      *
                    *  FGGE TAPE   UA1100  *
                    *                      *
                    ************************

          TAPE DESIGNATOR    UA1100
          SLOT NUMBER        BL6055
          PRINT LEVEL        0
               SUMMARY PRINTOUT            = ON
               RECORD HEADER PRINT         = OFF
               DATA DUMP (FLOATING)        = OFF
               SCALED DATA DUMP (INTEGER)  = OFF
               SCALED DATA DUMP (HEX)      = OFF


END FILE 1  -  TEST FILE:      258 BLOCKS.     0 I/O ERRORS.     0 DATA ERRORS


TAPE HEADER:
          FGGE2C200078111600781130 18
          004240
          FORMAT(20A4)
          0123456789=:)> STUVWXYZ.)-JKLMNOPQR*'(+ABCDEFGHI.)_<
          9 TRACK, 1600 BPI
          BINARY DATA. ODD PARITY
          IBM 360/91
          NASA / GODDARD SPACE FLIGHT CENTER          U.S.A.
          FORMAT(1060A4)

          THIS TAPE CONTAINS SELECTED TERRESTRIAL PARAMETERS FROM THE NIMBUS-7
          EARTH RADIATION BUDGET EXPERIMENT.

          PROCESSED FOR FGGE ON:  WED MAR 10,1982

          SCIENTIST:   GARY N WOLFORD
          ADDRESS:     NASA / GODDARD SPACE FLIGHT CENTER
                       GREENBELT, MARYLAND      20771
                       UNITED STATES OF AMERICA        (U.S.A.)

                         ********************************

          THIS TAPE FOLLOWS THE FGGE LEVEL-3 FORMATS INSTEAD OF THE LEVEL-2 FORMATS.

          WARNING:   THE FILL FLAG FOR THE ARRAY OF PACKED INTEGERS  O(I) IS DEFINED
                     AS THE VALUE  B'1000000000000000' = X'8000' = -32768.
                     THE USER'S PROGRAM SHOULD CHECK FOR THIS FILL FLAG -BEFORE-
                     UNPACKING THE  O(I).  AS THE UNPACKING PRODUCES UNPREDICTABLE
                     RESULTS WHEN PERFORMED ON THE FILL FLAG.

          ***********************************************************************

END FILE  2  -  TAPE HEADER FILE:          4 BLOCKS.        0 I/O ERRORS


GRID DESCRIPTOR FILE:   THE ERB NUMBERING SYSTEM ASSIGNS A NUMBER, BETWEEN 1 AND 2370, TO EACH TARGET
                        AREA STARTING FROM THE SOUTH POLE.
                        FOR EACH LATITUDE BAND THE LONGITUDE INTERVALS START AT THE 0 DEGREE MERIDIAN
                        AND PROGRESS WEST BY THE INCREMENTS LISTED.
                        WITHIN EACH LATITUDE BELT THE TARGET NUMBERS INCREASE WESTWARD FROM THE 0.0 DEG
                        MERIDIAN AND CONTINUE TO INCREASE WITHIN THE ADJACENT LATITUDE BELT TO THE NORTH

                        TARGET NO.       LATITUDE LIMITS     LONGITUDE
                                                             INTERVAL

                        1-3              POLE     85.5        120.0
                        4-12             85.5     81.0         40.0
                        13-20            81.0     76.5         22.5
                        24-40            [illegible]          [illegible]
```

79-114	67.5	63.0	10.0
115-154	63.0	58.5	9.0
155-199	58.5	54.0	8.0
200-247	54.0	49.5	7.5
248-307	49.5	45.0	6.0
308-367	45.0	40.5	6.0
368-427	40.5	36.0	6.0
428-499	36.0	31.5	5.0
500-571	31.5	27.0	5.0
572-643	27.0	22.5	5.0
644-715	22.5	18.0	5.0
716-795	18.0	13.5	4.5
796-875	13.5	9.0	4.5
876-955	9.0	4.5	4.5
956-1035	4.5	EQUATOR	4.5
1036-1115	EQUATOR	4.5	4.5
1116-1195	4.5	9.0	4.5
1196-1275	9.0	13.5	4.5
1276-1355	13.5	18.0	4.5
1356-1427	18.0	22.5	5.0
1428-1499	22.5	27.0	5.0
1500-1571	27.0	31.5	5.0
1572-1643	31.5	36.0	5.0
1644-1703	36.0	40.5	6.0
1704-1763	40.5	45.0	6.0
1764-1823	45.0	49.5	6.0
1824-1871	49.5	54.0	7.5
1872-1916	54.0	58.5	8.0
1917-1956	58.5	63.0	9.0
1957-1992	63.0	67.5	10.0
1993-2022	67.5	72.0	12.0
2023-2042	72.0	76.5	18.0
2043-2058	76.5	81.0	22.5
2059-2067	81.0	85.5	40.0
2068-2070	85.5	POLE	120.0

END FILE 3 - GRID DESCRIPTOR FILE: 1 BLOCKS. 0 I/O ERRORS

END FILE 4 339 BLOCKS. 0 I/O ERRORS

ERB-MATRIX COUNT OF AVAILABLE DAILY/MONTHLY RECORDS FOR 1978 1 NOVEMBER

DAY #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2001 POP1 WFOV - AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2002 POP1 WFOV - DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2003 L.W.TERR.FLUX WFOV-AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2004 L.W.TERR.FLUX WFOV-DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2005 MAX REFL.ENERGY(.2-4UM)-AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2006 MAX REFL.ENERGY(.2-4UM)-DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2007 MAX REFL.ENERGY(.7-3)-AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2008 MAX REFL.ENERGY(.7-3)-DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2009 REFL.ENERGY WFOV(.2-4)-AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2010 REFL.ENERGY WFOV(.2-4)-DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2011 REFL.ENERGY WFOV(.7-3)-AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2012 REFL.ENERGY WFOV(.7-3)-DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2013 ALBEDO WFOV(.2-4)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2014 ALBEDO WFOV(.2-.7)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2015 ALBEDO WFOV(.7-3)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2016 NET RADIATION WFOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2017 S.W.POP.NFOV -AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2018 S.W.POP.NFOV -DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2019 L.W.TERR.FLUX NFOV-AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2020 L.W.TERR.FLUX NFOV-DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2021 L.W.TERR.FLUX NFOV-AN+DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2022 ALBEDO NFOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2023 NET RADIATION NFOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

2025 L.W. POP.NFOV -DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2036 AVG.SOLAR INSOLATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2037 ALBEDO WFOV(.2-4) UNCORRECTED	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

DAY #	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	MONTHLY
2011 POP: WECV - AN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2012 POP: WFCF - DN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2013 L.W.TERR.FLUX WFOV-AN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2014 L.W.TERR.FLUX WFOV-DN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2015 MAX REFL.ENERGY(.2-4UM)-AN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2016 MAX REFL.ENERGY(.2-4UM)-DN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2017 MAX REFL.ENERGY(.7-3)-AN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2018 MAX REFL.ENERGY(.7-3)-DN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2019 REEL.ENERGY WECV(.2-4)-AN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2010 RFFL.ENERGY WFCV(.2-4)-DN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2011 RFFL.ENERGY WFOV(.7-3)-AN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2012 RFFL.ENERGY WFOV(.7-3)-DN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2013 ALBEDO WFOV(.2-4)	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2014 ALBEDO WFOV(.2-.7)	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2015 ALBEDO WFOV(.7-3)	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2016 NET RADIATION WFOV	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2017 S.W.POP.NFOV -AN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2018 S.W.POP.NFOV -DN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2019 L.W.TERR.FLUX NFOV-AN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2020 L.W.TERR.FLUX NFOV-DN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2021 L.W.TERR.FLUX NFOV-AN+DN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2022 ALBEDO NFOV	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2023 NET RADIATION NFOV	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2024 L.W.POP.NFOV -AN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2025 L.W.POP.NFOV -DN	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2036 AVG.SOLAR INSOLATION	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1
2037 ALBEDO WFOV(.2-4) UNCORRECTED	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

ERB-MATRIX COUNT OF NON-FILL DATA AND NON-ZERO POPULATIONS FOR 1978 : NOVEMBER

DAY #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2001 POP: WECV - AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	319
2002 POP: WFCF - DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	231
2003 L.W.TERR.FLUX WFOV-AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	319
2004 L.W.TERR.FLUX WFOV-DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	231
2015 MAX REEL.ENERGY(.2-4UM)-AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	319
2016 MAX RFFL.ENERGY(.2-4UM)-DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	231
2017 MAX REFL.ENERGY(.7-3)-AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	319
2008 MAX REFL.ENERGY(.7-3)-DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	231
2009 RFFL.ENERGY WFOV(.2-4)-AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	319
2010 RFFL.ENERGY WFOV(.2-4)-DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	231
2011 RFFL.ENERGY WFOV(.7-3)-AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	294
2012 RFFL.ENERGY WFOV(.7-3)-DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	294
2013 ALBEDO WFOV(.2-4)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	294
2014 ALBEDO WFOV(.2-.7)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	319
2015 ALBEDO WFOV(.7-3)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1222
2016 NET RADIATION WFOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	121
2017 S.W.POP.NFOV -AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1288
2018 S.W.POP.NFOV -DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1206
2019 L.W.TERR.FLUX NFOV-AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1439
2020 L.W.TERR.FLUX NFOV-DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1185
2021 L.W.TERR.FLUX NFOV-AN+DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	413
2022 ALBEDO NFOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1288
2023 NET RADIATION NFOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1206
2024 L.W.POP.NFOV -AN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2071
2025 L.W.POP.NFOV -DN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2036 AVG.SOLAR INSOLATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2037 ALBEDO WFOV(.2-4) UNCORRECTED	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

DAY #	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	MONTHLY
2011 POP: WFCV - AN	189	199	0	594	649	656	0	597	634	651	0	593	601	642	0	2042
2012 POP: WFCF - DN	142	185	0	473	536	526	0	477	545	492	0	471	499	530	0	1804
2003 L.W.TERR.FLUX WFOV-AN	189	199	0	594	649	656	0	597	634	651	0	593	601	642	0	2042
2004 L.W.TERR.FLUX WFOV-DN	142	185	0	473	536	526	0	477	545	492	0	471	499	530	0	1804
2005 MAX REFL.ENERGY(.2-4UM)-AN	189	199	0	594	649	656	0	597	634	651	0	593	601	642	0	2042

2006	MAX REFL.ENERGY(.2-4UN)-DN	142	185	0	473	556	526	0	477	545	492	0	471	495	530	0 1804
2007	MAX REFL.ENERGY(.7-3)-AN	189	199	0	594	649	656	0	597	634	651	0	593	601	642	0 2042
2008	MAX REFL.ENERGY(.7-3)-DN	142	185	0	473	556	526	0	477	545	492	0	471	495	530	0 1804
2009	REFL.ENERGY WFOV(.2-4)-AN	189	199	0	594	649	656	0	597	634	651	0	593	601	642	0 2042
2010	REFL.ENERGY WFOV(.2-4)-DN	142	185	0	473	556	526	0	477	545	492	0	471	495	530	0 1804
2011	REFL.ENERGY WFOV(.7-3)-AN	189	199	0	594	649	656	0	597	634	651	0	593	601	642	0 2042
2012	REFL.ENERGY WFOV(.7-3)-DN	142	185	0	473	556	526	0	477	545	492	0	471	495	530	0 1804
2013	ALBEDO WFOV(.2-4)	172	177	0	542	509	599	0	543	577	594	0	542	553	590	0 1970
2014	ALBEDO WFOV(.2-.7)	172	177	0	542	509	599	0	543	577	594	0	542	553	590	0 1976
2015	ALBEDO WFOV(.7-3)	172	177	0	542	509	599	0	543	577	594	0	542	553	590	0 1976
2016	NET RADIATION WFOV	189	199	0	594	649	656	0	597	634	651	0	593	601	642	0 2042
2017	S.W.POP.NFOV -AN	1775	1561	0	1702	1850	1688	0	1536	1649	1599	0	1615	1581	1410	0 2022
2018	S.W.POP.NFOV -DN	192	197	0	177	170	170	0	172	174	172	0	163	164	163	0 383
2019	L.W.TERR.FLUX NFOV-AN	1830	1615	0	1763	1904	1748	0	1622	1736	1685	0	1704	1669	1500	0 2070
2020	L.W.TERR.FLUX NFOV-DN	1775	1684	0	1755	1899	1754	0	1754	1687	1600	0	1754	1678	1588	0 2070
2021	L.W.TERR.FLUX NFOV-AN+DN	1564	1342	0	1488	1735	1507	0	1406	1438	1310	0	1478	1371	1188	0 2070
2022	ALBEDO NFOV	1749	1531	0	1680	1823	1664	0	1535	1649	1599	0	1615	1581	1410	0 1992
2023	NET RADIATION NFOV	1561	1338	0	1486	1732	1502	0	1400	1430	1309	0	1469	1363	1177	0 2070
2024	L.W.POP.NFOV -AN	1830	1615	0	1763	1904	1748	0	1622	1736	1685	0	1704	1669	1500	0 2073
2025	L.W.POP.NFOV.-DN	1775	1684	0	1755	1899	1754	0	1754	1687	1600	0	1754	1678	1588	0 2070
2036	AVG.SOLAR INSOLATION	2070	2070	0	2070	2070	2070	0	2070	2070	2070	0	2070	2070	2070	0 2070
2037	ALBEDO WFOV(.2-4) UNCORRECTED	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 1976

IJ-62117
12/2/78-11/ /79
NIMBUS 7
FGGE ERB-M

```
$NOP
$NOP *** LIST OF DDLT1 *******
$EXE TPLIST RC

INPUT PARAMETERS ARE:  ED SR=1=1

 TAPE NO.   1            FILE NO.   2
  RECORD    1            LENGTH    424
FGGELC2000678120280792531118                                                    004240
                                                    FORMAT(20A4)
                                        0123456789=:> STUVWXYZ.)-JKLMNOPQR* ;+ABCDEFGHI.) <
                    9 TRACK,  800 BPI
    BINARY DATA, ODD PARITY                                                   IBM 360/91
                                                        NASA / GODDARD SPACE FLIGHT CENTER
        U.S.A.                          FORMAT(106CA4)

                                                                                THIS TAPE C
ONTAINS SELECTED TERRESTRIAL PARAMETERS FROM THE NIMBUS-7          EARTH RADIATION BUDGET EXPERIM
ENT.
                                PROCESSED FOR FGGE ON:  FRI AUG 13,1982
                                                                                SCIENTI
ST:   GARY N WOLFORD                                        ADDRESS:     NASA / GODDAR
D SPACE FLIGHT CENTER                                   GREENBELT, MARYLAND     20771
                                            UNITED STATES OF AMERICA        (U.S.A.)

                                                                                ******
*************************
                                    THIS TAPE FOLLOWS THE FGGE LEVEL-3 FORMATS INSTEAD OF THE LE
VEL-2 FORMATS.
 WARNING:   THE FILL FLAG FOR THE ARRAY OF PACKED INTEGERS  Q(I) IS DEFINED                AS THE
VALUE  8'1000000000000000' = X'8000' = -32768.                THE USER'S PROGRAM SHOULD
CHECK FOR THIS FILL FLAG -BEFORE-                UNPACKING THE  Q(I),  AS THE UNPACKING PRODUC
ES UNPREDICTABLE                    RESULTS WHEN PERFORMED ON THE FILL FLAG.

                                                                  ***********************************
*********************************************


                                                                  TABLES I
                                    G AND S PARAMETERS AND SURFACES
                  (EXTENSION FOR N-7 ERB LEVEL II-C)
                                                          NUMBER
                        STANDARD      HEX   DEC   ABBR.                PARAMETER NAME
    UNIT          ---   ----  ------  ----------------------------------------------   --------
                                                                        7D0   2000  -ERBSU  N
-7 ERB REFERENCE SURFACE UPPER TROPOSPHERE    M
                                                        N-7 ERB WIDE FIELD OF VIEW PARAMETERS
                                        (DAILY AND MONTHLY WORLD GRIDS)
  7D1   2001  -WPOPA  DATA POPULATION-ASCENDING NODE (AN)          DIMENSIONLESS

***** JOB DONE.
$EXE TPDUMP RS
```

DUMP OF TAPE DOUT1

INPUT TAPE DOUT1 ON T60
DATA INPUT HEADER 18 SR 4 1 1 SR 18 LAST 1

FILE	INPUT RECS.	DATA RECORDS INPUT	MAX. SIZE	READ ERROR SUMMARY PERM	ZERO B	SHORT	UNDEF.	INPUT RETRIES #RECS.	TOTAL#
1	200	200	4240	0	0	0	0	0	0

YEAR MONTH DAY
78122

FILE 4 RECORD 1 LENGTH 4240BYTES

(0)	7D17D00F	B03A9800	0FF00000	00000000	0000F1FE	00000424	4E0C0200	FF000816	1090EC00	42138000
(40)	00000005	00000000	B200B200	B200B200	B200B200	B200B200	B200B200	B200B200	42004A00	46004600
(80)	4E001200	B600B200	DE000200	F6000600	4E004A00	4A004200	1200CE00	F6001600	DE00EA00	1200EA00
(120)	DA00B200	B200B200	B2001600	B200B600	0E000200	D6000600	B200F600	CA00DA00	E200C200	FA00B200
(160)	0A00B200	0E00B200	0A00B200	B200B200	B200B200	E200B200	DA00E200	B200B200	B2000E00	B2000A00
(200)	B200DA00	FE00B200	FE00BA00	B2000A00	B200DA00	E200B200	0600E200	B6000200	B200FE00	BE00B200
(240)	D200B200	B200B200	B200B200	B2000200	B600B200	B200B200	DA00DE00	B2000A00	B200BA00	0600B200
(280)	B2000600	B200B200	0600B200	B2000200	B200B200	0600B200	BA00FE00	B200CE00	EA00B200	B200B200
(320)	B200B200	B200B200	B200B200	C200F600	B200B200	B200B200	EE00CA00	B2000200	B200B200	B2000600
(360)	B200B200	0200B200	B2000200	B200B200	EA00CE00	B200B200	0600B200	B2000200	B200B200	0200B200
(400)	B200B200	B200B200	B200B200	B200B200	B200B200	B6000200	B200B200	B200B200	B2000200	B200B200
(440)	EE00CA00	B200B200	0200B200	B200CA00	EE00B200	B2000200	B200E200	D600DE00	B200B200	0200B200
(480)	B200EA00	CE00B200	B2000200	B200B200	B200B200	B200B200	B200B200	B200B200	B200B200	0200B200
(520)	B200B200	B200B200	B2000600	B200B200	BA00FA00	B200B200	B2000200	B200B200	B2000200	B200B200
(560)	B200D600	E200B200	B200B200	0200B200	B200B200	F600B200	B200B200	CE00E600	B200B200	B2000600
(600)	B200B200	B200B200	B200B200	B200B200	B200B200	B200B200	B200B200	B200DA00	DA00B200	B200B200
(640)	B200B200	B200B200	0200B200	B200B200	DA00DA00	B200B200	B2000200	B200B200	B200DE00	D600B200
(680)	B200B200	0200B200	B200B200	0200B200	B200B200	D600DA00	B200B200	B2000200	B200B200	B2000200
(720)	B200B200	B200B200	B200B200	B200FA00	B200B200	B200B200	B200B200	B200B200	0200B200	B200B200
(760)	B200B200	B200B200	DE00D600	B200B200	B2000600	B200B200	B200F200	C200B200	B200B200	0200B200
(800)	B200B200	0200B200	B200B200	F200C200	B200B200	B2000200	B200B200	B2000200	B200B200	B200EA00
(840)	CA00B200	B200B200	B200B200	B200FA00	BA00B200	B200B200	B200B200	B200B200	0200B200	B200B200
(880)	B200B200	B200B200	B2000200	B200B200	B2000200	B200B200	B200E200	0200B200	B200B200	B200DA00
(920)	DA00B200	B200B200	B2000200	B200B200	B200B200	0200B200	B200E200	B2000200	B200B200	B200B200
(960)	0200B200	B200B200	B200CE00	E600B200	B200B200	B200B200	B200B200	B2000200	B200B200	B200B200
(1000)	B200B200	B200B200	B200E200	C200B200	B200B200	B200B200	B200B200	B200B200	0200B200	B200B200
(1040)	B200FE00	B200B200	B200B200	C600EE00	B200B200	B200B200	0200B200	B200B200	B200FE00	B200B200
(1080)	B200B200	0200B200	B200B200	B200FE00	B600B200	B200B200	BE00F600	B200B200	B200B200	FE00B200
(1120)	B200B200	B200B200	B200B200	B2000200	B200B200	B200B200	B200E200	B200B200	B200B200	0200B200
(1160)	B200B200	B200B200	B200B200	B200B200	0200B200	B200B200	B200C200	B200B200	B200B200	B2000200
(1200)	B200B200	B200B200	0200B200	B200B200	B2000200	B200B200	B200B200	EE00C600	B200B200	B200B200
(1240)	0200B200	B200B200	B2000200	B200B200	B200B200	0200B200	B200B200	B200B200	B200B200	B200BE00
(1280)	F200B200	B200B200	B200B200	B200B200	B200B200	0200B200	B200B200	B200B200	B200B200	B200B200
(1320)	FE00BA00	B200B200	B200B600	FE00B200	B200B200	B2000200	B200B200	B200B200	FE00B200	B200B200
(1360)	B200E600	CE00B200	B200B200	B2000200	B200B200	B200B200	0200B200	B200B200	B200FE00	B200B200
(1400)	B200B200	0200B200	B200B200	B200B200	B200B200	B200B200	0200B200	B200B200	B200B200	B200B200
(1440)	B200B200	0200B200	B200B200	B200B200	B200B200	E200B200	B2000200	B200B200	B200B200	0200B200
(1480)	B200B200	B200B200	FE00B200	B200B200	B200BA00	FA00B200	B200E200	B200FE00	B600B200	B200B200
(1520)	B2000200	B200B200	B200B200	B200FE00	B200B200	B200B200	B2000200	B200B200	B200B200	D200E200
(1560)	B200B200	B200B200	B200B200	B200B200	B2000200	B200B200	B200B200	B200B200	B200B200	B200B200
(1600)	B200FE00	B200B200	B200B200	B200B200	B200B200	B200B200	0200B200	B200B200	B200B200	0200B200
(1640)	B200B200	B200B200	0200B200	B200B200	B200B200	0200B200	B200B200	B200B200	FE00B200	B200B200
(1680)	B200F200	BE00B200	B200B200	B2000200	B200B200	B200B200	B2000200	B200B200	B200B200	B200FE00
(1720)	B200B200	B200B200	B200B200	B200B200	B2000200	B200B200	B200E200	B200B200	B200B200	B200B200
(1760)	B2000200	E200B200	B200B200	B200B200	B200B200	B200B200	DA00DA00	B200B200	B200B200	FE00DE00
(1800)	B200B200	B200B200	0200B200	B200B200	B200B200	FE00B200	B200B200	B200B200	0200B200	B200B200
(1840)	B200B200	0200B200	B200B200	B200EE00	C600B200	B200B200	B200FE00	B200B200	B200B200	B2000200
(1880)	B200B200	B200B200	B200B200	B200B200	B200B600	FA00B200	B200E200	B200B200	B200B200	B200B200
(1920)	B2000200	B200B200	B200B200	B200B200	B200B200	B200B200	B200FE00	B200B200	B200B200	D6000200
(1960)	B200B200	B200B200	CA00E600	B200B200	B200B200	0200B200	B200B200	B200B200	0200B200	B200B200
(2000)	B200B200	0200B200	B200B200	B200B200	FE00B200	B200B200	B200EA00	CA00B200	B200B200	B2000200
(2040)	B200B200	B200B200	B200B200	B200B200	B200B200	0200B200	B200B200	B200B200	B200B200	B200B200
(2080)	B200FA00	B600B200	B200B200	B200B200	B200B200	B200B200	B2000200	B200B200	B200B200	B200FE00

(2200)	D600B200	B200B200	B200B200	B200B200	B200B200	0200B200	B200B200	B200B200	B200B200	B200B200
(2240)	B200B200	0200B200	B200B200	B200B200	B200B200	B200B200	B2000200	B200B200	B200B200	B2000200
(2280)	B200B200	B200B200	B2000200	B200B200	B200B200	E2000200	B200E200	B200B200	BE00F200	B200B200
(2320)	B200B200	0200B200	B200B200	B200B200	0200B200	B200B200	B200E200	FE00B200	B200B200	B200B200
(2360)	FE00B200	B200B200	B200B200	B200B200	B200B200	FE00B200	B200B200	B200B200	B200B200	B200B200
(2400)	B200B200	0200B200	B200B200	B200B200	B200B200	B200B200	B200EA00	C600B200	B200B200	B200E600
(2440)	CE00B200	B200B200	B200FE00	B200B200	B200B200	B200FE00	B200B200	B200B200	B2000200	B200B200
(2480)	B200B200	B600FE00	B200B200	B200B200	FE00B200	B200B200	B200B200	0200B200	B200B200	B200B200
(2520)	0200B200	B200B200	B200B200	B200B200	B200B200	CA00EA00	B200B200	B200B200	B200B200	B200B200
(2560)	B200B200	0200B200	B200B200	B200B200	B200B200	B200B200	B200B200	0200B200	B200B200	B200B200
(2600)	FE00B200	B200B200	B200DE00	D600B200	B200B200	B2000200	B200B200	B200B200	B2000200	B200B200
(2640)	B200B200	B200FE00	B200B200	B200B200	B2000200	B200B200	B200B200	F600BE00	B200B200	B200B200
(2680)	0200B200	B200B200	B200B200	B200B200	B200B200	B2000200	B200B200	B200B200	B200B200	B200B200
(2720)	B200B200	FE00B200	B200B200	B200B200	B200B200	B200B200	B200B200	0200B200	B200B200	B200B200
(2760)	0200B200	B200B200	B2000200	B200B200	B200B200	0200B200	B200B200	B200EE00	C200B200	B200B200
(2800)	B2000200	B200B200	B200B200	0200B200	B200B200	B2000200	B200B200	B200B200	FE00B200	B200B200
(2840)	B200B200	B200B200	B200B200	FE00B200	B200B200	B200B200	B200B200	B200B200	0200B200	B200B200
(2880)	B200B200	B200B200	B200B200	B200FE00	B200B200	B200B200	0200B200	B200B200	B2000200	B200B200
(2920)	B200B200	E200CE00	B200B200	B200B200	0200B200	B200B200	B2000200	B200B200	B200B200	0200B200
(2960)	B200B200	B200FE00	B200B200	B200B200	DA00DA00	B200B200	B200B200	B200B200	B200B200	0200B200
(3000)	B200B200	B200B200	B200B200	B200B200	EE00C600	B200B200	B200B200	B200B200	B200B200	B2000200
(3040)	B200B200	B200B200	0200B200	B200B200	B200D600	DA00B200	B200B200	B2000200	B200B200	B200B200
(3080)	0200B200	B200B200	B2000200	B200B200	B200B200	FE00B200	B200B200	B200CE00	E600B200	B200B200
(3120)	B2000200	B200B200	B200B200	B200B200	B200B200	0200B200	B200E200	B200B200	B200B200	B200B200
(3160)	B2000200	B200B200	B200B200	B200B200	B200B200	B2000200	B200E200	B200B200	C200F200	B200B200
(3200)	B200B200	0200B200	B200B200	B2000200	B200B200	B200B200	0200B200	B200B200	B200F600	BA00B200
(3240)	B200B200	BE00F600	B200B200	B200B200	0200B200	B200B200	B200C200	B200B200	B200B200	B200B200
(3280)	B200B200	CA00C200	B200B200	B200B200	B200B200	B200B200	B200FE00	B200B200	B200B200	B200B200
(3320)	B200B200	B200FE00	B600B200	B200B200	E200CE00	B200B200	B2000200	B200B200	B2000200	B200B200
(3360)	B200DE00	D600B200	B200B200	0200B200	B200B200	0200B200	B200B200	DA00DA00	B200B200	B2000200
(3400)	B200B200	B200B200	B200B200	B200EE00	B200B200	B200B200	B200E600	CE00B200	B200B200	B200B200
(3440)	B200B200	B200B200	0200B200	B200B200	B2000200	B200B200	B2000200	B200B200	B200F200	C200B200
(3480)	B200B200	0200B200	B200B200	0200B200	B200B200	EE00C600	B200B200	B2000200	B200B200	B2000200
(3520)	B200B200	B200B200	B200B200	B2000200	B200B200	B200B200	B200B200	B200B200	0200B200	B200B200
(3560)	B200B200	B200B200	F200C200	B200B200	B2000600	B200B200	B200F600	BE00B200	B200B200	0200B200
(3600)	B200B200	0200B200	B200B200	F600BE00	B200B200	B2000200	B200B200	B2000200	B200B200	B200EE00
(3640)	C600B200	B200B200	B200B200	B200FA00	BA00B200	B200B200	B200B200	B200B200	0200B200	B200B200
(3680)	B200B200	B200B200	B2000200	B200B200	B2000200	E200B200	0200B200	B200B200	0200B200	B2000200
(3720)	B200B200	B2000600	B200B200	0200B200	B200B200	0200B200	B2000200	B200B200	B200B200	B200E200
(3760)	D200B200	B200B200	B200B200	F200C600	B200B200	B200B200	B2000200	B200B200	B2000200	B200B200
(3800)	0600B200	B200DE00	DA00B200	B2000200	B200B200	0200B200	B200C600	B200B200	DA00DE00	B200B200
(3840)	C200B200	B200B200	B200B200	0200B200	B200B200	B200B200	0200B200	B200B200	B200B200	B2000200
(3880)	B200B200	0600B200	B2000600	B200B200	0200B200	B2000600	B200BE00	FA00B200	D600E200	B200EA00
(3920)	CA00B200	0200B600	B200B200	B200C600	F200B200	B200B200	B200F200	C600B200	B200B200	B2000600
(3960)	F200B200	0600B200	B2000600	B200EA00	C200B200	0600B200	C200F600	B2000600	B200B200	0600B200
(4000)	E600D200	B200B200	B2000600	B200B200	B200B200	EA00CE00	B200B200	B200C600	0A00B200	FE00BE00
(4040)	EA00D200	CE00EE00	B600F600	B2000A00	B2000A00	B200FE00	C200E600	D600B200	B200EE00	D200B200
(4080)	B200B600	0600B200	B200B200	EE00D200	1600FA00	CE000A00	0A00D600	EE001200	DA00E200	1600B200
(4120)	CE00F600	B200DE00	EA00B200	B200B200	B200B200	B600B200	B200B200	B200B200	B200B200	B600B200
(4160)	B600B200	B200B200	B200B200	B200B200	B200B200	B200B200	B200B200	00000000	00000000	00000000
(4200)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000

FILE	INPUT RECS.	DATA RECORDS INPUT	MAX. SIZE	READ ERROR SUMMARY PERM	ZERO B	SHORT	UNDEF.	INPUT RETRIES #RECS.	TOTAL#
4	625	625	4240	0	0	0	0	0	0

FILE 18 RECORD 599 LENGTH 4240BYTES

7911

(0)	7F47D016	403A9800	0FF05000	00000000	000000FE	00000424	4F0BC000	FF000816	1090E523	42F1F330
(40)	00000008	00000000	63396439	62396186	61E06239	628662E0	60396086	60E06139	5EC65EF9	5F205F53
(80)	5F865FAC	5FE06013	5D465D79	5DAC5DD3	5E065E39	5E6C5E93	5AD35AF9	5B205B46	5B6C5B93	5BAC5BD3
(120)	5BF55C20	596C5993	59B959C3	59F95A20	5A465A6C	5A935AB9	58D358EC	58F95913	592C5939	59535960
(160)	59795993	59A059B9	59C659E0	59F957A0	57B957C6	57E057F9	58065820	582C5846	5860586C	58865893
(200)	58AC58C6	5C065C13	5C205C2C	5C395C46	5C535C60	5C6C5C86	5C935CA0	5CAC5CB9	5CC65CD3	5CE05CEC
(240)	5B065B13	5B205B2C	5B395B46	5B535B60	5B6C5B86	5B935BA0	5BAC5BB9	5BC65BD3	5BE05BEC	6160616C
(280)	61796179	61966193	61A061AC	61B961C6	61D361E3	61E061FC	61F96206	62136220	62C6622C	60786086

REQ. AGENT	RAND NO.	ACQ. AGENT
DAD	V0249	CYN

NIMBUS 7

GARP (FGGE/ERB-Z) SOLAR IRRADIANCE ZONALLY AVERAGED

INSOLATION DATA ON MAGNETIC TAPE

78-098A-07K ESRB-00014

THIS DATA SET CATALOG CONSISTS OF ONE MAGNETIC TAPE. THE TAPE IS 9-TRACK, 1600 BPI, EBCDIC AND WAS CREATED ON AN IBM 360 COMPUTER. THE D NUMBER AND THE TIME SPAN ARE AS FOLLOWS:

D#	FILES	TIME SPAN
D-63115	62	12/02/78 - 11/01/79

B R I E F D E S C R I P T I O N

GARP(FGGE/ERB-Z) Zonal Avg Insol
78-098A-07K

The FGGE/ERB-Z tape contains five parameters extracted and reformatted from the Nimbus-7 Earth Radiation Budget (ERB) Zonal Means Tape (ZMT) in accordance with the First GARP (Gloabl Atmospheric Weather Program) Global Experiment (FGGE) Level II International Exchange Format Specification. The FGGE/ERB-Z dataset consists of three types of files one one tape: a test file, a header file, and data files. The purpose of this dataset was to facilitate correlations with many different experiments (ground, air, and space) during the FGGE Global Weather Experiment (December 1, 1978 through November 30, 1979).

M A T E R I A L S F O R D I S T R I B U T I O N

78-098A-07K
GARP(FGGE/ERB-Z) Zonal Avg Insol

FGGE/ERBZ tape specification and shipping letter description, NASA CR 170548 (3/83), B42238-000A.

A C K N O W L E D G E M E N T S

When using the data in any reports, publications, or presentations, please acknowledge the National Space Science Data Center and the following individuals or groups:

78-098A-07K
Dr. H. L. Kyle, Nasa/Gsfc, Dr. Herbert Jacobowitz, Noaa/Nesdis, And Members Of The Erb Nimbus Experiment And Information Processing Teams

REQ. AGENT	RAND NO.	ACQ. AGENT
DAD	V0249	CYN

NIMBUS 7

GARP (FGGE/SMMR-LO) SEA SURFACE TEMPERATURE

DATA ON MAGNETIC TAPE

78-098A-08T ESAD-00240

THIS DATA SET CATALOG CONSISTS OF ONE MAGNETIC TAPE. THE TAPE IS 9-TRACK, 1600 BPI, EBCDIC, AND WAS CREATED ON AN IBM 360 COMPUTER. THE D NUMBER AND THE TIME SPAN ARE AS FOLLOWS:

D#	FILES	TIME SPAN
D-63116	904	12/01/78 - 12/01/79

REQ. AGENT	RAND NO.	ACQ. AGENT
DAD	V0249	CYN

NIMBUS 7

GARP (FGGE/SMMR-LO) TOTAL ATMOSPHERIC WATER

VAPOR DATA ON MAGNETIC TAPE

78-098A-08U

THIS DATA SET CATALOG CONSISTS OF 6 MAGNETIC TAPES. THE TAPES ARE 9-TRACK, 1600 BPI, EBCDIC AND WERE CREATED ON AN IBM 360 COMPUTER. THE D NUMBERS AND THE TIME SPANS FOLLOW BELOW:

D#	FILES	TIME SPAN
D-63117	159	12/01/78 - 01/31/79
D-63118	151	02/01/79 - 03/31/79
D-63119	156	04/01/79 - 05/31/79
D-63120	155	06/01/79 - 07/31/79
D-63121	155	08/01/79 - 09/30/79
D-63122	154	10/01/79 - 12/01/79

W-63115
12/2/78 - 11/1/79
NIMBUS 7
FGGE ERB-2

```
$NOP
$NOP ***** LIST OF DOUT2 ******
$AVF IN
$EXE TPLIST HS

INPUT PARAMETERS ARE:  ED SR=1=1 2

 TAPE NO.   1              FILE NO.   2
 RECORD   1                LENGTH   2960
FGGE  45647812    7911                                                    NAME:     NATIONAL
AERONAUTICS AND SPACE ADMINISTRATION (NASA)
                                        ADDRESS:  GODDARD SPACE FLIGHT CENTER (GSFC)
                                  GREENBELT, MARYLAND 20771
                UNITED STATES OF AMERICA (USA)                                    SCIENTIST: GARY
 WOLFORD                                                        DATE:     WED APR 20,1983
                                        0123456789=:> /STUVWXYZ,(-JKLMNOPQR*);+ABCDEFGHI.)(<
                              TAPE CHARACTERISTICS: 9 TRACK, 800 BPI,CODE EBCDIC,MODE NRZI,PARITY ODD
          TAPE CONTENTS: THIS TAPE CONTAINS                          DATA THAT WAS   DERIVED FRO
M THE ERB  INSTRUMENT FLOWN ON THE NIMBUS G EXPERIMENTAL SATELLITE.  THIS TAPE CONFORMS WITH THE FG
GE LEVEL 2B INTERNATIONAL EXCHANGE FORMAT.    ALL  AVAILABLE DATA FROM   0078 12      TO   0079 11
    IS SUPPLIED.
             TABLE 1   DATA SOURCE INDEX                                                   CODE
             DESCRIPTION                                                  11        RAWINSONDE DATA
                                                          12        PILOT WIND DATA
                                       13        TWOS RADAR SOUNDING DATA
                   14        TWOS NAVAID SOUNDING DATA                                              1
5        AIRCRAFT DROPWINDSONDE DATA                                          16        CONSTANT LE
VEL BALLOON DATA                                                   17        EXPERIMENTAL SATELLITE STRATOS
PHERIC SOUNDING DATA                          21        AIRCRAFT DATA - ASDAR
                       22        AIRCRAFT DATA - AIDS CASSETTE
   23        AIRCRAFT DATA - CONVENTIONAL  (AIREP)                                  24        AIRCRAF
T DATA - CONVENTIONAL  (CODAR)                                   31        MANUAL SURFACE LAND OBSERV
ATION  (SYNOP)                                 32        AUTOMATIC SURFACE LAND OBSERVATION (SYNOP)
                              33        SURFACE OBSERVATION FROM FIXED SHIP (SHIP)
        34        SURFACE OBSERVATION FROM MOBILE SHIP (SHIP)                                   35        SUR
FACE OBSERVATION FROM ENVIRONMENTAL BUOYS                                          (NOT INCLUDED IN FGG
E SPECIAL OBSERVING SYSTEM)                                41        SATELLITE SOUNDING DATA
                                 42        EXPERIMENTAL SATELLITE OZONE DATA (TOTAL AND PROFILE)
                   51        SATELLITE CLEAR RADIANCE DATA

 TAPE NO.   1              FILE NO.   2
 RECORD   1                LENGTH   2960
H05 78 12   0052E000000000000000000    *5205                    65 78 12    00013001002 00213220-1000010020
0313203-100 00100200413180-10000100200613131-100 00100200713102-10000100200813080-100 00100201013027
-10000100201113012-100 00100201212995-10000100201412962-100 00100201512960-10000100201612945-100 0
0100201812901-10000100201912863-100 00100202012848-10000100202212820-100 00100202312819-10000100202
412816-100 00100202612794-10000100202712793-100 00100202812770-10000100203012743-100 00100203112740
-100-99-99-99-9999-9-9 *99999999999999999999999999999999999999999999999999999999999999999999999999
99999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999
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***** JOB DONE.
$AVF IN 61
$EXE TPLIST BS

INPUT PARAMETERS ARE:  ED FL=1=1

 TAPE NO.   1              FILE NO.   1
 RECORD   1                LENGTH   2960
H05(79 11)    0056000000000000000000    *5605                    65(79 11)    00441005001001000000-1000050060
0103027-100 0050110010000 0-1000050160010300 9-100 0050210010000 0-1000050260010297 2-100 0050310010002
8-1000050360010294 4-100 0050410010021 4-1000050460010305 6-100 0050510010045 4-1000050560010320 6-100 0
0506100100718-1000050660010336 2-100 0050710010099 3-1000050760010351 2-100 0050810010127 1-10000508600
103651-100 0050910010154 9-1000050960010377 4-100 0051010010182 2-1000051060010387 8-100 0051110010208 7
-1000051160010396 3-100 0051210010234 3-1000051260010402 6-100 0051310010258 7-1000051360010406 8-100 00
514100102818-1000051460010408 6-100 0051510010303 3-1000051560010408 2-100 0051610010323 2-100005166001
04054-100 0051710010341 2-1000051760010400 3-100 0051810010357 3-1000051860010392 9-100 0051910010371 3-
1000051960010383 2-100 0050010030000 0-1000050060030316 2-100 0050110030000 0-1000050160030314 3-100 005
0210030000 0-1000050260030310 4-100 0050310030001 1-1000050360030305 7-100 0050410030018 0-1000050460030
3149-100 0050510030041 3-1000050560030328 7-100 0050610030067 4-1000050660030343 5-100 0050710030094 7-1
0000050760030357 8-100 0050810030122 4-1000050860030371 0-100 0050910030150 2-1000050960030382 6-100 0051
0100301776-1000051060030392 5-100 0051110030204 4-1000051160030400 3-100 0051210030230 2-1000051260030400
061-100 0051310030255 0-1000051360030409 6-100 0051410030278 4-1000051460030410 9-100 0051510030300 3-10
0005156003040 98-100 0051610030320 5-1000051660030406 4-100 0051710030339 0-1000051760030400 8-100 00518
100303556-1000051860030392 8-100 0051910030370 1-1000051960030382 5-100 0050010040000 0-1000050060040032
27-100 0050110040000 0-1000050160040320 7-100 0050210040000 0-1000050260040316 7-100 0050310040000 5-100
0050360040311 3-100 0050410040016 5-1000050460040319 4-100 0050510040039 5-1000050560040332 8-100 005061
00400654-1000050660040347 1-100 0050710040092 6-1000050760040361 1-100 0050810040120 3-1000050860040373
9-100 0050910040148 2-1000050960040385 3-100 0051010040175 6-1000051060040394 8-100 0051110040202 5-1000
051160040402 4-100 0051210040228 5-1000051260040407 9-100 0051310040253 3-1000051360040411 1-100 0051410
0402769-1000051460040412 1-100 0051510040299 0-1000051560040410 8-100 0051610040319 5-1000051660040407 1
-100 0051710040338 2-1000051760040401 2-100 0051810040355 0-1000051860040392 9-100 0051910040369 8-10000
519600403824-100 0050010050000 0-1000050060050329 0-100 0050110050000 0-1000050160050327 0-100 00502100
500000-1000050260050322 9-100 0050310050000 1-1000050360050317 0-100 0050410050015 0-1000050460050323 9-
100 0050510050037 7-1000050560050336 7-100 0050610050063 4-1000050660050350 6-100 0050710050090 5-100005
07600503643-100 0050810050118 2-1000050860050376 8-100 0050910050146 0-1000050960050387 8-100 005101005
01736-1000051060050397 1-100 0051110050200 5-1000051160050404 4-100 0051210050226 6-1000051260050409 6-1
00 0051310050251 6-1000051360050412 5-100 0051410050275 4-1000051460050413 2-100 0051510050297 7-1000051
5600504116-100 0051610050318 3-1000051660050407 7-100 0051710050337 2-1000051760050401 5-100

 TAPE NO.   1              FILE NO.   1
 RECORD   30               LENGTH   2960
0051950270408 2-1000052000270428 1-100 0050050280000 0-1000050100280510 5-100 0050150280000 0-1000050200
2805073-100 0050250280000 0-1000050300280501 1-100 0050350280000 0-1000050400280491 7-100 0050450280000
0-1000050500280479 3-100 0050550280010 2-1000050600280474 2-100 0050650280033 0-1000050700280478 7-100 0
0507502800604-1000050800280485 2-100 0050850280090 3-1000050900280491 6-100 0050950280121 6-10000510002
804968-100 0051050280153 6-1000051100280500 4-100 0051150280185 6-1000051200280501 9-100 0051250280217 4
-1000051300280501 3-100 0051350280248 5-1000051400280498 2-100 0051450280278 7-1000051500280492 6-100 00
515502803077-1000051600280484 6-100 0051650280335 3-1000051700280474 0-100 0051750280361 3-100005180028
04610-100 0051850280385 5-1000051900280445 5-100 0051950280407 7-1000052000280427 7-100 0050050290000 0-
1000050100290514 5-100 0050150290000 0-1000050200290511 4-100 0050250290000 0-1000050300290505 0-100 005
0350290000 0-1000050400290495 6-100 0050450290000 0-1000050500290483 1-100 0050550290009 5-1000050600290
4772-100 0050650290032 0-1000050700290481 3-100 0050750290059 3-1000050800290487 5-100 0050850290089 1-1
0000050900290493 6-100 0050950290120 4-1000051000290498 6-100 0051050290152 3-1000051100290501 9-100 0051
1502901844-1000051200290503 3-100 0051250290216 3-1000051300290502 4-100 0051350290247 5-1000051400290 4
991-100 0051450290277 8-1000051500290493 4-100 0051550290306 9-1000051600290485 1-100 0051650290334 6-10
0005170029047 44-100 0051750290360 7-1000051800290461 2-100 0051850290385 0-1000051900290445 5-100 00519
502904073-1000052000290427 5-100 *99999999999999999999999999999999999999999999999999999999999999999999
99999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999
```

D-63116
12/01/78 - 12/1/79
FGGE/SMMR-L
SEA Surface TEM
78-098A-08T

```
$ASS IN TAO
$NOP
$NOP
$NOP
$NOP ****** LIST OF DOUT9 *******
$AVF IN
$EXE TPLIST BS

INPUT PARAMETERS ARE:  ED SR=1=1 2

 TAPE NO.   1              FILE NO.   1
 RECORD   1                LENGTH   2960
FGGE  45647812010079053100                                                    NAME:     NATIONAL
AERONAUTICS AND SPACE ADMINISTRATION (NASA)
                                        ADDRESS:  GODDARD SPACE FLIGHT CENTER (GSFC)
                                  GREENBELT, MARYLAND 20771
                UNITED STATES OF AMERICA (USA)                                    SCIENTIST:KAREN
 W POSEY                                                        DATE:     FRI SEP 10,1982
                                                 0123456789=:> /STUVWXYZ,(-JKLMNOPQR*);+ABCDEFGHI.)(<
                            TAPE CHARACTERISTICS: 9 TRACK, 800 BPI,CODE EBCDIC,MODE NRZI,PARITY ODD
        TAPE CONTENTS: THIS TAPE CONTAINS SEA SURFACE TEMPERATURE        DATA THAT WAS   DERIVED FRO
M THE SMMR INSTRUMENT FLOWN ON THE NIMBUS G EXPERIMENTAL SATELLITE.  THIS TAPE CONFORMS WITH THE FG
GE LEVEL 2B INTERNATIONAL EXCHANGE FORMAT.   ALL  AVAILABLE DATA FROM 78 12 01 00 00 TO 79 05 31 23
 59 IS SUPPLIED.
             TABLE 1   DATA SOURCE INDEX                                                  CODE
             DESCRIPTION                                                  11       RAWINSONDE DATA
                                                          12       PILOT WIND DATA
                                          13       TWOS RADAR SOUNDING DATA
                    14       TWOS NAVAID SOUNDING DATA                                          1
5       AIRCRAFT DROPWINDSONDE DATA                                          16       CONSTANT LE
VEL BALLOON DATA                                          17       EXPERIMENTAL SATELLITE STRATOS
PHERIC SOUNDING DATA                          21       AIRCRAFT DATA - ASDAR
                          22       AIRCRAFT DATA - AIDS CASSETTE
   23       AIRCRAFT DATA - CONVENTIONAL  (AIREP)                                  24       AIRCRAF
T DATA - CONVENTIONAL  (CODAR)                                  31       MANUAL SURFACE LAND OBSERV
ATION  (SYNOP)                                  32       AUTOMATIC SURFACE LAND OBSERVATION (SYNOP)
                          33       SURFACE OBSERVATION FROM FIXED SHIP (SHIP)
      34       SURFACE OBSERVATION FROM MOBILE SHIP (SHIP)                                  35       SUR
FACE OBSERVATION FROM ENVIRONMENTAL BUOYS                                  (NOT INCLUDED IN FGG
E SPECIAL OBSERVING SYSTEM)                          41       SATELLITE SOUNDING DATA
                                  42       EXPERIMENTAL SATELLITE OZONE DATA (TOTAL AND PROFILE)
          51       SATELLITE CLEAR RADIANCE DATA

 TAPE NO.   1              FILE NO.   2
 RECORD   1                LENGTH   2960
H067812010000630000000000000000000     *6323                  627812010000175002 1-0343546+247000021-03
13532+25800 0021-0293519+267000021-0273505+27300 0021-0253491+279000021-0483543+23800 0021-0463529+
249000021-0433515+25100 0021-0413502+269000021-0393488+28100 0021-0623539+226000021-0603526+24200 0
021-0583512+249000021-0553498+26700 0021-0533484+278000022-0763536+22500 0022-0743522+237000022-072
3509+25000 0022-0693495+260000022-0673481+26900 0022-0903533+197000022-0883519+22500 0022-0863505+2
35000022-0843491+24900 0022-0813477+236000023-1043530+20300 0023-1023516+215000023-1003502+22900 00
23-0973488+244000023-0953474+25500 0023-1183526+201000023-1163513+21300 0023-1143499+232000023-1123
485+24600 0023-1093471+263000023-1333523+19100 0023-1303509+207000023-1283495+21700 0023-1263481+23
1000023-1233467+25300 0024-1473520+189000024-1453506+20000 0024-1423492+212000024-1403478+23400 002
4-1373463+243000024-1613517+17600 0024-1593503+203000024-1563488+21200 0024-1543474+221000024-15134
60+20900 0025-1753513+185000025-1723499+19300 0025-1703485+208000025-1683471+21600 0025-1653456+238
000025-1893510+19100 0025-1863496+210000025-1843481+22000 0025-1823467+230000025-1793452+24700 0025
-2033507+199000025-2013492+20400 0025-1983478+217000025-1963463+22700 0025-1933448+249000026-217350
3+20400 0026-2153489+209000026-2123474+23200 0026-2103459+232000026-2073445+24300 0026-2313500+1920
00026-2293485+21200 0026-2273470+226000026-2243456+23800 0026-2223441+220000027-2453497+20400 0027-
2433482+204000027-2413467+22400 0027-2383452+229000027-2353437+24700 0027-2593493+204000027-2573478
+20900 0027-2553463+220000027-2523448+23100 0027-2493432+241000027-2733489+21200 0027-2713474+21200
```

```
23400 0028-2943435+246000028-2913419+22800 0029-3153479+204000029-3133463+20900 0029-3103447+221000
029-3083431+23300 0029-3243443+217000029-3223427+21400 0029-3193410+226000030-3393438+18600 0030-33
63422+190000030-3573468+15800 0030-3553451+166000030-3523434+16800 0030-3503417+180000030-3463401+1
8900 0030-3713464+132000030-3693447+14800 0030-3663430+158000030-3633413+16800 0030-3603395+137000
31-3853460+13200 0031-3833443+125000031-3803425+14300 0031-3773408+150000031-3743390+15400 0031-399
3456+124000031-3973438+12700 0031-3943420+130000031-3913402+14300 0031-3883385+149000032-4133451+11
500 0032-4113433+116000032-4083415+13300 0032-4053397+129000032-4023379+13400 0032-4283447+08500003
2-4253429+09600 0032-4223410+112000032-4193392+12000 0032-4153373+137000032-4393424+08800 0032-4333
386+116000032-4293367+08900 0033-4553438+067000033-4433361+11300 0033-4693433+064000033-4563354+104
00 0034-4843429+035000034-4813409+05200 0034-4783388+065000034-4713348+07300 0034-4983424+028000034
-4953403+04600 0034-4923382+056000034-4883361+06300 0034-4843340+066000034-5123419+01700

***** JOB DONE.
$AVF IN 903
$EXE TPLIST RS

INPUT PARAMETERS ARE:  ED FL=1=1

 TAPE NO.   1              FILE NO.   1
 RECORD   1                LENGTH   2960
H067912010000630000000000000000000    *6323                    627912010000026210 6-3660377+197002107-39
40369+16700 2108-4080365+123002108-4060347+16200 2108-4220361+110002108-4190342+13000 2108-4170324+
151002108-4130305+16700 2109-4360356+093002109-4330337+10600 2109-4300318+127002109-4270300+14200 2
109-4240281+162002109-4500352+07300 2109-4470332+092002109-4440313+10600 2109-4410294+122002109-437
0275+12200 2109-4640347+063002109-4610327+08000 2109-4580308+078002109-4550288+08900 2109-4510268+0
87002110-4780343+02700 2110-4750322+068002110-4720302+07200 2110-4690282+079002110-4650262+02900 21
10-4920338+012002110-4900317+03300 2110-4860296+051002110-4830275+04500 2110-4790255+045002111-5070
333+00400 2111-5040311+024002111-5000290+04500 2111-4970268+032002111-4930247+05500 2111-5210327+01
4002111-5180305+01300 2111-5140283+023002111-5100261+01800 2111-5060239+033002111-5310299+01500 211
1-5280276+016002111-5240253+02400 2111-5190231+025002112-5450292+00200 2112-5370245+00400-9-9-999-9
99-999-9 *99999999999999999999999999999999999999999999999999999999999999999999999999999999999999999
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 TAPE NO.   1              FILE NO.   1
 RECORD   1                LENGTH   2960
H067912010000630000000000000000000    *6323                    627912010000026210 6-3660377+197002107-39
40369+16700 2108-4080365+123002108-4060347+16200 2108-4220361+110002108-4190342+13000 2108-4170324+
151002108-4130305+16700 2109-4360356+093002109-4330337+10600 2109-4300318+127002109-4270300+14200 2
109-4240281+162002109-4500352+07300 2109-4470332+092002109-4440313+10600 2109-4410294+122002109-437
0275+12200 2109-4640347+063002109-4610327+08000 2109-4580308+078002109-4550288+08900 2109-4510268+0
87002110-4780343+02700 2110-4750322+068002110-4720302+07200 2110-4690282+079002110-4650262+02900 21
10-4920338+012002110-4900317+03300 2110-4860296+051002110-4830275+04500 2110-4790255+045002111-5070
333+00400 2111-5040311+024002111-5000290+04500 2111-4970268+032002111-4930247+05500 2111-5210327+01
4002111-5180305+01300 2111-5140283+023002111-5100261+01800 2111-5060239+033002111-5310299+01500 211
1-5280276+016002111-5240253+02400 2111-5190231+025002112-5450292+00200 2112-5370245+00400-9-9-999-9
99-999-9 *99999999999999999999999999999999999999999999999999999999999999999999999999999999999999999
99999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999
```

U-6511 /
12/01/78 - 01/31/79
FGGE/SMMR-LO
TOTAL ATMOSPERIC
WATER VAPOR
78-098A-08U

```
$JOB    8:47:47
$ASS IN TB1
$NOP
$NOP **** LIST OF DOUT10 *******
$AVF IN
$EXE TPLIST BS

INPUT PARAMETERS ARE:  ED SR=1=1 2

 TAPE NO.   1              FILE NO.   1
 RECORD   1                LENGTH   2960
FGGE  4564781201007812311 8                                                    NAME:     NATIONAL
AERONAUTICS AND SPACE ADMINISTRATION (NASA)
                                        ADDRESS:  GODDARD SPACE FLIGHT CENTER (GSFC)
                                GREENBELT, MARYLAND 20771
              UNITED STATES OF AMERICA (USA)                                   SCIENTIST:KAREN
 W POSEY                                                        DATE:     FRI SEP 10,1982
                                          0123456789=:> /STUVWXYZ,(-JKLMNOPQR*);+ABCDEFGHI.)(<
                          TAPE CHARACTERISTICS: 9 TRACK, 800 BPI,CODE EBCDIC,MODE NRZI,PARITY ODD
          TAPE CONTENTS: THIS TAPE CONTAINS TOTAL ATMOSPHERIC WATER VAPOR DATA THAT WAS   DERIVED FRO
M THE SMMR INSTRUMENT FLOWN ON THE NIMBUS G EXPERIMENTAL SATELLITE.  THIS TAPE CONFORMS WITH THE FG
GE LEVEL 2B INTERNATIONAL EXCHANGE FORMAT.   ALL  AVAILABLE DATA FROM 78 12 01 00 00 TO 78 12 31 23
 59 IS SUPPLIED.
              TABLE 1   DATA SOURCE INDEX                                                   CODE
              DESCRIPTION                                                   11       RAWINSONDE DATA
                                                        12       PILOT WIND DATA
                                   13       TWOS RADAR SOUNDING DATA
                     14       TWOS NAVAID SOUNDING DATA                                                1
5       AIRCRAFT DROPWINDSONDE DATA                                                16       CONSTANT LE
VEL BALLOON DATA                                                   17       EXPERIMENTAL SATELLITE STRATOS
PHERIC SOUNDING DATA                        21       AIRCRAFT DATA - ASDAR
                      22       AIRCRAFT DATA - AIDS CASSETTE
   23       AIRCRAFT DATA - CONVENTIONAL  (AIREP)                                   24       AIRCRAF
T DATA - CONVENTIONAL  (CODAR)                                   31       MANUAL SURFACE LAND OBSERV
ATION  (SYNOP)                                   32       AUTOMATIC SURFACE LAND OBSERVATION (SYNOP)
                          33       SURFACE OBSERVATION FROM FIXED SHIP (SHIP)
      34       SURFACE OBSERVATION FROM MOBILE SHIP (SHIP)                                   35       SUR
FACE OBSERVATION FROM ENVIRONMENTAL BUOYS                                   (NOT INCLUDED IN FGG
E SPECIAL OBSERVING SYSTEM)                                   41       SATELLITE SOUNDING DATA
                                   42       EXPERIMENTAL SATELLITE OZONE DATA (TOTAL AND PROFILE)
              51       SATELLITE CLEAR RADIANCE DATA

 TAPE NO.   1              FILE NO.   2
 RECORD   1                LENGTH   2960
H0978120100009200000000000000000    *9211                                  62781201000009990018+040356705130000018+04
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503000018+038351050300 0018+039354051100000019+029356505140 0019+030356005210000019+031355505130 0
019+032355005130000019+033354405170 0019+034353905080000019+035353405020 0019+036352905020000019+037
352305020 0019+038351804910000019+038351304960 0019+024356405190000019+025355905200 0019+026355304
92000019+027354804980 0019+028354304890000019+029353804910 0019+029353304910000019+030352705060 00
19+031352205030000019+032351704910 0019+033351104840000019+034350604950 0019+034350104970000019+0183
562050600 0019+019355705110000019+020355205160 0019+021354704900000019+023353704810 0019+024353105 0
80000019+025352605010 0019+026352104990000019+026351505020 0019+027351004790000019+028350504960 001
9+029349904900000019+013356105160 0019+014355605160000019+015355105010 0019+016354604960000019+01835
30048700 0019+019352504950000019+020351904770 0019+021351404910000019+022350904870 0019+02335030478
000019+024349804790 0019+007356005020000019+008355505060 0019+009355005020000019+010354404960 0019
+011353904990000019+012353404820 0019+013352904870000019+014352304820 0019+015351804750000019+016351
3046800 0019+016350704890000019+017350204770 0019+018349704560000019+023359505210 0019+003355305160
00019+004354805090 0019+005354304890000019+006353804880 0019+007353304730000019+007352704980 0019+
008352204880000019+009351704850 0019+010351204600000019+011350604800 0019+012350104690000019+0133496
046700 0020-003355705010000020-003355204930 0020-002354704970000020-001354204760 0020+000353704880 0
0020+001353104790 0020+002352604940000020+003352104860 0020+004351604640000020+005351004770 0020+0
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435550500000020-013350049100 0020-013544048200000020-012539050600 0020-011353404800000020-010352904
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20-005349704430 0020-004349204480000020-020355305000 0020-019354804900000020-018354304840 0020-017
353804880000020-016353304980 0020-014352204740000020-013351704680 0020-013351204640000020-012350604
100 0020-011350104280000020-010349604710 0020-009349004500000020-025355204950 0020-024354704870002
0-023354204900 0020-022353704980000020-022353104880 0020-021352604630000020-020352104650 0020-0193
516045000020-018351004690 0020-017350504440000020-016350004430 0020-015349404550000020-014348904350
00 0020-030355104880000020-029354605010 0020-028354104850000020-027353504780 0020-027353004710000020
-026352504490 0020-025352004530000020-024351404400 0020-023350904520000020-022350404450

***** JOB DONE.
$AVF IN 158
$EXE TPLIST BS

INPUT PARAMETERS ARE:  ED FL=1=1

 TAPE NO.   1              FILE NO.   1
 RECORD   1                LENGTH   2960
H09790131000092000000000000000000    *9211                    627901310000099210 1+527204601510021 01+52
92055015400 2101+530206301560021 01+532207201540 0 2101+534208101400021 01+535208901320 0 2101+53720980
120002101+538210701140 0 2101+539211601120021 01+541212401090 0 2101+542213301000021 01+543214200650 0 2
101+544215100600021 01+532204301440 0 2101+534205201400021 01+535206001470 0 2101+537206901390021 01+539
2078013000 2101+540208601250021 01+542209501110 0 2101+543210401120021 01+545211301090 0 2101+546212201
00002101+547213100880 0 2101+548214000770021 01+549214900690 0 2101+537203901330021 01+539204801420 0 21
01+541205701350021 01+542206601350 0 2101+544207401170021 01+546208301140 0 2101+547209201080021 01+5492
101010400 2101+550211001030021 01+551211901010 0 2101+553212800800021 01+554213700760 0 2101+555214700 5
7002101+542203601290 0 2101+544204501420021 01+546205301380 0 2101+548206201390021 01+549207101260 0 210
1+551208001240021 01+552208901190 0 2101+554209800970021 01+555210700920 0 2101+557211700860021 01+55821
26007800 2101+559213500680021 01+560214400680 0 2101+547203201330021 01+549204101340 0 2101+55120500124
002101+553205901190 0 2101+555206801310021 01+556207701130 0 2101+558208601160021 01+559209501090 0 2101
+561210500920021 01+562211400870 0 2101+563212300790021 01+565213200710 0 2101+566214200720021 01+553202
8014300 2101+555203701380021 01+558205501300 0 2101+560206401300021 01+561207401090 0 2101+563208301070
02101+565209201010 0 2101+566210200920021 01+567211100690 0 2101+569212000770021 01+570213000650 0 2101+
571213900750021 02+560203301330 0 2102+568208001160021 02+570208901120 0 2102+571209900990021 02+5732108
010100 2102+574218007600021 02+575212700740 0 2102+577213700750021 02+577209500970 0 2102+578210500880 0
2102+579211500790 0 2102+581212500720021 02+582213400690 0 2102+583210200880021 02+585211200900 0 2102+5
862122007400021 02+587213200670 0 2102+589209901040021 02+590210900870 0 2102+591211900820021 02+59321290
08300 2124+445049801330021 24+446049001290 0 2124+439049501400021 24+441048801430 0 2124+433050001630 02
124+434049301540 0 2124+436048601530021 24+427049701520 0 2124+429049001540021 24+430048301490 0 2124+42
204950145002124+424048801420 0 2124+416049301380021 25+415040202600 0 2130+235037301980021 30+229037802
1500 2130+230037201830021 30+223038202180 0 2130+224037702040021 30+216038702590 0 2130+217038102100021
31+211038502320 0 2131+212038002110021 31+205038402020 0 2131+206037801770021 31+198039401900 0 2131+199
038801770021 31+200038301740 0 2131+192039802220021 31+193039202070 0 2131+194038701960021 31+195038101 9
800 2131+185040803250021 31+186040203010 0 2131+187039702650021 31+188039102160 0 2131+178041203160021 3
1+179040603190 0 2131+180040103330021 31+181039502950 0 2132+173041003400021 32+174040503390 0 2132+1750
399033800 2132+167040903490 0 2132+168040303470021 32+169039803420 0 2132+162040703750021 32+163040203 7
00 2146-334028802990021 46-339028702560 0 2147-345028502050021 47-344027902230 0 2147-343027202340021 47
-350028401750 0 2147-349027701750021 47-348027101790 0 2147-347026402040021 47-355028201950 0

 TAPE NO.   1              FILE NO.   1
 RECORD   50               LENGTH   2960
0043+742012500300000043+745010700350 0 0043+747008900330000043+714023900680 0 0043+717022500760000043+72
00211006900 0043+724019600690000043+727018100650 0 0043+713021400800000043+716020000810 0 0043+71901860
070000044+708020400840 0 0044+711019000840000044+714017600810 0 0044+723013100710000044+707018200940 0
044+710016800800000044+713015400880 0 0044+715013900740000044+718012400690 0 0044+721010800700000044+702
017300810 0 0044+711013000730000044+713011500590 0 0044+716010000480000044+718008400500 0 0044+720006800
660000044+698016400910 0 0044+706012200700000044+708010800720 0 0044+711009300670000044+713007700610 0 0
44+715006100600000044+717004500550 0 0044+701011400910000044+703010000830 0 0044+706008500690000044+7080
070008600 0044+710005500720000044+713003900650 0 0044+697010700910000044+699009300900 0 0044+702007900 8
9000044+704006400820 0 0044+706004800890000044+708003300830 0 0045+692010000910000045+694008601010 0 004
5+697007201070000045+699005700870 0 0045+701004300830000045+702002700830 0 0045+687009300960000045+68900
80011100 0045+670011900830000045+673010600840 0 0045+665011200680000045+660010500680 0 0045+663009300 78
000045+676000200720 0 0046+655009900670000046+658008700760 0 0046+671359800770000046+650009300620 0 0046
+653008200620000046+666359400690 0 *9999999999999999999999999999999999999999999999999999999999999999999
999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999
```

REQ. AGENT	RAND NO.	ACQ. AGENT
DAD	V0249	CYN

NIMBUS 7

GARP (FGGE/SMMR-30) SEA ICE CONCENTRATION

DATA ON MAGNETIC TAPE

78-098A-08V ESAD-00175

THIS DATA SET CATALOG CONSISTS OF 18 MAGNETIC TAPES. THE TAPES ARE 9-TRACK, 1600 BPI, EBCDIC AND WERE WRITTEN ON AN IBM 360 COMPUTER. THE D NUMBERS AND THE TIME SPANS ARE AS FOLLOWS:

D#	FILES	TIME SPAN
D-62123	54	12/01/78 - 12/20/78
D-62124	59	12/21/78 - 01/11/79
D-62125	55	01/12/79 - 02/01/79
D-62126	51	02/01/79 - 02/19/79
D-62127	51	02/21/79 - 03/10/79
D-62128	49	03/11/79 - 03/28/79
D-62129	52	04/02/79 - 04/21/79
D-62130	58	04/21/79 - 05/11/79
D-62131	55	05/11/79 - 05/31/79
D-62132	55	06/01/79 - 06/20/79
D-62133	48	06/21/79 - 07/10/79
D-62134	57	07/11/79 - 08/01/79
D-62135	54	08/02/79 - 08/21/79
D-62136	55	08/22/79 - 09/10/79
D-62137	54	09/11/79 - 09/30/79
D-62138	55	10/01/79 - 10/21/79
D-62139	54	10/21/79 - 11/11/79
D-62140	54	11/12/79 - 12/01/79

B R I E F D E S C R I P T I O N

GARP(FGGE/SMMR-30)Sea Ice Concent
78-098A-08V

In 1995 the National Snow and Ice Data Center (NSIDC) indicated no interest in receiving this research data set as part of the Earth Science data transition plan.

M A T E R I A L S F O R D I S T R I B U T I O N

78-098A-08V
GARP(FGGE/SMMR-30)Sea Ice Concent

NASA CR 170550, FGGE/SMMR-30 Tape Specification and Shipping Letter Description.

15-63125
12/01/78 - 12/20/78
FGGE/SMMR-30
78-098A00V

```
$NOP *********DOUT-16********
$AVF IN
$EXEC TPLIST BS

INPUT PARAMETERS ARE:  ED SR=1=1 2

 TAPE NO.   1              FILE NO.   1
 RECORD   1                LENGTH   2960
FGGE  45647812010078121000                                                    NAME:     NATIONAL
AERONAUTICS AND SPACE ADMINISTRATION (NASA)
                                          ADDRESS:  GODDARD SPACE FLIGHT CENTER (GSFC)
                                  GREENBELT, MARYLAND 20771
                UNITED STATES OF AMERICA (USA)                                    SCIENTIST:KAREN
 W POSEY                                                          DATE:      FRI DEC 03,1982
                                                  0123456789=:> /STUVWXYZ,(-JKLMNOPQR*);+ABCDEFGHI.)(<
                              TAPE CHARACTERISTICS: 9 TRACK, 800 BPI,CODE EBCDIC,MODE NRZI,PARITY ODD
        TAPE CONTENTS: THIS TAPE CONTAINS SEA ICE CONCENTRATION          DATA THAT WAS   DERIVED FRO
M THE SMMR INSTRUMENT FLOWN ON THE NIMBUS G EXPERIMENTAL SATELLITE.  THIS TAPE CONFORMS WITH THE FG
GE LEVEL 2B INTERNATIONAL EXCHANGE FORMAT.   ALL  AVAILABLE DATA FROM 78 12 01 00 00 TO 78 12 10 23
 59 IS SUPPLIED.
            TABLE 1   DATA SOURCE INDEX                                                      CODE
            DESCRIPTION                                                        11       RAWINSONDE DATA
                                                          12       PILOT WIND DATA
                                        13       TWOS RADAR SOUNDING DATA
                   14       TWOS NAVAID SOUNDING DATA                                                  1
5       AIRCRAFT DROPWINDSONDE DATA                                                  16       CONSTANT LE
VEL BALLOON DATA                                                  17       EXPERIMENTAL SATELLITE STRATOS
PHERIC SOUNDING DATA                          21       AIRCRAFT DATA - ASDAR
                       22       AIRCRAFT DATA - AIDS CASSETTE
   23       AIRCRAFT DATA - CONVENTIONAL  (AIREP)                                        24       AIRCRAF
T DATA - CONVENTIONAL  (CODAR)                                        31       MANUAL SURFACE LAND OBSERV
ATION  (SYNOP)                                    32       AUTOMATIC SURFACE LAND OBSERVATION (SYNOP)
                          33       SURFACE OBSERVATION FROM FIXED SHIP (SHIP)
        34       SURFACE OBSERVATION FROM MOBILE SHIP (SHIP)                                  35       SUR
FACE OBSERVATION FROM ENVIRONMENTAL BUOYS                                          (NOT INCLUDED IN FGG
E SPECIAL OBSERVING SYSTEM)                                  41       SATELLITE SOUNDING DATA
                                  42       EXPERIMENTAL SATELLITE OZONE DATA (TOTAL AND PROFILE)
            51       SATELLITE CLEAR RADIANCE DATA

 TAPE NO.   1              FILE NO.   2
 RECORD   1                LENGTH   2960
H09781201000094000000000000000000    *9441                    62781201000099900 33-45134480400030033-45
03444033003 0033-45334470270030033-4533443028003 0033-45234400240030033-4523436028003 0033-45634460
250030033-4563442028003 0033-45534390260030033-4553435030003 0033-45434310320030033-4543428027003 0
033-45334240240030033-4533420029003 0033-45234160290030033-4513413028003 0033-45134090260030033-450
3405031003 0033-45934450250030033-4583442032003 0033-45834380340030033-4573434024003 0033-457343002
50030033-4563427025003 0033-45634230320030033-4553419031003 0033-45534150300030033-4543412030003 00
33-45434080260030033-4533404030003 0033-45234000270030033-4523397032003 0033-46134440310030033-4613
441032003 0033-46034370290030033-4603433026003 0033-45934290280030033-4593426034003 0033-4583422030
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3-4673406032003 0033-4673403032003 3-4663395028003 0033-4653395026003 3-4653391036003 0033-4643
38703400 30033-4643384036003 0033-4633380035003 3-4623376034003 0033-4623372030003 3-4613368034
03 0033-4603364025003 3-4593361025003 0033-4593357021003 3-4583353019003 0033-4573349016003 3
-4563345015003 0033-4753440032003 3-4743436032003 0033-4743432024003 3-4733428033003

***** JOB DONE.
$AVF IN 53
$EXEC TPLIST BS

INPUT PARAMETERS ARE:  ED FL=1=1 1

 TAPE NO.   1              FILE NO.   1
 RECORD   1                LENGTH   2960
H0978122000009400000000000000000000     *9441                    6278122000000992102+4520502049003 2102+45
30498046003 2102+4530494059003 2102+4540491059003 2102+4500497023003 2102+4510493038003 2102+4510490 0
380032128-4510310021003 2128-4510306025003 2128-4510302037003 2128-4500299024003 2128-4540309025003 2
128-4540305027003 2128-4530302027003 2128-4530298027003 2128-4520294023003 2128-4520290025003 2128-451
0287023003 2128-4510283017003 2128-4580309024003 2128-4570305021003 2128-4570301022003 2128-455029702
50032128-4550293020003 2128-4540289026003 2128-4540286028003 2128-4530282030003 2128-4530278037003 21
28-4520274049003 2128-4520271061003 2128-4510267077003 2128-4510263070003 2128-4610308016003 2128-4600
304025003 2128-4600300240032128-4590297022003 2128-4590293025003 2128-4580289025003 2128-4570285037
0032128-4560281040003 2128-4550277032003 2128-4550273072003 2128-4540270086003 2128-4540266078003 212
8-4530262064003 2128-4530258034003 2128-4520254033003 2128-4510251042003 2128-4630307021003 2128-46303
03025003 2128-4620300027003 2128-4620296031003 2128-4610292033003 2128-4610288055003 2128-4600284066
032128-4600280076003 2128-4590277082003 2128-4590273078003 2128-4580269078003 2128-4580265060003 2128
-4570261051003 2128-4560257041003 2128-4560254039003 2128-4550250043003 2128-4540246042003 2128-454024
2042003 2128-4530238050003 2128-4520235085003 2128-4520231089003 2128-4510227070003 2128-450022306000
32128-4660306022003 2128-4660303030003 2128-4650299040003 2128-4650295049003 2128-4640291054003 2128-
4640287069003 2128-4630283070003 2128-4630279081003 2128-4620276087003 2128-4610272072003 2128-4610268
071003 2128-4600264051003 2128-4600260046003 2128-4590256040003 2128-4580252044003 2128-4580249039003
2128-4570245035003 2128-4560241054003 2128-4560237066003 2128-4550233078003 2128-4540229067003 2128-4
530226055003 2128-4530222054003 2128-4520218045003 2128-4510214042003 2128-4500210041003 2128-46903060
37003 2128-4680302046003 2128-4680298059003 2128-4670294062003 2128-4670290064003 2128-4660286055003 2
128-4660282060003 2128-4650278064003 2128-4650275065003 2128-4640271060003 2128-4630267059003 2128-46
3026304100 3 2128-4620259038003 2128-4620255035003 2128-4610251036003 2128-4600248040003 2128-460024404
3003 2128-4590240077003 2128-4580236083003 2128-4580232061003 2128-4570228054003 2128-4560224053003 21
28-4550221047003 2128-4540217042003 2128-4540213039003 2128-4530209038003 2128-4710305050003 2128-471
0301074003 2128-4700297075003 2128-4700293073003 2128-4690289071003 2128-4690285049003 2128-4680281058
003 2128-4680277053003 2128-4670274046003 2128-4670270042003 2128-4660266041003 2128-4660262037003 2128
8-4650258036003 2128-4640254040003 2128-4640250040003 2128-4630246046003 2128-4620243056003 2128-4620
2390730032128-4610235069003 2128-4600231056003 2128-4590227045003 2128-4590223042003 2128-4580219042
03 2128-4570216042003 2128-4560212038003 2128-4550208031003 2128-4740304072003 2128-4730300086003 2128
-4730296073003 2128-4720292072003 2128-4720288058003 2128-4710284048003 2128-4710280050003

 TAPE NO.   1              FILE NO.   1
 RECORD   122              LENGTH   2960
0024+6510110034003 0024+6520104028003 0024+6530098017003 0024+6540092015003 0024+6550086013003 0024+65
60080016003 0024+6570074016003 0024+6580068018003 0024+6590061021003 0024+6590055023003 0024+66000490
180030024+6610042017003 0024+6510096015003 0024+6520090013003 0024+6530084013003 0024+6530078015003 0
024+6540072019003 0024+6550065016003 0024+6560059022003 0024+6570053027003 0024+6570047018003 0024+658
0040019003 0024+6480093019003 0024+6490087013003 0024+6500081020003 0024+6510075021003 0024+652006902
40003 0024+6530063021003 0024+6530057029003 0024+6540051025003 0024+6550045015003 0024+6560038021003 00
24+6460091025003 0024+6470085024003 0024+6470079027003 0024+6480073027003 0024+6490067037003 0024+6500
061030003 0024+6510055032003 0024+6520049025003 0024+6520043018003 0024+6530037024003 0024+6430089031
003 0024+6440083030003 0024+6450077034003 0024+6460071028003 0024+6470065043003 0024+6470059033003 002
4+6480053029003 0024+6490047025003 0024+6500041017003 0024+6500035024003 0024+6410087029003 0024+64100
81019003 0024+6420075026003 0024+6430069025003 0024+6440063037003 0024+6450057034003 0024+6460051027
030024+6460045030003 0024+6470039013003 0024+6480033022003 0024+6380084035003 0024+6390079018003 0024
+6400073020003 0024+6410067025003 0024+6410061036003 0024+6420055032003 0024+6430049027003 0024+644004
3027003 0024+6440037020003 0024+6450031019003 0024+6370071017003 0024+6380065020003 0024+6390059031
30024+6430053034003 0024+6400047027003 0024+6410041028003 0024+6420035021003 0024+6430029020003 0024+
6350069017003 0024+6350063020003 0024+6360057020003 0024+6370051029003 0024+6380045019003 0024+6390039
022003 0024+6390034021003 0024+6400028025003 0025+6320067023003 0025+6330061019003 0025+6340055019003
```

98-098A-07K
B42238-

NASA CR 170548

FGGE/ERBZ TAPE SPECIFICATION AND SHIPPING LETTER DESCRIPTION

MARCH 1983

NASA
National Aeronautics and
Space Administration

Goddard Space Flight Center
Greenbelt, Maryland 20771

FGGE/ERBZ TAPE SPECIFICATION AND SHIPPING LETTER DESCRIPTION

Systems & Applied Sciences Corp.
5809 Annapolis Road
Hyattsville, Maryland 20784

Contract No. NAS5-26753
SSD-T-8237-002-82

REQ. AGENT	RAND NO.	ACQ. AGENT
DAD	V0249	CYN

NIMBUS 7

GARP (FGGE/SBUV) TOTAL OZONE PROFILES

DATA ON MAGNETIC TAPE

78-098A-09S ESAD-00055

THIS DATA SET CATALOG CONSISTS OF 6 MAGNETIC TAPES. THE TAPES ARE 9-TRACK, 1600 BPI, EBCDIC AND WERE CREATED ON AN IBM 360 COMPUTER. THE D NUMBERS AND THE TIME SPANS ARE AS FOLLOWS:

D#	FILES	TIME SPAN
D-63141	218	11/30/78 - 01/31/79
D-63142	213	01/31/79 - 03/31/79
D-63143	217	03/31/79 - 05/30/79
D-63144	193	06/02/79 - 07/30/79
D-63145	192	08/01/79 - 09/30/79
D-63146	196	09/30/79 - 11/30/79

N-63141

11/30/78 - 1/31/7

NIMBUS 7

FGGE /SBUV

```
NO PROCEDURE
$NOP
$NOP
$NOP ****** LIST OF IOUT3 ************
$AVF IN
$EXE TPLIST BS

INPUT PARAMETERS ARE:  ED SR=1=1 2

 TAPE NO.   1              FILE NO.   1
 RECORD   1                LENGTH   2960
FGGE  45647812010078123100                                                  NAME:     NATIONAL
AERONAUTICS AND SPACE ADMINISTRATION (NASA)
                                        ADDRESS:  GODDARD SPACE FLIGHT CENTER (GSFC)
                                  GREENBELT, MARYLAND 20771
                UNITED STATES OF AMERICA (USA)                                  SCIENTIST: GARY
 N WOLFORD                                                  DATE:     THU SEP 24,1981
                                          0123456789=:> /STUVWXYZ,(-JKLMNOPQR*);+ABCDEFGHI.)(<
                          TAPE CHARACTERISTICS: 9 TRACK, 800 BPI,CODE EBCDIC,MODE PE,PARITY ODD
        TAPE CONTENTS: THIS TAPE CONTAINS   TOTAL AND PROFILE OZONE     DATA THAT WAS   DERIVED FRO
M THE SBUV INSTRUMENT FLOWN ON THE NIMBUS-7 EXPERIMENTAL SATELLITE.  THIS TAPE CONFORMS WITH THE FG
GE LEVEL2B INTERNATIONAL EXCHANGE FORMAT.   ALL   AVAILABLE DATA FROM 78 11 30 21 15 TO 78 12 30 23
 58 IS SUPPLIED.
            TABLE 1   DATA SOURCE INDEX                                                  CODE
            DESCRIPTION                                                  11       RAWINSONDE DATA
                                                  12       PILOT WIND DATA
                                  13       TWOS RADAR SOUNDING DATA
                 14       TWOS NAVAID SOUNDING DATA                                          1
5       AIRCRAFT DROPWINDSONDE DATA                                          16       CONSTANT LE
VEL BALLOON DATA                                          17       EXPERIMENTAL SATELLITE STRATOS
PHERIC SOUNDING DATA                  21       AIRCRAFT DATA - ASDAR
                  22       AIRCRAFT DATA - AIDS CASSETTE
   23       AIRCRAFT DATA - CONVENTIONAL  (AIREP)                          24       AIRCRAF
T DATA - CONVENTIONAL  (CODAR)                                  31       MANUAL SURFACE LAND OBSERV
ATION  (SYNOP)                              32       AUTOMATIC SURFACE LAND OBSERVATION (SYNOP)
                        33       SURFACE OBSERVATION FROM FIXED SHIP (SHIP)
      34       SURFACE OBSERVATION FROM MOBILE SHIP (SHIP)                                35       SUR
FACE OBSERVATION FROM ENVIRONMENTAL BUOYS                                   (NOT INCLUDED IN FGG
E SPECIAL OBSERVING SYSTEM)                  41       SATELLITE SOUNDING DATA
                          42       EXPERIMENTAL SATELLITE OZONE DATA (TOTAL AND PROFILE)
          51       SATELLITE CLEAR RADIANCE DATA

 TAPE NO.   1              FILE NO.   2
 RECORD   1                LENGTH   2960
H04781201000042000000000000000000    *42315032302-715000928647811302115009-72010082378113021152304
            101000100000102000250000103000880000310400301000080500964000320601907000771070261500156
080509200439090839700868110056500104711029140092112035210107220101790202260302710403560504700606442
0708130810560911221010851109331207242130644140672150679160634-9-999-9-999*42330035502-7306005976478
11302115009-73540047178113021155504            101000100000102000240000103000860000310400298000080
500959000310601945000791070273200155080542400469090890200924110060300109511032030100812037290113020
1017202021903026404034905046406063920708060810500911251011001109601207522130678140716150724160672-9
-999-9-999*42332032702-745500202647811302116009-75010005378113021162704            101000100000102
000250000103000840000310400287000090500960000310601958000791070270300152080545900450090893000931110
055950107011032770102312039120116620101780202220302640403410504450606122070785081054091140101113110
9621207432130673140719150730160675-9-999-9-999*42328035902-759535731647811302116009-763835550781130
21165904            101000100000102000240000103000800000310400280000090500962000320601935000761070
260000151080527700412090866200904110057690102611032370099912040870119620101730202140302540403270504
2906059720707770810580911441011071109421207162130646140694150708160655-9-999-9-999*42324023102-7726
35160647811302117009-77653494278113021173104            101000100000102000230000103000780000310400
276000100500971000320601943000741070252300151080514000385090863400884110057400100711031220095512039
800116520101690202090302480403190504190605872070773081071091161101119110938120697213062314067315069
5160652-9-999-9-999*42336020302-784234473647811302118009-78753421378113021180304            101000
090000102000230000103000760000310400271000100500977000320601960000731070250100157080519500401090916
300943110064730117011033940102712038070116020101650202030302400403090504080605762070767081078091175
```

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0007310702470001530805137004070909205009281100677901223110371201097120402701213201016002019703023 30
4030005039606056520707580810790911801011361109421206842130607140664150708160684-9-999-9-999*4236002
0702-8013326956478113021190 09-8029323507811302119 0704                 1010000900001020002300001030007 40
0003104002550001305009570003006020270007410702527001510805074003810909111008721100712601287110422 50
1179120441101288201016702020403023804030105038806054120707270810550911821011641109861207072130609 14
0658150696160673-9-999-9-999*42368023902-8057316206478113021190 09-8062312527811302119390 4
   1010001000001020002300002030007400003104002520001005009440003006020200007410702531001490805109 00
3990909249008881100740201326110452301252120458401334201016902020503024004030205038606053 4

***** JOB DONE.
$AVE IN 217
$EXE TPLIST BS

INPUT PARAMETERS ARE:  ED FL=1=1

 TAPE NO.   1              FILE NO.   1
 RECORD   1                LENGTH   2960
H04790131180042000000000000000000    *42273030902-7388092316479013115230 09-7435090937901311523090 4
              1010000900001020002500001030009000003104003060000805008960003106017930007610702430001 58
0805151004590907146007501100448500901110204000700120353701046201017202022403027404036705048906065 82
0707960809730910341010191108821206592130619140691150668160555-9-999-9-999*42275034102-7533087966479
0131152300 9-7577086307901311523410 4                 1010000900001020002400001030008800003104003030000 80
5009080003106017710007510702321001420804996004340907056007341100457300897110217500732120379601087 20
1016802021803026604035605047806065220707990809890910441010171108601206292130592140668150652160546-9
-999-9-999*42276031302-7669082716479013115240 09-7710080727901311524130 4                 1010000900001 02
0002400001030008600003104002950000905009140003106017680007310702233001380804844003980906933007271 10
0459300878110226300747120403101122201017302022103026604035005046506063420707880809990910581010231 10
8501206062130567140646150635160535-9-999-9-999*42274034502-7794076416479013115240 09-7830074017901 31
15244504                1010000900001020002300001030008200003104002830000905009050003106017610007010 70
2153001370804618003650906660007001100453200868110232400751120427901163201016802021203025404033205 04
4006060720707660809960910611010231108411205882130542140615150606160513-9-999-9-999*42275021702-7902
0688764790131152500 9-7930066027901311525170 4                 1010000800001020002000001030007300003104 00
2760001005009280003106017630006810702130001370804629003620906706006891100456600878110234400751120 43
2801165201014202018103021904029405040706059220707690810200910831010311108331205802130539140616150 60
9160516-9-999-9-999*42276024902-7985059926479013115250 09-8005056627901311525490 4                 101000
0800001020001900001030006700002104002490000905008930002906017820006610702128001340804603003670906 71
8006781100464300895110240600764120439501172201013802017203020504026905036506053220707080809840910 74
1010391108481205822130533140611150607160516-9-999-9-999*42278022102-8042049626479013115260 09-805104
6017901311526210 4                 1010000800001020001900001030006700002104002510001005009050002906017 76
0006710702054001320804571003870906725006741100467700942110243700794120444401174201013802017203020 40
4026805036606053620707160809980910841010411108391205722130526140606150604160516-9-999-9-999*4228600
5302-8067038446479013115260 09-8065034737901311526530 4                 1010000800001020001800001030006 30
0002104002400001005008920002806017850006710702090001270804595003960906870006961100489600966110262 00
0844120466501225201013502016603019604025605034806051220706910809850910831010451108451205712130524 14
0607150611160525-9-999-9-999*42288002502-8056027086479013115270 09-8043023557901311527250 4
   1010000800001020001900001030006400002104002400001005008900002806017850006810702104001240804676 00
4060907003007181100493700960110260700843120461101219201013602016703019704025705034806051 1

 TAPE NO.   1              FILE NO.   1
 RECORD   37               LENGTH   2960
2070914081279091517101650111729121612213133014107615066716040 2-9-999-9-999*42248002502-207622637647
9013120590 09-2016226227901312059250 4                 1010001200002020002800002030009700004104003370001 4
0501192000390603154001281070559200365080682300475090453800463110011460030711005830026012015890050 32
0101980202500303010403960505220607192070927081297091528101651111713121590213130814105815065416039 3-
9-999-9-999*42226005702-1893225916479013120590 09-1834225767901312059570 4                 1010001200002 0
2000280000203000970000410400334000140501193000400603230001351070570400386080655000443090411700432 11
0009240025511004370020112012960042920101980202500303010403960505200607132070920081296091543101683 11
1765121635213131314102715060916035 9-9-999-9-999*9999999999999999999999999999999999999999999999999999
9999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999
9999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999
9999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999
9999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999
9999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999
9999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999
```

D-63142
1/31/79 - 3/31/79
FGGE/SBUV

```
$ASS IN TRC
$NP
NO PROCEDURE
$NOP
$NOP
$NOP
$NOP **** LIST OF DOUT4 *************
$AVF IN
$EXE TPLIST BS

INPUT PARAMETERS ARE:  ED SR=1=1

 TAPE NO.   1              FILE NO.   1
 RECORD   1                LENGTH   2960
FGGE  45647902010079022818                                                  NAME:     NATIONAL
AERONAUTICS AND SPACE ADMINISTRATION (NASA)
                                        ADDRESS:  GODDARD SPACE FLIGHT CENTER (GSFC)
                                GREENBELT, MARYLAND 20771
              UNITED STATES OF AMERICA (USA)                                  SCIENTIST: GARY
 N WOLFORD                                                  DATE:     TUE JUL 07,1981
                                          0123456789=:> /STUVWXYZ,(-JKLMNOPQR*);+ABCDEFGHI.)(<
                          TAPE CHARACTERISTICS: 9 TRACK, 800 BPI,CODE EBCDIC,MODE PE,PARITY ODD
        TAPE CONTENTS: THIS TAPE CONTAINS   TOTAL AND PROFILE OZONE     DATA THAT WAS   DERIVED FRO
M THE SBUV INSTRUMENT FLOWN ON THE NIMBUS-7 EXPERIMENTAL SATELLITE.  THIS TAPE CONFORMS WITH THE FG
GE LEVEL2B INTERNATIONAL EXCHANGE FORMAT.   ALL   AVAILABLE DATA FROM 79 01 31 21 00 TO 79 02 28 20
 59 IS SUPPLIED.
            TABLE 1   DATA SOURCE INDEX                                                  CODE
            DESCRIPTION                                                  11       RAWINSONDE DATA
                                                      12       PILOT WIND DATA
                                      13       TWOS RADAR SOUNDING DATA
                  14       TWOS NAVAID SOUNDING DATA                                          1
5       AIRCRAFT DROPWINDSONDE DATA                                          16       CONSTANT LE
VEL BALLOON DATA                                          17       EXPERIMENTAL SATELLITE STRATOS
PHERIC SOUNDING DATA                      21       AIRCRAFT DATA - ASDAR
                      22       AIRCRAFT DATA - AIDS CASSETTE
   23       AIRCRAFT DATA - CONVENTIONAL  (AIREP)                                  24       AIRCRAF
T DATA - CONVENTIONAL  (CODAR)                                  31       MANUAL SURFACE LAND OBSERV
ATION  (SYNOP)                                  32       AUTOMATIC SURFACE LAND OBSERVATION (SYNOP)
                          33       SURFACE OBSERVATION FROM FIXED SHIP (SHIP)
       34       SURFACE OBSERVATION FROM MOBILE SHIP (SHIP)                                35       SUR
FACE OBSERVATION FROM ENVIRONMENTAL BUOYS                                  (NOT INCLUDED IN FGG
E SPECIAL OBSERVING SYSTEM)                          41       SATELLITE SOUNDING DATA
                                  42       EXPERIMENTAL SATELLITE OZONE DATA (TOTAL AND PROFILE)
            51       SATELLITE CLEAR RADIANCE DATA

***** JOB DONE.
$AVF IN 212
$EXE TPLIST BS

INPUT PARAMETERS ARE:  ED FL=1=1

 TAPE NO.   1              FILE NO.   1
 RECORD   1                LENGTH   2960
H04790331180042000000000000000000    *42472011102+79192518664790331507009+79472489079033115071104
            1010001100001020003300001030012400004104004070001105009570003406018390007810702831001 53
080609200463091200301184110109260172611074140182912036830117920102240202990303700405040506800608872
070978081020091033101022110928120766213072514078015085316086 5-9-999-9-999*42447011502+8053232016479
03311508009+80602283379033115081504              1010001100001020003400001030012700004104003880001 00
500906000330601854000761070284600171080636600529091313601430110104670163111055610164112031340103420
102340203130303870405200506770608412070912080964091006101023110948120770213072914080215091216095 0-9
-999-9-999*42262012702-770034233647903311603009-76573405279033116032704                 101000110000102
000360000103001410000410400420000110500773000290601206000571070162900105080422100346090653700664110
```

```
$NOP ********* DOUT-4 **********
$EXEC TPLIST BS

INPUT PARAMETERS ARE:  ED SR=1=1 1

 TAPE NO.   1              FILE NO.   1
 RECORD   1                LENGTH   2960
H04790201000042000000000000000000     *42232002902-17152254764790131 2100009-16552253179013121002904
              1010001200002020002700002030009700004104003350001405012060004006032590013810705762003 94
0806627004550904128004391100086700240110043200199120136700451201019702024803029904039305051806071 42
0709260813110915611017001117791216482131325141039150616160361-9-999-9-999*42225000102-1530224996479
01312101009-1471224847901312101010 4              1010001200002020002800002030009700004104003340001 40
5012160004006033280014110705820003920806483004290903924004221100074900210110036700171120124800414 20
1019802025003030004039405051706071320709260813210915841017341118201216762131326141022150594160344-9
-999-9-999*42235003302-1347224546479013121010 09-1287224397901312101330 4              101000120000202
0002700002030009500004104003320001405012200004006033450013810705914003790806700004230904023004271 10
0070700199110036100168120129400420201019502024503029404038605050906070720709250813260915921017411 11
8301216972131358141055150616160354-9-999-9-999*42233000502-1163224096479013121020 09-1104223957901 31
21020504              1010001200002020002800002030009600004104003290001405012000003906033890014010 70
6050003850806653004110903897004191100062500177110032100150120124200405201019902025003030004039205 05
1106070020709090813030915801017511118701217422131380141053150602160344-9-999-9-999*42231003702-0980
2236564790131210200 9-0921223517901312102370 4              1010001200002020002700002030009500004104 00
3260001405012070003906034060014110766055003840806656004050903858004171100056500161110029200137120 12
0300393201019702024703029604038605050406069420709070813110915931017621118771217452131380141054150 60
1160342-9-999-9-999*42231000902-0798223216479013121030 09-0738223077901312103050 4              101000
1200002020002700002030009400004104003240001405012060003906034450014310706128003860806650004000903 80
8004141100051600148110027200128120119500390201019602024603029404038305050006068820709010813090916 00
1017791119031217692131391141056150597160338-9-999-9-999*42230004102-0615222786479013121030 09-055622
26479013121034104              1010001200002020002700002030009300004104003220001405012060003906034 34
0014210706131003850806655003950903774004121100047600137110025300120120117300384201019402024303029 00
4037905049606068620709000813100915981017741118971217682131394141057150596160336-9-999-9-999*4222900
1302-0432222346479013121040 09-0373222207901312104130 4              1010001200002020002700002030009 30
0004104003210001405011960003906034230014210706136003850806686003940903781004131100045000129110024 20
0114120116700382201019702024603029404038105049706068320708940812990915871017651118941217682131398 14
1062150599160337-9-999-9-999*42228004502-0249221916479013121040 09-0190221777901312104450 4
   1010001200002020002700002030009200004104003210001405011970003906033810014010706089003810806707 00
3920903780004121100043300125110023300111120115700379201019302024103028804037605049306068 4

***** JOB DONE.
$AVF IN 212
$EXEC TPLIST BS

INPUT PARAMETERS ARE:  ED SR=1=1 1

 TAPE NO.   1              FILE NO.   1
 RECORD   1                LENGTH   2960
H04790331180042000000000000000000     *42472011102+7919251866479033115070 09+7947248907903311507110 4
              1010001100001020003300001030012400004104004070001105009570003406018390007810702831001 53
0806092004630912003011841101092601726110741401829120368301179201022402029903037004050405068006088 72
0709780810200910331010221109281207662130725140780150853160865-9-999-9-999*42447011502+8053232016479
03311508009+8060228337903311508150 4              1010001100001020003400001030012700004104003880001 00
5009060003306018540007610702846001710806366005290913136014301101046701631110556101641120313401034 20
1023402031303038704052005067706084120709120809640910061010231109481207702130729140802150912160950-9
-999-9-999*42262012702-7700342336479033116030 09-7657340527903311603270 4              101000110000102
0003600001030014100004104004200001105007730002906012060005710701629001050804221003460906537006641 10
0505300919110211200687120351301019201023802032903041704057605076206091820709170808090907501007021 10
5721204202130450140550150573160495-9-999-9-999*42269015902-7568336866479033116030 09-7522335357903 31
16035904              1010001100001020003400001030013600004104004390001205008640003306013030006110 70
1720001120804410003470906695006771100502100894110209300684120354201012201022802031403039604055205 07
5406096220710000809110908341007651106081204442130474140577150595160509-9-999-9-999*42272013102-7425
3323064790331160400 9-7377331037903311604310 4              1010001100001020003400001030013300005104 00
4440001205009250003506013870006310701764001160804311003260906471006541100499200877110216900693120 37
1201037201022802031003038804053805074206097220710390809820909021008191106411204612130476140568150 57
6160491-9-999-9-999*42277010302-7275328476479033116050 09-7224327407903311605030 4              101000
```

N-63143
3/31/79 - 5/30/79
FGGE/SBUV

```
$NOP
$NOP ***************** DOUT-E *****************
$AVE IN
$EXE TPLIST RS

INPUT PARAMETERS ARE:  ED SR=1=1 2

 TAPE NO.   1              FILE NO.   1
 RECORD   1                LENGTH   2960
FGGE  4564790401007904301 8                                                    NAME:     NATIONAL
 AERONAUTICS AND SPACE ADMINISTRATION (NASA)
                                        ADDRESS:  GODDARD SPACE FLIGHT CENTER (GSFC)
                                   GREENBELT, MARYLAND 20771
                UNITED STATES OF AMERICA (USA)                                    SCIENTIST: GARY
 N WOLFORD                                                   DATE:     TUE SEP 29,1981
                                          0123456789=:> /STUVWXYZ,(-JKLMNCPQR*);+ABCDEFGHI.)(<
                              TAPE CHARACTERISTICS: 9 TRACK, 800 BPI,CODE EBCDIC,MODE PE,PARITY ODD
         TAPE CONTENTS: THIS TAPE CONTAINS   TOTAL AND PROFILE OZONE     DATA THAT WAS   DERIVED FRO
M THE SBUV INSTRUMENT FLOWN ON THE NIMBUS-7 EXPERIMENTAL SATELLITE.  THIS TAPE CONFORMS WITH THE FG
GE LEVEL2B INTERNATIONAL EXCHANGE FORMAT.   ALL   AVAILABLE DATA FROM 79 03 31 21 54 TO 79 04 30 20
 58 IS SUPPLIED.
            TABLE 1   DATA SOURCE INDEX                                                        CODE
            DESCRIPTION                                                          11       RAWINSONDE DATA
                                                                      12       PILOT WIND DATA
                                                 13       TWOS RADAR SOUNDING DATA
                    14       TWOS NAVAID SOUNDING DATA                                                  1
5       AIRCRAFT DROPWINDSONDE DATA                                                    16       CONSTANT LE
VEL BALLOON DATA                                                          17       EXPERIMENTAL SATELLITE STRATOS .
PHERIC SOUNDING DATA                          21       AIRCRAFT DATA - ASDAR
                         22       AIRCRAFT DATA - AIDS CASSETTE
   23       AIRCRAFT DATA - CONVENTIONAL  (AIREP)                                        24       AIRCRAF
T DATA - CONVENTIONAL  (CODAR)                                          31       MANUAL SURFACE LAND OBSERV
ATION  (SYNOP)                                   32       AUTOMATIC SURFACE LAND OBSERVATION (SYNOP)
                                 33       SURFACE OBSERVATION FROM FIXED SHIP (SHIP)
      34       SURFACE OBSERVATION FROM MOBILE SHIP (SHIP)                                        35       SUR
FACE OBSERVATION FROM ENVIRONMENTAL BUOYS                                                 (NOT INCLUDED IN FGG
E SPECIAL OBSERVING SYSTEM)                                 41       SATELLITE SOUNDING DATA
                                 42       EXPERIMENTAL SATELLITE OZONE DATA (TOTAL AND PROFILE)
            51       SATELLITE CLEAR RADIANCE DATA

 TAPE NO.   1              FILE NO.   2
 RECORD   1                LENGTH   2960
HD4790401000042000000000000000000      *42322002302+508419762647903312154009+514219733790331215423 04
            101000100000102000025000020300101000041040040900016050131200042060252000102107035380019 9
080574100519090860100924110055980099911027030089612021770070820101760202320302870404020505850608842
071135081438091494101428111236121001213083514078415072216065 5-9-999-9-999*42338005502+5262196716479
033121540 09+531919640790331215455 04                 101000090000102000025000020300102000041040041700016 0
501306000420602428000991070341500193080581200527090916100986110062430102411030670099512022890074220
101740202310302860404040505940609042071152081430091463101382111183120959213081714078515074616069 2-9
-999-9-999*42360002702+543819575647903312155009+549519541790331215527 04                 101000100000102
000260000203001060000410400423000165012580004106023580009610703440001940806061005360909802010211 10
068780112111034780109012024330077620101810202400303000404230506160609172071142081371091397101332111
161120959213083514081315078616073 7-9-999-9-999*42360005902+561519470647903312155009+567219434790331
21555904                 101000100000102000026000020300107000041040042600016050124400041060231400094107 0
340900194080611700534090996101006110068190112511033840106112024350076820101790202390302990404240506
210609262071145081354091371101306111140120946213083414081815079816075 0-9-999-9-999*42357003102+5791
193566479033121560 09+584919316790331215631 04                 101000100000102000027000020300108000041040 0
425000160501236000410602324000941070340300196080613100530091005000988110066670111611031940100712023
860074520101828020243030304040429050625060924207113708134409136810131011114712094621308311408181508 0
3160758-9-999-9-999*42352000302+596619231647903312157009+602319188790331215703 04                 101000
100000102000028000302030011200004104004290001605012140004106023030009210703392001970806129005200910 00
800957110064130109011030120094212023730073020101910202550303180404470506430609312071130081316091342
101294111142120942213082814081815080316075 7-9-999-9-999*42361003502+613919097647903312157009+619519
049790331215735 04                 101000100000102000028000020300113000041040042700016050119500040060229 0
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0702+631118947647903312158009+63671889379033121580704              101000100000102000290000203001140
000410400423000150501163000400602237000891070333900200080629300551091079201082110073440122911036160
113412025940082920101960202620303260404560506480609212071098081257091286101252111117120923213082414
0830150840160808-9-999-9-999*42389003902+648318779647903312158009+65381871979033121583904
   101000110000102000300000203001170000410400420000150501135000400602185000871070324500197080630300
55509112000114011007860012991103923012211202679008652010206020274030340040469050655060912

***** JOB DONE.
$AVF IN 216
$EXEC TPLIST BS

INPUT PARAMETERS ARE:  ED FL=1=1 1

 TAPE NO.   1              FILE NO.   1
 RECORD   1                LENGTH   2960
H04790530180042000000000000000000    *42256011802-613232022647905301540009-60753197779053015401804
            101000110000102000370000103001450000410400455000120500891000330601417000671070212600132
080443900374090679700674110048020080911018960063312018360059020102500203420304280405870507910609962
0710300809390908651008051106901205702130553140592150581160515-9-999-9-999*42267015002-5957318856479
05301540009-59013184579053015405004              101000110000102000360000103001500000510400487000130
500923000350601434000681070217100131080435200332090658400642110051380082811023960072612021850067020
1024002033503042804060505083806107220710980809680908771008131106991205852130560140585150562160496-9
-999-9-999*42263012202-578331764647905301541009-57263172579053015412204              101000120000102
000370000103001460000510400476000130500961000360601495000691070224500139080453000339090680200665110
050090079511021060066812019550061120102530203430304270405890508060610452071101081015090926100851110
7231206042130580140609150586160515-9-999-9-999*42266015402-560831647647905301541009-555131612790530
15415404              101000120000102000380000103001530000510400504000140501000000380601562000711070
241400153080489100367090715600696110049080078611018960062812017830056920102570203520304440406190508
5406110620711570810550909601008851107611206472130628140659150629160546-9-999-9-999*42280002602-5434
31541647905301542009-53773150879053015422604              101000120000102000370000103001520000510400
522000150501069000410601648000741070253400166080511300398090743800734110052510083911020890068612018
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6160567-9-999-9-999*42294005802-525731442647905301542009-52003141179053015425804              101000
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200775110055740094411022890075312018900061520102480203480304460406440509260612522071332081210091081
1009811108321207122130690140719150677160583-9-999-9-999*42302003002-508031350647905301543009-502231
32279053015433004              101000110000102000370000203001660000610400608000170501190000460601742
000771070271100182080536600416090773200759110058660097411025250078812019670063120102370203390304440
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0202-490231266647905301544009-48443124079053015440204              101000110000102000360000203001650
000610400618000180501228000470601848000811070294300198080571100467090798300795110060250101111026220
083412019750063720102290203300304350406560509810613672071455081293091147101045110900120790213076414
0781150717160608-9-999-9-999*42324003402-472331186647905301544009-46653116179053015443404
   101000110000102000360000203001650000610400614000180501252000480601946000841070312000208080588800
50209080390081511006183010411102792008871202023006542010231020332030436040655050975061356

 TAPE NO.   1              FILE NO.   1
 RECORD   30               LENGTH   2960
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05093006127820713790812730911391010281108621207282130686140696150632160529-9-999-9-999*42256001802-
501923499647905302056009-49572347279053020561804              10100012000010200036000020300160000051
040059200017050122600047060184500081107027920019108050990041109065990061511004006007521101503005261
201660005192010237020334030433040638050940061306207141208129809116110105111088912075921307081407061
50626160515-9-999-9-999*42253005002-483723417647905302056009-47792339279053020565004              10
100012000010200036000020300157000051040057900017050125100048060192200083107028750019408051290042509
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002331579053020572204              10100011000010200034000020300152000051040057600018050124100047060
194400083107029900019608052340044209064840060511003825007281101433005151201621005082010220020312030
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53005402-447923265647905302057009-44212324279053020575404              10100011000010200034000020300
145000051040054100017050125800046060202600085107030260019308052110044709063830060111003746007101101
402005081201596005022010226020313030399040577050841061188207134108134709125410115111098212083221307
53140730150625160501-9-999-9-999*42254002602-429923194647905302058009-42412317279053020582604
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N-63174
6/02/79- 7/30/79
FGGE ISBUV

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$ROP ****** (OUTP) ***********
$EXEC TPLIST BS

INPUT PARAMETERS ARE:  ED SR=1=1 2

 TAPE NO.   1              FILE NO.   1
 RECORD   1                LENGTH   2960
FGGE  456479060200790630 18                                                    NAME:     NATIONAL
AERONAUTICS AND SPACE ADMINISTRATION (NASA)
                                        ADDRESS:  GODDARD SPACE FLIGHT CENTER (GSFC)
                                  GREENBELT, MARYLAND 20771
                 UNITED STATES OF AMERICA (USA)                                  SCIENTIST: GARY
 N. WOLFORD                                                   DATE:     FRI OCT 09,1981
                                            0123456789=:> /STUVWXYZ,(-JKLMNOPQR*);+ABCDEFGHI.)(<
                              TAPE CHARACTERISTICS: 9 TRACK, 800 BPI,CODE EBCDIC,MODE PE,PARITY ODD
          TAPE CONTENTS: THIS TAPE CONTAINS   TOTAL AND PROFILE OZONE     DATA THAT WAS   DERIVED FRO
M THE SBUV INSTRUMENT FLOWN ON THE NIMBUS-7 EXPERIMENTAL SATELLITE.  THIS TAPE CONFORMS WITH THE FG
GE LEVEL2B INTERNATIONAL EXCHANGE FORMAT.   ALL   AVAILABLE DATA FROM 79 06 02 00 58 TO 79 06 30 20
 59 IS SUPPLIED.
             TABLE 1   DATA SOURCE INDEX                                                   CODE
             DESCRIPTION                                                   11       RAWINSONDE DATA
                                                        12       PILOT WIND DATA
                                          13       TWOS RADAR SOUNDING DATA
                     14       TWOS NAVAID SOUNDING DATA                                              1
5       AIRCRAFT DROPWINDSONDE DATA                                          16       CONSTANT LE
VEL BALLOON DATA                                                   17       EXPERIMENTAL SATELLITE STRATOS
PHERIC SOUNDING DATA                          21       AIRCRAFT DATA - ASDAR
                         22       AIRCRAFT DATA - AIDS CASSETTE
   23       AIRCRAFT DATA - CONVENTIONAL  (AIREP)                                24       AIRCRAF
T DATA - CONVENTIONAL  (CODAR)                                   31       MANUAL SURFACE LAND OBSERV
ATION  (SYNOP)                                32       AUTOMATIC SURFACE LAND OBSERVATION (SYNOP)
                         33       SURFACE OBSERVATION FROM FIXED SHIP (SHIP)
      34       SURFACE OBSERVATION FROM MOBILE SHIP (SHIP)                                35       SUR
FACE OBSERVATION FROM ENVIRONMENTAL BUOYS                                                (NOT INCLUDED IN FGG
E SPECIAL OBSERVING SYSTEM)                                   41       SATELLITE SOUNDING DATA
                                  42       EXPERIMENTAL SATELLITE OZONE DATA (TOTAL AND PROFILE)
            51       SATELLITE CLEAR RADIANCE DATA

 TAPE NO.   1              FILE NO.   2
 RECORD   1                LENGTH   2960
H047906020000420000000000000000000    *42390014202-62001811464790602005 8009-614418066790602005842 04
             1010001500001020004900002030020400005104006530001805012340004906019060008610702928001 89
0806450004920910355010941100898901327110392801198120207800693201032702045703058304082505113306143 42
0714650812950911721010841109251207742130778140854150855160768-9-999-9-999*42412011402-6029179706479
06020059009-597417927790602005914 04                    1010001500001020005100002030021200006104006810001 90
5012790005006020710009310703330002000806960005020910599010541100953560139011042940124612021410070820
1033302046803060204085805118406149620715200813390912301011611110261208862130878140935150901160789-9
-999-9-999*42402014602-5858178396479060200590 09-5801178017906020059460 4                1010001500001 02
0005200002030021500006104006850001905013020005006022570010210703665002170807039005330909899009521 10
0839801312110403501161120219400712201033602047803061904088705121206150220715200813620912501012501 11
1381209892130943140964150881160745-9-999-9-999*42396011802-5683177216479060201000 09-5626176857906 02
01001804                1010001500001020005000002030021600007104006880001905012820004906021360010 11070
3530002050806822005530909542009641100813201270110410401202120227000736201032802046603060504087105 12
0506151420715270813380912401011851110731209482130915140935150853160719-9-999-9-999*42387002202-5331
1751264790602010100 9-5274174817906020101220 4                1010001600001020005000002030020800007104 00
6660001805013120005006022490010510703736002170806986005350909273009431100732601137110367301097120 22
8500730201033402046603059604084305115608146120715070813780912971012441111341210082130962140966150 85
9160707-9-999-9-999*42381005402-5155174186479060201010 09-5097173887906020101540 4                101000
1500001020004900002030020400007104006590001805013250005006023250010810703864002350807238005530909 76
0010591100744101171110321201018120196800653201032002044903057804082505113706144520715010813940913 27
1012831111771210442130993140998150895160745-9-999-9-999*42371002602-4978173276479060201020 09-492017
3007906020102260 4                1010001500001020004700002030019500007104006410001805013340005106023 57
0010610703881002440807071005240909334009861100708801137110310400969120196700647201030902043103055 20
4078605108806140420714830814090913491013021111911210532130989140980150865160714-9-999-9-999*4234700
5600 478817945647906020100000 4741172018786602010250 4                1010001400001020004500002030018 90
```

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0838120184000603101029402041303053204076305106806139420714810814130913531013061111981210672130997 14
0978150846360683-9-999-9-999*42333003002-46211716664790602010300 9-456217143790602010330 04
   101000140000102300420000203001790000610400616000180501337000510602371001011070392900267080689500
5650908414008341100551600997110224800771120179200582201027802038903049904071805101506135 0

***** JOB DONE.
$AVE IN 192
$EXEC TPLIST BS

INPUT PARAMETERS ARE:  ED FL=1=1 1

 TAPE NO.   1              FILE NO.   1
 RECORD   1                LENGTH   2960
H047907310000420000000000000000000    *42328002102-476523308647907302100009-4707232837907302100210 4
            101000120000102000340000203001390000510400503000170501243000450602297000931070371700243
0806417005610908930087811005709010031102513008551201609005292010234020316030397040558050791061098 2
0712550813330913171012711111591210232130924140885150793160684-9-999-9-999*42334005302-4587232316479
0730210000 9-452923207790730210053 04                  101000120000102000350000203001420000510400510000170
5012440004506023090009410703764002450806414005980908821009151100593301026110274700932120167500556 20
1023602032103040504057105080806111420712650813330913171012741111691210372130934140888150787160677-9
-999-9-999*42317002502-4409231596479073021010 09-435123137790730210125 04                  101000120000102
0003400002030014000005104005160001805012540004506022580009310703657002290806175005710908299008551 10
0542200946110248300850120163200540201022602031003039304056105080706112920712860813440913091012521 11
1351210082130907140858150752160640-9-999-9-999*42307005702-4230230936479073021010 09-417123071790730
21015704              101000120000102000350000203001410000510400497000180501226000440602296000941070
3725002250806071005380907860007841100502600888110231600787120161500524201023702032003040304056505 07
9406108520712350813150913051012661111641210322130915140851150728160609-9-999-9-999*42321002902-4050
2302764790730210200 9-399123006790730210229 04                  101000120000102000340000203001360000510400
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0160620-9-999-9-999*42324000102-3869229636479073021030 09-381122943790730210301 04                101000
1200001020003400002030013200005104004650001705012010004106023600009510703908002250806292005470907 92
9008021100548500944110282600903120176100564201023002030803038404053305074106101220711690812910913 12
1012921112091210832130960140888150745160612-9-999-9-999*42306003302-3689229026479073021030 09-363122
8827907302103330 4                  101000120000102000320000203001250000410400453000170501203000410602367
0009710703935002250806347005670907734007931100492300870110234500806120160700527201021702028903036 10
4050305070706098520711550812980913211012961112111210882130970140899150747160603-9-999-9-999*4232000
0502-351022842647907302104009-34512282379073021040504                  101000120000102000310000203001200
0004104004330001705012000004006024150009810704008002270806466005840907878008361100534800923110276 10
0912120171500563201021402028203034904048205067206093920711190812970913411013241112401211092130987 14
0916150760160612-9-999-9-999*42322003702-3329227836479073021040 09-327022765790730210437 04
   101000110000102000290000203001140000410400419000160501204000400602482001001070413200233080653800
6050907710008551100530600915110292500947120180300595201020402026903033204045805064206090 8

 TAPE NO.   1              FILE NO.   1
 RECORD   30               LENGTH   2960
1100512800948110293700910120500301258201012102015403018704025405036106054220707120809510910181009 81
1108141205942130567140650150645160547-9-999-9-999*42302034902+762702162647907310111009+758102000790
7310111490 4                  101000070000102000190000103000710002104002640000705008490002806017160006 91
0702320001280804964003750907007006541100493200933110280200859120481801226201013202017103020904028 50
5039606056920707210809270909961009781108411206282130593140665150645160539-9-999-9-999*42290032102+7
4860167564790731011200 9+743801540790731011221 04                  101000080000102000220000103000780000310
4002690000705008260002706017420007110702429001420805132004060907154006981100478700945110236700767 12
0393601102201015402019803024004031905042506057820707110808970909761009811108701206602130619140688 15
0666160556-9-999-9-999*99999999999999999999999999999999999999999999999999999999999999999999999999999
9999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999
9999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999
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D-63145
FGGE/SBUV

```
 TAPE NO.   1              FILE NO.   3
 RECORD   1                LENGTH   2960
FGGE  45647908C10079083118                                                    NAME:     NATIONAL
AERONAUTICS AND SPACE ADMINISTRATION (NASA)
                                          ADDRESS:  GODDARD SPACE FLIGHT CENTER (GSFC)
                                   GREENBELT, MARYLAND 20771
              UNITED STATES OF AMERICA (USA)                                      SCIENTIST: GARY
 N WOLFORD                                                        DATE:     TUE SEP 29,1981
                                                  0123456789=:> /STUVWXYZ,(-JKLMNCPQR*);+ABCDEFGHI.)(<
                          TAPE CHARACTERISTICS: 9 TRACK, 800 BPI,CODE EBCDIC,MODE PE,PARITY ODD
        TAPE CONTENTS: THIS TAPE CONTAINS   TOTAL AND PROFILE OZONE     DATA THAT WAS   DERIVED FRO
M THE SBUV INSTRUMENT FLOWN ON THE NIMBUS-7 EXPERIMENTAL SATELLITE.  THIS TAPE CONFORMS WITH THE FG
GE LEVEL2B INTERNATIONAL EXCHANGE FORMAT.   ALL   AVAILABLE DATA FROM 79 08 01 00 41 TO 79 08 31 20
 59 IS SUPPLIED.
            TABLE 1   DATA SOURCE INDEX                                                   CODE
            DESCRIPTION                                                  11       RAWINSONDE DATA
                                                        12       PILOT WIND DATA
                                    13       TWOS RADAR SOUNDING DATA
                 14       TWOS NAVAID SOUNDING DATA                                          1
 5       AIRCRAFT DROPWINDSONDE DATA                                          16       CONSTANT LE
VEL BALLOON DATA                                          17       EXPERIMENTAL SATELLITE STRATOS
PHERIC SOUNDING DATA                      21       AIRCRAFT DATA - ASDAR
                    22       AIRCRAFT DATA - AIDS CASSETTE
   23       AIRCRAFT DATA - CONVENTIONAL  (AIREP)                                  24       AIRCRAF
T DATA - CONVENTIONAL  (CODAR)                                  31       MANUAL SURFACE LAND OBSERV
ATION  (SYNOP)                                  32       AUTOMATIC SURFACE LAND OBSERVATION (SYNOP)
                         33       SURFACE OBSERVATION FROM FIXED SHIP (SHIP)
        34       SURFACE OBSERVATION FROM MOBILE SHIP (SHIP)                                35       SUR
FACE OBSERVATION FROM ENVIRONMENTAL BUOYS                                        (NOT INCLUDED IN FGG
E SPECIAL OBSERVING SYSTEM)                          41       SATELLITE SOUNDING DATA
                                42       EXPERIMENTAL SATELLITE OZONE DATA (TOTAL AND PROFILE)
            51       SATELLITE CLEAR RADIANCE DATA

 TAPE NO.   1              FILE NO.   3
 RECORD   28               LENGTH   2960
                                                                                          RECORD 1
  - REPORT HEADER,  TOTAL OZONE                                        RECORD 2     - PROFILE OZONE H
EADER                                                  RECORD 3-6   - PROFILE DATA RECORD TYPE 1
                                  RECORD 7-9   - PROFILE DATA RECORD TYPE 2

                                                                  ***********************************
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$ASS IN TB1
$NOP
$NOP
$NOP ******** COLT-7 *********
$AVF IN 2
$EXEC TPLIST BS

INPUT PARAMETERS ARE:  ED SR=1=1 1

 TAPE NO.   1              FILE NO.   1
 RECORD   1                LENGTH   2960
H04790801000042000000000000000000     *42254015702-662618919647908010041009-65721886179080100415704
              101000100000102000310000103001140000310400350000090500756000270601380000631070214300132
080411700350090703200706110047960080711021800070112016700054420102180202880303500404640506080607632
0706120808010907861007671106951205872130537140543150549160527-9-999-9-999*42271012902-6458187416479
08010042009-64021868779080100422904                 101000100000102000300000103001140000410400382000100
500825000300601408000641070221600130080438500349090745400714110052240086111025500078312018120058020
1020402027203033604046005063206083820709050808760908311007881107001206012130565140578150585160558-9
-999-9-999*42275010102-628618577647908010043009-62301852979080100430104                 101000100000102
00029000010300116000410400411000110000907000330601483000671070228400136080453600355090767500740110
052140084311024640077512017790056820101980202670303330404640506580609042070993080965090901100837110
7261206192130582140598150606160576-9-999-9-999*42265013302-611318429647908010043009-605718383790801
00433304                101000100000102000290000103001110000410400416000120501015000360601610000711070
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3706091120710520810940910211009261107681206322130575140582150578160543-9-999-9-999*42251000502-5941
18290647908010044009-58851825179080100440504                 101000090000102000280000103001110000410400
430000120501046000380601665000721070242500152080454000339090713200671110042310070211017630059012015
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700653110039020069411015870055812014710047420101810202460303080404430506610609812071141081173091088
1009861108261206942130630140623150593160535-9-999-9-999*42247000902-559218058647908010045009-553518
02279080100450904                 101000090000102000280000103001150000410400458000140501134000410601802
000771070262600183080471000409090700000668110039060072611015320055012013980045720101860202530303170
4045405067706100520711760812230911391010321108641207242130650140638150602160540-9-999-9-999*4225000
4102-541717948647908010045009-53601791579080100454104                 101000100000102000290000103001160
000410400449000140501142000410601904000791070276400187080476300410090691300650110039020072811015620
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   101000100000102000280000203001140000410400445000150501171000420602005000821070290200189080479500
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***** JOB DONE.
$AVF IN 191
$EXEC TPLIST BS

INPUT PARAMETERS ARE:  ED FL=1=1 1

 TAPE NO.   1              FILE NO.   1
 RECORD   1                LENGTH   2960
H04790930180042000000000000000000     *42288000702+537929985647909301500009+54372995279093015000704
              101000100000102000270000203001070000410400401000150501177000390602404000951070346200205
080618500534090714700687110041910081911015150055712024640073720101890202510303100404300506080608702
0710600812750913521013451112061209572130854140867150742160567-9-999-9-999*42272003902+5557298826479
09301500009+56142984679093015003904                 101000100000102000270000203001080000410400409000150
501177000400602308000931070322300192080577300492090667400635110038200075711013620050212024530071020
1018802025003031104043405061806088920710790812760913291013031111431208922130793140808150693160530-9
-999-9-999*42259001102+573429771647909301501009+57912973279093015011104                 101000100000102
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037060073511012530047012022770068020101910202530303140404370506210608912071078081265091303101260111
0821208272130741140769150673160521-9-999-9-999*42252004302+590929649647909301501009+596529606790930
15014304                101000100000102000270000203001090000410400420000150501178000410602127000871070
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D-63146
9/30/79 - 11/30/79
FGGE/SBUV

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$NOP ************ DOUT-8 **********
$AVF IN
$EXEC TPLIST BS

INPUT PARAMETERS ARE:  ED SR=1=1 2

 TAPE NO.   1              FILE NO.   1
 RECORD   1                LENGTH   2960
FGGE  45647910010079103118                                                    NAME:     NATIONAL
AERONAUTICS AND SPACE ADMINISTRATION (NASA)
                                        ADDRESS:  GODDARD SPACE FLIGHT CENTER (GSFC)
                                GREENBELT, MARYLAND 20771
              UNITED STATES OF AMERICA (USA)                                  SCIENTIST: GARY
 N WOLFORD                                                  DATE:     WED SEP 30,1981
                                          0123456789=:> /STUVWXYZ,(-JKLMNCPQR*);+ABCDEFGHI.)(<
                          TAPE CHARACTERISTICS: 9 TRACK, 800 BPI,CODE EBCDIC,MODE PE,PARITY ODD
        TAPE CONTENTS: THIS TAPE CONTAINS   TOTAL AND PROFILE OZONE     DATA THAT WAS   DERIVED FRO
M THE SBUV INSTRUMENT FLOWN ON THE NIMBUS-7 EXPERIMENTAL SATELLITE.  THIS TAPE CONFORMS WITH THE FG
GE LEVEL2B INTERNATIONAL EXCHANGE FORMAT.   ALL   AVAILABLE DATA FROM 79 09 30 21 15 TO 79 10 31 20
 59 IS SUPPLIED.
            TABLE 1   DATA SOURCE INDEX                                                  CODE
            DESCRIPTION                                                  11       RAWINSONDE DATA
                                                      12       PILOT WIND DATA
                                  13       TWOS RADAR SOUNDING DATA
                 14       TWOS NAVAID SOUNDING DATA                                          1
5       AIRCRAFT DROPWINDSONDE DATA                                          16       CONSTANT LE
VEL BALLOON DATA                                          17       EXPERIMENTAL SATELLITE STRATOS
PHERIC SOUNDING DATA                      21       AIRCRAFT DATA - ASDAR
                  22       AIRCRAFT DATA - AIDS CASSETTE
   23       AIRCRAFT DATA - CONVENTIONAL  (AIREP)                                  24       AIRCRAF
T DATA - CONVENTIONAL  (CODAR)                                  31       MANUAL SURFACE LAND OBSERV
ATION  (SYNOP)                                  32       AUTOMATIC SURFACE LAND OBSERVATION (SYNOP)
                         33       SURFACE OBSERVATION FROM FIXED SHIP (SHIP)
       34       SURFACE OBSERVATION FROM MOBILE SHIP (SHIP)                                35       SUR
FACE OBSERVATION FROM ENVIRONMENTAL BUOYS                                        (NOT INCLUDED IN FGG
E SPECIAL OBSERVING SYSTEM)                          41       SATELLITE SOUNDING DATA
                                42       EXPERIMENTAL SATELLITE OZONE DATA (TOTAL AND PROFILE)
            51       SATELLITE CLEAR RADIANCE DATA

 TAPE NO.   1              FILE NO.   2
 RECORD   1                LENGTH   2960
H04791001000042000000000000000000    *42231013602-804829779647909302115009-80332943179093021153604
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080392700351090704200676110037950072211015420056012019250061520101910202500303050404130505710607802
0708820809180908801008181106831205342130484140508150541160533-9-999-9-999*42240010802-7998287226479
09302116009-79742841579093021160804                 101000090000102000270000103001030000410400368000100
500859000310601393000641070195100128080407700354090725800712110038830071311016310056812020910065920
1018202024203029904041405058306080520709060809210908691008011106671205312130494140527150563160551-9
-999-9-999*42244014002-791927798647909302116009-78872753879093021164004                 101000090000102
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6841205362130495140527150563160551-9-999-9-999*42249011202-781827015647909302117009-778026800790930
21171204                 101000090000102000250000103000990000310400374000110500928000330601465000621070
196500126080407400317090730400705110040960072511018910063312023640072520101680202250302800403930505
6906081920709520810010909411008521106891205372130494140526150563160553-9-999-9-999*42267004402-7699
26364647909302117009-76562618479093021174404                 101000090000102000250000103001000000410400
376000110500963000350601596000661070217100140080443500352090782000754110043810077511020250068112024
170074920101730202310302860403990505730608222070964081040091000100922110760120594213054314057515060
9160593-9-999-9-999*42280001602-756525821647909302118009-75192567179093021181604                 101000
090000102000250000103000980000310400376000120501021000360601748000711070233500153080465000383090816
700792110046200081511020920070712023790074620101730202290302820403930505640608202070984081107091086
1010091108341206442130577140605150636160619-9-999-9-999*42297004802-742225369647909302118009-737325
24479093021184804                 101000090000102000250000103000980000310400385000130501081000380601868
000761070245500166080484100426090878100878110053560095511023910080012023600075520101710202260302800
4039105056806083920710220811750911621010811108801206812130601140627150666160659-9-999-9-999*4231300
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000410400379000136501121000390602042000811070263700173080500500419090904700887110058600102711027770
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0651150684160676-9-999-9-999*42326005202-711524665647909302119009-70632457379093021195204
   101000090000102000250000203001000000410400391000140501151000400602093000831070276300180080524000
45409093470092411006038010561102866009281202538008062010176020231030285040397050573060848

***** JOB DONE.
$AVF IN 195
$EXEC TPLIST BS

INPUT PARAMETERS ARE:  ED FL=1=1 1

 TAPE NO.   1              FILE NO.   1
 RECORD   1                LENGTH   2960
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080651300484090489000466110016300040511006560028312013450043520101890202410302920403900505300607452
0709380812320914041014891115201214142131192140993150651160414-9-999-9-999*42240005802+2437308266479
11301500009+24983080979113015005804              101000110000102000270000203000990000410400349000140
501125000360602793001121070486600294080629800478090490900465110017540042611006930029512013440043420
1019502024903030104040005054006075020709350812190913881014751115011213772131148140957150635160413-9
-999-9-999*42239003002+261930776647911301501009+26813075979113015013004              101000110000102
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018810044611007330030812013530043520101920202460302980403990505440607652070955081236091392101463111
4661213292131105140927150626160414-9-999-9-999*42238000202+280130726647911301502009+286230708791130
15020204              101000110000102000270000203000990000410400363000150501162000370602725001101070
453800270080598000470090498300473110019820046211007560031312013440043120101890202430302950403980505
5006078320709800812610914051014601114391212872131066140900150617160414-9-999-9-999*42238003402+2983
30673647911301502009+30443065679113015023404              101000100000102000260000203000990000410400
374000150501191000380602677001081070433600257080581700466090505500480110021290048311008110033012013
760043920101850202390302920403980505580608082071016081295091419101450111396121230213101914087015060
9160417-9-999-9-999*42230000602+316630620647911301503009+32273060279113015030604              101000
100000102000260000203001010000410400387000150501200000390602583001051070409600243080557200452090498
600475110021400047811007840031812013170042320101850202410302950404060505740608362071044081304091402
1014101113311211612130963140829150590160410-9-999-9-999*42229003802+334830565647911301503009+340930
54679113015033804              101000100000102000260000203001020000410400400000150501220000400602518
001031070392700232080544100445090504300477110022460049111008140032612013260042420101810202380302930
4040805058706086820710820813260913991013861112841211122130926140805150584160413-9-999-9-999*4222700
1002+353030508647911301504009+35903048879113015041004              101000100000102000270000203001070
000410400420000160501222000400602434001001070381200227080538500445090509600481110022940049711008100
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0793150583160416-9-999-9-999*42227004202+371030449647911301504009+37713042979113015044204
   101000100000102000260000203001080000410400437000160501258000420602436001021070377300237080538600
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 TAPE NO.   1              FILE NO.   1
 RECORD   18               LENGTH   2960
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130773140824150791160682-9-999-9-999*42349011002+599921539647911302024009+60562149479113020241004
            1010001200001020003700001030015100005104005270001405011120004106018160008310702845001720
805979004920909074009041100746901169110333701026120210400689201025102034303043204060705085806115820
712460811770910961010251108911207582130748140801150777160680-9-999-9-999*42337014202+61702140364791
1302024009+62282135279113020244204              1010001200001020003800001030014900004104005230001405
011150004206017800008010702764001830806149005220909529009701100714501150110282500939120192500640201
025602034603043104060005084606114920712460811840910941010121108641207292130739140815150814160719-9-
999-9-999*99999999999999999999999999999999999999999999999999999999999999999999999999999999999999999
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99999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999999
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