

3172

GERMAN RESEARCH SATELLITE  
EI 92 PROTON DATA  
GRS 625/A1 - AZUR  
(69-097A-03A)

2 of 2

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## **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 This inventory information is now no longer maintained in the DSCs, but is now managed in the inventory part of the NSSDC information system.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

GRS-A

GRA-A/ AZUR-MISSION

69-097A-03A

This data set was not restored. There were originally two 7-track, 800 BPI tapes written in Binary. There is one tape copy from the 7-track tape. The original tape to this dataset was never restored so there is only the 9-track tape IT format 800 BPI CDC BIN et-92. The DD number along with corresponding D numbers are as follows:

DD#	DATE RECEIVED	TIME SPAN
DD009979	07/18/1972	11/10/69 - 06/28/70

## GRS-A

## PROTON + ALPHA COUNT RATES, TAPE

69-097A-03A

This data set has been restored. There were originally two 7-track, 800 BPI tapes written in Binary. There is one restored tape. The DR tape is a 3480 cartridge and the DS tape is 9-track, 6250 BPI. The original tapes were created on a 3400 computer and the restored tapes were created on an IBM 9021 computer. The DR and DS numbers along with the corresponding D numbers are as follows:

DR#	DS#	D#	FILES	TIME SPAN
-----	-----	-----	-----	-----
DR005512	DS005512	D008549	1	11/10/69 - 06/28/70
		D008550	2	11/10/69 - 06/28/70

SUMMARY

GRS-A  
PROTON + ALPHA COUNT RATES, TAPE  
69-097A-03A

DR#	DS#	D#	FILES	TIME SPAN
-----	-----	-----	-----	-----
DR005512	DS005512	D008549	1	11/10/69 - 06/28/70
		D008550	2	11/10/69 - 06/28/70

- o TOTAL NUMBER FILES: 2, TOTAL NUMBER RECORDS: 5320, TOTAL NUMBER BYTES: 20M, LARGEST BLOCKSIZES: 3816, LARGEST RECORD SIZES: 5118.
- o FIXES.
- o GOOD COPY.
- o THIS DATA SET HAS BEEN RESTORED ON AN IBM 9021 COMPUTER.



GERMAN RESEARCH SATELLITE

EI 92 PROTON DATA

GRS 625/A1 - AZUR

(69-097A-03A)

This data set consists of <sup>two</sup>~~three~~ tapes. These tapes are CDC3400, 800 BPI, Binary, 7-track with one file per tape. The first tape (D-8549) has no end of file at the end of tape and it has to be processed as having 5119 records on the tape. Tape two (D-8550) has a normal end of file. Tape three (3200 ft. tape) (C-6316) was the output of a merge of tape one and two.

Tape 1 - D-8549	Invariant Latitude	14° - 69°	1/10/69 - 09/10/69
Tape 2 - D-8550	Invariant Latitude	69° - 89°	1/10/69 - 09/10/69
Tape 3 - C-6316	Invariant Latitude	14° - 89°	1/10/69 - 09/10/69

INSTITUT FÜR REINE UND ANGEWANDTE KERNPHYSIK  
DER CHRISTIAN-ALBRECHTS-UNIVERSITÄT KIEL

EI 92 PROTON DATA

(SATELLITE GRS 625/A1-AZUR)

Contents:

Experiment EI 92

IT-Format

IT-Tape

## Description

### Satellite and Orbit

The German Research Satellite AZUR was launched Nov. 8, 1969 into a nearly polar orbit of  $103^\circ$  inclination with initial apogee altitude of 3145 km and perigee altitude of 384 km and an orbital period of 122 minutes.

The orbit cuts through the entire range of magnetic shells at invariant radial distances between 1.0 and  $1.55 R_E$ . The orbital plane is nearly sun-synchronous and lies in the dawn-dusk plane of the earth.

The satellite is magnetically aligned to the earth's magnetic field lines. The active life time of AZUR lasted from Nov. 8, 1969 until June 29, 1970.

### Experiment EI 92

The solid state telescope EI 92 onboard the satellite AZUR consists of two totally depleted silicon surface barrier detectors of equal size, 34 microns thick and 7 mm in diameter. Four energy threshold discriminators for detector 1 and one energy threshold for detector 2, set to the same level as the lowest threshold of detector 1, define in combination with anticoincidence conditions six experimental channels whose characteristics are given in the table below.

Detector 2 was designed to be on the same size and sensitivity as detector 1 in order to be able to account for contaminating pulses in detector 1 originating from higher energy particles that penetrate the shielding of the detectors.

An acceptance cone for incoming particles is defined by a mechanical collimator with  $20.4^\circ$  full opening angle. This collimator contains a permanent magnet keeping electrons with energies up to 500 keV from hitting the detectors.

The geometric factor of the telescope is  $G = 0.0137 \text{ cm}^2 \text{ sr}$ . The axis of the collimator points perpendicular ( $\pm 5^\circ$ ) to the local magnetic field vector so that the telescope is receiving particles whose pitch angles are  $90^\circ \pm 15^\circ$ .

#### Table of experimental channels

<u>Channel</u>	<u>Particles</u>	<u>Energy Range (MeV)</u>
1	protons	1.65 - 13.5
2	protons	0.25 - 12.5
3	protons	0.25 - 1.65
4	protons	0.50 - 1.65
5	protons	1.0 - 1.65
6	alphas	2.0 - 6.4

The counts in the individual channels are accumulated for a period of 9.875 sec onboard the satellite and transmitted to ground in real-time in 10 sec intervals.

#### Literature

Keppler, E., "Der Forschungssatellit AZUR", Zeitschrift für Geophysik 36, 457-476, 1970

Moritz, J., "Messung von Strahlungsgürtel-Protonen im Energiebereich 0.25-13.5 MeV mit dem Satelliten AZUR", Zeitschrift für Geophysik 37, 153-178, 1971

Description

Purpose

The IT-Format was designed to organize EI 92 proton data in reference to the earth's magnetic field. Magnetic field parameters used are

$\Lambda$  , invariant latitude  
NOS, northern or southern hemisphere  
B , magnetic field strength  
MLT, magnetic local time

For this format proton data are summarized according to the invariant latitude in intervals of one degree width. Within each interval data are ordered in time scale. Time overlapping was eliminated in a previous step of data reduction. Proton data of bad quality are skipped. A dense packing of information on the output tape permits an efficacious reduction in tape storage requirement.

Variables

Twelve variables constitute one sample (data set) of proton data. A description of each variables is given in the following list

<u>Variable</u>	<u>Description</u>
INLAT	invariant latitude (deg) (reference field: GSFC 12/66)
UT	time in days since year of launch (69) an fraction of day

<u>Variable</u>	<u>Description</u>
B	magnetic field strength (reference field: GSFC 12/66)
NOS	+1, northern hemisphere -1, southern hemisphere
MLT	magnetic local time in hours and fraction of hour (reference field: central dipole)
LT	local time in hours and fraction of hour
CHAN 1	counting rate (counts per 10 sec) protons: 1.65-13.5 MeV
CHAN 2	counting rate protons: 0.25-12.5 MeV
CHAN 3	counting rate protons: 0.25-1.65 MeV
CHAN 4	counting rate protons: 0.50-1.65 MeV
CHAN 5	counting rate protons: 1.0-1.65 MeV
CHAN 6	counting rate alphas: 2.0-6.4 MeV

Data Set

Each data set exists of twelve logical words (one sample) stored in six CDC 3400 computer words. For additional information on data conversion and packing refer to section IT-Tape.

Record

Every seventy-nine data sets of a given invariant latitude interval are summarized in one physical record. The proceeding record label (three computer words long) designs

- latitude interval
- current record number related to the latitude interval
- number of data sets written in this record

The last record of a certain interval might contain less than seventy-nine data sets. Nevertheless the record length is defined to fourhundred and seventy-seven CDC 3400 computer words.

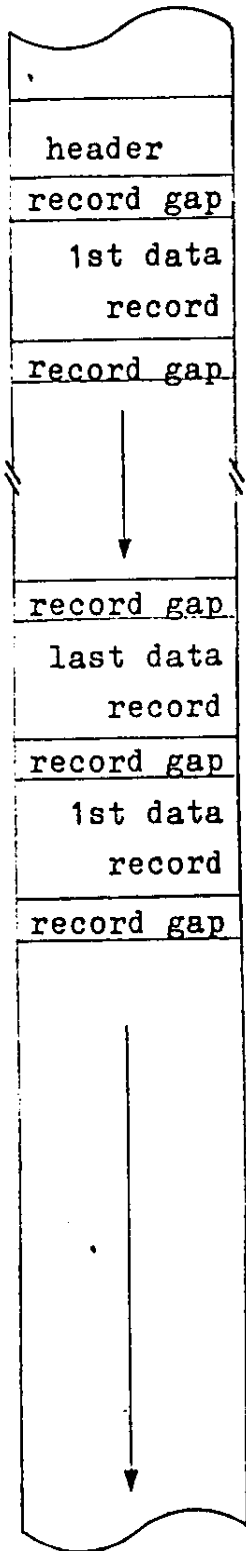
Each record is followed by the subsequent record. No marks are used to separate records belonging to different latitude intervals.

Tape

All EI 92 proton data in IT-Format are stored on two output tapes (7 tracks, 2400' long, 1/2" wide). The tapes were generated by CDC 3400 buffered write in odd parity and 800 bpi density. Contents and format will be specified in section IT-Tape.

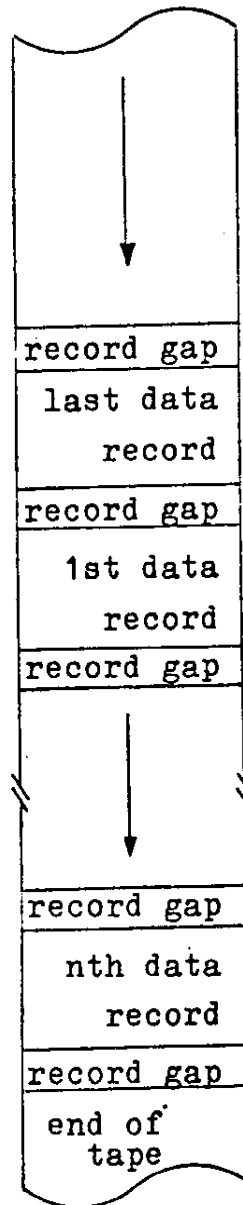
Tape Format

1st IT-Tape



1st latitude interval

2nd latitude interval



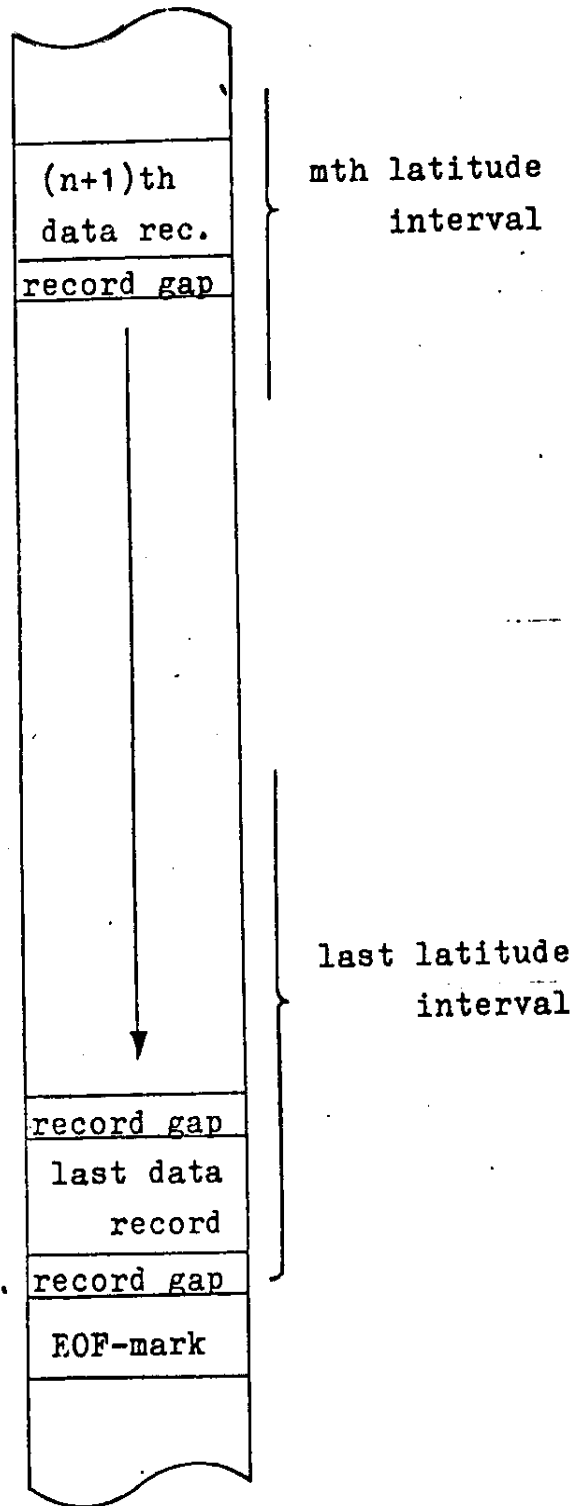
(m-1)th latitude interval

mth latitude interval

connected to  
2nd IT-Tape

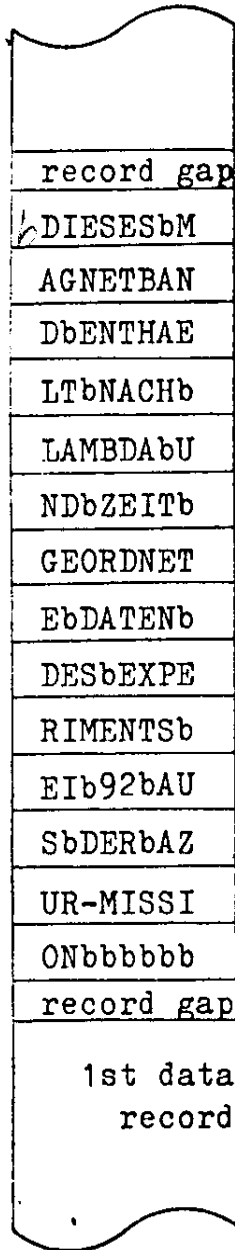


2nd IT-Tape



Header

1st data tape

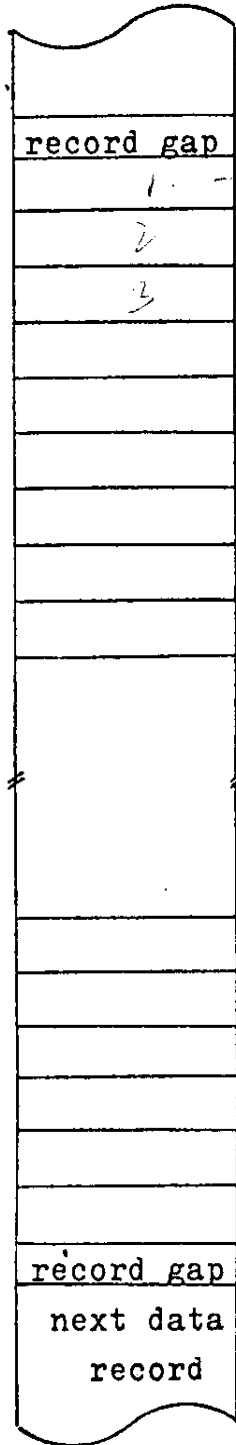


header length:

112 characters in CDC 3400  
BCD mode  
(transmitted to tape by  
binary buffered write)

(b is blank)

Record



invariant latitude, integer word  
record number  
record length N (number of data sets)

1st data set

length: 6 CDC 3400 data words

Nth data set

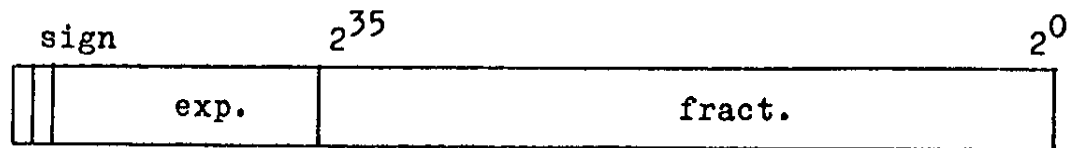
( $N \leq 79$ )

maximum record length:

$\leq 477$  CDC 3400 data words

Data Set

Each data set contains 12 logical words in 6 physical data words.

Word 1:Contents

$\Lambda$ , invariant latitude  
(deg)

Format

CDC 3400  
floating point.

Word 2:Contents

UT, time in days since  
year of launch and  
fraction of day  
(e.g. Nov 8, 69  $\equiv$  312) ✓

Format

CDC 3400  
floating point

Word 3:

Contents

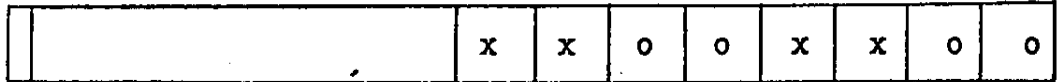
Format

B, magnetic field strength (gauss)

CDC 3400 floating point

Word 4:

sign  $10^8$   $10^7$   $10^6$   $10^5$   $10^4$   $10^3$   $10^2$   $10^1$



*MLT*

*LT*

Contents

Format

NOS, MLT, LT

CDC 3400 sign and 8 decimal integer characters used

NOS { +1, latitude north  
-1, latitude south

sign bit { 0  
1

For sign bit: 0

MLT, magnetic local time in hours and fraction of hour

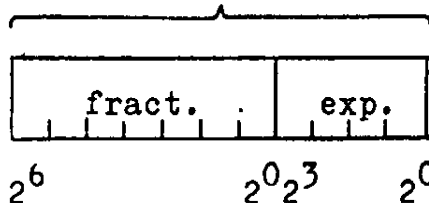
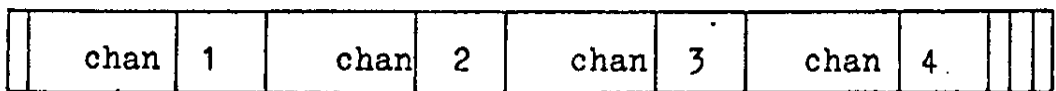
characters  $10^8 - 10^5$   
xx.oo

LT, local time in hours and fraction of hour

characters  $10^4 - 10^1$   
xx.oo

Word 5:

sign  $2^{36}$   $2^{25}$   $2^{14}$   $2^3$



ContentsFormat

Counting Rates  
CHAN 1, 2, 3, 4

CDC 3400            44 bits used  
integer

CHAN 1 in  
counts/10 sec

bits  $2^{46} - 2^{36}$   
rate = fract.\*  $2^{\text{exp.}}$

CHAN 2 in  
counts/10 sec

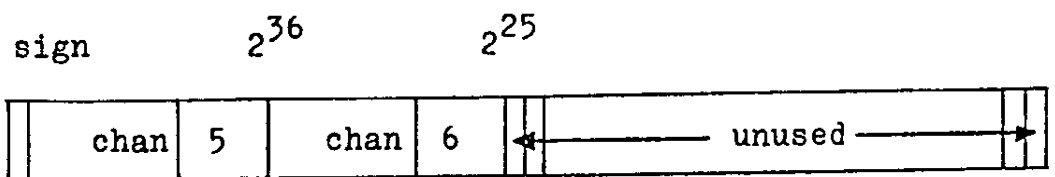
bits  $2^{35} - 2^{25}$   
rate = fract.\*  $2^{\text{exp.}}$

CHAN 3 in  
counts/10 sec

bits  $2^{24} - 2^{14}$   
rate = fract.\*  $2^{\text{exp.}}$

CHAN 4 in  
counts/10 sec

bits  $2^{13} - 2^3$   
rate = fract.\*  $2^{\text{exp.}}$

Word 6:ContentsFormat

Counting Rates  
CHAN 5, 6

CDC 3400            22 bits used  
integer

CHAN 5 in  
counts/10 sec

bits  $2^{46} - 2^{36}$   
rate = fract.\*  $2^{\text{exp.}}$

CHAN 6 in  
counts/10 sec

bits  $2^{35} - 2^{25}$   
rate = fract.\*  $2^{\text{exp.}}$

INBR	DDDDMMSS	MLT	LT	L	B	92K1	92K2	92K3	92K4	92K5	92K6	0,25	4	0,50	1,00	1,65	ALPHA	B/B0	R	LAMB	NS
74,83	314002604	3,32	0,54	14,61	0,337	0	0	0	0	0	0	0	0	0	0	0	0	0,999,999	1,21413	73,244	N
75,22	314002614	3,29	0,46	15,36	0,339	0	0	0	0	0	0	0	0	0	0	0	0	0,999,999	1,21280	73,683	N
74,96	314022644	4,29	1,52	14,85	0,324	0	0	0	0	0	0	0	0	0	0	0	0	0,999,999	1,23046	73,268	N
75,43	314022654	4,27	1,45	15,80	0,326	0	0	0	0	0	0	0	0	0	0	0	0	0,999,999	1,22876	73,805	N
74,58	314023524	17,36	19,20	14,14	0,434	0	0	0	0	0	0	0	0	0	0	0	0	0,999,999	1,11699	73,679	N
74,67	314042704	4,52	2,41	14,30	0,310	3	18	17	3	1	1	103	14	14	0	14	0	0,999,999	1,24809	72,818	N
75,16	314042714	4,51	2,37	15,24	0,312	1	15	15	5	1	1	73	29	29	0	0	0	0,999,999	1,24616	73,382	N
74,54	314062714	4,32	3,17	14,07	0,300	1	7	9	4	1	1	36	22	22	0	0	0	0,999,999	1,26146	72,577	N
75,00	314062724	4,30	3,15	14,92	0,302	1	7	6	3	1	1	28	14	14	0	7	0	0,999,999	1,25953	73,109	N
75,46	314062734	4,27	3,12	15,86	0,304	1	11	11	3	1	1	58	14	14	0	0	0	0,999,999	1,25761	73,646	N
75,08	314063614	18,26	20,55	15,08	0,395	552	13440	12800	7296	1264	4	40520	44407	9276	4056	22	999,999	1,15317	73,945	N	
74,74	314082754	3,42	3,36	14,43	0,300	0	0	0	0	0	0	0	0	0	0	0	0	0,999,999	1,26232	72,794	N
75,12	314082804	3,39	3,34	15,16	0,301	0	0	0	0	0	0	0	0	0	0	0	0	0,999,999	1,26061	73,242	N
75,50	314082814	3,35	3,31	15,94	0,303	0	0	0	0	0	0	0	0	0	0	0	0	0,999,999	1,25888	73,679	N
75,47	314083644	19,43	22,11	15,89	0,380	0	0	0	0	0	0	0	0	0	0	0	0	0,999,999	1,16774	74,271	N
74,99	314083654	19,39	22,02	14,92	0,382	0	0	0	0	0	0	0	0	0	0	0	0	0,999,999	1,16570	73,766	N
74,51	314083704	19,35	21,52	14,01	0,383	0	0	0	0	0	0	0	0	0	0	0	0	0,999,999	1,16364	73,253	N
75,27	314103704	21,27	23,52	15,47	0,365	1	6	9	2	1	1	22	7	7	0	0	0	0,999,999	1,18355	73,945	N
75,01	314103714	21,21	23,42	14,96	0,367	1	11	10	5	2	1	36	22	22	7	7	0	0,999,999	1,18155	73,675	N
74,74	314103724	21,15	23,32	14,44	0,368	1	12	11	5	2	1	44	22	22	7	7	0	0,999,999	1,17951	73,394	N
74,66	314193959	10,07	8,02	14,29	0,233	1	6	6	3	1	1	22	14	14	0	0	0	0,999,999	1,37189	71,953	S
74,66	314194010	10,02	7,59	14,29	0,232	1	6	6	3	1	1	44	7	7	0	0	0	0,999,999	1,37286	71,943	S
74,65	314194020	9,57	7,56	14,27	0,232	1	2	2	2	1	1	0	0	0	0	0	0	0,999,999	1,37378	71,922	S
74,63	314194030	9,52	7,52	14,24	0,231	1	6	6	2	1	1	28	7	7	0	0	0	0,999,999	1,37470	71,896	S
74,56	314194050	9,43	7,46	14,14	0,230	1	6	6	3	1	1	22	7	7	0	0	0	0,999,999	1,37651	71,800	S
74,52	314194100	9,39	7,44	14,03	0,230	1	5	5	3	1	1	14	7	7	0	0	0	0,999,999	1,37743	71,742	S
74,70	315004929	3,46	1,09	14,37	0,338	3	5	7	2	1	1	7	7	7	0	14	0	0,999,999	1,21251	73,111	N
75,12	315004939	3,43	1,00	15,17	0,340	1	7	7	3	1	1	29	14	14	0	0	0	0,999,999	1,21115	73,585	N
74,86	315025009	4,36	2,02	14,66	0,325	0	0	0	0	0	0	0	0	0	0	0	0	0,999,999	1,22862	73,170	N
75,34	315025019	4,35	1,56	15,62	0,327	0	0	0	0	0	0	0	0	0	0	0	0	0,999,999	1,22688	73,724	N
74,69	315045029	4,51	2,49	14,28	0,312	3	4	3	2	1	1	7	7	7	0	14	0	0,999,999	1,24520	72,822	N
75,14	315045039	4,50	2,45	15,21	0,314	1	1	1	1	1	1	7	7	7	0	0	0	0,999,999	1,24326	73,389	N
74,52	315065039	4,24	3,22	14,04	0,303	2	7	6	2	1	1	29	7	7	0	7	0	0,999,999	1,25685	72,591	N
74,97	315065049	4,22	3,20	14,88	0,305	1	5	2	3	1	1	14	0	0	0	0	0	0,999,999	1,25495	73,117	N
75,43	315065059	4,19	3,17	15,81	0,307	1	3	2	1	1	1	7	0	0	0	0	0	0,999,999	1,25306	73,649	N
75,36	315222145	7,13	6,48	15,65	0,214	2	11	10	1	1	1	66	0	0	0	7	0	0,999,999	1,41178	72,521	S
75,09	315222155	7,11	6,47	15,10	0,213	2	6	2	1	1	1	29	0	0	0	7	0	0,999,999	1,41260	72,189	S
74,81	315222165	7,08	6,46	14,57	0,213	1	15	16	2	1	1	103	0	0	0	0	0	0,999,999	1,41341	71,853	S
74,53	315222175	7,06	6,44	14,06	0,212	3	4	3	2	1	1	7	7	7	0	14	0	0,999,999	1,41420	71,512	S
75,33	316012115	17,56	19,10	15,60	0,448	1	3	3	1	1	1	14	0	0	0	0	0	0,999,999	1,10619	74,557	N
74,76	316012125	17,54	19,07	14,47	0,450	1	2	2	1	1	1	7	0	0	0	0	0	0,999,999	1,10380	73,966	N
75,31	316031345	4,41	2,07	15,55	0,329	1	1	1	1	1	1	0	0	0	0	0	0	0,999,999	1,22472	73,700	N

69-0974-03A

INBR	DDDDMMSS	MLT	LT	L	B	92K1	92K2	92K3	92K4	92K5	92K6	0,25	0,50	1,00	1,65	ALPHA	B/80	R	LAMB	NS
75,29	316032154	17,34	19,38	15,51	0,432	1	1	1	1	1	1	0	0	0	0	0	0	0	74,419	N
74,65	316032204	17,33	19,34	14,24	0,434	1	1	1	1	1	1	0	0	0	0	0	0	0	73,736	N
74,70	316051354	4,48	2,56	14,37	0,315	3	3	3	3	3	3	14	0	0	0	0	0	0	72,905	N
75,20	316051404	4,47	2,52	15,32	0,317	3	3	3	3	3	3	0	0	0	0	0	0	0	73,473	N
74,93	316055904	16,55	15,39	14,80	0,342	2	2	2	2	2	2	7	0	0	0	0	0	0	73,393	S
75,43	316055914	16,54	15,37	15,81	0,340	2	2	2	2	2	2	22	0	0	0	0	0	0	73,927	S
75,48	316072254	18,55	21,26	15,90	0,397	1	1	1	1	1	1	22	0	0	0	0	0	0	74,393	N
74,91	316072304	18,52	21,18	14,75	0,398	1	1	1	1	1	1	7	0	0	0	0	0	0	73,794	N
75,23	316223554	6,58	6,46	15,39	0,210	2	2	2	2	2	2	0	0	0	0	0	0	0	72,305	S
74,68	316223614	6,53	6,44	14,32	0,209	1	1	1	1	1	1	14	0	0	0	0	0	0	71,630	S
74,74	317013624	4,08	1,30	14,44	0,342	1	1	1	1	1	1	22	0	0	0	0	0	0	73,186	N
75,20	317013634	4,06	1,22	15,33	0,344	1	1	1	1	1	1	0	0	0	0	0	0	0	73,703	N
74,54	317033654	4,47	2,24	14,09	0,328	1	1	1	1	1	1	0	0	0	0	0	0	0	72,842	N
75,05	317033704	4,46	2,18	15,02	0,330	1	1	1	1	1	1	7	0	0	0	0	0	0	73,419	N
74,53	317053714	4,45	3,03	14,05	0,317	1	1	1	1	1	1	0	0	0	0	0	0	0	72,725	N
75,03	317053724	4,43	3,00	14,99	0,319	1	1	1	1	1	1	0	0	0	0	0	0	0	73,303	N
75,20	317054544	18,05	20,34	15,33	0,414	1	1	1	1	1	1	0	0	0	0	0	0	0	74,209	N
74,35	317054554	18,03	20,27	14,09	0,415	1	1	1	1	1	1	0	0	0	0	0	0	0	73,524	N
75,45	317205603	8,10	7,01	15,85	0,215	1	1	1	1	1	1	0	0	0	0	0	0	0	72,646	S
75,25	317205613	8,07	7,00	15,44	0,214	1	1	1	1	1	1	14	0	0	0	0	0	0	72,401	S
75,06	317205623	8,04	6,58	15,04	0,214	1	1	1	1	1	1	28	0	0	0	0	0	0	72,160	S
74,85	317205633	8,00	6,57	14,64	0,213	1	1	1	1	1	1	0	0	0	0	0	0	0	71,904	S
74,64	317205643	7,57	6,55	14,26	0,212	2	2	2	2	2	2	0	0	0	0	0	0	0	71,648	S
74,96	318015953	4,17	1,37	14,89	0,345	2	2	2	2	2	2	22	0	0	0	0	0	0	73,445	N
75,43	318020003	4,15	1,30	15,81	0,347	1	1	1	1	1	1	7	0	0	0	0	0	0	73,978	N
75,20	318020803	17,42	19,18	15,33	0,453	1	1	1	1	1	1	14	0	0	0	0	0	0	74,446	N
74,37	318020813	17,40	19,14	14,12	0,454	1	1	1	1	1	1	0	0	0	0	0	0	0	73,793	N
74,85	318040023	4,50	2,29	14,64	0,331	1	1	1	1	1	1	7	0	0	0	0	0	0	73,212	N
75,37	318040033	4,49	2,24	15,69	0,333	2	2	2	2	2	2	7	0	0	0	0	0	0	73,803	N
74,92	318060043	4,38	3,07	14,77	0,321	1	1	1	1	1	1	0	0	0	0	0	0	0	73,203	N
74,65	318080103	3,56	3,33	14,26	0,317	1	1	1	1	1	1	7	0	0	0	0	0	0	72,859	N
75,07	318080113	3,52	3,31	15,06	0,319	1	1	1	1	1	1	0	0	0	0	0	0	0	73,346	N
75,49	318080123	3,48	3,29	15,92	0,321	1	1	1	1	1	1	14	0	0	0	0	0	0	73,827	N
74,67	318080953	19,20	21,41	14,31	0,403	2	2	2	2	2	2	0	0	0	0	0	0	0	73,571	N
74,66	319002229	3,29	0,52	14,29	0,359	1	1	1	1	1	1	14	0	0	0	0	0	0	73,233	N
75,06	319002239	3,26	0,43	15,06	0,360	1	1	1	1	1	1	7	0	0	0	0	0	0	73,685	N
75,47	319002249	3,22	0,34	15,89	0,362	1	1	1	1	1	1	0	0	0	0	0	0	0	74,134	N
74,61	319022309	4,27	1,52	14,20	0,345	2	2	2	2	2	2	0	0	0	0	0	0	0	73,063	N
75,10	319022319	4,26	1,45	15,13	0,347	1	1	1	1	1	1	14	0	0	0	0	0	0	73,622	N
74,71	319023129	17,36	19,21	14,37	0,454	1	1	1	1	1	1	0	0	0	0	0	0	0	73,938	N



IMBR	DDDDHHMMSS	MLT	LT	L	B	92K1	92K2	92K3	92K4	92K5	92K6	0,25	0,50	1,00	1,65	ALPHA	B/B0	R	LAMB	NS
54,51	543014849	5127	4,24	2,97	0,310	1	16	38	14	1	1	176	95	0	0	0	25,966	1,18939	50,718	N
54,97	543014859	5127	4,19	3,03	0,312	1	75	76	36	2	1	294	250	7	0	0	27,971	1,18863	51,256	N
55,42	543014909	5127	4,18	3,10	0,314	1	105	104	53	8	1	375	331	51	0	0	30,160	1,18785	51,791	N
55,35	543031159	5151	6,23	3,09	0,130	148	83968	83944	33280	1712	7	365+3	232+3	12552	1082	44	12,293	1,55977	44,751	S
55,12	543031209	5151	6,22	3,06	0,129	174	84992	82944	34304	1904	10	358+3	238+3	13965	1273	44	11,838	1,55964	44,420	S
54,88	543031219	5151	6,122	3,02	0,129	190	84992	82944	34304	2000	7	358+3	237+3	14650	1391	66	11,389	1,55943	44,077	S
54,64	543031229	5151	6,121	2,99	0,128	246	83968	82944	35328	2016	12	350+3	245+3	14753	1803	80	10,963	1,55919	43,735	S
54,85	543034949	5133	4,27	3,02	0,291	7	296	284	214	34	1	515	1325	242	44	0	25,612	1,21459	50,618	N
55,35	543034959	5133	4,26	3,09	0,293	9	444	436	328	43	1	795	2098	309	58	0	27,826	1,21357	51,218	N
55,46	543051119	5146	6,31	3,11	0,118	176	107+3	105+3	41984	2144	10	467+3	293+3	15710	1288	66	11,372	1,60849	44,063	S
55,26	543051129	5146	6,31	3,08	0,117	204	108+3	107+3	43008	2368	9	474+3	299+3	17367	1494	58	10,982	1,60860	43,750	S
55,04	543051139	5146	6,30	3,05	0,117	232	109+3	107+3	44072	2336	9	467+3	306+3	17331	1700	58	10,594	1,60661	43,425	S
54,84	543051149	5146	6,29	3,02	0,116	244	110+3	108+3	45036	2496	11	467+3	313+3	18394	1788	73	10,244	1,60669	43,118	S
54,64	543051159	5146	6,29	2,99	0,116	284	110+3	108+3	45968	2560	9	463+3	316+3	18780	2083	58	9,907	1,60674	42,809	S
54,70	543054959	5124	4,38	2,99	0,274	23	1552	1552	1016	115	1	394	6633	839	161	0	23,591	1,23664	50,011	N
55,17	543055009	5124	4,37	3,06	0,276	19	1964	1984	1248	119	1	541	8311	868	132	0	25,530	1,23505	50,595	N
54,79	543063509	1721	16,53	3,01	0,311	3	188	188	69	13	1	87	412	88	14	0	27,180	1,18891	51,050	S
55,31	543063519	17120	16,53	3,09	0,311	6	384	380	176	45	1	150	964	323	36	0	29,343	1,119108	51,597	S
54,89	543074929	5103	4,51	3,02	0,263	26	1392	1370	1202	198	1	106	7612	1450	184	0	23,358	1,25247	49,937	S
55,31	543074939	5103	4,50	3,09	0,266	19	1520	1504	1360	174	1	106	8731	1273	132	0	25,101	1,25046	50,470	N
55,46	543090829	6113	7,02	3,11	0,121	204	92160	91136	37888	2048	8	392+3	263+3	15018	1494	51	11,673	1,59371	44,295	S
55,24	543090839	6113	7,00	3,08	0,120	200	94208	92160	39424	2176	8	388+3	274+3	15960	1465	51	11,228	1,59439	43,950	S
55,01	543090849	6112	6,59	3,04	0,120	276	93184	92160	40448	2368	12	375+3	222+3	12927	1450	80	11,977	1,56118	44,523	S
54,79	543090859	6112	6,58	3,01	0,119	246	93184	92160	40960	2400	8	376+3	280+3	17344	1759	80	10,801	1,59502	43,600	S
54,57	543090909	6111	6,57	2,98	0,118	352	92160	91136	41472	2464	9	365+3	283+3	17603	2024	51	10,395	1,59564	42,251	S
55,43	543110839	6142	7,12	3,11	0,129	158	81920	80896	29952	1664	1	375+3	208+3	12243	1155	0	12,437	1,56069	44,853	S
55,21	543110849	6141	7,11	3,07	0,129	170	83968	82944	31232	1696	12	380+3	217+3	12397	1444	80	11,977	1,56118	44,523	S
54,99	543110859	6140	7,10	3,04	0,128	198	83968	82944	32000	1760	4	375+3	222+3	12927	1450	22	11,537	1,56164	44,191	S
54,76	543110909	6140	7,09	3,00	0,128	222	83968	82944	32768	1888	6	369+3	227+3	13855	1627	36	11,113	1,56207	43,857	S
54,54	543110919	6139	7,07	2,97	0,127	250	84992	83968	34304	2048	7	365+3	237+3	15025	1933	44	10,710	1,56249	43,524	S
55,42	543131050	7110	7,09	3,11	0,140	120	79872	78848	29184	1344	8	365+3	204+3	9835	876	51	13,413	1,52512	45,505	S
55,23	543131100	7109	7,07	3,07	0,139	132	76800	75776	115	1472	7	357+3	0	10785	964	44	12,982	1,52523	45,224	S
55,03	543131110	7108	7,06	3,04	0,139	142	74752	73728	29696	1408	6	324+3	208+3	10321	1038	36	12,569	1,52534	44,945	S
54,84	543131120	7106	7,05	3,02	0,138	168	74752	73728	30208	1520	5	320+3	211+3	11131	1229	29	12,174	1,52544	44,666	S
54,60	543144330	15146	16,45	2,98	0,192	103	43008	43008	13952	784	5	213+3	96943	5735	750	29	16,277	1,37987	47,120	S
54,88	543144340	15144	16,44	3,02	0,191	82	49664	49152	14464	800	2	255+3	100+3	5874	596	7	16,945	1,38184	47,446	S
55,13	543144350	15142	16,43	3,06	0,191	59	57856	57344	15872	840	4	305+3	110+3	6154	426	22	17,646	1,38377	47,771	S
55,43	543144400	15141	16,42	3,11	0,191	61	60416	59904	16640	808	2	319+3	116+3	5933	441	7	18,383	1,38568	48,097	S
55,36	543181840	20123	19,02	3,10	0,414	1	1	1	1	1	1	0	0	0	0	0	39,423	1,08892	53,623	N
54,83	543181850	20120	18,59	3,01	0,413	2	2	2	2	2	1	0	0	0	0	0	36,256	1,08825	53,062	N
54,59	543185239	15149	16,02	2,98	0,175	119	50688	50688	20224	1072	4	224+3	140+3	7862	868	22	14,840	1,41900	46,359	S
54,86	543185249	15148	16,00	3,02	0,175	115	56320	55808	20736	1024	5	258+3	145+3	7501	839	29	15,488	1,41942	46,713	S
55,13	543185259	15146	15,58	3,06	0,176	94	62976	62464	21504	992	5	301+3	151+3	7281	684	14	16,166	1,41983	47,065	S
55,40	543185309	15144	15,56	3,10	0,176	90	69632	69632	22016	976	5	350+3	154+3	7148	655	29	16,884	1,42024	47,417	S
55,16	543202140	19,59	18,47	3,06	0,414	1	2	1	1	1	1	0	0	0	0	0	38,200	1,08855	53,413	N

SATELLIT GRS 625 A1 - EXPERIMENT EI 92 - GMT

INBR	DDDDMMSS	MLT	LT	L	B	92K1	92K2	92K3	92K4	92K5	92K6	0,25	0,50	1,00	1,65	ALPHA	B/80	R	LAMB	NS
54,61	543205450	16,22	15,57	2,98	0,189	121	43008	42496	15360	880	4	199+3	106+3	6449	883	22	16,053	1,38643	47,007	S
54,95	543205500	16,21	15,55	3,05	0,189	90	51200	51200	15872	816	6	260+3	110+3	5963	655	36	16,935	1,38713	47,441	S
55,29	543205510	16,20	15,53	3,08	0,190	78	59904	59904	16896	824	1	316+3	118+3	6058	266	0	17,870	1,38781	47,872	S
54,78	543225537	16,57	16,06	3,01	0,209	86	34304	34304	13312	656	2	154+3	93173	4814	625	7	18,260	1,34383	48,044	S
55,16	543225547	16,56	16,04	3,06	0,210	66	43520	43008	14976	624	1	206+3	105+3	4586	478	0	19,352	1,34506	48,500	S