

GEOPHYSICAL STUDIES OF THE GULF OF ADEN,
GULF OF OMAN AND OWEN BASIN (ARABIAN SEA)

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Data collected by R. R. S. Shackleton
Cruises 3, 4/75

April - May 1975

I.O.S. Data Report No. 13

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estimated portion of the total area of the basin, which is about 1000 square miles, and which includes the entire area of the basin.

ERRATUM

PAGE 14

(3) Section B Should read

This section contains manual copies of navigation track charts generated by the IBM 1130 computer. The tracks were plotted from two minute positions and are scaled at 1:1000,000 at the standard latitude. Each hour is marked on the track, annotated with hour and day number every six hours. The positions of accepted satellite fixes are annotated in hours and minutes.

(4) Section C Should read

This section contains tabulated six minute listings of the uncorrected magnetic and bathymetric data, and reduced magnetic, gravity and bathymetric data. All data has been produced from the data files. The data file is searched for significant maxima or minima not sampled on the six minute interval and these are written onto the field of the previous six minute sample followed by an asterisk and the time recorded as minutes past the hour.

This document describes geophysical data collected by the Deep Sea Floor Group of the Institute of Oceanographic Sciences (Wormley), and continues the series of I.O.S. Data reports on geophysical cruises. The series is intended to provide an efficient means of documenting the data not only for internal use but also for distribution to the scientific community. On citing this report in a bibliography the reference should be followed by the words "UNPUBLISHED MANUSCRIPT" in accordance with accepted bibliographic custom.

PREVIOUS REPORTS IN THIS SERIES

- JONES M. T., 1972. Bathymetric and Magnetic Traverses in the area of Rockall Bank and King's Trough; R. R. S. "Discovery" Cruise 33, National Institute of Oceanography Data Report Geophysics 1, 21pp and figs. (Unpublished manuscript).
- JONES M. T., 1973. Bathymetric and Magnetic Traverses across the North Atlantic; N. C. Marcel Bayard, Cantat II Ocean Survey Cruise, National Institute of Oceanography Data Report Geophysics 2, 24pp and figs. (Unpublished manuscript).
- OLLIFF N. J., 1973. "GLORIA" in Peake and Freen Deeps and on the Azores-Gibraltar Rise; R. R. S. "Discovery" Cruise 43, National Institute of Oceanography Data Report Geophysics 3, 20pp and figs. (Unpublished manuscript).
- OLLIFF, N. J., 1973. Bathymetric and Magnetic Traverses over the Rockall Plateau; R. R. S. "Discovery" Cruise 47, National Institute of Oceanography Data Report Geophysics 4, 20pp and figs. (Unpublished manuscript).
- MILES, P. R., 1976. "GLORIA" studies of the Mid-Atlantic Ridge (FAMOUS area) and the Azores-Gibraltar Plate Boundary; R. R. S. "Discovery" Cruise 54, Institute of Oceanographic Sciences Data Report No. 8, 22pp and figs. (Unpublished manuscript).
- MILES, P. R., 1976. Bathymetric and Magnetic Traverses over the South West Margin of the Rockall Plateau; R. R. S. "Discovery" Cruise 60, Institute of Oceanographic Sciences Data Report No. 9, 23pp and figs. (Unpublished manuscript).
- MILES, P. R., 1977. "GLORIA" and Geophysical Studies on the Mid-Atlantic Ridge and north of the Azores; R. R. S. "Discovery" Cruise 73, Institute of Oceanographic Sciences Data Report No. 12, 23 pp and figs. (Unpublished manuscript).

ABSTRACT

This report contains magnetic, gravity, seismic and bathymetric data collected by the I. O. S. projects during Cruises 3/75 and 4/75 on R. R. S. Shackleton in April - May 1975. The profiles and track charts were all generated automatically from data files set up from the shipboard data logger. Included in the report is a description of methods used in data acquisition and preparation

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SECTION A : 1:2,000,000 Profiles of Reduced Data and PES records

B : 1:1,000,000 Track Charts

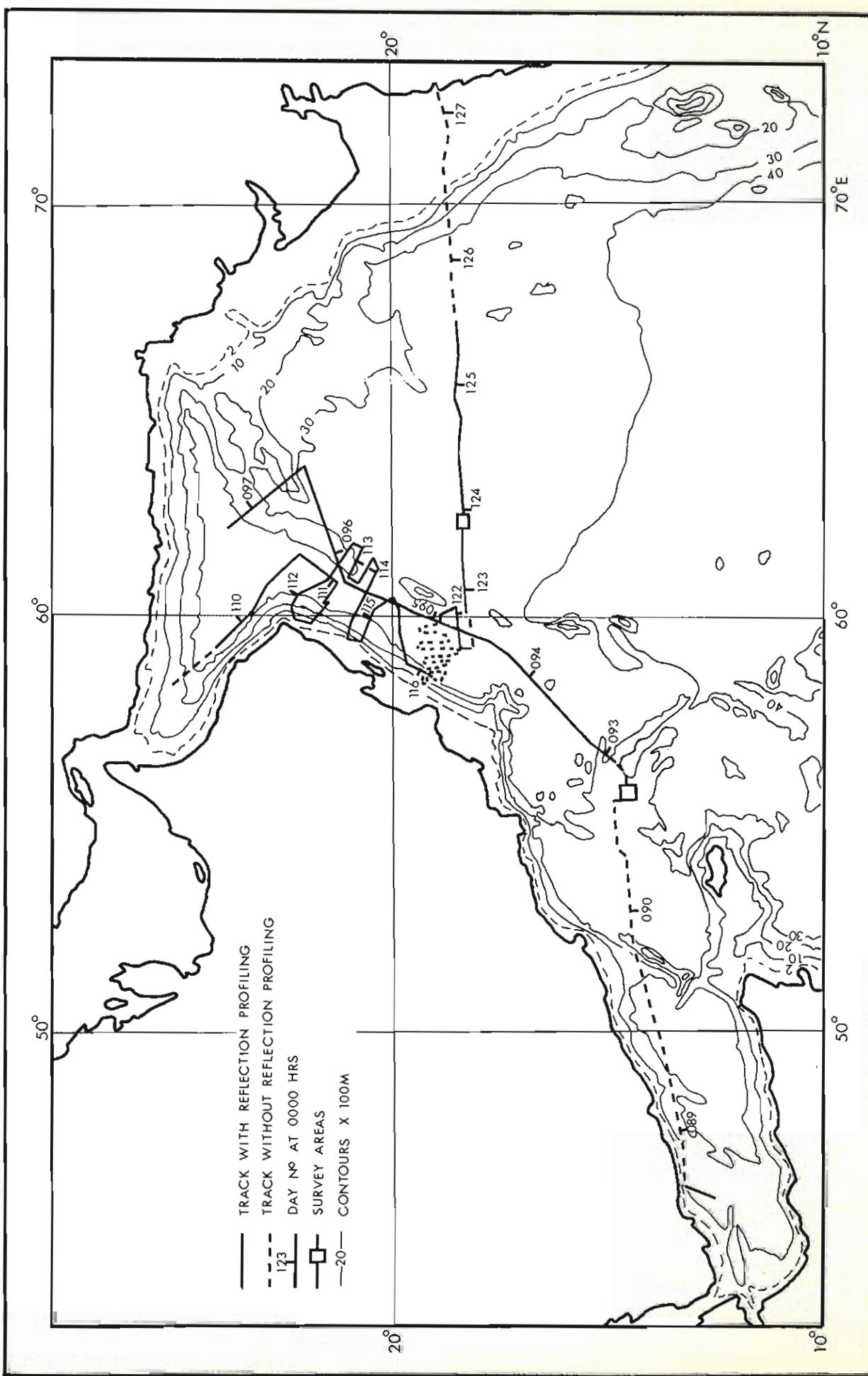
C : Data Lists

D : Station Position Tables

E : Seismic Reflection Records

FIG 1

6



CRUISE OBJECTIVESCruise 3/75

1. Magnetic survey, western Gulf of Aden.
2. Seismic refraction experiment, East Sheba Ridge.
3. Subduction zone off the Makran coast, Gulf of Oman.
4. Reflection profiles across the Murray Ridge.
5. Passage track over Owen Basin.

Cruise 4/75

6. Geophysical study of the Owen Basin.
7. Organic geochemistry of recent sediments.
8. Other geological sampling.
9. On-line digital processing of seismic profiles.

INSTRUMENTATION

Magnetics: A Varian Type 4937 proton precession magnetometer was operated for most of the cruise. The instrument functioned successfully although the towed fish sustained minor shark bite damage. The data were recorded in analogue form on a chart recorder and also stored in digital form on the shipboard data logger at six second intervals. The chart record occasionally contained noise spikes of unknown origin which could not be connected with the ship's own radio transmission.

Bathymetry: Either an I.O.S. Mark III Precision Echo Sounder and towed fish or a Kelvin Hughes MS38 with hull transducer was used to record continuous soundings on a mufax display at an assumed velocity of 800 fms/sec. Readings were entered into the log book at 10 minute intervals and subsequently manually transferred to the data logger.

Gravimeter: A La Coste-Romberg marine gravimeter was used from Djibouti to Bombay to continuously measure gravity. Cross-coupling and total corrections, spring tension and total gravity values were displayed on a chart recorder and gravity was logged by the data logger. Spring tension and gravity were also output every five minutes on a digital printer.

The generally low sea-states during both cruises probably meant that good quality data were obtained and this is confirmed by preliminary estimates of cross-over differences. The La Coste meter was tied into land base stations at Djibouti, Dubai and Bombay by means of a Worden Educator land gravimeter. The La Coste meter had drifted at a mean rate of +0.048 mgal/day between Djibouti and Bombay. The gravity data was finally corrected for drift and Eötvös correction when the data logger tapes were processed at Barry.

NAVIGATION

The following navigational aids were used:

- (a) Satellite Navigation System using a Magnavox 702CA receiver working in conjunction with the shipboard Hewlett Packard 2100 computer.
- (b) Redifon Omega receiver.

The computer was used throughout the cruise to control the navigation and was used as the prime navaid. The Magnavox Satellite Navigator and Hewlett Packard 2100 computer performed satisfactorily. The only problem was the occasional corruption of the stored computer program which caused satellite passes to be ignored and corrupted ancillary software facilities. This problem was overcome by reloading the program.

During Cruise 4, when a set of satellite alerts was regularly taken to the bridge, there were less poor fixes caused by the ship changing course or speed during a satellite pass.

Overall the fixes given by the satellite navigator were very good even for a satellite having a high or low angle of elevation. The operation of the whole system, considering the high temperature and humidity, was excellent.

The Redifon Omega receiver was switched on throughout the cruises but, due to propagation and station problems, doubtful useful navigational information was obtained from the chart records.

SHIPBOARD ACQUISITION OF DATA

Cruise data was sampled and stored on magnetic tape by the data logger at one second intervals, each logger tape lasting about 14 hours.

Data Logger Tape Format:

Serial Number

Time

Navigational Aids (4 channels)

Ship's Head

Digital Input

A-D channels for Analogue Inputs (6 channels)

Observed Magnetics

La Coste Gravimeter

Loran

Loran

PROCESSING AND EDITING OF DATA

The completed data logger tapes were processed on the portable IBM 1130 computer system at the Institute of Oceanographic Sciences, Shipborne Computer Group, Barry.

Data from each logger tape is initially transferred to the working disk files GEO.., Fig. 2. Various filtering and transfer routines are used to load the magnetic/bathymetric 6 second sampling files MGEOOS, BGEOOS plus the general 2 minute data file IIDAS, then to load the working data files MGEOF, BGEOF and IIDAT. Data required unfiltered is entered directly to IIDAT. This data can now be displayed for editing in profile and/or list form using efficient editing routines. The editing procedure involves the identification and removal of data errors and inconsistencies. The reduction of the geophysical data to magnetic anomaly, bouguer anomaly and corrected metres is made using a suite of geophysical programs which reduce and load the data to the permanent data file GEOF. The ship's D. R. navigation stored in NAVF1 by TRACK is merged with the manually entered satellite data in NAVF4 by CADJ to place course corrected navigation in GEOF. Unless automatic echo sounder tracking is used, depths are entered manually into GEOF with the loading program making the necessary calculation concerning Matthews area.

The gravity and magnetic data were reduced using

- (a) The Geodetic Reference System 1967,
- (b) The International Geomagnetic Reference Field 1975.

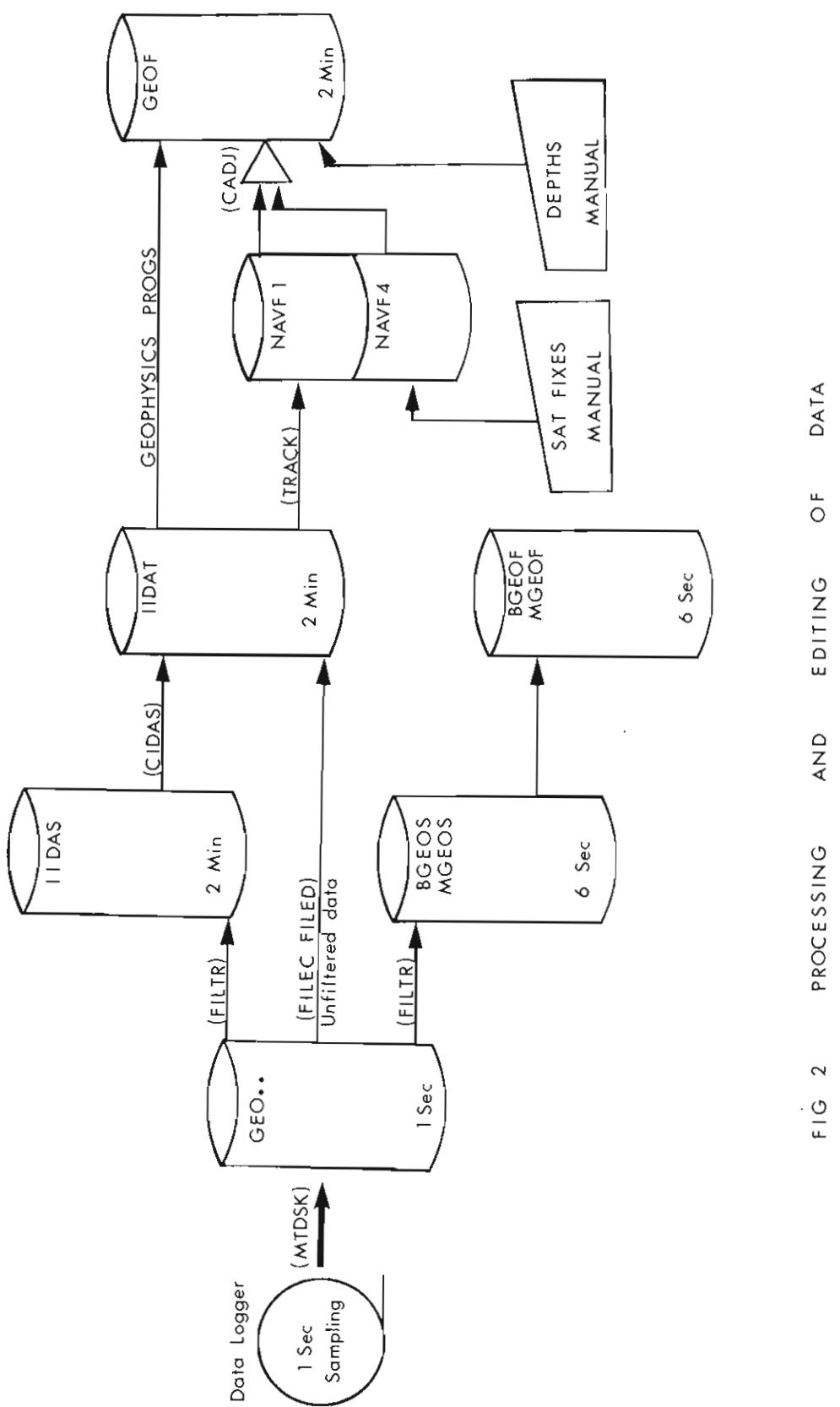


FIG 2 PROCESSING AND EDITING OF DATA

DATA PRESENTATION

This report is intended to meet as effectively as possible the varying requirements of the personnel most likely to make use of the bathymetric, magnetic and seismic data of Shackleton Cruise 3/4/75. Because of the large volume of data involved, it is not considered practical to include listings of the original data files. The data is presented at three levels of processing:

- (a) Summarised listings of raw data;
- (b) Summarised listings of reduced data;
- (c) Profiles of reduced data.

It is intended that when used in conjunction with the 1:1,000,000 track charts this data should be suitable for incorporation into compilation charts or for further computer orientated calculations. For a more direct scientific interpretation of the data, the 1:2,000,000 profiles are supplemented with a track chart at the same scale overlaid on a bathymetric chart. Reduced copies of the original P. E. S. records are also included in the report to enable study of the bathymetry in more detail than is given by either the profiles or the listings.

(1) Profile Location Sheets

The ship's track for cruise 3/4/75 has been manually prepared on a bathymetric chart of 1:2,000,000 at a standard latitude of 33°N. Except for the 500 metre contour, the contour interval is 1000 metres, which illustrates the prominent features of the sea floor relief and provides a context in which to study the profiles presented in Section A. The profiles have been plotted at the same distance scales as the profile location sheets and are identified on the track by a circular figure representing the start of each profile. Changes in day number are also shown on the tracks by a mark at 0000 hrs annotated with the new day number.

(2) Section A

This section contains profiles together with reduced copies of the original P. E. S. records. Magnetic anomaly, corrected depth, gravity anomaly, course-made-good and speed-made-

good were plotted from the edited data files. The parameters are each plotted against distance run along each track in kilometers from the start of a leg, the distance being scaled to a 1:2,000,000 Mercator grid at 33°N enabling the profiles to be overlaid on the profile location sheets. The distance run axis is marked every 10 kilometers and annotated every 50 kilometers; a time axis in G.M.T. is also included so that the profiles can be correlated with the P.E.S. records and tabular listings of data in section B and C. The magnetic anomaly is plotted at a scale of 160 gammas/cm with a nominal range of ± 400 gammas. Each 2 minute magnetic anomaly value is plotted but the pen is lifted each time there is a data gap in excess of 4 minutes. Corrected depth is plotted at a scale of 1400 m/cm with a nominal range of 0-7000 m. The vertical exaggeration of the bathymetric profiles is 14.3 : 1 at 33°N.

Each profile is accompanied on the facing page by a reduced copy of the relevant section of the P.E.S. record. As the P.E.S. records against time and not distance, it is impractical to provide a one-to-one correspondence in horizontal axis scale between the profiles and P.E.S. records. Correlations between the two have to be made by time: the P.E.S. records are therefore annotated with hour marks. The recorded depth phase of the P.E.S. records are also shown, the 100 fathom lines within this phase are discernable on the original record as horizontal lines.

(3) Section B

This section contains tabulated 6 minute listings of the uncorrected magnetic and bathymetric data. All data presented in section B and C has been produced from the data files. The data file is searched for significant maxima or minima not sampled on the six minute interval and these are written onto the field of the previous six minute sample followed by an asterisk and the time recorded as minutes past the hour.

(4) Section C

This section tabulates six minute listings of the reduced magnetic, gravity and bathymetric data. Magnetic anomaly (total magnetic field minus the International Geomagnetic Reference field), gravity anomaly and the corrected depth, both in fathoms and metres, are read from data files.

(5) Section D

Station position tables.

(6) Section E

Seismic reflection records.

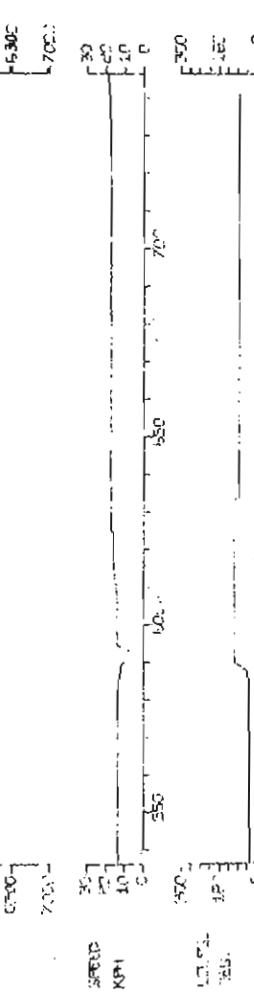
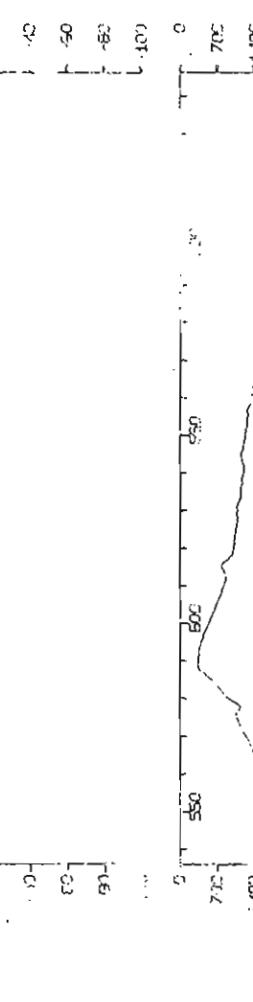
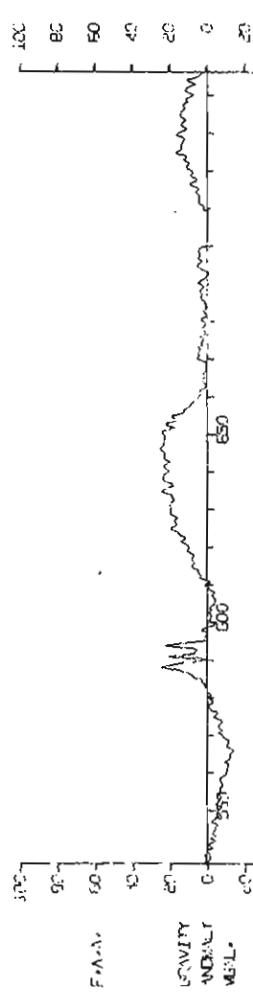
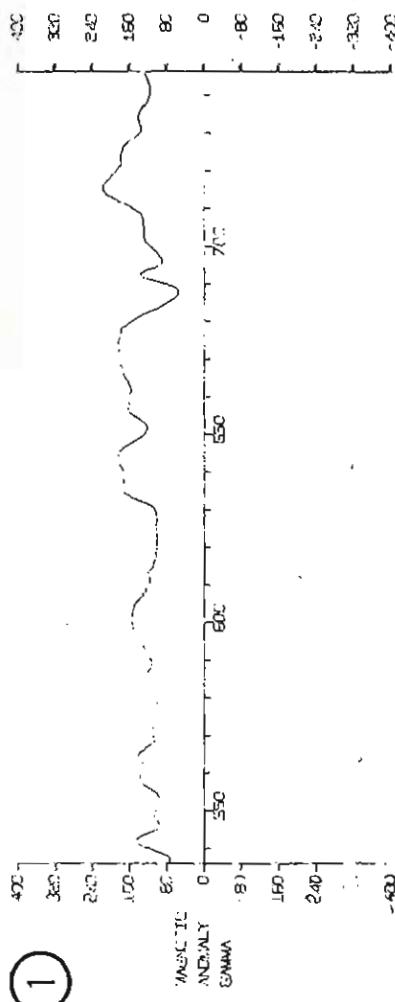
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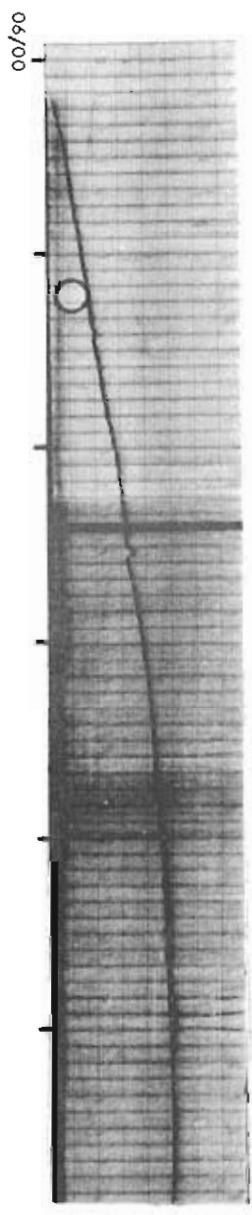
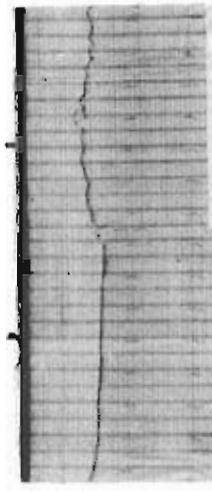
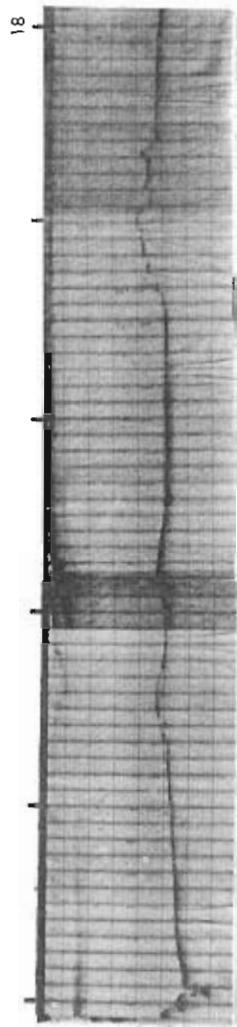
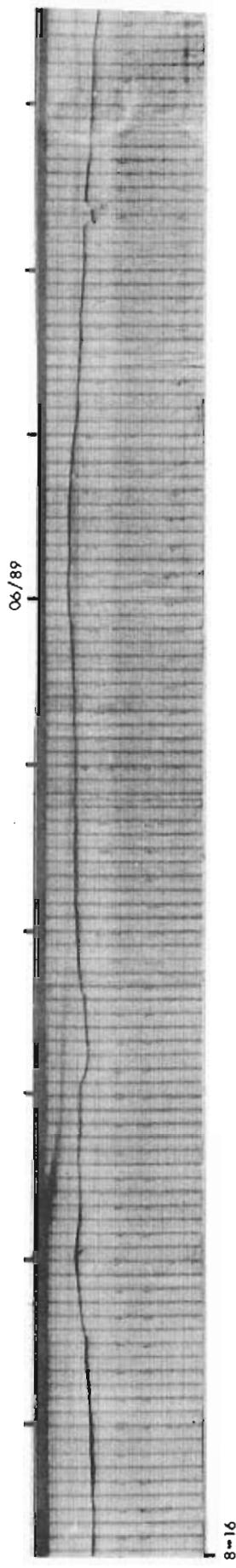
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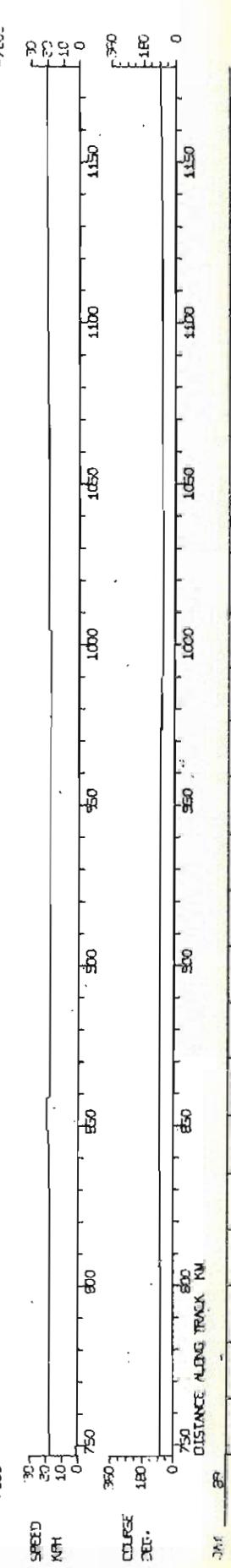
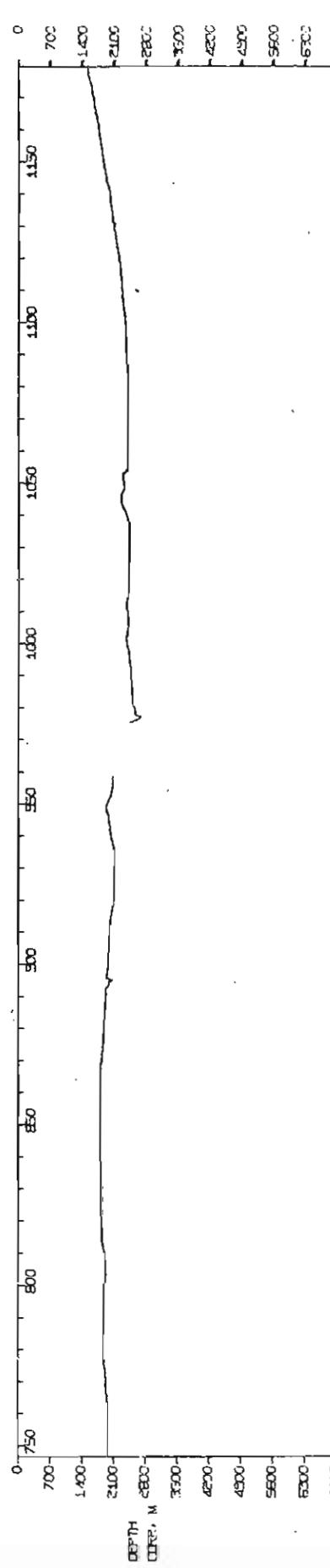
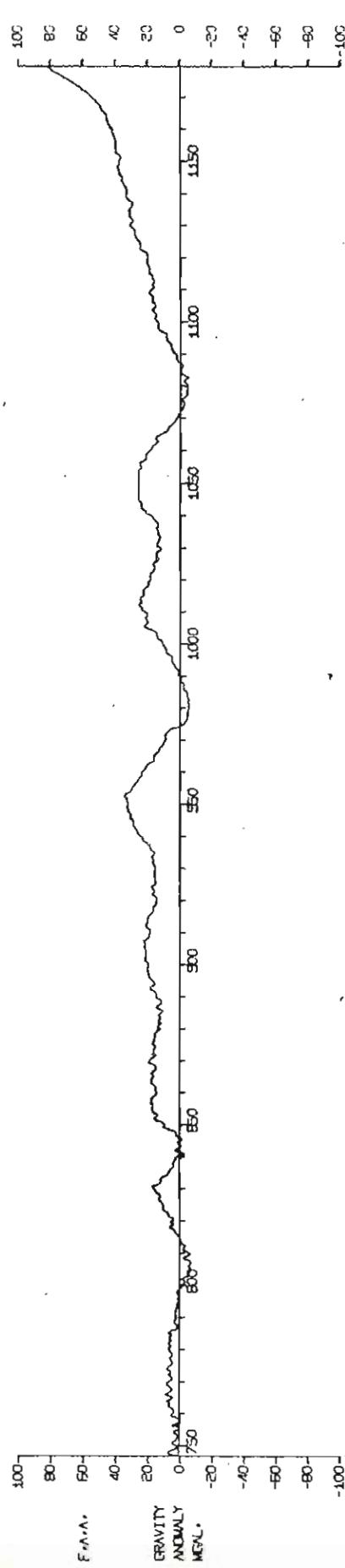
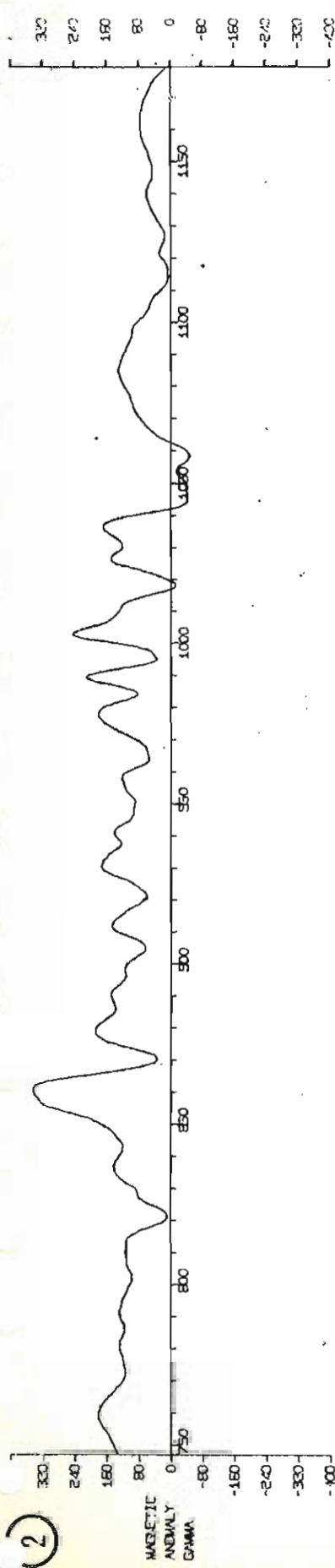
Precision Echo-Sounder Records
1:2,000,000 Profiles of Reduced Data

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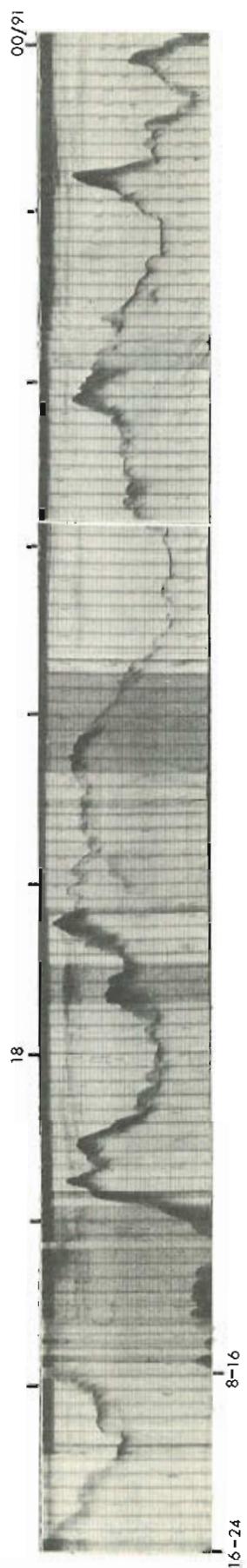
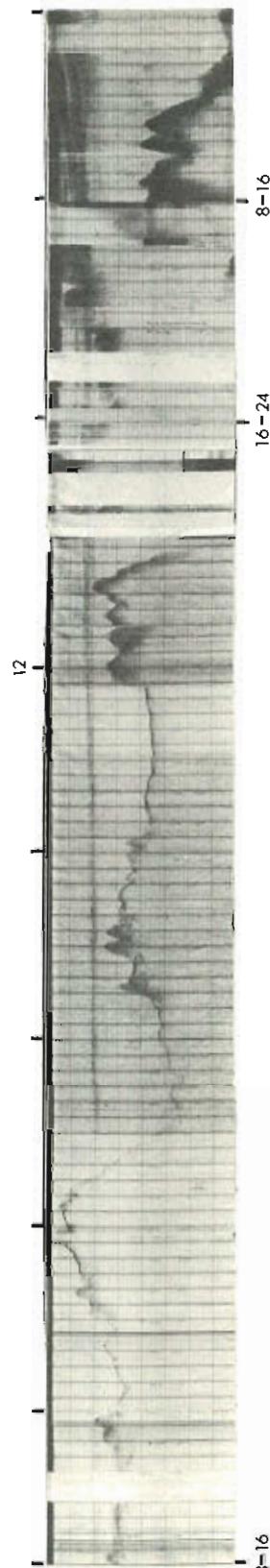
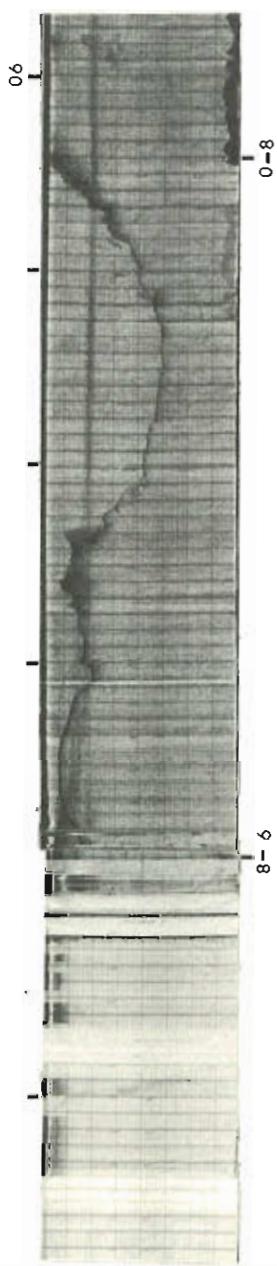


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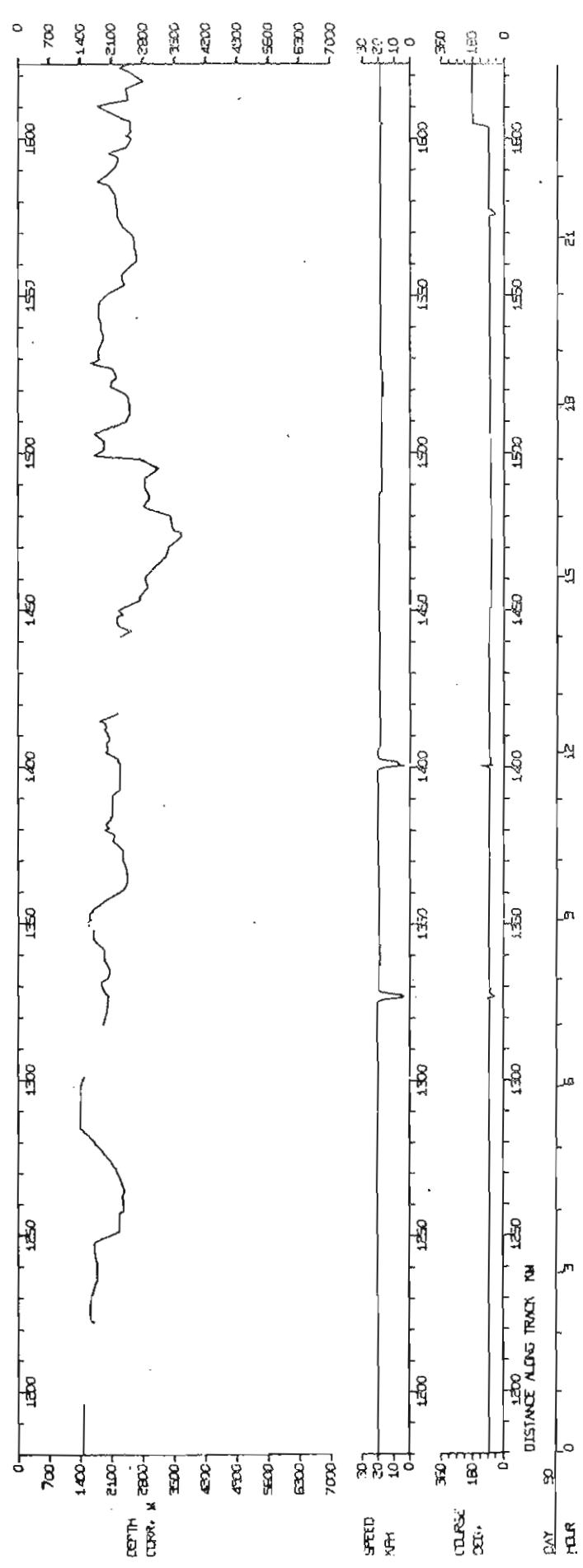
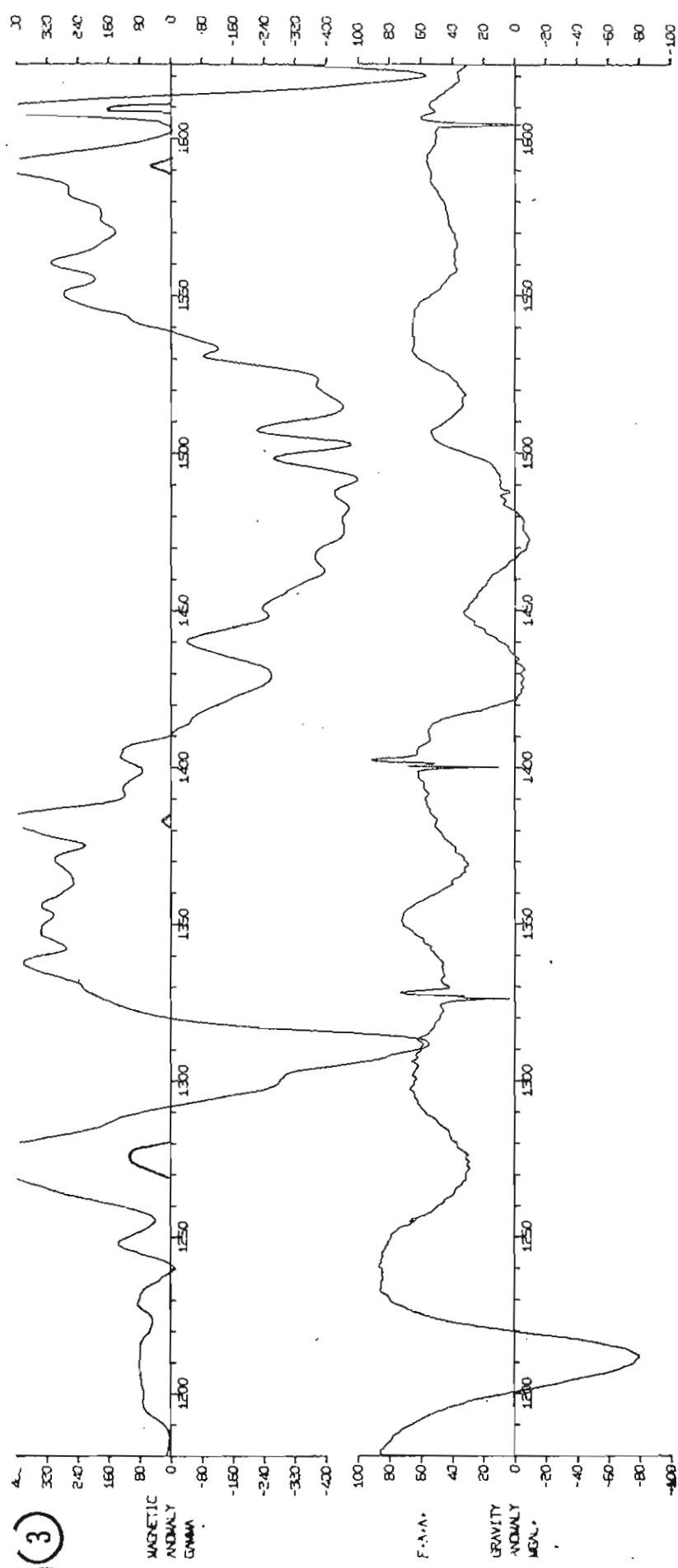




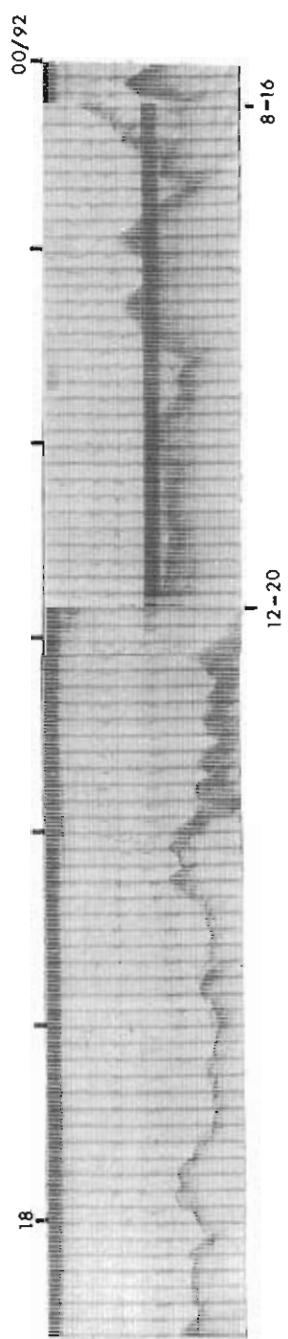
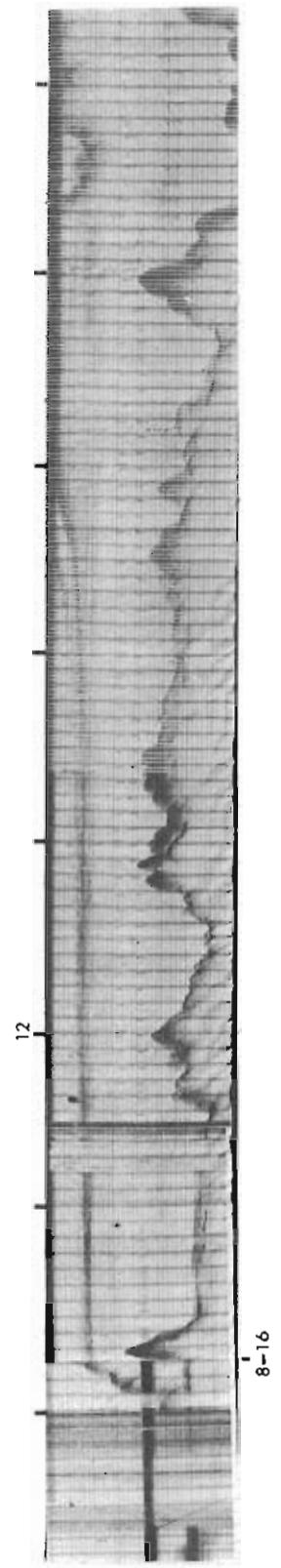
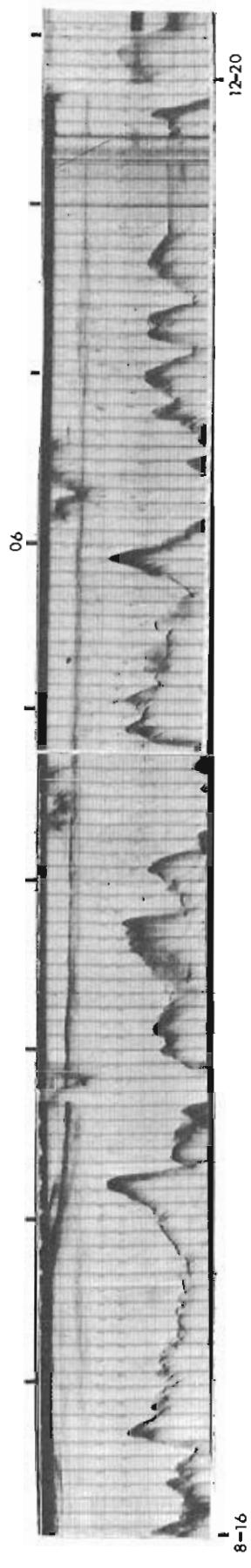
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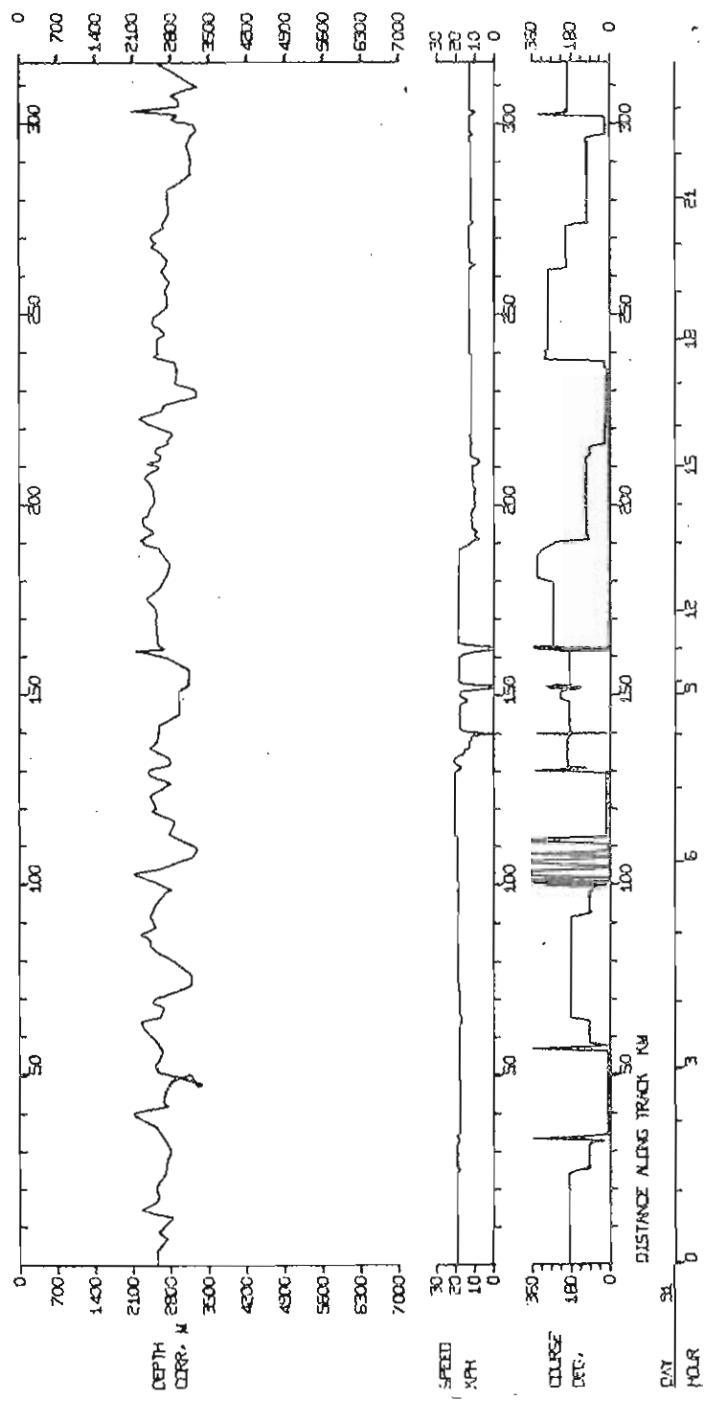
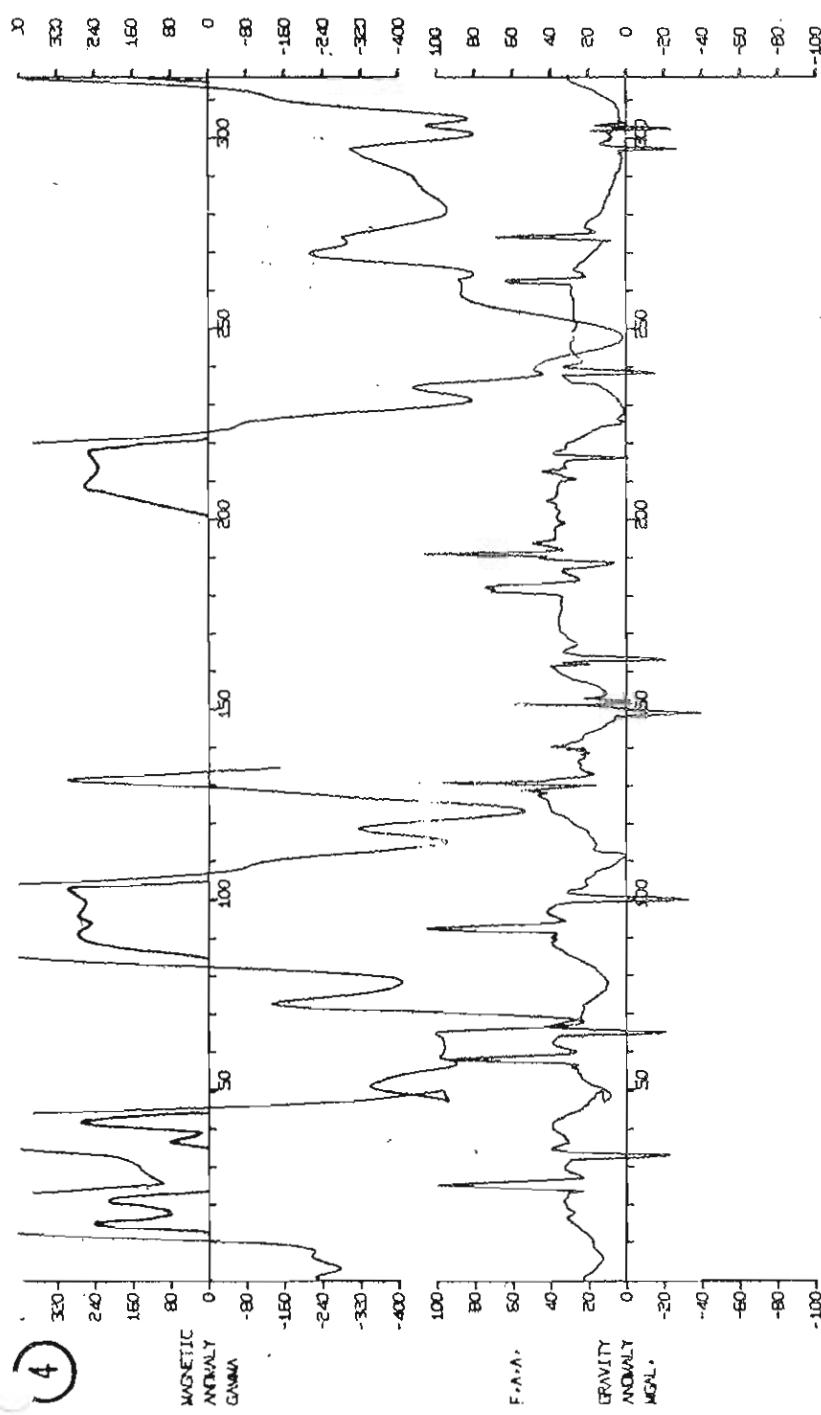
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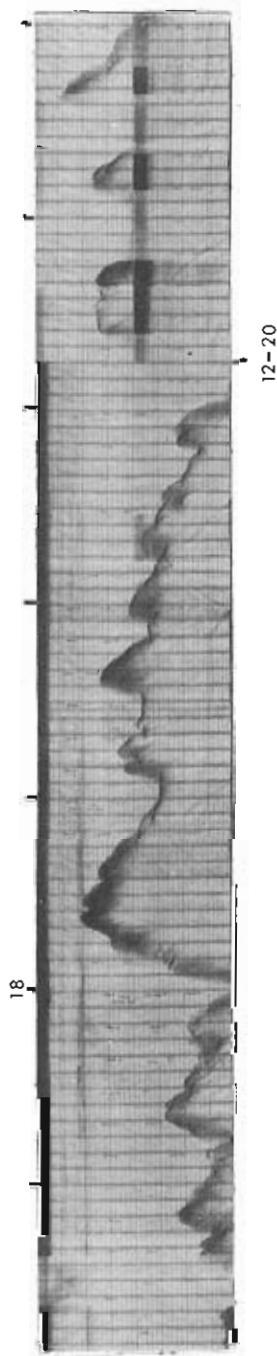
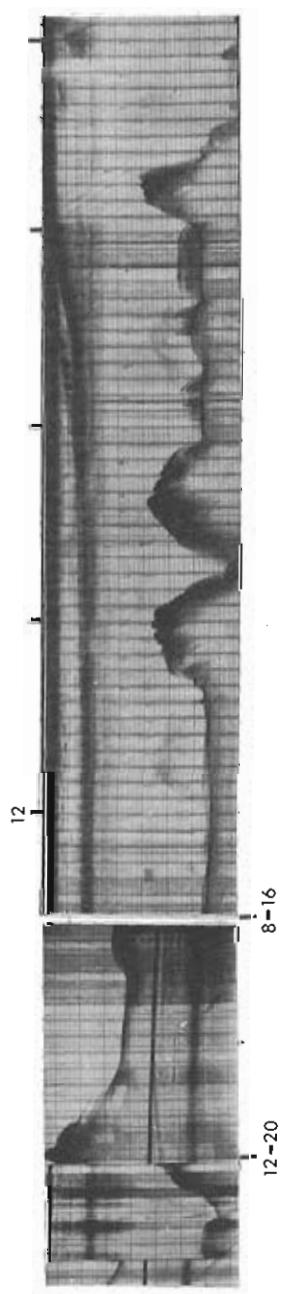
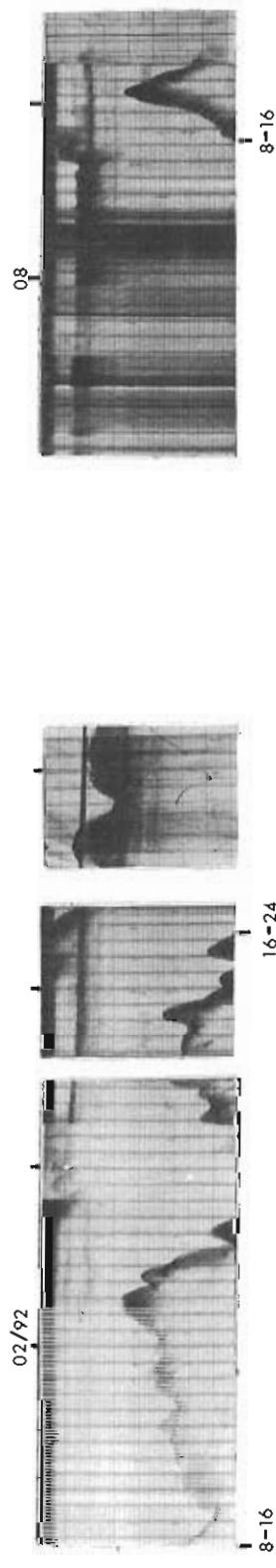
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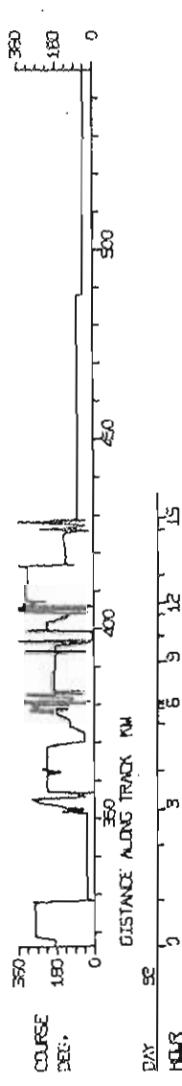
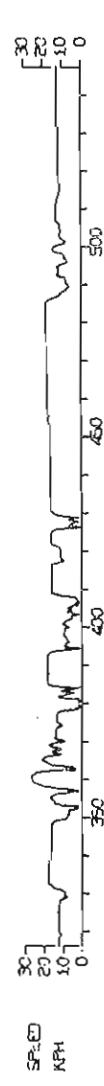
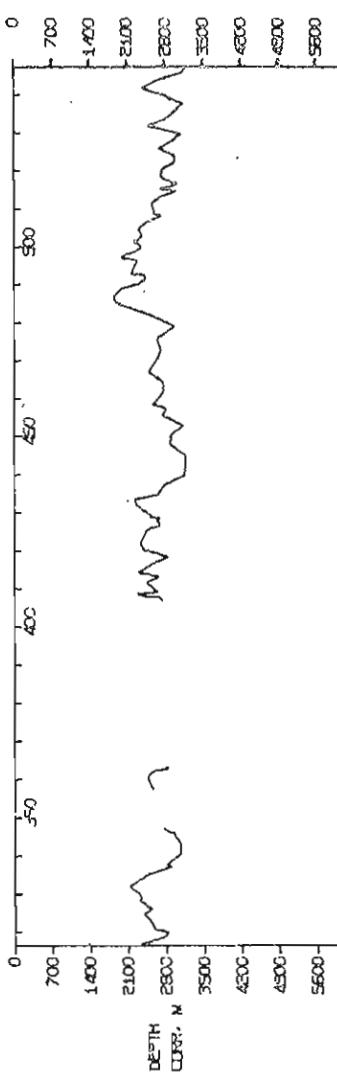
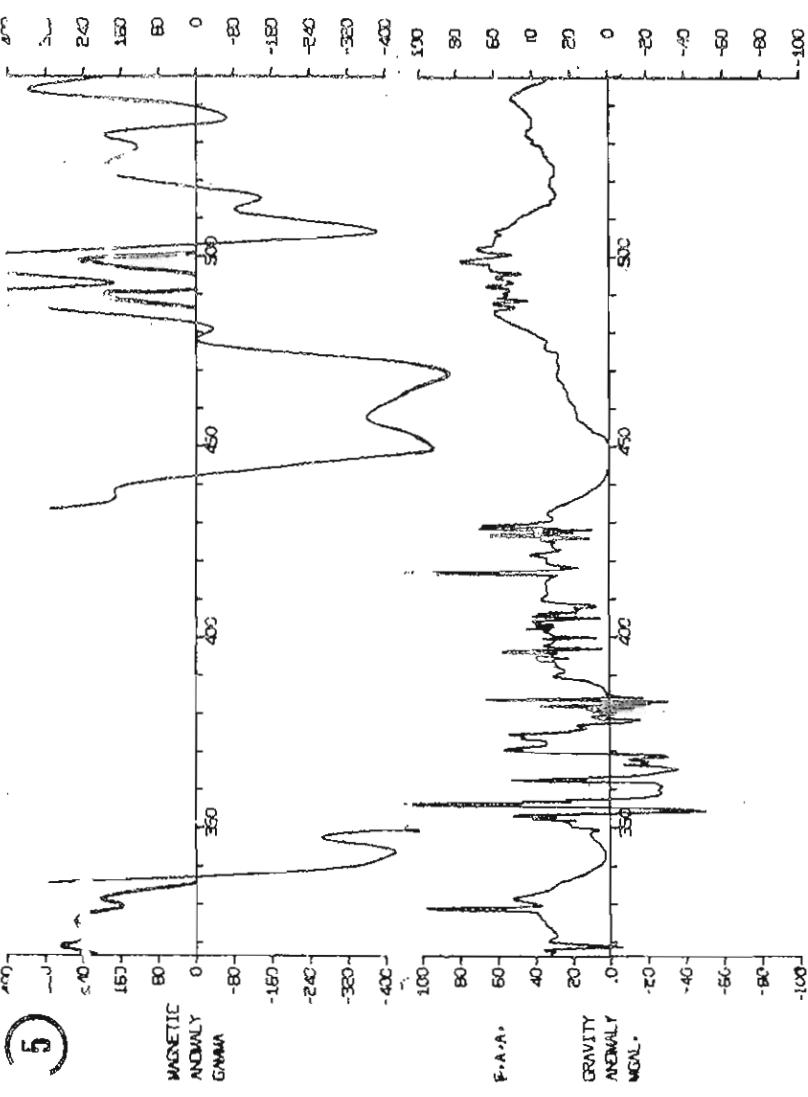


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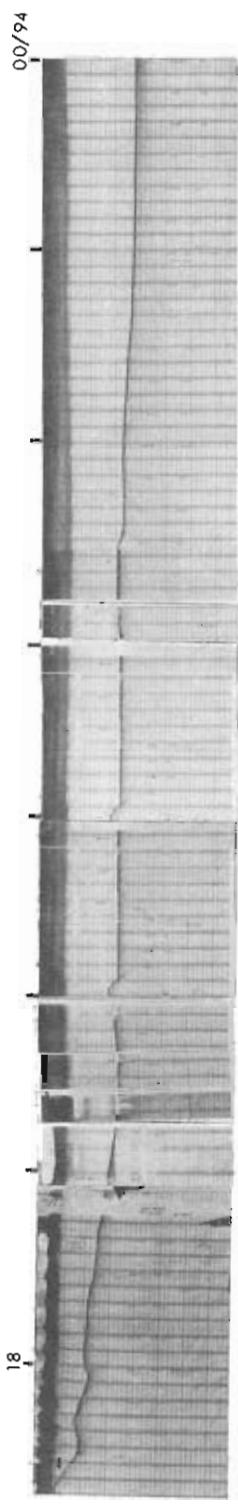
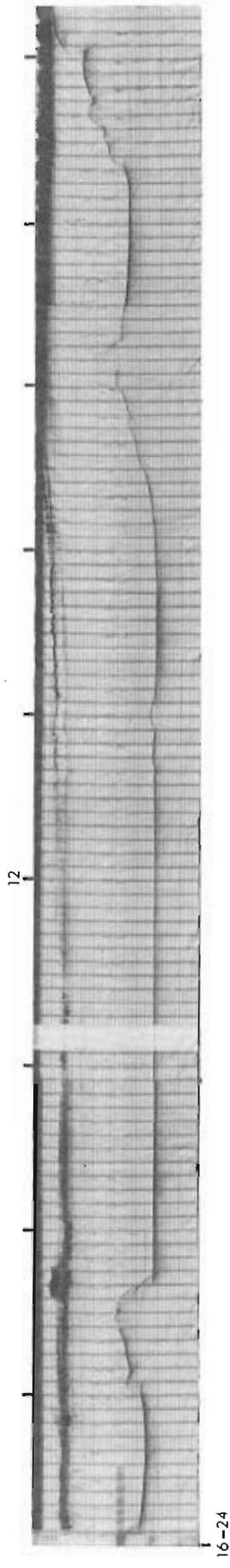
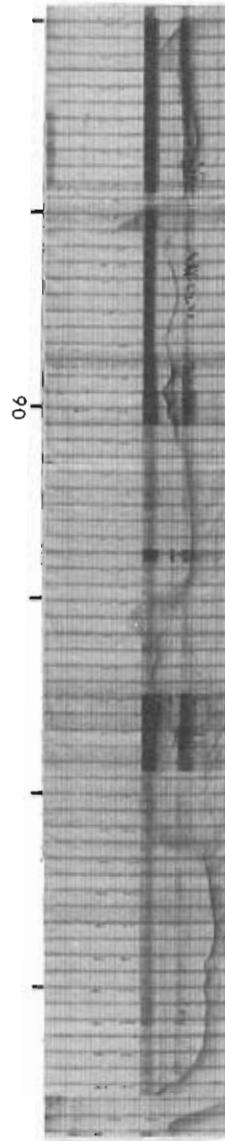
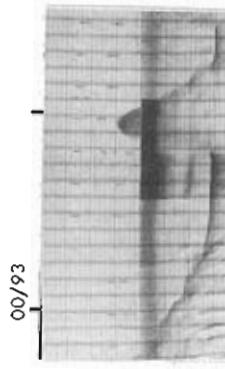
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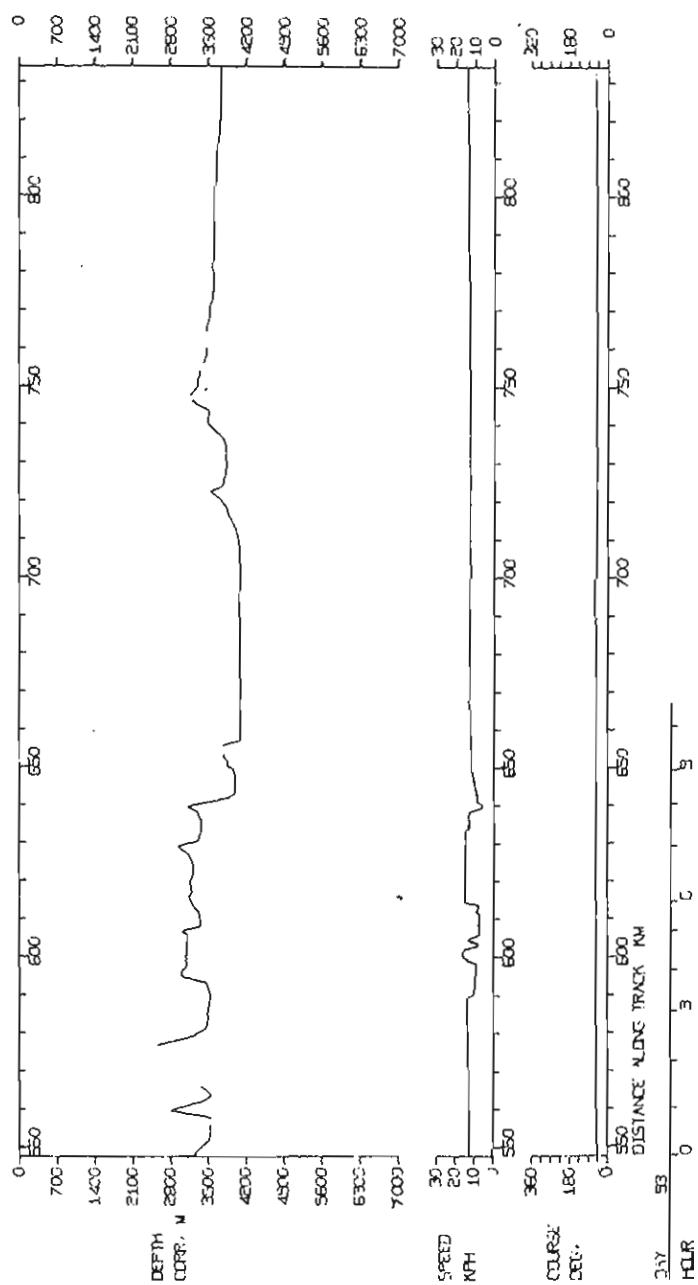
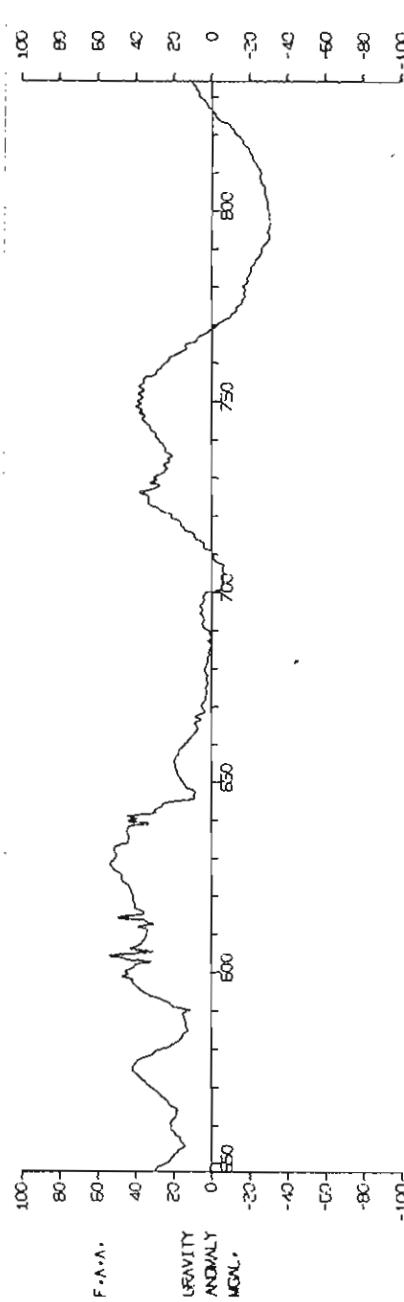
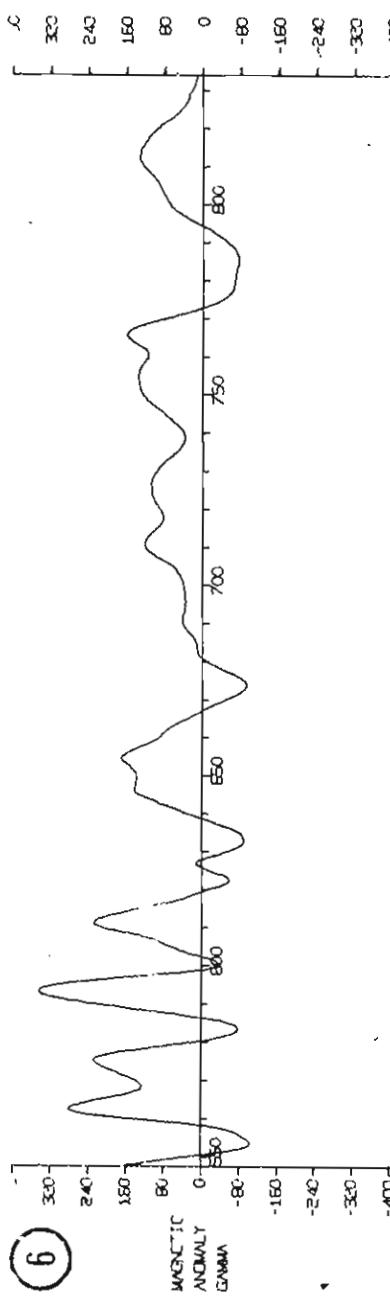


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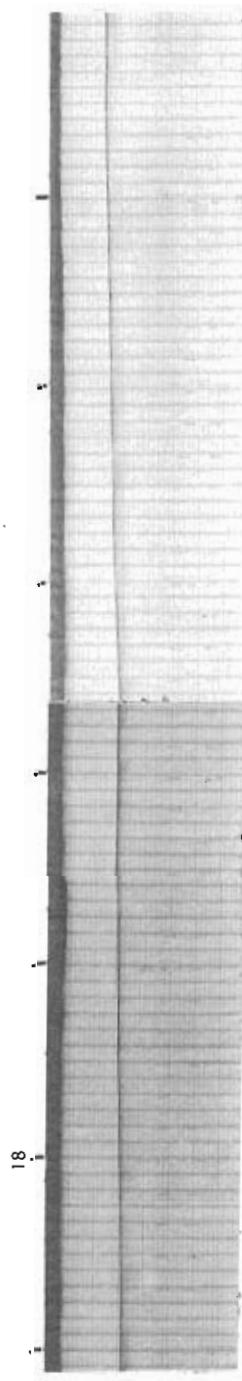
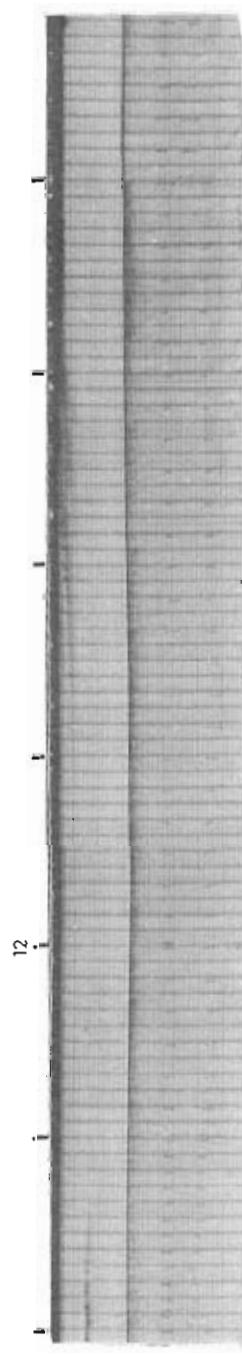
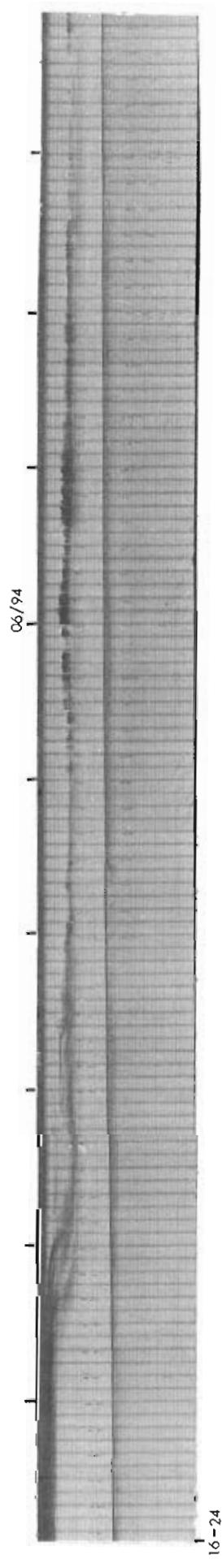
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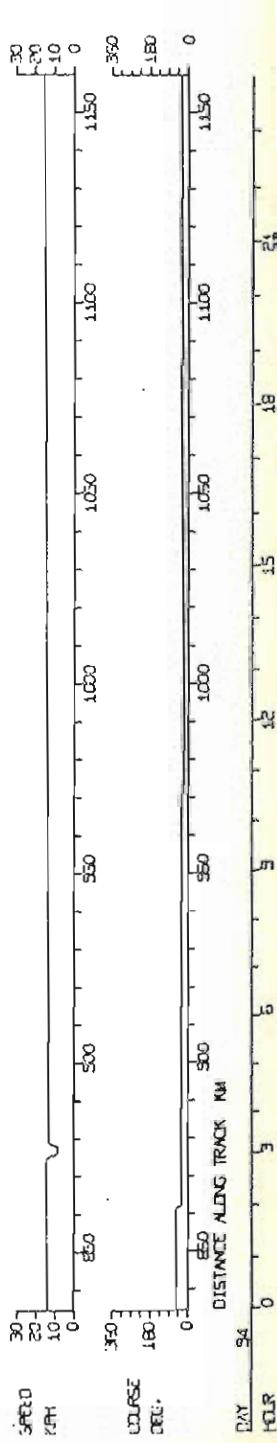
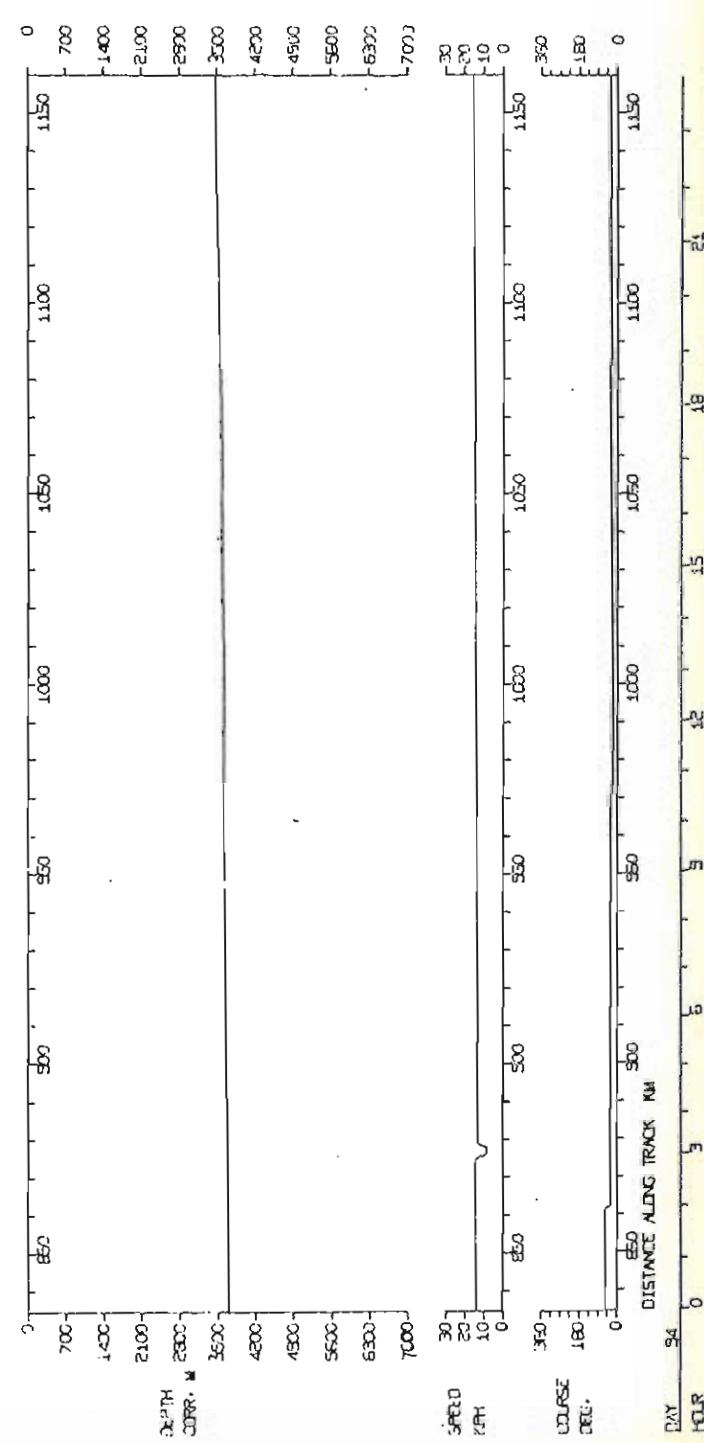
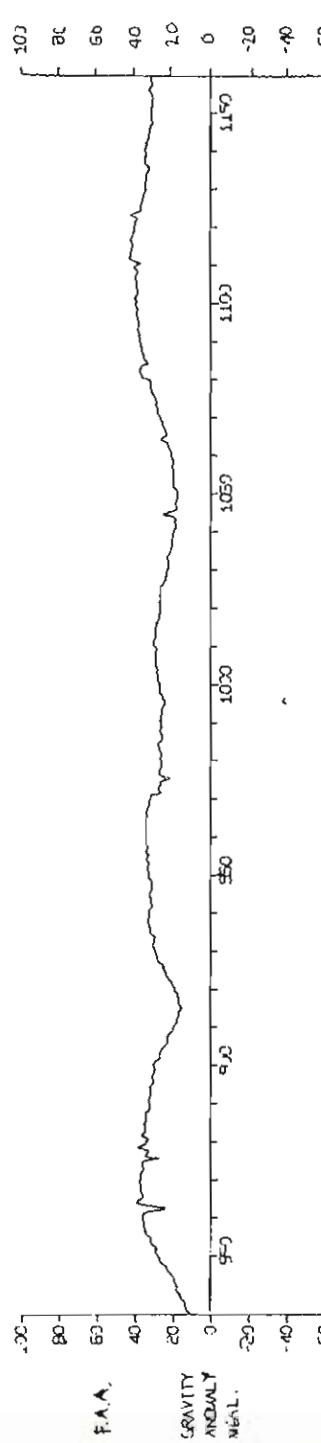
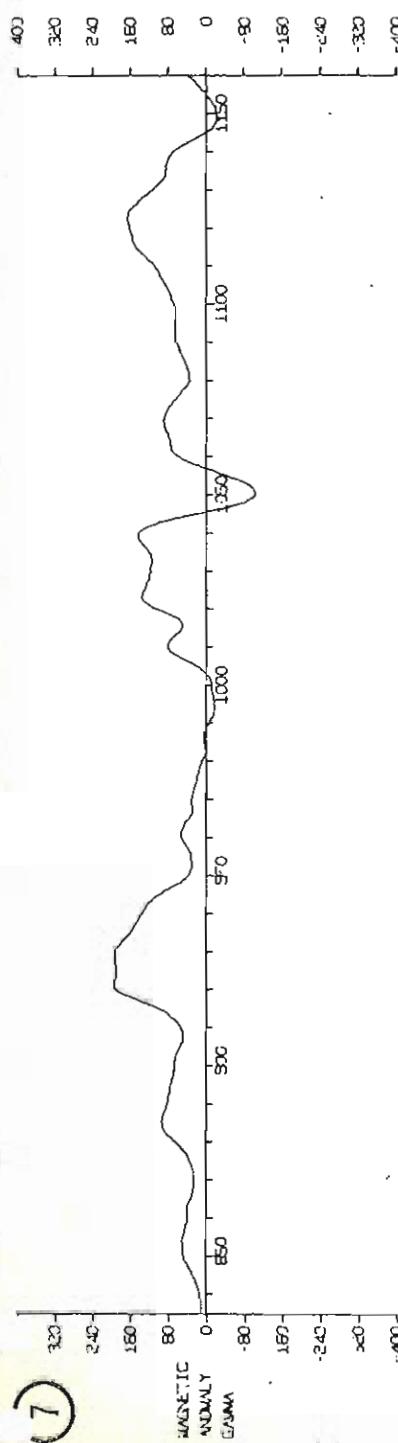
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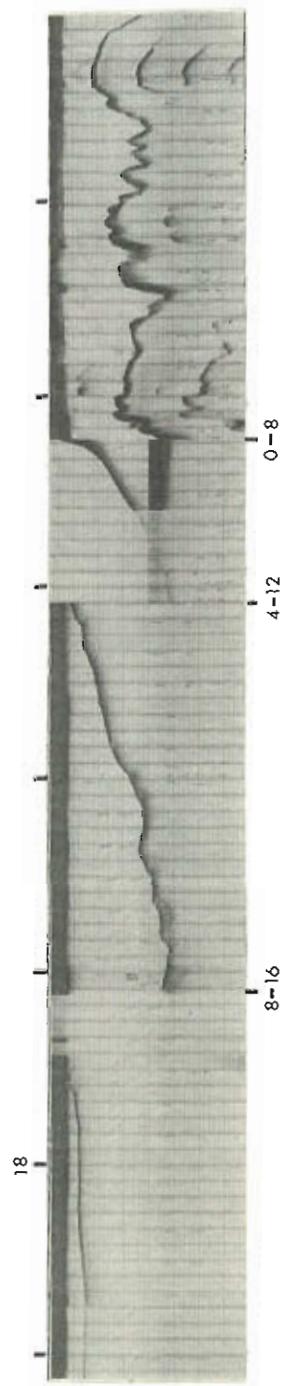
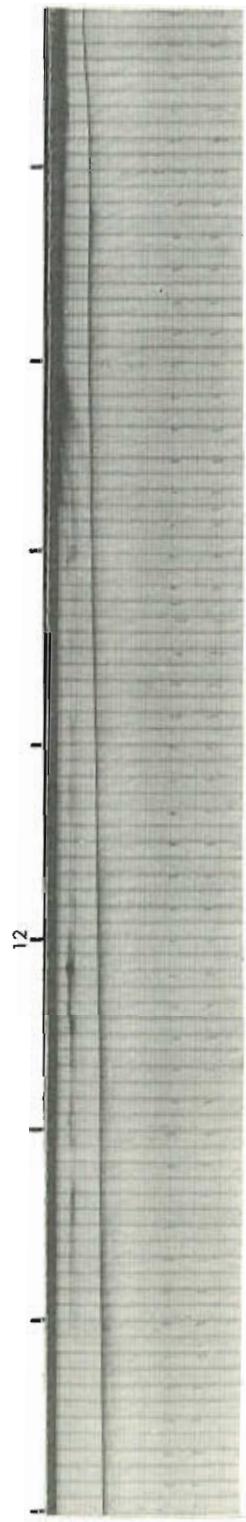
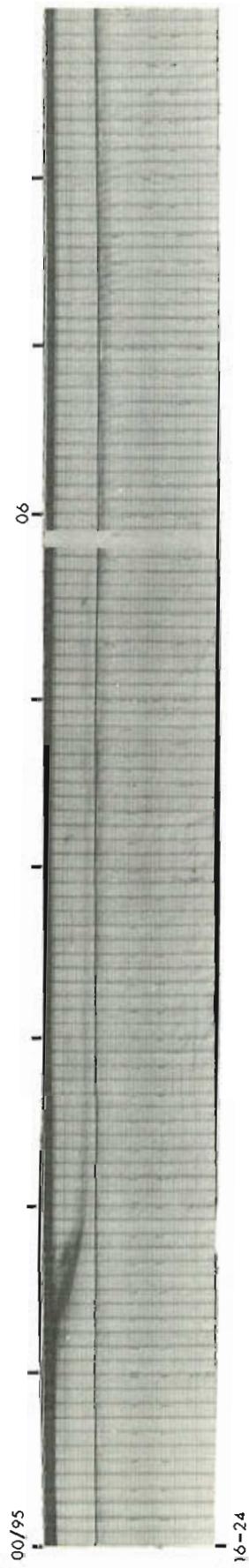


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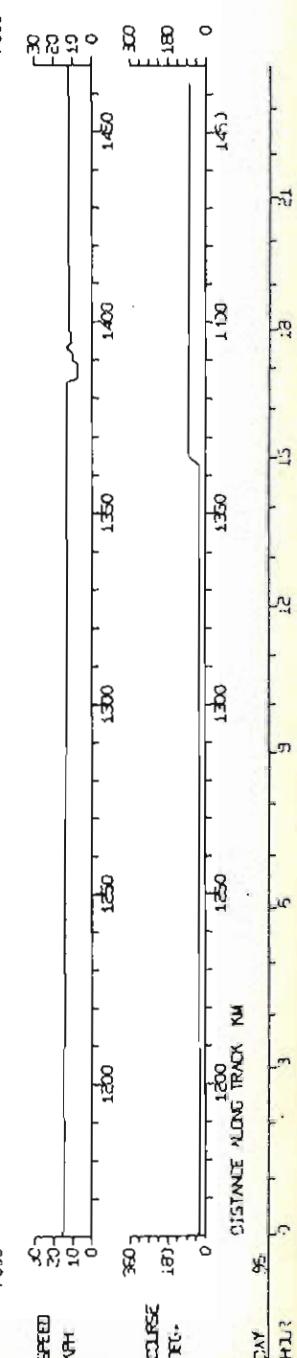
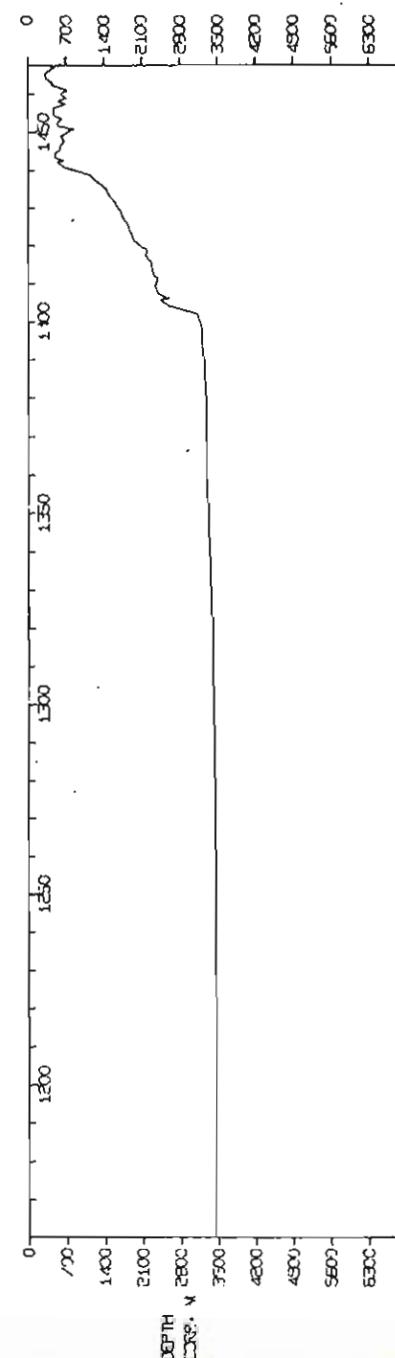
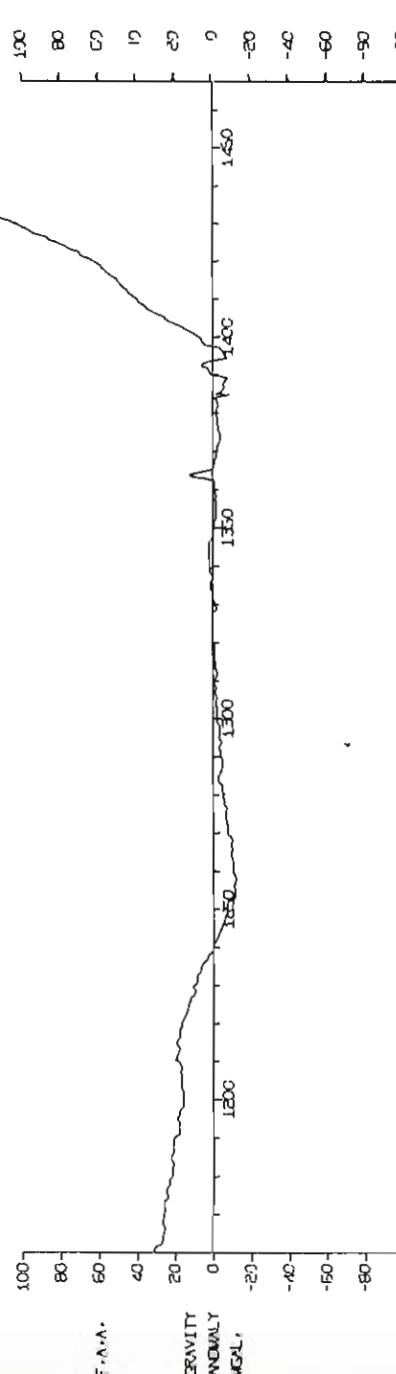
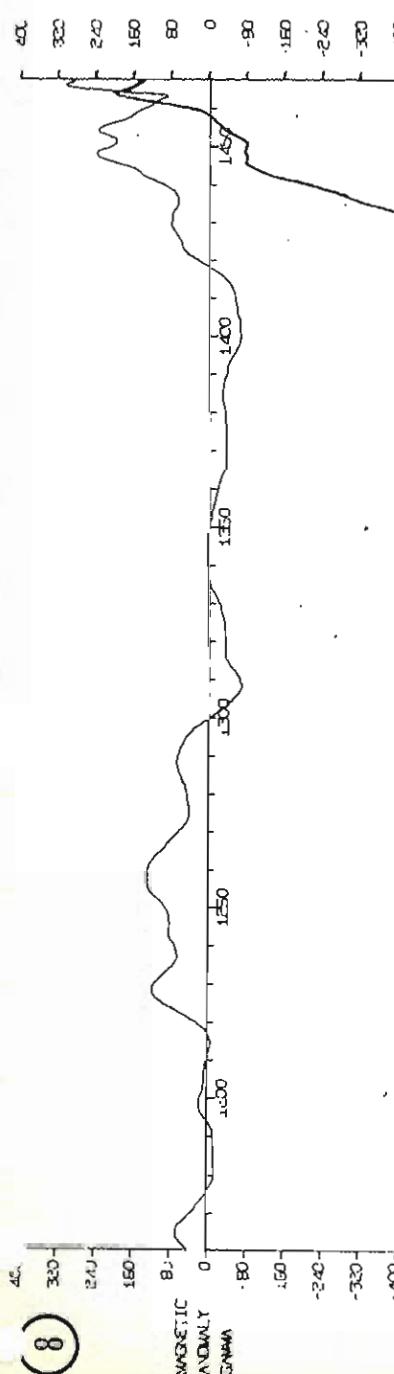


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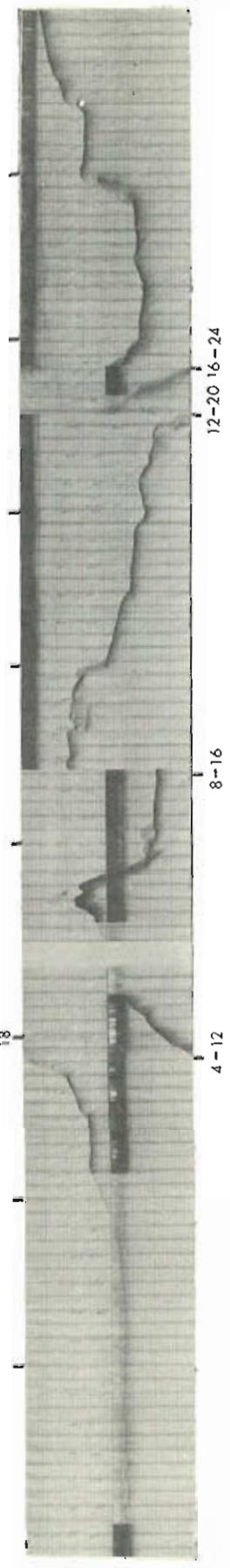
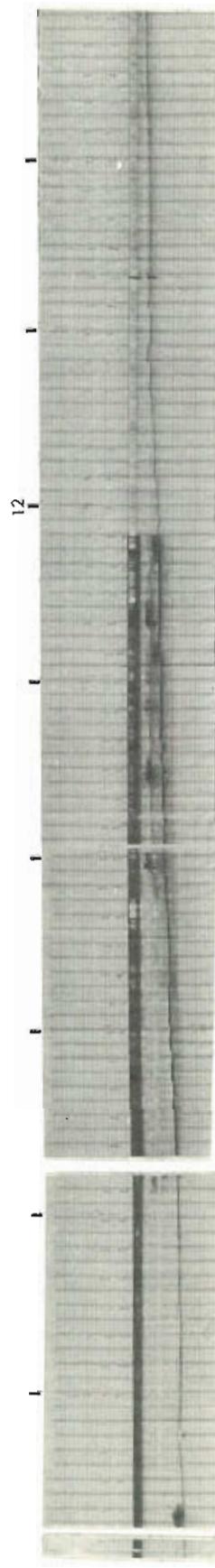
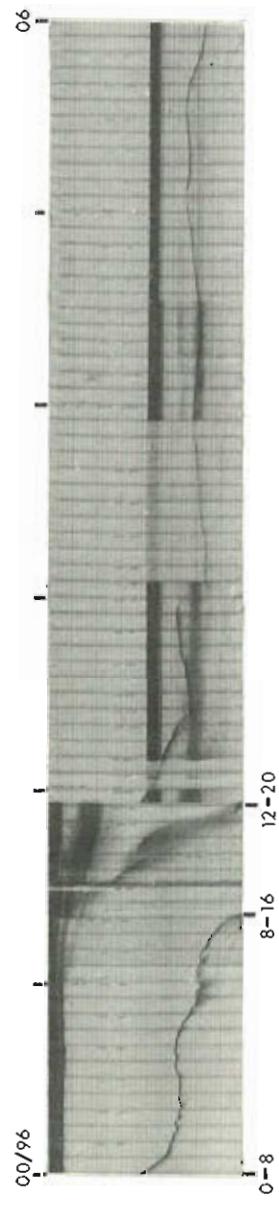


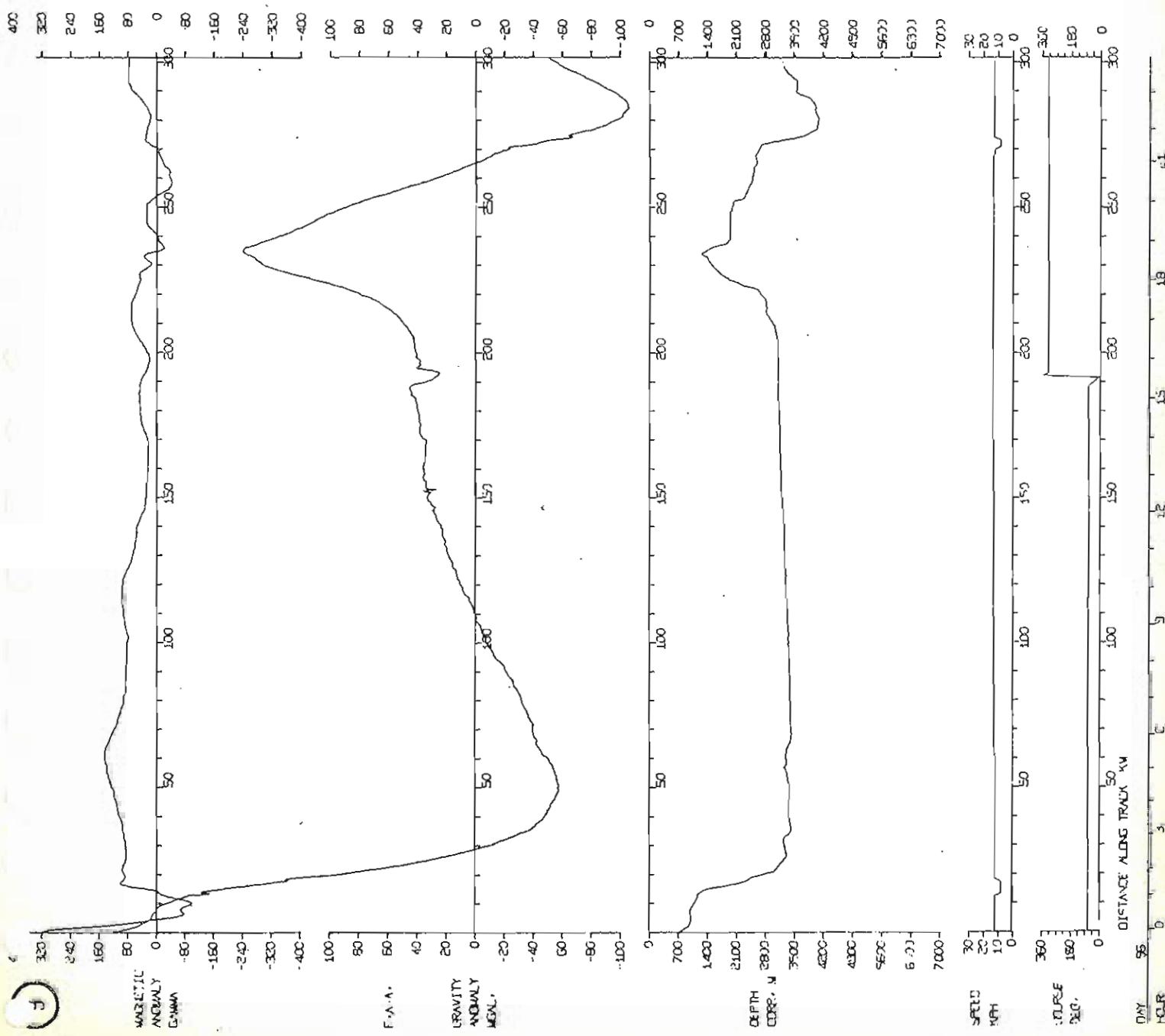


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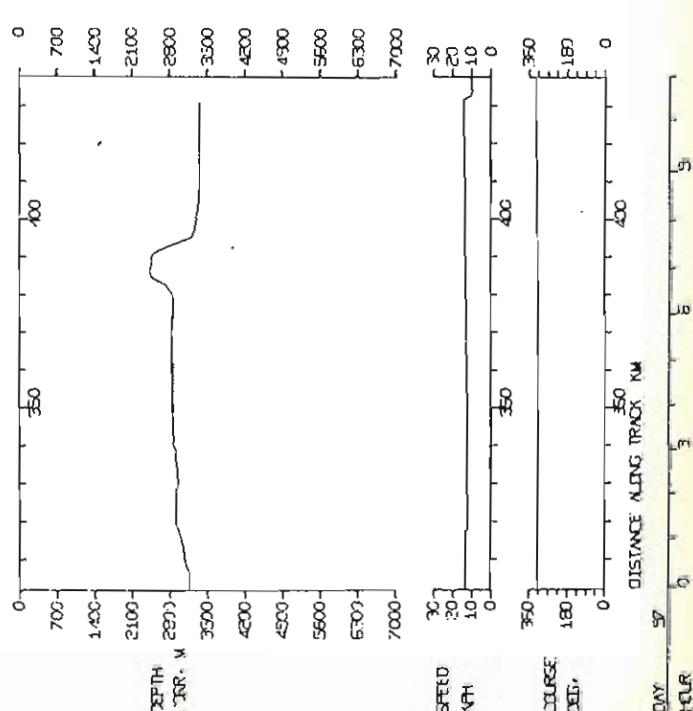
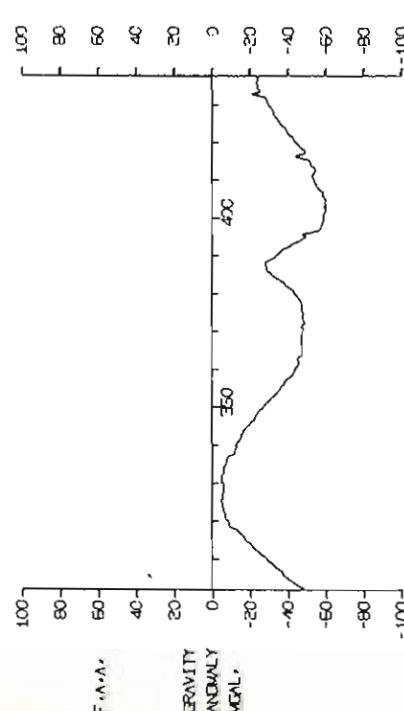
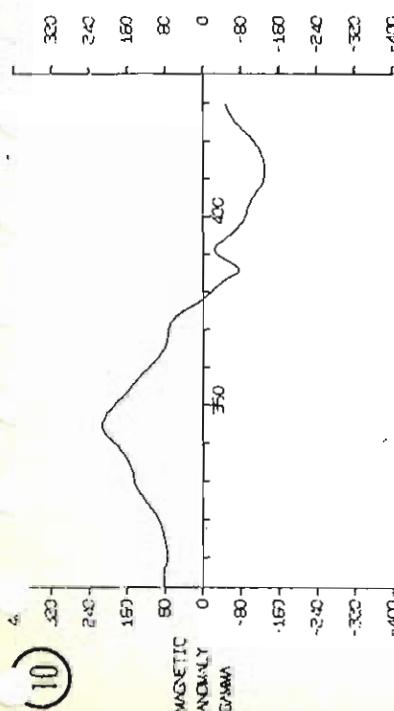


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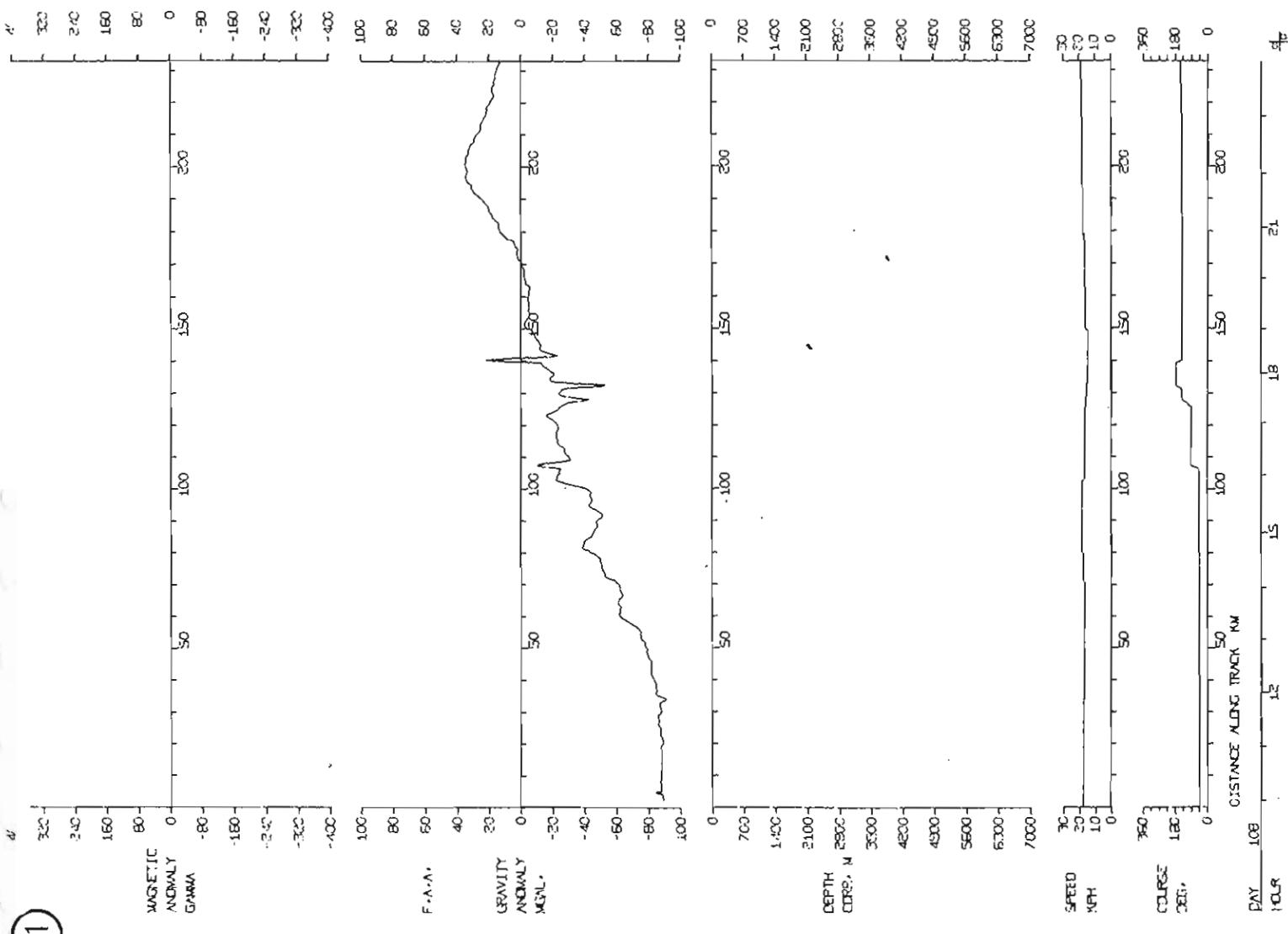




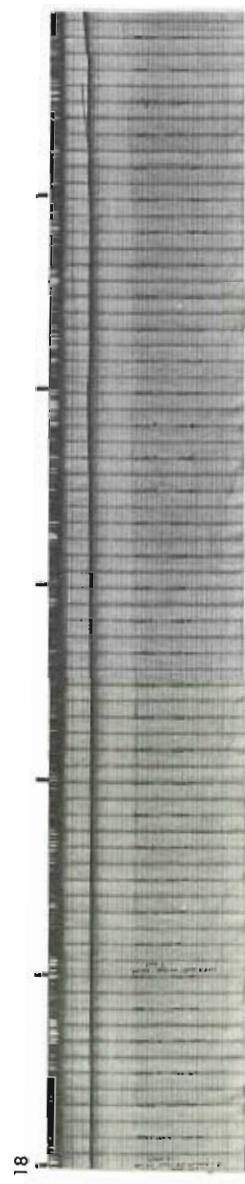
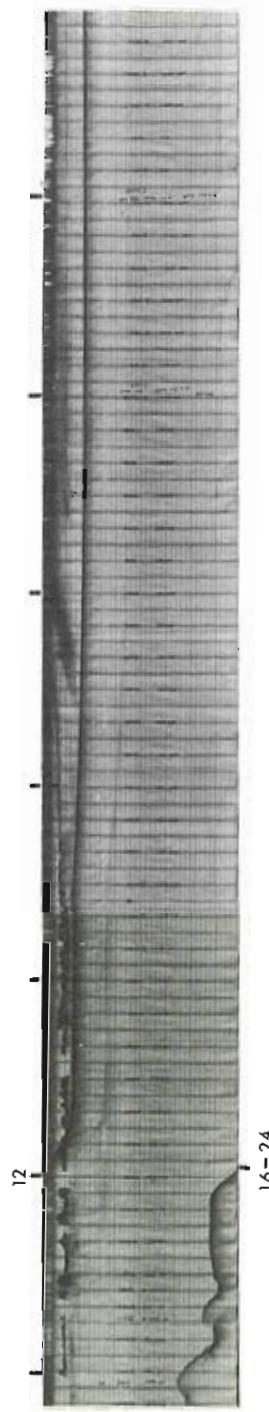
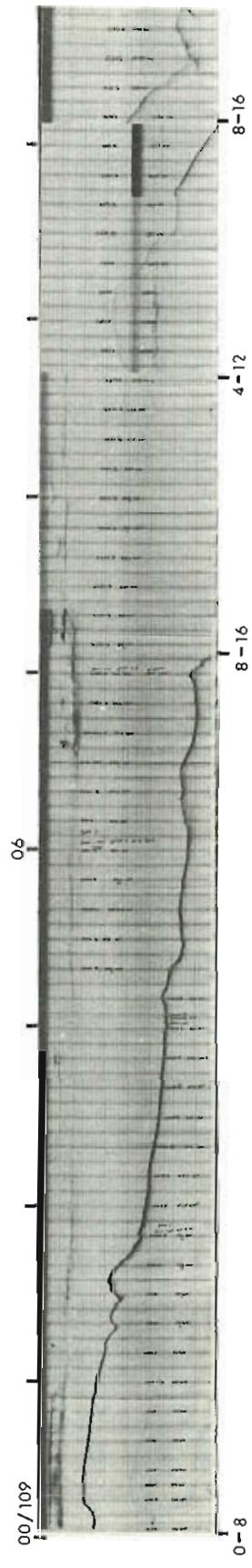
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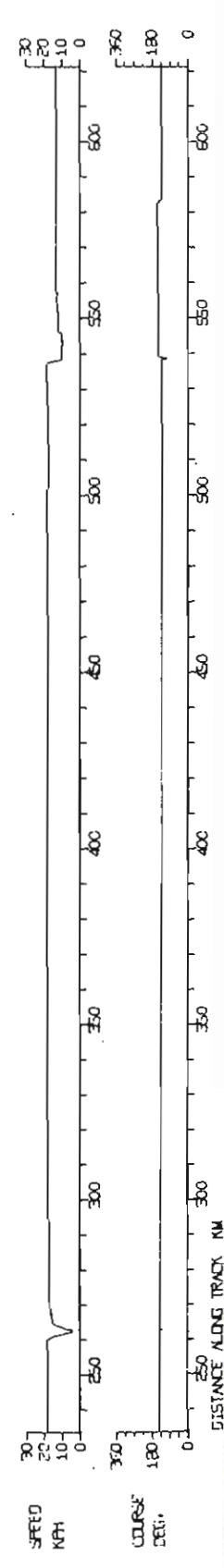
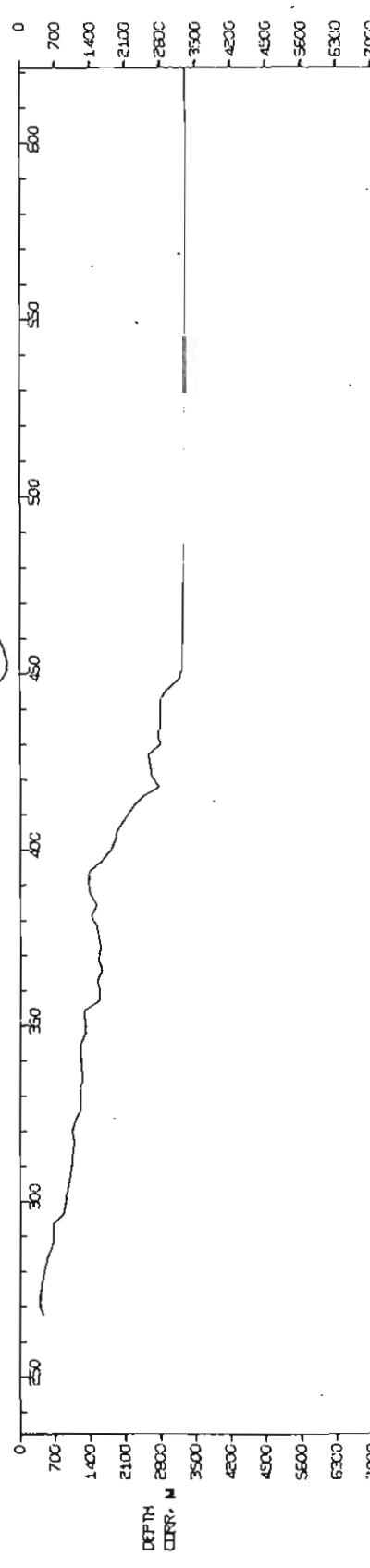
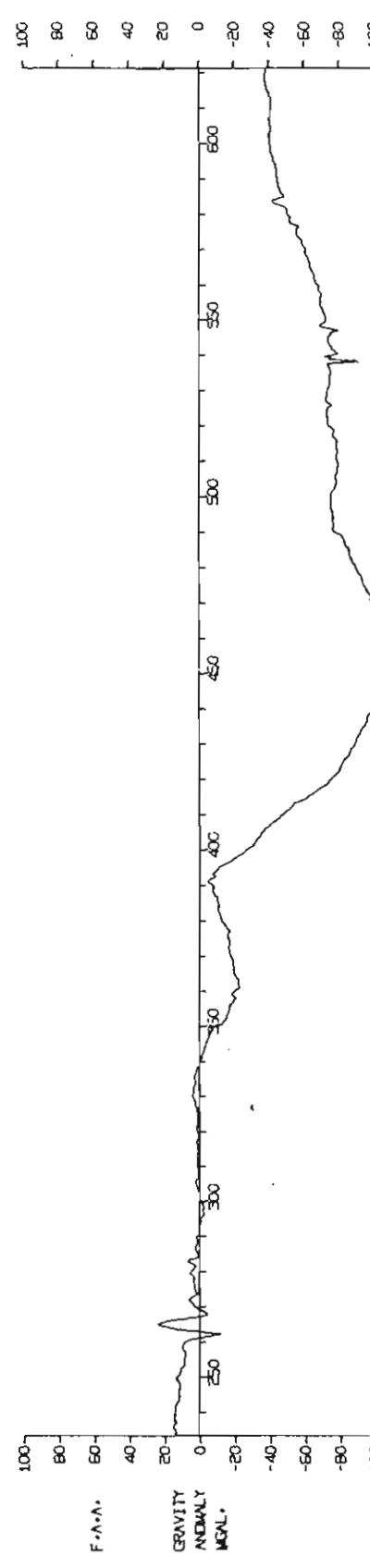
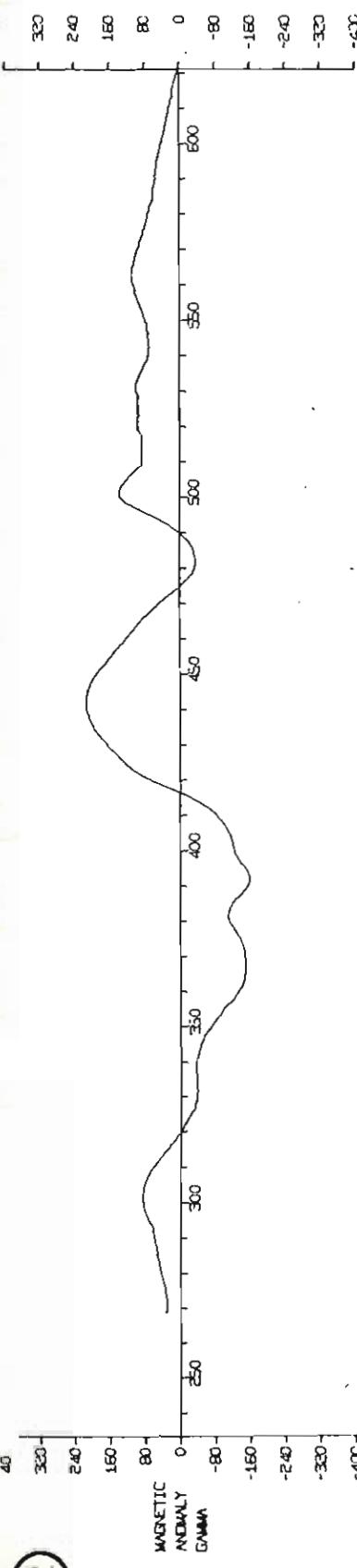
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(12)



(12)

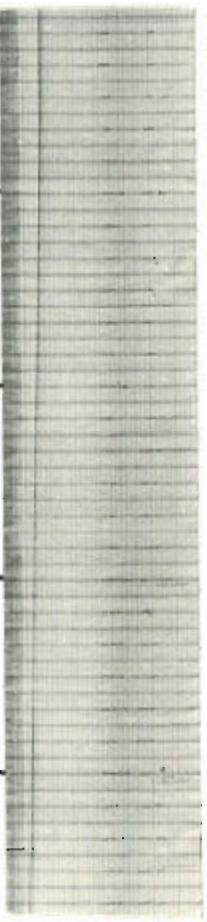
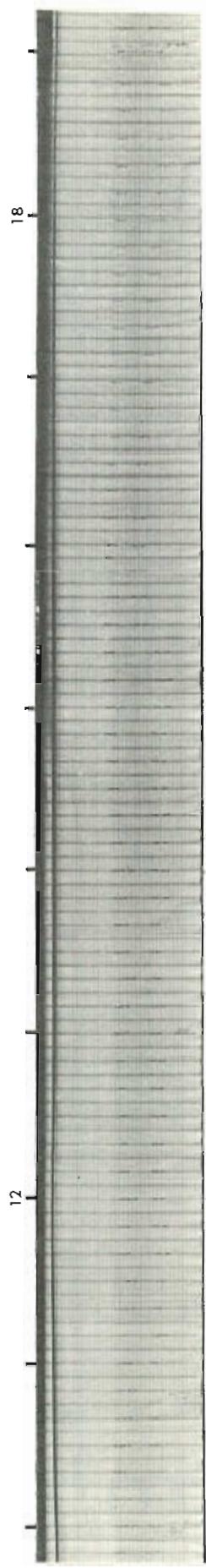
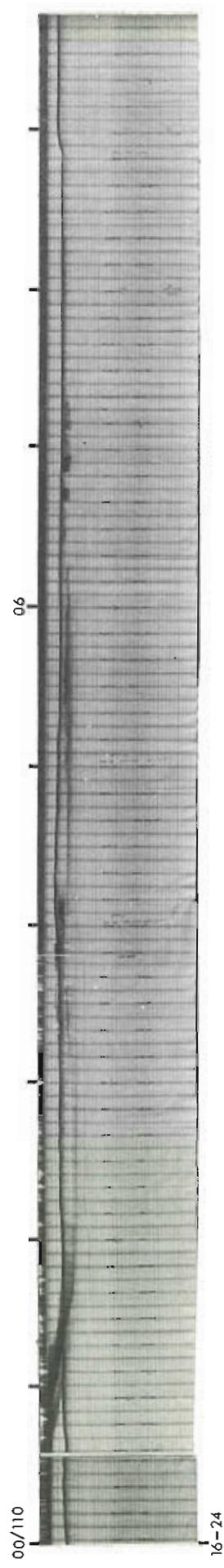


DISTANCE ALONG TRACK KM

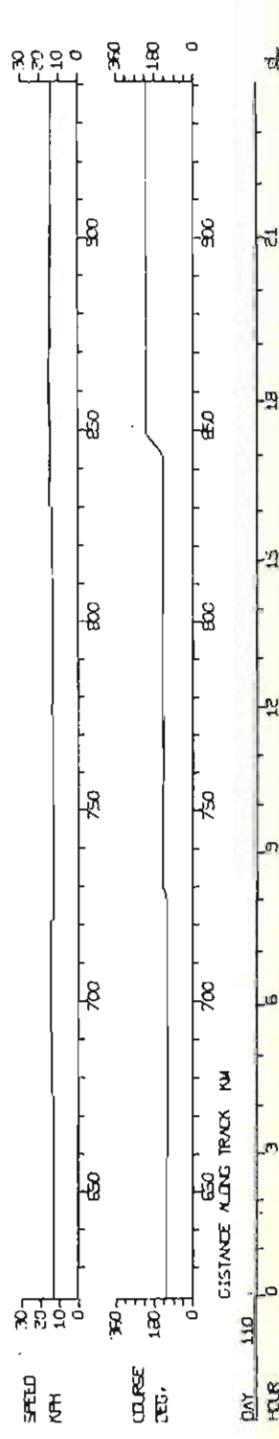
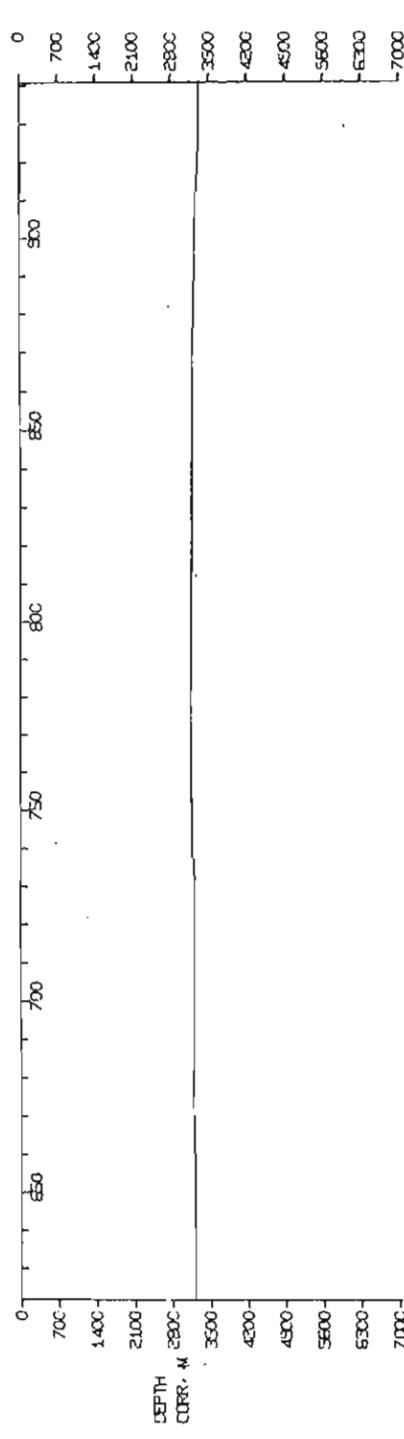
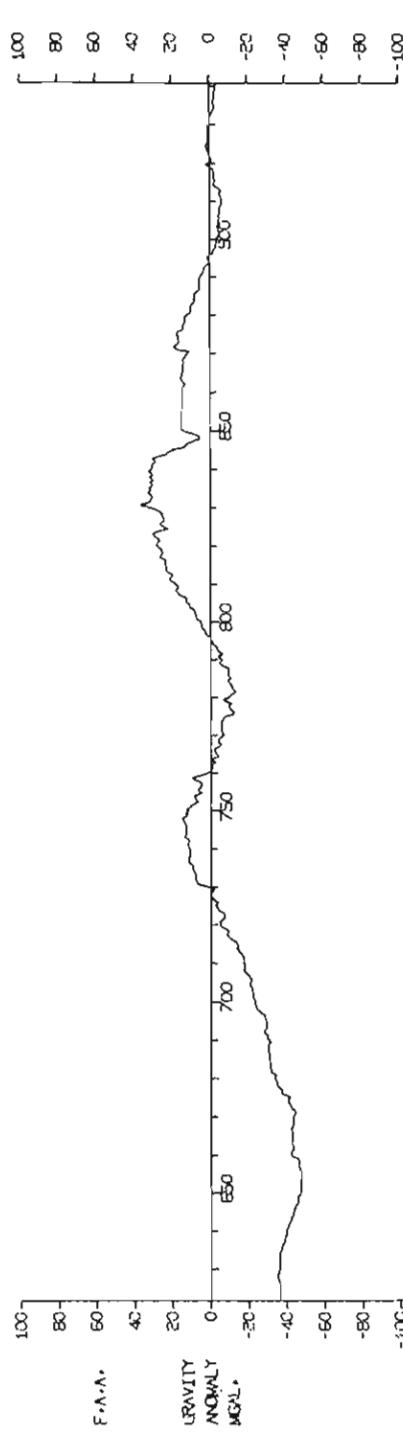
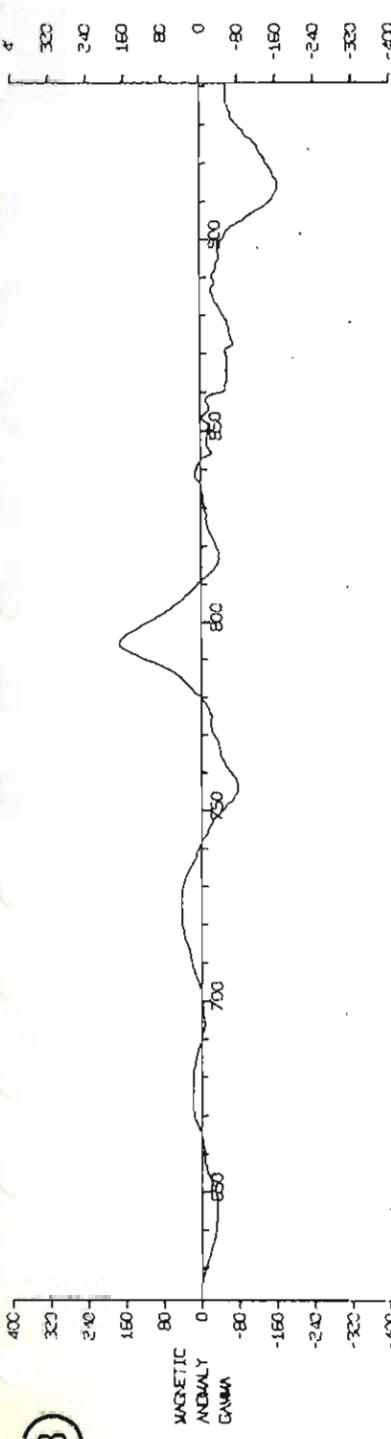
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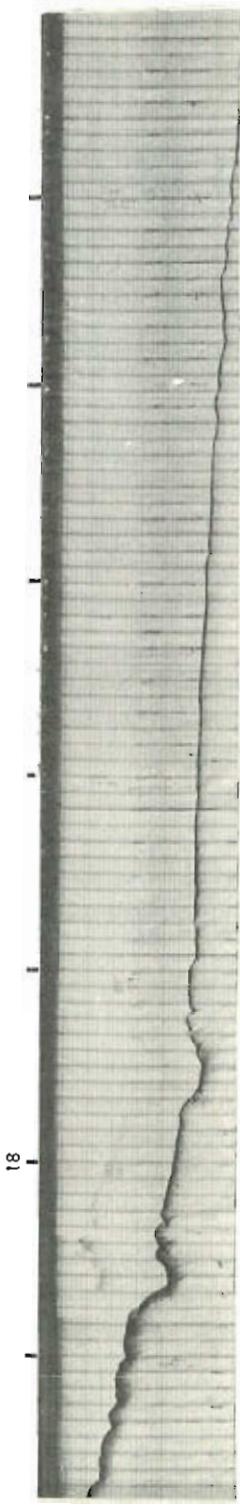
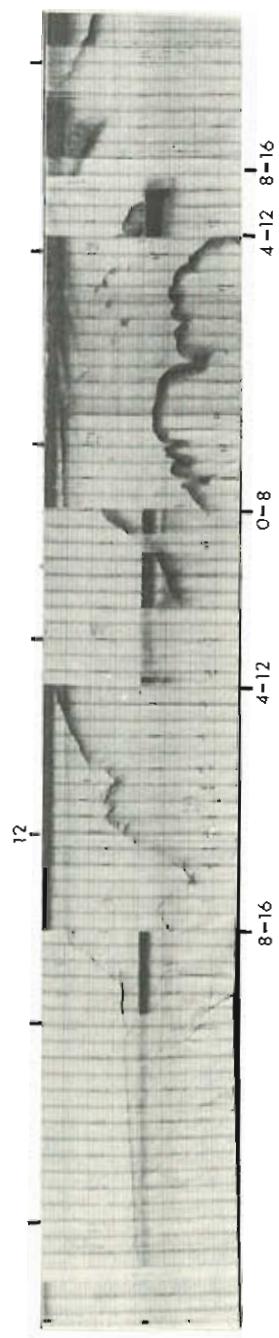
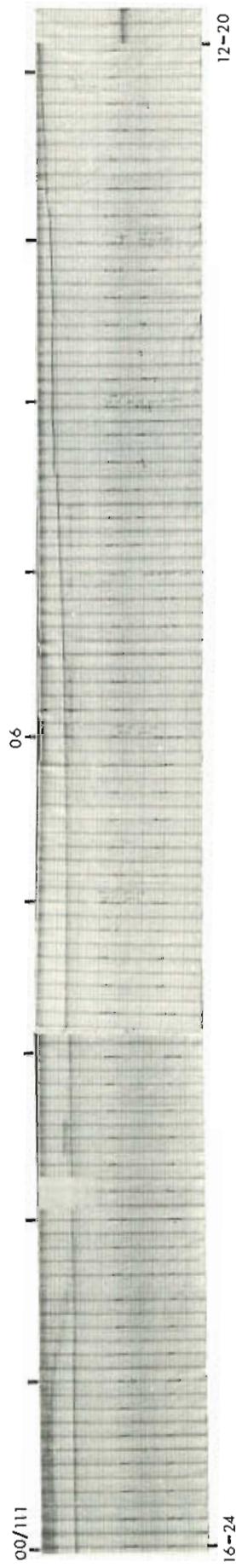
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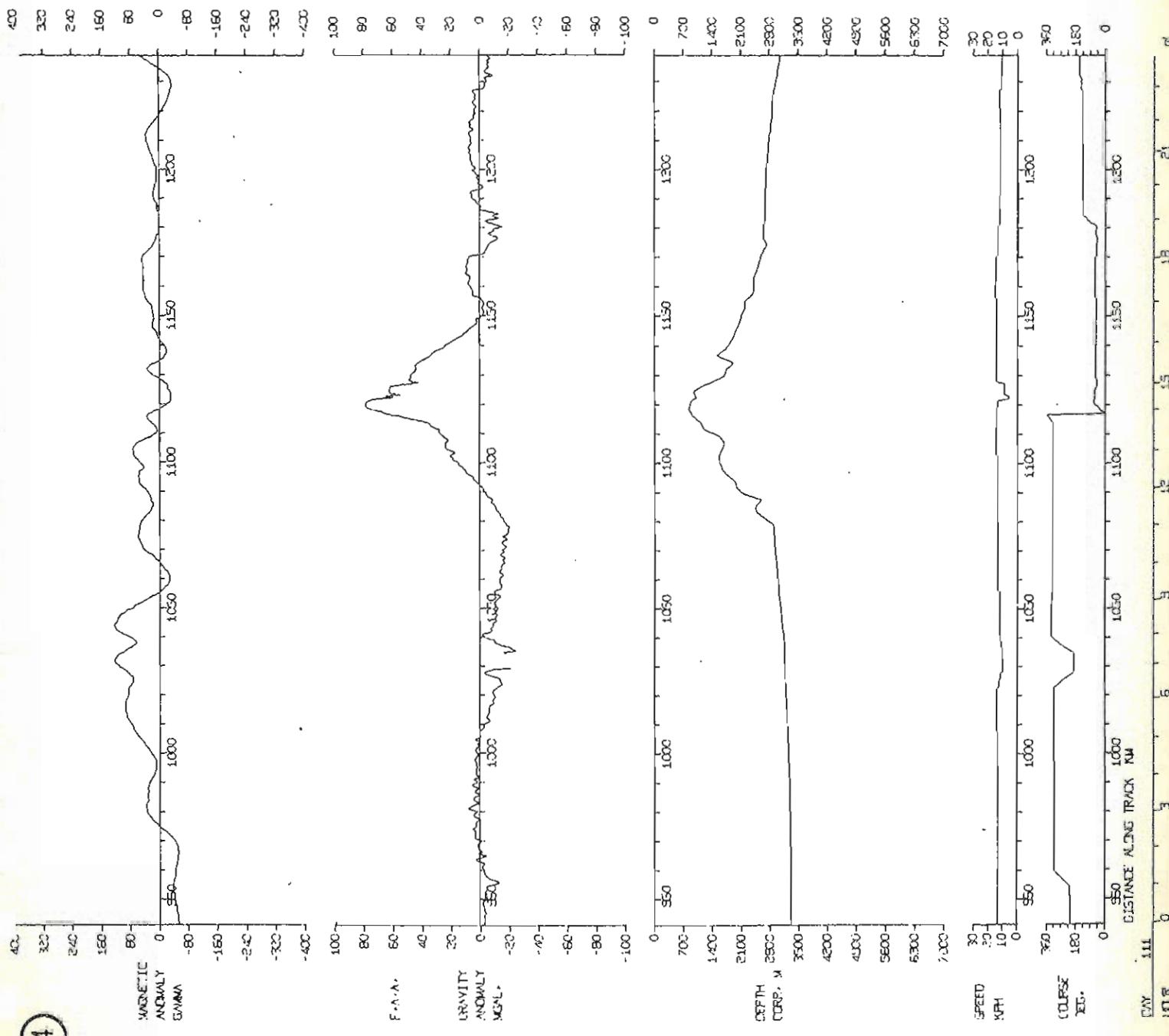


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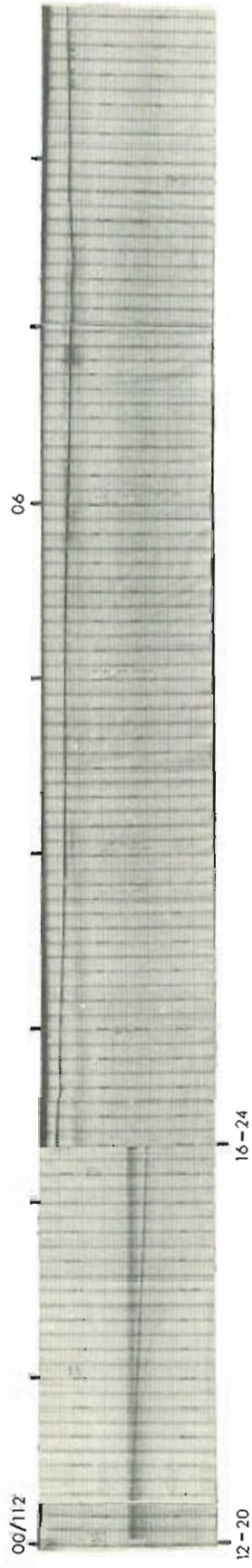




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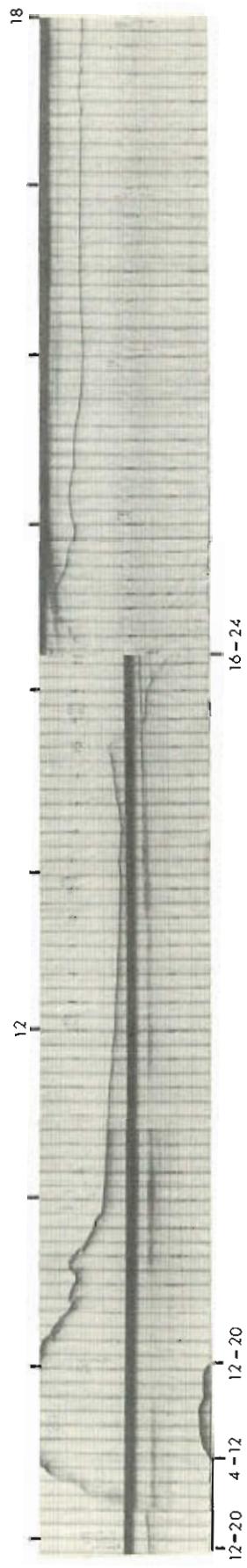


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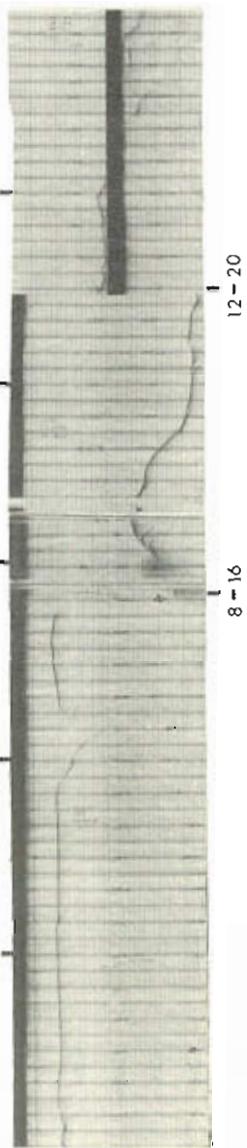
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12-20

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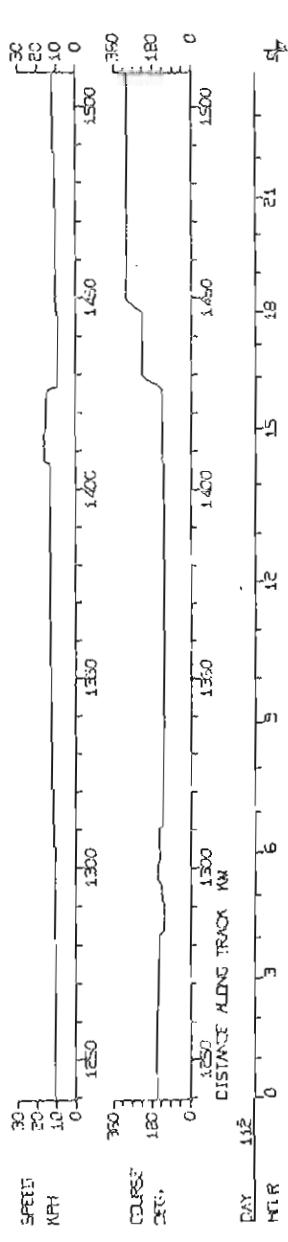
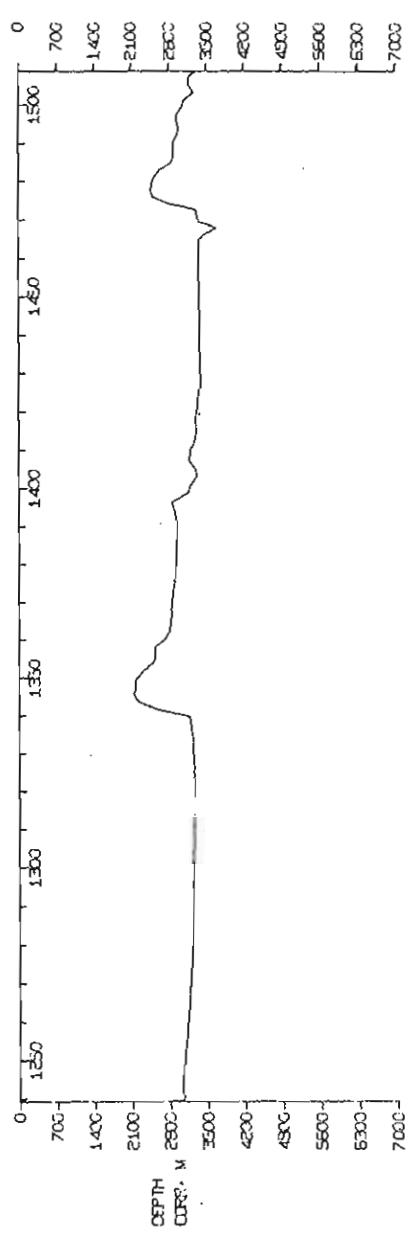
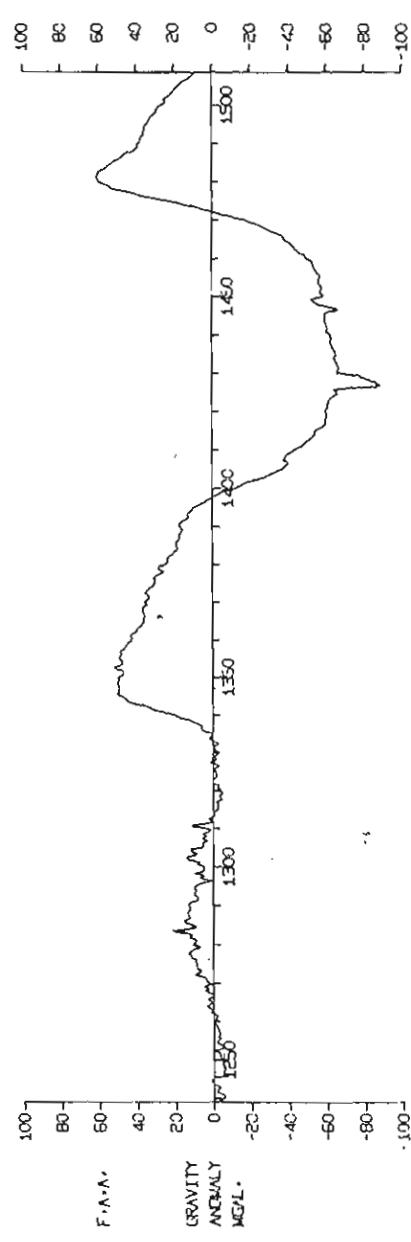
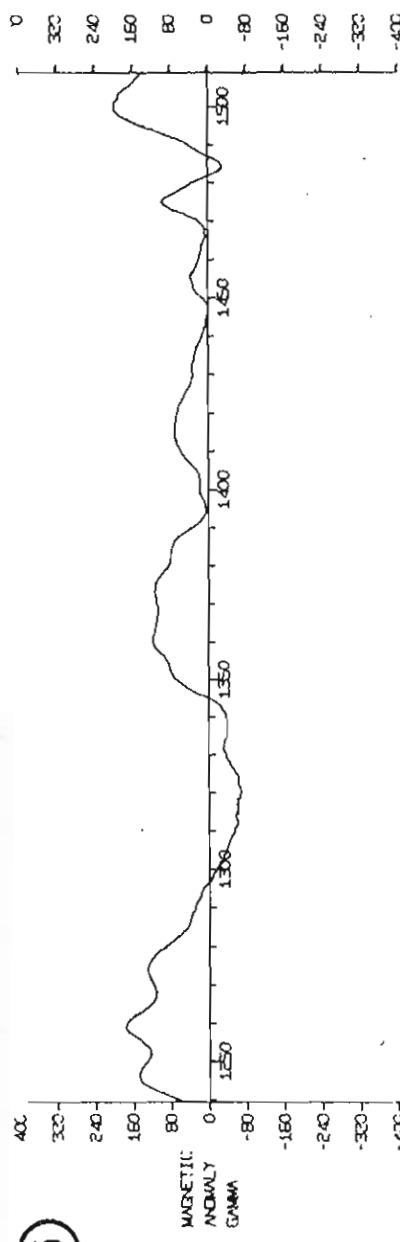
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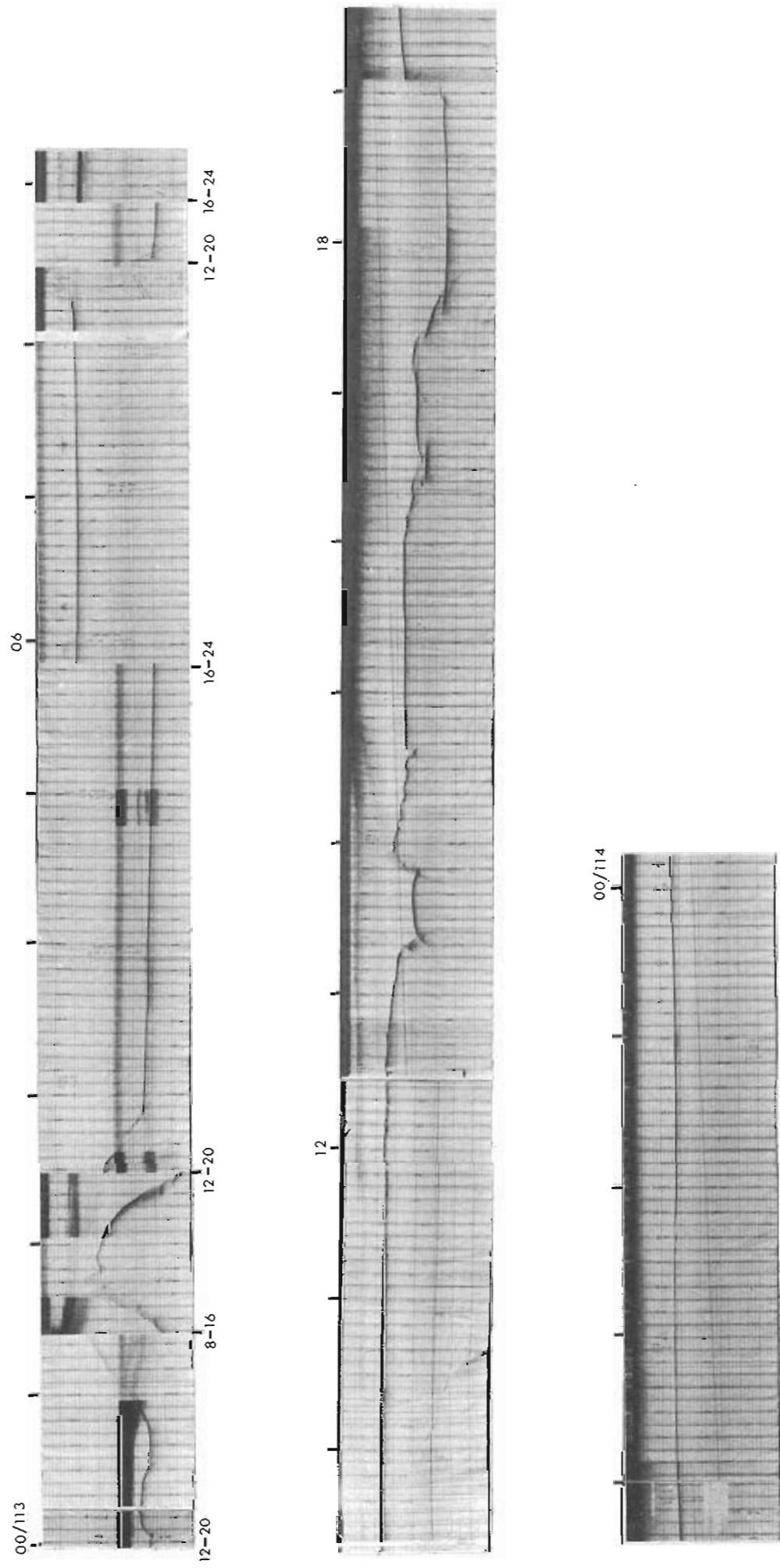
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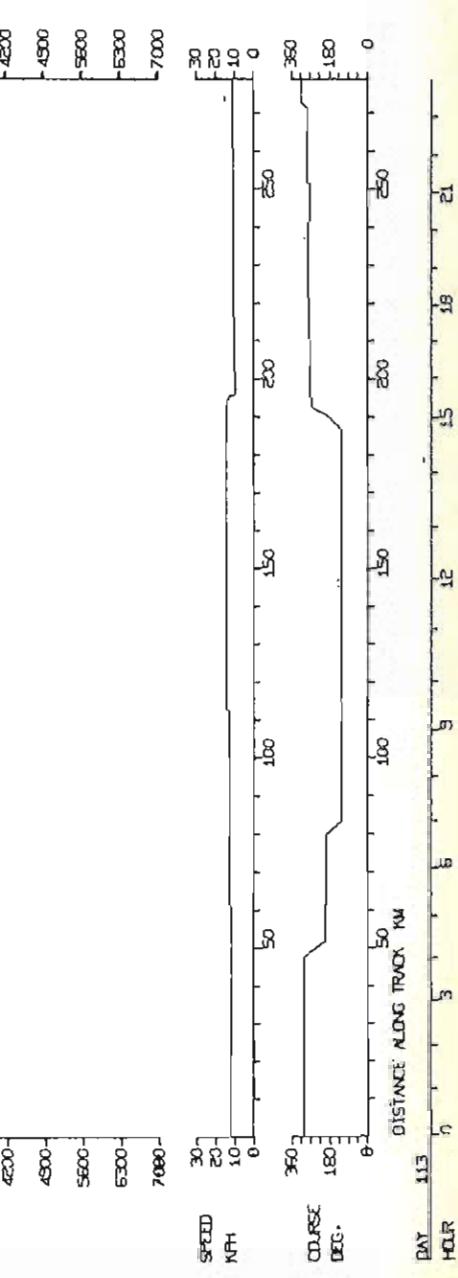
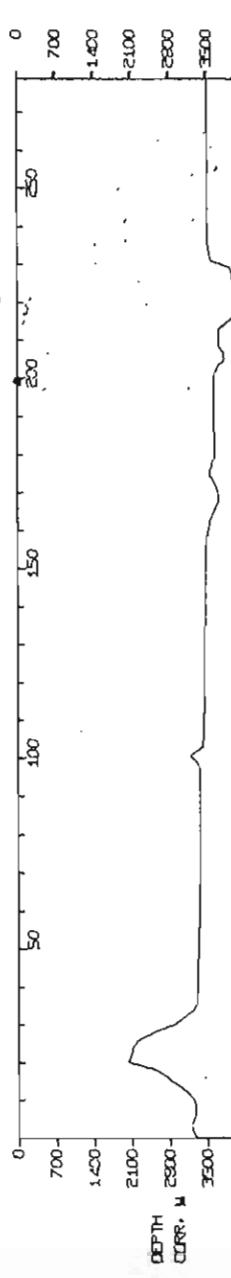
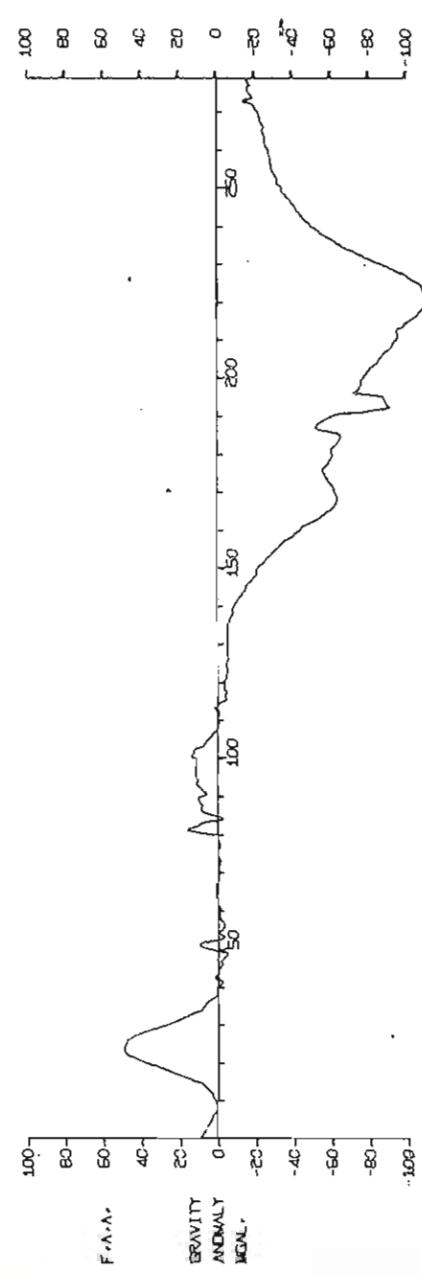
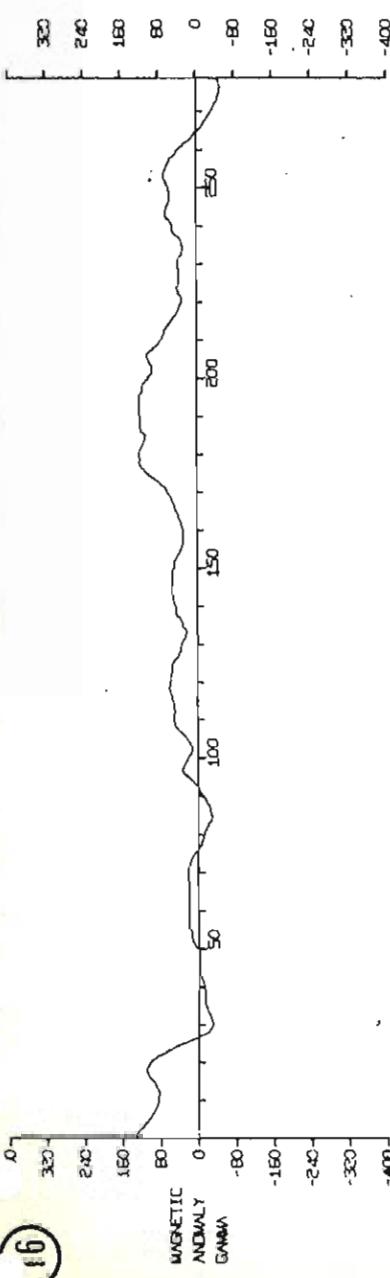
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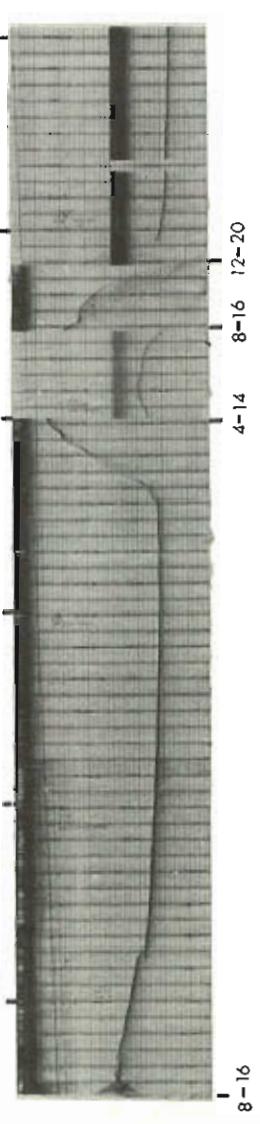
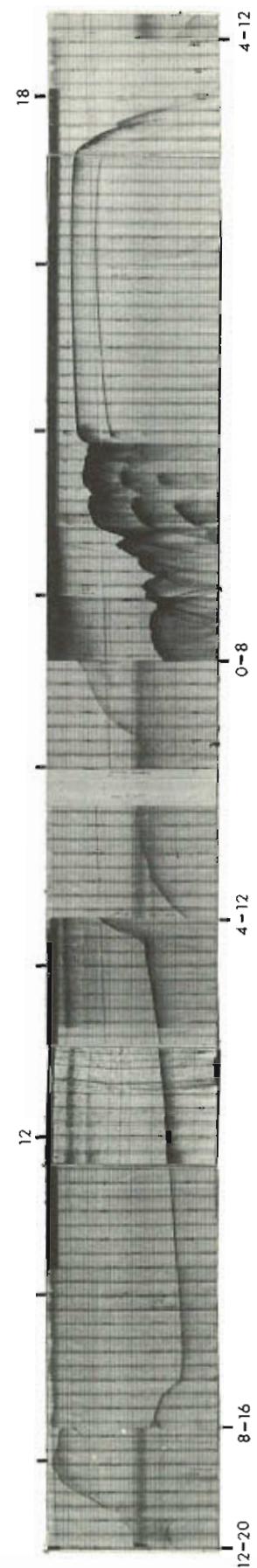


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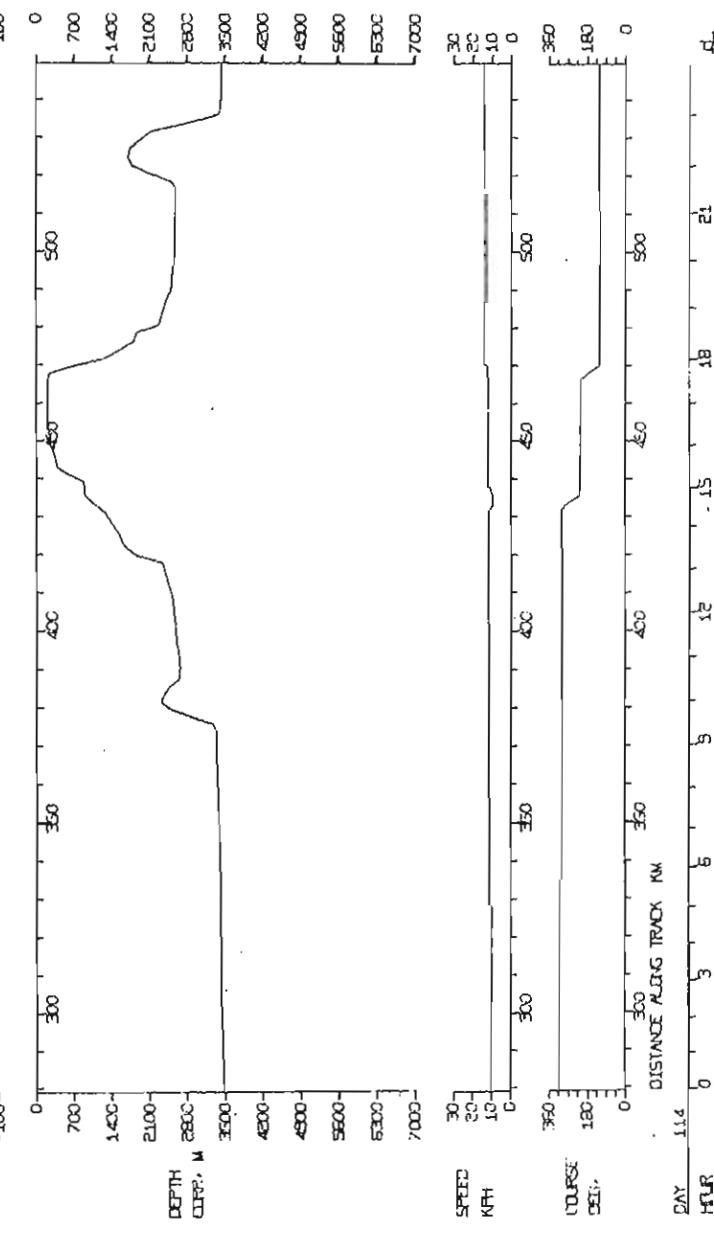
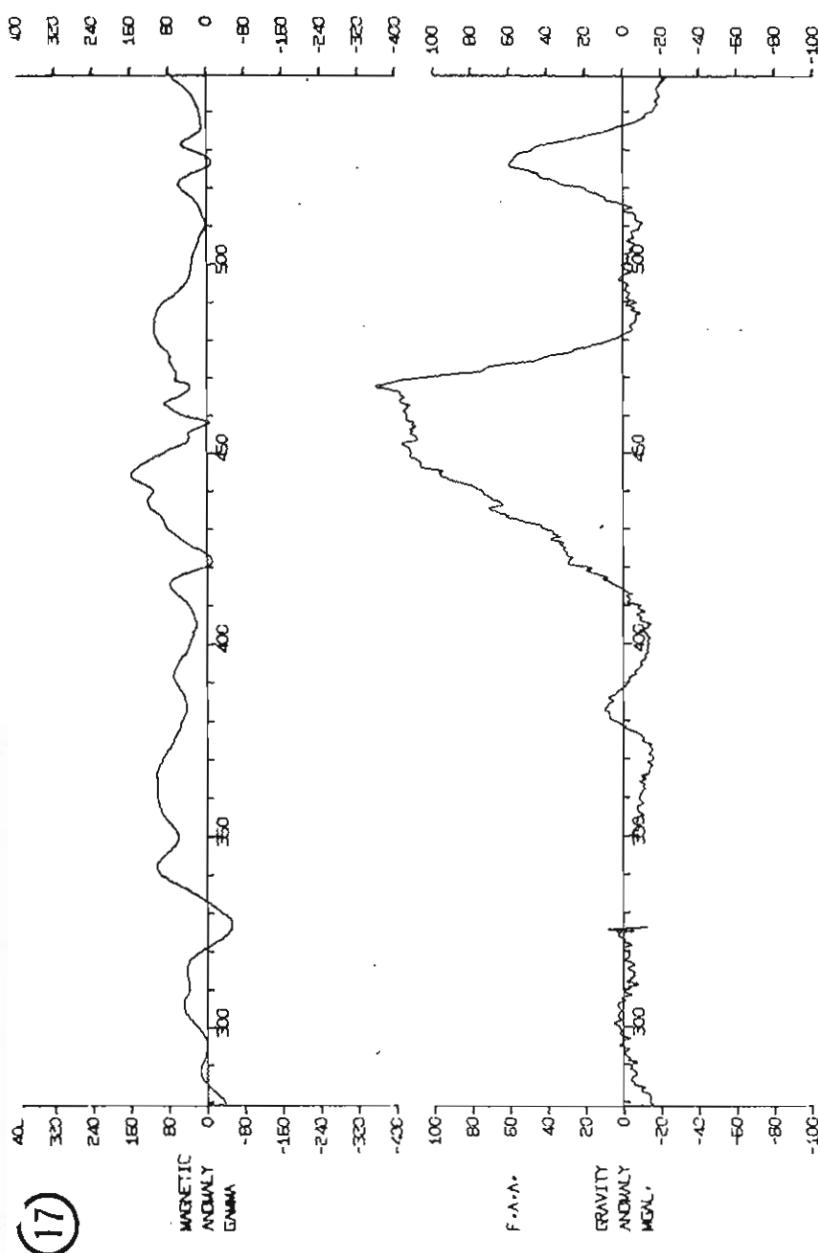


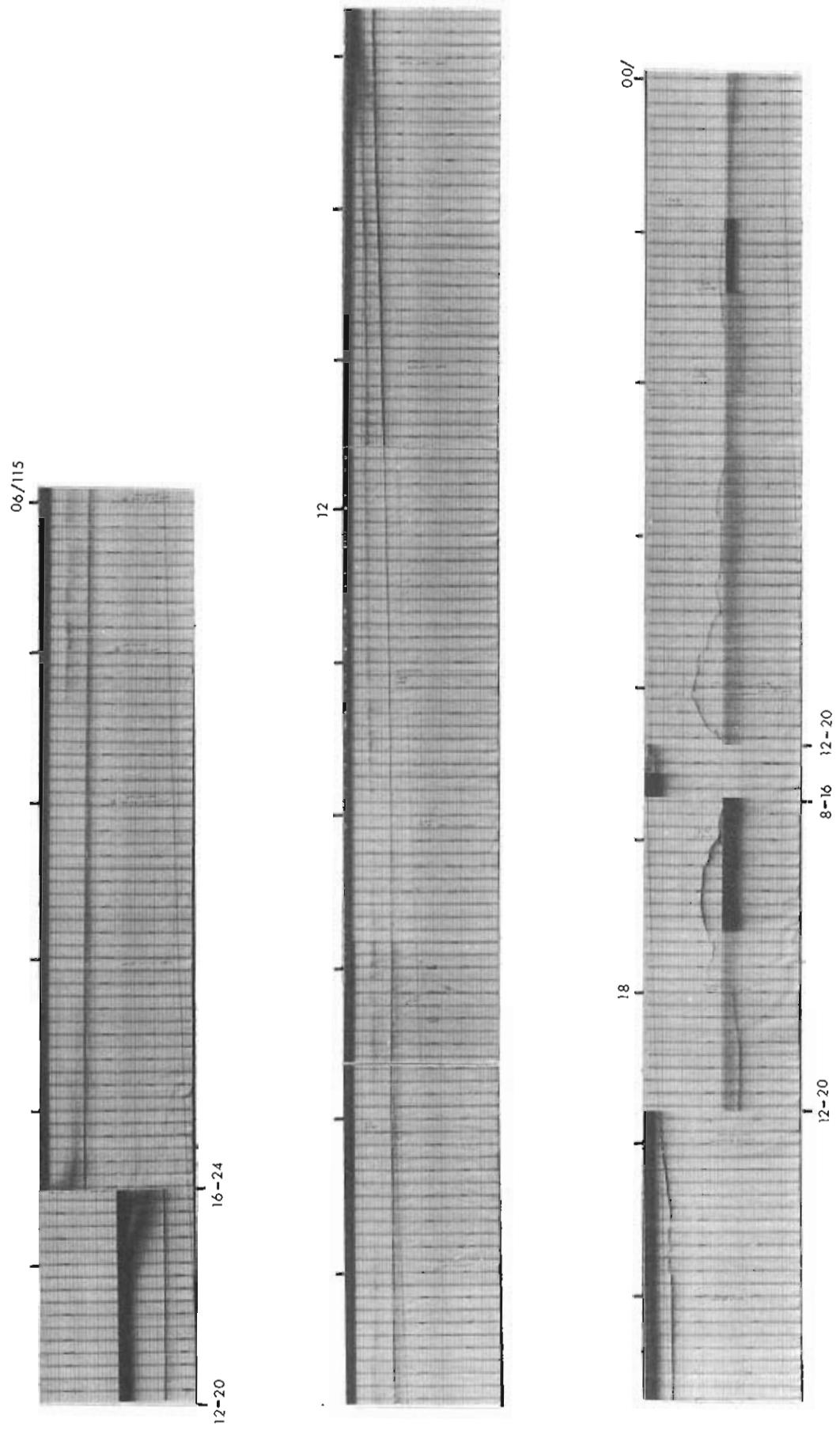
DISTANCE ALONG TRACK KM DAY HOUR

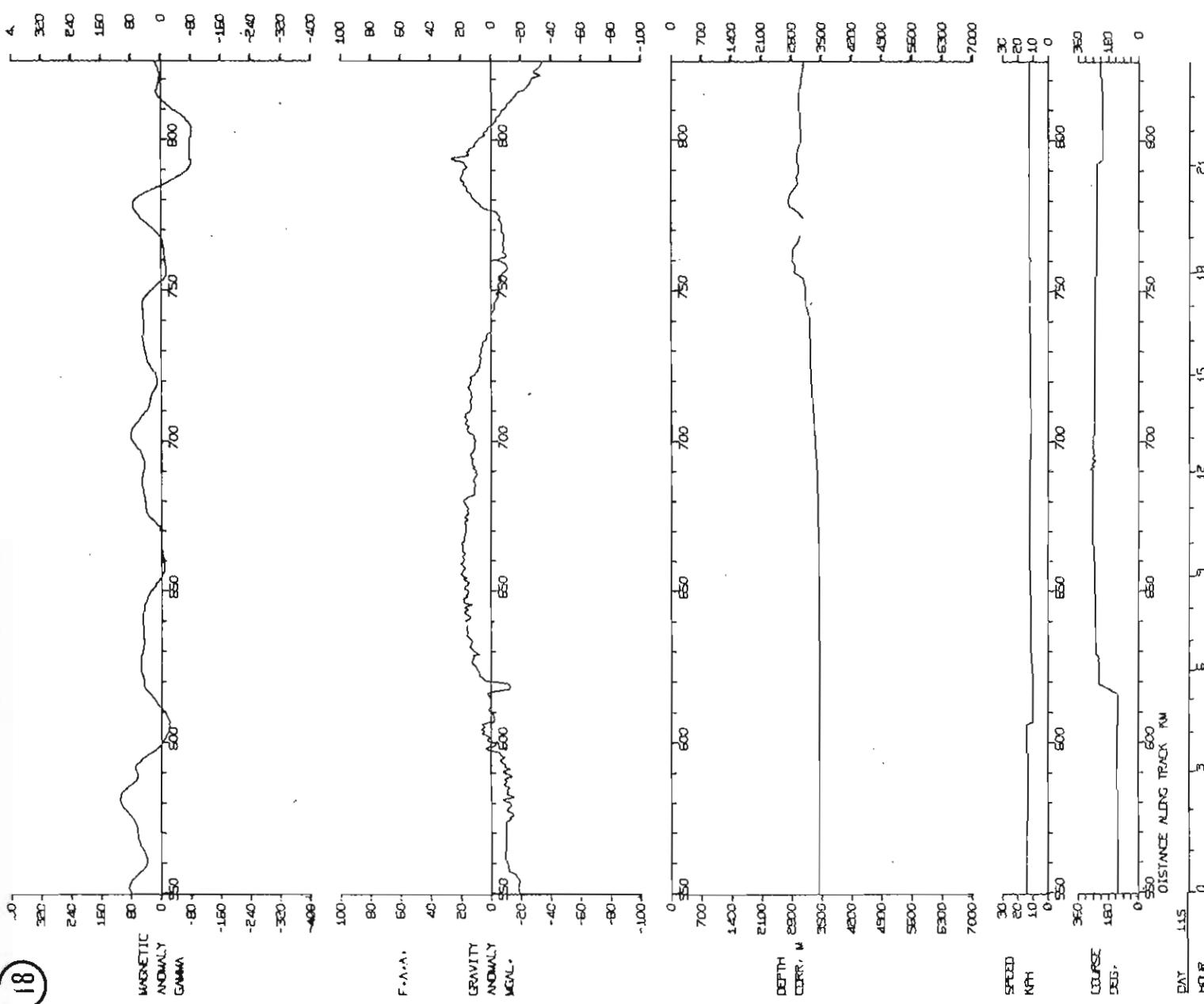
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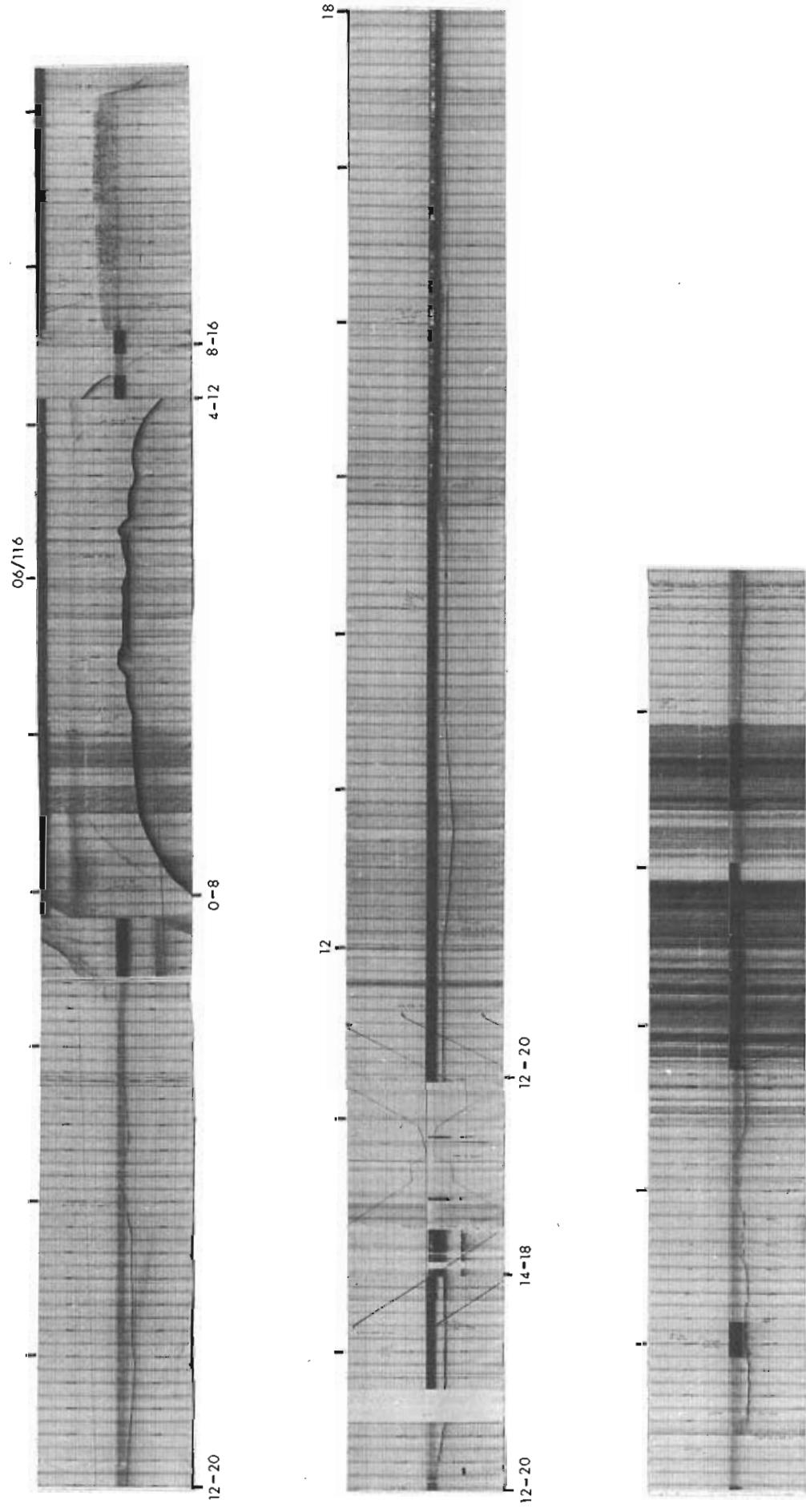


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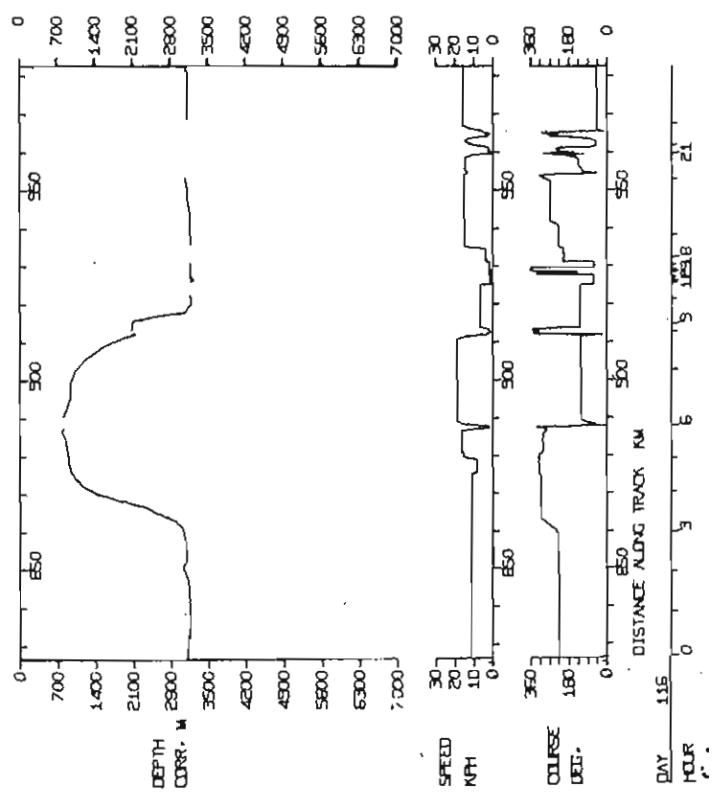
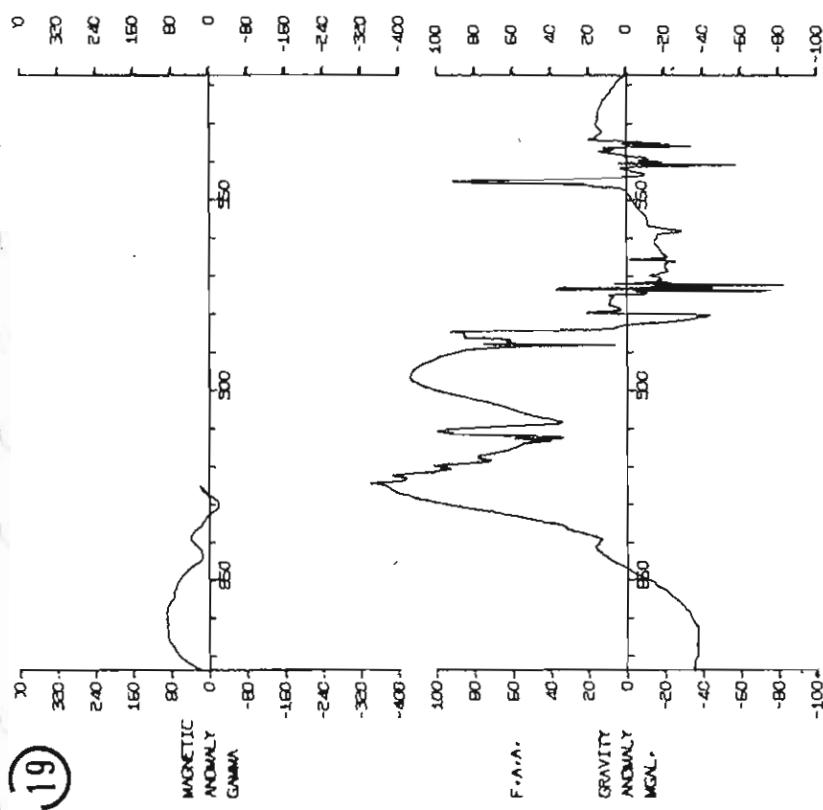




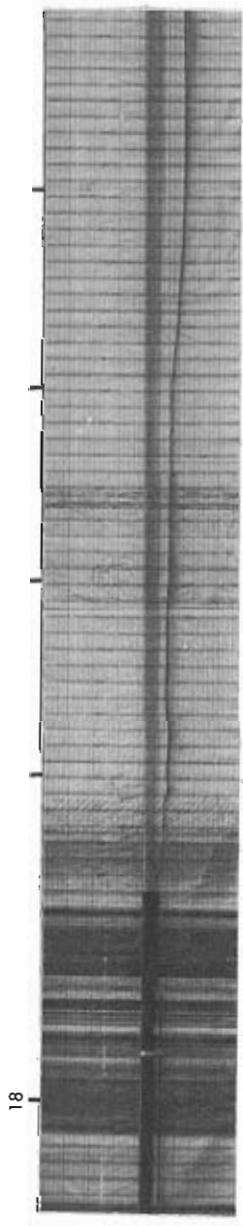
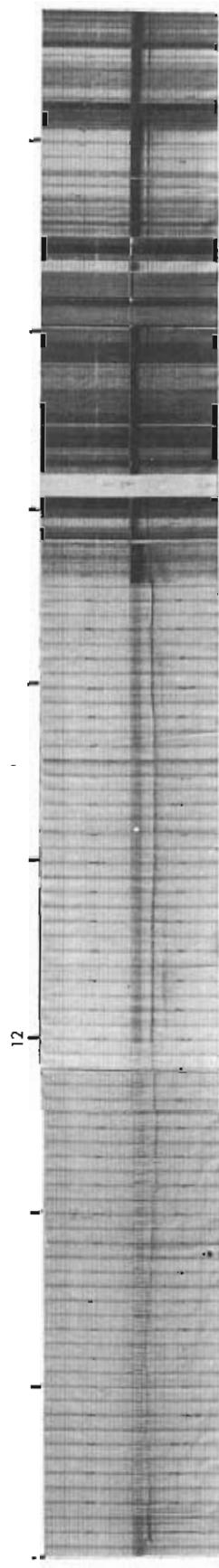
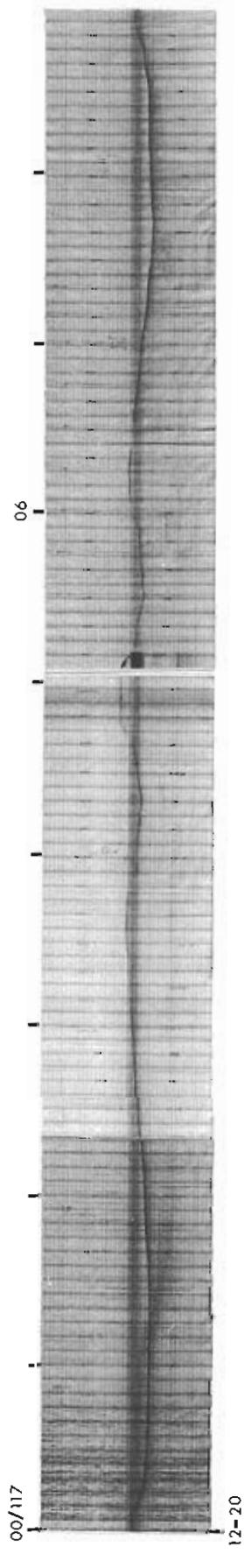




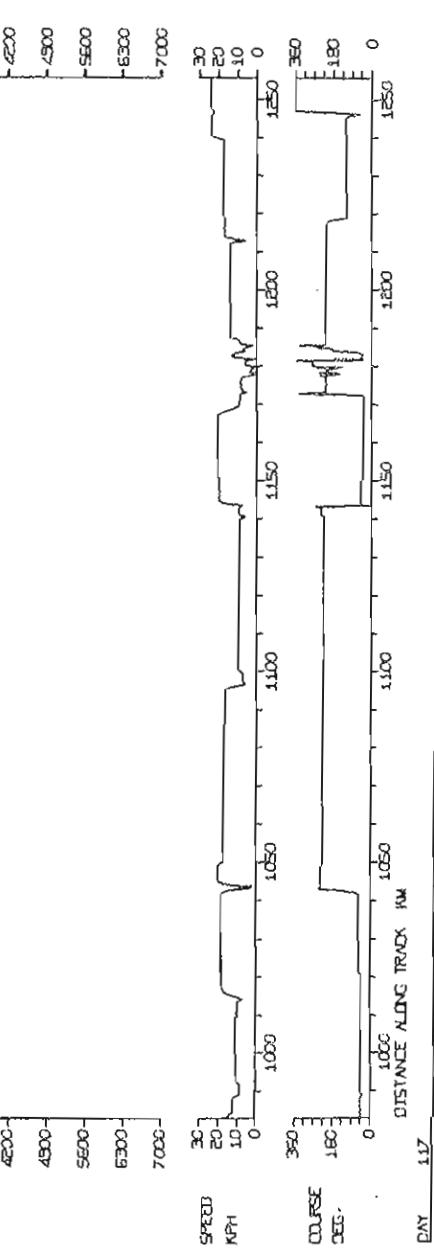
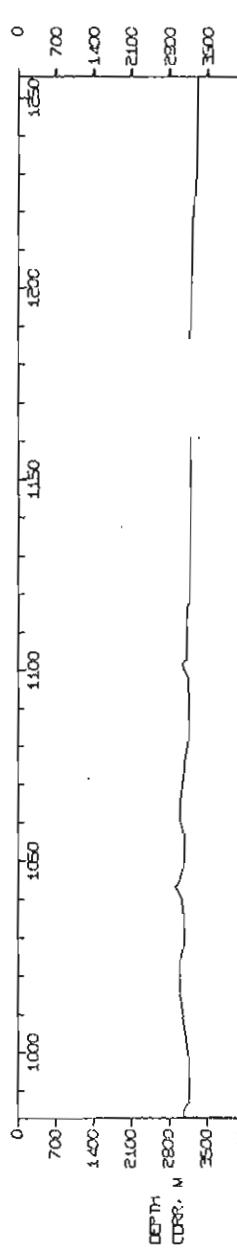
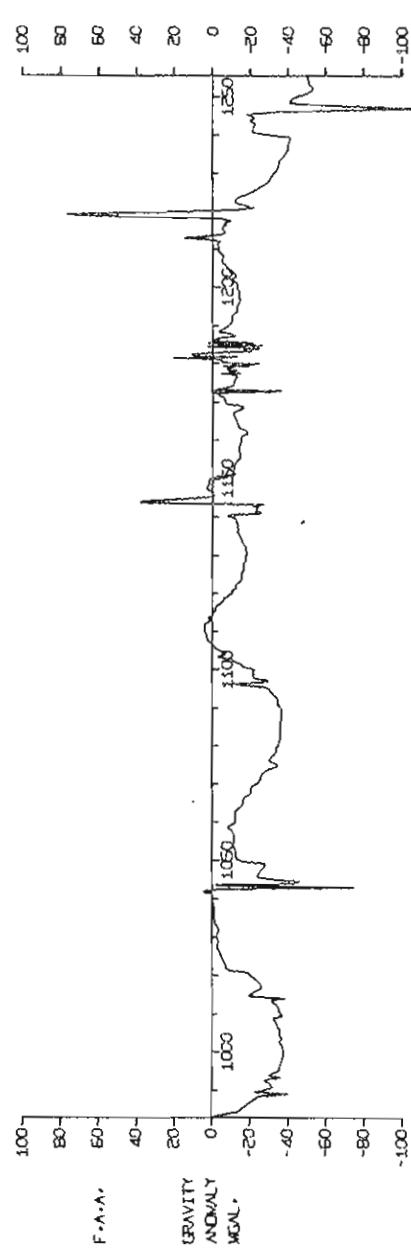
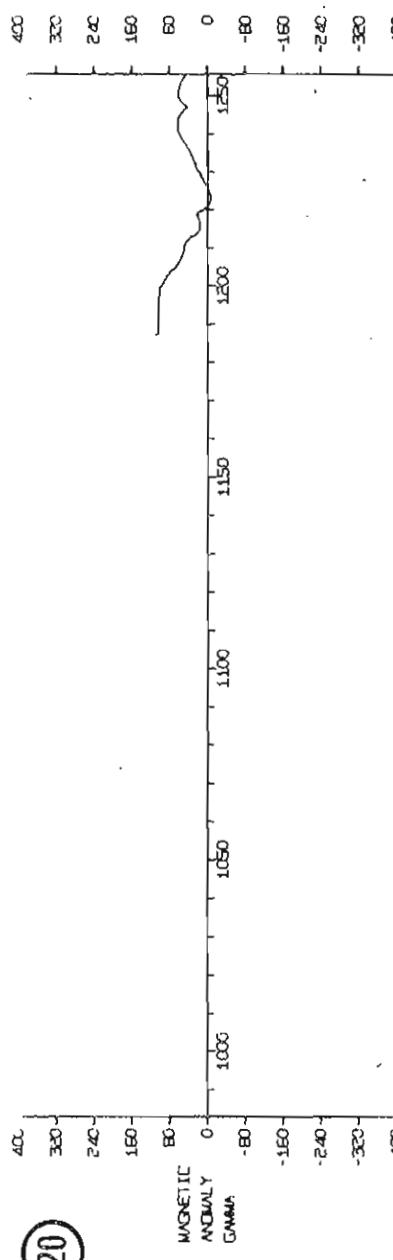
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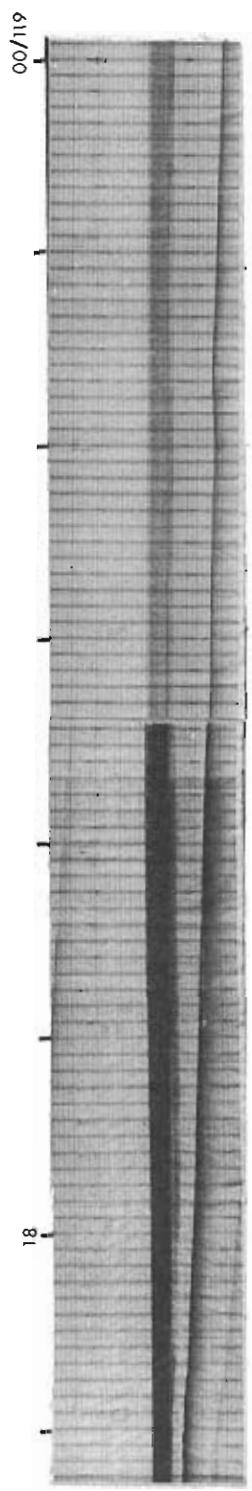
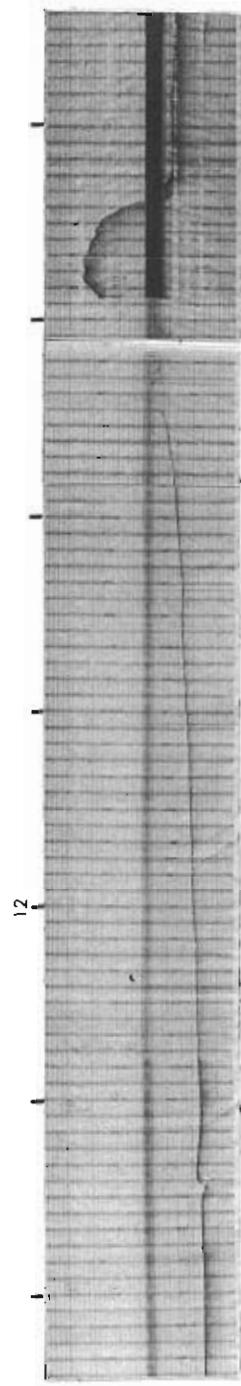
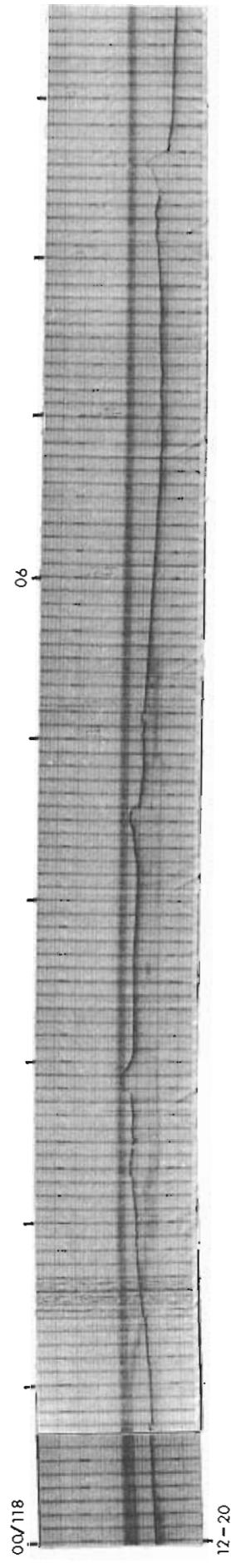
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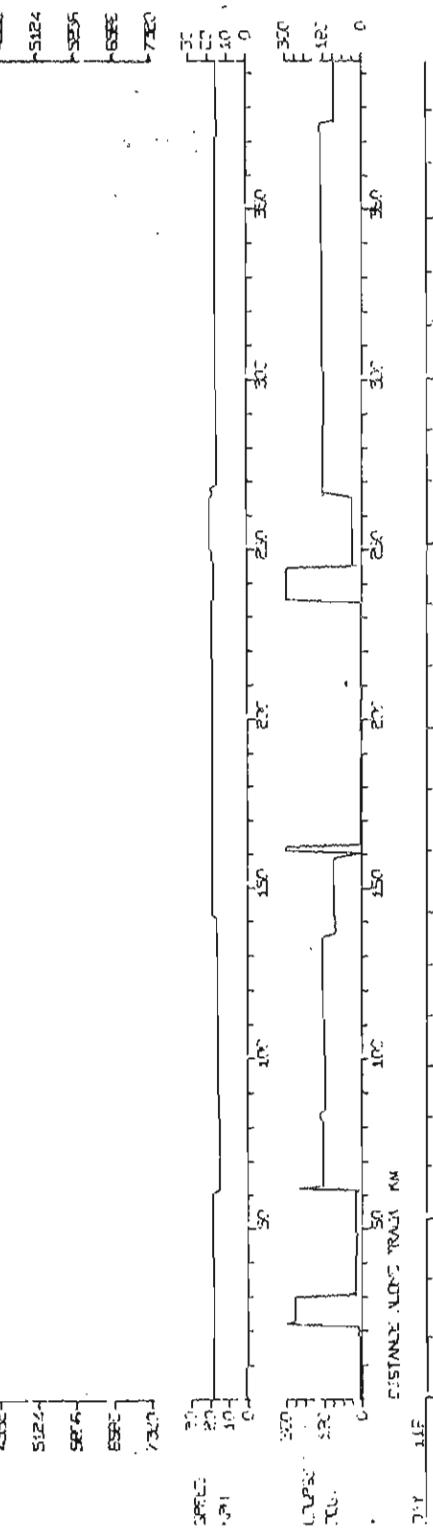
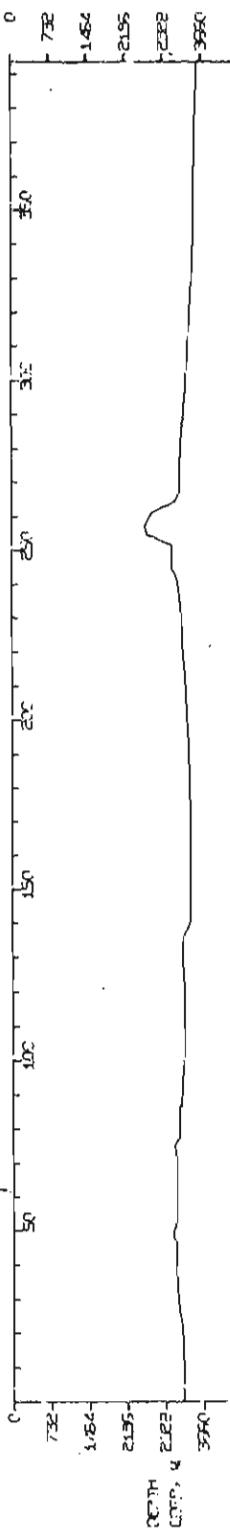
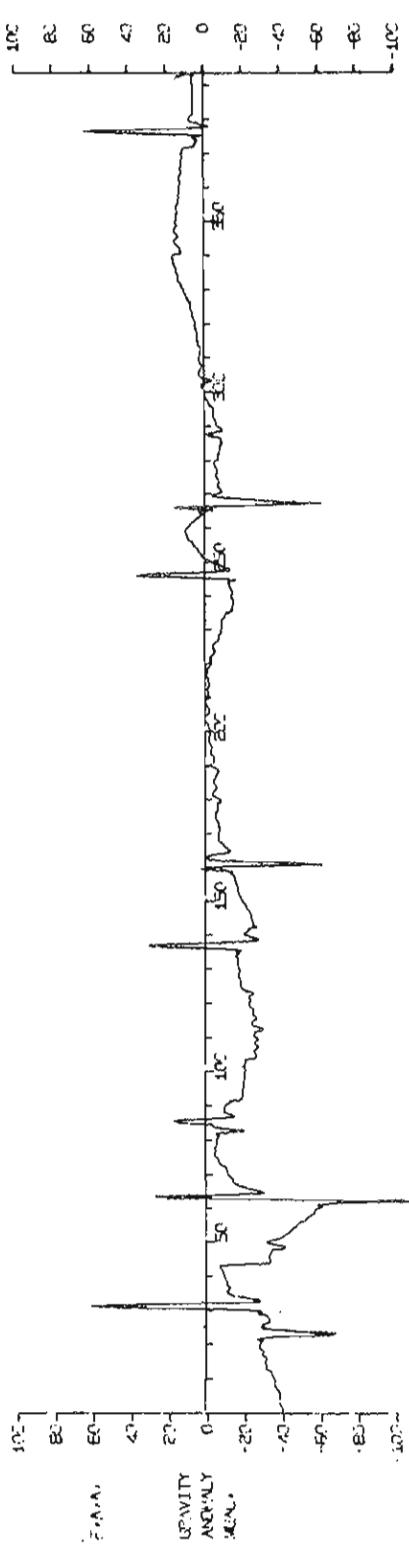
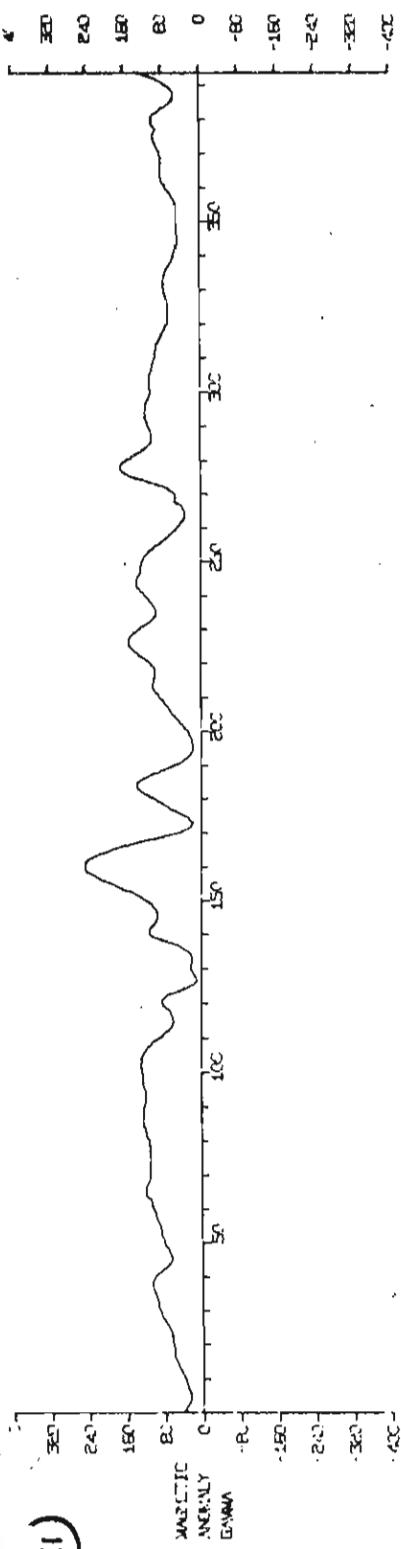


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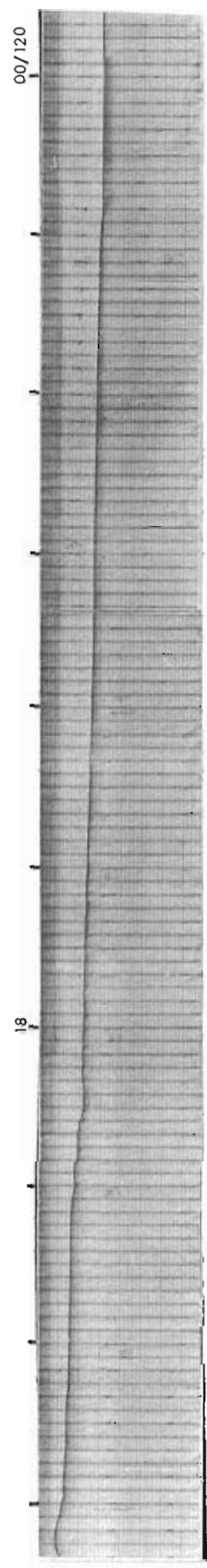
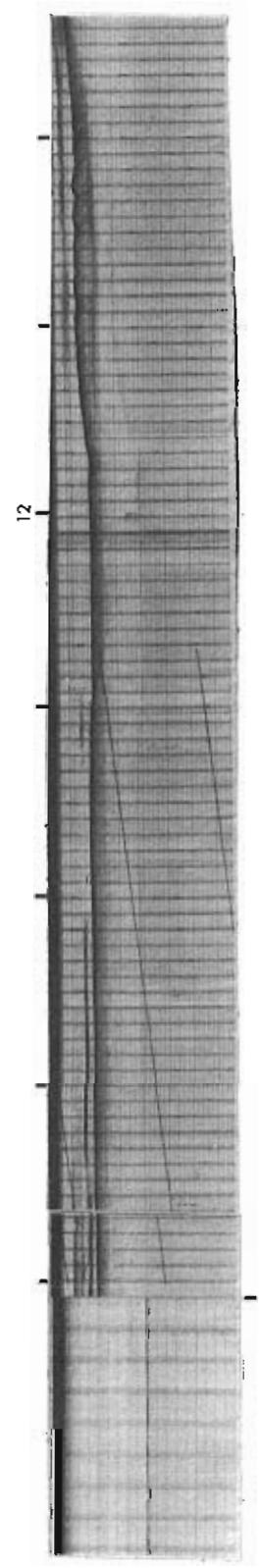
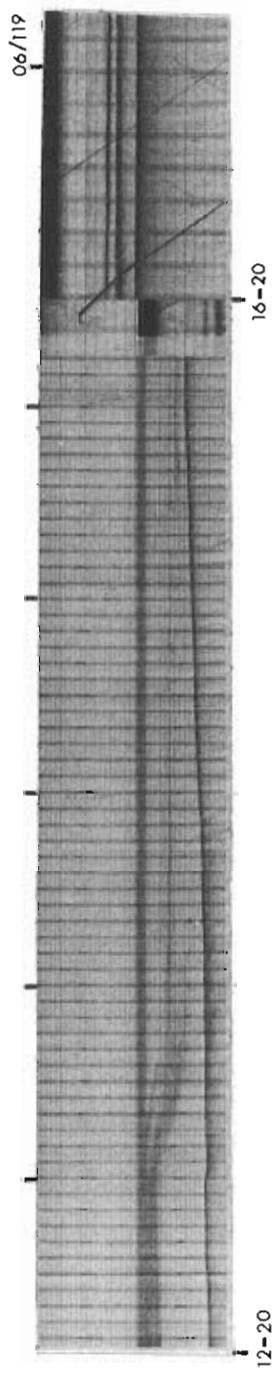


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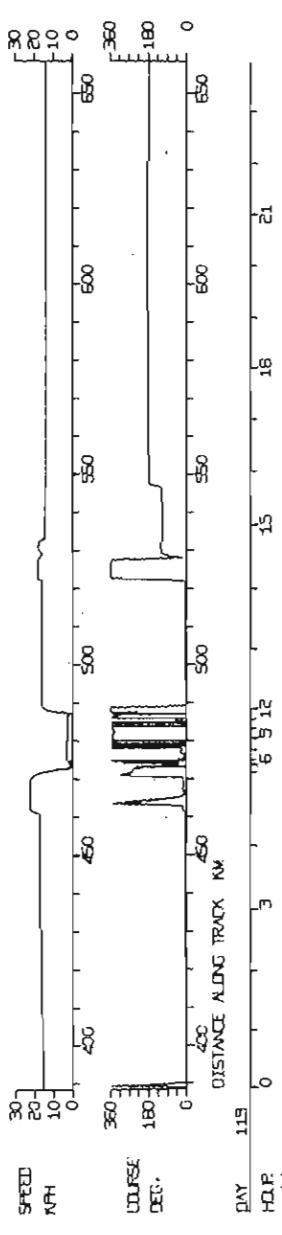
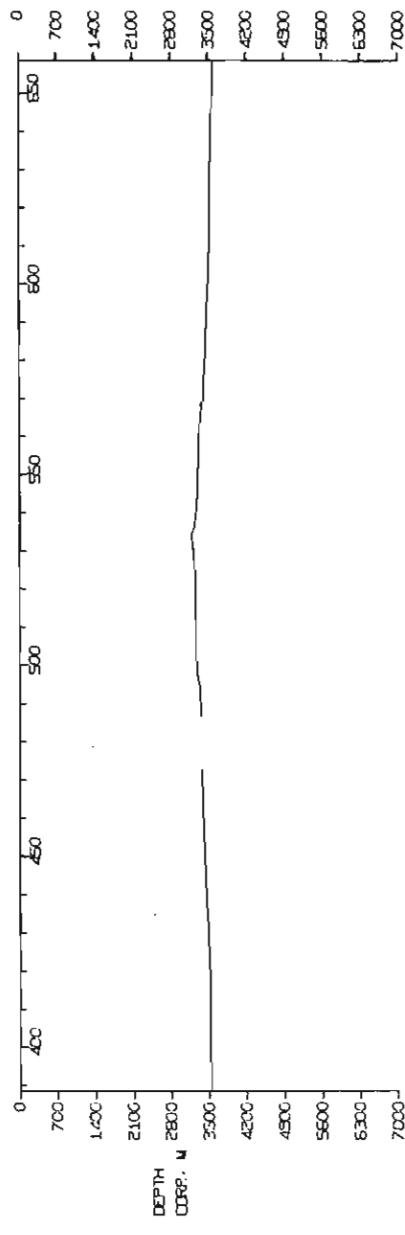
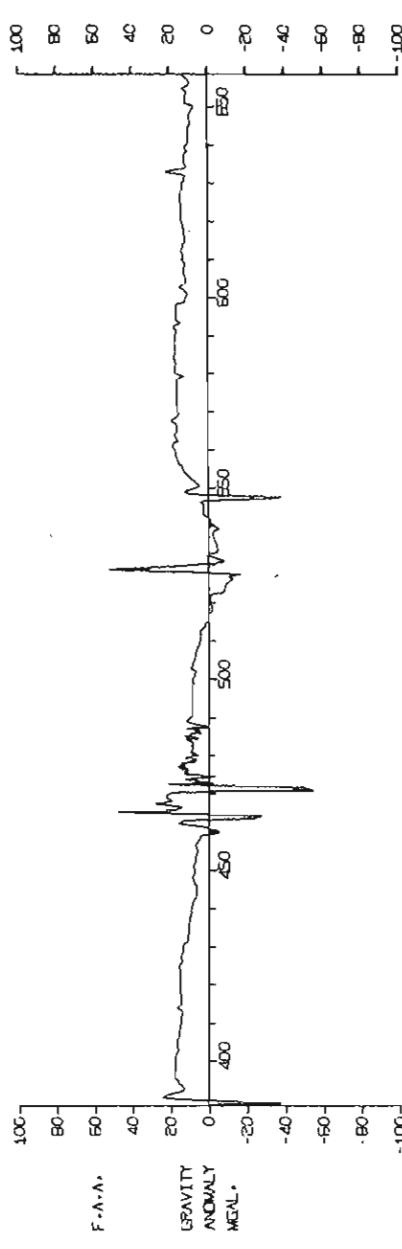
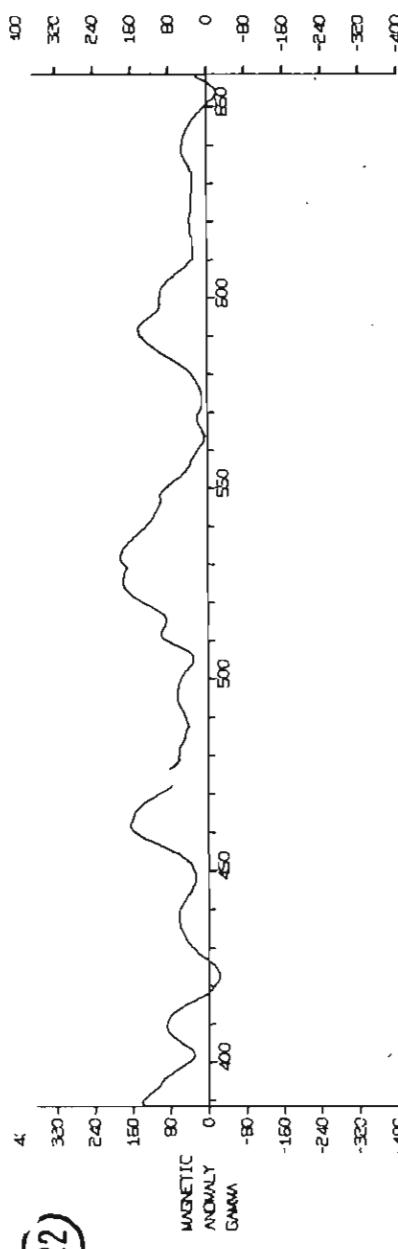


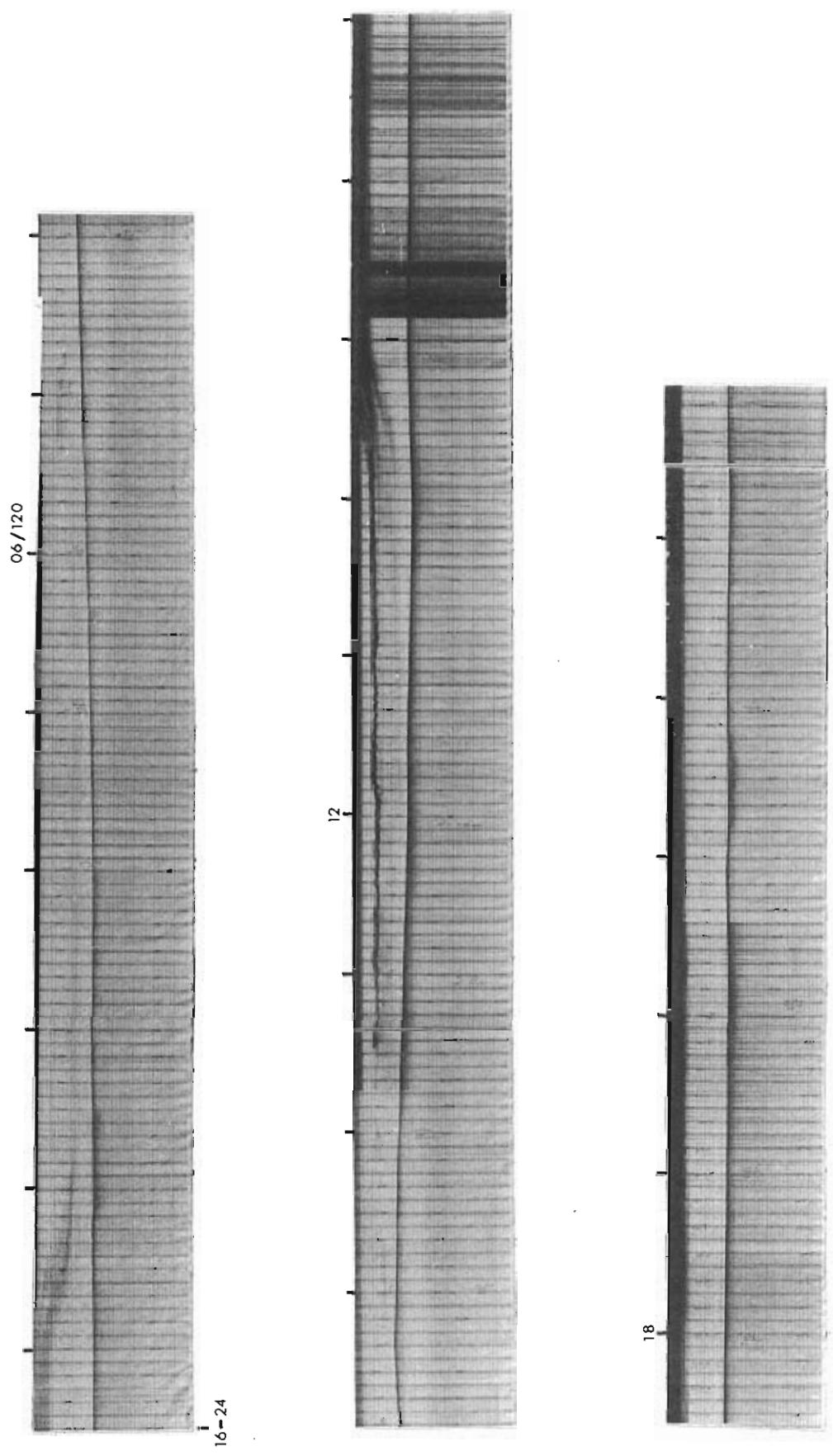


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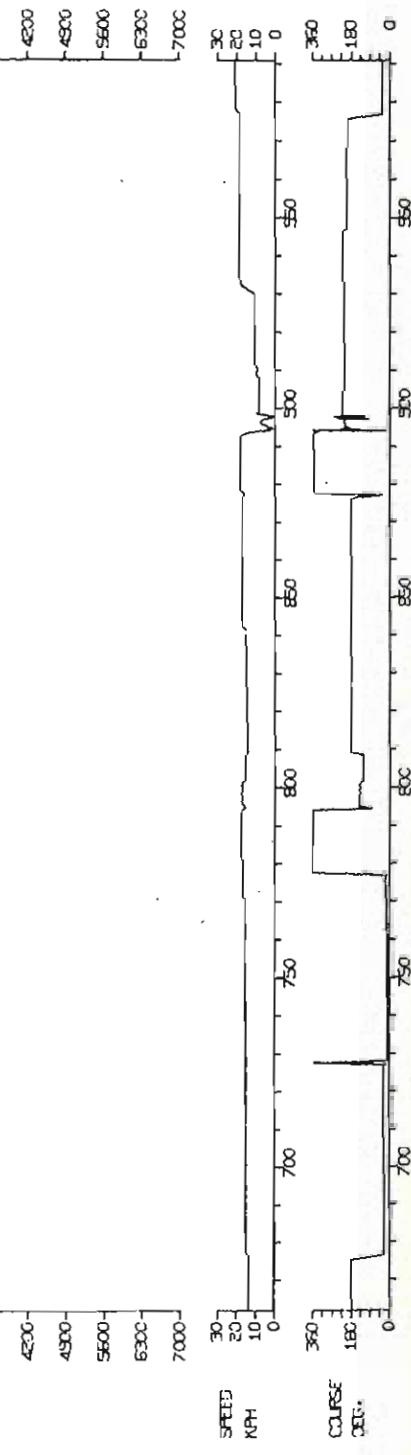
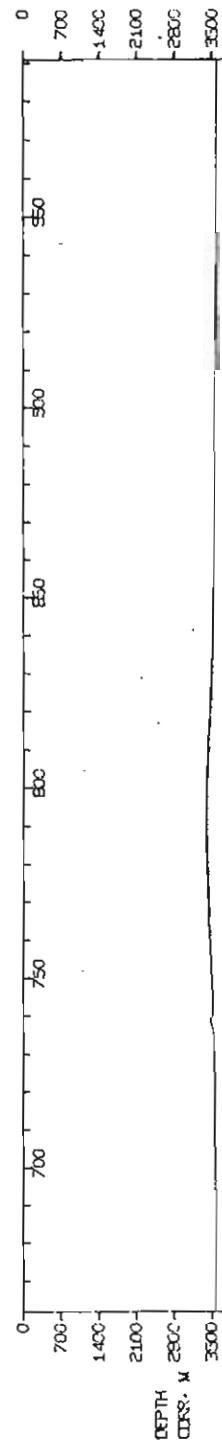
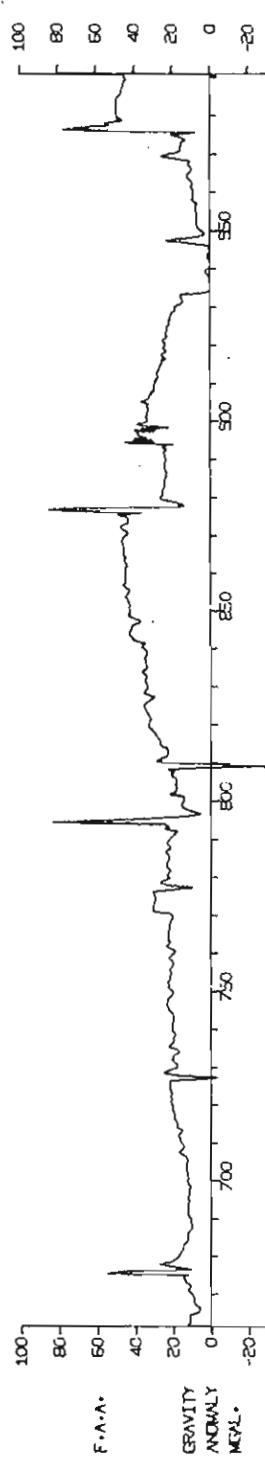
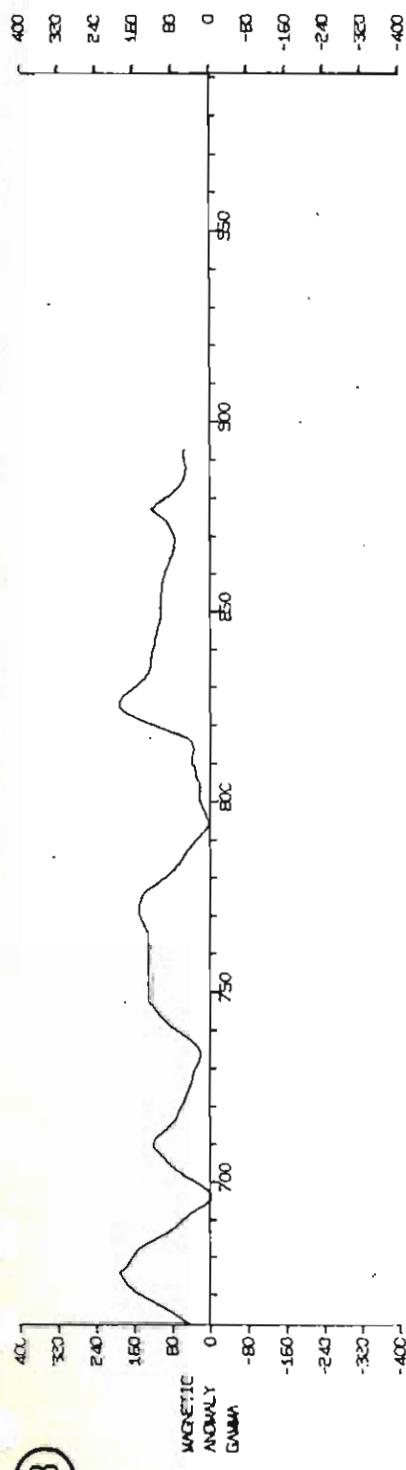


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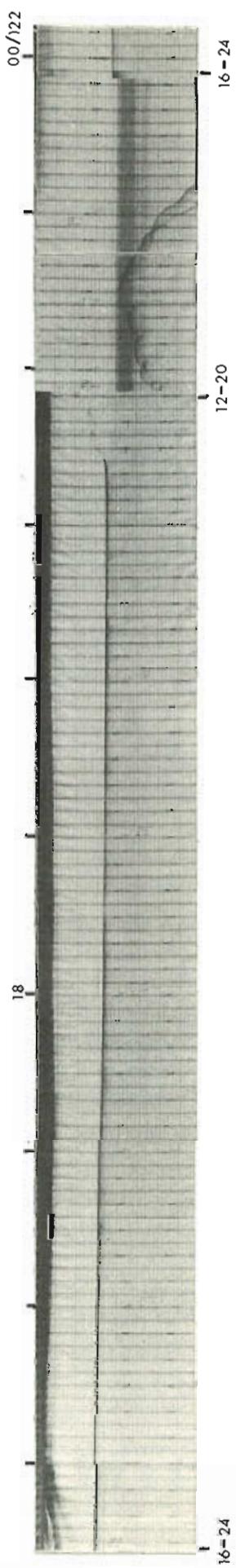
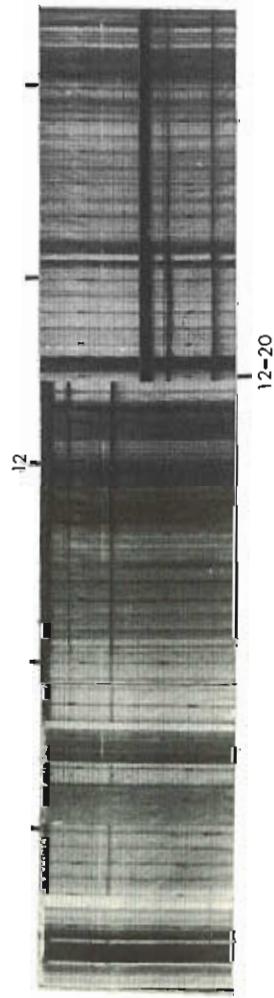
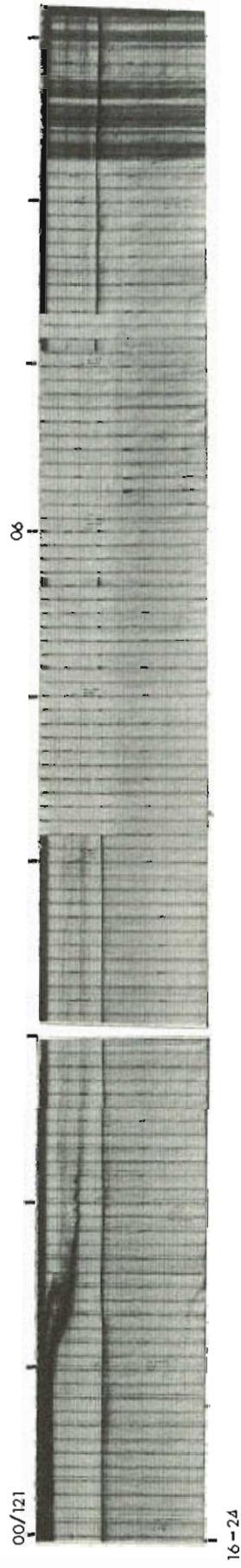




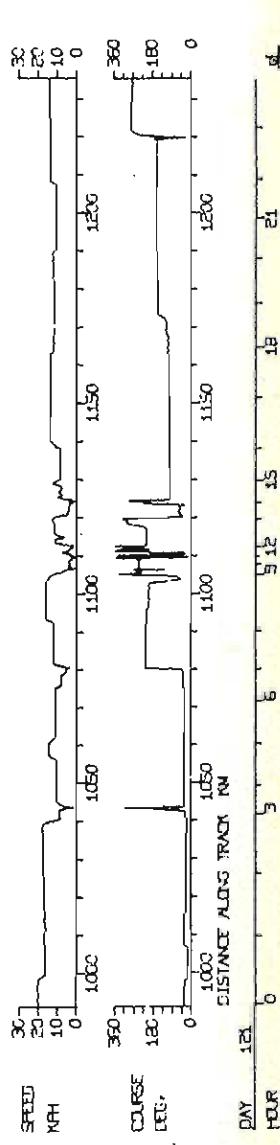
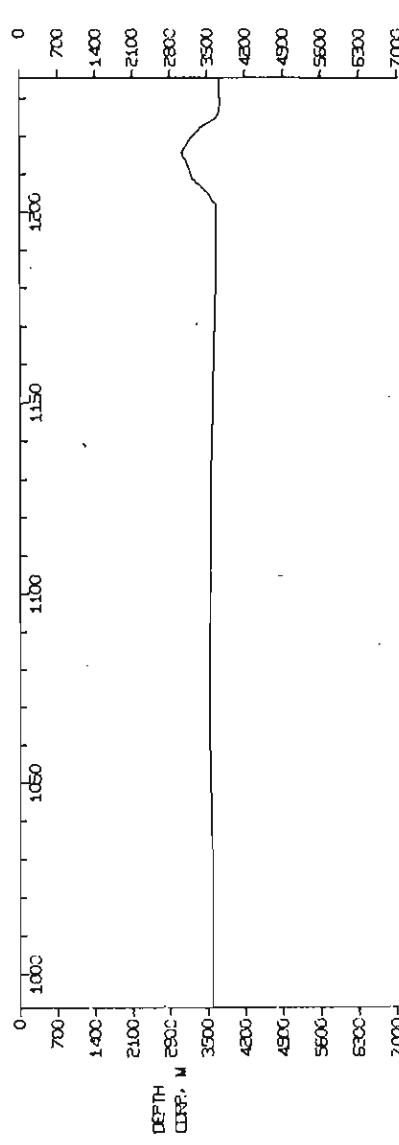
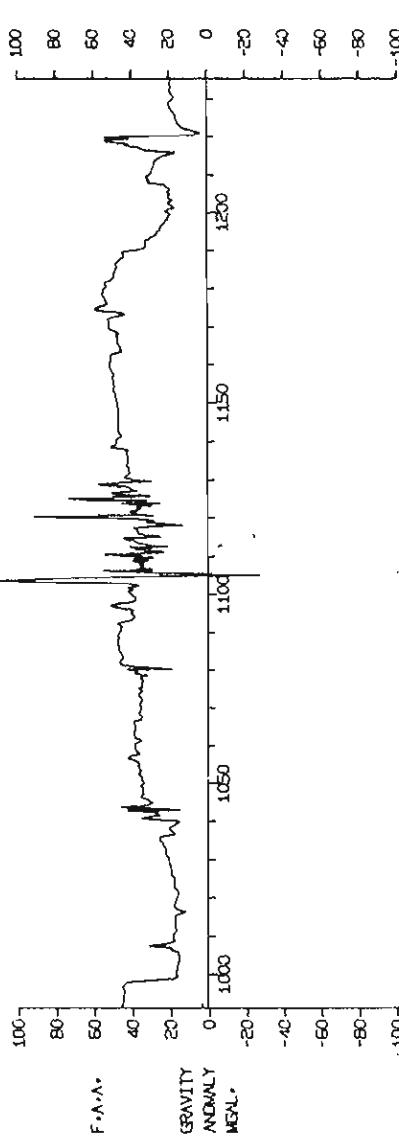
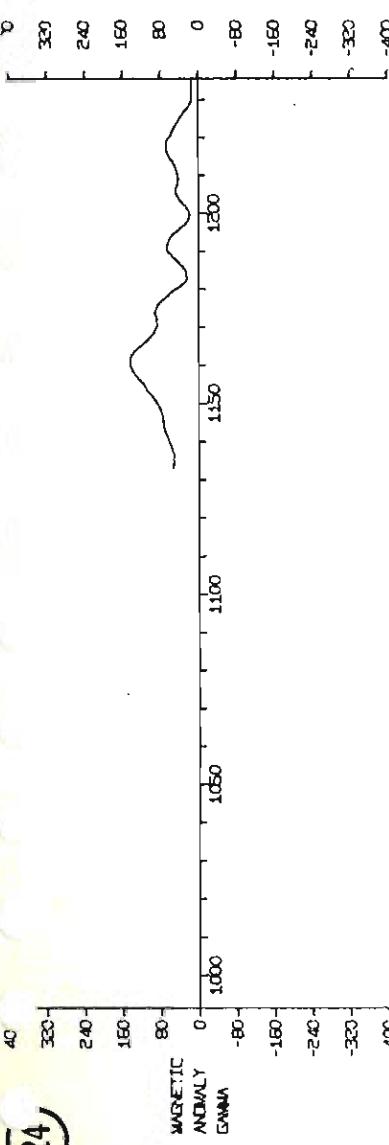
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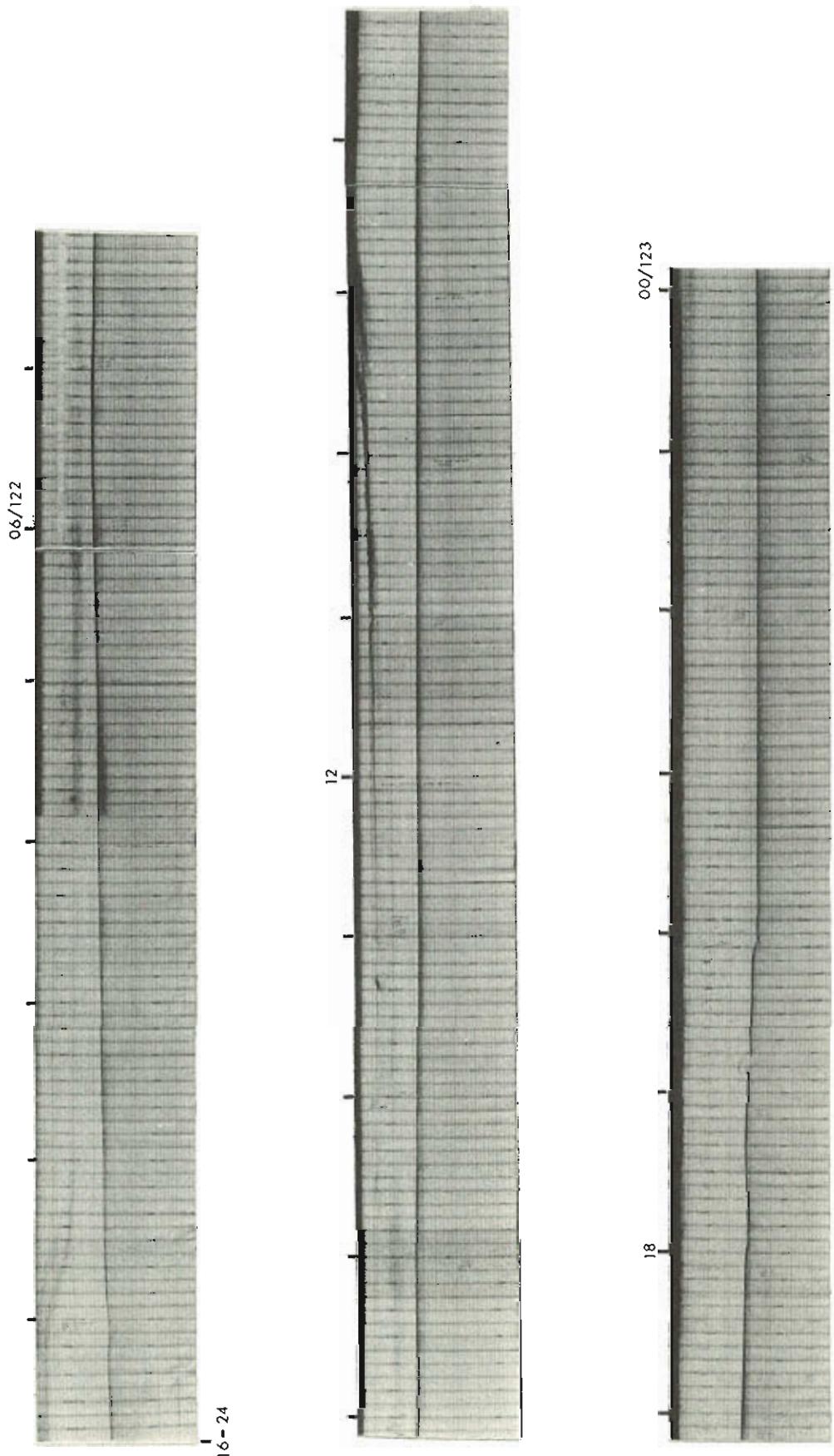
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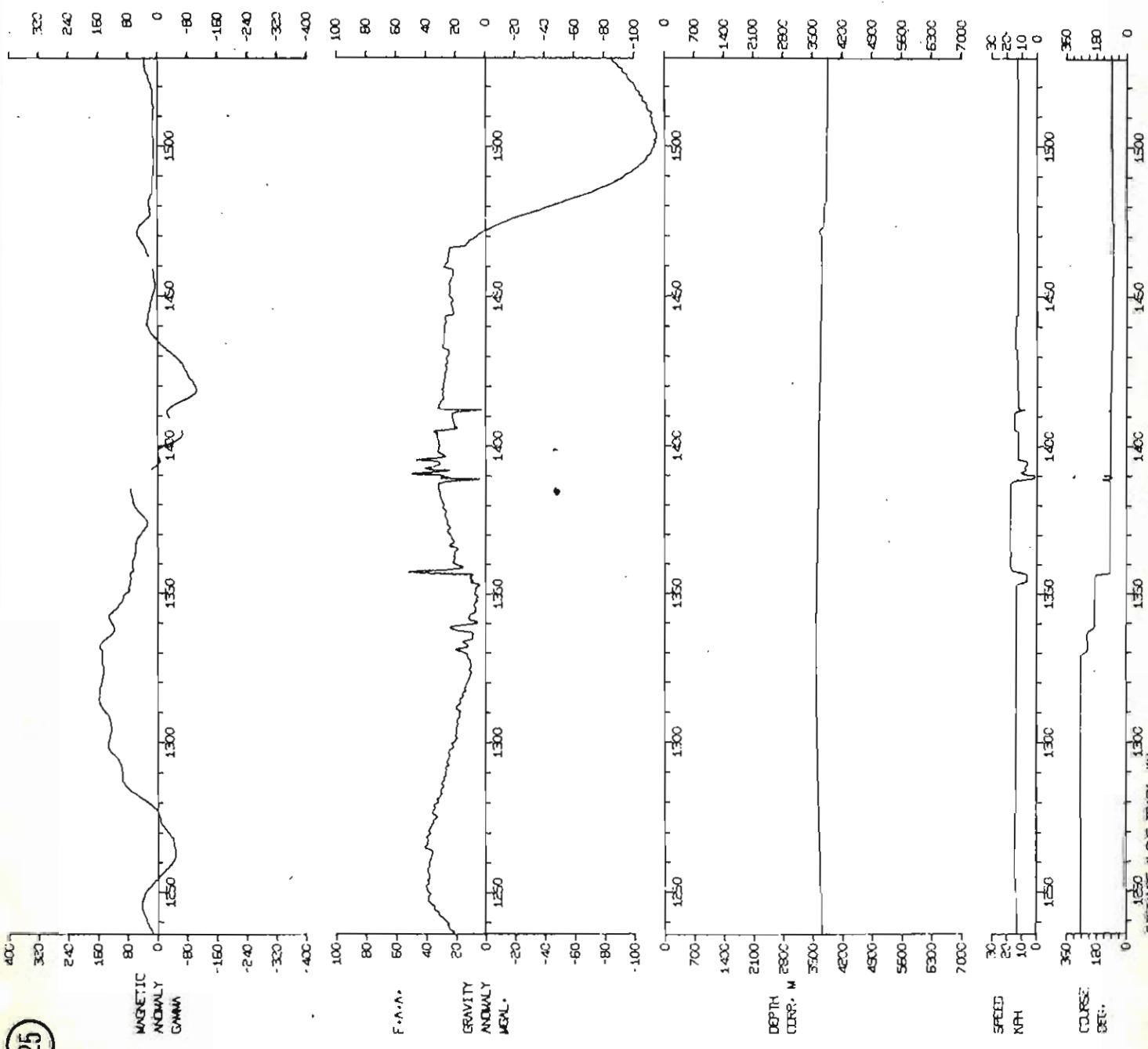
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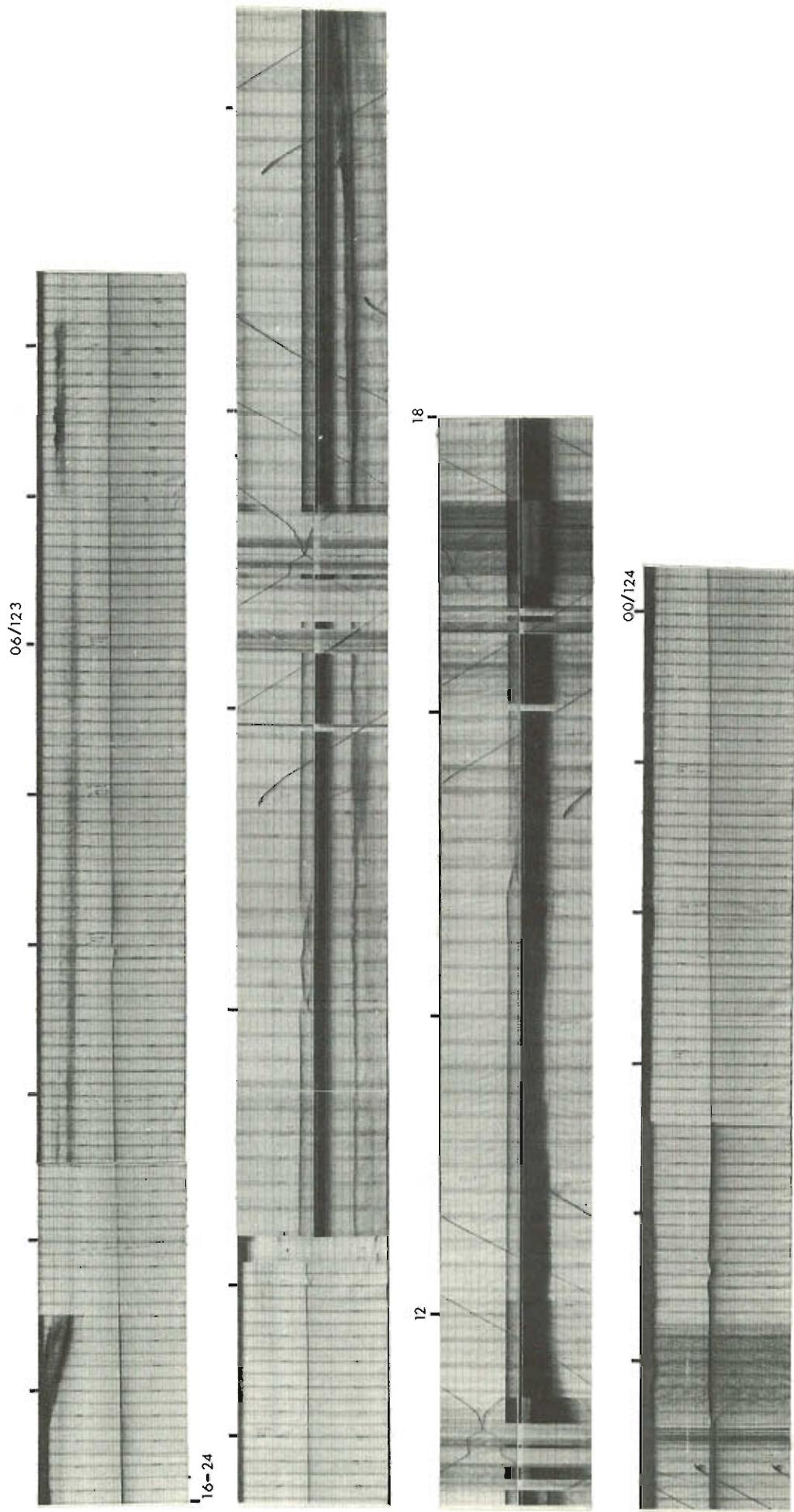


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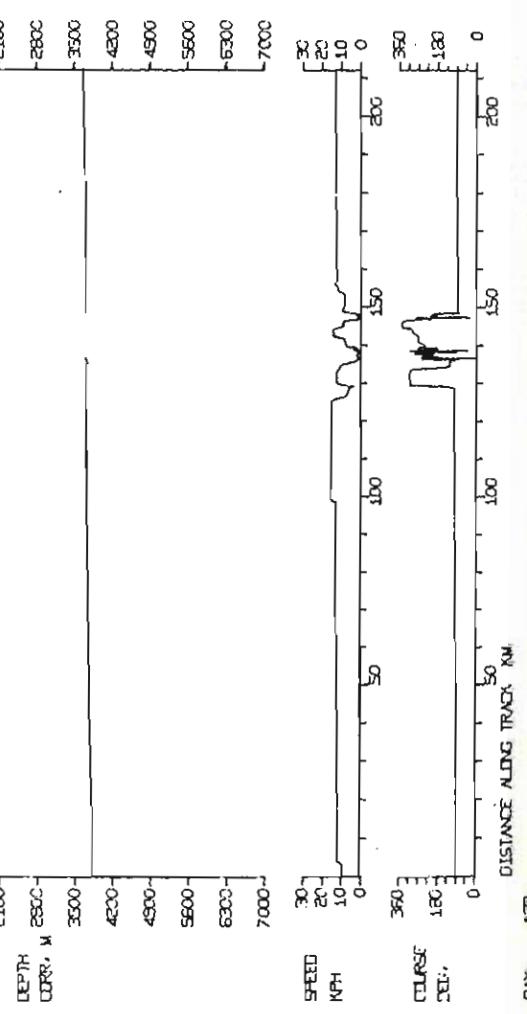
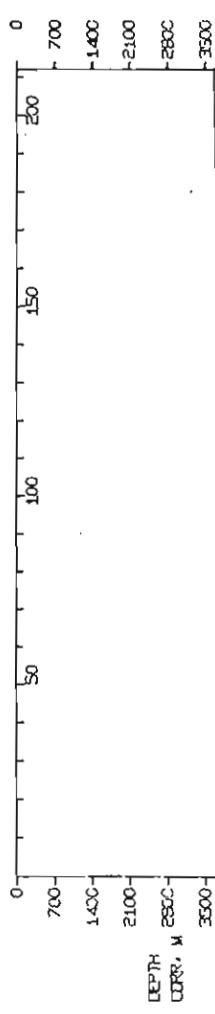
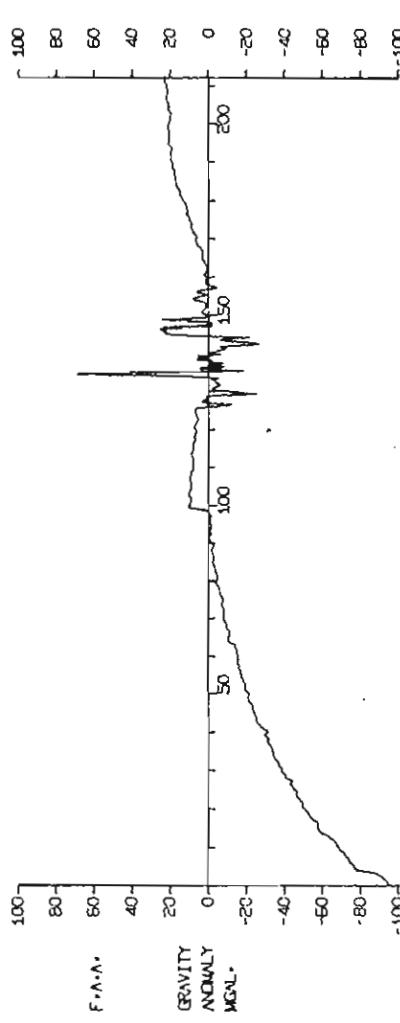
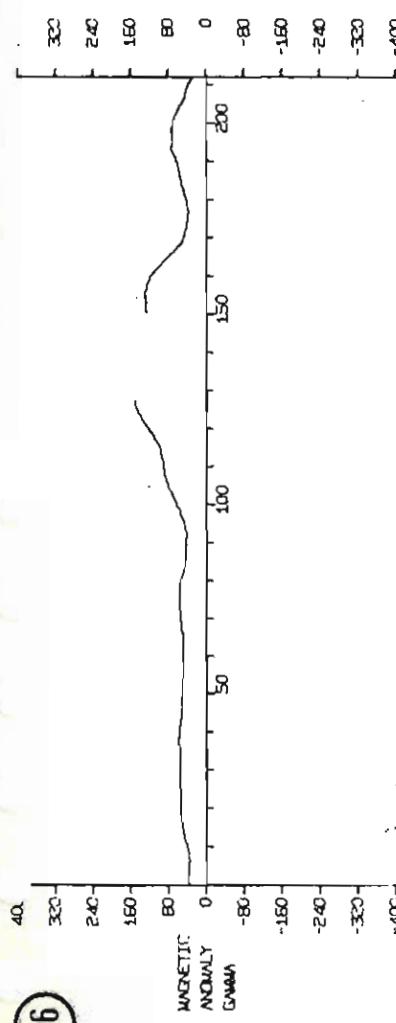


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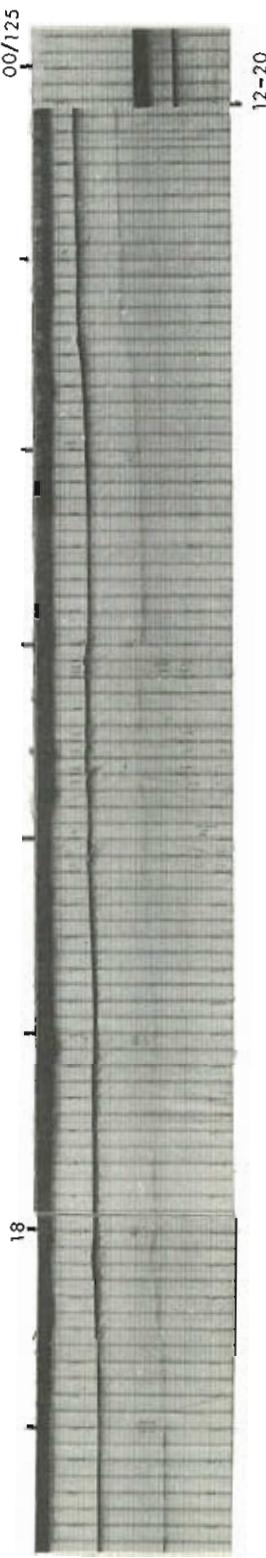
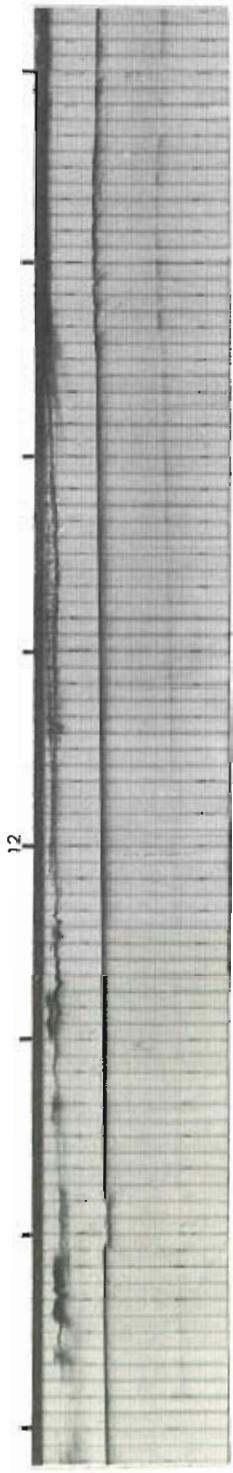
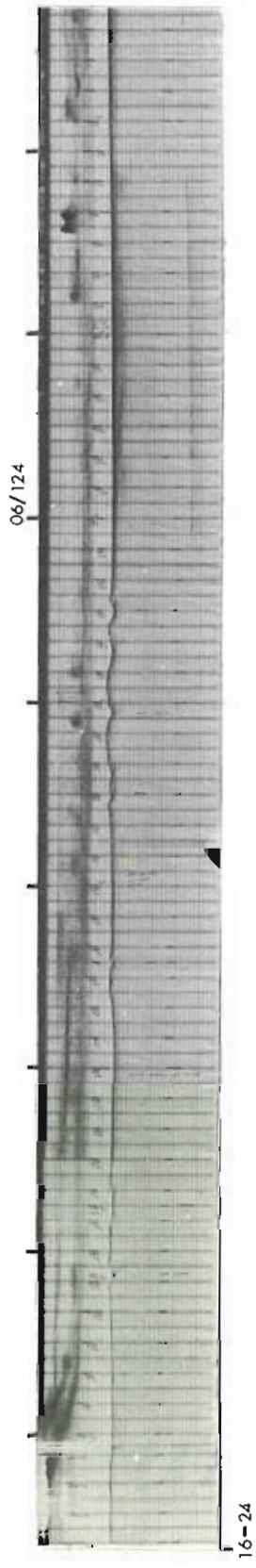




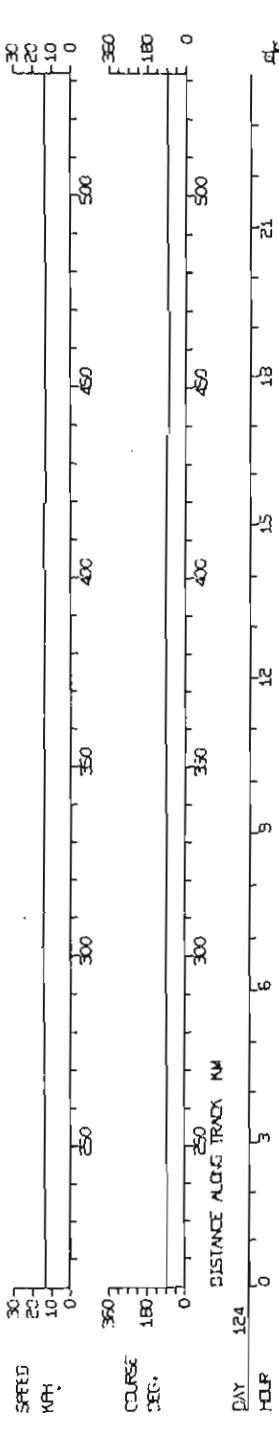
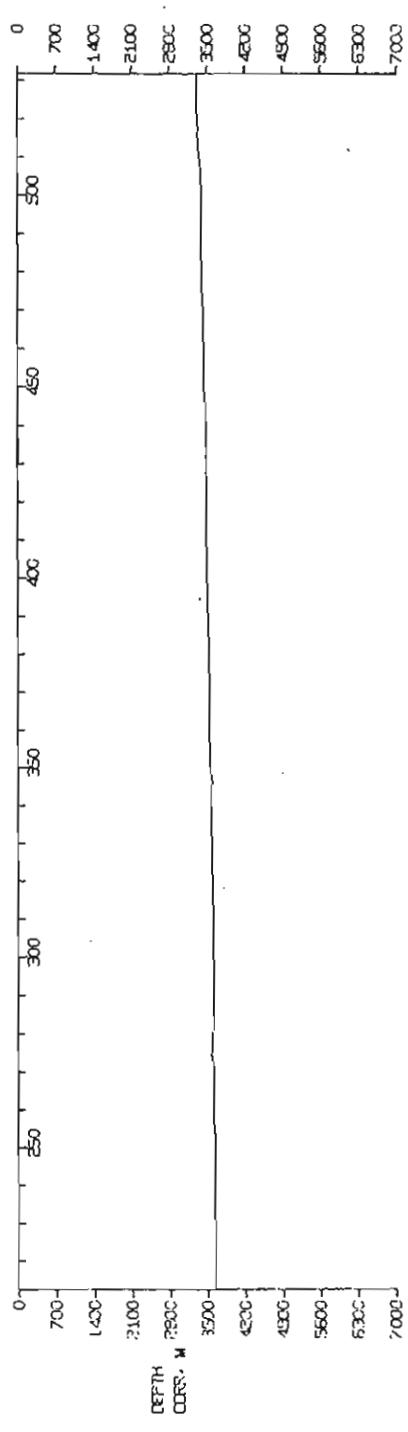
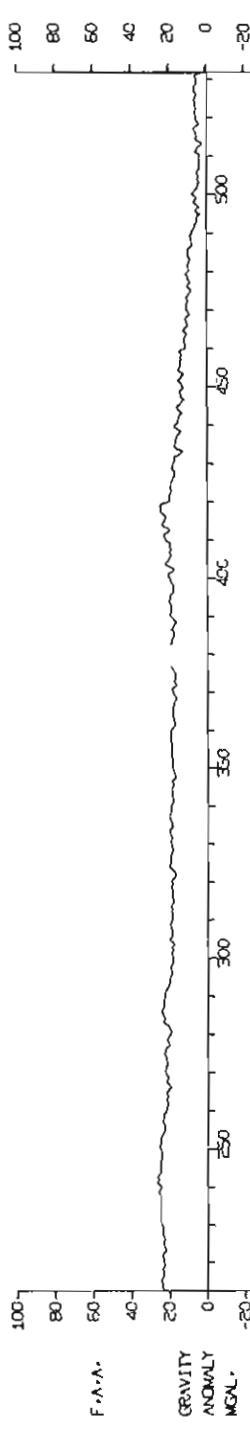
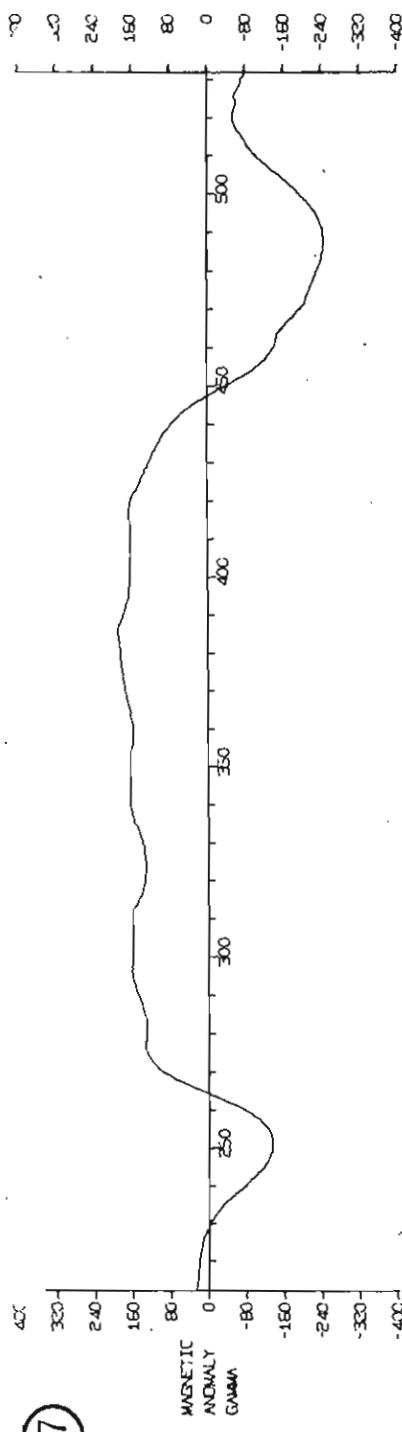
26

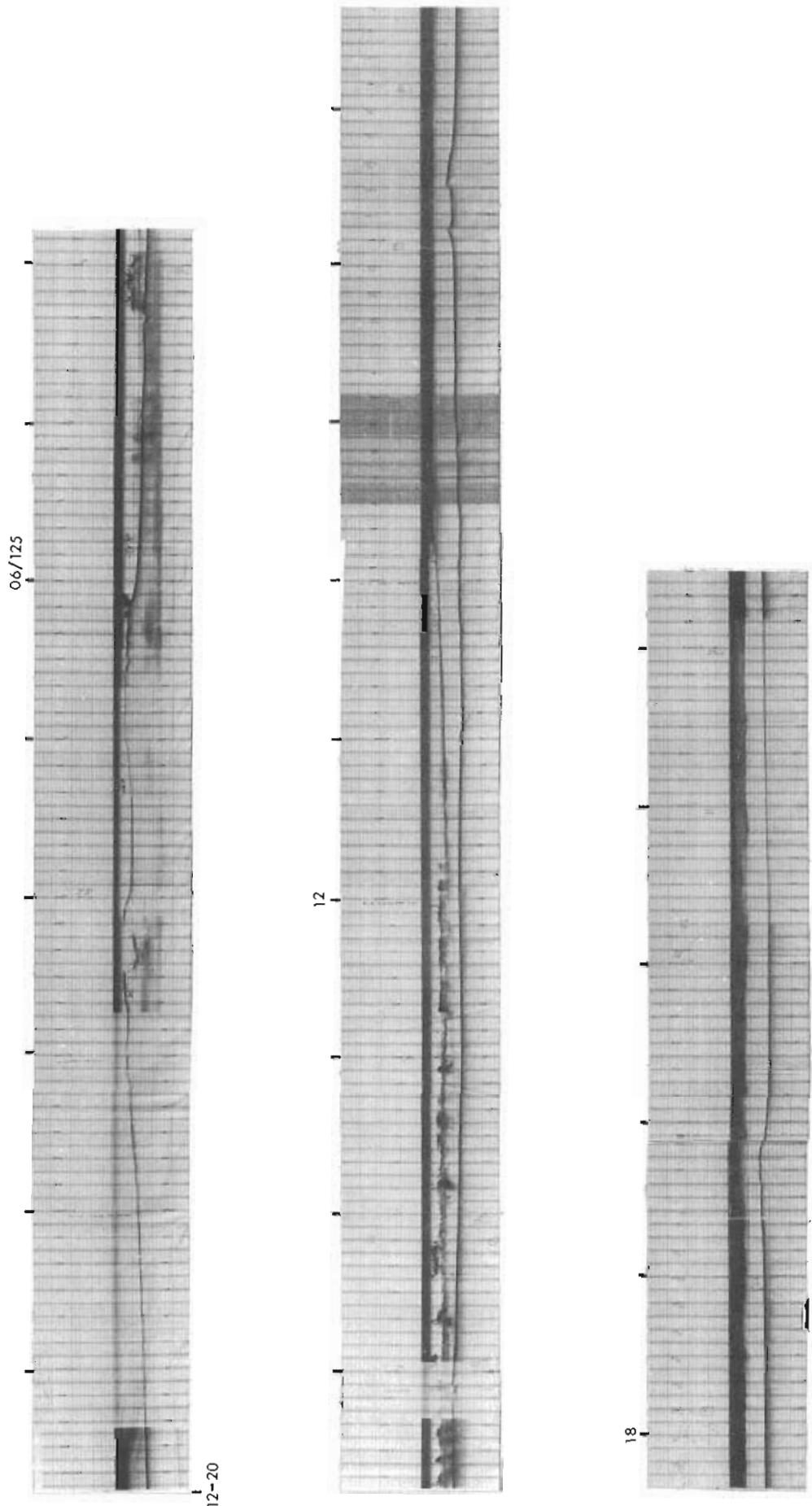


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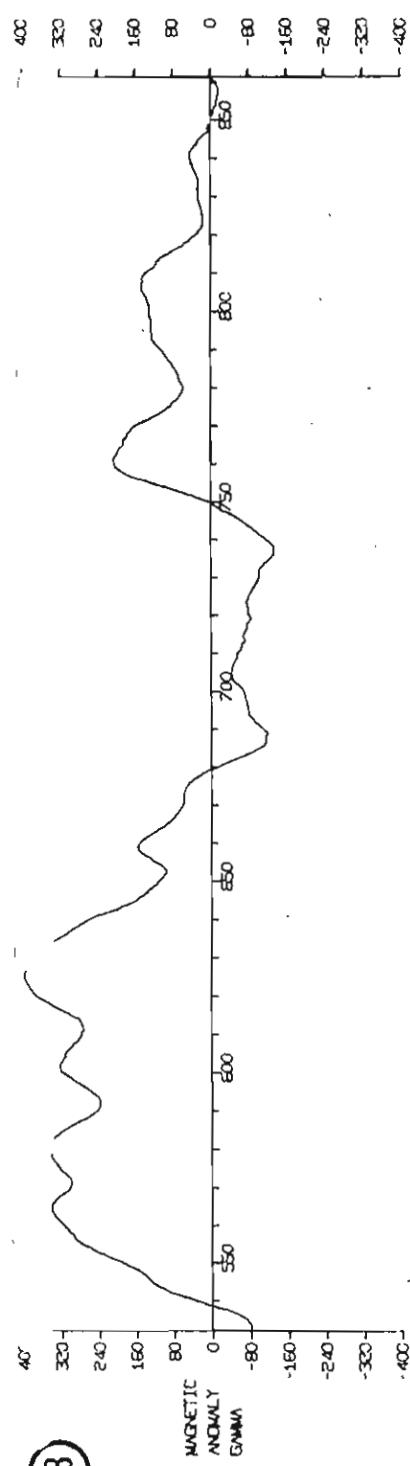


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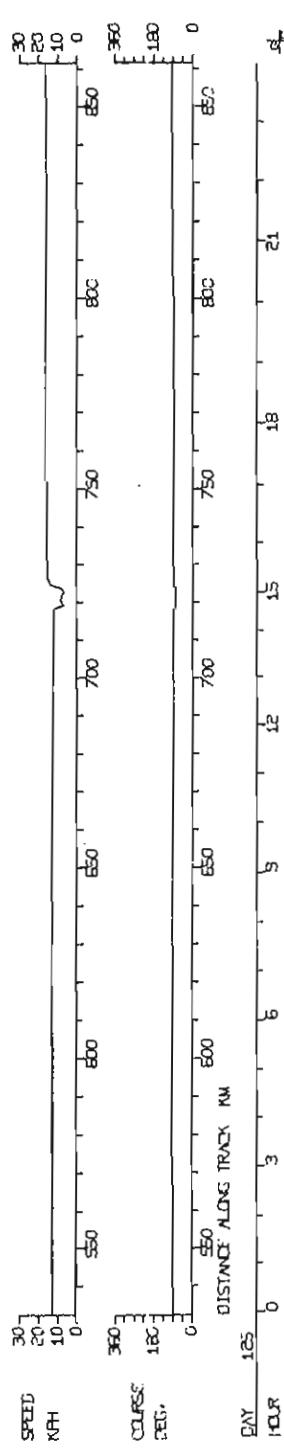
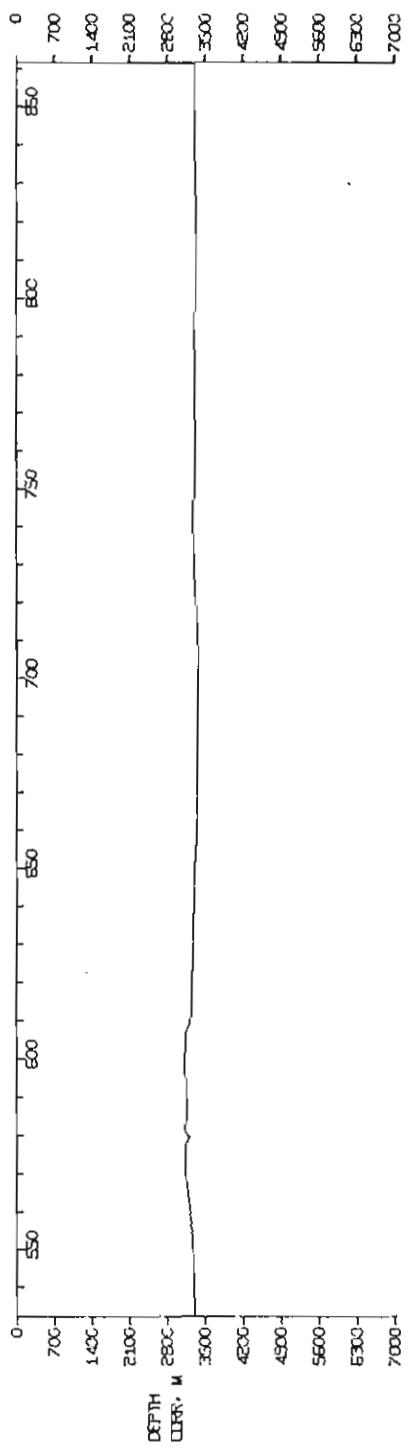
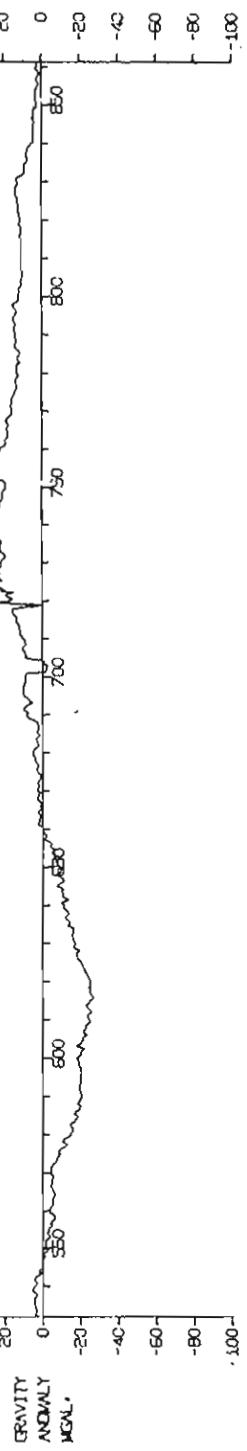




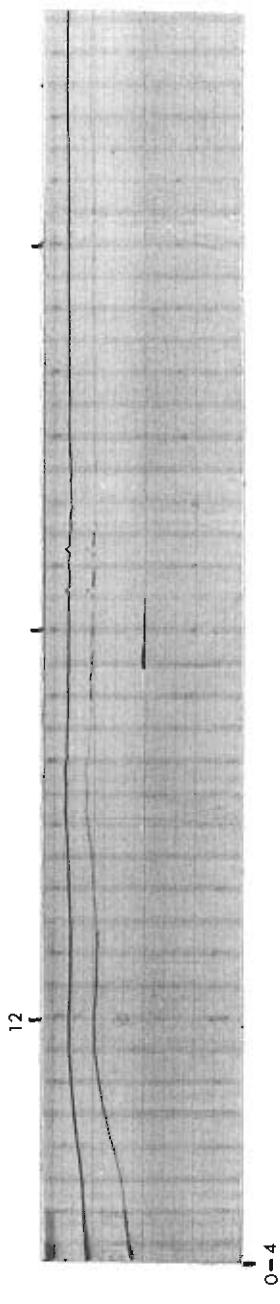
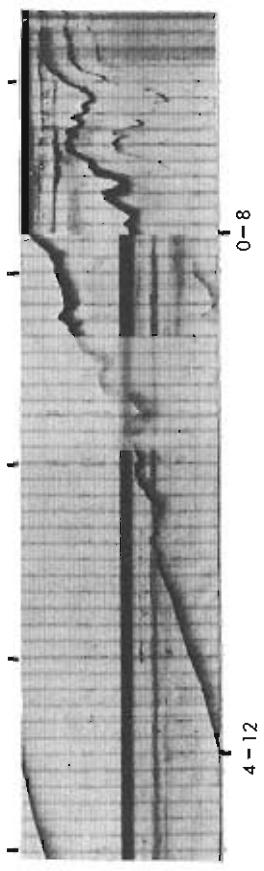
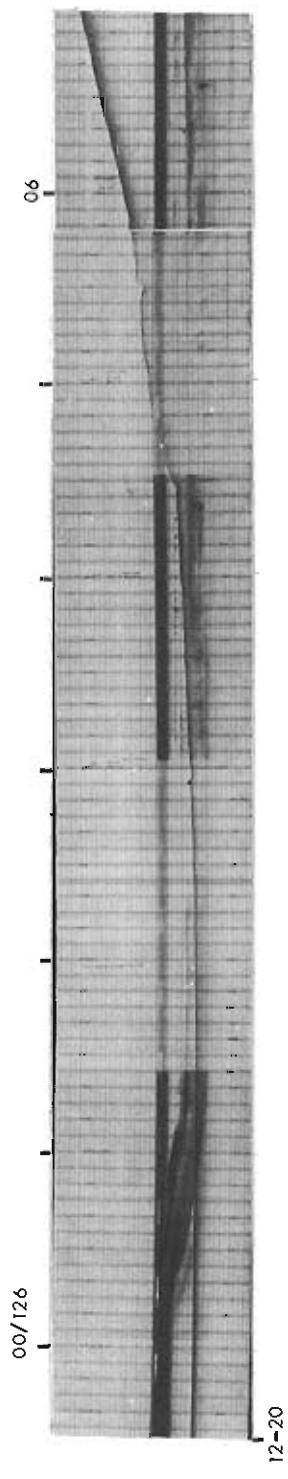
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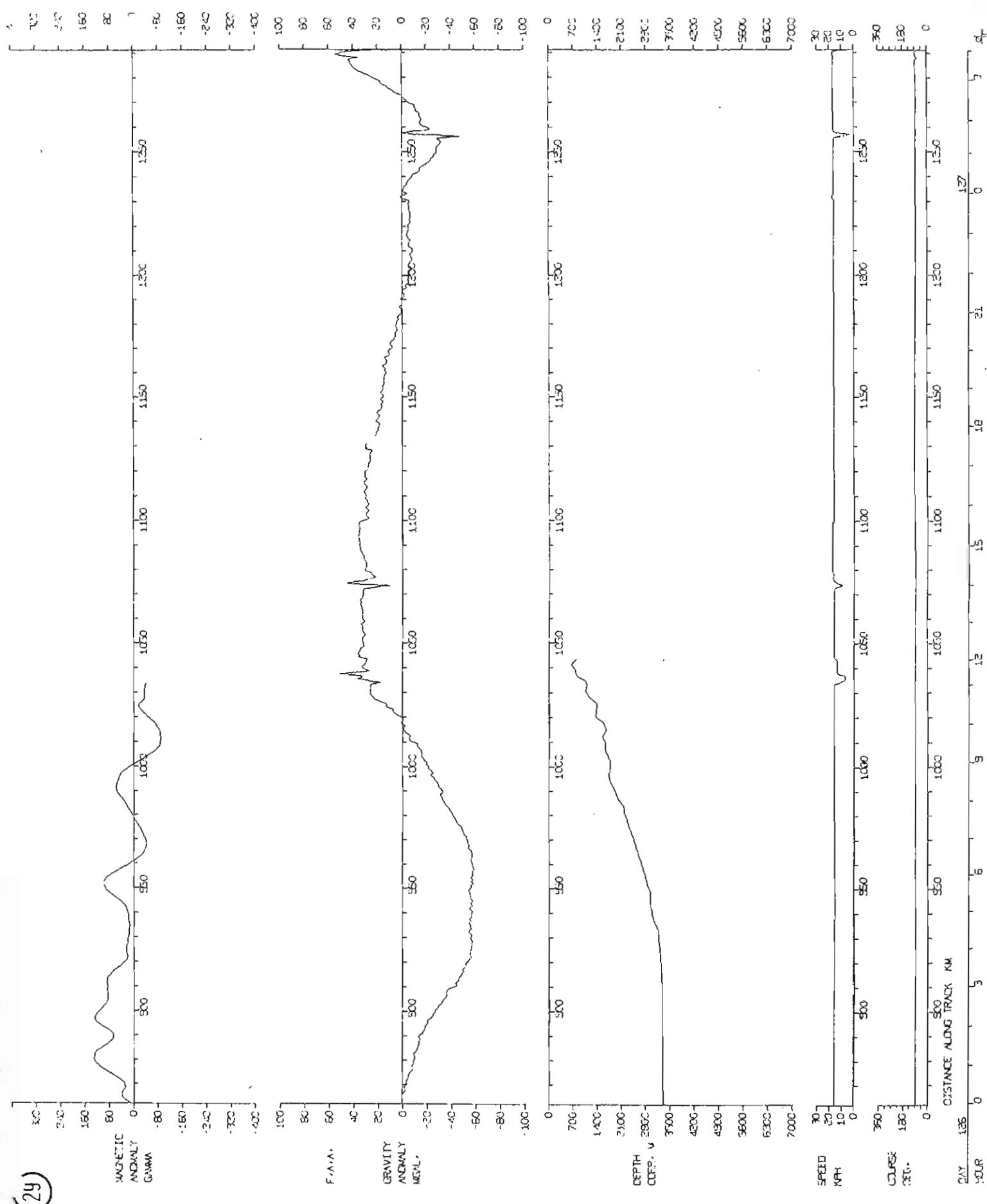
F.A.G.



(29)

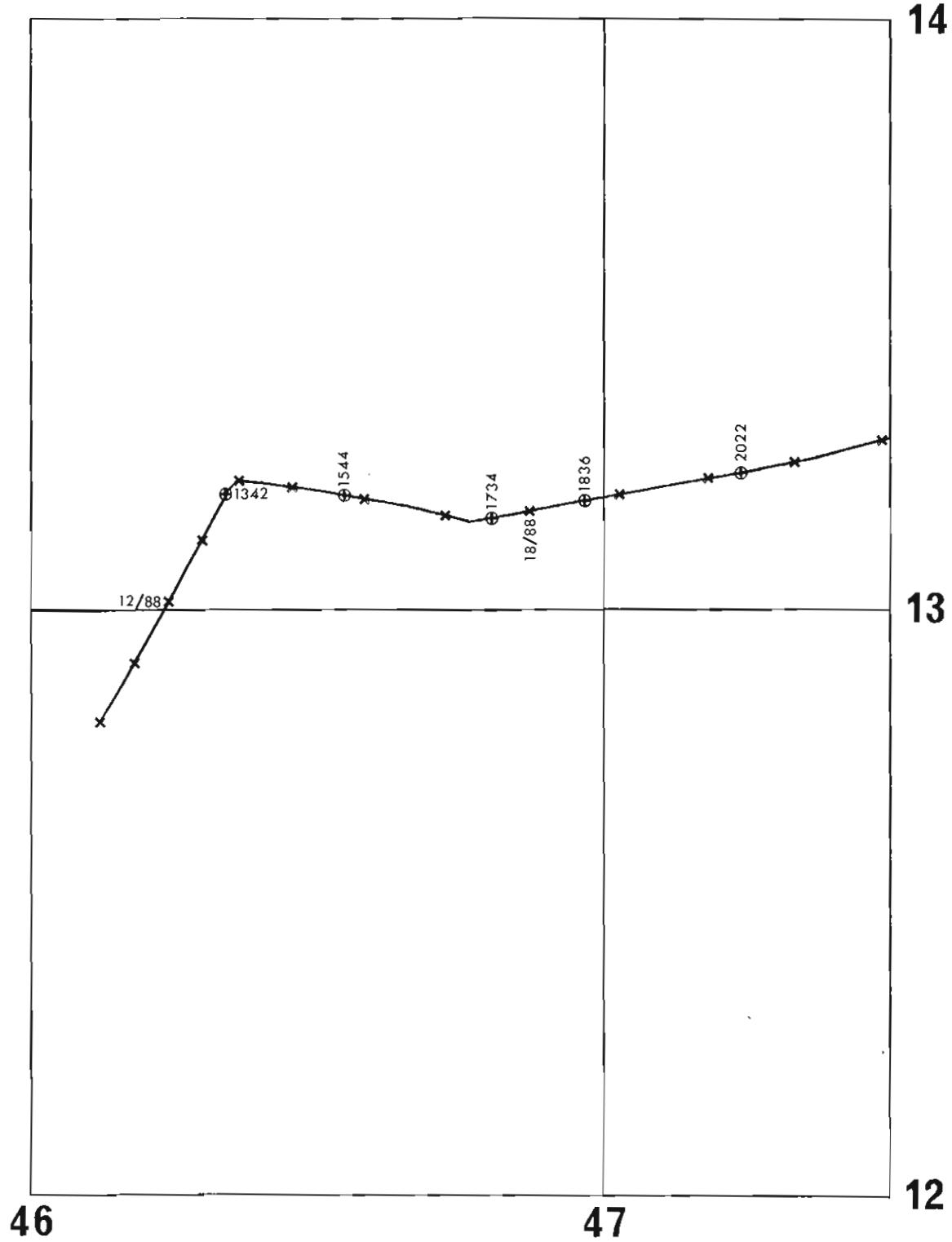


(24)

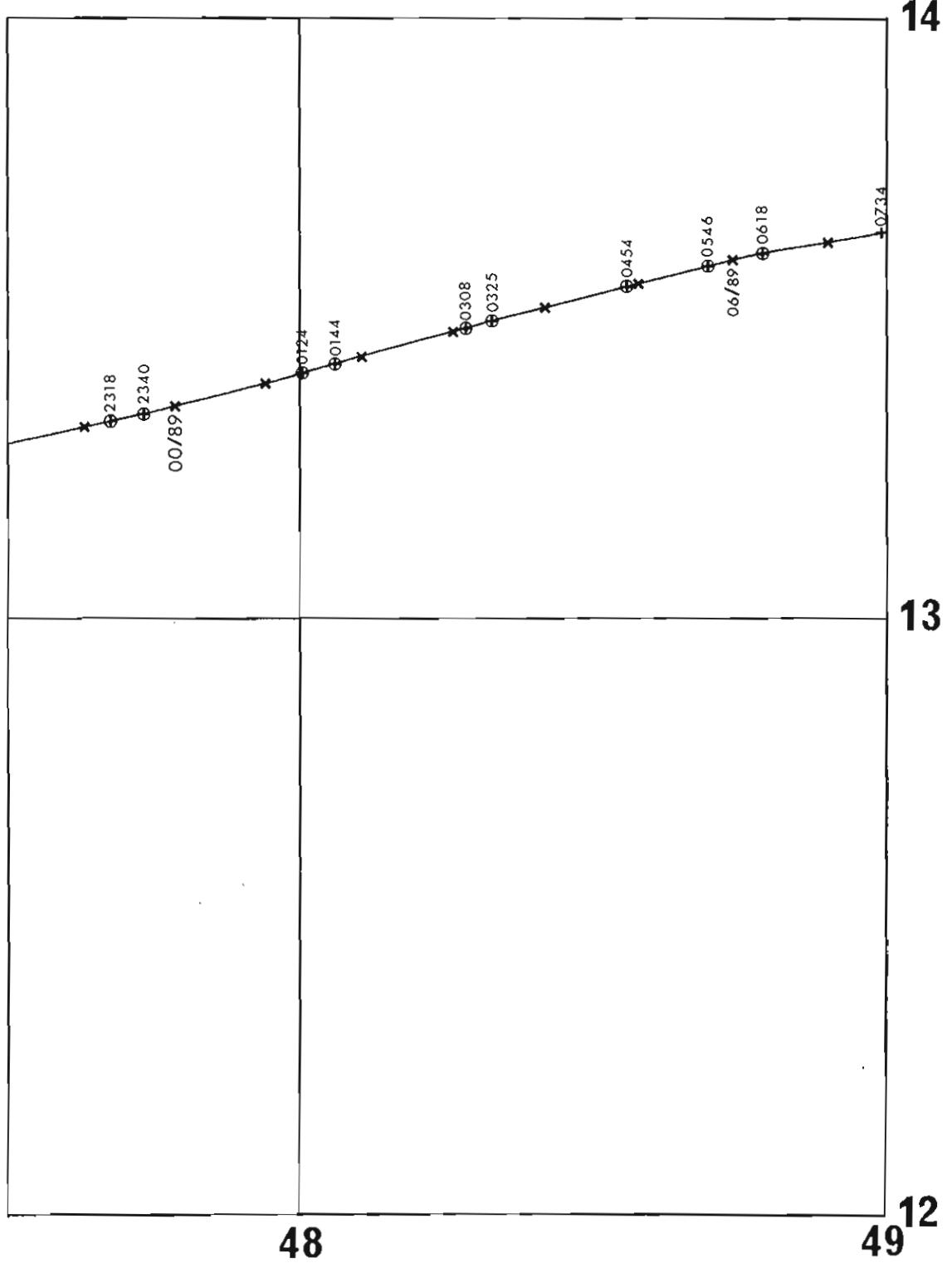


SECTION B

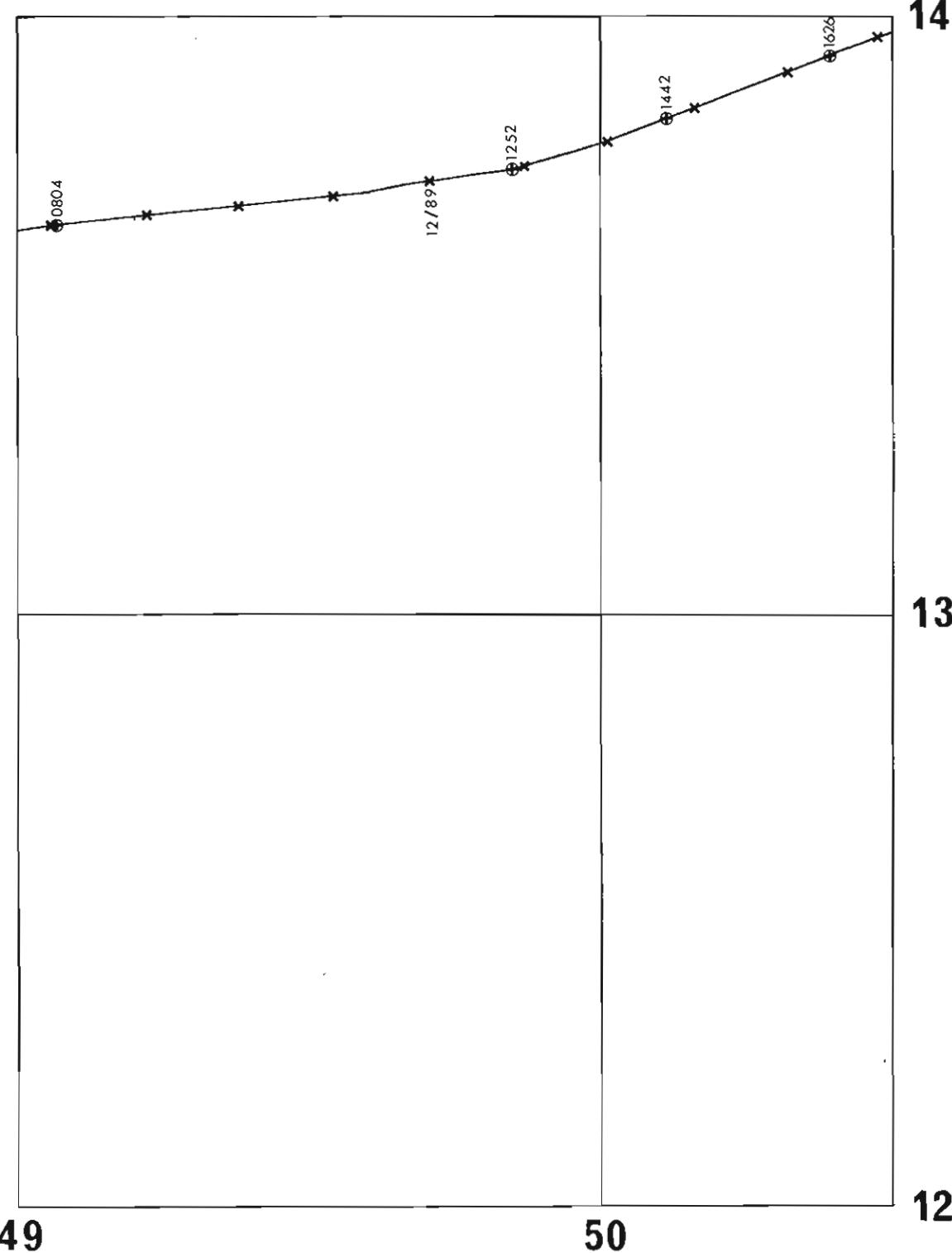
1:1,000,000 Track Charts



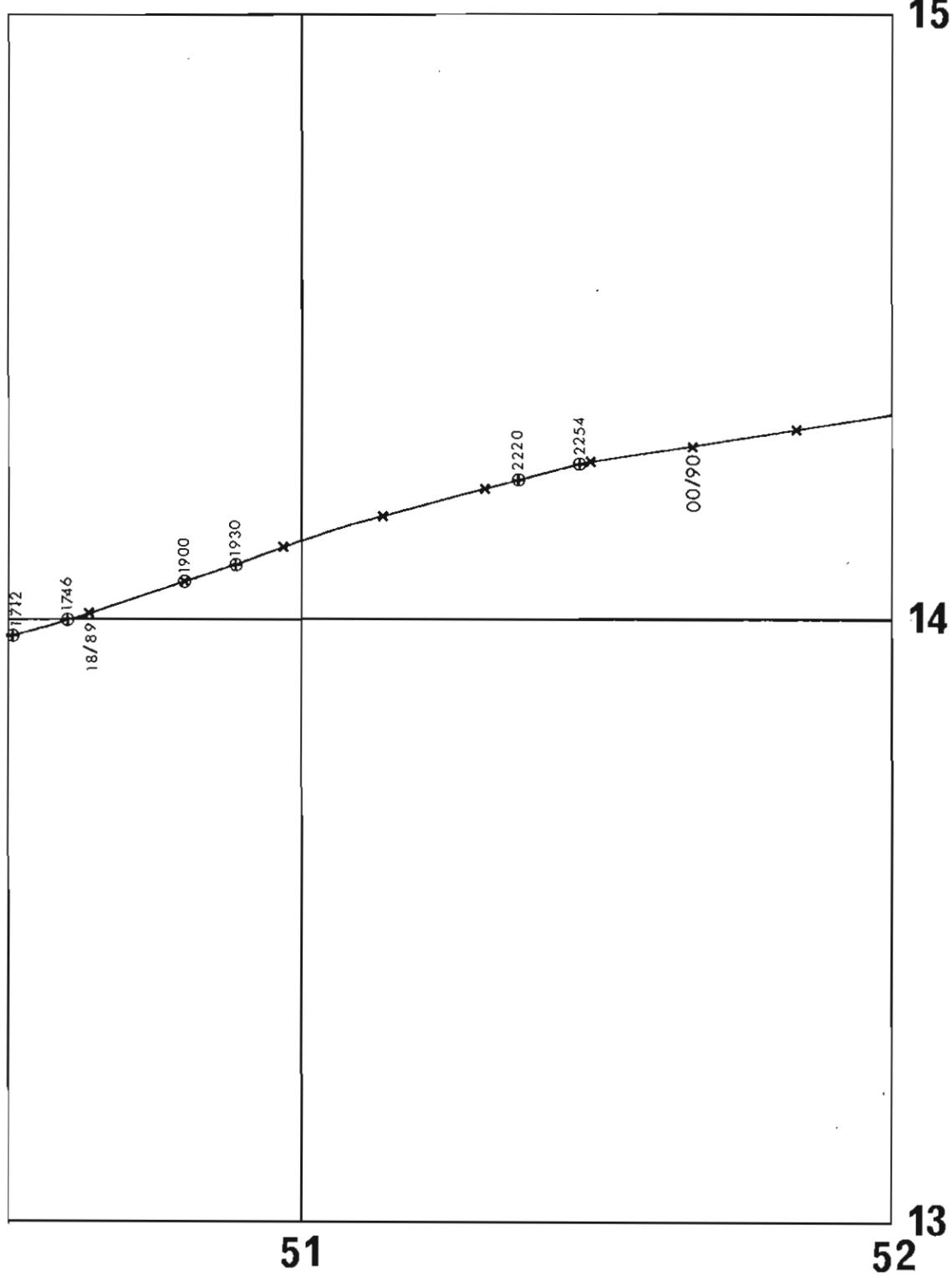
1 - 1



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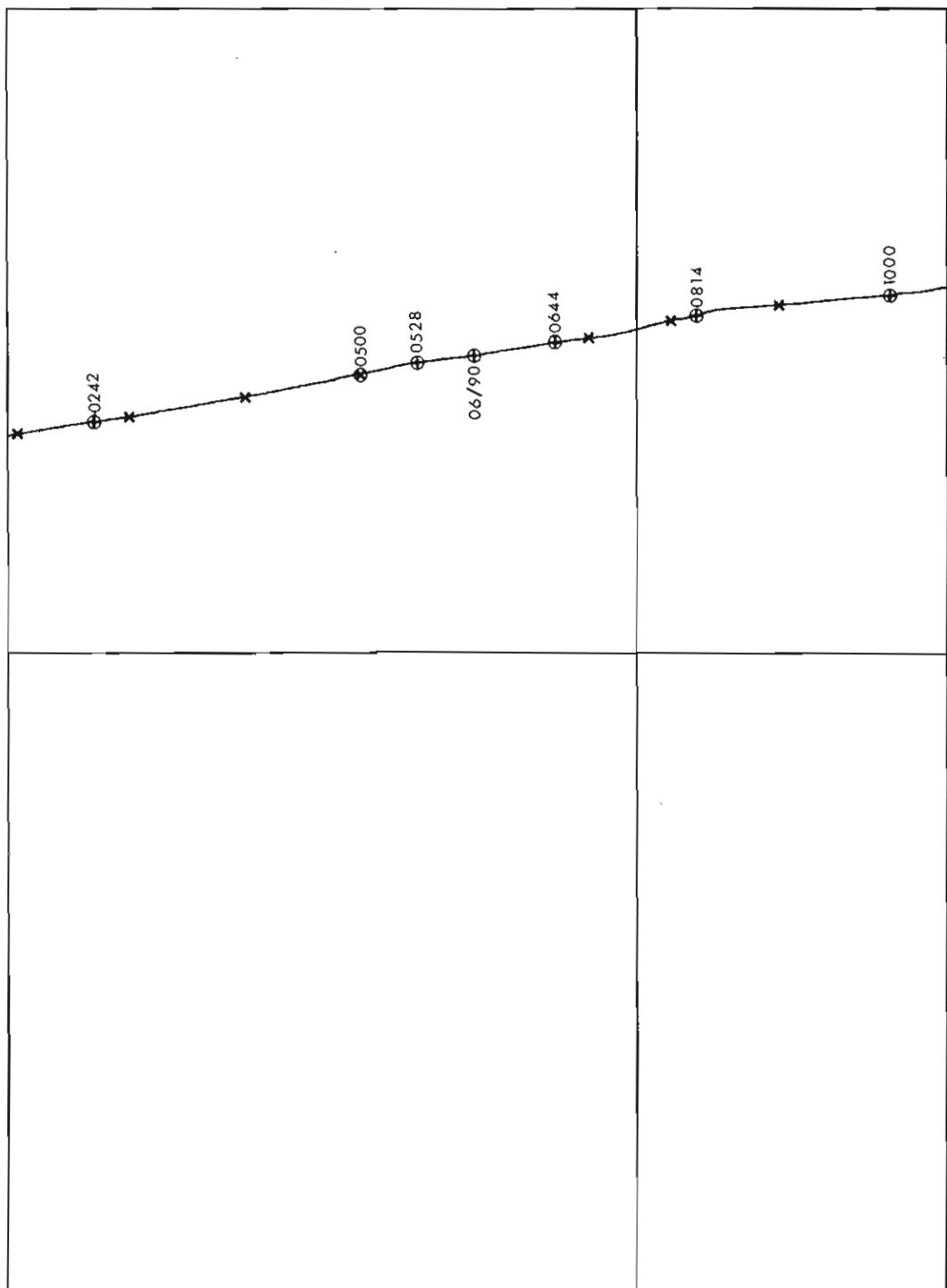
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1624

1708

18/90

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1 - 6

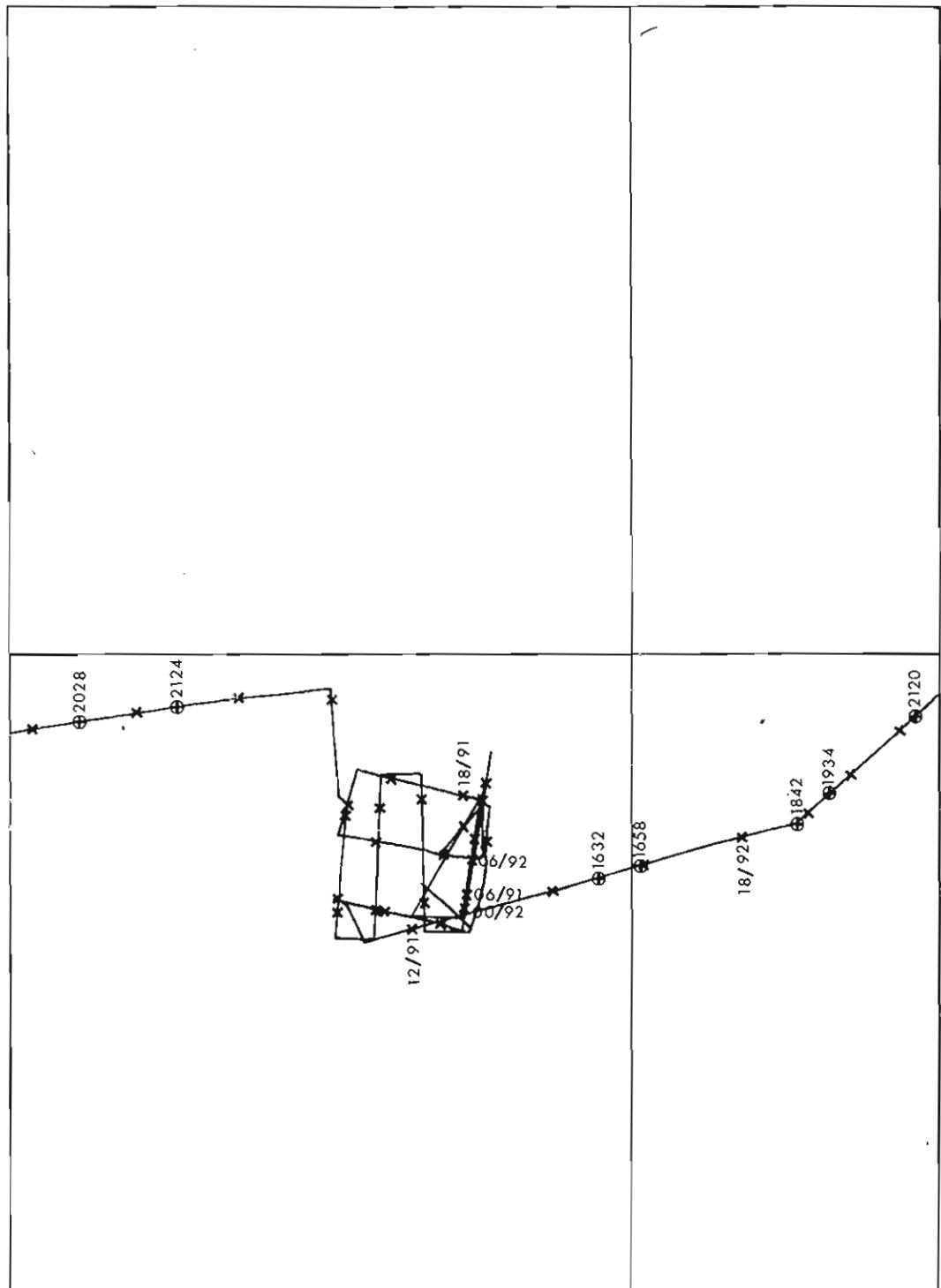
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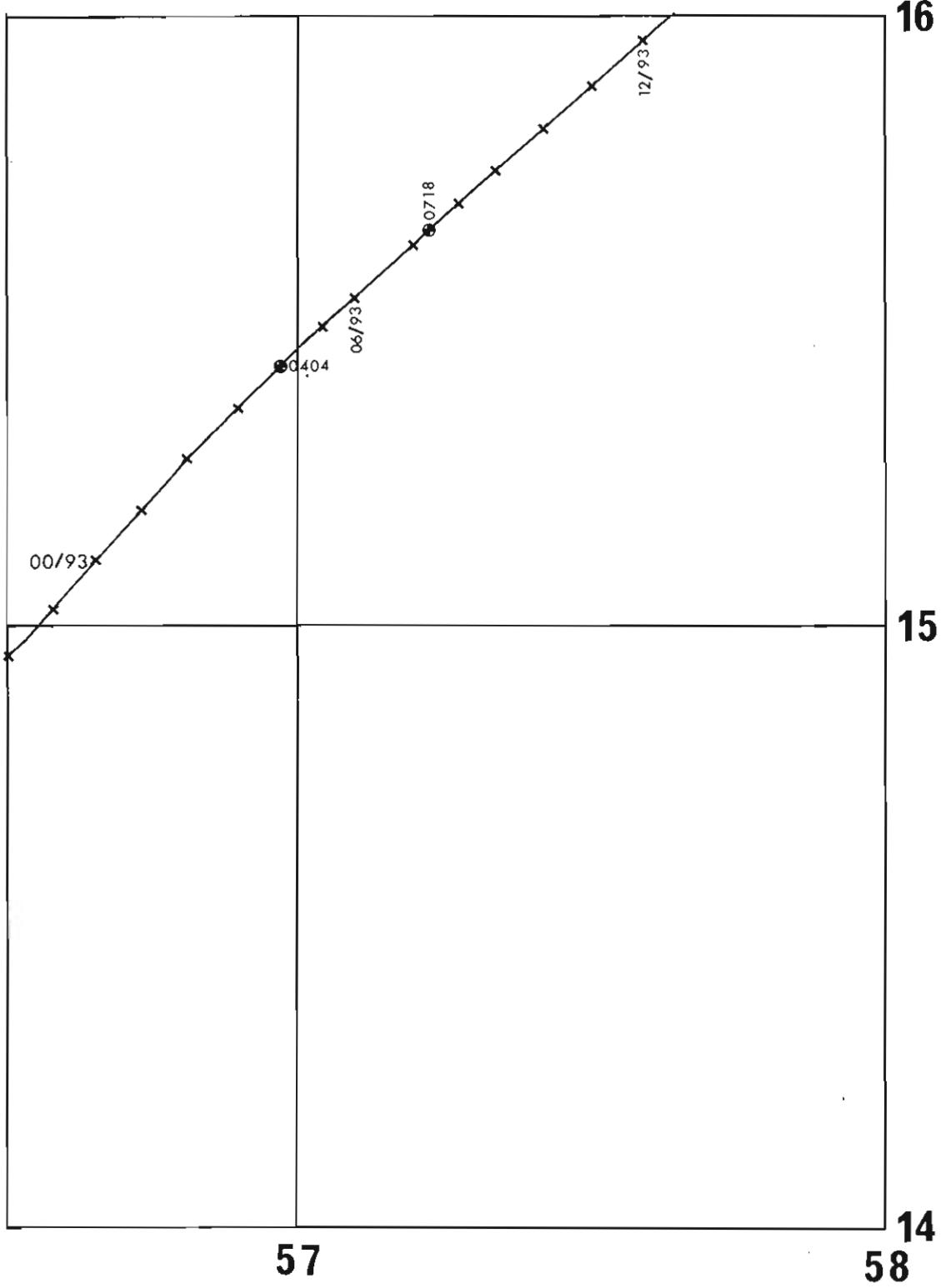
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1-7



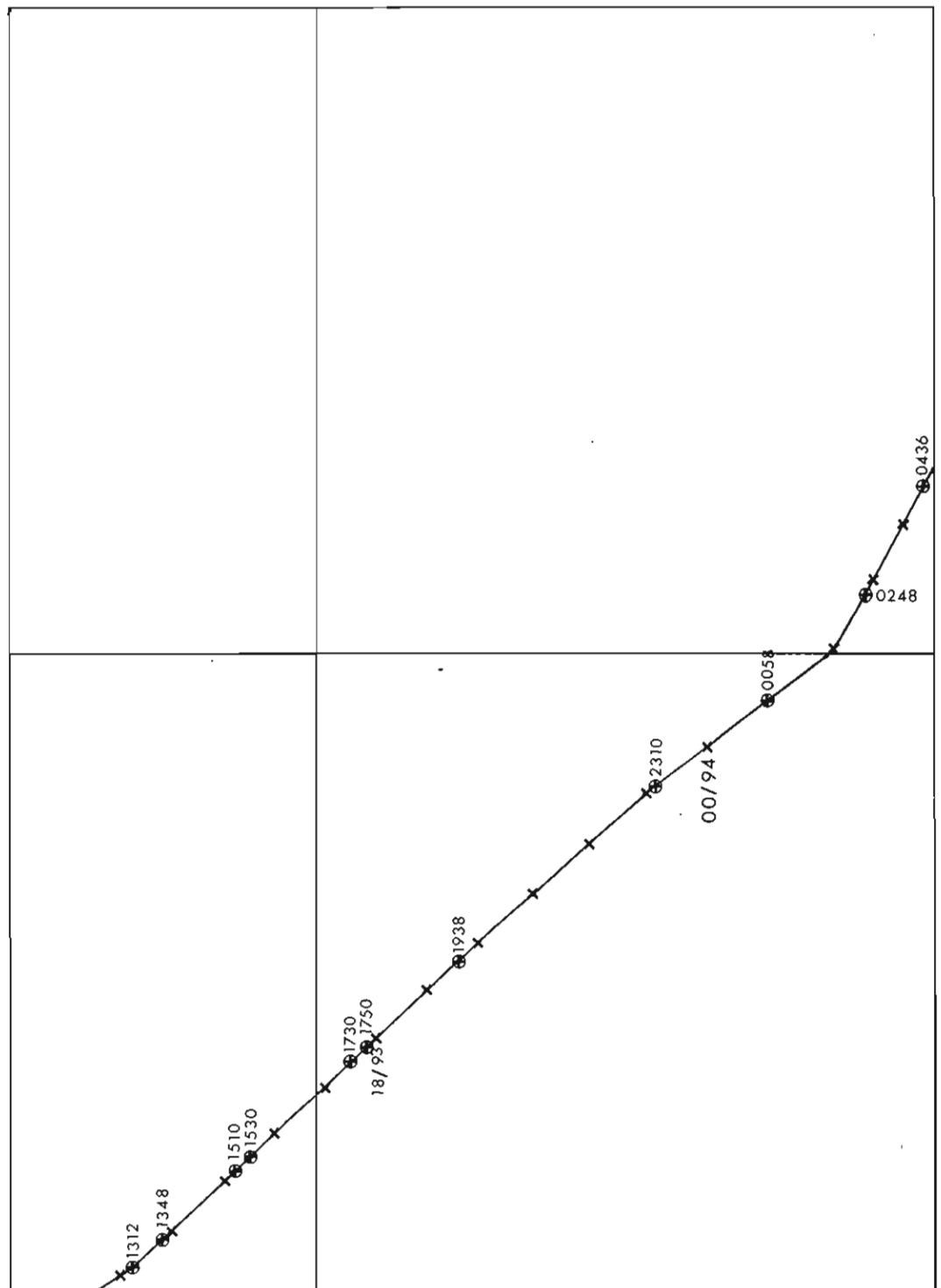
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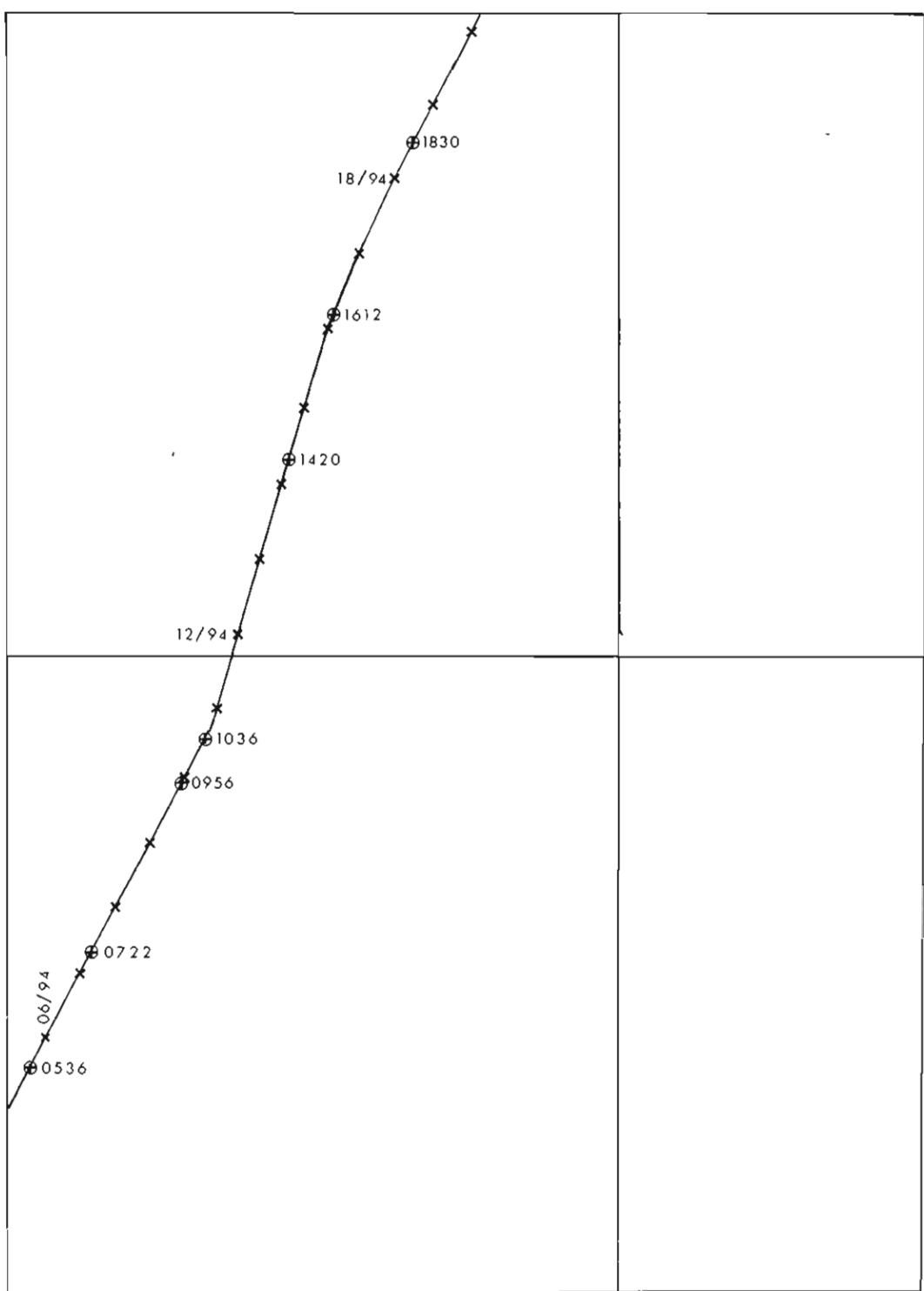
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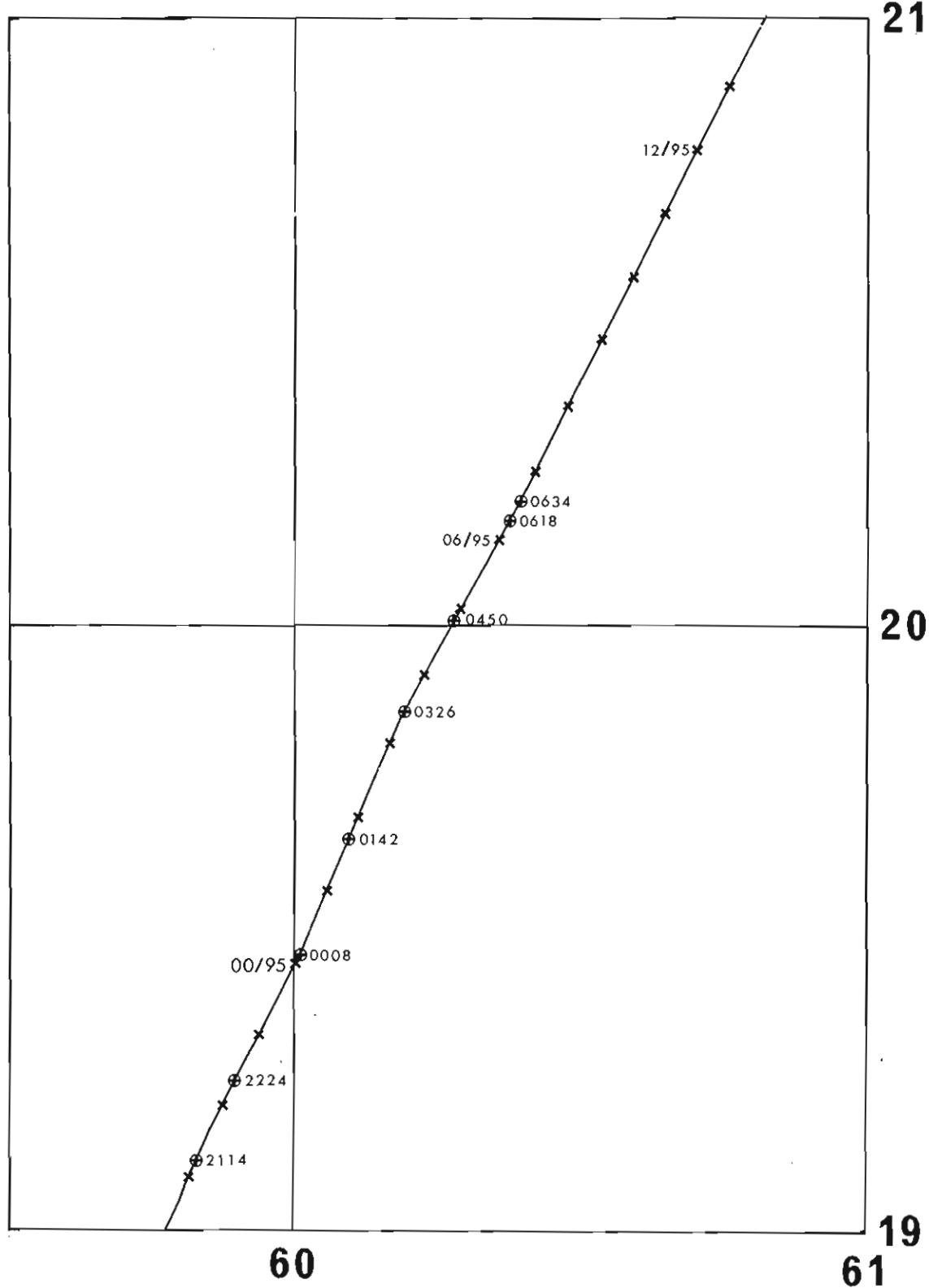
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1 - 10

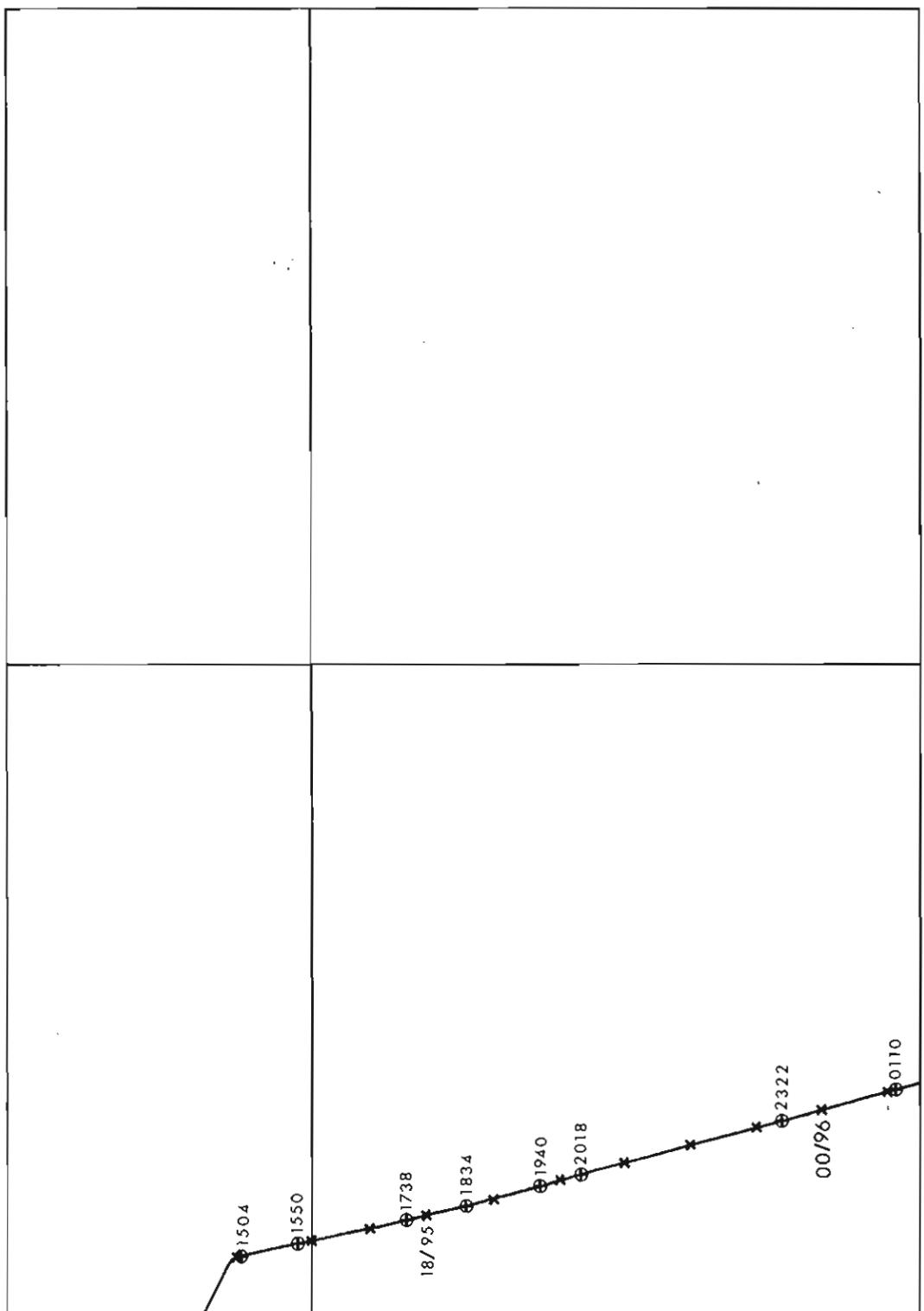


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62



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0114

0216

0254

2234

2110

1924

1848

18/96

1544

1428

1358

1230

12/96

0954

0728

0622

0526

0406

0340

0308

0220

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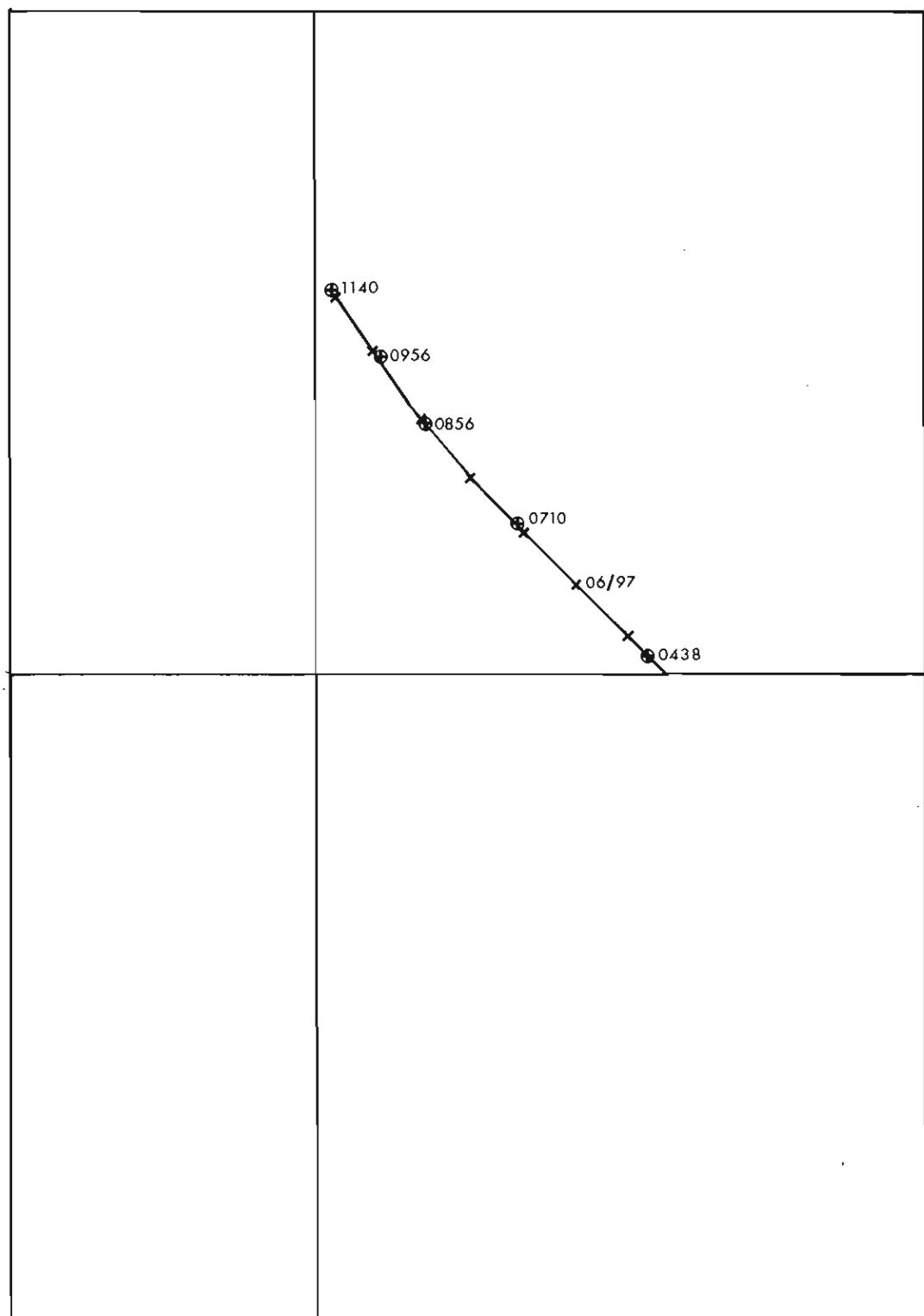
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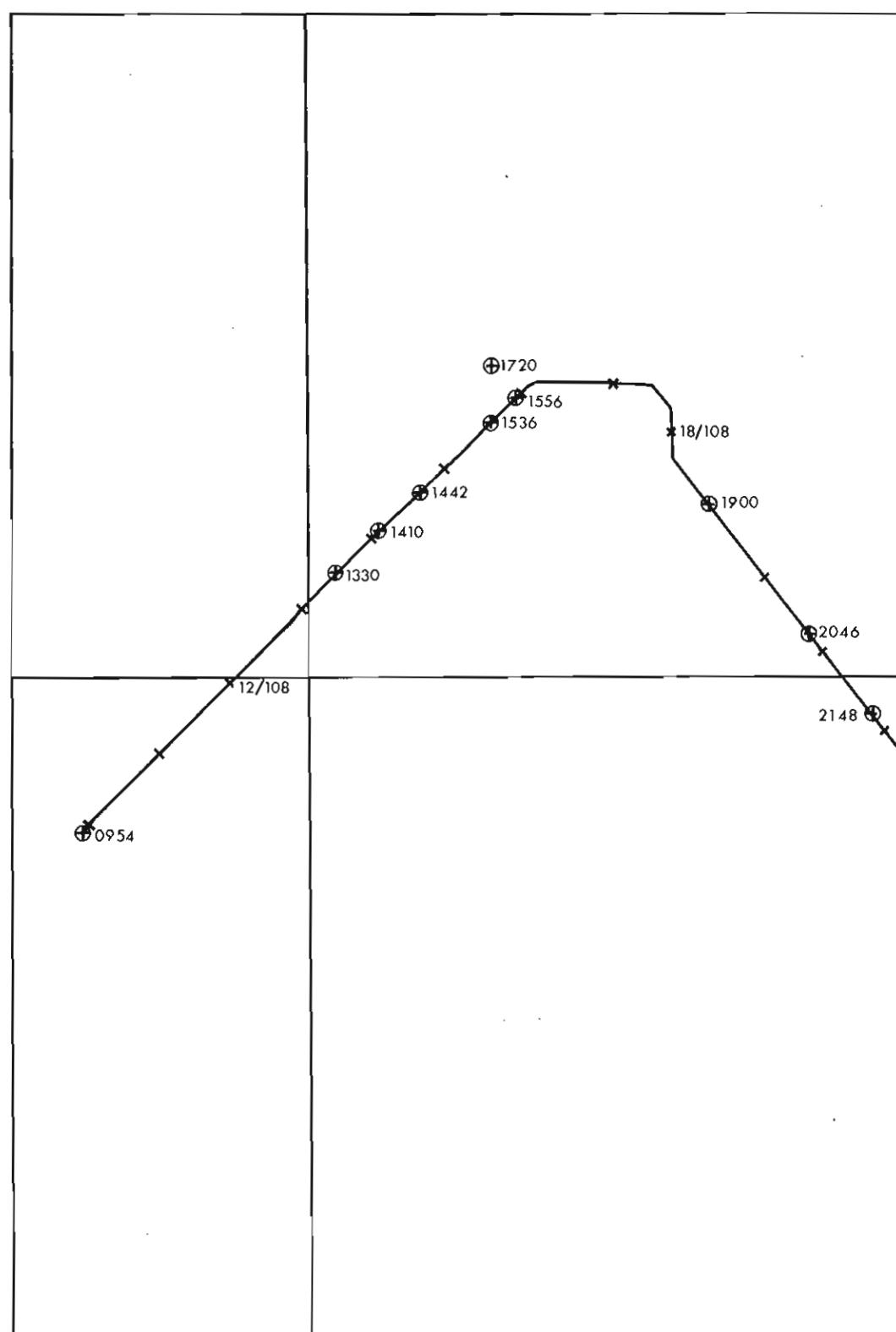
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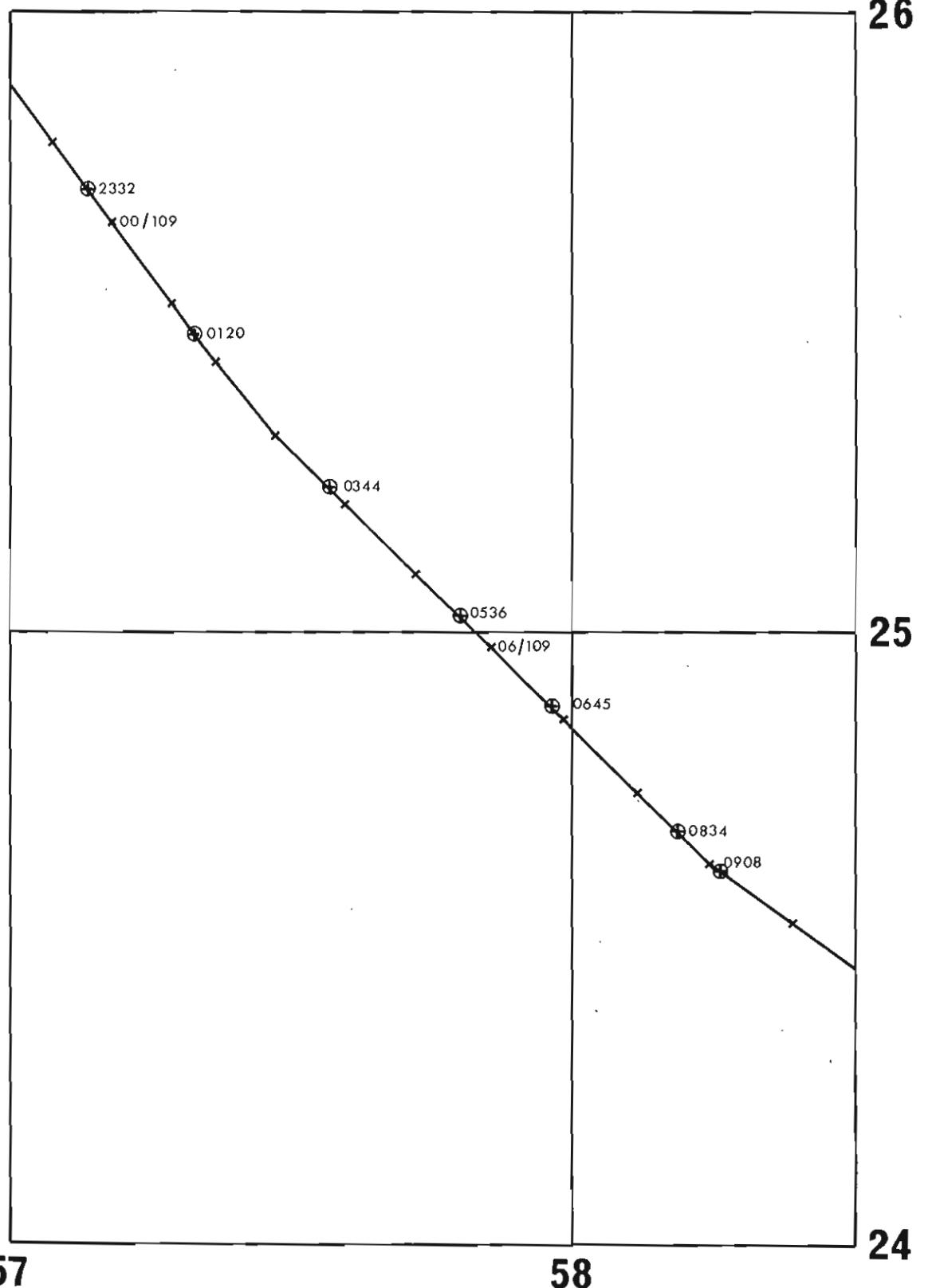
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2 - 1



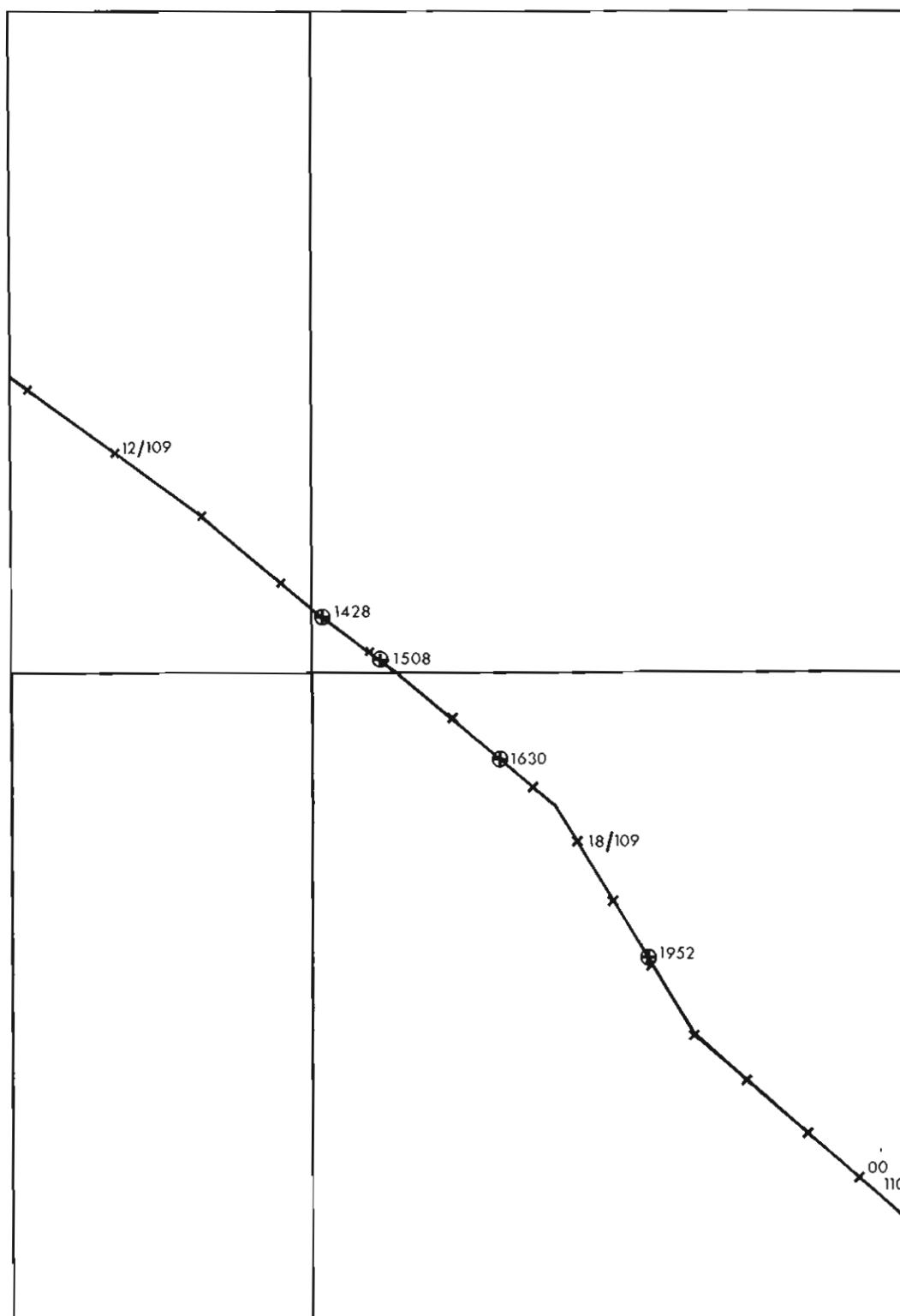
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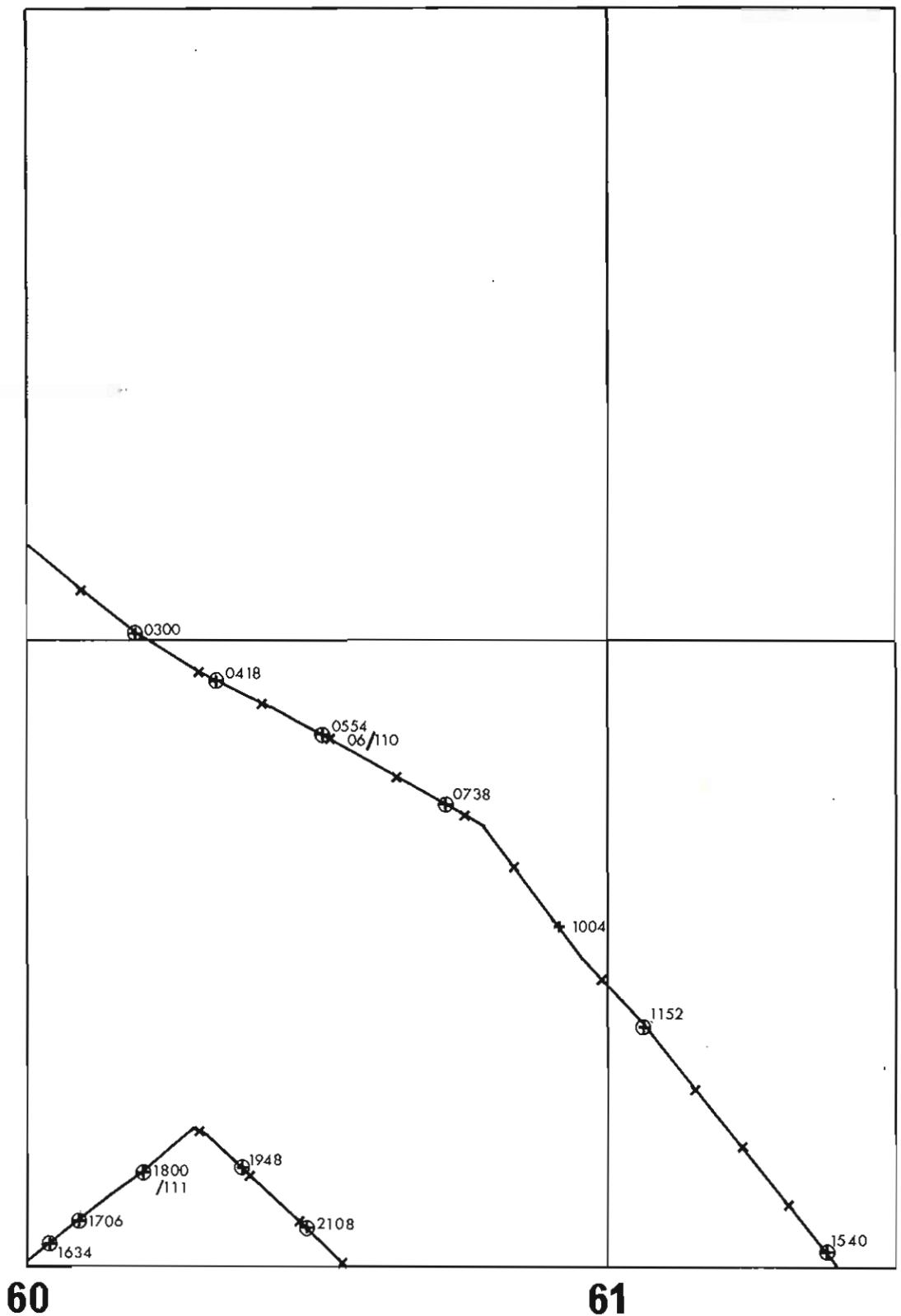


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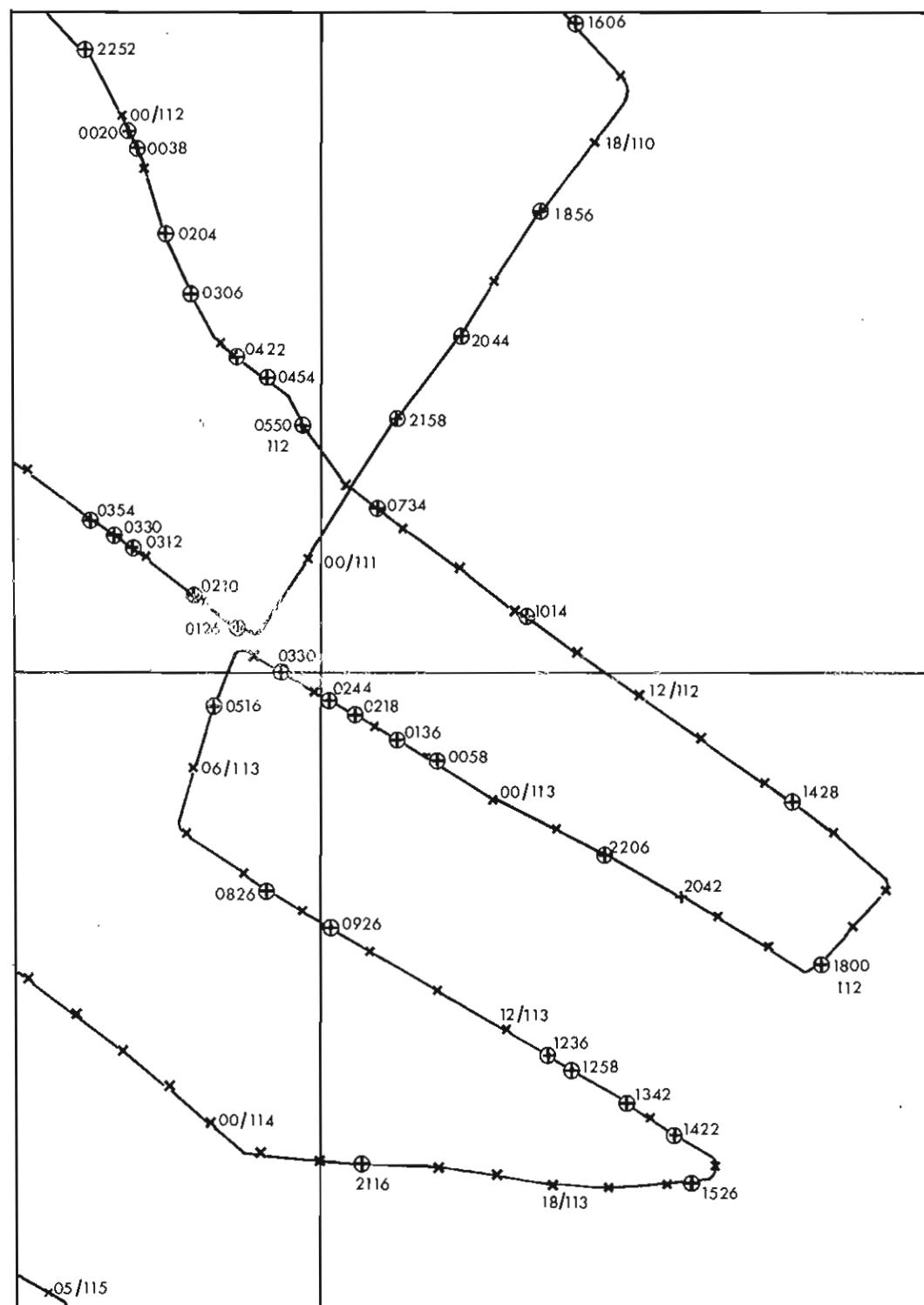
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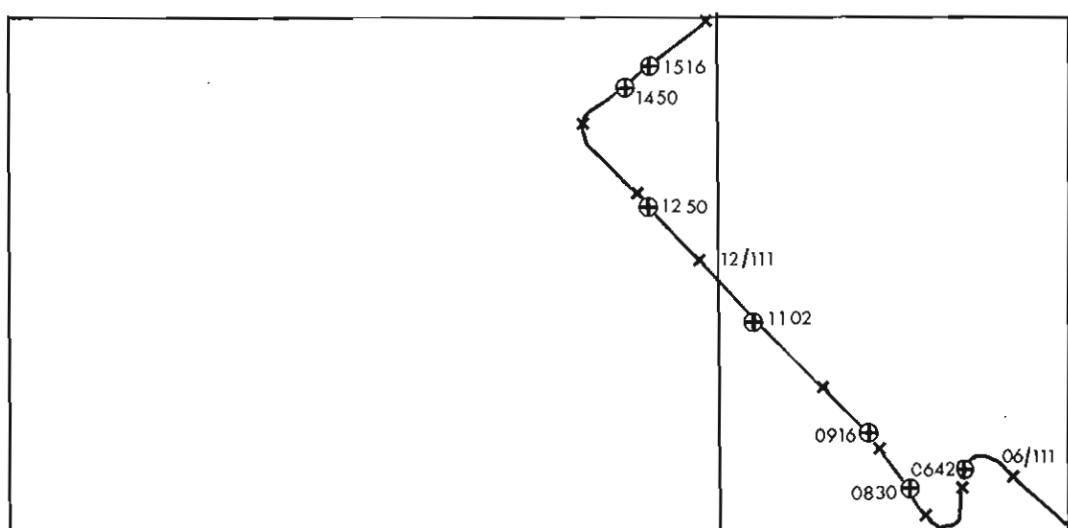
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22

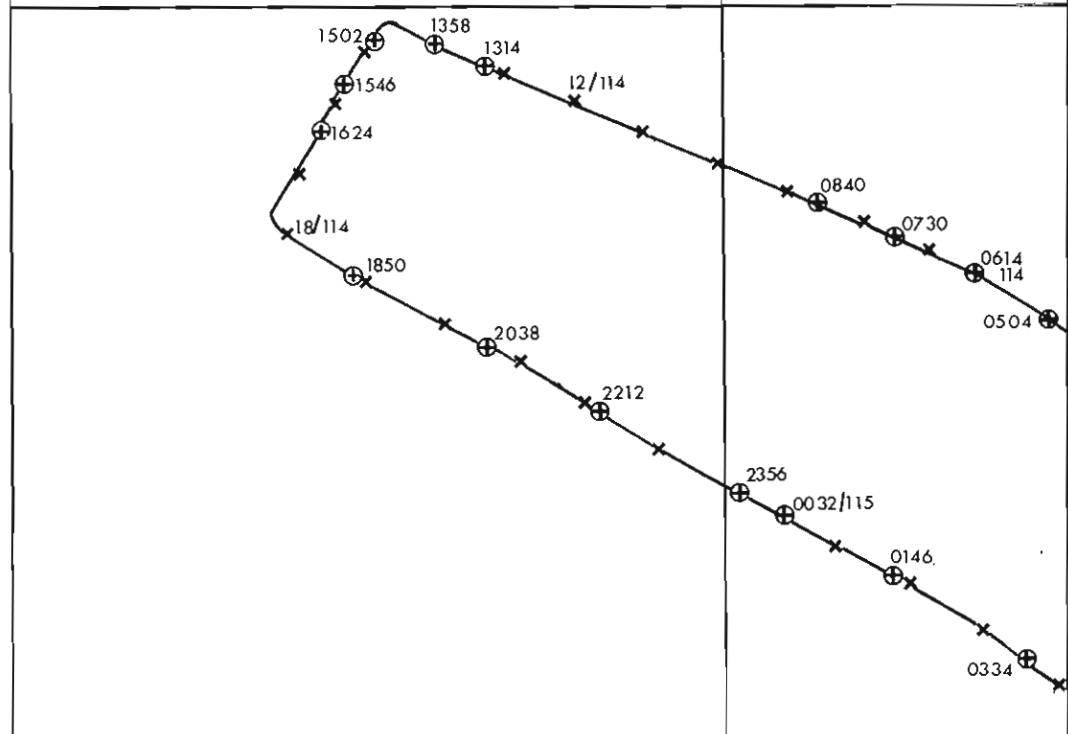


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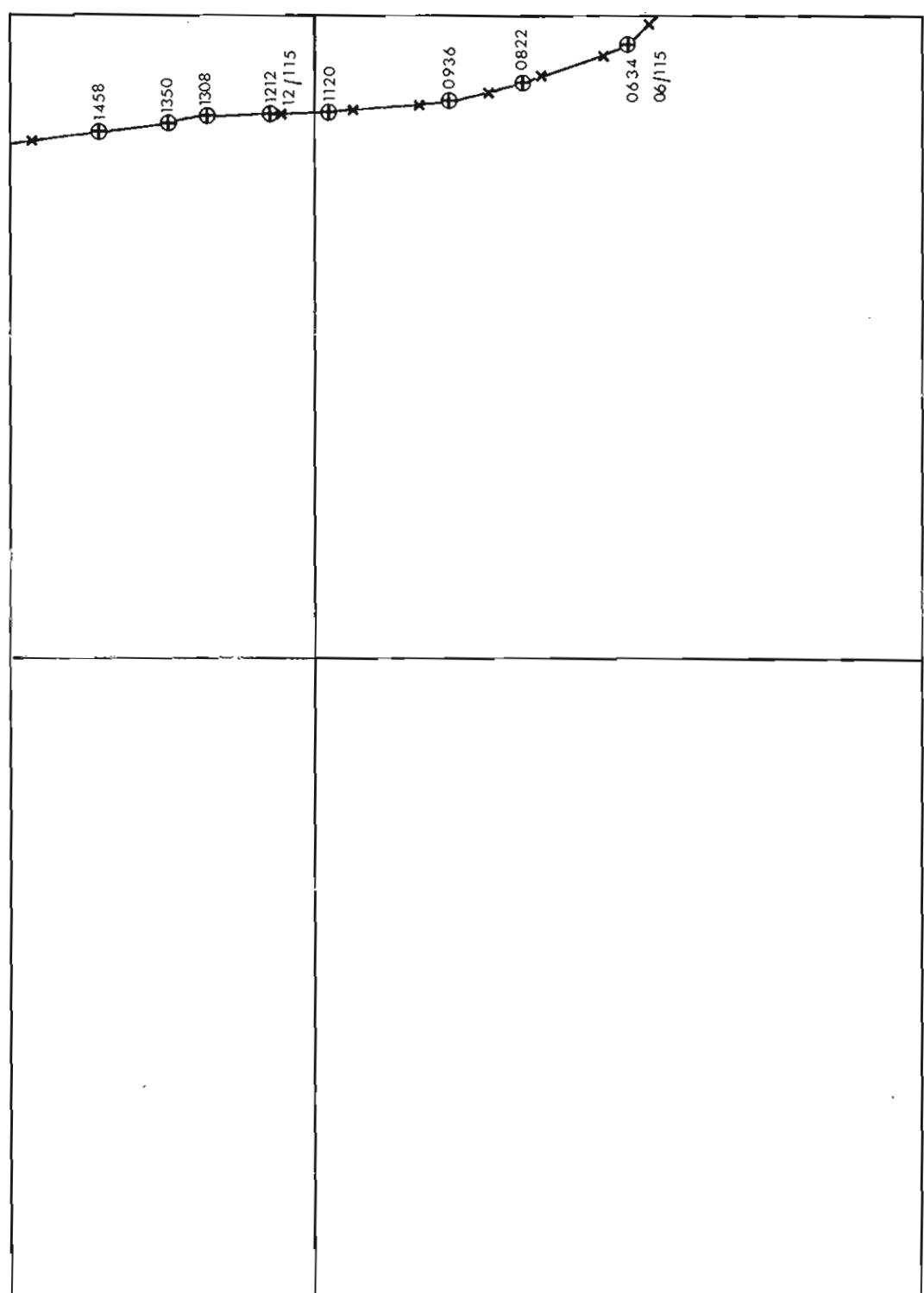
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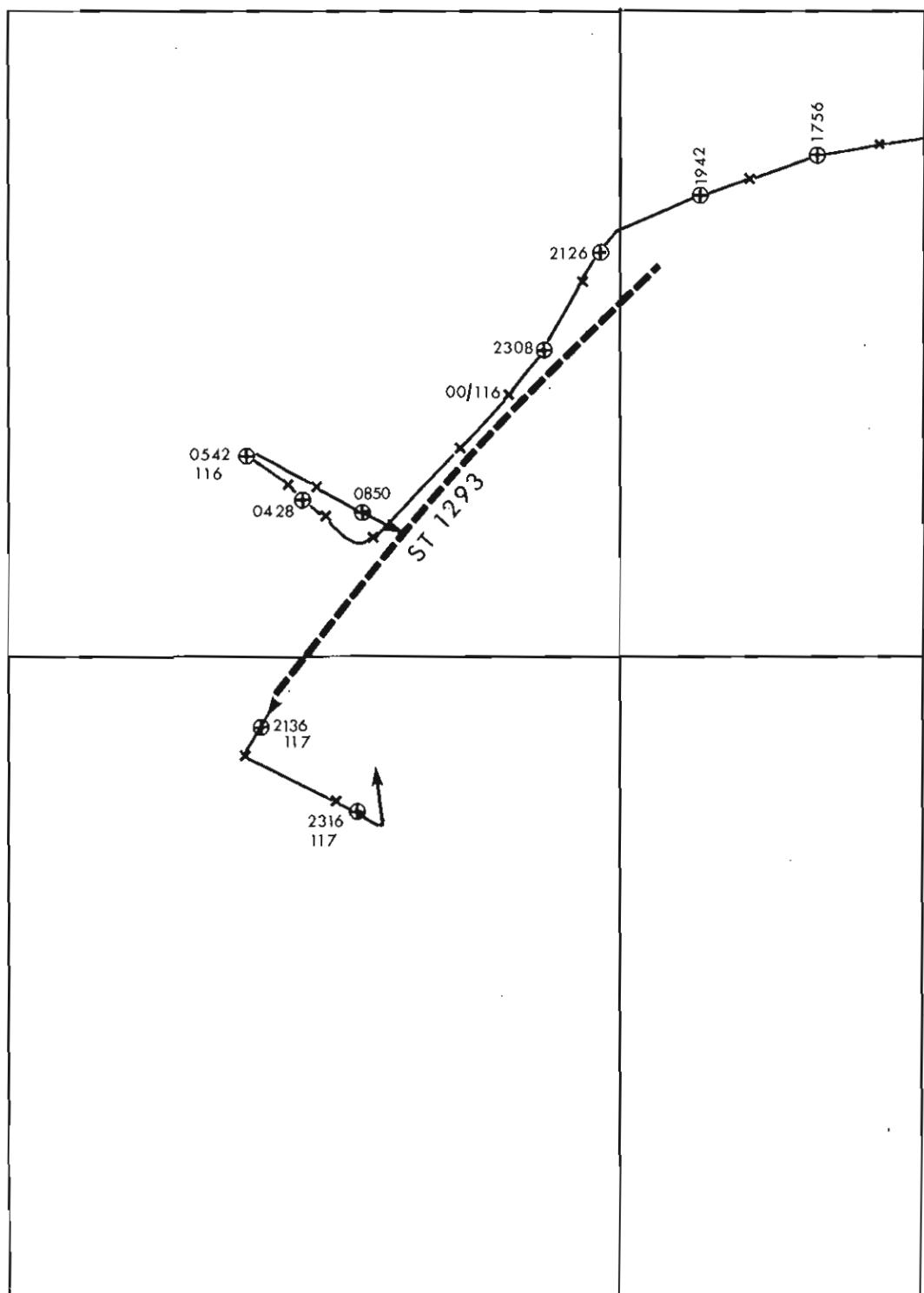
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2 - 7



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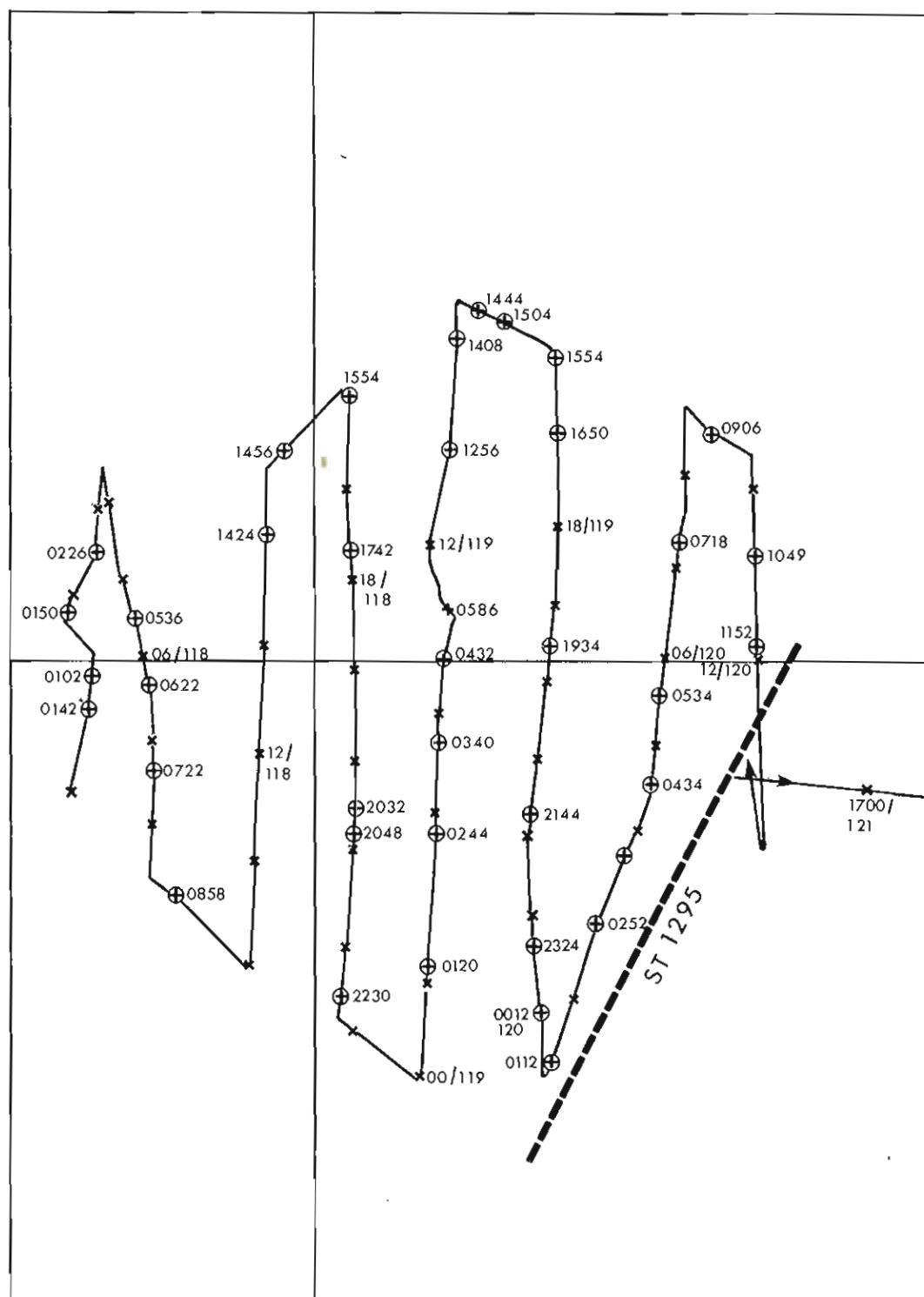
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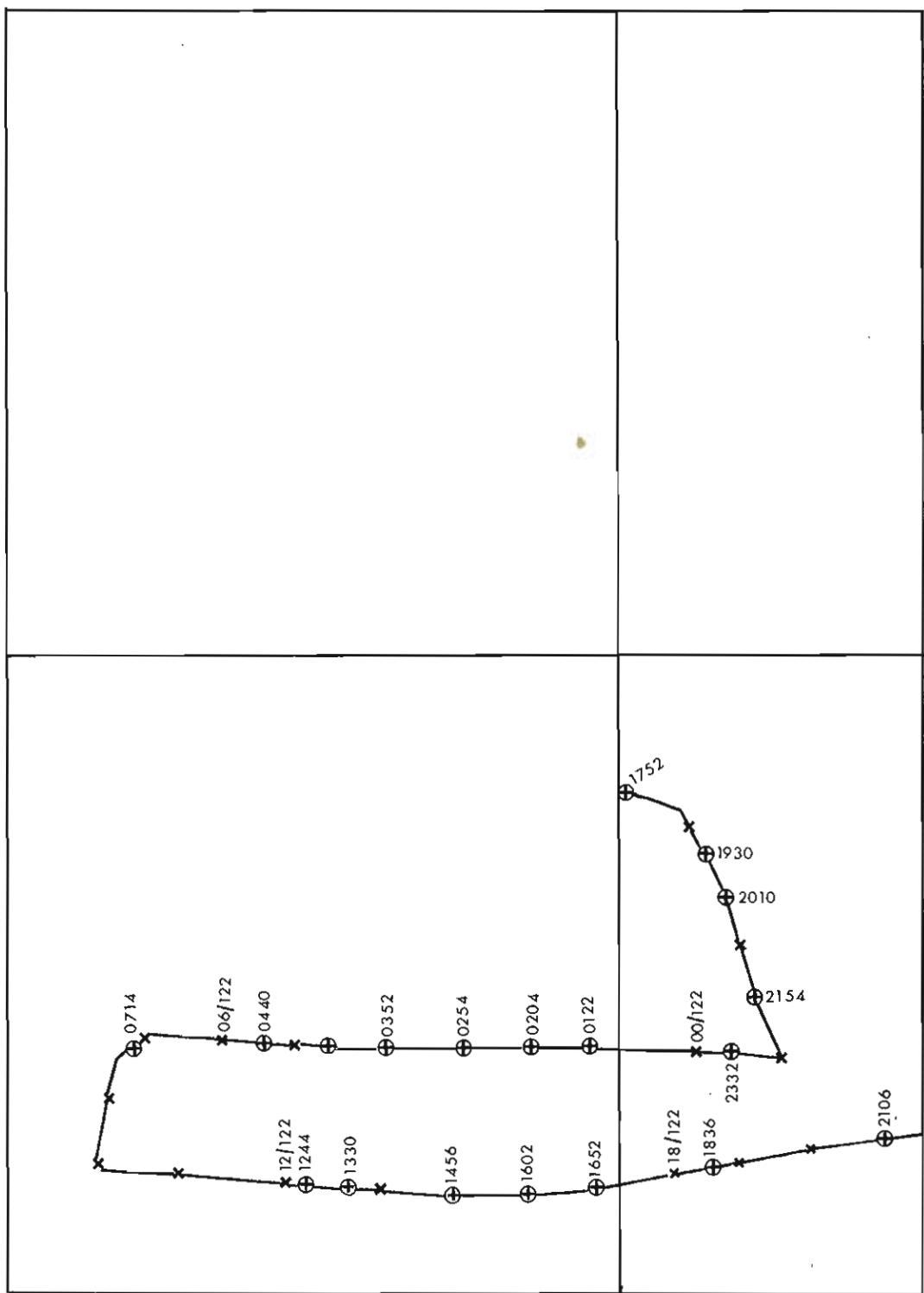
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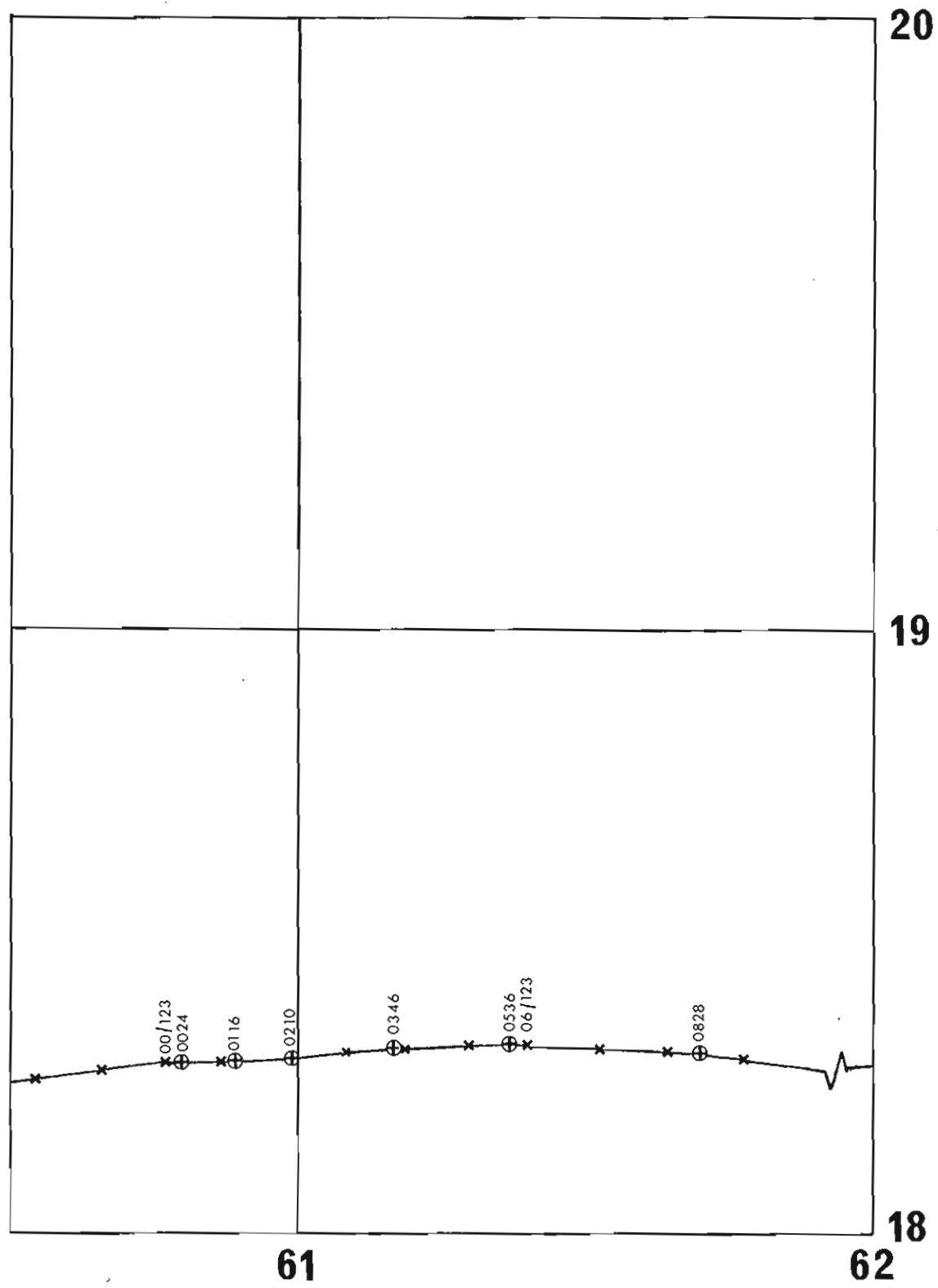
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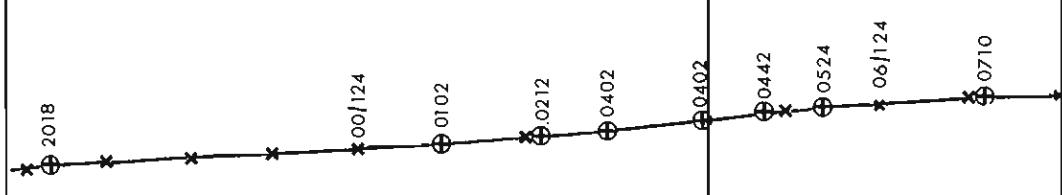
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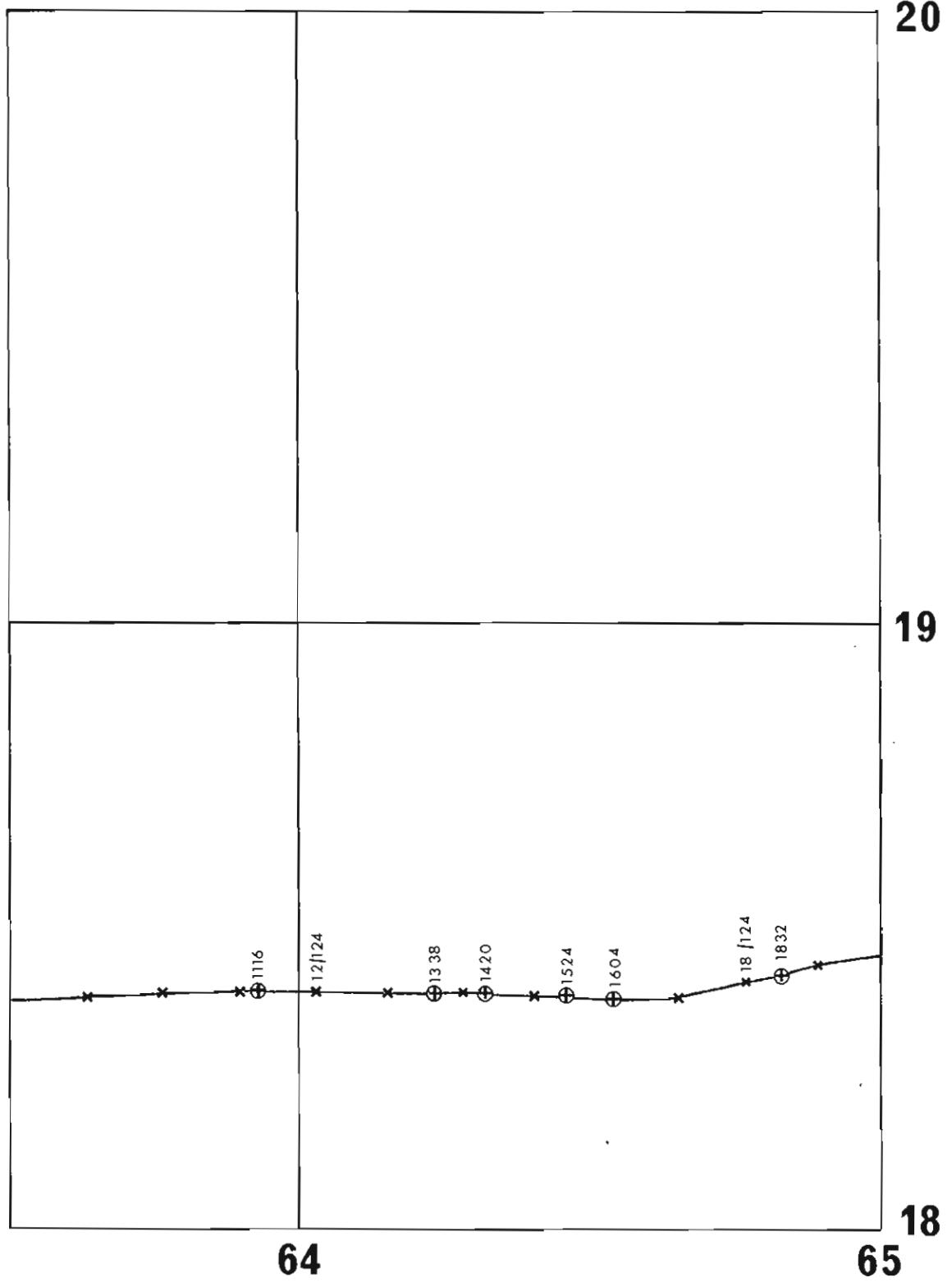
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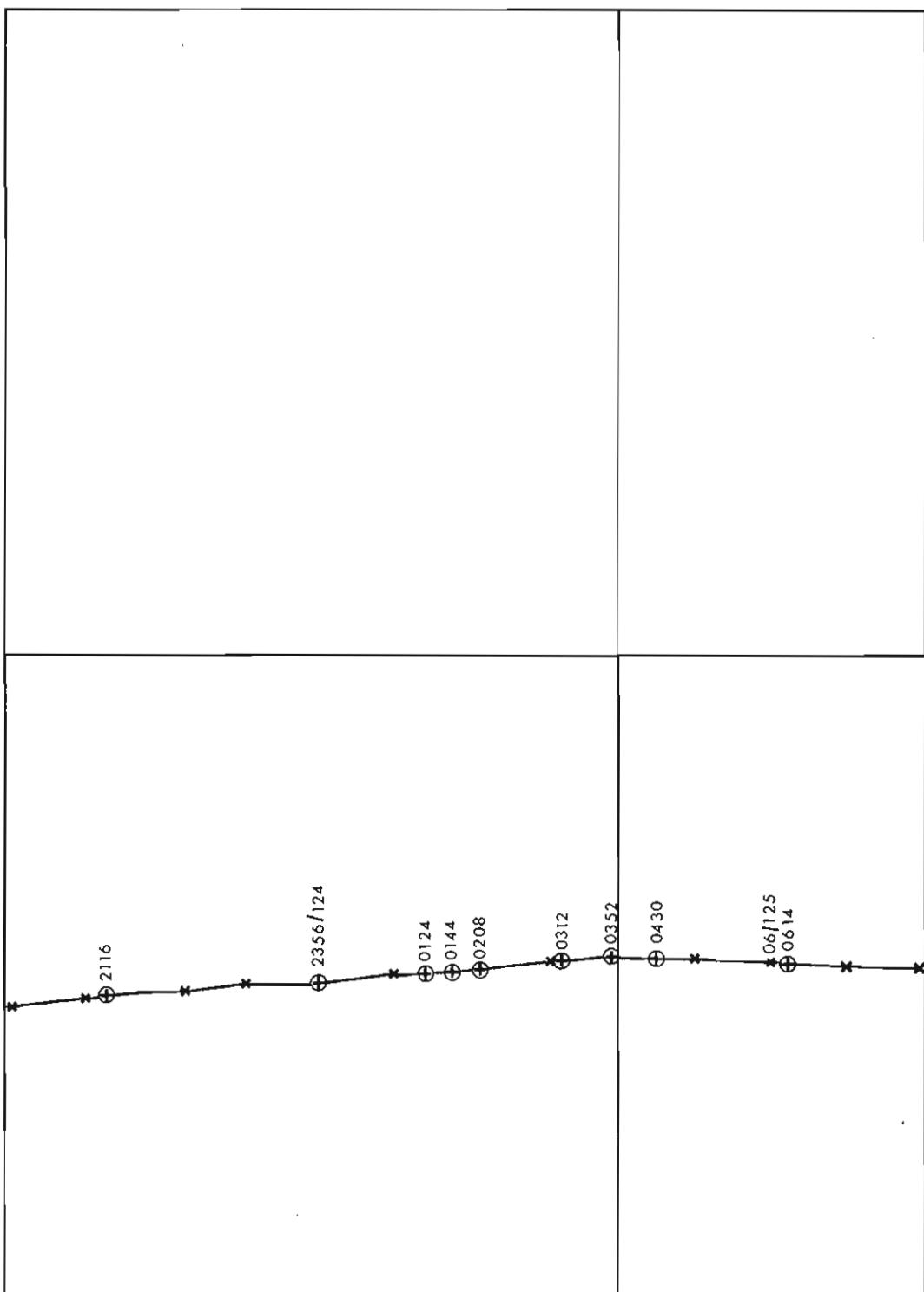
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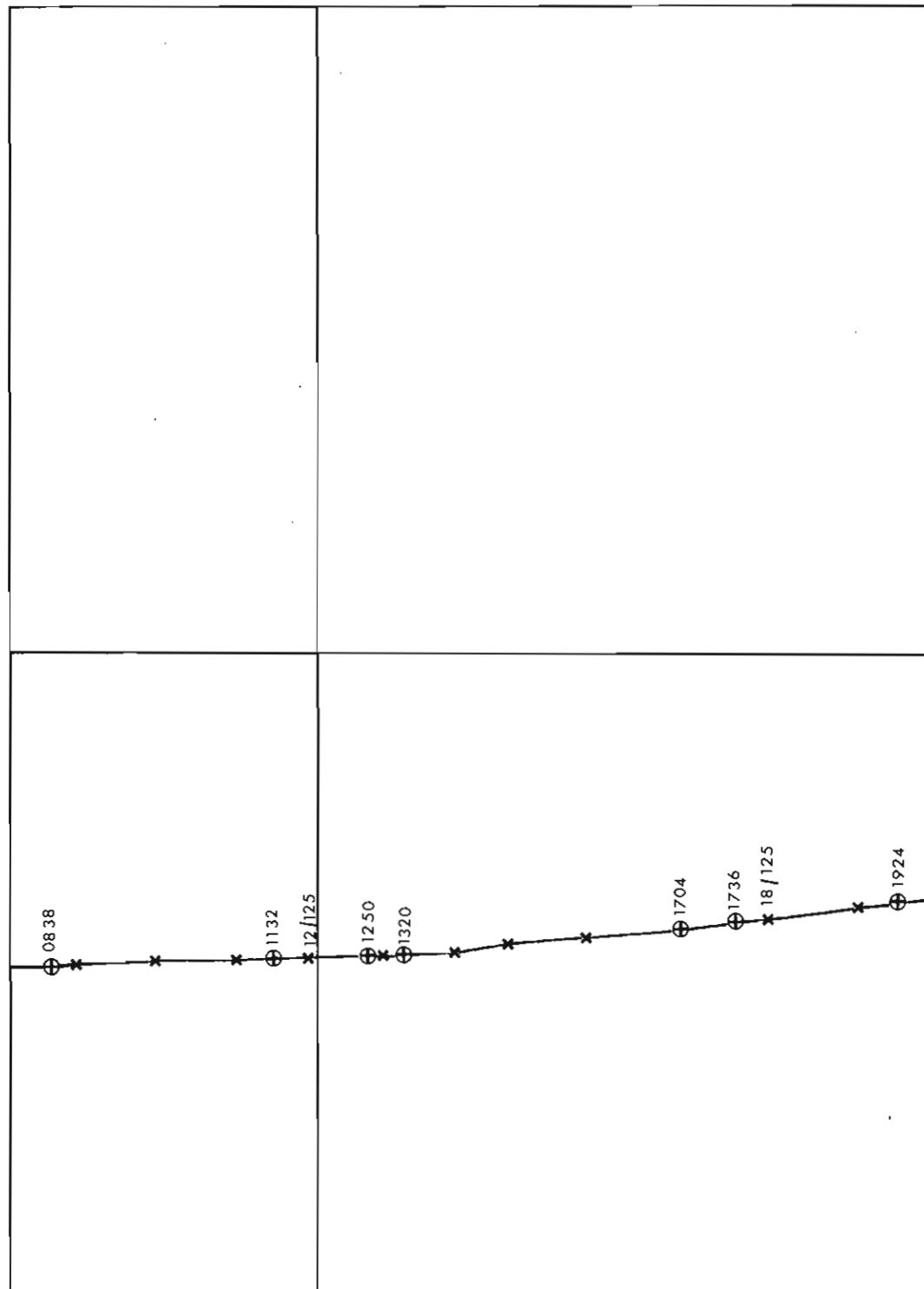
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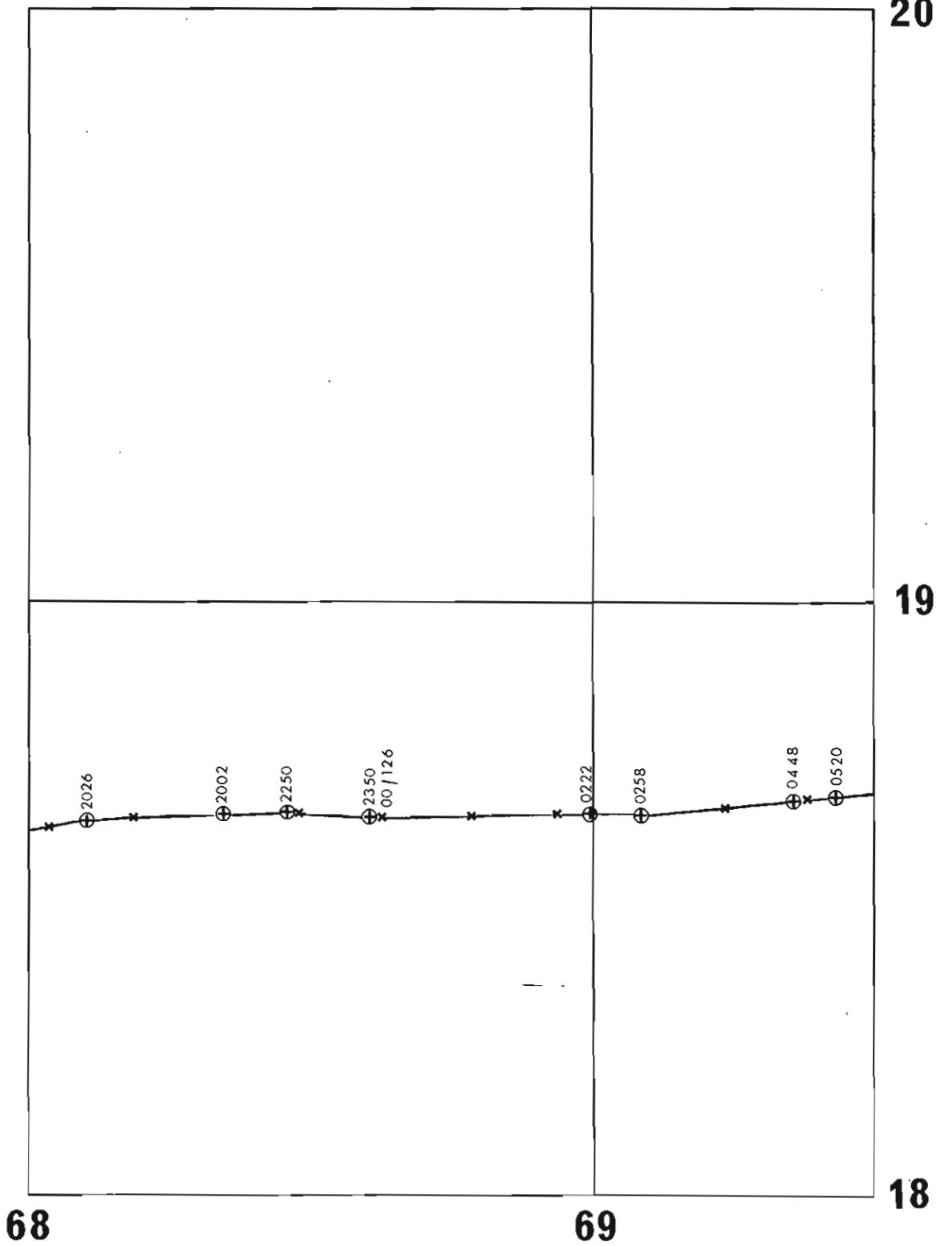
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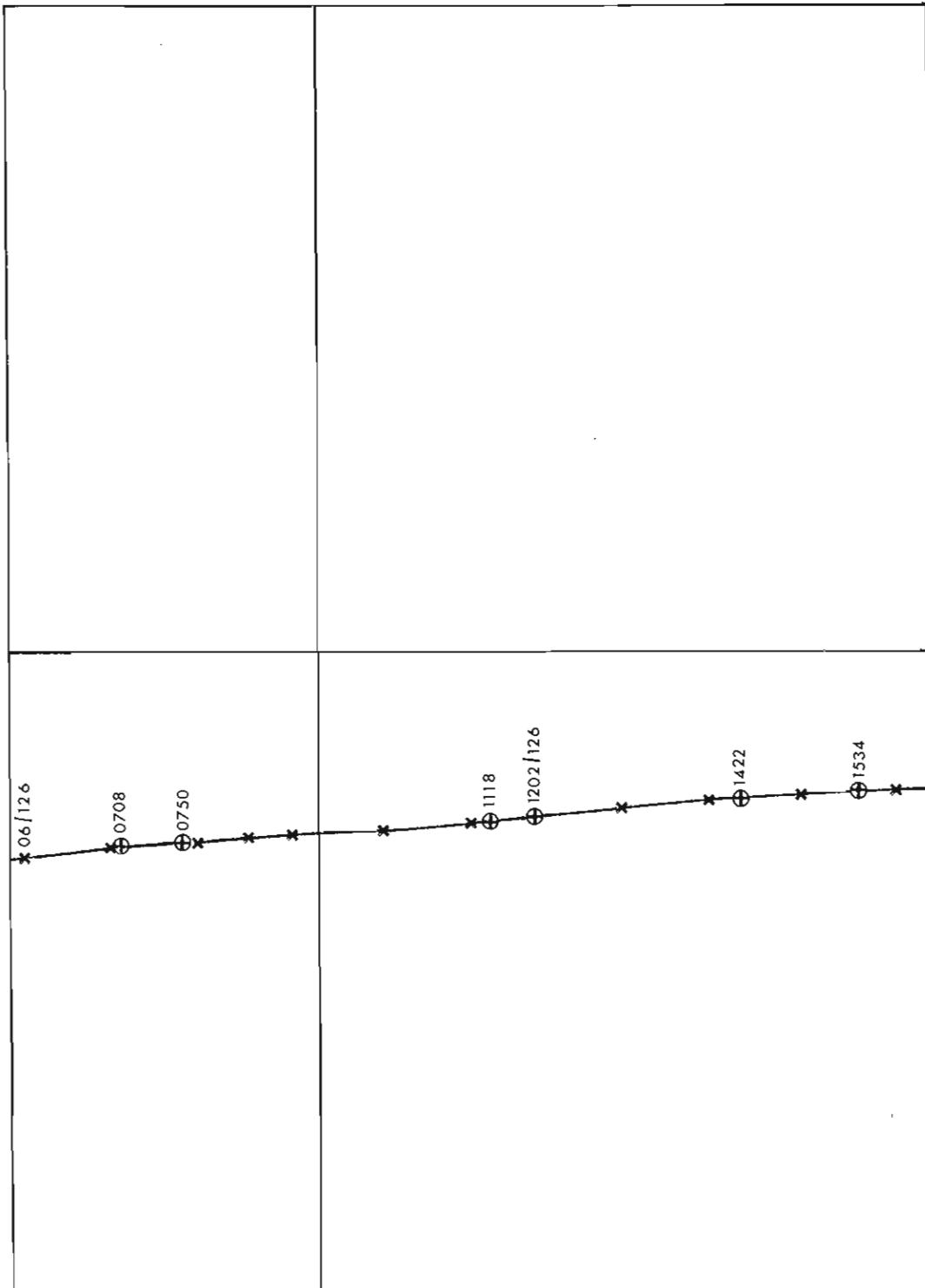
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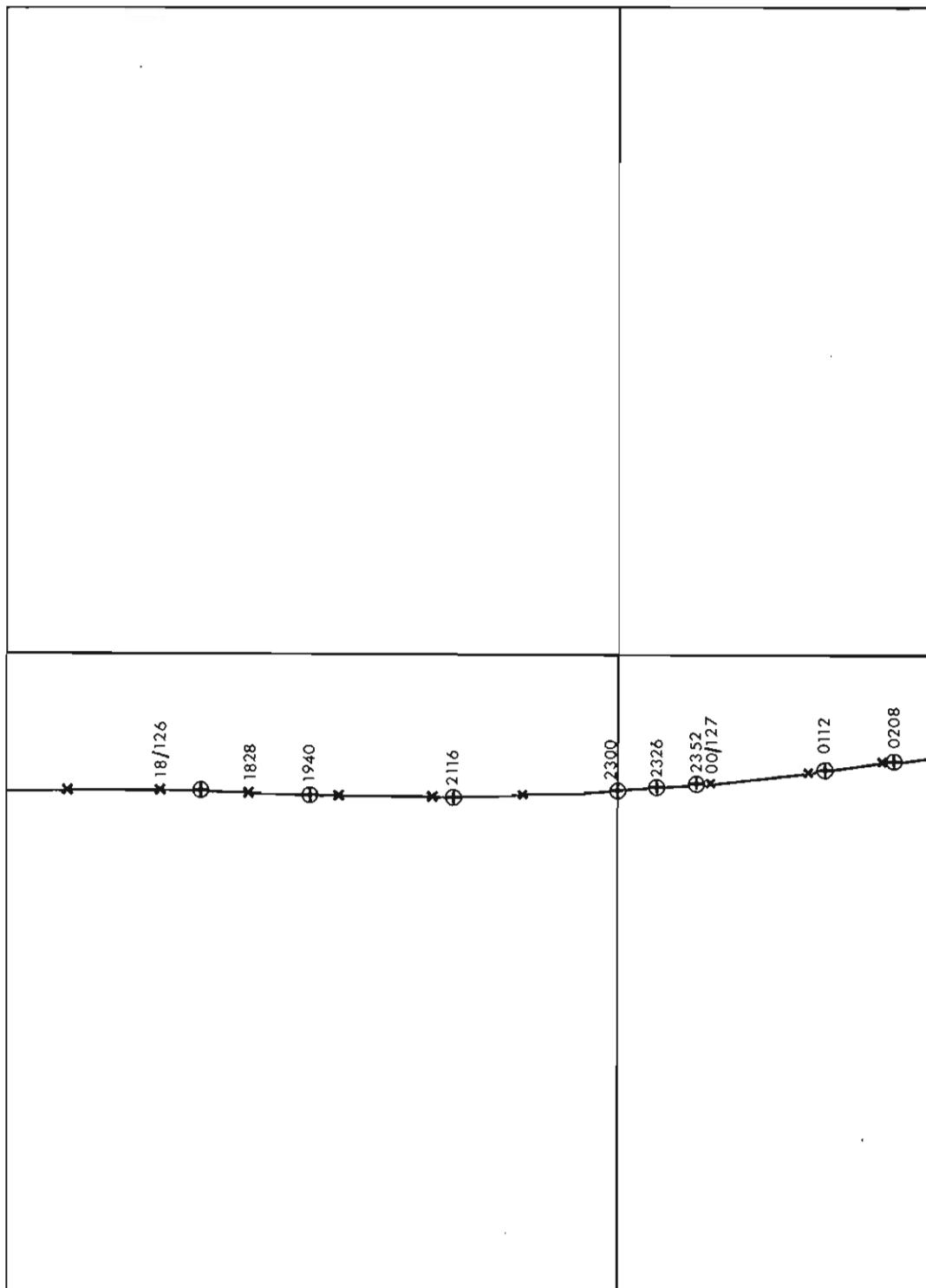
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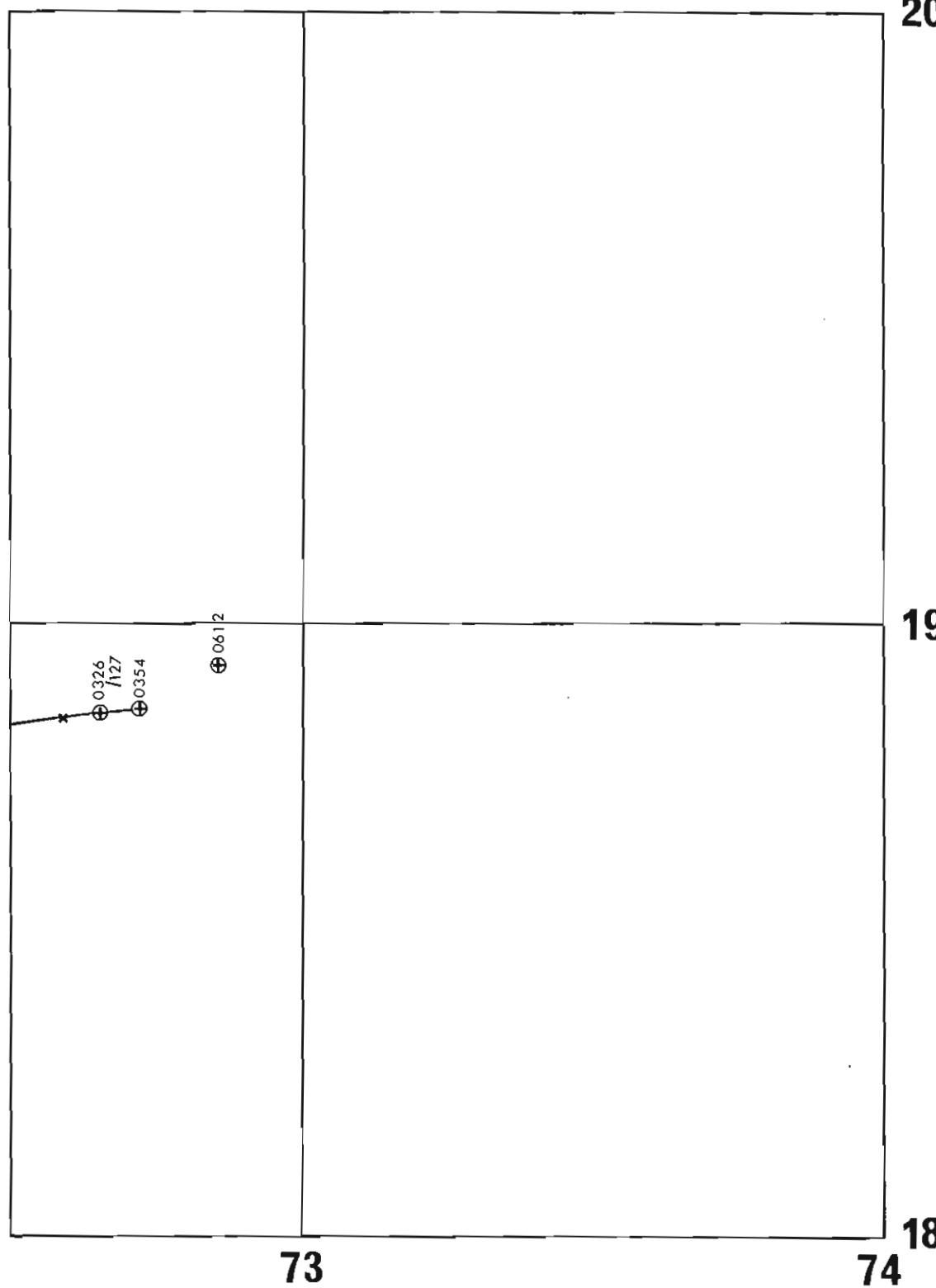
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SECTION C

Data Lists

RRS SHACKLETON CRUISE 3/75
TOTAL MAGNETIC FIELD

DATE 29- 3- 75
(DAYNO 88)

HOURS	00	06	12	18	MINUTES	24	30	36	42	48	54
0	37240	37236	37258	37293	37322*28	37320	37301	37281	37286	37301	37363
1	37305	37303	37308*10	37307	37313	37331	37353	37363	37364	37364	37363
2	37368	37384*10	37383	37370	37360*28	37362	37371	37378*44	37377*52	37376	37376
3	37370	37378	37385	37393	37404	37414	37423	37429	37432	37430	37430
4	37427* 2	37431	37436	37441	37444	37446	37452	37458	37466	37466	37470
5	37473* 4	37477	37479	37478	37474	37465	37457	37453	37445	37443	37443
6	37449	37443	37439	37436	37435*28	37431	37435*40	37434	37436	37434	37434
7	37435	37439	37461	37490	37515*26	37511*32	37510	37518	37525	37525	37536
8	37537	37520	37503	37482*22	37484	37500	37525	37535	37531	37533	37533
9	37533	37542	37555	37560	37562	37570	37576	37580	37578	37579	37579
10	37566	37550	37525	37493	37481	37468	37482	37539	37559	37532	37532
11	37517	37520	37542	37559	37567	37570	37573	37579	37596	37623	37623
12	37653	37674	37677	37668	37658	37648*32	37650	37651	37651	37640	37640
13	37625	37619	37626	37633	37629	37621	37617	37621	37639*58		

RRS SHACKLETON CRUISE 3/75
TOTAL MAGNETIC FIELD

DATE 30- 3- 75
(DAYNO 89)

HOURS	00	06	12	18	MINUTES	24	30	36	42	48	54
0	37642	37652	37662	37672	37683	37697	37707	37714*16	37713	37709	
1	37700	37691	37603	37672	37666	37668	37676	37681	37690	37698	
2	37700	37694*10	37695	37699	37709	37716	37718	37717	37714	37709*56	
3	37702* 4	37703	37707	37717	37724	37728	37734	37736	37739	37724	
4	37694	37660	37646	37655	37685	37715	37733	37738	37763	37786	
5	37800	37808	37807	37800	37796*26	37796	37811	37826	37847	37877	
6	37927	37987	38024	38039	38052*26	38046	37994	37994	37907	37751*58	
7	37753	37792	37852	37894	37915	37921	37911	37897	37882	37881	
8	37888	37898* 8	37895	37880	37867*26	37870	37874	37865	37847	37827*58	
9	37831	37852	37891	37918	37923	37910	37894	37872	37844*52	37846	
10	37863	37883	37915	37951	37973*26	37970	37963	37946	37929	37940	
11	37954* 2	37947	37923	37914	37915	37913	37918	37933	37945	37953	
12	37960	37940	37909	37898	37903	37909	37927	37957	37990	38017	
13	38037	38049* 8	38043	38014	37975	37960	37994	38057	38098	38062	
14	37982	37931* 8	37940	37958	38018	38108	38160	38138	38089	38068	
15	38054	38050	38030	37975	37930*26	37941	37981	38032	38091	38112	
16	38100	38089	38100	38126	38152*28	38148	38104	38024	37954*52	37955	
17	37959	37963	37968	37985	38000	37992	37973*40	37976	37999	38038	
18	38068	38090	38108	38121	38137	38147	38154	38165	38178	38190	
19	38190	38207	38207	38205	38201	38198	38195	38196	38197	38187	
20	38174	38164	38166	38160	38147	38157	38134	38138	38146	38161	
21	38174	38171	38168	38168	38180	38191	38205	38210	38226	38235	
22	38240	38239	38232*14	38235	38239	38247	38255	38266	38275	38282	
23	38287	38291	38294	38294*20	38294	38289	38286	38282	38272	38260	

RRS SHACKLETON CRUISE 3/75
TOTAL MAGNETIC FIELD

DATE 31- 3- 75
(DAYNO 90)

HOURS	00	06	12	18	MINUTES	24	30	36	42	48	54
0	38253	38252	38251	38253	38257	38271	38294	38317	38332	38337	
1	38346	38342	38350	38355	38359	38369*34	38368	38371	38375*52	38373	
2	38365	38355*10	38353*14	38356	38375	38401	38398*38	38400	38389	38361	
3	38345	38321	38341	38394	38451	38480	38460	38426	38394*52	38397	
4	38433	38493	38574	38652	38705	38762	38813	38857	38887	38902	
5	38481	38803	38711	38625	38574	38545	38484	38410	38322	38235	
6	38167	38146	38158	38077	37969	37888	37831	37781	37811	38012	
7	38293	38446	38522	38585	38627	38639	38645	38655	38678	38699	
8	38731	38787	38841	38866	38838	38760*32	38769	38809	38837*52	38836	
9	38823	38804* 8	38845*16	38844	38815	38793	38769*38	38771	38784	38803	
10	38830* 4	38823	38754*10	38762	38842	38848	38953	38975	38927	38799	
11	38696	38679	38687	38678	38643*28	38644	38654	38661	38677	38711*58	
12	38710	38699	38647	38592	38579	38550	38543	38524	38496	38463	
13	38431	38395	38369	38356	38361	38368	38440	38495	38550	38590*56	
14	38574	38516	38451	38388	38395	38411	38396	38369	38351	38324	
15	38293	38273	38207	38305	38304	38294	38267	38249	38250	38255	
16	38263	38251* 8	38257	38283	38300	38286	38253	38254	38316	38406	
17	38447* 2	38450	38263*16	38287	38401	38537*32	38521	38445	38366	38325*58	
18	38327	38348	38373	38396	38401*28	38403	38456	38523	38635	38711	
19	38674* 2	38686	38735	38784	38842	38890	38919	38972	39036	39077	
20	39101* 2	39087	39038	39126	39063	39149*34	39147	39099	39052	39031	
21	39110	38993	39011	39411*29	39137	39055	39101	39132	39133	39158	
22	39220	39343*10	39338	39282	39180	39071	38903	38926	38691	38903	
23	39051	39456*10	39143	39201	38945	38687	38411	38193*46	38194	38544*58	

RRS SHACKLETON CRUISE 3/75
TOTAL MAGNETIC FIELD

DATE 1- 4- 75
(DAYNU 91)

00	06	12	18	MINUTES	24	30	36	42	48	54
0 38605* 2	38539*10	38545	38545*20	38581	38659	39020	39437*44	39393	39393	39259
1 39387* 1	39384	39170	38652*20	38871	38896	38913	38950	39128	39268	39268
2 39197* 2	39257	39175*14	39372	38946	38560	38395	38314	38387	38498*58	38498*58
3 38491	38451	38329*16	38332	38573	38302	38365	38389*14	38263	38063*56	38063*56
4 38156	38499	38709	38585	38460	38409*32	38460	38696	39054	39299	39299
5 39422	39470* 8	39063	39425	39458	39443*34	39445	39460	39498	39270	39270
6 38923	38758	30716	38608	38427	38333	38535*40	38523	38319	38194	38194
7 38336	38629	38857	39187*20	38963	38726					
8										
9										
10										
11										
12										
13										
14	39180	39188	39213	39255	39306	39353	39400	39425	39204*50	39190
15	39436	39426	39419	39416	39415	39422	39427	39448	39411	39448
16	39043	38898	38801	38763	38745	38692	38591	38469	38353	38279*56
17	38289	38342	3818*16	38406	38300	38153*34	38175*40	38173	38163	38163
18	38087	38037	38001	37985*20	37988	38010	38048	38103	38163	38223
19	38275	38309	38324	38324	38321	38328*32	38304	38288	38339	38454
20	38577	38619	38573	38527*20	38539*26	38518	38466	38412	38366	38332
21	38315* 4	38316	38324	38338	38354	38369	38376	38382	38391	38409
22	38436	38464	38490	38507	38530*26	38463	38348	38279*44	38309	38387
23	38289* 4	38295	38386	38516	38623	38679	38705	38773	38919	39337*58

RRS SHACKLETON CRUISE 3/75
TOTAL MAGNETIC FIELD

DATE 2- 4- 75
(DAYNU 92)

00	06	12	18	MINUTES	24	30	36	42	48	54
0 39400	39483	39455	39424	39426	39438	39452*38	39447	39432	39406	39406
1 39338* 2	39355	39400*16	39394	39351	39198	38925	38636	38487	38442	38442
2 38410* 2	38430	38581*16	38577	38449						
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15	38613	38501	39152*14	39053	38977*28	38985*34	38982	38936	38834	38717
16	38452	38426	38409	38366	38325*26	38373	38418	38466	38487	38475
17	38876	38850	38914	39074	39281	38331	38566	38766	38875	38875
18	39239	39088*10	39106	39235	39369	39421	39505*40	39502	39452	39359
19	39192	39057	38907	38755	38625	38573	38608	38702	38810	38895*58
20	38890	38866	38846*14	38860	38928	39013	39090	39156	39192	39207*56
21	39204	39193	39173	39156	39148	39164	39230*40	39229	39165	39056
22	38983* 4	38987	39014	39057	39141	39280	39430*40	39428	39382	39314
23										

RRS SHACKLETON CRUISE 3/75
TOTAL MAGNETIC FIELD

DATE 3- 4- 75
(DAYNU 93)

00	06	12	18	MINUTES	24	30	36	42	48	54
0 39247	39189	39122	39055	39000*28	39001	39016	39038	39073	39149	
1 39263	39363	39144*14	39405	39364	39317	39285	39277	39290	39317	
2 39348	39376	39011*14	39391	39338	39262	39192	39142	39120	39124	
3 39161	39235	39227	39417	39480	39526	39562	39572	39557	39510	
4 39041	39364	39290	39207*22	39210	39251	39280	39303	39333	39350	
5 39366	39388	39414	39446	39477	39498	39509	39507	39492	39473	
6 39433	39380	39346	39312	39281	39256*32	39266	39304	39341*52	39337	
7 39302	39276	39256*16	39258	39268	39240	39323	39356	39379	39393	
8 39406	39423	39444	39466	39483	39502	39522	39531	39531	39533	
9 39535	39538	39548	39562	39578	39584	39574	39556	39537	39524	
10 39518	39511	39502	39488	39472	39457	39441	39423	39405	39389	
11 39380	39378	39388	39408	39434	39461	39483	39498	39506	39510	
12 39516	39525	39536	39550	39560	39567*40	39566	39569	39572	39572	
13 39575	39581	39587	39593	39602	39611	39623	39641	39664	39683	
14 39697	39704	39705	39701	39693	39686	39684	39686	39699	39709	
15 39718	39727	39731	39758	39740	39742	39739	39738	39734	39726	
16 39717	39710	39707	39705	39707	39713	39724	39738	39753	39767	
17 39783	39798	39813	39825	39835	39843	39850	39855	39858	39859	
18 39855	39851	39851	39861	39861	39897	39916*36	39914	39900	39873	
19 39840	39809	39781	39758	39742	39733	39729	39729	39732	39734	
20 39737* 4	39736	39739	39743	39750	39761	39776	39794	39814	39835	
21 39859	39882	39903	39920	39932	39941	39951	39960	39969	39981	
22 39946	40010	40021	40031	40035	40037	40035	40031	40027	40029	
23 40010	39999	39989	39985	39981	39977	39980	39976	39976	39978*58	

RRS SHACKLETON CRUISE 3/75
TOTAL MAGNETIC FIELD

DATE 4- 4- 75
(DAY 0 94)

HOURS	00	06	12	18	24	MINUTES	30	36	42	48	54
0	349577	349611	349636	349659	349695	349695	349697	349709	349718	349726	349737
1	349647	349658	349664	349667	349672	349675	349675	349678	349678	349682	349682
2	349687	349691	349693	349696	349699	349699	349697	349702	349709	349716	349726
3	349736	349743	349749	349756	349769	349769	349785	349791	349793	349797	349827
4	349829	349830	349832	349833	349837	349837	349843	349843	349848	349848	349848
5	349851	349856	349860	349861*14	349859	349859	349859	349862	349866	349875	349887
6	349872	349879	349882	349880	349869	349869	349849	349850	349861	349863	349864
7	349874	349874	349880	349885	349876	349876	349889	349889	349879	349879	349874
8	349872	349872	349870	349869	349866	349866	349860	349847	349834	349826	349810
9	349869	349869	349874	349874	349818	349825	349836	349847	349859	349865	349868
10	349867	349863	349863	349866	349871	349871	349879	349882	349882	349883	349885
11	349888	349891	349892	349892*14	349890	349892	349847	349854	349851	349851	349851
12	349815	349814	349816	349819	349819	349825	349832	349850	349846	349853	349864
13	349881	349892	349893	349893	349855	349875	349883	349882	349876	349870	349872
14	349885	349891	349892	349892	349866	349884	349899	349899	349891	349892	349895
15	349870	349883	349888	349888	349881	349883	349849	349861	349856	349856	349880
16	349853	349870	349872	349851*20	349854	349867	349898	349875	349872	349881	349881
17	349842	349863	349878	349883	349891	349892	349802	349813	349821	349825	349824
18	349821	349818	349818	349807	349807*22	349807	349809	349814	349823	349833	349844
19	349855	349865	349874	349881	349886	349891	349899	349896	349803	349810	349820
20	349828	349841	349852	349864	349875	349881	349893	349803	349812	349813	349814
21	349867	349874	349884	349893	349819	349821	349890	349803	349819	349819	349819
22	349878	349872	349869	349872	349880	349880	349832	349818	349817	349817	349817
23	349823	349815*	349817	349817	349812	349813	349843	349858	349813	349819	349822

RRS SHACKLETON CRUISE 3/75
TOTAL MAGNETIC FIELD

DATE 5- 4- 75
(DAY 0 95)

HOURS	00	06	12	18	24	MINUTES	30	36	42	48	54
0	41227	41245	41262	41273	41276	41271	41264	41259	41257	41253	41253
1	41250	41249	41247	41249	41253	41261	41267	41273	41271	41283	41283
2	41288	41295	41305	41319	41347	41356	41361	41363	41363	41366	41366
3	41370	41376	41381	41389	41389	41392	41394	41400	41410	41410	41410
4	41423	41442	41464	41488	41513	41539	41559	41572	41579	41575	41575
5	41570	41563	41557	41555	41559	41567	41578	41591	41599	41605	41605
6	41610	41616	41626	41639	41654	41672	41688	41697	41702	41708	41708
7	41714	41715	41712	41708	41701	41697	41694	41688	41683	41680	41680
8	41560	41581	41690	41698	41704	41710	41719	41730	41740	41750	41750
9	41759	41767	41771	41772	41773	41773	41773	41768	41762	41753	41753
10	41741	41731	41723	41717	41712	41707	41707	41711	41719	41731	41731
11	41745	41758	41769	41775	41782	41788	41793	41796	41803	41809	41809
12	41817	41825	41832	41841	41850	41861	41872	41882	41890	41897	41897
13	41904	41910	41915	41920	41926	41931	41937	41942	41946	41948	41948
14	41950	41954	41958	41961	41963	41966	41970	41972	41974	41976	41976
15	41976	41975	41979	41979	41982	41982	41987	41988	41989	41989*50	41992
16	41994	41997	42000	42004	42009	42013	42016	42017	42017	42017	42017
17	42018	42018	42016	42016	42017	42017	42014	42016	42011	42008	42007
18	42004	42006*	42006	42008	42012	42014	42019	42022	42026	42030	42030
19	42034	42036	42042	42049	42059	42071	42086	42102	42120	42138	42138
20	42155	42167	42174	42179	42187	42195	42204	42212	42214	42216*	42216
21	42215	42209	42206	42210	42216	42227	42245	42268	42291	42305	42305
22	42325	42363	42394	42409	42398	42370	42371	42389	42418*	42412	42412
23	42386	42362	42351	42335	42317	42285	42286	42396	42512*	42504*	42504*

RRS SHACKLETON CRUISE 3/75
TOTAL MAGNETIC FIELD

DATE 6- 4- 75
(DAY 0 96)

HOURS	00	06	12	18	24	MINUTES	30	36	42	48	54
0	42530	42482	42351	42266	42201	42145	42132	42160*	42159	42131*	42144
1	42191	42223	42231	42248	42286	42327	42345	42343	42337	42338	42338
2	42346	42350*	42349	42346	42347	42348	42350	42354	42358	42362	42362
3	42366	42371	42375	42379	42382	42387	42395	42400	42405	42410	42410
4	42415	42420	42425	42431	42441	4248	42480	42448	42454	42460	42465
5	42470	42472	42479	42483	42487	42489	42492	42483	42491*	42490	42488
6	42486	42483	42479*	42479	42480	42478	42479	42478	42477	42477	42479*
7	42476	42480	42480	42481	42485	42488	42488	42487	42490	42494	42497*
8	42498	42502	42503	42506	42511	42512*	42513	42513	42518	42523	42523
9	42529	42532	42537	42541	42544	42549	42554	42558	42560	42564	42564
10	42568*	42568*	42567	42569	42568	42568	42567	42567*	42562	42562	42562
11	42562*	42562*	42564	42566	42567	42570	42571	42574	42572	42582	42582
12	42570	42566*	42568	42569	42569	42573	42577	42581	42582	42585	42585
13	42587	42591	42593	42597	42597	42602	42605	42607	42608	42612	42612
14	42618	42625	42634	42642	42642	42647	42652	42657	42662	42665	42672*
15	42671	42675	42677	42680	42682	42683	42683	42680	42681*	42681	42681*
16	42682	42687	42695	42702	42714	42726	42736	42746	42754	42761	42761
17	42767	42771	42774	42777	42782	42782	42779	42778	42779	42779	42779
18	42779	42786*	42785	42773	42761	42773	42791	42772	42740	42748	42748
19	42762	42769	42777	42777	42792	42806	42813	42818	42820	42823	42828
20	42824	42816	42803	42785	42779	42788	42788	42791*	42797	42812	42812
21	42822	42830	42839	42845	42855	42873	42882	42892	42894	42895	42895
22	42896	42898	42896	42898	42900	42909	42915	42926	42937	42949	42949
23	42963	42975	42983	42988	42996	43000	43001	43006	43006	43006	43012*

PRS SHACKLETON CRUISE 3/75 TOTAL MAGNETIC FIELD										DATE 7-4-75 (DAYNO 97)	
HOURS	00	06	12	18	MINUTES	24	30	36	42	48	54
0	43014	43019	43023	43026	43028	43026	43029	43031	43035	43040	
1	43045	43051	43056	43063	43070	43078	43087	43097	43109	43118	
2	43128	43136	43143	43149	43153	43154	43165	43171	43181	43192	
3	43201	43214	43226	43238	43245	43252	43251	43250	43245	43239	
4	43233	43257	43261	43274	43281	43286	43290	43294	43187	43179	
5	43174	43170	43166	43164	43165	43168*34	43167	43168	43165	43160	
6	43150	43157	43123	43112	43105	43097	43090	43078	43065	43053	
7	43060	43074	43100	43116	43119	43110	43100	43090	43082	43078	
8	43076	43075	43076	43075	43073	43069	43065	43061	43062	43062	
9	43064	43068	43075	43084	43091	43103	43118	43130	43146	43161	
10	43173	43184	43195*14								
11											
12	42570	42566	42564	42569	42573	42575	42577	42574	42572	42570*56	
13	42587	42591	42593	42597	42599	42602	42605	42581	42582	42585	
14	42618	42625	42634	42642	42647	42652	42657	42662	42665	42672*58	
15	42671	42675	42677	42680	42682	42683	42683	42680	42681	42681	
16	42682	42687	42695	42704	42714	42726	42736	42746	42754	42761	
17	42767	42771	42774	42777	42782	42782	42779	42778	42779	42779	
18	42779	42786*10	42785	42773	42761	42773	42791	42772	42740	42748	
19	42762	42769	42777	42792	42806	42813	42818	42820	42823	42828	
20	42824	42816	42803	42785	42779	42779	42793*40	42791	42797	42812	
21	42822	42830	42839	42845	42855	42873	42882	42892	42894	42894	
22	42846	42898	42896	42898	42900	42909	42915	42926	42937	42949	
23	42963	42975	42983	42988	42996	43000	43001	43006	43006	43012*58	

RRS SHACKLETON CRUISE 3/75
UNCORRECTED DEPTH IN METRES

DATE 29- 3- 75
(DAYNO 88)

HOURS	00	06	12	18	MINUTES	24	30	36	42	48	54
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
10	1415	1413	1411	1409	1408	1408	1407	1402	1399		
11	1395	1390	1385	1383	1384	1386	1395*40	1394	1390*50	1396	
12	1405	1397	1383	1358	1314	1211	1162	1115	1066		
13	1017	1116*10	1061	896	799	735	647	553	444	371	
14	315	316	320	330	339	349	368	391	424	463	
15	505	542	580	618	656	693	727	761	794	823	
16	850	746*10	785	901	952	969	982	996	1009	1028	
17	1050	1030*10	1045	1093	1107	1105	1120	1142	1187*50	1153	
18	1103	1133	1159	1176	1195	1214	1218	1235	1281	1305	
19	1319	1330	1351	1395	1431	1463	1485	1507	1529	1545	
20	1558	1567	1575	1583	1595	1609	1638	1663	1683	1707	
21	1732	1746	1758	1764	1771	1778	1784	1789	1790	1793	
22	1796	1796	1795	1793	1791	1790	1790	1791	1792	1797	
23	1803	1808	1815	1830	1838	1843	1855	1870	1891	1907*58	

RRS SHACKLETON CRUISE 3/75
UNCORRECTED DEPTH IN METRES

DATE 30- 3- 75
(DAYNO 89)

HOURS	00	06	12	18	MINUTES	24	30	36	42	48	54
0	1909	1931	1948	1953	1957	1960	1956	1951	1946	1942	
1	1939	1928	1917	1906	1901	1900	1878	1859	1845	1828	
2	1807* 2	1816	1831	1843	1846	1845	1838*40	1839	1842	1843	
3	1843	1876	1900	1907*20	1900	1889	1880	1847	1829	1820	
4	1814	1801*10	1802	1803	1800	1796	1805*40	1804	1800*50	1802	
5	1805	1803	1800	1797	1791	1785	1781	1775	1766	1755	
6	1743	1737*10	1739	1745	1745	1745	1749	1753	1755	1767	
7	1785	1802	1816	1820	1827	1836	1841	1845	1851	1859	
8	1869	1870	1873	1939*22	1884*26	1891	1906	1919	1925	1932	
9	1939	1942	1944	1944	1954	1970	1992	2013	2034	2042	
10	2043	2055	2064	2066	2070	2076	2088*40	2080	2056	2029	
11	2001	1986	1972	1956	1923	1880	1934	1979	2006	2016	
12	2017										
13	2652* 4	2546	2524	2494	2478	2469	2462	2455	2446	2439	
14	2432	2417	2404	2395	2361	2315	2324	2344	2385*50	2377	
15	2366	2323*10	2328	2343	2363	2385	2389	2395	2396		
16	2396	2395	2394	2395	2396	2396	2356	2319	2257	2219	
17	2191	2290*10	2281	2237*22	2231*26	2230	2236	2234	2250	2350	
18	2357	2365	2372	2379	2381	2381	2376	2371	2360	2366	
19	2366	2358	2348	2337	2329	2323	2319	2316	2311	2303	
20	2293	2274	2257	2249	2240	2231	2220	2208	2195	2176	
21	2154	2130	2108	2088	2085*28	2048	2033	2017	1999	1983	
22	1968	1935	1905	1881	1857	1832	1813	1793	1773	1753	
23	1734	1717	1688	1662	1640	1620	1594	1564	1527	1473*58	

RRS SHACKLETON CRUISE 3/75
UNCORRECTED DEPTH IN METRES

DATE 31- 3- 75
(DAYNO 90)

HOURS	00	06	12	18	MINUTES	24	30	36	42	48	54
0	1463	1456	1450	1443	1440	1437	1437	1441	1454	1526	
1	1628	2487*10									
2	2597	2079	1690	1626	1607	1593	1616	1646	1690	1756	
3	1768	1765	1753	1722	1704	1693	2016	2236	2253*50	2238*58	
4	2334	2345*10	2286*14	2366*20	2331	2279	2217	2145	2050	1940	
5	1821	1710	1586	1439	1385	1379	1375*40	1382	1408*50	1392	
6	1568	1454*10									
7	1865	1909	1946	1968	1975	1975	2012*40	1991	1930	1840*58	
8	1939	2048*10	2024	1904*22	1912	1931	1791	1692	1672*50	2900*58	
9	1620	1571	1699	1879	2085	2301	2432*40	2429	2421	2385	
10	2337	2335	2287	2099*20	2140*26	2030*32	1939	2051	2092*50	2086	
11	2078	2264*10	2260	2246*20	2259	2279	2275	2267	2248	2231	
12	2012* 4	1960*10	2048*14	2009	1986*26	1821*32	2187*40				
13	2268	2505	2229	2341*22	2213*26	2363	2670	2710	2868*50	2841	
14	2402	2921	3048	3190	3265	3306	3464	3599*44	3420	3387	
15	3365	2758*10	2788	2908*20	2860	2787	2789	2851	3091*50	2937	
16	1682* 4	1752	1899	1929*20	1701*26	1803	2139	2385	2451	2478	
17	2487	2452	2353	2052*20	2064	2200	2158	1602*46	1811*50	1795	
18	1772	1829	1909*16	1887	1858	1847	1805	1778	1781	1859	
19	1975	2363*10	2345	2275*20	2353	2469	2633*40	2623	2593	2578	
20	2571	2433	2317	2247	2212	2195	2170	2140	2055	1745	
21	1959	2061	2159	2224*20	1993	2368	2493*40	2498*46	2493	2487	
22	2348	2100	1761*14	2043*20	2429	2352*32	2754*40	2696	2523	2421*58	

RRS SHACKLETON CRUISE 3/75
UNCORRECTED DEPTH IN METRES

HOURS	MINUTES					DATE 1-4-91					75
	00	06	12	18	24	30	36	42	48	54	
0	2516	2680*10	2516	2676*29	2516*26	2612	2780*58	2209*44	2368	2527	
1	2487*4	2516	2504	2694	2659	2747*34	2721	2644	2563	2480	
2	2245	2056	2597*16	2603	2622	2695	2858	3317*44	2997	2514	38
3	2458*2	2524	2597*14	2540	2454	2349	2194*40	2368	2572	241	38
4	2627	2714	3010	3109	3109	2944	2761	2542	2396	2205	38
5	2460*4	2451	2377*14	2410	2469	2579	2758	2500	2067*50	2505	
6	2679	3150	3219	2981	2707	2816*54	2711	2487*14	2137	2363	
7	2703*4	2615	2341*14	2743*20	2736	2455*34	2385	2473	2507	2516*58	
8	2515	2517	2520	2522	2525	2527	2745	2890	2890	288	
9	2879	2946	2984	2993	3002	3011	3021	3030	3039	304	
10	3057	3672*10	2999	2780	2085*28	2090	2394	2603	2626*50	2617	
11	2604	2588	2571	2554	2537	2521	2504	2687	2465*50	2474	
12	2467	2304*10	2352	2494	2587	2655	2732*40	2700	2603	2253*58	
13	2195*4	2275*8	2314	2418*20	2347	2242	2242	2337	2343	237	
14	2429	2458*10	2451	2443	2424	2399	2354	2249	2326	248	
15	2312*4	2385	2537	2560*20	2451	2487	2670*40	2701	2765*50	2622	
16	2414	2158*10	2237	2474	2586*26	2630	2961	3187	3208*50	3044	
17	2798	2827	2846	2847	2834	2813	2505*40	2504	2501	2495	
18	2487	2633	2549	2401*20	2412	2498	2603	2674	2677	2657	
19	2626	2719*10	2697	2630	2560	2630	2670*40	2641	2553	236	16
20	2465	2370	2432	2606*20	2575	2633	2699*40	2697	2691	267	
21	2655	2660	2708	2844	2963	3072	3072	3076	3091*50	3083	
22	3072	2999*10	3012	3052	3113	3186	3151	2751*44	2853*50	2019	
23	2897	2881	2752*14	2837	5219*26	3124	2981	2839	2697	2555	

RRS SHACKLETON CRUISE 3/75
UNCORRECTED DEPTH IN METRES

HOURS	MINUTES					DATE 2-4-92					75
	00	06	12	18	24	30	36	42	48	54	
0	2271	2533	2765*16	2652	2511	2469	2341*40	2465*46	2436	2948	2257*58
1	2308	2273	2214	2074*20	2195	2377	2838*38	2794	2948	3001	
2	3603	2935	2633*16	2676			2516*40	2493	2399*50	255	
3											
4	2791	2762									
5											
6											
7											
8											
9											
10											
11											
12	2692	2690	2682	2662	2652	2648	2608*40	2565	2392*50	2622	56
13	2246	2402	2561	2783*20	2606	2341	2286*40	2304	2359	2417	
14	2619	2615*10	2618	2630*20	2598	2549	2630*40	2594	2451*50	246	
15	2476	2327	2176*16	2377	2625	2696	2922	3076	3087	3098	
16	3109	2944	2832	2820*20	2921	3072	2670*40	2758*46	2502*50	2578	
17	2692	2719*10	2662	2432*20	2486	2568	2668*40	2652	2588*50	2723	
18	2926	2656	2358	2002	1807	1840	1917	2019	2173	228	
19	2374	2385*8	2134	2173	2214	2257	1957	2040	2308*50	230	
20	2165	2337*10	2321	2257*20	2309	2388	2677*38	2550	2525	2498	
21	2619	2944*10	2633	2955*20	2840	2666	2669	2717	2857	2909	
22	2915	2637*10	2683	2821	2935	3036	2436*40	2499	2688	2809	
23	2897	3065*10	3005	2825	2508	2323	2476	2666	2930	311	78

RRS SHACKLETON CRUISE 3/75
UNCORRECTED DEPTH IN METRES

HOURS	MINUTES					DATE 3-4-93					75
	00	06	12	18	24	30	36	42	48	54	
0	3138	3211	3290	3382	3426	3445	3449	3979	3576	2747*58	
1	2769	3078	3331	3471	2747	3109	3260	3370	3405*50	339	
2											
3	3391	3415	3438	3467*20	3453	3431	3407	3298	2926*50	2932	
4	2941	3036*10	3029	3003*20	3015	3032	3010*40	3022	3069*50	3015	
5	2933	3137	3276	3285*20	3280	3274	3263	3238	3188	3146	
6	3109	3127*10	3121	3080*22	3098	3153	3157*40	3142	3098	299	
7	2868	3226	3242	3279	3293	3295	3256	3191	3036*50	311	
8	3237	3529	3755	3849	3887	3897	3908*40	3907	3904	3892	
9	3745*4	3776*10	3754	3665*20	3728	3669*34	3774	3986	3988	3989	
10	3990	3992	3993	3994	3994	3994	3994	3993	3991	3990	
11	3490	3990	3990	3990	3989	3987	3989	3989	3990	3980	
12	3487	3985	3982	3980	3978	3976	3969	3959	3936*50	395	
13	3972	3980	3985	3986	3987	3987	3986	3982	3975	396	
14	3961	3941	3915	3877	3836	3793	3767	3728	3664	3561	
15	3438	3639	3678	3680	3715	3729	3736	3741	3744	3745	
16	3745	3717	3680	3578	3492	3407	3392*40	3438*46	3397	3259	
17	3352*4	3065*16	3110	3108	3210	3208	3277*40	3153	2780	333	
18	3351	3372*8	3110	3110	3358	3369	3364	3414	342	342	
19	3428	3429	3482	3473	3484	3500*32	3508*40	3505	3499	3481	
20	3156	3500	3502	3508	3508	3508	3508	3508	3508	3499	
21	3186	3483	3482	3483	3489	3497	3514	3526	3524	3524	
22	3127	3131	3130	3149	3159	3570	3531	3590	3594	3594	
23	3115	3107	3100	3111	3113	3614	3614	3617	3617	361	

RRS SHACKLETON CRUISE 3/75
UNCORRECTED DEPTH IN METRES

DATE 4- 4- 75
(DAYNO 94)

HOURS	00	06	12	18	MINUTES	24	30	36	42	48	54
0	3619	3618	3617	3617	3617	3617	3617	3617	3617	3617	3616
1	3614	3614	3613	3611	3607	3603	3603	3602	3602	3598	3596
2	3594	3591	3590	3588	3587	3586	3585	3584	3582	3579	3571
3	3577	3577	3577	3577	3577	3577	3576	3573	3566*50	3566	3565
4	3579	3571	3566	3566	3568	3570	3572*40	3571	3567	3557	3557
5	3564	3563	3562	3561	3561	3561	3560	3558	3557	3548	3546
6	3557	3556	3554	3552	3552	3552	3549	3548	3548	3546	3546
7	3544	3544	3543	3541	3540	3539	3538	3537	3535	3534	3534
8	3533	3532	3531	3529	3529	3527	3527	3524*50	3524	3522	3521
9	3519	3515	3512	3510	3509	3508	3507	3505	3504	3504	3504
10	3504	3504	3504	3504	3504	3504	3502	3500	3507	3508	3508
11	3509	3511	3511	3511	3513	3515	3516	3517	3517	3518	3518
12	3519	3520	3521	3522	3522	3522	3522	3522	3522	3522	3522
13	3520	3520	3520	3520	3520	3519	3518	3516	3515	3513	3513
14	3511	3509	3507	3505	3504	3504	3503	3503	3501	3500	3498
15	3500	3499	3498	3498	3498	3497	3498	3497	3499	3499	3494
16	3495	3489	3486	3489	3491	3493	3494	3495	3495	3486	3484
17	3493	3493	3493	3492	3490	3489	3488	3487	3487	3486	3484
18	3482	3480	3477	3474	3471	3467	3465	3463	3462	3460	3460
19	3456	3454	3452	3450	3448	3445	3447	3448	3449	3449	3449
20	3449	3449	3449	3448	3445	3442	3443	3429	3424	3417	3417
21	3409	3404	3400	3394*20	3396	3398	3396	3393	3388	3385	3385
22	3383	3383	3382	3377	3376	3376	3374	3372	3372	3371	3371
23	3369	3365	3363	3363	3362	3360	3361	3362	3363	3364	3364

PRS SHACKLETON CRUISE 3/75
UNCORRECTED DEPTH IN METRES

DATE 5- 4- 75
(DAYNO 95)

HOURS	00	06	12	18	MINUTES	24	30	36	42	48	54
0	3365	3363	3361	3361	3361	3361	3361	3361	3361	3361	3363
1	3365	3365	3365	3366	3368	3369	3370	3369	3369	3369	3369
2	3370	3372	3372	3372	3372	3372	3372	3373	3374	3375	3375
3	3376	3376	3376	3376	3376	3376	3376	3376	3376	3376	3376
4	3376	3376	3376	3376	3375	3374	3374	3374	3373	3372	3372
5	3372	3372	3372	3372	3374	3376	3377	3378	3378	3378	3378
6	3378	3378	3377	3376	3376	3375	3374	3373	3373	3372	3372
7	3370	3369	3368	3367	3366	3365	3365	3364	3362	3361	3361
8	3361	3359	3358	3358	3357	3356	3355	3354	3353	3351	3351
9	3359	3349	3348	3347	3345	3343	3342	3341	3340	3339	3339
10	3339	3338	3337	3336	3334	3333	3331	3330	3329	3328	3328
11	3327	3325	3324	3323	3321	3319	3318	3317	3315	3312	3312
12	3310	3308	3306	3304	3301	3299	3297	3295	3294	3290	3290
13	3285	3282	3280	3276	3272	3268	3266	3263	3259*50	3265	3265
14	3274	3256	3244	3241	3239	3237	3235	3232	3227	3225	3225
15	3224	3224	3224	3224	3224	3224	3225	3226	3226	3226	3225
16	3224	3223	3221	3219	3207	3197	3188	3181	3179	3178	3178
17	3178	3186*10	3181	3168	3155	3142	3140	3138	3137	3137	3137
18	3136	3120	3097	3059	2849	2553	2553*40	2500	2348*50	2290*56	2290*56
19	2308	2341* 8	2285	2254	2234	2217	2125*38	2158*46	2155	2004	2004
20	1920	1886	1852	1818	1778	1734	1694	1653	1609	1552	1552
21	1489	1448	1390	1297	1207	1119	845	628	662*50	475	475
22	490	571	658*14	600*22	639	860*32	523*40	622*46	454*50	456	456
23	461	538*10	702*14	589*20	732	457*34	416	332	329	439	439

RRS SHACKLETON CRUISE 3/75
UNCORRECTED DEPTH IN METRES

DATE 6- 4- 75
(DAYNO 96)

HOURS	00	06	12	18	MINUTES	24	30	36	42	48	54
0	669	812	920	957	971	973	944*40	965	1029	1076	
1	1116	1124	1164	1289	1220	1814	2042	2235	2355	2609	
2	2930	2993	3058	3124	3237*26	3233	3220	3201	3172	3146*56	
3	3186	3347*10	3346	3342	3329	3310	3301	3290	3272	3266	
4	3266	3275	3286	3301	3306	3287	3268	3253	3253	3235	
5	3215	3164	3219	3222*20	3215	3204	3215	3239	3290	3321	
6	3343	3340	3343	3338	3331	3325	3305*40	3306*46	3306*50	3309	
7	3314	3315	3316	3317	3315	3310	3308	3306	3304	3301	
8	3299	3297	3294	3291	3286	3281	3281	3280	3278	3273	
9	3266	3257	3252	3253	3253	3253	3246	3238	3229	3217	
10	3204	3215*10	3210	3209	3209	3211	3186*40	3187	3193*50	3158	
11	3189	3187	3187	3181	3179	3180	3180	3176	3163	3158	
12	3157	3146	3137	3132	3126	3114	3091*40	3094	3074*50	3076	
13	3098	3080*10	3085	3105*20	3098	3087	3085	3083	3083	3083	
14	3082	3062	3080	3077	3074	3071	3068	3067	3065	3061	
15	3054	3018* 8	3054*10	3028*20	3047*26	3023	3025	3027	3027	3029	
16	3032	3036*10	3035	3033	3026	3018	3004	2989	2969	2921	
17	2858	2806	2761	2760	2756	2751	2674	2602	2425	2130	
18	1891	1753	1627	1526	1453	1394	1196*40	1251	1415	1697	
19	1873* 2	1869*10	1873	1887*20	1883	1876	1879	1887	1906	1929	
20	1953	2291	2247	2285	2332	2385	2405	2422	2437	2466	
21	2433	2486*10	2501	2551	2580	2632	2911	3203	3516	3731	
22	3497	3927	3951	3967*20	3837	3802	3903*60	3880	3812	3652	
23	3745	3163	3171	3671	3394	3217	3116	3116	3132	3103	

REGS SAILOR'S CRUISE 3/75
UNEXPECTED CERTAIN FIRMS

HOURS	LINES					DATE (DAY-MO-YR)					
	00	06	12	18	24	30	36	42	48	54	
0	3076	3079	3042	3083	3060	3025	3094	2995	2987	2969	
1	2944	2915	2892	2865	2849	2835	2835	2835	2835	2833	
2	2851	2840	2853	2802*40	2875	2864	2862	2855	2835*50	2838	
3	2842	2785*10	2789	2805*20	2792	2772	2789*40	2785	2767*50	2776	
4	2791	2774*10	2775	2779	2780	2780	2776*40	2777	2780*50	2774	
5	2765	2762	2757	2749	2745	2743	2743	2745	2749	2755	
6	2761	2770	2717	2782*20	2769	2751	2698	2601	2443	2371	
7	2345	2361	2381	2391	2319	2707	2944	3112	3144	3163	
8	3177	3191	3204	3215	3227	3241	3245	3248	3248	3248	
9	3243	3248	3248	3248	3248	3248	3248	3248	3248	3248	
10	3249	3248	3218	3248							
11											
12	3157	3146	3137	3132	3126	3118	3096*38	3176	3163	3158	
13	3098	3083* 8	3085	3105	3098	3087	3085	3102*46	3074	3076	
14	3082	3082	3080	3077	3074	3071	3068	3067	3065	3061	
15	3054	3016	3054*16	3028	3047	3023	3025	3027	3027	3029	
16	3032	3030*10	3031	3033	3026	3018	3004	2989	2969	2921	
17	2958	2800	2761	2760	2756	2751	2674	2602	2425	2130	
18	1891	1753	1627	1526	1453	1394	1253*38	1251	1415	1697	
19	1873	1870* 8	1873	1807	1803	1876	1879	1887	1906	1929	
20	1953	2208	2247	2285	2332	2385	2405	2422	2437	2466	
21	2533	2493* 8	2501	2554	2588	2632	2911	3203	3516	3731	
22	3897	3927	3951	3967	3937	3892	3903*40	3880	3812	3652	
23	3445	3400	3470	3471	3394	3277	3216	3164	3132	3085*58	

HOURS	TIMEES										DATE (DAYNO)	30-3-75
	00	06	12	18	24	30	36	42	48	54		
0	70★ 4	71	89	121	143★28	140	117	93	94	106	128★56	
1	107	100	99	98★20	98	116	131	137	134	134		
2	130	149★ 8	137	124	103★28	104	110★40	110★44	105	101		
3	95	95	98	101	103	114	119	121	120	114		
4	153★ 2	111	116	121	123	125	130	136	147★52	146		
5	153★ 4	154★10	153	152	147	137	129	124	115	113		
6	118	111	107	103	101★28	99★32	100★40	99	100	98		
7	99	102	123	153	175★26	171	170	171	176	185★56		
8	182	167	113	118★22	119	132	155	162	159	156		
9	153	160	174★16	173	179★26	178	181	183	175★52	177		
10	161	143	115	86	66	51	62	135★46	134	104		
11	87	95	107	121	126	126	125	129	144	168		
12	195	213	214	202	189	178	176	177	172	158		
13	140	132	136	146	134	123	114★43	115	115	128★58		

HOURS	TIMEES										DATE (DAYNO)	30-3-75
	00	06	12	18	24	30	36	42	48	54		
0	130	137	144	151	159	170	177	180	178	171		
1	159	147	136	122	113	112	116	118	124	129		
2	126	120	116	117	124	129★32	127	123	117	108		
3	101	97	98	105	109	110	111★40	112	112	94		
4	61	20	7	13	40	67	81★38	84	106	126		
5	138	143	159	129	121★26	119	131	143	161	188		
6	234	291	325	337	346★26	339	284	182	92	32★58		
7	33	69	127	166	188	188	176	159	137★52	138		
8	183	150★ 8	145	128	115	113	115	104	84	60★58		
9	63	82	114	143	146	131	113	88	57★52	58		
10	73	91	120	154	173★26	169	159	140	121	130		
11	141★ 2	132	109	94	92	88	90	102	112	117		
12	122	66	51★20	55	58	74	101	132	156			
13	173	181	173	141	99	81	113	173	211	172		
14	88	32★ 8	34	54	110	197	245	220	167	143		
15	130	121	93	35	-15★26	7	29	77	152	149		
16	133	110	126	148	166	163	115	31	-31	-44		
17	-44	-43	-41	-27	-15	-26	-51★40	-49	-29	6		
18	33	51	65	78	87	93	97	104	114	122		
19	127	132	128	122	114	108	101	98	95	82		
20	65	56	50	41	24	11	4	4	8	20		
21	29	23	16	13	21	29	39	47	53	59		
22	60	56	47	45	45	50	55	63	69	73		
23	75	76	76	72	70	62	56	49	36	14★58		

HOURS	TIMEES										DATE (DAYNO)	31-3-75
	00	06	12	18	24	30	36	42	48	54		
0	11	7	3	2	3	14	34	55	67	69		
1	69	68	73	75	70	81★34	80★38	79	78	75		
2	69	52	47	46	62	85★32	81	78	64	33		
3	15	-13	4	54	108	134	111	74	77★52	39		
4	72	129	206	281	331	384	432	472	499	510		
5	486	605	310	221	167	135	71	-6	-97	-187		
6	-257	-279	-292	-356	-467	-551	-611	-664	-637	-439		
7	-161	-16	63	122	161	173	178	186	207	225		
8	254	367	358	381	348	266★32	274	311	335	333		
9	315	300★ 8	325	332	300	276	253	249	259	276		
10	297	291	218★16	225	302	355	426	574	574	543		
11	137	117	122	110	84	70	79	85	100	129★58		
12	127	113	59	1	-14	-46	-55	-77	-107	-143		
13	-171	-216	-245	-260	-255	-233	-184	-131	-79	-42★56		
14	-61	-126	-186	-255★22	-249	-236	-254	-285	-307	-338		
15	-372	-396	-386	-372	-373	-387	-421	-447★46	-446	-441★58		
16	-442	-455	-456	-453	-429	-437	-401★40	-476	-416	-331		
17	-266★ 2	-266	-406★10	-403	-353	-221★52	-230	-317	-399	-444★58		
18	-163	-421	-432	-574★22	-341★20	-584	-340	-265	-196	-83		
19	-125★ 2	-112	-67	-21	-34	-90	-106	157	218	256		
20	-277★ 2	-271	259	196	226	310★54	307	256	207	163		
21	152	146	156	162★60	176	191	234	263	261	284		
22	452	356★19	455	393	293	132	91	26	-6	4		
23	652	711★10	586	325	76	-254	-448	-656★46	-553	-482		

RRS SHACKLETON CRUISE 3/75
MAGNETIC ANOMALY

DATE 1- 4- 75
(DAYNO 91)

HOURS	00	06	12	18	24	MINUTES	30	36	42	48	54
0	-224* 2	-282*10	-274	-217*20	-227	-144	223	646*44	606	478	
1	615* 4	616	406	93*20	114	134	150	186	358	492	
2	413* 2	670	679*14	572	141	-251	-422	-509	-441	-340*58	
3	-349	-395	-526*16	-525	-488	-501	-500	-478*44	-600	-793*56	
4	-696	-348	-132	-250	-370	-413*32	-358	-116	248	499	
5	527	675	680	540	675	656*34	658	669	701	468	
6	115	556	-104	-218	-405	-506	-315*40	-329	-540	-672	
7	-536	-251	-29	299*20	79	-152					
8											
9											
10											
11											
12											
13											
14	397	405	430	472	522	569	616	641	666*52	408	
15	652	642	631*16	632	630	635	639	656	615	664	
16	240	91	-7	-51	-73	-130	-234	-360	-480	-447	
17	-551	-501	-431*14	-445	-554	-708*34	-699	-689	-699	-730	
18	-775	-825	-860	-876*20	-873	-850	-812	-757	-697	-636	
19	-584	-550	-534	-534	-537	-527*32	-562*40	-561	-505	-386	
20	-259	-213	-251	-295*20	-279*26	-300	-353	-407	-454	-488	
21	-506* 4	-505	-497	-484	-468	-454	-447	-442	-433	-415	
22	-389	-361	-336	-319	-297*26	-367	-486	-561*44	-534	-457	
23	-548* 4	-541	-446	-312	-201	-141	-111	-38	112	535*58	

RRS SHACKLETON CRUISE 3/75
MAGNETIC ANOMALY AFTER REMOVAL OF THE IGRF IN GAMMAS

DATE 2- 4- 75
(DAYNO 92)

HOURS	00	06	12	18	24	MINUTES	30	36	42	48	54
0	600	687	663	633	636	648	663*38	659	644	619	
1	566	566	602	598	550	392			-335	-386	
2	-425* 2	-408	-266*16	-272	-405						
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15	-212	-327	350*14	249	168*28	170	169	120	15	-105	
16	-403	-432	-441	-514*20	-505	-466	-424	-379	-361	-377	
17	-12	-452	-499	-544*26	-541	-482	-312	-115	-215	-256	
18	-12	-41	20	177	381	517	598*40	595	543	449	
19	318	171*10	188	313	444	507	579	654*44	631	423	
20	249	111	-42	-197	-331	-386	-355	-265	-162	-83*58	
21	-90	-117	-142*14	-130	-65	16	90	153	185	196*56	
22	191	176	153	133	121	134	194*40	192	124	12	
23	-68* 4	-65	-42	-3	78	213	357*40	353	304	232	

RRS SHACKLETON CRUISE 3/75
MAGNETIC ANOMALY AFTER REMOVAL OF THE IGRF IN GAMMAS

DATE 3- 4- 75
(DAYNO 93)

HOURS	00	06	12	18	24	MINUTES	30	36	42	48	54
0	161	99	28	-43	-93	-105	-93	-75	-44	28	
1	139	235	281*14	269	224	173	137	125	134	157	
2	184	208	228*14	215	158	78	4	-50	-79*52	-76	
3	-45	27	115	201	261	306	345*40	344	326	277	
4	208	125	49	-41*22	-39	-3	23	44	70	84	
5	98	118	142	171	200	219	228	224	206	185	
6	142	84	40	7	-28	-56	-52	-18	12*50	6	
7	-33	-64	-91*16	-90	-84	-66	-37	-8	12	25	
8	36	51	69	89	103	120	137	143	141*50	137*58	
9	136	137	144	154	171*28	169	156	134	112	95	
10	86	76	63	46	26	7	-13	-35	-56	-76	
11	-89	-94	-88	-72	-49	-26	-8	4	8	9	
12	11	16	24	34	40	42	39	36	36	36*58	
13	35	37	70	42	47	53	61	75	94	109	
14	119	122	119	111	99	88	82	82	89	95	
15	100	105	109	109	107	106	99	94	86	75	
16	62	51	45	36*22	37	39	47	57	68	78	
17	91	102	113	121	128	132	136*38	136	135	132	
18	125	117	113	119	154	147	161*38	157	139	108	
19	71	37	55	-22	-42	-55	-62	-66	-67	-69	
20	-71	-75	-77	-76	-72	-55	-54	-40	-24	-7	
21	13	32	39	62	70	75	61	36	91	99	
22	103	119	127	133	133	131	123	117	109	98	
23	86	69	55	77	38	31	30	22	18	14	

RRS SHACKLETON CRUISE 3/75
MAGNETIC ANOMALY

DATE 4-4-75
(DAYNO 94)

MINUTES	24	30	36	42	48	54
00	00	12	18			
0	11	11	12*10	11	13	20
1	42	47	51	51*22	49	46
2	41	53	33	24	25	24
3	37	40	46	51	59	82
4	91	87	35	81*22	80	78
5	68*2	67	65	60	55	50
6	70	82	100	122	150	173
7	190	190	191	193	192	186
8	140	141	134	128	121	110
9	35	31*10	30	32*22	31	37
10	46	35	31	30*22	31*28	30
11	16	14	9	4	0	2
12	-8	-10	-17	-20	-16*28	-17
13	5	20	43	63	81*28	80
14	55	76	102	121	135*26	134
15	116	112*8	114	118	128	138
16	15	38	77	-106	-96	-74
17	48	64	73	75	81	86
18	72	64	56	45	37	33
19	52	57	60	62	62*26	61*34
20	70	77	83	89	94	102
21	152	153	158	161	165*26	164
22	107	95	86	84	84	79
23	-6	-18	-24	-26	-22	-16

RRS SHACKLETON CRUISE 5/75
MAGNETIC ANOMALY AFTER REMOVAL OF THE IGRF IN GAMMAS

DATE 5-4-75
(DAYNO 95)

MINUTES	24	30	36	42	48	54
00	00	12	18			
0	39	51	62	67	65	54
1	4	-3	-11	-15	-17	-15
2	-16	-15	-11	-3	6	14
3	7	7	7	6	2	-2
4	5	19	50	54	74	95
5	98	85	71	63*22	64	66
6	81	81	85	93	102	114
7	129	125	116	107	94	85
8	40	40*10	41*14	43*22	44*26	43
9	64	67*10	66	62	57	52
10	-5	-21	-34	-45	-55	-65
11	-53	-45	-38*16	-39	-38*26	-36
12	-34	-31	-29	-25	-22	-16
13	1	2	2	2	3	3
14	-5	-7*10	-8	-10	-13*26	-16
15	-36*4	-37*10	-36	-36	-37*26	-38
16	-37	-35*8	-36	-33*20	-30*26	-28*34
17	-32	-33	-37	-40*22	-39	-40
18	-66	-67*10	-69	-68	-67	-67
19	-58	-58	-55	-50	-42	-33
20	39	49	53	56	61	67
21	75	67	62	63	67	75
22	162	197	226	238	225	201
23	199	172	159	140	120	111

RRS SHACKLETON CRUISE 3/75
MAGNETIC ANOMALY AFTER REMOVAL OF THE IGRF IN GAMMAS

DATE 6-4-75
(DAYNO 96)

MINUTES	24	30	36	42	48	54
00	00	12	18			
0	320	269	136	48	-19	-78*32
1	-43	-14	-7	8	45	-66*40
2	96*2	94	92	87	84	101
3	89	91	95*16	91	94	84
4	111	114	116	120*20	120	126
5	139*4	138	142	146*22	146*26	144
6	128	122	119	114	110	108
7	93	92	88*14	87	89*28	88
8	84	85*10	85*16	84	85	85
9	87	88	90	92	92	94
10	97*4	96	99	91	88	83
11	65	63	61	59	58	58
12	41	55	54	51	52	51
13	26	27	26	27	25	25
14	25	29	35	39	41	43
15	47*2	49	48	46	47	43
16	22	23	28	33	40	48
17	72	72	72	73	72	72
18	43	43	47	31	15	24
19	-5	-2	3	17	29*28	28
20	21	16	-7	-28	-38	30
21	-17	-12	-7	-13	-21*32	25
22	27*4	26	21*10	16*22	16	35
23	61	75	75	76	61	59

CRS. SING. LEFT. CRUTSE 3/75
PAGE FIFTEEN

DATE 7- 4- 75
(DAY 0 97)

HOURS	00	06	12	18	24	30	36	42	48	54
					VOTES					
0	80	82	82	82	81	76	75	74	77*52	76
1	76	81	83	87	91	96	103	110	119	125
2	132	138	142	144*20	146	148	152	155	162	170
3	176	187	196	205	210	214	210	206	199	190
4	181	173	164	155	150	141	133	124	114	104
5	96	89	82	78	76	74	73*38	71	65	57
6	44	28	11	-2	-12	-23	-33	-48	-64	-79*56
7	-74	+59	-46	-27	-27	-38	-51	-64	-75	-83
8	-88	-92	-94	-99	-104	-111	-119	-126	-128	-132*58
9	-133	-132	-129	-124	-121	-113	-104	-94	-82	-71
10	-63	-56	-52							
11								51	49	45
12	41	55	54	31	32	31	31	30	28	27
13	26	27	26	27	25	25	25	24	22	26*58
14	25	29	35	39	41	43	48*40	47	47	48
15	47	49	48	48	47	43	37	30	26	23
16	22	23	28	33	40	48	55	61	66	69
17	72	72	72	71	72	69	63	58	55	51
18	48	48	47	31	15	24	38	16	-21	-16
19	-5	-2	-3	14	29*28	28	30	28	28	29
20	21	10	-7	-28	-38	-42	-34*40	-38	-35	-23
21	-17	-12	-7	-4	-3	21	25	33	32	30
22	27* 4	26	20*18	18*20	18	23	26	34	42	50
23	61	70	75	76	81	82	80	81	78	79*58

RRS SHACKLETON CRUISE 3/75 DEPTH IN CORRECTED METRES										DATE 29- 3- 75	
HOURLY	00	06	12	18	24	MINUTES	30	36	42	48	54
0	1457	1455	1452	1450	1449	1449	1448	1443	1440	1440	1440
1	1456	1451	1426	1423*20	1425	1427	1436*40	1435	1431*50	1437	1437
2	1446	1438	1424	1398	1393	1298	1247	1197	1149	1099	1099
3	1048	1150*10	1093	925	825	760	669	572	461	385	385
4	327	329	333	343	353	363	382	406	440	480	480
5	523	561	600	639	674	716	751	786	820	850	850
6	878	771*10	811	936	982	1009	1013	1027	1040	1060	1060
7	1082	1062*10	1078	1142*20	1141	1138	1154	1176	1223*50	1188	1188
8	1137	1168	1195	1211	1231	1251	1254	1272	1319	1344	1344
9	1356	1369	1391	1426	1473	1506	1528	1551	1573	1589	1589
10	1603	1612	1621	1628	1641	1655	1685	1711	1731	1755	1755
11	1781	1796	1807	1814	1821	1828	1834	1839	1840	1843	1843
12	1846	1845	1845	1843	1842	1841	1841	1841	1842	1847	1847
13	1854	1853	1866	1881	1890	1895	1908	1923	1944	1960*58	1960*58

RRS SHACKLETON CRUISE 3/75 DEPTH IN CORRECTED METRES										DATE 30- 3- 75	
HOURLY	00	06	12	18	24	MINUTES	30	36	42	48	54
0	1963	1985	2002	2003	2012	2015	2011	2006	2000	1996	1996
1	1993	1981	1970	1959	1954	1953	1931	1911	1896	1879	1879
2	1558	1867	1882	1895	1898	1897	1890*40	1891	1894	1895	1895
3	1895	1929	1953	1961*20	1953	1939	1933	1899	1881	1871	1871
4	1865	1857	1852	1854	1891	1846	1856*40	1855	1850*50	1852	1852
5	1856	1854	1851	1848	1842	1835	1831	1825	1816	1804	1804
6	1792	1787*10	1788	1793	1794	1794	1799	1802	1804	1817	1817
7	1835	1853	1867	1871	1879	1888	1892	1897	1903	1911	1911
8	1921	1923	1923	1993*22	1936*26	1944	1960	1972	1979	1986	1986
9	1993	1996	1998	1998	2009	2024	2047	2069	2090	2099	2099
10	2044	2112	2121	2123	2128	2133	2146*40	2138	2113	2086	2086
11	2056	2042	2027	2011	1976	1933	1988	2034	2062	2072	2072
12	2073										
13	2724*4	2615	2594	2562	2546	2537	2530	2522	2513	2506	2506
14	2090	2483	2470	2461	2426	2379	2388	2405	2450*50	2443	2443
15	2431	2386*10	2392	2407	2428	2450	2455	2458	2461	2461	2461
16	2461	2460	2460	2461	2461	2461	2421	2375	2319	2281	2281
17	2251	2353*10	2344	2293*22	2405*26	2392	2400	2406	2408	2414	2414
18	2422	2430	2437	2441	2446	2446	2441	2436	2433	2431	2431
19	2431	2422	2413	2401	2393	2386	2383	2379	2375	2366	2366
20	2356	2336	2320	2311	2302	2293	2281	2269	2256	2236	2236
21	2214	2189	2166	2146	2143*28	2105	2089	2073	2055	2038	2038
22	2023	1989	1958	1933	1909	1884	1860	1843	1823	1803	1803
23	1783	1760	1736	1709	1687	1667	1640	1609	1571	1516*58	1516*58

RRS SHACKLETON CRUISE 3/75 DEPTH IN CORRECTED METRES										DATE 31- 3- 75	
HOURLY	00	06	12	18	24	MINUTES	30	36	42	48	54
0	1506	1499	1492	1485	1482	1479	1479	1483	1496	1570	1570
1	1674	2555*10									
2	2668	2137	1736	1673	1653	1639	1662	1693	1738	1805	1805
3	1818	1815	1802	1771	1753	1742	2072	2297	2312*50	2300*58	2300*58
4	2398	2409*10	2349*14	2431*20	2395	2341	2270	2204	2107	1994	1433
5	1873	1758	1631	1481	1426	1419	1417	1422	1449*50	1433	1433
6	1408	1096*10									
7	1918	1963	2000	2023	2036	2030	2068*40	2047	1984	1887*58	1887*58
8	1988	2100*10	2075	1954*22	1981	1980	1836	1735	1714*50	2975*58	2975*58
9	1662	1612	1742	1926	2137	2362	2494*40	2491	2482	2446	2446
10	2396	2394	2341	2148*20	2194*26	2081*32	1988	2103	2145*50	2139	2139
11	2130	2321*10	2317	2302*29	2316	2336	2333	2324	2305	2287	2287
12	2063*4	2010*10	2130*14	2060	2036*25	1868*32	2242*40				
13	2320	2569	2285	2400*22	2269*26	2422	2738	2778	2941*50	2914	2914
14	2873	2996	3127	3273	3350	3393	3557	3696*44	3511	3477	3477
15	3451	2626*10	2859	2982*26	2933	2858	2864	2924	3171*50	3013	3013
16	1726*	1747	1947	1978*20	1704*28	1949	2193	2445	2512	2541	2541
17	2550	2510	2413	2104*20	2116	2255	2212	1943*46	1957*50	1841	1841
18	1817	1876	1953*10	1955	1905	1891	1823*40	1824	1926	1906	1906
19	2125	2422*10	2404	2332*20	2012	2527	2700*40	2690	2658	2643	2643
20	2030	2049	2575	2510	2268	2250	2234	2194	2107	1789	1789
21	1401	2113	2210	2200*29	2341	2424	2355*40	2501*46	2556	2550	2550
22	2107	2153	1766*14	2155*20	2190	2411*32	2424*40	2765	2587	2482*58	2482*58

RRS SHACKLETON CRUISE 3/75
DEPTH IN CORRECTED METRES

												DATE (DAYNO 1- 4- 75)
00	2575	2542*10	2583	2743*20	2580*20	2678	2850*38	2265*44	2427		2591	
1	2555* 1	2580	2670	2711	2726	2817*34	2790	2711	2628		2542	
2	2302	2107	2663*16	2669	2689	2763	2031	3405*44	3075		2580	
3	2521* 2	2567	2663*14	2604	2536	2399	2254*40	2428	2637		2464*58	
4	2185	2783	3038	3190	3020	2532	2606	2456			2257*58	
5	2531* 4	2512	2457*14	2475	2531	2644	2928	2563	2114*50		2569	
6	2452	2332	3303	3059	2775	2801*34	2780	2550*44	2094		2422	
7	2313* 4	2661	2406*14	2813*20	2805	2415*34	2445	2535	2570		2580*58	
8	2573	2577	2581	2584	2588	2591	2815	2903	2963		2959	
9	2952	3015	3021	3070	3080	3080	3098	3108	3117		3127	
10	3135	3152*10	3076	2851	2137*28	2143	2155	2669	2693*50		2684	
11	2676	2653	2636	2619	2602	2581	2567	2550	2527*50		2536	
12	2559	2362*10	2411	2557	2653	2723	2802*40	2760	2669		2310*58	
13	2250* 4	2332*8	2377	2479*20	2407	2299	2299	2396	2402		2438	
14	2099	2516*10	2513	2504	2485	2460	2114	2306	2385		2550	
15	2370* 4	2445	2601	2625*20	2515	2550	2738*40	2769	2835*50		2691	
16	2175	2212*10	2293	2536	2651*26	2696	3038	3270	3291*50		3123	
17	2069	2899	2919	2926	2906	2884	2569*40	2568	2564		2558	
18	2550	2706	2614	2462*20	2473	2561	2669	2742	2745*50		2724	
19	2693	2788*10	2766	2697	2625	2696	2738*40	2708	2617		2422*56	
20	2527	2430	2493	2672*20	2640	2700	2768*40	2766	2759		2745	
21	2723	2727	2777	2917	3039	3152	3152	3156	3171*50		3163	
22	3152	3076*10	3090	3131	3194	3269	3233	2820*44	2926*50		2070	
23	2971	2955	2802*14	2909	3303*26	3205	3058	2912	2766		2620	

RRS SHACKLETON CRUISE 3/75
DEPTH IN CORRECTED METRES

												DATE (DAYNO 2- 4- 75)
00	2324	2595	2855*16	2719	2574	2531	2700*40	2527*46	2497		2314*58	
1	2366	2330	2270	2126*20	2251	2437	2011*38	2866	3024		3078	
2	3080	3010	2700*16	2743				2575*40	2552		2621	
3												
4	2862	2832										
5												
6												
7												
8												
9												
10												
11												
12	2756	2756	2750	2729	2720	2715	2674*40	2630	2452*50		2669*56	
13	2302	2462	2626	2854*20	2672	2400	2344*40	2362	2419		2536	
14	2685	2681*10	2684	2696*20	2663	2614	2696*40	2660	2512*50		2523	
15	2539	2386	2231*16	2437	2692	2764	2997	3156	3167		3178	
16	3190	3020	2904	2892*20	2996	3152	2738*40	2828*46	2565*50		2643	
17	2760	2788*10	2729	2494*20	2549	2632	2736*40	2719	2653*50		2792	
18	3001	2724	2417	2053	1853	1887	1965	2070	2227		2341	
19	2434	2445*8	2188	2227	2270	2314	2008	2092	2366*50		2359	
20	2220	2396*10	2380	2314*20	2368	2449	2745*38	2614	2589		2561	
21	2685	3020*16	2700	3031*20	2912	2734	2736	2786	2930		2983	
22	2990	2704*10	2751	2893	3010	3114	2497*40	2562	2756		2881	
23	2971	3144*10	3082	2897	2654	2381	2539	2734	3005		3195*58	

RRS SHACKLETON CRUISE 3/75
DEPTH IN CORRECTED METRES

												DATE (DAYNO 3- 4- 75)
00	3215	3293	3376	3471	3517	3537	3541	4092	3673		2817*58	
1	2839	3158	3419	3564	3482							
2												
3	3480	3505	5530	3560*20	3545	3522	3497	3385	3496*50		3489	
4	3016	3114*10	3197	3080*20	3092	3110	3088*40	3100	3001*50		3007	
5	3009	3219	3362	3371*20	3366	3359	3348	3323	3148*50		3092	
6	3196	3208*10	3202	3159*22	3178	3235	3239*40	3223	3271		3228	
7	2941	3310	3327	3365	3380	3382	3341	3274	3178		3074	
8	3322	3624	3855	3956	3996	4006	4017*40	4016	3114*50		3197	
9	3848* 4	3880*10	3857	3765*20	3830	3768*34	3878	4098	4013		4001	
10	4103	4104	4105	4106	4107	4107	4107	4106	4104		4103	
11	4103	4103	4103	4103	4101	4099	4101	4103	4103		4101	
12	4099	4097	4095	4092	4090	4088	4081	4070	4046*50		4061	
13	4084	4092	4098	4094	4099	4099	4094	4095	4087		4079	
14	4073	4052	4025	3985	3942	3897	3870	3850	3764		3657	
15	3530	3738	3778	3780	3816	3831	3838	3844	3847		3848	
16	3848	3818	3768	3574	3585	3597	3482*40	3530*46	3187		3345	
17	3046* 4	3165*10	3191	3295*20	3294	3291	3442	3363*40	3235		3421	
18	3446	3461*8										
19	3519	3520	3551	3566	3577	3594*32	3456	3478	3505		3519	
20	3549	3596	3632	3602	3602	3602	3602	3599	3592		3574	
21	3579	3577	3575	3577	3582	3590	3603	3620	3602		3592	
22	3619	3625	3633	3644	3645	3666	3677	3666	3619		3619	
23	3712	3704	3797	3709	3710	3711	3714	3715	3691		3696	

RRS SHACKLETON CRUISE 3/75

HOURS	DEPTH IN CORRECTED METRES				MINUTES				DATE 4- 4- 75 (DAYNO 94)			
	00	06	12	18	24	30	36	42	48	54		
0	3717	3716	3715	3715	3715	3715	3715	3715	3715	3715	3714	
1	3711	3711	3711	3708	3705	3700	3699	3696	3696	3696	3693	
2	3691	3688	3686	3685	3684	3683	3682	3680	3678	3678	3676	
3	3674	3674	3674	3674	3674	3674	3672	3670	3668*50	3666	3667	
4	3675	3667	3662	3662	3664	3666	3668*40	3667	3663	3661	3661	
5	3660	3659	3658	3657	3656	3656	3655	3654	3653	3653	3653	
6	3653	3652	3650	3648	3647	3647	3645	3643	3643	3643	3642	
7	3639	3639	3639	3638	3635	3634	3633	3631	3630	3630	3629	
8	3628	3627	3626	3625	3624	3622	3621	3620	3625*50	3623	3623	
9	3619	3616	3613	3611	3609	3608	3607	3606	3605	3604	3604	
10	3604	3601	3604	3604	3601	3604	3605	3606	3608	3608	3609	
11	3610	3611	3612	3612	3613	3616	3617	3617	3617	3618	3618	
12	3619	3620	3622	3623	3623	3623	3623	3623	3623	3623	3622	
13	3621	3621	3621	3621	3620	3619	3618	3617	3616	3616	3614	
14	3612	3609	3607	3605	3604	3604	3603	3601	3601	3600	3600	
15	3600	3599	3598	3598	3598	3597	3598	3599	3600	3599	3598	
16	3595	3585*10	3586	3586	3590	3593	3594	3595	3595	3595	3594	
17	3593	3593	3592	3591	3590	3589	3588	3587	3586	3586	3584	
18	3581	3579	3576	3573	3570	3566	3564	3562	3561	3558	3558	
19	3555	3553	3550	3548	3546	3543	3545	3546	3547	3547	3547	
20	3547	3547	3547	3546	3545	3540	3535	3526	3521	3514	3514	
21	3506	3501	3496	3490*20	3492	3491	3492	3489	3484	3484	3481	
22	3479	3479	3478	3473	3471	3471	3469	3468	3468	3466	3466	
23	3464	3461	3458	3458	3457	3454	3456	3457	3458	3459	3459	

RRS SHACKLETON CRUISE 3/75
DEPTH IN CORRECTED METRES

HOURS	DEPTH IN CORRECTED METRES				MINUTES				DATE 5- 4- 75 (DAYNO 95)			
	00	06	12	18	24	30	36	42	48	54		
0	3460	3458	3456	3456	3456	3456	3456	3456	3456	3456	3456	
1	3460	3460	3461	3462	3463	3464	3166*40	3465	3464	3464	3465	
2	3466	3467	3468	3468	3468	3468	3468	3468	3469	3469	3470	
3	3471	3471	3471	3471	3471	3471	3471	3471	3471	3471	3471	
4	3471	3471	3471	3471	3471	3470	3470	3469	3469	3468	3468	
5	3468	3468	3468	3468	3469	3471	3473	3473	3473	3473	3473	
6	3473	3473	3473	3472	3471	3471	3469	3468	3468	3467	3467	
7	3466	3465	3464	3462	3461	3460	3460	3459	3459	3456	3456	
8	3456	3454	3453	3453	3452	3451	3450	3448	3448	3447	3446	
9	3445	3444	3443	3442	3440	3437	3436	3435	3434	3434	3434	
10	3434	3432	3431	3430	3428	3426	3425	3424	3423	3423	3422	
11	3420	3419	3418	3417	3415	3413	3412	3410	3408	3408	3406	
12	3403	3401	3399	3397	3394	3392	3389	3388	3387	3383	3383	
13	3377	3375	3372	3369	3364	3360	3358	3355	3350*50	3356	3356	
14	3366	3347	3335	3332	3330	3328	3325	3322	3318	3316	3316	
15	3314	3314	3314	3314	3314	3314	3316	3316	3316	3316	3316	
16	3314	3313	3311	3305	3296	3286	3277	3270	3268	3267	3267	
17	3267	3275*10	3270	3257	3243	3229	3226	3226	3225	3225	3225	
18	3224	3207	3183	3144	2928	2623	2620*40	2566	2413*50	2353*56	2353*56	
19	2371	2405*8	2347	2320	2298	2278	2184*38	2218*46	2215	2059		
20	1974	1939	1904	1869	1828	1783	1742	1700	1655	1597		
21	1532	1490	1431	1335	1243	1153	872	649	681*50	493		
22	508	591	681*14	621*22	661	887*32	542*40	643*46	470*50	473		
23	478	554*10	726*14	609*20	756	474*34	431	345	342	455		

RRS SHACKLETON CRUISE 3/75
DEPTH IN CORRECTED METRES

HOURS	DEPTH IN CORRECTED METRES				MINUTES				DATE 6- 4- 75 (DAYNO 96)			
	00	06	12	18	24	30	36	42	48	54		
0	692	838	949	987	1003	973*40	995	1060	1109			
1	1146	1157	1219	1327	1564	2099	2296	2420	2681			
2	3011	3076	3143	3211	3328*26	3324	3291	3260	3233*56			
3	3275	3441*10	3440	3437	3423	3403	3394	3382	3364	3358		
4	3368	3367	3378	3394	3400	3379	3360	3344	3325	3325		
5	3302	3252	3305	3313*20	3305	3294	3305	3330	3382	3415		
6	3437	3439	3437	3432	3425	3418	3391*40	3400*46	3400*50	3403		
7	3407	3408	3409	3411	3408	3403	3401	3399	3397	3394		
8	3392	3390	3387	3384	3379	3373	3373	3372	3370	3365		
9	3356	3349	3343	3344	3345	3345	3337	3328	3319	3307		
10	3294	3305*10	3304	3297*20	3299	3269	3269	3265	3281	3281		
11	3279	3276	3276	3269	3213	3205	3173*40	3178	3192	3161		
12	3245	3233	3224	3220	3173	3171	3169	3169	3168			
13	3184	3165*10	3171	3192*20	3184	3173	3171	3169	3168			
14	3167	3167	3166	3163	3159	3156	3154	3152	3151	3146		
15	3136	3131*8	3139*16	3112*20	3131*26	3107	3109	3111	3111	3113		
16	3116	3120*10	3119	3117	3110	3088	3070	3051	3002			
17	2937	2877	2837	2836	2832	2826	2747	2671	2492	2189		
18	1944	1802	1673	1570	1495	1431	1232*40	1288	1457	1745		
19	1925*2	1921*10	1925	1940*20	1936	1929	1931	1939	1960	1983		
20	2004	2269	2309	2347	2396	2450	2470	2489	2503	2533		
21	2602	2552*10	2570	2624	2659	2704	2092	3292	3617	3841		
22	4013	4044	4060	4084*20	4054	4047	4019*40	3995	3924	3758		
23	3543	3554	3554	3570	3496	3369	3305	3252	3220	3190		

RHS SHACKLETON CRUISE 3/75
DEPTH IN CONVENTED METRES

HOURS	MINUTES						DATE 7-4-75			
	00	06	12	18	24	30	36	42	48	54
0	3161	3165	3168	3169	3145	3109	3092	3078	3070	3051
1	3026	2999	2971	2944	2926	2913	2913	2913	2913	2911
2	2909	2918	2931	2962*20	2954	2943	2941	2931	2913*50	2916
3	2926	2851*10	2866	2883*20	2869	2849	2866*40	2861	2843*50	2853
4	2867	2851*10	2852	2855	2856	2856	2852*40	2853	2856*50	2850
5	2841	2838	2833	2826	2821	2819	2819	2820	2825	2831
6	2837	2846	2854	2858*20	2845	2826	2772	2679	2510	2436
7	2409	2429	2446	2456	2588	2781	3025	3199	3232	3252
8	3265	3280	3294	3305	3318	3331	3336	3339	3339	3339
9	3339	3339	3339	3339	3339	3339	3339	3339	3339	3339
10	3339	3339	3339	3339						
11										
12	3245	3233	3224	3220	3213	3205	3182*38	3265	3251	3246
13	3184	3169*8	3171	3192	3184	3173	3171	3178	3192	3161
14	3167	3167	3166	3163	3159	3156	3154	3169	3169	3168
15	3136	3101	3139*16	3112	3131	3107	3109	3152	3151	3146
16	3116	3120*10	3119	3117	3110	3101	3088	3072	3051	3002
17	2937	2877	2837	2836	2832	2826	2747	2671	2492	2189
18	1944	1802	1673	1570	1495	1431	1291*38	1288	1457	1745
19	1925	1922*8	1925	1940	1936	1929	1931	1939	1960	1983
20	2000	2269	2309	2347	2396	2450	2470	2489	2503	2533
21	2602	2562*8	2570	2624	2659	2704	2992	3292	3617	3841
22	4013	4044	4069	4085	4054	4007	4019*40	3995	3924	3758
23	3543	3558	3568	3570	3490	3369	3306	3252	3220	3171*58

RRS SHACKLETON CRUISE 3/75 FREE AIR GRAVITY ANOMALY IN MGALS								DATE 29- 3- 75			
RS	00	06	12	18	MINUTES	24	30	36	42	48	54
0	-56* 4	-23* 8	4*16	-4*22	-47*28	-55*34	-47*40	-42	-24*50	-42	-106
1	-97* 2	-121*10	-67*16	-79*20	-78*28	-86*34	-84	-70	-84*50	-41*56	-244*56
2	-53	-7*10	-142*16	-107*22	-119*28	-103	-87*40	-63*44	-23*50	36*56	29
3	170	-9* 8	205*14	65*22	47*26	6*32	27*38	67	96	157*52	173*56
4	-3* 4	-15	-8*14	-15*20	-38	-30*34	-46*38	-12*44	-7*50	228*56	228*56
5	41	78* 8	80*16	66*20	92*28	140*34	108*35	140	196*52	38*58	38*58
6	168	190	169*16	181*20	245	174	230*40	200*44	64	44*52	24*56
7	246* 4	222*10	221*16	241*20	217*26	191*34	123*40	104	17*50	52*56	52*56
8	-1* 2	24* 8	18*14	11*20	50*28	45*32	42*38	13*46	-4*52	24*56	24*56
9	32* 4	31	-3*16	8*20	33*26	37*32	48*40	35	-15	17*50	48*56
10	49* 4	48*10	39	-66*20	-28*28	-48*32	-26	-18	108*40	165*44	116*56
11	34* 2	43* 8	91*14	89*22	71	91*32	116	116	109*52	141*50	148
12	162	138*10	111*14	138*22	133*28	113*34	66*38	116	109*52	116*56	116*56
RRS SHACKLETON CRUISE 3/75 FREE AIR GRAVITY ANOMALY IN MGALS								DATE 30- 3- 75			
RS	00	06	12	18	MINUTES	24	30	36	42	48	54
0	72* 4	7*10	43*14	8*20	-7*28	42*32	-13	31*46	33	78*58	78*58
1	54* 2	43*10	49	39*22	66*26	77*32	41*38	61*44	40	52*56	52*56
2	59* 4	66*10	50	32*22	14*26	29	16*40	9*46	1*50	-16*58	-16*58
3	-41* 4	-62*10	-56	-59*20	-76	-72*34	-22*38	-5*46	-10	8	8
4	60* 2	51* 8	38	100*22	90	126*32	117	167*46	111*52	119	119
5	71	41*10	29*16	-34*20	-17*28	9*32	19	17	89	155*56	155*56
6	133	160*10	176*16	158	146*26	173*32	157*40	173	138*50	186*56	186*56
7	145* 2	159	165*14	154*20	153*26	131*32	128*70	123*46	97*50	139	139
8	106	137* 8	179*16	146*20	171	189	186*40	213*46	206	202*56	202*56
9	205* 2	183*10	174*16	206*22	202	197	164*40	143*46	134*50	164*56	164*56
10	169* 2	141* 8	151*14	152*20	165*28	154*32	151*40	166	184	222	222
11	256	285*10	304*16	311*22	325*28	317*32	340*40	330	295	264	264
12	236* 4	224	200	158*20	143	123	98	87*44	66	-17	-17
13	-49	-53*10	-59	-57*22	-53*28	-57	-28*38	-14*46	9*52	-2*56	-2*56
14	21	41* 8	44	76	99*26	110	136	216*46	193*50	197*58	197*58
15	212	246* 8	242*14	223*22	211	178*34	184	151*44	162	141*56	141*56
16	113* 4	138* 8	115*16	131*20	127*28	133	206*40	233*46	232	247*56	247*56
17	255	251	253*14	251	236*28	249	211	204	173	147*58	147*58
18	131	74	41	16	0	-30*32	-17	-51*46	-55*50	-58*58	-58*58
19	-14* 2	-13	-13	10	52*28	46	82*38	96	129	150*56	150*56
20	172* 4	142* 8	168	187*22	156*26	156*32	165	182*44	201*50	199*56	199*56
21	244* 4	238* 8	254	270*20	309*26	287*32	307*38	310	287	330*56	330*56
22	323* 2	342	355	375	376*28	360*32	391	399	399	413	413
23	428	450* 8	452	482	513	552	595	648	714	818*58	818*58
RRS SHACKLETON CRUISE 3/75 FREE AIR GRAVITY ANOMALY IN MGALS								DATE 31- 3- 75			
RS	00	06	12	18	MINUTES	24	30	36	42	48	54
0	860* 4	854	816	778	736	676	603	535	432	305	305
1	136	-74	-270	-444	-627	-728	-805*40	-779	-683	-485	-485
2	231	76	332	518	637	729	788	854*46	852*52	834*58	834*58
3	836* 4	862* 8	852*14	845*20	829	807	787*38	752	660*52	630	630
4	533	487	442	385	357	316	311	282	311*52	292	292
5	636* 4	362	102	416	476	509	563	615*46	614	634	634
6	636* 4	625*10	646	611*22	656*26	633*32	597*40	578	619	542	542
7	510* 2	479	451*14	476*20	23*26	360*32	313*38	343	412*52	422	710*56
8	167* 2	457* 8	462*14	454	490	536*32	545	581	640	290*58	290*58
9	721* 2	710	685	628	554	477	405*40	393	311*50	551	551
10	309	380*10	372*14	399	448	474	509	493	534	619*58	619*58
11	573* 2	542	578*14	613*22	621*28	96*34	678*40	601	509	619*58	619*58
12	625	608	535*14	553*22	536*28	522	445	286	151	29	29
13	-52* 4	-64* 8	-45	-41*22	-71*26	-0*34	-36*38	1	31	74	74
14	125	182	251*16	273	323*26	295*32	273	239	212	177	177
15	155	103	46	4	-31	-79*32	-98*38	-84	-63*52	-62*56	-62*56
16	-80	-11	66*14	87*22	22	88*34	93*40	87	112	137	137
17	191	291	386	474	517	535*32	486	441	395	358	358
18	330* 4	335* 8	312	362*22	361	396	431	511	572	625	625
19	652	639*10	640	653*20	651*26	648	636*38	640	615*50	588	588
20	557	489	457	428	367*26	384*34	382	386*46	363*52	364	364
21	378* 2	393	413	420	429	438	456	483	505	539*56	539*56
22	550* 4	533	551	565	561	533	512*38	499	506	-42*56	-42*56
23	596* 4	509*10	542	542	594	446	397	360*44	370*50	310*58	310*58

RRS SHACKLETON CRUISE 3/75
FREE AIR GRAVITY ANOMALY IN MGALS

HOURS	MINUTES					DATE 1- 4- 75 (DAYNO 91)				
	00	06	12	18	24	30	36	42	48	54
0	227★ 2	181	153	121	155	170★32	190	239	314★52	271★56
1	511★ 2	309★10	220★14	997	225	327★34	316	-233★44	400	304★56
2	322	386	393	327	234	198	167	121	78	116
3	196	256★10	290★14	933★22	261★28	298	592	-210★46	410★50	337
4	239★ 2	231★10	209	154	108	91	124	154	225	313
5	593★ 4	399★ 8	1052★16	317★22	345	418	-334★40	315★46	204★52	220★56
6	161	132	55	-5★20	157★28	164	194	251	301	390
7	404★ 2	557★10	1093★10	450	168	234★32	255★38	238★46	314★52	211
8	237	219	235	222★20	400	226★34	215	124	65★50	-400★56
9	597★ 4	-31★10	-30	-1	104	-1★32	-29★40	50★46	-10★52	222★58
10	104★ 4	122	212	318	405★28	293★34	192★40	214	275	319★58
11	291★ 4	254	339	268★22	252	-212	336	257★44	296	349★56
12	350	358	343★16	342★22	714★28	747★32	242★40	377★44	332	60
13	113★ 2	1060	331★14	381	501	373★34	377★38	366★46	369	321
14	360	368	347★14	370★20	365	424	371★40	377★44	354★58	316
15	262★ 4	340★10	335	315★22	326★28	324	-10	386	320★52	32
16	273	229	186	142	8★26	51	15	33	18	325
17	50	75	105	145	292	339★32	-131	332★44	229★50	235
18	265	290	297★14	274★20	282	273	261★38	266	279	280
19	275	277★ 8	293★14	292★20	290	645	230★40	283★46	266	247
20	213	183	130★16	143★20	691★26	162★34	224★40	220	198	162
21	135	123	115	104	92★28	87	75	68	59★50	45
22	35★ 4	29★10	20★14	45★22	-273	141	70★40	99★44	-235★50	9★58
23	31★ 4	41★10	35★14	45	56	95	142	189	263	304

RRS SHACKLETON CRUISE 3/75
FREE AIR GRAVITY ANOMALY IN MGALS

HOURS	MINUTES					DATE 2- 4- 75 (DAYNO 92)				
	00	06	12	18	24	30	36	42	48	54
0	322★ 4	361★ 8	-67	331★20	283★28	313★34	312	343	372★50	384★56
1	980★ 2	361★ 8	422	522	390	300	225	127	70	31
2	23★ 2	36	63	111★20	57	206★32	212	257★44	414★52	298★58
3	283★ 4	520★10	-509★16	-426	1073	208	425	-271★46	-279★50	379★58
4	235	108	-361★14	-202★22	-311★28	-289	563★38	334★46	476★50	535★56
5	120★ 4	178★ 8	-94★14	65★22	-24★26	1★32	15★38	82★44	24★50	53★56
6	844★ 2	96	42	36	29★28	25★32	27	24	11★52	31★58
7	30	37	28★14	88	91	79★34	79★38	87	99★50	96★56
8	52★ 2	367★10	-215★14	-313★22	659★26	-179★32	22★38	29	85	234★58
9	290★ 4	379★10	287★16	-313★22	357★20	211★28	386★34	320	572★46	36★52
10	304★ 4	355★10	69	303	309★28	445★32	393★40	376	359★52	358
11	413★ 2	43★10	413★14	363★20	337	263★32	381★38	173★44	322★52	304
12	181★ 4	179	175	173★22	173★26	191★32	69	365★44	322★50	332★58
13	343	273★ 8	1094	161	335★28	326★32	423★38	253	368★52	99★56
14	355★ 4	162★ 8	630	186★20	305★26	399	692★40	262★44	386★50	349
15	674	294★ 8	333	288	211	143	94	51	22	13
16	0	4★10	2★14	-9★20	9	23	93	130	166★50	176
17	193	217	223	240	274★28	263★32	274★40	263★44	341★52	322★56
18	362	429	512	606★20	491★26	609	595★40	579	533	519★58
19	522	648	501	598★20	460	612★32	632	623	783	506★56
20	554	700	604	602★22	565★28	604★32	540	502	476	418
21	373	310★10	261★16	275★22	284	314★32	305★38	313	282★52	291★56
22	284	325★ 8	324	345★20	351	407★32	401	427★46	436	412★58
23	406★ 2	406	428	452	484	518	496	454	401	339

RRS SHACKLETON CRUISE 3/75
FREE AIR GRAVITY ANOMALY IN MGALS

HOURS	MINUTES					DATE 3- 4- 75 (DAYNO 93)				
	00	06	12	18	24	30	36	42	48	54
0	317	287	236	210	191	134★34	160★40	158	187★50	213★56
1	211	210	188	176★20	204	224	255	283	318	344
2	376	405	400★16	403	353	304	233	177	153	117★56
3	127	127	152★16	102★20	184	211	253	312	350	374
4	396	418★ 8	476★16	461★22	425	317★32	450★38	544	303	433
5	397	369★10	361	349	339★28	344	390★40	301★46	333	501★58
6	347★ 2	407★10	395	410★20	415★26	426	467★40	466★44	497	534★56
7	520	495	510	439★22	433★28	437	442★40	327★44	444★50	429
8	448★ 4	391	304★16	290	260	238	78★38	93	79	128★56
9	141	155	179★14	185★22	182	195★32	186	170★46	165	144
10	119	99	65★16	75★20	48★28	89★32	26★38	42	50	27
11	19★ 4	29★10	20★16	26★22	15★26	31	28	17	9★52	12
12	8	19★10	7	6★20	14	46★32	36	58★44	42	59
13	46★ 4	36★10	-34	-59★20	-69★26	-63★34	-66	-70★46	-48	-18★56
14	-8★ 2	40★ 8	35	79★20	78	137★32	155★40	212★46	201	268
15	337★ 4	333★10	323	304	268★26	285★34	302★38	263	228★50	251
16	250★ 2	199	234★16	244	268	295★32	286	318★44	336	366
17	348★ 8	354★16	393★20	356	349★34	383★38	351★44	360	291	291
18	276	253	226★14	196	129★28	139★32	77★40	71	24	-20★58
19	-33	-79	-103	-128★20	-164★26	-158	-166★40	-185★44	-164	-188★58
20	-19	-207★10	-208★14	-232	-246	-260	-268	-288	-311★50	-297★56
21	-306	-317★10	-305★14	-313★20	-297	-301★32	-292★38	-282★44	-286★52	-266★58
22	-267	-268★10	-264	-246	-225	-219	-203	-178	-167	-138
23	-102★ 4	-103	-43	-24	-6	17	33	59★44	75	90

RRS SHACKLETON CRUISE 3/75
FREE AIR GRAVITY ANOMALY IN MGALS

HOURS	00	06	12	18	MINUTES	24	30	36	42	48	54	DATE (DAYNO 74)
0	104	131* 8	126	147	164	174	179	188	208	228	228	354*56
1	250	264	286	284	314*26	342*34	340	347*46	354*50	354*52	354*52	369*58
2	236* 2	386* 8	356*14	368*22	362	372	367*38	349*46	354*52	334*56	334*56	334*56
3	300	341	324*14	385*20	346	325	361	339*44	349	349	349	334*56
4	343* 2	315*10	320*14	322	319	310	320	296*44	308	294	294	171*58
5	291	292	270*14	266	250	229*34	228	215	195	227	227	314
6	174	167* 8	148*14	160	168*28	166	183*38	195	206	227	227	314
7	246* 4	240	275*14	276	288	303*32	296*40	286	302	324*58	324*58	324*58
8	326* 4	318* 8	324*14	305*22	307	312	307*40	308	302	345*50	345*50	343*56
9	319	331* 8	319	323*22	338*26	333	340*40	335*46	345*50	343*56	343*56	343*56
10	340* 2	331*10	335*14	322*22	324	316	258*38	258*46	266*50	211	211	211
11	270* 2	261	254	265	257	276*34	270	251	262*50	257	257	257
12	264* 2	258	255*14	251	248*28	246	269*38	264*44	280*50	271	271	271
13	280	290* 8	282	288*20	281*26	299	284*40	286*44	290*50	283	283	283
14	273	266	260*16	268*20	261	259*34	262	245	234	230	230	230
15	220	227*10	226	208	201*28	202	195*38	179*46	188*52	180	180	180
16	248	175* 8	185	173	173	187*34	197*38	195*44	199*50	191*58	191*58	191*58
17	207* 4	200	213	264*22	226*26	232	246	251	273*50	273	273	273
18	281* 4	285	305*14	316*22	313*26	356*32	371	352*46	332	346	346	400*58
19	362* 2	368*10	375*16	373	382	374	388*40	386	394*50	400*58	400*58	400*58
20	378* 4	381	386*16	391	381*26	406*32	367	420*46	423	407*58	407*58	407*58
21	422* 2	414	409	398*22	385*26	425	368*40	367	358	342*58	342*58	342*58
22	345* 2	336*10	342*14	324*22	325	349	340	338*46	340	326	326	326
23	320	304*10	312*16	311	308*28	307	299	322*44	304*50	313*58	313*58	313*58

RRS SHACKLETON CRUISE 3/75
FREE AIR GRAVITY ANOMALY IN MGALS

HOURS	00	06	12	18	MINUTES	24	30	36	42	48	54	DATE (DAYNO 95)
0	317	269*10	264*16	267	251*28	266*34	265*40	246*44	254	259	259	213*56
1	243* 4	243* 8	229	230	206	201*34	203	224	213*52	159*56	159*56	159*56
2	208	167*10	170	171	187	175*32	157*40	156	148*52	159*56	159*56	159*56
3	158* 4	164* 8	167*16	158*20	200*26	190	166*40	177	192	167	167	167
4	176* 2	164*10	161	147	129*28	130	121	96	108*52	93	93	93
5	83* 2	64*10	65	46	33	7	-1*38	-17	-26	-39	-39	-39
6	-48	-60* 8	-71	-98*22	-98*26	-114	-124	-113*44	-126*52	-125	-125	-125
7	-107* 2	-105* 8	-110	-101	-107*26	-96*32	-106	-89	-78	-79	-79	-79
8	-67* 2	-71	-76	-66*20	-52*28	-64	-46*38	-53*44	-25*50	-39	-39	-39
9	-56	-50	-41*16	-48*20	-33*26	-50*32	-35*38	-43*46	-42*52	-28*56	-28*56	-28*56
10	-24	-27	-31	-26*22	-28*26	-13*34	-17	-16	-9	-13	-13	-13
11	-13* 4	-21* 8	-17	-16	-11*28	-14*32	-7	0	-2	-5	-5	-13
12	3* 2	-2	-10	-19	-3*28	-9*32	7*40	5	13	13	13	-13
13	17	14* 8	14*14	16*20	15	19*34	16	-2	-5	-13	-13	-13
14	-7	-23*10	-24	-21	-23	-23*32	-14*40	-6*46	-14*50	123*56	123*56	123*56
15	68	-1	-11*14	-18	-21*28	-24	-40*40	-39	-33*52	-36	-36	-36
16	-28	-31	-23	-34*22	-31*26	-94*34	-15	-47	-67*50	-57*58	-57*58	-57*58
17	-60	-82*10	-43	6	15	60	-82*40	-59*46	-67*50	-50	-50	-50
18	40	51	75	112	154	214	245	286	335	363	363	363
19	387	417	442	468	487	508	542	565	585	623	623	623
20	693* 4	691	756	805	856	906	958	1008	1062	1114	1114	1114
21	1175	1240	1309	1376	1452	1520	1606	1691	1792	1900	1900	1900
22	1957	1995	2001	1989	2009	1964*32	1977	2026	2042	2103	2103	2103
23	2142	2145	2173	2236	2317	2445	2597	2699*44	2662	2592	2592	2592

RRS SHACKLETON CRUISE 3/75
FREE AIR GRAVITY ANOMALY IN MGALS

HOURS	00	06	12	18	MINUTES	24	30	36	42	48	54	DATE (DAYNO 96)
0	2501	2385	2314	2261	2231	2199*38	2187	2143	2076	2076	2076	2076
1	2008	1820* 8	1885	1785	1675	1545	1414	1300*46	1252	960	960	960
2	793	625	477	344	237	121	24	58	137	195	195	195
3	-260	-309	-380	-405	-428	-460	-475	-493	-505	-525*58	-525*58	-525*58
4	-535	-557*10	-561	-572	-577*28	-584*34	-572*40	-573	-570	-560	-560	-560
5	-555	-546	-530	-519	-502	-473	-459	-441	-423	-435	-435	-435
6	-4111* 2	-405	-400*14	-407	-391	-381	-371	-361	-345	-331*56	-331*56	-331*56
7	-324* 2	-321	-304	-287	-269*26	-269	-247	-231	-213	-209	-209	-209
8	-188	-155	-137	-128	-106	-94	-82*38	-75	-61	-42*58	-42*58	-42*58
9	-43	-13*10	-18	-10	4	7	18	-2*44	48	69	69	69
10	77	98* 8	100	114	127*26	131	148*38	153	178*50	181	181	181
11	194	208*10	197*14	208	225	226*38	240	266*52	278*58	278*58	278*58	278*58
12	292* 4	266* 8	295	310	327	354*34	265	337	330	352	352	352
13	344* 4	347	354*14	352	339*28	345	341	340	340	329*52	329*52	329*52
14	359	373* 8	377*14	367*20	379	376*32	381	391*44	390	403*56	403*56	403*56
15	404	432	448*16	444	346	283	241*38	399*46	371*50	368*56	368*56	368*56
16	405* 2	394* 8	408	414*20	417	419	428	445	464	489	489	489
17	509	521	566	606	646	694	767	830	904	1004	1004	1004
18	1113	1217	1324	1413	1468	1502	1539	1598*44	1587	1503	1503	1503
19	1427	1351	1281	1220	1159	1107	1054	991	923	855	855	855
20	771	703	597	514	427	334	253	175	108	42	42	42
21	-31	-85	-136	-222*22	-242	-404	-456	-534	-641*50	-697	-697	-697
22	-815	-468	-916	-1918*22	-1014	-1063*34	-1059	-1054	-1038	-1003	-1003	-1003
23	-472	-911	-873	-826	-771	-723	-661	-614	-575	-528	-528	-528

RMS SHACKLETON CRUISE 3/75
FREE AIR GRAVITY ANOMALY IN GALS

DATE 7-4-75

(DAYNO 97)

75

HOURS	MINUTES										
	00	06	12	18	24	30	36	42	48	54	
0	-489	-445	-405	-376*20	-356	-324	-296	-258	-230	-208	
1	-179	-160	-138	-92*22	-87	-73*32	-57*38	-58*44	-47*52	-50*58	
2	-52	-60*10	-44*16	-49	-48	-58*32	-61	-75*46	-76	-118	
3	-119	-125	-139	-152*20	-162	-176	-200	-223	-237	-258	
4	-280	-303	-324	-347	-363	-384	-402	-426	-441	-457	
5	-449*2	-480*10	-474*14	-471*20	-477*26	-470*32	-476	-471*44	-490	-479*56	
6	-484	-470*10	-474*14	-469	-451	-435	-403	-371	-330	-287*58	
7	-288	-281*8	-322	-351	-382	-425	-499*38	-477	-566	-580*56	
8	-586*4	-589	-598	-594	-600	-587*32	-571	-553	-540	-525	
9	-548*2	-523	-438*16	-494*22	-484	-451	-433	-404	-392	-362	
10	-344	-326*8	-312	-295	-207*28	-257*34	-236*40	-245*44	-231	-243	
11	-229	-52*2	-230*14	-99*20	-240*26	-240	-240	-261*50	-261*50	-269*56	
12	-292*4	266	295	310	319*28	354*34	265	337	330	352	
13	-345*2	347	354	352	340*26	345	341	340	335*50	329	
14	359	375	377	367	370	376	381	391	390	403	
15	404	432	448*16	444	346	283	241	399*46	375*52	368	
16	405	394	407*14	414	417	419	428	445	464	489	
17	509	531	566	606	646	694	767	830	904	1004	
18	1113	1217	1324	1413	1468	1502	1539	1598	1587	1503	
19	1427	1351	1281	1220	1159	1107	1054	991	923	855	
20	771	703	597	514	427	334	253	175	108	42	
21	31	85	136	-222*22	-242	-404	-456	-662*46	-641	-697	
22	818	888	940	-1010*20	-1014	-1046*32	-1059	-1054	-1038	-1003	
23	972	917	873	-826	-771	-723	-661	-614	-575	-502*58	

RRS SHACKLETON CRUISE 4/75
TOTAL MAGNETIC FIELD

DATE 18- 4- 75
(DAYNO 108)

MINUTES	00	06	12	18	24	30	36	42	48	54
HOURS	0									
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										

RRS SHACKLETON CRUISE 4/75
TOTAL MAGNETIC FIELD

DATE 19- 4- 75
(DAYNO 109)

MINUTES	00	06	12	18	24	30	36	42	48	54
HOURS	0									
1										
2										
3	43608	43607*	8	43628*14	43623	43618	43615	43612	43611	43610
4	43609	43607		43604	43599	43604	43602	43603	43606	43610*56
5	43504	43491		43477	43465	43453	43439	43565	43550	43519
6	43411	43408		43405	43400	43392	43384	43425	43420	43414
7	43316	43302		43281	43267	43254	43245	43362	43347	43330
8	43235	43224		43228	43233	43239	43241	43231	43227	43224
9	43176	43169*	8	43171	43178	43187	43191	43193	43196	43191
10	43211	43221		43227	43258	43284	43315	43345	43371	43407
11	43418	43430		43438	43449	43458	43463	43466	43469	43465
12	43461	43451		43442	43430	43415	43400	43387	43371	43356
13	43326	43310		43291	43273	43254	43233	43211	43191	43162
14	43152	43150		43149	43152	43160	43172	43189	43211	43237
15	43286	43293		43287	43275	43261	43241	43226	43218	43217
16	43214	43220*	10	43218	43216	43212	43207	43205*46	43204	43199
17	43190	43179		43168	43163*20	43159	43151	43149*38	43146	43142
18	43140	43137		43134	43132	43134*26	43132	43132	43132	43131
19	43132	43128		43129	43129	43125	43121	43114	43108	43094
20	43085	43079		43072	43064	43056	43050	43043	43038	43031
21	43016	43009		43007	43004	43000	42996	42993	42989	42985
22	42978	42973		42968	42963	42958	42952	42948	42943	42940
23	42930	42926		42920	42916	42911	42908	42903	42899	42888

RRS SHACKLETON CRUISE 4/75
TOTAL MAGNETIC FIELD

DATE 20- 4- 75
(DAYNO 110)

MINUTES	00	06	12	18	24	30	36	42	48	54
HOURS	0									
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										

RRS SHACKLETON CRUISE 4/75
TOTAL MAGNETIC FIELD

DATE 21-4-75
(DAYNO 111)

HOURS	MINUTES										DATE 21-4-75 (DAYNO 111)
	00	06	12	18	24	30	36	42	48	54	
0	41999	41996	41990	41987	41983	41979	41977	41973	41971	41969	
1	41964	41957	41951	41947	41949	41947*34	41948	41948	41949	41948	
2	41953	41956	41963	41974	41985	41999	42015	42028	42040	42049	
3	42057	42062	42065	42062*20	42064	42065*32	42067	42070	42068	42064	
4	42060	42058	42058	42058	42061	42068	42078	42086	42097	42106	
5	42118	42128	42137	42144	42155	42164	42169	42175	42180	42183	
6	42179	42178	42181	42180	42172	42166*34	42174*38	42174	42182	42188	
7	42193	42196	42189	42178	42158	42145	42127	42111	42116	42131	
8	42155	42155	42174	42184	42186*22	42182	42182	42175	42151	42137	
9	42124	42111	42097	42089	42080	42075*32	42077	42083	42093	42104	
10	42117	42131	42142	42142	42174	42182	42189	42196	42197*50	42199*56	
11	42198*4	42197	42191	42182	42180	42176	42186*38	42188	42196	42205	
12	42218	42232	42236	42240	42244*26	42231	42239	42250	42263	42272	
13	42278*2	42275	42261	42241	42223*28	42223	42233	42249	42264*50	42257	
14	42239	42227	42219	42220	42224	42224	42226	42235	42238	42242	
15	42253	42272	42298	42350*22	42318	42303	42288*40	42283*44	42287	42297	
16	42311	42323	42331	42342	42353	42357	42361	42366	42373	42380	
17	42395	42407	42415	42424	42428	42432	42439	42444*44	42447	42455	
18	42460	42456	42450	42445	42444	42447*34	42446	42446	42451	42455*56	
19	42455	42457	42455	42454	42451	42454	42457	42456	42451	42448	
20	42443	42437	42433	42430	42428	42429*34	42429*40	42428	42429	42430	
21	42433*4	42433*10	42432	42433	42433	42431	42428	42422	42414	42404	
22	42395	42386	42377	42369	42360	42352	42345	42340	42334	42329	
23	42324	42321	42319	42321	42326	42334	42343	42355	42363	42378*58	

RRS SHACKLETON CRUISE 4/75
TOTAL MAGNETIC FIELD

DATE 22-4-75
(DAYNO 112)

HOURS	MINUTES										DATE 22-4-75 (DAYNO 112)
	00	06	12	18	24	30	36	42	48	54	
0	42381	42395	42411	42430	42445	42455*34	42455*38	42451	42446	42435	
1	42424	42414	42407	42405	42409	42415	42423	42432	42438*50	42435	
2	42425	42411	42394	42377	42362	42351	42344	42339	42339	42339	
3	42340	42341	42341	42339	42332	42324	42315	42302	42287	42273	
4	42261	42247	42236	42225	42219	42214*34	42211	42201*46	42202	42197	
5	42187	42184	42178	42168	42153	42148	42141	42131	42120	42111	
6	42109	42102	42096	42090	42083	42074	42066	42059	42055	42057*56	
7	42052*2	42047*8	42046	42042*20	42037	42030	42033*40	42033*44	42029	42030	
8	42034	42040	42047*16	42045	42048	42048	42045	42041	42036	42031*58	
9	42030*4	42031	42031	42033	42036	42044	42059	42080	42095	42107	
10	42117	42124	42127	42127*20	42129	42134	42144	42152	42155	42153	
11	42147	42144	42140	42136	42132	42129	42129	42129	42131*50	42130	
12	42126	42118	42108	42097	42089	42082*34	42083	42080	42075	42066	
13	42050	42032	42016	42004	41995	41990	41989	41991	41995	41995	
14	41993	41991	41994	41994	42002	42012	42023	42030	42036	42039	
15	42042*4	42041	42039	42037	42035	42028	42022	42015	42010	42006	
16	42003	41998	41997	41995	41992	41987	41983	41978	41975	41970	
17	41964	41957	41952	41946	41940	41936	41930	41926	41921	41916	
18	41912	41908	41904	41908	41916	41924	41932*40	41931	41932	41935	
19	41933	41927	41922	41917	41914	41911	41907	41906	41906	41897	
20	41894	41895	41895	41901	41910	41925	41944	41963	41984*52	41983	
21	41973	41957	41944	41931	41917	41900	41881	41869	41866	41874	
22	41894	41911	41928	41942	41959	41981	42007	42034	42059	42078	
23	42095	42106	42110	42110	42104	42101	42089	42078	42072	42059*58	

RRS SHACKLETON CRUISE 4/75
TOTAL MAGNETIC FIELD

DATE 23-4-75
(DAYNO 113)

HOURS	MINUTES										DATE 23-4-75 (DAYNO 113)
	00	06	12	18	24	30	36	42	48	54	
0	42056	42051	42045	42038	42032	42028	42023	42020	42019	42019	
1	42021	42027	42033	42042	42049	42055	42051	42044	42032	42017	
2	42002	41979	41958	41940	41930	41925	41929	41934	41940	41944	
3	41948	41950	41953	41953*20	41957	41962	41965	41971*46	41971*52	41970	
4	41972	41973	41975*14	41982*20	41982	41979	41976	41976*44	41972	41968*56	
5	41962	41959	41953	41947	41942	41936	41933	41927	41924	41919	
6	41913	41904	41896	41885	41869	41859	41850	41842	41834	41826	
7	41815	41810	41811	41812	41815*26	41819	41824	41827	41833	41841	
8	41851	41858*10	41857	41850	41842	41834	41828	41829	41834	41840	
9	41850	41856	41857	41857	41853	41854	41856*40	41854	41858*50	41856	
10	41852	41851	41847	41846	41839	41830	41822	41820	41813	41803*58	
11	41804	41808*8	41819*16	41820*20	41817*26	41821	41821	41821	41822	41822	
12	41821	41817	41813	41809*20	41804	41795	41789	41783	41781	41779	
13	41779	41780	41783	41787	41789	41791	41796	41801	41812	41825	
14	41838	41846	41845*16	41847*20	41843	41836	41826*40	41831	41837*50	41833	
15	41829	41825	41821	41819	41816	41812	41807*40	41805*46	41802	41794	
16	41788	41782	41778*16	41781	41783	41786	41788	41781	41771	41760	
17	41753	41748*8	41745*14	41741	41735	41729	41722	41716	41710	41707	
18	41702	41697*10	41699	41704*20	41708*26	41707	41701	41702*46	41703*50	41700	
19	41703	41703*10	41701	41695	41692	41690	41693*38	41694	41699	41707	
20	41712	41711*8	41715	41722	41724	41722	41718	41714	41711	41709	
21	41708	41708	41712	41718*22	41717	41717	41714	41711	41705	41699	
22	41592	41584	41676	41666	41656	41649	41640	41633	41627	41621	
23	41615	41609	41605*14	41602	41597	41596	41595	41596	41597	41601	

RRS SHACKLETON CRUISE 4/75
TOTAL MAGNETIC FIELD

HOURS	00	06	12	18	MINUTES	24	30	36	42	48	54	DATE (DAYNO 114)
0	41608	41615	41625	41635	41647	41658	41666	41674	41679	41684	41685	41690
1	41684	41682	41681	41680	41680	41680	41681	41682	41685	41689	41690	41690
2	41695	41704	41952*14	41720	41729	41737	41741	41747*44	41748*52	41747	41747	41747
3	41743*4	41741	41742	41742	41747	41750	41752	41756*46	41755	41754	41754	41754
4	41748	41740	41730	41718	41708	41695	41687	41681	41677	41677	41677	41677
5	41679	41686	41697	41711	41724	41737	41751	41766	41782	41799	41801	41799
6	41818	41832	41847	41853	41856*28	41854	41854	41838	41831	41831	41821	41821
7	41818	41816*8	41815	41821	41828	41837	41845	41857*46	41856	41861	41861	41861
8	41863	41868*8	41868*14	41871*22	41870	41870	41872	41873	41870	41865	41865	41865
9	41863	41858	41853	41847	41842	41839	41834	41831	41829	41826	41826	41826
10	41822	41820*10	41821*14	41822	41825	41830	41838	41845	41854*52	41853	41853	41853
11	41851	41848	41843	41839	41830	41826*32	41823	41821	41819*52	41812*52	41812*52	41812*52
12	41813	41813	41817	41821	41826	41834	41844	41856	41873*52	41872	41872	41872
13	41874	41866	41844	41818	41794	41787	41794	41807	41826	41845	41845	41845
14	41859	41873	41885	41894	41899	41905	41910	41918	41924	41926	41926	41926
15	41925	41916	41903	41903	41915	41931	41933	41923	41907	41887	41887	41887
16	41866	41843	41820	41792	41775	41769*32	41764	41739	41708*50	41726	41726	41726
17	41763	41772	41787*16	41782	41756	41736	41715	41713	41738*50	41738*50	41738*50	41738*50
18	41733	41739	41744	41740	41747	41758	41762	41766*44	41765	41765	41765	41765
19	41763	41758	41754	41746	41733	41717	41703	41695	41685	41679	41679	41679
20	41675	41671*10	41670	41667	41663	41658	41652	41649	41649	41643	41637	41637
21	41631	41630	41634	41635	41637	41643	41643	41651	41663	41675*52	41674	41674
22	41662	41637	41610	41597*20	41602	41623	41651	41653	41633	41616	41616	41616
23	41608	41607	41606	41608	41611	41614	41618	41627	41638	41656*58	41638	41638

RRS SHACKLETON CRUISE 4/75
TOTAL MAGNETIC FIELD

HOURS	00	06	12	18	MINUTES	24	30	36	42	48	54	DATE 25-4-75 (DAYNO 115)
0	41660	41668*10	41666	41660	41650	41638	41624	41613	41607	41606	41606	41606
1	41609	41614	41618	41622*20	41621	41622	41624	41624	41629	41635	41635	41635
2	41644	41652	41657	41659*22	41658	41652	41638	41624	41610	41602	41602	41602
3	41601	41604*8	41602	41590	41575	41560	41542	41528	41518	41509	41509	41509
4	41501	41492*10	41493	41491*20	41493	41495	41500	41506	41512	41517	41517	41517
5	41522	41527	41533	41539	41542	41542	41537	41534	41534	41533	41533	41533
6	41533	41530	41528	41525	41525	41522	41519	41513	41508	41504	41504	41504
7	41496	41494	41492	41490	41488	41487	41485	41483	41482	41477	41477	41477
8	41471*4	41470	41461*16	41459	41453	41446	41426	41426	41423	41413	41413	41413
9	41405	41399	41392	41388	41387	41386	41386*38	41385*44	41386*52	41386	41386	41386
10	41384	41381	41382	41380	41381	41384	41391	41400	41406	41409	41409	41409
11	41410	41408	41409	41408	41411*26	41409	41410	41411*44	41410	41410	41408	41408
12	41404	41399	41397	41397	41396	41399	41402	41409	41412	41419	41419	41419
13	41425*4	41424*10	41422	41418	41412	41402	41393	41387	41377	41367	41367	41367
14	41361	41357	41353	41350	41346	41340	41334	41326	41323	41322	41322	41322
15	41323	41327	41333	41336	41338	41339	41341*38	41342*44	41341*52	41339	41339	41339
16	41341	41341*8	41336	41334	41331	41328	41328	41326	41325	41324	41324	41324
17	41326	41325	41320	41310	41301	41288	41278	41266	41253	41244	41244	41244
18	41241	41238*10	41236	41237	41236	41233	41231	41230	41228*50	41230	41230	41230
19	41233	41237	41244	41253	41261	41270	41276	41280	41283	41281	41281	41281
20	41274	41259	41238	41213	41191	41171	41150	41131	41115	41103	41103	41103
21	41094	41089	41091	41085	41082	41077	41072	41067	41067	41059	41059	41059
22	41047	41045	41045	41048	41054	41063	41072	41079	41085	41058	41058	41058
23	41093	41094	41087	41079	41073	41067	41062*40	41060	41060	41058	41058	41058

RRS SHACKLETON CRUISE 4/75
TOTAL MAGNETIC FIELD

HOURS	00	06	12	18	MINUTES	24	30	36	42	48	54	DATE 26-4-75 (DAYNO 116)
0	41061	41073	41085	41091	41094	41096	41098	41099	41094	41094	41094	41094
1	41068	41085	41082	41080	41075	41068	41058	41049	41045	41045	41038	41038
2	41031	41023	41013	41002	40988	40972	40958	40948	40945	40945	40946	40946
3	40953	40960	40958	40953	40942	40937	40933	40929	40919	40919	40911	40911
4	40907	40912	40927	40941	40958*28							
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												

RRS SHACKLETON CRUISE 4/75
TOTAL MAGNETIC FIELD

DATE 27- 4- 75
(DAYNO 117)

MINUTES	00	06	12	18	24	30	36	42	48	54
HOURS										
0										
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20	40965	40960	40954	40948	40943	40937	40929	40985	40974	40970
21	40877	40864	40854	40845	40838	40828	40814	40800	40907	40894
22	40778*	2	40762	40750	40744	40747	40753	40760	40765	40779
23	40779	40785	40793	40800	40802	40799*34	40788	40807	40812	40809

RRS SHACKLETON CRUISE 4/75
TOTAL MAGNETIC FIELD

DATE 28- 4- 75
(DAYNO 118)

MINUTES	00	06	12	18	24	30	36	42	48	54
HOURS										
0	40801*4	40802	40803	40810	40822	40834	40847	40861	40874	40887
1	40896	40903	40912	40920	40927	40940	40951	40958	40967	40977
2	40990	41001	41008	41006	40996	40990	40992	41002	41016	41025
3	41036*	2	41043	41053	41064	41074	41087*34	41094*38	41092	41087
4	41070	41063	41059	41053	41047	41043	41039	41036	41033	41032
5	41030	41028	41026	41021	41016	41011	41003	40997	40992	40990
6	40986	40981	40979	40975	40969	40959	40947	40931	40912	40893
7	40876	40864	40856	40855	40859	40863	40857	40829	40795	40771
8	40763	40764	40762	40755	40747	40749	40762	40790	40818	40823
9	40811	40800	40793*14	40797	40810	40829	40857	40884	40907	40923
10	40927	40916	40890	40853	40805	40761	40740*38	40749	40777	40808
11	40838	40869	40896	40906	40892	40867	40842	40829	40824	40827
12	40836	40849	40866	40884	40903	40920	40936	40955	40971	40984
13	40988	40992	41005	41027	41052	41074	41085	41084	41075	41062
14	41056	41061	41076	41094	41112	41129	41138	41143	41146	
15	41144	41138	41128	41117	41109	41101*34	41102	41110	41150*50	41119*55
16	41121	41134	41162	41190	41207	41206	41192	41171	41147	41127
17	41110	41102	41098	41098	41096	41094	41089	41083	41073	41062
18	41054	41048	41044	41037	41028	41018	41009	41001	40992	40983
19	40971	40960	40949	40939	40931	40925	40918	40916	40912	40909
20	40904	40899	40891	40879	40866	40856	40847	40838	40828	40820
21	40815	40810	40803	40796	40790	40786	40768	40791*46	40790	40790
22	40786	40781	40773	40766	40762	40763	40763	40760	40747*50	40751
23	40754	40751	40736	40719	40703	40695	40694	40703	40720	40742

RRS SHACKLETON CRUISE 4/75
TOTAL MAGNETIC FIELD

DATE 29- 4- 75
(DAYNO 119)

MINUTES	00	06	12	18	24	30	36	42	48	54	
HOURS											
0	40777*	4	40776	40767	40758	40754	40750	40739	40726	40710*52	40712
1	40728	40752	40775	40791	40801	40804	40798	40785	40766	40749	
2	40742	40737	40737	40748	40766	40789	40811	40830	40847	40859	
3	40871	40880	40888	40889	40888	40885	40884	40884	40889	40900	
4	40917	40941	40974	41011	41046	41069	41080*38	41077	41066	41048	
5	41025	0	0	0	0	0	0	0	0	0	
6	0	0	0	0	0	0	0	0	0	0	
7	0	0	0	0	0	0	0	0	0	0	
8	41022	41018	41019	41017	41018*28	41017	41019	41020*44	41020	41023	
9	41023*	2	41022	41025*16	41026*20	41026	41026	41027*46	41026	41027	
10	41023*	4	41024	41025*16	41024	41023	41023	41025	41025	41026	
11	41026	41026	41028	41028	41027	41028	41027	41025	41025	41025	
12	41028	41039	41051	41065	41077	41086	41092	41098*46	41098*50	41093*56	
13	41090	41092	41109	41141	41172	41188	41187	41188	41197	41223	
14	41253	41281	41303	41319	41325	41323*32	41333	41336	41331	41320	
15	41308	41295	41281	41270	41261	41254	41246	41240*46	41239	41225	
16	41208	41198	41169	41154	41142	41133	41120	41108	41094	41085	
17	41080	41080	41081	41079	41070	41060	41051	41045	41043*52	41041	
18	41042	41044	41047	41055	41066	41078	41090	41100	41107	41113*56	
19	41112	41106	41090	41070	41052	41042	41035	41029	41023	41010	
20	40795	40777	40957	40939	40925	40915	40909	40936	40903	40900	
21	40992*	4	40993	40887	40879	40872	40866	40855	40851	40845	
22	40939	40936	40834	40834	40838	40837	40830	40824	40816	40806	
23	40795	40782	40750	40753	40736	40719	40709*49	40705	40714	40729	

RRS SHACKLETON CRUISE 4/75
TOTAL MAGNETIC FIELD

HOURS	MINUTES										DATE 30- 4- 75 (DAYNO 120)	
	00	06	12	18	24	30	36	42	48	54		
0	40746	40759	40770	40781	40796	40811	40825	40835	40841	40843		
1	40837* 4	40839	40835	40834	40832	40823	40806	40791	40779	40772		
2	40764	40753	40739	40729*20	40733	40749	40774	40801	40824	40846		
3	40862	40880	40898	40911*22	40909	40901	40894	40889	40889*50	40888		
4	40888	40889	40890	40891	40893	40896	40899	40897	40899	40903		
5	40917	40937	40961	40985	41005	41023	41039	41054	41066	41073		
6	41079	41083	41089	41097	41106	41132	41116	41120	41127	41134		
7	41144	41156	41168	41177	41185	41188	41189	41176	41163	41153		
8	41148	41143	41141*16	41137	41133	41121*34	41122	41125*46	41124	41127		
9	41130* 2	41129	41124*16	41125	41129	41130*32	41129	41133	41125	41116		
10	41111* 2	41116	41138	41165	41186	41208	41223	41228	41233	41209		
11	41189	41168	41150	41136	41126	41117	41111	41104	41095	41087		
12	41076	41067	41057	41049	41043	41036	41028	41020	41011	41002		
13	40992	40979	40966	40956	40945	40939	40938	40939	40945	40964*56		
14	40958	40943	40931	40925	40924	40926	40932	40941	40950			
15												
16												
17												
18												
19												
20												
21												
22												
23												

RRS SHACKLETON CRUISE 4/75
TOTAL MAGNETIC FIELD

HOURS	MINUTES										DATE 1- 5- 75 (DAYNO 121)	
	00	06	12	18	24	30	36	42	48	54		
0	1	2	3	4	5	6	7	8	9	10	11	12
1	13	14	15	16	17	18	19	20	21	22	23	
2	24	25	26	27	28	29	30	31	32	33	34	
3	35	36	37	38	39	40	41	42	43	44	45	
4	46	47	48	49	50	51	52	53	54	55	56	
5	57	58	59	60	61	62	63	64	65	66	67	
6	68	69	70	71	72	73	74	75	76	77	78	
7	79	80	81	82	83	84	85	86	87	88	89	
8	90	91	92	93	94	95	96	97	98	99	100	
9	101	102	103	104	105	106	107	108	109	110	111	
10	112	113	114	115	116	117	118	119	120	121	122	
11	123	124	125	126	127	128	129	130	131	132	133	
12	134	135	136	137	138	139	140	141	142	143	144	
13	145	146	147	148	149	150	151	152	153	154	155	
14	156	157	158	159	160	161	162	163	164	165	166	
15	167	168	169	170	171	172	173	174	175	176	177	
16	178	179	180	181	182	183	184	185	186	187	188	
17	189	190	191	192	193	194	195	196	197	198	199	
18	200	201	202	203	204	205	206	207	208	209	210	
19	211	212	213	214	215	216	217	218	219	220	221	
20	222	223	224	225	226	227	228	229	230	231	232	
21	233	234	235	236	237	238	239	240	241	242	243	
22	244	245	246	247	248	249	250	251	252	253	254	
23	255	256	257	258	259	260	261	262	263	264	265	

RRS SHACKLETON CRUISE 4/75
TOTAL MAGNETIC FIELD

HOURS	MINUTES										DATE 2- 5- 75 (DAYNO 122)	
	00	06	12	18	24	30	36	42	48	54		
0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	1	1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9	9	9	9
10	10	10	10	10	10	10	10	10	10	10	10	10
11	11	11	11	11	11	11	11	11	11	11	11	11
12	12	12	12	12	12	12	12	12	12	12	12	12
13	13	13	13	13	13	13	13	13	13	13	13	13
14	14	14	14	14	14	14	14	14	14	14	14	14
15	15	15	15	15	15	15	15	15	15	15	15	15
16	16	16	16	16	16	16	16	16	16	16	16	16
17	17	17	17	17	17	17	17	17	17	17	17	17
18	18	18	18	18	18	18	18	18	18	18	18	18
19	19	19	19	19	19	19	19	19	19	19	19	19
20	20	20	20	20	20	20	20	20	20	20	20	20
21	21	21	21	21	21	21	21	21	21	21	21	21
22	22	22	22	22	22	22	22	22	22	22	22	22
23	23	23	23	23	23	23	23	23	23	23	23	23

RRS SHACKLETON CRUISE 4/75
TOTAL MAGNETIC FIELD

					MINUTES					DATE 3-5-75 (DAYNO 123)
HOURLS	00	06	12	18	24	30	36	42	48	54
0	40812	40812	40814	40812	40813	40814	40814	40816	40817	40820
1	40823	40829	40831	40835	40838	40841	40843	40846	40848	40849
2	40852	40854	40855	40857	40859	40861	40862	40863	40865	40867
3	40869	40871* 8	40871	40875	40877	40877	40881*40	40879	40879	40879
4	40879	40881	40881*16	40880	40883*28	40882	40883	40887	40887	40888
5	40887	40891* 8	40893*15	40892	40891	40893	40896	40897	40898	40902
6	40905* 2	40905	40909*14	40910	40913*26	40913	40915	40916*46	40915	40916
7	40913	40911	40910	40909	40909	40909	40909	40909	40911*50	40910
8	40913	40916	40919	40924	40929	40935	40941	40947	40954	40959
9	40964	40969	40972	40973	40976	40979	40985	40993	41002	41011
10	41020	41029	41034	41038	41040					
11										
12										
13										
14										
15										
16										
17										
18										
19	41016	41017* 8	41018	41019	41023	41023*32	41021	41019	41012	41016
20	41000	40992	40985	40976	40969	40963*34	40961	40958*46	40959	40958
21	40958	40957	40959	40963	40966	40971	40975	40980	40983	40987
22	40991	40994	40998	41004	41012	41014	41012	41015	41019*52	41017
23	41017	41017	41014	41011	41005	41002	41001	41001	40998	40993

RRS SHACKLETON CRUISE 4/75
TOTAL MAGNETIC FIELD

					MINUTES					DATE 4-5-75 (DAYNO 124)
HOURLS	00	06	12	18	24	30	36	42	48	54
0	40990	40990* 8	40989	40989	40992	40989	40992	40991	40992	40992*58
1	40991	40990	40987*14	40985	40981	40976	40971	40966	40958	40948
2	40938	40927	40918	40910	40899	40891	40884	40880	40877	40875*58
3	40874	40876	40881	40888	40899	40913	40930	40949	40975	41002
4	41028	41027	41082	41107	41127	41143	41155	41164	41171	41178*56
5	41177	41178	41180	41181	41182	41186	41190	41195	41200	41207
6	41211	41217	41223	41227	41230	41231	41231	41234	41234	41235
7	41237	41239	41241	41244	41247	41246	41243	41258	41232	41230
8	41230	41227	41228	41230	41230	41232	41235	41238	41243	41246
9	41251	41256	41267	41269	41274	41279	41282	41284	41284	41288*58
10	41287	41288* 8	41290	41292	41292	41295*34	41294	41294*46	41293	41294
11	41295	41297	41302	41305	41307	41312	41314	41318	41320	41325
12	41328	41330	41333	41335	41337	41340	41342	41344	41347	41349
13	41350	41345	41344	41340	41339	41337	41336	41337*44	41337	41337
14	41338	41340* 8	41340	41340*22	41339	41341	41342	41346*46	41345	41346
15	41348	41353	41352	41353	41352	41350	41344	41339	41335	41332
16	41329	41326	41322	41318	41315	41311	41307	41302	41298	41291
17	41284	41277	41268	41259	41245	41229	41214	41198	41181	41163
18	41147	41133	41123	41115	41109	41104	41100	41102*44	41101	41095
19	41089	41080	41074	41066	41061	41058	41056	41053	41051	41048
20	41045	41043	41040	41038	41038	41037	41037	41039	41041	41044
21	41048	41055	41061	41069	41079	41091	41104	41115	41129	41143
22	41158	41174	41188	41202	41214	41224	41232	41240	41249	41259
23	41266	41270	41272	41267	41267	41273	41271	41266	41265	41260*56

RRS SHACKLETON CRUISE 4/75
TOTAL MAGNETIC FIELD

					MINUTES					DATE 5-5-75 (DAYNO 125)
HOURLS	00	06	12	18	24	30	36	42	48	54
0	41256* 2	41256	41264	41279	41308	41344	41377	41411	41442	41464
1	41481	41491	41506	41527	41552	41579	41601	41621	41644	41656
2	41668	41678	41689	41701	41712	41718	41719	41711	41698	41688
3	41683	41586	41699	41711	41719	41729	41736	41739*44	41739*52	41738
4	41728	41716	41698	41680	41661	41649	41642	41642	41650	41665
5	41681	41699	41716	41736*22	41735*28	41732	41728*38	41725	41715	41706
6	41696* 4	41691*10	41693	41701	41714	41734	41755	41775	41794	41806
7	41814	41821	41825	41827	41819	41816	41813	41808	41796	41780
8	41762	41747	41733	41717	41698	41673	41645	41619	41603	41590
9	41578	41567	41558	41549	41554	41570	41589	41605	41618*50	41615
10	41604	41590	41573	41561	41552	41544	41537	41533	41533	41534*58
11	41533	41527	41515	41499	41478	41455	41431	41409	41387	41375
12	41375	41371* 8	41379	41392	41404	41415	41418	41422	41426	41429
13	41433	41449	41456	41463	41466	41466*32	41463	41457	41460	41453
14	41446* 4	41452*10	41451	41448	41449	41443	41441	41445	41451	41453
15	41457* 4	41459*10	41458*16	41457	41452	41446	41441	41442*46	41439	41429
16	41413* 4	41419	41426	41436	41455	41472	41491	41512	41539	41561
17	41592	41629	41675	41719	41757	41776	41784	41779	41775	41769
18	41765	41757	41713	41718	41698	41682	41672	41661	41661	41668
19	41574	41683	41693	41705	41716	41731	41746*40	41745	41749	41751
20	41759	41759	41764	41771	41782	41786	41786	41777	41763	41756
21	41749	41719	41702	41687	41678	41671	41672	41676	41681	41687
22	41689	41693* 8	41691	41697	41705	41711	41716	41718	41712	41704
23	41682* 4	41686	41682*16	41681	41677	41672*52	41670	41668	41670	41693*56

RRS SHACKLETON CRUISE 4/75
TOTAL MAGNETIC FIELD

DATE 6- 5- 75
(DAYNO 126)

MINUTES	00	06	12	18	24	30	36	42	48	54
HOURS										
0	41706	41720	41732	41732	41723	41725	41740	41761	41784	41806
1	41822	41837*10	41836	41834	41818	41802	41781*40	41783*44	41785	41801
2	41824	41844	41851	41846	41836	41825	41817	41815*44	41816	41821*56
3	41820	41825	41825	41814	41804	41789	41780	41765*46	41767	41772
4	41774	41772	41774*14	41774	41773*26	41775	41774	41778	41782	41784
5	41791	41795	41807	41822	41841	41859	41873	41879	41880	41876
6	41862	41843	41825	41807	41790	41776	41768	41762	41759	41762
7	41768	41776	41784	41791	41801	41810	41818	41827	41836	41845
8	41855	41867	41877	41885	41887	41885	41881	41877	41865	41848
9	41829	41809	41792	41774	41764	41761*34	41759	41762	41766	41774
10	41785	41801	41816	41831	41843	41847	41835	41832	41835	41836
11	41836									
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										

RRS SHACKLETON CRUISE 4/75
TOTAL MAGNETIC FIELD

DATE 7- 5- 75
(DAYNO 127)

MINUTES	00	06	12	18	24	30	36	42	48	54
HOURS										
0	41791	41795	41807	41822	41841	41859	41873	41879	41880	41876
1	41862	41843	41825	41807	41790	41776	41768	41762	41759	41762
2	41768	41776	41784	41791	41801	41810	41818	41827	41836	41845
3	41855	41867	41877	41885	41887	41885	41881	41877	41865	41848
4	41829	41809	41792	41774	41760*28	41761*34	41759	41762	41766	41774
5	41785	41801	41816	41831	41843	41847	41835	41832	41835	41836
6	41836									
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										

RRS SHACKLETON CRUISE 4/75
UNCORRECTED METRES

DATE 18- 4- 75
(DAYNO 108)

HOURS	00	06	12	18	MINUTES	24	30	36	42	48	54
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											

RRS SHACKLETON CRUISE 4/75
UNCORRECTED METRES

DATE 19- 4- 75
(DAYNO 109)

HOURS	00	06	12	18	MINUTES	24	30	36	42	48	54
0											
1											
2											
3	483	457*10	442	396	380	380	402	423	440	461	
4	863	518	558	609	630	636	674	789	841		
5	1042	882	902	925	949	973	987	1001	1016	1029	
6	1214	1199	1186	1178	1174	1170	1225	1264	1275*50	1261	
7	1240	1431	1559	1564*20	1539	1503	1609*40	1591	1518*50	1543	
8	1580	1563	1542	1516	1459	1386	1500*40	1473	1394	1354	
9	1333	1332	1377	1516	1641	1759	1804	1846	1883	1950	
10	2034	2118	2213	2330	2504	2707	2625	2567	2552	2527	
11	2496	2743*10	2728	2666*20	2697	2743	2721	2707	2710	2760	
12	2835	2977	3088	3134	3152	3157	3157	3157	3157	3157	
13	3157	3155	3156	3159	3160	3160	3169	3177	3185	3191	
14	3195	3199	3203	3207	3210	3213	3216	3220	3223	3225	
15	3226	3228	3230	3231	3232	3233	3234	3235	3235	3236	
16	3237	3237	3236	3233*20	3235	3237	3238	3239	3239	3239	
17	3239	3241*10	3240	3238	3237	3237	3237	3237	3238	3240	
18	3241	3240	3239	3240	3241	3241	3241	3241	3241	3241	
19	3241	3241	3241	3241	3241	3242	3241	3241	3242	3242	
20	3242	3242	3242	3241	3241	3241	3241	3241	3241	3240	
21	3239	3239	3238	3237	3237	3237	3235	3233	3233	3227	
22	3224	3223	3224	3220	3231	3231	3233	3233	3233	3234	
23	3235	3232	3228	3222	3220	3219	3219	3218	3216	3208	

RRS SHACKLETON CRUISE 4/75
UNCORRECTED METRES

DATE 20- 4- 75
(DAYNO 110)

HOURS	00	06	12	18	MINUTES	24	30	36	42	48	54
0	3175	3167	3161	3156	3155	3157	3166*40	3162	3151	3148	
1	3149	3149	3149	3149	3151	3153	3155	3157	3157	3156	
2	3155	3149	3144	3140	3139	3140	3137	3135	3135	3137	
3	3142	3136*10	3138	3146*20	3143	3138	3137	3135	3129	3119	
4	3107	3099	3094	3094	3096	3098	3103	3109	3114	3118	
5	3122	3122	3124	3133*20	3132	3132	3132	3133	3134*50	3134	
6	3133	3132	3131	3129	3130	3131	3131	3132	3134	3136	
7	3138	3138	3138	3138	3139	3140	3138	3136	3136	3136	
8	3136	3135	3135	3136	3136	3135	3133	3134	3138*50	3122	
9	3098	3098	3098	3097	3096	3096	3095	3094	3093	3092	
10	3091	3087	3084	3082	3080	3078	3077	3076	3076	3075	
11	3074	3074	3073	3070	3067	3065	3065	3065	3065	3065	
12	3065	3067	3069	3069	3069	3071	3073	3075	3076	3077	
13	3078	3079	3080	3080	3080	3080	3080	3080	3081	3082	
14	3082	3082	3082	3082	3082	3082	3083	3084	3085	3085	
15	3085	3085	3085	3085	3086	3087	3086	3086	3087	3087	
16	3087	3087	3087	3088	3090	3091	3091	3091	3091	3090	
17	3089	3090	3091	3091	3092	3091	3091	3091	3091	3091	
18	3091	3091	3091	3092	3092	3091	3093	3095	3096	3101	
19	3107	3107	3108	3112	3116	3120	3127	3131	3131	3132	
20	3135	3136	3137	3141	3143	3146	3148	3151	3155	3157	
21	3152	3162	3164	3165	3167	3169	3173	3176	3179	3182	
22	3186	3190	3194	3196	3200	3204	3206	3208	3211	3214	
23	3217	3220	3223	3224	3224	3224	3225	3226	3226	3226	

RRS SHACKLETON CRUISE 4/75
UNCORRECTED METRES

DATE 21-4-75
(DAYNO 111)

HOURS	00	06	12	18	MINUTES	30	36	42	48	54
					24					
0	3226	3226	3226	3226	3226	3226	3226	3226	3226	3226
1	3226	3226	3226	3227	3229	3230	3230	3230	3229	3225
2	3222	3219	3216	3215	3214	3211	3210	3207	3227	3204
3	3202	3199	3196	3194	3192	3189	3187	3185	3183	3181
4	3178	3174	3170	3168	3165	3160	3157	3154	3153	3151
5	3147	3145	3143	3139	3137	3135	3130	3126	3121	3117
6	3113	3110	3107	3103	3088	3069	3071	3066	3067	3065
7	3065	3065	3066	3068	3070	3072	3069	3064	3063	3058
8	3054	3035	3021	3016	3009	3003	2994	2991	2978	2968
9	2957	2949	2941	2930	2926	2926	2915	2898	2891	2891
10	2886	2876	2867	2859	2852	2846	2837	2831	2831	2821
11	2807	2681	2560	2451	2404	2388	2518*40	2432	2172	2025
12	1935	1915	1864	1751	1667	1598	1565	1537	1511*50	1538
13	1578	1651*10	1628	1556	1388	1170	1124	1055	939	862
14	805	827	851	988*20	977	962	924*40	954	1045	1166
15	1302	1504	1650	1686	1762	1865	1463*40	1504	1627	1716
16	1789	1832	1876	1919	1960	2001	2029	2063	2107	2121
17	2121	2238	2323	2352*20	2345	2334	2375	2413	2444	2470
18	2494	2534	2580	2659*20	2622	2568	2565	2564	2564	2580
19	2604	2600	2597	2597	2597	2600	2603	2605	2610	2610
20	2615	2618	2621	2621	2626	2633	2644	2653	2656	2667
21	2643	2586	2689	2691	2695	2699	2717	2730	2733	2744
22	2758	2780*10	2778	2771	2765	2760	2779	2796	2804	2822
23	2844	2855	2868	2884	2897	2908	2919	2932	2948	2961

RRS SHACKLETON CRUISE 4/75
UNCORRECTED METRES

DATE 22-4-75
(DAYNO 112)

HOURS	00	06	12	18	MINUTES	30	36	42	48	54
					24					
0	2972	2990*10	2983	2955*20	2958	2963	2970	2977	2983	2989
1	2996	3002	3009	3015	3022	3028	3035	3042	3048	3058
2	3061	3066	3070	3075	3080	3087	3105*40	3104	3100*50	3103
3	3109	3116	3122	3127	3133	3138	3143	3147	3151	3154
4	3157	3160	3163	3166	3168	3169	3169	3170	3171	3171
5	3171	3173	3175	3176	3179	3182	3184	3187	3192	3195
6	3199	3204	3206	3208	3210	3213	3213	3214	3215	3216
7	3219	3221	3222	3221	3220	3219	3210	3201	3191	3186
8	3184	3184	3183	3180	3174	3167	3175*40	3169	3151	3138
9	3127	3122	2996	2628	2372	2173	2090*40	2096	2112	2123
10	2131	2194	2274	2384	2449	2491	2473*40	2508	2613	2685
11	2740	2747	2755	2763	2767	2771	2778	2788	2801	2814
12	2827	2832	2838	2846	2854	2862	2865	2870	2880*50	2877
13	2671	2895*10	2889	2876	2857	2835	2783*40	2841	3015	3090
14	3116	3244*10	3240	3227	3170	3091	3110	3138	3182	3214
15	3241	3204*10	3211	3230	3241	3248	3269	3288	3305	3314
16	3319	3315	3310	3303	3299	3295	3295	3295	3295	3295
17	3295	3295	3295	3295*20	3293	3288	3293	3297	3300	3302
18	3303	3296	3289	3275*20	3280	3288	3287	3285	3280	3276
19	3272	3274	3276	3278	3280	3281	3281	3279	3274*50	3119
20	3387	3617*10	3553	3560	3281	3259	3248	3134	2813	2601
21	2441	2396*10	2401	2416	2440	2469	2526	2604	2725	2784
22	2813	2524*10	2820	2805*20	2830	2868	2915*40	2911	2898	2885
23	2873	2927	2970	2992	3077	3193	3136	3095	3083*50	3195*58

RRS SHACKLETON CRUISE 4/75
UNCORRECTED METRES

DATE 23-4-75
(DAYNO 113)

HOURS	00	06	12	18	MINUTES	30	36	42	48	54
					24					
0	3222	3169	3133	3133	3155	3189	3219*40	3208	3178	3118
1	3043	2922	2813	2726	2606	2469	32766	32766	2019*50	2028
2	2041	2107	2205	2367	2573	2802	2911	3017	3113	3172
3	3211	3216	3219	3222	3224	3226	3239*40	3238	3237	3236
4	3233	3236	3238	3241	3241	3246	3249	3252	3255	3258
5	3263	3264	3266	3269	3271	3274	3276	3279	3283	3287
6	3292	3296	3300	3302	3304	3305	3307	3309	3310	3310
7	3310	3309	3308	3307	3306	3306	3305	3304	3303	3301
8	3297	3292	3282	3284	3295	3105	3234	3322	3331	3335
9	3338	3341	3344	3346	3348	3350	3353	3355	3357	3358
10	3358	3360	3362	3363	3364	3365	3365	3366	3369*50	3368
11	3367	3369*10	3368	3364	3364	3363	3364	3362	3362	3361
12	3361	3366	3372	3387*20	3383	3376	3383	3391	3402	3415
13	3431	3455	3485	3529	3676	3632	3623	3603	3562	3505
14	3442	3473	3503	3531	3648	3559	3552	3547	3545	3541
15	3537	3537	3537	3537	3537	3537	3529	3524	3526	3526
16	3526	3543	3565	3596	3655	3727	3731*40	3712	3655	3636
17	3637	3599*10	3602	3611	3671	3756	3838	3891	3901	3908
18	3914	3915	3914	3910	3905	3901	3894	3887	3878	3861
19	3640	3636	3495	3480	3467	3456	3450	3443	3437	3432
20	3427	3425	3422	3418	3416	3416	3416	3415	3413	3411
21	3409	3413*10	3411	3408	3408	3409	3420*40	3419	3418	3422
22	3427	3427	3428	3430	3431	3431	3431	3426	3409*50	3415
23	3424	3424	3423	3421	3421	3418	3416	3410	3406	3406

RRS SHACKLETON CRUISE 4/75
UNCORRECTED METRES

DATE 24- 4- 75
(DAYNO 114)

HOURS	00	06	12	18	MINUTES	24	30	36	42	48	54
0	3403	3402	3400	3396	3394	3392	3391	3389	3385	3383	
1	3381	3379	3377	3376	3376	3375	3373	3370	3367		
2	3365	3364	3360*16	3359	3355	3352	3351	3350	3350	3350	
3	3350	3350	3350	3349	3348	3347	3347	3347	3347	3346	
4	3345	3345	3345	3345	3345	3345	3345	3345	3343	3344	
5	3345	3344	3343	3343	3343	3343	3343	3343	3342	3340	
6	3338	3335	3334	3332	3331	3330	3329	3327	3324	3321	
7	3317	3315	3312	3308	3305	3303	3301	3298	3293	3290	
8	3288	3284	3280	3278	3276	3274	3273	3273	3271	3268	
9	3266	3264	3262	3260	3256	3202	2982	2761	2539	2376	
10	2242	2275	2316	2373	2464	2573	2608*40	2607	2605	2598	
11	2590	2581	2571	2557	2548	2540	2530	2522	2515	2507	
12	2498	2489	2483	2481	2464	2440	2418	2396	2374	2350	
13	2324	2309	2207	1930	1761	1646	1595	1550	1515	1468	
14	1417	1365	1313	1261	1188	1105	1026	955	901	883	
15	683	873	813	653	515	388	373	358	339	306	
16	265	254	245	238	232	225	219	214	210	207	
17	205	201*10	202	203	205	208	222	301	511	839	
18	1225	1390	1551	1704	1775	1803	2050	2221	2240	2265	
19	2293	2320	2354	2403	2428	2441	2449	2457	2466	2474	
20	2482	2489	2497	2503	2508	2516	2516	2529	2529	2532	
21	2533	2533	2533	2535*20	2532	2527	2488	2379	2131	1927	
22	1745	1655*10	1662	1681	1759	1865	1982	2195	2601	2955	
23	3285	3306	3323	3327	3331	3336	3341	3346	3349	3350	

RRS SHACKLETON CRUISE 4/75
UNCORRECTED METRES

DATE 25- 4- 75
(DAYNO 115)

HOURS	00	06	12	18	MINUTES	24	30	36	42	48	54
0	3350	3350	3351	3355	3357	3358	3361	3364	3365	3365	
1	3365	3365	3365	3365	3366	3369	3369	3369	3369	3369	
2	3370	3370	3370	3370	3371	3372	3373	3374	3374	3375	
3	3376	3377	3378	3378	3379	3380	3380	3380	3381	3381	
4	3381	3383	3383	3383	3383	3384	3385	3387	3387	3387	
5	3387	3387	3387	3387	3387	3387	3387	3387	3387	3387	
6	3387	3387	3387	3387	3387	3387	3387	3387	3387	3387	
7	3387	3387	3385	3385	3385	3384	3384	3383	3380	3380	
8	3380	3377	3376	3376	3376	3376	3376	3376	3376	3376	
9	3376	3376	3376	3376	3375	3374	3374	3374	3373	3373	
10	3374	3373	3372	3371	3370	3369	3366	3365	3365	3364	
11	3361	3359	3357	3353	3350	3347	3343	3340	3338	3335	
12	3332	3330	3326	3320	3316	3314	3308	3303	3297	3295	
13	3288	3286	3283	3279	3274	3268	3258	3251	3249	3245	
14	3241	3234	3227	3221	3216	3211	3209	3207	3205	3201	
15	3197	3192	3189	3188	3188	3189	3189	3189	3186	3186	
16	3186	3160*10	3161	3163	3168	3175	3163	3150	3134	3115	
17	3094	3086	3080	3083	3082	3080	3060	3042	3029	2927	
18	2780	2835*10	2818	2769	2746	2736	2749	2779	2843	2881	
19	2908					3027	2944	2853	2743	2683	
20	2648	2667	2699	2760	2824	2890	2840*40	2851	2897*50	2896	
21	2895	2866	2847	2847	2860	2879	2918	2944	2944	2944	
22	2944	2952*10	2950	2946	2941	2937	2911	2889	2871*50	2876	
23	2882	2898	2914	2931	2941	2948	2961	2973	2982	2988	

RRS SHACKLETON CRUISE 4/75
UNCORRECTED METRES

DATE 26- 4- 75
(DAYNO 116)

HOURS	00	06	12	18	MINUTES	24	30	36	42	48	54
0	3007	3015	3024	3033	3042	3050	3061	3072	3083	3087	
1	3087	3078	3072	3072	3070	3067	3064	3059	3053	3033	
2	3007	2948*10	2959	2993	3014	3028	3018	3009	3004	32766	
3	32766	32766	32766	32766	2699	2524	2383	2192	1900	1641	
4	1397	1261	1145	1068	1007	953	936	921	908	899	
5	892	881	866	842	805	761	797*40				
6	980	1094	1233	1419	1679	1975	2099*40	918	902*50	933	
7	2023	2027	2107	2337	2641	2981	3003	3034	3102*50	3097	
8	3091	3088									
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											

RRS SHACKLETON CRUISE 4/75
UNCORRECTED METRES

DATE 27- 4- 75
(DAYNO 117)

HOURS	MINUTES					42	48	54
	00	06	12	18	24			
0	2977	2986	3007	3050	3072	3083	3088	3090
1	3098	3099	3100	3102*20	3099	3094	3088	3069
2	3054	3043	3039	3026	3014	3005	2996	2980
3	2963	2949	2941	2944	2931	2911	2922	2955
4	2999	2999	3003	3018*20	3006	2988	2971	2838
5	2882	2879	2916	2951	2988	3025	3020	2977
6	2901	2927	2915	2915	2924	2937	2952	2996
7	3007	3028	3047	3059	3073	3087	3102*40	3091
8	3087	3080	3076	3075	3073	3072	3050	2979
9	2950	3049*10	3048	3047	3048	3050	3046	3034
10	3032	3010*10	3013	3022	3028	3032	3050	3083
11	3076	3085	3091	3091	3094	3098	3102*40	3091
12	3087	3089	3091	3092	3093	3094	3093	3097
13	3113	3110	3110	3115	3115	3113	3113	3104
14	3094	3094	3094	3091	3095	3102		3105
15								
16								
17								
18								
19								
20	3091	3095	3098	3098	3094	3089	3091	3080
21	3105	3116*10	3115	3109*20	3112	3116	3117	3092
22	3120	3131	3143	3159	3170	3180	3189	3121
23	3215	3217	3219	3219	3219	3221	3219	3208

RRS SHACKLETON CRUISE 4/75
UNCORRECTED METRES

DATE 28- 4- 75
(DAYNO 118)

HOURS	MINUTES					42	48	54
	00	06	12	18	24			
0	3211	3207	3202	3195	3192	3191	3192	3204*50
1	3197	3187	3178	3170	3154	3133	3121	3101
2	3098	3085	3069	3039*20	3047	3058	3072*40	2981*50
3	3043	3061	3073	3074	3073	3072	3070	3083
4	3087	3091*10	3086	3070	3048	3023	3072	3131*50
5	3127	3109*10	3115	3138	3150	3157	3163	3129
6	3191	3199	3207	3216	3225	3233	3238	3185
7	3244	3237*10	3238	3241*20	3236	3228	3230*40	3242
8	3203	3192	3182	3184	3183	3182	3204	3290
9	3326	3331	3334	3338	3345	3354	3356	3363
10	3365	3364	3362	3357	3357	3360	3323*40	3340
11	3350	3344	3338	3335	3330	3325	3323	3309
12	3299	3297	3291	3290	3284	3277	3273	3258
13	3252	3236	3224	3217	3211	3204	3208*40	3182
14	3171	3161	3150	3136	3113	3087	2981*40	3025*50
15	3018	2732	2530	2484*20	2530	2601	2862	3126
16	3124	3122	3123	3128	3131	3135	3141	3148
17	3164	3173	3182	3195	3202	3208	3215	3228
18	3244	3251	3257	3263	3269	3275	3281	3298
19	3303	3307	3312	3314	3325	3352	3356	3344
20	3354	3358	3364	3370	3374	3378	3383	3390
21	3391	3391	3391	3394	3396	3400	3401	3409
22	3416	3412	3408	3404	3404	3405	3412	3426
23	3431	3433	3436	3439	3444	3449	3452	3459

RRS SHACKLETON CRUISE 4/75
UNCORRECTED METRES

DATE 29- 4- 75
(DAYNO 119)

HOURS	MINUTES					42	48	54
	00	06	12	18	24			
0	3467	3465	3462	3458	3454	3449	3443	3437
1	3436	3447*10	3446	3443	3442	3442	3441	3438
2	3438	3436	3433	3429	3424	3420	3418	3410
3	3391	3384	3378	3374	3368	3361	3359	3349
4	3345	3340	3336	3330	3325	3321	3316	3305
5	3292	3292						
6								
7								
8								
9								
10								
11	3281	3276	3274	3274	3261	3283	3283	3283
12	3186	3188*10	3187	3187	3187	3189	3190	3191
13	3189	3183	3176	3167	3156	3144	3132	3109
14	3142	3153	3163	3172	3177	3180	3186	3198
15	3204	3206	3209	3214	3216	3219	3220	3236
16	3252	3257	3264	3263	3289	3317	3315	3312
17	3321	3325	3329	3330	3332	3336	3340	3349
18	3356	3360	3363	3369	3373	3376	3380	3388
19	3394	3396	3400	3407	3410	3411	3412	3391
20	3394	3396	3400	3407	3410	3411	3413	3413
21	3414	3415	3414	3417	3419	3420	3423	3429
22	3431	3431	3432	3434	3435	3436	3442	3445
23	3463	3461	3471	3475	3474	3475	3476	3478

RRS SHACKLETON CRUISE 4/75
UNCORRECTED METRES

DATE 30-4-75
(DAYNO 120)

HOOURS	00	06	12	18	MINUTES	24	30	36	42	48	54
0	3482	3478	3474	3471*20	3473	3475	3475	3475	3475	3478	3480
1	3482	3482	3482	3482	3481	3478	3481	3482	3482	3483	3485
2	3486	3486	3486	3486	3485	3484	3484	3481	3478	3475	3473
3	3469	3473	3475	3475	3475	3475	3475	3475	3475	3475	3473
4	3471	3469	3467	3464	3462	3460	3460	3458	3455	3451	3448
5	3445	3383*10	3393	3431*20	3428	3424	3424	3421	3415	3411	3411
6	3409	3404	3400	3396	3391	3385	3380	3374	3367	3365	3365
7	3365	3362	3358	3352	3349	3347	3342	3339	3336	3332	3332
8	3327	3322	3318	3313	3308	3303	3292*40	3294	3299	3305	3305
9	3310	3315	3319	3323	3325	3327	3331	3334	3335	3342	3342
10	3352	3359	3365	3369	3373	3376	3387	3394	3393	3393	3393
11	3394	3401	3406	3410	3414	3418	3422	3426	3430	3434	3434
12	3438	3437	3436	3435	3434	3434	3436	3439	3445	3449	3449
13	3451	3454	3458	3461	3463	3466	3469	3473	3478	3481	3481
14	3482	3479	3474	3471	3468	3466	3462	3459	3457	3459	3454
15	3449	3451	3453	3453	3454	3455	3455	3459	3459	3460	3460
16	3460	3460	3460	3460	3460	3460	3460	3460	3460	3460	3460
17	3460	3460	3460	3460	3461	3462	3463	3464	3465	3466	3466
18	3467	3471	3473	3474	3476	3478	3479	3481	3482	3483	3483
19	3484	3485	3486	3487	3488	3489	3490	3491	3490	3489	3489
20	3489	3489	3489	3489	3489	3489	3487	3485	3483	3483	3483
21	3484	3490	3495	3495	3494	3493	3493	3493	3493	3493	3493
22	3493	3493	3493	3494	3496	3497	3499	3501	3503	3505	3505
23	3508	3511	3513	3515	3513	3509	3507	3507	3505	3503	3501

RRS SHACKLETON CRUISE 4/75
UNCORRECTED METRES

DATE 1-5-75
(DAYNO 121)

HOOURS	00	06	12	18	MINUTES	24	30	36	42	48	54
0	3500	3499	3498	3497	3497	3497	3496	3495	3495	3495	3495
1	3495	3497*10	3496	3494	3489	3484	3486	3489	3492	3492	3493
2	3493	3493	3493	3492	3490	3489	3488	3486	3483	3481	3481
3	3480	3479	3478	3478	3478	3478	3476	3474	3473	3473	3471
4	3467	3465	3463	3461	3459	3456	3456	3456	3456	3454	3454
5	3449	3447	3445	3443	3440	3438	3440	3442	3443	3443	3444
6	3445	3443	3442	3442	3440	3438	3427*40	3428	3433*50	3432	3432
7	3431	3427*10	3431	3442	3445	3445	3447	3447	3446	3446	3444
8	3442	3438*10	3439	3441	3445	3449	3451	3453	3453	3451	3451
9	3449	3449	3449	3449	3449	3449	3449	3449	3451	3451	3451
10	3451	3452	3453	3453	3453	3453	3453	3453	3453	3453	3453
11	3453	3453	3453	3453	3453	3453	3453	3453	3452	3450	3449
12	3449	3449	3450	3452	3454	3456	3456	3456	3457	3459	3460
13	3460	3458	3456	3456	3456	3456	3456	3460*40	3461	3460	3460
14	3456	3458	3459	3460	3461	3462	3462	3465	3466	3467	3470
15	3460	3461	3462	3463	3464	3464	3465	3465	3467	3467	3470
16	3473	3476	3480	3484	3486	3488	3489	3490	3491	3491	3492
17	3493	3493	3494	3497	3501	3504	3506	3509	3512	3512	3515
18	3519	3520	3520	3519	3522	3526	3528	3531	3534	3534	3536
19	3537	3541	3545	3547	3548	3548	3548	3548	3549	3552	3554
20	3555	3555	3556	3561*20	3560	3559	3561	3563	3563	3564	3565
21	3566	3566	3566	3562	3531	3486	3440	3386	3317	3231	3231
22	3138	3110	3077	3035	2987	2935	2988	3048	3121	3203	3203
23	3288	3446	3565	3606	3623	3628	3625	3621	3617	3617	3613

RRS SHACKLETON CRUISE 4/75
UNCORRECTED METRES

DATE 2-5-75
(DAYNO 122)

HOOURS	00	06	12	18	MINUTES	24	30	36	42	48	54
0	3610	3606	3601	3594	3590	3588	3587	3587	3591	3592	3592
1	3592	3581	3572	3568	3565	3562	3562	3562	3560	3559	3559
2	3559	3557	3554	3549	3546	3544	3542	3540	3539	3537	3537
3	3533	3479	3529	3527	3524	3522	3520	3518	3516	3513	3513
4	3511	3509	3507	3506	3505	3504	3503	3501	3499	3498	3498
5	3497	3494	3492	3490	3487	3484	3483	3481	3479	3477	3477
6	3475	3473	3470	3465	3462	3460	3458	3456	3454	3453	3453
7	3453	3456	3459	3460	3461	3462	3464	3466	3467	3470	3470
8	3473	3475	3477	3478	3479	3480	3481	3482	3482	3482	3482
9	3482	3482	3483	3486	3490	3495	3496	3497	3498	3501	3501
10	3504	3505	3507	3509	3512	3515	3516	3517	3518	3519	3519
11	3520	3528*10	3526	3522	3520	3520	3520	3520	3520	3520	3520
12	3520	3520	3520	3520	3521	3521	3522	3523	3523	3524	3525
13	3526	3528	3530	3530	3531	3533	3534	3535	3537	3538	3538
14	3541	3542	3543	3544	3546	3548	3550	3552	3553	3554	3554
15	3555	3557	3560	3562	3563	3564	3565	3569	3578	3580	3580
16	3579	3578	3577	3579	3580	3583	3583	3584	3587	3591	3591
17	3595	3599	3602	3604	3606	3608	3610	3612	3613	3617	3617
18	3621	3636*10	3633	3627	3622	3617	3610*40	3611	3613	3617	3617
19	3621	3548*10	3568	3630	3650	3650	3655	3659	3663	3678	3678
20	3698	3707	3712	3711	3711	3712	3712	3712	3712	3714	3714
21	3716	3717	3718	3719	3721	3722	3723	3723	3723	3725	3725
22	3727	3727	3727	3720	3730	3731	3731	3731	3732	3733	3733
23	3734	3734	3735	3736	3736	3734	3734	3734	3734	3734	3734

RRS SHACKLETON CRUISE 4/75
UNCORRECTED METRES

DATE 3-5-75
(DAYNO 123)

HOURS	MINUTES									
	00	06	12	18	24	30	36	42	48	54
0	3734	3733	3732	3731	3731	3731	3731	3731	3731	3730
1	3729	3728	3726	3724	3723	3722	3721	3719	3717	3715
2	3712	3710	3708	3706	3704	3701	3701	3701	3699	3696
3	3694	3692	3690	3688	3685	3683	3679	3676	3674	3674
4	3674	3675	3676	3676	3676	3676	3674	3671	3669	3666
5	3663	3660	3655	3658	3658	3658	3658	3657	3656	3654
6	3650	3648	3647	3647	3646	3645	3644	3643	3642	3640
7	3639	3637	3636	3636	3636	3635	3633	3632	3631	3630
8	3630	3630	3630	3629	3627	3625	3622	3621	3621	3620
9	3619	3618	3617	3616	3615	3614	3614	3613	3609	3620
10	3601	3603*10	3602	3600	3599	3599	3601	3603	3603	3605
11	3599	3602	3612	3639*20	3623	3599	3599	3599	3601	3601
12										
13										
14										
15										
16										
17										
18										
19	3599	3599	3600	3603*20	3598	3603	3601	3595*50	3597	
20	3608	3610	3613	3618	3619	3619	3619	3604	3606	
21	3619	3620	3621	3620	3617	3614	3606	3621	3620	
22	3588	3587	3586	3585	3584	3584	3583	3583	3582	
23	3581	3580	3579	3577	3575	3572	3568	3565	3562	3555*50

RRS SHACKLETON CRUISE 4/75
UNCORRECTED METRES

DATE 4-5-75
(DAYNO 124)

HOURS	MINUTES									
	00	06	12	18	24	30	36	42	48	54
0	3553	3548	3542	3535	3533	3533	3533	3537	3548	3553
1	3555	3555	3554	3554	3544	3542	3536	3549*50	3552	3523
2	3530	3527	3527	3529	3534	3541	3543	3547	3548	3525
3	3548	3547	3543	3544	3525	3515	3520	3524	3525	3525
4	3526	3524	3521	3515*20	3518	3522	3506	3491	3477*50	3485
5	3497	3486*10	3490	3505	3516	3531	3515*40	3516	3519	3520
6	3520	3519	3519	3519	3519	3519	3518	3516	3515	3514
7	3513	3512	3511	3511	3509	3506	3505	3503	3501	3499
8	3497	3494	3492	3490	3488	3486	3485	3483	3482	3481
9	3470	3476	3474	3470	3468	3467	3465	3463	3460*50	3473
10	3493	3480	3468	3458	3454	3453	3452	3451	3449	3449
11	3449	3449	3449	3448	3447	3445	3444	3443	3442	3440
12	3425	3423	3426	3433	3432	3431	3430	3429	3428	3426
13	3425	3423	3421	3417	3415	3414	3413	3412	3410	3408
14	3407	3406	3404	3402	3401	3400	3390	3383	3380	3378
15	3376	3375	3374	3374	3375	3376	3383	3387	3388	3391
16	3394	3394	3395	3397	3399	3400	3396	3394	3393	
17	3391	3388	3386	3384	3377	3369	3362	3354	3339*50	3343
18	3349	3350	3350	3349	3348	3347	3345	3343	3345	
19	3347	3347	3345	3341	3335	3328	3322	3316	3312	3308
20	3305	3307	3306	3301	3299	3299	3297	3294	3288*50	3294
21	3303	3307	3310	3310	3309	3308	3307	3305	3302	3299
22	3295	3290	3284	3276	3266	3255	3254	3250	3240	3238
23	3241	3235	3231	3230	3228	3226	3224	3223	3219*50	

RRS SHACKLETON CRUISE 4/75
UNCORRECTED METRES

DATE 5-5-75
(DAYNO 125)

HOURS	MINUTES									
	00	06	12	18	24	30	36	42	48	54
0	3219	3216	3214	3212	3210	3208	3206	3203	3201	3199
1	3197	3196	3194	3191	3185	3178	3174	3170	3167	3162
2	3157	3150	3142	3131	3118	3105	3099	3091	3080	3065
3	3049	3058*10	3056	3049	3041	3032	3127*40	3107	3025*50	3039
4	3061	3079	3091	3091	3092	3094	3092	3087	3076	3061
5	3043	3039	3036	3036	3045	3058	3050*40	3052	3056	3086
6	3127	3138	3148	3157	3163	3167	3171	3173	3174	3176
7	3177	3181	3186	3191	3192	3191	3208*40	3206	3197*50	3201
8	3208	3213	3217	3217	3215	3213	3214	3211	3197*50	3203
9	3211	3222	3230	3233	3236	3239	3242	3246	3250	3254
10	3257	3260	3263	3263	3265	3266	3271	3274	3276	
11	3281	3281	3280	3279	3278	3275	3273	3271	3270	3268
12	3266	3266	3267	3268	3269	3270	3270	3272	3279	3282
13	3283	3290	3295	3295	3298	3303	3296	3289	3280	3277
14	3277	3275	3274	3277*20	3271	3263	3260	3257	3250	3245
15	3241	3233*10	3234	3235	3234	3231	3230	3230	3230	3223
16	3226	3214	3206	3206	3198	3186	3180*40	3188	3210	3223
17	3231	3235	3238	3240	3241	3242	3244	3244	3244	3245
18	3246	3246	3246	3246	3245	3244	3243	3242	3242	3241
19	3230	3237	3233	3228	3222	3217	3200*40	3205	3218	3234
20	3252	3260	3267	3268	3269	3270	3271	3272	3272	3271
21	3270	3272*10	3271	3270	3264	3266	3264	3261	3257	3255
22	3253	3250	3247	3245	3243	3241	3241	3240	3238	3236
23	3225	3230	3233	3230	3229	3229	3227	3226	3226	3226

RRS SHACKLETON CRUISE 4/75
UNCORRECTED METRES

DATE 6-5-75
(DAYNO 126)

HOURS	00	06	12	18	MINUTES	24	30	36	42	48	54
0	3226	3224	3222	3221	3220	3219	3219	3219	3219	3219	3219
1	3219	3218	3216	3215	3214	3213	3212	3210	3207	3205	
2	3204	3202	3200	3199	3196	3193	3191	3188	3184	3184	3181
3	3178	3167	3159	3154	3150	3146	3141	3136	3131	3124	
4	3116	3105	3098	3098	3083	3061	3018	2975	2936	2912	
5	2897	2875	2857	2842*20	2851	2866	2823	2785	2756	2731	
6	2707	2674	2641	2608	2572	2535	2501	2468	2439	2404	
7	2360	2325	2286	2253	2222	2191	2147	2116	2109	2051	
8	1968	1923	1879	1836	1785	1730	1681*40	1686	1703	1721	
9	1741	1692	1642	1573*20	1583	1598	1500*40	1522	1613*50	1590	
10	1554	1306*10	1309	1320	1333	1346	1224	1119	1024*50	1042	
11	1068	1026	969	879	816	768	751	712	604*50	659	
12	742										
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											

RRS SHACKLETON CRUISE 4/75
UNCORRECTED METRES

DATE 7-5-75
(DAYNO 127)

HOURS	00	06	12	18	MINUTES	24	30	36	42	48	54
0											
1											
2											
3											
4											
5	2897	2875	2857	2842	2851	2866	2823	2785	2756	2731	2902*58
6	2707	2674	2641	2608	2572	2535	2501	2468	2439	2404	
7	2366	2325	2286	2253	2222	2191	2147	2116	2109	2051	
8	1968	1923	1879	1836	1785	1730	1691*38	1686	1703	1721	
9	1741	1692	1642	1573	1583	1598	1519*38	1522	1613	1590	
10	1554	1356*8	1309	1320	1333	1346	1224	1119	1024	1042	
11	1068	1026	969	879	816	768	751	712	604	659	
12	742										
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											

SUM = 1.719, ACTIVITY E = 02, , REPORT CODE = 03, RECORD COUNT = 000738

RRS SHACKLETON CRUISE 4/75
MAGNETIC ANOMALY

DATE 18- 4- 75
(DAYNO 108)

HOURS	00	06	12	18	MINUTES	24	30	36	42	48	54
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											

RRS SHACKLETON CRUISE 4/75
MAGNETIC ANOMALY

DATE 19- 4- 75
(DAYNO 109)

HOURS	00	06	12	18	MINUTES	24	30	36	42	48	54
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											

RRS SHACKLETON CRUISE 4/75
MAGNETIC ANOMALY

DATE 20- 4- 75
(DAYNO 110)

HOURS	00	06	12	18	MINUTES	24	30	36	42	48	54
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											

RRS SHACKLETON CRUISE 4/75
MAGNETIC ANOMALY

HOURS	MINUTES					DATE 21- 4- 75 (DAYNO 111)				
	00	06	12	18	24	30	36	42	48	54
0	-56* 2	-53	-53	-49*22	-49*26	-44*34	-45	-43	-40	-37
1	-37	-34	-41	-43*20	-43	-49*34	-48	-50	-51	-52*56
2	-52* 2	-50	-45	-36	-27	-15	-1	10	19	26
3	-35* 2	55	55	32	32	32	31	32	29	29
4	16	12	10	8*20	9	14	22	28	36	43
5	55	61	67	72	80	87	89	92	95	95
6	89	93*10	86	83	71*28	71*32	78	86	98	108
7	117	125*8	121	115	99	90	75	61	67	80
8	101	116	124*14	120	116*26	111	100	88	70	52
9	36	20	8	-8	-20	-27	-29	-25	-18	-10
10	9	11	16	36	46	51	55	59	57*50	56
11	53	49	49	28	23	17*32	22*38	22	27	33
12	43	57*10	56	55*22	57	42	47	55	71	71
13	74* 2	69	52	29	5*28	6	13	26	35	24
14	0	-18	-30	-32	-29	-33*34	-32	-26	-25	-24
15	+16	-2	19	34*20	29	10	-10	-18	-20	-15
16	-55	2	5	20*22	19*25	17	16	17	21*50	21
17	31	36	11	43*22	44	42*32	47*40	43*46	44	47
18	48	39	29	19	13	9	5	3*44	1	1*56
19	0	3	5	5	4	10	17*40	16	14	13
20	11	8*10	8*16	5	7*28	6	14*40	13	17	20
21	21	50*10	29	33	35	36*34	34	31	25	18
22	11	4	-2	-8	-14	-20	-24	-27	-30	-32
23	-35	-35	-54	-29	-20	-9	3	19	30	51*58

RRS SHACKLETON CRUISE 4/75
MAGNETIC ANOMALY

HOURS	MINUTES					DATE 22- 4- 75 (DAYNO 112)				
	00	06	12	18	24	30	36	42	48	54
0	55	72	91	113	132	144	148	147	140	140
1	132	126	123	125	133	142	154	167	178	178
2	171	161	148	135	124	116	113*40	111	114	118
3	122	126	130	131	128	123	117	109	95	84
4	75	64	56	46	42*28	39*34	37	29*46	30	27
5	19	18	14	6	-6	-8	-11	-18	-25	-30*58
6	-31	-35	-38	-41	-41	-50	-55*40	-58	-59*50	-55*56
7	-58* 2	-62	-69	-61*20	-65	-69	-63*40	-62*44	-64	-62
8	-56	-48	-38*16	-39	-34	-32	-34	-36	-39	-38
9	-39	-38	-37*14	-32	-28	-18	-1	22	39	53
10	65	74	79	81*20	84	91	103	113	118	118
11	114	113	111	109	106*28	105	109*38	109	114*50	114
12	112	105	97	88	82	78*34	80	79	75	68
13	54	34	24	14	7	3	4	8	15*50	17*58
14	16	15	17	22	32	43	54	60	66	68
15	33	31	33	34	33	31	49	41	37	34
16	22	18	11*16	12	9	9	4	4*44	1	25
17	-1* 2	-2	-2	5	13	22	31*40	30	32	36*56
18	34	29	24	20	18	16	13	12	9	9
19	3	3* 8	6	12	22	38	58	78	97*52	99
20	84	67	53	39	23	5	-15	-28	-32	-25
21	-6	10	26	39	55	76	101	127	151	169
22	185	195	197	196	189	185	172	160	153	144

RRS SHACKLETON CRUISE 4/75
MAGNETIC ANOMALY

HOURS	MINUTES					DATE 23- 4- 75 (DAYNO 113)				
	00	06	12	18	24	30	36	42	48	54
0	136	129	121	113	105	90	92	88	85	83
1	83	84	93	101	106	111	106	97	84	68
2	51	27	15	-15	-26	-30	-26	-22	-19	-19
3	-15* 4	-16	-14	-15*20	-13*26	-9	-6*38	-4*46	-5*52	-7
4	-5	-7	-3	-4	-11	11	13	15	20*52	21*56
5	18	20* 8	18	17	17	17	20*40	18	22*50	21
6	26	17	14	10	12	7	-11	-13	-17	-21
7	-29	-32	-39	-27	-22	-17	-11	-6	-1	-11
8	22	33*10	32	27	21	15	10	13	19	27
9	38	45	43	50	47	48*32	54*40	53	58	59*56
10	57* 4	56	51	54	49	41	35*40	34	29	21*58
11	23	29* 8	33	42	43*26	48	50*38	51	54*50	55
12	53	53	50	49*26	45	57	53	29*46	28	27*56
13	30	33	37	43	47	51	54	64	77	92
14	197	123*30	121	123*21	120	114	107*40	112	118	120*56
15	112	121	122	122	121	114*34	116*40	115*16	112	105
16	100	76*10	95	96	99	103	106	101	92	82
17	75	72* 6	74*14	66	64	56	49	44	50	56
18	52	52*10	51	51	51	51	54	54	57	51
19	3	3*10	51	51	28	27	30*30	31	37	45
20	5	5* 7	51	52	55	55	50*34	51	56	55
21	6	57	52	52	55	55	55	55	56	52
22	43* 4	51	51	21	12	5	-5	-10	-15	-21
23	-28	-31	-35	-37	-14	-9	-51	-50	-51	-40

RRS SHACKLETON CRUISE 4/75
MAGNETIC ANOMALY

HOURS					MINUTES				DATE 24- 4- (DAYNO 114)		
	00	06	12	18	24	30	36	42	48	54	75
0	-44	-39	-51	-23	-13	-4	2	8*44	12	15	
1	13	10	7	4	2*28	-1*34	1	0	2	5	
2	9	16	-2*14	29	36	46*34	48*40	49*44	48*52	46	
3	40* 4	37	36	35	38	40	40	42*46	40	37	
4	30	20	9	5	16	-31	-40	-48	-53	-55	
5	-54	-49	-39	-27	-15	-4	9	22	37	53	
6	71	84	98	103	105*28	102	94	85	77	66	
7	63	60* 8	58	62	70	78	85	96*46	95	99	
8	100	107* 8	103*14	105*22	104	103	105	105	101	95	
9	93	87	81	75	69	65	59	55	53	49	
10	45	42*10	42*14	43	45	49	56	63	71*52	69	
11	67	63	57	53	43	38*32	35	32	29*52	21*58	
12	20* 4	21	24	28	32	39	49	60	76*52	75	
13	75	67	45	18	-7	-15	-9	4	22	40	
14	53	66	77	84	88	93	99	108	117	121*56	
15	125	120	111*14	116	153	153	160	154	143	127	
16	111	92	74	51	38	55	36	16	-10	11	
17	51	66	89*16	85	64	48	32	34	65*50	62	
18	63	71	74*16	75	84	96	102	107	108	110	
19	109	105	103	96	84	69	57	50	41	36	
20	34	32*10	31	29	27	23	18	16	11	5	
21	0	1	7*14	9	12	20	30	43	55	58	
22	47	24	-1	-13*20	-7	16	45	49	30	15	
23	9* 2	10*10	9	13	17	22	27	38	51	71*58	

RRS SHACKLETON CRUISE 4/75
MAGNETIC ANOMALY

HOURS					MINUTES				DATE 25- 4- (DAYNO 115)		
	00	06	12	18	24	30	36	42	48	54	75
0	76	86*10	85	81	72	62	49	40	35	36	
1	40	47	52	57	58	60	62	66	72	79	
2	90	99	105	111	109	104	91	79	67	60*56	
3	63	67	68	58	45	32	16	4	-4	-12	
4	-18	-22	-25*16	-22*20	-19	-17	-11	-4	3	9	
5	15	21	28	36	42	46	44	44	47	49	
6	52	52	53	53	54	54	51	49	47	46	
7	44	45	46*16	45	47*26	47	46*38	46*44	49	47	
8	45* 4	44	39*16	38	35	30	24	15*44	14	6	
9	0	-4	-9	-11	-10	-10*32	-8	-7	-2*52	-3	
10	-2	-3	0	-1	1	6	14	25	32	37	
11	40* 2	39	41	41	45	45	48	51*44	51*50	50	
12	48* 2	43	42	43	44	48	53	61	65	71	
13	82* 4	82*10	80	78	73	65	58	54	46	38	
14	33	30*10	29*14	27	25	20	16	9	7	9	
15	11	17	25	30	33	36	39	41	45*52	43	
16	47	49* 8	46	46*20	44	43	45*40	44	45	46	
17	49	50	47	39	32	21	13	3	-8*50	-15	
18	-16	-15*10	-16	-12	-11	-10*32	-11	-9	-8*50	-4	
19	2	9	18	36	41	53	61	68	74	75	
20	71	59	41	19	-1	-18	-36	-52	-65	-74	
21	-80	-82	-78*16	-77	-76	-76	-77	-77	-81	-82	
22	-84	-81	-77	-69	-59	-45	-32	-21	-10	0	
23	7	12	10	7*20	5	3*34	5*40	4	7	16*58	

RRS SHACKLETON CRUISE 4/75
MAGNETIC ANOMALY

HOURS					MINUTES				DATE 26- 4- (DAYNO 116)		
	00	06	12	18	24	30	36	42	48	54	75
0	18	34	50	61	68	74	80	86*46	85	86	
1	86* 2	88	89	91	89	86	80	75	75*50	71	
2	68	64	57	58	40	28	17	11	12	17	
3	27	38	38	34	22	15	10	4	-7	-17	
4	-23	-19	-6	7	21*28						
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											

RRS SHACKLETON CRUISE 4/75
MAGNETIC ANOMALY

DATE 27-4-
(DAYNO 117) 75

HOURS	00	06	12	18	MINUTES	24	30	36	42	48	54
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20	105	105	104	103	100	103	100	109	103*50	105	105
21	68	60	55	51	49	44	35	24	88	80	80
22	22*2	2	42	52	60	55	11	17	17	15	15
23	75								62*44	59	50

RRS SHACKLETON CRUISE 4/75
MAGNETIC ANOMALY

DATE 28-4-
(DAYNO 118) 75

HOURS	00	06	12	18	MINUTES	24	30	36	42	48	54
0	45	34	27	26		30	34	39	45	51	57
1	59	59	64*16	63	67	77	84	88	91	95	95
2	100	106*10	104	95	78	66	63	67	76	79	79
3	83*2		91	96	100	103	107	117	118*50	115	115
4	110	108	108	108*20	108*28	107	108	109	111	115	115
5	118	121	124	124*22	123	122	119	119	119	123	123
6	124	125	128	130	129	124	118	107	93	80	80
7	68	62	59	64	73	85*34	82	60	32	9*58	
8	11	18	24*14	21	19		45	76	105	112	
9	103	93*10	93*14	100	117	139	171	202	228	248	
10	248	230	197	153	98	48	17*38	22	43	67	
11	89	114	138*16	137	116	84	52	32	20	16	
12	18	24	34	45	57	67	76	88	97	102	
13	99	96	102	117	134	149	153	145	129	108	
14	95	93	101	112	124	134	136	129	128	125	
15	116	103	86	68	53	41	32	33	54*50	51*56	
16	56	74	108	142	165	170	162	146	128	114	
17	103	100*8	103	108	112	116	117*40	116	112	107	
18	105	105	107*10	106	103	99	96	94	92*50	88	
19	82	77	72	68	67*26	66*34	65	69	71	76*56	
20	75	76	74	68	60	56	53	46*46	47	46*56	
21	46	48*10	47	46	46	49	56	64	71	78	
22	80	81	80	79	81	88	94	97	90*50	95	
23	101	100	87	72	59	53	54	65	84	125*58	

RRS SHACKLETON CRUISE 4/75
MAGNETIC ANOMALY

DATE 29-4-
(DAYNO 119) 75

HOURS	00	06	12	18	MINUTES	24	30	36	42	48	54
0	142*4	139	125	110	100	90	73	54	37	29	
1	39	57	74	84	88	85	73	54	29	25	
2	-8	-19	-25	-20	-9	8	24	37	47	53	
3	59	61	63	57	50	40	33	27	25	30	
4	40	58	84	115	143	164*34	156*40	157	137	110	
5	80										
6											
7	72	67	67	64	63*28	62	63	83	77	74	
8	62*2	61	62*16	62*20	62	51	61	60*46	59	59	
9	56	54	54*16	52	50*28	49	50	50	49	49	
10	47	47	45	47	45	46	44	40*46	41	39*56	
11	41	45	50	57	52	65*34	63	61	54	45	
12	29*4	30	40	66	90	100	93	87	90	110	
13	134	156	171	179*22	178	169*32	180	185	181	171	
14	160	148	135	125	117	111	104	97*44	102	94	
15	82	67	56	46	57	33	26	19	10	5*56	
16	7	12	18	22	18	13	9	9	11	15	
17	21	22	37	56	67	84	101	116	129	139	
18	144	144	133	113	105	101	101*40	99*46	98	90	
19	50	55	55	41	32	27	27	29	31	34	
20	36*2	36*10	36	34	32	32*34	32*40	30*44	30*52	29*58	
21	31	52	50	51	49	51*34	52	50*46	48	43	
22	37	29	21	1	-2	-11	-21	-11	-6	16	

RRS SHACKLETON CRUISE 4/75
MAGNETIC ANOMALY

DATE 30-4-75
(DAYNO 120)

HOURLS	00	06	12	18	MINUTES	24	30	36	42	48	54
0	38	56	71	88	108	128	147	162	173	181	
1	189	179	169	162	154	139	116	95	77	54	
2	59	34	14	-5*22	-4	6	25	46	63	79	
3	89	101	113	119	113	99	86	75	68	62	
4	56	51	46	41	37	35	32	24	20	18	
5	26	40	58	76	90	102	112	121	129*50	128	
6	128	126	126	127	130	130	125	128*46	127	128	
7	122	138	144	149*20	148	144	138	119	100	83	
8	72	60	51	40	30	16	5	-3	55	12	
9	17	20*10	19	19	25	28*32	28	37	35	30*56	
10	33	42	70	102	129	156	177	189*46	188	180	
11	165	156	138	129	125	122	122	120	117	115	
12	110	108	104	103	103	103	101	100	97	95	
13	91	85	78	75	70	71	76	83	96	123*56	
14	113	92	73	61	53	47*34	48	51	53		
15											
16											
17											
18											
19											
20											
21											
22											
23											

RRS SHACKLETON CRUISE 4/75
MAGNETIC ANOMALY

DATE 1-5-75
(DAYNO 121)

HOURLS	00	06	12	18	MINUTES	24	30	36	42	48	54
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16	53	56	61	65	54	53*34	52*40	52*44	51	52	
17	93	101	109	118	69	72	75*38	75	79	86	
18	127	114	105	96	127	134	140	144	142	137	
19	83	74	63	52	91	88	88*38	88	93	89	
20	47	58	66	67	38	27	23	23	28	36	
21	18	16	18	23	64	59	52	48	52	46	
22	41	42	44	50	64	39	43	48*44	46	43	
23	50	45	38	30	58	63	68	67	62	56	

RRS SHACKLETON CRUISE 4/75
MAGNETIC ANOMALY

DATE 2-5-75
(DAYNO 122)

HOURLS	00	06	12	18	MINUTES	24	30	36	42	48	54
0	14	18	24	29	32	37	42	44*46	43	41	
1	39	32	20	12	22	9	19	-31	-40	-45	
2	-48	-48*10	-45	-41	-35	-27	-19	-10	-8	-3	
3	6*4	0	26	43	59	75	85	94	94	94	
4	97	97	102	109	121	132*32	135*40	132	130*50	126	
5	124	127*10	126	130	140	149	154	158	158	159	
6	155	153	151	148	146	146*32	149*38	150	151	148	
7	156*2	155	147	133	122	116	121	127	132*50	124	
8	113	106	97	96	85	80*32	77	77	74	73	
9	75*2	76	65*14	70*20	69*28	66	62	60	60	55	
10	44	32	27	39	51	62	67	71	75*50	0	
11	0	0	0	0	0	0	0	0	0	0	
12	-5*2	-5	4*14	3	-8	-29	-50	-63	-67	-60	-5*58
13	6	6	-29	-24	-23	-38	-58	-79	-95	-43	-106*56
14	-104	-73	-94	-85	-80	-71	-70	-63	-55	-27	-27*56
15	-31	-17	-6	3	13	21	26	30	29	29	
16	26	21	20*14	18	16	13	10	7	9*50	9	
17	9	13*8	0	0	0	24	28	32	37	44	
18	51	56	55	51	42	33	19*10	21	20	23	
19	25	23	18	15	15	13	14*58	14	10	12*56	
20	13*2	10	11*14	11*22	10*28	9	10*38	10*44	11	14	14*58
21	15	17*10	15*14	15*20	15*28	12	17	17	14	15	
22	14	13	17	21	20	20	31*3	30	35	37*52	
23	14	14	17	21	20	20					

RRS SHACKLETON CRUISE 4/75
MAGNETIC ANOMALY

HOURS	MINUTES					DATE 3-5-75 (DAYNO 123)				
	00	06	12	18	24	30	36	42	48	54
0	38	39* 8	39	36	37	36*34	35	36	35*50	39*56
1	39	44	44	47	48*26	51*32	51	53*44	53*52	52
2	54	54	54	54	56*28	55	55	55*44	55	56
3	56	56* 8	55	59*22	58	57	57*40	56	54	53
4	52* 2	51	50*16	48	48	48	51*40	52*44	49	49
5	48* 4	49* 8	48	48	47*28	47*32	49*38	48	48	52*56
6	53* 2	54* 8	55*14	56*20	57*26	56	57	57	57*50	55
7	51	48	43*16	44	43	42	41	40	41*50	40*56
8	41	44* 8	45	49	53	59	63	69	75	79
9	83	87* 8	90	90	92*26	95	100	107	116	124
10	132	141	145	149	150					
11										
12										
13										
14										
15										
16										
17										
18										
19	128* 2	126	127*16	126	129	126	123	119	113	125
20	95	86	77	66	58	50	47	41*46	42	104
21	38	36	36	39	40	47*32	47	52*44	52	39*58
22	56* 2	59	61	66	72	73	69	71	73*52	54
23	69	67	63	58	51	47	42*40	43	38	32

RRS SHACKLETON CRUISE 4/75
MAGNETIC ANOMALY

HOURS	MINUTES					DATE 4-5-75 (DAYNO 124)				
	00	06	12	18	24	30	36	42	48	54
0	27	26* 8	23*16	23*20	24	19	21	19*44	18	16*58
1	14	12	6	3	-2	-9	-16	-22	-32	-44
2	-55	-68	-78	-88	-101	-111	-119	-125	-130	-135
3	-136	-136	-133	-128	-119	-106	-91	-74	-50	-24
4	90	27	50	73	91	105	115	123	128	133*56
5	132* 2	130	130	130*22	129	131	134	137	140	146
6	148	153	157	159	161*28	160	158	160	159*50	158
7	159* 4	160* 8	161*16	160	162	159	155	148	141	138
8	136	132*10	131	132	130	131	132	133*44	139*50	139
9	142	146	155	156	159	165*34	164	165	164*50	165*58
10	165* 4	164	164	164	163	164	162	159	158	157
11	157	158	161	163	164	167	172*40	171	172	176
12	178	179	180	181	182	183*32	186*40	185	187	189*56
13	188	182	179	175*20	172	169	167*38	166*44	165	164
14	164	164	163*16	162*22	162*28	162*34	161	164*46	162	164*58
15	163	167	165	165	163	160	154	148	143	139
16	135	130	125	120	116	111	105	99	94	85
17	76	67	56	44	28	10	-7	-25	-44	-64
18	-82	-98	-110	-121	-129	-136	-142	-144	-146	-155
19	-163	-175	-183	-194	-201	-206	-209	-214	-218	-223
20	-228	-231	-236	-240	-241	-244	-246	-246	-245	-244
21	-242	-237	-232	-226	-218	-207	-196	-186	-174	-161
22	-148	-134	-121	-109	-98	-90	-83	-77	-69	-61
23	-56	-53	-53	-59	-61	-56	-60	-70*46	-69	-76*56

RRS SHACKLETON CRUISE 4/75
MAGNETIC ANOMALY

HOURS	MINUTES					DATE 5-5-75 (DAYNO 125)				
	00	06	12	18	24	30	36	42	48	54
0	-82	-83	-77	-63	-36	-1	30	62	92	112
1	127	136	149	169	192	217	238	256	277	288
2	298	306	316	326	335	340*34	329	329	315	303
3	296	298	309	320	326	334	339*38	341	340*52	338
4	327	314	295	277	257	244	236	235	242	256
5	271	288	304	319	321*28	317	312*38	308	297	287
6	276* 4	270*10	371	278	290	310	316	349	367	378
7	385	391	395	396	387	383	379	373	359	342
8	323	307	292	275	254	228	199	172	155	141
9	127	115	105	94	98	113	130	145	156	152
10	140	124	106	93	82	73	65	60	58	59
11	56	46	35	14	-5	-29	-54	-78	-101	-114
12	-115	-121* 8	-114	-102	-91	-82	-80	-77	-75	-73
13	-70	-60	-50	-42*22	-43	-44*32	-48	-56	-54	-63
14	-72* 4	-67*10	-69	-73	-74	-81	-84	-81	-77	-78*58
15	-74* 4	-76	-76*16	-78	-84	-92	-101*40	-100	-104	-116
16	-130	-135	-131	-116	-99	-84	-66	-47	-22	-2
17	27	63	106	144	184	201	207	200	194	186
18	179	169	153	126	104	86	74	61	58*50	68*58
19	67	74	82	92	101	114	125	123	125	124*56
20	131	122	131	136	145	147	145	137	119	110
21	92	70	51	35	20	16*32	15	17	21	25
22	27* 2	27	24	29	34*26	41	45*38	44	36	27
23	44	7	7	21	-5	-11*32	-14	-17	-16	5*58

RRS SHACKLETON CRUISE 4/75
MAGNETIC ANOMALY

HOURS	00	06	12	18	MINUTES					DATE (DAYNO 126)	75
					24	30	36	42	48		
0	11	30	40	39	28	29	43	62	84		104
1	119	131*10	130	126	109	91	77	69*44	70		84
2	106	120	130	123	112	100	90	86*44	86		89
3	87	91	89	77	69	49	38	20*46	23*50		25
4	25	21	21*14	19	18	13*34	13*38	16	18		18
5	23	25	36	49	66	82	94	101*44	97		92
6	76	55	35	15	-4	-20	-30	-37	-40*52		-41
7	-37	-30	-24	-18	-10	-3	-3	11	18		25
8	34	44	52	59*20	59	55	49	44	30		11
9	-10	-31	-50	-70	-81	-87	-89	-88	-86		-79
10	-70	-56	-42	-29	-13*26	-16	-30	-35	-35*52		-35*58
11	-36										
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											

RRS SHACKLETON CRUISE 4/75
MAGNETIC ANOMALY

HOURS	00	06	12	18	MINUTES					DATE (DAYNO 127)	75
					24	30	36	42	48		
0	0	0	0	0	0	0	0	0	0		0
1	0	0	0	0	0	0	0	0	0		0
2	0	0	0	0	0	0	0	0	0		0
3	0	0	0	0	0	0	0	0	0		0
4	0	0	0	0	0	0	0	0	0		0
5	23	25	36	49	66	82	94	101	97		92
6	76	55	35	15	-14	-20	-30	-37	-40*52		-41
7	-37	-30	-24	-18	-10	-3	-3	11	18		25
8	34	44	52	59	59	55	49	44	30		11
9	-10	-31	-50	-70	-81	-87	-89	-88	-86		-79
10	-70	-56	-42	-29	-13	-16	-30	-35	-34*50		-35*58
11	-36										
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											

RRS SHACKLETON CRUISE 4/75
CORRECTED METRES

HOURS	00	06	12	18	24	MINUTES	30	36	42	48	54	DATE 18- 4- 75 (DAYNO 110)
0												
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												

RRS SHACKLETON CRUISE 4/75
CORRECTED METRES

HOURS	00	06	12	18	24	MINUTES	30	36	42	48	54	DATE 19- 4- 75 (DAYNO 109)
0												
1												
2												
3	500	536	578	630	651	658	697	714	747	781	868	
4	891	910	931	954	979	1003	1013	1033	1047	1061	1061	
5	1075	1091*10	1054	1092	1144	1200	1183*40	1189	1204	1226	1226	
6	1251	1235	1222	1214	1209	1206	1262	1302	1313*50	1298	1298	
7	1277	1473	1604	1609*20	1584	1547	1655*40	1637	1562*50	1587	1587	
8	1625	1697	1586	1560	1427	1543*40	1515	1435	1394	1394	1394	
9	1373	1371	1418	1560	1680	1809	1855	1898	1935	2005	2005	
10	2090	2177	2274	2394	2572	2781	2697	2637	2622	2596	2596	
11	2565	2819*10	2803	2740*21	2771	2819	2781*40	2782	2784	2836	2836	
12	2913	3060	3174	3221	3240	3245	3245	3245	3245	3245	3245	
13	3245	3243	3244	3247	3248	3257	3266	3270	3280	3280	3280	
14	3284	3289	3293	3296	3300	3303	3307	3310	3313	3315	3315	
15	3316	3319	3321	3322	3323	3324	3325	3326	3326	3327	3327	
16	3328	3326	3327	3325	3325	3328	3329	3330	3330	3330	3330	
17	3330	3331	3331	3328	3328	3328	3329	3329	3330	3330	3330	
18	3331	3330	3330	3331	3331	3331	3331	3331	3331	3331	3331	
19	3331	3331	3331	3331	3332	3333	3332	3332	3332	3332	3332	
20	3333	3333	3333	3332	3331	3331	3331	3331	3331	3331	3331	
21	3330	3330	3329	3328	3329	3328	3325	3323	3321	3318	3318	
22	3314	3313	3314	3320	3322	3322	3323	3324	3324	3325	3325	
23	3326	3322	3318	3313	3310	3309	3309	3308	3306	3298	3298	

RRS SHACKLETON CRUISE 4/75
CORRECTED METRES

HOURS	00	06	12	18	24	MINUTES	30	36	42	48	54	DATE 20- 4- 75 (DAYNO 110)
0	3263	3256	3249	3246	3245	3245	3254*40	3250	3239	3236	3236	
1	3237	3237	3237	3237	3239	3241	3243	3245	3245	3245	3244	
2	3243	3237	3232	3227	3226	3228	3224	3222	3222	3222	3225	
3	3229	3224*10	3226	3233*20	3230	3226	3226	3222	3216	3206	3206	
4	3194	3186	3166	3180	3182	3184	3190	3195	3201	3205	3205	
5	3206	3210	3211	3218	3219	3218	3219	3220	3222	3221	3221	
6	3221	3217	3215	3217	3217	3218	3218	3219	3221	3221	3223	
7	3226	3226	3226	3226	3225	3228	3225	3224	3224	3224	3224	
8	3224	3223	3222	3224*20	3223	3223	3221	3221	3226*50	3229	3229	
9	3184	3184	3184	3183	3182	3182	3181	3180	3179	3178	3178	
10	3177	3173	3171	3168	3166	3163	3162	3161	3161	3161	3161	
11	3169	3166	3159	3155	3152	3152	3150	3150	3150	3150	3150	
12	3154	3152	3154	3154	3155	3156	3154	3160	3161	3162	3162	
13	3163	3165	3165	3165	3165	3169	3169	3166	3167	3167	3167	
14	3167	3167	3167	3167	3167	3167	3167	3169	3171	3171	3171	
15	3171	3171	3171	3171	3172	3173	3172	3171	3172	3173	3173	
16	3173	3173	3173	3176	3175	3177	3177	3177	3177	3176	3176	
17	3175	3176	3177	3177	3177	3177	3177	3177	3177	3177	3177	
18	3177	3177	3177	3177	3178	3177	3177	3177	3177	3177	3177	
19	3194	3196	3195	3194	3202	3207	3207	3210	3218	3220	3220	
20	3222	3223	3225	3224	3231	3233	3233	3239	3243	3245	3245	
21	3246	3251	3252	3250	3254	3253	3253	3261	3265	3271	3271	
22	3270	3274	3283	3275	3294	3294	3294	3298	3300	3304	3304	
23	3307	3311	3313	3310	3310	3311	3311	3316	3316	3316	3316	

RRS SHACKLETON CRUISE 4/75
CORRECTED METRES

DATE 21- 4- 75
(DAYNO 111)

HOURS	00	06	12	18	MINUTES	24	30	36	42	48	54
0	3310	3310	3316	3316	3316	3316	3316	3316	3316	3316	3316
1	3316	3316	3317	3318	3319	3320	3320	3319	3317	3317	3315
2	3313	3309	3307	3305	3304	3301	3299	3297	3294	3294	3294
3	3292	3288	3285	3283	3281	3279	3276	3274	3272	3272	3269
4	3267	3263	3259	3257	3253	3248	3245	3242	3241	3239	3239
5	3235	3233	3230	3227	3224	3222	3217	3213	3208	3204	3204
6	3199	3197	3194	3189	3174	3154	3158*40	3156	3152	3150	3143
7	3150	3150	3151	3153	3155	3158	3154	3151	3148	3148	3143
8	3139	3120	3105	3099	3093	3086	3077	3068	3060	3050	3050
9	3039	3031	3022	3011	3007	3007	2996	2985	2977	2971	2971
10	2965	2955	2946	2938	2931	2924	2915	2909	2909	2899	2899
11	2884	2755	2630	2518	2470	2454	2587*40	2498	2231	2081	2081
12	1989	1969	1917	1801	1715	1644	1610	1581	1554*50	1582	1582
13	1624	1698*10	1674	1601	1428	1206	1159	1087	968	889	889
14	831	853	898	1018*20	1008	992	953*40	984	1077	1201	1201
15	1541	1548	1697	1730	1812	1918	1506*40	1548	1673	1765	1765
16	1839	1884	1929	1972	2015	2056	2086	2120	2165	2180	2180
17	2180	2299	2386	2416*20	2409	2398	2440	2479	2511	2538	2538
18	2563	2603	2651	2732*20	2694	2638	2636	2634	2634	2651	2651
19	2676	2671	2668	2668	2668	2668	2671	2674	2677	2681	2681
20	2637	2620	2693	2693	2698	2706	2717	2726	2729	2741	2741
21	2756	2760	2763	2765	2769	2773	2791	2805	2808	2819	2819
22	2834	2856*10	2854	2847	2841	2835	2856	2872	2881	2899	2899
23	2922	2933	2947	2963	2977	2988	2999	3012	3029	3043	3043

RRS SHACKLETON CRUISE 4/75
CORRECTED METRES

DATE 22- 4- 75
(DAYNO 112)

HOURS	00	06	12	18	MINUTES	24	30	36	42	48	54
0	3054	3073*10	3066	3037*20	3040	3045	3052	3060	3065	3072	3072
1	3078	3085	3092	3099	3106	3112	3119	3126	3133	3140	3140
2	3146	3151	3155	3160	3166	3173	3192*40	3191	3186*50	3190	3190
3	3195	3202	3209	3214	3220	3226	3230	3235	3239	3242	3242
4	3245	3248	3251	3255	3257	3258	3258	3258	3259	3260	3260
5	3260	3262	3264	3265	3268	3271	3273	3276	3281	3285	3285
6	3288	3294	3297	3297	3300	3303	3303	3304	3305	3307	3307
7	3309	3313*10	3312	3311	3310	3309	3309	3309	3320	3325	3325
8	3273	3273	3272	3268	3263	3256	3263*40	3257	3239	3226	3226
9	3214	3209	3079	2700	2437	2233	2148*40	2154	2171	2182	2182
10	2189	2255	2336	2450	2516	2559	2540*40	2576	2685	2758	2758
11	2815	2823	2831	2838	2843	2847	2855	2864	2878	2892	2892
12	2905	2910	2916	2925	2933	2941	2944	2949	2960*50	2956	2956
13	2950	2973*10	2968	2955	2935	2913	2860*40	2919	2998	3176	3176
14	3203	3335*10	3331	3317	3258	3177	3197	3226	3271	3304	3304
15	3331	3294*10	3300	3321	3332	3339	3361	3381	3398	3407	3407
16	3413	3408	3403	3396	3392	3388	3388	3388	3388	3388	3388
17	3388	3388	3388	3388	3385	3381	3385	3389	3393	3395	3395
18	3396	3389	3381	3367*20	3373	3381	3380	3377	3373	3368	3368
19	3264	3266	3368	3370	3372	3373	3373	3372	3366*50	3412	3412
20	3483	3722*10	3655	3455	3375	3350	3339	3221	2891	2672	2672
21	2508	2461*10	2467	2482	2507	2537	2595	2676	2800	2861	2861
22	2890	2901*10	2898	2883*20	2908	2947	2996*40	2991	2977	2965	2965
23	2952	3008	3052	3075	3162	3282	3223	3181	3169*50	3284*50	3284*50

RRS SHACKLETON CRUISE 4/75
CORRECTED METRES

DATE 23- 4- 75
(DAYNO 113)

HOURS	00	06	12	18	MINUTES	24	30	36	42	48	54
0	3313	3257	3220	3220	3243	3279	3309*40	3298	3266	3205	3205
1	3128	3003	2690	2801	2678	2537	2018*40	2029	2064	2084	2084
2	2098	2165	2266	2432	2644	2879	2992	3100	3200	3260	3260
3	3301	3306	3310	3312	3314	3316	3330*40	3329	3328	3326	3326
4	3224	3326	3329	3332	3335	3337	3341	3344	3346	3350	3350
5	3254	3355	3357	3361	3363	3366	3368	3371	3375	3380	3380
6	3384	3389	3393	3395	3395	3398	3400	3402	3403	3403	3403
7	3403	3402	3401	3400	3400	3400	3398	3397	3396	3394	3394
8	3390	3384	3371	3353	3285	3192	324	3416	3425	3429	3429
9	3432	3435	3438	3440	3443	3445	3447	3450	3452	3453	3453
10	3453	3455	3457	3458	3459	3460	3460	3461	3463	3463	3463
11	3462	3463	3463	3461	3459	3458	3459	3459	3457	3456	3456
12	3456	3461	3468	3483*20	3478	3471	3478	3487	3498	3512	3512
13	3528	3553	3584	3626	3679	3737	3728	3707	3664	3606	3606
14	3540	3572	3603	3632	3650	3661	3654	3649	3647	3643	3643
15	3638	3638	3638	3638	3638	3638	3630	3625	3627	3627	3627
16	3627	3645	3668	3700	3761	3836	3840*40	3820	3761	3742	3742
17	3743	3743*10	3706	3715	3777	3866	3949	4007	4017	4024	4024
18	4030	4031	4031	4026	4021	4017	4010	4002	3993	3976	3976
19	3954	3742	3595	3579	3566	3555	3548	3541	3534	3529	3529
20	3925	3522	3519	3515	3513	3513	3513	3512	3510	3508	3508
21	3606	3508	3508	3505	3504	3506	3512	3517	3515	3519	3519
22	3525	3525	3525	3528	3528	3528	3528	3524	3506*50	3512	3512
23	3521	3521	3526	3518	3515	3515	3510	3506	3503	3501	3501

RRS SHACKLETON CRUISE 4/75
CORRECTED METRES

HOURS	00	06	12	18	24	MINUTES	30	36	42	48	54	DATE 24-4-75 (DAYNO 114)
	00	06	12	18	24	MINUTES	30	36	42	48	54	
0	3460	3490	3496	3492	3490	3489	3487	3485	3481	3478		
1	3477	3475	3473	3472	3471	3471	3470	3468	3465	3462		
2	3463	3459	3455*16	3454	3450	3447	3446	3445	3445	3445		
3	3465	3445	3445	3445	3442	3441	3441	3441	3441	3440		
4	3439	3439	3430	3430	3439	3439	3439	3439	3438	3438		
5	3439	3438	3437	3437	3437	3437	3437	3437	3436	3434		
6	3452	3429	3428	3426	3425	3424	3423	3421	3418	3414		
7	3411	3409	3406	3401	3398	3396	3394	3390	3386	3383		
8	3381	3376	3372	3370	3369	3367	3366	3365	3362	3360		
9	3354	3355	3353	3351	3352	3352	3364	3367	3369	3360		
10	2354	2358	2356	2354	2352	2352	2365	2379	2376	2370		
11	2661	2652	2641	2627	2618	2610	2600	2591	2584	2576		
12	2567	2558	2551	2549	2531	2506	2484	2461	2439	2414		
13	2381	2372	2367	1984	1811	1693	1641	1595	1559	1512		
14	1456	1405	1352	1299	1220	1138	1057	985	930	912		
15	912	901	840	675	533	403	328	372	353	318		
16	277	265	255	249	242	235	229	224	220	217		
17	214	212	211	212	215	218	232	313	530	866		
18	1262	1431	1595	1753	1825	1854	2107	2282	2301	2327		
19	2356	2383	2418	2469	2495	2508	2516	2525	2534	2542		
20	2550	2558	2565	2572	2576	2580	2585	2591	2598	2601		
21	2602	2602	2603	2604	2601	2597	2556	2444	2190	1981		
22	1794	1702*10	1709	1729	1809	1918	2037	2255	2672	3037		
23	3371	3403	3416	3421	3425	3430	3436	3440	3444	3445		

RRS SHACKLETON CRUISE 4/75
CORRECTED METRES

HOURS	00	06	12	18	24	MINUTES	30	36	42	48	54	DATE 25-4-75 (DAYNO 115)
	00	06	12	18	24	MINUTES	30	36	42	48	54	
0	3445	3445	3446	3450	3451	3453	3456	3459	3460	3460		
1	3460	3460	3166	3166	3464	3464	3464	3464	3464	3465		
2	3466	3466	3466	3466	3467	3468	3468	3469	3470	3470		
3	3471	3475	3473	3473	3474	3475	3475	3476	3477	3477		
4	3477	3478	3479	3479	3479	3479	3480	3481	3482	3483		
5	3483	3483	3483	3483	3483	3483	3483	3483	3483	3483		
6	3483	3483	3483	3483	3483	3483	3483	3483	3483	3483		
7	3483	3482	3481	3481	3481	3481	3480	3478	3476	3475		
8	3475	3473	3471	3471	3471	3471	3471	3471	3471	3471		
9	3471	3471	3471	3471	3471	3470	3469	3468	3468	3468		
10	3470	3468	3467	3466	3465	3464	3462	3460	3460	3459		
11	3456	3454	3451	3448	3445	3441	3438	3435	3432	3429		
12	3426	3424	3420	3413	3409	3407	3401	3396	3390	3385		
13	3381	3378	3375	3371	3366	3360	3350	3342	3340	3336		
14	3331	3325	3318	3311	3306	3301	3299	3297	3294	3291		
15	3286	3286	3278	3277	3277	3279	3278	3276	3275	3275		
16	3275	3248*10	3249	3251	3257	3263	3251	3237	3222	3202		
17	3180	3165*10	3166	3169*20	3168	3165	3145	3127	3113	3008		
18	2856	2913*10	2896	2845	2821	2811	2825	2931	2921	2961		
19	2988	0	0	0	0	3111	3026	2931	2819	2797		
20	2721	2740	2773	2835	2901	2969	2918*40	2930	2977*50	2976		
21	2975	2945	2926	2926	2939	2958	2999	3026	3026	3026		
22	3026	3033*10	3032	3127	3023	3018	2991	2968	2950*50	2985		
23	2962	2977	2994	3012	3023	3029	3055	3064	3064	3070		

RRS SHACKLETON CRUISE 4/75
CORRECTED METRES

HOURS	00	06	12	18	24	MINUTES	30	36	42	48	54	DATE 26-4-75 (DAYNO 116)
	00	06	12	18	24	MINUTES	30	36	42	48	54	
0	3090	3099	3108	3117	3126	3135	3146	3158	3169	3173		
1	3175	3164	3158	3158	3155	3152	3149	3144	3137	3117		
2	3090	3029*10	3041	3076	3090	3112	3101	3092	3088	3077		
3	3163	3040	2999	2929	2773	2593	2449	2253	1954	1688		
4	1438	1299	1180	1101	1038	983	966	950	937	928		
5	921	917	894	E69	831	786	823*40	947	931*50	963		
6	1011	1124	1270	1061	1727	2030	2154*40	2151	2131	2100		
7	2079	2083	2165	2401	2713	3063	3086	3118	3188*50	3183		
8	3177	3174										
9	3177											
10	3177											
11	3166	3177	3189	3200	3212	3223	3235	3250*44	3244	3235		
12	3225	3216	3207	3194	3188	3179	3179	3179	3179	3179		
13	3179	3178	3177	3177	3176	3175	3176	3177	3177	3178		
14	3179	3179	5179	3178	3178	3178	3178	3178	3177	3177		
15	3177	3173	3169	3165	3161	3154	3158	3158	3154	3158		
16	3158	3158	3159	3160	3161	3161						
17	3171	3155*10	3161	3177*20	3171	5161	3128*40	3130	3130	3186		
18	3152									3139*50	3116	
19												
20												
21												
22												
23												

RRS SHACKLETON CRUISE 4/75
CORRECTED METRES

DATE 27- 4- 75
(DAYNO 117)

00	06	12	18	MINUTES	24	30	36	42	48	54
00	3065	3069	3090	3135	3158	3169	3171	3174	3176	3180
1	3184	3185	3186	3188	3185	3189	3174	3165	3154	3146
2	3139	3132	3123	3109	3097	3086	3079	3072	3063	3054
3	3045	3022*10	3023	3026*20	3012	2992	2989	2992	2903	2937
4	3082	3082	3086	3101*20	3089	3071	3053	3015	2913*50	2916
5	3020	2959	2996	3032	3070	3109	3104	3097	3086	3060
6	3026	3008	2996	2996	3005	3018	3034	3050	3066	3078
7	3090	3112	3132	3144	3158	3173	3188*40	3186	3182	3177
8	3173	3166	3161	3160	3159	3158	3135	3111	3084	3061
9	3041	3096	3133	3131*20	3133	3135	3131	3121	3118	3116
10	3116	3094*10	3097	3106	3112	3116	3134	3152	3173*50	3168
11	3161	3171	3177	3177	3180	3184	3188*40	3186	3182	3177
12	3173	3175	3177	3178	3179	3180	3179	3180	3183	3190
13	3199	3195*10	3197	3203*20	3201	3199	3199	3199	3199	3192
14	3180	3180	3180	3177	3181	3188				
15										
16										
17										
18										
19										
20	3177	3181	3184	3184	3180	3175	3177	3150	3156	3165
21	3192	3203*10	3201	3195*20	3198	3203	3204	3206	3178	3184
22	3207	3218	3231	3247	3259	3269	3278	3286	3209*50	3208
23	3305	3307	3309	3309	3310	3311	3310	3308	3306	3304

RRS SHACKLETON CRUISE 4/75
CORRECTED METRES

DATE 28- 4- 75
(DAYNO 118)

00	06	12	18	MINUTES	24	30	36	42	48	54
00	3301	3297	3291	3285	3282	3280	3279	3282	3294*50	3291
1	3286	3276	3266	3259	3242	3220	3208	3196	3187	3184
2	3184	3171	3154	3124*20	3131	3143	3158*40	3139	3063*50	3049
3	3128	3146	3158	3160*20	3159	3158	3155	3156	3163	3168
4	3173	3177*10	3171	3155	3133	3107	3158	3197	3218*50	3217
5	3214	3195*10	3203	3226	3238	3245	3251	3259	3266	3274
6	3280	3288	3297	3306	3315	3324	3328	3343	3339*50	3338
7	3335	3331	3328	3331	3326	3318	3319	3319	3316	3308
8	3297	3282	3271	3273	3272	3271	3294	3327	3383	3410
9	3422	3425	3428	3432	3440	3449	3451	3453	3456	3458
10	3460	3459	3457	3452	3452	3454	3417*40	3421	3435	3442
11	3445	3438	3432	3429	3424	3418	3416	3414	3410	3402
12	3392	3390	3387	3382	3376	3369	3365	3360	3356	3350
13	3343	3327	3314	3307	3300	3294	3296	3282	3271	
14	3260	3249	3238	3223	3200	3173	3063*40	3072	3109*50	3106
15	3101	2807	2600	2552*20	2600	2672	2941	3139	3195	3213
16	3211	3209	3210	3215	3218	3222	3229	3234	3236	3243
17	3262	3261	3271	3284	3292	3297	3305	3313	3318	3326
18	3335	3342	3348	3354	3361	3367	3373	3379	3386	3391
19	3396	3400	3406	3412	3419	3426	3431	3435	3438	3443
20	3449	3453	3459	3465	3470	3473	3479	3484	3486	3487
21	3487	3487	3487	3490	3493	3496	3497	3500	3506	3510
22	3513	3509	3504	3501	3502	3509	3515	3519	3524	3528
23	3528	3531	3533	3537	3542	3547	3551	3554	3557	3565*58

RRS SHACKLETON CRUISE 4/75
CORRECTED METRES

DATE 29- 4- 75
(DAYNO 119)

00	06	12	18	MINUTES	24	30	36	42	48	54
00	3566	3564	3561	3556	3552	3547	3540	3536	3534	3534
1	3534	3545*10	3544	3541	3540	3540	3539	3537	3537	3536
2	3536	3534	3531	3526	3521	3517	3515	3512	3507	3498
3	3487	3480	3474	3469	3463	3456	3454	3451	3448	3444
4	3439	3435	3430	3424	3419	3415	3409	3403	3398	3391
5	3384	3384								
6										
7										
8										
9										
10										
11	3373	3369	3366	3366	3353	3375	3375	3375	3375	3374
12	3275	3277*10	3275	3275	3276	3279	3279	3279	3280	3280
13	3279	3272	3264	3255	3244	3231	3219	3203	3173*50	3195
14	3229	3241	3251	3260	3266	3269	3275	3281	3288	3291
15	3294	3296	3299	3304	3307	3309	3310	3312	3315	3327
16	3343	3343	3348	3354	3360	3381	3111	3407	3445*50	3409
17	3343	3348	3354	3354	3360	3381	3111	3407	3445	3448
18	3415	3419	3423	3424	3426	3130	3434	3434	3443	3448
19	3423	3455	3458	3464	3468	3471	3476	3480	3484	3487
20	3490	3493	3496	3503	3506	3507	3519	3509	3509	3510
21	3511	3510	3511	3511	3515	3517	3520	3523	3524	3526
22	3528	3528	3529	3531	3533	3534	3540	3543	3543	3547
23	3551	3562	3570	3572	3573	3574	3575	3576	3577	3579

RRS SHACKLETON CRUISE 4/75
CORRECTED METRES

DATE 30-4-75
(DAYNO 120)

HOURS	00	06	12	18	MINUTES	24	30	36	42	48	54
0	3581	3577	3573	3570*20	3572	3574	3574	3575	3577	3577	3579
1	3581	3581	3581	3581	3580	3578	3580	3582	3583	3584	3584
2	3585	3585	3585	3585	3584	3583	3580	3577	3575	3572	3572
3	3588	3572	3574	3574	3574	3574	3574	3574	3574	3574	3574
4	3570	3568	3565	3563	3561	3559	3556	3553	3549	3546	3546
5	3543	3479*10	3489	3528*20	3525	3521	3521	3518	3512	3508	3508
6	3506	3501	3496	3492	3487	3481	3475	3469	3462	3460	3460
7	3460	3457	3453	3447	3443	3441	3437	3433	3431	3426	3426
8	3420	3416	3411	3407	3401	3396	3384*40	3386	3392	3398	3398
9	3403	3408	3412	3417	3419	3420	3425	3428	3429	3437	3437
10	3447	3454	3460	3464	3468	3471	3483	3490	3489	3489	3489
11	3490	3497	3503	3506	3511	3515	3520	3524	3527	3531	3531
12	3536	3535	3534	3532	3532	3532	3533	3536	3543	3547	3547
13	3549	3553	3556	3559	3562	3564	3568	3572	3578	3580	3580
14	3581	3578	3574	3570	3567	3564	3561	3558	3556	3556	3556
15	3547	3550	3551	3551	3552	3553	3553	3554	3557	3559	3559
16	3559	3559	3559	3559	3559	3559	3559	3559	3559	3559	3559
17	3559	3559	3559	3559	3559	3561	3562	3563	3564	3565	3565
18	3566	3570	3572	3573	3575	3578	3579	3580	3581	3582	3582
19	3583	3584	3586	3587	3588	3589	3591*40	3590	3589	3589	3589
20	3589	3589	3589	3589	3589	3589	3587	3584	3582	3582	3582
21	3583	3590	3595	3595	3594	3593	3593	3593	3593	3593	3593
22	3593	3593	3593	3594	3595	3597	3599	3601	3603	3606	3606
23	3608	3611	3614	3616*20	3613	3610	3608	3605	3603	3601	3601

RRS SHACKLETON CRUISE 4/75
CORRECTED METRES

DATE 1-5-75
(DAYNO 121)

HOURS	00	06	12	18	MINUTES	24	30	36	42	48	54
0	3600	3599	3598	3597	3597	3597	3595	3595	3595	3595	3595
1	3595	3597*10	3596	3594	3589	3583	3586	3588	3592	3593	3593
2	3593	3593	3592	3591	3590	3589	3588	3586	3583	3581	3581
3	3579	3578	3578	3578	3578	3578	3575	3573	3572	3570	3570
4	3566	3564	3562	3559	3557	3555	3555	3553	3555	3555	3552
5	3547	3545	3543	3540	3538	3536	3538	3540	3541	3542	3542
6	3543	3541	3540	3540	3538	3536	3538	3536	3526	3529	3529
7	3526	3526	3528	3540	3543	3543	3545	3545	3544	3542	3542
8	3540	3537	3537	3539	3543	3547	3550	3551	3551	3550	3550
9	3547	3547	3547	3547	3547	3547	3547	3548	3549	3549	3549
10	3549	3550	3551	3551	3551	3551	3551	3551	3551	3551	3551
11	3551	3551	3551	3551	3551	3551	3551	3551	3551	3551	3551
12	3547	3547	3548	3550	3553	3555	3555	3556	3558	3558	3559
13	3559	3556	3555	3555	3555	3555	3555	3559*40	3558	3556	3555
14	3555	3556	3557	3558	3559	3561	3561	3559	3559	3559	3559
15	3559	3560	3561	3562	3562	3562	3564	3565	3566	3568	3568
16	3572	3575	3579	3584	3586	3587	3588	3589	3590	3592	3592
17	3593	3593	3594	3597	3601	3604	3606	3609	3612	3616	3616
18	3619	3620	3621	3619*20	3622	3627	3629	3632	3635	3637	3637
19	3638	3643	3647	3649	3650	3650	3650	3651	3654	3656	3656
20	3657	3657	3658	3662	3662	3661	3663	3665	3666	3668	3668
21	3669	3669	3668	3664	3632	3585	3537	3492	3410	3322	3322
22	3226	3196	3162	3119	3069	3016	3071	3132	3208	3292	3292
23	3381	3544	3668	3710	3728	3733	3730	3726	3721	3718	3718

RRS SHACKLETON CRUISE 4/75
CORRECTED METRES

DATE 2-5-75
(DAYNO 122)

HOURS	00	06	12	18	MINUTES	24	30	36	42	48	54
0	3714	3710	3704	3697	3694	3691	3690	3691	3694	3695	3695
1	3695	3684	3675	3670	3667	3665	3664	3662	3641	3638	3638
2	3661	3659	3656	3651	3649	3646	3644	3642	3641	3616	3614
3	3634	3578	3630	3628	3625	3623	3621	3619	3616	3598	3598
4	3612	3609	3608	3606	3605	3604	3603	3601	3599	3578	3576
5	3597	3594	3592	3590	3587	3583	3582	3581	3578	3552	3551
6	3574	3572	3568	3564	3561	3559	3556	3554	3552	3568	3568
7	3551	3551	3557	3558	3559	3561	3563	3565	3566	3568	3568
8	3572	3574	3576	3577	3578	3579	3581	3581	3581	3581	3581
9	3581	3581	3583	3586	3590	3595	3596	3597	3598	3601	3601
10	3604	3605	3607	3609	3612	3612	3617	3618	3619	3620	3620
11	3621	3629*10	3627	3623	3621	3621	3621	3621	3621	3621	3621
12	3621	3621	3621	3621	3622	3623	3623	3623	3625	3626	3626
13	3627	3629	3631	3631	3632	3634	3635	3637	3638	3640	3640
14	3642	3643	3644	3645	3647	3650	3652	3654	3655	3656	3656
15	3657	3660	3662	3661	3666	3657	3665	3672	3681	3683	3683
16	3682	3681	3680	3682	3683	3686	3686	3687	3690	3694	3694
17	3699	3702	3705	3708	3710	3712	3715	3716	3718	3721	3721
18	3726	3711*10	3739	3732	3726	3722	3714*40	3715	3717	3721	3721
19	3726	3650*10	3671	3739	3756	3755	3761	3765	3770	3785	3785
20	3655	3421*10	3820	3819	3819	3821	3821	3821	3821	3822	3822
21	3820	3820	3827	3828	3829	3830	3831	3832	3832	3834	3834
22	3836	3836	3835	3837	3839	3840	3840	3840	3841	3841	3841
23	3843	3843	3841	3841	3845	3843	3843	3843	3843	3843	3843

RRS SHACKLETON CRUISE 4/75
CORRECTED METRES

DATE 3-5-
(DAYNO 123) 75

HOURS	00	06	12	18	24	MINUTES	30	36	42	48	54
0	3503	3442	3831	3100	3840	3049	3840	3840	3840	3840	3839
1	3538	3337	3835	3833	3831	3830	3829	3827	3825	3823	3804
2	3321	3818	3816	3814	3812	3809	3809	3808	3805	3803	3781
3	3802	3799	3797	3795	3792	3790	3786	3782	3781	3776	3773
4	3781	3782	3783	3784	3785	3783	3780	3778	3776	3773	3759
5	3769	3766	3764	3764	3764	3760	3764	3763	3762	3759	3746
6	3756	3754	3752	3752	3751	3750	3740	3740	3747	3747	3735
7	3745	3742	3741	3741	3741	3741	3739	3737	3735	3726	3725
8	3735	3735	3735	3734	3732	3729	3727	3726	3726	3726	3709
9	3724	3723	3721	3720	3719	3719	3718	3717	3713	3713	3709
10	3705	3707*10	3706	3704	3703	3703	3705	3707	3707	3707	3705
11	3703	3706	3715	3745*20	3728	3713	3703	3703	3705*50		
12											
13											
14											
15											
16											
17											
18											
19	3703	3703	3704	3707*20	3702	3707	3707	3705	3699*50	3701	
20	3712	3715	3718	3722	3724	3724	3724	3724	3726*50	3725	
21	3724	3726*10	3725	3724	3721	3715	3710	3705	3697	3694	
22	3691	3690	3689	3688	3688	3685	3686	3686	3686	3685	
23	3684	3683	3682	3680	3678	3674	3671	3668	3664	3657*58	

RRS SHACKLETON CRUISE 4/75
CORRECTED METRES

DATE 4-5-
(DAYNO 124) 75

HOURS	00	06	12	18	24	MINUTES	30	36	42	48	54
0	3655	3650	3644	3637	3634	3634	3634	3638	3650	3655	
1	3657	3657	3656	3654	3650	3646	3644	3638	3619*50	3624	
2	3631	3628	3628	3630	3635	3642	3644	3647	3649	3650	
3	3650	3649	3645	3636	3626	3616	3621	3625	3625	3626	
4	3627	3625	3622	3616*20	3619	3623	3606	3591	3576*50	3584	
5	3597	3585*10	3589	3602	3617	3633	3616*40	3617	3620	3621	
6	3621	3620	3619	3619	3619	3619	3618	3617	3616	3615	
7	3614	3612	3612	3612	3609	3605	3605	3603	3601	3599	
8	3597	3594	3592	3596	3587	3585	3584	3583	3582	3580	
9	3578	3575	3573	3569	3567	3566	3564	3562	3559	3572	
10	3593	3579	3567	3566	3552	3551	3550	3549	3547	3547	
11	3547	3547	3547	3546	3545	3543	3542	3541	3540	3538	
12	3536	3535	3533	3531	3529	3528	3527	3526	3525	3524	
13	3523	3520	3518	3514	3512	3511	3510	3509	3506	3505	
14	3504	3503	3501	3499	3497	3496	3486	3478	3476	3474	
15	3471	3470	3470	3470	3470	3471	3478	3483	3484	3487	
16	3490	3490	3491	3493	3495	3496	3493	3490	3489	3489	
17	3487	3484	3482	3480	3473	3464	3457	3410	3434*50	3437	
18	3443	3444	3445	3443	3442	3441	3439	3437	3437	3439	
19	3401	3401	3400	3400	3429	3422	3415	3409	3405	3401	
20	3398	3400	3400	3394	3392	3392	3390	3387	3381*50	3387	
21	3396	3400	3403	3403	3403	3401	3400	3398	3395	3392	
22	3388	3383	3376	3368	3358	3347	3345	3341	3331	3329	
23	3331	3326	3322	3321	3319	3316	3315	3314	3313	3311	

RRS SHACKLETON CRUISE 4/75
CORRECTED METRES

DATE 5-5-
(DAYNO 125) 75

HOURS	00	06	12	18	24	MINUTES	30	36	42	48	54
0	3309	3307	3304	3302	3300	3297	3295	3293	3291	3288	
1	3296	3285	3283	3280	3274	3267	3263	3259	3255	3250	
2	3245	3238	3229	3218	3205	3192	3185	3177	3165	3150	
3	3133	3143*10	3140	3134	3125	3116	3214*40	3193	3109*50	3124	
4	3146	3165	3177	3177	3178	3180	3178	3173	3161	3146	
5	3128	3123	3120	3120	3129	3143	3135*40	3137	3141	3171	
6	3214	3226	3236	3245	3251	3256	3259	3262	3263	3264	
7	3265	3270	3275	3280	3282	3280	3295*	3295	3286*50	3291	
8	3297	3303	3307	3307	3305	3303	3304	3301	3286*50	3292	
9	3301	3313	3321	3321	3326	3330	3333	3337	3341	3345	
10	3345	3352	3355	3356	3357	3352	3362	3366	3369	3371	
11	3373	3373	3373	3373	3370	3367	3365	3363	3362	3360	
12	3358	3358	3358	3359	3361	3362	3362	3364	3371	3374	
13	3375	3383	3388	3388	3391	3395	3389	3381	3372	3369	
14	3369	3367	3366	3364	3363	3354	3352	3348	3341	3336	
15	3331	3327	3324	3324	3324	3322	3321	3320	3320	3319	
16	3316	3301	3296	3296	3297	3275	3269*40	3277	3299	3313	
17	3322	3325	3325	3331	3332	3333	3335	3335	3335	3335	
18	3337	3337	3337	3337	3336	3335	3334	3333	3333	3333	
19	3330	3327	3321	3313	3313	3317	3290*40	3291	3308	3325	
20	3303	3352	3353	3359	3361	3362	3363	3364	3364	3363	
21	3306	3307*10	3355	3362	3360	3353	3356	3353	3348	3346	
22	3315	3341	3339	3336	3336	3331	3331	3331	3329	3327	
23	3326	3325	3324	3324	3319	3317	3317	3316	3316	3316	

RRS SHACKLETON CRUISE 4/75
CORRECTED METRES

DATE 6-5-75
(DAYNO 126)

HOURS	00	06	12	18	MINUTES	24	30	36	42	48	54
0	3316	3314	3312	3311	3310	3309	3309	3309	3309	3309	3309
1	3309	3308	3307	3305	3304	3303	3302	3300	3297	3295	3295
2	3294	3291	3290	3286	3286	3285	3280	3277	3273	3269	3269
3	3267	3256	3247	3242	3238	3233	3229	3224	3218	3211	3211
4	3203	3192	3184	3184	3169	3146	3101	3057	3017	2993	2993
5	2977	2954	2935	2920*20	2930	2945	2901	2861	2832	2806	2806
6	2781	2747	2713	2679	2643	2604	2569	2536	2505	2470	2470
7	2431	2389	2349	2315	2283	2251	2206	2174	2167	2108	2108
8	2023	1976	1931	1887	1835	1779	1728*40	1731	1751	1770	1770
9	1790	1740	1688	1618*20	1628	1644	1543*40	1566	1659*50	1635	1635
10	1599	1340*10	1348	1359	1372	1386	1261	1153	1056*50	1074	1074
11	1101	1058	999	907	843	793	775	736	624*50	681	681
12	767										
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											

RRS SHACKLETON CRUISE 4/75
CORRECTED METRES

DATE 7-5-75
(DAYNO 127)

HOURS	00	06	12	18	MINUTES	24	30	36	42	48	54
0											
1											
2											
3											
4											
5	2977	2954	2935	2920	2930	2945	2901	2861	2832	2806	2982*58
6	2781	2747	2713	2679	2643	2604	2569	2536	2505	2470	
7	2431	2389	2349	2315	2283	2251	2206	2174	2167	2108	
8	2023	1976	1931	1887	1835	1779	1739*38	1734	1751	1770	
9	1790	1740	1688	1618	1628	1644	1563*38	1566	1659	1635	
10	1599	1395* 8	1348	1359	1372	1386	1261	1153	1056	1074	
11	1101	1058	999	907	843	793	775	736	624	681	
12	767										
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											

SUBMB = IN705, ACTIVITY E = 02, , REPORT CODE = 03, RECORD COUNT = 000738

RRS SHACKLETON CRUISE 4/75
FREE AIR GRAVITY ANOMALY IN MGALS

HOURS	00	06	12	18	MINUTES	DATE 18- 4- (DAYNO 108) 75				
						24	30	36	42	48
0	-892* 4	-840*10	-875*14	-879	-872	-875*32	-882*40	-875*46	-873*52	-882*56
1	-873	-890	-875*14	-872*20	-856*26	-850*34	-854	-880	-866	-917
2	-850* 4	-846* 8	-843	-829	-819*28	-811*32	-796*40	-784*46	-791*50	-781*56
3	-748* 4	-753* 8	-739	-689	-608*28	-616*34	-626	-602	-636*52	-616*58
4	-621	-600	-533	-521	-507	-499*32	-477	-384*46	-388	-421
5	-448	-481* 8	-467	-513	-420*28	-430	-428*38	-440	-354	-232*58
6	-233* 4	-251* 8	-98	-312	-284	-276	-236	-226	-218	-231
7	-221	-154* 8	-195	-237	-427*28	-330	-235	-531*46	-182*50	-180
8	-212	-168	-134	-228	-233	-116*34	-127*38	-115	-92	-75*56
9	-60	-19	-36	-45*22	-56*26	-51*32	-43	-48*46	-65*50	-26*56
10	-21* 2	-16* 8	-21	-9	15	24*32	17	34	88	118
11	139	179	197	204	233	266	315*46	304	348*56	
12	338	352*10	347	342	323*28	316	294	253*46	257	244
13	223	215* 8	203	167*22	184*28	164*34	160*40	165*44	151	130*58

RRS SHACKLETON CRUISE 4/75
FREE AIR GRAVITY ANOMALY IN MGALS

HOURS	00	06	12	18	MINUTES	DATE 19- 4- (DAYNO 109) 75				
						24	30	36	42	48
0	136	149* 8	142*16	141	135*28	114*34	116	105*46	108	133
1	108	81	84	71	97	43	-127*38	-89	12	132
2	238	82	-52	13	60*26	12*32	31*38	35*44	43	43
3	68* 4	29	12	12*22	16*28	7*34	4	-8*46	-27*50	-28*56
4	-22	0* 8	1	16	11	9	10*38	7	10*52	16*58
5	10	1	12	16*20	10*28	18*34	17	37*44	30*50	19
6	26	16	0	-15	-29	-39	-57	-66	-128	-155
7	-173* 4	-175	-182*16	-197	-221*28	-226	-196*40	-194*44	-199	-181
8	-179* 4	-175	-175*16	-165	-135	-123	-115*40	-107	-96	-88*56
9	-52* 2	-81* 8	-103	-155	-214	-268	-310	-339	-362	-405
10	-454	-495	-532	-609	-657	-711	-748	-785	-805	-823
11	-853	-874	-891	-913	-932	-957*34	-965	-986	-1016	-1034
12	-1052	-1075	-1107	-1127	-1129*28	-1130	-1121	-1101	-1087	-1067
13	-1036* 4	-1027* 8	-1056	-995	-985*26	-972	-937*40	-938	-921	-900
14	-878	-857*10	-858	-817	-821	-764*32	-764*40	-766	-762	-756
15	-753* 4	-758	-778	-788	-787*28	-801*32	-783*40	-796*44	-783*52	-793*56
16	-763* 2	-777	-734*16	-733*20	-731	-762	-724	-733	-752*52	-743*56
17	-759	-730* 8	-744*14	-716*20	-801	-773	-761	-747	-745	-758*56
18	-801* 4	-774	-693	-729	-721*26	-707*32	-708	-699*46	-692*50	-698*56
19	-681* 4	-690	-667	-663	-652	-641	-634*38	-627	-603*52	-613
20	-597	-590	-555*16	-554*20	-576	-521*34	-525	-504*46	-505	-460
21	-415	-486	-466	-459	-452	-446*34	-445*40	-439*46	-440	-422*56
22	-423	-410*10	-405*16	-406	-399*28	-414*34	-413	-405*44	-400*50	-402*56
23	-405	-417* 8	-412	-410	-404	-391	-384	-376*46	-377	-385*56

RRS SHACKLETON CRUISE 4/75
FREE AIR GRAVITY ANOMALY IN MGALS

HOURS	00	06	12	18	MINUTES	DATE 20- 4- (DAYNO 110) 75				
						24	30	36	42	48
0	-377	-365	-365	-356*22	-359	-347	-350	-365	-357*50	-361*51
1	-359	-369	-378	-386	-393*26	-399	-407	-420	-430	-436*51
2	-450	-455	-463	-476*22	-475	-472	-479	-471	-467*52	-463*51
3	-421* 4	-424	-434	-422*20	-431*28	-430	-423	-433	-433*50	-448*51
4	-427	-405*10	-417*16	-369*20	-374	-351	-335*38	-317*46	-312*50	-316
5	-315* 4	-303* 8	-298*16	-314*20	-304*26	-280*32	-297*38	-294*44	-285*50	-265
6	-245	-235* 8	-228*14	-224*20	-205*26	-221	-202	-179*46	-173*50	-178
7	-162	-139* 8	-141	-86*22	-95*26	-60	-76*40	-72	-57	-24*51
8	-11* 4	6*10	-21*16	-18	77*28	78*34	77	88*46	97	115*51
9	103	115*10	118*14	136*22	120*28	128	132*40	152*46	131*52	122*55
10	105* 2	62* 8	83	64*22	52	40	96	7	-7*50	-4*55
11	-47* 2	-19*10	-27	-39*20	-48	-59*34	-56*40	-55*44	-69*50	-127*5
12	-94* 4	-116* 8	-68	-134*22	-115*28	-91*34	-113*38	-97*46	-100	-47*5
13	-41* 4	-67* 8	-36	-12*20	-9	12	21	45*44	73*52	81*5
14	79	105* 8	119*14	166*20	180*26	166	215*40	195*44	234*50	243*55
15	226* 2	253*10	253*14	289*20	264*26	303*34	217*40	262*46	239*52	256*55
16	255	369* 8	314	326*22	322*26	319*32	323*38	326*44	311*50	307*55
17	276	217	130	47*22	60	146	159*40	138*44	156	151*5
18	149	139	145*16	126*20	150*26	133*34	140	139*46	133	187*5
19	182	158	172*14	143*22	136	131*32	106	98*44	83*52	85*5
20	-53* 2	57	55*15	49	32	-2*34	11*38	-15*46	-20	-33
21	-31	-45*10	-59*16	-82	-48*28	-50	-52	-65	-55*52	-60*5
22	-20* 2	-24	-24*16	-23	19	-15	0	18*46	10*52	11*5
23	/	11	-1*14	3	-12	-23*32	-14	-21*46	-23	-30*5

RRS SHACKLETON CRUISE 4/75
FREE AIR GRAVITY ANOMALY IN MGALS

HOURS	MINUTES								DATE 21-4-75 (DAYNO 111)	
	00	06	12	18	24	30	36	42	48	54
0	-31* 2	-38* 8	-29	-42	-34	-18*32	-46*38	-37*46	-38	-48*58
1	-139* 4	-124	-61	-31*20	-33	-41*34	-15	-50*46	13*50	4*58
2	15* 4	-16*10	33*16	28*20	21*28	49*32	18*38	0*46	41*52	40*56
3	76* 4	74	-4*14	45*22	0*28	35*32	3*38	51	38*52	18*58
4	15	11*10	25*16	19	35	2*32	26*40	-2*44	-6*52	30*56
5	-9* 2	5* 8	-31*16	-29	-71	-46	-66*40	-63*46	-100*52	-92*58
6	-109	-100*	-107	-159*20	-138*26	-133	-34*38	-52	-215	0
7	0	0	0	-163*22	-251*26	-216	-151	-110	-94	-16*56
8	-87* 4	-78* 8	-99	-119*20	-113	-122*32	-111	-128*44	-102*50	-102
9	-150* 4	-133	-98*14	-147*20	-156	-139*34	-168*38	-135*44	-155*52	-180*58
10	-157* 2	-140*10	-171*14	-188*22	-178	-195*34	-158*40	-197*46	-200*50	-183*58
11	-186	-170* 8	-152*14	-114*22	-102*28	-77*34	-100*38	-62	-51	-37
12	-14	12	35*14	66	88	142*34	137*38	177*46	199	164
13	228	234* 8	209	243	270*28	303	337	431	554	669
14	783* 4	782* 8	589*16	642*20	536*28	617*32	619	614*46	615	410*58
15	492* 2	475* 8	436*16	438	441	403	351	322	264	231
16	178	129	94	67	13*28	27*32	-16	-34*44	-16	-35
17	-23	49* 8	42	56	74	61*32	94	91*46	81*52	71*58
18	73	-36	-56*16	-62	-127*28	-124	-103*40	-163*46	-111	-40
19	-93* 4	-136	8*16	-14*20	7	54*34	52	60*44	-7	-29
20	-1* 2	14*10	6	50*22	24*28	50*34	47	58*46	55*50	70*56
21	75* 4	68	50	51*22	54	71*32	38*38	71*44	69*52	63*56
22	38* 2	18*10	37*16	14*20	49*28	47	30*38	23	-37*52	-31*56
23	-36* 2	-58	-35*14	-100	-37	-51	-54*38	-49*46	-82*50	-68*56

RRS SHACKLETON CRUISE 4/75
FREE AIR GRAVITY ANOMALY IN MGALS

HOURS	MINUTES								DATE 22-4-75 (DAYNO 112)	
	00	06	12	18	24	30	36	42	48	54
0	-30* 2	-65* 8	-16*16	-21*20	-25	12	-76*40	-49*44	-64*52	-50
1	-55* 2	-33*10	4*16	-57*22	-14*28	-41*34	-36*40	-31	-25*52	-3*58
2	-11* 4	-21	14	32*20	7*28	32	-1	42*44	53*50	36*58
3	35	97* 8	64*14	89	91	119*34	132*40	115	113*52	88*58
4	95	108	218	87	159*26	123	136	120	133	86*56
5	103* 4	88* 8	104	0*22	75*26	98*32	56*38	88*46	68	143
6	89	120	61*16	27*20	34*26	56	12	111	24*52	-6*56
7	-2	-29*10	-20*14	-44*20	-51*28	-21*34	-36*38	4	-12	-20
8	-37* 4	16* 8	-8*16	-23*20	-1*28	-2	16*40	-3*46	59*52	54*56
9	81	140	201	303	355	447	508*40	500	495	506*51
10	509* 2	470*10	519*16	488	495*28	492*34	487	461	433	437*56
11	406* 2	383	368*16	358*20	376*28	349*34	364	335	360	334
12	298* 2	315	257*14	293	238*26	243	211	192*44	195*50	172
13	178	158	180	141	131*26	108	77	36	-16	-75
14	-153	-219	-287	-349	-398*26	-371	-396	-451	-491	-534*5/
15	-553	-598	-602*14	-596	-605*28	-614	-639*40	-887*46	-876	-845
16	-801	-652*10	-656	-670	-658	-653	-640	-646*44	-650	-635
17	-629	-627*10	-619*16	-622	-598	-606	-599	-592*44	-587*52	-589
18	-660* 2	-628	-553	-521	-586*26	-566*32	-577*38	-563*44	-561*50	-571*56
19	-557	-541	-531*14	-531	-494	-472	-443	-425	-377*52	-380
20	-350	-309	-267	-217	-155	-82	-5	62	146	245
21	347	432	536*14	558	601	609	605	577	549	519
22	479	460	402	394	381	371	361	359	342	333
23	312	294* 8	278	254*22	243	214	194	169	139	108

RRS SHACKLETON CRUISE 4/75
FREE AIR GRAVITY ANOMALY IN MGALS

HOURS	MINUTES								DATE 23-4-75 (DAYNO 113)	
	00	06	12	18	24	30	36	42	48	54
0	96	79	62	50	37	26	-5*40	-1	9	29*56
1	36	58	92	148	210	273	339	402	455	484
2	497	484	462	418	342	263	212	157	108	79
3	63	-1*10	6*14	6*20	-33*28	-26	15	0*46	-9	-14*5
4	-26* 2	-61* 8	-16	97*22	90	-43*32	-9*38	-25	-42*50	-16*56
5	-19* 2	-22*10	8*16	-2	9	7	7*40	6	-5*52	-15*56
6	-11	-15	-2*16	-8*20	-3	-18	-1*38	0	159	99
7	-37* 4	-29	86*16	73*20	84	103*32	48	71	110*50	97
8	106* 4	106* 8	102*16	109*20	137*28	124*34	119	67	48	28
9	3	-7*10	0*16	-9	14*28	-3*34	-57*38	-39*44	-54	-34*5/
10	-36	-47	-60	-46	-62*28	-46*34	-54	-55	-60	-55*56
11	-50* 4	-51	-63	-87*22	-80	-96	-112	-130	-149	-161
12	-187	-208*10	-210	-238	-261	-287	-319	-345	-390	-421
13	-448	-510	-552	-594	-621	-638*32	-619*40	-624	-602	-580
14	-555* 4	-564	-589	-616*20	-594	-622	-659*40	-646	-521*50	-541
15	-589	-750	-920	-894	-715*28	-723	-746	-754	-756*52	-762
16	-774	-789* 8	-802	-823	-846	-856	-871	-893	-915	-924
17	-942	-961* 8	-950	-956	-983	-1009	-1036	-1058	-1076	-1092
18	-1098	-1116*10	-1119	-1106	-1095	-1086	-1053	-1025	-994	-947
19	-939	-854	-896	-767	-725	-680	-646	-619	-582	-553
20	-531	-502	-485	-465	-449	-431	-419	-404	-392	-371
21	-548* 4	-350	-321*16	-328*22	-323	-307	-300	-294	-290	-283*58
22	-234	-271	-263*14	-260*20	-262	-253	-241	-254	-242	-239
23	-233	-227	-207	-138*22	-193*23	-192	-175	-159	-165*52	-166

RRS SHACKLETON CRUISE 4/75
FREE AIR GRAVITY ANOMALY IN MGALS

DATE 24- 4-
(DAYNO 114) 75

HOURLS	00	06	12	18	24	30	36	42	48	54
0	-162	-145*10	-142*16	-126	-117*26	-53*32	-39*40	-42	-73*50	-33*58
1	-35*4	-77*8	-24*14	-10*22	-6*28	-34*32	22*38	8*46	-39*50	20*58
2	16	25*8	449*14	6*20	23*28	24*32	5	31*46	-14*52	7*56
3	-47*2	-2*8	-28*14	-17*22	-36*28	-51*34	-67*38	-22	-59*50	0*58
4	-26*4	-36	-2	-48*20	9*26	-15	12*40	85*46	28	
5										
6										
7										
8	-79*4	-83*10	-95	-55*22	-49*28	-52	-106*40	-76*46	-69*52	-106*58
9	-161*2	-154*10	-141*16	-151*20	-10*28	-123*32	-140*40	-140*46	-157*50	-126
10	68*2	104	89*14	111*20	-110*24	-98	-64	-16*44	20	71*56
11	-69	-89*10	-93	-123*28	62	35	-1	-16	-29*50	-56*58
12	-147*2	-85*8	-66*16	-116*20	-95*28	-125*32	-128*40	-147*44	-131*50	-137*58
13	112*4	78*8	200*16	158*20	294*26	290*32	304*40	321*46	304*50	308*56
14	329*4	376*8	367	428*20	514	623*32	598	662	713	630
15	694*2	703	737*14	774*20	822	907	971*38	950	1066	1066
16	1125*2	1123*10	1118	1168*20	1085*26	1122*34	1127*40	1110*46	1095*50	1140*56
17	1137*2	1160	1121*14	1174*22	1174*28	1165	1307*40	1260	1186	979
18	743	678	457	266*22	269	169	80	15	-49*50	-68*58
19	-71*2	-93*8	-61*16	-74*22	-10*28	-34*34	-8*38	-27*44	26*52	19
20	-5*4	12*10	-27*14	-34*20	-42*28	-30	-14*40	-50*46	-35*52	-79*58
21	-100*2	-59*8	-72	7*20	-51	95*32	94	195*44	226	345
22	436	471	598*14	596	570	521	465	339	225	109
23	30	-69	-111*14	-158*22	-183*26	-165	-179*40	-172*44	-187*50	-199*56

RRS SHACKLETON CRUISE 4/75
FREE AIR GRAVITY ANOMALY IN MGALS

DATE 25- 4-
(DAYNO 115) 75

HOURLS	00	06	12	18	24	30	36	42	48	54
0	-198	-182*10	-185	-194*20	-186	-172	-126	-121	-112	-102
1	-92	-105*10	-103	-98*20	-102	-106*32	-104	-98*44	-126*50	-156
2	-103*2	-144*10	-136	-159*22	-104*28	-106*34	-133	-112*46	-86*50	-148
3	-79*2	-93*10	-109	-60*20	-98	-68*32	35	-38*44	29*50	-1
4	35*2	34*8	-24*16	-24*22	-28	-23	17*40	11	-8*50	-6
5	-4	82	27	-72	-137*26	-129*32	-42	40	60	68
6	87*4	97	129*20	120	118*32	82	110	139*50	130	
7	118	159*10	156	152	151*28	157	173*38	128*46	144	145*58
8	177*4	119*8	167*16	148*22	171*26	139*34	178*38	143*46	141*50	151*58
9	167	182*10	162*14	176*20	180*28	166*32	189	191*46	190	181*56
10	194	178*8	176*14	166*20	163	177*34	148*40	176*46	153*52	157*56
11	143	163	183	156	109*26	111*34	97*38	103	115	86*56
12	93*4	123*8	119*16	129*22	134*26	142*32	121*38	105	113	98*56
13	108	148*10	146	141*22	142	152*34	155	171*44	138*52	145
14	132	129	140*14	123	133*26	130	154	136*46	128*50	142*56
15	109	88*8	76*16	71	58*28	60	59*40	62	47*52	55*56
16	31*2	28	17	-7	-13*28	-8*34	-9	-1	-9	-23*56
17	-21*2	-25	-45*14	-34*20	-51*28	-63	-46	-82*44	-62*50	-67
18	-96	-120	-110	-44*20	-105*28	-81*34	-96*40	-91	-92*52	-90
19	-96*2	-67*10	-70	-70*22	-50*28	-46*34	-52*38	5	55	70
20	103	125	163*16	154*20	187*26	171	202	191	187*50	154
21	168	262*8	140*16	159*20	150*26	119	107	86	36*50	52
22	25*2	1	-37*16	-33*20	-56	-64	-89	-105	-123	-147
23	-164	-185	-233	-263*22	-261	-336*34	-283*40	-295	-318	-344*56

RRS SHACKLETON CRUISE 4/75
FREE AIR GRAVITY ANOMALY IN MGALS

DATE 26- 4-
(DAYNO 116) 75

HOURLS	00	06	12	18	24	30	36	42	48	54
0	-349	-351*10	-356	-369*22	-377*26	-372	-371	-374	-372*50	-377
1	-369	-352	-343	-336	-310	-292	-268	-241	-223	-150*58
2	-155*2	-125	-70	-37	-4	38	79	107	130	166*56
3	145*2	119*8	172	247	312*26	373	481	587	705	832
4	950	1960	1133	1212	1241	1351*32	1192	1236*46	1235	1026
5	1018*4	707*10	786	665	591*28	556*32	592	335*46	397*52	327*58
6	440*4	342*8	999*16	923	333	504	611	740	903	1036
7	1138*8	1136	1096	1008	884	55*32	756*38	634	577	620*54
8	622*2	595	613*16	631*20	627*26	640*32	627	605	847*52	845*54
9	856*2	931	189	56	-32	-187	-312	-448*46	220*52	212
10	22	52	96	87*22	-52	63	-78*40	-104*44	-84*50	-110
11	-76	-71	-83	-93*20	-89	-73	-78	-72*44	-179*52	-47*55
12	-49	-729*10	-666*16	-670	-692	-718	-724*40	-766	375	191*51
13	214	272	299	309	358*26	456*34	-424	-89	-143	-159
14	-151	-152	-156	-158	-146	-731	-837	-203*46	-236*50	-147
15	-40*2	-135*8	-95	-216*20	-130*26	-150	-154*40	-179*44	-163*50	-159
16	-179	-176*3	-183	-171	-168*28	-179*54	-181	-132	-152*52	-146
17	-115	-171*10	-162*16	-168	-170	-177	-225*38	-212	-218	-200*54
18	-208*4	-265	-199	-201*22	-208	-255	-17*40	-27	-218	-185
19	-145*4	-155*10	-297*16	-110*22	-111	-113	-80	-56	-36	-17
20	29	426*23	-103*16	31*22	-384*26	48*32	-168*40	-165	-131*52	-131*55
21	-192	-104*10	-54*15	-122*23	-121*23	-45*31	-13*44	-95	11*52	-31*58
22	144*4	124*9	-127*10	-235*26	22	-180*52	-129	85	207*50	165*55
23	122	153*11	152	154	146	131	112	60	58	58

RRS SHACKLETON CRUISE 4/75
FREE AIR GRAVITY ANOMALY IN MGALS

DATE 27-4- 75
(DAYNO 117)

HOURS	00	06	12	18	MINUTES	24	30	36	42	48	54
0	-9	-134	-164	-195	-231	-224*34	-244	-323*46	-318	-276*58	
1	-368*2	-300	-344	-352	-360	-371*34	-374*40	-376*44	-373*50	-356*58	
2	-377*2	-358*10	-359	-349*20	-344*26	-328*34	-375*38	-363	-361	-348	
3	-313*2	-390	-196	-268*22	-258	-223	-99	-74	-61	-28*58	
4	-38*2	-29	-38	-19	-10*28	-20*32	-1*40	46*44	-755	-17	
5	-117	-466*8	-235	-286*22	-173	-131	-114*40	-121	-118	-84*56	
6	-128*2	-118*10	-134	-165*20	-212*28	-205	-255*40	-254	-352*52	-300*56	
7	-311	-339	-352*14	-367*20	-359*26	-359*32	-365	-373	-347*52	-352	
8	-319	-111*10	-159	-307	-220*28	-225*32	-223	-227*46	-159*52	-163	
9	-127	-32*8	-75*14	-52	-20*26	-6	-22	32*44	38*52	37	
10	45*2	7*10	18*14	1*22	-9	-17	-5	-54	-70	-98	
11	-105	-125*10	-136	-150	-148*26	-154*32	-172*38	-163	-171	-184*56	
12	-178	-185	-177*14	-166*20	-157*26	-161	-147*38	-140*46	-134*52	-139*56	
13	-130*4	-78*10	-93	-231*22	-245*28	-279*32	382	-16*44	30*50	21	
14	-112*4	-113	-137	-139*22	-149*28	-192*32	-146	-132	-169*52	-167	
15	-75*4	-66*8	-35*14	-366*22	-8*26	-70	-113*40	-117*46	-137*52	-43*58	
16	-82	-156	-104*16	-98*20	-114	-104	-119	-109*46	-100*50	-103	
17	-94	-137*10	-73*16	-78	-108*26	-54	-195*38	-184	-109	-135	
18	-98	-119	-253	-46*20	-50	-121*34	53*38	-134*44	-52	-211*58	
19	-253*4	32*8	18*16	23*22	-221*28	-158	-8	-126	-32	-82	
20	-103*4	-105	-132*16	-137	-146*26	-147	-131*38	-137	-132*52	-122	
21	-91	-52*10	-65*14	-38*20	-214	-47*32	103	-71*46	-50*50	-105*56	
22	773*2	-222*8	-115*14	-141	-271	-302	-329	-349	-361	-499*56	
23	-400*4	-398	-414*14	-215*22	-197*26	-1102*34	-405*38	-436	-507*52	-507*52	

RRS SHACKLETON CRUISE 4/75
FREE AIR GRAVITY ANOMALY IN MGALS

DATE 28-4- 75
(DAYNO 118)

HOURS	00	06	12	18	MINUTES	24	30	36	42	48	54
0	-404	-390	-384	-387	-367	-360*32	-348	-308*44	-304*50	-290*58	
1	-304	-298*10	-259	-685	-286	-334*32	-269*38	611*46	-283*52	-219	
2	-126*4	-107*8	-109	-92	-66*26	-339*32	-286	-419*46	-312*50	-382	
3	-431	-469	-514	-551	-584*28	-1173*32	-273*38	-306	-215	-157	
4	-142	-111*10	-113	-66*22	-42*28	-57*34	-42*38	-58	-69*52	-206*58	
5	-146	-176*10	-157*16	-92*22	-96	-122*34	-186*38	-192	-197*56	-197*56	
6	-206*4	-213*10	-197*14	-205*22	-268	-256*32	-281*38	-256	-256*50	-308*58	
7	-301	-239	-271	-252	-248	-238*34	-206*38	-255	-187*52	-191	
8	-170*2	-186*8	-179	-171	-181*28	-194*32	-300*38	-288*44	-202*50	-279*58	
9	-250	-244*8	-241	-221	-194	-175*32	-174	-160*44	-131*50	-625*58	
10	-460	9	-133	-98	-67*28	-79*34	-66*38	-51*44	-55	-60*56	
11	-83*2	-33*8	-65*14	-38*20	-57*26	-74	-52*40	-50	-27	-38	
12	-19*2	-33*10	-19*14	-9	-29*28	-25	-3	-16	-13*50	-19*56	
13	-8*2	-8*8	-36*16	-26*20	-56*26	-40*32	-66*38	-83*46	-92*50	-88	
14	-104*2	-139	-148	-138*20	-147	-124*34	366*40	-138*46	-116	-41	
15	11	36	59	104*22	103	68	35*40	162*44	-622	-40*56	
16	-97*2	-71*10	-78	-59*20	-73*26	-60	-55*40	-71*44	-83*52	-78	
17	-96	-10*8	-101*14	-61*20	-63	-46*32	-52*40	-33	-20	-3*56	
18	-2	-43*10	-32	28	9*28	23*32	26*38	20	17	28	
19	35*2	37	49	45	61	73*34	68	80	96	104	
20	138*4	133*8	146*14	148	166*26	167*32	119	136	133*52	136	
21	139*4	154*8	147*16	140*20	149	136*34	135*40	131*46	129	133*58	
22	124	120*10	114*16	118*22	116*28	53*32	53*38	4*44	631	-31	
23	81*2	46*10	49	58*20	60*26	58	59*40	53*44	65	114*58	

RRS SHACKLETON CRUISE 4/75
FREE AIR GRAVITY ANOMALY IN MGALS

DATE 29-4- 75
(DAYNO 119)

HOURS	00	06	12	18	MINUTES	24	30	36	42	48	54
0	-379*2	249*8	192	129	155	185*34	174*40	181	175	157*58	
1	160*4	169*8	157	150*22	147	143	168*40	134*44	140*50	144	
2	145*4	151*8	142*16	155*20	135*26	146	136*38	103*46	110*50	100	
3	102*2	98	92*16	84*22	77	66	75*40	83*46	68*52	79*56	
4	73*4	65	66*16	44*22	-59*28	157*34	-285*40	133*46	184*50	-550*58	
5	212*4	-33*10	-4*14	3	52*26	41*32	67	60*46	67	84	
6	122*2	59*10	111*14	95	78	12*34	0*40	-1	21*52	15*56	
7	33*2	115*10	52*14	113	129	118	145*40	106*44	134	161	
8	131*4	142*10	73*16	100*22	82	58*32	120*40	109*46	46*52	62	
9	92	65*8	94*14	81*22	84*26	93	75*40	76*46	92*52	87	
10	81*2	75*8	86	100	85	48*34	53	69	127	89*58	
11	99*2	36*10	57	70	42*26	56	115	9*46	2	-4*56	
12	117*4	78*10	79*14	90	80	88	82	85*46	74	94*56	
13	84*2	64*10	66	48*22	43	43*32	19*40	-5*46	1	-19*56	
14	-10*2	-8	-83*14	-132*22	-171*26	522	-86*38	8*44	-52*50	-47	
15	-37	-24	-59	-7*20	-4	19*34	39*40	-382*46	123*52	104	
16	41	78	104	125	142	160*32	159	185*46	148*50	177*58	
17	151*2	161	191*14	164	146	152*32	161*38	160*46	163*52	159	
18	165*2	120	172*16	171	162	175	171*40	165	176*50	173	
19	182*4	141*10	171*14	167*20	159*26	116*34	121*38	105*44	146*52	110*58	
20	113*2	113	126	114	119*26	140*34	135*40	122	110	121*58	
21	123	143*10	132*14	130*22	137	135*32	148	140	135*52	125*58	
22	112	216	119	124*20	124*26	113*34	110*40	101*41	105*50	105*56	
23	80*4	95*10	94	67*20	119*26	114*34	104*38	150	90*50	129*58	

RRS SHACKLETON CRUISE 4/75
FREE AIR GRAVITY ANOMALY IN MGALS

DATE 30-4-75
(DAYNO 120)

HOURS	00	06	12	18	MINUTES	24	30	36	42	48	54
0	108* 4	115	121	56*20	84*26	83	95	103*46	138*50	147*56	
1	101* 4	277*10	213	171	155	146	121	125	95*50	100*56	
2	112	123* 8	117*16	123*20	115*28	104*32	122*38	121*44	129*50	131*56	
3	119	172* 8	138*14	155	170*26	148	179	187*46	188	201*56	
4	210	205*10	223*16	220*22	204*22	199*28	224*34	172*38	202*44	163*52	222*58
5	193* 4	184*10	205*14	204*22	214	223*28	221	217	233*46	222*52	227*58
6	233* 4	214*10	219*16	214	212	209	291*32	184	211*46	226*52	226*58
7	222* 2	215	194	312	225	246*34	90*40	270*44	234*52	213*56	
8	236* 2	219	238*14	237*22	225	836*40	566	47		157*56	
9	134* 4	221	177	181*22	183	227*32	-301	293	221*52	223	
10	259* 2	296*10	293	330*20	317*28	319	337	356	293*52	356*56	
11	330* 4	346*10	335*14	364*20	343*28	351*34	348	367*46	340*50	406	
12	414* 4	366*10	373	420*20	424*26	452*34	426*38	460*44	457*50	444*56	
13	454	454	463*14	451	468*26	435*34	476*38	433*46	490*50	133*58	
14	145	268	251	246*20	233	230	233*40	249*46	255*50	431*58	
15	700* 2	456	297*16	410*22	305*28	405*34	333*38	385*46	378	291*58	
16	311* 4	376*10	404*14	362*20	337*26	370	358*40	362*46	371*50	352*56	
17	367	361* 8	361	216	387	329*32	346*38	353*44	357	329	
18	325* 2	368	331	311*22	321*26	295*32	297*40	299*44	293	285*58	
19	242	277	54*14	233*22	261*28	231*34	253*38	235	254*50	233	
20	238	237*10	213*14	218	216*26	208	192*40	187	145	160	
21	66* 2	55* 8	27*14	-8*22	16*28	4*34	236*40	224*46	36	73*58	
22	64* 2	75* 8	95*16	89*20	98*26	93	94*40	115*44	265*52	159*58	
23	157* 4	206*13	777*14	556*20	491	501	500*38	477	464*50	458*58	

RRS SHACKLETON CRUISE 4/75
FREE AIR GRAVITY ANOMALY IN MGALS

DATE 1-5-75
(DAYNO 121)

HOURS	00	06	12	18	MINUTES	24	30	36	42	48	54
0	458* 2	450* 8	454*16	444	176*28	169*34	151*40	158*46	154	177*58	
1	188* 4	166* 8	177*16	179*22	117*26	183*32	170	156*44	180*50	174*56	
2	191	194	209*14	225*20	219	258*34	171*38	206*44	149*50	353*56	
3	251* 2	424*10	145*14	382	461*28	370	314*40	351*46	336*52	344*56	
4	339	330* 8	352*14	366*22	350*26	361	358*38	423*46	360*50	386*58	
5	388* 2	346	383	391	379*26	391*32	352	348	351*50	352*56	
6	360	342	363	366*22	341	347	339	357*44	311	372*58	
7	427* 4	189*10	283	462*20	452	447	473*38	463	463*52	474*56	
8	458* 4	447* 8	474	380*20	389*26	513	376	425*44	261*50	1100	
9	276* 2	550*10	503	333	360*28	372*32	376*40	290*44	358*50	332*58	
10	340* 2	363	332	400*22	306*26	345*34	390*38	331*44	342*52	346*58	
11	325* 2	355	340*14	284	349*28	545*34	493	229	326*50	385	
12	297* 2	411	208	257*20	292	442*34	248*38	376*46	394*50	322*58	
13	917* 4	284*10	358	413*22	369*26	377	349*38	375*44	294	247*58	
14	266	338*10	437*14	317*22	730*28	301*34	507*40	368*44	402	575*56	
15	297	441* 8	417	420*22	413	432	420	425	425	419*58	
16	510* 4	489	487	453	477*28	469*34	472*38	472	470	476	
17	487* 2	489	493	502*22	495*26	502	518*38	515*44	513*50	446	
18	460	471*10	484*14	468	519*26	520*32	528*38	437*44	596*52	579	
19	541* 4	540	551*16	554	546*28	510	499*40	493	488*52	484	
20	433* 2	452	325*16	323*20	335	267*34	270	250	223*52	209*58	
21	213	226*10	172*16	212*22	182*26	206*32	212*40	195*44	211	317*56	
22	329* 2	297* 8	282*14	285	251	163	431*38	545*44	321*52	56	
23	140	171*10	165*14	178	204*28	202	174	199*44	200*52	207*58	

RRS SHACKLETON CRUISE 4/75
FREE AIR GRAVITY ANOMALY IN MGALS

DATE 2-5-75
(DAYNO 122)

HOURS	00	06	12	18	MINUTES	24	30	36	42	48	54
0	209* 4	238* 8	252*14	251	280	310	346*38	339	389*52	385	
1	367* 2	593* 8	400*14	393*22	371	375	392*38	380*44	374*50	366	
2	351* 2	408* 8	388*14	395*22	369*28	380*32	367	350*46	321*50	355*56	
3	337* 4	424	326*16	315	305*28	300	295*40	276*44	266*52	268*56	
4	267* 2	248	260	242	247*26	212*34	226*38	189*46	202*50	190*56	
5	195	185	192	172*22	169	197	166*38	172	156*52	133*56	
6	131* 4	132	117	104	112*28	101	100*40	97	120	204*58	
7	110* 4	114	79*16	90*20	81	240*32	46*40	113*46	107	70*58	
8	75* 4	76* 8	63*14	73*22	58*28	66*32	34	80*46	99*52	97*56	
9	100	80	518	149*20	220	209*32	180*40	241*44	207	221	
10	256* 2	257*10	253	270*20	260	275*32	288	299*44	313*50	321*56	
11	366* 4	302*10	241*16	258*20	251	291*34	290	297*46	295*52	272*58	
12	281	286	297*14	496*22	467	232	406	298*46	299*50	306	
13	463* 2	265* 8	321*16	308*22	306*28	313*32	310	326*46	346*50	208*58	
14	201	221*10	229*16	211*22	211*26	310*32	298	281*46	284*52	290*58	
15	276* 2	283	275	263*20	271	259	268	247	262	243	
16	244	285* 8	269*16	271	279	271*34	273*38	260*44	269	208	
17	219* 2	215	227*14	213	236	231*32	235*38	240*44	236	222	
18	213* 4	209* 8	278	246*22	252*26	241*34	236*40	238	129	111	
19	70	48	-1	-48	-105	-161	-220	-310	-387	-455	
20	-527	-595	-670	-732	-789	-842	-889	-926	-969	-996	
21	-1033	-1062	-1083	-1115*22	-1114	-1127	-1137*40	-1137*44	-1152*52	-1155	
22	-1137* 2	-1138	-1122*16	-1128*20	-1122*28	-1110	-1085*38	-1088	-1057*50	-1067	
23	-1102* 2	-1121	-1111	-996	-959*28	-966	-922*38	-915	-943	-960	

RRS SHACKLETON CRUISE 4/75
FREE AIR GRAVITY ANOMALY IN MGALS

HOURS	MINUTES				DATE 3-5-75 (DAYNO 123)					
	00	06	12	18	24	30	36	42	48	54
0	-979	-949	-954	-912	-847	-774	-747*38	-743	-724	-700
1	-682*2	-670	-642	-596	-581	-583	-534*40	-539	-501*52	-503
2	-491	-463*8	-471	-433*22	-447*26	-407*32	-383*40	-394*44	-377	-371
3	-342*2	-339*10	-340	-310*22	-321*26	-315*34	-314	-279	-253*52	-254
4	-241*2	-230*10	-234	-211	-217*26	-202	-196*40	-192	-179	-172
5	-163*2	-152*10	-165*14	-151*22	-155	-148*32	-102*40	-103	-117*50	-100*56
6	-101	-83*8	-81*14	-85	-66*26	-83	-59*40	-65*44	-40*52	-42
7	-53*4	-36*10	-38	-22*20	-34	-26	-16	-30	-1*52	-20*56
8	-7	-21*8	-6*14	-18	-4*26	103	84*38	104*44	91	87
9	93*1	75*10	78*16	72	86*26	77	62*40	70*44	59	72
10	49*2	61	68	126	27*26	-1*32	11	-182*46	-21*52	-25
11	-40*2	-58*8	686	-193	-10	14	-73*38	-19*46	-90*50	i
12										
13	-36*4	-43*10	-13*16	-45*20	-4	-67	-41*40	-19*44	-84	-33
14	-11*4	-27*8	-26*16	3*20	24*26	51*32	59*38	-17*44	31*50	19*58
15	47*2	34	-19*14	39*20	13*26	54*32	12	-70*44	0	-97*56
16	-271*4	-63*8	-222	236*20	130*26	240	-24	5*44	56*50	8
17	5*2	30	18*14	2*20	15*28	7*34	5	-15*44	-16*50	2*56
18	-7*4	-19*8	-3	4*20	50*26	246*34	-9*40	-8	36	21
19	6*2	8*8	81*16	7*20	60*26	-53	17*38	1	2*52	2*58
20	7	27*8	22*16	26	52*26	69*32	54	77	83*52	84
21	97	101*10	106	117	131	146*32	149	164	169	181*56
22	188*4	180*8	195	196*22	187*26	210*34	202*38	207	199	212*58
23	209	200*8	193	207*22	206	220*34	212*38	217	213	232

RRS SHACKLETON CRUISE 4/75
FREE AIR GRAVITY ANOMALY IN MGALS

HOURS	MINUTES				DATE 4-5-75 (DAYNO 124)					
	00	06	12	18	24	30	36	42	48	54
0	231	238	246*14	236*22	243*28	223*32	232*38	240	219*52	222
1	235	229	235	235*20	245	254	246	251*44	247	246*56
2	261*2	243*10	251	269*22	259	247*54	253*40	246*46	239*50	254*58
3	244*4	245	240	231	237*28	233	214*40	220	208*50	208*56
4	219	192*8	215*14	204	220*28	220*32	211	229*46	222*52	221
5	215*4	207	189*16	197	231*26	225	244*38	229	232*50	224*56
6	220	206	198*16	191	195*28	179*31	179*38	185	188*52	175*56
7	185*4	180*8	196*16	194	182*28	149*32	190*38	177	183*52	182
8	167*4	186	164*14	174	186*28	193*34	180*40	186*44	184	183
9	198*4	182*10	181	197	189	197*32	174*38	182	188*50	175*56
10	182	163	183*16	183*22	192*28	192*32	181	192*46	193*52	193*56
11	183	170*8	175	176*20	183	171	126	183*46	159*52	173*56
12	162*4	168	184				190*58	187	175*50	186*56
13	156*4	163	197	188*22	203*28	186*52	192	180*44	187*52	186
14	206	169	218	185*22	197*26	194*34	186	222*46	191*52	236*58
15	231	216*8	241*14	247*20	192*26	209	186	192	183*52	176*58
16	159*2	177*8	164*16	171*20	125*26	173*32	164*40	159*44	132*52	172*56
17	159	146*10	125*14	160*22	144	141*34	144*40	130	152*52	150
18	118*2	151	136	137*22	146*28	141	119*40	118	101*50	122
19	96	113*8	89*14	108*20	107*26	108*34	97	76	82*52	102*56
20	110*2	92	99	85*20	90*26	102	77	81	86	61*58
21	64	51*10	26*14	37*22	81	44*34	75*38	47*46	34*52	48*56
22	50*2	38*10	37*16	41*20	59*26	46	21	55*46	67*52	36*58
23	57*4	53*8	50*16	58*20	62*26	44*32	68*40	48*46	53*50	26*58

RRS SHACKLETON CRUISE 4/75
FREE AIR GRAVITY ANOMALY IN MGALS

HOURS	MINUTES				DATE 5-5-75 (DAYNO 125)					
	00	06	12	18	24	30	36	42	48	54
0	37*2	30	41*14	46*20	26*26	51	27*40	43*46	6*52	16
1	-2*4	2*8	-8*16	-17*22	-19	-17*52	-28*40	-32*46	-51*52	-67*58
2	-65	-35*10	-42	-59	-67	-43*40	-48*44	-61*52	-44*56	
3	-42	-56	-74	-84*22	-90	-105*34	-110	-148*44	-165	-144
4	-168*4	-168*8	-190	-184*20	-194*26	-211	-195*40	-197	-198	-202*56
5	-203*4	-191*8	-181*16	-206*22	-206*28	-177*32	-212*40	-236*44	-215	-227*56
6	-250	-236*8	-255	-229*20	-246	-273	-256*40	-242	-254*50	-245
7	-232	-220	-206	-182*20	-200*28	-162	-171*38	-155*46	-158*52	-129*58
8	-147*2	-124*8	-114*14	-107*20	-100*26	-105*34	-105*40	-77*46	-84	-114
9	-83	-104*8	-79*14	-73*22	-58*26	-12*34	-50	-24*46	-2*52	-6
10	12*4	9*10	24*10	11*22	1*26	25*34	8*38	14*44	22*50	12
11	2	15*10	18	36*20	45*28	14*34	26*38	34*44	13	24*56
12	23*	31	72*16	98*20	53*28	65	99*40	98	98	93*56
13	92*	118*10	-31*14	-16*20	79*26	88	105	93*44	93	117*56
14	126*	137*10	136	142	154	15*32	226*40	150*46	162	144*58
15	216*	190	360*14	204*20	218*28	227*32	215*38	180*46	216*50	223*56
16	211	251*8	247*14	237*22	231*26	243	224*40	203*44	206*52	191*58
17	193	232*10	240*16	238*22	243*28	221*34	187*38	175*46	181*50	173*56
18	188*	156*10	162*16	158*22	155	165	126	116*46	131*50	131*56
19	128*	115*10	103*14	141*22	153*26	147*52	137	151	132	153
20	125	123	101*16	110	95*20	15*32	111*36	102	100	113*58
21	115*	115*10	119*16	116*22	128*26	11*32	125*40	136*44	134*50	125
22	91*	75	42	71	80*26	75	32*46	41*46	41*50	36*58
23	91*	15*10	27*16	36*22	29	32	15	25	37*52	24

RRS SHACKLETON CRUISE 4/75
FREE AIR GRAVITY ANOMALY IN MGALS

HOURS	MINUTES					DATE 6-5-75 (DAYNO 126)				
	00	06	12	18	24	30	36	42	48	54
0	-8★ 4	11★ 8	6	-32★22	-12★26	-30★34	-36	-51★44	-60	-80★58
1	-210★ 4	-204★ 8	-91★16	-122★22	-118	-134★34	-152★38	-137	-163	-188★58
2	-234★ 4	-234	-257	-296★28	-294	-328	-366★46	-363★52	-373	-373
3	-436★ 4	-469★10	-465	-488	-497★26	-524	-525	-570★46	-558★52	-565★56
4	-571★ 2	-572★ 8	-564★16	-575★20	-518★26	-559★34	-552★40	-551★46	-566	-572★56
5	-555★ 4	-578★ 8	-566	-555★22	-558★26	-545★32	-571★40	-583★46	-578★52	-582★58
6	-584★ 4	-590★ 8	-576★16	-578	-574★28	-572★32	-573	-543★44	-536★52	-519★58
7	-533★ 2	-498★10	-501	-490	-455	-438	-420	-403	-386	-355
8	-337	-312★10	-338★14	-319	-300★26	-278	-237★40	-254	-211★50	-196★56
9	-205	-159★ 8	-159★16	-159	-159★26	-62★34	-60★38	-65	-25	-26★56
10	7	-11	35	68★20	136★26	131	211	259★44	263★50	258★58
11	173★ 4	285★ 8	364★14	321★20	311★26	515★32	265★38	330★46	318	296★56
12	358★ 4	360★10	343★16	309★22	314★26	327★34	295★38	323★46	322	335★56
13	300	327★10	324★16	321	343★26	344★34	322★40	320★46	318	92★56
14	450★ 4	386	211★14	247	291★28	292	312★40	306	324	336★56
15	340★ 4	350★ 8	361★14	356★20	356★28	353★32	267★40	290	268★50	294★56
16	280★ 4	305★10	289★14	309★20	283★26	312★34	280★38	307	304	277★56
17	271	259★10	263★16	238★22	289★26	299	0	220★44	208	192
18	160★ 2	211	179★14	204★20	176	169★32	146★38	149★46	175★52	164
19	158★ 2	142	141★16	144	138★28	158★34	124★38	118★44	96★52	113★58
20	75★ 4	94★10	91	51★22	56	33★32	51★38	42★44	34★52	18
21	1★ 2	20★ 8	-3★14	10★20	-14★26	-5★32	-29★40	-61★46	-47★50	-49★56
22	-64	-83	-59	-92★20	-69★28	-83	-95	-60	-72	-43★56
23	-48	-61	-75★16	-74	-70	-71	-66★40	-55★44	-69	8★56

RRS SHACKLETON CRUISE 4/75
FREE AIR GRAVITY ANOMALY IN MGALS

HOURS	MINUTES					DATE 7-5-75 (DAYNO 127)				
	00	06	12	18	24	30	36	42	48	54
0	-8★ 4	-16	-42★16	-52	-86★28	-149★34	-148	-183	-235★50	-264★58
1	-282★ 4	-285	-310	-290★22	-487★26	-315★32	-215	-215	-239	-147★56
2	-167★ 4	-148★ 8	-114★14	-105★20	-102	-40	-5	-12	-107	167★56
3	199	265	345	397	434★28	347★32	549	319	-99	-70★56
4	-59	-39	-19★14	340★22	323★26	412★34	154★40	203	533★50	579★58
5	-555★ 4	-578	-575★16	-555★22	-558	-545	-567★38	-578★44	-574★50	-571★56
6	-583★ 2	-590	-576★16	-567★22	-568★26	-572	-573	-543	-544★50	-519★58
7	-533	-498★10	-501	-490	-455	-438	-420	-403	-386	-355
8	-337	-312★10	-338	-295★22	-300	-278	-237★40	-254	-211	-196
9	-205	-159	-158★16	-159	-125	-68★32	-60	-65	-25	-26
10	7	-11	35	68	136	131	211	259	263	258★58
11	198★ 2	285	364	321	331	515	265	330★46	318	296
12	321★ 2	360★10	343★16	315★20	314	327★34	295	323★46	322	335
13	300	327★10	324★16	321	343	344★34	322★40	320★46	318	92
14	450★ 4	386	211	247	299★26	292	312★40	306	324	341★58
15	342★ 2	350	361	356	356★28	353	269★38	290	268	294
16	272★ 2	305★10	289	309	283	312★34	280	307	304	277
17	271	256★ 8	263★16	244★20	289	299	0	220	208	192
18	180	211	179	204	165★28	169	164★40	152★44	175★52	152★58
19	158	142	144★14	125★22	127★26	158★34	125★40	130★46	112★50	113★58
20	82★ 2	94★10	91	57★20	56	33	51	42	34★52	18
21	1	20	-3	10	-14	-5	-29★40	-53★44	-47	-49
22	-64	-83	-59	-92	-69★28	-83	-95	-60	-72	-43
23	-48	-59★10	-63★14	-74	-70	-71	-62★38	-55	-69	8

SECTION D

Station Position Tables

STATION POSITION TABLES

3/75

Station No.	Type	Time(GMT)/day no. Start End	Lat.	Long. E	Depths CM CF	Comments
1285	PUBS	0812/091	1125/092	14°58.8' 14°34.8'	55°45.6' 55°43.9'	2517- 3255 1780
1286	V	1106/097	1231/097	23°18.4'	63°16.0'	3345 1829
1287	DSB	1248/097	1213/098	23°41.5' 23°34.5'	61°01' 62°03'	To 2400 metres wire out. 3 buoys used. Aquaflex and 300 ins ³ airgun.
1288	DSB	1922/100	1705/101	24°20.0' 24°17.5'	61°00' 61°59'	3 buoys used. Aquaflex and 300 ins ³ airgun.

4/75

Station No.	Type	Time(GMT)/day no. Start End	Lat.	Long. E	Depths CM CF	Comments
1289	C	0530/116	0615/116	19°17.6'	58°22.6'	823 450
1290	C	0738/116	0905/116	19°13.8'	58°34.6'	2292 1253
1291	C	0955/116	1144/116	19°10.3'	58°40.0'	3172 1735
1292	V	1526/116	1647/116	19°11.4'	58°41.3'	To 2200 metres wire out.
1293	PUBS	2046/116	1925/117	19°06.1'	58°33.4'	2 PUBS used. Aquaflex, Geophex and 1000 ins ³ airgun.
1294	C	0507/119	0705/119	19°02.2'	59°02.6'	3176 1737 3202 1751 3383 1850
1295	PUBS	1250/120	1421/121	18°51.5'	59°42.2'	Core obtained.
1296	C	1120/123	1500/123	18°16.8'	61°56.7'	3555- 3544 1938
1297	C	1640/123	1750/123	18°17'	61°54.7'	3699 2023 3703 2025

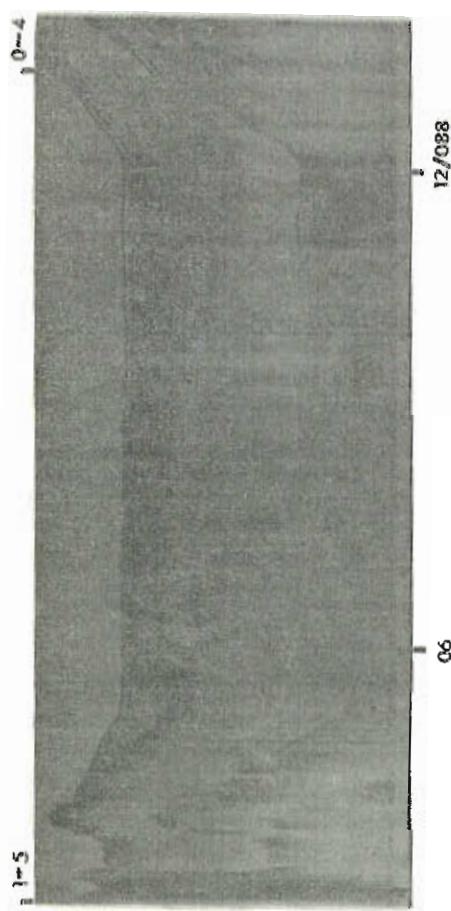
PUBS = Seismic refraction with pop-up buoys
 DSB = Seismic refraction with sonobuoy

V = Velocimeter
 C = Coring

SECTION E

Seismic Reflection Records

(A)



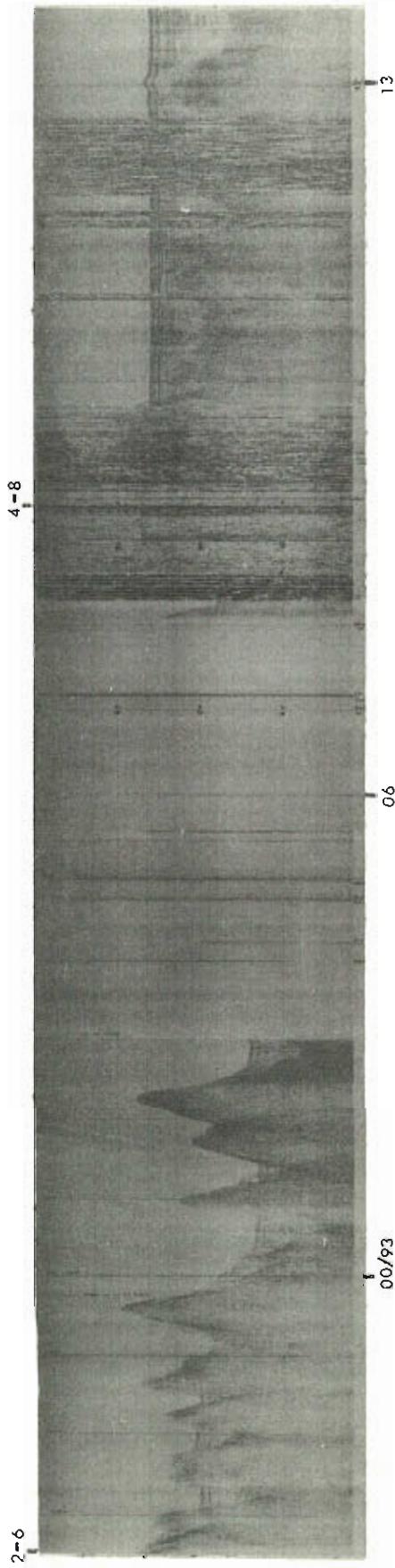
1-1-5

10-4

66

12/088

(B)

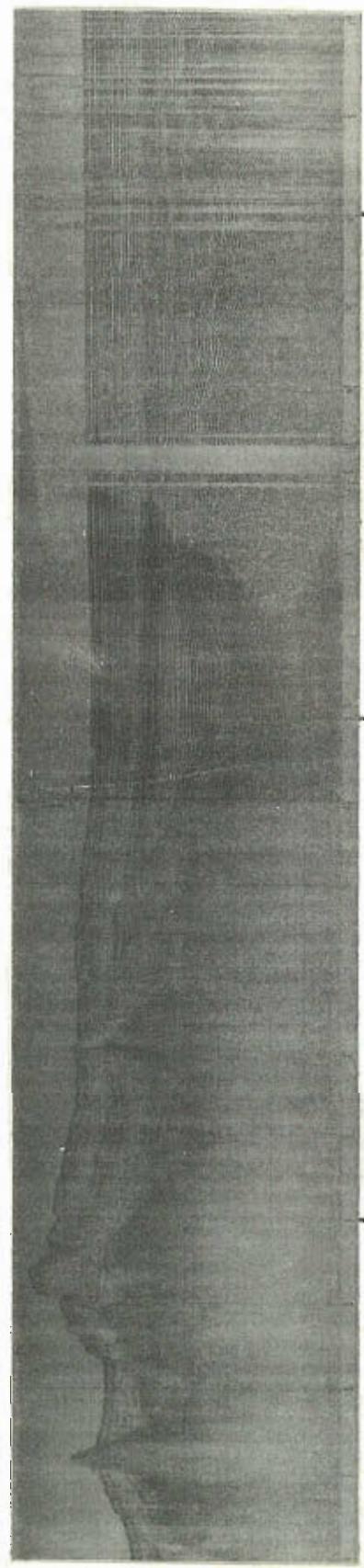


13

06

00/093

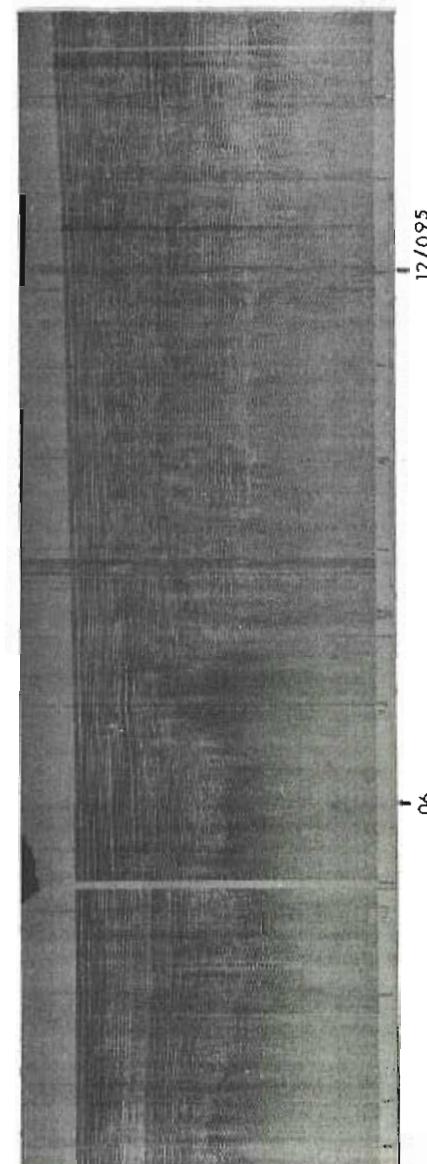
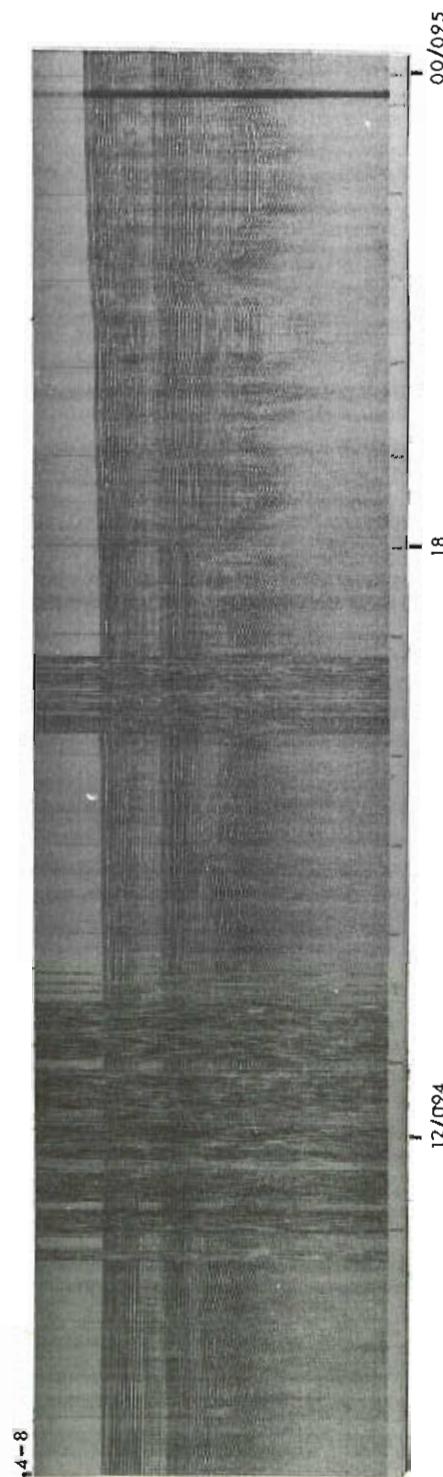
2-6

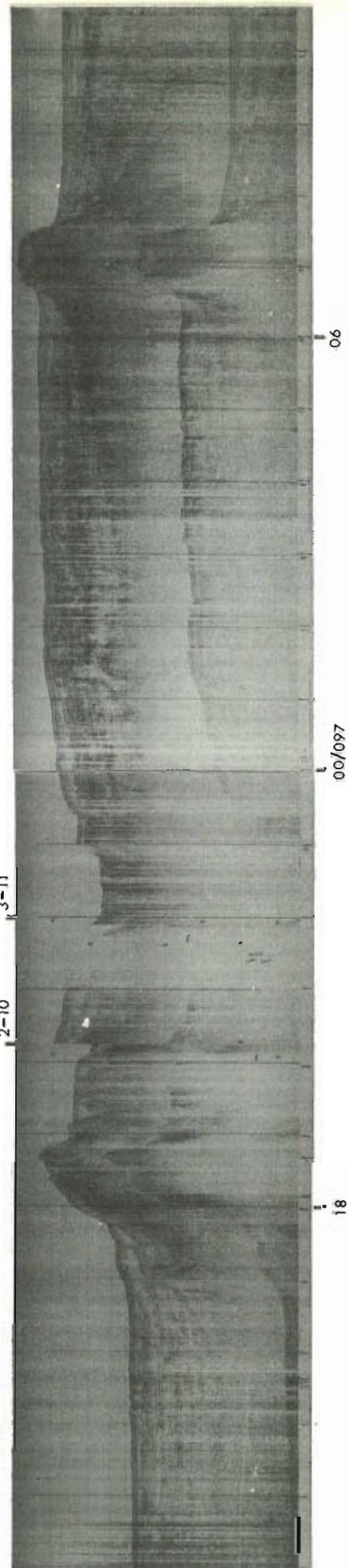
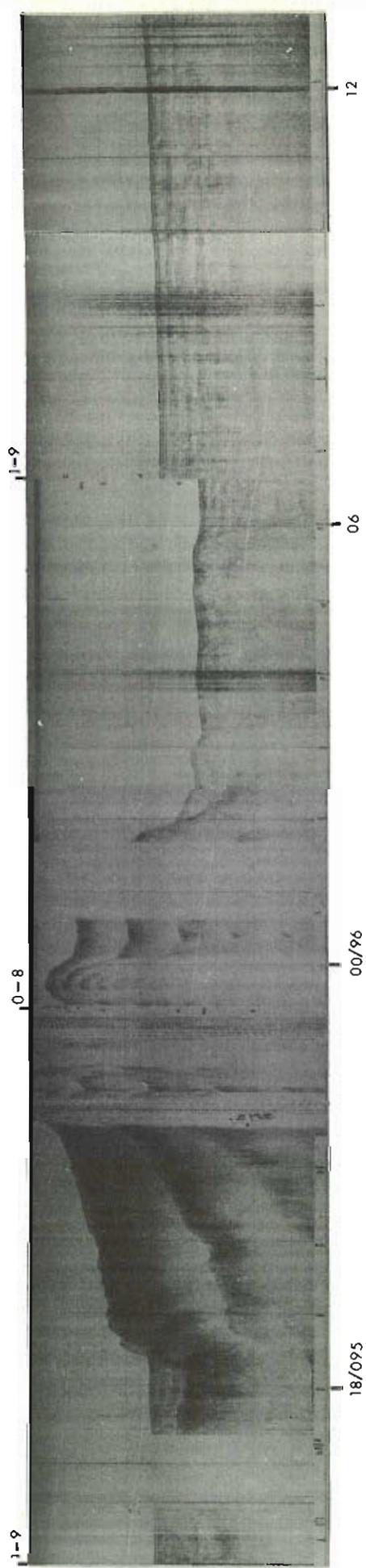


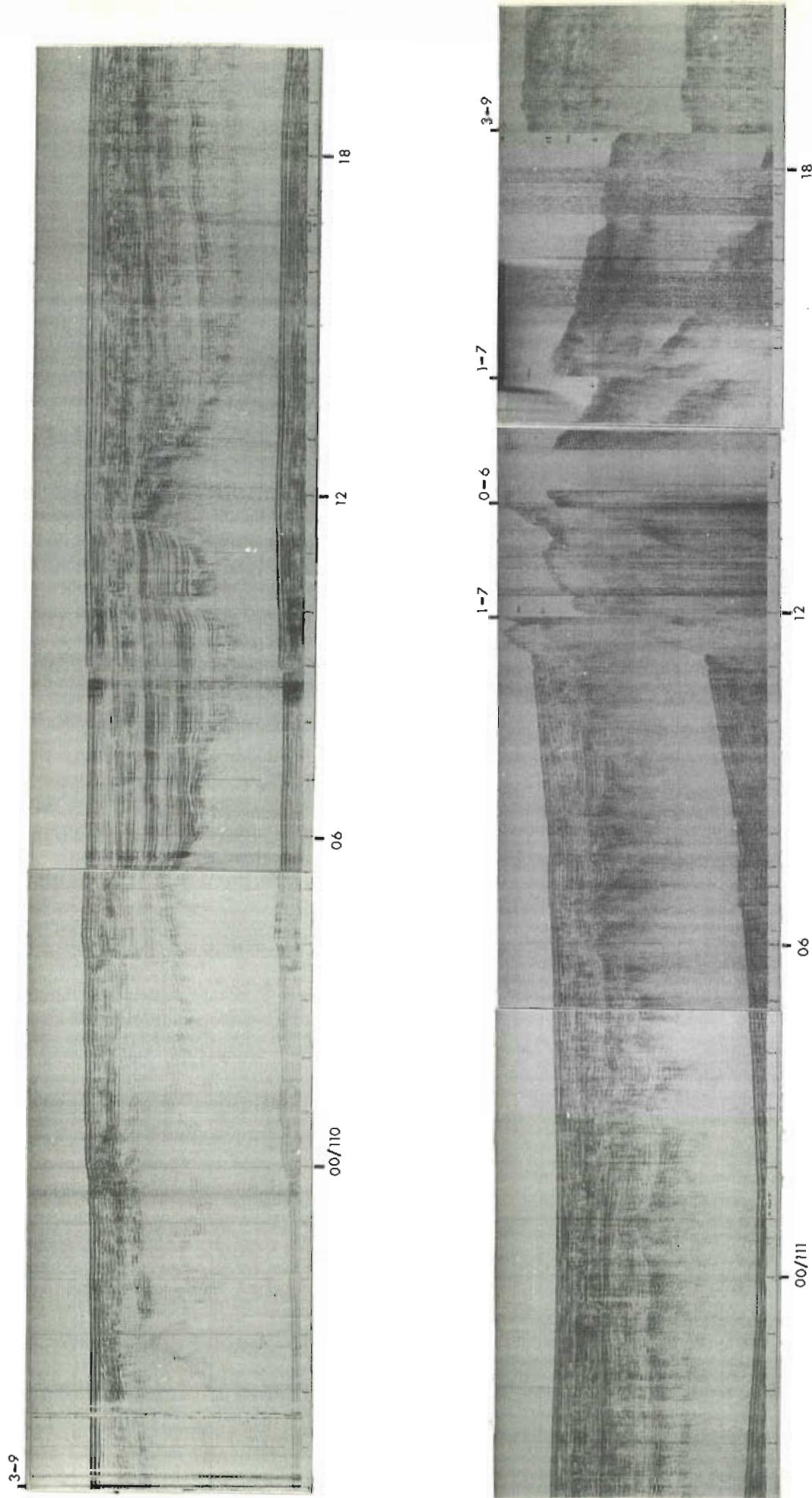
06

00/094

18/093

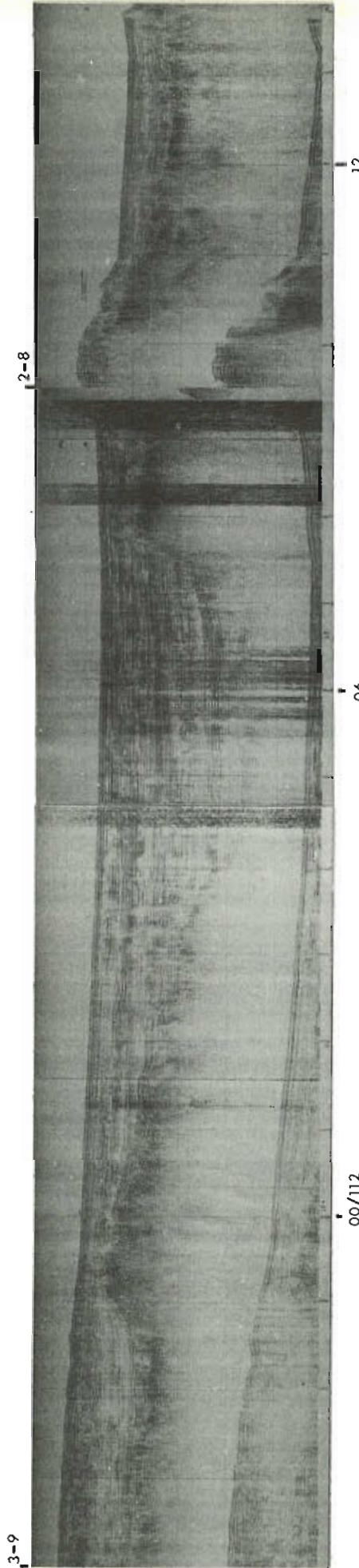




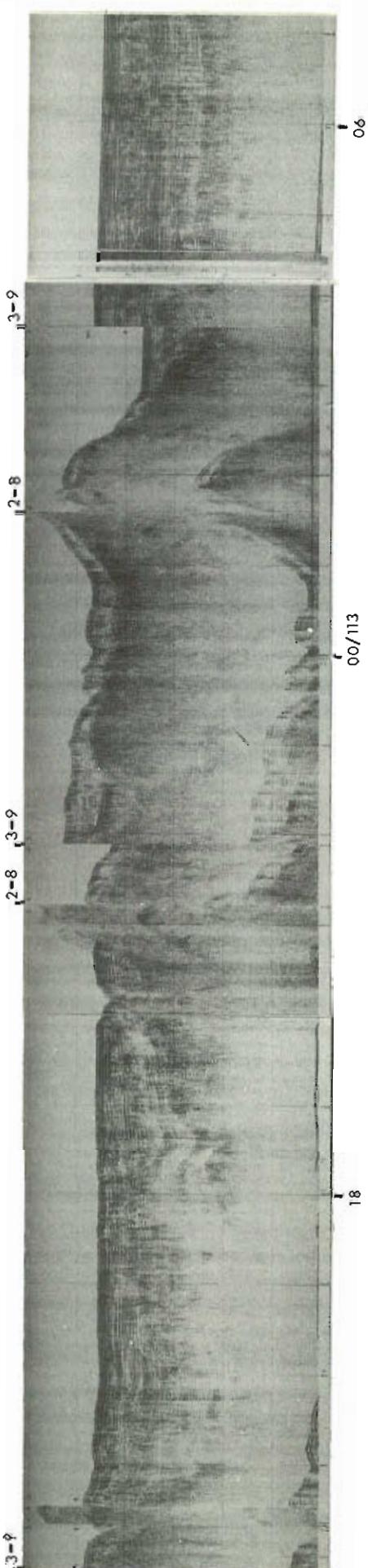


(E)

F

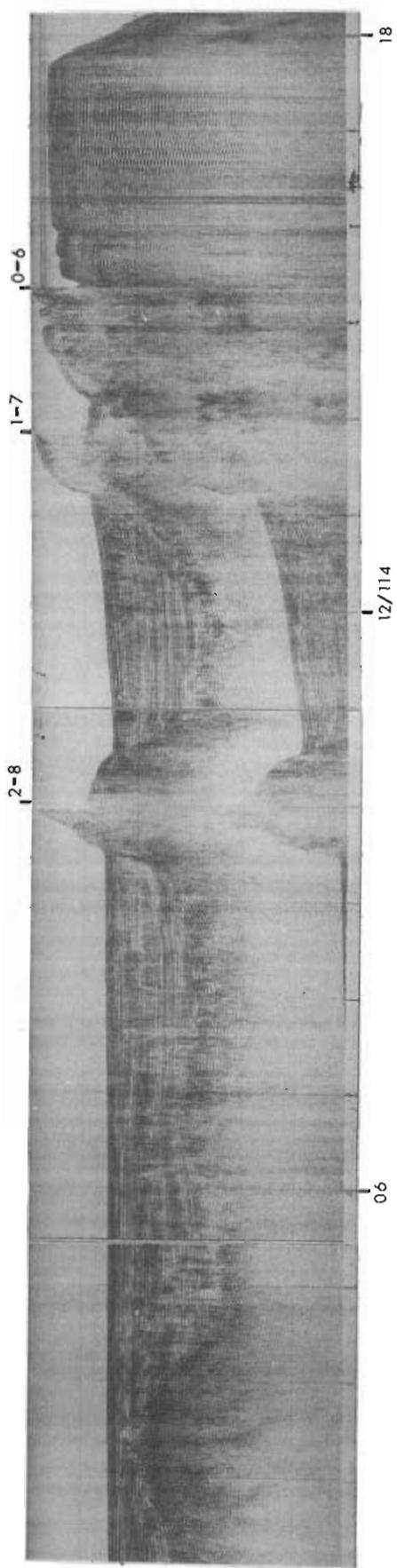
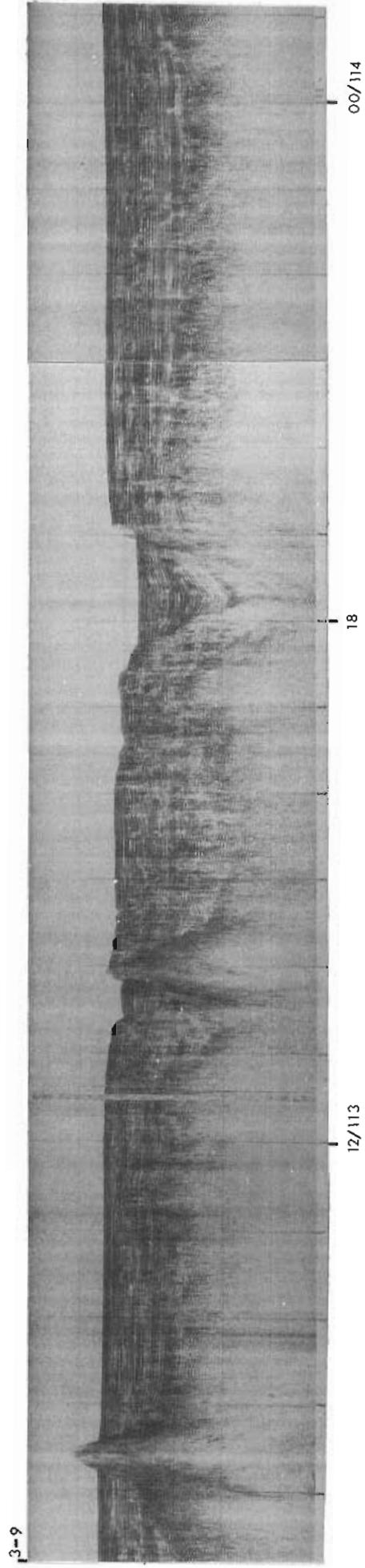


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(6)



(H)

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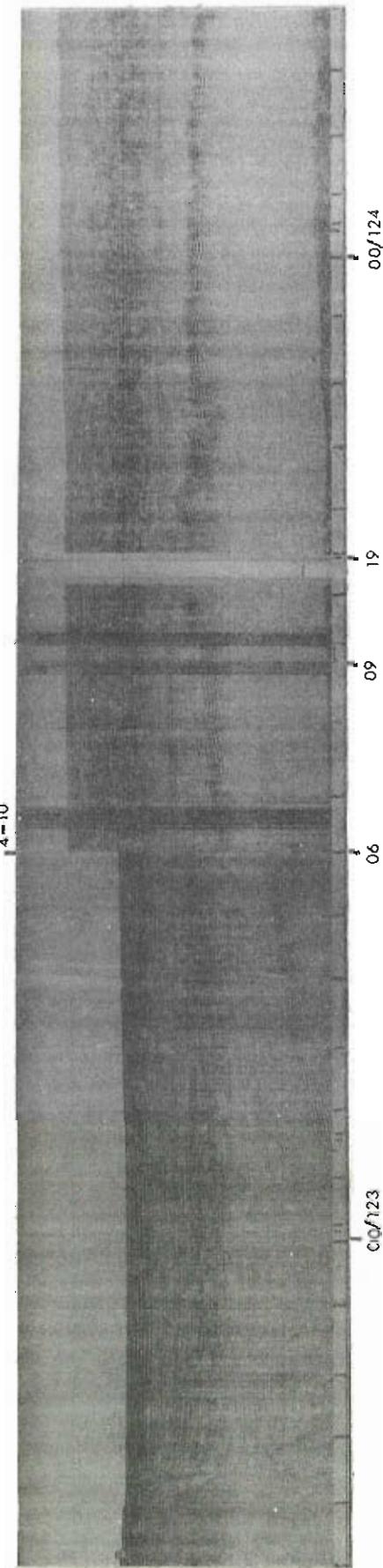
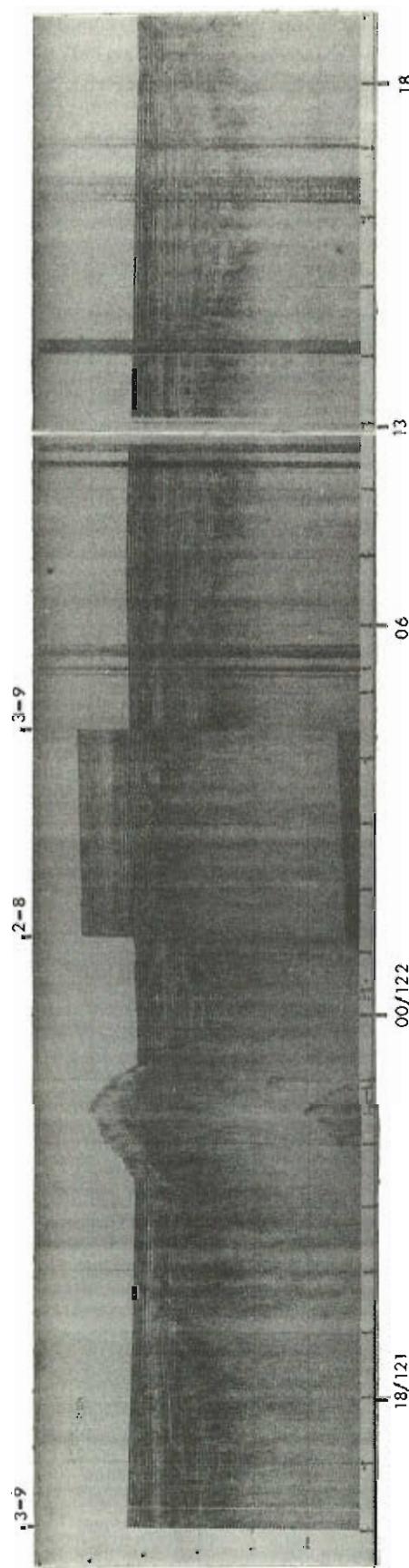
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(J)

