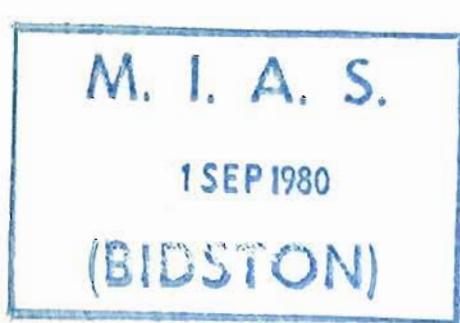


NATIONAL INSTITUTE OF OCEANOGRAPHY  
Wormley, Godalming, Surrey.



BATHYMETRIC AND MAGNETIC TRAVERSES OVER THE  
ROCKALL PLATEAU:

R. R. S. "DISCOVERY", CRUISE 47, JUNE - JULY, 1972

N. J. Olliff

N. I. O. DATA REPORT GEOPHYSICS 4

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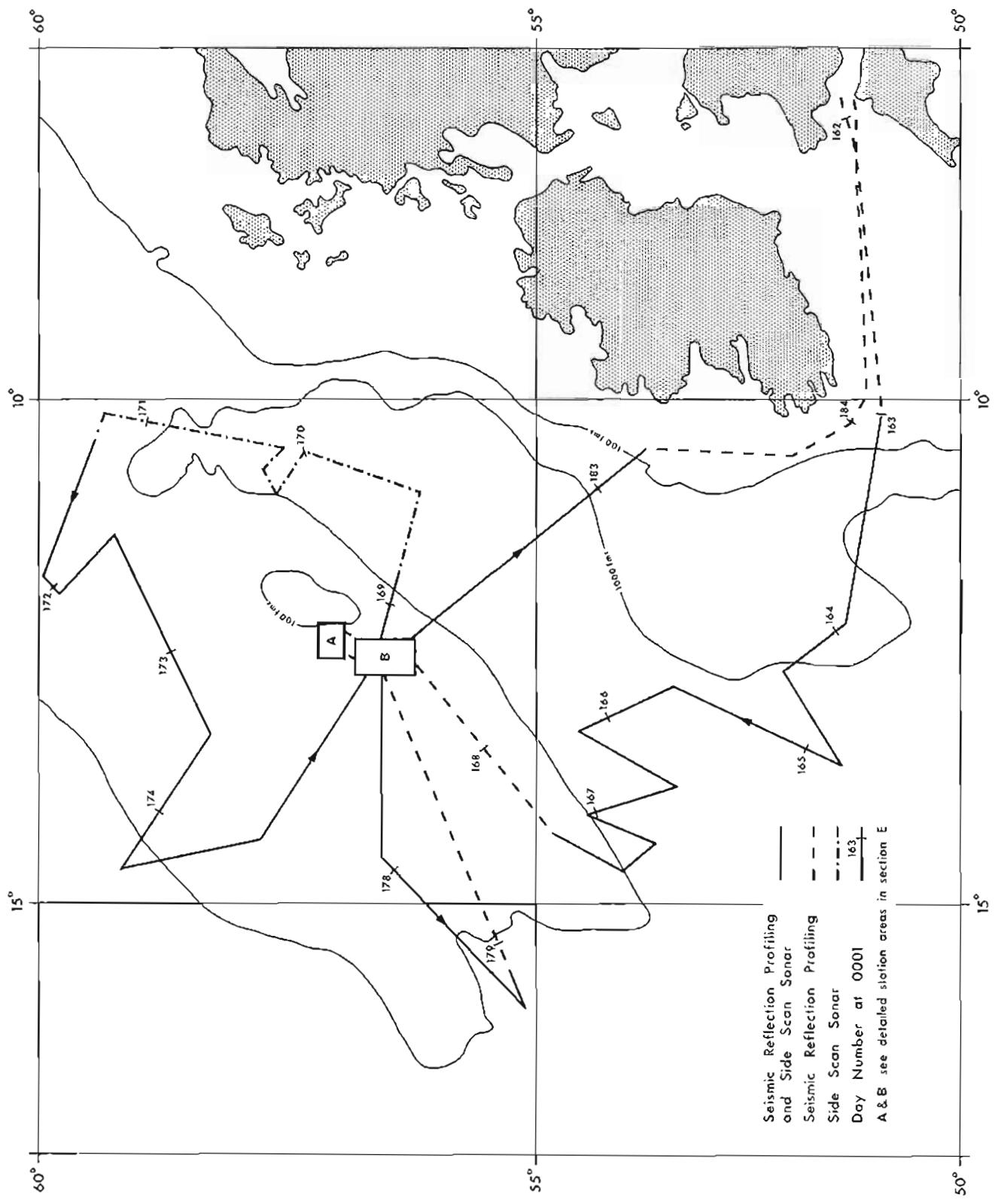


PREFACE

This document describes geophysical data collected by the Deep Sea Floor Group of the Institute of Oceanographic Sciences (Wormley), and continues the series of N.I.O. Data Reports (Geophysics). 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 On citing this report in a bibliography the reference should be followed by the words "UNPUBLISHED MANUSCRIPT" in accordance with accepted bibliographic custom.

The present report contains magnetic and bathymetric data collected during Cruise 47 on R.R.S. Discovery in June-July 1972. The profiles, tables and track charts were all generated automatically from data files stored on disk by the shipboard IBM 1800 Computer. Included in the report is a description of methods used in data acquisition and preparation.







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### CRUISE OBJECTIVES

The principal objective of this cruise was to intensively sample the outcrop geology of the shallower banks on the Rockall Plateau. The major tool was a 1 metre I.G.S. drill with back up equipment comprising vibrocorer, rock corers, dredges and a stereo-camera. The three main areas for study were:-

#### (a) Rockall Bank

Previous cruises to the area had provided good geophysical control and defined the location of outcrops and sediment distribution. Objectives included sampling of in-situ rocks, superficial sediments and use of the asdic for structural mapping of the outcrops and observation of sediment distribution patterns.

#### (b) George Bligh and Hatton Banks

Previous seismic reflection profiles across these banks had shown outcropping basement at depths accessible to the available sampling equipment. The intention was to obtain in-situ rock for intercomparison of the geology of the three main banks of the Plateau.

It was planned to continuously seismic profile on all passage tracks using Bolt air-guns and in the shallow water areas to obtain high resolution seismic profiles using the ORE 3.5 kHz seismic profiler. The side-scan sonar was carried for continuous operation as a narrow beam echo-sounder in the deeper waters and for use as a support for bottom sampling and sediment distribution studies in all depths less than 300 fathoms. Magnetics and depth data were to be obtained on all tracks.

The results of Cruise 47 can be found by referring to (Billett et al 1973), (Roberts et al 1973), (Miller et al 1973), (Roberts et al, in press) and (Roberts, in press).

INSTRUMENTATION

Magnetics - A Varian proton magnetometer was operated throughout the cruise, but broke down due to mechanical and electronic failures three times. The data was recorded in analogue form on a chart recorder and was also stored in digital form by the shipboard computer as two minute values averaged over a period of 30 seconds (i.e. 5 six second readings). Apart from the three malfunctions of the magnetometer the errors in stored total field values coincided with radio transmission from the ship. The erroneous data was corrected during the editing of the data files on board. No corrections were made for either daily variation or the effect of the ship's heading.

Bathymetry - An N.I.O. Mark III Precision Echo-Sounder with an N.I.O. Mark II towed fish was used to record bathymetry on a Mufax display at an assumed velocity of 800 fms/sec. It was operated continuously during the cruise. The records were manually digitised at five minute intervals. This data was manually entered into the computer system for reduction and storage.

## NAVIGATION

The following navigational aids were used:-

- (a) Satellite Navigation System using a Magnavox C/A 702 receiver working in conjunction with the shipboard IBM 1800 computer,
- (b) Loran 'C' using a Decca Loran ADL21 receiver in the Rockall Area,
- (c) Decca SW British Chain when in range.

The computer was used throughout the cruise to control the navigation and was checked daily with manually prepared track charts. The satellite navigation was used as the prime navaid throughout the cruise and gave about twenty acceptable fixes per day. Loran 'C' was logged by the computer but not used directly in determining the ship's position by the computer system.

Ship's position was determined from satellite fixes used in conjunction with a dead reckoning derived from the N.I.O. two component electromagnetic log and the ship's gyrocompass. At regular intervals the dead reckoning track was automatically adjusted by the computer to agree with the satellite fixes. The difference between the dead reckoning positions and the satellite positions was attributed to a 'current' which was used to compute adjusted values of ship's position at two minute intervals. These values were stored in the reduced data file (GEOF). As the computed 'current' can be considered the sum of actual ocean current, satellite fix error and e.m. log calibration error, all satellite fixes giving rise to a 'current' of greater than 2 knots were rejected as erroneous. After a track up date, the dead reckoning is started from the last accepted satellite fix.

### SHIPBOARD ACQUISITION, REDUCTION AND STORAGE OF DATA

The basic configuration used during Cruise 47 is summarised in Fig. (1). The Sequential Sampling Program controls the sampling of the digital clock, gyrocompass, magnetometer, 2 component e.m. log and the meteorological instruments, and buffers the data to a raw data disk buffer. There are two of these buffers and every two minutes the sampling program switches buffer and initiates the Raw Data Manipulation Program to filter the sampled data, to yield two minute values of the sampled variables which together with the day number and time are written to the raw data disk file DATF (see Table 1). At this stage the program also updates the dead reckoning position of the ship and stores it in the processed data file GEOF.

When the satellite receiver locks on to a satellite, an interrupt is given to the computer which then reads the satellite data and stores it on disk. These interrupts occur every two minutes while the satellite passes over and after the completion of a pass a series of programs are executed to decode the information and to calculate the geographical position. A summary of this data is then stored on the satellite fix disk file SATF (see Table 2).

At intervals of the order of four hours the Track Adjustment Program is executed to update and adjust the dead reckoning to agree with the satellite fixes. Satellite fixes giving 'currents' of greater than 2 knots are ignored and adjusted values of position, course and speed made good and distance covered are written to the processed data file GEOF (see Table 3). At this stage the Data Reduction Program is also executed to reduce total magnetic field values to anomaly values by removal of the International Geomagnetic Reference Field (Mead 1970) and to correct the measured wind's velocity for the effect of the ship's velocity. These reduced values are also written to GEOF.

Depths are entered manually into the system through the P.D.R. Console as day number, time and depth in uncorrected fathoms. This data is written by the PDR Console Program to the depth data disk file DPC1 (see Table 4) and at regular intervals (usually at the time of running of the Track Adjustment Program) the Matthews Correction Program is executed to convert the depths to corrected metres. Computer approximated curves are used in the application of the correction (Howarth (1970)) and information about the time

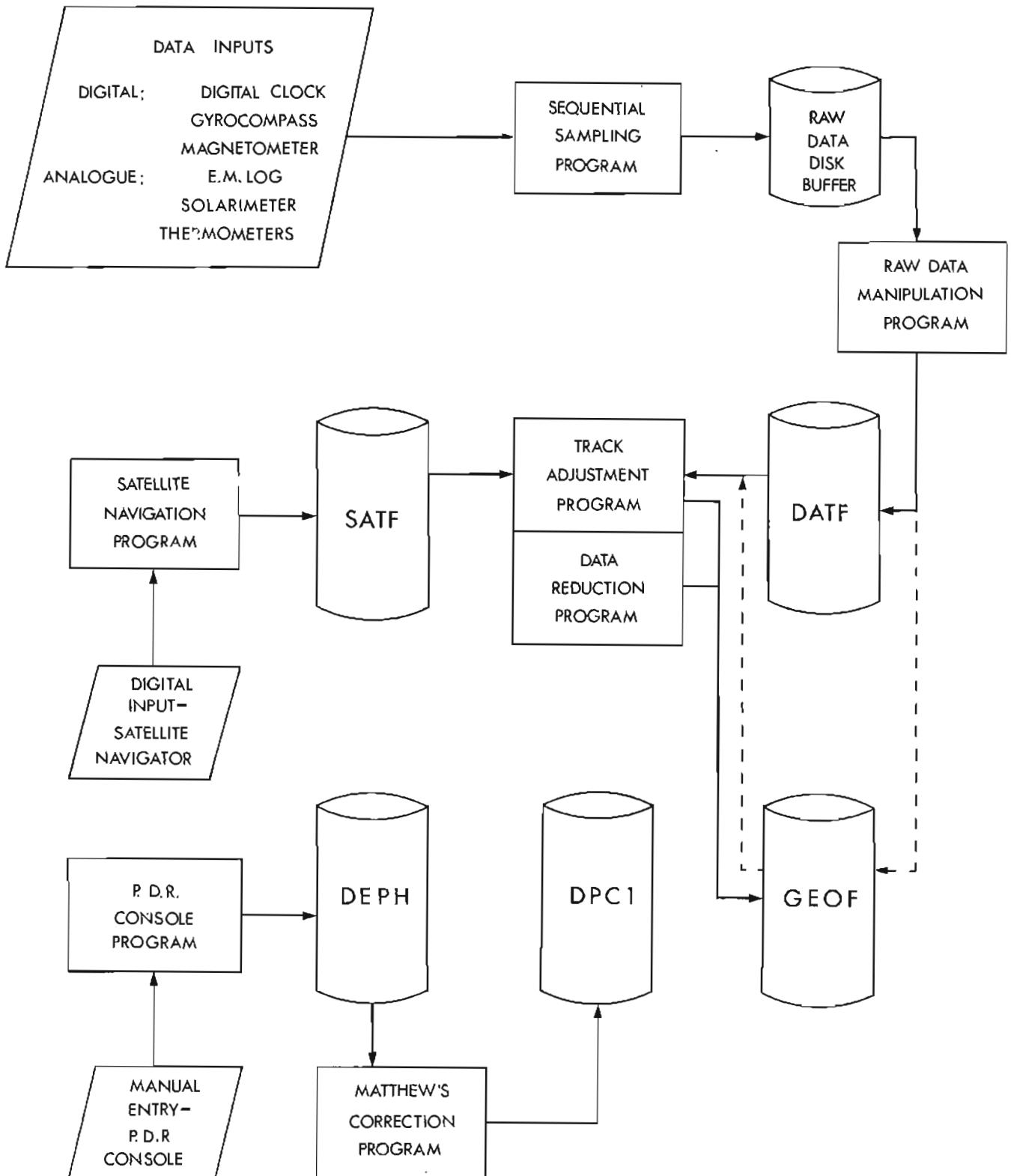


FIG (1) SHIPBOARD AQUISITION, REDUCTION & STORAGE OF DATA

of changing from one Matthews Area to another is usually inputted through the computer console.

General purpose plotting programs are available to display data stored on the disk files. It is possible to plot profiles of the observed variables against either time or distance, and also to plot Mercator track charts with, if required, plotted numerical values of an observed variable. During Cruise 47, a complete series of 1:1,000,000 track charts and profiles of geophysical and meteorological variables were produced. These were used both for on-the-spot interpretations and for identifying errors in the stored data.

CONTENTS OF SHIPBOARD DATA FILES

TABLE (1) - DATF - Raw Data File

15 words/record; nominal data frequency = 2 mins.

Word	Field	Unit
1	Day No. (G.M.T.)	-
2	Time (G.M.T.)	0.1 mins
3	Ship's speed (North) through the water	0.01 knots
4	Ship's speed (East) through the water	0.01 knots
5	Relative wind speed (North)	0.01 knots
6	Relative wind speed (East)	0.01 knots
7	Solarimeter reading	
8	Starboard dry temperature	
9	Starboard dry-wet temperature	Scanned Digit Values
10	Port dry temperature	
11	Port dry-wet temperature	
12	Total magnetic field in gammas	gammas (-32000)
13	Ship's heading	0.1 degrees
14	Relative humidity	0.01%
15	Sea surface temperature	Digit value

TABLE (2) - SATF - Satellite Fix File

10 words/record; nominal data frequency = 2 hours (approx.)

Word	Field	Unit
1	Day No. (G.M.T.)	-
2	Lock on time (G.M.T.)	0.1 mins
3	Latitude - degrees	degrees
4	Latitude - minutes	0.01 mins
5	Longitude - degrees	degrees
6	Longitude - minutes	0.01 mins
7	Ship's velocity North	0.01 knots
8	Ship's velocity East	0.01 knots
9	Antenna Height (metres)*100+elevation (degrees)	
10	No. of messages received and frequencies used	

TABLE (3) - GEOF - Processed Data File

16 words/record; nominal data frequency = 2 mins.

Word	Field	Unit
1	Day No. (G.M.T.)	-
2	Time (G.M.T.)	0.1 mins
3	Latitude - degrees	degrees
4	Latitude - minutes	0.01 mins
5	Longitude - degrees	degrees
6	Longitude - minutes	0.01 mins
7	Course made good overground	0.1 degrees
8	Speed made good overground	0.01 knots
9	Distance run from start of leg (0.01 n. mile/0-9999)	0.01 n. miles
10	Distance run from start of leg (100's of n. miles)	100 n. miles
11	Blank	-
12	Corrected wind speed	0.01 knots
13	Corrected wind direction	0.1 degrees
14	Blank	-
15	Magnetic anomaly	gammas
16	Flag to indicate that Track Adjustment Program has been executed	

TABLE (4) - DPC1 - Depth Data File

9 words/record; nominal data frequency = 5 mins. (approx.)

Word	Field	Unit
1	Day No. (G.M.T.)	-
2	Time (G.M.T.)	0.1 mins
3	Latitude	degrees
4	Latitude	0.01 mins
5	Longitude	degrees
6	Longitude	0.01 mins
7	Uncorrected depths	fms
8	Corrected depths	fms
9	Corrected depths	metres

EDITING OF DATA FILES

The Cruise 47 data stored on the disk files was edited on the ship and completed before leaving the ship. Data collected the previous day was checked daily. Computer tracks plus satellite fixes were plotted at 1 in 1,000,000 and compared directly with a manually updated track. This track was controlled by Loran 'C' and satellite, also bathymetric crossovers. Satellite fixes were rejected or reaccepted manually and the navigation updating programs rerun to correct the ship's track. Depths entered into the data files were listed and compared with the P.D.R. Mufax recorder and any errors detected were then corrected on the data file. Total magnetic field values stored on the computer were displayed in profile form and compared with the analogue chart recorder. Errors were thus detected and corrected.

Errors in bathymetry were caused mainly by human error, whereas magnetics, gyro, etc. seemed related to radio transmissions from the ship.

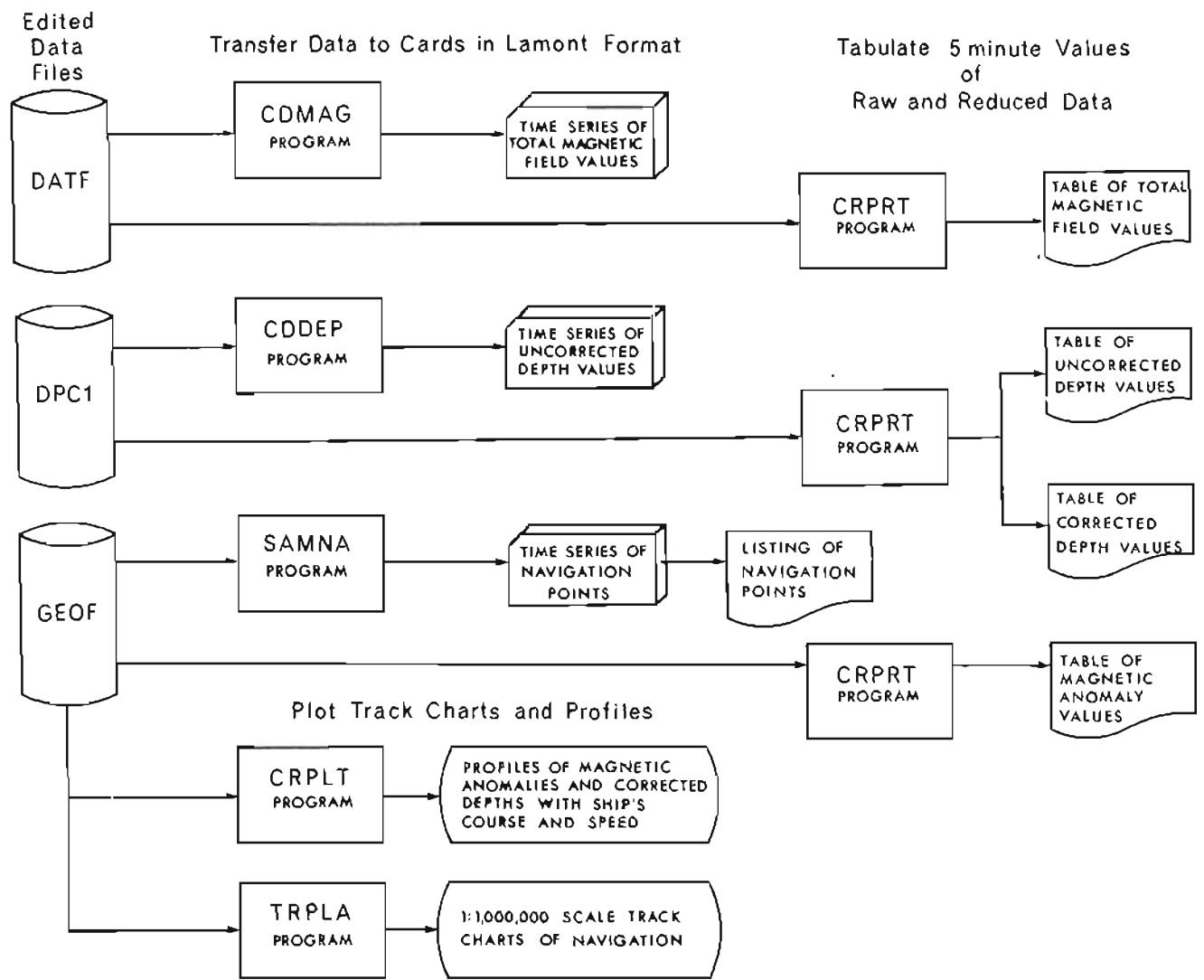


FIG.(2) LABORATORY STORAGE AND DOCUMENTATION OF DATA

DATA TRANSFER TO LAMONT FORMAT CARDS

Once edited the magnetic, bathymetric and navigational data stored on disk are sampled and output onto card in the standard Lamont format (Talwani, 1969). As much of the data handled at N.I.O. is in Lamont format, the laboratory series of programs for reducing and compiling magnetic data in particular is based around this standard card input. The format has a certain degree of national and international acceptance and as such is useful for data exchange purposes. The data is stored on cards as a time series of raw data points which are allowed to be at unequal time intervals and separate decks are prepared for bathymetry, magnetics and navigation data. Each deck consists basically of a series of day cards each followed by a series of data cards.

(a) Magnetics

Magnetic data is read off the DATP files as total magnetic field using the CDMAG program which outputs a Lamont card deck of the form:-

Day Card: IDAY,IMON,IYR,TZ,LB,LC,JCT in the format (I2,I3,I5,F5.0,I3,I2,I5)

where IDAY,IMON,IYR = Date as day, month, year

TZ = Time Zone in hours (set as 0.0)

LB = No. of magnetic data cards following this day card

LC = No. of readings on last magnetic data card following this day card

JCT = First two digits of the total field reading in gammas

Followed by a series of Magnetic Data Cards each in the form

(JHR(I),JMIN(I),JG(I), = 1,9) in the format 9(I2,I2,I3,1X)

where JHR,JMIN = Time in hours and minutes

JG = Last three digits of total field reading in gammas

New Day Cards are punched when either the date changes or the first two digits of total field change. CDMAG outputs one data point for each 2 minute total magnetic field reading present on the DATF files and ignores blank fields.

(b) Bathymetry

Bathymetry data is read off the DPC1 files as uncorrected depth in fathoms (at 800 fms/sec) using the CDDBP program which outputs a Lamont card deck of the form:-

Day Card: IDAY, IMON, IYR, TZ, LB, LC, NMZ in the format (I2, I3, I5, F6.1, 2X,  
I3, I2, I5)

where IDAY, IMON, IYR = Date as day, month, year

TZ = Time Zone in hours (set as 0.0)

LB = No. of bathymetric data cards following  
this day card

LC = No. of readings on last bathymetric  
data card following this day card

NMZ = Matthews Area Number relevant to this  
day card

Followed by a series of Bathymetric Data Cards each in the form:-

(JHR(I), JMIN(I), JG(I), I = 1, 8) in the format 8(I2, I2, I5, 1X)

where JHR, JMIN = Time in hours and minutes

JG = Depth in uncorrected fathoms

New Day Cards are punched when either the date or Matthews Area changes.

CDDEP outputs one data point for each depth value stored on the DPC1 files.  
Information about changes in Matthews Area is input to CDDEP from a manually  
prepared card deck.

### (c) Navigation

Navigation data is sampled off the GEOF files using the SAMNA program  
which outputs a Lamont card deck of the form:-

Day Card: IDAY, IMON, IYR, TZ, LB in the format (I2, I3, I5, P5.0, 1X, I4)

where IDAY, IMON, IYR = Date as day, month, year

TZ = Time Zone in hours (set as 0.0)

LB = No. of navigation data cards following  
this day card

Followed by a series of Navigation Data Cards each in the form:-

JHR, JMIN, LAT, AT, LONG, ONG in the format (I2, I2, I4, F5.2, I5, F5.2)

where JHR, JMIN = Time in hours and minutes

LAT, AT = Latitude in degrees and minutes (to 0.01 min)

LONG, ONG = Longitude in degrees and minutes (to 0.01 min)

New Day Cards are punched when the date changes. Navigation points are  
not punched for each 2 minute geographic position in the GEOF file. Instead  
SAMNA samples the file and only selects a sufficient number of these 2 minute  
values so as to define the track covered to within 0.5 n. miles assuming a  
linear interpolation between each selected point. The basic operation of the  
program is as follows:- the first 2 minute geographic position in the GEOF  
file is taken as the first navigation point and the file is read until a  
2 minute value is encountered eight or more minutes later. This is then taken

as the first temporary navigation point and the file is read until a 2 minute geographic position is obtained that either (a) departs by more than 0.5 n. miles from the position estimated by extrapolation from the preceding navigation point and the temporary navigation point or (b) is more than 30 n. miles from the preceding navigation point. The 2 minute position immediately preceding this is selected as a new navigation point. A new temporary navigation point is then chosen eight or more minutes later and a similar procedure is adopted for selecting the next navigation point. The whole GEOF file is sampled in this manner and the data for each navigation point is punched out on card.

#### 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 collected bathymetric and magnetic data of Cruise 47. Because of the large volume of data involved it is not considered practical to include listings of the original disk data files. The data is presented instead at three levels of processing - summarised listings of raw data, summarised listings of reduced data, and profiles of the reduced data. The computing aspects of the data presentation are summarised in Fig. (2). It is hoped that when used with either the 1:1,000,000 track charts or the listing of the navigation points produced by the SAMNA program, the data listings should satisfy the needs of those wishing either to incorporate the data into compilation charts or to perform further computer orientated calculations on the data. The 1:2,000,000 profiles are intended for those wishing to make a more direct scientific interpretation of the data and to this end the profiles are supplemented with a track chart at the same scale and overlain on a bathymetric chart. Reduced copies of the original P.D.R. records are also included in the report for those wishing to study the bathymetry in more detail than is given by either the profiles or the listings.

#### Profile Location Sheet

The ship's track for Cruise 47 has been manually prepared on a bathymetric chart of 1 in 2,000,000 at 57°N. Except for the 100 fathom contour, the contour interval chosen was 500 fathoms so as to illustrate the prominent features of the sea floor relief and to provide 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 sheet and each is identified on the track by a circled figure representing the start of the profile. Changes in day number are also shown on the tracks by a mark at 0000 hrs on the new day which is annotated with the new day number. Details of the stations are shown on a 1:1,000,000 insert on the profile location sheet. Section A contains profiles together with reduced copies of the original P.D.R. records. Magnetic anomaly, corrected depth and course and speed made good were plotted from the edited GEOF file using the CRPLT program. The parameters are each plotted against distance run along track in nautical miles from the start of a leg - the distance being scaled to a Mercator

Chart projection at 1:2,000,000 at 57°N for tracks north of 48°N so that the profiles can be directly overlain on the profile location sheet. The distance run axis is marked every 100 n. miles and annotated every 500 n. miles. A time axis in G.M.T. is also included so that the profiles can be correlated with the P.D.R. records, and with the tabular listings of data in Sections C and D. Magnetic anomaly is plotted at a scale of 400 γ/inch with a nominal range of from -600 γ to 600 γ. However, this range is automatically adjusted by CRPLT for each profile so as to cope with the range of data values in the GEOF file. 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 2000 fms/inch with a nominal range of 0-4000 fms which is automatically reduced if more space is required for the magnetic profile. The vertical exaggeration of the bathymetric profile is 13.9:1 at 57°N. As depth is not continuously recorded at 2 minute intervals each depth reading is marked on the profile by a small tick and successive readings are joined by a straight line. Thus gaps in data appear as straight lines without tick marks.

Each profile is accompanied on its facing page by a reduced copy of the relevant section of the P.D.R. record. As the P.D.R. records against time and not distance, it is not practical to provide a one to one correspondence in horizontal axis scale between the profiles and the P.D.R. records. Correlations between the two have to be made by time and to this end the P.D.R. records are annotated with hour marks. The basic five minute interval marks produced by the P.D.R. can be discerned as vertical lines on the original record. The records have also been annotated with the recording depth phase of the P.D.R. and the 100 fathom lines within this phase are discernible on the original record as horizontal lines.

Section B contains a listing of the navigation points and computer generated navigation track charts. The navigation points were selected from the GEOF file using the SAMNA program and provide a linearly interpolatable track to within 0.5 n. miles of that contained in the GEOF file. The track charts were plotted from the two minute positions in the GEOF file using the TRPLA program and are scaled at 1:1,000,000 at 57°N. Each hour is marked on the track and annotated with time (in hours and minutes G.M.T.) and day no. The first position plotted on each chart is similarly annotated. So as to provide some indication of positional control, the positions of the accepted satellite fixes were automatically plotted on the track charts as small squares and each is annotated by time in hours and minutes.

Section C contains tabulated 5 minute value listings of the raw magnetic and bathymetric data. All data presented in Sections C and D has been produced using the program CRPRT on the appropriate data file. The program samples the file and tabulates values of the selected parameter itself, or a simple function of it, at 5 minute intervals. Where no parameter value is present on the five minute mark the file is searched for values either side of the mark up to but not including the two neighbouring five minute marks. An interpolated value is then produced for that five minute mark but if values are not available either side of that time the field is left blank. Once the five minute values have been selected the file is then searched for maximum and minimum values. If a maximum or minimum value is found that is 3 or more parameter units outside the range of two successive five minute values, it is overwritten onto the field of the nearest five minute mark and is followed by an asterisk and the time of the occurrence of the maximum or minimum (recorded only as minutes past the hour). Section C thus contains the total magnetic field values accessed from the DATP file and the uncorrected depth in fathoms as accessed from the DPC1 file.

Section D contains tabulated 5 minute value listings of the reduced magnetic and bathymetric data. Magnetic anomaly (total magnetic field minus the International Geomagnetic Reference Field) is tabulated from the GEOF file and the corrected depths in fathoms and metres from the DPC1 file.

REFERENCES

- Bark, C. and Drake, C.L. (editors), 'Structural evolution of the continental margins of the British Isles and Rockall Plateau' in *Continental Margins of the World*, Springer Verlag (in press).
- Ellett, D.J. and Roberts, D.G. (1973), 'The overflow of Norwegian Sea Deep Water across the Wyville-Thomson Ridge', *Deep-Sea Research*, 20(9), 819-835.
- Howarth, R.A. (1970), 'Computer Approximations for Matthews Areas', N.I.O. Internal Report No. N22.
- Mead, G.D. (1970), 'International Geomagnetic Reference Field in Dipole Co-ordinates', *J. Geophys. Res.*, 75, No. 22.
- Miller, J.A., Matthews, D.H. and Roberts, D.G. (1973), 'Rock of Grenville Age from Rockall Bank', *Nature Physical Science*, 246, (152), 61.
- Roberts, D.G., 'Marine Geology of the Rockall Plateau and Trough', *Phil. Trans. Roy. Soc. Lond. A* (in press).
- Roberts, D.G., Hogg, N.H., Bishop, D. and Flewelling, C., 'Moating around Seamounts in the Rockall Trough', *Deep-Sea Research* (in press).
- Roberts, D.G., Ardus, D.A. and Dearnley, R. (1973), 'Pre-Cambrian rocks drilled on the Rockall Bank', *Nature Physical Science*, 244, (132), 21-23.
- Talwani, M. (1969), 'A Computer System for the Reduction, Storage and Display of Underway Data acquired at sea', Lamont-Doherty Geological Observatory Technical Report No. 1.



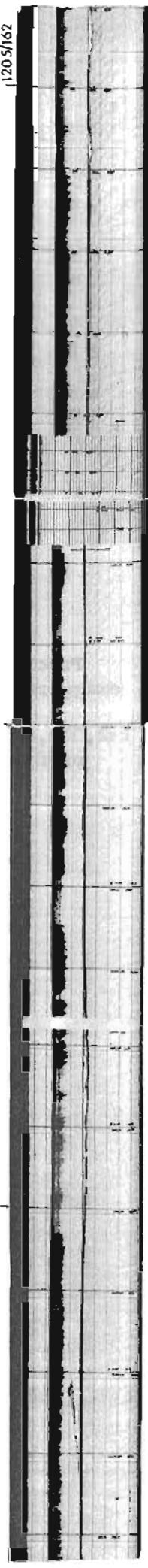
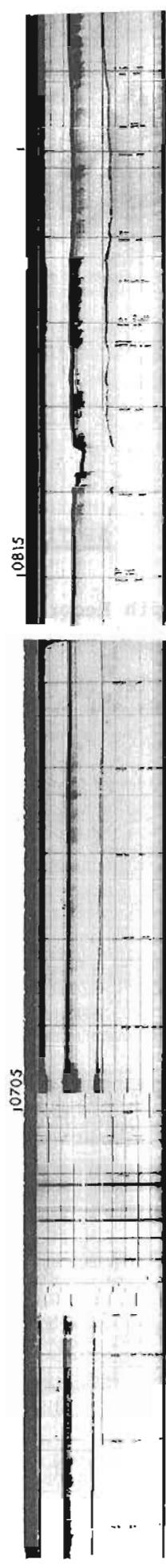
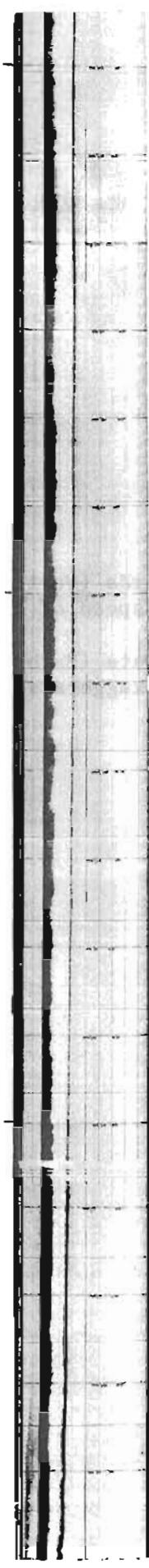
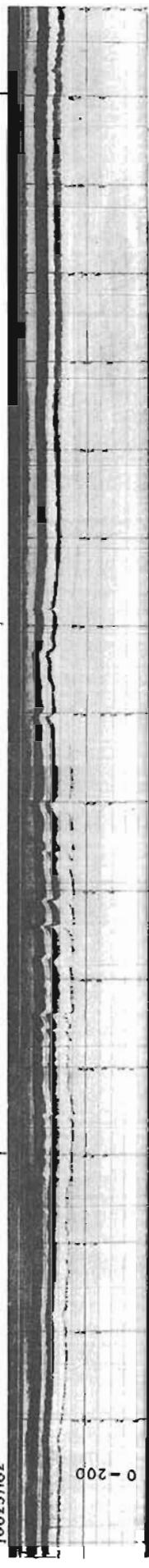
SECTION A

Precision Depth Recorder Records (Vertical  
exaggeration 5.18:1 at a ship's speed of 10 kts)

1:2,000,000 Profiles of Reduced Data (Bathymetric  
profiles at 13.9:1 vertical exaggeration)

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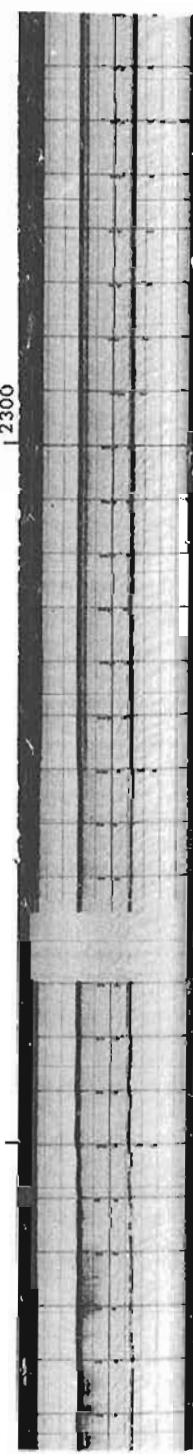
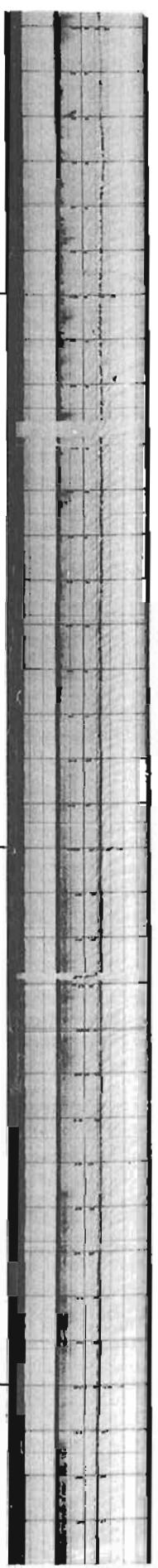
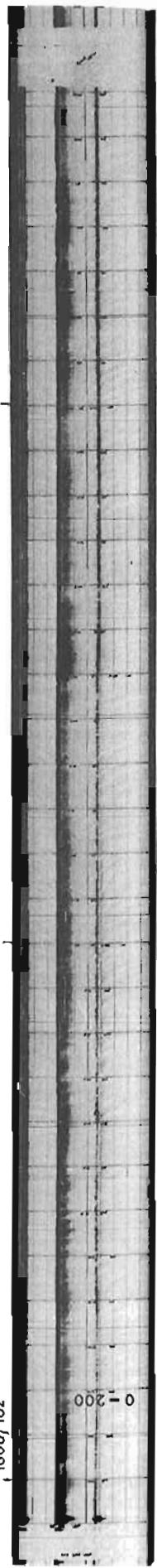
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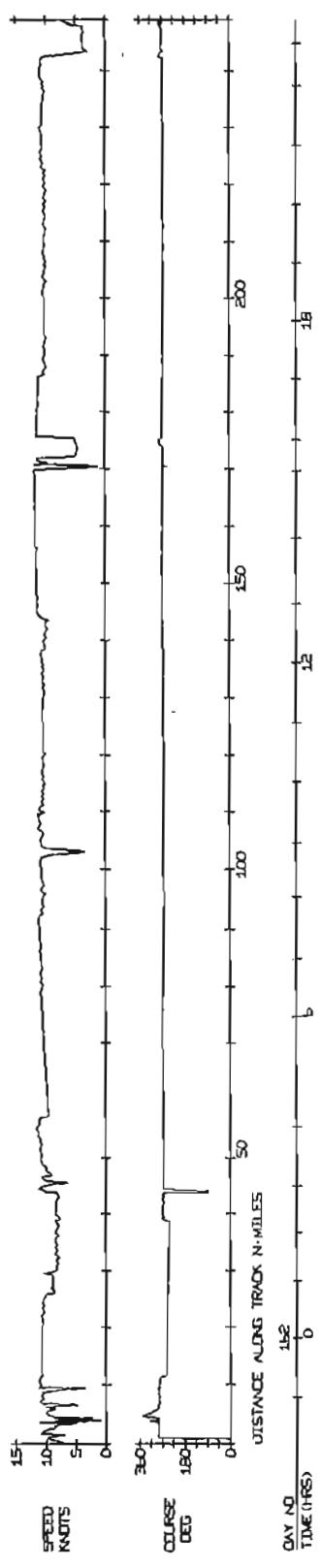
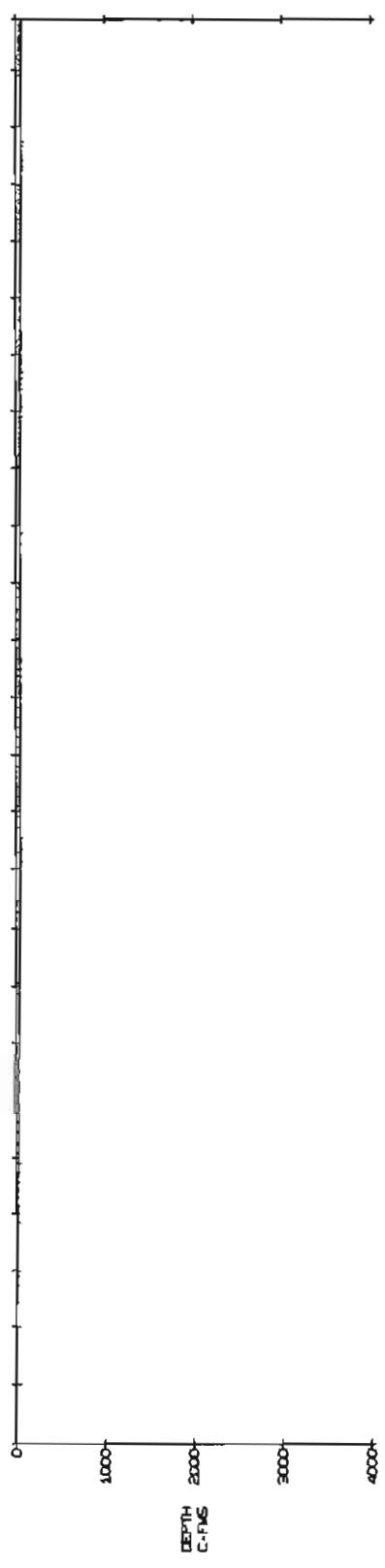
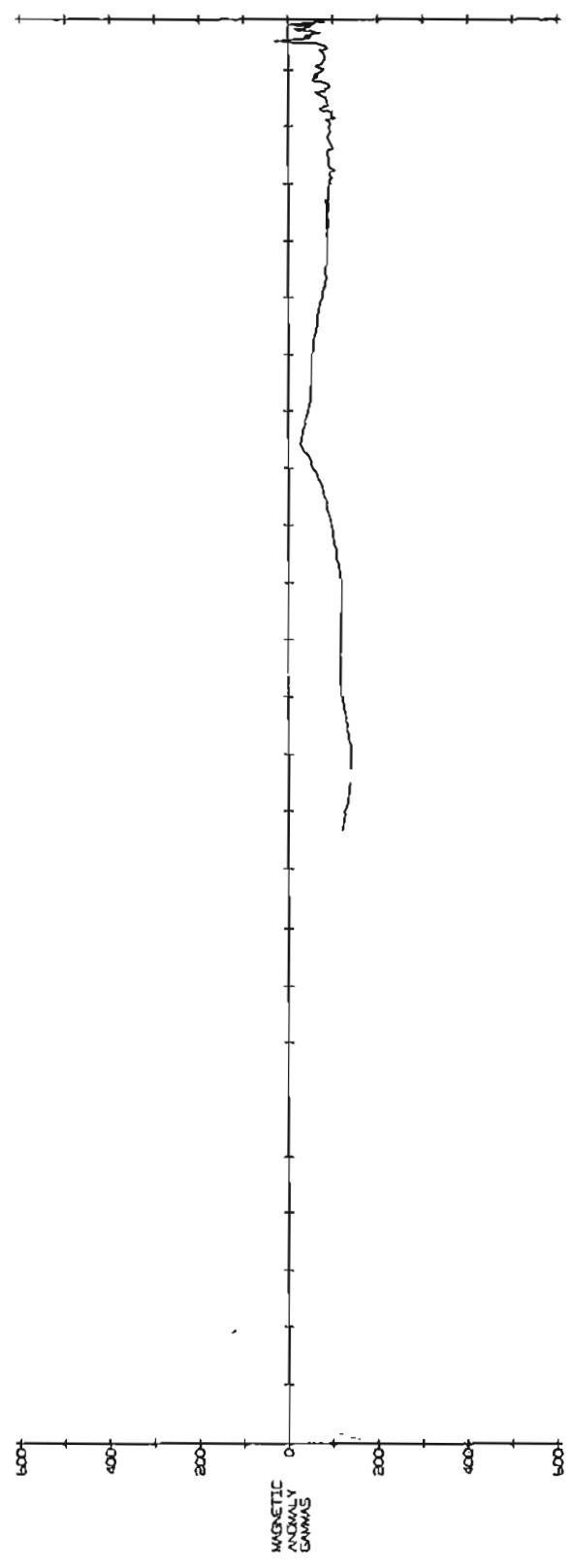
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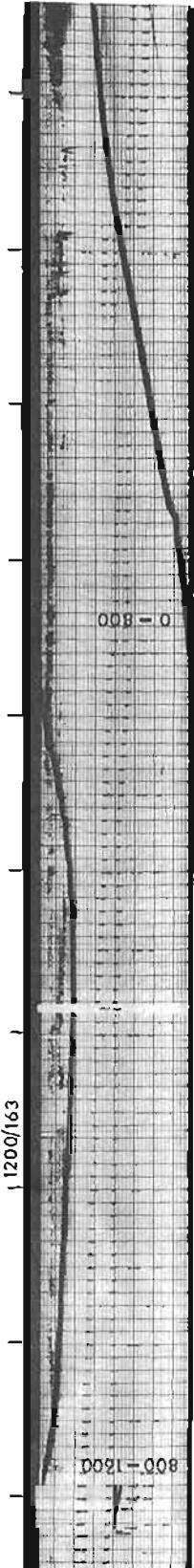
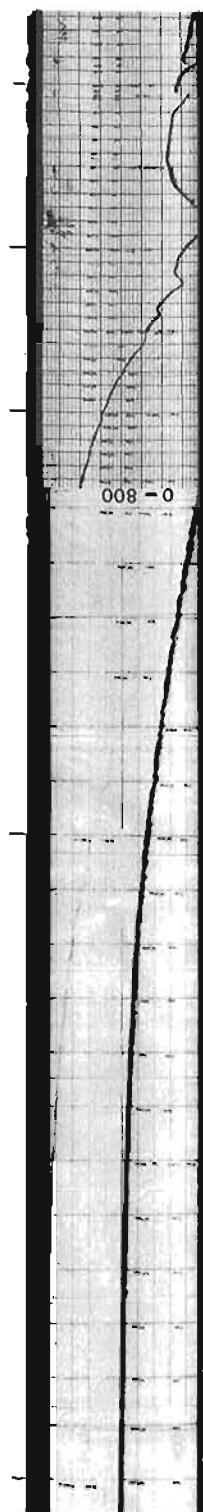
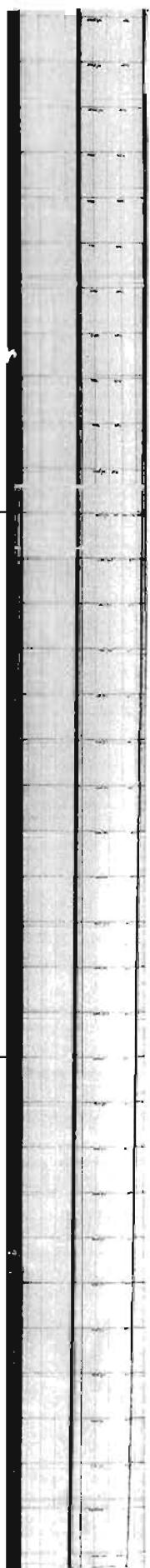
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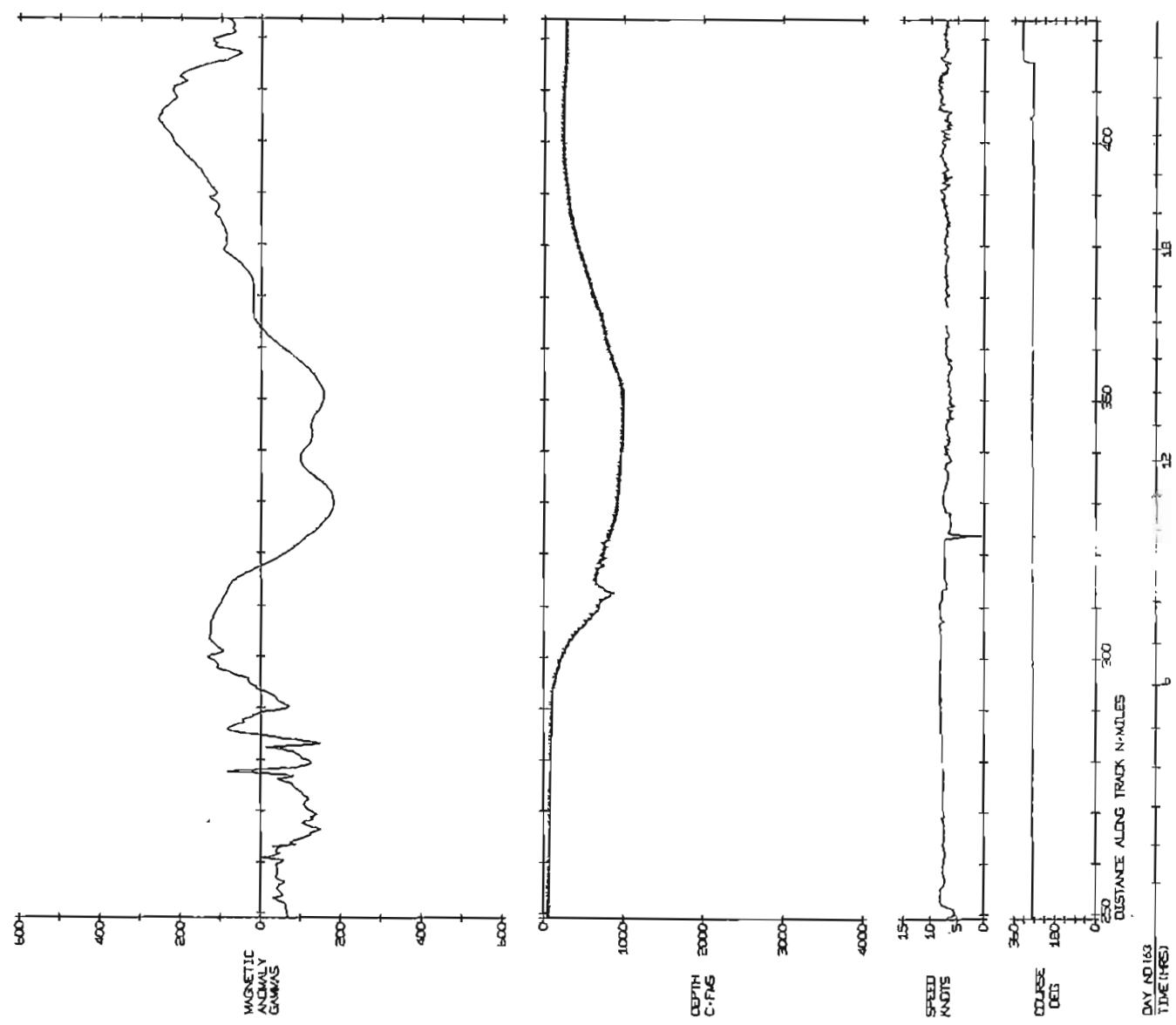
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800-1600

1200-1600

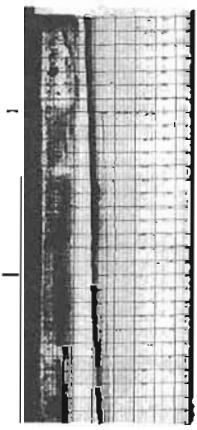
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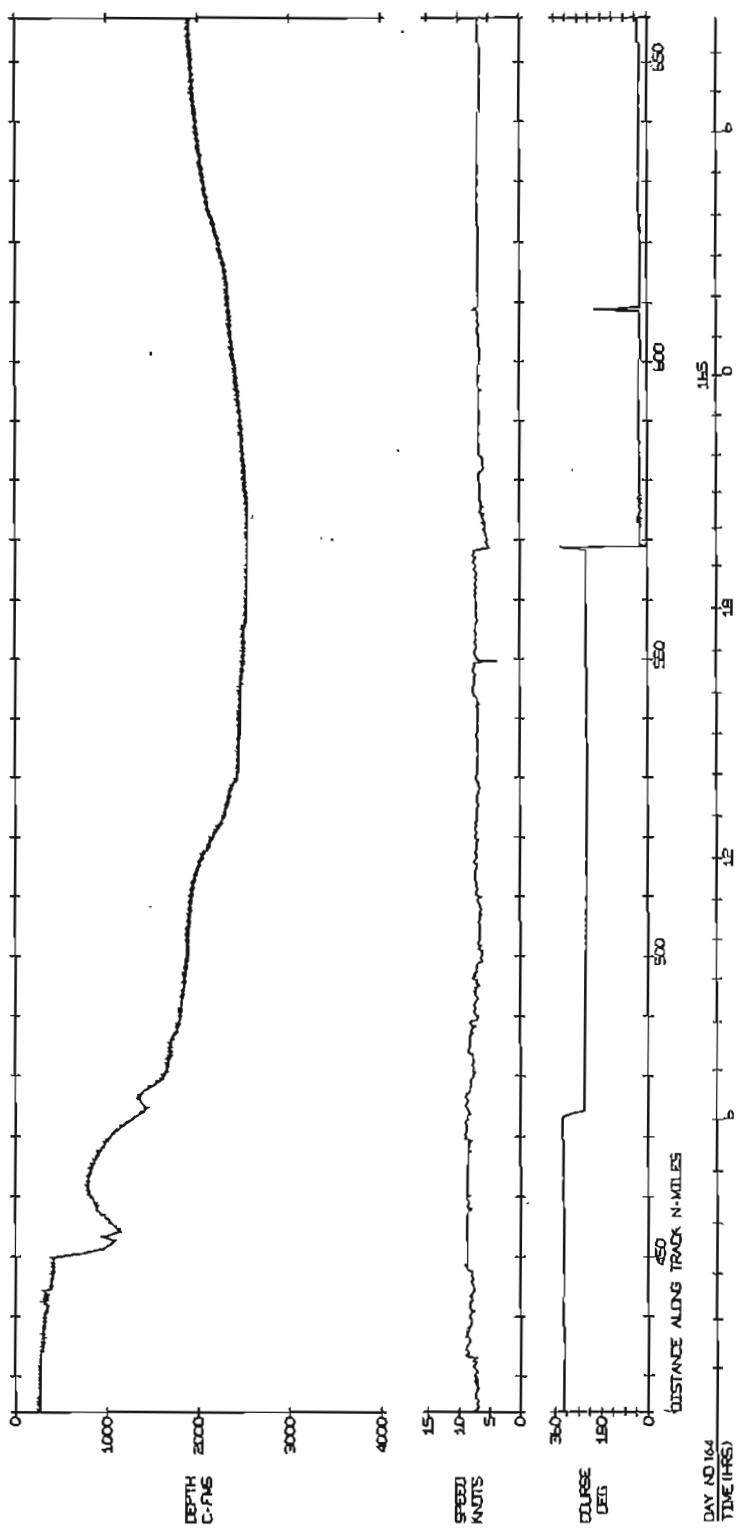
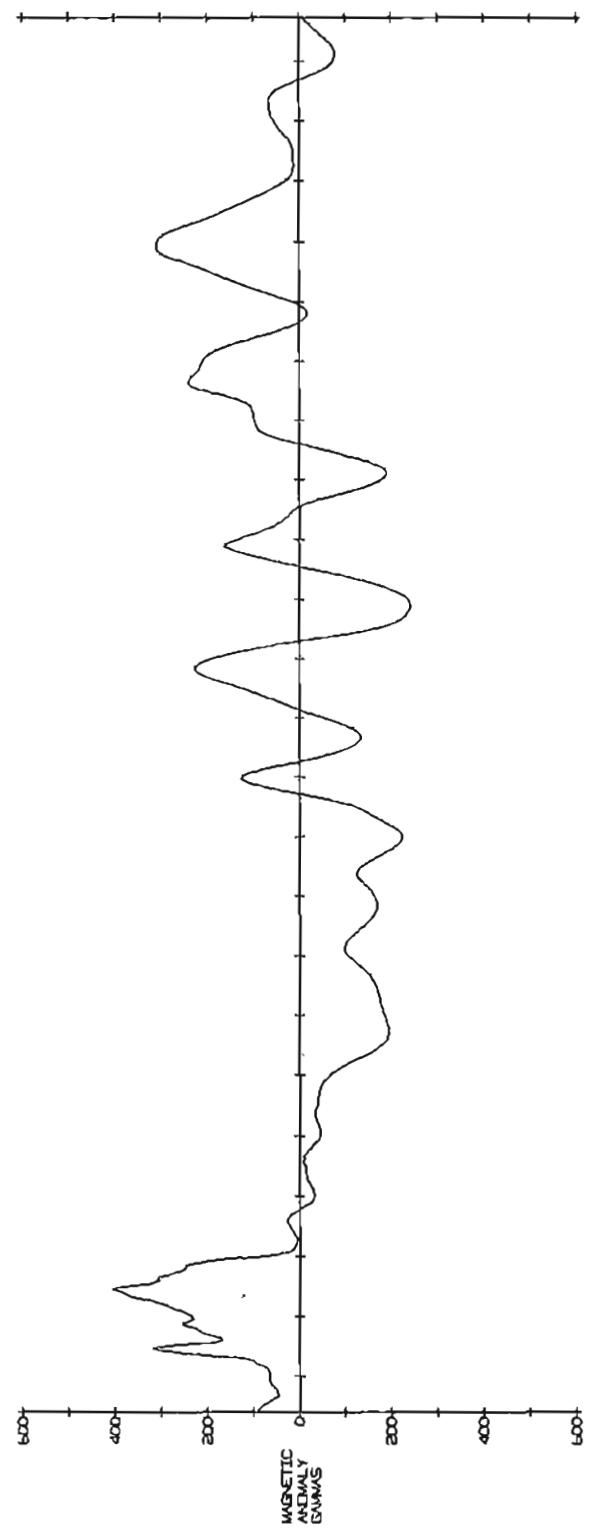
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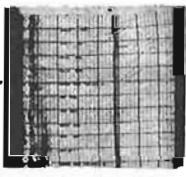
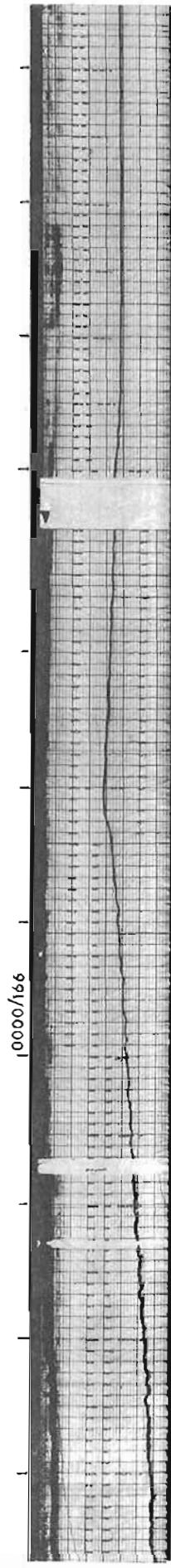
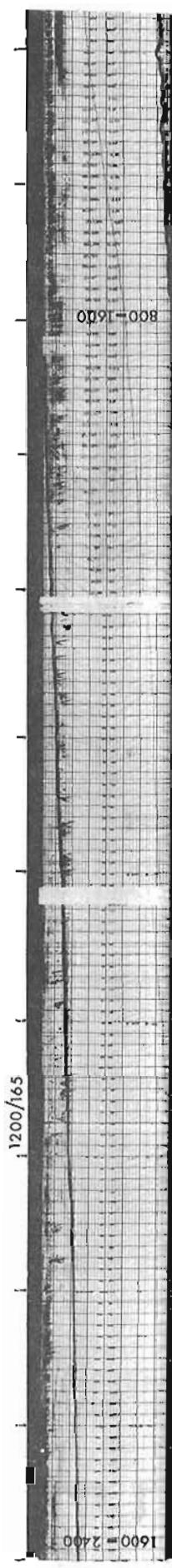
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1200-1600

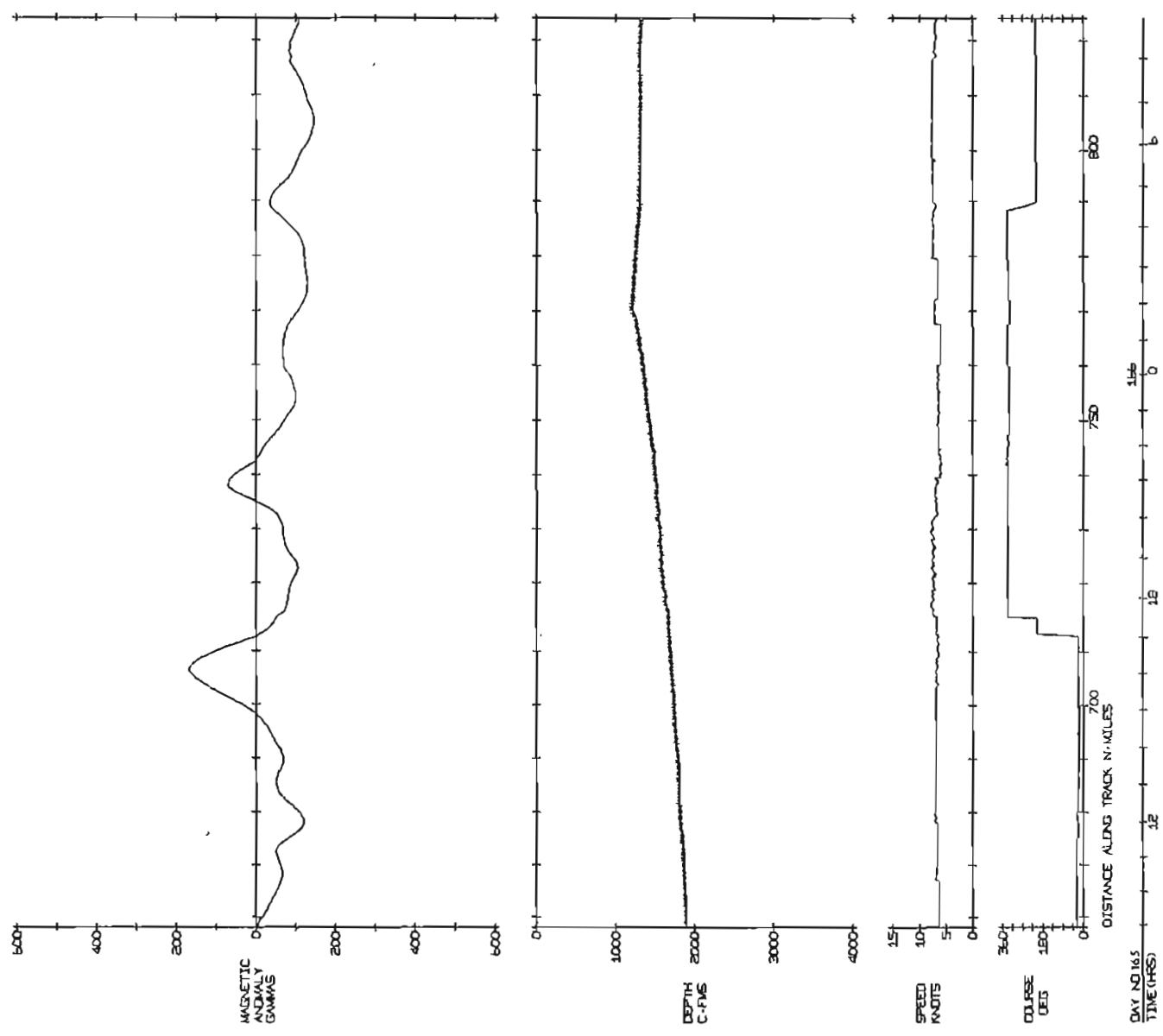


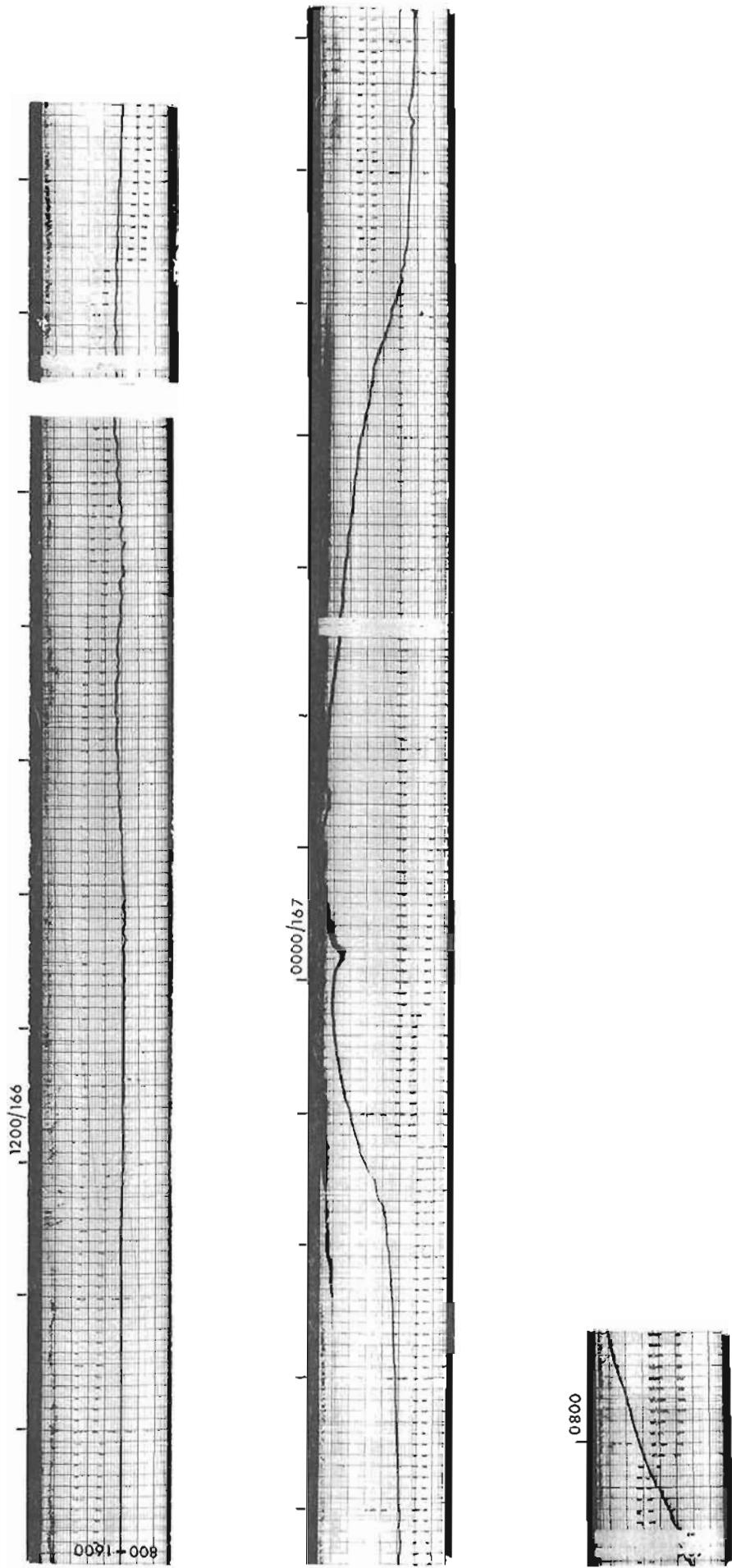
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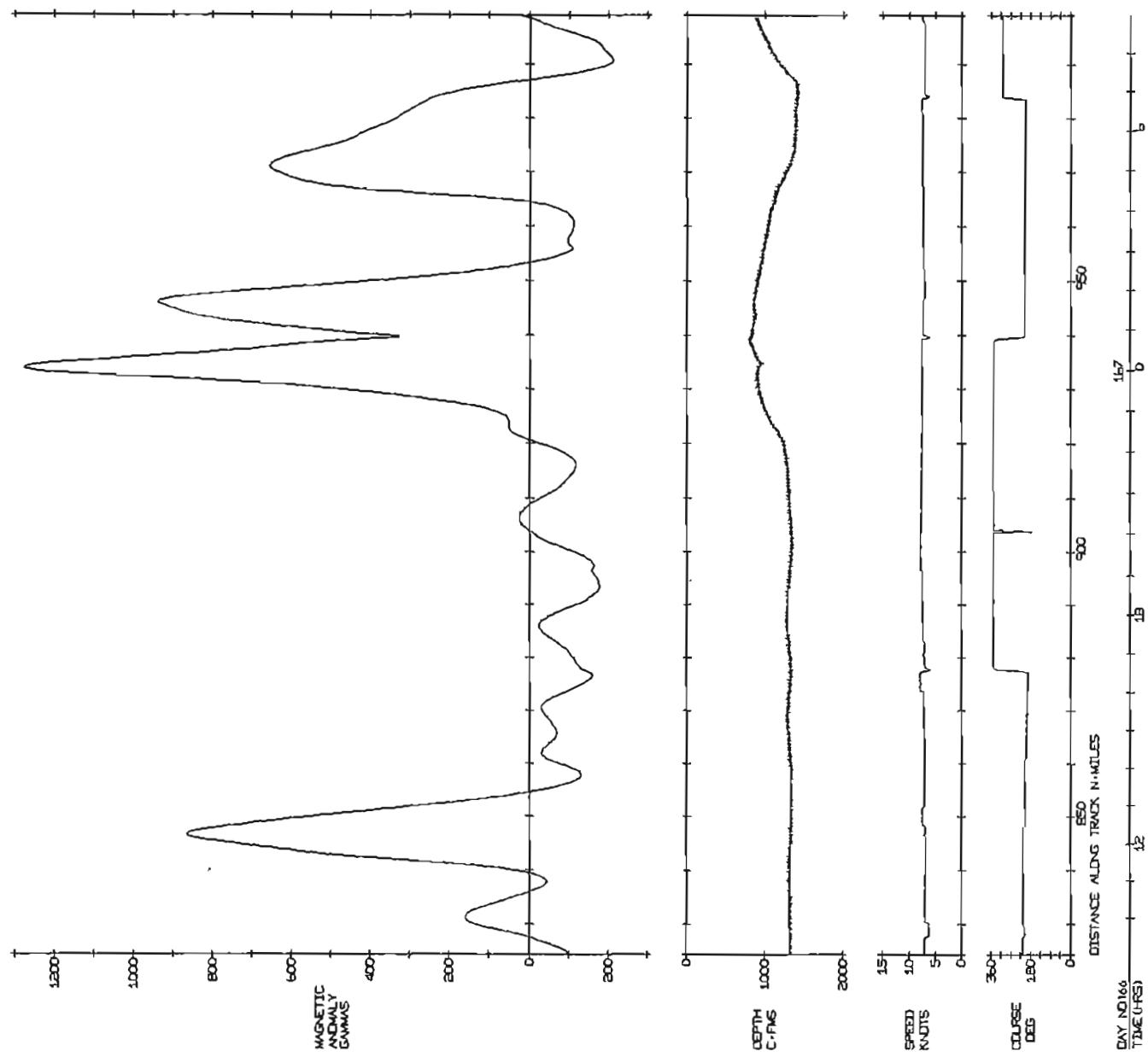


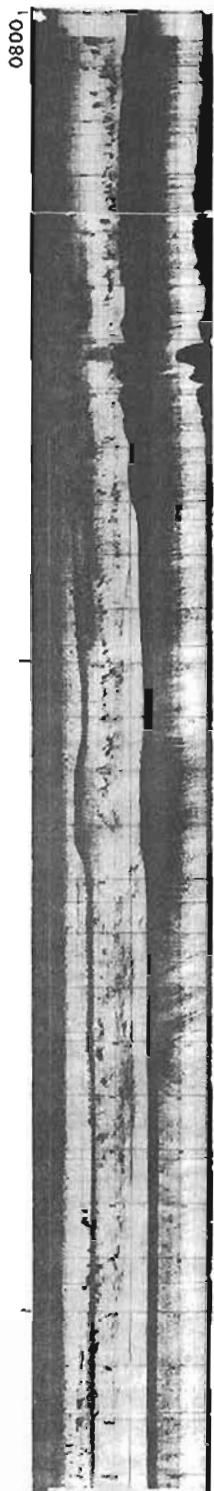
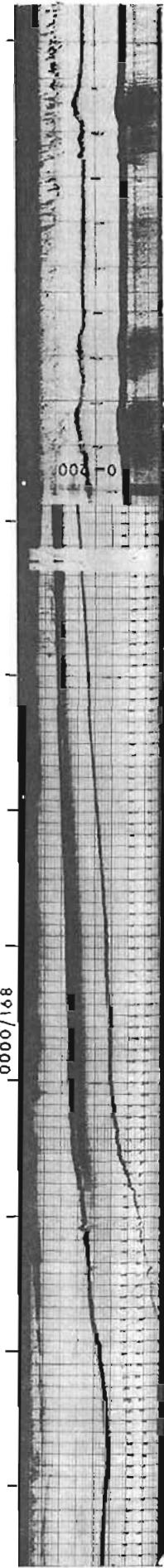
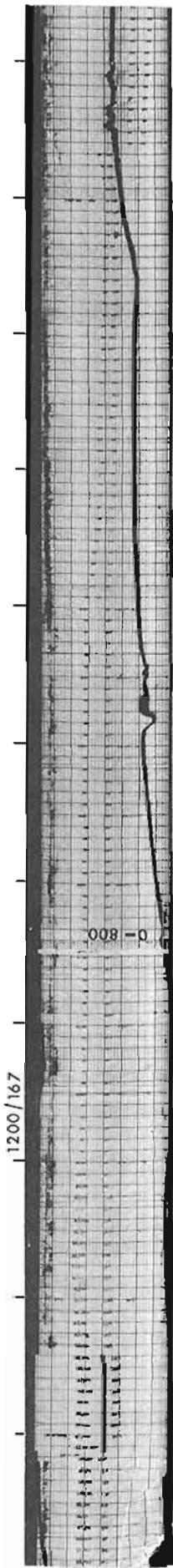
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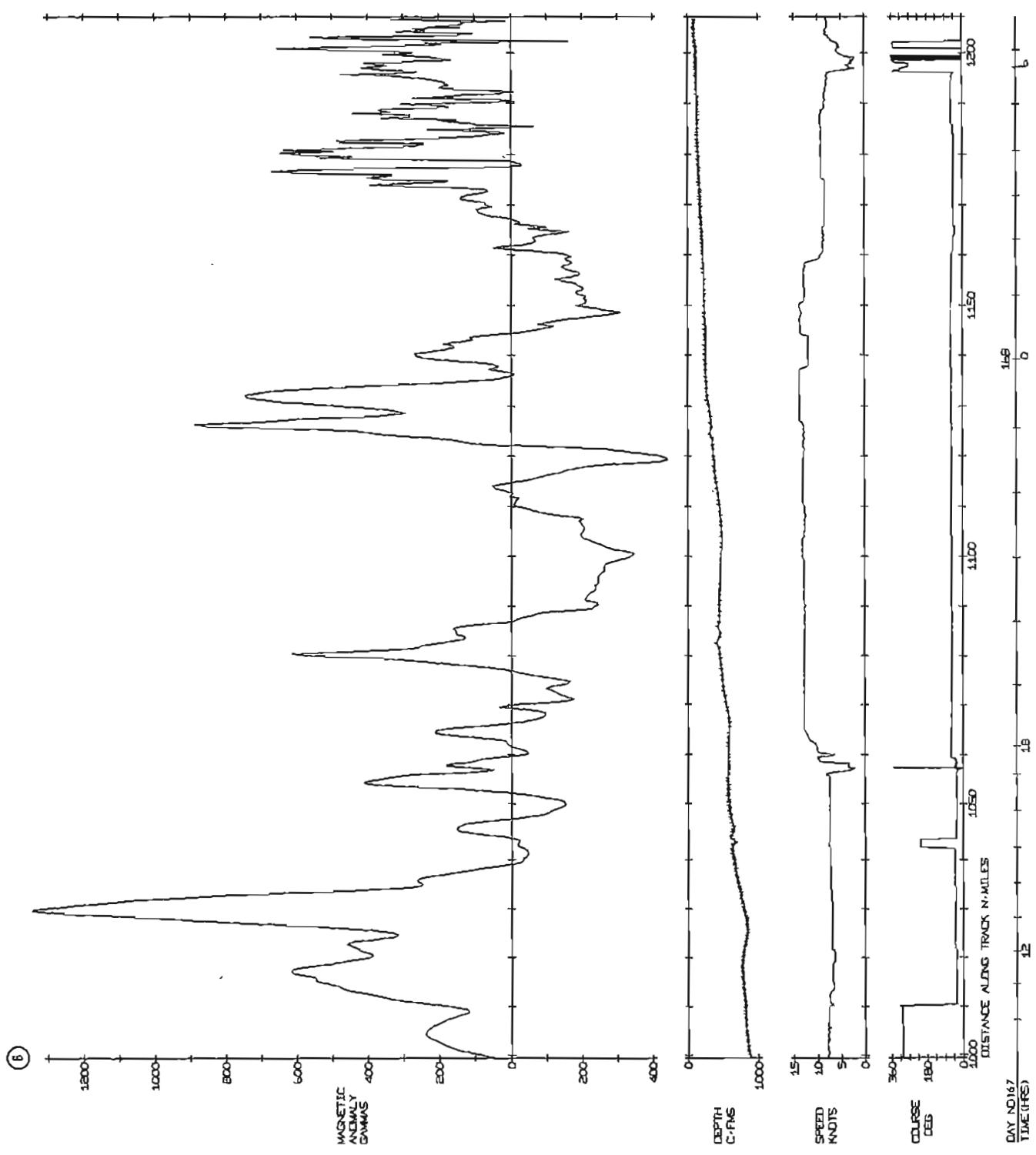


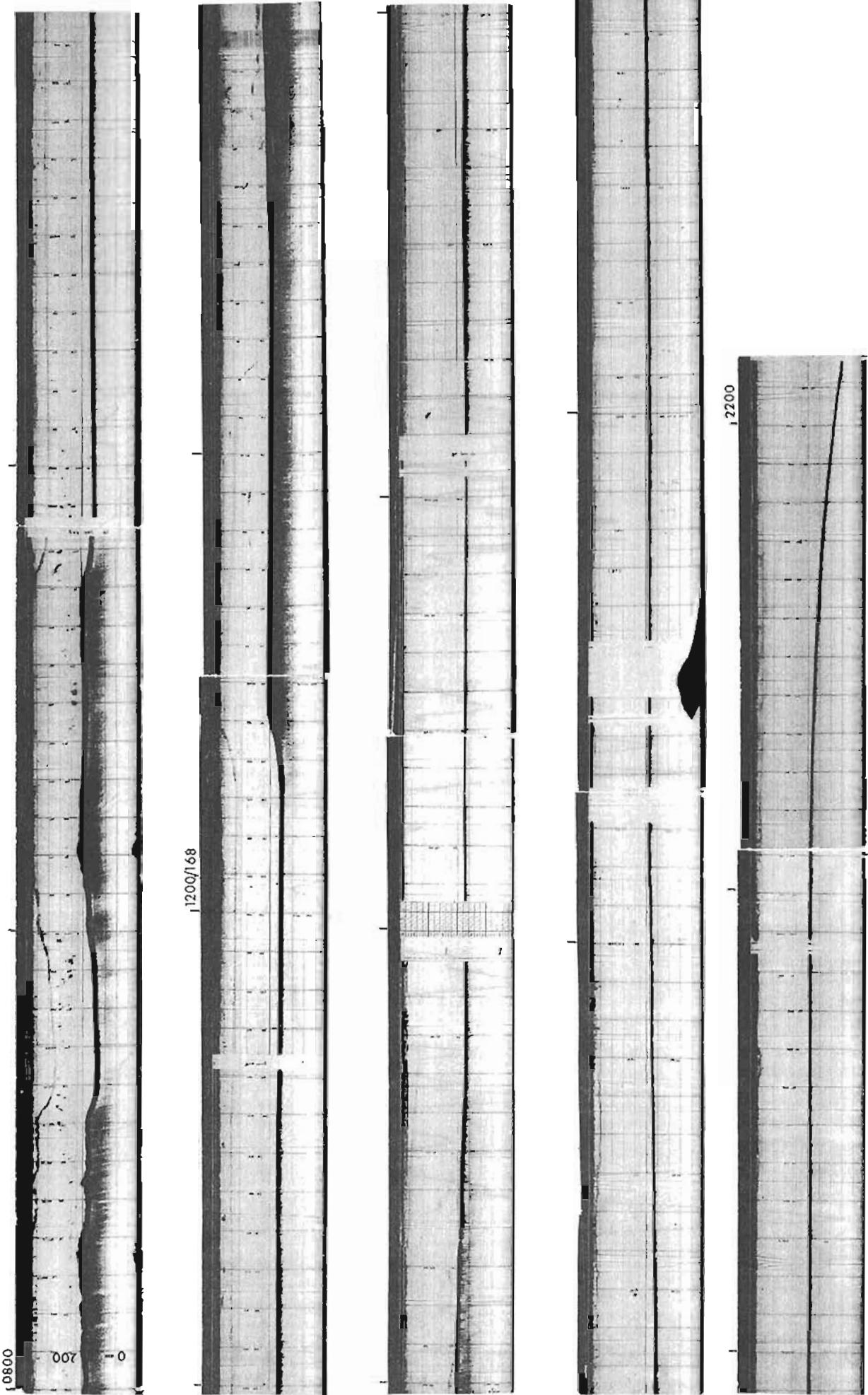


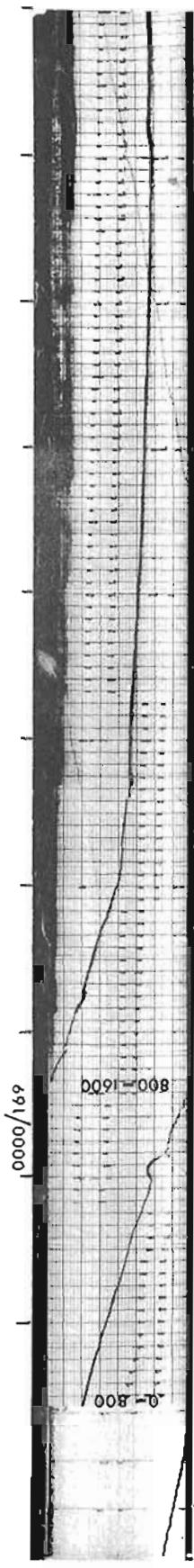
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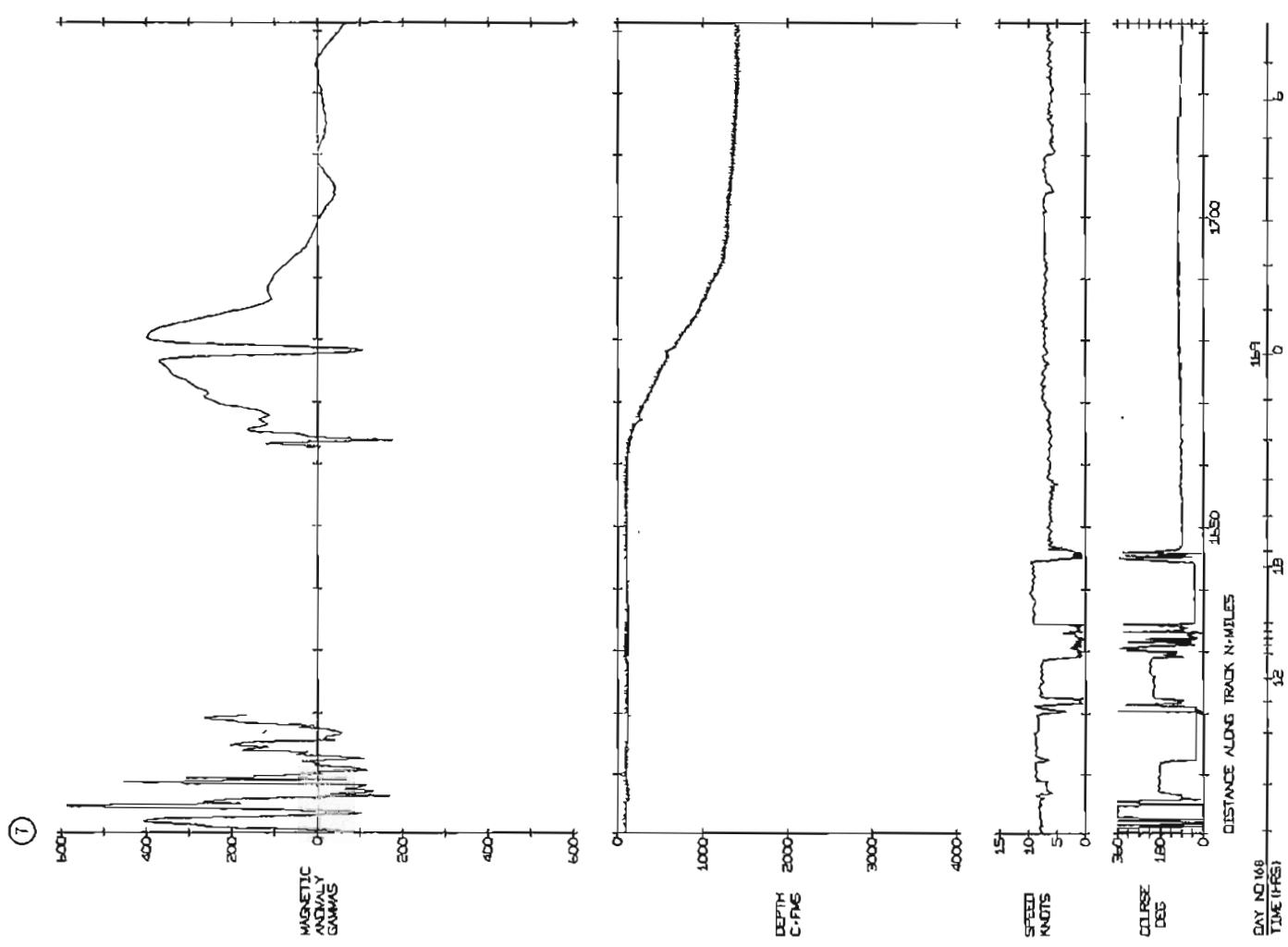


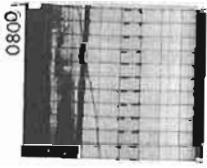
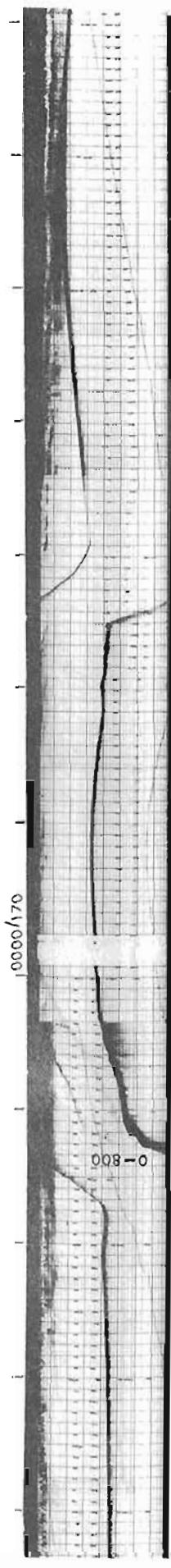
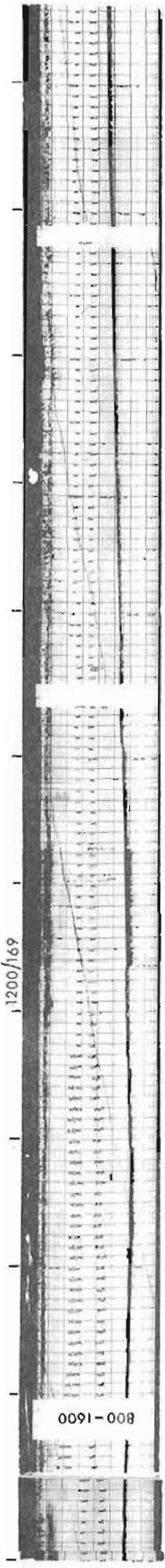




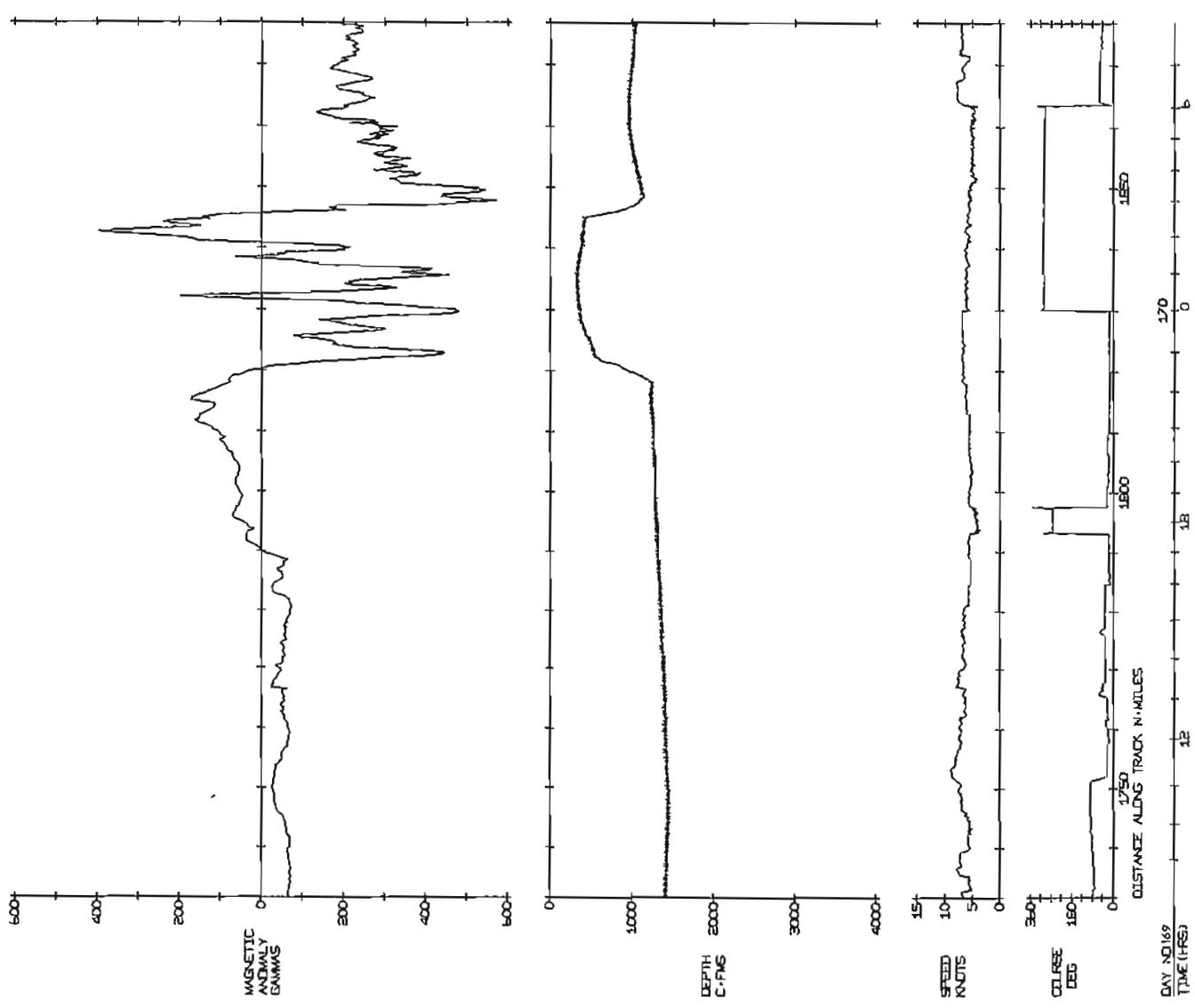


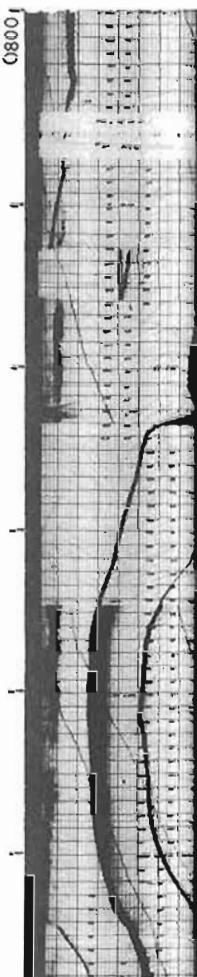
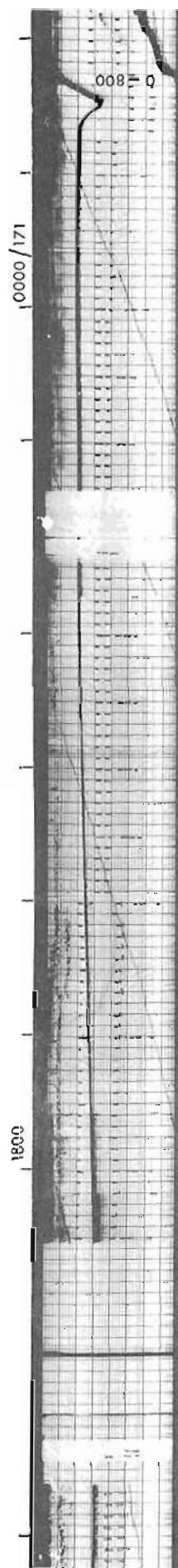
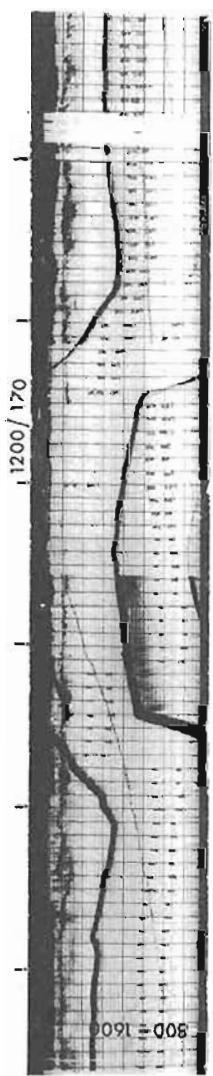




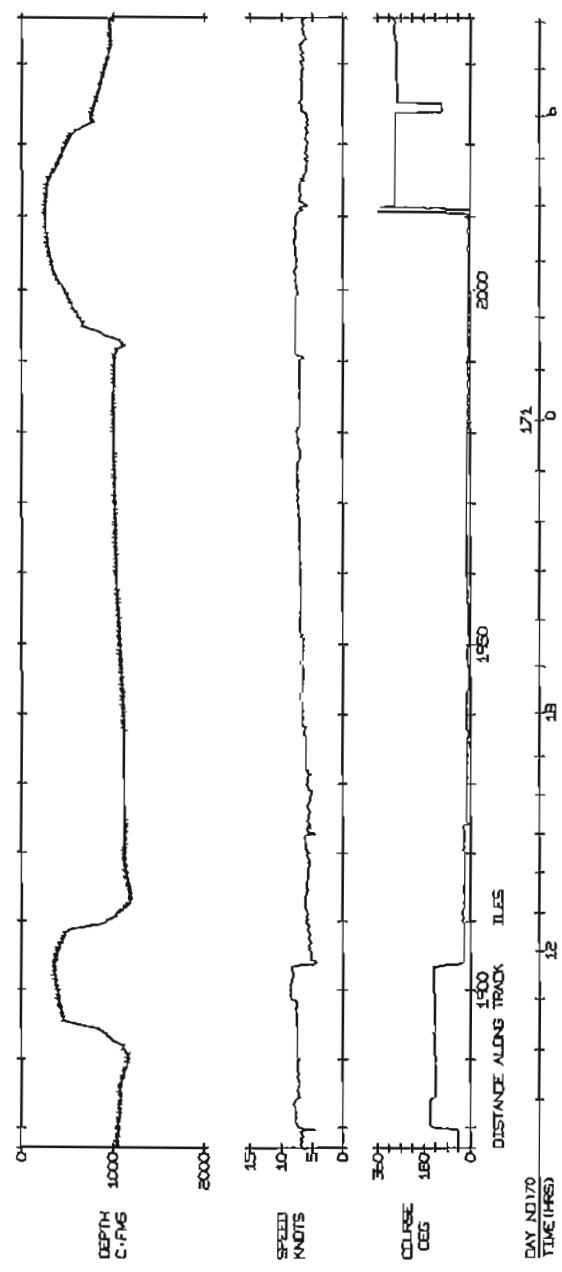
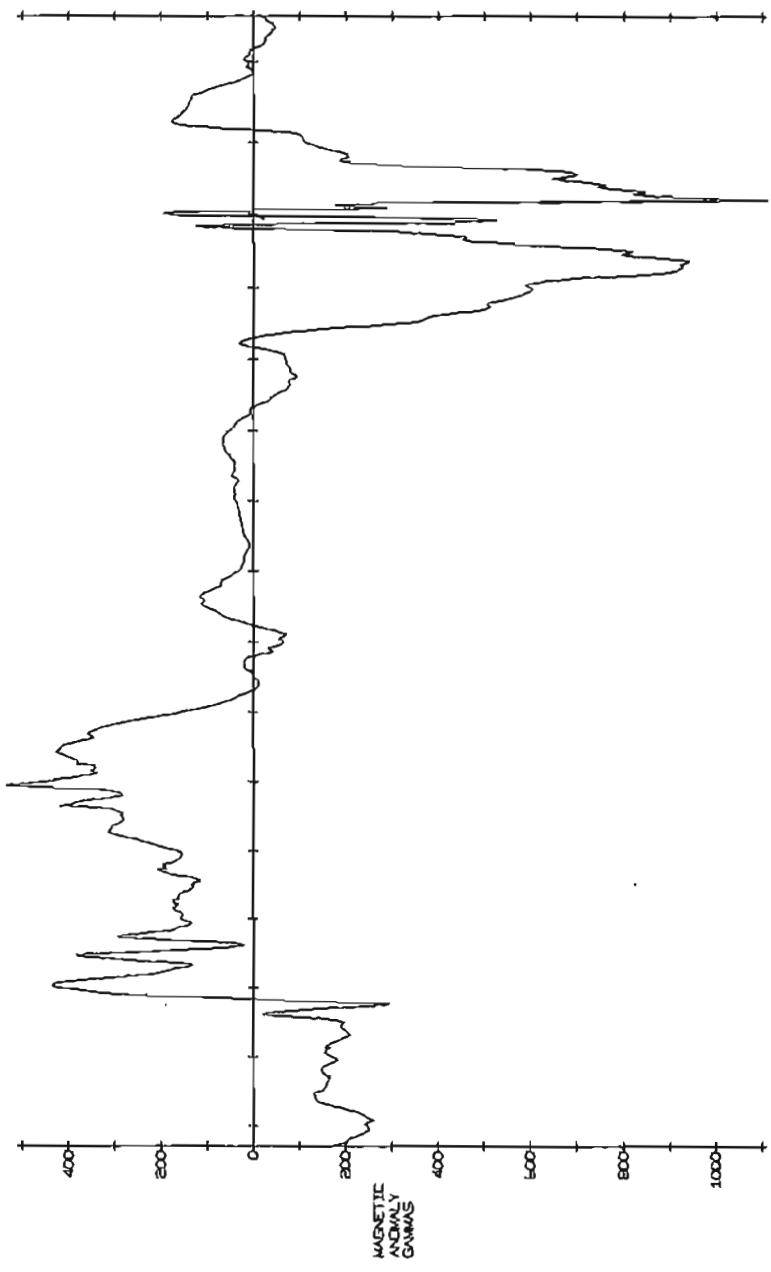


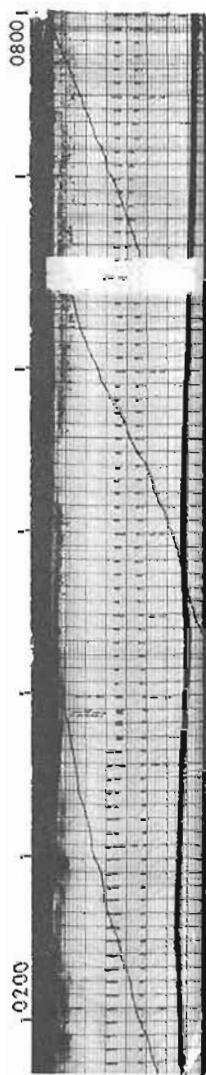
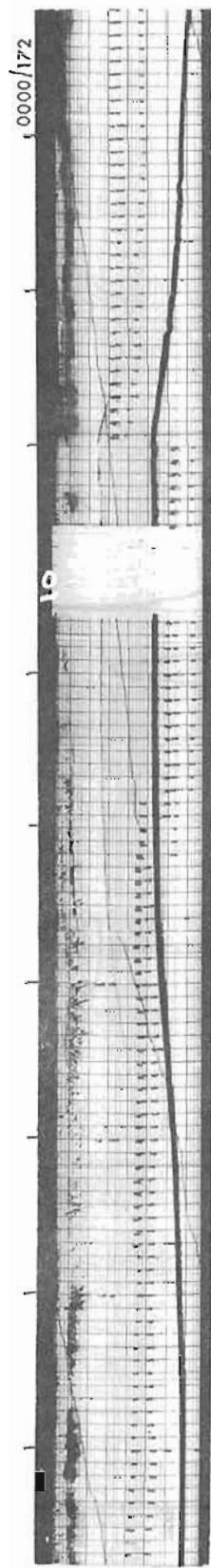
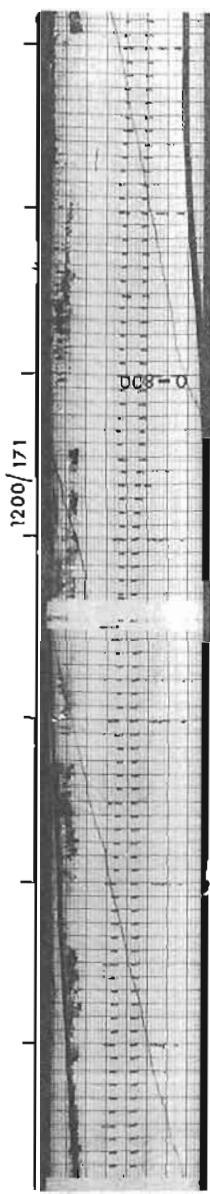
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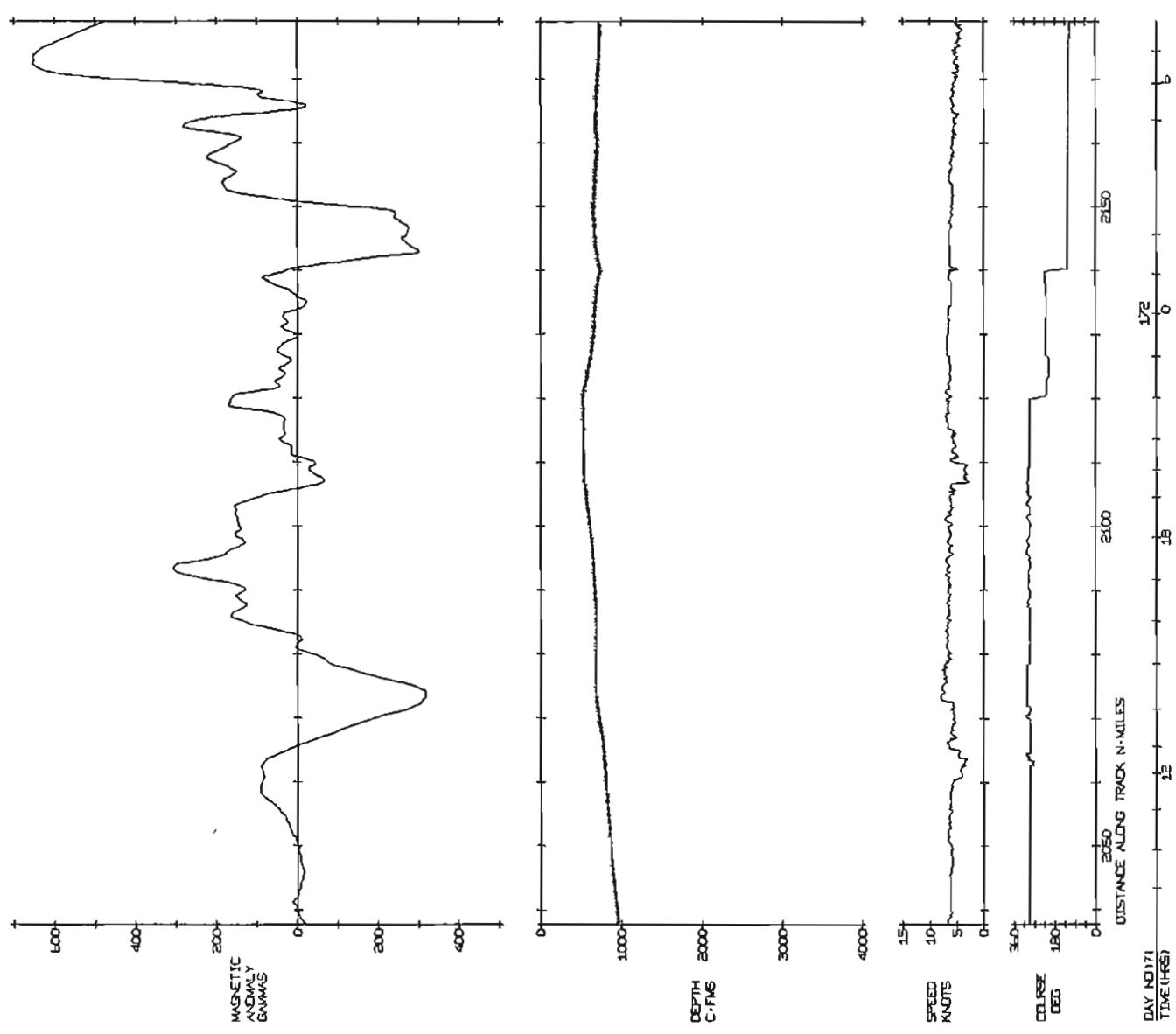


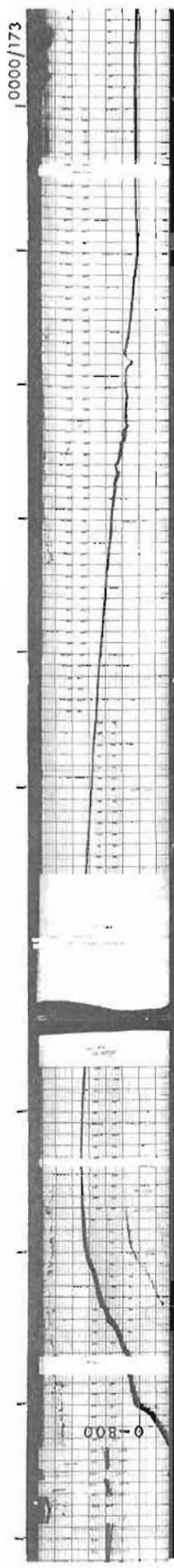
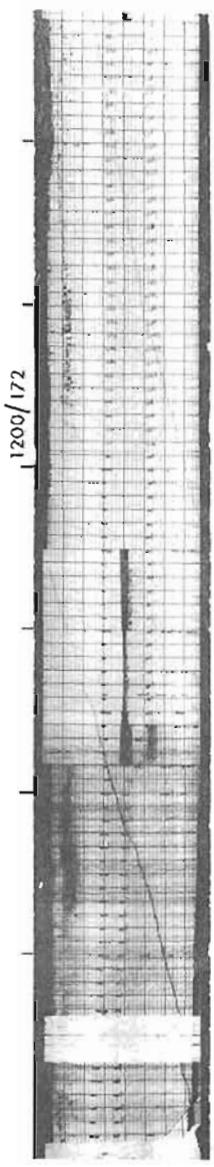
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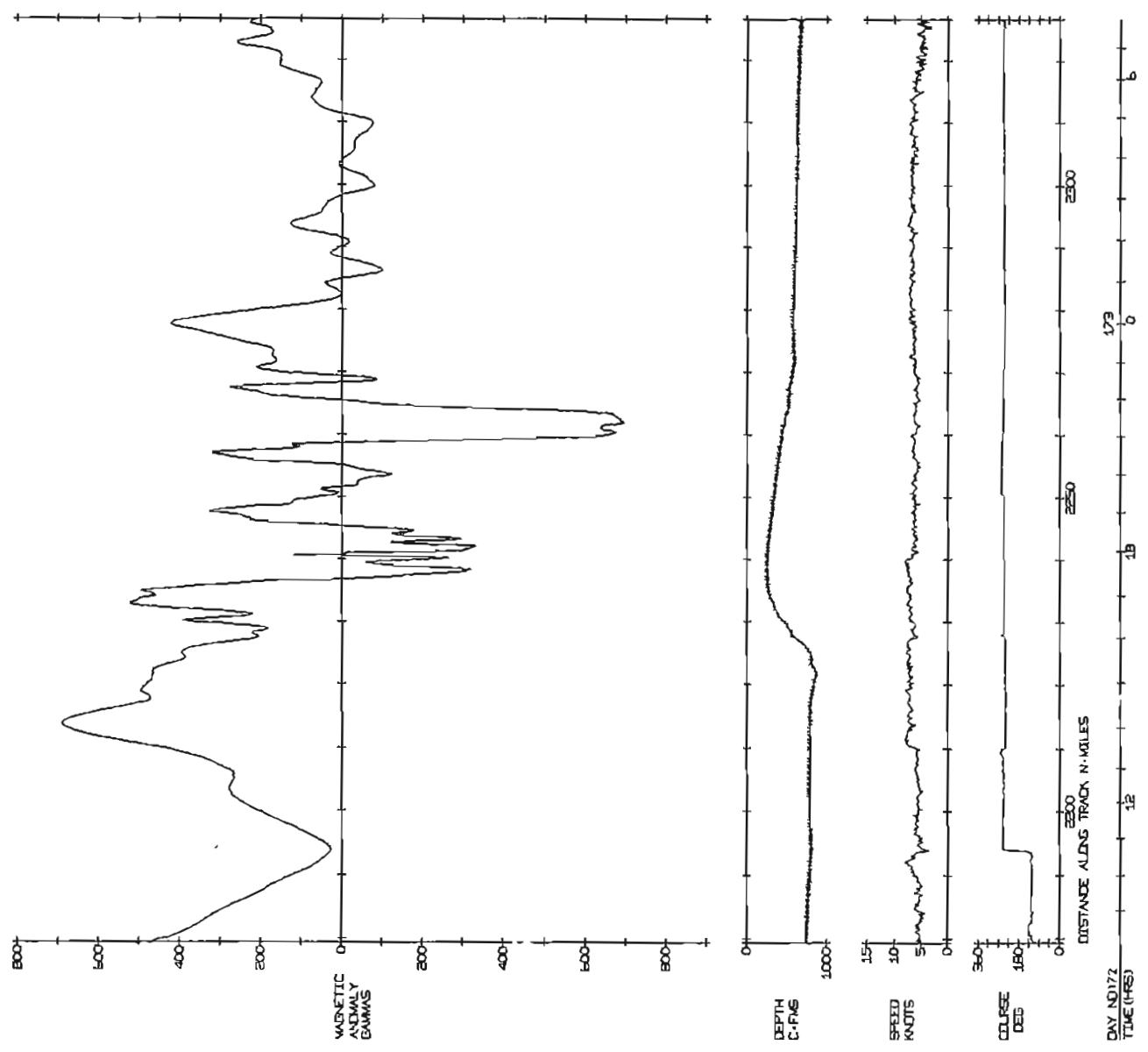


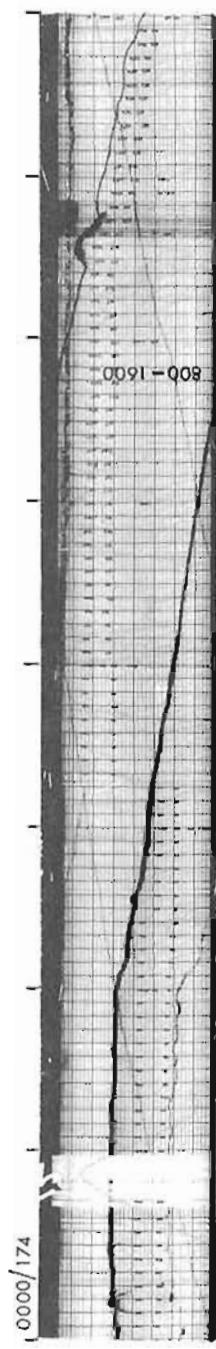
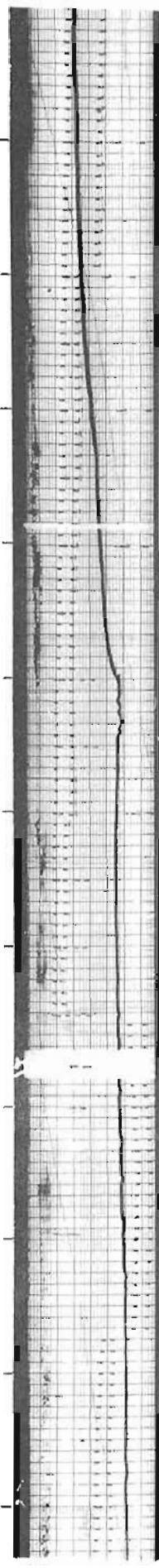
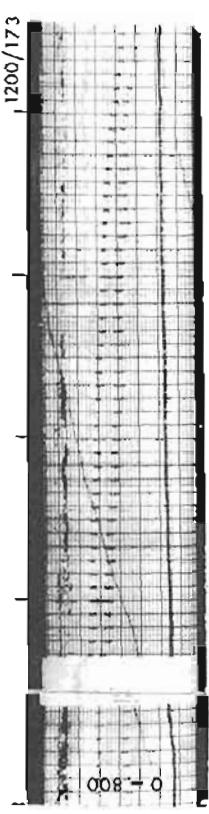
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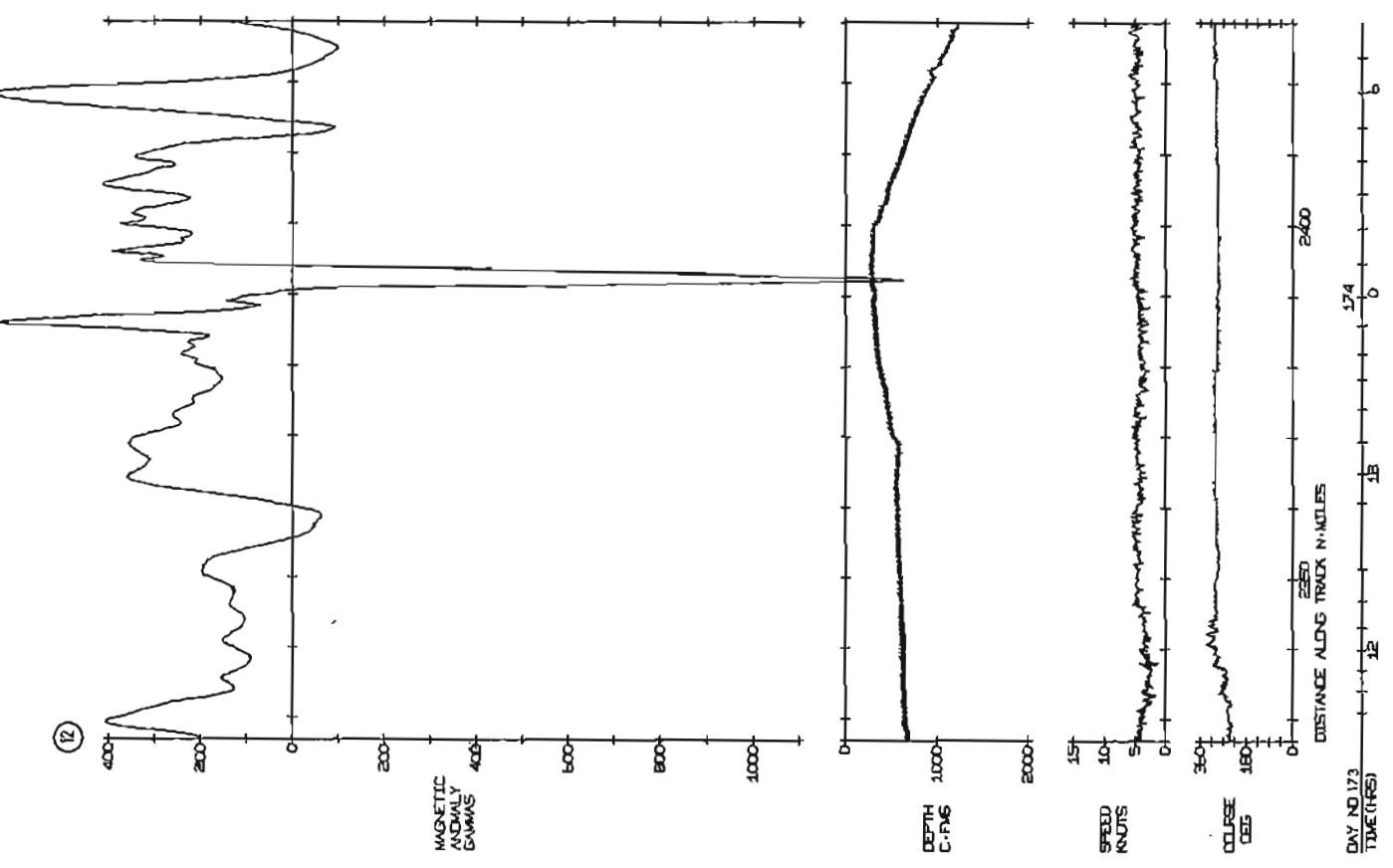


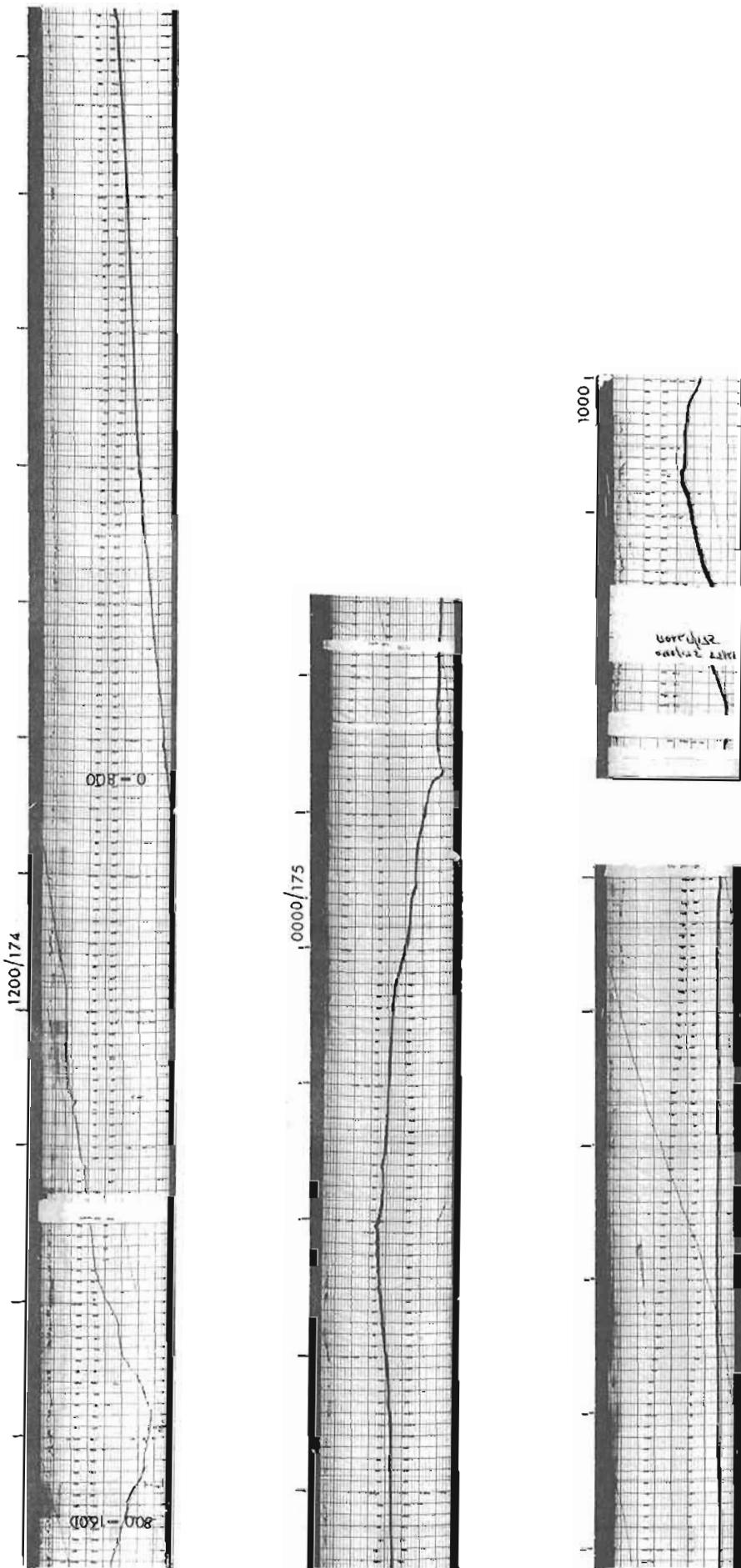


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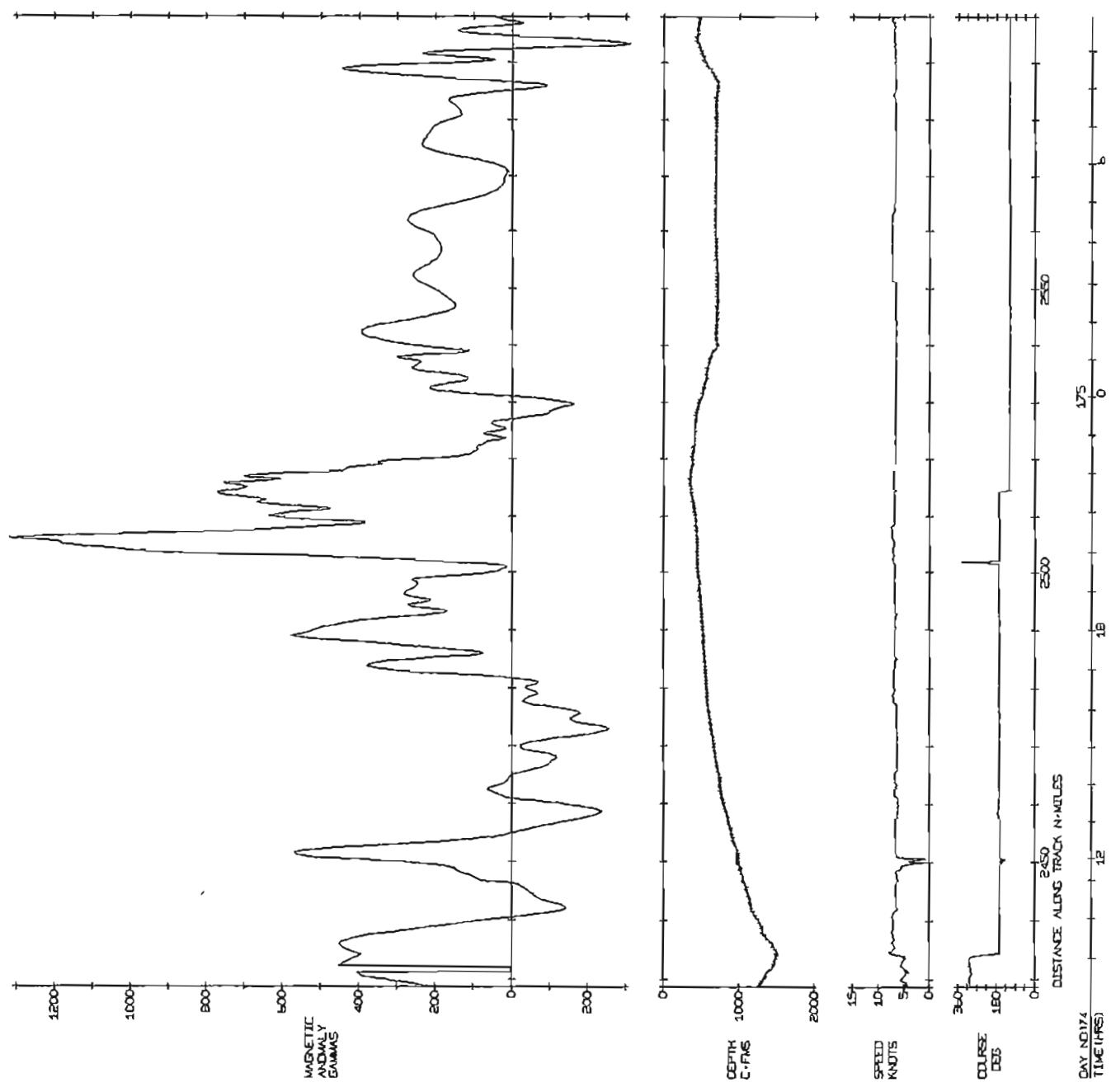


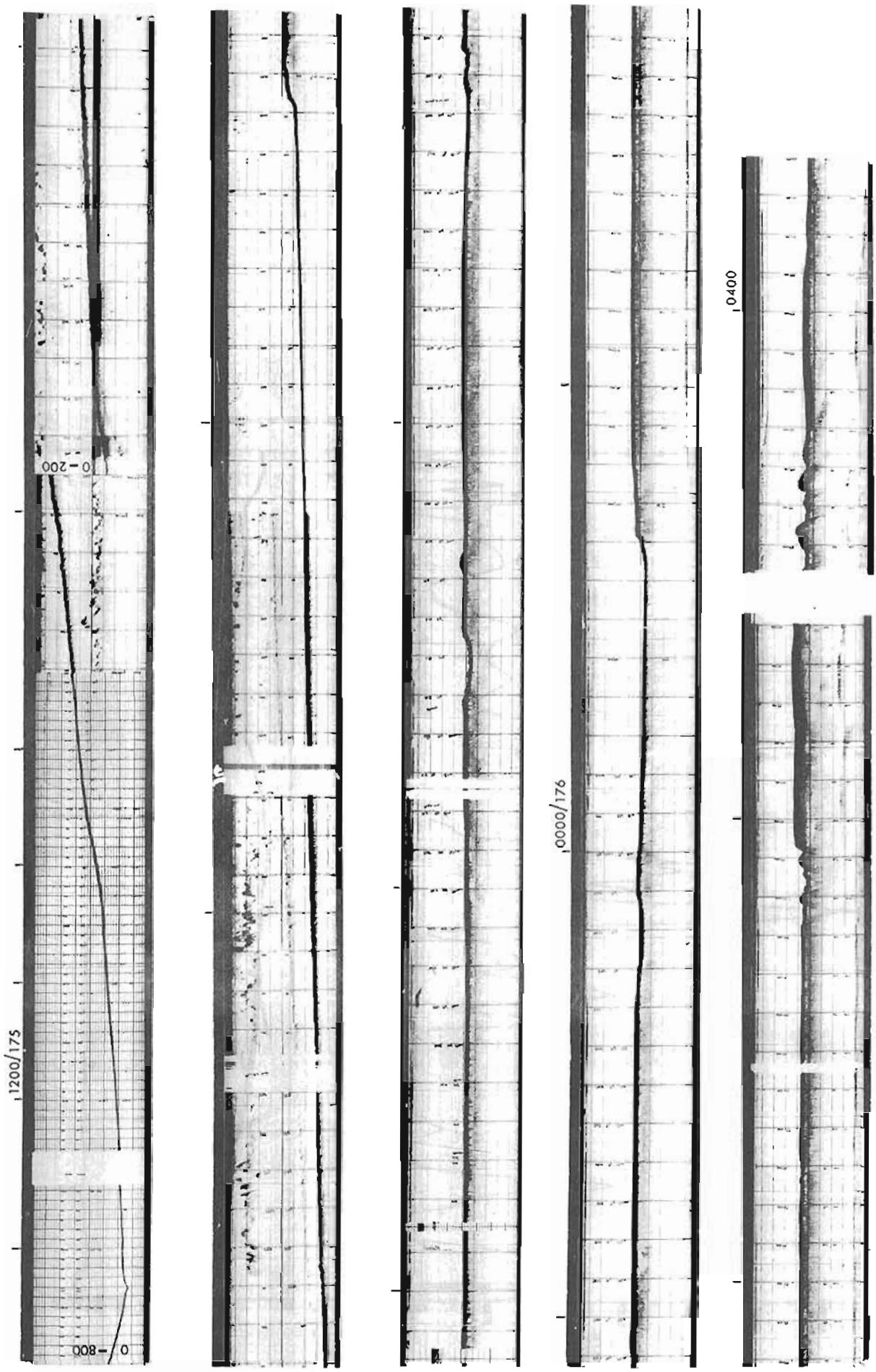


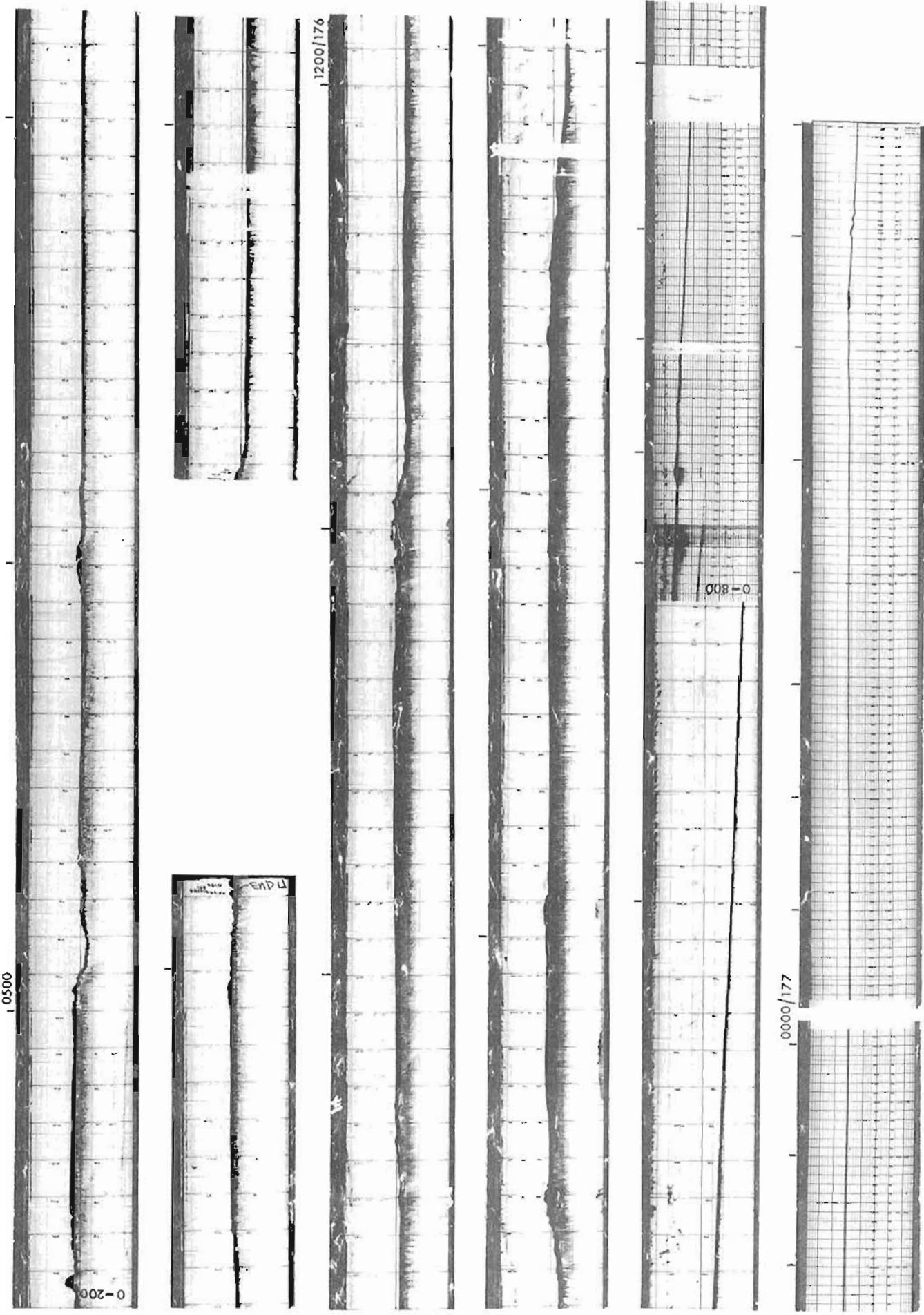




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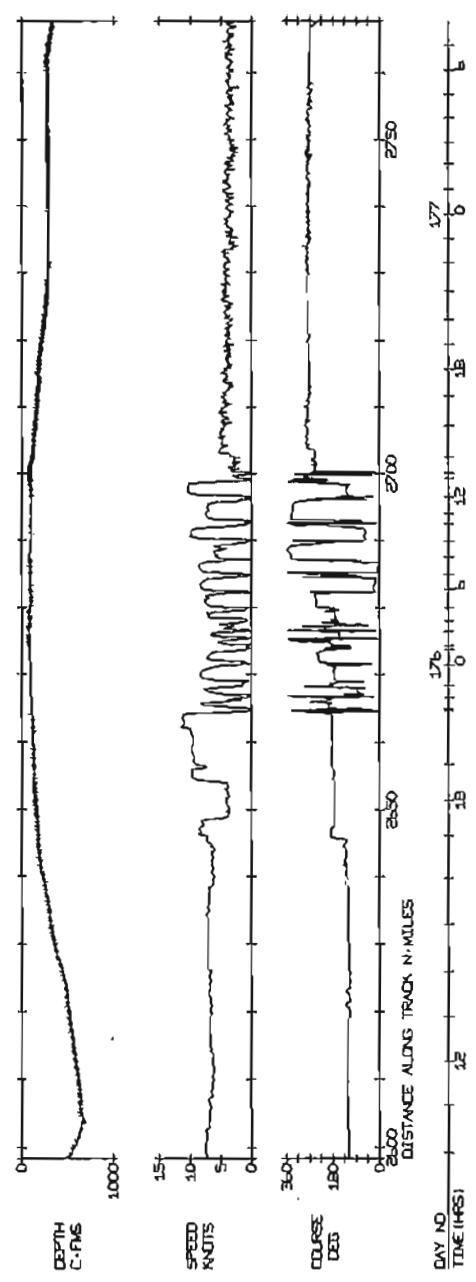
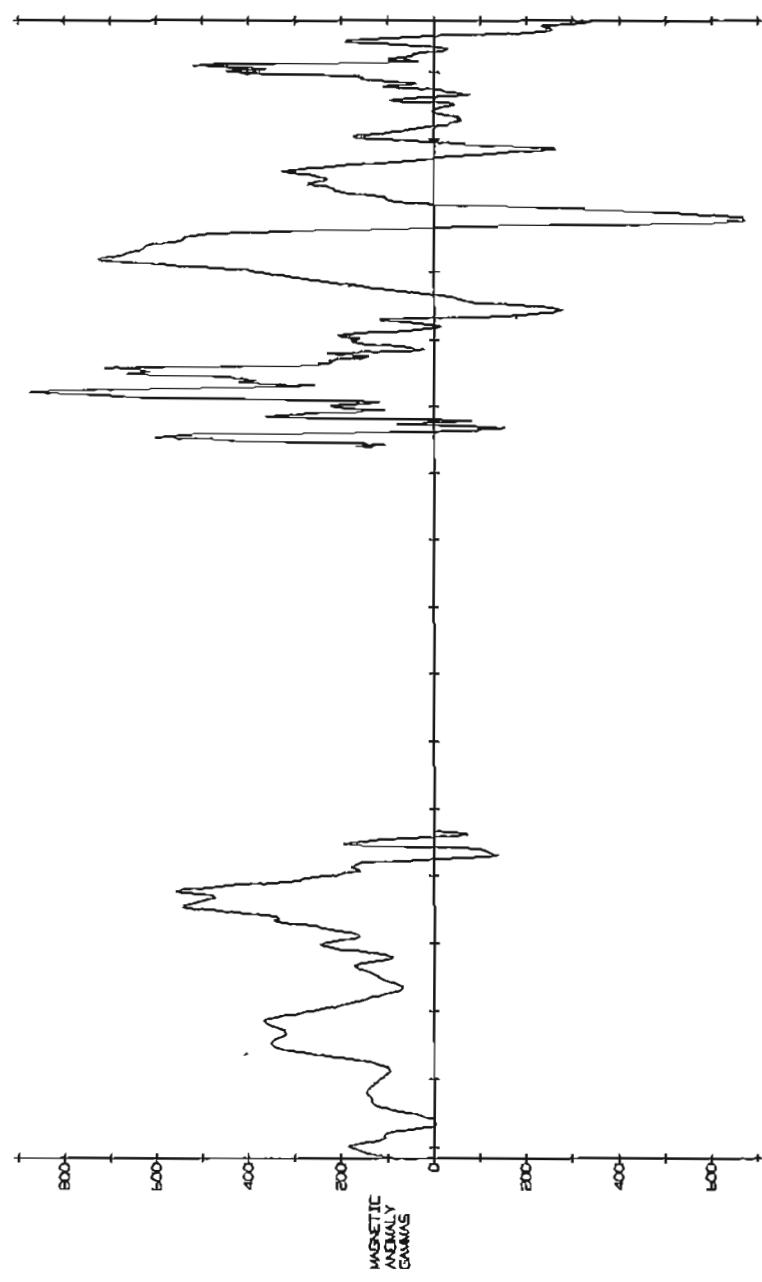


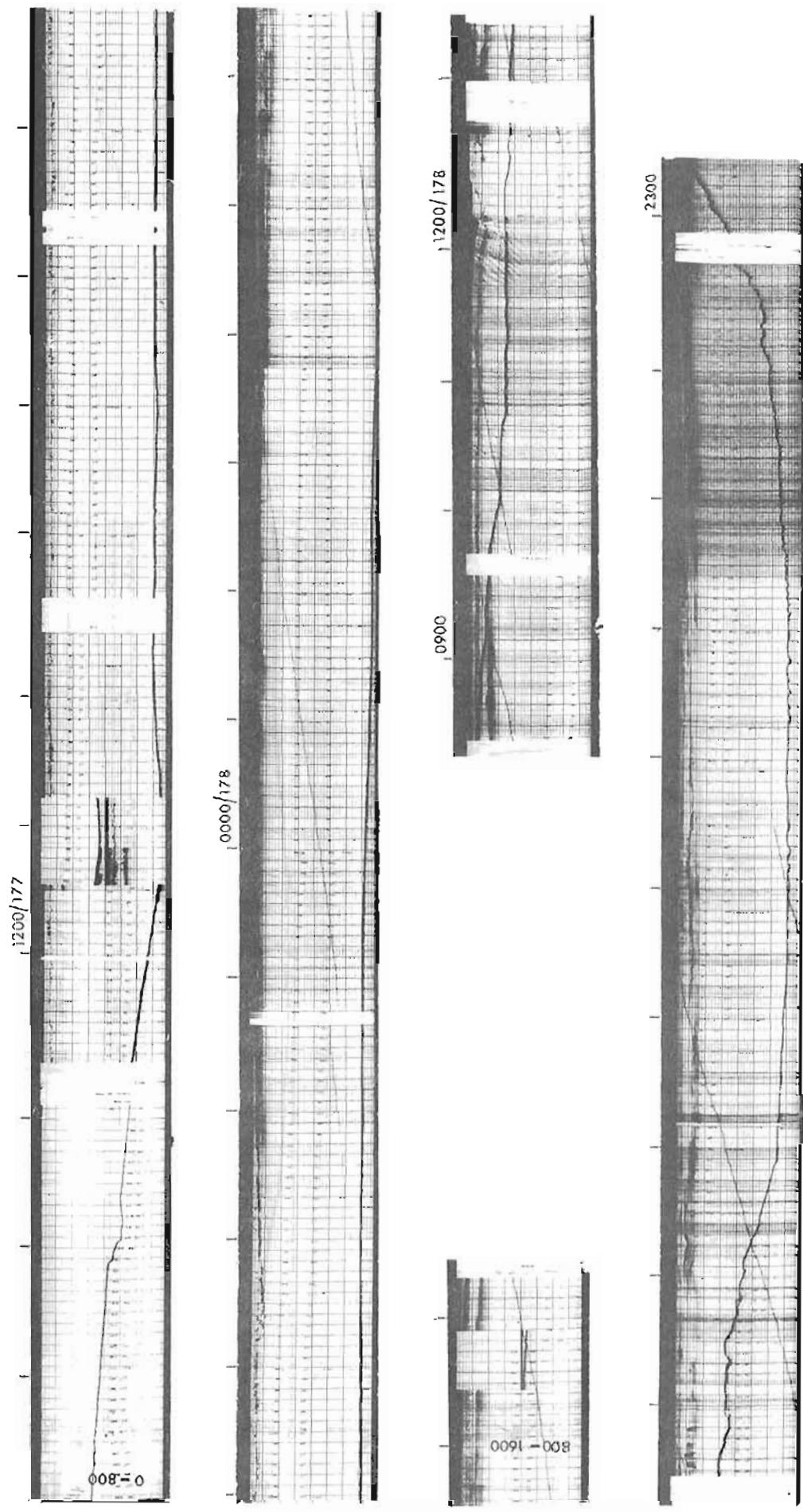




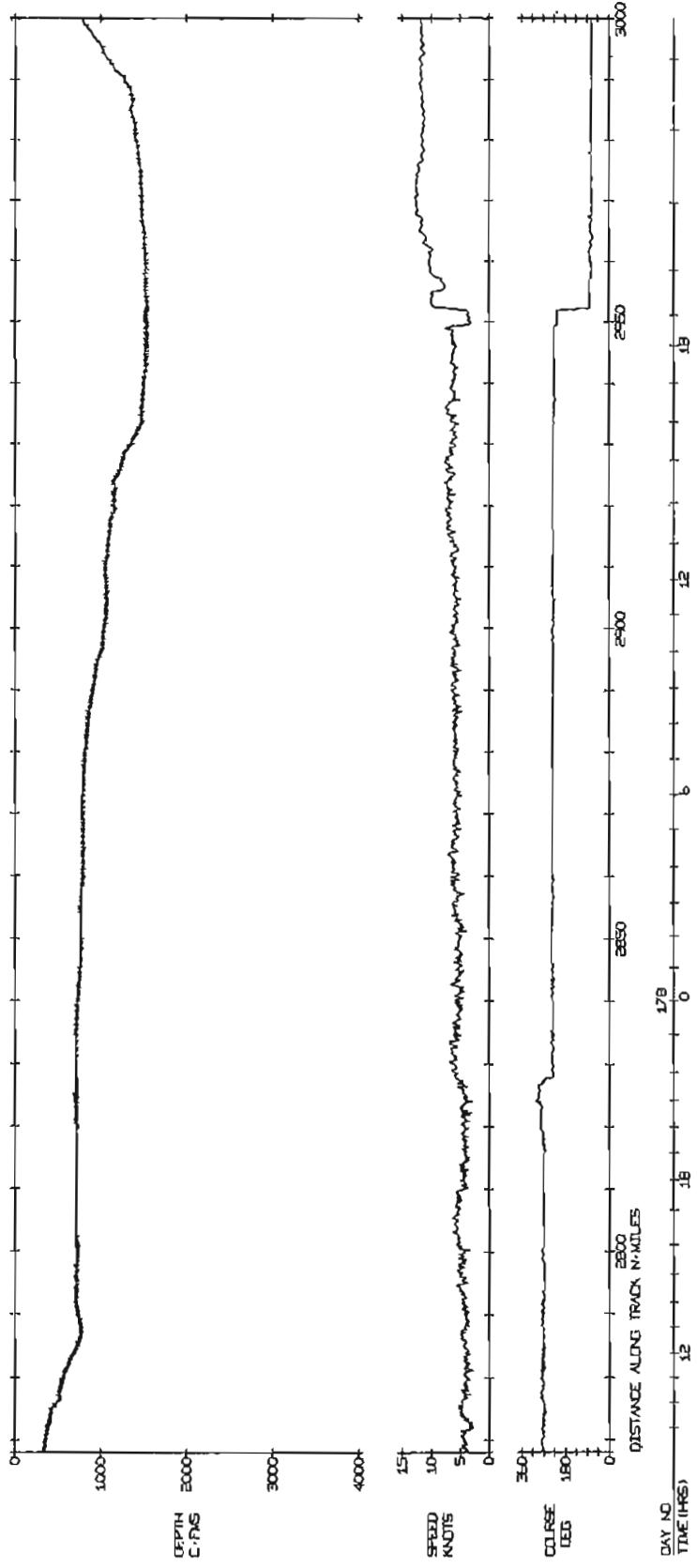
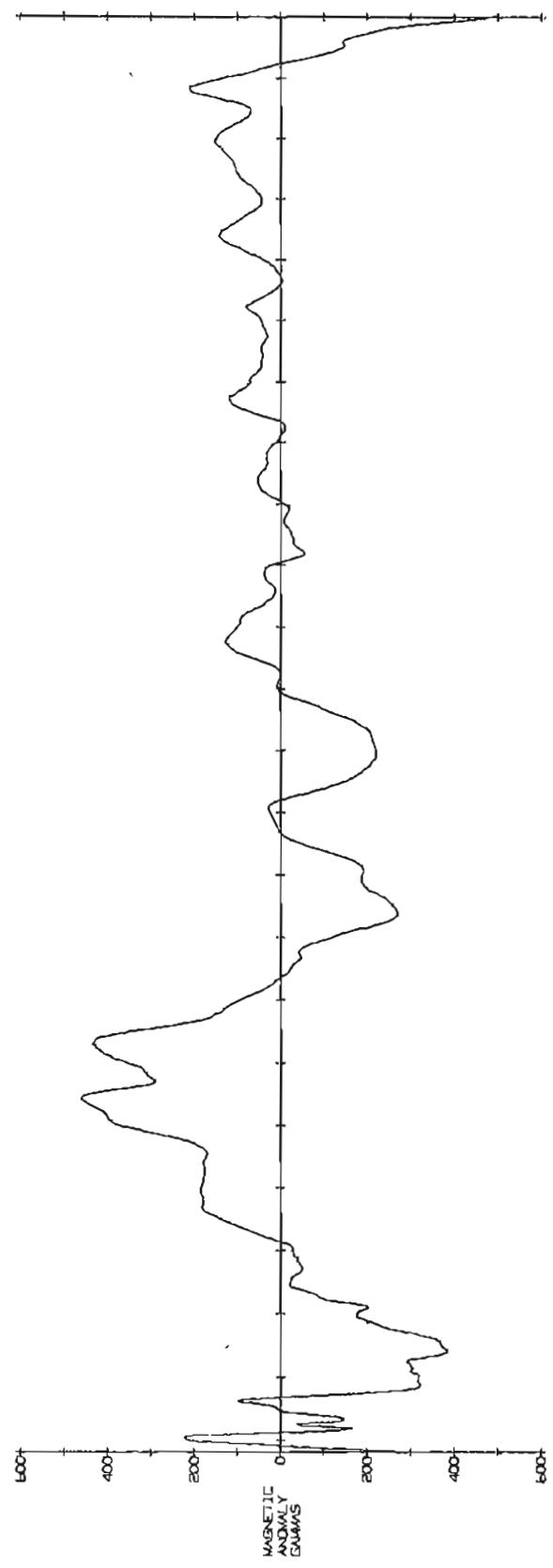


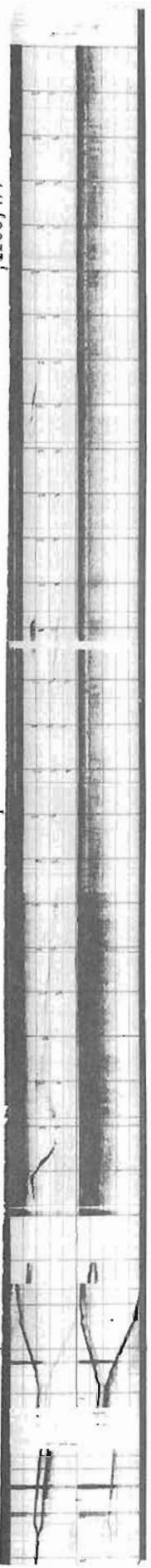
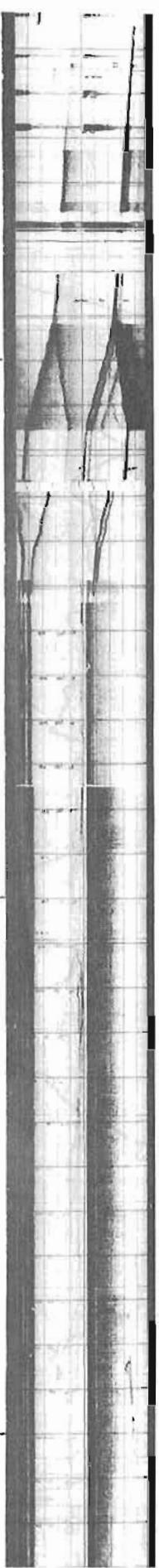
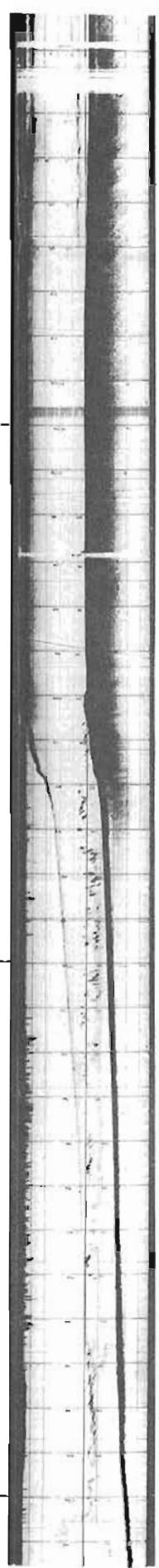
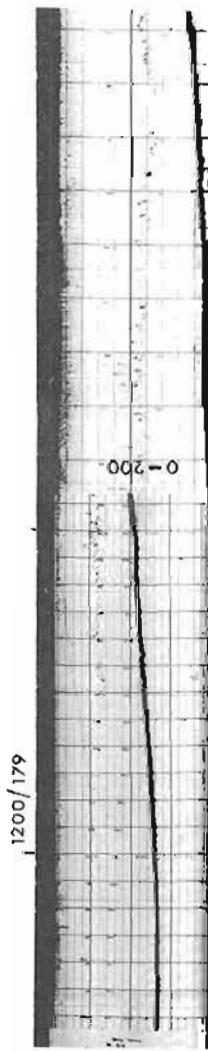
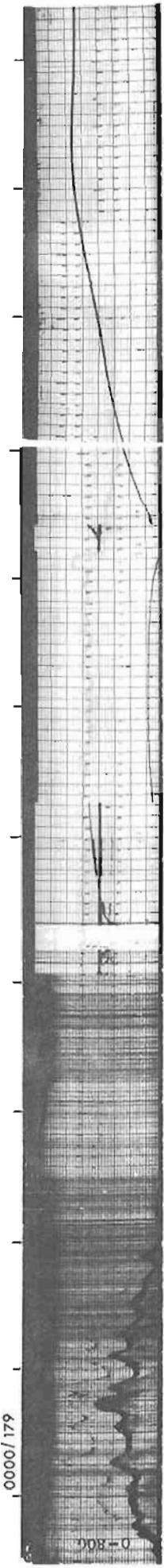
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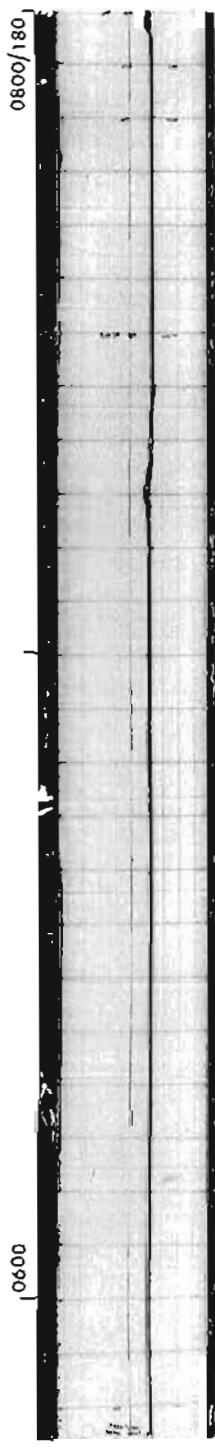
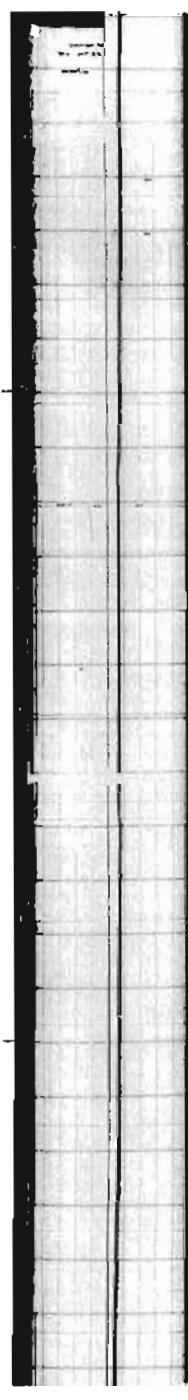
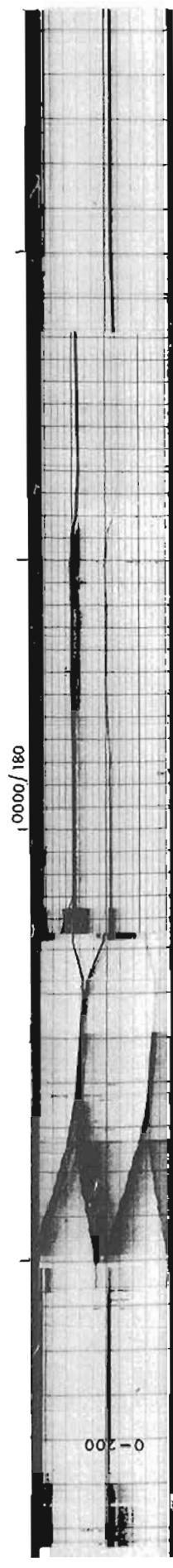




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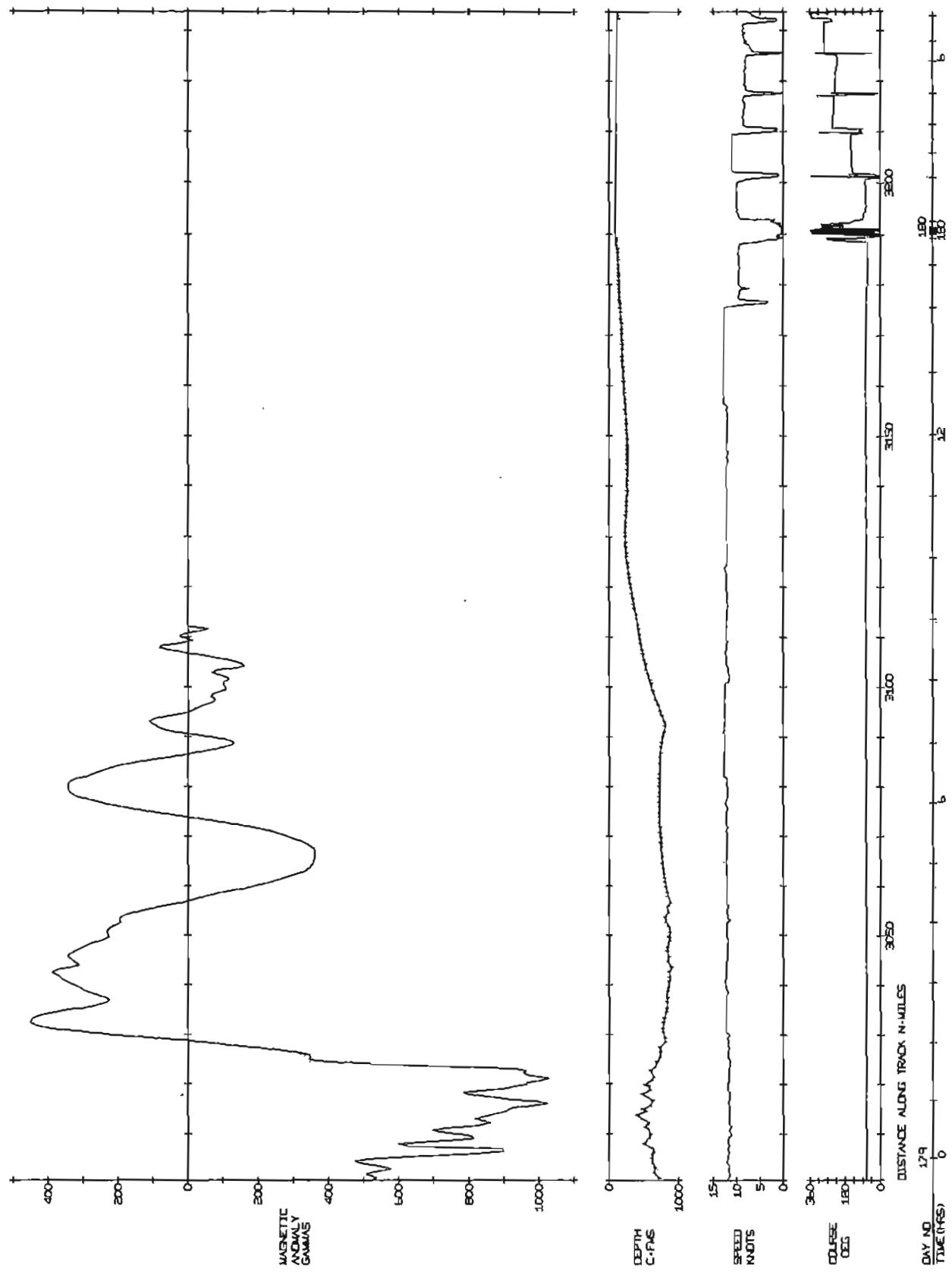


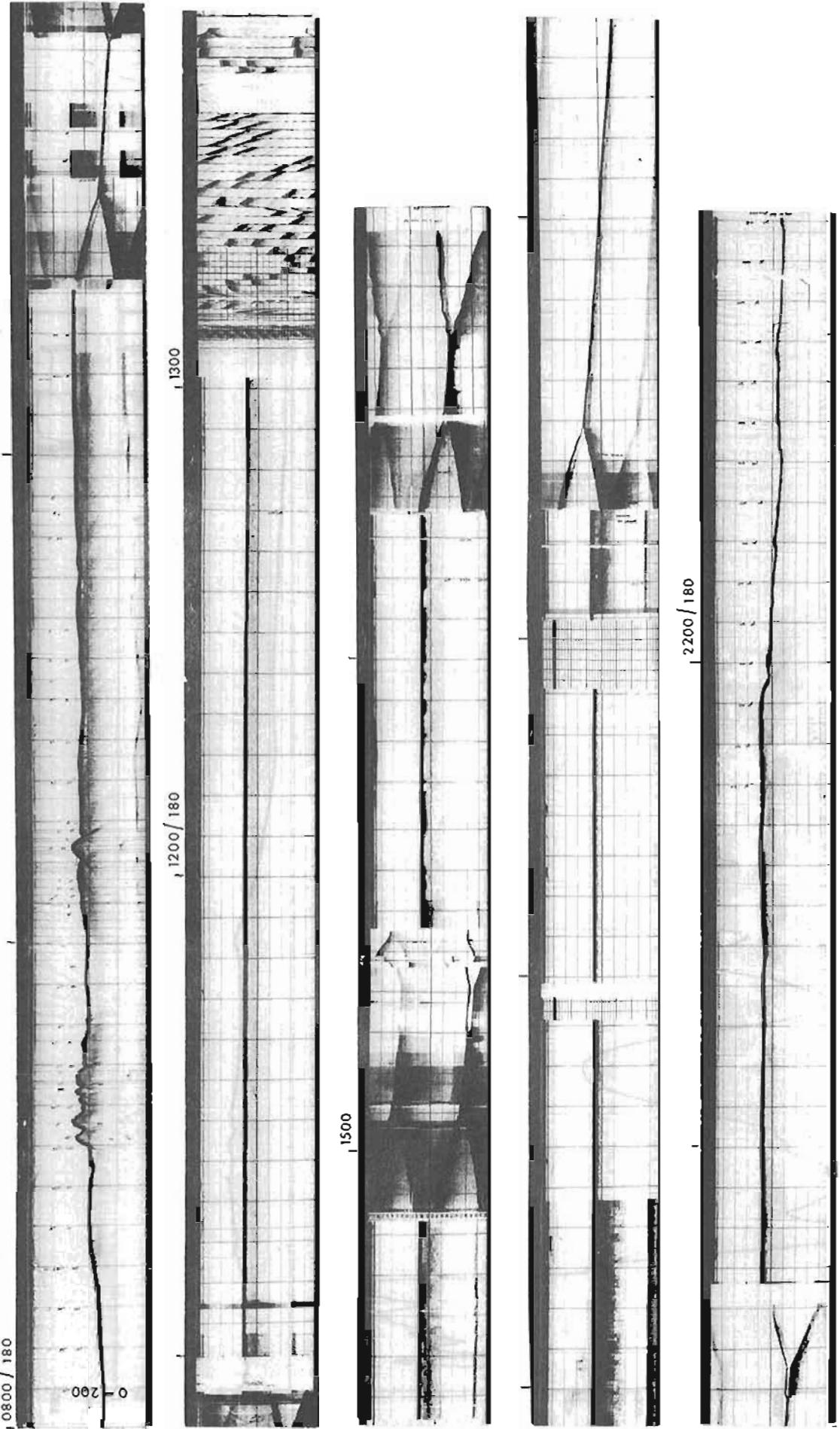


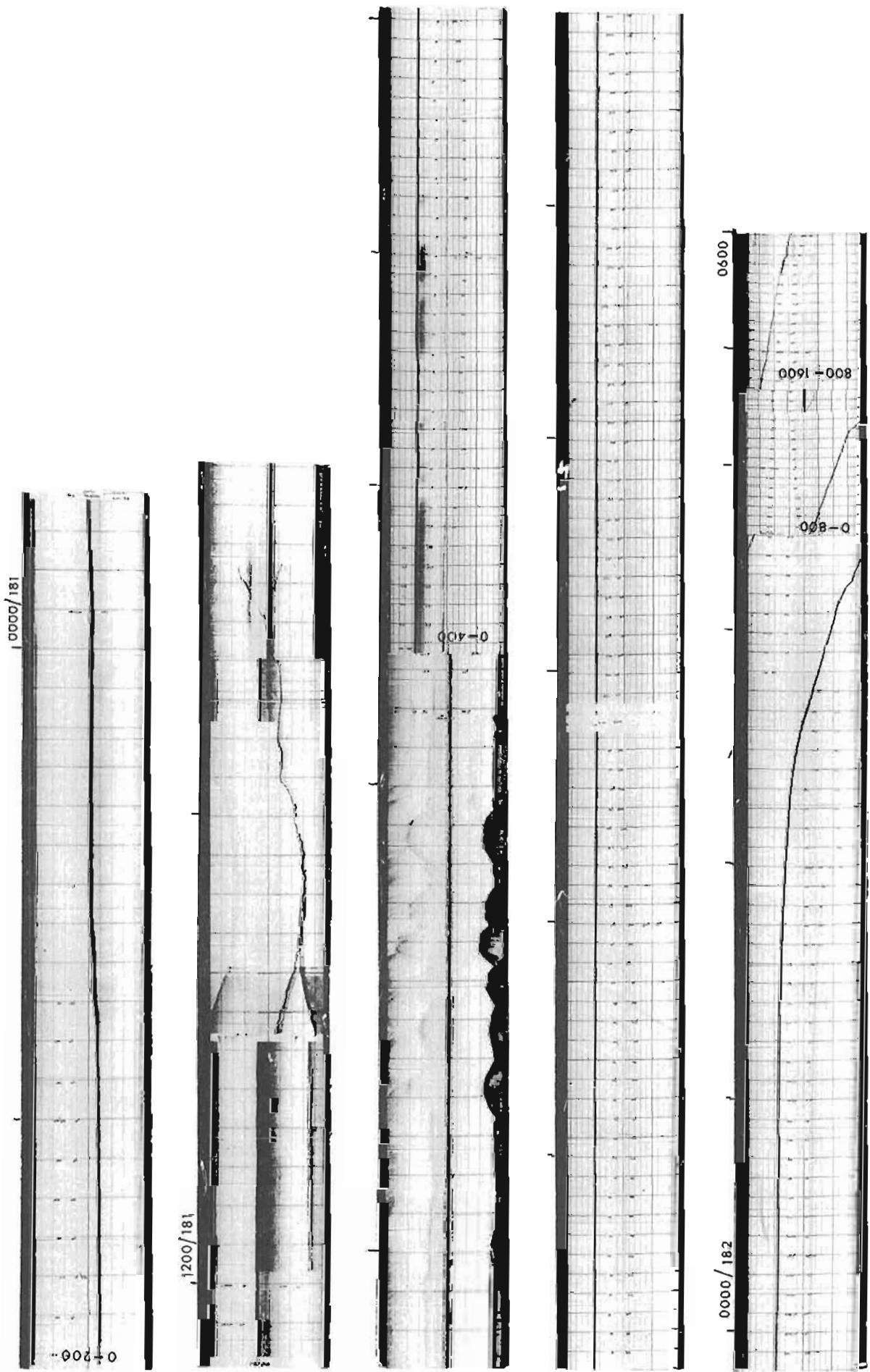




(16)

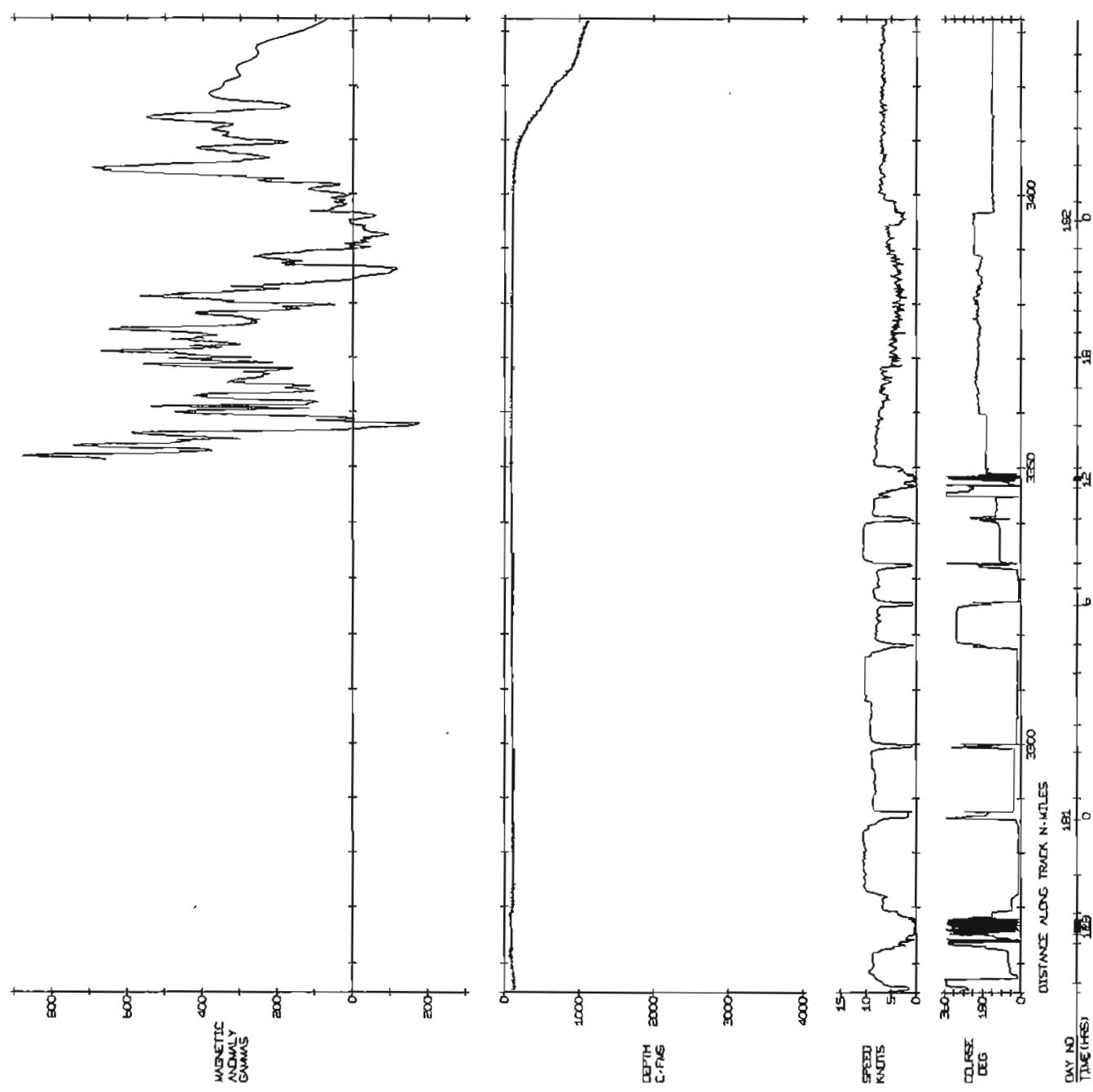


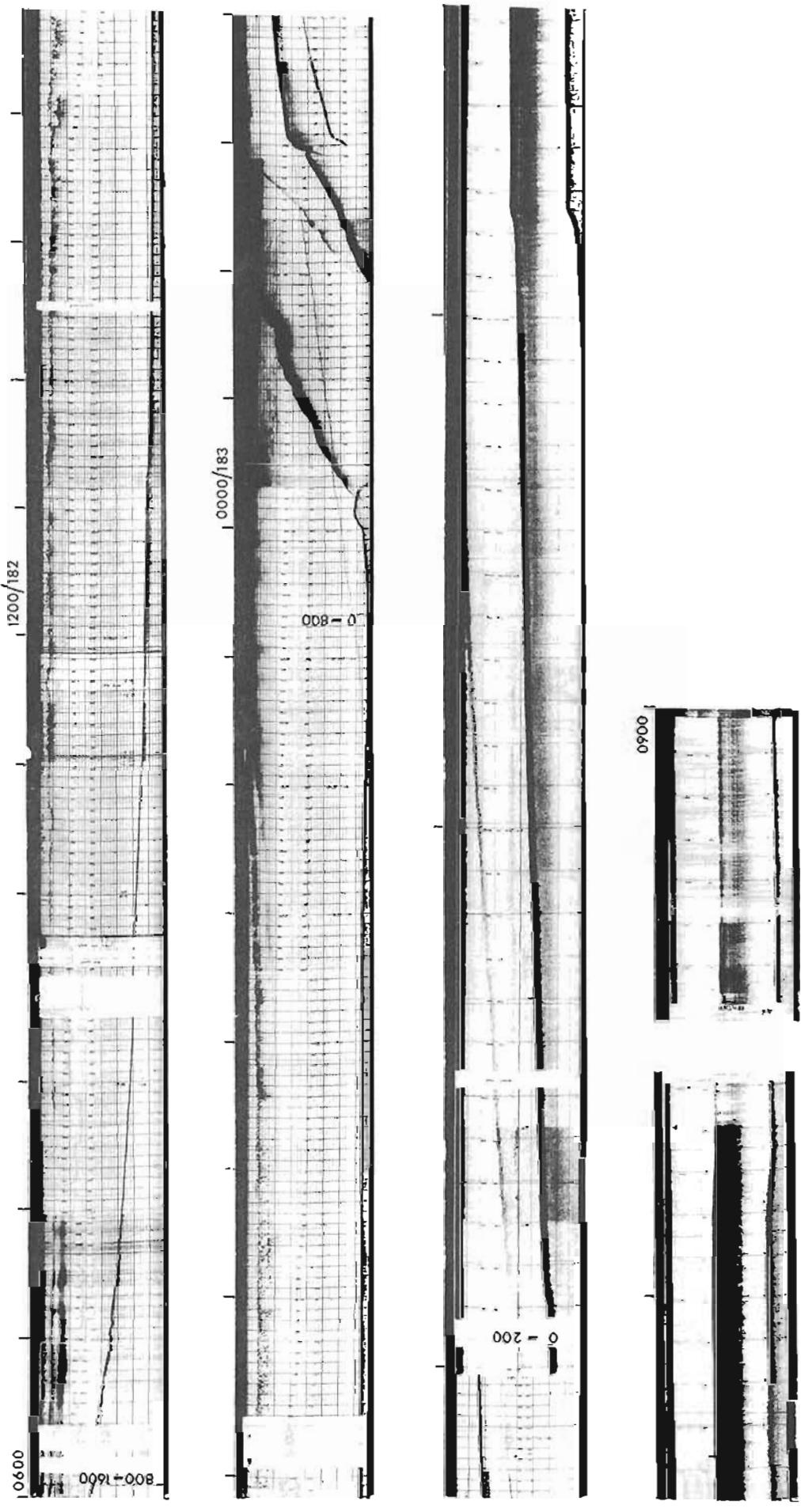




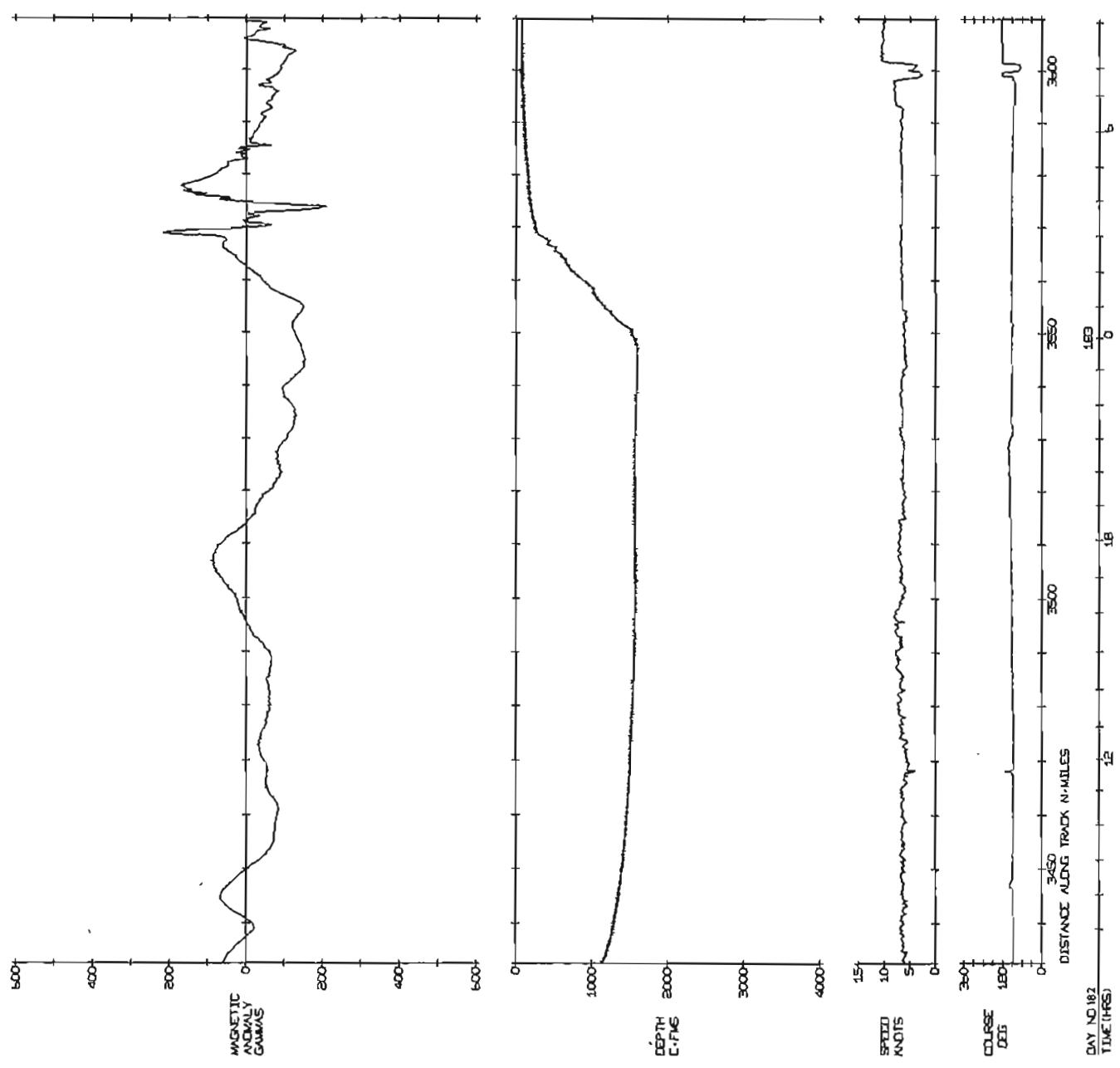


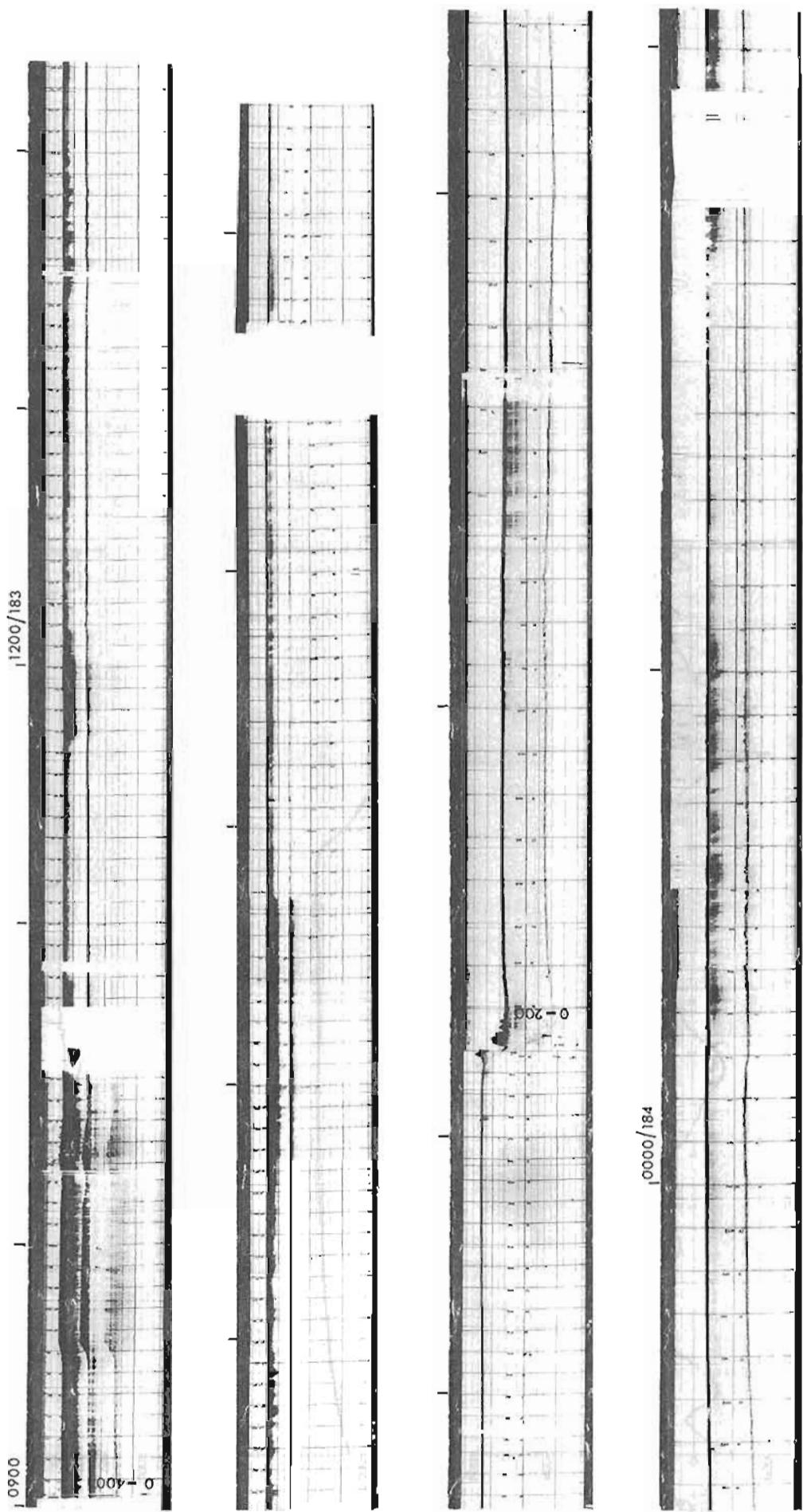
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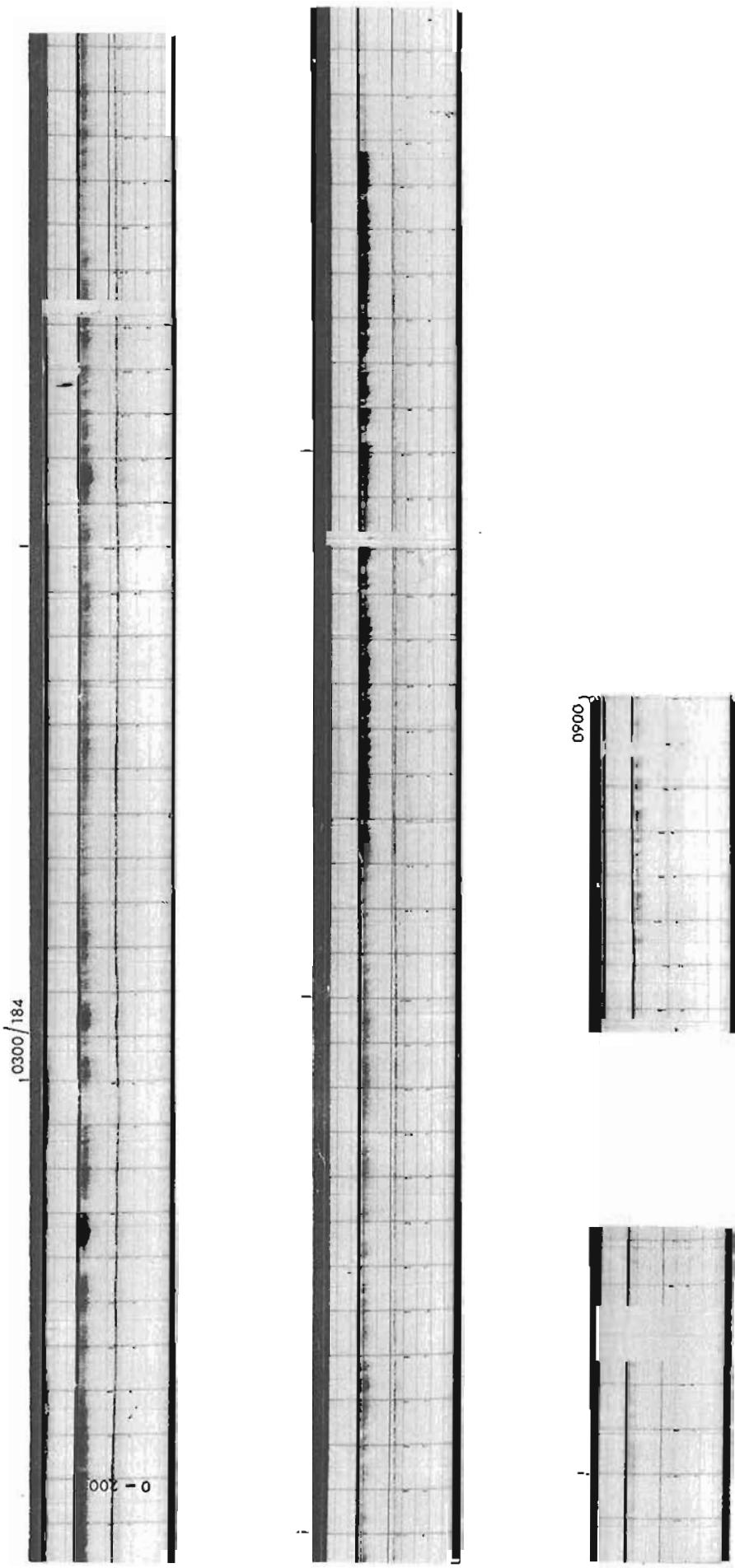




(18)

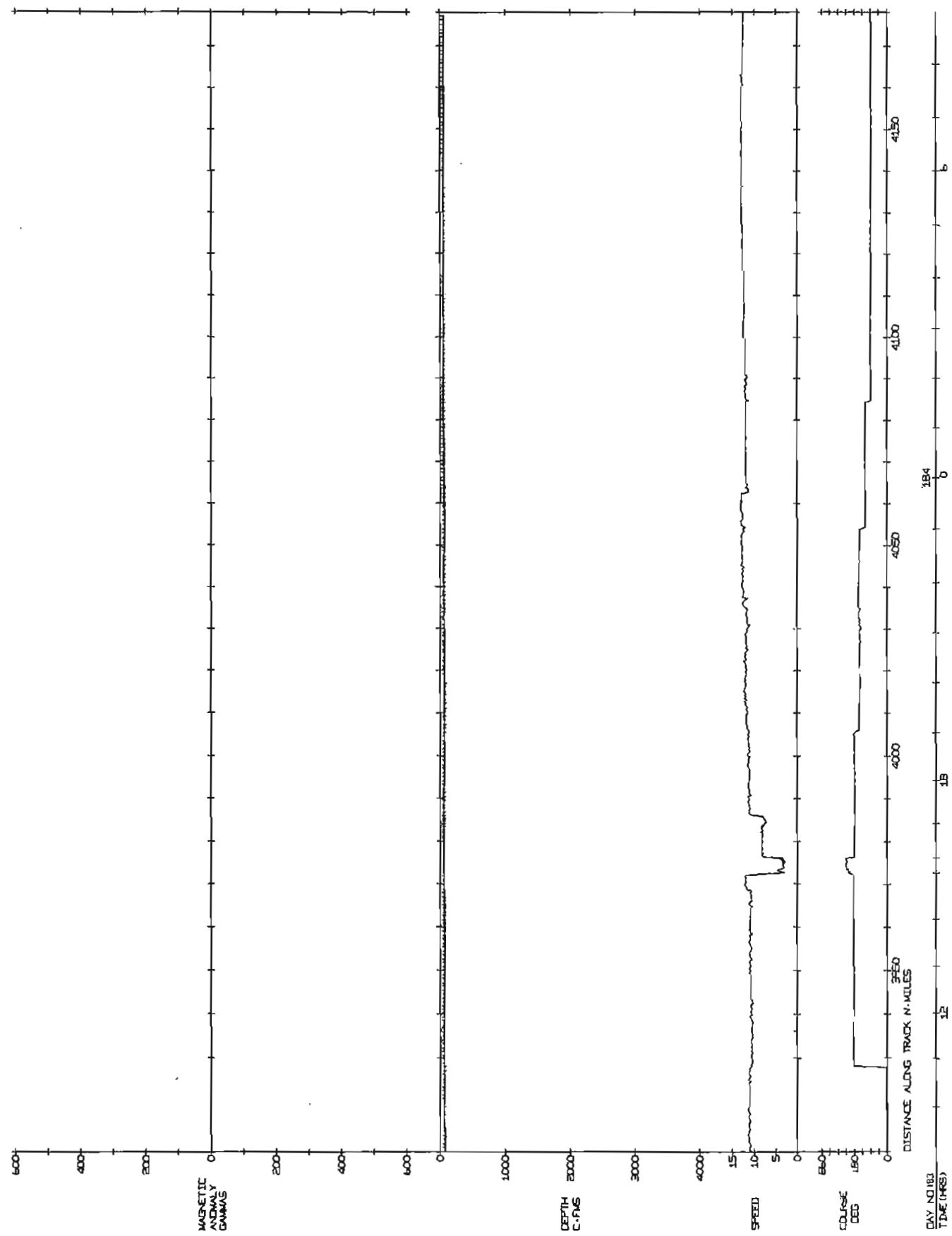


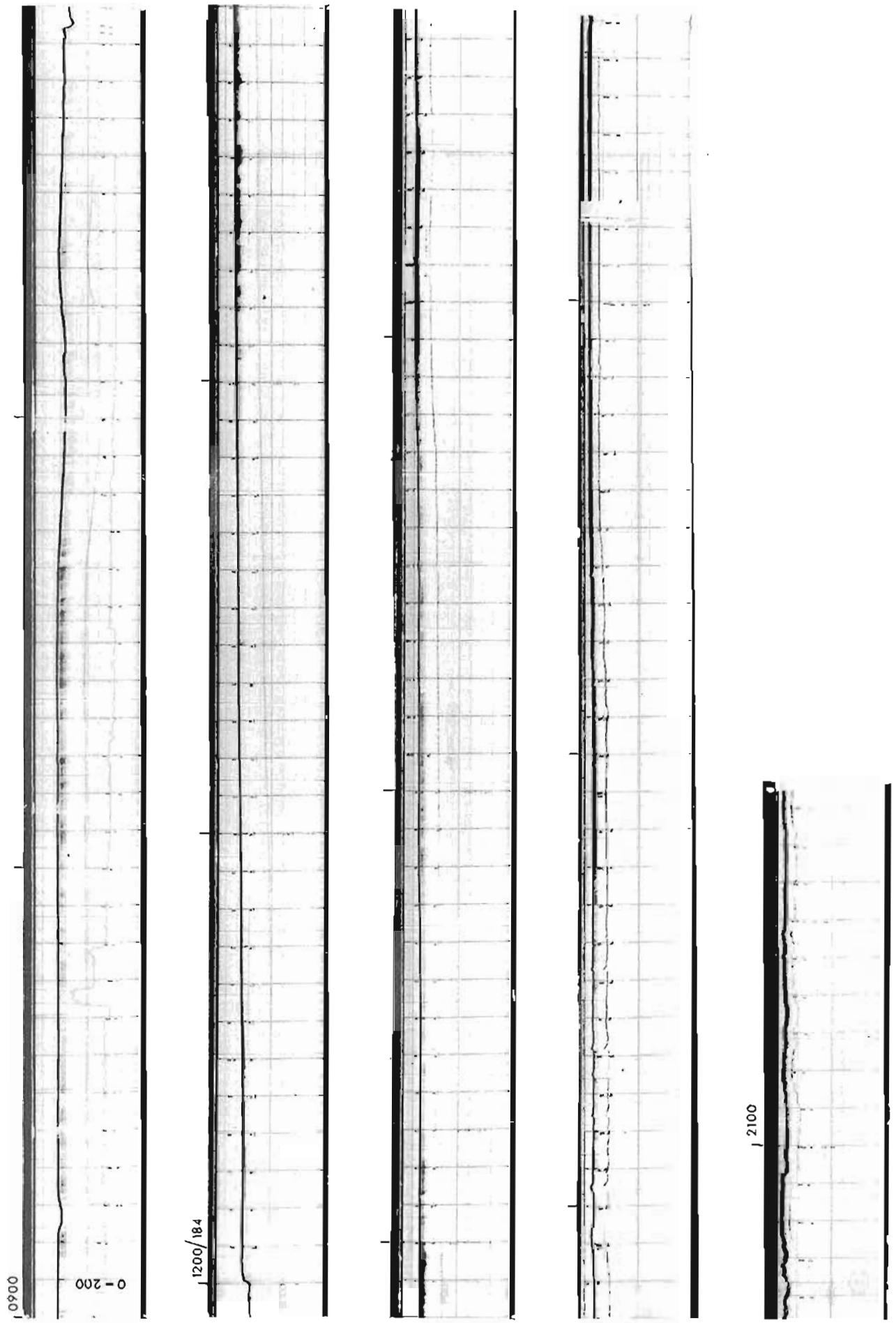




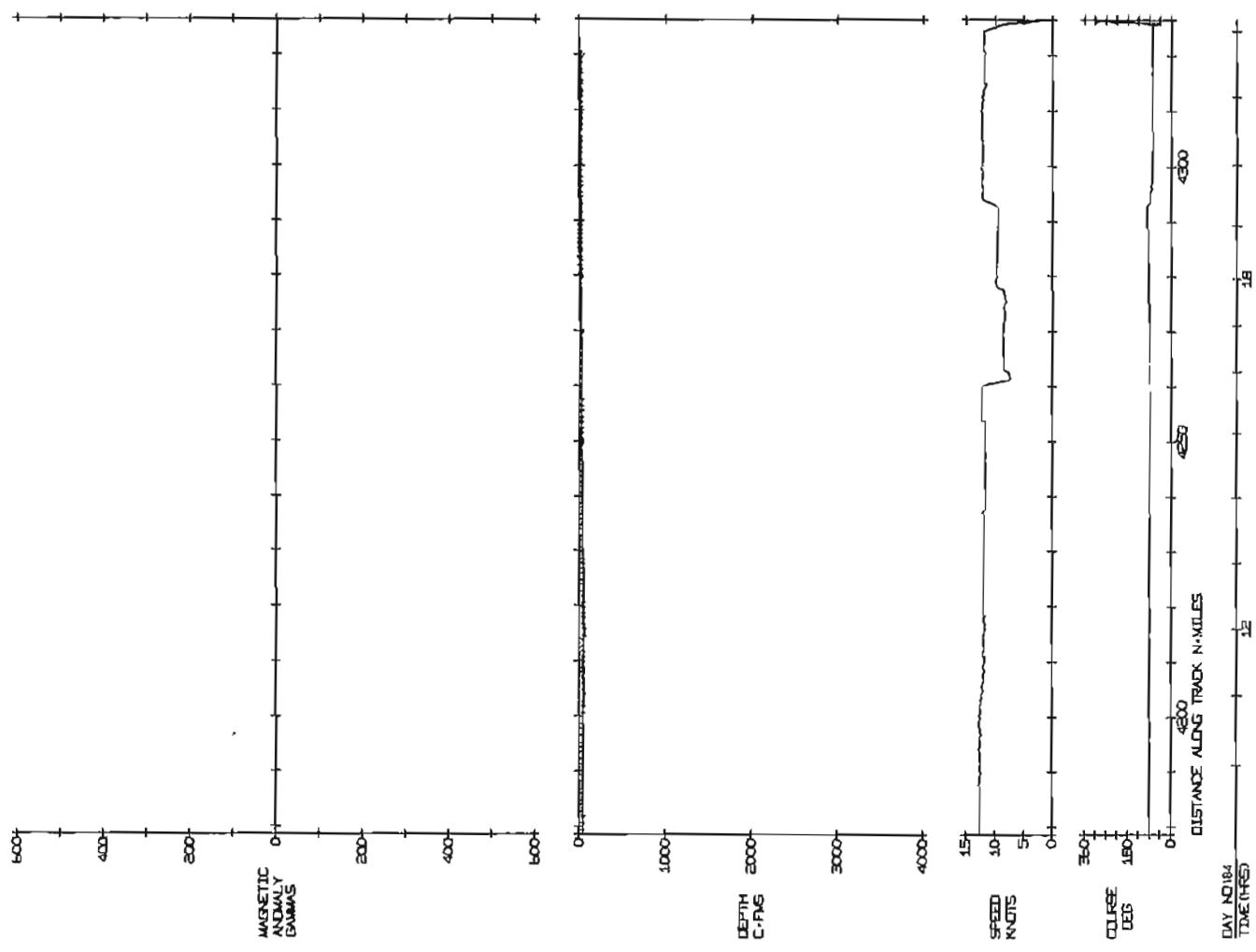


(19)





(2)





SECTION B

*Listing of Navigation Points.*

*1:1,000,000 Track Charts.*

## B1

## NAVIGATION POINTS FOR DISCOVERY CRUISE 47 LEG 1

DAY NO	TIME H M	LATITUDE DEG MIN	LONGITUDE DEG MIN
161	22 1	51 21.5	-3 36.8
161	2235	51 22.5	-3 43.8
161	2249	51 23.7	-3 45.9
161	23 7	51 24.3	-3 50.2
161	2322	51 24.8	-3 53.9
161	2348	51 23.5	-4 0.9
162	054	51 19.9	-4 18.1
162	156	51 16.5	-4 30.9
162	224	51 15.0	-4 36.3
162	326	51 14.5	-4 50.8
162	410	51 13.6	-5 3.6
162	644	51 11.7	-5 43.1
162	710	51 11.3	-5 50.5
162	843	51 9.3	-6 16.8
162	857	51 9.2	-6 18.8
162	1047	51 7.2	-6 49.6
162	1245	51 5.4	-7 21.7
162	1326	51 5.4	-7 34.2
162	1435	51 4.7	-7 55.4
162	15 5	51 4.3	-8 4.2
162	1517	51 4.2	-8 5.4
162	1531	51 4.1	-8 8.2
162	1610	51 4.1	-8 14.0
162	1720	51 3.9	-8 34.4
162	2015	51 1.4	-9 21.6
162	2127	51 0.5	-9 41.6
162	2232	50 59.9	-9 59.8
163	0 0	51 0.3	-10 9.3
163	053	51 1.4	-10 18.8
163	345	51 5.6	-10 52.7
163	517	51 7.6	-11 11.5
163	845	51 12.1	-11 55.4
163	947	51 13.6	-12 6.6
163	10 1	51 13.7	-12 7.9
163	11 5	51 15.1	-12 19.5
163	12 3	51 16.3	-12 30.2
163	1412	51 19.3	-12 52.5
163	1618	51 22.1	-13 15.1
163	1742	51 23.5	-13 30.9
163	19 6	51 25.0	-13 46.6
163	2258	51 30.1	-14 32.3
164	031	51 39.2	-14 42.6
164	125	51 44.5	-14 49.0
164	215	51 50.1	-14 55.6
164	3 5	51 55.4	-15 1.7
164	551	52 15.3	-15 22.8
164	611	52 17.4	-15 25.5
164	711	52 13.9	-15 37.5
164	927	52 6.1	-16 1.9
164	1110	51 59.8	-16 16.7
164	1358	51 48.1	-16 42.4
164	1722	51 34.6	-17 14.1
164	1926	51 26.8	-17 34.2
164	1946	51 28.4	-17 33.1
164	2040	51 32.9	-17 28.9
164	2217	51 41.8	-17 20.8
165	245	52 8.1	-16 57.3
165	437	52 19.2	-16 47.4
165	641	52 31.1	-16 35.2
165	858	52 43.7	-16 22.0
165	1214	53 2.9	-16 5.6
165	1320	53 10.0	-16 0.6
165	1644	53 32.1	-15 47.1
165	1737	53 37.5	-15 44.2
165	2037	53 58.1	-15 58.2
165	2129	54 3.4	-16 1.6
165	2245	54 10.9	-16 7.3
166	054	54 23.1	-16 18.2
166	145	54 28.0	-16 22.2
166	233	54 32.8	-16 26.8
166	340	54 39.9	-16 31.7
166	431	54 45.8	-16 35.6
166	449	54 44.2	-16 38.0
166	649	54 31.1	-16 51.4
166	759	54 23.6	-16 59.3

## NAVIGATION POINTS FOR DISCOVERY CRUISE 47 LEG 1

DAY NO	TIME H M	LATITUDE DEG MIN	LONGITUDE DEG MIN
166	8 9	54 23.8	-16 59.5
166	953	54 13.9	-17 11.2
166	1113	54 6.3	-17 20.1
166	1313	53 54.3	-17 32.4
166	1449	53 44.1	-17 41.0
166	1628	53 32.5	-17 46.7
166	1638	53 32.3	-17 47.5
166	1836	53 46.4	-17 50.7
166	2223	54 15.0	-17 59.3
167	049	54 32.6	-18 6.5
167	248	54 19.8	-18 17.8
167	654	53 53.4	-18 41.3
167	918	54 4.0	-19 4.3
167	1027	54 9.3	-19 16.2
167	1140	54 16.4	-19 8.3
167	1234	54 21.3	-19 2.3
167	1540	54 38.7	-18 38.6
167	1713	54 48.3	-18 29.1
167	1741	54 49.8	-18 27.7
167	18 3	54 51.7	-18 23.0
167	1831	54 54.9	-18 14.5
167	2052	55 12.1	-17 31.5
167	2239	55 25.0	-16 57.8
167	2337	55 31.8	-16 38.5
168	010	55 35.6	-16 27.6
168	041	55 38.8	-16 17.6
168	111	55 42.2	-16 7.6
168	141	55 45.8	-15 59.0
168	219	55 49.7	-15 52.2
168	432	56 3.4	-15 27.0
168	512	56 6.6	-15 17.8
168	546	56 9.2	-15 10.9
168	6 4	56 9.9	-15 12.0
168	624	56 10.3	-15 13.4
168	658	56 12.2	-15 13.3
168	734	56 16.2	-15 13.4
168	758	56 19.4	-15 12.9
168	843	56 25.1	-15 12.5
168	856	56 24.2	-15 11.5
168	922	56 20.8	-15 11.9
168	932	56 20.2	-15 11.7
168	1034	56 27.4	-15 4.7
168	1048	56 27.9	-15 4.3
168	1138	56 27.4	-15 3.3
168	1228	56 22.1	-15 9.3
168	1346	56 21.8	-15 8.8
168	1412	56 21.7	-15 8.7
168	15 2	56 21.8	-15 7.9
168	1547	56 21.9	-15 7.3
168	1626	56 22.0	-15 6.0
168	17 4	56 22.5	-15 4.7
168	1812	56 30.6	-14 54.6
168	1910	56 30.0	-14 54.0
168	20 8	56 30.1	-14 43.3
168	2148	56 29.8	-14 24.7
168	23 7	56 29.4	-14 9.2
169	0 5	56 28.2	-13 56.6
169	129	56 25.7	-13 38.9
169	443	56 19.4	-12 59.8
169	6 2	56 17.5	-12 45.8
169	731	56 16.7	-12 29.2
169	1018	56 16.9	-11 58.2
169	1056	56 16.2	-11 50.7
169	1112	56 16.1	-11 47.2
169	12 4	56 22.4	-11 42.1
169	1254	56 27.5	-11 37.8
169	1318	56 29.5	-11 35.0
169	1349	56 32.5	-11 31.0
169	1359	56 33.3	-11 29.9
169	1413	56 34.1	-11 28.8
169	1544	56 41.8	-11 17.9
169	1614	56 44.2	-11 15.8
169	1740	56 51.3	-11 12.3
169	1838	56 51.3	-11 19.1
169	1950	56 57.2	-11 14.2

## NAVIGATION POINTS FOR DISCOVERY CRUISE 47 LEG 1

DAY NO	TIME H M	LATITUDE DEG MIN	LONGITUDE DEG MIN
169	2133	57 6.0	-11 8.1
169	2235	57 12.3	-11 4.8
170	0 7	57 22.1	-11 0.9
170	250	57 31.2	-11 26.0
170	359	57 34.4	-11 35.5
170	6 8	57 39.9	-11 52.5
170	658	57 43.0	-11 42.7
170	744	57 46.1	-11 35.2
170	830	57 49.3	-11 27.9
170	926	57 43.4	-11 21.0
170	1124	57 32.3	-11 2.3
170	1138	57 31.1	-10 60.0
170	1214	57 33.8	-10 57.7
170	1348	57 42.1	-10 51.0
170	1546	57 52.6	-10 44.0
170	1737	58 3.1	-10 39.9
170	19 1	58 12.0	-10 36.5
170	2213	58 33.5	-10 28.6
171	023	58 48.7	-10 21.8
171	2 0	59 0.2	-10 18.4
171	4 1	59 15.5	-10 14.6
171	549	59 19.9	-10 34.9
171	643	59 21.8	-10 45.2
171	8 7	59 24.8	-11 2.4
171	935	59 28.6	-11 18.7
171	11 3	59 32.0	-11 35.4
171	12 1	59 33.9	-11 45.5
171	1313	59 35.7	-11 55.8
171	14 9	59 37.6	-12 5.3
171	1454	59 40.4	-12 14.5
171	1524	59 41.8	-12 20.5
171	1637	59 45.0	-12 35.3
171	1745	59 48.2	-12 48.5
171	1931	59 52.9	-13 7.4
171	2033	59 54.6	-13 14.4
171	2134	59 56.8	-13 25.4
171	22 6	59 57.7	-13 31.8
171	2246	59 54.0	-13 36.2
171	2318	59 51.1	-13 39.9
172	042	59 44.1	-13 51.4
172	110	59 42.0	-13 54.7
172	446	59 30.1	-13 18.6
172	650	59 24.6	-12 59.3
172	751	59 22.4	-12 50.8
172	825	59 20.7	-12 45.9
172	855	59 19.2	-12 41.9
172	10 4	59 15.8	-12 31.6
172	1038	59 13.7	-12 26.1
172	1115	59 12.6	-12 31.9
172	1245	59 9.6	-12 46.9
172	1350	59 7.1	-12 58.8
172	1512	59 2.2	-13 15.2
172	1622	58 58.4	-13 28.9
172	1735	58 54.8	-13 44.0
172	1817	58 52.9	-13 52.3
172	1958	58 49.3	-14 11.1
172	2121	58 47.0	-14 26.5
172	23 6	58 43.4	-14 45.0
173	1 2	58 37.7	-15 6.9
173	251	58 32.6	-15 27.8
173	454	58 26.9	-15 51.2
173	626	58 23.8	-16 7.4
173	8 2	58 21.0	-16 20.8
173	930	58 18.7	-16 30.5
173	1021	58 18.5	-16 35.1
173	1141	58 18.8	-16 41.7
173	1221	58 20.0	-16 45.2
173	1334	58 22.5	-16 51.2
173	1416	58 23.9	-16 56.1
173	1531	58 26.3	-17 5.8
173	1613	58 27.6	-17 11.7
173	1731	58 30.5	-17 21.6
173	1921	58 34.7	-17 34.9
173	2031	58 37.5	-17 43.6
173	2142	58 39.6	-17 50.9

## NAVIGATION POINTS FOR DISCOVERY CRUISE 47 LEG 1

DAY NO	TIME H M	LATITUDE DEG MIN	LONGITUDE DEG MIN
173	2314	58 42.1	-18 1.5
174	126	58 45.7	-18 19.4
174	246	58 48.0	-18 31.5
174	57	58 52.4	-18 50.8
174	652	58 56.8	-19 5.3
174	746	58 59.2	-19 12.2
174	82	58 59.9	-19 14.3
174	912	59 2.4	-19 23.2
174	1035	58 53.2	-19 18.3
174	1130	58 47.8	-19 15.3
174	1210	58 46.3	-19 14.1
174	1337	58 37.2	-19 9.1
174	1439	58 30.7	-19 6.0
174	1649	58 16.9	-18 59.4
174	1831	58 5.7	-18 54.3
174	2136	57 45.1	-18 45.1
174	2318	57 39.4	-18 26.2
175	13	57 34.2	-18 7.0
175	334	57 26.5	-17 38.4
175	542	57 20.0	-17 13.5
175	105	57 5.9	-16 25.1
175	111	57 2.6	-16 14.9
175	122	56 58.9	-15 5.0
175	1256	56 55.8	-15 55.7
175	1453	56 49.6	-15 34.2
175	167	56 45.3	-15 21.1
175	171	56 41.4	-15 13.7
175	1724	56 38.6	-15 13.8
175	1848	56 32.8	-15 12.5
175	1929	56 26.4	-15 12.7
175	1949	56 23.2	-15 13.2
175	2036	56 23.4	-15 13.2
175	2130	56 22.8	-15 13.3
175	2152	56 21.9	-15 13.8
175	2246	56 22.1	-15 12.8
175	2258	56 22.2	-15 11.4
175	2336	56 21.7	-15 11.2
175	2348	56 20.8	-15 10.9
176	02	56 19.3	-15 10.6
176	038	56 19.1	-15 10.8
176	054	56 18.3	-15 12.9
176	231	56 17.6	-15 13.1
176	251	56 17.4	-15 12.9
176	35	56 16.8	-15 12.5
176	351	56 16.7	-15 12.6
176	425	56 16.0	-15 12.4
176	437	56 15.0	-15 12.3
176	55	56 14.5	-15 12.7
176	525	56 13.7	-15 15.9
176	61	56 14.0	-15 15.6
176	617	56 15.7	-15 14.7
176	715	56 15.8	-15 14.5
176	729	56 17.5	-15 14.4
176	81	56 17.7	-15 14.7
176	825	56 19.5	-15 15.7
176	857	56 19.3	-15 15.6
176	933	56 19.7	-15 14.9
176	943	56 20.3	-15 12.9
176	1025	56 20.7	-15 13.2
176	1055	56 21.1	-15 13.0
176	1119	56 23.4	-15 14.9
176	1147	56 23.3	-15 14.9
176	1219	56 23.0	-15 13.4
176	1229	56 22.4	-15 11.4
176	1345	56 22.5	-15 12.4
176	1415	56 22.4	-15 12.6
176	1521	56 21.5	-15 18.9
176	1753	56 22.9	-15 38.5
176	1849	56 23.2	-15 45.1
176	2046	56 24.1	-15 58.6
176	2230	56 25.4	-16 11.6
176	2352	56 25.9	-16 20.0
177	22	56 27.0	-16 34.7
177	456	56 27.8	-16 52.7
177	639	56 27.8	-17 4.0

## NAVIGATION POINTS FOR DISCOVERY CRUISE 47 LEG 1

DAY NO	TIME H M	LATITUDE DEG MIN	LONGITUDE DEG MIN
177	8 6	56 27.4	-17 13.2
177	953	56 27.6	-17 25.9
177	1038	56 27.8	-17 31.8
177	1439	56 28.3	-18 1.3
177	1559	56 28.2	-18 12.5
177	1830	56 28.1	-18 35.2
177	1919	56 28.0	-18 41.3
177	2023	56 28.4	-18 49.4
177	22 3	56 29.3	-19 2.0
177	2352	56 23.0	-19 16.8
178	222	56 15.5	-19 35.7
178	324	56 12.1	-19 43.9
178	548	56 3.6	-20 4.0
178	854	55 52.4	-20 28.7
178	1128	55 42.5	-20 48.9
178	1227	55 38.9	-20 56.9
178	1414	55 31.6	-21 12.8
178	1534	55 26.0	-21 25.1
178	1650	55 20.7	-21 35.5
178	18 8	55 15.2	-21 45.6
178	1844	55 12.9	-21 49.6
178	1919	55 11.2	-21 51.1
178	1953	55 12.1	-21 42.4
178	2037	55 14.2	-21 29.8
178	2129	55 17.3	-21 11.9
178	23 4	55 22.7	-20 41.1
179	115	55 30.6	-19 58.5
179	343	55 40.2	-19 8.6
179	6 2	55 48.3	-18 21.3
179	742	55 54.7	-17 46.7
179	850	55 58.9	-17 22.9
179	1015	56 3.9	-16 53.6
179	1141	56 9.4	-16 23.7
179	1319	56 15.1	-15 48.6
179	14 3	56 17.8	-15 32.4
179	1419	56 18.2	-15 29.8
179	15 2	56 21.1	-15 19.1
179	1532	56 23.0	-15 11.9
179	1554	56 22.8	-15 12.2
179	1628	56 23.1	-15 12.0
179	17 4	56 22.9	-15 11.6
179	2315	56 22.9	-15 11.6
180	031	56 22.9	-15 12.7
180	059	56 22.7	-15 12.8
180	111	56 22.5	-15 11.6
180	133	56 23.4	-15 5.2
180	2 1	56 24.7	-14 57.8
180	237	56 25.2	-14 57.5
180	3 1	56 21.8	-14 52.8
180	323	56 18.7	-14 48.7
180	349	56 18.6	-14 47.8
180	4 1	56 18.1	-14 49.3
180	443	56 15.3	-14 58.0
180	515	56 15.2	-14 58.0
180	6 0	56 11.1	-15 6.0
180	614	56 10.0	-15 7.6
180	644	56 10.1	-15 8.2
180	715	56 11.0	-15 15.3
180	729	56 11.5	-15 18.3
180	723	56 11.3	-15 17.4
180	741	56 11.4	-15 18.8
180	759	56 11.7	-15 19.4
180	817	56 13.9	-15 19.1
180	845	56 16.2	-15 12.9
180	9 0	56 15.8	-15 12.4
180	923	56 16.4	-15 12.8
180	959	56 16.3	-15 11.6
180	1149	56 16.3	-15 12.3
180	1546	56 16.4	-15 12.0
180	2152	56 16.0	-15 11.9
180	2214	56 15.7	-15 10.1
180	2243	56 18.3	-15 6.9
181	0 5	56 31.7	-15 2.8
181	027	56 31.3	-15 2.9
181	045	56 31.1	-15 2.5

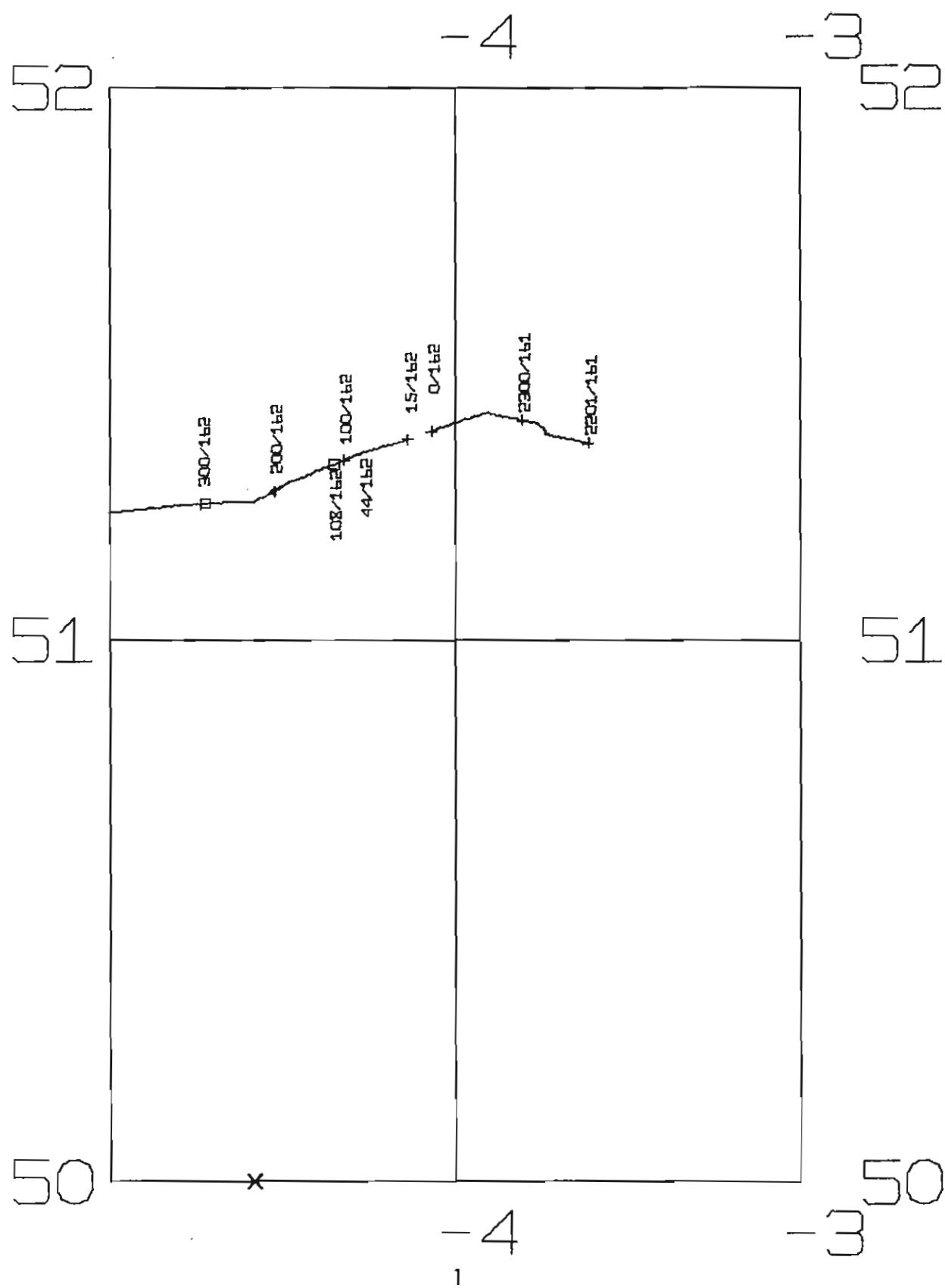
## NAVIGATION POINTS FOR DISCOVERY CRUISE 47 LEG 1

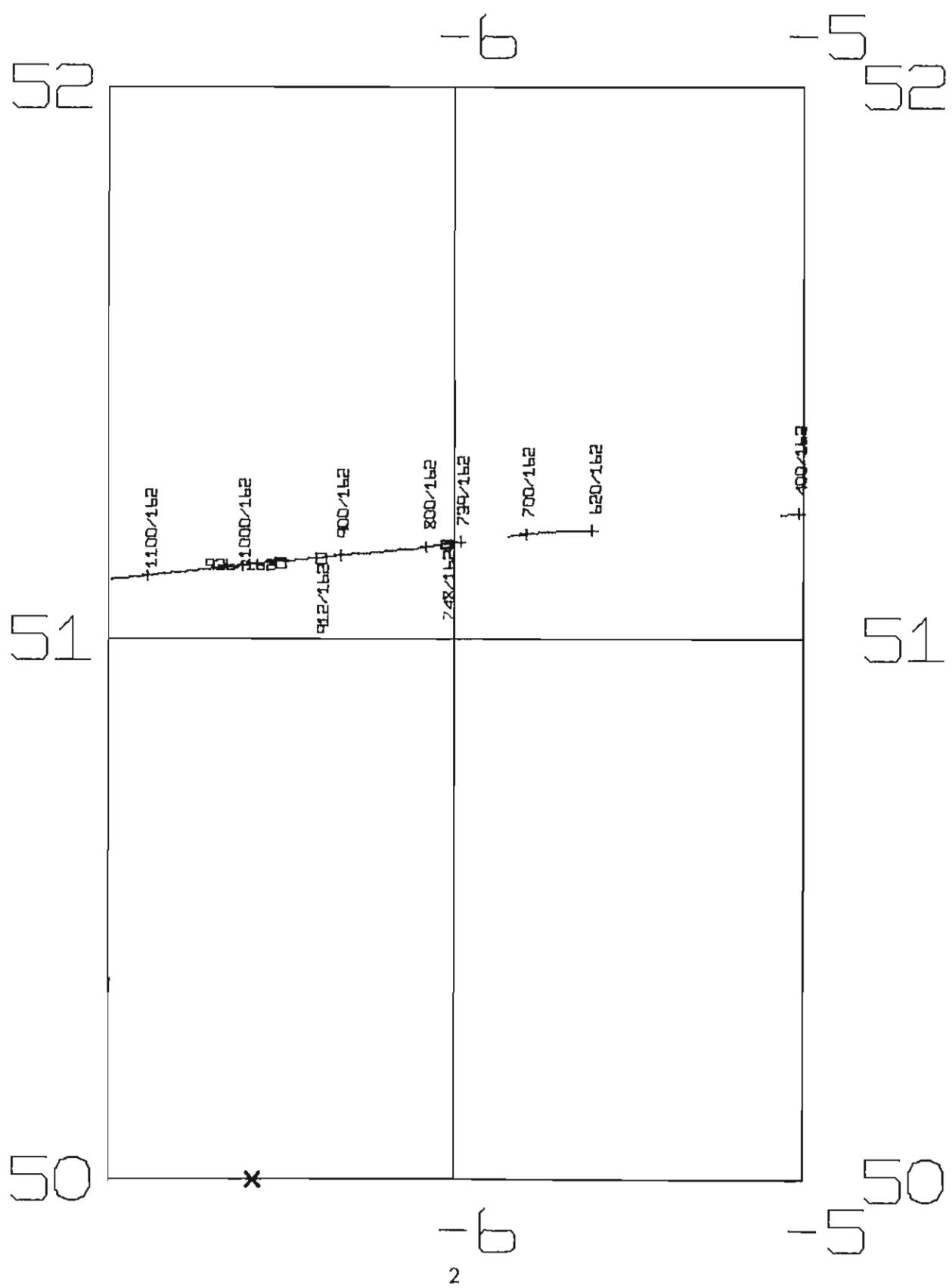
DAY NO	TIME H M	LATITUDE DEG MIN	LONGITUDE DEG MIN
181	2 9	56 41.0	-14 51.8
181	23 9	56 40.9	-14 51.4
181	33 1	56 48.3	-14 47.1
181	43 0	56 57.8	-14 43.2
181	45 8	56 57.3	-14 43.3
181	51 0	56 57.4	-14 44.3
181	6 1	57 0.9	-14 54.3
181	64 5	57 0.7	-14 54.1
181	72 9	57 6.5	-14 52.4
181	75 5	57 6.1	-14 52.0
181	8 5	57 6.4	-14 51.3
181	84 9	57 4.8	-14 38.3
181	92 1	57 4.4	-14 37.6
181	94 5	57 3.3	-14 32.4
181	95 7	57 3.8	-14 33.3
181	101 5	57 3.6	-14 33.6
181	12 2	57 4.1	-14 32.3
181	14 52	57 3.5	-14 31.9
181	15 9	57 2.3	-14 31.3
181	16 9	56 54.6	-14 27.2
181	162 3	56 53.0	-14 27.0
181	171 0	56 48.3	-14 30.7
181	175 8	56 44.4	-14 34.3
181	20 3	56 36.3	-14 39.9
181	21 43	56 30.9	-14 43.7
181	224 8	56 26.8	-14 45.4
182	0 5	56 21.9	-14 53.1
182	03 7	56 20.7	-14 54.2
182	11 6	56 18.6	-14 49.9
182	22 6	56 12.7	-14 39.9
182	41 9	56 3.4	-14 24.0
182	7 5	55 51.0	-14 0.3
182	81 9	55 45.6	-13 50.3
182	85 9	55 42.5	-13 45.2
182	123 4	55 27.6	-13 16.4
182	132 7	55 23.9	-13 8.9
182	145 3	55 16.8	-12 56.5
182	163 3	55 7.7	-12 43.0
182	172 8	55 3.0	-12 36.4
182	185 2	54 55.4	-12 26.4
182	215 0	54 39.9	-12 8.2
183	0 7	54 29.1	-11 52.0
183	23 5	54 17.7	-11 33.4
183	42 5	54 8.3	-11 20.1
183	53 5	54 2.6	-11 11.2
183	7 9	53 55.5	-10 57.2
183	73 1	53 54.0	-10 53.8
183	8 3	53 52.8	-10 52.5
183	81 7	53 52.2	-10 51.4
183	9 5	53 45.3	-10 52.3
183	114 9	53 15.7	-10 56.6
183	14 9	52 50.6	-10 59.0
183	15 3	52 41.1	-11 0.2
183	153 8	52 39.6	-11 2.5
183	16 5	52 38.2	-11 4.2
183	172 5	52 27.1	-11 3.7
183	19 9	52 7.8	-11 2.3
183	204 8	51 51.0	-10 46.7
183	213 8	51 42.5	-10 39.1
183	223 0	51 32.6	-10 31.5
183	23 6	51 26.2	-10 25.3
184	01 8	51 19.1	-10 4.5
184	13 6	51 12.0	-9 42.4
184	4 4	51 11.8	-8 54.7
184	53 6	51 12.4	-8 23.4
184	75 4	51 13.5	-7 36.0
184	94 7	51 13.7	-6 57.9
184	114 4	51 13.3	-6 19.3
184	141 2	51 13.2	-5 32.3
184	155 7	51 14.5	-5 0.5
184	164 3	51 15.0	-4 50.3
184	174 2	51 15.2	-4 36.9
184	181 2	51 14.9	-4 29.4
184	191 0	51 13.8	-4 14.7
184	193 6	51 13.6	-4 7.5

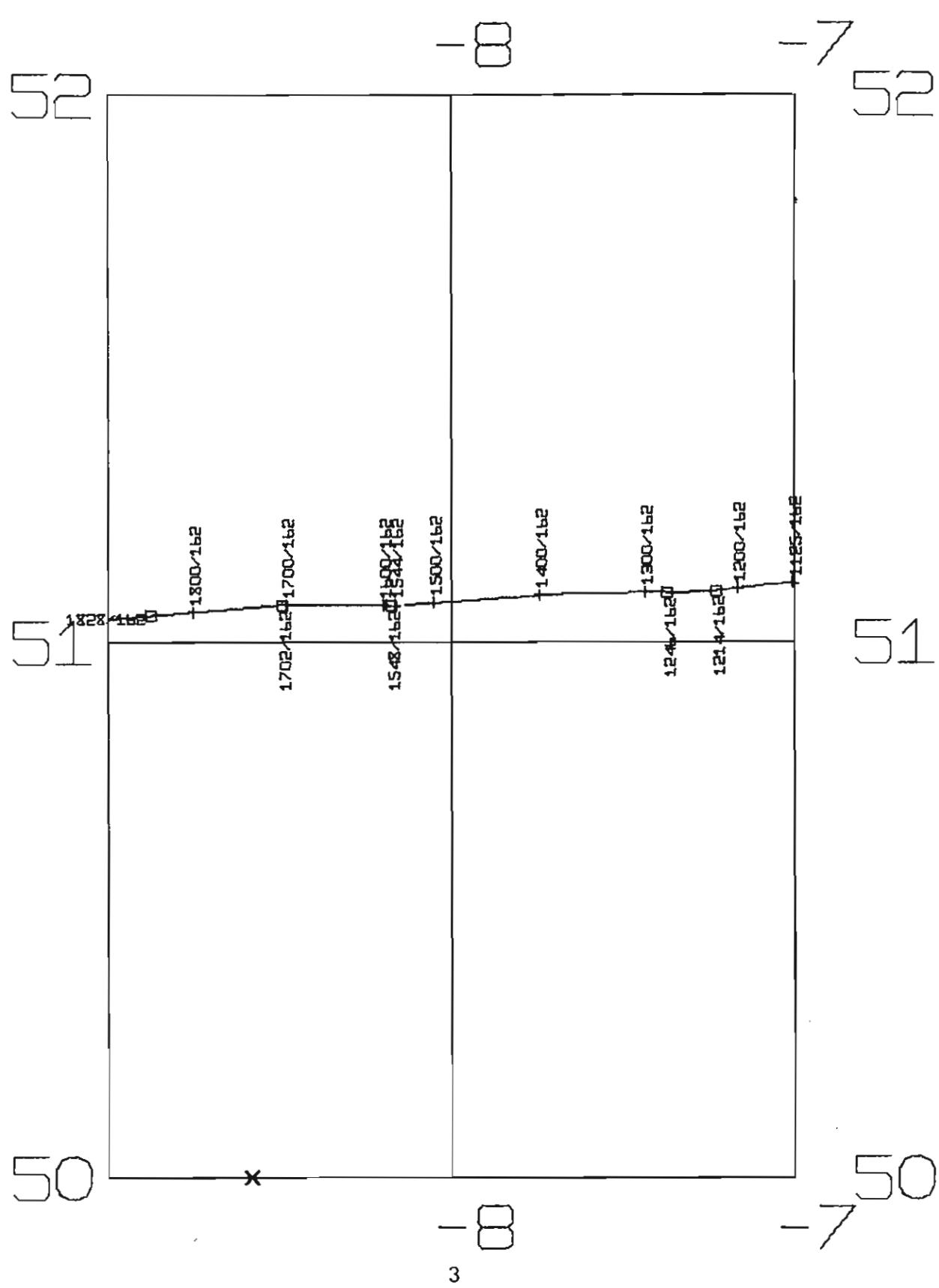
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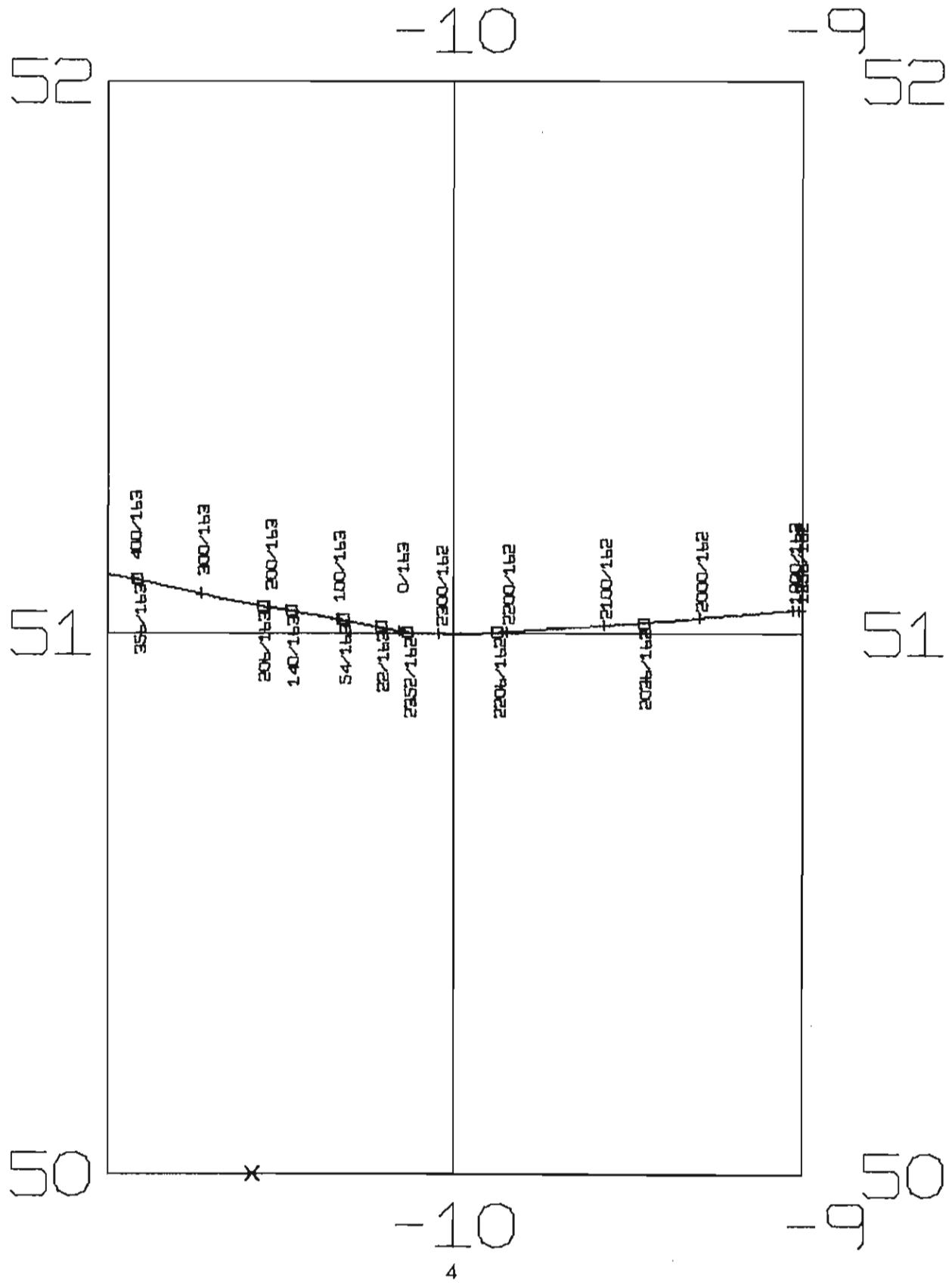
NAVIGATION POINTS FOR DISCOVERY CRUISE 47 LEG 1

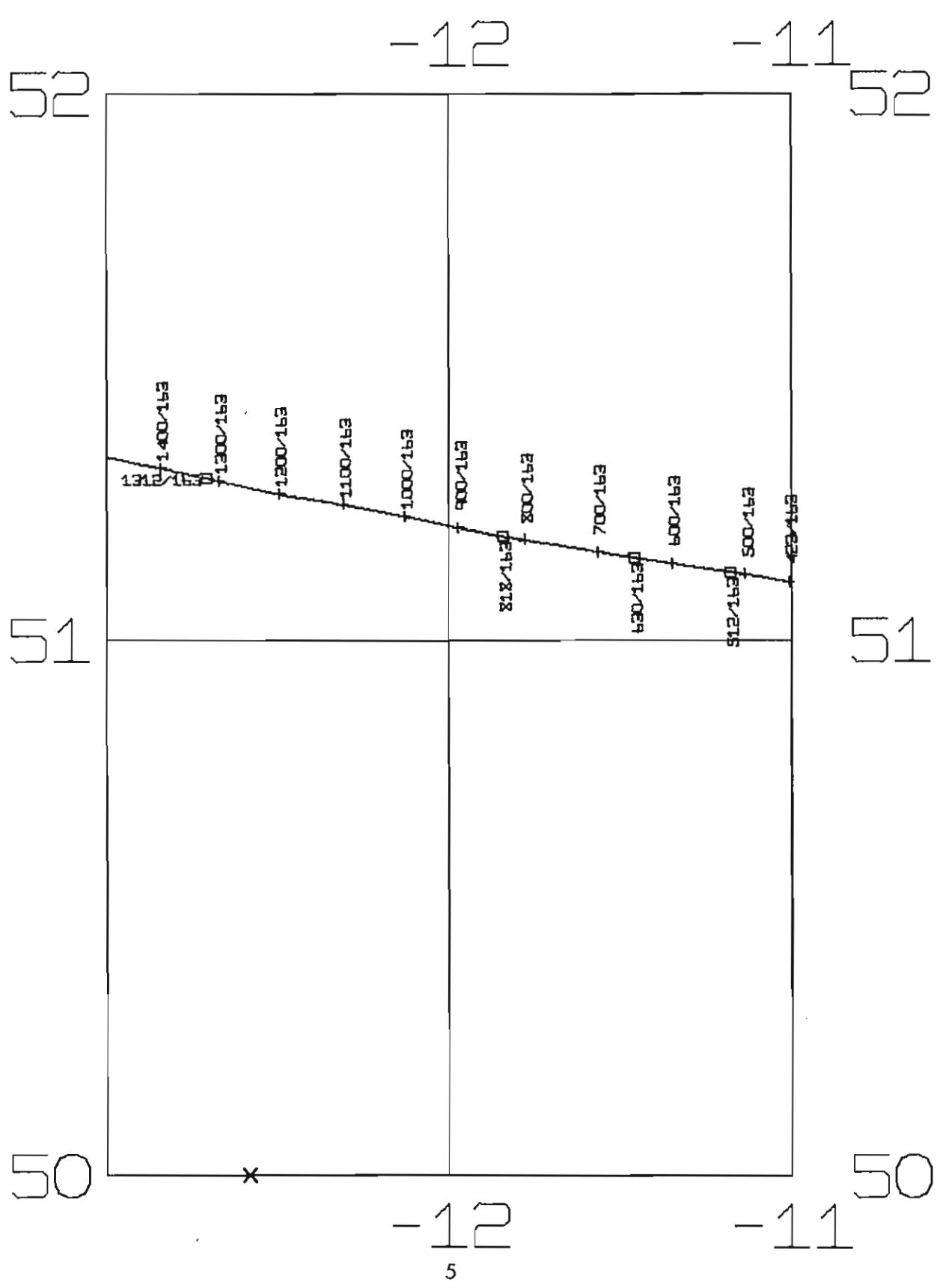
DAY NO	TIME H M	LATITUDE DEG MIN	LONGITUDE DEG MIN
184	2010	51 14.9	-3 56.5
184	22 7	51 19.9	-3 20.0

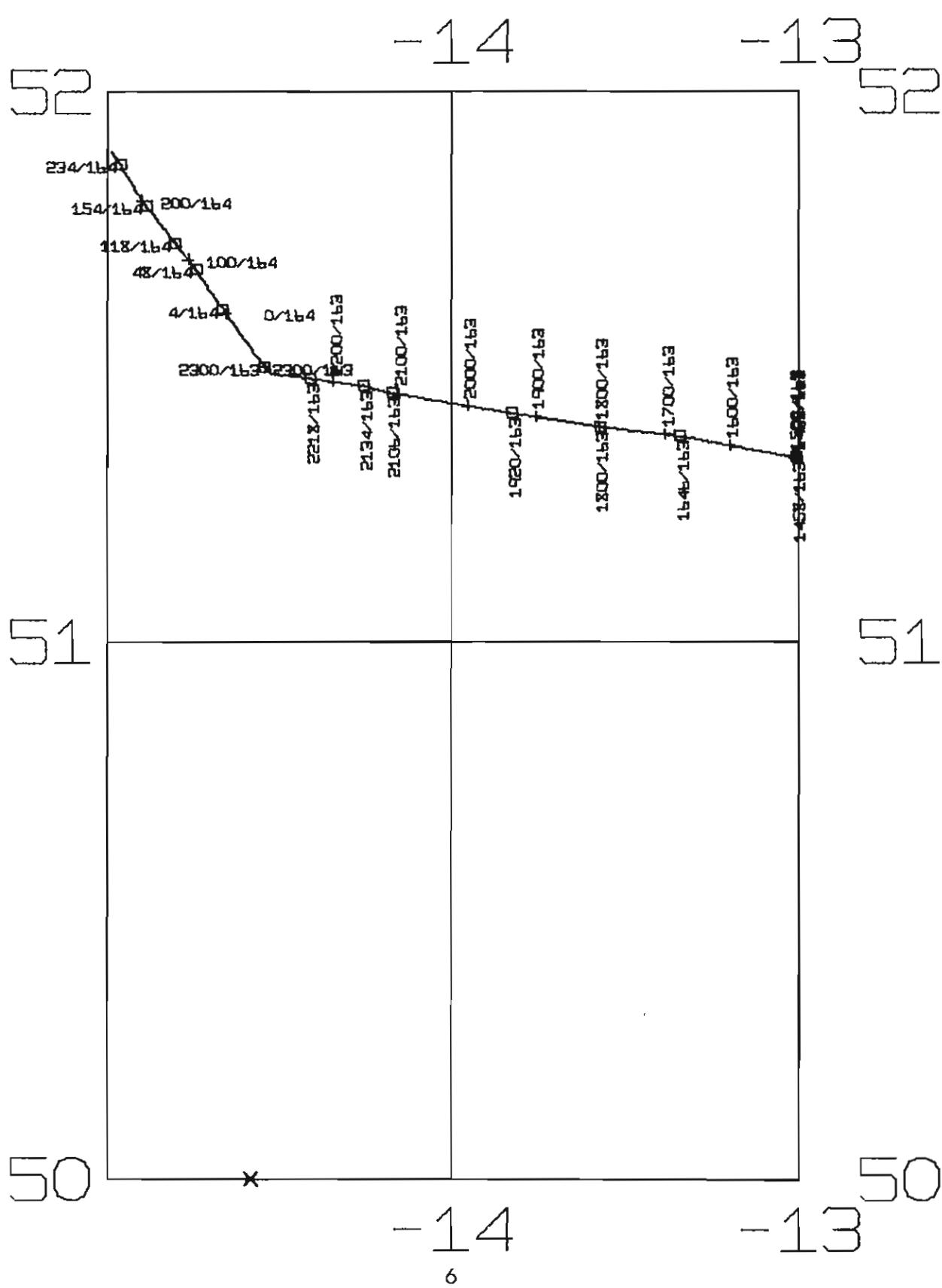


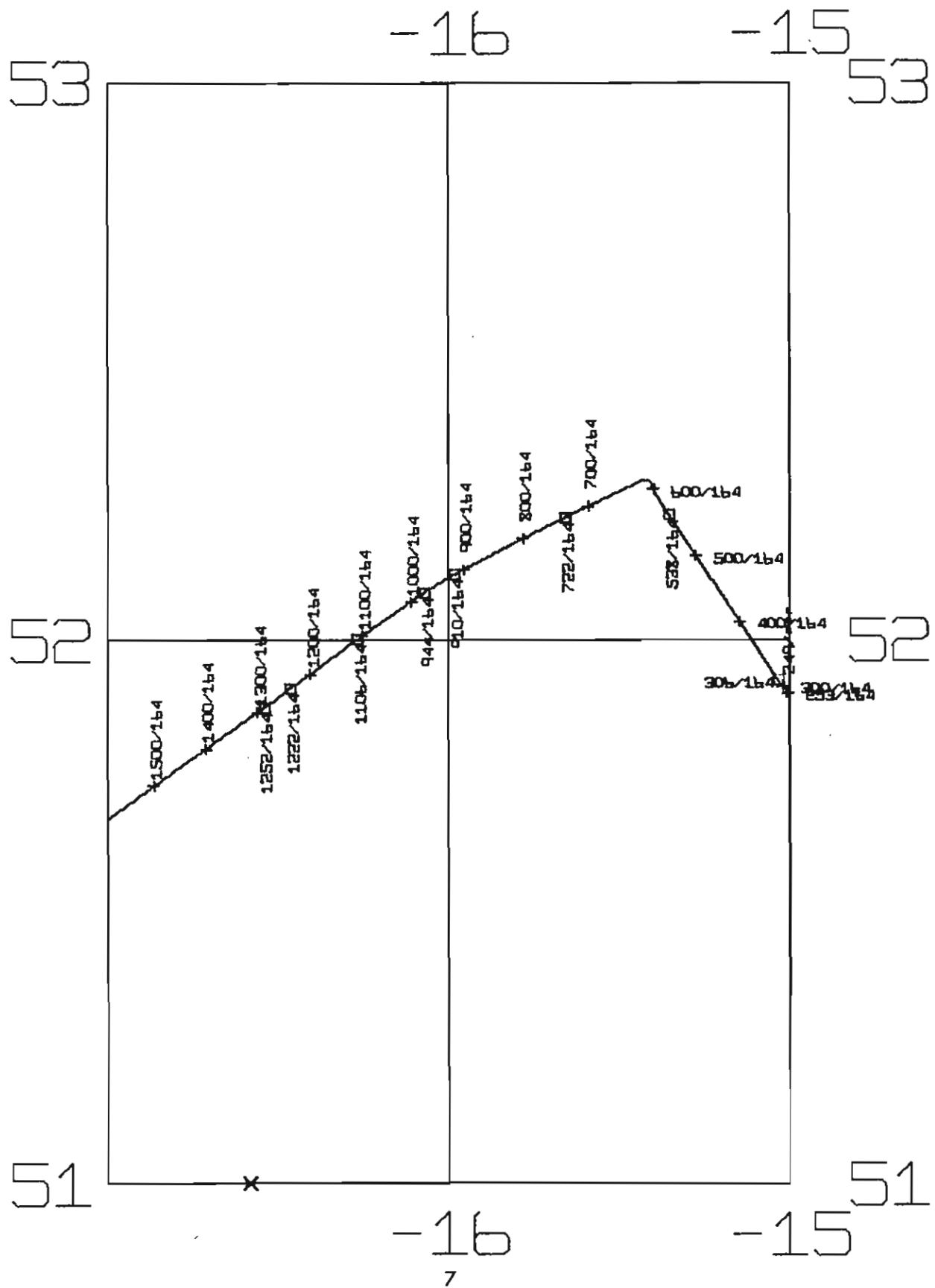


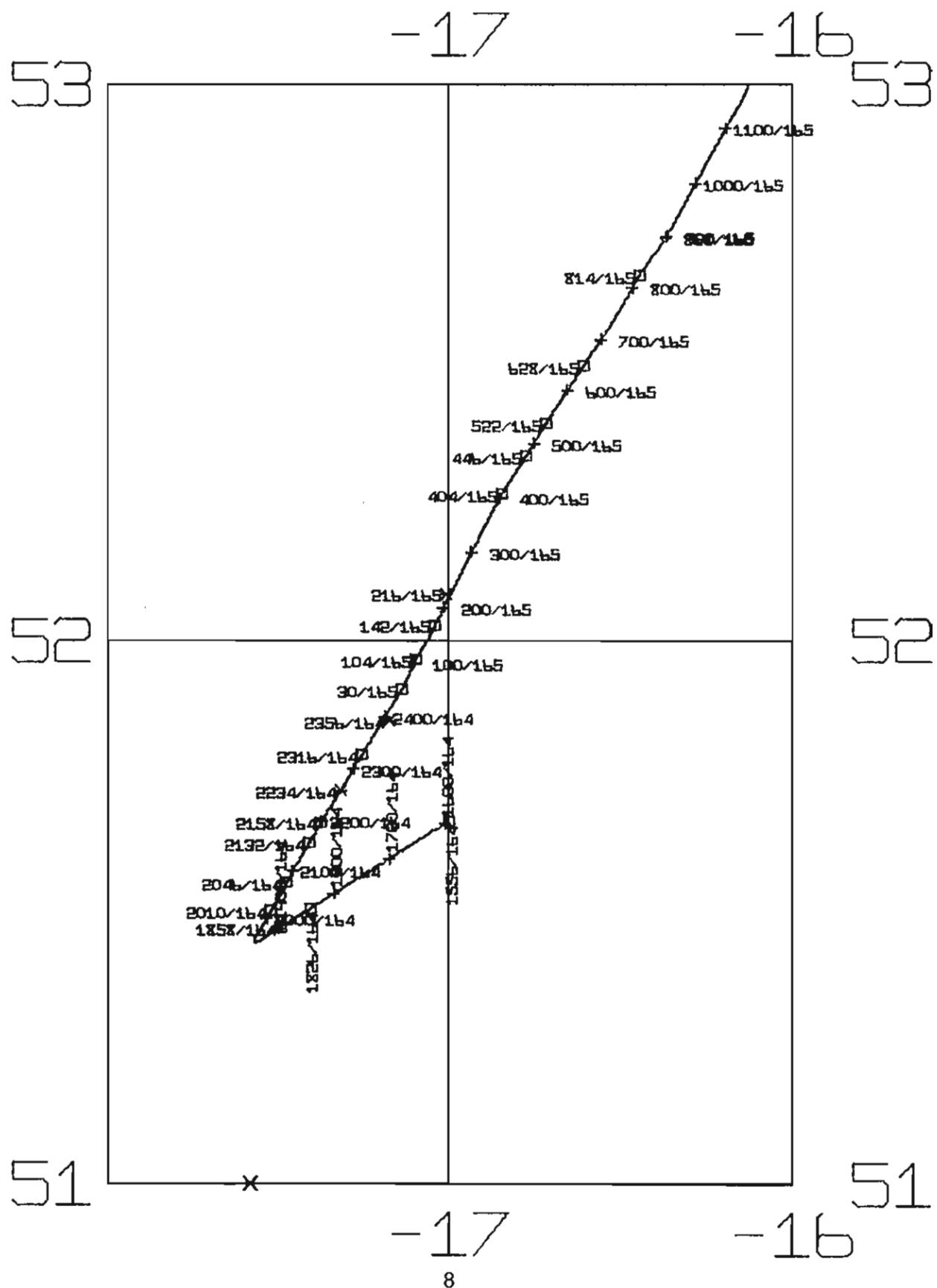


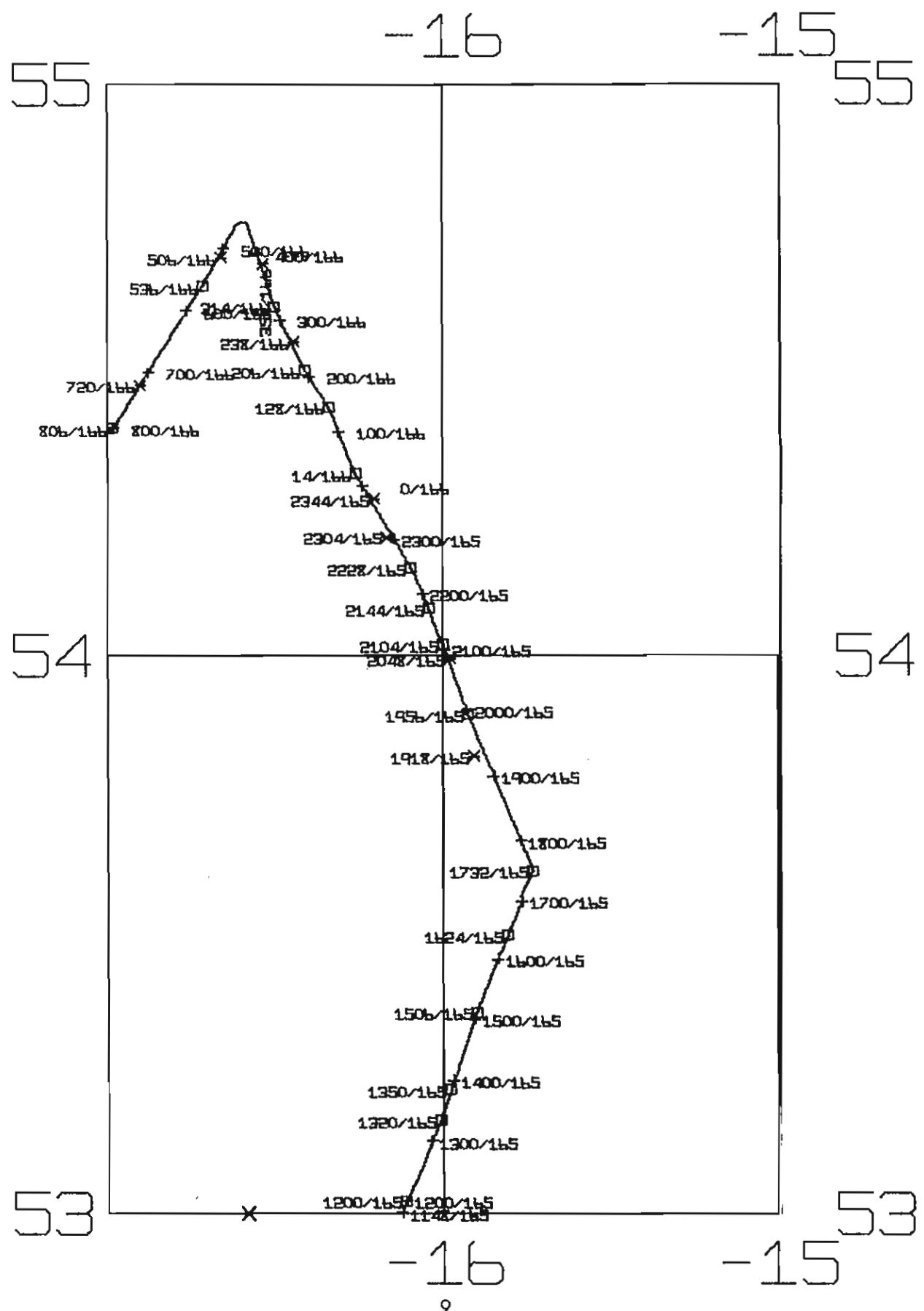


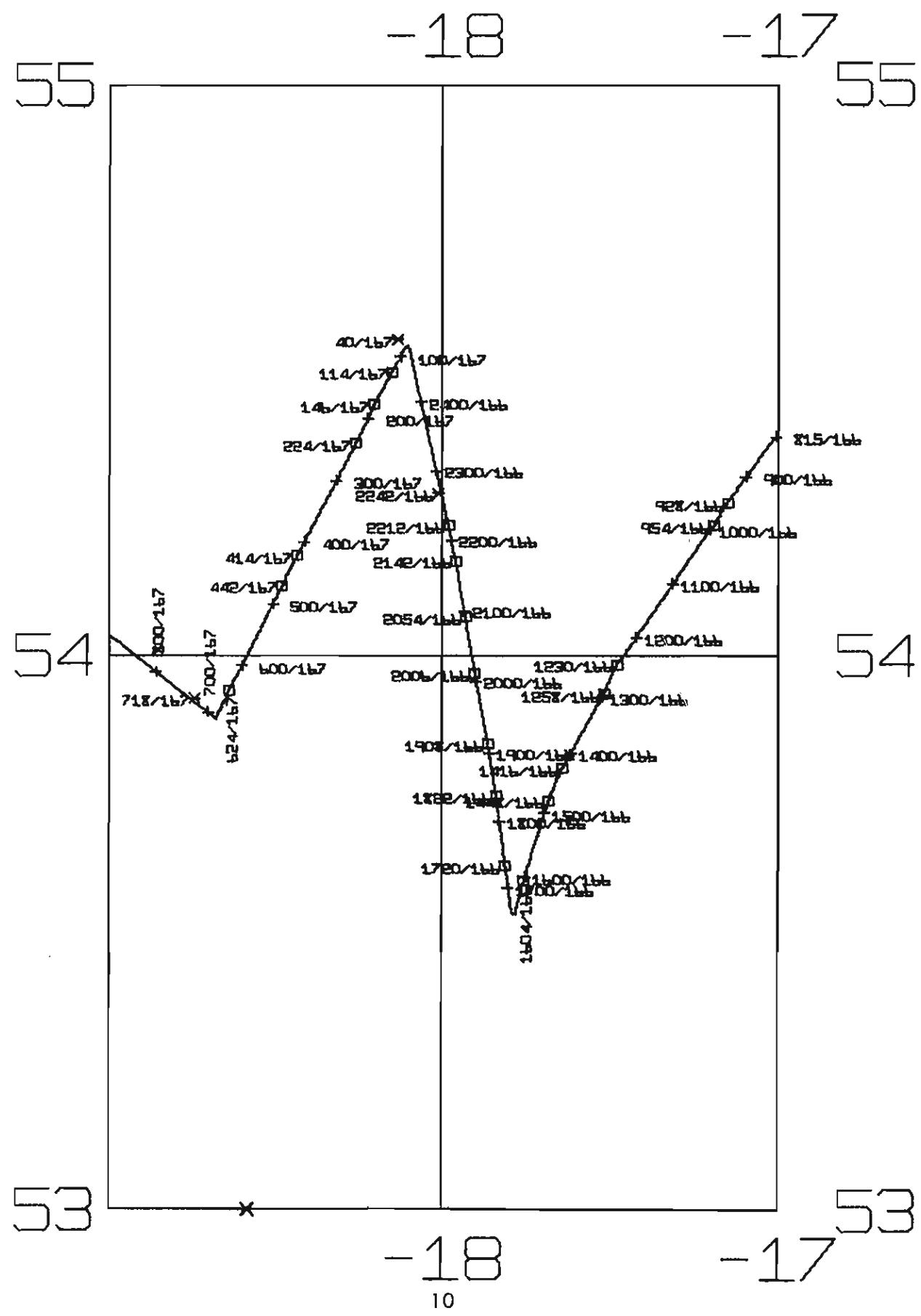


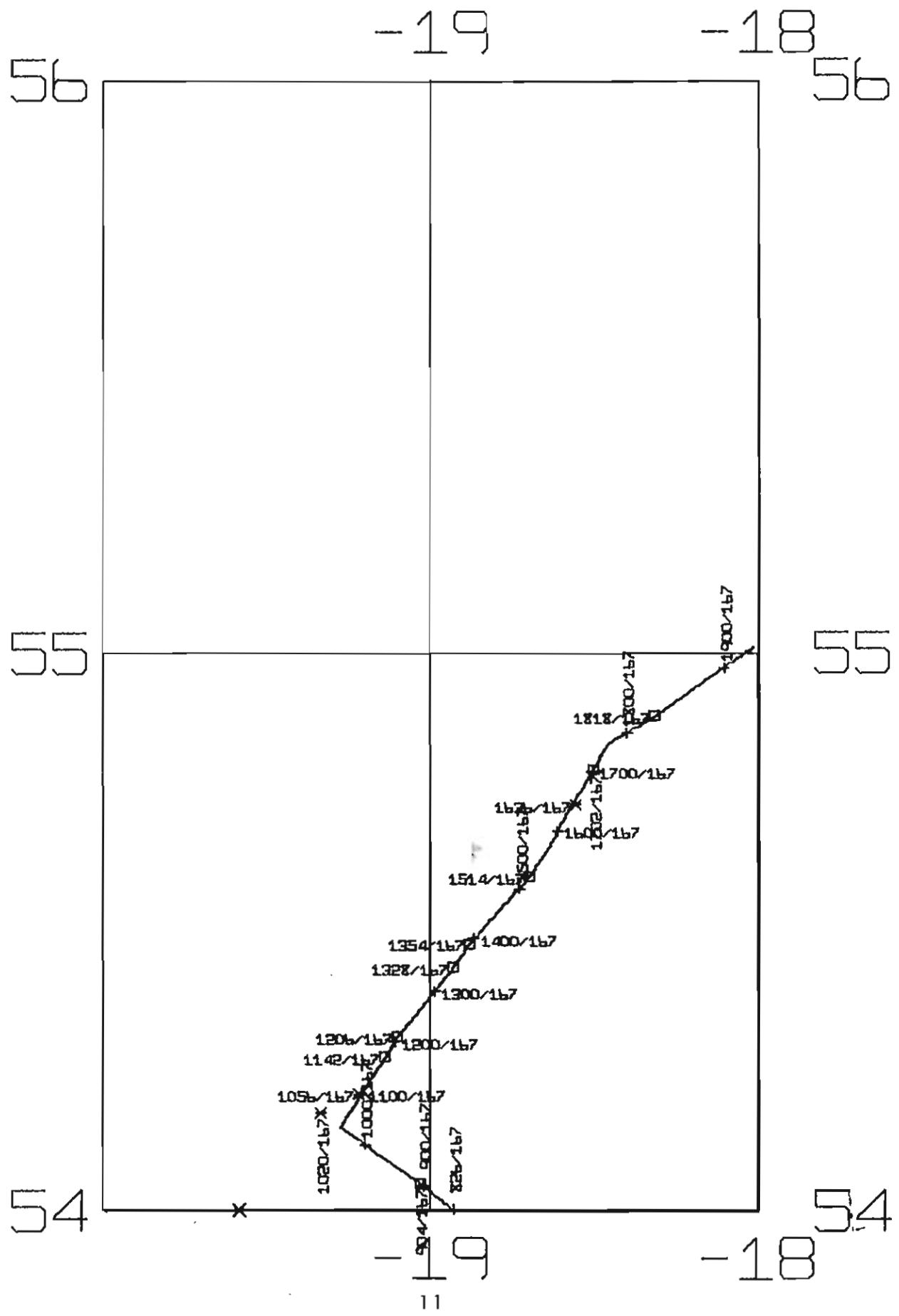


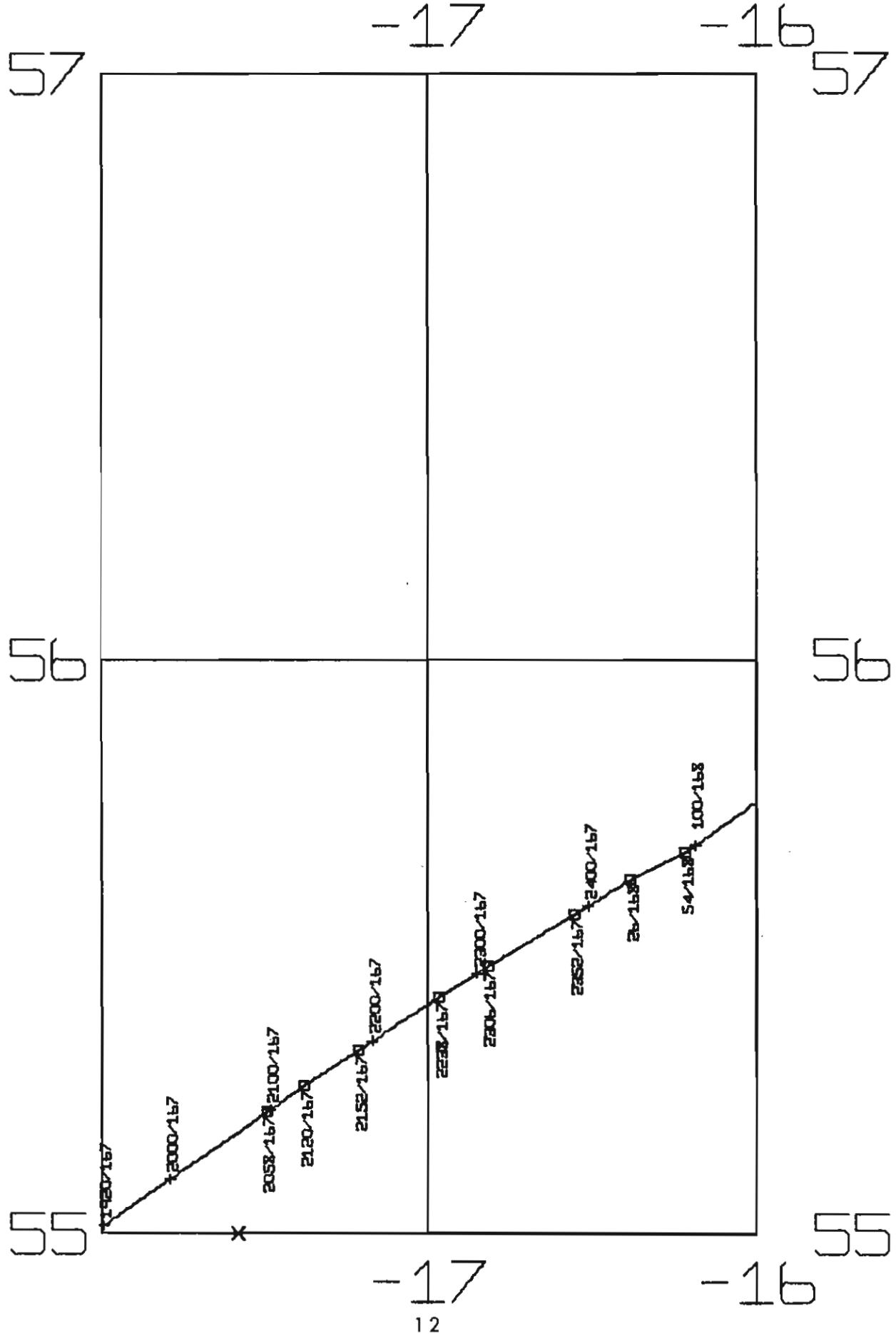


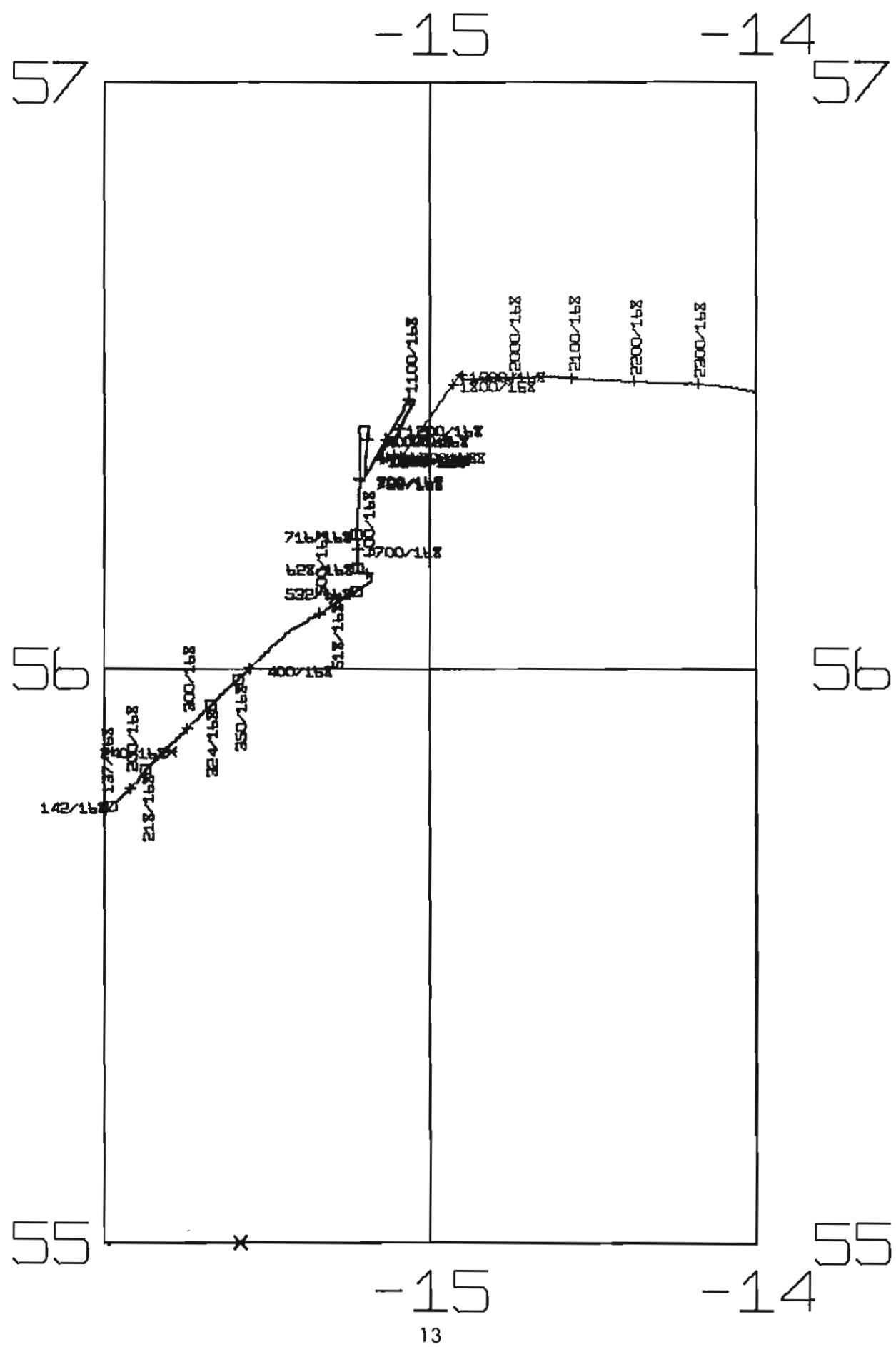












56

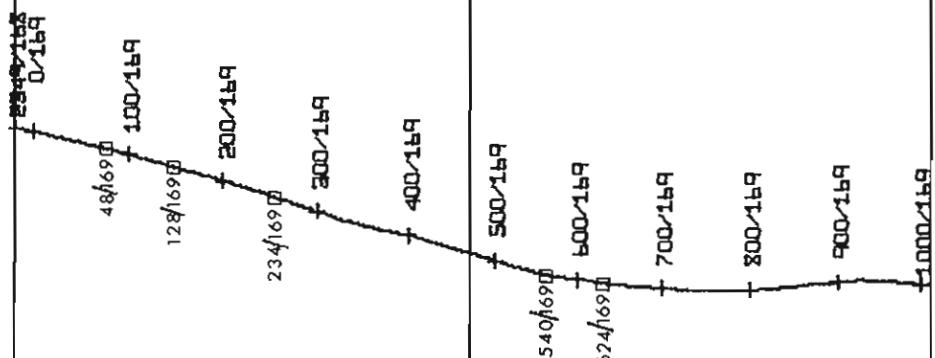
-13  
14-12  
56

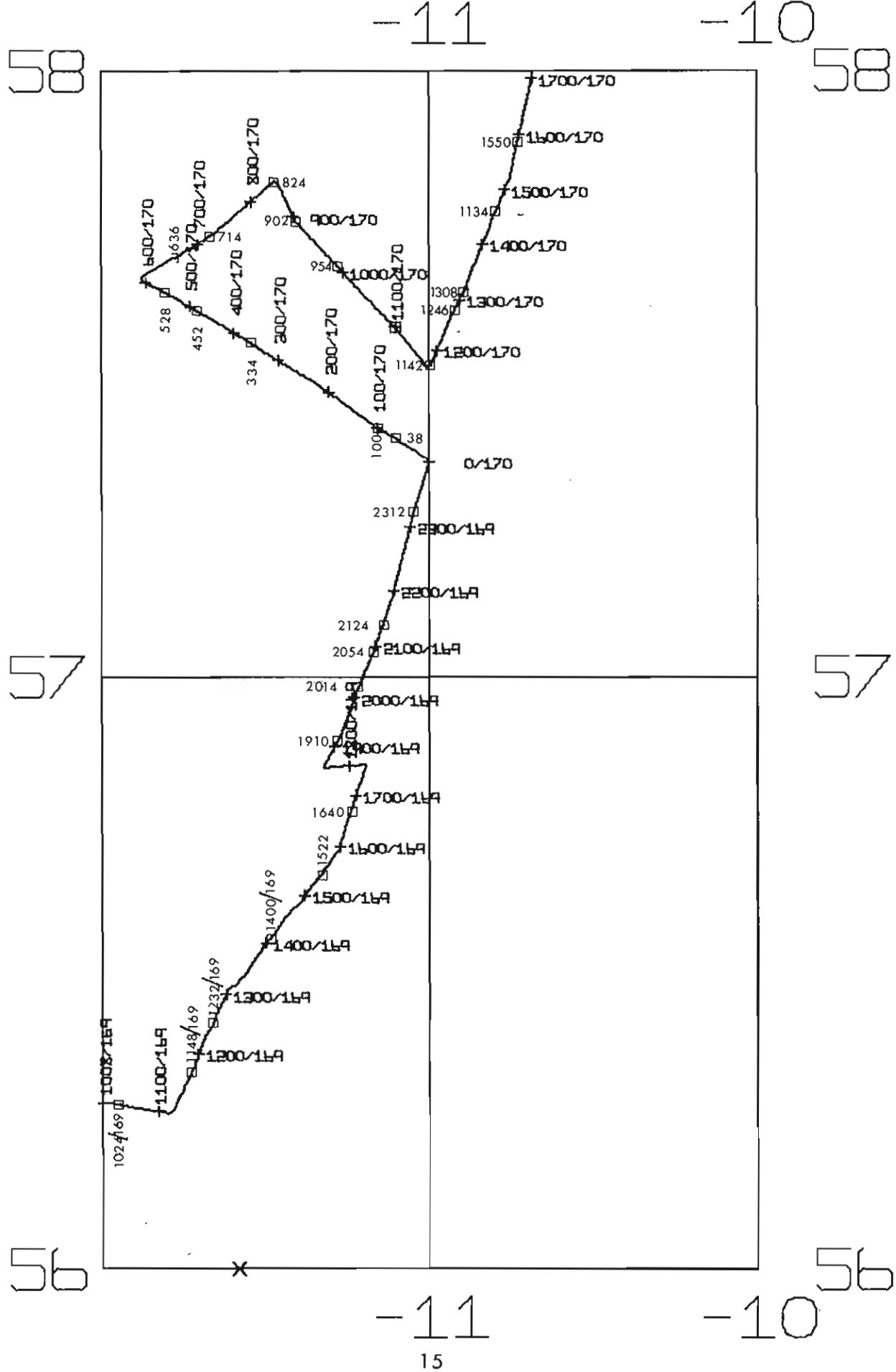
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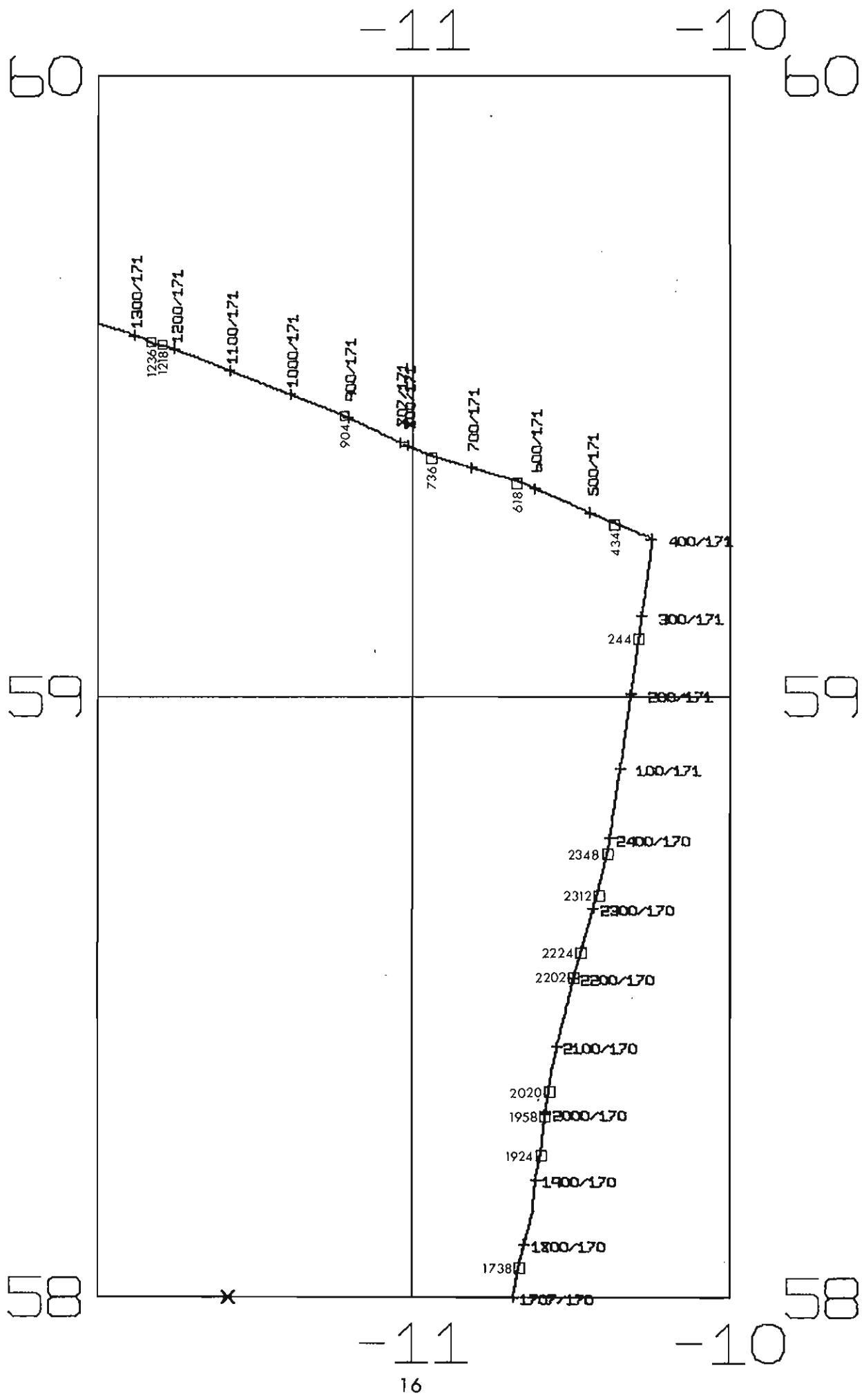
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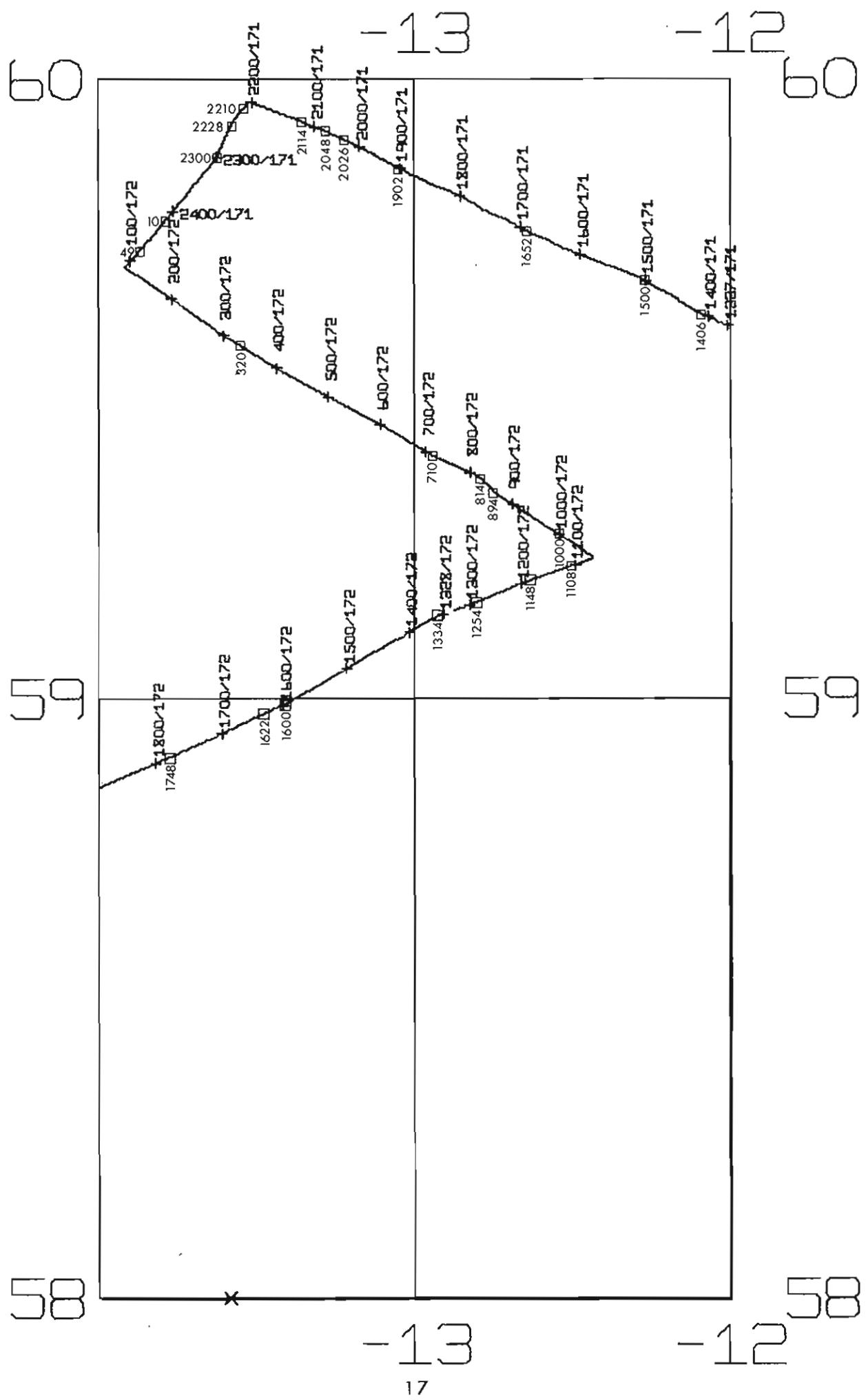
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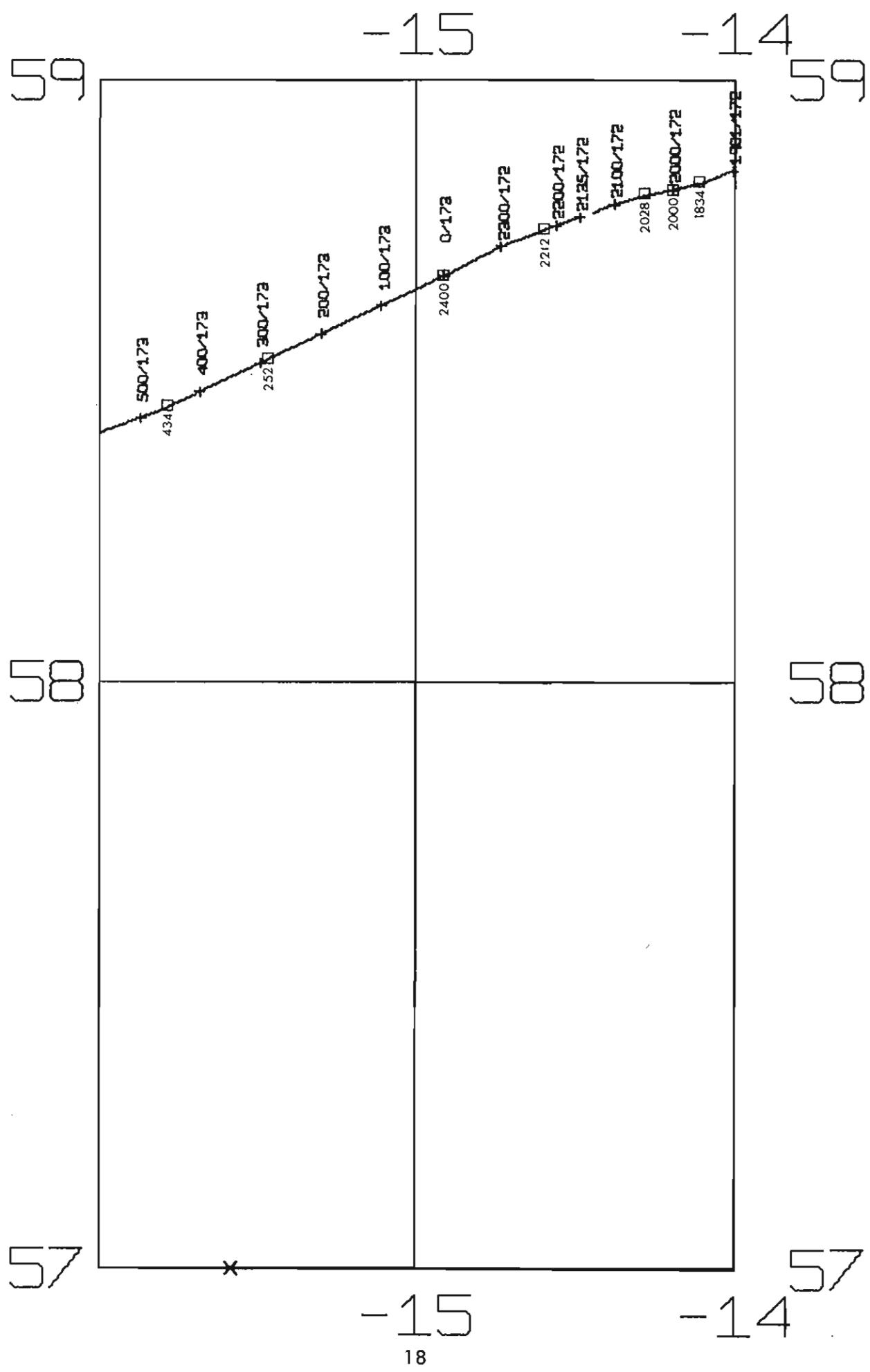
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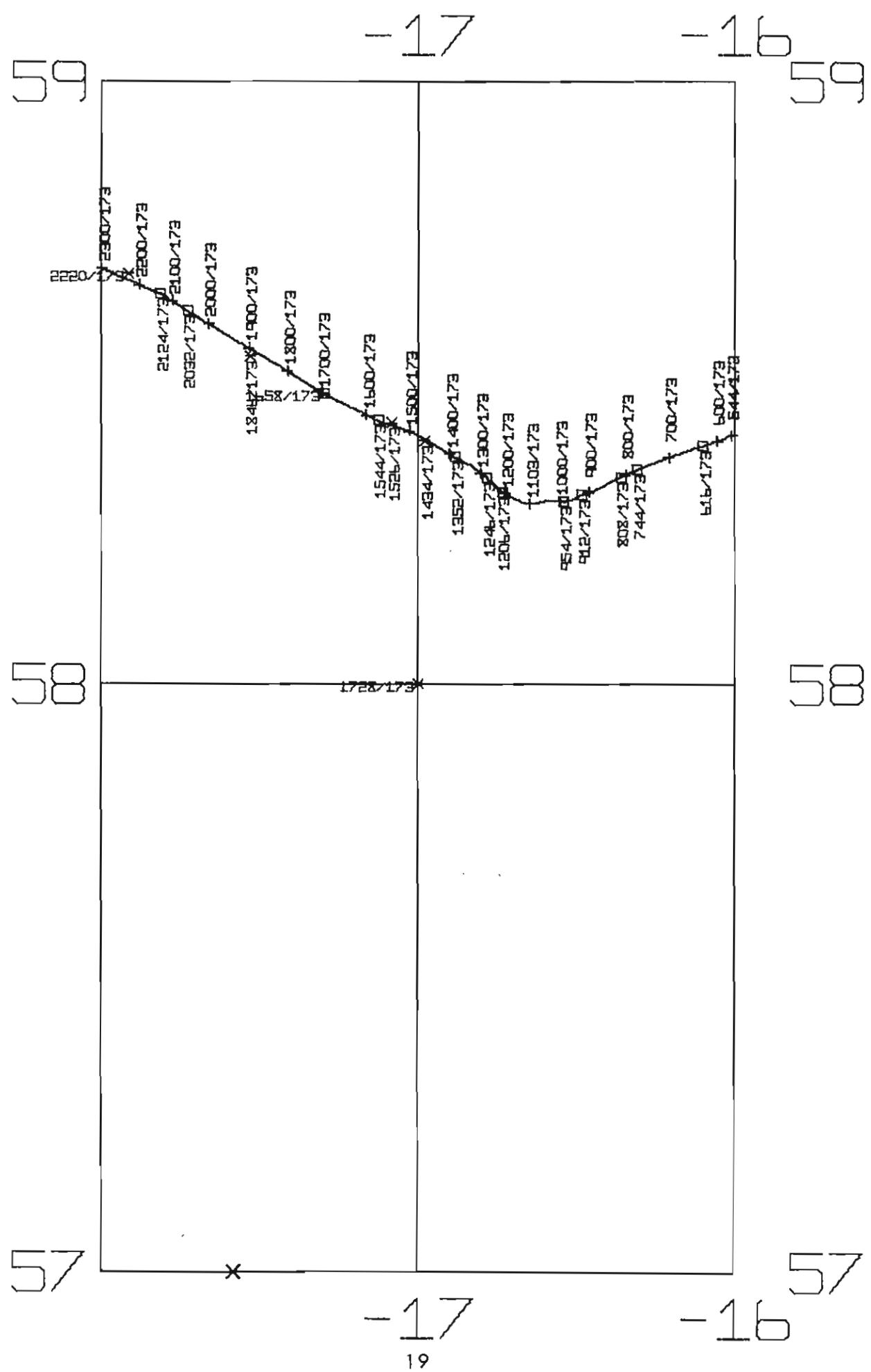
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58

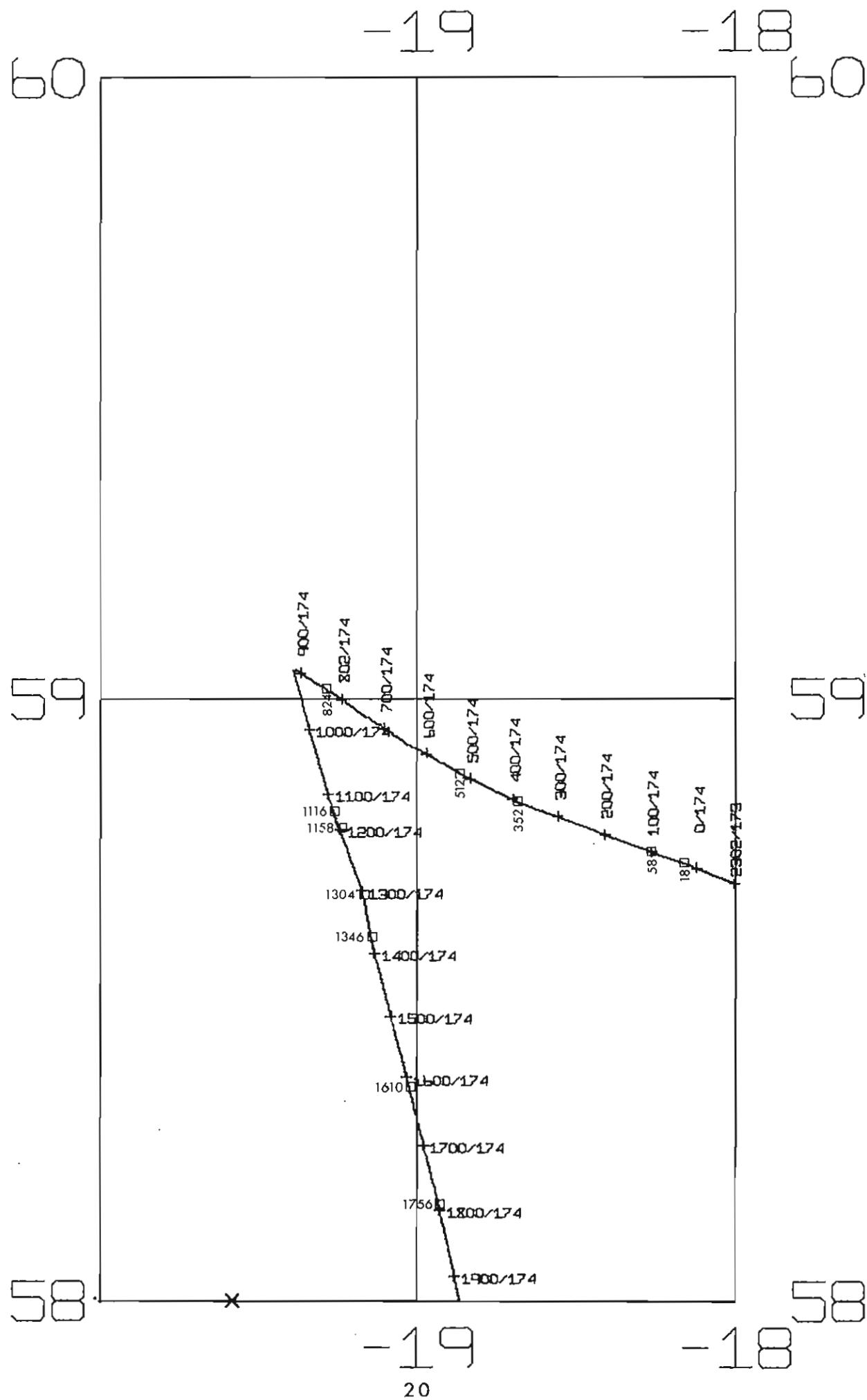


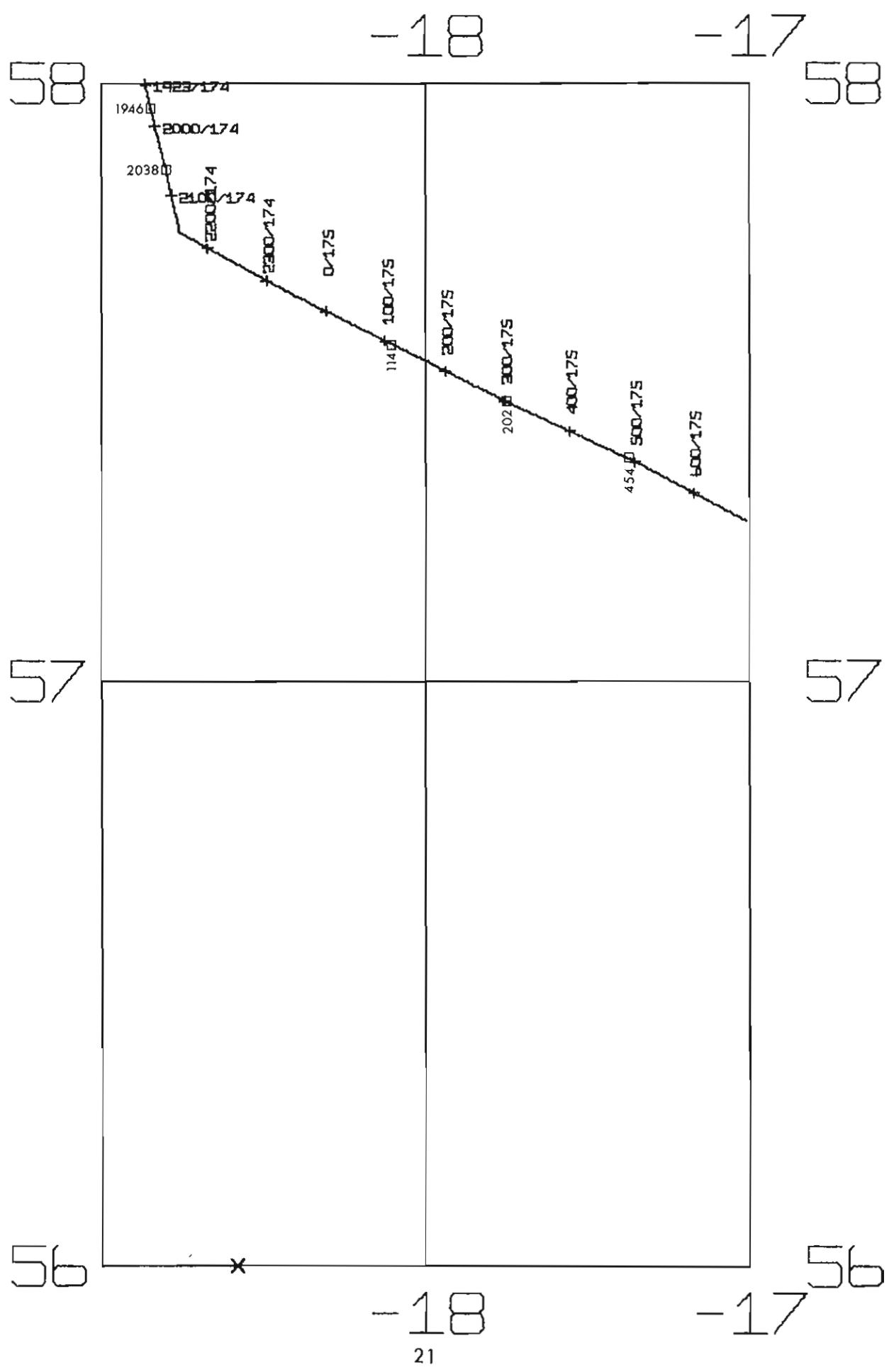


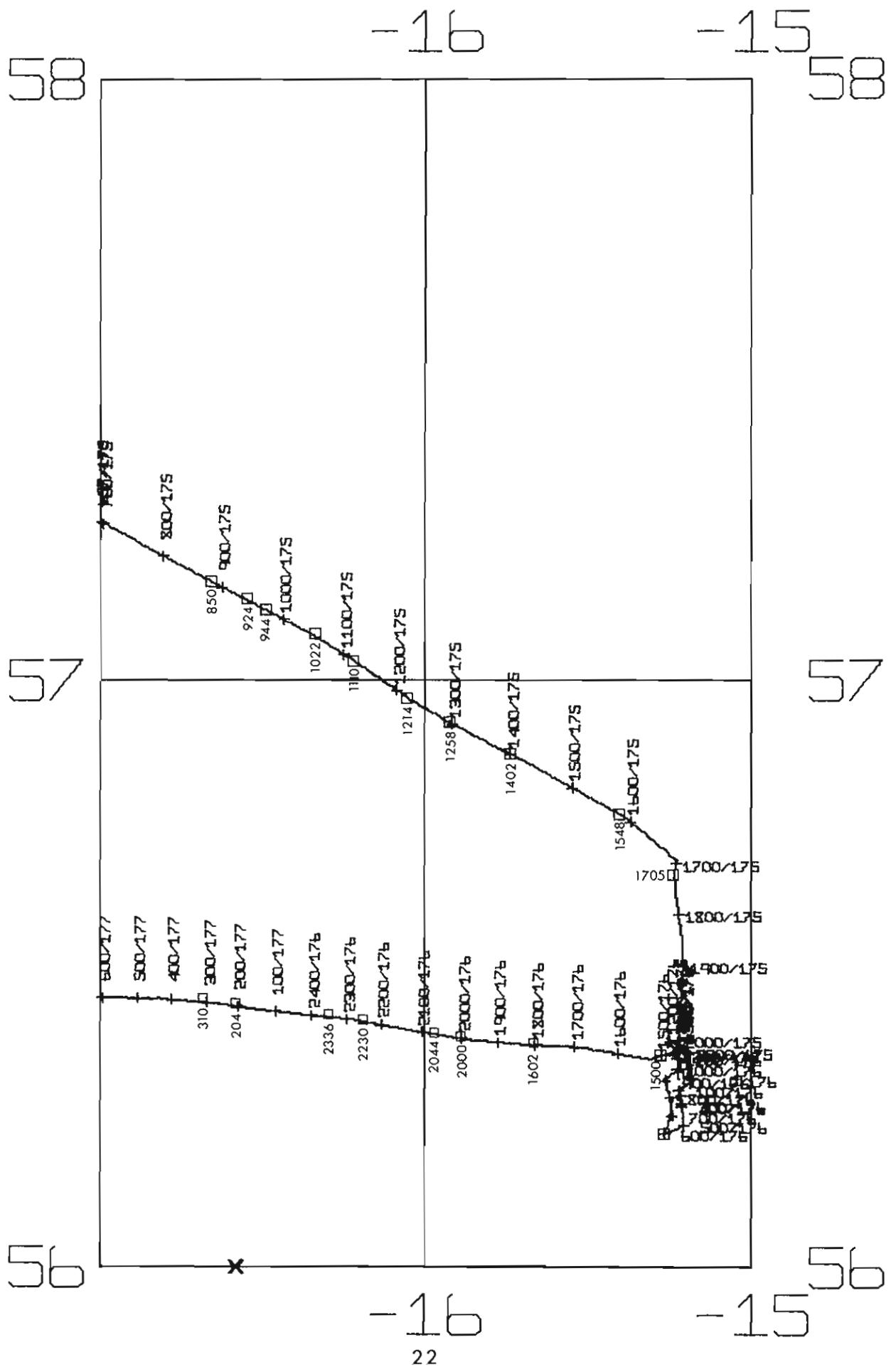


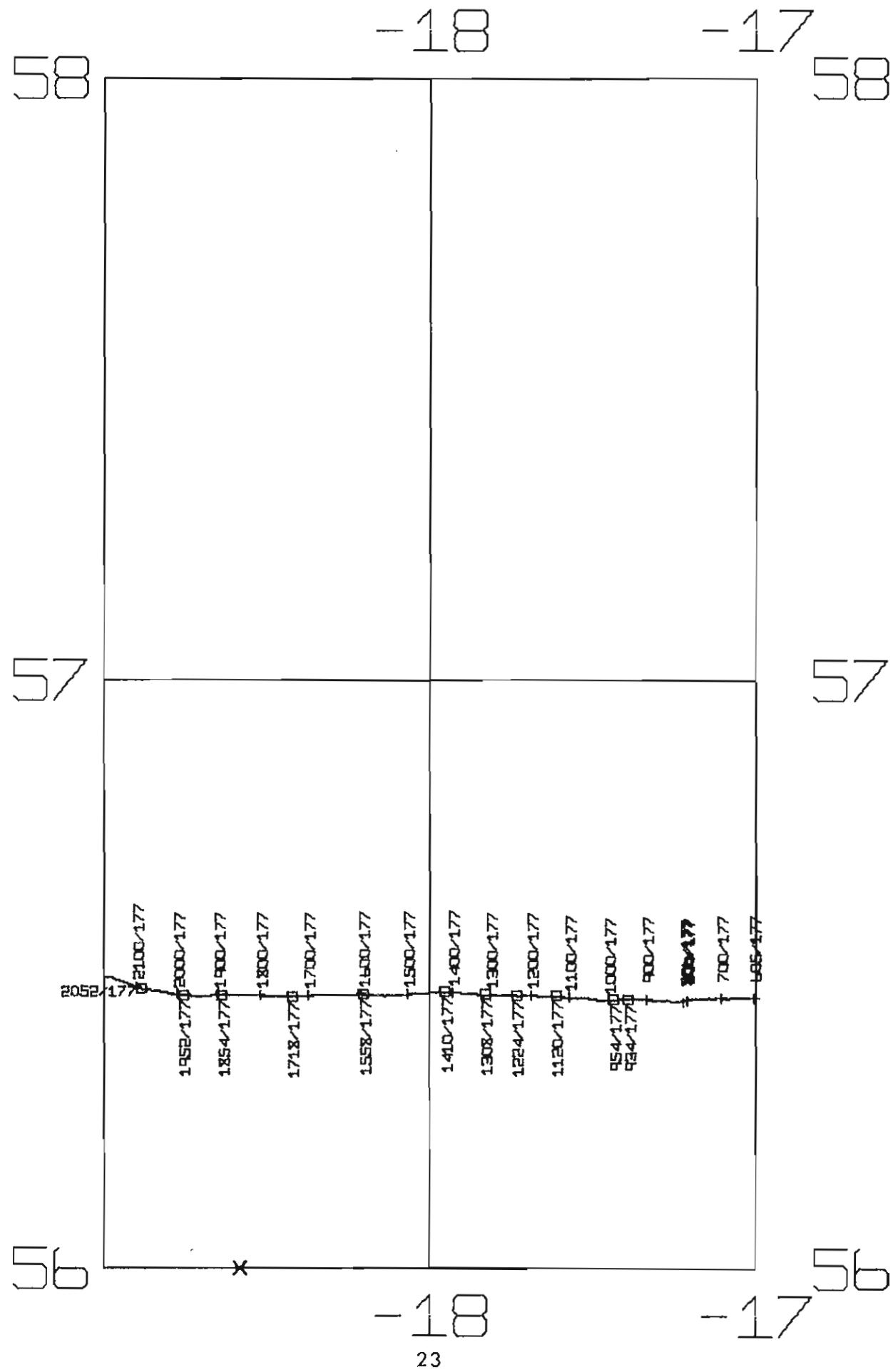


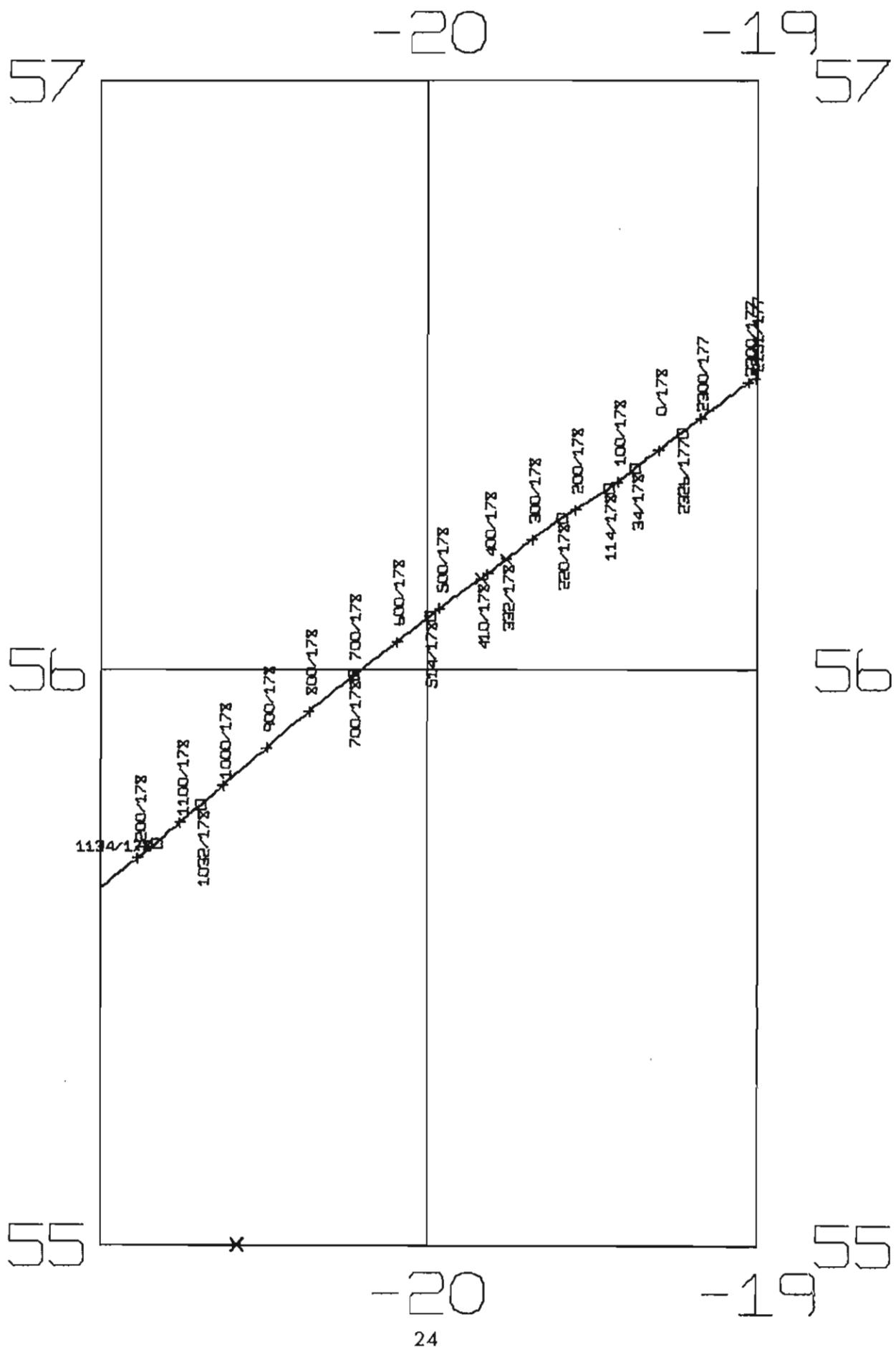


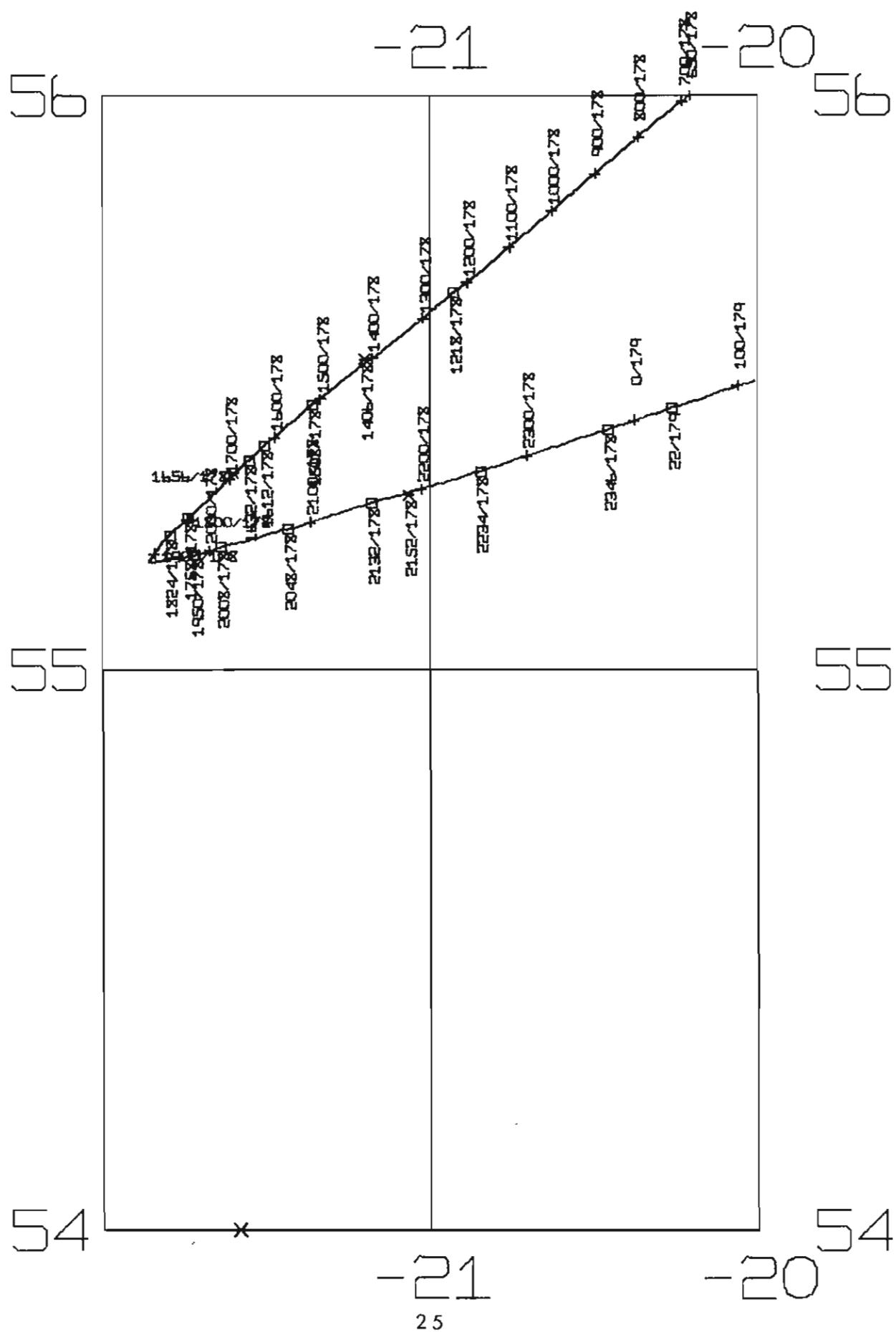


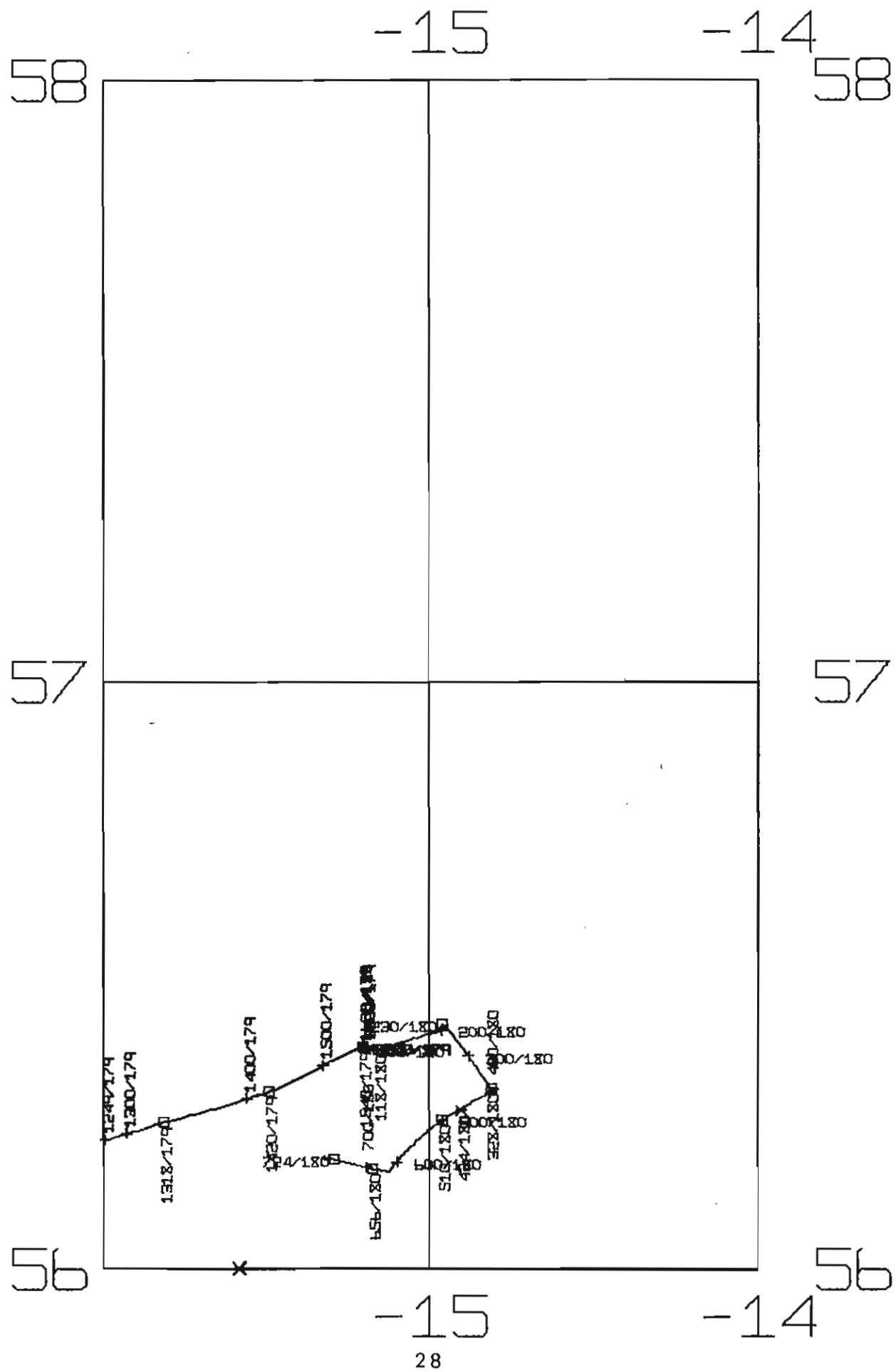


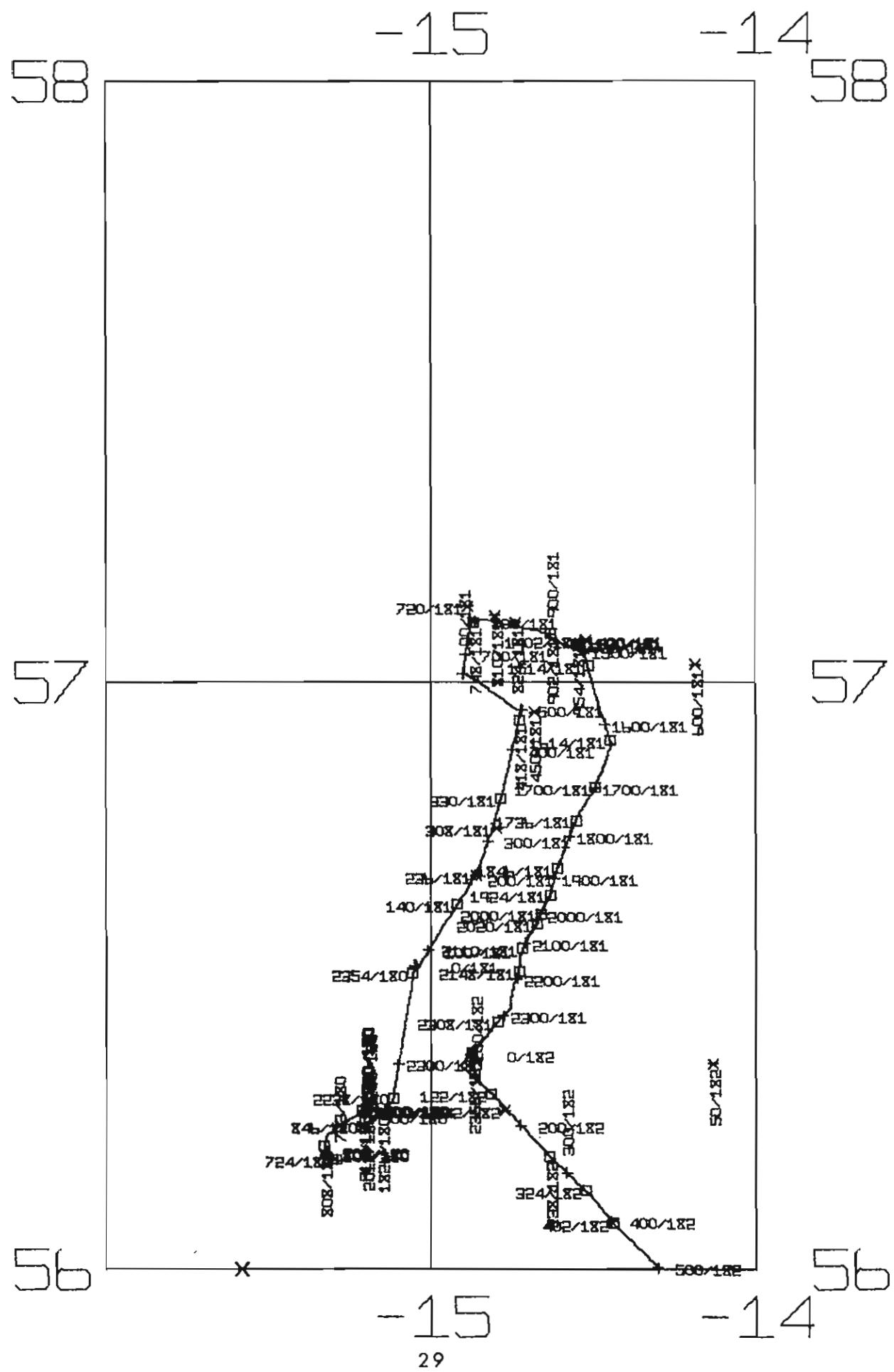


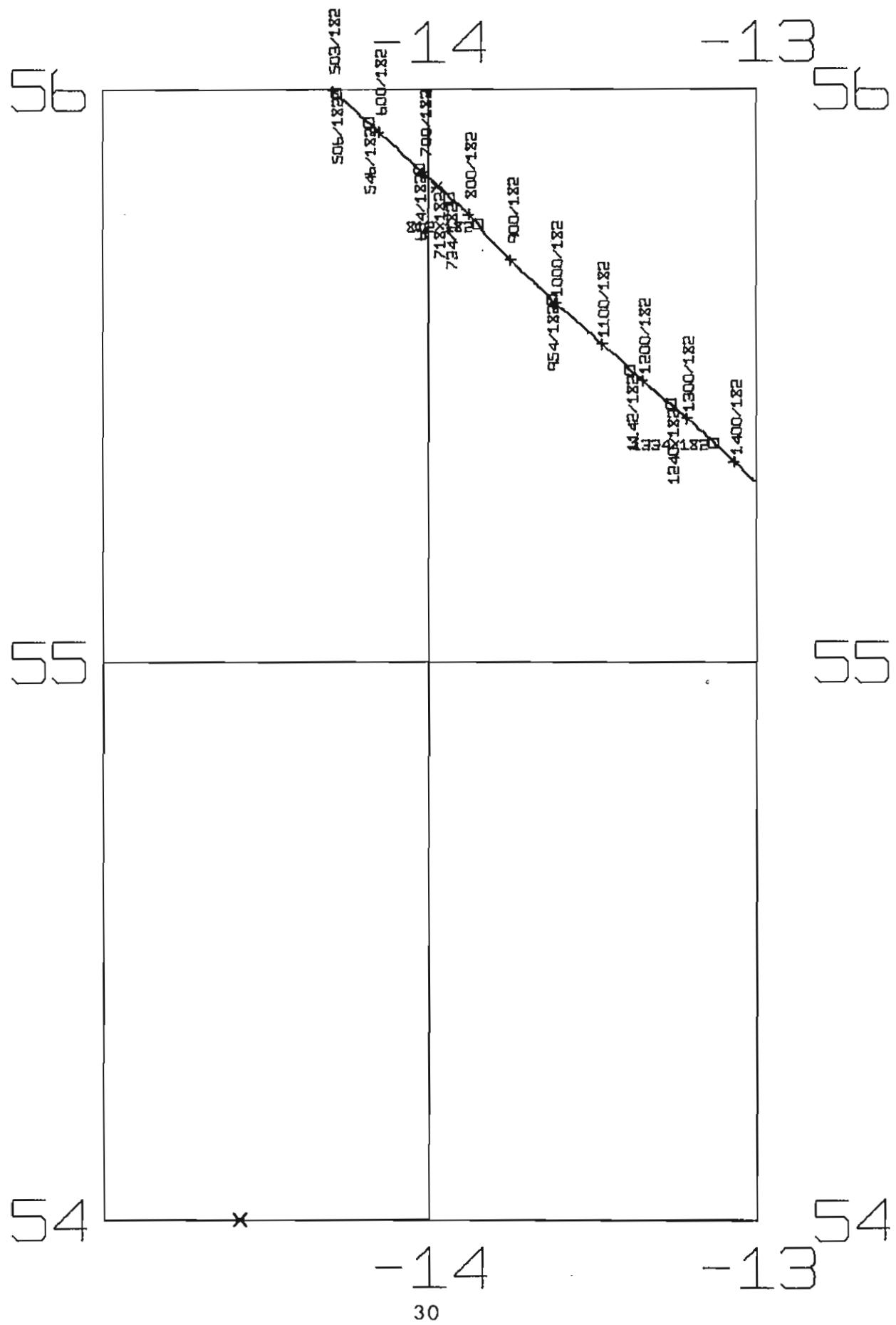


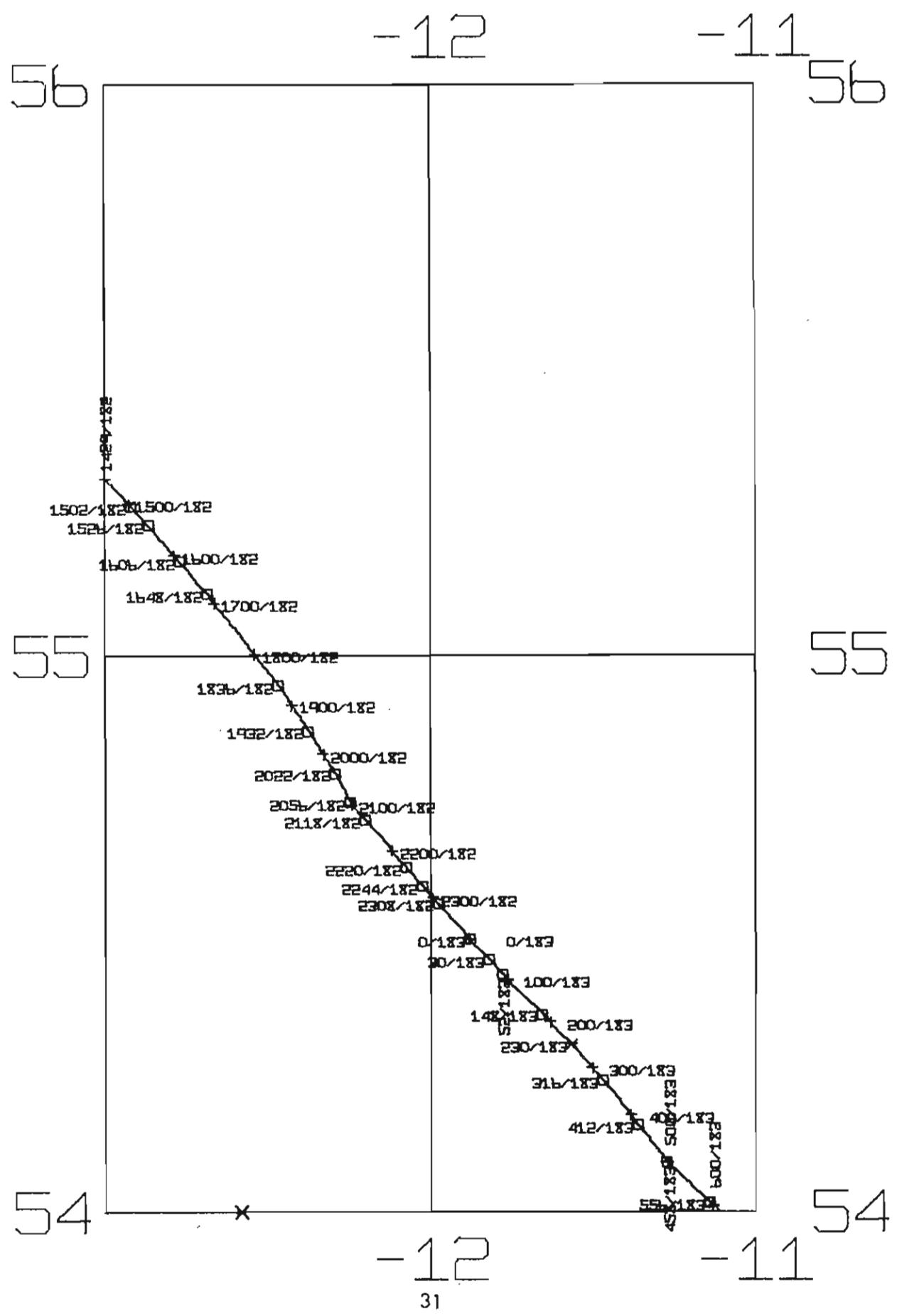


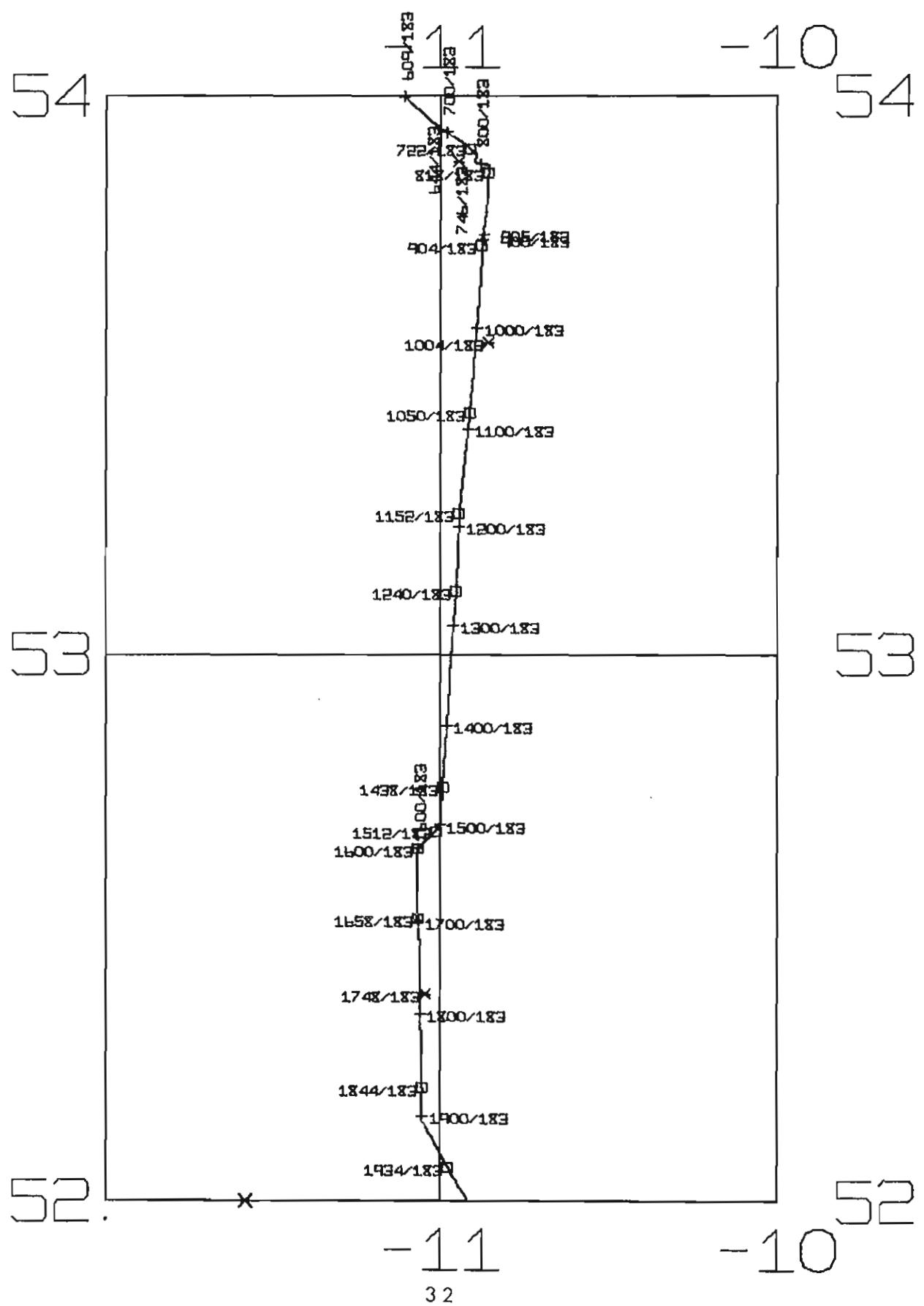


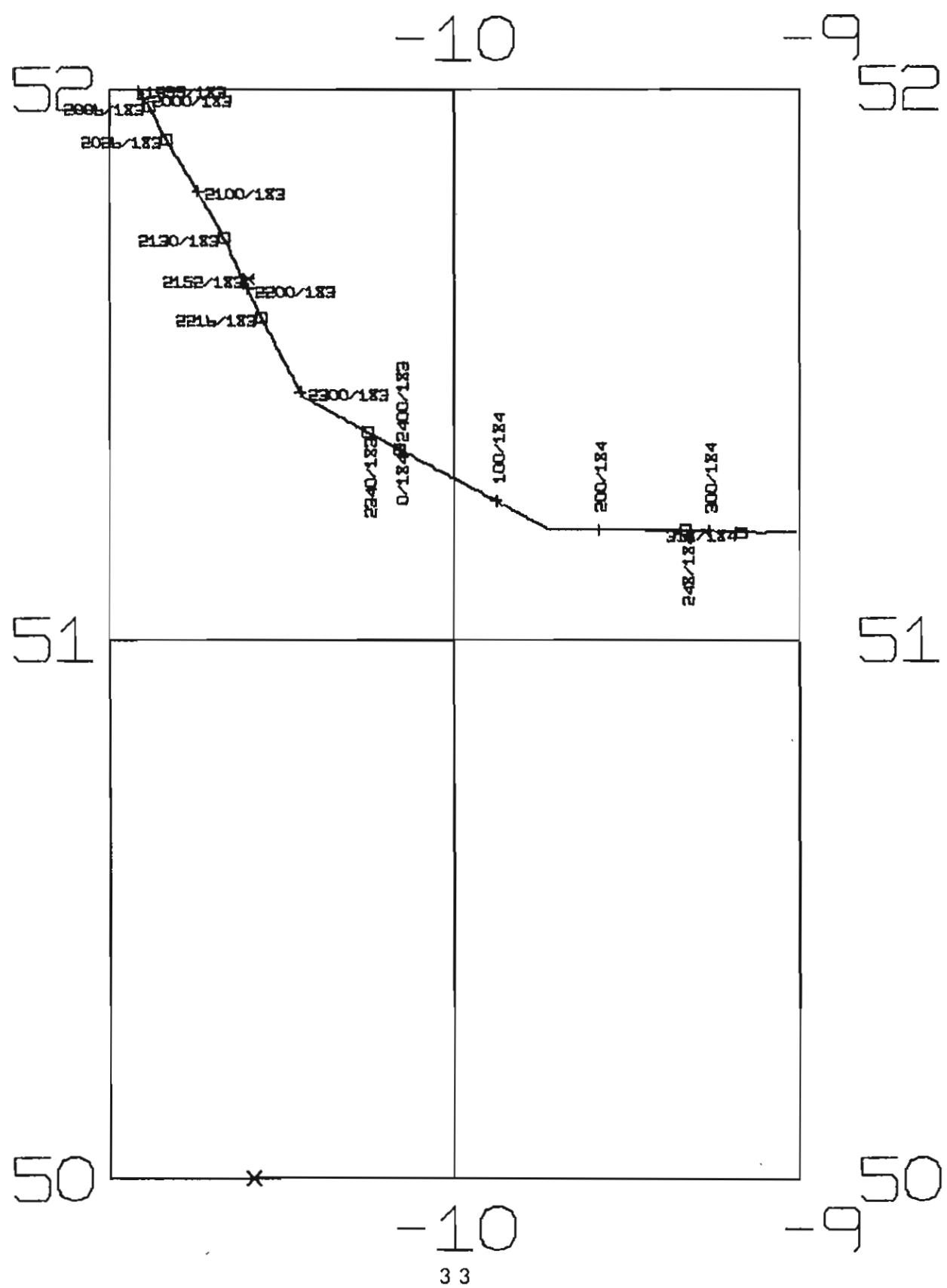


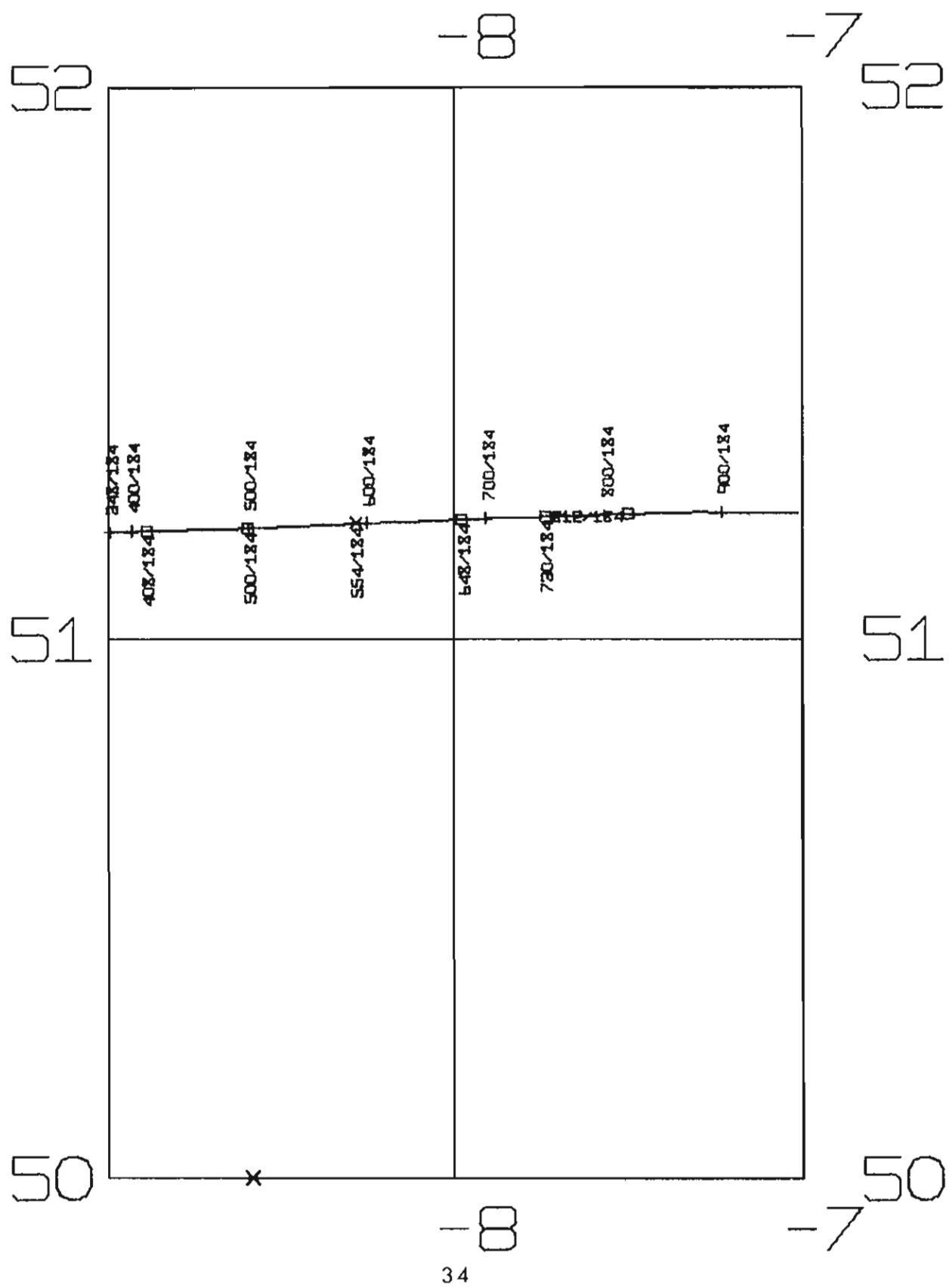


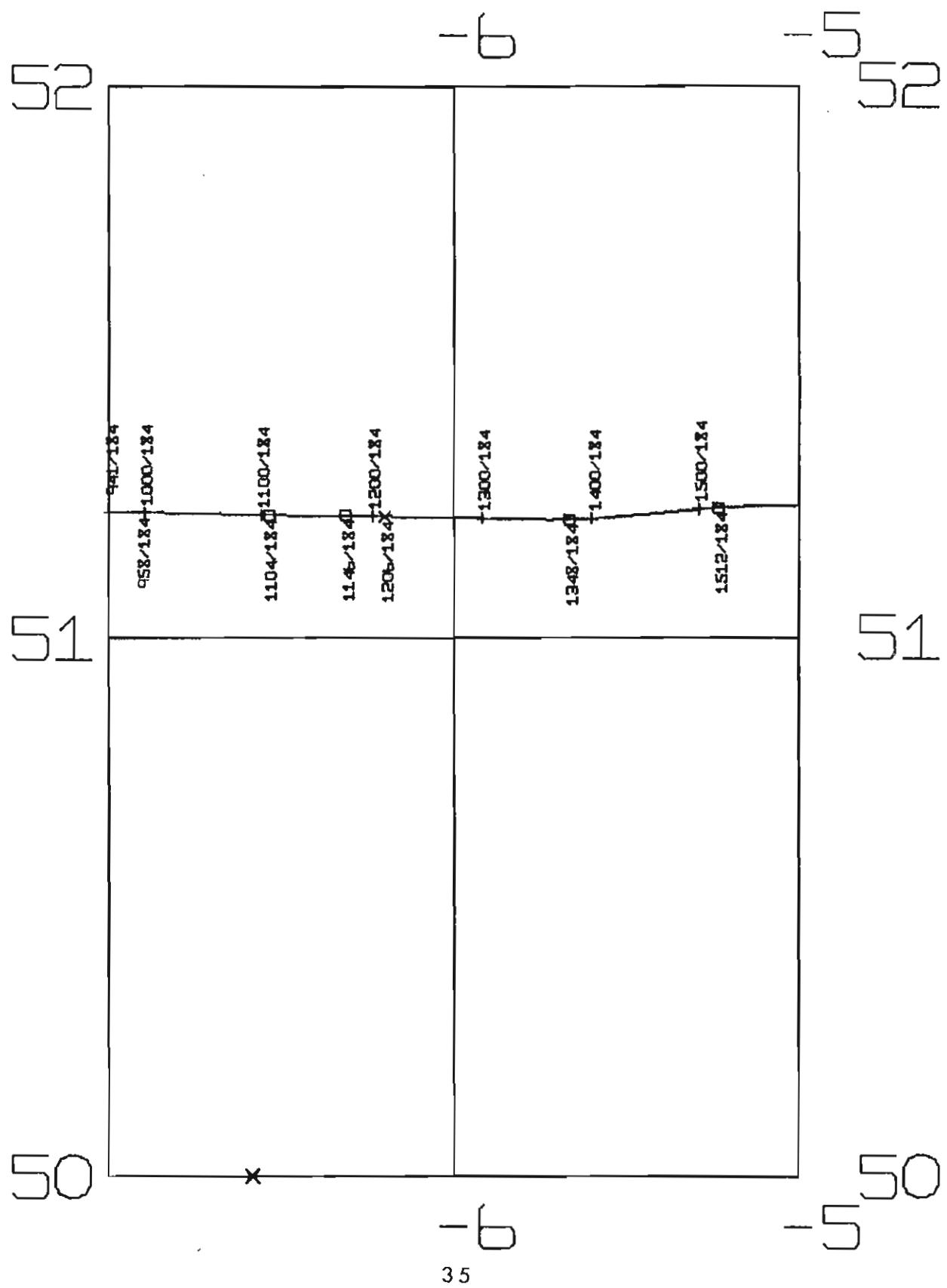


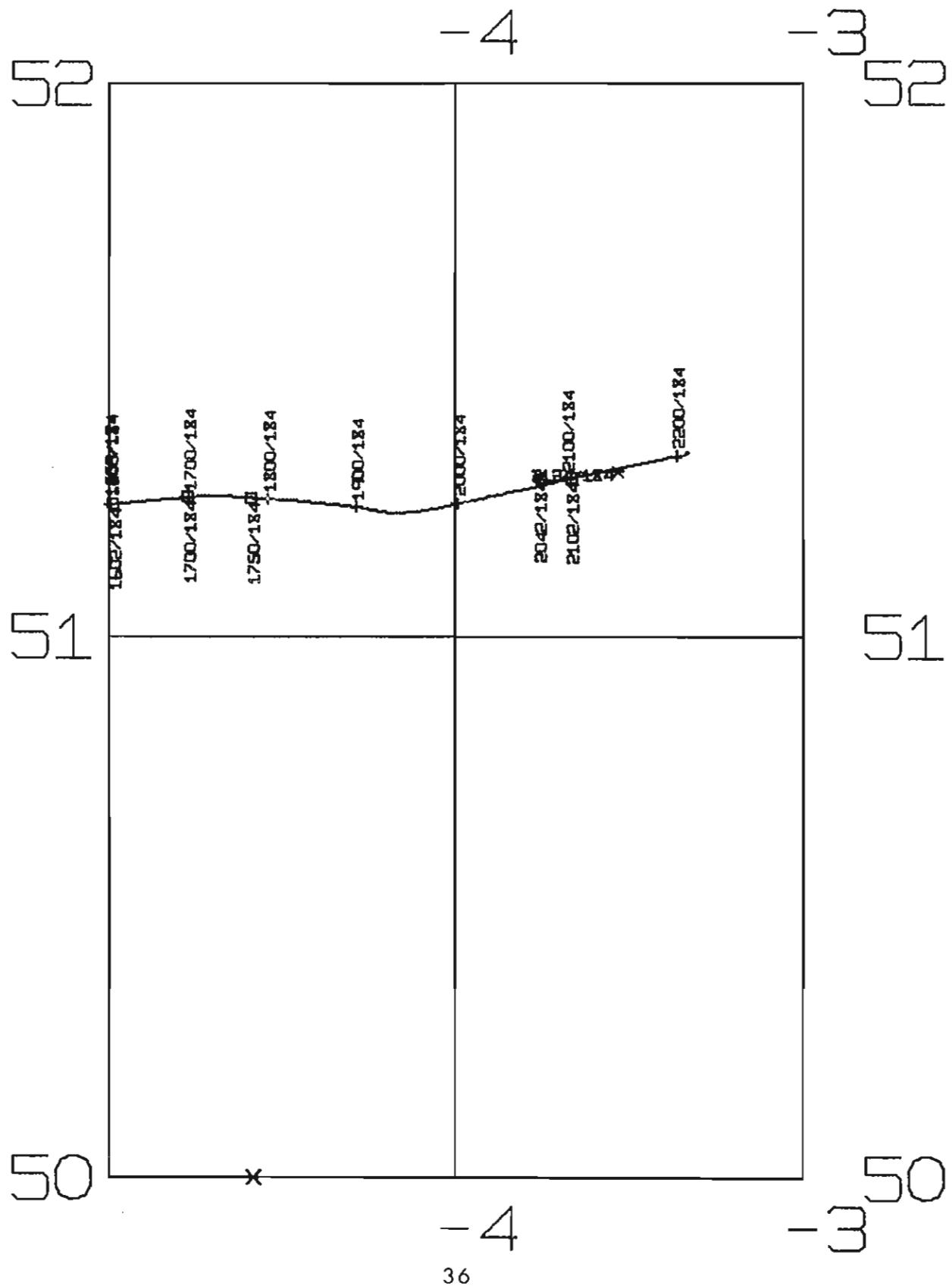












SECTION C

Tables of (a) Total Magnetic Field

(b) Uncorrected Depth in Fathoms (at 800 fms/sec)



RRS DISCOVERY CRUISE NO. 47  
TOTAL MAGNETIC FIELD IN GAMMAS

DATE 12- 6-1972 (DAY NO 164)

	HOURS	MINUTES	20	25	30	35	40	45	50	55
00	48372	48378	48370	48350	48345	48340	48337	48332	48327	48322
01	48388	48400	48395	48404	48411	48416	48422	48427	48432	48437
02	48600	48605	48609	48613	48617	48621	48627	48631	48635	48640
03	48680	48685	48691	48695	48701	48706	48712	48717	48722	48727
04	48464	48465	48469	48473	48478	48482	48486	48490	48494	48498
05	48466	48467	48471	48475	48480	48484	48488	48492	48496	48500
06	48485	48485	48492	48495	48500	48504	48508	48512	48516	48520
07	48445	48445	48450	48453	48457	48461	48465	48469	48473	48477
08	48332	48332	48336	48339	48343	48347	48351	48355	48359	48363
09	48361	48361	48364	48367	48371	48374	48377	48381	48385	48389
10	48406	48406	48409	48413	48417	48421	48425	48429	48433	48437
11	48341	48343	48346	48351	48355	48358	48362	48365	48369	48373
12	48333	48333	48336	48340	48343	48347	48351	48355	48359	48363
13	48330	48330	48334	48337	48341	48345	48349	48353	48357	48361
14	48601	48601	48604	48607	48610	48613	48616	48619	48623	48627
15	48343	48343	48346	48351	48354	48358	48362	48365	48369	48373
16	48560	48560	48562	48565	48568	48571	48574	48577	48581	48585
17	48578	48578	48582	48585	48588	48591	48594	48597	48601	48605
18	48214	48214	48217	48220	48223	48226	48229	48232	48235	48239
19	48463	48463	48466	48469	48472	48475	48478	48481	48484	48487
20	48527	48527	48531	48534	48537	48540	48543	48546	48549	48552
21	48370	48370	48373	48376	48379	48382	48385	48388	48391	48394
22	48403	48403	48406	48409	48412	48415	48418	48421	48424	48427
23	48617	48617	48620	48623	48626	48629	48632	48635	48638	48641

RRS DISCOVERY CRUISE NO. 47  
TOTAL MAGNETIC FIELD IN GAMMAS

	HOURS	MINUTES	00	05	10	15	20	25	30	35	40	45	50	55
00	48768	48768	48758	48758	48756	48754	48748	48739	48730	48727	48722	48710	48667	48667
01	48643	48643	48620	48620	48618	48616	48614	48612	48610	48608	48606	48604	48602	48601
02	48635	48635	48610	48610	48608	48606	48604	48602	48600	48598	48596	48594	48592	48591
03	48897	48897	48910	48910	48912	48914	48916	48918	48920	48922	48924	48926	48928	48930
04	48803	48803	48788	48788	48774	48762	48758	48752	48747	48742	48737	48732	48727	48722
05	48657	48657	48657	48657	48657	48664	48664	48666	48667	48668	48672	48676	48680	48684
06	48705	48705	48716	48716	48720	48723	48728	48732	48735	48739	48743	48747	48751	48755
07	48734	48734	48726	48726	48712	48697	48679	48661	48647	48632	48619	48606	48593	48581
08	48621	48621	48624	48624	48629	48637	48646	48657	48666	48677	48686	48696	48693	48690
09	48617	48617	48613	48613	48610	48604	48602	48601	48600	48602	48607	48613	48619	48625
10	48687	48687	48685	48685	48682	48681	48680	48679	48678	48677	48676	48675	48674	48673
11	48701	48701	48706	48706	48709	48710	48710	48712	48713	48715	48716	48717	48718	48719
12	48658	48658	48660	48660	48665	48673	48682	48692	48697	48703	48709	48715	48721	48726
13	48750	48750	48753	48753	48752	48752	48752	48752	48752	48752	48752	48752	48752	48752
14	48767	48767	48774	48774	48774	48774	48774	48774	48774	48774	48774	48774	48774	48774
15	48863	48863	48871	48871	48871	48871	48871	48871	48871	48871	48871	48871	48871	48871
16	49039	49039	49046	49046	49045	49045	49045	49045	49045	49045	49045	49045	49045	49045
17	48901	48901	48885	48885	48875	48868	48868	48868	48868	48868	48868	48868	48868	48868
18	48846	48846	48847	48847	48848	48851	48851	48851	48851	48851	48851	48851	48851	48851
19	48867	48867	48876	48876	48885	48892	48892	48892	48892	48892	48892	48892	48892	48892
20	48940	48940	48946	48946	48957	48971	48971	48971	48971	48971	48971	48971	48971	48971
21	49099	49099	49094	49094	49089	49083	49083	49083	49083	49083	49083	49083	49083	49083
22	49038	49038	49036	49036	49099	49099	49099	49099	49099	49099	49099	49099	49099	49099
23	49001	49001	49001	49001	49001	49001	49001	49001	49001	49001	49001	49001	49001	49001

C 2

RRS DISCOVERY CRUISE NO. 47  
TOTAL MAGNETIC FIELD IN GAMMAS

	00	05	10	15	20	25	30	35	40	45	50	55
HOURS	49039	49048	49055	49062	49069	49076	49083	49089	49095	49102	49108	49114
001	49082	49093	49095	49097	49104	49107	49113	49117	49122	49127	49132	49137
002	49066	49073	49075	49077	49104	49107	49113	49117	49122	49127	49132	49137
003	49091	49093	49097	49104	49108	49120	49122	49126	49132	49137	49142	49149
004	49159	49171	49182	49180	49170	49162	49156	49146	49140	49134	49128	49120
005	49201	49189	49180	49170	49162	49156	49148	49140	49134	49128	49120	49112
006	49113	49106	49101	49101	49105	49102	49109	49104	49108	49103	49104	49106
007	49089	49093	49091	49091	49092	49093	49094	49094	49097	49105	49110	49114
008	49117	49119	49118	49118	49117	49115	49110	49115	49117	49121	49126	49130
009	49087	49094	49106	49106	49104	49104	49104	49106	49107	49108	49111	49114
100	49334	49324	49324	49324	49324	49324	49324	49324	49324	49324	49324	49324
111	49115	49123	49141	49141	49174	49223	49298	49403	49403	49403	49403	49403
112	49884	49945	49991	49991	50005	49986	49941	49941	49980	49980	49973	49950
113	48995	49312	49037	49037	49055	49065	49065	49065	49065	49065	49065	49065
114	49014	49016	49020	49020	49023	49026	49032	49032	49036	49038	49038	49038
115	48967	48949	48928	48928	48908	48894	48885	48885	48892	48910	48918	48944
116	48954	48962	48974	48974	48987	48987	48901	48901	48901	48902	48905	48947
117	49034	49020	49074	49074	49020	49065	48965	48965	48965	48965	48965	48965
118	48944	48959	48968	48968	48971	48971	48978	48978	48993	49012	49036	49135
119	49150	49166	49182	49182	49191	49198	49198	49198	49198	49198	49198	49198
200	49143	49131	49123	49123	49119	49119	49119	49119	49119	49119	49119	49119
211	49152	49174	49202	49202	49232	49258	49280	49280	49295	49306	49315	49331
222	49356	49390	49439	49439	49500	49569	49645	49732	49732	49732	49732	49732

RRS DISCOVERY CRUISE NO. 47  
TOTAL MAGNETIC FIELD IN GAMMAS

	00	05	10	15	20	25	30	35	40	45	50	55
HOURS	50573	50576	50509	50382	50260	50139	50030	49949	49858	49715	49657	49574
001	49872	49979	50036	50106	50158	50190	50214	50254	50235	50173	50084	50084
002	49979	49871	49771	49673	49579	49492	49420	49360	49309	49231	49204	49204
003	49183	49178	49186	49187	49182	49176	49169	49165	49162	49161	49165	49172
004	49186	49207	49237	49237	49233	49232	49165	49165	49162	49162	49162	49162
005	49896	49903	49897	49897	49898	49898	49852	49852	49848	49714	49714	49788
006	49635	49610	49585	49585	49550	49550	49536	49536	49519	49507	49507	49653
007	49387	49347	49300	49245	49190	49190	49139	49139	49139	49141	49141	49447
008	49061	49068	49080	49080	49080	49096	49147	49147	49175	49205	49205	49421
009	49320	49365	49412	49447	49447	49449	49517	49517	49537	49544	49540	49530
100	49498	49478	49452	49442	49442	49447	49547	49547	49672	49711	49711	49819
111	49853	49885	49895	49895	49895	49918	49937	49937	49967	49982	49982	49945
112	49771	49784	49805	49814	49814	49814	49876	49876	49907	49947	49947	49947
113	50372	50533	50716*12	50705	50621	50536	50441	51304	5112	49906	49726	49638
114	49631	49643	49622	49573	49520	49470	49470	49363	49355	49347	49347	49346
115	49360	49374	49371	49388	49452	49452	49523	49523	49516	49516	49516	49516
116	49296	49275	49259	49259	49259	49259	49263	49263	49263	49263	49263	49263
117	49704	49529	49477	49477	49477	49477	49494	49494	49494	49494	49494	49494
118	49449	49449	49519	49519	49519	49519	49584	49584	49584	49584	49584	49584
119	49313	49274*04	49386	49386	49386	49386	49404	49404	49404	49404	49404	49404
120	49445	49399	49399	49399	49399	49400	50056*30	4973	4973	4973	4973	4973
221	49122	49122	49104*04	49113	49113	49113	49229	49229	49229	49229	49229	49229
222	49499*58	49498	49455	49455	49455	49455	49249	49249	49249	49249	49249	49249
223	50184	50347*03	49924	49755*13	49924	49924	49379	49379	49379	49379	49379	49379

C 3  
DATE 14- 6-1977 (DAY NO 166)

	00	05	10	15	20	25	30	35	40	45	50	55
HOURS	50573	50576	50509	50382	50260	50139	50030	49949	49858	49715	49657	49574
001	49872	49979	50036	50106	50158	50190	50214	50254	50235	50173	50084	50084
002	49979	49871	49771	49673	49579	49492	49420	49360	49309	49231	49204	49204
003	49183	49178	49186	49187	49182	49176	49169	49165	49162	49161	49165	49172
004	49186	49207	49237	49237	49233	49232	49165	49165	49162	49161	49165	49172
005	49896	49903	49897	49897	49898	49898	49852	49852	49848	49714	49714	49788
006	49635	49610	49585	49585	49550	49550	49536	49536	49519	49507	49507	49653
007	49387	49347	49300	49245	49190	49190	49139	49139	49139	49141	49141	49447
008	49061	49068	49080	49080	49080	49096	49147	49147	49175	49205	49205	49205
009	49320	49365	49412	49447	49447	49449	49547	49547	49672	49711	49711	49788
100	49498	49478	49452	49442	49442	49449	49545	49545	49659	49716	49716	49788
111	49853	49885	49895	49895	49895	49918	49937	49937	49967	50110	50110	50247
112	49771	49784	49805	49814	49814	49814	49876	49876	49907	50110	50110	50247
113	50372	50533	50716*12	50705	50621	50536	50441	51304	5112	49906	49726	49638
114	49631	49643	49622	49573	49520	49470	49470	49363	49355	49347	49347	49346
115	49360	49374	49371	49388	49452	49452	49523	49523	49519	49519	49519	49519
116	49296	49275	49259	49259	49259	49259	49263	49263	49263	49263	49263	49263
117	49704	49529	49477	49477	49477	49477	49494	49494	49494	49471	49471	49396
118	49449	49449	49519	49519	49519	49519	49584	49584	49584	49260*47	49260*47	49342*57
119	49313	49274*04	49386	49386	49386	49386	49404	49404	49404	49471	49471	49593
200	49445	49399	49399	49399	49399	49400	49400	49400	49400	49569	49569	49593
221	49122	49122	49104*04	49113	49113	49113	49229	49229	49229	49229	49229	49229
222	49499*58	49498	49455	49455	49455	49455	49249	49249	49249	49445	49445	49445
223	50184	50347*03	49924	49755*13	49924	49924	49379	49379	49379	49530	49530	49530

RRS DISCOVERY CRUISE NO. 47  
TOTAL MAGNETIC FIELD IN GAMMAS

HOURS		MINUTES										DATE		
		00	05	10	15	20	25	30	35	40	45	50	55	
00	49667	49729	49621*12	49650*16	49570	49522	49383	49342*33	49266	49156	49279*51	49251		
01	49266	49233*03	49279	49339	49274	49317	49298	49296*37	49319	49432	4927*49	49408		
02	49408	49385	49317	4938*16	49453	49460	49502	49558*29	49574	49536	49554	49514**5		
03	49612	49548*07	49587	49877	49670	49889	49822*33	49546	4962*43	49913	49913	50144**5		
04	50135*01	49875	49741*09	49987*13	49579	49736*27	49449*32	49603	49866*42	49785	49874*52	49679*5		
05	49912*00	49509	4979*08	49807*22	4978*	49678*26	49692*28	49728	49978*42	49775	49872	49923*5		
06	49908	49863	49923*12	49894*16	49807	49712*24	49856*32	49813*36	49763	49679	49027*43	49679		
07	50108*02	50003	49751	49768*14	49366*18	50097*	49856*24	49838*35	49688	49504*45	49504*52	49472		
08	49515	49812	49966*12	49929	49458*22	49624	50151	49724	49557	49563*52	49541			
09	50018*02	49496*06	49671	4943*16	49514	49592*26	49447	49724	49724	49500	49500	49500		
10	49505	49570	49681	49834*16	49746	320000	320000	320000	320000	320000	320000	320000		
11	32000	32000	32000	32000	32000	32000	32000	32000	32000	32000	32000	32000		
12	32000	32000	32000	32000	32000	32000	32000	32000	32000	32000	32000	32000		
13	32000	32000	32000	32000	32000	32000	32000	32000	32000	32000	32000	32000		
14	32000	32000	32000	32000	32000	32000	32000	32000	32000	32000	32000	32000		
15	32000	32000	32000	32000	32000	32000	32000	32000	32000	32000	32000	32000		
16	32000	32000	32000	32000	32000	32000	32000	32000	32000	32000	32000	32000		
17	32000	32000	32000	32000	32000	32000	32000	32000	32000	32000	32000	32000		
18	32000	32000	32000	32000	32000	32000	32000	32000	32000	32000	32000	32000		
19	32000	32000	32000	32000	32000	32000	32000	32000	32000	32000	32000	32000		
20	32000	32000	32000	32000	32000	32000	32000	32000	32000	32000	32000	32000		
21	32000	32000	32000	32000	32000	32000	32000	32000	32000	32000	32000	32000		
22	49359*58	49562	49643	49698	4969*16	49664	49653	49666	49647	49669	49652	49625	49760	
23	49779	49781	49804	49815	49857	49864	49877	49887	49894	49877	49877	49791	49791	

RRS DISCOVERY CRUISE NO. 47  
TOTAL MAGNETIC FIELD IN GAMMAS.

RRS DISCOVERY CRUISE NO. 47		TOTAL MAGNETIC FIELD IN GAMMAS		DATE 17- 6-1972 ( DAY NO 169)	
HOURS	MINUTES	00	05	10	15
49498	49398	49602	49893	49842	49824
49658	49623	49598	49380	49590	49579
49541	49530	49520	49384	49419	49467
49441	49436	49427	49379	49407	49389
49397	49403	49403	49302	49412	49413
49392	49389	49392	49302	49416	49416
49380	49383	49380	49379	49416	49417
49383	49383	49380	49381	49417	49417
49304	49304	49295	49298	49302	49302
49294	49294	49294	49295	49303	49303
49291	49291	49291	49291	49303	49303
49290	49290	49290	49290	49303	49303
49293	49293	49293	49293	49303	49303
49292	49292	49292	49292	49303	49303
49291	49291	49291	49291	49303	49303
49290	49290	49290	49290	49303	49303
49289	49289	49289	49289	49303	49303
49288	49288	49288	49288	49303	49303
49285	49285	49285	49285	49303	49303
49284	49284	49284	49284	49303	49303
49283	49283	49283	49283	49303	49303
49282	49282	49282	49282	49303	49303
49281	49281	49281	49281	49303	49303
49280	49280	49280	49280	49303	49303
49279	49279	49279	49279	49303	49303
49278	49278	49278	49278	49303	49303
49277	49277	49277	49277	49303	49303
49276	49276	49276	49276	49303	49303
49275	49275	49275	49275	49303	49303
49274	49274	49274	49274	49303	49303
49273	49273	49273	49273	49303	49303
49272	49272	49272	49272	49303	49303
49271	49271	49271	49271	49303	49303
49270	49270	49270	49270	49303	49303
49269	49269	49269	49269	49303	49303
49268	49268	49268	49268	49303	49303
49267	49267	49267	49267	49303	49303
49266	49266	49266	49266	49303	49303
49265	49265	49265	49265	49303	49303
49264	49264	49264	49264	49303	49303
49263	49263	49263	49263	49303	49303
49262	49262	49262	49262	49303	49303
49261	49261	49261	49261	49303	49303
49260	49260	49260	49260	49303	49303
49259	49259	49259	49259	49303	49303
49258	49258	49258	49258	49303	49303
49257	49257	49257	49257	49303	49303
49256	49256	49256	49256	49303	49303
49255	49255	49255	49255	49303	49303
49254	49254	49254	49254	49303	49303
49253	49253	49253	49253	49303	49303
49252	49252	49252	49252	49303	49303
49251	49251	49251	49251	49303	49303
49250	49250	49250	49250	49303	49303
49249	49249	49249	49249	49303	49303
49248	49248	49248	49248	49303	49303
49247	49247	49247	49247	49303	49303
49246	49246	49246	49246	49303	49303
49245	49245	49245	49245	49303	49303
49244	49244	49244	49244	49303	49303
49243	49243	49243	49243	49303	49303
49242	49242	49242	49242	49303	49303
49241	49241	49241	49241	49303	49303
49240	49240	49240	49240	49303	49303
49239	49239	49239	49239	49303	49303
49238	49238	49238	49238	49303	49303
49237	49237	49237	49237	49303	49303
49236	49236	49236	49236	49303	49303
49235	49235	49235	49235	49303	49303
49234	49234	49234	49234	49303	49303
49233	49233	49233	49233	49303	49303
49232	49232	49232	49232	49303	49303
49231	49231	49231	49231	49303	49303
49230	49230	49230	49230	49303	49303
49229	49229	49229	49229	49303	49303
49228	49228	49228	49228	49303	49303
49227	49227	49227	49227	49303	49303
49226	49226	49226	49226	49303	49303
49225	49225	49225	49225	49303	49303
49224	49224	49224	49224	49303	49303
49223	49223	49223	49223	49303	49303
49222	49222	49222	49222	49303	49303
49221	49221	49221	49221	49303	49303
49220	49220	49220	49220	49303	49303
49219	49219	49219	49219	49303	49303
49218	49218	49218	49218	49303	49303
49217	49217	49217	49217	49303	49303
49216	49216	49216	49216	49303	49303
49215	49215	49215	49215	49303	49303
49214	49214	49214	49214	49303	49303
49213	49213	49213	49213	49303	49303
49212	49212	49212	49212	49303	49303
49211	49211	49211	49211	49303	49303
49210	49210	49210	49210	49303	49303
49209	49209	49209	49209	49303	49303
49208	49208	49208	49208	49303	49303
49207	49207	49207	49207	49303	49303
49206	49206	49206	49206	49303	49303
49205	49205	49205	49205	49303	49303
49204	49204	49204	49204	49303	49303
49203	49203	49203	49203	49303	49303
49202	49202	49202	49202	49303	49303
49201	49201	49201	49201	49303	49303
49200	49200	49200	49200	49303	49303

RRS DISCOVERY CRUISE NO. 47  
TOTAL MAGNETIC FIELD IN GAMMAS

DATE 18- 6-1972 (DAY NO 170)

HOURS	00	05	10	15	20	25	30	35	40	45	50	55
00	49080	49198	49312	49412	49461	49517	49582	49646	49730	49773	49851	49913
01	49228	49159	49343	49891	49747	49840	49804	49666	49233	49233	49233	49113
02	49860	49085	49173	49173	49091	49166	49186	49283	49283	49292	49292	49162
03	49044	49161	49275	49313	49315	49275	49341	49341	49341	49248	49248	49349
04	49316	49365	49385	49358	49321	49321	4939*	4939*	4939*	49408	49408	49349
05	49455	49444	49444	49409	49425	49425	49479	49479	49479	49515	49515	49474
06	49481	49462	49473	49473	49471	49453	49439	49439	49439	49487	49487	49494
07	49514	49485	49529	49507	49498	49493	49423	49423	49423	49451	49451	49458
08	49529	49470	49468	49442	49423	49423	49425	49425	49425	49464	49464	49458
09	49747	49747	49747	49707	49726	49726	49709	49804	49720	49752	49752	49762
10	49747	49747	49747	49747	49747	49747	49747	49747	49747	49752	49752	49761
11	49747	49747	49747	49747	49747	49747	49747	49747	49747	49752	49752	49761
12	49707	49776	49776	49774	49774	49786	49780	49776	49756	49755	49755	49755
13	49832	49821	49825	49825	49825	49793	49793	49789	49789	49824	49824	49806
14	49956	49952	49949	49949	50201	50175	50175	50162	49961	49961	49961	49953
15	49948	49986	49986	49986	50103	50090	50090	50067	50016	50016	50016	50077
16	49948	50106	50108	50108	50103	50053	50037	50037	50036	50059	50059	50077
17	49841	49841	49802	49802	49750	49750	49736	49736	49736	49931	49931	49877
18	49745	49745	49746	49733	49690	49690	49700	49675	49675	49716	49716	49741
19	49809	49809	49824	49844	49864	49864	49862	49873	49673	49673	49705	49777
20	49799	49799	49795	49795	49795	49795	49795	49868	49868	49835	49835	49809
21	49823	49823	49825	49825	49825	49828	49833	49838	49842	49842	49847	49861
22	49858	49860	49864	49864	49873	49884	49884	49889	49896	49896	49896	49875
23												

RRS DISCOVERY CRUISE NO. 47  
TOTAL MAGNETIC FIELD IN GAMMAS

HOURS	00	05	10	15	20	25	30	35	40	45	50	55
00	49861	49849	49852	49842	49818	49811	49811	49799	49781	49781	49766	49781
01	49785	49795	49799	49799	49804	49819	49819	49908	49931	49931	49603	49522
02	49495	49416	49383	49383	49337	49310	49310	49302	49317	49317	48991	48974
03	48991	49118	49105	49105	49295	49121	49121	49631	49642	49642	49651	49651
04	49766	49758	49835	49835	49830	49123	49123	49305	49261	49261	49767	49767
05	49758	49763	49873	49873	49854	49854	49854	49904	49904	49904	4975	4975
06	50131	50131	50126	50126	50124	50124	50124	50094	50039	50039	50135	50135
07	50009	50009	50007	50007	50018	50018	50018	49980	49977	49977	50019	50019
08	49983	49983	49992	49992	50021	50021	50021	50023	50023	50023	50037	50037
09	50045	50046	50046	50046	50025	50025	50025	50069	50080	50080	50103	50103
10	50112	50121	50131	50131	50155	50155	50155	50168	50167	50167	50162	50162
11	50169	50174	50174	50174	50175	50175	50175	50152	50152	50152	50144	50144
12	50098	50076	50053	50053	50032	50032	50032	49996	49934	49934	49962	49962
13	49838	49822	49808	49808	49830	49830	49830	49858	49899	49899	49978	49978
14	49804	49804	49813	49813	49835	49835	49835	49921	49921	49921	50295	50295
15	50045	50045	50045	50045	50025	50025	50025	50069	50135	50135	50336	50336
16	50289	50313	50313	50313	50321	50321	50321	50348	50348	50348	50360	50360
17	50383	50436	50436	50436	50486	50486	50486	50486	50347	50347	50359	50359
18	50338	50352	50352	50352	50348	50348	50348	50348	50348	50348	50360	50360
19	50316	50290	50290	50290	50212	50212	50212	50175	50175	50175	50168	50168
20	50201	50201	50201	50201	50194	50194	50194	50240	50240	50240	50253	50253
21	50290	50281	50281	50281	50279	50279	50279	50286	50286	50286	50297	50297
22	50426	50411	50411	50411	50347	50347	50347	50347	50347	50347	50429	50429
23	50289	50281	50281	50281	50312	50312	50312	50286	50286	50286	50268	50268

C 5

RRS DISCOVERY CRUISE NO. 47  
TOTAL MAGNETIC FIELD IN GAMMAS

	00	05	10	15	20	25	30	35	40	45	50	55
HOURS	50277	50253	50226	50219	50235	50245	50254	50274	50295	50320	50320	50320
00	50292	50263	50238	50219	50235	50246	50256	50274	50293	50319	50351	50351
01	50302	50343	50362	50349	50361	50361	50368	50370	50370	50370	50387	50387
02	50303	50357	50367	50340	50368	50368	50376	50377	50377	50377	50387	50387
03	50304	50343	50276	50193	50173	50173	50173	50179	50179	50179	50187	50187
04	50305	50340	50166	50188	50173	50173	50174	50174	50174	50174	50174	50174
05	50306	50340	50159	50174	50174	50174	50176	50176	50176	50176	50176	50176
06	50307	50341	50174	50179	50179	50179	50182	50182	50182	50182	50187	50187
07	50308	50354	50152	50152	50152	50152	50152	50152	50152	50152	50152	50152
08	50309	50357	50182	50139	50122	50122	50122	50122	50122	50122	50122	50122
09	50310	50162	50121	50136	50106	50106	50106	50106	50106	50106	50106	50106
10	50311	50128	50121	50121	50118	50118	50118	50118	50118	50118	50118	50118
11	50312	50296	50306	50316	50320	50320	50326	50326	50326	50326	50326	50326
12	50313	50342	50731	50733	50733	50733	50737	50737	50737	50737	50737	50737
13	50314	50527	50518	50515	50517	50517	50517	50517	50517	50517	50517	50517
14	50315	50521	50267	50230	50249	50249	50249	50249	50249	50249	50249	50249
15	50316	50543	50543	50444	50444	50444	50444	50444	50444	50444	50444	50444
16	50317	49755	49755	49728	49728	49728	49728	49728	49728	49728	49728	49728
17	50318	49755	49755	49752	49752	49752	49752	49752	49752	49752	49752	49752
18	50319	50369	50350	50233	50233	50233	50233	50233	50233	50233	50233	50233
19	50320	49935	49966	49938	49942	49942	49942	49942	49942	49942	49942	49942
20	50321	49437	49389	49245	49245	49245	49245	49245	49245	49245	49245	49245
21	50322	50148	50236	50233	50233	50233	50233	50233	50233	50233	50233	50233
22	50323	50234	50234	50234	50242	50242	50242	50242	50242	50242	50242	50242
23	50324	50234	50234	50234	50234	50234	50234	50234	50234	50234	50234	50234

RRS DISCOVERY CRUISE NO. 47  
TOTAL MAGNETIC FIELD IN GAMMAS

	00	05	10	15	20	25	30	35	40	45	50	55
HOURS	50492	50461	50395	50329	50259	50191	50128	50089	50073	50056	50112	50112
00	50098	50048	50088	49974	49986	500195	50051	50080	50125	50125	50125	50125
01	50063	50072	50033	50179	50200	50200	50173	50140	50140	50140	50140	50140
02	50096*00	50049	50050	50049	50049	50049	50042	50066	50066	50066	50066	50066
03	50049	50150	50150	50147	50147	50147	50147	50152	50152	50152	50152	50152
04	50049	50150	50150	50147	50147	50147	50147	50156	50156	50156	50156	50156
05	50049	50150	50150	50147	50147	50147	50147	50156	50156	50156	50156	50156
06	50049	50150	50150	50147	50147	50147	50147	50156	50156	50156	50156	50156
07	50049	50150	50150	50147	50147	50147	50147	50156	50156	50156	50156	50156
08	50049	50150	50150	50147	50147	50147	50147	50156	50156	50156	50156	50156
09	50049	50150	50150	50147	50147	50147	50147	50156	50156	50156	50156	50156
10	50230	50230	50230	50240	50240	50240	50240	50252	50252	50252	50252	50252
11	50242	50251	50251	50251	50251	50251	50251	50263	50263	50263	50263	50263
12	50242	50242	50242	50242	50242	50242	50242	50253	50253	50253	50253	50253
13	50242	50242	50242	50242	50242	50242	50242	50253	50253	50253	50253	50253
14	50242	50242	50242	50242	50242	50242	50242	50253	50253	50253	50253	50253
15	50242	50242	50242	50242	50242	50242	50242	50253	50253	50253	50253	50253
16	50242	50242	50242	50242	50242	50242	50242	50253	50253	50253	50253	50253
17	50242	50242	50242	50242	50242	50242	50242	50253	50253	50253	50253	50253
18	50242	50242	50242	50242	50242	50242	50242	50253	50253	50253	50253	50253
19	50242	50242	50242	50242	50242	50242	50242	50253	50253	50253	50253	50253
20	50422	50437	50437	50437	50437	50437	50437	50447	50447	50447	50447	50447
21	50518	50507	50507	50507	50507	50507	50507	50507	50507	50507	50507	50507
22	50939	50885	50885	50885	50885	50885	50885	50885	50885	50885	50885	50885
23	50744	50744	50744	50744	50744	50744	50744	50744	50744	50744	50744	50744

C6  
DATE 20- 6-1972 ( DAY NO 172 )

DATE 21- 6-1972 ( DAY NO 173 )

RRRS DISCOVERY CRUISE NO. 47 TOTAL MAGNETIC FIELD IN GAMMAS		00	05	10
HOURS		00	05	10
000	50383	50351	50302	50617
001	50662*02	50640	50676	50780
002	50667	50747	50707	50784
003	50681	50746	50727	50359
004	50726	50727	5079	50467
005	50320	50379	50922	50784
006	51022	50320	50369	50359
007	50369	50369	50359	50351

C7

DATE 22-6-1972 (DAY NO 174)

RRS DISCOVERY CRUISE NO. 47  
TOTAL MAGNETIC FIELD IN GAMMAS

HOURS	00	05	10	15	MINUTES	20	25	30	35	40	45	50	55
00													
01													
02													
03													
04													
05													
06													
07													
08	50687	50731	50775	50823	50867	50926	50973	50993	50997	50997	50997	50995	50995
09	50904	50892	50915	50929	50942	50948	50978	50988	50997	50997	50997	50997	50997
10	50491	50410	50341	50313	50350	50376	50397	50397	50415	50415	50415	50437	50437
11	50924	50965	50196	50573	50580	50621	50680	50680	50864	50864	50864	50896	50896
12	50241	50196	50165	50149	50165	50210	50210	50377	50377	50377	50377	50488	50488
13	50390	50379	50368	50352	50315	50281	50281	50274	50274	50274	50274	50417	50417
14	50316	50301	50259	50193	50128	50084	50084	50128	50128	50128	50128	50303	50303
15	50158	50211	50265	50274	50254	50230	50230	50248	50248	50248	50248	50134	50134
16	50611	50611	50636	50556	50556	50436	50436	50409	50409	50409	50409	50502	50502
17	50774	50738	50694	50637	50539	50439	50439	50416	50416	50416	50416	50511	50511
18	50502	50481	50448	50446	50446	50476	50476	50422	50422	50422	50422	50847	50847
19	51150	51254	51362	51383	51504	51281	51281	50965	50965	50965	50965	50767	50767
20	50711	50649	50772	50824	50803	50803	50803	50896	50896	50896	50896	50844	50844
21	50639	50571	50472	50472	50483	50395	50395	50267	50267	50267	50267	50134	50134
22	50181	50154	50150	50125	50125	50150	50150	50089	50089	50089	50089	49985	49985
23													

DATE 22- 6-1972 ( DAY NO 174 )

HOURS	00	05	10	15	MINUTES	20	25	30	35	40	45	50	55
00													
01													
02													
03													
04													
05													
06													
07													
08													
09													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

DATE 23- 6-1972 ( DAY NO 175 )

HOURS	00	05	10	15	MINUTES	20	25	30	35	40	45	50	55
00													
01													
02													
03													
04													
05													
06													
07													
08													
09													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

RRS DISCOVERY CRUISE NO. 47  
TOTAL MAGNETIC FIELD IN GAMMAS

HOURS	00	05	10	15	MINUTES	20	25	30	35	40	45	50	55
00													
01													
02													
03													
04													
05													
06													
07													
08													
09													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

DATE 23- 6-1972 ( DAY NO 175 )

HOURS	00	05	10	15	MINUTES	20	25	30	35	40	45	50	55
00													
01													
02													
03													
04													
05													
06													
07													
08													
09													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

DATE 23- 6-1972 ( DAY NO 175 )

HOURS	00	05	10	15	MINUTES	20	25	30	35	40	45	50	55
00													
01													
02													
03													
04													
05													
06													
07													
08													
09													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

DATE 23- 6-1972 ( DAY NO 175 )

RRS DISCOVERY CRUISE NO. 47  
TOTAL MAGNETIC FIELD IN GAMMAS

MINUTE\$	DATE	24- 6-1972 (DAY NO 176)
15 20	35 30	40 45 50 55

49658*03	50602*11	51603*17	49736*21	49696
50465*07	49493*09	49787	49942*17	49812
500809*01	50417	50142	49847*21	49888
49783	49845	49826	49822	49761
49771	49786	49801	49815*19	49736
496771	49768	49784	49842	49379
49641	49479	49394	49351	49914
49698	49750	49784	49835	50284
50321	50359	50357	50319	50307
50185	50173	50133	50043	49924

REQUESTS DISCOVERED CRUISE NO. 47  
TENTH MAGNETIC FIELD IN GAMMAS

DATE 24-6-1972 (DAY NO 176)  
25 40 45 50 55

49993	50174**37	50093
49697	49806**37	49785
50005	49978	50025
50974	49829	49701
49656	49605	49506
49457	49519	49550
49946	49984	50014
50272	51269	51259
49557	49767	49755

DATE 25- 6-1972 (DAY NO 177)

30	49879	49851
	49950	49897
	49460	49856
	49636	49636
	49630	49630
	5159	5159
	49641	49641
31	49972	50001
	49953	49419
	49752	49682
	49719	49789
	49696	49789
	49863	49867
	49765	49734
	49765	49475
	49516	49960
	49953	49960
	49621	49783
	49640	49632
	49648	49473
	49463	49432
	49416	49432
	49609	49601
	49599	49736
	49464	49437
	49468	49465
	49416	49460
	49608	49590
	49599	49408
	49464	49460
	49463	49465
	49417	49432
	49609	49601
	49773	49771
	49772	49773
	49772	49774
	49725	49943
	49018	500720
	50016	50023
	50020	50020
	50076	50076
	50073	50073
	50176	50176
	50187	50187
	50318	50318
	50193	50193
	50311	50311
	50119	50119
32	49767	49769
	49972	50001
	49516	49419
	49752	49682
	49719	49789
	49696	49789
	49863	49867
	49765	49734
	49516	49475
	49953	49960
	49621	49783
	49640	49632
	49648	49473
	49463	49432
	49416	49432
	49608	49601
	49599	49736
	49464	49437
	49468	49465
	49416	49460
	49608	49590
	49599	49408
	49464	49460
	49463	49465
	49417	49432
	49609	49601
	49773	49771
	49772	49773
	49772	49774
	49725	49943
	49018	500720
	50016	50023
	50020	50020
	50076	50076
	50073	50073
	50176	50176
	50187	50187
	50318	50318
	50193	50193
	50311	50311
	50119	50119
33	49744	49767
	49931	49972
	49516	49419
	49752	49682
	49719	49789
	49696	49789
	49863	49867
	49765	49734
	49516	49475
	49953	49960
	49621	49783
	49640	49632
	49648	49473
	49463	49432
	49416	49432
	49608	49601
	49599	49736
	49464	49437
	49468	49465
	49416	49460
	49608	49590
	49599	49408
	49464	49460
	49463	49465
	49417	49432
	49609	49601
	49773	49771
	49772	49773
	49772	49774
	49725	49943
	49018	500720
	50016	50023
	50020	50020
	50076	50076
	50073	50073
	50176	50176
	50187	50187
	50318	50318
	50193	50193
	50311	50311
	50119	50119

55

4.9433	4.9484	4.9474
9710	49862	51298
0119	25056	50211
3626	43556	49716
9625	49689	49730
9575	49602	49653
0105	51130	50241
0253	50203	50189
9985	4987	49172

55	4 9879 4 9843 4 9642 4 9641 4 9630 5 1159 :: 5
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RRS DISCOVERY CRUISE NO. 47  
TOTAL MAGNETIC FIELD IN GAMMAS

	DATE	76- 6-1972 (DAY NO 178)	DATE	76- 6-1972 (DAY NO 178)								
HOURS	00	05	10	15	20	25	30	35	40	45	50	55
00	49979	49963	49950	49934	49922	49909	49901	49894	49884	49872	49862	49860
01	49853	49850	49842	49835	49832	49836	49837	49838	49837	49832	49821	49817
02	49745	49730	49708	49683	49659	49640	49626	49616	49617	49616	49616	49621
03	49629	49637	49648	49663	49676	49683	49686	49690	49692	49689	49689	49689
04	49884	49887	49889	49894	49894	49895	49897	49897	49897	49886	49886	49884
05	49817	49795	49771	49750	49732	49713	49701	49701	49701	49704	49704	49704
06	49655	49655	49656	49656	49768	49780	49797	49797	49797	49797	49797	49797
07	49699	49713	49732	49752	49752	49768	49780	49787	49787	49787	49787	49787
08	49880	49878	49878	49871	49871	49869	49870	49877	49877	49877	49877	49877
09	49978	49986	49993	49994	49994	49992	49985	49979	49979	49959	49959	49955
10	49945	49931	49917	49904	49896	49887	49887	49876	49876	49884	49884	49884
11	49899	49899	49899	49897	49897	49890	49891	49881	49881	49809	49819	49826
12	49828	49828	49828	49835	49835	49838	49845	49845	49845	49840	49838	49846
13	49858	49858	49875	49881	49881	49890	49890	49890	49890	49896	49891	49888
14	49890	49890	49889	49889	49889	49883	49875	49868	49868	49850	49846	49849
15	49859	49859	49884	49884	49910	49932	49957	49968	49973	49972	49935	49927
16	49923	49921	49921	49914	49904	49904	49897	49897	49897	49893	49893	49892
17	49891	49885	49878	49878	49878	49879	49879	49887	49887	49889	49893	49893
18	49902	49910	49910	49916	49921	49914	49914	49892	49869	49836	49826	49834
19	49840	49840	49853	49872	49892	49921	49921	49946	49946	49931	49909	49863
20	49852	49852	49857	49867	49867	49897	49897	49905	49907	49927	49946	49934
21	49912	49912	49912	49854	49866	49917	49917	49976	49988	49883	49827	49777
22	49710	49653	49653	49611	49619	49576	49516	49398	49282	49231	49189	49268

RRS DISCOVERY CRUISE NO. 47  
TOTAL MAGNETIC FIELD IN GAMMAS

	DATE	76- 6-1972 (DAY NO 179)	DATE	76- 6-1972 (DAY NO 179)								
HOURS	00	05	10	15	20	25	30	35	40	45	50	55
00	49183	48854*06	48947	49154*14	48945	48995	49050*29	48887*37	48921	48876	48832	48832
01	4887	48913	48953*09	48799	48741	48704*23	48987	48938	49338	49380	49421	49557
02	49682	49854	50001	50121	50169	50159	50123	50123	50012	49949	49954	50022
03	50054	50076	50098	5020*16	50030	50048	50032	50032	50002	49963	49927	49915
04	49890	49886	49837	49770	49698	49645	49578	49456	49457	49417	49332	49337
05	49325	49320	49316	49323	49344	49323	49379	49420	49420	49661	49730	49558
06	49922	49975	50002	50006	50002	49971	49933	49636	49636	49501	49575	49534
07	49522	49584	49688	49736	49758	49703	49703	49601	49601	49575	49575	49540
08	49524	49552	49571*08	49528	49528	49713	49735	49679	49679	49657	49657	49548
09	49622	49664	49713	49758	49758	49735	49735	49673	49673	49658	49658	49696
10	49618	49449	49390*09	49491*13	49562	49562	49562	49549	49549	49634	49634	49570
11	49538	49551	49633	49729*17	49669	49597	49617	49590	49590	49629	49715*43	49458
12	49568	49568	49620	49588	49620	49620	49620	49620	49620	49733	49733	49765
13	49627*59	49335	49371	49576	50044	49871*27	49892	49792	49792	49735	49642*43	49374*49
14	49873*00											

C10

	DATE	76- 6-1972 (DAY NO 179)	DATE	76- 6-1972 (DAY NO 179)								
HOURS	00	05	10	15	20	25	30	35	40	45	50	55
00	49183	48853*09	48947	49154*14	48945	48995	49050*29	48887*37	48921	48876	48832	48832
01	4887	48913	48953*09	48799	48741	48704*23	48987	48938	49338	49380	49421	49557
02	49682	49854	50001	50121	50169	50159	50123	50123	50012	49949	49954	50022
03	50054	50076	50098	5020*16	50030	50048	50032	50032	50002	49963	49932	49915
04	49890	49886	49837	49770	49698	49645	49578	49506	49506	49457	49417	49337
05	49325	49320	49316	49323	49344	49323	49379	49420	49420	49661	49730	49558
06	49922	49975	50002	50006	50002	49971	49933	49636	49636	49501	49575	49534
07	49522	49584	49688	49736	49758	49703	49703	49601	49601	49575	49575	49540
08	49524	49552	49571*08	49528	49528	49713	49735	49679	49679	49658	49658	49548
09	49622	49664	49713	49758	49758	49735	49735	49673	49673	49638	49638	49696
10	49618	49449	49390	49491*13	49562	49562	49562	49549	49549	49634	49634	49570
11	49538	49551	49633	49729*17	49669	49597	49617	49590	49590	49629	49715*43	49458
12	49568	49568	49620	49588	49620	49620	49620	49620	49620	49733	49733	49765
13	49627*59	49335	49371	49576	50044	49871*27	49892	49792	49792	49735	49642*43	49374*49
14	49873*00											

115

117

118

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23

MINUTES 15 20 25 30 35 DATE ?9- 6-1972 (DAY NO 181)

49473	49637*07	49675	50113*17	50178	50042*23	50407*29	50126*37	49983	50242*47	49974	49603
49736*01	49953*07	49932	50032*17	50075	50172*25	49753	49722*33	50015	50054*43	49793	49805*57
49994	50064	50278*11	50102	49958	49894	49780	49713*36	50023	50085*39	49846	4981*56
50115	50236	50078	49896	49851	49853	49901*79	49901*79	50023	50085*39	49961*49	50020
50145	50244	50078	49896	49851	49838	49880	49908	49908	49972*47	50002	49993
50175	50274	50078	49896	49851	49838	49880	49908	49908	49972*47	50002	49993
50205	50284	50078	49896	49851	49838	49880	49908	49908	49972*47	50002	49993
50235	50344	49948	49986*13	49936	49881*27	49881*27	49930	50023	50144*42	50060	49950
50265	50374	49948	49986*13	49936	49881*27	49881*27	49930	50023	50144*42	50060	49950
50295	50444	49948	49986*13	49936	49881*27	49881*27	49930	50023	50144*42	50060	49950
50325	50502*02	49546	49506*12	49518	49499*18	49458	49479	49513	49514	49529	49550
50355										49551	49550

RRS DISCOVERY CRUISE NO. 47  
TOTAL MAGNETIC FIELD IN GAMMAS

RECOVERY CRUISE NO. 47  
FINAL MAGNETIC FIELD IN GAMMAS

TIME	00	05	10	15	20	25	30	35	40	45	50	55
HOURS	4876.9	4877.2	4877.1	4877.5	4877.3	4876.9	4876.6	4875.9	4875.3	4874.4	4873.8	4873.1
00	4872.9	4873.5	4874.6	4876.3	4877.6	4878.7	4880.1	4880.4	4881.2	4881.8	4882.0	4882.7
01	4883.4	4884.3	4885.3	4886.1	4886.7	4886.8	4887.8	4888.1	4889.5	4889.3	4889.4	4889.3
02	4894.9	4904.2*03	4889.7	4875.2*17	4878.4	4882.0	4879.1	4876*33	4874.7	4862.0	4859.1*49	4877.4
03	4885.8	4883.7*03	4889.6*11	4895.4*11	4894.1	4895.6	4892.9	4890.3	4887.9	4884.8	4884.8	4883.7
04	4881.8	4881.8	4878.3	4875.9*13	4876.7	4874.9*77	4877.5	4869.3	4874.1	4873.0	4872.6	4872.6
05	4871.5	4870.8	4870.4	4869.5	4868.9	4868.5	4868.9	4867.3	4866.0	4866.4	4866.4	4865.0
06	4864.5	4863.0	4864.6	4867.1	4865.1	4863.6	4862.7	4862.2	4861.8	4861.6	4861.2	4860.6
07	4860.6	4860.4	4860.0	4859.3	4858.4	4858.1	4860.7	4860.7	4860.0	4865.0	4860.7*51	4862.9
08												
09												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												

C 12

RRS DISCOVERY CRUISE NO 47  
 DEPTH IN FATHOMS AT AN ASSUMED VELOCITY OF 800 FMS/SEC  
 HOURS 00 05 10 15 20 25 30  
 00 22 24 26 28 30 32 34  
 01 23 25 27 29 31 33 35  
 02 24 26 28 30 32 34 36  
 03 25 27 29 31 33 35 37  
 04 26 28 30 32 34 36 38  
 05 27 29 31 33 35 37 39  
 06 28 30 32 34 36 38 40  
 07 29 31 33 35 37 39 41  
 08 30 32 34 36 38 40 42  
 09 31 33 35 37 39 41 43  
 10 32 34 36 38 40 42 44  
 11 33 35 37 39 41 43 45  
 12 34 36 38 40 42 44 46  
 13 35 37 39 41 43 45 47  
 14 36 38 40 42 44 46 48  
 15 37 39 41 43 45 47 49  
 16 38 40 42 44 46 48 50  
 17 39 41 43 45 47 49 51  
 18 40 42 44 46 48 50 52  
 19 41 43 45 47 49 51 53  
 20 42 44 46 48 50 52 54  
 21 43 45 47 49 51 53 55  
 22 44 46 48 50 52 54 56  
 23 45 47 49 51 53 55 57

DATE 10- 6-1972 (DAY NO 162)  
 HOURS 00 05 10 15 20 25 30  
 00 22 24 26 28 30 32 34  
 01 23 25 27 29 31 33 35  
 02 24 26 28 30 32 34 36  
 03 25 27 29 31 33 35 37  
 04 26 28 30 32 34 36 38  
 05 27 29 31 33 35 37 39  
 06 28 30 32 34 36 38 40  
 07 29 31 33 35 37 39 41  
 08 30 32 34 36 38 40 42  
 09 31 33 35 37 39 41 43  
 10 32 34 36 38 40 42 44  
 11 33 35 37 39 41 43 45  
 12 34 36 38 40 42 44 46  
 13 35 37 39 41 43 45 47  
 14 36 38 40 42 44 46 48  
 15 37 39 41 43 45 47 49  
 16 38 40 42 44 46 48 50  
 17 39 41 43 45 47 49 51  
 18 40 42 44 46 48 50 52  
 19 41 43 45 47 49 51 53  
 20 42 44 46 48 50 52 54  
 21 43 45 47 49 51 53 55  
 22 44 46 48 50 52 54 56  
 23 45 47 49 51 53 55 57

DATE 11- 6-1972 (DAY NO 163)  
 HOURS 00 05 10 15 20 25 30  
 00 22 24 26 28 30 32 34  
 01 23 25 27 29 31 33 35  
 02 24 26 28 30 32 34 36  
 03 25 27 29 31 33 35 37  
 04 26 28 30 32 34 36 38  
 05 27 29 31 33 35 37 39  
 06 28 30 32 34 36 38 40  
 07 29 31 33 35 37 39 41  
 08 30 32 34 36 38 40 42  
 09 31 33 35 37 39 41 43  
 10 32 34 36 38 40 42 44  
 11 33 35 37 39 41 43 45  
 12 34 36 38 40 42 44 46  
 13 35 37 39 41 43 45 47  
 14 36 38 40 42 44 46 48  
 15 37 39 41 43 45 47 49  
 16 38 40 42 44 46 48 50  
 17 39 41 43 45 47 49 51  
 18 40 42 44 46 48 50 52  
 19 41 43 45 47 49 51 53  
 20 42 44 46 48 50 52 54  
 21 43 45 47 49 51 53 55  
 22 44 46 48 50 52 54 56  
 23 45 47 49 51 53 55 57

DATE 12- 6-1972 (DAY NO 164)  
 HOURS 00 05 10 15 20 25 30  
 00 22 24 26 28 30 32 34  
 01 23 25 27 29 31 33 35  
 02 24 26 28 30 32 34 36  
 03 25 27 29 31 33 35 37  
 04 26 28 30 32 34 36 38  
 05 27 29 31 33 35 37 39  
 06 28 30 32 34 36 38 40  
 07 29 31 33 35 37 39 41  
 08 30 32 34 36 38 40 42  
 09 31 33 35 37 39 41 43  
 10 32 34 36 38 40 42 44  
 11 33 35 37 39 41 43 45  
 12 34 36 38 40 42 44 46  
 13 35 37 39 41 43 45 47  
 14 36 38 40 42 44 46 48  
 15 37 39 41 43 45 47 49  
 16 38 40 42 44 46 48 50  
 17 39 41 43 45 47 49 51  
 18 40 42 44 46 48 50 52  
 19 41 43 45 47 49 51 53  
 20 42 44 46 48 50 52 54  
 21 43 45 47 49 51 53 55  
 22 44 46 48 50 52 54 56  
 23 45 47 49 51 53 55 57

DATE 13- 6-1972 (DAY NO 165)  
 HOURS 00 05 10 15 20 25 30  
 00 22 24 26 28 30 32 34  
 01 23 25 27 29 31 33 35  
 02 24 26 28 30 32 34 36  
 03 25 27 29 31 33 35 37  
 04 26 28 30 32 34 36 38  
 05 27 29 31 33 35 37 39  
 06 28 30 32 34 36 38 40  
 07 29 31 33 35 37 39 41  
 08 30 32 34 36 38 40 42  
 09 31 33 35 37 39 41 43  
 10 32 34 36 38 40 42 44  
 11 33 35 37 39 41 43 45  
 12 34 36 38 40 42 44 46  
 13 35 37 39 41 43 45 47  
 14 36 38 40 42 44 46 48  
 15 37 39 41 43 45 47 49  
 16 38 40 42 44 46 48 50  
 17 39 41 43 45 47 49 51  
 18 40 42 44 46 48 50 52  
 19 41 43 45 47 49 51 53  
 20 42 44 46 48 50 52 54  
 21 43 45 47 49 51 53 55  
 22 44 46 48 50 52 54 56  
 23 45 47 49 51 53 55 57

R.R.S. DISCOVERY CRUISE NO. 47		DEPTH IN UNCORRECTED FATHOMS		AT AN ASSUMED		VELOCITY OF		800 FMS./SEC.	
	HOURS	00	05	10	15	20	MINUTES	25	30
00	260	263	260	260	260	261	262	264	264
01	269	272	274	278	282	286	286	291	291
02	313	317	327	337	339	340	340	322	322
03	397	406	406	410	400	405	405	928	928
04	1024	998	938	882	864	854	854	816	816
05	1794	810	828	850	874	896	896	930	930
06	1208	1300	1354	1400	1400	1315	1315	1322	1322
07	1616	1622	1630	1640	1640	1656	1656	1653	1653
08	1745	1808	1840	1811	1817	1827	1827	1828	1828
09	1837	1839	1883	1839	1844	1854	1854	1850	1850
10	1870	1878	1883	1883	1892	1901	1901	1914	1914
11	1902	2004	2032	2058	2074	2084	2084	2100	2100
12	2222	2233	2240	2246	2256	2266	2266	2275	2275
13	2358	2362	2366	2369	2371	2374	2374	2374	2374
14	2380	2382	2383	2384	2385	2386	2386	2387	2387
15	2392	2394	2396	2400	2403	2404	2404	2412	2412
16	2426	2428	2427	2427	2422	2420	2420	2424	2424
17	2456	2459	2460	2462	2463	2464	2464	2466	2466
18	2474	2476	2476	2476	2478	2480	2480	2480	2480
19	2472	2470	2469	2469	2468	2467	2467	2466	2466
20	2448	2442	2442	2441	2438	2436	2436	2434	2434
21	2420	2416	2416	2411	2410	2408	2408	2406	2406
22	2388	2386	2386	2381	2378	2374	2374	2369	2369

DATE	12- 6-1977	(DAY NO) 1649	55
35	264 298 344 1012 790 964 11658 11784 11835 11854 11921 2122 22888 2375 23888 2416 2434 2468 2478 2465 2443 2405 2363	265 303 304* 1062 774 998 1452 1672 1790 1836 1862 1932 2146 22988 2377 2390 2418 2434 2468 2478 2464 2443 2405 2363	266 304 384 938 772 1098 1116 1174 1088 1570 1532 1692 1792 1840 1864 1945 2168 2310 2378 2393 2397 2422 2448 2470 2474 2459 2429 2398 2354
40	45	50	55

RCS DISCOVERY CRUISE NO 47		DEPTH IN UNCORRECTED FATHMS		AT AN ASSUMED		VELCITY OF		800 FMS / SFC	
	HOURS	00	05	10	15	20	25	30	
00	23 42	22 92	22 56	22 54	22 51	22 51	22 48	22 43	22 39
01	22 92	21 92	20 84	21 84	21 77	21 73	21 62	21 52	21 42
02			20 66	20 56	20 46	20 46	20 38	20 38	20 31
03			19 82	19 82	19 78	19 74	19 71	19 66	19 66
04			19 36	19 36	19 34	19 16	19 15	19 16	19 16
05			18 87	18 87	18 83	18 84	18 84	18 84	18 84
06			18 66	18 66	18 64	18 54	18 54	18 55	18 55
07			18 50	18 50	18 47	18 48	18 45	18 45	18 45
08			18 34	18 34	18 33	18 29	18 28	18 28	18 27
09			18 13	18 13	18 14	18 08	18 06	18 04	18 02
10			18 01	18 01	17 97	17 93	17 86	17 80	17 74
11			18 51	18 51	17 73	17 54	17 52	17 49	17 48
12			18 70	18 70	17 73	17 55	17 52	17 49	17 47
13			18 90	18 90	17 76	17 76	17 70	17 66	17 64
14			18 54	18 54	17 56	17 56	17 52	17 48	17 46
15			18 34	18 34	17 56	17 56	17 52	17 48	17 46
16			18 14	18 14	17 76	17 76	17 70	17 66	17 64
17			18 01	18 01	17 76	17 76	17 70	17 66	17 64
18			17 70	17 70	17 73	17 73	17 69	17 65	17 63
19			17 51	17 51	17 73	17 73	17 69	17 65	17 63
20			17 32	17 32	17 56	17 56	17 52	17 48	17 46
21			17 28	17 28	17 56	17 56	17 52	17 48	17 46
22			17 24	17 24	17 56	17 56	17 52	17 48	17 46
23			17 20	17 20	17 56	17 56	17 52	17 48	17 46

DATE	13- 6-1972	(DAY NO 165)
	40	55
	45	50
	49	55
	53	55
	57	55
	61	55
	65	55
	69	55
	73	55
	77	55
	81	55
	85	55
	89	55
	93	55
	97	55
	101	55
	105	55
	109	55
	113	55
	117	55
	121	55
	125	55
	129	55
	133	55
	137	55
	141	55
	145	55
	149	55
	153	55
	157	55
	161	55
	165	55
	169	55
	173	55
	177	55
	181	55
	185	55
	189	55
	193	55
	197	55
	201	55
	205	55
	209	55
	213	55
	217	55
	221	55
	225	55
	229	55
	233	55
	237	55
	241	55
	245	55
	249	55
	253	55
	257	55
	261	55
	265	55
	269	55
	273	55
	277	55
	281	55
	285	55
	289	55
	293	55
	297	55
	301	55
	305	55
	309	55
	313	55
	317	55
	321	55
	325	55
	329	55
	333	55
	337	55
	341	55
	345	55
	349	55
	353	55
	357	55
	361	55
	365	55
	369	55
	373	55
	377	55
	381	55
	385	55
	389	55
	393	55
	397	55
	401	55
	405	55
	409	55
	413	55
	417	55
	421	55
	425	55
	429	55
	433	55
	437	55
	441	55
	445	55
	449	55
	453	55
	457	55
	461	55
	465	55
	469	55
	473	55
	477	55
	481	55
	485	55
	489	55
	493	55
	497	55
	501	55
	505	55
	509	55
	513	55
	517	55
	521	55
	525	55
	529	55
	533	55
	537	55
	541	55
	545	55
	549	55
	553	55
	557	55
	561	55
	565	55
	569	55
	573	55
	577	55
	581	55
	585	55
	589	55
	593	55
	597	55
	601	55
	605	55
	609	55
	613	55
	617	55
	621	55
	625	55
	629	55
	633	55
	637	55
	641	55
	645	55
	649	55
	653	55
	657	55
	661	55
	665	55
	669	55
	673	55
	677	55
	681	55
	685	55
	689	55
	693	55
	697	55
	701	55
	705	55
	709	55
	713	55
	717	55
	721	55
	725	55
	729	55
	733	55
	737	55
	741	55
	745	55
	749	55
	753	55
	757	55
	761	55
	765	55
	769	55
	773	55
	777	55
	781	55
	785	55
	789	55
	793	55
	797	55
	801	55
	805	55
	809	55
	813	55
	817	55
	821	55
	825	55
	829	55
	833	55
	837	55
	841	55
	845	55
	849	55
	853	55
	857	55
	861	55
	865	55
	869	55
	873	55
	877	55
	881	55
	885	55
	889	55
	893	55
	897	55
	901	55
	905	55
	909	55
	913	55
	917	55
	921	55
	925	55
	929	55
	933	55
	937	55
	941	55
	945	55
	949	55
	953	55
	957	55
	961	55
	965	55
	969	55
	973	55
	977	55
	981	55
	985	55
	989	55
	993	55
	997	55
	1001	55
	1005	55
	1009	55
	1013	55
	1017	55
	1021	55
	1025	55
	1029	55
	1033	55
	1037	55
	1041	55
	1045	55
	1049	55
	1053	55
	1057	55
	1061	55
	1065	55
	1069	55
	1073	55
	1077	55
	1081	55
	1085	55
	1089	55
	1093	55
	1097	55
	1101	55
	1105	55
	1109	55
	1113	55
	1117	55
	1121	55
	1125	55
	1129	55
	1133	55
	1137	55
	1141	55
	1145	55
	1149	55
	1153	55
	1157	55
	1161	55
	1165	55
	1169	55
	1173	55
	1177	55
	1181	55
	1185	55
	1189	55
	1193	55
	1197	55
	1201	55
	1205	55
	1209	55
	1213	55
	1217	55
	1221	55
	1225	55
	1229	55
	1233	55
	1237	55
	1241	55
	1245	55
	1249	55
	1253	55
	1257	55
	1261	55
	1265	55
	1269	55
	1273	55
	1277	55
	1281	55
	1285	55
	1289	55
	1293	55
	1297	55
	1301	55
	1305	55
	1309	55
	1313	55
	1317	55
	1321	55
	1325	55
	1329	55
	1333	55

RECOVERED	NO. 47	DEPTH IN INCORRECTED FATHOMS	AT AN ASSUMED	VELOCITY OF	800	FWS./SEC
HOURS				MINUTES	25	30
00	1326	1316	1318	1304	1302	1301
01	1268	1272	1257	1248	1236	1204
02	1182	1186	1190	1194	1198	1238
03	1219	1223	1226	1226	1232	1277
04	1254	1264	1266	1270	1273	1286
05	1250	1254	1264	1284	1284	1283
06	1280	1282	1284	1286	1283	1284
07	1283	1285	1285	1285	1283	1284
08	1280	1278	1284	1282	1283	1284
09	1296	1296	1296	1290	1298	1296
10	1296	1296	1296	1296	1295	1295
11	1291	1290	1290	1289	1288	1288
12	1302	1303	1304	1303	1300	1306
13	1304	1304	1306	1308	1304	1308
14	1308	1308	1303	1300	1296	1290
15	1276	1266	1265	1266	1260	1265
16	1276	1270	1270	1273	1270	1279
17	1284	1284	1287	1280	1285	1263
18	1258	1258	1260	1264	1266	1271
19	1285	1291	1291	1294	1304	1306
20	1308	1303	1303	1307	1294	1291
21	1273	1279	1273	1267	1263	1262
22	1227	1227	1227	1208	1159	1142
23	975	998	1122	1122	1122	1191

DATE	14- 6-1972 (DAY NO 166)	35	40	45	50	55	59	63	68	72	78
1303	1298	1281	1280	1280	1280	1280	1280	1280	1280	1280	1278
1230	1222	1202	1180	1180	1180	1180	1180	1180	1180	1180	1182
1210	1208	1208	1214	1214	1214	1214	1214	1214	1214	1214	1214
1237	1240	1240	1244	1244	1244	1244	1244	1244	1244	1244	1246
1282	1280	1280	1280	1280	1280	1280	1280	1280	1280	1280	1280
1287	1284	1284	1284	1284	1284	1284	1284	1284	1284	1284	1283
1284	1284	1284	1284	1284	1285	1285	1285	1285	1285	1285	1284
1285	1282	1282	1280	1280	1280	1280	1280	1280	1280	1280	1280
1286	1288	1290	1290	1290	1292	1292	1292	1292	1292	1292	1296
1296	1296	1296	1296	1296	1294	1294	1294	1294	1294	1294	1296
1292	1292	1291	1291	1291	1292	1292	1292	1292	1292	1292	1292
1290	1290	1290	1293	1293	1295	1295	1295	1295	1295	1295	1296
1305	1306	1306	1305	1305	1306	1306	1306	1306	1306	1306	1307
1303	1316	1316	1303	1303	1310	1310	1310	1310	1310	1310	1307
1288	1282	1282	1284	1284	1285	1285	1285	1285	1285	1285	1277
1264	1275	1275	1276	1276	1269	1269	1269	1269	1269	1269	1276
1304	1296	1296	1296	1296	1297	1297	1297	1297	1297	1297	1296
1271	1276	1276	1256	1256	1260	1260	1260	1260	1260	1260	1256
1309	1312	1312	1316	1316	1312	1312	1312	1312	1312	1312	1280
1287	1285	1285	1284	1284	1281	1281	1281	1281	1281	1281	1279
1257	1248	1248	1248	1248	1243	1243	1243	1243	1243	1243	1238
1071	1053	1053	1053	1053	1032	1032	1032	1032	1032	1032	1012
896	889	889	889	889	887	887	887	887	887	887	889

HOURS		DEPT IN FATHMS		AT AN ASSUMED VELCITY OF MINUTES		VELCITY OF MINUTES		FINS/SEC	
00	00	00	00	00	00	00	00	00	00
00	896	909	936	900	874	856	846	844	844
01	828	834	848	848	862	860	919	911	911
02	866	885	891	898	910	904	1011	1011	1011
03	960	971	978	982	994	1004	1135	1135	1135
04	1062	1077	1088	1105	1113	1127	1134	1134	1134
05	1256	1280	1304	1324	1334	1356	1356	1356	1356
06	1361	1362	1364	1366	1366	1268	1268	1268	1268
07	1384	1382	1381	1356	1022	1000	1248	1248	1248
08	1075	1056	1035	944	936	983	959	959	959
09	868	859	851	844	836	830	824	824	824
10	804	802	801	801	801	801	795	795	795
11	770	767	763	760	757	755	754	754	754
12	772	778	778	797	803	814	823	823	823
13	815	798	788	778	771	760	754	754	754
14	696	686	679	672	665	658	652	652	652
15	615	617	617	617	600	623	636	636	636
16	584	580	575	570	567	567	564	564	564
17	558	559	558	558	558	558	558	558	558
18	563	566	570	575	579	580	568	568	568
19	491	483	474	467	460	452	440	440	440
20	436	435	440	436	440	442	445	445	445
21	462	470	475	476	474	470	465	465	465
22	418	406	395	384	375	370	366	366	366
23	332	317	317	317	317	317	274	274	274

DATE	15- 6-1977	( DAY NO 167)
35	820	55
40	810	45
44	844	50
44	935	50
44	1016	55
44	11152	55
44	11348	55
44	11367	55
44	11212	55
44	11939	55
44	820	55
44	792	55
44	754	55
44	826	55
44	730	55
44	740	55
44	638	55
44	614	55
44	562	55
44	558	55
44	557	55
44	422	55
44	447	55
44	460	55
44	356	55
44	267	55

HRS DISCOVERY CRUISE NO 47 DEPTH IN UNCORRECTED FATHOMS		AT AN ASSUMED VELOCITY OF MINUTES		800 FMS/SEC	
HOURS	00	05	10	15	20
00	240	242	240	241	240
01	228	228	228	222	220
02	202	198	196	194	188
03	173	171	170	166	164
04	146	143	141	135	134
05	137	137	136	134	132
06	122	122	122	122	120
07	106	111	112	104	99
08	102	98	96	94	89
09	108	104	100	96	104
10	118	119	119	97	100
11	113	113	113	116	115
12	116	116	117	113	112
13	101	101	102	103	104
14	197	197	197	101	102
15	115	116	117	114	112
16	117	115	107	105	111
17	118	115	107	104	114
18	119	115	105	104	103
19	120	102	103	100	100
20	221	102	150	106	108
21	222	142	355	174	200
22	223	334	372	398	440
23					457
HRS DISCOVERY CRUISE NO 47 DEPTH IN UNCORRECTED FATHOMS		AT AN ASSUMED VELOCITY OF MINUTES		800 FMS/SEC	
HOURS	00	05	10	15	20
00	568	570	662	678	733
01	932	952	971	1004	1033
02	1188	1207	1213	1220	1226
03	1260	1261	1263	1266	1275
04	1304	1307	1312	1316	1322
05	1338	1339	1339	1342	1348
06	1364	1368	1367	1368	1372
07	1364	1367	1366	1363	1370
08	1379	1382	1379	1387	1384
09	1392	1394	1395	1400	1400
10	1408	1412	1412	1412	1412
11	1406	1406	1406	1394	1396
12	1380	1379	1376	1378	1384
13	1372	1371	1370	1368	1366
14	1355	1350	1350	1359	1358
15	1330	1329	1327	1326	1321
16	1311	1308	1304	1303	1300
17	1290	1288	1288	1287	1283
18	1274	1272	1270	1268	1267
19	1257	1257	1257	1257	1257
20	1250	1250	1248	1248	1244
21	1236	1235	1232	1228	1227
22	1209	1213	1212	1212	1212
23	516	510	460	478	414

DATE	16- 6-1972	(DAY NO 168)
35	50	55
40	45	50
45	40	35
50	55	50
55	50	55
60	55	50
65	50	45
70	45	40
75	40	35
80	35	30
85	30	25
90	25	20
95	20	15
100	15	10

DATE	17- 6-1972	(DAY NO 169)	55
35	797 1072 1247 1284 1328 1355 1373 1388 1402 1412 1394 1378 1361 1334 1317 1317 1295 1280 1258 1255 1254 1247 1243 1218 890 404	856 1094 1258 1288 1328 1357 1376 1375 1390 1408 1413 1386 1376 1359 1334 1315 1315 1296 1281 1258 1255 1254 1240 1242 1217 1218 890 404	897 1144 1259 1298 1334 1362 1374 1377 1394 1406 1414 1386 1375 1357 1335 1314 1314 1293 1279 1257 1254 1240 1242 1217 1218 890 404
40	828 1094 1258 1288 1328 1357 1376 1375 1390 1402 1412 1394 1378 1361 1334 1317 1317 1295 1280 1258 1255 1254 1240 1242 1217 1218 890 404	910 1166 1258 1300 1336 1363 1378 1376 1394 1406 1413 1384 1374 1354 1332 1314 1314 1290 1277 1257 1252 1239 1206 1530 360	
45	856 1120 1258 1292 1331 1359 1380 1375 1390 1402 1412 1394 1376 1359 1334 1315 1315 1296 1281 1258 1255 1254 1240 1242 1217 1218 890 404	910 1166 1258 1300 1336 1363 1378 1376 1394 1406 1413 1384 1374 1354 1332 1314 1314 1290 1277 1257 1252 1239 1206 1530 360	
50	897 1144 1259 1298 1334 1362 1374 1377 1394 1406 1414 1386 1375 1357 1334 1314 1314 1293 1279 1257 1252 1239 1206 1530 360	910 1166 1258 1300 1336 1363 1378 1376 1394 1406 1413 1384 1374 1354 1332 1314 1314 1290 1277 1257 1252 1239 1206 1530 360	
55	910 1166 1258 1300 1336 1363 1378 1376 1394 1406 1413 1384 1374 1354 1332 1314 1314 1290 1277 1257 1252 1239 1206 1530 360	910 1166 1258 1300 1336 1363 1378 1376 1394 1406 1413 1384 1374 1354 1332 1314 1314 1290 1277 1257 1252 1239 1206 1530 360	

RSS DISCOVERY CRUISE NO 47						RSS DISCOVERY CRUISE NO 47					
DEPTH IN INCORRECTED FATHOMS			AT AN ASSUMED VELOCITY OF 800 FEET/MINUTES			DEPTH IN INCORRECTED FATHOMS			AT AN ASSUMED VELOCITY OF 800 FEET/MINUTES		
HOURS	00	05	10	15	20	00	05	10	15	20	25
00	358	350	345	339	335	332	330	326	325	324	324
01	327	328	332	340	343	350	360	374	382	391	391
02	385	391	401	405	414	420	580	788	882	980	1042
03	1081	1112	1114	1092	1096	1079	1074	1066	1052	1052	1045
04	1038	1031	1024	1018	1012	1005	998	994	983	977	972
05	967	964	958	954	950	948	946	945	944	944	943
06	944	945	945	944	945	949	952	958	960	960	980
07	986	989	993	997	1001	1004	1007	1009	1014	1014	1016
08	1024	1025	1029	1032	1034	1038	1038	1044	1047	1045	1050
09	1060	1068	1058	1050	1067	1079	1093	1107	1122	1134	1138
10	1094	1087	1096	938	900	810	630	444	432	416	406
11	1400	3906	386	366	360	354	352	356	362	370	378
12	390	400	416	429	442	456	474	532	757	876	1002
13	1040	1076	1125	1154	1167	1170	1167	1164	1154	1140	1126
14	1118	1114	1112	1110	1108	1107	1106	1105	1107	1109	1112
15	1112	1112	1112	1110	1110	1110	1105	1107	1107	1109	1110
16	117	1090	1088	1086	1084	1083	1082	1082	1099	1097	1092
17	1067	1065	1063	1060	1059	1058	1053	1053	1075	1073	1069
18	1043	1041	1039	1036	1036	1033	1033	1031	1051	1049	1045
19	20	1020	1018	1018	1016	1016	1014	1012	1028	1026	1022
20	1008	1006	1005	1005	1004	1003	1003	1003	1011	1010	1008
21	999	998	997	997	997	996	994	994	1000	1000	1000
22	999	999	999	999	999	999	994	994	999	999	990
23											
RSS DISCOVERY CRUISE NO 47						RSS DISCOVERY CRUISE NO 47					
HOURS	00	05	10	15	20	00	05	10	15	20	25
00	990	990	988	988	988	988	988	988	988	988	988
01	992	992	994	998	1001	1030	1107	1042	914	810	992
02	624	584	560	524	510	486	463	420	384	360	666
03	318	303	290	280	274	272	268	264	259	257	339
04	3253	256	257	261	263	271	288	304	328	357	349
05	406	424	406	459	480	494	510	530	500	768	750
06	750	755	767	778	792	803	818	837	843	866	874
07	886	899	918	925	940	940	954	959	951	950	948
08	946	958	941	936	934	930	926	927	917	913	908
09	899	897	892	888	884	879	877	872	870	865	862
10	853	853	850	849	844	841	838	837	833	830	824
11	822	818	816	814	811	808	806	800	796	794	792
12	790	788	786	784	782	780	778	776	773	770	765
13	762	759	753	748	744	738	731	726	720	714	704
14	698	692	686	682	678	673	676	674	672	672	672
15	673	674	675	676	677	672	678	678	679	679	679
16	655	655	651	648	646	642	646	638	637	634	667
17	623	623	616	607	602	595	592	586	586	576	627
18	563	563	566	554	547	542	539	539	537	536	568
19	531	531	529	527	526	526	524	524	523	523	524
20	522	522	525	524	524	524	522	522	522	522	516
21	516	516	520	520	520	520	520	520	520	520	658
22	615	615	620	620	620	620	620	620	620	620	658
23											

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RSS DISCOVERY CRUISE NO 47						RSS DISCOVERY CRUISE NO 47					
DEPTH IN INCORRECTED FATHOMS			AT AN ASSUMED VELOCITY OF 800 FEET/MINUTES			DEPTH IN INCORRECTED FATHOMS			AT AN ASSUMED VELOCITY OF 800 FEET/MINUTES		
HOURS	00	05	10	15	20	00	05	10	15	20	25
00	990	990	988	988	988	988	988	988	988	988	988
01	992	994	998	1001	1030	1107	1042	914	810	810	992
02	624	584	560	524	510	486	463	420	384	360	666
03	318	303	290	280	274	272	268	264	259	257	339
04	3253	256	257	261	263	271	288	304	328	357	349
05	406	424	406	459	480	494	510	530	500	854	866
06	750	755	767	778	792	803	818	837	843	854	866
07	886	899	918	925	940	940	954	959	951	950	948
08	946	958	941	936	934	930	926	927	917	913	908
09	899	897	892	888	884	879	877	872	870	865	862
10	853	853	850	849	844	841	838	837	833	830	824
11	822	818	816	814	811	808	806	800	800	800	824
12	790	788	786	784	782	780	778	776	773	770	792
13	762	759	753	748	744	738	731	726	720	714	704
14	698	692	686	682	678	673	676	674	672	672	672
15	673	674	675	676	677	672	671	668	666	664	667
16	655	655	651	648	646	642	646	638	637	634	630
17	623	623	616	607	602	595	592	586	586	576	572
18	563	563	566	554	547	542	539	539	537	536	533
19	531	531	529	527	526	526	524	524	523	523	524
20	522	522	525	524	524	524	522	522	522	522	516
21	516	516	520	520	520	520	520	520	520	520	658
22	615	615	620	620	620	620	620	620	620	620	658
23											

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RMS DISCOVERY CRUISE NO 47  
 DEPTH IN UNCORRECTED FATHMS AT AN ASSUMED VELOCITY OF 800 FMS/SEC  
 HOURS 00 05 10 15 20 25 30 35  
 00 660 665 670 674 679 684 689 694  
 01 715 724 729 734 739 744 749 754  
 02 663 654 656 658 659 660 662 664  
 03 652 654 656 658 659 660 662 664  
 04 683 686 688 690 692 694 696 698  
 05 670 672 673 675 677 679 681 685  
 06 690 693 695 696 698 701 703 705  
 07 711 713 714 715 717 718 720 723  
 08 728 729 731 733 736 738 740 742  
 09 749 750 753 754 756 759 761 764  
 10 774 776 779 782 785 788 792 796  
 11 793 791 778 777 776 775 774 774  
 12 778 777 777 777 776 775 774 774  
 13 114 774 774 774 774 774 774 774  
 14 827 836 836 836 836 836 836 836  
 15 570 555 555 555 555 555 555 555  
 16 256 266 266 266 266 266 266 266  
 17 259 259 259 259 259 259 259 259  
 18 310 315 315 315 315 315 315 315  
 19 364 370 370 370 370 370 370 370  
 20 436 436 436 436 436 436 436 436  
 21 516 516 516 516 516 516 516 516  
 22 584 584 584 584 584 584 584 584  
 23

DATE 20- 6-1972 (DAY NO 172)  
 HOURS 00 05 10 15 20 25 30 35 40 45 50 55  
 00 667 672 675 679 683 687 691 697 691 697 702 706  
 01 659 664 667 671 675 682 687 693 694 697 702 706  
 02 656 660 664 667 670 675 681 687 690 694 702 706  
 03 654 658 662 665 668 672 677 683 687 691 702 706  
 04 652 656 660 664 667 672 677 683 687 691 702 706  
 05 650 654 658 662 665 670 675 681 685 691 702 706  
 06 648 652 656 660 664 668 672 677 683 687 702 706  
 07 646 650 654 658 662 666 670 675 681 685 702 706  
 08 644 648 652 656 660 664 668 672 677 681 702 706  
 09 642 646 650 654 658 662 666 670 675 681 702 706  
 10 640 644 648 652 656 660 664 668 672 677 702 706  
 11 638 642 646 650 654 658 662 666 670 675 702 706  
 12 636 640 644 648 652 656 660 664 668 672 702 706  
 13 634 638 642 646 650 654 658 662 666 670 702 706  
 14 632 636 640 644 648 652 656 660 664 668 702 706  
 15 630 634 638 642 646 650 654 658 662 666 702 706  
 16 628 632 636 640 644 648 652 656 660 664 702 706  
 17 626 630 634 638 642 646 650 654 658 662 702 706  
 18 624 628 632 636 640 644 648 652 656 660 702 706  
 19 622 626 630 634 638 642 646 650 654 658 702 706  
 20 620 624 628 632 636 640 644 648 652 656 702 706  
 21 618 622 626 630 634 638 642 646 650 654 702 706  
 22 616 620 624 628 632 636 640 644 648 652 702 706  
 23

RMS DISCOVERY CRUISE NO 47  
 DEPTH IN UNCORRECTED FATHMS AT AN ASSUMED VELOCITY OF 800 FMS/SEC  
 HOURS 00 05 10 15 20 25 30 35  
 00 570 575 580 584 588 591 594 597  
 01 579 594 600 604 607 610 613 616  
 02 597 604 607 610 613 615 618 620  
 03 605 612 615 618 621 623 626 628  
 04 613 620 623 626 629 632 635 638  
 05 621 628 631 634 637 640 643 646  
 06 629 636 640 643 646 649 652 655  
 07 637 644 648 652 656 659 662 666  
 08 645 652 656 660 664 667 670 674  
 09 653 660 664 668 672 675 678 682  
 10 661 668 672 676 680 684 687 691  
 11 669 676 680 684 688 692 696 700  
 12 677 684 688 692 696 700 704 708  
 13 685 692 696 700 704 708 712 716  
 14 693 700 704 708 712 716 720 724  
 15 701 708 712 716 720 724 728 732  
 16 709 716 720 724 728 732 736 740  
 17 717 724 728 732 736 740 744 748  
 18 725 732 736 740 744 748 752 756  
 19 733 740 744 748 752 756 760 764  
 20 741 748 752 756 760 764 768 772  
 21 749 756 760 764 768 772 776 780  
 22 757 764 768 772 776 780 784 788  
 23

DATE 21- 6-1972 (DAY NO 173)  
 HOURS 00 05 10 15 20 25 30 35 40 45 50 55  
 00 578 594 600 604 607 610 613 616  
 01 597 604 607 610 613 615 618 620  
 02 612 615 618 620 623 626 629 632  
 03 620 623 626 628 631 634 637 640  
 04 628 631 634 637 640 643 646 649  
 05 636 639 642 645 648 651 654 657  
 06 644 647 650 653 656 659 662 665  
 07 652 655 658 661 664 667 670 673  
 08 660 663 666 669 672 675 678 681  
 09 668 671 674 677 680 683 686 689  
 10 676 679 682 685 688 691 694 697  
 11 684 687 690 693 696 699 702 705  
 12 692 695 698 701 704 707 710 713  
 13 700 703 706 709 712 715 718 721  
 14 708 711 714 717 720 723 726 729  
 15 716 719 722 725 728 731 734 737  
 16 724 727 730 733 736 739 742 745  
 17 732 735 738 741 744 747 750 753  
 18 740 743 746 749 752 755 758 761  
 19 748 751 754 757 760 763 766 769  
 20 756 759 762 765 768 771 774 777  
 21 764 767 770 773 776 779 782 785  
 22 772 775 778 781 784 787 790 793  
 23

C18  
 DATE 20- 6-1972 (DAY NO 172)  
 HOURS 00 05 10 15 20 25 30 35 40 45 50 55  
 00 697 691 685 679 673 667 661 655  
 01 695 689 683 677 671 665 659 653  
 02 693 687 681 675 669 663 657 651  
 03 691 685 679 673 667 661 655 649  
 04 689 683 677 671 665 659 653 647  
 05 687 681 675 669 663 657 651 645  
 06 685 679 673 667 661 655 649 643  
 07 683 677 671 665 659 653 647 641  
 08 681 675 669 663 657 651 645 639  
 09 679 673 667 661 655 649 643 637  
 10 677 671 665 659 653 647 641 635  
 11 675 669 663 657 651 645 639 633  
 12 673 667 661 655 649 643 637 631  
 13 671 665 659 653 647 641 635 629  
 14 669 663 657 651 645 639 633 627  
 15 667 661 655 649 643 637 631 625  
 16 665 659 653 647 641 635 629 623  
 17 663 657 651 645 639 633 627 621  
 18 661 655 649 643 637 631 625 619  
 19 659 653 647 641 635 629 623 617  
 20 657 651 645 639 633 627 621 615  
 21 655 649 643 637 631 625 619 613  
 22 653 647 641 635 629 623 617 611  
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225 DISCOVERY C2211SE NO 47  
 DEPTH IN INCORRECT FATHIMS AT AN ASSUMED VELOCITY OF 800 FMS/SFC  
 HOURS 00 05 10 15 20 25 30 35 40 45 50 55  
 00 305 314 310 312 295 294 293 289 284 286 278 294  
 01 284 288 286 284 292 299 299 297 297 300 302 302  
 02 308 322 353 356 366 374 390 392 428 436 448 452  
 03 457 462 470 476 490 506 520 530 539 554 567 572  
 04 582 609 620 628 628 637 646 657 668 678 688 697  
 05 708 717 729 738 750 764 774 786 798 813 824 842  
 06 856 882 894 914 928 948 976 990 951 1014 1020 1020  
 07 1038 1052 1074 1084 1100 1114 1134 1146 1146 1156 1190 1218  
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C19

DATE 72- 6-1977 ( DAY NO 174 )

RRS DISCOVERY CRUISE NO 47										RRS DISCOVERY CRUISE NO 47									
DEPTH IN INCORRECTED FATHOMS AT AN ASSUMED VELNCTY OF 800 FMS/SEC										DEPTH IN INCORRECTED FATHOMS AT AN ASSUMED VELNCTY OF 800 FMS/SEC									
HOURS	00	05	10	15	20	25	30	35	40	45	50	55	DATE	??-6-1972 (DAY NO 174)	DATE	??-6-1972 (DAY NO 175)	DATE	??-6-1972 (DAY NO 176)	
00	1464	1472	1274	1477	1295	1458	1432	1306	1408	1328	1339	1316	1256	1284	1285	1296	132	1448	
01	1221	1041	1190	1622	1032	1144	1135	1004	1128	1122	1087	1082	965	965	965	965	965	1050	
02	965	847	733	964	966	837	827	814	940	927	914	900	878	878	878	878	878	856	
03	636	576	730	650	576	725	718	638	802	793	782	773	752	744	752	752	752	737	
04	508	542	504	504	504	501	501	498	564	564	564	556	554	548	548	548	548	545	
05	466	462	462	462	462	465	465	449	449	449	449	440	440	437	437	437	437	432	
06	431	431	431	430	430	430	430	429	430	429	429	423	423	414	414	414	414	406	
07	400	392	392	384	384	377	377	374	374	374	374	365	365	356	356	356	356	344	
08	346	360	360	360	360	369	375	375	373	373	373	368	368	389	389	389	389	397	
09	400	403	403	403	403	408	408	412	412	412	412	420	420	433	433	433	433	474	
10	517	628	687	690	692	694	675	672	674	674	674	672	672	671	671	671	671	672	
11	605	615	688	692	692	676	672	672	680	680	680	680	680	682	682	682	682	682	
12	576	682	682	682	682	682	682	682	684	684	684	680	680	696	696	696	696	696	
13	538	698	698	698	698	698	698	698	698	698	698	698	698	526	526	526	526	505	
14	484	484	467	467	467	448	448	427	427	427	427	443	443	451	451	451	451	459	
15	532	532	557	573	593	593	593	593	611	611	611	628	641	655	655	655	655	634	
16	530	530	530	530	530	530	530	530	538	538	538	538	538	557	557	557	557	586	
17	514	514	498	498	498	498	498	498	562	562	562	562	562	536	536	536	536	519	
18	438	438	438	438	438	438	438	438	498	498	498	498	498	486	486	486	486	447	
19	315	315	315	315	315	315	315	315	398	398	398	398	398	362	362	362	362	321	
20	231	231	231	231	231	231	231	231	296	296	296	296	296	289	289	289	289	245	
21	173	173	173	173	173	173	173	173	206	206	206	206	206	195	195	195	195	152	
22	151	151	151	151	151	151	151	151	170	170	170	170	170	167	167	167	167	136	
23	135	135	135	135	135	135	135	135	148	148	148	148	148	140	140	140	140	104	

C20

HOURS		NO 47 DEPTH IN FATHOMS AT AN ASSUMED VELOCITY OF FMS/SEC				NO 47 DEPTH IN FATHOMS AT AN ASSUMED VELOCITY OF FMS/SEC			
00	05	10	15	20	25	30	35		
00									
01	88	86	86	88	91	91	91		
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05	93	97	109	103	91	91	91		
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RRS DISCOVERY CRUISE NO 47  
DEPTH IN UNCORRECTED FATHOMS AT AN ASSUMED VELCITY OF 800 FMS/SEC

HOURS	00	05	10	15	20	25	30	35	40	45	50	55
00	718	719	721	725	726	728	730	734	736	738	740	743
01	744	745	747	750	752	753	756	758	756	754	752	756
02	756	756	754	754	754	752	752	752	752	754	754	754
03	759	759	760	762	765	766	769	770	774	776	776	778
04	780	781	782	783	783	783	783	783	782	782	782	781
05	780	780	779	780	778	778	777	776	775	774	774	774
06	776	776	778	778	779	782	785	785	787	790	792	796
07	797	797	803	807	810	814	814	818	822	826	828	832
08	838	840	842	848	840	860	862	868	872	880	882	885
09	892	903	916	920	922	928	932	937	950	963	974	974
10	988	1008	1009	1007	1010	1012	1013	1016	1022	1032	1040	1045
11	1046	1042	1043	1044	1054	1054	1048	1048	1056	1064	1063	1071
12	1043	1042	1040	1040	1038	1037	1037	1094	1113	1130	1156	1177
13	1071	1072	1080	1086	1088	1092	1093	1131	1169	1187	1204	1220
14	1136	1136	1139	1137	1158	1132	1132	1348	1366	1388	1405	1445
15	1242	1243	1243	1242	1312	1312	1312	1465	1465	1467	1469	1478
16	1447	1446	1448	1454	1458	1459	1459	1496	1502	1506	1504	1502
17	1476	1484	1488	1494	1496	1499	1499	1502	1503	1499	1497	1494
18	1506	1504	1510	1506	1508	1508	1508	1506	1503	1508	1497	1499
19	1496	1498	1503	1505	1513	1506	1506	1503	1498	1487	1470	1456
20	1502	1500	1494	1492	1490	1492	1492	1484	1481	1487	1460	1388
21	1452	1448	1447	1447	1438	1444	1444	1442	1422	1412	1400	1378
22	1382	1376	1350	1350	1340	1340	1340	1350	1328	1317	1264	1160
23	1075	1076	1074	1074	1074	1074	1074	1074	1074	1074	1074	1074

HOURS	00	05	10	15	20	25	30	35	40	45	50	55
00	606	634*07	612	590	562	586	548	557*36	472	378*44	468*51	582*53
01	620	466*06	587	500*17	600	630	586	648	717	732	692	692*53
02	796	785	761	764	769	782	814	823	823	824	828	838
03	850	860	850	884	826	846	823	854	852	858	850	850
04	800	793	837	825	870	830	823	802	789	778	778	762
05	753	747	738	732	727	727	722	718	714	712	712	709
06	710	710	711	712	712	712	713	716	716	726	726	734
07	744	757	776	782	739	718	691	658	633	610	588	588
08	568	547	527	491	474	474	463	434	434	417	401	401
09	388	372	347	336	320	308	294	285	285	245	245	254
10	248	244	238	233	233	233	237	241	241	261	261	258
11	254	258	257	259	259	261	261	274	274	216	216	208
12	264	250	243	239	239	239	239	239	239	184	184	166
13	206	196	193	188	188	192	192	192	192	178	178	134
14	161	155	152	147	147	146	146	144	144	139	139	136
15	132	130	126	117	117	104	104	99	99	99	99	98

C22

RSS DISCOVERY CRUISE NO 47		RSS DISCOVERY CRUISE NO 47		RSS DISCOVERY CRUISE NO 47	
DEPTH IN INCORRECTED FATHOMS		DEPTH IN INCORRECTED FATHOMS		DEPTH IN INCORRECTED FATHOMS	
HOURS	MINUTES	HOURS	MINUTES	HOURS	MINUTES
00	05	00	05	00	05
01		01		01	
02		02		02	
03		03		03	
04		04		04	
05		05		05	
06		06		06	
07		07		07	
08		08		08	
09		09		09	
10		10		10	
11		11		11	
12		12		12	
13		13		13	
14		14		14	
15		15		15	
16		16		16	
17		17		17	
18		18		18	
19		19		19	
20		20		20	
21		21		21	
22		22		22	
23		23		23	
00	05	00	05	00	05
01		01		01	
02		02		02	
03		03		03	
04		04		04	
05		05		05	
06		06		06	
07		07		07	
08		08		08	
09		09		09	
10		10		10	
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14		14		14	
15		15		15	
16		16		16	
17		17		17	
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20		20		20	
21		21		21	
22		22		22	
23		23		23	

	DATE 28- 5-1972 ( DAY NO 180 )				DATE 29- 6-1972 ( DAY NO 181 )				DATE 30- 6-1972 ( DAY NO 182 )		
	40	45	50		40	45	50		40	45	50
35	40	45	50		71*38	79*43	126 96		176	175	175
90	106 114	114	116 117		82	78	79		92 93	94	94
07	114	114	116 117		106 114	114	116 117		98 98	98	98
14									100 101	100 101	100 101
									100 101	101 102	101 102
									102 101	102 101	104 103
									102 101	103 102	104 103
									107 107	108 108	108 108

RRS DISCOVERY CRUISE NO 47  
 DEPTH IN UNCORRECTED FATHOMS AT AN ASSUMED VELOCITY OF  
 HOURS 00 05 10 15 20 25 30 35 40 45 50 55  
 00 108 108 110 112 114 115 116 117 118 119 120 121  
 01 110 110 112 114 116 117 118 119 120 121 122 123  
 02 133 137 142 146 152 158 162 168 174 180 184 188  
 03 285 303 330 368 398 427 462 485 512 534 556 587  
 04 614 620 663 689 703 727 752 777 798 800 823 840  
 05 952 960 970 983 987 1003 1016 1028 1038 1056 1084 1090  
 06 1109 1124 1144 1168 1177 1187 1197 1207 1210 1220 1233 1245  
 07 1246 1253 1260 1272 1281 1286 1293 1304 1312 1320 1330 1345  
 08 1326 1330 1334 1338 1343 1348 1354 1361 1366 1369 1374 1379  
 09 1379 1382 1386 1390 1393 1396 1400 1403 1407 1410 1412 1415  
 10 1419 1423 1425 1427 1430 1432 1436 1438 1442 1444 1447 1449  
 11 1448 1454 1456 1458 1460 1462 1464 1466 1468 1470 1472 1474  
 12 1470 1472 1476 1478 1479 1480 1482 1484 1486 1488 1490 1492  
 13 1483 1486 1488 1490 1492 1494 1498 1500 1502 1505 1507 1509  
 14 1514 1517 1521 1524 1527 1530 1532 1534 1536 1538 1540 1542  
 15 1525 1527 1531 1534 1535 1536 1538 1540 1542 1544 1546 1548  
 16 1535 1536 1536 1538 1539 1539 1540 1542 1543 1544 1545 1546  
 17 1536 1536 1537 1538 1539 1540 1541 1542 1543 1544 1545 1546  
 18 1534 1534 1535 1536 1537 1538 1539 1540 1541 1542 1543 1544  
 19 1530 1530 1531 1532 1533 1534 1535 1536 1537 1538 1539 1540  
 20 1531 1533 1534 1535 1536 1537 1538 1539 1540 1541 1542 1543  
 21 1533 1534 1535 1536 1537 1538 1539 1540 1541 1542 1543 1544  
 22 1549 1560 1561 1562 1563 1564 1565 1566 1567 1568 1569 1570  
 23 1560 1561 1562 1563 1564 1565 1566 1567 1568 1569 1570 1571

RRS DISCOVERY CRUISE NO 47  
 DEPTH IN UNCORRECTED FATHOMS AT AN ASSUMED VELOCITY OF  
 HOURS 00 05 10 15 20 25 30 35 40 45 50 55  
 00 110 110 112 114 115 116 117 118 119 120 121 122  
 01 112 112 114 116 117 118 119 120 121 122 123 124  
 02 123 127 130 134 138 142 146 150 154 158 162 166  
 03 295 303 310 318 326 334 342 350 358 366 374 382  
 04 614 620 628 636 645 654 663 672 681 690 699 708  
 05 952 960 968 976 984 992 1000 1008 1016 1024 1032 1040  
 06 1109 1117 1125 1133 1141 1149 1157 1165 1173 1181 1189 1197  
 07 1192 1197 1205 1213 1221 1227 1235 1243 1251 1259 1267 1275  
 08 1208 1217 1225 1233 1241 1249 1257 1265 1273 1281 1289 1297  
 09 1209 1217 1225 1233 1241 1249 1257 1265 1273 1281 1289 1297  
 10 1214 1222 1230 1238 1246 1254 1262 1270 1278 1286 1294 1302  
 11 1223 1231 1239 1247 1255 1263 1271 1279 1287 1295 1303 1311  
 12 1232 1240 1248 1256 1264 1272 1280 1288 1296 1304 1312 1320  
 13 1241 1249 1257 1265 1273 1281 1289 1297 1305 1313 1321 1329  
 14 1250 1258 1266 1274 1282 1290 1298 1306 1314 1322 1330 1338  
 15 1259 1267 1275 1283 1291 1299 1307 1315 1323 1331 1339 1347  
 16 1268 1276 1284 1292 1299 1307 1315 1323 1331 1339 1347 1355  
 17 1277 1285 1293 1301 1309 1317 1325 1333 1341 1349 1357 1365  
 18 1286 1294 1302 1310 1318 1326 1334 1342 1350 1358 1366 1374  
 19 1295 1303 1311 1319 1327 1335 1343 1351 1359 1367 1375 1383  
 20 1304 1312 1320 1328 1336 1344 1352 1360 1368 1376 1384 1392  
 21 1313 1321 1329 1337 1345 1353 1361 1369 1377 1385 1393 1401  
 22 1322 1330 1338 1346 1354 1362 1370 1378 1386 1394 1402 1410  
 23 1331 1339 1347 1355 1363 1371 1379 1387 1395 1403 1411 1419

C 24

DATE 30- 6-1972 ( DAY NO 182 )  
 RRS DISCOVERY CRUISE NO 47  
 DEPTH IN UNCORRECTED FATHOMS AT AN ASSUMED VELOCITY OF  
 HOURS 00 05 10 15 20 25 30 35 40 45 50 55  
 00 110 110 112 114 115 116 117 118 119 120 121 122  
 01 112 112 114 116 117 118 119 120 121 122 123 124  
 02 123 127 130 134 138 142 146 150 154 158 162 166  
 03 295 303 310 318 326 334 342 350 358 366 374 382  
 04 614 620 628 636 645 654 663 672 681 690 699 708  
 05 952 960 968 976 984 992 1000 1008 1016 1024 1032 1040  
 06 1109 1117 1125 1133 1141 1149 1157 1165 1173 1181 1189 1197  
 07 1192 1197 1205 1213 1221 1227 1235 1243 1251 1259 1267 1275  
 08 1208 1217 1225 1233 1241 1249 1257 1265 1273 1281 1289 1297  
 09 1209 1217 1225 1233 1241 1249 1257 1265 1273 1281 1289 1297  
 10 1214 1222 1230 1238 1246 1254 1262 1270 1278 1286 1294 1302  
 11 1223 1231 1239 1247 1255 1263 1271 1279 1287 1295 1303 1311  
 12 1232 1240 1248 1256 1264 1272 1280 1288 1296 1304 1312 1320  
 13 1241 1249 1257 1265 1273 1281 1289 1297 1305 1313 1321 1329  
 14 1250 1258 1266 1274 1282 1290 1298 1306 1314 1322 1330 1338  
 15 1259 1267 1275 1283 1291 1299 1307 1315 1323 1331 1339 1347  
 16 1268 1276 1284 1292 1299 1307 1315 1323 1331 1339 1347 1355  
 17 1277 1285 1293 1301 1309 1317 1325 1333 1341 1349 1357 1365  
 18 1286 1294 1302 1310 1318 1326 1334 1342 1350 1358 1366 1374  
 19 1295 1303 1311 1319 1327 1335 1343 1351 1359 1367 1375 1383  
 20 1304 1312 1320 1328 1336 1344 1352 1360 1368 1376 1384 1392  
 21 1313 1321 1329 1337 1345 1353 1361 1369 1377 1385 1393 1401  
 22 1322 1330 1338 1346 1354 1362 1370 1378 1386 1394 1402 1410  
 23 1331 1339 1347 1355 1363 1371 1379 1387 1395 1403 1411 1419

DATE 1- 7-1972 ( DAY NO 183 )  
 RRS DISCOVERY CRUISE NO 47  
 DEPTH IN UNCORRECTED FATHOMS AT AN ASSUMED VELOCITY OF  
 HOURS 00 05 10 15 20 25 30 35 40 45 50 55  
 00 110 110 112 114 115 116 117 118 119 120 121 122  
 01 112 112 114 116 117 118 119 120 121 122 123 124  
 02 123 127 130 134 138 142 146 150 154 158 162 166  
 03 295 303 310 318 326 334 342 350 358 366 374 382  
 04 614 620 628 636 645 654 663 672 681 690 699 708  
 05 952 960 968 976 984 992 1000 1008 1016 1024 1032 1040  
 06 1109 1117 1125 1133 1141 1149 1157 1165 1173 1181 1189 1197  
 07 1192 1197 1205 1213 1221 1227 1235 1243 1251 1259 1267 1275  
 08 1208 1217 1225 1233 1241 1249 1257 1265 1273 1281 1289 1297  
 09 1209 1217 1225 1233 1241 1249 1257 1265 1273 1281 1289 1297  
 10 1214 1222 1230 1238 1246 1254 1262 1270 1278 1286 1294 1302  
 11 1223 1231 1239 1247 1255 1263 1271 1279 1287 1295 1303 1311  
 12 1232 1240 1248 1256 1264 1272 1280 1288 1296 1304 1312 1320  
 13 1241 1249 1257 1265 1273 1281 1289 1297 1305 1313 1321 1329  
 14 1250 1258 1266 1274 1282 1290 1298 1306 1314 1322 1330 1338  
 15 1259 1267 1275 1283 1291 1299 1307 1315 1323 1331 1339 1347  
 16 1268 1276 1284 1292 1299 1307 1315 1323 1331 1339 1347 1355  
 17 1277 1285 1293 1301 1309 1317 1325 1333 1341 1349 1357 1365  
 18 1286 1294 1302 1310 1318 1326 1334 1342 1350 1358 1366 1374  
 19 1295 1303 1311 1319 1327 1335 1343 1351 1359 1367 1375 1383  
 20 1304 1312 1320 1328 1336 1344 1352 1360 1368 1376 1384 1392  
 21 1313 1321 1329 1337 1345 1353 1361 1369 1377 1385 1393 1401  
 22 1322 1330 1338 1346 1354 1362 1370 1378 1386 1394 1402 1410  
 23 1331 1339 1347 1355 1363 1371 1379 1387 1395 1403 1411 1419

MILES DISCOVERED IN UNCORRECTED FATHOMS		NO. 47 CRUISE NO. DEPTH IN FATHOMS		AT AN ASSUMED VELOCITY OF 800 FEET/SEC.		DATE 7-1-72 (DAY NO. 184)	
HOURS	MINUTES	00	05	10	15	20	25
00	56	54	52	50	49	47	45
01	55	53	51	50	49	47	45
02	52	50	49	48	47	45	43
03	56	54	52	51	50	49	47
04	53	51	50	49	48	47	45
05	54	52	51	50	49	48	46
06	52	50	49	48	47	46	44
07	49	47	46	45	44	43	41
08	47	46	45	44	43	42	40
09	46	45	44	43	42	41	39
10	45	44	43	42	41	40	38
11	45	44	43	42	41	40	37
12	46	45	44	43	42	41	36
13	46	45	44	43	42	41	35
14	45	44	43	42	41	40	34
15	45	44	43	42	41	40	33
16	46	45	44	43	42	41	32
17	46	45	44	43	42	41	31
18	46	45	44	43	42	41	30
19	47	46	45	44	43	42	29
20	47	46	45	44	43	42	28
21	47	46	45	44	43	42	27
22	47	46	45	44	43	42	26
23	47	46	45	44	43	42	25
24	47	46	45	44	43	42	24
25	47	46	45	44	43	42	23
26	47	46	45	44	43	42	22
27	47	46	45	44	43	42	21
28	47	46	45	44	43	42	20
29	47	46	45	44	43	42	19
30	47	46	45	44	43	42	18
31	47	46	45	44	43	42	17
32	47	46	45	44	43	42	16
33	47	46	45	44	43	42	15
34	47	46	45	44	43	42	14
35	47	46	45	44	43	42	13
36	47	46	45	44	43	42	12
37	47	46	45	44	43	42	11
38	47	46	45	44	43	42	10
39	47	46	45	44	43	42	09
40	47	46	45	44	43	42	08
41	47	46	45	44	43	42	07
42	47	46	45	44	43	42	06
43	47	46	45	44	43	42	05
44	47	46	45	44	43	42	04
45	47	46	45	44	43	42	03
46	47	46	45	44	43	42	02
47	47	46	45	44	43	42	01
48	47	46	45	44	43	42	00

SECTION D

Tables of (a) Magnetic Anomaly

(b) Corrected Depth in Fathoms

(c) Corrected Depth in Metres

RRS DISCOVERY CRUISE NO. 47		MAGNETIC ANOMALY IN GAMMAS AFTER THE REMOVAL OF IGRF MINUTES				
HOURS	00	05	10	15	20	
00	-132	-130	-129	-123	-126	-141
01	-116	-117	-117	-125	-124	-119
02	-120	-122	-121	-121	-121	-121
03	-102	-102	-99	-96	-93	-93
04	-61	-54	-56	-53	-52	-52
05	-31	-33	-34	-37	-39	-39
06	-16	-55	-55	-55	-53	-53
07	-17	-67	-70	-72	-75	-75
08	-18	-88	-89	-91	-90	-95
09	-19	-90	-91	-91	-94	-94
10	-20	-98	-91	-91	-80	-63*18
11	-21	-95	-57	-61	-52	-39
12	-22	28*06	-23			
RRS DISCOVERY CRUISE NO. 47		MAGNETIC ANOMALY IN GAMMAS AFTER THE REMOVAL OF IGRF MINUTES				
HOURS	00	05	10	15	20	
00	-58	-70	-66	-68	-64	-43
01	-61	-44	-39	-43	-47	-104
02	-78	-86	-113	-126	-109	-85
03	-110	-114	-121	-107	-100	-111
04	-69	-126	-134	-107	-100	-104
05	-23	-39	-48	-72	-100	-104
06	122	125	125	124	123	123
07	195	91	86	82	78	78
08	-248	-40	-52	-65	-77	-77
09	-138	-44	-151	-165	-162	-156
10	-179	-176	-171	-164	-156	-147
11	-199	-100	-101	-105	-104	-140
12	-128	-129	-131	-135	-145	-139
13	-156	-153	-150	-156	-156	-156
14	-185	-133	-176	-176	-165	-165
15	-190	-190	-160	-171	-169	-169
16	-187	-137	-166	-176	-177	-177
17	-190	-190	-167	-177	-177	-177
18	-187	-137	-166	-176	-177	-177
19	-190	-190	-167	-177	-177	-177
20	-148	105	106	114	128	128
21	228	153	160	166	174	174
22	212	242	242	249	254	254
23	218	219	219	206	186	186
	52	85	85	117	117	117

DATE	10- 6-1972 (DAY NO 167)	40	45	50	55
-134	-137	-136	-135	-132	-139
-138	-118	-118	-117	-116	-132
-118	-119	-119	-119	-121	-116
-119	-108	-108	-108	-105	-105
-109	-78	-74	-74	-67	-78
-81	-30	-28	-28	-31	-54
-52	-52	-53	-53	-54	-52
-60	-61	-64	-64	-67	-60
-84	-86	-84	-84	-86	-84
-90	-88	-88	-88	-89	-89
-92	-92	-91	-91	-89	-92
-77	-89	-85	-85	-86	-78
-35	-49	-11!	-11!	-76	-76
DATE	11- 6-1972 (DAY NO 163)	40	45	50	55
-55	-52	-47	-44	-40	-48
-2**38	-47	-140	-128	-128	-30**57
-128**39	-75	-73	-55	-43	-118
-73	-128	-128	-128	-81	-127
-40	-28	-28	-3	10	10
124	93	93	102	112	112
116	111	104	104	109	109
141	124	120	122	122	129
115	120	118	118	118	118
118	118	110	107	107	105
129	129	127	125	125	127
155	157	157	159	157	157
117	113	109	101	101	104
18	18	18	18	18	18
63	72	72	83	83	91
98	101	101	108	108	114
127	133	133	137	137	143
209	217	217	220	220	223
164	233	233	226	226	214
66	140	140	108	108	78
			70	70	73

RR'S DISCOVERY CRUISE NO. 47		MAGNETIC ANOMALY IN GAMMAS AFTER		THE REMOVAL OF I.G.R.F. MINUTES	
HOURS	MINUTES	00	05	10	15
00	86	89	78	66	53
01	67	95	117	211	291
02	241	243	268	118	-1
03	231	248	218	-14	-1
04	254	217	2	-14	-1
05	25	-10	-34	-13	-1
06	254	-34	-39	-14	-1
07	05	-112	-129	-183	-142
08	182	-112	-129	-141	-149
09	192	-186	-186	-156	-149
10	10	-149	-149	-131	-131
11	10	-116	-124	-156	-156
12	11	-116	-162	-205	-215
13	12	-116	-166	-205	-215
14	13	-116	-160	-137	-84
15	14	-116	-166	-137	-7
16	15	-116	-166	-92	-70
17	16	-116	-166	-92	-70
18	17	-116	-166	-24	-76
19	18	-116	-166	-233	-222
20	19	-116	-166	-114	-140
21	20	-116	-166	-32	-25
22	21	-116	-166	-169	-184
23	22	-116	-166	-12	-17
	23	-116	-166	100	119

R.R.S. DISCOVERY CRUISE NO. 47		MAGNETIC ANOMALY IN GAMMAS		AFTER THE REMOVAL OF I.G.R.F.	
HOURS	MINUTES	00	05	10	15
00	00	229	221	216	213
00	01	284	258	238	218
00	02	54	77	99	119
00	03	294	305	310	310
00	04	178	162	147	129
00	05	137	113	10	110
00	06	353	44	49	54
00	07	-77	-77	-73	-68
00	08	-15	-16	-16	-60
00	09	-150	-154	-156	-53
00	10	-156	-154	-152	-53
00	11	-120	-120	-117	-104
00	12	-151	-151	-152	-57
00	13	-159	-154	-148	-45
00	14	-124	-124	-37	-41
00	15	168	168	166	158
00	16	164	164	166	158
00	17	1	1	2	1
00	18	3	2	2	1
00	19	805	829	844	884
00	20	-959	-855	-827	-794
00	21	-66	-52	-33	-35
00	22	-23	-42	-40	-47
00	23	-90	-98	-99	-100

DATE 12-6-1972 (DAY NO 164)

DATE 13- 6-1972 (DAY NO 165)



R.R.S. DISCOVERY CRUISE NO. 47  
MAGNETIC ANOMALY IN GAMMAS AFTER THE REMOVAL OF IGRF  
HOURS 00 05 10 15 20 25 30 35 40 45 50 55  
00 -203 -265 156\*12 185\*16 105 56 -82 -123\*33 -199 -308 -185\*51 -213  
01 -199 -262\*03 -187 -128 -100\*16 -193 -151 -170 -173\*37 -151 -38 -45\*49 -64  
02 -66 -90 -59\*07 97 386\*13 178 175\*27 329\*29 670\*33 50 -33\*43 415 -645\*57  
03 125 635\*01 374 239\*09 485\*13 175\*22 170\*26 359\*42 473\*42 278 367\*52 367 172\*56  
04 305\*00 395 271\*08 408\*12 379\*16 195\*26 184\*28 473\*42 220 265 220 350 411\*54  
05 395 349 408\*12 379\*14 291\*18 164\*28 203 220 220 220 350 350 271\*54  
06 654\*02 476 221\*12 37\*14 165\*18 164\*24 317\*32 266\*35 220 220 350 350 271\*54  
07 391 456 406\*12 367\*14 165\*18 164\*22 266\*35 266\*35 220 220 350 350 271\*54  
08 451\*02 256 106 120\*16 143 581 175 175 175 175 175 175 175 175  
09 -58 -69\*06 114 265\*16 175 175 175 175 175 175 175 175 175 175  
10 12 -179\*58 256 107 468 163 130 120 116 123 121\*52 45  
11 22 255 259 107 283 1296 310 335 359 141 198 234  
12 23

R.R.S. DISCOVERY CRUISE NO. 47  
MAGNETIC ANOMALY IN GAMMAS AFTER THE REMOVAL OF IGRF  
HOURS 00 05 10 15 20 25 30 35 40 45 50 55  
00 -8 -106 98 340 393 396 387 365 331 289 247 212  
01 171 138 115 108 116 116 110 105 101 93 84  
02 174 65 156 146 119 119 117 107 101 93 84  
03 -4 -14 -21 -16 -19 -13 -11 -9 -8 -7 -6 -5  
04 -29 -18 -21 -16 -20 -10 -8 -6 -5 -4 -3  
05 -16 -13 0 -13 -10 -8 -6 -5 -4 -3 -2  
06 -6 69 -65 -66 -69 -68 -72 -73 -72 -73 -72  
07 -65 2 -13 0 -65 -69 -72 -73 -72 -73 -72  
08 -66 -65 -65 -65 -65 -68 -72 -73 -72 -73 -72  
09 -67 -58 -58 -58 -58 -60 -64 -64 -64 -64 -64  
10 -59 7 -31 -32 -34 -36 -38 -38 -38 -38 -38  
11 -55 1 -70 -70 -70 -70 -70 -70 -70 -70 -70  
12 -54 -52 -55 -54 -53 -53 -53 -53 -53 -53 -53  
13 -54 -52 -55 -54 -53 -53 -53 -53 -53 -53 -53  
14 -64 -64 -71 -71 -70 -70 -70 -70 -70 -70 -70  
15 -64 -64 -71 -71 -70 -70 -70 -70 -70 -70 -70  
16 -71 -71 -70 -70 -70 -70 -70 -70 -70 -70 -70  
17 -71 0 -71 0 -71 0 -71 0 -71 0 -71 0  
18 48 62 67 68 64 63 60 55 53 49 47  
19 52 54 59 63 61 57 54 52 49 48 47  
20 66 68 74 83 84 88 89 98 97 54 58  
21 145 160 150 149 138 123 123 115 115 102 116  
22 122 126 106 174 176 176 176 176 176 167 148  
23 -409 -233 -233 -178 -178 -178 -178 -178 -178 -178 -178 -465

DATE 16- 6-1972 (DAY NO 168)  
HOURS 00 05 10 15 20 25 30 35 40 45 50 55  
00 -199 -265 156\*12 185\*16 105 56 -82 -123\*33 -199 -308 -185\*51 -213  
01 -199 -262\*03 -187 -128 -100\*16 -193 -151 -170 -173\*37 -151 -38 -45\*49 -64  
02 -66 -90 -59\*07 97 386\*13 178 175\*27 329\*29 670\*33 50 -33\*43 415 -645\*57  
03 125 635\*01 374 239\*09 485\*13 175\*22 170\*26 359\*42 473\*42 278 367\*52 367 172\*56  
04 305\*00 395 271\*08 408\*12 379\*16 195\*26 184\*28 473\*42 220 265 220 350 411\*54  
05 395 349 408\*12 379\*14 291\*18 164\*28 203 220 220 220 350 350 271\*54  
06 654\*02 476 221\*12 37\*14 165\*18 164\*24 317\*32 266\*35 220 220 350 350 271\*54  
07 391 456 406\*12 367\*14 165\*18 164\*22 266\*35 266\*35 220 220 350 350 271\*54  
08 451\*02 256 106 120\*16 143 581 175 175 175 175 175 175 175 175  
09 -58 -69\*06 114 265\*16 175 175 175 175 175 175 175 175 175 175  
10 12 -179\*58 256 107 468 163 130 120 116 123 121\*52 45  
11 22 255 259 107 283 1296 310 335 359 141 198 234  
12 23

D 4  
DATE 17- 6-1972 (DAY NO 169)  
HOURS 00 05 10 15 20 25 30 35 40 45 50 55  
00 -199 -265 156\*12 185\*16 105 56 -82 -123\*33 -199 -308 -185\*51 -213  
01 -199 -262\*03 -187 -128 -100\*16 -193 -151 -170 -173\*37 -151 -38 -45\*49 -64  
02 -66 -90 -59\*07 97 386\*13 178 175\*27 329\*29 670\*33 50 -33\*43 415 -645\*57  
03 125 635\*01 374 239\*09 485\*13 175\*22 170\*26 359\*42 473\*42 278 367\*52 367 172\*56  
04 305\*00 395 271\*08 408\*12 379\*16 195\*26 184\*28 473\*42 220 265 220 350 411\*54  
05 395 349 408\*12 379\*14 291\*18 164\*28 203 220 220 220 350 350 271\*54  
06 654\*02 476 221\*12 37\*14 165\*18 164\*24 317\*32 266\*35 220 220 350 350 271\*54  
07 391 456 406\*12 367\*14 165\*18 164\*22 266\*35 266\*35 220 220 350 350 271\*54  
08 451\*02 256 106 120\*16 143 581 175 175 175 175 175 175 175 175  
09 -58 -69\*06 114 265\*16 175 175 175 175 175 175 175 175 175 175  
10 12 -179\*58 256 107 468 163 130 120 116 123 121\*52 45  
11 22 255 259 107 283 1296 310 335 359 141 198 234  
12 23

DATE	18- 6-1972 (DAY NO 170)				
30	35	40	45	50	55
31	-331	-?04**41	-214	-318	-458
60	-161	-?14	-134	-1169	-169
339	-160	-?08**42	-173	-1318	-472
779	-308	-?13**38	-375	-380	-280
279	-206	-?287	-287	-237	-254
279	-203	-?3285*47	-137	-145	-183
36	-235	-1763	-227	-145	-175
46	-258	-26	-240	-182	-237
153	-258	-245	-210	-184	-152
197	-149	-160	-180	-173	-158
197	-137	-137	-196	-23	-1
169	-130	-130	-52	-52	-1
184	-167	-134	-384	-48	-17
159	-128	-133	-354	-35	-30
343	-187	-208	-351	-35	-38
343	-305	-305	-357	-35	-44
343	-309	-309	-11	-11	-34
357	-338	-338	-66	-66	-36
357	-357	-357	-88	-88	-38
40	17	17	11	11	44
65	107	107	107	107	34
65	385	385	385	385	34

D 5

RRS DISCOVERY CRUISE NO.47  
MAGNETIC ANOMALY IN GAMMAS AFTER THE REMOVAL OF IGRF

	00	05	10	15	20	25	30	35	40	45	50	55
HOURS	00	33	10	-16	-21	-20	-3	16	37	59	73	85
00	358	28	-276	-58	-123	-180	-239	-156	-156	-265	-260	-260
01	153	153	-174	-179	-184	-178	-243	-151	-172	192	172	216
02	222	210	-191	-163	-163	-145	-164	-164	-266	280	266	269
03	243	195	-129	-148	-562	-606	-235	-60	-95	89	98	166
04	269	390	-488	-614	-600	-585	-629	-651	-652	650	650	645
05	08	628	-474	-457	-407	-390	-373	-557	-541	-529	-503	488
06	122	279	-295	-279	-248	-232	-216	-203	-190	-179	-153	138
07	122	104	-61	-82	-67	-53	-40	-30	-25	-24	-33	148
08	61	74	-61	-89	-105	-120	-140	-158	-173	-189	-206	234
09	12	256	-256	-261	-270	-276	-277	-273	-270	-265	-264	274
10	12	306	-291	-321	-338	-338	-423	-463	-520	-572	-624	660
11	12	679	-689	-681	-651	-607	-564	-519	-472	-487	-495	485
12	14	476	-468	-465	-467	-453	-419	-386	-387	-393	-370	446
13	15	203	-203	-180	-180	-199	-297	-286	-280	-287	-315	498
14	17	461	-493	-394	-394	-261	-290	-147	-147	-347	-490	117*53
15	18	-296	-329	-123	-111	-299*17	-258	-125	-176	-318	-62*	-434
16	19	-316	-329	-179	-120	-101	-143	-143	-176	-114	-266*43	-246
17	20	-122	-62	-33	-6	-101	-135	-235	-235	-132	-40	-84
18	21	-627	-675	-644	-640	-678	-678	-79	-79	-108	-108	-37
19	22	-680	-167	-200	-276*17	-255	-65	-79	-79	-156	-205	191
20	23	162	161	170	171	198	198	239	239	339	378	412

DATE 20- 6-1972 (DAY NO 172)

	00	05	10	15	20	25	30	35	40	45	50	55
HOURS	00	420	388	322	256	186	118	55	16	0	6	38
01	23	-26	-79	-100	-89	-60	-24	-24	-12	22	-23	-20
02	-13	-11	-56	-101	-122	-122	-61	-61	-50	15	46	33
03	-16	-17	-46	-78	-81	-68	-62	-62	-40	-14	3	-1
04	-12	-25	-31	-32	-33	-33	-40	-52	-40	-72	-77	-70
05	-35	-33	-30	-60	-60	-69	-74	-64	-64	-54	-54	-51
06	-60	84	105	128	142	153	153	150	150	151	151	178
07	214	248	204	225	205	178	174	174	185	206	226	219
08	205	204	221	227	227	2305	2305	211	187	198	2358	341
09	329	3125	3134	2346	2146	2155	2155	152	144	149	136	126
10	126	106	102	97	93	91	90	90	90	97	106	109
11	123	1305	104	104	105	105	105	109	133	127	126	112
12	109	105	128	129	129	129	129	129	121	127	134	134
13	132	1188	188	184	176	167	167	167	178	193	195	196
14	116	-36	-44	-44	-50	-50	-55	-55	-63	-45	-45	-45
15	115	-57	-91	-134	-169	-169	-169	-169	-169	-169	-169	-169
16	116	341	330	322	317	317	317	317	315	342	357	355
17	117	341	351	341	273	273	273	273	277	338	352	347
18	118	233	216	216	214	214	214	214	246	256	258	258
19	119	212	158	158	164	164	164	164	167	167	163	153
20	210	152	152	152	164	164	164	164	173	173	210	225
21	212	234	234	234	234	234	234	234	234	234	234	242
22	223	240	240	240	240	240	240	240	240	240	240	242

	00	05	10	15	20	25	30	35	40	45	50	55
HOURS	00	33	10	-16	-21	-20	-3	16	37	59	73	85
00	358	28	-276	-58	-123	-180	-239	-156	-156	-265	-260	-260
01	153	153	-174	-179	-184	-178	-243	-151	-172	192	172	216
02	222	210	-191	-163	-163	-145	-164	-164	-266	280	266	269
03	243	195	-129	-148	-562	-606	-235	-60	-95	89	98	165
04	269	390	-488	-614	-600	-585	-629	-651	-652	-64	-64	-70
05	08	628	-474	-457	-407	-390	-373	-557	-541	-52	-52	-51
06	122	279	-295	-279	-248	-232	-216	-203	-190	-179	-153	138
07	122	104	-61	-82	-67	-53	-40	-30	-25	-24	-33	148
08	61	74	-61	-89	-105	-120	-140	-158	-173	-189	-206	234
09	12	256	-256	-261	-270	-276	-277	-273	-270	-265	-264	274
10	12	306	-291	-321	-338	-338	-423	-463	-520	-572	-624	660
11	12	679	-689	-681	-651	-607	-564	-519	-472	-487	-495	485
12	14	476	-468	-465	-467	-453	-419	-386	-387	-393	-370	446
13	15	203	-203	-180	-180	-199	-297	-286	-280	-287	-315	498
14	17	461	-493	-394	-394	-261	-299*17	-258	-125	-147	-62	117*53
15	18	-296	-329	-123	-111	-299*17	-258	-125	-176	-176	-40	-84
16	19	-316	-329	-179	-120	-101	-143	-143	-176	-176	-48	-434
17	20	-122	-62	-33	-6	-101	-135	-235	-235	-101*42	-120	-84
18	21	-627	-675	-644	-640	-678	-678	-79	-79	-569	-38	-434
19	22	-680	-167	-200	-276*17	-255	-65	-79	-79	-272	-303	-378
20	23	162	161	170	171	198	198	239	239	303	339	412

	00	05	10	15	20	25	30	35	40	45	50	55
HOURS	00	33	10	-16	-21	-20	-3	16	37	59	73	85
00	358	28	-276	-58	-123	-180	-239	-156	-156	-265	-260	-260
01	153	153	-174	-179	-184	-178	-243	-151	-172	192	172	216
02	222	210	-191	-163	-163	-145	-164	-164	-266	280	266	269
03	243	195	-129	-148	-562	-606	-235	-60	-95	89	98	165
04	269	390	-488	-614	-600	-585	-629	-651	-652	-64	-64	-70
05	08	628	-474	-457	-407	-390	-373	-557	-541	-52	-52	-51
06	122	279	-295	-279	-248	-232	-216	-203	-190	-179	-153	138
07	122	104	-61	-82	-67	-53	-40	-30	-25	-24	-33	148
08	61	74	-61	-89	-105	-120	-140	-158	-173	-189	-206	234
09	12	256	-256	-261	-270	-276	-277	-273	-270	-265	-264	274
10	12	306	-291	-321	-338	-338	-423	-463	-520	-572	-624	660
11	12	679	-689	-681	-651	-607	-564	-519	-472	-487	-520	485
12	14	476	-468	-465	-467	-453	-419	-386	-387	-393	-456	446
13	15	203	-203	-180	-180	-199	-297	-286	-280	-287	-357	355
14	17	461	-493	-394	-394	-261	-299*17	-258	-125	-147	-352	347
15	18	-296	-329	-123	-111	-299*17	-258	-125	-176	-176	-354	346
16	19	-627	-675	-644	-640	-678	-678	-79	-79	-272	-327	347
17	20	-680	-167	-200	-276*17	-255	-65	-79	-79	-277	-327	347
18	21	162	161	170	171	198	198	239	239	303	33	

RRS DISCOVERY CRUISE NO. 47										DATE 22- 6-1972 (DAY NO 174)		
MAGNETIC ANOMALY IN GAMMAS AFTER THE REMOVAL OF IGRF												
HOURS	00	05	10	15	20	25	30	35	40	45	50	55
00	68	307	-15	-166	-557	-931	-1325	-1209	-886	-512	-257	152
01	329*02	305	282	392*16	371	325	249	235	238	219	216	255
02	317	365	322	319	344	340	317	282	248	225	223	255
03	312	376	408	409	382	358	330	312	296	259	256	293
04	339	338	317	291	269	246	190	102	10	744	772	-91
05	-84	-27	58	129	217	314	405	494	571	625	648	644
06	597	494	356	233	136	73	23	-6	-27	-46	-58	-69
07	-75	-87	-97	-101	-92	-77	-60	-44	-22	-10	-55	109
08												
09												
10	11	12	13	14	15	16	17	18	19	20	21	22

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RRS DISCOVERY CRUISE NO.47  
MAGNETIC ANOMALY IN GAMMAS AFTER THE REMOVAL OF IGRF

HOURS	00	05	10	15	20	25	30	35	40	45	50	55
00												
01												
02												
03												
04												
05												
06												
07												
08	416	401	390	380	370	360	350	340	330	320	310	300
09	26	-52	-118	-144	-133	-102	-74	-47	-25	-18	-12	-10
10	503	546	566	513	195	255	296	334	401	442	475	471
11	-152	-194	-224	-237	-219	-172	-106	-79	-30	-67	-107	-107
12	-123	-112	-6	-7	-242	-244	-255	-219	-155	-155	-155	-155
13	-145	-236	-76	-140	-31	-49	-70	-50	-39	-46	-169	-39
14	-155	-99	-43	-31	-155	79	155	139	139	147	147	147
15	-326	378	356	279	155	194	229	248	346	480	569	541
16	-17	518	484	442	389	291	194	173	271	212	248	280
17	18	273	255	245	254	229	106	43	111	171	374	644
18	19	273	255	245	254	1190	1094	780	561	414	382	634
19	20	950	1056	1167	1190	1313	1094	780	705	691	592	634
20	21	541	1048	607	661	642	18	137	137	751	44	53
21	22	498	432	337	349	263	44	-12	-89	90	47	18
22	23	68	43	16	16	16	44	-12	-100	-145	-156	-103

DATE 22- 6-1972 (DAY NO 174)

HOURS	00	05	10	15	20	25	30	35	40	45	50	55
00												
01												
02												
03												
04												
05												
06												
07												
08												
09	416	401	390	380	370	360	350	340	330	320	310	300
10	26	-52	-118	-144	-133	-102	-74	-47	-25	-18	-12	-10
11	503	546	566	513	195	255	296	334	401	442	475	471
12	-152	-194	-224	-237	-219	-172	-106	-79	-30	-67	-107	-107
13	-123	-112	-6	-7	-242	-244	-255	-219	-155	-155	-155	-155
14	-145	-236	-76	-140	-31	-49	-70	-50	-39	-46	-169	-39
15	-155	-99	-43	-31	-155	79	155	139	139	147	147	147
16	-326	378	356	279	155	194	229	248	346	480	569	541
17	-17	518	484	442	389	291	194	173	271	212	248	280
18	18	273	255	245	254	1190	1094	780	561	414	382	634
19	19	273	255	245	254	1313	1094	780	705	691	592	634
20	20	950	1056	1167	1190	1313	1094	780	705	691	592	634
21	21	541	1048	607	661	642	18	137	137	751	44	53
22	22	498	432	337	349	263	44	-12	-89	90	47	18
23	23	68	43	16	16	16	44	-12	-100	-145	-156	-103

HOURS	00	05	10	15	20	25	30	35	40	45	50	55
00												
01												
02												
03												
04												
05												
06												
07												
08												
09	416	401	390	380	370	360	350	340	330	320	310	300
10	26	-52	-118	-144	-133	-102	-74	-47	-25	-18	-12	-10
11	503	546	566	513	195	255	296	334	401	442	475	471
12	-152	-194	-224	-237	-219	-172	-106	-79	-30	-67	-107	-107
13	-123	-112	-6	-7	-242	-244	-255	-219	-155	-155	-155	-155
14	-145	-236	-76	-140	-31	-49	-70	-50	-39	-46	-169	-39
15	-155	-99	-43	-31	-155	79	155	139	139	147	147	147
16	-326	378	356	279	155	194	229	248	346	480	569	541
17	-17	518	484	442	389	291	194	173	271	212	248	280
18	18	273	255	245	254	1190	1094	780	561	414	382	634
19	19	273	255	245	254	1313	1094	780	705	691	592	634
20	20	950	1056	1167	1190	1313	1094	780	705	691	592	634
21	21	541	1048	607	661	642	18	137	137	751	44	53
22	22	498	432	337	349	263	44	-12	-89	90	47	18
23	23	68	43	16	16	16	44	-12	-100	-145	-156	-103

HOURS	00	05	10	15	20	25	30	35	40	45	50	55
00												
01												
02												
03												
04												
05												
06												
07												
08												
09	416	401	390	380	370	360	350	340	330	320	310	300
10	26	-52	-118	-144	-133	-102	-74	-47	-25	-18	-12	-10
11	503	546	566	513	195	255	296	334	401	442	475	471
12	-152	-194	-224	-237	-219	-172	-106	-79	-30	-67	-107	-107
13	-123	-112	-6	-7	-242	-244	-255	-219	-155	-155	-155	-155
14	-145	-236	-76	-140	-31	-49	-70	-50	-39	-46	-169	-39
15	-155	-99	-43	-31	-155	79	155	139	139	147	147	147
16	-326	378	356	279	155	194	229	248	346	480	569	541
17	-17	518	484	442	389	291	194	173	271	212	248	280
18	18	273	255	245	254	1190	1094	780	561	414	382	634
19	19	273	255	245	254	1313	1094	780	705	691	592	634
20	20	950	1056	1167	1190	1313	1094	780	705	691	592	634
21	21	541	1048	607	661	642	18	137	137	751	44	53
22	22	498	432	337	349	263	44	-12	-89	90	47	18
23	23	68	43	16	16	16	44	-12	-100	-145	-156	-103

HOURS	00	05	10	15	20	25	30	35	40	45	50	55
00												
01												
02												
03												
04												
05												
06												
07												
08												
09	416	401	390	380	370	360	350	340	330	320	310	300
10	26	-52	-118	-144	-133	-102	-74	-47	-25	-18	-12	-10
11	503	546	566	513	195	255	296	334	401	442	475	471
12	-152	-194	-224	-237	-219	-172	-106	-79	-30	-67	-107	-107
13	-123	-112	-6	-7	-242	-244	-255	-219	-155	-155	-155	-155
14	-145	-236	-76	-140	-31	-49	-70	-50	-39	-46	-169	-39
15	-155	-99	-43	-31	-155	79	155	139	139	147	147	147
16	-326	378	356	279	155	194	229	248	346	480	569	541
17	-17	518	484	442	389	291	194	173	271	212	248	280
18	18	273	255	245	254	1190	1094	780	561	414	382	634
19	19	273	255	245	254	1313	1094	780	705	691	592	634
20	20	950	1056	1167	1190	1313	1094	780	705	691	592	634
21	21	541	1048	607	661	642	18	137	137	751	44	53
22	22	498	432	337	349	263	44	-12	-89	90	47	18
23	23	68	43	16	16	16	44	-12	-100	-145	-156	-103

HOURS</th
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RRS DISCOVERY CRUISE NO. 47  
MAGNETIC ANOMALY IN GAMMAS AFTER THE REMOVAL OF IGNITES

HOURS	00	05	10	15	20	25	30	35	40	45	50	55
00												
01	-6											
02	700	80*	85*	90	207	127	423	517	259	-90	-151	
03	701	875*	826	551	230	114	412	200	124	275	620	
04	164	484	246	226	255*	21	384	430	524	649	614*	53
05	164	178	159	192	221	158	140*	97	21	50	110	
06	25	-137	-223	-267	-205	-125	-144	226	-16	-72	114	
07	71	-122	-155	-247	-284	-102	-169	-102	-48	-22	27	
08	682	719	716	677	391	350	313	379	419	501	602	
09	535	523	482	663	639	623	627	611	586	555	540	
10								-387	-600	-670	-635	
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												

RRS DISCOVERY CRUISE NO. 47  
MAGNETIC ANOMALY IN GAMMAS AFTER THE REMOVAL OF IGNITES

HOURS	00	05	10	15	20	25	30	35	40	45	50	55
00	-548	-472	-388	-274	-126	1	80	102	126	183	211	
01	217	230	265	261	231	234	257	297	325	273	164	
02	114	135	151	124	178	120	-167	-231	-266	-225	-46	
03	118	81	152	169	131	125	-159	-19	-15	-159	-159	
04	-555	-34	-16	105	-9	-45	-45	-94	152	14	-75	
05	-558	-26	16	105	91	-42	-42	152	155	78	445*	53
06	363	469	517*	273	34	96	59	146	152	240	407	
07	80	158	188	172	125	-106	-180	-257	-253	-27	-330	
08			-205	-106	-8	-179	-180	-217	-223	-237	-332	
09	-166	-96	-50	-57	-130	-145	-179	-145	-162	25	-112	
10	1052	99	63	-208	-135	-130	-130	-173	-162	7	13	
11	-320	-311	-300	-303	-303	-303	-303	-315	-324	-320	-361	
12	-378	-385	-381	-376	-371	-370	-370	-395	-393	-393	-361	
13	-239	-229	-202	-191	-178	-176	-176	-359	-344	-344	-285	
14	-147	-148	-141	-148	-148	-146	-146	-178	-178	-178	-202	
15	-116	-117	-117	-117	-117	-117	-117	-178	-178	-178	-177	
16	168	177	177	177	177	175	175	197	197	197	174	
17	168	174	174	174	174	188	188	207	207	207	169	
18	168	174	174	174	174	175	175	197	197	197	173	
19	160	175	175	175	175	188	188	207	207	207	174	
20	360	375	387	392	392	399	399	406	406	406	316	
21	455	461	441	414	414	382	382	397	397	397	448	
22	335	319	356	356	356	284	284	306	306	306	306	
23	378	378	378	378	378	378	378	417	417	417	427	

DATE 24- 6-1972 (DAY NO 176)

RRS DISCOVERY CRUISE NO. 47  
MAGNETIC ANOMALY IN GAMMAS AFTER THE REMOVAL OF IGNITES

HOURS	00	05	10	15	20	25	30	35	40	45	50	55
00	-221*	37	517	259	124	524	21	103	126	183	211	
01	114	412	384	226	97	97	234	297	325	273	164	
02	21	140*	140	125	125	125	125	-234	-266	-225	-46	
03	114	114	114	114	114	114	114	-159	-159	-159	-159	
04	114	114	114	114	114	114	114	-159	-159	-159	-159	
05	114	114	114	114	114	114	114	-159	-159	-159	-159	
06	114	114	114	114	114	114	114	-159	-159	-159	-159	
07	114	114	114	114	114	114	114	-159	-159	-159	-159	
08	114	114	114	114	114	114	114	-159	-159	-159	-159	
09	114	114	114	114	114	114	114	-159	-159	-159	-159	
10	114	114	114	114	114	114	114	-159	-159	-159	-159	
11	114	114	114	114	114	114	114	-159	-159	-159	-159	
12	114	114	114	114	114	114	114	-159	-159	-159	-159	
13	114	114	114	114	114	114	114	-159	-159	-159	-159	
14	114	114	114	114	114	114	114	-159	-159	-159	-159	
15	114	114	114	114	114	114	114	-159	-159	-159	-159	
16	114	114	114	114	114	114	114	-159	-159	-159	-159	
17	114	114	114	114	114	114	114	-159	-159	-159	-159	
18	114	114	114	114	114	114	114	-159	-159	-159	-159	
19	114	114	114	114	114	114	114	-159	-159	-159	-159	
20	114	114	114	114	114	114	114	-159	-159	-159	-159	
21	114	114	114	114	114	114	114	-159	-159	-159	-159	
22	114	114	114	114	114	114	114	-159	-159	-159	-159	
23	114	114	114	114	114	114	114	-159	-159	-159	-159	

DATE 25- 6-1972 (DAY NO 177)

RRS DISCOVERY CRUISE NO. 47  
MAGNETIC ANOMALY IN GAMMAS AFTER THE REMOVAL OF IGNITES

HOURS	00	05	10	15	20	25	30	35	40	45	50	55
00	-221*	37	517	259	124	524	21	103	126	183	211	
01	114	412	384	226	97	97	234	297	325	273	164	
02	21	140*	140	125	125	125	125	-234	-266	-225	-46	
03	114	114	114	114	114	114	114	-159	-159	-159	-159	
04	114	114	114	114	114	114	114	-159	-159	-159	-159	
05	114	114	114	114	114	114	114	-159	-159	-159	-159	
06	114	114	114	114	114	114	114	-159	-159	-159	-159	
07	114	114	114	114	114	114	114	-159	-159	-159	-159	
08	114	114	114	114	114	114	114	-159	-159	-159	-159	
09	114	114	114	114	114	114	114	-159	-159	-159	-159	
10	114	114	114	114	114	114	114	-159	-159	-159	-159	
11	114	114	114	114	114	114	114	-159	-159	-159	-159	
12	114	114	114	114	114	114	114	-159	-159	-159	-159	
13	114	114	114	114	114	114	114	-159	-159	-159	-159	
14	114	114	114	114	114	114	114	-159	-159	-159	-159	
15	114	114	114	114	114	114	114	-159	-159	-159	-159	
16	114	114	114	114	114	114	114	-159	-159	-159	-159	
17	114	114	114	114	114	114	114	-159	-159	-159	-159	
18	114	114	114	114	114	114	114	-159	-159	-159	-159	
19	114	114	114	114	114	114	114	-159	-159	-159	-159	
20	114	114	114	114	114	114	114	-159	-159	-159	-159	
21	114	114	114	114	114	114	114	-159	-159	-159	-159	
22	114	114	114	114	114	114	114	-159	-159	-159	-159	
23	114	114	114	114	114	114	114	-159	-159	-159	-159	

RRS DISCOVERY CRUISE NO. 47  
MAGNETIC ANOMALY IN GAMMAS AFTER THE REMOVAL OF MANTLE

DATE 7.6- 6-1977 ( DAY NO 178 )

MAGNETIC ANOMALY IN GAMMAS		AFTER THE REMOVAL OF IGRF		
HOURS	NO. 47	00	05	10
00	-573	-900*06	-806	-598*14
01	-954	-825	-784*09	-937
02	-43	-129	277	399
03	343	366	389	312*16
04	194	191	142	77
05	-357	-360	-363	-355
06	254	309	337	342
07	-131	-68	336	85
08	-117	-88	-69*08	-157
				-109
				-20

DATE	27- 6-1972	(DAY NO 179)	
0	45	50	55
4	-86.8	-91.6	-102.6
1	-34.9	-30.6	-57
3	-23.9	-28.4	-16.9
1	-22.6	-23.2	30.9
9	-27.3	-31.9	21.7
0	-10	-8.7	-34.6
5	0	18.0	180
9	7.2	20	-97
5	-6.9	-10.9	-102
6	6	-55	-55
		4**42	

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RRS DISCOVERY CRUISE NO. 47  
MAGNETIC ANOMALY IN GAMMAS AFTER THE REMOVAL OF IGRF

DATE 29- 6-1972 (DAY NO 181)  
HOURS 00 05 10 15 20 25 30 35 40 45 50 55

HOURS	00	05	10	15	20	25	30	35	40	45	50	55
14												
15	-6*07	32	474*17	394	507	465*37	323	587*47	321	424*43	165	180*57
16	331*07	370	255	219*22	253	89*33	385	490*52	446	490*46	43	270*56
17	112*01	670*11	484	304*17	260	298*29	421	484*39	395	484*43	43	423
18	384	641	138*03	177	45*13	249	292	320	410*	362*49	43	338
19	519	161	199	250	323*13	301*27	351	566*42	482	449*48	43	374
20	161	290	-120	-80	-76	116	26	-16	-36	-86	-104	-107
21	-102*02	-4	-42*12	-29	-48*18	135	163	240	255	137	135	8
22												
23												

RRS DISCOVERY CRUISE NO. 47  
MAGNETIC ANOMALY IN GAMMAS AFTER THE REMOVAL OF IGRF

DATE 30- 6-1972 (DAY NO 182)  
HOURS 00 05 10 15 20 25 30 35 40 45 50 55

HOURS	00	05	10	15	20	25	30	35	40	45	50	55
00	0	-36	-54	-63	-46	-15	58	111*33	55	44	17	48
01	22	293	222	280	337	412	56	182*36	295	482	664	693*54
02	450	318*04	347	344	478	331	308	173	281	344	332	373
03	338	347	344	348	307	197	170	170	234	342	375	383
04	362	254	256	246	243	225	197	143	306	290	285	256
05	250	57	52	47	41	15	28	21	121	102	102	272
06	62	-22	-18	-9	-4	15	29	40	50	58	64	-14
07	-22	-66	-56	-50	-41	133	25	16	6	-2	-67	-67
08	-35	-62	-56	-52	-64	69	72	74	-75	-75	-76	-76
09	-43	-78	-82	-84	-84	86	86	79	-79	-73	-66	-63
10	-78	-60	-55	-52	-56	-56	-55	-54	-54	-56	-50	-54
11	-60	-55	-52	-58	-52	-38	-36	-36	-42	-42	-42	-46
12	-45	-40	-38	-36	-56	-63	-63	-62	-63	-62	-64	-64
13	-51	-55	-52	-57	-61	-61	-63	-63	-68	-67	-67	-65
14	-60	-60	-49	-47	-37	-33	-19	-11	-5	-49	6	6
15	-15	-16	-12	-18	-19	-24	-28	-33	-38	-46	56	61
16	67	67	76	77	84	85	87	86	79	74	73	62
17	53	45	33	20	10	0	-5	-17	-79	-79	-23	-25
18	-29	-37	-42	-42	-82	-84	-84	-70	-73	-81	-89	-95
19	-91	-88	-113	-125	-125	-125	-125	-125	-127	-128	-123	-123
20	-110	-114	-103	-103	-154	-154	-154	-152	-152	-143	-143	-141
21	-107	-114	-114	-114	-148	-148	-148	-148	-148	-140	-140	-136
22												
23												

DATE 30- 6-1972 (DAY NO 182)  
HOURS 00 05 10 15 20 25 30 35 40 45 50 55

	HOURS	00	05	10	15	20	MINUTES
00	-134	-129	-128	-122	-122	-122	-122
01	-149	-142	-128	-109	-109	-109	-109
02	-118	-117	-113	-115	-115	-115	-115
03	120	217*03	76	66*	17	22	22
04	70*01	59	102*11	163	163	163	163
05	47	50	117	113	113	113	113
06	-28	-34	-35	-42	-42	-42	-42
07	-73	-85	-66	-67*	17	-57	-57
08	-92	-93	-96	-102	-102	-102	-108

DATE	1-7-1970	(DAY NO 183)
35	40	45
-129	-134	-140
-60	-49	-41
-50	-60	-60
-34*33	-59	-84
-720	-98	-82
-67	-12	-10
-56	-67	-60
-81	-84	-85
-73	-84	-73
		3
	50	55
	-145	-149
	-37	-28
	-54	-54
	-212*49	-76
	72	64
	-18	-20
	-59	-69
	-88	-93
	-62*51	-37

D12

R.R.S. DISCOVERY CRUISE NO. 47  
DEPTH IN CORRECTED FATHOMS

DATE 10- 6-1972 (DAY NO 162)

RRS DISCOVERY CRUISE NO 47  
DEPTH IN CORRECTED FATHOMS

MINUTES	20	25	30	35
	62	63	64	65
	72	77	77	78
	74	85	85	85
	84	89	90	90
	89	95	95	96
	94	95	95	96
	94	103	106	107
	94	182	195	209
	94	517	535	588
	94	664	649	641
	94	774	740	800
	94	890	898	905
	94	943	945	948
	94	980	983	985
	94	997	997	995
	94	997	997	917
	94	940	945	917
	94	790	779	772
	94	790	654	641
	94	668	514	501
	94	526	377	366
	94	383	298	292
	94	302	243	243
	94	747	739	739
	94	239	252	259
	94	239	247	247
	94	272	277	277

DATE	11- 6-1972	(DAY NO 163)	55
0.0	6.0	6.9	6.9
	1.9	8.1	8.1
	3.5	8.7	8.7
	5.1	9.2	9.2
	6.6	9.7	9.7
	8.1	12.4	12.4
	9.6	2.96	2.96
	11.4	6.736	6.736
	12.9	8.26	8.26
	14.5	9.24	9.24
	16.0	9.58	9.58
	17.4	9.935	9.935
	18.9	9.85	9.85
	20.4	7.48	7.48
	21.9	7.54	7.54
	23.4	6.06	6.06
	24.9	4.64	4.64
	26.3	3.42	3.42
	27.8	2.73	2.73
	29.3	2.39	2.39
	30.7	2.70	2.70
	32.2	2.72	2.72

RECEIVED IN DISCOVERY COURT NO 47  
NEPTH IN CORRECTED FATHOMS

MINUTES	15	20	25	30	35	40	45	50	55
10	265	284	345	419	415	958	901	883	868
11	265	284	345	409	415	958	901	883	868
12	266	288	346	409	419	958	901	883	868
13	267	292	296	720	948	893	915	872	850
14	270	298	329*	833	950	1344	1695	1692	1692
15	270	315	352	1034	1085	1807	985	1422	1485
16	271	317	352	1034	1085	1791	1791	1712	1712
17	272	307	393	311*	38	1060	1060	1107	1107
18	273	311	402	1140	1120	1791	1791	1607	1627
19	275	314	402	1120	1120	1175	1175	1627	1647
20	275	314	402	1120	1120	1772	1772	1772	1799
21	275	314	402	1120	1120	1847	1847	1847	1847
22	275	314	402	1120	1120	1890	1890	1890	1890
23	275	314	402	1120	1120	1916	1916	1916	1916
24	275	314	402	1120	1120	1995	1995	1995	1995
25	275	314	402	1120	1120	2011	2011	2011	2011
26	275	314	402	1120	1120	2228	2228	2228	2228
27	275	314	402	1120	1120	2270	2270	2270	2270
28	275	314	402	1120	1120	2276	2276	2276	2276
29	275	314	402	1120	1120	2404	2404	2404	2404
30	275	314	402	1120	1120	2449	2449	2449	2449
31	275	314	402	1120	1120	2462	2462	2462	2462
32	275	314	402	1120	1120	2464	2464	2464	2464
33	275	314	402	1120	1120	2495	2495	2495	2495
34	275	314	402	1120	1120	2497	2497	2497	2497
35	275	314	402	1120	1120	2526	2526	2526	2526
36	275	314	402	1120	1120	2547	2547	2547	2547
37	275	314	402	1120	1120	2549	2549	2549	2549
38	275	314	402	1120	1120	2551	2551	2551	2551
39	275	314	402	1120	1120	2553	2553	2553	2553
40	275	314	402	1120	1120	2553	2553	2553	2553
41	275	314	402	1120	1120	2553	2553	2553	2553
42	275	314	402	1120	1120	2553	2553	2553	2553
43	275	314	402	1120	1120	2553	2553	2553	2553
44	275	314	402	1120	1120	2553	2553	2553	2553
45	275	314	402	1120	1120	2553	2553	2553	2553
46	275	314	402	1120	1120	2553	2553	2553	2553
47	275	314	402	1120	1120	2553	2553	2553	2553
48	275	314	402	1120	1120	2553	2553	2553	2553
49	275	314	402	1120	1120	2553	2553	2553	2553
50	275	314	402	1120	1120	2553	2553	2553	2553
51	275	314	402	1120	1120	2553	2553	2553	2553
52	275	314	402	1120	1120	2553	2553	2553	2553
53	275	314	402	1120	1120	2553	2553	2553	2553
54	275	314	402	1120	1120	2553	2553	2553	2553
55	275	314	402	1120	1120	2553	2553	2553	2553

MINUTES	DATE	13- 6-1972 (DAY NO 165)
20	2391	2385
25	2347	2345
30	2311	2306
35	2222	2211
40	2092	2024
45	1965	1964
50	1932	1932
55	1901	1901
	1891	1890
	1873	1873
	1850	1849
	1813	1811
	1795	1793
	1761	1753
	1733	1731
	1698	1695
	1668	1662
	1603	1594
	1568	1555
	1539	1528
	1496	1496
	1439	1442
	1383	1381
	1365	1375
	1311	1370
	1259	1253
	1222	1222
	1206	1205
	1176	1176
	1150	1150
	1124	1124
	1094	1094
	1067	1067
	1031	1031
	1005	1005
	979	979
	953	953
	927	927
	901	901
	875	875
	849	849
	823	823
	797	797
	771	771
	745	745
	719	719
	693	693
	667	665
	641	641
	615	615
	589	589
	563	563
	537	537
	511	511
	485	485
	459	459
	433	433
	407	407
	381	381
	355	355
	329	329
	303	303
	277	277
	251	251
	225	225
	200	200
	174	174
	148	148
	122	122
	96	96
	70	70
	44	44
	18	18
	12	12
	9	9
	6	6
	3	3
	1	1

DATE	13- 6-1972	(DAY NO 165)
40	374 332 291 184 071 06 953 924 897 889 866 841 807 788 748 720 684 665 588 560 517 548 472 375	55 2366 2326 2282 2176 2065 2002 1952 1922 1897 1885 1864 1832 1807 1785 1745 1714 1683 1650 1576 1563 1512 1489 1423 1365
45	2369 2326 2282 2176 2065 2002 1952 1922 1897 1885 1864 1832 1807 1785 1745 1714 1683 1650 1576 1563 1512 1489 1423 1365	50 2362 2322 2267 2153 2059 20998 1945 1920 1897 1885 1862 1828 1804 1781 1741 1710 1680 1638 1582 1559 1525 1496 1421 1370
50	2366 2326 2282 2176 2065 2002 1952 1922 1897 1885 1864 1832 1807 1785 1745 1714 1683 1650 1576 1563 1512 1489 1423 1365	55 2362 2322 2267 2153 2059 20998 1941 19197 1897 1882 1859 1825 18015 1779 1743 1712 1682 1638 1580 1559 1525 1496 1421 1371
55	2366 2326 2282 2176 2065 2002 1952 1922 1897 1885 1864 1832 1807 1785 1745 1714 1683 1650 1576 1563 1512 1489 1423 1365	55 2362 2322 2267 2153 2059 20998 1941 19197 1897 1882 1859 1825 18015 1779 1743 1712 1682 1638 1580 1559 1525 1496 1421 1371

RRSS DISCOVERY CRUISE NO 47  
DEPTH IN CORRECTED FATHOMS

HOURS	00	05	10	15	20	25	30	35	40	45	50	55
00	1356	1345	1345	1347	1333	1331	1330	1329	1328	1327	1326	1325
01	1296	1202	1220	1255	1275	1254	1230	1236	1249	1234	1234	1208
02	1208	1246	1250	1294	1308	1305	1301	1305	1267	1264	1241	1241
03	1245	1277	1282	1315	1312	1312	1312	1315	1308	1308	1274	1274
04	1277	1308	1310	1312	1312	1312	1312	1312	1312	1312	1308	1308
05	1308	1313	1315	1315	1315	1315	1315	1315	1315	1315	1312	1312
06	1313	1318	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
07	1318	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
08	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
09	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
10	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
11	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
12	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
13	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
14	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
15	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
16	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
17	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
18	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
19	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
20	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
21	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
22	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
23	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
24	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
25	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
26	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
27	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
28	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
29	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
30	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
31	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
32	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
33	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
34	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
35	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
36	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
37	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
38	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
39	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
40	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
41	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
42	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
43	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
44	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
45	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
46	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
47	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
48	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
49	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
50	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
51	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
52	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
53	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
54	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324
55	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324	1324

D 15

MINUTES	00	05	10	15	20	25	30	35	40	45	50	55
00	891	873	864	846	826	802	834	852	872	877	877	877
01	894	877	861	844	828	803	824	844	867	874	874	874
02	900	891	878	861	845	820	841	860	877	884	884	884
03	907	901	894	875	858	833	854	873	890	897	897	897
04	914	907	897	880	863	844	865	884	899	906	906	906
05	921	914	907	890	873	854	875	894	910	917	917	917
06	928	921	914	907	890	871	892	911	927	934	934	934
07	935	927	920	913	906	887	908	927	943	950	950	950
08	942	935	928	921	914	895	916	935	951	958	958	958
09	950	943	936	929	922	903	924	943	960	967	967	967
10	957	947	940	933	926	907	928	947	964	971	971	971
11	964	954	947	940	933	914	935	954	971	978	978	978
12	971	961	954	947	940	921	942	961	978	985	985	985
13	978	967	960	953	946	927	948	967	984	991	991	991
14	985	972	965	958	951	932	952	971	988	995	995	995
15	992	985	978	971	964	945	965	984	999	1006	1006	1006
16	1000	993	986	979	972	953	974	993	1010	1017	1017	1017
17	1007	997	990	983	976	957	978	997	1017	1024	1024	1024
18	1014	1007	999	992	985	966	987	1006	1024	1031	1031	1031
19	1021	1014	1007	1000	983	967	988	1007	1024	1032	1032	1032
20	1028	1018	1011	1004	987	970	991	1010	1027	1035	1035	1035
21	1035	1025	1018	1011	994	977	998	1017	1034	1042	1042	1042
22	1042	1032	1025	1018	1001	984	1005	1024	1041	1049	1049	1049
23	1049	1039	1032	1025	1018	1001	1022	1041	1059	1067	1067	1067
24	1056	1045	1038	1031	1024	1017	1038	1057	1075	1083	1083	1083
25	1063	1052	1045	1038	1031	1024	1045	1064	1082	1090	1090	1090
26	1070	1059	1052	1045	1038	1031	1058	1077	1095	1103	1103	1103
27	1077	1066	1059	1052	1045	1038	1067	1085	1103	1111	1111	1111
28	1084	1071	1064	1057	1050	1043	1072	1090	1108	1126	1126	1126
29	1091	1078	1071	1064	1057	1050	1079	1097	1115	1133	1133	1133
30	1098	1085	1078	1071	1064	1057	1086	1104	1122	1140	1140	1140
31	1105	1092	1085	1078	1071	1064	1093	1111	1129	1147	1147	1147
32	1112	1100	1093	1086	1079	1072	1					

RRS DISCOVERY CRUISE NO 47  
DEPTH IN CORRECTED FATHOMS

DEPTH	00	05	10	15	20	25	30	35	40	45	50	55
HOURS	246	248	234	234	228	246	246	246	238	236	234	234
00	206	202	198	198	194	191	191	189	182	182	179	176
01	176	173	169	169	167	167	167	164	155	156	150	150
02	145	143	137	137	136	136	136	134	140	142	147	136
03	141	140	138	138	126	126	126	124	123	129	127	126
04	126	124	126	126	107	107	107	97	90	95	117	121
05	106	107	99	97	99	97	97	97	108	125	125	97
06	102	107	95	97	100	103	104	103	100	100	118	122
07	122	123	123	122	120	119	119	118	119	118	118	118
08	127	127	117	117	117	117	117	115	115	118	119	120
09	112	107	107	107	107	107	107	107	107	107	103	103
10	120	123	123	123	120	119	119	118	118	118	103	103
11	120	120	104	104	107	107	107	106	103	102	101	101
12	103	100										100
13	103											100
14	100											100
15												100
16												100
17												100
18												100
19												100
20												100
21												100
22												100
23												100

RRS DISCOVERY CRUISE NO 47  
DEPTH IN CORRECTED FATHOMS

DEPTH	00	05	10	15	20	25	30	35	40	45	50	55
HOURS	580	582	676	693	713	749	774	814	846	874	911	930
00	952	972	992	1026	1055	1095	1118	1144	1169	1192	1211	1234
01	1214	1233	1247	1247	1247	1269	1286	1286	1286	1286	1286	1286
02	1288	1333	1341	1345	1350	1357	1361	1361	1361	1361	1361	1361
03	1368	1369	1372	1376	1378	1384	1389	1389	1389	1389	1393	1393
04	1394	1394	1397	1403	1403	1407	1407	1407	1407	1407	1407	1407
05	1408	1410	1410	1410	1405	1405	1406	1406	1406	1406	1407	1407
06	1411	1411	1418	1418	1415	1419	1419	1419	1421	1425	1425	1425
07	1410	1423	1423	1432	1432	1434	1434	1434	1440	1440	1440	1440
08	1423	1426	1442	1444	1444	1444	1444	1444	1446	1446	1446	1446
09	1440	1444	1444	1444	1444	1444	1444	1444	1446	1446	1446	1446
10	1438	1441	1441	1441	1441	1447	1447	1447	1447	1447	1447	1447
11	1411	1407	1407	1409	1409	1425	1425	1425	1425	1425	1425	1425
12	1380	1370	1368	1365	1365	1391	1391	1391	1391	1391	1391	1391
13	1358	1357	1356	1356	1356	1364	1364	1364	1364	1364	1364	1364
14	1349	1349	1349	1349	1349	1349	1349	1349	1349	1349	1349	1349
15	1337	1337	1333	1332	1332	1327	1327	1327	1327	1327	1327	1327
16	1317	1315	1315	1313	1313	1309	1309	1309	1309	1309	1309	1309
17	1300	1298	1296	1294	1294	1288	1288	1288	1288	1288	1288	1288
18	1283	1283	1283	1283	1283	1281	1281	1281	1281	1281	1281	1281
19	1276	1276	1274	1274	1274	1269	1269	1269	1269	1269	1269	1269
20	1261	1260	1257	1253	1252	1249	1249	1249	1249	1249	1249	1249
21	1237	1237	1237	1236	1236	1236	1236	1236	1236	1236	1236	1236
22	1234	1234	1234	1234	1234	1234	1234	1234	1234	1234	1234	1234
23	1227	1227	1227	1227	1227	1227	1227	1227	1227	1227	1227	1227

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DEPTH	15	20	25	30	35	40	45	50	55		
HOURS	246	248	234	234	228	246	246	246	238	236	234
00	206	202	198	198	194	191	191	189	182	182	176
01	176	173	169	169	167	167	167	164	155	156	150
02	145	143	137	137	136	136	136	134	140	142	136
03	141	140	138	138	126	126	126	124	123	125	121
04	126	124	126	126	107	107	107	97	108	125	121
05	106	107	99	97	100	103	104	103	100	100	106
06	102	107	95	97	100	103	104	103	100	103	138
07	122	123	123	122	120	119	119	118	118	118	128
08	127	127	117	117	117	117	117	115	115	115	127
09	112	107	107	107	107	107	107	107	107	107	121
10	120	123	123	123	120	119	119	118	118	118	126
11	120	120	104	104	104	104	104	104	104	104	122
12	103	100									122
13	103										122
14											122
15											122
16											122
17											122
18											122
19											122
20											122
21											122
22											122
23											122

DEPTH	15	20	25	30	35	40	45	50	55		
HOURS	246	248	234	234	228	246	246	246	238	236	234
00	206	202	198	198	194	191	191	189	182	182	176
01	176	173	169	169	167	167	167	164	155	156	150
02	145	143	137	137	136	136	136	134	140	142	136
03	141	140	138	138	126	126	126	124	123	125	121
04	126	124	126	126	107	107	107	97	108	125	121
05	106	107	99	97	100	103	104	103	100	103	106
06	102	107	95	97	100	103	104	103	100	103	138
07	122	123	123	122	120	119	119	118	118	118	127
08	127	127	117	117	117	117	117	115	115	115	125
09	112	107	107	107	107	107	107	107	107	107	121
10	120	123	123	123	120	119	119	118	118	118	126
11	120	120	104	104	104	104	104	104	104	104	122
12	103	100									122
13	103										122
14											122
15											122
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17											122
18											122
19											122
20											122
21											122
22											122
23			</td								



RRS DISCOVERY CRUISE NO 47  
DEPTH IN CORRECTED FATHOMS

DATE	20- 6-1972 (DAY NO 172)
HOURS	00 0.5
00	668 673
01	731 740
02	673 669
03	664 666
04	693 697
05	680 701
06	704 722
07	724 739
08	761 740
09	786 762
10	805 788
11	790 790
12	786 786
13	788 788
14	840 849
15	579 563
16	282 270
17	260 263
18	315 320
19	315 321
20	376 376
21	436 443
22	524 525
23	593 591
MINUTES	15 20
00	678 682
01	725 668
02	669 670
03	666 691
04	698 682
05	681 705
06	704 726
07	724 744
08	742 744
09	764 764
10	788 794
11	801 801
12	801 801
13	801 798
14	790 790
15	789 872
16	579 552
17	270 266
18	263 269
19	320 323
20	315 321
21	376 386
22	436 457
23	524 530
24	593 583
25	684 684
26	725 725
27	747 747
28	764 764
29	787 787
30	790 790
31	797 797
32	798 798
33	799 799
34	804 804
35	808 808
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434	808

RRS DISCOVERY CRUISE NO 47  
DEPTH IN CORRECTED FATHOMS

HOURS	00	05	10	15	20	25	30	35	40	45	50	55
00	312	322	315	317	300	299	298	289	290	283	289	289
01	289	293	290	289	297	304	302	305	307	307	307	307
02	313	327	359	361	372	380	396	435	443	455	459	459
03	464	469	477	483	498	513	528	538	547	563	576	585
04	591	605	618	629	638	647	656	667	678	688	698	708
05	719	728	740	749	762	776	786	798	810	826	837	855
06	869	896	908	929	943	964	975	986	1031	1027	1037	1037
07	1055	1076	1092	1102	1119	1133	1153	1166	1176	1211	1240	1240
08	1267											
09												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												

D19

## RRS DISCOVERY CRUISE NO 47

DEPTH IN CORRECTED FATHOMS

HOURS	00	05	10	15	20	25	30	35	40	45	50	55
00												
01												
02												
03												
04												
05												
06												
07	0.8	1.273	1.505	1.297	1.318	1.330	1.352	1.364	1.391	1.428	1.459	1.465
08	1.492	1.211	1.182	1.164	1.159	1.147	1.141	1.147	1.140	1.119	1.108	1.076
09	1.058	1.049	1.039	1.020	1.018	1.010	1.002	1.000	1.000	1.000	1.000	1.000
10	9.80	9.82	9.80	8.50	8.27	8.15	8.05	7.94	7.84	9.83	9.80	9.80
11	1.13	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
12	6.69	6.63	6.63	6.54	6.51	6.42	6.34	6.27	6.21	6.16	6.03	6.03
13	5.92	5.88	5.88	5.84	5.84	5.76	5.76	5.64	5.63	5.63	5.59	5.57
14	5.53	5.50	5.50	5.47	5.47	5.41	5.37	5.35	5.31	5.29	5.24	5.21
15	5.19	5.15	5.15	5.12	5.12	5.09	5.06	5.03	4.99	4.93	4.88	4.85
16	4.76	4.72	4.72	4.72	4.72	4.75	4.59	4.50	4.50	4.49	4.44	4.42
17	4.41	4.41	4.41	4.41	4.41	4.40	4.39	4.35	4.35	4.33	4.23	4.21
18	4.09	4.09	4.09	4.09	4.09	4.09	3.93	3.86	3.86	3.82	3.74	3.72
19	3.59	3.59	3.59	3.59	3.59	3.59	3.59	3.59	3.59	3.59	3.59	3.59
20	3.17	3.17	3.17	3.17	3.17	3.17	3.17	3.17	3.17	3.17	3.17	3.17
21	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75
22	2.34	2.34	2.34	2.34	2.34	2.34	2.34	2.34	2.34	2.34	2.34	2.34
23	2.09	2.09	2.09	2.09	2.09	2.09	2.09	2.09	2.09	2.09	2.09	2.09

HOURS	00	05	10	15	20	25	30	35	40	45	50	55
00												
01	5.05	5.17	5.28	5.37	5.40	5.43	5.46	5.49	5.50	5.53	5.56	5.60
02	6.17	6.28	6.41	6.52	6.59	6.64	6.69	6.73	6.75	6.79	6.82	6.88
03	7.02	7.04	7.06	7.06	7.04	7.03	7.03	7.03	7.03	7.03	7.03	7.03
04	6.90	6.86	6.86	6.86	6.88	6.88	6.88	6.88	6.88	6.88	6.88	6.88
05	6.94	6.94	6.94	6.94	6.94	6.94	6.94	6.94	6.94	6.94	6.94	6.94
06	6.95	6.95	6.95	6.95	6.95	6.95	6.95	6.95	6.95	6.95	6.95	6.95
07	6.92	6.92	6.92	6.92	6.92	6.92	6.92	6.92	6.92	6.92	6.92	6.92
08	6.95	6.95	6.95	6.95	6.95	6.95	6.95	6.95	6.95	6.95	6.95	6.95
09	6.94	6.94	6.94	6.94	6.94	6.94	6.94	6.94	6.94	6.94	6.94	6.94
10	6.97	6.97	6.97	6.97	6.97	6.97	6.97	6.97	6.97	6.97	6.97	6.97
11	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93
12	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93
13	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93
14	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93
15	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93
16	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93
17	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93
18	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93
19	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93
20	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93
21	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93

## RRS DISCOVERY CRUISE NO 47

DEPTH IN CORRECTED FATHOMS

HOURS	00	05	10	15	20	25	30	35	40	45	50	55
00												
01	5.05	5.17	5.28	5.37	5.40	5.43	5.46	5.49	5.50	5.53	5.56	5.60
02	6.17	6.28	6.41	6.52	6.59	6.64	6.69	6.73	6.75	6.79	6.82	6.88
03	7.02	7.04	7.06	7.06	7.04	7.03	7.03	7.03	7.03	7.03	7.03	7.03
04	6.90	6.86	6.86	6.86	6.88	6.88	6.88	6.88	6.88	6.88	6.88	6.88
05	6.94	6.94	6.94	6.94	6.94	6.94	6.94	6.94	6.94	6.94	6.94	6.94
06	6.95	6.95	6.95	6.95	6.95	6.95	6.95	6.95	6.95	6.95	6.95	6.95
07	6.92	6.92	6.92	6.92	6.92	6.92	6.92	6.92	6.92	6.92	6.92	6.92
08	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93
09	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93
10	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93
11	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93
12	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93
13	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93
14	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93
15	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93
16	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93
17	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93
18	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93
19	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93
20	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93
21	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93

## D 20

HOURS	00	05	10	15	20	25	30	35	40	45	50	55
00												
01	5.05	5.17	5.28	5.37	5.40	5.43	5.46	5.49	5.50	5.53	5.56	5.60
02	6.17	6.28	6.41	6.52	6.59	6.64	6.69	6.73	6.75	6.79	6.82	6.88
03	7.02	7.04	7.06	7.06	7.04	7.03	7.03	7.03	7.03	7.03	7.03	7.03
04	6.90	6.86	6.86	6.86	6.88	6.88	6.88	6.88	6.88	6.88	6.88	6.88
05	6.94	6.94	6.94	6.94	6.94	6.94	6.94	6.94	6.94	6.94	6.94	6.94
06	6.95	6.95	6.95	6.95	6.95	6.95	6.95	6.95	6.95	6.95	6.95	6.95
07	6.92	6.92	6.92	6.92	6.92	6.92	6.92	6.92	6.92	6.92	6.92	6.92
08	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93
09	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93
10	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93
11	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93
12	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93
13	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93
14	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93
15	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93
16	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93
17	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93
18	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93
19	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93
20	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93
21	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93
22	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93

HOURS	00	05	10	15	20	25	30	35	40	45	50	55
00												
01	5.05	5.17	5.28	5.37								

RRS DISCOVERY CRUISE NO 47  
DEPTH IN CORRECTED FATHOMS

DATE 24- 6-1972 (DAY NO 176)

DEPTH IN CORRECTED FEET	HOURS	00	05	10	15	MINUTES 20
00						
01						
02		91				
03						
04						
05						
06						
07						

RR S DISCOVERY CRUISE NO 47  
DEPTH IN CORRECTED FATHOMS

		DATE	24- 6-1972	(DAY NO 176)
25	30	35	40	45
94	89	82	87	91
95	95	94	94	91
		106	101	102
		86	89	86
		59	57	55
		104	104	104
		94	94	93
		95	95	95
		95	95	95
		109	109	109
		139	139	139
		167	167	167
		167	167	167
		193	193	193
		193	193	193
		207	207	207
		240	240	240
		270	270	270
		289	289	289
		293	293	293
		294	294	294
		297	297	297

HRS DISCOVERY CRUISE NO 47		DEPTH IN CORRECTED FATHOMS		MINUTES	
TIME	DEPTH	TIME	DEPTH	TIME	DEPTH
00	295	05	293	295	293
01	293	10	288	287	283
02	289	15	284	284	284
03	284	20	284	284	284
04	284	25	284	284	284
05	280	30	296	277	277
06	284	35	338	317	316
07	295	40	387	344	352
08	295	45	383	394	400
09	383	50	479	523	517
10	519	55	566	589	598
11	513	60	680	710	720
12	512	65	774	759	755
13	513	70	719	712	710
14	514	75	719	719	719
15	515	80	733	722	719
16	517	85	733	722	719
17	517	90	733	722	719
18	518	95	733	722	719
19	519	100	733	722	719
20	519	105	733	722	719
21	522	110	733	722	719
22	522	115	733	722	719

D 21

ARRRS DISCOVERY CRUISE NO 47  
DEPTH IN CORRECTED FATHOMS

DATE 26-6-1972 (DAY NO 178)

RRS DISCOVERY CRUISE NO 47  
DEPTH IN CORRECTED FATHOMS

DATE	27- 6-1972 (DAY NO 179)	40	45	50	55
95	387*44	732	747	479*51	594*53
96		840	844		706*53
96		869	875		855
71		793	785		867
75		726	725		777
28		737	725		723
		646	623		749
		434	421		600
		281	271		410
		92	97		260
		251	254		258
		69	66		265
		267	266		213
		222	218		217
		183	174		138
		143	140		101
		101	102		101

MINUTES	25	30	35
	598	559	572
	643	598	36
	798	620	661
	863	839	839
	888	839	844
	888	837	818
	742	737	733
	726	727	731
	754	733	705
	485	470	455
	328	316	301
	238	240	243
	239	267	267
	239	236	230
	269	197	189
	150	150	148
	152	152	107

• 22

RRS DISCOVERY CRUISE NO 47  
DEPTH IN CORRECTED FATHOMS

MINUTES	20	15	DATE	28- 6-1972 ( DAY NO 180 )
	25	30	35	40
				4.5
				50
				55

123	126	120	118	107	100	103	109	93	74**38	82**43	130	99	130
-----	-----	-----	-----	-----	-----	-----	-----	----	--------	--------	-----	----	-----

20  
21  
22  
23

	95	101	00
RRS DISCOVERY CRUISE NO 47			05
DEPTH IN CORRECTED FATHOMS			

MINUTES	DATE	28-6-1972 (DAY NO 180)
20	35	40
25	30	45

107	100	$\frac{179}{103}$	93	74*38	82*43	$\frac{130}{99}$
-----	-----	-------------------	----	-------	-------	------------------

MINUTES	20 25	30	35	40	45	50	55
114 120	118 120	109 119	111 118	109 118	105 118	120 115	115 111
					DATE 29- 6-1972	(DAY NO 181)	

90  
96  
99  
101  
103  
106  
104  
108  
110  
111

90  
96  
99  
101  
103  
106  
104  
108  
110  
111

D 23

DATE	29-	6-1972	(DAY NO 181)
40	45	50	55

MINUTES	20	25	30	35
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## RRS DISCOVERY CRUISE NO 47

DATE 30- 6-1977 (DAY NO 182)

DEPTH IN CORRECTED FATHOMS	HOURS	MINUTES	00	05	10	15	20	25	30	35	40	45	50	55
000	112	112	112	114	114	113	115	116	117	118	119	120	122	124
001	114	114	114	114	114	114	115	116	117	118	119	120	122	124
002	135	139	137	144	144	143	145	146	147	148	149	150	151	152
003	291	310	633	704	704	704	704	704	704	704	704	704	704	704
004	627	980	972	991	991	991	991	991	991	991	991	991	991	991
005	007	1148	1281	1292	1292	1292	1292	1292	1292	1292	1292	1292	1292	1292
006	008	1148	1364	1364	1364	1364	1364	1364	1364	1364	1364	1364	1364	1364
007	009	1148	1413	1413	1413	1413	1413	1413	1413	1413	1413	1413	1413	1413
008	010	1148	1451	1451	1451	1451	1451	1451	1451	1451	1451	1451	1451	1451
009	011	1148	1481	1481	1481	1481	1481	1481	1481	1481	1481	1481	1481	1481
010	012	1148	1481	1481	1481	1481	1481	1481	1481	1481	1481	1481	1481	1481
011	013	1148	1481	1481	1481	1481	1481	1481	1481	1481	1481	1481	1481	1481
012	014	1148	1481	1481	1481	1481	1481	1481	1481	1481	1481	1481	1481	1481
013	015	1148	1481	1481	1481	1481	1481	1481	1481	1481	1481	1481	1481	1481
014	016	1148	1481	1481	1481	1481	1481	1481	1481	1481	1481	1481	1481	1481
015	017	1148	1481	1481	1481	1481	1481	1481	1481	1481	1481	1481	1481	1481
016	018	1148	1481	1481	1481	1481	1481	1481	1481	1481	1481	1481	1481	1481
017	019	1148	1481	1481	1481	1481	1481	1481	1481	1481	1481	1481	1481	1481
018	020	1148	1481	1481	1481	1481	1481	1481	1481	1481	1481	1481	1481	1481
019	021	1148	1481	1481	1481	1481	1481	1481	1481	1481	1481	1481	1481	1481
020	022	1148	1481	1481	1481	1481	1481	1481	1481	1481	1481	1481	1481	1481
021	023	1148	1481	1481	1481	1481	1481	1481	1481	1481	1481	1481	1481	1481

## RRS DISCOVERY CRUISE NO 47

DEPTH IN CORRECTED FATHOMS	HOURS	MINUTES	00	05	10	15	20	25	30	35	40	45	50	55
000	1526	1526	1566	1566	1566	1566	1566	1566	1566	1566	1566	1566	1566	1566
001	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561
002	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561
003	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561
004	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561
005	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561
006	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561
007	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561
008	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561
009	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561
010	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561
011	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561
012	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561
013	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561
014	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561
015	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561
016	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561
017	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561
018	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561
019	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561
020	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561
021	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561
022	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561
023	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561	1561

D 24

RRS DISCOVERY CRUISE NO 47	DEPTH IN CORRECTED FATHOMS	HOURS	MINUTES	DATE	DAY NO 184)
00	56	00	05	2- 7-1972	55
01	55	01	54		54
02	55	02	54		52
03	55	03	54		52
04	55	04	54		54
05	55	05	47		52
06	55	06	47		52
07	55	07	47		51
08	55	08	47		49
09	55	09	46		48
10	55	10	46		46
11	55	11	45		46
12	55	12	45		46
13	55	13	45		46
14	55	14	37		46
15	55	15	37		46
16	55	16	37		46
17	55	17	37		46
18	55	18	37		46
19	55	19	28		46
20	55	20	28		46
21	55	21	19		46
22	55	22	17		46
23	55	23	17		46
24	55	24	17		46
25	55	25	17		46
26	55	26	17		46
27	55	27	17		46
28	55	28	17		46
29	55	29	17		46
30	55	30	17		46
31	55	31	17		46
32	55	32	17		46
33	55	33	17		46
34	55	34	17		46
35	55	35	17		46
36	55	36	17		46
37	55	37	17		46
38	55	38	17		46
39	55	39	17		46
40	55	40	17		46
41	55	41	17		46
42	55	42	17		46
43	55	43	17		46
44	55	44	17		46
45	55	45	17		46
46	55	46	17		46
47	55	47	17		46
48	55	48	17		46
49	55	49	17		46
50	55	50	17		46
51	55	51	17		46
52	55	52	17		46
53	55	53	17		46
54	55	54	17		46
55	55	55	17		46
56	55	56	17		46
57	55	57	17		46
58	55	58	17		46
59	55	59	17		46
60	55	60	17		46
61	55	61	17		46
62	55	62	17		46
63	55	63	17		46
64	55	64	17		46
65	55	65	17		46
66	55	66	17		46
67	55	67	17		46
68	55	68	17		46
69	55	69	17		46
70	55	70	17		46
71	55	71	17		46
72	55	72	17		46
73	55	73	17		46
74	55	74	17		46
75	55	75	17		46
76	55	76	17		46
77	55	77	17		46
78	55	78	17		46
79	55	79	17		46
80	55	80	17		46
81	55	81	17		46
82	55	82	17		46
83	55	83	17		46
84	55	84	17		46
85	55	85	17		46
86	55	86	17		46
87	55	87	17		46
88	55	88	17		46
89	55	89	17		46
90	55	90	17		46
91	55	91	17		46
92	55	92	17		46
93	55	93	17		46
94	55	94	17		46
95	55	95	17		46
96	55	96	17		46
97	55	97	17		46
98	55	98	17		46
99	55	99	17		46
100	55	100	17		46
101	55	101	17		46
102	55	102	17		46
103	55	103	17		46
104	55	104	17		46
105	55	105	17		46
106	55	106	17		46
107	55	107	17		46
108	55	108	17		46
109	55	109	17		46
110	55	110	17		46
111	55	111	17		46
112	55	112	17		46
113	55	113	17		46
114	55	114	17		46
115	55	115	17		46
116	55	116	17		46
117	55	117	17		46
118	55	118	17		46
119	55	119	17		46
120	55	120	17		46
121	55	121	17		46
122	55	122	17		46
123	55	123	17		46

## RRS DISCOVERY CRUISE NO 47

DEPTH IN CORRECTED METRES

HOURS	00	05	10	15	MINUTES	20	25	30	35	40	45	50	55
00													
01	39	39	36	43	39	43	41	37	37	40	43	41	37
02	41	41	47	56	56	58	58	58	58	60	60	60	60
03	62	62	62	64	64	66	66	66	66	66	66	66	66
04	66	66	68	68	68	69	69	69	69	69	69	69	69
05	69	69	79	83	83	85	85	85	85	85	85	85	85
06	79	96	96	98	98	98	98	98	98	98	98	98	98
07	92	98	98	88	88	88	88	88	88	88	88	88	88
08	98	88	88	88	88	88	88	88	88	88	88	88	88
09	88	88	88	88	88	88	88	88	88	88	88	88	88
10	88	88	88	88	88	88	88	88	88	88	88	88	88
11	88	88	88	88	88	88	88	88	88	88	88	88	88
12	88	88	88	88	88	88	88	88	88	88	88	88	88
13	92	96	96	98	98	100	100	100	100	101	101	101	100
14	96	100	100	100	100	101	101	101	101	101	101	101	100
15	100	100	100	103	103	103	103	103	103	103	103	103	103
16	100	104	104	107	107	107	107	107	107	107	107	107	107
17	107	107	107	109	109	109	109	109	109	109	109	109	109
18	119	109	109	109	109	109	109	109	109	111	111	111	111
19	109	111	111	113	113	113	113	113	113	113	113	113	113
20	111	111	111	108	108	108	108	108	108	108	108	108	108
21	107	108	108	107	107	107	107	107	107	107	107	107	107
22													
23													

## RRS DISCOVERY CRUISE NO 47

DEPTH IN CORRECTED METRES

HOURS	00	05	10	15	MINUTES	20	25	30	35	40	45	50	55
00	111	113	113	113	115	115	115	115	115	115	115	115	115
01	130	149	152	152	152	154	154	154	154	154	154	154	154
02													
03	160	162	162	164	164	164	164	164	164	164	164	164	164
04	169	171	173	173	173	173	173	173	173	173	173	173	173
05	181	182	182	184	184	184	184	184	184	184	184	184	184
06	241	259	259	274	274	290	290	290	290	290	290	290	290
07	574	631	631	689	689	765	765	765	765	765	765	765	765
08	1327	1451	1451	1451	1451	1387	1387	1387	1387	1387	1387	1387	1387
09	1264	1359	1359	1359	1359	1643	1643	1643	1643	1643	1643	1643	1643
10						117	117	117	117	117	117	117	117
11	1533	1595	1705	1705	1705	1712	1712	1712	1712	1712	1712	1712	1712
12	1695	1759	1764	1772	1772	1777	1777	1777	1777	1777	1777	1777	1777
13	1817	1820	1824	1824	1824	1824	1824	1824	1824	1824	1824	1824	1824
14	1793	1798	1798	1768	1768	1768	1768	1768	1768	1768	1768	1768	1768
15	1548	1537	1537	1507	1507	1479	1479	1479	1479	1479	1479	1479	1479
16	1352	1331	1331	1314	1314	1257	1257	1257	1257	1257	1257	1257	1257
17	1047	1047	1047	1025	1025	982	982	982	982	982	982	982	982
18	803	780	780	758	758	720	720	720	720	720	720	720	720
19	603	593	593	571	571	546	546	546	546	546	546	546	546
20	488	473	473	460	460	438	438	438	438	438	438	438	438
21	438	438	438	441	441	453	453	453	453	453	453	453	453
22	440	440	440	441	441	475	475	475	475	475	475	475	475
23	498	498	498	498	498	498	498	498	498	498	498	498	498

D 26

HOURS	00	05	10	15	MINUTES	20	25	30	35	40	45	50	55
00													
01	39	39	36	43	39	43	41	37	37	40	45	50	55
02	41	41	47	56	56	58	58	58	58	60	60	60	60
03	62	62	62	64	64	66	66	66	66	66	66	66	66
04	66	66	68	68	68	71	73	73	73	73	73	73	73
05	69	69	79	83	83	85	85	85	85	85	85	85	85
06	79	96	96	98	98	100	100	100	100	101	101	101	100
07	92	98	98	88	88	101	101	101	101	101	101	101	100
08	98	88	88	88	88	100	100	100	100	101	101	101	100
09	88	88	88	88	88	100	100	100	100	101	101	101	100
10	88	88	88	88	88	100	100	100	100	101	101	101	100
11	88	88	88	88	88	100	100	100	100	101	101	101	100
12	88	88	88	88	88	100	100	100	100	101	101	101	100
13	92	96	96	98	98	100	100	100	100	101	101	101	100
14	96	100	100	103	103	103	103	103	103	103	103	103	103
15	100	104	104	107	107	107	107	107	107	107	107	107	107
16	107	107	107	109	109	109	109	109	109	109	109	109	109
17	119	109	109	109	109	109	109	109	109	111	111	111	111
18	109	111	111	113	113	113	113	113	113	113	113	113	113
19	111	111	111	108	108	108	108	108	108	108	108	108	108
20	107	108	108	107	107	107	107	107	107	107	107	107	107
21													
22													
23													

HOURS	00	05	10	15	MINUTES	20	25	30	35	40	45	50	55
00													
01	39	39	36	43	39	43	41	37	37	40	45	50	55
02	41	41	47	56	56	58	58	58	58	60	60	60	60
03	62	62	62	64	64	66	66	66	66	66	66	66	66
04	66	66	68	68	68	71	73	73	73	73	73	73	73
05	69	69	79	83	83	85	85	85	85	85	85	85	85
06	79	96	96	98	98	100	100	100	100	101	101	101	100
07	92	98	98	88	88	101	101	101	101	101	101	101	100
08	98	88	88	88	88	100	100	100	100	101	101	101	100
09	88	88	88	88	88	100	100	100	100	101	101	101	100
10	88	88	88	88	88	100	100	100	100	101	101	101	100
11	88	88	88	88	88	100	100	100	100	101	101	101	100
12	88	88	88	88	88	100	100	100	100	101	101	101	100
13	92	96	96	98	98	100	100	100	100	101	101	101	100
14	96	100	100	103	103	103	103	103	103	103	103	103	103
15	100	104	104	107	107	107	107</td						

RRS DISCOVERY CRUISE NO 47  
DEPTH IN CORRECTED METRES

DATE	12- 6-1977 (DAY NO 164)	15	20	25	30	35	40	45	50	55
00	486	492	486	488	490	494	496	498	500	503
01	503	509	513	520	528	545	567	569	576	577
02	586	593	612	634	634	644	647	650	653	657
03	743	760	760	748	748	1734*	1891	1752	1797	2086
04	1914	1865	1548	1596	1596	1477	1477	1477	1447	1462
05	1484	1514	1514	1634	1634	1675	1807	1865	1940	2150
06	2258	2431	2431	2619	2619	2459	2607	2717	2867	2980
07	3256	3037	3037	3071	3098	3105	3132	3169	3221	3241
08	3270	3387	3387	3308	3344	3344	3355	3359	3378	3378
09	3447	3447	3447	3425	3458	3477	3477	3492	3492	3439
10	3522	3530	3530	3549	3549	3566	3591	3625	3650	3505
11	3532	3532	3532	3895	3895	3945	3987	4033	4075	3707
12	3739	3739	3739	4244	4244	4263	4305	4324	4347	4119
13	4179	4407	4407	4461	4461	4470	4476	4476	4497	4438
14	4440	4486	4486	4488	4488	4493	4497	4501	4505	4480
15	4505	4505	4509	4520	4520	4528	4551	4567	4570	4503
16	4570	4574	4574	4572	4572	4563	4559	4581	4613	4620
17	4628	4634	4634	4642	4642	4644	4651	4651	4659	4659
18	4667	4667	4667	4674	4674	4674	4674	4667	4663	4663
19	4659	4659	4659	4651	4651	4649	4647	4647	4630	4622
20	4613	4613	4601	4590	4590	4588	4584	4576	4576	4567
21	4559	4559	4551	4540	4540	4536	4530	4528	4517	4507
22	4493	4493	4470	4470	4470	4461	4457	4457	4440	4422

RRS DISCOVERY CRUISE NO 47  
DEPTH IN CORRECTED METRES

DATE	12- 6-1977 (DAY NO 164)	15	20	25	30	35	40	45	50	55
00	486	492	486	488	490	494	496	498	500	503
01	503	509	513	520	528	545	567	569	576	577
02	586	593	612	634	634	644	647	650	653	657
03	743	760	760	748	748	1734*	1891	1752	1797	2086
04	1914	1865	1548	1596	1596	1477	1477	1477	1447	1462
05	1484	1514	1514	1634	1634	1675	1807	1865	1940	2150
06	2258	2431	2431	2619	2619	2459	2607	2717	2867	2980
07	3256	3037	3037	3071	3098	3105	3132	3169	3221	3241
08	3270	3387	3387	3308	3344	3344	3355	3359	3378	3378
09	3447	3447	3447	3425	3458	3477	3477	3492	3515	3505
10	3522	3530	3530	3549	3549	3566	3591	3625	3650	3551
11	3532	3532	3532	3895	3895	3945	3987	4033	4075	3777
12	3739	3739	3739	4244	4244	4263	4305	4324	4347	4146
13	4179	4407	4407	4461	4461	4470	4476	4476	4497	4394
14	4440	4486	4486	4488	4488	4493	4497	4501	4505	4375
15	4505	4505	4509	4520	4520	4528	4551	4567	4570	4364
16	4570	4574	4574	4572	4572	4563	4559	4581	4594	4351
17	4628	4634	4634	4642	4642	4644	4651	4651	4659	4255
18	4667	4667	4667	4674	4674	4674	4674	4667	4663	4255
19	4659	4659	4659	4651	4651	4649	4647	4647	4630	4255
20	4613	4613	4601	4590	4590	4588	4584	4576	4576	4255
21	4559	4559	4551	4540	4540	4536	4530	4528	4528	4255
22	4493	4493	4470	4470	4470	4461	4457	4457	4440	4255

D 27

DATE	12- 6-1977 (DAY NO 164)	15	20	25	30	35	40	45	50	55
00	486	492	486	488	490	494	496	498	500	503
01	503	509	513	520	528	545	567	569	576	577
02	586	593	612	634	634	644	647	650	653	657
03	743	760	760	748	748	1734*	1891	1752	1797	2086
04	1914	1865	1548	1596	1596	1477	1477	1477	1447	1462
05	1484	1514	1514	1634	1634	1675	1807	1865	1940	2150
06	2258	2431	2431	2619	2619	2459	2607	2717	2867	2980
07	3256	3037	3037	3071	3098	3105	3132	3169	3221	3241
08	3270	3387	3387	3308	3344	3344	3355	3359	3378	3378
09	3447	3447	3447	3425	3458	3477	3477	3492	3515	3505
10	3522	3530	3530	3549	3549	3566	3591	3625	3650	3551
11	3532	3532	3532	3895	3895	3945	3987	4033	4075	3777
12	3739	3739	3739	4244	4244	4263	4305	4324	4367	4146
13	4179	4407	4407	4461	4461	4470	4476	4476	4497	4294
14	4440	4486	4486	4488	4488	4493	4497	4501	4505	4344
15	4505	4505	4509	4520	4520	4528	4551	4567	4570	4344
16	4570	4574	4574	4572	4572	4563	4559	4581	4594	4344
17	4628	4634	4634	4642	4642	4644	4651	4651	4659	4344
18	4667	4667	4667	4674	4674	4674	4674	4667	4663	4344
19	4659	4659	4659	4651	4651	4649	4647	4647	4630	4344
20	4613	4613	4601	4590	4590	4588	4584	4576	4576	4344
21	4559	4559	4551	4540	4540	4536	4530	4528	4528	4344
22	4493	4493	4470	4470	4470	4461	4457	4457	4440	4344

D 27

DATE	12- 6-1977 (DAY NO 164)	15	20	25	30	35	40	45	50	55
00	486	492	486	488	490	494	496	498	500	503
01	503	509	513	520	528	545	567	569	576	577
02	586	593	612	634	634	644	647	650	653	657
03	743	760	760	748	748	1734*	1891	1752	1797	2086
04	1914	1865	1548	1596	1596	1477	1477	1477	1447	1462
05	1484	1514	1514	1634	1634	1675	1807	1865	1940	2150
06	2258	2431	2431	2619	2619	2459	2607	2717	2867	2980
07	3256	3037	3037	3071	3098	3105	3132	3169	3221	3241
08	3270	3387	3387	3308	3344	3344	3355	3359	3378	3378
09	3447	3447	3447	3425	3458	3477	3477	3492	3515	3505
10	3522	3530	3530	3549	3549	3566	3591	3625	3650	3551
11	3532	3532	3532	3895	3895	3945	3987	4033	4075	3777
12	3739	3739	3739	4244	4244	4263	4305	4324	4367	4146
13	4179	4407	4407	4461	4461	4470	4476	4476	4497	4294
14	4440	4486	4486	4488	4488	4493	4497	4501	4505	4344
15	4505	4505	4509	4520	4520	4528	4551	4567	4570	4344
16	4570	4574	4574	4572	4572	4563	4559	4581	4594	4344
17	4628	4634	4634	4642	4642	4644	4651	4651	4659	4344
18	4667	4667	4667	4674	4674	4674	4674	4667	4663	4344
19	4659	4659	4659	4651	4651	4649	4647	4647	4630	4344
20	4613	4613	4601	4590	4590	4588	4584	4576	4576	4344
21	4559	4559	4551	4540	4540	4536	4530	4528	4528	4344
22	4493	4493	4470	4470	4470	4461	4457	4457	4440	4344

D 27

DATE	12- 6-1977 (DAY NO 164)	15	20	25	30	35	40	45	50	55
00	486	492	486	488	490	494	496	498	500	503
01	503	509	513	520	528	545	567	569	576	577
02	586	593	612	634	634	644	647	650	653	657
03	743	760	760	748	748	1734*	1891	1752	1797	2086
04	1914	1865	1548	1596	1596	1477	1477	1477	1447	1462
05	1484	1514	1514	1634	1634	1675	1807	1865	1940	2150
06	2258	2431	2431	2619	2619	2459	2607	2717	2867	2980
07	3256	3037	3037	3071	3098	3105	3132	3169	3221	3241
08	3270	3387	3387	3308	3344	3344	3355	3359	3378	3378
09	3447	3447	3447	3425	3458	3477	3477	3492	3515	3505
10	3522	3530	3530	3549	3549	3566	3591	3625	3650	3551
11	3532	3532	3532	3895	3895	3945	3987	4033	4075	3777
12										

RECEIVED IN CORRECTED MFTRES NO 47

RRRS DISCOVERY CRUISE NO. 47	
DEPTH IN CORRECTED METRES	
HOURS	00
000	1696
001	1545
002	1616
003	1791
004	1982
005	2345
006	2547
007	2589
008	2009
009	1603
010	1501
011	1437
012	1441
013	1521
014	1300
015	1149
016	1153
017	1091
018	1043
019	1053
020	918
021	816
022	864
023	879
	783
	760
	595

## RRS DISCOVERY CRUISE NO 47

DEPTH IN CORRECTED METRES		DEPTH IN CORRECTED METRES		DEPTH IN CORRECTED METRES	
HOURS	MINUTES	00	05	10	15
00	451	455	453	453	453
01	429	429	423	423	418
02	378	370	366	363	355
03	323	320	318	310	306
04	273	267	263	252	250
05	259	259	257	253	250
06	231	231	228	231	227
07	220	210	212	197	188
08	194	186	182	182	182
09	205	197	175	179	197
10	224	225	225	220	214
11	214	214	214	214	216
12	220	220	218	218	216
13	190	190	194	194	194
14	184	184	186	186	186
15	192	192	196	196	192
16	216	216	216	216	216
17	218	203	199	197	197
18	194	194	196	197	192
19	268	268	283	283	354
20	625	625	664	664	786
21	16	216	199	197	197
22	17	17	192	192	192
23	18	18	197	192	192
24	19	19	197	192	192
25	20	20	192	192	192
26	21	21	192	192	192
27	22	22	194	194	194
28	23	23	192	192	192

## RRS DISCOVERY CRUISE NO 47

DEPTH IN CORRECTED METRES		DEPTH IN CORRECTED METRES		DEPTH IN CORRECTED METRES	
HOURS	MINUTES	00	05	10	15
00	1066	1066	1238	1305	1370
01	1742	1779	1815	1895	1931
02	2221	2256	2268	2281	2313
03	2356	2358	2361	2378	2392
04	2434	2444	2461	2470	2472
05	2502	2504	2504	2517	2532
06	2551	2557	2559	2566	2574
07	2604	2559	2559	2562	2568
08	2634	2607	2619	2641	2643
09	2630	2630	2641	2641	2643
10	2634	2634	2641	2641	2643
11	2637	2637	2641	2641	2643
12	2641	2641	2641	2641	2643
13	2644	2644	2644	2644	2646
14	2647	2647	2647	2647	2649
15	2650	2650	2650	2650	2652
16	2653	2653	2653	2653	2655
17	2656	2656	2656	2656	2658
18	2659	2659	2659	2659	2661
19	2662	2662	2662	2662	2664
20	2665	2665	2665	2665	2667
21	2668	2668	2668	2668	2669
22	2671	2671	2671	2671	2673
23	2674	2674	2674	2674	2676
24	2677	2677	2677	2677	2679
25	2680	2680	2680	2680	2682
26	2683	2683	2683	2683	2685
27	2686	2686	2686	2686	2688
28	2689	2689	2689	2689	2691
29	2692	2692	2692	2692	2694
30	2695	2695	2695	2695	2697
31	2702	2702	2702	2702	2704
32	2705	2705	2705	2705	2707
33	2708	2708	2708	2708	2709
34	2711	2711	2711	2711	2713
35	2714	2714	2714	2714	2716
36	2717	2717	2717	2717	2719
37	2720	2720	2720	2720	2722
38	2723	2723	2723	2723	2725
39	2726	2726	2726	2726	2728
40	2729	2729	2729	2729	2731
41	2732	2732	2732	2732	2734
42	2735	2735	2735	2735	2737
43	2738	2738	2738	2738	2739
44	2741	2741	2741	2741	2743
45	2744	2744	2744	2744	2746
46	2747	2747	2747	2747	2749
47	2750	2750	2750	2750	2752
48	2753	2753	2753	2753	2755
49	2756	2756	2756	2756	2758
50	2759	2759	2759	2759	2761
51	2762	2762	2762	2762	2764
52	2765	2765	2765	2765	2767
53	2768	2768	2768	2768	2770
54	2771	2771	2771	2771	2773
55	2774	2774	2774	2774	2776

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DEPTH IN CORRECTED METRES		DEPTH IN CORRECTED METRES		DEPTH IN CORRECTED METRES	
HOURS	MINUTES	00	05	10	15
00	451	451	451	451	451
01	412	412	414	414	414
02	346	346	351	351	351
03	301	301	306	306	306
04	258	258	250	250	250
05	247	247	246	246	246
06	227	227	227	227	227
07	214	214	214	214	214
08	192	192	192	192	192
09	175	175	175	175	175
10	153	153	153	153	153
11	132	132	132	132	132
12	111	111	111	111	111
13	90	90	90	90	90
14	69	69	69	69	69
15	58	58	58	58	58
16	47	47	47	47	47
17	36	36	36	36	36
18	25	25	25	25	25
19	14	14	14	14	14
20	3	3	3	3	3
21	22	22	22	22	22
22	11	11	11	11	11
23	0	0	0	0	0

DEPTH IN CORRECTED METRES		DEPTH IN CORRECTED METRES		DEPTH IN CORRECTED METRES	
HOURS	MINUTES	00	05	10	15
00	436	436	436	436	436
01	396	396	393	393	393
02	323	323	293	286	286
03	276	276	261	259	259
04	250	250	233	229	229
05	231	231	214	214	214
06	222	222	217	217	217
07	211	211	211	211	211
08	200	200	190	190	190
09	184	184	184	184	184
10	164	164	164	164	164
11	143	143	143	143	143
12	123	123	123	123	123
13	103	103	103	103	103
14	83	83	83	83	83
15	63	63	63	63	63
16	43	43	43	43	43
17	23	23	23	23	23
18	03	03	03	03	03
19	22	22	22	22	22
20	02	02	02	02	02
21	21	21	21	21	21
22	01	01	01	01	01
23	22	22	22	22	22

DEPTH IN CORRECTED METRES		DEPTH IN CORRECTED METRES		DEPTH IN CORRECTED METRES	
HOURS	MINUTES	00	05	10	15
00	432	432	432	432	432
01	381	381	381	381	381
02	323	323	323	323	323
03	276	276	276	276	276
04	250	250	250	250	250
05	231	231	231	231	231
06	222	222	222	222	222
07	211	211	211	211	211
08	190	190	190	190	190
09	170	170	170	170	170
10	150	150	150	150	150
11	130	130	130	130	130
12	110	110	110	110	110
13	90	90	90	90	90
14	70	70	70	70	70
15	50	50	50	50	50
16	30	30	30	30	30
17	10	10	10	10	10
18	0	0	0	0	0
19	20	20	20	20	20
20	40	40	40	40	40
21	60	60	60	60	60
22	80	80	80	80	80
23	100	100	100	100	100

DEPTH IN CORRECTED METRES		DEPTH IN CORRECTED METRES		DEPTH IN CORRECTED METRES	
HOURS	MINUTES	00	05	10	15
00	430	430	430	430	430
01	389	389	389	389	389
02	328	328	328	328	328
03	277	277	277	277	277
04	250	250	250	250	250
05	231	23			

RRS DISCOVERY CRUISE NO 47  
DEPTH IN CORRECTED METRES

	HOURS	00	05	10	15	20	25	30	35	40	45	50	55
00	671	656	647	636	628	623	619	611	609	608	608	609	609
01	613	612	623	637	643	656	675	682	701	716	732	730	730
02	721	732	751	758	2038	2045	2075	2084	2084	1471	1646	1829	1944
03	2017	2075	2051	1900	1888	1862	1862	1855	1844	1989	1963	1950	1950
04	1937	1924	1911	1799	1788	1773	1769	1765	1763	1762	1762	1823	1814
05	1804	1763	1763	1760	1763	1771	1771	1776	1776	1797	1808	1818	1829
06	1762	1845	1853	1860	1868	1873	1873	1883	1883	1892	1896	1896	1903
07	1840	1911	1920	1926	1930	1937	1937	1941	1941	1951	1967	1962	1962
08	1982	1974	1959	1991	2014	2040	2066	2066	2066	2094	2116	2133	2124
09	2042	2029	1859	1750	1681	1512	1777	851	831	809	779	779	760
10	749	723	704	704	686	675	663	660	660	667	678	693	708
11	730	749	749	803	827	853	887	995	1413	1635	1776	1870	1870
12	1941	2008	2100	2178	2178	2178	2178	2178	2178	2154	2129	2113	2101
13	2086	2073	2068	2068	2064	2064	2064	2066	2066	2070	2070	2075	2075
14	2075	2075	2075	2072	2072	2072	2072	2072	2072	2064	2064	2064	2064
15	1854	1854	1854	1854	1854	1854	1854	1849	1849	1845	1845	1841	1841
16	2034	2030	2030	2027	2023	2021	2019	2019	2007	2005	2047	2045	2038
17	1985	1981	1981	1977	1972	1970	1968	1959	1959	1955	1996	1991	1989
18	1940	1936	1936	1933	1927	1921	1918	1914	1914	1912	1908	1905	1901
19	1897	1893	1893	1890	1890	1886	1886	1886	1886	1878	1878	1875	1875
20	1875	1871	1871	1869	1869	1867	1867	1865	1865	1860	1860	1860	1860
21	1858	1856	1856	1854	1854	1852	1852	1849	1849	1845	1845	1841	1841

RRS DISCOVERY CRUISE NO 47  
DEPTH IN CORRECTED METRES

	HOURS	00	05	10	15	20	25	30	35	40	45	50	55
00	1841	1845	1849	1856	1837	1862	1903	1916	1937	1837	1839	1841	1845
01	1845	1845	1041	974	479	510	506	499	781	1699	1505	1238	1208
02	1160	592	564	540	486	490	505	505	492	714	670	631	594
03	471	471	477	818	853	892	918	948	482	482	479	468	464
04	755	755	471	818	1425	1446	1450	1453	566	610	655	701	725
05	1394	1394	1403	1403	1425	1446	1450	1453	985	1115	1115	1394	1394
06	1671	1671	1707	1750	1750	1750	1750	1750	1783	1783	1768	1766	1763
07	1671	1671	1707	1750	1750	1750	1750	1750	1774	1774	1705	1697	1681
08	1671	1671	1671	1671	1671	1671	1671	1671	1714	1714	1705	1705	1705
09	1671	1671	1671	1671	1671	1671	1671	1671	1748	1748	1548	1548	1537
10	1671	1671	1671	1671	1671	1671	1671	1671	1743	1743	1479	1479	1472
11	1671	1671	1671	1671	1671	1671	1671	1671	1752	1752	1349	1349	1349
12	1671	1671	1671	1671	1671	1671	1671	1671	1758	1758	1760	1760	1760
13	1671	1671	1671	1671	1671	1671	1671	1671	1729	1729	1733	1733	1732
14	1671	1671	1671	1671	1671	1671	1671	1671	1744	1744	1442	1442	1422
15	1671	1671	1671	1671	1671	1671	1671	1671	1758	1758	1758	1758	1758
16	1671	1671	1671	1671	1671	1671	1671	1671	1763	1763	1763	1763	1763
17	1671	1671	1671	1671	1671	1671	1671	1671	1774	1774	1774	1774	1774
18	1671	1671	1671	1671	1671	1671	1671	1671	1788	1788	1788	1788	1788
19	1671	1671	1671	1671	1671	1671	1671	1671	1818	1818	1818	1818	1818
20	1671	1671	1671	1671	1671	1671	1671	1671	1847	1847	1487	1487	1472
21	1671	1671	1671	1671	1671	1671	1671	1671	1853	1853	1442	1442	1422
22	1671	1671	1671	1671	1671	1671	1671	1671	1858	1858	1349	1349	1349
23	1671	1671	1671	1671	1671	1671	1671	1671	1863	1863	1358	1358	1358

D 30

	HOURS	00	05	10	15	20	25	30	35	40	45	50	55
00	1841	1845	1849	1856	1837	1862	1903	1916	1937	1837	1839	1841	1845
01	1845	1845	1041	974	479	510	506	499	781	1699	1505	1238	1208
02	1160	592	564	540	486	490	505	505	492	714	670	631	594
03	471	471	477	818	853	892	918	948	482	482	479	468	464
04	755	755	471	818	1425	1446	1450	1453	566	610	655	701	725
05	1394	1394	1403	1403	1425	1446	1450	1453	985	1115	1154	1337	1337
06	1671	1671	1671	1671	1671	1671	1671	1671	1752	1752	1752	1752	1752
07	1671	1671	1671	1671	1671	1671	1671	1671	1758	1758	1758	1758	1758
08	1671	1671	1671	1671	1671	1671	1671	1671	1818	1818	1818	1818	1818
09	1671	1671	1671	1671	1671	1671	1671	1671	1847	1847	1487	1487	1472
10	1671	1671	1671	1671	1671	1671	1671	1671	1853	1853	1442	1442	1422
11	1671	1671	1671	1671	1671	1671	1671	1671	1858	1858	1858	1858	1858
12	1671	1671	1671	1671	1671	1671	1671	1671	1863	1863	1863	1863	1863
13	1671	1671	1671	1671	1671	1671	1671	1671	1868	1868	1868	1868	1868
14	1671	1671	1671	1671	1671	1671	1671	1671	1873	1873	1873	1873	1873
15	1671	1671	1671	1671	1671	1671	1671	1671	1878	1878	1878	1878	1878
16	1671	1671	1671	1671	1671	1671	1671	1671	1883	1883	1883	1883	1883
17	1671	1671	1671	1671	1671	1671	1671	1671	1888	1888	1888	1888	1888
18	1671	1671	1671	1671	1671	1671	1671	1671	1893	1893	1893	1893	1893
19	1671	1671	1671	1671	1671	1671	1671	1671	1898	1898	1898	1898	1898
20	1671	1671	1671	1671	1671	1671	1671	1671	1903	1903	1903	1903	1903
21	1671	1671	1671	1671	1671	1671	1671	1671	1908	1908	1908	1908	1908
22	1671	1671	1671	1671	1671	1671	1671	1671	1909	1909	1909	1909	1909
23	1671	1671	1671	1671	1671	1671	1671	1671	1914	1914	1914	1914	1914

	HOURS	00	05	10	15	20	25	30	35	40	45	50	55
00	671	656	647	636	623	643	656	675	682	701	716	732	730
01	613	623	751	758	2038	2045	2062	1862	1844	1989	1989	1963	1950
02	721	2017	2051	1900	1888	1875	1865	1855	1844	1951	1951	1963	1944
03	1924	1911	1911	1920	1926	1930	1937	1937	1941	2094	2116	2133	2124
04	1804	1804	1853	1853	1868	1873							

RRS DISCOVERY CRUISE NO 47  
DEPTH IN CORRECTED MFTS

HOURS	00	05	10	15	20	25	30	35	40	45	50	55
00	1222	1231	1236	1240	1248	1255	1262	1272	1279	1290	1300	1307
01	1237	1254	1242	1237	1231	1221	1212	1211	1209	1202	1206	1236
02	1232	1225	1223	1227	1226	1230	1234	1238	1243	1252	1249	1245
03	1212	1215	1219	1227	1228	1228	1225	1226	1225	1225	1226	1245
04	1269	1245	1247	1247	1249	1251	1256	1258	1258	1257	1260	1275
05	1245	1245	1245	1245	1245	1245	1245	1245	1245	1245	1245	1245
06	1282	1282	1288	1292	1297	1301	1304	1306	1306	1306	1310	1329
07	1321	1321	1325	1325	1332	1332	1334	1334	1334	1334	1334	1349
08	1353	1353	1355	1358	1362	1368	1368	1371	1375	1379	1383	1390
09	1392	1394	1401	1405	1408	1409	1409	1414	1416	1422	1425	1433
10	1442	1448	1448	1459	1461	1461	1461	1467	1479	1483	1481	1478
11	1474	1474	1474	1474	1474	1474	1474	1474	1479	1483	1481	1450
12	1446	1446	1446	1446	1446	1446	1446	1446	1446	1446	1446	1438
13	1438	1438	1438	1438	1438	1438	1438	1438	1438	1438	1438	1442
14	1442	1446	1446	1446	1446	1446	1446	1450	1450	1452	1450	1524
15	1537	1554	1554	1591	1591	1528	1472	1479	1479	1472	1472	1232
16	1059	1031	1011	1011	950	898	844	747	714	651	625	545
17	1516	495	481	488	482	473	473	469	469	466	466	473
18	477	482	482	492	492	510	516	525	532	544	553	569
19	577	582	586	592	597	603	614	629	636	644	651	670
20	680	688	688	697	707	716	725	735	746	755	768	794
21	799	811	822	837	859	859	848	888	903	931	955	968
22	959	961	1002	948	970	1067	1069	1009	1022	1033	1041	1072
23	1085	1082	1082	1074	1074	1067	1069	1063	1063	1061	1059	1059

RRS DISCOVERY CRUISE NO 47  
DEPTH IN CORRECTED MFTS

HOURS	00	05	10	15	20	25	30	35	40	45	50	55
00	1059	1091	1121	1143	1153	1169	1173	1173	1177	1175	1175	1173
01	1089	1121	1138	1155	1164	1169	1173	1173	1177	1175	1175	1173
02	1084	1119	1138	1151	1162	1168	1173	1173	1177	1175	1175	1173
03	1057	1057	1134	1149	1166	1171	1176	1176	1181	1181	1181	1181
04	1084	1119	1138	1151	1162	1168	1173	1173	1177	1175	1175	1173
05	1057	1057	1134	1149	1166	1171	1176	1176	1181	1181	1181	1181
06	1059	1091	1121	1143	1153	1169	1173	1173	1177	1175	1175	1173
07	1088	1121	1136	1155	1164	1169	1173	1173	1177	1175	1175	1173
08	1059	1091	1121	1143	1153	1169	1173	1173	1177	1175	1175	1173
09	1088	1121	1136	1155	1164	1169	1173	1173	1177	1175	1175	1173
10	1059	1091	1121	1143	1153	1169	1173	1173	1177	1175	1175	1173
11	1088	1121	1136	1155	1164	1169	1173	1173	1177	1175	1175	1173
12	1059	1091	1121	1143	1153	1169	1173	1173	1177	1175	1175	1173
13	1088	1121	1136	1155	1164	1169	1173	1173	1177	1175	1175	1173
14	1059	1091	1121	1143	1153	1169	1173	1173	1177	1175	1175	1173
15	1088	1121	1136	1155	1164	1169	1173	1173	1177	1175	1175	1173
16	1059	1091	1121	1143	1153	1169	1173	1173	1177	1175	1175	1173
17	1088	1121	1136	1155	1164	1169	1173	1173	1177	1175	1175	1173
18	1059	1091	1121	1143	1153	1169	1173	1173	1177	1175	1175	1173
19	1088	1121	1136	1155	1164	1169	1173	1173	1177	1175	1175	1173
20	1059	1091	1121	1143	1153	1169	1173	1173	1177	1175	1175	1173
21	1088	1121	1136	1155	1164	1169	1173	1173	1177	1175	1175	1173
22	1059	1091	1121	1143	1153	1169	1173	1173	1177	1175	1175	1173
23	1088	1121	1136	1155	1164	1169	1173	1173	1177	1175	1175	1173

D 31

DATE	20- 6-1972	( DAY NO 172 )	DATE	21- 6-1972	( DAY NO 173 )
00	1279	1290	00	1075	1080
01	1254	1254	01	1125	1110
02	1245	1245	02	1125	1120
03	1245	1245	03	1125	1120
04	1245	1245	04	1125	1120
05	1245	1245	05	1125	1120
06	1245	1245	06	1125	1120
07	1245	1245	07	1125	1120
08	1245	1245	08	1125	1120
09	1245	1245	09	1125	1120
10	1245	1245	10	1125	1120
11	1245	1245	11	1125	1120
12	1245	1245	12	1125	1120
13	1245	1245	13	1125	1120
14	1245	1245	14	1125	1120
15	1245	1245	15	1125	1120
16	1245	1245	16	1125	1120
17	1245	1245	17	1125	1120
18	1245	1245	18	1125	1120
19	1245	1245	19	1125	1120
20	1245	1245	20	1125	1120
21	1245	1245	21	1125	1120
22	1245	1245	22	1125	1120
23	1245	1245	23	1125	1120

RECORDS OF DISCOVERY COUNTS NO 47  
DEPTH IN CORRECTED METRES

HOURS	00	05	10	15	20	25	30	35	40	45	50	55
00	572	589	577	581	549	547	545	529	518	529	518	529
01	529	536	532	529	544	557	553	559	562	562	562	562
02	573	599	657	662	681	696	725	729	796	833	840	840
03	850	859	874	885	911	940	966	985	1002	1030	1054	1070
04	1082	1108	1132	1152	1167	1184	1221	1241	1260	1278	1295	1295
05	1316	1332	1355	1371	1394	1420	1461	1483	1511	1532	1565	1565
06	1591	1640	1662	1699	1725	1763	1792	1768	1886	1897	1897	1897
07	1931	1968	1998	2017	2047	2073	2110	2133	2151	2215	2268	2268
	2318											
	08											
	09											
	10											
	11											
	12											
	13											
	14											
	15											
	16											
	17											
	18											
	19											
	20											
	21											
	22											
	23											

DATE 22-6-1977 (DAY NO 174)

D 32

RECORDED IN CONRECTED MFTRS NO 47

MINUTES 15 20 25 30 35 40 45 DATE 7/7- 6-1977 (DAY NO 174)

RRS DISCOVERY CRUISE NO 47  
DEPTH IN CORRECT METRES

DATE 23- 6-1977 (DAY NO 175)

R.R.S. DISCOVERY CRUISE NO 47  
DEPTH IN CORRECTED METRES

HOURS	00	05	10	15	20	25	30	35	40	45	50	55
00												
01	167	164	164	167	173	173	173	173	173	173	173	173
02	175	173	175	179	181	175	175	175	175	175	175	175
03	233	235	240	242	246	252	252	252	257	266	272	229
04	281	283	291	294	296	302	306	306	313	313	321	321
05	321	328	332	339	343	347	350	354	358	354	328	343
06	358	364	364	364	358	356	365	373	380	388	388	391
07	395	403	410	418	425	432	432	440	447	451	507	357
08	459	466	474	479	483	492	492	494	501	503	533	533
09	514	518	520	524	526	526	526	529	531	533	539	541
10	535	537	537	539	537	537	537	544	544	544	541	541
11	541	541	541	541	541	541	541	541	541	541	541	541
12	169	175	175	179	179	179	179	179	179	179	179	179
13	177	192	207	196	181	175	175	175	173	173	173	173
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												

HOURS	00	05	10	15	20	25	30	35	40	45	50	55
00												
01	164	164	164	167	173	173	173	173	173	173	173	173
02	175	175	175	179	181	175	175	175	175	175	175	175
03	233	235	240	242	246	252	252	252	257	266	272	229
04	281	283	291	294	296	302	306	306	313	313	321	321
05	321	328	332	339	343	347	350	354	358	354	328	343
06	358	364	364	364	358	356	365	373	380	388	388	391
07	395	403	410	418	425	432	432	440	447	451	507	357
08	459	466	474	479	483	492	492	494	501	503	533	533
09	514	518	520	524	526	526	526	529	531	533	539	541
10	535	537	537	539	537	537	537	544	544	544	541	541
11	541	541	541	541	541	541	541	541	541	541	541	541
12	169	175	175	179	179	179	179	179	179	179	179	179
13	177	192	207	196	181	175	175	175	173	173	173	173
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												

HOURS	00	05	10	15	20	25	30	35	40	45	50	55
00												
01	164	164	164	167	173	173	173	173	173	173	173	173
02	175	175	175	179	181	175	175	175	175	175	175	175
03	233	235	240	242	246	252	252	252	257	266	272	229
04	281	283	291	294	296	302	306	306	313	313	321	321
05	321	328	332	339	343	347	350	354	358	354	328	343
06	358	364	364	364	358	356	365	373	380	388	388	391
07	395	403	410	418	425	432	432	440	447	451	507	357
08	459	466	474	479	483	492	492	494	501	503	533	533
09	514	518	520	524	526	526	526	529	531	533	539	541
10	535	537	537	539	537	537	537	544	544	544	541	541
11	541	541	541	541	541	541	541	541	541	541	541	541
12	169	175	175	179	179	179	179	179	179	179	179	179
13	177	192	207	196	181	175	175	175	173	173	173	173
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												

D 34

HOURS	00	05	10	15	20	25	30	35	40	45	50	55
00												
01	164	164	164	167	173	173	173	173	173	173	173	173
02	175	175	175	179	181	175	175	175	175	175	175	175
03	233	235	240	242	246	252	252	252	257	266	272	229
04	281	283	291	294	296	302	306	306	313	313	321	321
05	321	328	332	339	343	347	350	354	358	354	328	343
06	358	364	364	364	358	356	365	373	380	388	388	391
07	395	403	410	418	425	432	432	440	447	451	507	357
08	459	466	474	479	483	492	492	494	501	503	533	533
09	514	518	520	524	526	526	526	529	531	533	539	541
10	535	537	537	539	537	537	537	544	544	544	541	541
11	541	541	541	541	541	541	541	541	541	541	541	541
12	169	175	175	179	179	179	179	179	179	179	179	179
13	177	192	207	196	181	175	175	175	173	173	173	173
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												

D 34

HOURS	00	05	10	15	20	25	30	35	40	45	50	55
00												
01	164	164	164	167	173	173	173	173	173	173	173	173
02	175	175	175	179	181	175	175	175	175	175	175	175
03	233	235	240	242	246	252	252	252	257	266	272	229
04	281	283	291	294	296	302	306	306	313	313	321	321
05	321	328	332	339	343	347	350	354	358	354	328	343
06	358	364	364	364	358	356	365	373	380	388	388	391
07	395	403	410	418	425	432	432	440	447	451	507	357
08	459	466	474	4								

RRS DISCOVERY CRUISE NO 47  
DEPTH IN CORRECTED METRES

DEPTH	00	05	10	15	20	25	30	35	40	45	50	55
HOURS	1341	1342	1391	1346	1354	1355	1363	1374	1378	1387	1387	1387
00	1389	1408	1422	1428	1430	1404	1404	1415	1411	1411	1411	1411
01	1411	1419	1417	1422	1428	1437	1436	1445	1449	1449	1449	1449
02	1411	1458	1462	1462	1462	1460	1460	1462	1462	1462	1462	1462
03	1456	1456	1454	1454	1454	1455	1456	1457	1457	1457	1457	1457
04	1456	1456	1456	1456	1456	1456	1456	1456	1456	1456	1456	1456
05	1456	1456	1456	1456	1456	1456	1456	1456	1456	1456	1456	1456
06	1449	1449	1452	1452	1452	1452	1452	1452	1452	1452	1452	1452
07	1488	1564	1568	1579	1583	1568	1568	1571	1571	1571	1571	1571
08	1665	1885	1883	1944	1948	1885	1885	1948	1948	1948	1948	1948
09	1844	1944	1944	1944	1944	1944	1944	1944	1944	1944	1944	1944
10	1952	1952	1952	1952	1952	1952	1952	1952	1952	1952	1952	1952
11	1949	1949	1949	1949	1949	1949	1949	1949	1949	1949	1949	1949
12	1949	1949	1949	1949	1949	1949	1949	1949	1949	1949	1949	1949
13	1949	1949	1949	1949	1949	1949	1949	1949	1949	1949	1949	1949
14	2114	2120	2120	2120	2120	2020	2020	2024	2024	2024	2024	2024
15	2313	2314	2314	2314	2314	2314	2314	2314	2314	2314	2314	2314
16	2696	2707	2707	2707	2707	2707	2707	2711	2711	2711	2711	2711
17	2752	2767	2767	2767	2767	2786	2786	2790	2790	2790	2790	2790
18	2809	2805	2805	2805	2805	2809	2809	2813	2813	2813	2813	2813
19	2794	2794	2794	2794	2794	2807	2807	2822	2822	2822	2822	2822
20	2801	2805	2805	2805	2805	2786	2786	2779	2779	2779	2779	2779
21	2700	2564	2564	2564	2564	2698	2698	2692	2692	2692	2692	2692
22	2575	2575	2575	2575	2575	2478	2478	2494	2494	2494	2494	2494
23	2006	1866	1866	1866	1866	1788	1788	1788	1788	1788	1788	1788

RRS DISCOVERY CRUISE NO 47  
DEPTH IN CORRECTED METRES

DEPTH	00	05	10	15	20	25	30	35	40	45	50	55
HOURS	1132	1184*07	1143	916*17	1050	1095	1024	1045*36	887	708*44	876*51	1088
00	1158	1486	1465	1421	1121	1121	1095	1210	1274	1339	1367	1292*53
01	1586	1586	1586	1542	1436	1436	1530	1530	1530	1530	1530	1564
02	1586	1493	1480	1562	1524	1524	1536	1545	1545	1545	1545	1586
03	1493	1395	1395	1378	1367	1367	1357	1497	1497	1497	1497	1422
04	1306	1326	1326	1326	1328	1328	1329	1341	1341	1341	1341	1324
05	1389	1413	1413	1449	1478	1460	1337	1337	1337	1337	1337	1370
06	1402	1023	1023	985	918	918	1290	1290	1290	1290	1290	1099
07	1062	1062	1062	697	675	630	600	552	552	552	552	751
08	1727	459	447	446	438	438	440	446	446	446	446	477
09	466	485	483	487	487	487	490	492	492	492	492	485
10	477	470	457	449	449	449	421	421	421	421	421	391
11	388	369	364	362	354	354	347	347	347	347	347	313
12	304	293	287	283	278	278	272	272	272	272	272	253
13	260	250	246	246	222	222	222	222	222	222	222	286
14	115	115	115	115	115	115	115	115	115	115	115	115
15	115	115	115	115	115	115	115	115	115	115	115	115
16	186	186	186	186	186	186	186	186	186	186	186	186
17	117	117	117	117	117	117	117	117	117	117	117	117
18	119	119	119	119	119	119	119	119	119	119	119	119
19	211	211	211	211	211	211	211	211	211	211	211	211
20	211	211	211	211	211	211	211	211	211	211	211	211
21	223	223	223	223	223	223	223	223	223	223	223	223

D 35

DATE	26- 6-1972 ( DAY NO 178 )		27- 6-1972	( DAY NO 179 )
HOURS	1378	1411	1404	1404
01	1408	1408	1449	1449
02	1452	1452	1460	1460
03	1458	1458	1467	1467
04	1445	1445	1447	1447
05	1445	1445	1474	1474
06	1445	1445	1475	1475
07	1445	1445	1475	1475
08	1445	1445	1475	1475
09	1445	1445	1475	1475
10	1445	1445	1475	1475
11	1445	1445	1475	1475
12	1445	1445	1475	1475
13	1445	1445	1475	1475
14	1445	1445	1475	1475
15	1445	1445	1475	1475
16	1445	1445	1475	1475
17	1445	1445	1475	1475
18	1445	1445	1475	1475
19	1445	1445	1475	1475
20	1445	1445	1475	1475
21	1445	1445	1475	1475
22	1445	1445	1475	1475
23	1445	1445	1475	1475

DATE	26- 6-1972 ( DAY NO 178 )		27- 6-1972	( DAY NO 179 )
HOURS	1378	1411	1404	1404
01	1408	1408	1449	1449
02	1452	1452	1460	1460
03	1458	1458	1467	1467
04	1445	1445	1474	1474
05	1445	1445	1474	1474
06	1445	1445	1474	1474
07	1445	1445	1474	1474
08	1445	1445	1474	1474
09	1445	1445	1474	1474
10	1445	1445	1474	1474
11	1445	1445	1474	1474
12	1445	1445	1474	1474
13	1445	1445	1474	1474
14	1445	1445	1474	1474
15	1445	1445	1474	1474
16	1445	1445	1474	1474
17	1445	1445	1474	1474
18	1445	1445	1474	1474
19	1445	1445	1474	1474
20	1445	1445	1474	1474
21	1445	1445	1474	1474
22	1445	1445	1474	1474
23	1445	1445	1474	1474



R.S. DISCOVERY CRUISE NO 47  
DEPTH IN CORRECTED METRES

HOURS	00	05	10	15	20	25	30	35	40	45	50	55
00	205	205	205	205	205	207	209	209	209	209	209	209
01	209	209	216	216	216	218	220	220	224	229	235	239
02	209	209	216	216	216	218	220	220	224	229	235	239
03	248	256	256	256	256	256	256	256	256	256	256	256
04	533	1148	1148	1148	1148	1148	1148	1148	1148	1148	1148	1148
05	1179	1179	1179	1179	1179	1179	1179	1179	1179	1179	1179	1179
06	1173	2348	2348	2348	2348	2348	2348	2348	2348	2348	2348	2348
07	2330	2487	2487	2487	2487	2487	2487	2487	2487	2487	2487	2487
08	2480	2585	2585	2585	2585	2585	2585	2585	2585	2585	2585	2585
09	2562	2606	2606	2606	2606	2606	2606	2606	2606	2606	2606	2606
10	2618	1837	1837	1837	1837	1837	1837	1837	1837	1837	1837	1837
11	1240	2363	2363	2363	2363	2363	2363	2363	2363	2363	2363	2363
12	1813	2459	2459	2459	2459	2459	2459	2459	2459	2459	2459	2459
13	1818	2566	2566	2566	2566	2566	2566	2566	2566	2566	2566	2566
14	1818	2754	2754	2754	2754	2754	2754	2754	2754	2754	2754	2754
15	1818	2750	2750	2750	2750	2750	2750	2750	2750	2750	2750	2750
16	1818	2750	2750	2750	2750	2750	2750	2750	2750	2750	2750	2750
17	1818	2750	2750	2750	2750	2750	2750	2750	2750	2750	2750	2750
18	1818	2750	2750	2750	2750	2750	2750	2750	2750	2750	2750	2750
19	1818	2750	2750	2750	2750	2750	2750	2750	2750	2750	2750	2750
20	1818	2864	2864	2864	2864	2864	2864	2864	2864	2864	2864	2864
21	2869	2869	2869	2869	2869	2869	2869	2869	2869	2869	2869	2869
22	2899	2901	2901	2901	2901	2901	2901	2901	2901	2901	2901	2901
23	2920	2922	2922	2922	2922	2922	2922	2922	2922	2922	2922	2922

R.S. DISCOVERY CRUISE NO 47  
DEPTH IN CORRECTED METRES

HOURS	00	05	10	15	20	25	30	35	40	45	50	55
00	2864	2864	2792	2792	2779	2779	2779	2779	2779	2779	2779	2779
01	2105	1370	1305	1257	1257	1257	1257	1257	1257	1257	1257	1257
02	1370	3494	3494	3254	3254	3254	3254	3254	3254	3254	3254	3254
03	569	336	329	207	203	164	145	145	145	145	145	145
04	05	276	211	169	169	150	154	154	154	154	154	154
05	06	143	143	143	143	143	143	143	143	143	143	143
06	07	143	143	143	143	143	143	143	143	143	143	143
07	08	143	143	143	143	143	143	143	143	143	143	143
08	09	143	143	143	143	143	143	143	143	143	143	143
09	10	143	143	143	143	143	143	143	143	143	143	143
10	11	143	143	143	143	143	143	143	143	143	143	143
11	12	143	143	143	143	143	143	143	143	143	143	143
12	13	143	143	143	143	143	143	143	143	143	143	143
13	14	143	143	143	143	143	143	143	143	143	143	143
14	15	143	143	143	143	143	143	143	143	143	143	143
15	16	143	143	143	143	143	143	143	143	143	143	143
16	17	143	143	143	143	143	143	143	143	143	143	143
17	18	143	143	143	143	143	143	143	143	143	143	143
18	19	143	143	143	143	143	143	143	143	143	143	143
19	20	143	143	143	143	143	143	143	143	143	143	143
20	21	143	143	143	143	143	143	143	143	143	143	143
21	22	143	143	143	143	143	143	143	143	143	143	143
22	23	143	143	143	143	143	143	143	143	143	143	143

D 37

DATE	30- 6-1977 (DAY NO 182)	31- 6-1977 (DAY NO 183)	DATE	1- 7-1972 (DAY NO 183)	2- 7-1972 (DAY NO 184)
00	209	209	00	209	209
01	1693	1693	01	1693	1693
02	1694	1694	02	1694	1694
03	1281	1281	03	1281	1281
04	1281	1281	04	1281	1281
05	1281	1281	05	1281	1281
06	1281	1281	06	1281	1281
07	1281	1281	07	1281	1281
08	1281	1281	08	1281	1281
09	1281	1281	09	1281	1281
10	1281	1281	10	1281	1281
11	1281	1281	11	1281	1281
12	1281	1281	12	1281	1281
13	1281	1281	13	1281	1281
14	1281	1281	14	1281	1281
15	1281	1281	15	1281	1281
16	1281	1281	16	1281	1281
17	1281	1281	17	1281	1281
18	1281	1281	18	1281	1281
19	1281	1281	19	1281	1281
20	1281	1281	20	1281	1281
21	1281	1281	21	1281	1281
22	1281	1281	22	1281	1281
23	1281	1281	23	1281	1281

DATE	30- 6-1977 (DAY NO 182)	31- 6-1977 (DAY NO 183)	DATE	1- 7-1972 (DAY NO 183)	2- 7-1972 (DAY NO 184)
00	209	209	00	209	209
01	1693	1693	01	1693	1693
02	1694	1694	02	1694	1694
03	1281	1281	03	1281	1281
04	1281	1281	04	1281	1281
05	1281	1281	05	1281	1281
06	1281	1281	06	1281	1281
07	1281	1281	07	1281	1281
08	1281	1281	08	1281	1281
09	1281	1281	09	1281	1281
10	1281	1281	10	1281	1281
11	1281	1281	11	1281	1281
12	1281	1281	12	1281	1281
13	1281	1281	13	1281	1281
14	1281	1281	14	1281	1281
15	1281	1281	15	1281	1281
16	1281	1281	16	1281	1281
17	1281	1281	17	1281	1281
18	1281	1281	18	1281	1281
19	1281	1281	19	1281	1281
20	1281	1281	20	1281	1281
21	1281	1281	21	1281	1281
22	1281	1281	22	1281	1281
23	1281	1281	23	1281	1281

DATE	30- 6-1977 (DAY NO 182)	31- 6-1977 (DAY NO 183)	DATE	1- 7-1972 (DAY NO 183)	2- 7-1972 (DAY NO 184)
00	209	209	00	209	209
01	1693	1693	01	1693	1693
02	1694	1694	02	1694	1694
03	1281	1281	03	1281	1281
04	1281	1281	04	1281	1281
05	1281	1281	05	1281	1281
06	1281	1281	06	1281	1281
07	1281	1281	07	1281	1281
08	1281	1281	08	1281	1281
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12	1281	1281	12	1281	1281
13	1281	1281	13	1281	1281
14	1281	1281	14	1281	1281
15	1281	1281	15	1281	1281
16	1281	1281	16	1281	1281
17	1281	1281	17	1281	1281
18	1281	1281	18	1281	1281
19	1281	1281	19	1281	1281
20	1281	12			

RRS DISCOVERY CRUISE NO 47  
DEPTH IN CORRECTED METRES

DATE	2- 7-1972 ( DAY NO 184 )
HOURS	MINUTES
00	05
001	103
002	101
003	100
004	96
005	103
006	100
007	90
008	86
009	85
010	83
011	85
012	83
013	87
014	94
015	109
016	109
017	96
018	98
019	98
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021	92
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## SECTION E

### Station Position Tables

<u>Key</u>	G	Grab
SMI		Smith and McIntyre grab
S		Shipek grab
RC		Rock corer
SC		Stereo camera
Drill/UTV		IGS Minidrill/Underwater Television/Videotape system
A		Anchor

TABLE I

#### Cruise 47. Station Position List

Station No.	Type	Equipment Used	Date	Time Z/Day No. From To	Lat. N Long. W to Lat. N Long. W	D/B /NAVAD ID Used	Depth Range	Comments				
						UCF	CF	CM				
7914	G	SMI	16.6.72	1308/168	1313/168	56°21.55'N 15°08.41'W	I	101	104	192	1 small pebble.	
7915	A	-	16.6.72	1400/168	1454/168	56°21.63'N 15°09.00'W	I	97-112	100-115	184-212	Station abandoned, anchors dragged in heavy swell and wind conditions.	
7916	RC		23.6.72	1955/175	2120/175	56°23.29'N 15°13.20'W	Loran-C/ Satellite	104-103	106-102	193-194	A B C	
7917	G	SMI S	23.6.72	2028/175	2100/175	56°23.34'N 15°13.14'W	53°23.26'N 15°13.02'W	"	103	105	192	A B C
7918	G	S	23.6.72	2145/175	2204/175	56°21.85'N 15°13.77'W	56°21.83'N 15°13.69'W	"	92- 94	94- 96	172-175	A B C
7919	RC		23.6.72	2204/175	2235/175	56°21.83'N 15°13.69'W	56°21.8'N 15°13.47'W	"	92- 96	94- 98	172-179	A B C
7920	G	S	23.6.72	2256/175	2306/175	56°22.09'N 15°11.92'W	56°22.13'N 15°11.36'W	"	92- 98	94-100	172-183	A B C

Station No.	Type	Equipment Used	Date	Time Z/Day No. From To	Lat. N to Long. W	Lat. N to Long. W	D/B /NAVID Used	Depth Range CM	Comments
							UCF	CF	
7921	RC		23.6.72	2307/175	2320/175	56°22.13'N 15°11.36'W	Loran-C/ Satellite	93	Sand and gravel.
7922	G	S	24.6.72	0004/176	0015/176	56°19.29'N 15°10.50'W	"	97-102	A No sample. B No sample.
7923	RC		24.6.72	0017/176	0032/176	56°19.37'N 15°10.32'W	"	99-104	Coarse sand and mud.
7924	G	S	24.6.72	0051/176	0100/176	56°18.37'N 15°12.52'W	"	103	182-190
						56°18.05'N 15°12.9'W	"	105	192
7925	RC		24.6.72	0104/176	0156/176	56°18.09'N 15°12.95'W	"	89	Core lost. Rock and sediment.
7926	G	S	24.6.72	0215/176	0229/176	56°17.4'N 15°13.11'W	"	87	159 A No sample. B A few sand grains
7927	RC		24.6.72	0231/176	0238/176	56°17.5'N 15°13.05'W	"	88	160 Pebble and sediment.
7928	G		24.6.72	0258/176	0302/176	56°16.77'N 15°12.41'W	"	74	138 No sample.
7929	RC		24.6.72	0305/176	0313/176	56°16.8'N 15°12.49'W	"	75	134-136 A No core. B Rock (metamorphic & fish head).
7930	G	S	24.6.72	0340/176	0350/176	56°16.69'N 15°13.07'W	"	88	164 A No sample. B No sample.
						56°16.6'N 15°12.5'W	"	90	

Station No.	Type	Equipment Used	Date	Time Z/Day	No. From To	Lat. N Long. W	Lat. N to Long. W	D/B /NAV AID Used	Depth UCF	Range CF	CM	Comments
7931	RC		24.6.72	0355/176	0417/176	56°16.53'N 15°12.53'W	56°16.27'N 15°12.47'W	Loran-C/ Satellite	82- 88	84- 90	153-164	A No core. B No core. C Rocks (metamorphic).
7932	G	S	24.6.72	0432/176	0440/176	56°14.91'N 15°12.21'W	56°14.91'N 15°12.21'W	"	82	84	153	No sample.
7933	RC		24.6.72	0444/176	0449/176	56°14.76'N 15°12.16'W	56°14.76'N 15°12.16'W	"	82	84	153	Hard blocky material. Metamorphic fragments.
7934	G	S	24.6.72	0525/176	0530/176	56°13.62'N 15°15.8'W	56°13.6'N 15°15.8'W	"	96	98	179	No sample.
7935	RC		24.6.72	0533/176	0550/176	56°13.6'N 15°15.8'W	56°13.5'N 15°15.8'W	"	98-101	100-103	183-188	A No sample. B Shelly green-black sand.
7936	G	S	24.6.72	0615/176	0629/176	56°15.6'N 15°14.6'W	56°15.6'N 15°14.5'W	"	99	101	185	A Small volume of fine sand. B No sample. C Small volume of fine sand.
7937	RC		24.6.72	0639/176	0655/176	56°15.6'N 15°14.4'W	56°15.6'N 15°14.3'W	"	98- 99	100-101	183-185	A Compact white ooze core (3") & green brown sediment. B Semi-consolidated coarse iron-stained white ooze.

Station No.	Type	Equipment Used	Date	Time Z/Day From To	Lat. N Long. W	Lat. N to Lat. N Long. W	D/B /NAVAD Used	UCF	CF	Depth Range CM	Comments	
7938	G	S	24.6.72	0726/176	0734/176	56°17.4'N 15°14.3'W	56°17.38'N 15°14.4'W	Loran-C/ Satellite	92	94	172	No sample.
7939	RC		24.6.72	0738/176	0752/176	56°17.4'N 15°14.4'W	56°17.3'N 15°14.4'W	"	91	93	170	A No core. B No core.
7940	G	S	24.6.72	0828/176	0848/176	56°19.4'N 15°15.6'W	56°19.3'N 15°15.6'W	"	105	107	196	A Sample. B Sample.
7941	RC		24.6.72	0857/176	0924/176	56°19.2'N 15°15.5'W	56°19.2'N 15°15.8'W	"	107	109	200-201	A No core. B No core.
7942	G	S	24.6.72	0953/176	1020/176	56°20.3'N 15°13.1'W	56°20.6'N 15°13.2'W	"	99	101	185	A No sample. B No sample. C
7943	RC		24.6.72	1020/176	1045/176	56°20.6'N 15°13.2'W	56°20.6'N 15°12.75'W	"	92-102	94-104	172-190	A No core. B No core.
7944	G	S	24.6.72	1124/176	1143/176	56°23.2'N 15°14.9'W	56°23.2'N 15°14.9'W	"	110	112	205	A No sample. B No sample. C
7945	RC		24.6.72	1151/176	1210/176	56°23.28'N 15°14.68'W	56°23.3'N 15°14.4'W	"	112-115	114-117	209-215	A No core. B No core.
7946	G	S	24.6.72	1310/176	1336/176	56°22.35'N 15°11.9'W	56°22.4'N 15°12.45'W	"	94	96	175	A Medium carbonate sand. B Carbonate sand & rock fragments.

Station No.	Type	Equipment Used	Date	Time Z/Day No. From To	Lat. N Long. W	Lat. N to Long. W	D/B NAVAJD Used	Depth Range CM	Comments	
							UCF	CF		
7947	RC		24.6.72	1340/176	1357/176	56°22'4"N 15°12.37'W	Loran-C/ Satellite	92	94 172	Metamorphic rocks.
7948A	G	SMI	27.6.72	1540/179	1545/179	56°23'2"N 15°11.6'W	"	98	100 183	A Coarse sand & dark pebbles & epifauna.
7948B	G	SMI	27.6.72	1645/179	1700/179	"	"	106	108 198	B No sample.
7948C	G	SMI	27.6.72	1715/179	1720/179	"	"	106	108 198	C No sample.
7948D	G	SMI	27.6.72	1730/179	1742/179	"	"	105	107 196	D Medium coarse carbonate sand & 1 large echinoid.
7948E	G	SMI	27.6.72	1755/179	1805/179	"	"	105	107 196	E Coarse gravel & carbonate.
7948F	G	SMI	27.6.72	2110/179	2125/179	"	"	104	106 194	F Pebbles & rich epifauna.
7948G	G	SMI	27.6.72	2201/179	2215/179	"	"	104	106 194	G Coarse sand & pebbles.
7949A	Drill/ UTV		27.6.72	1830/179	2018/179	"	"	104	106 194	A Sediment bottom. 2 pebbles recovered.
7949B	Drill/ UTV		27.6.72	2255/179	2325/179	"	"	104	106 194	B Lost drill barrel.



Station No.	Type	Equipment Used	Date	Time Z/Day No. From To	Lat. N Long. W	Lat. N Long. W	D/B /NAV AID Used	UCF	CF	Depth Range CM	Comments
7955A	Drill/ UTV		28.6.72	1013/180	56°16.5'N 15°91.80'W		Loran-C/ Satellite	79	81	147	A 10 cm of plagioclaste-garnet granulite.
7955B	Drill/ UTV		28.6.72	1442/180	1500/180	"	"	84	86	157	B) Electrical ) failures - ) drilling C) aborted.
7955C	Drill/ UTV		28.6.72	1614/180	1638/180	"	"	84	86	157	
7955D	Drill/ UTV		28.6.72	1912/180	2027/180	"	"	82	84	153	D Approx. 40 cm penetration into rock. Loss of barrel & core during retraction.
7960A	G	SMI	29.6.72	0435/181	0450/181	56°57.0'N 14°42.8'W	"	93	95	173	A 1 subangular metamorphic rock and epifauna.
7960B	G	SMI	29.6.72	0455/181	0500/181	"	"	93	95	173	B Fine sand and gravel.
7961A	G	SMI	29.6.72	0605/181	0610/181	57°01.0'N 14°52.7'W	"	140	143	261	A No sample.
7961B	G	SMI	29.6.72	0620/181	0629/181	"	"	140	143	261	B Stiff green carbonate sand.
7962A	G	SMI	29.6.72	0730/181	0745/181	57°06.9'N 14°49.2'W	"	162	165	302	A No sample.

Station No.	Type	Equipment Used	Date	Time Z/Day No. From To	Lat. N Long. W	Lat. N Long. W to Lat. N Long. W	D/B NAVID Used	Depth Range CM	Comments	
								CF		
7962B	G	SMI	29.6.72	0747/181	0755/181	57°06.9'N 14°49.2'W	Loran-C/ Satellite	162	302	B Stiff green carbonate sand.
7963A	G	SMI	29.6.72	0850/181	0900/181	57°04.9'N 14°37.8'W	"	102	190	A Sand and rock fragments.
7963B	G	SMI	29.6.72	0903/181	0908/181	"	"	102	190	B Small sand sample.
7956A	SMI	SMI	28.6.72	1115/180	1125/180	56°16.5'N 15°11.80'W	"	79	81	A No sample.
7956B	SMI	SMI	28.6.72	1130/180	1143/180	"	"	79	81	B 1 jellyfish.
7956C	SMI	SMI	28.6.72	1710/180	1720/180	"	"	79	81	C Carbonate sand & shells.
7956D	SMI	SMI	28.6.72	1734/180	1742/180	"	"	79	81	D Bryozoa fragments and sponge.
7957	SC	SMI	28.6.72	1300/180	1423/180	"	"	80	82	38 stereopairs.
7958A	G	SMI	29.6.72	0012/181	0020/181	56°31'N 15°02'W	"	108	110	A Medium carbonate sand.
7958B	G	SMI	29.6.72	0032/181	0040/181	"	"	110	112	B Medium carbonate sand & transparent animal.

Station No.	Type	Equipment Used	Date	Time Z/Day No. From To	Lat. N to Long. W	D/B /NAV AID Used	Depth Range UCF CF CM	Comments
7959A	G	SMI	29.6.72	0210/181	56°41.5'N 14°51.5'W	Loran-C/ Satellite	101 103	188 A Coarse sand & small pebbles.
7959B	G	SMI	29.6.72	0225/181	0232/181 "	" " " "	101 103	188 B 3 sub-angular metamorphic rocks with epifauna.
7964	Drill/ UTV		29.6.72	1229/181	1333/181 57°04.27'N 14°31.95'W	" " " "	82- 83 149-151	17 cm of micro- perthite granulite.