

*Report and Index of
Underway Marine Geophysical Data*

SOJOURN EXPEDITION

LEG 2

(SOJN02MV)

R/V MELVILLE

(Issued March 1997)

Ports:

Papeete, Tahiti (28 October 1996)

to

Valparaiso, Chile (10 December 1996)

Chief Scientist:

Rachel Haymon (Univ. of Calif. Santa Barbara)

Resident Marine Technician - Gene Pillard

Computer Technician - Todd Porteous

No Seabeam/UW Processor on board

Post-Cruise Processing and Report Preparation by the
Geological Data Center, Scripps Institution of Oceanography
La Jolla, California 92093-0223

Data Collection and Processing Funded by
NSF OCE94-00707

NOTE: *This is an index of underway geophysical data edited and processed after the completion of the cruise leg and is intended primarily for informal use within the institution. This document is not to be reproduced or distributed outside Scripps without prior approval of the chief scientist or the Geological Data Center, Scripps Institution of Oceanography, La Jolla, California 92093-0223*

GDC CRUISE I.D.# 269

**REPORT AND INDEX OF NAVIGATION
AND UNDERWAY GEOPHYSICAL DATA**

Processed by the Geological Data Center
Scripps Institution of Oceanography

Contents:

Index Chart - gives track of cruise leg, dates, ports, and mileage of each type of data collected.

Track Charts - annotated with dates and hour ticks.

Profiles - depth, magnetic and gravity free air anomaly vs. distance. (Sections of track with seismic reflection data have a wide black line along the bottom of the profile.)

Sample Index - list of begin/end times and positions of all underway records as well as samples and measurements from other disciplines if collected on the cruise leg.

NOTE: One or more of the underway data types may not be collected on a given cruise leg.

For information on the availability and reproduction costs of data in the following forms, contact S.M. Smith, Curator, Geological Data Center, Scripps Institution of Oceanography, La Jolla, California 92093-0223.

Phone: (619)534-2752, FAX: (619)534-6500, Internet email:
ssmith@ucsd.edu

1. Files on Exabyte or DAT:
 - a) Separate time series ASCII files of navigation, single beam depth, gravity and magnetics.
 - b) These same data in a merged ASCII file in the MGD77 Exchange Format.
 - c) SeaBeam depth data (binary, Sun byte order) in SIO Swath Bathymetry Format. (*)
 - d) SeaBeam Sidescan data. (*)

2. Microfilm (35 mm flowfilm) or hard copies of:
 - a) Underway watch log book
 - b) SeaBeam vertical beam profile/Sidescan records.
 - c) Echosounder records - 3.5 kHz frequency.
 - d) Magnetometer records.
 - e) Seismic reflection profiler records.

3. Navigation listing with times and positions of fixes and course and speed changes.

4. Plots:

- a) Copies of archived track plots.
- b) Copies of archived SeaBeam contour plots.
- c) Custom plots in Mercator projection:
 - 1) Track plots.
 - 2) SeaBeam depth contour plots.
 - 3) Depth, magnetic or gravity values printed or profiled along track.

(*) R/V Revelle Seabeam 2100 data available in SB2100 vendor format only, as of October 1996

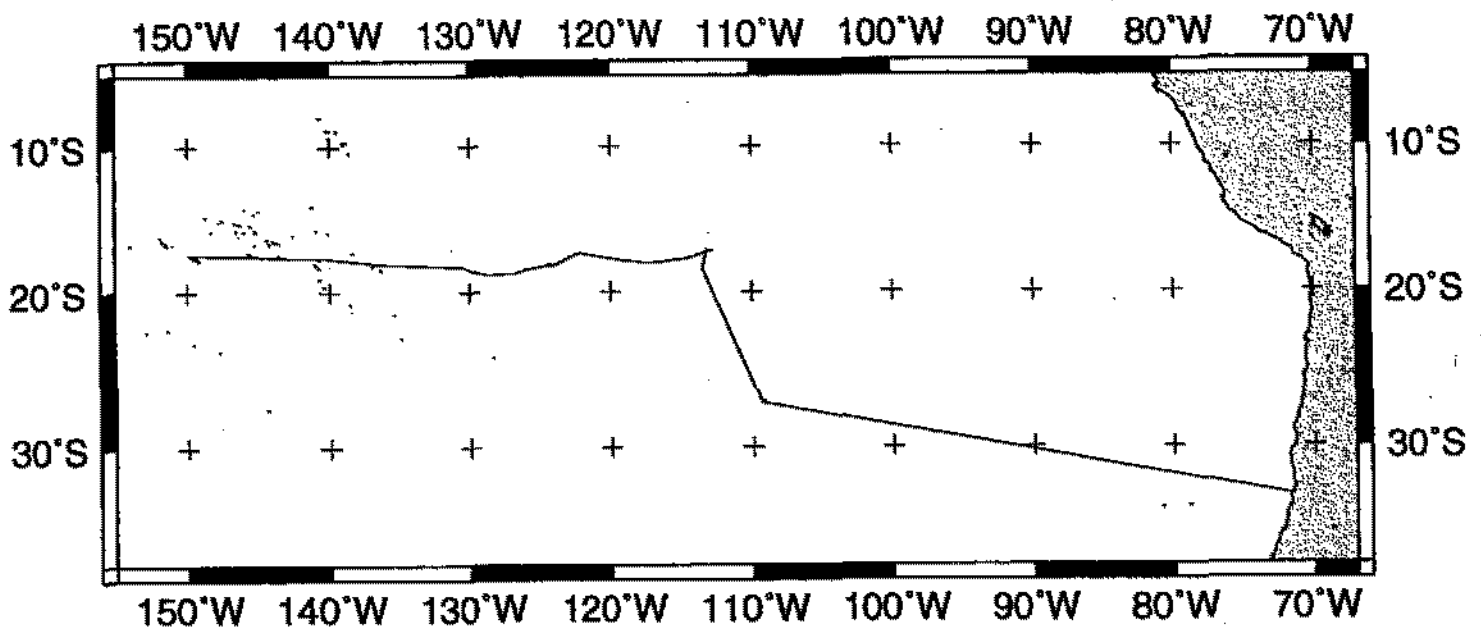
rev10/96

SIO SEABEAM 2000 DATA INFORMATION

The following items are available, subject to the approval of the cruise leg chief scientist:

- 1) *Hardcopy of realtime contour swath records and records with vertical beam and sidescan grayscale display are available for inspection at the data center.*
- 2) Microfilm (35 mm flowfilm) of vertical beam/sidescan records.
- 3) SeaBeam merged tapes - SeaBeam data merged with GPS-based navigation. *(Navigation is edited to the extent that DR courses and speeds are edited and poor fixes are removed after inspection of speeds and drift vectors between fix pairs. No editing is done on the basis of adjusting to overlapping SeaBeam swaths.)*
- 4) Archive contour plots - 8 inches/degree chart scale, with contour interval nominally 50m, are generated for all transit lines. Some survey areas are plotted at appropriate scales as well. Available for inspection at data center.
- 5) Custom generated plots of SeaBeam swaths on Mercator projection in four colors at variable plot scales and contour intervals. There are provisions to adjust positions of individual track lines and to edit out beams (bad data or overlapping data on inside of turns.)

Revised September 1995



SOJOURN EXPEDITION LEG 2

CHIEF SCIENTIST: Rachael Haymon, Univ. of Cal. Santa Barbara

PORTS: Papeete, Tahiti - Valparaiso, Chile

DATES: 28 October - 10 December 1996

SHIP: R/V Melville

TOTAL MILEAGE OF UNDERWAY DATA COLLECTED

Cruise - 5669 miles

Magnetics - 1146 miles

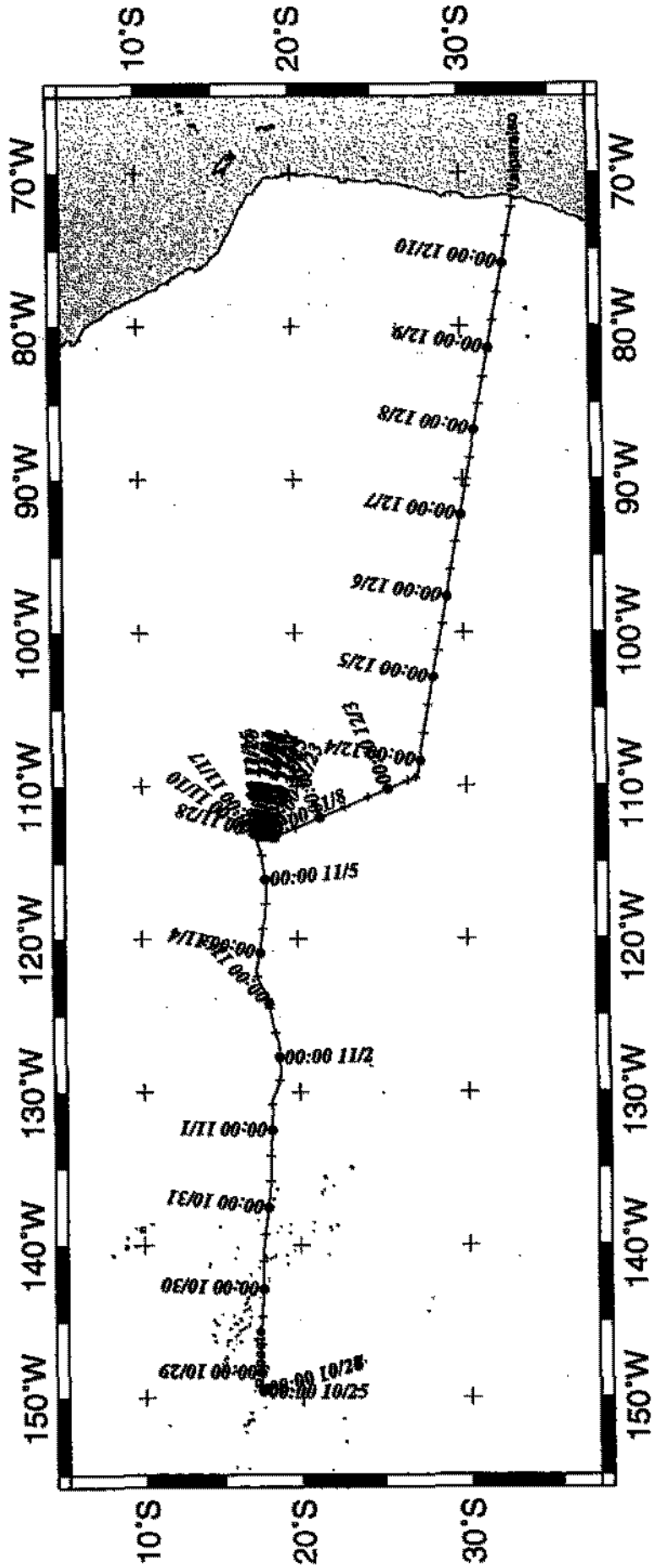
Bathymetry - 1445 miles

Seismic Reflection - none collected

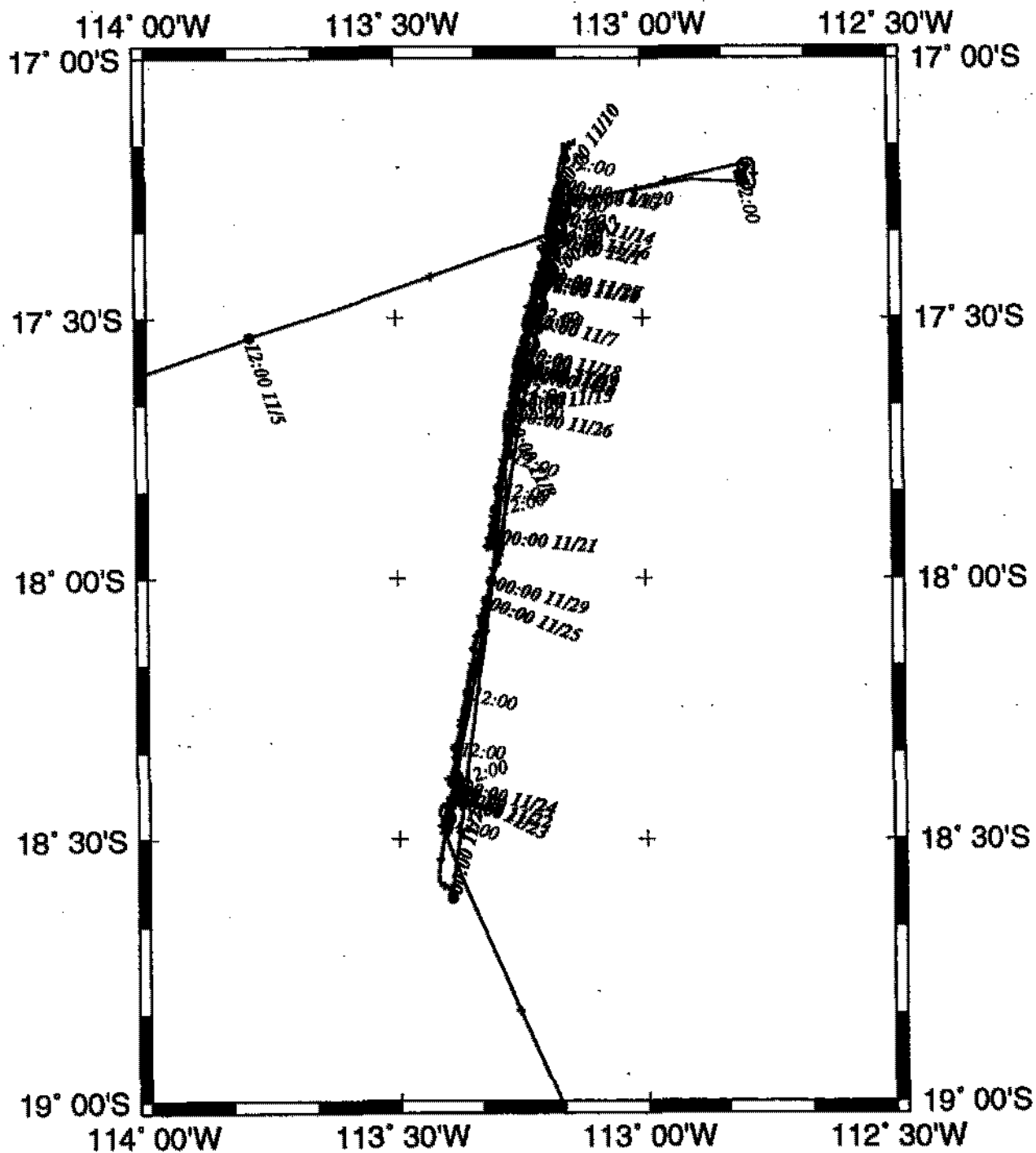
Sea Beam - 1445 miles

Gravity - 5189 miles

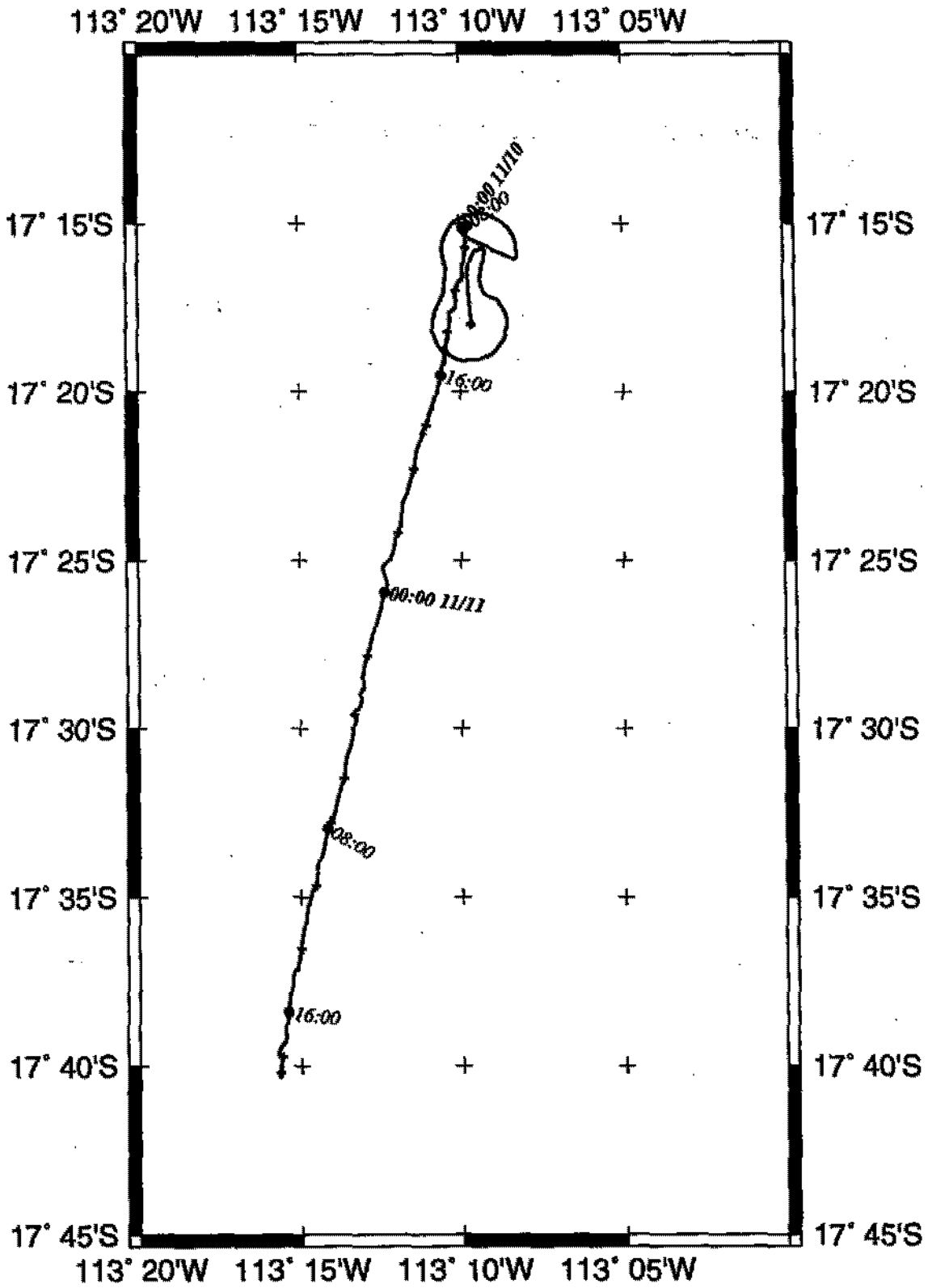
RAV Melville Sojourn Expedition Leg 02



SOJN02MV Survey A

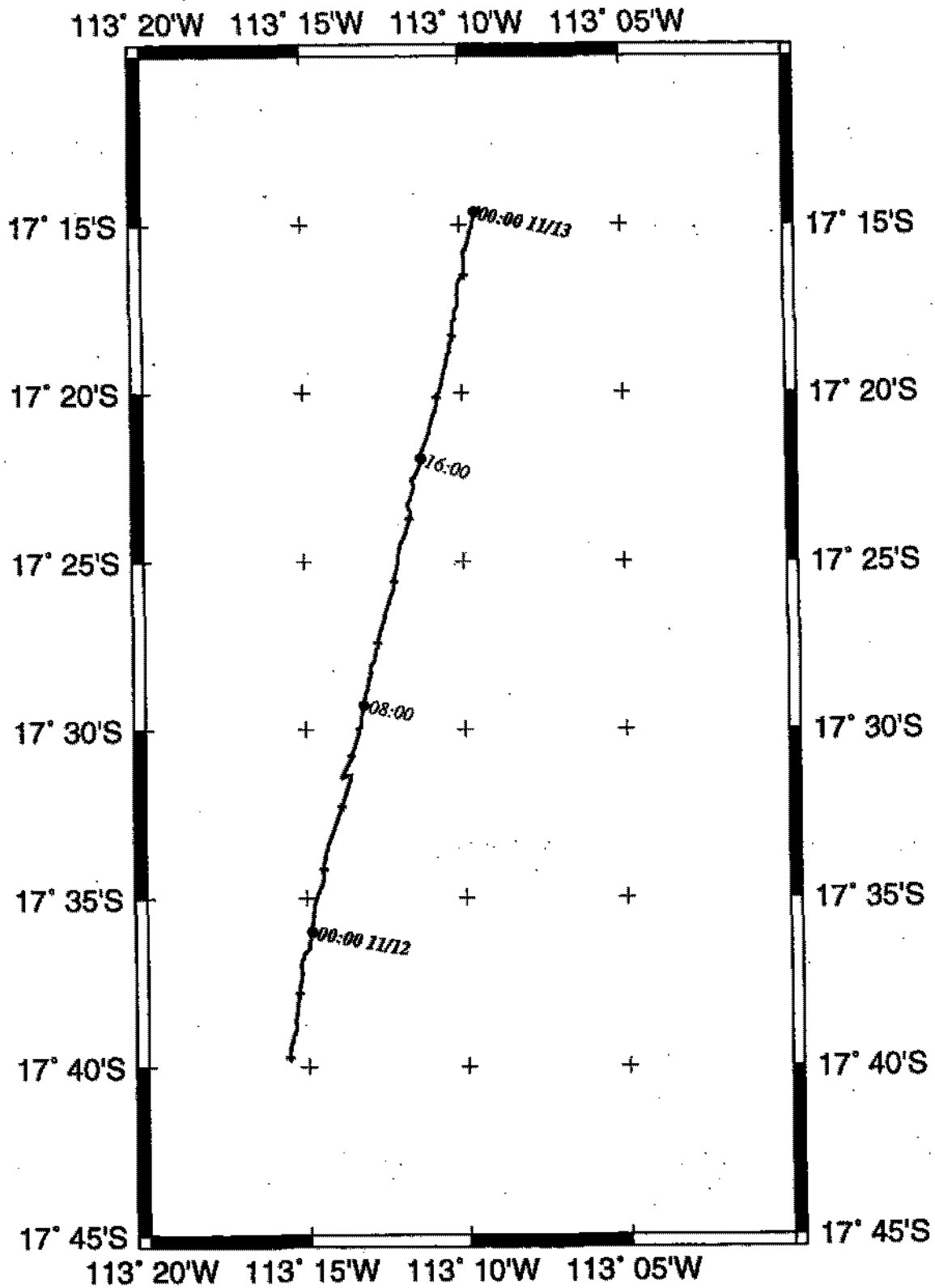


SOJN02MV Survey.a

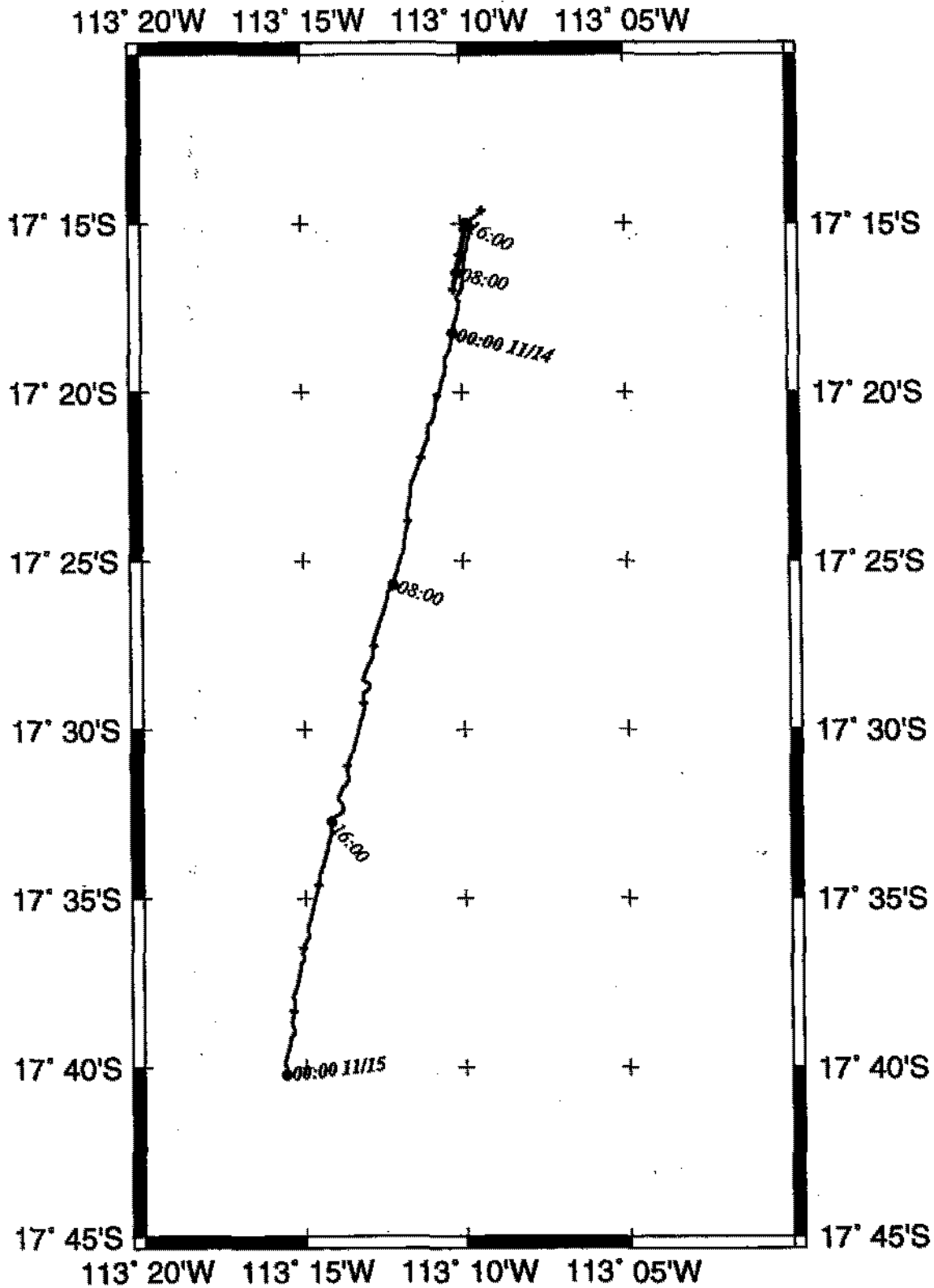


GMT Feb 20 15:54

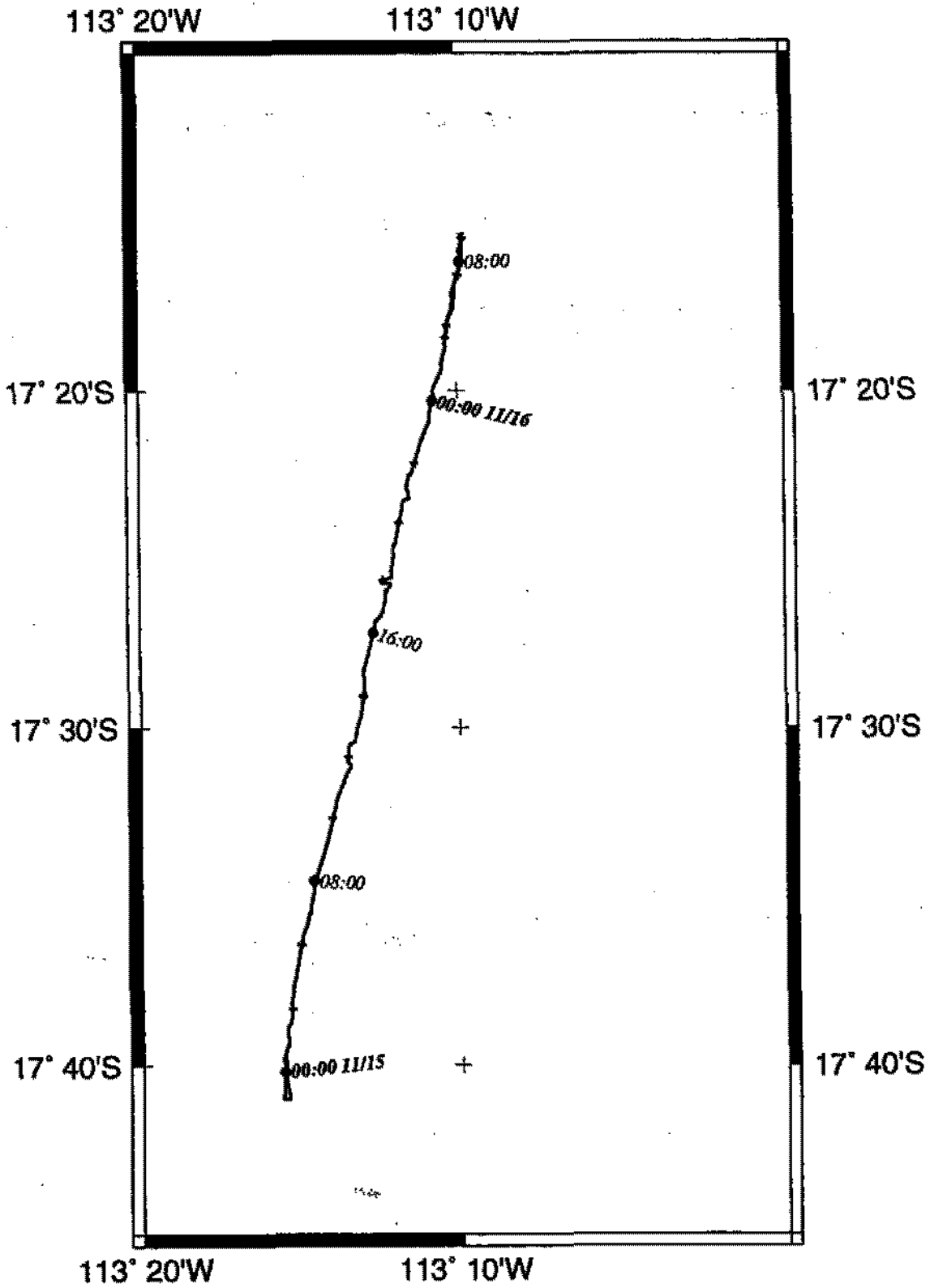
SOJN02MV Survey.b



SOJN02MV Survey.c

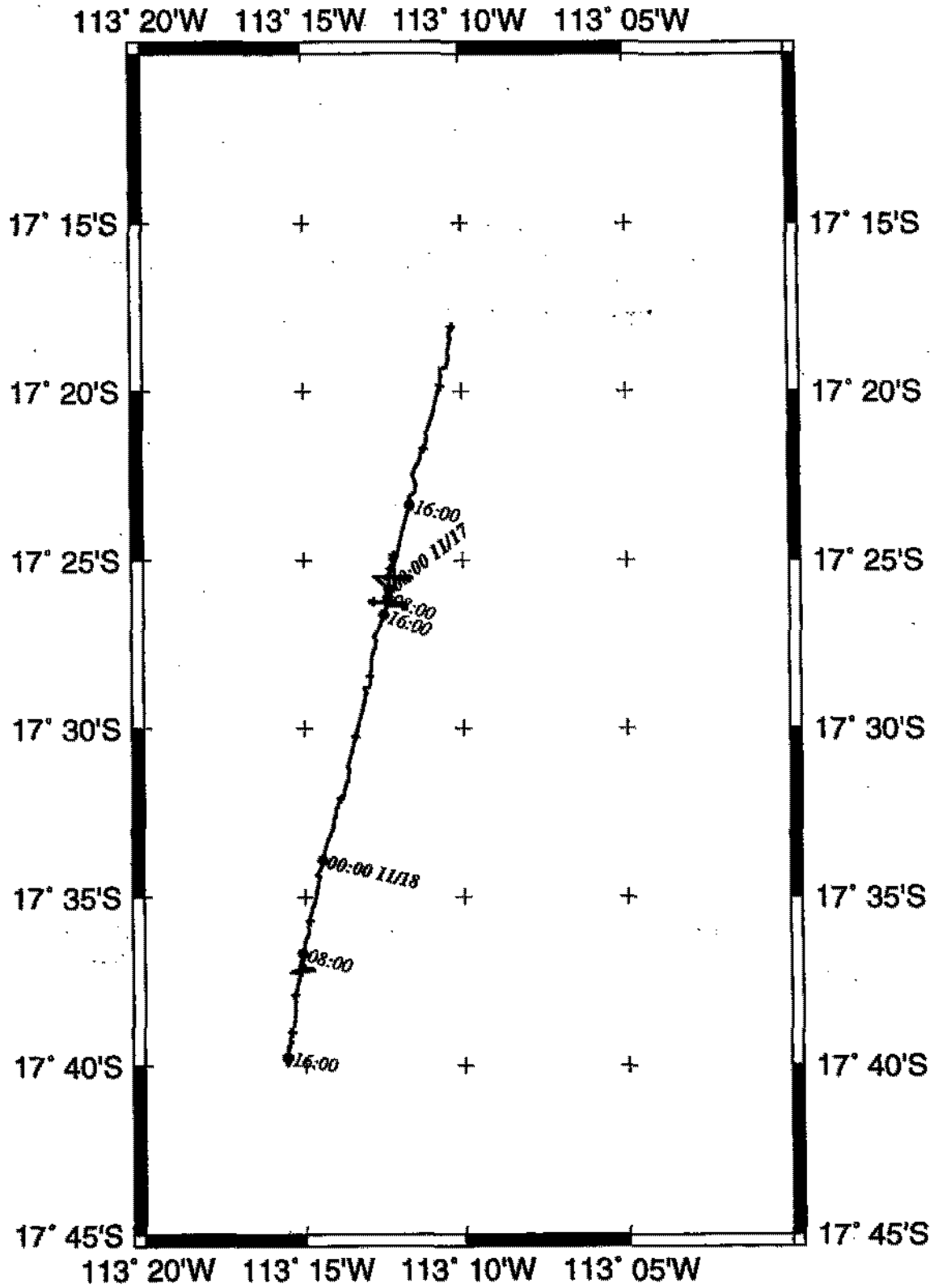


SOJN02MV Survey.d



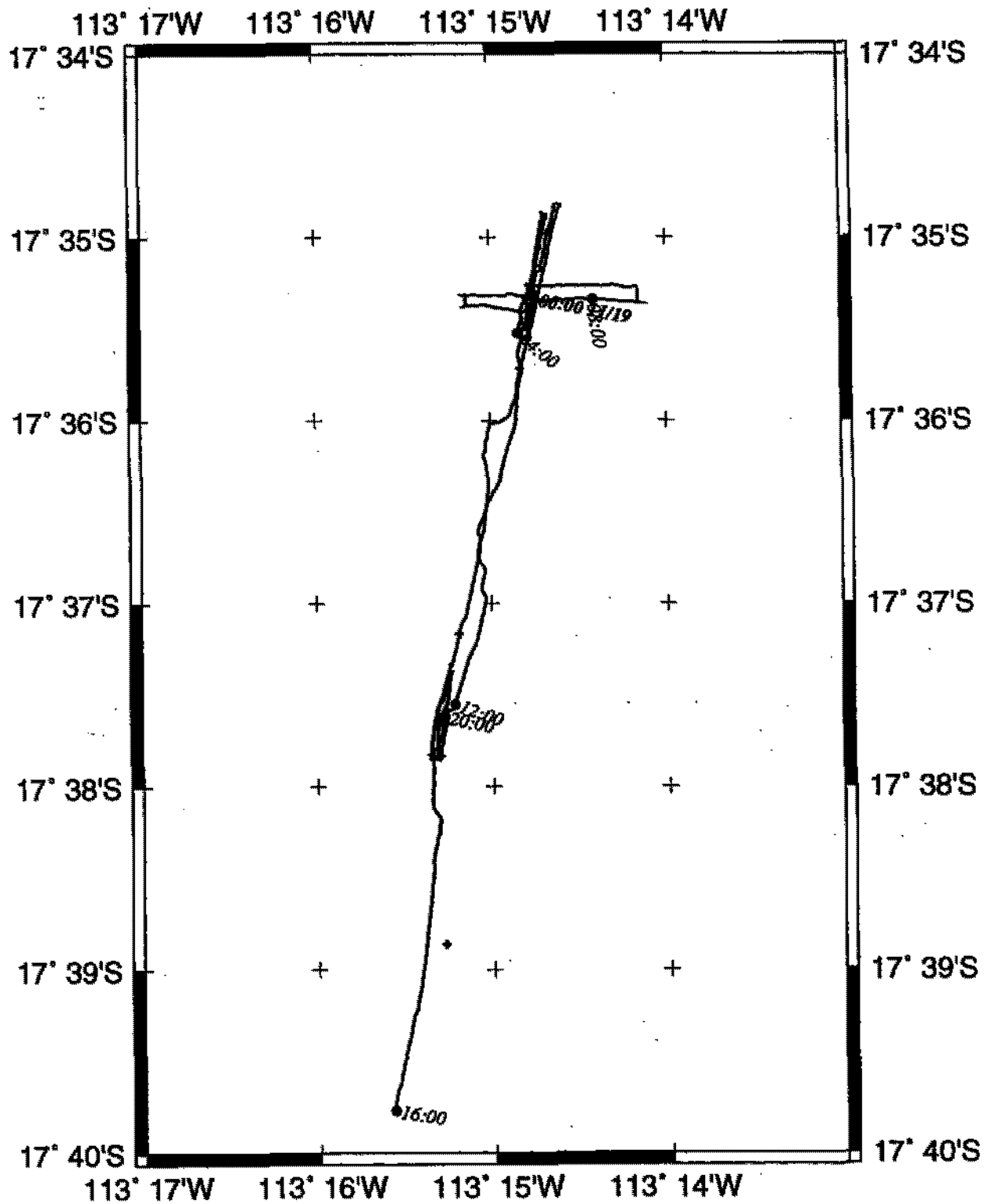
GMT Feb 20 15:59

SOJN02MV Survey.e

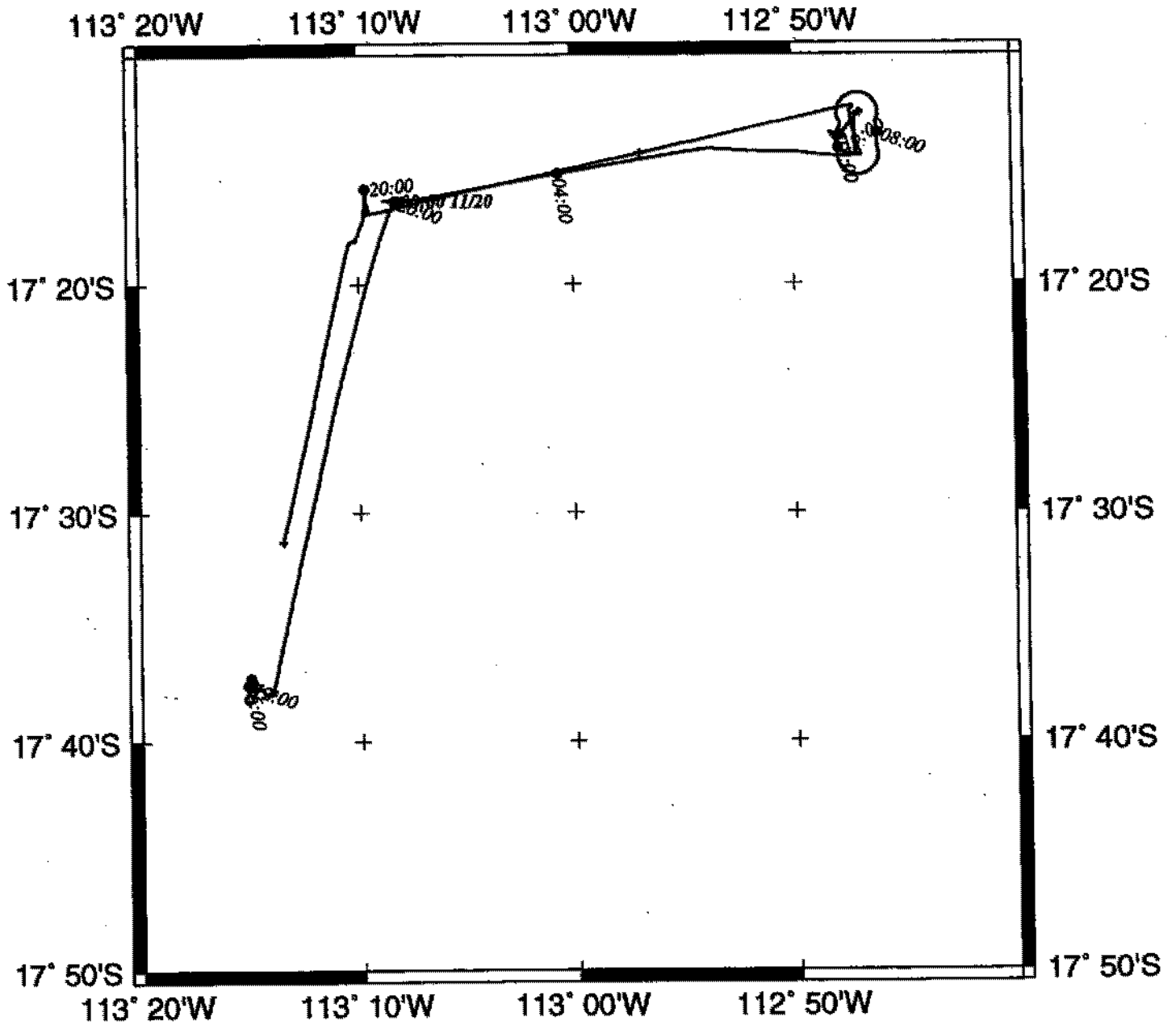


GMT Feb 20 16:00

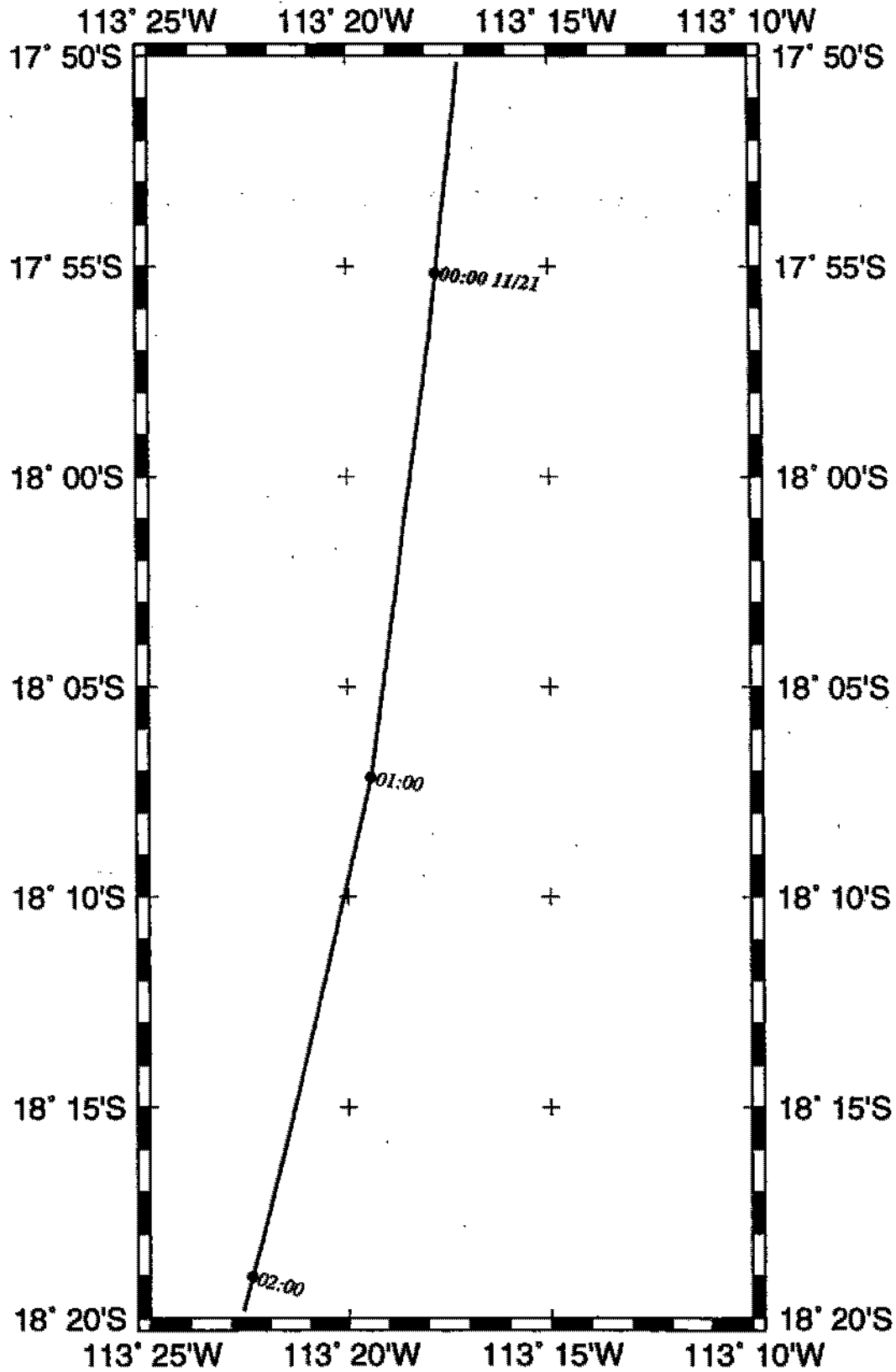
SOJN02MV Survey.f



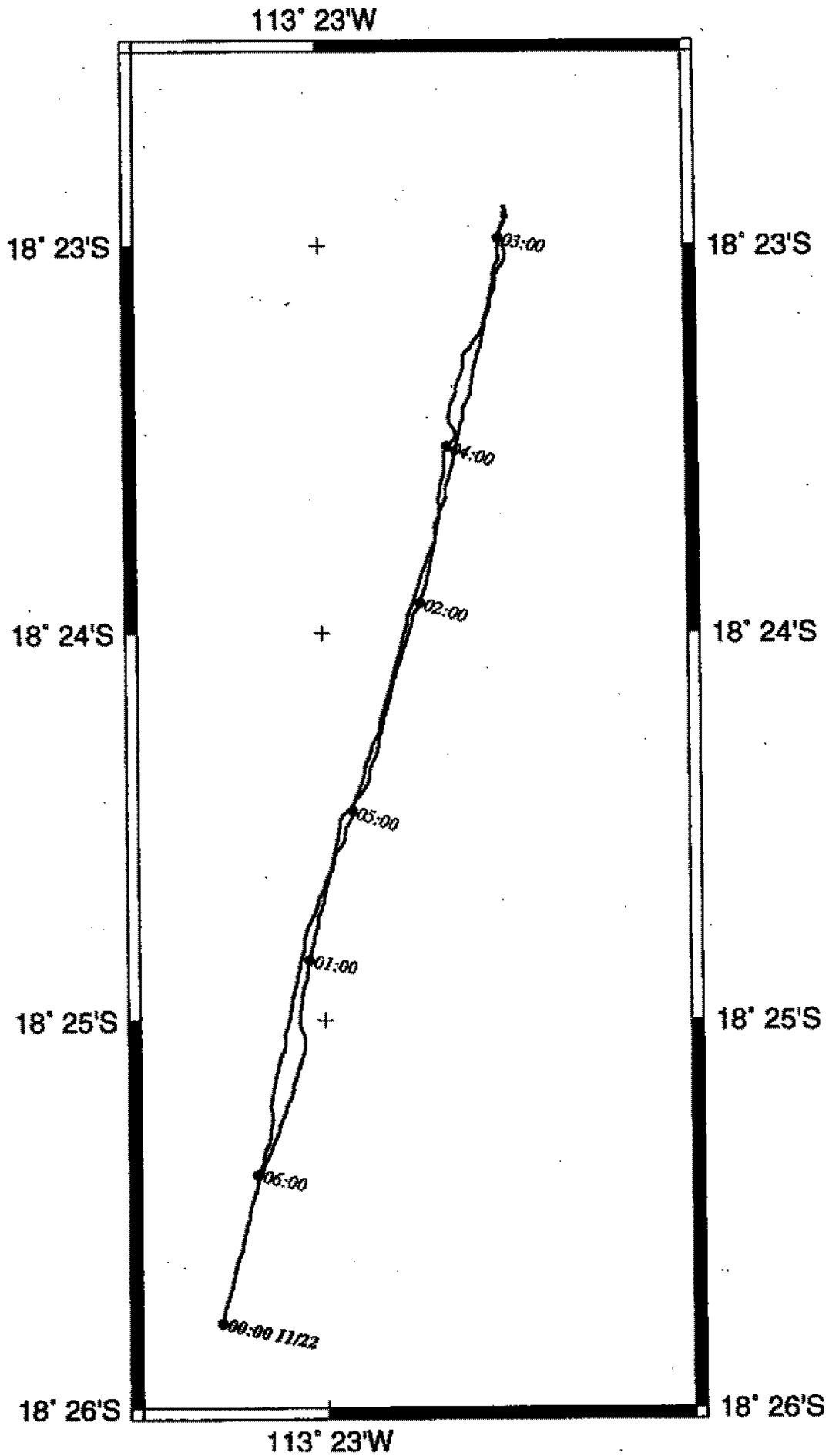
SOJN02MV Survey.g



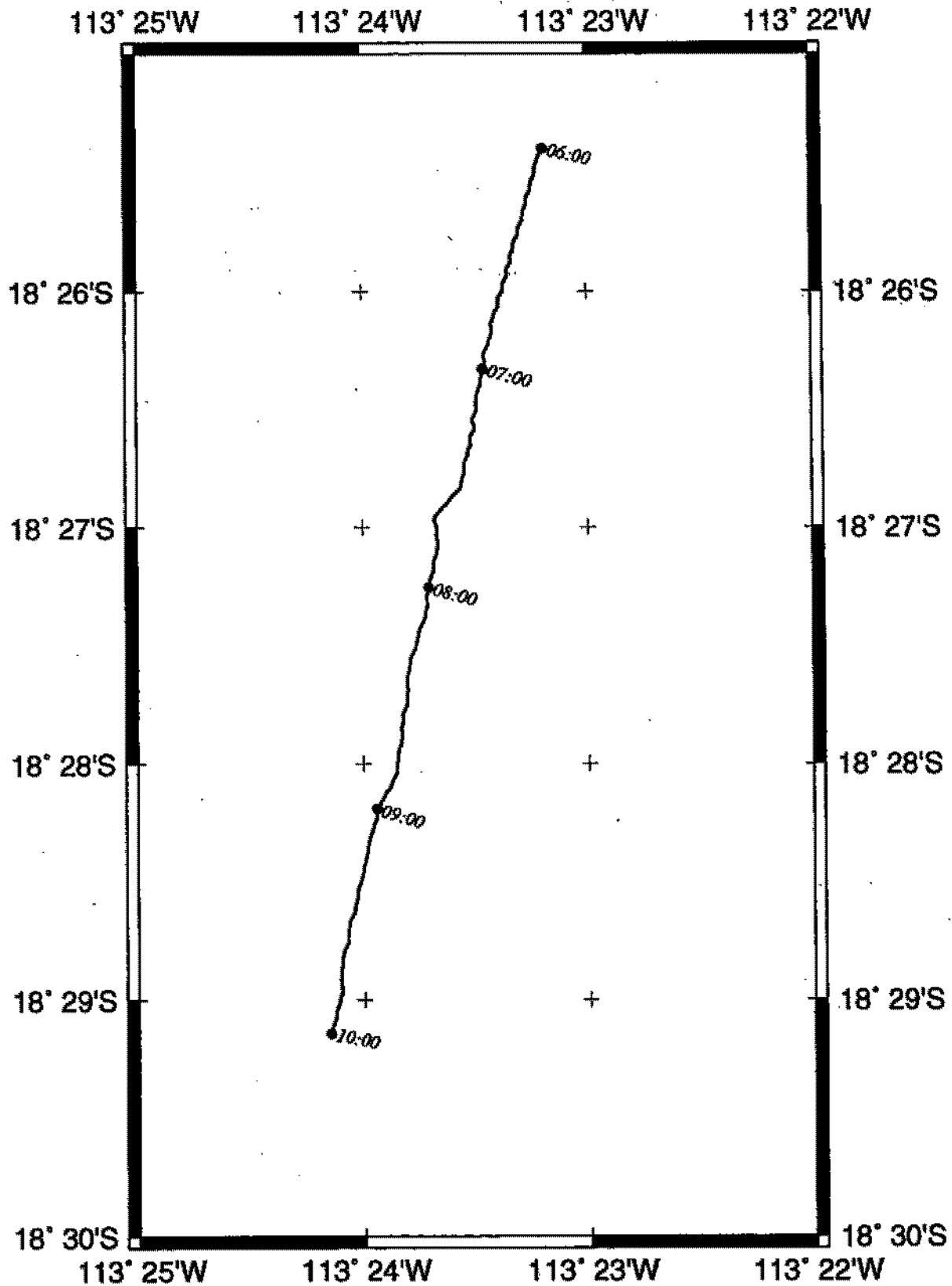
SOJN02MV Survey.h



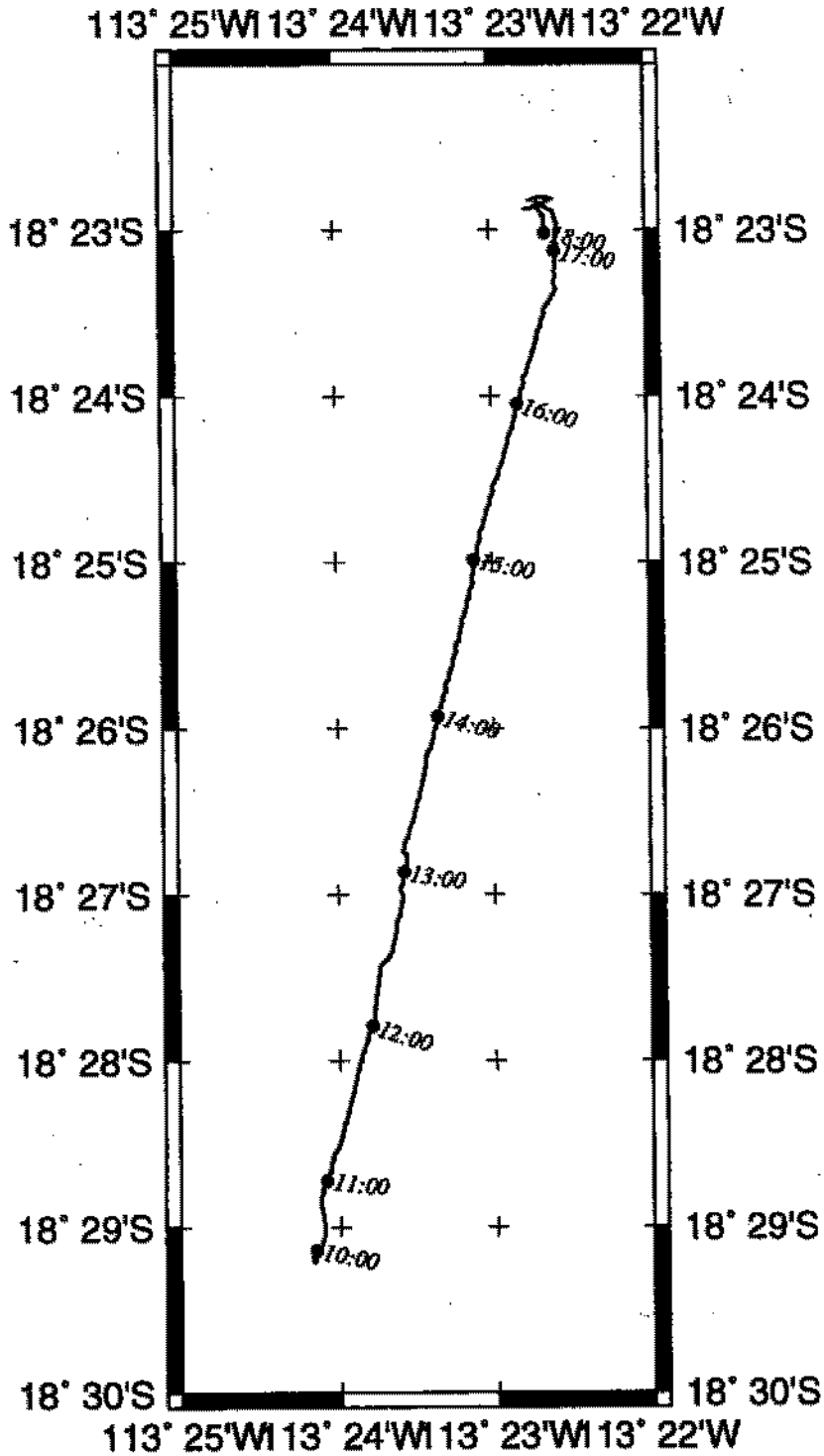
SOJN02MV Survey.i



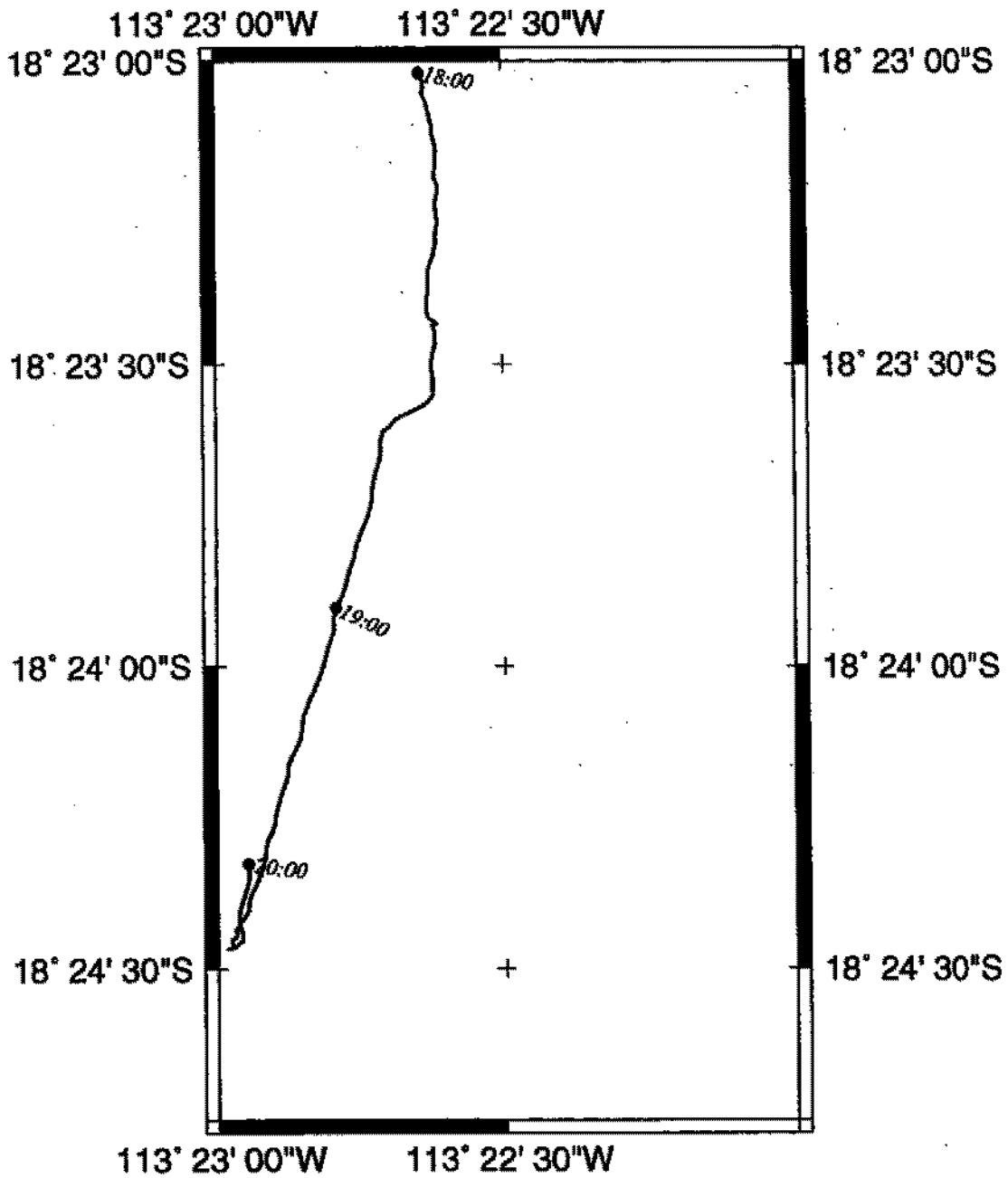
SOJN02MV Survey.j



SOJN02MV Survey.k

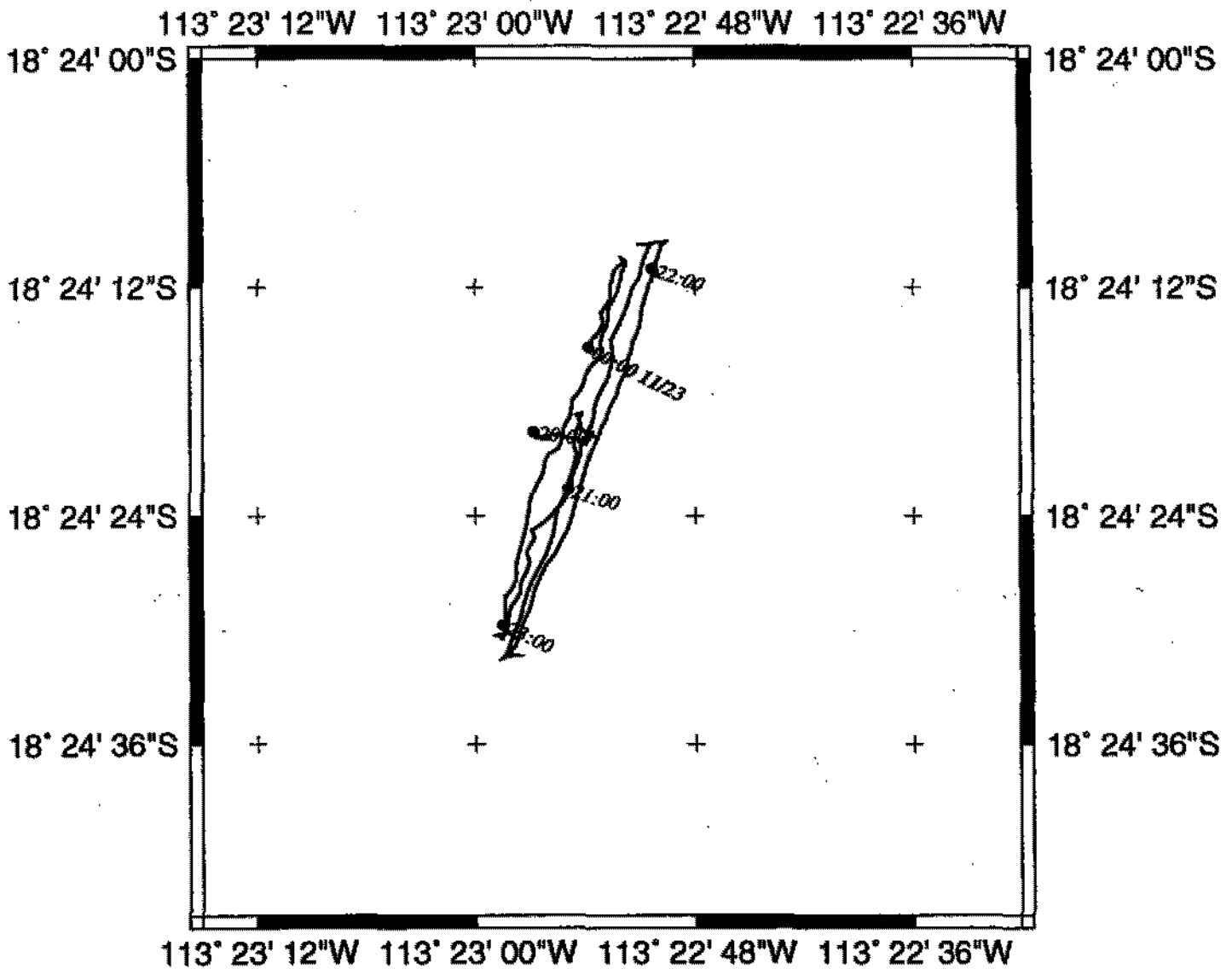


SOJN02MV Survey.I



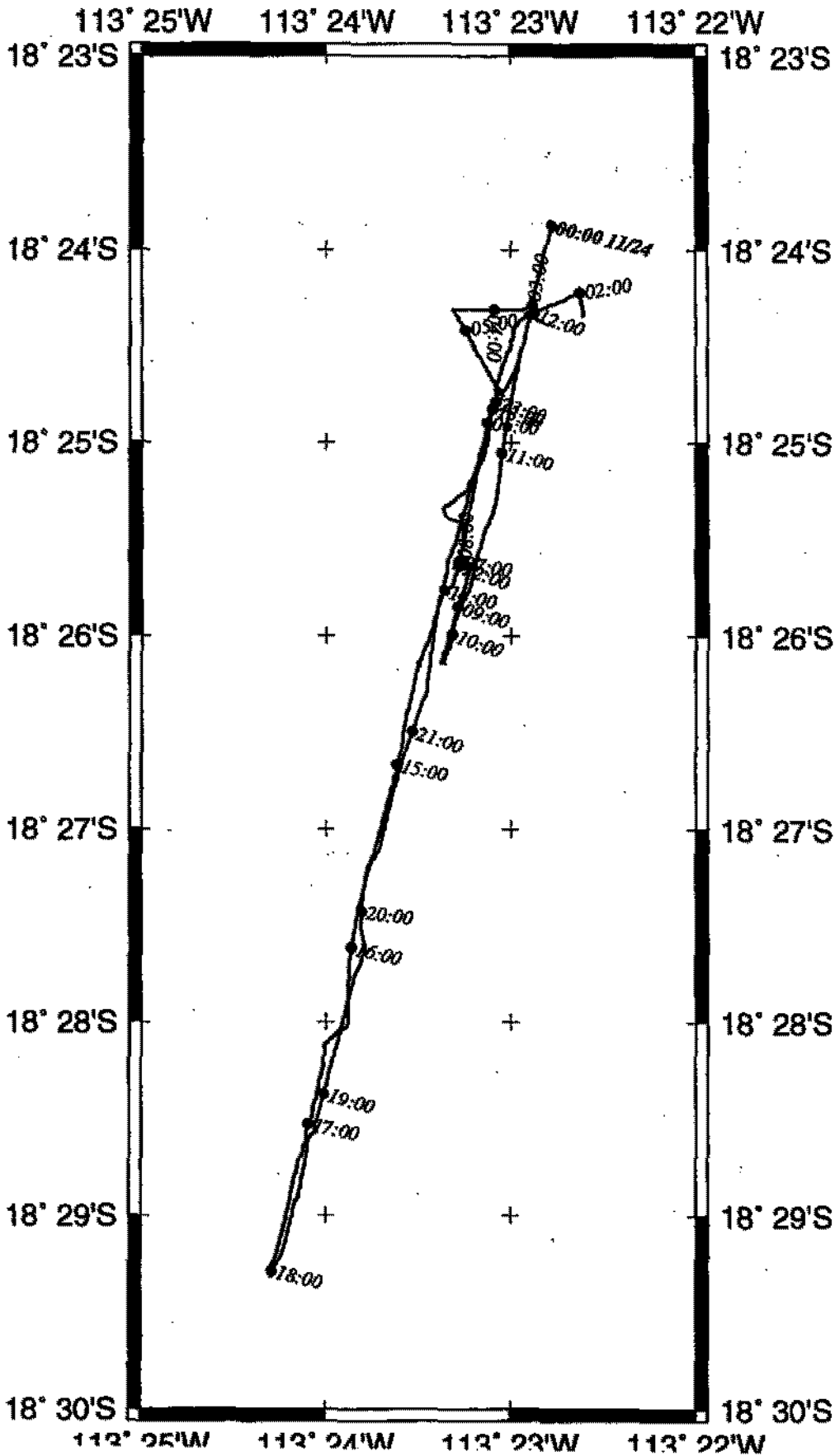
GMT Mar 3 12:58 :22Nov96:

SOJN02MV Survey.m

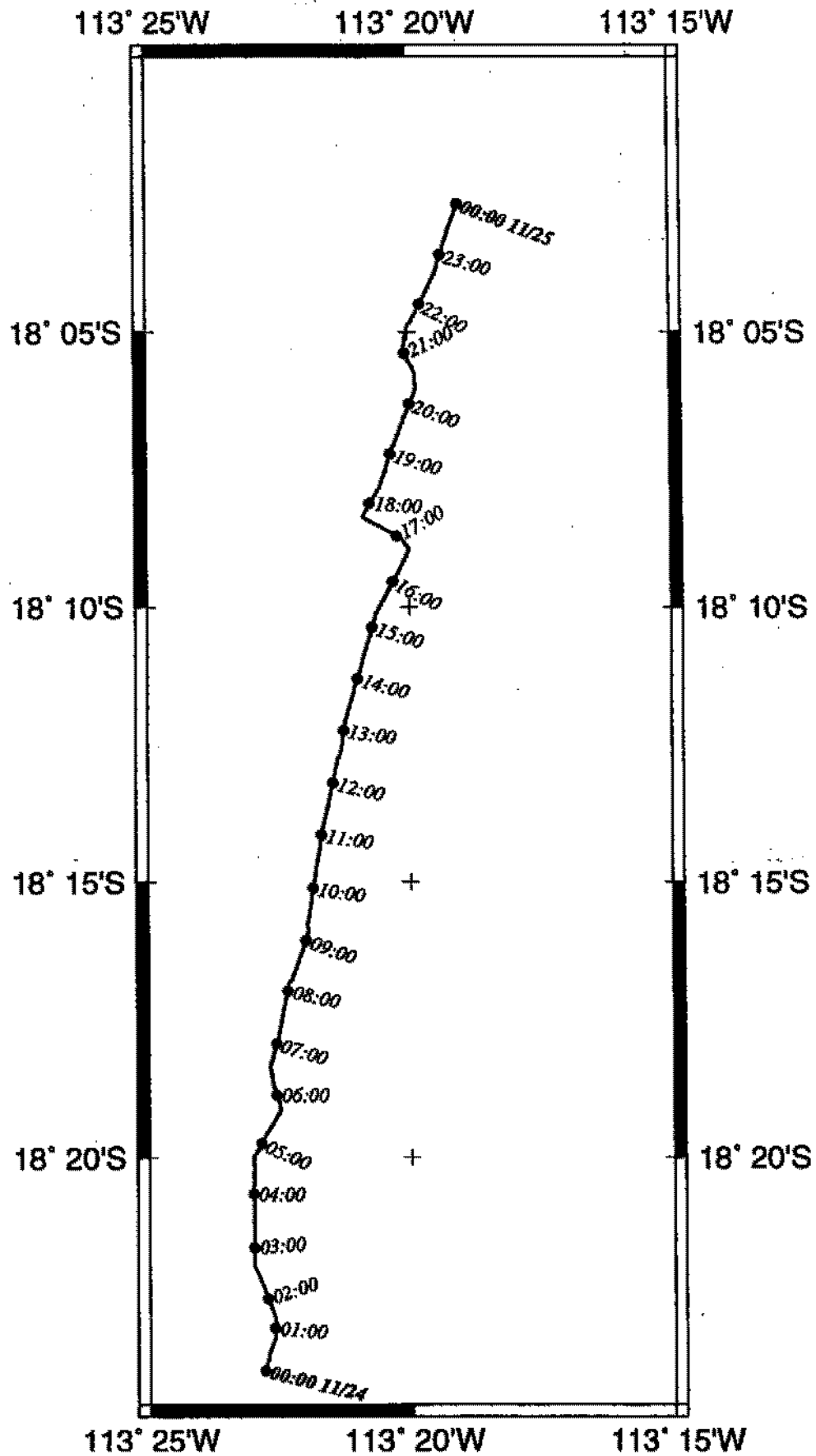


GMT Feb 21 08:54

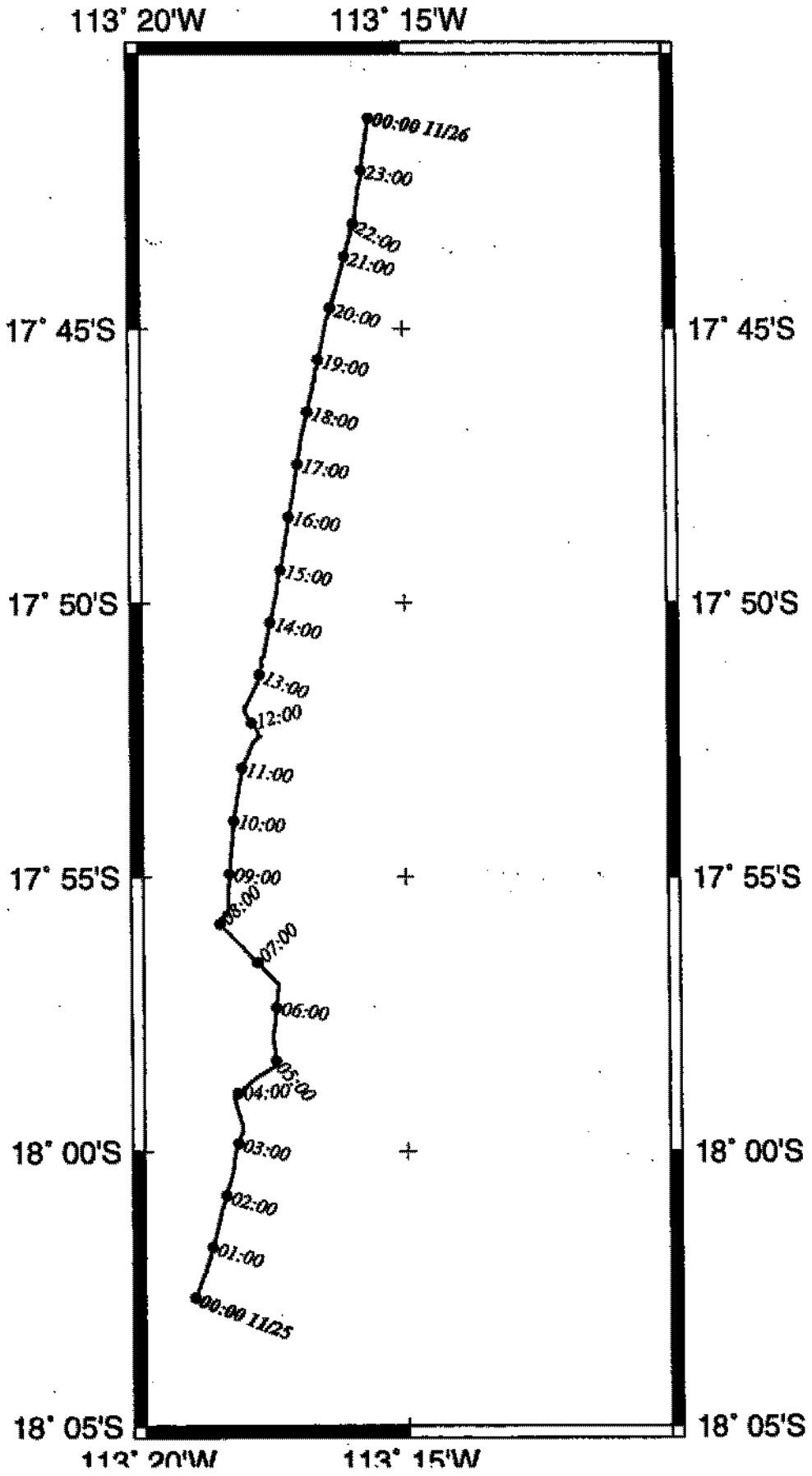
SOJN02MV Survey.n



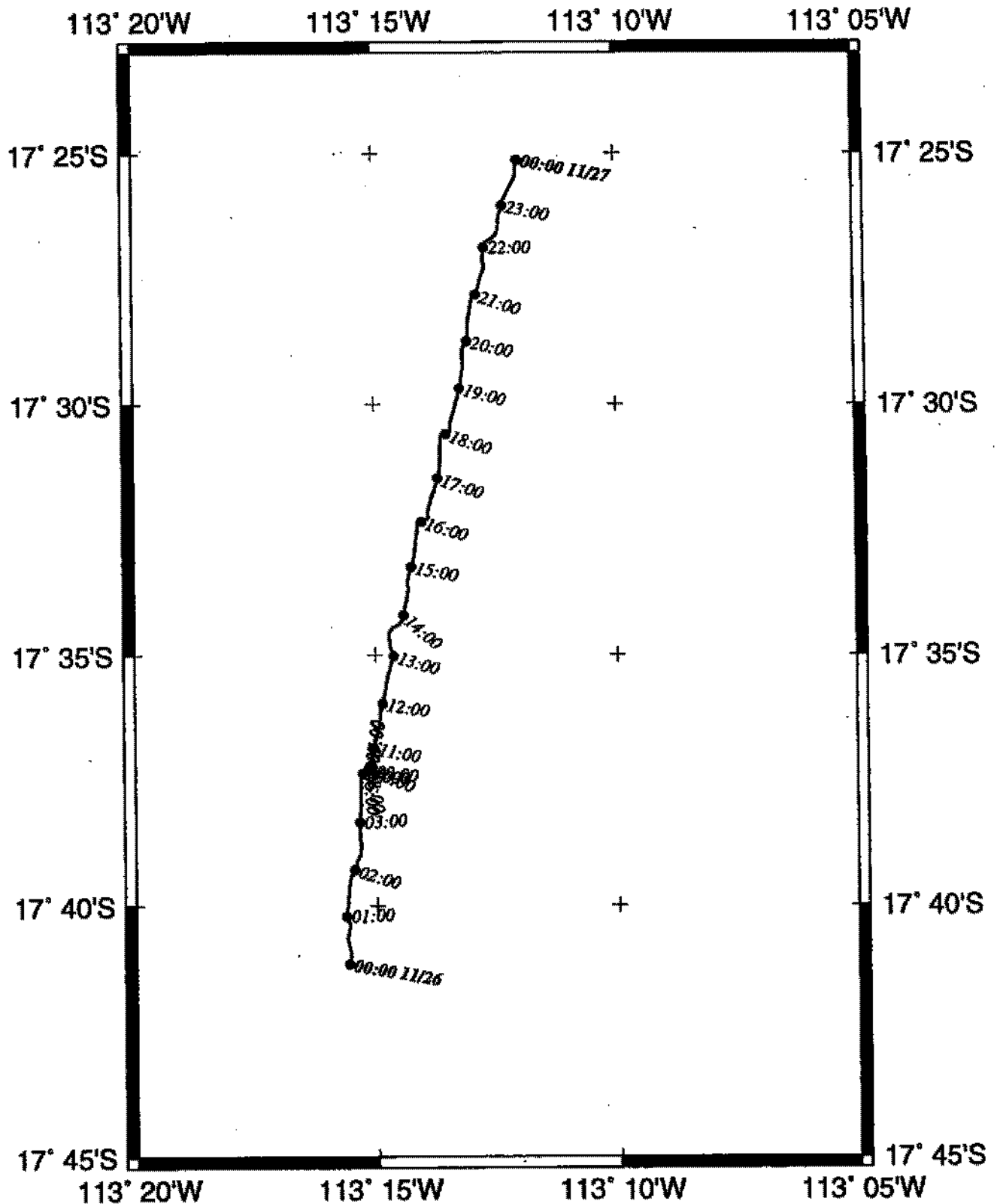
SOJN02MV Survey.o



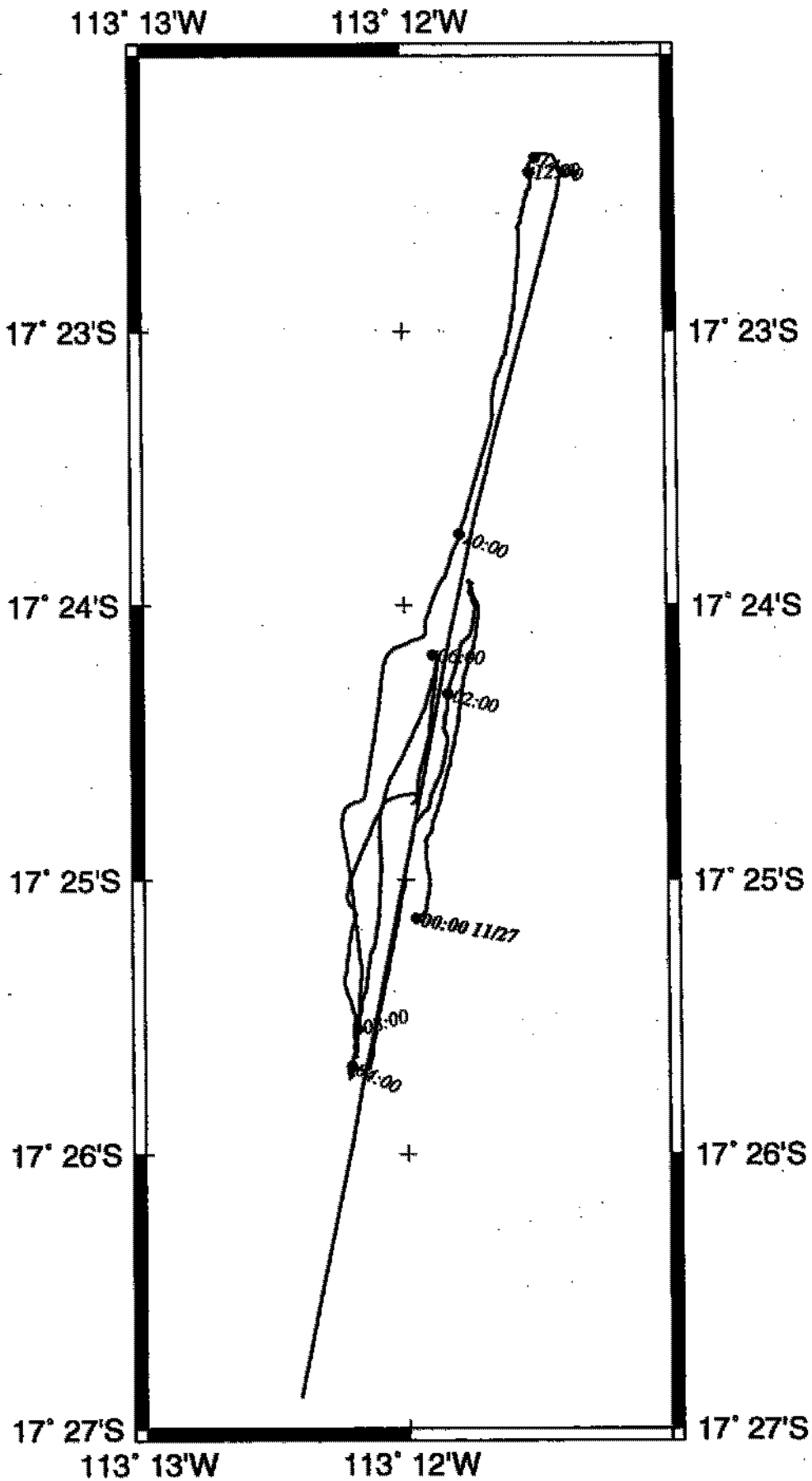
SOJN02MV Survey.p



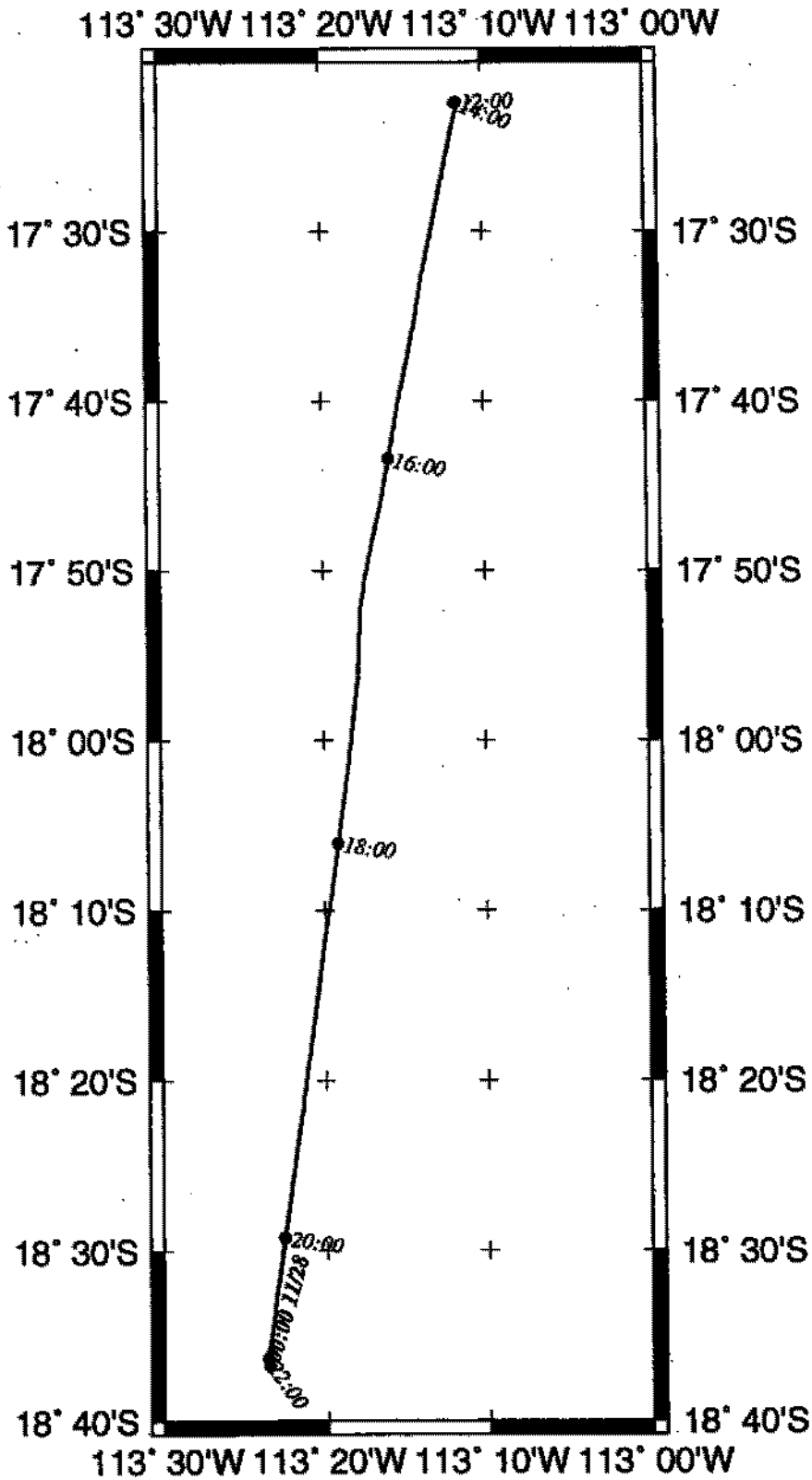
SOJN02MV Survey.q



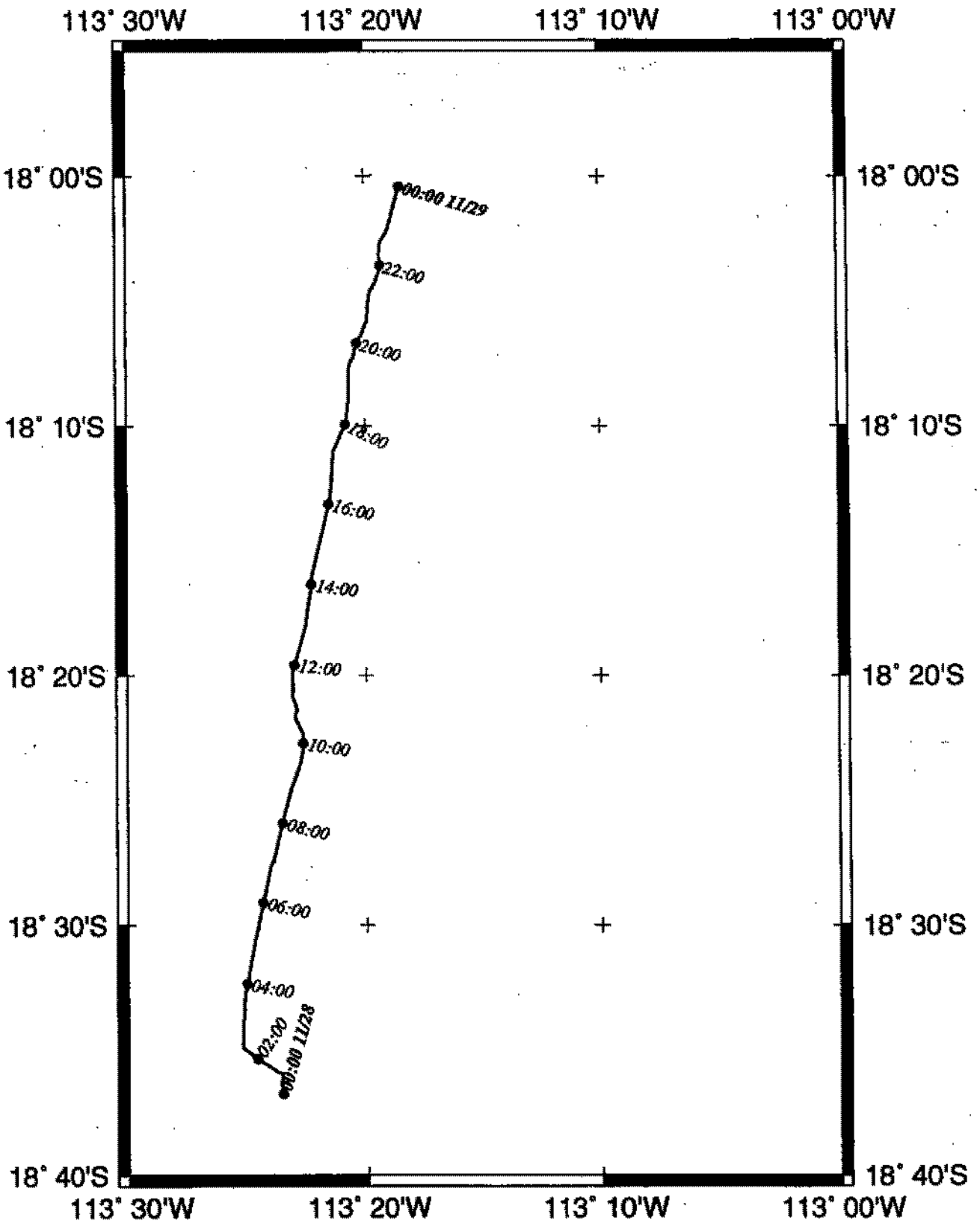
SOJN02MV Survey.r



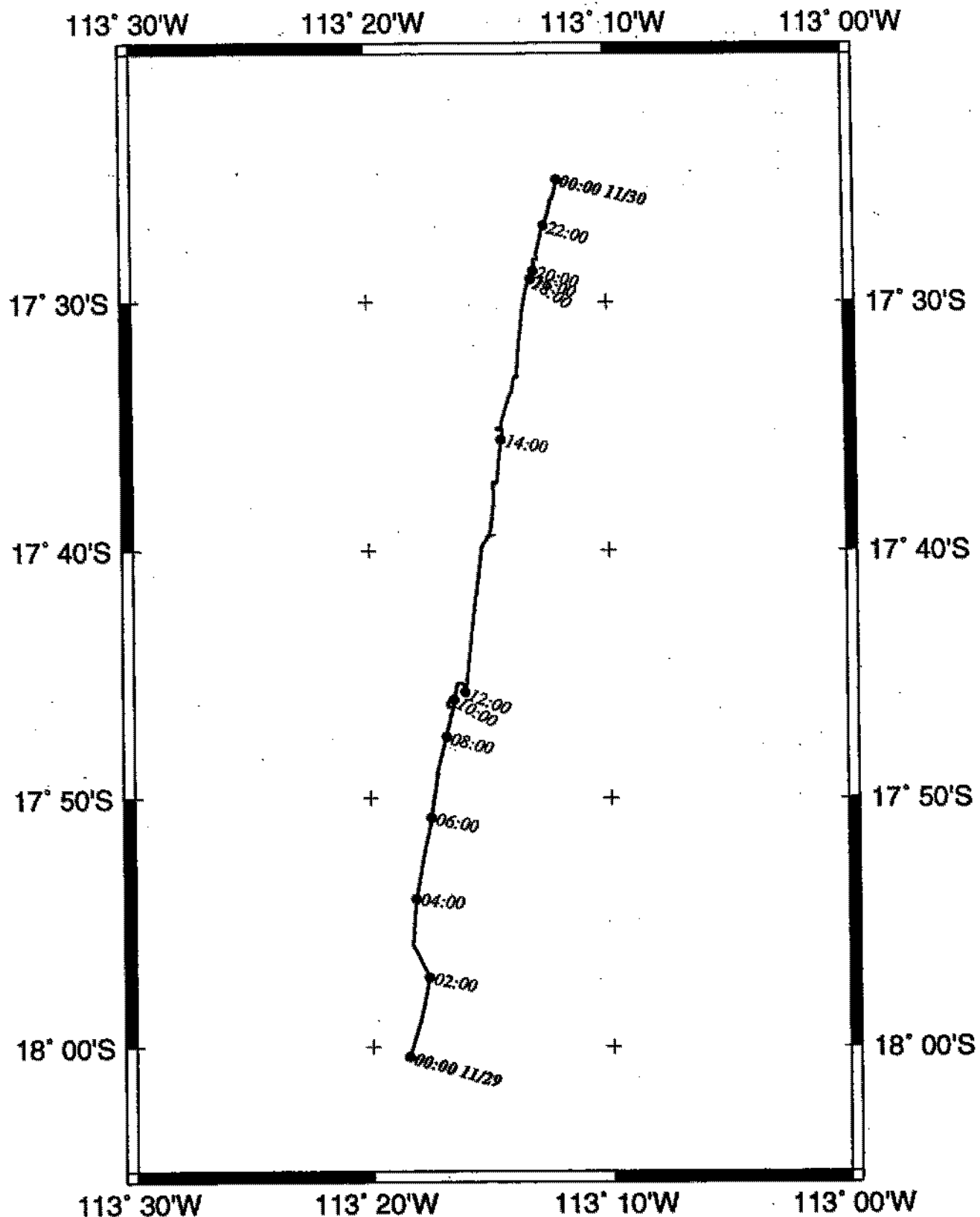
SOJN02MV Survey.s



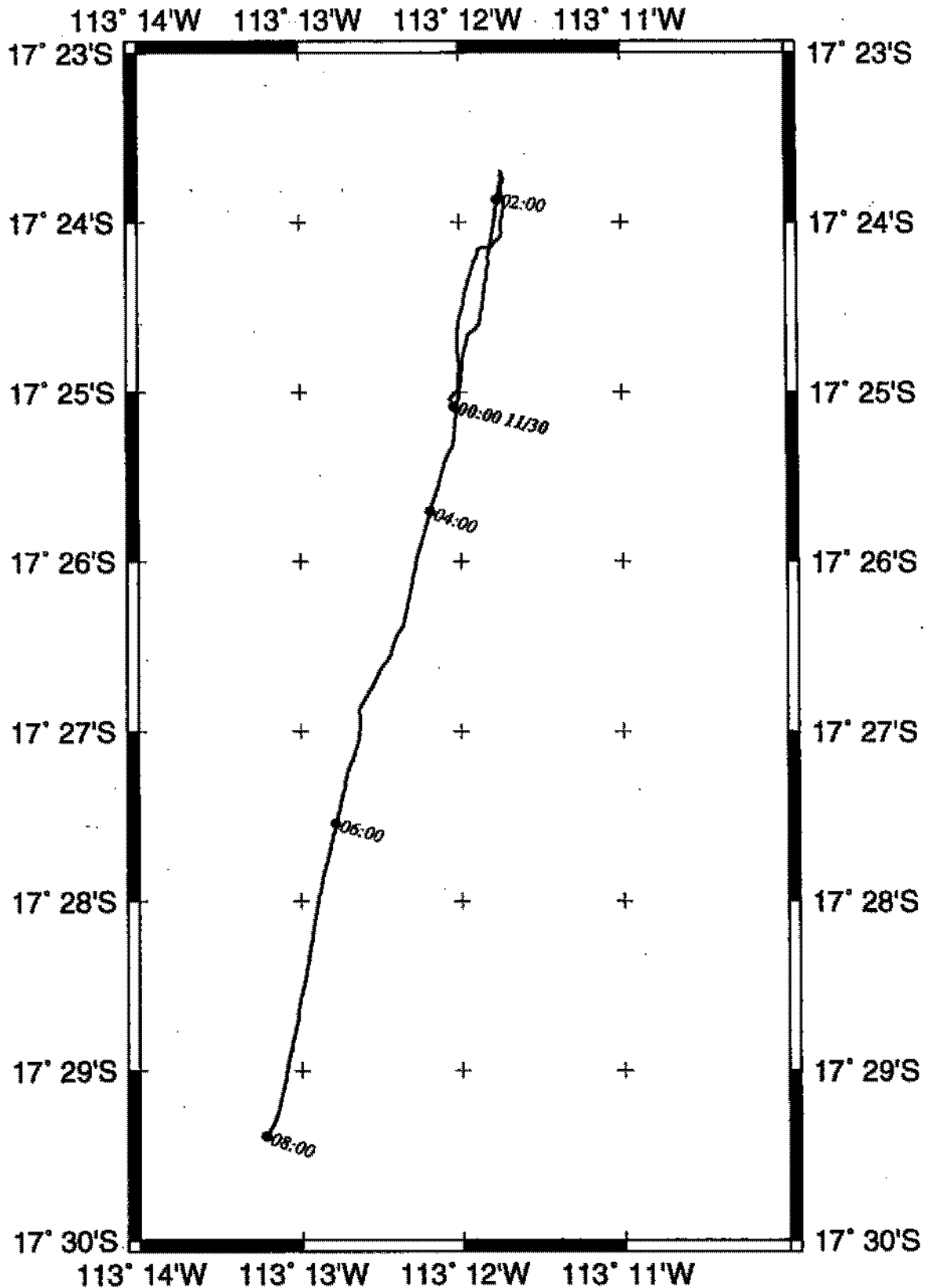
SOJN02MV Survey.t



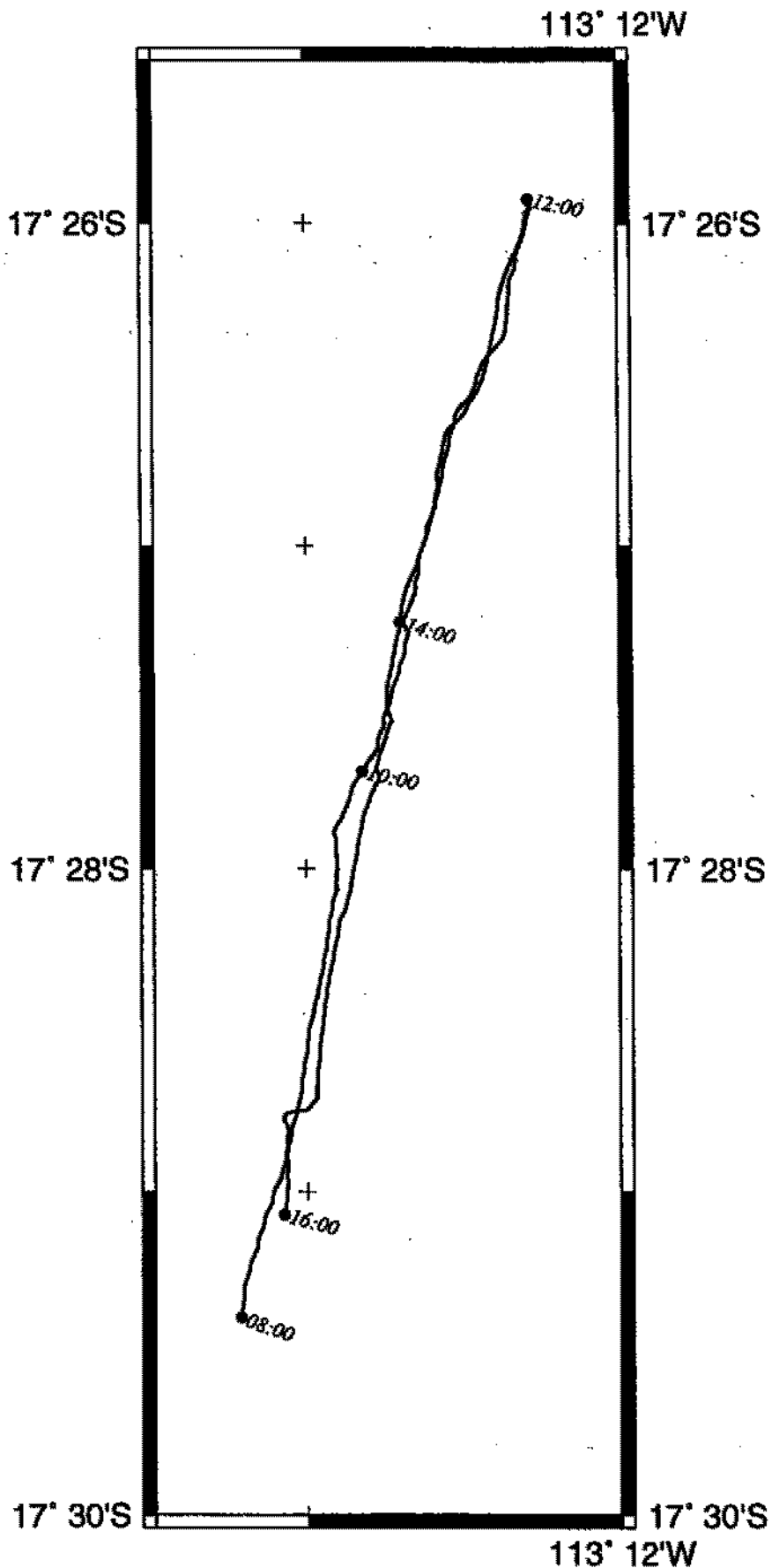
SOJN02MV Survey.u



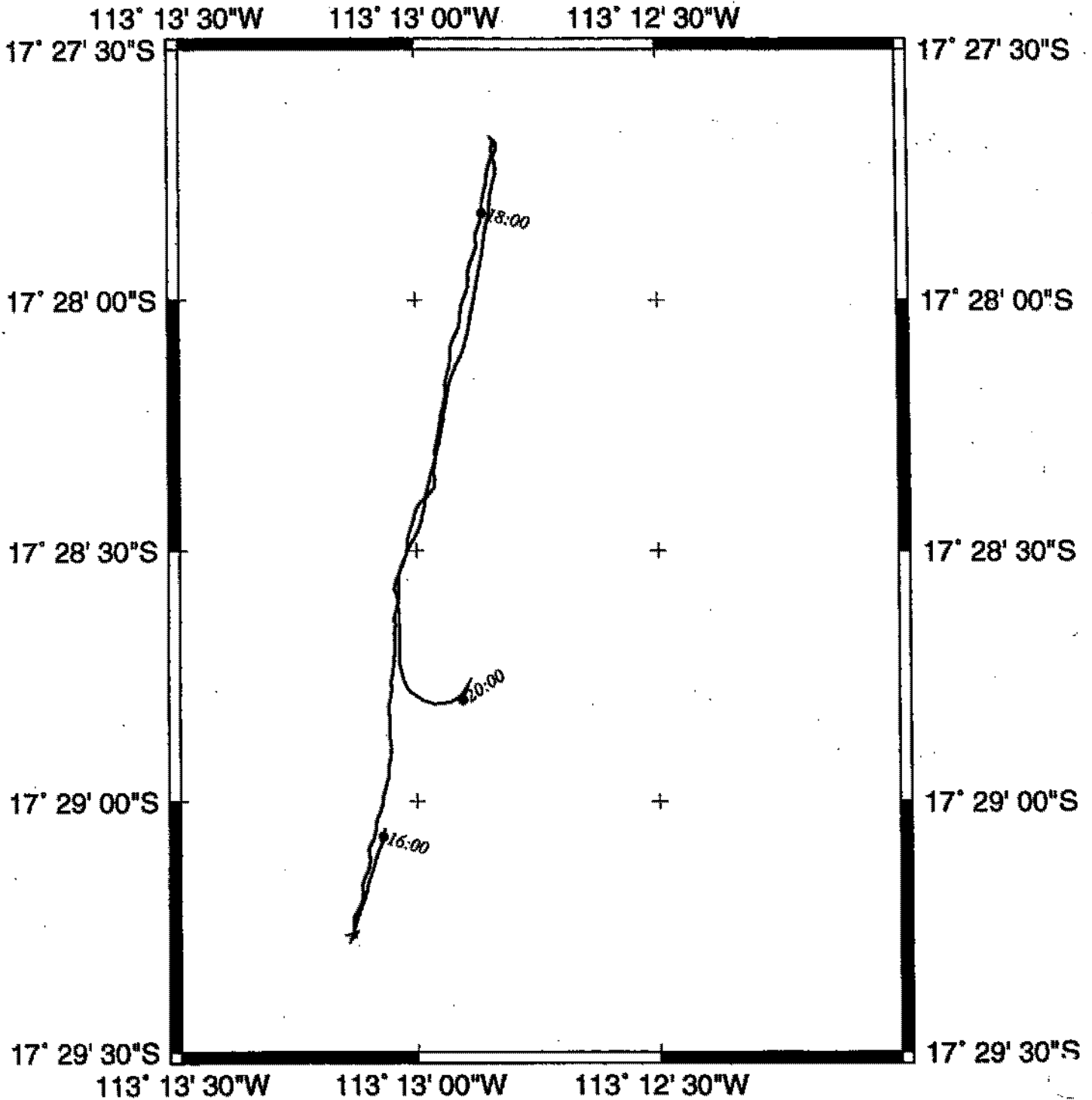
SOJN02MV Survey.v



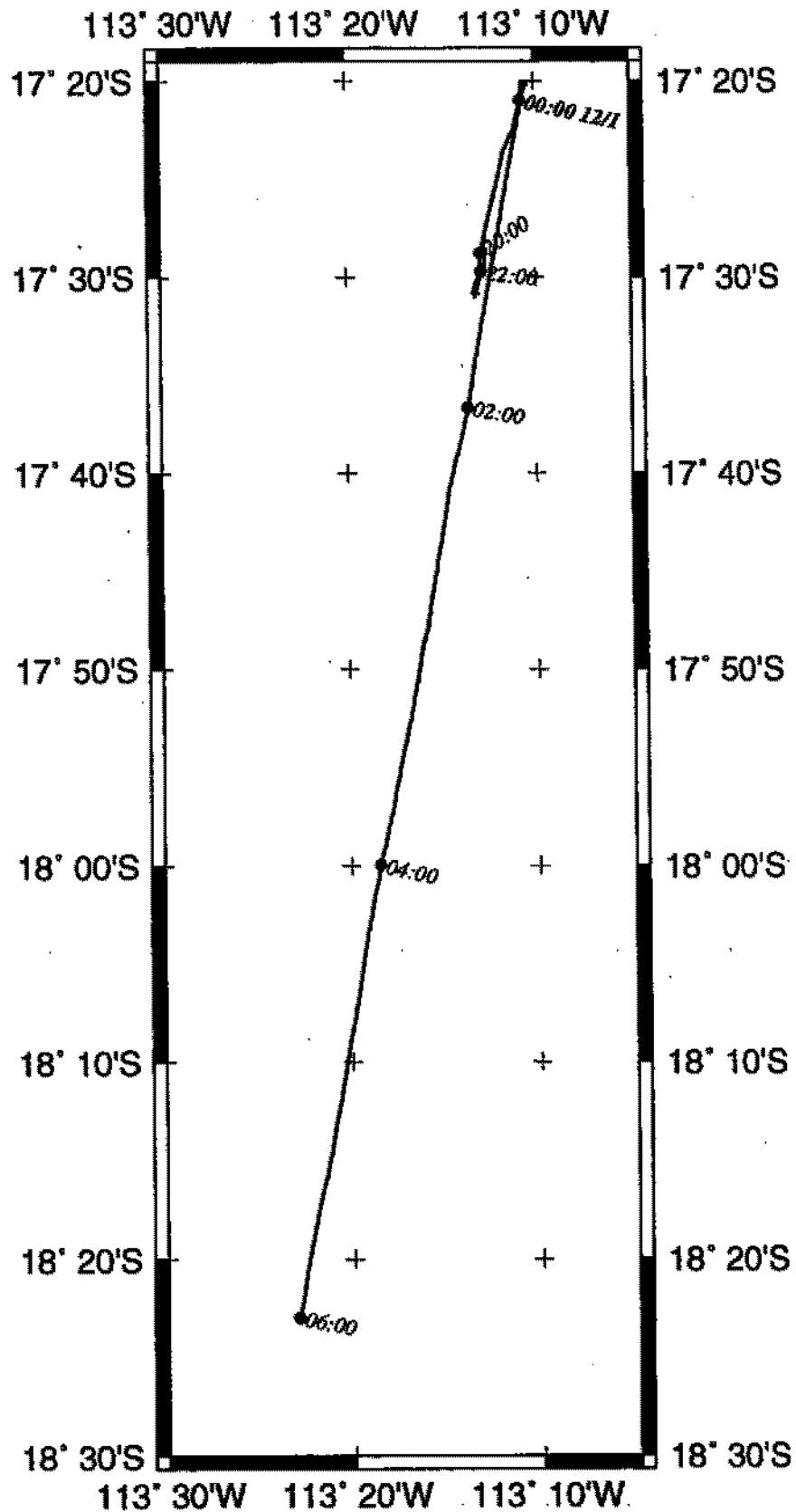
SOJN02MV Survey.w



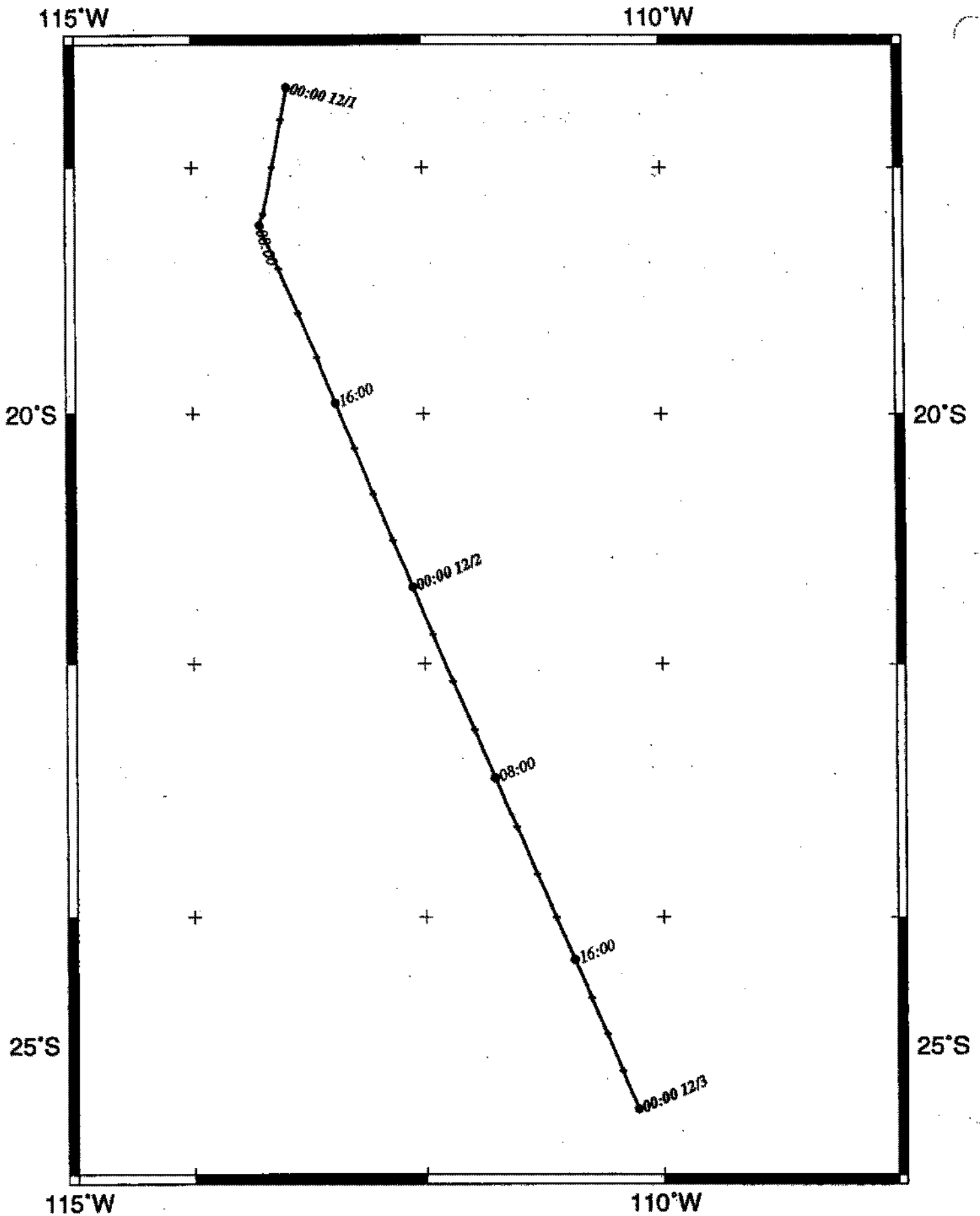
SOJN02MV Survey.x

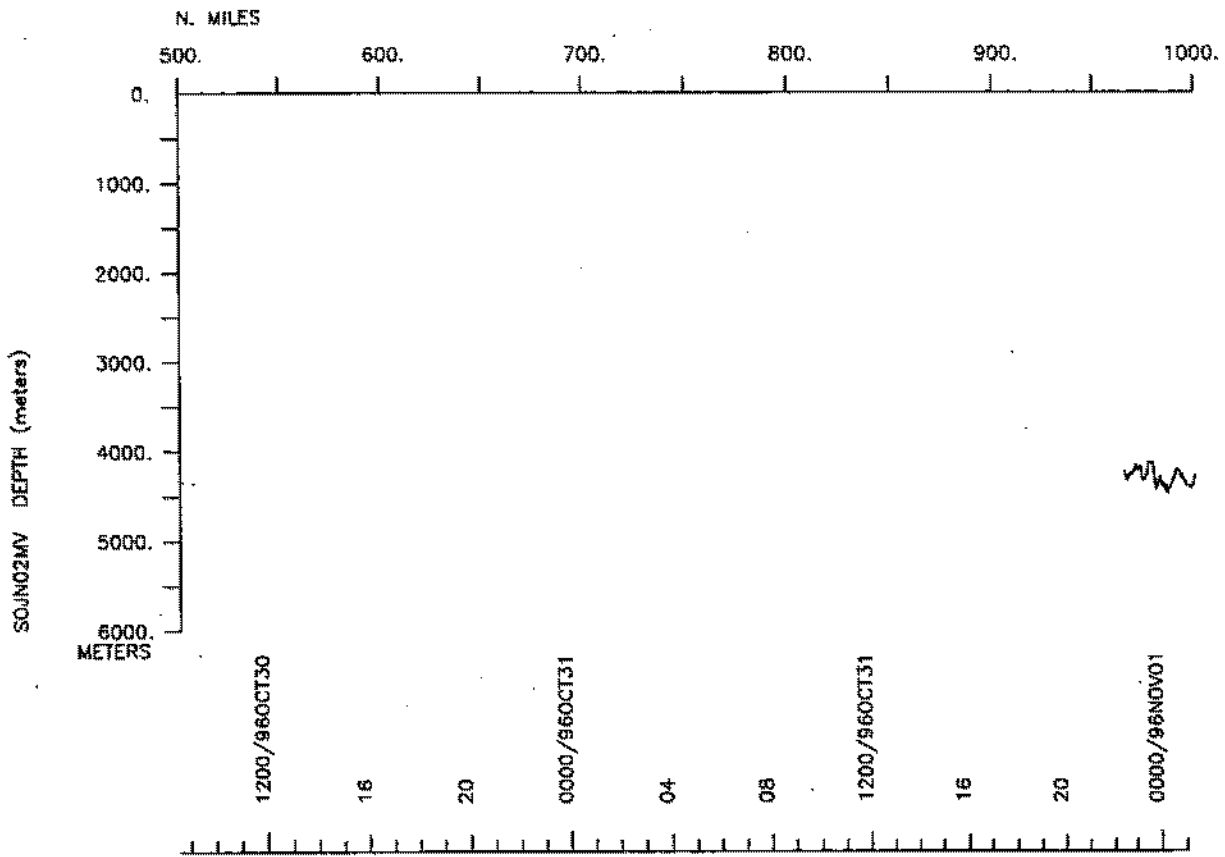
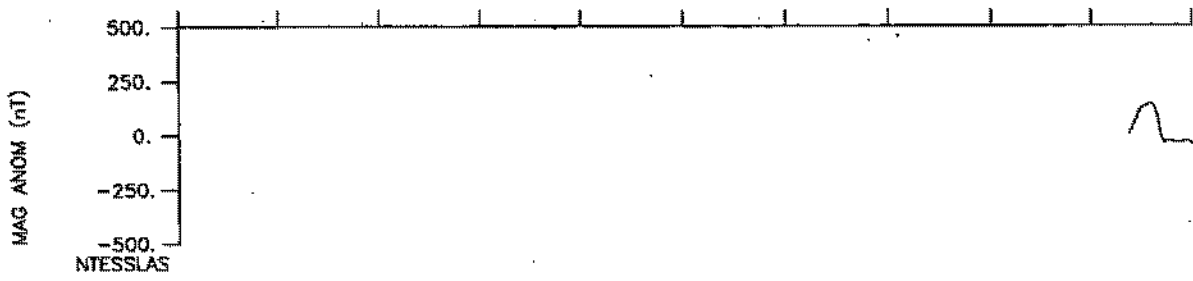
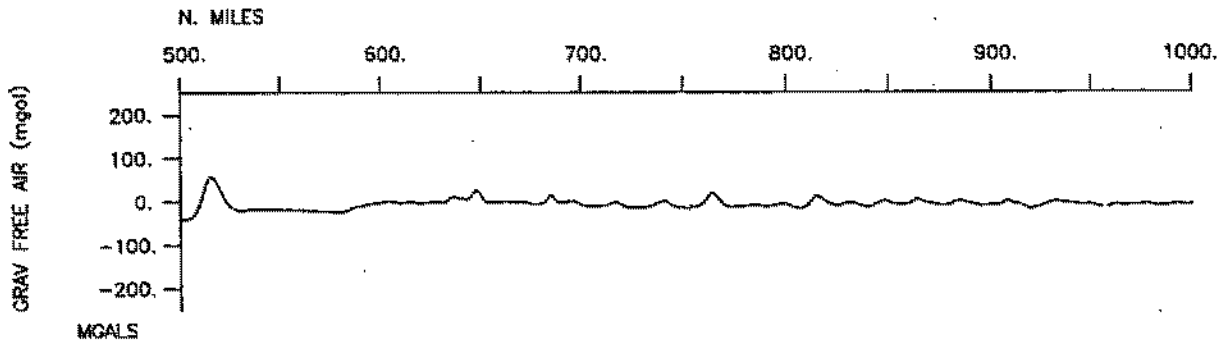


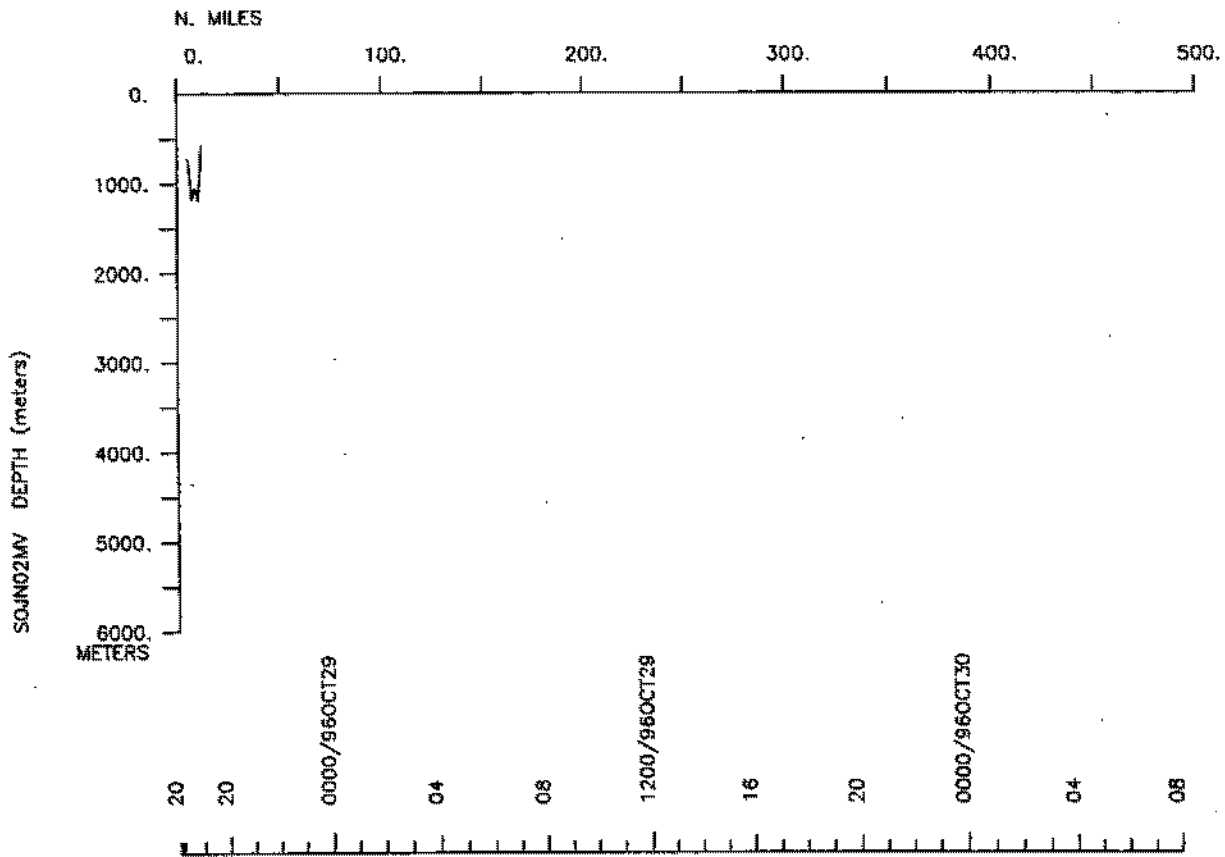
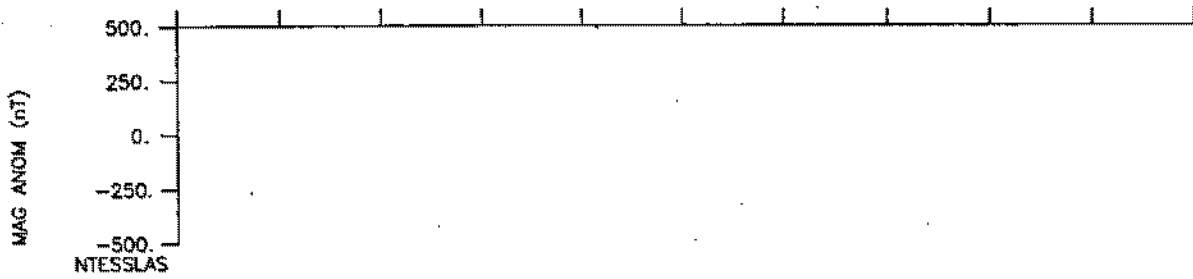
SOJN02MV Survey.y

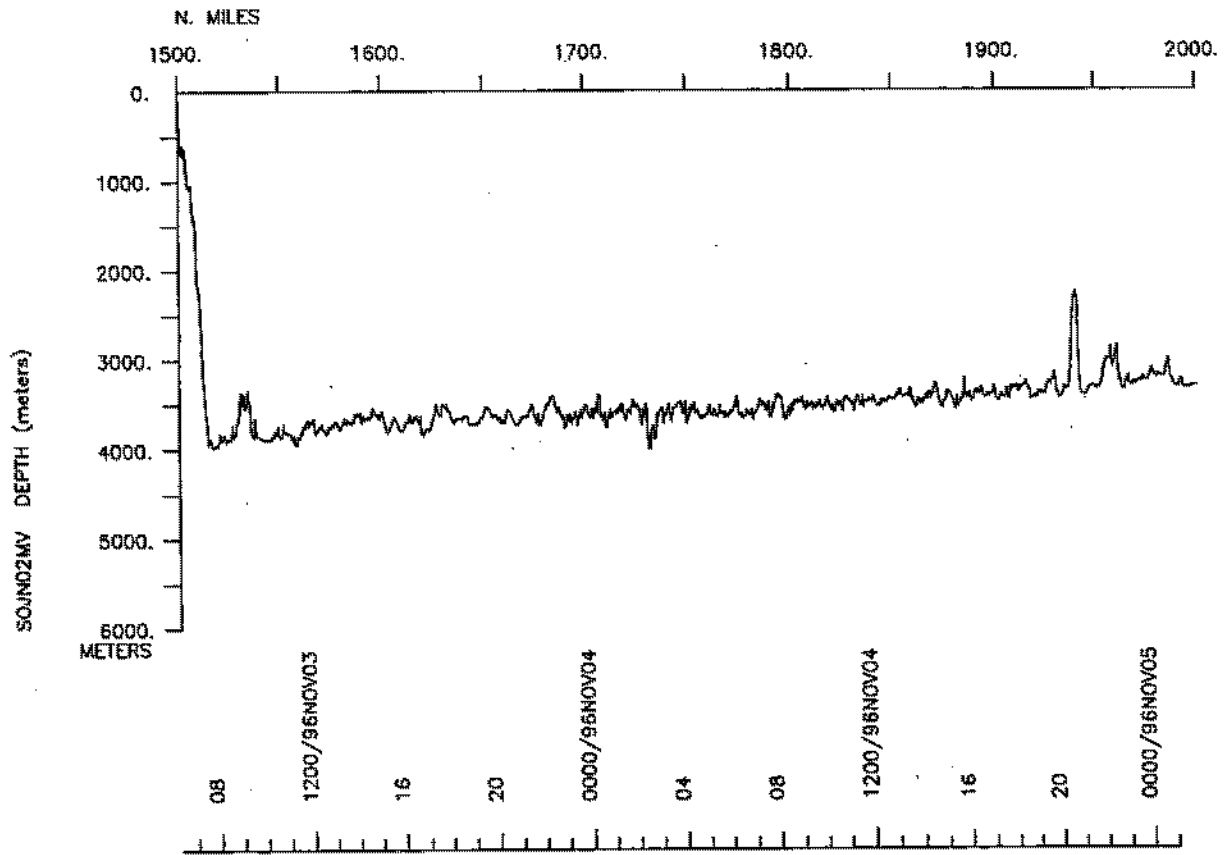
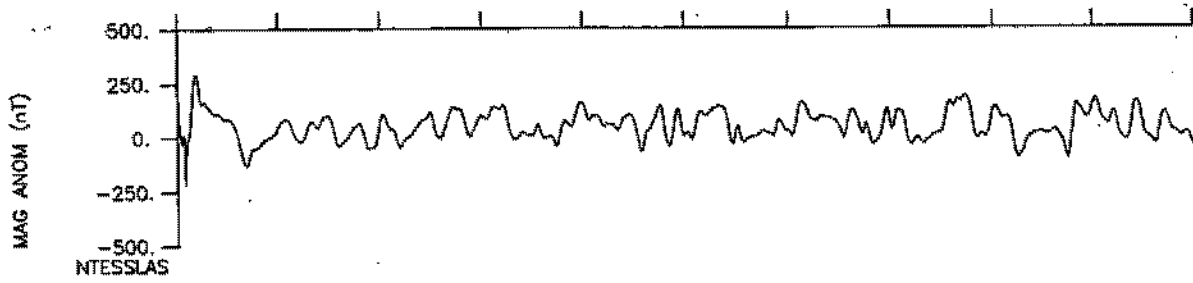
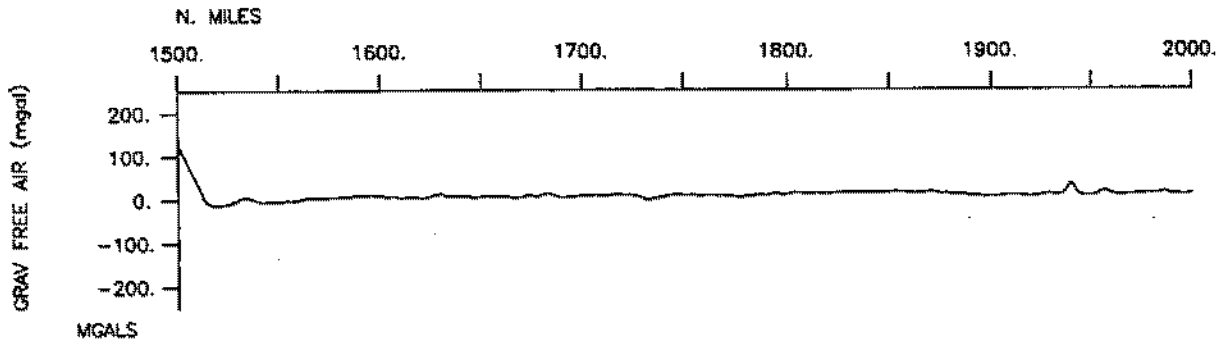


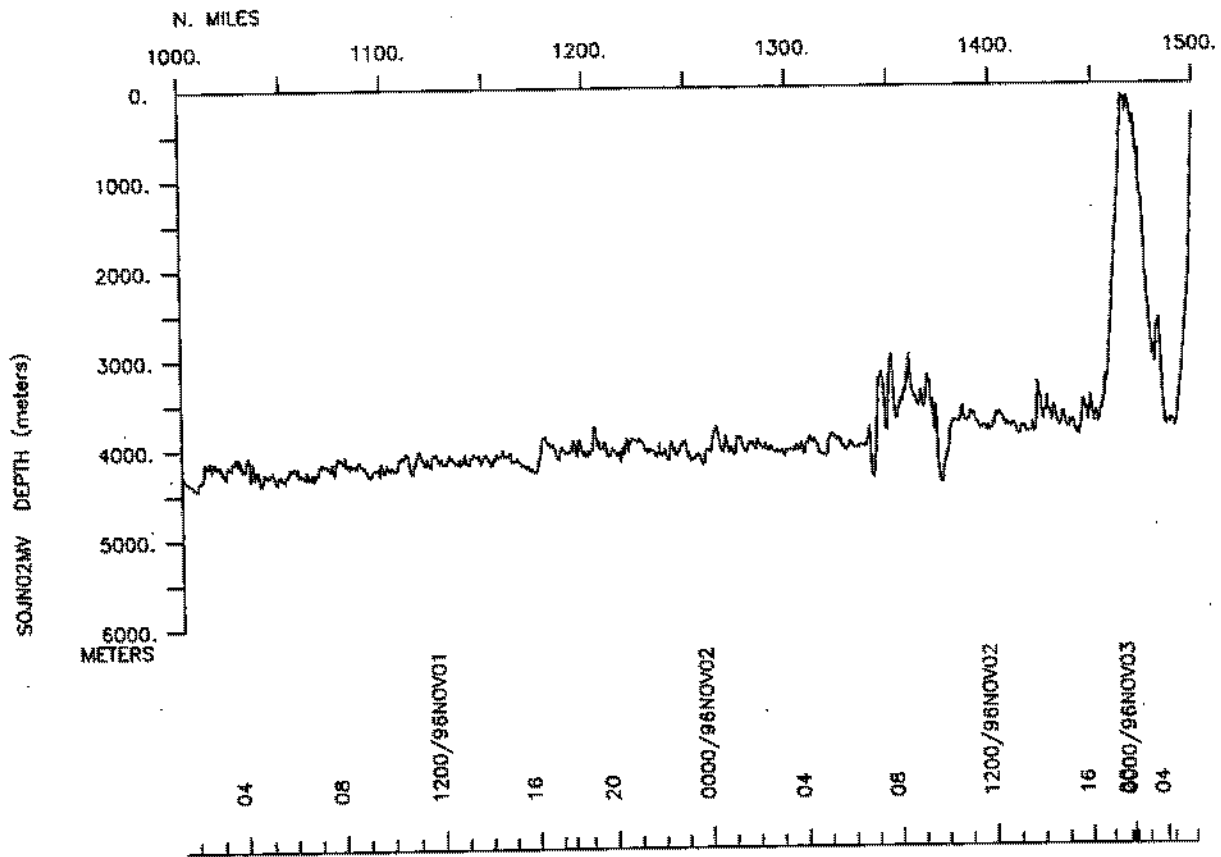
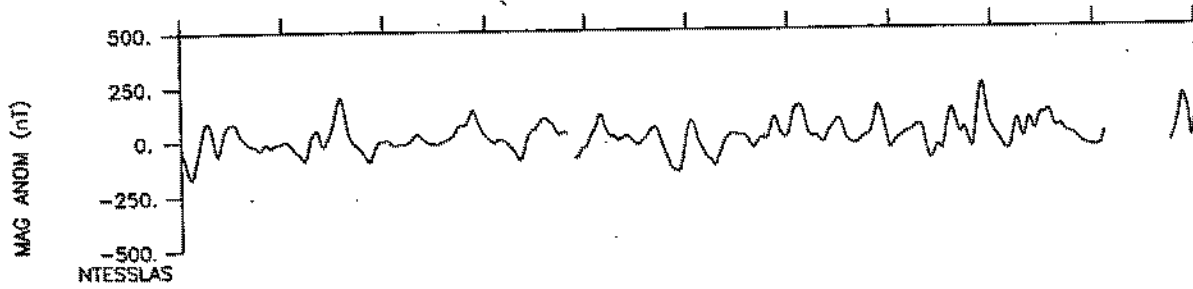
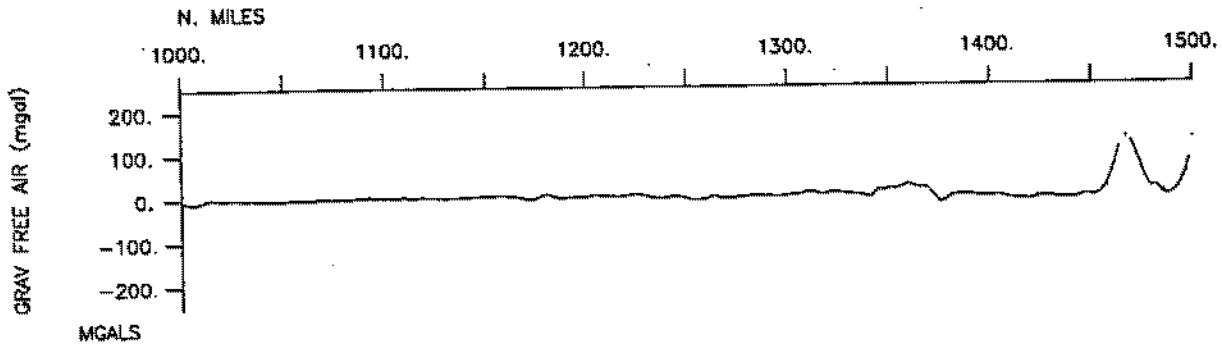
Sojourn Survey.z

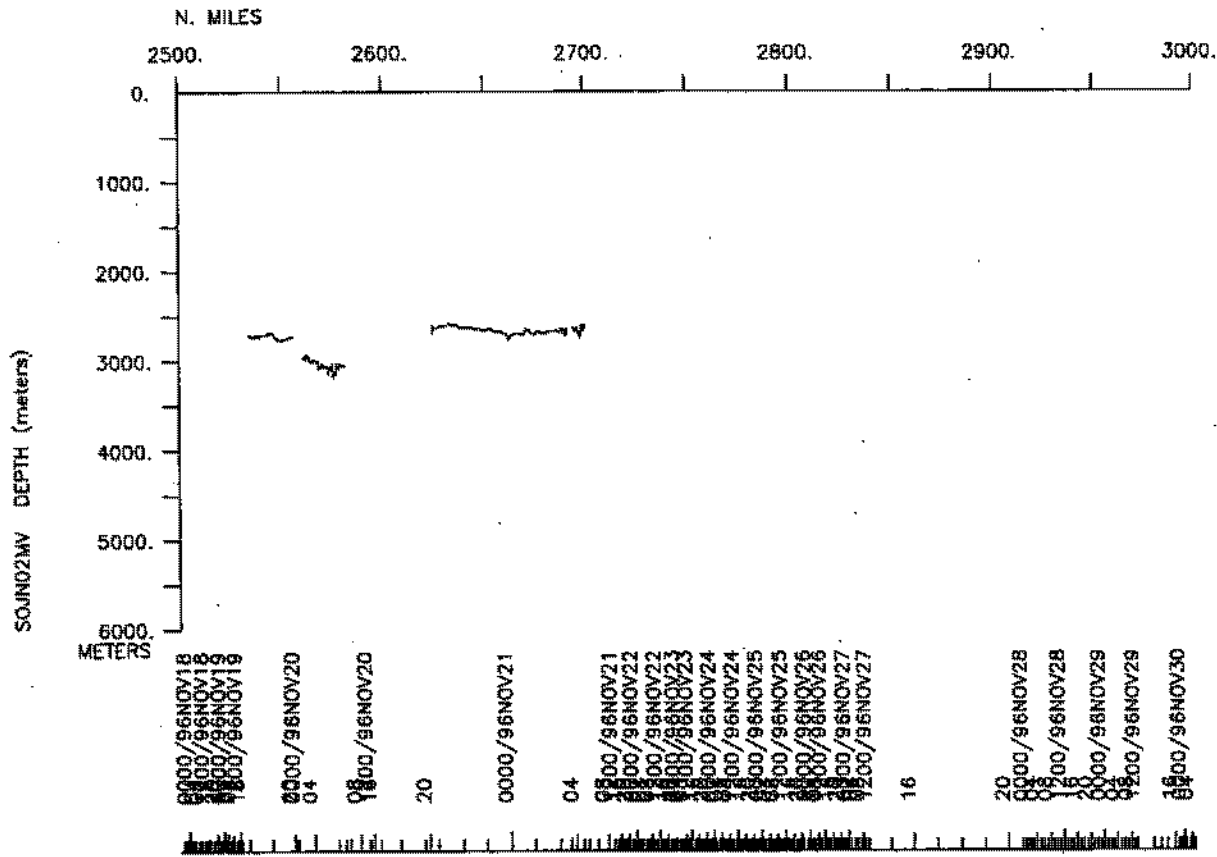
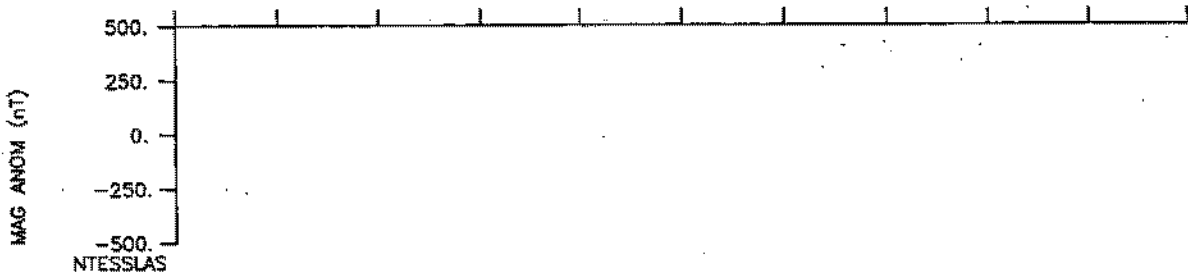
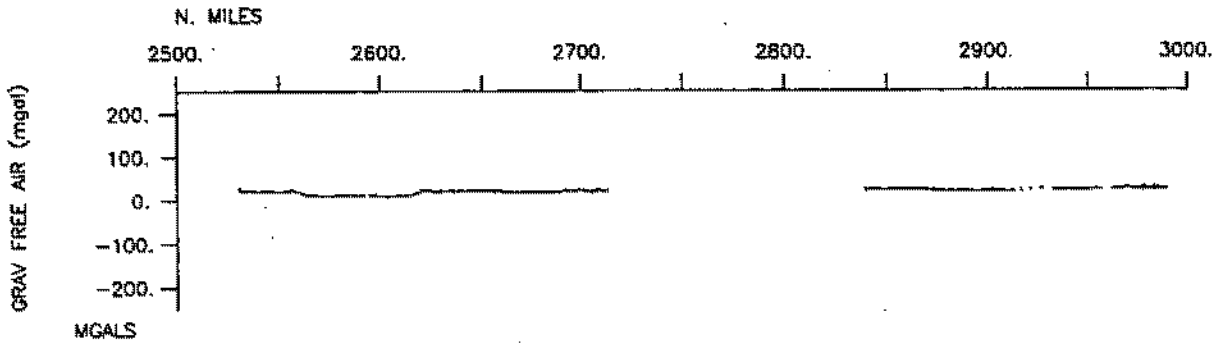


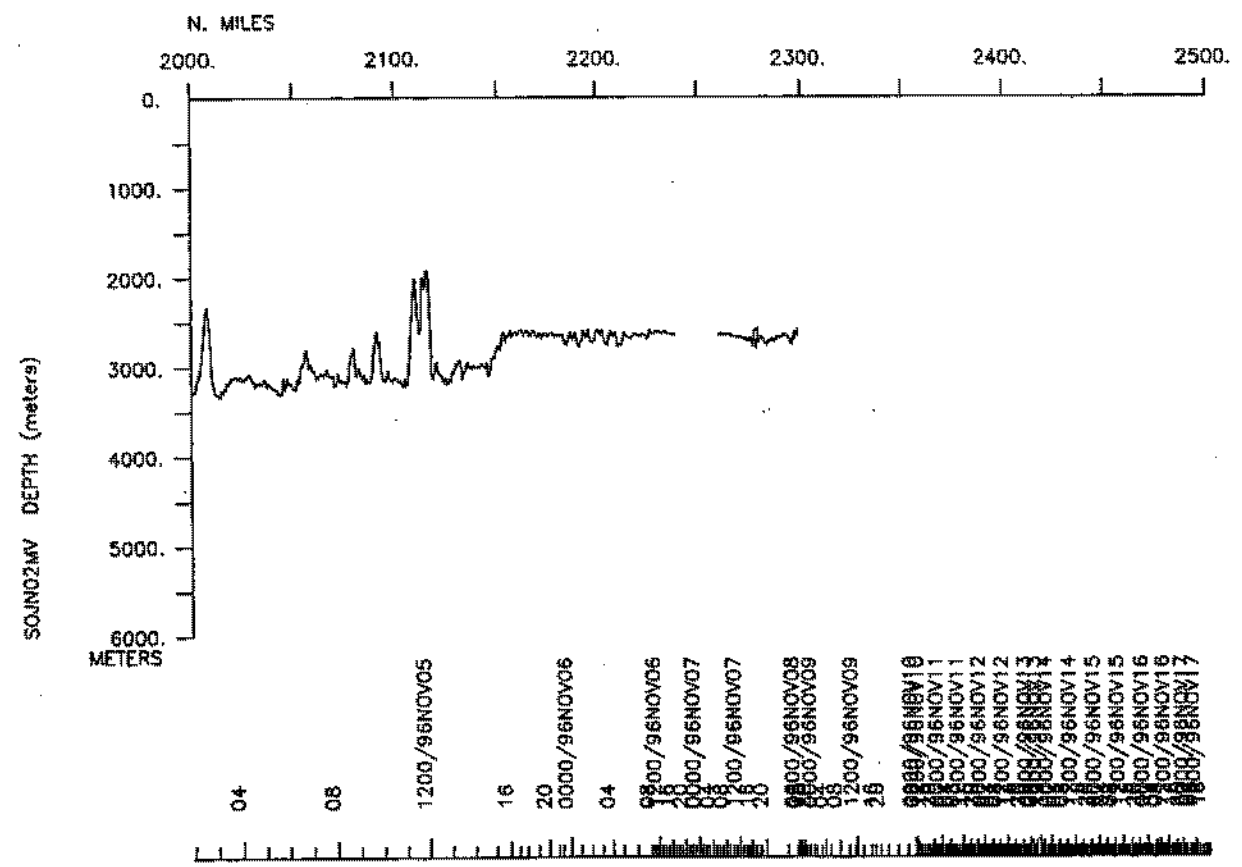
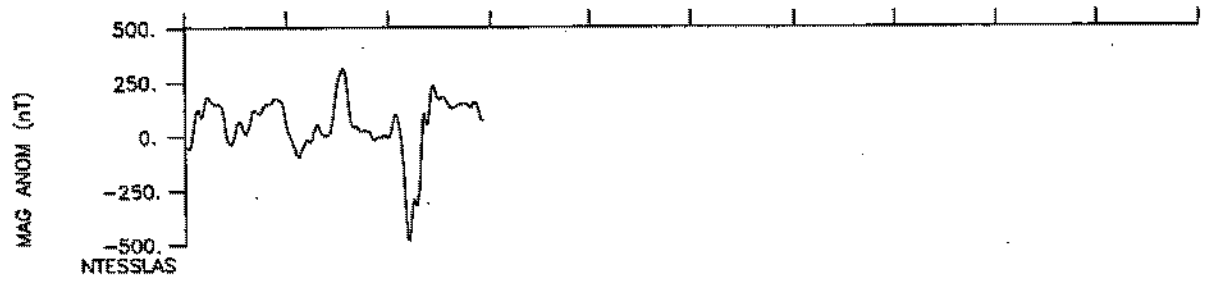
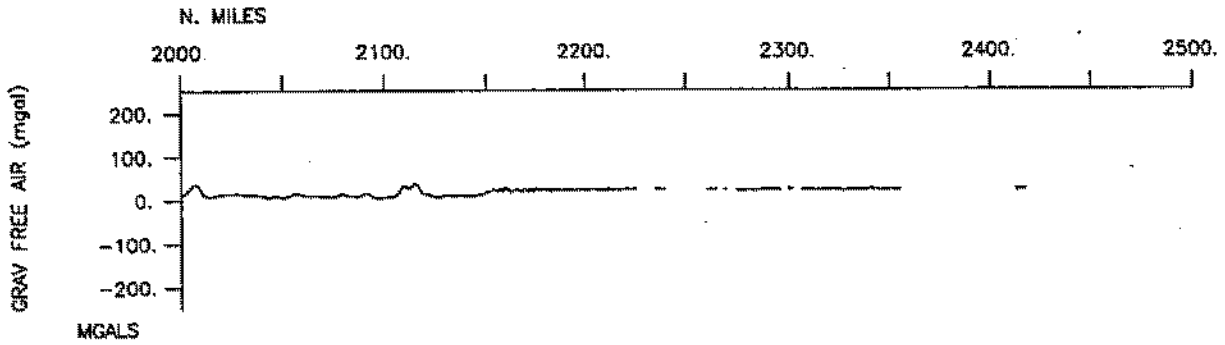


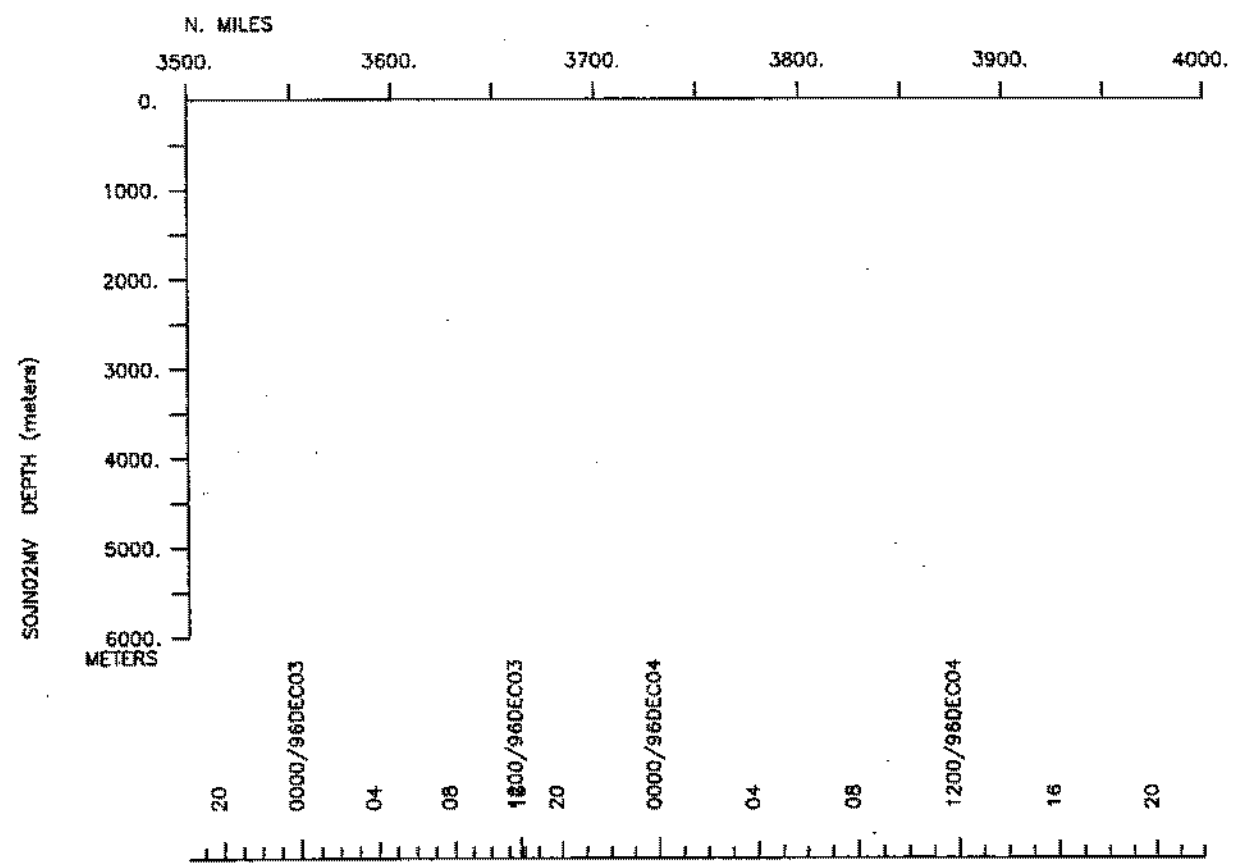
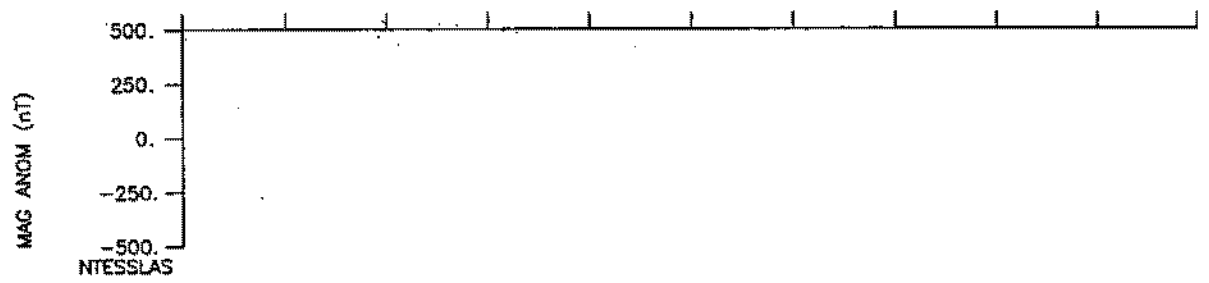
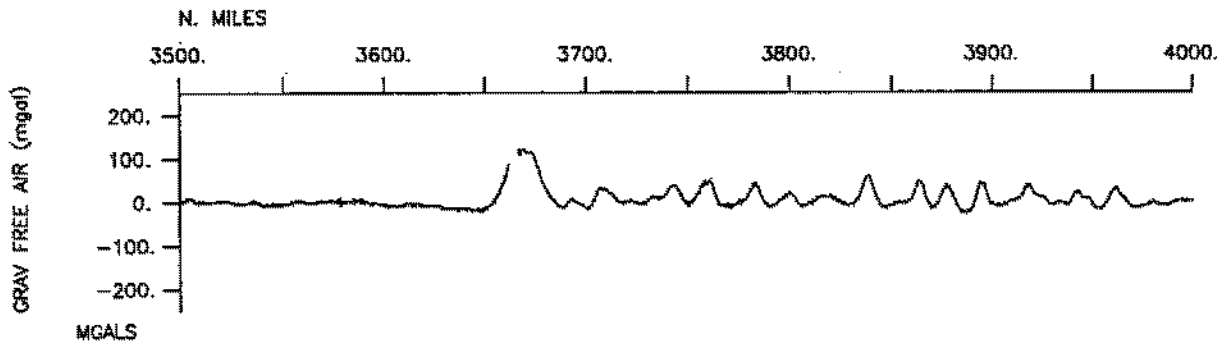


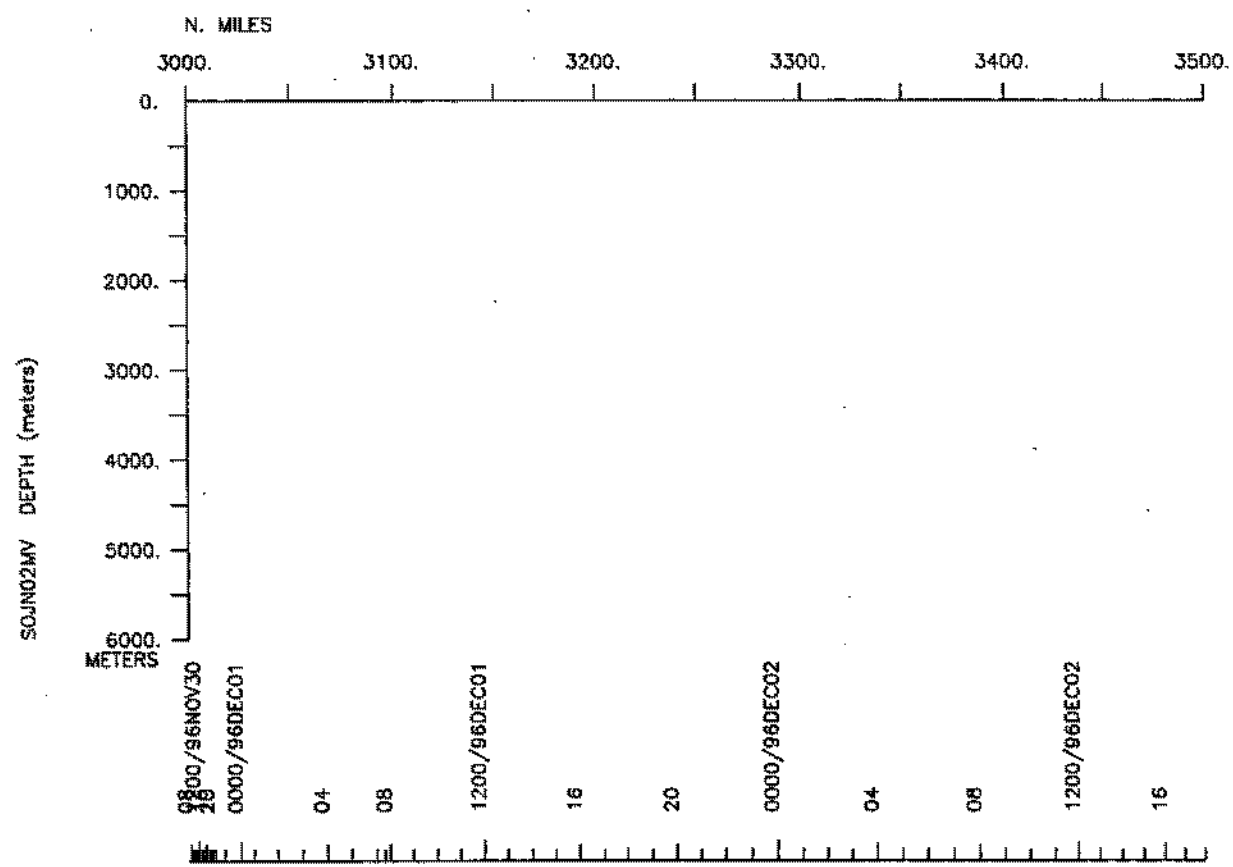
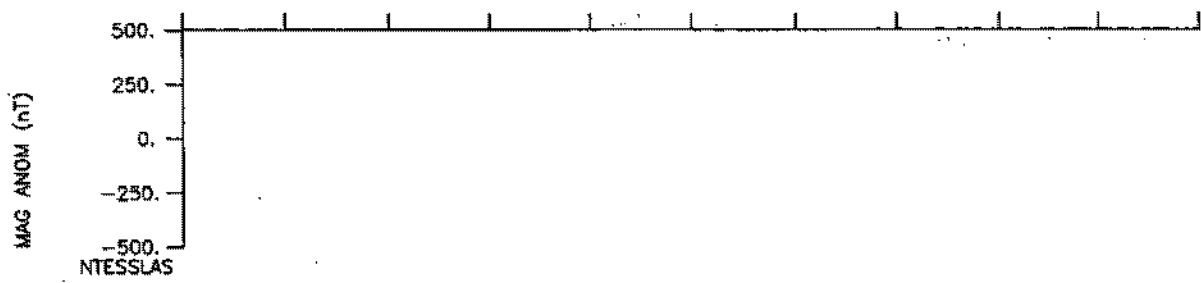
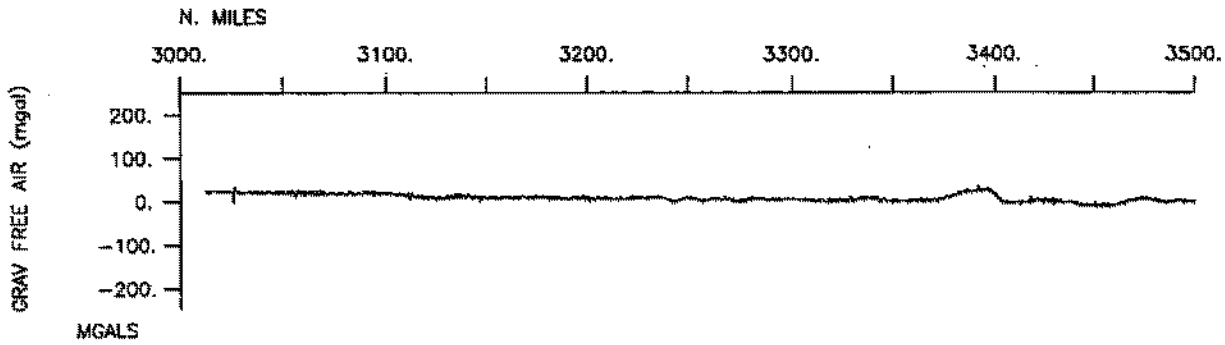


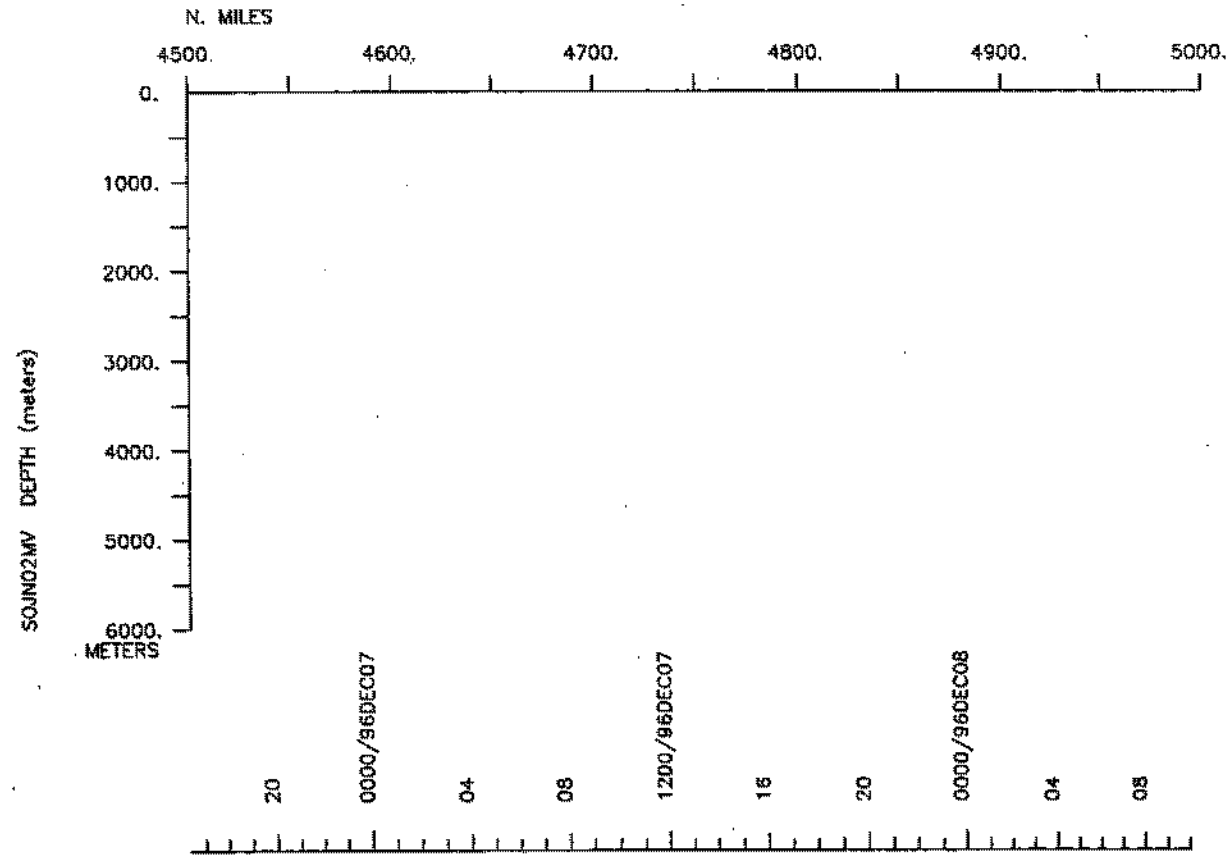
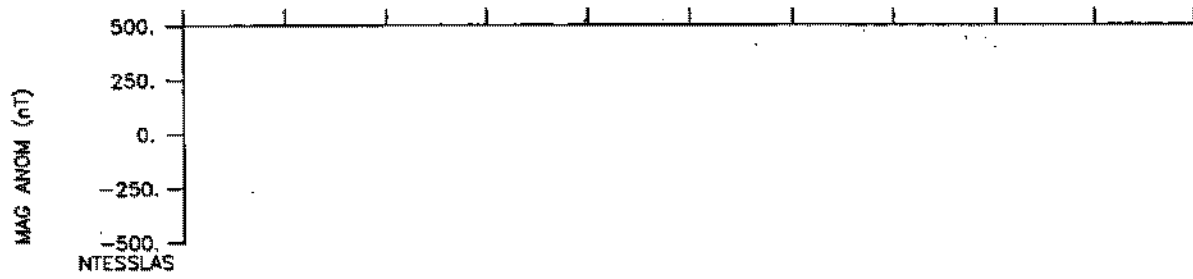
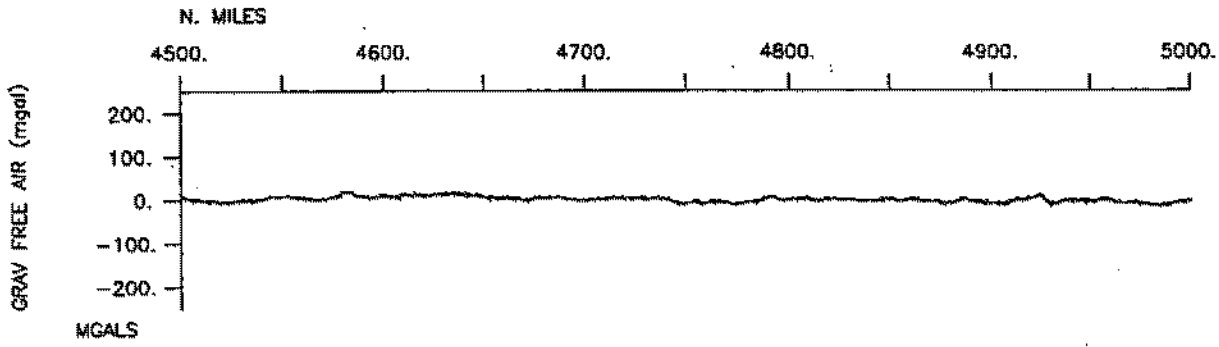


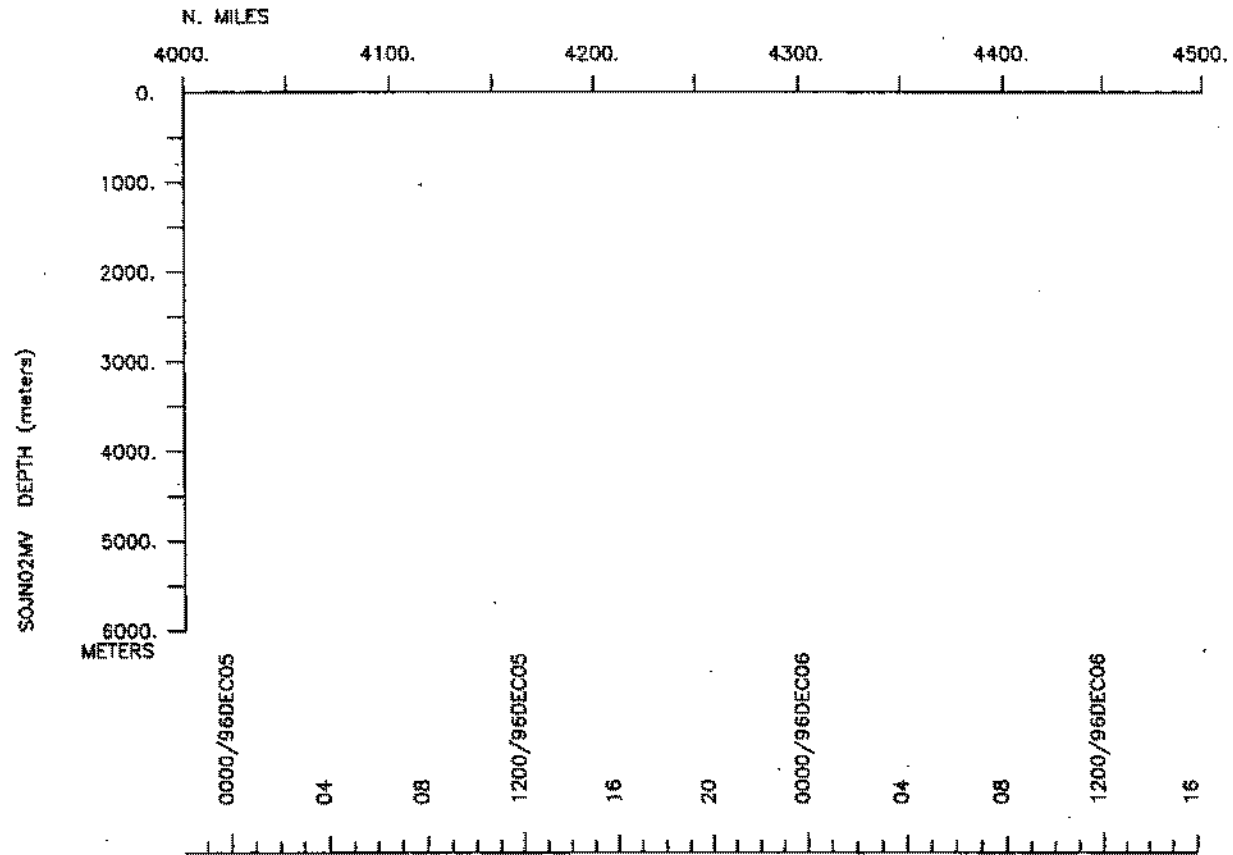
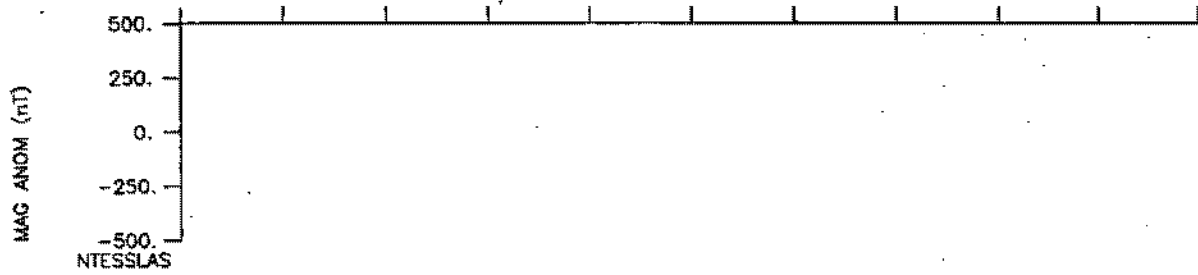
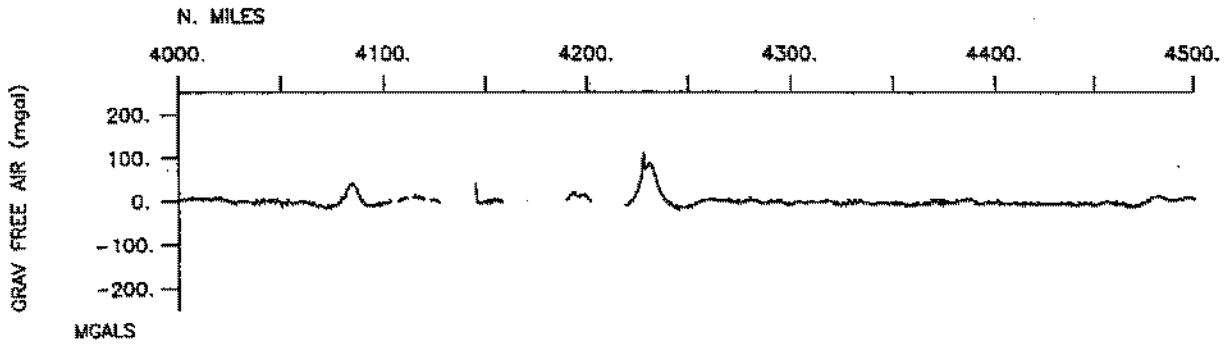


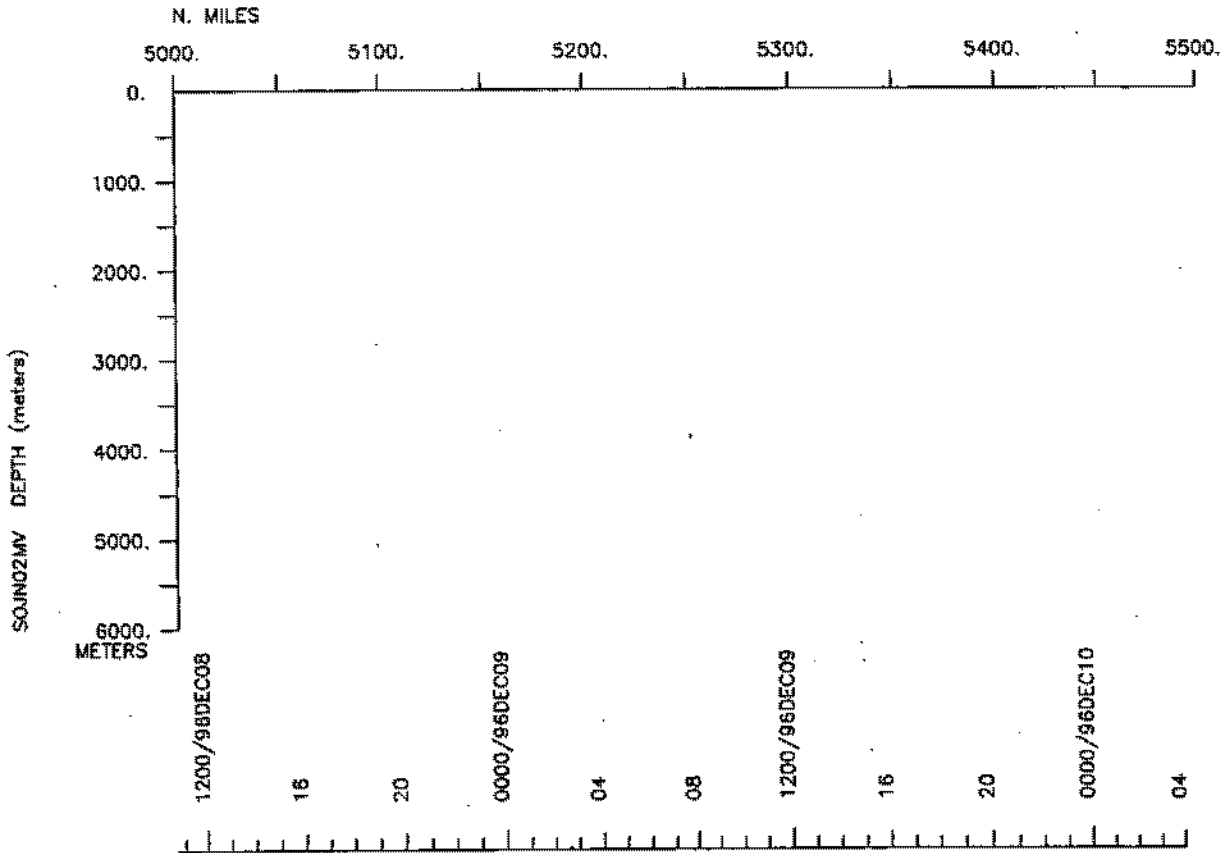
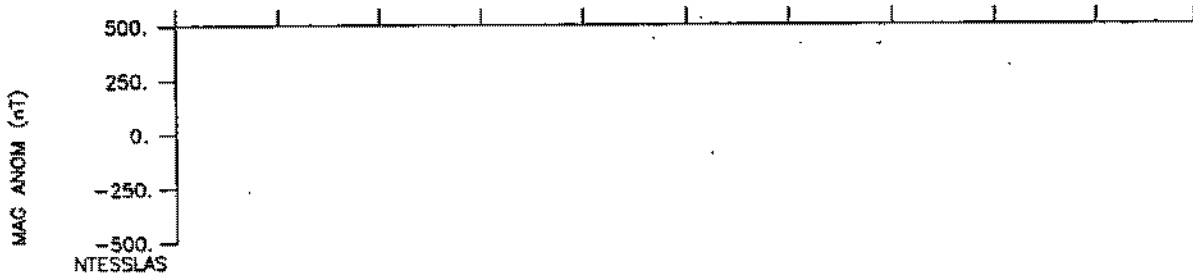
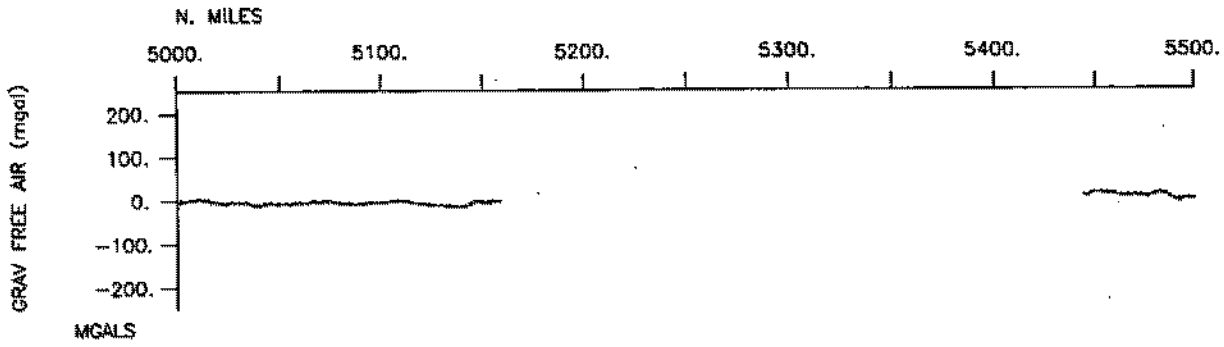


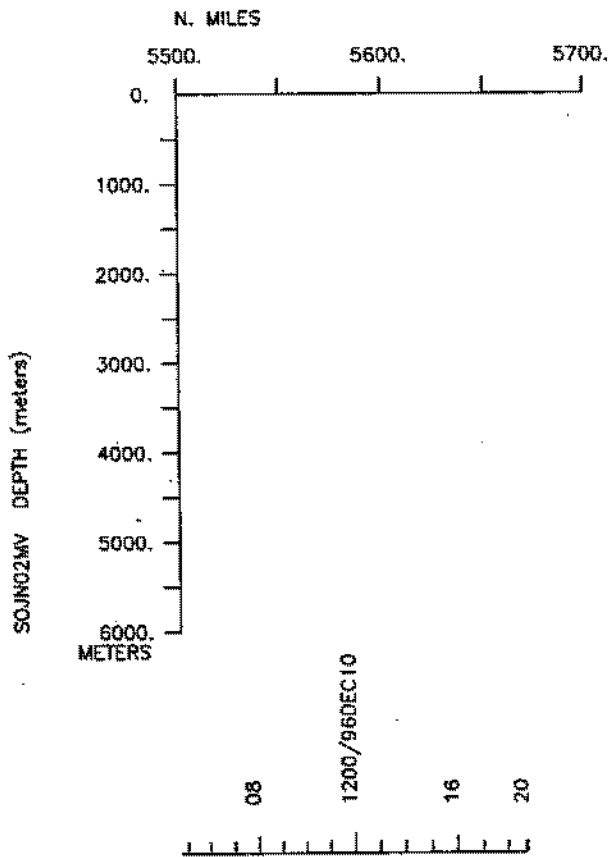
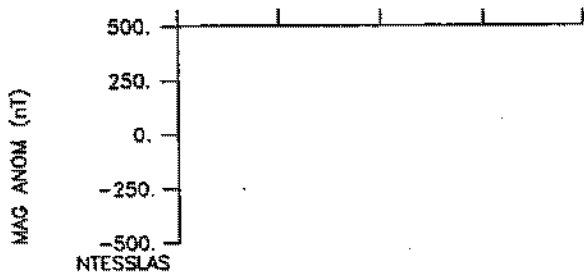
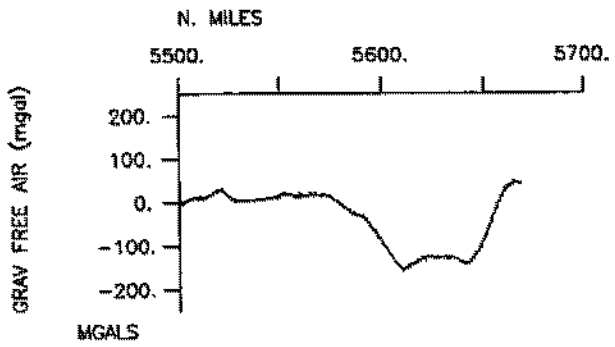












S.I.O. SAMPLE INDEX

SOJOURN EXPEDITION

LEG 2

(SOJN02MV)

R/V Melville

(Issued March 1997)

Ports:

Papeete, Tahiti (28 October 1996)
to
Valparaiso, Chile (10 December 1996)

Chief Scientist:

Rachel Haymon (Univ. Of Calif. Santa Barbara)

The Sample Index is a first level interdisciplinary listing of time, position, sample identification and disposition of all samples, records and measurements collected on this cruise leg. The index data are encoded at sea by the resident marine technician and processed on shore by the S.I.O. Geological Data Center shortly after the completion of the cruise leg.

Positions are interpolated on the basis of sample time by comparison to a single, edited navigation file. Samples beginning at one time and position and ending at another are entered on two consecutive lines. Disposition and sample type are represented by three and four character codes to permit future computer searches on these parameters. (Listings defining these codes are available from the Geological Data Center.)

GDC CRUISE I.D.# 269

**** Ports ***

1800	281096	10	LGPT B	Papeete, Tahiti	GDC	17-32.00S	149-34.00W	f	SOJN02MV
1800	101296	3	LGPT E	Valapariso, Chile	GDC	33-02.00S	71-37.00W	f	SOJN02MV

**** Personnel ***

#	*****NAME*****	*****TITLE*****	*****AFFILIATION*****	**CRID**
PESP UCSB	Haymon, Dr. R.	Chief Scientist	U.C. Santa Barbara	SOJN02MV
PEST UCSB	Baron, S.	Grad. Student	U.C. Santa Barbara	SOJN02MV
PEVL UCSB	Bezy, B.	Volunteer	U.C. Santa Barbara	SOJN02MV
PEVL UCSB	Birk, E.	Volunteer	U.C. Santa Barbara	SOJN02MV
PESP WHO	Crook, T.	Technician	Woods Hole	SOJN02MV
PEST UCSB	Crowder, L.	Grad. Student	U.C. Santa Barbara	SOJN02MV
PESP WHO	Elder, B.	Technician	Woods Hole	SOJN02MV
PESP WHO	Feldman, K.	Technician	Woods Hole	SOJN02MV
PESP WHO	Gleason, D.	Technician	Woods Hole	SOJN02MV
PEST UCSB	Hobson, J.	Grad. Student	U.C. Santa Barbara	SOJN02MV
PEVL SIX	Gyongyver, L.	Volunteer	Rutgers Univ.	SOJN02MV
PESP WHO	Lemmond, P.	Technician	Woods Hole	SOJN02MV
PESP UCSB	MacDonald, K.	Co-Chief Sci.	U.C. Santa Barbara	SOJN02MV
PEST MIT	Madge, L.	Grad Student	Mass. Inst. of Tech.	SOJN02MV
PESP WHO	Olds, D.	Technician	Woods Hole	SOJN02MV
PERT STS	Pillard, E.	Resident tech	Scripps Institution	SOJN02MV
PECT STS	Porteous, T.	Computer Engineer	Scripps Institution	SOJN02MV
PECS UCSB	Scheirer, Dr. D.	Scientist	Brown University	SOJN02MV
PESP WHO	Sellers, W.	Technician	Woods Hole	SOJN02MV
PEST UCSB	Sharfstein, P.	Grad. Student	U.C. Santa Barbara	SOJN02MV
PESP SIX	Sudarakov, S.	Scientist	Russia	SOJN02MV
PEST UCSB	Terra, F.	Undergrad. student	U.C. Santa Barbara	SOJN02MV
PESP SIX	van Dover, C.	Scientist	Univ. of Alaska	SOJN02MV
PESP UCSB	White, S.	Undergrad. student	U.C. Santa Barbara	SOJN02MV
PESP OSU	Wright, D.	Scientist	Oregon State Univ.	SOJN02MV

**** NOTES ***

#An 'X' in the (B)egin/(E)nd column following the sample code indicates no
#sample or data recovered. A 'C' indicates continuation of data collection
#from before the beginning or after the end of a particular leg. (Moored
#bottom instruments, for example.) The number appearing in the columns
#between the sample identifier and the disposition code, for many sample
#entries, is the water depth in corrected meters.

#GMT	DDMMYY	SAMP	B	SAMPLE	DISP			p	CRUISE
#TIME	DATE	TZ	CODE	E IDENTIFIER	CODE	LATITUDE	LONGITUDE	c	LEG-SHIP

**** Underway Data Curator - S. M. Smith ext. 42752 ****

**** Log Books ***

1800	281096	0	LBUW B	Underway Watch Log	GDC	17-32.39S	149-34.84W	g	SOJN02MV
2043	061196	0	LBUW E	Underway Watch Log	GDC	17-24.94S	113-12.22W	g	SOJN02MV
1800	281096	0	LBSC B	Science Log Book 1	UCSB	17-32.39S	149-34.84W	g	SOJN02MV
1703	201196	0	LBSC E	Science Log Book 1	UCSB	17-12.45S	112-47.31W	g	SOJN02MV
0231	211196	0	LBSC B	Science Log Book 2	UCSB	18-23.57S	113-23.36W	g	SOJN02MV
2141	301196	0	LBSC E	Science Log Book 2	UCSB	17-28.63S	113-12.64W	g	SOJN02MV

**** Sea Beam Records (vertical beam and side scan) ***

2200	311096	0	MBSR B	v.beam&sscan r-01	GDC	18-13.59S	132-54.72W	g	SOJN02MV
2011	061196	0	MBSR E	v.beam&sscan r-01	GDC	17-24.07S	113-12.04W	g	SOJN02MV

#GMT	DDMMYY	SAMP	B	SAMPLE	DISP				p	CRUISE
#TIME	DATE	TZ	CODE	E IDENTIFIER	CODE	LATITUDE	LONGITUDE		c	LEG-SHIP
#	-----		-----	-----	-----	-----	-----		-----	-----
*** Magnetics (Earth Total Field) Records ***										
2240	311096	0	MGRA	B Magnetic Analog r-01	GDC	18-13.88S	132-47.49W	g		SOJN02MV
1616	011196	0	MGRA	E Magnetic Analog r-01	GDC	18-45.31S	129-11.74W	g		SOJN02MV
1625	011196	0	MGRA	B Magnetic Analog r-02	GDC	18-45.80S	129-09.91W	g		SOJN02MV
1415	051196	0	MGRA	E Magnetic Analog r-02	GDC	17-24.38S	113-22.98W	g		SOJN02MV
*** Continuous Recorded Gravity ***										
1800	281096	0	GVCR	B Gravity-digital	GDC	17-32.39S	149-34.84W	g		SOJN02MV
1800	101296	0	GVCR	E Gravity-digital	GDC	32-57.71S	71-45.08W	g		SOJN02MV
*** Intergrated Meteorological Acquisition System ***										
1800	281096	0	IMET	B Weather Measurements	GDC	17-32.39S	149-34.84W	g		SOJN02MV
1800	101296	0	IMET	E Computer logged	GDC	32-57.71S	71-45.08W	g		SOJN02MV
*** Acoustic Doppler Current Profiler ***										
2300	281096	0	ADCP	B Accoustic Doppler	GDC	17-28.95S	148-34.76W	g		SOJN02MV
1800	101296	0	ADCP	E Current Profiler	GDC	32-57.71S	71-45.08W	g		SOJN02MV
*** Camera ***										
1955	021196	0	CAXX	B ARGO II, video	UCSB	18-10.40S	124-15.18W	g		SOJN02MV
2342	021196	0	CAXX	E mag, ctd, s.scan	UCSB	18-10.08S	124-15.85W	g		SOJN02MV
0128	081196	0	CAXX	B ARGO II, video	UCSB	17-41.30S	113-16.08W	g		SOJN02MV
0821	081196	0	CAXX	E mag, ctd, s.scan	UCSB	17-40.96S	113-15.50W	g		SOJN02MV
1617	091196	0	CAXX	B ARGO II, video	UCSB	17-19.71S	113-10.67W	g		SOJN02MV
1748	091196	0	CAXX	E ctd, ss sonar	UCSB	17-19.71S	113-10.67W	g		SOJN02MV
0421	101196	0	CAXX	B ARGO II, video	UCSB	17-15.08S	113-09.77W	g		SOJN02MV
0215	131196	0	CAXX	E ctd, ss sonar	UCSB	17-14.60S	113-09.34W	g		SOJN02MV
1700	131196	0	CAXX	B ARGO II, video	UCSB	17-15.00S	113-09.86W	g		SOJN02MV
1634	191196	0	CAXX	E ctd, ss sonar	UCSB	17-37.24S	113-15.07W	g		SOJN02MV
2232	191196	0	CAXX	B Medea, video	UCSB	17-16.38S	113-08.22W	g		SOJN02MV
0247	201196	0	CAXX	E Medea	UCSB	17-16.26S	113-07.81W	g		SOJN02MV
0947	201196	0	CAXX	B Medea, video	UCSB	17-13.55S	112-47.87W	g		SOJN02MV
1508	201196	0	CAXX	E Medea	UCSB	17-13.57S	112-47.73W	g		SOJN02MV
1032	211196	0	CAXX	B ARGO II, video	UCSB	18-23.20S	113-22.80W	g		SOJN02MV
1323	271196	0	CAXX	E ctd, ss sonar	UCSB	17-22.42S	113-11.51W	g		SOJN02MV
1654	291196	0	CAXX	B ARGO II, video	UCSB	17-29.09S	113-13.16W	g		SOJN02MV
2141	301196	0	CAXX	E ctd, ss sonar	UCSB	17-28.63S	113-12.64W	g		SOJN02MV

#GMT	DDMMYY	SAMP	B	SAMPLE	DISP				P	CRUISE
#TIME	DATE	TZ	CODE	E IDENTIFIER	CODE	LATITUDE	LONGITUDE		C	LEG-SHIP
#										
**** Cores ****										
0030	031196	0	CORG	B Wax Core #1	UCSB	18-10.41S	124-15.18W	g		SOJN02MV
0040	031196	0	CORG	E Wax Core #1	UCSB	18-10.41S	124-15.18W	g		SOJN02MV
0105	031196	0	CORG	B Wax Core #2	UCSB	18-10.41S	124-15.17W	g		SOJN02MV
0115	031196	0	CORG	E Wax Core #2	UCSB	18-10.39S	124-15.17W	g		SOJN02MV
**** Navigation Transponders ****										
1709	051196	0	NVXX	B Transponder H	UCSB	17-24.56S	113-11.51W	g		SOJN02MV
1800	101296	0	NVXX	C Xmit-11.00, Rec-9.0	UCSB	32-57.71S	71-45.08W	g		SOJN02MV
1752	051196	0	NVXX	B Transponder G	UCSB	17-26.60S	113-11.79W	g		SOJN02MV
1800	101296	0	NVXX	C Xmit-10.50, Rec-9.0	UCSB	32-57.71S	71-45.08W	g		SOJN02MV
0350	211196	0	NVXX	B Transponder S	UCSB	18-25.15S	113-23.49W	g		SOJN02MV
1800	101296	0	NVXX	C Xmit-11.50, Rec-9.0	UCSB	32-57.71S	71-45.08W	g		SOJN02MV
**** Conductivity, Temperature, Depth ****										
0748	061196	0	TDXX	B AMS 120 , mag	UCSB	17-10.02S	113-08.82W	g		SOJN02MV
1946	071196	0	TDXX	E ctd, ss sonar	UCSB	17-56.78S	113-17.09W	g		SOJN02MV
1350	081196	0	TDXX	B CTD Tow-Yo	UCSB	17-41.00S	113-15.66W	g		SOJN02MV
0223	091196	0	TDXX	E CTD Tow-Yo	UCSB	17-35.03S	113-14.88W	g		SOJN02MV
0418	131196	0	TDXX	B CTD Tow-Yo	UCSB	17-14.95S	113-09.78W	g		SOJN02MV
0930	131196	0	TDXX	E CTD Tow-Yo	UCSB	17-16.99S	113-10.23W	g		SOJN02MV
2228	271196	0	TDXX	B AMS-120, ss sonar	UCSB	18-36.11S	113-23.66W	g		SOJN02MV
1136	291196	0	TDXX	E AMD-120, ss sonar	UCSB	17-45.62S	113-16.00W	g		SOJN02MV
**** Expendable Bathythermographs ****										
1109	021196	0	BTXP	sojourn xbt 8-14	GDC	18-25.24S	125-32.42W	g		SOJN02MV
1230	021196	0	BTXP	sojourn xbt 8-14	GDC	18-22.21S	125-16.14W	g		SOJN02MV
**** Ocean Bottom Seismometers ****										
1800	281096	0	SBOB	C Dorman OBS recovered	SIO	17-32.39S	149-34.84W	g		SOJN02MV
0307	201196	0	SBOB	E Dorman OBS recovered	SIO	17-16.46S	113-08.37W	g		SOJN02MV
1800	281096	0	SBOB	C WHOI OBS recovered	WHOI	17-32.39S	149-34.84W	g		SOJN02MV
1530	201196	0	SBOB	E WHOI OBS recovered	WHOI	17-13.55S	112-48.19W	g		SOJN02MV
#				End Sample Index						SOJN02MV