

**REPORT AND INDEX OF
UNDERWAY MARINE GEOPHYSICAL DATA
SOJOURN EXPEDITION**

LEG 9

**(SOJN09MV)
R/V MELVILLE
(issued August 1997)**

Ports:

Papeete, Tahiti (31 May 1997)

to

San Diego, California (29 June 1997)

Chief Scientist:

Alan Chave (Woods Hole Oceanographic Institution)

Ron Moe, Computer Engineer
Gene Pillard, Resident Marine Technician
No Sea Beam/Underway Processor on board

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

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.# 2679

**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.

SeaBeam 2000 Data Collected in Ancillary Mode

In the absence of funding for SeaBeam operations on this leg, SeaBeam data were collected in "ancillary mode". In this mode of operation, no Hardware Technician or SB/Underway Processor were on board and the types of realtime records and post-processed data products are reduced from those available under the fully funded mode.

The SeaBeam data remain proprietary to the SIO Shipboard Technical Support Group, not the chief scientist.

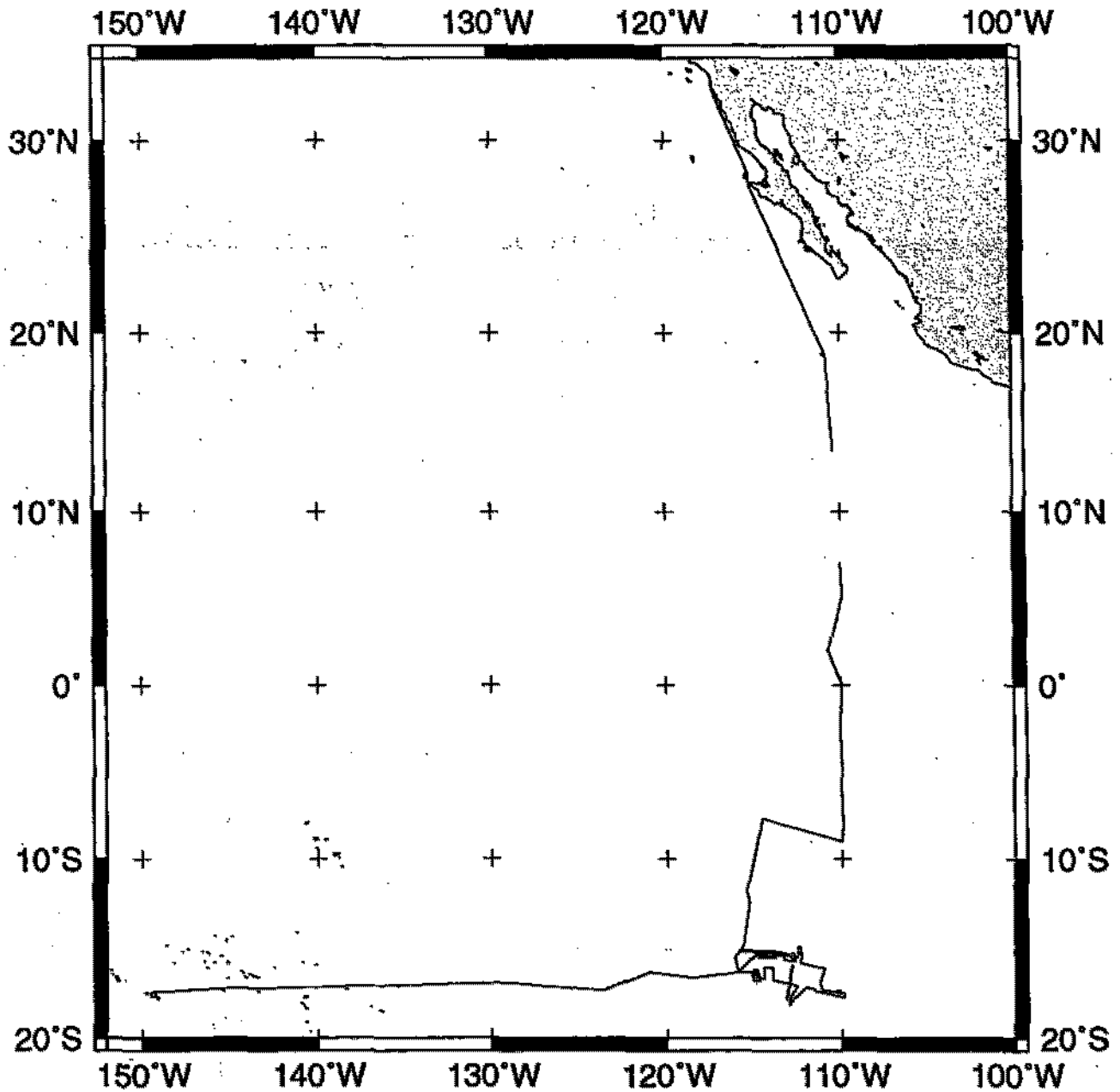
May 1993

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



SOJOURN EXPEDITION LEG 9

CHIEF SCIENTIST: Alan Chave (Woods Hole Oceanographic Inst.)

PORTS: Papeete, Tahiti - San Diego, California

DATES: 31 May - 29 June 1997

SHIP: R/V Melville

TOTAL MILEAGE OF UNDERWAY DATA COLLECTED

Cruise - 7595 miles

Magnetics - magnetometer broken

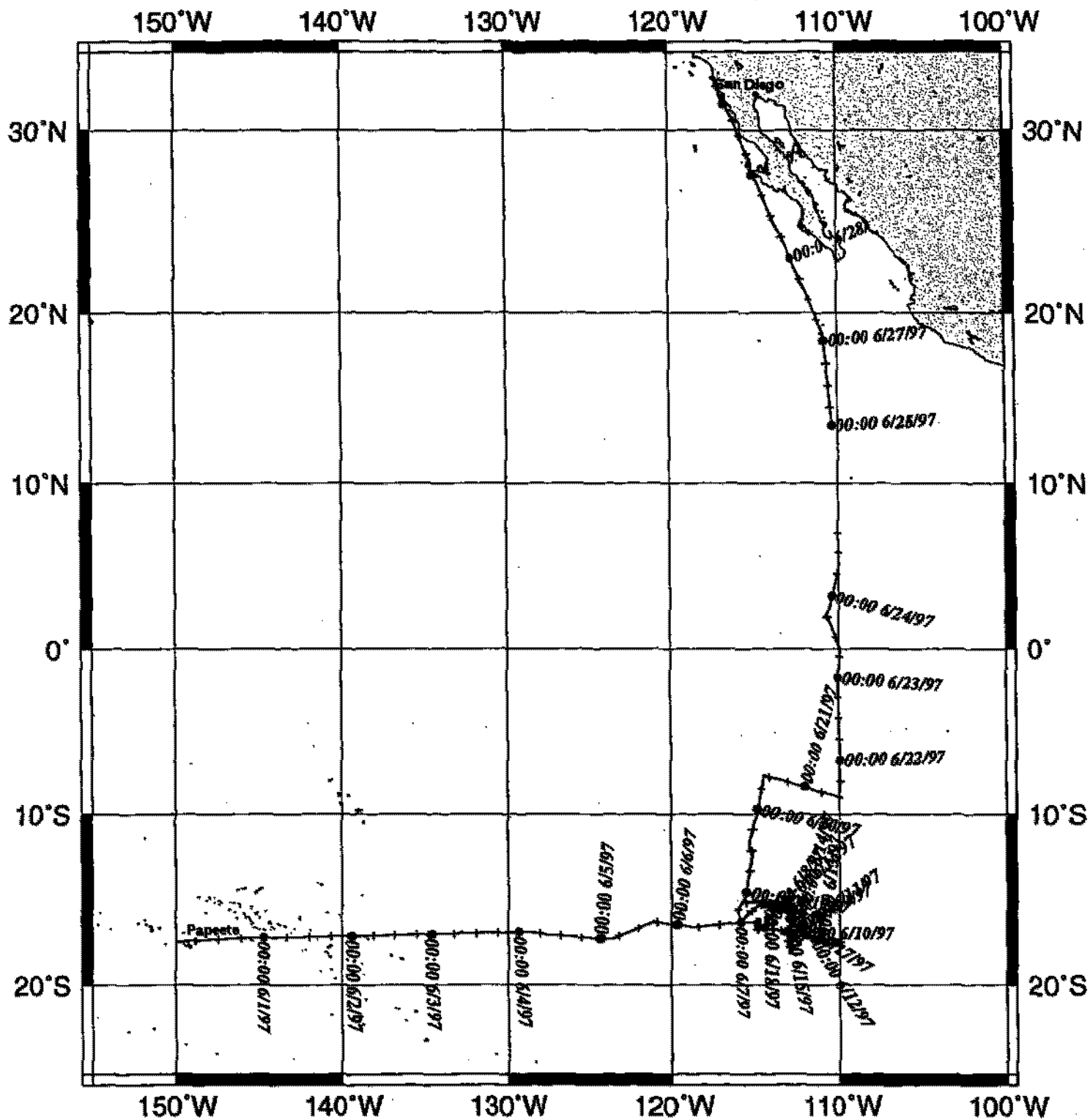
Bathymetry - 7360 miles

Seismic Reflection - none collected

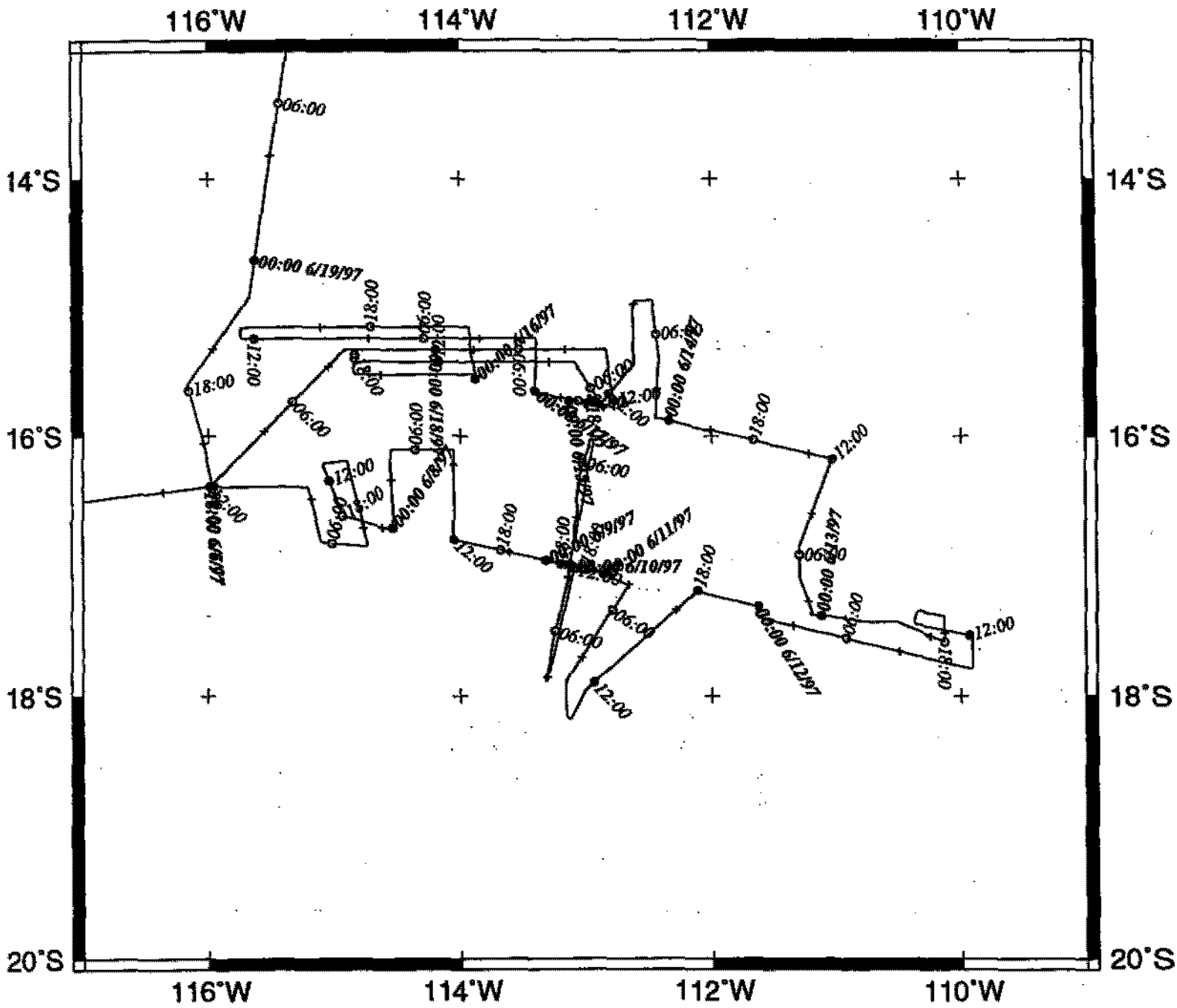
Sea Beam - 7360 miles

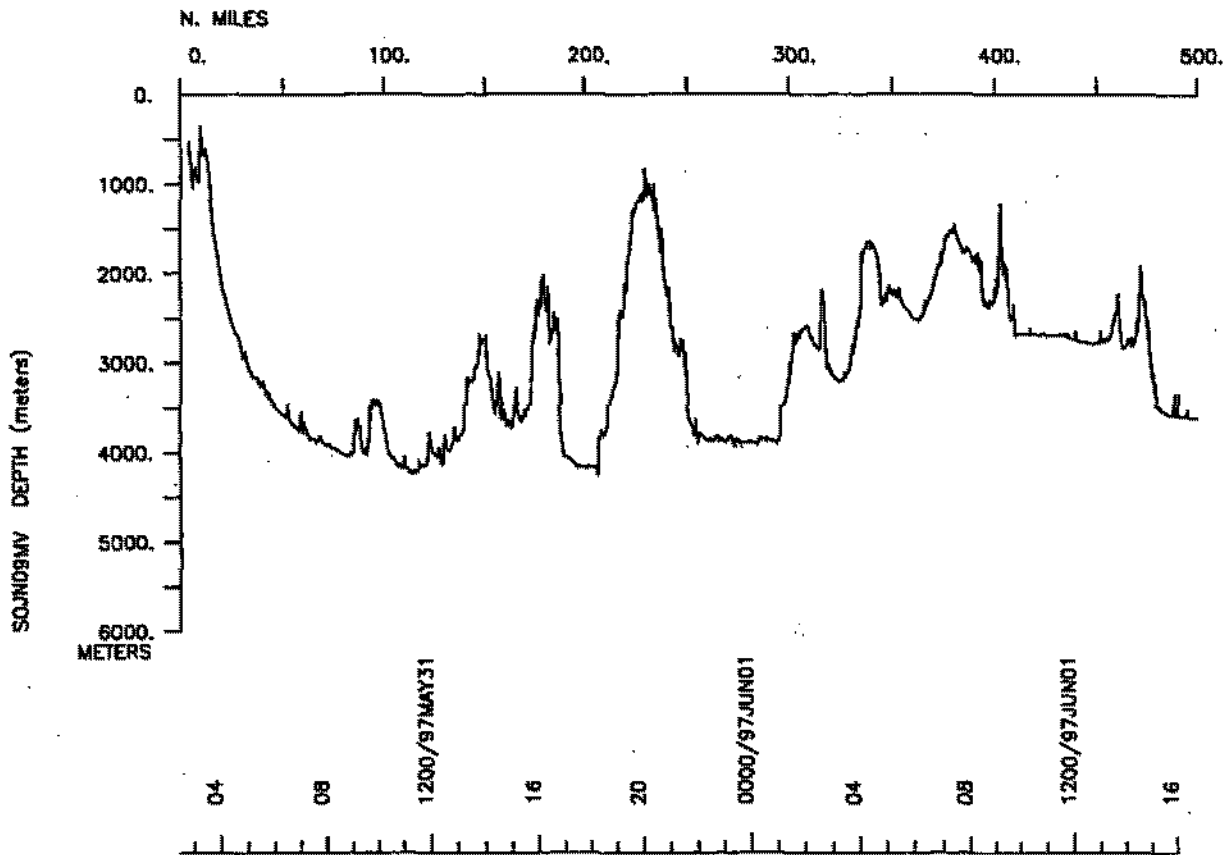
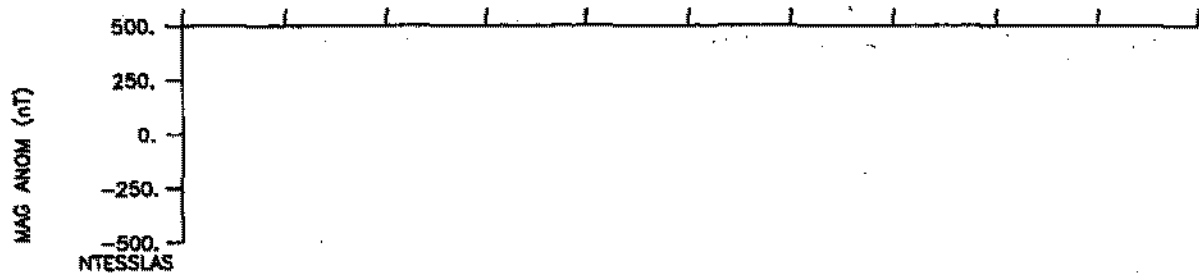
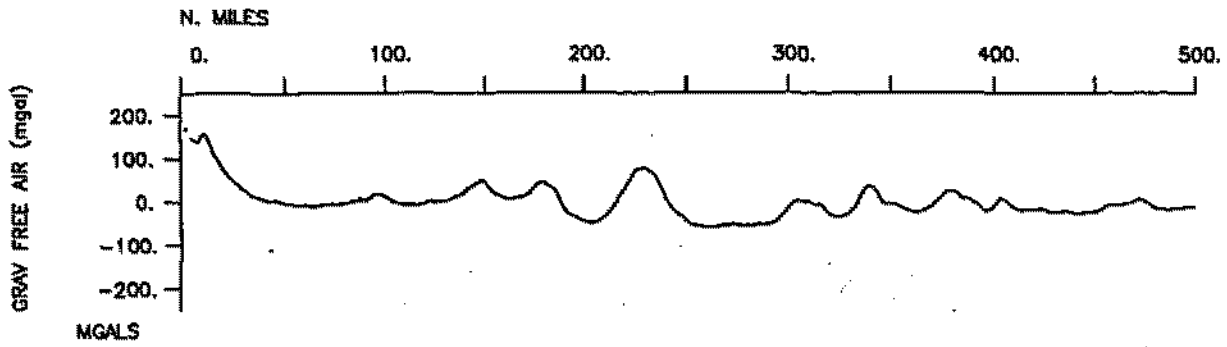
Gravity - 7190 miles

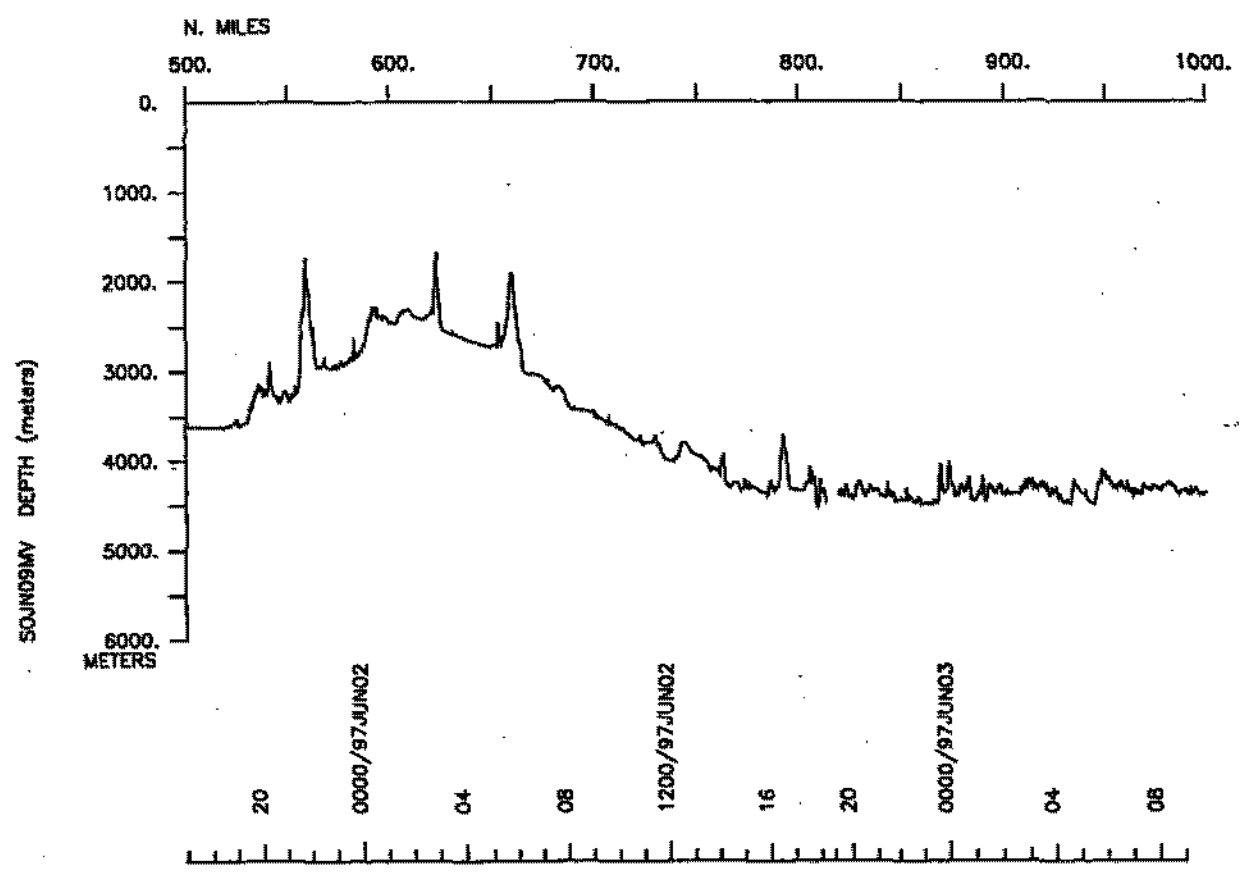
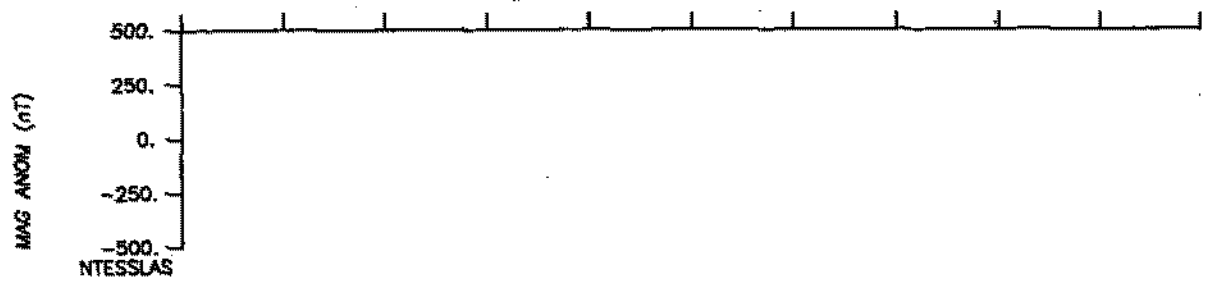
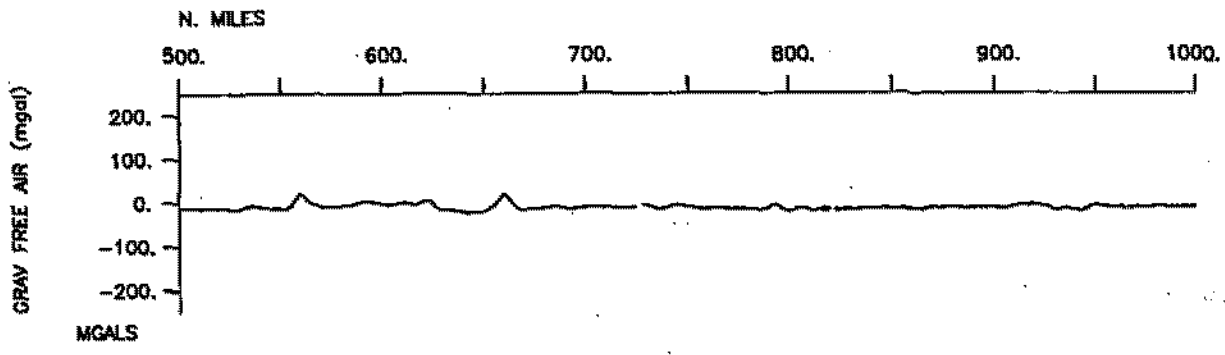
SOJN09MV Track

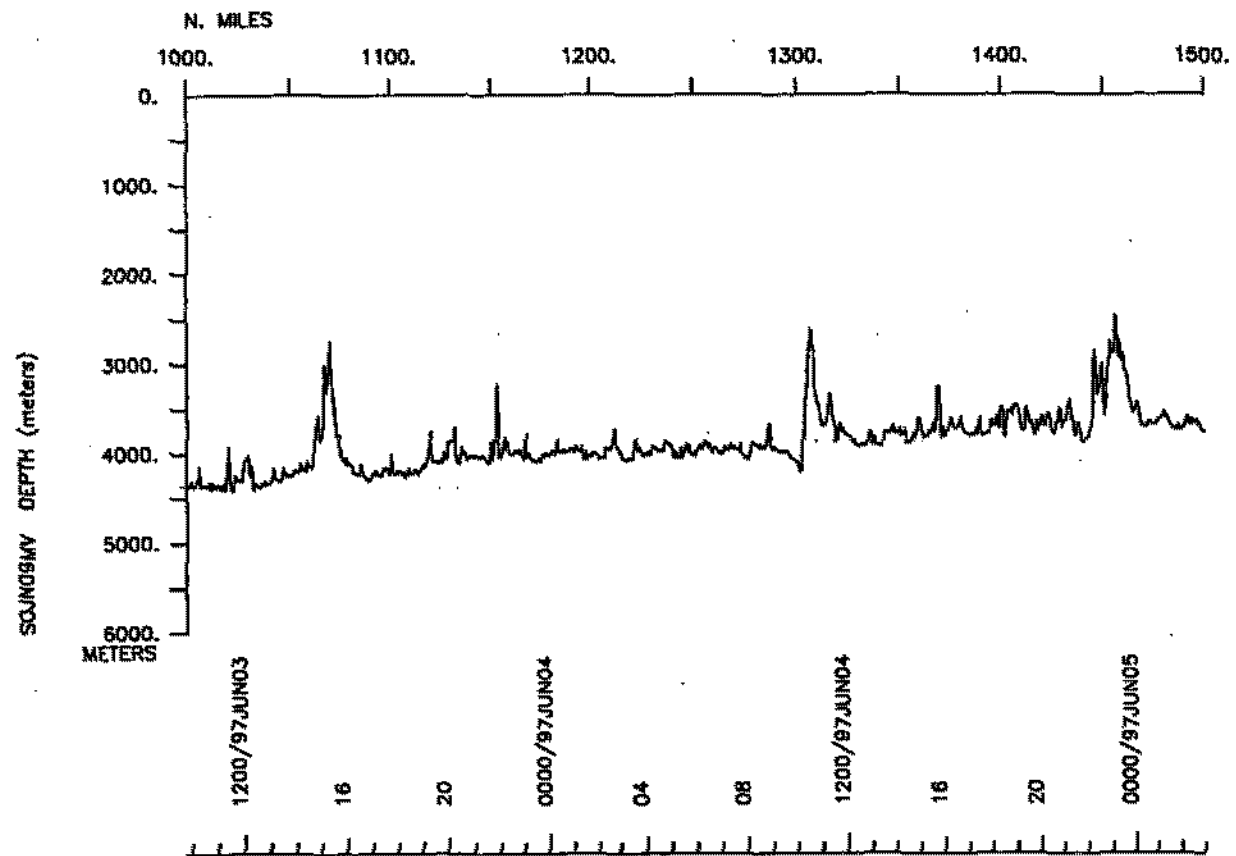
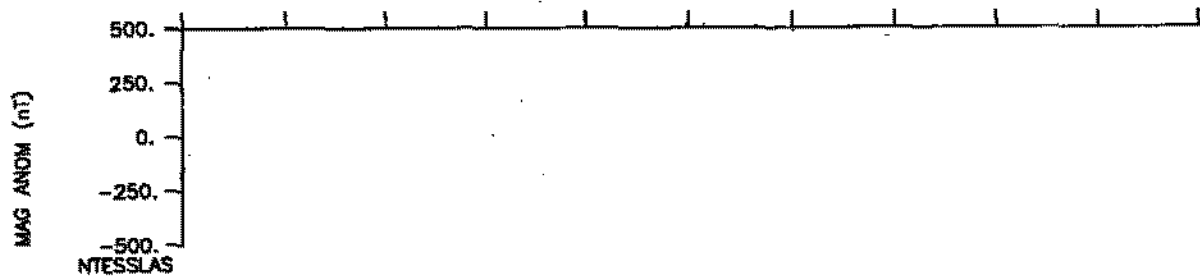
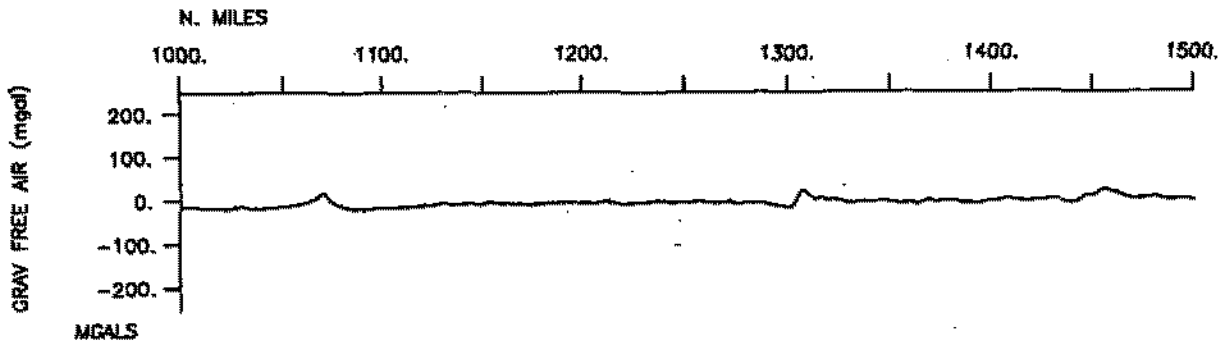


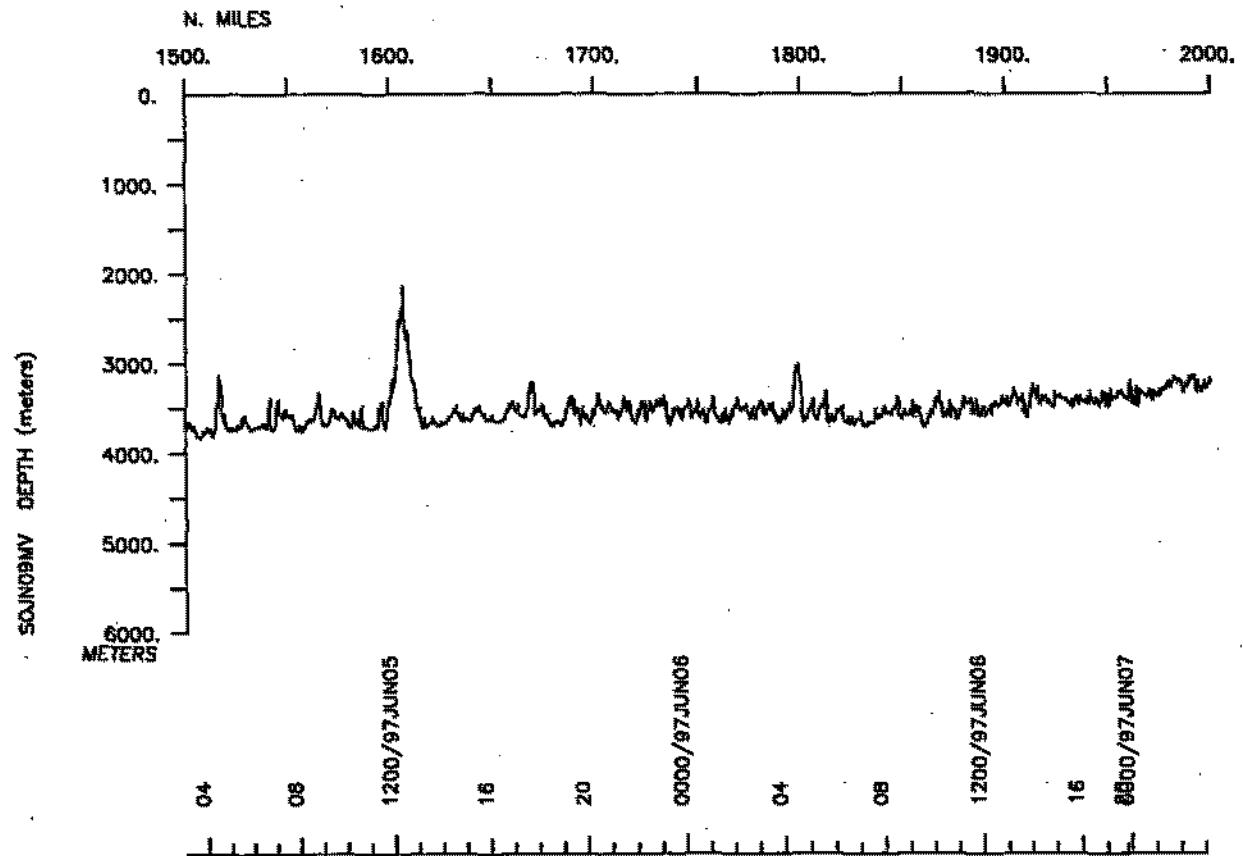
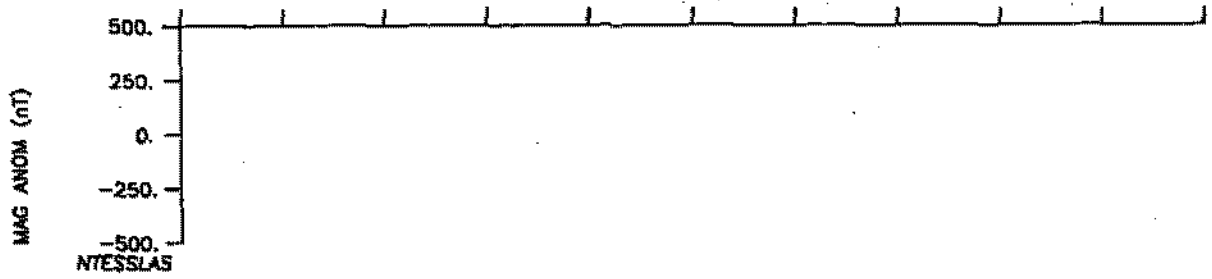
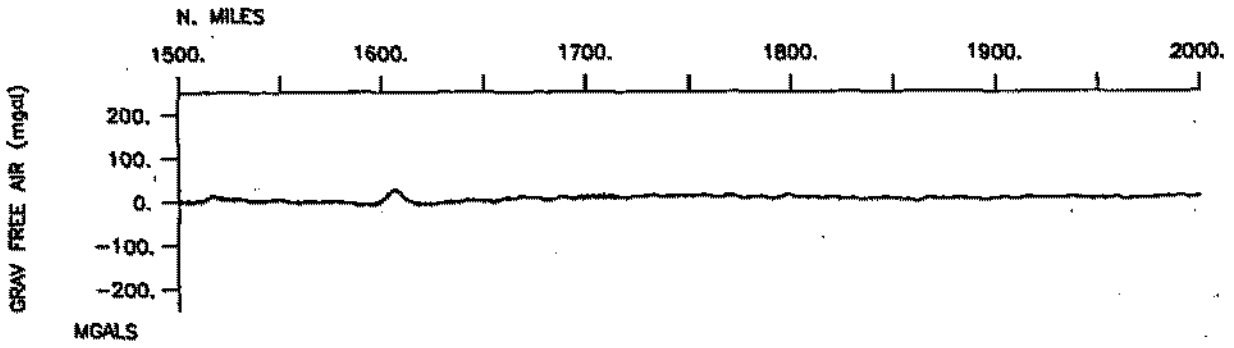
SOJN09MV Survey Area

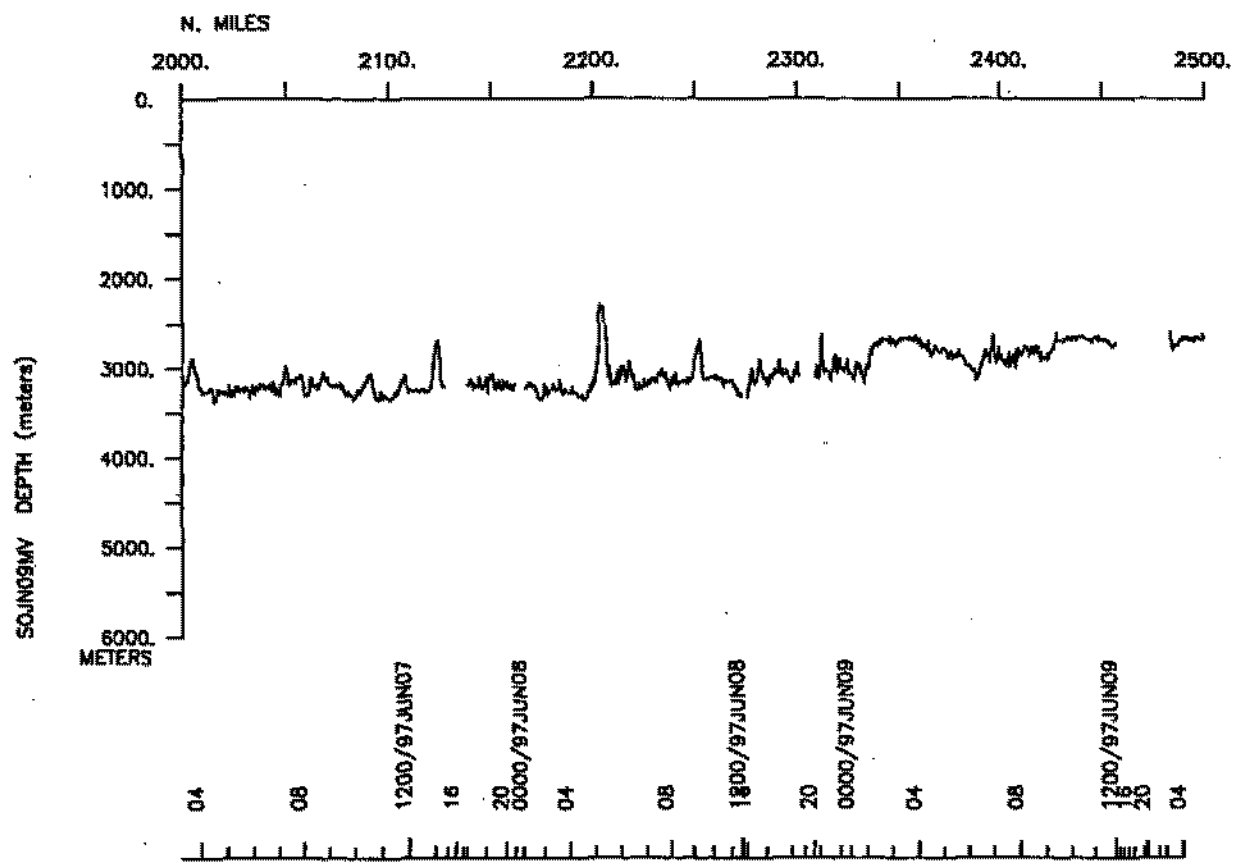
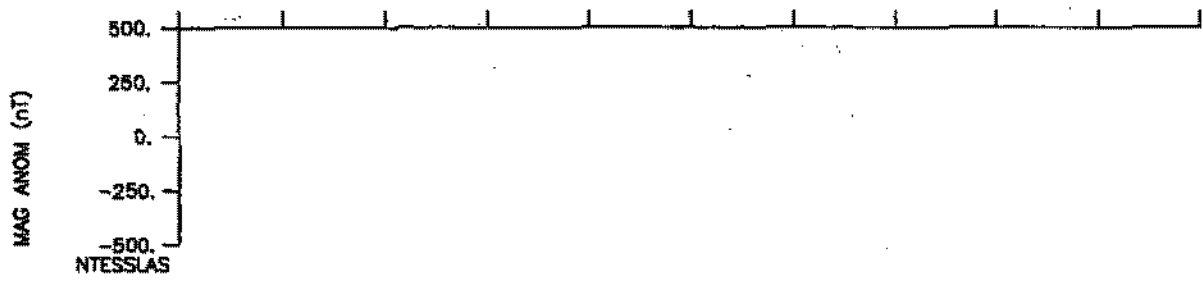
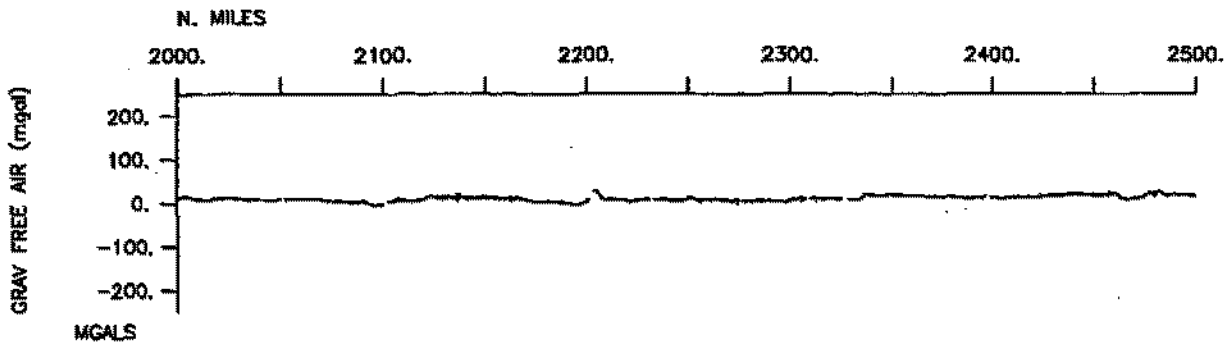


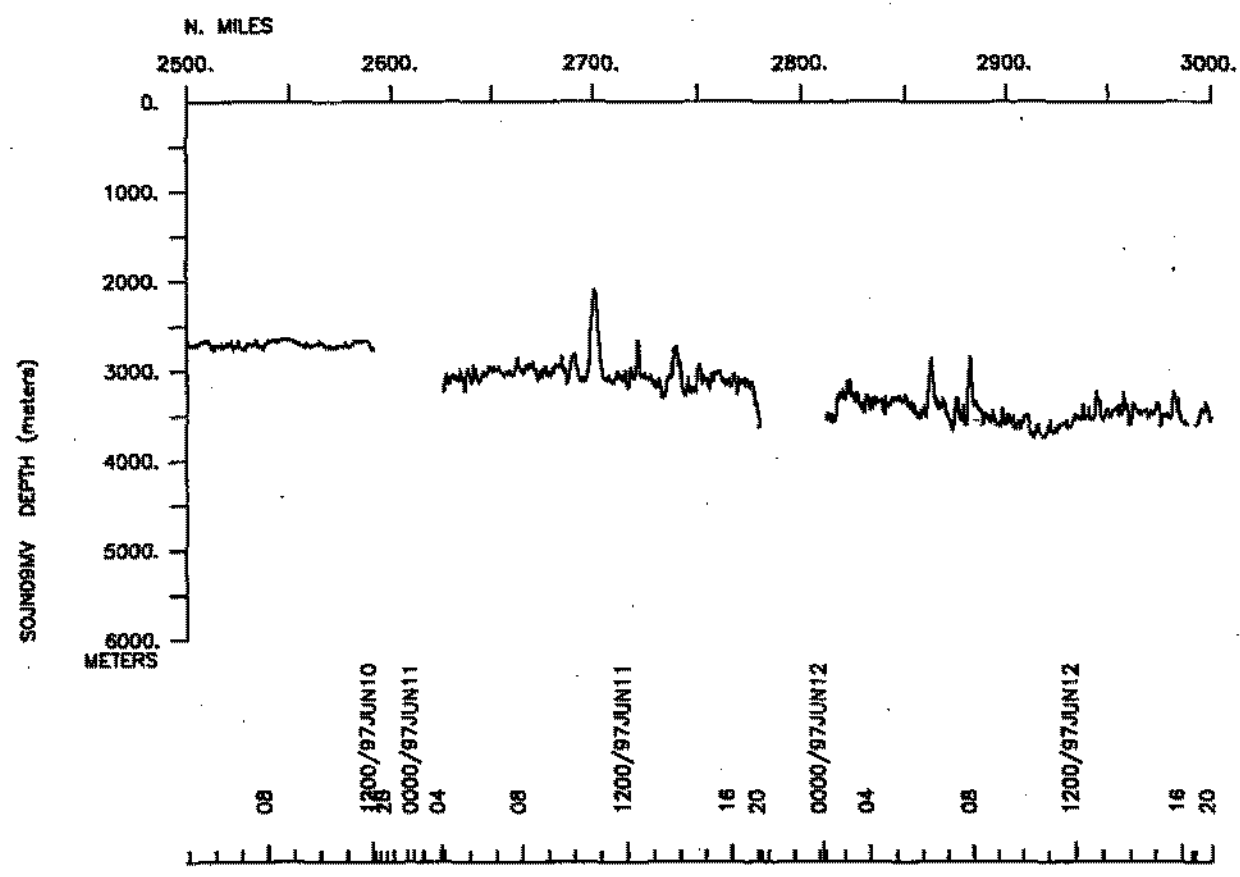
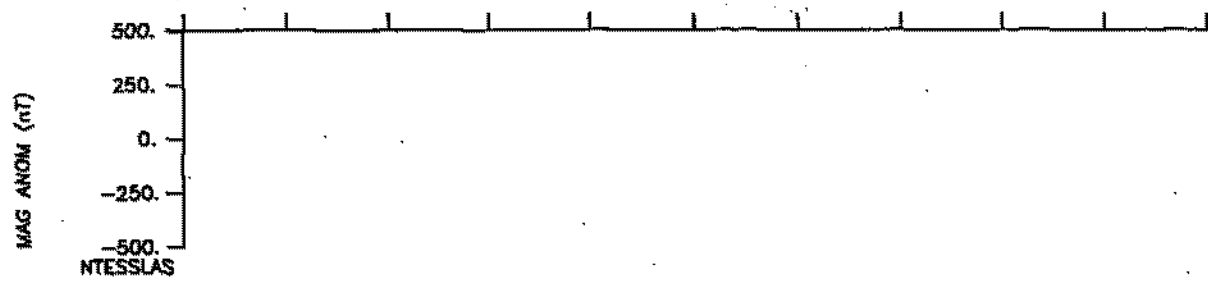
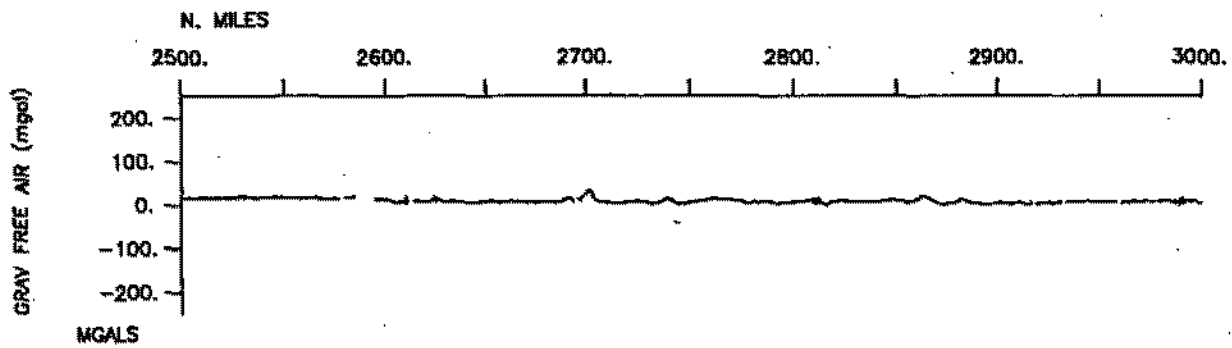


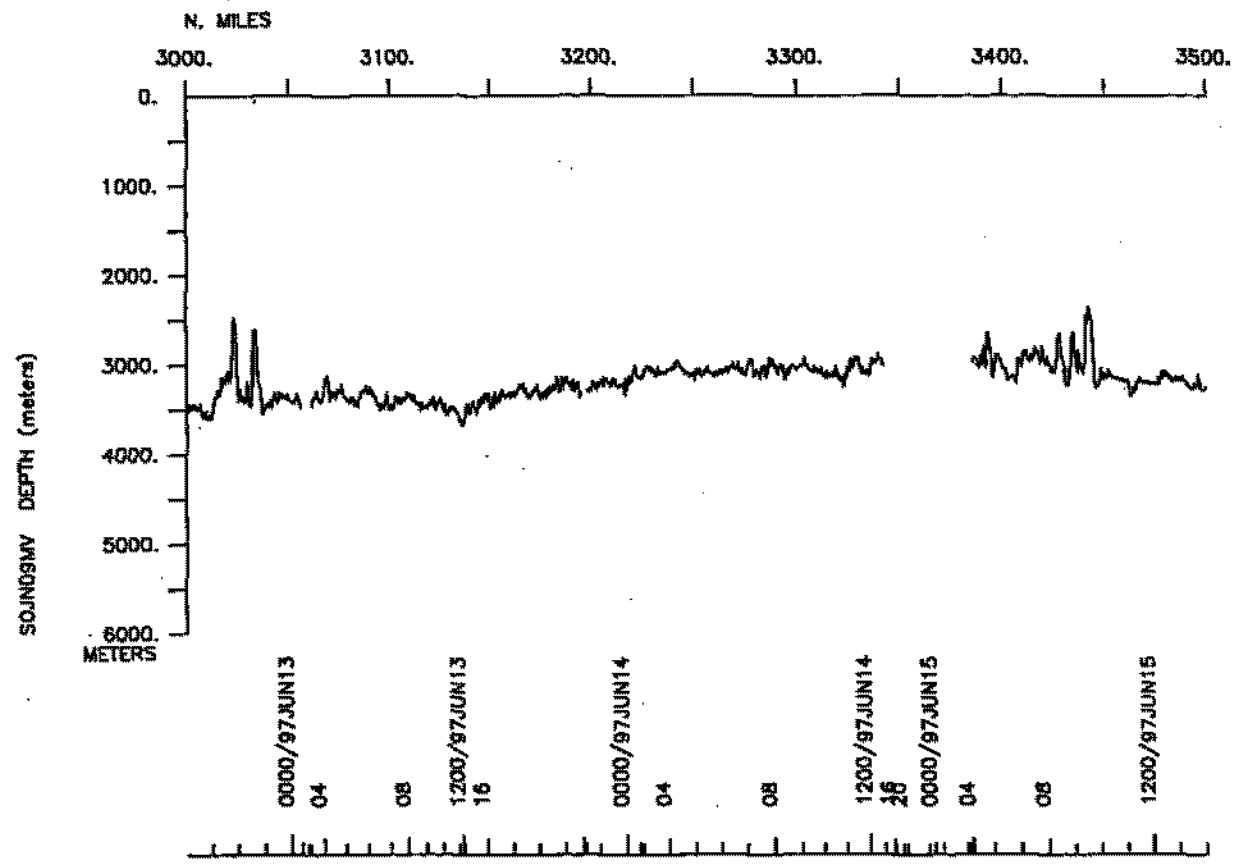
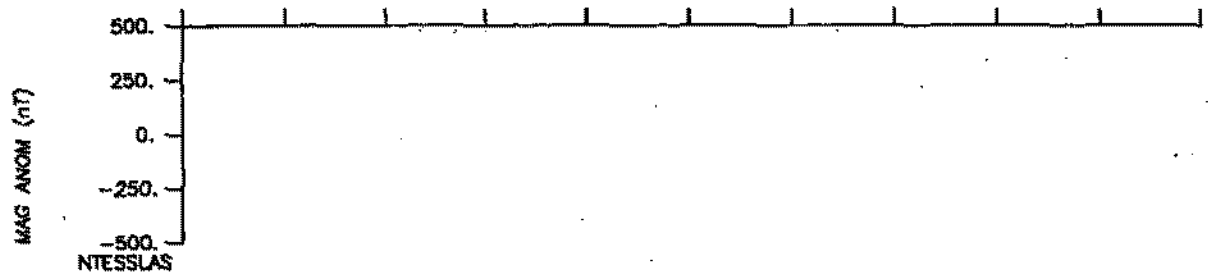
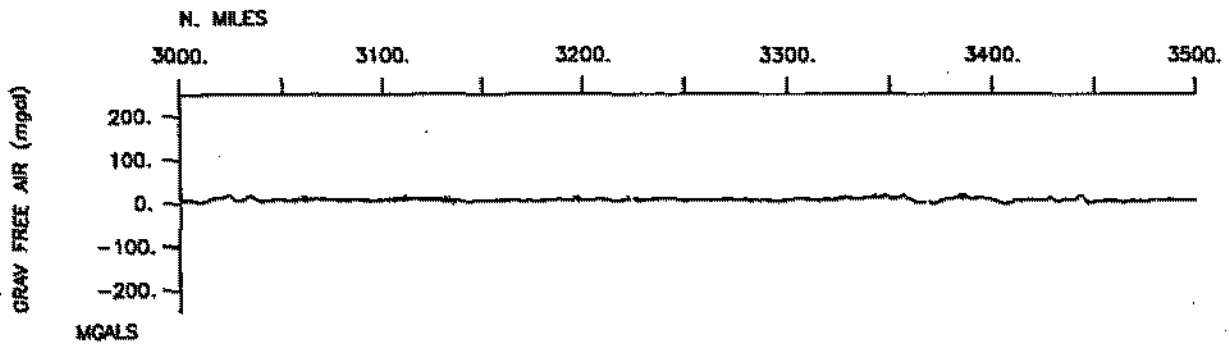


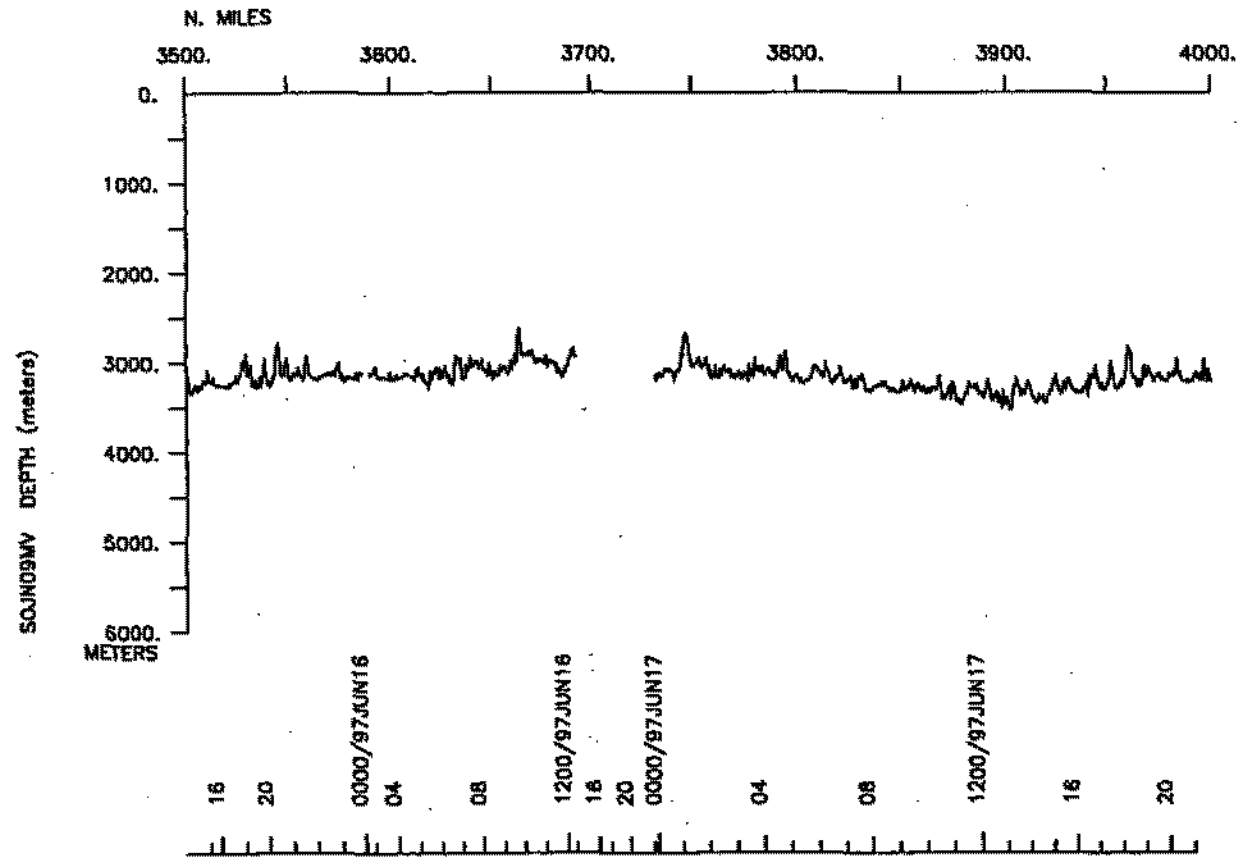
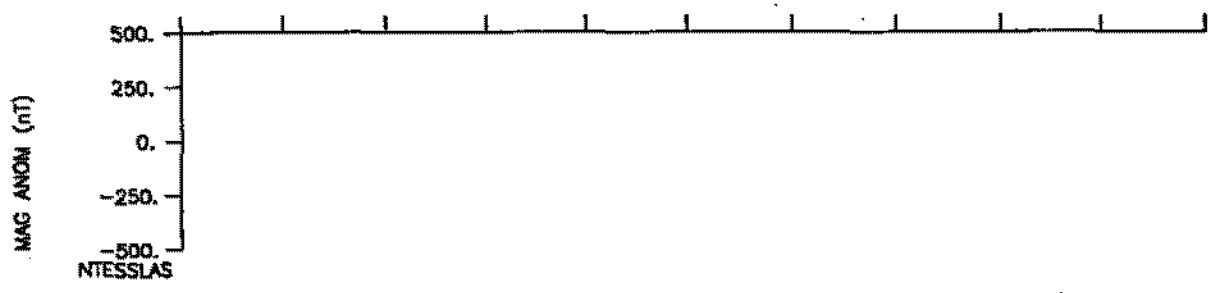
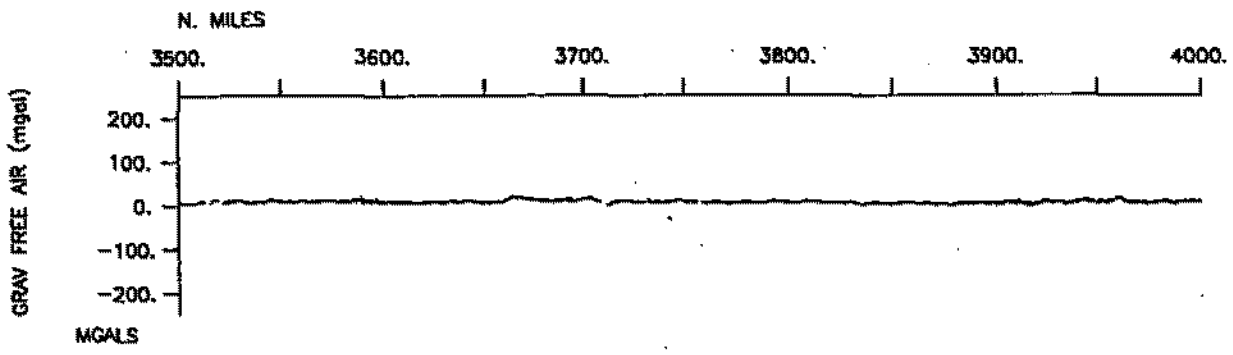


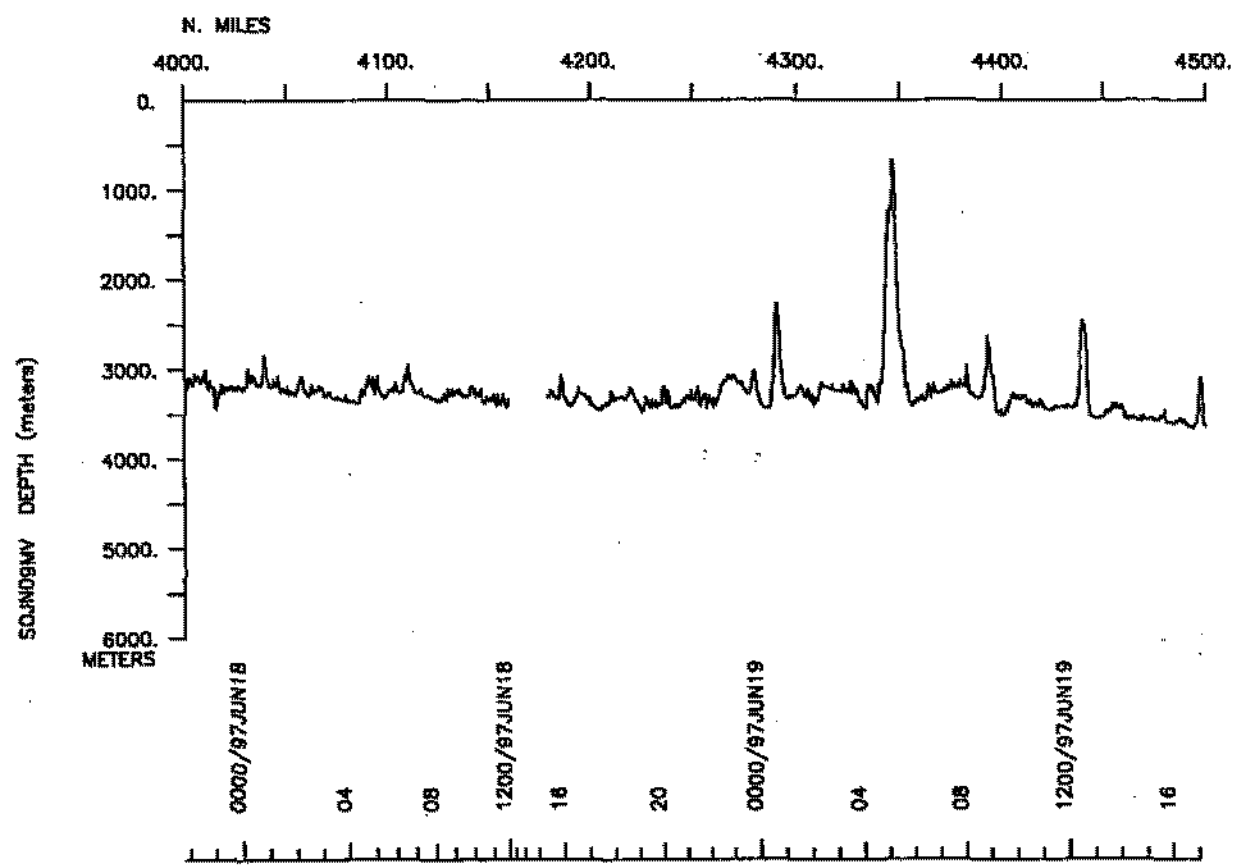
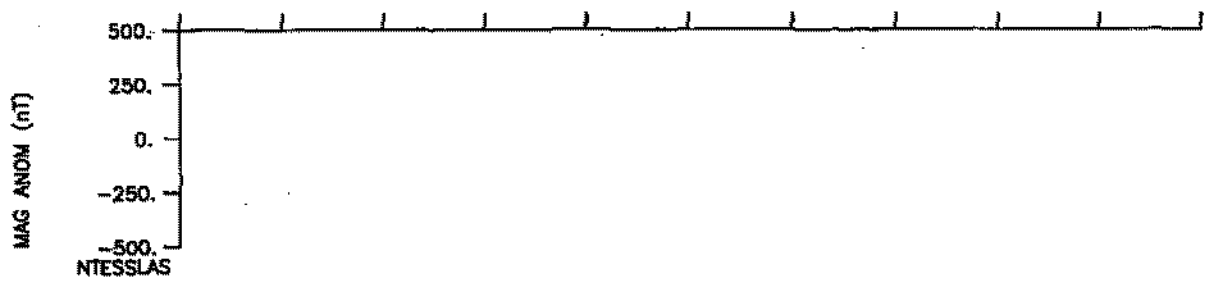
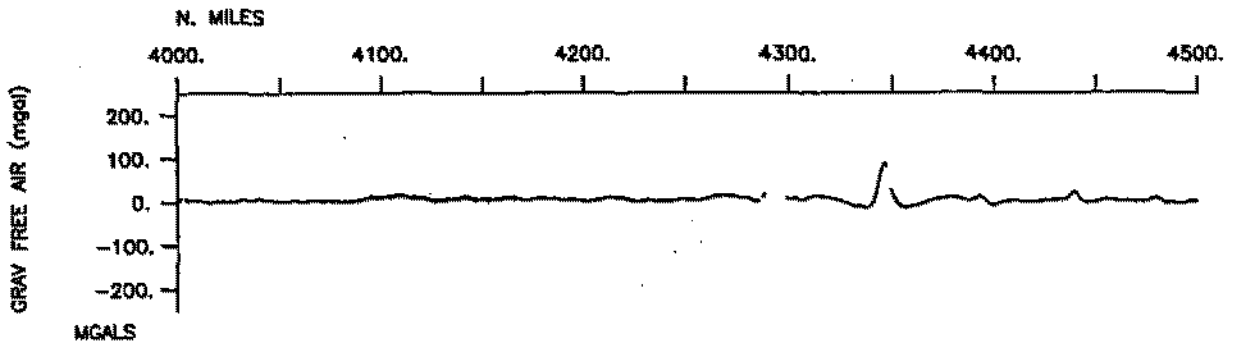


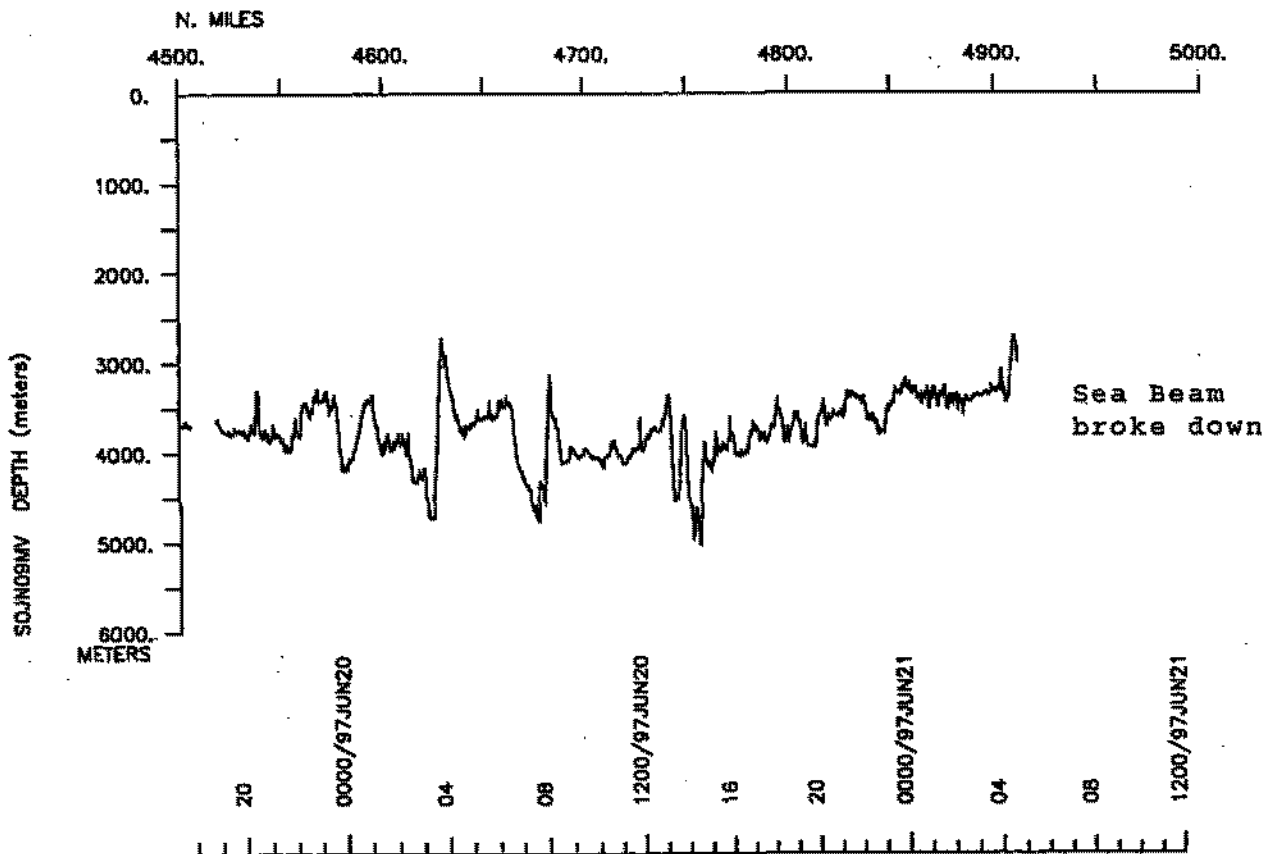
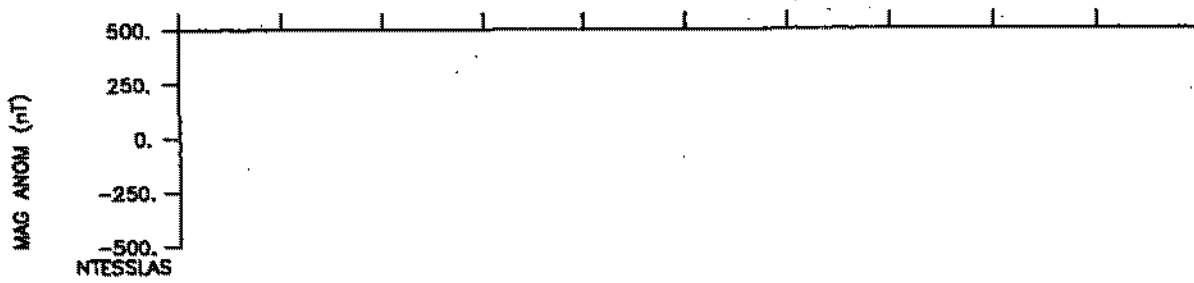
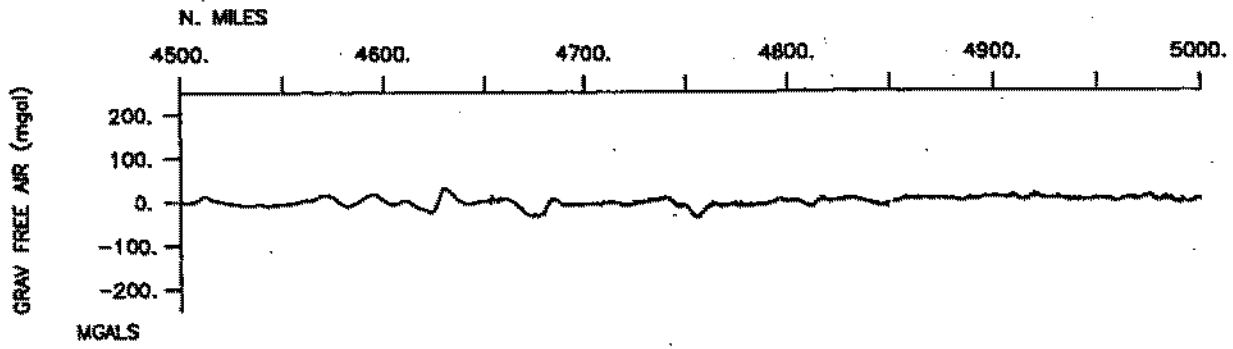


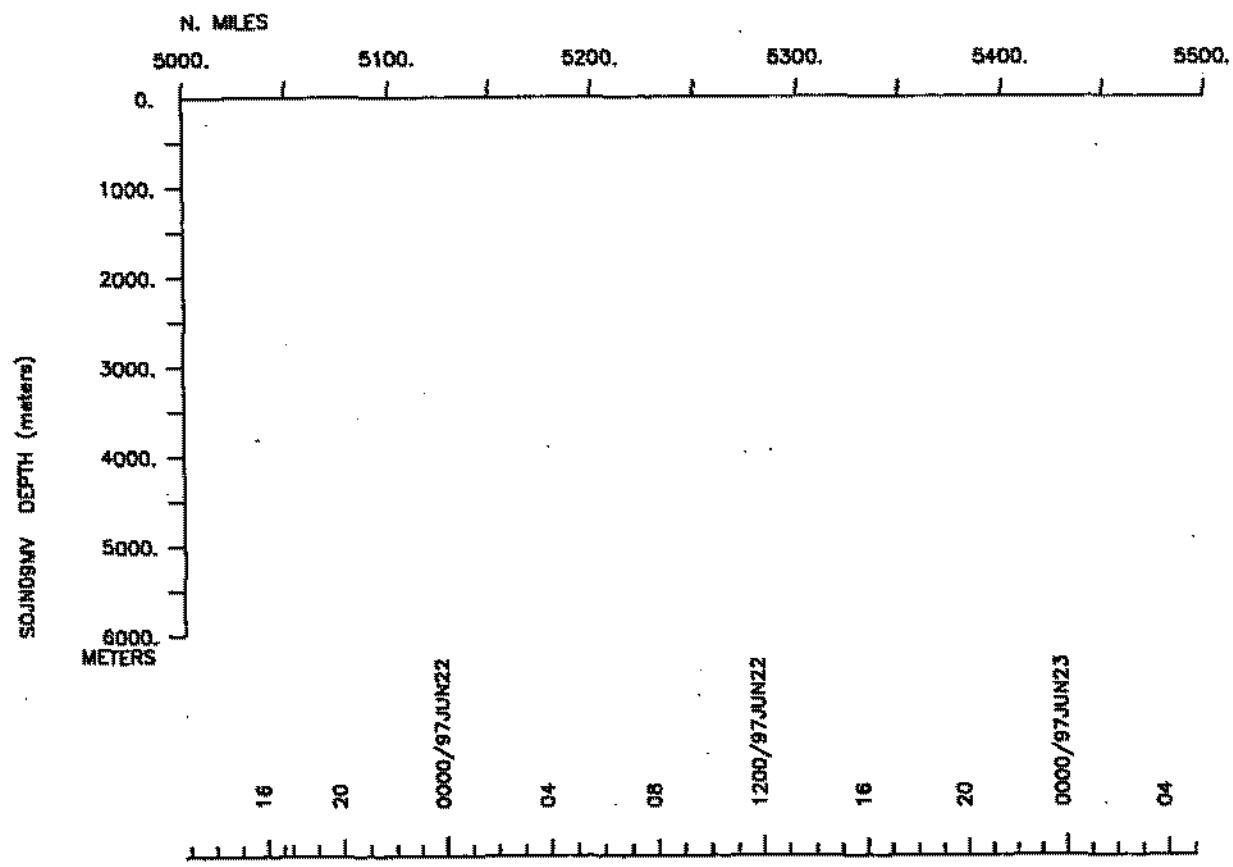
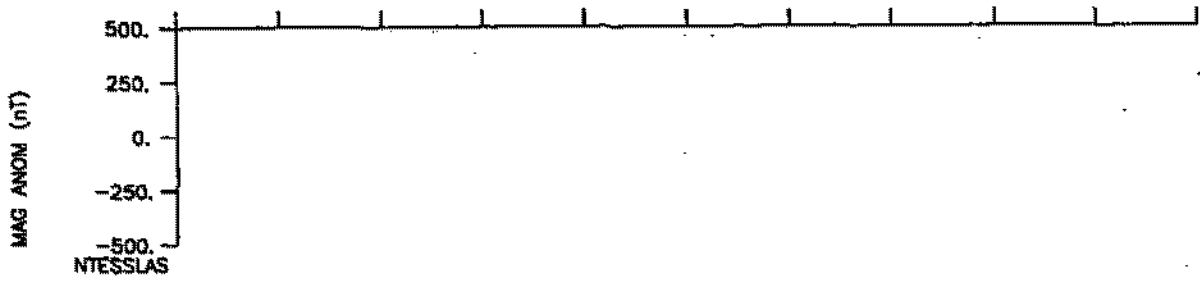
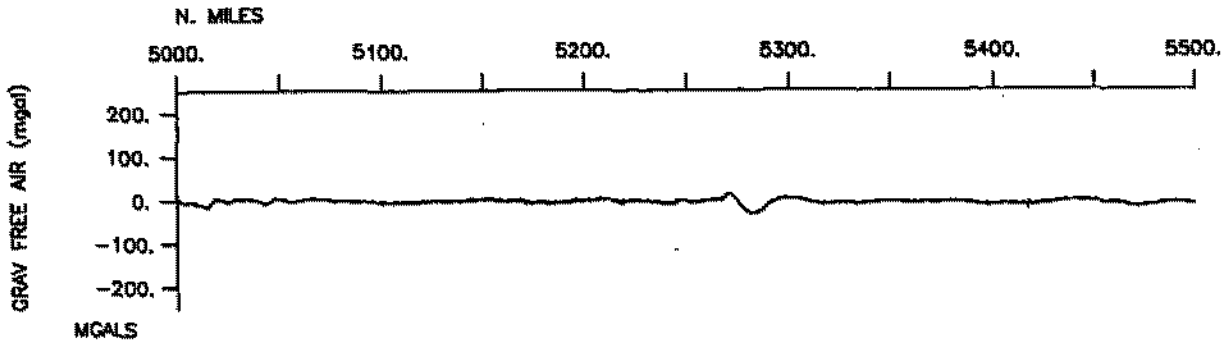


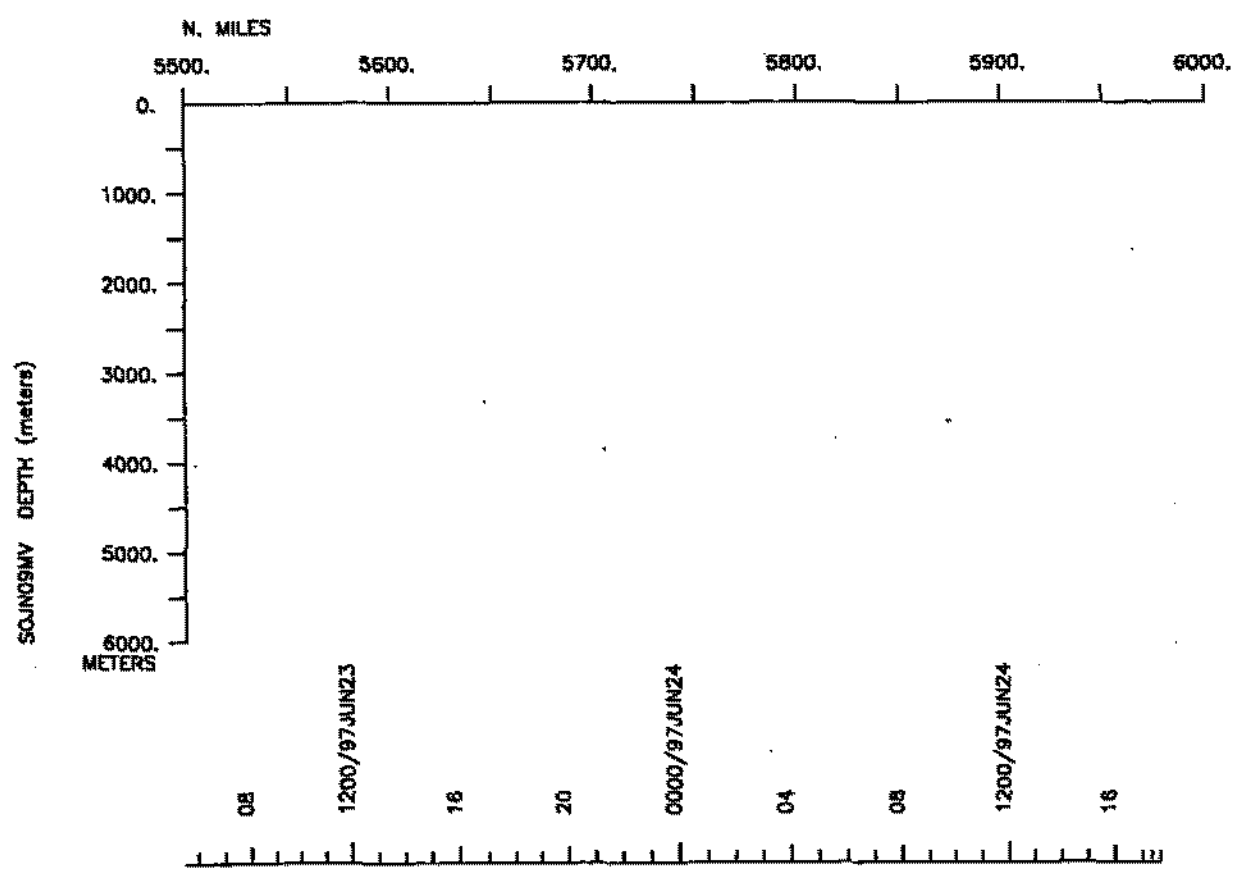
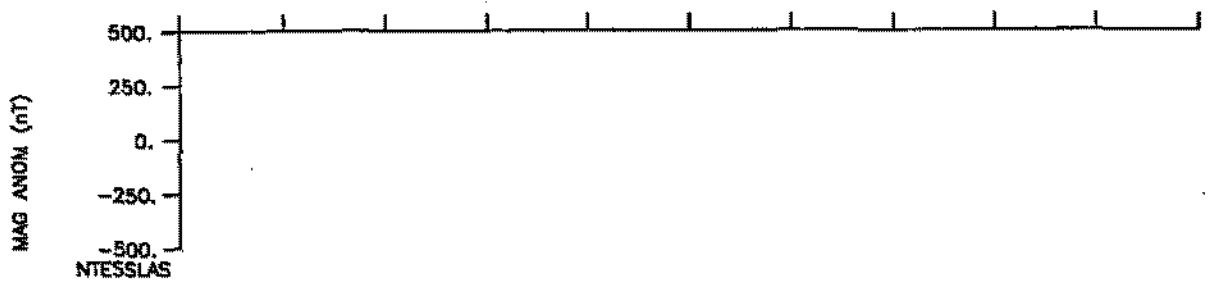
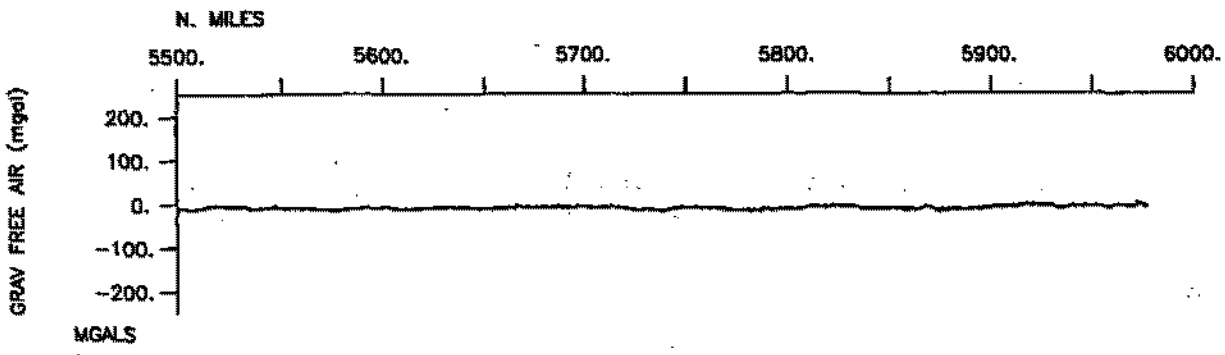


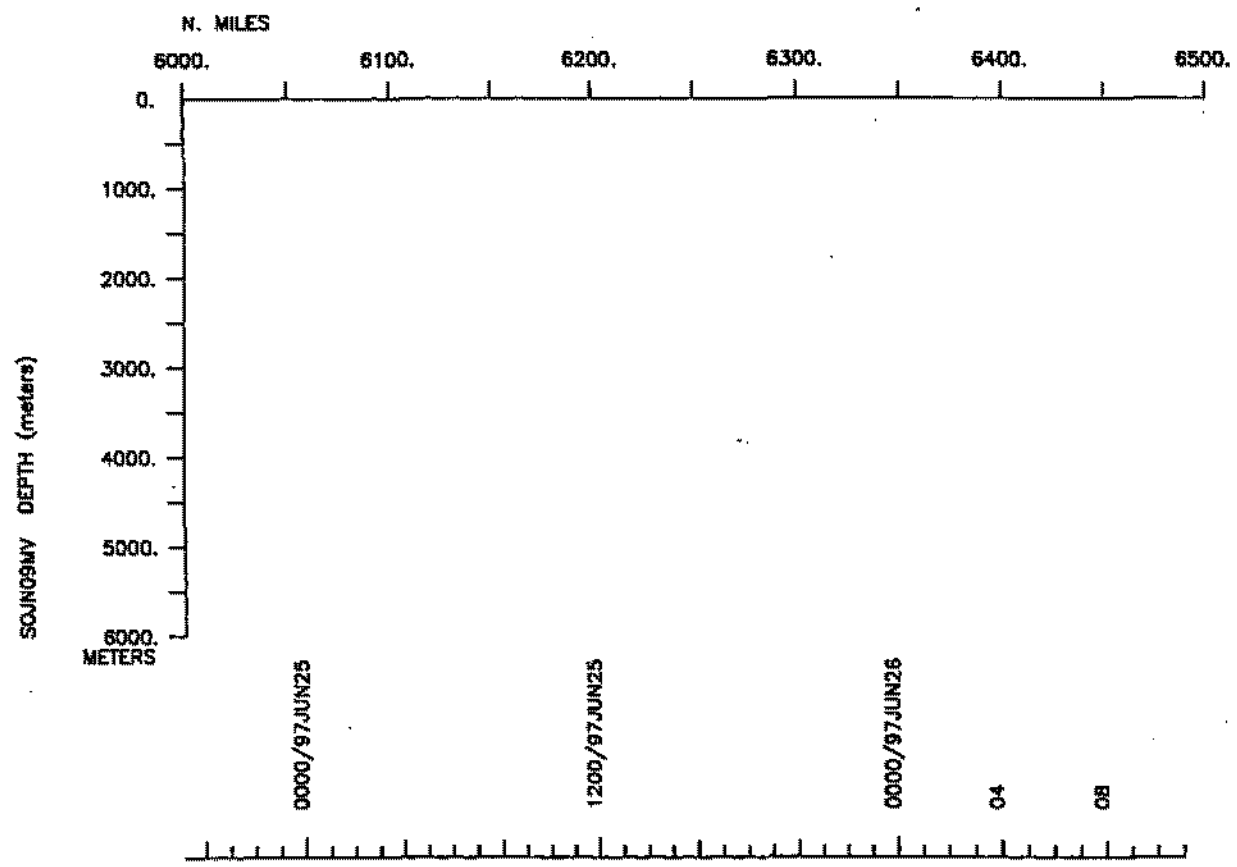
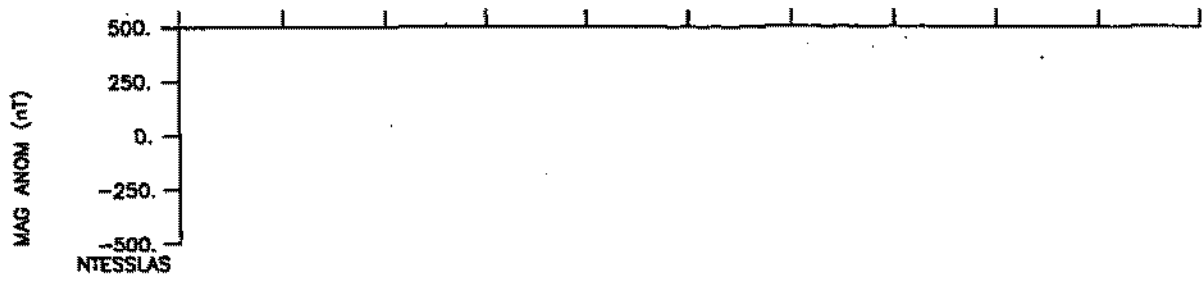
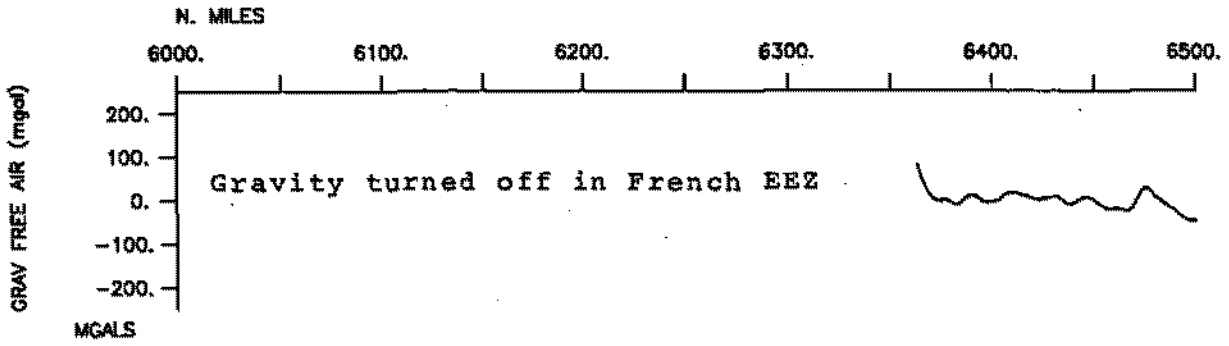


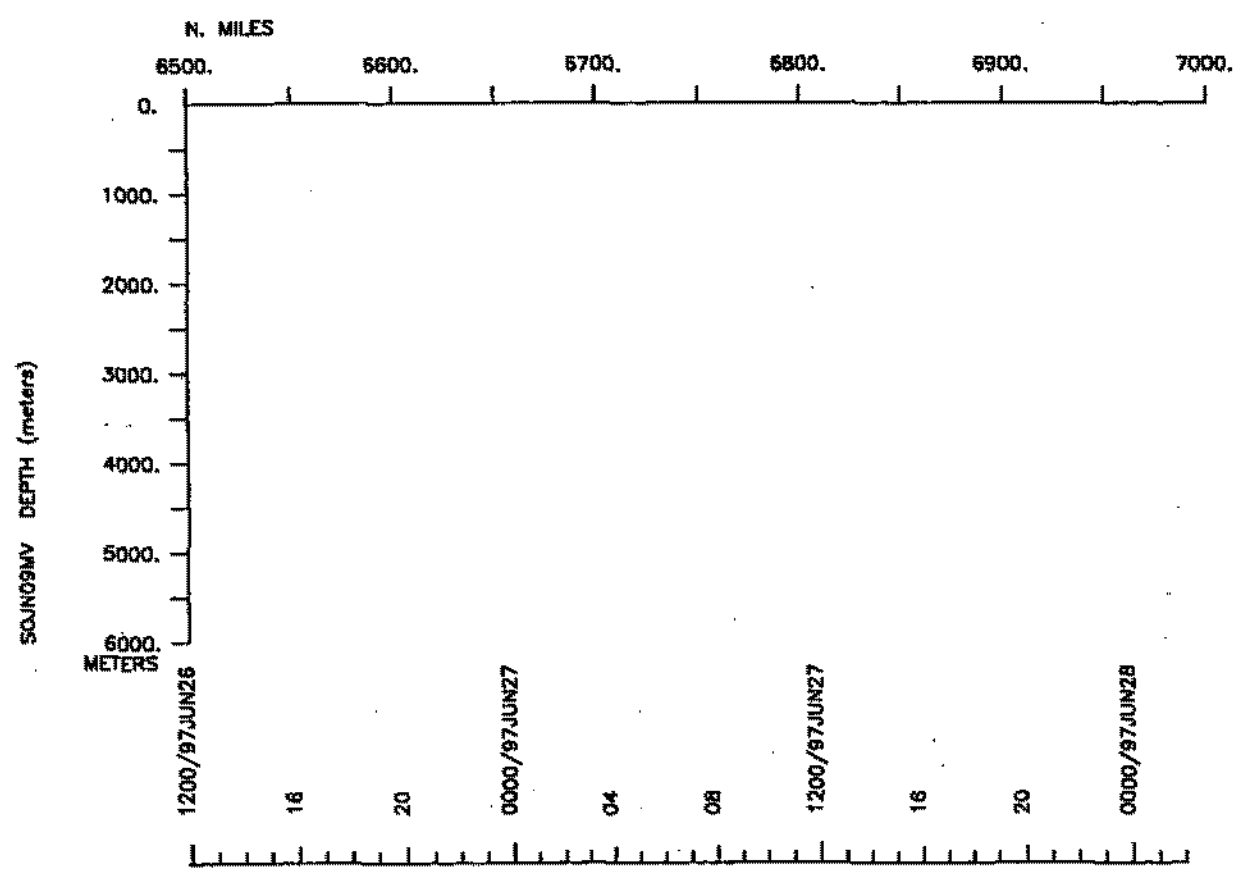
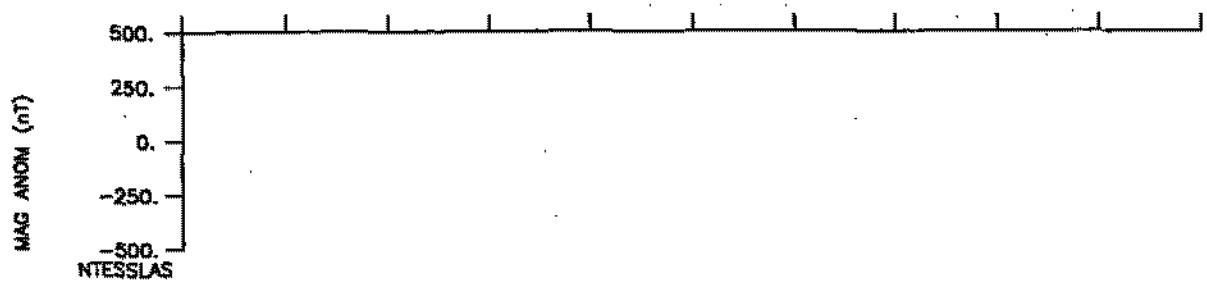
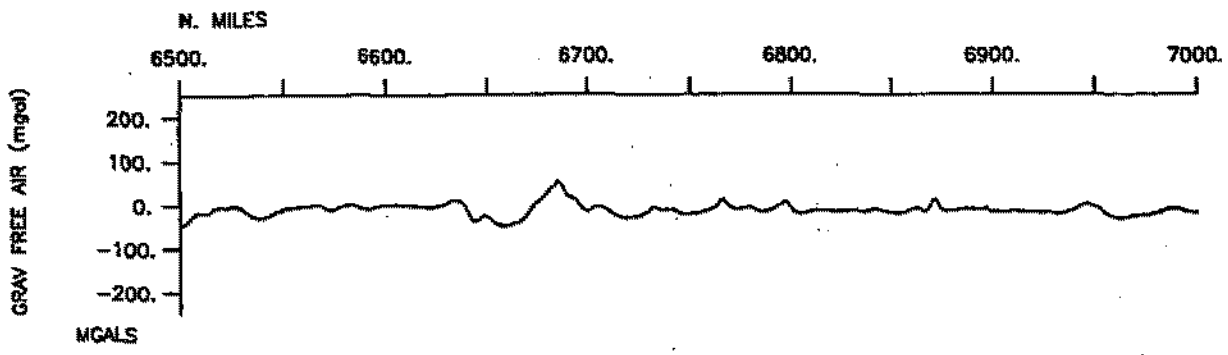


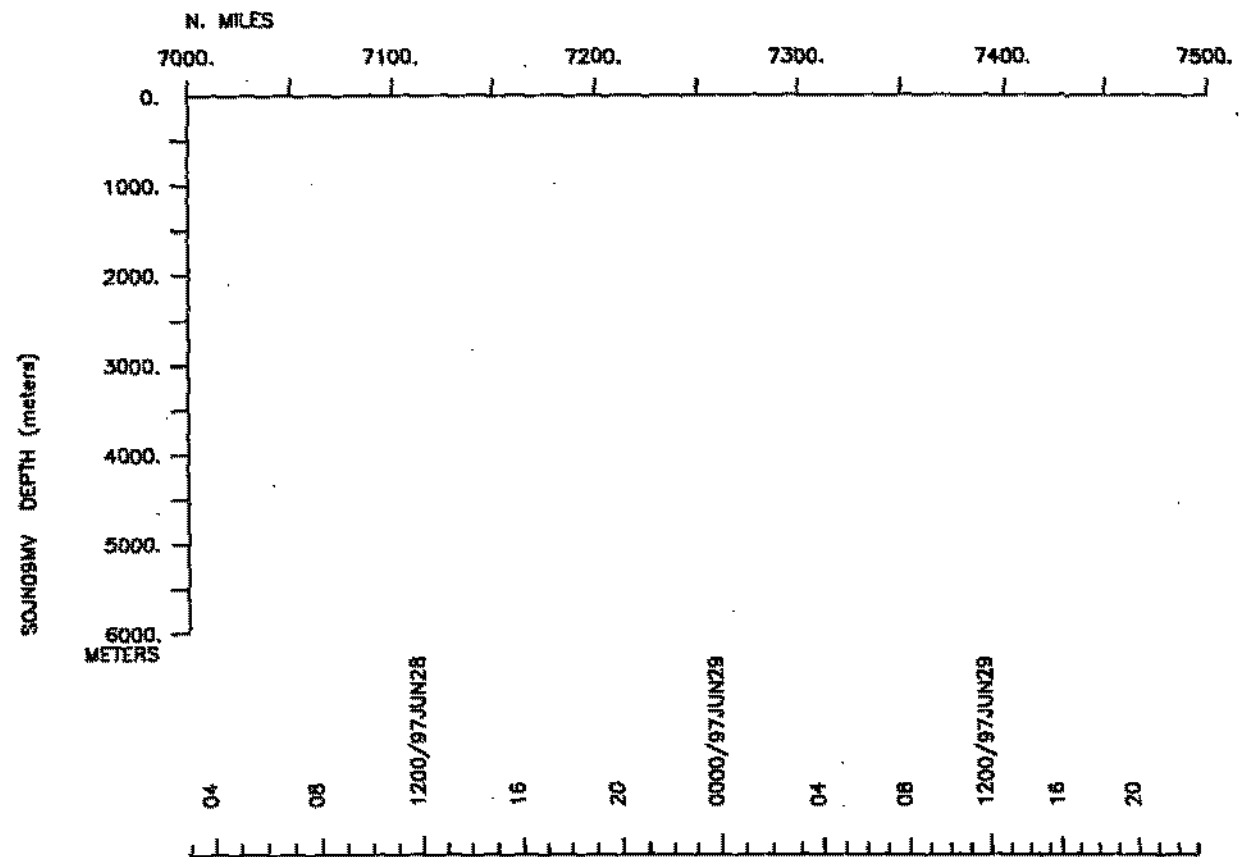
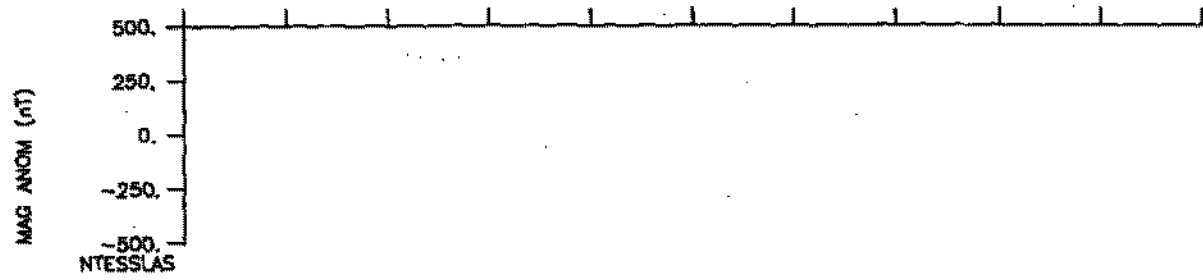
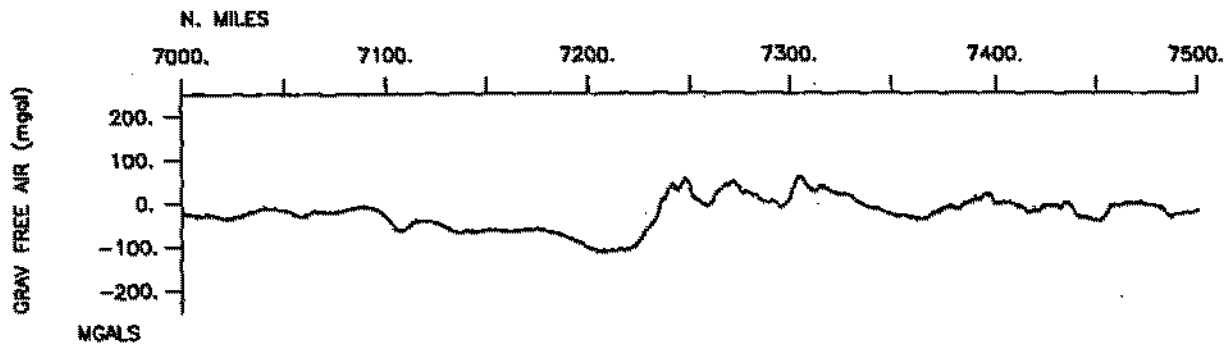


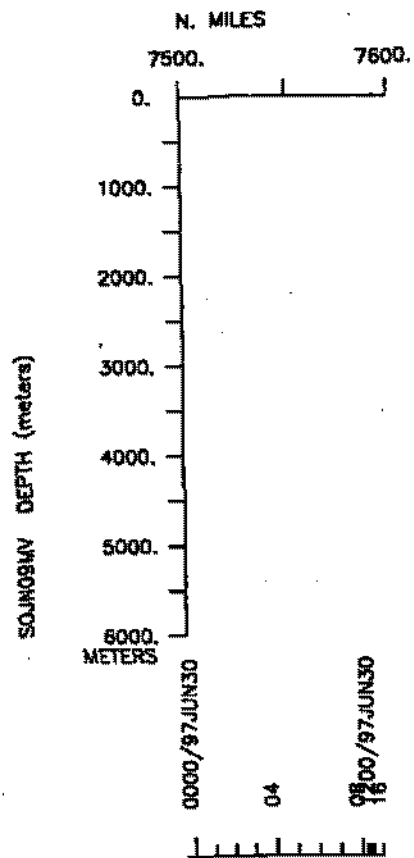
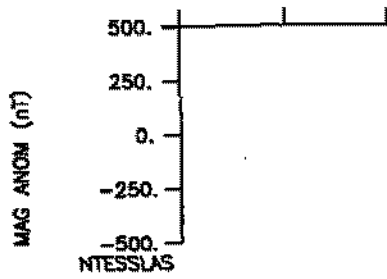
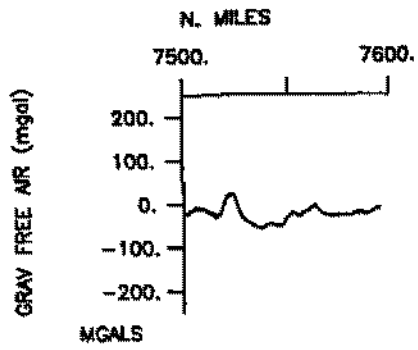












S.I.O. SAMPLE INDEX

SOJOURN EXPEDITION

LEG 9

(SOJN09MV)

R/V Melville

(Issued August 1997)

**Papeete, Tahiti (31 May 1997)
to
San Diego, California 29 June 1997)**

**Chief Scientist: Alan Chave
Woods Hole Oceanographic Institution**

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.# 267

**** Ports ****

1306 310597 11 LGPT B Papeete, Tahiti 17-21.47S 147-13.80W g SOJN09MV
 2200 300697 7 LGPT E San Diego, Ca 32-43.00N 117-11.00W f SOJN09MV

**** Personnel ****

#	*****NAME*****	*****TITLE*****	*****AFFILIATION*****	**CRID**
PECS	WHOI Chave, Alan	Chief Scientist	Woods Hole	SOJN09MV
PEST	JPN Baba, Kiyoshi	Grad Student	Chiba University	SOJN09MV
PESP	WHOI Bailey, John	Technician	Woods Hole	SOJN09MV
PESP	FNC Banteaux, Lionel	Technician	France-CNRS	SOJN09MV
PESP	SIX Booker, Niall	Volunteer	Univ. of Washington	SOJN09MV
PESP	FNC Dubreule, Alain	Technician	France-CNRS	SOJN09MV
PESP	WHOI Evans, Robert	Scientist	Woods Hole	SOJN09MV
PESP	SIO Filloux, Jean	Scientist	Scripps Institution	SOJN09MV
PESP	JPN Goto, Takanori	Scientist	Japan-JSPS	SOJN09MV
PESP	GBN Heinson, Graham	Scientist	Flinders University	SOJN09MV
PECT	STS Moe, Ron	Computer Tech	Scripps Institution	SOJN09MV
PESP	SIO Moeller, Helmut	Technician	Scripps Institution	SOJN09MV
PEST	FNC Nolasco, Maria	Grad Student	Univ. Bretagne	SOJN09MV
PERT	STS Pillard, Gene	Resident Tech	Scripps Institution	SOJN09MV
PESP	JPN Seama, Nobukazu	Scientist	Chiba University	SOJN09MV
PESP	FNC Tarits, Pascal	Scientist	Univ. Bretagne	SOJN09MV
PESP	JPN Toh, Hiroki	Scientist	Univ. of Tokyo	SOJN09MV
PESP	GEN White, Antony	Scientist	Flinders University	SOJN09MV
PESP	UWA de Villiers, S.	Scientist	U. of Washington	SOJN09MV

**** 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	CODE	LATITUDE	LONGITUDE	p	CRUISE
#TIME	DATE	TZ	CODE	E IDENTIFIER	CODE				C	LEG-SHIP

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

**** Log Books ****

0400 310597 0 LBUW B underway log book GDC 17-27.47S 149-17.68W g SOJN09MV
 2230 290697 0 LBUW E underway log book GDC 31-06.88N 116-33.79W g SOJN09MV

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

0215 310597 0 MBSR B v.beam&sidescan r-01 GDC 17-32.42S 149-34.61W g SOJN09MV
 0730 100697 0 MBSR E v.beam&sidescan r-01 GDC 17-48.83S 113-18.02W g SOJN09MV
 0735 100697 0 MBSR B v.beam&sidescan r-02 GDC 17-49.90S 113-18.26W g SOJN09MV
 0440 200697 0 MBSR E v.beam&sidescan r-02 GDC 8-46.55S 114-48.22W g SOJN09MV

**** Continuous Recorded Digital Gravity ****

0206 310597 0 GVCR B digital gravity GDC 17-32.23S 149-34.17W g SOJN09MV
 1500 300697 0 GVCR E digital gravity GDC 32-42.02N 117-14.00W g SOJN09MV

#GMT	DDMMYY	SAMP	B	SAMPLE	DISP				p	CRUISE
#TIME	DATE	TZ	CODE	E IDENTIFIER	CODE	LATITUDE	LONGITUDE		C	LEG-SHIP
#	-----	---	---	-----	---	-----	-----	-----	---	-----
*** Acoustic Doppler Current Profiler ***										
0206	310597	0	ADCP	B current profile	GDC	17-32.23S	149-34.17W	g	SOJN09MV	
1500	300697	0	ADCP	E computer logged	GDC	32-42.02N	117-14.00W	g	SOJN09MV	
*** Hydrocast ***										
2208	060697	0	HCNI	16 btl. metals 3200m UWA		16-23.39S	115-58.98W	g	SOJN09MV	
0048	080697	0	HCNI	16 btl. metals 3000m UWA		16-42.53S	114-32.17W	g	SOJN09MV	
0210	100697	0	HCNI	16 btl. metals 2600m UWA		17-00.27S	113-06.03W	g	SOJN09MV	
*** Electromagnetic Free Vehicle Instruments ***										
1822	250596	0	EFFV	C electro-magnetic	WHOI	32-43.00N	117-11.00W	f	SOJN09MV	
1543	070697	0	EFFV	E instrument free veh.	WHOI	16-36.94S	114-56.28W	g	SOJN09MV	
0055	260596	0	EFFV	C electro-magnetic	JPN	32-43.00N	117-11.00W	f	SOJN09MV	
2233	070697	0	EFFV	E & magnetometer	JPN	16-42.53S	114-32.15W	g	SOJN09MV	
0621	260596	0	EFFV	C electro-magnetic	AUA	32-43.00N	117-11.00W	f	SOJN09MV	
1548	080697	0	EFFV	E & magnetometer	AUA	16-48.00S	114-02.15W	g	SOJN09MV	
0546	300596	0	EFFV	C electro-magnetic	WHOI	32-43.00N	117-11.00W	f	SOJN09MV	
2015	080697	0	EFFV	E instrument free veh.	WHOI	16-53.78S	113-36.13W	g	SOJN09MV	
0101	300596	0	EFFV	C electro-magnetic	FNC	32-43.00N	117-11.00W	f	SOJN09MV	
0042	090697	0	EFFV	E & magnetometer	FNC	16-57.56S	113-18.57W	g	SOJN09MV	
1927	290596	0	EFFV	C electro-magnetic	WHOI	32-43.00N	117-11.00W	f	SOJN09MV	
1402	090697	0	EFFV	E instrument free veh.	WHOI	16-59.80S	113-07.15W	g	SOJN09MV	
1819	290596	0	EFFV	C electro-magnetic	AUA	32-43.00N	117-11.00W	f	SOJN09MV	
1708	090697	0	EFFV	E & magnetometer	AUA	16-59.48S	113-09.35W	g	SOJN09MV	
1639	290596	0	EFFV	C electro-magnetic	WHOI	32-43.00N	117-11.00W	f	SOJN09MV	
1948	090697	0	EFFV	E instrument free veh.	WHOI	16-59.05S	113-12.24W	g	SOJN09MV	
1840	110696	0	EFFV	C electro-magnetic	WHOI	32-43.00N	117-11.00W	f	SOJN09MV	
2238	090697	0	EFFV	E instrument free veh.	WHOI	17-00.26S	113-05.96W	g	SOJN09MV	
0726	280596	0	EFFV	C electro-magnetic	FNC	32-43.00N	117-11.00W	f	SOJN09MV	
1418	100697	0	EFFV	E & magnetometer	FNC	17-00.47S	113-04.96W	g	SOJN09MV	
0549	280596	0	EFFV	C electro-magnetic	WHOI	32-43.00N	117-11.00W	f	SOJN09MV	
1656	100697	0	EFFV	E instrument free veh.	WHOI	17-00.70S	113-02.90W	g	SOJN09MV	
0346	280596	0	EFFV	C electro-magnetic	AUA	32-43.00N	117-11.00W	f	SOJN09MV	
2035	100697	0	EFFV	E & magnetometer	AUA	17-01.44S	113-00.36W	g	SOJN09MV	
0630	030696	0	EFFV	C electro-magnetic	AUA	32-43.00N	117-11.00W	f	SOJN09MV	
2036	110697	0	EFFV	E & magnetometer	AUA	17-11.79S	112-06.94W	g	SOJN09MV	
1402	020696	0	EFFV	C electro-magnetic	WHOI	32-43.00N	117-11.00W	f	SOJN09MV	
1902	120697	0	EFFV	E instrument free veh.	WHOI	17-34.87S	110-08.09W	g	SOJN09MV	

#GMT	DDMMYY	SAMP	B	SAMPLE	DISP				p	CRUISE
#TIME	DATE	TZ	CODE	E IDENTIFIER	CODE	LATITUDE	LONGITUDE	C	LEG-SHIP	
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2120	020696	0	EFFV	C electro-magnetic	JPN	32-43.00N	117-11.00W	f	SOJN09MV	
0250	130697	0	EFFV	E & magnetometer	JPN	17-22.51S	111-12.00W	g	SOJN09MV	
0141	050696	0	EFFV	C electro-magnetic	AUA	32-43.00N	117-11.00W	f	SOJN09MV	
1451	130697	0	EFFV	E & magnetometer	AUA	16-10.84S	111-02.30W	g	SOJN09MV	
0050	060696	0	EFFV	C electro-magnetic	JPN	32-43.00N	117-11.00W	f	SOJN09MV	
2204	130697	0	EFFV	E & magnetometer	JPN	15-57.98S	112-00.78W	g	SOJN09MV	
0429	060696	0	EFFV	C electro-magnetic	WHOI	32-43.00N	117-11.00W	f	SOJN09MV	
0236	140697	0	EFFV	E instrument free veh.	WHOI	15-51.61S	112-26.81W	g	SOJN09MV	
2300	060696	0	EFFV	C electro-magnetic	WHOI	32-43.00N	117-11.00W	f	SOJN09MV	
1449	140697	0	EFFV	E instrument free veh.	WHOI	15-46.32S	112-53.42W	g	SOJN09MV	
2100	060696	0	EFFV	C electro-magnetic	WHOI	32-43.00N	117-11.00W	f	SOJN09MV	
1740	140697	0	EFFV	E instrument free veh.	WHOI	15-43.55S	112-56.48W	g	SOJN09MV	
1857	060696	0	EFFV	C electro-magnetic	WHOI	32-43.00N	117-11.00W	f	SOJN09MV	
2037	140697	0	EFFV	E instrument free veh.	WHOI	15-44.52S	113-00.18W	g	SOJN09MV	
1550	060696	0	EFFV	C electro-magnetic	WHOI	32-43.00N	117-11.00W	f	SOJN09MV	
0015	150697	0	EFFV	E instrument free veh.	WHOI	15-43.66S	113-07.06W	g	SOJN09MV	
1401	080696	0	EFFV	C electro-magnetic	WHOI	32-43.00N	117-11.00W	f	SOJN09MV	
1742	150697	0	EFFV	E instrument free veh.	WHOI	15-22.02S	114-50.38W	g	SOJN09MV	
0017	080696	0	EFFV	C electro-magnetic	JPN	32-43.00N	117-11.00W	f	SOJN09MV	
0202	160697	0	EFFV	E & magnetometer	JPN	15-33.44S	113-52.10W	g	SOJN09MV	
0124	070696	0	EFFV	C electro-magnetic	AUA	32-43.00N	117-11.00W	f	SOJN09MV	
1451	160697	0	EFFV	E & magnetometer	AUA	15-47.16S	112-46.13W	g	SOJN09MV	
1726	060696	0	EFFV	C electro-magnetic	AUA	32-43.00N	117-11.00W	f	SOJN09MV	
1907	160697	0	EFFV	E & magnetometer	AUA	15-43.80S	113-02.91W	g	SOJN09MV	
1951	070696	0	EFFV	C electro-magnetic	FNC	32-43.00N	117-11.00W	f	SOJN09MV	
2326	160697	0	EFFV	E & magnetometer	FNC	15-39.75S	113-23.69W	g	SOJN09MV	

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

**** Free Vehicle Bottom Magnetometers ****

1900	250596	0	MGXX	C free vehicle bottom	WHOI	32-43.00N	117-11.00W	f	SOJN09MV
1745	070697	0	MGXX	E magnetometer	WHOI	16-36.96S	114-56.21W	g	SOJN09MV
0601	300596	0	MGXX	C free vehicle bottom	WHOI	32-43.00N	117-11.00W	f	SOJN09MV
2024	080697	0	MGXX	E magnetometer	WHOI	16-53.84S	113-36.15W	g	SOJN09MV
1953	290596	0	MGXX	C free vehicle bottom	WHOI	32-43.00N	117-11.00W	f	SOJN09MV
1420	090697	0	MGXX	E magnetometer	WHOI	16-59.82S	113-07.20W	g	SOJN09MV
1708	290696	0	MGXX	C free vehicle bottom	WHOI	32-43.00N	117-11.00W	f	SOJN09MV
2001	090697	0	MGXX	E magnetometer	WHOI	16-59.00S	113-12.25W	g	SOJN09MV
2224	140696	0	MGXX	C free vehicle bottom	WHOI	32-43.00N	117-11.00W	f	SOJN09MV
2251	090697	0	MGXX	E magnetometer	WHOI	17-00.27S	113-06.03W	g	SOJN09MV
0613	280596	0	MGXX	C free vehicle bottom	WHOI	32-43.00N	117-11.00W	f	SOJN09MV
1715	100697	0	MGXX	E magnetometer	WHOI	17-00.66S	113-03.12W	g	SOJN09MV
2250	270596	0	MGXX	C free vehicle bottom	WHOI	32-43.00N	117-11.00W	f	SOJN09MV
2358	100697	0	MGXX	E magnetometer	WHOI	17-03.95S	112-51.21W	g	SOJN09MV
0216	030696	0	MGXX	C free vehicle bottom	WHOI	32-43.00N	117-11.00W	f	SOJN09MV
0126	120697	0	MGXX	E magnetometer	WHOI	17-19.02S	111-38.21W	g	SOJN09MV
1415	020696	0	MGXX	C free vehicle bottom	WHOI	32-43.00N	117-11.00W	f	SOJN09MV
1913	120697	0	MGXX	E magnetometer	WHOI	17-34.90S	110-08.09W	g	SOJN09MV
2306	060696	0	MGXX	C free vehicle bottom	WHOI	32-43.00N	117-11.00W	f	SOJN09MV
1503	140697	0	MGXX	E magnetometer	WHOI	15-46.25S	112-53.56W	g	SOJN09MV
1904	060696	0	MGXX	C free vehicle bottom	WHOI	32-43.00N	117-11.00W	f	SOJN09MV
2042	140697	0	MGXX	E magnetometer	WHOI	15-44.57S	113-00.25W	g	SOJN09MV
1600	060696	0	MGXX	C free vehicle bottom	WHOI	32-43.00N	117-11.00W	f	SOJN09MV
0021	150697	0	MGXX	E magnetometer	WHOI	15-43.74S	113-07.03W	g	SOJN09MV
1613	080696	0	MGXX	C free vehicle bottom	WHOI	32-43.00N	117-11.00W	f	SOJN09MV
1750	150697	0	MGXX	E magnetometer	WHOI	15-21.96S	114-50.33W	g	SOJN09MV

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End Sample Index

SOJN09MV