INFORMAL REPORT AND INDEX OF

NAVIGATION, DEPTH, MAGNETIC AND SUBBOTTOM PROFILER DATA

(Issued June 1985)

MARATHON EXPEDITION

LEG 6

Pago Pago, Samoa (23 August 1984) to Mar del Plata, Argentina (26 September 1984)

R/V Washington

Chief Scientist - P. Lonsdale

Resident Marine Tech - R. Comer

Post-Cruise Processing and Report Preparation by S.I.O. Geological Data Center

Data Collection and Processing funded by ONR Contract Number NOO014-80-C-0440

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 Instituiton of Oceanography, La Jolla, California 92093.

GDC Cruise I.D.# 215

INFORMAL REPORT AND INDEX OF NAVIGATION, DEPTH, MAGNETIC AND SUBBOTTOM PROFILER DATA

Contents:

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

Track Charts - annotated with dates (day/month) and hour ticks. The scale is .312 in/degree longitude.

Profiles - depth and magnetic anomaly vs. distance. Dates (day/month) and positions of major course changes (greater than 30 degrees) are annotated. Sections of track having subbottom profiles (airgun or watergun) records have a wide black line along the bottom of the profile. Sections having Sea Beam are indicated by a narrow black line.

Sample Index - list of beginning and end times and positions of all underway records as well as all other samples (geology, biology, physical oceanography, etc.) collected on the 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. Phone (619)452-2752.

1. Navigation listing of times and positions of course and speed changes, fixes and drift velocity.

2. Depth compilation plots - compilation plots at the traditional scale of 4in/degree longitude (1:1,000,000) are no longer produced for Sea Beam cruises. Custom plots may be requested of vertical beam (2&2/3 degree beam width) depths retrieved at one minute intervals of ship time.

3. Plots of magnetic anaomaly profiles along track - map scale = 1.2in/degree, anomaly scale between 15N and 15S latitude = 500 gamma/inch, anomaly scale north of 15N and south of 15S = 1000 gamma/inch, from values retrieved at approximately 1 mile spacing and regional field removed using the 1980 IGRF.

4. Separate time series files of navigation, depth and magnetics of data merged in the MGD77 Exchange format on magnetic tape.

5. Microfilm or Xerox copies of:

- a. Echosounder records 12 and 3.5 kHz frequency
- b. Subbottom profiler records (air or water guns)
- c. Magnetometer records
- d. Underway data log

Revised June 1985 (Sea Beam)

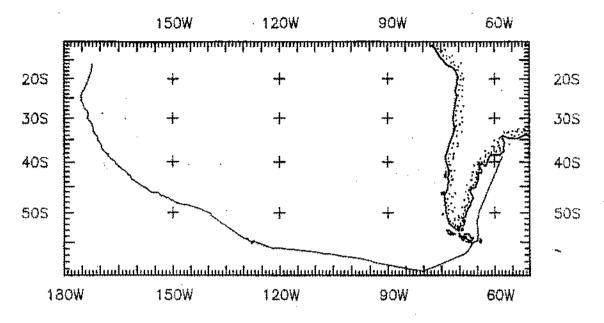
SIO Sea Beam Data

The following forms are available, subject to approval of the cruise leg chief scientist.

- 1) Archive contour copy of contour swath books generated in real time on board ship available for inspection at the Data Center.
- 2) Microfilm (35mm flowfilm) containing swath books plus, for some cruises, the UGR monitor record and navigation listings.
- 3) Sea Beam merged tapes Sea Beam data merged with navigation.

 (Navigation is edited to the extent that poor fixes are removed after inspection of drift vectors between fix pairs. No editing is done on the basis of adjusting to overlapping Sea Beam swaths.)
- 4) Custom generated plots of Sea Beam 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).

S. M. Smith - June 1985



MARATHON LEG 6 Track at .0375in/degree

MARATHON EXPEDITION LEG 6

CHIEF SCIENTIST: P. Lonsdale

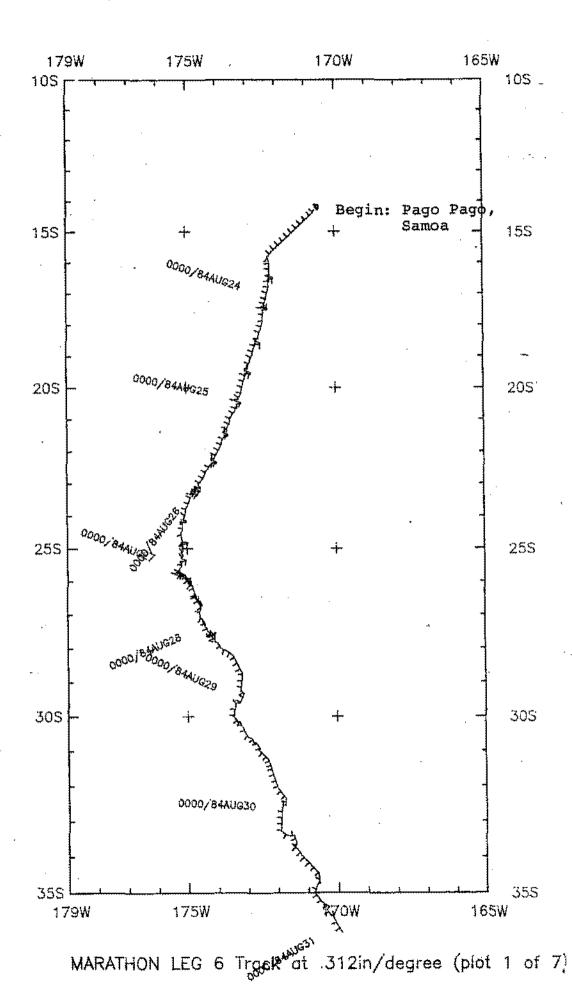
PORTS: Pago Pago, Samoa - Mar del Plata, Argentina

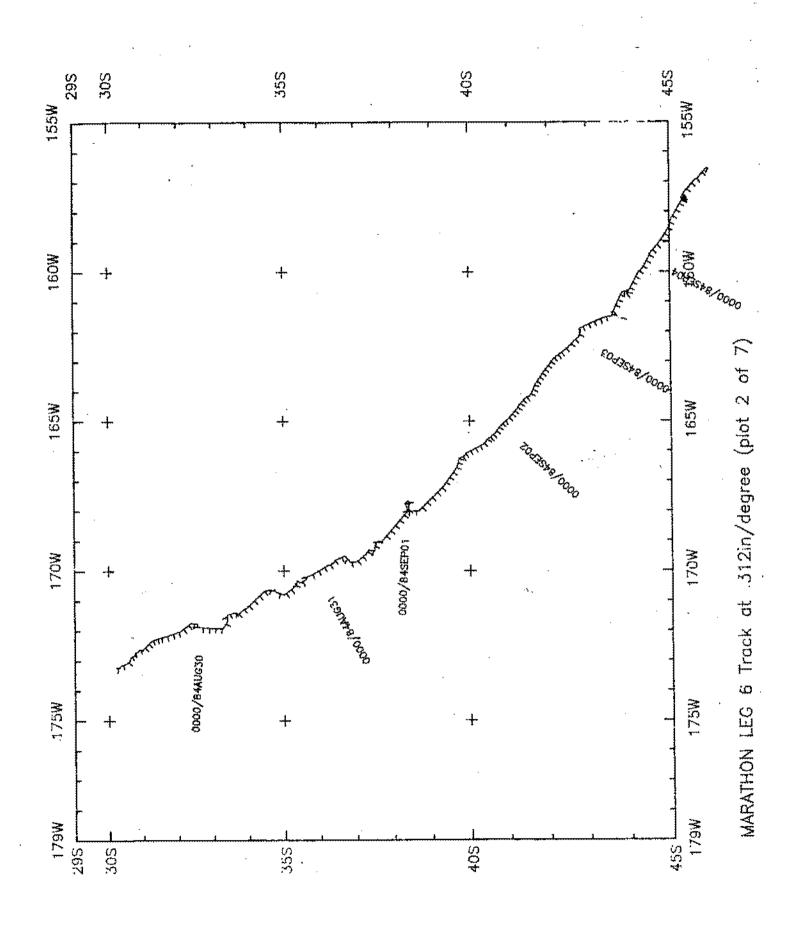
DATES: 23 August - 26 September 1984

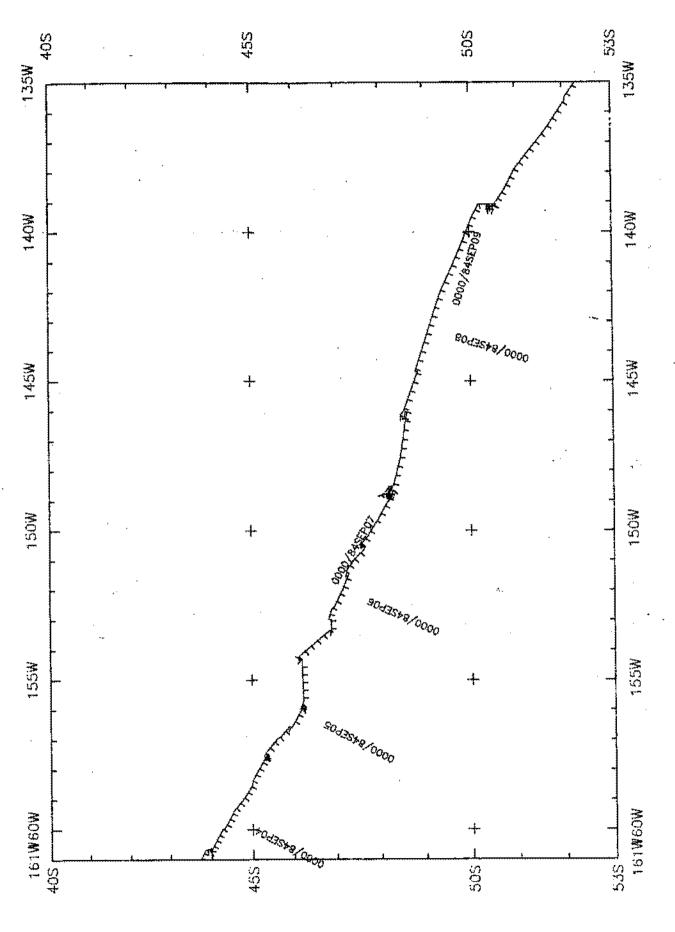
SHIP: R/V Washington

TOTAL MILEAGE OF UNDERWAY DATA COLLECTED

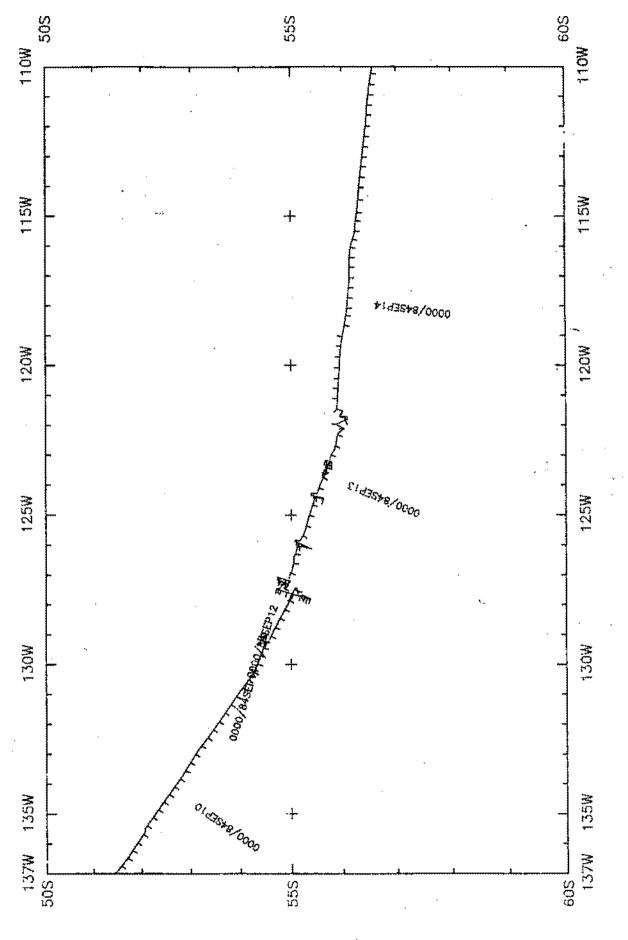
- 1) Cruise 8304 miles
- 2) Bathymetry 6903 miles3) Magnetics 7723 miles
- 4) Seismic Reflection 4744 miles
- 5) Gravity 1800 miles 6) Sea Beam 6903 miles



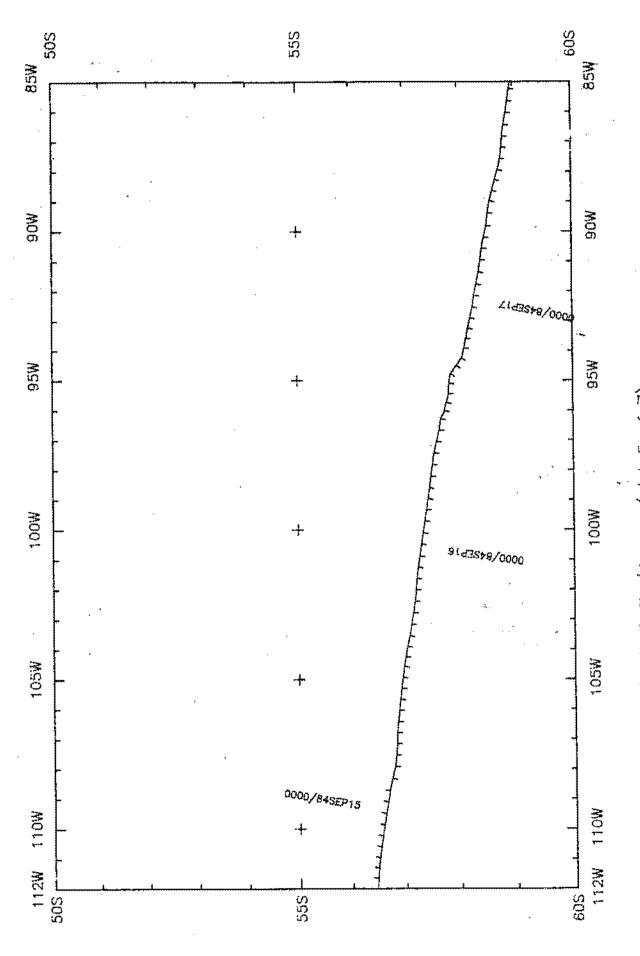




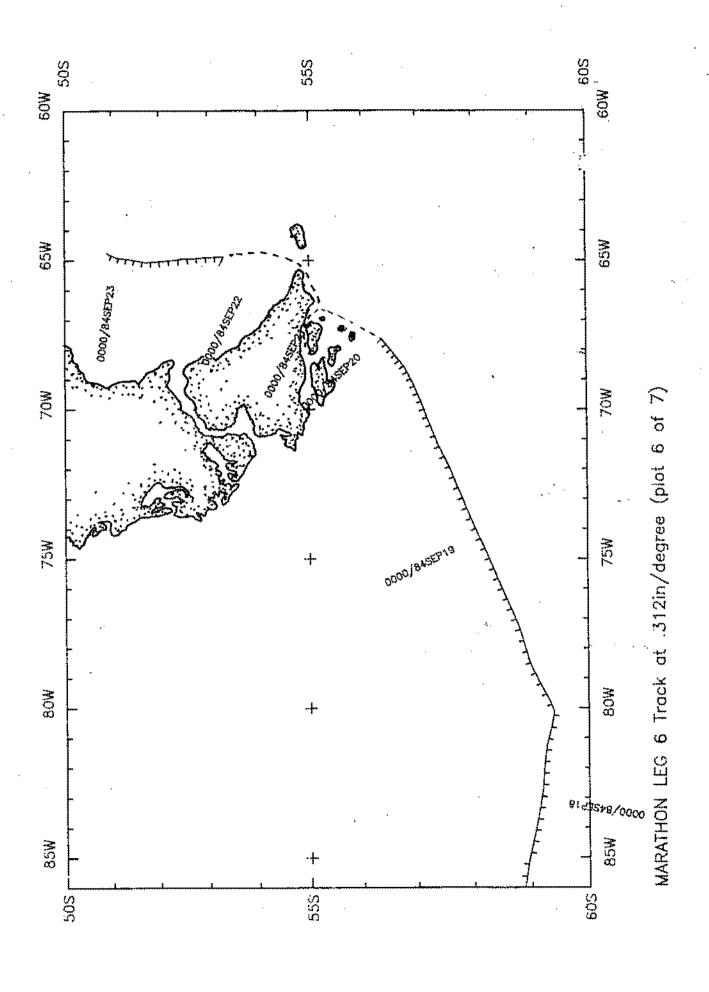
MARATHON LEG 6 Track at .312in/degree (piot 3 of 7)

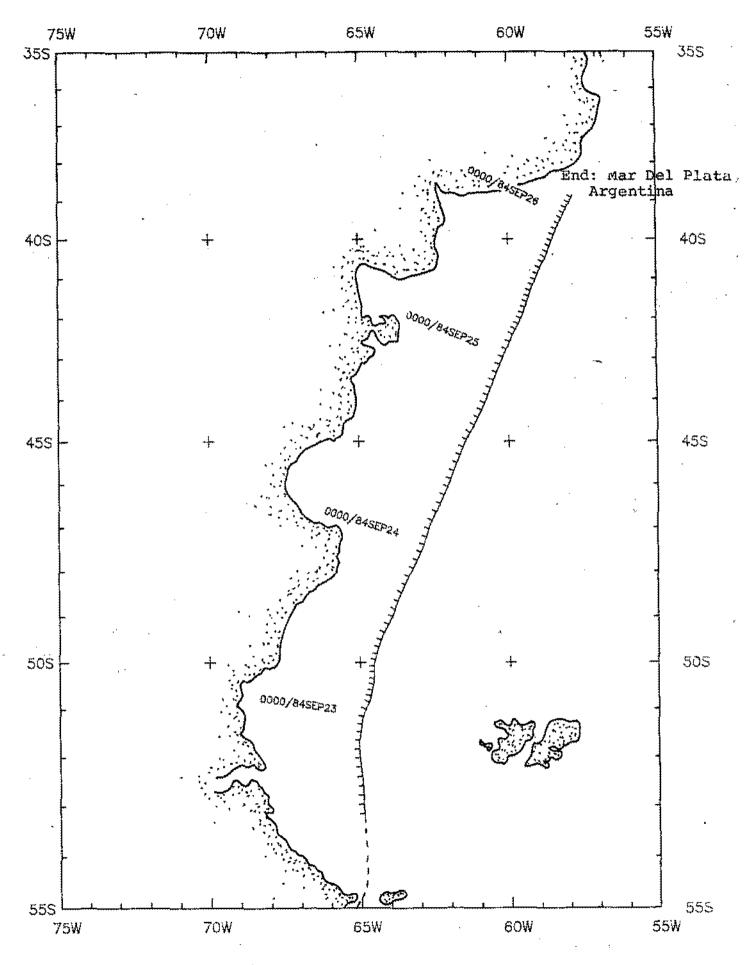


WARATHON LEG 6 Track at 312in/degree (plot 4 of 7)

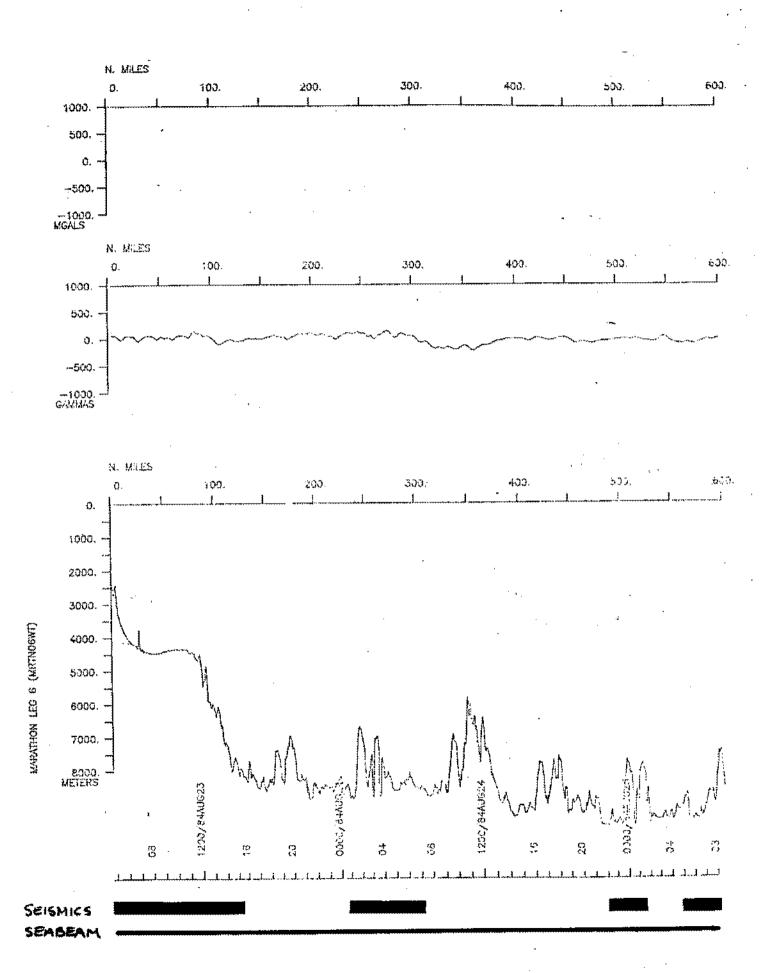


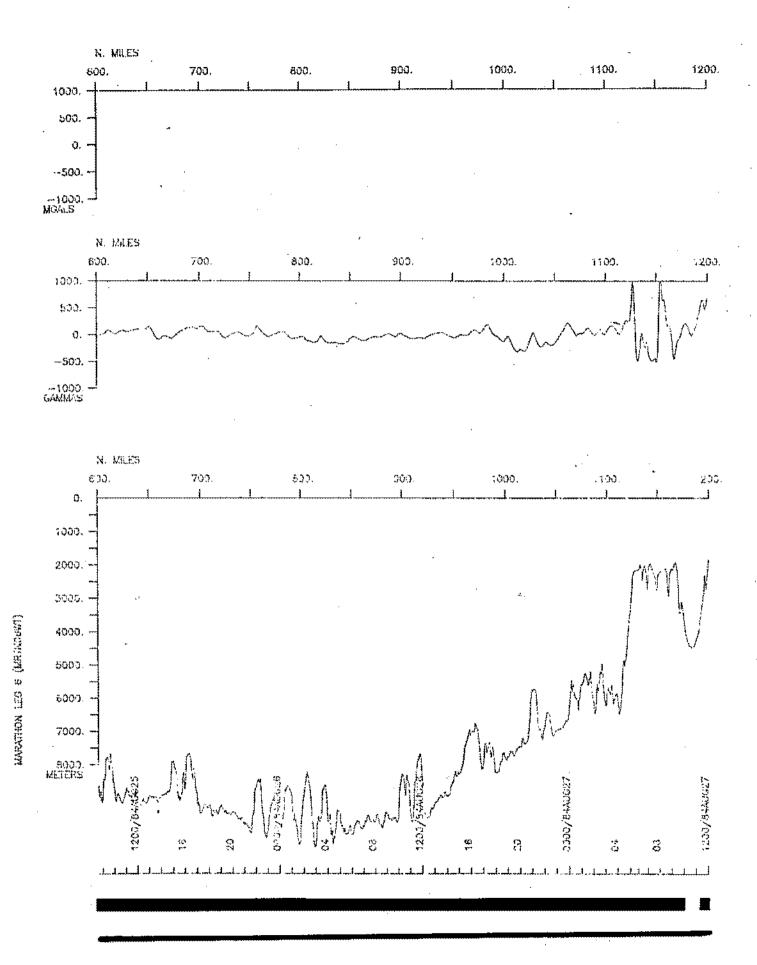
MARATHON LEG 6 Track at .312in/degree (plot 5 of 7)

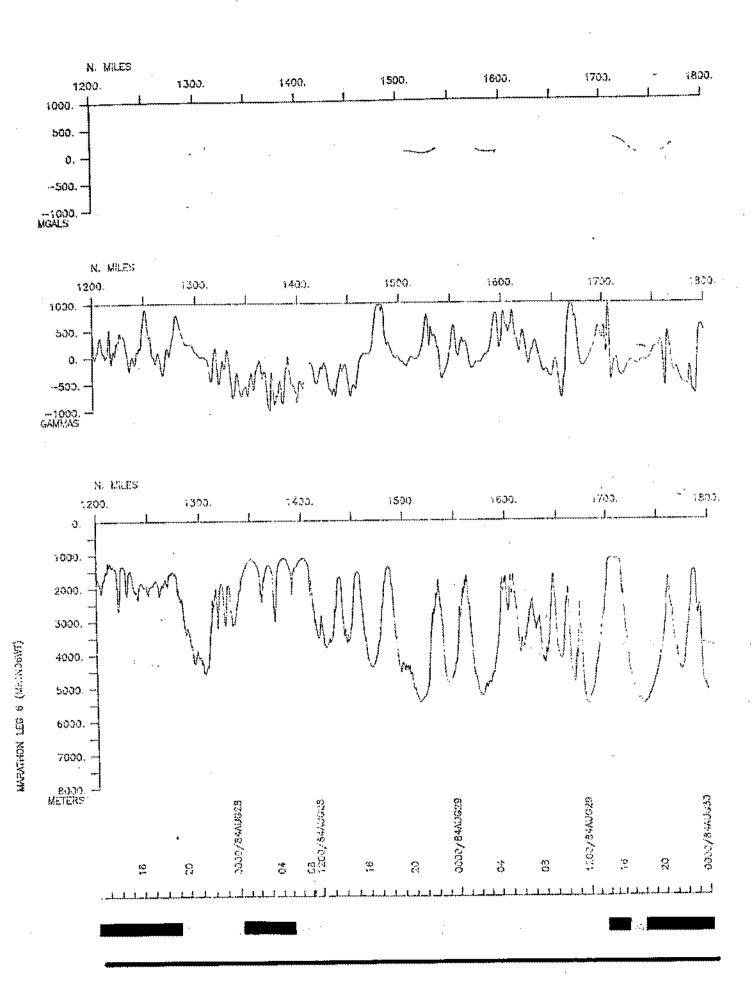


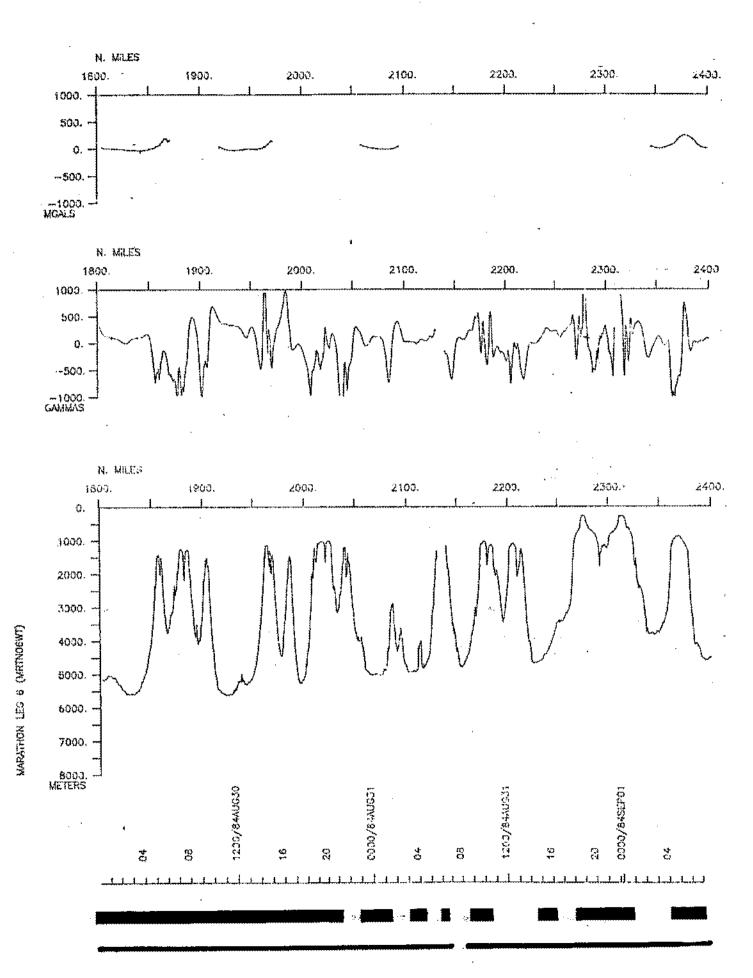


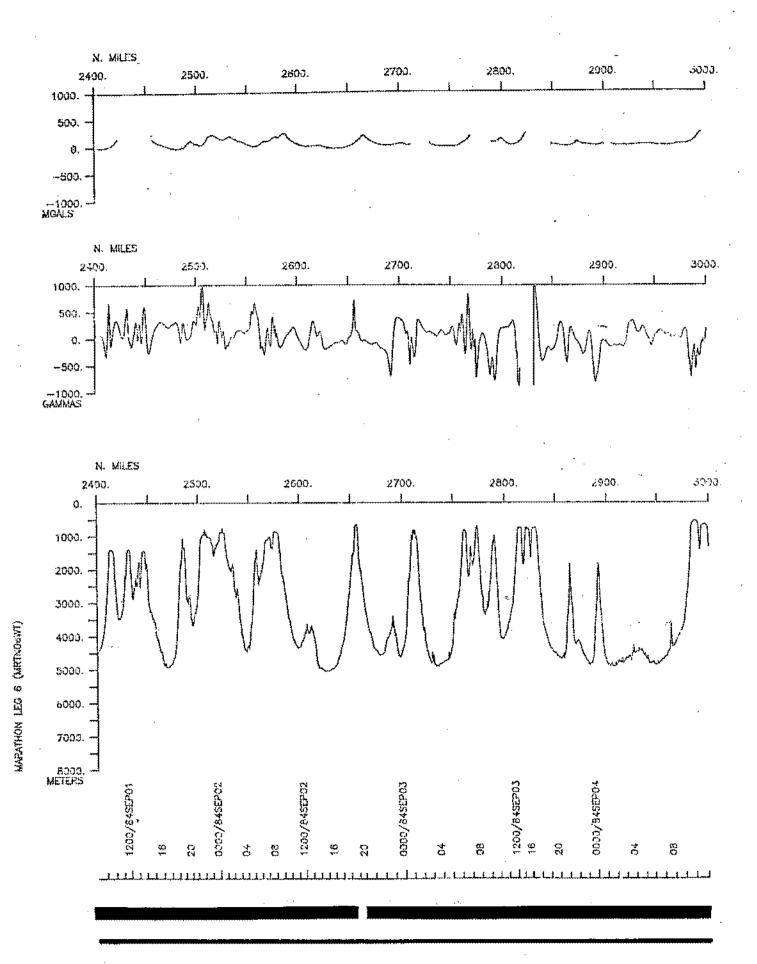
MARATHON LEG 6 Track at .312in/degree (plot 7 of 7)

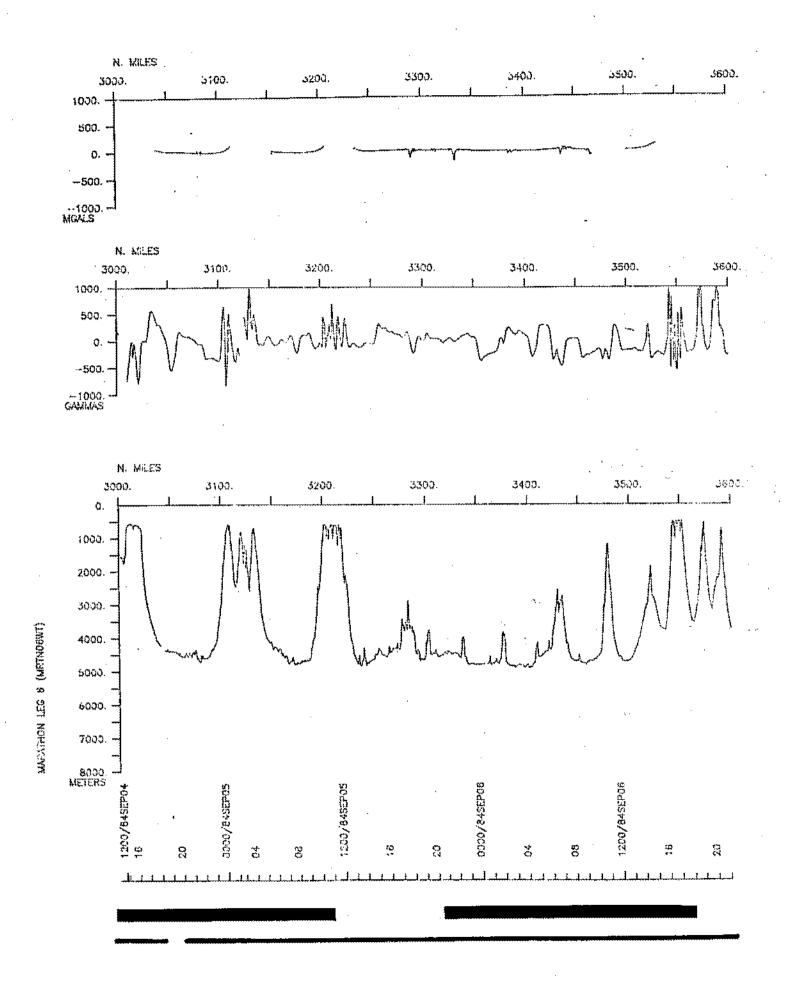


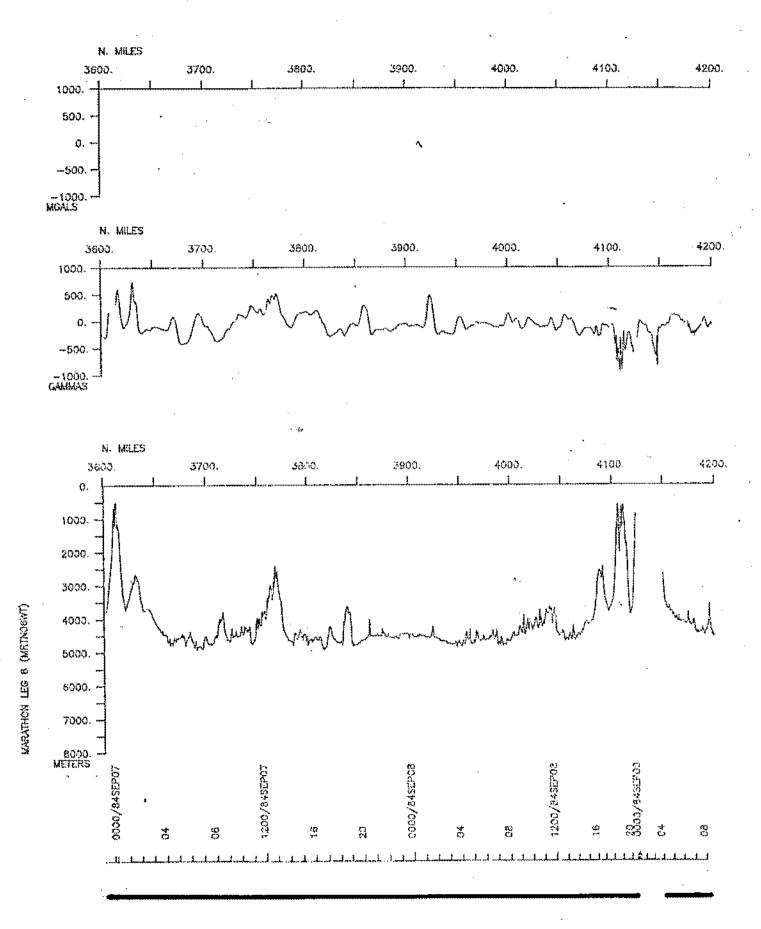


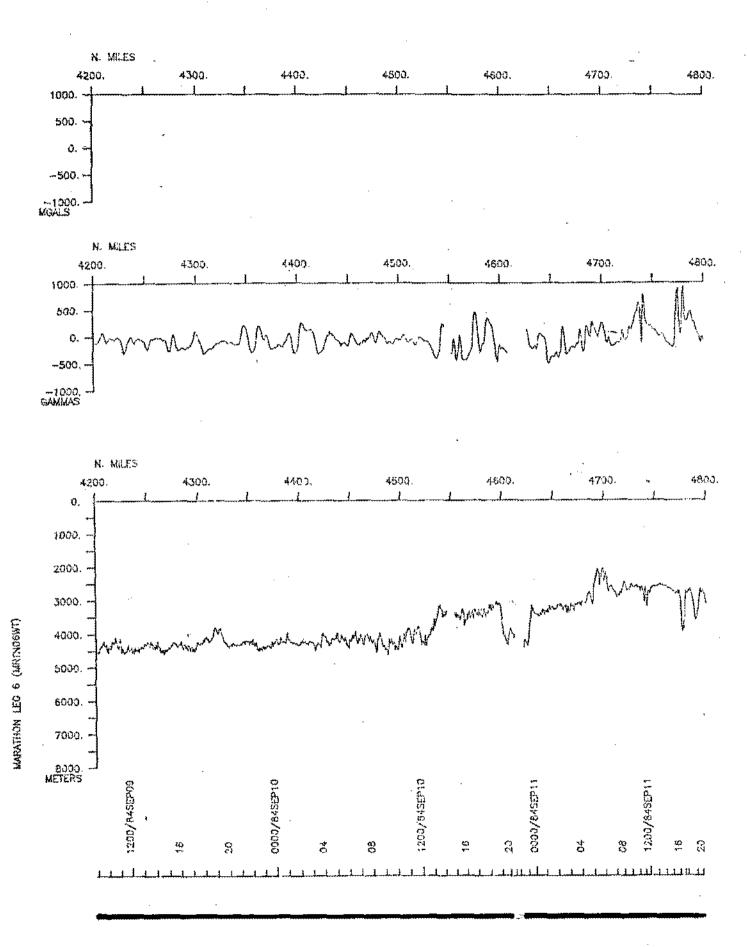


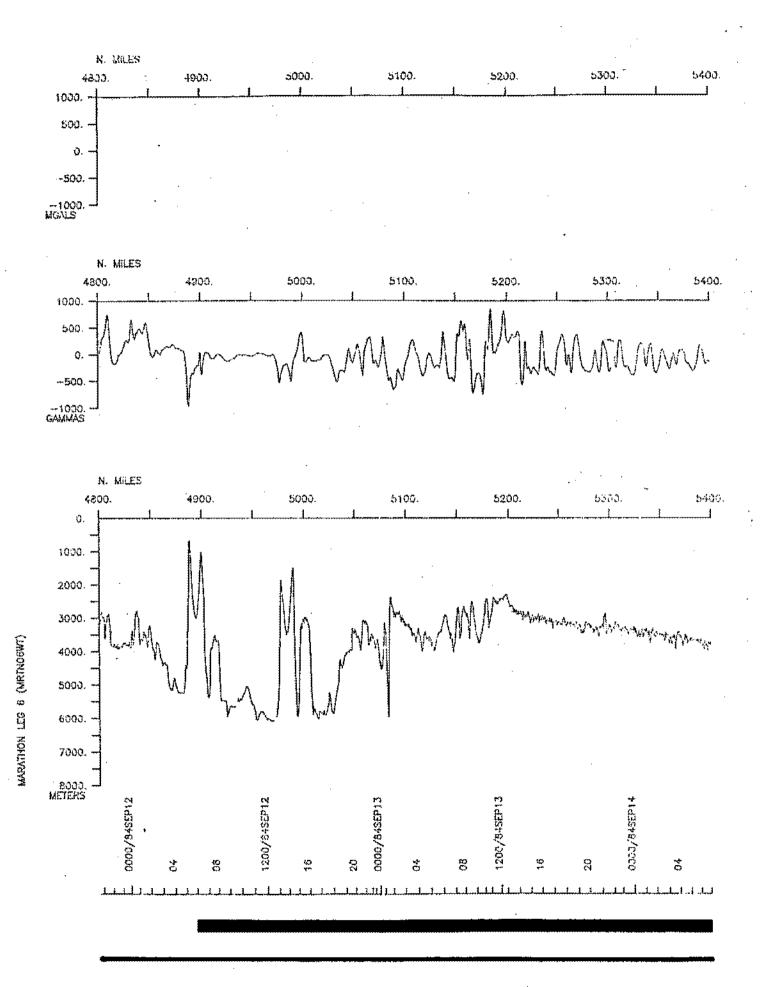


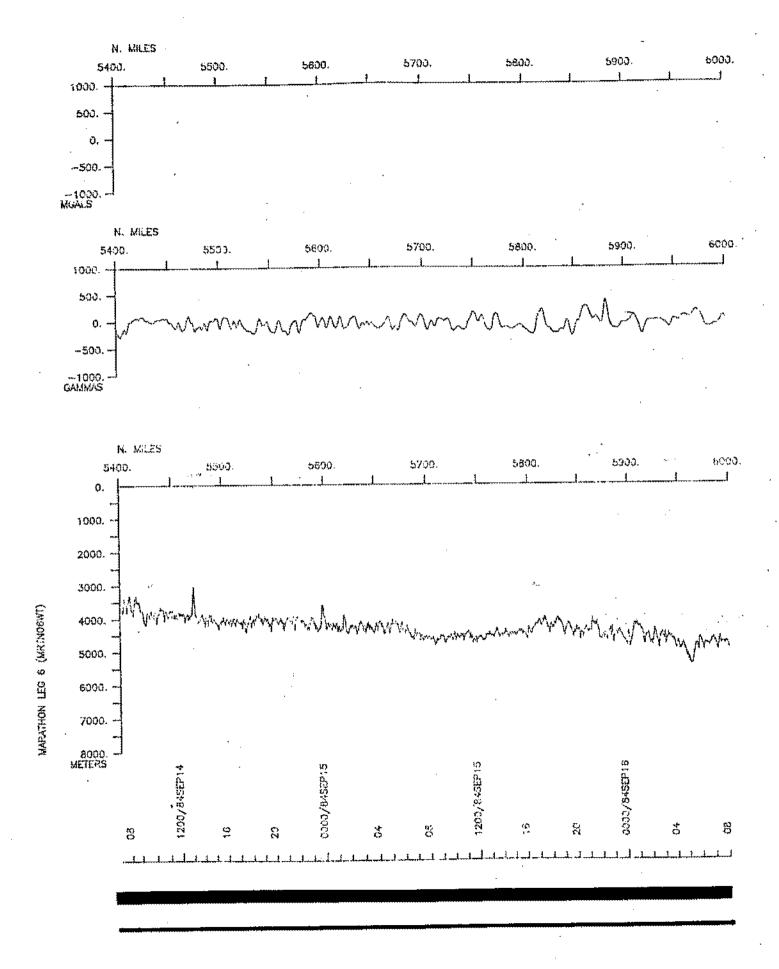


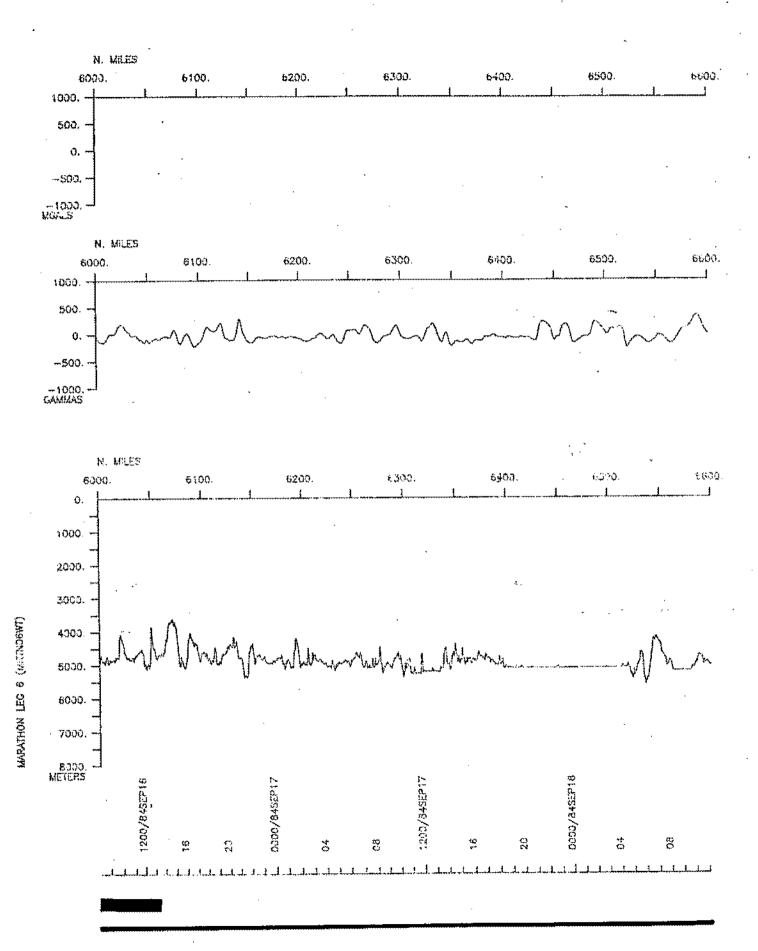


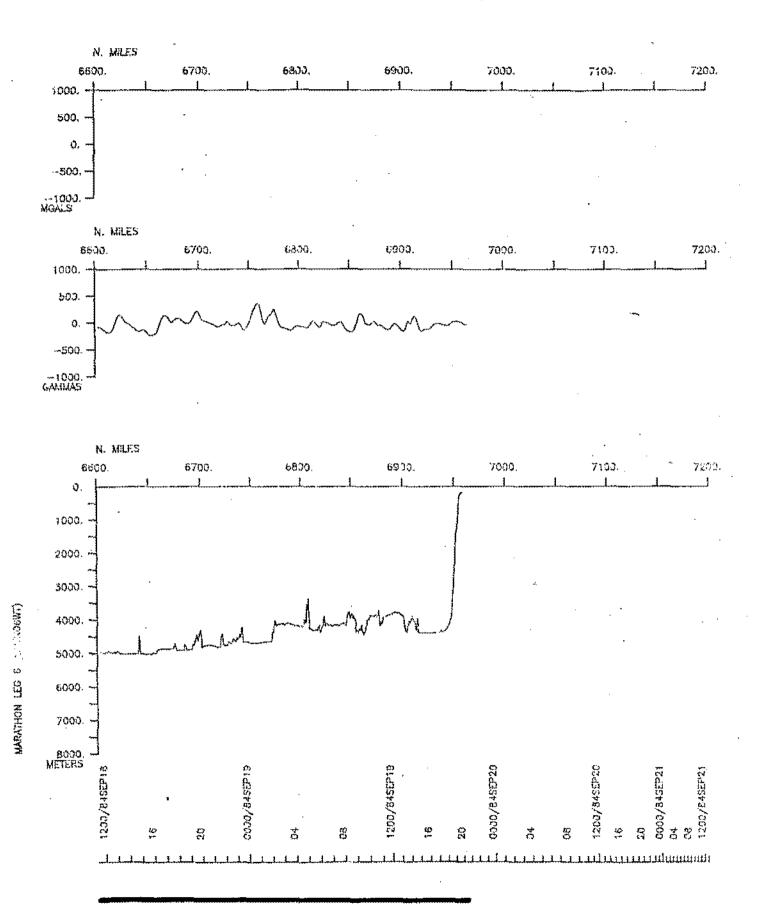


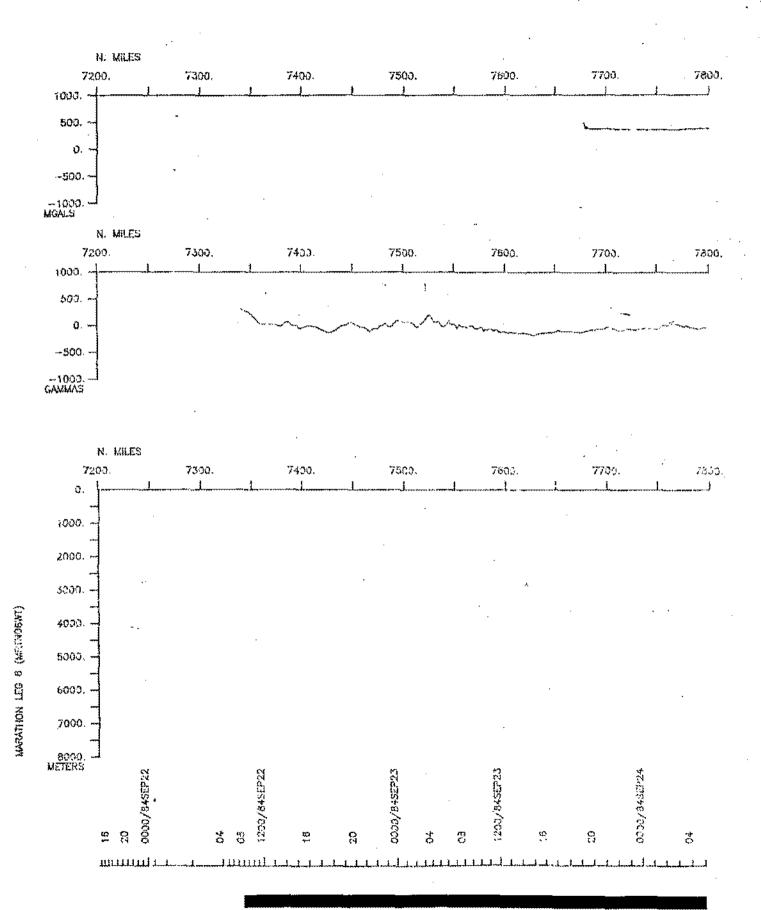


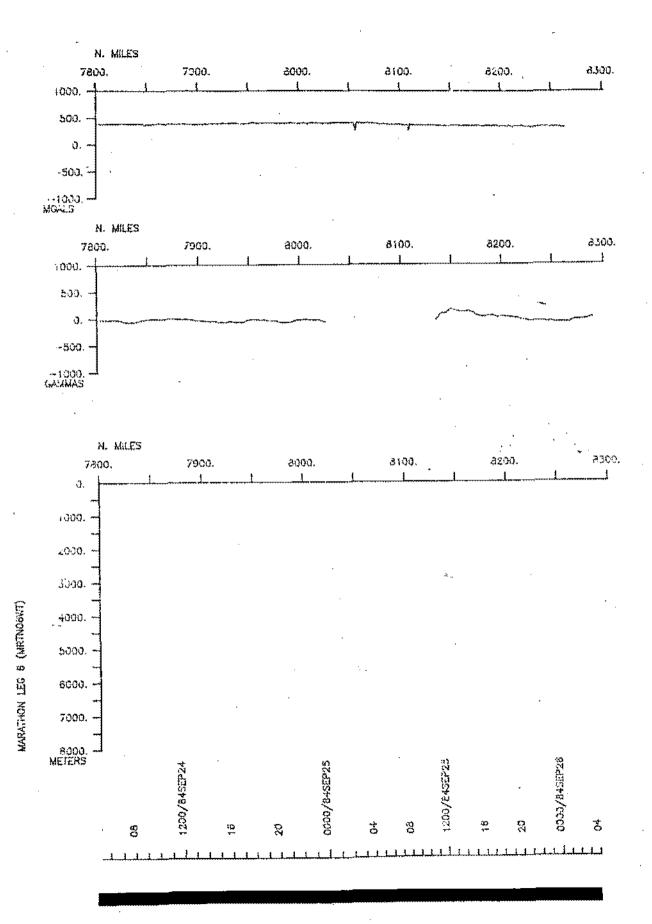












S.I.O. SAMPLE INDEX

(Issued June 1985)

MARATHON EXPEDITION

Leg 6

PAGO PAGO, SAMOA (23 August 1984) to MAR DEL PLATA, ARGENTINA (29 September 1984) R/V Washington

Chief Scientist - P. Lonsdale

Post-Cruise Processing and Report Preparation by S.I.O. Geological Data Center

Index Encoding Funded by ONR Grant Number NOO014-80-C-0440 Index Processing and Report Preparation funded in part by SIA

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. #215

PORTS

0320	230884	LGPT B	PAGO PAGO, SAMOA	14-17 S	170-40 W	fMRTNO6WT
1100	260984	LGPT E	MAR DEL PLATA, ARG	38-5198	57-499W	sMRTNO6WT
2058	200984	LGUS B	USHUATA, ARGENTINA	54-212S	67-368W	EMRTNO6WT
1835	210984	LGUS E	USHUAIA, ARGENTINA	54-212S	67-368¥	fMRTNO6WT

PERSONNEL									
NAME			***TITLE***	***AFFILIATION***	**CRID**				
	PECS GRD	LONSDALE.DR.P.	CHIEF SCIENTIST	SCRIPPS INSTITUTION	MRTNO6WT				
	PECT SCG	CHARTERS, J.	COMPUTER TECH.	SCRIPPS INSTITUTION	_ MRTNO6WT				
	PEAT SGG	CRAMPTON, P.	AIRGUN TECH.	SCRIPPS INSTITUTION	MRTNO6WT				
	PERT MTG	COMER, R.L.	RESIDENT TECH.	SCRIPPS INSTITUTION	MRTNO6WT				
	PEBO GDC	SMITH, W.	SEABEAM OPERATOR	SCRIPPS INSTITUTION	MRTNO6WT				
	PEBE SCG	HYLAS,T.	SEABEAM ENGINEER	SCRIPPS INSTITUTION	MRTNO6WT				
	PEST GRD	STURZ,A.	STUDENT	SCRIPPS INSTITUTION	MRTNO6WT				
	PEVL GRD	LEVINE,S.	VOLUNTEER	SCRIPPS INSTITUTION	MRTNO6WT				
	PESP SIO	YOHE,R.	WATCH STANDER	SCRIPPS INSTITUTION	MRTNO6WT				
	PEOB ARG	VOLLADARES, LT.J.	OBSERVER	ARGENTINA	MRTNO6WT				
	PEOB ARG	MOUZO.F.L.	OBSERVER	ARGENTINA	MRTNO6WT				

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 TIME	DDMMYY DATE	SAMP CODE	S.	AMPLE ENTIFI	ER		(DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
***U	NDERWAY	DATA CURATOR	- S.	M. SN	ITH I	EXT.	.2752				
L	OG BOOK	S									
0424	230884	LBUW	B UN	DERWAY	WATC	нц	OG	GDC	14-252S	170-457W	sMRTNO6WT
0433	260984	LBUW	E UN	DERWA'	WATC	H LA	DG	GDC	38-519S	57-499W	sMRTNO6WT
S	***SEABEAM MONITOR										
0427	230884										BMRTNO6WT
1230	.240884										sMRTNO6WT
1258	240884										sMRTNO6WT
1255	290884	MBRM	E 12	KHZ SI	3 MONI	TOR	R-02	GDC	31-090S	172-261W	sMRTNO6WT
1306	290884	MBRM	B 12	KHZ S	B MONI	TOR	R-03	GDC	31-103S	172-244W	sMRTNO6WT
	030984										sMRTNO6WT
1148	030984	MBRM									
1035	080984	MBRM	E 12	KHZ S	B MONT	TOR	R-04	GDC	49-533S	140-094W	sMRTNO6WT
	080984										
	130984								55-5788	121-447W	sMRTNO6WT
#tim	es 1107	,130984-2359,	6098	4 dis	carded	by	Lons	dale			
0000	170984	MBRM MBRM MBRM	B 12	KHZ S	B MONI	TOR	R-06	GDC	58-1745	92-083W	sMRTNU6WI
0830	180984	MBRM	E 12	KHZ S	B MONI	TOR	R-06	GDC	59-187S	79-429W	sMRTNO6WI
0859	180984	MBRM	B 12	KHZ S	B MONI	TOR	R-07	GDC	59-159S	79-328W	sMRTNO6WI
1952	190984	MBRM	E 12	KHZ S	B MONI	TOR	R-07	GDC	56-4248	68-237W	sMRTNO6WT
S	EABEAM	SWATH BOOK							.		
0424	230884	MBSB	R SE	AREAM	SWATH	RO	OK-OI	GDC	14-2528	170-457W	sMRTNO6WT
1703	250884	MBSB MBSB	ELO	NSDAL.	E SB S	W B	X-01	GDC	22-2115	174-092W	sMRTNO6WT
1703	250884	MBSB MBSB MBSB MBSB MBSB	B SE	ABRAM	SWATH	BO	OK-02	GDC	22-211S	174-092W	sMRTNO6WT
0010	280884	MRSR	EIC	NSDAL	E SB S	WB	K-02	GDC	27-273S	174-206W	sMRTNO6WT
0010	780884	MRSB	B SE	AREAM	SWATH	BO	OK-03	GDC	27-273S	174-206W	sMRTNO6WT
2346	290884	MRSR	EIG	NSDAT.	E SB S	WB	K-03	GDC	32-406S	171-532W	sMRTNO6WT
2346	290884	MRSB	R SF	AREAM	SWATH	BC	OK-04	GDC	32-406S	171-532W	sMRTNO6WT
	310884										sMRTNO6WT
	310884										sMRTNO6WT
	020984										sMRTNO6WT
	020984										sMRTNO6WT
	040984										sMRTNO6WT
	040984										sMRTNO6WT
	060984				E SB S						sMRTNO6WT
	060984										sMRTNO6WT
	080984				E SB S						sMRTNO6WT
	080984										sMRTNO6WT
	100984				E SB S						sMRTNO6WT
	3 100984										sMRTNO6WT
	120984										sMRTNO6WT
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1400 120984	MBSB B SEABEAM SWATH BOOK-11	GDC 55-378S 124-291V sMPTNO6WT
1111 140984	MBSB E LONSDALE SB SW BK-11	GDC 56-195S 113-59+0
1111 140984	MBSB B SEABEAM SWATH BOOK-12	GDC 56-195S 113-594W aMRTNO6WT
0536 160984	MBSB E LONSDALE SB SW BK-12	GDC 57-288S 98-225W sMRTNO6WT
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2355 170984	MBSB E LONSDALE SB SW BK-13	GDC 59-106S 82-591W sMRTNO6WT
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1952 190984	MBSB E LONSDALE SB SW BK-14	GDC 56-424S 68-237W sMRTNO6WT
0530 230884	MBSB B SEABEAM SWATH BOOK-OL	GDC 14-330S 170-538W sMRTNO6WT
1648 250884	MBSB E ARCHIVE SB SW BK-01	GDC 22-217S 174-059W sMRTNO6WT
1648 250884	MBSB B SEABEAM SWATH BOOK-02	GDC 22-217S 174-059W sMRTNO6WT
0010 280884	MBSB E ARCHIVE SB SW BK-02	GDC 27-273S 174-206W sMRTNO6WT
0010 280884		GDC 27-2735 174-200W SHRTNOGWT
2354 290884	MBSB E ARCHIVE SB SW BK-03	
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	MBSB B SEABEAM SWATH BOOK-04	GDC 32-420S 171-533W sMRTNO6WT
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1932 310884	MBSB B SEABEAM SWATH BOOK-OS	GDC 38-245S 167-508W sMRTNO6WT
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2120 020984	MBSB B SEABEAM SWATH BOOK-06	GDC 42-306S 162-322W sMRTNO6WT
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1822 060984	MBSB B SEABEAM SWATH BOOK-08	GDC 48-126S 148-384W sMRTNO6WT
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1402 120984	MBSB E ARCHIVE SB SW BK-10	GDC 55-375S 124-289W sMRTN06WT
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1111 140984		GDC 56-195S 113-594W sMRTNO6WT
0532 160984		GDC 56-195S 113-594W sMRTNO6WT
	MBSB E ARCHIVE SB SW BK-12	GDC 57-287S 98-240W sMRTN06WT
0532 160984		GDC 57-287S 98-240W sMRTNO6WT
2355 170984	MBSB E ARCHIVE SB SW BK-13	GDC 59-106S 82-591W sMRTNO6WT
2355 170984	MBSB B SEABEAM SWATH BOOK-14	
1952 190984	MBSB E ARCHIVE SB SW BK-14	GDC 56-424S 68-237W sMRTNO6WT
		·
FATHOGRAMS		
		•
0000 000884		GDC 14-188S 170-408W sMRTNO6WT
2019 080984	DPR3 E 3.5KHZ EPC R-01	GDC 50-224S 139-092W sMRTNO6WT
2115 080984	DPR3 B 3.5KHZ EPC R-O2	GDC 50-263S 139-102W sMRTN06WT
1238 140984	DPR3 E 3.5KHZ EPC R-02	GDC 56-212S 113-293W sMRTNO6WT
1923 190984	DPR3 B 3.5KHZ EPC R-03	GDC 56-447S 68-287W sMRTNO6WT
1358 200984	DPR3 E 3.5KHZ EPC R-03	GDC 55-017S 66-557W sMRTNO6WT
0725 220984	DPR3 B 3.5KHZ EPC R-04	GDC 53-422S 64-467W sMRTNO6WT
2137 220984	DPR3 E 3.5KHZ EPC R-04	GDC 51-328S 65-009W sMRTNO6WT
2144 220984	DPR3 B 3.5KHZ EPC R-O5	GDC 51-316S 65-005W sMRTNO6WT
2210 230984	DPR3 E 3.5KHZ EPC R-05	GDC 47-430S 63-043W sMRTN06WT
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2236 230984 2240 240984 2245 240984 2201 250984 2205 250984 0400 260984	DPR3 B 3.5KHZ EPC R-06 DPR3 E 3.5KHZ EPC R-06 DPR3 B 3.5KHZ EPC R-07 DPR3 E 3.5KHZ EPC R-07 DPR3 B 3.5KHZ EPC R-08 DPR3 E 3.5KHZ EPC R-08	GDC 47-382S 63-009W sMRTN06WT GDC 43-130S 60-198W sMRTN06WT GDC 43-119S 60-192W sMRTN06WT GDC 39-446S 58-220W sMRTN06WT GDC 39-441S 58-216W sMRTN06WT GDC 38-548S 57-514W sMRTN06WT
MAGNETICS		
0526 040984 1910 150984 1920 150984 0400 260984	MGRA B MAGNETICS ROLL-01 MGRA E MAGNETICS ROLL-02 MGRA B MAGNETICS ROLL-02 MGRA E MAGNETICS ROLL-03 MGRA B MAGNETICS ROLL-03 MGRA E MAGNETICS ROLL-03	GDC 14-285S 170-491W sMRTNO6WT GDC 44-593S 158-312W sMRTNO6WT GDC 44-597S 158-299W sMRTNO6WT GDC 57-114S 102-186W sMRTNO6WT GDC 57-117S 102-148W sMRTNO6WT GDC 38-548S 57-514W sMRTNO6WT
SEISMIC REFLECTION)//	•
0500 230884 0139 310884 0237 310884 0358 060984 0403 060984 1324 160984 0824 220984 0410 250984 0410 250984 0401 260984 0500 230884 2244 050984 2250 050984 1329 160984 0824 220984	SPRF B SEISMIC 2 SEC R-01 SPRF E SEISMIC 2 SEC R-01 SPRF B SEISMIC 2 SEC R-02 SPRF E SEISMIC 2 SEC R-02 SPRF B SEISMIC 2 SEC R-03 SPRF B SEISMIC 2 SEC R-03 SPRF B SEISMIC 2 SEC R-04 SPRF B SEISMIC 2 SEC R-04 SPRF B SEISMIC 2 SEC R-05 SPRF B SEISMIC 4 SEC R-01 SPRS B SEISMIC 4 SEC R-01 SPRS B SEISMIC 4 SEC R-02	GDC 14-287S 170-493W sMRTNO6WT GDC 36-146S 169-483W sMRTNO6WT GDC 36-242S 169-432W sMRTNO6WT GDC 47-253S 150-573W sMRTNO6WT GDC 47-260S 150-563W sMRTNO6WT GDC 57-478S 95-387W sMRTNO6WT GDC 53-374S 64-481W sMRTNO6WT GDC 42-151S 59-447W sMRTNO6WT GDC 38-546S 57-513W sMRTNO6WT GDC 38-546S 57-513W sMRTNO6WT GDC 47-045S 152-121W sMRTNO6WT GDC 47-050S 152-107W sMRTNO6WT GDC 57-480S 95-374W sMRTNO6WT GDC 53-374S 64-481W sMRTNO6WT
0401 260984	SPRS E SEISMIC 4 SEC R-03	GDC 38-546S 57-513W sMRTNO6WT
GRAVITY		
	GVRA E GRAVIMETER R-01	LMD 14-215S 170-425W sMRTNO6WT LMD 51-420S 65-036W sMRTNO6WT LMD 54-489S 65-233W sMRTNO6WT LMD 38-519S 57-499W sMRTNO6WT
0356 230884 1100 260984	TCRC B THERMOGRAPHS 1-33 TCRC E THERMOGRAPHS 1-33	GDC 14-208S 170-421W sMRTNO6WT GDC 38-519S 57-499W sMRTNO6WT

Jul 5 13:04 1985 MARATHON LEG 6 SAMPLE INDEX Page 5

DREDGES

0803	280884		DRRO	в	ROCK	DREDGE-01	2250M	GCR	27-395S	174-048W	sMRTNO6WT
0950	280884		DRRO	E I	ROCK	DREDGE-01	2250M				sMRTNO6WT
2248	310884		DRRO	BF	ROCK	DREDGE-02	320M	GCR	38-2345	168-000W	sMRTNO6WT
2318	310884	1.00	DRRO	EF	ROCK	DREDGE-02	320M	GCR	38-235\$	168-001W	sMRTNO6WT
1624	030984		DRRO	X F	ROCK	DREDGE-03		GCR	43-5918	160-434W	sMRTNO6WT
1306	040984		DRRO	BF	ROCK	DREDGE-04	1500M	GCR	45-190S	157-390W	sMRTNO6WT
1401	040984		DRRO	E F	ROCK	DREDGE-04	1500M	GCR	45-1948	157-388W	sMRTNO6WT
0222	050984		DRRO	X F	ROCK	DREDGE-05	1425M	GCR	46-1265	155-585W	sMRTNO6WT
	060984		DRRO	BE	ROCK	DREDGE-06	720M	GCR	48-121S	148-484W	sMRTNO6WT
2336	060984		DRRO	E F	ROCK	DREDGE-06	720M	GCR	48-122S	148-485W	sMRTNO6WT
2145	080984		DRRO	B	ROCK	DREDGE-07	640M	GCR	50-264\$	139-100W	sMRTNO6WT
	080984		DRRO	E	ROCK	DREDGE-07	640M	GCR	50-2648	139-100W	sMRTNO6WT
2335	080984		DRRO	X	ROCK	DREDGE-08	600M	GCR	50-265\$	139-095W	sMRTNO6WT

END SAMPLE INDEX