INFORMAL REPORT AND INDEX OF

NAVIGATION, DEPTH, MAGNETIC AND SUBBOTTOM PROFILER DATA

(Issued September 1987)

CROSSGRAIN EXPEDITION

LEG 1

San Diego, California (17 February 1987) to Papeete, Tahiti (25 March 1987)

R/V T. Washington

Chief Scientist - E. L. Winterer

Resident Marine Tech - J. Boaz

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

Data Collection and Processing Funded by University of California General Funds and U.S. Navy-0720

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.# 228

INFORMAL 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 anomaly and gravity free air anomaly vs. distance. 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 and measurements (geology, biology, physical oceanography, etc.) 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, CA 92093. Phone (619)534-2752.

- Navigation listing with 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.
- Plots of depths, magnetics or gravity profiles along track custom plots at various map and profile scales on Mercator projection may be requested.
- 4. Separate time series files of navigation, depth, gravity and magnetics as well as these 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
 - c. Magnetometer records
 - d. Gravity records
 - e. Underway data log book

SIO Sea Beam Data

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

1) Archive copy of contour swath books generated in real time on board ship available for inspection at the data center.

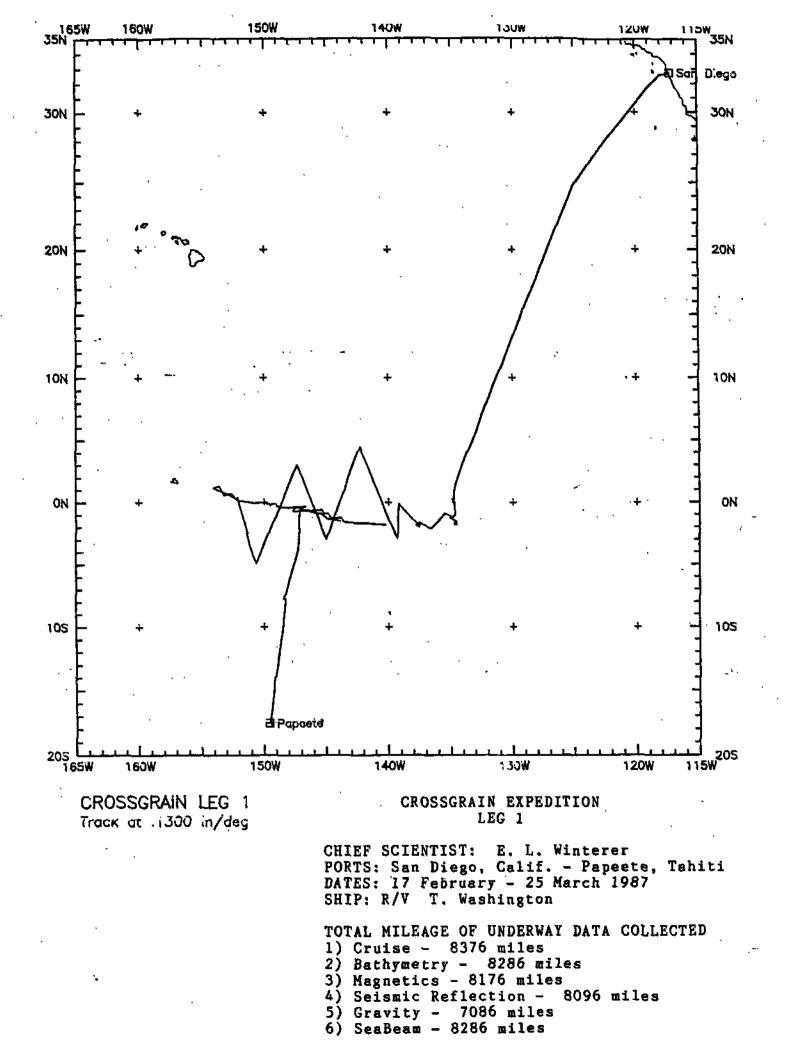
2) Microfilm (35mm flowfilm) containing swath books plus, for some cruises, the Sea Beam monitor record and navigation list.

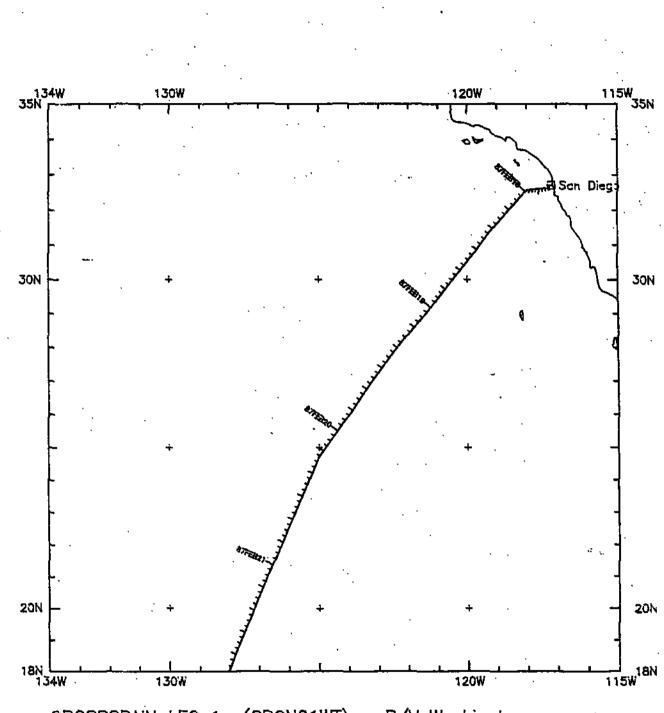
3) Sea Beam merged tapes - Sea Beam data merged with navigation. (Navigation is edited to the extent that DR courses and speeds are edited and poor fixes are removed after inspection of drift vectors between fix pairs. No editing is done on the basis of adjusting to overlapping Sea Beam swaths.)

4) Archive contour plots - 16"/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; additional copies may be generated from plot files stored on tape.

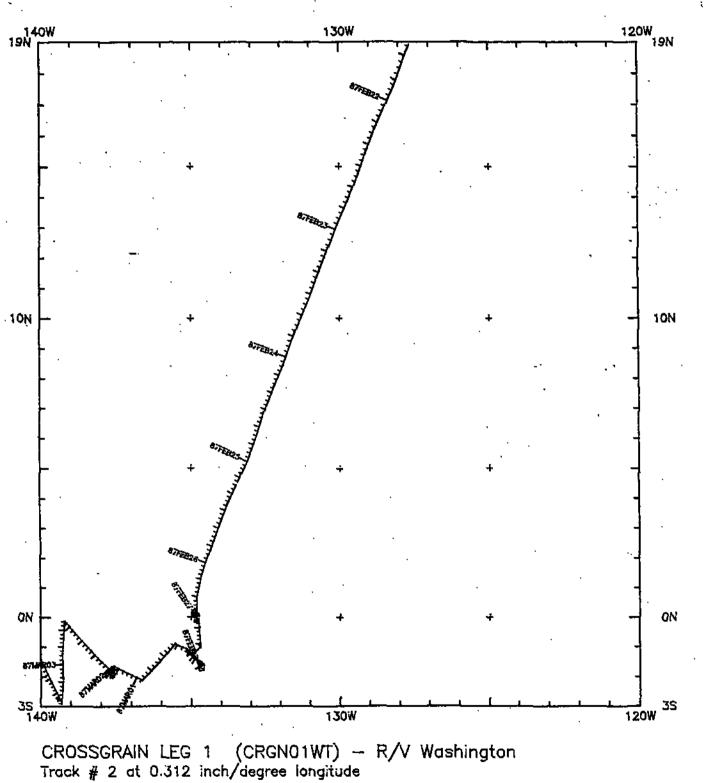
5) Custom generated plots of Sea Beam swaths on Mercator projection in four colors at variable plot scales and contour intervals. There are provisions to adjust positions of individual track lines and to edit out beams (bad data or overlapping data on inside of turns).

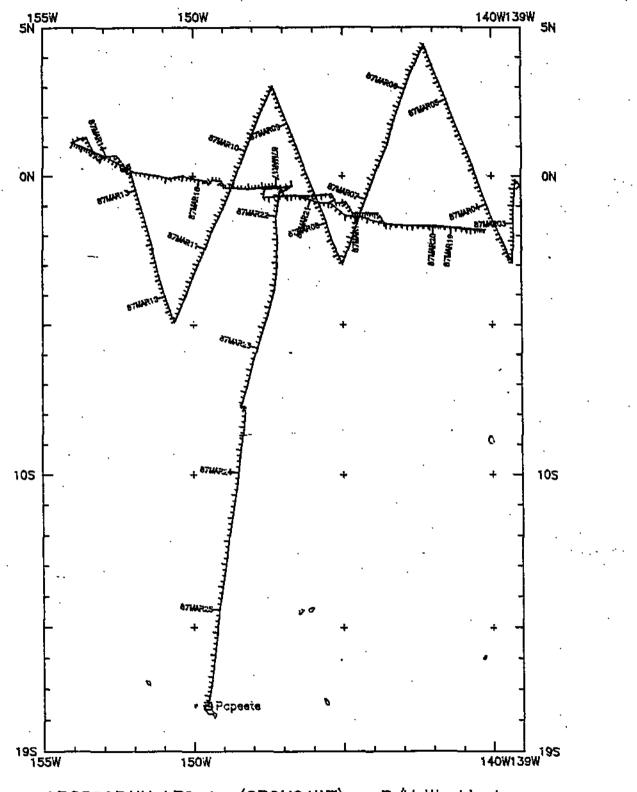
revised October 1986

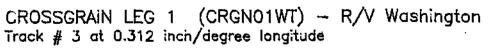


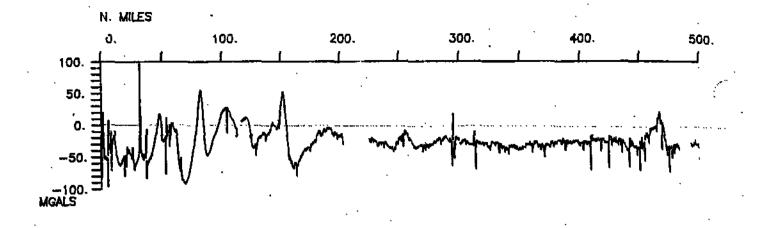


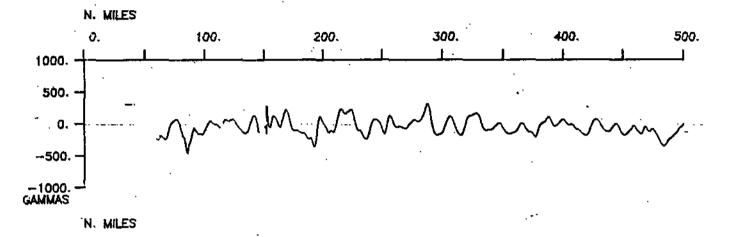
CROSSGRAIN LEG 1 (CRGN01WT) - R/V Washington Track # 1 at 0.312 inch/degree longitude

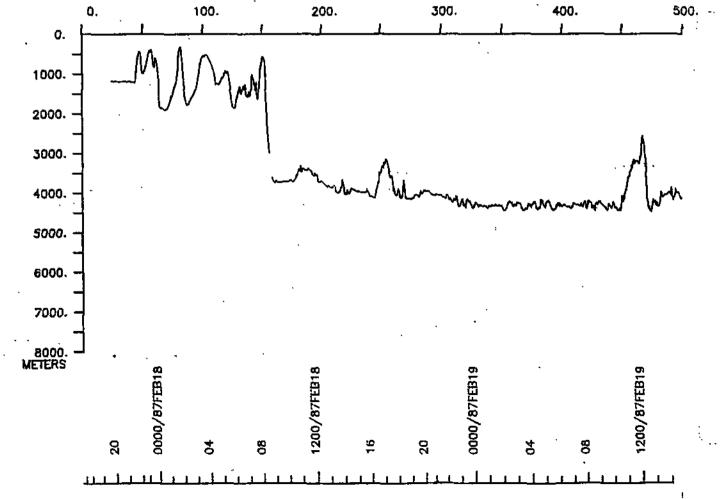


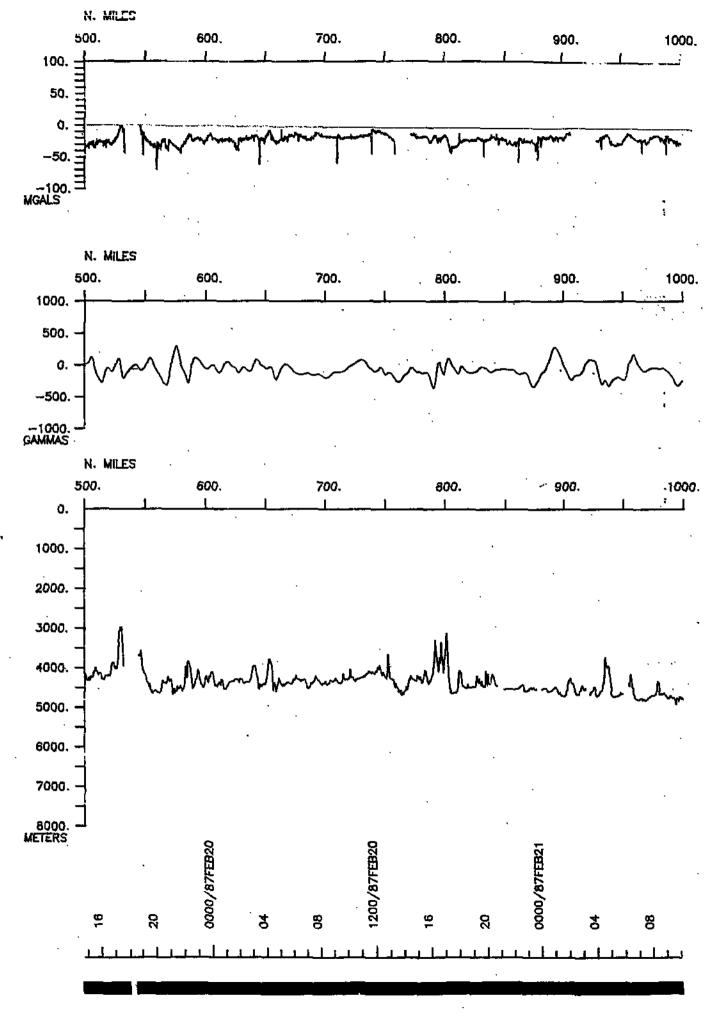


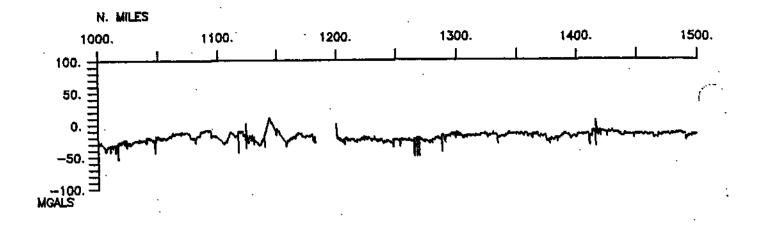


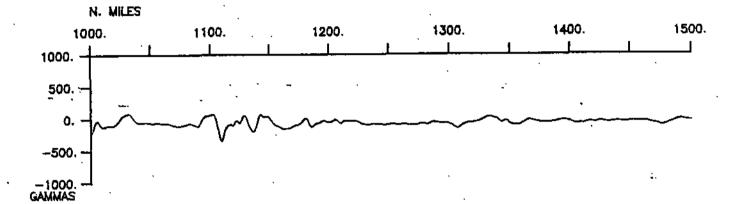


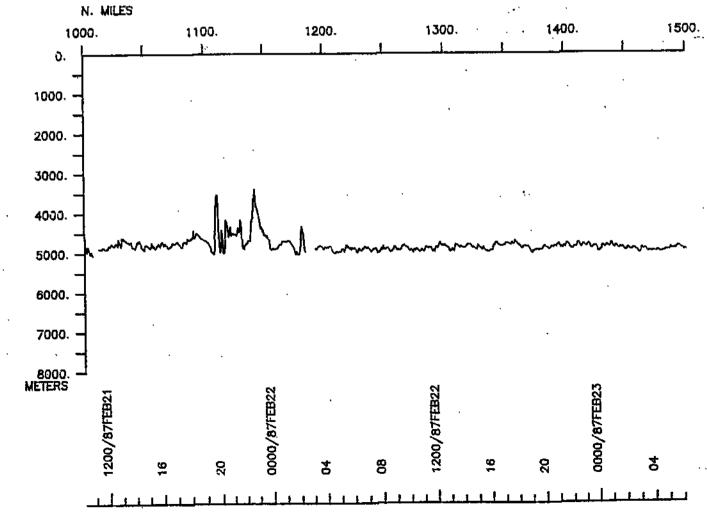


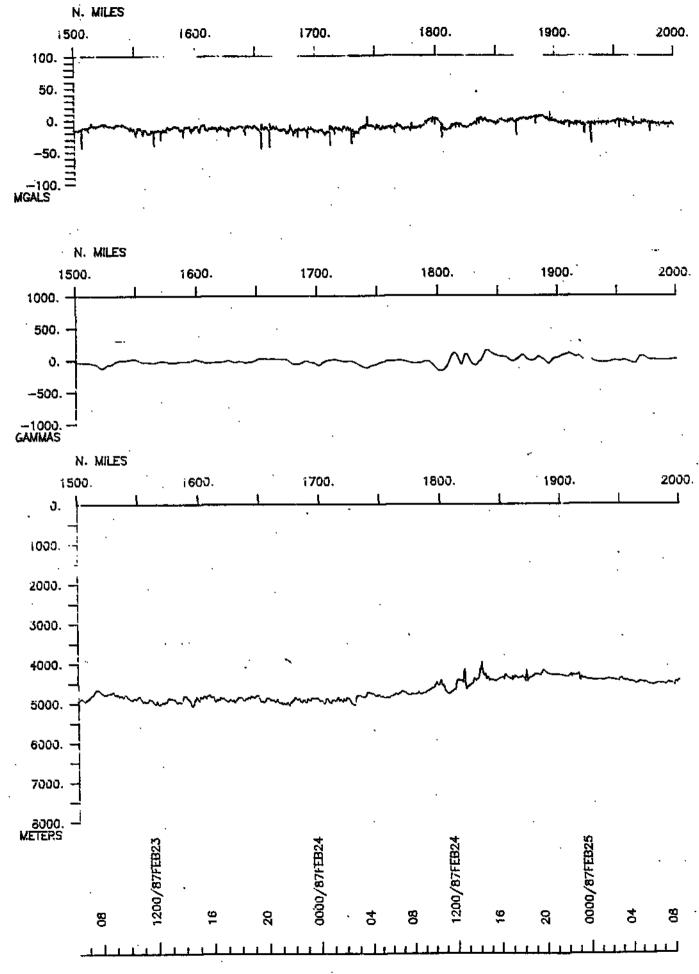


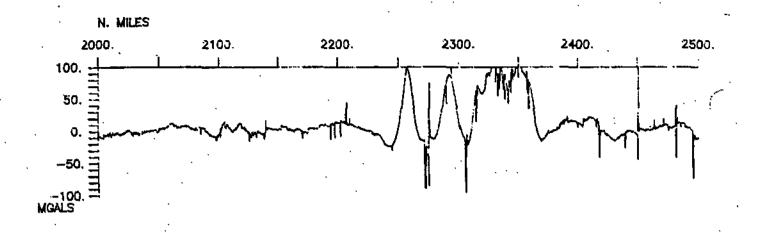


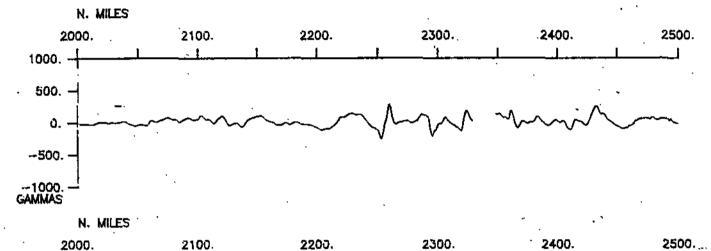


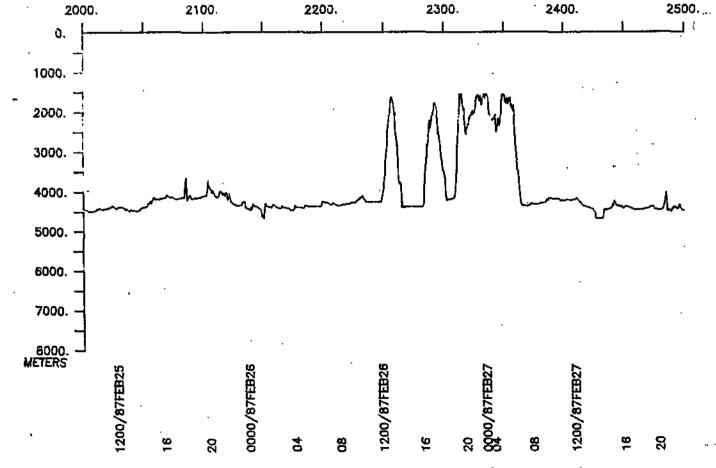


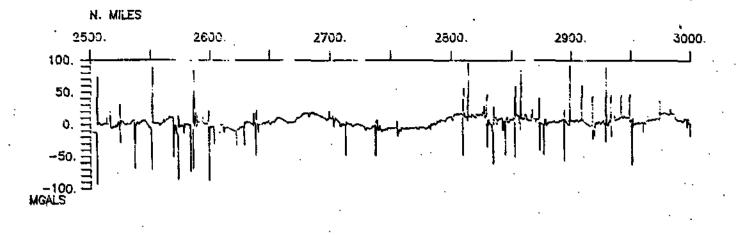


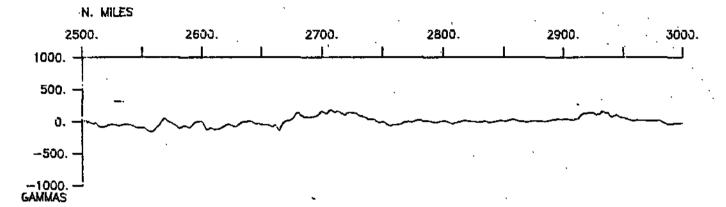


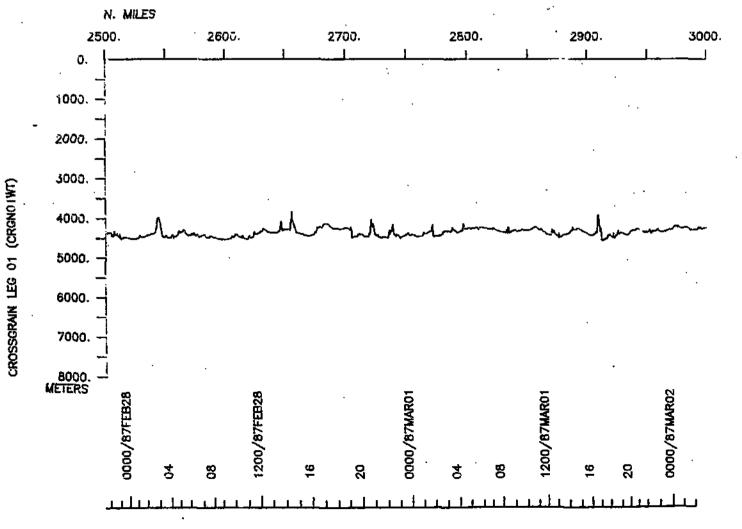




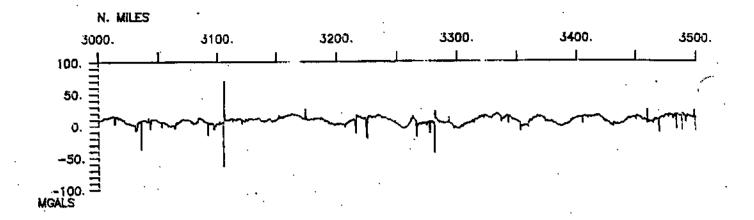


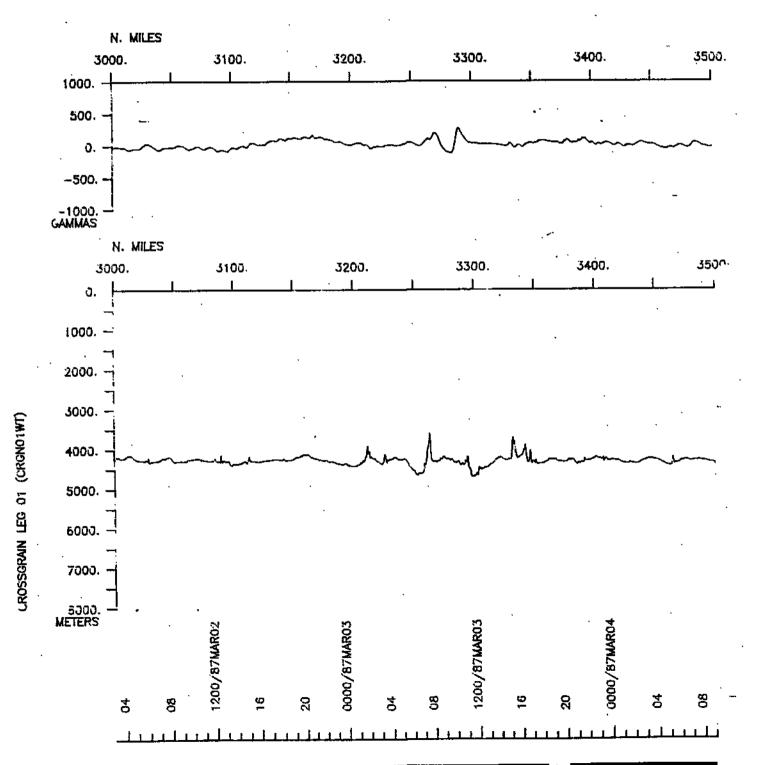


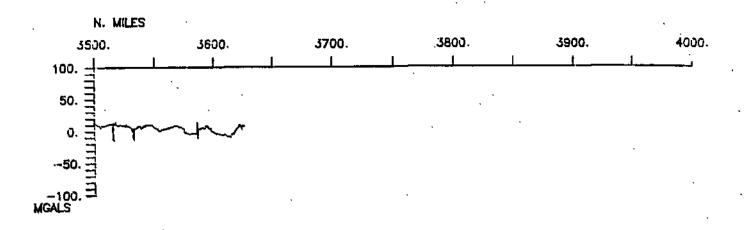


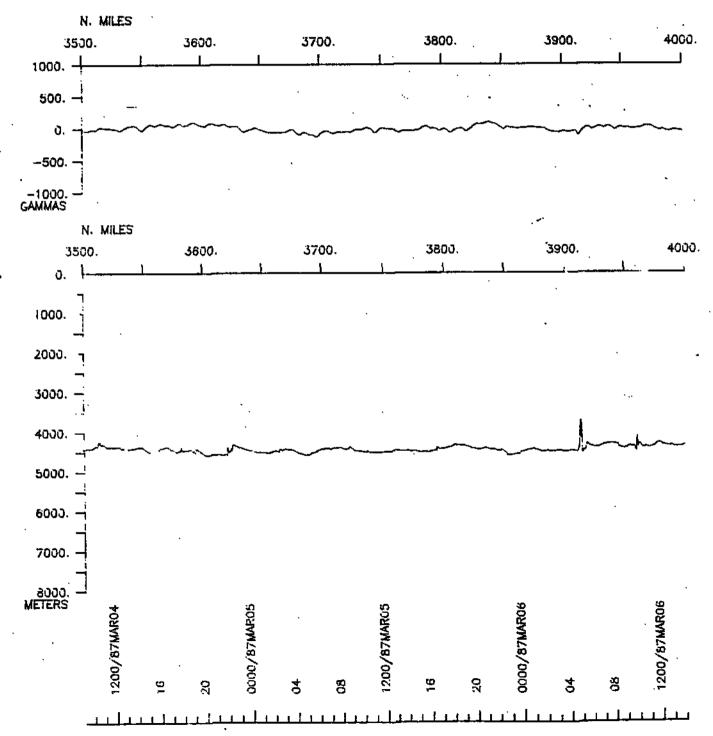


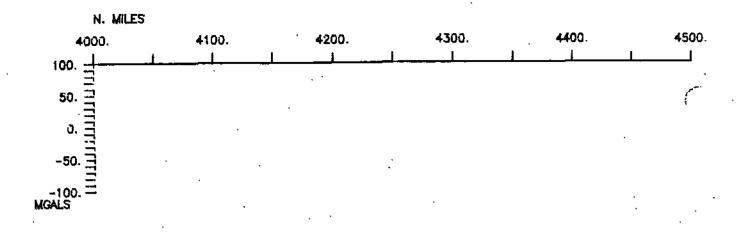
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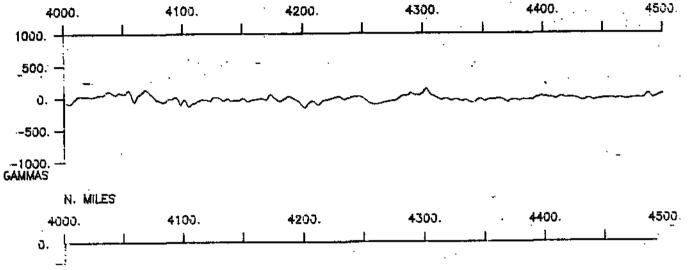


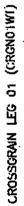




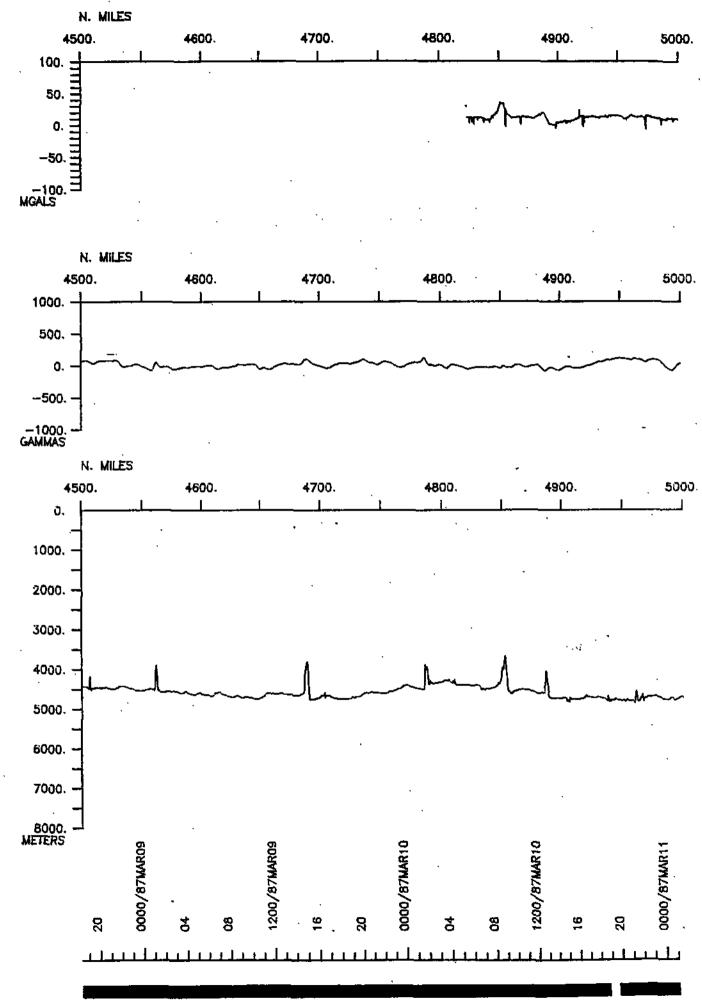


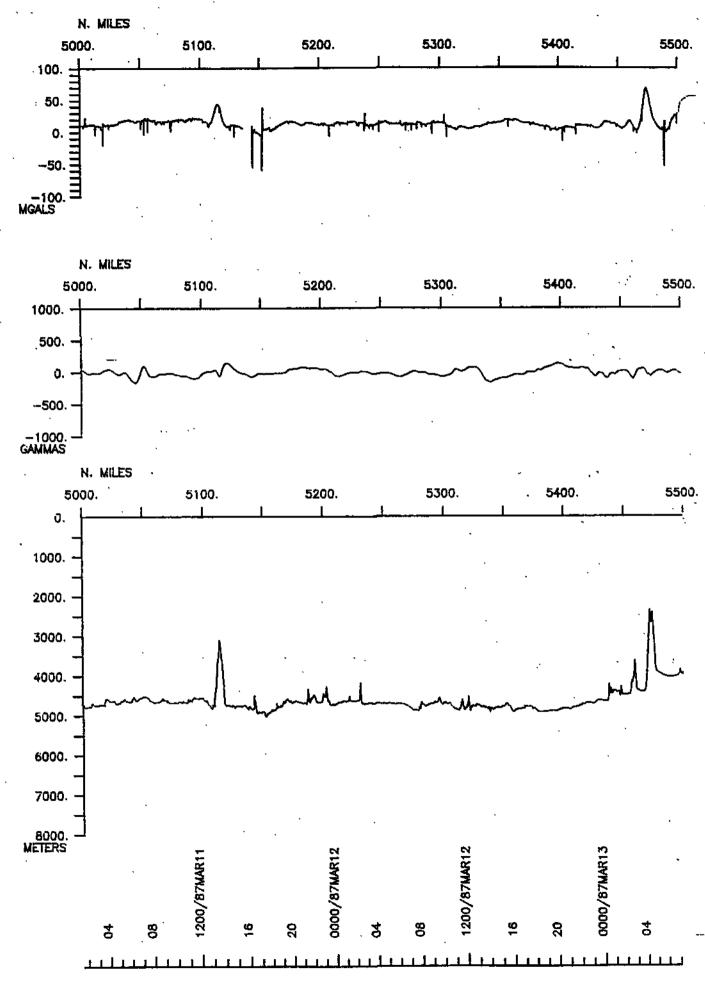


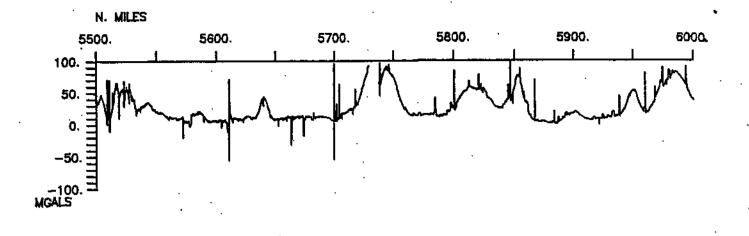


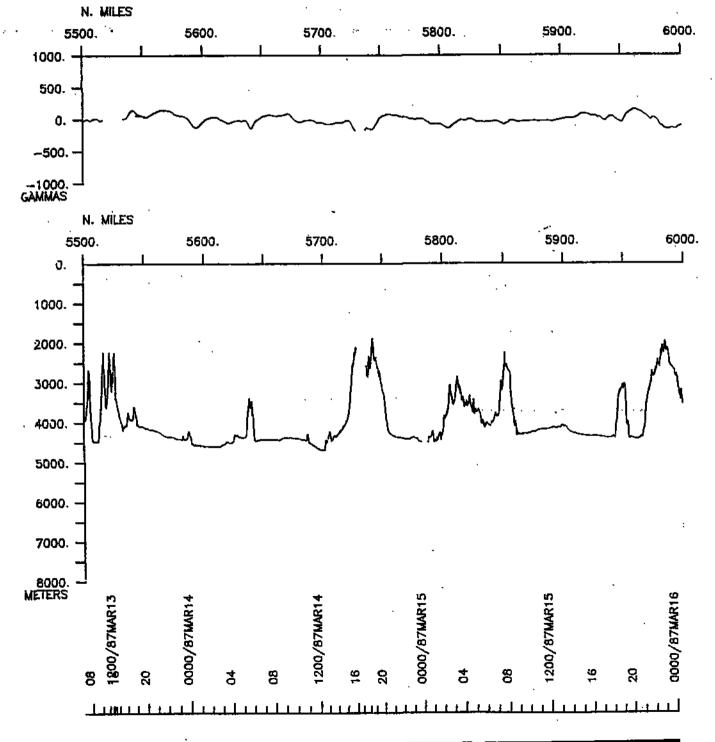


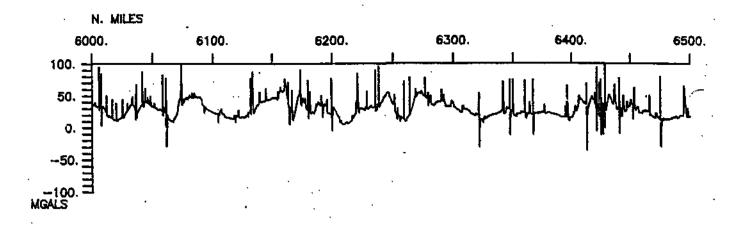
1000. –¹ Ī 2000. – 3000. 4000.-_____ 5000. _ 6000. --7000. a000. METERS 1200/87MAR08 0000/87MAR08 1200/67MAP07 0000/87MAR07 91 8 3 80 16 20 9 16 8

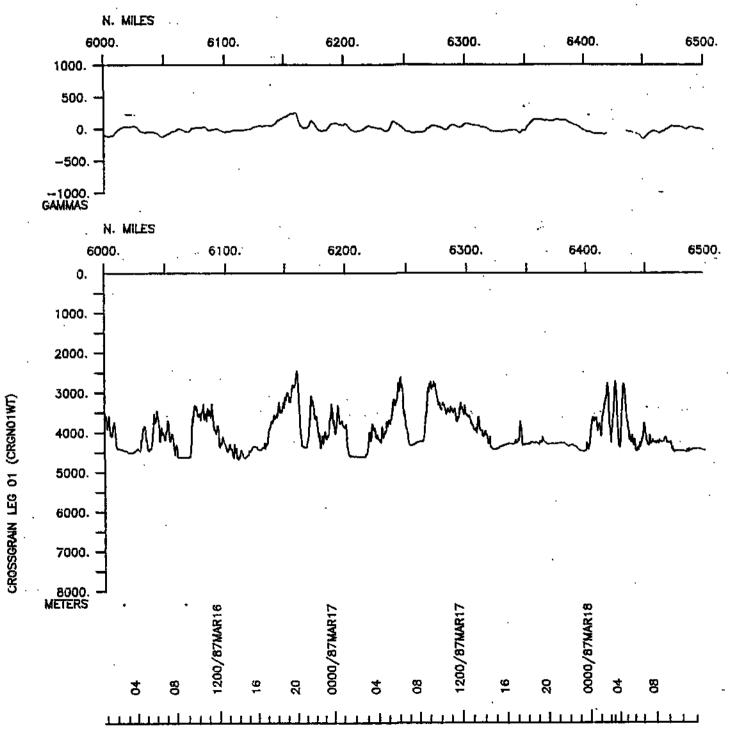


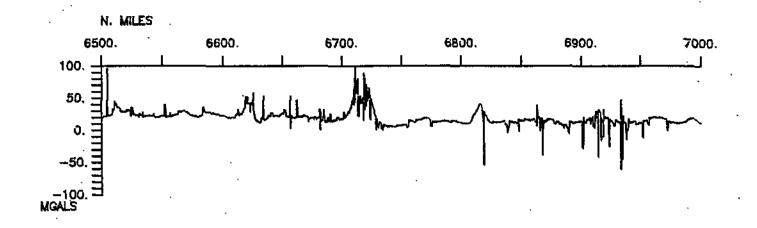


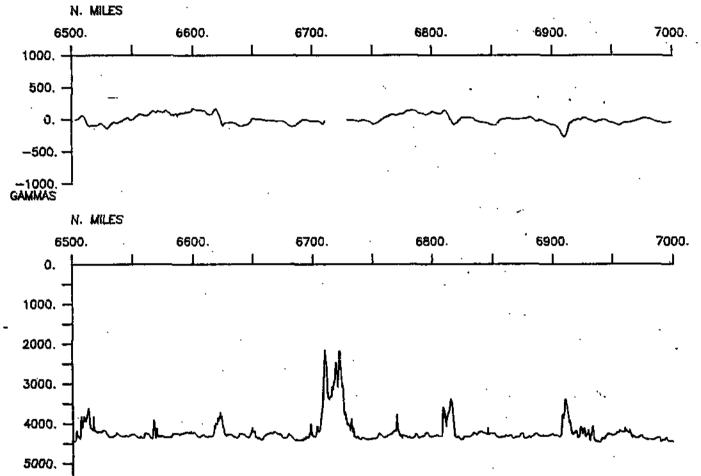


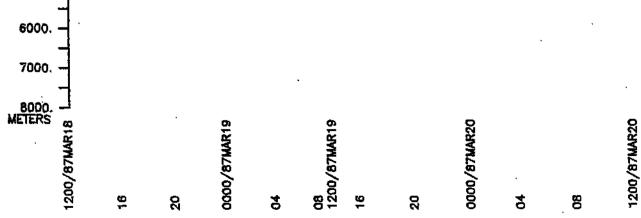


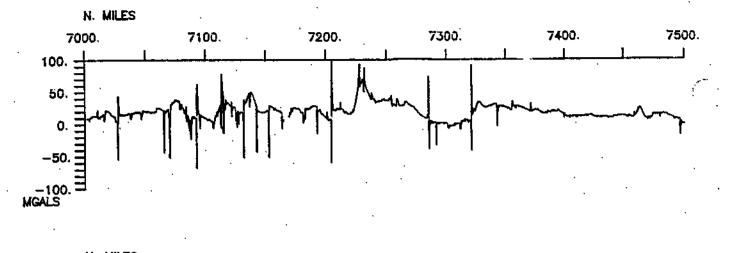


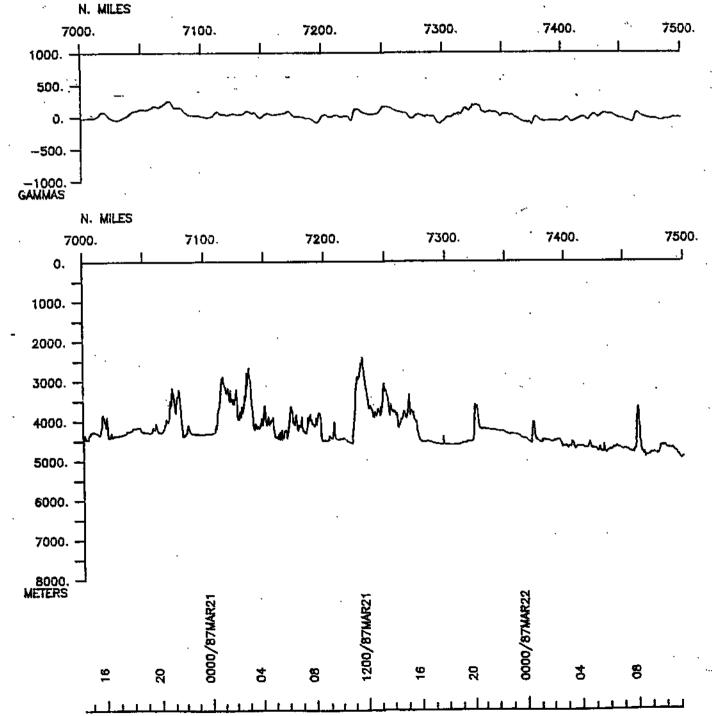


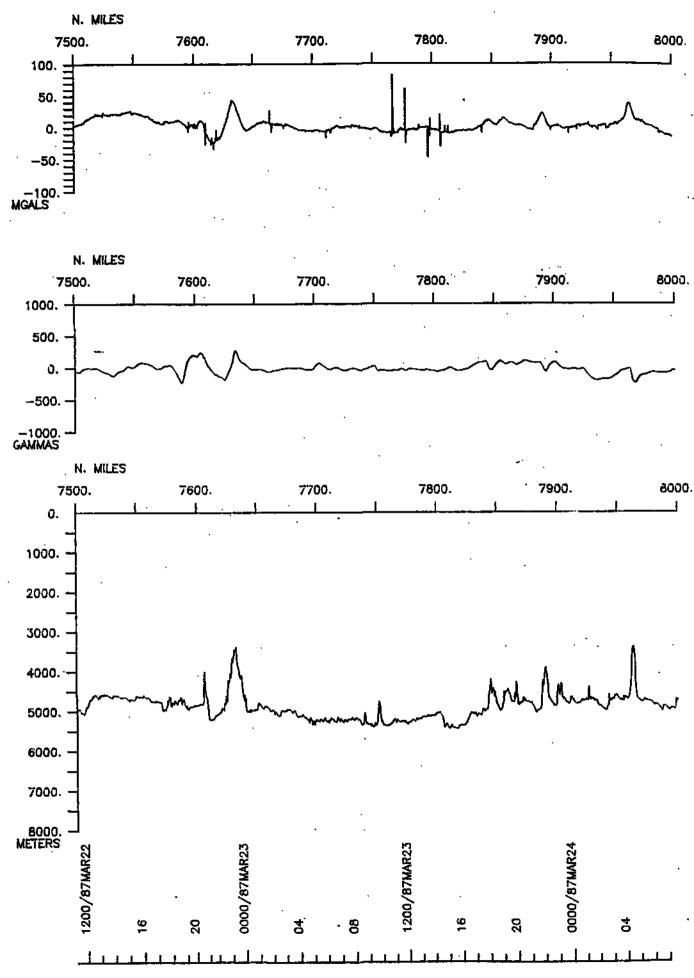


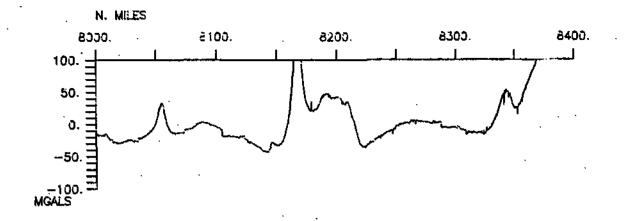


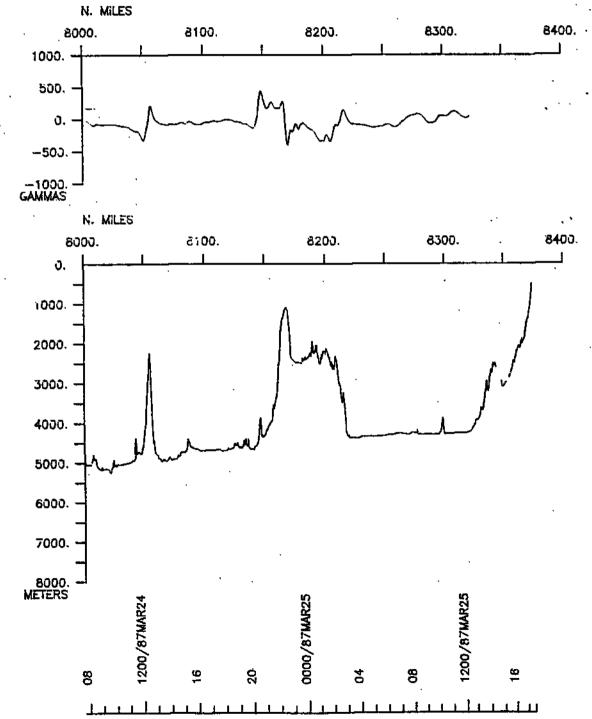












S.I.O. SAMPLE INDEX

(Issued September 1987)

CROSSGRAIN EXPEDITION

Leg 1

San Diego, Calif. (17 February 1987) to Papeete, Tahiti (25 March 1987)

R/V Washington

Chief Scientist - B. L. Winterer

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

Index Encoding Funded by NSF Grant Number OCE86-16368 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. #228

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#***PORTS***

1600 170287	LGPT B SAN DIEGO, CAL.	32-382N 117-141W sCRGN01WT
1800 250387	LGPT E PAPEETE, TAHITI	17-319S 149-339W sCRGN01WT

CRTD

77777

#***PERSONNEL*** ***NAME***

	THE MANEL TO A		A ALL LULATION	dit TD
PECS GRD	WINTERER, E.L.	CHIEF SCIENTIST	SCRIPPS INSTITUTION	CRGNO1WT
PESP SIX	SANDWELL, D.	PROFESSOR	UNIVERSITY OF TEXAS	CRGNO1WT
PEST GRD	LYNCH, M.	STUDENT	SCRIPPS INSTITUTION	CRGNO1WT
PEVL GRD	HARRISON, K.	VOLUNTEER	SCRIPPS INSTITUTION	CRGNO1WT
PERT STS	-	RESIDENT TECH	SCRIPPS INSTITUTION	CRGN01WT
PECT STS	ABBOTT, J.	COMPUTER TECH	SCRIPPS INSTITUTION	CRGNOIWT
PEST GRD	GEE,J.	STUDENT	SCRIPPS INSTITUTION	CRGNO1WT
PEST GRD	WU,G.	STUDENT	SCRIPPS INSTITUTION	CRGNO1WT
PECT GRD	HENKART, P.	COMPUTER TECH	SCRIPPS INSTITUTION	CRGNO1WT
PESP STS	CRAMPTON, P.	AIRGUN TECH	SCRIPPS INSTITUTION	CRGNO1WT
PEBO STS	SMITH, S.	SEABEAM OPERATOR	SCRIPPS INSTITUTION	CRGNO1WT
PEBE STS	PHILLIPS, J.	SEABEAM TECH	SCRIPPS INSTITUTION	CRGNO1WT
PEVL GRD	GRANIRER, J.	VOLUNTEER	SCRIPPS INSTITUTION	CRGNO1WT
PEST GRD	MEAD.G.	STUDENT	SCRIPPS INSTITUTION	CRGNC TT
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#***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. POSITIONS ARE IN TENTHS #OF MINUTES.

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#GMT DDMMYY LOC T #TIME DATE TIME Z	SAMP SAMPLE CODE IDENTIFIER	DISP CODE	LAT. LONG.	CRUISE LEG-SHIP
#***UNDERWAY DATA	CURATOR - S. M. SMITH EXT	. 42752	•	
#***LOG BOOKS***	.:			· `
1910 170287 1730 250387	LBUW B UNDERWAY WATCH LOO LBUW E UNDERWAY WATCH LOO	• • • • • •	2-380N 117-365 7-315S 149-354	
#*** SINGLE SONOBC	DUY SEISMIC RUN ***		• •	
0046 020387 0203 020387	SRSS B SEIS. RUN CRGNO1- SRSS E UR/AG/SD/AN/DG	01 GDC GDC	1-405S 137-529 1-314S 138-004	
0355 020387 0436 020387	SRSS B SEIS. RUN CRGNO1- SRSS E UR/AG/SD/AN/DG		1-1815 138-124 1-1325 138-164	
∠112 020387	SRSS B SEIS. RUN CRGNO1- SRSS E UR/AG/SD/AN/DG		0-5928 139-16 1-1098 139-17	
2353 020387 0219 030387	SRSS B SEIS. RUN CRGNO1- SRSS E UR/AG/SD/AN/DG	04 GDC GDC	1-3485 139-173 1-5675 139-170	
0444 040387 0624 040387	SRSS B SEIS. RUN CRGNO1- SRSS E UR/AG/SD/AN/DG		0-1335 140-26 0-013N 140-31	
1850 040387 2023 040387	SRSS B SEIS. RUN CRGNO1- SRSS E UR/AG/SD/AN/DG		1-482N 141-16 2-022N 141-20	
2026 040387 2156 040387	SRSS B SEIS. RUN CRGNO1- SRSS E UR/AG/SD/AN/DG		2-027N 141-21 2-163N 141-26	
2202 040387 2248 040387	SRSS B SEIS. RUN CRGNO1- SRSS E UR/AG/SD/AN/DG		2-172N 141-26 2-243N 141-29	
2300 040387 0034 050387	SRSS B SEIS. RUN CRGNOI- SRSS E UR/AG/SD/AN/DG		2-261N 141-29 2-405N 141-34	
0037 050387 0216 050387	SRSS B SEIS. RUN CRGNO1- SRSS E UR/AG/SD/AN/DG		2-410N 141-35 2-553N 141-40	
1821 050387 `958 050387	SRSS B SEIS. RUN CRGNO1- SRSS E UR/AG/SD/AN/DG		3-455N 142-35 3-318N 142-41	
2002 050387 2135 050387	SRSS B SEIS. RUN CRGNO1- SRSS E UR/AG/SD/AN/DG	12 GDC GDC	3-312N 142-41 3-180N 142-47	8W sCRGNO1WT 7W sCRGNO1WT
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#GMT DDMMYY LOC T #TIME DATE TIME Z #		SAMPLE IDENTIFIER	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
2114 060387 2244 060387	SRSS B SRSS E	SEIS. RUN CRGNO1-13 UR/AG/SD/AN/DG				sCRGNO1WT sCRGNO1WI
2252 060387 0022 070387	SRSS B SRSS E	SEIS. RUN CRGNO1-14 UR/AG/SD/AN/DG	GDC GDC			sCRGNO1WT sCRGNO1WT
1743 070387 1858 070387	SRSS B SRSS -E	SEIS. RUN CRGNO1-15 UR/AG/SD/AN/DG	GDC GDC			sCRGNO1WT sCRGNO1WT
1900 070387 2036 070387	SRSS B SRSS E	SEIS. RUN CRGNO1-16 UR/AG/SD/AN/DG	GDC GDC		145-208W 145-244W	sCRGN01WT sCRGN01WT
1755 080387 1930 080387	SRSS B SRSS E	SEIS. RUN CRGNO1-17 UR/AG/SD/AN/DG	GDĆ GDC			aCRGN01WT aCRGN01WT
1936 080387 2116 080387	SRSS B SRSS E	SEIS. RUN CRGNO1-18 UR/AG/SD/AN/DG	GDC GDC			sCRGN01WT sCRGN01WT
2121 080387 2255 080387	SRSS E SRSS E	SEIS, RUN CRGNO1-19 UR/AG/SD/AN/DG	GDC GDC			sCRGNOf sCRGNO1WT
2258 080387 0035 090387		SEIS. RUN CRGN01-20 UR/AG/SD/AN/DG				sCRGN01WT sCRGN01WT
0038 090387 0133 090387	SRSS E SRSS E	SEIS. RUN CRGNO1-21 UR/AG/SD/AN/DG	GDC		146-529W 146-557W	sRGNO1WT sCRGNO1WT
0135 090387 0303 090387	SRSS E SRSS E	SEIS. RUN CRGNO1-22 UR/AG/SD/AN/DG				sCRGN01WT sCRGN01WT
1823 090387 2006 090387	SRSS H SRSS H	SEIS. RUN CRGNO1-23 UR/WG/SD/AN/DG	GDC GDC	1-372N 1-230N	147-566W 148-021W	sCRGNO1WT sCRGNO1WT
2008 090387 2134 090387		SEIS. RUN CRGNO1-24 UR/WG/SD/AN/DG	GDC GDC			sCRGNOIWT sCRGNOIWT
2137 090387 2258 090387		SEIS. RUN CRGNO1-25 UR/WG/SD/AN/DG	GDC GDC			sCRGN01WT sCRGN01WT
2303 090387 0045 100387		B SEIS. RUN CRGNO1-26 UR/WG/SD/AN/DG	GDC GDC			sCRGN01WT sCRGN01WT
1759 100387 1930 100387		B SEIS. RUN CRGNO1-27 E UR/WG/SD/AN/DG	GDC GDC			sCRGNO ***T sCRGNO
1948 100387 2115 100387		B SEIS. RUN CRGNO1-28 E UR/WG/SD/AN/DG	GDC GDC	1-5149 2-0349	149-235W 149-282W	sCRGNO1WT sCRGNO1WT

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#GMT DDMMYY LOC T #TIME DATE TIME Z #	SAMP CODE	SAMPLE IDENTIFIER	DISP CODE LAT.	LONG.	CRUISE LEG-SHIP
2022 170387	SRSS B	SEIS. RUN CRGNO1-29	GDC 0-559S	144-501W a	sCRGNO1WT
2145 170387	SRSS E	UR/WG/SD/AN/DG	GDC 1-069S	144-445W a	sCRGNO1WT
2240 170387 ·	SRSS B	SEIS. RUN CRGNO1-30	GDC 1-142S	144-409W	sCRGNO1WT
2308 170387	SRSS E	UR/WG/SD/AN/DG	GDC 1-180S	144-392W	sCRGNO1WT
0102 200387	SRSS B	SEIS. RUN CRGNO1-31	GDC 1-403S	142-117W =	BCRGNO1WT
0229 200387	SRSS E	UR/WG/SD/AN/DG	GDC 1-398S	142-246W =	SCRGNO1WT
#*** SEABEAM SWATH	BOOKS **	**			
1941 170287	MBSB B	SB SWATH BOOK 01	GDC 32-383N	117-343W	sCRGN01WT
1959 180287	MBSB E	SB SWATH BOOK 01	GDC 29-410N	120-463W	sCRGN01WT
1959 180287	MBSB B	SB SWATH BOOK O2	GDC 29-410N	120-463W	sCRGN01WT
637 200287	MBSB E	SB SWATH BOOK O2	GDC 22-417N	125-571W	sCRGN01WT
1637 200287	MBSB B	SB SWATH BOOK 03	GDC 22-417N	125-571W	sCRGN01WI
0706 220287	MBSB E	SB SWATH BOOK 03	GDC 15-532N	128-575W	sCRGN01WT
0706 220287	MBSB B	SB SWATH BOOK 04	GDC 15-532N	128-575W	sCRGN01WT
0352 240287	MBSB E	SB SWATH BOOK 04	GDC 8-044N	132-034W	sCRGN01W1
0352 [°] 240287	MBSB B	SB SWATH BOOK 05	GDC 8-044N	132-034W	sCRGN01WT
1355 260287	MBSB E	SB SWATH BOOK 05	GDC 0-090S	134-482W	sCRGN01WT
1355 260287	MBSB B	SB SWATH BOOK 06	GDC 0-090S	134-482W	sCRGN01WT
0018 010387	MBSB E	SB SWATH BOOK 06	GDC 2-013S	136-534W	sCRGN01WT
0018 010387 0451 030387	MBSB B MBSB E	SB SWATH BOOK 07 SB SWATH BOOK 07	GDC 2-0135 GDC 2-1955		
0451 030387 0910 050387		SB SWATH BOOK 08 SB SWATH BOOK 08	GDC 2-1958 GDC 3-539N	139-151W 142-058W	
0917 050387 1035 070387		SB SWATH BOOK 09 SB SWATH BOOK 09	GDC 3-549N GDC 2-310S	142-062W 144-506W	
1039 070387 1620 090387	. —	SB SWATH BOOK 10 SB SWATH BOOK 10	GDC 2-3169 GDC 1-5451	144-509W 147-494W	
. 1623 090387 2226 110387		SB SWATH BOOK 11 SB SWATH BOOK 11	GDC 1-541N GDC 4-1635	147-496W 150-534W	
2226 110387 0826 140387		SB SWATH BOOK 12 SB SWATH BOOK 12	GDC 4-1639 GDC 1-198N		

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#TIME DATE TIME Z	CODE IDENTIFIER	DISP CODE LAT.	CRUISE LONG. LEG-SHIF
# 0826 140387 1903 160387	MBSB B SB SWATH BOOK 13 MBSB E SB SWATH BOOK 13	GDC 1-198N GDC 0-260S	153-357W sCRGNO1WI 147-423W sCRGNO1WI
1903 160387	MBSB B SB SWATH BOOK 14	GDC 0-260S	147-423W sCRGNO1WT
0324 190387	MBSB E SB SWATH BOOK 14	GDC 1-471S	140-488W sCRGNO1WT
	MBSB B SB SWATH BOOK 15 MBSB E SB SWATH BOOK 15		140-488W sCRGNO1WT 146-356W sCRGNO1WT
0317 210387	MBSB B SB SWATH BOOK 16		146-356W sCRGNO1WT
2230 220387	MBSB E SB SWATH BOOK 16		147-465W sCRGNO1WT
2230 220387	MBSB B SB SWATH BOOK 17		147-465W sCRGNO1WT
1740 240387	MBSB E SB SWATH BOOK 17		148-573W sCRGNO1WT
1740 240387	MBSB B SB SWATH BOOK 18		148-573W sCRGN01WT
1734 250387	MBSB E SB SWATH BOOK 18		149-352W sCRGN01WI
#*** SEABEAM 12KHZ	UGR MONITOR RECORDS ***		· · · · ·
1940 170287	MBRM B SB MONITOR R-01		117-345W sCRGN01WT
1634 210287	MBRM E SB MONITOR R-01		127-503W sCRGN01WT
	MBRM B SB MONITOR R-02	GDC 18-248N	127-509W sCRGNO1WT 133-550W sCRGNO1WT
1245 250287	MBRM B SB MONITOR R-03		133-553W sCRGNO1WT
0355 010387	MBRM E SB MONITOR R-03		137-253W sCRGNO1WT
0400 010387	MBRM B SB MONITOR R-04		137-260W sCRGNO1WT
1837 040387	MBRM E SB MONITOR R-04		141-153W sCRGNO1WT
1840 040387	MBRM B SB MONITOR R-05		141-155W sCRGNO1WT
0508 080387	MBRM E SB MONITOR R-05		145-488W sCRGNO1WT
0515 080387	MBRM B SB MONITOR R-06		145-492W sCRGNOIWT
0045 120387	MBRM E SB MONITOR R-06		150-590W sCRGNOIWT
0052 120387	MBRM B SB MONITOR R-07		150-593W sCRGNO1WT
1930 150387	MBRM E SB MONITOR R-07		150-244W sCRGNO1WT
1940 150387	MBRM B SB MONITOR R-08	-	150-230W sCRGNO1WT
1425 190387	MBRM E SB MONITOR R-08		140-107W sCRGNO1WT
1434 190387 0656 230387	MBRM B SB MONITOR R-09 MBRM E SB MONITOR R-09		140-118W sCRGNC
0700 230387	MBRM B SB MONITOR R-10	GDC 7-058S	148-118W sCRGNO1WT
1734 250387	MBRM E SB MONITOR R-10	GDC 17-317S	149-352W sCRGNO1WT

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#GMT E #TIME #	DMMYY LOC T DATE TIME Z	SAMP CODE	SAMPLE IDENTIFIE	R		DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
#*** S	SEISMIC REFLECT	CION REC	CORDS ***						
2308 1 0909 2	70287 230287	SPRS B SPRS E	WATERGUN WATERGUN	SLOW Slow	R-01 R-01	GDC GDC	32-348N 11-185N	117-536W 130-456W	sCRGNO1WT sCRGNO1WT
0914 2 1816 (230287)20387	SPRS B SPRS E	WATERGUN WATERGUN	SLOW Slow	R-02 R-02				sCRGNO1WI sCRGNO1WT
)20387)60387		WATERGUN WATERGUN		R-03 R-03	GDC GDC			aCRGNO1WT sCRGNO1WT
	060387 1 1 0 3 8 7		WATERGUN WATERGUN		R-04 R-04	GDC GDC			sCRGNO1WT sCRGNO1WT
0531 1 0913 1	10387 130387		WATERGUN WATERGUN		R-05 R-05	GDC GDC	· · · · · ·		sCRGNO1WT sCRGNO1WT
	L30387 L70387		WATERGUN WATERGUN			GDC GDC			sCRGN01WT sCRGN01WT
	L70387 240387		WATERGUN WATERGUN		R-07 R-07				sCRGNO1WI sCRGNO1WI
1332 1221	240387 250387		WATERGUN WATERGUN						sCRGN01Wi sCRGN01WI
2300 1 1808 2	170287 210287	SPRS B SPRS E	WATERGUN WATERGUN			GDC GDC			sCRGNO1WT sCRGNO1WT
	210287 D10387		WATERGUN WATERGUN						sCRGNO1WT sCRGNO1WT
	010387 080387	SPRF B SPRF E	WATERGUN WATERGUN	FAST FAST	R-03 R-03	GDC GDC			sCRGN01WT sCRGN01WT
	080387 150387		WATERGUN WATERGUN			GDC GDC			sCRGNO1WT sCRGNO1WT
	150387 220387		WATERGUN WATERGUN			GDC GDC			sCRGNO1WT sCRGNO1WT
	220387 250387		WATERGUN WATERGUN			GDC GDC			sCRGNO1WT sCRGNO1WT

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#GMT #TIME #	DDMMYY LOC T DATE TIME Z	SAMP CODE	SAMPLE IDENTIFIER	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
* ***	MAGNETOMETER R	ECORDS	***				
2315 0342	170287 010387	MGRA B MGRA E	MAGNETICS R-01 Magnetics R-01	GDC GDC	32-348N 1-463S	117-548W 137-235W	sCRGNO1WT sCRGNO1WT
0350 1745	010387 120387	MGRA B MGRA E	MAGNETICS R-02 Magnetics R-02	GDC GDC			sCRGNO1WT sCRGNO1WT
1748 2249	120387 [:] 240387	MGRA B MGRA E	MAGNETICS R-03 MAGNETICS R-03	GDC GDC	1-246S 14-128S	151-389W 149-087W	sCRGNO1WT sCRGNO1WT
2256 1249	240387 250387	MGRA B Mgra E	MAGNETICS R-04 MAGNETICS R-04	GDC GDC	14-142S 16-454S	149-088W 149-258W	sCRGNO1WT sCRGNO1WT
# ***	ECHOSOUNDER RE	CORDS *	**		. **		
0019 0745	240387 240387	DPR3 B DPR3 E	EPC 3.5KHZ R-01 EPC 3.5KHZ R-01	GDC GDC	10-007S 11-231S	148-288W 148-424W	sCRGN('T sCRGN(T
0750 0940	240387 250387	DPR3 B DPR3 E	EPC 3.5KHZ R-02 EPC 3.5KHZ R-02	GDC GDC	11-240S 16-121S	148-426W 149-209W	sCRGNO1WT sCRGNO1WT
#***	EXPENDABLE BAT	HYTHERM	OGRAPH RECORDS ***	•			
1609 0409 1616 0405 1753 2208 0353 0933 1632 2150 0356 0924 1706 2218 0439	180287 190287 190287 200287 200287 210287 210287 210287 220287 220287 220287 220287 220287 230287 230287 230287 230287 230287 230287 230287 240287	BTXP BTXP		GDC GDC GDC GDC GDC GDC GDC GDC GDC GDC	28-363N 26-449N 24-522N 22-453N 20-394N 18-118N 17-269N 16-271N 15-268N 14-137N 13-187N 12-142N 11-157N 9-542N 9-008N 7-589N	121-488W 123-267W 125-551W 126-530W 127-555W 128-149W 128-415W 129-074W 129-341W 129-584W 130-243W 130-465W 131-206W 131-417W 132-059W	SCRGNO1WT SCRGNO1WT SCRGNO1WT SCRGNO1WT SCRGNO1WT SCRGNO1WT SCRGNO1WT SCRGNO1WT SCRGNO1WT SCRGNO1WT SCRGNO1WT SCRGNO1WT SCRGNO1WT SCRGNO1WT
1729	240287 240287 240287	BTXP BTXP	XBT 019 XBT 020	GDC GDC	6-111N	132-473W	sCRGNO1WI sCRGNO1WI

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#GMT DDMMYY LOC T #TIME DATE TIME Z #	SAMP CODE	SAMPLE IDENTIFIER	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
1115 250287	BTXP BTXP	XBT 021 XBT 022	GDC GDC GDC GDC GDC GDC GDC GDC GDC GDC	3-431N	133-500W	sCRGN01WT sCRGN01WT
1710 250287 2324 250287 0530 260287	BTXP BTXP	XBT 023 XBT 024	, GDC GDC	1-595N	134-317W	sCRGNO1WT sCRGNO1WT
0530 260287 1149 260287	BTXP BTXP BTXP	XBT 025 XBT 026 XBT 027	GDC GDC GDC	0-088N	134-471W	sCRGNO1WT sCRGNO1WT sCRGNO1WT
1824 260287 0540 270287 1005 270287	BTXP BTXP	XBT 028 XBT 029	GDC GDC GDC	·0-017N	134-414W	sCRGNO1WT sCRGNO1WT
1750 270287	BTXP	XBT 030 XBT 031	GDC GDC	1-271S 1-444S	134-479W 134-472W	sCRGNO1WT sCRGNO1WT
0519 280287 1135 280287	BTXP BTXP BTXP BTXP	XBT 032 XBT 033	GDC GDC GDC GDC GDC GDC	0-586S	135-244W	sCRGNO1WT sCRGNO1WT
2347 280287	BTXP BTXP BTXP	XBT 034 XBT 035 XBT 036	GDC GDC GDC	1-3365 2-0345 1-4145	136-489W	SCRGNO1WT SCRGNO1WT
1124 010387 `721 010387	BTXP BTXP	XBT 037 XBT 038	GDC GDC	1-504S 2-002S	137-424W 137-378W	sCRGN01WT sCRGN01WT
0206 020387	BTXP BTXP	XBT 039 XBT 040	GDC GDC	1-462S 1-310S	137-436W 138-007W	sCRGN01WT sCRGN01WT
1945 020387	BTXP BTXP BTXP	XBT 041 XBT 042 XBT 043	GDC GDC GDC	0-2985 0-5865 1-3015	138-544W 139-165W 139-177W	sCRGN01WT sCRGN01WT sCRGN01WT
0447 030387 1111 030387	BTXP BTXP	XBT 044 XBT 045	GDC GDC GDC GDC GDC GDC GDC GDC GDC GDC	2-189S 2-457S	139-151W 139-275W	sCRGN01WT sCRGN01WT
1815 030387 2307 030387	BTXP BTXP	XBT 046 XBT 047	GDC GDC	1-466S 1-050S	139-515W 140-093W	sCRGNO1WT sCRGNO1WT
0513 040387 1053 040387 1729 040387	BTXP BTXP BTXP	XBT 048 XBT 049 XBT 050	GDC GDC GDC	0-090S 0-388N 1-366N	140-282W 140-471W 141-111W	SCRGNOIWI SCRGNOIWT
2320 040387 0534 050387	BTXP	XBT 051 XBT 052	GDC	3-240N	141-530W	sCRGN01WT
1102 050387 1740 050387	BTXP BTXP	XBT 053 XBT 054	GDC	3-514N	142-328W	sCRGNO1WT sCRGNO1WT
2307`050387 0530 060387 1051 060387	BTXP BTXP BTXP	XBT 055 XBT 056 XBT 057	GDC GDC GDC	2-060N	143-149W	sCRGNO1WT sCRGNO1WT sCRGNO1WT
1739 060387 2332 060387	BTXP BTXP	XBT 058 XBT 059	GDC GDC	0-147N 0-427S	143-515W 144-125W	sCRGNO1WT sCRGNO1WT
0604 070387 1107 070387	BTXP BTXP	XBT 060 XBT 061	GDC GDC	2-360S	144-525W	sCRGN01WT sCRGN01WT
1800 070387 ?343 070387 J457 080387	BTXP BTXP BTXP	XBT 062 XBT 063 XBT 064	GDC GDC GDC	1-367S	145-324W	sCRGNO1WT sCRGNO1WT sCRGNO1WT
1804 080387	BTXP	XBT 065	GDC			sCRGN01WT

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#GMT DDMMYY LOC	Т	SAMP	SAM	PLE		DISP			CRUISE
#GMT DDMMYY LOC #TIME DATE TIME	Ż	CODE	TDEN	TIFIER		CODE	LAT.	LONG.	LEG-SHIP
#									
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2330 080387		BTXP	XBT	066	, ,	GDC	1-424N	146-492W	sCRGN01WT
0534 090387	•	BTIP	XBT	067		GDC		147-092W	
0534 090387 1107 090387		BTXP	XBT	068		GDC		147-289W	
1752 090387	•	BTXP	XBT	069	••	GDC		147-548W	
2327 090387		BTXP	XBT	070		GDC		148-122W	
		BTXP	XBT	071		GDC		148-325W	
1104 100387		BTYD	XBT			GDC		148-504W	
1104 100387 1746 100387		BTXP	XBT	073	•	GDC		149-158W	
2259 100387		BTXP	XBT	074		GDC		149-337W	
		BTXP	XBT	075		GDC			sCRGN01WT
0945 110387		BTXP	XBT	076		GDC			sCRGN01WT
1833 110387		BTXP	XBT	077		GDC			sCRGN01WT
		BTXP	XBT	078		GDC			sCRGN01WT
		BTXP	XBT	079		GDC			
0525 120387	•	BTXP	XBT	080					sCRGN01WT
1124 120387		BTXP				GDC			SCRGN01WT
1735 120387			XBT			÷ – –			sCRGN01WT
2345 120387		BTXP	XBT	082	•	GDC			sCRGN01WT
0514 130387		BTXP	XBT	083		GDC			SCRGNC T
2234 130387		BTXP	XBT	084					sCRGN01-T
0557 140387		BTXP	XBT	085		GDC			sCRGN01WT
1004 140387		BTXP	XBT	086		GDC			sCRGN01WT
1753 140387		BTXP	XBT	087		GDC			sCRGN01WT
0438 150387		BTXP	XBT	880		GDC			sCRGN01WT
1140 150387		BTXP	XBT						sCRGN01WT
1733 150387		BTXP	XBT						sCRGN01WT
2321 150387		BTXP	XBT	091		GDC			sCRGNO1WI
0455 160387		BTXP	XBT	092		GDC			sCRGN01WT
1149 160387		BTXP	XBT	093		GDC			sCRGNO1WT
1856 160387		BTXP	XBT	094		GDC			sCRGN01WT
2325 160387		BTXP	XBT	095		GDC			sCRGNO1WT
0512 170387		BTXP	XBT						sCRGN01WT
1109 170387		BTXP	XBT	097		GDC			sCRGN01WT
1841 170387		BTXP	XBT	098		GDC			sCRGN01WT
2303 170387	•	BTXP	XBT	099		GDC			sCRGN01WT
0450`180387		BTXP	XBT	100		GDC			sCRGN01WT
1050 180387		BTXP	XBT	101		GDC			sCRGN01WT
1904 180387		BTXP	XBT	102		GDC	1-402S	142-166W	sCRGN01WT
2355 180387	•	BTXP	XBT	103		GDC	1-453S	141-248W	sCRGN01WT
0521 190387		BTXP -	XBT	104		GDC	1-481S	140-322W	sCRGNO1WT
0006 200387		BTXP	XBT	105		GDC	1-4135	142-014W	sCRGN01WT
0521 200387		BTXP	XBT	106		GDC	1-395S	142-5 59 W	sCRGN01WT
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#GMT DDMMYY LOC T #TIME DATE TIME Z	SAMP CODE	SAMPLE IDENTIFIER	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
#					144 66411	OD ON OL LUT
1142 200387	BTXP	XBT 107	GDC			sCRGN01WT
1918 200387	BTXP	XBT 108	GDC			
2338·200387	BTXP	XBT 109	GDÇ			
0521 210387	BTXP	XBT 110	GDC	0-384S	146-580W	
1118 210387	BTXP	XBT 111	GDC	0-255S	147-333W	sCRGN01WT
1807 210387	BTXP	XBT 112	GDC	0-279S	146-531W	sCRGNO1WT
0029 220387	BTXP	XBT 113	GDC	1-277S	147-129W	sCRGN01Wi
0547 220387	BTXP	XBT 114	GDC	2-296S	147-111W	sCRGN01WT
1006 220387	BTXP	XBT 115	GDC	3-203S	147-099W	sCRGN01WT
1824 220387	BTXP	XBT 116	GDC	4-543S	147-342₩	sCRGN01WT
0020 230387	BTXP	XBT 117	GDC	5-522S	147-524W	sCRGN01WT
0610 230387	BTXP	XBT 118	GDC	6-566S	148-091W	sCRGN01WT
0957 230387	BTXP	XBT 119	GDC	7-377S	148-220W	sCRGN01WT
1834 230387	BTXP	XBT 120	GDC	8-551S	148-220W	sCRGN01WT
2356 230387	BTXP	XBT 121	GDC		148-285W	sCRGN01WT
0608 240387	BTXP	XBT 122	, – –		148-394W	sCRGN01WT
1048 240387	BTXP	XBT 123	ĞDC		148-478W	sCRGN01WT
1040 24030/ .	DIAC	VAT 143	200	11-0100	740-4104	O ONOH OT # 1

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