

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

(Issued October 1987)

CROSSGRAIN EXPEDITION

LEG 4

Hilo, Hawaii (4 June 1987)
to
Honolulu, Hawaii (7 June 1987)

R/V T. Washington

Co-Chief Scientists - C. de Moustier & P. Lonsdale

Resident Marine Tech - G. Hargreaves

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

Data Collection and Processing Funded by
UC General Funds

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.

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

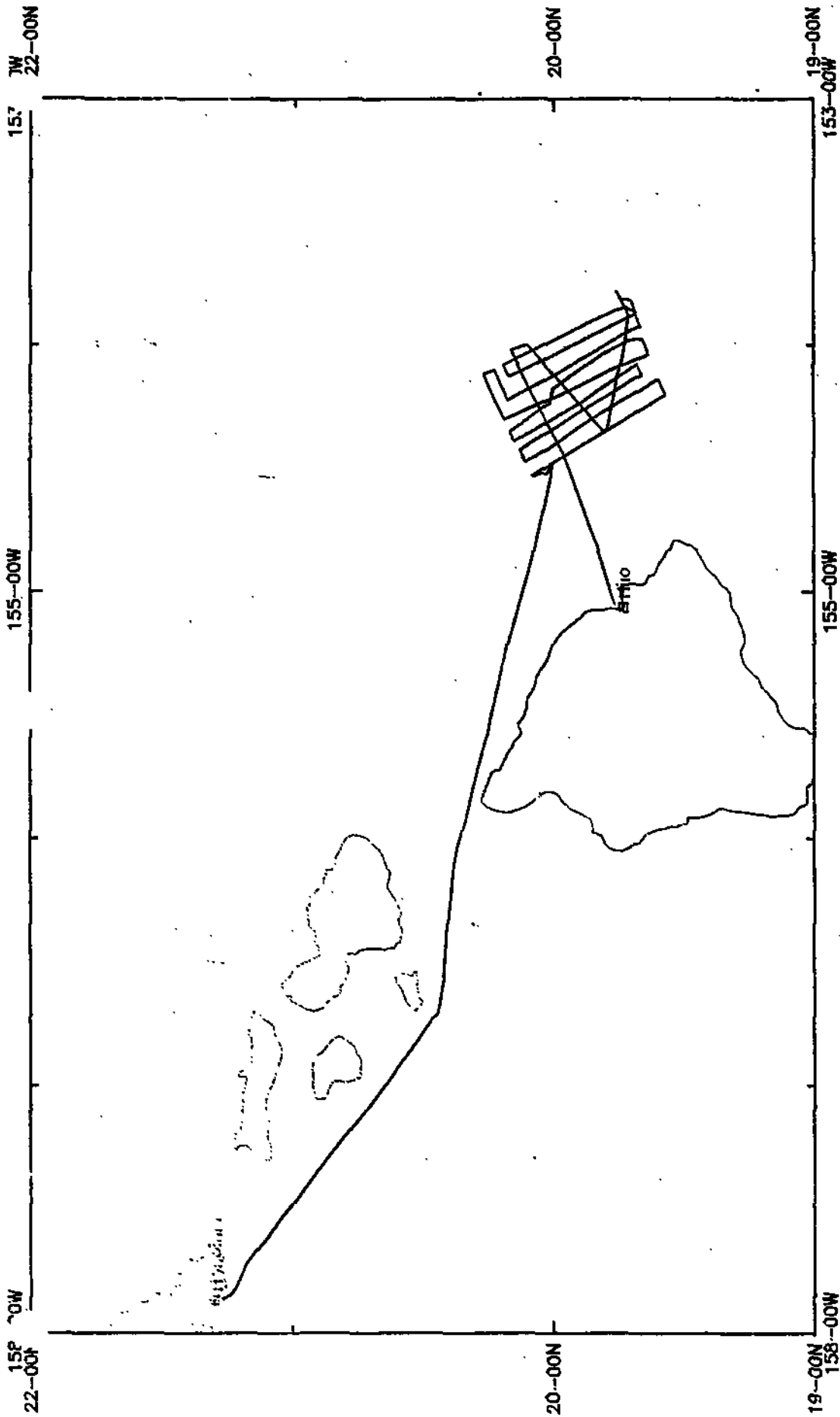
Contents:

-
- 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.

1. 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 $\frac{2}{3}$ degree beam width) depths retrieved at one minute intervals of ship time.
3. 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

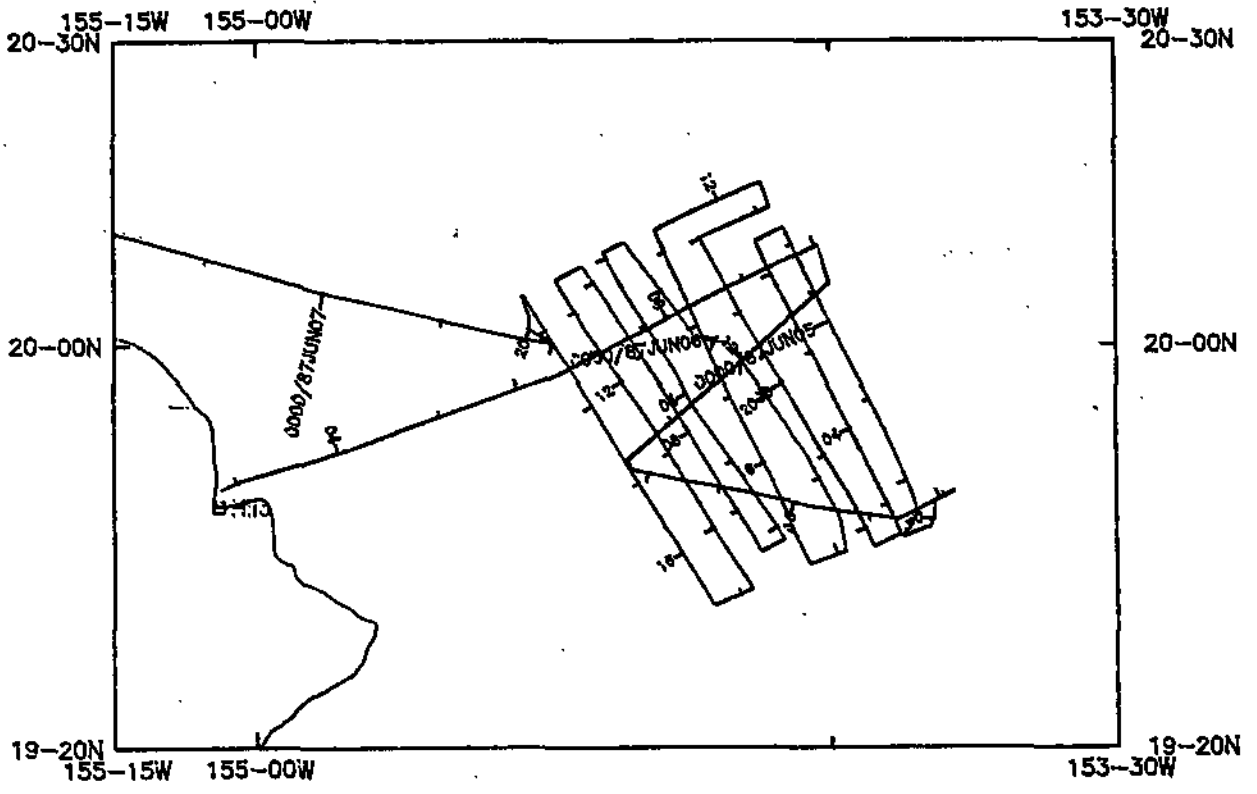


CO-CHIEF SCIENTISTS: C. DE MOUSTIER and P. LONSDALE (SIO)
PORTS: Hilo, Hawaii - Honolulu, Hawaii
DATES: 04 - 07 June 1987
SHIP: R/V T. Washington

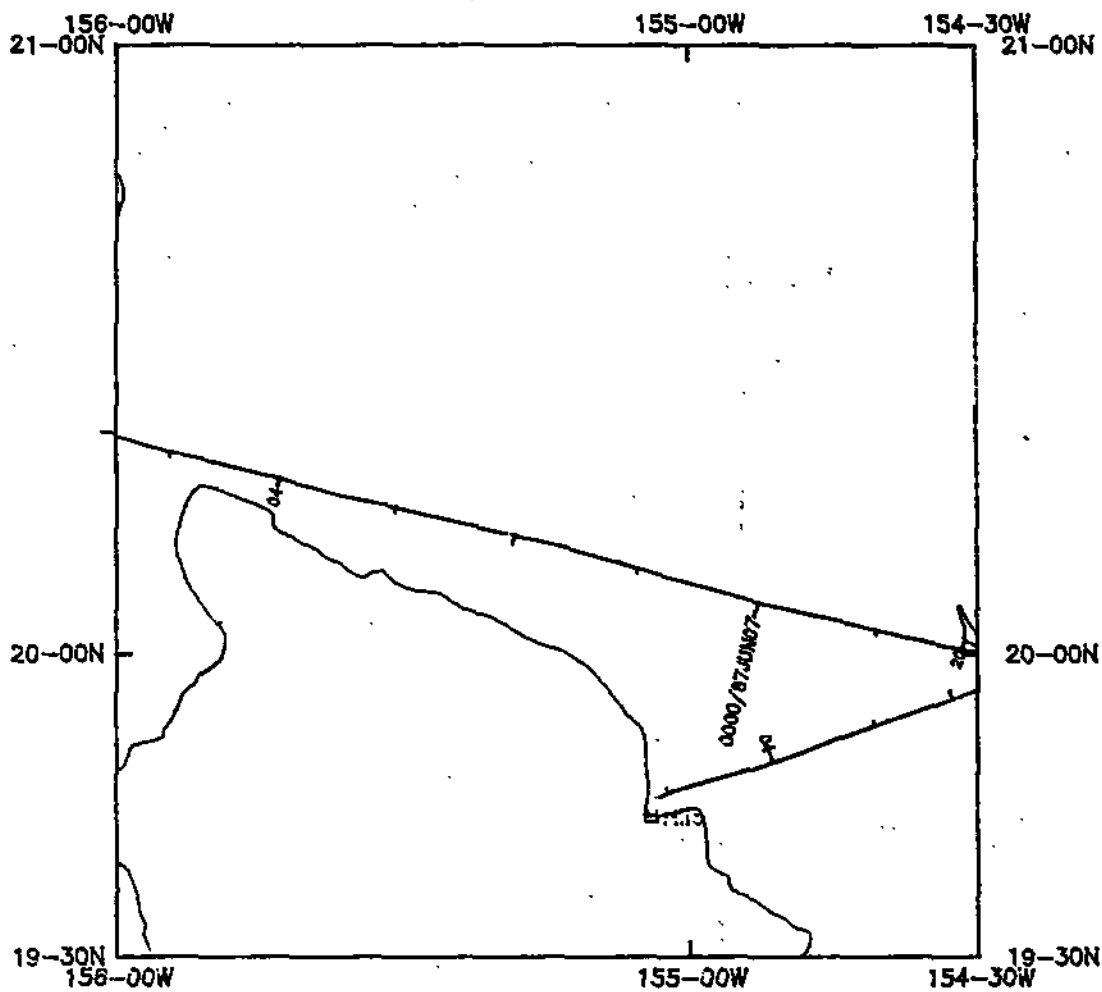
CROSSGRAIN LEG 04 (CRGNO4WT)
 Track at 1.7 in/deg longitude

TOTAL MILEAGE OF UNDERWAY DATA COLLECTED

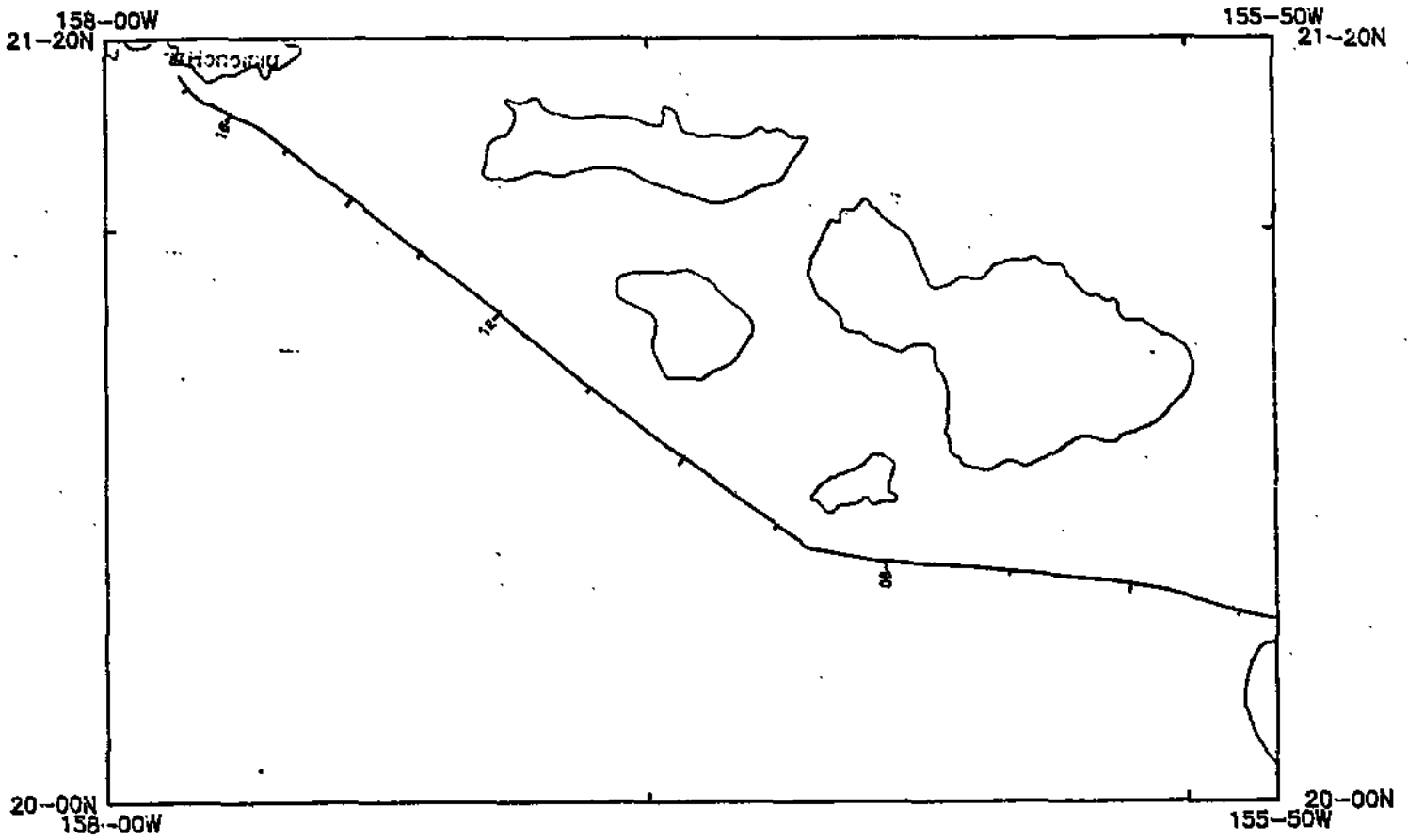
- 1) Cruise - 713 miles
- 2) Bathymetry - 633 miles
- 3) Magnetics - 500 miles
- 4) Seismic Reflection - 430 miles
- 5) Gravity - 613 miles
- 6) SeaBeam - 713 miles



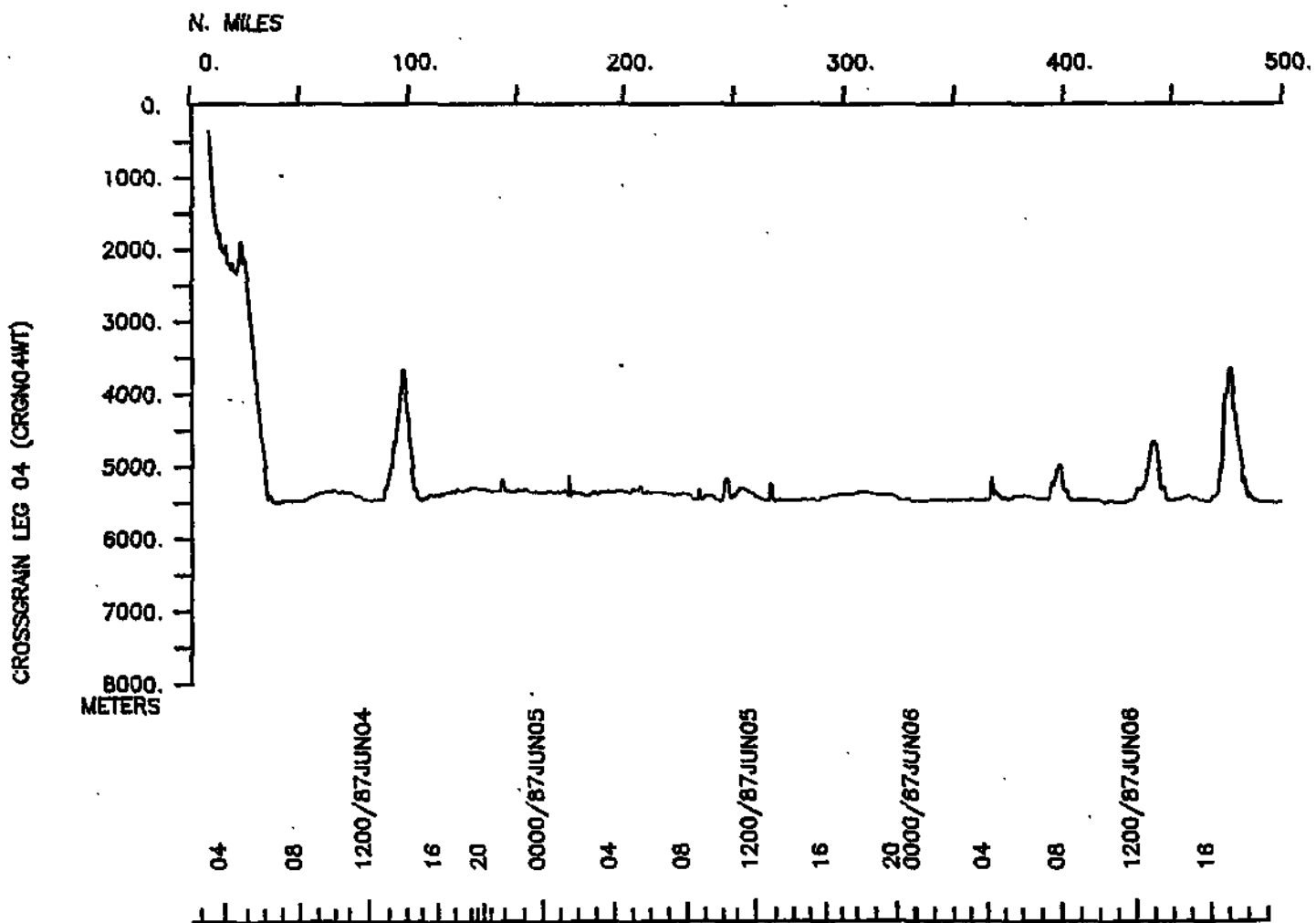
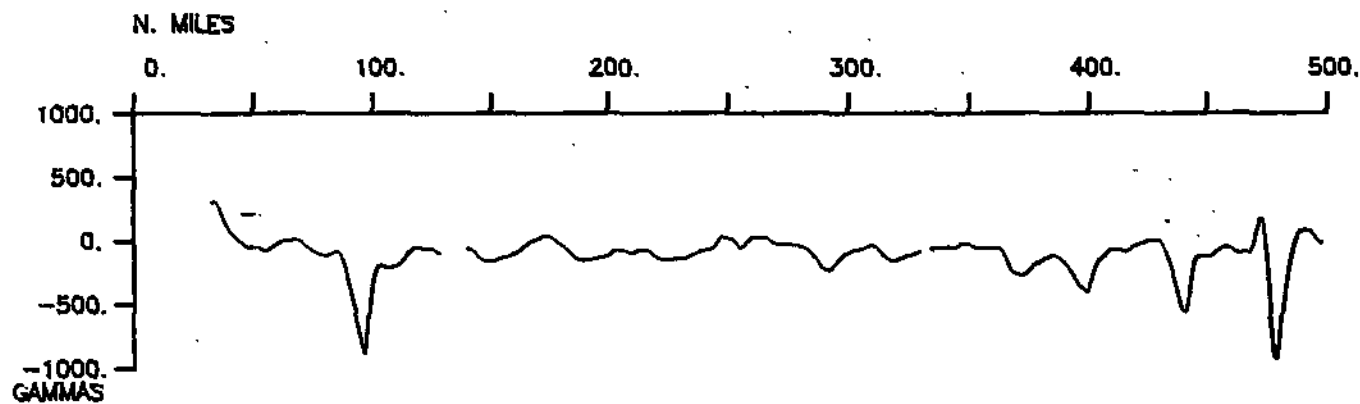
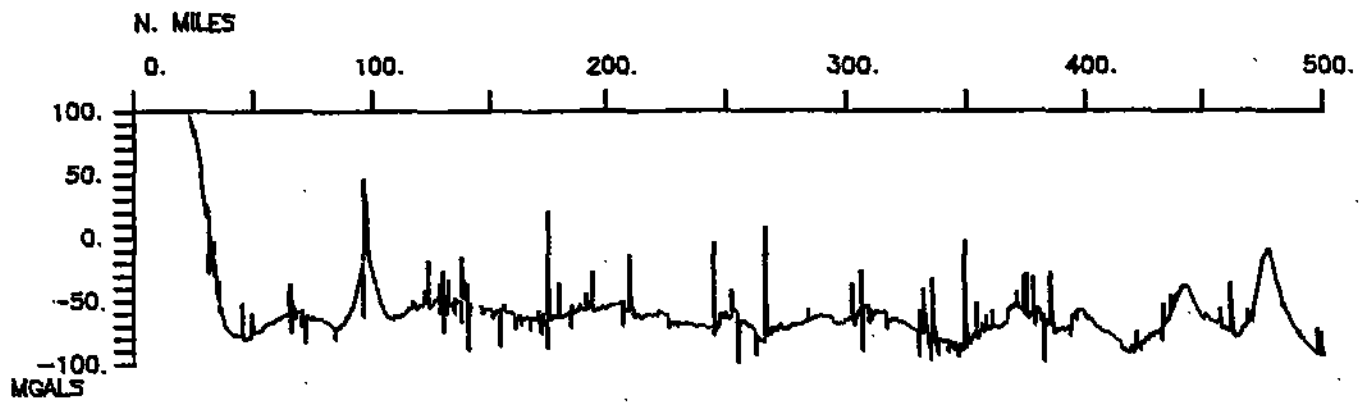
CROSSGRAIN LEG 04 (CRGN04WT)
 Track at 3.0 in/deg longitude - Plot 1 of 3

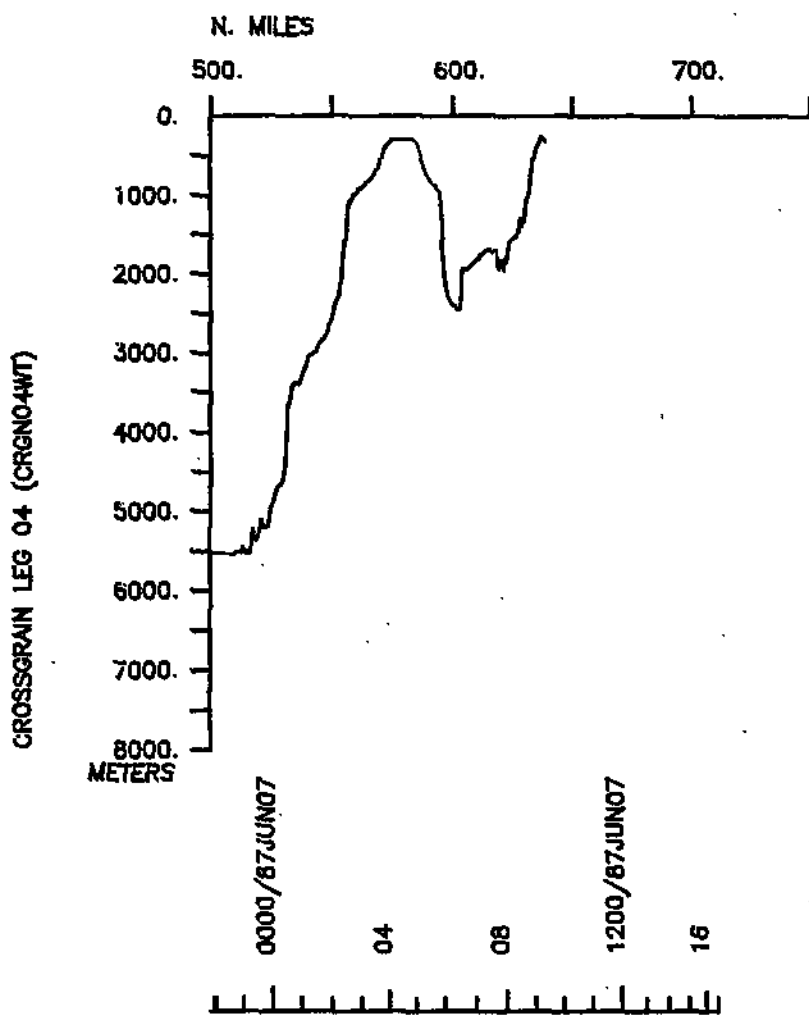
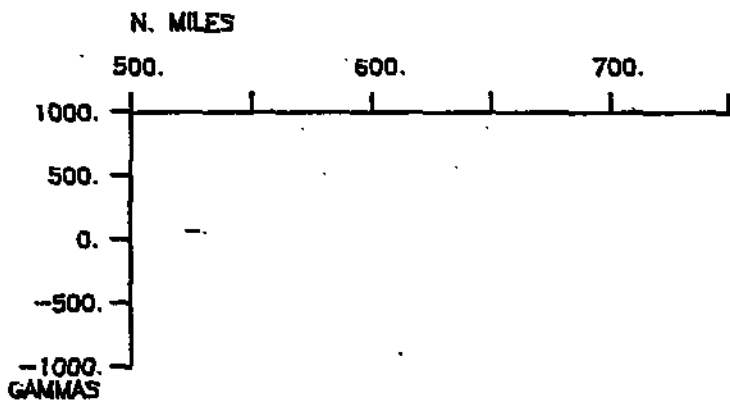
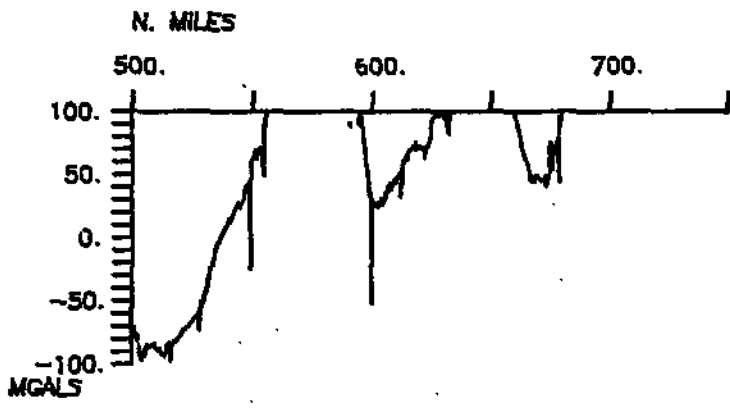


CROSSGRAIN LEG 04 (CRGN04WT)
Track at 3.0 in/deg longitude - Plot 2 of 3



CROSSGRAIN LEG 04 (CRGN04WT)
Track at 3.0 in/deg longitude - Plot 3 of 3





S.I.O. SAMPLE INDEX

(Issued August 1987)

CROSSGRAIN EXPEDITION

Leg. 4

Hilo, Hawaii (4 June 1987)
to
Honolulu, Hawaii (7 June 1987)

R/V Washington

Co-Chief Scientists - G. de Moustier & P. Lonsdale

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

**** PORTS ***

0224 040687	LGPT B HILO HAWAII	19-44 N 155-04 W fCRGNO4WT
1803 070687	LGPT E HONOLULU HAWAII	21-18 N 157-52 W fCRGNO4WT

**** PERSONNEL ***

#	** NAME **	** TITLE **	** AFFILIATION **	**CRID**
PECS MPL	LONSDALE, P.	CHIEF SCIENTIST	SCRIPPS INSTITUTION	CRGNO4WT
PECS MPL	de MOUSTIER, C.	CHIEF SCIENTIST	SCRIPPS INSTITUTION	CRGNO4WT
PESP MFC	CARR, C ^{continued}	WATCH STANDER	SCRIPPS INSTITUTION	CRGNO4WT
PESP VOL	CRAMPTON, N.	VOLUNTEER	SCRIPPS INSTITUTION	CRGNO4WT
PESP STS	CRAMPTON, P.	AIRGUN TECH	SCRIPPS INSTITUTION	CRGNO4WT
PESP HIG	EPP, D ^{David}	SCIENTIST	HAWAII INST.GEOPHYSICS	CRGNO4WT
PESP MPL	FOSTER, A.	RESEARCH ASSIST.	SCRIPPS INSTITUTION	CRGNO4WT
PERT STS	HARGREAVES, G.	RES TECH	SCRIPPS INSTITUTION	CRGNO4WT
PESP HIG	MATSUMOTO, H.	SCIENTIST	HAWAII INST.GEOPHYSICS	CRGNO4WT
PEBE STS	PHILLIPS, J.	SEABEAM ENG.	SCRIPPS INSTITUTION	CRGNO4WT
PECT STS	STUBER, D.	COMPUTER TECH	SCRIPPS INSTITUTION	CRGNO4WT
PEBO STS	SMITH, W.	SEABEAM OPERATOR	SCRIPPS INSTITUTION	CRGNO4WT

****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.

#GMT #TIME	DDMMYY DATE	LOC TIME	T Z	SAMP CODE	SAMPLE IDENTIFIER	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
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**** UNDERWAY DATA CURATOR - S. M. SMITH EXT. 42752

**** LOG BOOKS ****

0224	040687			LBUW B	UNDERWAY WATCH LOG	GDC	19-438N	155-034W	sCRGNO4WT
0900	070687			LBUW E	UNDERWAY WATCH LOG	GDC	20-290N	156-457W	sCRGNO4WT

**** ECHOSOUNDER RECORDS ****

0604	040687			DPR3 B	3.5KHZ R-01	GDC	19-558N	154-321W	sCRGNO4WT
1837	040687			DPR3 E	3.5KHZ R-01	GDC	19-452N	153-474W	sCRGNO4WT
2133	040687			DPR3 B	3.5KHZ R-02	GDC	19-429N	153-512W	sCRGNO4WT
2003	060687			DPR3 E	3.5KHZ R-02	GDC	20-014N	154-313W	sCRGNO4WT

** 12 KHZ SEABEAM MONITOR RECORDS ****

0308	040687			MBRM B	SEABEAM MONITOR R-01	GDC	19-467N	155-008W	sCRGNO4WT
0919	070687			MBRM E	SEABEAM MONITOR R-01	GDC	20-312N	156-491W	sCRGNO4WT

**** MAGNETIC (TOTAL EARTH FIELD) RECORDS ****

0555	040687			MGRA B	MAGNETICS R-01	GDC	19-554N	154-331W	sCRGNO4WT
1935	060687			MGRA E	MAGNETICS R-01	GDC	20-040N	154-318W	sCRGNO4WT

**** SEABEAM ARCHIVE SWATH BOOKS ****

0335	040687			MBSB B	ARCHIVE SWATH 01	GDC	19-480N	154-559W	sCRGNO4WT
0506	060687			MBSB E	ARCHIVE SWATH 01	GDC	19-478N	154-098W	sCRGNO4WT
0506	060687			MBSB B	ARCHIVE SWATH 02	GDC	19-478N	154-098W	sCRGNO4WT
0919	070687			MBSB E	ARCHIVE SWATH 02	GDC	20-312N	156-491W	sCRGNO4WT

#GMT	DDMMYY	LOC	T	SAMP	SAMPLE	DISP			CRUISE
#TIME	DATE	TIME	Z	CODE	IDENTIFIER	CODE	LAT.	LONG.	LEG-SHIP

*** SEISMIC RECORDS ***

0555	040687			SPRS B	SLOW SEISMICS	R-01	GDC 19-554N	154-331W	sCRGNO4WT
1612	060687			SPRS E	SLOW SEISMICS	R-01	GDC 19-406N	154-164W	sCRGNO4WT
0555	040687			SPRS B	FAST SEISMICS	R-01	GDC 19-554N	154-331W	sCRGNO4WT
1612	060687			SPRS E	FAST SEISMICS	R-01	GDC 19-406N	154-164W	sCRGNO4WT

*** EXPENDABLE BATHYTHERMOGRAPHS ***

2052	040687			BTXP	XBT 053		NOA 19-412N	153-516W	sCRGNO4WT
0537	050687			BTXP	XBT 054		NOA 19-404N	153-545W	sCRGNO4WT
1815	050687			BTXP	XBT 055		NOA 19-404N	153-587W	sCRGNO4WT
0406	060687			BTXP	XBT 056		NOA 19-544N	154-146W	sCRGNO4WT
1811	060687			BTXP	XBT 057		NOA 19-553N	154-256W	sCRGNO4WT

END SAMPLE INDEX