

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

(Issued October 1987)

CROSSGRAIN EXPEDITION

LEG 6

Honolulu, Hawaii (18 June 1987)  
to  
Hilo, Hawaii (26 June 1987)

R/V T. Washington

Co-Chief Scientists - D. Hammond & W. Berelson  
(University of Southern California)

Resident Marine Tech - Gene Pillard

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

Data Collection and Processing Funded by NSF  
Grant Number OCE87-02835

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

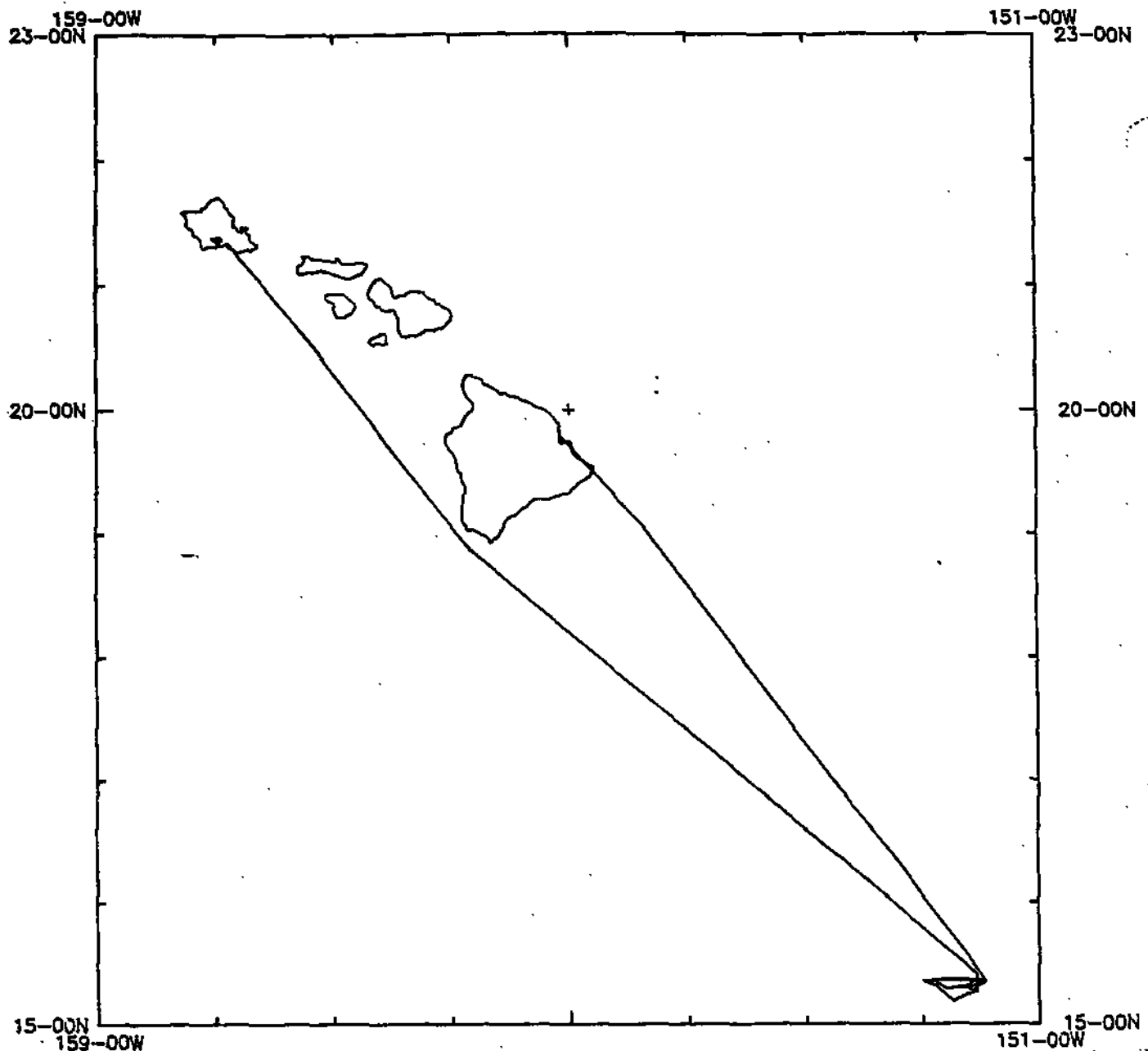
Contents:  
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- Index Chart - gives track of cruise leg, dates, ports, and mileage of each type of data collected.
- Track Charts - annotated with dates and hour ticks.
- Profiles - depth, magnetic anomaly and gravity free air anomaly vs. distance. Sections 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



**CROSSGRAIN LEG 6**  
Track at .75 in/deg (CRGN06WT)

**CROSSGRAIN EXPEDITION  
LEG 6**

**CO-CHIEF SCIENTISTS:** D. Hammond (Univ. of So. Cal.)  
W. Berelson (Univ. of So. Cal.)

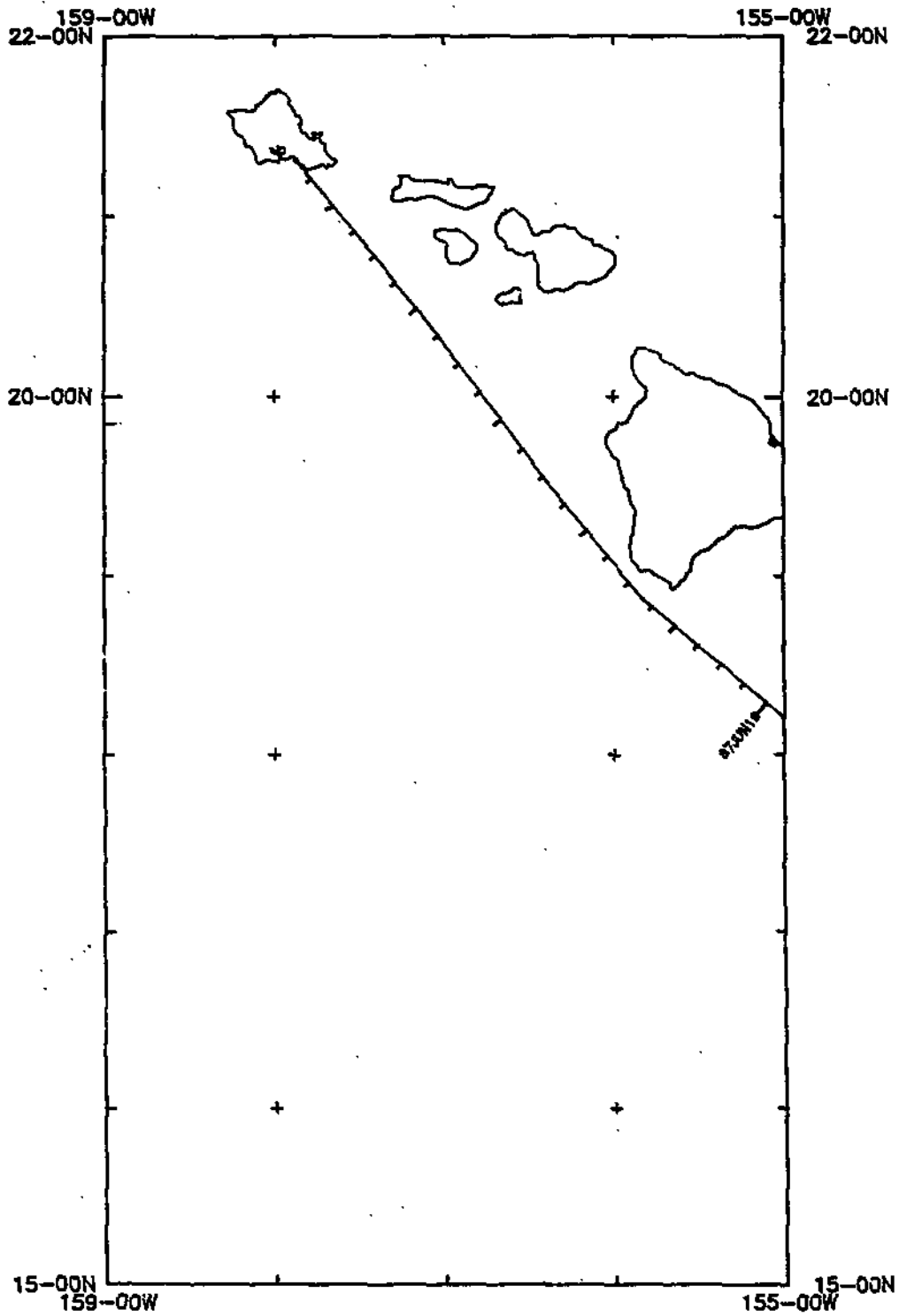
**PORTS:** Honolulu - Hilo, Hawaii

**DATES:** 18 - 26 June 1987

**SHIP:** R/V T. Washington

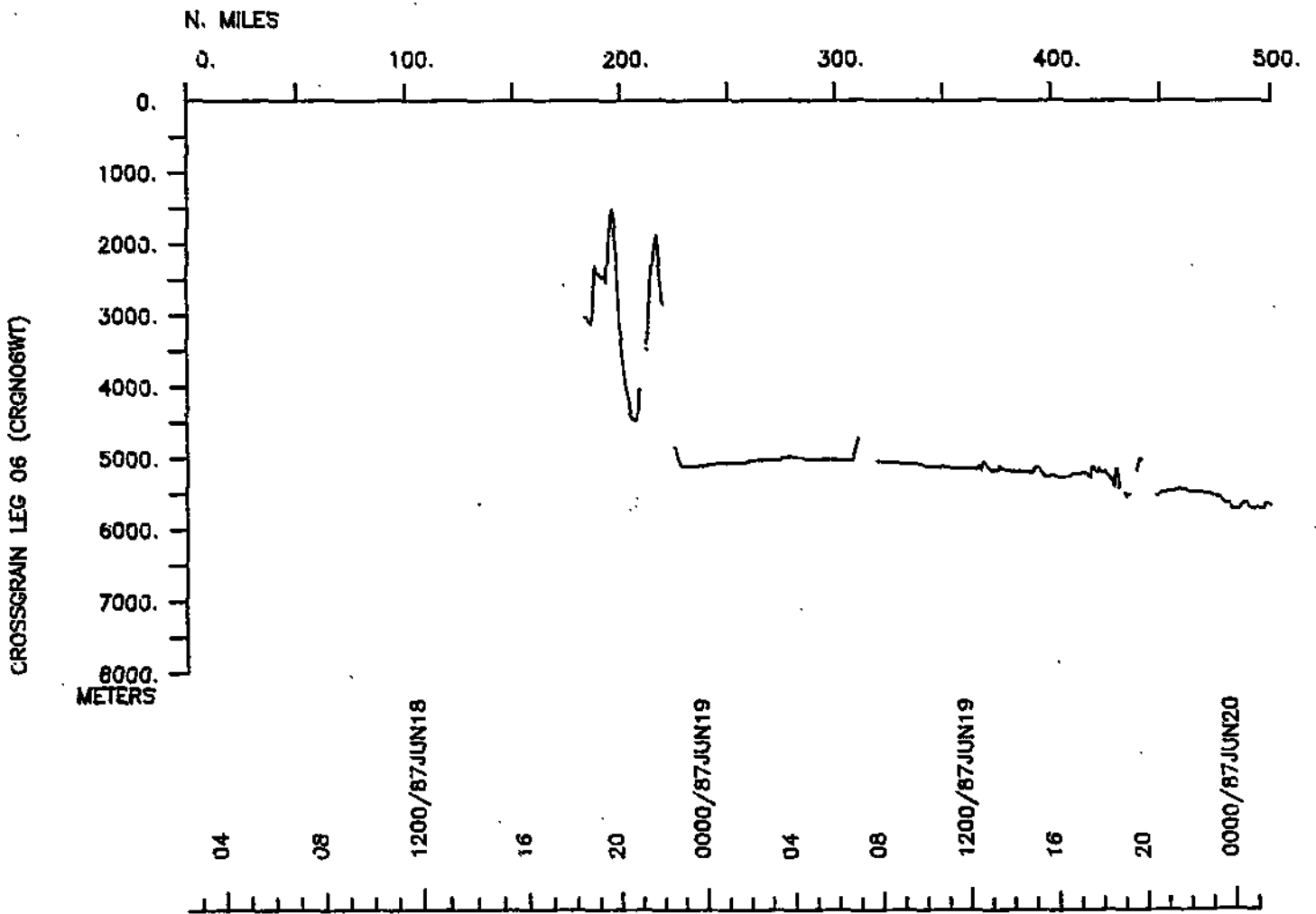
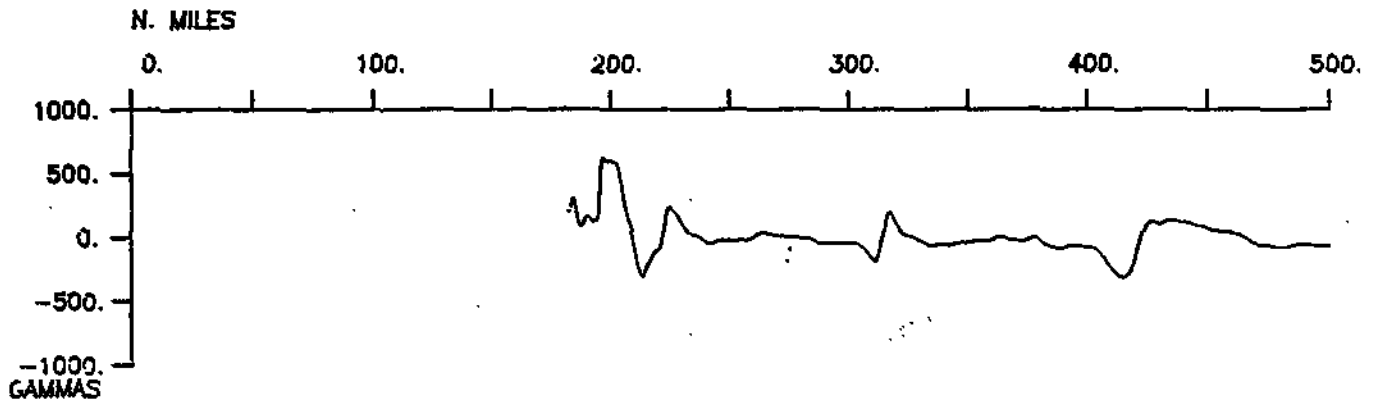
**TOTAL MILEAGE OF UNDERWAY DATA COLLECTED**

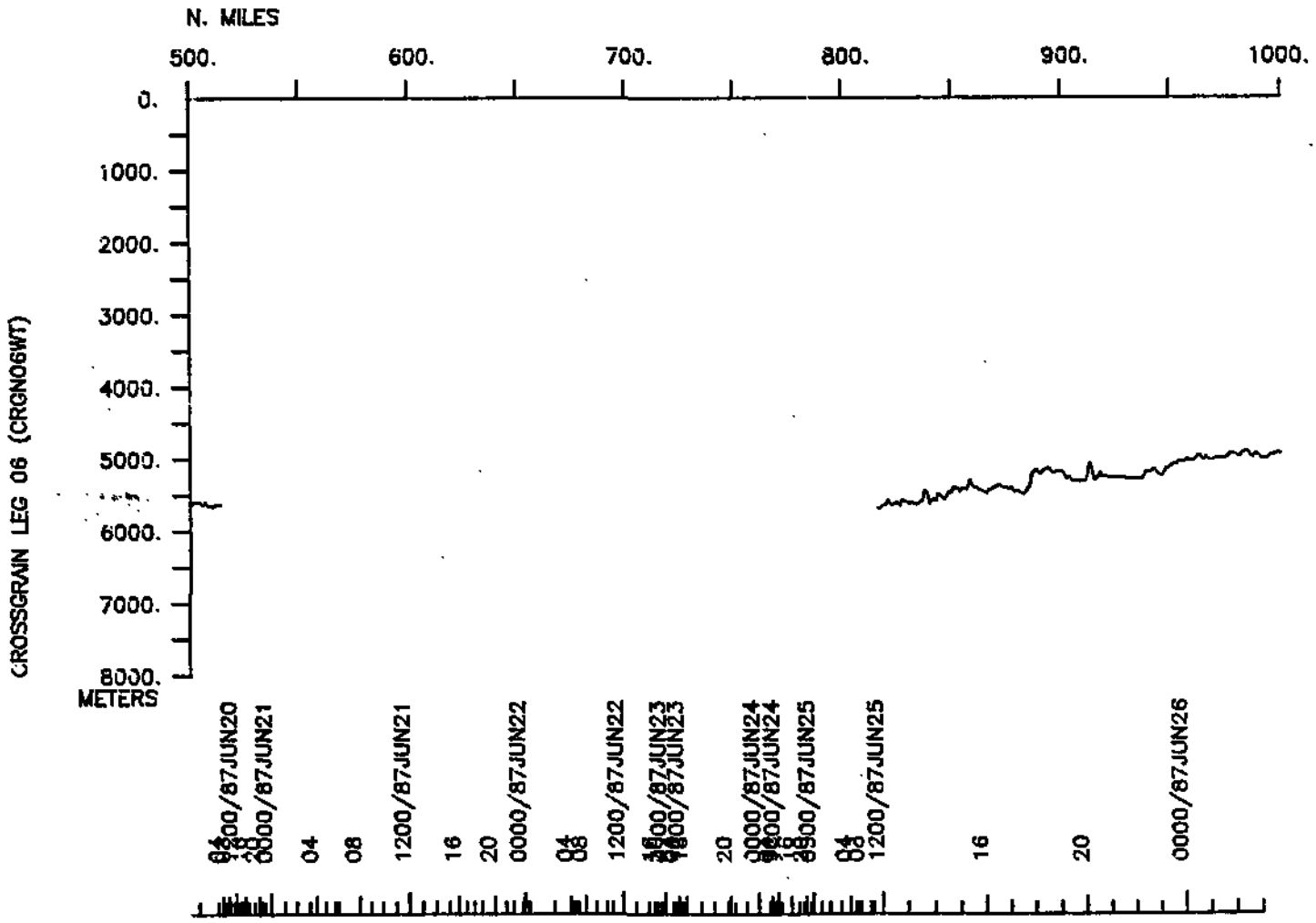
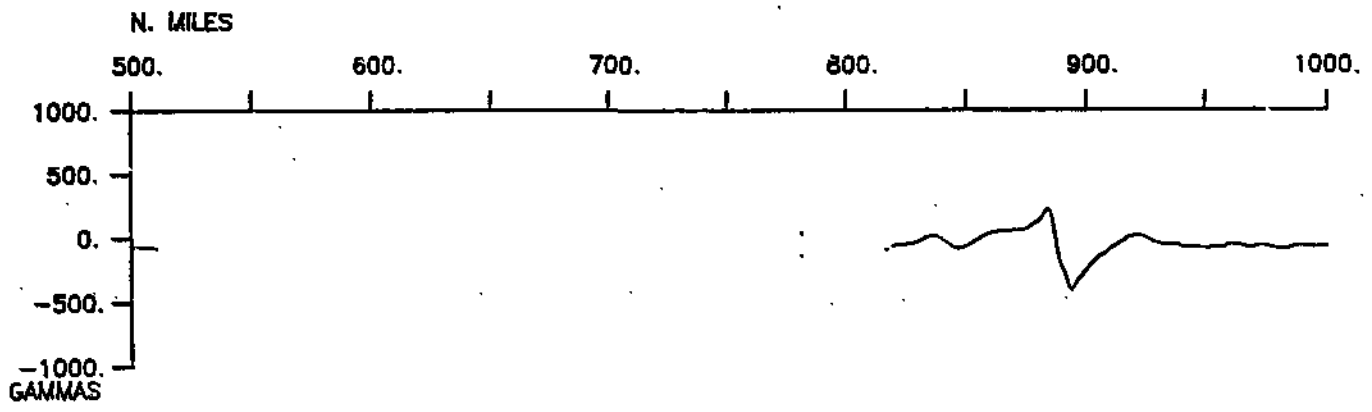
- 1) Cruise - 1154 miles
- 2) Bathymetry - 634 miles
- 3) Magnetics - 644 miles
- 4) Seismic Reflection - none collected
- 5) Gravity - none collected

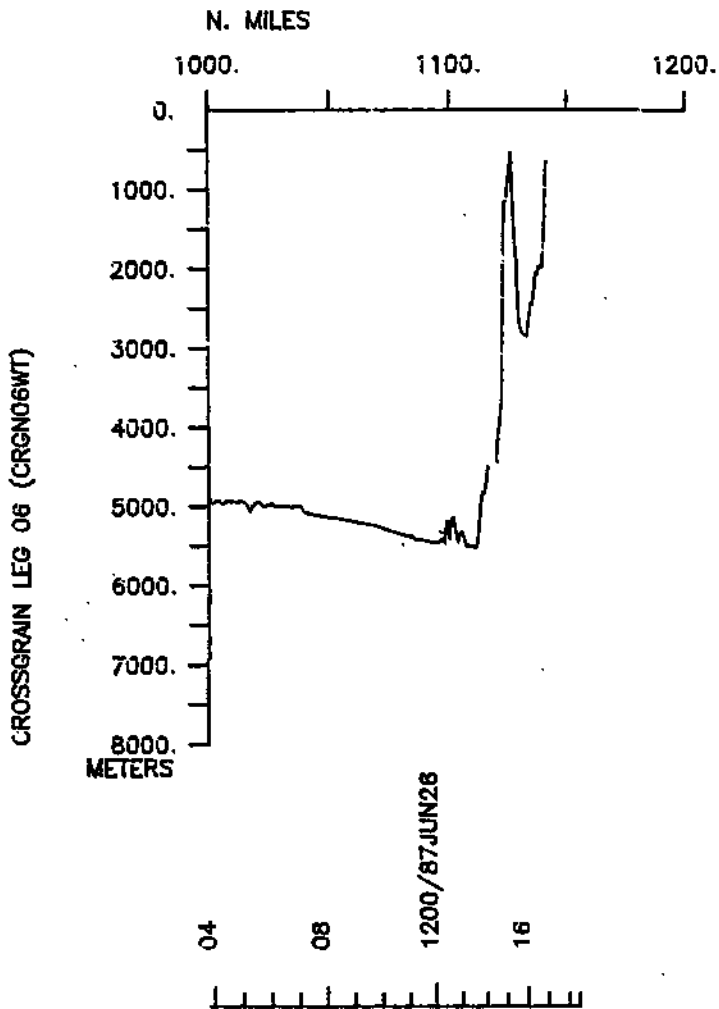
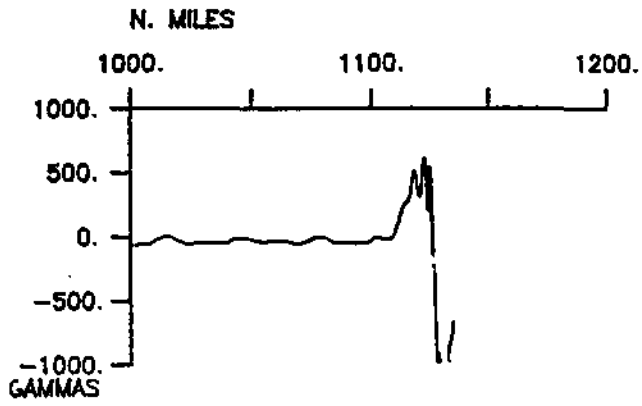


CROSSGRAIN LEG 6 Plot 1 at 1.00in/deg











S.I.O. SAMPLE INDEX

(Issued October 1987)

CROSSGRAIN EXPEDITION

Leg 6

Honolulu, Hawaii (18 June 1987)  
to  
Hilo, Hawaii (26 June 1987)

R/V Washington

Co-Chief Scientists - D. Hammond & W. Berelson  
(University of Southern California)

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\*\*\*\*

0200 180687	LGPT B HONOLULU, HAWAII	21-18 N 157-52 W fCRGN06WT
1600 260687	LGPT E HILO, HAWAII	19-44 N 155-04 W fCRGN06WT

\*\*\*\*PERSONNEL\*\*\*\*

	***NAME***	***TITLE***	***AFFILIATION***	**CRID**
PECS USC	HAMMOND, D.E.	CHIEF SCIENTIST	UNIV. OF SO. CALIF.	CRGN06WT
PECS USC	BERELSON, W.M.	CHIEF SCIENTIST	UNIV. OF SO. CALIF.	CRGN06WT
PESP USC	BAUSCH, D.	TECHNICIAN	UNIV. OF SO. CALIF.	CRGN06WT
PEVL SIX	CARR, C.	VOLUNTEER	SCRIPPS INSTITUTION	CRGN06WT
PEST USC	CHEN, M.-S.	GRAD STUDENT	UNIV. OF SO. CALIF.	CRGN06WT
PESP USC	CHIN, C.S.	TECHNICIAN	UNIV. OF SO. CALIF.	CRGN06WT
PEOB SIX	COURTWAY, D.	OBSERVER	SCRIPPS INSTITUTION	CRGN06WT
PESP USC	GIBLIN, M.F.	TECHNICIAN	UNIV. OF SO. CALIF.	CRGN06WT
PESP USC	KUSAKABE, M.	POST DOC	UNIV. OF SO. CALIF.	CRGN06WT
PESP USC	O'NEILL, D.J.	TECHNICIAN	UNIV. OF SO. CALIF.	CRGN06WT
PESP USC	MCRANEY, J.	ADVISOR	UNIV. OF SO. CALIF.	CRGN06WT
PECT STS	MOE, R.L.	COMPUTER TECH	SCRIPPS INSTITUTION	CRGN06WT
PERT STS	PILLARD, E.G.	RESIDENT TECH	SCRIPPS INSTITUTION	CRGN06WT
PESP UCS	STOUT, P.	POST DOC	UNIV. OF SO. CALIF.	CRGN06WT
PESP USC	XU, X.M.	GRAD STUDENT	UNIV. OF SO. CALIF.	CRGN06WT
PESP USC	ZUKIN, J.G.	TECHNICIAN	UNIV. OF SO. CALIF.	CRGN06WT

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

\*\*\*UNDERWAY DATA CURATOR - S. M. SMITH EXT. 42752

\*\*\*LOG BOOKS\*\*\*

1820	180687		LBUW	B UNDERWAY WATCH LOG	GDC	18-549N	155-521W	sCRGNO6WT
1655	260687		LBUW	E UNDERWAY WATCH LOG	GDC	19-397N	154-559W	sCRGNO6WT

\*\*\* ECHOSOUNDER RECORDS \*\*\*

1820	180687		DPR3	B EPC 3.5 KHZ R-01	GDC	18-549N	155-521W	sCRGNO6WT
0534	230687		DPR3	E EPC 3.5 KHZ R-01	GDC	15-215N	151-278W	sCRGNO6WT
0600	230687		DPRT	B EPC 12 KHZ R-01	GDC	15-216N	151-279W	sCRGNO6WT
1037	250687		DPRT	E EPC 12 KHZ R-01	GDC	15-205N	151-300W	sCRGNO6WT
1100	250687		DPRT	B EPC 12 KHZ R-02	GDC	15-206N	151-300W	sCRGNO6
1600	260687		DPRT	E EPC 12 KHZ R-02	GDC	19-341N	154-499W	sCRGNO6W.

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

1820	180687		MGRA	B MAGNETICS R-01	GDC	18-549N	155-521W	sCRGNO6WT
1655	260687		MGRA	E MAGNETICS R-01	GDC	19-397N	154-559W	sCRGNO6WT

\*\*\* EXPENDABLE BATHYTHERMOGRAPHS \*\*\*

1946	180687		BTXP	XBT-01	NOA	18-443N	155-413W	sCRGNO6WT
0249	190687		BTXP	XBT-02	NOA	17-591N	154-440W	sCRGNO6WT
2230	190687		BTXP	XBT-03	NOA	15-508N	152-044W	sCRGNO6WT
1958	200687		BTXP	XBT-04	NOA	15-219N	151-291W	sCRGNO6WT
1526	210687		BTXP	XBT-05	NOA	15-187N	151-333W	sCRGNO6WT
2341	220687		BTXP	XBT-06	NOA	15-250N	151-277W	sCRGNO6WT
1723	230687		BTXP	XBT-07	NOA	15-219N	151-295W	sCRGNO6WT
1054	250687		BTXP	XBT-08	NOA	15-205N	151-300W	sCRGNO6WT
2352	250687		BTXP	XBT-09	NOA	17-123N	152-566W	sCRGNO6WT
0613	260687		BTXP	XBT-10	NOA	18-116N	153-426W	sCRGNO6WT

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

0528	200687			GCFV X	BOTTOM FLUX LANDER	USC	15-217N	151-282W	sCRGN06WT
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\*\*\* HYDROCASTS \*\*\*

0741	200687			HCNI	TSONIC SURFACE	USC	15-225N	151-297W	sCRGN06WT
1227	200687			HCNI	T O BE,U,TH SURFACE	USC	15-228N	151-298W	sCRGN06WT
2157	220687			HCNI	TSONIC BE,U,TH 3500M	USC	15-246N	151-275W	sCRGN06WT
2027	230687			HCNI	T RA SURFACE	USC	15-221N	151-308W	sCRGN06WT
1025	240687			HCNI	TSONIC BE,U,TH 5539M	USC	15-222N	151-289W	sCRGN06WT
1123	250687			HCNI	T RA SURFACE	USC	15-205N	151-302W	sCRGN06WT

\*\*\* BOX CORES \*\*\*

33	220687			COBX B	SOUTAR BOXCORE #166	USC	15-222N	151-273W	sCRGN06WT
1528	230687			COBX X	PRETRIPPED	USC	15-229N	151-253W	sCRGN06WT
0146	240687			COBX B	SOUTAR BOXCORE #167	USC	15-207N	151-294W	sCRGN06WT
0711	240687			COBX X	PRETRIPPED	USC	15-211N	151-292W	sCRGN06WT

\*\*\* AIR SAMPLES \*\*\*

0230	180687			ASCS B	ATOMS. PARTICULATES	USC	21-180N	157-521W	sCRGN06WT
1530	260687			ASCS E	BE-7 1 SAMPLE/2DAYS	USC	19-310N	154-466W	sCRGN06WT

\*\*\* SURFACE SAMPLES \*\*\*

0230	180687			SSXX B	SURFACE SAMPLE	USC	21-180N	157-521W	sCRGN06WT
1530	260687			SSXX E	TH, BE 1 SAMPLE/DAY	USC	19-310N	154-466W	sCRGN06WT

\*\*\* THERMOGRAPH RECORDS \*\*\*

0030	180687			TGRC B	THERMOGRAPHS 1-5	GDC	21-180N	157-521W	sCRGN06WT
1600	260687			TGRC E	THERMOGRAPHS 1-5	GDC	19-341N	154-499W	sCRGN06WT

\* END SAMPLE INDEX