

INFORMAL REPORT AND INDEX OF  
NAVIGATION, DEPTH, MAGNETIC AND SUBBOTTOM PROFILER DATA  
(Issued September 1985)

ATLAS EXPEDITION

LEG 1

San Diego, California (13 September 1984)  
to  
Honolulu, Hawaii (4 October 1984)

R/V Melville

Chief Scientist - L. Olson (Univ. of Washington)

Resident Marine Tech - R. Wilson

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

Data Collection and Processing funded by NSF  
Grant Number OCE83-17741

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.  
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Geological Data Center, Scripps Institution of Oceanography,  
La Jolla, California 92093.

GDC Cruise I.D.# 216

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

Contents:

Index Chart - gives track of cruise leg, dates, ports, and mileage 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.

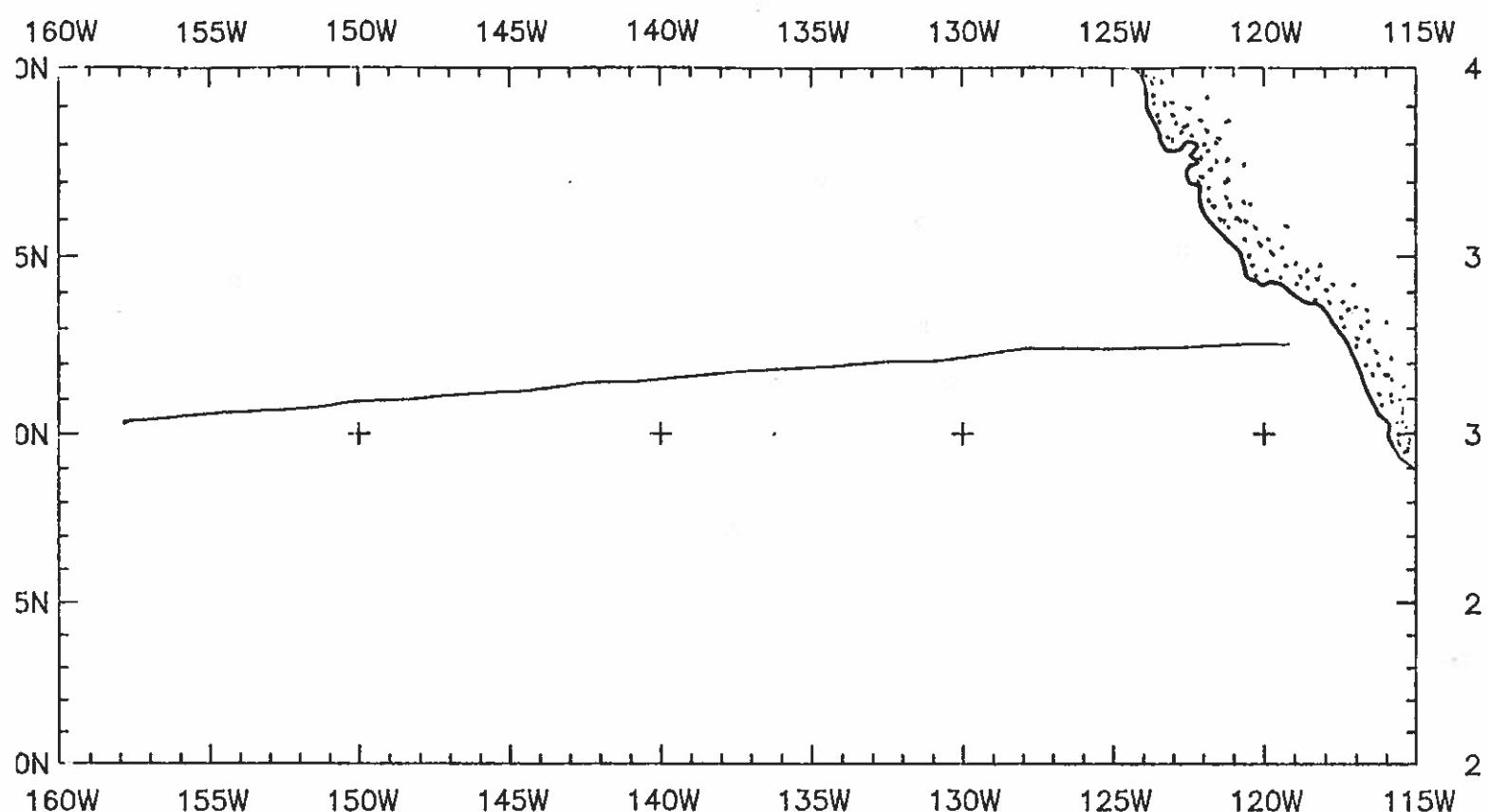
For information on the availability and reproduction costs of data in the following forms, contact S. M. Smith, Curator, Geological Data Center, Scripps Institution of Oceanography, La Jolla, California 92093. Phone (619)452-2752.

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 anomaly 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)

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Navigation only available for this cruise leg



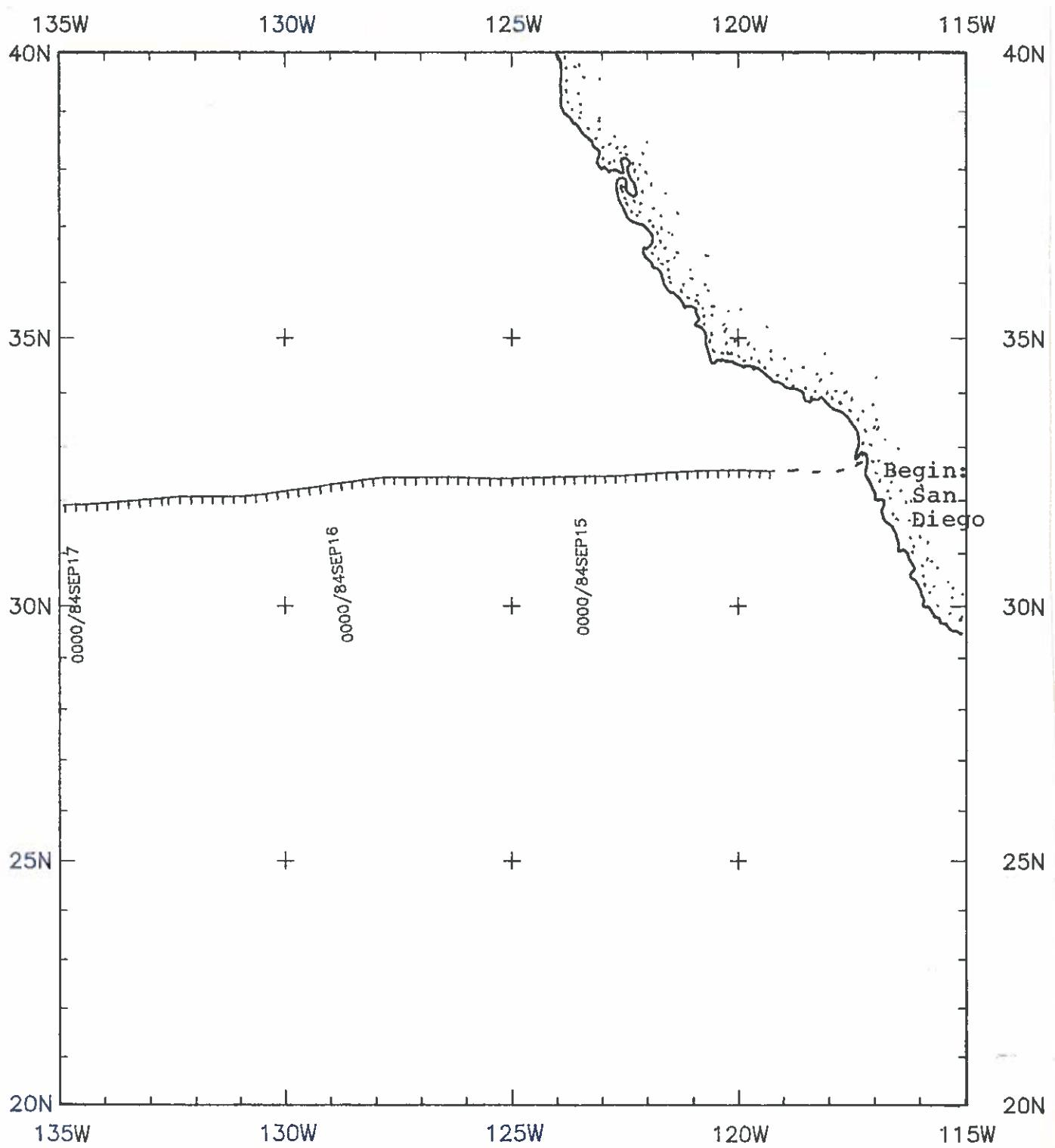
ATLAS LEG 01 Track at .1632in/degree

ATLAS EXPEDITION  
LEG 1

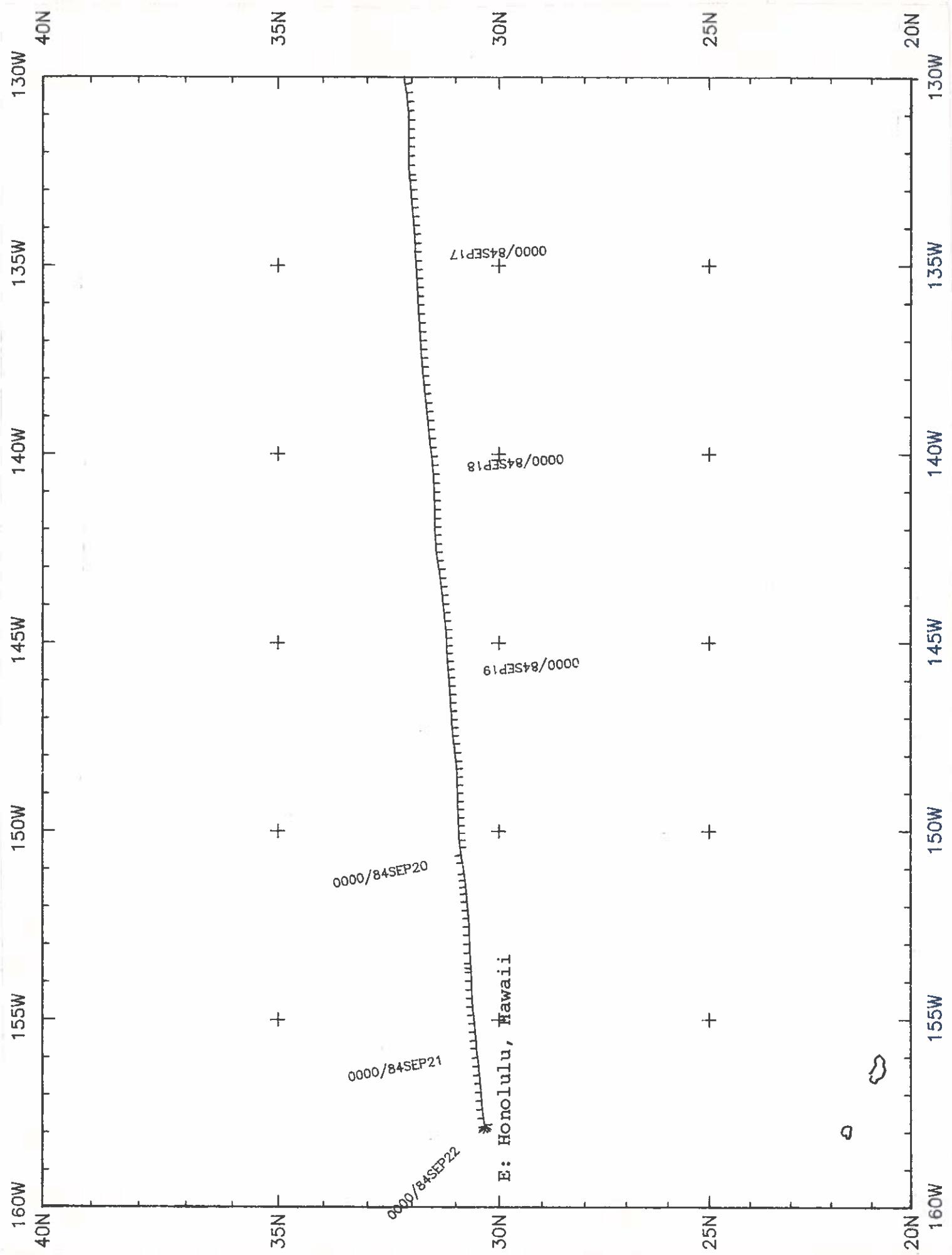
CHIEF SCIENTIST: L. Olson (U.of Washington)  
PORTS: San Diego, Calif. - Honolulu, Hawaii  
DATES: 13 September - 04 October 1984  
SHIP: R/V Melville

TOTAL MILEAGE OF UNDERWAY DATA COLLECTED

- 1) Cruise - 2097 miles
- 2) Bathymetry - collected but not processed
- 3) Magnetics - not collected
- 4) Seismic Reflection - not collected
- 5) Gravity - not collected



ATLAS LEG 01 Track at .312in/degree (plot 1 of 2)



S.I.O. SAMPLE INDEX

(Issued June 1985)

ATLAS EXPEDITION

Leg 1

San Diego, California (13 September 1984)  
to  
Honolulu, Hawaii (04 October 1984)

R/V Melville

Chief Scientist - L. Olson (Univ. of Washington)

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

Index Encoding Funded by Sandia  
Contract Number 25-0412  
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. #216

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\*\*\*\*PORTS\*\*\*

1953 130984	LGPT B SAN DIEGO, CALIF.	32-331N 119-122W sATLS01MV
1930 041084	LGPT E HONOLULU, HAWAII	30-210N 157-511W sATLS01MV

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

#	***NAME***	***TITLE***	***AFFILIATION***	**CRID**
PECS UWA	OLSON, L.	CHIEF SCIENTIST	U. of WASHINGTON	ATLS01MV
PERT MTG	WILSON, R.	RESIDENT TECH	SCRIPPS INSTITUTION	ATLS01MV
PECT MTG	ABBOTT, L.	COMPUTER TECH	SCRIPPS INSTITUTION	ATLS01MV
PECT MTG	STUBER, D.	COMPUTER TECH	SCRIPPS INSTITUTION	ATLS01MV
PESP MBD	YAYANOS, A.	SCIENTIST	SCRIPPS INSTITUTION	ATLS01MV
PESP MBD	AUMANN, M.	STAFF RES. ASSO.	SCRIPPS INSTITUTION	ATLS01MV
PESP UWA	MILLER, J.	ENGINEER	U. of WASHINGTON	ATLS01MV
PESP MBD	CORETS, E.	LAB ASST.	SCRIPPS INSTITUTION	ATLS01MV
PESP MBD	INGRAM, C.	RES. ASSO.	SCRIPPS INSTITUTION	ATLS01MV
PESP MBD	HESSLER, R.	SCIENTIST	SCRIPPS INSTITUTION	ATLS01MV
PESP SIX	LIPKIN, J.	SCIENTIST	SANDIA LABS	ATLS01MV
PESP SIX	HICKOX, C.	SCIENTIST	SANDIA LABS	ATLS01MV
PESP USN	VALENT, P.	SCIENTIST	U.S. NAVY	ATLS01MV
PESP UWA	MILLER, V.	ENGINEER	U. of WASHINGTON	ATLS01MV
PESP UWA	GROPPER, B.	FIELD ENG.	U. of WASHINGTON	ATLS01MV
PESP UWA	AUFRANCE, T.	ENGINEER	U. of WASHINGTON	ATLS01MV
PESP UWA	BACKES, J.	ENGINEER	U. of WASHINGTON	ATLS01MV
PESP UWA	KIENTZ, K.	ENG. TECH	U. of WASHINGTON	ATLS01MV
PESP WHO	DICKINSON, W.	RES. ASSO.	WOODS HOLE	ATLS01MV
PESP WHO	BALL, L.	RES. ASST.	WOODS HOLE	ATLS01MV
PEST MBD	DELONG, E.	STUDENT	SCRIPPS INSTITUTION	ATLS01MV
PEST URI	BRANDES, H.	STUDENT	SCRIPPS INSTITUTION	ATLS01MV
PESP UWA	MCGINNIS, L.	INSTRUMENT MAKER	U. of WASHINGTON	ATLS01MV
PESP USN	BURNS, J.	ENGINEER	U.S. NAVY	ATLS01MV
PESP UWA	CARLSON, J.	ENGINEER	U. of WASHINGTON	ATLS01MV
PESP WHO	SAYLES, F.	SCIENTIST	WOODS HOLE	ATLS01MV
PEST MBD	MULLENEAUX, L.	STUDENT	SCRIPPS INSTITUTION	ATLS01MV
PESP URI	SILVA, A.	SCIENTIST	U. of RHODE ISLAND	ATLS01MV
PESP UWA	VANNOTER, R.	FIELD ENG.	U. of WASHINGTON	ATLS01MV

\*\*\*\*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.

#

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

\*\*\*\*UNDERWAY DATA CURATOR - S. M. SMITH EXT.2752

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

2000 130984	LBSC B SAYLES SCIENTIFIC LOG WHO	32-331N 119-122W	sATLS01MV
1930 041084	LBSC E SAYLES SCIENTIFIC LOG WHO	30-210N 157-511W	sATLS01MV
2000 130984	LBSC B THERMAL DATA LOG	SIX 32-331N 119-122W	sATLS01MV
1930 041084	LBSC E THERMAL DATA LOG	SIX 30-210N 157-511W	sATLS01MV
2000 130984	LBSC B HESSLERS LOG	SIO 32-331N 119-122W	sATLS01MV
1930 041084	LBSC E HESSLERS LOG	SIO 30-210N 157-511W	sATLS01MV
2000 130984	LBSC B ISHTE MPG1 84 LOG	UWA 32-331N 119-122W	sATLS01MV
1930 041084	LBSC E ISHTE MPG1 84 LOG	UWA 30-210N 157-511W	sATLS01MV

\*\*\*\*FATHOMETERS\*\*\*

1604 150984	DPRT B EDO 12KHZ R-01	GDC 32-257N 127-081W	sATLS01MV
2000 150984	DPRT E EDO 12KHZ R-01	GDC 32-243N 128-037W	sATLS01MV
1507 210984	DPRT B EDO 12KHZ R-02	GDC 30-186N 157-505W	sATLS01MV
0500 011084	DPRT E EDO 12KHZ R-02	GDC 30-210N 157-511W	sATLS01MV

\*\*\*\*FREE VEHICLES TRAPS\*\*\*

1507 210984	TRFV B RRH363	5874M	RRH 30-186N 157-505W	sATLS01M7
1524 220984	TRFV E 5MSQ TRAP(363)	5874M	RRH 30-184N 157-494W	sATLS01MV
1734 210984	TRFV B RRH364	5889M	RRH 30-181N 157-504W	sATLS01MV
1846 220984	TRFV E FUNNEL TR(364)	5889M	RRH 30-180N 157-493W	sATLS01MV
1336 220984	TRFV B RRH365	5851M	RRH 30-178N 157-511W	sATLS01MV
1500 230984	TRFV E FISH TRAP(365)	5851M	RRH 30-174N 157-507W	sATLS01MV
1934 220984	TRFV B RRH366	5891M	RRH 30-182N 157-502W	sATLS01MV
1548 230984	TRFV E 5MSQ TRAP(366)	5891M	RRH 30-180N 157-504W	sATLS01MV
1854 230984	TRFV B RRH368	5865CM	RRH 30-178N 157-545W	sATLS01MV
0000 250984	TRFV E FISH TR(368)	5865CM	RRH 30-210N 157-511W	sATLS01MV
2014 230984	TRFV X RRH369	5875M	RRH 30-182N 157-510W	sATLS01MV
1157 250984	TRFV B RRH370	5891M	RRH 30-193N 157-521W	sATLS01MV
1335 260984	TRFV E FISH TR(370)	5891M	RRH 30-193N 157-521W	sATLS01MV
0142 260984	TRFV B RRH373	5862M	RRH 30-194N 157-513W	sATLS01MV
1526 260984	TRFV E 5MSQ TR(373)	5862M	RRH 30-194N 157-513W	sATLS01MV
1635 260984	TRFV B RRH375	5839M	RRH 30-194N 157-521W	sATLS01MV
1702 270984	TRFV E 5MSQ TR(375)	5839M	RRH 30-194N 157-521W	sATLS01MV
1317 290984	TRFV B RRH378	5868M	RRH 30-218N 157-509W	sATLS01MV
1259 300984	TRFV E 5MSQ TRAP(378)	5868M	RRH 30-218N 157-509W	sATLS01MV
1439 290984	TRFV B RRH379	5849M	RRH 30-212N 157-512W	sATLS01MV
2051 300984	TRFV E FUNNEL TR(379)	5849M	RRH 30-212N 157-512W	sATLS01MV

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1632 210984	TRFV B PRAT NO. 1	MBD 30-188N 157-504W	sATLS01MV
1144 220984	TRFV E PRAT NO. 1	MBD 30-186N 157-502W	sATLS01MV
1647 210984	TRFV B TIFT B	MBD 30-182N 157-506W	sATLS01MV
1053 220984	TRFV E TIFT B	MBD 30-181N 157-501W	sATLS01MV
1057 220984	TRFV B TIFT A	MBD 30-180N 157-500W	sATLS01MV
1040 230984	TRFV E TIFT A	MBD 30-173N 157-498W	sATLS01MV
1155 220984	TRFV B PRAT NO. 4	MBD 30-186N 157-500W	sATLS01MV
1115 230984	TRFV E PRAT NO. 4	MBD 30-180N 157-499W	sATLS01MV
1050 230984	TRFV B TIFT B	MBD 30-175N 157-498W	sATLS01MV
0709 240984	TRFV E TIFT B	MBD 30-210N 157-545W	sATLS01MV
1131 230984	TRFV B PRAT NO. 2	MBD 30-181N 157-497W	sATLS01MV
1040 240984	TRFV E PRAT NO. 2	MBD 30-210N 157-511W	sATLS01MV
1124 250984	TRFV B TIFT A	5892M MBD 30-210N	157-511W sATLS01MV
1130 260984	TRFV E TIFT A	5892M MBD 30-210N	157-511W sATLS01MV
1138 250984	TRFV B TIFT B	5892M MBD 30-210N	157-511W sATLS01MV
0000 260984	TRFV E TIFT B	5892M MBD 30-210N	157-511W sATLS01MV

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

0101 230984	COBX CORE 01 H367	5790M RRH 30-180N	157-478W sATLS01MV
1517 250984	COBX CORE 02 H371	5962M RRH 30-195N	157-519W sATLS01MV
2015 250984	COBX CORE 03 H372	5888M RRH 30-218N	157-490W sATLS01MV
0413 260984	COBX CORE 04 H374	5909M RRH 30-176N	157-538W sATLS01MV
0730 270984	COBX CORE 05 H376	5825M RRH 30-192N	157-498W sATLS01MV
2001 280984	COBX CORE 06 H377	5843M RRH 30-212N	157-513W sATLS01MV

\*\*\*\*HYDROCASTS\*\*\*

1208 270984	HCNI HYDRO DEEP	5881M AAY 30-210N	157-511W sATLS01MV
0017 290984	HCNI HYDRO DEEP	5870M AAY 30-210N	157-511W sATLS01MV
0255 300984	HCNI HYDRO SHALLOW	AAY 30-210N	157-511W sATLS01MV

\*\*\*\*INSITU HEAT TRANSFER EXPERIMENT\*\*\*

0044 240984	BLXX B ISHTE TEST PLATFORM	UWA 30-205N 157-512W	sATLS01MV
0342 240984	BLXX E ISHTE TEST PLATFORM	UWA 30-215N 157-521W	sATLS01MV
0940 240984	BLXX B ISHTE TEST PLATFORM	UWA 30-210N 157-511W	sATLS01MV
0440 250984	BLXX E ISHTE TEST PLATFORM	UWA 30-210N 157-511W	sATLS01MV
2303 270984	BLXX B ISHTE TEST PLATFORM	UWA 30-210N 157-511W	sATLS01MV
2230 280984	BLXX E ISHTE TEST PLATFORM	UWA 30-210N 157-511W	sATLS01MV
1830 260984	BLXX B ISHTE CHEMICAL PLATTF	WHO 30-210N 157-511W	sATLS01MV
0435 270984	BLXX E ISHTE CHEM. PLATFORM	WHO 30-210N 157-511W	sATLS01MV
2239 300984	BLXX B ISHTE CHEM.PLT.5865M	WHO 30-210N 157-511W	sATLS01MV
0741 011084	BLXX E ISHTE CHEM.PLT.5865M	WHO 30-210N 157-511W	sATLS01MV

\*\*\*\*MANGANESE NODULE COLONIZATION EXPERIMENT\*\*\*

1824 300984	BLXX B COLONIZATION E.5870M	MBD 30-214N 157-500W	sATLS01MV
1930 041084	BLXX C COLONIZATION E.5870M	MBD 30-214N 157-500W	sATLS01MV

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END SAMPLE INDEX