

GEOSECS EXPEDITION

LEG C

R/V MELVILLE

INFORMAL REPORT AND INDEX OF
NAVIGATION, DEPTH AND MAGNETIC DATA

Adak, Alaska (8 October 1973)

to

Tokyo, Japan (25 October 1973)

Chief Scientist, Leg C - T. Takahashi

Resident Marine Tech - R. Wilson

Post-Cruise Processing by - S. Smith, U. Albright
R. Wilson, O. McConnell

Prepared by

Underway Data Processing Group

S.I.O. Geological Data Center

Scripps Institution of Oceanography

La Jolla, California

January 4, 1974

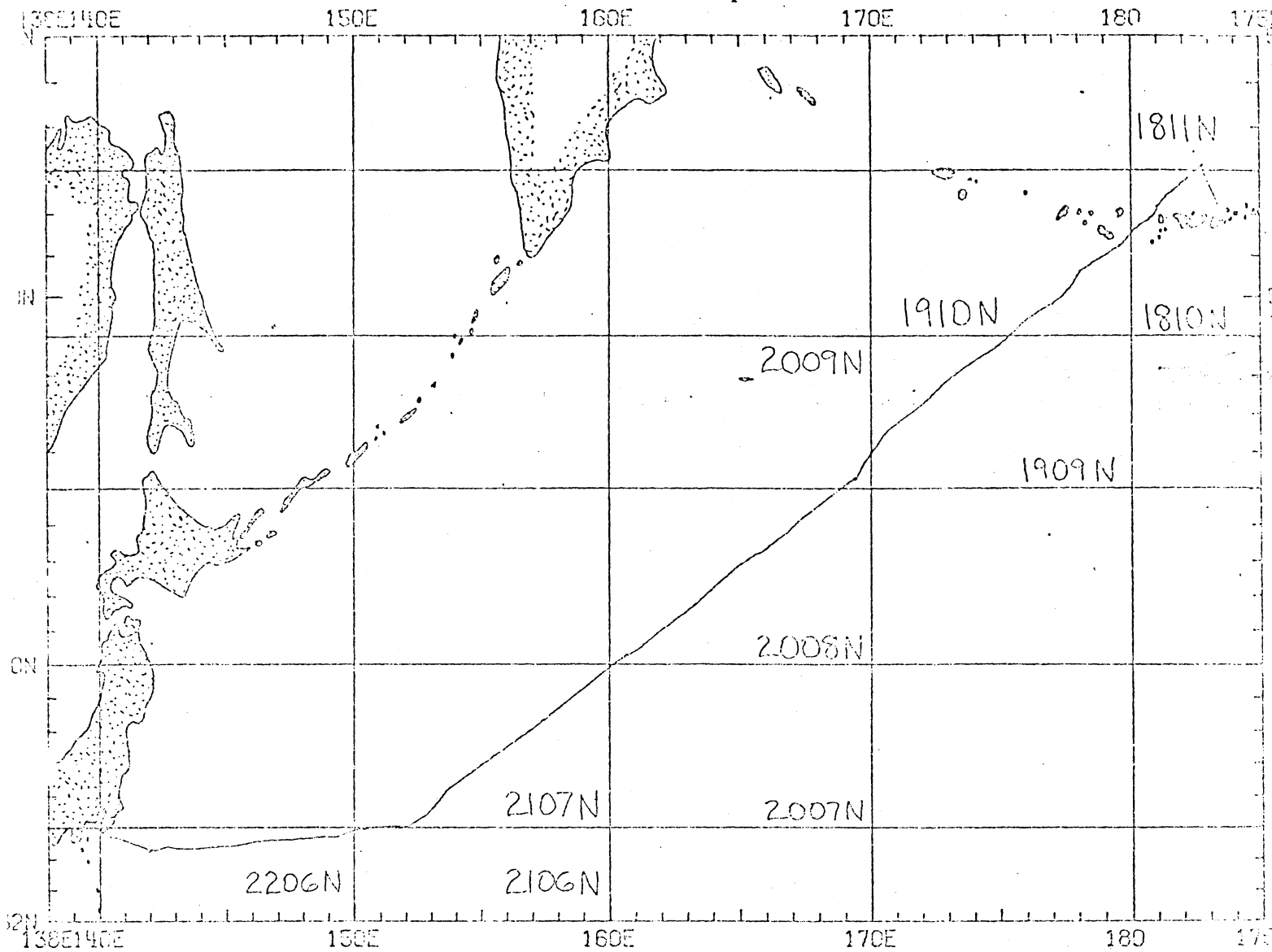
Preliminary Report and Index of Navigation, Depth, Magnetic and Subbottom Profiler Data

Contents:

- Index Chart - gives track of cruise leg and boundaries of depth compilation plots (see below).
- Track Charts - annotated with dates (day/month) and hour ticks. The scale (.3"/deg. long) is the same as the index charts of previous SIO cruises published as Report IMR TR-25.
- 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 profiler (airgun) records have a solid black line along the bottom of the profile.

For information on the availability and reproduction costs of data in the following forms, contact T. E. Chase, Curator, Geological Data Center, Scripps Institution of Oceanography, La Jolla, California 92037 (714-453-2000, Ext. 1534):

1. Navigation listing of times and positions of course and speed changes, fixes and drift velocity.
 2. Depth compilation plots - in fathoms (assumed sound velocity of 800 fm./sec.) at approximately 1 mile spacing, plotted at 4" degree with standard U.S. Navy Oceanographic Office BC series boundaries (see index chart).
 3. Plots of magnetic anomaly profiles along track-map scale = 1.2"/degree; anomaly scale between 15°N and 15°S latitude = 500 gamma/inch; anomaly scale north of 15°N and south of 15°S = 1000 gamma/inch from values retrieved at approximately 1 mile spacing and regional field removed using the 1965 IGRF.
 4. Card Decks of navigation, depth and magnetics (for specific formats, contact S. M. Smith, Geological Data Center).
 5. S.I.O. 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.
 6. Microfilm or Xerox copies of:
 - a. Echosounder records - 12 and 3.5 kHz frequency
 - b. Subbottom profiler records (airgun)
 - c. Magnetometer records
 - d. Underway Data Log
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GEOSecs EXPEDITION

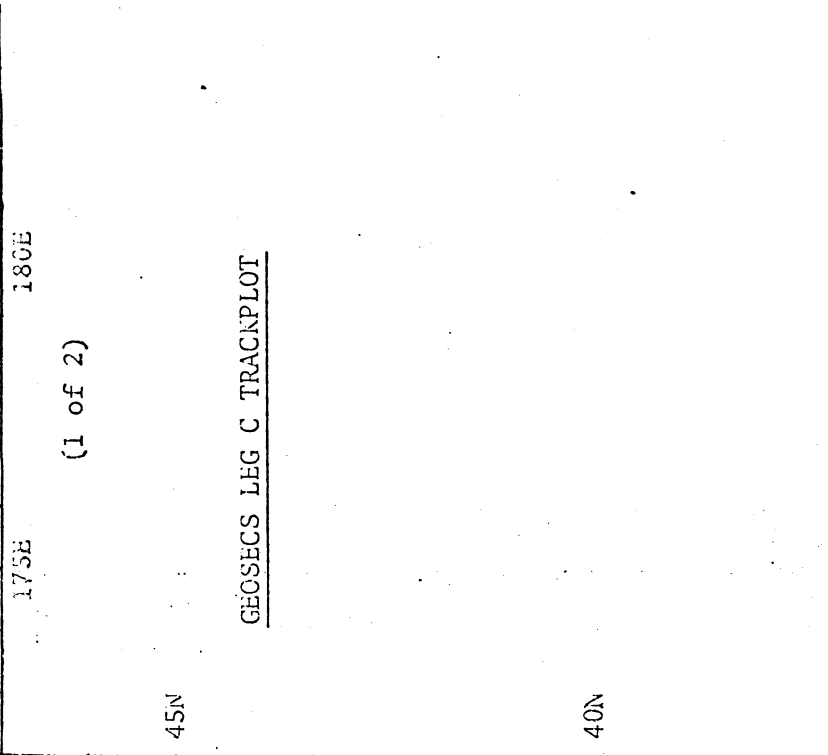
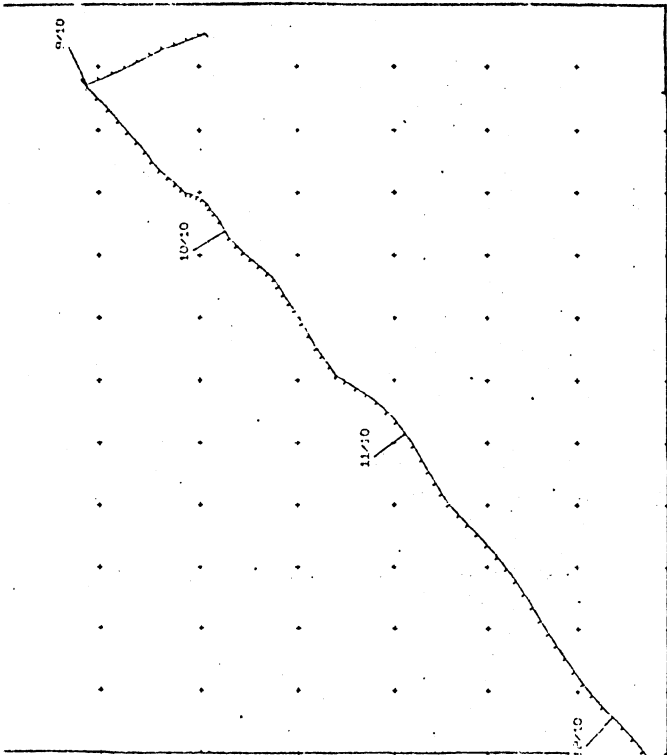
LEG C

R/V MELVILLE

Chief Scientist - T. Takahashi
 Adak - Tokyo (8 Oct. 1973 - 25 Oct. 1973)

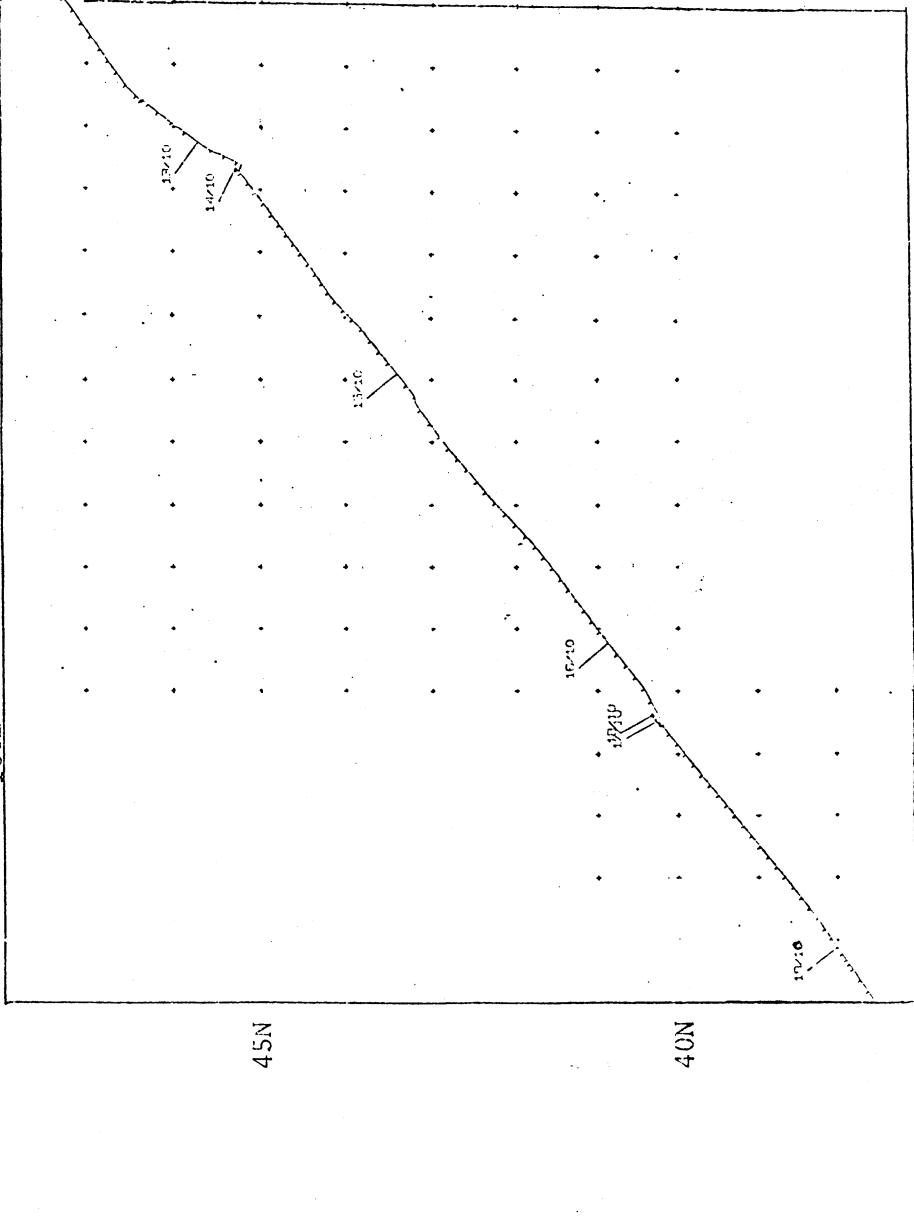
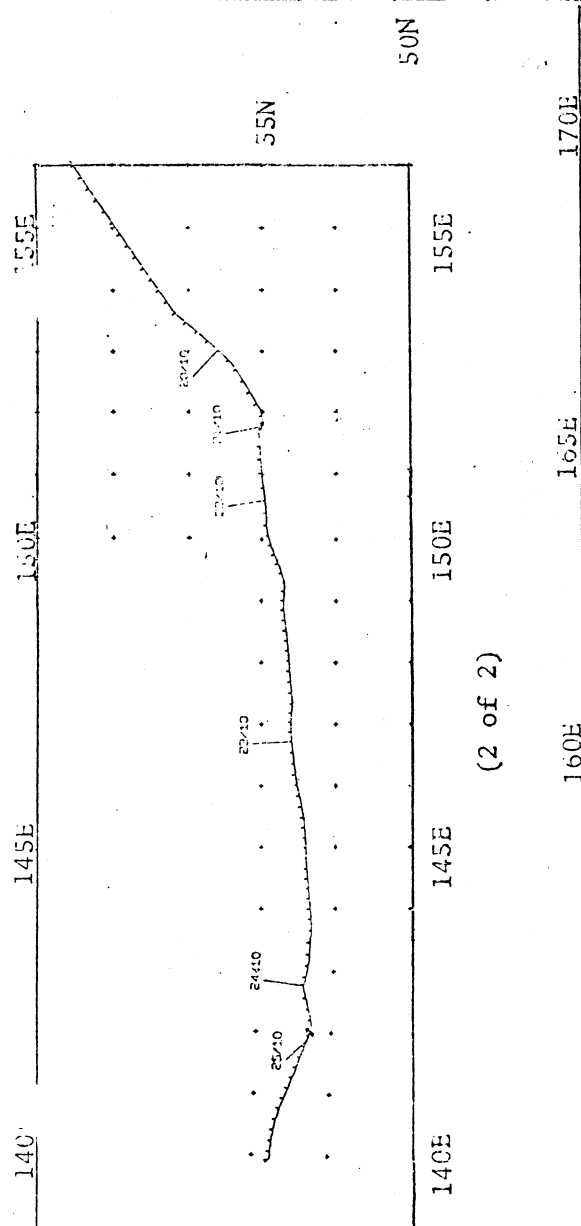
TOTAL MILEAGE

- 1) Cruise - 2522 miles
- 2) Magnetics - 2272 miles
- 3) bathymetry - 2347 miles



(1 of 2)

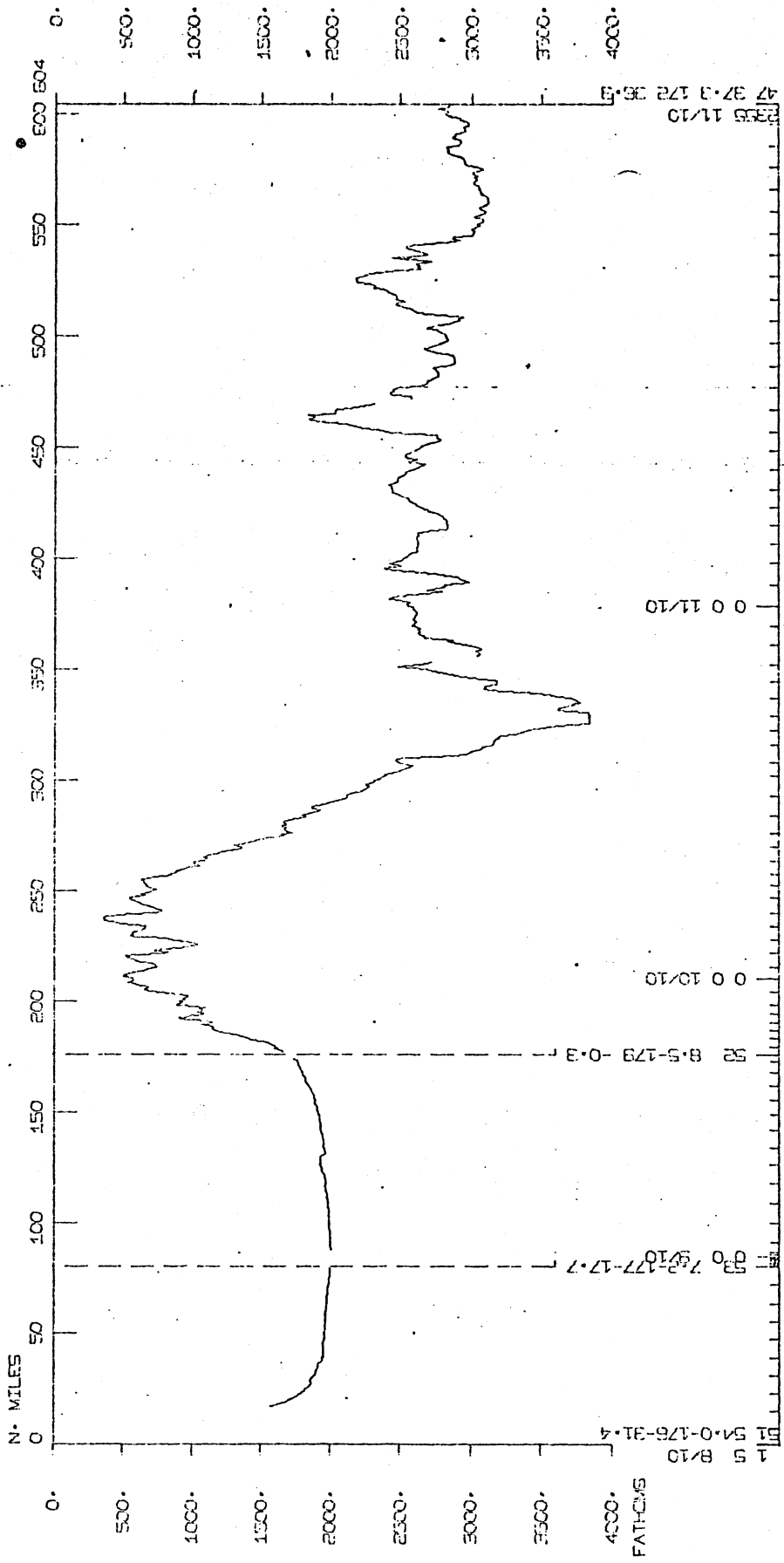
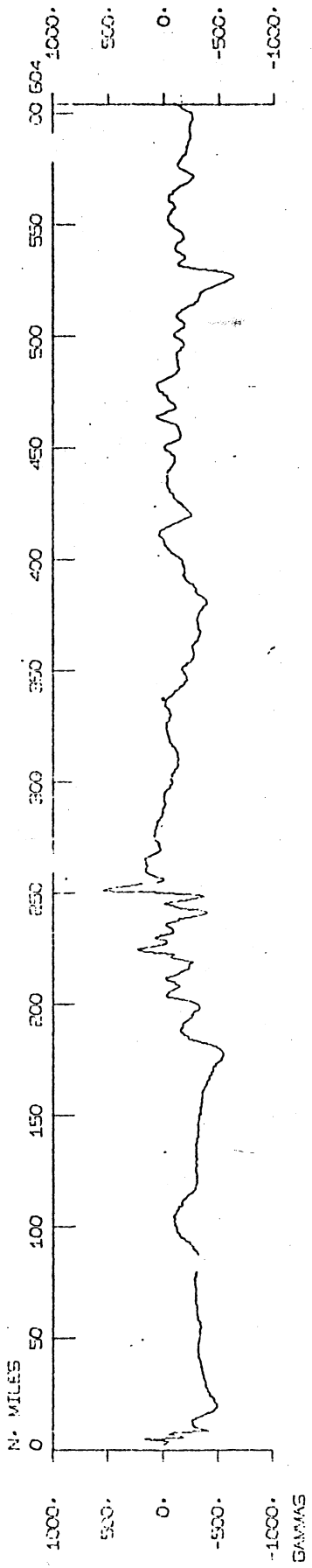
GEOSECS LEG C TRACKPLOT



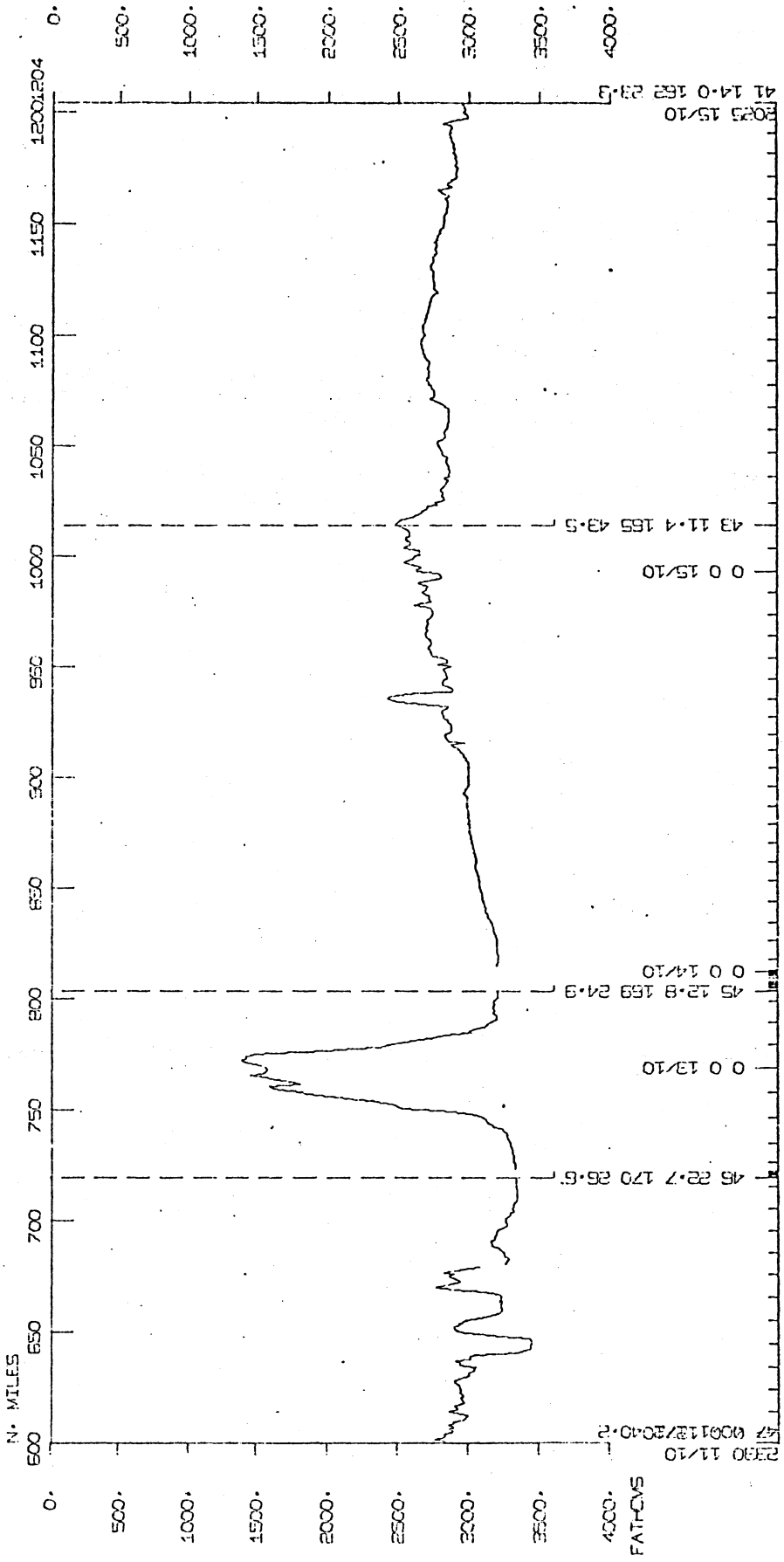
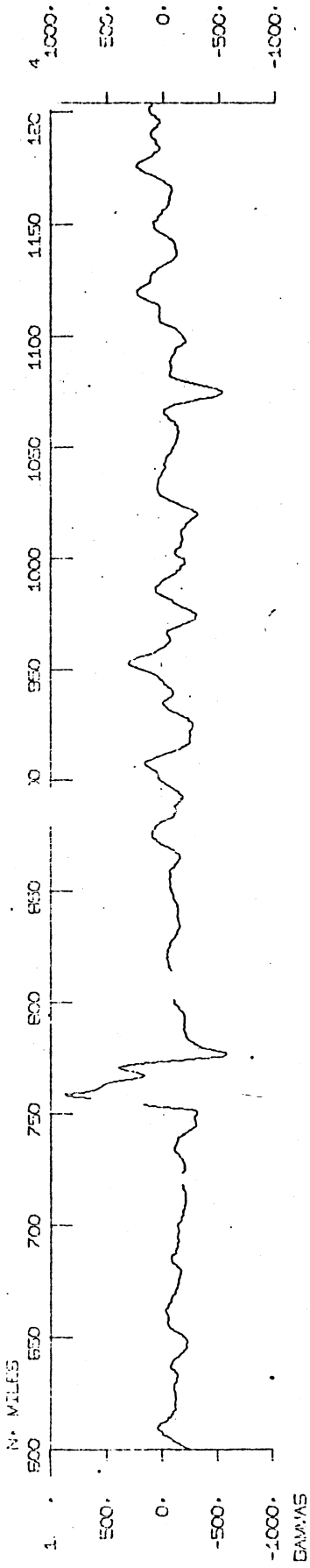
(2 of 2)

160E 165E 170E

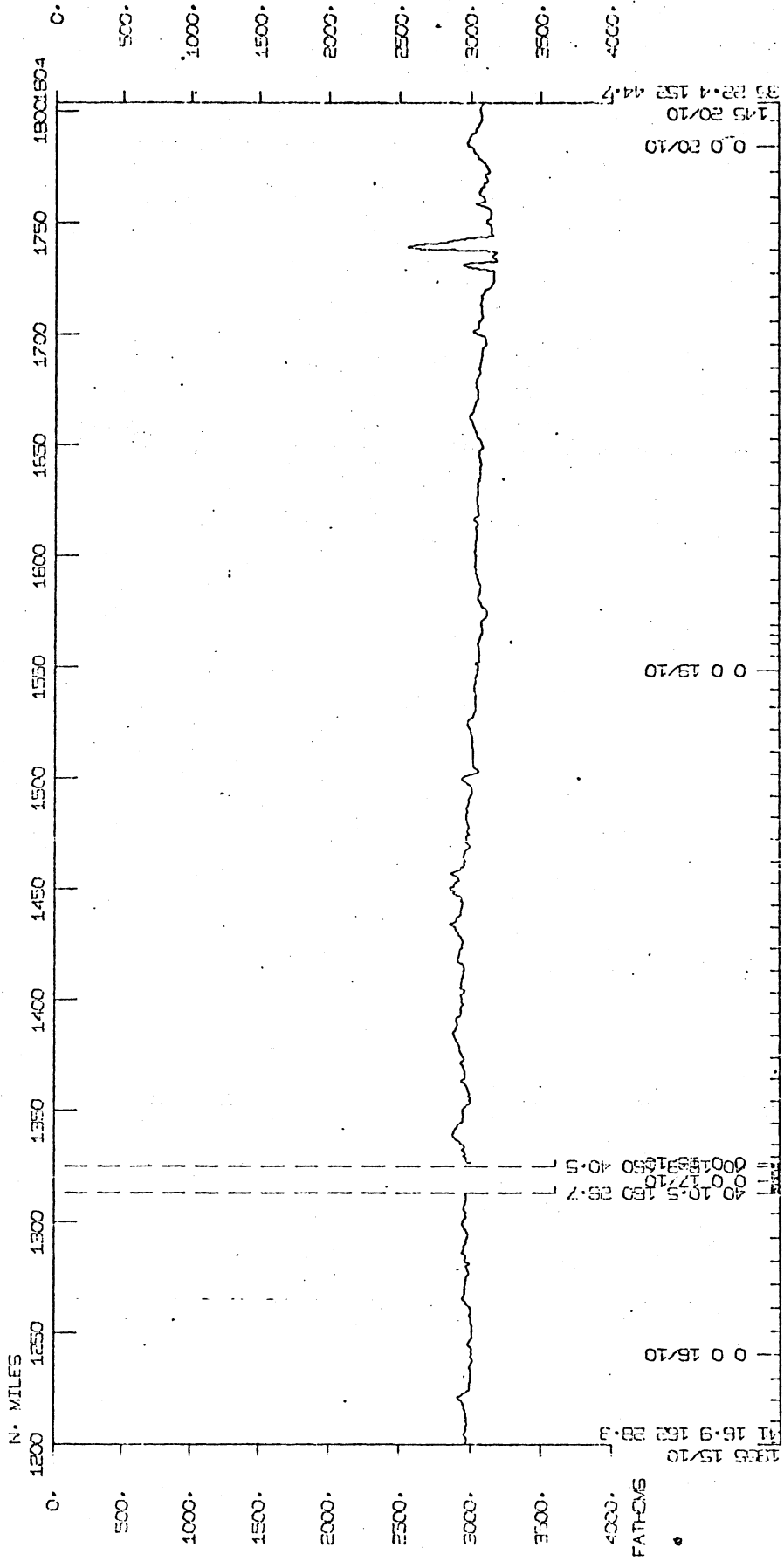
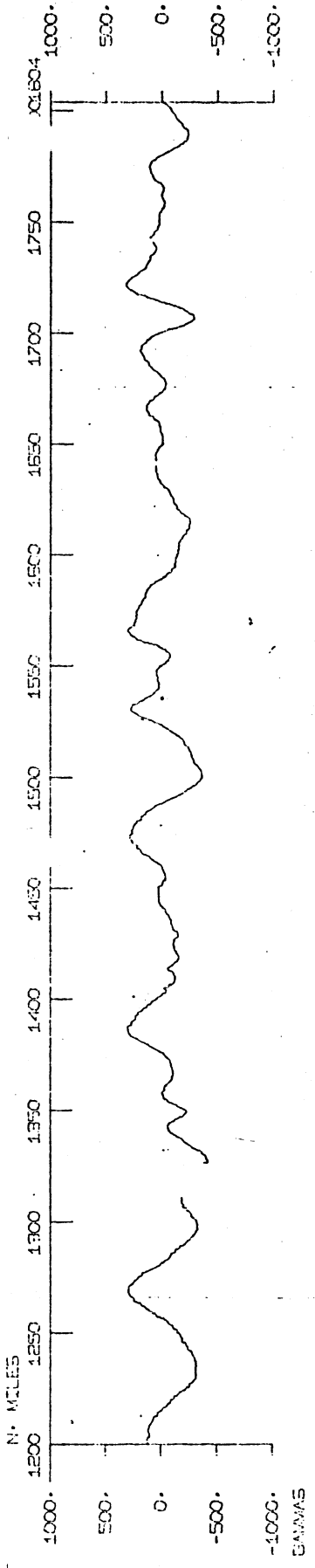
GEOSECS LEG C

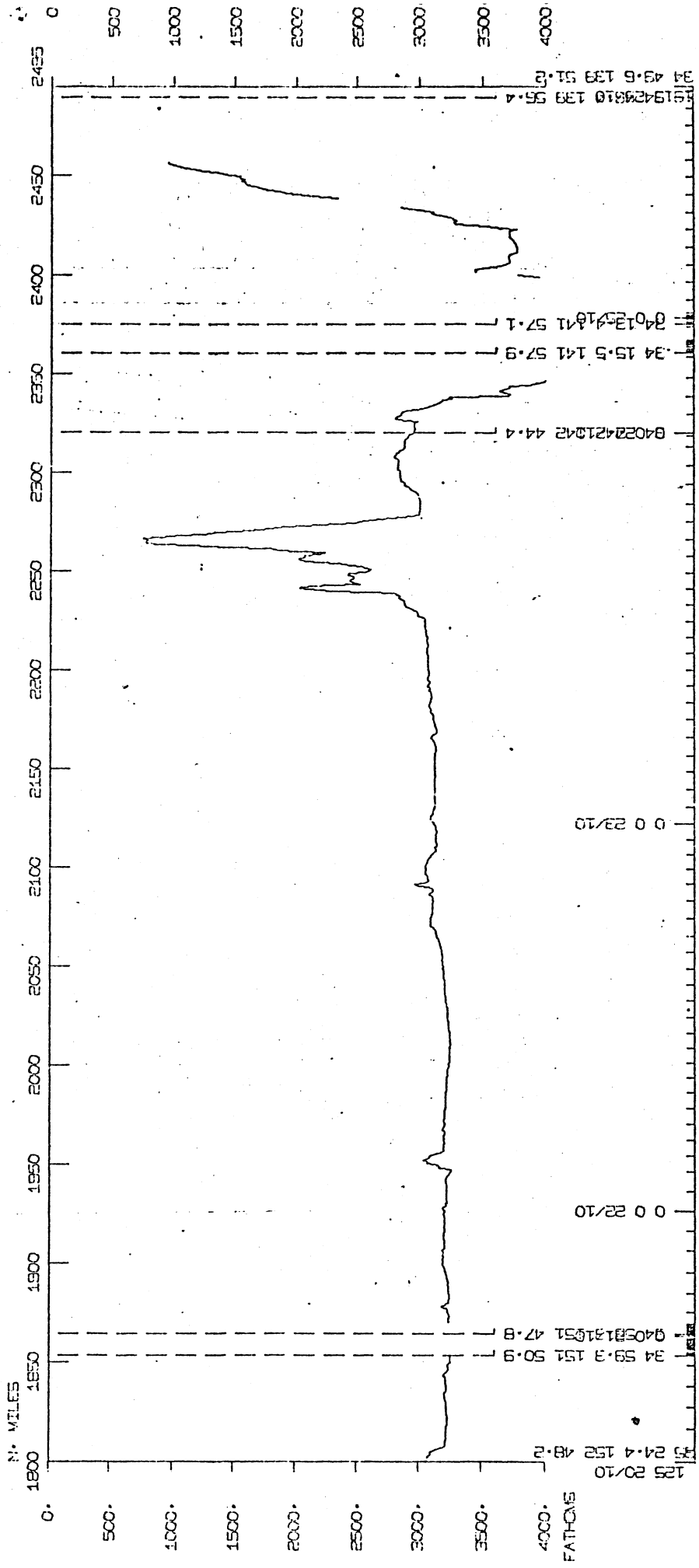
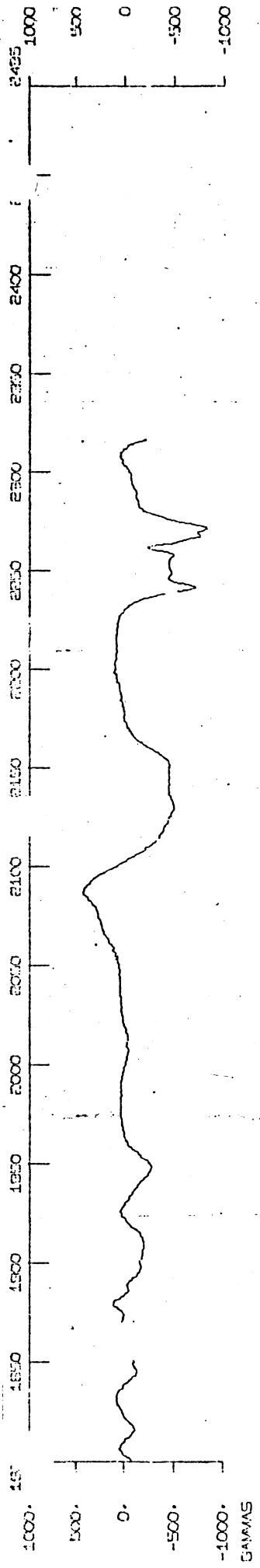


GEOSFCS LEG 1



GEOSECS LEG C





WORLDWIDE LTD

LISTED FEBRUARY 10, 1974

0 81073 LGC B ADAK, ALASKA, USA 51 540N 176 314W S GECS CMV
 1947 251073 LGC E TOKYU, JAPAN 35 491N 139 535E S GECS CMV

PERSONNEL

PECS	TAKAHASHI, T.	QNC	GECS CMV
PERT	WILSON, R.	GRD	GECS CMV
PECT	SPIEGELBERG, JOHN	GOG	GECS CMV
PEET	JAIN, J.	GOG	GECS CMV
PEMT	CUNNINGHAM, L.	GOG	GECS CMV
PEMT	TUY, C.	GOG	GECS CMV
PE	MEAD, R.	DCP	GECS CMV
PE	RAIGAN, P.	GOG	GECS CMV
PE	RENNER, R.	GOG	GECS CMV
PE	WYBURNNEY, V.	GOG	GECS CMV
PE	YATES, R.	GOG	GECS CMV
PE	BREEZE, C.	GOG	GECS CMV
PE	BRUECKER, W.	LDO	GECS CMV
PE	GILBERT, A.	GOG	GECS CMV
PE	GURAT, D.	GOG	GECS CMV
PE	HESTER, A.	GOG	GECS CMV
PE	HURWITZ, R.	GOG	GECS CMV
PE	LEVEILLE, K.	GOG	GECS CMV
PE	LINGLE, D.	GOG	GECS CMV
PE	PARK, K.	OSU	GECS CMV
PE	SPIEGELBERG, JOAN	GOG	GECS CMV
PE	SUNDQUIST, E.	LDG	GECS CMV
PE	VADNAIS, R.	GOG	GECS CMV
PE	WILLIAMS, R.	GOG	GECS CMV
PE	WOY, R.	GOG	GECS CMV
PE	REEBURG, W.	UAK	GECS CMV

*** NOTE *** TIME ZONES AND MINUTES OF LATITUDE AND LONGITUDE ARE LISTED IN TENTHS (E.G. 10.6 IS LISTED AS 106)

UNDERWAY DATA - CURATOR T.E. CHASE 2ND FLOOR AQUARIUM (EXT.1534)

*** NAVIGATION PLOTS ***

TIME GMT D.M.Y.	TIME TZ LOC LOC	SAMP CODE	SAMPLE IDENT.	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
259	81073	NVBP B	BRIDGE PLOT 1	GDC 52	69N 176	356W	S GECS CMV
126	111073	NVRP E	BRIDGE PLOT 1	GDC 49	451N 176	512E	S GECS CMV
126	111073	NVBP B	BRIDGE PLOT 2	GDC 49	451N 176	512E	S GECS CMV
1024	131073	NVBP E	BRIDGE PLOT 2	GDC 45	139N 169	249E	S GECS CMV
1024	131073	NVBP B	BRIDGE PLOT 3	GDC 45	139N 169	249E	S GECS CMV
2100	171073	NVBP E	BRIDGE PLOT 3	GDC 40	188N 160	405E	S GECS CMV
2100	171073	NVBP B	BRIDGE PLOT 4	GDC 40	188N 160	405E	S GECS CMV
637	201073	NVBP E	BRIDGE PLOT 4	GDC 34	592N 151	509E	S GECS CMV
637	201073	NVBP B	BRIDGE PLOT 5	GDC 34	592N 151	509E	S GECS CMV
610	251073	NVBP E	BRIDGE PLOT 5	GDC 34	16.3N 142	02E	S GECS CMV

*** FATHOGRAMS ***

TIME GMT D.M.Y.	DATE LOC LOC	TIME TZ LOC LOC	SAMP CODE	SAMPLE IDENT.	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
141	81073	DPRT B	GDR 12	KHZ R-01	GDC 51	571N 176	288W	S GECS CMV
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329	91073	DPRT B	GDR 12	KHZ R-02	GDC 53	87N 177	152W	S GECS CMV
900	101073	DPRT E	GDR 12	KHZ R-02	GDC 51	80N 180	378W	S GECS CMV
910	101073	DPRT B	GDR 12	KHZ R-03	GDC 51	75N 180	393W	S GECS CMV
1515	111073	DPRT E	GDR 12	KHZ R-03	GDC 48	288N 174	179E	S GECS CMV
1525	111073	DPRT B	GDR 12	KHZ R-04	GDC 48	279N 174	157E	S GECS CMV
1118	121073	DPRT E	GDR 12	KHZ R-04	GDC 46	234N 170	274E	S GECS CMV
1932	121073	DPRT B	GDR 12	KHZ R-05	GDC 46	200N 170	257E	S GECS CMV
330	131073	DPRT E	GDR 12	KHZ R-05	GDC 45	127N 169	250E	S GECS CMV
339	141073	DPRT B	GDR 12	KHZ R-06	GDC 45	159N 169	206E	S GECS CMV
650	161073	DPRT E	GDR 12	KHZ R-06	GDC 40	109N 160	296E	S GECS CMV
25	181073	DPRT B	GDR 12	KHZ R-07	GDC 40	182N 160	390E	S GECS CMV
630	201073	DPRT E	GDR 12	KHZ R-07	GDC 34	593N 151	509E	S GECS CMV
1824	211073	DPRT B	GDR 12	KHZ R-08	GDC 35	27N 151	455E	S GECS CMV
125	241073	DPRT E	GDR 12	KHZ R-08	GDC 34	209N 142	288E	S GECS CMV

DATE	TIME	TZ	SAMP	DISP	LONG.	CRUISE
TIME	LOC	LOC	LOC	CODE	T.	LEG-SHIP
D.M.Y.	LOC	LOC	LOC	CODE	T.	LEG-SHIP
127	241073		DPRT B GDR 12 KHZ R-09	GDC 34	208N 142 285E	S GECS CMV
425	241073		DPRT E GDR 12 KHZ R-09	GDC 34	155N 141 579E	S GECS CMV
629	251073		DPRT B GDR 12 KHZ R-10	GDC 34	167N 142 15E	S GECS CMV
1500	251073		DPRT E GDR 12 KHZ R-10	GDC 34	423N 140 335E	S GECS CMV

*** MAGNETOMETER ***

TIME	DATE	TIME	TZ	SAMP	DISP	LONG.	CRUISE
TIME	D.M.Y.	LOC	LOC	LOC	CODE	LAT.	LEG-SHIP
135	81073		MGR B MAGNETICS R-01	GDC 51	563N 176 282W	S GECS CMV	
2018	191073		MGR E MAGNETICS R-01	GDC 36	86N 153 363E	S GECS CMV	
2021	191073		MGR B MAGNETICS R-02	GDC 36	82N 153 359E	S GECS CMV	
2225	231073		MGR E MAGNETICS R-02	GDC 34	230N 142 478E	S GECS CMV	

GEOCHEMICAL STATIONS

TIME	DATE	TIME	TZ	SAMP	DISP	LONG.	CRUISE
TIME	D.M.Y.	LOC	LOC	LOC	CODE	LAT.	LEG-SHIP
330	131073		GCLV R GE0SECS LV STA 221	GOG 45	127N 169 250E	S GECS CMV	
331	141073		GCLV E GE0SECS LV STA 221	GOG 45	167N 169 219E	S GECS CMV	
650	161073		GCLV R GE0SECS LV STA 222	GOG 40	109N 160 296E	S GECS CMV	
20	181073		GCLV E GE0SECS LV STA 222	GOG 40	182N 160 391E	S GECS CMV	
650	201073		GCLV B GE0SECS LV STA 223	GOG 34	591N 151 509E	S GECS CMV	
1818	211073		GCLV E GE0SECS LV STA 223	GOG 35	28N 151 465E	S GECS CMV	
425	241073		GCLV B GE0SECS LV STA 224	GOG 34	155N 141 579E	S GECS CMV	
20	251073		GCLV E GE0SECS LV STA 224	GOG 34	163N 142 002E	S GECS CMV	
1046	81073		GCSV B GE0SECS SV STA 219	GOG 53	65N 177 170W	S GECS CMV	
322	91073		GCSV E GE0SECS SV STA 219	GOG 53	92N 177 142W	S GECS CMV	
1118	121073		GCSV B GE0SECS SV STA 220	GOG 46	234N 170 274E	S GECS CMV	
1930	121073		GCSV E GE0SECS SV STA 220	GOG 46	201N 170 259E	S GECS CMV	

BATHYTHERMOGRAPHS - CURATORIAL GROUP, (EXT. 1135)

*** BATHYTHERMOGRAPH ***

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0	81073		RTX	NO. SAMPLES = 1	BTS 51	540N	176	314W S GECS CMV
0	91073		RTX	NO. SAMPLES = 2	BTS 53	72N	177	148W S GECS CMV
0	101073		RTX	NO. SAMPLES = 4	BTS 51	440N	179	366W S GECS CMV
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0	181073		RTX	NO. SAMPLES = 3	BTS 40	183N	160	392E S GECS CMV
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0	241073		RTX	NO. SAMPLES = 2	BTS 34	242N	142	452E S GECS CMV

END SAMPLE INDEX