Report and Index of

Underway Marine Geophysical Data

Northeast Circle Route Expedition

Leg 5

(NECR05RR)

R/V Revelle

(Issued March 2001)

Ports:
Honolulu, Hawaii (12 November 2000)
to
Hilo, Hawaii (7 December 2000)

Chief Scientist: John Hildebrand
Scripps Institution of Oceanography
jahildebrand@ucsd.edu

Computer Tech – Dan Jacobson
Resident Marine Tech – Gene Pillard

Post–Cruise processing and report preparation by the
Geological Data Center, Scripps Institution of Oceanography
La Jolla, CA 92093–0223

GDC Cruise ID# 294

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

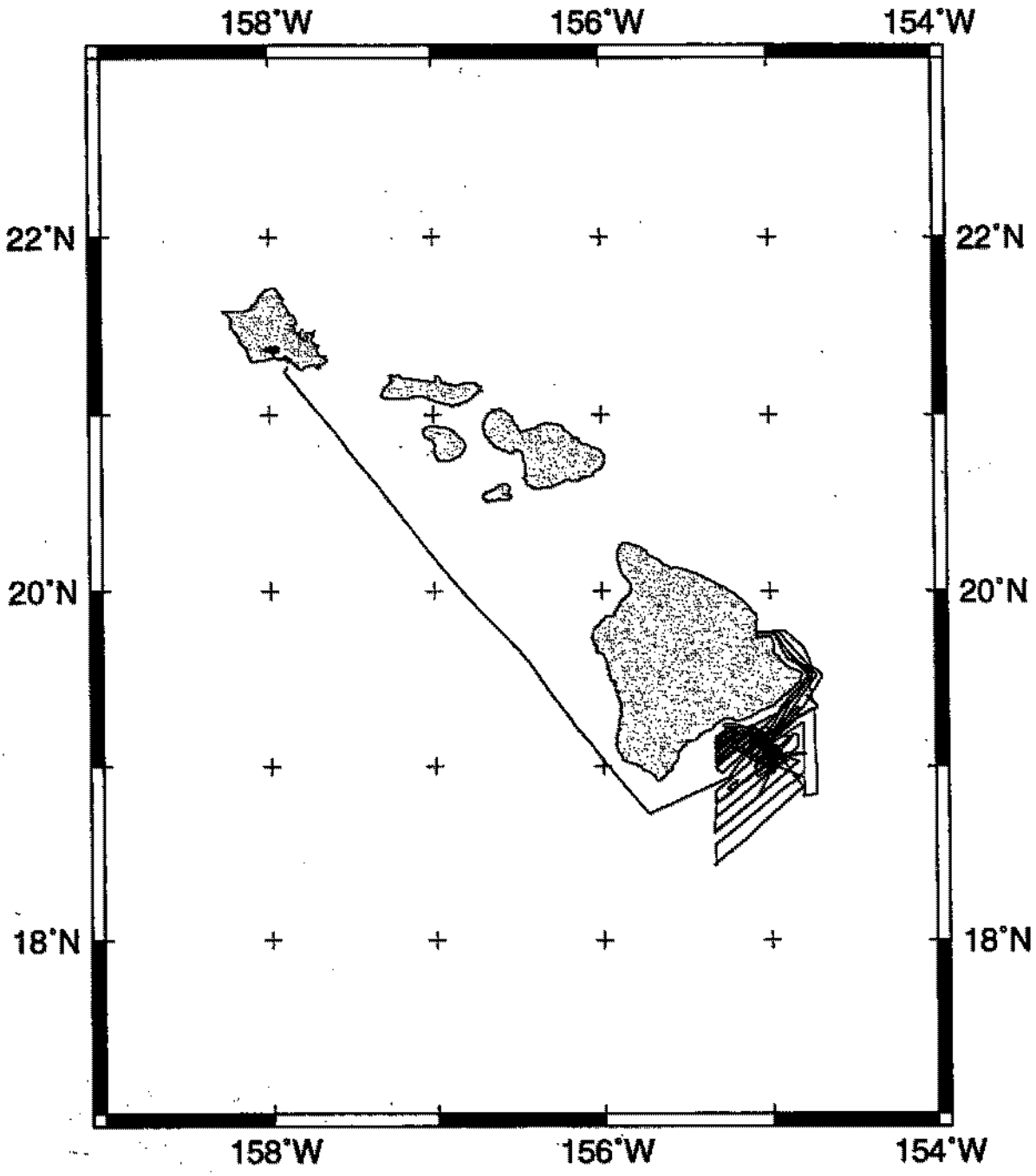
Profiles – depth, magnetic and gravity free air anomaly vs. distance. (Sections of track with seismic reflection data have a wide black line along the botttom of the profile.)

Sample Index – list of begin/end times and positions of all underway records as well as samples and measurements from other disciplines collected on the leg.

NOTE: One or more of the underway data types may not be collected on a given leg. For information on the availability and reproduction costs of data in the following forms, contact the Geological Data Center, Scripps Institution of Oceanography, La Jolla, California 92093–0223. Phone: (858)534–2752, Fax: (858)534–6500, internet email: ualbright@ucsd.edu or gwells@ucsd.edu

1. Files via ftp or on 8mm (Exabyte) magnetic tape or CDrom:
   a) Separate time series ASCII files of navigation, single beam depth, gravity and magnetics.
   b) Above data in a single merged ASCII file in the MGD77 Exchange Format.
   c) SeaBeam depth data (binary, Sun byte order)
   d) SeaBeam Sidescan data.
2. Microfilm (35mm flowfilm) or hard copies of:
   a) Underway watch log
   b) SeaBeam vertical beam profile/Sidescan records.
   c) 3.5 kHz and 12 kHz echosounder records.
   d) Seismic reflection profiler records.
3. Navigation abstract listing with times and positions of major course and speed changes.
4. Custom plots in Mercator projection:
   a) Track plots.
   b) SeaBeam depth contour plots.
   c) Depths, magnetic or gravity values printed or profiled along track.

Rev 6/2000



NECR EXPEDITION LEG 5 (NECR05RR)

CHIEF SCIENTIST: John Hildebrand, Scripps Institution of Oceanography

PORTS: Honolulu - Hilo, Hawaii

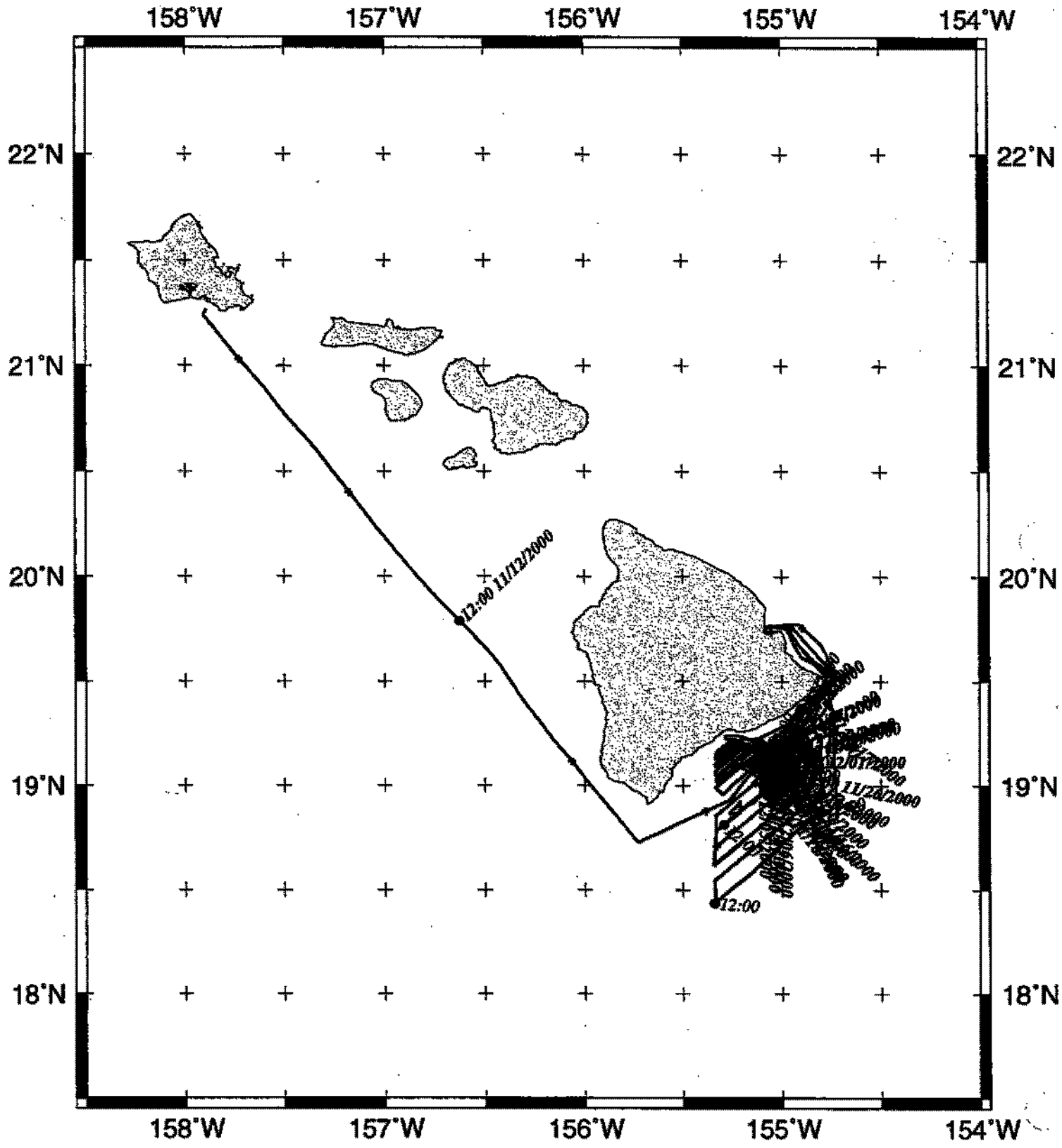
DATES: 12 November - 7 December 2000

SHIP: R/V Revelle

TOTAL MILEAGE OF UNDERWAY DATA COLLECTED

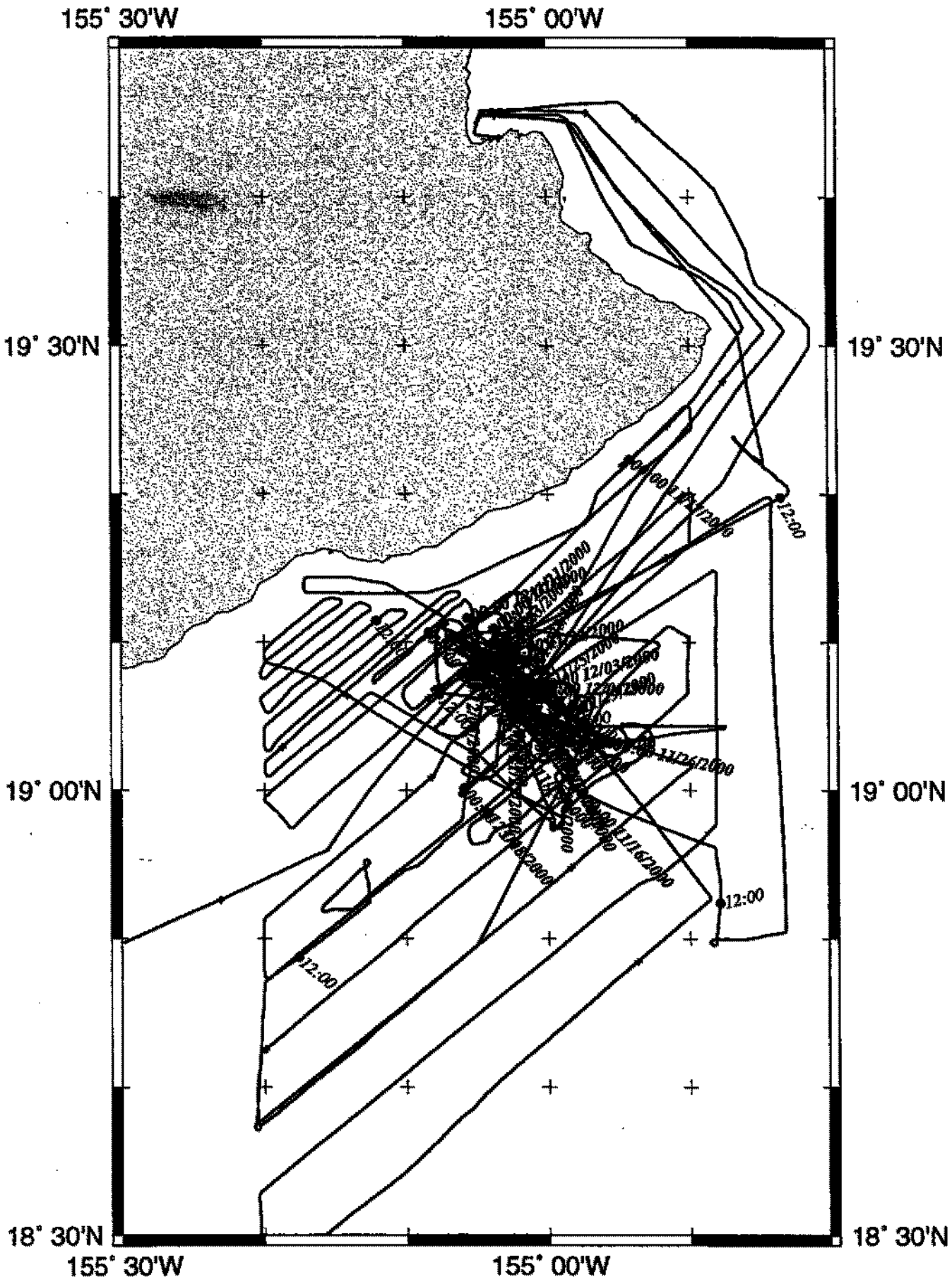
Cruise- 1895 miles	**Magnetics- none collected**
Bathymetry- 1177 miles	**Seismic Reflection- none collected**
Sea Beam- 1177 miles	**Gravity- none collected**

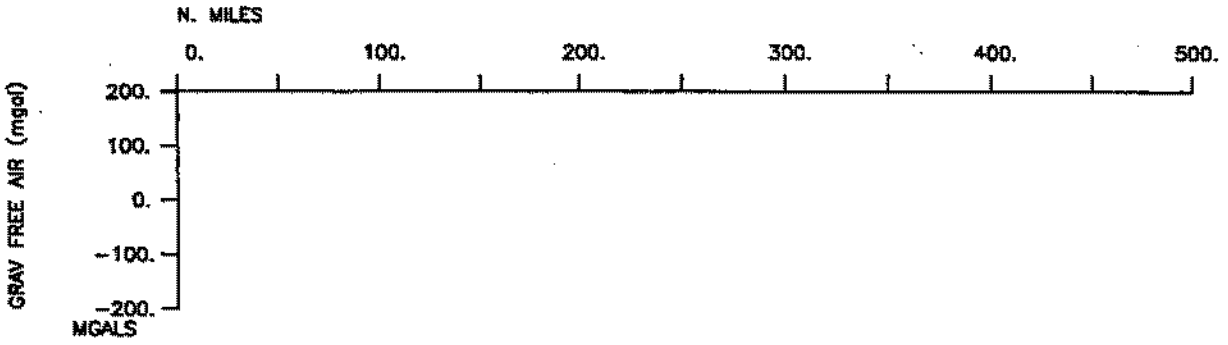
NECR leg 5 Track



GMT Feb 8 10:49 :Honolulu - Hilo, Hawaii 12 November - 7 December 2000:

NECR leg 5 Survey

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300.
400.
500.
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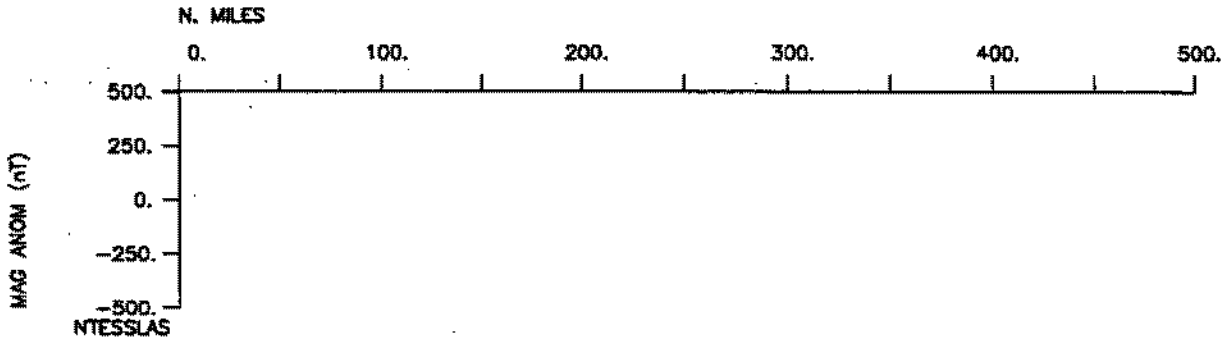
100.
0.
−100.
−200.
MGALS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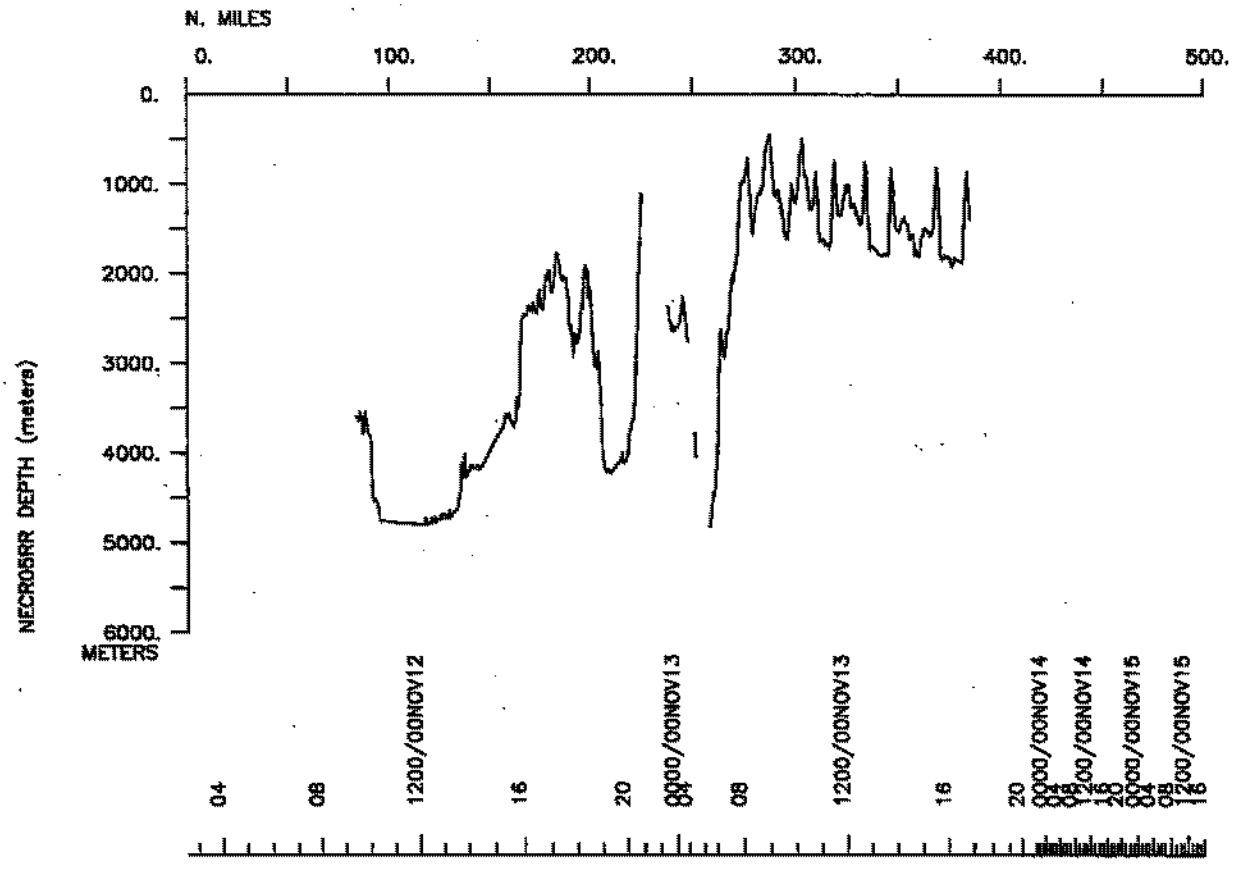
NTESSLAS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1000.
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3000.
4000.
5000.
6000.
METERS
04
08
1200/00NOV12
16
20
0000/00NOV13
04
08
1200/00NOV13
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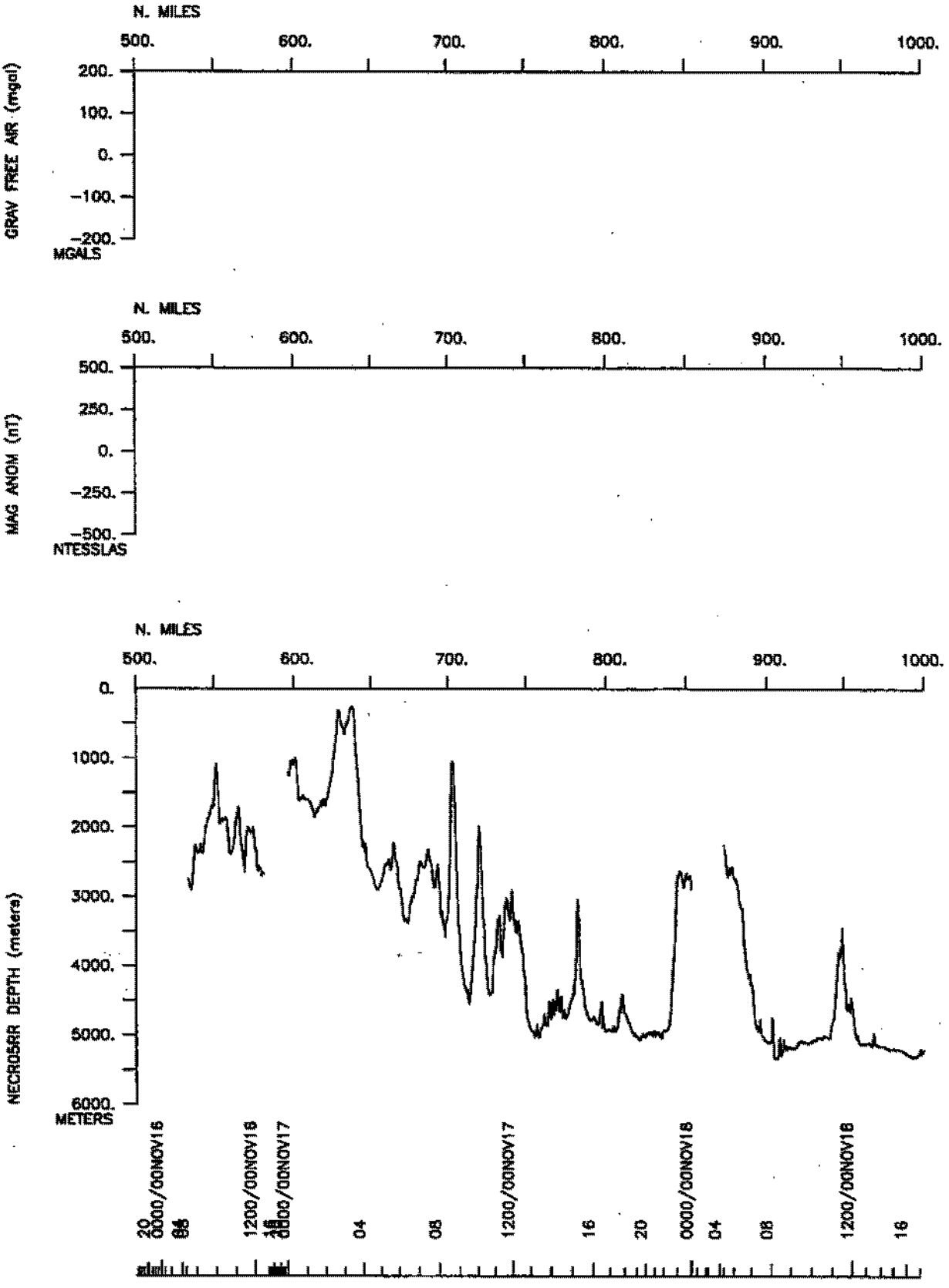
20
0000/00NOV15
04
08
1200/00NOV15
16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-200.
MGALS
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500.
600.
700.
800.
900.
1000.
MAG ANOM (nT)
500.
250.
0.
-250.
-500.
NTESSLAS
N. MILES
500.
600.
700.
800.
900.
1000.
NECR05RR DEPTH (meters)
0.
1000.
2000.
3000.
4000.
5000.
6000.
METERS
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0000/00NOV16
1200/00NOV16
0000/00NOV17
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08
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0000/00NOV18
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08
1200/00NOV18
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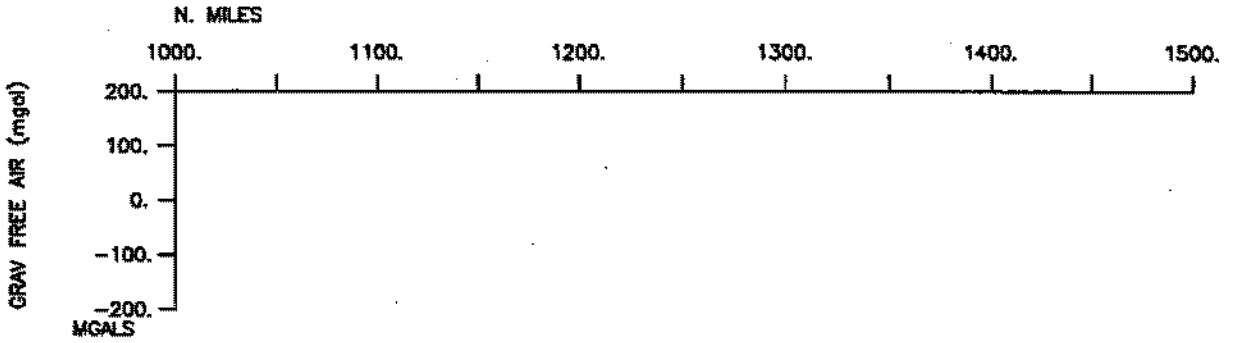
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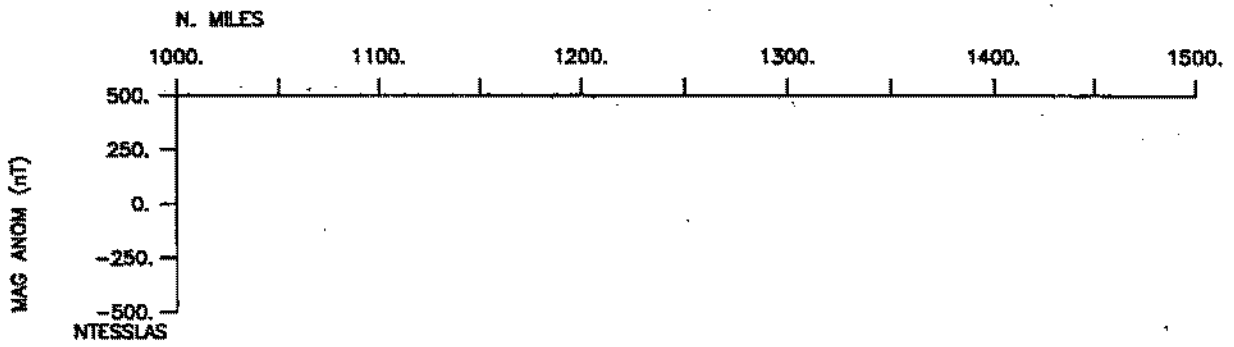
MGALS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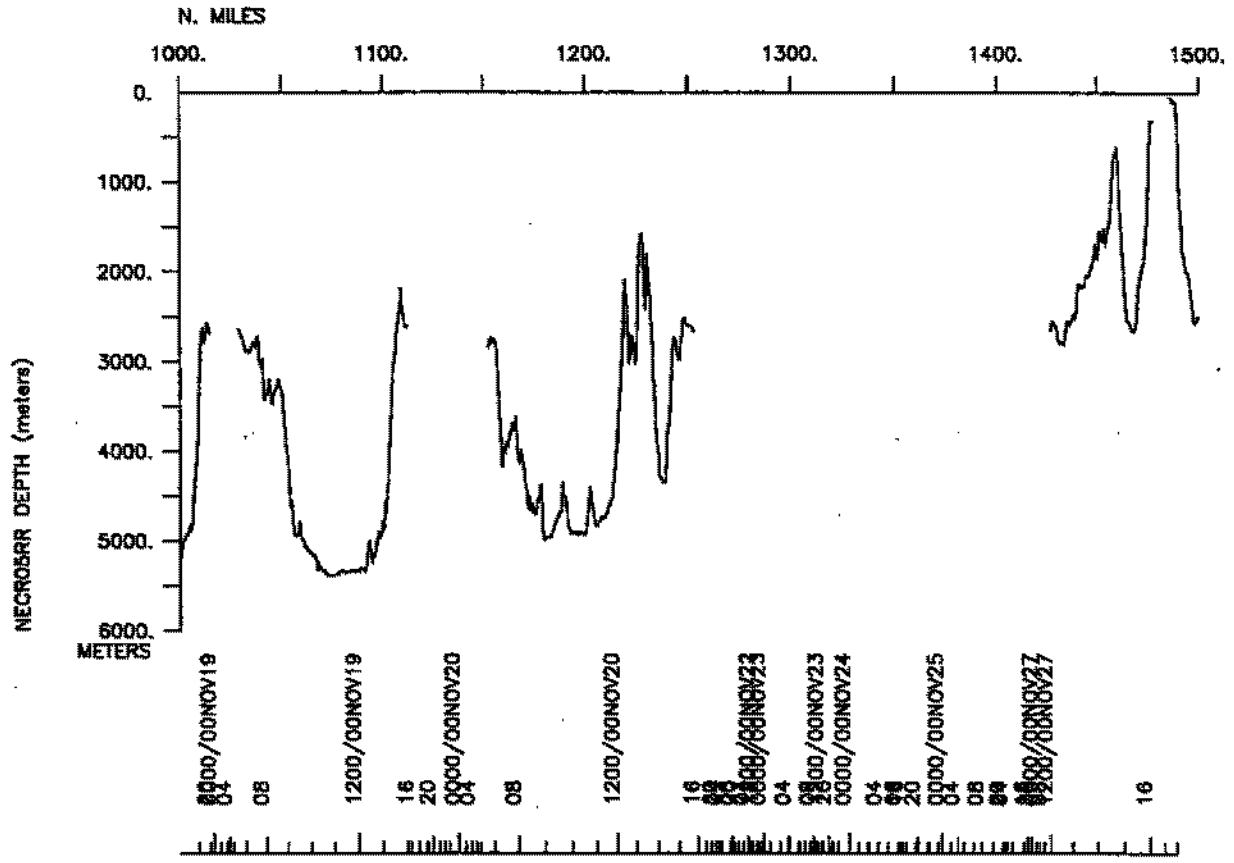
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1200.
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1400.
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NECR05RR DEPTH (meters)
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1000.
2000.
3000.
4000.
5000.
6000.
METERS
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1200/00NOV20
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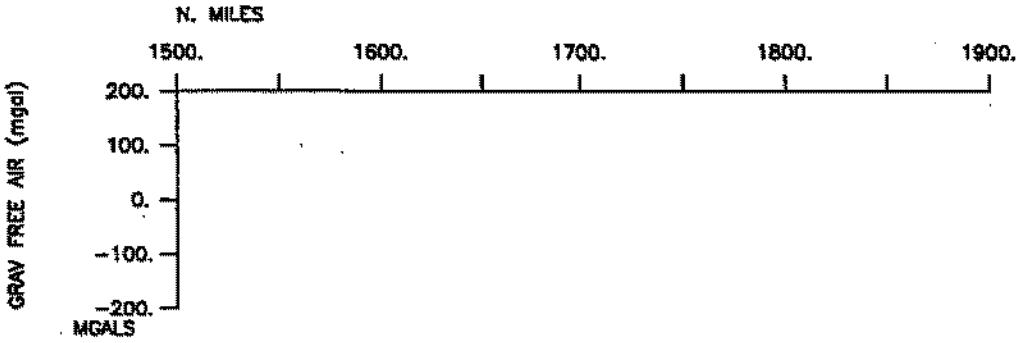
1200/00NOV25
1200/00NOV27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1700.
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GRAV FREE AIR (mgal)
200.
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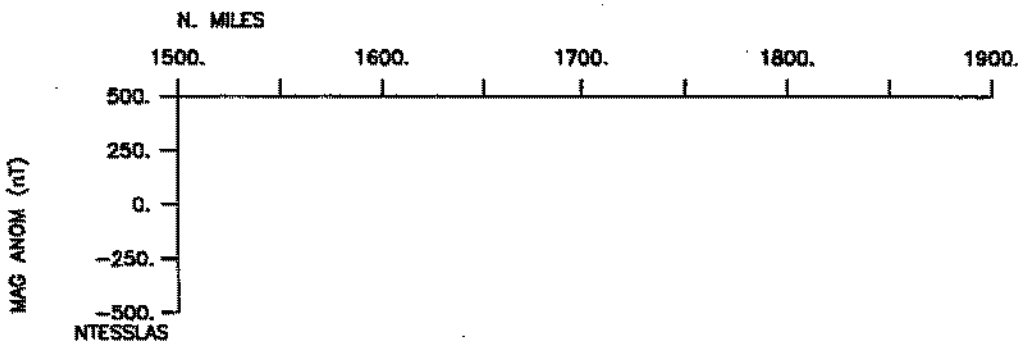
MGALS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MAG ANOM (nT)
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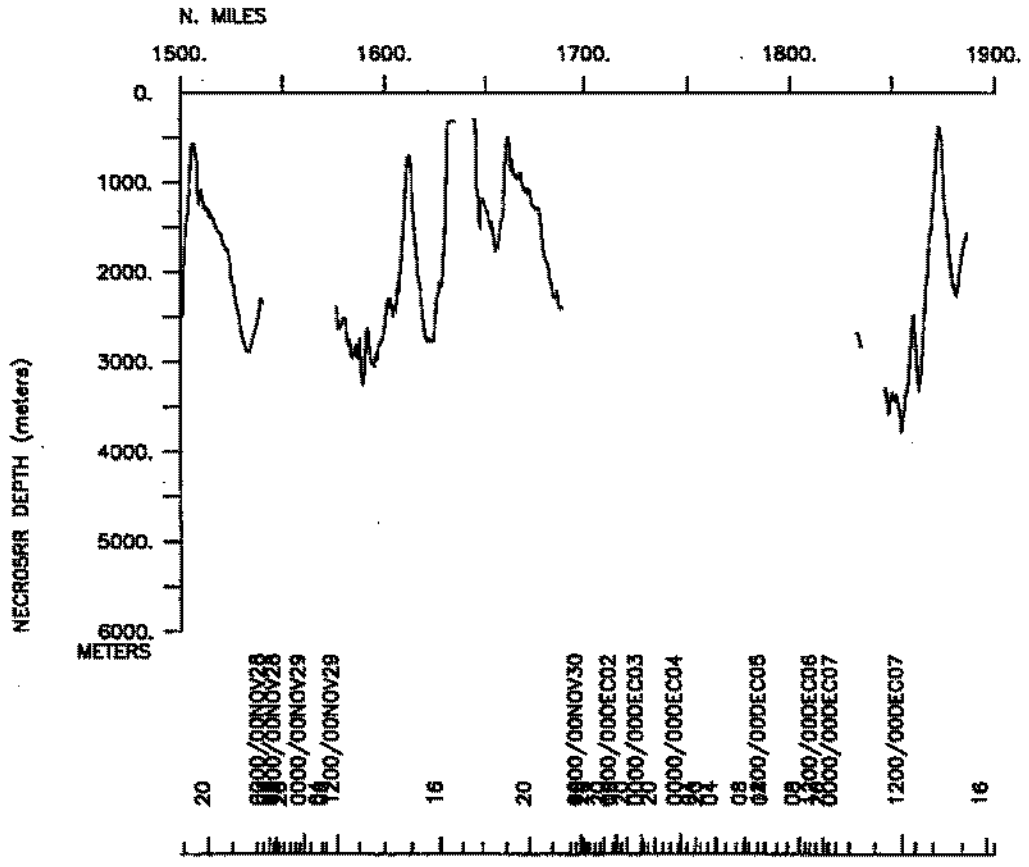
N. MILES
1500.
1600.
1700.
1800.
1900.
NECR05RR DEPTH (meters)
0.
1000.
2000.
3000.
4000.
5000.
6000.
METERS
20
16
20
16

S.I.O. Sample Index

Northeast Circle Route Expedition

Leg 5

(NECR05RR)

R/V Revelle

(Issued March 2001)

PORTS:

Honolulu, Hawaii (12 November 2000)
to
Hilo, Hawaii (7 December 2000)

Chief Scientist: John Hildebrand
Scripps Institution of Oceanography

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 ID# 294

```
#*** PORTS ***

0233 121100  0 LGPT B Honolulu, Hawaii            21-18.00N 157-52.00W f NECR05RR
1700 071200  0 LGPT E Hilo, Hawaii                19-44.00N 155-00.00W f NECR05RR


#*** PERSONNEL ***
#         ********NAME******** ******TITLE******  *****AFFILIATION**** **CRID**
#--- ---- -------------------- ------------------  -------------------- --------

PECS MPL  Hildebrand, John     Chief Scientist     Scripps Institution  NECR05RR
PESP MPL  Chadwell, Dave       Scientist           Scripps Institution  NECR05RR
PESP MPL  Zimmerman, Richard   Engineer           Scripps Institution  NECR05RR
PESP MPL  Jabson, Dave         Engineer            Scripps Institution  NECR05RR
PESP MPL  Friesema, Ed         Engineer            Scripps Institution  NECR05RR
PESP MPL  Price, Dave          Technician          Scripps Institution  NECR05RR
PESP FNC  Ballu, Valerie       Scientist           IGP, Paris           NECR05RR
PESP FNC  Ammann, Jerome       Scientist           IGP, Paris           NECR05RR
PESP JPN  Fujimoto, Hiromi     Scientist           Univ. of Tokyo       NECR05RR
PESP JPN  Osada, Yukihito      Scientist           Univ. of Tokyo       NECR05RR
PERT STS  Pillard, Gene        Resident tech       Scripps Institution  NECR05RR
PERT STS  Rusk, Steve          CTD Technician      Scripps Institution  NECR05RR
PECT STS  Jacobson, Dan        Computer tech       Scripps Institution  NECR05RR

#*** 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.

#GMT DDMMYY    SAMP B SAMPLE                DISP                        p CRUISE
#TIME DATE  TZ CODE E IDENTIFIER            CODE LATITUDE   LONGITUDE   C LEG-SHIP
#---------- -- ---- - ------------------------ ---- --------- ---------- - --------

#*** Underway Data Curator - Geological Data Center ext. 41899 *


#*** Sea Beam Data ***

0929 121100  0 MBSR B v.beam&sidescan       GDC  20-09.96N 156-59.05W g NECR05RR
1516 071200  0 MBSR E v.beam&sidescan       GDC  19-42.30N 154-56.36W g NECR05RR


#*** Integrated Meteorological Data Acquisition ***

0233 121100  0 IMET B weather data          GDC  21-15.90N 157-53.44W g NECR05RR
1700 071200  0 IMET E weather data          GDC  19-43.92N 155-03.26W g NECR05RR
```

#GMT DDMMYY #TIME DATE	TZ	SAMP B CODE E	SAMPLE IDENTIFIER	DISP CODE	LATITUDE	LONGITUDE	p c	CRUISE LEG-SHIP
#*** Conductivity, Temperature, Depth ***								
2058 121100	0	TDCT B	CTD #1 deployed JF	MPL	18-56.01N	155-15.50W	g	NECR05RR
2200 121100	0	TDCT E	CTD #1 on deck. DFH	MPL	18-56.00N	155-15.50W	g	NECR05RR
2354 121100	0	TDCT B	CTD #2 deployed. DFH	MPL	19-08.25N	155-04.50W	g	NECR05RR
0145 131100	0	TDCT E	CTD #2 aboard DH	MPL	19-08.25N	155-04.50W	g	NECR05RR
0241 131100	0	TDCT B	CTD #3 deployed MS	MPL	19-04.02N	155-01.01W	g	NECR05RR
0443 131100	0	TDCT E	CTD #3 aboard MS	MPL	19-04.00N	155-01.00W	g	NECR05RR
0730 2I1100	0	TDCT B	CTD #4 deployed JF	MPL	19-09.20N	155-03.27W	g	NECR05RR
1922 231100	0	TDCT E	CTD #4 on deck JF	MPL	19-09.18N	155-03.39W	g	NECR05RR
0724 241100	0	TDCT B	CTD #5 deployed JF	MPL	19-07.35N	155-02.83W	g	NECR05RR
1724 241100	0	TDCT E	CTD #5 on deck TD	MPL	19-07.23N	155-02.75W	g	NECR05RR
0704 251100	0	TDCT B	CTD #6 deployed JF	MPL	19-09.17N	155-03.38W	g	NECR05RR
1657 251100	0	TDCT E	CTD #6 aboard TD	MPL	19-09.19N	155-03.39W	g	NECR05RR
1532 261100	0	TDCT B	CTD #7 deployed TD	MPL	19-09.19N	155-03.39W	g	NECR05RR
1851 261100	0	TDCT E	CTD #7 on deck JF	MPL	19-09.19N	155-03.39W	g	NECR05RR
0634 271100	0	TDCT B	CTD #8 Deployed JF	MPL	19-09.19N	155-03.39W	g	NECR05RR
1000 271100	0	TDCT E	CTD #8 Ondeck. DFH	MPL	19-09.19N	155-03.39W	g	NECR05RR
0835 281100	0	TDCT B	CTD #9 deployed JF	MPL	19-04.94N	155-00.63W	g	NECR05RR
1653 281100	0	TDCT E	CTD #9 aboard TD	MPL	19-04.94N	155-00.51W	g	NECR05RR
0458 291100	0	TDCT B	CTD #10 deployed MS	MPL	19-09.85N	155-05.23W	g	NECR05RR
0005 301100	0	TDCT E	CTD #10 onboard. DFH	MPL	19-07.27N	155-02.90W	g	NECR05RR
1126 301100	0	TDCT B	CTD deployed DFH	MPL	19-07.27N	155-02.89W	g	NECR05RR
1734 301100	0	TDCT E	CTD aboard TD	MPL	19-07.27N	155-02.89W	g	NECR05RR
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1718 011200	0	TDCT E	CTD aboard TD	MPL	19-06.88N	155-00.85W	g	NECR05RR
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0916 071200	0	TDCT E	CTD on deck JF	MPL	19-11.60N	155-05.62W	g	NECR05RR
#			End Sample Index					NECR05RR