Report and Index of

Underway Marine Geophysical Data

Northeast Circle Route Expedition

Leg 1

(NECR01RR)

R/V Revelle

(Issued November 2000)

Ports:
San Diego, California (14 July 2000)
to
Astoria, Oregon (11 August 2000)

Chief Scientist: Fred Spiess
Scripps Institution of Oceanography

Computer Tech – Ron Moe
Resident Marine Tech – Tammy Baiz

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

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 92093–0223.*

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

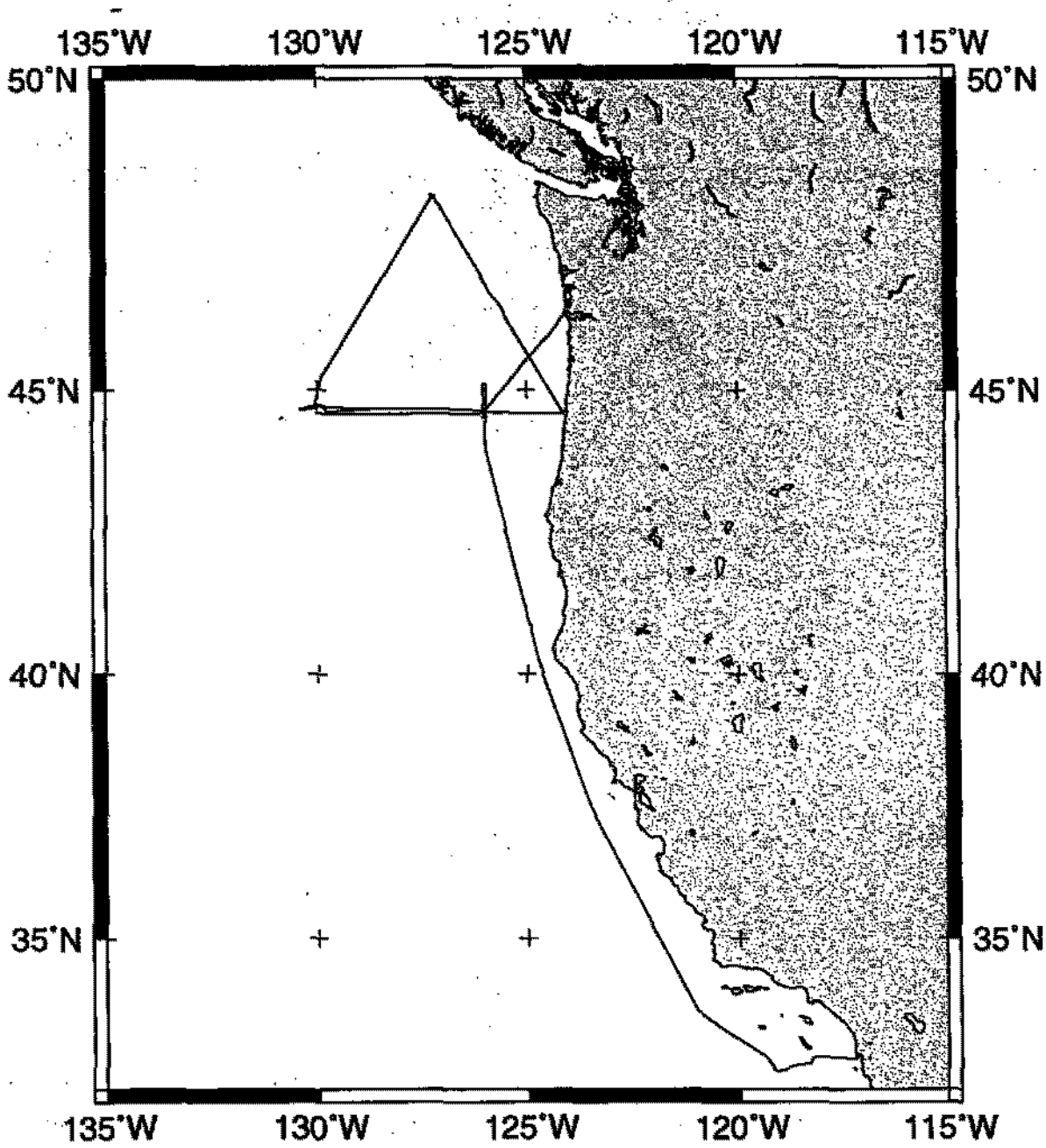
Profiles – depth, magnetic and gravity free air anomaly vs. distance. (Sections of track with seismic reflection data have a wide black line along the botttom of the profile.)

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 1 (NECR01RR)

CHIEF SCIENTIST: Fred Spiess, Scripps Institution of Oceanography

PORTS: San Diego, California - Astoria, Oregon

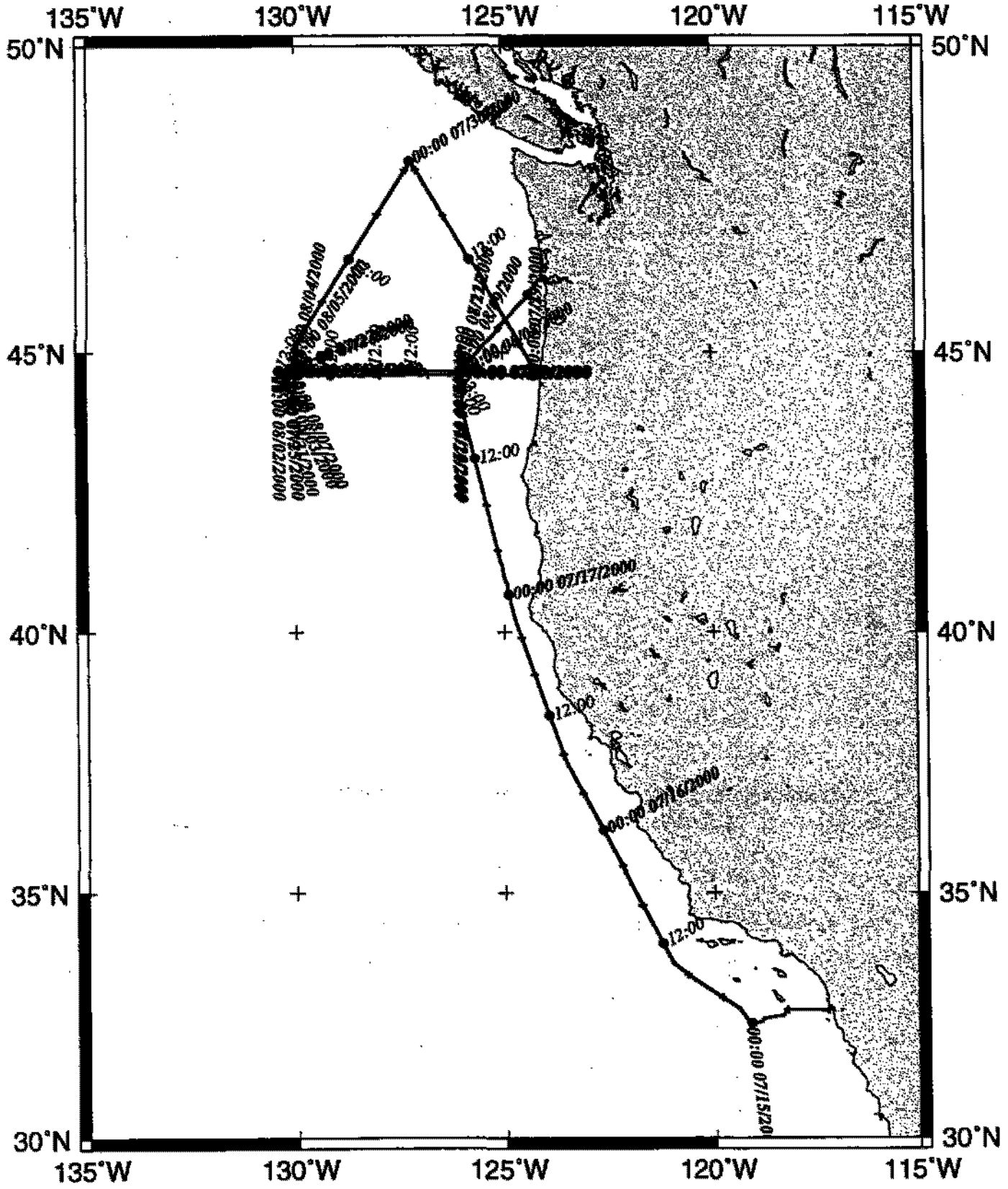
DATES: 14 July - 11 August 2000

SHIP: R/V Revelle

TOTAL MILEAGE OF UNDERWAY DATA COLLECTED

Cruise- 2497 miles	**Magnetics- none collected**
Bathymetry- 1900 miles	**Seismic Reflection- none collected**
Sea Beam- 1900 miles	**Gravity- none collected**

NECR leg 1 Track



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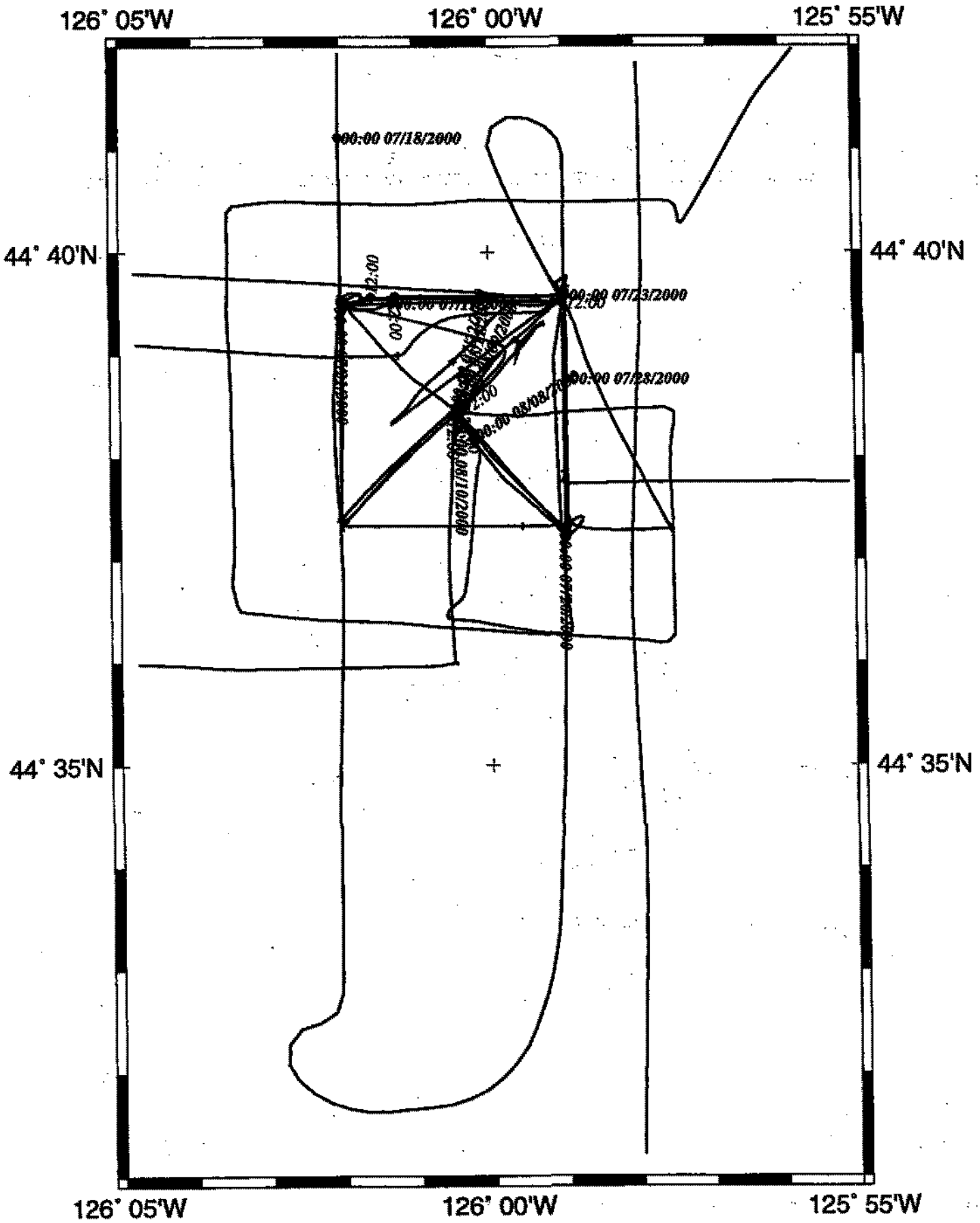
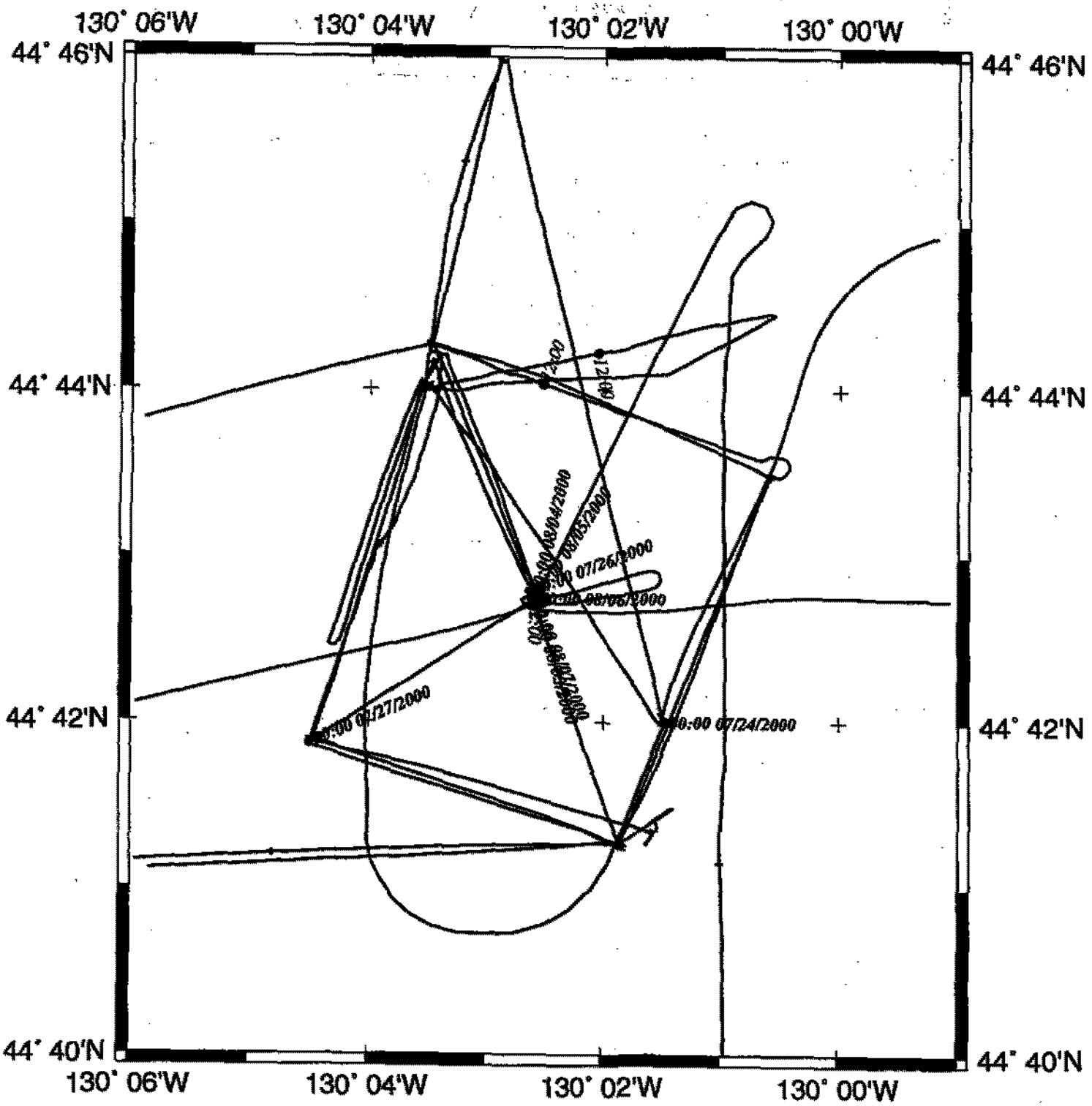
NECR01RR survey 1



NECR01RR survey 2



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300.
400.
500.
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100.
0.
-100.
-200.
MGALS


N. MILES
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100.
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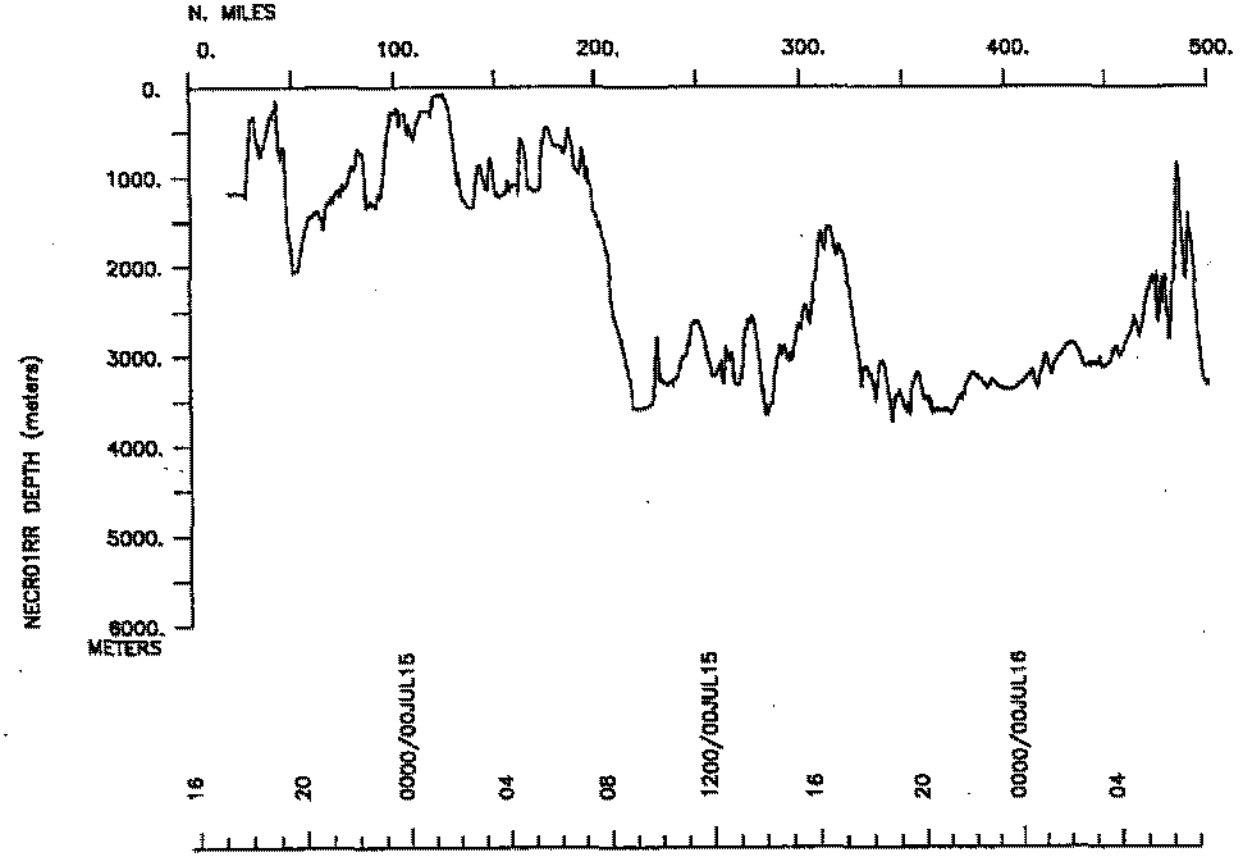
-500.
-750.
NTESSLAS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METERS
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04
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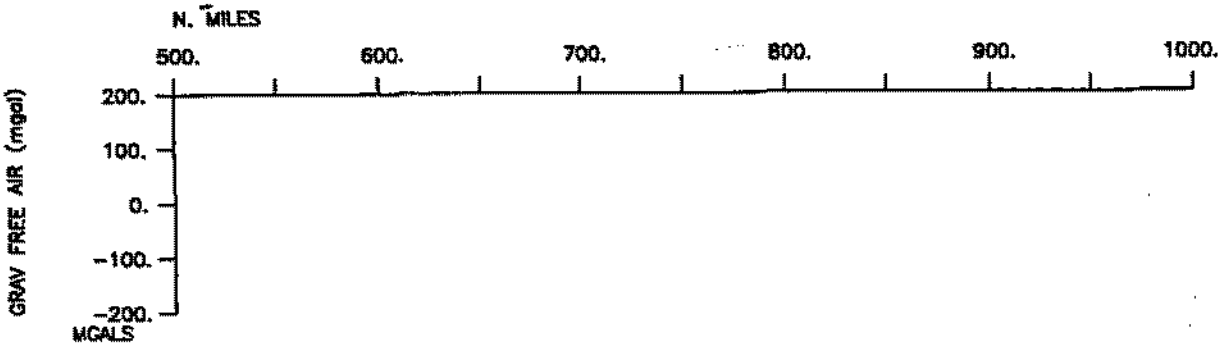
1200/00JUL15
16
20
0000/00JUL16
04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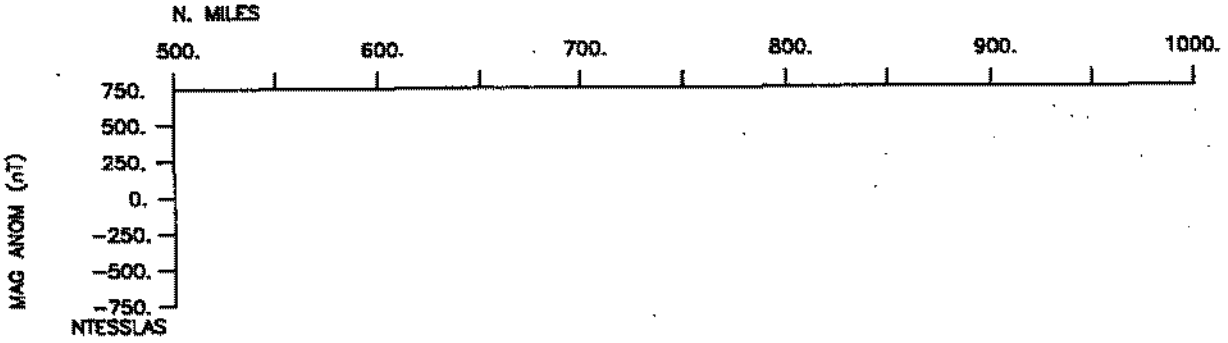
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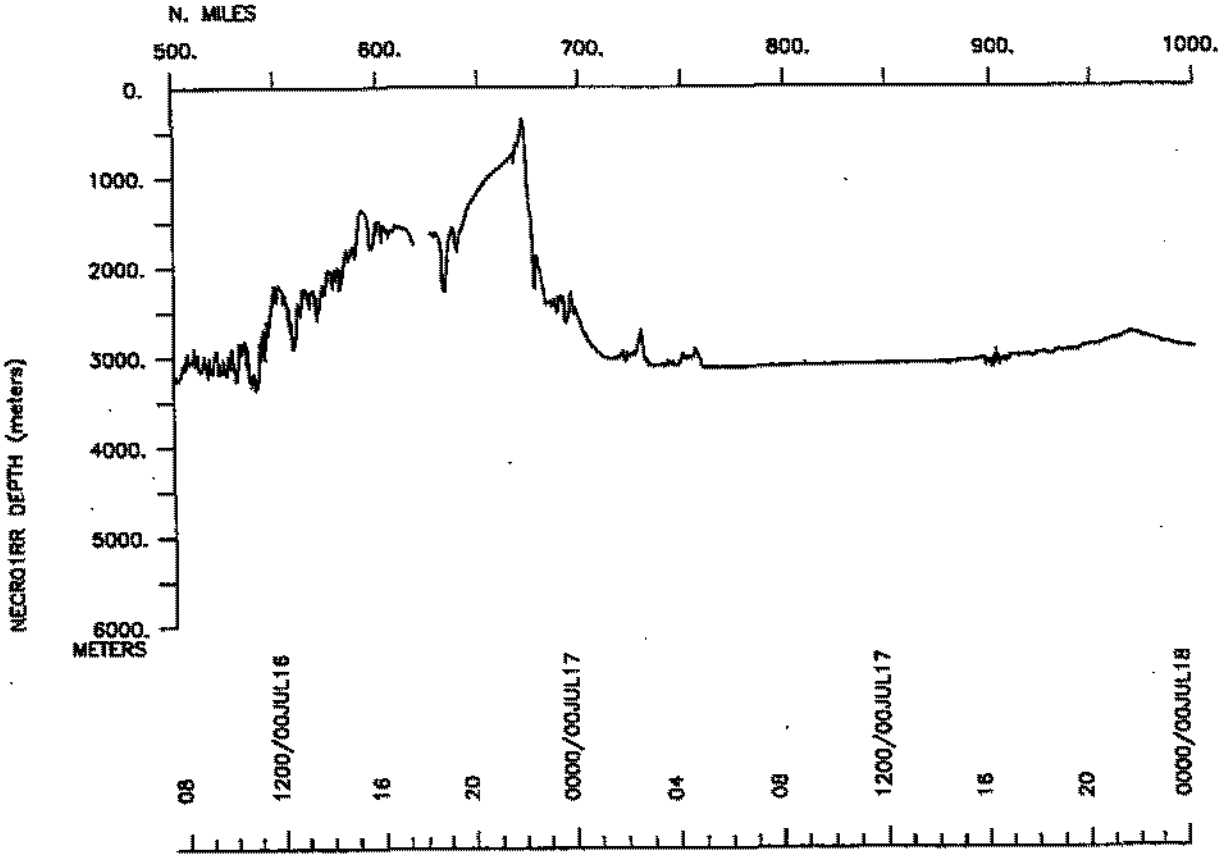
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1200/00JUL17
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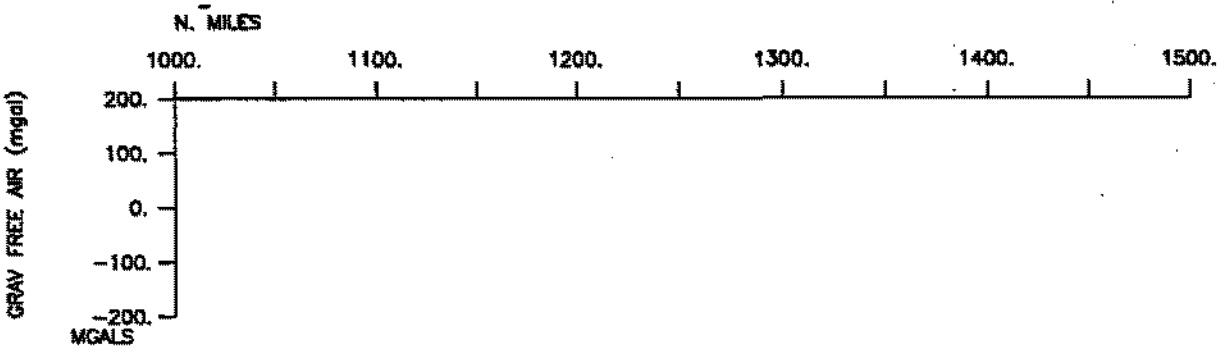
0000/00JUL18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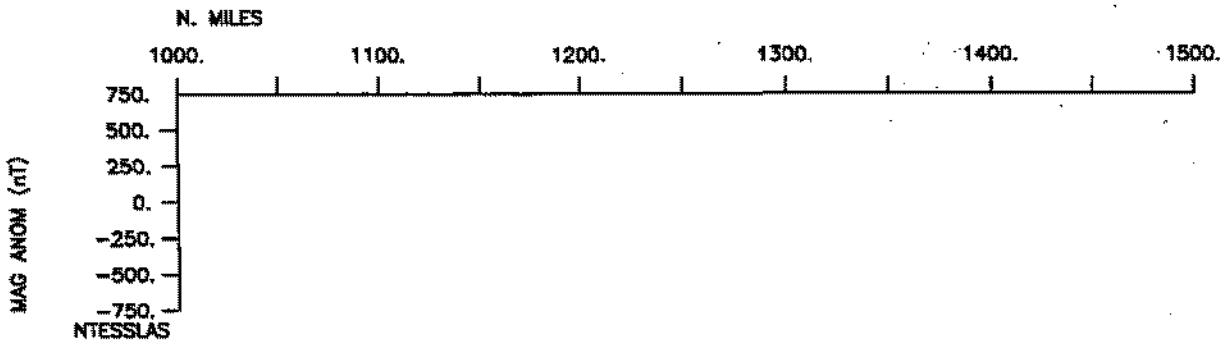
MGALS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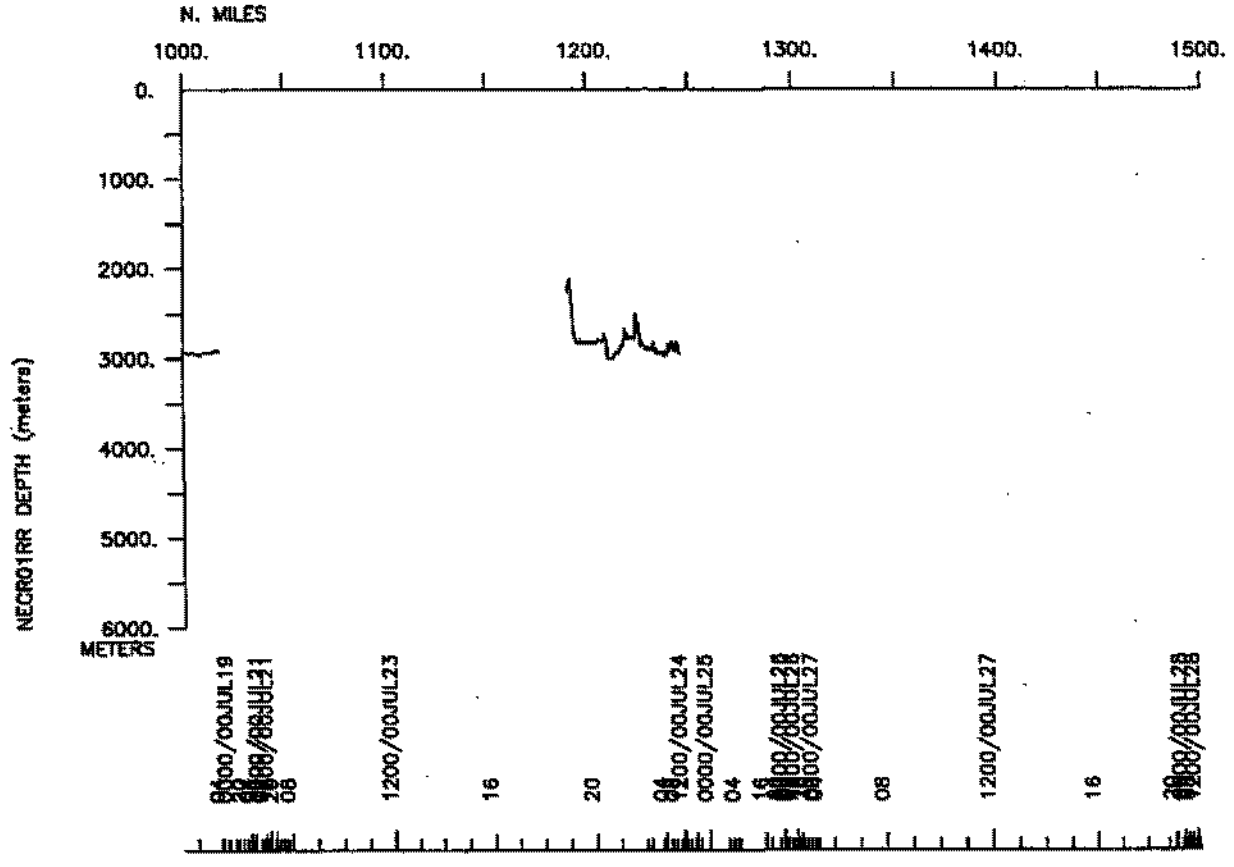
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1300.
1400.
1500.
NECR01RR DEPTH (meters)
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1000.
2000.
3000.
4000.
5000.
6000.
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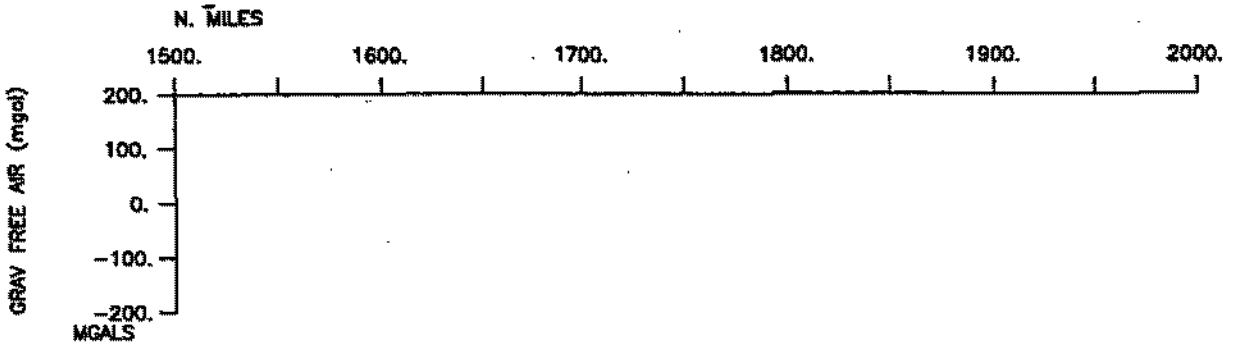
20
0000/00JUL25
04
08
1200/00JUL27
16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1900.
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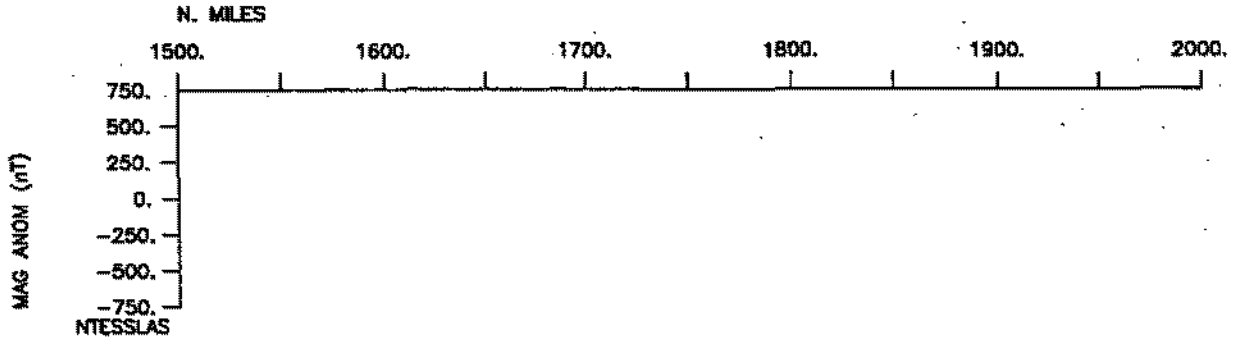
GRAV FREE AIR (mgal)
200.
100.
0.
-100.
-200.
MGALS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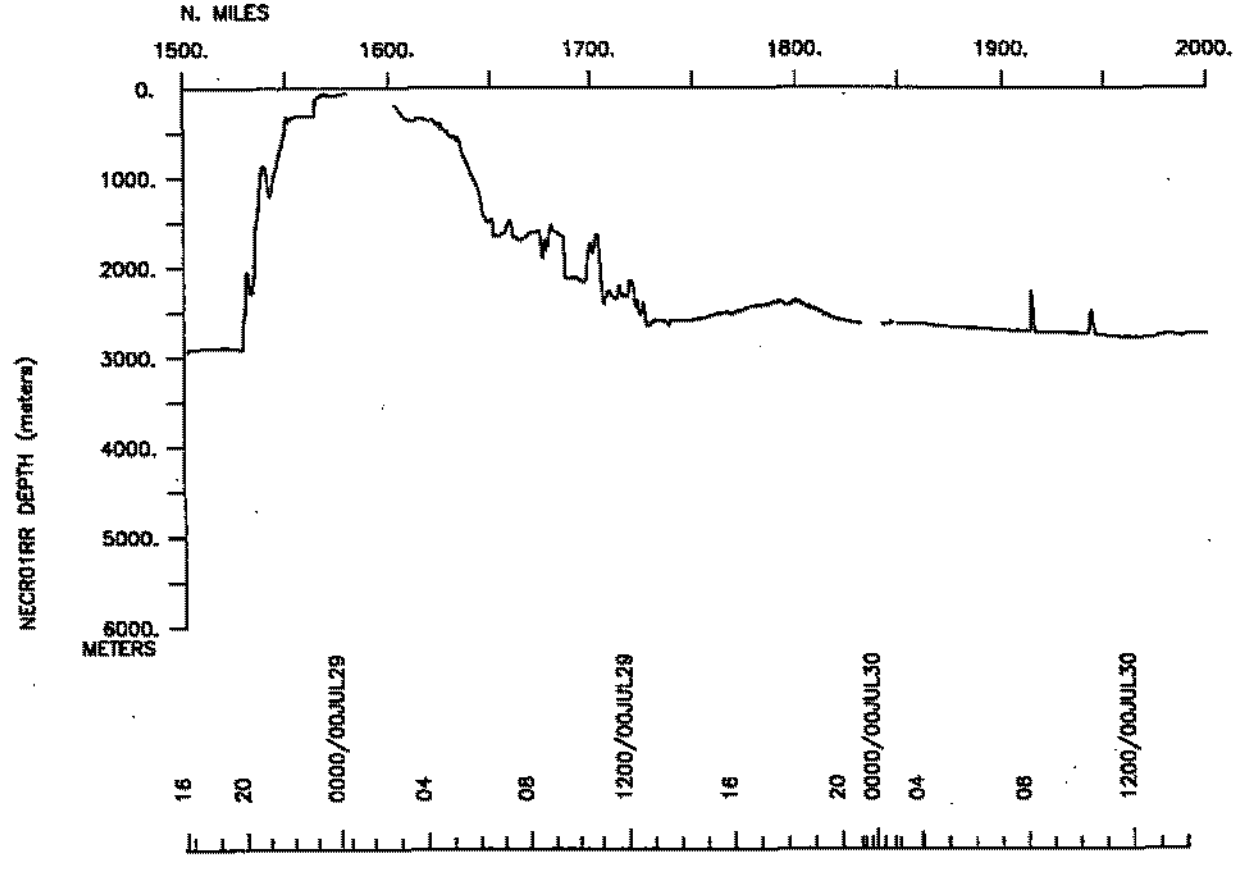
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1600.
1700.
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1000.
2000.
3000.
4000.
5000.
6000.
METERS
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0000/00JUL29
04
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08
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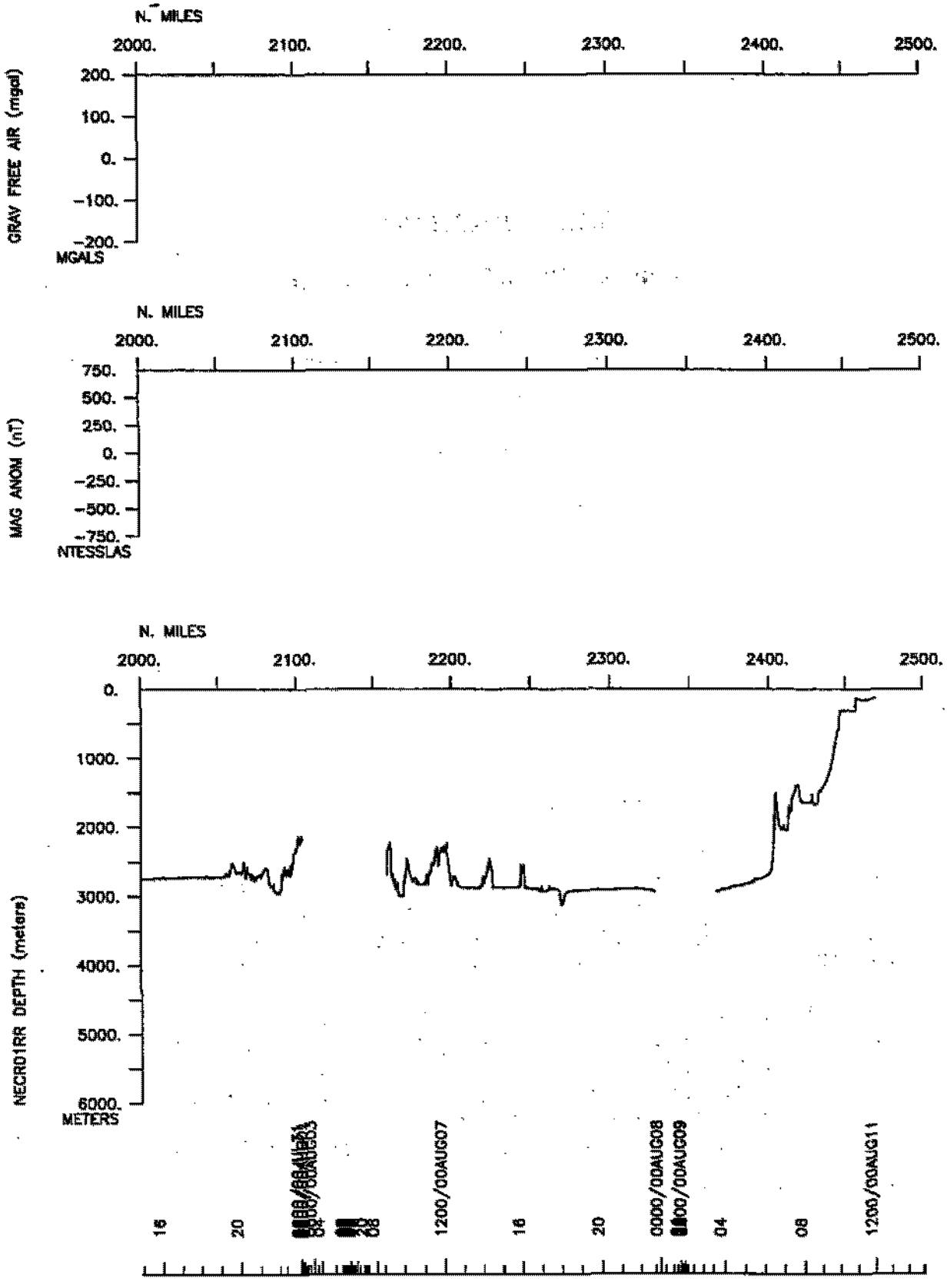
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100.
0.
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-200.
MGALS
N. MILES
MAG ANOM (nT)
750.
500.
250.
0.
-250.
-500.
-750.
NTESSLAS
N. MILES
NECR01RR DEPTH (meters)
0.
1000.
2000.
3000.
4000.
5000.
6000.
METERS
16
20
1200/00AUG07
16
20
0000/00AUG08
04
08
1200/00AUG11

S.I.O. Sample Index

Northeast Circle Route Expedition

Leg 1

(NECR01RR)

R/V Revelle

(Issued November 2000)

PORTS:

San Diego, California (14 July 2000)
to
Astoria, Oregon (11 August 2000)

Chief Scientist: Fred Spiess
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 ***

1500 140700  0 LGPT B San Diego, Calif.          32-42.40N 117-14.17W g NECR01RR
1500 110800  0 LGPT E Astoria, Oregon            46-11.49N 123-52.28W g NECR01RR


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

PECS MPL  Spiess,F.             Chief Scientist    Scripps Institution  NECR01RR
PESP MPL  Hildebrand,J.         Senior scientist   Scripps Institution  NECR01RR
PESP MPL  Chadwell,D.           Senior scientist   Scripps Institution  NECR01RR
PEST SIO  Arrigoni,V.           Student intern     Scripps Institution  NECR01RR
PEST SIO  Bellanca,W.           Student intern     Scripps Institution  NECR01RR
PEST SIO  Defensor,N.           Student intern     Scripps Institution  NECR01RR
PESP MPL  Kabson,D.             Engineer           Scripps Institution  NECR01RR
PEST JPN  Osada,Y.              Graduate student   Tokyo Univ. Japan    NECR01RR
PESP MPL  Price,D.              Electronics tech   Scripps Institution  NECR01RR
PEST SIO  Sweeney,A.            Graduate student   Scripps Institution  NECR01RR
PESP MPL  Zimmerman,R.          Engineer           Scripps Institution  NECR01RR
PECT SCG  Moe,R.                Computer tech      Scripps Institution  NECR01RR
PERT STS  Baiz,T.               Res tech           Scripps Institution  NECR01RR
PESP MPL  Friesma,E.            Engineer           Scripps Institution  NECR01RR
PESP JPN  Miura,S.              Scientist          Tohoku Univ. Japan   NECR01RR
PEVL MPL  Lindquist             Student volunteer  Scripps Institution  NECR01RR
PEVL MPL  Williams,E.           Volunteer          Scripps Institution  NECR01RR
PEVL MPL  Olivares,N.           Volunteer          Scripps Institution  NECR01RR
PESP SIO  Colgan,C.             Photographer       Scripps Institution  NECR01RR


#*** 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 *

#*** Log Books ***

2215 200700  0 LBSC B CTD Log Book          ODF  44-39.51N 126-02.00W g NECR01RR
0045 110800  0 LBSC E CTD Log Book          ODF  44-38.44N 125-58.83W g NECR01RR

2100 190700  0 LBSC B Deep Tow Log Book     MPL  44-37.30N 125-59.00W g NECR01RR
0045 110800  0 LBSC E Deep Tow Log Book     MPL  44-38.44N 125-58.83W g NECR01RR


#*** Sea Beam Records ***

1700 140700  0 MBSR B v.beam&sidescan r-01 GDC  32-38.32N 117-28.10W g NECR01RR
1208 110800  0 MBSR E v.beam&sidescan r-01 GDC  46-00.01N 124-21.36W g NECR01RR


#*** Acoustic Doppler Current Profiler ***

1600 140700  0 ADCP B acoustic doppler      GDC  32-38.22N 117-14.09W g NECR01RR
1500 110800  0 ADCP E current profiler      GDC  46-11.49N 123-52.28W g NECR01RR
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#GMT DDMMYY     SAMP B SAMPLE                DISP                        p CRUISE
#TIME DATE   TZ CODE E IDENTIFIER            CODE LATITUDE  LONGITUDE   c LEG-SHIP
#---------- -- ---------------------------- ---- --------- ----------- - --------

#*** Integrated Meteorological Acquisition System ***

1600 140700  0 IMET B weather data           GDC  32-38.22N 117-14.09W g NECR01RR
1500 110800  0 IMET E weather data           GDC  46-11.49N 123-52.28W g NECR01RR


#*** Current Meter Doppler ***

1948 180700  0 CMXX B Hydrographic doppler SIO  44-39.50N 125-59.00W g NECR01RR
1726 100800  0 CMXX E sonar system           SIO  44-38.42N 126-00.45W g NECR01RR


#*** Tide Gauge ***

1948 180700  0 CMTG B Tide gauge             MPL  44-39.50N 125-59.00W g NECR01RR
0700 230700  0 CMTG E Tide gauge             MPL  44-39.56N 125-59.11W g NECR01RR

1646 250700  0 CMTG B Tide gauge             MPL  44-41.26N 130-01.87W g NECR01RR
2155 260700  0 CMTG E Tide gauge             MPL  44-41.27N 130-01.64W g NECR01RR

2220 300700  0 CMTG B Tide gauge             MPL  44-44.27N 130-03.49W g NECR01RR
1735 060800  0 CMTG E Tide gauge             MPL  44-44.20N 130-03.40W g NECR01RR

2343 070800  0 CMTG B Tide gauge             MPL  44-38.48N 126-00.47W g NECR01RR
1726 100800  0 CMTG E Tide gauge             MPL  44-38.42N 126-00.45W g NECR01RR


#*** Deep Tow Vehicle ***

2120 190700  0 DTXX B Deep Tow Control vcl MPL  44-37.30N 125-59.00W g NECR01RR
0542 200700  0 DTXX E Deep Tow Control vcl MPL  44-38.47N 126-00.42W g NECR01RR

0118 210700  0 DTXX B Deep Tow Control vcl MPL  44-39.51N 126-02.00W g NECR01RR
1543 210700  0 DTXX E Deep Tow Control vcl MPL  44-39.50N 126-02.00W g NECR01RR

2006 210700  0 DTXX B Deep Tow Control vcl MPL  44-38.47N 126-00.46W g NECR01RR
0052 220700  0 DTXX E Deep Tow Control vcl MPL  44-38.48N 126-00.47W g NECR01RR

1348 220700  0 DTXX B Deep Tow Control vcl MPL  44-37.37N 126-01.96W g NECR01RR
1646 220700  0 DTXX E Deep Tow Control vcl MPL  44-37.37N 126-01.96W g NECR01RR

2240 220700  0 DTXX B Deep Tow Control vcl MPL  44-39.50N 125-59.00W g NECR01RR
0409 230700  0 DTXX E Deep Tow Control vcl MPL  44-39.66N 125-58.95W g NECR01RR

1915 250700  0 DTXX B Deep Tow Control vcl MPL  44-44.27N 130-03.49W g NECR01RR
2322 250700  0 DTXX E Deep Tow Control vcl MPL  44-44.27N 130-03.49W g NECR01RR

0229 260700  0 DTXX B Deep Tow Control vcl MPL  44-41.26N 130-01.87W g NECR01RR
2005 260700  0 DTXX E Deep Tow Control vcl MPL  44-41.87N 130-04.50W g NECR01RR

2319 260700  0 DTXX B Deep Tow Control vcl MPL  44-41.87N 130-04.50W g NECR01RR
0512 270700  0 DTXX E Deep Tow Control vcl MPL  44-42.74N 130-02.60W g NECR01RR

2050 270700  0 DTXX B Deep Tow Control vcl MPL  44-39.58N 125-58.95W g NECR01RR
1736 280700  0 DTXX E Deep Tow Control vcl MPL  44-37.78N 125-59.00W g NECR01RR
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#GMT DDMMYY     SAMP B SAMPLE                DISP                          p CRUISE
#TIME DATE   TZ CODE E IDENTIFIER            CODE LATITUDE   LONGITUDE    c LEG-SHIP
#---------- -- ---------------------------- ---- --------- ----------- - --------

#*** Conductivity, Temperature, Depth ***

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0007 210700  0 TDCT E ctd  001              ODF  44-39.51N 126-02.00W g NECR01RR

2226 230700  0 TDCT B ctd  002              ODF  44-42.01N 130-01.48W g NECR01RR
0010 240700  0 TDCT E ctd  003              ODF  44-42.00N 130-01.48W g NECR01RR

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0632 240700  0 TDCT B ctd  004              ODF  44-42.00N 130-01.50W g NECR01RR
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0855 240700  0 TDCT B ctd  005              ODF  44-44.01N 130-03.50W g NECR01RR
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1536 240700  0 TDCT B ctd  006              ODF  44-41.87N 130-04.50W g NECR01RR
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1400 250700  0 TDCT E ctd  007-014          ODF  44-40.45N 130-23.18W g NECR01RR

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0000 030800  0 TDCT E ctd  066              ODF  44-40.30N 130-25.01W g NECR01RR

0017 030800  0 TDCT B ctd  067              ODF  44-41.36N 130-21.81W g NECR01RR
0127 030800  0 TDCT E ctd  067              ODF  44-41.37N 130-21.81W g NECR01RR

0207 030800  0 TDCT B ctd  068              ODF  44-39.16N 130-22.71W g NECR01RR
0334 030800  0 TDCT E ctd  068              ODF  44-39.16N 130-22.72W g NECR01RR

0628 030800  0 TDCT B ctd  069-114          ODF  44-42.74N 130-02.60W g NECR01RR
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0639 070800  0 TDCT E ctd  115-121          ODF  44-42.75N 130-02.59W g NECR01RR

0357 080800  0 TDCT B ctd  122-155          ODF  44-38.47N 126-00.47W g NECR01RR
1604 100800  0 TDCT E ctd  122-155          ODF  44-38.43N 126-00.40W g NECR01RR

1752 100800  0 TDCT B ctd  156-159          ODF  44-38.45N 126-00.38W g NECR01RR
0025 110800  0 TDCT E ctd  156-159          ODF  44-38.45N 126-00.37W g NECR01RR

#*** Expendable Bathythermographs ***

2254 140700  0 BTXP   XBT tf_00083.edf      GDC  32-25.52N 118-51.82W g NECR01RR
2014 150700  0 BTXP   XBT tf_00084.edf      GDC  35-33.42N 122-15.96W g NECR01RR
2039 160700  0 BTXP   XBT tf_00086.edf      GDC  40-01.47N 124-38.71W g NECR01RR
1943 170700  0 BTXP   XBT tf_00087.edf      GDC  44-42.05N 125-57.98W g NECR01RR
1922 230700  0 BTXP   XBT tf_00088.edf      GDC  44-39.33N 129-21.54W g NECR01RR
1918 280700  0 BTXP   XBT tf_00089.edf      GDC  44-37.49N 125-30.86W g NECR01RR
2140 300700  0 BTXP   XBT tf_00090.edf      GDC  44-47.68N 130-02.40W g NECR01RR

#                     End Sample Index                                 NECR01RR
```