

Report and Index of
Underway Marine Geophysical Data
Hahnaro Expedition

Leg 14

(HNRO14RR)

R/V Revelle

(Issued August 2000)

Ports:

Pusan, Korea (16 January 2000)

to

Pusan, Korea (5 February 2000)

Chief Scientist:

Craig Lee, University of Washington
craig@apl.washington.edu

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# 285

**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.

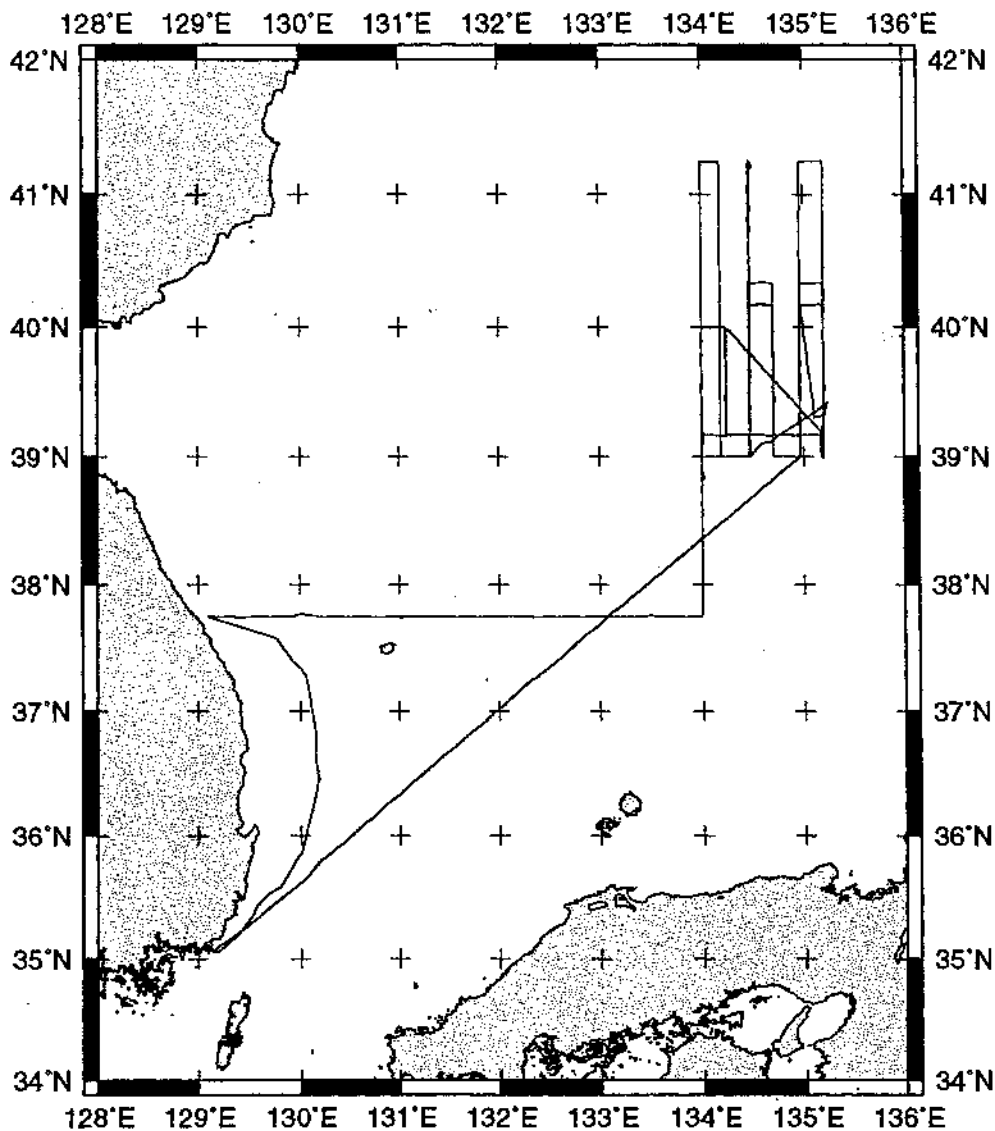
Track Charts– annotated with dates and hour ticks

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



HAHNARO EXPEDITION LEG 14 (HNRO14RR)

CHIEF SCIENTIST: Craig Lee, University of Washington

PORTS: Pusan - Pusan, South Korea

DATES: 16 January - 5 February 2000

SHIP: R/V Revelle

TOTAL MILEAGE OF UNDERWAY DATA COLLECTED

Cruise - 3639 miles

Magnetics - none collected

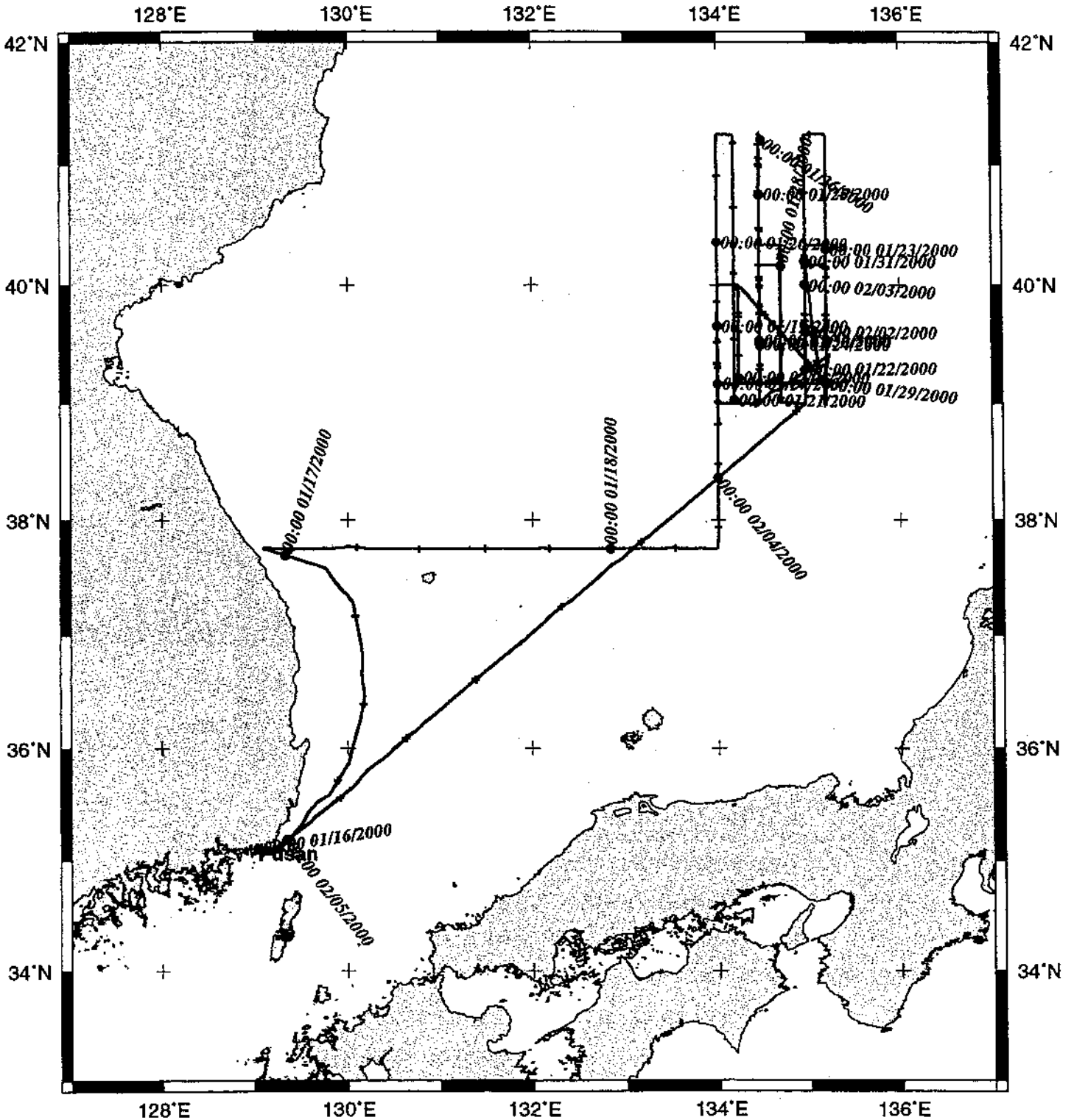
Bathymetry - 490 miles

Seismic Reflection - none collected

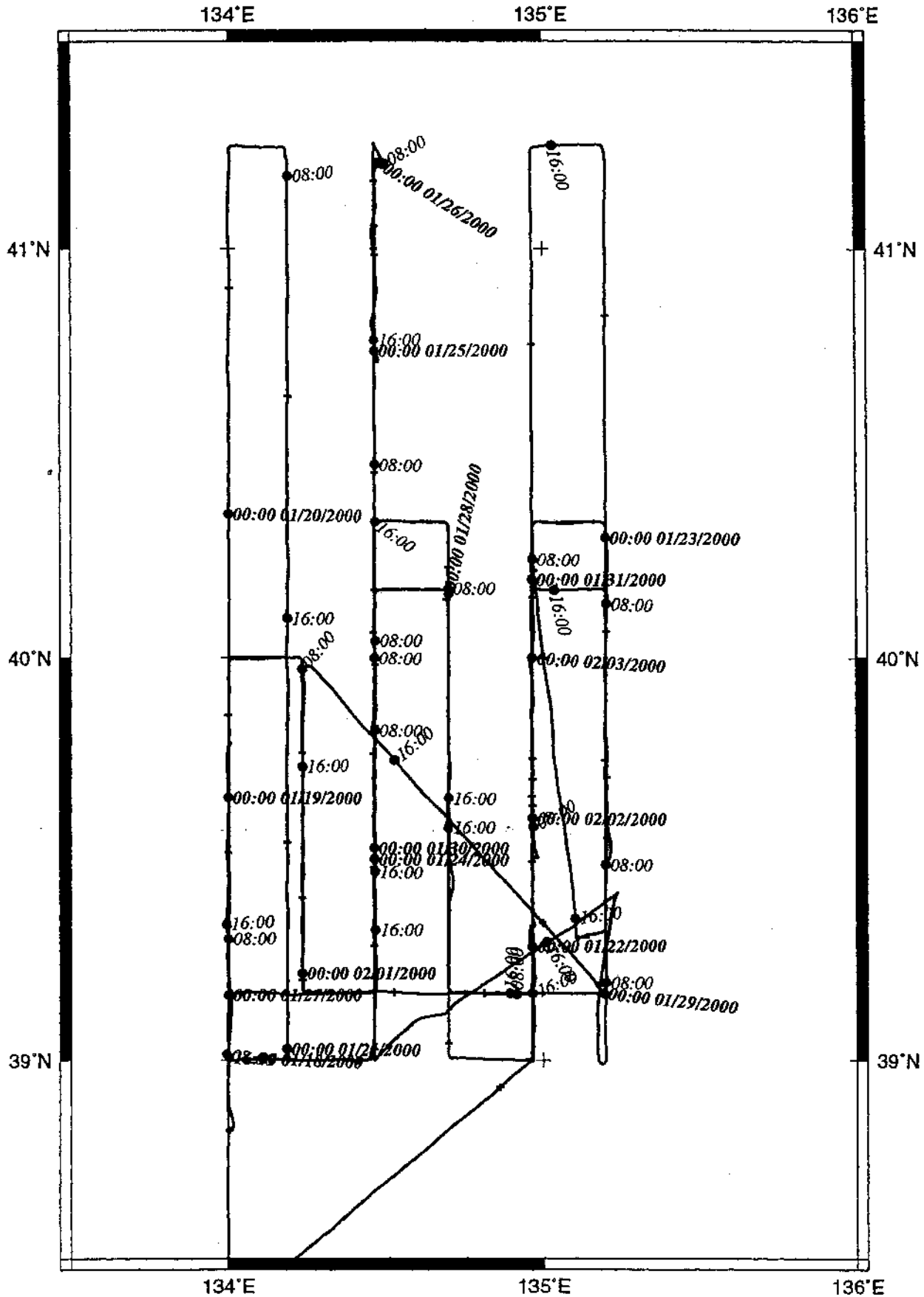
Sea Beam - 490 miles

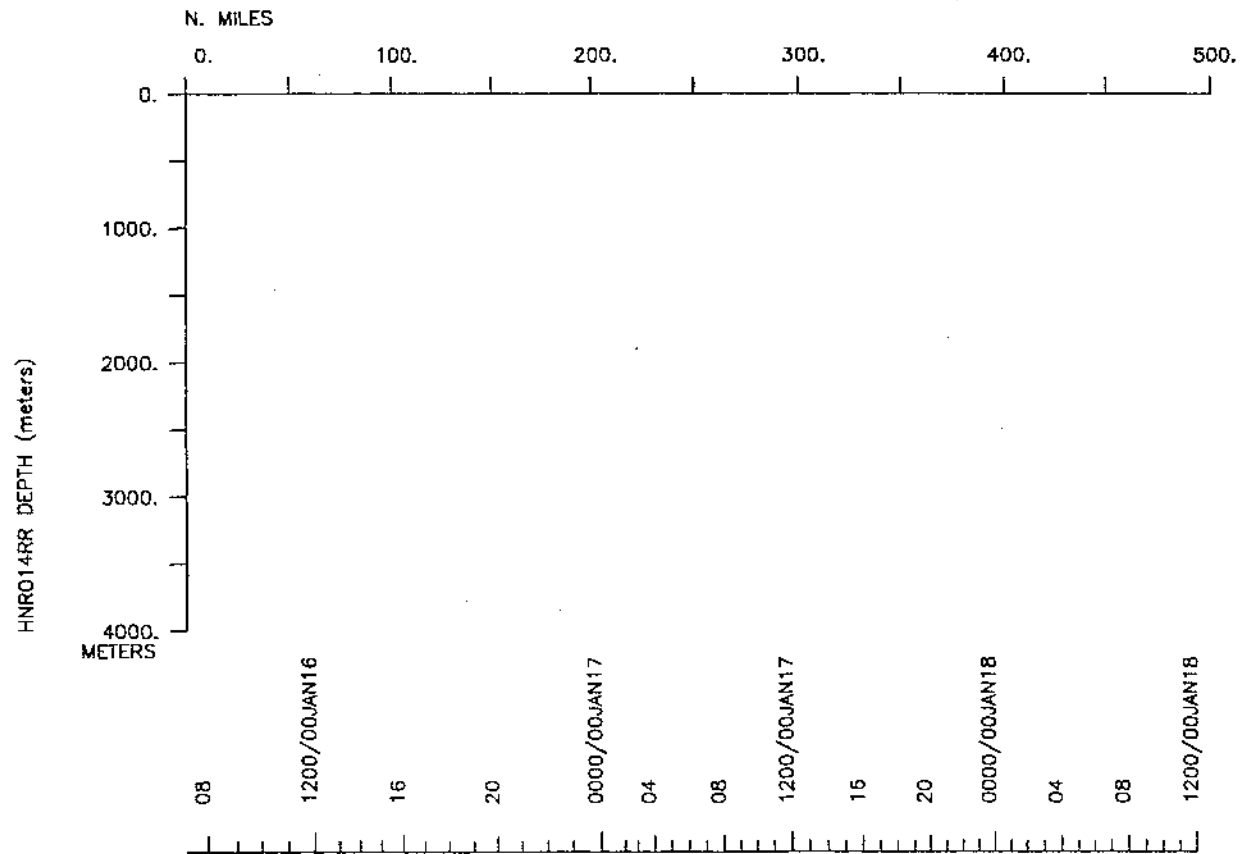
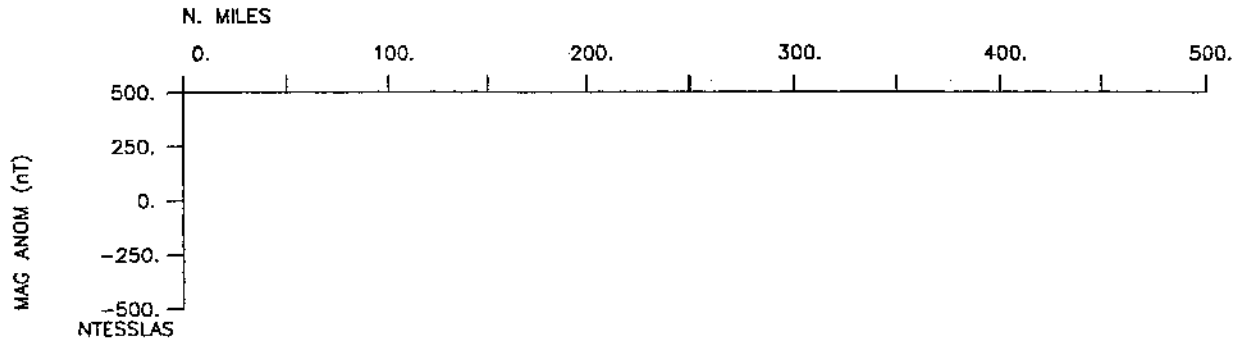
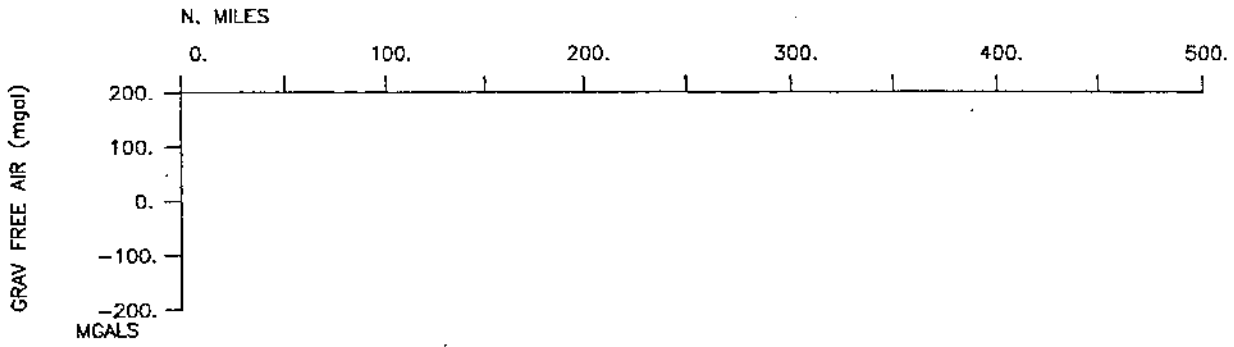
Gravity - none collected

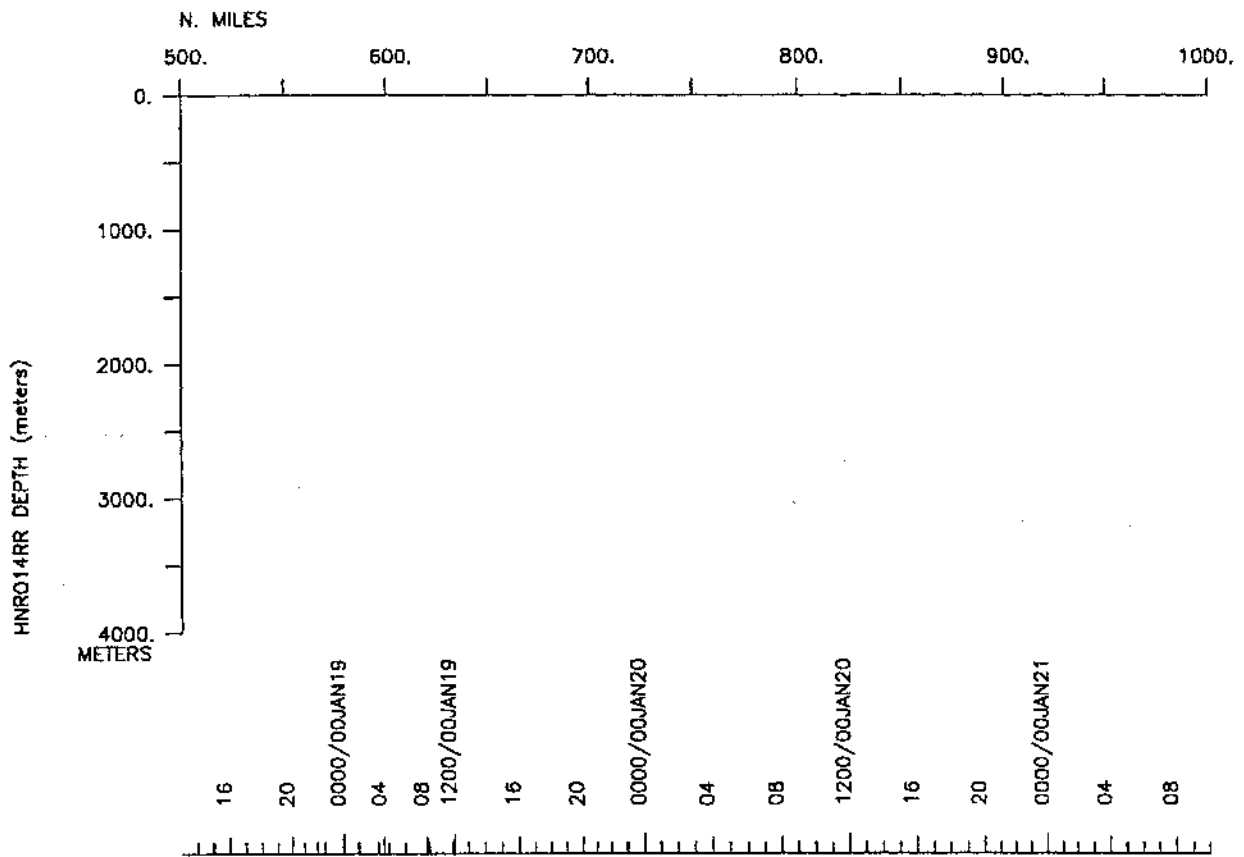
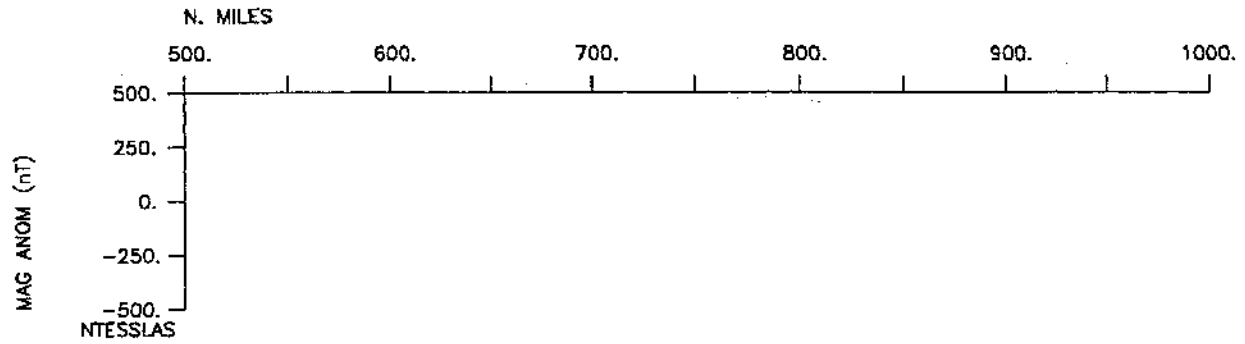
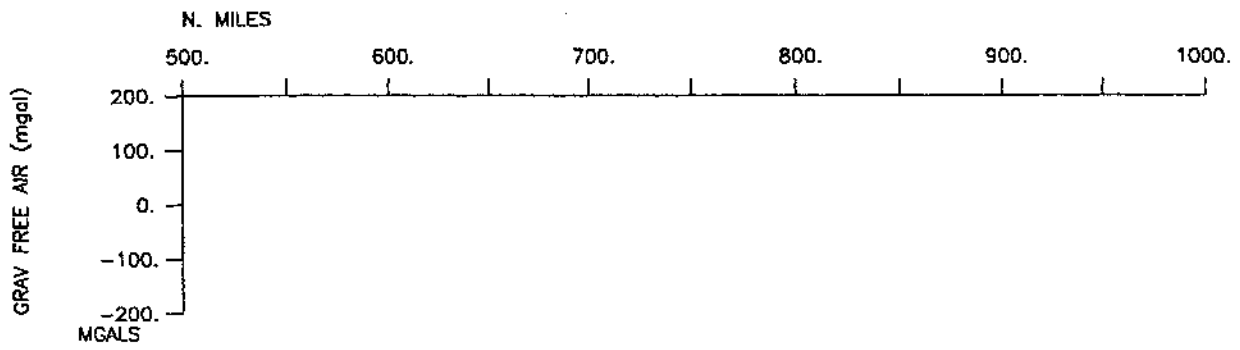
HAHNARO Leg 14 Track

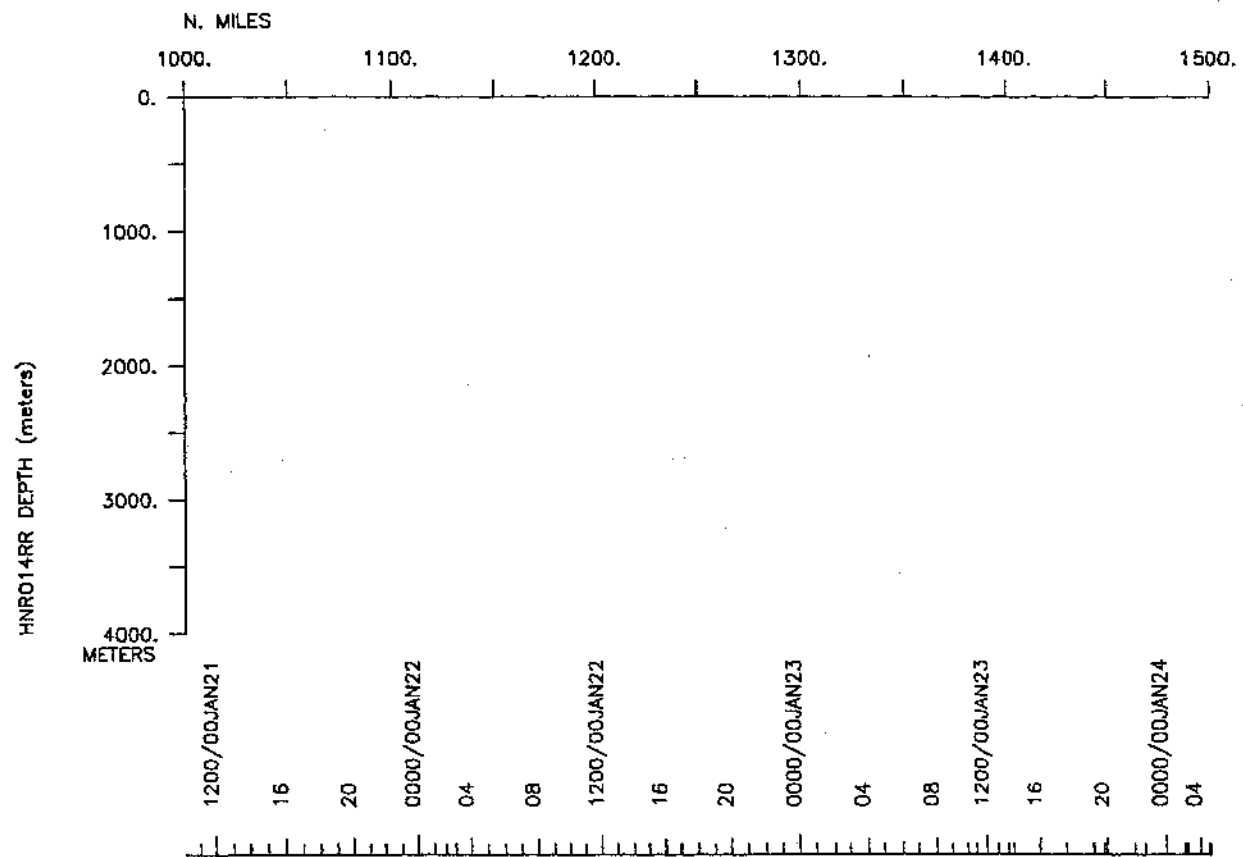
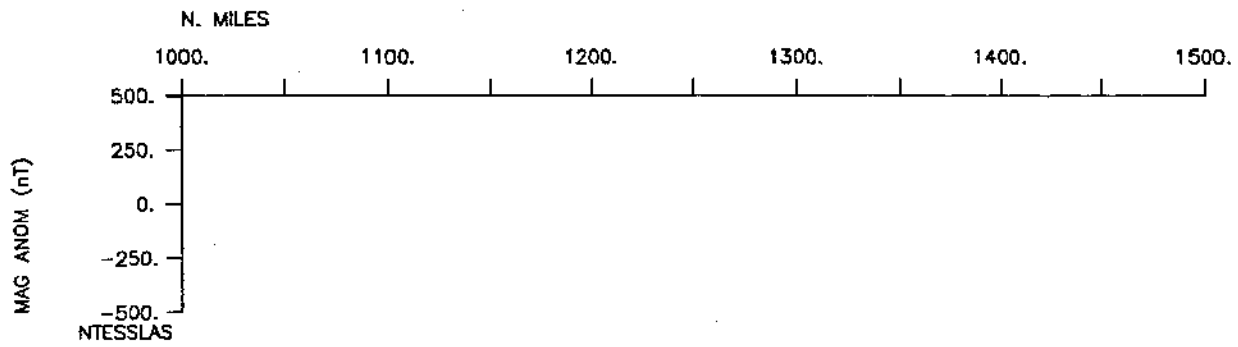
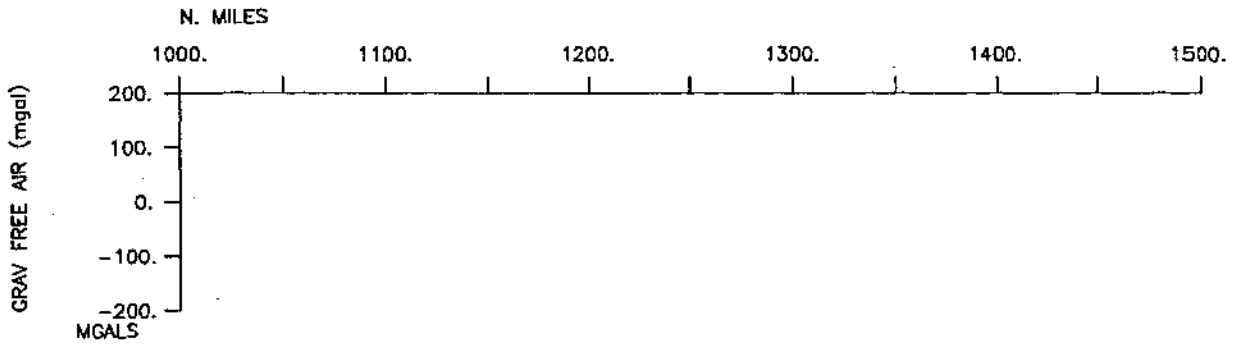


HAHNARO Leg 14 (HNRO14RR) Survey

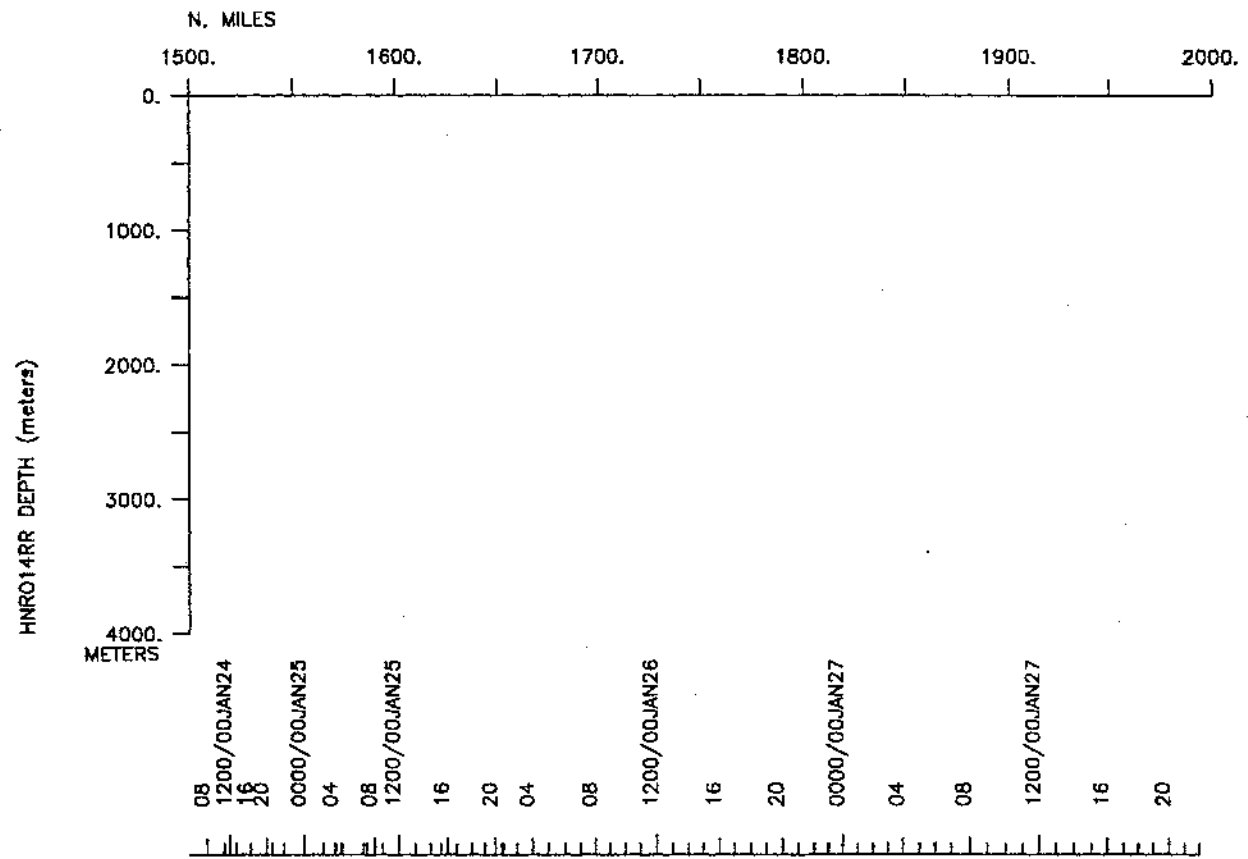
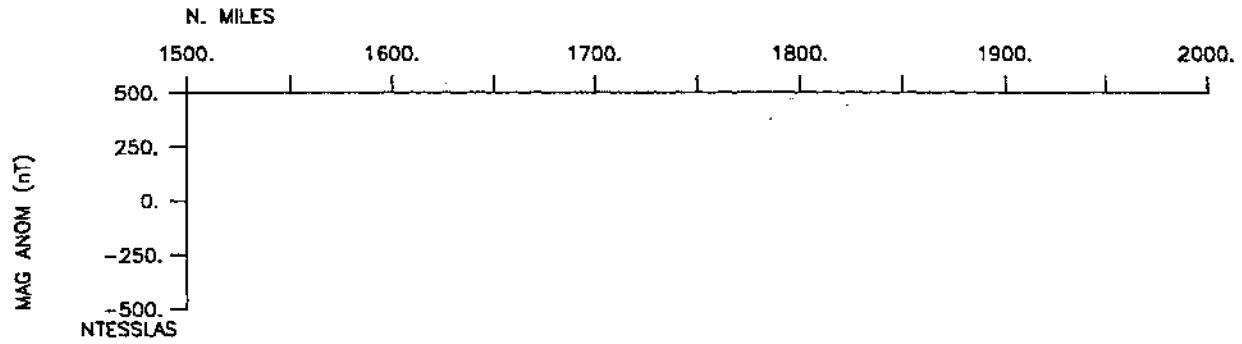
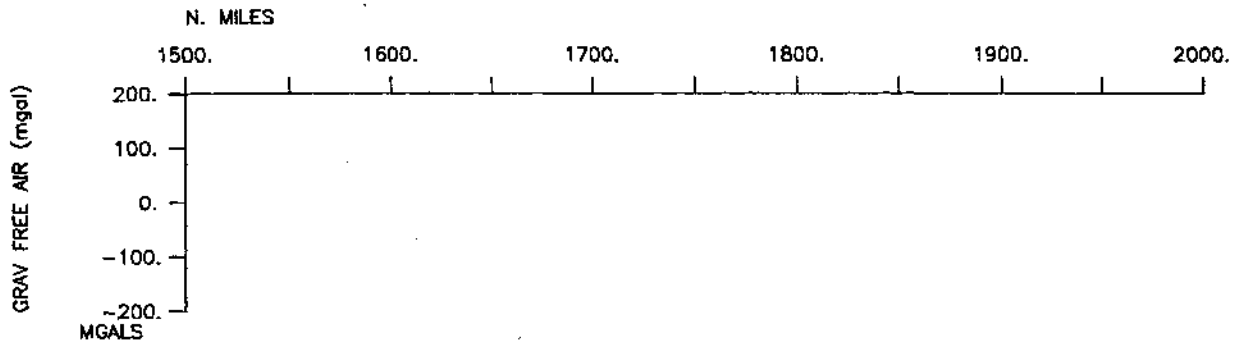


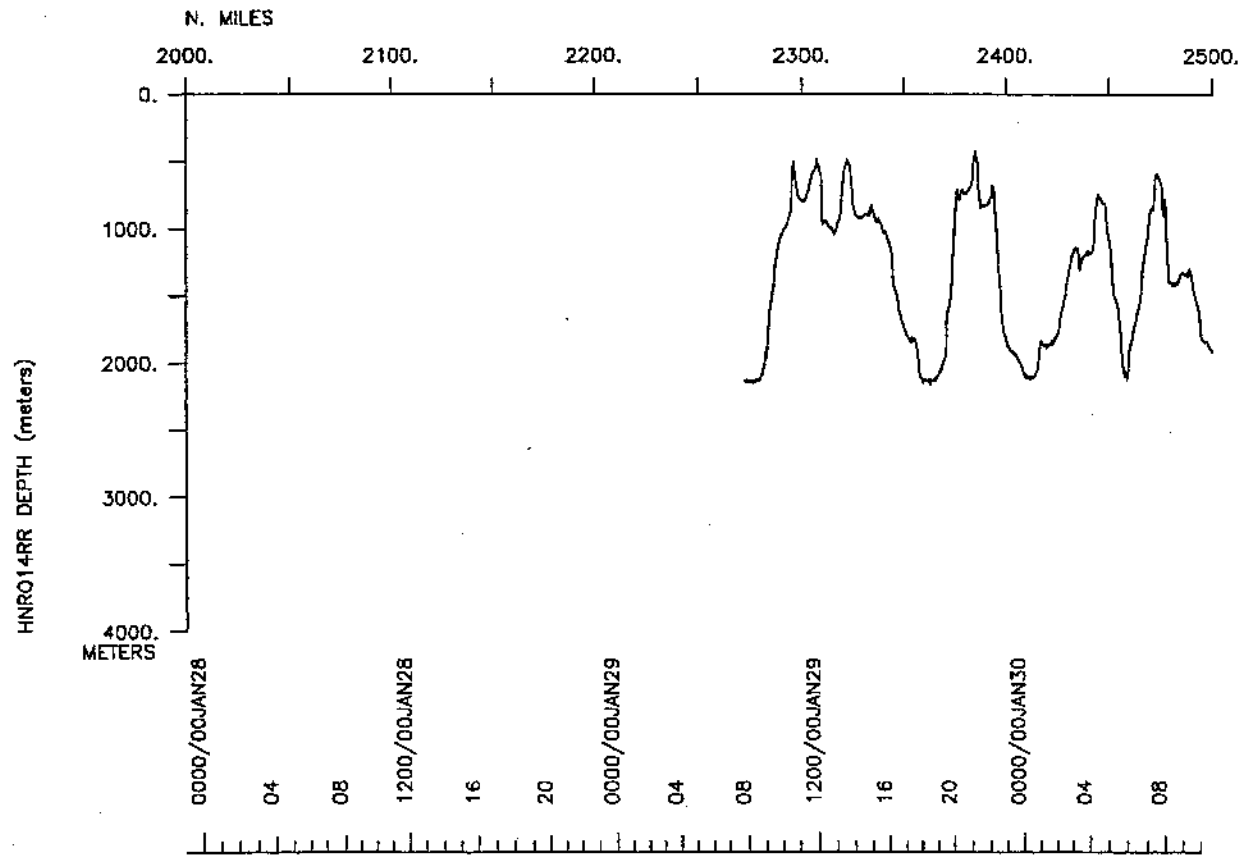
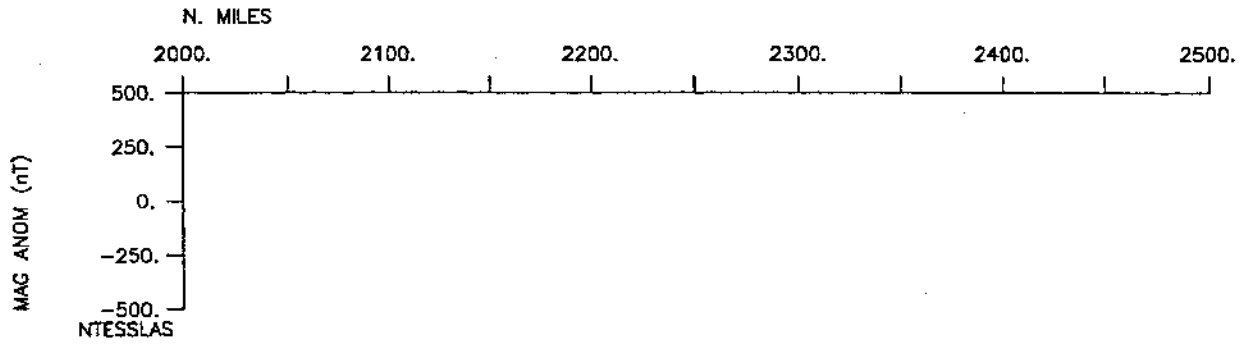
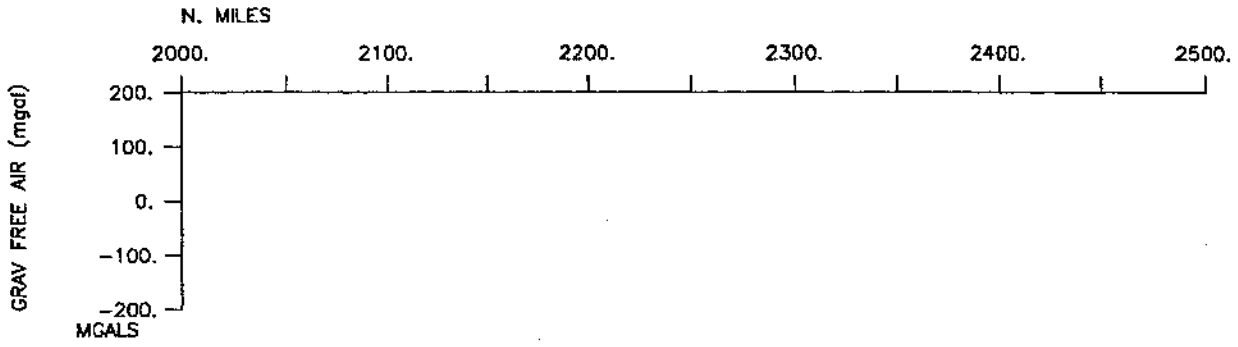


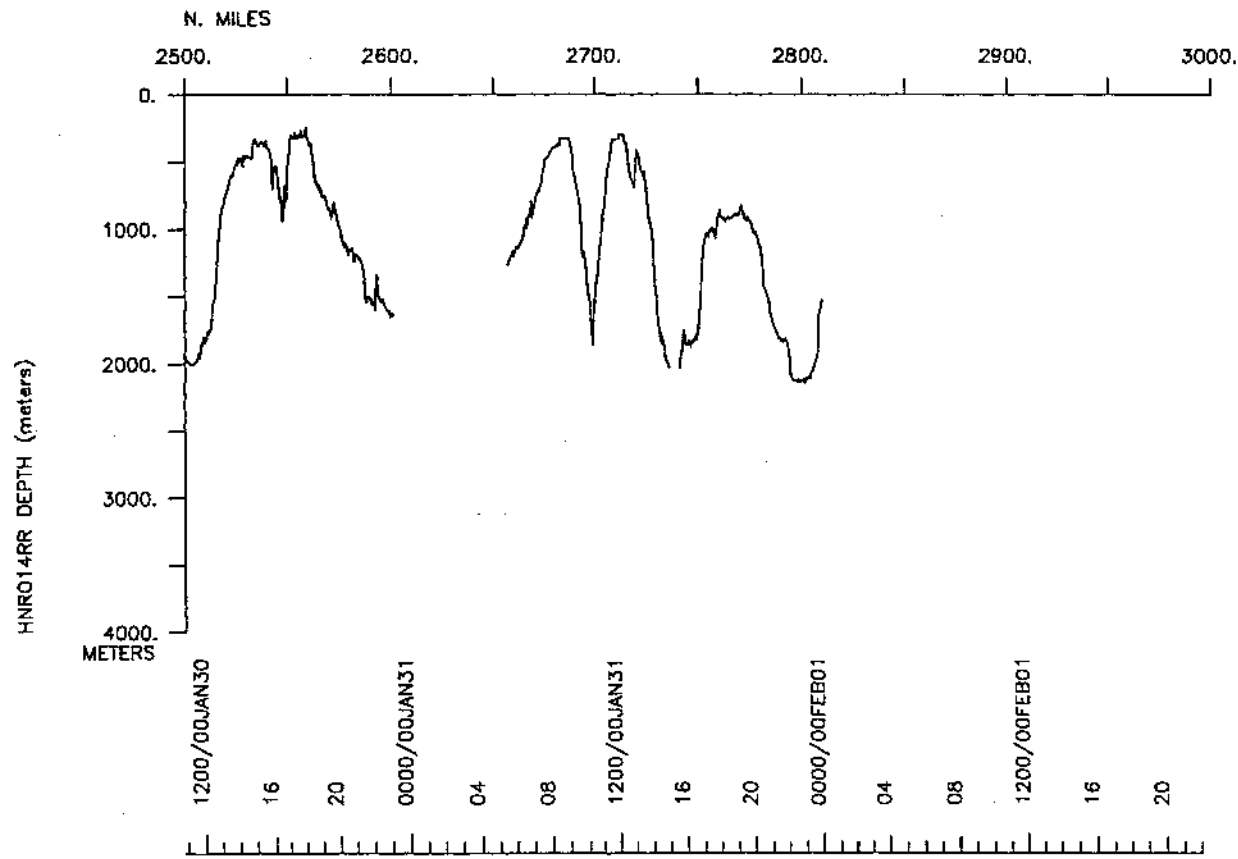
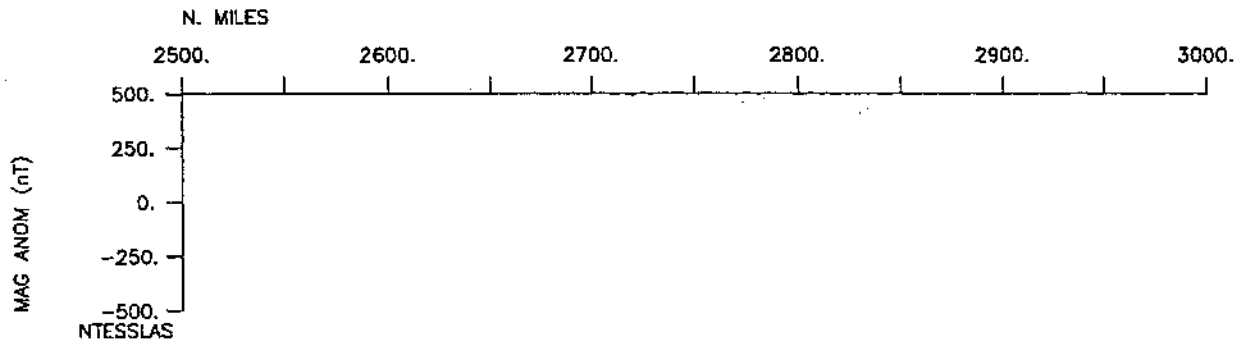
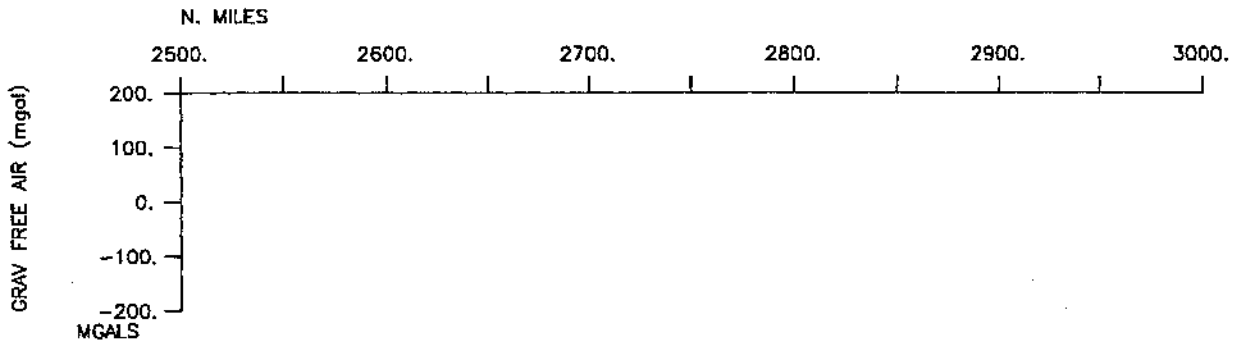


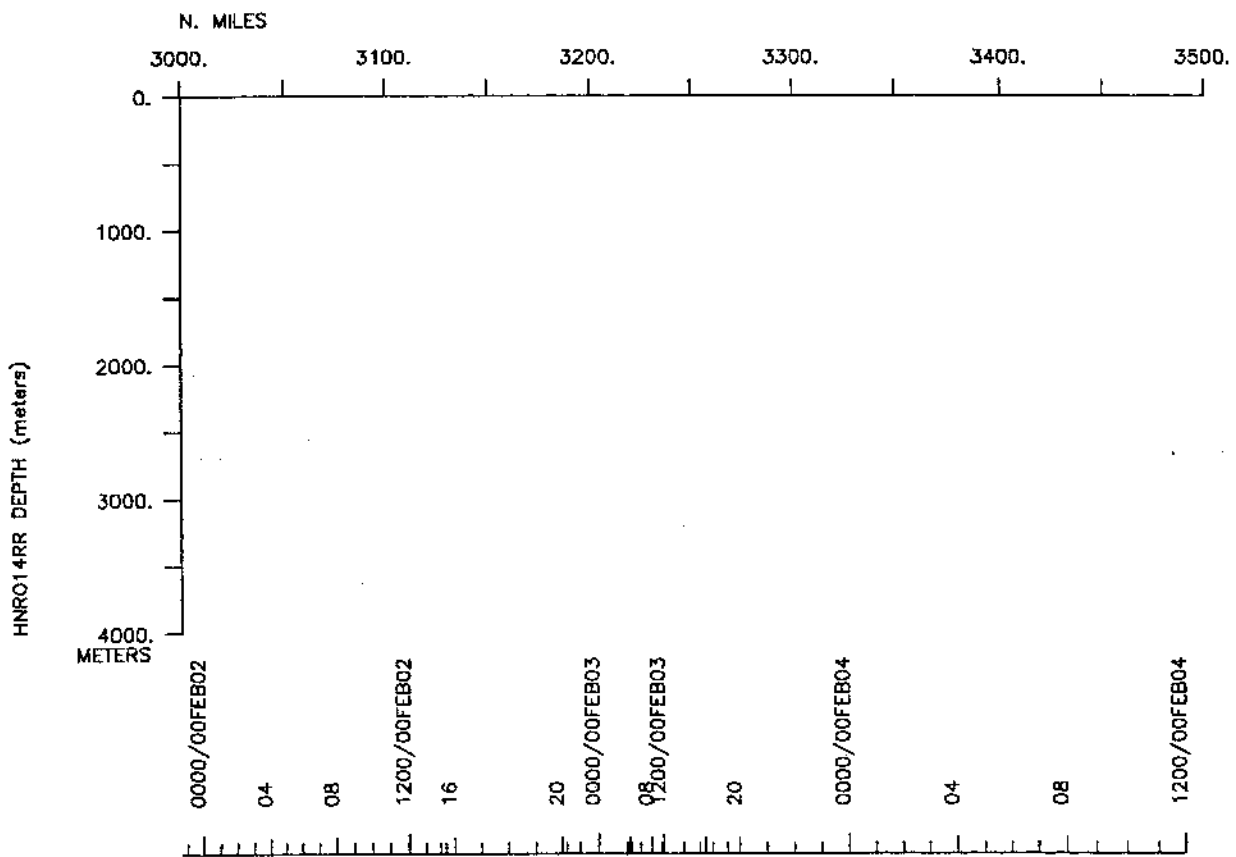
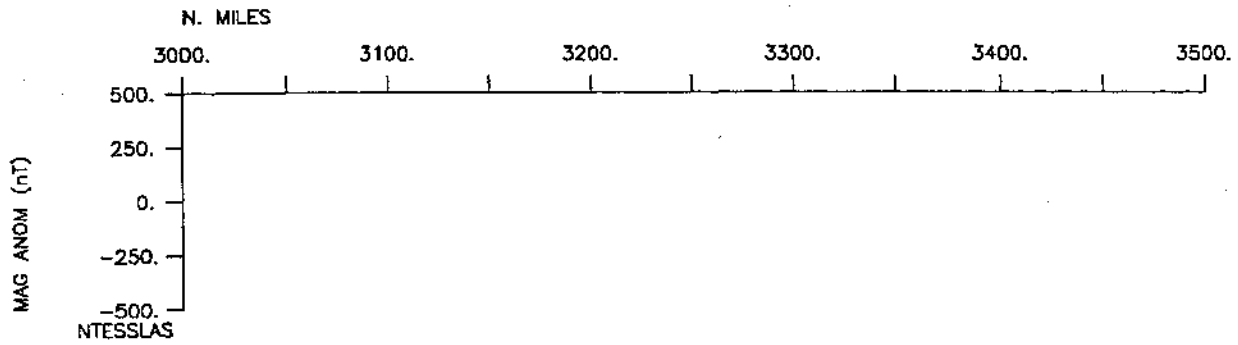
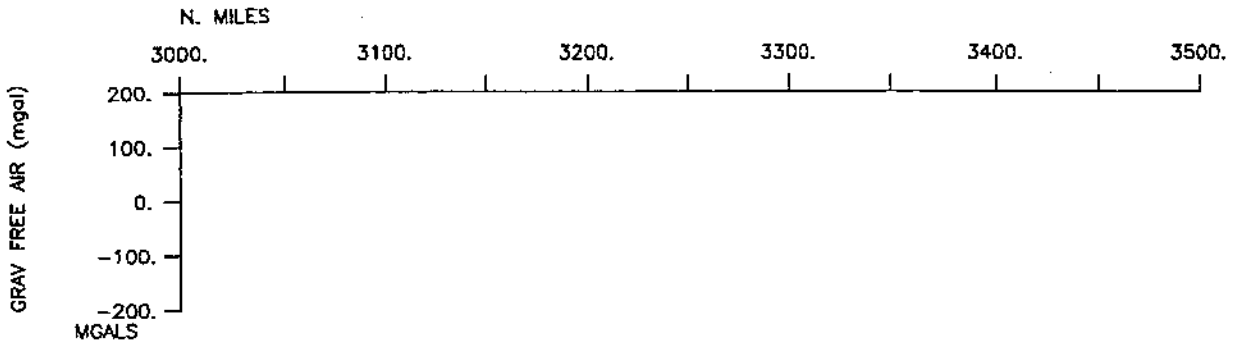


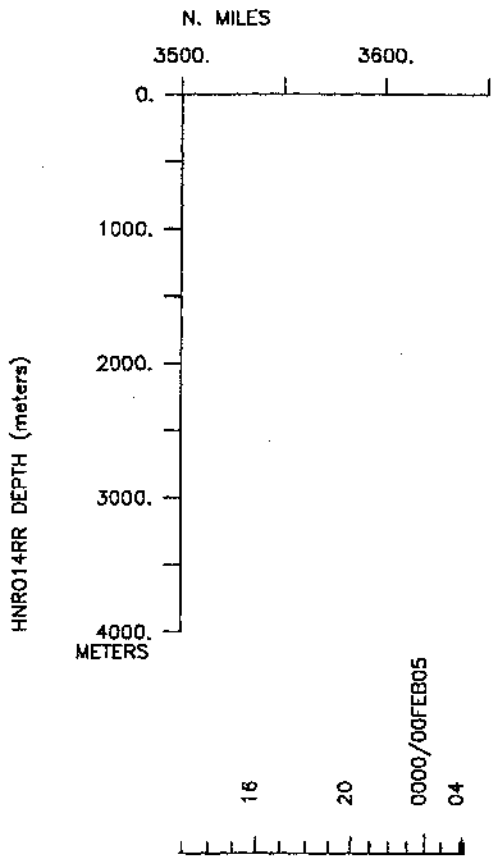
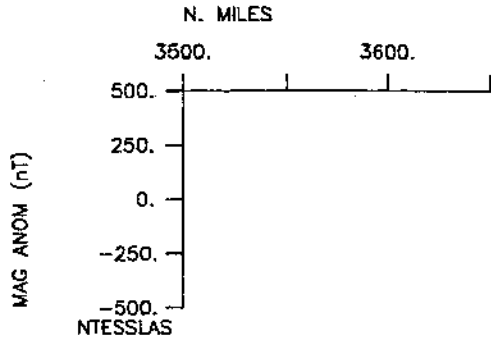
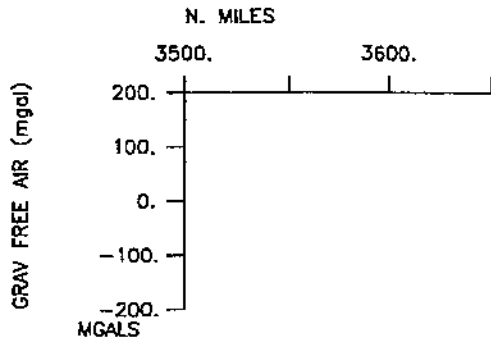
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S.I.O. Sample Index

Hahnaro Expedition

Leg 14

(HNRO14RR)

R/V Revelle

(Issued August 2000)

PORTS:

Pusan, Korea (16 January 2000)
to
Pusan, Korea (5 February 2000)

Chief Scientist:

Craig Lee, University of Washington

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# 285

#*** Ports ***

```

2356 150100 0 LGPT B Pusan, Korea      GDC 35-06.00N 129-03.00E f HNRO14RR
0230 050200 0 LGPT E Pusan, Korea      GDC 35-06.00N 129-03.00E f HNRO14RR

```

#*** Personnel ***

```

# *****NAME***** *****TITLE***** *****AFFILIATION***** **CRID**
#-----
PECS UWA Lee,C.                Chief Scientist      Univ. of Washington  HNRO14RR
PESP SIX Bartloi,A.            Contractor           Proteco-Italy        HNRO14RR
PESP SIX Suk,M-S.              Sr. Scientist       Korean Oc Res Dev In HNRO14RR
PESP NRL Arnone,R.            Scientist           Naval Research Lab   HNRO14RR
PESP WHOI Bahr,F.              Research Asso.      Woods Hole O. I.    HNRO14RR
PESP SIX Yang,S.               Scientist           Kwangju Univ. Korea HNRO14RR
PESP SIX Murray,S.            Sr. Scientist       Office of Naval Res  HNRO14RR
PESP SIX La Violette,P.        Scientist           Heron Laboratories   HNRO14RR
PESP MPL Alden,D.              Scientist           Scripps Institution  HNRO14RR
PESP WHOI Fucile,P.            Research Asso.      Woods Hole O. I.    HNRO14RR
PESP WHOI Gordon,A.           Engineering Asst.   Woods Hole O. I.    HNRO14RR
PESP NRL Chan,C.              Scientist           Naval Research Lab   HNRO14RR
PEST SIX Ar,D.S.               Student             Kwangju Univ. Korea HNRO14RR
PESP MPL Pinkle,R.            Scientist           Scripps Institution  HNRO14RR
PESP MPL Goldin,M.            Dev. Engineer       Scripps Institution  HNRO14RR
PESP SIX Jones, B.            Scientist           U. of Southern Calif HNRO14RR
PEST SIX Bricker,J.           Grad Student        Stanford              HNRO14RR
PEST SIX Kim, J.K.            Grad Student        Kwangju Univ. Korea HNRO14RR
PESP WHOI Marquette,C.        Research Engineer   Woods Hole O. I.    HNRO14RR
PEST SIX Lyoung,J.            Grad Student        Kwangju Univ. Korea HNRO14RR
PESP SIX Park,D.W.            Sr. Engineer        Korean Oc Res Dev In HNRO14RR
PESP SIX Petrov, A.           Observer            Ferhri                HNRO14RR
PEST SIX Jarosz,E.            Grad Student        Louisiana State Univ HNRO14RR
PEST SIX Ragan, M.            Grad Student        U. of Southern Calif HNRO14RR
PESP USR Smirnov,S.           Observer            RF PacFlt Russia     HNRO14RR
PESP SIX Choi,S-H.            Scientist           Ocean Res Inst Korea HNRO14RR
PECT SCG Moe,R.               Computer Tech       Scripps Institution  HNRO14RR
PEST SIX Zheng, Z.            Grad Student        U. of Southern Calif HNRO14RR
PERT STS Baiz,T.              Resident Tech       Scripps Institution  HNRO14RR

```

#*** 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 - S. M. Smith ext. 42752 ***										
*** Log Books ***										
0056	190100	0	LBSC	B CTD Log Book-USC	SIX	39-31.97N	134-00.10E	g		HNRO14RR
1908	030200	0	LBSC	E CTD Log Book-USC	SIX	38-59.91N	134-58.07E	g		HNRO14RR
0155	170100	0	LBSC	B Sea Soar Log Book	WHOI	37-45.02N	129-05.96E	g		HNRO14RR
1525	020200	0	LBSC	E Sea Soar Log Book	WHOI	39-18.22N	135-06.63E	g		HNRO14RR
*** Sea Beam Data ***										
0751	290100	0	MBDR	B SeaBeam data	GDC	39-16.80N	134-00.08E	g		HNRO14RR
2358	310100	0	MBDR	E SeaBeam data	GDC	39-13.23N	134-14.01E	g		HNRO14RR
*** Acoustic Doppler Current Profiler ***										
2356	150100	0	ADCP	B Acoustic Doppler	GDC	35-06.20N	129-02.35E	g		HNRO14RR
0230	050200	0	ADCP	E Current Profiler	GDC	35-07.13N	129-04.19E	g		HNRO14RR
*** Integrated Meteorological Weather Data ***										
2356	150100	0	IMET	B Weather data coll.	GDC	35-06.20N	129-02.35E	g		HNRO14RR
0230	050200	0	IMET	E Weather data coll.	GDC	35-07.13N	129-04.19E	g		HNRO14RR
*** Hydrographic Doppler Sonar System ***										
0700	160100	0	CMXX	B Hydrographic Doppler	MPL	35-06.07N	129-02.51E	g		HNRO14RR
0230	050200	0	CMXX	E Sonar System	MPL	35-07.13N	129-04.19E	g		HNRO14RR
*** Towed Vehicle - Temperature & Depth ***										
0155	170100	0	TDXX	B Sea Soar	WHOI	37-45.02N	129-05.96E	g		HNRO14RR
2308	180100	0	TDXX	E Sea Soar	WHOI	39-47.13N	133-59.99E	g		HNRO14RR
1155	190100	0	TDXX	B Sea Soar	WHOI	38-49.34N	133-59.86E	g		HNRO14RR
1432	230100	0	TDXX	E Sea Soar	WHOI	39-24.12N	135-13.69E	g		HNRO14RR
1027	250100	0	TDXX	B Sea Soar	WHOI	41-12.47N	134-29.72E	g		HNRO14RR
1600	250100	0	TDXX	E Sea Soar	WHOI	40-46.61N	134-28.00E	g		HNRO14RR
0156	260100	0	TDXX	B Sea Soar	WHOI	41-12.37N	134-29.38E	g		HNRO14RR
1525	020200	0	TDXX	E Sea Soar	WHOI	39-18.22N	135-06.63E	g		HNRO14RR
*** Atmospheric - Upper Air Sampling ***										
1310	160100	0	ASUA	Balloon Meteorolog.	MPL	35-54.69N	130-01.36E	g		HNRO14RR
2358	160100	0	ASUA	Balloon Meteorolog.	MPL	37-41.43N	129-20.09E	g		HNRO14RR
1208	170100	0	ASUA	Balloon Meteorolog.	MPL	37-44.95N	130-47.81E	g		HNRO14RR
0008	180100	0	ASUA	Balloon Meteorolog.	MPL	37-44.99N	132-52.06E	g		HNRO14RR
0357	180100	0	ASUA	Balloon Meteorolog.	MPL	37-45.42N	133-30.95E	g		HNRO14RR
1157	180100	0	ASUA	Balloon Meteorolog.	MPL	38-28.48N	134-00.01E	g		HNRO14RR
0000	190100	0	ASUA	Balloon Meteorolog.	MPL	39-39.23N	133-59.99E	g		HNRO14RR
0544	190100	0	ASUA	Balloon Meteorolog.	MPL	39-10.12N	134-00.10E	g		HNRO14RR
1307	190100	0	ASUA	Balloon Meteorolog.	MPL	38-56.90N	134-00.01E	g		HNRO14RR
0016	200100	0	ASUA	Balloon Meteorolog.	MPL	40-23.36N	134-00.01E	g		HNRO14RR
2358	200100	0	ASUA	Balloon Meteorolog.	MPL	39-01.94N	134-11.10E	g		HNRO14RR
1206	210100	0	ASUA	Balloon Meteorolog.	MPL	40-07.65N	134-41.85E	g		HNRO14RR

0001	220100	0	ASUA	Balloon	Meteorolog.	MPL	39-17.11N	134-58.00E	g	HNRO14RR
0731	220100	0	ASUA	Balloon	Meteorolog.	MPL	40-10.57N	134-57.99E	g	HNRO14RR
0008	230100	0	ASUA	Balloon	Meteorolog.	MPL	40-16.60N	135-11.96E	g	HNRO14RR
0752	230100	0	ASUA	Balloon	Meteorolog.	MPL	39-12.68N	135-12.05E	g	HNRO14RR
1200	230100	0	ASUA	Balloon	Meteorolog.	MPL	39-11.54N	135-10.85E	g	HNRO14RR
0000	240100	0	ASUA	Balloon	Meteorolog.	MPL	39-30.00N	134-28.00E	g	HNRO14RR
1156	240100	0	ASUA	Balloon	Meteorolog.	MPL	40-09.97N	134-28.01E	g	HNRO14RR
1203	260100	0	ASUA	Balloon	Meteorolog.	MPL	39-58.53N	134-28.01E	g	HNRO14RR
0000	270100	0	ASUA	Balloon	Meteorolog.	MPL	39-09.69N	134-00.02E	g	HNRO14RR
0325	270100	0	ASUA	Balloon	Meteorolog.	MPL	39-34.88N	133-59.92E	g	HNRO14RR
1201	270100	0	ASUA	Balloon	Meteorolog.	MPL	39-24.10N	134-13.94E	g	HNRO14RR
1840	270100	0	ASUA	Balloon	Meteorolog.	MPL	39-39.75N	134-28.11E	g	HNRO14RR
0004	280100	0	ASUA	Balloon	Meteorolog.	MPL	40-08.80N	134-42.00E	g	HNRO14RR
0125	280100	0	ASUA	Balloon	Meteorolog.	MPL	39-57.26N	134-42.02E	g	HNRO14RR
1159	280100	0	ASUA	Balloon	Meteorolog.	MPL	39-39.23N	134-58.00E	g	HNRO14RR
1839	280100	0	ASUA	Balloon	Meteorolog.	MPL	39-53.73N	135-11.98E	g	HNRO14RR
0001	290100	0	ASUA	Balloon	Meteorolog.	MPL	39-09.99N	135-11.37E	g	HNRO14RR
0608	290100	0	ASUA	Balloon	Meteorolog.	MPL	39-09.84N	134-10.29E	g	HNRO14RR
1159	290100	0	ASUA	Balloon	Meteorolog.	MPL	39-51.27N	133-59.99E	g	HNRO14RR
1832	290100	0	ASUA	Balloon	Meteorolog.	MPL	39-23.41N	134-14.09E	g	HNRO14RR
0007	300100	0	ASUA	Balloon	Meteorolog.	MPL	39-32.64N	134-28.00E	g	HNRO14RR
0610	300100	0	ASUA	Balloon	Meteorolog.	MPL	40-20.06N	134-32.85E	g	HNRO14RR
1156	300100	0	ASUA	Balloon	Meteorolog.	MPL	39-36.06N	134-42.14E	g	HNRO14RR
0010	310100	0	ASUA	Balloon	Meteorolog.	MPL	40-12.96N	134-58.00E	g	HNRO14RR
0603	310100	0	ASUA	Balloon	Meteorolog.	MPL	39-46.09N	135-12.16E	g	HNRO14RR
1152	310100	0	ASUA	Balloon	Meteorolog.	MPL	39-19.76N	135-00.73E	g	HNRO14RR
0006	010200	0	ASUA	Balloon	Meteorolog.	MPL	39-12.12N	134-14.00E	g	HNRO14RR
0612	010200	0	ASUA	Balloon	Meteorolog.	MPL	39-47.43N	134-28.21E	g	HNRO14RR
1157	010200	0	ASUA	Balloon	Meteorolog.	MPL	40-13.75N	134-42.04E	g	HNRO14RR
0000	020200	0	ASUA	Balloon	Meteorolog.	MPL	39-36.12N	134-58.10E	g	HNRO14RR
0557	020200	0	ASUA	Balloon	Meteorolog.	MPL	40-19.74N	135-04.33E	g	HNRO14RR
1200	020200	0	ASUA	Balloon	Meteorolog.	MPL	39-33.20N	135-12.20E	g	HNRO14RR
2350	020200	0	ASUA	Balloon	Meteorolog.	MPL	39-59.90N	134-57.98E	g	HNRO14RR
1159	030200	0	ASUA	Balloon	Meteorolog.	MPL	39-29.78N	134-58.01E	g	HNRO14RR
0002	040200	0	ASUA	Balloon	Meteorolog.	MPL	38-21.47N	133-59.71E	g	HNRO14RR
0607	040200	0	ASUA	Balloon	Meteorolog.	MPL	37-30.56N	132-43.39E	g	HNRO14RR

*** Conductivity, Temperature, Depth (samples shared by Kwangju U. & UWA) ***

0056	190100	0	TDCT	B	ctd001	24	500M	UWA	39-31.97N	134-00.10E	g	HNRO14RR
0206	190100	0	TDCT	E	tson	QGH	N 15	UWA	39-31.99N	134-00.05E	g	HNRO14RR
0336	190100	0	TDCT	B	ctd002	24	500M	SIX	39-20.02N	133-59.99E	g	HNRO14RR
0442	190100	0	TDCT	E	tson	QGH	N 15	SIX	39-20.02N	133-59.99E	g	HNRO14RR
0542	190100	0	TDCT	B	ctd003	24	500M	UWA	39-10.19N	134-00.18E	g	HNRO14RR
0701	190100	0	TDCT	E	tson	QGH	N 15	UWA	39-10.10N	134-00.00E	g	HNRO14RR
0850	190100	0	TDCT	B	ctd004	24	500M	SIX	39-00.04N	133-59.92E	g	HNRO14RR
0948	190100	0	TDCT	E	tson	QGH	N 15	SIX	39-00.04N	133-59.92E	g	HNRO14RR
1843	230100	0	TDCT	B	ctd005	24	500M	UWA	39-00.00N	134-28.01E	g	HNRO14RR
1941	230100	0	TDCT	E	tson	QGH	N 15	UWA	39-00.00N	134-28.00E	g	HNRO14RR
2115	230100	0	TDCT	B	ctd006	24	500M	SIX	39-15.04N	134-28.01E	g	HNRO14RR
2222	230100	0	TDCT	E	tson	QGH	N 15	SIX	39-15.04N	134-28.01E	g	HNRO14RR
0000	240100	0	TDCT	B	ctd007	24	500M	UWA	39-30.00N	134-28.00E	g	HNRO14RR
0057	240100	0	TDCT	E	tson	QGH	N 15	UWA	39-30.00N	134-28.01E	g	HNRO14RR
0218	240100	0	TDCT	B	ctd008	24	500M	SIX	39-39.98N	134-28.04E	g	HNRO14RR
0315	240100	0	TDCT	E	tson	QGH	N 15	SIX	39-39.97N	134-28.03E	g	HNRO14RR
0436	240100	0	TDCT	B	ctd009	24	500M	UWA	39-49.95N	134-28.03E	g	HNRO14RR
0531	240100	0	TDCT	E	tson	QGH	N 15	UWA	39-50.00N	134-27.99E	g	HNRO14RR
0902	240100	0	TDCT	B	ctd010	24	500M	SIX	39-59.99N	134-27.99E	g	HNRO14RR
1000	240100	0	TDCT	E	tson	QGH	N 15	SIX	40-00.00N	134-27.99E	g	HNRO14RR

1132	240100	0	TDCT	B	ctd011	24	500M	UWA	40-09.97N	134-28.00E	g	HNRO14RR
1232	240100	0	TDCT	E	tson	QGH	N 15	UWA	40-09.97N	134-27.99E	g	HNRO14RR
1756	240100	0	TDCT	B	ctd012	24	500M	SIX	40-19.98N	134-28.08E	g	HNRO14RR
1900	240100	0	TDCT	E	tson	QGH	N 15	SIX	40-19.98N	134-28.07E	g	HNRO14RR
2028	240100	0	TDCT	B	ctd013	24	500M	UWA	40-29.94N	134-28.02E	g	HNRO14RR
2130	240100	0	TDCT	E	tson	QGH	N 15	UWA	40-30.00N	134-28.00E	g	HNRO14RR
0004	250100	0	TDCT	B	ctd014	24	500M	SIX	40-45.00N	134-27.94E	g	HNRO14RR
0100	250100	0	TDCT	E	tson	QGH	N 15	SIX	40-45.00N	134-27.94E	g	HNRO14RR
0247	250100	0	TDCT	B	ctd015	24	500M	UWA	40-59.97N	134-27.99E	g	HNRO14RR
0436	250100	0	TDCT	E	tson	QGH	N 15	UWA	40-59.92N	134-27.94E	g	HNRO14RR
0625	250100	0	TDCT	B	ctd016	24	500M	SIX	41-14.92N	134-28.04E	g	HNRO14RR
0715	250100	0	TDCT	E	tson	QGH	N 15	SIX	41-14.94N	134-28.05E	g	HNRO14RR
2047	020200	0	TDCT	B	ctd017	24	500M	UWA	40-15.00N	134-58.00E	g	HNRO14RR
2144	020200	0	TDCT	E	tson	QGH	N 15	UWA	40-15.00N	134-58.00E	g	HNRO14RR
2348	020200	0	TDCT	B	ctd018	24	500M	SIX	39-59.89N	134-57.97E	g	HNRO14RR
0043	030200	0	TDCT	E	tson	QGH	N 15	SIX	39-59.91N	134-57.99E	g	HNRO14RR
0315	030200	0	TDCT	B	ctd019	24	500M	UWA	39-45.00N	134-58.00E	g	HNRO14RR
0355	030200	0	TDCT	E	tson	QGH	N 15	UWA	39-45.42N	134-57.87E	g	HNRO14RR
0612	030200	0	TDCT	B	ctd020	24	500M	SIX	39-40.02N	134-58.01E	g	HNRO14RR
0658	030200	0	TDCT	E	tson	QGH	N 15	SIX	39-40.02N	134-58.01E	g	HNRO14RR
0830	030200	0	TDCT	B	ctd021	24	500M	UWA	39-34.86N	134-58.14E	g	HNRO14RR
0927	030200	0	TDCT	E	tson	QGH	N 15	UWA	39-34.86N	134-58.14E	g	HNRO14RR
1008	030200	0	TDCT	B	ctd022	24	500M	SIX	39-30.02N	134-58.03E	g	HNRO14RR
1111	030200	0	TDCT	E	tson	QGH	N 15	SIX	39-30.00N	134-58.00E	g	HNRO14RR
1336	030200	0	TDCT	B	ctd023	24	500M	UWA	39-20.01N	134-57.99E	g	HNRO14RR
1419	030200	0	TDCT	E	tson	QGH	N 15	UWA	39-20.00N	134-57.99E	g	HNRO14RR
1516	030200	0	TDCT	B	ctd024	24	500M	SIX	39-09.98N	134-58.02E	g	HNRO14RR
1636	030200	0	TDCT	E	tson	QGH	N 15	SIX	39-09.98N	134-58.01E	g	HNRO14RR
1836	030200	0	TDCT	B	ctd025	24	500M	UWA	38-59.91N	134-58.07E	g	HNRO14RR
1908	030200	0	TDCT	E	tson	QGH	N 15	UWA	38-59.91N	134-58.07E	g	HNRO14RR

*** Temperature, Depth & Optics (Univ. of Southern Calif.) ***

0553	240100	0	TDXX	B	Optical cast 01	SIX	39-50.00N	134-28.00E	g	HNRO14RR
0620	240100	0	TDXX	E	Optical cast 01	SIX	39-50.00N	134-28.01E	g	HNRO14RR
0815	240100	0	TDXX	B	Optical cast 02	SIX	40-00.00N	134-27.99E	g	HNRO14RR
0848	240100	0	TDXX	E	Optical cast 02	SIX	40-00.00N	134-27.99E	g	HNRO14RR
1256	240100	0	TDXX	B	Optical cast 03	SIX	40-09.97N	134-28.00E	g	HNRO14RR
1330	240100	0	TDXX	E	Optical cast 03	SIX	40-09.97N	134-28.00E	g	HNRO14RR
1452	240100	0	TDXX	B	Optical cast 04	SIX	40-19.98N	134-28.08E	g	HNRO14RR
1545	240100	0	TDXX	E	Optical cast 04	SIX	40-19.98N	134-28.07E	g	HNRO14RR
2151	240100	0	TDXX	B	Optical cast 05	SIX	40-30.00N	134-28.00E	g	HNRO14RR
2223	240100	0	TDXX	E	Optical cast 05	SIX	40-30.00N	134-28.00E	g	HNRO14RR
2154	020200	0	TDXX	B	Optical cast 13	SIX	40-15.00N	134-58.00E	g	HNRO14RR
2227	020200	0	TDXX	E	Optical cast 13	SIX	40-15.00N	134-58.00E	g	HNRO14RR

0122	030200	0	TDXX	B	Optical	cast	14	SIX	39-59.94N	134-57.95E	g	HNRO14RR
0154	030200	0	TDXX	E	Optical	cast	14	SIX	39-59.95N	134-57.95E	g	HNRO14RR
0413	030200	0	TDXX	B	Optical	cast	15	SIX	39-45.00N	134-58.01E	g	HNRO14RR
0450	030200	0	TDXX	E	Optical	cast	15	SIX	39-45.01N	134-58.01E	g	HNRO14RR
0525	030200	0	TDXX	B	Optical	cast	16	SIX	39-40.02N	134-58.02E	g	HNRO14RR
0605	030200	0	TDXX	E	Optical	cast	16	SIX	39-40.02N	134-58.01E	g	HNRO14RR
0744	030200	0	TDXX	B	Optical	cast	17	SIX	39-34.84N	134-58.04E	g	HNRO14RR
0821	030200	0	TDXX	E	Optical	cast	17	SIX	39-34.85N	134-58.13E	g	HNRO14RR
1116	030200	0	TDXX	B	Optical	cast	18	SIX	39-30.00N	134-58.00E	g	HNRO14RR
1149	030200	0	TDXX	E	Optical	cast	18	SIX	39-29.99N	134-58.00E	g	HNRO14RR
1256	030200	0	TDXX	B	Optical	cast	19	SIX	39-20.00N	134-57.99E	g	HNRO14RR
1327	030200	0	TDXX	E	Optical	cast	19	SIX	39-20.01N	134-57.99E	g	HNRO14RR
1655	030200	0	TDXX	B	Optical	cast	20	SIX	39-09.98N	134-58.01E	g	HNRO14RR
1735	030200	0	TDXX	E	Optical	cast	20	SIX	39-09.98N	134-58.02E	g	HNRO14RR

*** Expendable Bathythermograph with Photometer ***

2035	020200	0	PSXX	XBT	Photometer			WHOI	40-15.00N	134-58.00E	g	HNRO14RR
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#					End Sample Index							HNRO14RR
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