Report and Index of

Underway Marine Geophysical Data

Zheng He Expedition

Leg 01

(ZHNG01RR)

R/V Roger Revelle

(Issued Mar 2005)

Ports:
San Diego, CA (03-Dec-04)
to
Papeete, Tahiti (02-Jan-05)

Chief Scientist: Dave Nelson
Oregon State University
nelsonda@coas.oregonstate.edu

Computer Tech - Scott Allen
Resident Tech - Gene Pillard

Post-Cruise processing and report preparation by the
Shipboard Technical Support Group,
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 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 Shipboard Technical Support, Scripps Institution of Oceanography, La Jolla, California 92093-0223*

STS Cruise ID#305

Report and Index of Navigation
and Underway Geophysical Data

Contents:

Index Chart - give track of cruise leg, dates, ports.

Track Charts - annotated with dates and hour ticks.

Profiles - depth, magnetic and gravity free air anomaly vs. distance.

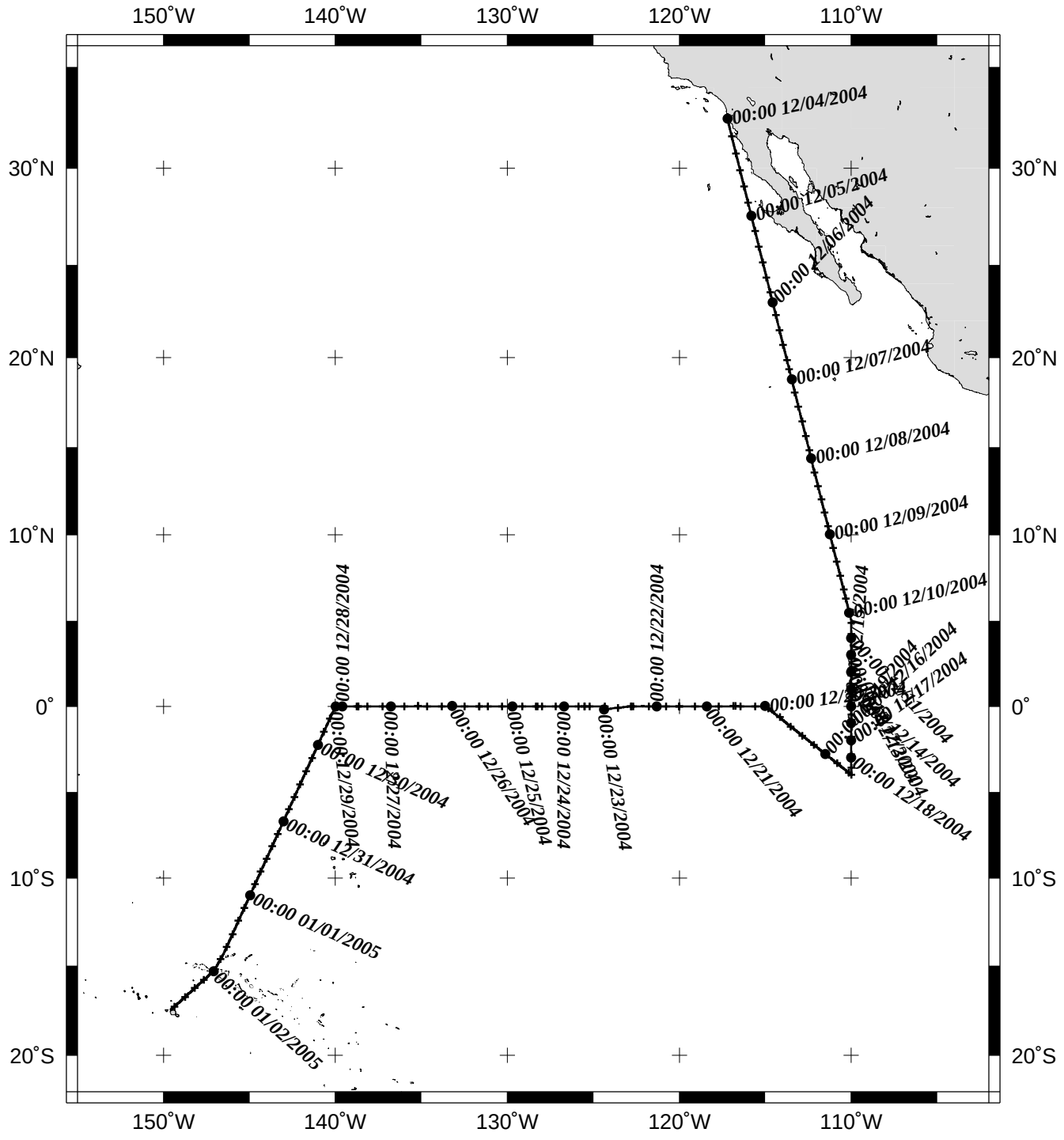
Sample Index - list of begin/end times and positions of all underway records as well as samples and measurements from other disciplines collected on the leg.

Note:
For information on the availability of this current digital data as well as archived digital data contact:

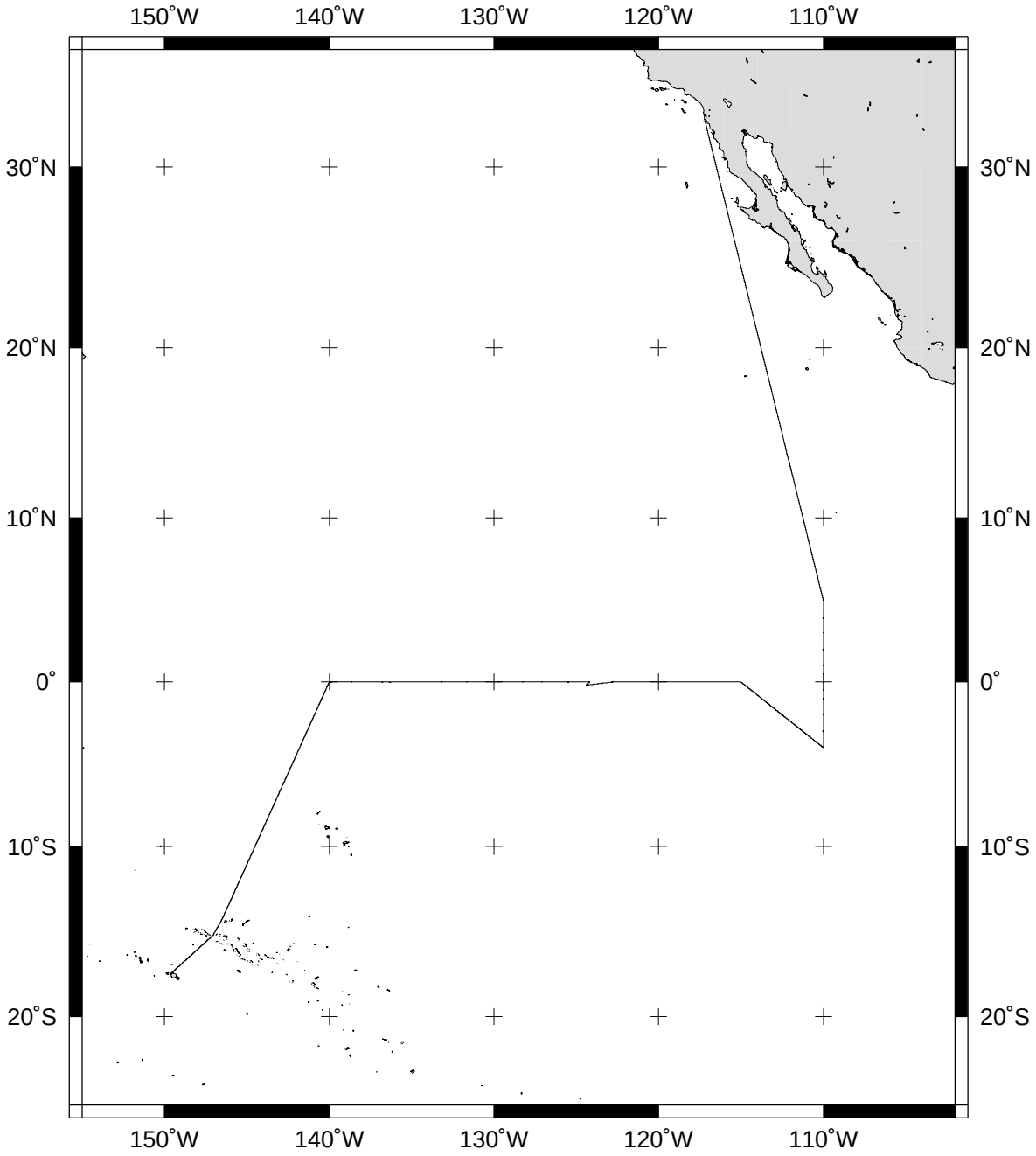
Stephen P. Miller
Geological Data Center
Scripps Institution of Oceanography
La Jolla, California 92093-0220
Phone: (858) 534-1898
Internet email: spmiller@ucsd.edu; or his website: http://SIOExplorer@ucsd.edu

Rev 05/2002

ZHNG01RR



GMT 2005 Mar 21 10:51:01 **:San Diego, CA - Papeete, Tahiti 3 December 2004 - 2 January 2005:**



ZHENG HE EXPEDITION LEG 1 (ZHNG01RR)

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CHIEF SCIENTIST: David Nelson, Oregon State University

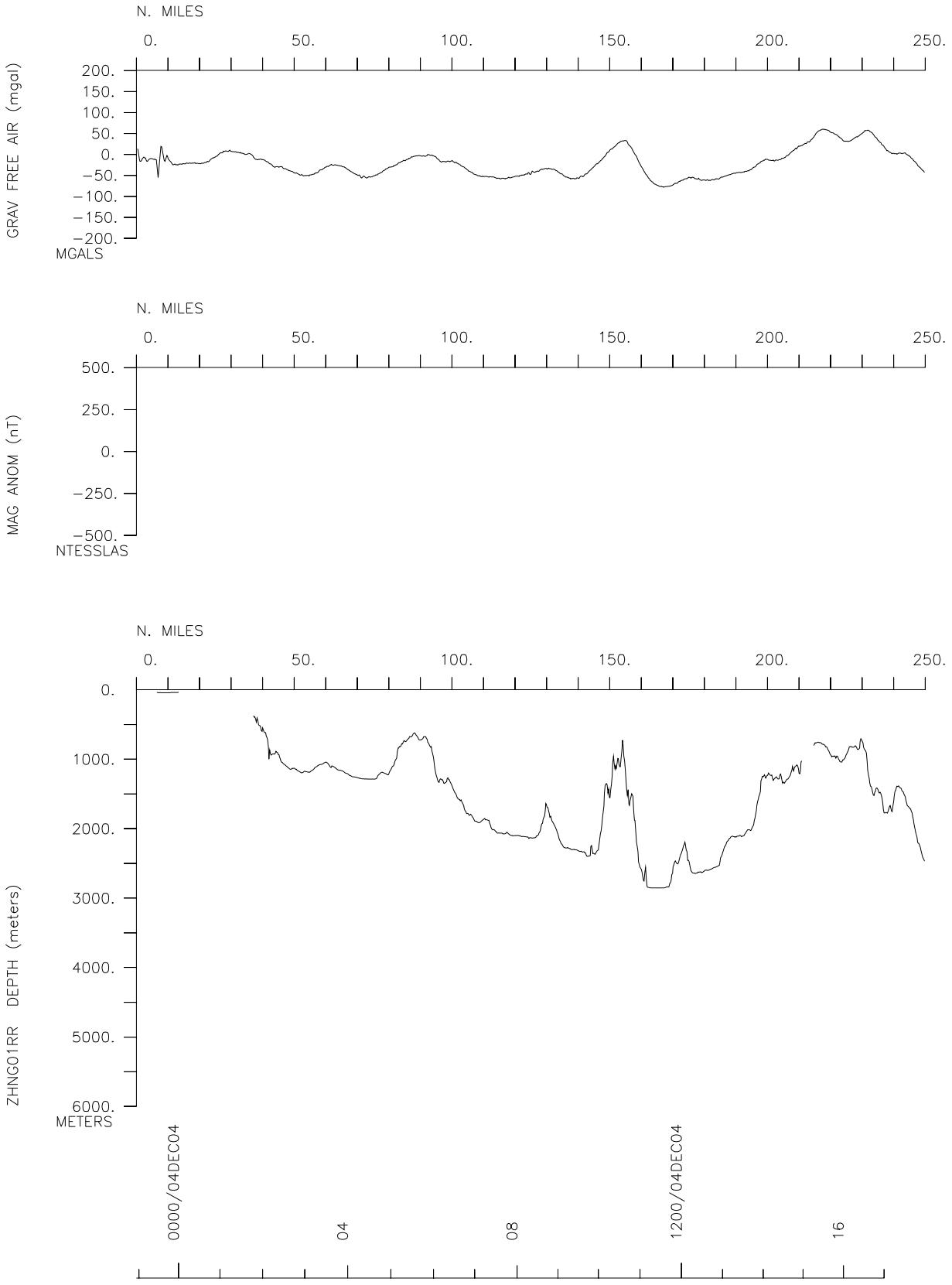
PORTS: San Diego, California - Papeete, Tahiti

DATES: 03 December 2004 - 2 Janusry 2005

SHIP: R/V Revelle

TOTAL MILEAGE OF UNDERWAY DATA COLLECTED

Cruise-5545 miles	**Magnetics-none collected**
Bathymetry-5274 miles	**Seismic Reflection-none collected**
Multibeam-5274 miles	**Gravity-5334 miles**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GRAV FREE AIR (mgal)
200. 150. 100. 50. 0. −50. −100. −150. −200.
MGALS
N. MILES
0. 50. 100. 150. 200. 250.
MAG ANOM (nT)
500. 250. 0. −250. −500.
NTESSLAS
N. MILES
0. 50. 100. 150. 200. 250.
ZHNG01RR DEPTH (meters)
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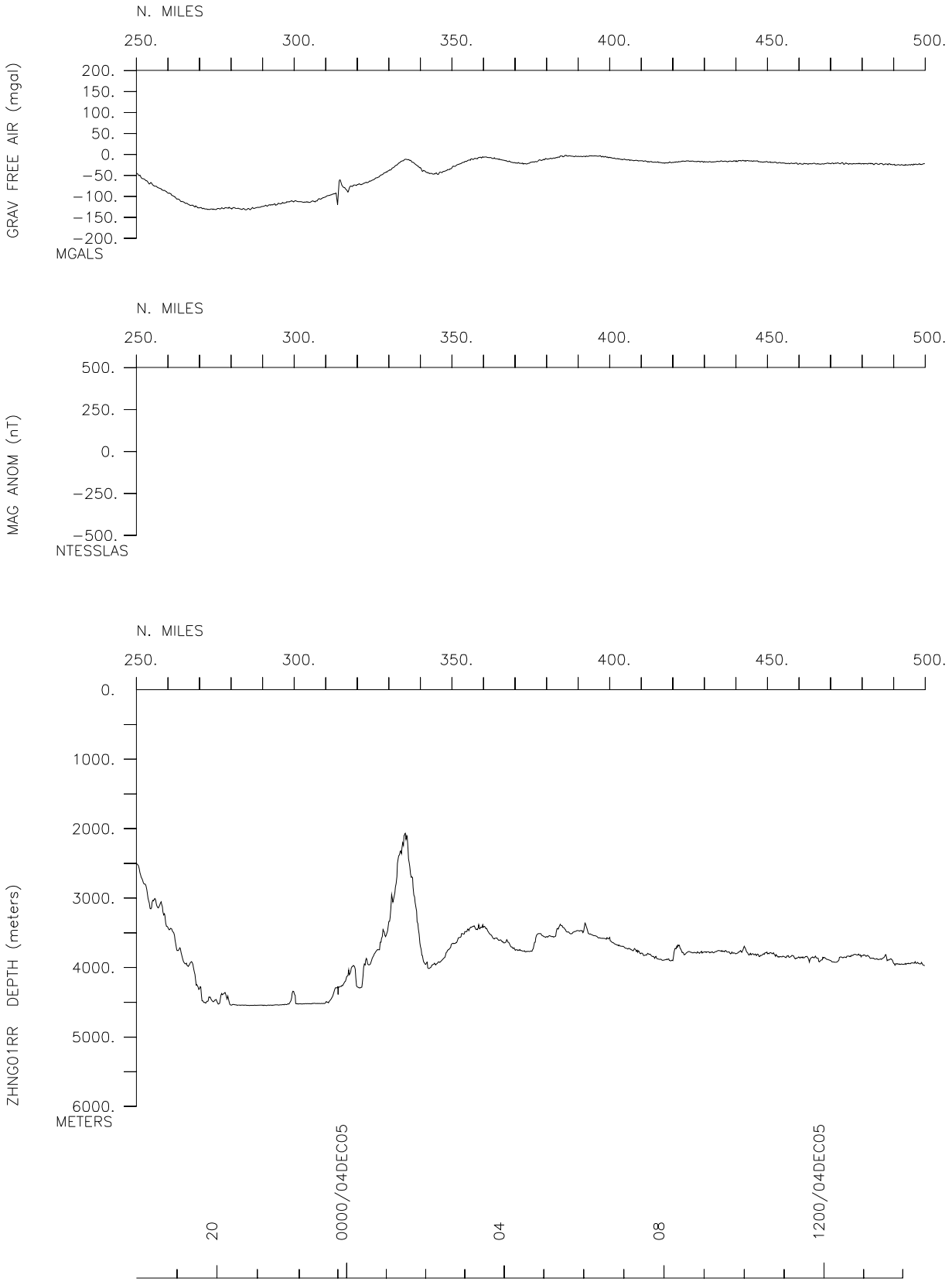
METERS
0000/04DEC04
04
08
1200/04DEC04
16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300.
350.
400.
450.
500.
GRAV FREE AIR (mgal)
200.
150.
100.
50.
0.
−50.
−100.
−150.
−200.
MGALS
N. MILES
250.
300.
350.
400.
450.
500.
MAG ANOM (nT)
500.
250.
0.
−250.
−500.
NTESSLAS
N. MILES
250.
300.
350.
400.
450.
500.
ZHNG01RR DEPTH (meters)
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2000.
3000.
4000.
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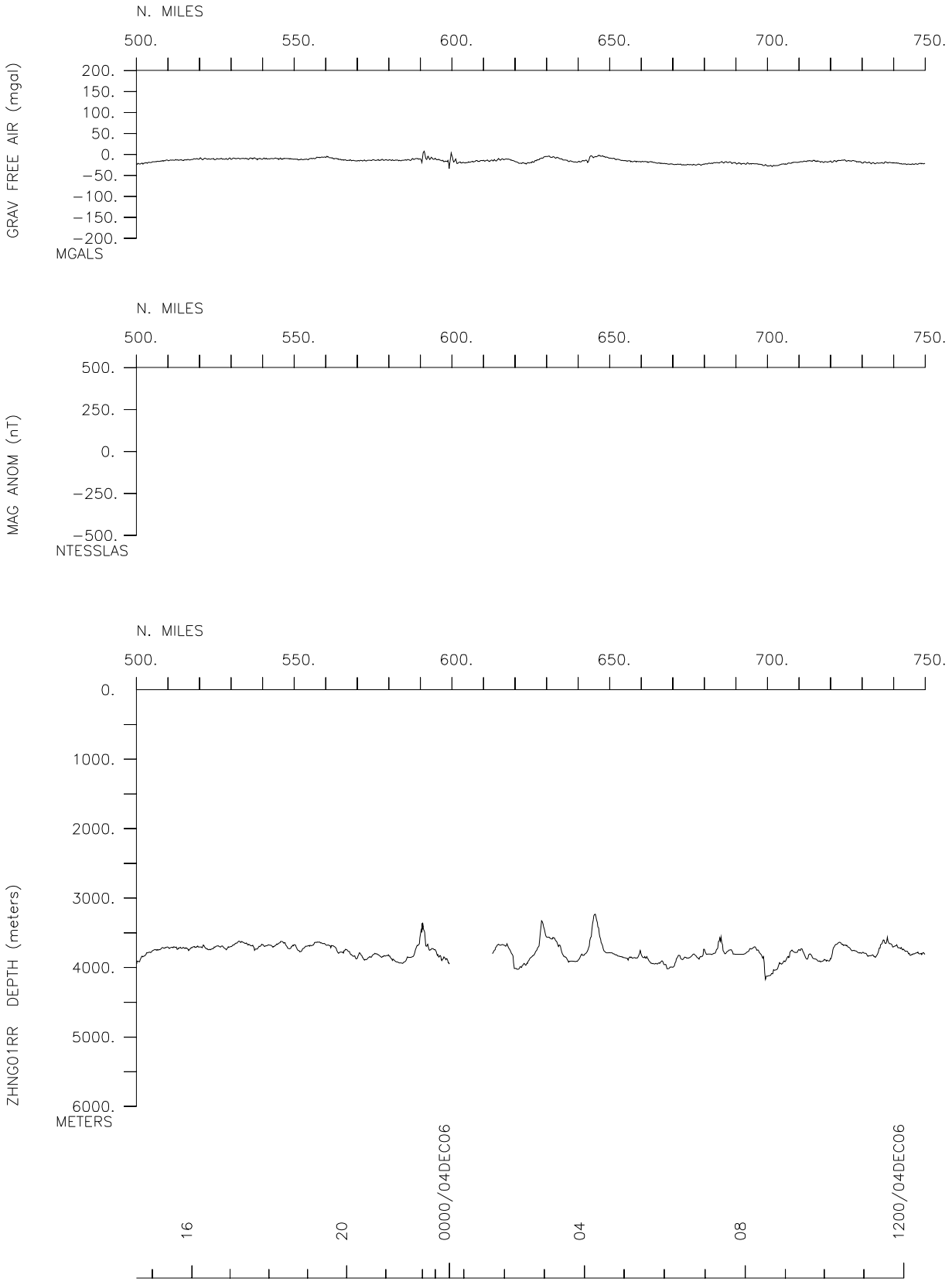
04
08
1200/04DEC05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550.
600.
650.
700.
750.
GRAV FREE AIR (mgal)
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150.
100.
50.
0.
−50.
−100.
−150.
−200.
MGALS
N. MILES
MAG ANOM (nT)
500.
250.
0.
−250.
−500.
NTESSLAS
N. MILES
ZHNG01RR DEPTH (meters)
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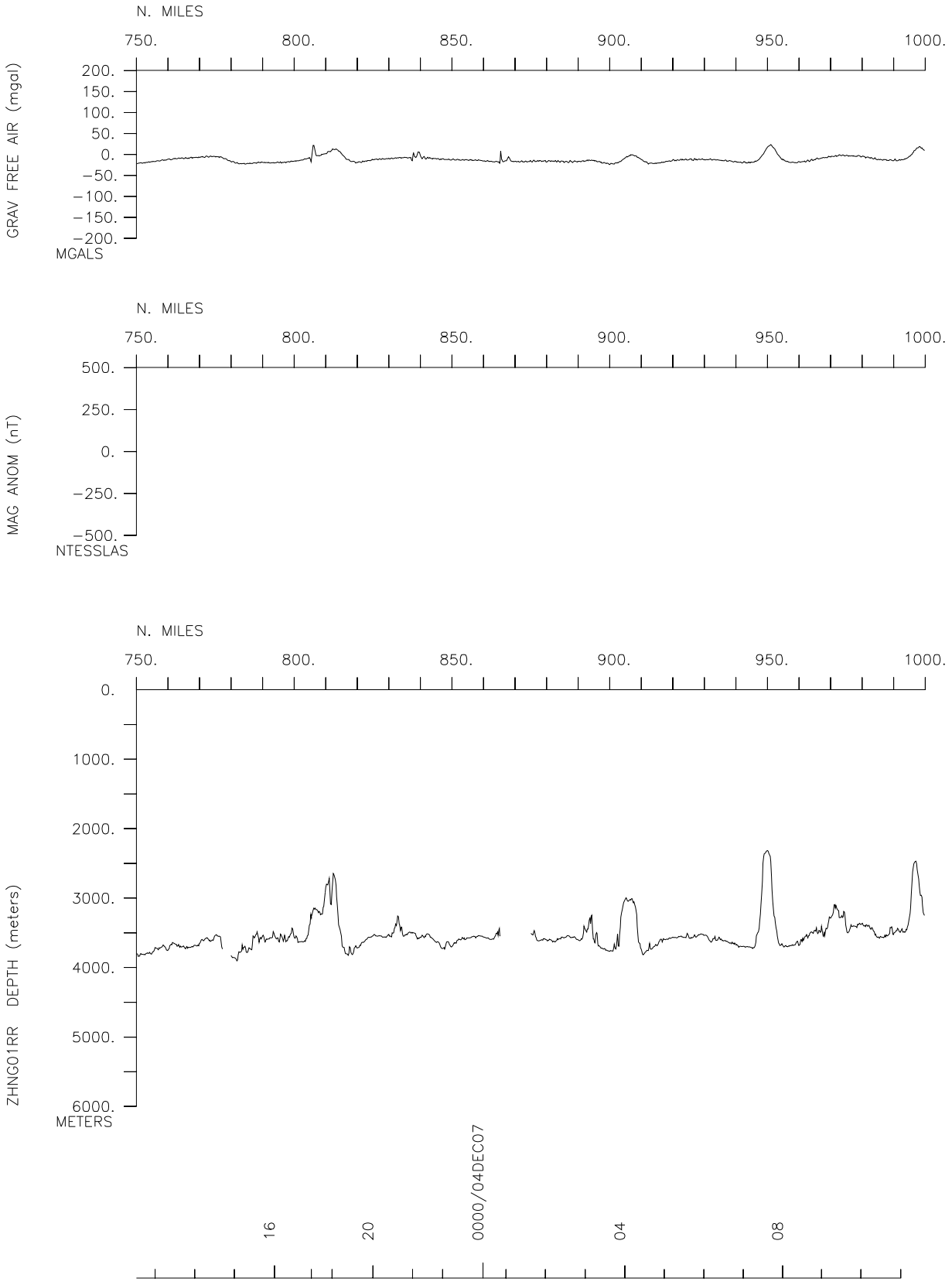
2000.
3000.
4000.
5000.
6000.
METERS
16
20
0000/04DEC06
04
08
1200/04DEC06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800.
850.
900.
950.
1000.
GRAV FREE AIR (mgal)
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150.
100.
50.
0.
−50.
−100.
−150.
−200.
MGALS
N. MILES
750.
800.
850.
900.
950.
1000.
MAG ANOM (nT)
500.
250.
0.
−250.
−500.
NTESSLAS
N. MILES
750.
800.
850.
900.
950.
1000.
ZHNG01RR DEPTH (meters)
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1000.
2000.
3000.
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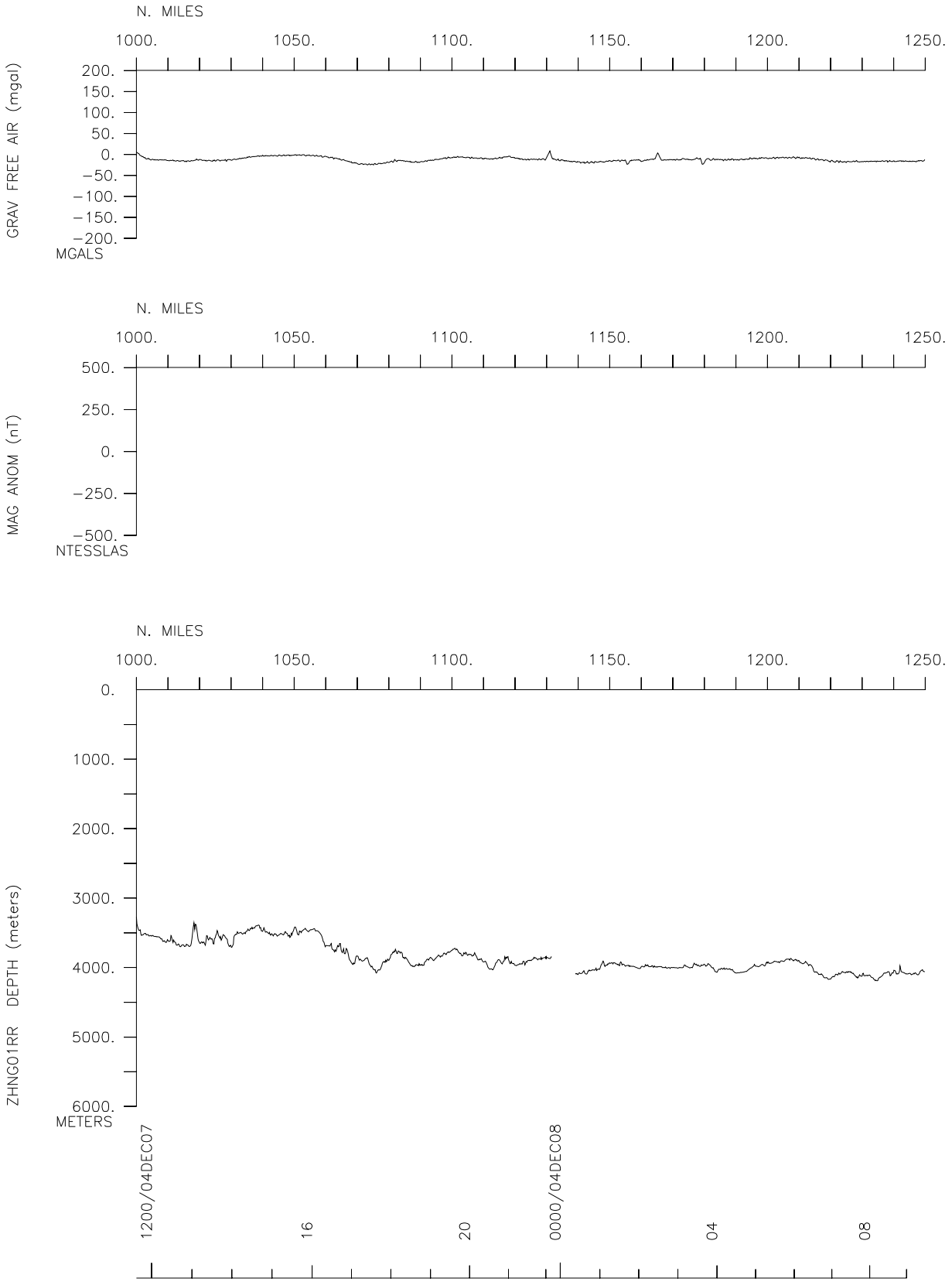
5000.
6000.
METERS
16
20
0000/04DEC07
04
08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1050.
1100.
1150.
1200.
1250.
GRAV FREE AIR (mgal)
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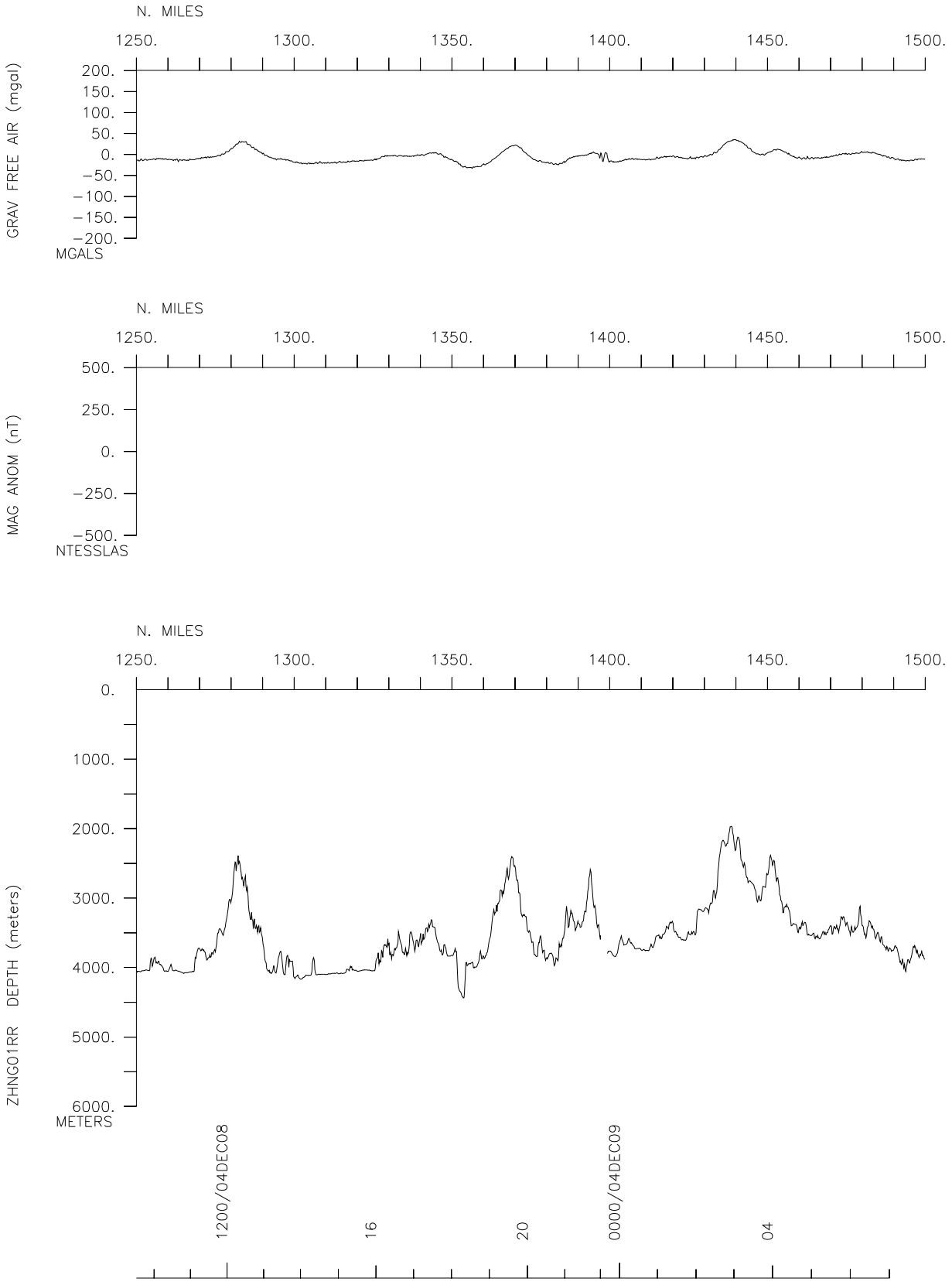
150.
100.
50.
0.
−50.
−100.
−150.
−200.
MGALS
N. MILES
1000.
1050.
1100.
1150.
1200.
1250.
MAG ANOM (nT)
500.
250.
0.
−250.
−500.
NTESSLAS
N. MILES
1000.
1050.
1100.
1150.
1200.
1250.
ZHNG01RR DEPTH (meters)
0.
1000.
2000.
3000.
4000.
5000.
6000.
METERS
1200/04DEC07
16
20
0000/04DEC08
04
08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1300.
1350.
1400.
1450.
1500.
GRAV FREE AIR (mgal)
200.
150.
100.
50.
0.
−50.
−100.
−150.
−200.
MGALS
N. MILES
MAG ANOM (nT)
500.
250.
0.
−250.
−500.
NTESSLAS
N. MILES
ZHNG01RR DEPTH (meters)
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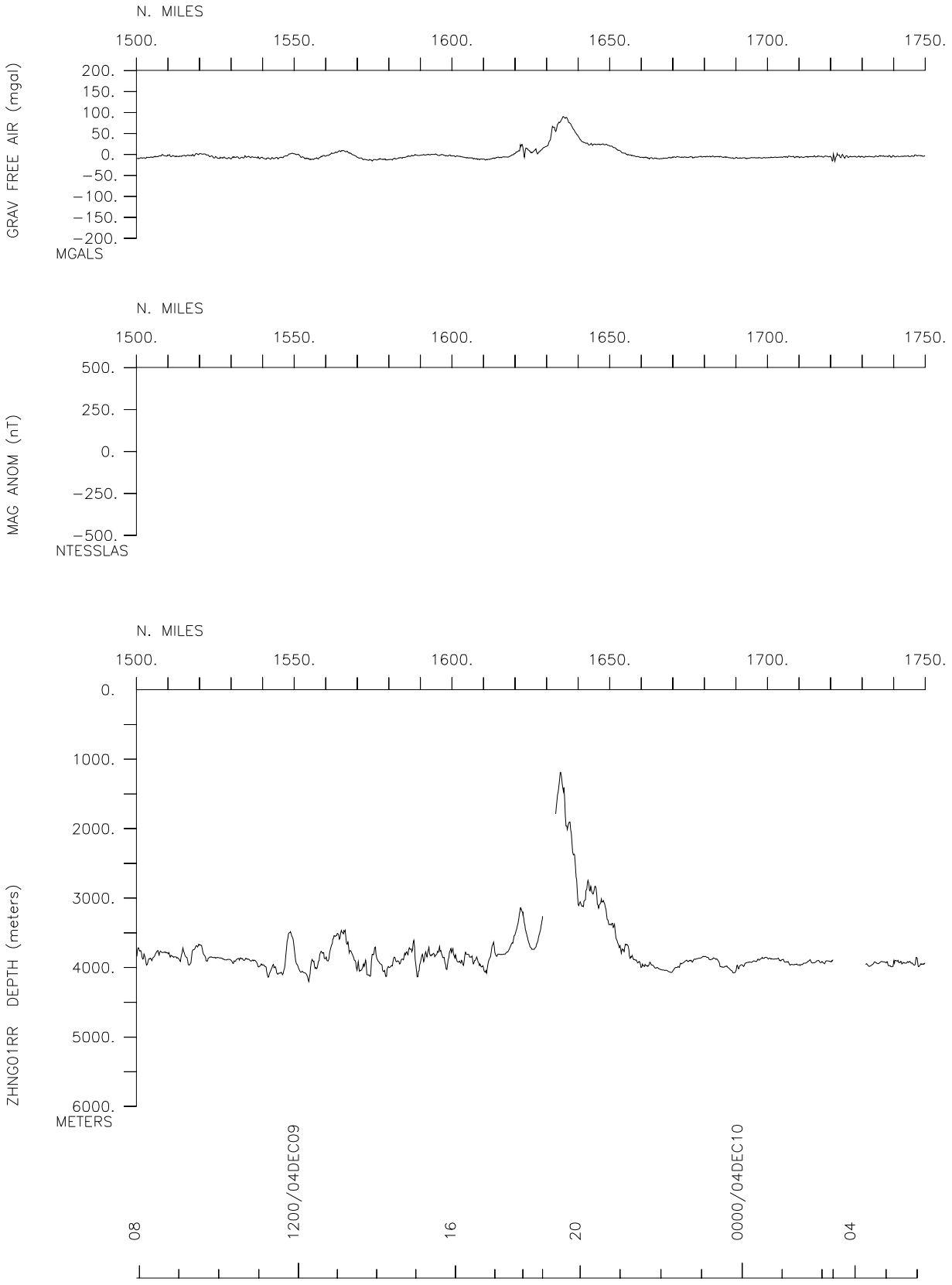
1000.
2000.
3000.
4000.
5000.
6000.
METERS
1200/04DEC08
16
20
0000/04DEC09
04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1550.
1600.
1650.
1700.
1750.
GRAV FREE AIR (mgal)
200.
150.
100.
50.
0.
−50.
−100.
−150.
−200.
MGALS
N. MILES
1500.
1550.
1600.
1650.
1700.
1750.
MAG ANOM (nT)
500.
250.
0.
−250.
−500.
NTESSLAS
N. MILES
1500.
1550.
1600.
1650.
1700.
1750.
ZHNG01RR DEPTH (meters)
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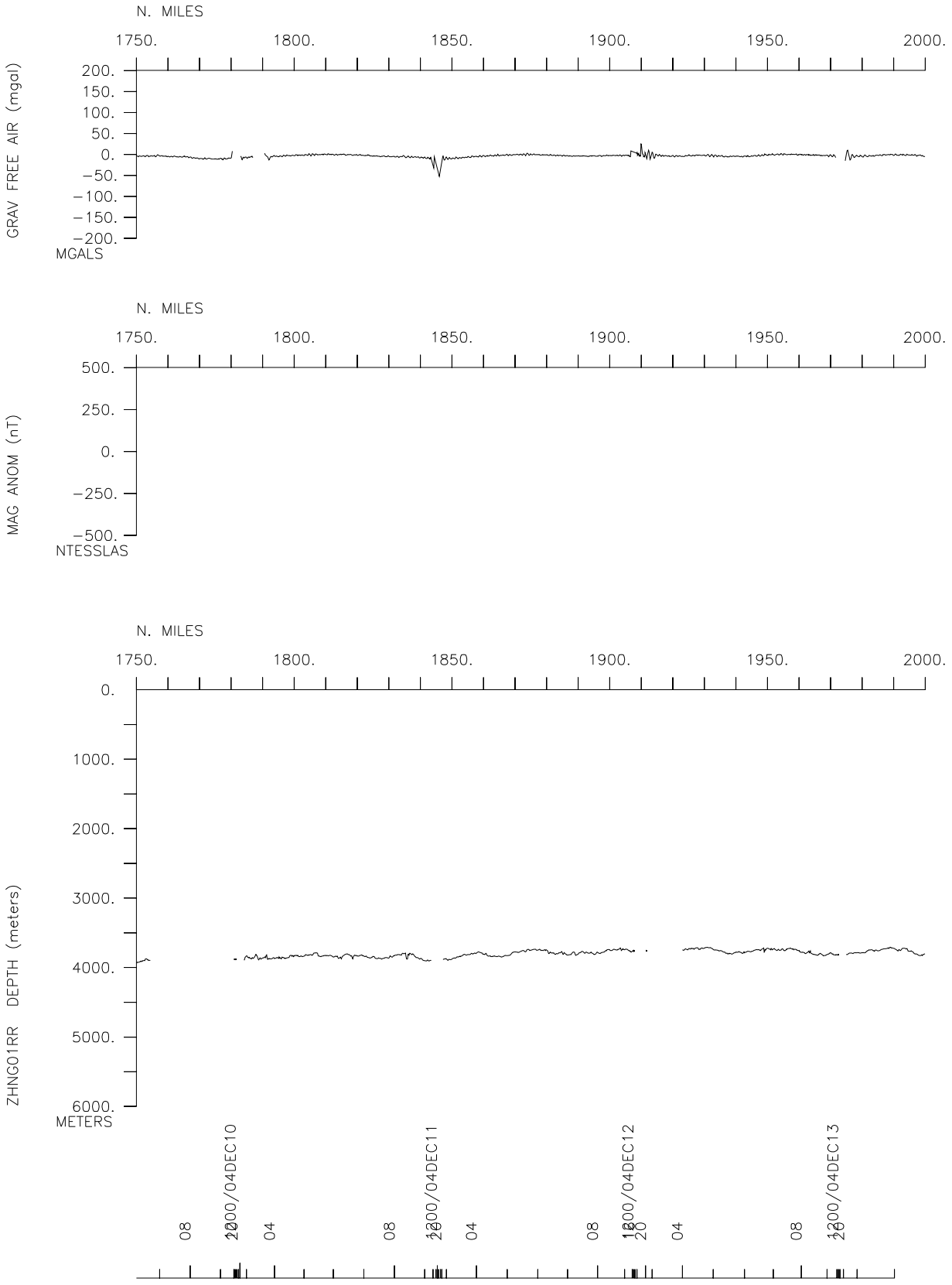
1000.
2000.
3000.
4000.
5000.
6000.
METERS
08
1200/04DEC09
16
20
0000/04DEC10
04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1750.
1800.
1850.
1900.
1950.
2000.
GRAV FREE AIR (mgal)
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150.
100.
50.
0.
−50.
−100.
−150.
−200.
MGALS
N. MILES
MAG ANOM (nT)
500.
250.
0.
−250.
−500.
NTESSLAS
N. MILES
ZHNG01RR DEPTH (meters)
0.
1000.
2000.
3000.
4000.
5000.
6000.
METERS
2000/04DEC10
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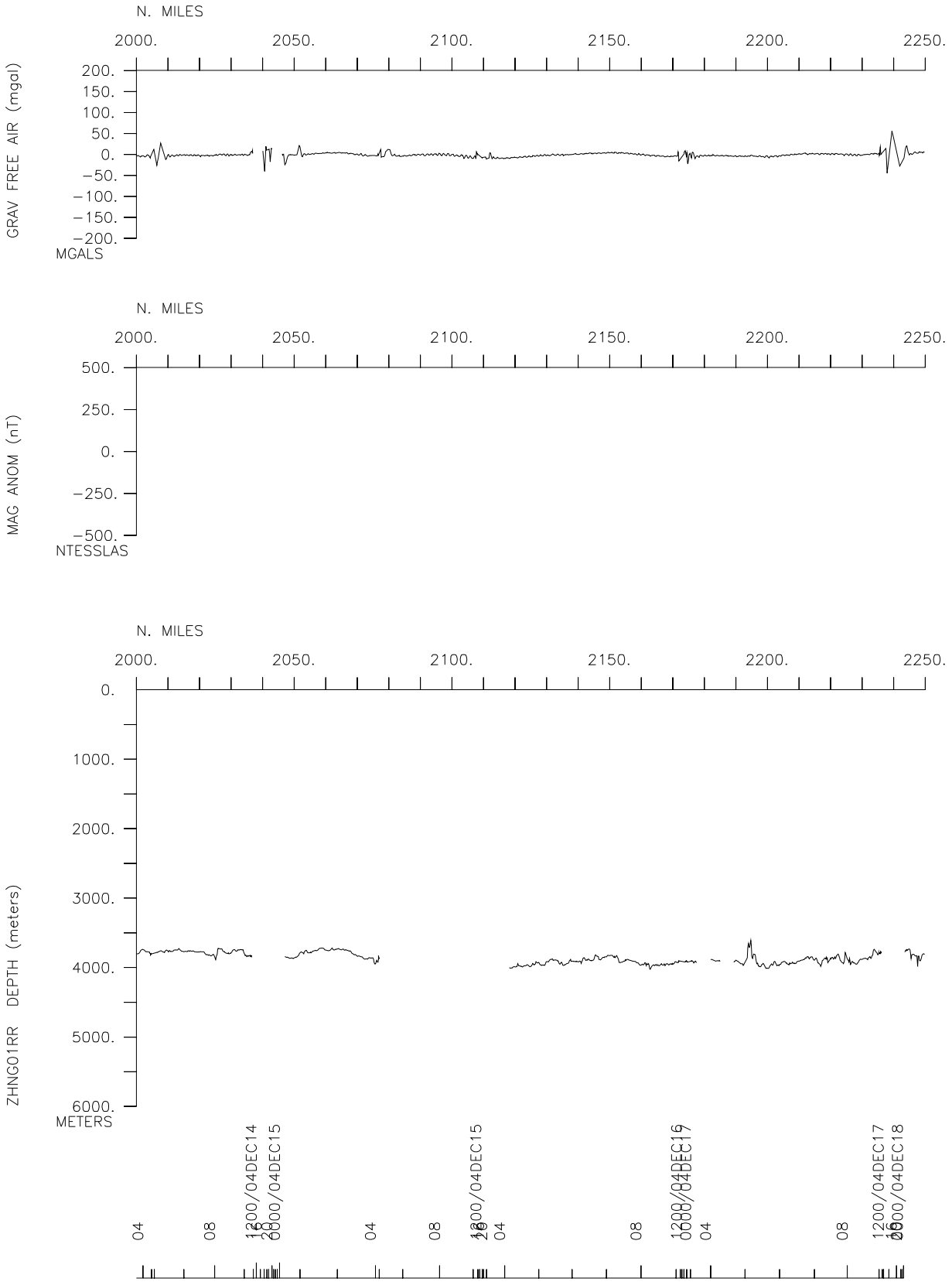
2000/04DEC12
2000/04DEC13
08
04
08
04
08
04
08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2150.
2200.
2250.
GRAV FREE AIR (mgal)
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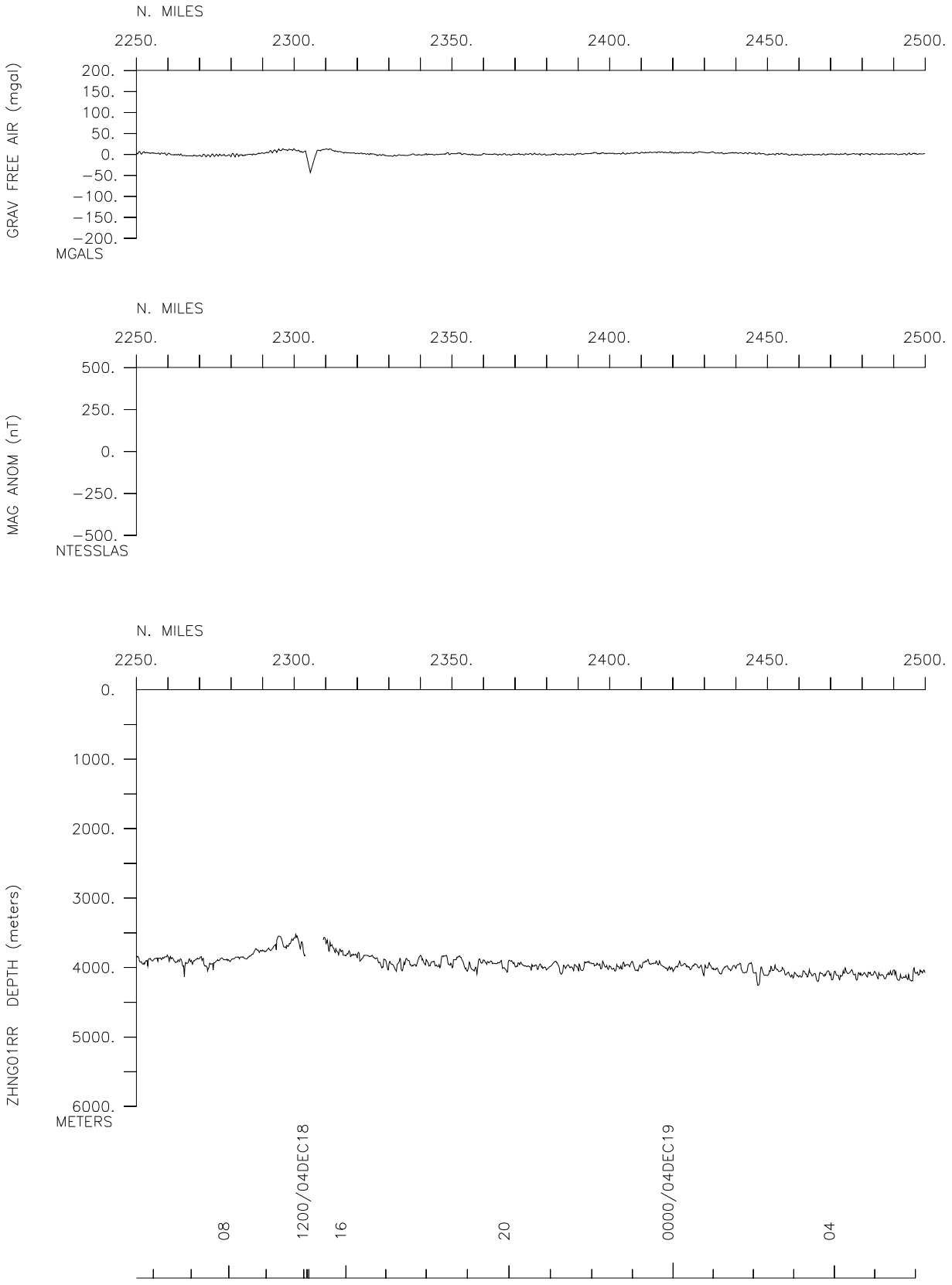
150.
100.
50.
0.
−50.
−100.
−150.
−200.
MGALS
N. MILES
MAG ANOM (nT)
500.
250.
0.
−250.
−500.
NTESSLAS
N. MILES
ZHNG01RR DEPTH (meters)
0.
1000.
2000.
3000.
4000.
5000.
6000.
METERS
04
08
1200/04DEC14
0000/04DEC15
04
08
1200/04DEC15
04
08
04
08
1200/04DEC17
0000/04DEC18


N. MILES
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2300.
2350.
2400.
2450.
2500.
GRAV FREE AIR (mgal)
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150.
100.
50.
0.
−50.
−100.
−150.
−200.
MGALS
N. MILES
MAG ANOM (nT)
500.
250.
0.
−250.
−500.
NTESSLAS
N. MILES
ZHNG01RR DEPTH (meters)
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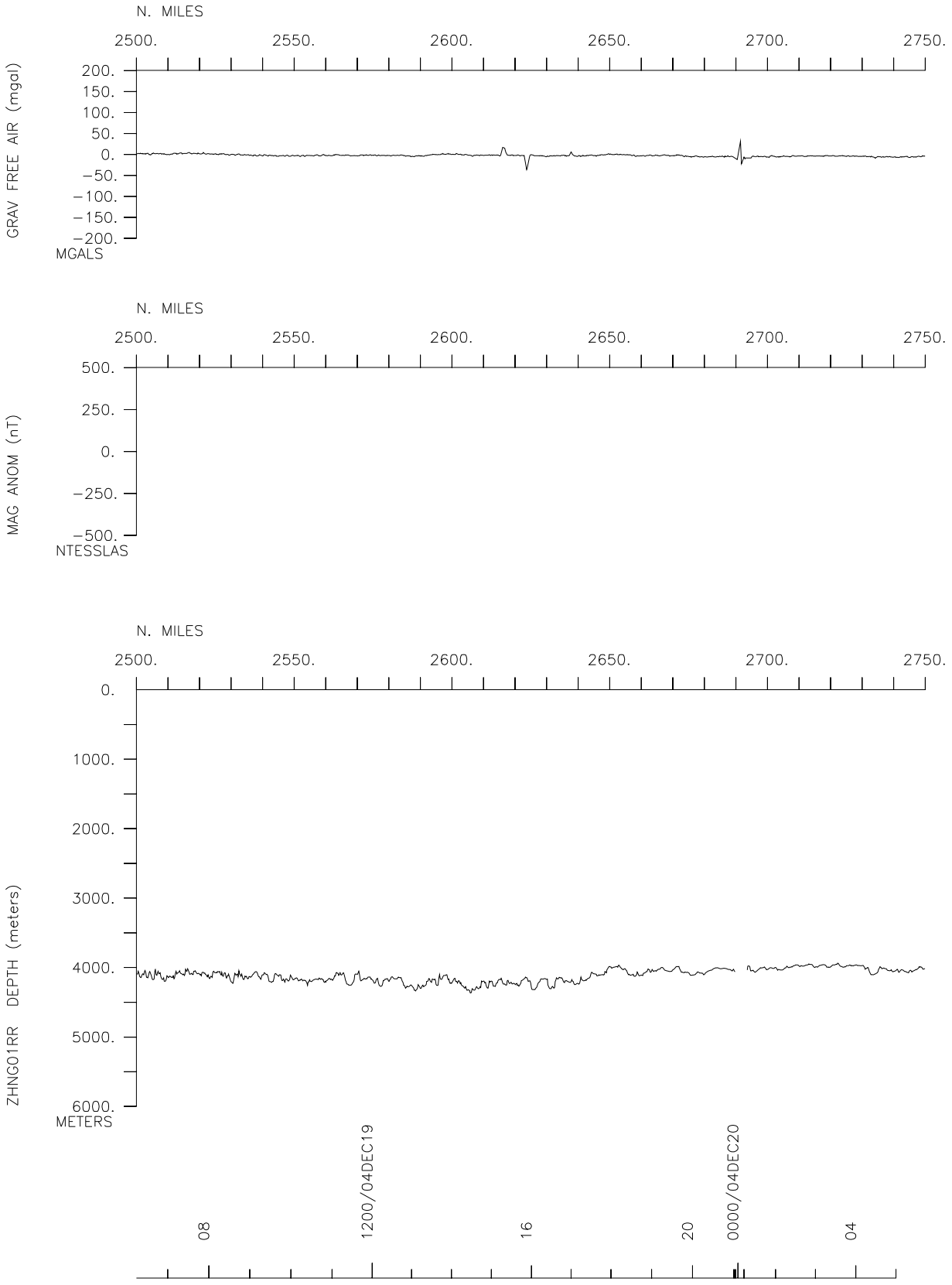
2000.
3000.
4000.
5000.
6000.
METERS
08
1200/04DEC18
16
20
0000/04DEC19
04


N. MILES
2500.
2550.
2600.
2650.
2700.
2750.
GRAV FREE AIR (mgal)
200.
150.
100.
50.
0.
−50.
−100.
−150.
−200.
MGALS
N. MILES
MAG ANOM (nT)
500.
250.
0.
−250.
−500.
NTESSLAS
N. MILES
ZHNG01RR DEPTH (meters)
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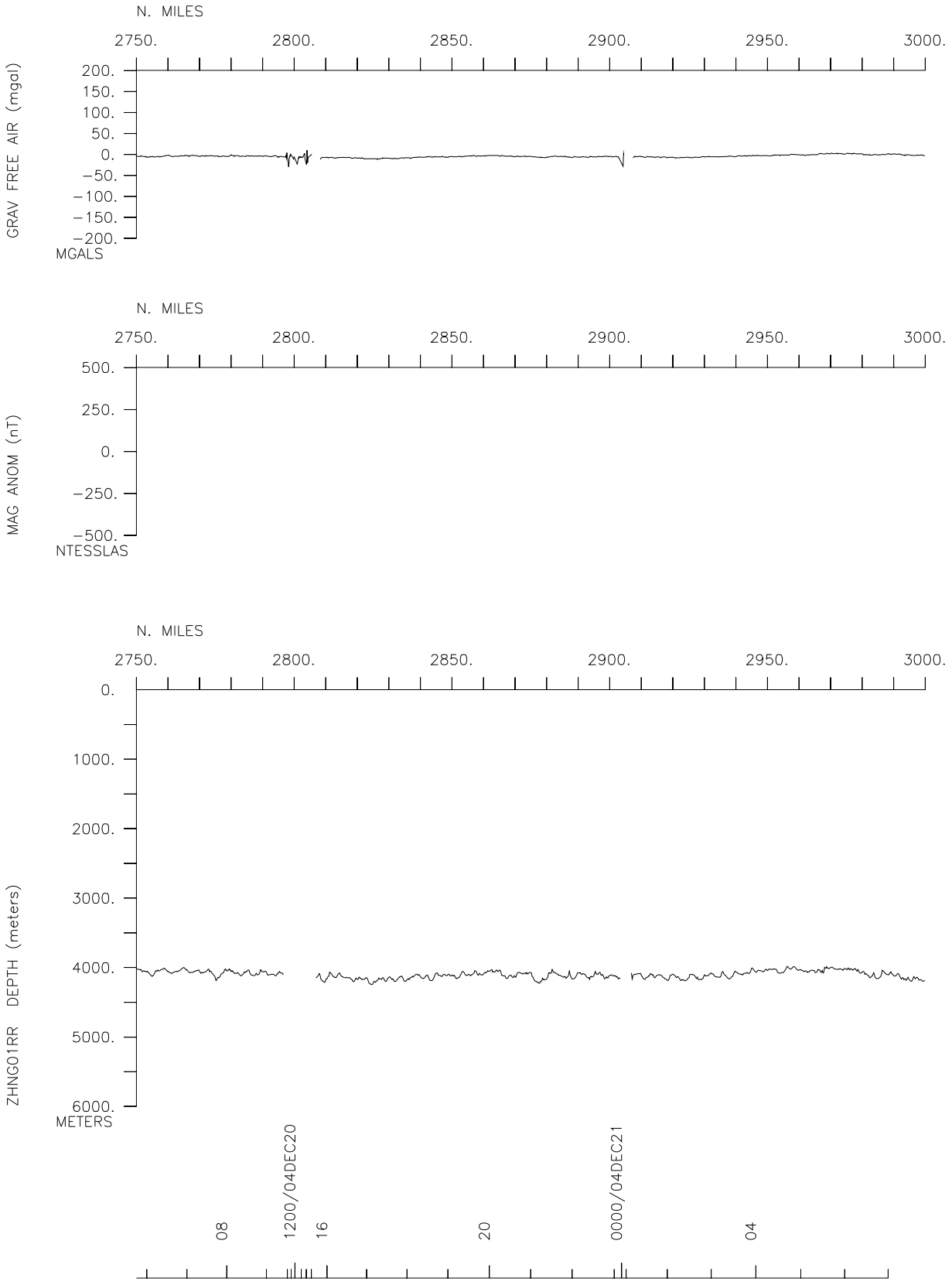
2000.
3000.
4000.
5000.
6000.
METERS
08
1200/04DEC19
16
20
0000/04DEC20
04


N. MILES
2750.
2800.
2850.
2900.
2950.
3000.
GRAV FREE AIR (mgal)
200.
150.
100.
50.
0.
−50.
−100.
−150.
−200.
MGALS
N. MILES
MAG ANOM (nT)
500.
250.
0.
−250.
−500.
NTESSLAS
N. MILES
ZHNG01RR DEPTH (meters)
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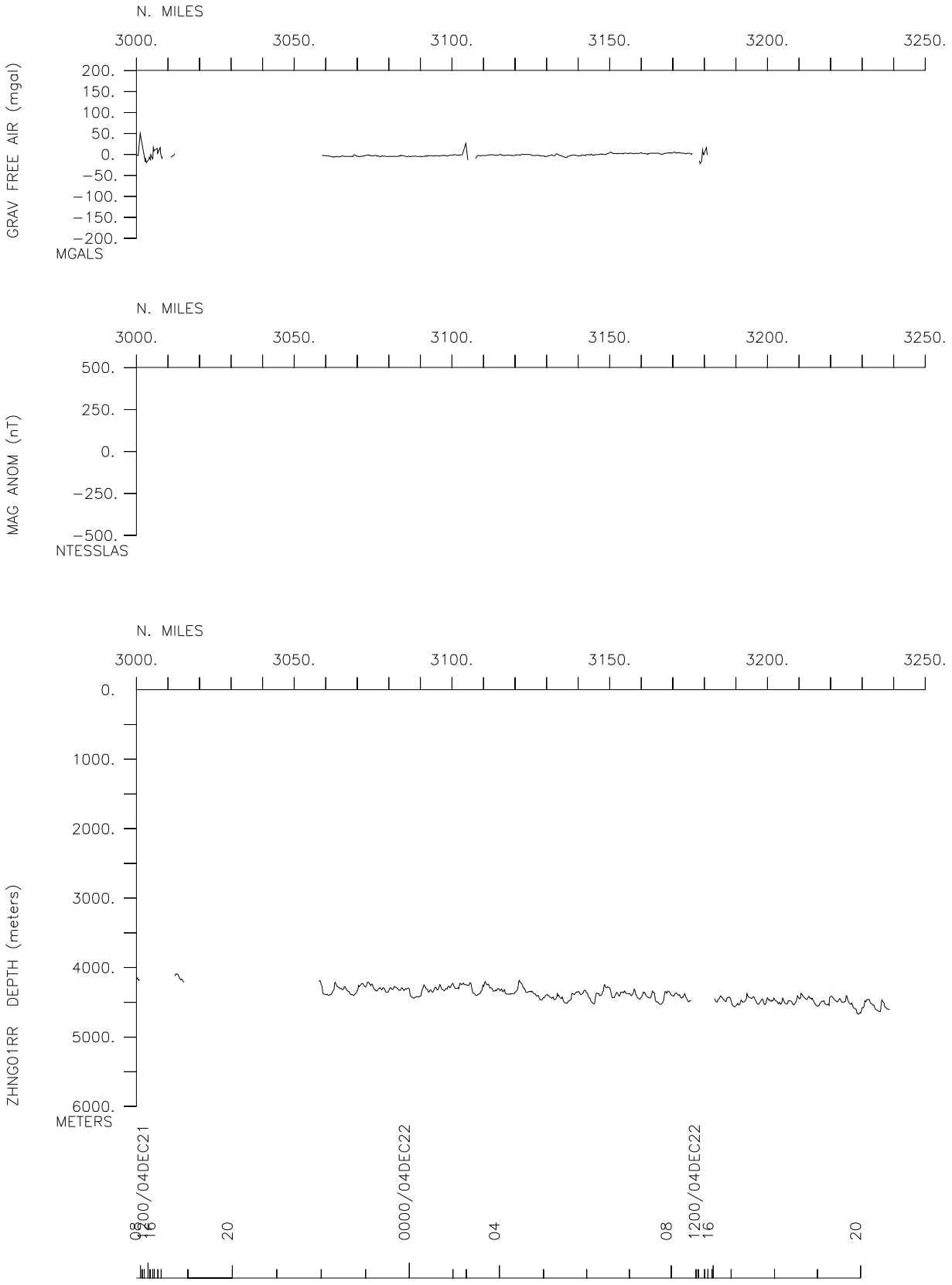
2000.
3000.
4000.
5000.
6000.
METERS
08
1200/04DEC20
16
20
0000/04DEC21
04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3050.
3100.
3150.
3200.
3250.
GRAV FREE AIR (mgal)
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150.
100.
50.
0.
−50.
−100.
−150.
−200.
MGALS
N. MILES
3000.
3050.
3100.
3150.
3200.
3250.
MAG ANOM (nT)
500.
250.
0.
−250.
−500.
NTESSLAS
N. MILES
3000.
3050.
3100.
3150.
3200.
3250.
ZHNG01RR DEPTH (meters)
0.
1000.
2000.
3000.
4000.
5000.
6000.
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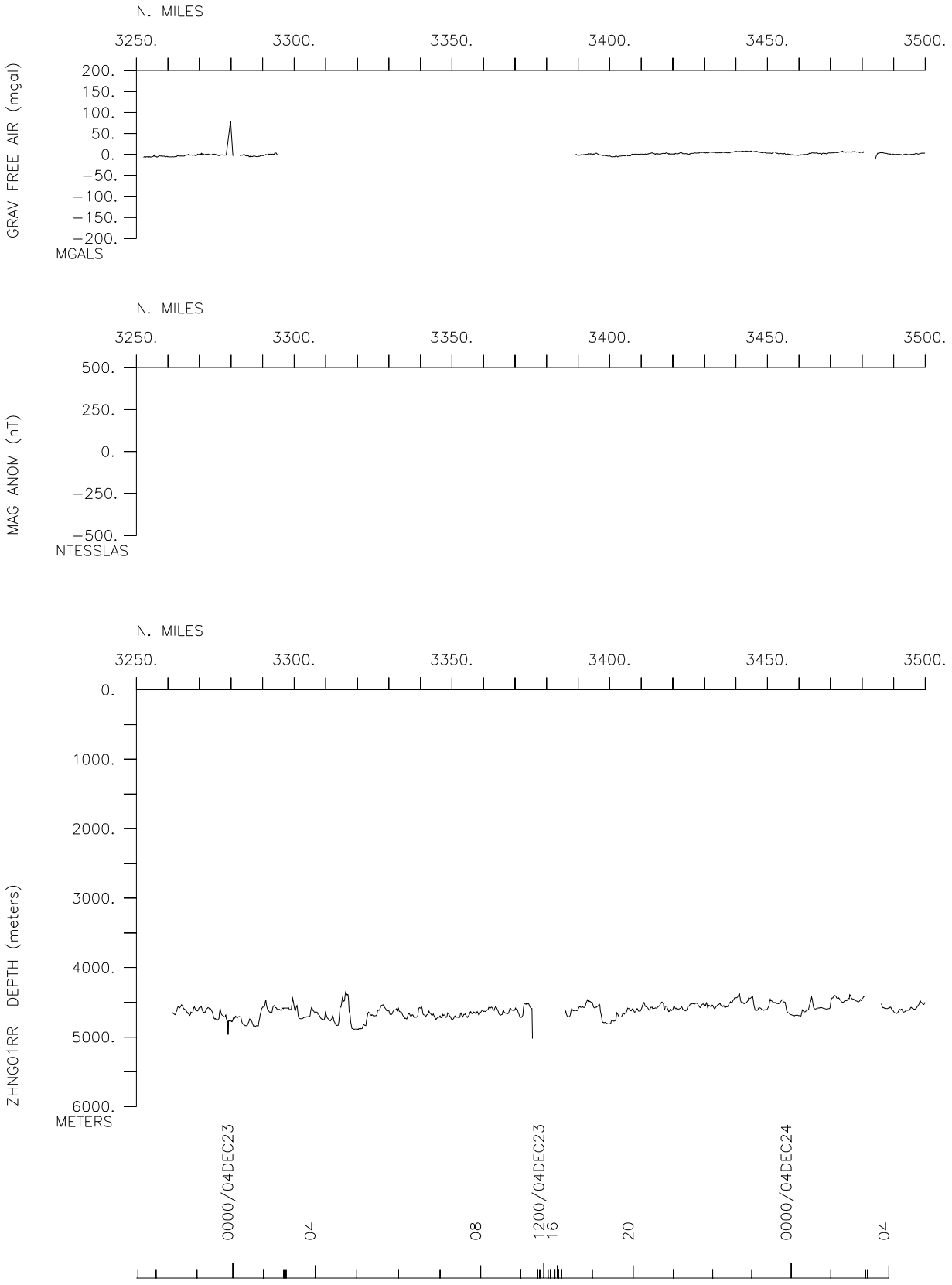
16
20
0000/04DEC22
04
08
1200/04DEC22
16
20


N. MILES
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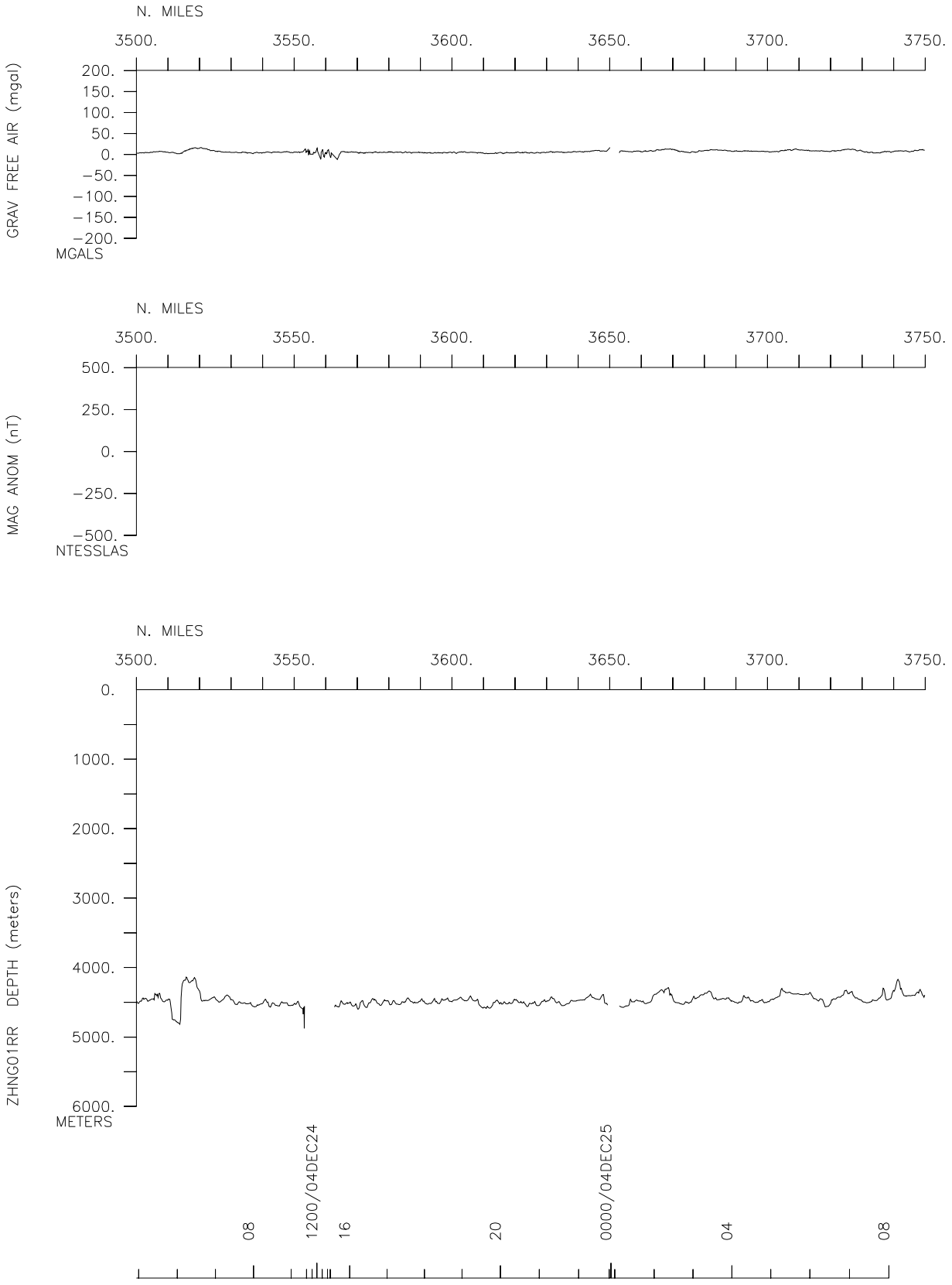
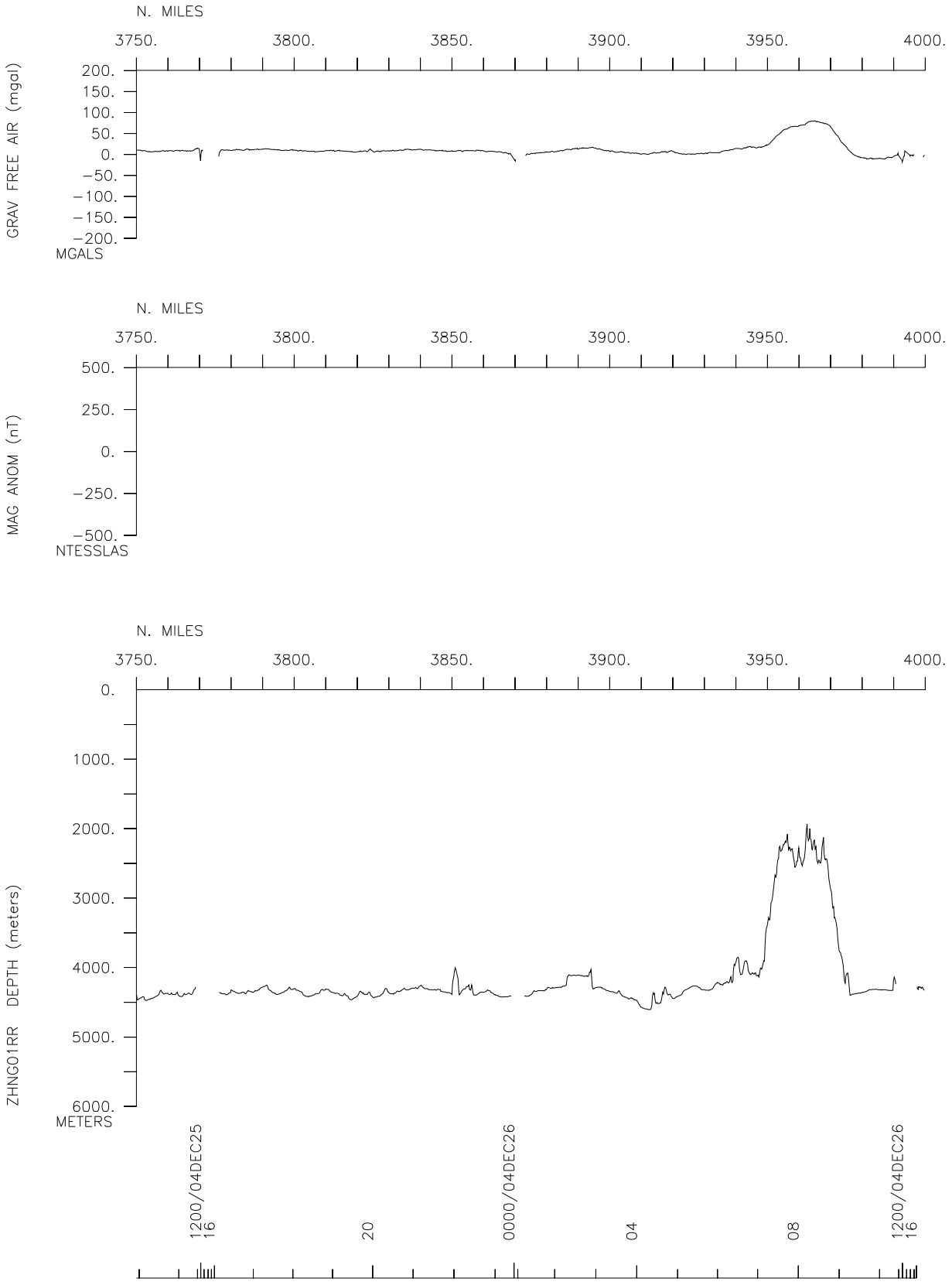
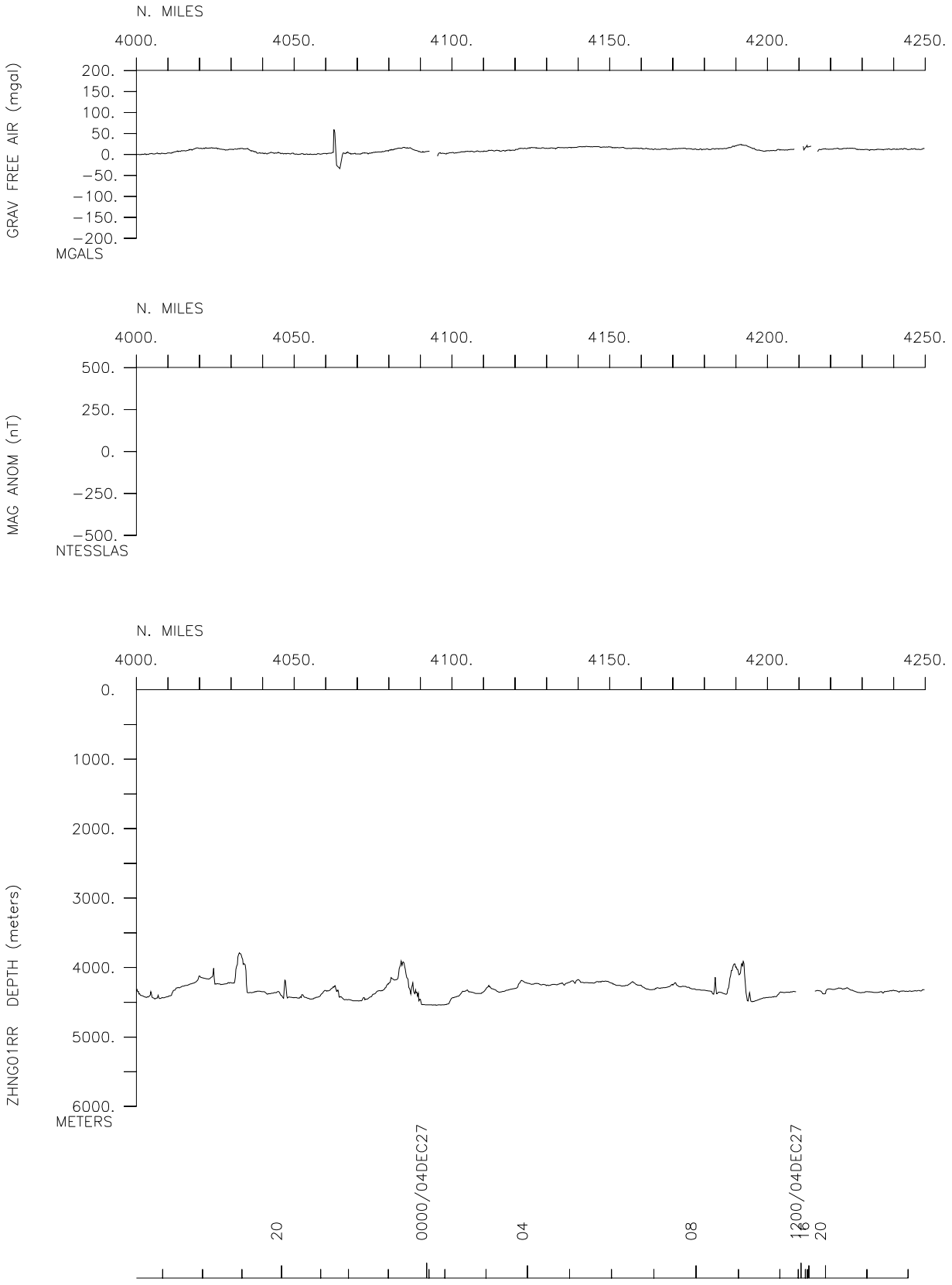
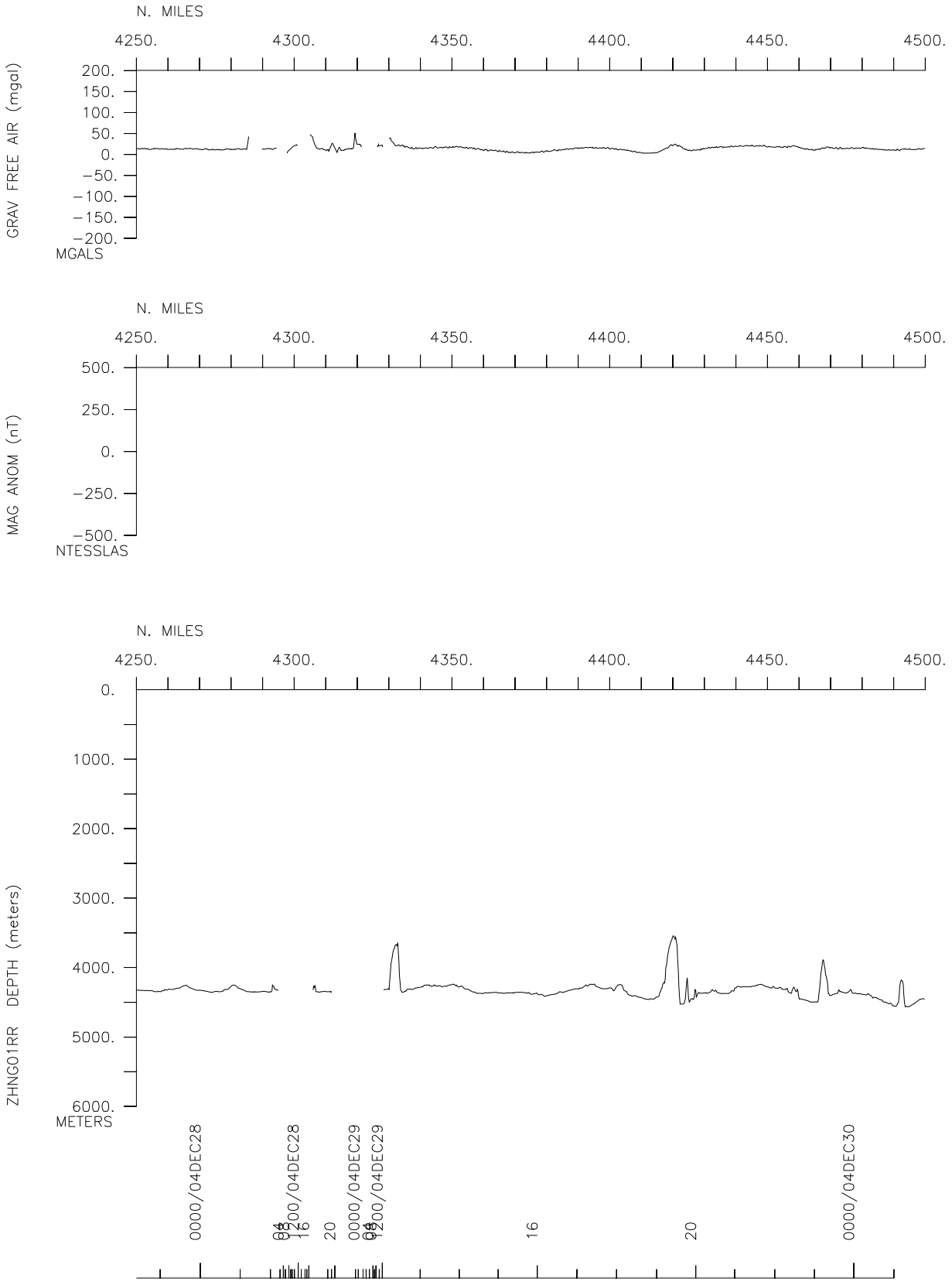
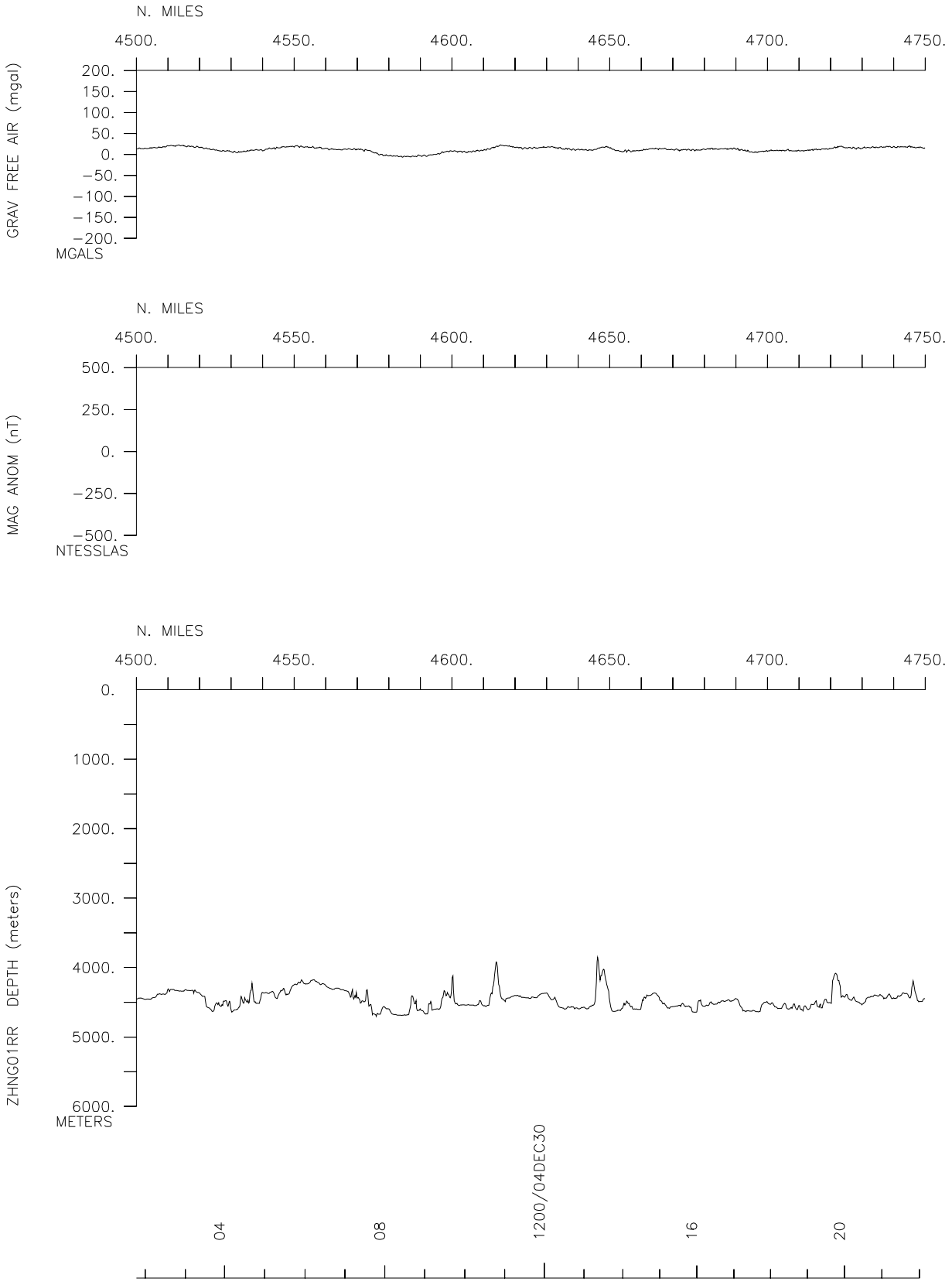
3300.
3350.
3400.
3450.
3500.
GRAV FREE AIR (mgal)
200.
150.
100.
50.
0.
−50.
−100.
−150.
−200.
MGALS
N. MILES
MAG ANOM (nT)
500.
250.
0.
−250.
−500.
NTESSLAS
N. MILES
ZHNG01RR DEPTH (meters)
0.
1000.
2000.
3000.
4000.
5000.
6000.
METERS
0000/04DEC23
04
08
1200/04DEC23
16
20
0000/04DEC24
04

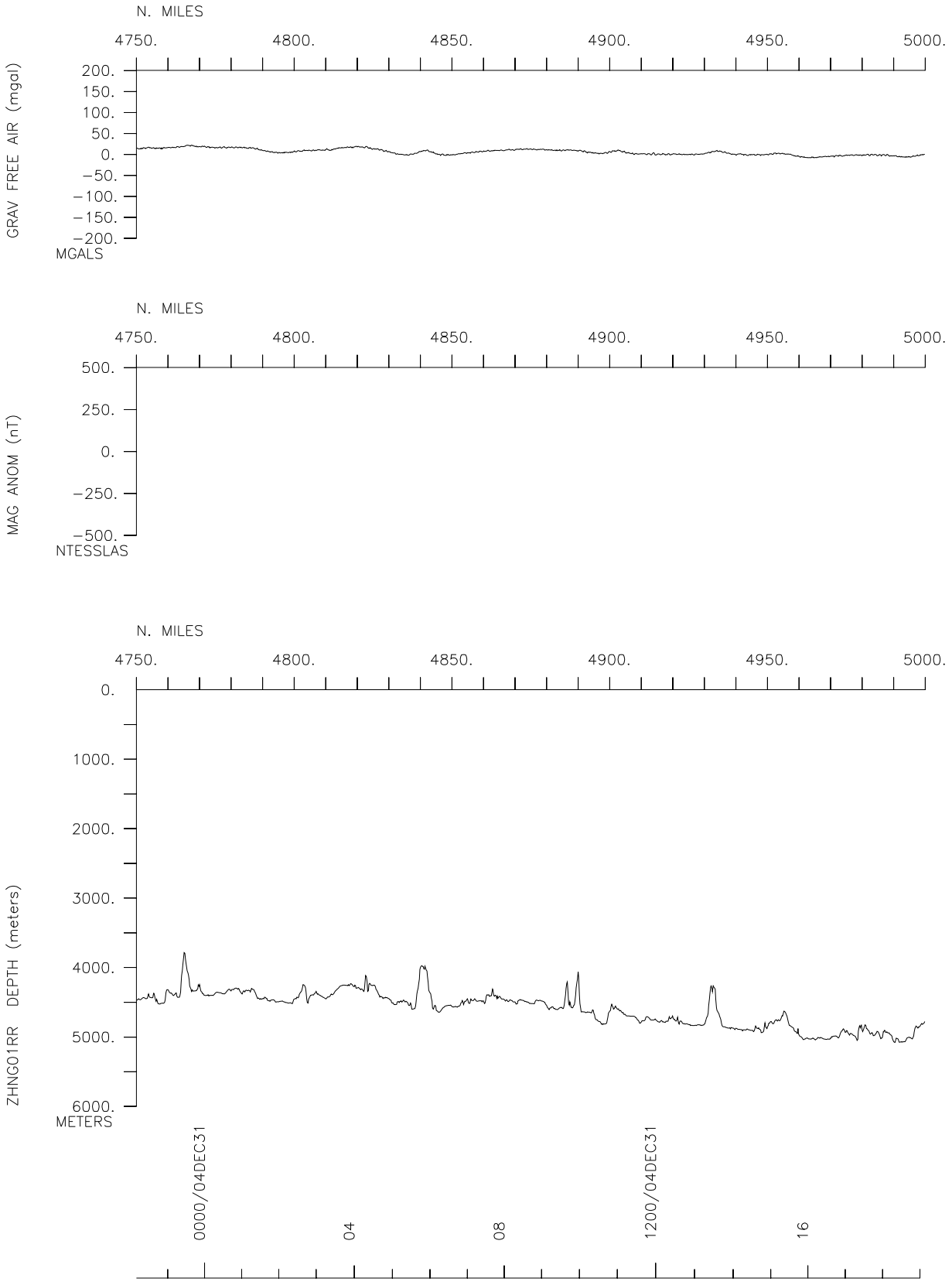

N. MILES
3500.
3550.
3600.
3650.
3700.
3750.
GRAV FREE AIR (mgal)
200.
150.
100.
50.
0.
−50.
−100.
−150.
−200.
MGALS
N. MILES
3500.
3550.
3600.
3650.
3700.
3750.
MAG ANOM (nT)
500.
250.
0.
−250.
−500.
NTESSLAS
N. MILES
3500.
3550.
3600.
3650.
3700.
3750.
ZHNG01RR DEPTH (meters)
0.
1000.
2000.
3000.
4000.
5000.
6000.
METERS
08
1200/04DEC24
16
20
0000/04DEC25
04
08


N. MILES
3750.
3800.
3850.
3900.
3950.
4000.
GRAV FREE AIR (mgal)
200.
150.
100.
50.
0.
−50.
−100.
−150.
−200.
MGALS
N. MILES
3750.
3800.
3850.
3900.
3950.
4000.
MAG ANOM (nT)
500.
250.
0.
−250.
−500.
NTESSLAS
N. MILES
3750.
3800.
3850.
3900.
3950.
4000.
ZHNG01RR DEPTH (meters)
0.
1000.
2000.
3000.
4000.
5000.
6000.
METERS
1200/04DEC25
16
20
0000/04DEC26
04
08
1200/04DEC26
16


N. MILES
4000.
4050.
4100.
4150.
4200.
4250.
GRAV FREE AIR (mgal)
200.
150.
100.
50.
0.
−50.
−100.
−150.
−200.
MGALS
N. MILES
4000.
4050.
4100.
4150.
4200.
4250.
MAG ANOM (nT)
500.
250.
0.
−250.
−500.
NTESSLAS
N. MILES
4000.
4050.
4100.
4150.
4200.
4250.
ZHNG01RR DEPTH (meters)
0.
1000.
2000.
3000.
4000.
5000.
6000.
METERS
20
0000/04DEC27
04
08
1200/04DEC27
16
20


N. MILES
4250.
4300.
4350.
4400.
4450.
4500.
GRAV FREE AIR (mgal)
200.
150.
100.
50.
0.
−50.
−100.
−150.
−200.
MGALS
N. MILES
MAG ANOM (nT)
500.
250.
0.
−250.
−500.
NTESSLAS
N. MILES
ZHNG01RR DEPTH (meters)
0.
1000.
2000.
3000.
4000.
5000.
6000.
METERS
0000/04DEC28
1200/04DEC28
16
20
0000/04DEC29
1200/04DEC29
16
20
0000/04DEC30


N. MILES
4500.
4550.
4600.
4650.
4700.
4750.
GRAV FREE AIR (mgal)
200.
150.
100.
50.
0.
−50.
−100.
−150.
−200.
MGALS
N. MILES
4500.
4550.
4600.
4650.
4700.
4750.
MAG ANOM (nT)
500.
250.
0.
−250.
−500.
NTESSLAS
N. MILES
4500.
4550.
4600.
4650.
4700.
4750.
ZHNG01RR DEPTH (meters)
0.
1000.
2000.
3000.
4000.
5000.
6000.
METERS
04
08
1200/04DEC30
16
20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MGALS
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4850.
4900.
4950.
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NTESSLAS
N. MILES
4750.
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4900.
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ZHNG01RR DEPTH (meters)
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3000.
4000.
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METERS
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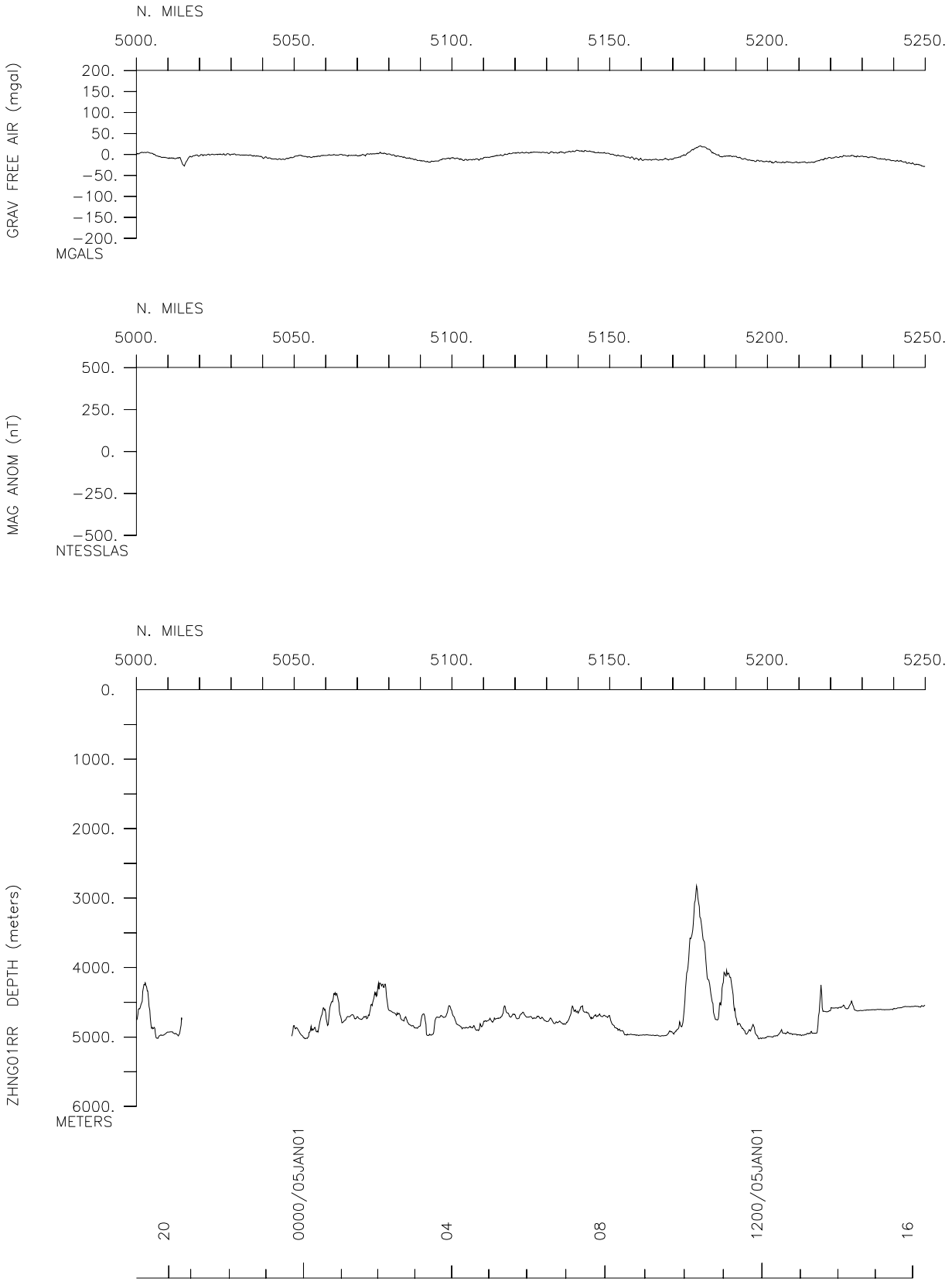
04
08
1200/04DEC31
16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150.
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50.
0.
−50.
−100.
−150.
−200.
MGALS
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5050.
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5150.
5200.
5250.
MAG ANOM (nT)
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250.
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5100.
5150.
5200.
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ZHNG01RR DEPTH (meters)
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3000.
4000.
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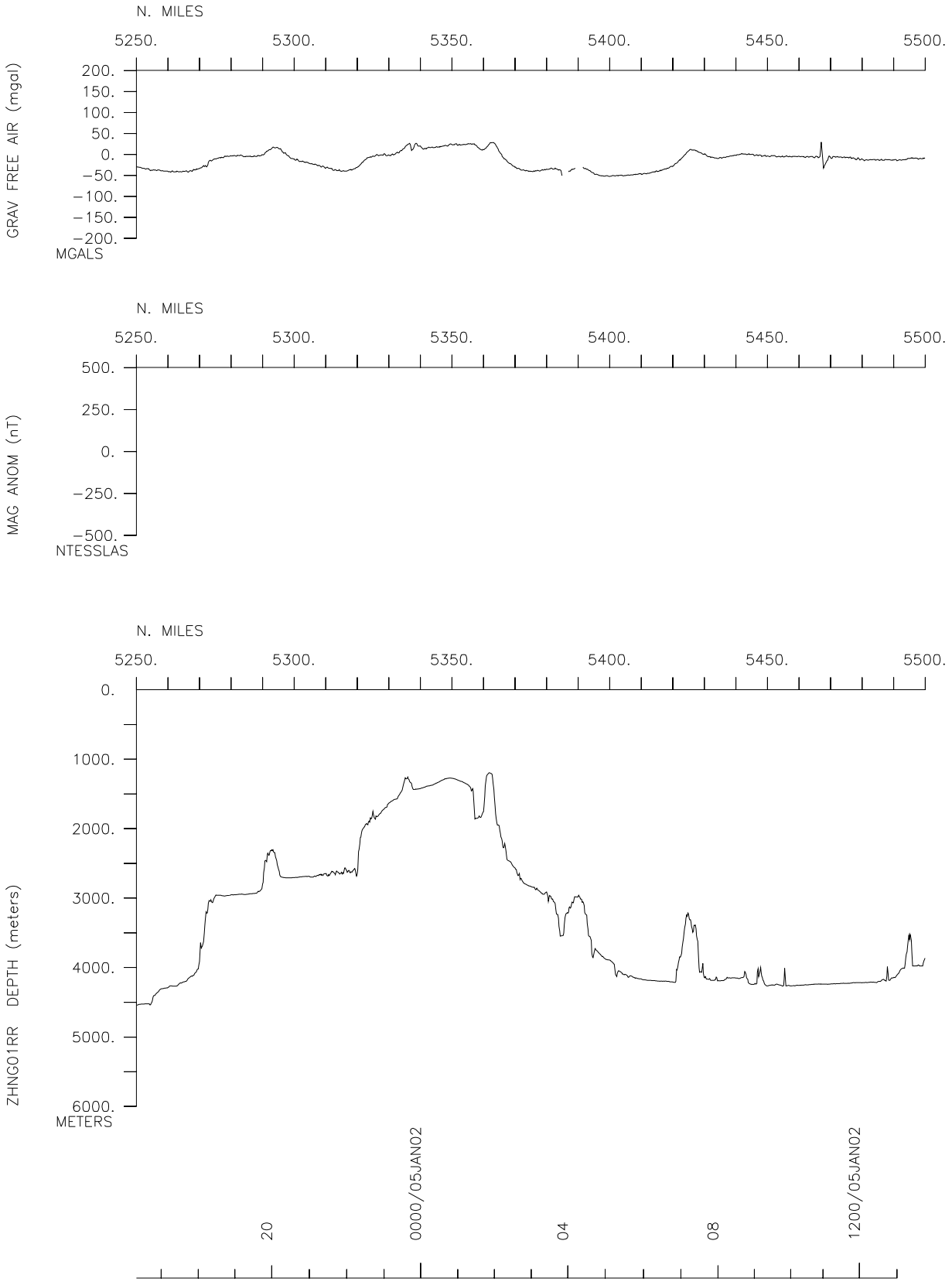
6000.
METERS
20
0000/05JAN01
04
08
1200/05JAN01
16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4000.
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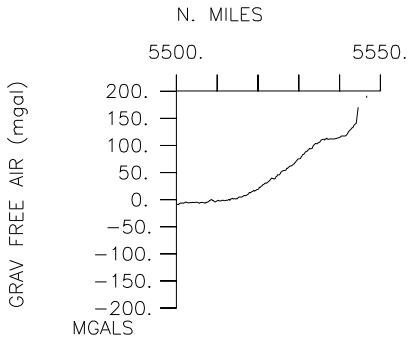
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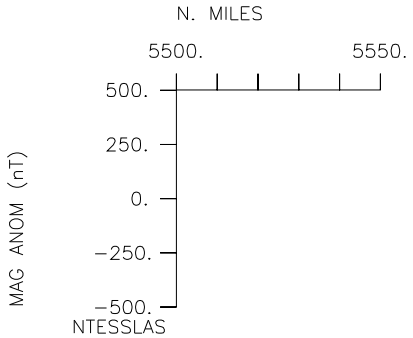
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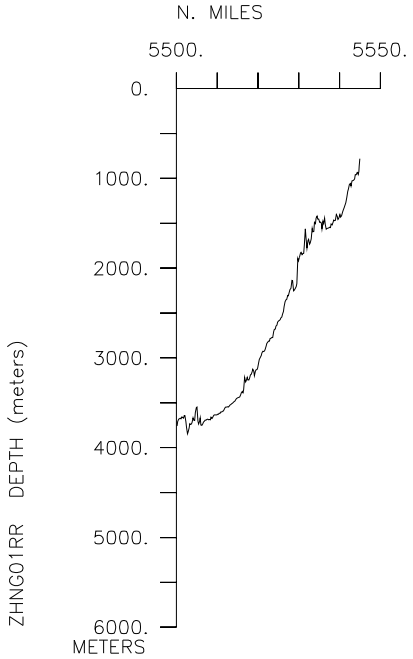
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4000.
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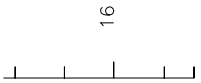
METERS


16

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#*** Ports ***

2251 031204    LGPT B San Diego, CA            32-43.00N 117-14.00W f ZHNG01RR
1800 020105    LGPT E Papette, Tahiti          17-32.00S 149-34.00W f ZHNG01RR


#*** Personnel ***
#         ********NAME******** ******TITLE******  *****AFFILIATION**** **CRID**
#--- ---- -------------------- -----------------  -------------------- --------

PECS OSU  Nelson. D.           Chief Scientist    Oregon State Univ.   ZHNG01RR
PESP SIX  Balch, W.            Scientist          Bigelow Lab.         ZHNG01RR
PESP UCSB Brzezinski, M.       Scientist          U.ofC.Santa Barbara  ZHNG01RR
PESP SIX  Dugdale, R.          Scientist          San Francisco State  ZHNG01RR
PESP IOD  Landry, M.           Scientist          Scripps Institution  ZHNG01RR
PESP UHI  Measures, C.         Scientist          Univ. of Hawaii      ZHNG01RR
PESP FNC  Treguer, P.          Scientist          I.U.E., Brest,France ZHNG01RR
PESP SIX  Chai, F.             Scientist          University of Maine  ZHNG01RR
PESP OSU  Strutton, P.         Scientist          Oregon State Univ.   ZHNG01RR
PESP UCSB Beucher, C.          Post-Doc           U.ofC.Santa BArbara  ZHNG01RR
PESP SIX  Parker, A.           Post-Doc           San Francisco State  ZHNG01RR
PESP SIX  Twining, B.          Post-Doc           Yale University      ZHNG01RR
PEST UCSB Demarest, M.         Grad student       U.ofC.Santa Barbara  ZHNG01RR
PEST UHI  Kaupp, L.            Grad student       University of Hawaii ZHNG01RR
PEST SIX  Lew, K.              Grad student       San Francisco State  ZHNG01RR
PEST SIO  Rykaczewski, R.      Grad student       Scripps Institution  ZHNG01RR
PEST SIO  Yang, E.             Grad student       Scripps Institution  ZHNG01RR
PESP OSU  Arrington, J.        Technician         Oregon State Univ.   ZHNG01RR
PESP SIX  Bowler, B.           Technician         Bigelow Lab.         ZHNG01RR
PESP FNC  Corvaisier, R.       Technician         I.U.E.,Brest,France  ZHNG01RR
PESP SIX  Greeley, D.          Technician         PacMarineEnviro.Lab. ZHNG01RR
PESP SIO  Hodges, M.           Technician         Scripps Institution  ZHNG01RR
PESP SIX  Hogue, V.            Technician         San Francisco State  ZHNG01RR
PESP UCSB Jones, J.            Technician         U.ofC.SantaBarbara   ZHNG01RR
PESP SIX  Maenner, S.          Technician         PacMarineEnviro.Lab. ZHNG01RR
PESP SIX  Marchi, A.           Technician         San Francisco State  ZHNG01RR
PESP SIX  Menzia, F.           Technician         PacMarineEnviro.Lab. ZHNG01RR
PESP UHI  Selph, K.            Technician         Univ. of Hawaii      ZHNG01RR
PESP SIX  Weber, K.            Technician         Bigelow Lab.         ZHNG01RR
PESP SIX  Zima, J.             Technician         Bigelow Lab.         ZHNG01RR
PESP SIX  Smith, C.            Teacher            Fr-Amer.IntnlSchool  ZHNG01RR
PECT STS  Allen, S.            Computer tech      Scripps Institution  ZHNG01RR
PERT STS  Pillard, E.          Resident tech      Scripps Institution  ZHNG01RR


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

#*** Underway Data Curator - Shipboard Technical Support Group ext.41899 ***
#*** Digital Data Curator - Geological Data Center, S.P. Miller, ext.41898 ***


#*** MultiBeam Data (SIMRAD) ***

2328 031204  0 MBSI B SIMRAD Multibeam     GDC  32-35.57N 117-13.41W g ZHNG01RR
1729 020105  0 MBSI E SIMRAD EM120 data    GDC  17-31.31S 149-35.78W g ZHNG01RR


#*** Digital Gravity ***

2301 031204  0 GVDD B digital gravity      GDC  32-41.07N 117-13.83W g ZHNG01RR
1746 020105  0 GVDD E digital gravity      GDC  17-32.40S 149-34.60W g ZHNG01RR


#*** Integrated Meteorological Acquisition System ***

2301 031204  0 IMET B Weather measurements GDC  32-41.07N 117-13.83W g ZHNG01RR
1746 020105  0 IMET E Weather measurements GDC  17-32.40S 149-34.60W g ZHNG01RR


#*** Acoustic Doppler Current Profiler ***

2301 031204  0 ADCP B ADCP 140 kHZ         GDC  32-41.07N 117-13.83W g ZHNG01RR
1746 020105  0 ADCP E current measurements GDC  17-32.40S 149-34.60W g ZHNG01RR

2301 031204  0 ADCP B ADCP 50KHZ           GDC  32-41.07N 117-13.83W g ZHNG01RR
1746 020105  0 ADCP E current measurements GDC  17-32.40S 149-34.60W g ZHNG01RR


#*** Conductivity, Temperature, Depth ***
#*** Samples shared between OSU and UCSB ***

2106 061204  0 TDCT B CTD TEST 24    1000m OSU  19-08.96N 113-33.58W g ZHNG01RR
2208 061204  0 TDCT E TSON C    GH    A    OSU  19-08.96N 113-33.58W g ZHNG01RR
2237 071204  0 TDCT B CTD      24    150m  UCSB 14-25.69N 112-20.93W g ZHNG01RR
2300 071204  0 TDCT E TSON C    GH    A    UCSB 14-25.69N 112-20.93W g ZHNG01RR
2245 081204  0 TDCT B CTD      24    300m  OSU  10-06.53N 111-15.81W g ZHNG01RR
2322 081204  0 TDCT E TSON C    GH    A    OSU  10-06.53N 111-15.81W g ZHNG01RR
1105 101204  0 TDCT B CTD 2.02 24    150m  UCSB  4-00.00N 110-00.00W g ZHNG01RR
1159 101204  0 TDCT E TSON C    GH    A    UCSB  4-00.01N 110-00.01W g ZHNG01RR
1607 101204  0 TDCT B CTD 2.04             OSU   4-00.00N 110-00.00W g ZHNG01RR
1714 101204  0 TDCT E TSON C    GH    A    OSU   4-00.00N 110-00.00W g ZHNG01RR
1810 101204  0 TDCT B CTD 2.06             UCSB  4-00.00N 110-00.01W g ZHNG01RR
1856 101204  0 TDCT E TSON C    GH    A    UCSB  4-00.00N 110-00.01W g ZHNG01RR
2215 101204  0 TDCT B CTD 2.07 24          OSU   3-59.84N 109-59.91W g ZHNG01RR
2257 101204  0 TDCT E TSON C    GH    A    OSU   4-00.00N 110-00.00W g ZHNG01RR
0003 111204  0 TDCT B CTD 2.09 24    120m  UCSB  4-00.00N 110-00.00W g ZHNG01RR
0036 111204  0 TDCT E TSON C    GH    A    UCSB  4-00.00N 110-00.00W g ZHNG01RR
1105 111204  0 TDCT B CTD 3.02 24    200m  OSU   3-00.00N 109-59.99W g ZHNG01RR
1157 111204  0 TDCT E TSON C    GH    A    OSU   3-00.01N 110-00.00W g ZHNG01RR
1602 111204  0 TDCT B CTD 3.04             UCSB  3-00.00N 110-00.01W g ZHNG01RR
1652 111204  0 TDCT E TSON C    GH    A    UCSB  3-00.00N 110-00.00W g ZHNG01RR
2011 111204  0 TDCT B CTD 3.08 24    3880  OSU   3-00.00N 110-00.00W g ZHNG01RR
2253 111204  0 TDCT E TSON C    GH    A    OSU   3-00.00N 110-00.00W g ZHNG01RR
0005 121204  0 TDCT B CTD 3.09 24    200M  UCSB  3-00.00N 110-00.00W g ZHNG01RR
0031 121204  0 TDCT E TSON C    GH    A    UCSB  3-00.00N 110-00.02W g ZHNG01RR
1058 121204  0 TDCT B CTD 4.02 24   200m   OSU   2-00.00N 110-00.02W g ZHNG01RR
1147 121204  0 TDCT E TSON C    GH    A    OSU   2-00.00N 110-00.00W g ZHNG01RR
1605 121204  0 TDCT B CTD 4.04 24          UCSB  1-59.98N 110-00.05W g ZHNG01RR
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2100	121204	0	TDCT	B	CTD 4.08	UCSB	2-00.00N	110-00.00W	g	ZHNG01RR
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0005	131204	0	TDCT	B	CTD 4.09 24 200m	OSU	2-00.00N	110-00.01W	g	ZHNG01RR
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1101	131204	0	TDCT	B	CTD 5.02 24 200m	UCSB	1-00.00N	110-00.00W	g	ZHNG01RR
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1142	161204	0	TDCT	E	TSON C GH A	OSU	2-00.00S	110-00.00W	g	ZHNG01RR
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1102	171204	0	TDCT	B	CTD 11.02 24	UCSB	3-00.00S	110-00.00W	g	ZHNG01RR
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1600	171204	0	TDCT	B	CTD 11.04 24	OSU	3-00.00S	110-00.01W	g	ZHNG01RR
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#GMT DDMMYY #TIME DATE	TZ	SAMP CODE	B E	SAMPLE IDENTIFIER	DISP CODE	LATITUDE	LONGITUDE	p c	CRUISE LEG-SHIP
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1331 201204	0	TDCT	B	CTD 14.04 24	OSU	0-00.03N	116-47.02W	g	ZHNG01RR
1354 201204	0	TDCT	E	TSON C GH A	OSU	0-00.48N	116-46.51W	g	ZHNG01RR
1456 201204	0	TDCT	B	CTD 14.06 24	UCSB	0-00.01S	116-47.68W	g	ZHNG01RR
1535 201204	0	TDCT	E	TSON C GH A	UCSB	0-00.59N	116-47.06W	g	ZHNG01RR
2337 201204	0	TDCT	B	CTD 15.01 24 500m	OSU	0-00.00S	118-24.01W	g	ZHNG01RR
0010 211204	0	TDCT	E	TSON C GH A	OSU	0-00.27N	118-23.77W	g	ZHNG01RR
1033 211204	0	TDCT	B	CTD 16.02 24	UCSB	0-00.20N	119-59.93W	g	ZHNG01RR
1118 211204	0	TDCT	E	TSON C GH A	UCSB	0-00.48N	119-59.46W	g	ZHNG01RR
1324 211204	0	TDCT	B	CTD 16.04 24	OSU	0-00.03S	120-00.10W	g	ZHNG01RR
1357 211204	0	TDCT	E	TSON C GH A	OSU	0-00.20N	119-59.98W	g	ZHNG01RR
1557 211204	0	TDCT	B	CTD 16.06 24	UCSB	0-00.01S	120-00.11W	g	ZHNG01RR
1638 211204	0	TDCT	E	TSON C GH A	UCSB	0-00.19N	120-00.11W	g	ZHNG01RR
0156 221204	0	TDCT	B	CTD 17.01 24 515m	OSU	0-00.00N	121-36.05W	g	ZHNG01RR
0230 221204	0	TDCT	E	TSON C GH A	OSU	0-00.01N	121-36.01W	g	ZHNG01RR
1030 221204	0	TDCT	B	CTD 18.02 24	UCSB	0-00.03N	122-48.01W	g	ZHNG01RR
1109 221204	0	TDCT	E	TSON C GH A	UCSB	0-00.11N	122-47.75W	g	ZHNG01RR
1309 221204	0	TDCT	B	CTD 18.04 24	OSU	0-00.16S	122-48.00W	g	ZHNG01RR
1334 221204	0	TDCT	E	TSON C GH A	OSU	0-00.35S	122-48.00W	g	ZHNG01RR
1413 221204	0	TDCT	B	CTD 18.05 24	UCSB	0-00.01S	122-47.95W	g	ZHNG01RR
1439 221204	0	TDCT	E	TSON C GH A	UCSB	0-00.10S	122-48.10W	g	ZHNG01RR
1547 221204	0	TDCT	B	CTD 18.06 24	OSU	0-00.01S	122-47.98W	g	ZHNG01RR
1628 221204	0	TDCT	E	TSON C GH A	OSU	0-00.07S	122-47.86W	g	ZHNG01RR
0154 231204	0	TDCT	B	CTD 19.01 24 510m	UCSB	0-00.07S	124-11.99W	g	ZHNG01RR
0228 231204	0	TDCT	E	TSON C GH A	UCSB	0-00.20S	124-11.90W	g	ZHNG01RR
1037 231204	0	TDCT	B	CTD 20.02 24	OSU	0-00.06N	125-29.89W	g	ZHNG01RR
1121 231204	0	TDCT	E	TSON C GH A	OSU	0-00.31N	125-29.40W	g	ZHNG01RR
1321 231204	0	TDCT	B	CTD 20.04 24	UCSB	0-00.13S	125-29.85W	g	ZHNG01RR
1401 231204	0	TDCT	E	TSON C GH A	UCSB	0-00.27S	125-29.61W	g	ZHNG01RR
1600 231204	0	TDCT	B	CTD 20.06 24	OSU	0-00.03S	125-30.03W	g	ZHNG01RR
1631 231204	0	TDCT	E	TSON C GH A	OSU	0-00.13S	125-30.03W	g	ZHNG01RR
0203 241204	0	TDCT	B	CTD 21.01 24 518m	UCSB	0-00.00S	127-06.01W	g	ZHNG01RR
0241 241204	0	TDCT	E	TSON C GH A	UCSB	0-00.09N	127-05.62W	g	ZHNG01RR
1015 241204	0	TDCT	B	CTD 22.02 24	OSU	0-00.31N	128-15.37W	g	ZHNG01RR
1052 241204	0	TDCT	E	TSON C GH A	OSU	0-00.65N	128-14.10W	g	ZHNG01RR
1251 241204	0	TDCT	B	CTD 22.04 24	UCSB	0-00.23N	128-15.24W	g	ZHNG01RR
1315 241204	0	TDCT	E	TSON C GH A	UCSB	0-00.48N	128-14.73W	g	ZHNG01RR
1415 241204	0	TDCT	B	CTD 22.05 24	OSU	0-00.15N	128-15.85W	g	ZHNG01RR
1501 241204	0	TDCT	E	TSON C GH A	OSU	0-00.57N	128-15.18W	g	ZHNG01RR
2256 241204	0	TDCT	B	CTD 23.01 24	UCSB	0-00.05S	129-42.60W	g	ZHNG01RR
2336 241204	0	TDCT	E	TSON C GH A	UCSB	0-00.06N	129-42.01W	g	ZHNG01RR
1116 251204	0	TDCT	B	CTD 24.02 24	OSU	0-00.04N	131-38.31W	g	ZHNG01RR
1153 251204	0	TDCT	E	TSON C GH A	OSU	0-00.23N	131-37.58W	g	ZHNG01RR
1358 251204	0	TDCT	B	CTD 24.04 24	UCSB	0-00.02S	131-38.36W	g	ZHNG01RR
1440 251204	0	TDCT	E	TSON C GH A	UCSB	0-00.00N	131-37.99W	g	ZHNG01RR
1519 251204	0	TDCT	B	CTD 24.05 24	OSU	0-00.06S	131-38.42W	g	ZHNG01RR
1551 251204	0	TDCT	E	TSON C GH A	OSU	0-00.06N	131-38.34W	g	ZHNG01RR
2336 251204	0	TDCT	B	CTD 25.01 24	UCSB	0-00.13N	133-12.95W	g	ZHNG01RR
0015 261204	0	TDCT	E	TSON C GH A	UCSB	0-00.37N	133-12.51W	g	ZHNG01RR
1112 261204	0	TDCT	B	CTD 26.02 24	OSU	0-00.69N	135-11.53W	g	ZHNG01RR
1151 261204	0	TDCT	E	TSON C GH A	OSU	0-00.92N	135-11.04W	g	ZHNG01RR
1403 261204	0	TDCT	B	CTD 26.04 24	UCSB	0-00.09N	135-12.04W	g	ZHNG01RR
1425 261204	0	TDCT	E	TSON C GH A	UCSB	0-00.33N	135-11.82W	g	ZHNG01RR
1515 261204	0	TDCT	B	CTD 26.05 24	OSU	0-00.12S	135-12.25W	g	ZHNG01RR
1600 261204	0	TDCT	E	TSON C GH A	OSU	0-00.29N	135-11.71W	g	ZHNG01RR

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#GMT DDMMYY    SAMP B SAMPLE              DISP                        p CRUISE
#TIME DATE  TZ CODE E IDENTIFIER          CODE LATITUDE  LONGITUDE  c LEG-SHIP
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0005 271204  0 TDCT B CTD 27.01 24         UCSB  0-00.12S 136-46.16W g ZHNG01RR
0046 271204  0 TDCT E TSON C    GH    A    UCSB  0-00.08S 136-45.77W g ZHNG01RR
1112 271204  0 TDCT B CTD 28.02 24         OSU   0-00.06S 138-41.04W g ZHNG01RR
1147 271204  0 TDCT E TSON C    GH    A    OSU   0-00.01N 138-40.61W g ZHNG01RR
1350 271204  0 TDCT B CTD 28.04 24         UCSB  0-00.02S 138-40.81W g ZHNG01RR
1431 271204  0 TDCT E TSON C    GH    A    UCSB  0-00.19S 138-40.55W g ZHNG01RR
1700 271204  0 TDCT B CTD 28.06 24         OSU   0-00.01S 138-40.70W g ZHNG01RR
1737 271204  0 TDCT E TSON C    GH    A    OSU   0-00.01N 138-40.70W g ZHNG01RR
0239 281204  0 TDCT B CTD 29.01 24  325m   UCSB  0-00.01N 139-59.99W g ZHNG01RR
0308 281204  0 TDCT E TSON C    GH    A    UCSB  0-00.21N 139-59.64W g ZHNG01RR
0408 281204  0 TDCT B CTD 29.03 24 4000m   OSU   0-00.22N 139-59.16W g ZHNG01RR
0715 281204  0 TDCT E TSON C    GH    A    OSU   0-00.52N 139-58.49W g ZHNG01RR
1119 281204  0 TDCT B CTD 29.05 24         UCSB  0-00.20N 139-59.96W g ZHNG01RR
1154 281204  0 TDCT E TSON C    GH    A    UCSB  0-00.29N 139-59.51W g ZHNG01RR
1355 281204  0 TDCT B CTD 29.07 24         OSU   0-00.03N 139-59.94W g ZHNG01RR
1417 281204  0 TDCT E TSON C    GH    A    OSU   0-00.02N 139-59.80W g ZHNG01RR
1515 281204  0 TDCT B CTD 29.08 24         UCSB  0-00.02S 140-00.04W g ZHNG01RR
1552 281204  0 TDCT E TSON C    GH    A    UCSB  0-00.05S 139-59.73W g ZHNG01RR
0118 291204  0 TDCT B CTD 29.12 24  200m   OSU   0-00.36N 139-58.62W g ZHNG01RR
0141 291204  0 TDCT E TSON C    GH    A    OSU   0-00.54N 139-58.45W g ZHNG01RR
1115 291204  0 TDCT B CTD 29.15 24         UCSB  0-00.22N 139-59.68W g ZHNG01RR
1155 291204  0 TDCT E TSON C    GH    A    UCSB  0-00.29N 139-59.10W g ZHNG01RR
2106 291204  0 TDCT B CTD TEST 24    1000m OSU   1-42.34S 140-45.94W g ZHNG01RR
2208 291204  0 TDCT E TSON C    GH    A    OSU   1-54.30S 140-51.30W g ZHNG01RR


#*** Hydrocasts ***
#*** Samples shared between OSU and UHI ***

2207 071204  0 HCGF B TM Rosette           OSU  14-25.69N 112-20.93W g ZHNG01RR
2220 071204  0 HCGF E TSONI     G          OSU  14-25.69N 112-20.93W g ZHNG01RR
2204 081204  0 HCGF B TM Rosette           UHI  10-06.53N 111-15.82W g ZHNG01RR
2233 081204  0 HCGF E TSONI     G          UHI  10-06.53N 111-15.82W g ZHNG01RR
0230 101204  0 HCGF B TM Rosette     310m  OSU   5-00.01N 109-59.97W g ZHNG01RR
0304 101204  0 HCGF E TSONI     G          OSU   5-00.01N 109-59.98W g ZHNG01RR
1214 101204  0 HCGF B TM  2.03             UHI   4-00.01N 110-00.01W g ZHNG01RR
1247 101204  0 HCGF E TSONI     G          UHI   4-00.01N 110-00.01W g ZHNG01RR
2313 101204  0 HCGF B TM 2.08         50m  OSU   4-00.00N 110-00.00W g ZHNG01RR
2315 101204  0 HCGF E TSONI     G          OSU   4-00.00N 110-00.00W g ZHNG01RR
0207 111204  0 HCGF B TM 2.1   12    310m  UHI   4-00.00N 110-00.01W g ZHNG01RR
0240 111204  0 HCGF E TSONI     G          UHI   4-00.01N 109-59.98W g ZHNG01RR
1208 111204  0 HCGF B TM 3.03  12          OSU   3-00.01N 110-00.01W g ZHNG01RR
1242 111204  0 HCGF E TSONI     G          OSU   3-00.01N 110-00.01W g ZHNG01RR
1706 111204  0 HCGF B TM 3.05  12          UHI   3-00.00N 110-00.00W g ZHNG01RR
1724 111204  0 HCGF E TSONI     G          UHI   3-00.00N 110-00.00W g ZHNG01RR
1918 111204  0 HCGF B TM 3.07  12          OSU   3-00.00N 110-00.01W g ZHNG01RR
1932 111204  0 HCGF E TSONI     G          OSU   3-00.00N 110-00.00W g ZHNG01RR
0212 121204  0 HCGF B TM 3.10  12    310M  UHI   3-00.00N 110-00.00W g ZHNG01RR
0240 121204  0 HCGF E TSONI     G          UHI   3-00.00N 110-00.01W g ZHNG01RR
1205 121204  0 HCGF B TM 4.03  12          OSU   2-00.00N 110-00.01W g ZHNG01RR
1235 121204  0 HCGF E TSONI     G          OSU   2-00.00N 110-00.00W g ZHNG01RR
2003 121204  0 HCGF B TM 4.07  12    114m  UHI   2-00.01N 110-00.00W g ZHNG01RR
2015 121204  0 HCGF E TSONI     G          UHI   2-00.00N 110-00.00W g ZHNG01RR
0201 131204  0 HCGF B TM 4.1   12     310m OSU   2-00.00N 110-00.01W g ZHNG01RR
0228 131204  0 HCGF E TSONI     G          OSU   2-00.00N 110-00.00W g ZHNG01RR
1206 131204  0 HCGF B TM 05.03 12          UHI   1-00.01N 110-00.01W g ZHNG01RR
1241 131204  0 HCGF E TSONI     G          UHI   1-00.00N 110-00.01W g ZHNG01RR
1718 131204  0 HCGF B TM 5.05  12          OSU   1-00.00N 110-00.01W g ZHNG01RR
1732 131204  0 HCGF E TSONI     G          OSU   1-00.00N 110-00.01W g ZHNG01RR
1907 131204  0 HCGF B TM 5.07 12           UHI   1-00.00N 110-00.00W g ZHNG01RR
1920 131204  0 HCGF E TSONI     G          UHI   1-00.00N 110-00.00W g ZHNG01RR
0103 141204  0 HCGF B TM  5.10 12    310m  OSU   1-00.00N 110-00.00W g ZHNG01RR
0129 141204  0 HCGF E TSONI     G          OSU   1-00.00N 110-00.01W g ZHNG01RR
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#GMT DDMMYY    SAMP B SAMPLE               DISP                        p CRUISE
#TIME DATE  TZ CODE E IDENTIFIER           CODE LATITUDE  LONGITUDE  c LEG-SHIP
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0530 141204  0 HCGF B TM 6.02  12          UHI   0-30.19N 109-59.68W g ZHNG01RR
0602 141204  0 HCGF E TSONI     G          UHI   0-30.28N 109-59.16W g ZHNG01RR
1201 141204  0 HCGF B TM 7.30  12          OSU   0-00.18S 109-59.74W g ZHNG01RR
1234 141204  0 HCGF E TSONI     G          OSU   0-00.27S 109-59.31W g ZHNG01RR
2003 141204  0 HCGF B TM 7.07  12    99m   UHI   0-00.01S 110-00.01W g ZHNG01RR
2019 141204  0 HCGF E TSONI     G          UHI   0-00.07S 109-59.80W g ZHNG01RR
0102 151204  0 HCGF B TM 7.10  12    310m  OSU   0-00.00N 109-59.85W g ZHNG01RR
0124 151204  0 HCGF E TSONI     G          OSU   0-00.05N 109-59.21W g ZHNG01RR
0602 151204  0 HCGF B TM 8.02  12          UHI   0-30.01S 109-59.94W g ZHNG01RR
0626 151204  0 HCGF E TSONI     G          UHI   0-29.97S 109-59.69W g ZHNG01RR
1158 151204  0 HCGF B TM 9.03 12           OSU   0-59.71S 109-59.91W g ZHNG01RR
1231 151204  0 HCGF E TSONI     G          OSU   0-59.71S 109-59.91W g ZHNG01RR
0258 161204  0 HCGF B TM 9.08  12   310m   UHI   1-00.00S 110-00.00W g ZHNG01RR
0321 161204  0 HCGF E TSONI     G          UHI   0-59.74S 109-59.95W g ZHNG01RR
1157 161204  0 HCGF B TM 10.03 12          OSU   2-00.00S 110-00.00W g ZHNG01RR
1231 161204  0 HCGF E TSONI     G          OSU   2-00.00S 110-00.00W g ZHNG01RR
1850 161204  0 HCGF B TM 10.06  12         UHI   2-00.00S 110-00.00W g ZHNG01RR
1901 161204  0 HCGF E TSONI     G          UHI   2-00.00S 110-00.00W g ZHNG01RR
0242 171204  0 HCGF B TM 10.10 12    310m  OSU   2-00.00S 110-00.00W g ZHNG01RR
0310 171204  0 HCGF E TSONI     G          OSU   2-00.00S 110-00.00W g ZHNG01RR
1203 171204  0 HCGF B TM 11.03  12         UHI   3-00.00S 110-00.00W g ZHNG01RR
1237 171204  0 HCGF E TSONI     G          UHI   3-00.00S 110-00.00W g ZHNG01RR
1713 171204  0 HCGF B TM 11.05  12         OSU   3-00.00S 110-00.01W g ZHNG01RR
1725 171204  0 HCGF E TSONI     G          OSU   3-00.00S 110-00.01W g ZHNG01RR
1902 171204  0 HCGF B TM Rosette 11.07     UHI   2-59.99S 110-00.00W g ZHNG01RR
1915 171204  0 HCGF E TSONI     G          UHI   3-00.00S 110-00.00W g ZHNG01RR
0205 181204  0 HCGF B TM 11.10  24  310m   OSU   3-00.00S 110-00.01W g ZHNG01RR
0232 181204  0 HCGF E TSONI     G          OSU   3-00.01S 110-00.01W g ZHNG01RR
0428 181204  0 HCGF B TM 11.12  12         UHI   3-00.01S 110-00.01W g ZHNG01RR
0458 181204  0 HCGF E TSONI     G          UHI   3-00.06S 110-00.07W g ZHNG01RR
1201 181204  0 HCGF B TM 12.03  12         OSU   3-59.95S 109-59.93W g ZHNG01RR
1242 181204  0 HCGF E TSONI     G          OSU   3-59.95S 109-59.93W g ZHNG01RR
0034 201204  0 HCGF B TM 13.02  12   310m  UHI   0-00.13N 115-00.04W g ZHNG01RR
0108 201204  0 HCGF E TSONI     G          UHI   0-00.86N 115-00.54W g ZHNG01RR
1204 201204  0 HCGF B TM 14.03  12         OSU   0-01.10N 116-44.86W g ZHNG01RR
1238 201204  0 HCGF E TSONI     G          OSU   0-01.12N 116-45.14W g ZHNG01RR
0026 211204  0 HCGF B TM 15.02  12   290m  UHI   0-00.13N 118-24.22W g ZHNG01RR
0053 211204  0 HCGF E TSONI     G          UHI   0-00.17N 118-23.78W g ZHNG01RR
1231 211204  0 HCGF B TM 16.03  12         OSU   0-00.11N 119-59.95W g ZHNG01RR
1302 211204  0 HCGF E TSONI     G          OSU   0-00.13N 119-59.93W g ZHNG01RR
1515 211204  0 HCGF B TM 16.05  12         UHI   0-00.02S 120-00.13W g ZHNG01RR
1529 211204  0 HCGF E TSONI     G          UHI   0-00.02S 120-00.10W g ZHNG01RR
1722 211204  0 HCGF B TM 16.07  12         OSU   0-00.13N 120-00.19W g ZHNG01RR
1738 211204  0 HCGF E TSONI     G          OSU   0-00.40N 120-00.22W g ZHNG01RR
0243 221204  0 HCGF B TM 17.02  12   300m  UHI   0-00.01N 121-36.05W g ZHNG01RR
0308 221204  0 HCGF E TSONI     G          UHI   0-00.00N 121-36.03W g ZHNG01RR
1145 221204  0 HCGF B TM 18.03 12          OSU   0-00.11N 122-47.74W g ZHNG01RR
1216 221204  0 HCGF E TSONI     G          OSU   0-00.20N 122-48.51W g ZHNG01RR
0245 231204  0 HCGF B TM 19.02  12  310m   UHI   0-00.37S 124-11.95W g ZHNG01RR
0311 231204  0 HCGF E TSONI     G          UHI   0-00.60S 124-11.57W g ZHNG01RR
1156 231204  0 HCGF B TM 20.03  12         OSU   0-00.16S 125-30.00W g ZHNG01RR
1224 231204  0 HCGF E TSONI     G          OSU   0-00.72S 125-29.39W g ZHNG01RR
1446 231204  0 HCGF B TM 20.05  12         UHI   0-00.11S 125-30.02W g ZHNG01RR
1502 231204  0 HCGF E TSONI     G          UHI   0-00.38S 125-29.70W g ZHNG01RR
1720 231204  0 HCGF B TM 20.07  12         OSU   0-00.16S 125-29.90W g ZHNG01RR
1742 231204  0 HCGF E TSONI     G          OSU   0-00.29S 125-29.66W g ZHNG01RR
0254 241204  0 HCGF B TM 21.02  12   290m  UHI   0-00.06N 127-05.59W g ZHNG01RR
0319 241204  0 HCGF E TSONI     G          UHI   0-00.04S 127-04.97W g ZHNG01RR
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#GMT DDMMYY    SAMP B SAMPLE               DISP                        p CRUISE
#TIME DATE  TZ CODE E IDENTIFIER           CODE LATITUDE  LONGITUDE  c LEG-SHIP
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1158 241204  0 HCGF B TM 22.03  12         OSU   0-00.20N 128-15.71W g ZHNG01RR
1227 241204  0 HCGF E TSONI     G          OSU   0-00.20N 128-14.84W g ZHNG01RR
1512 241204  0 HCGF B TM 22.06 12          UHI   0-00.50N 128-15.50W g ZHNG01RR
1526 241204  0 HCGF E TSONI     G          UHI   0-00.55N 128-15.20W g ZHNG01RR
0019 251204  0 HCGF B TM 23.02  12    410m OSU   0-00.06N 129-41.89W g ZHNG01RR
0052 251204  0 HCGF E TSONI     G          OSU   0-00.02N 129-41.18W g ZHNG01RR
1248 251204  0 HCGF B TM Rosette 24.03     UHI   0-00.04N 131-38.46W g ZHNG01RR
1318 251204  0 HCGF E TSONI     G          UHI   0-00.01S 131-37.83W g ZHNG01RR
0026 261204  0 HCGF B TM 25.02 12    390m  OSU   0-00.28N 133-12.77W g ZHNG01RR
0057 261204  0 HCGF E TSONI     G          OSU   0-00.45N 133-12.18W g ZHNG01RR
1256 261204  0 HCGF B TM Rosette 26.03     UHI   0-00.19N 135-12.00W g ZHNG01RR
1326 261204  0 HCGF E TSONI     G          UHI   0-00.45N 135-11.54W g ZHNG01RR
0100 271204  0 HCGF B TM 27.02 12    400m  OSU   0-00.10S 136-45.76W g ZHNG01RR
0133 271204  0 HCGF E TSONI     G          OSU   0-00.52S 136-45.14W g ZHNG01RR
1252 271204  0 HCGF B TM 28.03  12         UHI   0-00.02S 138-40.69W g ZHNG01RR
1320 271204  0 HCGF E TSONI     G          UHI   0-00.32S 138-40.41W g ZHNG01RR
1523 271204  0 HCGF B TM 28.05  12         OSU   0-00.01N 138-40.80W g ZHNG01RR
1538 271204  0 HCGF E TSONI     G          OSU   0-00.08S 138-40.63W g ZHNG01RR
1749 271204  0 HCGF B TM 28.07  12         UHI   0-00.00S 138-40.70W g ZHNG01RR
1801 271204  0 HCGF E TSONI     G          UHI   0-00.00S 138-40.65W g ZHNG01RR
1857 271204  0 HCGF B TM 28.08  12         OSU   0-00.01S 138-40.69W g ZHNG01RR
1927 271204  0 HCGF E TSONI     G          OSU   0-00.10N 138-40.44W g ZHNG01RR
0321 281204  0 HCGF B TM 29.02  12  410m   UHI   0-00.19N 139-59.66W g ZHNG01RR
0354 281204  0 HCGF E TSONI     G          UHI   0-00.23N 139-58.95W g ZHNG01RR
1257 281204  0 HCGF B TM 29.06  12         OSU   0-00.00S 139-59.90W g ZHNG01RR
1327 281204  0 HCGF E TSONI     G          OSU   0-00.01S 139-59.33W g ZHNG01RR
1603 281204  0 HCGF B TM 29.09  12         UHI   0-00.02S 139-59.99W g ZHNG01RR
1615 281204  0 HCGF E TSONI     G          UHI   0-00.02S 139-59.88W g ZHNG01RR
0105 291204  0 HCGF B TM 29.11      675m   OSU   0-00.31N 139-58.49W g ZHNG01RR
0111 291204  0 HCGF E TSONI     G          OSU   0-00.34N 139-58.49W g ZHNG01RR
0309 291204  0 HCGF B TM 29.13 12   210m   UHI   0-00.25N 139-59.77W g ZHNG01RR
0338 291204  0 HCGF E TSONI     G          UHI   0-00.51N 139-59.16W g ZHNG01RR
2207 301204  0 HCGF B TM Rosette           OSU   6-23.90S 142-52.64W g ZHNG01RR
2220 301204  0 HCGF E TSONI     G          OSU   6-26.25S 142-53.69W g ZHNG01RR


#*** Open Nets 1 Meter ***

0955 101204  0 ON1M B ZooPlankton tow 2.01 IOD   4-00.05N 109-59.92W g ZHNG01RR
1022 101204  0 ON1M E 200 o 180m           IOD   3-59.85N 109-59.96W g ZHNG01RR
2135 101204  0 ON1M B ZooPlankton tow 2.06 IOD   3-59.94N 109-59.98W g ZHNG01RR
2200 101204  0 ON1M E 200 o 180m           IOD   3-59.72N 109-59.83W g ZHNG01RR
0931 111204  0 ON1M B ZooPlankton tow 3.01 IOD   3-00.12N 110-00.00W g ZHNG01RR
0953 111204  0 ON1M E 200 o 180m           IOD   3-00.28N 109-59.72W g ZHNG01RR
1746 111204  0 ON1M B ZooPlankton Tow      IOD   3-00.11N 109-59.94W g ZHNG01RR
1801 111204  0 ON1M E 200 o 150m           IOD   3-00.08N 109-59.71W g ZHNG01RR
0930 121204  0 ON1M B ZooPlankton Tow      IOD   2-00.14N 110-00.15W g ZHNG01RR
0947 121204  0 ON1M E 200 o 150m           IOD   2-00.14N 110-00.06W g ZHNG01RR
1905 121204  0 ON1M B ZooPlankton 4.06     IOD   2-00.55N 110-00.46W g ZHNG01RR
1915 121204  0 ON1M E 200 o 180m           IOD   2-00.87N 110-00.69W g ZHNG01RR
0932 131204  0 ON1M B ZooPlankton   5.01   IOD   1-00.02N 110-00.04W g ZHNG01RR
0950 131204  0 ON1M E 200 o 180m           IOD   1-00.01N 109-59.85W g ZHNG01RR
1802 131204  0 ON1M B Zooplankton Tow 5.06 IOD   0-59.95N 109-59.85W g ZHNG01RR
1817 131204  0 ON1M E 200 o 180m           IOD   0-59.86N 109-59.54W g ZHNG01RR
0936 141204  0 ON1M B Zooplankton  7.01    IOD   0-00.01S 109-59.97W g ZHNG01RR
0952 141204  0 ON1M E 200 o 150m           IOD   0-00.11N 109-59.61W g ZHNG01RR
1900 141204  0 ON1M B Zooplankton Tow 7.06 IOD   0-00.06N 110-00.28W g ZHNG01RR
1915 141204  0 ON1M E 200 o 150m           IOD   0-00.25S 110-00.00W g ZHNG01RR
0932 151204  0 ON1M B Zooplankton Tow 9.01 IOD   1-00.00S 109-59.91W g ZHNG01RR
0946 151204  0 ON1M E 200 o 150m           IOD   0-59.85S 109-59.58W g ZHNG01RR
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#GMT DDMMYY    SAMP B SAMPLE                DISP                        p CRUISE
#TIME DATE  TZ CODE E IDENTIFIER            CODE LATITUDE  LONGITUDE  c LEG-SHIP
#---------- -- ---- - -------------------- ---- --------- ---------- - --------
1805 151204  0 ON1M B Zooplankton Tow 9.05 IOD   0-59.91S 109-59.96W g ZHNG01RR
1825 151204  0 ON1M E 200 o 150m           IOD   0-59.84S 109-59.96W g ZHNG01RR
0934 161204  0 ON1M B Zooplankton    10.01 IOD   1-59.96S 109-59.96W g ZHNG01RR
0948 161204  0 ON1M E 200 o 150m           IOD   1-59.79S 109-59.80W g ZHNG01RR
2003 161204  0 ON1M B Zooplankton  10.07   IOD   1-59.98S 110-00.00W g ZHNG01RR
2020 161204  0 ON1M E 200 o 150m           IOD   1-59.75S 109-59.97W g ZHNG01RR
0936 171204  0 ON1M B Zooplankton  11.01   OSU   2-59.98S 109-59.98W g ZHNG01RR
0952 171204  0 ON1M E 200 o 150m           IOD   2-59.92S 109-59.77W g ZHNG01RR
1800 171204  0 ON1M B Zooplankton  11.06   IOD   3-00.04S 109-59.90W g ZHNG01RR
1814 171204  0 ON1M E 200 o 150m           IOD   3-00.04S 109-59.60W g ZHNG01RR
1028 181204  0 ON1M B Zooplankton  11.06   IOD   3-59.90S 110-00.00W g ZHNG01RR
1043 181204  0 ON1M E 200 o 150m           IOD   3-59.94S 109-59.64W g ZHNG01RR
0945 201204  0 ON1M B Zooplankton  14.01   IOD   0-00.25N 116-44.24W g ZHNG01RR
1000 201204  0 ON1M E 200 o 150m           IOD   0-00.58N 116-43.80W g ZHNG01RR
0930 211204  0 ON1M B Zooplankton  16.01   IOD   0-00.03N 120-00.03W g ZHNG01RR
0945 211204  0 ON1M E 200 o 150m           IOD   0-00.14N 119-59.93W g ZHNG01RR
1801 211204  0 ON1M B Zooplankton 16.08    IOD   0-00.24N 120-00.08W g ZHNG01RR
1815 211204  0 ON1M E 200 o 150m           IOD   0-00.56N 120-00.13W g ZHNG01RR
0931 221204  0 ON1M B Zooplankton 18.01    IOD   0-00.01N 122-48.01W g ZHNG01RR
0945 221204  0 ON1M E 200 o 150m           IOD   0-00.04N 122-47.91W g ZHNG01RR
0933 231204  0 ON1M B Zooplankton 20.01    IOD   0-00.11S 125-29.92W g ZHNG01RR
0947 231204  0 ON1M E 200 o 150m           IOD   0-00.16S 125-29.58W g ZHNG01RR
1850 231204  0 ON1M B Zooplankton 22.01    IOD   0-00.00N 125-37.36W g ZHNG01RR
1905 231204  0 ON1M E 200 o 150m           IOD   0-00.00N 125-40.60W g ZHNG01RR
0932 241204  0 ON1M B Zooplankton 22.01    IOD   0-00.11N 128-15.81W g ZHNG01RR
0945 241204  0 ON1M E 200 o 150m           IOD   0-00.25N 128-15.40W g ZHNG01RR
1033 251204  0 ON1M B Zooplankton 24.01    IOD   0-00.06S 131-38.74W g ZHNG01RR
1046 251204  0 ON1M E 200 o 150m           IOD   0-00.00S 131-38.40W g ZHNG01RR
1035 261204  0 ON1M B Zooplankton 26.01    IOD   0-00.25N 135-12.03W g ZHNG01RR
1049 261204  0 ON1M E 200 o 150m           IOD   0-00.49N 135-11.67W g ZHNG01RR
1034 271204  0 ON1M B Zooplankton 28.01    IOD   0-00.06S 138-40.75W g ZHNG01RR
1048 271204  0 ON1M E 200 o 150m           IOD   0-00.01N 138-40.53W g ZHNG01RR
1915 271204  0 ON1M B Zooplankton 28.09    IOD   0-00.00N 138-40.69W g ZHNG01RR
1930 271204  0 ON1M E 200 o 150m           IOD   0-00.12N 138-40.41W g ZHNG01RR
1033 281204  0 ON1M B Zooplankton 29.04    IOD   0-00.03N 139-59.91W g ZHNG01RR
1049 281204  0 ON1M E 200 o 150m           IOD   0-00.13N 139-59.50W g ZHNG01RR
2103 281204  0 ON1M B Zooplankton 29.10    IOD   0-00.01N 139-59.97W g ZHNG01RR
2116 281204  0 ON1M E 200 o 150m           IOD   0-00.07N 139-59.61W g ZHNG01RR
1034 291204  0 ON1M B Zooplankton 29.14    IOD   0-00.06N 139-59.86W g ZHNG01RR
1047 291204  0 ON1M E 200 o 150m           IOD   0-00.15N 139-59.48W g ZHNG01RR

#*** Expendable Bathythermographs ***

0743 041204  0 BTXP   TF_00001 Fast Deep   GDC  30-48.37N 116-43.50W g ZHNG01RR
1828 051204  0 BTXP   TF_00002 Fast Deep   GDC  23-50.08N 114-47.84W g ZHNG01RR
1526 061204  0 BTXP   TF_00003 Fast Deep   GDC  19-58.32N 113-46.52W g ZHNG01RR
1305 071204  0 BTXP   TF_00004 Fast Deep   GDC  16-13.40N 112-48.44W g ZHNG01RR
1744 081204  0 BTXP   TF_00005 Fast Deep   GDC  10-55.33N 111-28.10W g ZHNG01RR
0253 121204  0 BTXP   TF_00006 Fast Deep   GDC   2-59.61N 109-60.00W g ZHNG01RR
0436 131204  0 BTXP   TF_00007 Fast Deep   GDC   1-42.86N 110-00.00W g ZHNG01RR
0142 151204  0 BTXP   TF_00008 Fast Deep   GDC   0-01.51S 109-59.40W g ZHNG01RR
0327 171204  0 BTXP   TF_00009 Fast Deep   GDC   2-00.37S 110-00.04W g ZHNG01RR
0943 181204  0 BTXP   TF_00010 Fast Deep   GDC   3-56.46S 110-00.01W g ZHNG01RR
0131 201204  0 BTXP   TF_00011 Fast Deep   GDC   0-00.67N 115-04.18W g ZHNG01RR
1605 201204  0 BTXP   TF_00012 Fast Deep   GDC   0-00.13N 116-52.05W g ZHNG01RR
0155 211204  0 BTXP   TF_00013 Fast Deep   GDC   0-00.00N 118-35.77W g ZHNG01RR
2254 211204  0 BTXP   TF_00014 Fast Deep   GDC   0-00.00N 121-03.08W g ZHNG01RR
1906 221204  0 BTXP   TF_00015 Fast Deep   GDC   0-04.07S 123-21.81W g ZHNG01RR
1916 231204  0 BTXP   TF_00016 Fast Deep   GDC   0-00.00N 125-42.98W g ZHNG01RR
1633 241204  0 BTXP   TF_00017 Fast Deep   GDC   0-00.00N 128-27.13W g ZHNG01RR
1703 251204  0 BTXP   TF_00018 Fast Deep   GDC   0-00.00N 131-51.72W g ZHNG01RR
1752 261204  0 BTXP   TF_00020 Fast Deep   GDC   0-00.00N 135-33.65W g ZHNG01RR
2056 271204  0 BTXP   TF_00021 Fast Deep   GDC   0-00.00N 138-57.16W g ZHNG01RR
1943 291204  0 BTXP   TF_00022 Fast Deep   GDC   1-26.73S 140-38.93W g ZHNG01RR
2005 301204  0 BTXP   TF_00023 Fast Deep   GDC   6-01.87S 142-42.69W g ZHNG01RR
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1909 311204  0 BTXP   TF_00024 Fast Deep   GDC  10-12.49S 144-36.32W g ZHNG01RR
2044 010105  0 BTXP   TF_00025 Fast Deep   GDC  14-46.33S 146-45.23W g ZHNG01RR

#                     End Sample Index                                ZHNG01RR
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