

**REPORT AND INDEX OF
UNDERWAY MARINE GEOPHYSICAL DATA**

TUNES EXPEDITION

LEG 6

R/V Thomas Washington

(Issued December 1991)

Kwajalein, Marshall Islands (31 October 1991)
to
Apra, Guam (2 December 1991)

Chief Scientist:

Hubert Staudigel (Scripps Institution of Oceanography)

Resident Marine Technician - Ron Comer

Post-Cruise Processing and Report Preparation by the
Geological Data Center, Scripps Institution of Oceanography
La Jolla, California 92093

Data Collection and Processing Funded by:
NSF Grant Number OCE91-02183

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.
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Geological Data Center, Scripps Institution of Oceanography,
La Jolla, California 92093.

GDC Cruise I.D.# 254

INFORMAL 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 anomaly and gravity free air anomaly vs. distance. Sections of track having subbottom profile (airgun or watergun) records have a wide black line along the bottom of the profile. Sections having Sea Beam are indicated by a narrow black line.

Sample Index - list of beginning and end times and positions of all underway records as well as all other samples and measurements (geology, biology, physical oceanography, etc.) collected on the cruise leg.

NOTE: One or more of the underway data types may not be collected on a given cruise leg.

For information on the availability and reproduction costs of data in the following forms, contact S. M. Smith, Curator, Geological Data Center, Scripps Institution of Oceanography, La Jolla, CA 92093-0223. Phone (619)534-2752. Fax (619)534-5306.

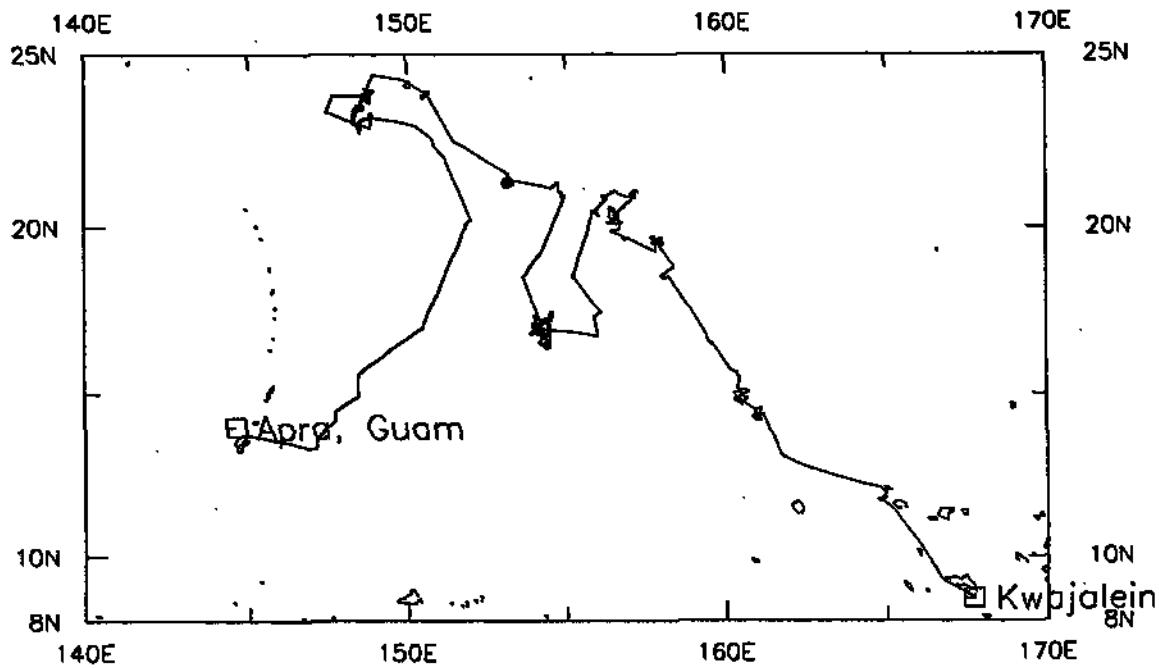
1. Navigation listing with times and positions of course and speed changes, fixes and drift velocity.
2. Depth compilation plots - compilation plots at the traditional scale of 4in/degree longitude (1:1,000,000) are no longer produced for Sea Beam cruises. Custom plots may be requested of vertical beam (2&2/3 degree beam width) depths retrieved at one minute intervals of ship time.
3. Plots of depths, magnetics or gravity profiles along track - custom plots at various map and profile scales on Mercator projection may be requested.
4. Separate time series files of navigation, depth, gravity and magnetics as well as these data merged in the MGD77 Exchange format on magnetic tape.
5. Microfilm or Xerox copies of:
 - a. Echosounder records - 12 and 3.5 kHz frequency
 - b. Subbottom profiler records
 - c. Magnetometer records
 - d. Underway data log book

SIO Sea Beam Data Information

The following forms are available, subject to approval of the cruise leg chief scientist:

- 1) Archive copy of contour swath books generated in real time on board ship available for inspection at the data center.
- 2) Microfilm (35mm flowfilm) containing swath books plus, for some cruises, the Sea Beam monitor record and navigation list.
- 3) Sea Beam merged tapes - Sea Beam data merged with navigation. (Navigation is edited to the extent that DR courses and speeds are edited and poor fixes are removed after inspection of drift vectors between fix pairs. No editing is done on the basis of adjusting to overlapping Sea Beam swaths.)
- 4) Archive contour plots - 16"/degree chart scale, with contour interval nominally 50m, are generated for all transit lines. Some survey areas are plotted at appropriate scales as well. Available for inspection at data center; additional copies may be generated from plot files stored on tape.
- 5) Custom generated plots of Sea Beam swaths on Mercator projection in four colors at variable plot scales and contour intervals. There are provisions to adjust positions of individual track lines and to edit out beams (bad data or overlapping data on inside of turns).

Revised October 1986



TUNES EXPEDITION Leg 6 (TUNE06WT)

*

TUNES EXPEDITION LEG 6

CHIEF SCIENTIST: Hubert Staudigel

Scripps Institution of Oceanography

PORTS: Kwajalein, Marshall Is. - Apra, Guam

DATES: 31 October - 2 December 1991

SHIP: R/V T. Washington

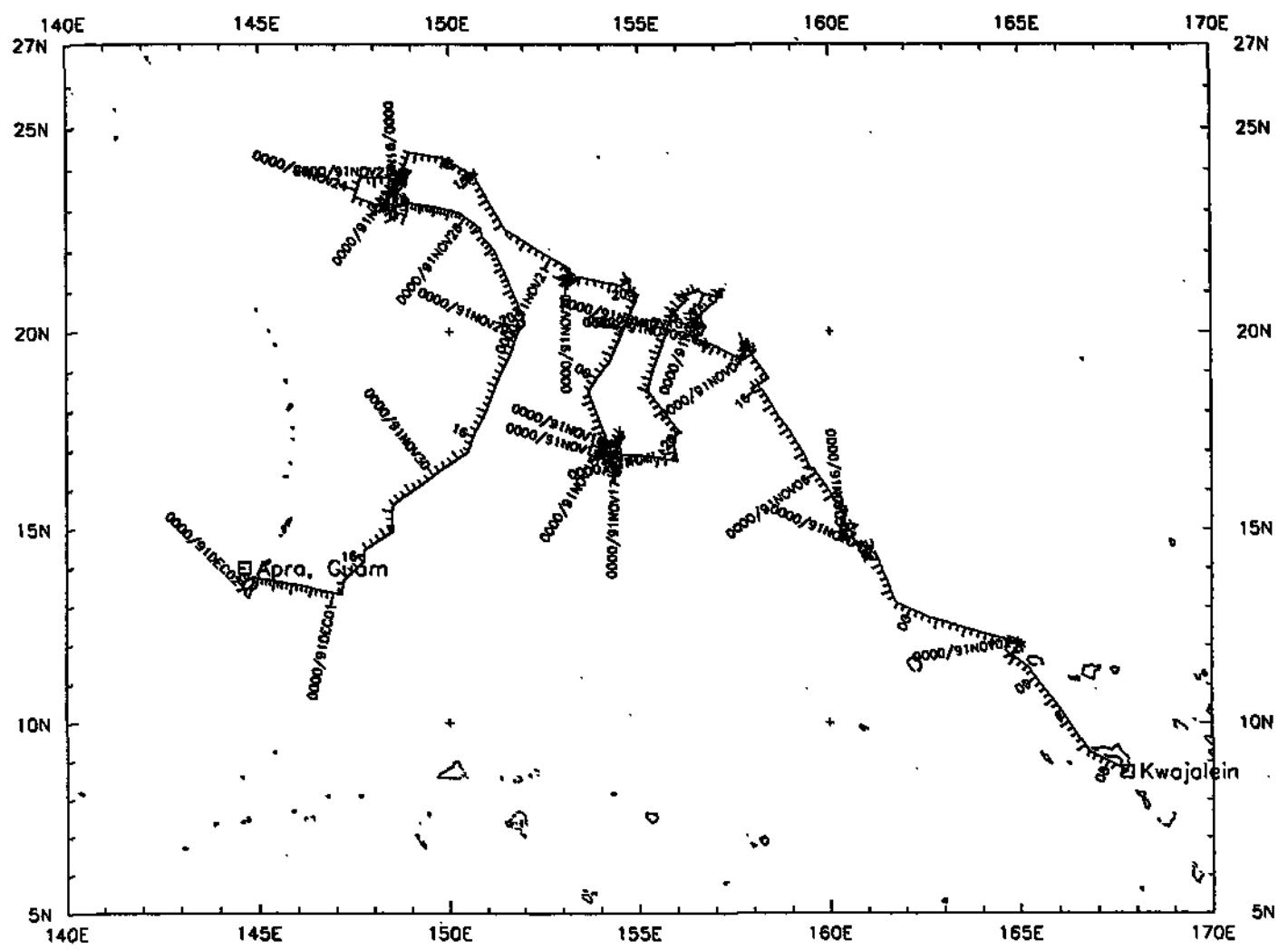
TOTAL MILEAGE OF UNDERWAY DATA COLLECTED

Cruise - 6029 miles

Magnetics - 5455 miles

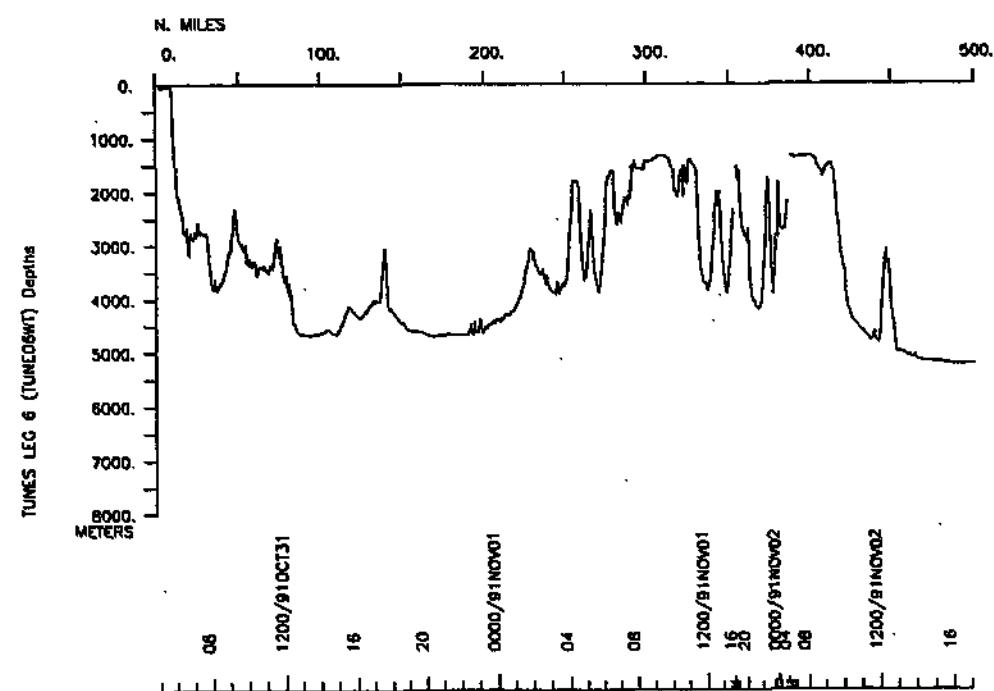
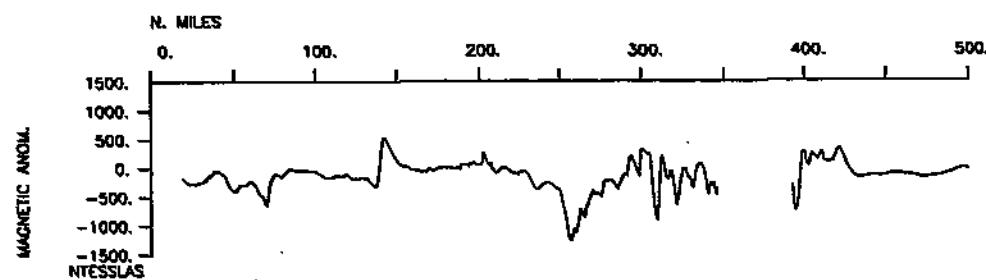
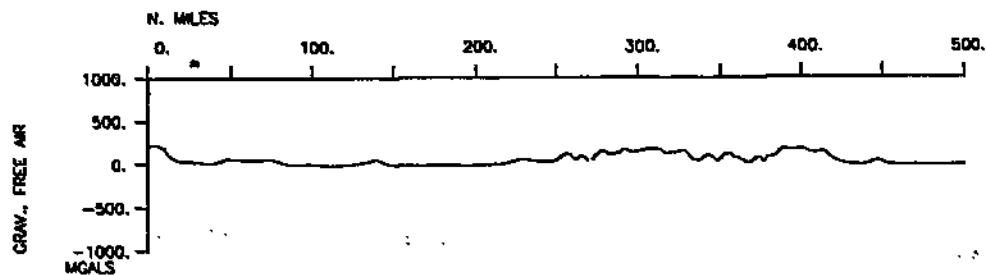
Bathymetry - 5790 miles

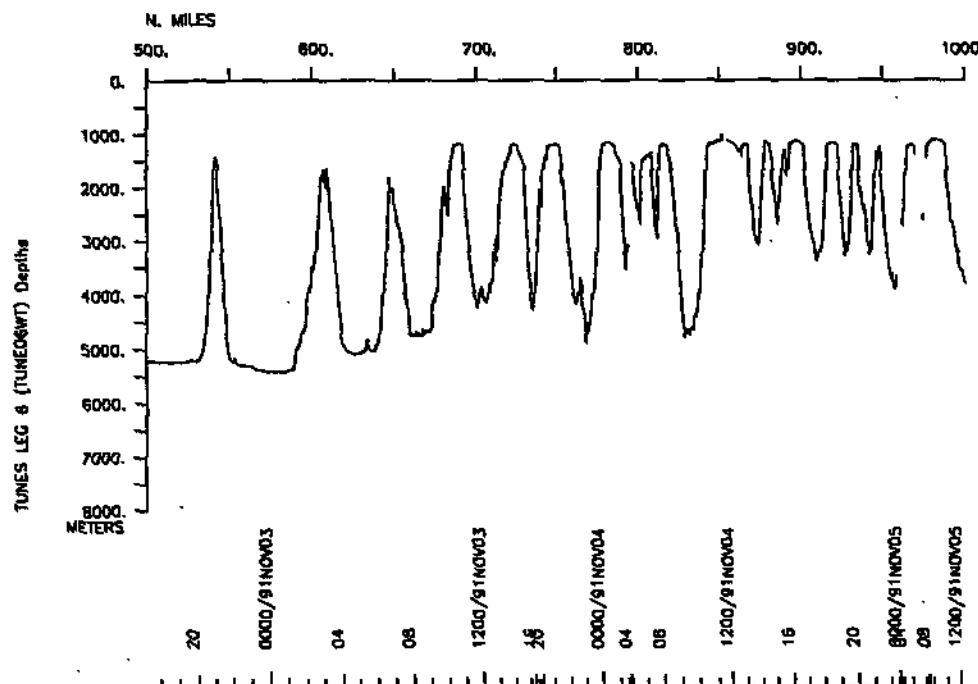
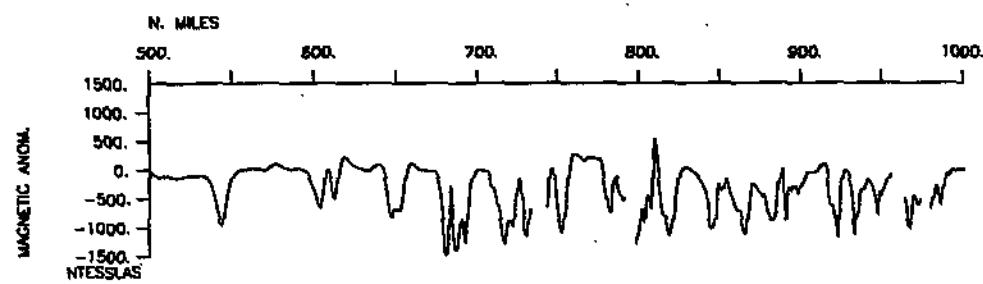
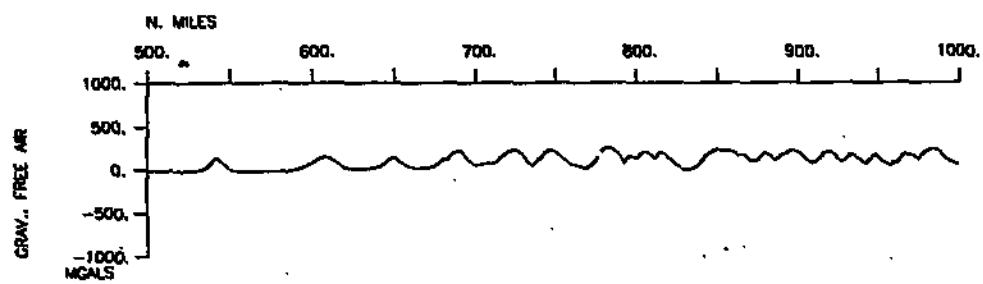
Seismic Reflection - none collected

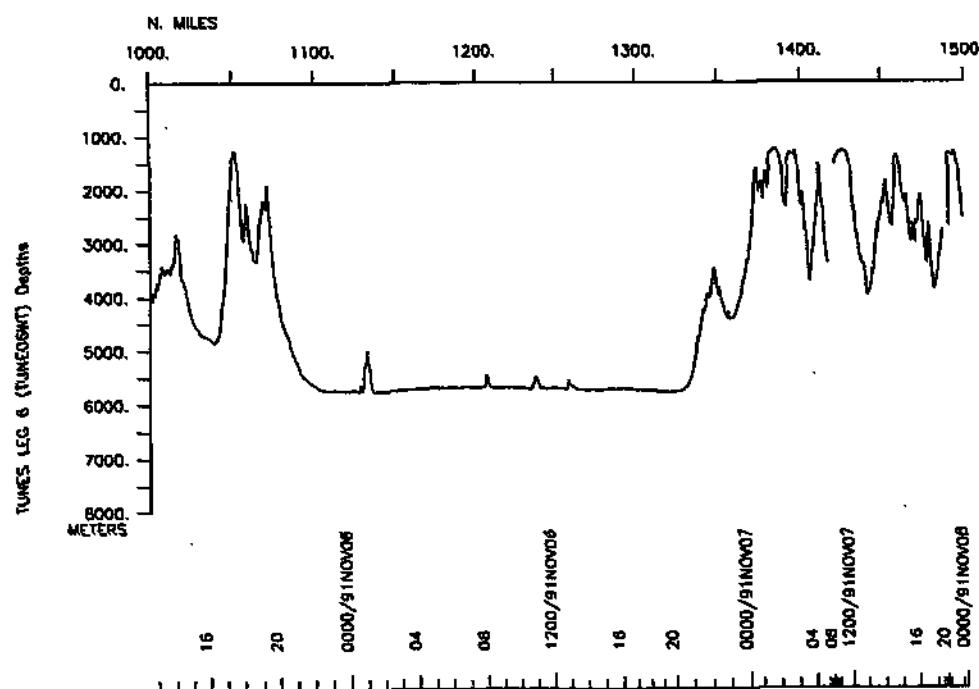
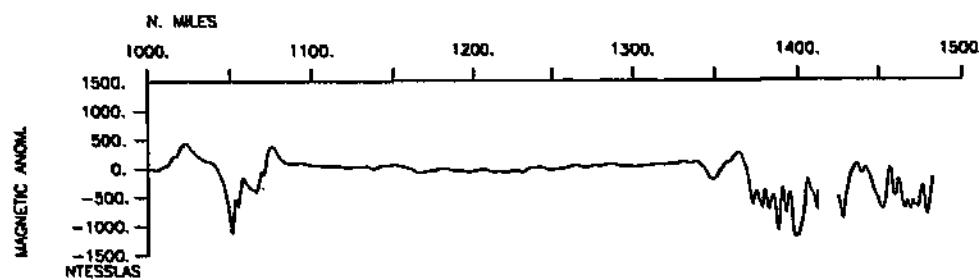
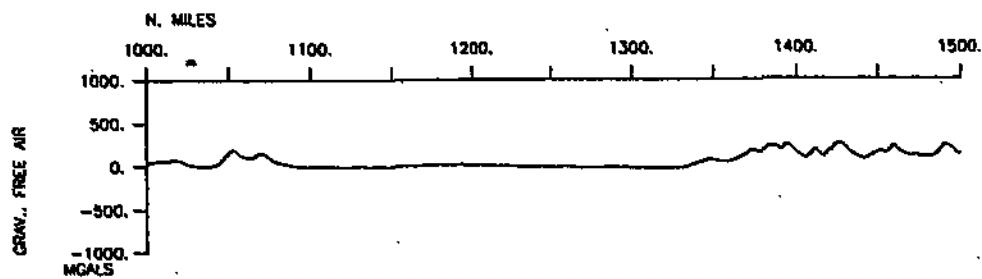


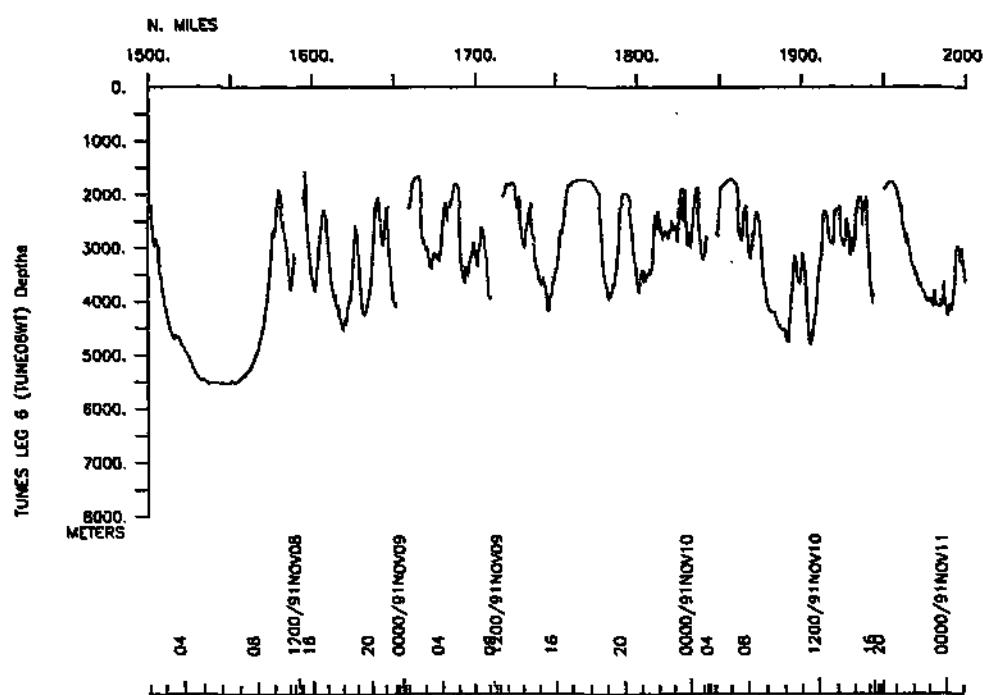
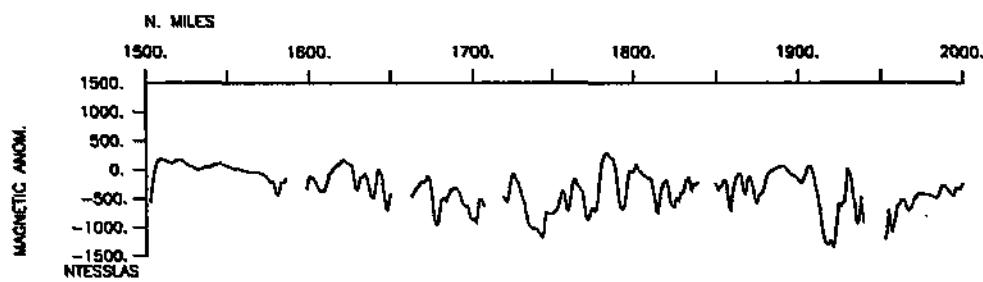
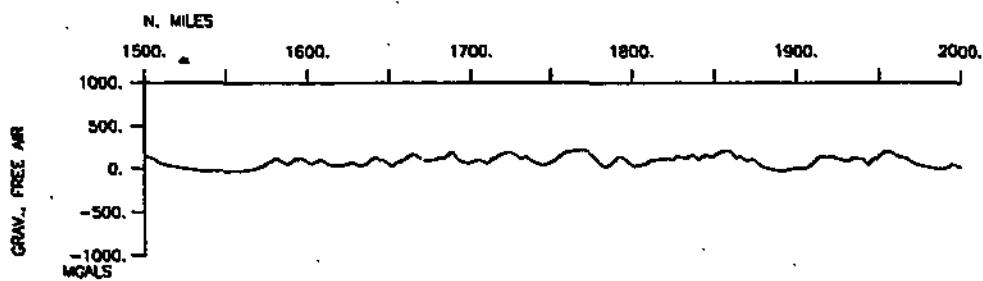
TUNES EXPEDITION Leg 6 (TUNE06WT)

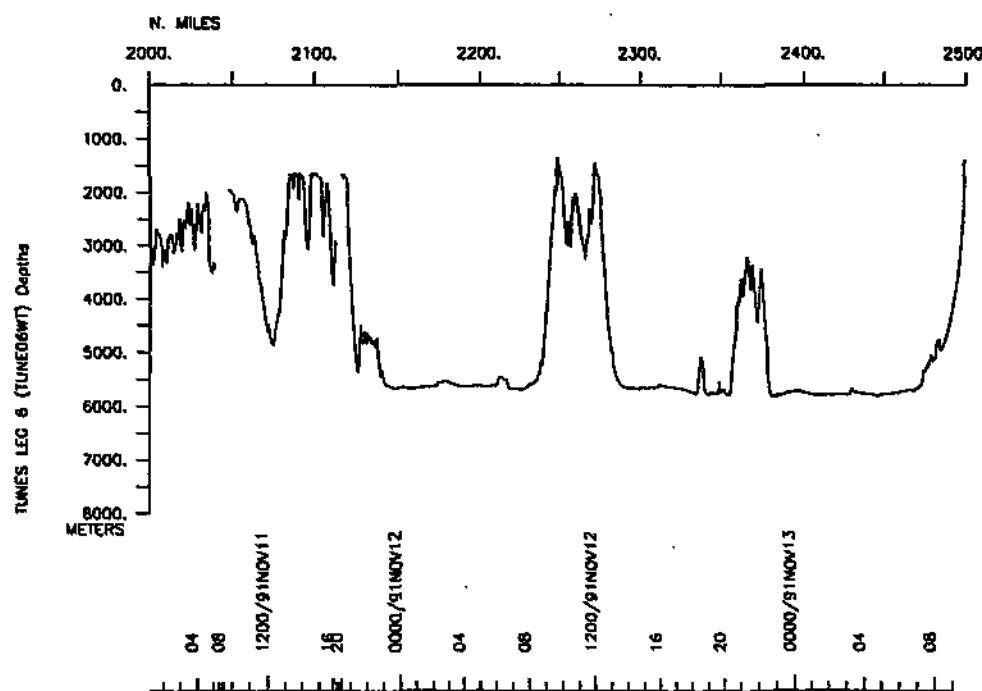
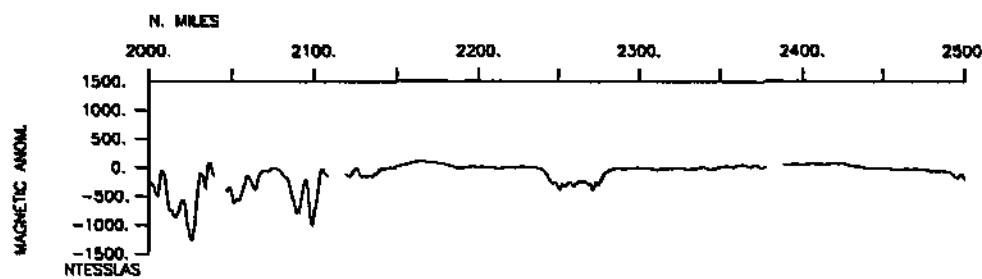
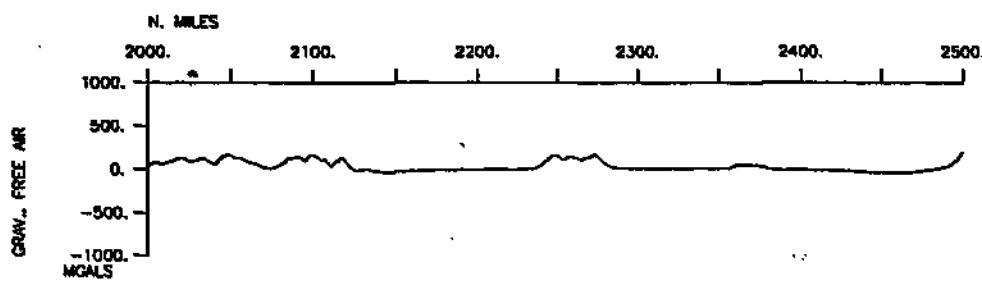
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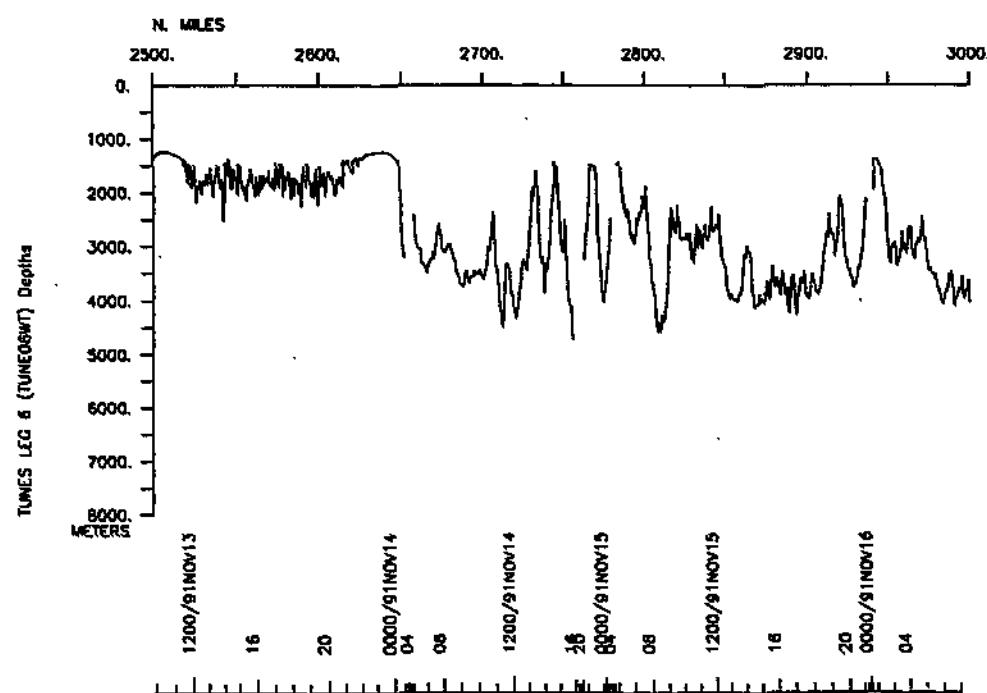
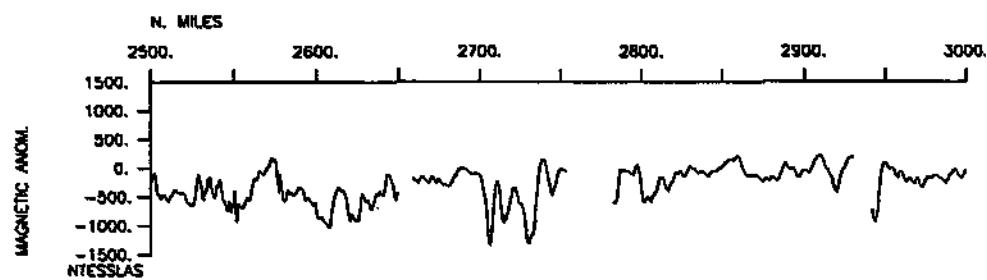


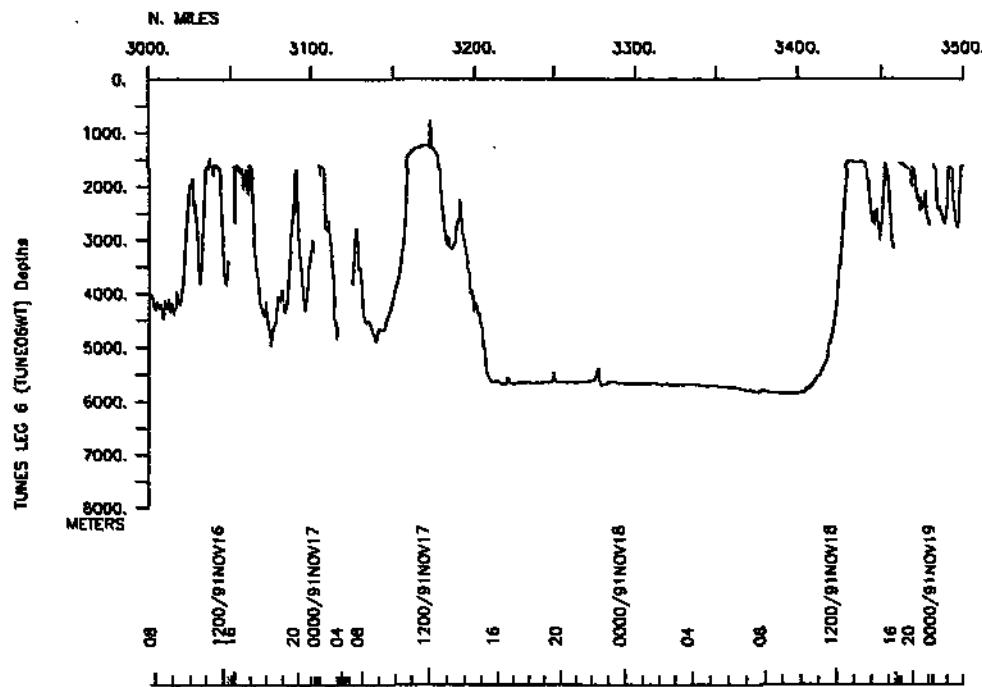
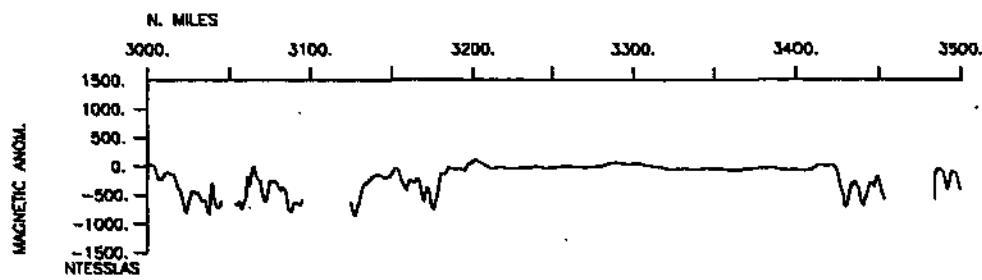
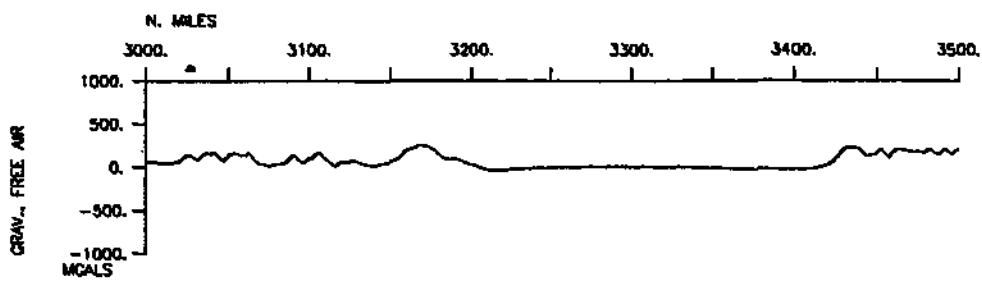


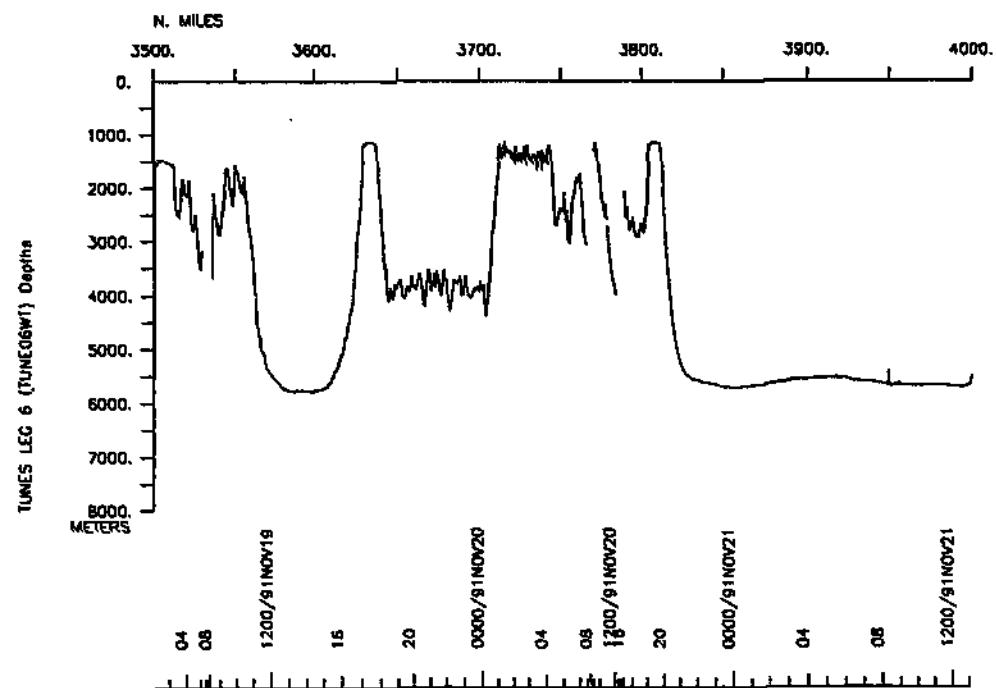
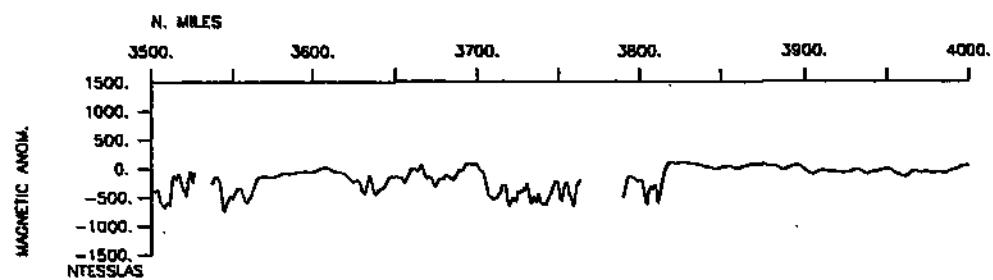
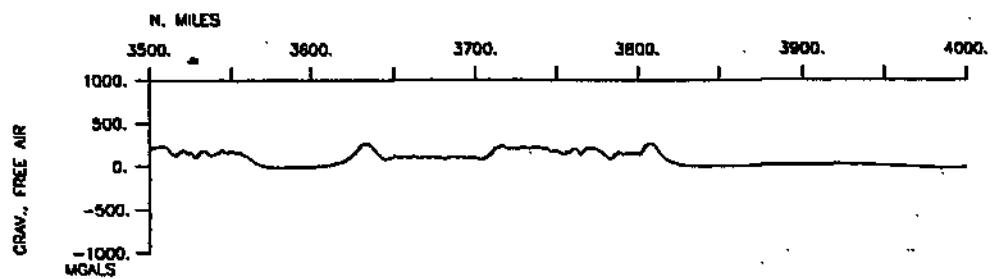


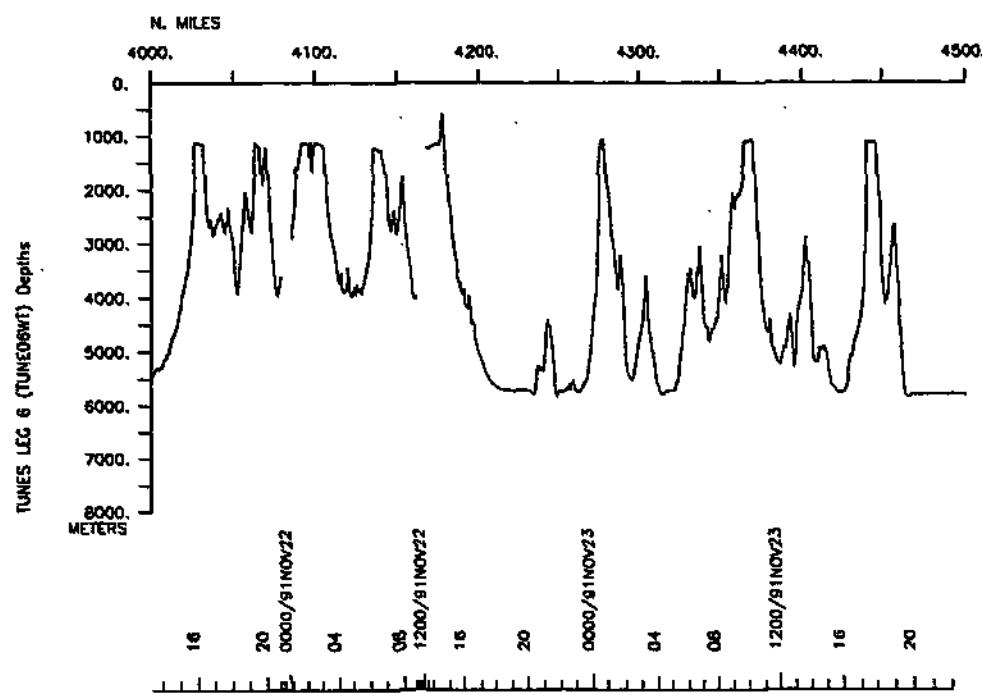
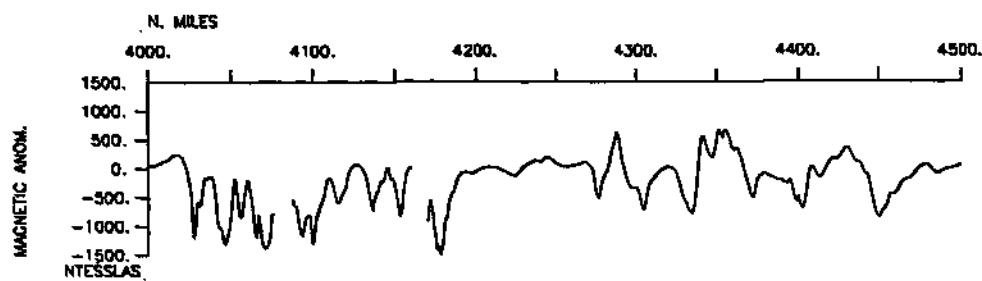
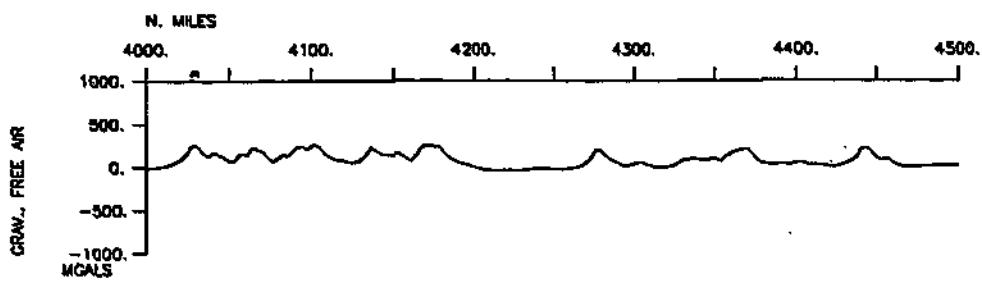


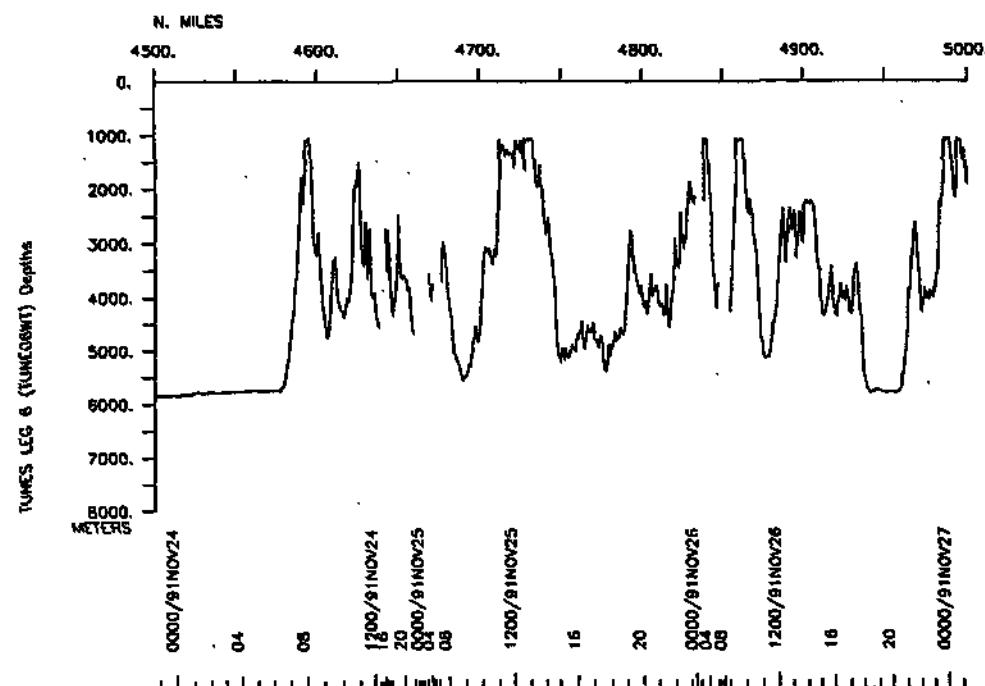
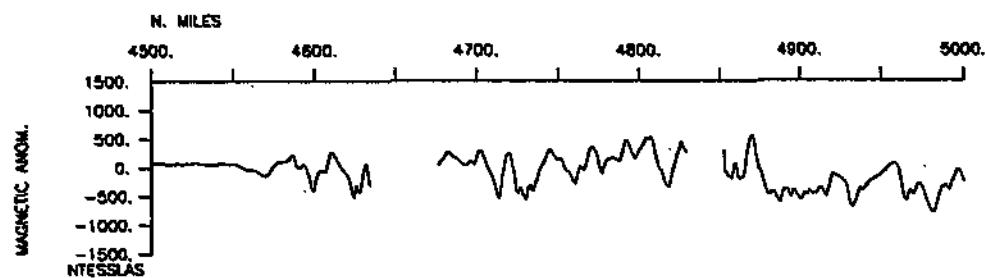
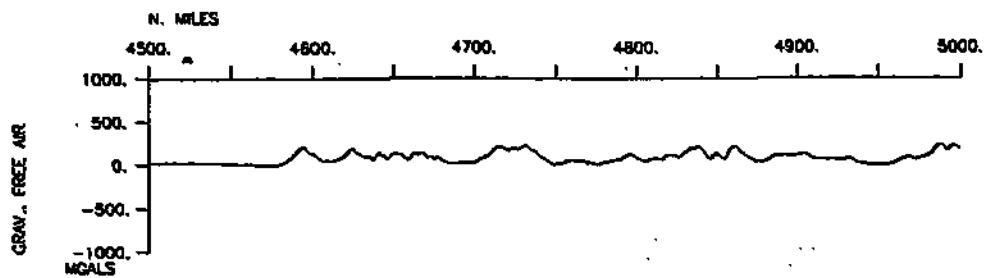


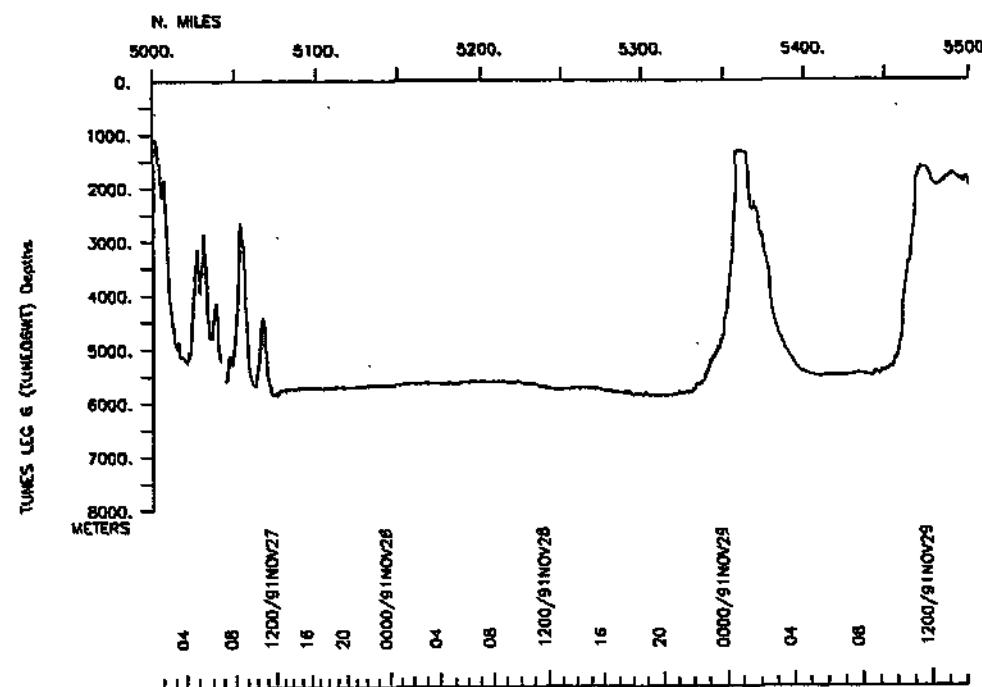
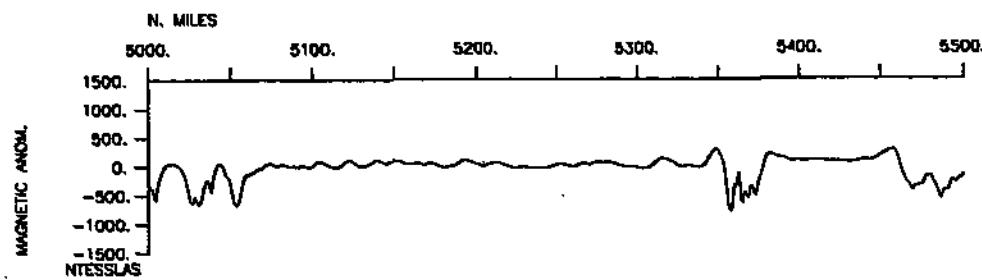
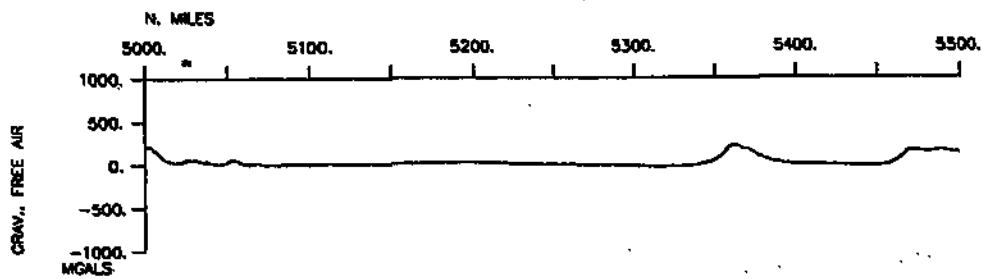


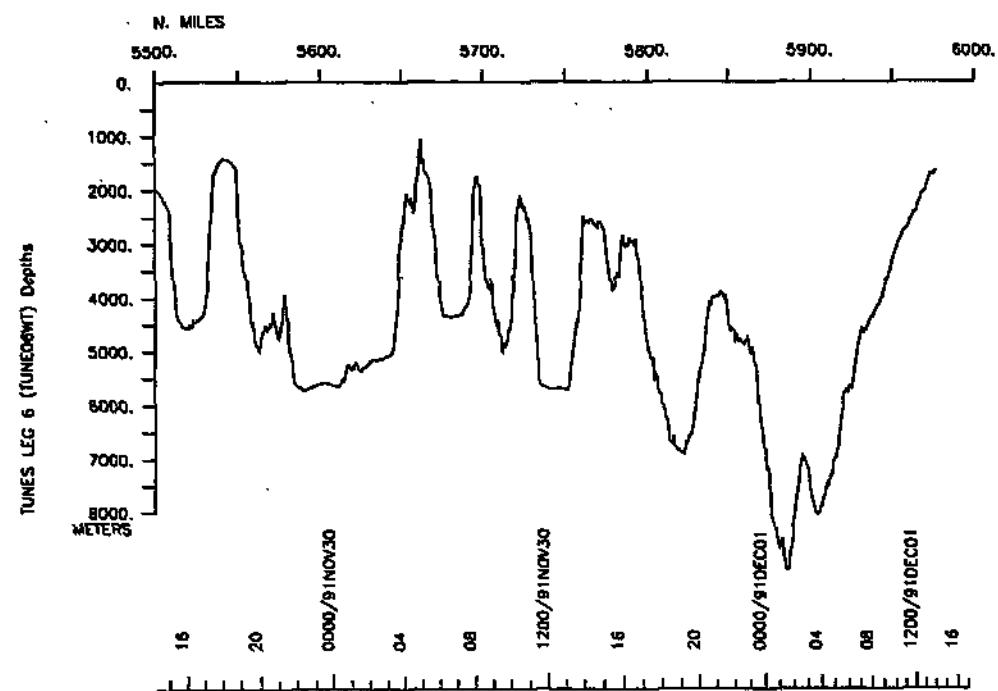
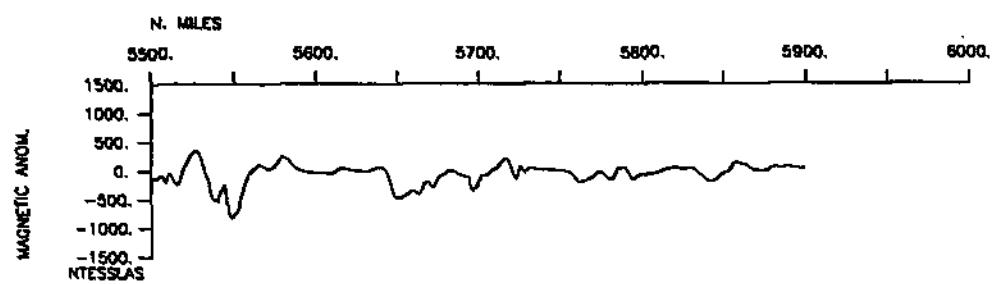
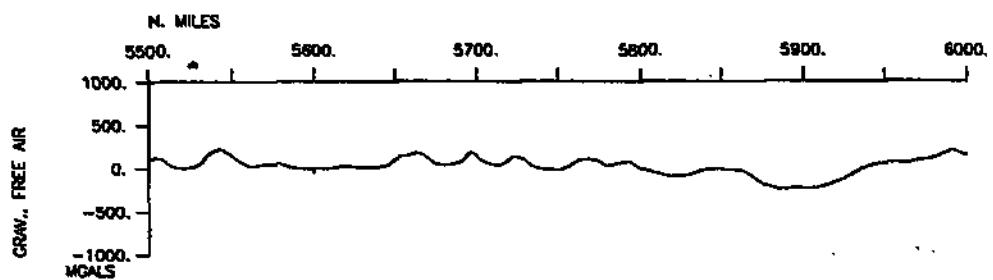


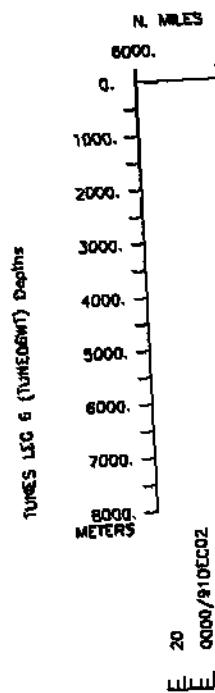
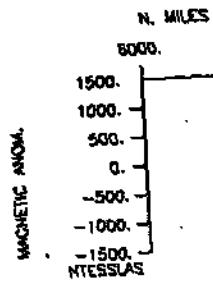
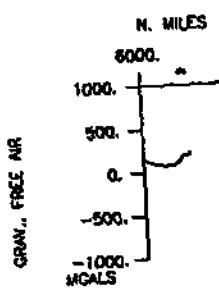












S.I.O. SAMPLE INDEX

(Issued December 1991)

TUNES EXPEDITION

Leg 6

R/V T. Washington

**Kwajalein, Marshall Islands (31 October 1991)
to
Apra, Guam (2 December 1991)**

Chief Scientist:

Hubert Staudigel (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 further computer searches on these parameters. (Listings defining these codes are available from the Geological Data Center.)

GDC Cruise I.D.# 254

Jan 6 09:36 1992 TUNES.LEG.6.SAMPLE.INDEX Page 1

**** PORTS ***

0400 311091	LGPT B Kwajalein, Marshall Is.	8-43 N 167-44 E fTUNE06WT
0020 021291	LGPT E Agana, Guam	13-27 N 144-37 E fTUNE06WT

**** PERSONNEL ***

	NAME	***TITLE***	***AFFILIATION***	**CRID**
PECS GRD	Staudigel,Dr.H.	Chief Scientist	Scripps Institution	TUNE06WT
PESP GSU	Pringle,M.	Geologist	U.S. Geological Survey	TUNE06WT
PESP IGP	Smith,Dr.W.	Geophysicist	Scripps Institution	TUNE06WT
PERT STS	Comer,R.	Resident Tech.	Scripps Institution	TUNE06WT
PECT STS	Charters,J.	Computer Tech.	Scripps Institution	TUNE06WT
PEBO STS	Albright,U.	Seabeam Proc.	Scripps Institution	TUNE06WT
PEST GRD	Janney,P.	Grad. Stud.	Scripps Institution	TUNE06WT
PEST GRD	Marchant,K.	Grad. Stud.	Scripps Institution	TUNE06WT
PEST GRD	Van Waasbergen,R.	Grad. Stud.	Scripps Institution	TUNE06WT
PEVL SIX	Laurs,B.	Volunteer	SIO non-employee	TUNE06WT

**** 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. Positions are in tenths
#of minutes.

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#GMT DDMMYY LOC T #TIME DATE TIME Z	SAMP CODE	SAMPLE IDENTIFIER	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
--	--------------	----------------------	--------------	------	-------	--------------------

**** UNDERWAY DATA CURATOR - Stuart M. Smith ext. 42752 ***

**** LOG BOOKS ***

0444 311091	LBUW	B Underway Watch Log	GDC	8-439N	167-439E	sTUNE06WT
1412 011291	LBUW	E Underway Watch log	GDC	13-423N	145-096E	sTUNE06WT

**** ECHO SOUNDERS ***

0502 311091	DPR3	B 3.5khz R-01	GDC	8-455N	167-422E	sTUNE06WT
0130 021191	DPR3	E 3.5khz R-01	GDC	12-059N	165-011E	sTUNE06WT
0330 021191	DPR3	B 3.5khz R-02	GDC	12-027N	164-581E	sTUNE06WT
0833 061191	DPR3	E 3.5khz R-02	GDC	17-371N	158-505E	sTUNE06WT
0850 061191	DPR3	B 3.5khz R-03	GDC	17-395N	158-485E	sTUNE06WT
0445 101191	DPR3	E 3.5khz R-03	GDC	20-137N	156-254E	sTUNE06WT
0608 101191	DPR3	B 3.5khz R-04	GDC	20-132N	156-247E	sTUNE06WT
0506 111191	DPR3	E 3.5khz R-04	GDC	20-534N	156-079E	sTUNE06WT
0952 111191	DPR3	B 3.5khz R-05	GDC	20-516N	156-149E	sTUNE06WT
1632 111191	DPR3	E 3.5khz R-05	GDC	20-269N	155-530E	sTUNE06WT
2054 111191	DPR3	B 3.5khz R-06	GDC	20-270N	155-547E	sTUNE06WT
0106 141191	DPR3	E 3.5khz R-06	GDC	16-469N	154-130E	sTUNE06WT
0610 141191	DPR3	B 3.5khz R-07	GDC	16-472N	154-150E	sTUNE06WT
2314 141191	DPR3	E 3.5khz R-07	GDC	17-023N	153-598E	sTUNE06WT
0613 151191	DPR3	B 3.5khz R-08	GDC	17-037N	154-088E	sTUNE06WT
0221 171191	DPR3	E 3.5khz R-08	GDC	16-222N	154-200E	sTUNE06WT
0230 171191	DPR3	B 3.5khz R-09	GDC	16-224N	154-201E	sTUNE06WT
0430 191191	DPR3	E 3.5khz R-09	GDC	21-171N	154-440E	sTUNE06WT

Jan 6 09:36 1992 TUNES.LEG.6.SAMPLE.INDEX Page 3

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	1140 211191	DPR3	E 3.5khz R-10	GDC	23-121N	151-021E	sTUNE06WT
	1145 211191	DPR3	B 3.5khz R-11	GDC	23-128N	151-016E	sTUNE06WT
	1905 231191	DPR3	E 3.5khz R-11	GDC	23-042N	148-164E	sTUNE06WT
	1917 231191	DPR3	B 3.5khz R-12	GDC	23-050N	148-140E	sTUNE06WT
	2230 251191	DPR3	E 3.5khz R-12	GDC	23-430N	148-484E	sTUNE06WT
	2242 251191	DPR3	B 3.5khz R-13	GDC	23-427N	148-479E	sTUNE06WT
	2330 301191	DPR3	E 3.5khz R-13	GDC	13-207N	146-592E	sTUNE06WT
	0026 011291	DPR3	B 3.5khz R-14	GDC	13-223N	146-510E	sTUNE06WT
	1412 011291	DPR3	E 3.5khz R-14	GDC	13-423N	145-096E	sTUNE06WT
	0444 311091	MBRM	B SeaBeam Monitor 01	GDC	8-439N	167-439E	sTUNE06WT
	0236 041191	MBRM	E SeaBeam Monitor 01	GDC	14-165N	160-543E	sTUNE06WT
	0604 041191	MBRM	B SeaBeam Monitor 02	GDC	14-172N	160-561E	sTUNE06WT
	0945 101191	MBRM	E SeaBeam Monitor 02	GDC	20-348N	156-459E	sTUNE06WT
	0953 101191	MBRM	B SeaBeam Monitor 03	GDC	20-358N	156-470E	sTUNE06WT
	2113 151191	MBRM	E SeaBeam Monitor 03	GDC	17-071N	154-191E	sTUNE06WT
	0142 161191	MBRM	B SeaBeam Monitor 04	GDC	17-069N	154-201E	sTUNE06WT
	2110 211191	MBRM	E SeaBeam Monitor 04	GDC	23-486N	150-283E	sTUNE06WT
	0056 221191	MBRM	B SeaBeam Monitor 05	GDC	23-469N	150-341E	sTUNE06WT
	1230 281191	MBRM	E SeaBeam Monitor 05	GDC	21-301N	151-267E	sTUNE06WT
	1235 281191	MBRM	B SeaBeam Monitor 06	GDC	21-294N	151-271E	sTUNE06WT
	1412 011291	MBRM	E SeaBeam Monitor 06	GDC	13-423N	145-096E	sTUNE06WT

Jan 6 09:36 1992 TUNES.LEG.6.SAMPLE.INDEX Page 4

#GMT #TIME	DDMMYY DATE	LOC T TIME	SAMP CODE	SAMPLE IDENTIFIER	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
#								
**** SEA BEAM ARCHIVE SWATH BOOKS ***								
0559 1052	311091 021191		MBSB B Archive Swath Bk MBSB E Archive Swath Bk		1 1	GDC 8-488N GDC 12-117N	167-339E 164-291E	sTUNE06WT
1052 1318	021191 041191		MBSB B Archive Swath Bk MBSB E Archive Swath Bk		2 2	GDC 12-117N GDC 14-599N	164-291E 160-158E	sTUNE06WT
1318 2002	041191 061191		MBSB B Archive Swath Bk MBSB E Archive Swath Bk		3 3	GDC 14-599N GDC 18-490N	160-158E 158-224E	sTUNE06WT
2003 2048	061191 091191		MBSB B Archive Swath Bk MBSB E Archive Swath Bk		4 4	GDC 18-491N GDC 20-351N	158-225E 156-252E	sTUNE06WT
2048 1023	091191 121191		MBSB B Archive Swath Bk MBSB E Archive Swath Bk		5 5	GDC 20-351N GDC 18-317N	156-252E 155-100E	sTUNE06WT
1023 1013	121191 141191		MBSB B Archive Swath Bk MBSB E Archive Swath Bk		6 6	GDC 18-317N GDC 16-478N	155-100E 154-061E	sTUNE06WT
1013 1017	141191 171191		MBSB B Archive Swath Bk MBSB E Archive Swath Bk		7 7	GDC 16-478N GDC 16-426N	154-061E 154-166E	sTUNE06WT
1017 1525	171191 191191		MBSB B Archive Swath Bk MBSB E Archive Swath Bk		8 8	GDC 16-426N GDC 21-200N	154-166E 153-357E	sTUNE06WT
1525 0202	191191 221191		MBSB B Archive Swath Bk MBSB E Archive Swath Bk		9 9	GDC 21-200N GDC 23-523N	153-357E 150-423E	sTUNE06WT
0202 0451	221191 241191		MBSB B Archive Swath Bk MBSB E Archive Swath Bk		10 10	GDC 23-523N GDC 23-486N	150-423E 148-106E	sTUNE06WT
0451 0327	241191 271191		MBSB B Archive Swath Bk MBSB E Archive Swath Bk		11 11	GDC 23-486N GDC 23-097N	148-106E 148-413E	sTUNE06WT
0327 1405	271191 291191		MBSB B Archive Swath Bk MBSB E Archive Swath Bk		12 12	GDC 23-097N GDC 17-402N	148-413E 150-471E	sTUNE06WT
1405 1412	291191 011291		MBSB B Archive Swath Bk MBSB E Archive Swath Bk		13 13	GDC 17-402N GDC 13-423N	150-471E 145-096E	sTUNE06WT

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#	GMT DDMYY LOC T	SAMP CODE	SAMPLE IDENTIFIER	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
#							
**** ROCK DREDGES ***							
1531 011191	DRRO	Rock Dred.	D09 3000M	GCR	12-049N	164-562E	STUNE06WT
2350 011191	DRRO	Rock Dred.	D10 3200M	GCR	12-062N	165-008E	STUNE06WT
0440 021191	DRRO	Empty Dred.	D11 2210M	GCR	12-018N	164-563E	STUNE06WT
1732 031191	DRRO	Rock Dred.	D12 2659M	GCR	14-196N	160-523E	STUNE06WT
0300 041191	DRRO	Rock Dred.	D13 2730M	GCR	14-170N	160-545E	STUNE06WT
2345 041191	DRRO	Rock Dred.	D14 2800M	GCR	14-470N	160-182E	STUNE06WT
0741 051191	DRRO	Rock Dred.	D15 2630M	GCR	14-521N	160-209E	STUNE06WT
0719 071191	DRRO	Rock Dred.	D16 2500M	GCR	19-326N	157-456E	STUNE06WT
1920 071191	DRRO	Rock Dred.	D17 3150M	GCR	19-350N	157-479E	STUNE06WT
0025 081191	DRRO	Rock Dred.	D18 2700M	GCR	19-304N	157-450E	STUNE06WT
1200 081191	DRRO	Rock Dred.	D19 2800M	GCR	19-422N	156-466E	STUNE06WT
2337 081191	DRRO	Empty Dred.	D20 2800M	GCR	19-515N	156-285E	STUNE06WT
0912 091191	DRRO	Rock Dred.	D21 3920M	GCR	20-098N	156-403E	STUNE06WT
0229 101191	DRRO	Rock Dred.	D22 3000M	GCR	20-135N	156-250E	STUNE06WT
1715 101191	DRRO	Rock Dred.	D23 2300M	GCR	21-029N	157-095E	STUNE06WT
0710 111191	DRRO	Rock Dred.	D24 3000M	GCR	20-520N	156-107E	STUNE06WT
1748 111191	DRRO	Rock Dred.	D25 2300M	GCR	20-269N	155-552E	STUNE06WT
0222 141191	DRRO	Empty Dred.	D26 1800M	GCR	16-485N	154-145E	STUNE06WT
1828 141191	DRRO	Rock Dred.	D27 2700M	GCR	16-592N	154-010E	STUNE06WT
0242 151191	DRRO	Rock Dred.	D28 3000M	GCR	17-023N	154-047E	STUNE06WT
2233 151191	DRRO	Rock Dred.	D29 2100M	GCR	17-075N	154-204E	STUNE06WT
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2221 181191	DRRO	Rock Dred.	D34 2300M	GCR	20-571N	154-545E	STUNE06WT
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1421 201191	DRRO	Rock Dred.	D37 2600M	GCR	21-151N	153-031E	STUNE06WT
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1047 221191	DRRO	Rock Dred.	D39 2400M	GCR	24-055N	149-567E	STUNE06WT
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0445 251191	DRRO	Rock Dred.	D42 3600M	GCR	23-537N	148-415E	STUNE06WT
0012 261191	DRRO X	Rock Dred.	D43 1650M	GCR	23-471N	148-457E	STUNE06WT
0604 261191	DRRO	Rock Dred.	D44 3500M	GCR	23-434N	148-468E	STUNE06WT

End sample index

STUNE06WT