

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

TUNES EXPEDITION (WOCE-P17C)

LEG 1

R/V Thomas Washington

(Issued August 1991)

San Diego, California (31 May 1991)

to

Papeete, Tahiti (11 July 1991)

Chief Scientist:

Mizuki Tsuchiya (Scripps Institution of Oceanography)

Resident Marine Technician - Ron Comer

Sea Beam Transit Mode

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 OCE89-11587

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.

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

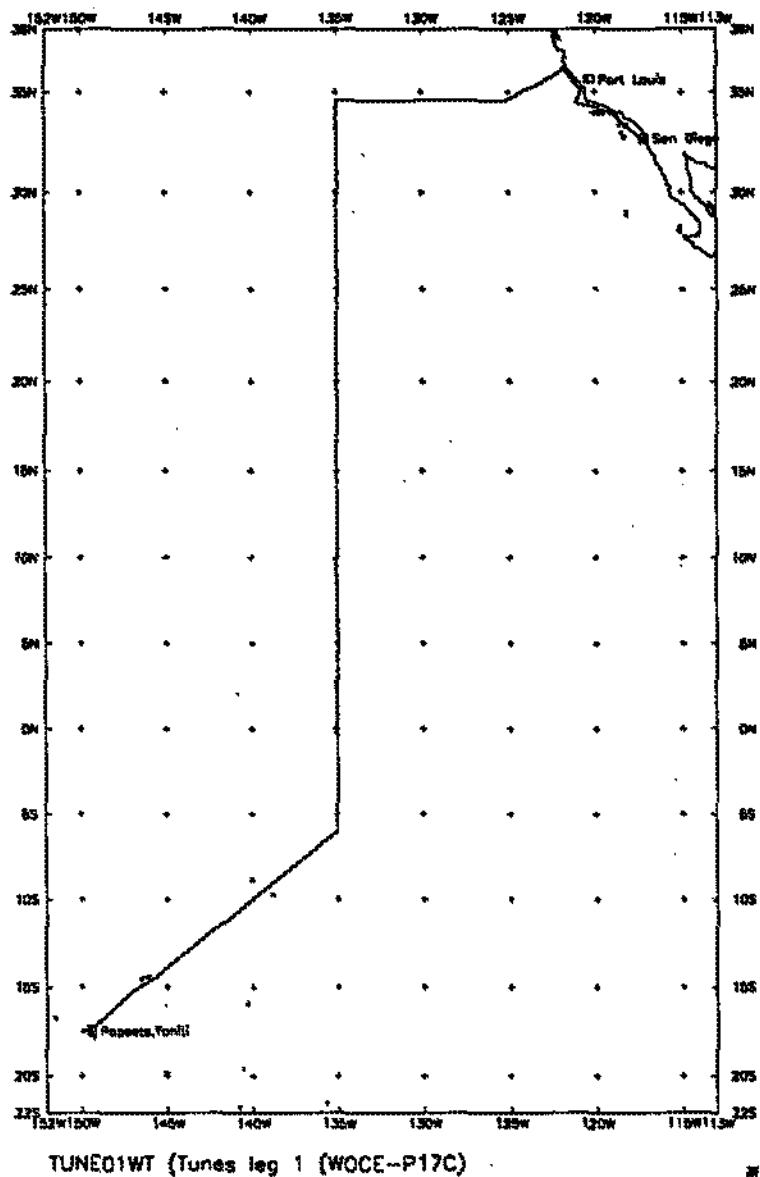
The following forms are available, subject to approval of the cruise leg chief scientist:

- 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

NOTE: Sea Beam data collection and processing were not funded by extramural grants on this leg. Instead, they have been collected and processed in "transit mode" by the SIO Shipboard Technical Support group as part of an experimental program to optimize ship usage and to increase the amount of available Sea Beam data. At this time, policies for processing these data are under review. For more information, contact the Geological Data Center curator.

April 1989



TUNES01WT (Tunes leg 1 (WOCE-P17C))

TUNES EXPEDITION LEG 1 (WOCE-P17C)

CHIEF SCIENTIST: Mizuki Tsuchiya

Scripps Institution of Oceanography

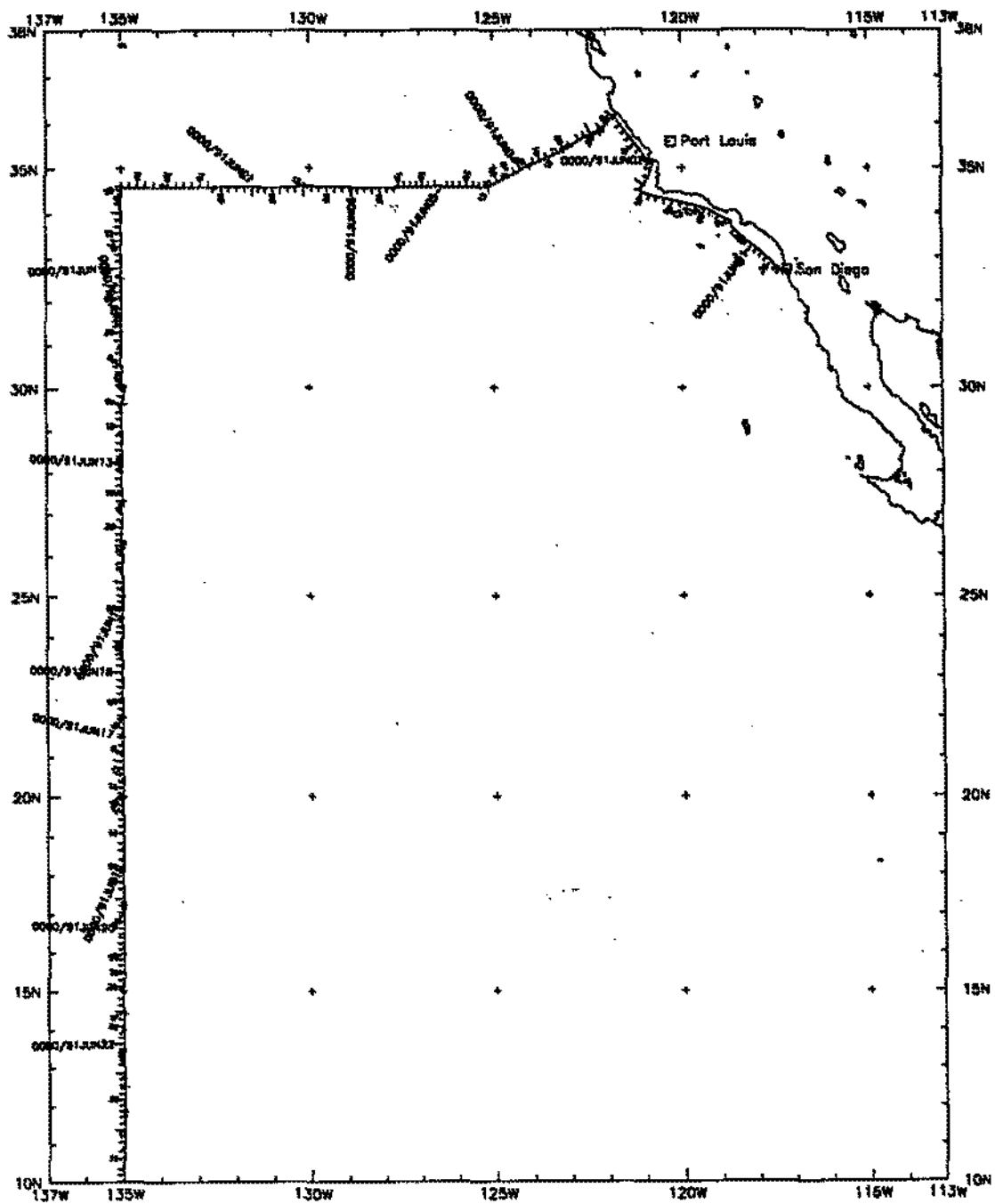
PORTS: San Diego, Calif. - Papeete, Tahiti

DATES: 31 May - 11 July 1991

SHIP: R/V T. Washington

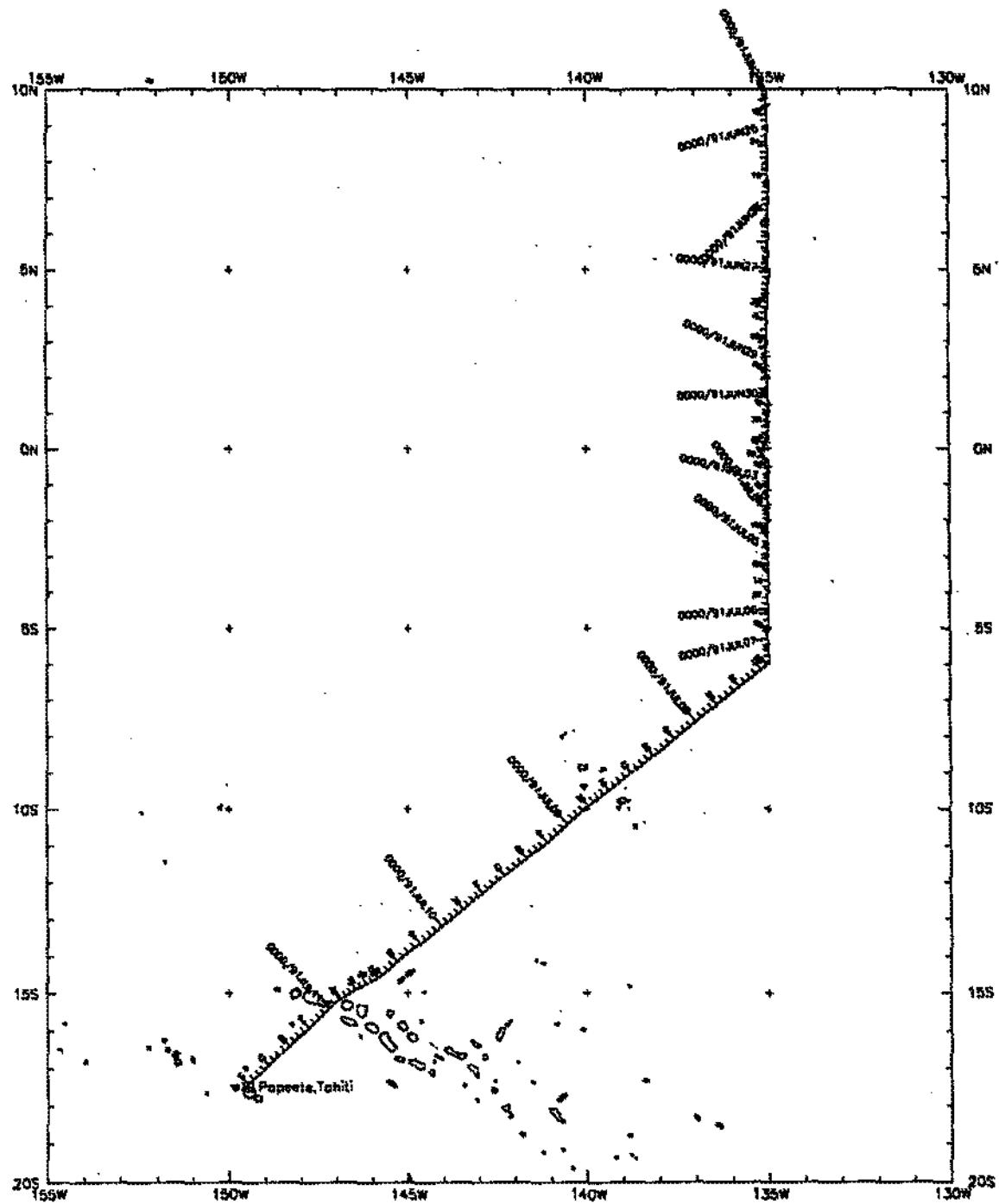
TOTAL MILEAGE OF UNDERWAY DATA COLLECTED

Cruise - 4808 miles	Magnetics - none collected
Bathymetry - 4400 miles	Seismic Reflection - none collected
Sea Beam - 4400 miles	Gravity - collected but not processed



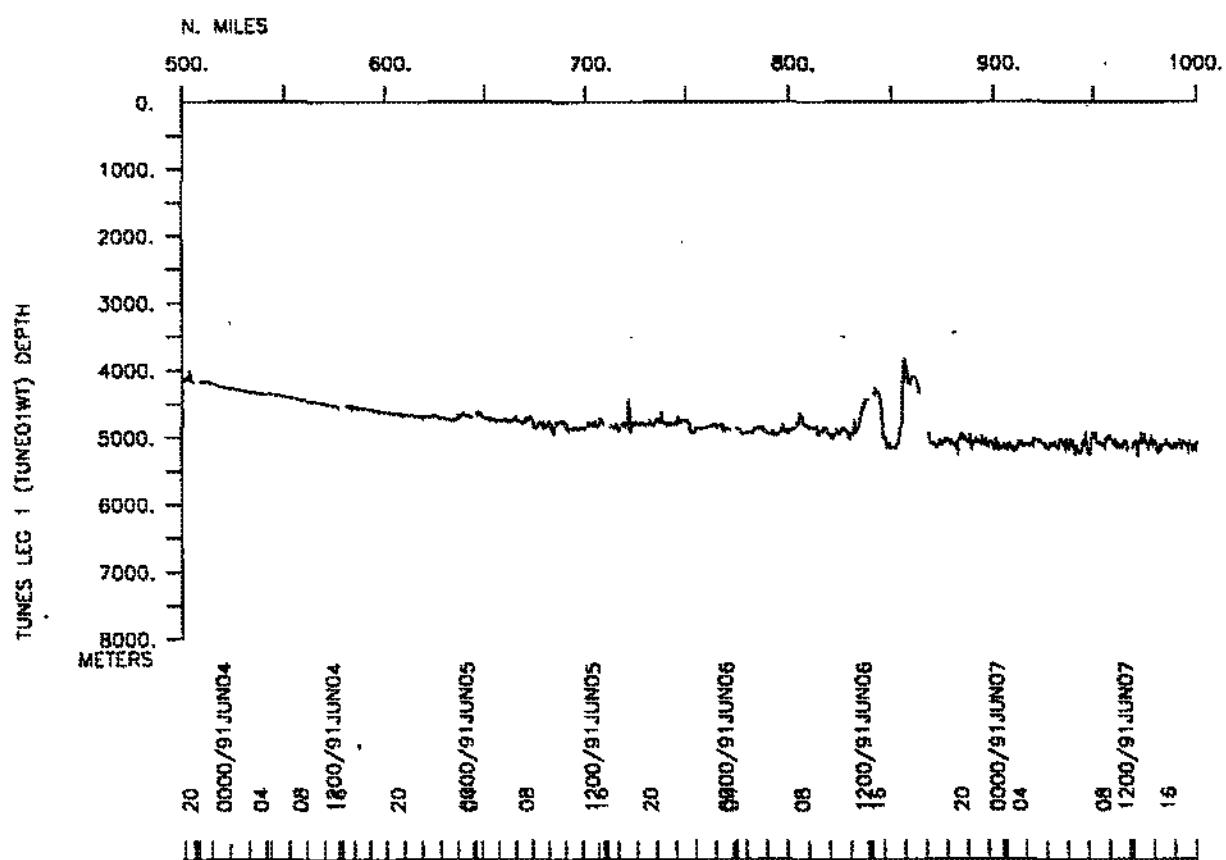
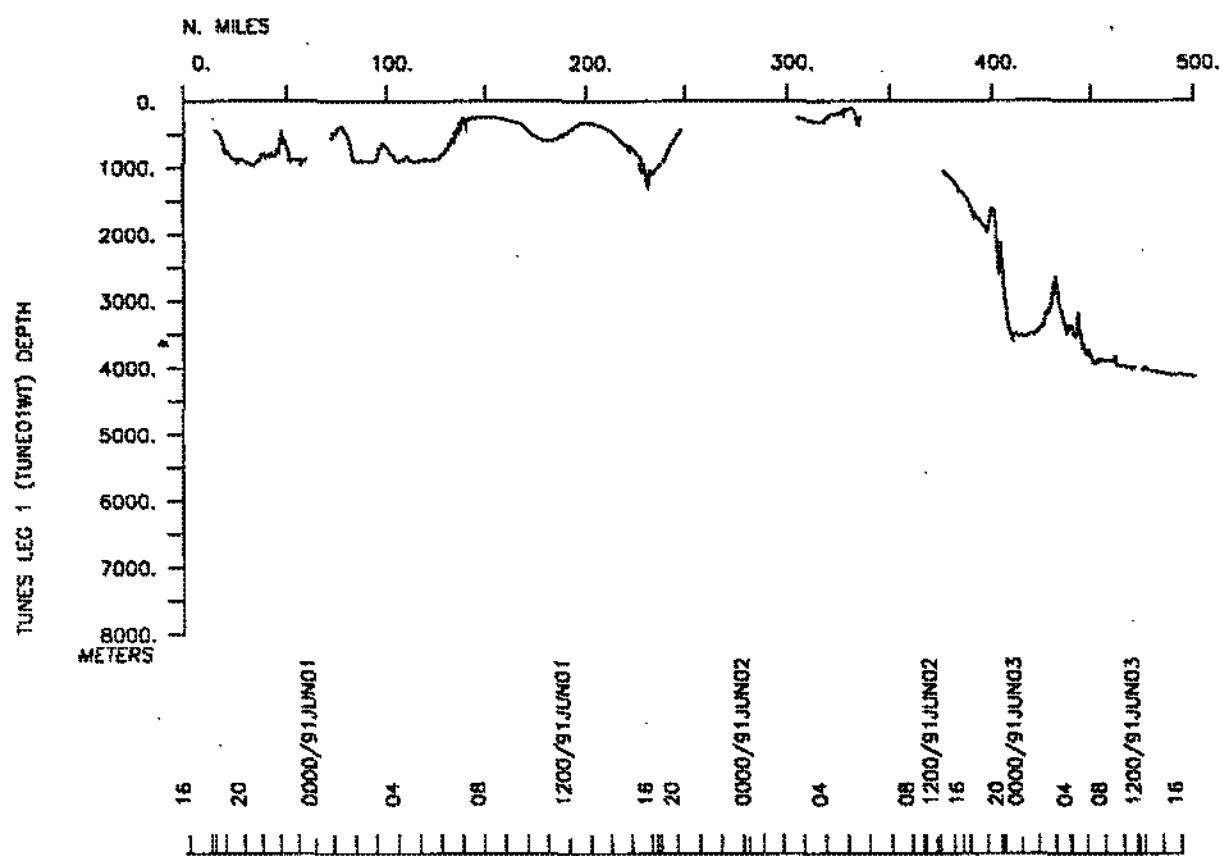
TUNEO1WT (Tunes Leg 1 (WOCE-P17C) Plot 1 of 2

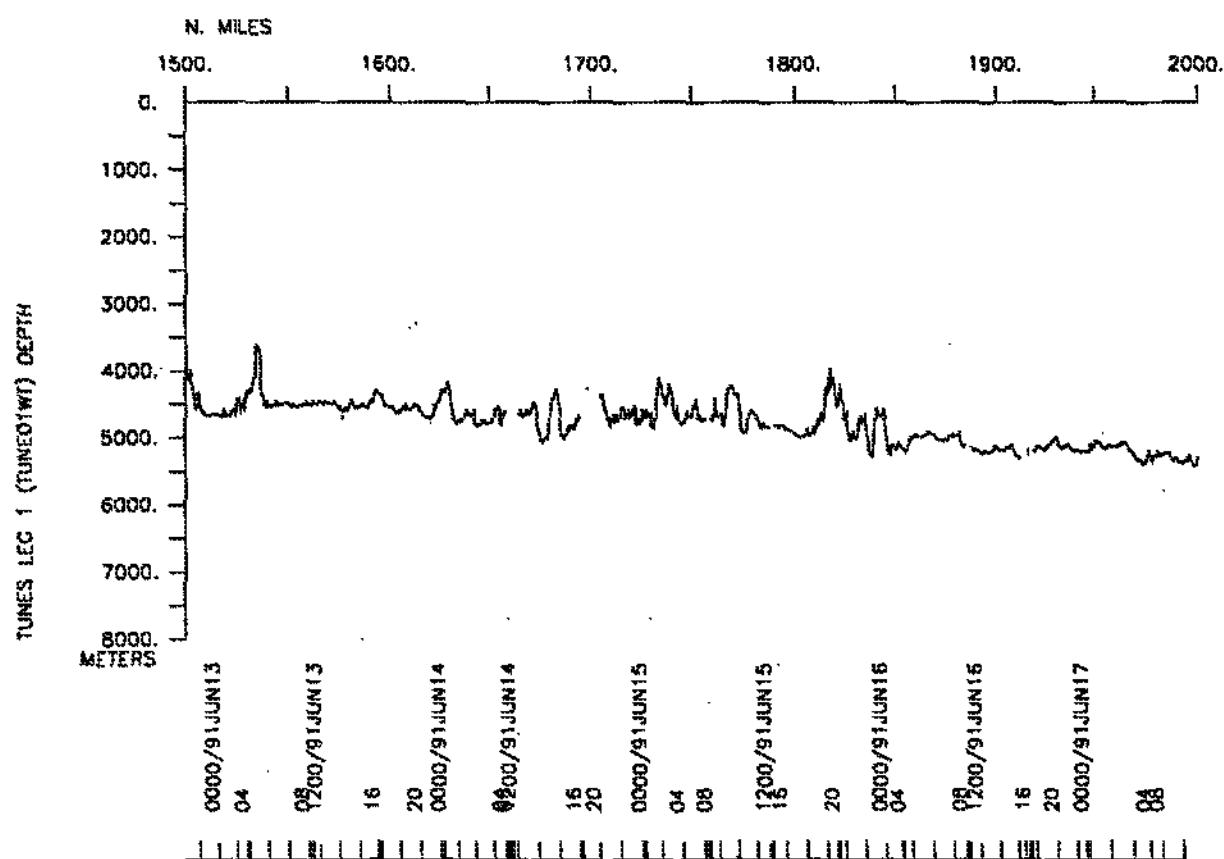
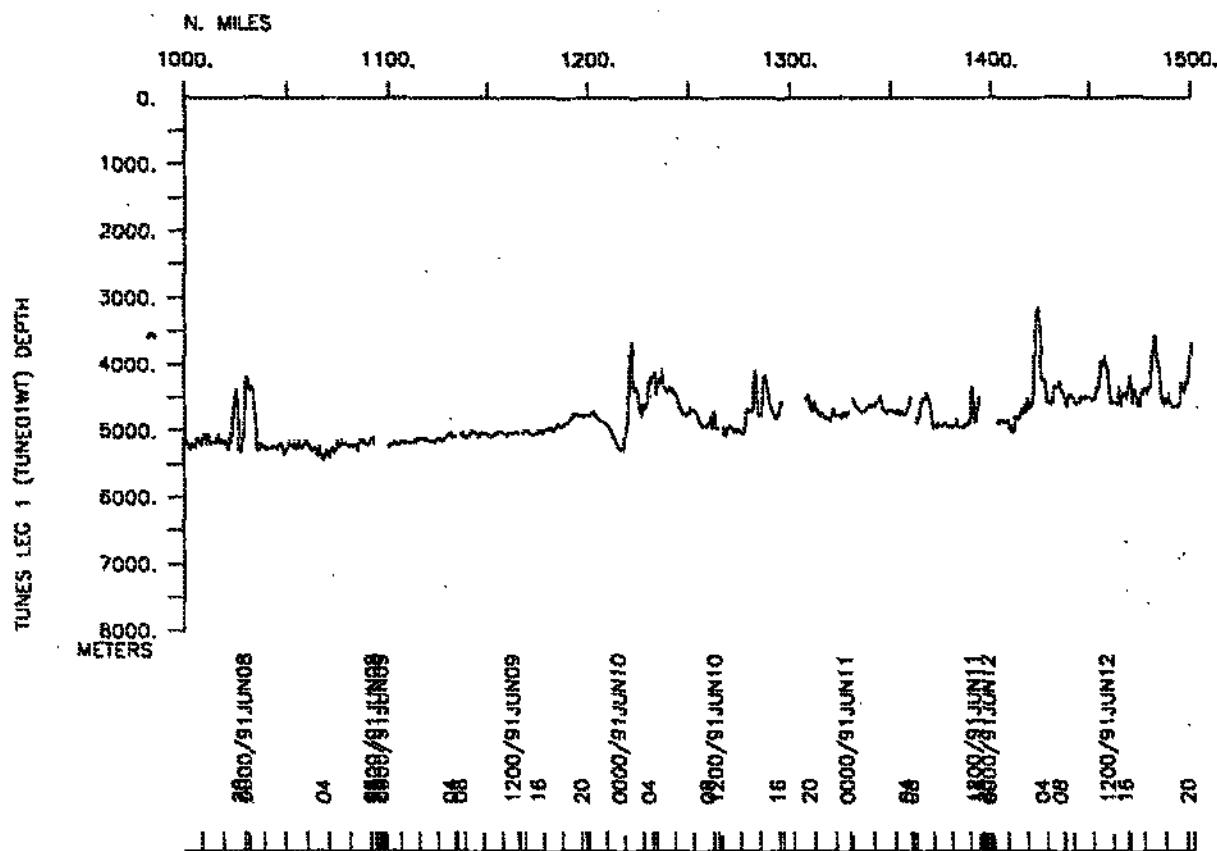
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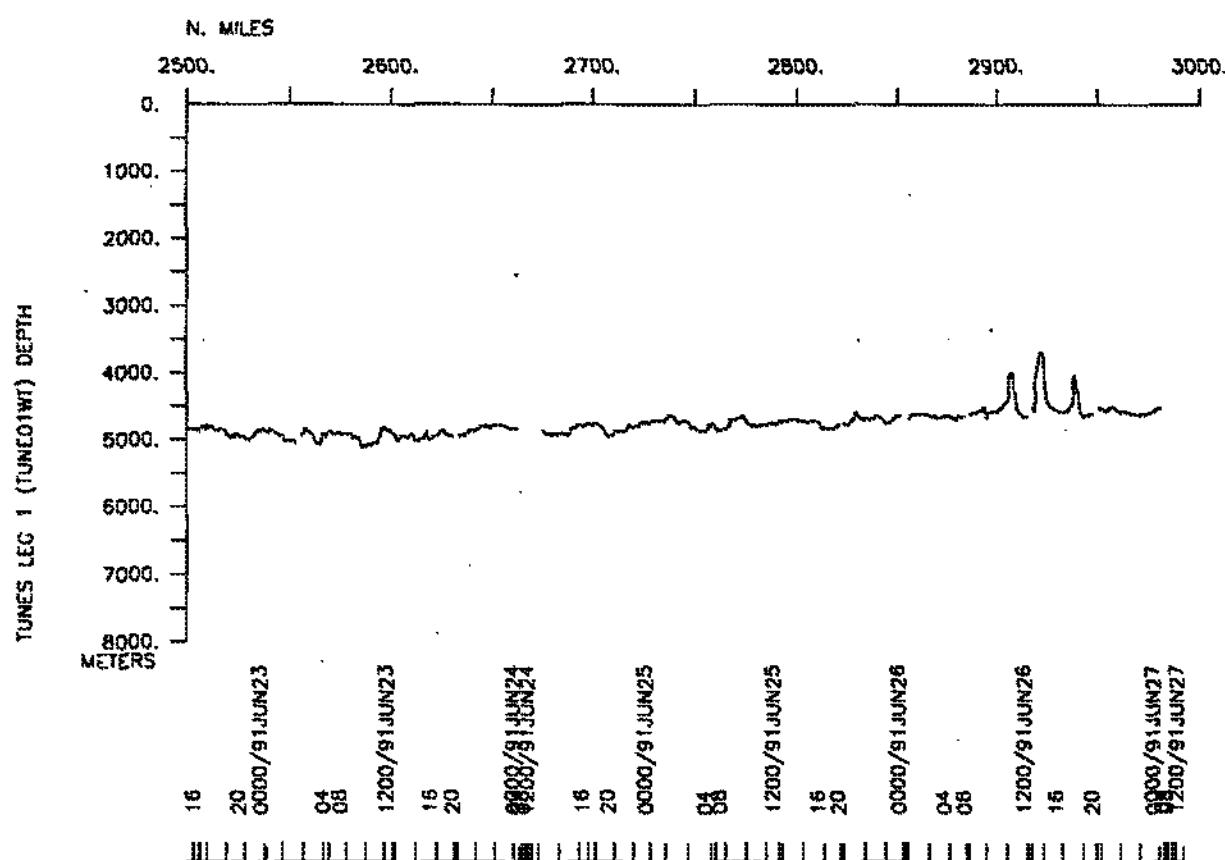
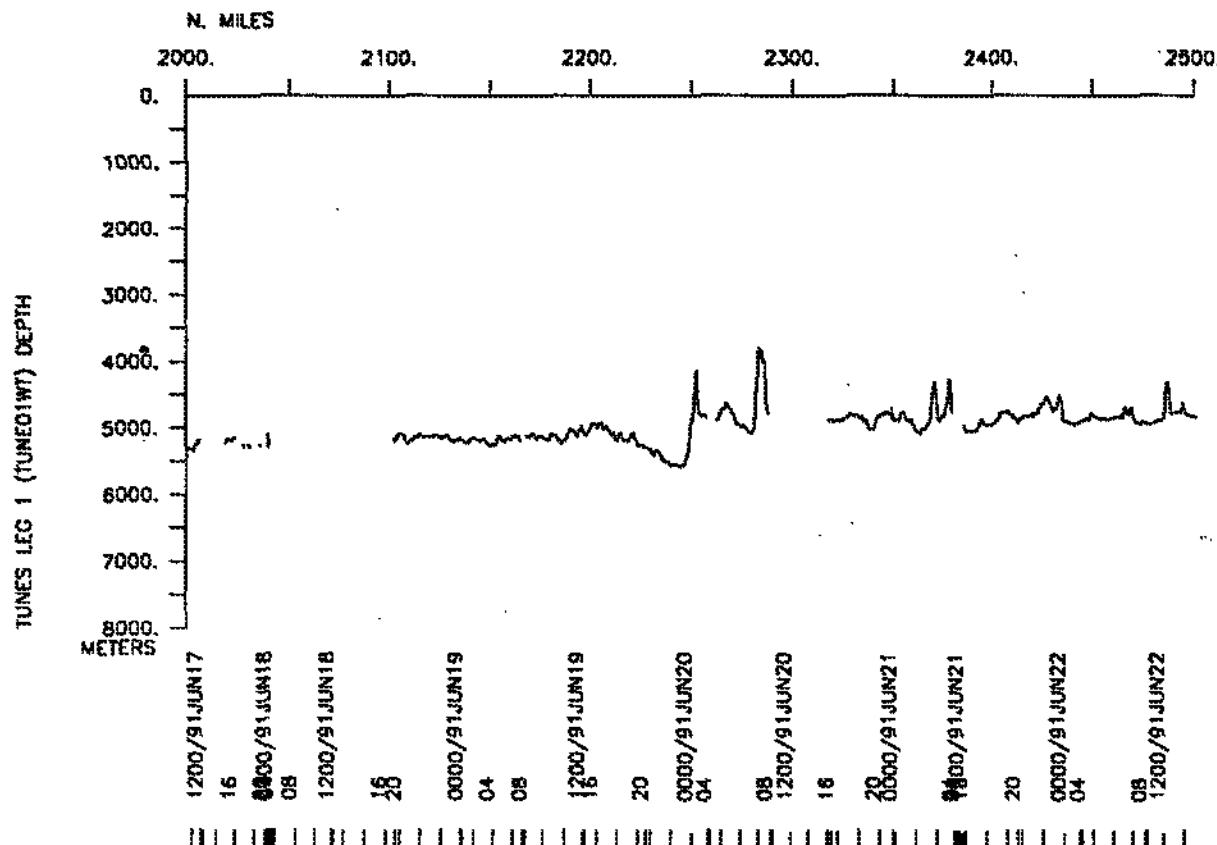


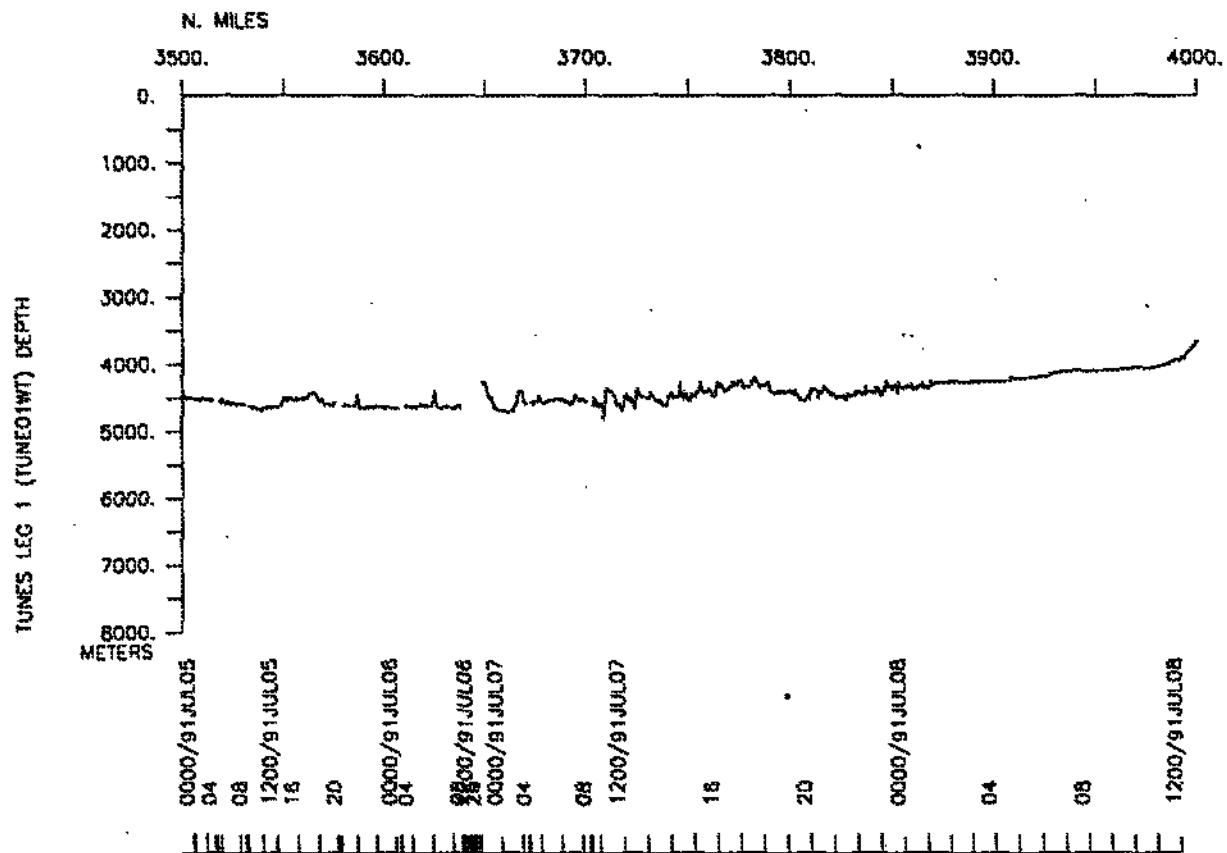
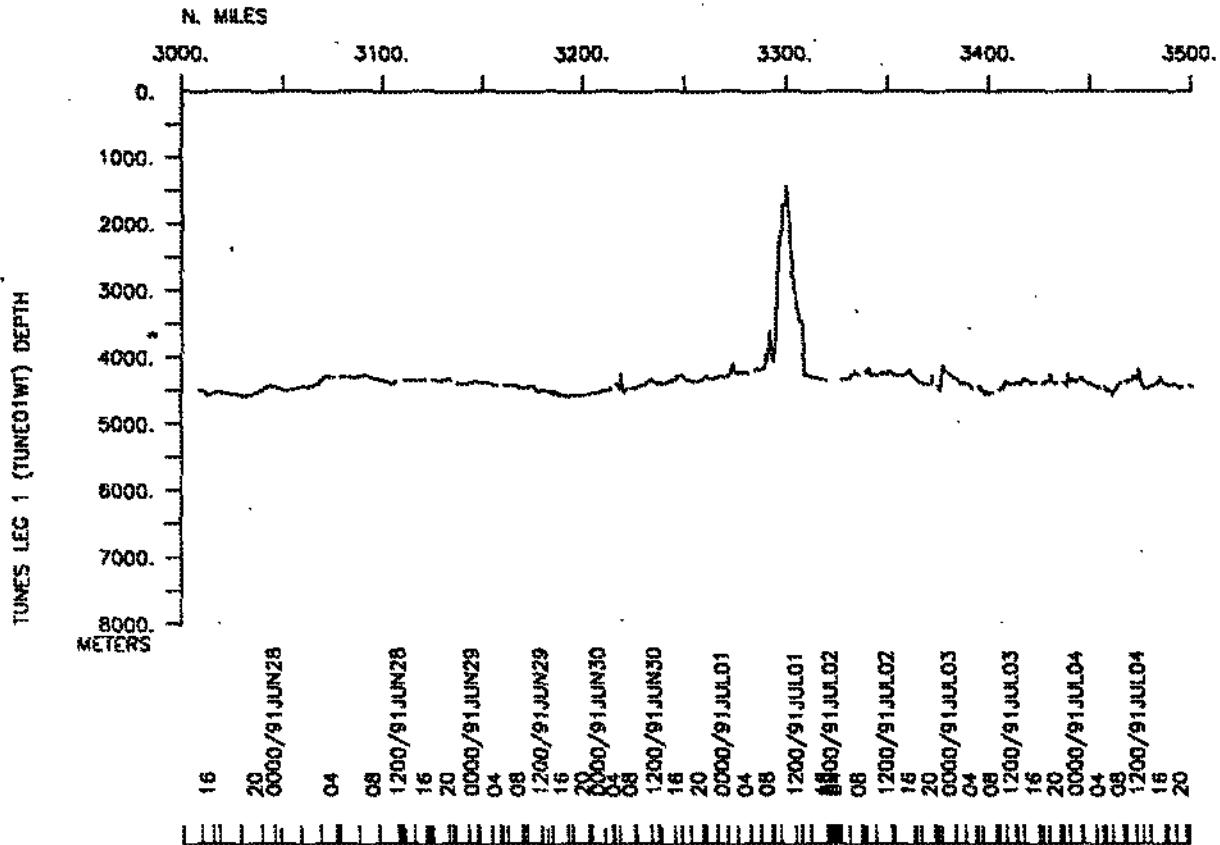
TUNEO1WT (Tunes Leg 1 (WOCE-P17C) Plot 2 of 2

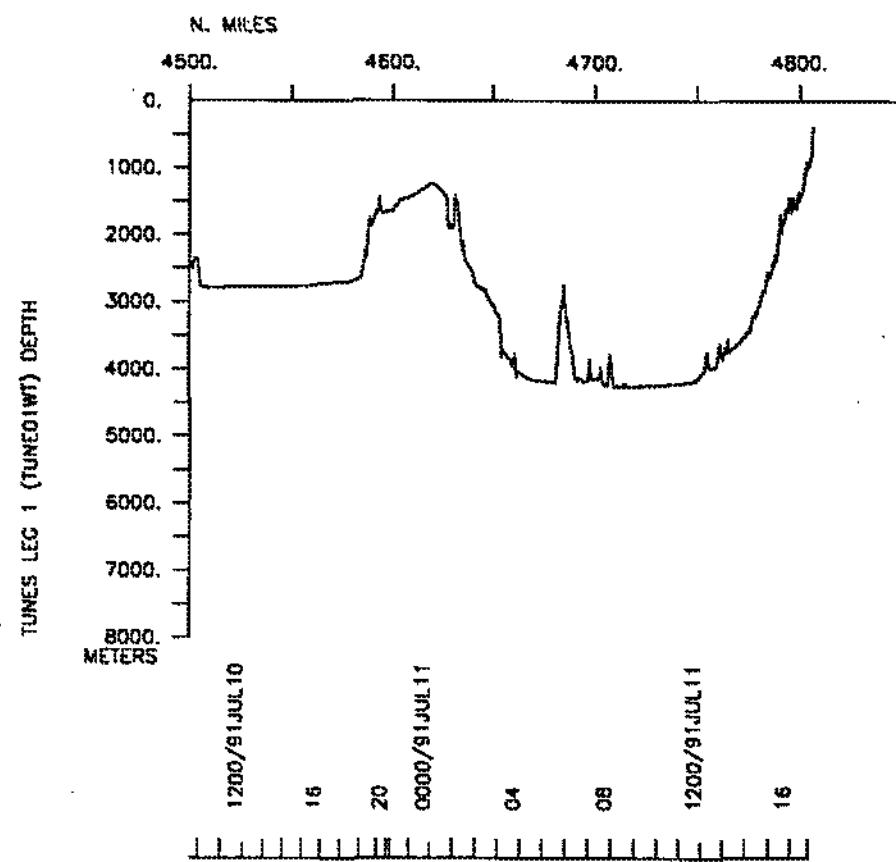
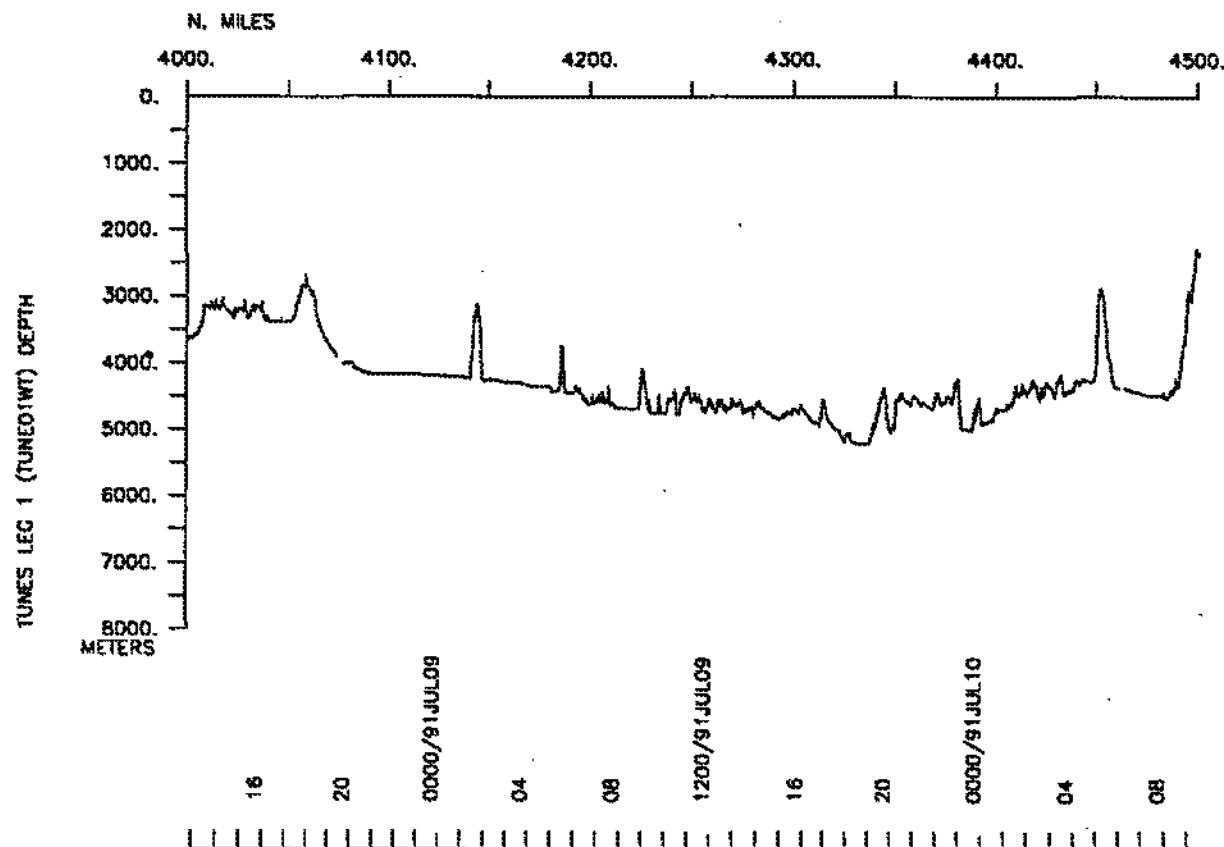
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S.I.O. SAMPLE INDEX

(Issued August 1991)

TUNES EXPEDITION

Leg 1

R/V T. Washington

San Diego, California (31 May 1991)
to
Papeete, Tahiti (11 July 1991)

Chief Scientist:

Mizuki Tsuchiya
(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

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****PORTS***

1518 310591	LGPT B San Diego, California	32-43 N 117-11 W	fTUNE01WT
1748 110791	LGPT E Papeete, Tahiti	17-29 S 149-29 W	fTUNE01WT
2318 010691	LGSS B Port Luis, California	35-10 N 120-46 W	fTUNE01WT
0012 020691	LGSS E Port Luis, California	35-10 N 120-46 W	fTUNE01WT

****PERSONNEL***

#	***NAME***	***TITLE***	***AFFILIATION***	**CRID**
#				
PECS MRD	Tsuchiya,Dr.M.	Chief Scientist	Scripps Institution	TUNE01WT
PESP PTU	Key,Dr.R.	Researcher	Princeton University	TUNE01WT
PESP WHOI	Jenkins,Dr.B.	Researcher	Woods Hole	TUNE01WT
PESP UHI	Firing,Dr.E.	Researcher	Univ. of Hawaii	TUNE01WT
PESP LDG	Breger,D.	Sr. Staff Asso.	Lamont Doherty	TUNE01WT
PEST UMI	Casey,K.	Student Assist.	Univ. of Miami	TUNE01WT
PERT STS	Comer,R.L.	Resident Tech.	Scripps Institution	TUNE01WT
PECT STS	Moore,M.J.	Computer Tech.	Scripps Institution	TUNE01WT
PEMT STS	Muus,D.	Marine Tech.	Scripps Institution	TUNE01WT
PESP STS	Bos,D.	Staff Res. Asso.	Scripps Institution	TUNE01WT
PESP STS	Costello,J.	Staff Res. Asso.	Scripps Institution	TUNE01WT
PEET STS	Jain,J.	Electronic Tech.	Scripps Institution	TUNE01WT
PEET STS	Matson,C.	Electronic Tech.	Scripps Institution	TUNE01WT
PESP POR	Denham,M.	Staff Res. Asso.	Scripps Institution	TUNE01WT
PESP STS	Johnson,M.C.	Staff Res. Asso.	Scripps Institution	TUNE01WT
PESP WHO	Hacker,S.	Research Assist.	Woods Hole	TUNE01WT
PESP STS	Lopez,L.	Staff Res. Asso.	Scripps Institution	TUNE01WT
PESP OSU	Ross,A.	Research Assist.	Oregon State Univ.	TUNE01WT
PEMT UMI	Sullivan,K.	Marine Tech. Sp.	Univ. of Miami	TUNE01WT
PESP UCS	Tadesco,K.	Research Asso.	U.C. Santa Barbara	TUNE01WT
PEMT STS	Wells,J.	Marine Tech.	Scripps Institution	TUNE01WT

****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	SAMP	SAMPLE	DISP	CRUISE		
#	TIME DATE	TIME Z	CODE	IDENTIFIER	CODE	CODE LAT.	LONG.	LEG-SHIP

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

**** LOG BOOK ***

0700 180691	LBUW B Underway Watch Log	GDC 19-579N 135-018W	sTUNE01WT
1630 180691	LBUW E Underway Watch Log	GDC 18-599N 134-598W	sTUNE01WT

**** ECHO SOUNDER RECORDS ***

1754 010691	DPRT B 12khz Sta. Record	GRD 34-299N 121-038W	sTUNE01WT
0947 130691	DPRT E Sta.000-31-1	GRD 27-303N 134-598W	sTUNE01WT
1121 130691	DPRT B 12khz Sta. Record	GRD 27-306N 134-596W	sTUNE01WT
0620 240691	DPRT E Sta.32-1, 66-2	GRD 9-576N 135-042W	sTUNE01WT
0947 240691	DPRT B 12khz Sta. Record	GRD 9-564N 135-054W	sTUNE01WT
0806 040791	DPRT E Sta.66-3, 111-1	GRD 2-110S 135-002W	sTUNE01WT
1148 040791	DPRT B 12khz Sta. Record	GRD 2-199S 134-598W	sTUNE01WT
0853 070791	DPRT E Sta.112-1, 123-1	GRD 6-014S 135-007W	sTUNE01WT

**** ECHO SOUNDER RECORDS - SEA BEAM MONITOR ***

1930 010691	MBMR B SB Monitor R-01	GDC 34-331N 121-028W	sTUNE01WT
0155 040691	MBMR E SB Monitor R-01	GDC 34-489N 124-349W	sTUNE01WT
0540 040691	MBMR B SB Monitor R-02	GDC 34-497N 124-336W	sTUNE01WT
0349 110691	MBMR E SB Monitor R-02	GDC 30-310N 135-001W	sTUNE01WT
0755 110691	MBMR B SB Monitor R-03	GDC 30-311N 134-577W	sTUNE01WT
1823 190691	MBMR E SB Monitor R-03	GDC 17-000N 135-000W	sTUNE01WT
2152 190691	MBMR B SB Monitor R-04	GDC 16-592N 134-587W	sTUNE01WT
0700 290691	MBMR E SB Monitor R-04	GDC 2-101N 135-000W	sTUNE01WT
0950 290691	MBMR B SB Monitor R-05	GDC 2-094N 135-015W	sTUNE01WT
2300 080791	MBMR E SB Monitor R-05	GDC 10-176S 140-236W	sTUNE01WT
0013 090791	MBMR B SB Monitor R-06	GDC 10-265S 140-340W	sTUNE01WT
1748 110791	MBMR E SB Monitor R-06	GDC 17-320S 149-343W	sTUNE01WT

*** CONTINUOUS COMPUTER LOGGED GRAVITY ***

1518 310591	GVCR B Continuous Gravity	GDC 32-412N 117-138W	sTUNE01WT
1748 110791	GVCR E Continuous Gravity	GDC 17-320S 149-343W	sTUNE01WT

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

**** CURRENT METERS ***

2010 230691	CMDR	Drogue Drift. 15116	POR	10-287N	135-016W	sTUNE01WT
0010 270691	CMDR	Drogue Drift. 15112	POR	5-000N	135-000W	sTUNE01WT
1946 010791	CMDR	Drogue Drift. 15124	POR	0-001N	135-090W	sTUNE01WT
0710 060791	CMDR	Drogue Drift. 15110	POR	5-008S	135-006W	sTUNE01WT
0752 110691	CMRT	ALACE 58 Sat Trackd	POR	30-311N	134-578W	sTUNE01WT
1138 140691	CMRT	ALACE 72 Sat Trackd	POR	26-020N	134-576W	sTUNE01WT
0024 160691	CMRT	ALACE 53 Sat Trackd	POR	23-038N	135-000W	sTUNE01WT
2153 190691	CMRT	ALACE 54 Sat Trackd	POR	16-591N	134-587W	sTUNE01WT
1741 220691	CMRT	ALACE 29 Sat Trackd	POR	12-303N	134-580W	sTUNE01WT
1052 250691	CMRT	ALACE 71 Sat Trackd	POR	7-597N	134-597W	sTUNE01WT
0844 270691	CMRT	ALACE 60 Sat Trackd	POR	4-589N	134-563W	sTUNE01WT
0659 290691	CMRT	ALACE 28 Sat Trackd	POR	2-102N	135-000W	sTUNE01WT
2203 010791	CMRT	ALACE 62 Sat Trackd	POR	0-005S	135-085W	sTUNE01WT
2209 040791	CMRT	ALACE 73 Sat Trackd	POR	2-460S	135-002W	sTUNE01WT
0123 050791	CMRT	ALACE 70 Sat Trackd	POR	2-510S	135-007W	sTUNE01WT

**** CURRENT METER WITH ACOUSTIC DOPPLER ***

1518 310591	CMXX B Continuous ADCP	UHI 32-412N	117-138W	sTUNE01WT
1748 110791	CMXX E 0-500M	UHI 17-320S	149-343W	sTUNE01WT

**** GEOCHEMICAL SAMPLES ***

0955 080691	GCGB	17-1 9 Bar.	5107M	PTU	34-356N	134-590W	sTUNE01WT
1949 080691	GCGB	17-3 5 Bar.	5245M	PTU	34-364N	134-565W	sTUNE01WT
2204 080691	GCGB	17-4 1 Bar.	5245M	PTU	34-369N	134-556W	sTUNE01WT
2315 080691	GCGB	17-5 3 Bar.	5204M	PTU	34-371N	134-552W	sTUNE01WT
1444 110691	GCGB	26-1 9 Bar.	4707M	PTU	30-008N	134-580W	sTUNE01WT
2324 110691	GCGB	26-3 9 Bar.	4842M	PTU	30-022N	134-536W	sTUNE01WT
0637 140691	GCGB	34-1 9 Bar.	4741M	PTU	26-011N	134-595W	sTUNE01WT
2028 170691	GCGB	46-1 8 Bar.	5161M	PTU	19-584N	135-002W	sTUNE01WT
0501 180691	GCGB	46-3 9 Bar.	5259M	PTU	19-588N	135-018W	sTUNE01WT
0523 210691	GCGB	57-1 9 Bar.	4890M	PTU	14-285N	134-592W	sTUNE01WT
1353 210691	GCGB	57-3 9 Bar.	4951M	PTU	14-265N	134-583W	sTUNE01WT
0201 240691	GCGB	66-1 9 Bar.	4908M	PTU	9-589N	135-018W	sTUNE01WT
0947 240691	GCGB	66-3 4 Bar.	4834M	PTU	9-564N	135-054W	sTUNE01WT
1124 240691	GCGB	66-4 5 Bar.	4851M	PTU	9-557N	135-058W	sTUNE01WT
0238 270691	GCGB	76-1 9 Bar.	4507M	PTU	5-001N	134-588W	sTUNE01WT
1018 270691	GCGB	76-3 9 Bar.	4552M	PTU	4-577N	134-560W	sTUNE01WT
1050 010791	GCGB	98-1 9 Bar.	4326M	PTU	0-097N	135-029W	sTUNE01WT

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#	GMT DDMMYY	LOC T	SAMP	SAMPLE	DISP	CRUISE			
#	TIME DATE	TIME-Z	CODE	IDENTIFIER	CODE	LAT.	LONG.	LEG-SHIP	
0007	020791		GCGB	98-3 9 Bar.	4319M	PTU	0-003S	135-082W	sTUNE01WT
1252	060791		GCGB	121-2 5 Bar.	4620M	PTU	5-045S	135-007W	sTUNE01WT
1600	060791		GCGB	121-3 Pre Trip	4536M	PTU	5-060S	135-014W	sTUNE01WT
2042	060791		GCGB	121-4 9 Bar.	4312M	PTU	5-078S	135-029W	sTUNE01WT

**** SURFACE SAMPLES ***

1518 310591	SSXX B Continuous Surface	ODF 32-412N 117-138W	sTUNE01WT
1748 110791	SSXX E Temperature	ODF 17-320S 149-343W	sTUNE01WT

**** CONDUCTIVITY/TEMPERATURE/DEPTH PROFILER WITH ACCOUSTIC DOPPLER ***

1533 280691	TDXX 81-1 CTD-ADCP	4340M ODF 2-494N 135-021W	sTUNE01WT
2354 280691	TDXX 83-1 CTD-ADCP	4367M ODF 2-296N 135-008W	sTUNE01WT
0835 290691	TDXX 85-1 CTD-ADCP	4454M ODF 2-096N 135-009W	sTUNE01WT
1743 290691	TDXX 87-1 CTD-ADCP	4574M ODF 1-502N 135-001W	sTUNE01WT
0203 300691	TDXX 89-1 CTD-ADCP	4461M ODF 1-296N 135-001W	sTUNE01WT
1050 300691	TDXX 91-1 CTD-ADCP	4378M ODF 1-092N 135-001W	sTUNE01WT
1901 300691	TDXX 93-1 CTD-ADCP	4314M ODF 0-494N 134-592W	sTUNE01WT
0311 010791	TDXX 95-1 CTD-ADCP	4213M ODF 0-295N 134-590W	sTUNE01WT
1130 010791	TDXX 97-1 CTD-ADCP	3401M ODF 0-095N 135-028W	sTUNE01WT
0312 020791	TDXX 98-4 CTD-ADCP	4319M ODF 0-008S 135-070W	sTUNE01WT
0802 020791	TDXX 99-1 CTD-ADCP	4224M ODF 0-116S 135-095W	sTUNE01WT
1626 020791	TDXX 101-1 CTD-ADCP	4320M ODF 0-307S 134-600W	sTUNE01WT
0013 030791	TDXX 103-1 CTD-ADCP	4300M ODF 0-505S 135-000W	sTUNE01WT
0816 030791	TDXX 105-1 CTD-ADCP	4486M ODF 1-112S 135-002W	sTUNE01WT
1619 030791	TDXX 107-1 CTD-ADCP	4396M ODF 1-312S 135-004W	sTUNE01WT
2358 030791	TDXX 109-1 CTD-ADCP	4220M ODF 1-504S 135-000W	sTUNE01WT
0806 040791	TDXX 111-1 CTD-ADCP	4438M ODF 2-110S 135-002W	sTUNE01WT
1615 040791	TDXX 113-1 CTD-ADCP	4395M ODF 2-309S 135-006W	sTUNE01WT
0001 050791	TDXX 115-1 CTD-ADCP	4488M ODF 2-501S 135-002W	sTUNE01WT
0850 050791	TDXX 117-1 CTD-ADCP	4614M ODF 3-159S 135-004W	sTUNE01WT

**** AIR SAMPLES ***

1518 310591	ASCS B Continuous Air	GRD 32-412N 117-138W	sTUNE01WT
1748 110791	ASCS E Sampling CFC	GRD 17-320S 149-343W	sTUNE01WT

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

**** TEMPERATURE/DEPTH/CONDUCTIVITY SAMPLES ***

1754	010691		TDCT	999-1		00	Test	ODF	34-299N	121-038W	sTUNE01WT
1029	020691		TDCT	1-1		18	552M	ODF	36-102N	121-443W	sTUNE01WT
1311	020691		TDCT	2-1		36	907M	ODF	36-060N	121-501W	sTUNE01WT
1631	020691		TDCT	3-1		36	1408M	ODF	35-585N	121-591W	sTUNE01WT
2116	020691		TDCT	4-1		36	2308M	ODF	35-477N	122-165W	sTUNE01WT
0410	030691		TDCT	5-1		36	3262M	ODF	35-324N	122-516W	sTUNE01WT
1137	030691		TDCT	6-1		36	4005M	ODF	35-176N	123-249W	sTUNE01WT
2007	030691		TDCT	7-1		36	4161M	ODF	35-054N	124-012W	sTUNE01WT
0338	040691		TDCT	8-1		36	4343M	ODF	34-490N	124-344W	sTUNE01WT
1308	040691		TDCT	9-1		36	4519M	ODF	34-351N	125-083W	sTUNE01WT
0216	050691		TDCT	10-1		36	4682M	ODF	34-354N	126-233W	sTUNE01WT
1445	050691		TDCT	11-1		36	4765M	ODF	34-347N	127-376W	sTUNE01WT
0202	060691		TDCT	12-1		36	4887M	ODF	34-352N	128-500W	sTUNE01WT
1259	060691		TDCT	13-1		36	4338M	ODF	34-354N	130-041W	sTUNE01WT
0009	070691		TDCT	14-1		36	5133M	ODF	34-353N	131-188W	sTUNE01WT
1123	070691		TDCT	15-1		36	5091M	ODF	34-355N	132-306W	sTUNE01WT
2207	070691		TDCT	16-1		36	4323M	ODF	34-346N	133-461W	sTUNE01WT
1508	080691		TDCT	17-2		36	5141M	ODF	34-357N	134-571W	sTUNE01WT
0536	090691		TDCT	18-1		36	5097M	ODF	34-035N	134-590W	sTUNE01WT
1240	090691		TDCT	19-1		36	5033M	ODF	33-343N	134-598W	sTUNE01WT
2007	090691		TDCT	20-1		36	4763M	ODF	33-037N	135-001W	sTUNE01WT
0302	100691		TDCT	21-1		36	4161M	ODF	32-332N	134-600W	sTUNE01WT
1003	100691		TDCT	22-1		36	4942M	ODF	32-017N	134-599W	sTUNE01WT
1617	100691		TDCT	23-1		36	4526M	ODF	31-319N	134-598W	sTUNE01WT
2313	100691		TDCT	24-1		36	4553M	ODF	31-002N	134-591W	sTUNE01WT
0553	110691		TDCT	25-1		36	4567M	ODF	30-310N	134-592W	sTUNE01WT
1934	110691		TDCT	26-2		36	5090M	ODF	30-017N	134-558W	sTUNE01WT
0728	120691		TDCT	27-1		36	4478N	ODF	29-303N	134-595W	sTUNE01WT
1431	120691		TDCT	28-1		36	4511M	ODF	28-595N	134-593W	sTUNE01WT
2046	120691		TDCT	29-1		36	3579M	ODF	28-298N	134-589W	sTUNE01WT
0309	130691		TDCT	30-1		36	4197M	ODF	28-001N	135-003W	sTUNE01WT
0947	130691		TDCT	31-1		36	4477M	ODF	27-303N	134-598W	sTUNE01WT
1121	130691		TDCT	32-1		36	4120M	ODF	27-306N	134-596W	sTUNE01WT
2239	130691		TDCT	33-1		36	4297M	ODF	26-301N	134-598W	sTUNE01WT
1106	140691		TDCT	34-2		36	4573M	ODF	26-022N	134-577W	sTUNE01WT
1737	140691		TDCT	35-1		36	4546M	ODF	25-292N	134-589W	sTUNE01WT
2335	140691		TDCT	36-1		36	4577M	ODF	24-597N	134-596W	sTUNE01WT
0637	150691		TDCT	37-1		36	4544M	ODF	24-289N	135-003W	sTUNE01WT
1323	150691		TDCT	38-1		36	4849M	ODF	24-002N	135-001W	sTUNE01WT
2000	150691		TDCT	39-1		36	4184M	ODF	23-301N	134-593W	sTUNE01WT
0232	160691		TDCT	40-1		36	5145M	ODF	22-599N	134-595W	sTUNE01WT

#	GMT	DDMMYY	LOC T	SAMP	SAMPLE	DISP		CRUISE		
#	TIME	DATE	TIME-Z	CODE	IDENTIFIER	CODE	LAT.	LONG.	LEG-SHIP	
0926	160691			TDCT	41-1	36	5147M	ODF 22-286N	134-595W	sTUNE01WT
1652	160691			TDCT	42-1	36	5234M	ODF 21-578N	134-594W	sTUNE01WT
2302	160691			TDCT	43-1	36	5211M	ODF 21-302N	134-599W	sTUNE01WT
0531	170691			TDCT	44-1	36	5252M	ODF 20-595N	134-598W	sTUNE01WT
1217	170691			TDCT	45-1	36	5244M	ODF 20-297N	134-593W	sTUNE01WT
0108	180691			TDCT	46-2	36	5257M	ODF 19-589N	135-014W	sTUNE01WT
1134	180691			TDCT	47-1	36	5274M	ODF 19-299N	134-597W	sTUNE01WT
1759	180691			TDCT	48-1	36	5200N	ODF 18-599N	134-594W	sTUNE01WT
0035	190691			TDCT	49-1	36	5201M	ODF 18-294N	134-593W	sTUNE01WT
0715	190691			TDCT	50-1	36	5164M	ODF 17-590N	135-002W	sTUNE01WT
1330	190691			TDCT	51-1	36	4967M	ODF 17-293N	134-595W	sTUNE01WT
2003	190691			TDCT	52-1	36	5281M	ODF 16-596N	134-593W	sTUNE01WT
0232	200691			TDCT	53-1	36	4832M	ODF 16-296N	134-597W	sTUNE01WT
0913	200691			TDCT	54-1	36	4801M	ODF 15-595N	134-599W	sTUNE01WT
1549	200691			TDCT	55-1	36	4857M	ODF 15-295N	134-597W	sTUNE01WT
2216	200691			TDCT	56-1	36	4750M	ODF 14-597N	135-005W	sTUNE01WT
0958	210691			TDCT	57-2	36	5001M	ODF 14-266N	134-586W	sTUNE01WT
2006	210691			TDCT	58-1	36	4905M	ODF 14-000N	134-596W	sTUNE01WT
0225	220691			TDCT	59-1	36	4896M	ODF 13-299N	134-596W	sTUNE01WT
0920	220691			TDCT	60-1	36	4907M	ODF 13-000N	134-593W	sTUNE01WT
1549	220691			TDCT	61-1	36	4849M	ODF 12-300N	134-590W	sTUNE01WT
2233	220691			TDCT	62-1	36	4852M	ODF 11-599N	134-596W	sTUNE01WT
0505	230691			TDCT	63-1	36	4884M	ODF 11-302N	134-597W	sTUNE01WT
1158	230691			TDCT	64-1	36	4889M	ODF 10-598N	135-002W	sTUNE01WT
1823	230691			TDCT	65-1	36	4908M	ODF 10-296N	135-008W	sTUNE01WT
0617	240691			TDCT	66-2	36	4824M	ODF 9-576N	135-042W	sTUNE01WT
1656	240691			TDCT	67-1	36	4794M	ODF 9-297N	135-000W	sTUNE01WT
2339	240691			TDCT	68-1	36	4724M	ODF 8-596N	134-599W	sTUNE01WT
0539	250691			TDCT	69-1	36	4779M	ODF 8-296N	134-592W	sTUNE01WT
1203	250691			TDCT	70-1	36	4737M	ODF 7-596N	134-594W	sTUNE01WT
1815	250691			TDCT	71-1	36	4785M	ODF 7-290N	134-592W	sTUNE01WT
0016	260691			TDCT	72-1	36	4664M	ODF 6-595N	134-592W	sTUNE01WT
0618	260691			TDCT	73-1	36	4631M	ODF 6-295N	134-589W	sTUNE01WT
1235	260691			TDCT	74-1	36	4626M	ODF 6-000N	134-591W	sTUNE01WT
1910	260691			TDCT	75-1	36	4560M	ODF 5-296N	134-582W	sTUNE01WT
0652	270691			TDCT	76-2	36	4585M	ODF 4-594N	134-573W	sTUNE01WT
1602	270691			TDCT	77-1	36	4531M	ODF 4-293N	134-594W	sTUNE01WT
2208	270691			TDCT	78-1	36	4453M	ODF 3-597N	134-598W	sTUNE01WT
0417	280691			TDCT	79-1	36	4313M	ODF 3-295N	135-005W	sTUNE01WT
1030	280691			TDCT	80-1	36	4331M	ODF 2-591N	135-018W	sTUNE01WT
1931	280691			TDCT	82-1	36	4349M	ODF 2-399N	135-009W	sTUNE01WT
0352	290691			TDCT	84-1	36	4412M	ODF 2-196N	135-010W	sTUNE01WT
1243	290691			TDCT	86-1	36	4516M	ODF 1-597N	134-598W	sTUNE01WT
2133	290691			TDCT	88-1	36	4549M	ODF 1-400N	135-000W	sTUNE01WT
0620	300691			TDCT	90-1	36	4469M	ODF 1-196N	134-596W	sTUNE01WT
1444	300691			TDCT	92-1	36	4261M	ODF 0-594N	135-000W	sTUNE01WT
2252	300691			TDCT	94-1	36	4284M	ODF 0-395N	134-594W	sTUNE01WT
0658	010791			TDCT	96-1	36	3551M	ODF 0-197N	134-592W	sTUNE01WT
2043	010791			TDCT	98-2	36	4319M	ODF 0-001S	135-088W	sTUNE01WT

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#	GMT	DDMMYY	LOC	T	SAMP	SAMPLE	DISP	CRUISE			
#	TIME	DATE	TIME	Z	CODE	IDENTIFIER	CODE	LAT.	LONG.	LEG-SHIP	
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1216	020791				TDCT	100-1	36 4236M	ODF	0-204S	134-594W	sTUNE01WT
2009	020791				TDCT	102-1	36 4349M	ODF	0-409S	134-599W	sTUNE01WT
0359	030791				TDCT	104-1	36 4463M	ODF	1-007S	135-001W	sTUNE01WT
1156	030791				TDCT	106-1	36 4366M	ODF	1-206S	135-005W	sTUNE01WT
1959	030791				TDCT	108-1	36 4366M	ODF	1-408S	135-002W	sTUNE01WT
0347	040791				TDCT	110-1	36 4439M	ODF	2-007S	135-001W	sTUNE01WT
1148	040791				TDCT	112-1	36 4320M	ODF	2-199S	134-598W	sTUNE01WT
2000	040791				TDCT	114-1	36 4414M	ODF	2-408S	135-001W	sTUNE01WT
0354	050791				TDCT	116-1	36 4559M	ODF	3-007S	135-004W	sTUNE01WT
1314	050791				TDCT	118-1	36 4622M	ODF	3-304S	135-003W	sTUNE01WT
1926	050791				TDCT	119-1	36 4613M	ODF	4-012S	135-007W	sTUNE01WT
0142	060791				TDCT	120-1	36 4647M	ODF	4-307S	135-003W	sTUNE01WT
0828	060791				TDCT	121-1	36 4667M	ODF	5-021S	135-011W	sTUNE01WT
0243	070791				TDCT	122-1	36 4542M	ODF	5-307S	135-004W	sTUNE01WT
0853	070791				TDCT	123-1	36 4505M	ODF	6-014S	135-007W	sTUNE01WT

End Sample Index