Report and Index of

Underway Marine Geophysical Data

SOJOURN EXPEDITION LEG 7 (SOJN07MV) R/V MELVILLE (Issued May 1997)

Ports:

Hobart, Tasmania (10 April 1997) to Melbourne, Australia (17 April 1997)

Co-Chief Scientists:

Neville Exon (Australian Geological Survey Organization)
Stuart M. Smith (Scripps Institution of Oceanography)

Resident Marine Technician - Ron Comer Computer Technician - Ron Moe Seabeam/UW Processor - Stuart M. Smith

Post-Cruise Processing and Report Preparation by the Geological Data Center, Scripps Institution of Oceanography La Jolla, California 92093-0223

Data Collection and Processing Funded by AGSO and NSF

NOTE: This is an index of underway geophysical data edited and processed after the completion of the cruise leg and is intended primarily for informal use within the institution. This document is not to be reproduced or distributed outside Scripps without prior approval of the chief scientist or the Geological Data Center, Scripps Institution of Oceanography, La Jolla, California 92093-0223

GDC CRUISE I.D.# 269

REPORT AND INDEX OF NAVIGATION AND UNDERWAY GEOPHYSICAL DATA

Processed by the Geological Data Center Scripps Institution of Oceanography

Contents:

Index Chart - gives track of cruise leg, dates, ports, and mileage of each type of data collected.

Track Charts - annotated with dates and hour ticks.

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

Sample Index - list of begin/end times and positions of all underway records as well as samples and measurements from other disciplines if 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, California 92093-0223.

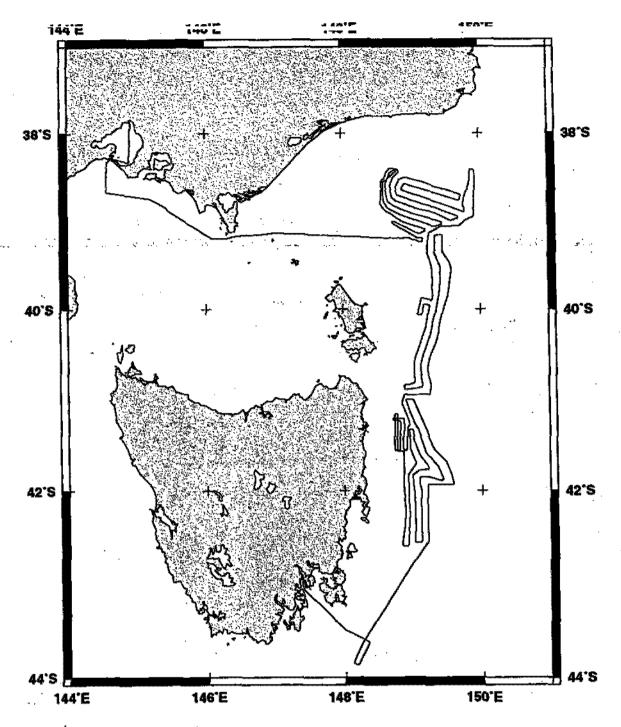
Phone: (619)534-2752, FAX: (619)534-6500, Internet email: ssmith@ucsd.edu

- 1. Files on Exabyte or DAT:
 - a) Separate time series ASCII files of navigation, single beam depth, gravity and magnetics.
 - b) These same data in a merged ASCII file in the MGD77 Exchange Format.
 - c) SeaBeam depth data (binary, Sun byte order) in SIO Swath Bathymetry Format. (*)
 - d) SeaBeam Sidescan data. (*)
- 2. Microfilm (35 mm flowfilm) or hard copies of:
 - a) Underway watch log book
 - b) SeaBeam vertical beam profile/Sidescan records.
 - c) Echosounder records 3.5 kHz frequency.
 - d) Magnetometer records.
 - e) Seismic reflection profiler records.
- Navigation listing with times and positions of fixes and course and speed changes.

4. Plots:

- a) Copies of archived track plots.
- b) Copies of archived SeaBeam contour plots.
- c) Custom plots in Mercator projection:
 - 1) Track plots.
 - 2) SeaBeam depth contour plots.
 - 3) Depth, magnetic or gravity values printed or profiled along track.
- (*) R/V Revelle Seabeam 2100 data available in SB2100 vendor format only, as of October 1996

rev10/96



SOJOURN EXPEDITION LEG 7

CO-CHIEF SCIENTISTS: Stuart M. Smith (SIO) & Neville Exon (AGSO)

PORTS: Hobart, Tasmania - Melbourne, Australia

DATES: 10 - 17 April 1997

SHIP: R/V Melville

TOTAL MILEAGE OF UNDERWAY DATA COLLECTED

Cruise - 2088 miles

Magnetics - 1842 miles

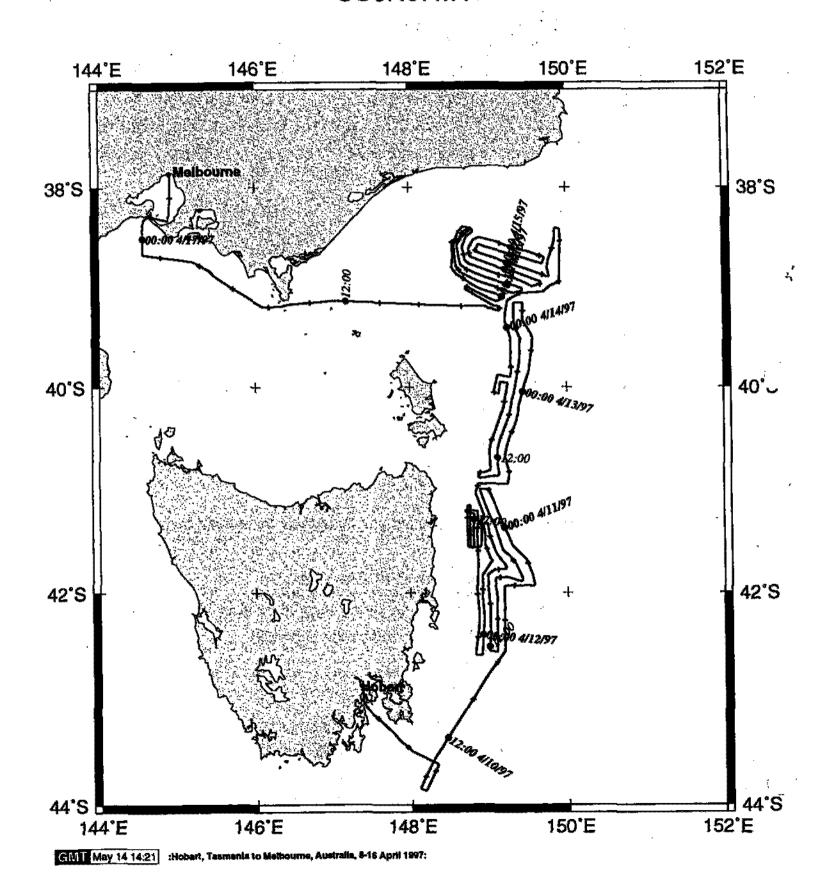
Bathymetry - 1860 miles

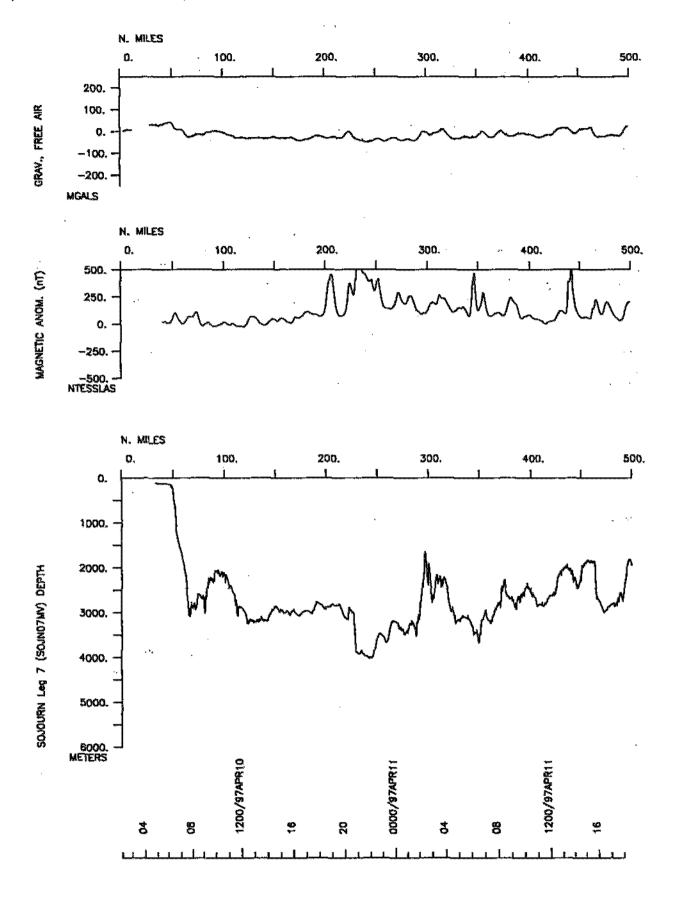
Seismic Reflection - none collected

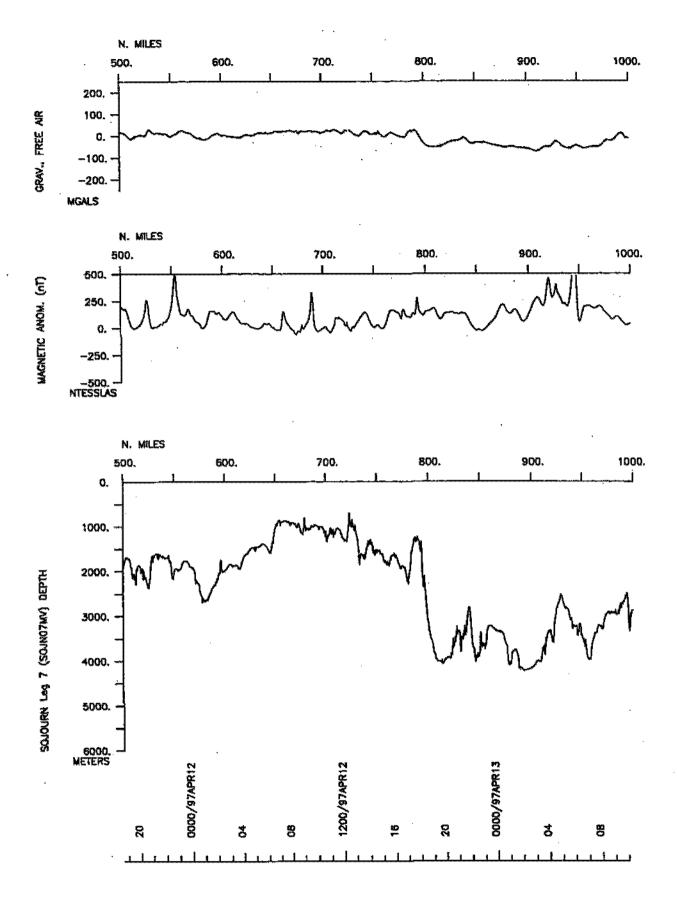
Sea Beam - 1860 miles

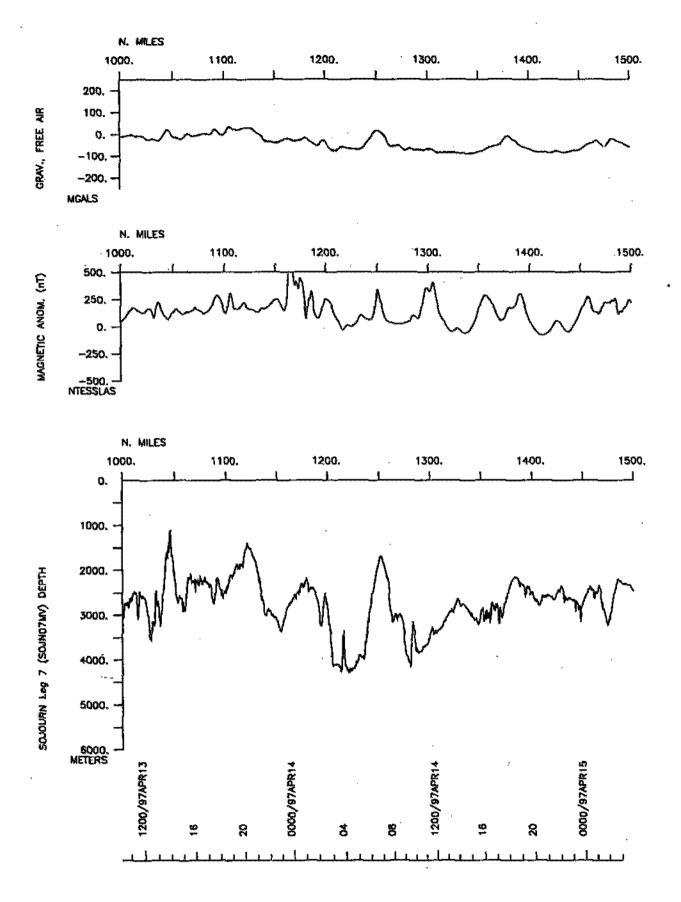
... Gravity - 2040 miles

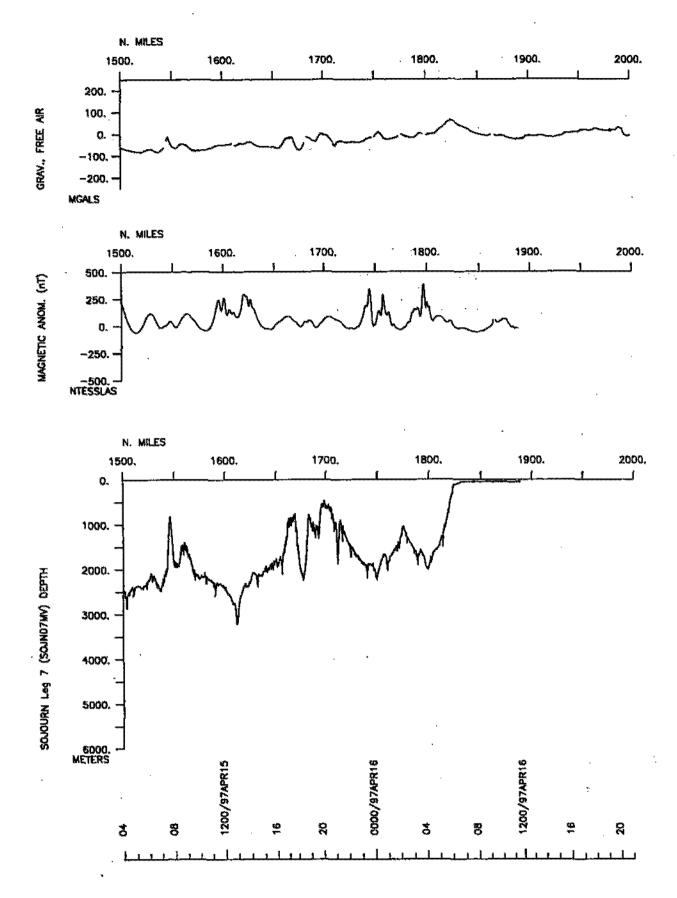
SOJN07MV

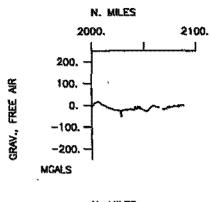


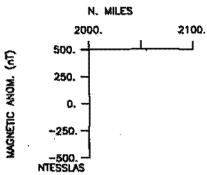


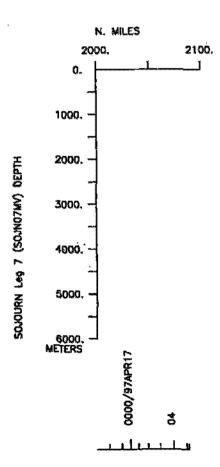












S.I.O. SAMPLE INDEX

SOJOURN EXPEDITION LEG 7 (SOJN07MV) R/V Melville (Issued May 1997)

Ports:

Hobart, Tasmania (10 April 1997) to Melbourne, Australia (17 April 1997)

Chief Scientists:

Neville Exon, Australian Geological Survey Oganization Stuart M. Smith, Scripps Institution of Oceanography

The Sample Index is a first level interdisciplinary listing of time, position, sample identification and disposition of all samples, records and measurements collected on this cruise leg. The index data are encoded at sea by the resident marine technician and processed on shore by the S.I.O. Geological Data Center shortly after the completion of the cruise leg.

Positions are interpolated on the basis of sample time by comparison to a single, edited navigation file. Samples beginning at one time and position and ending at another are entered on two consecutive lines. Disposition and sample type are represented by three and four character codes to permit future computer searches on these parameters. (Listings defining these codes are available from the Geological Data Center.)

GDC CRUISE I.D.# 269

```
#*** Ports ***
             LGPT B Hobart, Tasmania 42-53.00S 147-20.00E f SOJN07MV LGPT E Melbourne, Aust. 37-49.00S 144-57.00E f SOJN07MV
0205 100497
               LGPT E Melbourne, Aust.
0600 170497
#*** Personnel ***
          PECS AUA Exon, Dr. Neville CoChief Scientist Australian Geol. Sulv SOJN07MV
PESP AUA Hill, Dr. Peter Research Geol. Australian Geol. Surv SOJN07MV
Professor Univ. of Sydney SOJN07MV
                               Professor Univ. of Sydney SOJN07MV
Computer Engineer Scripps Institution SOJN07MV
PECT STS Moe, Ronald
                                 Resident Tech. Scripps Institution SOJN07MV
PERT STS Comer, Ron
#*** NOTES ***
#An 'X' in the (B)egin/(E)nd column following the sample code indicates no
#sample or data recovered. A 'C' indicates continuation of data collection
#from before the beginning or after the end of a particular leg. (Moored #bottom instruments, for example.) The number appearing in the columns
#between the sample identifier and the disposition code, for many sample
#entries, is the water depth in corrected meters.
#GMT DDMMYY SAMP B SAMPLE DISP p CRUISE
#TIME DATE TZ CODE E IDENTIFIER CODE LATITUDE LONGITUDE C LEG-SHIP
#*** Underway Data Curator - S. M. Smith ext. 42752 ***
#*** Log Books ***
0430 100497 0 LBUW B Underway Watch Log GDC 43-15.96S 147-40.59E g SOJN07MV
1125 160497 0 LBUW E Underway Watch Log GDC 39-09.01s 147-16.45E g SOJN07MV
**** Magnetics (Earth Total Field) Records ***
0515 100497 0 MGRA B Magnetics R-01 GDC 43-21.66S 147-48.39E g SOJN07MV 1125 160497 0 MGRA E Magnetics R-01 GDC 39-09.01S 147-16.45E g SOJN07MV
#*** Continuous Recorded Gravity ***
```

0205 100497 0 GVCR B Auto-logged Gravity GDC 42-54.22s 147-21.29E g SOJN07MV 0600 170497 0 GVCR E Auto-logged Gravity GDC 37-51.75s 144-54.80E g SOJN07MV

0500 100497 0 MBSR B v.beam&sidescan r-01 GDC 43-20.30S 147-46.53E g SOJN07MV 1146 160497 0 MBSB E v.beam&sidescan r-01 GDC 39-08.87S 147-13.82E g SOJN07MV

**** Sea Beam Records (vertical beam and side scan) ***

SOJN07MV

```
#GMT DDMMYY
              SAMP B SAMPLE
                                       DISP
                                                                b CRUISE
                                       CODE LATITUDE LONGITUDE e LEG-SHIP
 #TIME DATE TZ CODE E IDENTIFIER
 #*** Acoustic Doppler Current Profiler ***
 #*** Integrated Meteorological Aquisition System ***
 0205 100497 0 IMET B Weather Data Coll. GDC 42-54.225 147-21.29E g SOJN07MV
0600 170497 0 IMET E Weather Data Coll. GDC 37-51.758 144-54.80E g SOJN07MV
 #*** Expendable Bathythermographs ***
            0 BTXP B XBT T-5 t-5$1.sip
                                        NOAA 43-36.82S 148-19.12E g SOJN07MV
 0730 100497
 0739 100497
            0 BTXP B XBT T-5 t-5$2.sip
                                        NOAA 43-38.08S 148-20.63E g SOJN07MV
                                        NOAA 43-39.16S 148-19.98E g SOJN07MV
 0746 100497
            0 BTXP B XBT T-5 t-5$3.sip
 0353 110497
            0 BTXP B XBT T-5 t-5$4.sip
                                        NOAA 41-18.23S 149-02.39E g SOJN07MV
 0259 130497
           0 BTXP B XBT T-5 t-5$5.sip
                                        NOAA 39-26.60S 149-31.31E g SOJN07MV
 0515 140497 0 BTXP B XBT T-5 t-5$6.sip
                                        NOAA 38-41.93S 149-55.50E g SOJN07MV
 0533 140497 0 BTXP B XBT T-5 t-5$7.sip
                                        NOAA 38-38.27S 149-55.65E g SOJN07MV
 0537 150497 0 BTXP B XBT T-5 t-5$8.sip
                                        NOAA 38-45.16S 148-44.88E g SOJN07MV
```

End Sample Index