Report and Index of

Underway Marine Geophysical Data

Cook Expedition

Leg 2

(COOK02MV)

R/V Melville

(Issued March 2001)

Ports:

Arica, Chile (2 October 2000) to Arica, Chile (14 October 2000)

Chief Scientist:

Robert Weller, Woods Hole rweller@whoi.edu

Computer Tech - John Chatwood Resident Marine Tech - Ron Comer

Post-Cruise processing and report preparation by the Geological Data Center, Scripps Institution of Oceanography La Jolla, CA 92093-0223

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

GDC Cruise ID# 295

Report and Index of Navigation and Underway Geophysical Data

Processed by the Geological Data Center Scripps Institution of Oceanography

Contents:

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

Track Charts— annotated with dates and hour ticks

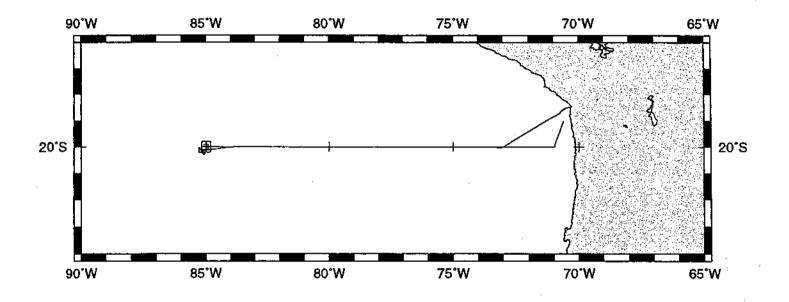
Profiles – depth, magnetic and gravity free air anomaly vs. distance. (Sections of track with seismic reflection data have a wide black line along the bottom of the profile.)

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

NOTE: One or more of the underway data types may not be collected on a given leg. For information on the availability and reproduction costs of data in the following forms, contact the Geological Data Center, Scripps Institution of Oceanography, La Jolla, California 92093-0223. Phone: (858)534-2752, Fax: (858)534-6500, internet email: ualbright@ucsd.edu or gwells@ucsd.edu

- 1. Files via ftp or on 8mm (Exabyte) magnetic tape or CDrom:
 - a) Separate time series ASCII files of navigation, single beam depth, gravity and magnetics.
 - b) Above data in a single merged ASCII file in the MGD77 Exchange Format.
 - c) SeaBeam depth data (binary, Sun byte order)
 - d) SeaBeam Sidescan data.
- 2. Microfilm (35mm flowfilm) or hard copies of:
 - a) Underway watch log
 - b) SeaBeam vertical beam profile/Sidescan records.
 - c) 3.5 kHz and 12 kHz echosounder records.
 - d) Seismic reflection profiler records.
- Navigation abstract listing with times and positions of major course and speed changes.
- 4. Custom plots in Mercator projection:
 - a) Track plots.
 - b) SeaBeam depth contour plots.
 - c) Depths, magnetic or gravity values printed or profiled along track.

Rev 6/2000



COOK EXPEDITION LEG 2 (COOK02MV)

CHIEF SCIENTIST: Robert Weller, Woods Hole

PORTS: Arica - Arica, Chile DATES: 02 - 14 October 2000

SHIP: R/V Melville

TOTAL MILEAGE OF UNDERWAY DATA COLLECTED

Cruise-1954 miles

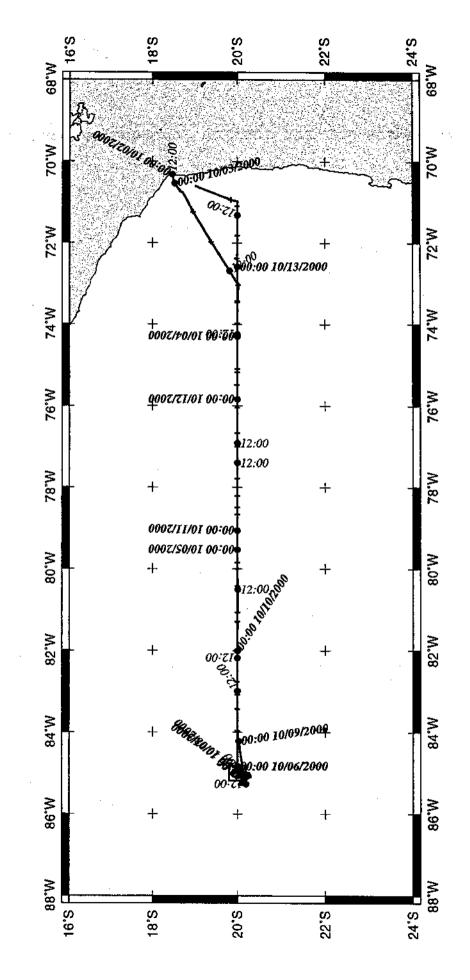
Magnetics-none collected

Bathymetry-1828 miles

Seismic Reflection-none collected

Sea Beam-1828 miles

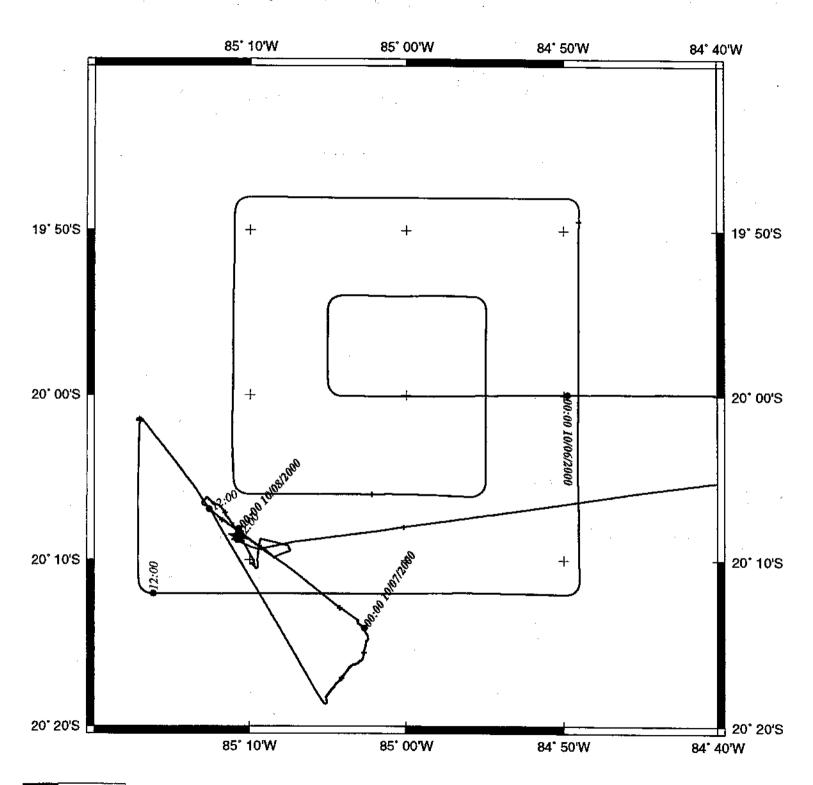
Gravity-1861 miles



COOK leg 2 Track

CIVII Mar 8 11:56 :Arica - Arica, Chile 2 - 14 October 2000:

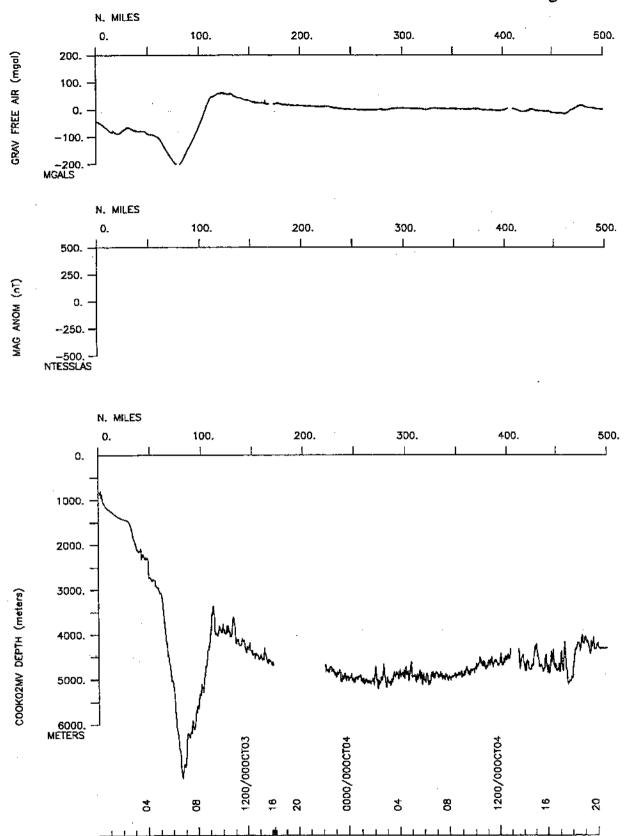
COOK leg 2 Track

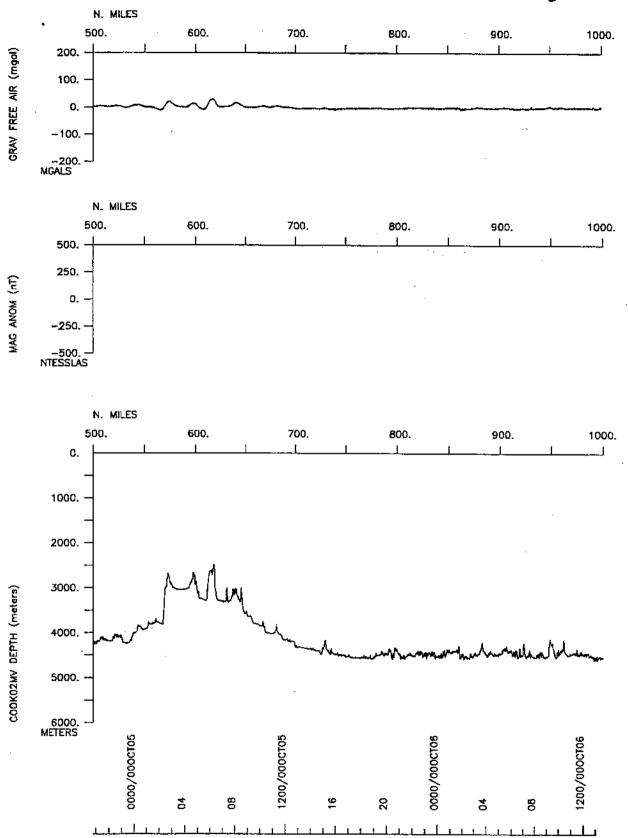


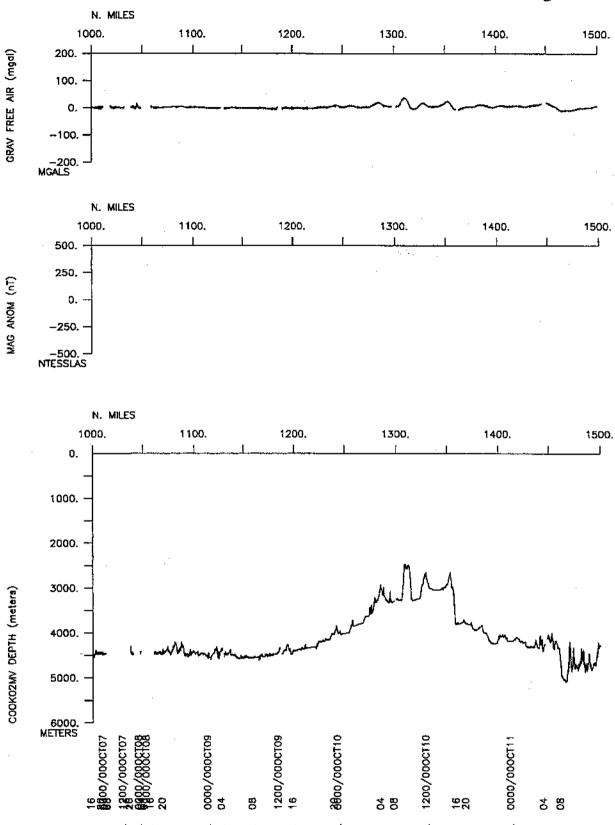
GMT Mar 6 11:56 :Arica - Arica, Chile 2 - 14 October 2000:

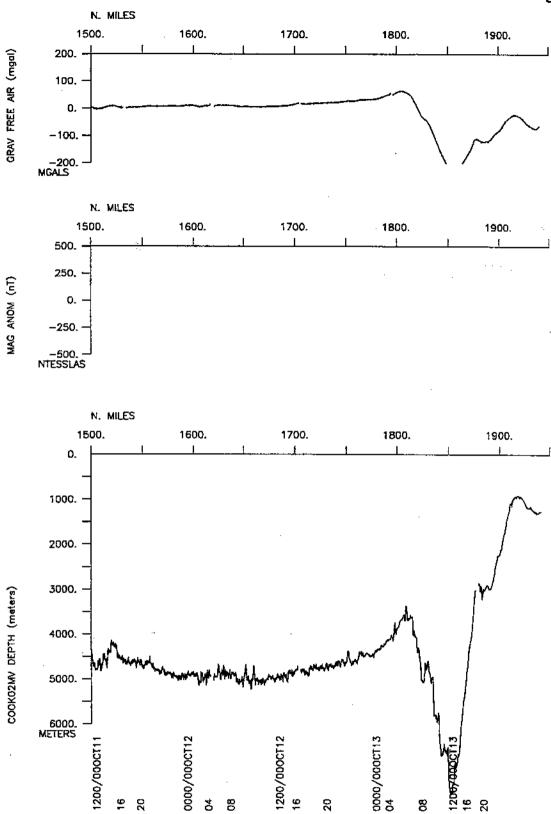


Page 01









S.I.O. Sample Index

COOK Expedition

Leg 2

(COOK02MV)

R/V Melville

(Issued March 2001)

PORTS:

Arica, Chile (2 October 2000) to Arica, Chile (14 October 2000)

Chief Scientist:

Robert Weller, Woods Hole

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

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

GDC Cruise ID# 295

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#*** Ports ***
 2150 021000 0 LGPT B Arica, Chile GDC 18-29.00S 70-20.00W f COOK02MV 1200 141000 0 LGPT E Arica, Chile GDC 18-29.00S 70-20.00W f COOK02MV
 #*** Personnel ***
          #--- ----
PECS WHOI Weller, Dr.R. Chief Scientist Woods Hole COOK02MV
PEXN SIX Schneider, Dr.W. Scientist U. of Concepcion COOK02MV
PERT STS Comer, R.L. Resident Tech. Scripps Institution COOK02MV
PEXN CHL Ramos, M.E. Research Assist. U. of Concepcion COOK02MV
PESP WHOI Lucas, L. Research Assoc. Woods Hole COOK02MV
PESP WHOI Fewings, M. Research Assoc. Woods Hole COOK02MV
PESP WHOI Strom, W. Sr. Engineer Woods Hole COOK02MV
PESP WHOI Ryder, J. Technician Woods Hole COOK02MV
PESP WHOI Bouchard, P. Technician Woods Hole COOK02MV
PESP WHOI Dunn, J. Engineering Asst. Woods Hole COOK02MV
PEXN CHL Hormazabal, C. Ocean Technician Woods Hole COOK02MV
PEXN CHL Castillo, M. Observer Chile SHOA Navy COOK02MV
PEXN CHL Valenzuela, C. Observer Chile SHOA Navy COOK02MV
PEXN CHL Castro, R. Grad. student U. of Concepcion COOK02MV
PEXN CHL Gutierrez, M. Grad. student U. of Concepcion COOK02MV
PEXN CHL Rodriguez Rubio, E. Grad. student U. of Concepcion COOK02MV
PEXN CHL Cuevas, L.A. Grad. student U. of Concepcion COOK02MV
PEXN CHL Cuevas, L.A. Grad. student U. of Concepcion COOK02MV
PEXN CHL Cuevas, L.A. Grad. student U. of Concepcion COOK02MV
PEXN CHL Cuevas, L.A. Grad. student U. of Concepcion COOK02MV
PEXN CHL Cuevas, L.A. Grad. student U. of Concepcion COOK02MV
PEXN CHL Cuevas, L.A. Grad. student U. of Concepcion COOK02MV
  #*** 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.
 #*** Underway Data Curator - Geological Data Center ext. 41899 *
  #*** Log Books ***
  2150 021000 0 LBUW B Underway watch log GDC 18-31.39S 70-32.21W g COOK02MV 0031 141000 0 LBUW E Underway watch log GDC 19-00.82S 70-36.62W g COOK02MV
  #*** Sea Beam Records (vertical beam and side scan) ***
  0007 031000 0 MBSR B vbeam&sidescan r-01 GDC 18-32.245 70-33.59W g COOK02MV
  0031 141000 0 MBSR E vbeam&sidescan r-01 GDC 19-00.82S 70-36.62W g COOK02MV
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	DISP CODE LATITUDE											
#*** Echo Sounder Records ***												
2349 021000 0 DPR3 B 3.5khz Knudsen r-01 1427 071000 0 DPR3 E 3.5khz Knudsen r-01	GDC 18-31.39s GDC 20-06.50s		g COOK02MV g COOK02MV									
2000 071000 0 DPR3 B 3.5khz Knudsen r-02 0031 141000 0 DPR3 E 3.5khz Knudsen r-02	GDC 20-09.26S GDC 19-00.82S		g COOK02MV g COOK02MV									
#*** Digital Gravity ***												
2150 021000 0 GVDR B Gravity data 1200 141000 0 GVDR E Gravity data	GDC 18-31.39S GDC 19-00.82S		g COOK02MV g COOK02MV									
#*** Anchored Bottom Buoy ***												
2043 071000 0 BUAB B Ank.Bot.Buoy Strat1 1200 141000 0 BUAB C Ank.Bot.Buoy Strat1	WHOI 20-09.52S WHOI 19-00.82S	85-08.87W 70-36.62W	g COOK02MV g COOK02MV									
#*** Conductivity, Temperature, Depth ***												
1145 091000 0 TDCT Seabird 3 24 4295M 2141 091000 0 TDCT Seabird 4 24 3916M	CHL 20-00.07S CHL 19-59.94S CHL 19-59.73S CHL 20-00.30S CHL 19-59.95S CHL 20-00.04S CHL 19-59.94S CHL 19-59.72S CHL 19-59.78S CHL 19-59.78S CHL 19-59.94S	83-59.66W 82-59.92W 82-00.56W 81-04.30W 79-59.88W 78-27.91W 77-00.03W 75-29.35W 73-59.23W 72-22.85W 71-19.34W	g COOK02MV g COOK02MV									
#*** Integrated Meteorological Data Acquisition **												
2150 021000 0 IMET B Weather Measurements 1200 141000 0 IMET E Weather Measurements	GDC 18-31.39S GDC 19-00.82S	70-32.21W 70-36.62W	g COOK02MV g COOK02MV									
#*** Acoustic Doppler Current Profiler ***												
0007 031000 0 ADCP B 300khz Current Prof. 0030 141000 0 ADCP E 300khz Current Prof.	GDC 18-32.24S GDC 19-00.82S	70-33.59W 70-36.62W	g COOKO2MV g COOKO2MV									
# End Sample Index			COOK 02MV									