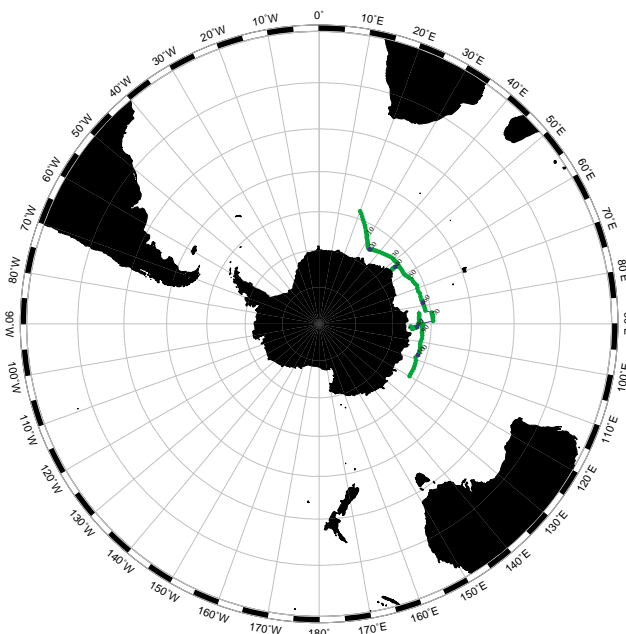


A. Cruise Report: S04I

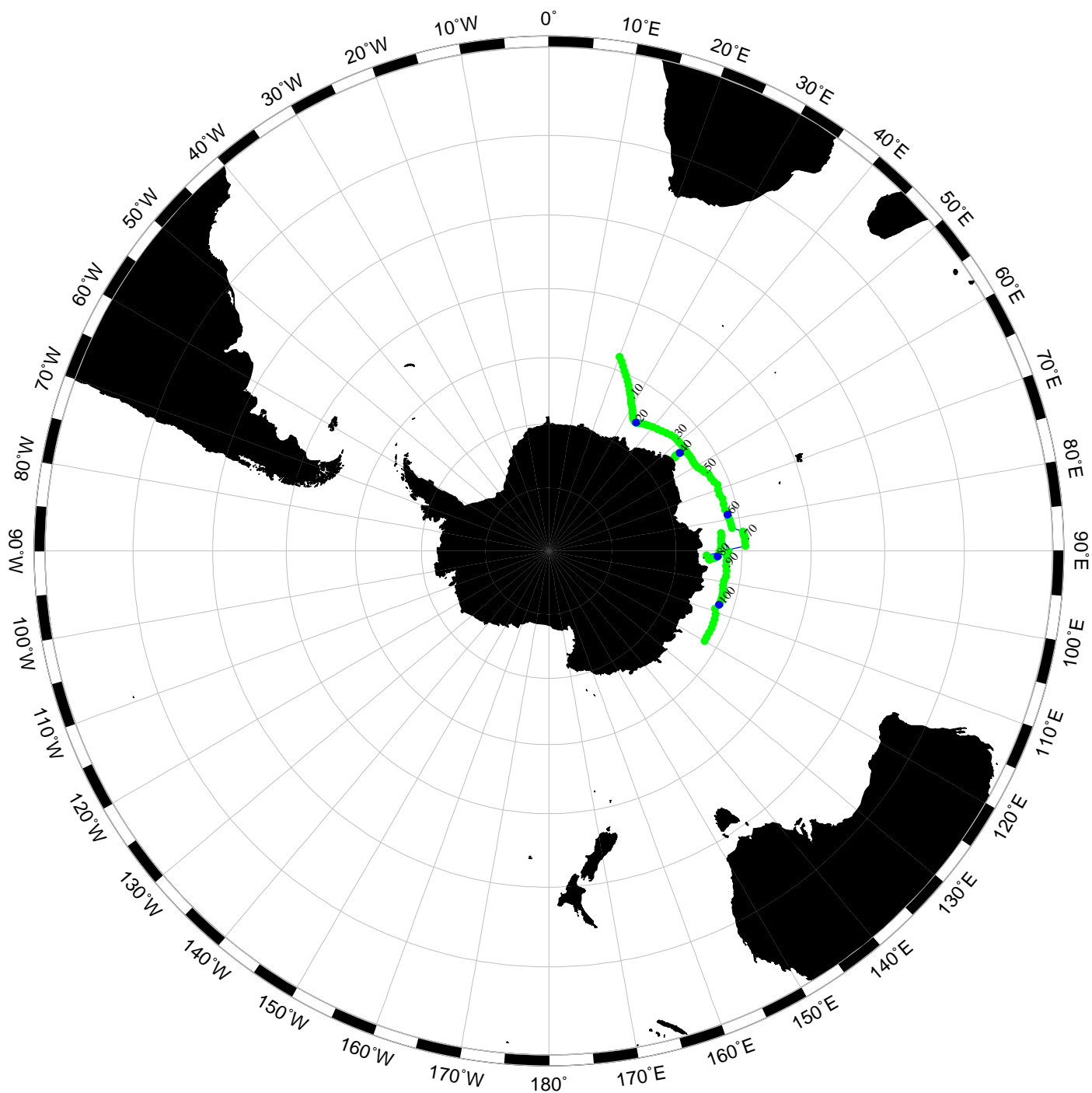


A.1. Highlights

WHP Cruise Summary Information

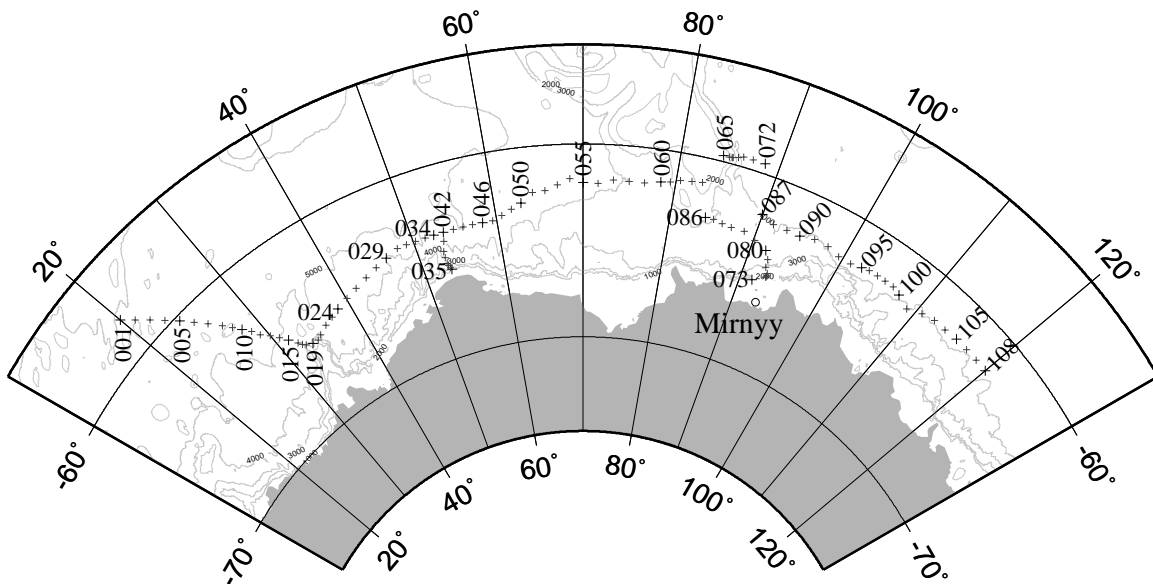
WOCE line designation	S04I
Expedition designation (ExpoCode)	320696_3
Chief scientists and affiliation	Thomas Whitworth III and James H. Swift*
Ship	RVIB NATHANIEL B. PALMER
Cruise dates	1996.MAY.03 - 1996.JUL.04
Ports of call	Cape Town, S. Africa - Hobart, Australia
Number of stations	108 full-depth CTD stations
Geographic boundaries	58° 0.23' S 20° 0.34' E 120° 0.08' E 65° 41.97' S
Floats and drifters deployed	17 ALACE floats
Moorings deployed or recovered	9 self-reporting current meter moorings
Thomas Whitworth III Department of Oceanography Texas A&M University College Station, TX, 77843 twhitworth@tamu.edu	James H. Swift Scripps Institution of Oceanography University of California, San Diego La Jolla, CA, 92093 jswift@ucsd.edu
Authors	S. Rutz, D. Chipman, M. Mensch, F. Delahoyd, D. Breger, R. Key, E. Peltola, T. Whitworth

Station locations for S04I: Whitworth/Swift: N.B. Palmer, 1996



**World Ocean Circulation Experiment
Southern Indian Ocean S4I
R/V Nathaniel B. Palmer NBP96-3
3 May - 4 July 1996
Cape Town, South Africa - Hobart, Tasmania, Australia
ExPCODE: 320696_3**

**Co-Chief Scientists:
Dr. Thomas Whitworth (Texas A&M University)
Dr. James H. Swift (Scripps Institution of Oceanography)**



S4I Cruise Track

**Oceanographic Data Facility (ODF)
Final Cruise Report
1 August 2003**

Data Submitted by:

Oceanographic Data Facility
Scripps Institution of Oceanography
La Jolla, CA 92093-0214
<http://odf.ucsd.edu>

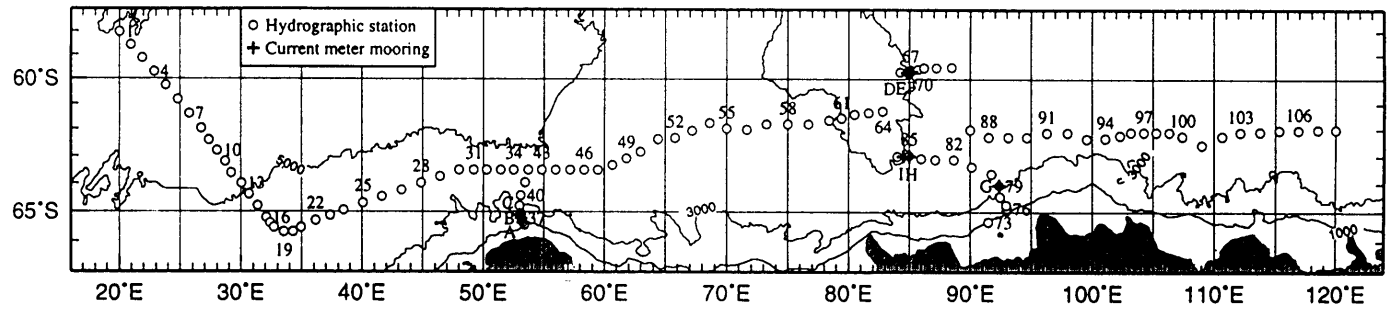


Figure 1: Locations of hydrographic stations and current meters for WOCE cruise S404I.

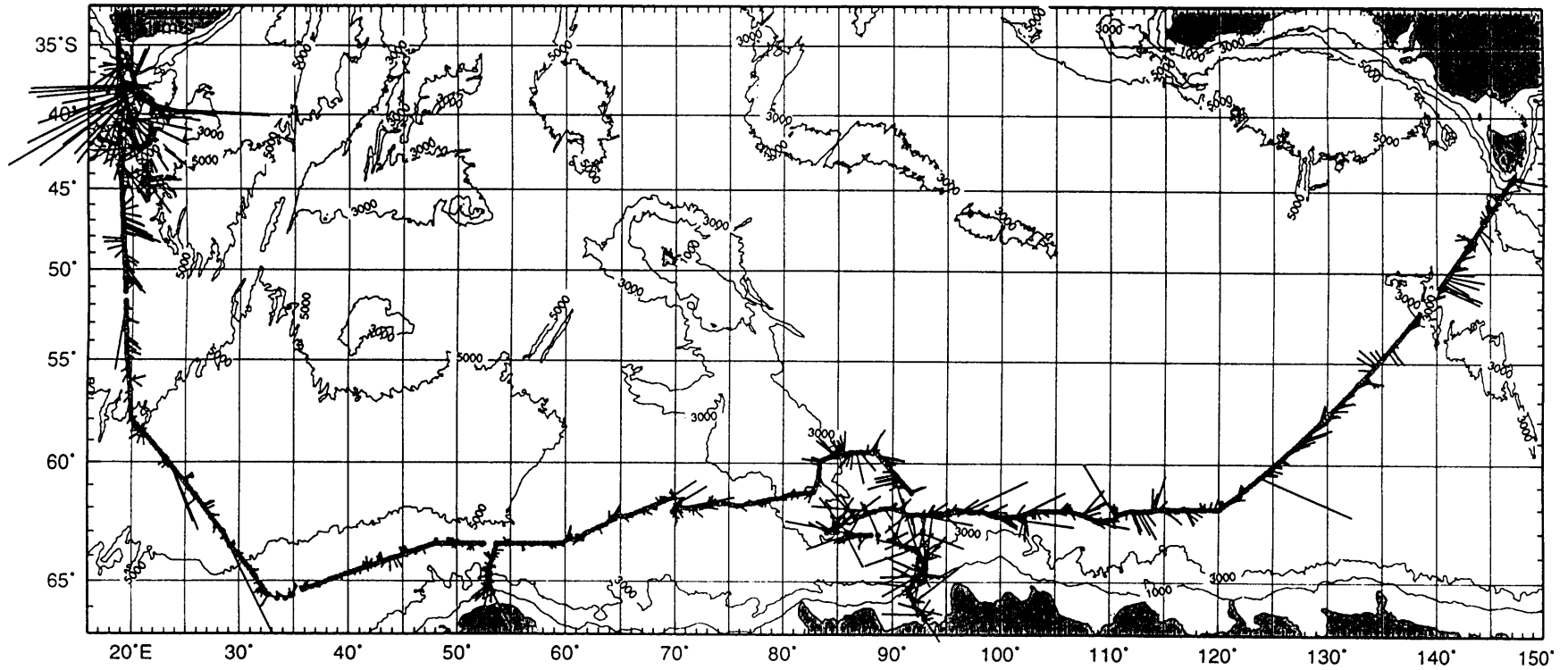


Figure 2: Underway ADCP current vectors in the layer between 75-125 m.

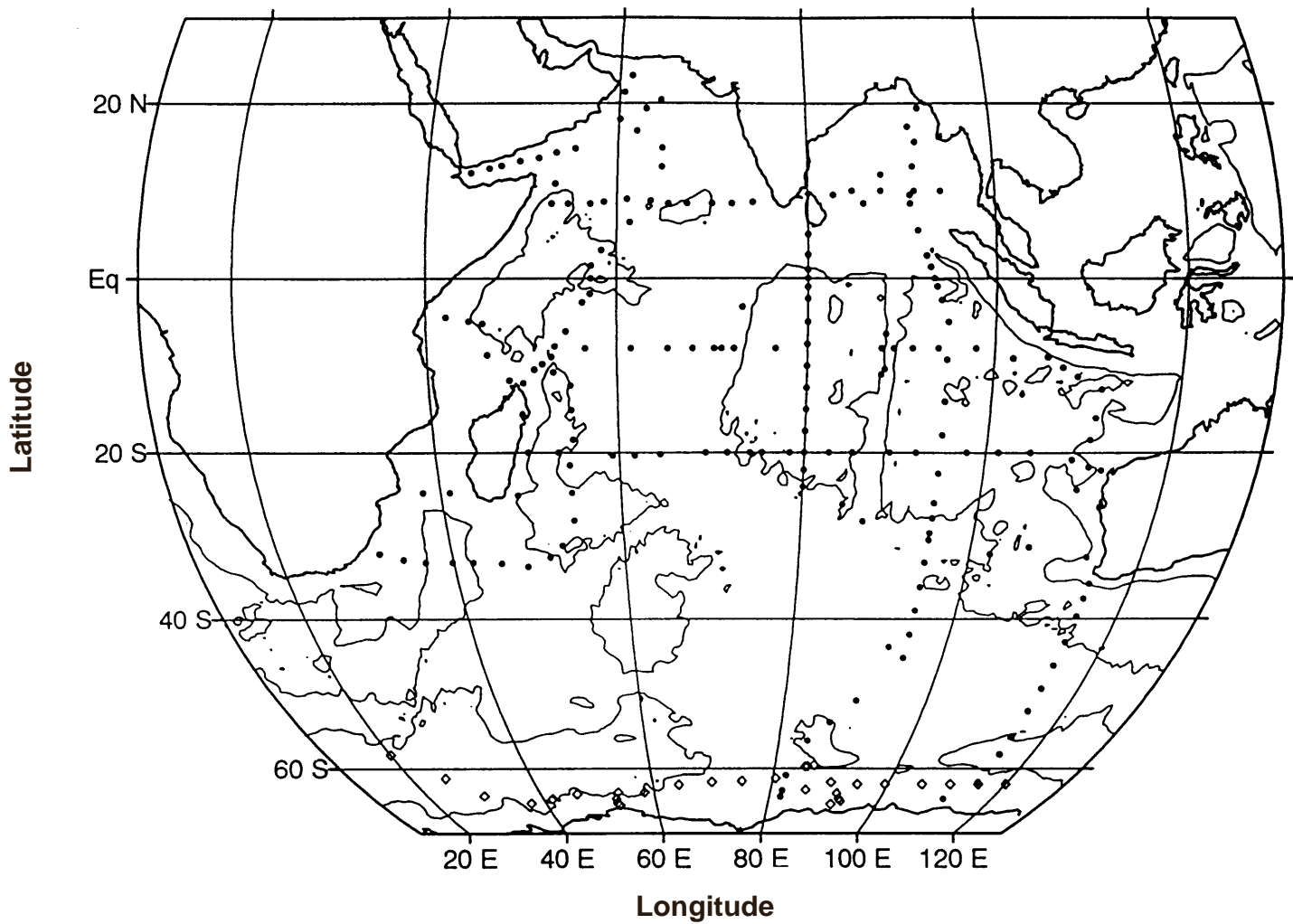


Figure 7: WOCE Indian Ocean Radiocarbon sampling locations.

TABLE 1. S4I $\Delta^{14}\text{C}$ station locations.

Station	Month	Latitude	Longitude	Bottom Depth (m)
73	6/14/96	-65.330	91.475	553
76	6/15/96	-64.859	93.004	1808
78	6/16/96	-64.464	92.481	3060
80	6/16/96	-63.653	91.737	3629
84	6/18/96	-63.092	86.007	3809
87	6/20/96	-62.001	90.001	4020
90	6/22/96	-62.286	94.670	3848
93	6/23/96	-62.335	99.558	4316
98	6/24/96	-62.104	105.269	4297
102	6/26/96	-62.244	110.607	3986
105	6/26/96	-62.002	115.331	4255
108	6/27/96	-62.000	120.000	4194

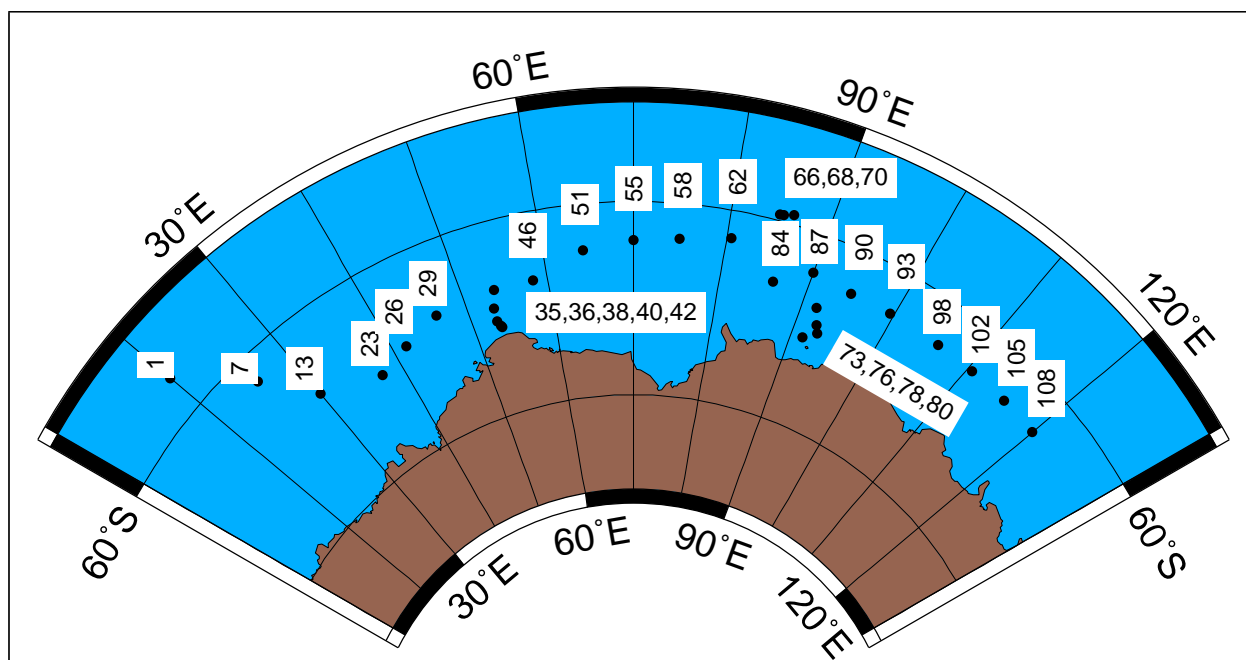


Figure 1: AMS ^{14}C station map for WOCE S4I.

2.0 Personnel

^{14}C sampling for this cruise was carried out by Robert M. Key (Princeton University). ^{14}C (and accompanying ^{13}C) analyses were performed at the National Ocean Sciences AMS Facility (NOSAMS) at Woods Hole Oceanographic Institution. R. Key collected the data from the originators, merged the files, assigned quality control flags to the ^{14}C and submitted the data files to the WOCE office (4/99). R. Key is P.I. for the ^{14}C data and NOSAMS for the ^{13}C data.