## Journal 15

- 1. 242200Z January 05
- 2. Position: Lat: 41-30.0S, LONG: 150-00.0W
- 3. Course: On Station
- 4. Speed: 11.5 kts
- 5. Distance: 90.0 NM
- 6. Steaming Time: 07H 48M
- 7. Station Time: 16H 12M
- 8. Fuel: 2,767 gals
- 9. Sky: St, Sc 8
- 10. Wind: 260-T, 12 Kts.
- 11. Sea: 260-T, 1-2 Ft
- 12. Swell: 230-T, 5-6 Ft
- 13. Barometer: 1024.7 Mb
- 14. Temperature: Air: 19.5 C, Sea: 17.2 C
- 15. Equipment Status: Normal
- 16. Comments: none
- MASTER, R/V ROGER REVELLE

Monday and we have all received a cruise update from the Chief Scientist, Dr. Bernadette Sloyan:

We are currently at Station 53 - 42 S 150 W. In the last week we have made good progress completing 25 stations. Trace Metal casts are being taken on odd numbered stations at 1 degree latitude spacing. These casts take approximately 1 hour and occur either prior to or after the CTD/Rosette cast. Shallow optics casts are being taken in a two-hour window surrounding local noon while we are on station. Only one of these noon optics casts has been aborted. This was due to a confused sea-state and unfavorable wind direction. The water property chemistry analysis has been progressing well also, with very few problems. These data are uploaded onto the ODF data server and are readily accessed along with the CTD data by interested science party members. We are actively plotting vertical property sections and comparing these with the previous WOCE P16S section.

In the previous week we had deployed four ARGO floats. Unfortunately, limited or no satellite transmissions were received from two of these floats upon deployment. During the week we worked with Elizabeth Steffen (PMEL) to diagnose why transmissions from these floats were not received. This entailed starting up two ARGO floats and placing them on the fantail for six hours. On this initial test one of the ARGO floats performed as expected with a number of transmission received by the satellite. No messages were received from the other float. However, upon retesting the float transmissions were received. The suggested cause of lack of received transmissions from deployed float is because they have been slow to right themselves while at the surface. We will continue to deploy the ARGO but on a modified deployment schedule.

A ridge of high pressure has dominated the weather pattern, interspersed with the passage of weak cold frontal systems. Albatross are now commonly sighted skimming the ocean surrounding the ship. With air temperatures cooling as we have moved south many of the science party and crew have progressively abandoned shorts for long pants, our last hold out is Chris Measures. We all await seeing his knees turn blue as we progress further south.

We are shrinking cups on even numbered casts and I still have about 150 cups to go....the average depth of the casts is about 5000m and these are the deepest casts of the cruise. No more penguins sighted....but Marine Res Tech Ron Comer did a plankton tow for me and we got some very cool looking jellies. I am working on getting my digital microscope up and running so I can take and send pictures of them.

Seas are still fairly calm but we keep getting weather warnings, so it's out there and we will find it soon. No broadcast tomorrow, but Thursday we will do one with Captain Dave Murline and one with Co-Chief Scientist Dr. Jim Swift from the bridge.