



Voyage Transit SS02-2006

Establishing geochemical tracers for paleo-oceanographic reconstructions in the Western Pacific.

Dr Anne Müller, University of New South Wales (Chief Scientist)

Southern Surveyor often makes a transit voyage to reach the port from which a research voyage will begin. Last year, to encourage and inspire the next generation of marine scientists, we encouraged universities to send science students on these voyages so they could experience real marine science. Nine students from the University of NSW and Macquarie University joined the first transit voyage of the year under the guidance of Chief Scientist Anne Müller and Assistant Professor Moninya Roughan.

This voyage featured a strongly integrated science and educational program. During the voyage Dr Müller conducted an extensive sampling program that included gravity coring at depths of up to 3 km, grab samples at depths of up to 2.5 km, XBT (eXpendable Bathy-Thermograph) launches, plankton tows and the acquisition of swath and sub-bottom profiler data. This provided students with the opportunity to assist with real science in an immersive educational environment.

Post-voyage laboratory research will be conducted on the samples gathered to establish tracers for seasurface oceanographic conditions

and to investigate the links between tracers and the oceanographic conditions in place at the time in the distant past when sediments were laid down. Scientific interest in the potential insights into paleo-climatic conditions that this research offers may be gauged by a request from the French government for access to the data arising from the voyage.

The educational program was also very gratifying. Perhaps the strongest evidence of this can be seen in the words of the students themselves.

- "... the student crew, including myself, gained an understanding of marine research unavailable in normal dayto-day learning." Luke Hedge.
- "...never could I have prepared myself for this amazing, life-altering experience." Steven Portelli.
- "...has truly been my biggest challenge and highlight... I have a new appreciation for geological and physical oceanographic studies... I value the experience that has reassured me of my love for the ocean." Chris Hellyer.
- "...has made me more enthusiastic about possible careers in oceanography." Tess Pritchard.

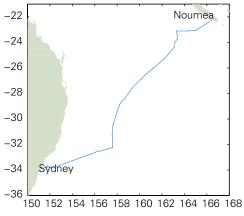
"The crew/scientists happily answered questions about their jobs, the ship, all the equipment, and the meaning of life. It was great to gain some of their knowledge, experience and enthusiasm." Helen MacDonald.

"This invaluable experience has inspired me to do further oceanographic research and has made me aware of the numerous opportunities available." Colette Kerry.

Itinerary

Departed Noumea 16:00 hrs Monday 11 September 2006

Arrived Sydney 13:00 hrs Sunday 17 September 2006



> Transit SS02-2006 voyage track