

New Zealand

In 2009 and 2010 the following GEOTRACES activities have taken place.

i) GEOTRACES-IPY data & metadata

The datasets (trace metal profiles and CTD) have been sent to the GEOTRACES Data Assembly Centre at BODC, UK.

ii) Workshop - GEOTRACES process study

In December 2009 we hosted a 5 day workshop in Wellington to discuss the results from our FeCycle II voyage that took place in September/October 2008. Twenty participants from New Zealand, Australia, USA and Chile presented results and commenced the construction of a coupled Fe and C budget from the upper water column during the development and decline of the spring diatom bloom. Plans to send metadata and data to BODC were finalised on the final day of the workshop.

iii) Planning for mid June 2011 P04 zonal section (North Queensland to Tahiti).

We have now confirmed dates for this voyage, and have been liaising with Andrew Bowie and Michael Ellwood in Australia to co-ordinate this joint 2 leg Australia-New Zealand voyage.

iv) Other activities: We have continued ship-of-opportunity dust sampling between Japan and New Zealand, New Zealand and Australia, and Australia and Antarctica in 2009/2010. We recently participated in a Dust-Phytoplankton Workshop In Brisbane which brought together, dust scientists, trace metal chemists and ocean scientists.

During the Australian PINTS voyage transect of the Tasman Sea (January 2010), we characterised water column biogeochemistry by measuring a suite of parameters including nanomolar nutrient and trace metals. In addition the impact of dust and variable CO₂ on surface water biology and biogeochemistry was determined by a series of deckboard manipulation experiments.

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