

## **New Zealand**

In 2010/11 we have focussed on three main tasks: the final data analysis and write-up of papers from the GEOTRACES process voyage FeCycle II; preparations for our leg of the Brisbane to Lima GP13 zonal section; ongoing aerosol dust sampling from both ships-of-opportunity and a land-based site in the Pacific. Other broader activities have included liaising (along with Dr. Carol Robinson) with three labs involved in the fledgling bioGEOTRACES component of GEOTRACES, and participating in GEOTRACES-related workshops on nutrient limitation (IGBP) and molecular biology (OCB).

The FeCycle II process study yielded a suite of interesting insights into patterns of biological uptake and recycling of iron in high iron waters, that are now being compared with those from FeCycle I (also a quasi-lagrangian biogeochemical budgetary study but in low iron waters) in a series of manuscripts to be submitted for publication in late 2011. We have been working closely with the Australians to ensure that we have two successful legs on GP13. This has involved loaning of equipment such as TM rosettes and pumps to ensure that each voyage will have back-up equipment etc. The New Zealand voyage will set sail on June 6 for 24 days, and we will rendez-vous with the Australian vessel in Auckland on June 5<sup>th</sup>. As in previous years we have continued our aerosol dust sampling programme between Japan and New Zealand. The data from the first three years of this study are being written up in a comparative study with that of the Atlantic Meridional Transect dust sampling programme.

### ***Relevant publications***

[Boyd P.W.](#) and [M. J. Ellwood](#) (2010) The biogeochemical cycle of iron in the ocean *Nature Geoscience*, 3, 675–682, doi:10.1038/ngeo964

Submitted by Philip Boyd.