

AGU Fall Meeting 2014 - SFB 754 representation

San Francisco, USA 15-19 December 2014

Trace metals and isotopes in the Eastern Tropical South Pacific: Results of the 2013 US GEOTRACES Zonal Transect and complimentary studies

Conveners: Jim Moffett, Chris German and Martin Frank

The second US GEOTRACES sectional cruise was staged in 2013: a zonal transect from the Peruvian Coast to the central South Pacific. It included (1) the Peruvian Oxygen Minimum Zone (OMZ), (2) a vast oligotrophic region of the upper water column, and (3) an extensive hydrothermal plume originating from the East Pacific Rise. Approximately 25 research groups were involved in the cruise, with samples collected for all key GEOTRACES parameters plus additional redox-sensitive tracers. The objectives were to understand the cycling of trace elements and isotopes in the highly diverse, overlapping regimes surveyed within the transect. Submissions are invited from participants in the US GEOTRACES program, from other programs in the region (e.g. the German SFB754) with complimentary objectives - including related process studies - and from workers who have become involved in any aspects of data synthesis and modelling after the cruise was completed.

<https://agu.confex.com/agu/fm14/webprogrampreliminary/Session2880.html>

Biogeochemical cycling of silicon in coastal transition zones

Conveners: Claudia Ehlert, Patricia Grasse, Daniel J. Conley, Mark A. Brzezinski

This session focuses on the bio(geo)chemical cycling of silicon between sources, sinks and within the dynamic transition zones, associated with the transformation of Si during transport from the freshwater to the marine environment. There are large variations in Si cycling in rivers and in estuaries, in the contributions of groundwater and pore water discharge to Si cycling in coastal regions, and within coastal zones themselves that result in large uncertainties in the global budget of silicon and in whether the silicon cycle in the ocean is in steady state.

While this session emphasizes on the silicon cycle, other data (e.g. trace elements like cadmium, zinc, iron, aluminum, etc) that elucidate the main processes and interactions between macro- and micro-nutrients within transition zones are also welcome. We explicitly solicit contributions from both isotope analyses as well as concentration studies with a focus on field study results.

<https://agu.confex.com/agu/fm14/webprogrampreliminary/Session2239.html>