GEOTRACES Data-Model Synergy Workshop

Hanse Wissenschaftskolleg, Delmenhorst, Germany 6-8 September, 2007

Draft Agenda:

Thursday, September 6

1. Cycling of micronutrients – processes, transports, sources and sinks

Chair: Marion Gehlen (LSCE)

- 08:30 Taxi transfer from hotels
- 09:00 09:15 Welcome, logistics, workshop objectives
- 09:15 10:00 Keynote 1: Ed Boyle (MIT)

 Cycling of Trace Micronutrients (e.g., Fe, Zn, Cd) in the Ocean: What We Know and What We Need to Know?
- 10:00 10:45 Keynote 2: Olivier Aumont (IFREMER)

 Modelling micronutrients in the ocean: The case of Iron.
- 10:45 11:15 Coffee Break
- 11:15 13:00 Discussion and short presentations
- 13:00 14:15 Lunch

2. Potential of TEIs as recorders of ocean productivity and nutrient/carbon fluxes Chair: Niki Gruber (ETH)

- 14:15 14:45 Keynote 1: Danny Sigman (Princeton U)
 Nitrate isotopes as a constraint on the ocean's fixed N budget.
- 14:45 15:15 Keynote 2: Christina de la Rocha (AWI)
 Understanding the distribution and behaviour of Si isotopes in the ocean
- 15:15 15:45 Keynote 3: Andy Ridgwell (U Bristol)
 What can we learn by assimilating geochemical ocean data in computer models?
- 15:45 16:15 Coffee Break
- 16:15 18:00 Discussion and short presentations
- 18:00 19:30 Dinner
- 19:30 21:00 Poster Session
- 20:30 21:00 Taxi transfer to hotels

Friday, September 7

3. Paleo proxy development – separating the effects of circulation and particle dynamics Chair: Bob Anderson (LDEO)

08:30 Taxi transfer from hotels

09:00 – 09:40 Keynote 1: Gideon Henderson (Oxford U)

The 231Pa/230Th paleoproxy: How should we interpret the growing observational dataset?

09:40 – 10:05 Keynote 2: Olivier Marchal (WHOI)

An inverse method to combine radiochemical measurements and a circulation model: Application to the North Atlantic.

10:05 – 10:30 Keynote 3: Thomas Arsouze (LSCE)

Modeling the Nd cycle with a global circulation model.

10:30 - 11:00 Coffee Break

11:00 – 12:45 Discussion and short presentations

12:45 - 14:15 Lunch

4. Data assimilation in the GEOTRACES context

Chair: Olivier Marchal (WHOI)

14:15 – 15:00 Keynote 1: Patrick Heimbach (MIT)

Title TBC: The ECCO model and its potential for GEOTRACES

15:00 – 15:45 Keynote 2: Thomas Kaminski (FastOpt, Hamburg)

Quantitative design of observational networks

15:45 - 16:15 Coffee Break

16:15 – 18:00 Discussion and short presentations

18:00 – 19:30 Dinner

19:30 – 21:00 Poster Session

20:30 – 21:00 Taxi transfer to hotels

Saturday, September 8

5. Data and model resources for GEOTRACES

Chair: NN.

08:00 Taxi transfer from hotels

Data

08:30 – 09:10 Chris Measures (U Hawaii)

Initial sampling plans for GEOTRACES in the Pacific and strategies for data availability and distribution within the GEOTRACES program.

09:10 – 09:40 Ian Robinson (NOC Southampton)

Satellite data for GEOTRACES - Availability, potential and limitations.

09:40 – 10:00 NN (BODC)

Title TBC: GEOTRACES relevant data at BODC

10:00 - 10:30 Coffee Break

Models I

10:30 – 10:50 Ernst Maier-Reimer (MPI Hamburg)

Title TBC: LSG/Hope/HAMOC

10:50 – 11:10 Jean-Claude Dutay (LSCE)

Title TBC: OPA/ORCA

11:10 – 11:30 Hiroyasu Hasumi (U Tokyo)

An overview of global scale ocean modelling from low to high resolution

11:30 – 12:00 NN (U Hamburg)

Title TBC: GECCO

12:00 - 13:30 Lunch

Models II

13:30 – 14:30 Andy Ridgwell (U Bristol)

Fast models of intermediate complexity as an analytical tool for GEOTRACES scientists

13:30 - 14:30 NN

Regional high resolution models

14:30 – 15:00 Final discussion. Where to go from here.

15:00 End of workshop

15:00 – 15:30 Taxi transfer to hotels

6. DMC

15:30 – 19:00 Meeting of GEOTRACES DMC Dinner in local restaurant