

Subject: US GEOTRACES: Pacific workshop 12-14 Sept 2011

US GEOTRACES Community,

US GEOTRACES will hold a workshop to refine the scientific objectives of a section between Peru and Tahiti, tentatively planned for Fall 2013. Investigators interested in conducting research as part of this section are invited to attend the workshop, which will take place 12-14 September 2011 at the Scripps Institution of Oceanography. No prior involvement in GEOTRACES is necessary to participate in this workshop.

The principal scientific objectives underpinning the Peru-Tahiti section include:

- 1) Compare and contrast the distributions of trace elements and their isotopes (TEIs) within the high productivity regime of the Peru upwelling system (processes such as micronutrient supply and boundary scavenging) with those characteristic of oligotrophic regimes offshore;
- 2) Evaluate the mobilization (or sequestration) of TEIs by processes associated with the intense oxygen minimum zone;
- 3) Characterize the distribution and speciation of trace elements surrounding zones of intense denitrification; and
- 4) Quantify sources and sinks of TEIs in hydrothermal plumes derived from the East Pacific Rise.

Additional rationale and motivation for this section (see map below) are described in an Implementation Plan posted online ([http://www.usgeotraces.org/documents/US\\_GEOTRACES\\_Pacific\\_Report\\_Jun09\\_000.pdf](http://www.usgeotraces.org/documents/US_GEOTRACES_Pacific_Report_Jun09_000.pdf)).

The purpose of this workshop is to refine the research objectives for the section and to devise a strategy to meet those objectives. Members of the US GEOTRACES Scientific Steering Committee (SSC) will participate in the workshop. They will synthesize results from the deliberations and prepare a set of priorities to guide the submission (tentatively 15 February 2012) and evaluation of proposals. The overriding criterion for establishing priorities is the degree to which an activity will enable US scientists to achieve the goals of GEOTRACES as defined in the Science Plan (<http://www.obs-vlfr.fr/GEOTRACES/index.php/science/science-plan>).

The Science Plan defines a number of key TEIs that must be measured on every section. It also identifies a number of complementary parameters that would be desirable. These include other TEIs that are of interest in their own right, for example in illuminating specific processes of interest, or parameters that may be critical for interpreting the distributions of key TEIs (e.g., circulation tracers). The SSC will consider these factors when establishing priorities for the section.

In preparation for the workshop, the SSC requests that those interested in participating **submit a brief (one page maximum) statement of interest by 1 July 2011**. Statements should (a) define the nature of the work to be done on the section, and (b) justify the

work in terms of GEOTRACES objectives. Statements can be emailed (preferably as Word documents) to <geotraces@ldeo.columbia.edu>. Statements will be posted on the US GEOTRACES web site unless the author requests that they be held in confidence.

Although no prior involvement in GEOTRACES is necessary to participate in the Pacific section, new investigators who have not participated in the GEOTRACES intercalibration exercise are obliged to follow the GEOTRACES policy for new investigators. This involves analysis of GEOTRACES reference standards, where applicable, or collection of duplicate samples for analysis by labs that have already demonstrated acceptable performance in the GEOTRACES intercalibration. This policy will be explained at the workshop.

Workshop travel expenses will be subsidized by the US GEOTRACES project office. The project office budget will cover full travel expenses for approximately 35 to 40 participants. However, the SSC prefers to limit the level of travel reimbursement rather than limit the number of participants. Therefore, the level of reimbursement may have to be limited if the number of participants exceeds approximately 40.

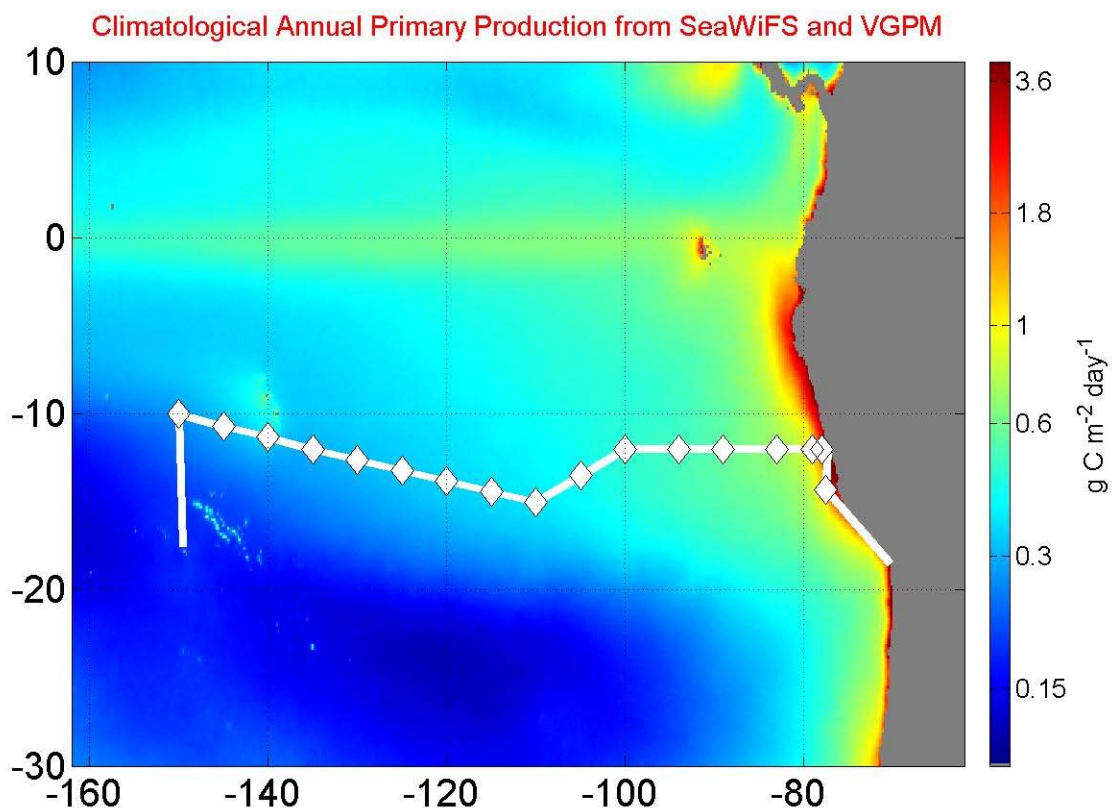


Figure: Tentative track of the US GEOTRACES zonal Pacific section with locations of deep stations shown as diamonds.