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SCOR WG-131: The Legacy of in situ Iron Enrichment Experiments - Data Compilation and Modeling

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Working Group 131 (WG-131) of the Scientific Committee on Oceanic Research (SCOR) has these aims:
1) Data compilation. Assembling in a common open-access database the metadata and data of the in situ iron fertilization experiments, ranging from surface water and water column data on physical, chemical and biological parameters, to biogeochemical rate processes and incubation experiments

2) Modeling and data synthesis of specific aspects of two or more such experiments for various topics, such as physical mixing, phytoplankton productivity, overall ecosystem functioning, iron chemistry, carbon budgeting, nutrient uptake ratios, and combinations of these variables and processes.

Over the last 24 months SCOR WG-131 participants, in particular Doug Mackie, have liased with Cyndy Chandler and Steve Gegg at the Biological and Chemical Oceanography Data Management Office (BCO-DMO; http://www.bco-dmo.org/home) to pull together a relational database that spans data from IronEx I in 1993 to SEEDS II in 2004. The BCO-DMO database currently contains data sets for IronEx I, IronEx II, SOIREE, SEEDS I, SEEDS II, SERIES, SOFeX-North and SOFeX-South. The BCO-DMO data base also has a link to the publicly available EisenEx data, which are stored at the World Data Center for Marine Environmental Sciences (WDC-MARE, http://www.wdc-mare.org/). We hope to launch the BCO-DMO database at a side meeting on the afternoon of Sunday 21 February 2010 before the Ocean Sciences Meeting in Portland. The relational BCO-DMO database permits intercomparisons of data, thus allowing for exciting and novel opportunities for data synthesis and modeling, from 1-dimensional simple biological models through to complex 3-dimensional models. Scientists interested in such work are invited to contact the chairs of WG-131.