

## **International Ocean Carbon Stakeholders Meeting Report UNESCO, Paris, December 6-7, 2004**

Many national and international programs conduct or have a direct interest in observations and research related to the global ocean carbon cycle. There is an immediate need to provide a global forum for coordination of ocean carbon studies, including data collection, large-scale synthesis efforts, model-data integration, and the development of a sustained ocean carbon observing system. Coordination is central to the achievement of the carbon-related goals of the SOLAS and IMBER Science Plans.

On December 6-7, 2004, a meeting was held at UNESCO in Paris to evaluate the most efficient way to meet these coordination needs. The meeting, sponsored by the U.S. National Science Foundation, IOC, and SCOR, included representatives of IOC, SCOR, IGBP, SOLAS, IMBER, GCP, CLIVAR, GOOS, GCOS, CARBOOCEAN, NASA, NSF, and JCOMM.

The meeting identified two types of coordination activities – those specific to meeting research program goals and those to address a global ocean carbon observing system. Unlike the research programs that have a finite lifetime, there are coordination activities that must be sustained, including the development of the observing system and permanent data archiving. The two coordination activities are intrinsically linked and must work closely together.

At the international level, the coordination needs for research and observations are:

1. To implement a central information center for program planning (for example, compiling information on current and planned repeat hydrographic sections, VOS carbon measurements, time series networks measuring carbon, process studies, etc.)
2. To develop international agreements on standards, best practices, data and meta-data standards, etc.
3. To develop, evaluate, and evolve strategies for large-scale observations for a sustained observing system
4. To carry out basin and global scale data synthesis and interpretation activities
5. To develop a data management system for ocean carbon data
6. To monitor implementation of the global ocean carbon observing systems, and to liaise with the larger global ocean/climate observing system.

To meet these coordination needs, the participants felt that it was important to continue the work of the IOCCP (sponsored by IOC and SCOR) and to utilize the recently formed SOLAS/IMBER implementation group for carbon research. These groups should be closely linked and jointly provide the services listed above. The IOCCP would take the lead on tasks 1,2, and 6 in collaboration with the research programs, and the SOLAS/IMBER group would take the lead on tasks 3,4, and 5, with input from the IOCCP. Secretariat functions should be coordinated, and optimally co-located, to provide an integrated service to the community. An important service would be to implement a web-based portal to provide a central point of contact for information on ocean carbon research and observations.

### acronyms:

[CARBOOCEAN](#) (European Union integrated research activity on the marine carbon cycle); [CLIVAR](#) (Climate Variability and Predictability Study); [GCP](#) (Global Carbon Project); [GOOS](#) (Global Ocean Observing System); [GCOS](#) (Global Climate Observing System); [IGBP](#) (International Geosphere – Biosphere Programme); [IOC](#) (Intergovernmental Oceanographic Commission); [IOCCP](#) (International Ocean Carbon Coordination Project); [IMBER](#) (Integrated Marine Biogeochemistry and Ecosystem Research Project); [JCOMM](#) (The Joint World Meteorological Organization – Intergovernmental Oceanographic Institution Committee on Oceanography and Marine Meteorology); [NASA](#) (U.S. National Aeronautics and Space Administration); [NSF](#) (U.S. National Science Foundation); [SOLAS](#) (Surface Ocean – Lower Atmosphere Study); [SCOR](#) (Scientific Committee on Oceanic Research); [UNESCO](#) (United Nations Educational, Scientific, and Cultural Organization); [VOS](#) (Volunteer Observing Ships).