

## **WGOMD Report to 9<sup>th</sup> Session of Atlantic Implementation Panel 08Sept2008**

### **Coordinated Ocean-ice Reference Experiments (CORE)**

WGOMD has completed CORE I, a comparison of seven global ocean-ice models run for 500 years using the same atmospheric forcing. The experimental design and simulation results are documented in Griffies et al. (2008, Ocean Modelling). An electronic version is available on the WGOMD website (<http://www.clivar.org/organization/wgomd/wgomd.php>).

CORE-II focuses on interannually varying forcing based on reanalysis and observational products. The CORE-II effort will provide a common framework for running ocean-ice models for hindcast purposes. WGOMD is in the process of determining the details of the experimental protocol, and then documenting a suite of model simulations with this protocol. Notably, CORE-II efforts will feed into CLIVAR panel activities aiming to use models to identify mechanistic descriptions of observed variability and change. Details of the CORE experiments are available on the CORE website (<http://www.clivar.org/organization/wgomd/core/core.php>). WGOMD welcomes any comments and suggestions from the AIP members.

### **Repository for Evaluating Ocean Simulations (REOS)**

This is a CLIVAR web site that is coordinated by WGOMD. The motivation for this web page stems from the growing needs of the modelling community to provide benchmark, thorough evaluations of their simulations, and to make use of newer observational datasets having been generated the past decade.

Essentially, this is a website that will facilitate access to observational datasets, develop a discussion on ocean metrics and ocean model evaluation, and provide tools and references for the community. Ideally what will come out of this is a discussion within the ocean modeling community that will lead to a recommendation for a standardized baseline approach for evaluating ocean climate studies. An ocean modeler who wants to compare some results to observations should also be able to use this site to determine what data he/she should get hold of and from where.

Efforts at developing a prototype REOS web site are underway, which the AIP is invited to take a look at ([www.clivar.org/organization/wgomd/reos/reos.php](http://www.clivar.org/organization/wgomd/reos/reos.php)). Input is solicited in terms of suggestions and ideas on how to improve the site, as well as specific recommendations from the AIP for the evaluation of simulations of the Atlantic basin (see Metrics).

### **Recommendations for CMIP5**

A document is being prepared by WGOMD that will outline recommendations on the variables to be archived from the ocean models for CMIP5. This will address 1/ space and time sampling (e.g., remapping to sphere or not; remapping to depth/pressure or not), and 2/ a list of variables with rationale for adding more and modifying some. In particular, the CMIP4 repository has almost no variables saved that relate to ocean SGS parameterizations. These recommendations will lead to a far richer CMIP5 repository for use by ocean scientists who study fundamental processes.

**WGOMD Workshop on Ocean Mesoscale Eddies** - Met Office Hadley Centre, UK, 27-29 April 2009

The intense level of research activities related to ocean mesoscale eddies prompts the WGOMD to hold a scientific workshop with the following main goals:

- To educate the research community regarding the importance of mesoscale eddies in the World Ocean, and correspondingly for establishing features of the ocean climate system;
- To identify best practices for parameterizing ocean mesoscale eddies in coarse resolution climate models, and to discuss various research avenues for improved parameterizations;
- To evaluate the ability of state-of-the-science numerical models to accurately represent the ocean mesoscale in eddy simulations.

The three-day workshop will consist of six speakers per day. Each speaker will present views on the state-of-the science in ocean mesoscale eddies as seen through observations, models, and theory. Each day will also have time to view posters contributed by interested workshop participants.

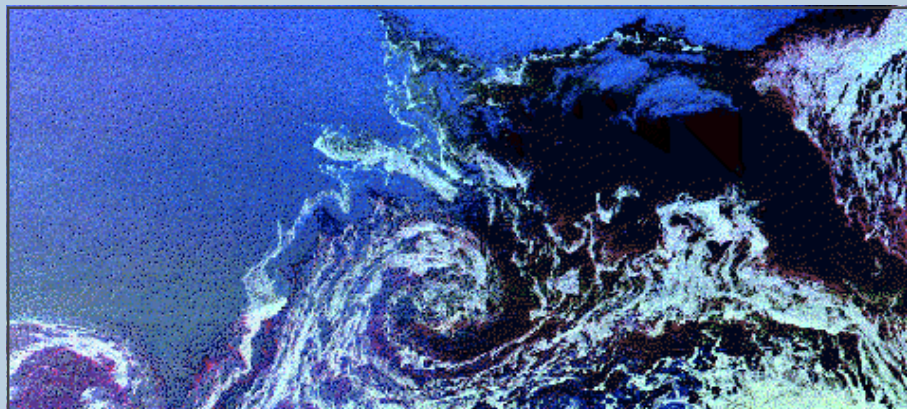
See the attached flyer for a complete list of speakers and visit the workshop webpage for more information and access to a detailed workshop proposal:

[http://www.metoffice.gov.uk/conference/mesoscale\\_workshop/](http://www.metoffice.gov.uk/conference/mesoscale_workshop/)

# CLIVAR WGOMD Workshop on Ocean Mesoscale Eddies:

## Representations, Parameterizations and Observations

UK Met Office Hadley Centre,  
Exeter, UK  
27-29 April 2009



This Workshop, organized by the CLIVAR Working Group on Ocean Model Development (WGOMD), has the following main goals:

- To educate the research community regarding the importance of mesoscale eddies in the World Ocean, and correspondingly for establishing features of the ocean climate system;
- To identify best practices for parameterizing ocean mesoscale eddies in coarse resolution climate models, and to discuss various research avenues for improved parameterizations;
- To evaluate the ability of state-of-the-science numerical models to accurately represent the ocean mesoscale in eddy simulations.

The three-day workshop will consist of six speakers per day. Each speaker will present views on the state-of-the science in ocean mesoscale eddies as seen through observations, models, and theory. Each day will also have time to view posters contributed by interested workshop participants.

### Confirmed speakers:

Mike Bell (Met Office)  
Frank Bryan (NCAR)  
Dudley Chelton (OSU)  
Raffaele Ferrari (MIT)  
Baylor Fox-Kemper (Colorado)  
Peter Gent (NCAR)  
Richard Greatbatch (Dalhousie University)  
Matthew Hecht (Los Alamos)  
David Marshall (Oxford)  
John Marshall (MIT)  
Trevor McDougall (CSIRO)  
Jim McWilliams (UCLA)  
Andreas Oschlies (IFM-GEOMAR)  
Steve Rintoul (CSIRO)  
Malcolm Roberts (Met Office Hadley Centre)  
Shafer Smith (NYU)  
Mike Spall (WHOI)  
Anne-Marie Treguier (IFREMER)  
Carl Wunsch (MIT)

For more information and to register see: [http://www.metoffice.gov.uk/conference/mesoscale\\_workshop/](http://www.metoffice.gov.uk/conference/mesoscale_workshop/)

### Organizing Committee

Helene Banks (co-Chair): Met Office Hadley Centre, UK  
Stephen Griffies (co-Chair): NOAA/GFDL, USA  
Claus Boening: IFM-GEOMAR, Germany  
Eric Chassignet: FSU, USA  
Gokhan Danabasoglu: NCAR, USA  
Helge Drange: University of Bergen, Norway  
Matthew England: University of New South Wales, Australia

Ruediger Gerdes: AWI, Germany  
Richard Greatbatch: Dalhousie University, Canada  
Gurvan Madec: LOCEAN, IPSL, France  
Anna Pirani: CLIVAR Project Office, UK  
Anne Marie Treguier: IFREMER, France  
Hiroyuki Tsujino: MRI, JMA, Japan