# CLIVAR SSG-17 ACTION ITEMS FOR WGOMD

- 1. Basin panels are encouraged to make use of available CORE-II runs, providing feedback to WGOMD (basin panel co-chairs).
- 2. SSG agrees to extend membership of WGOMD to cover biogeochemistry, the coastal (regional) modeling community, and land-ice connection in relation to sea level. Consider WGOMD membership overall (WGOMD co-chairs with ICPO).
- 3. Consider the relevance of links to the operational ocean modeling community taking advantage of existing member contacts in this area (WGOMD cochairs).
- 4. WGOMD is encouraged to continue to provide recommendations for evaluating ocean simulations, especially eddy resolving models (WGOMD).

### Members

	12	G. Danabasoglu (co-chair)	National Center for Atmospheric Research, USA
	11	H. Drange (co-chair)	University of Bergen, Norway
New	13	E. Curchitser	Rutgers University, USA
	10	S. Griffies	Geophysical Fluid Dynamics Lab., NOAA, USA
	12	S, Marsland	CSIRO, Australia
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Renewed 11 G Madec LODYC, Institute Pierre Simon Laplace, France

Renewed 11 R. Greatbatch Institut für Meereskunde, Kiel, Germany

Renewed 11 H Tsujino Meteorological Research Institute, Japan Meteorological Agency, Japan

#### Emeritus

C. Böning Institut für Meereskunde, Kiel, Germany

A. M. Treguier Laboratoire de Physique de Océans, IFREMER, France

R. Gerdes Alfred Wegener Institut für Polar- und Meeresforschung, Germany

E. Chassignet Florida State University, USA

The ICPO contact for the CLIVAR Working Group on Ocean Model Development is Anna Pirani

last updated Tue, Aug 24, 2010 by Anna Pirani

# **NEW MEMBERS**

Enrique Curchitser: Coastal - regional modeling,

Veronique C. Garcon: Biogeochemistry (CNRS, France)

# Helene Bank's Replacement:

- Adrian Hines (ocean, U.K. Met Office) ... or ...
- Jeff Ridley (land-ice, U.K. Met Office)

# OR

- Todd Ringler (ocean, LANL, USA) ... or ...
- Bill Lipscomb (land-ice, LANL, USA)

### OR

non-USA, non-European, a non-Australian member from the Southern Hemisphere

### **Dr Adrian Hines**

Adrian manages development of the ocean component of the climate model and the ocean biogeochemical modelling

#### Areas of expertise

Adrian's areas of expertise include:

- · Ocean modelling
- · Ocean data assimilation
- · Ocean model assessment

#### **Current activities**

Adrian manages the team that are responsible for development of the ocean model

component of the Hadley Centre <u>coupled climate models</u>, and the ocean biogeochemical model component of the Hadley Centre <u>earth system model</u> (HadGEM2-ES).

Adrian also contributes to the development of the ocean model. The ocean model development is focused on global configuration of the NEMO & which is developed in collaboration with the NEMO Consortium. The NEMO development work undertaken within the UK is coordinated between the Met Office and the through the JCRP & Adrian is responsible for overseeing the Met Office contribution to this work, and for coordinating this with other work within JCRP. The overall aim of the work is to deliver improved global ocean models for use in coupled climate modelling. The ocean biogeochemical modelling work is based around use of the Hadley Centre Ocean Carbon Cycle (HadOCC) model. The focus of the work is the understanding of feedbacks between the ocean carbon cycle and the climate system based on simulations of the HadGEM2-ES model.

Adrian is currently a member of the **NCOF** Are Executive Committee where he provides a link to the ocean climate modelling work.

#### Career background

Adrian graduated from Exeter University in 1994 with a BSc in Mathematics, before completing a PhD at Keele University and Southampton Oceanography Centre. He submitted his thesis titled "Models of large-scale wind and buoyancy driven ocean circulation" in 1997 immediately before joining the Met Office. Adrian spent twelve years working in the Met Office Ocean Forecasting team, initially working on data assimilation in the FOAM Ocean Forecasting System. He subsequently managed the FOAM team, the Wave Forecasting Research and Development team, and the Ocean Forecasting Research and Development team, gaining a broad knowledge of ocean forecasting. During this time Adrian was a representative on numerous national and international committees including:

# **Dr Jeff Ridley**

Jeff is a climate scientist working on the understanding and modelling of ice sheets and mountain glaciers, and their likely contribution to future global sea-level rise.

### Areas of expertise

- Polar ice sheets
- Mountain glaciers
- Sea-ice
- Sea-level rise
- Climate models

#### Current activities

Jeff's work on ice sheets involves embedding 3D models of ice sheets in the climate version of the Unified Model. Model simulations are used to evaluate the response of ice sheets to long-term climate change. This work is in collaboration with glaciologists at Bristol University.

The next generation of ice sheet models includes a representation of the interaction of oceans with ice streams and ice shelves. The development and assessment of these model components is being undertaken as part of a European Programme, <a href="Ice2sea">Ice2sea</a>. These studies will lead to an improved understanding of the likely contribution to global sea-level rise from Greenland and Antarctica.

Mountain glaciers are maintained by a balance of snowfall at high elevation; downhill motion of the ice, and melting at low elevation. A new understanding of the role of glaciers in the climate system, the contribution of their melt to river flow and ultimately to sea-level rise, is provided by a unique component of the Met Office Unified Model. Rather than simulating 100,000 individual glaciers, a novel approach has been developed which simultaneously represents all glaciers in a single grid cell of the climate model. This methodology provides dynamic glaciers which can form and melt as their local climate changes.

### Career background

Jeff joined the Met Office Hadley Centre in 2001 and has been involved in climate model development, and analysis of the cryosphere, since he joined. Before that he spent four years in the <u>Satellite Applications</u> group.