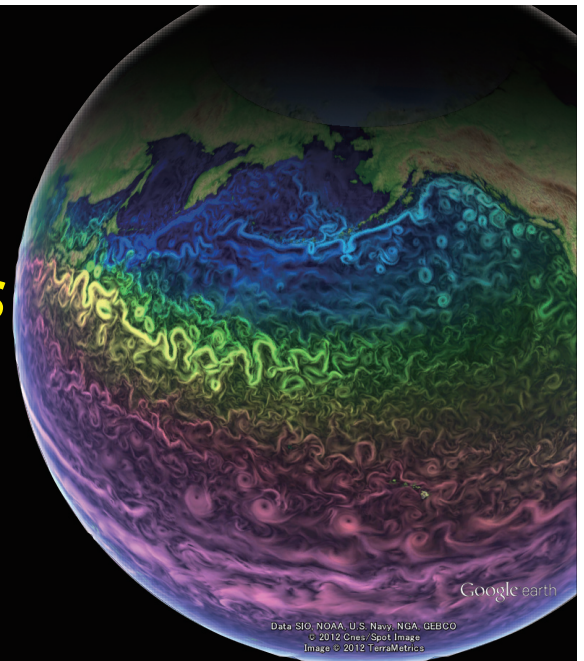


***The 5th OFES  
International Workshop:  
10-year progress of GCMs for the ES  
and future strategic perspective***

*January 24-25, 2013 Global Oceanographic Data Center (GODAC)/  
JAMSTEC in Nago, Okinawa, Japan*



**Conveners:**

Hideharu Sasaki (ESC/JAMSTEC)

Kevin Hamilton (IPRC, Univ. of Hawaii)

Yukio Masumoto (RIGC/JAMSTEC)

**Organizers:**

Earth Simulator Center (ESC)/JAMSTEC

Research Institute for Global Change (RIGC)/JAMSTEC

Data Research Center for Marine-Earth Science (DrC)/JAMSTEC

International Pacific Research Center (IPRC)/University of Hawaii

## Workshop Schedule

**Thursday, January 24, 2013**

10:00-10:15 Registration and Coffee

10:15-10:20 Opening Remarks and Practical Information

### Session 1: Indian Ocean and Indonesian Throughflow

Chair: Toru Miyama

10:20-10:40 Yukio Masumoto (RIGC, JAMSTEC)

Cooling processes in the Southeastern Tropical Indian Ocean during the initiation period of the 2006 IOD

10:40-11:00 Kelvin Richards (IPRC, Univ. of Hawaii)

Upper ocean variability in the Indian Ocean: results from CINDY and high resolution modelling

11:00-11:20 P.N. Vinayachandran (Indian Institute of Science)

Indian Ocean modeling using Regional Ocean Modeling System

11:20-11:40 Motoki Nagura (APL, JAMSTEC)

Longitudinal biases in the Seychelles dome simulated by 35 ocean-atmosphere coupled general circulation Models

11:40-12:00 Hailong Liu (Institute of Atmospheric Physics, CAS)

Evaluation of Indonesian Throughflow in an eddy resolving OGCM

12:00-12:10 Photo Session

12:10-13:30 Lunch

## Session 2: Tropics

Chair: Masami Nonaka

13:30-13:50 Jianping Gan (Hong Kong University of Science & Technology)

Multi-scale coupled circulation and biogeochemistry modeling system in the China Seas

13:50-14:10 Tandong Qu (IPRC, Univ. of Hawaii)

Variability of the South China Sea throughflow as seen from OFES

14:10-14:30 Takuya Hasegawa (RIGC, JAMSTEC)

Oceanic and atmospheric variation related to New Guinea coastal upwelling in the Bismarck Sea before El Nino onset using high-resolution climate model

14:30-14:50 Toru Miyama (RIGC, JAMSTEC)

Regional climate modeling study of wind variations over western Pacific warm pool before El Nino onsets

14:50-15:10 Ingo Richter (RIGC, JAMSTEC)

Influence of the subtropics on equatorial Atlantic dynamics

15:10-15:40 Coffee Break

## Session 3: Atmospheric and Ocean Dynamics

Chair: Kevin Hamilton

15:40-16:00 Nikolai Maximenko (IPRC, Univ. of Hawaii)

Migrating quasi-zonal jet-like structures in the ocean and in the OFES model solution

16:00-16:20 Shin Kida (ESC, JAMSTEC)

The dynamics of the water mass exchange between the North Pacific and the Okhotsk Sea

16:20-16:40 H. Annamalai (IPRC, Univ. of Hawaii)

Asian monsoon simulation in high-resolution climate models

16:40-17:00 Akira Yamazaki (ESC, JAMSTEC)

On the maintenance of Euro-Russian blocking in summer of 2010

19:00-21:00 Reception at the Kise Beach Palace

Friday, January 25, 2013

## Session 4: Air-Sea Interaction

Chair: Kelvin Richards

9:00-9:20 Niklas Schneider (IPRC, Univ. of Hawaii)

Air-sea interaction at a weak SST front

9:20-9:40 Masami Nonaka (RIGC, JAMSTEC)

Potential predictability of interannual variability in the Kuroshio Extension jet speed in the North Pacific OFES

9:40-10:00 Akira Kuwano-Yoshida (ESC, JAMSTEC)

Atmospheric response to the SST front in the northwestern Pacific region in an AGCM

10:00-10:20 Bunmei Taguchi (ESC, JAMSTEC)

Multi-decadal modulation of North Pacific Decadal Variability

10:20-10:50 Coffee Break

## Session 5 Modeling and Assimilation I

Chair: Shin Kida

10:50-11:10 Yongqiang Yu (Institute of Atmospheric Physics, CAS)

A quasi-global  $1/10^\circ$  eddy-resolving ocean general circulation model and its preliminary results

11:10-11:30 Hideharu Sasaki (ESC, JAMSTEC)

Submesoscales in a  $1/30^\circ$  North Pacific simulation

11:30-11:50 Yoshikazu Sasai (RIGC, JAMSTEC)

Impacts of sub-mesoscale physics on the phytoplankton production in the Western North Pacific using OFES

11:50-12:10 Daisuke Matsuoka (ESC, JAMSTEC)

Feature extraction and visualization for Ocean General Circulation Model via Multivariate Analysis

12:10-13:30 Lunch

## Session 6: Modeling and Assimilation II

Chair: Yukio Masumoto

13:30-13:50 Hidenori Aiki (RIGC, JAMSTEC)

Investigation of momentum fluxes from wind to surface waves and ocean circulation using a coupled atmosphere ocean surface-wave model under tropical cyclone conditions

13:50-14:10 Nobumasa Komori (ESC, JAMSTEC)

Development of an ensemble-based data assimilation system with a coupled atmosphere–ocean GCM

14:10-14:30 Takeshi Enomoto (DPRI, Kyoto Univ.)

Three keys towards non-hydrostatic spectral atmospheric general circulation models

14:30-15:00 Coffee Break

## Discussion: Scientific Targets and Future Prospects of Simulation Research

Chair: Hideharu Sasaki

15:00-17:00

17:00 Closing Remarks