## HYCOM NOPP GODAE meeting (Nov. 7-9, 2006) COAPS, Florida State University, FL

THIS IS AN INFORMATION EXCHANGE MEETING. DO NOT HESITATE TO PRESENT THE NUTS AND BOLTS ASPECTS OF YOUR WORK.

Suggested time for the presentations is +/- 15 minutes. In addition to a discussion of your results, it would be most useful to include in your presentation a status report as well as your vision for the following year.

#### **AGENDA**

=== TUESDAY ===

8:00am Pick-up name tags and registration

8:45am Welcome

### Overview

9:00am HYCOM NOPP GODAE present status E. Chassignet

9:20am HYCOM and GODAE in relation to Navy ocean prediction H. Hurlburt

9:40am Role of HYCOM in NCEP's modeling plans D.B. Rao

#### NAVY and NOAA Global and Basin-Scale HYCOM Systems

10:00am NCEP operational model: improvements and plans C. Lozano

10:20am Evaluation of the real time ocean forecast system Atlantic for NOAA's ocean prediction center

R. Daniels

10:40am BREAK + POSTERS

11:20am An update on the 1/12 degree global HYCOM effort J. Metzger

11:40am North Atlantic and global HYCOM evaluation J. Shriver

== LUNCH ==

## Data Assimilation

1:00pm The Navy Coupled Ocean Data Assimilation (NCODA) in HYCOM	O.M. Smedstad
1:20pm Verification of NCODA assimilation in the HYCOM 1/25 degree Gulf of Mexico domain	J. Cummings
1:40pm Evaluation of the NCODA assimilation as initial/boundary conditions for Hurricane Ivan and West Florida Shelf simulations	G. Halliwell
2:00pm The multivariate properties of the Ensemble Optimal Interpolation in the Gulf of Mexico	e F. Counillon
2:20pm Gulf of Mexico data assimilation comparison exercise	E. Chassignet
2:40pm Data assimilation in HYCOM using the SEEK filter: recent advances	P. Brasseur
3:00pm BREAK + GROUP PHOTO	
3:40pm On a 3D variational assimilation scheme in hybrid coordinates	C. Lozano
4:00pm Constrained Data Assimilation	C. Thacker
4:20pm DATA ASSIMILATION PLENARY DISCUSSION	
4:40pm HYCOM data service	A. Srinivasan
5:00pm DATA SERVING PLENARY DISCUSSION	
6:00pm Reception at the University Center Club	
== WEDNESDAY === WEDNESDAY === WEDNESDAY ===	== WEDNESDAY ==
Basin-scale/Regional/Coastal Simulations	
9:00am High resolution nested modeling in the Gulf of Mexico	P. Hogan
9:20am Loop current eddy interactions using HYCOM	K.H. Hyun
9:40am Upper-ocean response to Hurricane Ivan in a 1/25° nested Gulf of Mexico HYCOM	P. Thoppil
10:00am A West Florida Shelf ROMS model nested into HYCOM	A. Barth

10:20am Inter-annual simulations with SoFLA-HYCOM and comparison to in-situ data  10:40am BREAK + POSTERS	G. Peng
11:20am On the transport of river induced low salinity waters on the SoFLA-HYCOM domain	R. Schiller
11:40am HYCOM/QUODDY nested baroclinic nowcast/forecast system for the South Atlantic Bight	T. Shay
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1:00pm Nesting regional and coastal models in global HYCOM	S. deRada
1:30pm A regional Southern California model nested within global HYCOM	P. May
1:50pm Biophysical modeling of the California Current System	M.J. Olascoaga
2:10pm On the monthly and interannual variability of the eastern Pacific warm pool	L. Zamudio
2:30pm A Cariaco basin ROMS model nested in HYCOM	A. Alvera-Azcarate
2:50pm Sensitivity to vertical resolution in hybrid ocean models	
2.00pm constantly to volucial recolument in myona cocan measic	C. Narayanan
3:10pm BREAK + POSTERS	C. Narayanan
	C. Narayanan  C. Hansen
3:10pm BREAK + POSTERS  3:40pm The influence of mesoscale activity on the primary production in	·
3:10pm BREAK + POSTERS  3:40pm The influence of mesoscale activity on the primary production in the Norwegian Sea  4:00pm Modeling the shelf recruitment of Calanus finmarchicus on the west	C. Hansen
3:10pm BREAK + POSTERS  3:40pm The influence of mesoscale activity on the primary production in the Norwegian Sea  4:00pm Modeling the shelf recruitment of Calanus finmarchicus on the west coast of Norway	C. Hansen  A. Samuelsen

== THURSDAY ===== THURSDAY ===== THURSDAY ===== THURSDAY === **Surface Boundary Conditions** 9:00am Impacts of ocean currents and waves on the wind stress drag coefficient: relevance to HYCOM B. Kara 9:20am Sensitivity of surface turbulent fluxes to errors in bulk formula inputs M. Bourassa 9:40am Hybrid wind stress anomalies and their impacts on the global **HYCOM** simulations B. Kara **HYCOM** development 10.00am New features of HYCOM A. Wallcraft 10:20am BREAK +POSTERS 11:00am The quest for the perfect vertical grid generator R. Bleck 11:20am Embedding a forward model of barotropic and baroclinic tides into **HYCOM** B. Arbic 11:40am A proposed new approach to HYCOM's thermobaricity problem R. Bleck

# Afternoon reserved for follow-up discussions

== LUNCH ==

### <u>POSTERS</u>

Dissipation of midocean mesoscale eddies: Inferences from satellite altimetry data, in-situ data, and idealized models	B. Arbic
Introduction of inequality constraints into a Reduced Order Kalman Filter for data assimilation into ocean circulation models	C. Lauvernet
Branches, bifurcations, and retroflections over the Tail of the Grand Banks	M. McCartney
Persistent Transport Barrier on the West Florida Shelf	M.J. Olascoaga
Modeling the waters around Greenland	T. Rasmussen

Abyssal pathways and processes in the Indian Ocean from a 1/12 Global HYCOM Simulations

A. Srinivasan