# NAS GRP Deep Gulf of Mexico Synthesis Workshop

## Scripps Institution of Oceanography, 14-15 September, 2016

## Martin-Johnson House (T-29)

# Wednesday, September 14

17:30 End of Day

8:30	Arrival/Coffee
8:45	Welcome (Steve Morey, Bruce Cornuelle)
8:50	Overview of Project and Timeline (Steve Morey – 15min)
9:05	Loop Current Instabilities and Deep Currents from Recent PIES and Mooring Observations (Kathy Donohue – 40min)
9:45	Lagrangian Deep Float Analysis in the Eastern Gulf Basin (Peter Hamilton – 40min)
10:25	Break (20 min)
10:45	Deep Circulation in the Western Gulf from Recent Lagrangian Observations (Amy Bower – 40min)
11:25	Observations of Deep Coherent Vortices Throughout the Gulf (Heather Furey – 25min)
11:50	Lunch Break (walk to nearby dining – 90 min)
13:20	Data Assimilative ROMS Simulations and CICESE Moorings (Joao Marcos Azevedo Correia de Souza – 40 min)
14:00	4DVar State Estimates for the Gulf of Mexico Focused on the Deep Experimental Region (Bruce Cornuelle, Ganesh Gopalakrishnan – 50 min)
14:50	Break (20min)
15:10	Analysis of MITgcm Simulations and Comparison to Drifter Observations (Cathrine Hancock – 40 min)
15:50	Sensitivity Experiments for Loop Current Frontal Eddies (Heriberto Vazquez Peralta, Bruce Cornuelle, Ganesh Gopalakrishnan – 40 min)
16:30	Characteristics of Deep Currents in the Gulf of Mexico from the 1/25° HYCOM Reanalysis and Other Models (Steve Morey – 40 min)
17:10	Wrap-up Discussion – Tasks for Next Day (20 minutes)

#### Thursday, September 15

- 8:30 Arrival/Coffee
- 8:45 Discussion Synthesis of Year 1 Results / Annual Report Writing / Possible Manuscript Draft (75 min)
- 10:00 Break (20 min)
- 10:20 Review of Project Goals and Objectives (Steve Morey 15min)
- 10:35 Progress toward a 1/20° 4d-Var MITgcm Simulation (Bruce Cornuelle, Ganesh Gopalakrishnan 15min)
- 10:50 Progress Toward a 1/100° HYCOM Gulf of Mexico Simulation Assimilating PIES and Other data (Steve Morey 15min)
- 11:05 Progress Toward a ROMS Reanalysis Assimilating Recent Observations (Joao Marcos Azevedo Correia de Souza 15min)
- 11:20 Discussion Modeling Timeline and Data Sharing (40min)
- 12:00 Lunch Break (walk to nearby dining 90min)
- 13:30 Discussion Model and Observational Data Analysis: Technical Issues (75min)
- 14:45 Review and Planning of Year 2 Timeline (15min)
- 15:00 Break (20min)
- 15:20 Coordination of Analysis Tasks (30min)
- 15:50 Small Team Collaboration Time
- 17:30 End of Meeting

#### Attendees

Amy Bower - WHOI

Bruce Cornuelle - SIO

Joao Marcos Azevedo Correia de Souza - CICESE

Kathy Donohue - URI

Heather Furey - WHOI

Ganesh Gopalakrishnan - SIO

Peter Hamilton - Leidos

Cathrine Hancock - FSU

Aljaz Maslo - CICESE

Steve Morey - FSU

Enric Pallas-Sanz - CICESE

Heriberto J. Vazquez Peralta - SIO