Ocean Carbon and Biogeochemistry Scoping Workshop on Terrestrial and Coastal Carbon Fluxes in the Gulf of Mexico

USGS Normile Conference Center, St Petersburg, FL May 6-8, 2008

AGENDA

Tuesday, May 6, 2008

- 7:30 Registration and Continental Breakfast at the USGS (Posters can be put up immediately)
- 8:30 Introduction, Welcome, and Logistics
 Welcome by USGS and USF College of Marine Science

Comments by Program managers NSF, NOAA, NASA, USGS, MMS

Goals of Meeting- Paula Coble and Lisa Robbins

9:30 Plenary Talks, Carbon Cycle Land-Ocean Coupling – Processes, Fluxes, and Fates Session

Moderator: Wei-Jun Cai

- 9:30 **Eric Sundquist**, USGS, From carbon footprint to carbon pathway: carbon-cycle science at a crossroads
- 10:10 Break
- 10:30 **Ken Davis,** Pennsylvania State University, Land-Atmosphere Dynamics and Measurement of CO₂
- 11:10 Tom Bianchi, Texas A&M University: Anthropogenic and Natural Effects on the Biogeochemistry of Organic Carbon Cycling in a River-Dominated Margin: The Mississippi River System
- 11:50 Questions for presenters
- 12:00 Lunch and posters
- 1:00 Moderator: **Ben de Jong**
- 1:00 Steve Lohrenz, Gulf of Mexico Carbon Cycling
- 1:40 **Rik Wanninkhof,** CO₂ flux Dynamics over the Gulf of Mexico

- 2:20 **Dick Feely** Pressing questions and research needs from morning session Open discussion:
 - 1) most pressing questions or hypotheses
 - 2) general ideas on how to test them

3:00 Break

3:15 Breakout Session 1: Assessing the state of knowledge on carbon transport and flux in each of the three segments of the land –ocean system. What do we know? What are perceived data gaps? See actual breakout questions in Workshop folder.

Breakout groups:

1. River/ Estuary Group - meet in Normile Room

Co-Chairs: John Paul and Miguel Goni

Reporter: Regina Easley

2. Terrestrial/ Watershed Group - Meet in Breakout Room 1

Co-Chairs: Simone Alin and Charles Perry

Reporter: Lori Adornato

3. Ocean/Terrestrial/Atmospheric Group- Meet in Breakout Room 2

Co-Chairs: Liz Gordon and Carlos Del Castillo

Reporter: Laura Lorenzoni

4:40 Report from Breakout 1 back to Normile Conference Room

6:30- ~10:00 Dinner reception and posters on StarLite Cruise: Loading at 6:30pm, leaving at 7:00pm from USF docks- map will be provided. Cash bar. Bring sweater.

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Wednesday, May 7, 2008

- 7:30a Continental Breakfast
- 8:30 Update: Paula Coble and Lisa Robbins Normile Conference Room
- 8:45 Plenary Talks

Moderator: Lisa Robbins

- 8:45 Peter Raymond, Yale, Watershed Carbon cycle and export
- **9:15 Hobie Perry**, USDA Forest Service, National inventories of terrestrial ecosystem carbon stocks-documenting impacts of resource management on watershed carbon dynamics
- **9:45 Ray Najjar,** PennState, Eastern U.S. Continental Shelf Carbon Budget: Modeling Data Assimilation, and Analysis
- 10:15 Break

Moderator: Paula Coble

- **10:30 Beth Boyer**, UC Berkeley, Modeling watershed nutrient fluxes
- **11:00 Mead Allison**, UT Austin, Modeling Sediment Transport and Deposition on GOM Shelf
- **11:30 Ruoying He**, NCSU, Physical Oceanography and Circulation of the Gulf of Mexico
- 12:00 Lunch and posters
- 1:15 **Ben de Jong and Arturo Muhlia Melo**, Update on Mexican Carbon Programs and projects
- 1:30 Breakout Session 2: Pulling together a design for a future research project, taking in account the scales of variability, infrastructure required and modeling framework for integration across the system. See actual questions in Workshop folder.

Breakout groups:

1. Modeling and Prediction Group - Meet in Normile Room

Co-Chairs: Barnali Dixon and Chris Anderson

Reporter: David Butman

2. Infrastructure Group- Meet in Breakout Room 1

Co-Chairs: Kathy Tedesco and Bob Chen

Reporter: Robyn Conmy

3. Scales Group - Meet in Breakout Room 2 Co-Chairs: Ron Benner and Nazan Atilla

Reporter: David John

4:00 Summary Report back from Breakout 2 to plenary

6:00 Dinner on your own

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Thursday, May 8, 2008

- 7:30 Breakfast
- 8:30 Wei-Jun Summary of Breakouts 1 and 2 and Discussion of new directions
- 9:00 Brent McKee & Miguel Goni
- 1. Discussion of priority environments to focus research
 - * Coastal environments around the Gulf ie., Cuba, Straits of Florida, West FL shelf, north east shelf, Mississippi/Atchafalaya River region, Louisiana/Texas shelf, East Mexico shelf, Bay of Campeche, Campeche Bank and the Yucatan channel. Which environments will be most influenced by climate change (CO₂ in systems)?
 - *Where is there synergy with past or planned research projects?
- 2. Implementation and proposal planning
- 12:00 Adjourn

1:00- 5pm Report write up session: including organizers, session chairs, reporters, and involved students