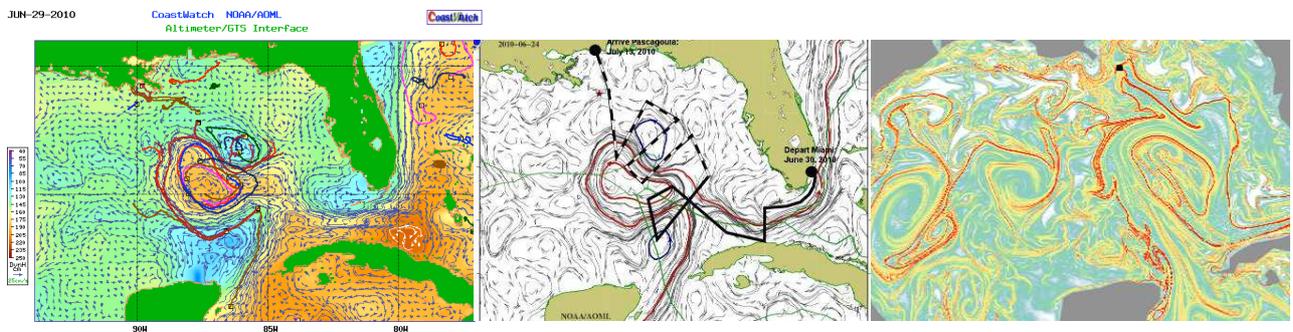


NOAA/AOML-SEFSC Workshop Gulf of Mexico Monitoring in Support of Oil Spill Efforts

Miami, Florida
July 1-2, 2010



Meeting Location: Rusty Pelican Restaurant, 2nd floor Conference Room, 3201 Rickenbacker Causeway, Miami, FL 33149. Tel: (305) 361-3818.

NOAA/AOML-SEFSC Workshop Gulf of Mexico Monitoring in Support of Oil Spill Efforts

Organizers: Gustavo Jorge Goni (NOAA/AOML, Gustavo.Goni@noaa.gov, 305-361-4339

and John Lamkin (NOAA/SEFSC, John.Lamkin@noaa.gov, 305-361-4226)

Dates: July 1 (**Registration: 8:15 am;** 9:00 am – 5:00 pm) and July 2 (9:00 am - 5:00 pm)

Location: Rusty Pelican Restaurant, 3201 Rickenbacker Causeway, Miami, Florida (305-361-3818; See maps below).

Goal: This is the first of a series of monthly thematic workshops that will be organized by NOAA to gather members of the scientific and operational communities, government and university laboratories and from private industry, all of whom are currently gathering observations, creating products, and/or performing analyses, in support of NOAA oil spill activities. This workshop is being held in order to exchange knowledge and strategies, and to improve monitoring of ocean conditions in the Gulf of Mexico and Straits of Florida in support of the Deepwater Horizon oil spill monitoring and mitigation efforts. These workshops will build on the Science Summit that was held in Baton Rouge, are a continuation of the dialogue, and will not necessarily present a final statement on a monitoring plan.

Objectives of this workshop

- a. Review the needs of the operational community and decision makers
- b. Communicate current efforts to monitor the oil spill
- c. Identify the short term and long term (operational and scientific) monitoring goals
- d. Define how to best accomplish these monitoring goals

For most discussion topics, we propose the following format be followed in the presentations:

- a. Work currently being done
- b. Identification of gaps and evaluate if these gaps are operational and/or logistical in nature or if they are part of a larger scientific question
- c. Short, mid- and long-term needs to address these gaps

July 1, registration and uploading of presentation (8:00am -9:00am)

July 1, morning session (9:00 am – 1:00 pm)

Observing the oil spill

Dr. Steve Murawski will be giving a presentation on NOAA efforts during the Thursday session.

- 1) Operational assets and needs – W. Conner, B. Benggio, S. Lehman
- 2) Organization of NOAA response and links to overall efforts – A. Leonardi/R. Pavia/W. Conner
- 3) Review of the activities of the Joint Analysis Group (JAG) – R. Pavia
- 4) Report on previous meetings – P. Ortner

- 5) Detection of oil in the water column at the well-head and in the far-field
 - a. Types of observations and methods underway – R. Pavia
 - b. Near and far field in-situ observations of oil and other chemical parameters– V. Asper, T. Weber, P. Coble, M. Wood, P. Santana.
 - c. Satellite observations of oil – J. Belge/D. Streett, J. Trinanes, M. Roffer, B. Pichel, O.Garcia
 - d. Modeling efforts – J. Galt, R. Hallberg, G. Halliwell, H. Kang, J. Olascoaga, M. Le Henaff.

End of morning session

July 1, afternoon session (2:00 pm- 4:30 pm)

Monitoring efforts of physical and biological parameters

- 6) Monitoring efforts of ocean currents and other physical parameters– G. Watabyashi, G. Goni, F. Bub, B. Jaimes, P. Brickley, F. Muller-Karger, R. Smith.
- 7) Monitoring efforts of biological parameters – J. Lamkin, B. Block
- 8) Summary and action items

End of afternoon session

Informal discussions and social hour (4:30 pm – 6:30 pm) at the Rusty Pelican Marina Room

July 2, morning session (9:00 am –1:00 pm)

Impacts of oil spill

- 9) Forecasting and impact of the oil spill in
 - a. Gulf of Mexico forecast – R. Patchen
 - b. Coastal areas and downstream (Florida Bay and west Florida coast, Northern Gulf Coast, Western Gulf Coast, Florida Keys, Bays and Straits: Monitoring of physical, biological and chemical parameters) –L. Johns, C. Paris, R. Lumpkin
- 10) Effects of hurricanes on the oil spill
 - a. Oceans and hurricanes – F. Marks, G. Goni
 - b. Hurricane effects on ocean dynamics – J. Galt, G. Halliwell,
 - c. Hurricane effects on coastal areas – M. Powell, C. Paris
 - d. Hurricane effects on ecosystems health – L. Johns

Data

- 11) Data sharing and distribution
 - a. Data formats and standards – J. Trinanes
 - b. What data are being shared and what data needs to be shared - Discussion
 - c. GTS data, and web and ftp sites - G. Goni

July 2, afternoon session (2:00 pm – 5:00 pm)

Plenary discussions and splinter groups

12) Discussions

- a) Quantitative survey of tar balls and subsurface oil distribution.
- b) Fluorometer data and metadata quality, interpretation, calibration, and distribution.
- c) Numerical modeling and analysis for particle movement prediction.
- d) Satellite and *in situ* observations for Gulf of Mexico dynamics analysis.
- e) Development and improvement of oil monitoring techniques using satellite observations.
- f) Improvement of predictions and understanding of storm surge modeling and near shore processes including hurricanes.
- g) Ecological research on the impact of the oil to benthic and planktonic communities.
- h) Interdisciplinary observational plan in affected and endangered marshes and sand beaches.
- i) Centralization and distribution of observational operations.
- j) Real-time data distribution of physical parameters.
- k) Encourage scientists from universities to release their data.

13) Splinter groups

- a) Short-term needs
- b) Mid-term needs
- c) Long-term needs
- d) Gulf of Mexico
- e) Biology and Ecosystems
- f) *In situ* oil detection

14) Conclusions

- a. *In situ* observational efforts
- b. Satellite observational efforts
- c. Numerical ocean modeling efforts
- d. Ecological modeling efforts
- e. What does the operational community need from the observational and modeling communities
- f. Heading towards a sustained monitoring system in the Gulf of Mexico:
 - i. What needs to be done in the short term
 - ii. What needs to be done in the upcoming years
- g. Lessons learned
- h. Recommendations

15) Summary and action items

16) Next workshop

Informal discussions and social hour (5:00 pm – 7:00 pm) at the Rusty Pelican Marina Room

List of Participants

1. Asper, Vernon (U. Southern Mississippi)
2. Atlas, Robert (NOAA/OAR/AOML)
3. Baertlein, Heather A. (NOAA/NMFS/SEFSC)
4. Baringer, Molly (NOAA/OAR/AOML)
5. Belge, Jennifer (NOAA/NESDIS/OSDPD)
6. Benggio, Bradford (NOAA/NOS/ORR)
7. Beron-Vera, Francisco Javier (U. Miami/RSMAS)
8. Block, Barbara (Stanford University)
9. Bosch, Julie (NOAA/NESDIS/NODC)
10. Bringas, Francis (U. of Miami/CIMAS)
11. Brickley, Peter (Horizon Marine)
12. Bub, Frank (NAVOCEANO)
13. Cadwallader, Matt (Horizon Marine)
14. Coble, Paula (U. South Florida)
15. Cobb, Hugh (NOAA/NWS/TPC)
16. Coleman, Felicia (FSU)
17. Conner, William (NOAA/NOS/ORR)
18. Crout, Richard (NOAA/NWS/NDBC)
19. Cummings, Nancie (NOAA/NMFS/SEFSC)
20. Dias, Laura (NOAA/NMFS/SEFSC)
21. Diercks, Arne (U. of Mississippi, NIUST)
22. Easson, Greg (U. of Mississippi)
23. Fletcher, Pamela (NOAA/OAR/AOML, Sea Grant)
24. Galt, Jerry (NOAA/NOS/ORR)
25. Garcia, Oscar (FSU)
26. Garzoli, Silvia (NOAA/OAR/AOML)
27. Goni, Gustavo (NOAA/OAR/AOML)
28. Halliwell, George (NOAA/OAR/AOML)
29. Hallberg, Robert (NOAA/OAR/GFDL)
30. Highsmith, Raymond (U. of Mississippi and NIUST)
31. Howard, Matthew (TAMU and GCOOS)
32. Howden, Stephen (U. of Southern Mississippi and GCOOS)
33. Jaimes, Benjamin (U. of Miami/RSMAS)
34. Johns, Libby (NOAA/OAR/AOML)
35. Kang, HeeSook (U. of Miami/RSMAS)
36. Kelble, Chris (NOAA/OAR/AOML)
37. Krinsky, Lisa (U. Florida, Sea Grant)
38. Lamkin, John (NOAA/NMFS/SEFSC)
39. Landsea, Chris (NOAA/NWS/TPC)
40. Lartigue, Julien (NOAA/NGI)
41. Le Hanaff, Matthieu (U. Miami/RSMAS)
42. Lehmann, Steve (NOAA/NOS/ORR)
43. Leonardi, Alan (NOAA/OAR)
44. Lindo, David (NOAA/AOML and UBI)
45. Lohrenz, Steven (U. Southern Mississippi)
46. Lumpkin, Rick (NOAA/OAR/AOML)
47. Macelloni, Leonardo (U. Mississippi, NIUST)
48. Marks, Frank (NOAA/OAR/AOML)
49. Muhling, Barbara (NOAA/NMFS/SEFSC)
50. Muller-Karker, Frank (U. South Florida)
51. Murawski, Steve (NOAA/NMFS)
52. Olascoaga, Josefina (U. of Miami/RSMAS)
53. Ortner, Peter (U. of Miami/CIMAS)
54. Ozgokmen, Tamay (U. of Miami/RSMAS)
55. Paris, Claire (U. of Miami/RSMAS)
56. Patchen, Rich (NOAA/NOS/OCS)

57. Pavia, Robert (NOAA/NOS/ORR)
58. Peter Brickley (Horizon Marine)
59. Pichel, William (NOAA/NESDIS/STAR)
60. Powell, Mark (NOAA/OAR/AOML)
61. Ponwith, Bonnie (NOAA/NMFS/SEFSC)
62. Prince, Eric (NOAA/NMFS/SEFSC)
63. Proni, John (FIU)
64. Quinlan, John (NOAA/NMFS/SEFSC)
65. Rule, Erica (NOAA/OAR/AOML)
66. Rochleder, Friedrich (Irobot)
67. Roffer, Mitchell (ROFFS)
68. Santana, Paco (Irobot)
69. Smith, Rob (Fugro Global Environmental and Ocean Sciences, and GCOOS)
70. Soloviev, Alexander (NSU)
71. Streett, Davida (NOAA/NESDIS/OSDPD)
72. Trinanes, Joaquin (NOAA/Coastwatch, NOAA/AOML, USC)
73. Uhlhorn, Eric (NOAA/OAR/AOML)
74. Walsh, Ian (Wetlabs Inc.)
75. Wanninkhoff, Rik (NOAA/OAR/AOML)
76. Watabayashi, Glen (NOAA/NOS/ORR)
77. Weber, Tom (NOAA and UNH-CCOM/JHC)
78. Wei, Eugene (NOAA/NOS/ORR)
79. Whitcraft, Samantha (NOAA/NMFS/SEFSC)
80. Willis, Zdenka (NOAA/NOS/IOOS)
81. Wood, Michelle (NOAA/OAR/AOML)

AOML = NOAA Atlantic Oceanographic and Meteorological Laboratory.

CIMAS = University of Miami, Cooperative Institute for Marine and Atmospheric Studies.

FIU = Florida International University.

FSU = Florida State University.

GCOOS = Gulf of Mexico Coastal Ocean Observing System.

GFDL = NOAA Geophysical Fluid Dynamics Laboratory.

IOOS = NOAA Integrated Ocean Observing System.

NCDDC = NOAA National Coastal Data Development Center.

NDBC = NOAA National Data Buoy Center.

NGI = Northern Gulf Institute.

NESDIS = NOAA National Environmental Satellite Data Information Service

NIUST = National Institute of Undersea Technology.

NMFS = NOAA National Marine Fisheries Service.

NOAA = National Oceanic and Atmospheric Administration.

NODC = NOAA Oceanographic Data Center.

NOS = NOAA National Ocean Service.

NSU = Nova Southeastern University.

NWS = NOAA National Weather Service.

OAR = NOAA Office of Ocean and Atmospheric Research.

OCS = NOAA Office of Coastal Survey.

ORR = NOAA Office of Response and Restoration.

OSDPD = Office of Satellite Data Processing and Distribution.

RSMAS = University of Miami, Rosenstiel School of Marine and Atmospheric Science.

SEFSC = NOAA Southeast Fisheries Science Center.

STAR = NOAA Center for Satellite Applications and Research.

TAMU = Texas A&M University.

TPC = NOAA Tropical Prediction Center.

UBI = University Balearic Islands, Spain.

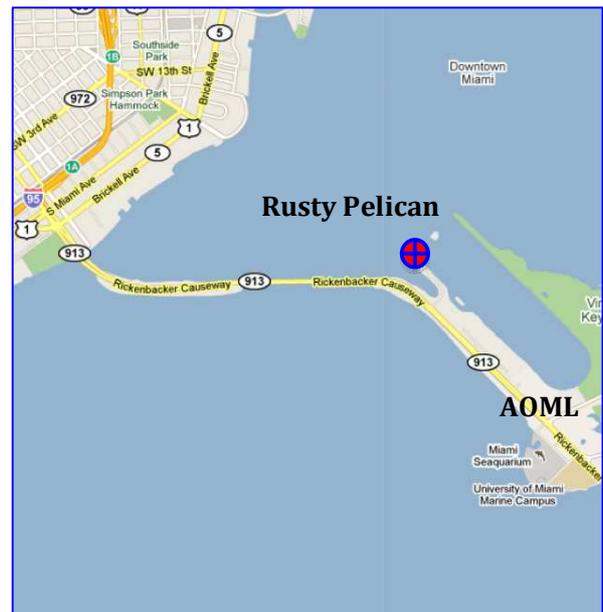
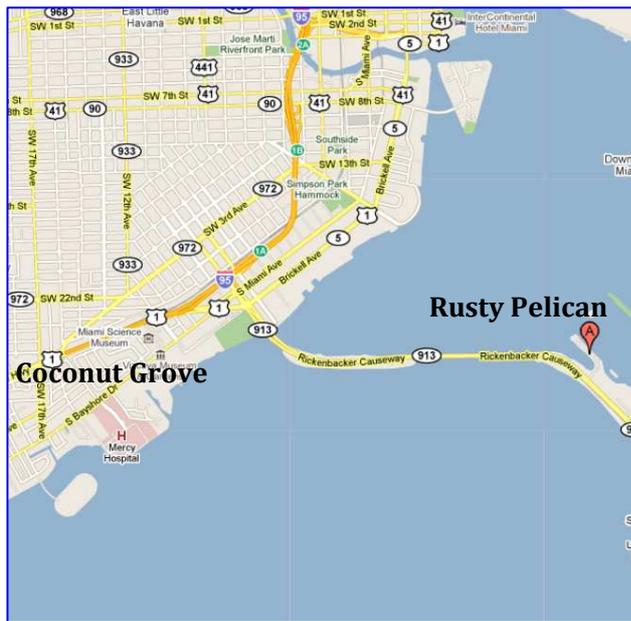
UNH-CCOM/JHC = University of New Hampshire, Center for Coastal and Ocean Mapping, Joint Hydrographic Center.

USC = University Santiago de Compostela, Spain.

New Meeting location

Because of space limitations at AOML and SEFSC, we are now holding this workshop at the conference room, Rusty Pelican Restaurant, 3201 Rickenbacker Causeway, Miami, FL 33149

If you are coming from Miami/C. Grove, take the Rickenbacker Causeway (Toll road). After you cross the tall bridge onto Virginia Key, take the first left and pass the Tiki Bar restaurant on the left and the marina on right. Keep driving, the road will curve to the left, keep driving and continue to the end of the road. You will then find the entrance to the parking lot of Rusty Pelican. Please park in any non-reserved space. We will hold the workshop in the first floor of this restaurant.



Logistics

For those from out of town, AOML visitors usually stay at the following hotels: Courtyard by Marriott Hotel, Mutiny, and Sonesta Bayfront, all in Coconut Grove. Rates are around \$110-\$120 per night. Please note that this is not a recommendation or endorsement.

Given the very good response to attend this workshop we will have to hold the workshop at the Rusty Pelican Restaurant, 3201 Rickenbacker Causeway, (305) 361-3818.

There is no funding available to support travel to this meeting.

In order to cover the costs of nametags, lunches, refreshments and coffee during the breaks, etc., a registration fee of \$75 (**to be paid in cash**) will be charged. We will provide a receipt.

We regret to inform that no simultaneous web broadcast will be available.