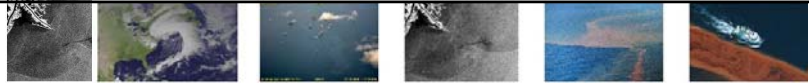


OIL OBSERVING TOOLS WORKSHOP

OCTOBER 20 – 22, 2015



Welcome to the Oil Observing Tools Workshop

October 20 – 22, 2015

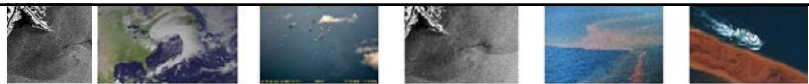
NOAA's GOM Disaster Response Center



1

OIL OBSERVING TOOLS WORKSHOP

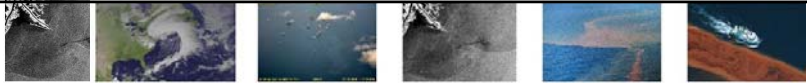
OCTOBER 20 – 22, 2015



Charlie Henry, Director NOAA GOM Disaster Response Center



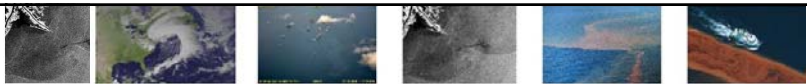
2



Nancy Kinner, UNH Director Coastal Response Research Center (CRRC)



3

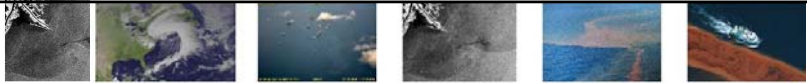


Logistics

- Access
- Fire exits
- Restrooms
- Safety
- Recycling
- Smoking area

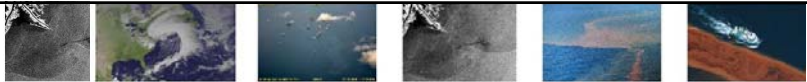


4



Logistics

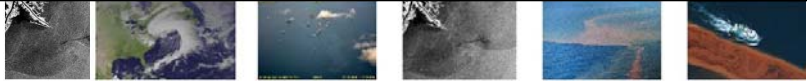
- Cell phones/laptops
- Breaks (coffee, tea, snacks)
- Meals (lunch provided, dinners on your own)
- Logistical Questions – see Kathy Mandsager or me



Coastal Response Research Center (CRRC)

- Partnership between NOAA's Office of Response and Restoration and the University of New Hampshire
 - Emergency Response Division (ERD)
 - Assessment and Restoration Division (ARD)
- Since 2004
 - UNH co-director – Nancy Kinner
 - NOAA co-director – Mark Miller



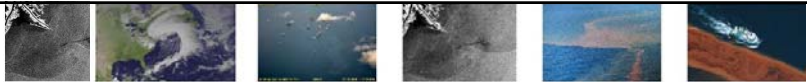


Overall CRRC Mission

- **Conduct and oversee basic and applied research and outreach on spill & environmental hazard response and restoration**
- **Transform research results into practice**
- **Serve as hub for spill /environmental hazards R&D**
- **Facilitate workshops bringing together ALL STAKEHOLDERS to discuss spill/hazards issues and concerns**



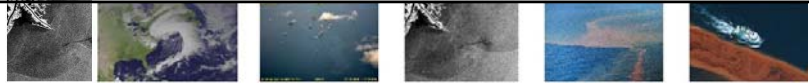
7



George Graettinger NOAA ORR Assessment Restoration Division

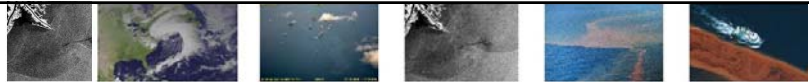


8



Meeting Overview

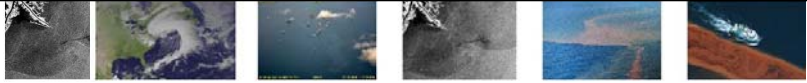
- DRC proposed Oil Observing Training to support ERD's Oil Observing program (deepening the bench)
- Proposal was expanded to include a Workshop focusing on OR&R needs including the use of remote sensing and lessons learned during Deepwater Horizon
- Workshop has evolved to assess the Office-wide needs for both Response and Assessment missions



Meeting Goals & Objectives

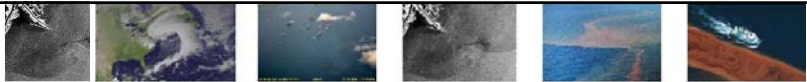
- Identify any *new developments in oil observing technologies* useful for real-time (or near real-time) characterization of surface oil during response and assessment
- Identify *merits and limitations of current technologies and their usefulness* to emergency response mapping of oil and predicting oil surface transport and trajectory forecasts





Meeting Goals & Objectives

- Focus on ***Applying Tools*** to Response and Assessment (Practical Applications, not Research)
- Identify specific needs and current limitations to supporting these missions (***needs assessment***)
- Each presentation will tee up topic to start the conversation on needs
- We will not cover all options, and we will not see all the potential tools that should be considered
- Please identify sensors and data that make sense for the break-out group discussions



Meeting Goals & Objectives

- Current technologies to be considered
 - Traditional human aerial observer
 - Aircraft with specialized sensor packages
 - Satellite earth observing systems
 - UAS/unmanned aircraft surveillance systems
- Assess and document utility of both visual observation and sensor technologies to enable appropriate tool selection for decision support during actual events
- Produce practical guide or Job-Aid for remote sensing oil observation





Meeting Strategy

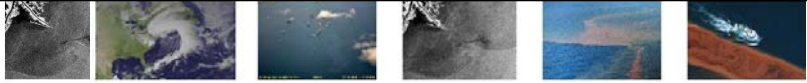
- Identify functional needs and potential solutions (understanding benefits and limitations)
- Consider bringing pieces *together in new ways* (Multiple sensors, alternative sensors)
- Collect, Process, Deliver, if we cannot bring the information to the table in a timely fashion we may lose the value of the effort




Meeting Questions

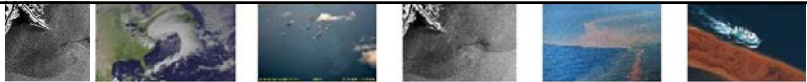
- What tools are currently available or evolving?
- What is the potential to meet needs?
- What is needed/where is the gap?
- How can we ensure that data can be recorded and delivered for subsequent use?





Participant Introductions

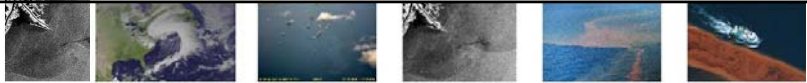
- **Name**
- **Affiliation**
- **What is your interest for this workshop?**



Agenda – Tuesday, October 20

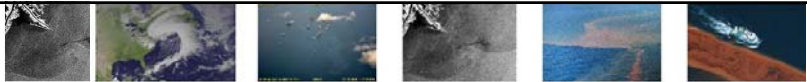
- **0830** **Welcome**
- **0845** **Background and workshop goals**
- **0930** **Plenary Session : Need for Oil Observing in Response**
 - **NOAA ORR: Scott Lundgren, Chief of Emergency Response Division**
 - **USCG: LT James Litzinger, Gulf Strike Team**
 - **NOAA ORR: Lisa DiPinto, Assessment and Restoration Division**
- **1000** **Break**





Agenda – Tuesday, October 20

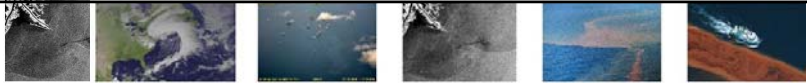
- **1015** **Plenary Session: Current Operational Programs**
 - NOAA ORR Oil Observing Program & Tools: Jeff Lankford, ERD
 - NOAA NESDIS-MPSR & Remote Sensing for Surface Oil Assessment: Davida Streett
 - USEPA ASPECT: Mark Thomas
 - NASA Programs: Cathleen Jones
 - Q&A – Speakers Panel
- **1115** **Plenary Session: Current Oil Observing Tools & Data Analysis**
 - SAR: Oscar Garcia, Water Mapping, LLC & Gordon Staples, MDA Canada
 - Landsat/TRACS: Mark Hess, Ocean Imaging & Kevin Hoskins, MSRC
 - AVIRIS Next Generation: Ira Leifer, Bubbleology Research International
- **1215** **Lunch provided**



Agenda – Tuesday, October 20

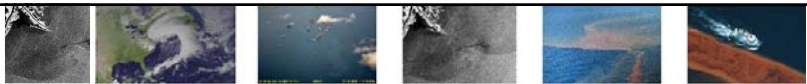
- **1245** **Plenary Session Continued**
 - Oil Spill Response Limited (OSRL): Jean Teo
 - Night Vision Applications: Mark Roberts, US Army Night Vision & Electronic Sensors
 - Q&A – Speakers Panel
- **1345** **Hands-On Training Stations with Real Field Data**
 - Traditional high resolution photography and video
 - SAR
 - Landsat/TRACS
 - ASPECT
 - Night Vision Applications
- **1500** **Break**





Agenda – Tuesday, October 20

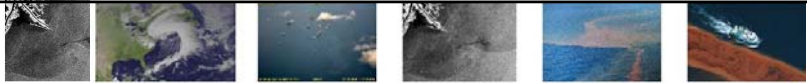
- **1515** **Plenary Panel: Lessons Learned from Hands-on Training**
 - Lisa DiPinto, NOAA ARD
 - James Hanzalik, USCG FOSC
 - Robyn Conmy, USEPA
 - Judd Muskat, CA DFW Spill Prevention and Response
 - Q&A – Speakers Panel
- **1700** **Adjourn**



Agenda – Wednesday, October 21

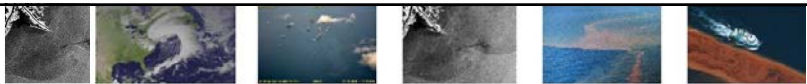
- **0830** **Review/Charge**
- **0845** **Plenary Session: New Technologies/New Applications**
 - NASA Out-Year Planning & Expectation: Sonia Gallegos
 - NRDA/Assessment Use:
 - DWH Multi-sensor Assessment: Jamie Holmes, Stratus Consulting
 - DWH SAR Applications: George Graettinger
 - UAS Potential Use & Limitations: Michele Jacobi, NOAA ORR ARD
 - KSAT- Multi-Mission Near Real-Time Satellite Imagery: Carles Debart
- **1000** **Charge to Breakout Groups**
- **1015** **Breakout Groups: Identify Needs & Gaps in Observing Technology**





Agenda – Wednesday, October 21

- **1130** **Plenary Session – Breakout Groups Reports**
- **1230** **Lunch provided**
- **1330** **Breakout Groups: Specific Gap Analysis**
- **1500** **Break**
- **1530** **Plenary Session: Breakout Group Reports**
- **1630** **Adjourn**



Agenda – Thursday, October 22

- **0830** **Charge to Breakout Groups**
- **0845** **Breakout Groups: Prioritize**
- **1030** **Break**
- **1045** **Plenary Session – Breakout Groups Reports**
- **1115** **Plenary Session: Workshop Summary**
- **1230** **Adjourn (no lunch provided)**



Facilitation Pledge

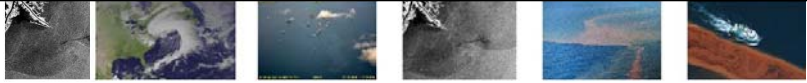
- I will recognize and encourage everyone to speak
- I will discourage side conversations
- I commit to:
 - Being engaged in meeting
 - Keeping us on task and time
- Stop me if I am not doing this!



Participant Pledge

- Be Engaged
 - Turn off cell phones & laptops(except at breaks)
- Listen to Others
- Contribute
- Speak Clearly; Use Microphones in Plenary
- Learn from Others
- Avoid Side Conversations





Agenda – Tuesday, October 20

- **0830** **Welcome**
- **0845** **Background and workshop goals**
- **0930** **Plenary Session : Need for Oil Observing in Response**
 - **NOAA ORR: Scott Lundgren, Chief of Emergency Response Division**
 - **USCG: LT James Litzinger, Gulf Strike Team**
 - **NOAA ORR: Lisa DiPinto, Assessment and Restoration Division**
- **1000** **Break**

