

**Radiance in a Dynamic Ocean (RaDyO)
Planning Meeting: 14 – 16 November, 2005
University of Rhode Island, GSO
Coastal Institute Building Conference Rooms**

Agenda

Monday, November 14

09:00 Introduction: Steven Ackleson, ONR

Project Overviews:

- 09:30 Michael Banner, Univ. New South Wales: Ocean surface wave optical roughness – innovative measurement and modeling.
- 09:45 Tommy Dickey, UCSB: High Resolution Time Series Observations and Modeling of Radiance, Optical Properties, and Physical Processes.
- 10:00 Dave Farmer, URI: Wave Induced Bubble Clouds and their Effect on Radiance in the Upper Ocean.
- 10:15 George Kattawar, TAMU: 3D-time dependent vector radiative transfer in an atmosphere-ocean system.
- 10:30 Coffee Break
- 10:45 Marlon Lewis, Satlantic: Quantitative estimation of variability in the underwater radiance distribution (RADCAM).
- 11:00 Ken Melville, Scripps: The influence of breaking at the ocean surface on oceanic radiance and imaging.
- 11:15 Scott Pegau, OSU: Spatial variability of irradiance in the wave boundary layer.
- 11:30 Lian Shen, JHU: A direct simulation-based study of radiance in a dynamic ocean.
- 11:45 Dariusz Stramski, Scripps: Measurements of wave-induced fluctuations in the underwater radiance under various surface boundary conditions. (Ackleson will present in Dariusz's absence)
- 12:00 Lunch (will be provided)
- 13:00 Mike Twardowski, WET Labs: High fidelity IOP observations.
- 13:15 Dick Yue, MIT: A direct simulation-based study of radiance in a dynamic ocean.
- 13:30 Ken Voss, U. Miami: Downwelling polarized radiance distribution measurements.

- 13:45 Break-out Group Discussion Instructions: Ackleson
- 14:00 Topic #1: Objectives & Logistical Requirements.
Purpose: to identify the overarching goals of RaDyO. Ask yourselves "What new fundamental understanding do we expect to emerge from this project?" and identify the primary observational and modeling requirements necessary to achieve those goals. A few overarching goals will be better than a laundry list of narrowly focused objectives.
- 15:00 Coffee Break
- 15:30 Topic #1 Group Summaries and Discussion
- 17:00 Recess for the day. Reception to follow at the Mosby Center.

Tuesday, November 15

- 09:00 Topic #2: Approach & Schedule. The goal of these discussions is to outline an approach and schedule that will realize the project goals and, at the same time, permit the individual research to follow personal research interests. Given that there are limited funds and a prescribed funding profile, it will be important to specify responsibilities, identify potential observational or modeling gaps, and indicate potential redundancies (e.g. several groups measuring the same thing). Suggest and justify one or more study sites.
- 10:30 Coffee Break
- 10:45 Topic #2 Group Summaries and Discussion
- 12:00 Lunch (will be provided)
- 13:00 Topic #3: Data management and reporting. Outline the interaction of modeling and field observations, including schedules for distributing results (e.g., simulations and observations) between RaDyO participants as well as reporting project results to the greater oceanographic community (e.g., target meetings and journal publications). Most importantly, how will data (sensor and model) be shared between RaDyO participants?
- 14:00 Topic #3 Group Summaries and Discussion
- 15:00 Coffee Break
- 15:30 Open Discussion:
 - Short term funding issues (FY06)
 - Action items and responsibilities
 - Project Science Leadership
 - Schedule next meeting date and location
- 17:00 Conclusions and adjournment. Dinner reservations for the group, at your own expense.

Wednesday, November 16 for wrap up, if needed