

Revised Agenda for Santa Barbara Channel Waves and Rays Workshop

[Please note revised Venue Location and Times for Talks]

Revised December 6, 2008

Location: The Santa Barbara Channel Waves and Rays Workshop will be held at UCSB's Centennial House on the University of California Santa Barbara campus. The UCSB campus is very close to the Santa Barbara Municipal Airport where most major rental car companies have offices. The UCSB campus is actually located closer to Goleta hotels and restaurants, but Santa Barbara establishments are only about 15-20 min away. I suggest carpooling from hotels if possible to minimize the number of cars requiring parking in the limited lot space on campus where we are meeting.

Centennial House is located in the southeast corner of the campus. It is in Building 530 on the campus map found at <http://www.aw.id.ucsb.edu/maps/>. Note that this building is adjacent to the Chancellor's residence and overlooks the lagoon. There is no internet connectivity as far as we know in Centennial House. However, there is likely access in the nearby UCen and Davidson Library.

The easiest way to reach Centennial House is to take Route 217 (also known as Ward Memorial Highway) to the east entrance of the UCSB campus and pass through the newly built Henley Gate. You will immediately see a rotary. Go left off of the rotary along the ocean almost to the end of Lagoon Road. You will see Parking Lot 6 on your left. If it is full, take a right and proceed to Parking Lot 5. You will pass the Centennial House on your left. [If you arrive at the Marine Biotechnology Building, you have gone a bit too far.]

Please park in Lot 5 or Lot 6 and either pay using a credit card or deposit an envelope with \$8 cash in the Parking kiosk and place a ticket in your window following instructions. Parking services actively enforce, so be sure to pay before leaving the lot.

Dates: January 6-9 (Tues-Fri.), 2009 Starting time each day will be 9 am. We will have ½ coffee breaks and over an hour for lunches to allow everyone to interact informally. I will try to keep the meeting moving along as some attendees will not be able to stay the entire period and I want to maximize everyone's inputs.

Local Housing and Restaurant Guide: www.santabarbara.com - This website has information concerning numerous places to stay and eat in the Goleta-Santa Barbara area. Prices and reviews are given on this site. One hotel that is nearby and seems to be popular is the Pacifica Suites on Hollister near Route 217.

Fees: It appears that we may not need to have fees since I was able to switch the venue to the Centennial House. I suggest you breakfast at your hotels or nearby them before coming to the meeting and bring coffees etc. if you like. We will use the University

Center (UCen), which is near Centennial House, for our coffee breaks and lunches. Dinners will be arranged on our own.

Objectives:

January 6-7 – Review recent results from Santa Barbara Channel Waves and Rays experiments concerning ocean waves and optics. The workshop will focus on a variety of observational and modeling studies conducted in the Santa Barbara Channel during September 5-27, 2008. We will also discuss complementary data sets and plans for collaborative papers with a goal of defining tentative titles and lead and contributing authors for a variety of papers concerning focused and complementary research on waves, optics, physics, meteorology of the Santa Barbara Channel.

January 8-9 – Planning for next Hawaiian Waves and Rays experiment; finalize specific area of experiment off the Big Island during August 23-September 15, 2009; discuss lessons learned from SBC experiment; updates on booms; decide on measurements from KM and FLIP; agree on personnel who will be aboard each platform; list complementary data sets that will be available and are desirable as well as modeling efforts that will be valuable for maximizing the scientific impacts of the experiment.

Tuesday January 6, 2009

Introductory remarks

0900 Welcome, logistics, introductions for the meeting (Tommy)

0920 Introduction, motivation, objectives, and brief background for Waves and Rays research (Tommy and Marlon)

Group Reports on SBC Wave and Ray results and lessons learned (total of 20 min max). Please inform Tommy if you prefer different groupings, or do not wish to present on behalf of a group, or if he missed a group (apologies!). Thanx!

0940 Melville et al.

1000 Stramski et al.

1020 **Coffee Break**

1050 Banner, Morison, Zappa, Schultz, Gemmrich et al. [note – 1 h for this group]

1150 Dickey et al.

1210 **Lunch Break until 1330**

1330 Twardowski et al.

1350 Vagle et al.

1410 Farmer et al. [given by Helen Czerski]

1430 Lewis et al.

1450 Pegau et al.

1510 Voss et al.

1530 **Coffee Break**

1600 Yue, Shen, et al.

1620 Kattawar et al.

1640 Jaffe et al.

1700 Lenain et al. (airplane Lidar)

1720 Eric Terrill et al. (WaMoS for Hawaii – coverage of FLIP and KM sites?)

1740 Break for Dinner

Guide to local restaurants and establishments: www.santabarbara.com.

Wednesday January 7, 2009

0900 Introductory remarks concerning SBC Wave and Ray collaborations (Tommy)

Brief presentations by potential collaborators working in SBC with comments about visions of potential interactions and publications (15 min max)

[Please inform me if you wish to give a brief introduction to your collaborative work and your name is not listed below. Thanx!]

0915 Libe Washburn - HF Radar currents during SBC Waves and Rays experiments

0930 Mark Moline - AUV operations during SBC Waves and Rays experiment – possibilities for Hawaii 2009?

0945 Dave Siegel - Plumes and Blooms and Remote Sensing of Channel

1000 Dan Reed and Steve Gaines – LTER and PISCO [Libe and Dave fill in?]

1015 Ben Holt – SAR imagery for SBC and Hawaii in 2009?

1030 Coffee Break

1100 Ira Leifer – Bubbles and surfactants

1115 Charles Jones and Leila Carvalho]– Atmospheric modeling, any possibilities for Hawaii 2009?

1130 Yi Chao – Modeling of SBC and possibly Hawaii 2009

1145 Charles Dong – Modeling of SBC and possible high resolution SST data and modeling around Hawaii?

1200 David Antoine – new radiance camera

1215 Lunch

1330 Informal discussions among SBC Waves and Rays collaborators

1530 Coffee Break

1600 Plenary discussions on some of the possible interactions, collaborations, and titles of papers with potential lead authors

1630 Discussion of possible collaborations for Hawaii Waves and Rays experiment August 2009.

1730 Break for dinner

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Thursday January 8, 2009

0900 Introductory remarks concerning plans for a Hawaiian Waves and Rays experiment planned for August 23-September 15, 2009 (Tommy)

Some discussion points for planning (note that some of these points will be resolved prior to the meeting. In that case, we have more time to focus on detailed planning):

1. How can we capitalize on the experiences and the results of the SBC experiment?

2. Discussion of specific experimental site west to southwest of the Big Island of Hawaii.
3. Specific dates for FLIP and KM are as follows: FLIP will be towed from Pearl Harbor to the Big Island site August 23-24 and towed from the Big Island site back to Pearl Harbor September 14-16. KM will leave Snug Harbor August 23 and leave the Big Island site September 14 reaching port September 15.
4. FLIP will be deployed in drift mode or let her drift? We can likely position KM within about ½ nautical miles of FLIP during the experiment.
5. Specific shipping instructions were sent in a previous email by Tommy for KM. Gray Drury at UH will be our contact. Luc and Ken will provide information for FLIP.
6. What are the practical limitations for this experiment vs. SBC (e.g. deployments of AUVs, gliders, skimmers, no boat transfers) ???
7. Requirements for Hawaii in terms of backups to instrumentation, batteries, sufficient gas for small boat operations, etc. etc. Think through contingencies.
8. Scientists will have to stay on KM or FLIP for the entire duration of the experiment as transfers will not be feasible except under emergency situations.
9. Communications issues for Hawaii – cell phone, internet, and other needed communication methods between FLIP and KM and to outside world during experiment. Science Meeting and Sampling Schedule reports need to be passed to KM from FLIP and from FLIP to KM.
10. What is the best mix of instruments (physical and optical) for each platform?
11. How can we better sample physics and optics concurrently and at co-located sampling spots? Can we more effectively sample waves from KM? Should some more wave measurements be made from KM? From FLIP? Note that we be able to position FLIP and KM much closer (~1/4 nautical miles) since no mooring will be used.
12. Possibilities of complementary data sets like high resolution SST around the islands (Charles Dong, UCLA), ocean color, etc.
13. Possible general circulation models for atmosphere and ocean at our Hawaiian site by Charles Dong, Yi Chao, Francesco Nencioli?
14. AUVs or gliders for experiment?
15. How can observationalists and modelers better integrate their science?
16. Other points from group welcome.

0915 Groups led by Chief Scientists of FLIP (Luc) and KM (Tommy) will meet separately to discuss their plans and optimal sampling strategies defining what measurements they wish to make from which platform and who the exact personnel to be onboard which platform (this is important for berthing).

1030 Coffee Break

1100 Plenary discussion by platform – first FLIP (i.e., resolve whether to drift or moor; site, etc.; waste contamination issues?)

1200 Lunch

1330 Plenary discussion for KM (i.e., optimize wave and optical measurements from KM; wave measurement- ship perturbation issues)

1430 General discussions

1530 Coffee Break

1600 General discussions

1700 Dinner Break

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Friday January 9, 2009

0900 Introductory remarks concerning plans for the Hawaii Waves and Rays experiment to be conducted off Hawaii August-September 2009 (Tommy)

Same discussion points as used yesterday. See above.

0915 Practical Issues – site has to be specifically defined to allow sufficient time to complete necessary reports; berthing constraints, booms for FLIP and possibly KM; where instrumentation will be shipped for the experiment (e.g., FLIP to Pearl Harbor; KM to Sand Island UH Marine Support Facility; others?). Time line of logistics for staging for the experiment.

1000 Brief group reports on plans to be used to document planning for Hawaii experiment e.g. lab space, berthing arrangements, etc.

1030 Coffee Break

1100 Continued brief group reports

1200 Review of key walking orders and to do's for agenda items etc. Future meetings.

1230 Adjourn formal meeting and go to lunch

1330-?? Continued meetings of those needing to discuss more issues