

CIOSS Council of Fellows Mtg (OSU only)

Attending: Ted Strub, Mark Abbott, Dudley Chelton, Roger Samelson, Amy Vandehey  
May 10, 2007

Main points from the meeting:

A priority task over the next several months will be to write the new five-year plan and umbrella budget, specified at \$5M per year. We are waiting for guidance from Ingrid Guch and John Cortinas as to the format, but Ingrid, Kent Hughes and Ted have agreed it will be shorter and not as specific as the previous five-year plan.

1) Modeling: Frank Aikman is interested in Ted's suggestion that he join with others in writing a short "white paper" on future operational coastal modeling systems. Frank will be at the Gordon Conference, as will Alexandre, John Allen, others from NRL, etc., who might contribute to such a paper.

- Rich Patchen (and maybe Frank Aikman) will visit CIOSS/COAS in August. The goal is to let them see the breadth of modeling in COAS and eventually to begin some collaborations with NOS modelers. The next step after this visit might be an extended, working visit to Corvallis by Rich, Eugene Wei or other modelers in that group. A visit of CIOSS modelers to NOAA labs back east could also be productive.

- Roger Samelson and Bob Miller will join Eric Bayler and Chris Mooers in chairing a "special session" in Orlando at the 2008 Ocean Sciences Mtg.

2) Ocean vector winds: CIOSS received "Ground System" funds this year to help transition the high resolution coastal mask for 12.5km scatterometer winds off the U.S. west coast to NOAA. Dudley mentioned that Ernesto Rodriguez from JPL may provide resources to help Mike and Barry extend their land masking effort for the west coast of the U.S. to other coastal regions throughout the world.

- Ernesto is also leading the effort to develop plans for the next generation of scatterometer. This "SAR" technology will have higher resolution, provide data right up to the coast and be able to measure through rain with less data loss.

- Paul Chang and others have stated that NOAA is generating momentum to launch a new scatterometer. There is some discussion of NOAA attempting to design a more advanced scatterometer, such as Ernesto is considering. The most logical thing for NOAA to do, however, is to launch a clone of QuikSCAT. NOAA may go through an initial analysis to see which way they go.

3) Coastal altimetry: Laury Miller would like CIOSS to host a workshop on the uses of altimeter data in the coastal region. This will probably occur in late-summer or early fall.

4) Outreach-SMILE: Ted and SMILE personnel are discussing various ways to transfer the SMILE experience to NOAA, in order to meet one of the suggestions of the external review panel - that SMILE serve as a model for a national NOAA program. Dudley suggested that maybe a NOAA person should come out here first to study how the SMILE program works. Ted and SMILE personnel have discussed this also.

5) Outreach-REU: CIOSS is supporting 4 students this summer and has funds in year 5 to support 5 students next summer. Space Grant may be interested in supporting 1-2 more, if they work on projects using satellite data. For OSU REU students during the year, students in the Honors College might be recruited. Bob Duncan can provide ideas for how to get in touch with the "right" students. Space Grant is again interested in helping to support local REU students during the school year.

6) Outreach-HMSC: It will take about \$10K to complete a pilot display at HMSC, demonstrating the use of satellite data in ocean studies. CIOSS will work with them to find the funds to help evaluate whether a larger effort is warranted.

7) Computers: As part of the "ground system" funds that NESDIS sent to transition the high-resolution scatterometer land mask to NOAA, there are funds to purchase computers and a RAID disc array. The presently planned system consists of two computers, each with two dual-core CPUs, and 4.5 terrabytes of disk before formatting into the RAID system. This represents a fair amount of compute power. Priorities for use will be (1) scatterometer land mask; (2) general analysis of large satellite data sets; (3) modeling. Within the next several months, Ted will get together with others to define the final system to purchase with these funds.

8) Other NOAA grants at OSU: Although CIOSS is not going to try to funnel most OSU NOAA grants through itself, it might approach Engineering departments on campus and explain how CIOSS can help OSU-NOAA collaborations to transfer internal NOAA funds to OSU. Mark suggested contacting Terri Fiez (7-3118, [terri@eecs.oregonstate.edu](mailto:terri@eecs.oregonstate.edu)), the head of Electrical Engineering and Computer Science Dept.

9) Suggestions/Planning for next 5 years: CIOSS will issue a call for proposals for year 6 under the usual 5 CIOSS Themes. Council members suggested continuing and new areas of possible emphasis:

- Improving satellite ocean products, especially in the coastal ocean;

- Climate data records (Tom Karl, Bruce Barkstrom, and John Bates at the Asheville NC lab). The model for this activity could be the improvement of the SST data set that followed Dick Reynolds' visit and collaboration with Dudley. This model might apply to coastal altimetry, with a visit by someone in Laury Miller's group (John Littleridge?); to scatterometry, with a visit by someone in Paul Chang's group (Zorana Jelenak or others); and ocean color (various possibilities within the COAST). Dudley's comment is that the visits should be longer (2-3 months) than the 4 weeks spent here by Dick Reynolds.

- A related topic is the need to explore methods to deal with expected multi-year gaps for U.S. satellite data records. Possible approaches involve the use of data from international satellites (Europe, India, China, Japan), possibly using models to assimilate the data to provide more consistent fields. A concern was expressed about differences in quality and coverage for the different satellites, resulting in the degradation of all satellite data

records to the "lowest common denominator."

10) Topics not really covered include present plans for the COAST project, the future of MOBY, AOA, etc. Curt Davis and Ricardo Letelier were not present to give those details.