

CIOSS Council of Fellows Meeting Friday, November 2, 2007

Members present: Curt Davis (Chair), Ricardo Letelier, Roger Samelson and Ted Strub (ex-officio). Amy Vandehey (CIOSS Administrative Specialist) recorded the minutes of the meeting.

Members absent: Mark Abbott, Dudley Chelton, Kent Hughes, Paul Chang, Alexander Ignatov, Laury Miller, Paul DiGiacomo, Mike Freilich (extended leave).

Updates to membership:

Paul DiGiacomo was recently added to the list of CIOSS Fellows as well as the Council, as per the August CIOSS Executive Board Meeting.

Curt Davis has agreed to take over from Dudley Chelton as Chair of the Council of Fellows. We thank Dudley for his 5 years of service as Chair.

Purpose of the Meeting:

1) A general discussion of the Executive Board suggestions - how we integrate our activities/products more effectively into the IOOS regional associations, how we help NESDIS form "parameter-based science teams" and how we help in the development of Climate Data Records (CDR's).

2) Call for internal proposals: We need to discuss the priorities for internal research projects and send out a call for short proposals to all CIOSS Fellows. The full Council will act as a "review panel" for the submitted proposals. So we want to ask for proposals in our priority areas. This is the main item of business for this meeting of the Council.

Background for the Meeting:

Executive Board August 30-31, 2007 Meeting Notes

The CIOSS Executive Board met August 30-31 and discussed future directions for CIOSS during the next 5 years. The bottom line is that the Executive Board thought that: (1) CIOSS is doing much of what is needed to integrate satellite and model products into the regional IOOS RA's but that we weren't putting this together to form as coherent an overall package as we could. We should work more closely and actively with our local RA's (ORCOOS and NANOOS) to integrate our products into their systems (web pages); (2) NESDIS has a need for "parameter-based external science teams" to help with its planning and evaluation of present and future satellite sensors. The COAST members form an obvious example of a team that could advise NESDIS on all aspects of ocean color, not just coastal and not just hyperspectral. Other teams are needed for OVW and SSH (maybe SST too). We did form Working Groups for OVW and Dynamics (including SSH and models) in Sept 2005, which could be rejuvenated. (3) CIOSS needs to help push the issue of CDR's. This will probably happen in ocean color during a series of 3 workshops that we (Curt Davis and Ricardo Letelier) have been asked to host during the

upcoming year. It's not clear that OVW and SSH need equivalent teams at this point, given that they are routinely reprocessed in a consistent fashion suitable for climate data records.

NESDIS priorities for research at all of the CI's

- (1) Risk reduction for GOES-R and NPOESS;
- (2) Research focused on the GEOSS societal benefit issues - Weather Forecasts, Disasters, Human Health, Energy Resources, Climate Var. and Change, Water Resources, Ecosystem Forecasts, Agriculture (and Forestry) and Ocean Resources/Biodiversity;
- (3) Research and applications that support implementation of IOOS;
- (4) Research and applications associated with NASA-NOAA transitions;
- (5) Research and applications associated with the US Climate Change Science Program;
- (6) Research and applications associated with Regional Ecosystem activities;
- (7) Research and applications that improve Research to Operations transitions;
- (8) Research and applications that promote environmental literacy;
- (9) Developing/improving multi-sensor products; and
- (10) Innovating technology that leads to new sensors, beyond GOES-R and NPOESS.

Council Meeting Notes:

1a) How we integrate our activities/products more effectively into the IOOS regional associations?

-As stated in the Executive Board notes, CIOSS is already doing much of what is needed to integrate satellite and model products into the regional IOOS RA's, but there needs to be better coordinated effort between the people that are doing this. Recognition for software codes and data should be given where appropriate. If someone is using our code/data, then we need to monitor the quality of the product that is posted on websites. More coordination is needed between people maintaining the various websites (Jasmine Nahorniak – MODIS, Craig Risien – ORCOOS, Amy Vandehey – CIOSS, and modeling [Lana ?]). Part of Craig's responsibilities is to interact with possible users.

-We need to put more effort into publicizing the products that we are producing. The MODIS real time website was recently completely revamped to make it more interactive and user friendly.

Action items: (1) Set up meeting with various groups and the people that maintain the websites to figure out what needs to be linked to on each website. (models, satellite data, in-situ data, bottom salinity, real-time updates); (2) For the model web site, perhaps some ongoing comparisons to other available data could be added (requires funding – 1-2 months tech time); (3) Discuss with Craig whether CIOSS could help in discussions with users.

1b) How we help NESDIS form "parameter-based science teams"?

-parameter meaning surface color, SST, etc.

-NASA has already made this change, e.g. from SeaWiFS and MODIS science teams to an Ocean Color Team. This has the advantage that the team can address using data from non-NASA including non-U.S. satellites and producing one integrated ocean color product. NASA funds this team by selecting proposals through their announcements of opportunity. CIOSS supports this approach and agrees with NESDIS that it is a great idea, but there needs to be funding for this effort. This was effectively not done with the HES sensor and the COAST group. For example the COAST was well supported by GOES-R Risk Reduction money as long as HES was a part of GOES-R, but the Risk Reduction money was halted immediately when HES was dropped from the platform. We should emphasize to NOAA that we need to keep this group of scientists together and use their expertise in support of NOAA's efforts to prepare for VIIRS and the use of foreign ocean color satellites. These are activities that should be covered by a parameter based ocean color team.

-The Council decided it was not practical to use the small amount of Core CIOSS funds to address this issue. We are currently funded through the Research and Operations program to hold a series of workshops on using foreign satellite ocean color data, addressing calibration issues, and on issues related to ocean color climate data records. These are all issues that need to be addressed by an Ocean Color Team. The results of these workshops may help frame a fruitful path for NOAA to move ahead on these issues and the development of an Ocean Color Team.

1c) How we help NOAA in the development of CDR's?

-There are some calibration issues; NASA reprocesses data from each satellite to address these issues. This is done with color data developing a cross calibration with sensors flying at the same time.

-Historically NOAA is focused on the Weather Service and operational needs, with changing algorithms, which is not conducive to compiling a long time series needed for climatology. The Pathfinder project (reprocessing AVHRR SST) has had sporadic support and there are no resources to reprocess other data sets.

-Need science quality data to do climatology.

-NOAA is more operationally focused while NASA is more science focused.

-Lautenbacher has said that NOAA would be the primary U.S. climate agency, but support to accomplish this has not been made available.

-The council agreed it is important to address these issues. However, it was not clear that anything useful could be accomplished using CIOSS Core funding for this purpose.

2) Call for internal proposals

Of the three priorities we chose to focus on strengthening the IOOS Connection – not a new direction, but we need to emphasize activities that are ongoing and can be expanded to connect the remote sensing and modeling work in CIOSS to the IOOS activities.

Some of the CIOSS Core funds for 2008-09 are already committed to the Administrative activities, SMILE, and REU students. Remaining money should go to research topics that have connections to IOOS. We have about \$224K left for 3-4 projects. There is not sufficient funding to support a full post-doc position for each project.

Action item: Curt will write up a call for proposals from the CIOSS Fellows. Proposals should be about 2-3 pages long, with a project and budget narrative, due by Monday, December 3rd.