

During the next 2 weeks the R2K community has an important opportunity to contribute to the design of the Ocean Observatories Initiative (OOI) infrastructure. The R2K Steering Committee has been asked to make a recommendation regarding prioritization of buoy sites at EPR (9°N) and MoMAR. Clarifying the level of interest in a node at the Cleft segment, as part of the Regional Cabled Observatory (RCO) on the Juan de Fuca plate, would also be helpful. We strongly encourage your input so that we can best represent community interests.

**We need to hear from you by April 12**

There are several mechanisms available for you to let us know what you think about MOR observatory site prioritization:

1. Submit comments to the online discussion page (<http://www.ridge2000.org/science/discussion/>). This approach has the advantage that others in the community are informed of your ideas and can build upon them.
2. Send email to any Steering Committee member or the R2K Office (ridge2000@ucsd.edu)
3. Call Donna at the R2K Office (858)534-8813

**Mid-Ocean Ridge Ocean Observatory Planning (Summary Mar31, 2006)**

Conceptual proposals for several mid-ocean ridge (MOR) observatory sites are under consideration for installation within OOI. The RCO targets the Endeavour segment of the Juan de Fuca Ridge and NeptuneCanada, which will form Stage 1 of the RCO, already is preparing to install a node there. Proposals for RCO Stage 2 also include a node at Axial Volcano and an option to expand a node at Cleft segment. Stage 1 infrastructure may allow sensor placement in Middle Valley. Two sites are proposed for a buoyed observatory as part of the global moored network: the East Pacific Rise at 9°50'N and the Mid-Atlantic Ridge at ~37°N (MoMAR). To support a full mid-ocean ridge observatory, a high power, high bandwidth buoy is required. OOI funds can provide 1 such buoy during the initial installation period (~2008-2012) so the EPR and MAR sites must be prioritized. To optimize the global network for geophysical, oceanographic, and biochemical studies, the location of some other OOI buoys will be adjusted based on this prioritization. Because of this and the need to complete detailed costing (including installation shiptime, which can be considerable for remote sites) and plans, it is critical that a decision on site location be made this Spring.

**Criteria for Consideration of Sites**

The OOI infrastructure would provide capabilities that greatly enhance R2K research, both Integrated Studies (IS) and Time-Critical Studies (TCS).

The R2K Steering Committee would like to hear your opinions about the strengths and drawbacks of each site and why one site may be a higher priority.

Funds from outside OOI will be required to develop critical sensors and to support researchers in their study of observatory data. The type of science enabled by an observatory is central to

many R2K goals so the program should plan to support significant work at OOI MOR site(s). This will be balanced with support for other aspects of R2K science that includes large-scale studies to enable understanding of the mantle or oceanographic processes at an ISS, and modeling or experimental studies that aid integration of results.

One outcome of the November 2005, Vancouver community workshop was the commitment to continue work at the 3 current IS sites in the near term and to evolve the suite of sites after the 2008 program review. Endeavour is currently an R2K site for both IS and TCS; EPR 9N is a current IS site; MoMAR is an InterRidge focus site and has been endorsed by the R2K community as the desired MAR site if/when a slow-spreading IS site is undertaken. Either we will need to obtain additional funds to take on a new IS site or, as laid out in the science plan, we will ramp down expenditures on an existing site(s) and ramp up work at the new site(s). The longer-term view of the program is a consideration in observatory site prioritization since OOI results would just begin to be available in the 2008-2012 period.

The ORION Science and Technical Advisory Committees (STACs) are formulating a Conceptual Network Design for the OOI. Drafts were presented at the Salt Lake City workshop last week. STAC site prioritization must include consideration of the science goals, phasing of experiments, and the trade off between costs and infrastructure that allow these goals to be attained.

Recommending a top priority MOR buoy site and clarifying how the science done there goes beyond what could be learned at nodes on the RCO should be the focus of R2K input to the STAC.

#### **Process and Timeline for Providing R2K Input to ORION**

April 3-12: community input to StCom

April 13-14: StCom meeting; outline initial recommendation draft

April 18-26: community advice on draft recommendation

April 27-30: StCom finalize recommendation

May 1: recommendation presented to ORION STAC

#### **Further Info**

OOI MOR proposals: [www.orionprogram.org/RFA/abstracts.html](http://www.orionprogram.org/RFA/abstracts.html)

ORION program: [www.orionprogram.org](http://www.orionprogram.org)

OOI Conceptual Network Design (March 27 draft, phasing timelines in the Global draft may not be relevant if available spar-type buoys can be employed): [www.orionprogram.org/di\\_workshop.html](http://www.orionprogram.org/di_workshop.html)

NeptuneCanada: [www.neptunecanda.ca](http://www.neptunecanda.ca)

EPR site info:

Vancouver 2005 Workshop Rpt

[www.ridge2000.org/science/meetings/wksp\\_reports.html](http://www.ridge2000.org/science/meetings/wksp_reports.html)

R2K website [www.ridge2000.org/science/iss/epr.html](http://www.ridge2000.org/science/iss/epr.html)

R2K Newsletters [www.ridge2000.org/science/info/newsletters.html](http://www.ridge2000.org/science/info/newsletters.html)

MoMAR site info:

[www.momar.org](http://www.momar.org)

MoMAR Steering Committee Chair inputs: J Escartin's online  
discussion comment and M Cannat's letter of support  
[www.ridge2000.org/science/downloads/announcements/cannatletter.pdf](http://www.ridge2000.org/science/downloads/announcements/cannatletter.pdf)

R2K MAR 2004 Workshop Rpt

[www.ridge2000.org/science/meetings/wksp\\_reports.html](http://www.ridge2000.org/science/meetings/wksp_reports.html)

R2K Steering Committee:

[www.ridge2000.org/science/info/stcom\\_bio.php](http://www.ridge2000.org/science/info/stcom_bio.php)