

**Minutes UNAVCO E&O meeting,
UNAVCO Headquarters
Boulder, CO
April 14, 2005**

Present: Michael Hamburger (chair), Eric Calais (Board of Directors liaison), James Cano, Susan Eriksson, Rusty Lowe, Jessica Murray, Rajul Pandya, Kimberly Schramm, John Taber, Mike Willis,
Staff: Susan Eriksson, Will Prescott, Mike Jackson, Chuck Meertens, Jim Riley, Lou Estey

Absent: Kelly MacGregor, John DeLaughter

Meeting convened at 8:40 am

Eric Calais, UNAVCO Board member liaison to E&O Committee (EOC), welcomed Committee members and described UNAVCO mission, committee structure and E&O charge.

Michael Hamburger reviewed agenda and discussed goals for meeting and discussed procedural items: EOC makes recommendation to BOD, use consensus if possible, when voting. UNAVCO staff does not vote. John Taber to take minutes, minutes to be circulated to committee, action items and resolutions to be posted on web site after submission to BOD.

Original EOC members have different length terms. Attempt made to create diverse committee and committee will recommend to BOD when it is time to reappoint new members. Conflict of interest issues discussed. A document must be signed for UNAVCO and EOC members to make EOC aware if they have potential conflicts. Important for it not to appear that EOC gives money to EOC members, but conflicts can be dealt with on an individual basis.

Will Prescott presented history and overview of UNAVCO, including draft UNAVCO strategic plan. He asked EOC to come up with a more complete set of E&O goals for the UNAVCO strategic plan. E&O is ~40% of strategic plan. The major short term task for EOC is to establish E&O component of UNAVCO strategic plan.

- Identify priorities E&O activities for UNAVCO
- Provide advice and assistance in 2007 UNAVCO proposal (due jan 2007): ask for more E&O money then (funding starts in 2008)
- Kitchen cabinet for Susan – advice and help
- One goal: increase pool and diversity of deformation scientists

Mike Jackson presented overview of EarthScope and PBO.

Chuck Meertens presented overview of the UNAVCO facility including a tour.

John Taber presented an overview of IRIS E&O.

Will Prescott presented an overview of EarthScope and a background of EarthScope E&O efforts. The outreach effort is already fairly well developed and John Delaughter will be focusing on education. He has funding for salary and travel (for him and a planned E&O committee). UNAVCO can probably apply for funds from general NSF R&RA RFP as long as it is clearly community focused.

Jim Riley presented basics of UNAVCO website. There was some initial discussion of potential modifications to the web site. The site is aimed primarily at a technical audience and there were several ideas suggested on how to make it more inviting for general audiences. UNAVCO will be adding more staff to help with web content. Need to balance needs of public and technical audiences.

Lou Estey gave a demonstration of the Jules Map Server. It was built originally as a visualization tool for science product support, not E&O. Jules Verne Voyager comes up 4th on a google search for "map tools". Jules Verne Jr. was then developed for a general and educational audience using Voyager images (demonstrated by MH). It includes educational modules to give teachers an way to use JV Jr. in the classroom. EarthScope Voyager Jr. includes EarthScope specific features and a "Did you know" section. It has been funded by NSF R&RA and is about 1.5 years through the initial 2 year grant.

There is a need to encourage broader community to get involved in E&O. Must make it easy to do and ideally have it help their research.

Susan Eriksson presented examples of recent UNAVCO E&O activities:

RESESS- SOARS described by Raj Pandya. It's been around for 10 years, focused on atmospheric sciences. Key is strong mentoring environment for 4 years. Discussion of reasons for very low number of underrepresented groups in earth science: lack of perceived relevance in urban areas, earth science not taught at HBCUs, need to push high tech aspect of earth science.

PBO Nucleus – funded project to renovate existing local GPS networks to add to PBO, with E&O component: one module each for middle school, undergraduate, geophysics majors -> integrate into existing resources
\$305,000 over 3.5 years -> 1 E&O staff plus travel, participant support, publications, external evaluation

Strain Processing short course – perhaps help with educational focus of training courses

Suggested Broad educational goals:

- Integrating research and education
- Nature of science
- Engaging students with data use

- Careers in geosciences
- Integration of research on learning

How does E&O fit in with UNAVCO mission and why should UNAVCO have an E&O program – MH presentation

- Long-term benefits for science community
- Many educational benefits
- Short-term goals
- Voyager map tools
- E&O materials on website
- Publications
- REU
- Leadership in EarthScope E&O

Strategic Planning

The group brainstormed in 3 separate sessions on

1. values,
2. what we would like UNAVCO E&O to have accomplished by 2010. This led to a set of 5 goals.
3. strategies for getting there.

The meeting adjourned for the day at 5pm

Friday, April 15

Mission statement

MH presented a draft statement. In discussion, perhaps add global, informal education, outreach, could be shorter, balance between breadth and specificity

Values

MH presented combined values from Thursday discussion. RP suggested an additional value (will email)

Is outreach sufficiently expressed in values? Some say yes.

Some values might really be goals, may need to be added to goals statements.

Goals

MH presented a distillation of yesterday's goals.

Action: MH and SE and EC will take goals, mission and values and refine into mission, vision and goals

Discussed list of yesterday's strategies and sorted into specific projects and more value-related strategies, then chose sorted projects into do now, investigate, or save for later.

Action: SE and MH to organize list of projects

Next Meeting

Combine with other national meeting or separate? Maybe a half day on Sunday (starting 1 or 2 pm?) before AGU

For now 2 meetings per year by ourselves, next in mid-late September, generally 1 in spring and 1 in fall

Maybe meet informally at IRIS/UNAVCO meeting

Action: SE to distribute potential dates for next meeting

Committee structure

Should we have community college person, another teacher, a high school student? First choice perhaps community college faculty

Could create subcommittees which engage broader community, can't have representation from all groups on main committee.

Collaborations

IRIS-UNAVCO - Ensure website linkages, collaborate on some activities, share resources, make sure both groups keep enough branding, particularly wrt EarthScope
Website subcommittee- perhaps after hiring of webmaster

DLESE expects UNAVCO will create quality resources and encourages submission to DLESE

GEON collaboration important – via CM contacts

UNAVCO facility revue in Oct for coop agreement, maybe some committee members could come

NASA Explorer Schools – great way to get to middle schools, RL has contacts

EarthScope E&O

How should UNAVCO/IRIS/ES work together?

Action: MH to call gdvd to express excitement of UNAV E&O and interest in working with ES

Budget

SE presented E&O budget. SE will be hiring web support person, wants someone with writing skills to develop content, not just web designer. They will work with JR on web development.

Other E&O staffing

Lou Estee may be involved in higher level E&O discussions, but need to offload some of his current database and programming activities to give him time.

PBO engineers make public presentations

Kathleen Hogkins ???

SE needs a specific person for her clerical needs – WP and SE to sort out
Need to push message about the importance of E&O program to BOD to maintain long term funding in the face of flat or decreasing budgets.

Action: SE to have draft of E&O strategic plan by UNAVCO annual meeting, MH to make short presentation

Action: SE to respond to NAGT lecture series request

Action: all committee members to submit conflict of interest statement