

EMWoG Telephone Conference Call
Thursday April 25, 2006, 2.00-3.25 pm EDT
Minutes and Action Items

Present: Phil Wannamaker, Gary Egbert, Dean Livelybrooks, Steve Park, Rob Evans, Adam Schultz, Shane Ingate (quorum achieved).

Apologies: Martyn Unsworth

Minutes from April 11 telecon were edited, approved and will be posted on the EMScope web site.

Procurement

Group discussed the recent confusion in EMSOC's instrument scheduling which reduced the number of NIMS being loaned to EarthScope from 10 to 8. In order to minimize the impact on the pilot project, Schultz advised that Narod has 2 NIMS ready for shipment, but without the mag sensor. Schultz then suggested that he has 2 hi-quality cores that could be leant to Narod for integration (replace the mag card) into the 2 incomplete NIMS sitting on Narod's shelf. Group agreed that this would increase the number of NIMS available for the pilot project to 10, and should be pursued at no cost to the project.

Backbone Status

Schultz reports that Booker will be delivering the prototype electrodes for testing this weekend. One of the tests will be to determine whether NaCl or KCl would be better for the electrolyte.

Schultz briefed Group that R. Aster of NMT has been contacted and is pursuing using Hilton Ranch (NM) as a Backbone site. Wannamaker described the site as one of low hills, with limited road access. The ranch can easily support orthogonal 1 km lines. The present number of cattle on the property is unknown.

Schulz also reported that he is working with Park on the Parkfield. The original vault used by Park for telluric measurements is unsuitable for the magnetometer because the vault is full of electronics

Transportable Pilots

Livelybrooks outlined his plan for scientific oversight. He suggested visiting both permitted sites (pre-construction) and during the installation of a NIMS, to serve as independent checks on PSP and POP procedures. Group agrees that this would be a good plan to conduct at 5-10 sites. Livelybrooks also indicated that he would visit sites that have been pulled the to ensure that the contractor is meeting land-owner's wishes as well as our own. Livelybrooks will also travel with a lap top into the field, with software provided by Parks, so that data may be examined in near-real-time.

Joint TA and MT Test

Soap Creek (OR) near Albany is the site of the OSU Animal Science ranch, and also hosts a TA site (H03A). Group discussed when the joint TA/MT tests will be conducted,

and decided that Wed 3 May will be a good day for installation. The plan is to record data with the mag-sensor at distances up to 100 m from the TA vault, and also to run different chemistries in the dipoles (either NaCl or KCl). As a minimum, 2 days of testing is required, but to determine its suitability as a backbone site, then the testing will last longer. Busby and Vernon will have to be kept apprised.

Action: Ingate to inform Busby and Vernon of schedule.

Schultz did indicate that there are a lot of electrical fences on the ranch, and it is not a clear winner as a potential Backbone site, at least until the tests are performed.

Conducting the tests next week conflicts with the proposed schedule for ANMO (now Hilton Ranch) installation. This ripple affect will likely impact the installation of the first few sites (Hilton Ranch NM, Parkfield CA, Bull Shoals MI). The Hilton Ranch construction is currently scheduled for June 22.

Use of WAAS GPS for line laying

Schultz asked Group if a survey-quality WAAS-enabled GPS receiver would be an acceptable substitute for compass and tape measure in laying out the e-lines. Group feels that this would be adequate for the Backbone stations, but lack of resolution in these systems would not work for the transportable systems, where errors of up to 2 m can be seen over lengths of 100 m.

Planning for other states

Map has not yet been drawn.

UCLA Physics

Further to Park's contact with physicists (Peter Chi) at UCLA, the following link describes their work for ground-based magnetometers to study magnetoseismology (McMaC, or "Mid-continent Magnetoseismic Chain"):
<http://spc.igpp.ucla.edu/mcmac/index.html>

Meetings:

- IRIS CoCom/BoD, San Francisco CA, May 3-5.
- USAAC meeting, Socorro NM, May 16-17.
- USArray Review and EFEC meeting, Socorro NM, May 17-18.
- USArray/MT short course, Tucson AZ, June 7.
- IRIS Workshop, Tucson AZ, June 8-10.

Next Telecon:

- May 9, 2-3 pm EDT.