

USArray Magnetotelluric Working Group

Charge and Authority

The Magnetotelluric Working Group (EMWoG) will review and provide advice on the ongoing deployment, short and long-term scientific goals and milestones of both Backbone and Portable magnetotelluric instrumentation as part of USArray. It will review numbers, locations and siting requirements of stations, equipment performance, and maintenance issues. The USArray Magnetotelluric Manager will be the primary IRIS staff liaison with the Working Group and will coordinate with the EMWoG Chair to develop topics and questions for review and action by the EMWoG. The EMWoG will provide advice to the USArray PI as needed and file a report to the IRIS Program Coordination Committee for its regular meetings (twice annually). The semi-annual reports from the EMWoG will be made available through the IRIS and EarthScope websites.

Tasks

Primary topics for the Working Group to consider include:

Facilitate cooperation between IRIS, EMSOC and USGS to achieve the goal of high-quality data flow (metadata and time-series) that is transparent to end users.

Facilitate the articulation of standardized design goals for Backbone and Portable MT stations. Participate in the selection of EarthScope MT system(s).

Provide scientific review of the identification and implementation of the siting and installation plans for both Backbone and Portable MT.

Provide advice on a standardized quality control path for data from USArray Backbone and Portable MT. This task includes the maintenance of station metadata and the implementation of feedback between centralized QC operations and the station operators on correctable station problems.

Provide advice on development of software tools that allow users to request EarthScope MT data including working with the DMS to treat the USArray Backbone and Portable MT as virtual networks for the purposes of data requests,

Assist in the development of long-term scientific and operational plans for USArray Backbone and Portable MT beyond the startup phase of EarthScope.

IRIS and EarthScope project management will maintain management and budgetary control of EarthScope EM, including the EVM reporting, status reporting, change control procedures and organizational control.

Organizational Guidelines

The level of effort for the EMWoG includes participation in a teleconference call every one-two months and one or two annual face-to-face meetings (preferably at other IRIS or community meetings). The EMWoG will deliver written answers to questions and may produce more lengthy reports on special topics. Voting will be used to ratify the written record and members should be prepared to provide written decisions. Members should have a good technical understanding of the project and be familiar with array operations and/or data usage.

Membership of the EMWoG will consist of 8 members with two year renewable terms. Members and Chair will be appointed by the IRIS President following discussion with the IRIS Board of Directors. A quorum will consist of 2/3 of the EMWoG members.

Potential Working Group members

Phil Wannamaker (UU) (Chair)
Adam Schultz (OSU)
Steve Park (UCR)
Gary Egbert (OSU)
Dean Livelybrooks (UO)
Kevin Mickus (MSU)
Rob Evans (WHOI)
Martyn Unsworth (U. Alberta/POLARIS)

nonvoting observers....
Kent Anderson (IRIS)
Bob Busby (IRIS)
Tim Ahern (IRIS)
Jim Fowler (IRIS)
Harley Benz (USGS)
Jeff Love (USGS)

