GEOSPHERE FRONTIER
WORKSHOP CHARGE AND PRESENTATION STRUCTURE

Charge:

This workshop is being organized to help shape the direction of research in geospace with an emphasis on crystalizing a research program at the NSF on space weather. The workshop will focus on the experimental infrastructure required for discovery research in the 21st century, with consideration for both basic and applied research driven by cutting edge observations of the Sun-Earth system. We will develop strategies that can integrate geospace research across outmoded disciplinary boundaries and better align with national priorities.

The workshop will take place in the context of contemporary community and national strategic documents. We expect the workshop to culminate in an action plan to formalize the NSF geospace science program (Aeronomy, Magnetosphere, Solar and Interplanetary) as the NSF research arm in space weather and to advance the geospace infrastructure program (Geospace Facilities and CubeSat program) by pursuing an NSF MREFC (Major Research Equipment and Facilities Construction) project to enable discovery science and advance space weather research across the geospace community.

It will be the responsibility of all speakers to remain on target during their talks and to address the three main charge questions in their talks:

- What major gaps in scientific understanding or engineering capability limits our ability to describe Sun-Earth connections?
- Where is discovery science likely to occur?
- How can we predict the occurrence of, and reaction to, space weather?

Organization:

This workshop is the beginning of a process to coordinate and advance space weather research within the Geospace Program at NSF, with an emphasis on earth-based observing capabilities. This will likely be a multi-year effort with the focus primarily on NSF priorities, activities, and programs, i.e. a document that charts earth-based observing for space weather research. To help further organize, energize, and provide structure to the workshop, it is requested that all speakers address the three main questions given above using a prescribed presentation format – see attached. A strict time allotment of 5 minutes per talk will be implemented with the plan to build in time for panel or group discussions.

To provide a means for sharing additional information, a site will be setup to place extra materials. This will keep us on task and help in organizing post workshop materials that will be circulated and maintained for future use.