

Fact Sheet on the Portfolio Review of the NSF Geospace Section

Information on the PR Review and committee membership, is available at <http://www.nsf.gov/geo/ags/geospace-portfolio-review-2015/>.

Committee: Dan Baker, Bill Bristow (resigned, May 2015), Koki Chau, Christina Cohen, Sarah Gibson, Joe Huba (joined, June 2015), Mona Kessel, Delores Knipp, Lou Lanzerotti, Bill Lotko (*chair*), Pat Reiff, Alan Rodger, Josh Semeter (*GEO Advisory Committee representative*), Howard Singer

Charge

1. Recommend the critical capabilities needed over the period from 2016 to 2025 that would enable progress on the science program articulated in Chapter 1 of the [Decadal Survey for Solar and Space Physics](#). The recommendations should encompass observational, theoretical, computational, and laboratory capabilities, as well as capabilities in research support, workforce, and education.
2. Recommend the balance of investments in the new and in existing facilities, grants programs, and other activities that would optimally implement the Survey recommendations and achieve the goals of the Geospace Section as articulated in the NRC-reviewed "[AGS Draft Goals and Objectives](#)" Document (2014) and the GEO/Advisory Committee Document "[Dynamic Earth: GEO Imperatives & Frontiers 2015-2020](#)". These recommendations may include closure or divestment of some facilities, as well as termination of programs and other activities, and/or new investments enabled as a result. The overall portfolio must fit within the budgetary constraints provided to the Committee.

Boundary Conditions of the Charge

- The review should be forward-looking focusing on the potential of all funded facilities, programs, and activities for delivering the desired science outcomes and capabilities (while taking into account respective past performances) and considering the value of funded activities in terms of both intellectual merit and broader impacts.
- The review should assume a *flat (adjusted for inflation) budget* scenario to encompass the period from 2016 through 2025, and consider costs if (i) the existing observing capabilities and science-funded programs were to continue in the status quo, as well as of (ii) new facilities and programs, including those recommended in the Survey and others the Review Committee may wish to introduce.
- The Committee's deliberations should take into consideration the national and international Geospace Sciences landscape and the consequences of its recommendations for domestic and international partnerships.

Principles

- Consider the balance across the entire portfolio of activities.
- All funded activities of the Geospace Section will be considered together with the Survey recommendations.
- Set funding priorities according to science goals.
- Maintain a flexible system of capabilities.
- Strive for a balance between investments in facilities and people.
- Value the role of peer-reviewed competition.
- Value openness in the availability of data.
- Provide excellent training and career opportunities.
- Fulfill a mission to educate and inform.

How you can help the Portfolio Review Committee

Tell us what programs and facilities in the existing or *possible future* portfolio of NSF's Geospace Section would enable your research *to achieve DS goals*.

Your input is important. Email comments are invited and open recommendations will be solicited at public forums of the communities served by the Geospace Section of the NSF including CEDAR, GEM, SHINE and SWW.

See <http://www.nsf.gov/geo/ags/geospace-portfolio-review-2015/>.

2012 Decadal Survey

SOLAR AND SPACE PHYSICS: A SCIENCE FOR A TECHNOLOGICAL SOCIETY

Key Science Goals: Chapter 1 (See also Chapter 4 for Science Challenges)

1. Determine the origins of the Sun's activity and predict the variations in the space environment.
2. Determine the dynamics and coupling of Earth's magnetosphere, ionosphere, and atmosphere and their response to solar and terrestrial inputs.
3. Determine the interaction of the Sun with the solar system and the interstellar medium.
4. Discover and characterize fundamental processes that occur both within the heliosphere and throughout the universe.