

The National Academies of
SCIENCES • ENGINEERING • MEDICINE



Role of Facilities in Earth System Science
Virtual Roundtable Discussion
Friday, May 28, 2021, 11:00am - 1:00pm ET

Public Agenda

The National Academies of Sciences, Engineering, and Medicine committee on “[*Advancing a Systems Approach to Studying the Earth: A Strategy for the National Science Foundation*](#)” has been tasked to develop a compelling vision for a systems approach to studying the Earth in order to inform approaches to integrated research at NSF and to provide guidance as to how NSF can support the research community. The final report will also identify the facilities, infrastructure, coordinating mechanisms, computing, and workforce development needed to support a more integrated approach for studying components of the earth system. This roundtable discussion will help inform committee members about a range of existing NSF computational and observational facilities; identify potential synergistic opportunities within current facilities, infrastructure, and coordinating mechanisms; and discuss ways to leverage these efforts for Earth System Science.

Friday, May 28, 2021
11:00am - 1:00pm ET

11:00 AM Welcome and Purpose of Roundtable

Courtney Flint, Utah State University, Committee Member

11:10 AM Remarks from Panelists

*11:10 am: **Everette Joseph**, NCAR Director*

*11:20 am: **Vladimir Papitashvili**, NSF Program Director for Astrophysics & Geospace Sciences and **Jessie Crain**, Antarctic Research Support Manager (McMurdo)*

*11:30 am: **John Trowbridge**, WHOI, OOI PI and **Paul Matthias**, WHOI, OOI Program Manager*

*11:40 am: **Roland Roberts**, NSF Program Director for NEON and **Kate Thibault**, Battelle Lead Research Scientist for NEON*

*11:50 am: **Joy Pauschke**, NSF Program Director for NHERI*

Advancing a Systems Approach to Studying the Earth: A Strategy for the National Science Foundation

12:00 PM Open Discussion and Q&A with Committee Members

Potential discussion topics include:

- The extent to which facilities are equipped to handle human dimensions of Earth system science (human and managed systems and decision making), using anecdotes and specific experiences/examples
- The workforce needed to realize synergistic opportunities among facilities, infrastructure, and coordinating mechanisms
- The sub-disciplines that are currently served through these facilities and efforts underway to make them useable by a wider range of disciplines (e.g., how is your program reaching out to new communities, beyond traditional user communities?)
- Extent to which computing resources are adequate and accessible to the facility. What happens when existing computing programs are retired?
- Plans for harnessing existing, planned, and future NSF-supported cyberinfrastructure for Earth System Science
- The accessibility and usability of facility data to the broad scientific community
- Opportunities provided by advances in sensor technology (e.g., low-cost, mobile, etc.) and data storage
- The extent to which the facility relies on agency partnerships for infrastructure (and, conversely, the extent to which agencies beyond NSF rely on these facilities)

12:50 PM Wrap-up

Courtney Flint, Utah State University, Committee Member

1:00 PM Adjourn