



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

***Computing, Data, and Cyberinfrastructure for a
Systems Approach to Studying the Earth***

A Two-Part Virtual Workshop

Part 2: Friday, February 12, 2021, 12:00 - 3:00pm 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 two-part workshop seeks feedback on computational, data, and analytic support for Earth systems research, including guidance on harnessing existing, planned, and future NSF-supported cyberinfrastructure.

Recording of Part 1 can be found here: <https://www.nationalacademies.org/event/02-04-2021/computing-data-and-cyberinfrastructure-for-a-systems-approach-to-studying-the-earth-part-1>.

Part 2

Friday, February 12, 2021

12:00 - 3:00pm ET

- 12:00 PM** **Welcome and Purpose of Workshop**
Bill Gropp, Committee Member and Workshop Organizer
- 12:05 PM** **AI for Earth**
Bruno Sánchez-Andrade Nuño, Microsoft

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- 12:25 PM** **Climate Modeling**
- *William Collins, Lawrence Berkeley National Laboratory*
 - *Tapio Schneider, California Institute of Technology*
- 12:55 PM** **Lessons Learned from Developing a Comprehensive Cyberinfrastructure for Natural Hazards**
Ellen Rathje, University of Texas at Austin
- 1:10 PM** **Workforce Needs**
Susan Winter, University of Maryland
- 1:25 PM** **Break**
- 1:40 PM** **Discussant**
Inez Fung, Committee Member and Workshop Organizer
- 1:50 PM** **Discussion and Audience Q&A**
Moderated by: Jerry Mitrovica, Committee Member and Workshop Organizer
- 2:50 PM** **Wrap-up**
Bill Gropp, Committee Member and Workshop Organizer
- 3:00 PM** **Adjourn**