

Future Directions for Earth Observations and Data Stewardship

December 2 & 3, 2025

MEETING OBJECTIVES

1. ***Roles and Responsibilities.*** Assess the contributions, including strengths and weaknesses, of each sector in collection, stewardship, coordination, and governance of Earth observation data and services, within the global context. Consider how the roles and responsibilities may need to evolve to support and strengthen a diverse and interconnected global Earth observation system.
2. ***Barriers and Opportunities.*** Examine barriers, including institutional, legal, political, financial, and technological, that have limited the creation and use of Earth observation data and services. Explore opportunities to strengthen governance and improve data sharing to enhance resilience of Earth observation data.
3. ***Advancing Collaboration and Impact.*** Discuss common goals and approaches for improving and broadening cross-sector communication and maximizing data use and efficiency with the goal of establishing a more resilient and equitable globally integrated Earth observation system that meets evolving societal and economic needs, as well as the need for ongoing research.

DECEMBER 2, 2025 (ALL TIMES EDT)

Day 1: Building a Shared Understanding of the Current Earth observations System

Slido Link: <https://app.sli.do/event/vSNWFCKyAqLZXnY4MLF8qo>



8:30 – 9:00 **Coffee and Networking** (in person only)

9:00 – 9:15 **Welcome and Workshop Goals**

Overview of workshop purpose, flow, and expected outputs as well as framing the challenge of building a globally integrated Earth observation system.

Speaker: Barbara Ryan, Planning Committee Chair

9:15 – 10:15 **Plenary Session: Societal Value of Earth Observations**

Compelling key examples of the benefits of Earth observations to society through the lens of 3-4 distinct Earth observations data end users. (10 minutes each)

Moderated by: Kieran Bhatia, Guy Carpenter

Guest Speakers:

Ian Giammanco, Insurance Institute for Business & Home Security

Kelly Hereid, Liberty Mutual

Rhiannon Price, NASA Lifelines

Susan Poulton, Ocean Discovery League

10:15 – 10:30 **Break**

10:30 – 11:45 Panel Discussion: Roles and Responsibilities

Discuss the contributions, including strengths and weaknesses, of each sector in collection, stewardship, coordination, and governance of Earth observation data and services, within the global context. Consider how the roles and responsibilities may need to evolve to support and strengthen a diverse and interconnected global Earth observation system.

Moderator will present a synthesis of pre-workshop homework in terms of collection, stewardship, coordination, and governance of Earth observations data and services. This will be followed by a panel discussion of experts representing public, private, academic, not-for-profit, and philanthropic sectors. Each panelist will provide opening remarks (up to 3 minutes) on their sector's role, followed by a moderated discussion.

Moderated by: Jay Dickson, Polar Geospatial Center; U. of Minnesota

Panelists:

Stephen Volz, National Oceanic and Atmospheric Administration (*formerly with*)

Robbie Schingler, Planet

Sean Arms, University Corporation for Atmospheric Research

Aaron Addison, World Geospatial Industry Council

Kate Lowry, Science Philanthropy Alliance

Frank Avila, National Geospatial-Intelligence Agency

11:45 – 12:45 LUNCH

12:45 – 2:30 Exploring Governance and Coordination Mechanisms

Explore examples of governance and coordination from both inside and outside the Earth observations landscape. What lessons can be applied towards building a future resilient and globally integrated Earth observation ecosystem?

12:45 – 1:30 Panel Discussion: Lessons Learned from the Outside

Each panelist will provide remarks (up to 7 minutes), followed by moderated discussion.

Moderated by: Jed Sundwall, Radiant Earth

Panelists:

Sandeep Vaheesan, Open Markets Institute

Marc Levinson, Independent Historian, Economist, and Author

John Wilbanks, Datasphere Initiative

1:30 – 2:30 Panel Discussion: Models for Governance and Coordination within the Earth Observation Ecosystem

Each panelist will provide remarks (up to 7 minutes) followed by discussion; including experts from previous discussion focused on examples from outside the Earth observation space.

Moderated by: William D. Collins, Lawrence Berkeley National Laboratory; UC Berkeley

Panelists:

Mark Parsons, Earth Science Information Partners

Ryan Abernathey, Earthmover

Jen Marcus, Taylor Geospatial Engine

Anne Hale-Miglares, Miglares Consulting

Umberto Modigliani, ECMWF

2:30 - 3:00 **BREAK**

3:00 – 4:00 **The Role of Technological Innovation in the Earth Observation Enterprise**

Examine the role of technological innovation in a future resilient and globally integrated Earth observation system. How will technology expand the use of Earth observation data and data services? What is the role of technological innovation in facilitating cross-sector coordination? *Each panelist will provide brief remarks (up to 7 minutes) followed by discussion*

Moderated by: Anna Michalak, Carnegie Institution for Science

Panelists:

Hamed Alemohammad, Clark Center for Geospatial Analytics

Carl Elkin, Google

Tom Hamill, Weather Company

Tom Kralidis, World Meteorological Organization Information System

4:00 – 5:15 **Insights for a Resilient Future Globally-Integrated Earth Observation System**

In person breakout groups focused on merging the lessons learned from the day's discussions to identify key elements of a resilient future globally integrated Earth observation ecosystem. Online participants have the option to contribute thoughts through Slido. *30-min breakout time followed by reports outs from breakout rooms and from Slido.*

Moderated by: Timothy Stryker, U.S. Geological Survey

5:15 – 5:30 **Closing Remarks and Adjourn**

Barbara Ryan, Planning Committee Chair

DECEMBER 3, 2025 (ALL TIMES EDT)

Day 2: Co-Creating Solutions for a Resilient Earth Observation System

Slido link: <https://app.sli.do/event/hXnVS4RdghNvG6na75eCv2>



8:30 – 9:00 **Coffee and Networking** (in person only)

9:00 – 9:30 **A World Café on Building Resilience - Setting the Stage for Collaboration**

- Synthesis of what we learned about the current system and key elements for a resilient future system based on themes and insights from Day 1.
- Introduce the theme for World Café Round 1: What does a resilient globally integrated Earth observation system look like twenty years from now?

Facilitator: Aravind Ravichandran, TerraWatch Space

9:30 – 10:30 **World Café Round 1: What does a resilient globally integrated Earth observation system look like twenty years from now?**

- A. What are the sectoral roles?
- B. How is the governance structured?
- C. What technological enablers are in place?

10:30 – 11:00 **BREAK**

11:00 – 12:00 **World Café Collective Harvest and Synthesis, Round 1**

12:00 – 1:00 **LUNCH**

1:00 – 2:15 **World Café Round 2: Building pathways from A to B**

Exercise to map out long-term, mid-term, and short-term actions to achieve a resilient globally integrated Earth observation system

- A. 20-year horizon
- B. 10-year horizon
- C. 5-year horizon

2:15 – 2:30 **BREAK**

2:30 – 3:30 **World Café Collective Harvest and Synthesis, Round 2**

3:30 – 4:00 **Closing Reflections and Next Steps**

4:00 **Adjourn**