

Event overview

On Friday, December 15, 2023, the [US Group on Earth Observations \(USGEO\)](#) held a Town Hall at the [American Geophysical Union \(AGU\) Annual Meeting](#). The USGEO Town Hall, entitled “Science & Service with the Earth Observations Enterprise”, consisted of two complementary elements – a presentation and an AGU Community Q&A session with a USGEO Panel. The objectives of this 1-hour event were to help the AGU community better understand the diverse activities of the USGEO community across scales and to collect feedback on the AGU community’s concerns and priorities. About 30 participants attended this USGEO Town Hall.

The 30-minute presentation gave an overview of the structure and functioning of USGEO, AmeriGEO, and GEO, and shared key achievements from the past year. Topics presented included:

- USGEO structure, history, objectives, working groups, products.
- National Plan – Principles, Goals, Initiatives, RFI (with QR code to facilitate comment submission).
- Satellite Needs Working Group 4th Round priorities, and results of Rounds 1-3.
- Activities/findings of the 2012, 2016, and 2023 Earth Observation Assessments.
- Status/findings of the Data Management Working Group report on cloud computing and data storage.
- Highlights from AmeriGEO, AmeriGEO Week, GEO, and GEO Week.

The 30-minute Q&A session with the USGEO Panel focused on the needs and concerns of the AGU community; the topics are summarized below, along with key points from the panelists’ responses. A major theme emerging from the discussion was engagement beyond the Federal government, domestically and internationally, within and beyond “traditional” users of EO. USGEO panelist bios are also below, and a recording of the session can be viewed [here](#).

Audience/Panel discussion

Below are the questions discussed during the Town Hall. The USGEO moderator asked the first question, and the audience asked all that followed. Attendees could ask questions either orally or via the Slido app. While all questions asked are included below, there was insufficient time to address some of the questions raised on Slido.

National Plan

- **How is USGEO engaging and incorporating state and local government interests and priorities into the National Plan for Civil Earth Observations and broader USGEO activities?** *Each US Federal agency has a constituency of state and local governments it regularly works with. State, local, and tribal governments are encouraged to contribute through the RFI process. NASA is also leading work in response to the CHIPS and Science act to assess state and indigenous government use of NASA EO data.*
- **How are new technologies like AI considered in the National Plan?** *We didn’t have time to get to this question.*

Earth Observations Assessment

- **How does the Earth Observations Assessment working group identify gaps and prioritize strategies for datasets and observing systems?** *The EOA documents the value that Earth observing systems contribute to broad societal benefit areas, such as climate change or agriculture/forestry. While the EOA process cannot exhaustively document all needs and gaps, it can identify areas where deeper scrutiny might be useful. The first and second EOAs revealed how different EO datasets supported Federal agencies’ activities in the service of the American public. The whole-systems approach helps broaden focus beyond traditional programmatic lines; agency requirements are derived from agency mission needs that are subsets of broader societal benefit areas. The EOA process is a useful complementary activity to the National Plan, which addresses the need for both new and continuing observations through calling for a formal continuity*

framework to assess continuing measurements that must be sustained but are at risk, balanced against future experimental observations that may be needed.

Satellite Needs Working Group

- **Does the Satellite Needs Working Group analyze capabilities across the entire Earth Observations Enterprise, or does it solely concern itself with Federally operated satellites?** *SNWG summarizes the observation/data/information products that Federal agencies report using, both Federal and non-Federal in origin. Results of past surveys have led to changes in what/how the Federal government purchases/license commercial EO data. The SNWG process identifies which critical systems need improvement plans, upgrades, better maintenance, etc. SNWG does not do a gap analysis of needed observations that are not currently collected. The Decadal Survey recommends what new observations need to be collected and informs the EO investments that NASA, NOAA, and USGS decide to make.*
- **Where can one find a report or document that summarizes the findings of previous Satellite Needs Working Group (SNWG) surveys? Is there a summary document showing gaps in science and priorities that industry could review?** *The SNWG has a [website](#) that describes their work and the results of each cycle. The raw results of the survey are not published. Numbers of inputs and summaries of products prioritized as shown in this presentation can be found in the slide deck posted to the library page of the [USGEO website](#).*

Earth Observations Enterprise engagement

- **How can we better engage on Earth observations across the Americas, particularly in countries already having strong EO capabilities, such as Brazil, Argentina, Peru, Mexico, Bolivia, Paraguay, while avoiding duplication and missed opportunities for synergies?** *The Committee on Earth Observation Satellites (CEOS) coordinates satellite assets and data interoperability around the world. All NASA satellites are international partnerships. The CEOS working group for capacity building and data democracy (now led by South Africa and Mexico) encourages full, free, and open data sharing. Many Latin American space agencies are part of AmeriGEO, and some efforts are led independently and are more loosely connected. Argentina's National Space Activities Commission (CONAE) supports capacity building efforts and shares training programs. Brazil's National Institute for Space Research (INPE) has been less actively engaged. The national GEO construct, which AmeriGEO is helping more countries adopt, varies by country and in some, national space agencies play a role in convening all EO-relevant agencies within their country, connect domestically and internationally, and build resilience to change.*
- **How is USGEO expanding the role of Earth observations in agencies that are not traditionally users of Earth observations?** *One example is our continuing engagement with the health/human services community by using Earth observations to help develop geospatial/mapping products that support public health activities. For example, vector-borne disease maps, which consider environmental observations like temperature and precipitation, can help identify and strengthen public messaging about potential disease hotspots. USGEO, AmeriGEO, and GEO are all useful platforms to expand networks with end-user communities. We also invite previously un-connected US departments/agencies like Housing and Urban Development to join USGEO meetings. The approach to date has been ad hoc, and there is interest in taking a more systematic approach moving forward.*
- **What role, if any, is there for commercial satellites to monitoring greenhouse gases like methane?** *We didn't have time to get to this question.*

General

- **How is the Decadal Survey connected to USGEO?** *The Decadal Survey is one of many sources of input for the US National Plan for Civil Earth Observations. The two documents differ in the author teams, the topics addressed, and the communities surveyed. The National Academies of Science,*

Engineering, and Mathematics conducts the Decadal Survey on behalf of NASA Earth Science, NOAA, and USGS to document and summarize the scientific research and application needs of the broader scientific community on what primary activities these agencies should pursue in the coming decade, which the agencies then use to inform their individual strategic planning activities. The National Plan, drafted by USGEO, represents the views of the approximately one dozen Federal agencies who are members of USGEO on what they see as broader needs and priorities, ranging from research through to policy issues, workforce concerns, etc., and the public RFI process allows for input from a broader community beyond academia (e.g. the private sector, non-profits, state/local/tribal governments, etc.). In short, the two documents, and the processes to create them, are complementary.

- **Has the pandemic shifted (or perhaps delayed or accelerated) the trajectory of the Earth Observation Enterprise since the last National Plan? If so, how? We didn't have time to get to this question.**

Bios

Mr. Lawrence Friedl (presenter and panelist) serves as the Senior Engagement Officer in the Earth Science Division at NASA Headquarters, enabling partnerships with philanthropies, foundations, companies, and nonprofit organizations. He serves as a Co-Chair of the interagency U.S. Group on Earth Observations (USGEO) and represents the United States on the global Group on Earth Observations (GEO).

Dr. Barbara Ransom (panelist) is a Program Director in the Office of the Assistant Director of the Directorate for Geosciences at the National Science Foundation (NSF). She is the past NSF Principal for USGEO, leads the Geoinnovation Hub in the NSF Directorate for Geosciences, and supports activities in the innovation space and the development of public-private partnerships.

Dr. Helena Chapman (panelist) is the Associate Program Manager for Health and Air Quality Applications at NASA Headquarters, where she manages related NASA-funded projects and program activities. She also serves as Executive Coordinator of the GEO Health Community of Practice and GEO Earth Observations for Health (EO4Health) Initiative.

Ms. Meredith Wagner (panelist) leads the Technology, Planning and Integration for Observations group at the National Oceanic and Atmospheric Administration (NOAA). Within USGEO, she co-leads the Earth Observation Assessment, which seeks to better understand Federal EO data usage and gaps to inform future investments.

Dr. Nancy Searby (panelist) is the Capacity Building Program Manager for NASA's Earth Action Program at NASA Headquarters. She champions applying Earth science data to improve society, building individual and institutional capacity both domestically and internationally, and is actively involved with AmeriGEO.

Mr. Tim Stryker (panelist) is Chief of the Outreach and Collaboration Branch of the U.S. Geological Survey (USGS) National Land Imaging Program. He works closely with internal and external stakeholders to advance the societal benefit of space-based and airborne land imaging systems. He is a former Executive Director of USGEO.

Dr. Pamela Collins (facilitator) is the Senior Advisor for Interagency & International Affairs in the Earth Science Division at NASA Headquarters. She supports coordination of NASA's engagement with the global Group on Earth Observations (GEO) and USGEO.

