

United States Group on Earth Observations Committee on Environment National Science and Technology Council

2023 Annual Report



INTRODUCTION

The United States Group on Earth Observations (USGEO) coordinates federal Earth observation activities in cooperation with domestic stakeholders, fosters improved Earth system data management and interoperability, identifies high-priority needs and uses for Earth observation data, and engages stakeholders to formulate the nation's positions for the international Group on Earth Observations (GEO).

USGEO serves as the formal interagency mechanism for determining and coordinating policy and decisions to ensure United States (U.S.) global leadership in Earth observation (EO) activities, operations, research, and connections with the Earth Observations Enterprise (EOE).

Fifteen departments and agencies are members of USGEO, along with three components of the Executive Office of the President (the Office of Science and Technology Policy [OSTP], Office of Management and Budget [OMB], and Council on Environmental Quality [CEQ]). USGEO is chaired by OSTP and three agencies – the National Aeronautics and Space Administration (NASA), National Oceanic and Atmospheric Administration (NOAA), and United States Geological Survey (USGS).

USGEO maintains four standing working groups:

Assessment Working Group: Conducts assessments of civil Earth observing systems to assist USGEO's efforts to coordinate, plan, and enhance federal Earth observation activities.

Data Management Working Group: Fosters the implementation of an interagency framework for life cycle data management, stewardship, and preservation for Earth observation data. Strengthens interagency access and sharing of Earth observation data to extend and maximize agency investments in data management and stewardship.

Satellite Needs Working Group: Conducts biennial collections of multi-agency satellite observation needs for NASA to consider as part of its satellite systems engineering and budgeting processes.

International Activities Working Group: Coordinates U.S. participation in international Earth observation activities, tracks U.S. activities related to GEO and the GEO Work Programme, and prepares U.S. personnel and positions for GEO meetings and events.

USGEO stands up ad hoc task teams for focused, time-bound activities.

This document highlights activities and outcomes directly attributable to USGEO or strongly supported by individuals engaged with USGEO. It includes information about events, reports and documents, seminars, and additional activities conducted throughout calendar year 2023.

USGEO is extremely grateful to Dr. Ezinne Uzo-Okoro for her service and leadership as the OSTP Co-Chair for USGEO (July 2021 – December 2023). In addition, USGEO is deeply appreciative to Dr. Barbara Ransom for her active role as the National Science Foundation Principal to USGEO (November 2018 – November 2023). USGEO benefitted greatly from their strong engagement and contributions.

HIGHLIGHTS FROM 2023

2023 was a productive year for USGEO. All USGEO components were active and achieved significant advancements to further Earth observations.

National Plan for Civil Earth Observations

Throughout the year, USGEO prioritized the scoping, development, and preparation for public review of the next National Plan for Civil Earth Observations. This document, which is planned for release in 2024, highlights opportunities across the EOE to advance Earth observations and enable data collection, distribution, and use. The draft released for public comment contained three thematic goals (Climate Change, Environment, and Human Health) and a set of six initiatives, including one or more actions for each goal and initiative.

Earth Observations Assessment

USGEO completed the agency information elicitation processes and data analyses for the two Societal Benefit Areas (SBAs) designated for this cycle: Climate and Agriculture/Forestry (including wildland fires). This effort included developing summary reports for both areas and a document articulating the methods used in the data collection and analysis for both SBAs. USGEO also began developing a concept for posting results of previous cycles EOA on the USGEO website.

Satellite Needs

USGEO completed the fourth cycle of its Satellite Needs Process, continuing this productive endeavor to review agency needs for satellite data and identify which can be satisfied via current activities, planned activities, or new investments. Six priority solutions spanning land, atmosphere, and ocean needs were identified in this cycle. Specific solutions for implementation will be determined based on budget appropriations for fiscal year 2024.

2023 GEO Week

A strong U.S. delegation supported the annual gathering of the Group on Earth Observations (GEO). Held in Cape Town, South Africa, the 2023 GEO Week included the GEO Plenary, Ministerial Summit, side events, and an awards ceremony. Key outcomes of the week included adoption of the 2023 Cape Town Ministerial Declaration and the Post-2025 GEO Strategy, entitled "Earth Intelligence for All". USGEO representatives played key roles in the planning and execution of the week's activities and the development and discussion of many of the documents and declarations that were reviewed and adopted.

AmeriGEO Week

USGEO led U.S. participation in this annual event, which focused this year on "Data-Driven Solutions for a Sustainable Planet." Held in August 2023 in San Jose, Costa Rica, the meeting focused on the needs of new participants and provided extensive training opportunities addressing topics including heat, public health, disasters, greenhouse gases, and biodiversity.

Enterprise Engagement

USGEO continued its engagement with the EOE via organized events at major scientific and technical meetings. USGEO organized a panel discussion at the American Meteorological Society annual meeting. USGEO representatives engaged with the EOE at the Earth Science Information Partners summer meeting. USGEO summarized its progress and fielded community questions at a town hall at the American Geophysical Union (AGU) fall meeting.

PRIMARY USGEO ACTIVITIES

USGEO enables domestic and international collaboration and coordination regarding the collection, sharing, prioritization, analysis, and use of Earth observations. Spanning these endeavors, USGEO engages with organizations across the multi-sector EOE. USGEO's primary activities in 2023 are summarized below.

National Plan for Civil Earth Observations

USGEO focused extensively on the development of the next National Plan for Civil Earth Observations (National Plan) for a planned release in 2024. The following three principles guided the development of the draft National Plan:

- Improve the integration of Earth observing services across Federal agencies and the broader EOE
- Ensure integrity of EO data across the EOE
- Ensure the continued availability of foundational U.S. Government capabilities in atmosphere, land, ice, and ocean EO, while expanding the use of commercial data and services

Following USGEO leadership's scoping of the document's objectives, purpose, and structure, four interagency writing teams, involving approximately 40 subject matter experts, drafted input on three thematic areas (climate, environment, and human health) and crosscutting issues. These materials provided the basis for three goals, a set of eight initiatives, and one or more actions for each goal and initiative—all of which were documented in the plan. In November, USGEO released a draft National Plan for public comment via a formal Request for Information (RFI) in the Federal Register; the public comment period lasted into January 2024. During the review process, USGEO members made extensive efforts to broaden awareness of the plan across the EOE to solicit reviews and encourage comments.

Assessments of all Earth observations

USGEO focused on assessments for two Societal Benefit Areas (SBAs) – Climate and Agriculture/Forestry (including wildland fires). In 2023, USGEO completed the agency information elicitation processes and data analyses and began writing summary reports for both SBAs along with a document articulating the methods used in the data collection and analysis for both SBAs.

During the process, USGEO identified that the Climate assessment required an extensive reworking of the value tree from the 2016 assessment, which focused on climate monitoring and research. Consequently, USGEO expanded the Climate assessment to include operational climate services. When completed, these two SBA assessments will provide quantified insights on the utility that specific observing systems deliver across federal agencies. The information will also inform agency budget and planning processes related to Earth observation systems. Release of these SBA assessments is expected in 2024.

In 2023, USGEO initiated plans for a sustained EO assessment approach and articulated a specific initiative regarding EO assessments in the draft National Plan released for public comment in November 2023. USGEO also began developing a concept for posting results of previous EO assessment cycles on the USGEO website.

Identification of satellite-based Earth observation needs

USGEO completed the fourth round of its Satellite Needs Process, building on the USGEO Satellite Needs Working Group (SNWG) collection of surveys about civilian agency needs for satellite Earth observation data and information products. Through a coordinated multi-agency assessment led by NASA, subject matter experts from NASA, NOAA, and USGS reviewed the 117 surveys submitted this cycle to determine how the identified needs could be met via current activities, planned activities, or new investments. NSF also reviewed the surveys, matching them to various science themes and subtopics and rating the NSF community's level of interest in those themes/subtopics; NSF provided those ratings to NASA to augment the assessment. Based on the analysis of the survey findings, the following emerged as priority solutions and were proposed to the Office of Management and Budget in 2023:

- 1. Vertical Land Motion Product (observations of land and coastal subsidence)
- 2. Low-latency Harmonized Landsat Sentinel-2 (HLS) Products (observations of land use / land cover)
- 3. Tropospheric Emissions: Monitoring Pollution (TEMPO) Near Real-Time SO, SO₂, and Enhanced Products (observations air quality aerosols, particulates)
- 4. Applied Remote Sensing Training (ARSET) (online courses to help agencies make better use of existing data)
- 5. Multi-Sensor Ocean Surface Winds Product
- 6. Algal Bloom Hotspot Advisory Product

The specific solutions NASA will implement to meet the needs identified by all surveyed federal agencies will be determined based on available funding and budget appropriations for Fiscal Year 2024.

In addition, NASA assessed ways to use commercial satellite data to meet needs from the Satellite Needs process (e.g., implementing a tiered End Users License Agreement (EULA) to enable wider dissemination of data for scientific use across government agencies).

Data and information management

In 2023, the USGEO Data Management Working Group focused on data management in cloud environments. One of the year's highlights was a virtual workshop in July to discuss issues related to acquisition, management, and use of commercial Earth observation data and leveraging private sector cloud data storage and computing resources. A particular focus of the meeting was to review a draft of the working group's report "Recommendations and Future Challenges for Earth Observation Data Management in the Cloud". Due for release in 2024, this report identifies best practices to archive, steward, analyze, and disseminate data in the cloud framework; addresses approaches for cost management; and documents remaining challenges.

Value of Earth Observations

USGEO continued to advance activities recommended in the 2019 National Plan to articulate the value of Earth observations. In particular, USGEO members NASA, NOAA, and USGS sponsored the Collaborative Network for Valuing Earth Information (CONVEI). This multi-year consortium, led by the World Wildlife Fund, launched its efforts to expand methods to evaluate the social and economic benefits of EO and also increase the number of use cases applying the methods and describing the benefits of Earth science information to society. CONVEI is also building a community of Earth scientists and social scientists to collaborate on connecting Earth science with social and economic sciences.

USGEO representatives organized and contributed to sessions on the socioeconomic benefits of EO at the annual gathering of the Group on Earth Observations (GEO Week) and at other conferences. The session at GEO Week highlighted the need for accessible techniques for initiating valuation approaches, enhanced communication and investments, and attention to gaps for incorporating valuation activities within the GEO Work Programme. In addition, USGEO representatives worked with the international GEOValue community to finalize the development phase of the GEOValue Societal Benefits Repository. This repository now includes over 275 entries showcasing the diverse benefits of EO data across sectors and makes EO valuation resources more accessible for decision-makers and researchers globally.

Earth Observations Enterprise engagement

USGEO continued its engagement with the EOE via organized events at major technical and scientific meetings. In January, USGEO organized a panel discussion at the 2023 American Meteorological Society (AMS) annual meeting in Denver. This panel was entitled "Reflecting on Two Decades of Earth Observation Advancements: Informing the Future of Civil Earth Observations for the U.S. Weather, Water and Climate Enterprise". This panel addressed user perspectives on commercial EO data, including its roles in open science, operational monitoring of climate, and informing diplomacy. In addition, the panel addressed the integration of commercial EO data into modelling for both scientific and commercial activities, as well as the trend of expanding the role of commercial entities from EO data provision towards provision of products and services.

In July, USGEO representatives engaged with the EOE at the Earth Science Information Partners annual meeting in Burlington, Vermont. In December, USGEO organized a town hall at the American Geophysical Union annual meeting in San Francisco, California. At this event USGEO provided an update on the activities it conducted in 2023 and plans for the coming years. In particular, USGEO representatives shared information about the draft National Plan in an effort to encourage the public to participate in the review process, presented results from AmeriGEO Week and GEO Week and its Ministerial Summit (described below), summarized the status of the Earth observations assessment, and shared results of the fourth round of the Satellite Needs process. This town hall event at AGU included significant time for audience questions.¹ In addition, online introductory briefings held in May familiarized United States Agency for International Development (USAID) Bureaus and Missions around the world with the nature, needs, and offerings of USGEO, AmeriGEO, and GEO programs. USGEO conducted numerous other international engagement activities (see International Leadership section below).

As mentioned above, USGEO members devoted special attention to broadening awareness across the EOE about the draft National Plan in an effort to solicit reviews and encourage comments from multiple sectors within the enterprise. In addition, USGEO began efforts to significantly update the USGEO website. Changes identified include updates to the overall page structure and the documents library, development of a new section to present more detailed results from past rounds of the Earth Observations Assessment, and changes to ensure compliance with administration security requirements. These website updates are expected to occur in 2024.

International leadership

USGEO and its constituent agency representatives continued their long history of providing executivelevel leadership and strategic, managerial, and technical support to GEO and GEO-related bodies and activities. This year was especially active. Key events and activities in 2023 included the following:

AmeriGEO Week 2023

USGEO led U.S. participation in the 2023 AmeriGEO Week in August in San Jose, Costa Rica. Hosted by the Ministry of Environment and Energy (MINAE), this event focused on the theme "Data-Driven Solutions for a Sustainable Planet." Over 230 people participated in person and over 400 joined virtually, representing 45 countries across the Americas and five continents. Notably, 78% of the attendees had never attended an AmeriGEO Week before. More than 20 capacity-building sessions offered direct training on using Earth observations and other geospatial data to evaluate disaster risks, model hydrological and flood scenarios, monitor greenhouse gas emissions, and track vector-borne diseases. The week's activities continued to build and strengthen regional relationships and capacity. AmeriGEO Week 2023 marked the formal

¹ The library page of the USGEO website (<u>usgeo.gov</u>) provides materials from the USGEO Town Hall at AGU.

accession of Trinidad and Tobago as a GEO members as well as the selection of Paraguay, Peru, and U.S. as the Americas Caucus Co-chairs.

GEO Leadership

The U.S. continued its role as a Co-Chair for the GEO Executive Committee (ExCom) and supported numerous ExCom meetings throughout the year. Key focal activities the US supported included overseeing development of the GEO Post-2025 Strategy, the GEO Secretariat Concept of Operations, and alternative potential communications strategies.

USGEO representatives played leadership roles in the GEO Programme Board, which provides oversight of the GEO work programme and its deliverables to the GEO community. Justyna Nicinska (NOAA) served as the U.S. lead to the Programme Board and Michael Crino (USAID) served as alternate. At the end of the 2023, Nicinska was nominated to serve as a Programme Board Co-Chair in the 2024. In addition, Virginia Burkett (USGS) served on the Equality, Diversity, and Inclusion (EDI) Subgroup of the Programme Board, which focuses on implementation of the recently adopted EDI principles within GEO.

Numerous U.S. representatives served active roles in GEO Working Groups:

- Katy Matthews (NOAA) Co-Chaired the Post-2025 Strategy Working Group (see GEO Post-2025 Strategy section below)
- Nancy Searby (NASA) and Allison Craddock (IAG) served as Co-Chairs of the Capacity Development Working Group
- Lawrence Friedl (NASA) served on the ExCom Budget Working Group
- David Borges (NASA) and Allison Craddock (IAG) served on the Disasters Working Group
- Virginia Burkett (USGS) Co-Chaired the Climate Change Working Group
- Lawrence Friedl (NASA) and Pam Collins (NASA) led the ad hoc 2023 Ministerial Working Group (see Ministerial Working Group section below)

U.S. representatives continued to serve in leadership roles and make major contributions to numerous activities in the GEO Work Programme, including the GEO Biodiversity Observation Network (GEO BON), GEO Global Agricultural Monitoring (GEOGLAM), GEO AquaWatch, GEO Global Water Sustainability (GEOGLOWS), and Earth Observations for the Sustainable Development Goals (EO4SDG).²

GEO Post-2025 Strategy

Led by Katy Matthews (NOAA), U.S. representatives actively participated in the development of the GEO Post-2025 Strategy entitled "Earth Intelligence for All."³. This document established a new direction for GEO by introducing the concept of Earth Intelligence; articulating GEO's refined vision, mission, and goals; expressing GEO's strengths and value proposition; and emphasizing updates to GEO's operating model.⁴ By adopting this strategy, GEO reaffirmed its commitment to full and open access to Earth observations, data and knowledge sharing, and the co-development of services.

GEO Symposium and Open Data & Open Knowledge Workshop

In June, a strong USGEO delegation attended the annual GEO Symposium hosted by the GEO Secretariat in Geneva, Switzerland. This event supported the collection of input for the finalization of the Post-2025

² Detailed information can be found on the GEO website and in the 2023 Work Programme Report.

³ The GEO Post-2025 Strategy is available <u>here</u>.

⁴ Earth Intelligence comprises integrated knowledge and insights derived from Earth and social science that inform strategic decisions, build capacities, and empower society to address environmental, societal, and economic challenges.

Strategy, and it provided an opportunity for workshop participants and members of Work Programme elements to develop new collaborative ideas to inform the next GEO Work Programme.

During the same week, GEO held an Open Data & Open Knowledge (ODOK) Workshop.⁵ Organized by the GEO Data Working Group, the Global Earth Observation System of Systems (GEOSS) platform team, and GEO Knowledge Hub team, the ODOK workshop focused on supporting open knowledge practices within the GEO Work Programme elements. The workshop included practical demonstrations, and participants discussed topics such as open in situ data, capacity development, open data licensing, and open data cubes.⁶

Ministerial Working Group

The U.S. was actively involved in planning the 2023 GEO Ministerial Summit in Cape Town, South Africa. Lawrence Friedl (NASA) and Pam Collins (NASA) represented the U.S. on the GEO Ministerial Working Group (MinWG) that planned the Summit, with Friedl serving as one of three elected Co-Chairs for the MinWG. Friedl and Collins played a very active role in guiding the MinWG and working with the GEO Secretariat to plan the Summit, create the Ministerial Package (collection of key documents for advance review by ministers), and produce the 2023 Cape Town Ministerial Declaration (see 2023 Cape Town Ministerial Declaration section below). They contributed to shaping the agenda and objectives of the GEO Week Plenary as well.

GEO Week Plenary and Ministerial Summit

The U.S. had strong, multi-sector representation at the 2023 GEO Week and Ministerial Summit held November 6-10 in Cape Town, South Africa. NOAA Administrator Richard Spinrad led the U.S. delegation along with USGS Director David Applegate as Alternate Principal. Assistant Secretary of Interior for Insular and International Affairs Ambassador Carman Cantor provided additional senior-level leadership. Representatives from multiple USGEO member agencies attended the GEO Week events, including NASA, NOAA, USAID, and USGS. U.S. representatives contributed significantly to the planning and execution of GEO Week and the Ministerial Summit and made numerous presentations at events throughout the week. Major results and outcomes from the week included⁷:

- Adoption of the 2023 Cape Town Ministerial Declaration •
- Adoption of the Post-2025 GEO Strategy
- Launch of the new GEO website
- Introduction of the Global Ecosystems Atlas and the Global Heat Resilience Service
- First-ever Youth Declaration at the Ministerial Summit

2023 Cape Town Ministerial Declaration

The Ministerial Declaration featured a notably positive tone and accentuated future GEO commitments. As adopted at the November 10th Ministerial Summit, the Declaration endorsed the concept of Earth intelligence, echoed key tenets of the GEO Post-2025 Strategy, recognized growing EO capabilities in multiple sectors, reaffirmed the integral role of young people in sustainability, integrated aspects of diversity and inclusivity throughout, and emphasized that the benefits of EO must be realized at all levels of society. A jubilant standing ovation followed the unanimous adoption of the Declaration by the ministers and ministerial representatives in attendance.

⁵ In 2021, the GEO Plenary adopted the GEO Statement on Open Knowledge.

⁶ More information is available at: <u>https://earthobservations.org/events/open-data-open-knowledge-workshop</u>

⁷ A summary of the 2023 GEO Week is available at <u>https://enb.iisd.org/geo-week-2023</u>.

U.S. Exhibit

The U.S. Jazz Observatory served as the theme of the U.S. exhibit in the GEO Week exhibition hall, showcasing U.S. expertise with Earth observations as well as U.S. leadership in the EO community and domestic and international partnerships, activities, and successes. NASA sponsored the design of the exhibit and multiple agencies provided content and stories featuring both public and private sector accomplishments. Printed and digital displays and handouts used musically themed written and visual narratives to creatively tell the story of over three dozen impactful research and implementation activities both within the U.S. and around the world. The exhibit space also served as a valuable home base for the U.S. delegation and a site for meetings with international partners.

GEO Incubators

The United States provided technical assistance in the development of two incubator concepts that will serve as initial offerings of the GEO Earth Intelligence for All initiative: the Global Ecosystem Atlas and the Global Heat Resilience Service. Both of these products aim to provide countries with tools to help build resilience domestically and meet the objectives of multilateral environmental agreements globally.

Global Ecosystems Atlas

The U.S. provided conceptual and technical leadership on the design of the Global Ecosystems Atlas project. U.S. support included authoring the original concept document, attending and helping shape the discussions at working meetings, reviewing important framing documents and workplans, serving on the Science Advisory Group, and ensuring sharing of the latest progress updates at the AmeriGEO and GEO annual meetings and on the Atlas webpage. Roger Sayre (USGS) provided key guidance and crucial contributions throughout this process. These activities ensured the development of a strong and enthusiastic Atlas project coalition with clear objectives and plans, which enabled GEO to make the case for and obtain seed funding to officially launch the effort. The long-term goals of the Atlas project are to gather and synthesize all existing ecosystem maps into a comprehensive nested categorical framework, use that framework to develop an open, standardized mapping protocol, consistent and intercomparable across scales and geographies, for the International Union for Conservation of Nature (IUCN) Global Ecosystem Typology, and then generate global and regional IUCN ecosystem maps. This effort will support enhancement of national ecosystem mapping capacity, and ultimately enable better ecosystem conservation, management, and sustainable use to slow biodiversity loss.

Global Heat Resilience Service

Aligned with the new GEO Strategy and as part of the global Early Warnings for All initiative, GEO initiated the Global Heat Resilience Service (GHRS). The GHRS concept is based on the U.S. National Integrated Heat Health Information System (NIHHIS) and was initially designed by GEO, the World Meteorological Organization (WMO), and NIHHIS. The GHRS builds on the capacity of the GEO Health Community of Practice Heat Small Group and the WMO-led Global Heat Health Information Network. The GHRS will provide essential, city-specific information to help improve public health, the economy, and urban development in response to extreme heat, now and in the future. Using a mix of spatial and non-spatial data sources, including satellite observations, field measurements, and local surveys, the service will help cities to better understand and prepare for heat-related risks. GHRS will focus initially on pilot projects in up to ten regionally diverse cities. Juli Trtanj (NOAA) is especially active with this incubator and is leading and overseeing U.S. contributions to this GEO Incubator.

Initiative for Enhancing Capacity for Climate Risk Assessment and Catalyzing Partnerships to Inform Decisions in Latin America and the Caribbean (LACI)

USGEO collaborated with AmeriGEO and the United States Global Change Research Program (USGCRP) throughout the year on capacity development for climate risk assessment across Latin America and the Caribbean. USGEO helped identify and notify potential applicants about calls for proposals for USGCRP-led capacity building activities and supported the award selection process to represent diverse geographies and themes. In partnership with AmeriGEO and USGCRP, LACI announced four pilot activities at the Sustainability Research and Innovation Congress in the Republic of Panama in June. LACI representatives also gave a keynote presentation about the partnership at the United Nations Framework Convention on Climate Change (UNFCCC) National Adaptation Plan (NAP) Expo in Santiago, Chile in March.

Notable International Activities

- Representatives from NASA and USGS met with representatives from El Salvador and Chile at the National Adaptation Plan Expo in March in Santiago, Chile to discuss best practices for conducting national climate assessments. This led to improved understanding of each nation's respective approaches.
- In August, federal agency personnel from across the USGEO community convened at NASA Headquarters in Washington, DC for the annual USGEO International Engagement Workshop. The event focused on the GEO Post-2025 Strategy, the future of the GEO Work Programme, and GEO's EO data architecture/infrastructure. A presentation summarized the 2023 Ministerial Declaration, and participants shared their progress on GEO Work Programme initiatives and working group activities.
- USGEO contributed to sponsorship of the GEO Indigenous Alliance 2023 Water Summit in October in partnership with the GEO AquaWatch Initiative. This virtual event brought together Indigenous leaders, NGOs, Indigenous youth, academia, and United Nations (UN) institutes to discuss Indigenous-led innovations in Earth observations, with a focus on water conservation and sustainability. In alignment with the United Nations' Declaration of 2023 as the Year of Water, the Summit highlighted the role of Indigenous Earth observation innovations that address water issues.
- As part of LACI, USGEO and USGCRP member agencies jointly hosted a multi-location Partnership Building and Knowledge Exchange event with Amazonian Indigenous leaders in November. This activity helped USGEO and USGCRP member agencies to better understand environmental pressures on Indigenous groups in the Amazon and how EO can further enable Indigenous leaders to protect their lands from illegal activities, such as logging.

LOOKING AHEAD

2024 will provide a significant opportunity for USGEO to advance U.S. leadership in Earth observations and engage the EOE to expand uses of Earth observations to benefit the nation and the world.

A key USGEO objective for 2024 is the completion of the National Plan for Civil Earth Observation (the Plan). In January, USGEO will receive public comments in response to a Request for Information published in December on the draft Plan. USGEO will review the comments and develop a final version of the National Plan for publication. USGEO will then look to engage with the Earth Observations Enterprise to follow through on the activities described in the Plan.

In addition, USGEO will complete its Earth Observations Assessment of the Agriculture & Forestry and the Climate Societal Benefit Areas (SBAs). The Assessment teams will complete their analyses, pinpoint findings, and craft recommendations for final reports, including tables identifying the importance of specific observing systems in supporting each SBA. USGEO will also pursue plans for a sustained process to assess other SBAs as part of a multi-year cycle.

To begin the fifth round of the Satellite Needs Process, USGEO will hold a kick-off meeting and initiate the collection of agency inputs. USGEO plans to open the survey three months earlier than normal to provide more time to analyze inputs and develop solutions that satisfy agency needs. In 2024, USGEO will continue to develop solutions across all rounds, improve methods for evaluating impact, and pursue new co-design/co-production strategies to improve stakeholder engagement. In addition, USGEO expects to release a report on Earth observation data management in the cloud.

In August, Ecuador will host the 2024 AmeriGEO Week in Quito. While the agenda for this event will include many topics related to AmeriGEO, a special focus will be placed on disaster risk reduction. A strong U.S. presence at this event will further advance coordination in the Americas. In September, China will host the GEO Symposium and Open Data & Open Knowledge Workshop in Hangzhou. "From Vision to Action: Crafting GEO's Post 2025 Implementation Plan," is the theme for this event, which will support efforts to transform the GEO Post-2025 Strategy into a detailed Implementation Plan. In addition, U.S. representatives will be very active in supporting the GEO Work Programme elements and development of the GEO incubators "Global Ecosystems Atlas" and "Global Heat Resilience Service".

USGEO will continue its EOE engagement efforts in 2024. For example, in January, USGEO will host a panel discussion at the AMS Annual Meeting in New Orleans, Louisiana. This meeting will focus on the new GEO Strategic Plan and the international Early Warnings for All initiative. USGEO will also make revise its website to enable better organization of and access to reference materials. As always, USGEO will continue to consider and seek to advance equity, diversity, and inclusion (EDI) in all its endeavors and in the communities with which it engages. USGEO plans to sponsor EDI webinars to be held on UN International Women's Day (March 8), UN Indigenous Day (August 9), and UN Youth Day (August 12).

USGEO looks forward to a positive, productive year of advanced generation and use of Earth observations in 2024.