

Statement Template for GEO Week 2022

DUE 14 OCTOBER 2022

Member Government or Participating Organization

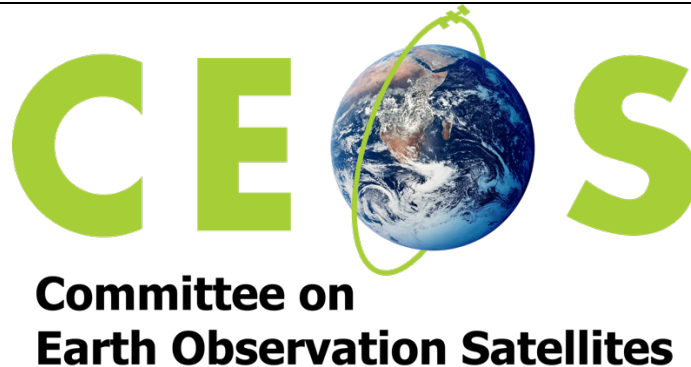
Committee on Earth Observation Satellites (CEOS)

Quote/Testimonial

Please write a short quote below related to an advancement/impact/result from your participation in GEO towards GEO's vision. Please limit the number of words to a minimum.

Paths to Sustainability: from Strategy to Practical Measures

Please insert below an illustration related to the above quote. To make sure the quality of the illustration is sufficient – please use a minimal width of 2000 pixels:



full name, title and organization of the person stating the quote

high quality head shot photo

Dr Selma Cherchali
2022 CEOS Chair
Head of the Earth Observation Department
Strategy Directorate
Centre National d'Études Spatiales (CNES)



Full Statement**Group on Earth Observations – GEO Week 2020****Statement of the Committee on Earth Observation Satellites (CEOS)**

The Committee on Earth Observation Satellites (CEOS) is a Participating Organisation to the Group on Earth Observations (GEO). CEOS was established in 1984 to ensure international coordination of civil space-based Earth observation programmes and to promote exchange of data to optimise societal benefit and inform decision making for a prosperous and sustainable future for humankind. For well over three decades, CEOS, which today consists of 34 Members and 29 Associates, substantively advances space-based Earth observation endeavours that no one country can do alone. As the challenges affecting the planet become more pronounced, more frequent, and more acute, this international cooperation continues to elevate societal benefit at multiple scales in support of the Sendai Framework for Disaster Risk Reduction, the 2030 Agenda for Sustainable Development, and the 2015 Paris Agreement, in line with the Space 2030 Agenda and its overarching objectives. GEO is a key partner for CEOS in addressing these important global agendas. As the “space arm” of GEO, CEOS influences and supports the space segment through active collaboration across the GEO Work Programme.

The CEOS Chair, who for 2022 is the Centre National d'Études Spatiales (CNES, France), presented priorities for this year under the banner “Paths to Sustainability: from Strategy to Practical measures”, with an emphasis on the transition of R&D and demonstration activities to applications and services. This issue is at the core of the relationship between CEOS and GEO, that key stakeholders should be engaged through the GEO mechanisms with the goal of establishing operational services. The Recovery Observatory (RO) and the Space for Climate Observatory (SCO) initiatives are prime candidates.

CEOS has recently mounted a major effort to support the United Nations Framework Convention on Climate Change (UNFCCC)'s Global Stocktake (GST) process. CEOS Members and Associates recognise the value and critical role of satellite Earth observation to track progress toward the achievement of Nationally Determined Contributions (NDCs) and for stocktaking. CEOS is investing significant time and expertise to define the strategic contribution of satellite Earth observation in the GST process and, within the broader context of the comprehensive *CEOS Strategy for Carbon Observations from Space*, CEOS is advancing multi-year efforts to better constrain the natural background carbon fluxes and to ensure that space-based observations are an integral and facilitating contribution to the GST process. A portal of relevant datasets has been compiled and can be found at <https://ceos.org/gst>.

Since 2014, CEOS has been developing a Recovery Observatory (RO) to increase the contribution and impact of satellite data to recovery efforts after major disaster in response to the Sendai “Build Back Better” recommendation. Beginning in 2020, a series of Recovery Observatory demonstrators were deployed to provide comprehensive geospatial coverage to support damage assessment and early planning for recovery frameworks. Recognition of these CEOS advances by

the UN General Assembly in the Space 2030 Agenda (November 2021) provided further impetus for action to implement sustainable Recovery Observatory activities.

CEOS Members and Associates continue to advance systematic observation of the Earth's climate system, now over several decades, amplifying scientific knowledge and understanding of the Earth as an integrated system. Through international cooperation, CEOS is proactively generating datasets and products on the Earth's changing climate, thereby sustaining provision of knowledge-based information to climate services and supporting informed decision making worldwide and on a sustained basis. CEOS Agencies are doing this by implementing the *Strategy Towards an Architecture for Climate Monitoring from Space*, which was developed in 2013. This climate science milestone involves the identification of existing and potential future gaps in the provision of the climate data requested by the UN's Global Climate Observing System Programme (GCOS). The Space for Climate Observatory (SCO) is yet another example. Its main goal is to study and monitor the impacts of climate change at local scales and to provide tools for decision-making on preparedness, adaptation, and resilience to climate change and its impacts through yearly selected short-term projects.

A key priority for CEOS across all its work is the provision of satellite Earth observation data that is free, open, and easily accessible to user communities worldwide. To promote broad utilisation of space-based data, development, and production of CEOS Analysis Ready Data (CEOS-ARD) products is an ongoing priority activity. CEOS-ARD are satellite data that have been processed to a minimum set of requirements and organised into a form that allows immediate analysis with a minimum of additional user effort and interoperability both through time and with other datasets.

CEOS Members and Associates remain dedicated to building capacity for the utilisation of space-based Earth observation data. The CEOS Work Plan spans the full range of the Earth observation data information life cycle, from the requirements and metadata definition for the initial ingestion of calibrated and validated satellite data into archives, through to the incorporation of derived and fully traceable information into end-user applications. To promote the use and application of these extensive data resources, a network of networks, known as the Earth Observation Training, Education, and Capacity Development Network (EOTEC DevNet) was initiated by CEOS in 2021 and includes representatives from the GEO Capacity Development Working Group (CD-WG). EOTEC DevNet is initially focused on fostering coordination among the leading providers of Earth observation-related capacity building to make it more accessible and relevant, ultimately increasing the use of Earth information in decision-making for climate change, disaster management and sustainable development.

CEOS is pleased to have a close and mutual partnership with GEO. With GEO now discussing a vision that looks beyond 2025, CEOS stands ready to support GEO members by agreeing common goals, priorities, and objectives as CEOS resources allow. Our leadership succession in December 2022 will transition the CEOS Chair from the Centre National d'Études Spatiales (CNES) of France to the Geo-Informatics and Space Technology Development Agency (GISTDA) of Thailand as the 2023 CEOS Chair. With this transition, CEOS looks forward to maintaining its support to GEO as we move from the 2022 priorities that encompass "Paths to Sustainability: from Strategy to Practical

Measures”, to a set of priorities in 2023 that will focus on “Space Technology for Better Environment, Economy, and Humanity”.