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| **Member Government or Participating Organization** |
| **Committee on Earth Observation Satellites (CEOS)** |

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| **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, recognizes the exceptional challenges that a world under COVID-19 has created for the Group on Earth Observations (GEO) and for cooperation across the broader international Earth observation community. We are committed to overcoming these challenges and furthering GEO’s mission in these challenging times.  CEOS coordinates its sixty-one Member and Associate Agencies in fulfilling its role as the space-based component of the GEO. We do this through ongoing coordination of the investments of CEOS Agencies in developing and sustaining the space segment of the Global Earth Observation System of Systems (GEOSS). We are deeply committed to GEO, and this is reflected in the scale and scope of CEOS Agency resources allocated on a best efforts basis to support many of the activities in the 2020-2022 GEO Work Programme.  CEOS is incredibly fortunate to have a close and open partnership with GEO. Our two organizations hold annual bilateral meetings, which provide the opportunity for CEOS and GEO leadership to interact and exchange information and views on strategic and working level engagement. This helps ensure that GEO and CEOS goals, priorities, and objectives are aligned and that synergies are optimized.  Three of our four continuing CEOS priorities (agreed to in 2015) map to GEO’s three Engagement Priorities. Our fourth priority is to ensure that space-based Earth observations support the success of the next decade of GEO, and that we enhance our engagement in GEO governance and leadership. On this latter point, during 2020, we have continued our full support for the GEO Programme Board and we have also served as a Participating Organization observer to the GEO Executive Committee. In turn, we rely on GEO to engage and connect its Members, Participating Organizations, and external users to encourage and support the full use of satellite data.  **Highlighted Activities**  For GEO Week 2020, we highlight some specific initiatives and priorities we are progressing in support of GEO:   * We are undertaking analysis and coordination of satellite data supply to support four specific indicators in support of the 2030 Agenda for Sustainable Development (the SDGs). * We are planning a *CEOS Agriculture, Forestry and Other Land Uses Roadmap* - to identify opportunities for using EO data to quantify the extent and dynamics of land activities and impacts at the global level and at national levels, in support of the Global Stocktake of the Paris Climate agreement. * We are developing a *CEOS Coastal Observations and Applications Strategy*, to support greater use of Earth observations in our costal zones where we see challenges including increasing populations and high exposure to natural hazards. * We are continuing our strong engagement in the area of disaster risk reduction with support to the Geohazards Supersites and Natural Laboratories Initiative, GEO Data Access for Risk Management Initiative, and more recently have developed a global flood risk modeling strategy. * We are implementing our *CEOS Analysis Ready Data (ARD) Strategy* to lower technical barriers to use of satellite Earth observation data, including through exploration of opportunities to expand the ARD concept beyond land. * We are working to incorporate ARD and Data Cube technology in support of the recently established Open Earth Alliance Community Activity.   **GEO Engagement Priority: Sustainable Development Goals Agenda**  We align our engagement with the SDGs mostly through GEO, benefiting from and leveraging GEO’s unique “convening power”. GEO provides a single internationally coordinated framework, entry point, and consistent communication vehicle to stakeholders for connecting with the EO community, and particularly with promoting the value of EO satellite data in national SDG reporting to the United Nations (UN) and countries’ own national development agendas. After consultation with stakeholders, including with GEO, we recently streamlined our activities to focus on the unique role that CEOS plays.  In 2020, we established four sub-teams within our Ad Hoc Team on Sustainable Development Goals to focus on water-related ecosystems, sustainable urbanization, coastal pollution, and land degradation. These four indicators are most ready to integrate Earth observations but there remain some methodological and data availability issues we continue to work on. We will continue to assist countries, GEO and other stakeholders in providing relevant and updated information on satellite data in this process.  The SDGs are, of course, not only about tracking indicators, but also about delivering impact. Accordingly, we are pleased to hear about successful case studies of GEO using Earth observation data to stimulate regional satellite data uptake in Africa, Southeast Asia and the Pacific Islands to improve livelihoods in these regions.  **GEO Engagement Priority: Climate Change and Paris Agreement**  We are continuing our significant support for this engagement priority, including through ongoing provision of observations to support the effective monitoring and management of the world’s forested regions and estimation of biomass. We are coordinating the implementation of *the CEOS Strategy for Space Data for GFOI,* ensuring provision of satellite observations in support of the development of national forest monitoring and measurement, reporting, and verification (MRV) systems. This strategy will evolve to reflect changes in relevant CEOS Agency mission plans, and in particular to include coordination of the missions contributing to estimation of above-ground biomass.  We have also recently developed a *CEOS Biomass Validation Protocol*, that is currently under review*.* This protocol will help ensure that data from a range of Agency missions targeting measurements of above ground biomass can be as policy relevant as quickly as possible. The most benefit from this protocol will be realized if/when a comprehensive companion *in situ* validation network is established, and we will look to GEO and its Climate Change Working Group to support us to promote this important activity.  We have also continued our active engagement with the United Nations Framework Convention on Climate Change (UNFCCC) Secretariat around the Systematic Observations processes for the Global Stocktake, including on development of an important synthesis report and will seek to ensure representation of Earth observation capabilities in this report. The emergence of the Global Stocktake puts new emphasis on national reporting and adaptation and mitigation measures that opens new opportunities and challenges for the Earth observation community.  The UNFCCC Secretariat has not only noted the importance of systematic observations for the realization of the Global Stocktake under the Paris Agreement, but also the need for government delegations to be fully aware of the significance of Earth observations and the part they can play. A concerted effort is needed to ensure our national representatives to the UNFCCC are fully informed with regard to Earth observations – GEO can play an important role in enabling the flow of this information through GEO Member Principals.  **GEO Engagement Priority: Disaster Risk Reduction**  CEOS is contributing to the monitoring of the implementation of the Sendai Framework, supporting the ongoing work of international initiatives to include GEO, striving to increase the awareness of decision-makers of the critical role of satellite EO, and reinforcing the need for enhanced satellite EO programs to better address Disaster Risk Management needs. For the Geohazards Supersites and Natural Laboratories (GSNL) initiative, CEOS’s Data Coordination Team facilitates and coordinates all space-based Earth observation data sharing and quota negotiations that allow GSNL Supersites leverage CEOS Member Agency data. CEOS also supports all space-based Earth observation-related objectives to the GEO Data Access and Risk Management (GEO-DARMA) aim to support risk reduction activities through the implementation of end user priorities in line with the Sendai Framework in regions of the Developing world.  CEOS is also focusing attentions on GEO’s Global Flood Risk Monitoring (GFRM) activities with the evolution of the Geostationary (GEO)/Low Earth orbit (LEO)/Synthetic Aperture Radar (SAR) Flood Pilot that supports and works with the GEO GFRM community towards shared flood risk mapping priorities related to space-based EO data interoperability and cloud-native analytics.  Lastly, CEOS has stepped up to leadership positions in the GEO Disaster Risk Reduction Working Group.  **Making Satellite Data Easier to Use for GEO Users**  Although GEO has chosen to focus on these three engagement priorities, we note that GEO’s mandate and user base is much broader. Accordingly, we note the important role that increased availability of Analysis Ready Data (ARD) will play in GEO. It will allow an ever-increasing range of users to bring Earth observation to bear on real-world problems, far more quickly and efficiently than was ever possible before.  For this growing user community, ARD is no longer a desire of global users but becoming a requirement and expectation.  We have been working together, and with private sector data suppliers and aggregators, to ensure that data discovery, access and integration is optimal for users and supports new technologies such as artificial intelligence and machine learning (AI/ML). We look to GEO to promote the importance of ARD as we move forward.  CEOS is also a convening partner in the recently accepted Open Earth Alliance Community Activity (OEA). The OEA is intended to expand the impact of the Open Data Cube (ODC) technology by: supporting the concept of a regional network of data cubes; allow more agility to explore open source solutions; and attracting external funds and cloud credits from interested donors. Having the OEA linked to GEO as a Community Activity will increase the visibility of the ODC and its impact on global users through GEO governments and other organizations.  **Coasts: Supporting an underserved area**  This year, we have also prioritized coastal observations. At our 2020 Plenary, we endorsed the creation of an Ad HocTeam on Coastal Observations and Applications. In 2020, we have actively engaged both the GEO Blue Planet and AquaWatch Initiatives to support the data and information needs of their respective users and stakeholders.  As part of the “land to sea” component of this work, we are co-designing/co-developing activities in collaboration with Blue Planet and AquaWatch. These activities focus on characterization of loadings of nutrients and sediments in the coastal zone and their attendant ecological impacts. We are supporting: development of metadata standards; definition of data requirements; and provision of suitable satellite data inputs for development of machine-learning based and transboundary coastal eutrophication and sediment loading indicators.  **Closing**  For 13 years, CEOS and GEO have aspired to harmonize and synergize activities and support of key initiatives. CEOS acknowledges and will continue its work to support the implementation of the GEO *Canberra Declaration 2019* including through our efforts to increase engagement with the private sector, our work to increase access to ARD, and our contributions across the GEO Work Programme in support of GEO Engagement Priorities.  This statement just touches on a few of the significant contributions of CEOS in support of GEO activities. CEOS Agencies are fully engaged in continuing to implement the space-based component of GEOSS under the leadership of the 2021 CEOS Chair, the U.S. National Aeronautics and Space Administration (NASA) and the 2020-2021 CEOS Strategic Implementation Team Co-Chairs, the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO) and Geoscience Australia. |

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| **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.* | |
| Space agencies and their partners work through CEOS to ensure that satellite Earth observation data makes a bigger difference than it would if we worked alone. By supporting GEO as its “space arm” we know that our satellite data reaches more users and makes an even bigger difference to our communities, economies and environment. | |
| *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:* | |
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| *full name, title and organization of the person stating the quote* | *high quality head shot photo* |
| CEOS Chair |  |

**Pre-recorded Video Message**

You are invited to provide a recorded statement for GEO Week 2020 to highlight the impact of Earth observations in your country or agency, and your support for the Group on Earth Observations. Speakers are recording their own statements, and this document will help you make that recording smooth and professional.

Here are some timing and technical specifics on your recording:

* Your talk is for 3 minutes. It is critical that your talk be 3 minutes or less.
* The recording for this session must be completed and delivered to the GEO Secretariat by close of business 9 October 2020.
* The video file will need to be transferred to a Google drive.

**The naming convention is: GEOWeek\_speaker last name\_speaker first name\_speaker country or organization**

* Example: GEOWeek\_Smith\_Jane\_Canada
* MP4 format is strongly recommended. Other file formats that can be submitted are: MOV, MP4, AVI, WMV.
* The file should be uploaded to this Google drive folder:

<https://drive.google.com/drive/folders/10gsVwJsmEfr-HsJF-Ug0WPIDSzlqohsv?usp=sharing>

* Support questions to the GEO Sec team should be sent to: [hbaeyens@geosec.org](mailto:hbaeyens@geosec.org)

Keep in mind, as you prepare your presentation:

* This meeting will have a global audience and has registrants from six continents.
* Storytelling and data are important to painting the picture
* Avoid timely references such as “good morning”

Video specifications

* A built-in webcam works well.
* Connect to Internet via Ethernet cable if possible, to erase any wifi issues. If you use wifi for your Internet connection, be in place where you have a strong signal
* Close as many things on your computer as possible to keep it running smoothly
* Disconnect from your company VPN
* Recordings on desktop or laptop computers usually yield better videos than recording on a phone or tablet. However, many cell phone cameras are good enough. Please ensure cell phone videos are filmed in landscape (horizontal.)

Reference: You can also watch this video for recording tips:

<https://www.youtube.com/watch?v=rQwanxQmFnc&feature=youtu.be>

Recording your video

* Record in landscape mode (not portrait mode), even while using a tablet or phone
* Set the camera at eye-height and look at the camera as you speak.
* Have an uncluttered, professional appearance with your background
* Be cautious about background images or logos as body parts or hair cannot be
* tracked by the camera and background at times which can make parts of you look
* as if you have temporarily disappeared.
* Sit an arm’s length from your camera
* Make sure there is a lot of light in the room. Light should not be behind you.

Handling audio

* Use a microphone or headset rather than relying on your computer microphone
* Speak clearly
* Turn off all electronic devices or items that make loud noises in the room