



**CEOS – GEO Bilateral Consultative Meeting
2–3 February 2021
Held Virtually**

**Meeting Summary
Marie-Claire Greening (CEOS Executive Officer)**

The annual bilateral meeting between CEOS (Committee on Earth Observation Satellites) and GEO (Group on Earth Observations) was held from 2nd to 3rd February 2021. This was attended by CEOS leadership and invited topic experts, and GEO leadership and secretariat (GEOSEC) members. The meeting was held virtually due to continued restrictions on global travel resulting from the COVID-19 pandemic.

Following is a summary table of the discussion topics, actions and considerations that resulted from the two-day meeting:

<p>Space-based Earth Observation Data for Open Science and Decision Support</p>	<p>There is CEOS and GEO consensus on the need to focus attention on open science.</p> <p>Actions:</p> <ul style="list-style-type: none"> ❖ Marie-Claire Greening to share GEO statement on Open Science with CEOS SEC for comment and feedback to GEO ahead of the GEO Executive Committee in March. ❖ CEOS/Brian Killough to work with GEO/Doug Cripe on a possible further example that could be included as a Knowledge Hub package that CEOS is currently working on for an IGARSS paper (a Google Earth Engine comparison with Sentinel 1 data) <p>Consideration:</p> <ul style="list-style-type: none"> ○ CEOS and GEO leadership to consider producing a joint leadership statement to encourage more widespread adoption of open science principles.
<p>Open Earth Alliance and Data Cubes</p>	<p>Community involvement in sandboxing ideas that can then be scaled up when appropriate is a useful approach.</p> <p>Data Cube technology should ideally be open source from beginning to end.</p> <p>Action:</p> <ul style="list-style-type: none"> ❖ Brian Killough to arrange regular meetings with GEO to engage on a strategic level about topics on data, technology, intellectual property rights, etc., and to outline generic principles that should be followed as the Open Earth Alliance (OEA) develops.



<p>Analysis Ready Data and the Cloud: Status, Activities, Pilots (incl. Digital Earth Africa)</p>	<p>Analysis Ready Data (ARD) is a very useful step in defining an end-product. Improving quality in ARD products should help user uptake. Cloud providers need to know what is considered to be authoritative data. Cloud platforms are powerful enablers but, if they provide closed solutions, this does not comply with the ideal of open science nor the need for processing transparency. -> Vendor-independence essential for open science solutions</p>
<p>In situ and Biomass Reference Network</p>	<p>CEOS and GEO have held discussions on the Biomass Reference Network. There is now a need to turn opportunities identified into actionable items. Action: <ul style="list-style-type: none"> ❖ Klaus Scipal (ESA) to discuss options with the GEOSEC for GEO to host the Biomass Reference Network on the GEO Knowledge Hub. Consideration: <ul style="list-style-type: none"> ○ GEO to launch a new community within its Work Programme to assist outreach to funders; this additional community activity would be in line with GEO strategy. </p>
<p>Capacity Building and EOTEC</p>	<p>EOTEC DevNet is the culmination of a multi-institutional effort. EOTEC DevNet would like to enhance sharing and come up with one huge community of practice, taking into account what other organisations are doing. Consideration: <ul style="list-style-type: none"> ○ GEOSEC to consider what supporting role and level of commitment it can continue to have in EOTEC DevNet. </p>
<p>Dashboards (beyond COVID-19)</p>	<p>The COVID-19 dashboard created by NASA / ESA / JAXA was impressive and unanimously commended. There was collective interest in maintaining this dashboard (with a possible repurposing), but also recognition that these are internal agency decisions. Action: <ul style="list-style-type: none"> ❖ CEOS and GEO communities to suggest what future expressions of the NASA / ESA / JAXA dashboard could look like and/or include. </p>
<p>Disasters - Emerging Activities and Ensuring Linkages</p>	<p>There is a need to bridge between the policy frameworks and the national framework in terms of reporting and plans. Pilot projects are useful to identify what people need in terms of information to guide their actions. Information needs to come from many sources, not just satellite; CEOS has a focused priority looking at floods in this context.</p>



<p>Climate - Informing the GST Process & Prep for the 2023 GST</p>	<p>CEOS (led by ESA) has initiated a comprehensive strategy process, stepping back to ensure that, from a CEOS point of view, all bases are covered and to make conscious decisions about what EO can and should contribute.</p> <p>GEOSEC supporting countries and the processes they are adopting for the Global Stocktake (GST), with a focus on vision and long-term perspectives. Adaptation is an area that can particularly benefit from space-based EO support.</p>
<p>Marine - COAST, COVERAGE & UN Decade of Ocean Science</p>	<p>COVERAGE has been submitted as an ‘Ocean Shot’ and COAST as a ‘Programme’ to the UN Decade of Ocean Science for Sustainable Development.</p> <p>The GEO Secretariat has been invited by UNESCO-IOC to become a ‘key strategic partner’ in running the UN Decade on Ocean Science, with a focus on observations and data.</p> <p>GEO will be submitting a proposal to the March Executive Committee meeting to mobilize an action across the GEO community to contribute to the UN Decade for Ocean Science for Sustainable Development.</p> <p>Action:</p> <ul style="list-style-type: none"> ❖ CEOS-COAST and GEO Secretariat to plan an ARD session during the GEO Data and Knowledge Week (May 2021)
<p>GEO Urban Resilience - scoping and links</p>	<p>Urban Resilience Subgroup for GEO has been asked to provide an Engagement Plan to work with the main stakeholders to see how EO can support the implementation of the New Urban Agenda.</p> <p>Expected impacts of this activity are to increase awareness of the communities and to inform decision making.</p>
<p>SDGs - Potential CEOS framework and complementarity</p>	<p>CEOS SDG Ad hoc team to discuss option for the future structure of the SDG effort within CEOS at a dedicated workshop on 11 Feb.</p> <p>Options are:</p> <ol style="list-style-type: none"> 1. Create a new CEOS Working Group 2. Transfer SDG work into existing bodies 3. Reduce the scope of CEOS support to GEO