

CEOS SEC Report

(two pages max.)

Entity: CEOS Chair Team

Prepared By: NASA

Updates on issues raised during the last CEOS SEC teleconference (Dot points)

- ❖ Review of SEC and CEOS Plenary Actions: The Chair team and CEO updated the open actions listing. It was distributed by Marie-Claire on June 7, 2021, welcoming SEC comments.
- ❖ Virtual Endorsement Accomplished: New GEO Geohazard Supersites and Natural Laboratories (GSNL) Permanent Supersite in Nicaragua (May 20, 2021)

Issues requiring discussion/decision during current CEOS SEC teleconference (Dot points)

- ❖ As noted on the final SEC-280 meeting agenda.

Other highlights, activities, actions, projects, collaborations

(Dot points, e.g. outputs, new products, papers, technical reports, media, pipeline and new projects, interactions, project status changes, new opportunities)

❖ Progress on the CEOS Chair Implementation Plan Objectives

- **MIM Database** - Created several videos for the MIM Database to improve visibility and use. These videos were created by the Symbios/SEO team.
- **Cloud Deployments** - Microsoft-Azure Cloud is now offering Landsat and Sentinel data via their Planetary Computer. The SEO plans to obtain credits to explore cloud services and data offerings. Copernicus Land Cover and Copernicus Digital Elevation Model (DEM) global data is now available through the Earth Analytics Interoperability Lab (EAIL) for CEOS testing.
- **Earth Analytics Interoperability Lab (EAIL)** - CSIRO-Chile has developed training documents for EAIL, uploaded multiple datasets to support projects, and sent out access information for users.
- **Open Data Cube (ODC) Sandbox** - The SEO and Symbios are planning a session for the GEO Symposium on June 24 that will focus on a demo of the new ODC Sandbox tool.
- **Training Webinars** - The first Jupyter Python notebook training webinar is planned for July/August. WGCapD has held several planning meetings to discuss details for the sessions.
- **Climate Use-Cases** - The EUMETSAT "Drought and Vegetation Data Cube" is an example of open data and open science, and it is comprised of Climate Data Records similar to what are found in the ECV Inventory. Our understanding is that, so far, there are about 16 climate use-cases offered by: JAXA, NOAA, NASA, SANSA, CMA, and the UK.

- **CEOS Communications** - The SEO is working with Symbios to develop a short video to showcase the impact of CEOS international cooperation, even during this past year when our travel and meetings have been affected by the COVID pandemic.
- **CEOS Website** - A CEOS Communications Team (SEO, CEO, Symbios) has been working on plans for a CEOS website revision to add consistency and to improve content for improved impact.
- **EOTEC DevNet** - Working with the SEO to develop an online database and Application Programming Interface (API) to support Flood Tools from CEOS Agencies. This will promote open science and open data sharing in support of floods.

Upcoming meetings or events

(Dot points, e.g. meetings, conferences of relevance, visits)

The items below are carried over from last month as a reminder:

- ❖ 2nd Climate Observations Conference of CGMS and WCRP (Aug. 30-Sept. 2; virtual event): The CEOS Chair has been invited to give a presentation on “satellite observations – capabilities and needs” on Sept. 1.
- ❖ IAC (Oct. 25-29; Dubai): The CEOS Chair has been invited to give a presentation on “Earth Observation International Cooperation” during Session B1.1. on Monday, Oct. 25. The segment consists of 30 minutes (presentation and Q & A).
- ❖ COP26 (Nov. 1-12; Glasgow): We contacted the U.S. Department of State regarding the Annual Joint Statement from Space Agencies to SBSTA. We received a “yes” on the matter of a member of the U.S. Delegation delivering the Joint Statement.
- ❖ CEOS Plenary (Nov. 1-4; Virtual): As we mentioned during SEC-278, the plan is to have a virtual plenary over 4 days (3 hrs. each day). On two days, there will be an early start on the U.S. East Coast, and on two days there will be a start time that favors Asia/Pacific and the Pacific coast of the U.S. We see this approach as being more equitable across CEOS and also discussed it with the Troika. Because these dates coincide with the first few days of COP26, the CEOS Chair team will make every effort to deconflict the scheduling of presenters and participants who will need to engage in COP26.

Attachments

(e.g. pictures, figures, graphs, links – for use in overall CEOS reporting and as website resources etc.)

CEOS SEC-280 Report

Entity: SIT Chair Team

Prepared By: J. Ross (GA) & CSIRO

Updates on issues raised during the last CEOS SEC teleconference

- Nil.

Issues requiring discussion/decision during current CEOS SEC teleconference

- Nil.

Other highlights, activities, actions, projects, collaborations

Working Teams

- There has been a round of Virtual Constellations chats over the past 2-3 weeks, with calls complete for five of the seven VCs. The remaining two chats will be completed in the next week or so. As always these have been a great opportunity to discuss progress and address blockers to VC activities and deliverables. Marie-Claire has supported most of the calls as CEO.

Carbon & Biomass

- The Global Stocktake Strategy paper effort has concluded for the time being and will be revisited at SIT TW, with a view to endorsement at CEOS Plenary.
- SIT Chair Team has consulted with the SEO and WGISS in support of the action from SIT-36 to establish a web presence to support communication of the planned datasets and guidance from the GHG and AFOLU teams for COP-26. The Team is drafting a short scoping paper to solicit comments and is first engaging with the GHG and AFOLU teams and with WGClimate, and will come back to CEOS SEC soon for any comments. SIT Chair Team envisions a lightweight and well-designed web presence, hosted at ceos.org and provided in English, French, and Spanish for maximum uptake across countries. A simple presence is planned initially and this could be further developed by incoming SIT Chair Team and other CEOS groups as capacity allows.
- Noting the launch of the [International Methane Emissions Observatory](#), we have put feelers out to UNEP to identify the officials in charge - with a view to a discussion session at SIT TW to establish whether there is mutual benefit in a relationship between CEOS and the IMEO in support of satellite observations to support their information requirements. SEC will be kept informed. AC-VC has agreed to help explore the relationship at a technical level.
- The AFOLU roadmap team work continues apace with the identification of baseline and enhanced product options for each of the main land sector datasets prioritised for COP-26 and beyond. A further call of the volunteer team is planned for early July.

SDGs

- Efforts continue within the AHT on preparing the two options for discussion at TW and Plenary, as well as the deliverables from the four SDG Indicator sub-teams. Working to overcome some delays due to capacity constraints. Some risk to outcomes for TW and Plenary, but being worked.

ARD

- Planning a re-group on the CEOS ARD Framework and scheduling a call with the VCs to discuss in more detail (late June / early July).

- Will pull together a first draft / skeleton of CEOS ARD Strategy v2 soon.
- Likely a CEOS ARD Framework session during week 1 of SIT TW fortnight.
- Landsat Collection 2 has been re-confirmed as CEOS ARD against the latest updates of the Surface Reflectance and Surface Temperature PFS (v5.0).
- See ceos.org/ard status table [here](#) for the latest on the status of assessments and peer reviews of CEOS datasets.
- The LSI-VC-10 meeting was held in late May, with lots of good progress on ARD-related topics. Meeting decisions, actions and minutes will be shared once finalised.

Upcoming meetings or events

- Technical Workshop 2021: Current plan is to be held as a virtual event over two weeks. The first week will have self-organised sessions with narrower thematic/topical focus and self organised. The second week will be more structured, debriefing from each thematic discussion.
 - o Week 1: 6th September
 - o Week 2: 13th September with three 2-2.5h sessions planned.
- We will share draft TW objectives and Week at a Glance by the end of June; draft agenda mid-July; and, then final agenda early-August. Protocol-wise we expect it will be similar to the meetings the current SIT Chair has hosted to date.

CEOS SEC-280 Report

Entity: CEO

Prepared By: Marie-Claire Greening

Updates on issues raised during the last CEOS SEC teleconference (Dot points)

278-02	WGClimate Chair to draft a letter to be sent to CEOS Principals (by the CEO) to ask for CEOS Agency support in the submission of use cases that are based on ECV Inventory data.	In Progress Letter currently being drafted
CEOS-34-20	COVERAGE, COAST, and SIT Chair Teams to discuss and conclude on how CEOS will coordinate internally and externally on CEOS involvement in the United Nations Decade of Ocean Science for Sustainable Development (2021-2030). Once determined, the SIT Chair will prepare a follow-up letter (in coordination with the CEOS Secretariat) to the IOC identifying the appropriate CEOS contact for matters relating to the Decade.	In Progress Coordination discussion has been completed. Letter in draft form and is currently with the SIT Chair for review. Also awaiting final inputs from WGClimate.

Issues requiring discussion/decision during current CEOS SEC teleconference (Dot points)

- **COP-26**
 - No further updates

Other highlights, activities, actions, projects, collaborations (Dot points, e.g. outputs, new products, papers, technical reports, media, pipeline and new projects, interactions, project status changes, new opportunities)

- **GEO Programme Board 20** outcomes:
 - Digital Earth Africa was approved as a GEO Initiative
 - GEO Knowledge Hub was endorsed for continued development pending endorsement by the GEO Executive Committee in July
- **VC meetings**
 - At the invitation of the SIT chair, attended the catch-up meetings with the Virtual Constellation co-leads for OCR-VC, OSVW-VC, P-VC and OST-VC.
 - Attended the LSI-VC-10 and AC-VC-7 meetings.
- **CEOS Comms**
 - Working with the SEO, SIT chair team and WGCapD on website improvements and to improve social media outreach

Upcoming meetings or events

(Dot points, e.g. meetings, conferences of relevance, visits)

- 21-24 June GEO Virtual Symposium
- 29 June – 2 July WGCV-29

Attachments

(e.g. pictures, figures, graphs, links – for use in overall CEOS reporting and as website resources etc.)

- Updated CEOS calendar of meetings / events attached to the SEC agenda. If any key meetings or events are missing from the calendar please contact Marie-Claire.

CEOS SEC Report

(two pages max.)

Entity: WGDDisasters

Prepared By: David Green (NASA), Pierric Ferrier (CNES)

Updates on issues raised during the last CEOS SEC teleconference

(Dot points)

- WGDDisasters Data Coordination Team (DCT) Lead role (SEC Action 274-02). During CEOS WGDDisasters Telecon-29 last week, Pierric Ferrier offered, and it was confirmed, that he would retain the WGDDisasters Data Coordination Team (DCT) Lead role for another calendar year (until Summer 2022).

Issues requiring discussion/decision during current CEOS SEC teleconference

(Dot points)

- On Friday, 21 May, David Green received a letter from Raul Kulichevsky, CONAE CEOS Principal, nominating Dr. Laura Frulla for the Vice Chair position in WGDDisasters. This Vice Chair nomination proposal was raised at WGDDisasters Telecon-29. The WG agreed internally to the nomination, after multiple member agencies expressed appreciation to CONAE for their willingness to serve. WGDDisasters requests CEOS SEC concurrence to bring the Vice Chair nomination to CEOS Plenary 2021 and request approval and endorsement.

Other highlights, activities, actions, projects, collaborations

(Dot points, e.g. outputs, new products, papers, technical reports, media, pipeline and new projects, interactions, project status changes, new opportunities)

- The Instituto Nicaraguense de Estudios Territoriales (INETER), Government of Nicaragua held a kick off meeting of the new GEO GSNL Nicaragua Supersite on Thursday, 3 June.

Upcoming meetings or events

(Dot points, e.g. meetings, conferences of relevance, visits)

- GEO Virtual Symposium 2021, Parallel Session C: EO Strategies, Partnerships and Services for Disaster Risk Reduction. CEOS WGDDisasters Flood Pilot members presenting on “Floods in Canada: The Need for Partnerships”.

CEOS SEC Report

(two pages max.)

Entity: WGClimate

Prepared By: Albrecht von Bargaen (DLR), Jeff Privette (NOAA)

Updates on issues raised during the last CEOS SEC teleconference

(Dot points)

- CDR Use Cases: action items clarified; more use cases have been submitted; letter to CEOS principals under iteration;

Issues requiring discussion/decision during current CEOS SEC teleconference

(Dot points)

- None

Other highlights, activities, actions, projects, collaborations

(Dot points, e.g. outputs, new products, papers, technical reports, media, pipeline and new projects, interactions, project status changes, new opportunities)

- CGMS Plenary, including climate / GHG / GCOS session
- Use Case web publication: Use Cases in review, initial set selected to be edited for website publication
- GHG Task Team meeting on June 4th, 2021; status update for new members, including review of the Teams' purpose; discussion of Annex C (Implementation Actions) update; planned follow-up meeting at end of June or beginning of July after AC-VC annual meeting, IWGGMS, et al., in order to consider the outcome of these meetings into the work plan
- The AFOLU Workshop, postponed from Varese in 2020, will be held in the (northern hemisphere) fall time 2021
- The observation synthesis report for Global Stocktake will be a community-drafted whitepaper addressing UNFCCC; organization of the writing team is now with Frank Martin Seifert (ESA) and David Crisp (NASA)

Upcoming meetings or events

(Dot points, e.g. meetings, conferences of relevance, visits)

- 2nd Climate Observation Conference, organised by GCOS & WCRP with support of EUMETSAT; August 30 – September 2nd, 2021; *virtual conference*

Attachments

(e.g. pictures, figures, graphs, links – for use in overall CEOS reporting and as website resources etc.)

CEOS SEC Report

(two pages max.)

Entity: WGCapD

Prepared By: Nancy Searby (Chair/NASA) & Pham Thy (Vice Chair/VNSC)

Updates on issues raised during the last CEOS SEC teleconference

(Dot points)

- UNOOSA nominated Jorge del Rio Vera as WGCapD Chair. His nomination was discussed and unanimously supported at the monthly WGCapD meeting,. WGCapD recommends this nomination for formal decision at the CEOS Plenary. WGCapD is still seeking candidates for Vice-chair position.

Issues requiring discussion/decision during current CEOS SEC teleconference

(Dot points)

- None

Other highlights, activities, actions, projects, collaborations

(Dot points, e.g. outputs, new products, papers, technical reports, media, pipeline and new projects, interactions, project status changes, new opportunities)

- WGCapD members are working on executing the 2021-2023 work plan that includes 33 deliverables (28 to be implemented in 2021 calendar year, 4 – in 2022, 1 – in 2023). Updates are captured monthly in the shared work plan document, with main developments reflected in the CEOS deliverables tracking tool.
- As a part of the effort on the Capacity Development for Flooding Plan deliverable (CB-21-05), an online [Flood Tracker](#) tool was drafted and shared with WGCapD principals and community members. CEOS SEO is supportive of the effort, considering a possibility they could help building out a database and API to ensure that data is accessible, easy to update and could be used in different ways.
- EOTEC DevNet planning team consisting of representatives from WGCapD, GEO, UNOOSA and flood SMEs, has been preparing for EOTEC DevNet Regional Meetings that will take place on June 14. All information and registration available on the [CEOS website](#). Meetings to be co-facilitated by WGCapD members and floods experts from respective regions.
- The Phase II Geospatial Applications for Disaster Risk Management MOOC (CB-21-07) was launched on June 1. It is a joint effort by UNOOSA and Centre for Space Science and Technology Education in Asia Pacific. Information available at ISRO-IIRS [website](#).
- The Jupyter Notebook Webinar, a joint deliverable CB-20-04 with WGISS, is planned for July 21-22, 2021. Organizers are using WGCapD's branded webinar toolkit materials and are still looking for experts with insight into the relevance (and challenges) of using Jupyter Notebooks for capacity development to serve on the panel.
- As a part of Branded Webinar Toolkit (CB-21-01) deliverable, conversations continue on the proposed thematic observation area icons to be used in CEOS-sponsored webinars. While the branding issues related to specific use of the logos are being resolved, the rest of the updated toolkit materials will be shared with the CEOS community.

- WGCapD is exploring ways to build a stronger relationship with UNFCCC and The Paris Committee on Capacity Building (PCCB) [network](#), possibly contributing to their capacity building efforts around CoP meeting in Glasgow.

Upcoming meetings or events

(Dot points, e.g. meetings, conferences of relevance, visits)

- EOTEC DevNet regional meetings are planned for June 14. Register [HERE](#) to participate.
- WGCapD Monthly Meeting on July 1, 2021
- WGCapD semi-annual meeting on September 6-9, 2021 to focus on Work Plan development

CEOS SEC Report

(two pages max.)

Entity: WGCV

Prepared By: Akihiko Kuze (JAXA) Philippe Goryl (ESA)

**Issues requiring discussion/decision during current CEOS SEC teleconference
(Dot points)**

Other highlights, activities, actions, projects, collaborations

- 13th annual joint vicarious calibration campaign for greenhouse gases observing sensors at Railroad Valley in Nevada June 7-July 8. Preparation meeting by GOSAT, -2, OCO-2, -3, TROPOMI team, June 4.
- RadCalNet workshop, June 9
- Preparation for the WGCV CARD4L Peer Review panel for hyperspectral products.
- Preparation of ACIX-3 (intercomparison atmospheric correction)

Upcoming meetings or events

(Dot points, e.g. meetings, conferences of relevance, visits)

- WGCV IVOS meeting on a potential new CEOS Solar Spectral Irradiance Spectrum (TSIS HSRS) June 16
- WGCV-49: June 29-July 2 (virtual, 4-day, 2-hour each day)
- WGCV-50: Early 2022 (Tokyo, Japan)

CEOS SEC-280 Report – June 2021

Entity: SEO

Prepared By: Brian Killough (NASA)

Issues requiring discussion/decision during CEOS SEC teleconference

- None

Updates on issues raised during the last CEOS SEC teleconference

- None

Upcoming meetings or events

- The **Open Data Cube Conference** is being held on June 22-25. Go to the website (opendatacube.org/odcc21) for more information. The event will include ODC training, a hackathon, and several discussion forums.
- The SEO has been approved for a session at the **GEO Symposium** on June 24. This session would be used to demonstrate the new Open Data Cube Sandbox running on Google Colab. This session will demonstrate the new tool, discuss ideas for future expansion of application algorithms and discuss how the tool might be used for future capacity building initiatives. The SEO will be supported by Symbios during this session.
- The SEO will participate virtually in the **IGARSS 2021 Conference** on July 12-16. A session on "CEOS and the Private Sector: Interactions and early progress on Analysis Ready Data" is planned for July 16 and co-chaired by Andreia Siqueira (GA) and Brian Killough (SEO, NASA). The session includes 5 papers with these lead authors: Adam Lewis (GA), Chris Barnes (USGS), Fang Yuan (GA), Brian Killough (SEO, NASA), and George Dyke (Symbios).

Other highlights, activities, actions, projects, collaborations

- **CEOS Communications** - A group of CEOS representatives (CEO, SEO, Symbios, WGCapD) have been meeting to discuss updates to the CEOS website and overall communications topics. Future revisions to the website are planned to enhance content for increased impact and to include more reports and examples of CEOS products. These revisions will also include adding the CEOS newsletter in electronic format.

Update on the CEOS Newsletter No.57

2021.06.10. JAXA

1. Update on the CEOS Newsletter No.57

- Articles and Contributors confirmed for submission
- Update on Plan of 2021 CEOS Chair (NASA)
- Update on 2021 GEO Activities (GEOSEC)
- Report of CEO
- Update on WGCapD
- Report of update on Biomass Protocol (WGCV)
- Report of AC-VC
- Report of LSI-VC-10
- CEOS Study for GST (ESA/SIT Vice chair)

- Articles and Contributors waiting for confirmation
- Report of 2021 CEOS-SIT meeting (SIT Chair /CSIRO/GA)
- Update on WGDisasters
- Update on WGClimate
- Update on WGISS

- Schedule
- Collecting articles: June
- CEOS Article submission due date : June 30, 2021
- Editing & Printing : July 2021
- Publication : August, 2021

2. Consideration and discussion of future CEOS Newsletter

The CEOS Newsletter can be upgraded by using up-to-date IT tools and social network services. We would like to upgrade the CEOS Newsletter to disseminate useful information to the public broadly. If the revision finishes sometime in this year, JAXA will be able to transfer the current newsletter to new system from early 2022.

We have started to communicate with SEO/CEO and got a positive feedback from them. We will continue to discuss the future plan.