

CEOS SEC Report

(two pages max.)

Entity: WGCV

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

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)

- SIT TW, Presentation “WGCV for New Space”, WGCV support for IMEO, side meeting CEOS Earth Analytics Interoperability Lab (EAIL) for WGCV work
- WGCV Vice chair (2023-2024) voting (e-mail) in September
- WGCV-51: Oct. 3-6, 2022, in Tokyo. The joint meeting with WGISS. Voting results and Nomination of the WGCV vice chair 2023-2024
WGCV Terms of Reference update: Chair/Vice Chair Nomination Process, Agreement of the new ACSG chair
CNES chair priority (GST, Calibration) SIT sat, Maturity Matrix (collaboration with WGISS)

Upcoming meetings or events

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

- SAR Subgroup, Synthetic Aperture Radar Workshop 2022 (CEOS SAR WGCV 2022) will be held at the Canadian Space Agency Headquarter's Conference Centre, from October 18 to 21, 2022.
- CEOS Plenary in France, the WGCV chair will report WGCV work summary.

CEOS SEC Report

(two pages max.)

Entity: WGClimate

Prepared By: Albrecht von Bargaen (DLR), Jeffrey A. Privette (NOAA)

Updates on issues raised during the last CEOS SEC teleconference

n/a

Issues requiring discussion during current CEOS SEC teleconference

n/a

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)

- Preparation of 17th WGClimate meeting (20-21 Oct 2022, Darmstadt, Germany)
 - Beyond reporting about the different activities, several agencies will provide an update; some additional presenters will provide additional input for discussion including the US-American KISS, a C3S project, and some update with regard to IMEO
 - Also discussion with other CEOS bodies
- GHG task team meeting on October 13th with handover to new lead (Yasjka Meijer, ESA)
- GCOS science conference (17-19 Oct 2022, Darmstadt, Germany, in person) [2nd Climate Observation Conference \(eventsforce.net\)](https://www.eventsforce.net)
- COP-27 preparation / UNFCCC
 - UNFCCC is aiming to move Earth observation much more in the focus of SBSTA/COP, or better the Parties
 - Statement final draft for SBSTA opening session at COP-27 has been send around before SEC meeting to all agencies;
 - CEOS/CGMS do have the opportunity to present three posters during the EID when representative is onsite. Currently, the WG chair plans to attend and one of the AFOLU chairs, also.

Upcoming meetings or events

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

- WGClimate meeting has been arranged for 20-21 October in Darmstadt hosted by EUMETSAT allowing the attendance of both, conference and WG meeting. The format is hybride.

Attachments

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

CEOS SEC-298 Report

Entity: SIT Chair Team

Prepared By: SIT Chair Team

Updates on issues raised during the last CEOS SEC teleconference

- None

Issues requiring discussion/decision during current CEOS SEC teleconference

- None.

Other highlights, activities, actions, projects, collaborations

- Following the “New Space” session at the SIT TW and the decision to assemble a Task Team to further develop the ‘New Space & Future CEOS’ topics and initiatives, the New Space Task Team Terms of Reference are being drafted. They will be shared with CEOS ahead of the Plenary, and presented to the CEOS Principals participating in the Plenary, for endorsement.

Carbon & Biomass

- The SIT Chair Team was pleased to host the CEOS AFOLU Roadmap team in a workshop jointly with the GCOS Terrestrial Observations Panel at ESRIN on 12th September. The event aimed to kick-start the development of the Roadmap document after 2 years of entirely virtual cooperation among the team. The day reaffirmed the vital importance of a CEOS strategy to ensure that public EO programmes are fit for purpose in meeting society’s needs for information to implement successfully the Paris Agreement.
- The AFOLU Co-Leads (Ben, Osamu and Frank Martin) are reflecting on the outcomes and working on securing resources to ensure the activity has the necessary capacity. Ben Poulter has volunteered to serve as the Lead Author for the Roadmap. All agencies with active investments and plans in the supporting observations are encouraged to be active participants as we plan together the future technologies and systems that will be needed for us to play our part in helping the countries of the world achieve better management of climate change.
- SIT Chair team is coordinating the updates needed to the CEOS GST Portal ahead of the UNFCCC COP meeting in Egypt next month. A number of dataset profiles will be updated. A new website section on ‘User Stories and Inspiration’ is being added with articles being contributed by GEOGLAM and SilvaCarbon - to help countries imagine how these datasets can help their information needs. All content will be available in English, French and Spanish per existing content.

CEOS-ARD

- LSI-VC-12 was hosted by ESA at ESRIN from September 8-9, the week before the CEOS SIT Technical Workshop. CEOS-ARD was a key discussion point.
- The Nighttime Lights Surface Radiance (NLSR) and Ocean Radar Backscatter (ORB) Product Family Specifications (PFS) were endorsed following LSI-VC-12. More details: <https://ceos.org/news/ard-pfs-orb-nlsr/>
- With Ocean Radar Backscatter joining the Aquatic Reflectance PFS in the CEOS-ARD portfolio, it is clear that the expansion ‘beyond land’ is gaining traction. The CEOS-ARD Oversight Group continues to push for other CEOS Virtual Constellations to take the lead in the development of PFS for their specific domains and user communities.

- There are currently 7 CEOS-ARD datasets, with 4 more under peer review, and many more under development / assessment. These are detailed on the [CEOS-ARD website](#). Recent updates include the submission of the PROBA-V Collection 2 and ALOS-2 PALSAR-2 Global Mosaics (RTC) and ScanSAR NRB datasets to be peer reviewed, as well as the addition of the Sentinel-3 SYN SDR product to the under development list.
- Representatives from the CEOS-ARD Oversight Group joined the recent OGC ARD Standards Working Group meeting. CEOS has been asked to provide input on the Charter for this group and an ISO New Work Item Proposal (NWIP). This work is proposed to use CEOS-ARD as the basis, so it is critical that CEOS is engaged. Additional CEOS representatives are requested.
- <https://twitter.com/CEOSARD> has continued to grow and a pilot of the [CEOS-ARD Impact Case Study site](#) was published.

Upcoming meetings or events

- SIT-38 will be held at ESA ESRIN (Frascati, Italy) in the week of 27th March 2023. Tue 28th March will be assigned to side meetings and Wed 29th and Thu 30th March will be the main days for SIT-38.

CEOS SEC-298 Report

Entity: CEO

Prepared By: Marie-Claire Greening

Actions:

295-02	Marie-Claire Greening (CEO) to provide guidance to SST-VC on how to proceed with coordination between CGMS and SST-VC.	IN PROGRESS <i>No contact has been made yet, however Marie-Claire aims to discuss this with the SST-VC leads at SIT Technical Workshop.</i>
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The CEO attempted to follow up with the SST-VC at the SIT TW but no one from the SST-VC was present at the meeting. A communique to the SST-VC co-leads was subsequently sent, but no response received to date. The CEO needs context and a clearer request for assistance before she can proceed.

CEOS Statement to GEO 2022: The CEOS statement to GEO has been written and reviewed by the SEC; only a few minor editorials were received on the original draft version written by the CEO. An updated and final draft version of the statement was sent out prior to SEC-298 and any final comments will be discussed during the SEC telecon. The final CEOS statement will be submitted to the GEO Secretariat after the SEC telecon and before the Friday 14th October deadline. The statement will be provided as a written statement only (no additional audio recording will be made of the reading of the statement).

GEO Week 2022: GEO Week 2022 will take place in Accra, Ghana from 31st October to 4th November. CEOS leadership will be represented by the SIT Chair (Ivan Petiteville) and the CEO, who will be present at the GEO Plenary and at the GEO Executive Committee, both of which will take place in-person in Ghana. Additionally, the CEO will lead a side meeting and run a CEOS booth in the main exhibition hall during GEO Week 2022.

GEO EAG report: The GEO Expert Advisory Group have produced a draft report on the future of the Global Earth Observing System of Systems (GEOSS). Comments on this draft were sought from the CEOS community before the 12th October deadline. A few comments were received and were forwarded on to the GEO Secretariat.

GEO PB: CEOS's membership to the GEO Programme Board (PB) is due to expire at the end of 2022. CEOS has self-nominated for the next period (2023 – 2025). This nomination will be considered and voted on at GEO Plenary in November.

Upcoming meetings or events

- WGClimate GHG Task Team meeting (13 October)
- 2nd GCOS Climate Observation Conference (17 – 19 October)
- CEOS SAR Cal/Val Workshop (18 – 21 October)
- WGClimate-17 (20 – 21 October)
- Pecora Conference (23 – 27 October)
- GEO Week 2022 / GEO-XVII and ExCom-59 (31 October – 04 November)
- CEOS OST-VC meeting (31 October – 04 November)
- UNFCCC COP-27 (07 – 18 November)
- CEOS-36 & Side Meetings (29 November – 01 December)

An updated calendar of CEOS meetings / events, and some key external events that the community may find of relevance, is detailed in the following page. If any key meetings or events are missing from this calendar, or if any dates have changed since publication, please contact Marie-Claire.

CEOS and relevant key external Meetings and Events 2022 - 2023

2022

October				
	03-Oct-22	06-Oct-22	4th Joint meeting: WGCV-51 / WGISS-54	Tokyo, Japan
	04-Oct-22	07-Oct-22	WGDisasters-18	Nice, France
	13-Oct-22	13-Oct-22	WGClimate GHG Task Team meeting	Virtual
	17-Oct-22	19-Oct-22	2nd GCOS Climate Observation Conference	Darmstadt, Germany
	18-Oct-22	21-Oct-22	CEOS SAR Cal/Val Workshop	Montreal, Canada
	20-Oct-22	21-Oct-22	WGClimate-17	Darmstadt, Germany
	20-Oct-22	21-Oct-22	GFOI Plenary	Washington DC, USA
	23-Oct-22	27-Oct-22	Pecora Conference	Denver, Colorado, USA
	24-Oct-22	28-Oct-22	GEO Blue Planet 5th Symposium	Accra, Ghana
	25-Oct-22	28-Oct-22	4th Climate from Space Workshop	Frascati, Italy & Virtual
	31-Oct-22	04-Nov-22	GEO Week 2022/GEO-XVII and ExCom-59	Accra, Ghana
	31-Oct-22	05-Nov-22	AfriGEO Symposium	Accra, Ghana
	31-Oct-22	04-Nov-22	OST-VC Meeting (side meeting during OSTST)	Venice, Italy
November				
	07-Nov-22	18-Nov-22	UNFCCC COP-27 (EID 09Nov22)	Sharm el-Sheikh, Egypt
	07-Nov-22	10-Nov-22	Very High-resolution Optical Data Assessment (VH-RODA) 2022	Frascati, Italy
	21-Nov-22	29-Nov-22	RAMSAR COP-14	Wuhan, China
	28-Nov-22	04-Dec-22	Oceania Geospatial Symposium	Nouméa, New Caledonia
	28-Nov-22	01-Dec-22	2022 Workshop on EO for Ecosystem Accounting	Virtual
	29-Nov-22	01-Dec-22	36th CEOS Plenary and Associated Side Meetings	Biarritz, France
December				
	12-Dec-22	16-Dec-22	AGU Fall Meeting 2022	Chicago, USA

2023

January				
	08-Jan-23	12-Jan-23	2023 AMS Annual Meeting	Denver, Colorado, USA
	30-Jan-23	01-Feb-23	WMO International GHG Monitoring Symposium	Geneva, Switzerland
February				
	06-Feb-23	17-Feb-23	UNCOUOS STSC 60th Session	Vienna, Austria
	07-Feb-23	08-Feb-23	GEO Programme Board Meeting #25	Geneva, Switzerland
March				
	27-Mar-23	31-Mar-23	GEO Open Data and Open Knowledge Workshop	ESRIN, Italy
	28-Mar-23	30-Mar-23	SIT-38 & Side Meetings	ESRIN, Italy
April				
	17-Apr-23	20-Apr-23	38th Space Symposium	Colorado Springs, USA
	23-Apr-23	28-Apr-23	EGU General Assembly	Vienna, Austria & Virtual
	24-Apr-23	28-Apr-23	ISRSE-39	Antalya, Turkey
May				
	16-May-23	19-May-23	JURSE 2023	Heraklion, Crete
	31-May-23	09-Jun-23	UN COPUOS 66th Session	Vienna, Austria
June				
	05-Jun-23	09-Jun-23	WGCV-52	Frascati, Italy
	13-Jun-23	14-Jun-23	GEO Symposium 2023 (TBD)	Geneva, Switzerland
	15-Jun-23	16-Jun-23	GEO Programme Board Meeting #26 (TBD)	Geneva, Switzerland
	26-Jun-23	28-Jun-23	CGMS-51 Plenary	TBD, Japan
July				
August				
September				
	05-Sep-23	06-Sep-23	GEO Programme Board Meeting #27	Virtual
October				
	02-Oct-23	06-Oct-23	74th International Astronautical Congress (IAC)	Baku, Azerbaijan
November				
	06-Nov-23	17-Nov-23	UNFCCC COP-28	United Arab Emirates
December				

Legend:

	CEOS leadership participation required
	For information; CEOS leadership participation optional

CEOS SEC Report- 298

(October 2022)

Entity: WGDisasters

Prepared By: H de BOISSEZON (CNES) – A EDDY (AG) – L FRULLA (CONAE)

Updates on issues raised during the last CEOS SEC teleconference

(Dot points)

- None

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)

- UN-IAF workshop (17th sept, Paris) : Jorge Del Rio Vera made a successful presentation of Recovery Observatory (RO) Demonstrator, as well as of the joint WG Disasters/CapD “RO training for decision makers” activities (end 2022-2023).
- WG Disasters18 was held in Nice from 3th to 7th October.

3 October was an exchange session with ~50 students from University Cote d’Azur, around risk thematics.

From 4 to 6 October was the main meeting, with 25 participants in attendance and another 30 online. As well as presenting substantive updates on activities underway (only one activity ends : Seismic Demonstrator), the WG Disasters held in depth discussion around :

- sustainability of WG activities beyond the demonstrator phase (uptake of satellite observations and derived products in proto-operational and operational public good activities and transition to commercial activities for some areas);
- and new activities to be considered by the group (including possible ocean-related activities and climate related activities).

Presentations were made by leaders of WGCapD, WGISS and Climate, and joint activities were discussed.

On 7 October, a site visit was made to the Vesubie valley to examine flash flood and landslide sites further to Alex major storm in October 2020 and discuss integration of satellite products with French civil protection and for resilient reconstruction.

Presentations from WGDisasters18 are available here:

<https://ceos.org/meetings/wgdisasters-18/>

- Philippine Space Agency (PhilSA) expressing willingness to become part of CEOS and specifically WG Disasters : linkages to CEOS presidency.

Upcoming meetings or events

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

- WGDIsasters 19 will be held in March (dates TBD) 2023 in Buenos Aires at the invitation of CONAE
- WGDIsasters 20 will be held on September (dates TBD) 2023 in Yellowstone, USA, at the invitation of USGS (Yellowstone Volcano Observatory).

CEOS SEC Report

(two pages max.)

Entity: WGISS

Prepared By: Makoto Natsuisaka (JAXA) and Tom Sohre (USGS)

Updates on issues raised during the last CEOS SEC teleconference

(Dot points)

- WGISS-54 meeting was successfully held in Tokyo as an in-person meeting on Oct. 3-7.
 - Data Preservation and Stewardship session
Archive Technology and Future Trends in member agencies were shared. The results of the information exchange on data stewardship with CGMS IV was reported. The mutual interests were identified, and continuous communication is planned.
 - Data Discovery and Access session
Status on the WGISS Connected Data Assets (IDN, FedEO, CWIC) was reported.
Federated Discovery using STAC was proposed. The L&Ls and recommendations raised through the trail will be summarized into a best practice.
Status on the Service Discovery Best Practices was also reported.
 - Interoperability Data and Use session
A use case of EAIL and expectation on the future use were presented by COAST. EAIL was used for a shoreline mapping and many efforts to improve the system were made by CSIRO. COAST also indicated the interests in AI/ML survey and service discovery. Cooperation will be discussed.
 - Technology Exploitation session
Status on Jupyter Notebook initiative was reported. The team will organize Jupyter Notebook Day on Oct. 21 as a joint event with WGCapD.
Presentation from WGCapD was invited.
AI/ML survey was proposed. The results of the survey will be summarized into a white paper.
System federation (authentication and authorization between different systems, data federation between HPC and archive, etc..) was proposed as a new topic.
 - Joint session with WGCV was held.
ESA EO Portal, CEOS CAL/VAL Portal, CEOS MIM Database and Status of ARD Activities were reported.
Activities of CEOS Common Online Dictionary to realize a thematic interoperability was reported.
Data Quality Assessment and Indicators, and DMSMM Maturity Matrix were discussed.

CEOS interoperability framework and the CEOS standardizations were proposed by LSI-VC.

➤ AOB

It was agreed for WGISS to participate in CEOS interoperability framework. Presentations from GEO, CEO, SEO, and ISO/OGC were given.

50 years anniversary for Landsat was celebrated!

- Status on WGISS was reported to the WGD18 meeting held in Paris on Oct. 4.

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)

Upcoming meetings or events

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

- The CEOS Jupyter Notebooks Day will be held on 21 Oct 2022, 14:00-20:00 UTC. This WGISS and WGCapD led workshop will focus on supporting global best practice and training.
 - Read more: <https://training.ceos.org/events/1569/>
 - Register here: <https://eventbrite.co.uk/e/ceos-jupyter-notebooks-day-tickets-430340759797>

Attachments

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

- None

CEOS SEC Report

(two pages max.)

Entity: WGCapD

Prepared By: Jorge Del Rio Vera (United Nations Office for Outer Space Affairs)

Updates on issues raised during the last CEOS SEC teleconference

(Dot points)

- Not applicable

Issues requiring discussion/decision during current CEOS SEC teleconference

(Dot points)

- Not applicable

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)

- Outputs

Summary of the status of Q3 deliverables:

- CB-20-07 Best Practice Guide to E-learning → Ongoing
- CB-20-12 Collaborative Feasibility Study → **Completed**
- CB-22-03 Webinar on satellite remote sensing for urban heat islands → **Completed**
- CB-22-02 Webinar on air quality data access and analysis from geostationary satellites → Course dates 11, 18, 28 October (Registration → [Accessing and Analyzing Air Quality Data from Geostationary Satellites](#))

Q4 Deliverables (10 deliverables, all of them in progress):

- CB-22-04 Earth Observations and Recovery Observatories: Capacity Building for Decision Makers
- CB-22-05 Indigenous Mapping Workshop 2022
- CB-20-23 AmeriGEO Contribution
- CB-21-03 Earth Observation Training, Education, and Capacity Development Network (EOTEC DevNet) Tools and Information Collection
- CB-22-10 Sentinel selected applications: practical training with Jupyter Notebooks on the ESA EO Platform
- CB-21-04 Zero Hunger MOOC
- CB-22-16 Indigenous Mapping Workshop
- CB-22-15 Third Vietnam School of Earth Observation (VSoEO 3)
- CB-22-09 Chesapeake Bay Feasibility Study
- CB-20-24 Remote Sensing Training in Africa

One outstanding deliverable from Q2: Space-based observations for Meteorological Hazards.

- Upcoming opportunities/milestones

WGCapD vicechair nomination

- Letter to CEOS principals drafted.

Metadata standards for learning objects:

- Meeting to take place towards the end of October, beginning of November. Date to be decided.

- Presentations

- Presentation of WGCapD during WGDisasters-18
- Presentation of WGCapD during WGISS-54

Upcoming meetings or events

WGCapD annual meeting

- Likely to take place in Vienna on the first week of March (dates to be decided). The meeting will be in hybrid format.

Attachments

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

CEOS SEC-297 Report – October 2022

Entity: SEO

Prepared By: Brian Killough (NASA) and David Borges (NASA)

Issues requiring discussion/decision during CEOS SEC teleconference

- The SEO is planning to host a CEOS exhibition booth at the **GEO Plenary** in Ghana (Oct 31 to Nov 4). Libby (Symbios, CEOS Comms) has prepared graphics for the back wall of the booth (see below). If CEOS agencies, WGs or VCs have any desires for material at the booth, please contact the SEO (Brian Killough or Dave Borges).



Updates on issues raised during the last CEOS SEC teleconference

- None

Upcoming meetings or events

- The SEO (Brian and Dave) will attend the **Pecora Conference** in Denver, Colorado, USA on October 24-28. This meeting is hosted by USGS and is typically focused on Landsat. The SEO will present material on the ODC Sandbox and the recent efforts on Nighttime Lights ARD.
- The SEO team (Brian, Dave, Libby, Oguz) will travel to **GEO in Ghana** to support the CEOS exhibition booth and several side meeting sessions. The SEO is leading a session on the ODC Sandbox and will use that session to focus on SDGs and Disasters. The SEO is also participating in sessions on DE-Africa, Disasters, and post-2025 GEO.

Other highlights, activities, actions, projects, collaborations

- The SEO (Brian and Dave) attended the **SatSummit conference** in Washington, DC on Sept 28-29. This meeting highlighted some of the latest satellite and data technologies. There were a few high-level "take aways" that were captured by the SEO ... *The future is forecasting, we need to confirm what we see from space (in-situ data needed), and ARD, STAC and ODC are the tools of the future.*
- The SEO (Brian) traveled to **Mexico to meet with INEGI, CSIRO and GEO** about future plans for Digital Earth Americas. We agreed to develop a 5-page strategy in the coming months. The initial goals/themes include: inspiring community engagement, enabling economic growth, and measuring social impact of a changing world. In addition, Mexico is funding a new project in Trinidad and Tobago (University of the West Indies) that will likely become an excellent prototype for the DE-Americas initiative.
- The SEO (Dave) attended WGDIsasters-18 meeting in Nice, France on Oct 4-7. During the WGDIsasters meeting, CNES (Linda Tomasini) gave a [presentation](#) highlighting the progress and future direction of the Space for Climate Observatory (SCO) which includes a focus on addressing the SDGs. There was agreement to further discuss opportunities between SCO efforts supporting WGDIsasters and alignment with CEOS SDG Coordination Group objectives. Sendai Framework Targets and Sustainable Development Goals have intentional overlap. Capturing CEOS efforts in this shared space may prove mutually beneficial.