

CEOS SEC-295 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

SIT Technical Workshop 2022

- The draft agenda is out for comment, and all are encouraged to provide their feedback.
- Registration is open, and the link can be found on the CEOS meetings website: <https://ceos.org/meetings/2022-sit-technical-workshop/> Registration options are available for in person, virtual, or unsure.
- Participants should be aware there is a large event scheduled in the Frascati area overlapping with the Workshop, and so ESRIN was able to secure several hotel room blocks. Please see Ivan's email for details and book early to avoid disappointment.
- Requests for side meetings Monday 12th and Tuesday 13th are also open. For additional side meeting requests, please contact the SIT Chair Team (Ivan.Petiteville@esa.int, george@symbioscomms.com) with the following information: Group and Point of Contact; Meeting Name / topic; Approximative number of Participants; Duration; Time of Day Preference (if any).

Carbon & Biomass

- A number of further calls have been held between the SIT Chair Team, the GHG and AFOLU teams and our counterparts in IMEO. IMEO are aiming for a large COP27 announcement and it will feature the role of EO in their MARS (Methane Alert and Response System). SIT Chair is preparing a letter to send to select agencies whose data IMEO would welcome utilising in MARS (ASI, CRESDA, CSA, DLR, EC, ESA, JAXA, NASA, NRSCC, USGS). IMEO will provide a presentation to the SIT TW.
- The AFOLU Roadmap team plans to meet in ESA ESRIN (Frascati, Italy) on 12 Sep just ahead of SIT TW for a workshop in cooperation with the GCOS Terrestrial Panel (TOPC). The workshop will focus on the 2035 timeframe to define requirements and help CEOS agencies frame their planning. Agenda and description [here](#).

WMO Study Group on Greenhouse Gas Monitoring

The recent 75th Session of the WMO Executive Council decided to proceed with the further development of a WMO-coordinated Global Greenhouse Gas Monitoring Infrastructure, as discussed during GHG Monitoring Workshop hosted by WMO in May this year. The Council further decided to establish a Joint Study Group. On 12 July, Ken Holmlund (WMO) wrote to the SIT Team to request a CEOS team representative to that Joint Study Group. After internal discussion at ESA, ESA's management has agreed to nominate Yasjka Meijer (Copernicus CO2M Mission Scientist at ESA, and WGClimate GHG task team member) to represent CEOS in that Joint Study Group, if CEOS SEC agrees.

CEOS-ARD

- Nighttime Lights Surface Radiance PFS is expected to be endorsed by LSI-VC soon. The assessment of the NASA Black Marble dataset will follow shortly after.
- An Ocean Radar Backscatter PFS is nearing completion and endorsement is targeted for LSI-VC-12.
- Increasing engagement with private sector/new space on CEOS-ARD (Satellogic, Capella, Sinergise).
- Substantial update to <https://ceos.org/ard/index.html#datasets>
 - o 20+ product assessments now on the radar.
 - o PROBA-V Collection 2 self-assessment just submitted for review
 - o ALOS-2 PALSAR-2 self-assessments expected soon.
- LSI-VC is considering a CEOS Interoperability Framework, and will plan an in-depth discussion at LSI-VC-12.
- LSI-VC-12 will be held September 8-9 at ESA ESRIN.
- New [CEOS-ARD Twitter page](#)

New Space

- Several agencies have agreed to provide inputs to the New Space session at SIT TW (ESA, USGS, GISTDA, with NASA TBC).
- There is also provision for 'elevator pitches' from different CEOS groups on how they see their work as benefiting the new geometries between public and private space. We have early indications from WGCV (on how space agency calval expertise and facilities could help improve the utility of smallsats, and more) and from LSI-VC with WGISS (on how their data standardisation efforts such as ARD will be important in a future where data mixing and interoperability is commonplace).
- Further pitches are welcome and CEOS SEC members are encouraged to contact their agency leads for WGs or VCs to make suggestions.

SDG Coordination

- The group met Tuesday 12 July. A [running set of call notes is available here](#).
- SDG side meeting to be moved to Tuesday 13th, afternoon 14:00-17:00.

Upcoming meetings or events

- SIT TW: we hope will allow the first in-person CEOS meeting in more than 2.5 years. Currently we are planning for that outcome (Tue 13 - Thu 15 Sept).
- 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. Meeting room bookings at ESRIN are still being confirmed. SEC agencies are invited to raise any known conflicts in the meantime.
- An August call of the CEOS Oceans coordination group is being planned. A survey of [CEOS Contributions to Oceans Activities](#) is currently open for agency contributions.

CEOS SEC-295 Report

Entity: CEO

Prepared By: Marie-Claire Greening

Actions

294-02	Marie-Claire to draft letters of appreciation for Doug Cripe and Raj Kumar from the CEOS SEC.	SEC-295
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The letters of appreciation for Doug and Raj are still being drafted and agreed. Marie-Claire is consulting with various members of the SEC on these and will hope to have them both finalised by SEC-296.

GEO Programme Board

The GEO Programme Board was held as a hybrid meeting in Geneva and online from 21-22 June.

The Post-2025 GEO Work Programme was discussed, specifically, the finalisation of the 2023-2025 GEO Work Programme and the Post-2025 Incubator. The plans are to continue development and implementation of the 2023-2025 GEO Work Programme and to bridge it with experimental incubators that will be clustered under specific themes or nexus areas, all with a connection to policy drivers.

The preliminary findings of the Expert Advisory Group on Re-evaluation of GEOSS (EAG) were presented. To date, no unanimous position has been reached, in fact finding consensus had been a challenge. Work of the EAG is continuing and discussions are being based around three main scenarios:

1. A complete cessation of GEOSS as a concept,
2. Fully supporting GEOSS infrastructure, and its underlying updated concept, as is, *or*
3. Revising GEOSS into a tailor-made service for targeted end-user communities.

The GEO Secretariat provided an update on GEO Week 2022, which will be held from 31 October – 4 November in Accra, Ghana. A first draft of the agenda has been prepared and is under discussion within the GEO Executive Committee. This year, the plan is for GEO Week to be focused on integrated and collective action, accelerated use of Earth Observations, and operationalisation.

Upcoming meetings or events

- GEO Programme Board Meeting #24 (06 – 07 September)
- LSI-VC-12 (08 – 09 September)
- SIT 2022 Technical Workshop & Side Meetings (13 – 15 September)
- 73rd International Astronautical Congress (IAC) (18 – 22 September)

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

July				
	13-Jul-22	14-Jul-22	GEO Executive Committee Meeting # 58	Virtual
	16-Jul-22	24-Jul-22	COSPAR 44	Athens, Greece & Virtual
	17-Jul-22	22-Jul-22	IGARSS 2022	Kuala Lumpur, Malaysia & Virtual
August				
September				
	06-Sep-22	07-Sep-22	GEO Programme Board Meeting #24	Geneva, Switzerland
	08-Sep-22	09-Sep-22	LSI-VC-12	Frascati, Italy
	12-Sep-22	12-Sep-22	AFOLU Roadmap meeting	Frascati, Italy
	13-Sep-22	15-Sep-22	SIT 2022 Technical Workshop & Side Meetings	Frascati, Italy
	18-Sep-22	22-Sep-22	73rd International Astronautical Congress (IAC)	Paris, France
October				
	03-Oct-22	06-Oct-22	4th Joint meeting: WGCV-51 / WGISS-54	Tokyo, Japan
	03-Oct-22	07-Oct-22	WGDisasters-18	Nice, France & 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
	23-Oct-22	27-Oct-22	Pecora Conference	Denver, Colorado, USA
	24-Oct-22	28-Oct-22	GEO Blue Planet 5th Symposium	Accra, Ghana
	31-Oct-22	04-Nov-22	GEO Week 2022/GEO-XVII and ExCom-59	Accra, Ghana
November				
	07-Nov-22	18-Nov-22	UNFCCC COP-27	Sharm el-Sheikh, Egypt
	07-Nov-22	10-Nov-22	Very High-resolution Optical Data Assessment (VH-RODA) 2022	Frascati, Italy
	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	2022 AMS Annual Meeting	Denver, Colorado, USA
February				
March				
	28-Mar-22	30-Mar-22	SIT-38 & Side Meetings	ESRIN, Italy
April				
	17-Apr-23	20-Apr-23	38th Space Symposium	Colorado Springs, USA
May				
	17-May-23	19-May-23	JURSE 2023	Heraklion, Crete
June				
	26-Jun-23	28-Jun-23	CGMS-51 Plenary	TBD, Japan
July				
August				
September				
October				
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- 295

(two pages max.)

Entity: WGD disasters

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

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)

- A dedicated session on WGD disasters experience was held at ISPRS in Nice June 10th “Innovative Applications of Satellite Data for Risk Management and Disasters”, highlighting selected WGD disasters activities.
- Recovery Observatory Demonstrator kicked off a review of sustainability in preparation for end of demonstrator phase late 2023. A report on next steps will be presented Q4 2022.
- The quota for GSNL Marmara Supersite was assigned (DLR, CNES, COSMO-SkyMed and SAOCOM)
- Some quotas for GSNL Kamchatka Supersite are remaining.
- Finalization of Charter / CEOS WG disasters cooperation procedures
- The Malaysian Space Agency has joined the WGD disaster

Upcoming meetings or events

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

- WGD disasters 18th meeting which will be held in Nice (Université Cote d’Azur) from 4 to 7 October (face to face and virtual), is under preparation.

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: WGClimate

Prepared By: Jeff Privette (NOAA)

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

Issues requiring discussion during current CEOS SEC teleconference

- WMO seeking CEOS representative for new Joint Study Group on Greenhouse Gas Monitoring. Request email to Ivan Petiteville. WGClimate and GHG Task Team is preparing to recommend a suitable candidate.

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-50 Plenary approved the nomination of Dr. Wenying Su of NASA as the next WGClimate Vice-Chair. Wenying becomes Vice-Chair upon approval of CEOS Plenary in late November. Jeff Privette (NOAA) moves from Vice-Chair to Chair, and Albrecht Von Bargaen rotates off of WGClimate leadership.
- Preliminary results of the ECV Inventory Gap Analysis Workshop (May 18-20; Carbon Cycle focus) submitted to the GCOS Implementation Plan review. Other review input was also submitted.
- A unified formal report on the v.3 and v.4 Gap Analyses will be released ~October. A draft will be shared for CEOS SIT Technical Workshop in September.
- WGClimate is preparing a draft Statement of Space Agencies for submission to UNFCCC/SBSTA at COP-27. Will circulate for CEOS and CGMS review in ~August.
- Approximately 20 CDR Use Cases are (nearly) published online. WGClimate is coordinating expansion with Use Case teams from ESA/CCI and ECMWF/Copernicus. Additional submissions are welcome. Example front page:



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Upcoming meetings or events

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

- GCOS science conference (17-19 Oct 2022, Darmstadt, Germany, in person)
 - WGClimate will coordinate its next meeting around the GCOS conference
- WMO GHG/Carbon Initiative: Modelling Workshop, Jul 28, 2022
 - Subtitle: Strengthening the support for mitigation action under the Paris Agreement – Part 2
 - Follow-up to WMO’s GHG Carbon Monitoring Workshop “The Case for a Coordinated Global Greenhouse Gas Monitoring Infrastructure” in May
 - Current focus is modeling, however WGClimate/Privette will participate
- Collective Madison Meeting sponsored by AMS and NOAA, 08-12 August 2022, Madison, WI, with following conferences:
 - 25th Conference on Satellite Meteorology, Oceanography, and Climatology joint with the NOAA Satellite Meeting
 - 17th Conference on Polar Meteorology and Oceanography
 - 16th Conference on Cloud Physics/16th Conference on Atmospheric Radiation.

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: WGISS

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

Updates on issues raised during the last CEOS SEC teleconference

(Dot points)

- The coordination of WGISS-54 as an in-person meeting in Oct., was almost completed. The registration has already started.
<https://ceos.org/meetings/wgiss-54/>
- A Connected Data Assets System Level Team Telecon was held on Jun. 28. Status on the elements of the connected data assets, CWIC, FedEO, and IDN & dMMT were reported. CWIC Metrics Access holding page will be ready in the next few months. In terms of IDN & dMMT, the review on Machine Learning and Training Data Keywords is still ongoing. The document on service discovery “Service Discovery Best Practices” is now circulated in the CEOS level. The review comments will be welcomed by the mid-September.
- TechExpo Interest Group had a monthly meeting. Agenda coordination about WGISS-54 was made and two major topics, Jupyter Notebook and ML/DL/AI, were involved in the agenda.

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)

- Participated in CEOS ARD Oversight Group #5 meeting on Jun. 22nd. It was identified as potential concerns that the scattering of terminology in various ARDs and the one of the naming about the namespace of those STACs. Those concerns are to be shared and discussed in the WGISS-WGCV joint symposium in Sep.
- Participated in CEOS Ocean Coordination Group #2 meeting on Jul. 5th. WGISS Ocean related activities and stakeholders was input to the group.

Upcoming meetings or events

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

- A hands-on training on the Jupyter Notebook Day will be held in September.

- WGISS-54 will be held in-person in Oct. 4-6 in Tokyo. Joint workshop with WGCV is planned on Oct. 5.

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: 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)

During last WGCapD monthly teleconference there were the following presentations:

- Presentation on ESA Living Planet Symposium by ESA representative (attached)
- Presentation on the meeting of regional communities of practice meeting of EOTEC DevNet that took place on 15 and 16 July. While the membership in the communities of practice in Americas, Africa and Europe is progressing, there are difficulties in creating engagement in the Asia-Oceania region.
- Presentation on UN-SPIDER upcoming activities in Asia (presentation attached), where participation of other WGCapD member is welcome. This could help with the engagement in the Asia-Oceania region.

Discussion on the creation of a task team to analyse the possibility of creating a repository of learning objects. The initial work would be to select a metadata standard for learning objects.

Summary of the status of Q3 deliverables. All deliverables for Q3 are in progress.

- CB-20-07 Best Practice Guide to E-learning
- CB-20-12 Collaborative Feasibility Study
- CB-22-03 Webinar on satellite remote sensing for urban heat islands
- CB-22-02 Webinar on air quality data access and analysis from geostationary satellites

A new deliverable has been proposed and will likely be included in the workplan of WGCapD:

CSA and NASA will insert a new deliverable in the CEOS WGCapD Workplan: Indigenous Mapping Workshop (Nov. 21-23, Alberta, Canada). EO (optical & radar) training and dialogue involving traditional knowledge.

Upcoming meetings or events

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

Attachments

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

Presentation ESA living planet symposium

Presentation UN-SPIDER

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)

- June 8-13, 14th joint vicarious calibration campaign in Railroad Valley, Nevada, U.S.A. for GOSAT, GOSAT-2, OCO-2, OCO-3 and TROPOMI. 3 clear-sky days. All 5 instruments acquired CAL/VAL data over the site.
- WGCV leads call, June 13 - WGCV-50 Action Review and plan for WGCV-51
- CEOS-IMEO (the International Methane Emissions Observatory (IMEO) call, 23 June 2022, present something real in COP-27
- Oceans Coordination Meeting July 6. WGCV responded “Ocean Activities survey”.

Upcoming meetings or events

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

- The Infrared and Visible Optical Sensors Subgroup (IVOS) F-to-FT meeting in Reston, VA, USA Aug 29 - Sep 2.
- WGCV-51: Oct. 3-6, 2022, in Tokyo. The joint meeting with WGISS. Registration, invitation letter, VISA application process started.

CEOS SEC-295 Report – July 2022

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

- The SEO submitted a request to GEOSEC for a CEOS exhibition booth at the **GEO Plenary** in Ghana (Oct 31 to Nov 4). The SEO will plan and host this booth on behalf of CEOS. If CEOS agencies, WGs or VCs have any desires for material at the booth, please contact the SEO (Brian Killough or David Borges).

Upcoming meetings or events

- The SEO will present a paper (virtually) at the upcoming IGARSS Conference on July 18. The hybrid meeting is being held in Kuala Lumpur, Malaysia. The paper is titled "**The Open Data Cube Sandbox: A Tool to Support Flood Disaster Response and Recovery**" and co-authored by Brian Killough (NASA, SEO), George Dyke (Symbios, SEO), Ake Rosenqvist (soloEO, SEO), and Drew Lubawy (AMA, SEO).

Other highlights, activities, actions, projects, collaborations

- The SEO (Brian Killough) is supporting the 2022 Better Working World Data Challenge. This competition uses climate datasets to develop machine learning species distribution models for frogs in Australia, Costa Rica and Africa. The challenge will present the final winners on July 20. The SEO supported the inclusion of CEOS satellite data products (Sentinel-2, Copernicus DEM, climate data) from the MS Planetary Computer and also participated on the final review panel. Past support was provided by GEO, CSIRO and GA. This project is a great example of our data supporting the topic of **biodiversity, inspiring young professionals to code, and using satellite data for machine learning models.**