**CEOS Entity: CSA – CEOS Chair** 

Prepared by: Eric Laliberté

New updates, particularly those that would benefit from CEOS SEC awareness, discussion, help and/or guidance:

- 2024 CEOS plenary: Preparation for the plenary is ongoing. Please make sure to register as soon as possible and confirm any side meetings requests. As of Aug 29<sup>th</sup>, there are 68 people registered, including 18 who will participate virtually. Plenary programme will include 2 social evening activities: on Tuesday October 22<sup>nd</sup> and Wednesday October 23<sup>rd</sup>.
- CSA Chair Team is working with SEO to develop a brief *Communiqué* on CEOS' approach to commercial space and collaboration with EO industry. When ready, the text will be shared with SEC members for review and feedback.
- CSA is finalizing a document that presents proposed next steps to ensure a long-term presence of biodiversity as a priority theme within the CEOS governance. The document also brings forward recommended actions to ensure better collaboration with key international biodiversity players (GEO Sec, GEO BON, UNCBD). Document was shared with biodiversity experts for initial feedback. Updated version will be shared with SEC and other CEOS members on Sept. 6<sup>th</sup>. Objective is to use these draft recommendations to feed discussions at SIT TW, as well as during the upcoming Plenary.
- CSA will also share takeaways from a biodiversity workshop that was hosted by UNCBD in Montreal in June 2024. The 2-day event was put together to (1) discuss several objectives:
  - How to ensure a better collaboration between international biodiversity players (CEOS, GEO Sec, GEO BON, UNCBD)
  - Define specifically what type of satellite data would be needed for specific EBVs
  - On the above, provide guidance on which satellites have the above information, what public data is available and what are the use cases where a country may want to buy satellite data.
  - Pull together guidance for countries looking to understand how to invest in their monitoring systems
- As a follow-up to this important milestone meeting, CEOS Chair team agreed to lead the
  drafting of an initial version of an "International communiqué" which would clearly frame
  the participants' intentions and the areas of collaboration they agree to concentrate on.
  When ready, such draft statement will be shared with SEC members for review and
  feedback. We do not anticipate to have a final version of the text prior to the 2024

Plenary, as no progress was made on its development by other partners over the summer.

# Additional points (for written reference only):

Upcoming meetings and events (for written reference only):

• CSA Chair team will not attend the upcoming SIT TW meeting in person.

**CEOS Entity:** SIT Chair Team **Prepared by:** SIT Chair Team

New updates, particularly those that would benefit from CEOS SEC awareness, discussion, help and/or guidance:

### SIT Technical Workshop

- The agenda for the SIT Technical Workshop has now been distributed to all of the CEOS mailing lists and registered participants.
- Since SIT TW is not a Principal-level meeting, documents for decision are not anticipated. The usual deadline of one week before the meeting applies to presentations and reference documents.
- Documents and presentations should be uploaded to the shared folder to allow for streamlined self service: <u>Shared Presentation Folder</u> (default view only, ask for upload/edit permission as required).
   We have preemptively added people's account from last time to streamline the permissions.
- SEC support is requested to ensure that all speakers and participants are aware and prepared for their roles at the TW. The agenda was constructed in close consultation with all speakers, however reminders are welcome.

### Climate Policy Impact / Greenhouse Gas Observation Coordination

- The lessons learned from the first UNFCCC Global Stocktake will now be presented for endorsement at SIT-40 in April 2025. Additional time is required to ensure all viewpoints can be heard and appropriately analysed. An update of the CEOS Global Stocktake Strategy will then be targeted for endorsement at the 2025 CEOS Plenary.
- JAXA SIT Chair Team has made contact with the IPCC Technical Support Unit (Sandro Federici) to discuss a more coordinated CEOS approach to inclusion of satellite EO in the IPCC's Emissions Factor Database (EFDB).
- AFOLU Roadmap team is working through the actions and ensuring a suitable lead is identified for
  each. Must be someone with the ability and authority to action a response. Will also seek to provide
  examples of responses. The actions will be monitored by the LSI-VC Forests and Biomass subgroup.
- GHG portal is being updated for 2024 including new features
- CEOS GST portal also being updated for 2024

## UNCCD External Request Process Paper

The results of the Phase B assessment have been compiled by the JAXA SIT Chair Team <a href="here">here</a>.
 These results will be presented and additional feedback welcomed during the SIT Technical Workshop.

- SIT TW is 17-19 Sep in Sydney.
- Save the date issued for SIT-40 in Fukuoka, Japan week of 7 April 2025

**CEOS Entity:** CEO Team

Prepared by: Steven Ramage, September 2024

### 1. CEOS 2024-2026 Work Plan

The CEO team is engaging with different members of the CEOS community to address the SIT-39-01 action on assessing CEOS impact within and outside the CEOS community with the findings to be presented during SIT TW in Australia.

- CEOS 2024-2026 updates of the deliverables
   The outdated 2024 deliverables were updated on the tracking tool.
- 3. Review of the Strategic Guidance Document
  A review team was created in July, where the CEO team collaborated with members of
  the CEOS Secretariat to review the Strategic Guidance document. All minor changes that
  were made have been recorded and will be presented during the Plenary.
- 4. Working Group on Capacity Building and Data Democracy
  There are proposed communications to broaden awareness of the shared training
  calendar via EOTEC DEVNET with CEOS, GEO and WMO. Also, follow up with WGCapD
  members regarding the African Heads of Space Agencies meeting where the WGCapD
  Chair was planning to present CEOS activities to African Space Agencies.
- Working Group on Disasters
   Working with Chair and others on planning SIT TW and Early Warning for All content for WG-Disasters22 in Hungary.
- 6. Working Group on Calibration and Validation The CEO will work with the respective WG Chairs including SEO on ideas for collaboration across WGCV and the Working Group on Information Systems and Services (WGISS) for the October joint meeting in Sioux Falls.

## 7. GEO engagement

- a) Ongoing participation in the online discussion for the Post 2025 GEO Work
   Programme and preparing input for the GEO Symposium, Open Data and Open
   Knowledge Workshop and the on-site Programme Board meeting in China.
  - i. There is a space-based data session that is now a different session structure than previously presented to the SEO, where there was a session contribution expected on CEOS and the MIM database. The CEO has been invited to moderate this session. However, the coordinator for this session has been on sick leave and will only return in early September.
  - ii. The CEO will also be on a panel at the GEO Symposium on Biodiversity and Ecosystems. A coordination call regarding the panel may not happen until quite close to the event, therefore the Secretariat is requested to provide

any guidance or insight on this topic ASAP. Here are the aims and objectives of the session, as provided by the GEO Secretariat:

- To identify 3-4 priority areas that the GEO Work Programme needs to focus on in the Post-2025 GEO Work Programme.
- To learn from the experience of current activities to learn from best practices, build on these efforts, and find synergistic opportunities for collaboration. These may include:
- Improving the accuracy and comprehensiveness of biodiversity and ecosystem data through advanced Earth observation technologies, AI, and ML to better inform conservation efforts.
- ii. Creating integrated monitoring systems that combine data from multiple sources, to provide a holistic view of ecosystem health and biodiversity.
- iii. Validating remote sensing and AI-derived data with on-the-ground observations to ensure accuracy and reliability.

The CEO welcomes input from the CEOS Secretariat regarding any areas of innovation and good practice CEOS is involved with related to biodiversity and ecosystem services. There will be a maximum of 3 slides allowed, with guidance as follows:

- o Outline the value of creating integrated monitoring systems that combine data from multiple sources, to provide a holistic view of ecosystem health and biodiversity the strength of CEOS partnerships and coordination of space agencies to achieve this.
- b) The CEO joined a GEO Programme Board Post-2025 session where they talked about launching the call for the revised GEO Work Programme, an Earth Intelligence Readiness Matrix (including Evenflow), and they presented templates for the Research to Operations (R20) approach and for Conveners\*, which is a new term for GEO and the Programme Board.
- 8. CEOS climate policy impact

Ongoing coordination with the SIT Chair regarding CEOS coordination topics, such as the GHG Roadmap and how the CEO can support work with IPCC, UNFCCC, WMO etc.

9. CEOS biodiversity

Supporting the Ecosystem Extent Task Team (EETT) with communication to UN CBD, potentially another letter coming to the CEOS Chair. Also working with ESA on planning the BIOSPACE25 Conference, in February 2025 in Frascati, Italy.

#### 10. Work with SEO

- a) Discussions around open geospatial standards and the OGC
- b) Commercial sector engagement, notably building on queries linked to ARD
- c) Participating in the SDG Coordination Group meetings.
- d) Collaboration with the World Economic Forum on a joint blog post

- \* GEO Conveners are groups that serve as a community of practice, a community of interest or working groups focused on the facilitation or exploitation of EO and Earth Intelligence applications. Conveners capture activities that do not fit in the R2O pipeline. They are not necessarily focused on developing a specific tool, application, or service and transitioning it into a sustained or operational product. Conveners should support connection and integration along the Focus Areas.
  - 11. Jeremy Werdell, an oceanographer in the Ocean Ecology Laboratory (OEL) at NASA Goddard Space Flight Center (GSFC) and a Project Scientist for the NASA PACE mission has become a co-lead of the Ocean Colour Radiometry Virtual Constellation (OCR-VC), joining Ewa Kwiatkowska (EUMETSAT) and Marie-Helene Rio (ESA). Jeremy has been added to the CEOS Constellations mailing list and the CEOS website has been updated to note this new assignment: https://ceos.org/ourwork/virtual-constellations/ocr/
  - 12. The CEOS calendar is regularly updated, and members of the CEOS Secretariat are requested to continue providing input regarding upcoming events.

## Upcoming events/invitations

## 2024 SIT Technical Workshop

17-19 September 2024, Sydney, Australia

## 2024 GEO Symposium and the Open Data and Open Knowledge (ODOK) Workshop

This includes several events with the GEO Programme Board at the end of the week. 23-27 September 2024, Hangzhou, Zhejiang Province of China.

## WGDisasters-22

30 September - 4 October 2024, Budapest, Hungary

## WGCV-54 & WGISS-58 Joint meeting

15-18 October 2024, USGS EROS, Sioux Falls, South Dakota, USA

## **38th CEOS Plenary**

22-24 October 2024, Montreal, Canada

## 64th GEO Executive Committee Meeting

5-7 November 2024, Geneva, Switzerland

## **Upcoming**

#### **CEOS**

#### SIT

- 2024 SIT Technical Workshop: September 17th 19th, 2024 | Sydney, Australia
- SIT-40: April 8th 10th, 2025 | Fukuoka, Japan
- 2025 SIT Technical Workshop: September 9th 11th, 2025 | Darmstadt, Germany

### Plenary

- 38th CEOS Plenary : October 22nd 24th, 2024 | Montreal, Canada
- 39th CEOS Plenary: November 4th 6th, 2025 | Bath, UK

#### **Working Groups**

- WGDisasters-22 : September 30th October 4th, 2024 | Budapest, Hungary
- WGCV-54 & WGISS-58 Joint meeting : October 15th 18th, 2024 | Sioux Falls, SD, USA
- WGCV SAR Workshop 2024 : November 12th 15th, 2024 | Ahmedabad, India
- Workshop on Pre-flight Calibration and Characterisation of Optical Satellite Instruments for Earth Observation : ESA-ESTEC | November, 2024
- WGClimate-22 & GHG Task Team : February 11th 13th, 2025 | Harwell, UK
- **WGISS-59**: March 24th 27th, 2025 | Location TBC

#### Virtual Constellations

- LSI-VC-16: September 23rd 25th, 2024 | Canberra, Australia
- AC-VC-20: October 14th 18th, 2024 | College Park, MD, USA

#### External

- AOGEO Symposium: September 3rd 5th, 2024 | Tokyo, Japan
- Advancing Earth Observation Forum (AEO24): September 9th 13th, 2024 |

  Adelaide Australia
- GEO Symposium and GEO Open Data and Open Knowledge Workshop : September 23rd 26th, 2024 | China
- **GEO Programme Board Meeting #29**: September 27th, 2024 | China | CEOS leadership participation
- EUMETSAT Meteorological Satellite Conference: September 30th October 4th, 2024 | Würzburg, Germany
- EuroGEO Workshop: October 8th 10th, 2024 | Krakow, Poland
- 75th International Astronautical Congress (IAC): October 14th 18th, 2024 | Milan, Italy
- UN CBD COP-16: October 21st November 1st, 2024 | Cali, Colombia
- Twelfth session of the World Urban Forum (WUF12): November 4th 8th, 2024 | Cairo, Egypt
- International Coordination Group for Spaceborne SAR workshop: November 6th -8th, 2024 | Ureshino, Japan
- UNFCCC COP-29: November 11th 24th, 2024 | Baku, Azerbaijan
- Fifth UN World Data Forum 2024 : November 12th 15th, 2024 | Medellín, Colombia
- AGU 24: December 9th 13th, 2024 | Washington DC, USA
- AMS Annual Meeting: January 12th 16th, 2025 | New Orleans, Louisiana, USA
- 17th European Space Conference : January 28th 29th, 2025 | Square, Brussels
- BIOSPACE25 Conference: February 10th 14th, 2025 | Frascati, Italy
- 40th International Symposium on Remote Sensing of the Environment (ISRSE40):
   March 17th 21st, 2025 | Farnborough, UK
- GEO Global Forum: May 5th 9th, 2025 | Rome, Italy
- CGMS-53: June 3rd 5th, 2025 | Europe
- ESA Living Planet Symposium 2025 : June 23rd 27th, 2025 | Vienna, Austria
- IGARSS 2025: August 4th 8th, 2025 | Brisbane, Australia
- **76th International Astronautical Congress** : September 29th October 3rd, 2025 | Sydney, Australia
- UNFCCC COP-30 : November 10th 21st, 2025 | Brazil
- AGU 25 : December 15th 19th, 2025 | New Orleans, Louisiana, USA

**CEOS Entity:** WG on Disasters

Prepared by: L.A. Frulla, Lorant Czaran, Andrew Eddy

New updates, particularly those that would benefit from CEOS SEC awareness, discussion, help and/or guidance:

- The Recovery Observatory was activated for May floods in Armenia by European Union and generated a comprehensive picture of flood impact.
- Tonga Preparedness Pilot platform was launched along with a Digital Twin of Tonga, and a short video was produced that was shared by the Tonga Government during the Pacific Islands Forum Heads of State event (in a side session focused on Disaster Risk Management). They were also presented to United Nations Secretary General and UN delegations to the Pacific Islands Forum.
- A contribution was submitted to the CEOS Newsletter entitled "The Recovery Observatory (RO) applying satellite EO to recovery".
- A new subgroup on Biodiversity and Disasters has been formed under leadership of ISRO and a pilot activity will be proposed later this year.
- Regarding the EW4All, a EW4All subgroup of the WG Disasters has been created but will
  not be meeting before SIT Technical Workshop meeting.

# Additional points (for written reference only):

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- The WG Disasters 22 will be in Budapest from October 1 to 4 ( hybrid).
- The WG Disasters 23 meeting will be held in March (dates TBC) in Italy at the invitation of the National Institute of Geophysics and Volcanology (INGV).
- The WG Disasters 24 meeting will be held in September (dates TBC) in Argentina at the invitation of CONAE.

**CEOS Entity:** Working Group on Calibration and Validation (WGCV)

Prepared by: Philippe Goryl, WGCV Chair, ESA

New updates, particularly those that would benefit from CEOS SEC awareness, discussion, help and/or guidance:

## Additional points (for written reference only):

- WGCV held a teleconference yesterday (4 September) to review the agenda, objectives, and logistics for the upcoming WGCV-54 meeting. The discussion also addressed select open actions from WGCV-53 and assessed progress on the <u>Preflight Workshop</u> and SITSat Task Team.
- Final selections for oral presentations at the upcoming <u>Pre-flight Calibration Workshop</u> are nearing completion. The workshop will focus on key themes related to the development and characterisation of satellite instrument calibration. The 54 submitted abstracts (all accepted) will be divided into oral and poster presentations across the four-day event.
- A discussion took place between WGCV and SEO (Dave Borges and his team) to improve the connection between the CEOS Cal/Val portal and SEO activities, and in particular, to improve RadCalNet as a service.
- The SITSat (SI-Traceable Satellite) Task Team is working on objectives for a potential side meeting to be held alongside WGCV-54.

- The Infrared and Visible Optical Sensors Subgroup will hold their annual meeting in Japan in the week of 9 September 2024.
- WGCV will present at the first Stakeholder Meeting of the CIPM Sectoral Task Group on Climate Change and Environment in Sèvres, France from 16-18 September 2024.
- The WGCV-54/WGISS-58 meeting will be held at USGS EROS, Sioux Falls, South Dakota, USA from 15-18 October 2024.
- Workshop on Pre-flight Calibration and Characterisation of Optical Satellite Instruments for Earth Observation will be held at ESTEC, Noordwijk, The Netherlands from 19-22 November 2024.

**CEOS Entity:** Joint CEOS-CGMS Working Group on Climate (WGClimate)

Prepared by: Jeff Privette (NOAA), Wenying Su (NASA)

New updates, particularly those that would benefit from CEOS SEC awareness, discussion, help and/or guidance:

- SIT Technical Workshop briefings (all with near-term deliverables)
  - Global Stocktake 1: Lessons-learned (update)
  - Space Agencies Statement to SBSTA-61 at COP-29 (in review)
  - Space Agencies Response to GCOS Implementation Plan (update)
  - ECV Inventory Gap Analysis and Coordinated Action Plan (update)
  - GHG Roadmap (update)
  - Vice Chair nomination: Vincent-Henri Peuch (for Plenary endorsement)
- WGClimate-21 (virtual only): October 7th (Primary); October 9th (carryover if needed)
  - Condensed meeting: activity status reports, adjusting for Plenary and COP-29
- COP-29 Earth Information Day: Submitted three themes for SBSTA consideration
  - Sustained and systematic space observations addressing GCOS Essential Climate Variables
  - Space observations have transformed our ability to monitor and understand climate change and inform sound policy
  - Supporting WMO's Global Greenhouse Gas Watch (G3W) through operational GHG monitoring and information services

## Additional points (for written reference only):

None to report

- CEOS SIT Tech. Workshop. September 17-19, Sydney, Australia (Jeff and Wenying travel)
- WGClimate-21, Oct. 7, 9, Virtual
- CEOS Plenary, Oct. 22-24, Montreal (Jeff and Wenying travel)
- COP-29, Nov. 11-24, Azerbaijan (TBD travel; note above on EID)
- WGClimate-22, 10-13 Feb. 2025, Harwell, UK (Save-the-date email issued)

**CEOS Entity: SEO** 

Prepared by: Dave Borges

New updates, particularly those that would benefit from CEOS SEC awareness, discussion, help and/or guidance:

- CEOS Communications Team has developed a new storymap, "CEOS Through the Years:
   <u>1984-2023</u>", as part of our 40<sup>th</sup> Anniversary campaign. The storymap will be embedded on
   the CEOS website next week. The Comms Team has also begun posting individual CEOS
   Principal video clips on social media channels. If able, please share further through agency
   networks.
- The SDG Coordination Group was represented at the UN-GGIM 14<sup>th</sup> Session in New York, 5-9 August and has contributed to the IAEG-SDG Working Group on Geospatial Information (WGGI) White Paper to be shared with the UNSC IAEG-SDG. This activity is pursuing the opportunity to fundamentally change how a subset of SDG indicators are currently produced, and potentially could provide novel and innovative techniques from Earth observations and other geospatial data more broadly across national reporting. Decisional language from the 14<sup>th</sup> Session "urged the WG to continue and address the importance of integrating all relevant forms of geospatial information, including Earth observations and insitu data, essential to assist countries to meet the ambitions of the 2030 Agenda".
- Dave Borges worked with GEO Secretariat to write an article summarizing UN-GGIM 14 outcomes titled, "Leveraging geospatial data to rescue the SDGs". The article is scheduled to publish later this week on the GEO website.
- The SEO is compiling findings regarding OUT-24-06: Integrate New Space data into the CEOS Analytics Lab and evaluate interoperability of with common CEOS datasets. Initial findings related to calibration and validation of commercial data led to a meeting with WGCV regarding the RadCalNet API and discussions are ongoing regarding opportunities to integrate capabilities with the new CEOS organizational github.

## Additional points (for written reference only):

- 7th Meeting of the UN Working Group on Geospatial Information of the Inter-agency and Expert Group on the SDG Indicators, UN Office Nairobi, Nairobi Kenya, 17-19 September.
- FOSS4G 2024, Cloud Native Geospatial for EO Workshop, Belem Brazil, 2-6 December.