**Minutes V1.0**

**281st CEOS SECRETARIAT MEETING**

Thursday 15 July 2021

Chaired by NASA

**Participants**

**CEO:** Marie-Claire Greening

**CNES:** Selma Cherchali, Aurélien Sacotte

**EUMETSAT:** Robert Husband

**GEOSEC:** Doug Cripe

**JAXA:** Osamu Ochiai, Yukio Haruyama, Koji Akiyama

**NASA:** Sandra Cauffman (Chair), Christine Bognar, Matt Steventon

**NOAA:** Kerry Sawyer

**OST-VC:** Annick Sylvestre-Baron, Estelle Obligis

**SIT Chair Team:** Adam Lewis, Jonathon Ross

**SEO:** Brian Killough  
**WGCapD:** Nancy Searby

**WGClimate:** Jeff Privette

**WGCV:**  Akihiko Kuze

**WGDisasters:** David Green, Dave Borges

**WGISS:** Robert Woodcock, Makoto Natsuisaka

1. **Welcome and Introductions, Review of Agenda**

Sandra Cauffman (NASA, CEOS Chair Team) welcomed everyone to SEC-281.

Before embarking on the agenda, Sandra offered a brief update in relation to the pandemic. NASA Headquarters is transitioning to Stage 2, which means that starting next week, some staff (25 percent) will resume working at Headquarters with alternating schedules.

Sandra then noted that the SIT Chair Team is leading us towards the SIT Technical Workshop, for which they distributed a document with draft objectives and the week at a glance for CEOS Agency review and comment. Feedback is requested by 16 July.

JAXA is preparing the next CEOS Newsletter and will offer an update at the end of today’s agenda. Sandra also noted that there will be updates from SEC colleagues who participated in the GEO Virtual Symposium and other meetings, including the recent WGCV-49 meeting.

Sandra welcomed OST-VC Co-Leads Annick Sylvestre-Baron (CNES) and Estelle Obligis (EUMETSAT), who will be reporting later. Sandra encouraged everyone to read the consolidated written report document for today’s CEOS SEC and thanked everyone for their ongoing support of CEOS activities.

Christine Bognar (NASA, CEOS Chair Team) noted that Karen St. Germain was unable to join the meeting due to a scheduling conflict.

The SEC-281 agenda was accepted without any changes.

1. **Action Status**

Marie Claire (CEOS Executive Officer) provided an update on Action **CEOS-34-20:**

* A letter has been sent to the Intergovernmental Oceanographic Commission (IOC), which is the United Nations body responsible for supporting global ocean science and services and is the body that is overseeing the UN Decade of Ocean Science for Sustainable Development.
* The letter includes detailed input from the COAST *Ad Hoc* Team, the COVERAGE Leads, and WGClimate, as well as an outline of the relevant activities being covered by the CEOS Virtual Constellations. The letter was sent from the CEOS SIT Chair to the IOC Executive Secretary, Vladimir Ryabinin, on 22 June 2021.
* The CEO and SIT Chair will maintain the dialogue with the IOC.

1. **CEOS Chair Report**

Christine Bognar (NASA, CEOS Chair Team) reported:

* CEOS continues to advance the implementation of the 2021 CEOS Chair theme through the activities reported to the SEC last month in the following main categories: MIM Database, Data Cloud Deployments, Earth Analytics Interoperability Lab (EAIL), Open Data Cube (ODC) Sandbox, Training Webinars (Jupyter Python Notebook training webinar), Climate use-cases, CEOS communications and website, and EOTEC DevNet.

She then offered a brief review of actions that the SEC has overseen in preparation for the CEOS Plenary:

* **2022 CEOS Chair:** The nomination from CNES was endorsed virtually by CEOS Principals. (This action carried over from 2020 and has been completed.)
* **2023 CEOS Chair:** The SEC now has the nomination of GISTDA from the Asia and Pacific region, which will be presented for endorsement at the CEOS Plenary on Nov. 1-4, 2021.
* **WGDisasters Vice Chair:** The nomination from CONAE now has the consensus of the WG and will be presented for CEOS Plenary endorsement.
* **WGCapD Chair:** The nomination from UNOOSA now has the consensus of the WG and will be presented for CEOS Plenary endorsement.
* There are two topics in work: a WGCapD Vice Chair nomination and a WGISS Vice Chair nomination (understood to be in progress).

Christine confirmed that the2nd Climate Observations Conference of CGMS and WCRP has been postponed until 2022. IAC will be held in Dubai from Oct. 25-29. COP26 will be held in Glasgow from Nov. 1-12. CEOS Plenary will be held virtually from Nov. 1-4 – a ‘Save the Date’ message to the CEOS community will be sent soon.

1. **SIT Chair Report**

Adam Lewis (GA, SIT Co-Chair) reported:

* A draft set of meeting objectives and week at a glance have been distributed for the upcoming 2021 SIT Technical Workshop. Feedback has been requested by 16 July. A draft agenda is in preparation.
* The SIT Chair Team participated in the 55th meeting of the GEO Executive Committee on 6 and 7 July 2021. An in-depth report is provided below. A key topic was the mid-term review of GEO’s current Strategic Plan period.
* **Working Teams:** The SST-VC and LSI-VC tag-up was held on 17 June, completing the set of tag-ups for this round. The SIT Chair Team and the VCs continue to find the informal approach to be quite productive and propose to continue in this way.
* **Carbon & Biomass:** There has been good progress and a full session on this theme is planned for the SIT Technical Workshop, with participation and updates anticipated from the UNFCCC Secretariat and GCOS.
* **SDGs:** There has been good progress on the options for governance of the SDG activity within CEOS. Adam thanked Brian Killough (SEO) for his suggestions and for advancing the discussion.
* **ARD:** The SIT Chair Team is working on CEOS ARD Strategy v2.0 – for presentation to SIT Technical Workshop and the CEOS Plenary. An effort is underway to find a time to have a consultation call with the VCs on the new CEOS ARD Governance Framework. The VCs will be central to a broader CEOS ARD concept. WGCV has been assessing options to streamline the CARD4L assessment process for improved turnaround times.

**GEO Meetings Report**

Jonathon Ross (GA, SIT Chair Team) reported on the 55th meeting of the GEO Executive Committee, which he and Alex Held attended on behalf of the SIT Chair Team:

* It was the first meeting under the leadership of the new GEO Secretariat Director Yana Gevorgyan.
* There was a comprehensive report from the GEO Climate Change Working Group. The working group’s strategic approach across different aspects of climate change was well received.
* GEO is poised to gain Observer status to the UNFCCC, subject to final approval at COP26, which looks positive. GEO is seeking permanent reporting status, similar to that of the joint CEOS-CGMS WGClimate.
* There was a report from the Executive Committee’s Advisory Group on the Pacific Islands. This group was established after the Canberra Ministerial to better understand how GEO can engage with Pacific Island nations and territories. Its work has been severely impacted by COVID. However, the group now has a work plan and is engaging in discussions on Digital Earth Pacific, with which CEOS (through the SEO) is engaging.
* Another major topic of the meeting was the GEO mid-term review. GEO is more than halfway through its current 10-year strategic plan. One key theme from the mid-term evaluation includes the role of the regional GEO initiatives (GEOs). Overall, the general consensus was that the review about GEO and its work was positive.
* There were also discussions about ongoing efforts to understand what needs to happen with the GEOSS platform, covering topics like available data assets and portals. The GEO ExCom also had discussions about ensuring the evolution of those platforms in the context of cloud computing.
* The summary of outcomes from the GEO Symposium was presented and the event was praised as a major success. The organising groups, including CEOS representatives, were highly praised.
* GEO Week 2021 is shaping up to be a comprehensive one-week virtual event with major side events and plenary sessions. There will be opportunities for statements, so the CEOS SEC may wish to consider establishing an action for the CEO (with support from the SIT Chair and CEOS Chair teams) to start thinking about preparing a CEOS written statement.

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| **281-01** | CEOS Executive Officer, with support from the CEOS Chair and SIT Chair teams, to consider the preparation of CEOS inputs for GEO Week 2021. | **GEO Week 2021** |

**Ocean Surface Topography Virtual Constellation (OST-VC) Report**

OST-VC Co-Leads Estelle Obligis (EUMETSAT) and Annick Sylvestre-Baron (CNES) showed a timeline of the current constellation and reported:

* **Sentinel-6 Michael Freilich:** The mission was successfully launched in November 2020. This mission is flying in tandem with Jason-3 (trailing by 30 seconds). The platform, flight operations and instruments are nominal. The Poseidon-4 instrument is performing extremely well in all modes in terms of tracking. A power decay which is similar to Sentinel-3 was observed and its impact is under assessment. Operational release of the low resolution mode NRT/STC products started in June and all performance requirements have been met. Cal/Val activities continue for the high-resolution mode and delivery of NTC products. An Altimetry High Rate NRT/STC/NTC Verification Workshop (S6VT) is planned for Oct. 21. Final commissioning review and decision for operational release to all users of the ALT HR and all NTC products will be held on Dec. 21.
* **SWOT:** Will carry the first wide-swath altimeter called KaRIN. This mission is highly expected by ocean, hydrology and coastal scientists. Despite the COVID-19 pandemic, major critical milestones continue to be met. In April 2021, the launch readiness date was confirmed as mid-Nov. 2022. In June, the payload unit (including both the nadir & KaRIN altimeters) was delivered by NASA to CNES/Thales Cannes.
* **Copernicus S3NG and S6NG Topography:** The mission requirements are being developed at ESA (endorsed by Mission Advisory Group) based on EC user needs with the objective to guarantee continuity of Sentinel-3 and Sentinel-6 topography measurements and to propose potential enhancements, notably in terms of sampling.
  + **S3NG:** ESA Phase A/B1 study will start later in 2021. There will be selection between a constellation of small satellite nadir altimeters, a swath altimeter or a hybrid of both approaches.
  + **S6NG:** There is an open call to work on the Sentinel-6 sea level stability uncertainty budget to understand what is needed for this mission.
* **Altimetry Requirement Document:** This document was originally written 12 years ago, and delivery of an update was expected at the beginning of 2022. However, due to ongoing activities (see written report), the final delivery of the white paper has been postponed until early 2023.

1. **CEOS Executive Officer Report**

Marie-Claire Greening (CEOS Executive Officer) reported:

* **COP-26:** There is no indication at the moment to suggest that the blue zone and main COP-26 meetings will not be in person. The updates remain the same as shared at last month’s SEC-280 meeting.
* **GEO Symposium:** The Symposium, held virtually on 21-24 June, was deemed a success, with approximately 700 attendees from 83 different countries. CEOS had a prominent role in many of the plenary, parallel and spotlight sessions, including a dedicated parallel session run by the COAST *Ad Hoc* Team and an Open Data Cube Sandbox demo run by the SEO.
* **CEOS Communications:** The SEO team is working with the CEO, SIT Chair Team and WGCapD on website and social media outreach improvements. This includes the possibility of releasing the newsletter online in collaboration with JAXA.
* Marie-Claire is working with Kerry Sawyer (NOAA) and others on historical record maintenance to preserve CEOS institutional memory.

1. **Working Group Reports**

**WGDisasters**

Dave Borges (WGDisasters Secretariat) reported on behalf of David Green (NASA, WGDisasters Chair):

* Dave expressed his gratitude on behalf of WGDisasters for Pierric Ferrier (CNES) for accepting to remain as the Data Coordination Team (DCT) Lead for the next year, while also serving as WGDisasters Chair and member of the CEOS Chair team for 2022.
* Engagement with the private sector is increasing across WGDisasters activities. Volcano Demonstrator Co-Leads have been meeting with ICEYE leadership in recent months to explore data sharing agreements that would improve persistent volcanology monitoring globally with intent to improve risk reduction capabilities. The Wildfire Pilot Co-Leads, in the context of their objective to conduct a detailed inventory and gap analysis of existing and proposed EO systems suitable for global active-fire monitoring, consider this effort incomplete without broad inclusion of commercial platforms and data streams. Additional, similar examples across the WG exist. WGDisasters leadership is considering if a WG-wide strategy on private sector engagement would be beneficial.
* WGDisasters’ observer status with the International Charter is currently being refined internally. This effort is being led by Pierric Ferrier of CNES. Almost all WGDisasters activities have expressed interest in receiving International Disaster Charter data when relevant to ongoing activities and designated areas of interest. In return, two WGDisasters activities (Seismic Demonstrator and Geohazards Lab) intend to provide value-added data to the Charter on a best-effort basis.
* Dave Borges will present *“CEOS WGDisasters Flood Pilot: Improving EO Flood Monitoring Capabilities through Data Fusion”* at IGARSS 2021 on July 15. Francesca Cigna is presenting *“Latest Efforts: Geoinformation for Hazards Monitoring, Disaster Risk Reduction and Emergency Response”* on July 16.
* WGDisasters-16 will be held on Sept. 21-23.

Dave also highlighted that WGDisasters is supporting the OGC Disaster Recovery Pilot 2021:

* The pilot has the goal of improving the ability of key decision makers and responders to discover, access, share and exploit location based information in support of disaster preparedness, response, etc.
* WGDisasters is working to ensure that CEOS ARD is brought to the attention of all OGC pilot participants, and have ensured that there are two ARD-related deliverables included in the OGC Disaster Recovery Pilot: Earth Observation Data Provider Disaster Readiness Guide and Observation Data User Disaster Readiness Guide. These will take into consideration the current state of CEOS ARD.

Kerry Sawyer (NOAA) asked how WGDisasters is implementing data sharing agreements with the private sector. Dave advised that the Working Group has not entered into any agreements, as it is unfamiliar territory. Kerry noted this topic has come up in the past, but there is no precedent for such data sharing agreements. Kerry suggested CEOS leadership be engaged in any formal discussions. Christine seconded this and requested Dave connect with CEOS leadership, as there should be oversight of any such agreements. It was also suggested that this be a topic for discussion on the SEC-282 agenda.

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| **281-02** | WGDisasters Chair to connect with the CEOS Chair and CEO on the matter of engagement and potential data sharing agreements with entities in the commercial sector. | **SEC-282** |

Adam Lewis (GA, SIT Co-Chair) encouraged WGDisasters to ensure connections between the OGC Disaster Recovery Pilot , OGC’s Testbed-16 ARD work, and the work of CEOS on ARD.

**WGClimate**

Jeff Privette (NOAA, WGClimate Vice Chair) reported on behalf of Albrecht von Bargen (DLR, WGClimate Chair):

* **CDR Use Cases:** Received a good response and an additional 17 total use cases have been received. WGClimate is working actively with the NOAA Graphics and Communication team to transfer these into web pages with use of standard templates. This should be posted publicly online by the end of the northern hemisphere summer.
* The Space Agency Statement is being updated for COP26 in cooperation with the CEOS Chair. The draft will be completed by August, and then seek CEOS and CGMS approval through the usual endorsement process.
* WGClimate Chair has accepted an invitation from UNOOSA to attend the United Nations/Austria World Space Forum on *“Space 4 Climate Action”* in December 2021. UNOOSA is a CEOS Associate Member and will send representatives to participate in future WGClimate meetings.
* The GHG Task Team had a meeting on June 4. The next meeting is still being planned.
* The AFOLU Workshop, postponed from Varese in 2020, will be held in the northern hemisphere Fall of 2021.
* The 2nd Climate Observation Conference, organised by GCOS & WCRP with support from EUMETSAT has been moved to 2022.

**WGISS**

Robert Woodcock (CSIRO, WGISS Chair) reported:

* **CEOS Earth Analytics Interoperability Laboratory:** The EAIL now has a range of data available to support the WGDisasters, DEMIX, and COAST groups. This includes data available on the public cloud repositories. The requested Canadian RCM data has a conditional EULA which is being negotiated and the EAIL is being updated to support the necessary access control mechanisms to allow use of this data. ESA and USGS archives are being used for both EO and DEM data. Additional data collections will be added in the coming months (MODIS, VIIRS). Some data requests (e.g., ICESat-2) may not be achievable without additional technical support, given the nature of the data, supply chain and available EAIL expertise. CSIRO Chile has also updated a range of Jupyter Notebooks on EAIL demonstrating the use of the data and systems.
* Work has commenced on actions resulting from WGISS-52, notably defining common names for STAC, ARD and other terms (in collaboration with LSI-VC).
* Persistent Identifiers: BP analysis of replica data in the cloud (for integrity and authenticity of data) is in preparation.
* A Jupyter Notebook Seminar will be held on Jul. 21-22. There have been more than 388 registrations to date.
* WGISS-52 will be held virtually on Oct. 19-21.
* WGISS-53 is being planned as a joint meeting with WGCV , hopefully in-person in Tokyo during March 2022.

**WGCapD**

Nancy Searby (NASA, WGCapD Chair) reported:

* WGCapD is still seeking candidates for the Vice Chair position. Welcome all candidates – please contact Nancy and Christine Bognar (NASA, CEOS Chair Team).
* Disaster Risk Management MOOC deliverable CB-21-07 is now closed. Information on this free course is available at the [ISRO-IIRS website](https://isat.iirs.gov.in/mooc.php). Registration closes on Aug. 15, 2021.
* The Branded Webinar Toolkit (CB-21-01) deliverable is now closed. Updated toolkit materials are now available on WGCapD’s Resources page on the CEOS website. Conversation on broader branding and labelling has been handed to the SEO, given the scope.
* The Earth Observation Training, Education, and Capacity Development Network (EOTEC DevNet) held its first set of regional exchanges on Jun. 14. During the exchanges, over 90 participants contributed to the start-up of four regional Communities of Practice and helped develop a new tracking tool on flood-related capacity building opportunities. The floods tracker, an example of the types of resources EOTEC DevNet plans to produce, captures existing EO flood tools, related capacity building and training opportunities, and outstanding gaps and needs. Deliverable CB-20-05 is now closed.
* EOTEC DevNet meetings also resulted in the identification of the group’s next focus area, drought, which will be discussed at the next round of regional exchanges, scheduled for Sept. 21, 2021.
* The Jupyter Notebook Webinar, a joint deliverable CB-20-04 with WGISS, will take place on July 21-22, with 388 registrants to date.
* A WGCapD work planning meeting will be held on Sept. 6-8, 2021. The EOTEC DevNet Leadership meeting will take place on Sept. 10, 2021. The next round of EOTEC DevNet regional meetings is planned for Sept. 21, 2021.

**WGCV**

Akihiko Kuze (JAXA, WGCV Chair) reported:

* WGCV-49 was held Jun. 29 - Jul. 2. Some key actions/outcomes arising from the discussions were:
  + Simplifying the CARD4L peer review process was agreed, and next steps were agreed.
  + Schedule a follow up teleconference on the potential WGCV recommendation of the TSIS HSRS solar spectra. This database has reduced uncertainties over a wide range and is much more flexible, with 3 different spectral resolutions that are useful for different applications. WGCV will recommend this database after a virtual meeting in August to discuss the topic further.
  + Considering nominations for the next WGCV Vice Chair (term from Oct. 2022 to Oct. 2024) preferably from the Americas region to continue the current cycle of geographic rotation.
* WGCV-50 is planned for March 21-24, 2022 (TBD) in Tokyo, Japan. The meeting will be a hybrid in-person/virtual event and is being proposed as a joint meeting with WGISS.

1. **GEO Report**

Doug Cripe (GEOSEC) reported:

* The GEO Virtual Symposium is the first step in a series of events that will lead towards the next work programme for GEO. The current work programme covers 2020-2022. The 2023-2025 work programme is now being considered. The Symposium aimed to stimulate ideas on the ‘nexus’ concept, which represents ways in which there are trade-offs between different sectors. If one can study the different sectors at the same time and try to ascertain how they impact each other, then one may be able to promote integration and good governance. Four of the plenary sessions in the symposium featured initial nexus types, such as: resilient cities; biodiversity ecosystems and nature-based solutions; oceans and climate; and water, energy, and food. This approach will be looked at more deeply to identify new opportunities during GEO Week at the end of Nov. 2021.
* New GEO Secretariat Director Yana Gevorgyan will be revising the concept of operations document (CONOPS). It is the document that outlines the duties and responsibilities of the GEO Secretariat staff. This will be presented in the next Executive Committee meeting in Nov. 2021.
* The Executive Committee (ExCom) has mandated that the GEO Secretariat assemble a group comprising ExCom membership to provide the response to the recommendations from the mid-term evaluation. This will begin in July and the final response from ExCom will be expected by GEO Plenary.
* The ExCom has agreed to allow the GEO Secretariat to work on the Knowledge Hub through to the end of the year to provide an initial glimpse of the operational version. This will be demonstrated during the GEO Week and a more comprehensive long-term plan will be prepared before the Plenary, so that the forward plan can be agreed.
* “GEO Climate Workshop: Policy and Finance” will be held on Sept. 21 to 23 (open). The theme of the workshop is “Earth Observation for Climate Ambition” – reflecting the focus of GEO on the role of Earth observation in supporting national climate action and the overall global stocktake process under the UNFCCC Paris Agreement. More information is available on the [GEO website](https://earthobservations.org/index.php).

1. **SEO Report**

Brian Killough (NASA, SEO) reported:

* 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 Jonathon Ross (GA, SIT Chair Team) and Brian Killough. The session includes five papers from CEOS colleagues.
* **Digital Earth Americas:** The second of three workshops is planned for July 29. These workshops, sponsored by CSIRO Chile and the Australian Government, will identify the EO needs and challenges of the region and will advance the use of satellite data and Open Data Cube technologies. The workshops involve key regional stakeholders (e.g., UN-GGIM, AmeriGEO, INEGI, CEPAL) and country-level Government agencies and are consistent with the 2020 Aguascalientes Declaration objective to improve collaboration and the use of EO in the region. This second workshop will focus on the diversity of Data Cube solutions available to users, ranging from simple to complex cloud-based platforms. This workshop will be slightly more technical than the previous workshop and will be suited to managers, geospatial data experts, Earth observing specialists and others who have an interest in understanding several of the options that are available in the Data Cube arena and how to decide on the right tool for the job.
* The SEO presented a demonstration of the Open Data Cube Sandbox at the GEO Symposium on Jun. 24. There was plenty of positive feedback. The SEO team is now working with GEO to provide content to include this tool in the GEO Knowledge Hub. A meeting was held with the GEO team on July 1 to discuss details.
* **CEOS Communications:** A group of CEOS representatives (CEO, SEO, WGCapD, CEOS Chair team) 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.

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| **281-03** | SEO to share the invitation to the Digital Earth Americas workshop with CEOS SEC. | **ASAP before July 29** |

1. **AOB, Next Meeting, and Adjournment**

**2022 CEOS Chair Priorities and Early Plenary Planning**

Selma Cherchali (CNES, 2022 CEOS Chair) reported. The CNES team has been working to summarise the priorities for their 2022 CEOS Chair term, which will be discussed during the SIT Technical Workshop. These priorities have been formulated in consideration and support/continuity of the NASA 2021 CEOS Chair theme of data for open science and decision support. The headline *“Paths to Sustainability: from strategy to practical measures”* proposes to build on the strategic work of CEOS:

* Through increased emphasis on the evolution of our various R&D and demonstration activities into applications and services.
* Focusing on the CEOS relationship with GEO to engage the stakeholders necessary for such evolution to applications and services.
* Work with the CEOS Working Groups, Virtual Constellations, and Ad Hoc Teams to develop case studies for our various applications to improve stakeholder understanding and appreciation of how EO data may help their information challenges.
* Through support to specific initiatives recently emerging from the CEOS structure, including the CEOS Biomass Protocol and the GEO Community Activity: Forest Biomass Reference System from Tree-by-Tree Inventory Data (GEO-TREES).
* Initiating new and complementary activities, in collaboration with the relevant technical specialist groups in CEOS. This will include cooperation on thermal IR cross-collaboration.

Sandra Cauffman (NASA, CEOS Chair Team) thanked Selma and the CNES team for stepping up to be Chair of CEOS in 2022.

The 2022 CEOS Plenary dates will be Oct. 25-27. The venue is yet to be confirmed.

Kerry Sawyer (NOAA) noted that the Diwali holiday, which is a very important Hindu festival in India, will overlap with the meeting dates. It was noted that the 2022 CEOS Chair Team has considered this feedback, which was first communicated during SEC-280. The overlap is unfortunate, however given the busy time of year with various holidays and other meetings competing for time, the overlap will need to be managed. Christine Bognar (NASA, CEOS Chair Team) added that the date also overlaps with the Pecora Conference in the U.S., but this should be manageable.

**57th CEOS Newsletter**

Yukio Haruyama (JAXA) shared some updates on the 57th CEOS Newsletter. All articles have been received, with just one update pending. Editing and printing will be completed by the end of July. All articles need to be reviewed by the respective contributors by the end of July before publishing. The publishing stage will begin by the first week of August.

**Next Meeting and Adjournment**

Christine Bognar (NASA, CEOS Chair Team) thanked everyone for participating. CEOS SEC-282 will be held on September 2, 2021. There will be no SEC meeting in August. The start time for the teleconference will be 7 AM US East.

Sandra Cauffman (NASA, CEOS Chair Team) thanked everyone for participating in the meeting. Sandra noted that this year NASA is celebrating the tenth anniversary of the NASA Space Apps Challenge ([spaceappschallenge.org](https://www.spaceappschallenge.org/)). In 2020, various CEOS Agencies were welcomed as partners, and there was great work done, particularly in relation to COVID-19. This year additional agencies will be asked to participate. All participation will be highly appreciated.