**Minutes V1.0**

**279th CEOS SECRETARIAT MEETING**

Thursday, 13 May 2021

Chaired by NASA

**Participants**

**AC-VC:** Hiroshi Tanimoto
**CEO:** Marie-Claire Greening

**ESA:** Ivan Petiteville

**EUMETSAT:** Robert Husband

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

**NOAA:** Kerry Sawyer

**CEOS Chair Team:** Karen St. Germain (Chair), Sandra Cauffman, Christine Bognar, Andy Mitchell, Stephen Ward, Matthew Steventon

**SIT Vice Chair Team:** Alex Held, Jonathon Ross, Stephen Briggs

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

**WGClimate:** Albrecht von Bargen

**WGCV:**  Akihiko Kuze

**WGDisasters:** David Green, Dave Borges

**WGISS:** Robert Woodcock, Makoto Natsuisaka

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

Karen St. Germain (NASA, CEOS Chair) welcomed everyone to SEC-279 and focused attention on the fact that there is a full agenda.

In the interest of time, Karen said her remarks would be brief. She noted that there had been a very positive Troika meeting on April 29, and that Christine Bognar (NASA, CEOS Chair Team) would review the highlights as part of the CEOS Chair Report.

Karen welcomed Selma Cherchali and her team from CNES to the SEC as the Incoming Chair team. She noted that the CEOS Chair Team looks forward to working with CNES between now and this year’s CEOS Plenary, when NASA will transition the Chair role to CNES as the 2022 CEOS Chair. Karen also noted that the NASA CEOS Chair team will be as supportive as possible to the CSIRO-GA SIT Chair team for the months remaining before they complete their ground-breaking two-year term as SIT Chair.

1. **Action Status**

Christine Bognar (NASA, CEOS Chair Team) noted that the action record (circulated as part of the agenda for this meeting) has undergone a significant update, with several actions being closed. She welcomed additional updates, but none were offered. Christine also noted that a number of actions will be discussed under subsequent agenda items.

1. **CEOS Chair Report**

Christine Bognar (NASA, CEOS Chair Team) reported:

*Troika*

* The meeting on April 29 welcomed Selma Cherchali of CNES as incoming CEOS Chair, as well as her team. There is agreement in the Troika on the need to engage CEOS Members and Associates to participate in CEOS technical groups and activities overall. Approaches include:
	+ Encouraging new Members and Associates to participate in CEOS activities is important as a building block toward holding leadership roles in the future;
	+ Encouraging CEOS Principals to consider engagement by their subject matter experts as a benefit to their own programs and part of burden sharing in CEOS;
	+ Encouraging CEOS Agencies to consider making other contributions when they cannot take on leadership roles in the WGs, VCs, AHTs (e.g., Deputy CEOS Executive Officer; Data Coordination Team (DCT) lead for the WGDisasters, and being members of WGs, VCs, and AHTs);
	+ Encouraging CEOS Agencies in all regions to approach CEOS as a forum for international cooperation on the delivery of EO products for which they can choose to mentor future representatives and plan accordingly; and,
	+ Actively pursuing broader inclusion across the range of CEOS roles.
* There is also consensus in the Troika on the importance of building and preserving institutional memory so that CEOS can continue to function effectively, advance its important work, and evolve with new people over time.

*Future CEOS Chairs*

* Now and in the past, the SEC has done a good job of being ahead of the curve on this aspect of CEOS governance. Along these lines, SEC members should all be thinking of the geographic rotation in the coming years. In the CEOS Terms of Reference, the three geographic regions are: Europe/Africa; Asia/Pacific-Oceania; Americas.
	+ 2022: CNES from the Europe/Africa region (confirmed at the SIT-36 Special Plenary Session);
	+ 2023: Agency from the Asia/Pacific region (for endorsement at the 2021 CEOS Plenary);
	+ 2024: Agency from the Americas region (for endorsement at the 2022 CEOS Plenary).

*Upcoming Meetings / Events*

* 2nd Climate Observations Conference of CGMS and WCRP (Aug. 30 to Sept. 2; virtual event): The CEOS Chair has been invited to give a presentation on *“Satellite Observations – Capabilities and Needs”* on Sept. 1.
* 72nd International Astronautical Congress (Oct. 25-29; Dubai): The CEOS Chair has been invited to give a presentation on *“Earth Observation International Cooperation”* during Session B1.1. on Monday, Oct. 25. The segment consists of 30 minutes (presentation and Q & A).
* COP26 (Nov. 1-12; Glasgow): NASA contacted the U.S. Department of State regarding the Annual Joint Statement from Space Agencies to SBSTA and received a “yes” on the matter of a member of the U.S. Delegation delivering the Joint Statement.
* CEOS Plenary (Nov. 1-4; Virtual): The plan is to have a virtual plenary over 4 days (3 hours each day). On two days, there will be an early start for the U.S. East Coast, and on two days there will be a start time that favors Asia/Pacific and the Pacific coast of the U.S. Because these dates coincide with the first few days of COP26, the CEOS Chair team will make every effort to deconflict the scheduling of presenters and participants who will need to engage in COP26.

Alex Held (CSIRO, SIT Co-Chair) communicated his thanks for the time zone sharing plan for CEOS Plenary.

1. **SIT Chair Report**

Jonathon Ross (GA, SIT Chair team) reported:

* SIT-36: Minutes and actions have been finalised and distributed.
* Working Teams: The 4th Working Teams All Hands call took place on Tuesday, May 11. The main discussion topics included: Analysis Ready Data (ARD) beyond land and the ARD Governance Framework; the Global Stocktake (GST) Strategy; and CEOS website updates (e.g., [ceos.org/observations](https://ceos.org/observations/)). A round of VC discussions is currently being planned for May to June.
* UNFCCC Global Stocktake: The SIT Chair team has had discussions with WGISS, the SEO and the AFOLU and GHG Task teams and will commence definition and development of a dedicated portal on ceos.org for the presentation of the full range of datasets and guidance under preparation for COP26. Ideally this will be a multilingual site.
* SIT Technical Workshop 2021: The meeting will be a fully virtual event from Sept. 6 to Sept. 16 inclusive. Week 1 is an informal time for groups to convene, have discussions and prepare materials on specific topics. This first week will be primarily self-organized by groups themselves, providing maximum flexibility. Week 2 has formal whole-group sessions focussing on items required for CEOS Plenary. During the second week there will be three sessions of 2-2.5-hour duration held in the usual time slots on Sept. 14-16. The meeting plan will be closely coordinated with the CEOS Chair team.

**Global Stocktake (GST) Strategy Team Outcomes**

At the invitation of the SIT Chair Team, Stephen Briggs (SIT Vice Chair Team) offered a presentation on the outcomes of the efforts of the Global Stocktake Strategy Team:

* At CEOS Plenary 2020, the SIT Chair Team was given an action to establish a study team to look at requirements for the Greenhouse Gas (GHG) and Agriculture, Forestry and Other Land Use (AFOLU) datasets; to consider the long-term approach; to confirm the full set of target datasets and communications materials; and to consider the necessary organisational aspects. In support of this, a high-level strategy paper was developed, discussed at SIT-36, and has now been updated to reflect all comments received. Both the report and a ‘next steps’ document were shared with the SEC.
* The scope of the Global Stocktake includes: mitigation (already well pursued by CEOS), adaptation (less so), and finance mechanisms and equity (lower CEOS relevance).
* Report recommendations 1 and 2 concern completeness of requirements of observations to support GHG mitigation and the development of Monitoring and Verification Support (MVS). This supports both the GST and verification of national GHG reporting. The focus is initially on terrestrial observations for SIT Technical Workshop 2021 and oceans for SIT Technical Workshop 2022. This will be led by the WGClimate GHG Task Force, with support from other CEOS entities and CEOS Associates.
* Recommendation 3 reinforces the CEOS to UNFCCC interface, which is via WGClimate representation of CEOS to SBSTA/RSO.
* Recommendation 4 proposes CEOS study the possibility of large-scale field experiments, following the model of IMBIE, to focus on one or two geographical areas (e.g., Amazon Basin, Northern Siberia) where current knowledge of GHG emissions is incomplete and which have major roles to play. The SIT Chair/Vice Chair will report at SIT Technical Workshop 2021 on possible options.
* Recommendation 5 concerns the need for consistency between definitions and observations of GHG in AFOLU and MVS/inversion systems. Emissions over different timescales need to be consistently handled by both approaches. The outcome will be consistency between the GHG Task Team Roadmap and AFOLU Roadmap Team in terms of definitions and observational needs.
* Recommendation 6 is to work with developing countries (DCs), as in the GFOI model, to ensure wider use of CEOS data with appropriate procedures consistent with IPCC Guidelines, and to develop support for satellite-based measures at CoPs through advocacy of DCs at CoPs because of their use of these data and procedures.
* Recommendation 7: Improve use of satellite data in developing and implementing adaptation strategies in all countries.
* Recommendation 8: Financial aspects of The Paris Agreement are becoming increasingly important. Satellite data can support the implementation and validation of adaptation projects funded in this way, although no process for this is proposed yet. Not an immediate priority for CEOS, but this should be maintained as a watching brief.
* Recommendation 9: The Paris Agreement (PA) fundamentally depends on knowledge of future climate response to GHG emissions. Support for the PA therefore depends on continuing support of the modelling community and hence of ongoing (and new) observations of ECVs for the work of the IPCC WGI. CEOS needs to continue this work in addition to seeking new opportunities supporting specific aspects of the PA.

The next step is to have the strategy paper discussed and approved at the SIT Technical Workshop 2021. Many recommendations are already covered by ongoing work, so progress will be made in the meantime.

Albrecht von Bargen (DLR, WGClimate Chair) asked whether contributions/edits can be made to the ‘next steps’ paper. Stephen clarified that it is only an informal communication document providing an overview of the main strategy paper and is not intended to be formalised.

Karen St. Germain (NASA, CEOS Chair) said she appreciated the effort and contributions to this complex and important topic. She thanked the SIT Vice Chair team for their effort stewarding this work. The concise next steps document is particularly helpful. Jonathon Ross (GA, SIT Chair team) added thanks to Stephen Briggs and the SIT Vice Chair team for their work.

Stephen noted that this is a good example of a situation where many, if not all, elements of CEOS have an important role to play. He encouraged all CEOS entities to look at the recommendations and assess potential contributions by their respective agencies.

**Atmospheric Composition Virtual Constellation (AC-VC) Report**

Atmospheric Composition Virtual Constellation (AC-VC) Co-Lead Hiroshi Tanimoto (NIES/JAXA) reported:

* AC-VC has three Co-Chairs: Barry Lefer (NASA), Ben Veihelmann (ESA), Hiroshi Tanimoto (new in 2020; from Japan’s National Institute for Environmental Studies (NIES) supported by JAXA). NIES is responsible for GOSAT, hence the representation. There are also several topical leads for areas under the AC-VC (such as GHG, aerosols, ozone, air quality trace gases).
* The Tropospheric Ozone team is working on dataset validation and harmonisation in collaboration with the International Global Atmospheric Chemistry (IGAC) Project.
* Air quality trace gas validation coordination is ongoing, in particular for Sentinel-4 and 5, as well as GEMS (Korea).
* Also working on a white paper on monitoring surface PM2.5 and contributed to the NASA/ESA/JAXA COVID-19 Dashboard.
* The [AC-VC-17 annual meeting](https://ceos.org/meetings/ac-vc-17/) will be held virtually, Jun. 7-11, 2021.
1. **CEOS Executive Officer Report**

Marie-Claire Greening (CEOS Executive Officer) reported:

* COP26: UKSA are waiting on news on the format of the meeting and which of their proposals will be taken forward as ‘official’ COP26 events. UKSA, WGClimate and the CEOS Executive Officer have set up a shared workspace to share information on COP26.
* [GEO Symposium 2021](https://earthobservations.org/symposium2021.php): Will be held Jun. 21-24 as a virtual event. The deadline for spotlight sessions has now passed, but late submissions might be possible if received by Marie-Claire this week.
* Communications: The CEO is working with the SEO team to improve social media outreach and corporate branding across the various CEOS websites. Marie-Claire welcomed inputs from the SEC on any of these points.
1. **Nicaragua Supersite: CEOS SEC Guidance to Accomplish Virtual Endorsement on an Urgent Basis**

David Green (NASA, WGDisasters Chair) requested SEC guidance on the possibility of accomplishing urgent virtual endorsement by CEOS Principals of a new Nicaragua Supersite in response to an active eruption. WGDisasters has recently completed the vetting process to include relevant WG member agency data sharing agreements and approved this new Supersite. Unfortunately, these steps could not be completed prior to SIT-36. The ongoing volcanic eruption of the San Cristobal Volcano (included in the proposed Supersite area) adds urgency to this request. The proposed Supersite Coordinator (INETER) would benefit now from image acquisition requests that Supersite status will make available, rather than waiting until CEOS Plenary 2021 to request CEOS endorsement.

Karen St. Germain (NASA, CEOS Chair) noted that bringing this question to the SEC is appropriate. She added that if the SEC agrees, the CEOS Chair has no objection to sending CEOS Principals an email requesting virtual endorsement with the rationale and the usual supporting document.

Alex Held (CSIRO, SIT Co-Chair), and Kerry Sawyer (NOAA) offered comments in support of pursuing virtual endorsement. It was agreed that CEOS Principals will be sent an email requesting virtual endorsement, with the formal proposal document attached.

Kerry asked if it is worth revisiting the process for endorsement of Supersites given that disasters are unforeseen and require a quick response. David will raise this idea with the WGDisasters team for discussion and report back to the SEC.

Kerry also noted there is a distinction between Permanent Supersites and Event Supersites. Event Supersites address the quick need for support due to emergency situations. Event Supersites do not require any confirmation from SIT or Plenary. David clarified that this was already intended to be a Permanent Supersite, which now happens to be undergoing an event, and so WGDisasters is seeking an expedited Permanent Supersite approval.

1. **Working Group Reports**

**WGDisasters**

David Green (NASA, WGDisasters Chair) reported:

* WGDisasters is still looking for a Data Coordination Team (DCT) Lead. This is a key role that focuses on timely data access and use, and pilot data integration to demonstrate user value. The WG is looking to agencies that have established data sharing policies, licensing, and practices so they have a good understanding of the processes involved.
* The Volcano Demonstrator has held several meetings with ICEYE representatives, and an exploratory data sharing partnership is being considered. This would highlight how ICEYE imagery would have a tangible impact on monitoring erupting volcanoes responsively.
* The Wildfire Pilot’s new [webpage](https://ceos.org/ourwork/workinggroups/disasters/wildfire-pilot/) is now live and includes key Pilot information, including the objectives, outcomes, milestones, and schedule.
* WGDisasters will next meet via teleconference on Jun. 29. David will raise the recommendations from the Global Stocktake Strategy Paper at the meeting. He thanked Stephen Briggs (SIT Vice Chair Team) for acknowledging the potential role of WGDisasters.

**WGClimate**

Albrecht von Bargen (DLR, WGClimate Chair) reported:

* WGClimate has been busy with the CGMS Working Group II meeting this week and preparing for next week’s CGMS Plenary.
* The ECV Inventory use case web publication is being advanced with the CEOS Chair and the CEO. This includes drafting a letter intended for CEOS Principals regarding the collection of further examples. Albrecht is working with NOAA/NCEI staff to publish the first use case submissions.
* Albrecht thanked Marie-Claire Greening (CEOS Executive Officer) for engaging with CEOS Agencies regarding the information exchange platform for COP26.
* **278-03:** *CEOS Chair Team to communicate with the WGClimate Chair via email to clarify the involvement of EUMETSAT and DLR on the GCOS Study Team, and the ambiguity around whether the involvement is in representation of CEOS or in representation of EUMETSAT and DLR, respectively.*
	+ Members of the Joint GCOS Study Team are nominated by sponsors. In the case of Albrecht/DLR this was WMO. The origin of the invitation to EUMETSAT is unclear.
	+ The Study Team is not looking at what is done in GCOS. Rather, they are looking at the governance.
	+ Draft results from the Study Team will be reported to CGMS Plenary next week and will also be communicated to CEOS at a future meeting. Albrecht will approach the CEOS Chair team in the coming days to explore options for such a report – perhaps at the SIT Technical Workshop.
* **CEOS-32-02:** *WGClimate to develop a ‘decision-maker’ version of the Statement of Space Agency Contributions in Support of Each Article of the Paris Agreement.*
	+ This action remains open, but it should be addressed through the GHG and AFOLU Roadmaps.
* **CEOS-34-06:** *WGClimate GHG Task Team to update Annex C of the Roadmap for Implementation of a Constellation Architecture for Monitoring Carbon Dioxide and Methane from Space (v2.4) to ensure that the outcomes of the 48th CGMS Plenary are appropriately reflected.*
	+ WGClimate Chair will request that the GHG Task Team set up a dedicated meeting during the summer to develop this annex.

**WGISS**

Robert Woodcock (CSIRO, WGISS Chair) reported:

* WGISS-51: 40-50 people attended throughout the meeting. There was a considerable amount of work and discussion on the advantages of cloud-based data processing and distribution. Some good examples were shared by CEOS Agencies. There are a number of cloud providers that are mirroring CEOS Agency data.
* WGISS discovery and access systems are being revised to fully address the cloud. Several actions are ongoing. Persistent identifiers and the handling of replica data is an area of study. The WG is also thinking about user notifications and feedback to data providers and is looking at potentially developing some best practices.
* Expecting to contribute to the CEOS ARD Strategy on cloud file formats and assessment. WGISS hopes to provide a guidance document for CEOS Agencies to use going forward.
* SpatioTemporal Asset Catalog (STAC) was a common theme at WGISS-51. WGISS is considering refining vocabularies around STAC.
* All WGISS-51 materials are available on the [meeting website](https://ceos.org/meetings/wgiss-51/).

**WGCapD**

Nancy Searby (NASA, WGCapD Chair) reported:

* WGCapD efforts to find a nominee to be Chair and a nominee to Vice Chair. Consultations continue among CEOS leadership, WGCapD Chair, and CEOS Principals on the next steps to identify candidates for the transition at the 2021 CEOS Plenary this November. WGCapD continues to follow up the UNOOSA option.
* WGCapD members are working on executing the 2021-2023 CEOS Work Plan, which contains 33 WGCapD deliverables (28 to be implemented in 2021, 4 in 2022, 1 in 2023). Updates are captured monthly in the shared work plan document, with main developments reflected in the CEOS Deliverables Tracking Tool.
* CB-18-06: The Advanced Multi-lingual Massive Open Online Course (MOOC) on Radar Backscatter is now officially closed. Four MOOCs are now available on the EO College Portal. The link for the MOOC in English is: <https://eo-college.org/courses/basic-principles-of-radar-backscatter>
* The [WGCapD-10 meeting report](http://ceos.org/wp-content/uploads/2020/10/WGCapD-10-Final-Report.pdf) is now available on the CEOS website.
* As part of the CB-21-10 deliverable, VNSC conducted a webinar on *Using Satellite Imagery in Urban Planning and Development* on April 15. The recording is available on WGCapD’s E-Learning page [here](https://ceos.org/ourwork/workinggroups/wgcapd/e-learning/). The next webinar in the series is planned for June 15.
* The Jupyter Notebook Webinar, a joint deliverable with WGISS (CB-20-04) is planned for July 21-22, 2021. Organizers are using WGCapD’s branded webinar toolkit materials and are still looking for experts with insight into the relevance (and challenges) of using Jupyter Notebooks for capacity development to serve on the panel.
* A set of proposed thematic observation area icons to be used in CEOS-sponsored webinars and presentations was redesigned following feedback. The draft was sent to the SEC with the agenda for this meeting.
* An EOTEC DevNet pilot was endorsed by CGMS Working Group IV. A CGMS Plenary presentation is next. Astrid-Christina Koch from the European Commission featured EOTEC DevNet in her UNCOPUOS STSC presentation. A Task Team is being established to advance planning for upcoming regional exchanges on June 14, and network leadership meetings in September. EOTEC DevNet regional meetings are planned for June 14.

**WGCV**

Akihiko Kuze (JAXA, WGCV Chair) reported:

* Input from WGCV was received by Prof. Liping Di, the convener of ISO TC211 on the ISO 19159 series of standards (pre-launch cal/val of instruments) and the ISO 19124 series of standards (post-launch cal/val of remote sensing instruments/products).
* There has been an application from NASA to sequester a subset of the Railroad Valley (RRV) site for use in vicarious calibration. Public comments are currently being sought.
1. **GEO SEC Report**

Christine Bognar mentioned that Doug Cripe (GEO Secretariat) was unable to join the meeting due to a national holiday. An apology was sent in advance to the CEOS Chair team, along with a written report highlighting some upcoming events/milestones:

* May 18-20: GEO Programme Board Meeting
* Jun. 21-24: [GEO Virtual Symposium](https://earthobservations.org/symposium2021.php)
* Jun. 25: Proposal submission deadline for the [GEO-Microsoft Planetary Computer Programme](https://earthobservations.org/geo_blog_obs.php?id=503)
1. **SEO Report**

Brian Killough (NASA, SEO) reported:

* The CEOS SEO has submitted a proposal for a "parallel session" for the GEO Symposium on Jun. 24. This session would be used to demonstrate the new Open Data Cube Sandbox running on Google Colab. The session will demonstrate the new tool, discuss ideas for future expansion of application algorithms and discuss how the tool might be used for future capacity building initiatives.
* Digital Earth Americas: On April 15, the SEO participated in the first of three workshops to support the Americas. 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 local stakeholders (e.g., UN-GGIM, AmeriGEO, INEGI, CEPAL) and country-level government agencies, and they are consistent with the 2020 Aguascalientes Declaration objective to improve collaboration and the use of EO in the region.
* Pacific Islands: The SEO, as a CEOS representative, was asked to be part of the Interim Steering Group for Digital Earth Pacific. The first meeting was held on May 5. Stuart Minchin (South Pacific Consortium) is a Co-Chair of the Steering Group along with Rosamond Bing (Tonga). Other members include GEO, NOAA, and GA. The group intends to assess country needs, establish prototypes, and develop a business case for Digital Earth Pacific (DEP).
1. **AOB, Next Meeting, and Adjournment**

Osamu Ochiai (JAXA) thanked everyone for their contributions to Chu Ishida’s Kudoboard. Chu is very grateful for all the kind messages from his CEOS friends.

**CEOS Chair 2023**

Osamu shared an update on the CEOS Chair for 2023. JAXA has reached out to Thailand’s Geo-Informatics and Space Technology Development Agency (GISTDA) under the leadership of Executive Director Dr. Pakorn Apaphant, who is also the GISTDA Principal for CEOS. Pakorn has agreed to nominate GISTDA for the role of 2023 CEOS Chair.

Christine Bognar and Karen St. Germain thanked and congratulated JAXA on this outcome and welcomed the nomination of GISTDA. There was a brief discussion on the next step, which is for GISTDA to coordinate with the CEOS Executive Officer on a formal letter of self-nomination addressed to the CEOS Chair. Osamu said he would facilitate the connection between Marie-Claire Greening (CEOS Executive Officer) and the GISTDA point of contact (Raksina Lekthanoo).

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| **279-01** | Osamu Ochiai of JAXA to facilitate the connection between the CEOS Executive Officer and the GISTDA point of contact (Raksina Lekthanoo) to guide GISTDA through the self-nomination process for the role of 2023 CEOS Chair. | **SEC-280** |

**COP26 (Nov. 1-12; Glasgow)**

Christine Bognar noted that NASA contacted the U.S. Department of State regarding the Annual Joint Statement from Space Agencies to SBSTA and received a “yes” on the matter of a member of the U.S. Delegation delivering the Joint Statement.

**Possibility of a CEOS Speaker for the 72nd International Astronautical Congress (Oct. 25-29; Dubai)**

The CEOS Chair has been invited to give a presentation on *“Earth Observation International Cooperation”* during Session B1.1. on Monday, Oct. 25. The segment consists of 30 minutes (presentation and Q & A).

Karen St.Germain (NASA, CEOS Chair) confirmed that she plans to attend and is working on closing the loop with NOAA.

**57th CEOS Newsletter Plan and Evolution of the Publishing Strategy**

Yukio Haruyama (JAXA) shared the plan for the next CEOS Newsletter. The plan was circulated to the SEC ahead of the call. Article submissions will be due by Jun. 30, with publication planned for August.

Yukio added that JAXA has been contributing to CEOS by publishing the CEOS Newsletter for many years, and it has been an effective way of supporting CEOS outreach. He noted that it is worth considering a change in format because of significant changes in the way news is now shared and consumed (i.e., online-focused, social media, etc.). Publishing the newsletter only twice a year means that some articles miss their ideal timing for release. Yukio welcomed feedback from the SEC on the idea of exploring new means of distributing CEOS Newsletter articles. One idea is to release the articles in a more online-suited format (via the CEOS website and social media) periodically throughout the year, in addition to their compilation in the regular PDF/print newsletter.

Brian Killough (NASA, SEO) supported the idea to explore additional, more frequent channels for publication of the good content compiled in the CEOS Newsletter. The SEO team working on communications will consider how best to do this in future. The SEO certainly welcomes the idea. Yukio thanked Brian and said that he looks forward to working on this new approach together with the SEO team.

**Next Meeting and Adjournment**

Christine Bognar (NASA, CEOS Chair Team) thanked everyone for participating. CEOS SEC-280 will be held on June 10, 2021. The start time for the teleconference will be 7 AM US East.