



2024 CEOS Strategic Implementation Team Technical Workshop (2024 SIT TW)

Objectives & Agenda

17 – 19 September 2024

Sydney, Australia

HYBRID MEETING – Remote Connection Details on Last Page

** ATTENDANCE AS PART OF OFFICIAL CEOS AGENCY DELEGATION ONLY **

The CEOS SIT Technical Workshop and its associated side meetings are intended to focus on problem-solving at the working level and preparing the CEOS material for decision-making at the CEOS Plenary. The Workshop agenda for 2024 seeks to convene technical experts and scientists from across the CEOS structure and activities to provide an opportunity for working-level task coordination and preparation for the 2024 CEOS Plenary, which will be held four weeks later.

As well as informational presentations and updates for the following topic areas, specific objectives for the SIT Technical Workshop 2024 include:

1. Climate Policy Impact

- a. Discuss the ongoing UNFCCC Global Stocktake (GST) lessons learned study and consider the impact on the CEOS GST Strategy and CEOS targets for the second UNFCCC Global Stocktake.
- b. Discuss how to ensure cohesion of the three individual CEOS Carbon Roadmaps (AFOLU, GHG, Aquatic).

2. Greenhouse Gas Observation Coordination

- a. Review and discuss the update of the CEOS-CGMS Greenhouse Gas Roadmap ahead of its potential endorsement at the 2024 CEOS Plenary.
- b. Review the content and next steps for the Greenhouse Gas Best Practices document.

3. Agriculture, Forestry and Other Land Use (AFOLU)

a. Review progress on the CEOS AFOLU Roadmap and discuss the finalisation of the action supplement, action assignments, and the LSI-VC framework for tracking the actions.

4. Biodiversity

- a. Review and discuss the outcomes of the Ecosystem Extent Task Team (EETT) Demonstrator activities ahead of their presentation at CEOS Plenary 2024 and consider proposed next steps.
- b. Review the draft *'Joint Communiqué on Enhanced International Cooperation for Biodiversity'* ahead of CEOS Plenary.
- c. Discuss a proposal for a sustained presence of biodiversity in CEOS.

5. Working Group Priority Topics

- a. Starting with the assessment undertaken by **WGDisasters**, discuss the extent of potential CEOS collaboration with WMO on the United Nations' Early warnings for all (EW4AII) initiative.
- b. Report on WGISS progress towards the second edition of the CEOS Interoperability Handbook.
- c. WGClimate: Review and discuss the draft CEOS-CGMS Statement to UNFCCC COP 29 SBSTA 61.
- d. Review status of expected Working Group Vice Chair nominations (WGCV, WGClimate) to be presented at CEOS Plenary for endorsement.

6. Virtual Constellation Priority Topics

- a. Ocean Surface Topography (OST-VC): User Requirements Document update.
- b. **Precipitation (P-VC):** Discuss recommendations from the recent International Precipitation Working Group (IPWG) meeting and the state of continuity for passive microwave radiometer measurements of precipitation; provide an update on precipitation CEOS-ARD.





- c. **Coastal Observations Applications Services and Tools (COAST-VC):** Hold a discussion regarding enhancing remote sensing observations as a focus of the United Nations' Ocean Decade activities.
- d. Sea Surface Temperature (SST-VC): Review a joint SST-VC and COAST-VC statement recommending masking requirements in coastal areas for upcoming SST missions.
- e. Ocean Colour Radiometry (OCR-VC): Review and discuss progress on the CEOS Aquatic Carbon Roadmap.

7. Other Business

- a. Discuss recent external requests received by the CEOS Sustainable Development Goals (SDG) Coordination Group (UNCCD, UN-WGGI IAEG-SDG).
- b. Discuss the status of CEOS support for the SDG Coordination Group (Ref: Action SIT-39-15).
- c. **CEOS-ARD Oversight Group:** Discuss the updated CEOS-ARD Strategy 2024 ahead of its presentation for endorsement at CEOS Plenary.
- d. Consider CEOS interaction with the GEO Post-2025 Work Programme.
- e. Discuss the opportunity of the 2025 United Nations Ocean Conference (UNOC).
- f. Review and discuss the 2025 CEOS Chair themes and CEOS Chair nominations for 2026+
- g. Confirm the objectives for the 2024 CEOS Plenary and preview the 2024 CEOS Plenary Montréal Statement.





Week at a Glance

The SIT Technical Workshop will take place over two days, September 18-19, and will be preceded by a side meeting day on September 17. A 'Week at a Glance' overview can be found below.

Tuesday, September 17	Wednesday, September 18	Thursday, September 19
 Side Meetings: CEOS Secretariat (SEC-325) (closed meeting) CEOS AFOLU Roadmap Ecosystem Extent Task Team Demonstrator Update Greenhouse Gas Observation Coordination CEOS Sustainable Development Goals (SDG) Coordination Group Greenhouse Gas Best Practices United Nations Ocean Conference (UNOC) 25 	Welcome and Core Business Greenhouse Gas Observation Coordination Biodiversity Working Group Priority Topics Climate Policy Impact	Agriculture, Forestry and Other Land Use (AFOLU) Virtual Constellation Priority Topics Other Business Closing Session
 COAST Virtual Constellation EC-USGS Bilateral (closed meeting) 	Cocktail reception in the Chemney Lounge (18:00-20:00)	

Side Meetings: Tuesday, September 17

Location: Novotel Sydney on Darling Harbour, Sydney, Australia 100 Murray St, Pyrmont NSW 2009

<u>08:30:</u> Welcome coffee for in-person participants will be hosted outside the Hunter room, and the meeting teleconference connection will be open for testing.

10:30-11:00: Morning break served outside the Hunter room

15:00-15:30: Afternoon break served outside the Hunter room

Time	Side Meeting Room #1 (Hunter 1&2, Capacity: 40 People)	Side Meeting Room #2 (Barossa, Capacity: 30 People)	Side Meeting Room #3 (Hunter 3&4, Capacity: 30 People)
09:00-09:30	CEOS Secretariat (SEC-325)		
09:30-10:00	(closed meeting) <u>POC:</u> CEOS Chair Team	Ecosystem Extent Task Team Demonstrator Update	
10:00-10:30		<u>POC:</u> Gary Geller & Shaun Levick	
10:30-11:00	CEOS AFOLU Roadmap	<u>Presentation</u>	Greenhouse Gas Observation Coordination
11:00-11:30	<u>POC:</u> Stephen Ward		<u>POC:</u> Hiroshi Suto
11:30-12:00			





12:00-12:30 12:30-13:00		Lunch @ The Ternary Event Space	
13:00-13:30 13:30-14:00		CEOS Sustainable Development Goals (SDG) Coordination Group <u>POC:</u> David Borges	Greenhouse Gas Best Practices
14:00-14:30 14:30-15:00	United Nations Ocean Conference (UNOC) 2025 POC: Selma Cherchali (CNES)		<u>POC:</u> Stephen Ward
15:00-15:30 15:30-16:00	COAST Virtual Constellation		
16:00-16:30 16:30-17:00	<u>POC:</u> Merrie Neely	Room Booked (closed meeting) <u>POC:</u> Astrid Koch	Room Booked (closed meeting) <u>POC:</u> Yuko Nakamura

AGENDA

2024 CEOS SIT Technical Workshop

Day 1: Wednesday, September 18

Location: Hunter Room, Novotel Sydney on Darling Harbour, Sydney, Australia

Welc	al / Teleconference Open ome coffee for in-person participants will be hosted outside the Hunter room, he meeting teleconference connection will be open for testing.	08:30	30 min		
	Session 1: Welcome and Core Business (09:00 – 09:50) Moderator: Hironori Maejima (SIT Chair, JAXA)				
1.1	 Welcome Hironori Maejima (SIT Chair, JAXA), Jonathon Ross (GA), Alex Held (CSIRO) [presentation] Acknowledgement of Country Host agencies' welcome SIT Chair's opening remarks Agency introductions Agenda overview 	09:00	15 min		
1.2	2024 CEOS Plenary Objectives (For Information) Eric Laliberté (CSA, CEOS Chair) [<u>presentation</u>]	09:15	15 min		





	 Draft 2024 CEOS Plenary Montréal Statement (For Information) 		
	2024-2026 CEOS Work Plan Lefteris Mamais (CEOS Executive Officer Team) [presentation]		
1.3	 Level of representation and activity of each CEOS entity (<i>Ref: Action SIT-39-01</i>) (<i>For Discussion</i>) Operation of the CEOS Executive Officer Team (<i>For Information</i>) 	09:30	20 min
Sessi	on 2: Greenhouse Gas Observation Coordination (09:50 – 10:50)		
	erator: Hiroshi Suto (JAXA)		
2.1	Session Introduction Hiroshi Suto (JAXA)	09:50	5 min
	[presentation]		
	Greenhouse Gas Roadmap Yasjka Meijer (GHG Task Team Lead, ESA) / Wenying Su (WGClimate Vice Chair,		
	NASA) [presentation]		
2.2	• <u>Update on Action SIT-39-12:</u> GHG Task Team of the Joint CEOS-CGMS WGClimate to work on an update of the CEOS-CGMS GHG Roadmap for discussion at the SIT Technical Workshop in preparation for potential endorsement at the 2024 CEOS Plenary. (For Discussion)	09:55	20 min
	• <u>Update on Action SIT-39-13:</u> The GHG Task Team of the Joint CEOS-CGMS WGClimate was asked to reflect the requests from UNEP IMEO in the 2024 update of the CEOS GHG Roadmap. (For Information)		
	 Update on collaboration with UNEP's International Methane Emissions Observatory (IMEO) and WMO's Global Greenhouse Gas Watch (G3W). (For Information) 		
	Greenhouse Gas Best Practices (For Information) John Worden (NASA/JPL) and Paul Green (UK NPL)		
2.3	[presentation]	10:15	15 min
	 <u>Supporting document</u>: Draft Greenhouse Gas Best Practices Review the content and next steps for the Best Practices document 		
2.4	<u>CEOS Greenhouse Gas Satellite Missions Portal</u> 2024 Update (For Information) Libby Rose (SIT Chair Team)	10.20	Emin
2.4	[presentation]	10:30	5 min
	Other Greenhouse Gas Topics (For Discussion)	40.07	45
2.5	Hiroshi Suto (JAXA) [<u>presentation</u>]	10:35	15 min





	 Soliciting contributions to activities needed to prepare CEOS GST2 			
	 products Clearly defining stakeholder needs (e.g., fluxes @ 1 x 1 degree for G3W, NRT for IMEO MARS) 			
	 Identifying ongoing efforts within CEOS agencies that meet those needs Identifying gaps (L1 to L4) 			
Grou	p Photo + Break	10:50	30 min	
Sessi	on 3: Biodiversity (11:20 – 12:25)			
Mode	erator: Eric Laliberté (CSA, CEOS Chair) & SIT Chair Team			
3.1	 Ecosystem Extent Task Team (EETT) Demonstrator Outcomes (For Information) Shaun Levick (EETT Co-lead, CSIRO) [presentation] Brief introduction, including a recap of what the EETT was tasked to do. Hudson Bay Lowlands Demonstrator outcomes. 	11:20	30 min	
	 Costa Rica and Great Western Woodlands Demonstrators: Summary of progress to date and next steps. Discussion 			
3.2	 Proposed Inputs for CEOS Plenary Decision Regarding the Future of CEOS and Biodiversity (For Discussion) Eric Laliberté (CEOS Chair, CSA) [presentation] Outcomes from the biodiversity dialogue with external stakeholders, including the June workshop hosted by the UN CBD Secretariat. Reference document: CEOS takeaways - Joint workshop on Biodiversity Draft 'Joint Communiqué on Enhanced International Cooperation for Biodiversity' (For Discussion ahead of CEOS Plenary) Findings regarding the potential role of CEOS in addressing the biodiversity collaboration (Ref: Action SIT-39-03) Reference document: Plenary strategic recommendation on Biodiversity Proposal for a sustained presence of biodiversity in CEOS (For Discussion) 	11:50	35 min	
	on 4: Working Group Priority Topics (12:25 – 14:55) erator: SIT Chair Team			





4.1	 Potential CEOS Engagement with the United Nations' Early Warnings for All (EW4All) Initiative Osamu Ochiai (JAXA, SIT Chair Team) and Laura Frulla (CONAE, WGDisasters Chair) [presentation] CEOS consideration for EW4All in several perspectives Update on WGDisasters' approach (with WMO) on EW4All (<i>Ref: Action SIT-39-11</i>) WGDisasters-22 meeting plan and engagement with the four pillars of EW4All. Proposed input/approach for CEOS Plenary discussion. Discussion: CEOS support for EW4All 	12:25	25 min
Lunch	۱ 	12:50	60 min
4.2	 CEOS Interoperability Handbook v2.0 (For Information) Tom Sohre (WGISS Chair, USGS) and Nitant Dube (WGISS Vice Chair, ISRO) (both remote) [presentation] Report on progress towards the second edition of the CEOS Interoperability Handbook. 	13:50	15 min
4.3	Draft CEOS-CGMS Statement to UNFCCC COP 29 SBSTA 61 (For Discussion) Jeff Privette (NOAA, WGClimate Chair) [presentation] • Discussion: Feedback on the draft Statement • CEOS presence at UNFCCC COP 29 (For Information) Note: WGClimate will complete final edits immediately following the TW in time to send the final version to UKSA by October 1. This Statement will be focused on recent climate advances enabled by satellites.	14:05	15 min
4.4	 GCOS Implementation Plan Response and Essential Climate Variable (ECV) Inventory (For Information) Jeff Privette (WGClimate Chair, NOAA) [presentation] Progress on the latest CEOS response to the GCOS Implementation Plan. Merged Gap Analysis and Coordinated Action Plan for the prior two ECV Inventory analyses (v4.0, v4.1). 	14:20	15 min
4.5	 Working Group Leadership Changes at Plenary Hironori Maejima (SIT Chair, JAXA) on behalf of Eric Laliberté (CSA, CEOS Chair) [presentation] WGCV Vice Chair nomination letter WGClimate Vice Chair nomination letter 	14:35	10 min





4.6	Discussion / Buffer	14:45	10 min
Breal	(14:55	20 min
	on 5: Climate Policy Impact (15:15 – 17:00) erator: Osamu Ochiai (SIT Chair Team, JAXA)		
5.1	Introduction and Context Osamu Ochiai (SIT Chair Team, JAXA) [<u>presentation</u>]	15:15	10 min
5.2	 First UNFCCC Global Stocktake (GST) Lessons Learned Study (For Information) Wenying Su (WGClimate, NASA) [presentation] Context and preliminary findings CEOS GST Strategy timeline 	15:25	25 min
5.3	 Discussion on Recommendations from GST #1 Lessons Learned (For Discussion) Moderator: Osamu Ochiai (SIT Chair Team, JAXA) [presentation] Alternate Pathways and Strategies for Increasing the Climate Policy Impact of CEOS Space Agency Data More integration of Research and Systematic Observation community preparation for UNFCCC SBSTA/COP events. New pathways (e.g., individual efforts of large cities, Global Covenant of Mayors for Climate & Energy (GCoM)) CEOS targets for the second UNFCCC Global Stocktake Others 	15:50	30 min
5.4	 Ocean Colour Radiometry Virtual Constellation (OCR-VC) (For Information) Ewa Kwiatkowska (EUMETSAT; remotely from Europe) [presentation] CEOS Aquatic Carbon Roadmap progress Ocean Reflectance CEOS-ARD Product Family Specification (PFS) VC-20-26: System Vicarious Calibration (SVC) infrastructures in support of climate-quality OCR data records 	16:20	20 min
5.5	 Report on the July 2024 IPCC Expert Meeting on Reconciling Land Use Emissions (For Information) Giacomo Grassi (EC-JRC, remotely from Italy) [presentation] Present key findings and recommendations of relevance to CEOS 	16:40	20 min





Adjournment of Day 1

17:00

18:00-20:00: Cocktail reception in the Chemney Lounge





Day 2: Thursday, September 19

Location: Hunter Room, Novotel Sydney on Darling Harbour, Sydney, Australia

Welc	al / Teleconference Open ome coffee for in-person participants will be hosted outside the Hunter room, the meeting teleconference connection will be open for testing.	08:30	30 min
	on 6: GEO Post-2025 Work Programme (09:00 – 09:20) erator: Osamu Ochiai, JAXA SIT Chair Team		
6.1	 CEOS Interaction with the GEO Post-2025 Work Programme [presentation] Justyna Nicinska (GEO Programme Board Co-chair, NOAA; remotely from the U.S.) Future GEO Work Programme development and opportunities for CEOS (For Information) CEOS goals and thoughts on the post-2025 GEO Work Programme and the role of CEOS (For Discussion) 	09:00	20 min
	on 7: Agriculture, Forestry and Other Land Use (AFOLU) (09:20 – 10:30) erator: Inge Jonckheere, ESA		
7.1	 CEOS AFOLU Roadmap (For Discussion) Osamu Ochiai (JAXA, AFOLU Co-Lead), Stephen Ward (LSI-VC, Forests & Biomass Team Sec) [presentation] Review progress on the CEOS AFOLU Roadmap. <u>Discussion:</u> Action supplement finalisation, action assignments, and the LSI-VC framework for tracking the actions. 	09:20	20 min
7.2	Biomass Harmonisation Activity Update (For Information) [<u>presentation</u>] Laura Duncanson (UMD/NASA; remotely from the U.S.)	09:40	15 min
7.3	National Engagement (For Information) Sylvia Wilson (USGS SilvaCarbon; remotely from the U.S.) [<u>presentation</u>]	09:55	15 min
7.4	Discussion	10:10	20 min
	Session 8: Virtual Constellation Priority Topics (10:30 – 12:50) Moderator: Yuko Nakamura, JAXA SIT Chair Team		
8.1	Precipitation Virtual Constellation (P-VC) Chris Kidd (P-VC Co-lead, NASA) [<u>presentation</u>]	10:30	20 min





	 International Precipitation Working Group (IPWG) meeting 		
	recommendations (For Discussion)		
	Passive microwave radiometer continuity (For Discussion)		
	 Precipitation CEOS-ARD (For Information) 		
Breal	(10:50	20 min
	Enhancing Remote Sensing Observations as a Focus of the United Nations' Ocean Decade Activities (Coastal Observations Applications Services and Tools (COAST-VC)) (For Discussion)		
0.7	Merrie Beth Neely (NOAA)	11.10	20 min
8.2	 [presentation] <u>Reference document: CEOS UN Ocean Decade Talking Points</u> Review talking points discussed at the COAST-VC side meeting on September 17. Discussion (15 min) 	11:10	20 min
8.3	Joint SST-VC and COAST-VC Statement Recommending Masking Requirements in Coastal Areas for Upcoming SST Missions <i>Misako Kachi (SST-VC Co-lead, JAXA)</i> [presentation] • <u>Reference document: Draft Statement</u> (For discussion ahead of presentation to CEOS Plenary for decision/action by CEOS Principals)	11:30	20 min
Sessi	on 9: Other Business (12:10 – 17:00)	<u> </u>	
Mod	erator: Osamu Ochiai, JAXA SIT Chair Team		
9.1	CEOS Carbon Roadmap Integration Needs (<i>For Discussion</i>) Osamu Ochiai (SIT Chair Team, JAXA) [<u>presentation</u>]	11:50	20 min
9.2	 CEOS Systems Engineering Office (SEO) Report (For Information) David Borges (SEO, NASA) [presentation] CEOS Analytics Lab (CAL) and commercial data analysis project (CEOS Work Plan deliverable OUT-24-6) CEOS GitHub presence CEOS 40th anniversary videos CEOS communications updates 	12:10	20 min
Luncl	า	12:30	60 min
9.3	CEOS Sustainable Development Goals (SDG) Coordination Group David Borges (SEO, NASA)	13:30	20 min





	 <u>Reference document: Draft 2025 CEOS Chair Themes</u> 		
9.9	2025 CEOS Chair Themes [<i>presentation</i>] Beth Greenaway (2025 CEOS Chair Team, UKSA)	15:50	15 min
9.8	Ocean Surface Topography Virtual Constellation (OST-VC) User Requirements Document update Yannice Faugere (CNES) / Estelle Obligis (EUMETSAT); remotely from Europe [presentation]	15:30	20 min
9.7	United Nations Ocean Conference (UNOC) 2025 (For Information) Selma Cherchali / Yannice Faugere (CNES); remotely from Europe [<u>presentation</u>]	15:15	15 min
Breal	(15:00	15 min
	Discussion/Buffer	14:40	20 min
9.6	 AquaWatch Australia Programme (For Information) Alex Held (CSIRO) [presentation] Relevance to CEOS and member programmes <u>Reference document: CEOS Feasibility Study for an Aquatic Ecosystem Earth Observing System (2018)</u> 	14:25	15 min
9.5	CEOS Missions, Instruments and Measurements (MIM) Database Update (For Information) George Dyke (ESA CEOS MIM Database Team) [presentation] • Share future plans and welcome discussion and ideas	14:10	15 min
9.4	Letter of Enhanced Cooperation from the United Nations Convention to Combat Desertification (UNCCD) Science, Technology, and Innovation Unit – Update on CEOS External Request Process Paper Progress <i>Masatoshi Kamei (SIT Chair Team)</i> [presentation]	13:50	20 min
	 <u>Status of Action SIT-39-15</u>: CEOS Chair and SEO to engage the CEOS Secretariat meetings on the matter of invigorating support for SDGs more broadly across the CEOS organisation (Members and Associates). Support requested of CEOS by UN-WGGI IAEG-SDGs regarding a review of metadata for select SDG Indicators. Support from WGClimate for SDG 13.2.2: Global Emissions (Climate Action). 		





9.10	CEOS-ARD Strategy 2024 (For Discussion) [presentation] Ferran Gascon and Matt Steventon, CEOS-ARD Oversight Group • <u>Reference document: Draft CEOS-ARD Strategy 2024</u> • Discussion ahead of presentation for endorsement at CEOS Plenary	16:05	15 min
	on 10: Closing Session erator: Hironori Maejima (SIT Chair, JAXA)		
10.1	Review of Preliminary Actions and Decisions Record (For Discussion) SIT Chair Team [presentation]	16:20	15 min
10.2	CEOS Chair Nominations for 2026+ Hironori Maejima (SIT Chair, JAXA) on behalf of Eric Laliberté (CSA, CEOS Chair) [<u>presentation</u>]	16:35	15 min
10.3	Closing Remarks Hironori Maejima (SIT Chair, JAXA), Jonathon Ross (GA), Alex Held (CSIRO) [<u>presentation</u>]	16:50	10 min
Adjou	urnment of Day 2	17:00	