



### 2021 CEOS Strategic Implementation Team Technical Workshop (SIT TW 2021) September 2021 7<sup>th</sup>-9<sup>th</sup>: side meetings 14<sup>th</sup>-16<sup>th</sup>: Workshop sessions VIRTUAL ONLY

https://ceos.org/meetings/2021-sit-technical-workshop

## **GoToMeeting Connection:** TBA (note: more details in protocols document) Meeting protocols: TBA

## **OBJECTIVES AND SCOPE**

During the 2020-2021 SIT Chair Term, the CSIRO/GA SIT Chair has focused on fostering *CEOS Principallevel discussion and decision making* to bring resources to address the significant coordination challenges presented by the harmonisation of observing systems across space agencies. This is bookended by the *SIT Technical Workshop, which focuses efforts on more detailed working-level task coordination and preparation for CEOS Plenary*.

Accordingly, a series of sessions have been planned, with key objectives including:

- Supporting tangible progress of the CEOS Chair priorities for 2021 [SIT-36 update];
- Ensuring Working Team items related to Plenary are fully reviewed and discussed;
- Supporting new initiatives and activities arising from the Working Teams (e.g., CEOS-COAST);
- Supporting those activities related to CEOS partners and stakeholders (e.g., GCOS, UNFCCC, GEO and its activities);
- Sharing and understanding progress against the CEOS Work Plan 2021-2023;
  - Progression of the three priority areas outlined in the <u>CSIRO/GA SIT Chair 2020-2021 Prospectus</u>:
    - Analysis Ready Data (ARD); Sustainable Development Goals (SDGs); Carbon and Biomass; and,
- Providing overall assurance that matters are or will be ready for discussion, decision, and/or endorsement at CEOS Plenary 2021.

The 2021 Workshop will be divided into two weeks:

- Week 1 commencing 6 September: Informal time for groups to meet virtually, have discussions, and prepare materials on specific topics, largely "self-organised" by the groups themselves and providing maximum flexibility. SIT Chair Team and CEOS Chair Team representatives will join sessions if/when possible. Securing participation for these meetings is the responsibility of the meeting organiser(s).
- **Week 2 commencing 13 September:** Three 3-hour formal sessions focussing on items required for Plenary will be held 14, 15 and 16 September.

Because this year's Workshop will again be held virtually, the formal sessions will be focused on crosscutting discussion, coordination, and preparation for the CEOS Plenary. Groups are encouraged to organise and host their own side discussions and meetings in preparation for the Workshop to progress their core business and Plenary preparations.





#### Week 1: 7<sup>th</sup>-9<sup>th</sup> September 2021

This week is designated for virtual thematic, topical focused **self-organised** meetings by various CEOS activities, groups, and initiatives. Where possible the SIT Chair Team will provide a representative, but this is modelled after the 'side meeting day' for a typical workshop.

The SIT Chair Team has created a shared table in which you can view and add your planned events for awareness should you desire. <u>Click here to view</u>.

### Week 2: 14th-16th September 2021

Topics and timing is notional and remains to be finalised in the detailed agenda.

UTC	Tuesday 14th	Wednesday 15th	Thursday 16th
1030 - 1200	<b>1.1: Opening TW Session</b> [45 min] Introduction Workshop Objectives Agenda Overview Open Actions CEOS Work Plan Status Update	<b>2.1 GEO Session</b> [30 min] New GEO Secretariat Director perspectives Update on GEO Week 2021 Preparation Highlights from the GEO Mid-Term Review	<b>3.1 Plenary Items TBA</b> [90 min] Working Group Leadership Review WGCV Topics Update on WMO Data Policy
	<ul> <li>1.2: CEOS Chair Priority Session [35 min] Open Science Priority</li> <li>1.3 CEOS's Impact on Open Science: A Case Study [10 min] Digital Earth Africa - A case study of how CEOS's work is delivering impact on global agendas through space-based Earth observations for open science</li> </ul>	2.2: Carbon & Biomass Part 1 [60 min] GST & SO update (10m, UNFCCC) GCOS update (10m, WMO) CEOS GST Strategy (10m, ESA) Discussion - optimising the space agency contribution to the GST (S Briggs moderator)	
1200 - 1220	Break [20 min]	Break [20 min]	Break [20 min]
1220 - 1350	<ul> <li><b>1.4 ARD</b> [30 min] Strategy 2.0 ARD Beyond Land</li> <li><b>1.5 SDG AHT</b> [60 min] Future Governance</li> </ul>	2.3: Carbon & Biomass Part 2 [80 min] IMEO introduction (10m, UNEP) Discussion: IMEO-CEOS cooperation (10m) AFOLU Roadmap update (10m) GHG Roadmap update (10m)	<ul> <li>3.2: Marine Science Session [25 min]</li> <li>3.3: SIT TW 2021 Final Review [65 min] Wrap-up from Session Leads Discussion Review of Actions to Plenary</li> </ul>





	GHG-AFOLU Cooperation (10m) Biomass protocol and GEO-TREES (10m) COP-26 and GST Dataset Comms (10m) Closing Discussion (20m)	
	<b>2.4 Incoming SIT Chair</b> <b>Prospectus</b> [10min]	

# **Session Timing**

US East	UTC	Europe	India	Australia East
0630 - 0950	1030 - 1350	1230 - 1550	1600 - 1920	2030 - 2350





## **Session Agendas**

# Tuesday 14th September

Number: Title [duration/time] Session Prep Lead Session Chairs	<b>1.1 Opening Technical Workshop</b> <b>[45 minutes from UTC 1030]</b> G. Dyke/SIT Chair Team A. Lewis/GA/SIT Co-Chair and A. Held/CSIRO/SIT Co-Chair
Plenary outcomes to support:	- All.
Objectives for proposed TW session:	<ul> <li>Framing of the Technical Workshop in preparation for Plenary.</li> <li>Review of key open actions and CEOS Work Plan towards Plenary.</li> </ul>
Agenda:	<ol> <li>Introduction (A. Lewis, A. Held) [20 min]</li> <li>Workshop Objectives and Agenda Overview</li> <li>Brief introductions (by delegations)</li> <li>Review of Actions (MC Greening) [10 min]</li> <li>Open Actions</li> </ol>
	<ul><li>CEOS Work Plan Update</li><li>3) Discussion [15 min]</li></ul>

Number: Title [duration/time] Session Prep Lead Session Chairs	<b>1.2 CEOS Chair Priority Session</b> [ <b>35 minutes</b> ] M. Steventon/SIT Chair Team TBA/CEOS Chair Team
Plenary outcomes to support:	- Delivery on CEOS Chair Priority.
Objectives for proposed TW session:	- Update on CEOS Chair Priority.
Agenda:	1) Review of Open Science Priority (CEOS Chair Team)
	2) Update on Open Science Priority Implementation Plan (B Killough TBC)

**T** 





Number: Title	<b>1.3 CEOS's Impact on Open Science: A Case Study</b>
[duration/time]	<b>[10 minutes]</b>
Session Prep Lead	<i>M. Steventon/SIT Chair Team</i>
Session Chairs	<i>A Lewis/SIT Chair Team</i>
Plenary outcomes to	<ul> <li>Support discussion on ARD and SDG ways forward by providing an example</li></ul>
support:	of integration of CEOS's capabilities to deliver impact.
Objectives for proposed TW session:	<ul> <li>To showcase how we can bring together different parts of the CEOS organisation to deliver impact.</li> <li>Inspire thinking for other similar future activities.</li> </ul>
Agenda:	<ul> <li>Digital Earth Africa as a case study on how CEOS's work is delivering impact on global agendas through support for open science.</li> </ul>

# Day 1 Break [20 minutes]

	on giobal agenuas through support for open science.	
Day 1 Break [20 minutes]		
Number: Title [duration/time] Session Prep Lead Session Chairs	<b>1.4 Analysis Ready Data [40 minutes]</b> M. Steventon/SIT Chair Team A. Lewis/SIT Chair Team and E. Armstrong/SST-VC Co-Lead	
Plenary outcomes to support:	<ul> <li>Endorsement of CEOS ARD Governance Framework (broad, beyond-land)</li> <li>Endorsement of CEOS ARD Strategy v2.0</li> </ul>	
Objectives for proposed TW session:	<ul> <li>Review progress on the first version of the CEOS ARD Strategy, which has guided the SIT Chair term on this topic</li> <li>Present CEOS ARD Strategy v2.0 for discussion and feedback</li> <li>Review progress to date on the first implementation of CEOS ARD (i.e., CARD4L)</li> <li>Present the CEOS ARD Governance Framework and accompanying barebones PFS template which is proposed to expand the work done under CARD4L</li> <li>Discuss the Governance Framework ahead of its presentation to CEOS Plenary 2021</li> </ul>	
Agenda:	<ol> <li>ARD Beyond Land: CEOS ARD Governance Framework [20 min]         <ul> <li>Presentation</li> <li>Discussion</li> </ul> </li> <li>CEOS ARD Strategy v2.0 [20 min]         <ul> <li>Presentation</li> <li>Discussion</li> </ul> </li> </ol>	





Number: Title [duration/time] Session Prep Lead Session Chairs	<b>1.5 Sustainable Development Goals Ad Hoc Team</b> <b>[50 minutes]</b> <i>G. Dyke/SIT Chair Team</i> <i>A. Held/SIT Chair Team and M. Paganini/AHT Co-Chair</i>
Plenary outcomes to support:	<ul> <li>Agreement of next steps in the evolution of the Ad Hoc Team and future CEOS response to the SDG community.</li> </ul>
Objectives for proposed TW session:	<ul> <li>Review of the preferred option for the SDG <i>Ad Hoc</i> Team governance.</li> <li>Discussion of governance in support of delivering a final recommendation to Plenary.</li> </ul>
Agenda:	<ol> <li>1) Future Governance [35 min]</li> <li>Brief review of SDG AHT governance process and reminder of the two options presented at SIT-36: "Option 1 Full Scale" (i.e. Working Group); and, "Option 2 Federated".</li> <li>Discussion of the preferred option and agreement of actions to Plenary.</li> <li>2) AHT Sub-Team progress [15 min]</li> <li>Brief summary from SDG AHT Co-Chairs of recent AHT Sub-Team Progress</li> </ol>
Wednesday 15th September	

### Wednesday 15th September

Number: Title [duration/time] Session Prep Lead Session Chairs	[30 minutes from 1030 UTC] M.C. Greening/CEOS Executive Officer
Plenary outcomes to support:	- Supporting Plenary's engagement with GEO as a key stakeholder.
Objectives for proposed TW session:	<ul> <li>Hear views of the new GEO Secretariat Director.</li> <li>Hear plans for GEO Week 2021</li> <li>Hear top-level outcomes from the GEO Midterm Review and have an initial CEOS exchange of views.</li> </ul>
Agenda:	<ol> <li>GEO Update (C. Larlee/GEO Secretariat) [20 min]</li> <li>Status of key GEO activities in relation to CEOS</li> <li>New GEO Secretariat Director perspectives</li> <li>GEO Week 2021 Plans</li> <li>Briefing on Mid-Term Review Outcomes by GEOSEC</li> <li>2) GEO Midterm Review (Discussion - All) [10 min]</li> <li>Brief discussion</li> </ol>





Number: Title [duration/time] Session Prep Lead Session Chairs	2.2 and 2.3: Carbon and Biomass [shared slide deck] [60 minutes, 20 minute break, 80 minutes] S. Ward/SIT Chair Team A. Lewis/GA/SIT Co-Chair (Session 1) and A. Held/CSIRO/SIT Co-Chair (Session 2)
Plenary outcomes to support:	<ul> <li>Endorsement of the CEOS Strategy to Support the Global Stocktake of the UNFCCC Paris Agreement</li> <li>Readiness of the GHG and AFOLU datasets from CEOS for COP-26 and the GST 1 Process and their effective communication and distribution</li> <li>Consideration of the way forward for an AFOLU Roadmap by the key data provider agencies</li> <li>Debate on CEOS support to the requirements of the International Methane Emissions Observatory (IMEO)</li> <li>Consideration of implementation measures to support implementation of the CEOS Biomass Protocol and GEO-TREES</li> <li>Update on the key GCOS processes and documents and CEOS response</li> </ul>
Objectives for proposed TW session:	<ul> <li>Update from UNFCCC SEC on the GST Process and the Systematic Observations Synthesis Report</li> <li>Refreshed input from GCOS and identification of any issues for Plenary</li> <li>Revisit of the Draft CEOS Strategy for the UNFCCC GST and preparation of Plenary discussion</li> <li>Introductory presentation from IMEO/UNEP and debate on how CEOS might mobilise coordinations in support of their requirements</li> <li>Update on the GHG Roadmap products for COP-26</li> <li>Update on the AFOLU Roadmap products for COP-26</li> <li>Discussion of any cooperation needed between GHG and AFOLU</li> <li>Update on the Biomass Protocol, its implementation and progress on GEO-TREES.</li> <li>Discussion of CEOS communications for the GST datasets release</li> </ul>
Format, Session(s):	This session has a significant participation external to CEOS. Invitees include: UNFCCC SEC, GCOS, and IMEO/UNEP. Timing will be: Session 1: 0630-0800 US East 20 mins break Session 2: 0820-0950 US East
Agenda:	<ol> <li>Session 1         <ol> <li>Introduction (SIT Chair Team, 5m)</li> <li>GST &amp; SO Synthesis Process Update (UNFCCC SEC, 10m)</li> <li>GCOS Process Update (GCOS, 10m)</li> <li>Draft CEOS Strategy for Support to the GST (SIT Vice-Chair, 15m)</li> <li>Discussion on optimising the space agency contribution to the GST [moderated by S. Briggs, 20m]</li> </ol> </li> <li>Session 2         <ol> <li>Intro to the IMEO (M. Caltagirone/UNEP, 10m)</li> </ol> </li> </ol>
	<ol> <li>7. Discussion of IMEO-CEOS cooperation [moderated by D. Crisp, 10m]</li> </ol>





AFOLU product status & Roadmap next steps in 2022 (Ochiai/Seifert, 15m) GHG product status (D Crisp, 15m) GHG-AFOLU cooperation (GHG & AFOLU teams, 10m) COP-26 and GST Dataset Comms (SIT Chair Team, 10m)
COP-26 and GST Dataset Comms (SIT Chair Team, 10m) Closing discussion time on all topics (15m)

Number: Title [duration/time] Session Prep Lead Session Chairs	S. Ward/SIT Chair Team
	Wrap up (SIT Chair, 5m)

## Thursday 16th September

Number: Title [duration/time] Session Prep Lead Session Chairs	[90 minutes] G. Dyke/SIT Chair Team			
Plenary outcomes to support:				
Objectives for proposed TW session:				
Agenda:	<ol> <li>Working Group Leadership Review (CEOS Chair) [15 min]</li> <li>WGCapD Chair (UNOOSA nominee)</li> <li>WGCapD Vice Chair (TBD nominee)</li> <li>WGDisasters Vice Chair (CONAE nominee)</li> <li>WGISS Vice Chair (TBD nominee)</li> <li>WGCV Topics (WGCV) [15 min]</li> <li>Total and Spectral Solar Irradiance Sensor-1 (TSIS-1) as a reference</li> <li>Vicarious calibration and intercomparison portal site for GHG sensors</li> <li>Update on WMO Data Policy [15 min, A Rea]</li> </ol>			

Day 3 Break [20 minutes]





Number: Title [duration/time] Session Prep Lead Session Chairs	3.2 Marine Science Session [25 minutes] M.C. Greening/CEOS Executive Officer TBA/Marine Teams
Plenary outcomes to support:	- Coordination of CEOS support to the Oceans community.
Objectives for proposed TW session:	<ul> <li>Hear the latest on the UN Ocean Decade of Ocean Science for Sustainable Development.</li> <li>Identify issues and actions to be taken between Workshop and Plenary.</li> </ul>
Agenda:	- TBA based on Marine community feedback.

Number: Title [duration/time] Session Prep Lead Session Chairs	3.3 SIT Technical Workshop 2021 Final Review [65 minutes] G. Dyke/SIT Chair Team A. Lewis/GA/SIT Co-Chair and A. Held/CSIRO/SIT Co-Chair				
Plenary outcomes to support:	- All.				
Objectives for proposed TW session:	<ul> <li>Review of main discussion points from the Workshop.</li> <li>Confirmation of actions between Workshop and Plenary.</li> </ul>				
Format:	Session leads to contribute to a shared slide deck which will be reviewed live.				
Agenda:	<ol> <li>1) Introduction (A. Lewis, A. Held) [5 min]</li> <li>2) Wrap Ups (Session Leads) [45 min]</li> <li>Review of shared slide deck and discussion</li> <li>3) Review of Actions to Plenary (SIT Chair Team) [10 min]</li> <li>4) Workshop Close (A. Lewis, A. Held) [5 min]</li> </ol>				



**SIT Chair Prospectus Timelines** 



# 2020-2021 CSIRO/GA Australian SIT Chair Priorities Timelines

RD Webin	INF LIF LIF	Draft Aquatic Reflectance and Nightlight Radiance PFS			Key Outcomes
	and Nightlight R				<ol> <li>A comprehensive ARD strategy for CEOS.</li> <li>An agreed CEOS position on multiple aspects of the interplay between industry and CEOS ARD.</li> </ol>
	Seek Support for Production of New CEOS ARD Products		Annual Review	CEOS ARD	
	Endorse CEOS Paper on Priv Industry Interactions with CE			Framework Revision	<b>3.</b> Demonstrated real world benefits of CEOS ARD for both data providers and data users.
	• 2020 CEOS Plenary •	•	SIT-36 ●	2021 CEOS Plenary •	4. A variety of CEOS ARD products being actively produced by numerous CEOS missions.
	CEOS Interoperability	CEOS	Assessment of CE		5. Data hosts/aggregators hosting and promoting CEOS ARD on their platforms.
		Webinar Availability			6. CEOS ARD Specifications used as the basis for community standards.
		#2, Feb		ARD4L Advisory Notes le Format Suggestions)	<ol> <li>Additional CEOS ARD Specifications for new applications, greatly increasing the user base for and impact of CEOS Agency data.</li> </ol>



