



36th Meeting of the CEOS Strategic Implementation Team (SIT-36) 23rd-25th March 2021 - VIRTUAL ONLY

AGENDA

During the 2020-2021 SIT Chair Term, the CSIRO/GA SIT Chair has focused on fostering *Principal-level discussion and decision making* to bring resources to address the significant coordination challenges presented by the harmonisation of observing systems across space agencies. This approach has been one of heightened attention on fewer priorities (presented at Plenary 2019: <u>CSIRO/GA SIT Chair 2020-2021 Prospectus</u>) that reflect the major thrusts across civil EO programmes, priority needs identified by the SIT Chair team, CEOS Chair priorities, and requests from CEOS partner organisations such as GEO and GCOS.

SIT-36 will focus on strategic topics and discussion aimed at identifying resources to escalate, elevate, and expedite existing CEOS Work Plan activities which directly support these major thrusts. This will be bookended later in the year by the SIT Technical Workshop, which will focus on more detailed working-level task coordination in preparation for Plenary.

The agenda for SIT-36 will be **tightly focussed** on the most essential business requiring CEOS Principal attention. The hope is that this approach will help participants to engage most effectively at a time when lengthy virtual meetings have led to meeting fatigue, time zone challenges, and disengagement.

The SIT-36 agenda will seek to address the following:

- Space-based EO Data for Open Science and Decision Support: To support the 2021 CEOS Chair focus on this topic, for each agenda item the SIT Co-Chairs will ask attendees for their thoughts on whether there are opportunities to enhance or adapt our activities to better support open science and inform decision making for societal benefit.
- **Delivery and Key Relationships:** Highlighting the newly endorsed CEOS Work Plan, discussing priorities emerging from the CEOS-GEO relationship (including Flagships, and Initiatives), and socialising the SIT Vice Chair's (ESA) proposed priorities for its SIT Chair period.
- **Working Team Engagement:** Showcasing achievements, taking advantage of Principal engagement to discuss opportunities and risks, and discussing current and emerging synergies across teams.
- **Oceans and Coasts:** Exploring coordination of the ongoing oceans and coasts-related activities including COVERAGE and CEOS-COAST; considering CEOS engagement with the UN Intergovernmental Oceanographic Commission (IOC) *Decade of Ocean Science for Sustainable Development.*
- **Sustainable Development Goals**: Detailed discussion on options for the future of CEOS engagement with the Sustainable Development Goals process including GEO's activities and resources in the area.
- Carbon and Biomass: Consideration of the approach CEOS may take to engage with the Global Stocktake Process under the Paris Agreement, including opportunities around Agriculture, Forestry and Other Land Uses (AFOLU), greenhouse gasses (GHG), an update on the CEOS Carbon Strategy, and endorsement of the CEOS Biomass Validation Protocol.
- Analysis Ready Data and Future Data Architectures: Review of the implementation of the CEOS ARD Strategy including progress for CEOS ARD beyond land, and discussion of CEOS support for uptake of ARD through advanced technologies activities such as the Open Earth Alliance.
- **Technical Workshop 2021:** Providing clarity on the support needed from Principals between SIT-36 and the Technical Workshop, and discussing what format will be most suitable for CEOS's second Virtual Technical Workshop.

Meeting at a Glance





| | Tuesday 23rd | Wednesday 24th | Thursday 25th |
|--|--|---|--|
| 2 hour 30 minute sessions from 6:30am US East | 1. Welcome, Opening Remarks and Overview Work Plan, CEOS-GEO, CEOS Chair, SIT Vice Chair 2. Oceans and Coasts COVERAGE, CEOS-COAST, UN Decade Engagement 3. Carbon & Biomass CEOS approach to Global Stocktake, Biomass Protocol | 4. Sustainable Development Goals Options for future engagement 5. Analysis Ready Data and Future Data Architectures CEOS ARD Beyond Land, CARD4L Implementation, Open Earth Alliance, EAIL 6. Working Group Showcase - Part 1 | 6. Working Group Showcase - Part 2 7. Virtual Constellation Showcase 8. Working Team Coordination Synergies across VCs, WGs and AHTs 9. Closing Special Plenary, Closing Discussion, Actions, Future Meetings |

SIT-36 Papers

| Paper | # | Gu |
|---|------|------|
| CEOS Work Plan 2021-2023 (deliverables.ceos.org) | 1.2 | Info |
| Implementation Plan for the 2021 CEOS Chair Theme: "Space-based Earth Observation Data for Open Science and Decision Support" (document here) | 1.4 | Info |
| CEOS COAST Ad Hoc Team Phase 2 Implementation Plan | 2.1 | Info |
| CEOS Strategy for Carbon Observations from Space (2014) | 3 | Info |
| Proposal for a coordinated contribution of the systematic observation community to the first Global Stocktake | 3 | Info |
| CEOS Working Group on Calibration and Validation Aboveground Woody Biomass Product Validation Good Practices Protocol (official DOI reference, aka CEOS Biomass Protocol) | 3.3 | Enc |
| A CEOS Strategy to Support the Global Stocktake of the UNFCCC Paris Agreement | 3.4 | Dec |
| CEOS Options Paper on Way Forward in Support of GEO on SDGs [PDF Word] | 4.2 | End |
| CEOS Analysis Ready Data Strategy (2019) (ceos.org/ard) | 5 | Info |
| Working Teams All Hands Call #3 (December 2020) - Brief Summary | 6, 7 | Info |
| WGDisasters Wildfire Pilot Implementation Plan | 6.1 | End |
| WGDisasters Landslide Demonstrator Implementation Plan | 6.1 | End |
| CEOS EOTEC DevNet Overview (v. v. Mar 10, 2021 final for SIT-36) | 6.1 | End |

Day 1 - Tuesday 23rd March

Session Timing

The core session timing is as follows. The meeting line will be open 30 minutes before the start of sessions. If you wish to test your IT setup (mic, speakers, screen sharing) please flag the SIT Chair Team by email (sitchair@lists.ceos.org) or on the meeting chat.





| Canberra | Tokyo | Rome | UTC | Washington DC |
|---------------|---------------|---------------|---------------|----------------------|
| 21:30 - 00:00 | 19:30 - 22:00 | 11:30 - 14:00 | 10:30 - 13:00 | 06:30 - 09:00 |

| Arrival | 10:00 - 10:30 |
|---------------------------------------|------------------|
| 9 | Agenda times UTC |
| before or during this arrival period. | |

Session 1: Welcome and Opening Session

Session Chair: Alex Held

Session Agenda Prep. Lead: George Dyke

Objectives: Brief reminder of SIT Chair priorities and SIT-36 objectives. Framing of points relevant to SIT-36 objectives from the CEOS Work Plan and the CEOS-GEO dialogue. Brief interventions from the CEOS Chair and SIT Vice Chair on their priorities as they relate to SIT-36.

Decision Points:

1. None identified.

| Target Session | Start: 10:3 | 30 UTC |
|-----------------------|-------------|--------|
|-----------------------|-------------|--------|

| 1.1 | Welcome and Opening Remarks Alex Held/SIT Chair, Adam Lewis/SIT Chair [presentation] ➤ SIT Chair Priorities ➤ Meeting Objectives ➤ Introductions | 15 mins total - 10 mins max opening - 5 mins head of delegation tour de table |
|-----|---|---|
| 1.2 | CEOS Work Plan - Highlights Marie-Claire Greening/CEO [presentation] ➤ Status and Summary ➤ Links to SIT-36 agenda | 5 mins (one slide) |
| 1.3 | CEOS-GEO Coordination Update Jonathon Ross/SIT Chair Team, Doug Cripe/GEO Secretariat ➤ Key CEOS-GEO bilateral outcomes | 5 mins (one slide) |
| 1.4 | CEOS Chair Priorities CEOS Chair ➤ Space-based Earth Observation Data for Open Science and Decision Support | 5 mins (one slide) |
| 1.5 | SIT Vice Chair Update SIT Vice Chair ➤ Thoughts toward ESA SIT Chair period | 5 mins (one slide) |

Session 2: Oceans and Coasts

Session Chair: Adam Lewis

Session Agenda Prep. Lead: Marie-Claire Greening





Objectives: Exploring coordination of the ongoing oceans and coasts-related activities including COVERAGE and CEOS-COAST. Consideration of CEOS engagement with the UN Intergovernmental Oceanographic Commission (IOC) Decade of Ocean Science for Sustainable Development.

Decision Points:

1. None identified.

| Target Session Start: 11:05 UT(| Tar | get Session | Start: | 11:05 | UTC |
|---------------------------------|-----|-------------|--------|-------|-----|
|---------------------------------|-----|-------------|--------|-------|-----|

| 2.1 | COVERAGE and CEOS-COAST Vardis Tsontos/NASA/COVERAGE, Raj Kumar/ISRO/CEOS-COAST AHT [presentation] ➤ Brief updates | 15 mins total - 5 mins (one slide) max x 2 - 5 mins discussion |
|-------|--|--|
| 2.2 | Decade of Ocean Science for Sustainable Development Paul diGiacomo/NOAA, Vardis Tsontos/NASA, Marie- Claire Greening/CEO [presentation] ➤ CEOS contributions ➤ Model for engagement with Decade Process | 10 mins |
| Break | | 11:30 UTC 5 mins |

Session 3: Carbon & Biomass

Session Chair: Adam Lewis

Session Agenda Prep. Lead: Stephen Ward

Objectives: Consideration of the approach CEOS may take to engage with the Global Stocktake Process under the Paris Agreement, including opportunities around Agriculture, Forestry and Other Land Uses (AFOLU), greenhouse gasses (GHG), an update on the CEOS Carbon Strategy, and endorsement of the CEOS Working Group on Calibration and Validation Aboveground Woody Biomass Product Validation Good Practices Protocol (aka CEOS Biomass Protocol, official DOI reference).

Decision Points:

- 1. AFOLU shortlist datasets for GST1 relevant producer agencies asked for support.
- 2. Call for endorsement of the CEOS Biomass Protocol (official DOI reference).
- 3. Agree next steps in the way forward for CEOS GST Strategy based on the discussion paper (document here). Latest SO synthesis report draft from UNFCCC SEC here.

Target Session Start: 11:35 UTC

| 3.1 | GHG Roadmap Update David Crisp/NASA JPL, Mark Dowell/EC ➤ Recorded presentation provided 1 week prior with a request for Principals to view in advance; any questions submitted prior to the meeting and a select few addressed live in the session ➤ Presentation video is here. ➤ PPT file with audio is here. | 15 mins to address questions on the pre-recording |
|-----|--|---|
| 3.2 | AFOLU Roadmap Update | 20 mins |





| | Osaum Ochiai, Frank Martin Seifert (LSI-VC Forest & Biomass) ➤ Individual product team needs - 1 slide each. Speakers: Land Cover & Forests: Martin Herold Biomass: Laura Duncanson Agriculture: Ian Jarvis (advance reading) ➤ Discussion | |
|---------|--|---|
| 3.3 | CEOS Biomass Protocol Laura Duncanson (WGCV LPV, Biomass) ➤ Brief summary of Protocol (advance reading) ➤ Discussion and call for Potential Endorsement | 20 mins total - 10 mins max slides - 10 mins discussion |
| 3.4 | CEOS Strategy for the Global Stocktake Stephen Briggs (SIT Vice-Chair Team) ➤ Strategy Paper (advance reading) ➤ Discussion and decision ➤ Relation to Carbon Strategy (Mark Dowell) | 30 mins total - 15 mins max slides - 15 mins discussion |
| Adjourn | | 13:00 UTC |





Day 2 - Wednesday 24th March

Session Timing

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| Arrival | 10:00 - 10:30 |
|--|------------------|
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Session 4: Sustainable Development Goals

Session 4 Shared Presentation Slide Deck

Session Chair: Alex Held

Session Agenda Prep. Lead: Andreia Siqueira

Objectives: Detailed discussion on options for the future of CEOS engagement with the Sustainable Development Goals process including GEO's activities in the area.

Decision Points:

1. Decision between option 1 ('full scale', i.e. Working Group) and option 2 ('federated', i.e work transferred to existing CEOS entities with coordination function) for CEOS support to the SDCs based on the options paper [PDF | Word].

| Target Session S | Start: 10 |):30 | UTC |
|------------------|-----------|------|-----|
|------------------|-----------|------|-----|

| 4.1 | SDG ad hoc Team Current Work Marc Paganini/SDG AHT ➤ Quick summary of subgroup outcomes ➤ Indicators supported | 15 mins total - 10 mins presentation - 5 mins discussion |
|-----|---|---|
| 4.2 | SDG Support Options Paper Alex Held/SDG AHT ➤ Brief review of process, participants, paper (advance reading) ➤ Two options: 'full scale' WG; and, 'federated'. ➤ Discussion and decision | 30 mins total - 15 mins presentation - 15 mins discussion (max) |

Session 5: Analysis Ready Data and Future Data Architectures

Session 5 Shared Presentation Slide Deck

Session Chair: Adam Lewis

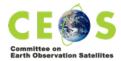
Session Agenda Prep. Lead: Matthew Steventon

Objectives: Review of the implementation of the CEOS ARD Strategy including progress for CEOS ARD beyond land, and discussion of CEOS support for uptake of ARD through advanced technologies activities





such as the Open Earth Alliance. **Decision Points:** 1. None identified. **Target Session Start: 11:15 UTC** 5.1 **CEOS ARD Strategy & CARD4L Update** 15 mins total Andreia Siqueira/SIT Chair Team - 10 mins presentation (max) ➤ CEOS ARD Strategy - 5 mins discussion Status of CARD4L datasets and PFS ➤ Aquatic Reflectance PFS ➤ CARD4L Advisory Notes Current PFS assessment workload 5.2 **CEOS ARD Strategy v2.0** 15 mins total Adam Lewis/SIT Chair Team - 5 mins presentation max Update to be prepared for CEOS Plenary decision - 10 mins discussion Discussion of main elements Break 11:45 UTC 5 mins 5.3 **CEOS ARD Beyond Land Target Session Restart:** Adam Lewis/LSI-VC and Ed Armstrong/SST-VC 11:50 UTC > Update on CEOS ARD beyond land work and 15 mins total Plenary Action 34-13 - 10 mins presentation (max) **CEOS ARD Governance Framework** - 5 mins discussion 5.4 **Future Data Architectures Activity Updates** 15 mins total Brian Killough/SEO, Rob Woodcock/WGISS - 5 mins presentation (max) x ➤ Open Earth Alliance ➤ Earth Analytics Interoperability Laboratory - 5 mins discussion ➤ WGISS data formats





Day 2 - Wednesday 24th March (Continued)

Session 6: Working Group Showcase - Part 1

Session 6 Shared Presentation Slide Deck

Session Chair: Adam Lewis

Session Agenda Prep. Lead: George Dyke

Objectives: Showcasing achievements, taking advantage of Principal engagement to discuss opportunities and risks, and discussing current and emerging synergies across teams. The session will include a brief update on biodiversity activities in the Group on Earth Observations Biodiversity Observation Network (GEO BON, geobon.org).

Decision Points:

- 1. Request CEOS endorsement of the EOTEC DevNet Plan.
- 2. Request CEOS endorsement of a WGDisasters Wildfire Pilot Implementation Plan and Landslide Demonstrator Implementation Plan.

Target Session Start: 12:20 UTC 6.1 **Working Group on Calibration & Validation** 40 mins total Akihiko Kuze/JAXA, Philippe Goryl/ESA [presentation] Per Group x 4: ➤ Biomass and GHG toward Global stocktake - 5 mins (one slide) Working Group on Capacity Building & Data - 5 mins discussion **Democracy** Nancy Searby/NASA Materials for pre-reading and pre-viewing encouraged and **Working Group on Disasters** welcome David Green/NASA > Wildfire Pilot Implementation Plan; and, ➤ Landslide Demonstrator Implementation Plan **Biodiversity Activities** Gary Geller/NASA [presentation] ➤ GEO BON and other activities ➤ Increasing Relevance of EO to biodiversity **Adjourn** 13:00 UTC





Day 3 - Thursday 25th March

Session Timing

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| Arrival | 10:00 - 10:30 |
|--|------------------|
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Session 6: Working Group Showcase - Part 2

Session 6 Shared Presentation Slide Deck

Session Chair: Adam Lewis

Session Agenda Prep. Lead: George Dyke

Objectives: Showcasing achievements, taking advantage of Principal engagement to discuss opportunities and risks, and discussing current and emerging synergies across teams.

Decision Points:

1. None identified.

Target Session Start: 10:30 UTC

| 6.1 | CEOS/CGMS Working Group on Climate | 10 mins total |
|-------------|---|---|
| (continued) | Albrecht von-Bargen/DLR, Jeff Privette/NOAA | Per Working Group: - 5 mins (one slide) - 5 mins discussion |
| | | Materials for pre-reading and pre-viewing encouraged and welcome |

Session 7: Virtual Constellation Showcase

Session 7 Shared Presentation Slide Deck

Session Chair: Alex Held

Session Agenda Prep. Lead: George Dyke

Objectives: Showcasing achievements, taking advantage of Principal engagement to discuss opportunities and risks, and discussing current and emerging synergies across teams.

Decision Points:

1. None identified.

Target Session Start: 10:40 UTC





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|--|--|---|--|
| 7.1 | Atmospheric Composition Ben Veihelmann/ESA ➤ Topics to be narrowed from: COVID-19; ARD possibilities; and, activities updates (GHG, AQ, Ozone) Land Surface Imaging Steven Labahn/USGS, Zoltan Szantoi/JRC, Adam Lewis/GA Precipitation Chris Kidd/NASA ➤ Satellite status, data processing, and outreach | 30 mins total Per Virtual Constellation x 3: - 5 mins (one slide) - 5 mins discussion Materials for pre-reading and pre-viewing encouraged and welcome Mid-Session 5 mins break | |
| Break | | 11:10 5 mins | |
| 7.1 (continued) | Ocean Colour Radiometry Ewa Kwiatkowska/EUMETSAT, Marie-Helene Rio/ESA ➤ Aquatic Carbon from Space; and, ➤ System Vicarious Calibration infrastructures' activities Ocean Surface Topography Estelle Obligis/EUMETSAT ➤ Selection of international OSTST Principal Investigators/Co-Investigators Ocean Surface Vector Wind Stefanie Linow/EUMETSAT ➤ Status and planned activities of the OSVW-VC Sea Surface Temperature Ed Armstrong/NASA ➤ Status of ARD datasets in SST community | Target Session Restart: 11:15 UTC 40 mins total Per Virtual Constellation x 4: - 5 mins (one slide) - 5 mins discussion Materials for pre-reading and pre-viewing encouraged and welcome | |
| Session 8: Working Team Coordination Session 8 Slide Deck Session Chair: Alex Held Session Agenda Prep. Lead: George Dyke Objectives: Discuss opportunities and risks, and discussing current and emerging synergies across teams. Decision Points: 1. None identified. Target Session Start: 11:55 UTC | | | |
| 8.1 | Working Team Coordination Discussion [session 8 presentation] SIT Chair Team Moderation ➤ Overlap or duplication identified ➤ Current cross-thematic synergies | 15 mins | |





| AAAA | Opportunities for further synergies Working Team engagement with Earth Analytics Interoperability Lab (EAIL) Identification of agenda items for Working Teams All Hands Call #4 | |
|------------------|---|--|
| \triangleright | Updates to https://ceos.org/observations/ | |

Session 9: Closing

Session Chair: Adam Lewis

Session Agenda Prep. Lead: George Dyke

Objectives: Actions, Coming Meetings description TBA

Decision Points:

1. Decision on endorsement of CNES's candidature for CEOS Chair 2022 (in special CEOS Plenary Session 9.1).

Target Session Start: 12:10 UTC

| | T a | rget Session Start: 12:10 UTC |
|---------|--|-------------------------------|
| 9.1 | CEOS Plenary Session CEOS Chair ➤ CEOS Chair 2022 ➤ Other topics to be coordinated | 5 mins |
| 9.2 | Closing Discussion SIT Chair Team Moderation ➤ Session summary slide deck ➤ Discussion points arising or needing revisiting from earlier in SIT-36 ➤ Any other business | 30 mins |
| 9.3 | Review of Draft Actions SIT Chair Team ➤ Decisions and actions document | 10 mins |
| 9.4 | Closing Remarks Adam Lewis/SIT Chair, Alex Held/SIT Chair ➤ Reflections on meeting objectives ➤ Coming meetings: SIT Chair - Working Teams, Technical Workshop, CEOS Plenary | 5 mins |
| Adjourn | | 13:00 UTC |





SIT Chair Prospectus Timelines

2020-2021 CSIRO/GA Australian SIT Chair Priorities Timelines

