**2019 SIT Technical Workshop**

**September 11-12, 2019**

**Fairbanks, Alaska**

**AGENDA v1.1**

<http://ceos.org/meetings/2019-sit-technical-workshop/>

**Objectives**

The annual SIT Technical Workshop is CEOS’s opportunity to assess progress in completing our objectives in preparation for the CEOS and GEO Plenaries, and UNFCCC COP and SBSTA Meetings. Outcomes of the SIT Technical Workshop will include recommendations to be taken to the CEOS Plenary for decision. As such, all agenda items for the SIT 2019 Technical Workshop are for ***information/discussion***.

The theme of the 2019 SIT Technical Workshop is “CEOS operations in the global community.” The 2019 SIT Technical Workshop will focus on **preparations for CEOS Plenary**, particularly **follow-up and continuity of themes initiated at SIT-33 and pursued at the 2018 SIT Technical Workshop, 32nd CEOS Plenary, and SIT-34.** Throughout the past 18 months, we have discussed potential changes in leadership transition for the Virtual Constellations (VCs), enhanced coordination among VCs and between VCs, Working Groups (WGs), and *ad hoc* Teams (AHTs), and a path to maturation for the AHTs. At SIT-34, we spent considerable time discussing these items and the *Concept Paper for Restructuring CEOS Virtual Constellations and Creation of a New Working Group* Addendum to *Strategic Directions and Partnerships for CEOS Discussion Paper, V1*, both still relevant documents. At the 2019 SIT Technical Workshop, we will present results from the two Study Teams created at SIT-34 in response to discussions from the Concept Paper – Working Group Study Team (WGST) and Ocean Virtual Constellation Merger Study Team (OVCMST) – and review proposals for recommended way forward for presentation at 33rd CEOS Plenary.

The objectives of the 2019 Workshop include:

* Continue **Virtual Constellation (VC)/Working Group (WG)/*ad hoc* Team (AHT) coordination discussions**, from the VC/WG/AHT Day, July-August Tag-ups, and SIT-34, with a focus on identifying SIT- and Plenary-level actions required to support the optimization of resource allocation and utilization, and on sustaining tangible outputs.
* Discuss **Ocean Virtual Constellation Merger Study Team (OVCMST)** and **Working Group Study Team (WGST)** outcomes and identify SIT- and Plenary-level actions required.
* Discuss proposed language changes to CEOS Strategic Guidance for **VC leadership rotation** and **AHT life** **cycles** as actioned at SIT-34. Additionally, determine which AHTs will request renewal during annual review of their mandates at Plenary.
* Update on the way forward for **CEOS on the coordination of climate observations including on greenhouse gases (GHGs)** (*e.g.,* Greenhouse Gases from Space, joint CEOS-CGMS activities, the ECV Inventory and gap analysis, IPCC Inventories).
* Update on the way forward on **data-related activities** including CEOS and Open DataCube activities, and LSI-VC’s work on Analysis Ready Data (ARD), and CARD4L (*e.g.,* potential expansion beyond land).
* An update and discussion around the **CEOS approach to key partnerships**, including CGMS, WMO, and GEO.

The Workshop will take place over two days, Wednesday and Thursday, 11 and 12 September, and will be preceded by a dedicated VC/WG/AHT Day on Monday, 9 September and a side meeting day on Tuesday, 10 September.

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| Monday 9th | Tuesday 10th | Wednesday 11th | Thursday 12th |
| 9:00am – 4:30pm  Virtual Constellation/ Working Group/*ad hoc* Team Working Day  *Invited Participants Only* | **9:00am – 5:00pm**  **Side Meetings**  ***(see below)*** | **9:00am – 5:45pm**  **SIT Technical Workshop Day 1**  *External User Environment and*  *Partnerships and Collaboration, Study Team Outcomes, Reports from Working Groups* | **9:00am – 4:40pm**  **SIT Technical Workshop Day 2**  *Reports from Virtual Constellations, Reports from Ad Hoc Teams, Other CEOS Activities and Work Planning, CEOS Business and Prep for CEOS Plenary* |

**Tuesday, 10 September 2019**

***Location:*** *Wood Center, University of Alaska, Fairbanks*

***Registration: 8:30 – 9:00***



**Wednesday, 11 September 2019**

***Sessions:*** *External User Environment and Partnerships and Collaboration, Study Team Outcomes, Reports from Working Groups*

***Location:*** *Wood Center, University of Alaska, Fairbanks*

***Registration: 8:30 – 9:00***

| *Session 1: Welcome and Introduction* | | | |
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| # | Time  *Duration* | Topic | Presenter |
| 1.1 | 9:00 – 9:05  *5 min* | Welcome | Steve **Volz**, SIT Chair (NOAA) |
| 1.2 | 9:05 – 9:15  *10 min* | *Tour de Table* Introductions | **All** |
| 1.3 | 9:15 – 9:30  *15 min* | Welcoming Remarks   * University of Alaska, Fairbanks * Fairbanks Command and Data Acquisition Station (FCDAS) | Larry **Hinzman**, Vice Chancellor for Research (UAF)  Robert **McCoy**, Director, Geophysical Institute (UAF)  Larry **Ledlow**, FCDAS Manager (NOAA) |
| 1.4 | 9:30 – 9:50  *20 min* | CEOS SIT Chair Introduction   * Review of Workshop Objectives and Adoption of Agenda * Continuity of SIT Chair Themes * SIT-34 Outcomes Recap and Action Status * OVCMST and WGST Progress Summary | Steve **Volz**, SIT Chair (NOAA) |
| 1.5 | 9:50 – 10:00  *10 min* | Review of CEOS Chair Priorities   * Mekong Initiative * CEOS Plenary Objectives | Lam Dao **Nguyen**, CEOS Chair Team (VNSC) |
| 1.6 | 10:00 – 10:30  *30 min* | VC/WG/AHT Working Day Outcomes   * Main Outcomes * Items for Consideration * Possible Plenary Decisions | VC/WG Day Nominee(s) |
| 1.7 | 10:30 – 10:45  *15 min* | Work Planning   * CEOS 2019-2021 Work Plan Status * Linkages to GEO Work Programme | Steven **Hosford**, CEO (ESA/CNES) |

***Group Photo and Coffee Break: 10:45 – 11:05, 20 minutes***

| *Session 2: External User Environment*  *Discussion Points – Highlight important partnerships and collaborations and identify what external user community expects of CEOS. How do technical components of CEOS look to these user aggregators to influence CEOS work? Scope community to determine “customers” and partners with emphasis on how we work collaboratively and what we have accomplished and need to accomplish.* | | | |
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| # | Time  *Duration* | Topic | Presenter |
| 2.1 | 11:05 – 11:15  *10 min* | Session Introduction | Steve **Volz**, SIT Chair (NOAA) |
| 2.2 | 11:15 – 11:30  *15 min* | Global Climate Observing System (GCOS)   * Essential Climate Variables (ECVs) * Climate Change Convention Engagement * 2019 IPCC Guidelines | *Carolin* ***Richter,*** *GCOS Secretariat\** |
| 2.3 | 11:30 – 11:45  *15 min* | Global Ocean Observing System (GOOS)   * Essential Ocean Variables (EOVs) | *GOOS Secretariat\** |
| 2.4 | 11:45 – 12:00  *15 min* | Group on Earth Observations (GEO)   * 2020-2022 GEO Work Programme and Connections to CEOS * Overview of Key GEO Initiatives with Significant CEOS Contributions | Doug **Cripe,** GEO Secretariat |
| 2.5 | 12:00 – 12:15  *15 min* | WMO Realignment   * What do Changes to WMO Structure Mean to CEOS? | Werner **Balogh,** WMO Space Programme |
| 2.6 | 12:15 – 12:25  *10 min* | Perspective on Arctic Initiatives   * Links between Global and Regional Satellite Programs | Hajo **Eicken** (UAF) |
| 2.7 | 12:25 – 12:45  *20 min* | Discussion Time   * Other Essential Variables and Themes * Actions to be Completed before CEOS and GEO Plenaries * Recommended Plenary Decisions | **All** |

***Lunch: 12:45 – 1:45, 60 minutes***

| *Session 3: Study Team Outcomes*  *Discussion Points – A Working Group Study Team (WGST) and Ocean Virtual Constellation Merger Study Team (OVCMST) were stood up at SIT-34 and have worked to prepare a report with proposed concept and recommended way forward to potentially present to Plenary* | | | |
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| # | Time  *Duration* | Topic | Presenter |
| 3.1 | 1:45 – 1:55  *10 min* | Session Introduction   * Summary of SIT-34 Discussion * Study Team Charters | Steve **Volz**, SIT Chair (NOAA) |
| 3.2 | 1:55 – 2:20  *25 min* | Working Group Study Team (WGST) Update   * Preliminary Findings, Options, and Recommendations * Steps towards Plenary | Brian **Killough**, WGST Representative (NASA)  Mark **Dowell**, WGST Representative (COM) |
| 3.3 | 2:20 – 2:35  *15 min* | Ocean Virtual Constellation Merger Study Team (OVCMST) Update   * Preliminary Findings, Options, and Recommendations * Steps towards Plenary | Ken **Casey**, OVCMST Representative  (NOAA) |
| 3.4 | 2:35 – 3:25  *50 min* | Discussion Time   * Actions to be Completed before CEOS and GEO Plenaries * Recommended Plenary Decisions | **All** |

***Coffee Break: 3:25 – 3:40, 15 minutes***

| *Session 4: Reports from Working Groups* | | | |
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| # | Time  *Duration* | Topic | Presenter |
| 4.1 | 3:40 – 3:55  *15 min* | Working Group Climate (WGClimate)   * Space Agency Statement to SBSTA 51 and Preparations for COP-25 * GCOS and ECV Inventory Gap Analysis | Jörg **Schulz,** WGClimate Chair (EUMETSAT) |
| 4.2 | 3:55 – 4:05  *10 min* | GHG Roadmap   * Roadmap Document and Targets * Actions | Mark **Dowell** (COM), David **Crisp** (NASA) |
| 4.3 | 4:05 – 4:15  *10 min* | CEOS Carbon Strategy Update   * Convention Engagement * Status Report on Last 36 Months * Future Effort and Next Phase | Mark **Dowell** (COM) |
| 4.4 | 4:15 – 4:30  *15 min* | Working Group on Information Systems and Services (WGISS) | Mirko **Albani**, WGISS Chair (ESA) |
| 4.5 | 4:30 – 4:45  *15 min* | Working Group on Calibration and Validation (WGCV) | Cindy **Ong**, WGCV Chair (CSIRO) |
| 4.6 | 4:45 – 5:00  15 min | Working Group on Disasters (WGDisasters)   * Draft Terms of Reference Review | David **Green**, WGDisasters Vice Chair (NASA) |
| 4.7 | 5:00 – 5:15  15 min | WGCapD Capacity Building Activities | Lauren **Childs-Gleason**, WGCapD (NASA) |
| 4.8 | 5:15 – 5:25  *10 min* | Discussion Time   * Actions to be Completed before CEOS and GEO Plenaries * Recommended Plenary Decisions | **All** |

| *Wrap-Up* | | | |
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| # | Time  *Duration* | Topic | Presenter |
|  | 5:25 – 5:45  *20 min* | Wrap-up   * Day One Summary * Day Two Preview | Steve **Volz**, SIT Chair (NOAA) |

***Adjourn***

***Evening Free***

**Thursday, 12 September 2019**

***Sessions:*** *Reports from Virtual Constellations, Reports from Ad Hoc Teams, Other CEOS Activities and Work Planning, CEOS Business and Prep for CEOS Plenary.*

***Location:*** *Wood Center, University of Alaska, Fairbanks*

***Registration: 8:30 – 9:00***

| *Session 5: Reports from Virtual Constellations* | | | |
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| # | Time  *Duration* | Topic | Presenter |
| 5.1 | 9:00 – 9:15  *15 min* | Atmospheric Composition Virtual Constellation (AC-VC)   * Tangible Outcomes * Plenary Decisions Required | *Jay* ***Al-Saadi****, AC-VC Co-Lead (NASA)\** |
| 5.2 | 9:15 – 9:30  *15 min* | Ocean Colour Radiometry Virtual Constellation (OCR-VC)   * Tangible Outcomes * Plenary Decisions Required | *Ewa* ***Kwiatkowska****, OCR-VC Co-Lead (EUMETSAT)\** |
| 5.3 | 9:30 – 9:45  *15 min* | Ocean Surface Topography Virtual Constellation (OST-VC)   * Tangible Outcomes * Plenary Decisions Required | François **Montagner** (EUMETSAT) |
| 5.4 | 9:45 – 10:00  *15 min* | Ocean Surface Vector Wind Virtual Constellation (OSVW-VC)   * Tangible Outcomes * Plenary Decisions Required | Raj **Kumar**, OSVW-VC Co-Lead (ISRO) |
| 5.5 | 10:00 – 10:15  *15 min* | Precipitation Virtual Constellation (P-VC)   * Tangible Outcomes * Plenary Decisions Required | Gail **Skofronick-Jackson**, P-VC Co-Lead (NASA) |
| 5.6 | 10:15 – 10:30  *15 min* | Sea Surface Temperature Virtual Constellation (SST-VC)   * Tangible Outcomes * Plenary Decisions Required | Ken **Casey**, SST-VC Co-Lead (NOAA) |
| 5.7 | 10:30 – 10:45  *15 min* | Land Surface Imaging Virtual Constellation (LSI-VC)   * Joint Meeting Outcomes * CARD4L | Steve **Labahn**, LSI-VC Co-Lead (USGS) |

***Coffee Break: 10:45 – 11:00, 15 minutes***

| *Session 5: Reports from Virtual Constellations – con’t* | | | |
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| # | Time  *Duration* | Topic | Presenter |
| 5.8 | 11:00 – 11:10  *10 min* | Advancement of the COVERAGE Initiative | Jorge **Vazquez**, COVERAGE (NASA/JPL) |
| 5.9 | 11:10 – 11:20  *10 min* | VC Leadership Rotation   * Review of Proposed Language for VC Leadership Rotation | Kerry **Sawyer**, SIT Chair Team (NOAA) |
| 5.10 | 11:20 – 11:40  *20 min* | Discussion Time   * Actions to be Completed before CEOS and GEO Plenaries * Recommended Plenary Decisions | **All** |

| *Session 6: Reports from Ad Hoc Teams/Working Group* | | | |
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| # | Time  *Duration* | Topic | Presenter |
| 6.1 | 11:40 – 11:50  *10 min* | Space Data Coordination Group (SDCG) for Global Forests Observations Initiative (GFOI)   * SDCG New WP Targets * Representation, Structure and Capacity | Osamu **Ochiai**, GFOI Lead for CEOS (JAXA)  Stephen **Ward**, SDCG Secretariat |
| 6.2 | 11:50 – 12:00  *10 min* | GEO Global Agricultural Monitoring (GEOGLAM) *ad hoc* Working Group   * *CEOS Response to GEOGLAM Requirements* (AGRI-4) for Plenary Endorsement | Brad **Doorn**, GEOGLAM AHWG Co-Lead (NASA) |
| 6.3 | 12:00 – 12:10  *10 min* | Sustainable Development Goals (SDGs) *ad hoc* Team   * Progressing Pilot Support to Indicators 6.6.1, 11.3.1, and 15.3.1 * Governance and Future Outlook | Marc **Paganini**, SDG AHT Co-Lead (ESA)  Alex **Held**, SDG AHT Co-Lead (CSIRO) |
| 6.4 | 12:10 – 12:30  *20 min* | *Ad hoc* Team (AHT) Lifecycles   * Mandate Renewal and Reporting * Coordination Prior to Plenary Decision * SDCG, GEOGLAM AHWG, SDG AHT | Kerry **Sawyer**, SIT Chair Team (NOAA) | |
| 6.5 | 12:30 – 1:00  *30 min* | Discussion Time   * Actions to be Completed before CEOS and GEO Plenaries * Recommended Plenary Decisions | **All** | |

***Lunch: 1:00 – 2:00, 60 minutes***

| *Session 7: Other CEOS Activities* | | | |
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| # | Time  *Duration* | Topic | Presenter |
| 7.1 | 2:00 – 2:10  *10 min* | GEO-LEO Activities Update   * Planned Trajectory | Mitch **Goldberg**, SIT Chair Team (NOAA) |
| 7.2 | 2:10 – 2:20  *10 min* | Observations for Coasts   * Discussion on CEOS Coastal Strategy | Paul **DiGiacomo**, SIT Chair Team (NOAA) |
| 7.3 | 2:20 – 2:35  *15 min* | Data Cubes as an Analysis Ready Tool   * ARD Use-cases * Data Cube Prototypes and Digital Earth Africa * Support to GEO-Amazon Project | Brian **Killough**, SEO (NASA) |
| 7.4 | 2:35 – 2:45  *10 min* | GEO Plenary Preparations   * CEOS Participation at GEO | **Steven Hosford**, CEO (ESA/CNES) |
| 7.5 | 2:45 – 2:55  *10 min* | Upcoming Changes to CEOS Representation in GEO | **Steven Hosford**, CEO (ESA/CNES) |

| *Session 8: CEOS Business and Prep for CEOS Plenary* | | | |
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| # | Time  *Duration* | Topic | Presenter |
| 8.1 | 2:55 – 3:15  *20 min* | WGST and OVCMST Next Steps   * Preparing for Plenary * Changes to CEOS Documentation | Steve **Volz**, SIT Chair (NOAA) | |
| 8.2 | 3:15 – 3:30  *15 min* | CEOS Leadership Continuity   * CEO/DCEO and 2021 CEOS Chair | Lam Dao **Nguyen**, CEOS Chair Team (VNSC) |
| 8.3 | 3:30 – 3:45  *15 min* | CEOS SIT Vice Chair Priorities for 2020-2021 SIT Chair Term   * *CEOS Analysis Ready Data Strategy* for Plenary Endorsement | Alex **Held**, SIT Vice Chair (CSIRO) |
| 8.4 | 3:45 – 3:55  *10 min* | Incoming CEOS Chair Objectives | Raj **Kumar**, Incoming CEOS Chair Team (ISRO) |
| 8.5 | 3:55 – 4:05  *10 min* | CEOS Plenary Preparations   * Logistics * New Membership * Other Plenary Decision Items | Lam Dao **Nguyen**, CEOS Chair Team (VNSC) |
| 8.6 | 4:05 – 4:15  *10 min* | AOB | **All** |
| 8.7 | 4:15 – 4:30  *10 min* | Review of Actions   * Highlight Workshop Actions to Plenary for Decision | SIT Chair Team |
| 8.8 | 4:30 – 4:40  *10 min* | SIT Chair Closing Remarks | Steve **Volz**, SIT Chair (NOAA) |

***Adjourn***