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Agenda item 13
Yellowstone National Park, USA (USGS)

5-7 September 2023



Ocean Coordination Group



- ❖ Aim: Come up with a series of recommendations to the 2023 CEOS Plenary on the coordination of CEOS ocean-related activities, including activities in support of the UN Decade of Ocean Science for Sustainable development (2021-2030) and GST1 (2023 UNFCCC Global Stocktake).
- Discussion on the existing and future mission product development and where ocean coordination would be of use
- Conducted initial collection of deliverables and outcomes related to those missions with all the members of the ocean-related VCs and the OCG
- Conducted initial analysis and mapping of CEOS workplan activities that directly or indirectly benefit the IOC and the UN Ocean Decade



Ocean Coordination Group



For SIT TW and Plenary:

- Complete the work on two documents and provide to the SIT TW for review and to the Plenary as the outcome of the OCG:
 - Needs Assessment for Ocean Coordination activities for upcoming satellite missions
 - List of IOC and Ocean Decade planned deliverables from CEOS VCs/WGs/Ad-Hoc Teams
- These will help inform the SIT TW and the Plenary of where Ocean Coordination could benefit the Earth observation community going forward
- Based on feedback heard from the SIT and Plenary, would not propose a new entity specific to overall ocean coordination at this time
- Would recommend the OCG end with these deliverables to the CEOS Plenary



COAST ad hoc Team



On an exceptional basis, CEOS has the ability to create *ad hoc* Teams in the event that the more permanent mechanisms are insufficient for CEOS to undertake a particular activity. When doing so, CEOS Plenary approves the overarching purpose, objectives and defines its lifetime. CEOS currently has one such Team.

The Coastal Observations Applications Services and Tools (COAST) ad hoc team was formed in 2019 to provide new and improved scientific/technical capabilities and to build capacity for a more robust, end-to-end value chain (from observations to data to products to information to actionable knowledge) in support of coastal stakeholders and global sustainable development.

COAST is expected to complete its work by the end of the 2023 calendar year.





COAST-VC Proposal



- Proposal: Creation of a COAST Virtual Constellation
 - Precedent for this type of VC are LSI-VC and AV-C (Multiple-property/domain-based with multiple measurement techniques)
 - Would continue to the specific work of COAST within CEOS, which is a deliverable of CEOS to the UN Decade of Ocean Science for Sustainable Development.
- COAST Activities Going Forward Could Include:
 - Finish products in development and advance new ones, including coastal blue carbon/habitat mapping, shoreline (e.g., UK coast)
 - Stakeholder Engagement Events and Co-Design in new regions
 - Utilise CEOS EAL to the extent enabled by SEO
 - Overall, would be complementary to existing activities in other VCs and WG activities and not overlap their work.
- NOAA and ISRO have indicated interest in continuing to lead the VC, need to find a third co-chair.

CEOS Virtual Constellations



The CEOS Virtual Constellations (VCs) are a set of space & ground segment capabilities operating in a coordinated manner to meet a combined/common set of EO requirements. The VCs aim to demonstrate the value of collaborative partnerships in addressing key observational gaps and to bridge multiple SBAs while maintaining the independence of individual contributions. The focus of the collaboration is to facilitate dialogue from "all topics, all agencies" to small, specialised groups with the aim to provide guidance on the design & development of future systems to meet a broad spectrum of EO requirements.

There are seven CEOS Virtual Constellations:

- Atmospheric Composition (AC-VC)
- Land Surface Imaging (LSI-VC)
- Ocean Colour Radiometry (OCR-VC)
- Ocean Surface Topography (OST-VC)
- Ocean Surface Vector Wind (OSVW-VC)
- Precipitation (P-VC)
- Sea Surface Temperature (SST-VC)

