

esa

CEOS WGV 46

CEOS COASTAL

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Background





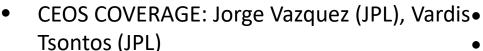
- One of the outcomes identified during the Ocean and Water Session of the Virtual Constellation (VC)/Working Group (WG) Day of the 2018 CEOS SIT Technical Workshop was the suggestion for CEOS to consider potential pilot projects in the coastal zone targeting high priority user needs (e.g., flooding, water quality).
- At SIT-34, ongoing CEOS Agency interest in analysis ready satellite data provision for the coastal domain was discussed.
- Dr. DiGiacomo presented on the coastal strategy topic during the VC/WG/ad hoc (AHT) Day and again at the 2019 SIT Technical Workshop. He recommended that the SIT establish a Coastal Study Team that would define the objective, scope, priorities and value chain approach for a CEOS coastal engagement strategy, including identification of potential pilot project(s) and the engagement strategy with internal and external stakeholders.



COAST Study Team Members







- CEOS Systems Engineering Office (SEO):
 Brian Killough (NASA)
- CEOS VCs: TBD (depending upon specific COAST project needs)
- CEOS WGCapD: pending
- CEOS WGClimate: pending
- CEOS WGCV: Cindy Ong (CSIRO), Akihiko Kuze (JAXA), and/or designee
- CEOS WGISS: Rob Woodcock (CSIRO) and/or designee
- CEOS WGDisasters: David Green (NASA), David Borges (NASA)
- CNES: Selma Cherchali

- ESA: Jérôme Benveniste
- EUMETSAT: Estelle Obligis
- European Commission: Astrid-Christina Koch, Fabienne Jacq
- GEO AquaWatch Initiative: Steve Greb
- GEO Blue Planet Initiative: Emily Smail
- GEO Secretariat: Douglas Cripe
- Geoscience Australia: Stephen Sagar, Trevor Dhu
- ISRO: Rashmi Sharma, Raj Kumar
- NASA: Laura Lorenzoni
- NOAA: Paul DiGiacomo (COAST Chair);
 Merrie Beth Neely (Science Support Staff)
- USGS: Steve Labahn (LSI-VC)
- VNSC: Lam Dao Nguyen



Focus/Priorities





- Focus on the interfacial nature of the coastal zone, especially the land-sea (~aquatic) interface, coupled with atmospheric and/or anthropogenic impacts as appropriate
- Identify, leverage and integrate appropriate CEOS capabilities and capacities across the various agencies, Virtual Constellations (VCs), Working Groups (WGs) et al.
- Constraint the focus so as not overly broad, and identify specific, tractable high priority pilot projects and related activities.
 - 1. Coastal Characterization & Mapping
 - 2. Coastal Disasters/Hazards (Physical and impact to people)
 - 3. Coastal Ecosystems/Water Quality/Habitat (Bio-chemical)
 - 4. Tools and Services (This is in all the topics above!)



Status and Plan















Selection of highest priority COAST Pilot Projects: April-May 2020

COAST Telecon #5: May 2020, COAST Telecon #6: June 2020

Identify COAST Pilot Project framework, approach, work plan: June-August 2020

COAST Telecon #7: July 2020, COAST Telecon #8: August 2020

COAST Side Meeting/Telecon #9 at SIT Technical Workshop Plenary: September 2020

Discussion, presentation, review at SIT Technical Workshop Plenary: September 2020

Implementation plan submitted for approval at CEOS Plenary: October 2020

	2020					2021				2022		
TASK	Jan	Apr	July	Sept	Dec	Apr	July	Sept	Dec	Apr	July	Sept
Phase 1												
Annotated Bibliography												
GEO CEOS Joint Workshop Prospectus												
Initial HighLevel Assessment and Gaps												
Pilot Project List (prioritized)												
Long list 7-10												
Short list 1-3												
Pilot Project Implementation Plan												
First draft												
Final draft												
Phase 2 - Internal Focus												
Detailed Assessment and Gaps												
CEOS Pilot Project 1												
CEOS Pilot Project 2												
CEOS Pilot Project 3												
GEO CEOS Joint Workshop (Feb 2021)												
Phase 3 - Broader Community Engagement and Partnership												
CEOS Co-led Community Coastal Project 1												
CEOS Co-led Community Coastal Project 2												
CEOS Co-led Community Coastal Project 3												



First initial thoughts





ARD discussion → WGCV can help

Proposed Approach to ARD for Pilots: within the context of the Underlying Tools/Products/Services theme, document the level of existing ARD and gaps that need to be filled to improve quality and operational efficiency. This can then 'inform' an ARD for Coasts definition for what is needed in the future. Caveats - while others (NASA, COVERAGE, GHRSST, etc.) may have definitions of ARD, we can define our way and in terms of what works for the Coast Study Team both now and in the future, with inclusion of pilot projects as one goal.

Data need, fitness for purpose, validation approach \rightarrow WGCV