C-CORE 2.14 Coastal sediment dynamics, estuarine fronts, and land–ocean interactions.

Coastal sediment dynamics, estuarine fronts, and land–ocean interactions

Challenge

Challenge ID	C-CORE_OFF2.14
Title	**Coastal sediment dynamics, estuarine fronts, and land–ocean interactions.**
Challenge originator:	
General Description	
What data/products do you use?	Models, aerial surveillance, satellite imagery
When do you use this kind of dataset?	To monitor coastal erosion, freshwater run-off and other dynamics that can influence currents and sedimentation in the nearshore environment
What are your actual limitations and do you have a work around?	Acquiring data of this type is difficult and expensive, requires modeling and in-situ data validation
Needs and expectations on EO data	High resolution imagery capable of detecting and tracking plumes and oceanic fronts
Challenge classification	
Pre license	
Exp.	1
Dev.	1
Prod.	1
Decom.	
Geographic context/ restrictions	- South China Sea
Topographic classification / Offshore classification	Shallow Water
Activity impacted /concerned	Operational, response capability enhancement
Technology Urgency	Short term (2-5 years)
Information requirements	
Update frequency	1-6 h during time of discharge
Temporal resolution	1-6 h during time of discharge
Spatial resolution	10-100m
Data quality	High
Data Coverage and extent	Regional
Example format	High resolution image
Timeliness	As close to real-time as possible

Existing standards	Huang, Weigen, Fu, Bin. 2002. *Remote Sensing for Coastal Area Management.* Laboratory of Ocean Dynamic Processes and Satellite Oceanography Second Institute of Oceanography State Oceanic Administration Hangzhou, People's Republic of China in China. *Coastal Management,* 30:271–276, 2002.

Relevant products

Content by label

There is no content with the specified labels