

CLS-1.1: Historic Metocean data for high level risk assessment

Historic Metocean data for high level risk assessment

Challenge

1. Pre-License

CLS_OFF.1.1 : Historic Metocean data for high level risk assessment

1	Challenge ID	CL_OFF.1.1				
2	Title	Historic Metocean data for high level risk assessment				
3	Originator of Challenge	Metocean Expert / Tullow Oil				
	General description					
4	What data/products do you currently use ?	Mostly historic records and metocean data mapping. For historic metocean data : Global freely available historic data as HYCOM For Waves data : Globewave For Currents data : Globecurrent For historical storms : Imagery of tropical events				
5	When do you use this kind of dataset?	These data are needed for risk assessment and new country entry assessment				
6	What are your actual limitations and do you have a work around?	Actual limitations: <ul style="list-style-type: none">• The statistics based on historical data are no longer reliable due to the impact of climate change. Actual limitations concerning satellite imagery : <ul style="list-style-type: none">• Large temporal and spatial smoothing in most product (altimetry)• Lack of regular passes, sensor switch off, lack of downloading station• Not possible to systematically study a given phenomena.• Underestimation of wave heights• Costs and accessibility of EO data are both an issue.				
7	Needs and expectations on EO data	Use of EO products in order to validate the metocean characteristics collected on a new area. EO products resolution: smaller scale features to be visible on satellite products. EO products Reliability: validation metrics could be useful.				
	Challenge classification					
8	Lifecycle stage	Pre license	Exp.	Dev.	Prod.	Decom.
	Score from impact	4				
9	Geographic context /restrictions	<ul style="list-style-type: none">• Worldwide• West Africa• Atlantic margins				
10	Topographic classification / Offshore classification	<ul style="list-style-type: none">• Deep/ultra deep water• Shallow water• Coastal water• Sea floor• Tidal regions (region of very strong tides)• Inland Sea/lake: Caspian sea• River Plume areas				
11	Activity impacted /concerned	New country entry assessments, new activity within our existing assets Risk mapping, identifying operational constraints, cost and timescale management				
12	Urgency (How quickly does the user need the solution)	Immediate (0-2 yrs); Short term (2-5 yrs)				
	Information requirements					
13	Update frequency	Ocean processes: as high as possible/3 hours. Access to data via FTP / portal interfaces – direct download for improved delivery times.				
14	Temporal resolution	10 min				
15	Spatial resolution	100m for metocean				

16	Data quality	n/a
17	Data Coverage and extent	Along track composite, geostationary is the best. Programmable is a disadvantage, it limits the use, and is not a good historical archive.
18	Example formats	GeoTIFF, .kml, jpeg, mostly import matrix of data in matlab ,ECW, JP2000, xml – copy of raw data, enhanced and full band non enhanced data
19	Timeliness	Not urgent for historical
20	Existing standards	Company standards for GIS and remote sensing deliverables – interested in seeing more standard across the industry

Relevant products

Content by label

There is no content with the specified labels