

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 ?	<p>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</p>				
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?	<p>Actual limitations:</p> <ul style="list-style-type: none"> The statistics based on historical data are no longer reliable due to the impact of climate change. <p>Actual limitations concerning satellite imagery :</p> <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	<p>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.</p>				
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	<p>New country entry assessments, new activity within our existing assets Risk mapping, identifying operational constraints, cost and timescale management</p>				
12	Urgency (How quickly does the user need the solution)	<p>Immediate (0-2 yrs); Short term (2-5 yrs)</p>				
Information requirements						
13	Update frequency	<p>Ocean processes: as high as possible/3 hours. Access to data via FTP / portal interfaces – direct download for improved delivery times.</p>				
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

