

CLS-2.5: Drilling Survey preparation : Metocean conditions, hindcast & forecast

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Challenge

CLS_OFF.2.5 : Drilling Survey preparation : Metocean conditions, hindcast & forecast

1	Challenge ID	CLS_OFF.2.5				
2	Title	Drilling Survey preparation :Metocean conditions: hindcast & forecast				
3	Originator of Challenge	CGG				
	General description					
4	What data/products do you currently use ?	Need currently being partly fulfilled. Forecast: ocean current data, consultancy, model data such as Hycom, ECMWF, NCEP				
5	When do you use this kind of dataset?	These data are needed during the Survey preparation (Hindcast). They are helpful for finding a weather window to conduct operations and avoid downtime. It then helps to reduce the survey duration by planning and optimizing operations. (Forecast)				
6	What are your actual limitations and do you have a work around?	Ocean current forecast: <ul style="list-style-type: none"> • Need for a better resolution (space and time), reliability and practical translation into operation at sea optimization Ocean models: <ul style="list-style-type: none"> • There's a need to improve the quality and the reliability of these models to meet with O&G needs. Reliability indicators are needed. • Enhancing hindcasts and forecast quality at fix point. Resolution can be inadequate: ground truthing at block level. 				
7	Needs and expectations on EO data	Satellite images: they are just inputs to other products or services. The company needs the global picture as a result of a combination of in-situ measurements, EO and combination of EO, models, and this is what is expected from the service companies.				
	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"> • Offshore operations / worldwide • West Africa • French Guyana • Namibia • Mozambique Channel 				
10	Topographic classification / Offshore classification	<ul style="list-style-type: none"> • Shallow Water • Deep Water • Inland Lakes 				
11	Activity impacted /concerned	H&S benefit, Strategic decision enabler, More efficient planning: ex. bathymetry planning for a survey, which boat, best window...				

12	Urgency (How quickly does the user need the solution)	
	Information requirements	
13	Update frequency	Daily for operation, weekly, annual Squall warning: daily update/twice daily Seismic survey : instantaneous
14	Temporal resolution	Tidal: hourly Current: daily if nothing else is available Monthly mean
15	Spatial resolution	1m, 100m, 1 km / 1:50000, 1:25000 ... Model : ¼° SAR image : 1/150000
16	Data quality	Higher for lakes as info for ground truthing/Very important during operations
17	Data Coverage and extent	Over survey area, typically 100km x 100km/Along track, programmable
18	Example formats	e.g. GeoTIFF, Report, GIS formatsn NetCDF etc... raw data and geotiffs
19	Timeliness	RT application as fast as possible/Squall: up to date/Metocean: that day
20	Existing standards	Looking for OGP standards

Relevant products

Content by label

There is no content with the specified labels