CLS-3.3: Evaluation of the efficiency of the structure

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Challenge

CLS_OFF.3.3 : evaluation of the efficiency of the structure

1	Challenge ID	CLS_OFF.3.3				
2	Title	Evaluation of the efficiency of the structure				
3	Originator of Challenge	SHELL/BMT				
	General description					
4	What data/products do you currently use ?	• Winds, waves and currents data (Waveclimate.com (also coastal locations)) • Pressure at sea level (altimeter) • Rainfall: TRMM, Tropical Rainfall Measuring Mission • Air temperature above the sea • Monitoring of temperature/pressure and solar radiation conditions				
5	When do you use this kind of dataset?	These data and products are mainly used during design phases. Some data are used in specific cases, for example: • Air temperature above the sea: for design to evaluate the efficiency of pumps of FPSO (Floating production storage and offloading) • Solar radiation: to evaluate the efficiency of platforms in the Middle East. • Tair, SST, rainfall, cloud cover/lightning, wind, current, wave are needed il all phases of the project and mainly during development to evaluate the efficiency of the structure. Wind and wave data are useful to evaluate buoyancy perturbation				
6	What are your actual limitations and do you have a work around?	n/a				
7	Needs and expectations on EO data	Air temperature and wind fields above land could be good to have thanks to EO data.				
	Challenge classification					
8	Lifecycle stage	Pre license	Exp.	Dev.	Prod.	Decom.
	Score from impact			4		
9	Geographic context /restrictions	• Global : offshore/coastal and onshore • Caspian sea •Nigeria • Qatar • Oman • West Australia • Med coastal and onshore •South Africa • Namibia • Mozambique • South-China sea • Philippines • Guyane • America • Venezuela				
10	Topographic classification / Offshore classification	All topographic classifications Profiles are always needed, as well as the deep sea currents.				
11	Activity impacted /concerned	Money saving				

12	Urgency (How quickly does the user need the solution)	The capability of having wind fields above the land and Tair above water would also be useful.
	Information requirements	
13	Update frequency	SAR: 2 images per day would be good Metocean data : OK for the time being
14	Temporal resolution	
15	Spatial resolution	For offshore a resolution of 20 – 25 km is OK. The main difficulties are located on coastal area.
16	Data quality	Ok for the time being
17	Data Coverage and extent	Perhaps more easy access to some area outside the limitation [52°N-52° S].
18	Example formats	Matlab or Fortran would be fine. But most important, the tools to read the products are needed.
19	Timeliness	Ok for the time being
20	Existing standards	Matlab or Fortran

Relevant products

Content by label

There is no content with the specified labels