

# CLS-1.4: Environmental conditions

## Environmental conditions

### Challenge

#### CLS\_OFF.1.4 : Environmental conditions

1	Challenge ID	CLS_OFF.1.4				
2	Title	Environmental conditions				
3	Originator of Challenge	SHELL / PETROBRAS				
	General description					
4	What data/products do you currently use ?	Profiles of SST and chlorophyll, Sea bottom mapping, Shallow water bathymetry and seabed classification with optic (down to 30 m), Lidor and aerial photographs for coastal morphology, Combined data (HR microwave & lidor data) for high resolution mangrove monitoring.				
5	When do you use this kind of dataset?	Site studies, recommendations for operations and discussion with environmental agencies. Baseline for Environmental monitoring and permits				
6	What are your actual limitations and do you have a work around?	For SST and sea bed classification, the main issue is about the clouds which block the optical imagery. In situ data need to be collected for mangrove monitoring.				
7	Needs and expectations on EO data	The spatial and temporal resolutions need to be improved especially for the coastal regions. An Improvement needs to be done on data access and display. For example: Concerning SAR acquisition: how to acquire data for Brazil? Who should the company contact?				
	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"> <li>Worldwide</li> <li>Brazil</li> </ul>				
10	Topographic classification / Offshore classification	<ul style="list-style-type: none"> <li>Deep/ultra deep water</li> <li>Shallow water</li> <li>Coastal water</li> <li>Sea floor</li> <li>Open Ocean</li> <li>Inland Sea/lake</li> <li>River Plume areas</li> <li>Coastal waters</li> </ul>				
11	Activity impacted /concerned	H&S operation cost reduction, strategic decision enabler and risk management				
12	Urgency (How quickly does the user need the solution)	Immediate (0-2 yrs)				

	Information requirements	
13	Update frequency	As often as possible depending on the process and the application
14	Temporal resolution	n/a
15	Spatial resolution	5 km-10 km and higher for coastal region.
16	Data quality	As good as possible to resolve the features
17	Data Coverage and extent	composite, geo stationary, programmable, objectively analysed (processed)
18	Example formats	Moving towards GIS georeferenced, netcdf
19	Timeliness	As soon as possible
20	Existing standards	n/a

## Relevant products

### Content by label

There is no content with the specified labels