OTM-042: Identifying seasonal terrain changes e.g. for access

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Challenge

	Challenge ID	OTM:042				
1	Title	Identifying seasonal terrain changes e.g. for access				
2	Theme ID	ON 2.4: Surface Geology Mapping - Terrain evaluation and Geo-morphology characterization				
3	Originator of Challenge	Onshore: OTM				
4	Challenge Reviewer / initiator	PetroSA, Ardan-Africa, Tullow				
	General description	Overview of Challenge				
5	What is the nature of the challenge? (What is not adequately addressed at present?)	Access routes can change between seasons as a consequence of flooding, vegetation, etc.				
6	Thematic information requirements	1. Obtain detailed topographic information, 2. Obtain detailed terrain characterisation, 14. Obtain detailed imagery of the surface,				
7	Nature of the challenge - What effect does this challenge have on operations?	Being aware of these changes allows us to plan our surveys more effectively whilst ensuring the safety of our staff. This also has relevance to identification of areas of soft ground (see challenge OTM:045)				
8	What do you currently do to address this challenge?/ How is this challenge conventionally addressed?	Scouting team deployed ahead of seismic vehicle, remote sensing, historical mapping (e.g. military maps), online imagery				
9	What kind of solution do you envisage could address this challenge?	Topographical mapping would be important if temporal images are not available. For seasonal variations you would need to see a collection of images acquired during each season. So for example Lake Chad that can be significantly bigger in the wet season				
10	What is your view on the capability of technology to meet this need? – are you currently using EO tech? If not, why not?					
	Challenge classification					
11	Lifecycle stage	Pre license	Exp.	Dev.	Prod.	Decom.
	Score from impact quantification [1]	2	3	0	0	0
12	Climate classification	Likely to be prevalent in areas which experience large seasonal changes (i.e. tropical / subtropical)				
13	Geographic context/restrictions	Generic onshore (Unspecified)				
14	Topographic classification / Offshore classification	Generic onshore (Unspecified)				
15	Seasonal variations	Any season - distinctly seasonal focussed challenge				
16	Impact Area	Operational cost reduction, health and safety				
17	Technology Urgency (How quickly does the user need the solution)	Immediately (0-2 years)				
	Information requirements					
18	Update frequency	Monthly				
19	Data Currently used					
20	Spatial resolution					
21	Thematic accuracy					
22	Example formats					
23	Timeliness	Generally this will be reference data - timeliness not important				
24	Geographic Extent	district area				
25	Existing standards					

[1] Impact quantification scores: *4 – Critical/ enabling; 3 – Significant/ competitive advantage; 2 – Important but non-essential; 1 – Nice to have; 0 – No impact, need satisfied with existing technology*

Relevant products

Content by label

There is no content with the specified labels