OTM-072: Monitoring flash floods

Monitoring flash floods

Challenge

	Challenge ID	OTM:072				
1	Title	Monitoring flash floods				
2	Theme ID	ON 4.3: Environmental monitoring - Natural HazardRisk Analysis				
3	Originator of Challenge	Onshore: OTM				
4	Challenge Reviewer / initiator	Ardan-Africa				
	General description	Overview of Challenge				
5	What is the nature of the challenge? (What is not adequately addressed at present?)	Engineering or survey crews can be caught out in large river basins when flash floods occur upstream. They receive no warning and only know about it when the water is actually on them.				
6	Thematic information requirements	3. Obtain detailed vegetation information, 4. Obtain detailed land-use information, 6. Identify inland water bodies and determine water quality, 9. Obtain detailed imagery of assets,				
7	Nature of the challenge - What effect does this challenge have on operations?	If they were given better notice they could ensure that equipment and personnel are clear of the danger area. This would improve H&S and reduce damage to equipment.				
8	What do you currently do to address this challenge?/ How is this challenge conventionally addressed?	Local knowledge is used where possible, together with met forecasts.				
9	What kind of solution do you envisage could address this challenge?	Very high to medium resolution EO data can provide timely images of the changing flood waters.				
10	What is your view on the capability of technology to meet this need? – are you currently using EO tech? If not, why not?	EO could be a useful complimentary technology				
	Challenge classification					
11	Lifecycle stage	Pre license	Exp.	Dev.	Prod.	Decom.
	Score from impact quantification [1]	1	3	3	1	1
12	Climate classification	Tropical humid				
13	Geographic context/restrictions	Generic onshore (Unspecified)				
14	Topographic classification / Offshore classification	Generic onshore (Unspecified)				
15	Seasonal variations					
16	Impact Area					
17	Technology Urgency (How quickly does the user need the solution)	Immediately (0-2 years)				
	Information requirements					
18	Update frequency					
19	Data Currently used					
20	Spatial resolution					
21	Thematic accuracy					
22	Example formats					
23	Timeliness	As close to real-time as possible				
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