Hatfield-1211: Planning bridging through a tropical forest

Planning bridging through a tropical forest

Challenge

Challenge ID:	HCP-1211	Originator:	Onshore: Hatfield
Title:	**Planning bridging through a tropical forest.**		
Theme:	ON 1.2: Seismic Planning - Identification of adverse terrain for trafficability		
Consortium Lead:	RPS Group	Interviewed Company:	RPS Group
Geography:	ON.REG.00 - Generic onshore		

Challenge Description	
What is not possible / not adequately addressed at present?	
Understand the amount of bridging that will be required to provide a path of "least resistance" for people carrying light equipment in man-portable operations. Identify streams and swampy areas within tropical forest that require bridging as well as other related hazards.	
What effect does this challenge have on operations?	
Advanced knowledge of the topography and inundated areas can limit the number of difficult river / stream crossings that need to be put in place. Exposure to hazards (mudslide areas, gorges, etc.). Pre-identifying particular vegetation types that slow line clearance crews down can minimise time lost due to slow clearance.	
Thematic information requirements:	Topographic information Water quantity Land cover
What do you currently do to address this challenge? How is this challenge conventionally addressed?	
Topographic maps, LiDAR acquisition for bare earth elevation models for camps and staging locations.	
What kind of solutions do you envisage could address this challenge?	
Bare earth digital terrain models equivalent to LiDAR.	
What is your view on the capability of technology to meet this need? Are you currently using EO tech? If not, why not?	
LiDAR is the best option as it provides sub-metre elevation accuracy and canopy height information. A satellite derived product similar to LiDAR would be useful.	

Challenge Classification			
Impact on Lifecycle (0=none, 4=high):		Climate / Topography / Urgency:	
Pre-license:	1	Climate class:	Tropical humid
Exploration:	3	Topographic class:	Forest / woodland
Development:	1	Seasonal variations:	Any season
Production:	1	Impact area:	Health and Safety, Cost reduction
Decommissioning:	1	Technology urgency:	3 - Immediately (0-2 years)

Challenge Information Requirements	
Update frequency:	Snapshot
Data currently used:	LiDAR
Spatial resolution:	Basin
Thematic accuracy:	Sub-metre elevation accuracy
Required formats:	Not Specific
Timeliness (Vintage):	Within six months

Geographic extents:	Basin
Existing standards:	None

Relevant products

Content by label

There is no content with the specified labels