Technical Information
Elevation1 Digital Surface Model

		1-m posting DEM	Orthomosaic (8 bits)
Method		Automatic stereo matching including auto-filtering of artefacts followed by enhanced editing. After editing tasks, all remaining voids are interpolated. Large voids over areas that are not flat are filled in with stereo data. Final visual quality check.	A pan-sharpened orthomosaic is also generated (geometrically seamless, but not radiometrically). The cutline between each image is automatic. No overall radiometric optimization. Final visual quality check.
Manual Editing Level		- Detection of water bodies (sea, lake, large river) and DEM flattening - Removal of main artefacts (spike, hole) - Manual editing.	
Source Data		Pléiades Stereo or Tristereo pair(s), Pansharpened, Primary, JPEG 2000 Regular	
Grid Spacing		1m	50cm
Accuracy	**Absolute XY***	- With GCPs: 1.5m CE90. - With Ref3D GCPs: 6 to 10m CE90**. - Without GCPs: 8.5m to 10.5m CE90.	- With GCPs: 1.5m CE90. - With Ref3D GCPs: 6 to 10m CE90**. - Without GCPs: 8.5m to 10.5m CE90.
	Absolute Z*	- With GCPs: 1.5m LE90. - With Ref3D GCPs: 6 to 10m LE90**. - Without GCPs: up to 10m LE90**.	
	Relative	- XY: 1.5m CE90. - Z: 1.5m LE90**.	1.5m CE90
Format		AsciiGrid or GeoTIFF.	GeoTIFF
Projection		Geo WGS84 or UTM / WGS84 (custom projection on request).	
Vertical Unit		Metres	
Vertical Reference		Elevations above mean sea level (ref. = EGM96).	

Accuracy Level	The accuracy specification of Elevation1 (with GCPs) is similar to the HRE10 NGA classification*.
GCPs	• Ground control points can help to attain optimal accuracy. • The customer can provide accurate GCPs (~10cm XYZ) that are visible in the stereopair.
AOI	• Large AOIs can be covered by adjacent stereopairs; the DEM mosaic will be seamless with no edge effect. • A minimum width of 10km is required. • Minimum area = 100 sq.km. / Maximum area = 2,000 sq.km. (larger areas will be considered on a case-by-case basis).
No Data Value	• The value –32767 is set for areas where the elevation is not determined (around AOI). • Potential clouds (if any) are considered as 'No Data'.
Metadata	No additional metadata is provided with the DEM.
Tiling	DEM 1m tile is 10km x 10km (~600 Mb).
B/H Ratio	• The optimal B/H ratio is in the range of [0.3 – 0.6]. • A high ratio (i.e. 0.6) is suitable for flat areas. • A low ratio (i.e. 0.3) is suitable for steep terrain.
Availability	Product limited to mineral or open areas with little (or low) vegetation and few buildings. Urban areas are only proposed on request with a custom price. Perfect for micro-relief in arid areas.