

# Slope Maps

Updated on 04 Mar 2024 · 4 Minutes to read · Contributors 

In this section, you will look at:

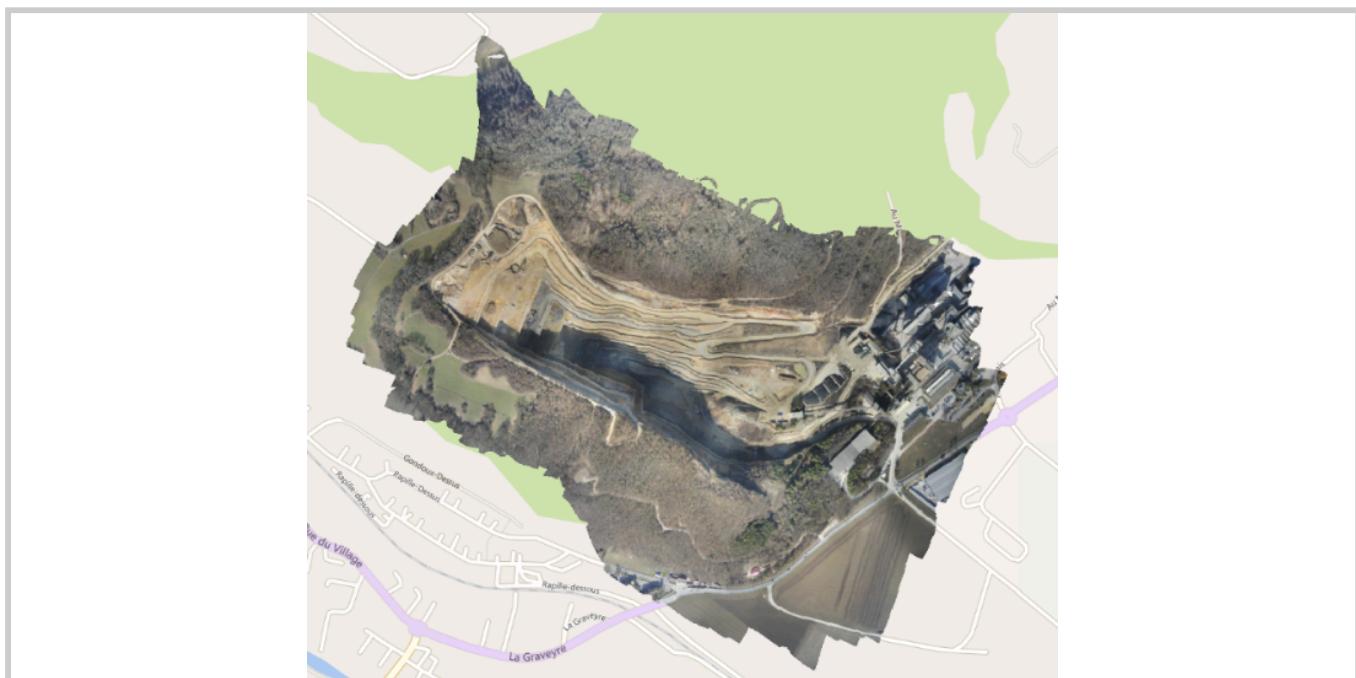
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## What are Slope Maps?

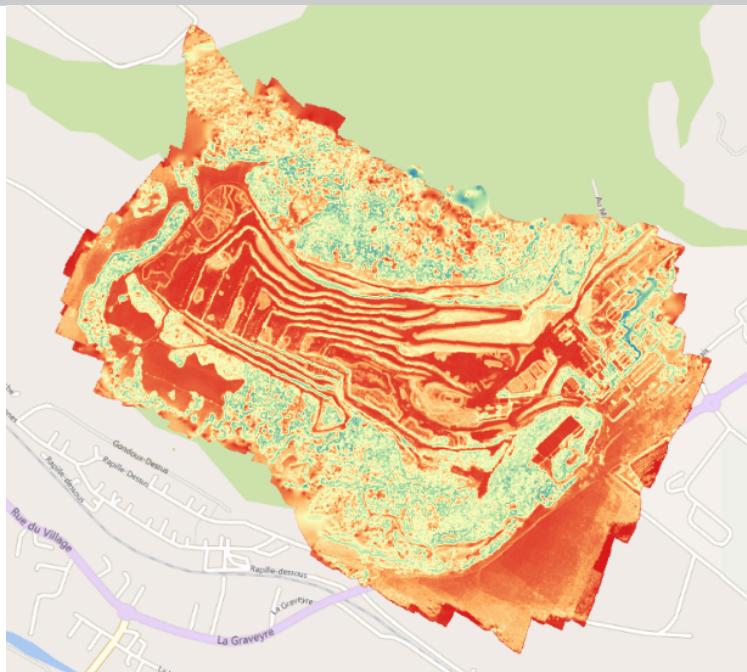
A slope map is a 2D representation of changes in the elevation of land. It shows how steep or gentle the slope is, which helps in determining the height between two areas.

Unlike contour maps that are made up of contour lines connecting areas of the same elevation, slope maps represent the degree of steepness in colours, going up from light to dark colours. For example, in the following slope map, blues and light yellow colours represent shallow slopes and dark orange and red colours represent steeper slopes.

Slope maps are often used along with contour maps to get a comprehensive understanding of the surface being studied.



Without Slope Map



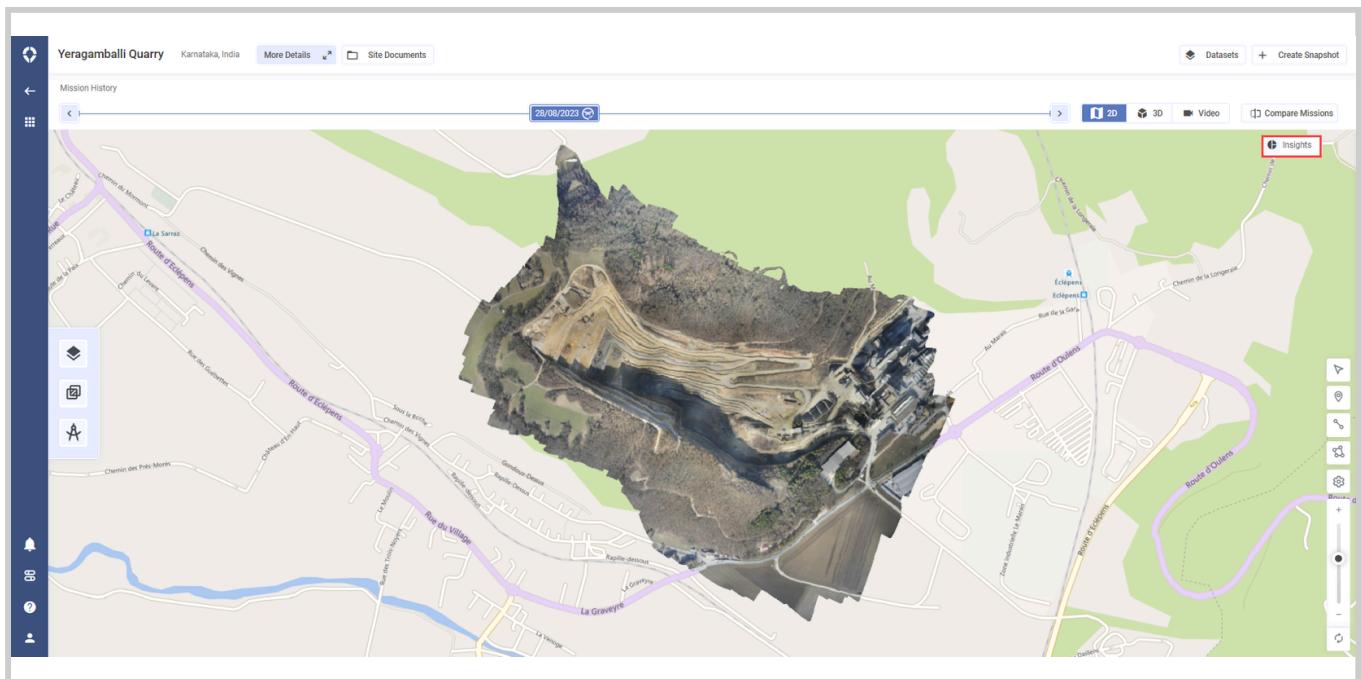
With Slope Map

## Uses of Slope Maps

- **Environmental Management:** Slope maps use Digital Elevation Models (DEMs) and algorithms to depict the direction of water flow. This helps pinpoint areas prone to erosion and landslides and guide in planning development projects to minimise environmental impact.
- **Agriculture:** Slope maps can also be used to determine the feasibility of using the land for agriculture. Terrains with steeper slopes are less suitable for cultivation.
- **Soil Management:** By identifying the steepness of slopes over time, slope maps can help pinpoint potential erosion areas, drainage patterns, landform and soil patterns, land use suitability, etc.
- **Managing and Controlling Wildfires:** Slope maps can help environmentalists manage wildfires better by identifying areas prone to faster spreading of fire (Fire typically burns faster uphill).

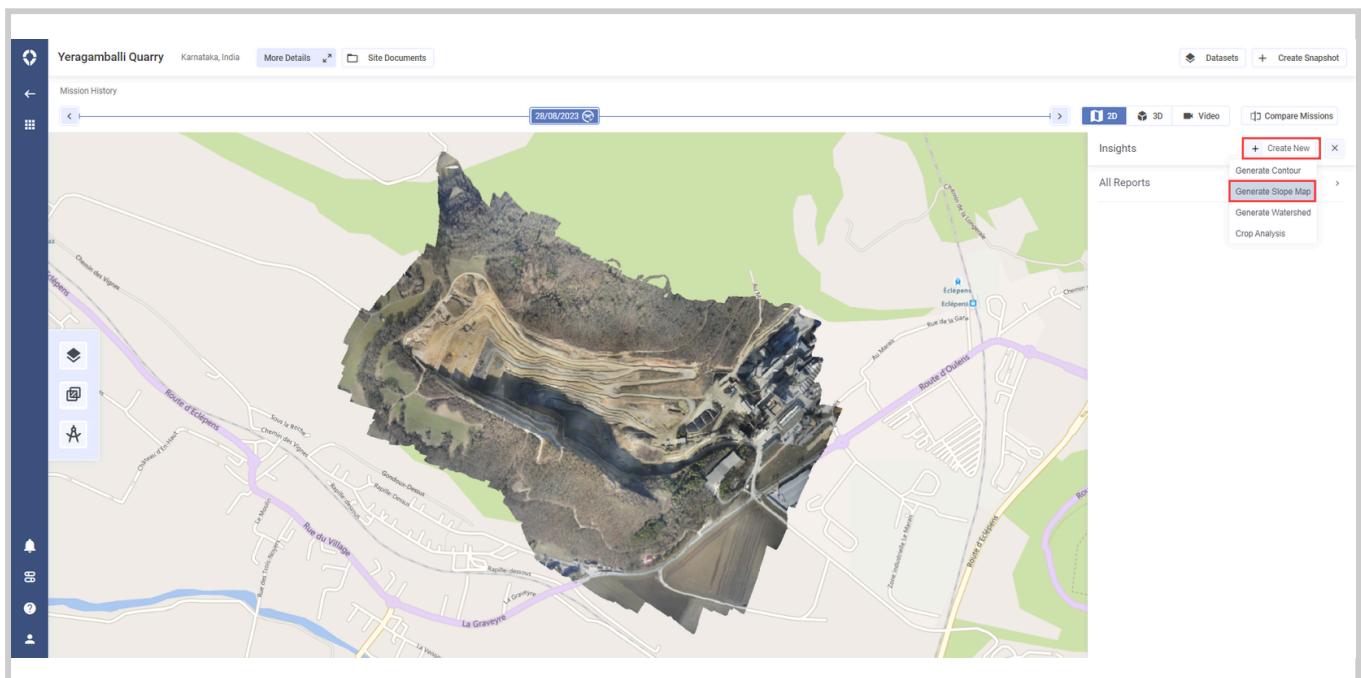
## Generating Slope Maps

1. Open the site and select the snapshot where you want to generate the slope map.
2. On the map area, click **Insights**.



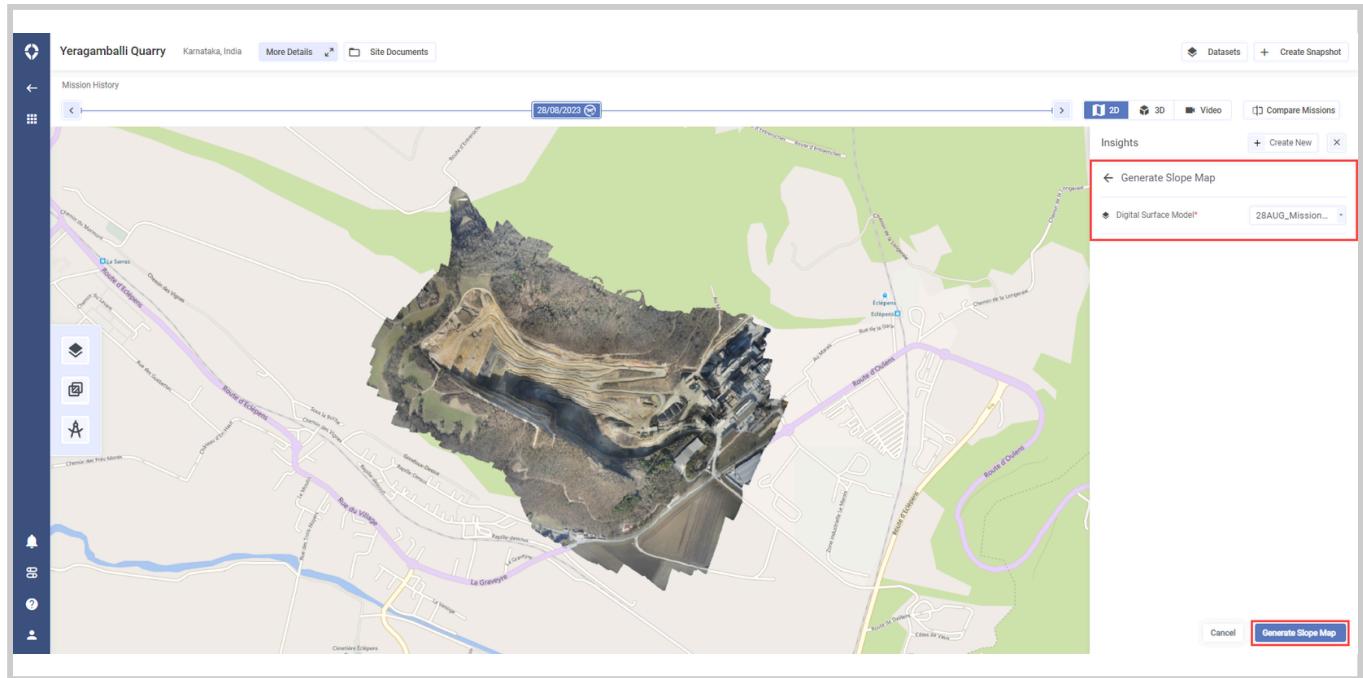
## Create Insight

1. In the **Insights** panel, click **Create New** and then click **Generate Slope Map**.



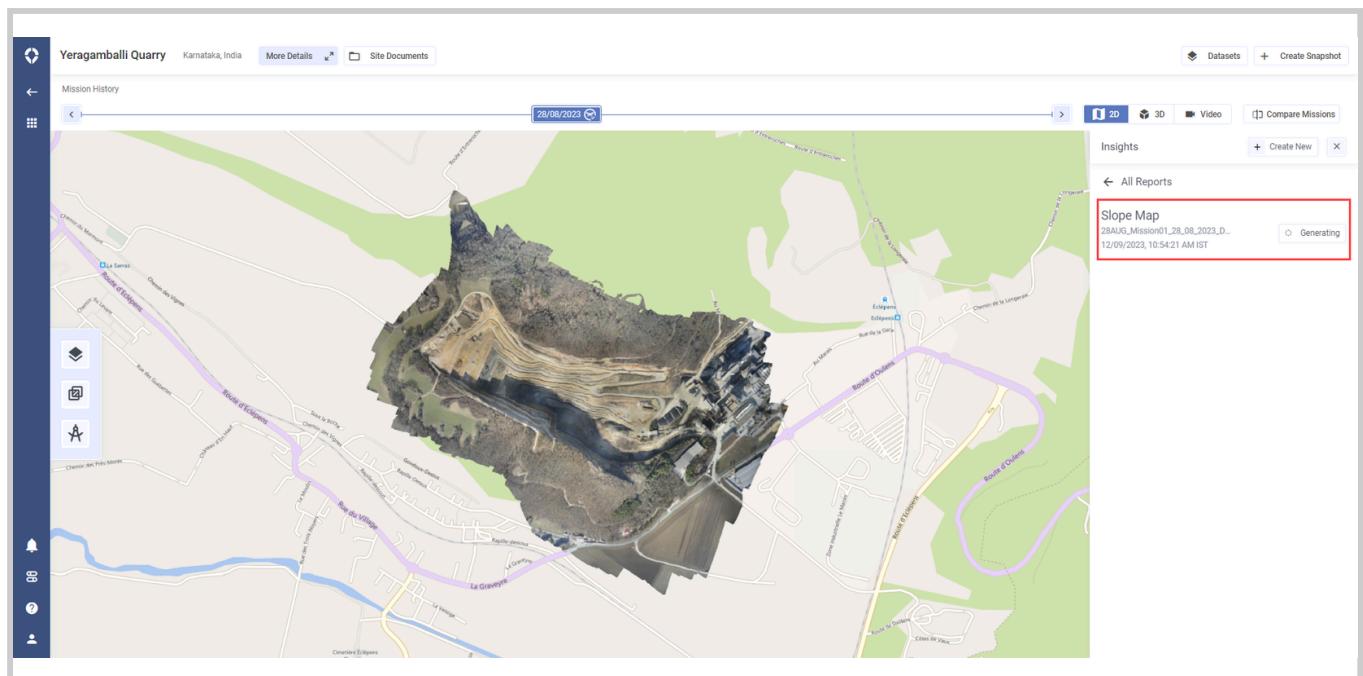
## Generate Slope Map

1. Select the **Digital Surface Model** on which you want to create the slope map and then click **Generate Slope Map**.



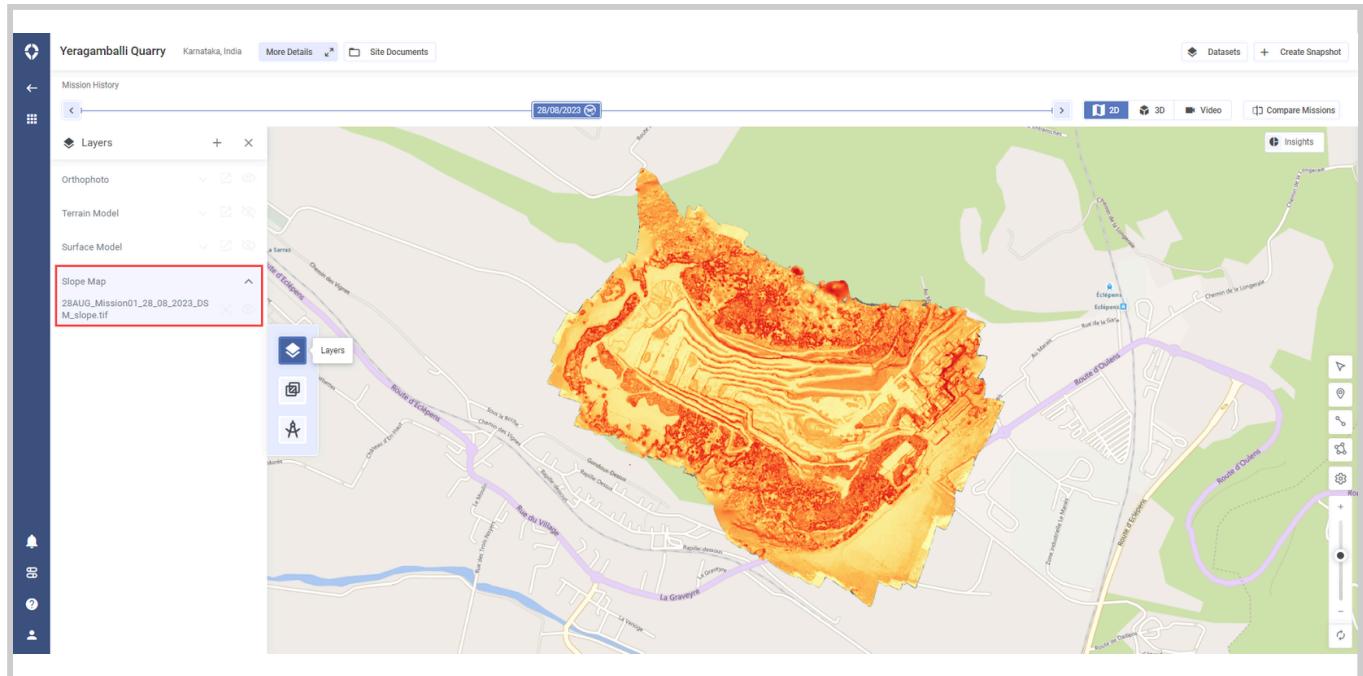
### Select DSM

1. In the **Token Quotation** popup, click **ACCEPT**. The slope map starts generating.



### Slope Map Generation in Progress

Once generated, the completion status is displayed in the **Insights** panel under **All Reports** and the slope map file is displayed in the **Layers** panel.



Generated Slope Map

**The time taken for processing and visualization of the Slope Map on Skydeck may vary in duration depending on the dataset size.**

## Viewing Slope Maps

For more information on how to visualize slope maps, click [here](#).



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