Overlays

Updated on 08 Apr 2024 • 5 Minutes to read • Contributors

An overlay is any geographic vector data that you can superimpose and visualize on the uploaded 2D raster layers. The 2D data gives you two-dimensional top-down representation of your captured data. The geographic features and information of such representation can be captured and visualized with the Overlays option on Skydeck. Overlays allow you to upload and visualize 2D vector datasets with exact geometries and attributes of every individual geographic entity.

Skydeck supports the following vector datasets.

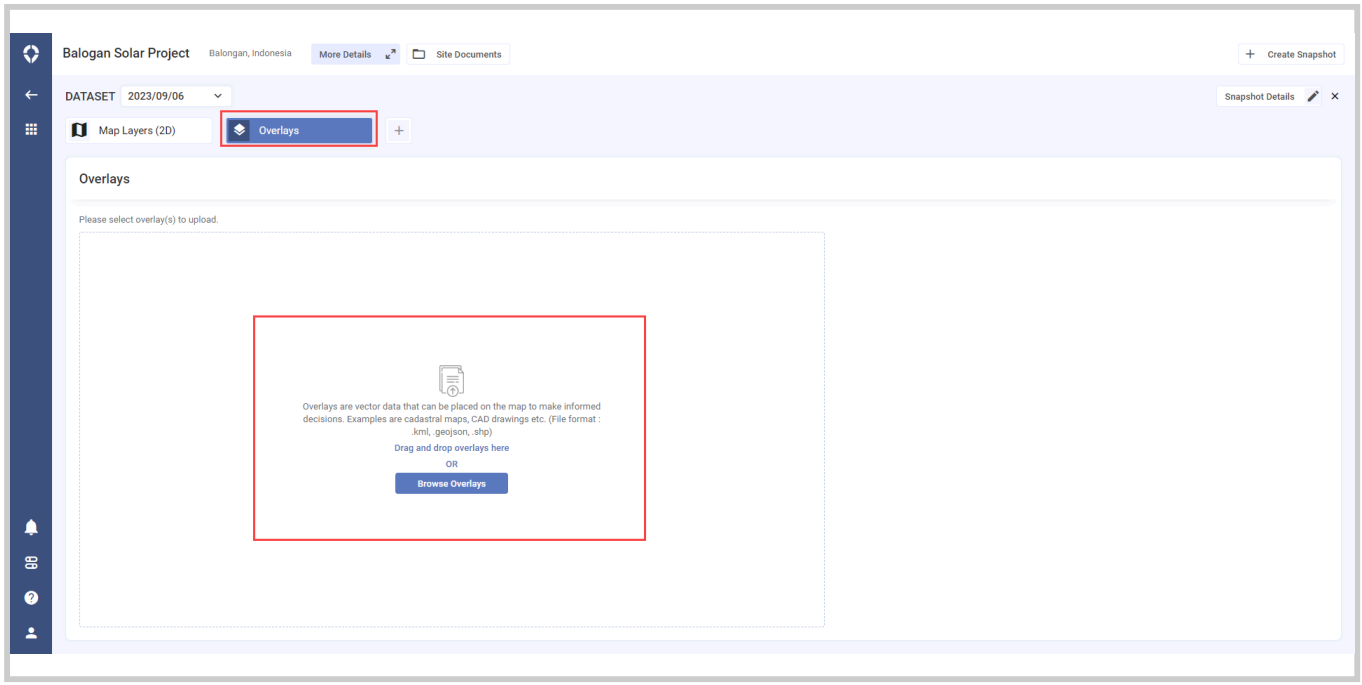
- **Point data**: Point data is most commonly used to represent nonadjacent features and to represent discrete data points. Points have zero dimensions, therefore you can measure neither length or area with this dataset.
- **Line data**: Line (or arc) data is used to represent linear features. Common examples would be rivers, trails and streets. Line features only have one dimension and therefore can only be used to measure length. Line features have a starting and ending point. Common examples would be road centerlines and hydrology.
- **Polygon data**: Polygons are used to represent areas such as the boundary of a city (on a large-scale map), lake, or forest. Polygon features are two-dimensional and therefore can be used to measure the area and perimeter of a geographic feature.

This article covers the following features:

> Certain Insight results are saved a Overlay files.

Uploading Vector Data as Overlays

1. Select the snapshot where you want to upload the vector data as an overlay and on the top right corner of the page, click **Datasets**. The **DATASET** page is displayed.
2. Click the **add** icon under the date dropdown and then select **Overlays**.
3. **Drag and drop overlays here** or click **Browse Overlays** to select the files from your system.

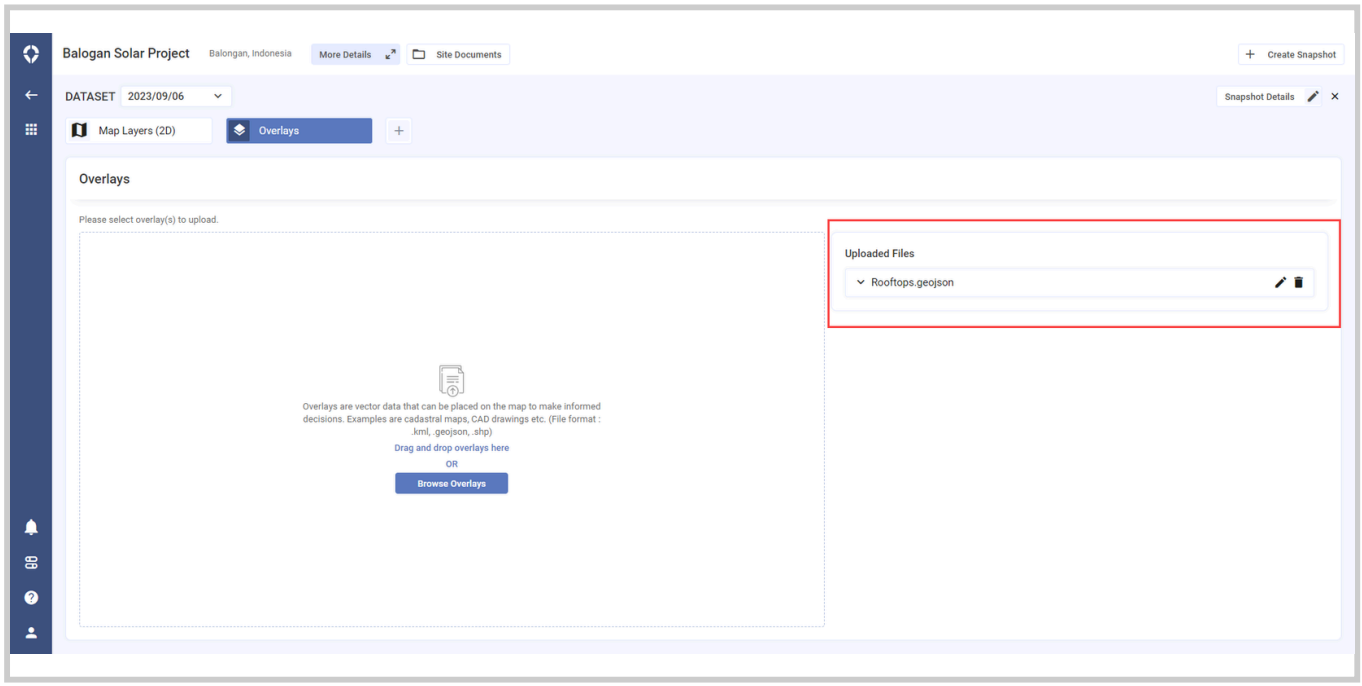


Upload an Overlay

The following file formats are supported here:

File Type	Coordinates System
KML (.kml)	WGS 84 EPSG 4326
GEOJSON (.geojson)	WGS 84 EPSG 4326
SHAPEFILE (.sph + .shx + .dbf)	WGS 84 EPSG 4326

The file upload status is displayed on the right pane.



> Do not leave the page until the upload is complete, doing so will stop the upload and you will have to repeat the process.

4. To rename the file, click the **edit** icon.
5. To delete the file, click the **delete** icon.
6. To download the file, click the **download** icon.

Visualizing Overlays

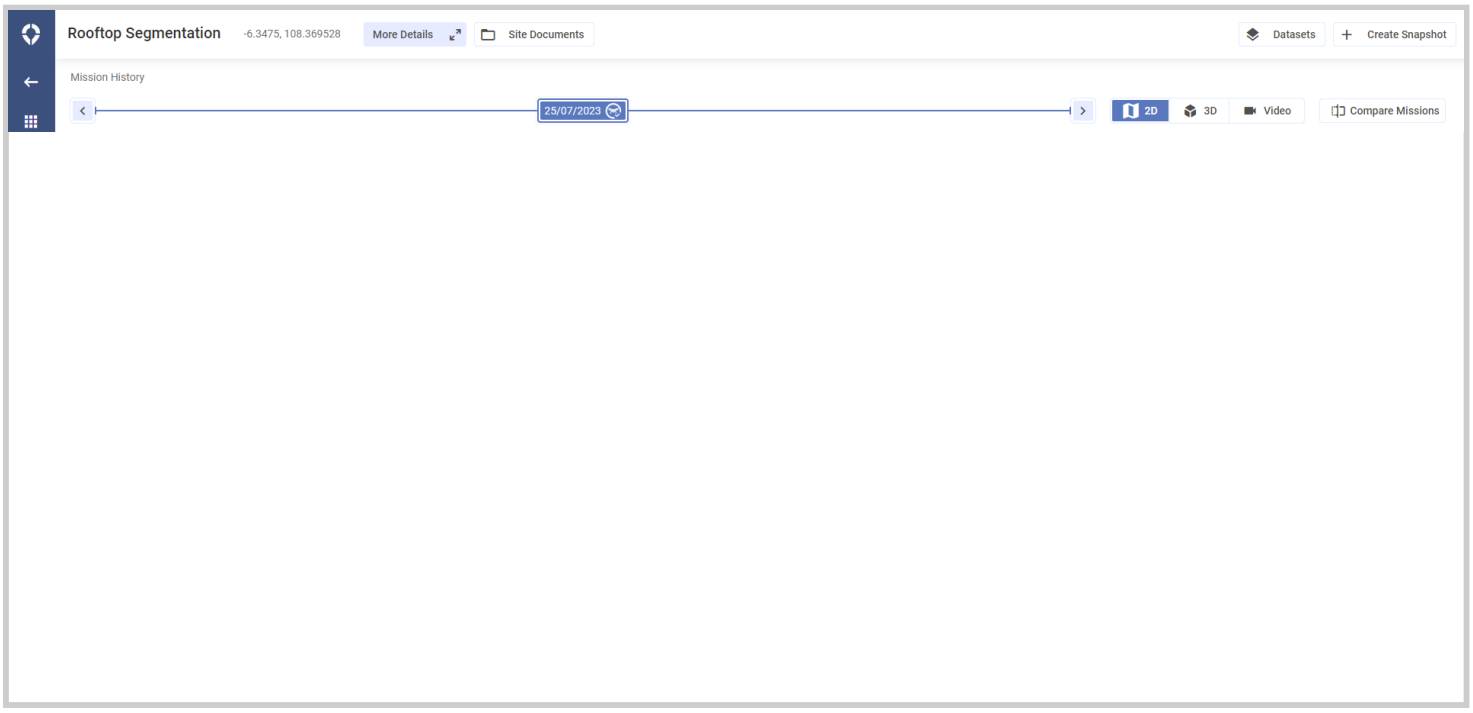
Clicking on any vector entity displays its:

- Perimeter (polygon)
- Area (polygon), Length (Line) and Coordinates (point)
- Dataset attributes

These attributes are generally presented as key-value pairs that provide additional details about the data represented by the vectors.

Customizing Overlays

1. In the sidebar, click the **Overlays** icon, identify the layer you want to customize and click on the **Settings** option.



Access Overlay on the Sidebar

2. The settings pop-up is displayed.
    a. You can change the opacity of the layer using the **Opacity slider**

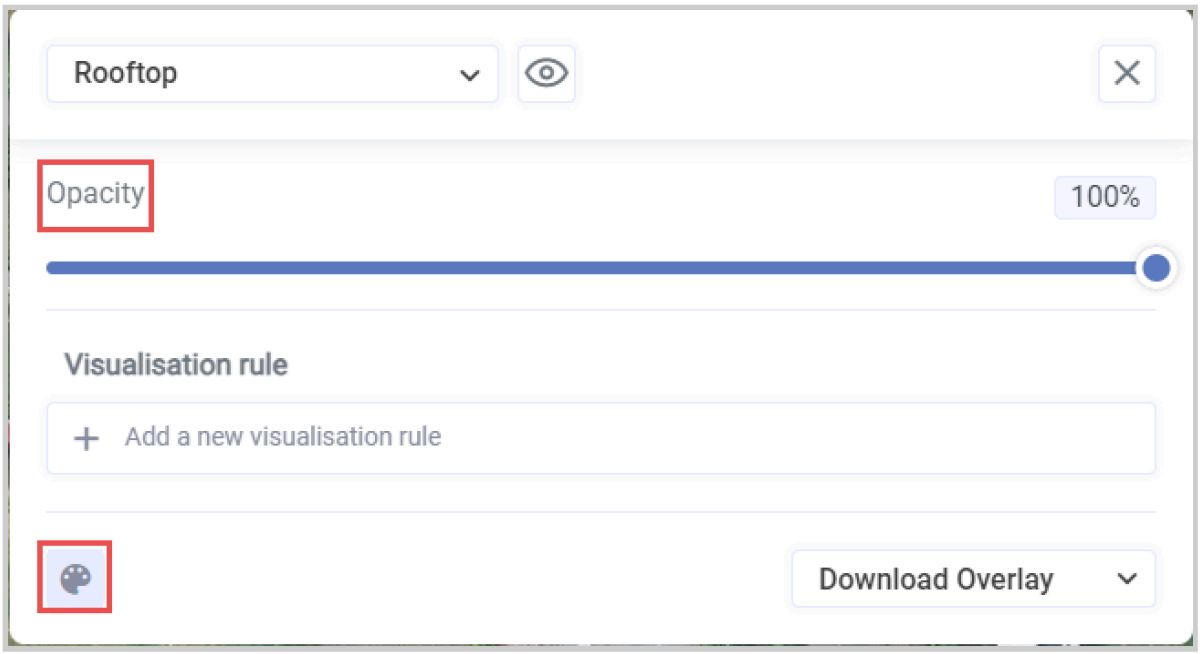
b. Click on the **customize option** on bottom left to change the styling of the vectors. You can change the following characteristics:

i. Line style and width

ii. Outline Style and width

iii. Fill colors

iv. Point symbols and style



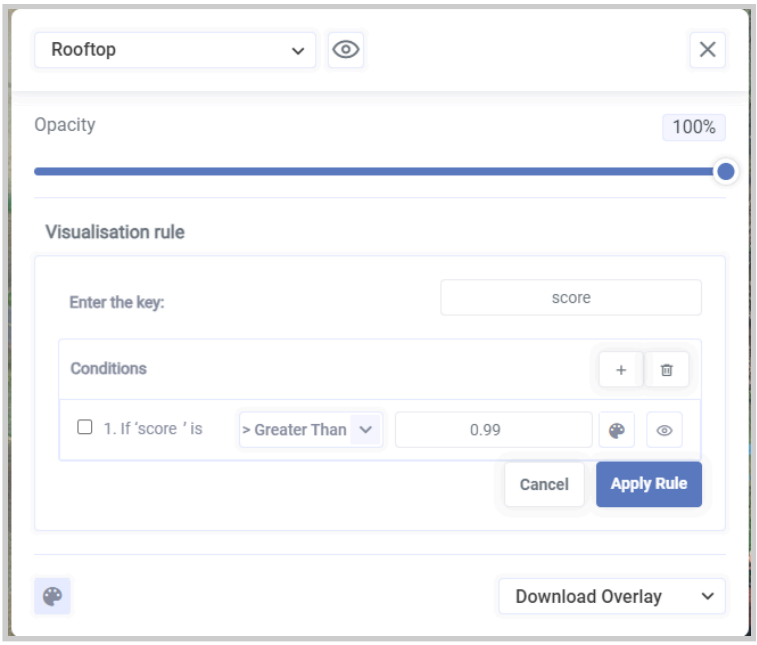
Overlay settings

> **This is applicable only to line type vector entities**

Applying Visualization Rule

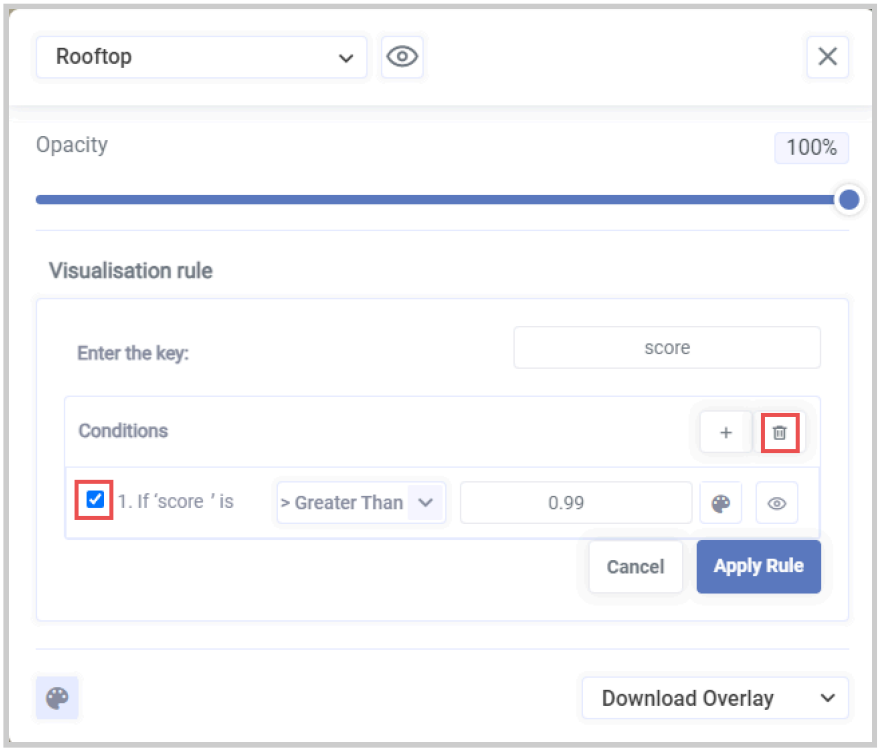
The Visualization rule option on SkyDeck can be used to customize the look of the vector dataset based on any of its attributes. This allows you to specify criteria and rules, to precisely filter the entities of interest enabling comprehensive and detailed analysis of the dataset.

1. To create the Visualization rule, click **Add a new visualization rule.**
2. Enter the key, this can be any attribute of the vector. This attribute value will be used for the conditions you dd.
3. Select the condition from the dropdown and the value for the condition.
4. Select the visualization to be used to represent the defined condition.
5. Once you have added all the rules click **Apply Rule**. The vector entities will be visualized as per defined criteria and theme.



Visualization Rules

To delete the visualization rules, select the rules from the list and click the **delete** icon.



Delete Visualization Rule

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