Capture guide Live Turbine Diagram

Explanation

In the platform, wind turbine photos can be depicted as an interactive diagram, providing a visual representation of issues and their location. We call this the live blade diagram. When moving through images in the platform, the diagram and faults are shown on the left side of the screen, as seen in the image below. The area between the green lines on the diagram, illustrates the blade-area, which is covered by the selected image, as well as the faults identified in that area.



Scopito also provides a specialized report including the diagram overview for all blade sides per turbine in the inspection, including an estimated distance from root where the fault is located, see report snippet below.

		0 N	🕏 No Issues found.		🕏 No Issues found.	
Severity POI	Severity 1	Severity 2	Severity 3		Severity 4	Severity S
Point of interest	Cosmetic	Similar to cosmetic	Damage, non-serious		Serious damage	Very serious damage
Needs further investigation	No intervention needed	Intervention done if other damage exists	Intervention done during planned WTG inspection		Rectify in the next 3 months	Intervention immediately
Blade	Side	Issues	Severity	Size	MR	Page
Blade 3	PS	POI	4		71.9%	4

Prerequisites

For us to provide you with the Wind Turbine Diagram, we rely on a set of conditions and structure of your data that is described in this section.

Data capture

During the capturing of the images with a drone it's important to ensure the following:

180°

39 - 52 feet

- Ensure the position of the Wind Turbine blades are either stationary or blades are rotated to point upwards one by one
- Ensure images are geotagged with proper latitude, longitude, altitude, and timestamp
- Ensure a Wind Turbine blade side is captured in one go and not through several iterations
- Ideally keep the distance from the Wind Turbine blade surface and the drone at 12-16 meters or 39-52 feet
- Ideally keep the camera pointing directly at the blade and have it horizontally centred and avoid changing the gimbal too much

Data capture

We recommend an image overlap of 10-20%.

]10% - 20%

Prior to uploading

Ensure all blades on a turbine are contained in the dataset, we do not support tertial blades





- Ensure you place each photo into a folder structure with: folder per turbine, you decide the name (see above illustartion for example)
- Ensure all blades on a turbine are contained in the dataset, we do not support tertial blades
- A subfolder per blade, must be prefixed with "blade" and can be followed by "1, 2, 3", "a, b, c" or anything else as long it can be used on blades across turbines
- A subfolder per blade side that must be named
 - LE Leading Edge
 - PS Pressure Side
 - SS Suction Side
 - TE Trailing Edge