

WEBINAR: Transform Drone Imagery into Operational Intelligence
Thursday, February 27, 2020

Questions & Answers

Is it possible to collect data and run statistical analysis through drone application?

Flight planning, data collection, image management, and processing are all inherent capabilities of Site Scan. Site Scan has limited analysis capabilities - Drone2Map has a few more options when it comes to image analysis. Either way, both can be used to create image products and those image products can be consumed in other ArcGIS applications (ArcGIS Pro + Image Analyst Ext) for further analysis.

Would all the data created by site-scan be uploaded to AGOL? including single frames? and would the data be removed from site-scan after? or held for a period of time? I work for a NZ government agency and privacy of imagery would need to be controlled

All the image products created in Site Scan can be uploaded as hosted items to ArcGIS Online - including single frames. The data is not removed from Site Scan after being shared to ArcGIS Online, only a copy of the data is made. The user has full control over where the data is stored and how long it is stored - there are no default periods of time.

Are there AI tools in ArcGIS that could identify specific trees based on the drone images collected?

Yes, there are AI/ML tools available in ArcGIS Pro that can perform feature detection from collected imagery. A model would need to be created and used on a training dataset to learn what features look like before it can be used for wide scale detection. Would suggest follow up call to gather more details.

Can I import geotiff files to make analysis on this software?

Site Scan and Drone2Map are specifically for processing raw image files collected from a drone flight (typically jpeg, png, etc). Geotiff is a common output file from analysis done in Drone2Map - however, Geotiffs can also be added to the project to visualize data.

Is Site Scan the only program that will interact with Drone2Map or would say DJI GO 4 or DJI Pilot integrate as well?

Drone2Map does not have flight management capabilities. It will process your drone data after it is collected. You may use any commercially available flight management software such as DJI GO 4 or Pilot.

From the point clouds can we estimate automatically the height of trees and size of crowns?

It depends on the density of the point cloud but most measurements would be more rough in nature not exact. There is no out of the box tool in Site Scan that automatically measures heights, it is done more on an interactive visual basis.

How long did it take to process the 366 images? (re: the example used in demo)

Processing 366 images in Site Scan took between 1 and 2 hours. A variety of image products were created during the single processing request - no items were queued. Processing times in Drone2Map will fluctuate based on the machine and resources the application is utilizing.

I see that it's a certain amount of images but how do you know exactly when to take a photo?

The intelligent flight modes in Site Scan are templated to capture data according to need. Photo centerpoints are based on your area of interest and flight plan.

How is workflow and drone operations constricted in the field by lack of cell/internet service.

We have 60% of our region in Northeast Washington State that has no cell coverage.

You would likely need to do the flight planning in the office while connected to the internet. The flight plan can be downloaded to the drone by plugging it into the device. Once downloaded, you would head to the field. The data collection can occur completely offline - images can be saved to the memory card of the drone. Once you regain connectivity, you can upload the images through the Site Scan mobile app or transfer to your machine and upload them through the Site Scan web app. At that point, the processing is done completely in the cloud. Drone2Map, on the other hand, can be configured to work offline. In that case, you can upload your captured images and do processing while disconnected in the field.

Can you also share images from Site Scan to Enterprise?

Yes

Can you use a shapefile as your starting polygon when developing a flight plan?

Yes

For volume calculations do you need the 3D extension for desktop pro?

No, you can complete natively in either Drone2Map or Site Scan.

Can I use this only with ArcGIS or ArcGIS Pro is needed?

Site Scan and Drone2Map can work independently of ArcGIS Pro. However, since they are part of the ArcGIS Platform, they integrate seamlessly with other components (ArcGIS Pro, ArcGIS Online, ArcGIS Enterprise, etc.)

Will Site Scan run on a windows 10 tablet?

The Site Scan mobile app is currently only compatible with iOS. The web app can be accessed through a web browser on any device, but is not optimized for mobile use.

Will this app work in Canada?

Yes, this is available in Canada.

Does Esri provide training for this software/system?

With the purchase of Site Scan, you will receive access to a Customer Success Program administered by 3DR, to include (remote) training. Should you require more specific onsite training, that is available for purchase through Esri.