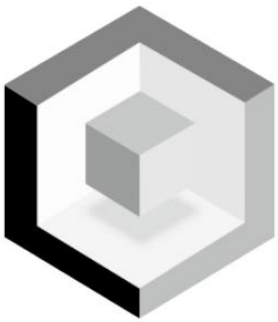
DJI TERRA

Installation and Photogrammetry Reconstruction Quick Start Guide



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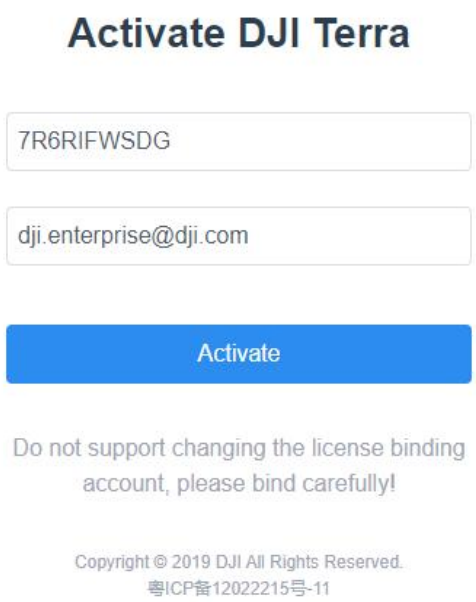
Activate Online Licenses

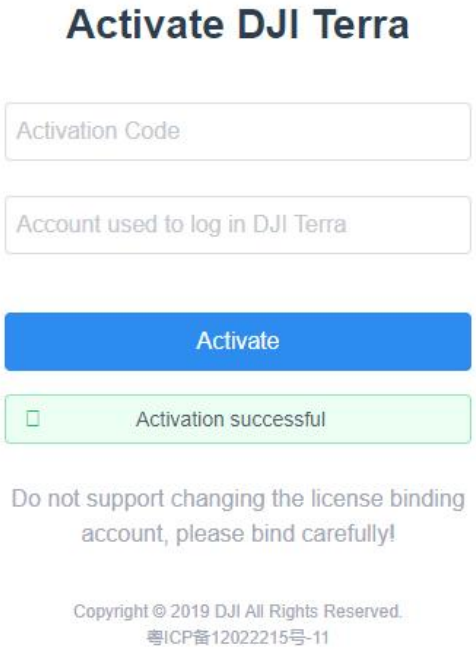
1. Go to https://license.dji.com/en and input the activation code received and the desired DJI account ID to use the license with, then click "Activate".

*The activation code should always be 10 digits.

*Unable to change the license binding account once the activation code is used and the license is bound, so please make sure the DJI ID account is correct before binding.

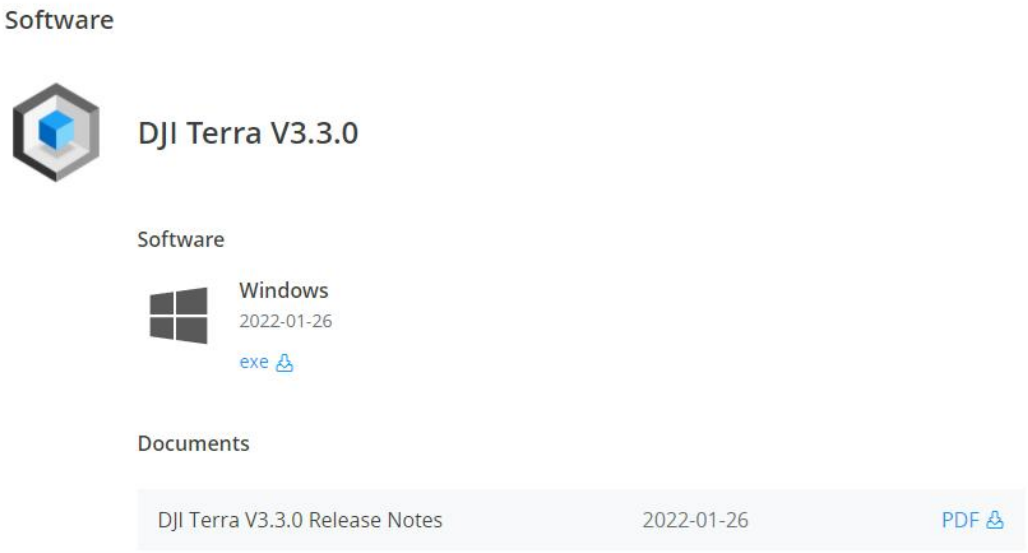


2. After successfully activating the license, an "Activation successful" message should pop up for confirmation.

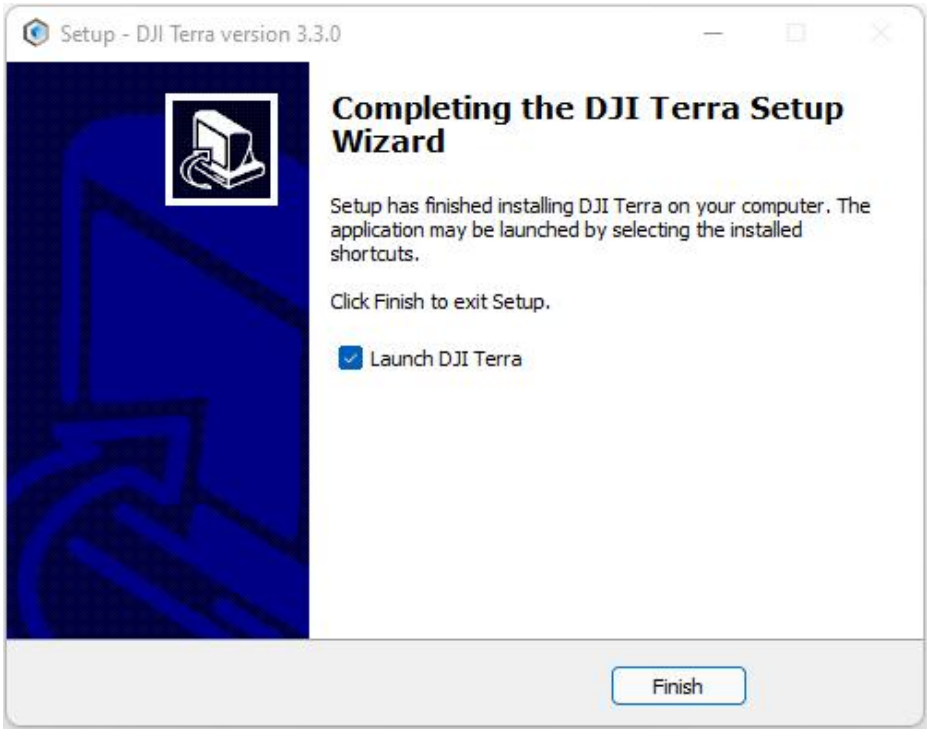


Software Download and Installation

1. Go to https://www.dji.com/downloads/products/dji-terra and download the latest version of DJI Terra software. Open the .exe installation file to initiate the installation.

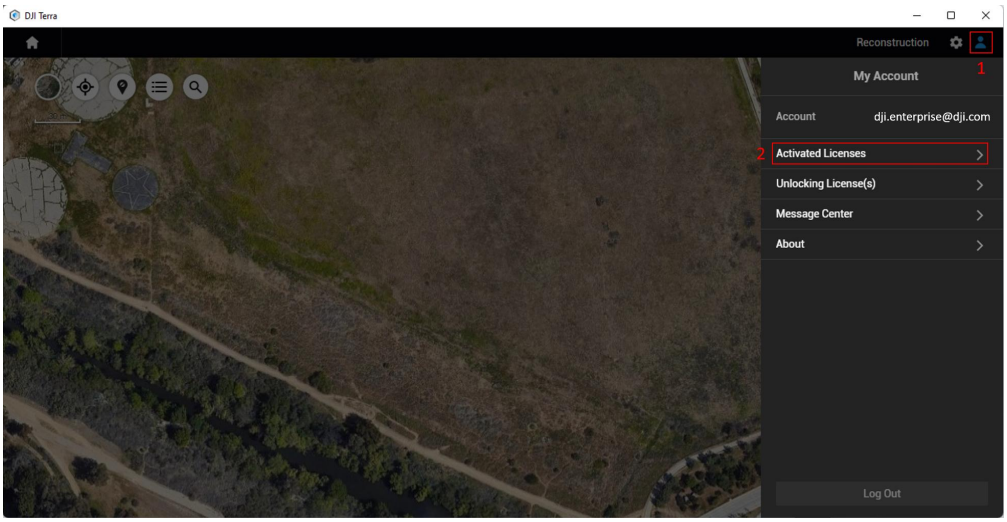


2. Follow the setup wizard and install the Terra software. After installation, should see the following window:



Bind Activated Licenses to Device

1. Open up DJI Terra, then select the "My Account" icon located in the upper right corner and log into Terra using the same license binding account used with the activation code.



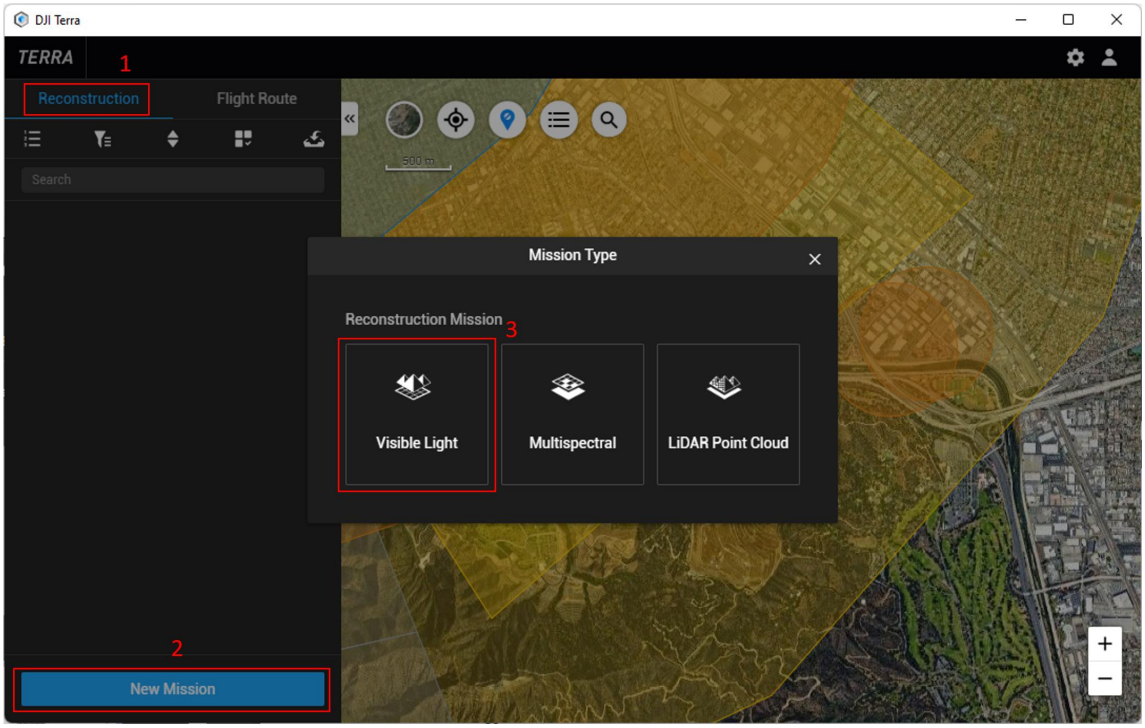
2. Check all the licenses listed and select the license to bind the servicer on. Select "Bind" to bind a Terra license to the current device, the "Bind" option will be changed to grayed "Bound" which indicates a successful license binding.

*The total number of bindable devices is also listed next to the "Bind" or "Bound" option.

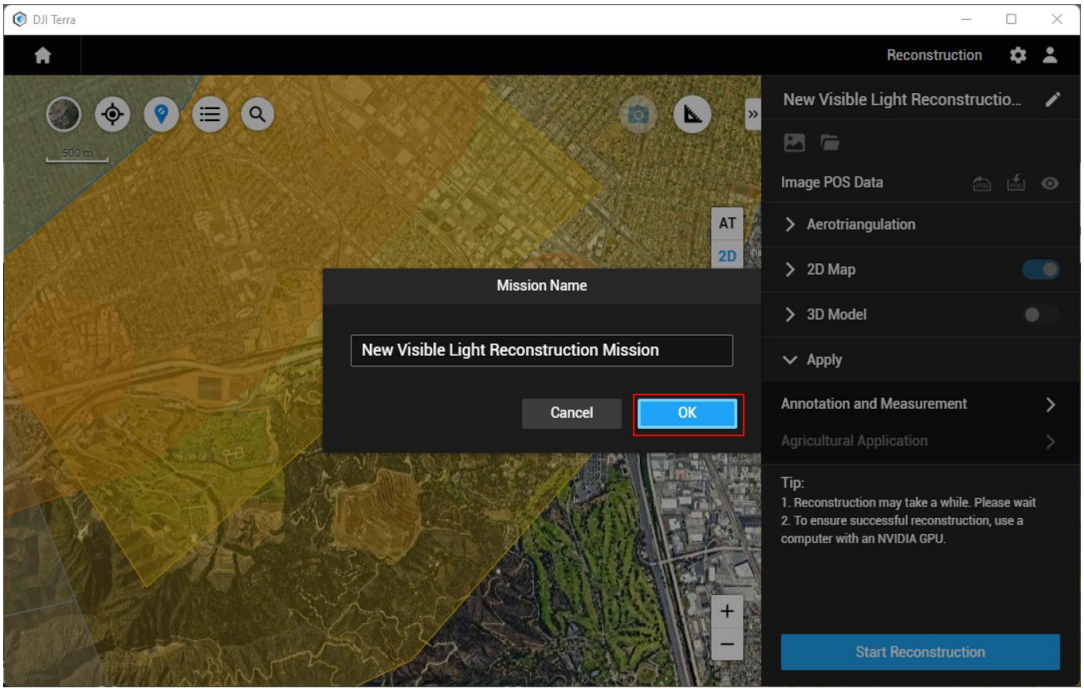
*To unbind, please contact DJI Support. The 1-device licenses can ONLY be unbound once in each natural year. 3-device licenses can ONLY be unbound twice in each natural year. The free trial license CANNOT be unbound. Once an unbinding is processed, all devices registered under the license will be unbound.

Import Imagery

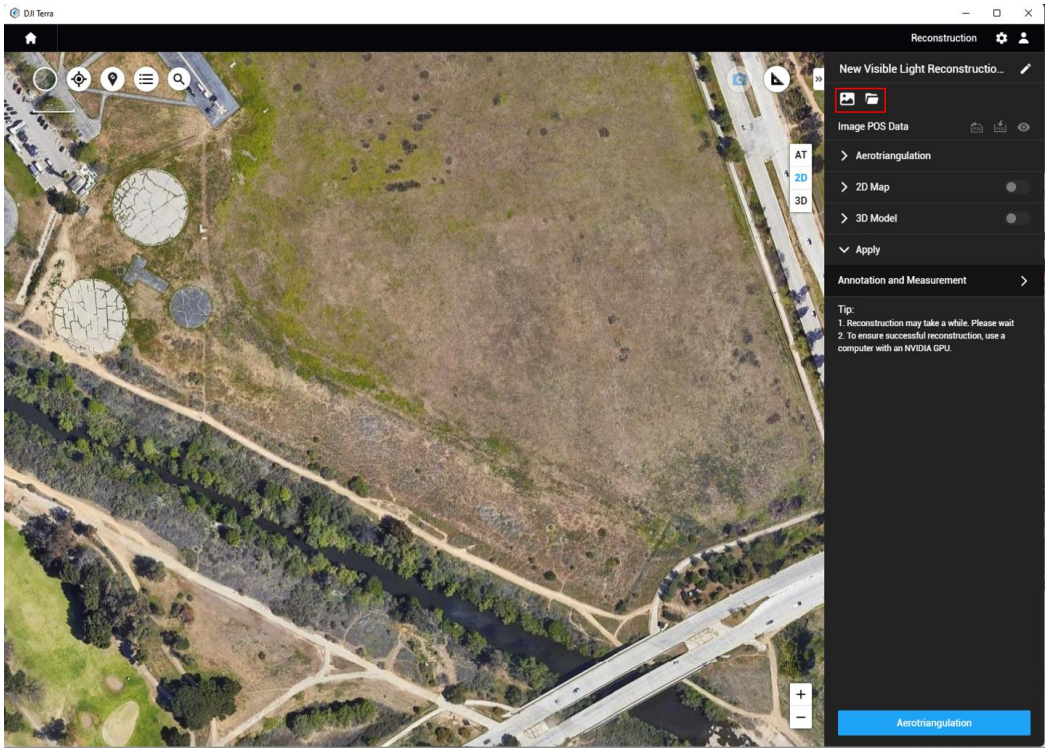
1. Under the "Reconstruction" mission list select "New Mission" and "Visible Light" to create a new photogrammetry reconstruction mission.



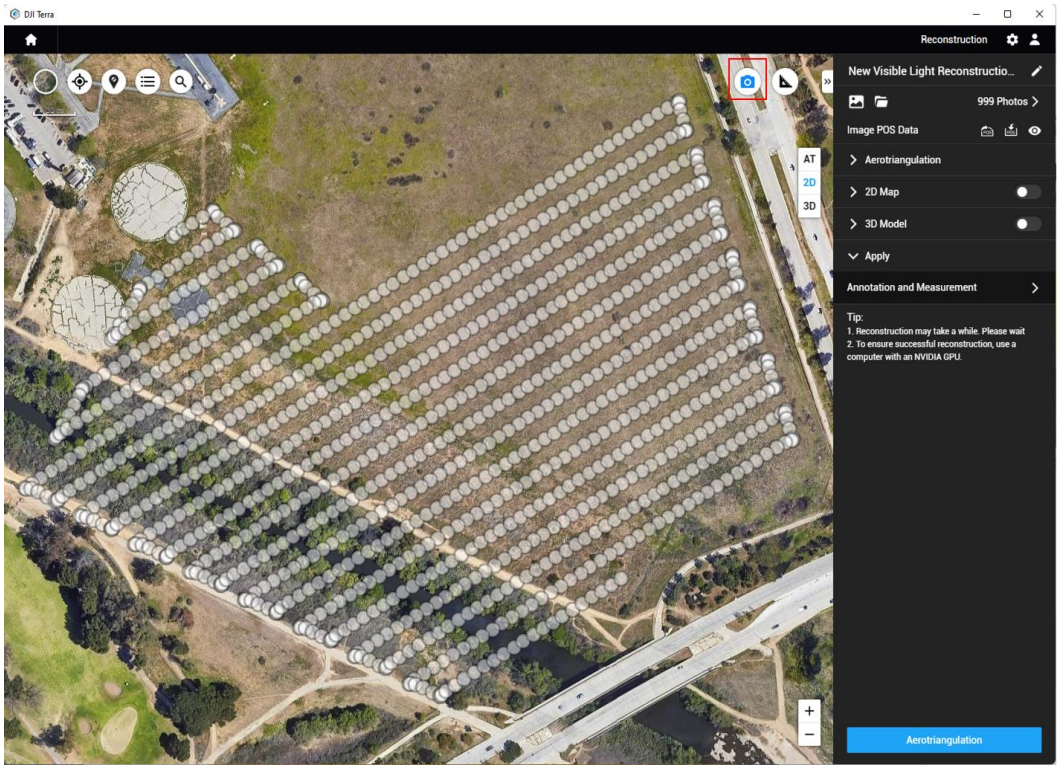
2. Name the mission and select "OK"



3. Click on the photo icon or the folder icon to add photos. It is recommended to select at least six photos on two main paths for reconstruction.



4. Once photos are imported, a camera icon will appear (enabled by default) in the upper left corner of the map view. Enabling this option will display white dots on the map which shows the corresponding location of the photos captured.

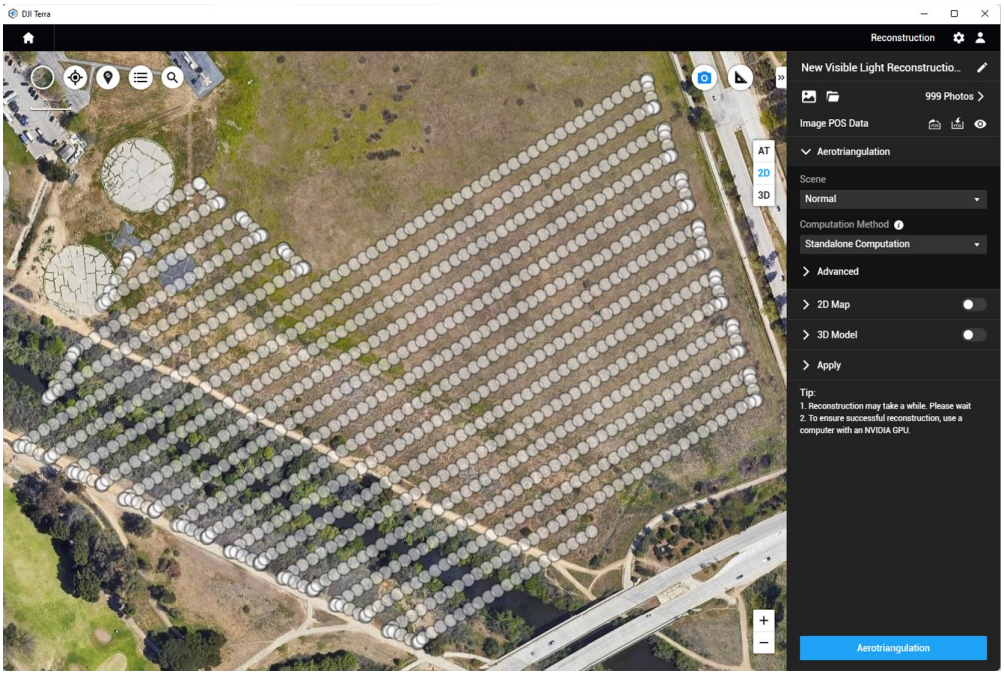


Aerotriangulation

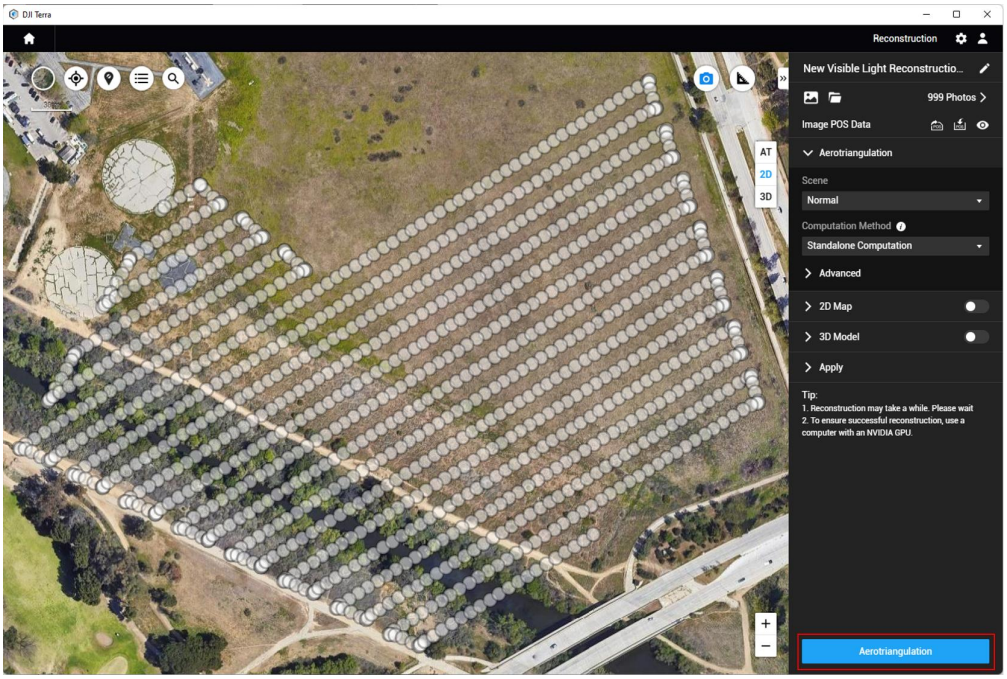
1. The aerotriangulation process is an essential step before proceeding to 2D/3D reconstruction. The accuracy of the aerotriangulation model can also reflect the accuracy of final deliverables.

*User can output the aerotriangulation model in XML format under "Advanced" settings.

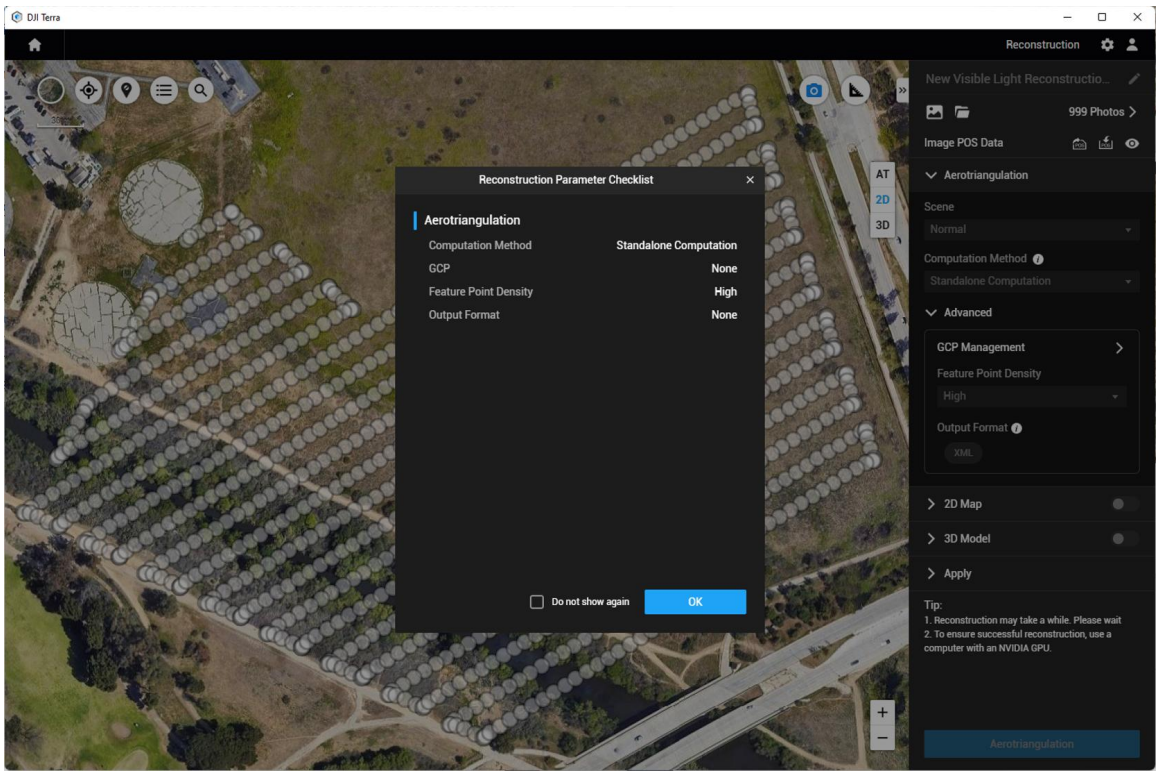
*User can add ground control points (GCP) and check points under "Advanced" settings after the aerotriangulation process is completed.



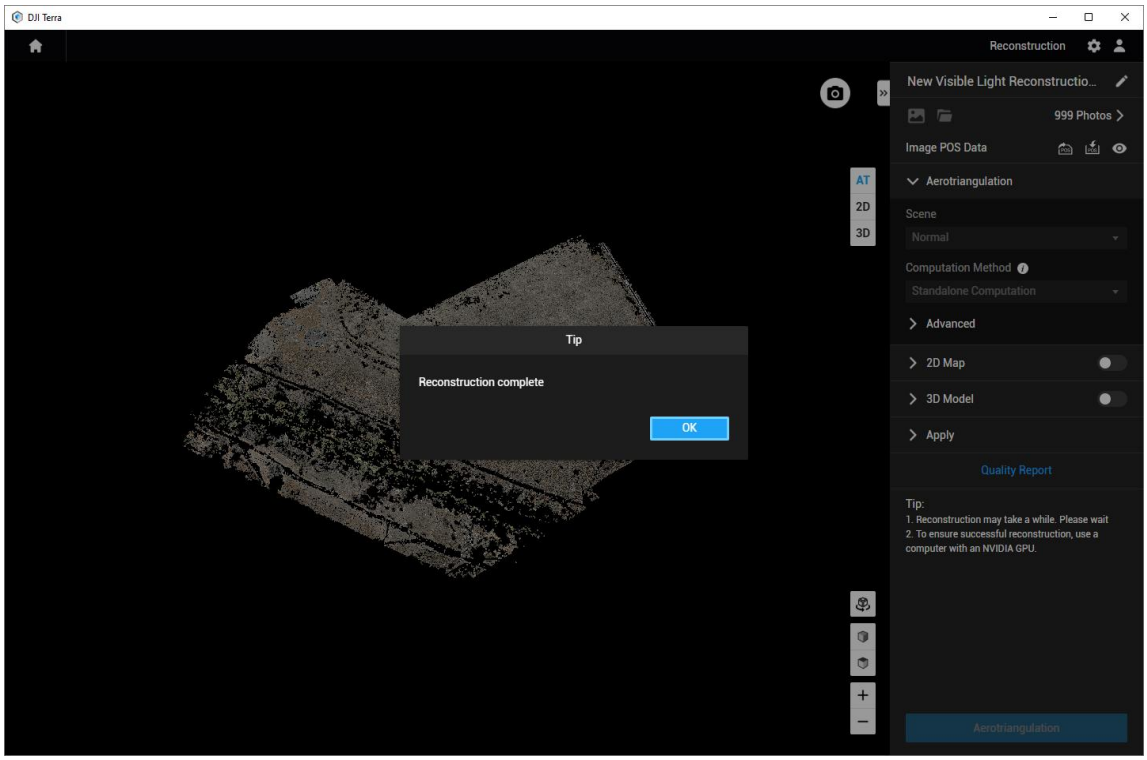
3. Select "Aerotriangulation" to start processing the aerotriangulation model.



4. A "Reonstriuction Rarameter Checklist" window will pop up, select "OK" to continue the aerotriangulation process.

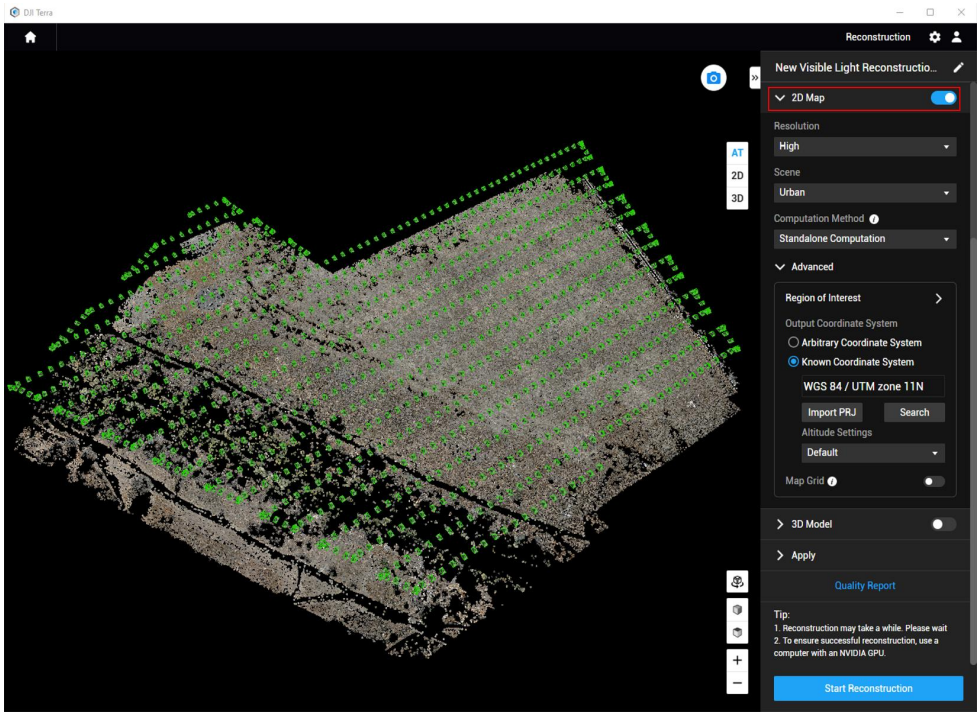


5. Once the process is complete, a message window "reconstruction complete" will pop up.

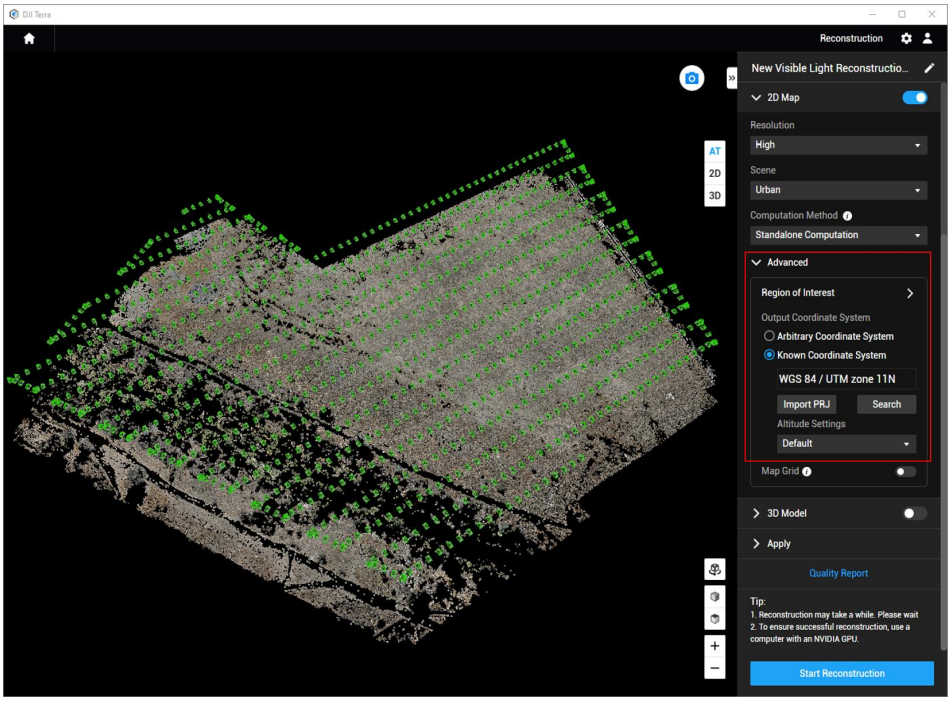


2D Map Reconstruction

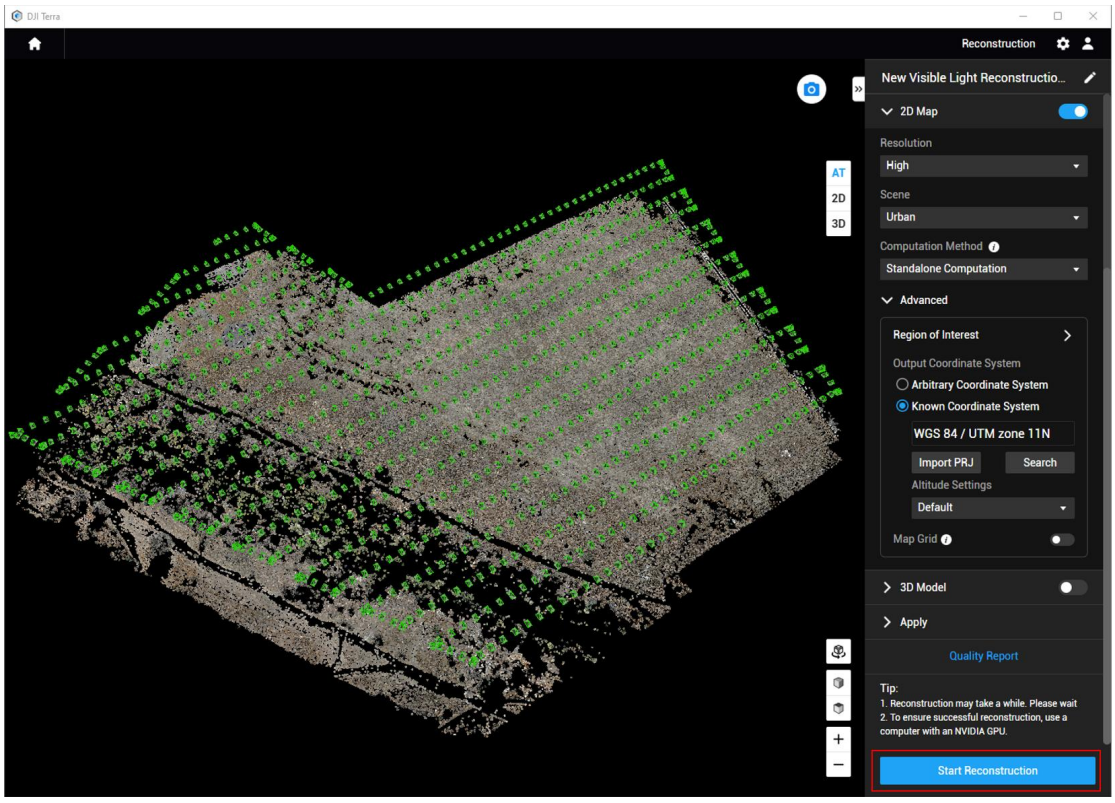
1. Once the aerotriangulation model is processed, enable the "2D Map" option to process both the digital orthophoto map (DOM) and the digital surface mode (DSM) in **GeoTIFF** format.



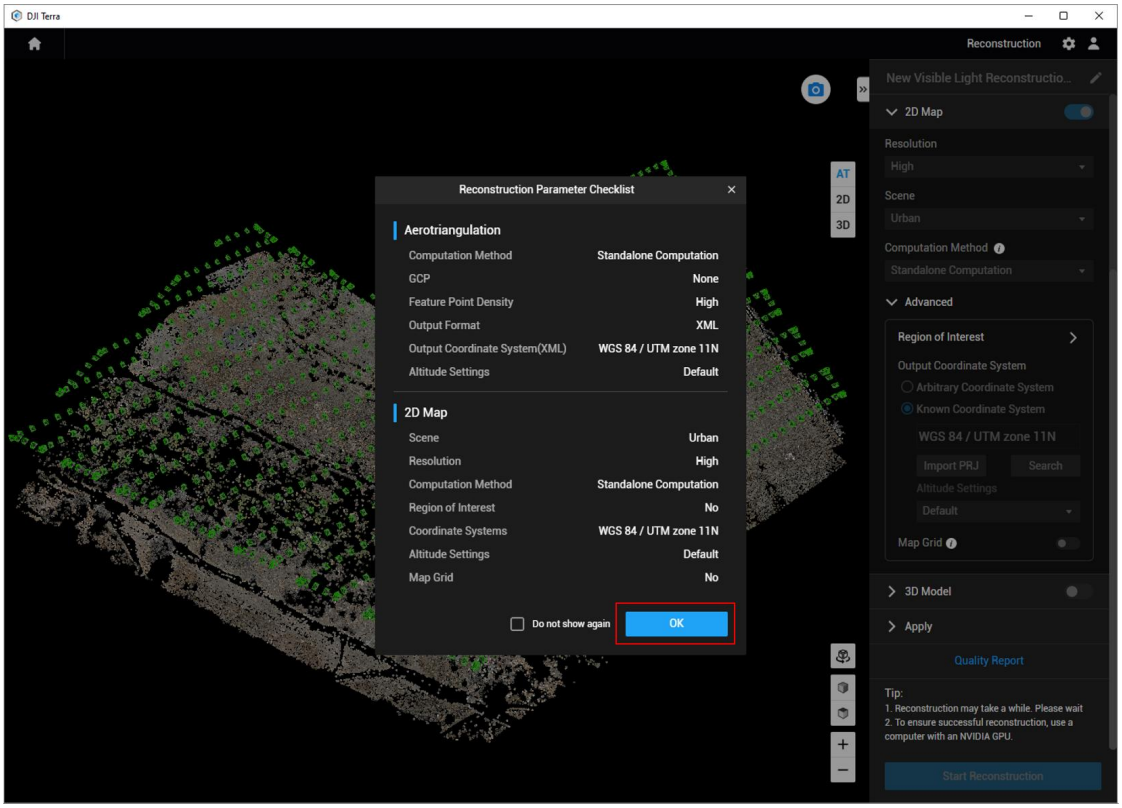
2. User can define projected coordinate system and elevation of the map by select the "Output Coordinate Setting" option under "Advanced" session



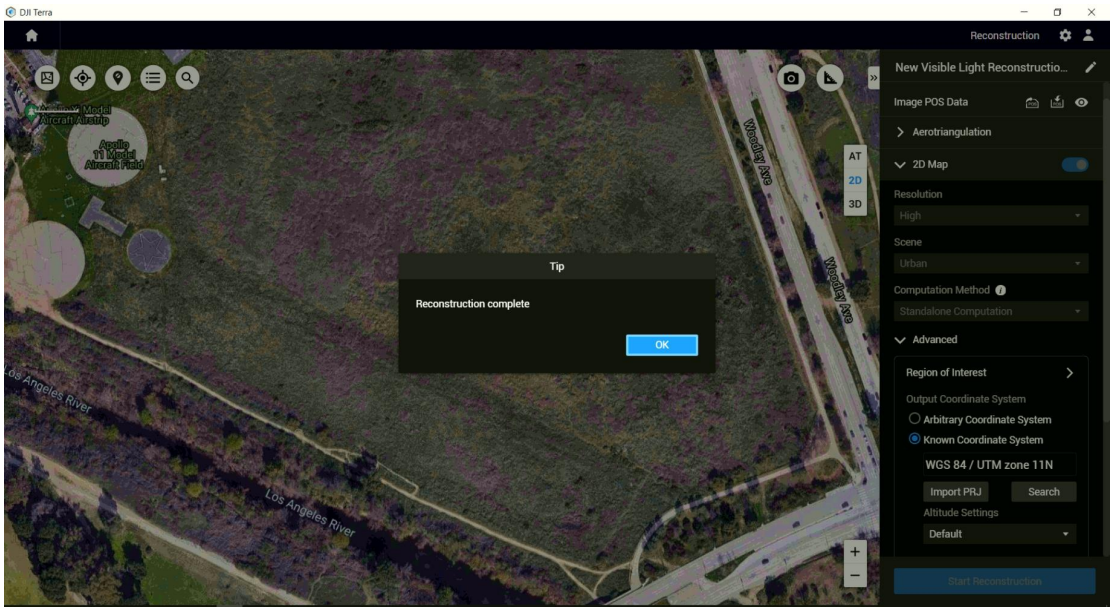
3. Select "Start Reconstruction" to start the 2D map reconstruction process.



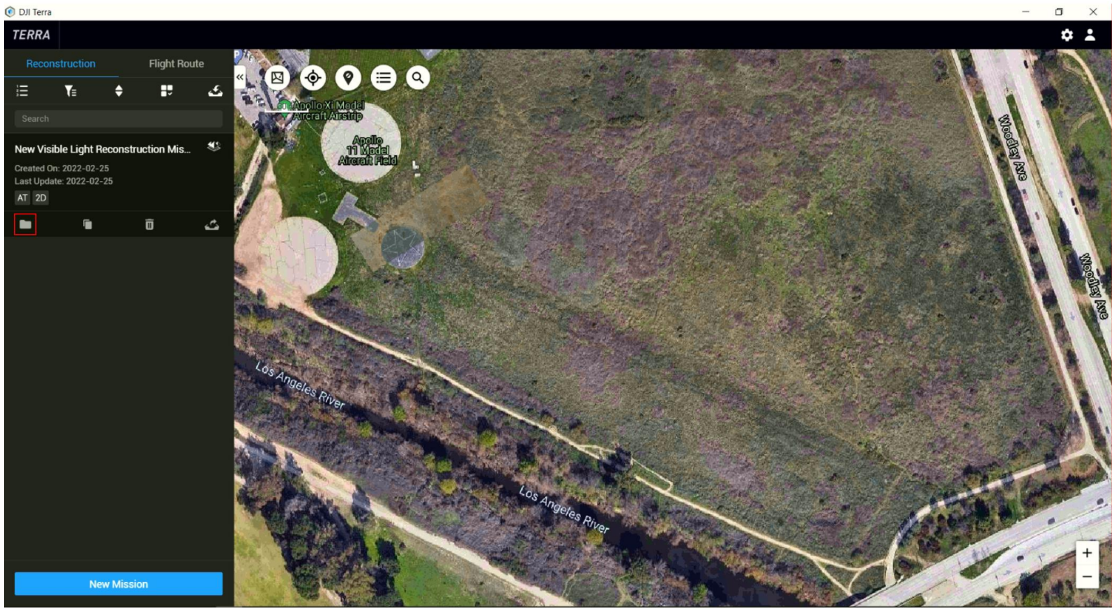
4. A "Reconstruction Parameter Checklist" window will pop up, select "OK" to continue the 2D Map reconstruction process.



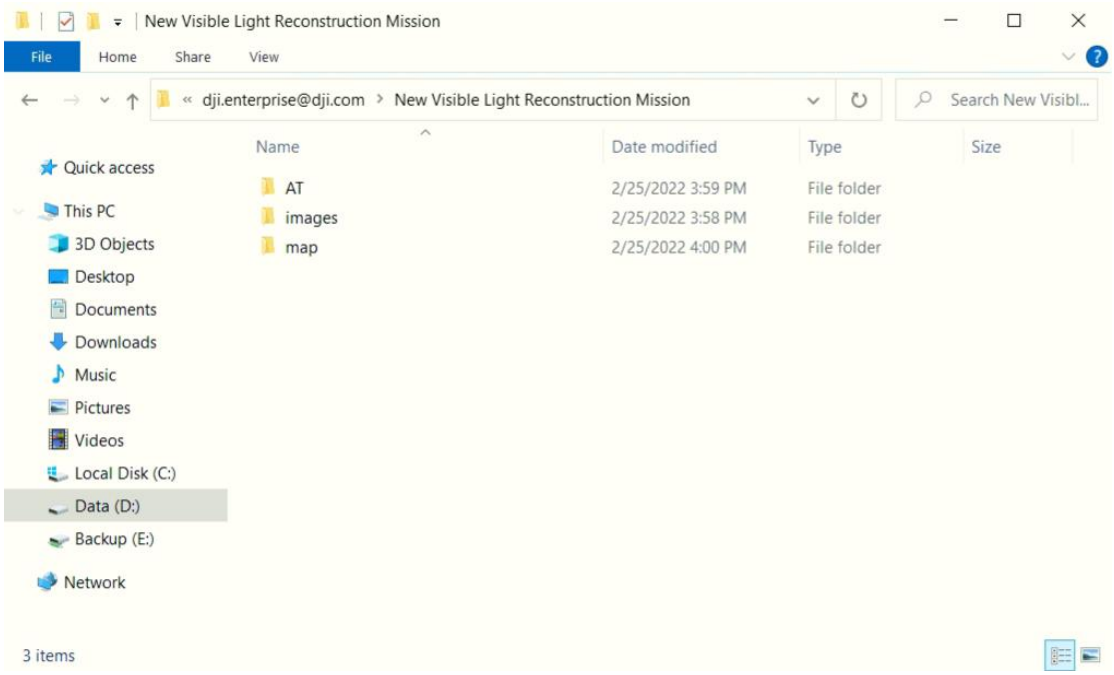
5. Once the reconstruction process is complete, message window "reconstruction complete" will pop up.



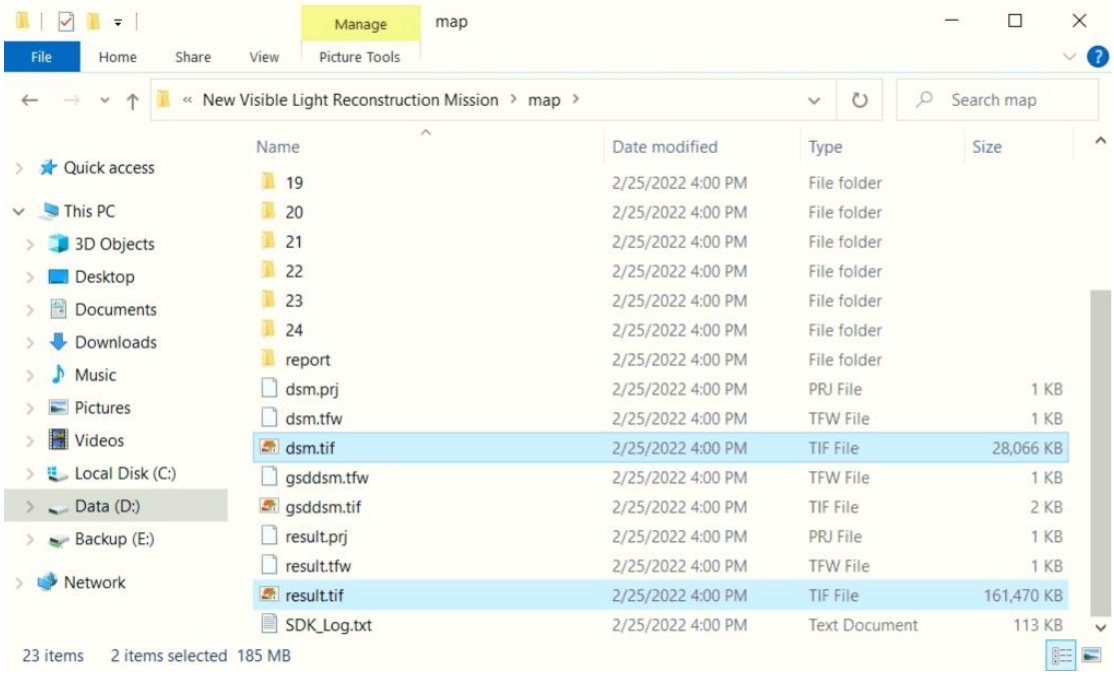
6. DJI Terra outputs digital orthophoto map (DOM) and digital surface model (DSM) both in GeoTIFF format. To access these map files, go back to the Terra reconstruction mission list and select on the reconstruction mission, click on the folder icon under the project name to open up the mission folder.



7. A File Explorer window should pop up.

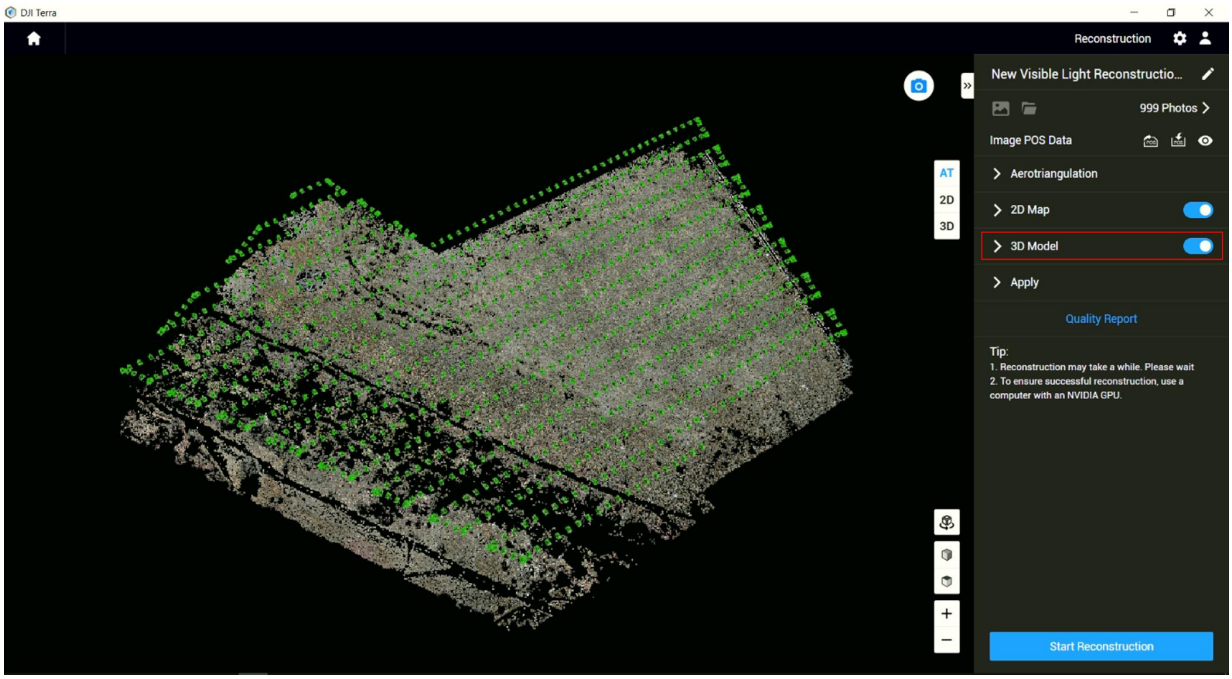


8. Go to the folder "map" to locate the digital orthophoto map file "result.tif" and corresponding digital surface model file "dsm.tif".

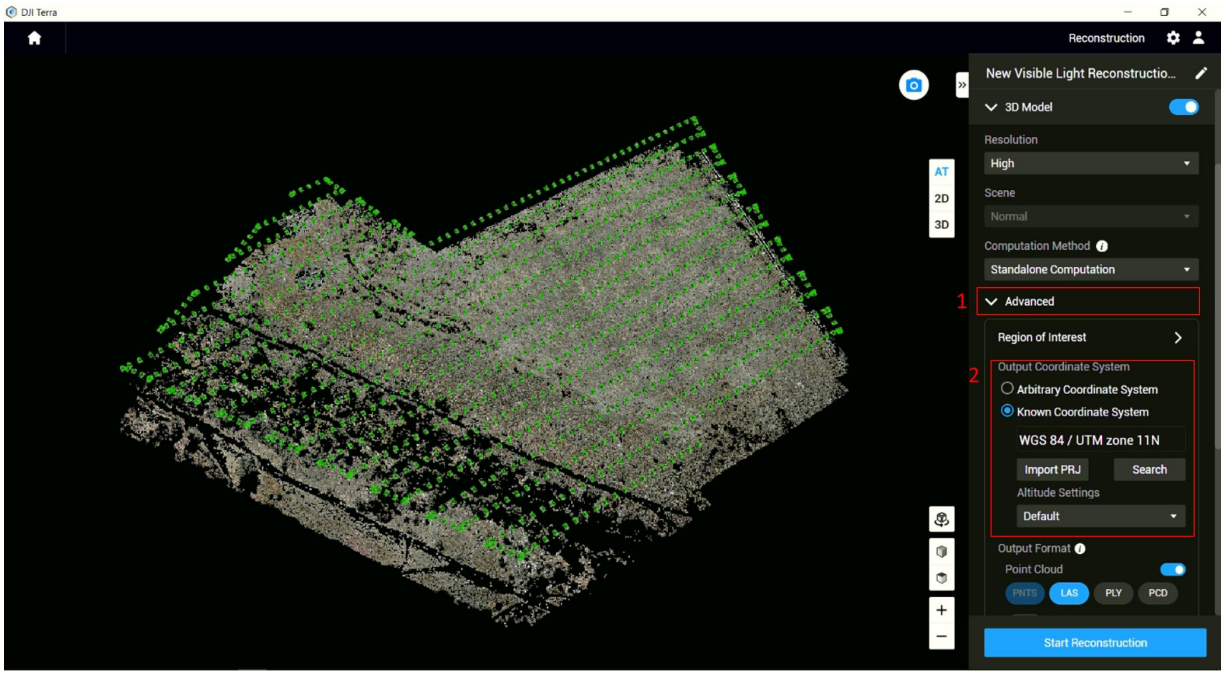


3D Model Reconstruction

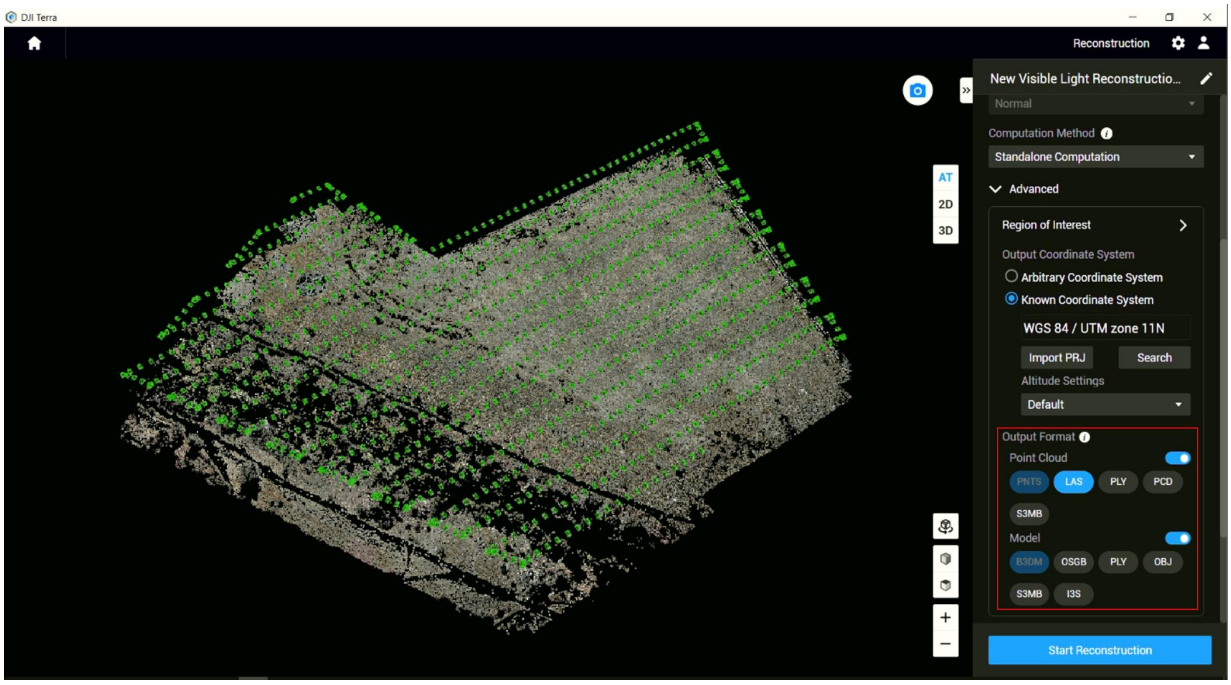
1. Once the aerotriangulation model is processed, enable the "3D Model" option below.



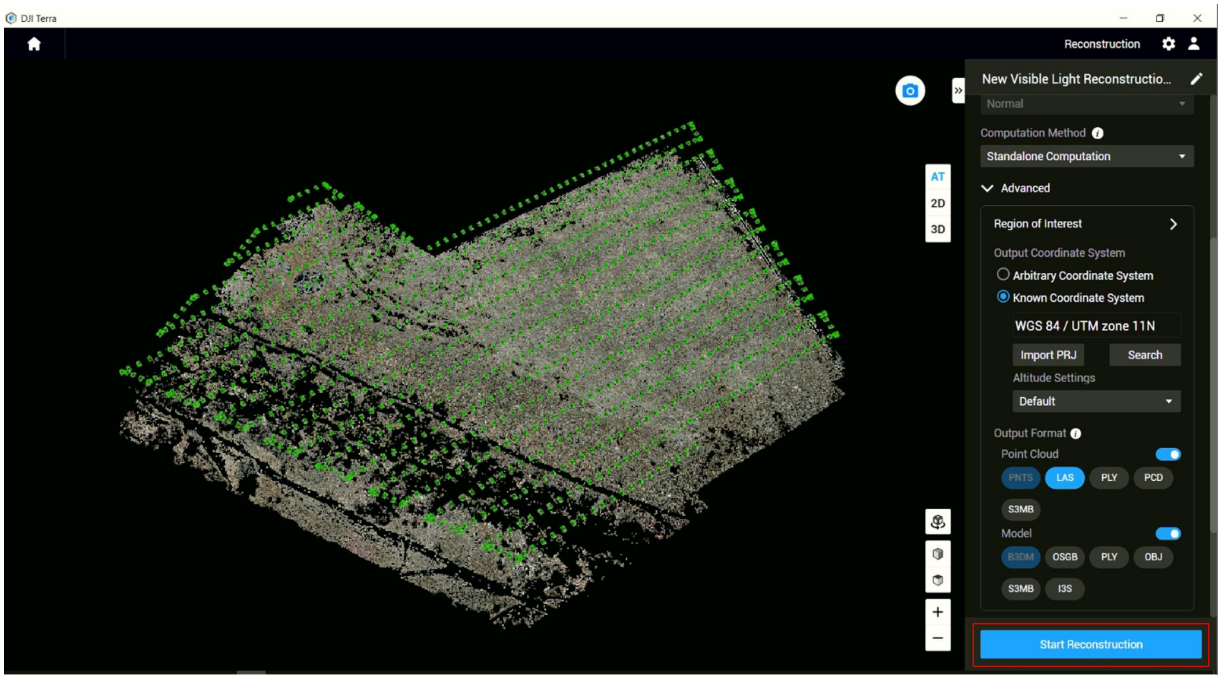
2. Define projected coordinate system and elevation of the map by select the "Output Coordinate Setting" option under "Advanced" session.



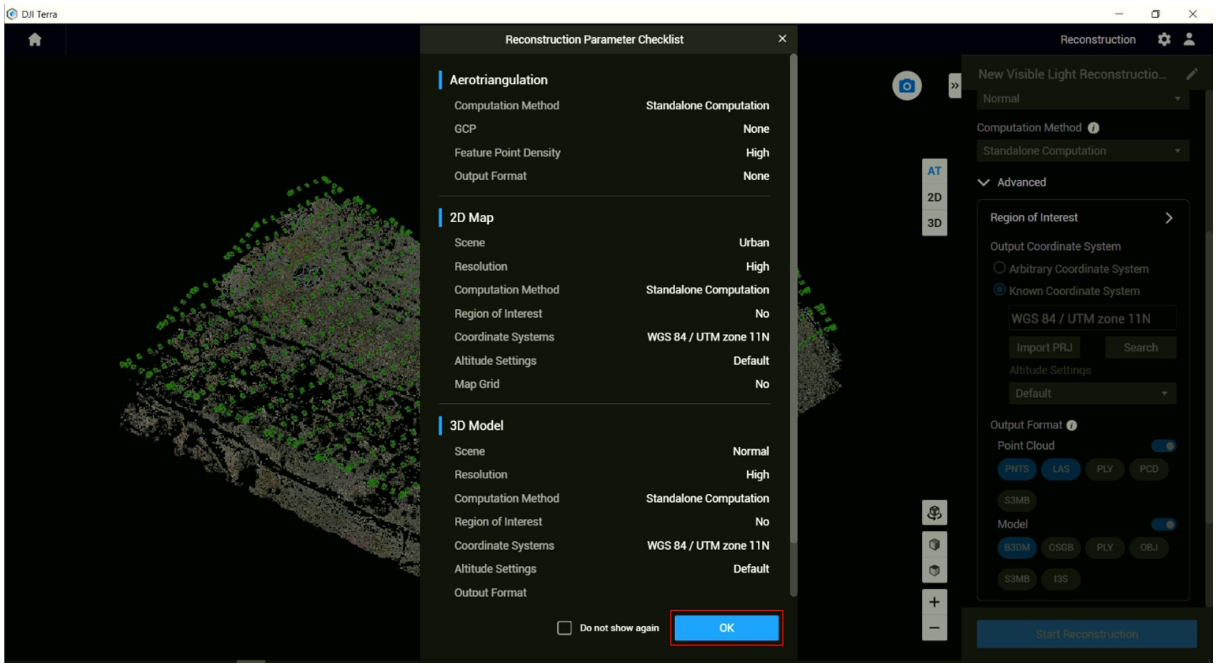
3. DJI Terra supports these model/point cloud output formats: Texture mesh in **PLY**, **OBJ**, **I3S** formats, LOD model in **B3DM**, **OSGB**, **S3MB** formats, LOD point cloud in **PNTS**, **S3MB** formats and Non-LOD point cloud in **LAS**, **PLY**, **PCD** formats.



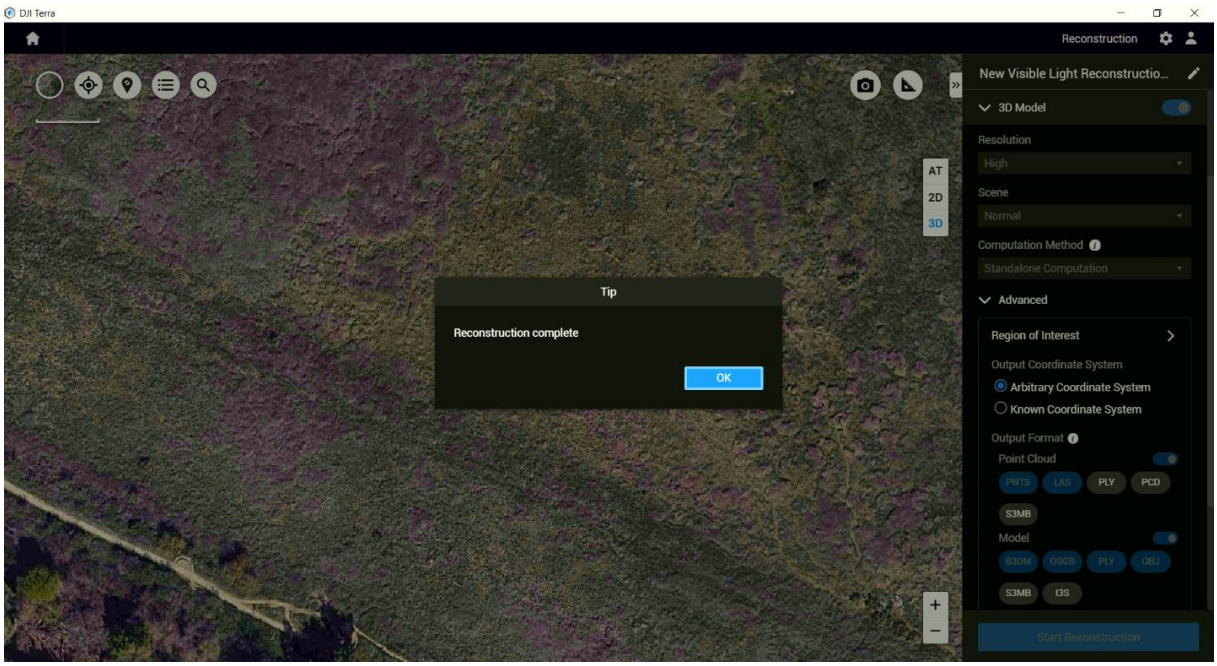
4. Select "Start Reconstruction" to start the 3D model/point cloud reconstruction process.



5. A "Reconstruction Parameter Checklist" window would pop up, select "OK" to continue with the 3D model/point cloud reconstruction process.

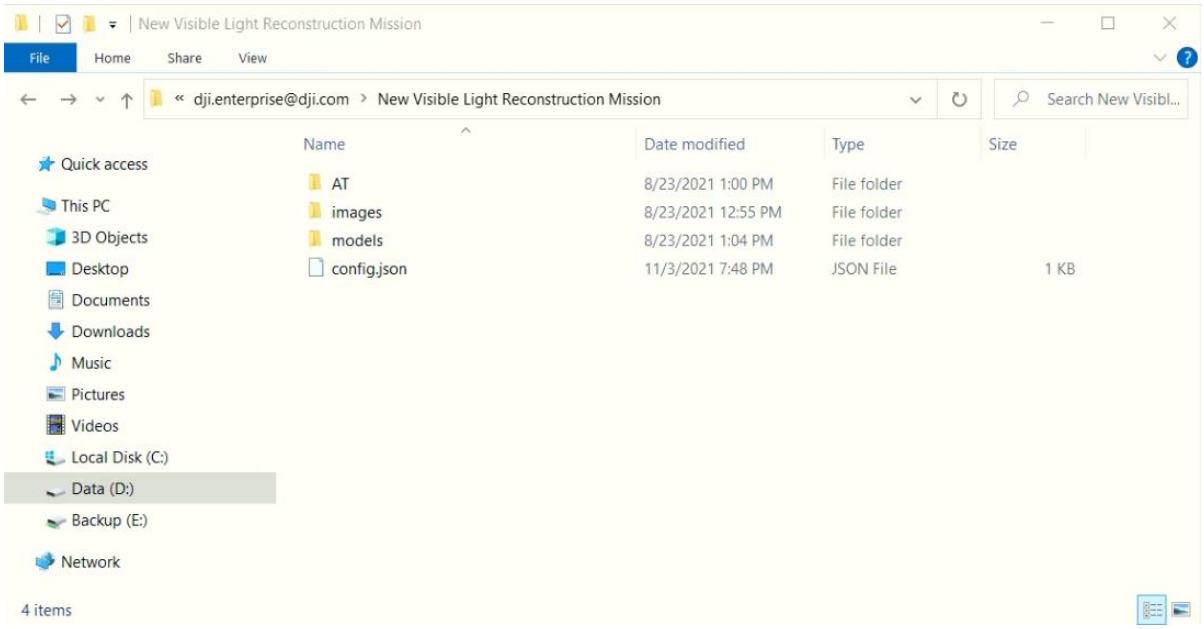


6. Once the reconstruction process is complete, a message window "reconstruction complete" will pop up.



7. To access output model files, go back to the Terra reconstruction mission list and select on the reconstruction mission, click on the folder icon under the project name to open the mission folder.

8. A File Explorer window should pop up.



9. Go to the folder "models/pc/0" to locate all the reconstructed models under different formats here.