



PHOTOGRAMMETRY – AGISOFT METASHAPE

Align Photos (Professional Edition) (04.07)

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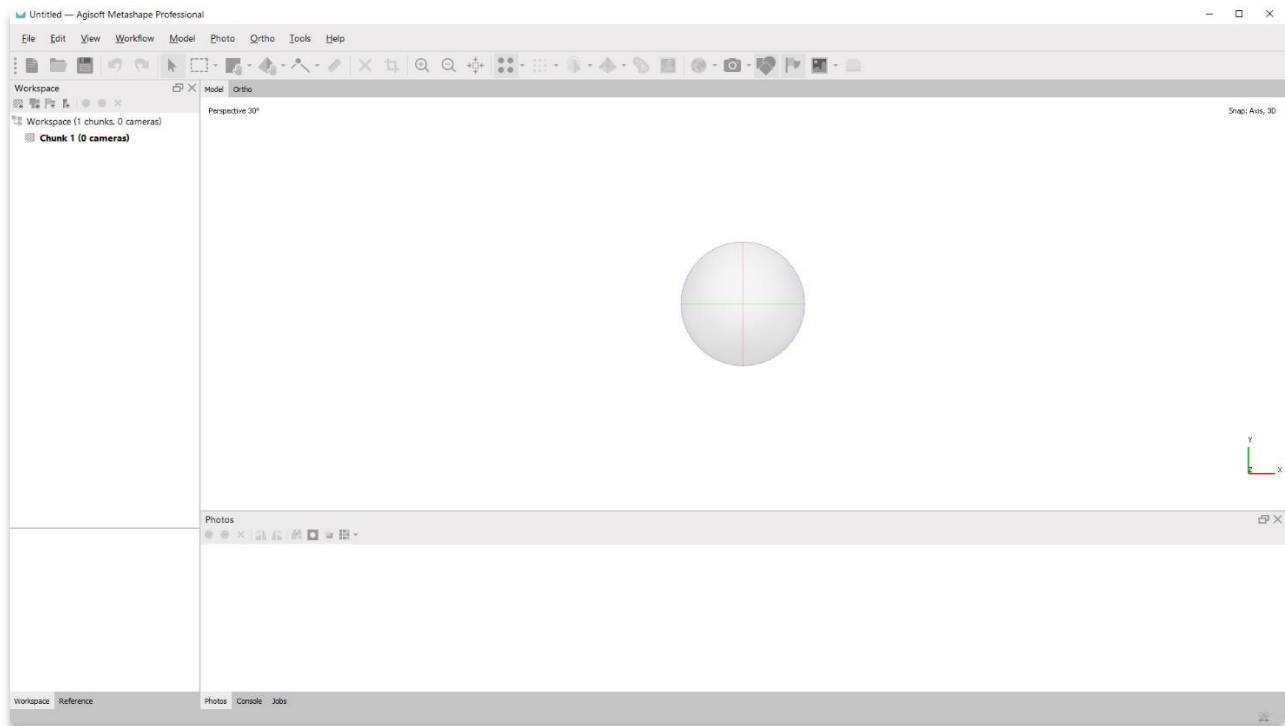
ABOUT AGISOFT METASHAPE

[Agisoft Metashape](#) is a stand-alone software product that performs photogrammetric processing of digital images and generates 3D spatial data to be used in GIS applications, cultural heritage documentation, and visual effects production as well as for indirect measurements of objects of various scales. This software provides a platform for cultural heritage specialists to create virtual reality scenes, textured 3D meshes, orthographic projections, geo-referenced maps and much more from images and/or laser scans completely automatically.

This **ASOR Tutorial (04.07)** will demonstrate how to align photos in Agisoft Metashape Professional on a Windows desktop. ASOR's tutorials for Metashape are focused on creating 3D surfaces and orthophotos of objects, monuments, and architecture during cultural heritage surveys through the eastern Mediterranean and northern Africa. ASOR plans to expand the scope of its photogrammetry tutorials, however for any questions that aren't covered in these tutorials, please visit [Agisoft's Community page](#), which includes video and written tutorials, the software's manual, and a community forum comprised of Metashape users.

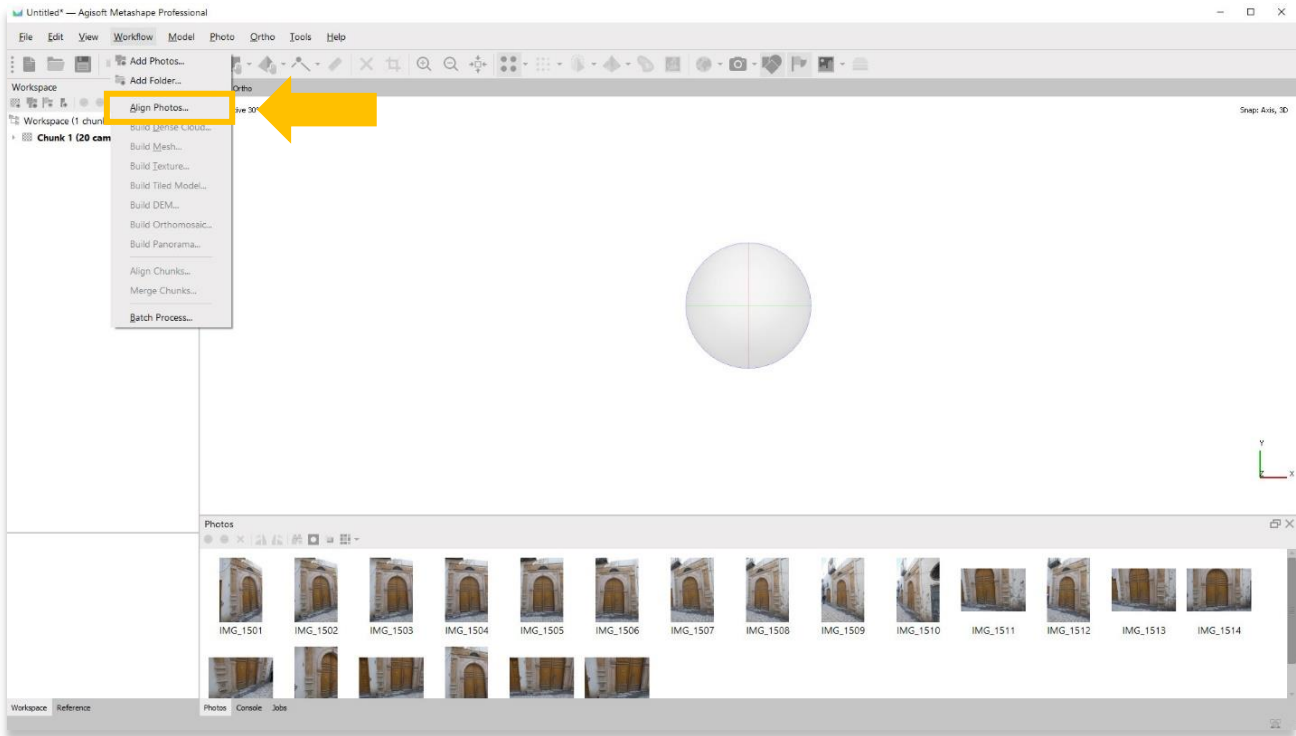
OPENING AGISOFT METASHAPE PROFESSIONAL

1. To open Agisoft Metashape Professional, search for the program by typing in "Metashape" in your computer-wide search function (bottom left corner of your screen). Click on the Metashape application in your programs window to open.

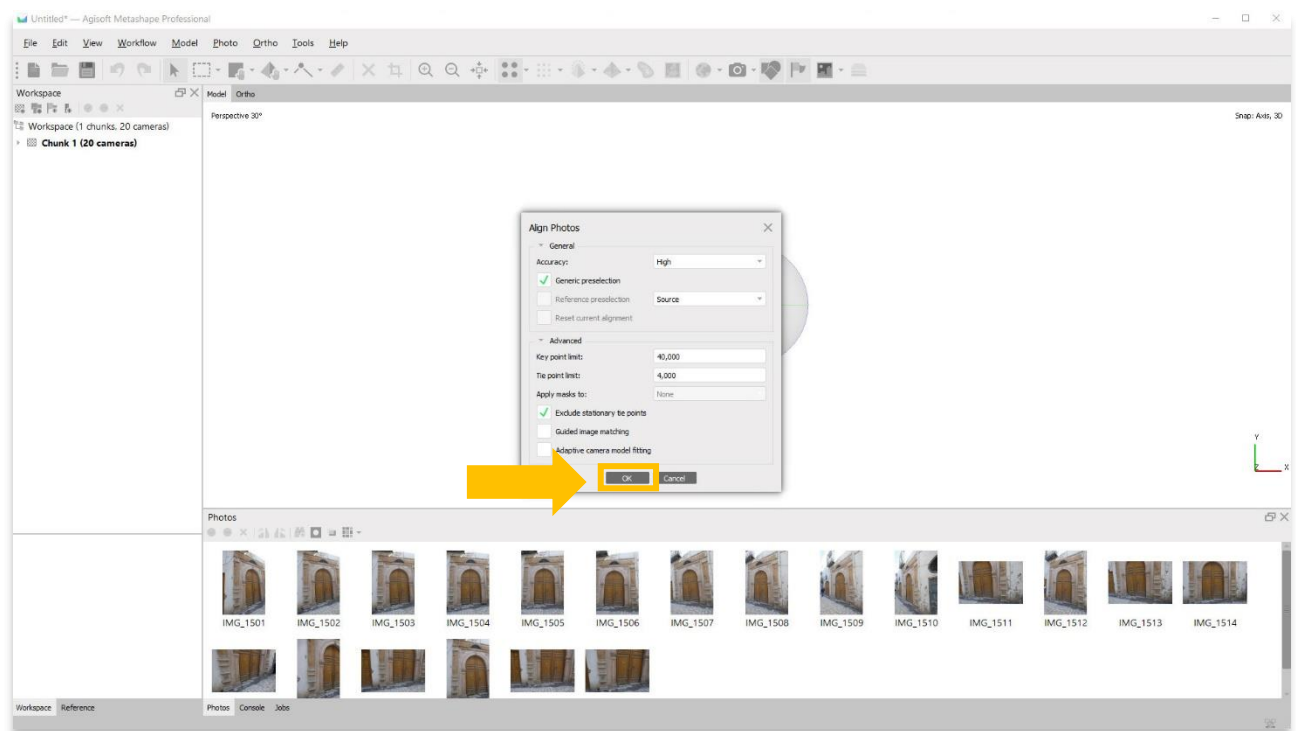


ALIGN PHOTOS

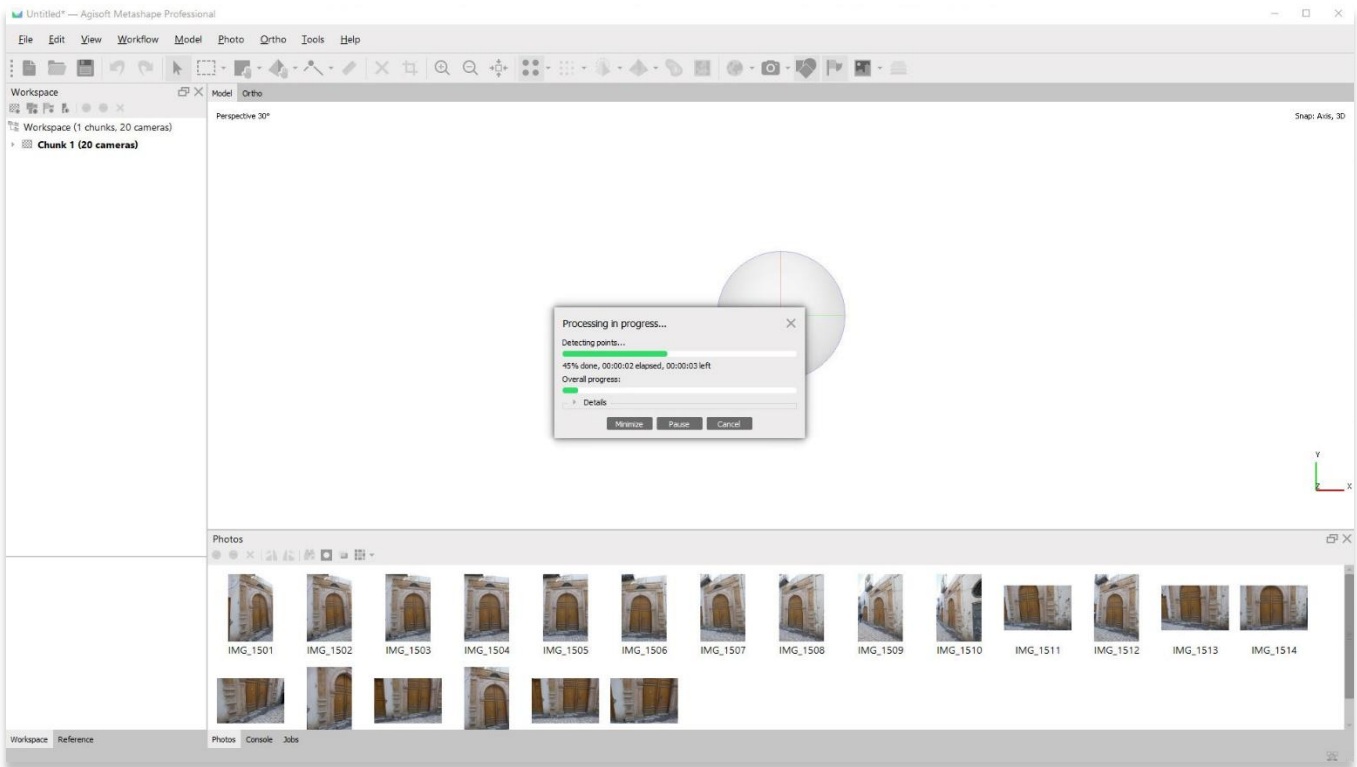
- Align photos to a new project using the same images you added in [ASOR Tutorial 04.06 \(Adding & Editing Photos to a New Project\)](#) by selecting the **Workflow Menu > Align Photos**.



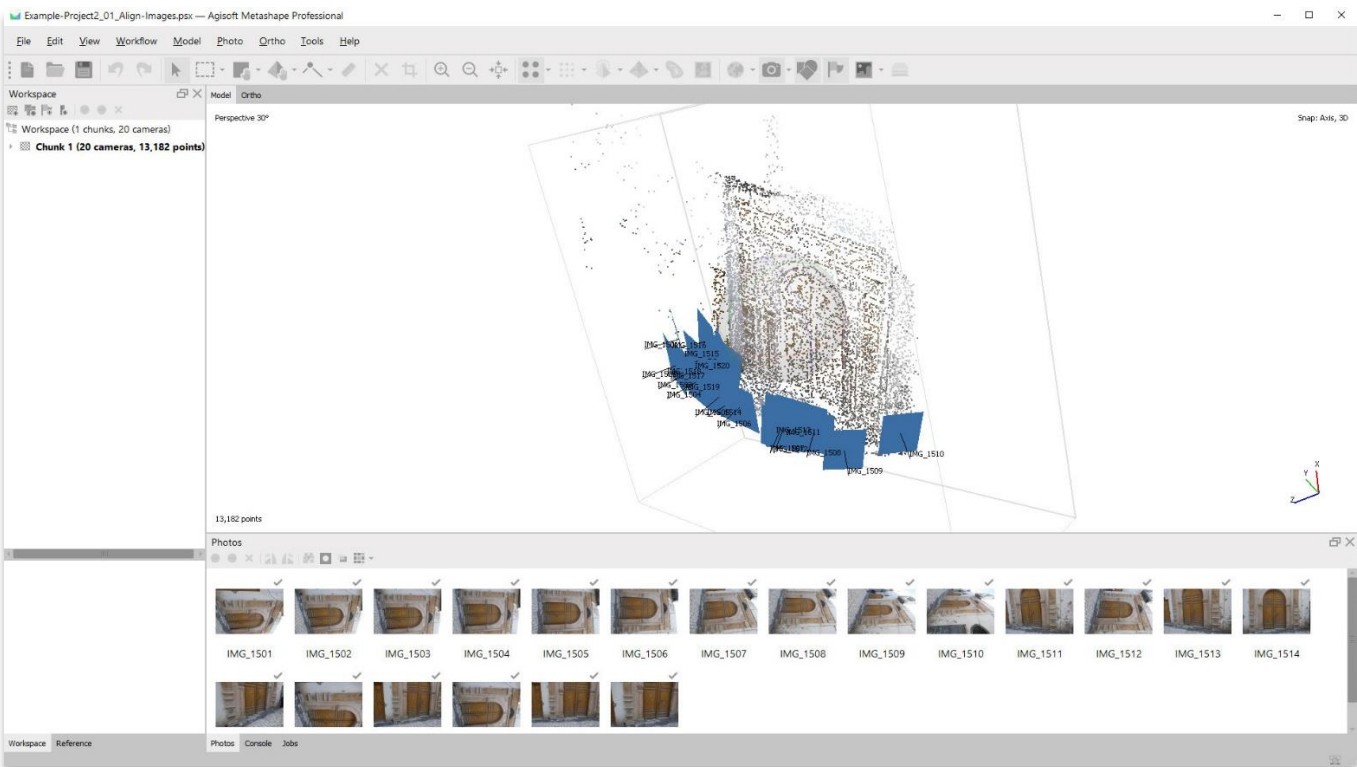
- A pop-up will appear that provides options for setting the accuracy of the model. Set the accuracy to **High** or **Highest** if possible. Use the following settings show in the screenshot below. Press **OK** when ready.



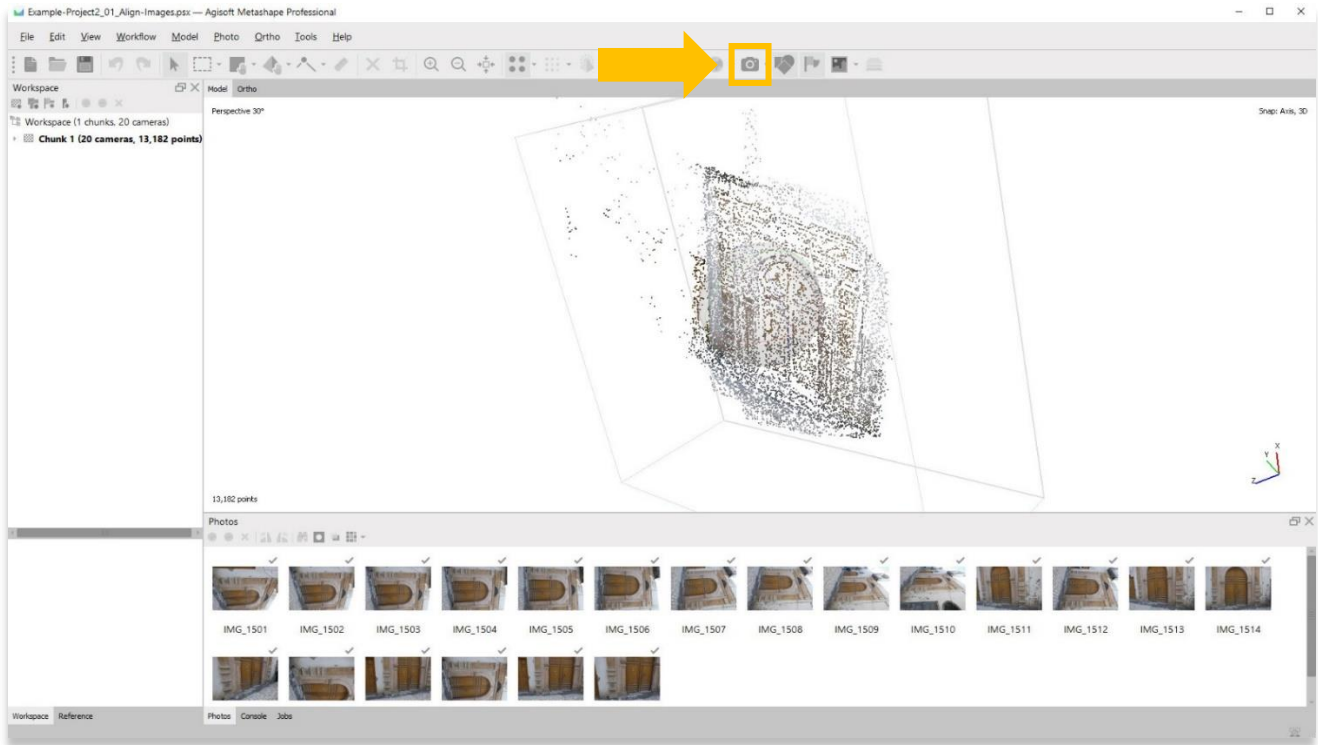
4. This step could take several hours or even days to complete. Your computer may not have enough RAM or memory to complete this step at **Highest** accuracy. Select the next best option until you are able to complete this step.



5. Once completed, the main panel will render a **sparse cloud** representation of your object. You will also see the camera locations shown as blue rectangles.

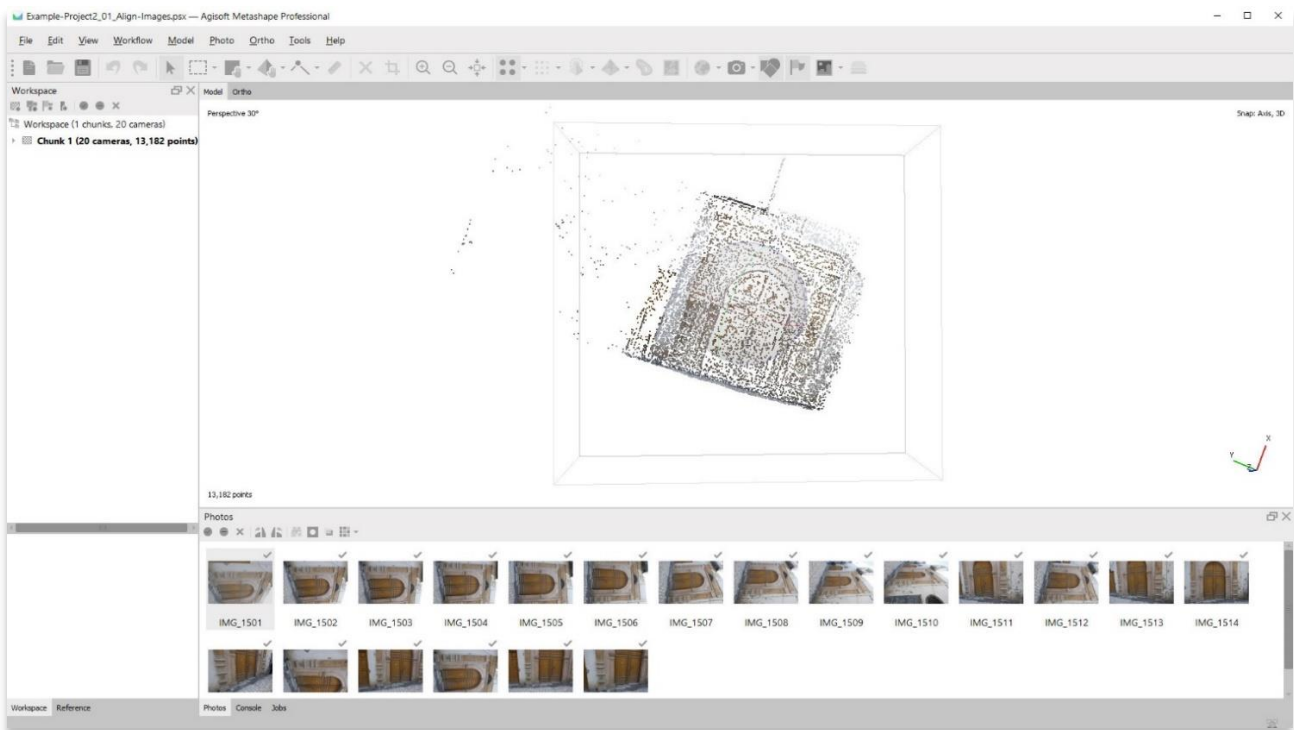


- Remove camera locations by selecting the **Camera** button on the toolbar. This will allow you to view the sparse cloud model better. You should be able to see your model taking shape.

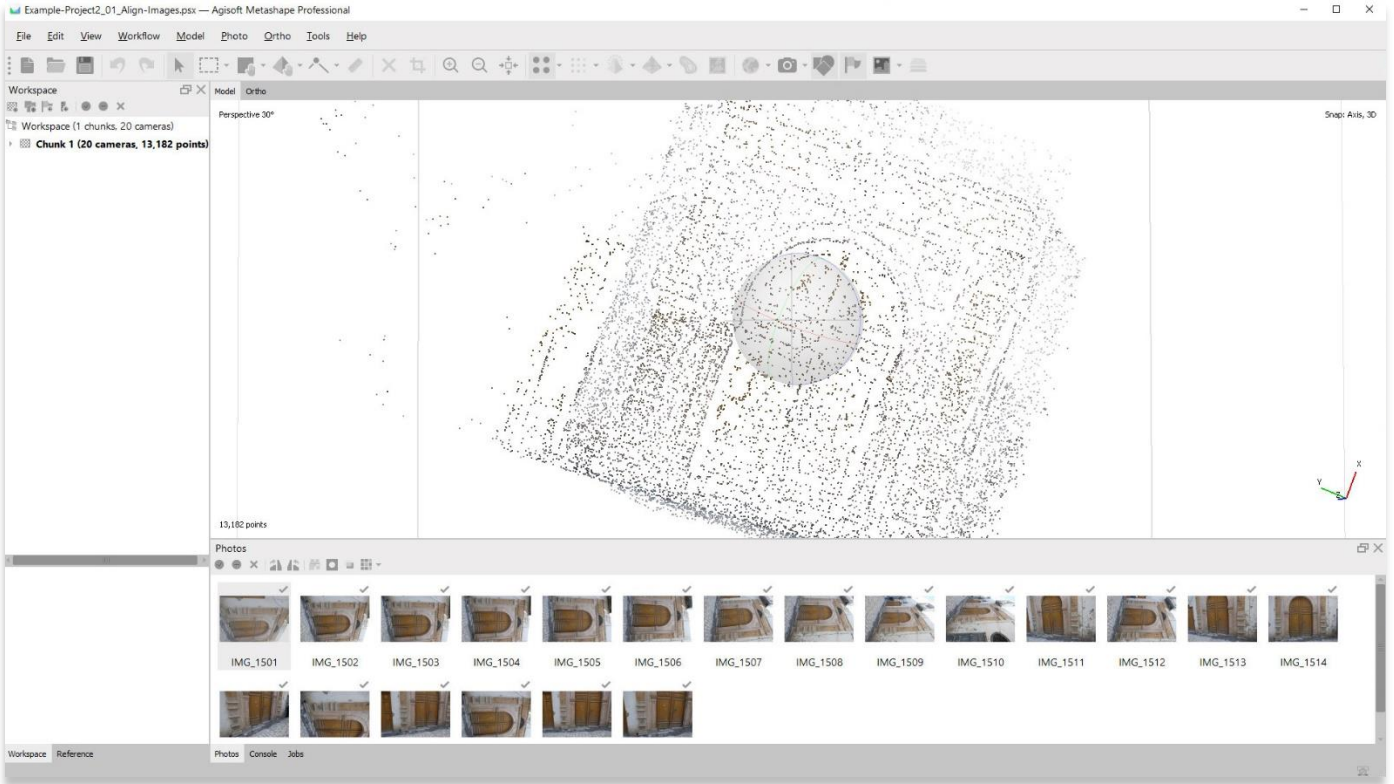


MOVING & ROTATING YOUR 3D MODEL

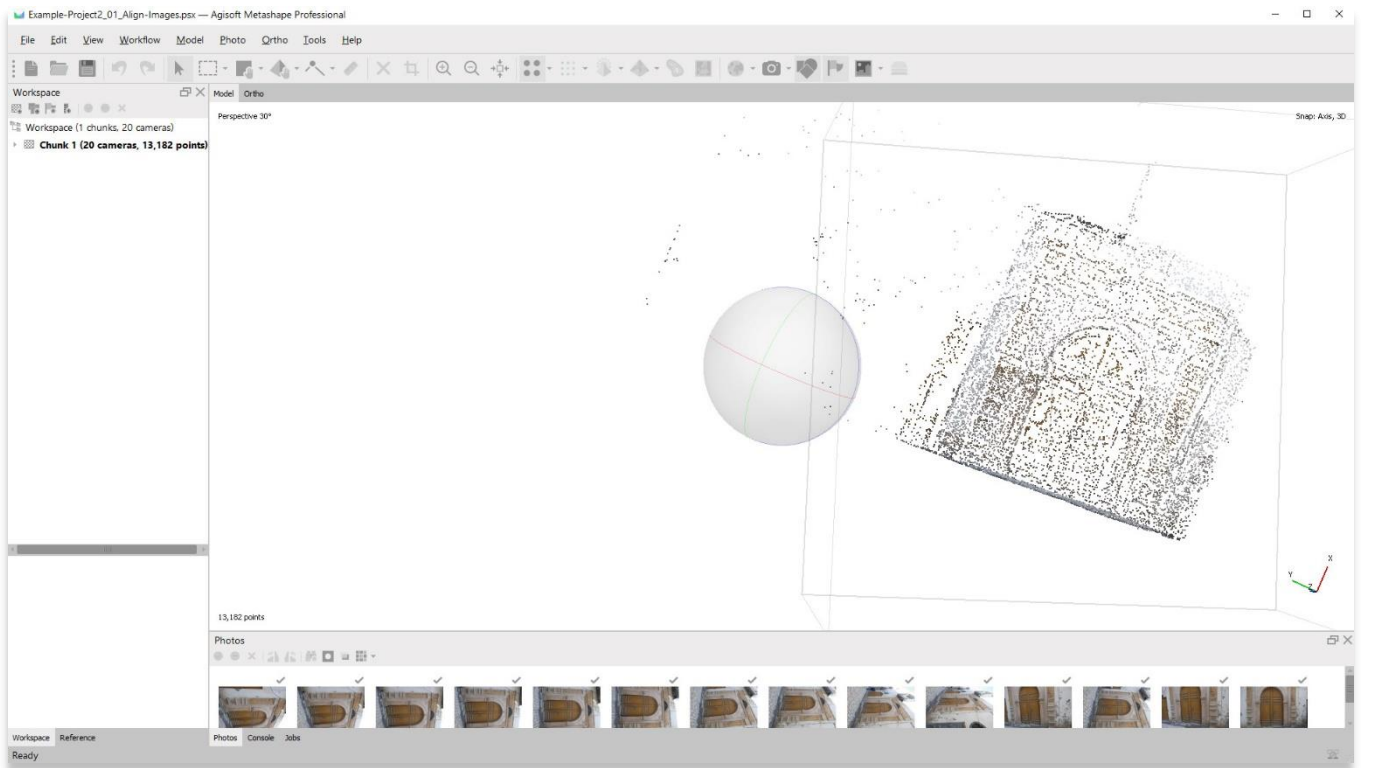
- From here, you can move the model within the main panel. Left click on the object, hold down and move your cursor to rotate your object.



8. Zoom in/out by rolling the mouse wheel.

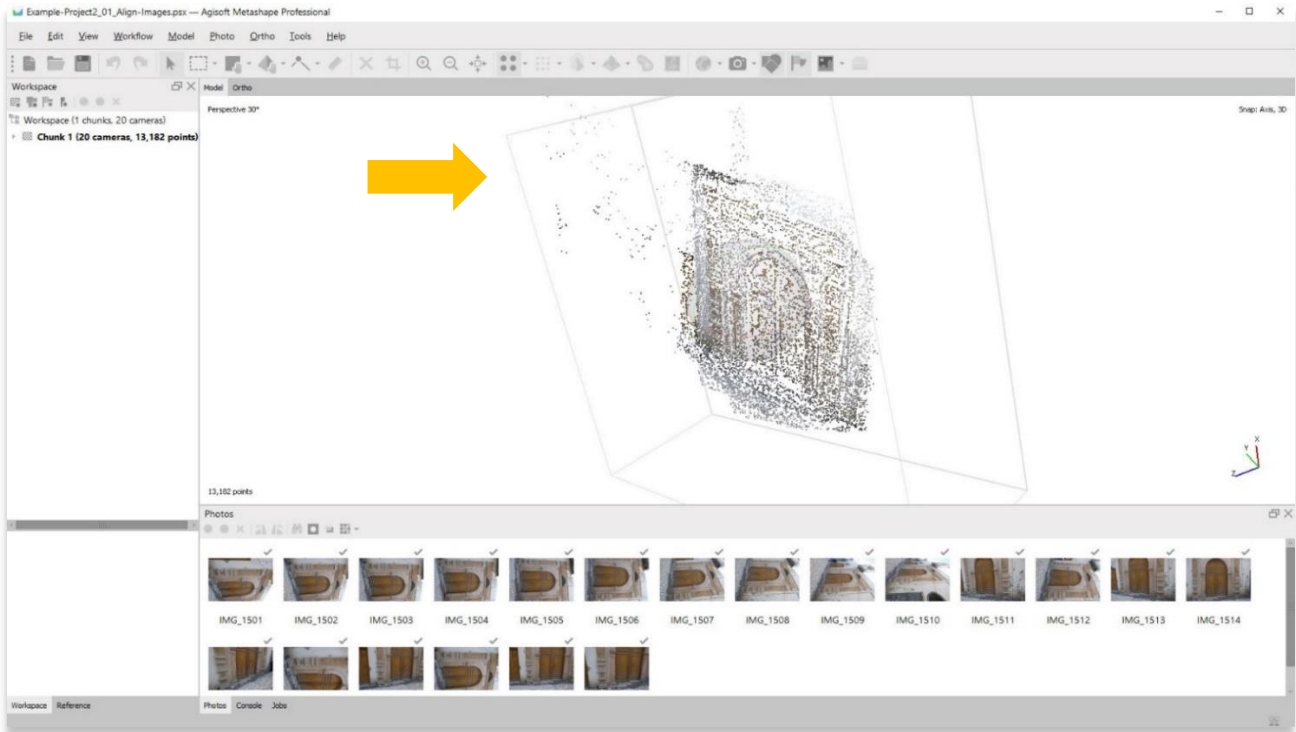


9. The center of rotation can also be moved by holding down the mouse wheel and moving the object.

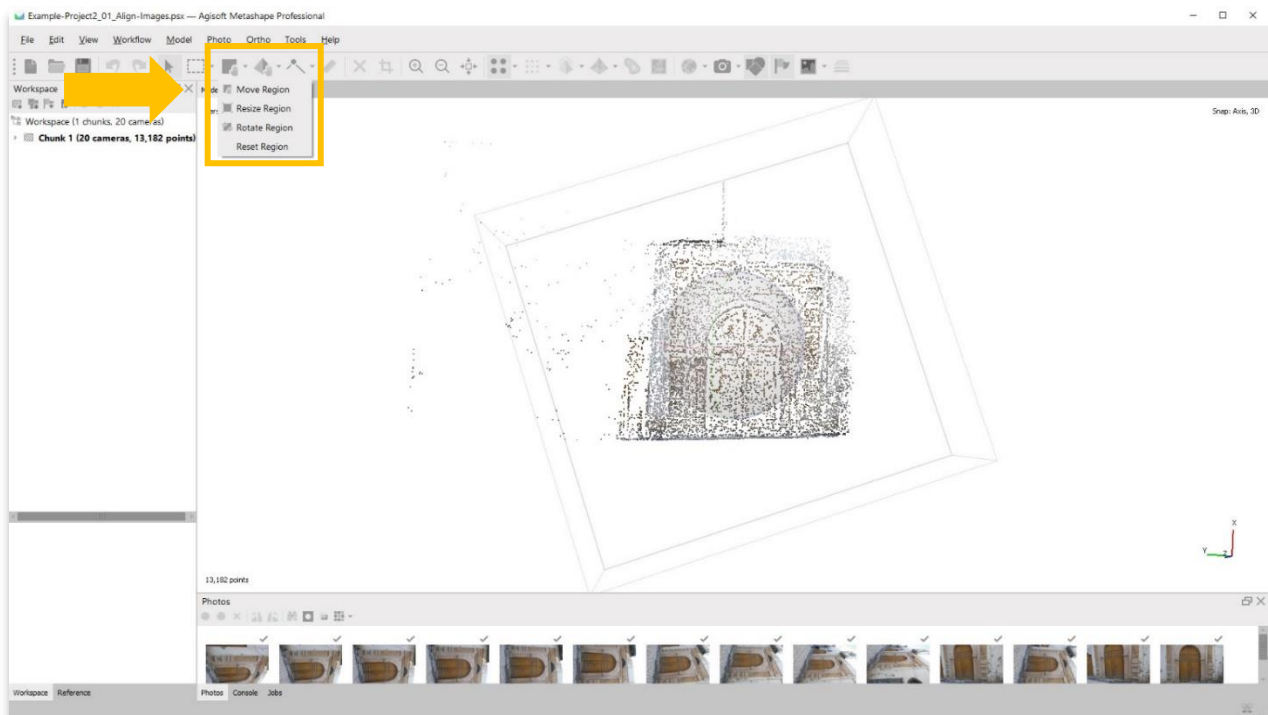


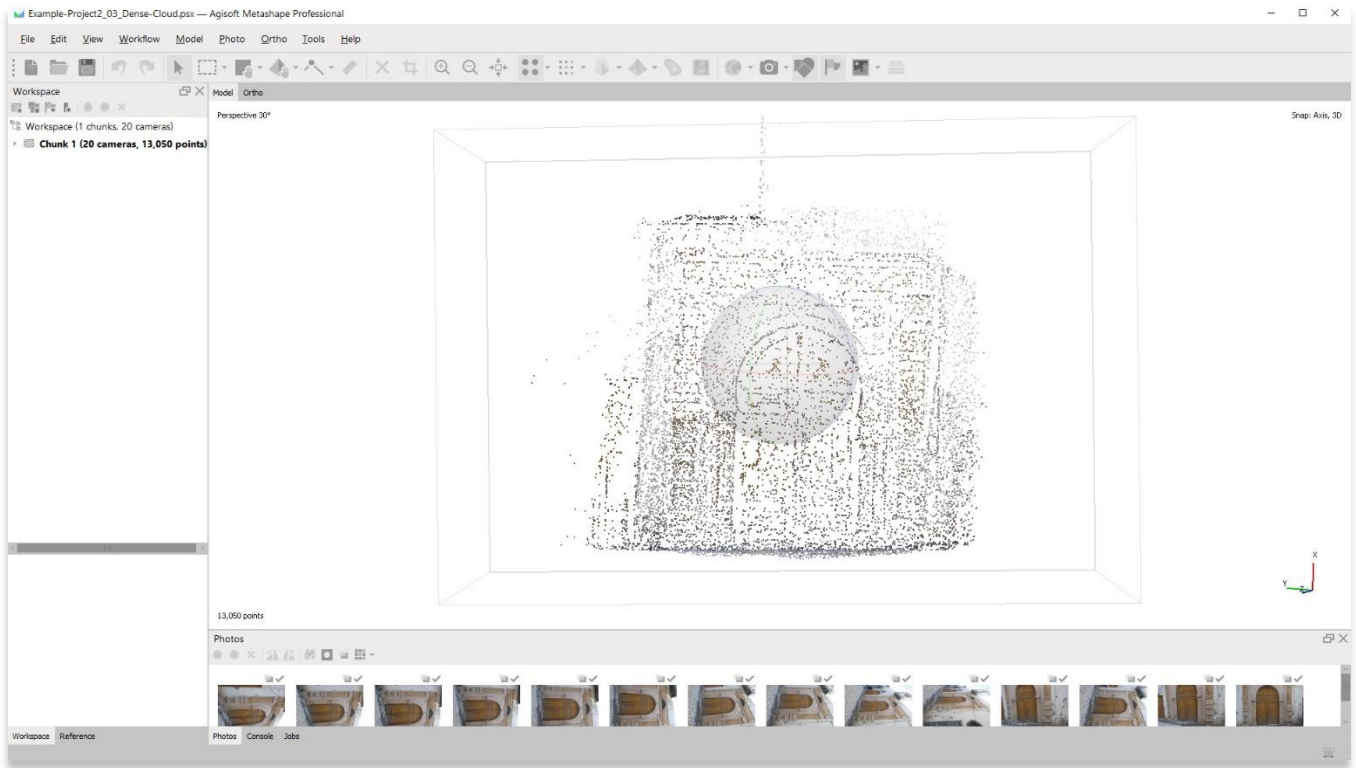
ADJUSTING THE BOUNDING BOX

10. The bounding box that surrounds your object can also be edited to better fit your model. It is a good idea to adjust this bounding box to fit only parts of your model that you wish to include. Any points located outside the box will not be included in further steps (i.e. creating a dense cloud, mesh, and orthomosaic).



11. Choose the **Move Region** button to adjust the bounding box. The box can be rotated, moved, and changed in size.





12. **Save your project** before moving onto the next step in the **Workflow** menu.



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