

PHOTOGRAMMETRY – AGISOFT METASHAPE

Building a Tiled Model (Professional Edition) (04.11)

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ABOUT AGISOFT METASHAPE

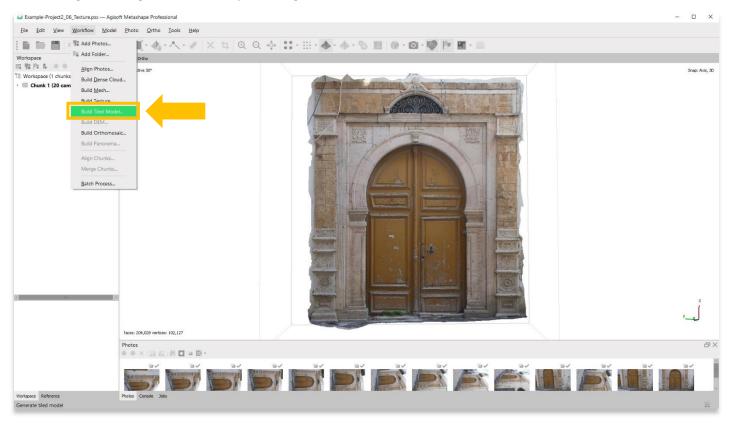
Agisoft Metashape is a stand-alone software product that performs photogrammetric processing of digital images and generates 3D spatial data to be used in GIS applications, cultural heritage documentation, and visual effects production as well as for indirect measurements of objects of various scales. 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 (04.11)** will demonstrate how to build a tiled model in Agisoft Metashape Professional on a Windows desktop. Metashape can construct a tiled model based on dense point cloud, mesh or depth maps data (See ASOR **Tutorials 04.08—Building a Dense Cloud Model & 04.09—Building a Mesh Model**). Hierarchical tiles are textured from the source imagery.

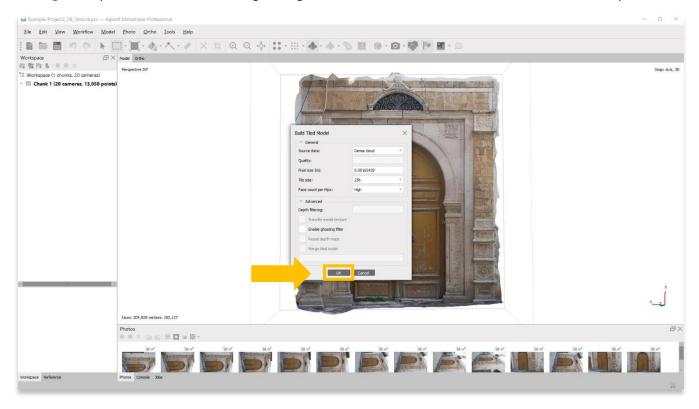
ASOR's tutorials for Metashape are focused on creating 3D surfaces and orthophotos of objects, monuments, and architecture during cultural heritage surveys through the eastern Mediterranean and northern Africa. ASOR plans to expand the scope of its photogrammetry tutorials, however for any questions that aren't covered in these tutorials, please visit <u>Agisoft's Community page</u>, which includes video and written tutorials, the software's manual, and a community forum comprised of Metashape users.

BUILD A TILED MODEL

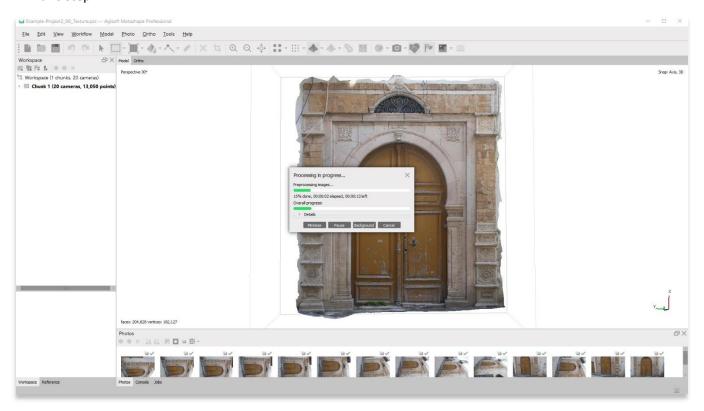
Begin building a tiled model by selecting the Workflow Menu > Build Tiled Model.



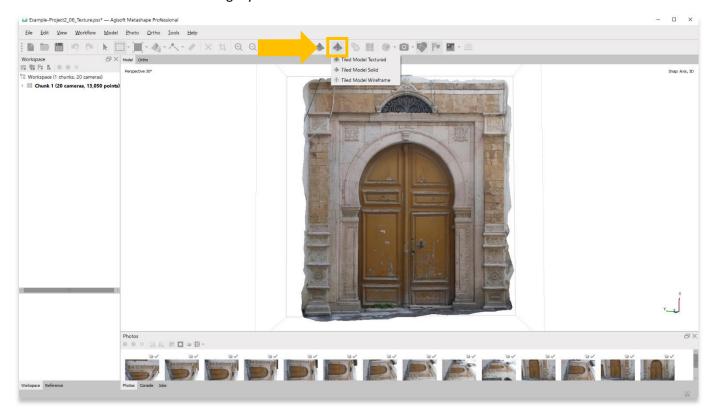
2. A pop-up will appear that provides options for setting the accuracy of the model. Set the accuracy to **High** or **Highest** if possible. Use the following settings show in the screenshot below. Press **OK** when ready.



3. 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.



4. Once completed, the main panel will render a <u>tiled</u> representation of your object/3D surface. To view the tiled model, choose the <u>Tiled Model</u> button in the top tool bar to see three options: <u>Textured</u>, <u>Solid</u>, and <u>Wireframe</u>. Please review <u>steps 4-7</u> in <u>ASOR Tutorial 04.09 (Building a Mesh Model)</u> for an explanation of the differences between these three rendering styles.



- 5. Building a Tiled Model is essential for exporting your model (with texture) into other platforms for viewing, such as Microsoft 3D Viewer, Meshlab, or any other 3D-capable viewer. Texture models (non-tiled, see <u>ASOR Tutorial 04.10—Building a Textured Model</u>) <u>may not export and render properly</u> in these programs unless processed as a Tiled Model.
- 6. Save your project before moving onto the next step in the Workflow menu.



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