

# AgiSoft PhotoScan 1.2 Expert /Error Minimization Workflow Overview

**"Workflow" menu** - ADD PHOTOS – navigate to directory with photos. Select and add all necessary photos for project. Page 7

**"Tools" menu** - CAMERA CALIBRATION – Check to make sure that all the photos with the same focal distance/parameters are grouped together. Page 9,10

**"Workflow" menu** – ALIGN PHOTOS - (aerial triangulation) Page 11

high, generic, 60000, 0

Check to see if all photos ("cameras") aligned. *Note: total number of points, projected points per photo, and initial adjusted.*

SAVE

OPTIMIZE (bundle adjustment) – leave K4, p3, p4 unchecked Page 14

**"Edit" menu** – Gradual Selection - PROJECTION ACCURACY- Remove bad points due to poor geometry – set LEVEL at 2 (if more than half of the points are selected for removal than increase the level to 3). Page 17

DELETE POINTS (PAGE 18) - OPTIMIZE (bundle adjustment) - no K4, p3, p4

**Repeat - "Edit" menu** – Gradual Selection - PROJECTION ACCURACY- This procedure is this repeated once ensure that more bad points have not surfaced. Use same level as previous step. If any points are selected, delete them, but mind projections.. Page 20

DELETE POINTS - OPTIMIZE (bundle adjustment) - no K4, p3, p4

**"Edit" menu** – Gradual Selection - RECONSTRUCTION UNCERTAINTY - Remove bad points due to poor geometry – set LEVEL at 10 (if more than half of the points are selected for removal than increase the level, but try not to exceed a level of 50). Page 21

DELETE POINTS - OPTIMIZE (bundle adjustment) - no K4, p3, p4

**Repeat - "Edit" menu** - Gradual Selection - RECONSTRUCTION UNCERTAINTY - This procedure is this repeated once ensure that more bad points have not surfaced. Use same level as previous step. If any points are selected, delete them, but mind projections. Page 22

DELETE POINTS - OPTIMIZE (bundle adjustment) - no K4, p3, p4

**"Edit" menu** - Gradual Selection- REPROJECTION ERROR -Remove bad points due to matching error, choose a level at which about 10% of all bad points are selected. Page 23

DELETE - OPTIMIZE – check K4 p3, p4

Add scale bar – manual markers or coded targets page 33

Change settings - click hammer and wrench in reference pane. Change tie point accuracy to 0.1. Page 27

OPTIMIZE - check K4 p3, p4

SAVE

**"Edit" menu** - REPROJECTION ERROR -Remove bad points due to matching error, choose a level at which about 10% of all bad points are selected. ""Select, delete, optimize - rinse and repeat until a **level of 0.3 pixels error is reached**.

DELETE points OPTIMIZE - add K4 p3, p4

""Select, delete, optimize - add K4"" – rinse and repeat until a level of 0.3 pixel error are removed. Page 23

*Monitor: projected points per photo to make sure none fall below 100.*

Adjustment results should be SEUW 1

You have reached the desired state. SAVE

You are now ready to create dense point cloud, mesh, texture. Page 36 – 38

Page numbers reference BLM\_Photoscan\_workflow\_1v2NAM

