
Agisoft PhotoScan Change Log

Version 0.8.5 build 1423 (25 April 2012)

Standard and Professional editions

- Added Portuguese user interface translation.
- Bug fixes.

Version 0.8.5 build 1419 (12 April 2012, preview release)

Standard and Professional editions

- Bug fixes.

Professional edition

- Updated EPSG coordinate system codes to version 7.9.
- Added support for datum conversion.
- Added support for custom coordinate systems.

Version 0.8.5 build 1398 (1 March 2012, preview release)

Standard and Professional editions

- Added support for stereoscopic viewing (requires professional graphics card).
- Added support for point selection based on reprojection error.
- Improved photo alignment stability using generic and ground control preselection modes.
- Added Decimate mesh and Export model commands in Batch process dialog.
- Bug fixes.

Professional edition

- Added support for aspect ratio, skew and tangential distortion auto calibration.
- Marker reprojection errors included in the Ground Control pane.
- Improved accuracy of resolution estimate for DEM export.

Version 0.8.5 build 1376 (3 February 2012, preview release)

Standard and Professional editions

- Added support for sparse point cloud editing.
- Added filter by points mode to Photos pane.

- Added LAS file format for point export.
- Improved model generation performance on multi-GPU configurations.
- Bug fixes.

Version 0.8.5 build 1330 (3 January 2012, preview release)

Standard and Professional editions

- Several speed and memory improvements.
- Added support for dense point cloud export.
- Added View Matches command in the Tools menu.
- Added support for masks import and export as individual images.
- Added an option to change size of thumbnails on the Photos pane.
- Cameras and polygons can be deselected in the 3D view while holding Shift key.

Professional edition

- Added support for using markers during photo alignment step.
- Added a separate pane for Ground Control data.
- Added support for loading camera orientations in Ground Control pane.
- Added a camera shift option to specify camera location with respect to GPS sensor.
- Added support for sorting Ground Control list.
- CSV import extended to support different column orders and delimiters.
- Included coordinate system selection option in the mesh import dialog.
- Added a Filter by Markers toolbar button on the Photos pane.

Version 0.8.4 build 1289 (7 November 2011)

Standard and Professional editions

- Improved memory consumption for photo alignment step.
- Bug fixes.

Professional edition

- Improved orthophoto sharpness and quality when original photos have poor quality in the border regions, as well as when the vignetting effect is present on the source photos.
- Lower amount of distortions in the orthophoto in the built up areas.
- Significantly decreased intensity changes across block boundaries when exporting orthophoto in blocks.

- Improved memory consumption for orthophoto export step.

Version 0.8.4 build 1277 (25 October 2011, preview release)

Standard and Professional editions

- Bug fixes.

Professional edition

- Added two pass hole filling algorithm for holeless orthophoto export.
- Added an option for automatic cropping of invalid DEM regions during DEM export.
- Added support for GISCAT telemetry format in the Ground Control dialog.

Version 0.8.4 build 1265 (11 October 2011, preview release)

Standard and Professional editions

- Added TIFF texture format option in the Export Model dialog.
- Bug fixes.

Professional edition

- Added support for point cloud/camera parameters optimization based on ground control data.

Version 0.8.3 build 1224 (17 September 2011)

Standard and Professional editions

- Bug fixes.

Version 0.8.3 build 1212 (11 September 2011, preview release)

Standard and Professional editions

- Added support for selection of photos directly in the 3D view.
- Added an option to configure the number of decimal places used for model/point cloud export.
- Bug fixes.

Professional edition

- Extended Python scripting API.
- Added support for specifying resolution of Orthophoto/DEM in projected units.

- Added an option to display photo locations based on ground control in 3D view before alignment to assist in selection of "good" photos.
- Added "Create Marker" command to the Photo view context menu to create an instance of the marker and place it on all photos automatically.
- Updated coordinate system support according to the latest EPSG version.

Version 0.8.3 build 1154 (14 August 2011, preview release)

Standard and Professional editions

- Improved texture generation performance in Generic mode for high poly models.
- Bug fixes.

Professional edition

- Added support for coordinate systems based on Lambert conformal conic projection (EPSG 3057, etc).

Version 0.8.3 build 1132 (7 August 2011, preview release)

Standard and Professional editions

- Improved error checking in the OpenCL mode.
- Bug fixes.

Version 0.8.3 build 1096 (27 July 2011, preview release)

Standard and Professional editions

- Improved batch processing functionality.
- Chunk merging operation redesigned to generate a new chunk during merging.
- Added a command to switch between orthographic and perspective viewing modes.
- Bug fixes.

Professional edition

- Python scripting support.
- Support for command line processing without GUI.
- Export of georeferencing errors in the Ground Control dialog.
- Support for export of georeferenced models preserving real world coordinates.

Version 0.8.2 build 985 (19 June 2011)

- Bug fixes.

Version 0.8.2 build 979 (12 June 2011)

- Improved Mosaic blending mode.
- Bug fixes.

Version 0.8.2 build 958 (06 June 2011)

New geometry reconstruction methods

Geometry reconstruction methods were redesigned. In the following table a summary of available methods is presented:

Object type	Geometry type	Based on	Equivalent in previous versions
Arbitrary	Sharp	Dense stereo	Exact
Arbitrary	Smooth	Dense stereo	Smooth
Arbitrary	Smooth	Point cloud	New in 0.8.2
Height field	Sharp	Dense stereo	Height field
Height field	Smooth	Dense stereo	New in 0.8.2
Height field	Smooth	Point cloud	New in 0.8.2

New point cloud based geometry reconstruction methods can be used for fast approximate geometry reconstruction. "Height field - Smooth" geometry reconstruction method is useful for orthophoto generation as it allows to get smooth geometry without holes for the whole area even for border zones or zones with no overlapping.

New texture blending mode (Mosaic)

Mosaic texture blending mode gives more quality for orthophoto and texture atlas than "Average" mode as long as it does not mix image details between overlapping photos but uses more appropriate photo. Mosaic texture blending mode is especially useful for orthophoto generation based on approximate geometric model.



Average blending mode

Mosaic blending mode

Improved photo alignment algorithm for large data sets

Solving camera orientation parameters for very large data sets (more than 500 photos) can take quite a long time. An improved version of algorithm is included in the new version, which helps to solve camera parameters for large data sets much faster. This is especially useful when used with preselection option based on measured GPS camera coordinates.

Support for Datums (other than WGS 84)

List of supported datums has expanded. Support for EPSG codes is added to the "Ground control" dialog.

Rotation of the volume selector

Volume selector became rotatable allowing to select working volume more precisely. Red-colored side of selector makes a sense for horizontal plane determination of height field reconstructed models.

Configurable comment string for PDF export

Comment string for the exported PDF can be modified or removed by user during export procedure.

Improved hole filling dialog

Preview is now available from "Close holes" dialog. Slide control allows to see and evaluate the result of hole filling with the current parameters before filling is applied to model.

Support for quad faces during mesh import

Models with quad faces are now correctly imported.

Custom chunk labels

Chunk labels are now modifiable.

Enabling/disabling chunks

Chunks could now be disabled before chunk alignment procedure. Disabled chunk are not taken in account during chunk alignment.

Transparent textures

Texture atlas now supports alpha-channel.

Batch processing

Batch processing is now available. The list of jobs could be entered from GUI with the autosave possibility after each completed step.

Version 0.8.1 build 877 (01 May 2011)

Standard and Professional editions

- Added crash reporting system for Mac OS X and Linux.
- Bug fixes.

Professional edition

- Added support for GPS camera coordinates import from EXIF meta data.

Version 0.8.1 build 841 (22 April 2011)

Standard and Professional editions

- Added preliminary support for Debian/Ubuntu 64 bit.
- Added Accuracy setting for Align Chunks command.
- Added an option to import masks from alpha channel for all photos in a single command.
- Bug fixes.

Professional edition

- Significant improvements in orthophoto generation performance (several times faster).
- Georeferencing procedure is simplified. Added Ground Control dialog for managing ground control coordinates.
- Added support for Omega Phi Kappa file format for point cloud/camera export.
- Added support for Tab-separated values text file format for ground control point coordinates.
- Fixed point cloud export for georeferenced data.

Version 0.8.0 build 794 (16 March 2011)

Standard and Professional editions

- Added support for Russian user interface language
- Bug fixes

Professional edition

- Added support for orthophoto and DEM export in Transverse Mercator and UTM projections
- Added an option to specify export region during orthophoto and DEM export
- Added an option to specify projection plane based on marker locations
- Added support for model export in Autodesk DXF format

Version 0.8.0 build 778 (28 February 2011)

Standard and Professional editions

- Added saving of reconstruction parameters and timings in project files
- Added menu command for generating mask from image alpha channel
- Added a keyboard modifier (Space) for fast switching between navigation and face selection tools in Model view

- Bug fixes

Version 0.8.0 build 764 (4 February 2011, preview release)

Standard and Professional editions

- Bug fixes

Version 0.8.0 build 758 (1 February 2011, preview release)

Standard and Professional editions

- Ported to crossplatform GUI framework
- Added Mac OS X support
- Bug fixes

Version 0.7.0 build 651 (29 December 2010)

Standard and Professional editions

- Reduced memory requirements of the mesh decimation algorithm (40% lower)
- Bug fixes

Professional edition

- Fixed a problem when large orthophotos in TIFF format failed to load in external software
- Improved orthophoto export (added support for orthophoto generation based on the user-specified projection plane)

Version 0.7.0 build 642 (19 December 2010)

Standard and Professional editions

- Reconstruction volume bounding box is now permanent and is saved in the project file
- Bug fixes

Professional edition

- Added "Set Reference Distance" menu command for setting model scale without need to generate keypoint file
- Added "Measure Distance" menu command for measuring distances between reference points

Version 0.7.0 build 635 (12 December 2010)

Standard and Professional editions

- Added K3 radial distortion coefficient in the camera calibration engine
- Added "Keep uv" mapping mode for texture atlas generation
- Added "Export texture" menu command
- Updated 3DS camera export to include original file names when possible
- Added an option to use original file names for "Undistort photos" command
- Bug fixes

Professional edition

- Added keypoint file format reference to the documentation

Version 0.7.0 build 627 (5 December 2010)

Standard and Professional editions

- Added support for camera export in VRML and COLLADA formats
- Bug fixes

Professional edition

- Added support for DEM export in GeoTIFF and Arc/Info ASCII Grid formats
- Improved georeferencing accuracy

Versions 0.2.1 - 0.6.1

Change log not available