

PHOTOMOD 7.2.3544-7.3.3768

General

- Coloring an external LAS point cloud based on project imagery
- Creating DEMs and TrueOrtho based on external LAS point cloud in PHOTOMOD AutoUAS
- 3D-model building speed-up using LAS by DEM
- Transforming LAS into a DEM and TrueOrtho
- Additional distortion coefficients during self-calibration
- Changes in the algorithm of bridge inserting during orthorectification
- Modifying the Voronoy diagram's calculation algorithm during orthoimage creation
- Point filtering according to the results of preliminary adjustment (object-oriented calculator)
- Joints DEM filtering by slope angle and NDVI/NDWI-indices
- NDVI-index recording into the LAS point cloud if the IR-band is available in project imagery
- New 3D-window. A prototype.
- A prototype of an image classifier using NDVI
- Merging rasters into a file from separate file-bands using a correlator
- Support of new Chinese sensors (satellite imaging data processing)

Aerial triangulation

- Optimizing automatic search for tie points with the option "search over the entire image" enabled
- The option "Not to consider points 'without adjustment'" in the relative orientation report window is available
- A list of cameras with their calibrated values is included in the "Block processing" report in case of several cameras.
- TerraPhoto camera format support
- Assigning a new camera to images after adjustment with self-calibration
- Improved Block processing Report

Satellite imaging

- Reading IR-band numbers from satellite image metadata
- Priority of RPC coefficients when using georeferencing in Pan-Sharpener
- Exporting image RPC-coefficients into .RPB
- Correct recognition of the Kanopus satellite 4A level

Digital terrain and surface models

- DEM building speed-up by LAS point cloud
- Modifying dense DEM building (SGM method) in cases of strong GSD change along a stereopair (near and distant views)

- Vegetation recognition by the IR-band when creating a dense DEM (SGM method)
- Considering the existing LAS point cloud classification in the Averaging filter and LAS Interpolation
- NDVI calculation statistics (histogram)
- Displaying information on the selected point in the LAS-viewer window
- Available “Maximum number of adjacent images” option when creating a LAS point cloud
- A pyramid calculation speed-up in distributed DEM building processes
- Fixed incorrect display of DEM NULL-values in the 3D window and the 3D-Mod window
- Fixed error in calculating the embankment volume when comparing two DEMs
- Exclusion of selected classes from DEM
- Preliminary interpolation of a point cloud improving the geometry of smooth objects when creating 3D-TIN

Stereovectorization

- Selection of vector objects according to their spatial mutual arrangement
- New options to the "Objects around Vertices" command

2D and 3D windows

- Polygon area calculation taking into account the 3rd coordinate
- Raster layer download in a 3D-window speed-up

Orthorectification and mosaics

- Orthorectification speed-up when inserting a large number of vector objects
- Changing the algorithm for accounting for invisible zones
- GeoTIFF tags in GIS Panorama (GSK-2011/PZ.90-11) when orthorectifying are added
- Assigning names from attributes when creating sheets in GeoMosaic
- Optional adding text suffixes and prefixes to the names of selected sheets in PHOTOMOD GeoMosaic projects
- Accounting for areas without background when selecting images by marker position

3D modeling (PHOTOMOD 3D-Mod)

- Configuring detailing level when using the “Transform into a grid” tool
- Object centering
- Supporting COLLADA objects
- Supporting models of *.DAE format.
- Fixed a bug that occurred when exporting models to OBJ format with an output file of more than 4 GB
- Optimized Export to .DAE format Options window
- Automatic calculation of the geometry center of OBJ models when importing into PHOTOMOD 3D-Mod to improve the quality of model displaying

TrueOrtho

- Additional options for TrueOrtho global adjustment
- Options for selecting color of TrueOrtho pixels based on source rasters

PHOTOMOD AutoUAS

- Recalculating external (LAS) point cloud into the project's coordinate system
- Interface improvement
- Added buttons to launch Viewer and 3D-Mod
- Distributed processing autorun when launching the program
- External camera support in PHOTOMOD format
- Ability to export 3D-TIN model to open in Cesium

PHOTOMOD GeoCalculator

- Supporting import and export coordinate systems with XML format for external PHOTOMOD GeoCalculator

PHOTOMOD Conveyor

- MegaTIFF image support

Raster Converter

- Fixed algorithm for updating metadata files during converting

Project Manager

- Distributed addition of ADS images to the project via Raster Converter
- Copy paths in the control panel

Import and Export

- Exporting vector objects (points) into .LAS