

PHOTOMOD 6.5.2764 – 7.0.3246

New functions

General

- More GPU support
- PHOTOMOD UAS. Image size is up to 100 MP
- Easy interface of images loading and block layout creation
- Changes of distributed processing GUI
- Fast commands icons in the upper part of main system window
- Distributed processing optimization for NUMA architecture
- System interface adaptation for low-resolution notebook screens

Coordinate systems

- Support of GOST 32453-2017 (including GSK-2011)
- Calculations between MSK / SK-63 and WGS 84
- Geocentric WGS-84 support

Aerial triangulation

- Significant acceleration of big blocks bundle adjustment by using the multithread mode
- Radical changes of tie point measurement algorithm for UAS images in order to increase the quality
- AT parameters presets for different type of territory (basically UAS)
- Intellectual first approach for the bundle adjustment (independent models)
- Increased adjustment reliability for "poor" data (not-stable angle and overlap values)
- Speeding up the self-calibration
- Import EO angle values from XMP-format
- Simple and fast GCP searching over the block of images
- Acceleration of tie points measurements for no-pyramid images
- Speeding up parallax and triplets filtering
- Importing camera passports from Metashape and Pix4d
- Reading and saving triangulation points catalog in multithread mode
- A capability of adding the shift to projection centers coordinate values
- Table with a list of images and corresponding triangulation points

Satellite imagery

- Displaying the azimuth value along with off-nadir angle in the window of manual tie point measuring

DTM and DSM

- New algorithm of the point cloud computing
- DSM – DTM filter
 - New parameter – "Slope angle"

- "Down" blunder detection
- TrueOrtho using option
- Several passes filtering for hilling areas
- Fast filling the "holes" in DSM by using distributed processing
- "Dividing" DSM and point cloud creation processes (by the appropriate options)
- MI (Mutual Information) for DSM building
- Point cloud filtering by data density
- Automatic "penalty" values pre-calculation (DSM)
- Displaying statistics of the point cloud and DEM
- Building DEM for several areas, limited by the vector polygons
- Median filter acceleration
- DSM-DTM filtering inside or outside selected polygons
- New interface of the "Histogram" window and increased speed of its calculation
- Batch and distributed DEM transformation between the coordinate systems
- A capability to manage output DSM precision
- Profiles from DEM interface changes
- New interface of volume calculation dialog
- Embedding TIN to DEM possibility
- Export of map projection/datum parameters to MTW format

TrueOrtho

- 4 channels TrueOrtho
- Rejecting pixels of big color distinctions

3D modeling

- Multiply speed up of 3D-TIN texturing
- 3D-TIN smoothing tools while the texturing
- 3D-TIN window changes
- Export of 3D-model to multilayer OSGB format
- Automatic TIN holes interpolation

Vector editor

- The grid-surrounding cursor in order to estimate the size of vectorization object
- Import of 3D-face objects from DXF format
- Export to DXF with 2D-option

Ortorectification and mosaic

- Cutlines algorithm corrections
- Images loading acceleration in **PHOTOMOD GeoMosaic**
- Additional options of datum / projection export to **GeoTIFF**

PHOTOMOD Conveyor

- Now it easy to install and start