

Change log

PHOTOMOD 5.21.1249 — 5.23.1416

General

- > 64-bit implementation of creating contours by points and satellite imagery block adjustment
- > Ability to process Pleiades imagery
- > Support of JPEG 2000 files with the size bigger than 2 GB
- > Renewed button and progress design icons
- > Ability to open windows with different coordinate systems simultaneously
- > Ability to show coordinate system information in corresponding context menu item
- > Ability to open in the "Read-only" mode files already opened in another program in the "On record" mode
- > Protection from memory overflow during MegaTIFF files processing
- > Ability to move across the block in the each frame when activating stereopair mode
- > Display of cursor coordinates in the 2D-window statusbar
- > Statistic information about selected folder and absolute path to it in the statusbar of system resources
- > Corrections of TAB format for compatibility with Credo
- > Import of CSV files with the size bigger than 4 GB
- > Support of EGM 96 and EGM 2008 geoids
- > Inclusion GIS "Panorama" 2011 mini" into distribution disk

Raster Converter

- > Button "Save radiometric parameters of selected images to their RMC files"
- > New submenu in the command "Add to list". It enables to "add all images from the current folder" and "add all images from the current folder and subfolders"
- > Option "Do not process images, only extract metadata"
- > General or distributed ADS data converting
- > Distributed satellite imagery converting to internal format with regard for automatic search

Core

- > Support of OS Win2008R2 for local version
- > Option of pixel coordinate system for marker moving
- > Support of degrees-minutes-seconds mode for CSV files import
- > New command — "Block — Split into strips — By metadata". It intends for satellite imagery projects and splits block into strips, in each of which closed images from the same circuit may be adjusted like one patchwork.
- > Libraries for support of VisionMap SLF
- > Ability to do matching in radiometric correction window when pressing button "Auto". 2 new methods: "Standard deviations" and "Autocolor"
- > Ability to create stereo quality map on the base of parametric search criterion
- > Ability to filter images by heading and pitch
- > New command — "Orientation — Delete points outside useful areas".
- > Display of information about focal length of the camera in detailed report on interior orientation of the image
- > Sorting by name and size in profile and virtual folder panels
- > Window of ground sample distance (GSD) for the group of images in menu "Block"
- > Parameter "Interpolation grid step" for accelerated transforms of ADS data
- > Ability to cut DEM by selected polygons
- > Option "Swap X,Y" for DEM creation by csv file
- > Renaming of command "Direct georeferencing" to "Adjustment by exterior orientation data"
- > New setting "Total texture size used for displaying project images in the block scheme window" on the bookmark "System"
- > Hot keys for hiding of 2D-window right panel (Ctrl-F11) and maximization of work area (Ctrl-Shift-F11).
- > Modification of coordinate displaying in the status line of 2D-window
- > Ability to full of DEM by average height values in the vertexes of selected vector polygons.

- > Command "Window — Layer view mask". It enables to edit joined images in the overlapping area dynamically.
- > Commands of stereopair select from menu "Window" are moved to new submenu "Stereopairs".
- > Command from menu "Service" related to the work with rasters are moved to individual menu "Rasters"
- > Commands from menu "Service", command "Create Fast-Ortho", as well as launch of Mosaic and GeoMosaic are moved to menu "Rasters"
- > Saving of output rasters with LZW-compression for the implementation of pan-sharpening
- > Replacement of affine model of image georeferencing by projective model in the corresponding window of menu "Rasters"
- > Ability to change correction method for one-channel rasters in the window "Autolevels"
- > Ability to import Exif metadata from origin UAV images
- > Ability to rename project in the window "Project Management".
- > Command "New 2D-window (single images)" in the menu "Window"
- > Button "Autolevels for selected images" in ImageWizard.
- > Ability to display information about images (sensor, processing level, survey date) in attributes of every object after implementation of command "Create vector layers from block layout for satellite blocks"
- > Field of folder input for accelerated search in import satellite images window.
- > Support of the command "Orientation — Load triangulation points" in the window of stereopair.
- > Dialogue for image selection during creating of vector layers from block layout
- > Ability to select options: "Serial numbers" or "From image names", - for splitting satellite images into strips by image names"
- > Moving of the command "Load atlas" to the menu "Service".
- > Moving of the command "Build pre-regions" to the menu "Block".
- > Moving of the DEM check commands to submenu "DEM — Check"
- > Display of relative overlapping in the report on relative orientation for monoblocks of satellite survey.
- > Default activated option "Delete empty strips when deleting images" in block scheme settings
- > Moving of the button "Auto change stereopair" in projects VisionMap to the toolbar
- > Option "Settings — Control — Adjust stereopair slope angle"
- > Option "Settings — Block scheme — Rotate block scheme window content by 180?" for inhabitants of southern hemisphere

AT/AAT

- > Ability to use raw DEM during automatic tie point measurement
- > Using of the option "Block layout — Projective transform" default in the point measurement window
- > History of moving across images in the point measurement window
- > Button "Automatically choose images containing point" in the tie points list.
- > Automatic layout of images being in separate strips by order in the point measurement window
- > Automatic using of DEM already loaded in the project for measure heights in the point measurement window
- > Button "Add GCP from active image" in the GCP list window.
- > Labels of sensor name and nadir-off angle for every satellite image in the point measurement window
- > Commands "Move/Add measurement into marker position" and "Add or more point measurements to marker position on all images" in the context menu
- > Export of the table of tie points measurements with fields to CSV file.
- > Buttons of group point type in GCP list window: "Ground control/Check/Excluded"
- > Setting of minimum dispersion in the window of tie point measurement parameters

Solver S/A

- > Ability to display adjusted EO data and copy them to origin data in the window of the exterior orientation data list.
- > Buttons of the EO status changing ("Control/Check/Unused") for selecting images in the window of the exterior orientation data list.
- > Button "Self-calibration parameters" in the main window of the adjustment parameters
- > Regrouping of the options in the dialogues of independent stereopairs and independent strips methods
- > Checkboxes of group mode switching on the bookmark "Images" in SolverS parameters
- > Automatic creating of the groups by tie points with automatic filtering bad part of tie points
- > Checking of manually grouped tie points in the column "Geometry" of the report
- > Separated input of the weights for manual and automatic measurements in the window of bundle adjustment parameters
- > Option "Bias and drift" like type of the refinement for RPC-blocks with less than 3 ground control points
- > Support of affine generic adjustment model (from 4 and more control points per image)
- > Adjustment with using of DEM for RPC-blocks
- > Generic method of block adjustment for SPOT5 images of 2A processing level
- > Adjustment parameter defining a criteria of iteration stopping — "Coordinates delta threshold".
- > Support of projects with a very small and very big distance between object and camera (less than 20 m and more than 10^7 m)

DTM

- > Commands "Substract one polygon layer from another" and "Intersect one polygon layer with another" in menu "Vectors — Topology"
- > Command "Projective transform" in menu "Vectors — Geometry"
- > Filter by image texture and command "Thinning" in menu "Vectors — Filter"
- > Command "Convolution smoothing" in menu "Vectors — Interpolate"
- > Command "In batch mode" in menu "Vectors — Build contours"
- > Option "As smooth curves" in menu "Vectors — Build contours — Smooth model"
- > Options "Selected objects" and "Maximal distance restricted by "in the command "Vectors — Geometry — Add intersection points"
- > Command "Split into layers by object type" in menu "Vectors — Geometry"
- > Options "Color by Z value" and "Color by attribute value" in the command "Vectors — Attributes — Color by attribute value"
- > Command "Set labels" in menu "Vectors - Attributes"
- > Option "Open read-only" in the window of vector loading
- > Range of acceptable stereo angles, nadir-off angles and distance to the boundary in the window of stereopair parametric search
- > Option "Create outscribed rectangles for sheet" in the command "Create standard orthomap sheet frames"
- > Optimization of TIN creating in order to build smooth model of contours ("TIN — Interpolate")
- > Options "Cut CSV file by rectangle edges" and "Cut CSV file by selected polygons" in menu "Vectors — Geometry"
- > Support of irregular points set import from CSV file into DEM without compute points stage of processing
- > Button "Read extents from file" in parameters of DEM creating from CSV file
- > Command of height measurement not only on the origin but also on the subsampled DEM with ability to input image subsampling factor.
- > Support of the double sheets for latitudes to north of 60
- > N in menu "Vectors - Create standard orthomap sheet frames"
- > Parameter "XY plane area on the reference surface" in the command "Polyline properties"
- > Commands "Show/hide labels in all layers" and "Show/hide labels in active layer" in menu "Edit"
- > Ability to export all line objects irrespectively of the number of vertexes in the window of the export vectors to CSV file
- > Export of vectors to PLY file
- > Option "Split into fragments" for the export of DEM to CSV file.

Mosaic

- > Saving of images with LZW-compression
- > Checkbox "Speed/Quality" in the parameters of creating fast-ortho images
- > Ability to change values of any field with synchronous recalculation of all other fields in the window "Print map"

GeoMosaic

- > Options: "Full cache size" (default 256 Mb), "Restrict cache size from" (default 300 images), "Maximal number of simultaneously opened images" (default 64 images) in the window "Service — Parameters — GeoMosaic"
- > Individual layer type "Clouds"
- > Distributed creating of useful areas and clouds
- > Adjusting detail of image edge search for calculation of useful areas
- > Commands "Source images outlines" and "Source images layout" in the menu "Misc"
- > Command of the clouds saving only for selecting images
- > Option "Not use clouds" in the window of cutlines creating
- > Buttons "Save" and "Open" in the window of clouds detecting parameters.
- > Option "Force" in the window of clouds detecting parameters
- > Option of clouds saving without topology checking
- > Toolbar "Cutlines type" with buttons "Image", "Transparent with reference image", "Background" and "Transparent without filling"
- > Option "Minimal offset from boundaries" in the window of cutlines creation parameters.
- > Marking of all related cutlines when opening window with origin images
- > Ability to move metadata of origin images into cutlines layer with saving of all attributes.
- > Ability to build cutlines
- > Option "Synchronize cutlines selection" in menu "Misc"
- > Ability to see previous image for simultaneous view and color correction of the images (buttons "Current+Previous", "Current +Next")
- > Option "Raster — Create overview pyramids when loading georeferenced images and DEMs" in the window of settings
- > Option "Mosaic — Parameters — Output — Create pyramids" for creating of pyramids for output rasters
- > Attributes: average GSD, number of channels and raster size, - for polygons associated with images
- > Option "Fast view in zoom $\geq 100\%$ " in the window "Service — Settings — GeoMosaic — Preview"
- > Command "Layer view mask" in the menu "Window"
- > Ability to load DEM: "Service — DEM"
- > Option "Link of vector data to the project". During saving of the project all resources save with names linked to the project name
- > Saving of images with LZW-compression
- > Serial number of the image in the heading of the project images list window
- > Button "Select images in active layer" in the window of project images list
- > Ability to input the scale when loading tie point errors into the layer
- > Command "Misc — Open images in marker position"
- > Filtering of tie points
- > Option "Search along selected cutlines" in menu "Points measure parameters"