

Digital Photogrammetric System

PHOTOMOD

Version 8.1

USER MANUAL

Hotkeys
(Linux)

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The system provides using of customized and non-customized hotkeys, that partially duplicate *menu items* and *toolbars buttons*, and also allow to open the *custom menus* (see the “Hotkeys and custom menus” chapter of the “[General information](#)” User Manual). The most of hotkeys used in the system could be changed in the **Customize hotkeys** window (**Service** › **Customize hotkeys** - see the detailed description in the “Customize hotkeys” chapter of the “[General information](#)” User Manual).


1. Opening windows and toolbars

Shortcuts like **Ctrl+Alt+<letter>** are used to open the following windows, toolbars and modules:

| Keyboard shortcut | Action |
|-------------------|---|
| Ctrl+Alt+B | to open the Block editor window |
| Ctrl+Alt+C | to open the Marker window |
| Ctrl+Alt+D | to open the Measurements window |
| Ctrl+Alt+E | to open the Explorer window |
| Ctrl+Alt+G | to open the Triangulation points window on the GCP list tab |
| Ctrl+Alt+I | to open the Manage project cameras window |
| Ctrl+Alt+K | to open the Points measurement module with images containing marker position |
| Ctrl+Alt+L | to open the Block layout window |
| Ctrl+Alt+M | to open the Mosaic module |
| Ctrl+Alt+O | to open the Project management window |
| Ctrl+Alt+P | to open the Settings window |
| Ctrl+Alt+R | to open the Relative orientation report settings window |
| Ctrl+Alt+T | to open the Triangulation points window on the All triangulation points tab |
| Ctrl+Alt+W | to open the 2D-window (stereopair) window |

2. Navigation

2.1. Windows with a list of files/folders of Windows file system

| Keyboard shortcut | Action |
|--------------------|--|
| Ctrl+Alt+O | to open the Project management window |
| Left arrow | to move to a folder that includes selected file, i.e. to rise one level <i>up</i> in the Project management window |
| Right arrow | to display content of selected folder, i.e. to open the folder in the Project management window |
| F3 | in the Project management window (Project › Open/manage ) allows to pass from the projects list to input field used for input of key word for project search. Moreover, you can click the F3 button after keyword input for projects search to perform sequential search for projects in the list |

2.2. The Explorer window and windows for resources load/save

| Keyboard shortcut | Action |
|--------------------|---|
| Ctrl+Alt+E | to open the Explorer window |
| Left arrow | to move at one subfolders level <i>up</i> |
| Right arrow | to show content of selected folder, i.e. to open the folder |



For example, keys **Left arrow** and **Right arrow** also work in **Raster Converter**, **Add images**, **Add pushbroom images** windows.

3. The main system window and layer manager

The following hotkeys are available in the main system window:

| Keyboard shortcut | Action |
|--|---|
| F1 | to open user manual |
| Shift+F8 | to show/hide brightness/contrast/gamma correction pane located on the bottom of the window |
| Ctrl+F8 | to show/hide scroll bars |
| Ctrl+F11 | to show/hide layer manager window, and also navigation window |
| Ctrl+Shift+F11 | to expand/collapse 2D-window, and also show/hide layer manager window, and also navigation window |
| Ctrl+S | to save active layer |
| Ctrl+Shift+S | to save active layer with a new name |
| Ctrl+Q | to close active layer |
| Ctrl+I | to display information about active layer |
| H | to show/hide active layer |
| Ctrl+H | to show/hide titles in active layer |
| Ctrl+Shift+H | to show/hide titles in <i>all</i> layers |
| Shift+arrows | “panning” for 0,9 of the window size, i.e. shift of the window content for 0,9 of the window size |
| Alt+arrows | “panning” for 8 pixels, i.e. shift of the window content for 8 pixels |
| Ctrl+arrows | move selected objects in plane by 4 directions |
| Ctrl+2 / Ctrl+4 / Ctrl+6 / Ctrl+8 [numeric key-board] | move selected objects in plane by 8 directions |
| Ctrl+PgUp / Ctrl+PgDn / Ctrl+mouse wheel | move selected objects along Z axis |
| Mouse wheel | scroll list of points/coordinates/files in windows with scrollbars |
| Tab | to temporarily hide toolbars |

- **Ctrl+O** – allows to open context (custom) menu, containing layer loading preferences

| Keyboard shortcuts in context menu | Action |
|------------------------------------|--|
| L | to open Load LAS window |
| G | to open layer, containing Grid |
| T | to open layer, containing DTM, represented as a triangular irregular network (TIN) |
| V | to open layer, containing vector objects |
| D | to open layer, containing DTM, represented as a DEM |
| R | to open layer, containing georeferenced rasters (from resources) |
| W | to open 3D-window |

- **Ctrl+N** – allows to open context (custom) menu, containing the options of data construction or new layer preferences

| Keyboard shortcuts in context menu | Action |
|------------------------------------|---|
| D | to create DTM as a DEM, based on triangular irregular network (TIN) |
| T | to create DTM as triangular irregular network (TIN), based on points and structural lines |
| C | to create a contours, based on triangular irregular network (TIN) |
| V | to create vector layer |
| S | to create vector layer with the Classifier |
| G | to create grid layer |

- Press and hold the **Alt** key during opening of new 2D-window for single image (**Window › New 2D-window (single image)**) allows to open the image in 1:1 zoom, otherwise, it will be opened in 2D-window in full.




Press and hold left mouse button during the operation **Window › New 2D-window (single image)** instead of mouse clicks.

- Press and hold the **Alt** during choosing the **Rasters › Load georeferenced images (files/resources)** menu item to load selected image to 2D-window immediately using parameters of the last loading, otherwise prior to load selected image file a settings window is opened (used to select coordinate system and background color).





Press and hold left mouse button during the operation **Window › New 2D-window (single image)** instead of mouse clicks.



- Press and hold the **Ctrl** key while opening the **Measurement** window (the  button of the main toolbar), that allows to not change current active layer in Manager, otherwise the *Marker* layer becomes active. In the same way, press and hold the **Ctrl** key while closing the **Measurement** window, that allows to not change the *Marker* active

layer (if the window was opened without using the **Ctrl** key), otherwise the layer which was active before opening the window becomes active.



3.1. Scaling

| Keyboard shortcut | Action |
|--|---|
| Alt+1 | 1:1 zoom |
| Alt+2–Alt+4 | customized zoom |
| Alt+0 | previous zoom |
| Alt+5 | “preset zoom” (used to switch between two customized zooms) |
| Alt+Enter | show window content in a whole (zoom to fit) |
| = [main keyboard] | zoom management |
| - [main keyboard] | zoom management |
| * [numeric keyboard] | zoom management |
| / [numeric keyboard] | zoom management |
| Ctrl+Alt+mouse move with pressed left button | zoom in of image part located inside of rectangle defined by mouse  |
| Ctrl+Alt+Shift+ mouse move with pressed left button | zoom out of image part located inside of rectangle defined by mouse  |
| Ctrl+Alt+mouse wheel | zoom change |
| Ctrl+Alt+mouse click | 1 step zoom in |
| Ctrl+Alt+Shift+mouse click | 1 step zoom out |




Press **Ctrl+Alt** hotkeys (or click an appropriate button to enable the  mode) and drag a rectangle by mouse to zoom in area of image. Press **Ctrl+Alt+Shift** hotkeys (or **Shift** key only, if the  mode is already enabled) and drag a rectangle by mouse to zoom out area of image.

3.2. Marker

| Keyboard shortcut | Action |
|--|---|
| Ctrl+Alt+C | to open the Marker window |
| Ctrl+mouse move with pressed left button | to drag selected object in plane |
| Alt+mouse move with pressed left button | enables panning mode |
| Shift+mouse move with pressed left button | to select by rectangle in group selection mode (the  and  buttons in Tools additional toolbar) |
| Esc | cancel selection |
| F4 | turn on/off “marker=mouse” mode |
| F6 | turn on/off fixed marker mode (<i>roam-mode</i>) |
| F7 | center window by marker |
| ~ | move marker to current vertex |

| Keyboard shortcut | Action |
|--|---|
| PgUp / PgDn | move marker along Z axis |
| Alt+Shift+mouse move with pressed left button along vertical line | fast marker move along Z axis |
| Arrows | move marker in plane by 4 directions |
| 2 / 4 / 6 / 8 [numeric key-board] | move marker in plane by 8 directions |
| Ctrl+Alt+Ins | to copy position of marker in 2D-window to clipboard (Edit › Copy marker to clipboard) |
| Alt+Shift+Ins | to move marker to position in 2D-window copied to clipboard (Edit › Paste marker from clipboard) |










Objects selection by polygon in group selection mode by polygon (the  button of the **Tools** toolbox): **Shift** + mouse click – used to define first vertex of polygon, mouse click – to specify every next vertex, double click – to define the last vertex of polygon (to finish a polygon drawing), **Esc** – to cancel polygon drawing for objects selecting

3.2.1. Snapping and multi-snapping modes



For work in *snapping* mode (**V**, **B**, **N**, **M**) *only* the hotkeys are used.

| Keyboard shortcut | Action |
|-------------------|---|
| V | to execute 3D snapping to vertices (when the mode was enabled with hotkey, marker moves to the vertex nearest to the marker position) |
| B | to execute 2D snapping to vertices (when the mode was enabled with hotkey, marker moves to the vertex nearest to the marker position without changing marker's height value) |
| N | to execute 3D snapping to lines (when the mode was enabled with hotkey, marker moves to the point on vector object segment, closest to the marker position, with exact match with XYZ coordinates) |
| M | to execute 2D snapping to lines (when the mode was enabled with hotkey, marker moves to the point on vector object segment, closest to the marker position, without changing marker's height value) |
| 2 | to turn on/off 2D multi-snapping mode – marker moves to vector object elements (vertices, medians etc.), XY-plane marker coordinates match to coordinates of object elements, Z-height of marker is not changed ( button in Vectors additional toolbar) |
| 3 | to turn on/off 3D multi-snapping mode – marker moves to vector object elements (vertices, medians etc.), XYZ marker coordinates match to coordinates of object elements ( button in Vectors additional toolbar) |
| 4 | to turn on/off Snapping to points mode – marker snaps to vertices of vector objects. Label End appears near that vertices ( button in Vectors additional toolbar) |
| 5 | to turn on/off Snapping to medians mode – marker snaps to medians of vector objects. In case of detecting object segment at the distance of lower than Detect radius , its median is highlighted by small grey circle symbol. |

| Keyboard shortcut | Action |
|-------------------|---|
| | Label Midpoint appears near that medians ( button in Vectors additional toolbar) |
| 6 | to turn on/off Snapping to lines mode – marker snaps to segments of vector objects. Label Nearest appears near segment point closest to the marker position ( button in Vectors additional toolbar) |
| 7 | to turn on/off Perpendicular snapping mode (allows to build orthogonal polylines/polygons and to snap segments of drawing objects to segments of existed objects in perpendicular manner) –  button in Vectors additional toolbar |
| 8 | to turn on/off Snapping to coords mode (allows to build polylines/polygons orthogonal to the basic or additional coordinate system, as well as accurately orient drawing objects regarding vertices of existed vector objects) –  button in Vectors additional toolbar |



2D snapping is used while creation an object coinciding with existing one only in XY plane. If, for example, it is necessary to add an extension to building with different height.



In snapping mode there is a possibility to draw a part of the created object over existing one.

4. Other system windows

4.1. Progress bar

- **Ctrl+C** / **Ctrl+Ins**, as well as the **Copy** context menu item, allow to copy event log to clipboard.
- **Ctrl+Shift+C** / **Ctrl+Shift+Ins** allow to copy event log to clipboard in inner format.







Click an event log area to use hotkeys.

4.2. The “Block editor” window

| Keyboard shortcut | Action |
|--------------------|---|
| Ctrl+Alt+B | to open the Block editor window |
| Ctrl+F | search for an image by name (part of name) |
| Ctrl+A | choosing (highlighting) of all block images |
| Shift+Ins | add a new strip |
| Shift+Del | delete chosen strip |
| Ins | add images from files, located <i>out</i> of active profile resources |
| Del | delete chosen images |
| Ctrl+arrows | move chosen images right/left/up/down |



4.3. The “Camera” window

- **Ctrl+Ins/Ctrl+Del** in tables of the **Camera** window (,  in the **Manage project cameras** window) allow to add/delete the table row. Press the **Shift** key while clicking the $10^3/10^{-3}$ buttons to multiply/divide distortion coefficients specified in the table by 10, otherwise by 1000.
- Press and hold the **Alt** key during closing of the **Camera** window (the ,  buttons in the **Project management** window) that allows to not re-calculate interior orientation.











4.4. The “Classifier” window



- **Ctrl+F** on the **Codes** tab in the **Classifier** window (**Window** > **Classifier**) allows to search for specified keyword in the Code table, **F3** – to move to the next code, containing the keyword specified.

4.5. The “Undo log” window

| Keyboard shortcut | Action |
|---------------------|--|
| Ctrl+Z | to cancel the last operation of vector objects editing on a layer ( button in main toolbar) |
| Ctrl+Shift+Z | to redo the last undone operation ( button in main toolbar) |

5. Work in “Points measurement” module

| Keyboard shortcut | Action |
|--|--|
| Ctrl+= | to add a tie point to marker position on selected image (duplicates the  button) |
| Space, Ctrl+Space | are used to search for and add a tie point on two (Space) or on all (Ctrl+Space) opened images (duplicate the  or  buttons) |
| Q | shows correlation coefficient of current image and left image in the marker position (duplicates the  button) |
| F, Ctrl+F | to perform search for a point with marker position, but without proposition about new point adding (or press and hold the Alt key while clicking the  or  button) |
| Shift+C | to synchronize markers in all windows with images and center by marker the image in active window |
| Shift+* / Shift+ / [numeric keyboard] | to zoom images in all opened windows at once (synchronously) |
| Ctrl+123456789 | to adjust a step of move in Stereowindow () |
| Alt+Ins / Alt+Del / Ctrl+F | to add/delete/search for GCP on the GCP list tab () of the Triangulation points window (with automatic enabling of editing mode during points adding or deleting) |
| Alt+ | Alt during adding of GC point () allows to add only one measurement on selected image, otherwise – on all opened images |

| Keyboard shortcut | Action |
|---------------------------------|--|
| mouse double click | click in the Map window (opened using the  button in the Points measurement window) allows to search for marker position only on opened images of the Points measurement window; |
| Shift+mouse double click | click in the Map window (opened using the  button in the Points measurement window) allows to search and open only the images that contain marker position |
| D | to turn on/off the distance measuring mode in windows of opened images |
| H+mouse wheel | to change the horizontal size of the frame around the marker |
| V+mouse wheel | to change the vertical size of the frame around the marker |
| B+mouse wheel | to change the size of the frame around marker on both axes |



To display the frame around the marker choose the **Show frame for centering on area objects** item in the right-click menu (in the window of opened image).

In order to hide the frame choose the **Show frame for centering on area objects** item in the right-click menu once more.

6. Work in stereomode

- **F9** – turn on/off stereomode in 2D-window with stereopair;
- **F11** – toggle a phase in stereo window when stereomode is enabled, or toggle left/right frame when stereomode is disabled;
- **F2** – adjust depth – allows to change images parallax to superpose marker;
- **F3** – restore depth – allows to set images parallax to stereopair default value;
- **Shift+PgUp** / **Shift+PgDn** / **Shift+mouse wheel** – used to change parallax of image (not marker);
- **Shift+F2** – set marker parallax to zero value (at current images parallax);
- **Shift+F3, Home** – set marker parallax to default value for stereopair;
- **Shift+F7** – turn on/off mode of fixed parallax marker;
- **Ctrl+Shift+mouse wheel** – change images Y-parallax;
- **Alt+Shift+mouse move with pressed middle button along horizontal line** – fast change of image parallax;
- Press and hold the **Shift** key while clicking OK in the **Select stereopair** window (**Window** › **Stereopairs** › **Select stereopair**) after *highlighting* of one of two *selected* images on the **All images** tab, leads to opening of the *highlighted* image in 2D-window as a *right* stereopair image, otherwise (by default) images position in a strip is considered during stereopair opening.



Enabled checkbox in the list means choosing the object, blue highlight – object highlighting in the list.

- **Space** – allows to place marker on a model surface automatically using correlator.

6.1. “Change stereopair” toolbar / “Stereopairs” menu

| Keyboard shortcut | Action |
|-----------------------------|--|
| Ctrl+Alt+Right arrow | to open next stereopair in strip |
| Ctrl+Alt+Down arrow | to open stereopair one strip down |
| Ctrl+Alt+Left arrow | to open previous stereopair in the strip |
| Ctrl+Alt+Up arrow | to open stereopair one strip up |
| Ctrl+J | to jump to the best stereopair automatically |





7. Rasters











| Keyboard shortcut | Action |
|---------------------|--|
| Ctrl+Shift+1 | to use one of three modes of displaying raster images in 2D-window: Cached only |
| Ctrl+Shift+2 | to use one of three modes of displaying raster images in 2D-window: Depending on zoom |
| Ctrl+Shift+3 | to use one of three modes of displaying raster images in 2D-window: Source only |

8. Vectors


| Keyboard shortcut | Action |
|-------------------|--|
| Ctrl+O,V | to open layer, containing vector objects |
| Ctrl+N,V | to create vector layer |
| Ctrl+N,S | to create vector layer with the classifier |
| Ctrl+N,C | to create a contours, based on triangular irregular network (TIN) |
| I | to display selected vector object properties (Vectors › Polyline properties) |
| Z | to open Elevations interpolating window (see the “ Vectorization ” User Manual) |







8.1. The “Vectors” toolbar

| Keyboard shortcut | Action |
|-------------------|--|
| P | to enable point objects input mode ( button in Vectors additional toolbar) |
| L | to enable non-closed polylines input mode ( button in Vectors additional toolbar) |
| G | to enable polygons input mode ( button in Vectors additional toolbar) |
| C | to enable CAD-objects creating mode ( button in Vectors additional toolbar) |


| Keyboard shortcut | Action |
|-------------------|---|
| R | to enable roofs creating mode ( button in Vectors additional toolbar) |
| A | to enable orthogonal input mode of vector objects ( button in Vectors additional toolbar) |
| S | to enable orthogonal input mode of vector objects for additional coordinate system ( button in Vectors additional toolbar) |
| Y | to enable streamline input mode of vector objects ( button in Vectors additional toolbar) |
| T | to turn on tracing mode ( button in Vectors additional toolbar) |
| X | to enable curve check points editing ( button in Vectors additional toolbar) |
| W | to select a vertex, located in marker area on a distance specified in the Swath field (Service > Settings > Vectors) ( button in Vectors additional toolbar) |
| E | to move marker to the selected vertex automatically ( button in Vectors additional toolbar) |
| 2 | to turn on/off 2D multi-snapping mode – marker moves to vector object elements (vertices, medians etc.), XY-plane marker coordinates match to coordinates of object elements, Z-height of marker is not changed ( button in Vectors additional toolbar) |
| 3 | to turn on/off 3D multi-snapping mode – marker moves to vector object elements (vertices, medians etc.), XYZ marker coordinates match to coordinates of object elements ( button in Vectors additional toolbar) |
| 4 | to turn on/off Snapping to points mode – marker snaps to vertices of vector objects. Label End appears near that vertices ( button in Vectors additional toolbar) |
| 5 | to turn on/off Snapping to medians mode – marker snaps to medians of vector objects. In case of detecting object segment at the distance of lower than Detect radius , its median is highlighted by small grey circle symbol. Label Midpoint appears near that medians ( button in Vectors additional toolbar) |
| 6 | to turn on/off Snapping to lines mode – marker snaps to segments of vector objects. Label Nearest appears near segment point closest to the marker position ( button in Vectors additional toolbar) |
| 7 | to turn on/off Perpendicular snapping mode (allows to build orthogonal polylines/polygons and to snap segments of drawing objects to segments of existed objects in perpendicular manner) –  button in Vectors additional toolbar |
| 8 | to turn on/off Snapping to coords mode (allows to build polylines/polygons orthogonal to the basic or additional coordinate system, as well as accurately orient drawing objects regarding vertices of existed vector objects) –  button in Vectors additional toolbar |
| D | to change default axes direction of additional coordinate system ( button in Vectors additional toolbar) |

8.2. The “Tools” toolbar













| Keyboard shortcut | Action |
|-------------------|--|
| Ctrl+Alt+A | turns the alignment mode on ( button in Tools additional toolbar) |



| Keyboard shortcut | Action |
|--|---|
| Ctrl+Alt+S | to scale vector objects during their transformation in the alignment mode ( button in Tools additional toolbar) |
| Ctrl+Alt+Ins | to copy position of marker in 2D-window to clipboard ( button in Tools additional toolbar) |
| Alt+Shift+Ins | to move marker to position in 2D-window copied to clipboard ( button in Tools additional toolbar) |
| Ctrl+Shift+V | to paste vector objects from clipboard to active vector layer into marker position ( button in Tools additional toolbar) |
| Shift+mouse move with pressed left button | to select by rectangle in group selection mode (the  and  buttons in Tools additional toolbar) |



Objects selection by polygon in group selection mode by polygon (the  button of the **Tools** toolbox): **Shift** + mouse click – used to define first vertex of polygon, mouse click – to specify every next vertex, double click – to define the last vertex of polygon (to finish a polygon drawing), **Esc** – to cancel polygon drawing for objects selecting

8.3. The “Topology” toolbar / The “Topology” menu

| Keyboard shortcut | Action |
|-------------------|--|
| Shift+C | to convert polyline to polygon ( button in Topology additional toolbar) |
| Shift+B | to convert polygon to polyline ( button in Topology additional toolbar) |
| Shift+P | to merge selected polylines into a single one by adding a segment between two last vertices of merging polylines ( button in Topology additional toolbar) |
| Shift+G | to merge selected polygons that have overlap or common border ( button in Topology additional toolbar) |
| Shift+X | to split a polyline into two ones in the closest to marker vertex ( button in Topology additional toolbar) |
| Shift+I | to split several polygons and polylines using “cutting” polyline ( button in Topology additional toolbar) |
| Shift+D | to remove a segment connecting two vertices of polyline/polygon ( button in Topology additional toolbar) |
| Ctrl+D | to remove a vertex with adjoining segments |
| Shift+S | to select polyline/polygon vertex closest to marker position |
| Shift+V | to connect creating line to existed one in a closest to marker vertex ( button in Topology additional toolbar) |
| Shift+L | to connect creating line to existed one in arbitrary place of segment ( button in Topology additional toolbar) |
| Shift+N | to continue construction of the previously created polyline |
| Shift+M | to draw a border of one polygon along a border of another one ( button in Topology additional toolbar) |
| Shift+A | to create polyline along another polyline up to marker position ( button in Topology additional toolbar) |
| Shift+F | to continue creating polyline along another polyline up to nearest join vertex ( button in Topology additional toolbar) |

| Keyboard shortcut | Action |
|-------------------|--|
| Shift+Z | to continue creating polyline/polygon along other vector objects up to selected vertex ( button in Topology additional toolbar) |
| Shift+R | to substitute a polyline/polygon fragment ( button in Topology additional toolbar) |
| Alt+S | (Vectors › Topology › Object fragment › Select start point of fragment , see the “Adding/deleting object fragment” chapter of the “ Vectorization ” User Manual) |
| Alt+D | to delete polyline/polygon fragment (Vectors › Topology › Object fragment › Delete line fragment) |

8.4. The “Geometry” menu

| Keyboard shortcut | Action |
|-------------------|---|
| J | to move <i>point/vertices to marker position</i> (Vectors › Geometry › Move point to marker) |
| K | to move <i>all vertices to marker height</i> (Vectors › Geometry › Move to marker height) |
| ~ | to move <i>marker to selected vertices</i> (Vectors › Geometry › Move marker to selected point) |
| Ctrl+F | (Vectors › Geometry › Orthogonalization forward , see the “Vertices editing” chapter of the “ Vectorization ” User Manual) |
| Ctrl+B | (Vectors › Geometry › Orthogonalization backward , see the “Vertices editing” chapter of the “ Vectorization ” User Manual) |

8.5. The “Selection” menu

| Keyboard shortcut | Action |
|-------------------|---|
| Ctrl+< | to select an object, previous to selected |
| Ctrl+> | to select an object, next to selected |
| < | to select a polyline vertex located <i>before</i> the selected one; sequence of vertices is displayed when you select a vector object (see the “Vector object properties” chapter of the “ Vectorization ” User Manual) |
| > | to select a polyline vertex located <i>after</i> the selected one; sequence of vertices is displayed when you select a vector object (see the “Vector object properties” chapter of the “ Vectorization ” User Manual) |

8.6. The “Clipboard” menu

| Keyboard shortcut | Action |
|---------------------|--|
| Ctrl+C | to copy selected vector objects to the clipboard |
| Ctrl+V | to paste vector objects from clipboard to active vector layer |
| Ctrl+X | to cut vector objects from active layer and copy them to clipboard |
| Ctrl+Shift+V | to paste vector objects from clipboard to active vector layer into marker position |

8.7. Grid

| Keyboard shortcut | Action |
|-------------------|----------------------|
| Ctrl+N,G | to create grid layer |

8.8. Snapping mode

| Keyboard shortcut | Action |
|-------------------|--|
| Ctrl+Space | duplicate Edit › Snapping › Select a segment for a snapping menu item. Is used during snapping to the selected segment's prolongation or parallel |

9. Terrain

9.1. Points

| Keyboard shortcut | Action |
|-------------------|---|
| Ctrl+O,V | to open layer, containing vector objects (points) |

9.2. TIN

| Keyboard shortcut | Action |
|-------------------|---|
| Ctrl+O,T | to open layer, containing DTM, represented as a triangular irregular network (TIN) |
| Ctrl+N,T | to create DTM as triangular irregular network (TIN), based on points and structural lines |
| Ctrl+T | to enable/disable editable TIN layer visibility |




9.3. DEM

| Keyboard shortcut | Action |
|-------------------|---|
| Ctrl+O,D | to open layer, containing DTM, represented as a DEM |
| Ctrl+N,D | to create DTM as a DEM, based on triangular irregular network (TIN) |

9.4. Contours

| Keyboard shortcut | Action |
|-------------------|---|
| Ctrl+N,C | to create a contours, based on triangular irregular network (TIN) |

10. Work in Geomosaic program

- Press and hold the **Shift** key while creating a preview (**Mosaic › Preview**  and **Mosaic › Preview (current sheet)** ) to perform re-calculating of brightness adjustment (duplicate the  **Mosaic › Rebuild brightness adjustment** button).