

Quick Guide MALÅ Vision Desktop

Signing up and installing the software

Visit malavision.guidelinegeo.com to create a MALÅ Vision account and to sign up for a MALÅ Vision Premium subscription. The MALÅ Vision Desktop software can be downloaded from www.guidelinegeo.com. Log in using your MALÅ Vision credentials. Always make sure you use the latest version of the software.

Note: Make sure you have internet access when starting MALÅ Vision Desktop for the first time. You will be prompted to log in to your MALÅ Vision account to verify that you have an active premium subscription. After this initial log in, your computer will remain verified for a period of 30 days, after which you will need to log in to your account again.

Getting started

When you have logged in you can choose to either create a new project or open an existing project.

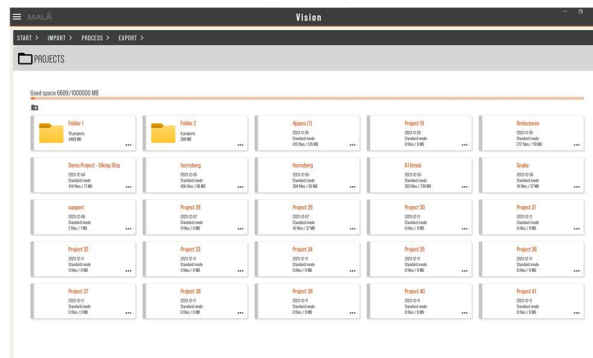
Note: Account and applications settings, projects, subscription details and help & support menus are available in the main menu.

To create a new project, press **New project**. Start by naming the project. Then drag and drop the data files or folders directly on screen or use the **Browse** function to import files.

Note: If you drag and drop a complete folder, MALÅ Vision Desktop will automatically decide which files are needed and add them to the upload window.

Press the **Import Files** button to begin the import and to open the main workspace of MALÅ Vision Desktop.

To open an existing project, click the *Open Projects* button on the start page. All available projects are listed with name and size. The available disk space is displayed at the top and folders can be created/deleted and sorted to organize the different projects. Additional options are available by clicking the three dots in the lower corner of each project icon.



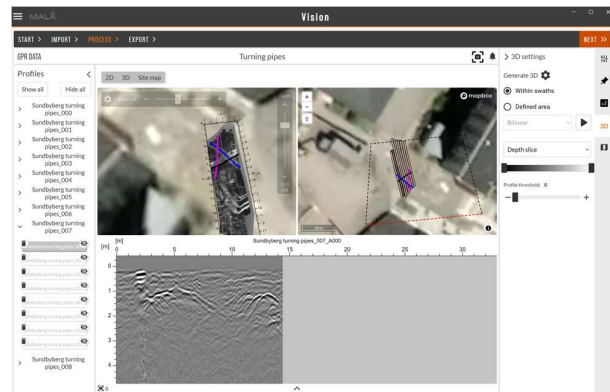
Note: MALÅ Vision Desktop is a very user friendly and efficient software for processing especially optimized for working with MIRA, MIRA HDR and MIRA Compact data. The software will automatically process and interpolate the imported data set. The auto interpolation option can be disabled, by changing the Interpolation setting in the Application settings menu (main menu).

Main view

In the main workspace view you can choose to display any combination of the 2D, 3D and Site map windows.

On the left-hand side you will find a pop-out menu containing a list of your imported profiles/swaths and in the right-hand side pop-out menu you can access different toolboxes for Filters, Interpretation, Analysis, 3D settings and the Site Map.

Both left and right menus can be hidden using the arrow buttons.



Filters

To add a filter to your data, press the **Add filter** button in the Filter toolbox and select the suitable filters. Many filters can also be adjusted using sliders which appear when clicking on the filter in the filter list. Display settings, such as contrast and aspect ratio can also be adjusted in this menu. The profile and depth slice contrast level can also be adjusted either with the slider in the 3D window or by using the keyboard shortcut: **alt + mouse wheel**.

Interpretation

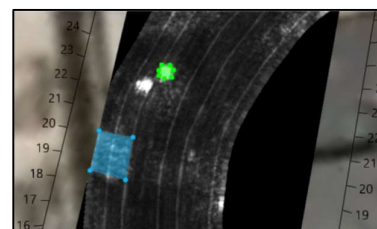
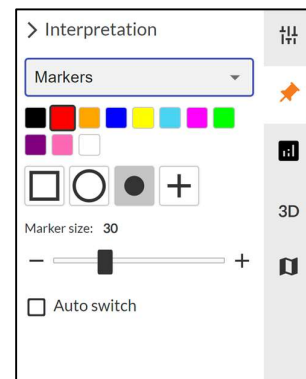
To add interpretations in the form of markers, polygons or polylines, choose the **Interpretation toolbox** and select the type of interpretation object to use in the drop-down menu, as well as its size, shape and color.

Left-click in your profile to add a marker. To move or delete a marker, right-click on the marker in the profile and select the appropriate action. To edit a marker, left-click on the marker and use the right-hand side toolbox menu to change the appearance of the marker.

Use the Auto switch option to automatically jump to the next 2D profile in your profile list after setting a marker.

You can convert a group of added point markers to a polyline by right-clicking the last marker and selecting "convert markers to polyline" or make a polyline by using the polylines option in the dropdown menu.

The option Polygons allows marking of areas in the 3D view. Left-click to add nodes to 3D view, the nodes will automatically form an area.




Analysis

In the Analysis tab you can open a trace view, flip profiles, toggle between time and depth for the vertical unit, set the velocity (manually or using pre-defined values), adjust the time zero and use the hyperbola fitting tool.


Hyperbolas can be added to the radargram for an easy velocity estimation. Press *Add hyperbola* and place the hyperbola in the radargram.


3D settings

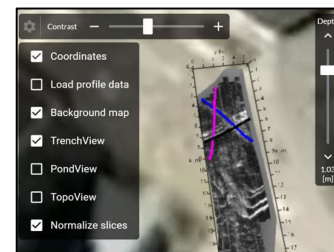
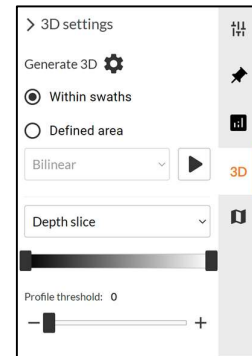
In the 3D settings you can interpolate your data, change your 3D color palette, and control the profile threshold.

To create an interpolated 3D volume, check the interpolation settings , decide if you wish to interpolate within swaths (for MIRA data) or in defined areas (for MIRA data and 2D data).

Add one or several defined areas depending on where you want to carry out the interpolation by using the + sign.

Press the play button  to start the interpolation process. This can be stopped at any time. A progress bar will indicate the remaining interpolation time.

When finished, use the depth slider in the 3D view to browse through the interpolated depth slices. You can also use the keyboard shortcut: **shift + mouse wheel**. Additional 3D settings are available by clicking the 3D settings button  next to the contrast slider.

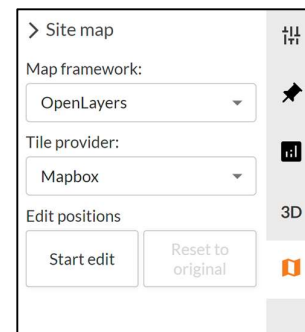


Site map


In the Site map toolbox your GPR profiles/swaths, markers, polylines and polygons are displayed on either a vector map, a satellite image or with a white background if your data is collected in a local grid.

Any annotations collected in the field using the MALÅ Controller App are also visible on the Site map.

In the Site map toolbox, you can edit the geometry of the collected profiles/swaths in different ways. Activate the edit options by clicking *Start edit*.



Screenshots and additional features

For both 2D, 3D and Sitemap a snapshot tool is available . When using this tool, the current workspace screen is saved. When selecting a Snapshot or an Image from the pull-up menu in the bottom part of the workspace additional markers can be set and a *Free draw* option is available.

Notifications from the software are listed in .

Report and Export

When you have finished your interpretation and created all snapshots, proceed to the Export tab.

With the **Create report** tool you can add both snapshots and text to a standardized report template. They are easily compiled to a report for rapid sharing (as a PDF or in Word format).

The **Export data** option includes export options for GPR files, Depth slices, Profile/Swath locations, Markers, Polylines, Snapshots and Images. The interpretations can be exported as .txt, .csv, .dxf or as .kmz-files (Google Earth format) and the depth slices in PNG or GeoTiff format.

Use the + button to add additional exports items to the same zipped export folder.

The dynamic txt- and csv-export of Interpretations and option Markers contains information about the set markers. Press ⚙️ to open the Export settings pop-up window. With ⊕ you can choose which parameters you wish to export; profile, type, symbol, longitude, latitude, depth (m), GPS-altitude (m), distance from start (m) and color. When clicking on each tab you can set a custom title and depending on the export type change parameters, e.g., transform map projections and add offsets.

Export settings								
Profile	Type	Symbol	Trace	Sample	Coordinate 1	Coordinate 2	Depth	GPS-altitude
Preview (First 4 rows)								
p_r_0001	4	2	138	63	17.91611560	59.45831063	-0.27880224	15.38000000
p_r_0002	4	2	157	64	17.91610737	59.45829949	-0.28904688	15.38000000
p_r_0003	4	2	120	63	17.91610068	59.45828925	-0.27880224	15.39000000
p_r_0003	2	2	80	188	17.91606306	59.45828938	-1.51099389	15.33000000

CLOSE SAVE & CLOSE

Data format and back up

MALÅ Vision Desktop uses its own internal data format. To back up your data and interpretations use the Export option in the Project view. You reach this by Projects in the Main menu or by Open Projects at the start screen. Press *** and choose **Export**. A zip file is created of the project content.



If you want to delete projects, use the Delete option in the Project view. Press *** and choose **Delete**.



User guide

Detailed instructions are available in the *MALÅ Vision Desktop User guide*. Download it from www.guidelinegeo.com