

DTMaster V5.1.1

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- New Feature: Color Stereo Support for Anaglyph
- Patch: 3D Cursor and system mouse interfere in DTMaster 5.1

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New: Windows XP64 and Windows Vista32/64 versions available

INPHO's photogrammetric software supports now the following operating systems: Windows 2000, Windows XP32, Windows XP64, Windows Vista32 and Windows Vista64. The 32 bit and 64 bit versions need different installation setups that can be either downloaded from our home page or are delivered on different DVDs.

The 64 bit versions do have the advantage that the file size limit of 2 GB RAM is no more existing and the processing with certain applications can be faster. By testing different data sets we found the following speed up factors when using 64 bit operating systems compared to processing with Windows XP32:

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- MATCH-T DTM - XP64/Vista64 are ~ 35% faster
- MATCH-T DSM - XP64/Vista64 are ~ 15% faster
- OrthoVista – Vista64 is ~ 25% faster, XP64 is ~ 6% faster
- MATCH-AT, OrthoMaster – same processing times on all operating systems
- DTMaster – no information, no speed up tests till now

The Windows Vista operating system has the following limitations:

- No support of stereo viewing but anaglyph color stereo viewing (Microsoft Vista does not support stereo in a window)
- Windows Vista 64bit requires at least 4 GB of RAM
- To take advantage of the 64 bit operating systems we suggest to install anyhow a minimum of 4 GB of RAM
- Windows Vista SP1 must be installed

The Windows 64 bit versions can be only used with the CodeMeter dongle from WIBU. The Aladdin hardlocks do not support 64 bit operating systems. Please contact sales@inpho.de to get an offer for replacing the Aladdin hardlock with the CodeMeter dongle.

Please note: The Windows 2000 support will be terminated with the next version of INPHO's photogrammetric software.

New Feature: Color Stereo Support for Anaglyph

DTMaster supports color stereo for red-cyan anaglyph glasses. Currently the option is build-in rudimentary within the registry. Activate the color stereo support by setting the default value "0" to "1" at following location:

Regedit – HKEY_CURRENT_USER – Software – Inpho – dtm – 5.1.0 – dtmaster – Preferences – Tuning Options – ColorAnaglyph -> Set value to 1

The option is very helpful for laptop computers or computers without a high-end stereo graphic-card and suited for temporary work.

inpho GmbH highly recommend to work with high-end stereo displays for all photogrammetric tasks.

Patch: 3D Cursor and system mouse interfere in DTMaster 5.1

The system mouse cursor (pointer) cannot be displayed from DTMaster 5.1 within an undocked stereo window. Moving the cursor outside the stereo view, displays the system mouse again. Only the 3D cursor is displayed. The problem is now fixed.

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New Feature: Support of Pushbroom – ADS40 Data

INPHO's photogrammetric software package supports now pushbroom sensor data of the ADS40 camera from Leica Geosystems. The image format levels 0 and 1 are fully supported and can be used in all applications for image processing and display. ApplicationsMaster allows the definition of projects. MATCH-AT Pushbroom enables the aerial triangulation for the ADS40 images. MATCH-T DSM can be used to automatically measure terrain or surface models that can be then checked and modified by DTMaster. Finally orthophotos can be generated with OrthoMaster. The sensor orientation data formats created by MATCH-AT Pushbroom are compatible with the ones created by GPRO.

MATCH-AT Pushbroom requires a license that can be acquired as an extension to MATCH-AT or as a stand-alone license. All other modules are supporting ADS40 data without an extra license. In case of processing level 0 images the different bands can't be currently combined to color composites. Such color composites are in preparation for further releases as well as the support of other pushbroom images.

New Feature: Breakline Filtering

Automatic selection and reclassification of points within a given buffer distance along lines can be executed. Afterwards points can be removed or moved to different layers. There is an interactive and a project wide function available.

New Feature: Square Measurement Tool

DTMaster offers now measuring tools to create perpendicular lines. Two functions allow creating rectangular lines either by measuring the ridges or the corner points of objects.

New Feature: Snapping

DTMaster offers now a large variety of snapping tools. Snapping can be set to vertices, line elements, and to start and end points of lines. The function allows distinguishing between 2D and 3D snapping.

New Feature: Check Project Tools

DTMaster offers now check tools for line crossings, identical points, large xy-distances of lines, large z-distances within lines, and z-monotony of lines. The Check Project Tool creates a list that can be navigated, and offers to repair the problematic situations.

New Feature: Smooth Points

DTMaster offers now smoothing of point clouds, using linear prediction algorithms.

New Feature: Show Excluded Area

DTMaster uses WINPUT coding for layer types. Users of WINPUT code for other applications need to check, if the orientation (clock-wise or counter clock-wise) is set correctly for input data. DTMaster hatches closed objects, related to its WINPUT coding. This helps to easily detect wrongly measured objects.

WARNING: Show excluded area uses a large amount of memory resources of the graphics card. It is recommended to switch off the hatching, if not needed.

New Feature: Working Areas

For systematic data quality control, DTMaster allows now to create tiles that cover the whole project area. The operator can check tile by tile. After a tile is finished, it can be removed. This helps to systematically check the whole project.

New Feature: Interpolate Gap

Interpolate Gap has been modified to work very stable for a large variety of cases. A new linear prediction has been added, which can fill now tube-like gaps and building gaps. Interpolation will now fill most industrial building gaps.

New Feature: Display Scale

DTMaster now displays the scale of the current view.

New Feature: Distance Measurement Tool

Allows measuring or selecting a line to determine a distance. Either the planimetric or the spatial distance is determined. Measuring a polyline will accumulate the line segments and show the total distance of the polyline.

New Feature: Visualize Vertices

Display option to display the vertices of lines as crosses. This option offers users to easily find vertices that are located within almost straight lines.

New Feature: Combine Lines

Multiple lines with start or end point close to each other can be merged into one single line. Tolerances for xy-distance and z-distance between start and end points can be individually defined.

New Feature: Compress Memory Function

DTMaster stores all editing steps in the UNDO stack. If large data sets are deleted, added, moved and measured, than the UNDO stack can get very large and reduce the performance of DTMaster. Executing the 'Compress Memory' function will delete the complete UNDO stack.

New Feature: Add Layers by Template

The Project Manager allows now adding layers to an existing file by using templates. Predefined templates generated with the Template Editor, can be used. The templates include layer name, interpolation mode, lock mode, color, and WINPUT type.

It is possible to add the template to multiple files simultaneously.

New Feature: Show Lines in ProfileView

DTMaster displays now also lines in the ProfileView.

New Feature: Set Background Color

DTMaster offers now with the Preference settings the definition of the display background color. The background color will be used for the OverView and the MainView.

New Feature: Deleting Vertices in Existing Lines

Deleting vertices of existing lines will not split anymore the line into two separated lines.

New Feature: Image Adjustment

Aerial and orthophoto views can be now radiometrically adjusted. Image adjustment offers to change the brightness, contrast, gamma values, and allows RGB corrections.

New Feature: Rotate Object

Already measured vector data can be rotated with the usage of an origin point and an angle.

Change: Project Manager Tab

Every Tab of the Project Manager can be undocked and will float on top of the DTMaster MainView. DTMaster will save the window positions for the next session. They can be easily re-docked to the Project Manager. This allows a flexible window arrangement.

Change: Brush Filter Settings

DTMaster offers now a more flexible Brush Filter management. Additionally to the Brush Filter size, it is possible to set an increment to enlarge or shrink the size step-wise. The settings moved from the Options Tab to the Filter Settings Tab.

Change: ImageTab Settings

The Project Manager offers an ImageTab to set the display options for aerial and orthophoto images. Changing the status has not been stored in former versions of DTMaster. This status will now be saved to the project XML file, and will be used automatically for further sessions of DTMaster.

IMPORTANT: By default the aerial and orthophoto images are now set to display footprint only. Aerial and orthophoto images have to be activated once before they can be displayed.

Should you have any questions regarding the technical details of software, please contact your Support Team at support@inpho.de.