TreesVis



A LiDAR Software designed for forestry practices

Key Features:

- → Advanced real-time 3D-visualisation with fast 3D-engine
- → Visualisation of rawdata (LiDAR-points) and rasterdata in geotiff format (DTM, DSM, nDSM, orthophotos, ...)
- → Extraction of bare ground (DTM) and calculation of vegetation surfaces (DSM) with various methods (to fit differing terrain and vegetation conditions)

RWB-format:

- → Space saving, fast, binary format for LiDAR-data (x,y,z + optionally 7 additional values such as intensity, pulse, etc.)
- → Import functions for las-format and ascii-files
- → Export to ascii and xml format

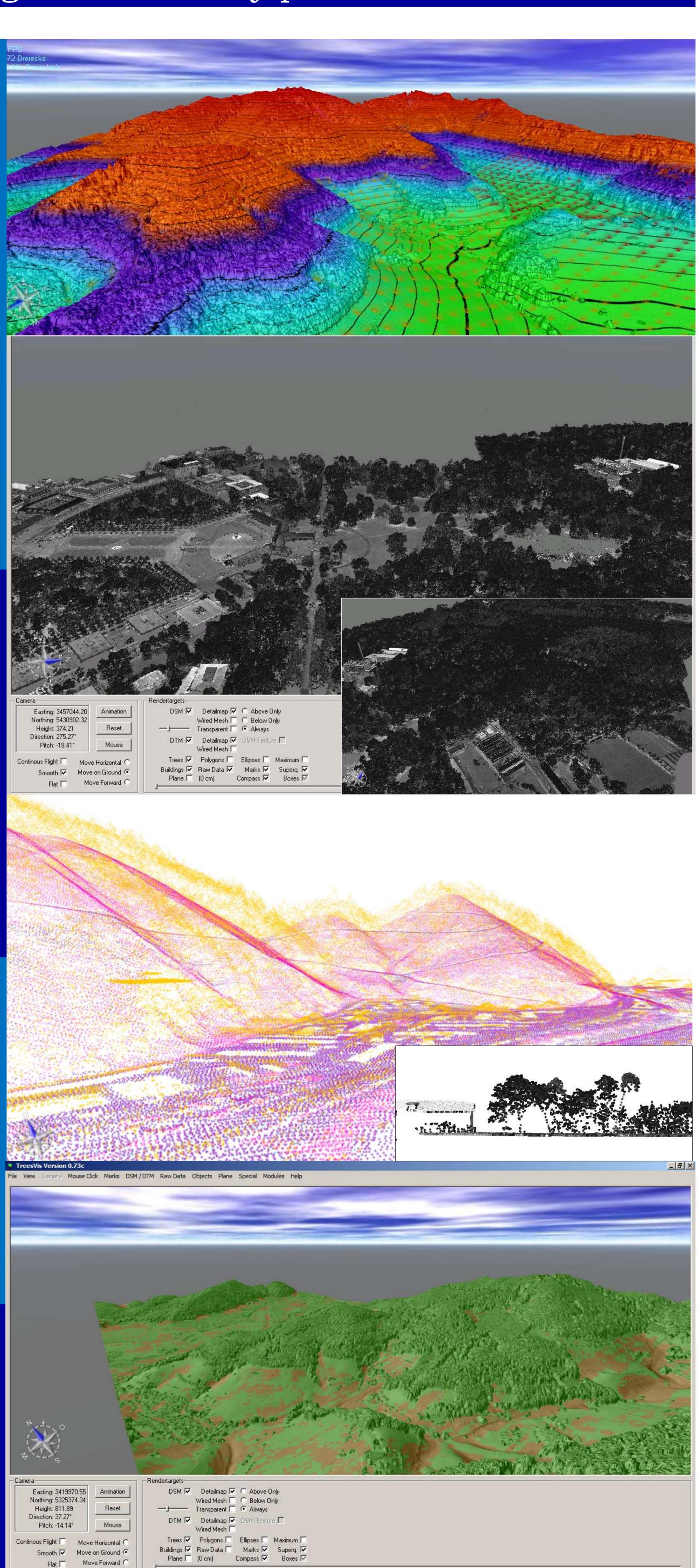
Various Tools

- Resampling of georasterfiles
- Creating transects
- → Creating movies of 3D-flights through your data
- → Visualisation of shapefiles
- Powerful rawdata calculator

Extraction Modules:

(available in combination with Halcon license)

- → Extraction of forest stands
- → Single tree delineation
- → Extraction of canyons



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What is TreesVis?

TreesVis is a powerful processing, analyzing and visualization software for LiDAR laser scanning data developed in C++. It can handle both airborne (fullwave data and common first/last-pulse data) and terrestrial LiDAR data. The software was developed with focus on the special purposes of forestry applications.

TreesVIS provides the comfort of a graphical user interface as well as the control of a shell-output to monitor the processing steps in detail. The GUI comes in common Windows style and provides comfortable access to the functions of TreesVis.

Users that acquire a TreesVis license have the opportunity to cooperate in the further development of the Software. Required or wished Tools can be planed and implemented exclusively or in the overall program.

Key features:

Working with rawdata

- Rawdata can be imported as ASCII or binary
- ASCII data can be easily converted into binary
- Export of rawdata to XML and ASCII
- Advanced functions to union sets of rawdata, filter or separate them relating to the DTM or DSM

DSM and **DTM** extraction

- Extraction of DSM, DTM and nDSM (Difference DSM-DTM) data with customized settings
- Work with terrain adjusted methods for computation
- Tile function for large areas with huge amounts of data with arbitrary rectangular tile size

Visualisation and navigation

- Real-time visualization of point data or DTM/DSM-surfaces in 3D
- Comfortable navigation through the data in 3D-view either by keyboard or by mouse or both simultaneously
- Adaptable view features like illumination or camera settings
- Recording of movies for presentations
- Setting of pointmarks in the terrain and retrieving of 3D-coordinates from every point
- Create transects through the terrain
- Separate loading of tree and buildings polygon data

Special features

- Select the DSM/DTM area, that shall be extracted in a rectangle of arbitrary size and rotation angle. This option is important to save disk space.
- Excluding of existing building polygons that won't be considered in the DTM or DSM extraction
- Setting options for color, illumination and shadow of the DSM/DTM

License

For the fall of 2010 and the upcoming years we introduce a new license system. University and research facilities can acquire a TreesVis license for a reduced price. Student versions are also available.

Prices:

| Student | Educational | Commercial |
|--|---|--|
| Single User License: Full Basic License without "Tile- function" for one year – renewable after handing in a student identification document | Single User License: Full Basic License (incl. Tile-function) for research and educational use 500 € | If you are interested in using TreesVis on a commercial basis please contact us (see contact details below). |
| 50 € | Lab pack (10 x Single User License): 3000 € | |
| | Campus License (unlimited number of Single User Licenses on the campus): | |
| | 10000 € | |
| Additional Halcon Modules not included! | Additional Halcon Modules not included! | |

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