



SCOP++ 5.4.4

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SCOP++ 5.4.4

This version is a PATCH release, a dongle update is not necessary.

Change: licensing

The dongle search order changed:

1. WIBU CodeMeter local key
2. WIBU CodeMeter server key
3. Aladdin Hardlock local key
4. Aladdin Hardlock network key

Patch: LIDAR Filtering

Fixed: Points lying near the lower border (.5*grid width) have been classified as unclassified points.

Patch: File Import with UTM coordinates

Fixed: Problems importing files with UTM coordinates.

Patch: DTM Export into TIN format

Fixed: Problems with not closed border lines.

Patch: PDF with legend

Fixed: Exporting a view including a legend and grid lines to PDF, the grid lines have been drawn over the legend.

SCOP++ 5.4.3 (Jan 09)

This version is a PATCH release, a dongle update is not necessary.

New feature: Consideration of WIBU CodeMeter dongle

The licenses for SCOP++ can be used with an Aladdin Hardlock or WIBU CodeMeter.

Please note: The search order is:

1. Aladdin Hardlock local key
2. Aladdin Hardlock network key
3. WIBU CodeMeter local key
4. WIBU CodeMeter server key

If you have only a WIBU CodeMeter, you can define an environment variable:
HL_SEARCH=ABC to fasten the dongle request.



For more information about WIBU CodeMeter please see the ApplicationsMaster Installation Manual.

SCOP++ needs no more a scop++.key file.

New feature: license management

Important using Aladdin network key or WIBU CodeMeter key :

The command line parameter –U allows to specify which modules should be checked and allocated. So it is possible to use only a subset of the available licensed modules.

With help of this command line parameter, users can define which licenses to be used:

E.g. 2 KERNEL licenses, 1 ANALYZER, 1 VISUALIZER, 1 LIDAR license available:

User 1 can start SCOP++ using 1 KERNEL license.

User 2 can start SCOP++ using 1 KERNEL + 1 ANALYZER license.

User 3 can start SCOP++ using LIDAR to do only LIDAR filtering.

Without defining parameters, the first user gets all SCOP++ licenses – KERNEL, ANALYZER, VISUALIZER and LIDAR.

Example:

Scop++ -U KERNEL,ANALYZER -> SCOP++ uses the KERNEL and ANALYZER license.

The module names have to be separated with a comma, after comma no blanks are allowed.

It is possible to add the –U option within the SCOP++ icon properties under Target (Ziel):

"C:\Programme\Inpho\SCOP++ 5.4\bin\scop++.exe" - U KERNEL

New feature: Possibility to use Wildcards (*, ?) for multiple file import.

E.g.: Defining *.wnp files for import – all Winput files in defined directory will be taken for import.

New feature: new DTM Export format (KERNEL)

Now, it is possible to import and export USGS DEM files.

Please note, the export to USGS DEM needs a prj file with a WKT string for the spatial reference system, the default is UTM31/WGS84.

An own definition can be made writing a file "default.prj" with the WKT string in the current working directory.

Enhancement: DXF layer table (KERNEL)

Number of entries for layer table was increased from 64 to 256.



Patch: Export format VESTRA (KERNEL)

Fixed: Crash using data reduction for DTM export into format VESTRA.

Patch: Export DTM to format DXF as type TIN (KERNEL)

Fixed: The resulting DXF file included only header lines.

Patch: Multiple starts of SCOP++ (KERNEL)

Fixed: Some problems with more than two parallel SCOP++ sessions. The RPC_TdmServer stopped.

Patch: Model Export with limit defined via two points (KERNEL)

Fixed: No export of lines, the points outside the limit were not set to void.

Patch: big DTMs with more than 16 Mio Computing Units (KERNEL)

Fixed: The program crashed while generating DTMs with more than 16 Mio Computing Units with classic prediction.

Patch: Scale definition in Batch Mode (KERNEL)

In batch mode, SCOP++ used the internal recommended default scale instead of the user defined scale (depending on the command file design).
Now, the user defined scale is always used.

Patch: Contour lines (KERNEL)

Fixed: problems in contouring if the DTM includes spot heights inside excluding areas.
Fixed: the parameter omit border did not work not properly.

Patch: DTM generation with classic prediction (KERNEL)

Fixed: problems with more than 16000 lines (form-, break-, or border lines).

Known problem: crash using “triangulation” as filling method

When using data preprocessing to fill automatically data gaps with filling method “triangulation” (model – data preprocessing – filling – filling method “triangulation”) the program crashes. The filling methods “linear prediction” and “moving planes” are working properly.

Restriction: path/file name

A path name can have up to 256 characters. The max. number of characters for a file name is 63 characters.



Please do not use: brackets (curly, squared or round), comma, semicolon, tilde, inverted comma (‘ or ´ or `).

SCOP++ 5.4.2 (June 2008)

This version is a PATCH release, a dongle update is not necessary.

New feature: new format VESTRA for DTM export (KERNEL)

To import DTM data into software VESTRA (AKG software), a new export format was added.

Patch: Contour lines (KERNEL)

Fixed: Missing contour lines for sub-intervals in the left and upper part of the contour line map if limits are defined.

Fixed: unusual small gaps in contour lines if limits are defined.

Patch: Export of models (KERNEL)

Instead of Exporting a Model, it is possible to store only a copy of the model.

Patch: Batch processing after cleanDB

Fixed: Batch processing with an existing project was not possible after execution of cleanDB. The project had to be first opened interactively.

Patch: Batch processing: crash defining a not existent file

Fixed: If a not existent file was defined as import file in a batch procedure, the program crashed.

Patch: length of the input file path name

Fixed: the import crashed if the path name was > 130 characters.

Patch: Display of contours (KERNEL)

Fixed: defined colors of dashed and dot-dashed lines were not considered for display.

Patch: Interpolation (adaptable prediction, moving planes, triangulation)

Fixed: If the number of DTM grid points > 200 millions, SCOP++ message the error:

No successful DTM computation: Failure!
gd_scopdhm(): error. Try with unpacked DTM.

Patch: Export of lines

Fixed: Exporting very much (> 999999) lines, cause false coding.



Patch: DTM Export

Fixed: Exporting a DTM with more than 8192 points per raster row in format (binary) WINPUT or (binary) XYZ or in a TIN format, the resulting file was erroneous, the y-coordinates were false.

SCOP++ 5.4.1 (Nov 2007)

This version is a PATCH release, a dongle update is not necessary.

New feature: Modifications for Contours Export (KERNEL)

- The depression contours are written into an own layer if “mark pits” (Properties Contours) is selected.
- The selection “Index only” was added to generate a file with labels only (enables the KOTPLOT function in SCOP Classic).

New feature: New Import Formats for Models

The formats DTED1, DTED2 and DTED3 were added for import.

Patch: Export Nearest Model (KERNEL)

The export of nearest model works again.

Patch: Import Secondary Model (KERNEL)

Fixed: crash while importing a secondary model.

Patch: Modification of Classify Step (LIDAR)

- Non-classifiable points will be written into a separate file
- Performance problems while sorting out the building points are solved
- Fixed: point gaps in large buildings

Patch: Remove Data / Model (KERNEL)

Fixed: some files were written twice in the selection list.

Patch: Multiple File Import (KERNEL)

Fixed: import of multiple files

Patch: Batch Mode – Export Model (KERNEL)

Fixed: export of model directly after DTM-generation was sometimes blocked.



Patch: Problems with Filenames including Blanks (KERNEL)

Fixed

Patch: Superimposing of Maps (VISUALIZER)

Fixed: superimposing of maps with z-coding or shading in perspective views didn't work.

Known Problems: Export of a DTM with topographic lines using data format SCOP RDH

An exported DTM with topographic lines in format SCOP RDH includes additional points (grid intersections with topographic lines) to increase the DTM accuracy. These points may cause problems in Z-coding and shading.

SCOP++ 5.4.0 (July 2007)

This version is a new release. It is necessary to update the hardlock dongle to work with it. Please deinstall the previous version and install SCOP++ 5.4.0.

New feature: File based processing mode (KERNEL)

The new model overlay mode "filebased" avoids importing data into the internal database of SCOP++ but prepares the data directly for the subsequent DTM generation and/or for filtering. Possible import formats are restricted to LAS, WINPUT, binary WINPUT, XYZ and binary XYZ.

Some minor restrictions apply, especially it is not possible to edit the data within SCOP++.

New feature: Extended DTM export (KERNEL)

DTM export functionality was extended to variable control of DTM contents to be exported. Existing CMF Files are compatible.

New feature: TIN based data reduction for DTM export (KERNEL)

During export (into vector or TIN format) the DTM can be reduced in a qualified mode using hierarchical or irregular data reduction.

New feature: Additional import formats for DTMs (KERNEL)

Following formats for DTM import are added (model only overlay):

- Raw Binary (BIL)
- USGS DEM
- USGS SDTS
- TIFF



New feature: Modified LAS import (KERNEL)

After LAS import selection (before importing the file), it is possible to inspect the file and to get a list of information (button Extraction). Pulse extraction (First/ Last/ All) for data import is possible.

New feature: Insertion of ObjectShapes into DTM (KERNEL)

Line data with encoding 'ObjectShape' (e.g. roofs, WINPUT code 87) are processed in a special manner during model interpolation. Along closed ObjectShapes, jump edges (e.g. house roofs) are inserted into the surface.

New feature: Automatic generation of command files (KERNEL)

Parameter export was extended to writing automatically command files (CMF) of user defined settings (e.g. DTM generation, contouring, profiles ...)

New feature: Access to command file via menu bar (KERNEL)

Access to project command file is possible via Menu → Project.

New feature: Interpolation/Check tool – Overlay data (KERNEL)

New source "Overlay data" to check input data (from overlays of type "data only" and "both") was added to Interpolation/Check tool.

New feature: View export to TIFF with LZW compression (KERNEL)

Export of views to LZW compressed TIFF file is now possible.

New feature: Initial project limits (KERNEL)

Project limits may be defined by user when initializing a new project.

New feature: Color selection for DTM structure visualization (KERNEL)

Definition of colors for structure lines and for point captions are possible.

New feature: Enhanced graphics manager (KERNEL)

Graphics manager for data- and model-overlays was extended to Structure and Slope selection.

New feature: Extended LIDAR classification (LIDAR)

A new step "Classify" was added. Multiple classes (ground, low vegetation, medium vegetation, high vegetation, buildings, low points) according to LAS 1.1 can be exported. The range of values for the different classes is user defined as well as the output file names.



If a LAS file was taken for input, it is possible to write the classification results directly into this file (only in file based mode).

New feature: Circular panorama (VISUALIZER)

Generation of circular panorama views was added.

New feature: Drop perspective view (VISUALIZER)

Dropping a perspective view, the option to delete all files in the perspective overlay directory was added.

New feature: Swapping data to disk (KERNEL, LIDAR)

The amount of data to generate a DTM with the interpolation methods adaptable prediction, moving planes and triangulation depends on the available RAM size.

For adaptable prediction and moving planes it was possible to interpolate about 15 Mio input points with 2 Gbytes RAM. Using triangulation, the max. input points were about 10 Mio points with 2 Gbytes RAM, the maximum point size is limited to 20 Mio.

With version 5.4.0 the program patches the input data and writes scratch files to the disk, so the number for input points are not longer limited by RAM.

However, for triangulation the max. number of input points furthermore is 20 Mio.

Patch: Consideration of UTM coordinates

The input of UTM coordinates of all zones is now possible.

Adaption for DGM-Band and Kottenband formats: 11 digits for x-coordinates.

Export of contours to HL-Band format with UTM coordinates is now possible.

Patch: Zooming of rotated display

Fixed: error when zooming a rotated display

Patch: HL-Band

Fixed: using an outdated intermediate file when exporting contours

Patch: Triangulation, Borderlines

Fixed: handling of borderlines

Patch: LIDAR strategy: remove steps in batch mode

Fixed: bug when removing steps with cmL/cmF



Patch: Check/Interpolation tool

Fixed: problems using source “overlay”.
Checking of two DTMs with common edges works now correctly.

Patch: Data import

Fixed: selecting multiple files at once with filenames of different lengths

Patch: Data import via cmF procedure

Defining multiple input files is now possible.

Information: LIDAR strategies

For the dependent strategies the last SortOut step is replaced by a Classify step.

Information: Project log file

Now, more information are stored in the project log file:

- interpolation: overlay name, data and time, titel and end-line
- preprocessing errors in log file and error file
- errors from “Eliminate Buildings” added to log file
- output for z-coding added

Known problems: Silhouette lines

Wrong silhouette lines may occur when using Panorama or Circular panorama views.

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