



RELEASE NOTES

NAVIEDIT 8.6.2

Last update: 02/12/2021

Version: 8.6.1



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1 Release notes NaviEdit 8.6.2

This is a cumulative release note for NaviEdit 8.6 and the two hotfixes NaviEdit 8.6.1 and 8.6.2.

NaviEdit 8.6 is a major release and remains backwards compatible with previous versions of NaviEdit.

You can find compatibility details via the [EIVA Download Site](#), see Utility.

1.1 Formatting conventions

Items formatted in **bold** are properties, buttons, or other elements in the NaviEdit software.

2 NaviEdit Patch 8.6.2

A minor hotfix from December 2021 including some new features and minor bug fixes.

2.1 New features

- Added import of the Reson S7K logging format
- Added import of the EdgeTech jsf logging format
- Added import of the seismic UKOOA/IOGP P1/11 format.
- Included an export of Speed over Ground (SoG)
- Licence Server support through the Licence Activator.
- Added the option to do a NADCON datum shift during import of NaviScan SBD files with geographical coordinates
- The NADCON shift files are included in the NaviEdit installer and will be installed in the C:\EIVA\Setup\Nadcon directory (for the default installation path)
- Added an option to choose between specifying depth relative to sea surface or relative to multibeam head when applying a sound velocity correction. Previous all depth were relative to the sea surface. For the time being this 'relative to multibeam head' option is working with only online sound velocity or a single sound velocity profile, either just a single one present or as a result of choosing 'use nearest' profile, but not yet working with interpolated profiles.



Figure 1 A multibeam swath with a clear happy smiley from depth water with a flight altitude of only 3 to 4 meters.

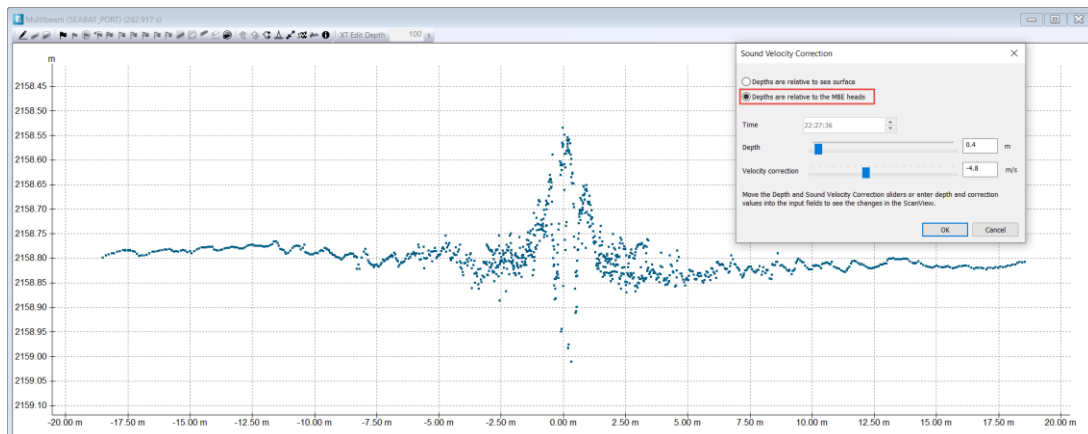


Figure 2 As a result of using the sound velocity correction tool with the option 'depths are relative to multibeam head' the smiley face is removed.

2.2 Minor improvements

- The DataEditor is now defaulting to show the legend in the different sensor views
- The LAS Export now includes an option to specify the WKT version of the geodesy
- The LAS Export has been improved so it is now doing the export faster
- Show the id of a user defined offset in the JobPlanner, Edit, User Offsets dialog
- Add 'Demo Version' to the NaviEdit DataEditor and the HeaderEditor when now valid dongle is present.

2.3 Bug fixes

- Removed the restriction on not being able to recalculate a bathy named 'Height by GPS'
- Fixed a bug where dots were not shown in the Position view when zooming very close in.
- Avoided an error message when saving sound velocity profile corrections when hitting both 'Apply' and 'Ok'
- Until now it has not been possible to detach or delete a database from the JobPlanner, if the database has been the active database in the current JobPlanner session without closing and restarting the JobPlanner. Now you can detach or delete a database which has been the active database during the current JobPlanner session, but you cannot and will never be able to delete or detach the current active one
- Also save the milliseconds when importing a XYZ file. (Still not show in import wizard)
- Avoid a crash on import an empty kmall file
- Remove the unused GUI for 'include deleted beams' setting during import of multibeam files and in the HeaderEditor
- Removed the requirement to set computer time to UTC when merging TerraPos NMA files.
- Fixed an issue where deletion of very large UKOOA P6 bin grids blocks could fail.

2.4 Tips & Tricks

- In the NaviEdit DataEditor when holding down the 'X' or 'Y' button while scrolling the scroll wheel on the mouse only the zoom in the X-axis respectively the Y-axis direction will change

3 NaviEdit Patch 8.6.1

A small hotfix from July 2021 including support for a couple of new sensors and minor bug fixes.

3.1 New features

- Added support for the PingDSP echosounder in NaviScan SBD files.
- Added support for SBG Systems in NaviScan SBD files.
- Geodesy related features:

- Added Projected CRS EPSG Code 5596 Fehmarnbelt TM and JGD2011 Datum to the EPSG Selector
 - Added a projection method description to the Geodesy Selector.
- The screenshot shows the new projection description in the Header editor:

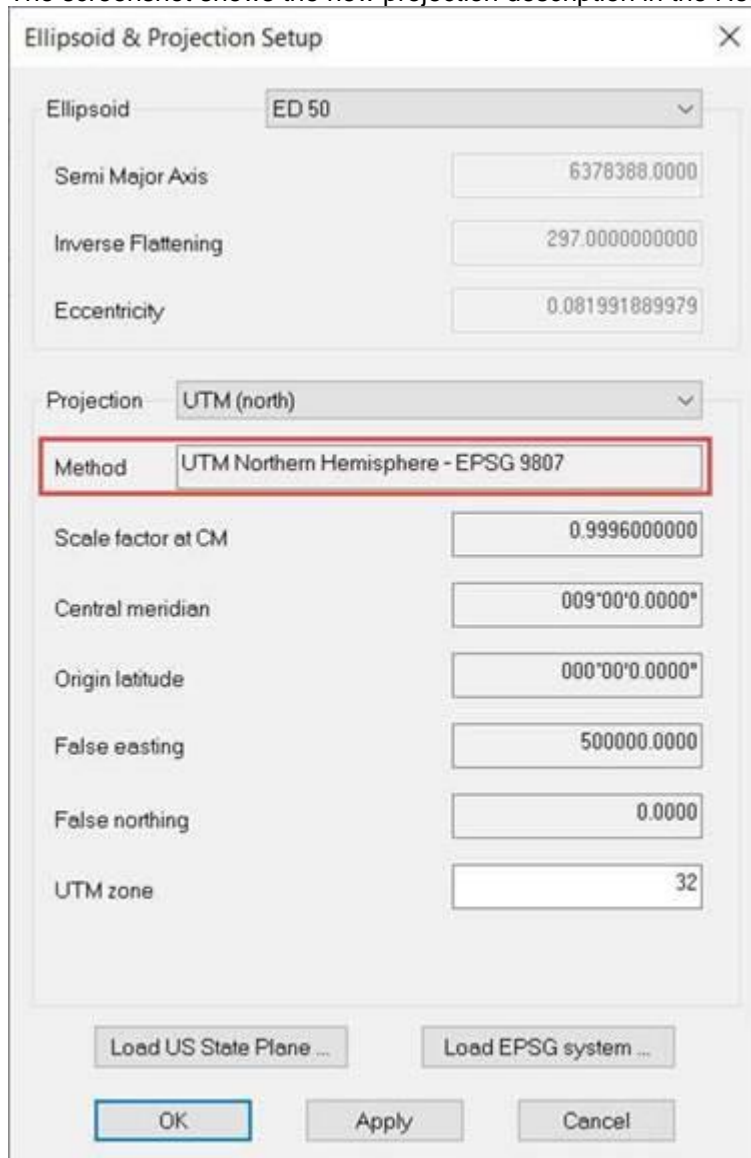


Figure 3 New projection description in the Header Editor

- Added support for the WaterLinked DVL in NaviScan SBD files.
- During import of Imagenex P83 files also extract Heading and Motion from the P83 files.
- Added support for SPRINT-Nav Mini
- NaviPac Interpreter also import positions of dragged objects

- Added the option to use the relative time stamp in the NaviScan SBD files by creating a DWORD registry key at HKEY_CURRENT_USER\SOFTWARE\Eiva\NaviEdit and setting it to 1.
- A possible time difference between the relative time stamp and the absolute time stamp normally used in SBD files is written in the Report.

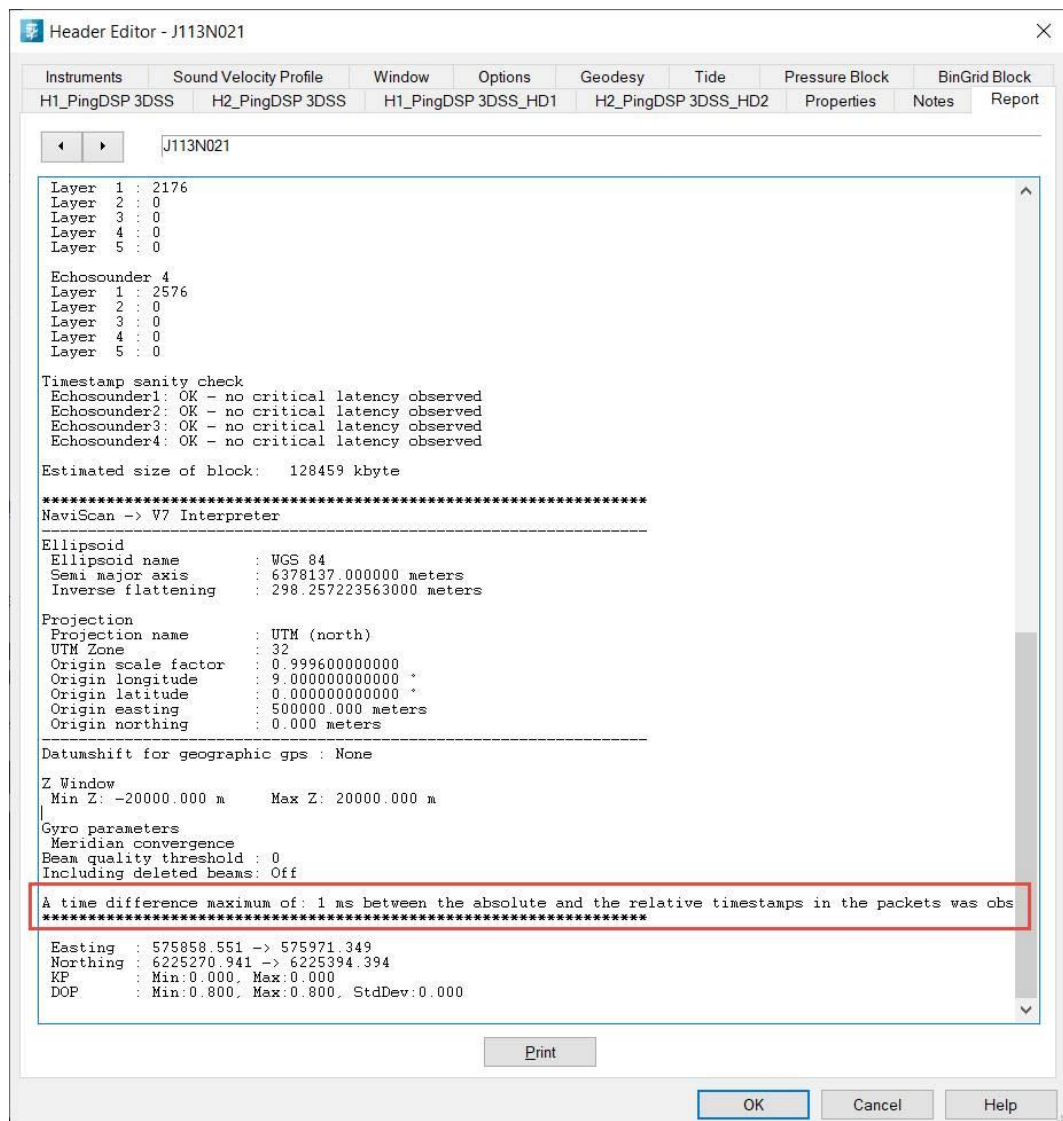


Figure 4 Report showing time difference.

- Added a /NOSQL switch for bypassing MS SQL installation, ODBC and database attachment during installation of NaviEdit. Should be used with the silent switch /S like /S /NOSQL.

3.2 Workflow Manager improvements

- Added the option to activate the LAS/LAZ export from the Workflow Manager
- Enabling the gap handling of Kongsberg files from the Workflow Manager

3.3 Bug fixes

- Copy Motion/Bathy/Position from other block did not set dataflag if data type was not already present.
- Specification of a datum shift in the HeaderEditor is now disabled for P6 bin grids
- Fixed an issue with the Danish System 34 projection
- Import bathy depth even if invalid as the pressure might be valid and useful for a RecalcBathy
- Added missing False Northing in the GUI for the RSO Borneo projection
- The GSF export did export incorrect across and along track values

4 NaviEdit 8.6

This version includes an automatic database upgrade to NaviEdit database version 8.0.4.0 and is designed for direct compatibility with NaviModel 4.5.

4.1 New features

4.1.1 Database upgrade and new SQL Server

- This version includes a database upgrade to NaviEdit database version 8.0.4.0. See <https://www.eiva.com/compatibility-matrix> for compatibility details.
- The Microsoft SQL Server included in this NaviEdit installer is SQL Server 2019 Express. This SQL Server requires Windows 10 64-bit. You can install this **NaviEdit** on a Windows 7 computer; you just need to download the free SQL Server 2012 Express version or connect to a SQL Server on another computer. If you want to install NaviEdit on a Windows 7 computer, select the **Select this option to connect to a SQL Server on another computer** option

during installation.

- If you want to upgrade from SQL Server 2012 Express to SQL Server 2019, you should uninstall the 2012 version first. EIVA does not see any urgent need to do this. NaviEdit databases created with SQL Server 2019 cannot be attached to earlier versions of the SQL Server.
- NaviEdit can connect to either SQL Server 2008 R2, SQL Server 2012, SQL Server 2014, SQL Server 2016, SQL Server 2017, and SQL Server 2019.

4.1.2 Importer of MarineSonic SDS sidescan files (*.sds).

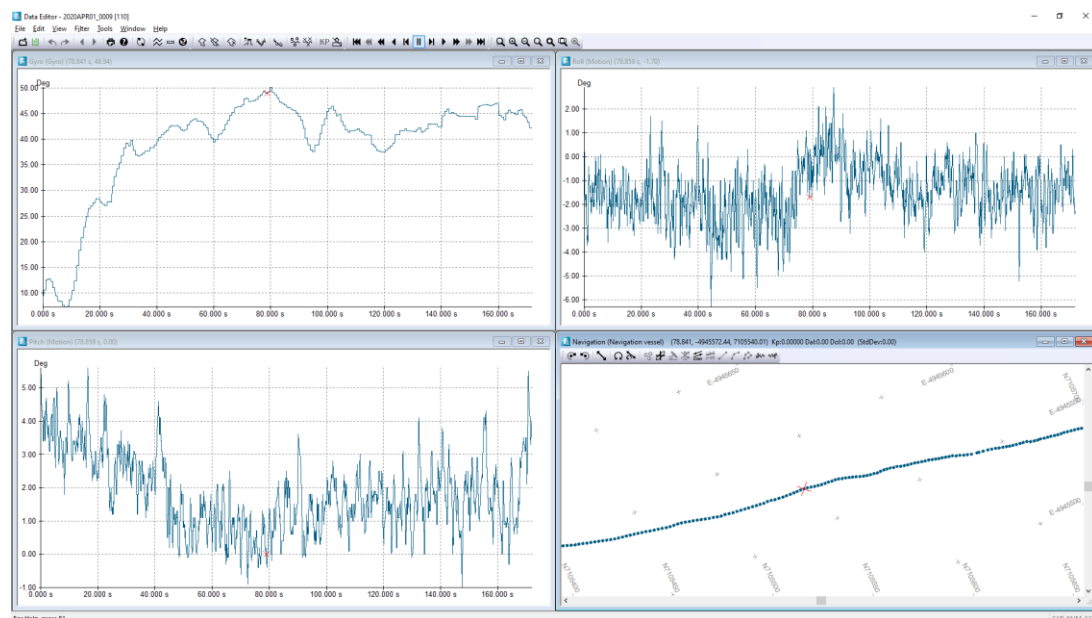


Figure 5 MarineSonics SDS file in DataEditor

Importer of MarineSonic SDS sidescan files into NaviEdit. Please note that the driver only supports navigation and sidescan information – enabling use in NaviModel

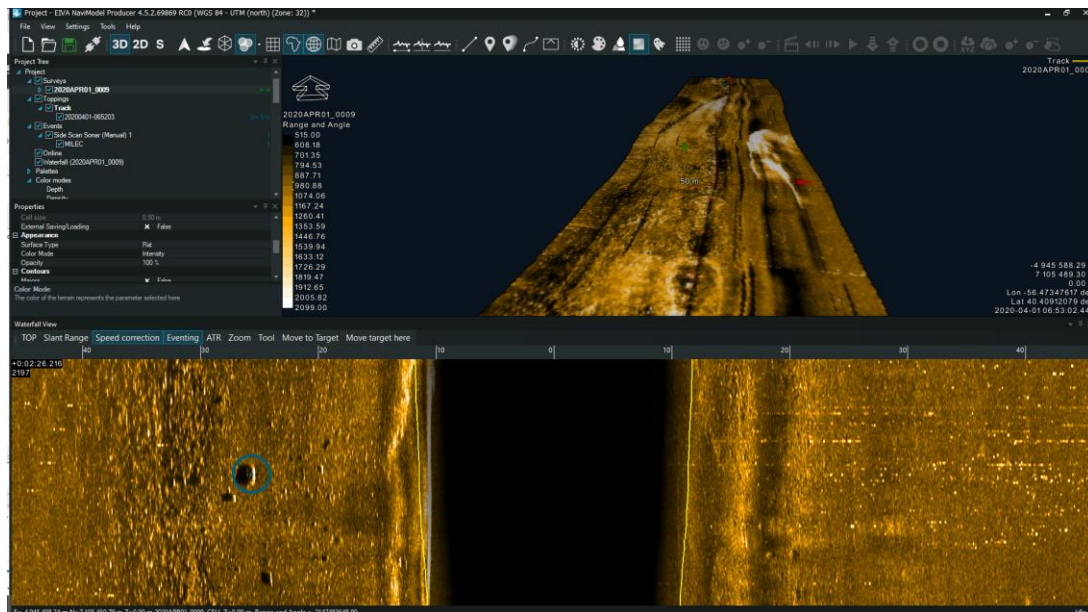


Figure 6 Sidescan displayed as waterfall and mosaic in NaviModel

4.1.3 IOGP/UKOOA P6/11 seismic bin grid files.

Header Editor - P6_11

Bin Grid Geodesy Report

☐ Enable editing

Bin grid origin I

Bin grid origin J

Bin grid origin easting m

Bin grid origin northing m

Scale factor of bin grid

Bin width on I-axis m

Bin width on J-axis m

Map grid bearing of bin grid J-axis °

Bin node increment I-axis

Bin node increment of J-axis

Seismic bin grid orientation

OK Cancel Help

Figure 7 Header Editor - P6/11: bin grid parameters

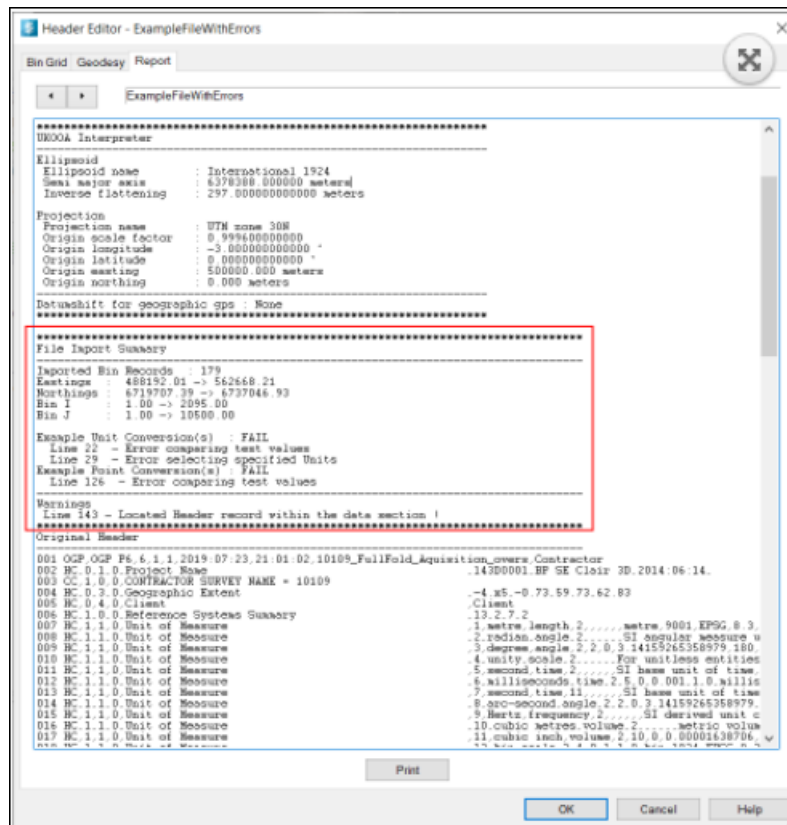


Figure 8 Header Editor – Part of the header in the original report

- Added **HeaderEditor** visualisation of the seismic bin grid. Editing can be enabled. The full original P6/11 header is available in the **HeaderEditor** report tab.
- Added **DataEditor** visualisation of the survey perimeter(s), the **Bin Grid** I and J Origin coordinates and a calculation of the I and J coordinates of the cursor position.
To view the survey perimeter(s) and the I and J Origin, the seismic bin grid block must be linked to a survey file in the **HeaderEditor**.

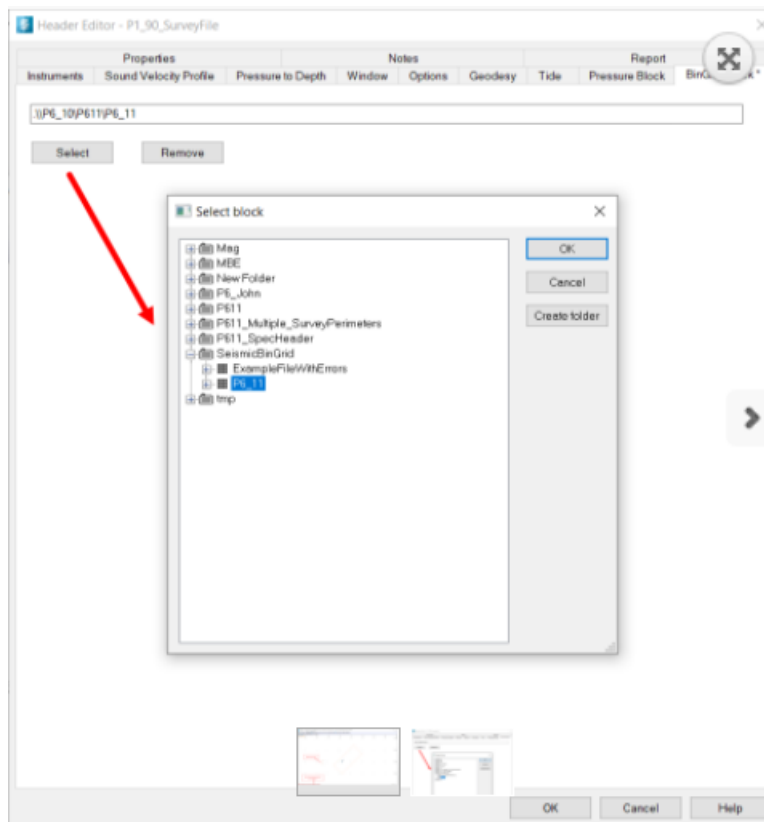


Figure 9 In the HeaderEditor a survey block can be linked to a P6/11 bin grid block

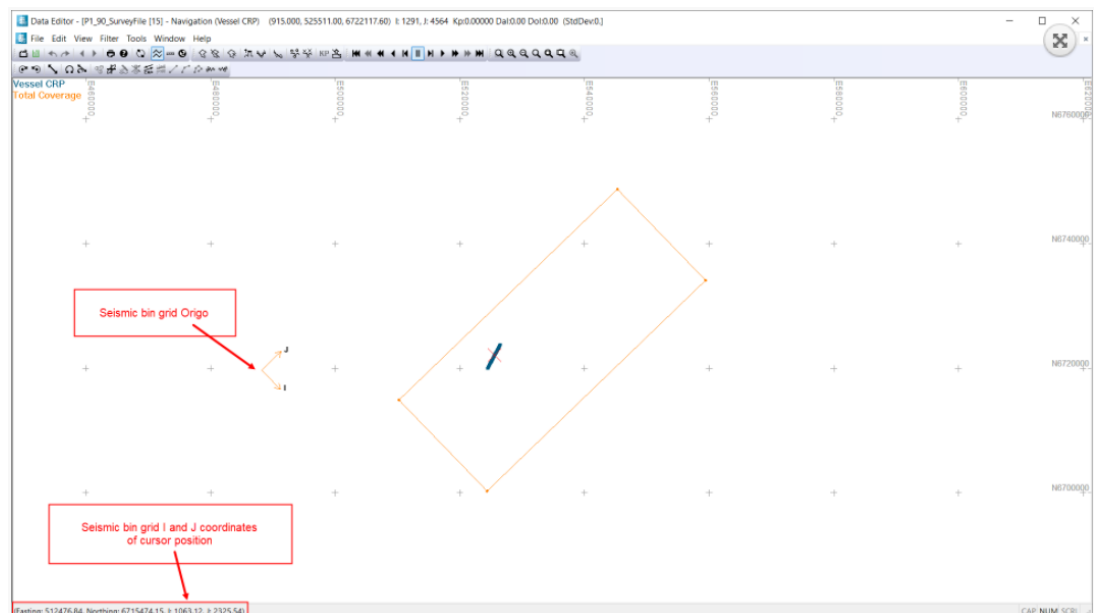


Figure 10 Shows the seismic bin grid Origo and the seismic bin grid survey perimeter

4.2 Other features

- Added two new database options in the JobPlanner to add or attach a database without asking for elevated rights, eg **Create new DB (no elevation)**.
- Added a merger to re-apply the cleaning done in online cleaning. This action is activated from the JobPlanner Tools, Merge Data Files menu and selecting **Online Cleaned OCS Files**. (OCS is Online Cleaned SBD files)
- Added two new status fields to the JobPlanner list view.
Delayed Heave OK status displayed if delayed heave has been merged.
MapSpikes is a special flag which is set, if a FAU file has been exported and reimported with the merge **Fau MapSpikes Deleted** function. This shows if the deleted flags in the FAU format have been merged into the original file.
- Re-enabled the import of XTF files.
- Added a merge motion data from other **NaviEdit** block action.
- More detailed logging of echosounder latency in the **NaviEdit** report
- Added an export of GPS Height.
- Added the option to use surface pressure as a single beam channel when calculating bathymetry. Before it was only possible to use a bathymetry type sensor. The surface pressure must be in bars when doing the recalculation.
- Extended the **Calculate Position from Cable Counter** to handle more than one block. The last position point of one block is automatically used as the first position point in the next block.
- Added import the Fish layback position from Klein SDF files.
- Added an option to copy any single beam channel to be the bathymetry value.
- Added an merger of single beam values in the format (YYYY/MM/DD H:MM:SS.sss Value.val).
- Added an option to import a Valeport svx2bathypack with split bathymetry and altimeter (for different mounting).
- Added driver for importing Imagenex DT360 and Delta-P

5 Minor improvements

5.1 Data Editor

- If you hold the Ctrl+Shift keys down while moving the mouse wheel you will – for most sensor types – change the active sensor, if more than one sensor exists. This is particularly useful for seismic streamer.

5.2 Workflow Manager improvements

- Added the option to set the OnlineSVP usage during SBD import.
- Added the option to apply scan reduction during import of SBD and EM files with the Workflow Manager.
- Added a **SetActiveSensors** task, which can change the active sensor.
- Added a new task to move blocks to a **NaviEdit** database folder – and create the folder if it is missing.
- Added a new task to stop the workflow if a certain condition is met. Specifically, if Yaw Stabilization was turned on for Kongsberg files.
- Added an option to set the **SkipScansWithoutMotion** check box.
- Added an option to set the Window parameters minimum and maximum Easting, Northing, Depth relative to CRP and X distance relative to CRP as found in the HeaderEditor's Window tab.

5.3 Bug fixes

- Fixed a problem with the look up in the binary geoid.bin or geoide.gbin file for Height/Bathy calculation.
- Fixed an import crash for GSF files which had ranges without having bearing angles.
- Fixed an insufficient number of decimals for the rotational part of a possible datumshift saved in geodesy.ini. This could affect a datum shift defined during import of geographical GPS coordinates.
- Fixed an issue with a dummy zero valued motion sensor being set as the active one when merging position data without motion and saying yes to the **Merge data missing and dummy inserted, do you want to commit anyway** dialogue.
- Fixed an issue for the LAS Export where the GPS Time value could suddenly decrease during export of a survey line.
- Fixed an issue with echo sounder mounted with more than 80 degrees roll angle.
- Fixed an issue with some KALL files with only one multibeam head not importing the multibeam data.
- Fixed missing import of backscatter intensity for HYPACK HSX files.
- USBL recalculation of old NPD files could get a very high DOP value preventing the recalculated positions to be shown.
- Fixed an issue with Orion pipetracker data not being shown in the **DataEditor** when bad Orion packets were logged.
- Fixed an issue with auto recalculation of bathymetry when merging NMA data failed.
- Fixed an issue with many 0 values being included in the LAS export.
- When merging FAU files back into a NaviEdit block, the MapSpikes deleted and the normal EIVA deleted flag was not un-deleted if un-deleted in the FAU file.
- Fixed an issue with import of Elac XSE files.

- Increased the number of characters to input as SQL Server and Database name in the JobPlanner ODBC selection dialogue.
- Fixed an issue where **Surface based** was automatically set during import of NaviScan SBD files.
- Fixed an issue where re-import of layered (multi detection layers) FAU files failed.
- Nortek Doppler velocity log did not always import.
- The average number of beams in a (multi detection) layer was wrong when LiDAR was present.
- For recovery/reloading of SBD files multi-beam and laser is now separated. (Also fixing that laser data was not created as point cloud in NaviModel after recovering SBD files).
- Fixed a problem with importing the newer version of the Kongsberg KMALL files.
- Fixed an issue with wrapped scans when importing HSX files.
- Fixed a crash with Recover Multibeam Files (if Recalculate Bathy was used during last SBD import).
- Fixed an issue where SBD files sometimes did not import the GPS Height.
- The single beam view only updated the first time Enable/Disable Bathy was clicked.
- Now list the mounting, the number of scans and the quality distribution of laser data in the report.
- No longer allow saving impossible bearing (min greater than max) angles in the slant range filter.

Workflow Manager bugfix:

- FindBlocksInFolder WFM task now properly .

6 Known limitations

There are no known major limitations to this release.