

Software release notes

Release 4.5.2

- Proportional pressure to depth calculation is supported.

Improvements

- HiPAPLocal position failed on default configuration.
- HiPAPLocal did not do lever arm compensation.
- Latitude-sensor for pressure to depth uses first valid position sensor or is configurable.

Release 4.5.1

- Export is possible in different frequencies.

Improvements

- Local position wild-point plot was not updates when doing wild-point removals.

Release 4.5.0.0

- Changed licensing dongles. Users upgrading to this dongle must exchange their current dongles with new ones. New dongles are not compatible with older versions of NavLab.
- Automated installation.
- Recommended install directory changed to Program Files.
- Removed support for navlab password.
- Added support for reading formatted binary files.
- Added option of showing time in UTC in Estimator plots.
- Added DVL scale factor and latency to configure sensor.
- Added possible customisation of warning/error levels on sensor errors.

Improvements

- Fixed: Failed to read ini files if matlab syntax were on first entry.
- Added interpolation of IMU for improved accuracy in highly dynamic situations.
- Improved user interface of plotLogFile.

Release 4.4.2

- Added Simulator.

- Added preproc and documentation for ZUPT sensor.
- Matlab-statements can be used in ini-files.
- HAIN: Starting sensor selection is no longer hard-coded.
- HAIN: Status plot in preproc shows descriptive status messages.

Improvements

- Fixed: Program occasionally crashed when selection of sensors was changed.
- Pressure will now show error if set up to use CTD and the profile is missing.
- Fixed: Installation failed in P-code.
- Fixed: Clock Correction failing QC test is was still used.
- Speed improvements.

Release 4.4.1

Improvements

- Some preproc errors did not show up in Main window NavLab failed in p-code (Matlab version).
- DVL Calibration failed to do summary if sensors were in a particular order.
- Unable to open ini-files from context menu in standalone mode.
- Improved warnings and checking of AposClockAhead.

Release 4.4.0

- New user interface showing status and progress better. All used sensors are shown. Status of individual sensors are shown.
- New dialog for sensor settings.
- Added features for DSU.
- Added access to sensor .ini-files by right-clicking sensor name.
- Added access to Preproc/Estimator .ini files by right-clicking appropriate buttons.
- Clock correction, by typically AposClockAhead, is made a separate sensor providing outlier removal possibility.
- Prediction is improved numerically with the option of exact discretization.

- ZUPT is added as a sensor.
- Preproc of sensors is done one sensor at a time as opposed to parallel before.
- For HAIN users: Name of navigation states has changed from "naveq" to "Navigation".

Improvements

- Fixed that entire data set is loaded in preproc, before adapting to start and stop times defined in preview.
- Fixed that NavLab standalone sometimes failed to install correctly.
- Fixed that help redirection failed in Matlab version 2012B. Showing users the same site always. All users are now sent to standalone help.
- Fixed that Misalignment of attitude sensor was compensated incorrectly.
- Fixed problem of buttons not being correctly colored.
- Removed possibility of doing outlier correction without it being used in subsequent Estimator run.
- Accuracy in calculation of local positions is improved.
- Fixed that attitude sensors occasionally plotted angles wrongfully.
- NavLab mission report is generated much faster.

Release 4.3.0

- Resmoothing has been added.
- HAIN Depth and Pressure are separated into two different sensors.
- Sensors can be selected/deselected.
- New Preview that gives better control over time selection.

Improvements

- Minimum interval between measurements will not work unless there exists an interval less than 0 in the measurement series.
- Automatic extraction of log data will not work if NavLab is installed to a location containing white space in the path.
- Entire data set is loaded in preproc, before adapting to start and stop times defined in preview.
- Saving of large data sets failed.
- Help did not show in Matlab 2012B.
- Estimator ran slowly on larger data sets.
- PlotBits in PlotLogFile showed wrong time scale.

Release 4.2.1

Improvements

- NavLab failed to install and run on some x64 computers reporting: "??? Invalid MEX-file (...)\haspRead.mexw64".
- install.bat failed to continue installation properly after installing MCR. Requiring running of install_navlab_wXX.exe afterwards.
- Installation of dongle drivers included in install.bat.

Release 4.2.0

- Updated pressure handling to also show pressure and calculated depth during Preproc.
- Tidelevel (used in pressure to depth calculations) added as a separate sensor, enabling manual outlier editing.
- DOS-window removed in standalone mode. Also errors obtained in standalone mode are written to log file.
- DVL Calibration separated out as an option.
- Extra check added on dongles. Dongles must be updated to gain access to this version.

Improvements

- Sensor quality indexing had errors.
- Compass measurements are plotted correctly when changing 360-0°.
- Improved speed of processing in Estimator.
- Improved numerical stability on Smoothing.
- Slow response in GUI fixed.
- Empty plots are removed.
- During outlier removal of position data, NavLab failed to remove the deleted points from the plot in meters.
- HASP drivers updated. Old drivers failed on some platforms.

Release 4.1.0

- Export of smooth pressure.
- Added option of manual outlier filtering after estimation.
- Added automatic outlier filtering during RT-estimation.
- Full text search in standalone help.

Improvements

- NavLab main window sometimes failed to show all content.

- CTD profile use was not documented.
- Evaluation of estimated run in summary.
- Added more information when NavLab fail to set mission folder on HAIN missions.

Release 4.0.0

- Help section for both standalone and MATLAB version.
- Summary report moved from export to Plot General.
- Use of AposClockAhead files.
- Added preview and possible selection of time frame to process.
- Added extraction of HAIN data, both automatic and with Extract.

- Use of Alternative GPS for HAIN.
- Installation files.
- Use of latency on DVL.

Improvements

- DVL Calibration wrote wrong scale factor value to APOS-import.
- PlotLogFile: Plot math function failes on certain characters.
- NavLab main window sometimes failed to show all content.
- Failed if status column was the last one on the record.