



NORBIT

DATA COLLECTION TOOL & 3D POINT CLOUD VIEWER

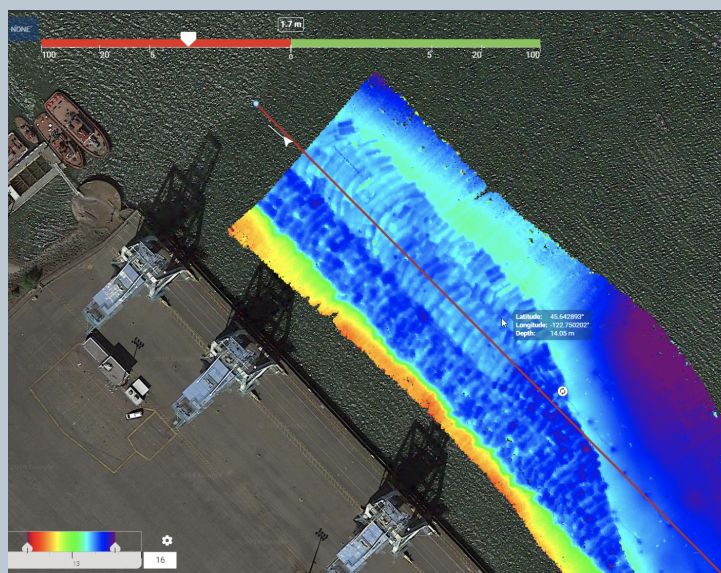
NORBIT's Bathymetry Data Collection Tool (DCT) is designed to simplify standard bathymetric survey operations. The survey utility displays the bathymetry grid in a web browser, providing a real-time view of survey coverage and data quality while data is being collected.

DCT is ideal for small boats, single-operator surveys, and USVs with low-bandwidth radio connections. It can be operated from a navigation plotter, tablet, smartphone, or PC using a simple web browser interface. The intuitive planning tools enable users to create survey lines quickly and efficiently. With a single tap or mouse click, users can draw survey lines and automatically generate multiple parallel lines at a specified spacing within seconds. Survey lines can then be easily adjusted, moved, rotated, resized, or deleted as required.

DCT - SIMPLIFYING SURVEY WORKFLOWS

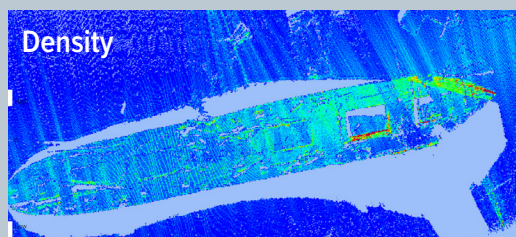
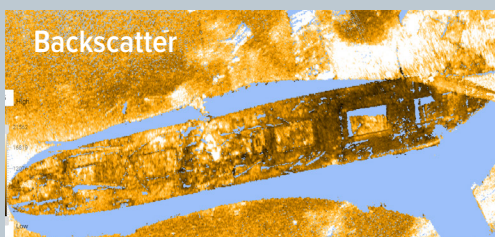
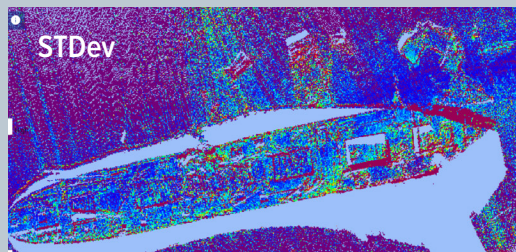
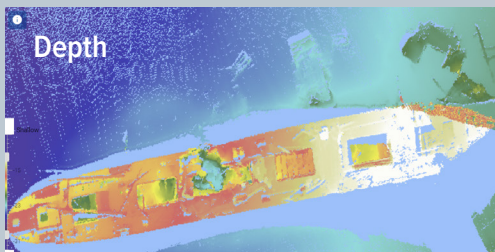
Clean and intuitive user interface:

- Runs in a web browser
- Streamlined functionality with access only to relevant tools and controls
- Easy accessible menus for rapid operation
- Quick to learn and use
- Enables surveyors of all experience levels to acquire high-quality data
- Survey the way you want with consistent data collection
- Minimal set up time as settings are inherited from sonar GUI
- Instant data quality control reducing post-processing time
- Can be used simultaneously with other acquisition software



DCT provides four real-time data displays: depth, sounding density, backscatter, and standard deviation. All displays can run simultaneously on one or multiple client devices. For example, the skipper can monitor the depth display while the surveyor or a remote QA specialist views sounding density or standard deviation.

Available real-time displays



Background maps can be customised independently on each client using Google Maps, allowing every user to configure the display to suit their role and preferences.

DCT provides a simple, reliable, and efficient workflow for bathymetric data collection with predictable and consistent data outputs. Survey data is recorded in both NORBIT's native .wbm format and the widely used .s7k format. By collecting all data relative to the ellipsoid, DCT reduces the risk of incorrect geodetic settings, making it easier for organisations to deploy less experienced survey personnel with confidence.

Despite its simple user interface, DCT includes powerful data-sharing capabilities built on the PostGIS and GeoServer frameworks. Support for standard WMS and WFS services enables seamless integration with GIS applications such as QGIS, providing immediate access to survey data for visualisation, analysis, and further processing within existing workflows.

DCT is available with NORBIT's integrated sonar systems.

DCT - MADE FOR EVERYONE!

Inexperienced surveyors

- Minimal training is required to collect IHO-quality data.
- Allows users to focus on survey operations and data collection rather than acquisition software settings.

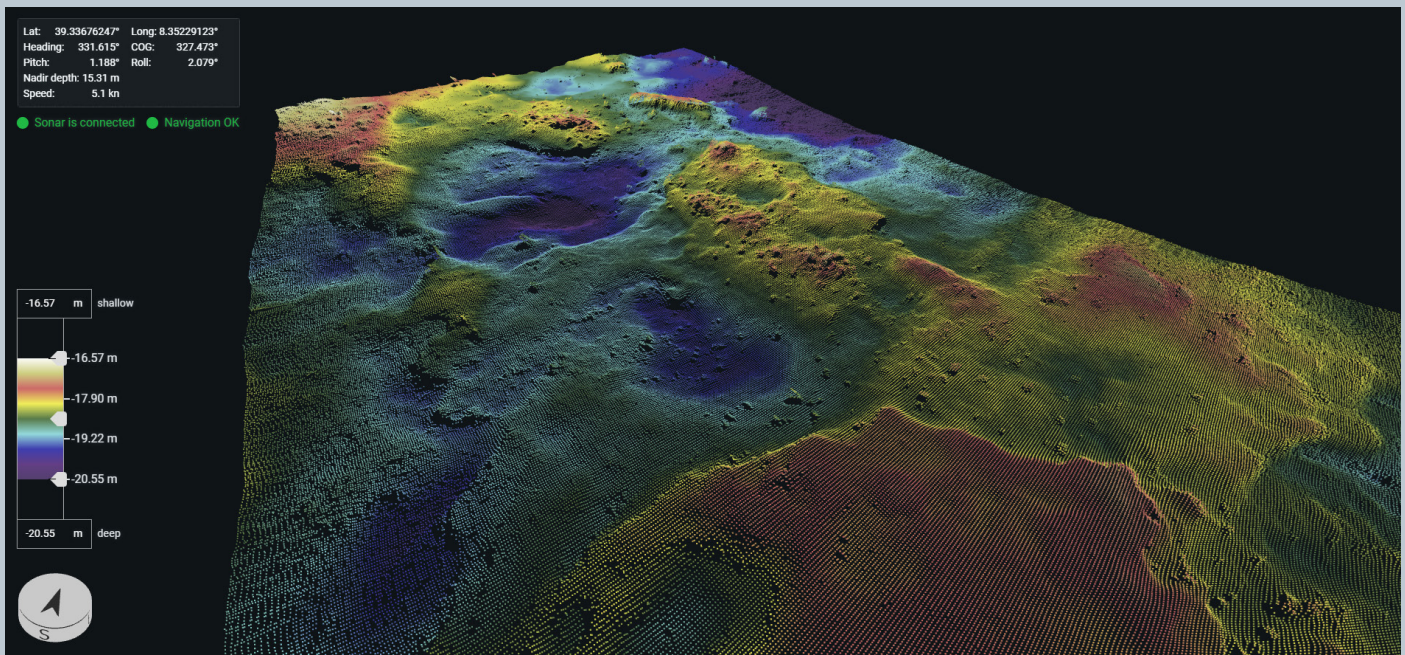
Experienced surveyors

- Designed for simple survey operations to deliver results faster.
- Optimised for small vessels with limited space for large displays.
- Enables rapid mobilisation on vessels of opportunity

The Real-Time 3D Point Cloud Viewer extends NORBIT's DCT software by providing live visualisation of geo-referenced 3D bathymetric data during acquisition. Complementing DCT's 2D coverage monitoring and survey planning capabilities, the interactive 3D environment enables rapid data interpretation and enhanced real-time quality assurance.

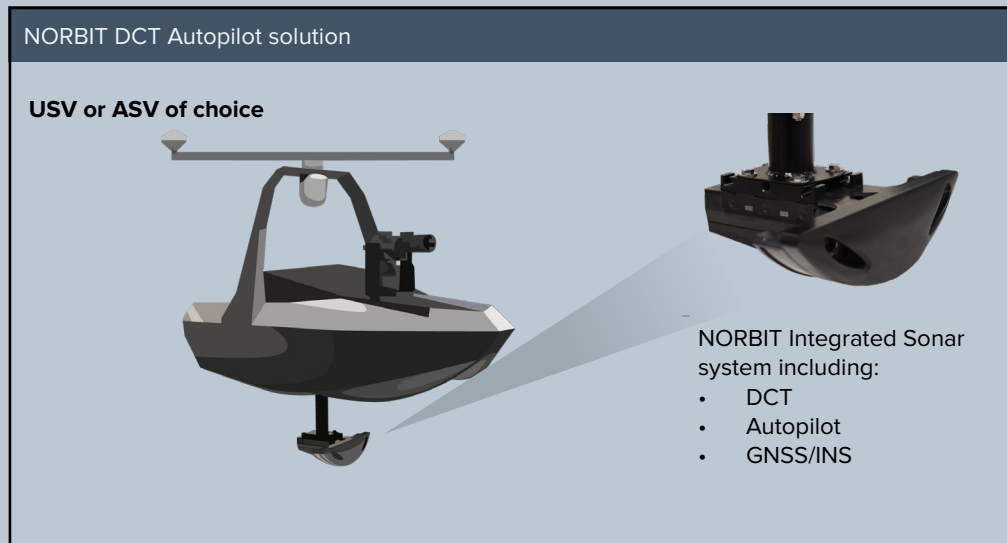
Operating entirely within a standard web browser, the viewer supports remote access and collaboration, allowing project managers, stakeholders and clients to monitor survey progress and review results from any location. This facilitates efficient data validation, informed operational decision-making, and streamlined project approval processes.

Integrated measurement and inspection tools enable users to explore, analyse and quantify features directly within the 3D environment, making the viewer ideally suited for the real-time inspection of subsea structures, assets and seabed features.



Autopilot Solution for USV/ASV

A NORBIT EXPLORE MORE FEATURE*



NORBIT's Autopilot solution for Unmanned Surface Vehicles (USVs) and Autonomous Surface Vehicles (ASVs) enables fully automated survey execution with minimal operator intervention. The vehicle is controlled remotely through NORBIT's Data Collection Tool (DCT).

DCT automatically starts data recording when the vehicle reaches the first survey line, while the USV autonomously navigates between survey lines as each line is completed. The result is an efficient, reliable, and fully automated workflow for hydrographic survey data collection.

FEATURES:

- Simple integration between NORBIT Autopilot and ArduPilot (trusted open-source autopilot system) through a single MAVLink connection.
- Improves USV navigation by using the integrated NORBIT GNSS/INS. No additional GPS is required.
- Enables automatic survey execution based on bathymetric coverage.
- Eliminates the need for manual boat steering during survey operations.
- Provides a remote operator display accessible from a tablet or any web browser.
- Includes an integration manual for all ArduPilot-compatible hardware, including CubePilot, Raspberry Pi, and similar platforms.
- Compatible with all NORBIT sonar systems integrated with Applanix or SBG GNSS/INS systems.



*NORBIT Explore More feature: an advanced Sonar capability for specialised use cases. It is not yet a fully self-serve feature for every workflow, so we recommend using it with guidance from our team. Some functionality may also require paid access

NORBIT
- explore more -

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