

# SONARWIZ FOR MAGNETOMETRY

*by Chesapeake Technology*

## SEAFLOOR MAPPING: EASIER, FASTER AND SMARTER, WITH SUPPORT YOU CAN COUNT ON

Help dive teams and recovery personnel locate underwater artifacts, treasures and pipelines you seek to find, map, or recover with SonarWiz for Magnetometry. Magnetometry data for ferrous-object detection, co-recorded with sidescan or sub-bottom data, provides a valuable new layer of information. SonarWiz for Magnetometry works real-time with your magnetometer and provides a platform for data post processing and manipulation. Magnetometry real time acquisition is included with all SonarWiz sidescan or sub-bottom real-time acquisition license purchases, while magnetometry post-processing is sold separately.

### SUPPORTED MAGNETOMETER VENDOR MODELS

SonarWiz for Magnetometry supports data logged as raw text and from serial port recording whereby a channel of magnetometry data feeds into and is recorded as an embedded data channel in the sonar top-side unit in parallel with the sidescan sonar data (such as for EdgeTech and Klein models).

- AquaScan AX2000 ([www.aquascan.com.uk](http://www.aquascan.com.uk))
- GEM 19M, 19T ([www.gem.com](http://www.gem.com))
- Geometrics 881 & 882 ([www.geometrics.com](http://www.geometrics.com))
- Marine Magnetics Standard and with Depth ([www.marinemagnetics.com](http://www.marinemagnetics.com))

(Other models can be supported - just contact [support@chesapeaketech.com](mailto:support@chesapeaketech.com) for details)

### MAGNETOMETRY POST PROCESSING OPTIONS

Import your magnetometry data as a text file or as an embedded channel from a sonar file. As text file magnetometry data is template-based, use any of our existing 20+ templates or ask us to create one. Templates are currently available for the following types of pre-recorded magnetometry data and many more.

- Define boat specs and sensor positions relative to the vessel reference position with the Vessel Editor
- Create a new project & import your bathymetric data files
- Load and merge raw bathymetry data (range/angle) with attitude data (roll/pitch/heading), sound velocity Casts, tide files and auxiliary navigation data

## LEARN SONARWIZ

**A variety of options are available for learning SonarWiz.**

- On-Site hands-on training tailored to your needs at your location
- Pre-scheduled hands-on training set throughout the year at locations around the world
- Topical information is provided through quarterly company webinars

## YOUR EMA

We're constantly upgrading SonarWiz, whether its to add or refine features, expand compatibility with other software and hardware, or integrate new and advanced algorithms to better process your data. While you'll always have the version of SonarWiz that you purchased, EMA license renewals give you access to the latest version of SonarWiz, quarterly release notes and 24/7 technical support.

# TOP LINE FEATURES

## DATA VIEWS

Upon data import, see the navigation plot or magnetometer amplitude in the Main Map View, alongside co-located sonar data.

## PLAN VIEW DRAWING METHOD

Choose between two rendering options to display your magnetometer data in the Plan View.

### Navigation Only

- A basic navigation trace of the magnetometry data

### Color Coded Amplitude Segments

- Color coded segment lengths represent magnetometer amplitudes.
- 12 color palettes are available to display the color coded data.

### Ambient Smoothing Constant

- Size of Moving Box Car Filter used to smooth the *Ambient Magnetometer* trace. Higher values correspond to more smoothing with 500 being the Default value.

### Observed Smoothing Constant

- Size of Moving Box Car Filter used to smooth the *Observed Magnetometer* trace. Higher values correspond to more smoothing with 20 being the Default value.

## IMPORT DOWN SAMPLING

This option allows the default (1Hz) sampling or removal of down sampling. Removing down sampling provides your data in full resolution.

## NAVIGATION CONTROLS

Magnetometer post-processing supports the full range of navigation, filtering, smoothing, and repair that SonarWiz offers for sidescan and sub-bottom post-processing, using an import time-constant for source smoothing, ZEdit, and NavInjectorPro.

## MAGNETOMETER DATA REPAIR

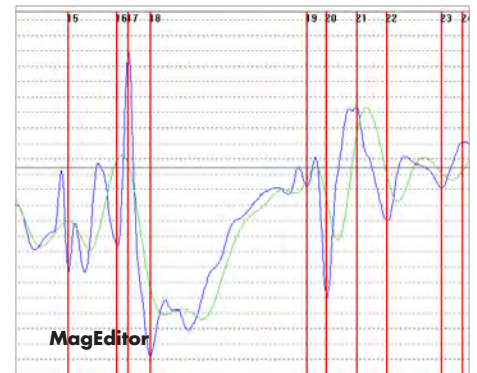
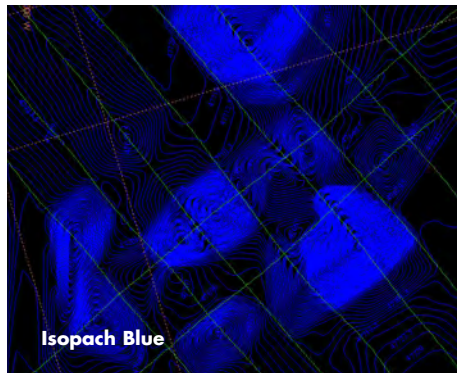
The ZEdit utility presents a graphical representation of magnetometer amplitude presented as a function of position. It allows repair, interpolation or smoothing to any degree, to digitally-filter your data.

## MAGNETOMETRY EDITING AND REPORTING

Magnetometer data can be presented in an editor with color-coded raw, smoothed, and ambient magnetometer field strength data graphed. Anomalies may be manually or automatically detected and exported in a report. The anomaly report can be edited or sorted within SonarWiz or exported as a CSV text file for further editing.

## REAL-TIME DATA ACQUISITION OPTIONS

In real-time, SonarWiz automatically builds a CMF file, loads it into your project and displays the navigation of the magnetometer in the Map Window behind the vessel.



FREE  
TRIAL

Interested in trying out **SonarWiz**? Fill out the quick form at  
[chesapeaketech.com/products/trialrequest.php](https://chesapeaketech.com/products/trialrequest.php)

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