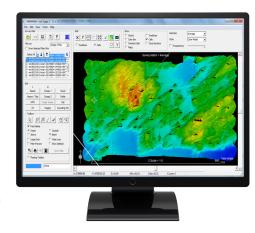


# **HYSWEEP**®

SOFTWARE FOR CALIBRATING, COLLECTING AND PROCESSING MULTIBEAM, TOPOGRAPHIC LASER BACKSCATTER AND WATER COLUMN DATA

## **About HYSWEEP®**

HYSWEEP® is the add on module to allow for the data collection and processing of your multibeam sonar and lidar systems. Tools for system calibration (Patch Test) make the set up simple to do. Online displays for real time CLOUD shows the system in operation. Processing large data sets are efficient with the 64 bit processing module. The software interfaces with nearly all multibeam sonars on the market today.

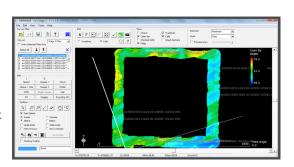


### **Features**

- Acquisition of backscatter, intensity and water column from multibeam sonars can be done simultaneously
  with the sounding data
- Complete software package for acquisition and processing
- Tools for data analysis include CUBE, Wobble Analysis, Beam Angle Test
- Export to ASCII XYZ, LAS, Matrix file and custom format. Data can be gridded to a dozen different methods, including average, mode, median, standard deviation and more.

## **Benefits**

- The HYSWEEP® Patch Test is simple to use, with just a few survey lines needed to run for an automatic computation of the mounting offsets.
- HYSWEEP® Survey provides the real time coverage display, TPU and other QC tools for a real time analysis of the data - before you go back to the office for data processing.



## Included in HYSWEEP®

HYSWEEP® SURVEY provides you with a coverage plot, real-time TPU displays, and QC tools needed to efficiently complete your multibeam survey.

REAL TIME POINT CLOUD: The program runs in conjunction with HYSWEEP® SURVEY and displays both multibeam and topographic laser data in a corrected and geo-referenced, color-coded point cloud. The REAL TIME POINT CLOUD program is useful for easier feature detection and data quality control.

The HYSWEEP® Water Column Logger allows users to ensure that targets above the seabed, such as wrecks, are fully detected, and to confirm the least depth in the water when fine features such as cables or masts may otherwise be missed with the multibeam sonar.

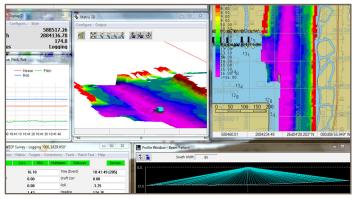
The HYSWEEP® multibeam editor allows you to review your raw data components, incorporate sound velocity and water level corrections (including RTK TIDES and VDATUM), and apply statistical filters to quickly clean your data and output a variety of data subsets.

GEOCODER™ is included in the program (licensed from UNH-CCOM) and allows you to generate mosaics and perform bottom classification from average backscatter and snippet data.

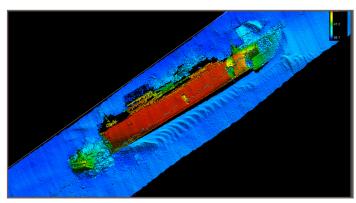
#### **HYSWEEP®** includes interfaces for the following systems:

Atlas, Fansweep, Hydrosweep
Bathy Swathplus
Blueview multibeams
Edgetech 4600 and 6205
GeoAcoustics GeoSwath
IBeam
Imagenex Delta T, DT100,101,102
Kongsberg MS1000
Kongsberg EM1002/2000/2040/710
Kongsberg EM 3000/3002/3002D/302
Kongsberg Mesotech M3
Klein HydroChart
Leica PS20
Norbit WBMS

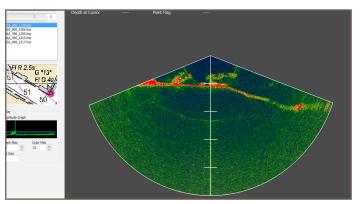
Odom ES3, MB1, MB2
Optech ILRIS
PingDSP 3DSS-DX
R2Sonic Sonic 20XX Series
Reson 71xx, 81xx, 91xx, T20, T50
Riegl LMS and V Series
Reinshaw
Ross Smart Sweep
SEA Swath Plus
Seabeam 2100/3000/SB1000
Tritech Gemini
Tritech SeaKing
Velodyne HDL, VLP
WASSP Multibeam



The HYSWEEP® SURVEY program showing 3D Seafloor, Beam Pattern, Coverage Map, and Motion Correction. Over 20 real-time windows can be chosen.



HYSWEEP® includes 3D visualization and processing tools using our CLOUD program.



The HYSWEEP® WATER COLUMN PLAYBACK allows you to replay the water column data provided by modern multibeam sonars.

