

Crowd Sourced Bathymetry

Benefits of Crowd Sourced Bathymetry (CSB)

Recreational boaters, pilot boats, tug boats, cruise ships, and survey ships in the “opportunistic” mode provide data streams of current observations to navigators, cartographers, scientists, and engineers. The benefits of this approach include:

- Data can be processed from any type of vessel for a myriad of hydrographic and environmental applications.
- ARGUS data can provide temporal frequency in repeat observations, with spatial representation that highlights vessel traffic patterns.
- Mariners can help create better charts, products, and data in coastal waters by providing depth, position, surface temperature, weather, and water quality data.
- The maritime community can rely on its own unlimited workforce for data collection.



Reduced Risk of Groundings and Environmental Disasters

The ARGUS™ Approach to Hydrographic Surveying

ARGUS™ was developed by SURVICE Engineering to autonomously process data during the routine use of commercial and recreational marine vessels and automatically upload those data to back-end processing servers. Using existing infrastructure, ARGUS™ can quickly and efficiently provide:

- Current water depths and environmental sensing for coastal and inland waterways.
- Shared platforms for wide-area sampling of water quality, weather, and sea state metrics.
- Processed data sets readily suitable for comparative analyses, for a cost-effective indication of chart discrepancies that can set priorities for dredging and detailed surveying.
- Multi-purpose vessels and limited operational mission costs.
- Access to remote, unsurveyed waterways, as well as a continuous, ongoing survey for those areas well-traveled.
- Customized hardware and software solutions for security, habitat, environmental, and other applications.

ARGUS Provides Acquisition, Processing, and Visualization of the Most Current Waterway Conditions

Ongoing Development

The patented ARGUS™ system has been in use since 2010 and has processed on the order of 100 million soundings in the United States and internationally. SURVICE and our development partners are working together on efforts to refine the bathymetric solutions, assess spatial and temporal trends, and develop a CSB product offering that provides value-added to international hydrographic interests - in order to prevent vessel groundings, improve safety, and limit environmental risk.

