

28 July 2011

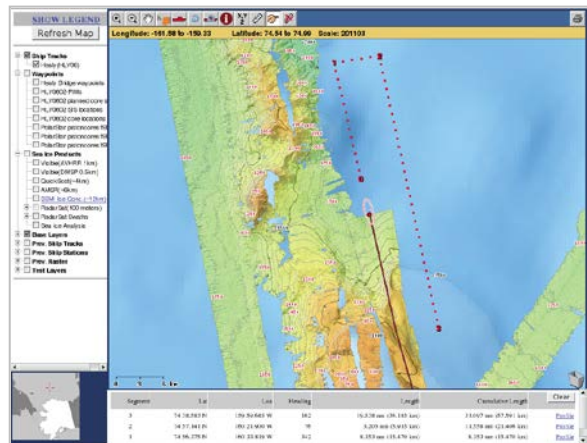
USCGC HEALY BEST PRACTICES EXAMPLES

REAL-TIME GEOSPATIAL BROWSER AND OTHER DISPLAYS FOR SCIENCE OPERATION AND PLANNING

HEALY uses a MapServer Geographic Information System to display near real time data. Selected data is integrated near real time into a GIS system for display to the scientific party. It provides spatial context to the data and has been positively received by the science teams aboard.

Data available include current ship position and orientation, historical ship tracks and data, seafloor bathymetry, station locations, RADARSAT, and subbottom profiles among others. In addition to the user interfaces that are part of individual instrumentation (such as the sonars and navigation systems), custom interfaces have been developed to centralize data with high update rates such as sea surface temperature, vessel attitude, position, etc.

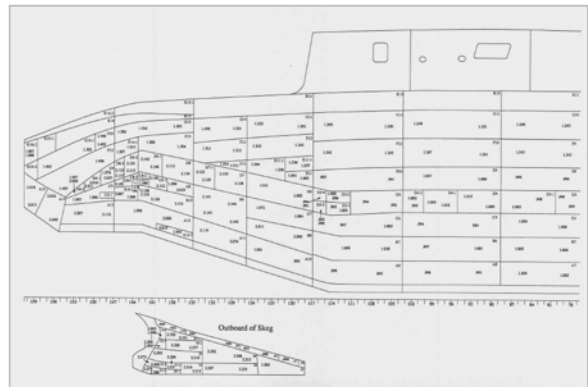
As an example, it has been used to display real-time multibeam data with the vessel location. Using the track planning tool, scientists can develop additional survey lines. Waypoint information is then provided to the bridge for use by the navigator.



<http://ilab.ldeo.columbia.edu/plone/healy/papers-and-publications/agu2007-real-time-poster-r0.pdf/view>

NDT REPORT

Hull plate thickness readings are mapped on a Shell Expansion Plan showing original plate thickness and latest gaugings.



CRANE OPERATOR PROTECTION

Structural bars have been added to the crane cabs to improve protection to the crane operators should a weight get into an uncontrolled swing in a seaway. They appear to have been installed after the cabs were constructed.

