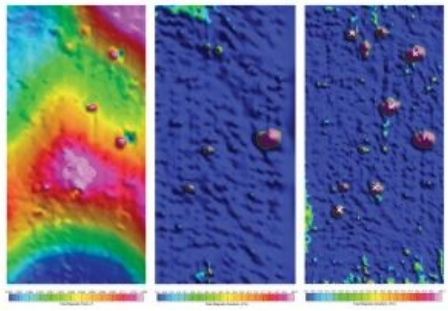
Marine Magnetics' Explorer Magnetometer Integrated with Gavia AUV



Teledyne Gavia, manufacturer of the Gavia autonomous underwater vehicle (AUV), has announced the integration of Marine Magnetics' Explorer AUV magnetometer. The Explorer AUV is a high-accuracy omnidirectional sensor which is towed behind the vehicle, allowing it to operate outside the AUV's magnetic signature. The Explorer's exceptional accuracy and sensitivity, small size, low noise and minimal power requirements make it a highly valuable tool that is ideally suited for use with AUVs.

Dynamic and static testing of the Gavia AUV was conducted at Marine Magnetics' facility in Canada and near Teledyne Gavia's manufacturing facility in Kopavogur, Iceland to validate that the Explorer could measure variations in the magnetic field, rather than the influence of the Gavia moving through the water column. The trial ensured that the data was accurate and free of heading error that might obscure small targets. The testing produced the data set in figure 1, which is smooth and free from stripping, a by-product of heading error. The pre and post-seeded surveys, completed on separate days, matched up perfectly. The data illustrates the accuracy of both the Explorer magnetometer and the 3D positioning capabilities of the Gavia AUV, allowing the combined Gavia AUV Explorer Mag to locate all of the seeded targets.

Growing list of available sensors

Equipping the Gavia AUV with the Marine Magnetics Explorer enables the Gavia AUV to combine high accuracy magnetic signature mapping along with Side Scan or Bathymetric survey data, Sub Bottom Profiler data, and still images, providing multiple detection levels of Unexploded Ordnance (UXO), pipelines, buried objects, or shipwrecks.

"The Gavia AUV's growing list of available sensors offers our clients an extremely flexible solution for a variety of commercial, military, and scientific applications. The integration of this small, yet sensitive, magnetometer allows users to have a low-logistics AUV with expanded capabilities for UXO mission capabilities in particular", commented Stefan Reynisson, general manager of Teledyne Gavia.

Figure 1 (images from left to right): Total field, pre-seeded, and post-seeded.