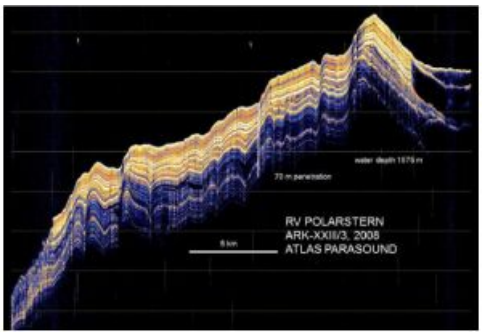
GMGS Buys Atlas Parasound Sub-bottom Profiler



Guangzhou Marine Geological Survey (GMGS) in China has awarded Atlas Hydrographic a contract to supply an Atlas Parasound hull-mounted sub-bottom profiler with full ocean depth range capability for its vessel Fen Dou 5. Delivery of the system is scheduled for February 2014. The system configuration consists of Atlas Parasound electronics, a pair of small-sized transducers, a transducer casing, Atlas Hydromap Control software for sensor steering and control, and Atlas Parastore software for data acquisition, storage and visualisation.

The Parasound is a versatile sub-bottom profiler which is being operated by marine geologists on many research vessels around the globe. By making use of the parametric effect the system is capable to penetrate more than 200m through the seafloor, the highest penetration range of all hull mounted sub-bottom profilers being available in the market. At the same time the entire water column can be recorded and gas bubbles escaping from the sea bottom, several hundreds of meters high, can be visualised. This feature is of importance for GMGS' investigation of natural marine resources.

As a multi-disciplinary and multi-functional marine geological investigation organisation, Guangzhou Marine Geological Survey (GMGS) conducts the basic, strategic and public marine geological investigation in China. With a fleet of several geophysical investigation vessels GMGS conducts research of marine geology in the South China Sea. Several GMGS vessels are already equipped with hydrographic survey echo sounders manufactured by Atlas Hydrographic, Germany.

This procurement, sealed in October 2013, will enhance capacity of the GMGS survey fleet which is already equipped with an Atlas Parasound on the vessel Hai Yang 6 and an Atlas Hydrosweep MD/30 multibeam echo sounder on HAI YANG 4. The multibeam echo sounder with 1°x1° beam resolution has been chosen as a flexible tool for hydrographic tasks in depth down to 7,000 m. The sea trials for the Hydrosweep MD/30 were successfully completed in August 2013.

Image: Sediment profile with up to 70m penetration in 1,575 m water depth recorded with Atlas Parasound. (Image courtesy: Dr Niessen, Alfred Wegener Institute Bremerhaven).