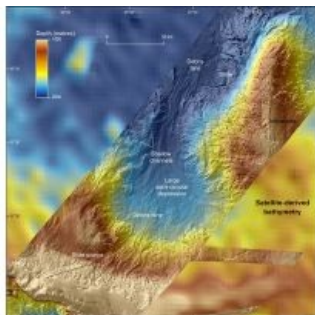# Special Achievement in GIS Award for MH370 Search

Geoscience Australia has been awarded the 2018 Special Achievement in GIS Award (SAG) by Esri, the global leader in Geographic Information System (GIS) technology. In San Diego to accept the award as part of Esri's User Conference on 11 July 2018, Geoscience Australia Chief Scientist Dr Adam Lewis said that while the data were collected for the sole purpose of locating the missing aircraft, it was important to recognise that this is some of the first high resolution data of this region, and will be valuable to the scientific community.

The SAG award recognises the international benchmark Geoscience Australia set using Geographic Information System (GIS) technology to collect and analyse large volumes of data during the search.

Selected from a pool of more than 100,000 organisations world-wide, GA received this recognition for the scientific discoveries made while mapping the world's deep seabed during the search for missing Malaysia Airlines flight MH370. GA has also made this data freely available allowing the world to visualise and gain a deeper understanding of one of the largest and most publicised marine surveys ever conducted.

Analysing Over 800,000 Square Kilometres

Esri Managing Director of Esri Australia and South Asia Brett Bundock said Geoscience Australia's use of GIS technology to distil and analyse more than 710,000 square kilometres of shipboard bathymetry data and more than 120,000 square kilometres of side scan sonar acquired by underwater vehicles has allowed the world to visualise and gain a deeper understanding of one of the largest and most publicised marine surveys ever conducted.

The maps created by Geoscience Australia provide more precise insight into tides, sea floor depth, ocean temperatures and seabed terrain than has ever been available before. Using GIS technology to create an accurate and detailed picture of the sea floor is critical for understanding factors such as: environmental change; tsunami forecasting; mineral extraction; oil and gas exploration; infrastructure construction; and cable and pipeline routing, to name just a few areas.

The search for MH370 involved collecting large volumes of data in a remote part of the southern Indian Ocean. The search was conducted in two phases: the first phase collected bathymetry data to develop maps of the sea floor topography in the search area; these maps then safely guided the second phase of the search, carried out by towed and autonomous underwater vehicles. A team of experts used Esri GIS technology to derive meaningful insights from the data gathered.