With over 290 surveys in its holdings, Geoscience Australia is co-custodian of the largest collection of single and multibeam bathymetric data in Australian territorial waters. Geoscience Australia’s main role is to collect, process, preserve and deliver swath bathymetry data for the nation’s benefit. Acquisition of bathymetry data is achieved through undertaking its own surveys or supporting acquisition by agencies like the Australian Marine National Facility. Processing and converting all of the 288 surveys into a single platform is achieved using Caris. Preserving raw and final processed datasets, creation of national and local scale grids and delivering datasets upon request to internal and external stakeholders are important functions undertaken by Geoscience Australia.

Geoscience Australia uses its bathymetry data to provide data and scientific advice to the Australian Government, Industry and Academia. After processing, the data is primarily used to create and update Australia’s National Bathymetric Grid as well as creating regional and local bathymetric grids. In addition, Geoscience Australia acquires bathymetric data to assist in identification and delineation of the Australian continental shelf; mapping of underwater geological structures (Gifford Guyot, undersea volcanoes), assisted in the discovery of wrecks (Centaur and HMAS Derwent) and identification and mapping of seafloor habitat and structures fostering marine biodiversity; the later within Australia’s current and future marine parks. Finally, Geoscience Australia uses bathymetry data to provide an environmental framework to its analysis and promotion of Australian oil and gas prospectivity.

This presentation gives some examples of the above and outlines the current and future of Australian Bathymetry Data.