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A DIGITAL SPATIAL DATABASE OF MAUD BELT GEOLOGY

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A considerable volume of geological and other scientific data has been acquired in Antarctica over the past decades. This valuable information, which is invariably in the form of paper maps and documents, is housed in various libraries around the world, and is not always easily accessible.

Many institutions involved in Antarctic research are putting effort into making this wealth of data digitally available for further research.

This project pertains to the development of a database that constitutes an integral part of the overall effort. A spatial database of the geology of the Maud belt has been compiled, and is presented both in terms of its content, and its functionality.

The majority of the compiled information has been derived from work funded and supported by the South African National Antarctic Program since the early 1960s. The geographical extent is thus limited to the region of Western Dronning Maud Land extending from the Heimefrontfjella in the southwest to the Gjelsvikfjella in the northeast.

Geological mapping, geochronological and geochemical data have been digitised and compiled into a queriable spatial GIS database. This work is now available for assimilation into further research work in the broader region as well as for integration with similar GIS-based databases from adjoining areas in East Antarctica.