

### 3g Thickness of Cenozoic weathering in the Great Artesian Basin

Abstract	<p>Thickness of Cenozoic weathering in the Great Artesian Basin.</p> <p>Data is available as isopachs and raster. Isopachs are in Shapefile format. Rasters are in both ESRI grid and ASCII grid formats.</p> <p>This GIS data set was produced for the Great Artesian Basin Water Resource Assessment and used in Figure 3.3 of Ransley TR and Smerdon BD (Eds) (2012) Hydrostratigraphy, hydrogeology and system conceptualisation of the Great Artesian Basin. A technical report to the Australian Government from the CSIRO Great Artesian Basin Water Resource Assessment. CSIRO Water for a Healthy Country Flagship, Australia.</p> <p>This dataset and associated metadata can be obtained from <a href="http://www.ga.gov.au">www.ga.gov.au</a>, using catalogue number 76539.</p>
Lineage	<p><b>SOURCE</b></p> <p>Thickness data sourced from GABLOG (Habermehl 2001), PIRSA (2007), QDEX (Queensland Department of Natural Resources and Mines, 2012), Gibson et al 1974 and Geoscience Australia's 1:250K Geological Map series (Geoscience Australia, 2010)</p> <p><b>REFERENCES</b></p> <ol style="list-style-type: none"> <li>1. Geoscience Australia. 2010. 1:250 000 scale Geological Map series – Explanatory Notes (1960-1980). Geoscience Australia, Canberra</li> <li>2. Gibson, D. L., B. S. Powell, et al. (1974). Shallow stratigraphic drilling, northern Cape York Peninsula, 1973. Record 1974/76. Australia, Bureau of Mineral Resources.</li> <li>3. Habermehl, M. A. (2001). Wire-line logged water bores in the Great Artesian Basin, Australia - digital data of logs and water bore data acquired by AGSO. Australian Geological Survey Organisation Bulletin 245. Canberra, Bureau of Rural Sciences: ix, 98 p.</li> <li>4. PIRSA (2007). Petroleum and geothermal in South Australia. 19th Edition (DVD). Adelaide, Primary Industries and Resources South Australia, Division of Minerals and Energy Resources.</li> <li>5. Queensland Department of Natural Resources and Mines (2012) "Queensland Digital Exploration Reports (QDEX)". <a href="http://mines.industry.qld.gov.au/geoscience/company-exploration-reports.htm">http://mines.industry.qld.gov.au/geoscience/company-exploration-reports.htm</a></li> </ol> <p><b>METHOD</b></p> <p>For the western Eromanga Basin, an averaged weathering thickness for each 1:250 000 Sheet area was derived from the explanatory notes or published geological maps.</p> <p>For Central Eromanga Basin, Carpentaria Basin, Laura Basin and Surat Basin, weathering depth were derived from reports contained in descriptive lithological logs from Well Completion Reports.</p> <p>Weathering thicknesses were derived from the QPED stratigraphic database where the logged information reported the alluvium and weathering thickness.</p> <p>Thickness data were imported into ArcGIS as point sets and interpolated to create a</p>

	<p>surface using the Topo to Raster tool in the ArcGIS Spatial analyst toolset. The raster was clipped to the Great Artesian Basin Water Resource Assessment project boundary - offshore included (Ransley TR and Smerdon BD (Eds) (2012) Hydrostratigraphy, hydrogeology and system conceptualisation of the Great Artesian Basin. A technical report to the Australian Government from the CSIRO Great Artesian Basin Water Resource Assessment. CSIRO Water for a Healthy Country Flagship, Australia).</p> <p>Isopachs were generated from the raster, using the Contour tool in the 3d analyst toolset in ArcGIS.</p>
Extent	West 132.1333; East 152.7583; North -8.4696; South -32.2067 / AU-NSW/QLD/SA
Scale	1:6 000 000

