



1:500 000 tectonic units of Western Australia, 2017

Citation

Unique ID	F941356A-22F1-4F6D-A64E-535A139C1BC6
Title	1:500 000 tectonic units of Western Australia, 2017
Jurisdiction	Western Australia

Description

Abstract	<p>The digital '1:500 000 tectonic units of Western Australia, 2017' has been compiled using boundaries derived from the digital '1:500 000 State interpreted bedrock geology of Western Australia, 2016' following the principles first used on the '1:500 000 Tectonic units of Western Australia — Preliminary Version' (2007). For the offshore component, the map uses data and divisions from the Geoscience Australia 'Australian Geological Provinces' GIS dataset, with polygons adjusted to match seamlessly into the onshore tectonic elements. The nomenclature and hierarchy for the tectonic units are based on the GSWA Explanatory Notes System. The State is the highest level unit in the hierarchy, and is subdivided at the next level into Archean to Paleoproterozoic cratons; Proterozoic orogens; Archean, Proterozoic and Phanerozoic basins (or superbasins); and igneous supersuites. All units depicted on this map, with the exception of basins and some igneous supersuites, are at the third or lesser hierarchical level. Cratons are subdivided into superterrane, terrane, and domains. Orogens are divided into provinces and orogenic forelands, and may also incorporate sedimentary basins; provinces are further subdivided into terranes/zones. The reworking of basins and craton margins into orogens and orogenic forelands is represented on a companion layer, the '1:500 000 orogenic events of onshore Western Australia, 2015'. Igneous supersuites are further divided into suites, and both may be constituents of cratons, orogens, or large igneous provinces (LIPs). Basins are divided into sub-basins and sub-basin elements, which include shelves, highs, terraces, arches, platforms, ridges, troughs, embayments and grabens, and are locally ranked and stacked according to age where units overlie each other. The order of overlapping polygon units is indicated by the DRAWORDER field; the draw order may display incorrectly in the MapInfo format type. Any tectonic unit within the hierarchy may also be preserved as an inlier or outlier, in which case it is depicted as a separate unit. Polygons on this map represent the present-day area of tectonic units, without inference on their original extent. Data are held in GDA 94 decimal degrees.</p>
Search Words	GEOSCIENCES-Geology INDUSTRY-Mining MINERALS
Geographic Extent Polygon	<p>-38.00 109.00, -38.00 129.00, -9.00 129.00, -9.00 109.00</p> <p>9.00 S</p> <p>109.00 E <input type="text"/> 129.00 E</p> <p>38.00 S</p>
Reference System	GDA94

Dataset Currency

Creation Date	2016-07-08
Publication Date	2017-06-30
Revision Date	2020-11-03

Dataset Status

Status	completed
Maintenance and Update	asNeeded

Access

Available Format Type(s)	ESRI shapefiles, ESRI file geodatabase, Google Earth kmz, MapInfo Tab files, MS Access mdb (database) files
Available Format Version(s)	ESRI layer files version 10.3, MapInfo 3, MS Access 2002-03 mdb
Access Constraints	copyright
Linkage	http://www.dmirs.wa.gov.au/datacentre
Application Profile	Data and Software Centre
Function	download

Data Quality

Lineage	Source data for this map are the GSWA '1:500 000 State interpreted bedrock geology of Western Australia, 2016', the '1: 500 000 tectonic units of Western Australia, 2015', and the Geoscience Australia 'Australian Geological Provinces' GIS dataset (for the offshore components). The nomenclature and hierarchy for the tectonic units are based on the GSWA Explanatory Notes System, a database that incorporates a seamless, current summary of the geology of Western Australia, based on the most recent geological mapping and interpretation. The Explanatory Notes System largely references the Australian Geological Provinces dataset in offshore areas.
Positional Accuracy	Geological themes were captured at compilation scale, which is nominally 1:500 000. All layers have been optimized for display at the nominal scale; viewing at smaller scales will degrade resolution, whereas larger scales will degrade accuracy. Estimated accuracy is +/-125 m.
Attribute Accuracy	The accuracy of the attribute information on all datasets in this data package is estimated at 95%.
Logical Consistency	All data were visually compared with published map work to check capture and attribution.
Completeness	All datasets are complete and have been verified.
Credit	Geological Survey of Western Australia, 2017, 1:500 000 tectonic units of Western Australia, 2017: Geological Survey of Western Australia, digital data layer, www.dmp.wa.gov.au/geoview . Compilers of geology: DMcB Martin, SP Johnson and A Riganti Compiler GIS: J Hogen-Esch Editor: SR White

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Metadata Information

Metadata Date	2020-10-29
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