

ISO Geodetic Registry

<i>Item class</i>	Transformation	
<i>Name</i>	GDA94 to GDA2020 [GA v1]	
<i>Item status</i>	VALID	
<i>Identifier</i>	702	
<i>Information source</i>	<i>Title</i>	Geocentric Datum of Australia 2020 Technical Manual Version 1.2
	<i>Author</i>	Permanent Committee on Geodesy of the Intergovernmental Committee on Surveying and Mapping
	<i>Publisher</i>	Intergovernmental Committee on Surveying and Mapping
	<i>Publication date</i>	2018-08-24
	<i>Edition date</i>	
<i>Data source</i>	ISO Geodetic Registry	
<i>Remarks</i>	Defined at epoch 2020.0.	
<i>Operation version</i>	GA v1	
<i>Scope</i>	Spatial referencing	
<i>Operation accuracy</i>	0.01 m	
<i>Source CRS</i>	GDA94 - XYZ	
<i>Target CRS</i>	GDA2020 - XYZ	
<i>Operation method</i>	Coordinate Frame Transformation (geocentric Cartesian domain)	

Extent

<i>Description</i>	Australia - onshore and offshore - mainland, Tasmania, Lord Howe Island, Norfolk Island, Macquarie Island. Christmas Island - onshore and offshore. Cocos (Keeling) Islands - onshore and offshore.	
<i>Geographic Bounding Box</i>	<i>West-bound longitude</i>	93.41
	<i>North-bound latitude</i>	-8.47
	<i>East-bound longitude</i>	173.4
	<i>South-bound latitude</i>	-60.56

Operation parameter values

<i>X-axis translation</i>	0.06155 metre
<i>Y-axis translation</i>	-0.01087 metre
<i>Z-axis translation</i>	-0.04019 metre
<i>X-axis rotation</i>	-0.0394924 arc-second
<i>Y-axis rotation</i>	-0.0327221 arc-second
<i>Z-axis rotation</i>	-0.0328979 arc-second
<i>Scale difference</i>	-0.009994 parts per million

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<i>Item class</i>	OperationMethod
<i>Name</i>	Coordinate Frame Transformation (geocentric Cartesian domain)
<i>Item status</i>	VALID
<i>Identifier</i>	74
<i>Alias</i>	Coordinate Frame Transformation
<i>Alias</i>	7-Parameter Transformation
<i>Alias</i>	Bursa-Wolf Transformation
<i>Data source</i>	ISO Geodetic Registry
<i>Remarks</i>	This method is a specific case of the Molodensky-Badekas (CF) method in which the evaluation point is at the geocentre with coordinate values of zero. Note the analogy with the Position Vector transformation method but beware of the differences!
<i>Formula</i>	Geomatics Guidance Note No 7, part 2: Coordinate Conversions and Transformations including Formulas

Operation parameters

<i>X-axis translation</i>
<i>Y-axis translation</i>
<i>Z-axis translation</i>
<i>X-axis rotation</i>
<i>Y-axis rotation</i>
<i>Z-axis rotation</i>
<i>Scale difference</i>