ISO Geodetic Registry

Item class	GeodeticDatum	
Name	**Australian Terrestrial Reference Frame 2014**	
Item status	VALID	
Identifier	783	
Alias	ATRF2014	
Information source	*Title*	Australian Terrestrial Reference Frame
	Author	Geoscience Australia
	Publisher	Geoscience Australia
	Revision date	2020
	Other citation details	Website. https://www.icsm.gov.au/australian-terrestrial-reference-frame (accessed 2021-09-27)
Information source	*Title*	Australian Terrestrial Reference Frame (ATRF): Technical Implementation Plan
	Author	Intergovernmental Committee on Surveying and Mapping (ICSM)
	Publisher	Geoscience Australia
	Revision date	2020-02-12
	Edition	Version 2.3
	Edition date	2020-02-12
	Other citation details	https://www.icsm.gov.au/sites/default/files/2020-02/ATRF%20Technical%20Implementation%20Plan%20v2.3_1.pdf (accessed 2021-09-27)
Data source	ISO Geodetic Registry	
Remarks	Densification of ITRF2014 in the Australian region.	
Anchor definition	ATRF2014 is aligned to ITRF2014 at epoch 2020.0. Horizontal velocities from the Australian Plate Motion Model are used to propagate the horizontal coordinates to any other desired epoch.	
Release date	2020-01-01	
Coordinate Reference Epoch	2020.0	
Scope	Spatial referencing	
Ellipsoid	GRS 1980	
Prime Meridian	Greenwich	

Extent

Description	**Australia including Lord Howe Island, Macquarie Island, Ashmore and Cartier Islands, Christmas Island, Cocos (Keeling) Islands, Norfolk Island. All onshore and offshore.**	
Geographic Bounding Box	*West-bound longitude*	93.41
	North-bound latitude	-8.47
	East-bound longitude	173.34
	South-bound latitude	-60.56

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Item class	Ellipsoid	
Name	**GRS 1980**	
Item status	VALID	
Identifier	27	
Alias	Geodetic Reference System 1980	
Alias	GRS1980	
Alias	IAG GRS80	
Alias	International 1979	
Alias	GRS80	
Information source	*Title*	Geodetic Reference System 1980
	Author	H. Moritz
	Publisher	Springer International Publishing
	Publication date	2003-03
	Series/Journal name	Journal of Geodesy
	Issue identification	Volume 74, No. 1
	Page	128–162
Information source	*Title*	Geodetic Reference System 1980
	Author	H. Moritz
	Publisher	International Association of Geodesy
	Publication date	1984
	Series/Journal name	Bulletin Geodesique
	Issue identification	Volume 58, No. 3
	Page	395-405
Data source	ISO Geodetic Registry	
Remarks	Adopted by IUGG 1979 Canberra. Inverse flattening is derived from geocentric gravitational constant GM = 3986005e8 m*m*m/s/s, dynamic form factor J2 = 108263e-8 and Earth's angular velocity = 7292115e-11 rad/s.	
Semi-major axis	6378137.0 m	
Inverse flattening	298.257222101 m	

ISO Geodetic Registry

Item class	PrimeMeridian	
Name	**Greenwich**	
Item status	VALID	
Identifier	25	
Alias	Zero meridian	
Information source	*Title*	Why the Greenwich meridian moved
	Author	S. Malys, J.H. Seago, N.K. Pavlis, P.K. Seidelmann, G.H. Kaplan
	Publisher	Springer International Publishing
	Publication date	2015-12
	Series/Journal name	Journal of Geodesy
	Issue identification	Volume 89, No. 12
	Page	1263–1272
Information source	*Title*	IERS Conventions (2010)
	Author	G. Petit, B.J. Luzum (eds)
	Publisher	Verlag des Bundesamts fur Kartographie und Geodasie
	Publication date	2010
	Edition date	
	Series/Journal name	IERS Technical Notes
	Issue identification	36.0
	Other citation details	ISSN: 1019-4568
Data source	ISO Geodetic Registry	
Greenwich longitude	0.0 °	