ISO Geodetic Registry

Item class	GeodeticCRS	
Name	**ATRF2014 - LatLon**	
Item status	VALID	
Identifier	787	
Alias	Australian Terrestrial Reference Frame 2014	
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	
Scope	Spatial referencing	
Datum	Australian Terrestrial Reference Frame 2014	
Coordinate System	Ellipsoidal 2D CS. Axes: latitude, longitude. Orientations: north, east. UoM: degree	

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

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

ISO Geodetic Registry

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 °	

ISO Geodetic Registry

Item class	EllipsoidalCS	
Name	**Ellipsoidal 2D CS. Axes: latitude, longitude. Orientations: north, east. UoM: degree**	
Item status	VALID	
Identifier	43	
Information source	*Title*	ISO 19111 Geographical information - Spatial referencing by coordinates
	Author	International Organization for Standardization (ISO)
	Publisher	International Organization for Standardization (ISO)
	Publication date	2007-07-01
	Edition	Second Edition
	Series/Journal name	International Standard
	Issue identification	ISO 19111:2007
Data source	ISO Geodetic Registry	
Remarks	Used in geographic 2D coordinate reference systems. Coordinates referenced to this CS are in degrees. Any degree representation (e.g. DMSH, decimal, etc.) may be used but that used must be declared for the user by the supplier of data.	

Axes

Item class	CoordinateSystemAxis	
Name	**Geodetic latitude**	
Item status	VALID	
Identifier	38	
Information source	*Title*	ISO 19111 Geographical information - Spatial referencing by coordinates
	Author	International Organization for Standardization (ISO)
	Publisher	International Organization for Standardization (ISO)
	Publication date	2007-07-01
	Edition	Second Edition
	Series/Journal name	International Standard
	Issue identification	ISO 19111:2007
Data source	ISO Geodetic Registry	
Remarks	Used in geographic 2D and geographic 3D coordinate reference systems.	
Abbreviation	Lat	
Direction	north	
Unit	degree (supplier to define representation)	

Item class	CoordinateSystemAxis	
Name	**Geodetic longitude**	
Item status	VALID	
Identifier	34	
Information source	*Title*	ISO 19111 Geographical information - Spatial referencing by coordinates
	Author	International Organization for Standardization (ISO)

	Publisher	International Organization for Standardization (ISO)
	Publication date	2007-07-01
	Edition	Second Edition
	Series/Journal name	International Standard
	Issue identification	ISO 19111:2007
Data source	ISO Geodetic Registry	
Remarks	Used in geographic 2D and geographic 3D coordinate reference systems.	
Abbreviation	Lon	
Direction	east	
Unit	degree (supplier to define representation)	