# 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 ° | |