ISO Geodetic Registry

Item class GeodeticDatum

Name International Terrestrial Reference Frame 1997

Item status VALID
Identifier 145

Alias IERS Terrestrial Reference Frame 1997

Alias ITRF97

Information source Title The International Terrestrial Reference Frame

(ITRF97)

Author C. Boucher, Z. Altamimi, P. Sillard

Publisher Central Bureau of IERS - Observatoire de Paris,

61 avenue de l'Observatoire, 75014 Paris, France

Publication date 1999-05-01

Edition date

Series/Journal name IERS Technical Notes

Issue identification 27.0

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

Remarks Replaces ITRF96. Replaced by ITRF2000. This is a purely Cartesian

reference frame with no ellipsoid defined. GRS80 is the ellipsoid

recommended by the IAG and IERS.

Anchor definition Realisation of the IERS Terrestrial Reference System (ITRS) at

reference epoch 1997.0. The origin, scale, orientation and its time evolution is achieved such that ITRF97 is in the same system as the ITRF96. Datum defined by a set of 3 dimensional Cartesian station

coordinates and velocities given by the citations.

Release date 1999-05-01 Coordinate Reference Epoch 1997.0

Scope Spatial referencing

Ellipsoid GRS 1980
Prime Meridian Greenwich

Extent

Description

World.

Geographic Bounding Box

West-bound longitude

North-bound latitude

East-bound longitude

South-bound latitude

-90.0

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 °