ISO Geodetic Registry

Item class GeodeticDatum

Name European Terrestrial Reference Frame 1994

Item statusVALIDIdentifier172AliasETRF94

Information source Title EUREF Technical Note 1: Relationship and

Transformation between the International and the

European Terrestrial Reference Systems

Author Z. Altamimi

Publisher Institut National de l'Information Géographique et

Forestière (IGN), France

Publication date 2018-06-28

Series/Journal name IERS Technical Note

Issue identification 1.0

Information source Title Memo : Specifications for reference frame fixing

in the analysis of a EUREF GPS campaign

(version 8)

Author C. Boucher, Z. Altamimi

Publisher Institute National de l'Information Geographique

et Forestiere (IGN), Laboratoire de Recherche en

Geodesie (LAREG)

Publication date 2011-05-18

Edition date

Information source Title ETRS89 realization: Current status, ETRF2005

and Future Development

Author Z. Altamimi Publication date 2008-06-17

Edition date

Data source ISO Geodetic Registry

Remarks The ETRF94 reference frame is a realisation of the ETRS89 reference

system.

Anchor definition Coincides with ITRF94 in orientation and scale at epoch 1989.0

realigned to ITRF89 at epoch 1989.0 using 3 translations and is fixed to the stable part of the Eurasian tectonic plate through 3 rotation rates derived from the NNR-NUVEL-1A geophysical model, representing the

Eurasian plate's angular velocity about its Euler pole.

Coordinate Reference Epoch 1989.0

Scope Spatial referencing

Ellipsoid GRS 1980
Prime Meridian Greenwich

Extent

Europe - onshore and offshore: Albania,
Andorra, Austria, Belgium, Bosnia and
Herzegovina, Bulgaria, Croatia, Cyprus,
Czech Republic, Denmark, Estonia, Faroe
Islands, Finland, France, Germany, Gibraltar,
Greece, Hungary, Ireland, Italy, Latvia,
Liechtenstein, Lithuania, Luxembourg,
Macedonia, Malta, Monaco, Montenegro,

ia, Spain, gdom (UK) le of Man,
-16.1
84.17
39.65
32.88

ISO Geodetic Registry

Item class Ellipsoid

Name GRS 1980

Item statusVALIDIdentifier27

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 statusVALIDIdentifier25

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 °