Item class GeodeticCRS

Name ETRF92 - LatLonEHt

Item statusVALIDIdentifier369

Alias European Terrestrial Reference Frame 1992

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
Scope Spatial referencing

Datum European Terrestrial Reference Frame 1992

Coordinate System Ellipsoidal 3D CS. Axes: latitude, longitude, ellipsoidal height. Orientations: north, east, up. UoM: degree, degree, metre.

### 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,
Netherlands, Norway including Svalbard and
Jan Mayen, Poland, Portugal, Romania, San
Marino, Serbia, Slovakia, Slovenia, Spain,
Sweden, Switzerland, United Kingdom (UK)
including Channel Islands and Isle of Man,
Vatican City State.

Geographic Bounding Box	West-bound longitude	-16.1
	North-bound latitude	84.17
	East-bound longitude	39.65
	South-bound latitude	32.88

Item class GeodeticDatum

Name European Terrestrial Reference Frame 1992

Item statusVALIDIdentifier195AliasETRF92

Information source Title ETRS89 realization: Current status, ETRF2005

and Future Development

Author Z. Altamimi Publication date 2008-06-17

Edition date

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Geodesie (LAREG)

Publication date 2011-05-18

Edition date

Data source ISO Geodetic Registry

Remarks The ETRF92 reference frame is a realisation of the ETRS89 reference

system.

Anchor definition Coincides with ITRF92 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-1 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

Description 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,

	Netherlands, Norway including Svalbard and Jan Mayen, Poland, Portugal, Romania, San Marino, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, United Kingdom (UK) including Channel Islands and Isle of Man, Vatican City State.	
Geographic Bounding Box	West-bound longitude	-16.1
	North-bound latitude	84.17
	East-bound longitude	39.65
	South-bound latitude	32.88

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

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 °

EllipsoidalCS Item class

Name Ellipsoidal 3D CS. Axes: latitude, longitude,

ellipsoidal height. Orientations: north, east, up.

UoM: degree, degree, metre.

**VALID** Item status Identifier 46

Information source Title ISO 19111 Geographical information - Spatial

referencing by coordinates

International Organization for Standardization Author

(ISO)

Publisher International Organization for Standardization

(ISO)

2007-07-01 Publication date Edition Second Edition Series/Journal name International Standard Issue identification ISO 19111:2007

Data source ISO Geodetic Registry

Remarks Used in geographic 3D coordinate reference systems. Horizontal

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.

#### Axes

Item class CoordinateSystemAxis

Name Geodetic latitude

Item status **VALID** Identifier 38

Information source Title ISO 19111 Geographical information - Spatial

referencing by coordinates

International Organization for Standardization **Author** 

(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

Used in geographic 2D and geographic 3D coordinate reference Remarks

systems.

Abbreviation Lat Direction north

Unit degree (supplier to define representation)

CoordinateSystemAxis Item class

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)

Item class CoordinateSystemAxis

Name Ellipsoidal height

Item statusVALIDIdentifier36

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 only as part of an ellipsoidal 3D coordinate system in a

geographic 3D coordinate reference system, never on its own.

*Abbreviation* h

Direction up
Unit metre