Item class GeodeticCRS

Name IGb14 - LatLonEHt

Item statusVALIDIdentifier726

Alias International GNSS Service 2014 (V2)

Information source Title Switch to IGb14 reference frame

Author P. Rebischung

Publisher International GNSS Service (IGS)

Publication date 2020-04-14 Series/Journal name ISGMAIL Issue identification 7921

Other citation details https://lists.igs.org/pipermail/

igsmail/2020/007917.html (accessed 2020-06-03)

Data source ISO Geodetic Registry

Remarks Replaces IGS14 - LatLonEHt.

Scope Spatial referencing

Datum IGb14

Coordinate System Ellipsoidal 3D CS. Axes: latitude, longitude, ellipsoidal height.

Orientations: north, east, up. UoM: degree, degree, metre.

#### Extent

Description	World.	
Geographic Bounding Box	West-bound longitude	-180.0
	North-bound latitude	90.0
	East-bound longitude	180.0
	South-bound latitude	-90.0

Item class GeodeticDatum

Name IGb14
Item status VALID
Identifier 724

Alias International GNSS Service 2014 (V2)

Information source Title Switch to IGb14 reference frame

Author P. Rebischung

Publisher International GNSS Service (IGS)

Publication date 2020-04-14
Series/Journal name ISGMAIL
Issue identification 7921

Other citation details https://lists.igs.org/pipermail/

igsmail/2020/007917.html (accessed 2020-06-03)

Data source ISO Geodetic Registry

Remarks An update to IGS14. Replaces IGS14. Used by IGS products

from 2020-05-17. An updated set of satellite and ground antenna calibrations, igs14.atx, should be used together with IGb14, as well as post-seismic deformation models psd\_IGb14.snx. IGb14 is aligned

indirectly with ITRF2014 via IGS14.

Anchor definition IGb14 was obtained from a long-term stacking of daily IGS solutions

of GPS weeks 730 to 2092. IGb14 is aligned in origin, scale and orientation to IGS14 via a subset of 233 stable, well-performing IGS

stations.

Release date 2020-04-14 Coordinate Reference Epoch 2010.0

Scope Spatial referencing

Ellipsoid GRS 1980
Prime Meridian Greenwich

#### Extent

Description	World.	
Geographic Bounding Box	West-bound longitude	-180.0
	North-bound latitude	90.0
	East-bound longitude	180.0
	South-bound latitude	-90.0

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 °

Item class EllipsoidalCS

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

ellipsoidal height. Orientations: north, east, up.

UoM: degree, degree, metre.

Item status VALID
Identifier 46

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 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 statusVALIDIdentifier38

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)

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