Item class GeodeticCRS

Name IGS05 - LatLon

Item status VALID
Identifier 441

Alias International GNSS Service 2005

Information source Title Proposed IGS05 Realization

Author R. Ferland

Publisher International GNSS Service (IGS)

Publication date 2006-10-19

Edition date

Series/Journal name IGSMAIL Issue identification 5447.0

Data source ISO Geodetic Registry

Remarks Replaces IGb00 - LatLon. Replaced by IGS08 - LatLon. Used by IGS

products within the period 2006-11-05 thru 2011-04-16.

Scope Spatial referencing

Datum IGS05

Coordinate System Ellipsoidal 2D CS. Axes: latitude, longitude. Orientations: north, east.

UoM: degree

### 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 IGS05
Item status VALID
Identifier 202

Alias International GNSS Service 2005

Information source Title Chronology of IGS Reference Frame Usage

Author International GNSS Service Analysis Centre

Coordinator

Publisher National Oceanic and Atmospheric Administration

(NOAA), National Geodetic Survey (NGS)

Publication date 2012-10-04
Other citation details Website

Information source Title IGS switch to absolute antenna model and

ITRF2005

Author Remi Ferland

Publisher International GNSS Service (IGS)

Publication date 2006-10-09 Series/Journal name IGSMAIL Issue identification 5438.0

Information source Title Proposed IGS05 Realization

Author R. Ferland

Publisher International GNSS Service (IGS)

Publication date 2006-10-19

Edition date

Series/Journal name IGSMAIL Issue identification 5447.0

Data source ISO Geodetic Registry

Remarks Replaces IGb00. Replaced by IGS08. Used by IGS products within the

period 2006-11-05 thru 2011-04-16.

Anchor definition Derived from and aligned to a subset of 139 stable IGS station

coordinates and velocities in ITRF2005 at epoch 2000.0. The first IGS reference frame to use absolute antenna phase calibrations for both

ground stations and satellite antennas.

Release date 2006-11-05
Coordinate Reference Epoch 2000.0

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 2D CS. Axes: latitude, longitude.

Orientations: north, east. UoM: degree

**VALID** Item status

Identifier 43

Information source Title ISO 19111 Geographical information - Spatial

referencing by coordinates

International Organization for Standardization **Author** 

(ISO)

International Organization for Standardization Publisher

(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 coordinate reference systems. 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 by the supplier of data.

#### Axes

Item class CoordinateSystemAxis

Name Geodetic latitude

**VALID** Item status Identifier 38

Information source Title ISO 19111 Geographical information - Spatial

referencing by coordinates

**Author** International Organization for Standardization

(ISO)

International Organization for Standardization Publisher

(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 2D and geographic 3D coordinate reference

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)