## ISO Geodetic Registry

Item class GeodeticDatum

Name IGS20
Item status VALID
Identifier 979

Alias International GNSS Service 2020

Information source Title Switch of the IGS products to the

IGS20.igs20.atx, repro3 standards and long

filenames

Author Salim Masoumi

Publisher International GNSS Service (IGS)

Publication date 2022-11-25 Series/Journal name IGSMAIL Issue identification 8282

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

igsmail/2022/008278.html (accessed 2023-01-27)

Information source Title Upcoming switch to IGS20/igs20.atx and repro3

standards

Author Arturo Villiger

Publisher International GNSS Service (IGS)

Publication date 2022-07-26 Series/Journal name IGSMAIL Issue identification 8238

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

igsmail/2022/008234.html (accessed 2023-01-27)

Data source ISO Geodetic Registry

Remarks Replaces IGb14. Used by IGS products from 2022-11-27. An updated

set of satellite and ground antenna calibrations defined in igs20.atx and post-seismic deformation models defined in psd\_IGS20.snx must be

used together with IGS20.

Anchor definition Derived from a long-term combination of daily IGS repro3 solutions

from 1994 to 2020 and aligned in origin, scale and orientation and their rates of change to ITRF2020 at epoch 2015.0 via a subset of 332

stable, well performing IGS stations.

Release date 2022-11-27 Coordinate Reference Epoch 2015.0

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  |

## 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 °