## ISO Geodetic Registry

Item class GeodeticDatum

North American Datum of 1983 (2011) Epoch

2010

Item status VALID
Identifier 126

Alias NAD83(2011)

Information source Title Notice to Adopt Standard Method for Horizontal

**Datum Transformation** 

Author US Government

Publisher Office of Federal Register, NARA

Publication date 1990-08-10 Edition date 1990-08-10

Series/Journal name Federal Register Notice

Issue identification Volume 55, No. 155, Document: 00-18809

Page 32681.0

Other citation details Mandates use of NADCON for official

transformations between datums

Information source Title NADCON 5.0: Geometric Transformation Tool for

points in the National Spatial Reference System

Author D. Smith, A. Bilich

Publisher NOAA's National Geodetic Survey

Publication date 2017-03-27 Edition date 2017-03-27

Series/Journal name NGS Technical Report

Other citation details Replaces version 4.2 and all earlier. Provides

gridding algorithm, datum transformations, and

extents of covnversion grids.

Information source Title CORS Coordinates

Author National Geodetic Survey

Publisher National Oceanic and Atmospheric Administration

(NOAA) National Geodetic Survey (NGS)

Revision date 2017-05-16

Series/Journal name NGS Online listing of transformation parameters

Other citation details webpage

Information source Title Publication of North American Datum of 1983

(2011) Epoch 2010.00, North American Datum of 1983 (PA2011) Epoch 2010.00 and North American Datum of 1983 (MA2011) Epoch

2010.00

Author US Government

Publisher Office of Federal Register, NARA

Publication date 2013-08-08 Edition date 2013-08-08

Series/Journal name Federal Register Notice

Issue identification Volume 78, No. 153, Document: 2013–19167,

Citation: 78 FR 48421

Page 48421-48422

Data source ISO Geodetic Registry

Remarks Replaces NAD83(CORS96) Epoch 2002.0 for control determined in an

active reference frame and NAD83 (2007) for passive control.

Anchor definition Realization of NAD83. The frame is defined by a time-dependent

seven parameter transformation of ITRF2008 3D geocentric Cartesian

- and in the analysis of the fact the Contemps in the United Ctates

coordinates and velocities for the Conterminous United States

(CONUS), including Alaska, Puerto Rico and the U.S. Virgin Islands at reference epoch 2010.0. The frame is kept aligned to North America at other epochs using the NNR-NUVEL-1A estimate of three Cartesian

rotation rates of change representing the tectonic plate motion of North America. The origin, scale and orientation of the frame are nominally defined to be that for the BIH Terrestrial System 1984 (BTS84). This also is a realization of passive control constrained to the values at the CORS. NAD83(20110 serves as a connection between passive network transformed by grids and active frames defined by timedependent transformations.

2013 Coordinate Reference Epoch 2010.0

Scope Spatial referencing

Ellipsoid GRS 1980 Prime Meridian Greenwich

## Extent

Release date

Description	United States and Territories - onshore				
	and offshore: Puerto Rico. United States				
	(USA) - Alaska, CONUS (Alabama, Arizona, Arkansas, California, Colorado, Connecticut,				
			Delaware, Florida, Georgia, Idaho, Illinois,		
	Indiana, Iowa, Kansas, Kentucky, Louisiana,				
	Maine, Maryland, Massachusetts, Michigan,				
	Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah,				
			Vermont, Virginia, Washington, West Virginia,		
			Wisconsin, Wyoming). Virgin Islands (US).		
			Geographic Bounding Box	West-bound longitude	167.65
				North-bound latitude	74.71
				East-bound longitude	-63.88
	South-bound latitude	14.92			

## 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 °