Item class GeodeticCRS

NAD 83 (CORS96) Epoch 1997.0 - XYZ

Item statusVALIDIdentifier311

Alias North American Datum of 1983 (CORS96) Epoch 1997.0

Information source Title Continuously Operating Reference Station

(CORS): History, Applications, and Future

Enhancements

Author R.A. Snay, T. Soler

PublisherASCEPublication date2008-04-01Edition date2008-04-01

Series/Journal name Journal of Surveying Engineering

Issue identification Volume 134, No. 4

Page 95-104

Other citation details NAD83 (CORS96) Epoch 1996.0,NAD83

(CORS96) Epoch 1997.0,NAD83 (CORS96)

Epoch 2002.0

Information source Title NGS No Longer Updates Published CORS

Coordinates in the Following Reference Frames

Author National Geodetic Survey

Publisher National Oceanic and Atmospheric Administration

(NOAA) National Geodetic Survey (NGS)

Revision date 2017-03-16 Edition date 2017-03-16

Series/Journal name NGS Online listing of transformation parameters

Other citation details webpage

Data source ISO Geodetic Registry
Scope Spatial referencing

Datum North American Datum of 1983 (CORS96) Epoch 1997.0

Coordinate System Geocentric 3D right-handed Cartesian CS. Axes: Geocentric X,Y,Z.

Orientation: Z to North Pole, [X and Y in the equatorial plane, X at Prime Meridian | X in the equatorial plane at the Prime Meridian]. UoM:

m.

Extent

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

Item class GeodeticDatum

North American Datum of 1983 (CORS96)

Epoch 1997.0

Item status VALID Identifier 139

Alias NAD83(CORS96)

Information source Title NGS No Longer Updates Published CORS

Coordinates in the Following Reference Frames

Author National Geodetic Survey

Publisher National Oceanic and Atmospheric Administration

(NOAA) National Geodetic Survey (NGS)

Revision date 2017-03-16 Edition date 2017-03-16

Series/Journal name NGS Online listing of transformation parameters

Other citation details webpage

Information source Title Continuously Operating Reference Station

(CORS): History, Applications, and Future

Enhancements

Author R.A. Snay, T. Soler

Publisher ASCE
Publication date 2008-04-01
Edition date 2008-04-01

Series/Journal name Journal of Surveying Engineering

Issue identification Volume 134, No. 4

Page 95-104

Other citation details NAD83 (CORS96) Epoch 1996.0,NAD83

(CORS96) Epoch 1997.0, NAD83 (CORS96)

Epoch 2002.0

Data source ISO Geodetic Registry

Remarks Replaces NAD83(1986). Replaced by NAD83(CORS96) Epoch 2002.0.

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

seven parameter transformations of ITRF96 and ITRF97 3D geocentric Cartesian coordinates and velocities at reference epoch 1997.0. 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).

Release date 1998 Coordinate Reference Epoch 1997.0

Scope Spatial referencing

Ellipsoid GRS 1980
Prime Meridian Greenwich

Extent

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 longitude167.65North-bound latitude74.71East-bound longitude-63.88South-bound latitude14.92

Item class Ellipsoid

Name GRS 1980

Item statusVALIDIdentifier27

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 °

CartesianCS Item class

Name Geocentric 3D right-handed Cartesian CS.

Axes: Geocentric X,Y,Z. Orientation: Z to North

Pole, [X and Y in the equatorial plane, X at

Prime Meridian | X in the equatorial plane at the

Prime Meridian]. UoM: m.

Item status **VALID** Identifier 45

Alias Earth centred, earth fixed, right-handed 3D coordinate system,

> consisting of 3 orthogonal axes with X and Y axes in the equatorial plane, positive Z-axis parallel to mean earth rotation axis and pointing

towards North Pole. UoM: m.

Alias **ECEF**

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 Second Edition Edition Series/Journal name International Standard

Issue identification ISO 19111:2007

Data source ISO Geodetic Registry

Used in geocentric coordinate reference systems. Remarks

Axes

Item class CoordinateSystemAxis Name **Geocentric X** Item status **VALID** Identifier 33 Information source Title ISO 19111 Geographical information - Spatial referencing by coordinates Author International Organization for Standardization 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 Abbreviation Χ Direction Geocentre > equator/0°E Unit metre

Item class CoordinateSystemAxis

Name **Geocentric Y**

VALID Item status Identifier 37

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

Abbreviation Y

Direction Geocentre > equator/90°E

Unit metre

Item class CoordinateSystemAxis

Name Geocentric Z

Item statusVALIDIdentifier39

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

Abbreviation Z

Direction Geocentre > north pole

Unit metre