Item class GeodeticCRS

NAD 83 (MARP00) - LatLon

Item statusVALIDIdentifier280

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 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 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 Introducing Two Spatial Reference Frames for

Regions of the Pacific Ocean

Author R.A. Snay

Publisher American Cobgress on Surveying and Mapping

Publication date 2003-01-01 Edition date 2003-01-01

Series/Journal name Surveying and Land Information Systems

Issue identification Volume 63, No. 1

Page 5-12

Other citation details MARP00, PACP00

Data source ISO Geodetic Registry
Scope Spatial referencing

Datum North American Datum of 1983 (MARP00)

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

UoM: degree

#### Extent

Guam - onshore and offshore. Northern

Mariana Islands - onshore and offshore. Palau onshore and offshore.

Geographic Bounding Box	West-bound longitude	129.48
	North-bound latitude	23.9
	East-bound longitude	149.55
	South-bound latitude	1.64

Item class GeodeticDatum

North American Datum of 1983 (MARP00)

Item status VALID Identifier 162

Alias NAD83 (MARP00)

Information source Title Introducing HTDP 3.1 to transform coordinates

across time and spatial reference frames

Author C. Pearson, R.A. Snay

PublisherSpringer-VerlagPublication date2013-01-01Edition date2013-01-01Series/Journal nameGPS SolutionsIssue identificationVolume 17, No. 1

Page 1-15

Other citation details NAD83 (2011), NAD83 (MA11), NAD83 (PA11)

transformation from IGb08

Information source Title Introducing Two Spatial Reference Frames for

Regions of the Pacific Ocean

Author R.A. Snay

Publisher American Cobgress on Surveying and Mapping

Publication date 2003-01-01 Edition date 2003-01-01

Series/Journal name Surveying and Land Information Systems

Issue identification Volume 63, No. 1

Page 5-12

Other citation details MARP00, PACP00

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

Remarks Replaces NAD83 (HARN). Replaced by NAD83(MA11) from

2011-09-06.

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

seven parameter transformation of ITRF2000 3D geocentric Cartesian coordinates and velocities at reference epoch 1993.62. The frame is kept aligned to the Mariana plate at other epochs based on an Euler pole calculated from 16 sites located on the North American, Mariana, and Pacific plates. The original web listing erroneously showed values for this frame as being identical to NAD83 (CORS96) Epoch 2002. However, the original HTDP (version 2.7) implementation used the

transformation given in the reference.

Release date 2003 Coordinate Reference Epoch 1993.6

Scope Spatial referencing

Ellipsoid GRS 1980
Prime Meridian Greenwich

Extent

Description	Guam - onshore and offshore. Northern Mariana Islands - onshore and offshore. Palau - onshore and offshore.	
Geographic Bounding Box	West-bound longitude	129.48
	North-bound latitude	23.9
	East-bound longitude	149.55
	South-bound latitude	1.64

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

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

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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

Identifier

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)