ISO Geodetic Registry

Item class	GeodeticDatum	
Name	**North American Datum of 1983 (High Accuracy Regional Network)**	
Item status	VALID	
Identifier	119	
Alias	NAD83(HARN)	
Alias	NAD83(HPGN)	
Alias	NAD83	
Alias	NAD83 (High Precision Geodetic Network)	
Alias	Guam Geodetic Network 1993	
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.
Data source	ISO Geodetic Registry	
Remarks	Replaces NAD83 (1986). It was replaced by the NAD83 (FBN) in CONUS, American Samoa, Guam, and CNMI (Rota, Tinian, and Saipan). It was replaced by a corrected NAD83 (HARN) in Puerto Rico and the U.S. Virgin Islands.	
Anchor definition	A realization of NAD83. The original state-wide HARN's were realized from an adjustment of data observed in the NAD83 (1986) reference frame to develop a set of passive geodetic control values. This was accomplished at various times in the early 1990's through 1997. The original HARN's were latitude and longitude only. A subsequent realization from GPS observations was made to develop new latitude, longitude, and ellipsoid heights. If the latitude and longitudes were less than 2 cm different, then the original values were retained and the ellipsoid heights simply added as a third coordinate. If the latitude or longitude changed by more than 2 cm, then all three coordinates were updated. This latter case forms the basis for the Federal Base Network (FBN), which is treated separately from the HARN's.	
Scope	Spatial referencing	
Ellipsoid	GRS 1980	
Prime Meridian	Greenwich	

Extent

Description	**United States and Territories - onshore and offshore: American Samoa. 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), Hawaii. Virgin Islands (US).**	
Geographic Bounding Box	*West-bound longitude*	144.58
	North-bound latitude	74.71
	East-bound longitude	-64.51
	South-bound latitude	-17.56

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 °	