

# ISO Geodetic Registry

Item class	GeodeticCRS		
Name	NAD27 - LatLon		
Item status	VALID		
Identifier	246		
Alias	NAD27		
Alias	NAD27(74)		
Alias	North American Datum of 1927		
Alias	Sea Level Datum of 1927		
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	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	
Data source	ISO Geodetic Registry		
Scope	Spatial referencing		
Datum	North American Datum of 1927		
Coordinate System	Ellipsoidal 2D CS. Axes: latitude, longitude. Orientations: north, east. UoM: degree		

## Extent

<i>Description</i>	<b>North and Central America: Antigua and Barbuda - onshore. Bahamas onshore plus offshore internal continental shelf only. Belize - onshore. Canada - onshore and offshore - Alberta, British Columbia, Manitoba, New Brunswick, Newfoundland and Labrador, Northwest Territories, Nova Scotia, Nunavut, Ontario, Prince Edward Island, Quebec, Saskatchewan, Yukon. Cuba - onshore and offshore. El Salvador - onshore. Guatemala - onshore. Honduras - onshore. Puerto Rico - onshore. Mexico - onshore</b>
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**plus offshore Gulf of Mexico. Nicaragua - onshore. United States (USA) – onshore and offshore - 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 (British) - onshore. Virgin Islands (US) - onshore and offshore.**

<i>Geographic Bounding Box</i>	<i>West-bound longitude</i>	167.65
	<i>North-bound latitude</i>	83.17
	<i>East-bound longitude</i>	-47.74
	<i>South-bound latitude</i>	7.98

# ISO Geodetic Registry

<i>Item class</i>	GeodeticDatum	
<i>Name</i>	<b>North American Datum of 1927</b>	
<i>Item status</i>	VALID	
<i>Identifier</i>	104	
<i>Alias</i>	NAD27(74)	
<i>Alias</i>	NAD27	
<i>Information source</i>	<i>Title</i>	NADCON 5.0: Geometric Transformation Tool for points in the National Spatial Reference System
	<i>Author</i>	D. Smith, A. Bilich
	<i>Publisher</i>	NOAA's National Geodetic Survey
	<i>Publication date</i>	2017-03-27
	<i>Edition date</i>	2017-03-27
	<i>Series/Journal name</i>	NGS Technical Report
	<i>Other citation details</i>	Replaces version 4.2 and all earlier. Provides gridding algorithm, datum transformations, and extents of covnversion grids.
<i>Information source</i>	<i>Title</i>	Annual Report of the Superintendent of the Coast and Geodetic Survey for fiscal year ended June 30, 1927
	<i>Author</i>	Coast and Geodetic Survey
	<i>Publisher</i>	Coast and Geodetic Survey
	<i>Publication date</i>	1927
<i>Information source</i>	<i>Title</i>	Notice to Adopt Standard Method for Horizontal Datum Transformation
	<i>Author</i>	US Government
	<i>Publisher</i>	Office of Federal Register, NARA
	<i>Publication date</i>	1990-08-10
	<i>Edition date</i>	1990-08-10
	<i>Series/Journal name</i>	Federal Register Notice
	<i>Issue identification</i>	Volume 55, No. 155, Document: 00-18809
	<i>Page</i>	32681.0
	<i>Other citation details</i>	Mandates use of NADCON for official transformations between datums
<i>Information source</i>	<i>Title</i>	Annual Report of the Director, United States Coast and Geodetic Survey to the Secretary of Commerce for the Fiscal Year Ended June 30, 1930
	<i>Author</i>	US Government
	<i>Publisher</i>	Government Printing Office
	<i>Publication date</i>	1930-06-30
	<i>Edition date</i>	1930-06-30
	<i>Page</i>	33.0
	<i>Other citation details</i>	NGVD29
<i>Data source</i>	ISO Geodetic Registry	
<i>Remarks</i>	Replaced by NAD27(76) in Ontario, CGQ77 in Quebec, Mexican Datum of 1993 in Mexico, NAD83(1986) in Canada (excl. Ontario & Quebec) & USA.	
<i>Anchor definition</i>	Fundamental point: Meade's Ranch. Latitude: 39°13'26.686"N, longitude: 98°32'30.506"W (of Greenwich). Note: this CRS includes longitudes which are POSITIVE EAST.	
<i>Release date</i>	1927-01-01	
<i>Scope</i>	Spatial referencing	
<i>Ellipsoid</i>	Clarke 1866	
<i>Prime Meridian</i>	Greenwich	

## Extent

<i>Description</i>	<p><b>North and Central America: Antigua and Barbuda - onshore. Bahamas onshore plus offshore internal continental shelf only. Belize - onshore. Canada - onshore and offshore - Alberta, British Columbia, Manitoba, New Brunswick, Newfoundland and Labrador, Northwest Territories, Nova Scotia, Nunavut, Ontario, Prince Edward Island, Quebec, Saskatchewan, Yukon. Cuba - onshore and offshore. El Salvador - onshore. Guatemala - onshore. Honduras - onshore. Puerto Rico - onshore. Mexico - onshore plus offshore Gulf of Mexico. Nicaragua - onshore. United States (USA) – onshore and offshore - 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 (British) - onshore. Virgin Islands (US) - onshore and offshore.</b></p>								
<i>Geographic Bounding Box</i>	<table> <tr> <td><i>West-bound longitude</i></td><td>167.65</td></tr> <tr> <td><i>North-bound latitude</i></td><td>83.17</td></tr> <tr> <td><i>East-bound longitude</i></td><td>-47.74</td></tr> <tr> <td><i>South-bound latitude</i></td><td>7.98</td></tr> </table>	<i>West-bound longitude</i>	167.65	<i>North-bound latitude</i>	83.17	<i>East-bound longitude</i>	-47.74	<i>South-bound latitude</i>	7.98
<i>West-bound longitude</i>	167.65								
<i>North-bound latitude</i>	83.17								
<i>East-bound longitude</i>	-47.74								
<i>South-bound latitude</i>	7.98								

# ISO Geodetic Registry

<i>Item class</i>	Ellipsoid
<i>Name</i>	<b>Clarke 1866</b>
<i>Item status</i>	VALID
<i>Identifier</i>	28
<i>Information source</i>	<p><i>Title</i> Annual Report of the Superintendent of the Coast and Geodetic Survey for fiscal year ended June 30, 1927</p> <p><i>Author</i> Coast and Geodetic Survey</p> <p><i>Publisher</i> Coast and Geodetic Survey</p> <p><i>Publication date</i> 1927</p>
<i>Information source</i>	<p><i>Title</i> Universal Transverse Mercator Grid Tables For Latitudes 0°-80° Clarke 1866 Spheroid (Meters) Volume II</p> <p><i>Author</i> U.S. Army Map Service</p> <p><i>Publisher</i> U.S. Army Map Service</p> <p><i>Publication date</i> 1958-07</p> <p><i>Series/Journal name</i> Technical Manual</p> <p><i>Issue identification</i> TM 5-241-4/2</p>
<i>Information source</i>	<p><i>Title</i> Transformation of grid coordinates</p> <p><i>Author</i> U.S. Army Map Service</p> <p><i>Publisher</i> U.S. Army Map Service</p> <p><i>Publication date</i> 1944</p> <p><i>Series/Journal name</i> Army Map Services Bulletin</p> <p><i>Issue identification</i> 7.0</p>
<i>Information source</i>	<p><i>Title</i> Annual Report of the Director, United States Coast and Geodetic Survey to the Secretary of Commerce for the Fiscal Year Ended June 30, 1930</p> <p><i>Author</i> US Government</p> <p><i>Publisher</i> Government Printing Office</p> <p><i>Publication date</i> 1930-06-30</p> <p><i>Edition date</i> 1930-06-30</p> <p><i>Page</i> 33.0</p> <p><i>Other citation details</i> NGVD29</p>
<i>Information source</i>	<p><i>Title</i> Grids and Grid References</p> <p><i>Author</i> Department of the Army</p> <p><i>Publisher</i> Headquarters, Department of the Army, Washington, DC</p> <p><i>Publication date</i> 1967-06-07</p> <p><i>Series/Journal name</i> Department of the Army Technical Manual</p> <p><i>Issue identification</i> TM 5-241-1</p>
<i>Information source</i>	<p><i>Title</i> Universal transverse mercator grid tables. Clarke 1866 (Technical Manual nos. 7, 21, 37), Clarke 1880 (nos. 9, 48), Everest (nos. 11, 49), Bessel (nos. 8, 39), International (no. 6) spheroids</p> <p><i>Author</i> U.S. Army Map Service</p> <p><i>Publisher</i> U.S. Army Map Service</p> <p><i>Publication date</i> 1951</p>
<i>Data source</i>	ISO Geodetic Registry
<i>Remarks</i>	Original definition a=20926062 and b=20855121 (British) feet. Uses Clarke's 1865 inch-metre ratio of 39.370432 to obtain metres. Metric value then converted to US survey feet for use in the US and international feet for use in Cayman Islands.
<i>Semi-major axis</i>	6378206.4 m
<i>Semi-minor axis</i>	6356583.8 m

# ISO Geodetic Registry

<i>Item class</i>	PrimeMeridian	
<i>Name</i>	<b>Greenwich</b>	
<i>Item status</i>	VALID	
<i>Identifier</i>	25	
<i>Alias</i>	Zero meridian	
<i>Information source</i>	<i>Title</i>	Why the Greenwich meridian moved
	<i>Author</i>	S. Malys, J.H. Seago, N.K. Pavlis, P.K. Seidelmann, G.H. Kaplan
	<i>Publisher</i>	Springer International Publishing
	<i>Publication date</i>	2015-12
	<i>Series/Journal name</i>	Journal of Geodesy
	<i>Issue identification</i>	Volume 89, No. 12
	<i>Page</i>	1263–1272
<i>Information source</i>	<i>Title</i>	IERS Conventions (2010)
	<i>Author</i>	G. Petit, B.J. Luzum (eds)
	<i>Publisher</i>	Verlag des Bundesamts für Kartographie und Geodäsie
	<i>Publication date</i>	2010
	<i>Edition date</i>	
	<i>Series/Journal name</i>	IERS Technical Notes
	<i>Issue identification</i>	36.0
<i>Data source</i>	<i>Other citation details</i>	ISSN: 1019-4568
	ISO Geodetic Registry	
<i>Greenwich longitude</i>	0.0 °	

# ISO Geodetic Registry

<i>Item class</i>	EllipsoidalCS	
<i>Name</i>	<b>Ellipsoidal 2D CS. Axes: latitude, longitude. Orientations: north, east. UoM: degree</b>	
<i>Item status</i>	VALID	
<i>Identifier</i>	43	
<i>Information source</i>	<i>Title</i>	ISO 19111 Geographical information - Spatial referencing by coordinates
	<i>Author</i>	International Organization for Standardization (ISO)
	<i>Publisher</i>	International Organization for Standardization (ISO)
	<i>Publication date</i>	2007-07-01
	<i>Edition</i>	Second Edition
	<i>Series/Journal name</i>	International Standard
	<i>Issue identification</i>	ISO 19111:2007
<i>Data source</i>	ISO Geodetic Registry	
<i>Remarks</i>	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

<i>Item class</i>	CoordinateSystemAxis	
<i>Name</i>	<b>Geodetic latitude</b>	
<i>Item status</i>	VALID	
<i>Identifier</i>	38	
<i>Information source</i>	<i>Title</i>	ISO 19111 Geographical information - Spatial referencing by coordinates
	<i>Author</i>	International Organization for Standardization (ISO)
	<i>Publisher</i>	International Organization for Standardization (ISO)
	<i>Publication date</i>	2007-07-01
	<i>Edition</i>	Second Edition
	<i>Series/Journal name</i>	International Standard
	<i>Issue identification</i>	ISO 19111:2007
<i>Data source</i>	ISO Geodetic Registry	
<i>Remarks</i>	Used in geographic 2D and geographic 3D coordinate reference systems.	
<i>Abbreviation</i>	Lat	
<i>Direction</i>	north	
<i>Unit</i>	degree (supplier to define representation)	

  

<i>Item class</i>	CoordinateSystemAxis	
<i>Name</i>	<b>Geodetic longitude</b>	
<i>Item status</i>	VALID	
<i>Identifier</i>	34	
<i>Information source</i>	<i>Title</i>	ISO 19111 Geographical information - Spatial referencing by coordinates
	<i>Author</i>	International Organization for Standardization (ISO)

	<i>Publisher</i>	International Organization for Standardization (ISO)
	<i>Publication date</i>	2007-07-01
	<i>Edition</i>	Second Edition
	<i>Series/Journal name</i>	International Standard
	<i>Issue identification</i>	ISO 19111:2007
<i>Data source</i>		ISO Geodetic Registry
<i>Remarks</i>		Used in geographic 2D and geographic 3D coordinate reference systems.
<i>Abbreviation</i>		Lon
<i>Direction</i>		east
<i>Unit</i>		degree (supplier to define representation)