Item class GeodeticCRS

Name NAD27 - LatLon

Item statusVALIDIdentifier246AliasNAD27AliasNAD27(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 sourceISO Geodetic RegistryScopeSpatial referencing

Datum North American Datum of 1927

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

UoM: degree

Extent

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.

Geographic Bounding Box

West-bound longitude	167.65
North-bound latitude	83.17
East-bound longitude	-47.74
South-bound latitude	7.98

Item class GeodeticDatum

North American Datum of 1927

Item status VALID
Identifier 104

Alias NAD27(74)
Alias NAD27

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 Annual Report of the Superintendent of the Coast

and Geodetic Survey for fiscal year ended June

30, 1927

Author Coast and Geodetic Survey
Publisher Coast and Geodetic Survey

Publication date 1927

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 Annual Report of the Director, United States

Coast and Geodetic Survey to the Secretary of Commerce for the Fiscal Year Ended June 30,

1930

Author US Government

Publisher Government Printing Office

Publication date1930-06-30Edition date1930-06-30Page33.0Other citation detailsNGVD29

Data source ISO Geodetic Registry

Remarks Replaced by NAD27(76) in Ontario, CGQ77 in Quebec, Mexican

Datum of 1993 in Mexico, NAD83(1986) in Canada (excl. Ontario &

Quebec) & USA.

Anchor definition 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.

Release date 1927-01-01

Scope Spatial referencing

Ellipsoid Clarke 1866

Prime Meridian Greenwich

Extent

Description

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.

Geographic Bounding Box

West-bound longitude167.65North-bound latitude83.17East-bound longitude-47.74South-bound latitude7.98

Item class Ellipsoid

Name Clarke 1866

Item statusVALIDIdentifier28

Information source Title Annual Report of the Superintendent of the Coast

and Geodetic Survey for fiscal year ended June

30, 1927

Author Coast and Geodetic Survey
Publisher Coast and Geodetic Survey

Publication date 1927

Information source Title Universal Transverse Mercator Grid Tables For

Latitudes 0°-80° Clarke 1866 Spheroid (Meters)

Volume II

Author U.S. Army Map Service Publisher U.S. Army Map Service

Publication date 1958-07

Series/Journal name Technical Manual Issue identification TM 5-241-4/2

Information source Title Transformation of grid coordinates

Author U.S. Army Map Service
Publisher U.S. Army Map Service

Publication date 1944

Series/Journal name Army Map Services Bulletin

Issue identification 7.0

Information source Title Annual Report of the Director, United States

Coast and Geodetic Survey to the Secretary of Commerce for the Fiscal Year Ended June 30,

1930

Author US Government

Publisher Government Printing Office

Publication date 1930-06-30 Edition date 1930-06-30 Page 33.0 Other citation details NGVD29

Information source Title Grids and Grid References

Author Department of the Army

Publisher Headquarters, Department of the Army,

Washington, DC

Publication date 1967-06-07

Series/Journal name Department of the Army Technical Manual

Issue identification TM 5-241-1

Information source Title 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

U.S. Army Map Service
U.S. Army Map Service

Publisher U.S. Army Map S Publication date 1951

Publication date 1951 ISO Geodetic Registry

Remarks Original definition a=20926062 and b=20855121 (British) feet.

Author

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.

 Semi-major axis
 6378206.4 m

 Semi-minor axis
 6356583.8 m

Data source

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

Item status VALID

Identifier 43

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 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

Item class CoordinateSystemAxis

Name Geodetic latitude

Item statusVALIDIdentifier38

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 Lat
Direction north

Unit degree (supplier to define representation)

Item class CoordinateSystemAxis

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)