

# ISO Geodetic Registry

<i>Item class</i>	GeodeticDatum	
<i>Name</i>	<b>North American Datum of 1983 (CSRS) version 4</b>	
<i>Item status</i>	VALID	
<i>Identifier</i>	147	
<i>Alias</i>	NAD83v4	
<i>Alias</i>	Canadian Spatial Reference System 1998	
<i>Alias</i>	NAD83	
<i>Alias</i>	NAD83(CSRS)	
<i>Alias</i>	NAD83CSRS	
<i>Alias</i>	NAD83(CSRS98)	
<i>Alias</i>	CSRS98	
<i>Alias</i>	Canadian Spatial Reference System	
<i>Alias</i>	CSRS	
<i>Alias</i>	North American Datum 1983 v4	
<i>Alias</i>	NAD83(CSRS)v4	
<i>Information source</i>	<i>Title</i>	The Canadian Spatial Reference System (CSRS)
	<i>Author</i>	Canadian Geodetic Survey
	<i>Publisher</i>	Canadian Geodetic Survey, Surveyor General Branch, Earth Sciences Sector, Natural Resources Canada, Government of Canada
<i>Information source</i>	<i>Publication date</i>	2016-08-30
	<i>Title</i>	The Evolution of NAD83 in Canada: Addendum
	<i>Author</i>	M. Craymer
	<i>Publisher</i>	Canadian Institute of Geomatics
	<i>Publication date</i>	2006
	<i>Series/Journal name</i>	Geomatica
<i>Information source</i>	<i>Issue identification</i>	Volume 60, No. 4
	<i>Page</i>	433.0
	<i>Title</i>	The Evolution of NAD83 in Canada
	<i>Author</i>	M. Craymer
	<i>Publisher</i>	Canadian Institute of Geomatics
	<i>Publication date</i>	2006
<i>Information source</i>	<i>Series/Journal name</i>	Geomatica
	<i>Issue identification</i>	Volume 60, No. 2
	<i>Page</i>	151-164
<i>Data source</i>	ISO Geodetic Registry	
<i>Remarks</i>	Adopted by the Canadian federal government for Canada, and by provincial governments in Alberta and British Columbia. Replaces NAD83(CSRS) v3. Replaced by NAD83(CSRS) v5.	
<i>Anchor definition</i>	Realization of the North American Datum of 1983 for the Canadian Spatial Reference System, referred to as CSRS98 or CSRS. The frame is defined by a time-dependent seven parameter transformation of ITRF2000 3D geocentric Cartesian coordinates and velocities for Canadian and bordering US and Greenland stations at reference epoch 2002.0. 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).	
<i>Release date</i>	2002-01-01	
<i>Scope</i>	Spatial referencing	
<i>Ellipsoid</i>	GRS 1980	

Prime Meridian	Greenwich
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## Extent

Description	<b>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.</b>		
Geographic Bounding Box	West-bound longitude	-141.01	
	North-bound latitude	90.0	
	East-bound longitude	-47.74	
	South-bound latitude	40.04	

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<i>Item class</i>	Ellipsoid														
<i>Name</i>	<b>GRS 1980</b>														
<i>Item status</i>	VALID														
<i>Identifier</i>	27														
<i>Alias</i>	Geodetic Reference System 1980														
<i>Alias</i>	GRS1980														
<i>Alias</i>	IAG GRS80														
<i>Alias</i>	International 1979														
<i>Alias</i>	GRS80														
<i>Information source</i>	<table> <tr> <td><i>Title</i></td><td>Geodetic Reference System 1980</td></tr> <tr> <td><i>Author</i></td><td>H. Moritz</td></tr> <tr> <td><i>Publisher</i></td><td>Springer International Publishing</td></tr> <tr> <td><i>Publication date</i></td><td>2003-03</td></tr> <tr> <td><i>Series/Journal name</i></td><td>Journal of Geodesy</td></tr> <tr> <td><i>Issue identification</i></td><td>Volume 74, No. 1</td></tr> <tr> <td><i>Page</i></td><td>128–162</td></tr> </table>	<i>Title</i>	Geodetic Reference System 1980	<i>Author</i>	H. Moritz	<i>Publisher</i>	Springer International Publishing	<i>Publication date</i>	2003-03	<i>Series/Journal name</i>	Journal of Geodesy	<i>Issue identification</i>	Volume 74, No. 1	<i>Page</i>	128–162
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<i>Author</i>	H. Moritz														
<i>Publisher</i>	Springer International Publishing														
<i>Publication date</i>	2003-03														
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<i>Series/Journal name</i>	Bulletin Geodesique														
<i>Issue identification</i>	Volume 58, No. 3														
<i>Page</i>	395-405														
<i>Data source</i>	ISO Geodetic Registry														
<i>Remarks</i>	Adopted by IUGG 1979 Canberra. Inverse flattening is derived from geocentric gravitational constant $GM = 3986005e8 \text{ m}^3/\text{s}^2$ , dynamic form factor $J_2 = 108263e-8$ and Earth's angular velocity = $7292115e-11 \text{ rad/s}$ .														
<i>Semi-major axis</i>	6378137.0 m														
<i>Inverse flattening</i>	298.257222101 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 °	