ISO Geodetic Registry

Item class	GeodeticCRS	
Name	**NAD83(CSRS) v4 - LatLonEHt**	
Item status	VALID	
Identifier	347	
Alias	NAD83v4	
Alias	Canadian Spatial Reference System 1998	
Alias	NAD83	
Alias	NAD83(CSRS)	
Alias	NAD83(CSRS98)	
Alias	CSRS98	
Alias	Canadian Spatial Reference System	
Alias	CSRS	
Alias	North American Datum 1983 v4	
Alias	NAD83(CSRS)v4	
Information source	*Title*	The Canadian Spatial Reference System (CSRS)
	Author	Canadian Geodetic Survey
	Publisher	Canadian Geodetic Survey, Surveyor General Branch, Earth Sciences Sector, Natural Resources Canada, Government of Canada
	Publication date	2016-08-30
Information source	*Title*	The Evolution of NAD83 in Canada
	Author	M. Craymer
	Publisher	Canadian Institute of Geomatics
	Publication date	2006
	Series/Journal name	Geomatica
	Issue identification	Volume 60, No. 2
	Page	151-164
Data source	ISO Geodetic Registry	
Scope	Spatial referencing	
Datum	North American Datum of 1983 (CSRS) version 4	
Coordinate System	Ellipsoidal 3D CS. Axes: latitude, longitude, ellipsoidal height. Orientations: north, east, up. UoM: degree, degree, metre.	

Extent

Description	**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.**	
Geographic Bounding Box	*West-bound longitude*	-141.01
	North-bound latitude	90.0
	East-bound longitude	-47.74
	South-bound latitude	40.04

ISO Geodetic Registry

Item class	GeodeticDatum	
Name	**North American Datum of 1983 (CSRS) version 4**	
Item status	VALID	
Identifier	147	
Alias	NAD83v4	
Alias	Canadian Spatial Reference System 1998	
Alias	NAD83	
Alias	NAD83(CSRS)	
Alias	NAD83CSRS	
Alias	NAD83(CSRS98)	
Alias	CSRS98	
Alias	Canadian Spatial Reference System	
Alias	CSRS	
Alias	North American Datum 1983 v4	
Alias	NAD83(CSRS)v4	
Information source	*Title*	The Canadian Spatial Reference System (CSRS)
	Author	Canadian Geodetic Survey
	Publisher	Canadian Geodetic Survey, Surveyor General Branch, Earth Sciences Sector, Natural Resources Canada, Government of Canada
	Publication date	2016-08-30
Information source	*Title*	The Evolution of NAD83 in Canada: Addendum
	Author	M. Craymer
	Publisher	Canadian Institute of Geomatics
	Publication date	2006
	Series/Journal name	Geomatica
	Issue identification	Volume 60, No. 4
	Page	433.0
Information source	*Title*	The Evolution of NAD83 in Canada
	Author	M. Craymer
	Publisher	Canadian Institute of Geomatics
	Publication date	2006
	Series/Journal name	Geomatica
	Issue identification	Volume 60, No. 2
	Page	151-164
Data source	ISO Geodetic Registry	
Remarks	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.	
Anchor definition	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).	
Release date	2002-01-01	
Scope	Spatial referencing	
Ellipsoid	GRS 1980	

Prime Meridian	Greenwich

Extent

Description	**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.**	
Geographic Bounding Box	*West-bound longitude*	-141.01
	North-bound latitude	90.0
	East-bound longitude	-47.74
	South-bound latitude	40.04

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 °	

ISO Geodetic Registry

Item class	EllipsoidalCS	
Name	**Ellipsoidal 3D CS. Axes: latitude, longitude, ellipsoidal height. Orientations: north, east, up. UoM: degree, degree, metre.**	
Item status	VALID	
Identifier	46	
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 3D coordinate reference systems. Horizontal 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.	

Axes

Item class	CoordinateSystemAxis	
Name	**Geodetic latitude**	
Item status	VALID	
Identifier	38	
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)	

Item class	CoordinateSystemAxis	
Name	**Ellipsoidal height**	
Item status	VALID	
Identifier	36	
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 only as part of an ellipsoidal 3D coordinate system in a geographic 3D coordinate reference system, never on its own.	
Abbreviation	h	
Direction	up	
Unit	metre	