

ISO Geodetic Registry

| | | | | | | | | | | | | | | | |
|-----------------------------|---|--------------|--|---------------|--------------------------|------------------|--|-------------------------|------------|----------------------------|-----------|-----------------------------|------------------|-------------|---------|
| <i>Item class</i> | GeodeticDatum | | | | | | | | | | | | | | |
| <i>Name</i> | North American Datum of 1983 (CSRS) version 3 | | | | | | | | | | | | | | |
| <i>Item status</i> | VALID | | | | | | | | | | | | | | |
| <i>Identifier</i> | 123 | | | | | | | | | | | | | | |
| <i>Alias</i> | NAD83v3 | | | | | | | | | | | | | | |
| <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> | NAD83(CSRS)v3 | | | | | | | | | | | | | | |
| <i>Alias</i> | Canadian Spatial Reference System | | | | | | | | | | | | | | |
| <i>Alias</i> | CSRS | | | | | | | | | | | | | | |
| <i>Alias</i> | North American Datum 1983 v3 | | | | | | | | | | | | | | |
| <i>Information source</i> | <table> <tr> <td><i>Title</i></td><td>The Evolution of NAD83 in Canada</td></tr> <tr> <td><i>Author</i></td><td>M. Craymer</td></tr> <tr> <td><i>Publisher</i></td><td>Canadian Institute of Geomatics</td></tr> <tr> <td><i>Publication date</i></td><td>2006</td></tr> <tr> <td><i>Series/Journal name</i></td><td>Geomatica</td></tr> <tr> <td><i>Issue identification</i></td><td>Volume 60, No. 2</td></tr> <tr> <td><i>Page</i></td><td>151-164</td></tr> </table> | <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>Series/Journal name</i> | Geomatica | <i>Issue identification</i> | Volume 60, No. 2 | <i>Page</i> | 151-164 |
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| <i>Author</i> | M. Craymer | | | | | | | | | | | | | | |
| <i>Publisher</i> | Canadian Institute of Geomatics | | | | | | | | | | | | | | |
| <i>Publication date</i> | 2006 | | | | | | | | | | | | | | |
| <i>Series/Journal name</i> | Geomatica | | | | | | | | | | | | | | |
| <i>Issue identification</i> | Volume 60, No. 2 | | | | | | | | | | | | | | |
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| <i>Author</i> | M. Craymer | | | | | | | | | | | | | | |
| <i>Publisher</i> | Canadian Institute of Geomatics | | | | | | | | | | | | | | |
| <i>Publication date</i> | 2006 | | | | | | | | | | | | | | |
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| <i>Publisher</i> | Canadian Geodetic Survey, Surveyor General Branch, Earth Sciences Sector, Natural Resources Canada, Government of Canada | | | | | | | | | | | | | | |
| <i>Publication date</i> | 2016-08-30 | | | | | | | | | | | | | | |
| <i>Data source</i> | ISO Geodetic Registry | | | | | | | | | | | | | | |
| <i>Remarks</i> | Adopted by the Canadian federal government for use in Canada, and by provincial governments in British Columbia, Nova Scotia and Ontario. Replaces NAD83(CSRS) v2. Replaced by NAD83(CSRS) v4. | | | | | | | | | | | | | | |
| <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 ITRF97 3D geocentric Cartesian coordinates and velocities for Canadian and bordering US and Greenland stations at reference epoch 1997.0. 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> | 1999-01-01 | | | | | | | | | | | | | | |
| <i>Scope</i> | Spatial referencing | | | | | | | | | | | | | | |
| <i>Ellipsoid</i> | 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 | |

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|-----------------------------|--|--------------|--------------------------------|---------------|-----------|------------------|--------------------------------------|-------------------------|---------|----------------------------|---------------------|-----------------------------|------------------|-------------|---------|
| <i>Item class</i> | Ellipsoid | | | | | | | | | | | | | | |
| <i>Name</i> | GRS 1980 | | | | | | | | | | | | | | |
| <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 | | | | | | | | | | | | | | |
| <i>Series/Journal name</i> | Journal of Geodesy | | | | | | | | | | | | | | |
| <i>Issue identification</i> | Volume 74, No. 1 | | | | | | | | | | | | | | |
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| <i>Title</i> | Geodetic Reference System 1980 | | | | | | | | | | | | | | |
| <i>Author</i> | H. Moritz | | | | | | | | | | | | | | |
| <i>Publisher</i> | International Association of Geodesy | | | | | | | | | | | | | | |
| <i>Publication date</i> | 1984 | | | | | | | | | | | | | | |
| <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

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|----------------------------|-------------------------------|---|
| <i>Item class</i> | PrimeMeridian | |
| <i>Name</i> | Greenwich | |
| <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 ° | |