ISO Geodetic Registry

Item class GeodeticDatum

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

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, | |
| | | |
| | | |
| | | |
| | Geographic Bounding Box | West-bound longitude |
| 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 °