ISO Geodetic Registry

Item class GeodeticDatum

North American Datum of 1983 (CSRS) version

7

Item status VALID Identifier 166

Alias North American Datum 1983 v7

Alias NAD83v7

Alias Canadian Spatial Reference System 1998

Alias NAD83

 Alias
 NAD83(CSRS)

 Alias
 NAD83CSRS

 Alias
 NAD83(CSRS)v7

 Alias
 NAD83(CSRS98)

Alias CSRS98

Alias Canadian Spatial Reference System

Alias CSRS

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

Information source Title Reference Frames: National & International

Author M. Craymer

Publisher Canadian Geodetic Survey, Surveyor General

Branch, Earth Sciences Sector, Natural

Resources Canada

Publication date 2017-05-01

Series/Journal name Presentation to Canadian Geodetic Reference

Systems Committee Meeting, Ottawa, May 1-2,

2017

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

Data source ISO Geodetic Registry

Remarks Adopted by the Canadian federal government for Canada, and by the

provincial governments in Alberta and Prince Edward Island. Replaces

NAD83(CSRS) v6.

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 ITRF2014 3D geocentric Cartesian coordinates and velocities for

Canadian and bordering US and Greenland areas at reference epoch 2010.0. 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 2017-05-01 Coordinate Reference Epoch 2010.0

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 statusVALIDIdentifier27

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 °