Item class GeodeticCRS

NAD83(CSRS) v6 - LatLonEHt

Item status VALID
Identifier 327

Alias NAD83v6

Alias Canadian Spatial Reference System 1998

Alias NAD83

 Alias
 NAD83(CSRS)

 Alias
 NAD83(CSRS)v6

 Alias
 NAD83(CSRS98)

Alias CSRS98

Alias North American Datum 1983 v6

Alias Canadian Spatial Reference System

Alias CSRS

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 Reference Frames: National

Author M. Craymer, J. Henton, D. Hutchinson, E. Lapelle,

M. Piraszewski

Publisher Canadian Geodetic Survey, Surveyor General

Branch, Earth Sciences Sector, Natural

Resources Canada

Publication date 2010-04-19

Series/Journal name Presentation to Canadian Geodetic Reference

Systems Committee Meeting, Ottawa, April 19-21,

2010

Data source ISO Geodetic Registry
Scope Spatial referencing

Datum North American Datum of 1983 (CSRS) version 6

Coordinate System Ellipsoidal 3D CS. Axes: latitude, longitude, ellipsoidal height. Orientations: north, east, up. UoM: degree, degree, metre.

### Extent

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

Item class GeodeticDatum

North American Datum of 1983 (CSRS) version

6

Item statusVALIDIdentifier183

Alias NAD83v6

Alias Canadian Spatial Reference System 1998

Alias NAD83

 Alias
 NAD83(CSRS)

 Alias
 NAD83CSRS

 Alias
 NAD83(CSRS)v6

 Alias
 NAD83(CSRS98)

Alias CSRS98

Alias North American Datum 1983 v6

Alias Canadian Spatial Reference System

Alias CSRS

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

Information source Title Reference Frames: National

Author M. Craymer, J. Henton, D. Hutchinson, E. Lapelle,

M. Piraszewski

Publisher Canadian Geodetic Survey, Surveyor General

Branch, Earth Sciences Sector, Natural

Resources Canada

Publication date 2010-04-19

Series/Journal name Presentation to Canadian Geodetic Reference

Systems Committee Meeting, Ottawa, April 19-21,

2010

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

Data source ISO Geodetic Registry

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

provincial governments in Manitoba, Newfoundland and Labrador,

Nova Scotia, Ontario, and Prince Edward Island. Replaces

NAD83(CSRS) v5. Replaced by NAD83(CSRS) v7.

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 ITRF2008 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 2010-01-01

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 North-bound latitude	-141.01 90.0
	East-bound longitude	-47.74
	South-bound latitude	40.04

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

Item class PrimeMeridian

Name Greenwich

Item statusVALIDIdentifier25

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 °

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 statusVALIDIdentifier38

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)

2007-07-01 Publication date Edition Second Edition Series/Journal name International Standard Issue identification ISO 19111:2007

Data source ISO Geodetic Registry

Used in geographic 2D and geographic 3D coordinate reference Remarks

systems.

Abbreviation Lon Direction east

Unit degree (supplier to define representation)

Item class CoordinateSystemAxis

Name Ellipsoidal height

**VALID** Item status 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)

2007-07-01 Publication date Edition Second Edition Series/Journal name International Standard ISO 19111:2007

Issue identification

ISO Geodetic Registry Data source

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