ISO Geodetic Registry

Item class VerticalDatum

Name Canadian Geodetic Vertical Datum of 2013

(Canadian Gravimetric Geoid of 2013a) Epoch

2002

Item status VALID
Identifier 964

Alias Canadian Geodetic Vertical Datum of 2013 (Canadian Gravimetric

Geoid of 2013a)

Alias CGVD2013(CGG2013a)

Alias CGG2013a
Alias CGVD2013

Information source Title Canadian Geodetic Vertical Datum of 2013

Author Judith Bosse

Publisher Government of Canada

Publication date 2015-12-05 Series/Journal name Canada Gazette

Issue identification Part I, December 5, 2015

Page 2587.0

Other citation details http://www.gazette.gc.ca/ (accessed 2022-01-21).

Information source Title Geoid Models

Author Canadian Geodetic Survey

Publisher Geodetic Survey Division, Natural Resources

Canada, Government of Canada

Revision date 2021-12-07

Other citation details Website. https://webapp.geod.nrcan.gc.ca/geod/

data-donnees/geoid.php?locale=en (accessed

2022-01-21).

Information source Title Canadian Gravimetric Geoid 2013 – Version A

(CGG2013a)

Author M. Veronneau, J. Huang

Publisher Geodetic Survey Division, Natural Resources

Canada, Government of Canada

Publication date 2015-11

Series/Journal name Internal Report

Information source Title The Canadian Geodetic Vertical Datum of 2013

(CGVD2013)

Author M. Veronneau, J. Huang

Publisher Canadian Institute of Geomatics

Publication date 2016
Series/Journal name Geomatica
Issue identification Volume 70, No. 1

Page 42997.0

Other citation details http://dx.doi.org/10.5623/cig2016-101 (accessed

2022-01-21).

Data source ISO Geodetic Registry

Remarks Heights are at epoch 2002.0.

Anchor definition CGVD2013(CGG2013a) is a gravimetric datum defined by the

Canadian Gravimetric Geoid of 2013a (CGG2013a), referenced to the NAD83(CSRS) v6 geodetic datum at epoch 2002.0. The geoid-based datum is defined by the equipotential surface Wo=62,636,856.0 m*m/s/s, representing by convention the coastal mean sea level for North America. The definition and geopotential value comes from an agreement between Canada and the USA. The Canadian Gravimetric Geoid of 2013a (CGG2013a) is the second realization of

the CGVD2013 vertical datum and is considered static. It is available in both the NAD83(CSRS) and ITRF2008 geometric reference frames using the GRS80 ellipsoid, making it compatible with space-based positioning techniques. Heights in CGVD2013(CGG2013a) epoch 2002.0 are orthometric and can be obtained from NAD83(CSRS) v6 or ITRF2008 ellipsoidal heights at epoch 2002.0 by subtracting the CGG2013a geoid height in either NAD83(CSRS) v6 or ITRF2008, respectively.

Release date 2015 Coordinate Reference Epoch 2002.0

Scope Spatial referencing

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 |