ISO Geodetic Registry

Item class Transformation

Name CGVD28 to CGVD2013(CGG2013a) epoch 2010

[v1]

Item statusVALIDIdentifier977

Information source Title GPS-H

Author Canadian Geodetic Survey

Publisher Geodetic Survey Division, Natural Resources

Canada, Government of Canada

Revision date 2021-03-15

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

tools-outils/gpsh.php

Information source Title Referencing and Time Tagging Heights in

Canada

Author M. Veronneau

Publisher Geodetic Survey Division, Natural Resources

Canada, Government of Canada

Publication date 2018

Series/Journal name Internal Report

Information source Title Height Transformation version 2.0 (HTv2.0),

Epochs 2002.0 and 2010.0

Author M. Veronneau

Publisher Geodetic Survey Division, Natural Resources

Canada, Government of Canada

Publication date 2019

Series/Journal name Internal Report
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).

Data source ISO Geodetic Registry

Remarks Grid transformation from CGVD28 normal orthomeetric heights to

CGVD2013(CGG2013a) orthometric heights at epoch 2010.0. Bi-linear interpolation of the grid file will give results agreeing to within 1cm

99.97% of the time.

Operation version V1

Information source

Scope Spatial referencing.

Operation accuracy 0.05 m

Source CRS CGVD28 - NOHt

Operation method Gravity-related height transformation (Canada)

Extent

Description Canada - onshore - Alberta, British Columbia, Manitoba south of 57°N, New Brunswick,

Northwest Territories south west of a line between 60°N, 110°W and the coast at 132°W,

Nova Scotia, Ontario south of 52°N, Prince

Edward Island, Quebec - mainland west of 66°W and south of 55°N, Saskatchewan south of 55°N, Yukon.

West-bound longitude Geographic Bounding Box -141.01

North-bound latitude 69.8 East-bound longitude -59.73 South-bound latitude 41.67

Operation parameter values

Geoid (height correction) model file	HT2_2010v70_CGG2013a.byn
ISOGR code for Interpolation CRS	320.0 unity

ISO Geodetic Registry

Item class OperationMethod

Name Gravity-related height transformation (Canada)

Item statusVALIDIdentifier962AliasGPS-H

Data source ISO Geodetic Registry

Remarks Transforms gravity-related heights between CGVD28 and

CGVD2013(CGG2013a) vertical datums using GPS-H software with coordinate epoch propagation and bi-quadratic interpolation of a grid of geoid model differences. See information sources for algorithm and file

format documentation.

Operation parameters

Geoid model difference file

ISOGR code for Interpolation CRS