ISO Geodetic Registry

Item class Transformation

Name CGVD28 to CGVD2013(CGG2013a) epoch 2002

[v1]

Item status VALID
Identifier 976

Information source

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 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 Geold Models

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 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

Data source ISO Geodetic Registry

Remarks Grid transformation from CGVD28 normal orthomeetric heights to

CGVD2013(CGG2013a) orthometric heights at epoch 2002.0. Bi-linear interpolation of the grid file will give results agreeing to within 1cm

99.97% of the time.

Operation version v1

Scope Spatial referencing.

Operation accuracy 0.05 m

Source CRS CGVD28 - NOHt

Target CRS CGVD2013(CGG2013a) epoch 2002 - OHt

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.

Geographic Bounding Box West-bound longitude -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_2002v70_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