ISO Geodetic Registry

Item class Transformation

NAD83(CSRS) v6 to CGVD2013(CGG2013) - OHt

[v1]

Item status VALID
Identifier 464

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

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Data source ISO Geodetic Registry

Remarks Grid transformation from NAD83(CSRS) v6 ellipsoidal heights to

CGVD2013(CGG2013) orthometric heights using the CGG2013 geoid model upon which CGVD2013(CGG2013) is defined. 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 0.03 m

Source CRS NAD83(CSRS) v6 - LatLonEHt Target CRS CGVD2013(CGG2013) - OHt

Operation method Geographic3D to Gravity Related Height (Canada)

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

Operation parameter values

Geoid (height correction) model file	CGG2013n83.byn	
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Item class OperationMethod

Name Geographic3D to Gravity Related Height

(Canada)

Item statusVALIDIdentifier89

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Remarks For consistency with earlier geoid models in Canada, reference

software for CGG2013 and CGG2013a uses bi-quadratic interpolation over nine grid nodes. The bi-linear interpolation is sufficient for most uses as the newer models have a higher spatial resolution. See

information source for file format documentation.

Formula The GPS Height Transformation (v2.0): An Ellipsoidal-CGVD28 Height

Transformation for Use With GPS in Canada

Operation parameters

Geoid (height correction) model file