

# ISO Geodetic Registry

|                           |   |   |
|---------------------------|---|---|
| <i>Item class</i>         | Transformation  |   |
| <i>Name</i>               | <b>NAD83(CSRS) v6 to CGVD2013(CGG2013) - OHt [v1]</b>   |   |
| <i>Item status</i>        | VALID   |   |
| <i>Identifier</i>         | 464   |   |
| <i>Information source</i> | <i>Title</i>  | The Canadian Geodetic Vertical Datum of 2013 (CGVD2013) |
|                           | <i>Author</i>   | M. Veronneau, J. Huang                                  |
|                           | <i>Publisher</i>  | Canadian Institute of Geomatics                         |
|                           | <i>Publication date</i>   | 2016  |
|                           | <i>Series/Journal name</i>  | Geomatica   |
|                           | <i>Issue identification</i>   | Volume 70, No. 1  |
|                           | <i>Page</i>   | 9.0   |
| <i>Data source</i>        | ISO Geodetic Registry   |   |
| <i>Remarks</i>            | 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. |   |
| <i>Operation version</i>  | v1  |   |
| <i>Scope</i>              | Spatial referencing   |   |
| <i>Operation accuracy</i> | 0.03 m  |   |
| <i>Source CRS</i>         | NAD83(CSRS) v6 - LatLonEHt  |   |
| <i>Target CRS</i>         | CGVD2013(CGG2013) - OHt   |   |
| <i>Operation method</i>   | Geographic3D to Gravity Related Height (Canada)   |   |

## Extent

|                                |  |         |
|--------------------------------|--|---------|
| <i>Description</i>             | <b>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.</b> |         |
| <i>Geographic Bounding Box</i> | <i>West-bound longitude</i>  | -141.01 |
|                                | <i>North-bound latitude</i>  | 90.0    |
|                                | <i>East-bound longitude</i>  | -47.74  |
|                                | <i>South-bound latitude</i>  | 40.04   |

## Operation parameter values

|   |                |
|---|----------------|
| <i>Geoid (height correction) model file</i> | CGG2013n83.byn |
|---|----------------|

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|                    |  |
|--------------------|--|
| <i>Item class</i>  | OperationMethod  |
| <i>Name</i>        | <b>Geographic3D to Gravity Related Height (Canada)</b>   |
| <i>Item status</i> | VALID  |
| <i>Identifier</i>  | 89   |
| <i>Data source</i> | ISO Geodetic Registry  |
| <i>Remarks</i>     | 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. |
| <i>Formula</i>     | The GPS Height Transformation (v2.0): An Ellipsoidal-CGVD28 Height Transformation for Use With GPS in Canada   |

## Operation parameters

*Geoid (height correction) model file*