ISO Geodetic Registry

Item class	Transformation	
Name	**ITRF2008 to CGVD2013(CGG2013a) Epoch 2010 - OHt [v1]**	
Item status	VALID	
Identifier	535	
Alias	ITRF2008 to CGVD2013(CGG2013a) - OHt [v1]	
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
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	9.0
Data source	ISO Geodetic Registry	
Remarks	Grid transformation from ITRF2008 ellipsoidal heights at epoch 2010.0 to CGVD2013(CGG2013a) orthometric heights at epoch 2010.0 using the CGG2013a geoid model upon which CGVD2013(CGG2013a) 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	ITRF2008 - LatLonEHt	
Target CRS	CGVD2013(CGG2013a) Epoch 2010 - 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	CGG2013ai08.byn

ISO Geodetic Registry

Item class	OperationMethod
Name	**Geographic3D to Gravity Related Height (Canada)**
Item status	VALID
Identifier	89
Data source	ISO Geodetic Registry
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