

ISO Geodetic Registry

<i>Item class</i>	Transformation	
<i>Name</i>	NAD83(CSRs) v6 to NAD83(CSRs) v7 [v1]	
<i>Item status</i>	VALID	
<i>Identifier</i>	1034	
<i>Information source</i>	<i>Title</i>	Coordinate Transformations
	<i>Author</i>	Canadian Geodetic Survey
	<i>Publisher</i>	Canadian Geodetic Survey, Surveyor General Branch, Lands and Minerals Sector, Natural Resources Canada, Government of Canada
	<i>Revision date</i>	2022-04-29
	<i>Other citation details</i>	Web page: https://webapp.csr-scrs.nrcan-rncan.gc.ca/geod/data-donnees/transformations.php (accessed 2024-02-25)
<i>Data source</i>	ISO Geodetic Registry	
<i>Remarks</i>	Null transformation. NAD83(CSRs) v6 and NAD83(CSRs) v7 are referenced to the same coordinate reference epoch and considered compatible with each other.	
<i>Operation version</i>	v1	
<i>Scope</i>	Spatial referencing.	
<i>Operation accuracy</i>	0.01 m	
<i>Source CRS</i>	NAD83(CSRs) v6 - XYZ	
<i>Target CRS</i>	NAD83(CSRs) v7 - XYZ	
<i>Operation method</i>	Position Vector Transformation (geocentric Cartesian domain)	

Extent

<i>Description</i>	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.	
<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>X-axis translation</i>	0.0 metre
<i>Y-axis translation</i>	0.0 metre
<i>Z-axis translation</i>	0.0 metre
<i>X-axis rotation</i>	0.0 milliarc-second
<i>Y-axis rotation</i>	0.0 milliarc-second
<i>Z-axis rotation</i>	0.0 milliarc-second
<i>Scale difference</i>	0.0 parts per billion

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<i>Item class</i>	OperationMethod
<i>Name</i>	Position Vector Transformation (geocentric Cartesian domain)
<i>Item status</i>	VALID
<i>Identifier</i>	88
<i>Alias</i>	7-Parameter Transformation
<i>Alias</i>	Bursa-Wolf Transformation
<i>Alias</i>	Position Vector Transformation
<i>Alias</i>	Helmert Transformation
<i>Data source</i>	ISO Geodetic Registry
<i>Remarks</i>	This method is a specific case of the Molodensky-Badekas (PV) method in which the evaluation point is the geocentre with coordinate values of zero. Note the analogy with the Coordinate Frame Transformation method but beware of the differences!
<i>Formula</i>	Geomatics Guidance Note No 7, part 2: Coordinate Conversions and Transformations including Formulas

Operation parameters

<i>X-axis translation</i>
<i>Y-axis translation</i>
<i>Z-axis translation</i>
<i>X-axis rotation</i>
<i>Y-axis rotation</i>
<i>Z-axis rotation</i>
<i>Scale difference</i>