

# ISO Geodetic Registry

<i>Item class</i>	Transformation	
<i>Name</i>	<b>NAD83(CSRS) v6 to NAD 83 (2011) [v1]</b>	
<i>Item status</i>	VALID	
<i>Identifier</i>	482	
<i>Information source</i>	<i>Title</i>	The Canadian Spatial Reference System (CSRS)
	<i>Author</i>	Canadian Geodetic Survey
	<i>Publisher</i>	Canadian Geodetic Survey, Surveyor General Branch, Earth Sciences Sector, Natural Resources Canada, Government of Canada
	<i>Publication date</i>	2016-08-30
<i>Information source</i>	<i>Title</i>	Introducing HTDP 3.1 to transform coordinates across time and spatial reference frames
	<i>Author</i>	C. Pearson, R.A. Snay
	<i>Publisher</i>	Springer-Verlag
	<i>Publication date</i>	2013-01-01
	<i>Edition date</i>	2013-01-01
	<i>Series/Journal name</i>	GPS Solutions
	<i>Issue identification</i>	Volume 17, No. 1
	<i>Page</i>	1-15
	<i>Other citation details</i>	NAD83 (2011), NAD83 (MA11), NAD83 (PA11) transformation from IGB08
<i>Information source</i>	<i>Title</i>	Reference Frames: National
	<i>Author</i>	M. Craymer, J. Henton, D. Hutchinson, E. Lapelle, M. Piraszewski
	<i>Publisher</i>	Canadian Geodetic Survey, Surveyor General Branch, Earth Sciences Sector, Natural Resources Canada
	<i>Publication date</i>	2010-04-19
	<i>Series/Journal name</i>	Presentation to Canadian Geodetic Reference Systems Committee Meeting, Ottawa, April 19-21, 2010
<i>Data source</i>	ISO Geodetic Registry	
<i>Remarks</i>	Null transformation. NAD83(CSRS)v6 and NAD83(2011) are equivalent by definition at epoch 2010.	
<i>Operation version</i>	v1	
<i>Scope</i>	Spatial referencing	
<i>Operation accuracy</i>	0.0 m	
<i>Source CRS</i>	NAD83(CSRS) v6 - XYZ	
<i>Target CRS</i>	NAD 83 (2011) Epoch 2010 - XYZ	
<i>Operation method</i>	Time-Dependent Position Vector Transformation (geocentric Cartesian domain)	

## Extent

<i>Description</i>	<b>North America - onshore and offshore: Canada - Alberta, British Columbia, Manitoba, New Brunswick, Newfoundland and Labrador, Northwest Territories, Nova Scotia, Nunavut, Ontario, Prince Edward Island, Quebec, Saskatchewan, Yukon. Puerto Rico. United States (USA) - Alaska, CONUS (Alabama, Arizona, Arkansas, California, Colorado,</b>
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<b>Connecticut, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming). Virgin Islands (US).</b>		
<i>Geographic Bounding Box</i>	<i>West-bound longitude</i>	167.65
	<i>North-bound latitude</i>	86.46
	<i>East-bound longitude</i>	-47.74
	<i>South-bound latitude</i>	14.92

Operation parameter values

<i>Time reference</i>	2010.0 year
<i>Rate of change of scale difference</i>	0.0 parts per billion per year
<i>Rate of change of Z-axis rotation</i>	0.0 milliarc-second per year
<i>Rate of change of Y-axis rotation</i>	0.0 milliarc-second per year
<i>Rate of change of X-axis rotation</i>	0.0 milliarc-second per year
<i>Rate of change of Z-axis translation</i>	0.0 metre per year
<i>Rate of change of Y-axis translation</i>	0.0 metre per year
<i>Rate of change of X-axis translation</i>	0.0 metre per year
<i>Scale difference</i>	0.0 parts per billion
<i>Z-axis rotation</i>	0.0 milliarc-second
<i>Y-axis rotation</i>	0.0 milliarc-second
<i>X-axis rotation</i>	0.0 milliarc-second
<i>Z-axis translation</i>	0.0 metre
<i>Y-axis translation</i>	0.0 metre
<i>X-axis translation</i>	0.0 metre

# ISO Geodetic Registry

<i>Item class</i>	OperationMethod
<i>Name</i>	<b>Time-Dependent Position Vector Transformation (geocentric Cartesian domain)</b>
<i>Item status</i>	VALID
<i>Identifier</i>	82
<i>Alias</i>	Time-Dependent 7-Parameter Transformation
<i>Alias</i>	14-Parameter Transformation
<i>Alias</i>	Time-Dependent Position Vector Transformation
<i>Data source</i>	ISO Geodetic Registry
<i>Remarks</i>	Note the analogy with the rotation for the Time-dependent Coordinate Frame Transformation but beware of the differences! The Position Vector Transformation convention is used by IAG.
<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>
<i>Rate of change of X-axis translation</i>
<i>Rate of change of Y-axis translation</i>
<i>Rate of change of Z-axis translation</i>
<i>Rate of change of X-axis rotation</i>
<i>Rate of change of Y-axis rotation</i>
<i>Rate of change of Z-axis rotation</i>
<i>Rate of change of scale difference</i>
<i>Time reference</i>