

# ISO Geodetic Registry

<i>Item class</i>	OperationMethod
<i>Name</i>	<b>Molodensky-Badekas Transformation (CF geographic 2D domain)</b>
<i>Item status</i>	VALID
<i>Identifier</i>	1002
<i>Data source</i>	ISO Geodetic Registry
<i>Remarks</i>	Transformation of coordinates from one geographic coordinate reference system into another is carried out as a concatenation of the following operations: (geographical to geocentric) + (geocentric to geocentric) + (geocentric to geographic). The Molodensky-Badekas (CF geog2D domain) transformation has 5 steps: (1) geographic 2D coordinates are converted to geographic 3D using ISOGR coordinate operation method code 86; (2) geographic 3D coordinates are converted to geocentric coordinates using ISOGR coordinate operation method code 78; (3) geocentric coordinates are transformed to the target frame using the Molodensky-Badekas (geocentric domain) method, ISOGR operation method code 1000; (4) transformed geocentric coordinates are converted to geographic 3D using ISOGR coordinate operation method code 78; (5) geographic 3D coordinates are converted to geographic 2D using ISOGR coordinate operation method code 86.

## 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>Ordinate 1 of evaluation point</i>
<i>Ordinate 2 of evaluation point</i>
<i>Ordinate 3 of evaluation point</i>