

ISO Geodetic Registry

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|---------------------------|---|---|
| <i>Item class</i> | Transformation | |
| <i>Name</i> | WGS 84 (G1150) to WGS 84 (G1762) [1] | |
| <i>Item status</i> | VALID | |
| <i>Identifier</i> | 577 | |
| <i>Information source</i> | <i>Title</i> | Department of Defense World Geodetic System 1984: Its Definition and Relationships with Local Geodetic Systems, Version 1.0.0 |
| | <i>Author</i> | National Geospatial-Intelligence Agency |
| | <i>Publisher</i> | National Geospatial-Intelligence Agency |
| | <i>Publication date</i> | 2014-07-08 |
| | <i>Series/Journal name</i> | Standardization Document |
| | <i>Issue identification</i> | NGA.STND.0036_1.0.0_WGS84 |
| <i>Data source</i> | ISO Geodetic Registry | |
| <i>Remarks</i> | Transformation between WGS 84 ephemerides, defined at epoch 2001.0. | |
| <i>Operation version</i> | 1.0 | |
| <i>Scope</i> | Spatial referencing and GPS satellite navigation | |
| <i>Operation accuracy</i> | 0.01 m | |
| <i>Source CRS</i> | WGS 84 (G1150) - XYZ | |
| <i>Target CRS</i> | WGS 84 (G1762) - XYZ | |
| <i>Operation method</i> | Coordinate Frame Transformation (geocentric Cartesian domain) | |

Extent

| | | |
|--------------------------------|-----------------------------|--------|
| <i>Description</i> | World. | |
| <i>Geographic Bounding Box</i> | <i>West-bound longitude</i> | -180.0 |
| | <i>North-bound latitude</i> | 90.0 |
| | <i>East-bound longitude</i> | 180.0 |
| | <i>South-bound latitude</i> | -90.0 |

Operation parameter values

| | |
|---------------------------|------------------------|
| <i>X-axis translation</i> | -6.0 millimetre |
| <i>Y-axis translation</i> | 5.0 millimetre |
| <i>Z-axis translation</i> | 20.0 millimetre |
| <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> | -4.5 parts per billion |

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| | |
|--------------------|---|
| <i>Item class</i> | OperationMethod |
| <i>Name</i> | Coordinate Frame Transformation (geocentric Cartesian domain) |
| <i>Item status</i> | VALID |
| <i>Identifier</i> | 74 |
| <i>Alias</i> | Coordinate Frame Transformation |
| <i>Alias</i> | 7-Parameter Transformation |
| <i>Alias</i> | Bursa-Wolf Transformation |
| <i>Data source</i> | ISO Geodetic Registry |
| <i>Remarks</i> | This method is a specific case of the Molodensky-Badekas (CF) method in which the evaluation point is at the geocentre with coordinate values of zero. Note the analogy with the Position Vector 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> |