# ISO Geodetic Registry

| | | |
|---|---|---|
| *Item class* | Transformation | |
| *Name* | **ITRF91 to ITRF92 [IERS v1]** | |
| *Item status* | VALID | |
| *Identifier* | 490 | |
| *Information source* | *Title* | IERS Conventions (2010) |
| | *Author* | G. Petit, B.J. Luzum (eds) |
| | *Publisher* | Verlag des Bundesamts fur Kartographie und Geodasie |
| | *Publication date* | 2010 |
| | *Edition date* | |
| | *Series/Journal name* | IERS Technical Notes |
| | *Issue identification* | 36.0 |
| | *Other citation details* | ISSN: 1019-4568 |
| *Information source* | *Title* | ITRF 92 and its associated velocity field |
| | *Author* | C. Boucher, Z. Altamimi, L. Duhem |
| | *Publisher* | Central Bureau of IERS - Observatoire de Paris, 61 avenue de l'Observatoire, 75014 Paris, France |
| | *Publication date* | 1993-10-01 |
| | *Edition date* | |
| | *Series/Journal name* | IERS Technical Notes |
| | *Issue identification* | 15.0 |
| *Data source* | ISO Geodetic Registry | |
| *Remarks* | No rates of change were estimated for the transformation parameters. | |
| *Operation version* | IERS v1 | |
| *Scope* | Spatial referencing | |
| *Operation accuracy* | 0.005 m | |
| *Source CRS* | ITRF91 - XYZ | |
| *Target CRS* | ITRF92 - XYZ | |
| *Operation method* | Position Vector Transformation (geocentric Cartesian domain) | |

## Extent

| | | |
|---|---|---|
| *Description* | **World.** | |
| *Geographic Bounding Box* | *West-bound longitude* | -180.0 |
| | *North-bound latitude* | 90.0 |
| | *East-bound longitude* | 180.0 |
| | *South-bound latitude* | -90.0 |

## Operation parameter values

| | |
|---|---|
| *X-axis translation* | -1.1 centimetre |
| *Y-axis translation* | -1.4 centimetre |
| *Z-axis translation* | 0.6 centimetre |
| *X-axis rotation* | 0.0 milliarc-second |
| *Y-axis rotation* | 0.0 milliarc-second |
| *Z-axis rotation* | 0.0 milliarc-second |
| *Scale difference* | -1.4 parts per billion |

# ISO Geodetic Registry

| | |
|---|---|
| *Item class* | OperationMethod |
| *Name* | **Position Vector Transformation (geocentric Cartesian domain)** |
| *Item status* | VALID |
| *Identifier* | 88 |
| *Alias* | 7-Parameter Transformation |
| *Alias* | Bursa-Wolf Transformation |
| *Alias* | Position Vector Transformation |
| *Alias* | Helmert Transformation |
| *Data source* | ISO Geodetic Registry |
| *Remarks* | 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! |
| *Formula* | Geomatics Guidance Note No 7, part 2: Coordinate Conversions and Transformations including Formulas |

## Operation parameters

| |
|---|
| *X-axis translation* |
| *Y-axis translation* |
| *Z-axis translation* |
| *X-axis rotation* |
| *Y-axis rotation* |
| *Z-axis rotation* |
| *Scale difference* |