# ISO Geodetic Registry

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|---|---|---|
| *Item class* | Transformation | |
| *Name* | **ITRF2000 to SIRGAS-CON DGF01P02 [SIRv1]** | |
| *Item status* | VALID | |
| *Identifier* | 652 | |
| *Information source* | *Title* | Use of velocities in the processing of GNSS data |
| | *Author* | Sistema de Referencia Geocéntrico para las Américas (SIRGAS) |
| | *Publisher* | Sistema de Referencia Geocéntrico para las Américas (SIRGAS) |
| | *Publication date* | 2017 |
| | *Other citation details* | Website |
| *Information source* | *Title* | Annual Report 2001 of IGS RNAAC SIR |
| | *Author* | W. Seemueller, H. Drewes |
| | *Publisher* | International GPS Service |
| | *Publication date* | 2004 |
| | *Series/Journal name* | IGS 2001-2002 Technical Reports |
| | *Issue identification* | JPL Publication 04-017 |
| | *Page* | 285-290 |
| *Information source* | *Title* | Deformation of the South American crust estimated from finite element and collocation methods |
| | *Author* | H. Drewes, O. Heidbach |
| | *Publisher* | Springer Berlin Heidelberg |
| | *Publication date* | 2005 |
| | *Series/Journal name* | International Association of Geodesy Symposia |
| | *Issue identification* | 128.0 |
| | *Page* | 544-549 |
| | *Other citation details* | In Sanso F. (eds) A Window on the Future of Geodesy. International Association of Geodesy Symposia, Vol 128. Springer, Berlin, Heidelberg |
| *Information source* | *Title* | Sistema de Referencia Geocentrico para las Americas (SIRGAS) |
| | *Author* | Sistema de Referencia Geocéntrico para las Américas (SIRGAS) |
| | *Publisher* | Sistema de Referencia Geocéntrico para las Américas (SIRGAS) |
| | *Publication date* | 2018 |
| | *Other citation details* | Website |
| *Data source* | ISO Geodetic Registry | |
| *Remarks* | Null reference frame transformation between ITRF2000 and SIRGAS-CON DGF01P02. | |
| *Operation version* | SIRv1 | |
| *Scope* | Spatial referencing | |
| *Operation accuracy* | 0.01 m | |
| *Source CRS* | ITRF2000 - LatLon | |
| *Target CRS* | SIRGAS-CON DGF01P02 - LatLon | |
| *Operation method* | Time-Dependent Position Vector Transformation (geocentric Cartesian domain) | |

## Extent

| | |
|---|---|
| *Description* | **South America - onshore and offshore. Central America - onshore and offshore. Mexico - onshore and offshore.** |

| | | |
|---|---|---|
| *Geographic Bounding Box* | *West-bound longitude* | -122.19 |
| | *North-bound latitude* | 32.72 |
| | *East-bound longitude* | -25.28 |
| | *South-bound latitude* | -59.87 |

## Operation parameter values

| | |
|---|---|
| *Time reference* | 1998.4 year |
| *Rate of change of scale difference* | 0.0 parts per billion per year |
| *Rate of change of Z-axis rotation* | 0.0 milliarc-second per year |
| *Rate of change of Y-axis rotation* | 0.0 milliarc-second per year |
| *Rate of change of X-axis rotation* | 0.0 milliarc-second per year |
| *Rate of change of Z-axis translation* | 0.0 millimetre per year |
| *Rate of change of Y-axis translation* | 0.0 millimetre per year |
| *Rate of change of X-axis translation* | 0.0 millimetre per year |
| *Scale difference* | 0.0 parts per billion |
| *Z-axis rotation* | 0.0 milliarc-second |
| *Y-axis rotation* | 0.0 milliarc-second |
| *X-axis rotation* | 0.0 milliarc-second |
| *Z-axis translation* | 0.0 millimetre |
| *Y-axis translation* | 0.0 millimetre |
| *X-axis translation* | 0.0 millimetre |

# ISO Geodetic Registry

| | |
|---|---|
| *Item class* | OperationMethod |
| *Name* | **Time-Dependent Position Vector Transformation (geocentric Cartesian domain)** |
| *Item status* | VALID |
| *Identifier* | 82 |
| *Alias* | Time-Dependent 7-Parameter Transformation |
| *Alias* | 14-Parameter Transformation |
| *Alias* | Time-Dependent Position Vector Transformation |
| *Data source* | ISO Geodetic Registry |
| *Remarks* | 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. |
| *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* |
| *Rate of change of X-axis translation* |
| *Rate of change of Y-axis translation* |
| *Rate of change of Z-axis translation* |
| *Rate of change of X-axis rotation* |
| *Rate of change of Y-axis rotation* |
| *Rate of change of Z-axis rotation* |
| *Rate of change of scale difference* |
| *Time reference* |