ISO Geodetic Registry

Item class Transformation

Name ITRF97 to IGS97 [IGS v1]

Item statusVALIDIdentifier586

Information source Title Original / New realization of ITRF97

Author R. Ferland

Publisher International GNSS Service (IGS)

Publication date 2000-06-23

Edition date

Series/Journal name IGSMAIL Issue identification 2899.0

Information source Title Chronology of IGS Reference Frame Usage

Author International GNSS Service Analysis Centre

Coordinator

Publisher National Oceanic and Atmospheric Administration

(NOAA), National Geodetic Survey (NGS)

Publication date 2012-10-04
Other citation details Website

Data source ISO Geodetic Registry

Remarks Null transformation. IGS97 is aligned to ITRF97 and is treated as the

same reference frame.

Operation version IGS v1

Scope Spatial referencing

Operation accuracy 0.0 m

Source CRS ITRF97 - XYZ
Target CRS IGS97 - XYZ

Operation method Time-Dependent 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

Time reference	1997.0 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	
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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