ISO Geodetic Registry

Item class	Transformation
Name	**IGS00 to IGb00 [IGS v1]**
Item status	VALID
Identifier	475

Information source		
	Title	IGS00 (v2)
	Author	R. Ferland
	Publisher	International GNSS Service (IGS)
	Publication date	2003-10-09
	Edition date	
	Series/Journal name	IGSMAIL
	Issue identification	4642.0

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. IGS00 and IGb00 are both aligned to ITRF2000 and are treated as the same reference frame. Although the actual IGS00-IGb00 transformation parameters are not null, they are statistically insignificant and treated as null by the IGS.
Operation version	IGS v1
Scope	Spatial referencing
Operation accuracy	0.0 m
Source CRS	IGS00 - XYZ
Target CRS	IGb00 - 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	1998.0 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
Z-axis translation	0.0 millimetre
Y-axis translation	0.0 millimetre
X-axis translation	0.0 millimetre

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