ISO Geodetic Registry

Item class	Transformation	
Name	**ITRF93 to ITRF94 [IERS v1]**	
Item status	VALID	
Identifier	579	
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*	IERS Conventions (1992)
	Author	D.D. McCarthy
	Publisher	Central Bureau of IERS - Observatoire de Paris, 61 avenue de l'Observatoire, 75014 Paris, France
	Publication date	1996-07-01
	Edition date	
	Series/Journal name	IERS Technical Notes
	Issue identification	21.0
Data source	ISO Geodetic Registry	
Remarks	Citation decribes the ITRF94 to ITRF93 transformation Accuracy of transformation is given at the reference epoch for the transformation parameters. Accuracy at other epochs depends on the accuracies of the parameters at the reference epoch and their rates of change. Refer to citations for accuracies of the parameters and their rates of change.	
Operation version	IERS v1	
Scope	Spatial referencing	
Operation accuracy	0.01 m	
Source CRS	ITRF93 - XYZ	
Target CRS	ITRF94 - 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	1988.0 year
Rate of change of scale difference	0.0 parts per billion per year
Rate of change of Z-axis rotation	-0.05 milliarc-second per year
Rate of change of Y-axis rotation	0.19 milliarc-second per year
Rate of change of X-axis rotation	0.11 milliarc-second per year
Rate of change of Z-axis translation	-0.08 centimetre per year
Rate of change of Y-axis translation	-0.04 centimetre per year

Rate of change of X-axis translation	0.29 centimetre per year
Scale difference	-0.4 parts per billion
Z-axis rotation	0.96 milliarc-second
Y-axis rotation	-0.8 milliarc-second
X-axis rotation	0.39 milliarc-second
Z-axis translation	1.5 centimetre
Y-axis translation	0.5 centimetre
X-axis translation	-0.6 centimetre

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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