ISO Geodetic Registry

Item class	Transformation	
Name	**ITRF97 to GDA94 [GA v1]**	
Item status	VALID	
Identifier	718	
Information source	*Title*	International Terrestrial Reference Frame (ITRF) to GDA94 Coordinate Transformations
	Author	J. Dawson, J. Steed
	Publisher	Geoscience Australia
	Publication date	2004-03-01
	Edition date	
Data source	ISO Geodetic Registry	
Remarks	Implemented 2001. Replaced by Dawson and Woods transformation of 2010, ITRF97 to GDA94 [GA-Aus 2010 v2].	
Operation version	GA v1	
Scope	Spatial referencing	
Operation accuracy	0.1 m	
Source CRS	ITRF97 - XYZ	
Target CRS	GDA94 - XYZ	
Operation method	Time-Dependent Coordinate Frame Transformation (geocentric Cartesian domain)	

Extent

Description	**Australia - onshore and offshore - mainland, Tasmania, Lord Howe Island, Norfolk Island, Macquarie Island. Christmas Island - onshore and offshore. Cocos (Keeling) Islands - onshore and offshore.**	
Geographic Bounding Box	*West-bound longitude*	93.41
	North-bound latitude	-8.47
	East-bound longitude	173.4
	South-bound latitude	-60.56

Operation parameter values

Time reference	2000.0 year
Rate of change of scale difference	-0.00109 parts per million per year
Rate of change of Z-axis rotation	0.001697 arc-second per year
Rate of change of Y-axis rotation	0.001782 arc-second per year
Rate of change of X-axis rotation	0.00204 arc-second per year
Rate of change of Z-axis translation	0.0169 metre per year
Rate of change of Y-axis translation	0.0049 metre per year
Rate of change of X-axis translation	-0.022 metre per year
Scale difference	0.004559 parts per million
Z-axis rotation	0.011825 arc-second
Y-axis rotation	0.013639 arc-second
X-axis rotation	0.012059 arc-second
Z-axis translation	0.1855 metre
Y-axis translation	0.0119 metre

X-axis translation	-0.2088 metre

ISO Geodetic Registry

Item class	OperationMethod
Name	**Time-Dependent Coordinate Frame Transformation (geocentric Cartesian domain)**
Item status	VALID
Identifier	94
Alias	Time-Dependent 7-Parameter Transformation
Alias	14-Parameter Transformation
Alias	Time-Dependent Coordinate Frame Transformation
Data source	ISO Geodetic Registry
Remarks	Note the analogy with the Time-dependent Position Vector 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