ISO Geodetic Registry

Item class	Transformation
Name	**ITRF96 to GDA94 [GA v1]**
Item status	VALID
Identifier	546
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, ITRF96 to GDA94 [GA-Aus 2010 v2].
Operation version	GA v1
Scope	Spatial referencing
Operation accuracy	0.1 m
Source CRS	ITRF96 - 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

X-axis translation	-0.014 metre
Y-axis translation	0.0431 metre
Z-axis translation	0.201 metre
X-axis rotation	0.012464 arc-second
Y-axis rotation	0.012013 arc-second
Z-axis rotation	0.006434 arc-second
Scale difference	0.024607 parts per million
Rate of change of X-axis translation	0.0411 metre per year
Rate of change of Y-axis translation	0.0218 metre per year
Rate of change of Z-axis translation	0.0383 metre per year
Rate of change of X-axis rotation	0.002542 arc-second per year
Rate of change of Y-axis rotation	0.001431 arc-second per year
Rate of change of Z-axis rotation	-2.34E-4 arc-second per year
Rate of change of scale difference	0.005897 parts per million per year

Time reference	2000.0 year

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