ISO Geodetic Registry

Item class Transformation

Name WGS 84 (G1674) to WGS 84 (G1762) [1]

Item statusVALIDIdentifier492

Information source Title Department of Defense World Geodetic System

1984: Its Definition and Relationships with Local

Geodetic Systems, Version 1.0.0

Author National Geospatial-Intelligence Agency
Publisher National Geospatial-Intelligence Agency

Publication date 2014-07-08

Series/Journal name Standardization Document
Issue identification NGA.STND.0036_1.0.0_WGS84

Data source ISO Geodetic Registry

Remarks Transformation between WGS 84 ephemerides, defined at epoch

2005.0.

Operation version 1.0

Scope Spatial referencing and GPS satellite navigation

Operation accuracy 0.01 m

 Source CRS
 WGS 84 (G1674) - XYZ

 Target CRS
 WGS 84 (G1762) - XYZ

Operation method Coordinate Frame 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

X-axis translation	-4.0 millimetre	
Y-axis translation	3.0 millimetre	
Z-axis translation	4.0 millimetre	
X-axis rotation	0.27 milliarc-second	
Y-axis rotation	-0.27 milliarc-second	
Z-axis rotation	0.38 milliarc-second	
Scale difference	-6.9 parts per billion	

ISO Geodetic Registry

Item class OperationMethod

Name Coordinate Frame Transformation (geocentric

Cartesian domain)

Item status VALID Identifier 74

Alias Coordinate Frame Transformation

Alias 7-Parameter Transformation

Alias Bursa-Wolf Transformation

Data source ISO Geodetic Registry

Remarks This method is a specific case of the Molodensky-Badekas (CF)

method in which the evaluation point is at the geocentre with

coordinate values of zero. Note the analogy with the Position Vector

transformation method but beware of the differences!

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