ISO Geodetic Registry

Item class	Transformation	
Name	**WGS 84 (G1674) to WGS 84 EGM96 - OHt [1]**	
Item status	VALID	
Identifier	608	
Information source	*Title*	The Development of the Joint NASA GSFC and the NIMA Geopotential Model EGM96
	Author	F.G. Lemoine, S. C. Kenyon, J. K. Factor, R.G. Trimmer, N. K. Pavlis, D. S. Chinn, C. M. Cox, S. M. Klosko, S. B. Luthcke, M. H. Torrence, Y. M. Wang, R. G. Williamson, E. C. Pavlis, R. H. Rapp, T. R. Olson,
	Publisher	National Aeronautics and Space Administration
	Publication date	1998-07
	Edition date	
	Series/Journal name	Technical Paper
	Issue identification	NASA/TP-1998-206861
Information source	*Title*	NGA/NASA EGM96,N=M=360 Earth Gravitational Model
	Author	NGA Office of Geomatics
	Publisher	National Geospatial-Intelligence Agency
	Revision date	2014-10-24
	Edition date	
Data source	ISO Geodetic Registry	
Remarks	Transformation from WGS 84 (G1674) ellipsoidal heights to EGM96 orthometric heights using the EGM 96 geoid grid.	
Operation version	1.0	
Scope	Spatial referencing	
Operation accuracy	1.0 m	
Source CRS	WGS 84 (G1674) - LatLonEHt	
Target CRS	WGS 84 EGM96 - OHt	
Operation method	Geographic3D to Gravity Related Height (EGM96)	

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

Geoid (height correction) model file	WW15MGH.GRD

ISO Geodetic Registry

Item class	OperationMethod
Name	**Geographic3D to Gravity Related Height (EGM96)**
Item status	VALID
Identifier	70
Data source	ISO Geodetic Registry
Remarks	This transformation involves the application of a geoid-ellipsoid separation value interpolated from a geoid model. The model provides separation values at the nodes on a regular grid of latitude and longitude intersection points. The geodetic latitude and longitude used to interpolate within the grid are not affected by this transformation. The grid is referenced to a specific geographic CRS (the source CRS) and interpolation must be made in this system. Calculation of the separation is achieved through a spline interpolation developed for the EGM96 grids, using the latitude and longitude of the point. This step provides the geoid-ellipsoid separation (N) above the ellipsoid of the source Geographic 3D CRS. The orthometeric height (H) is then computed from the ellipsoid height (h) in the source Geographic 3D CRS using: H = h - N Applies to EGM96 model. For earlier model see Geographic3D to GravityRelatedHeight (EGM84) and for later model see Geographic3D to GravityRelatedHeight (EGM2008).

Operation parameters

Geoid (height correction) model file