ISO Geodetic Registry

Item class	Transformation	
Name	**WGS 84 (G873) to WGS 84 EGM84 - OHt [1]**	
Item status	VALID	
Identifier	621	
Information source	*Title*	WGS 84, N=M=180 Earth Gravitational Model
	Author	NGA Office of Geomatics
	Publisher	National Geospatial-Intelligence Agency
	Revision date	2014-09-15
	Edition date	
	Other citation details	Website
Data source	ISO Geodetic Registry	
Remarks	Transformation from WGS 84 (G873) ellipsoidal heights to EGM84 orthometric heights using the EGM 84 geoid grid.	
Operation version	1.0	
Scope	Spatial referencing	
Operation accuracy	1.0 m	
Source CRS	WGS 84 (G873) - LatLonEHt	
Target CRS	WGS 84 EGM84 - OHt	
Operation method	Geographic3D to Gravity Related Height (EGM84)	

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	wwgrid.exe

ISO Geodetic Registry

Item class	OperationMethod
Name	**Geographic3D to Gravity Related Height (EGM84)**
Item status	VALID
Identifier	76
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 bi-linear interpolation of the EGM84 grid, 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 EGM84 models. For later models see Geographic3D to GravityRelatedHeight (EGM96) and Geographic3D to GravityRelatedHeight (EGM2008).

Operation parameters

Geoid (height correction) model file