## **ISO Geodetic Registry**

Item class Transformation

Name WGS 84 (G1762) to WGS 84 EGM2008 - OHt [1]

Item status **VALID** Identifier 644

Information source Title EGM2008 - WGS 84 Version

Author NGA Office of Geomatics

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Revision date

Edition date

Data source ISO Geodetic Registry

Transformation from WGS 84 (G1762) ellipsoidal heights to EGM2008 Remarks

> orthometric heights using the EGM2008 geoid grid with node spacing of 2.5 arc-minutes. For a smaller grid spacing (in principle more exact but requiring greater computing resources) see WGS 84 G1762 To WGS

84 EGM2008 - OHt [2].

Operation version 1.0

Scope Spatial referencing

Operation accuracy 1.0 m

Source CRS WGS 84 (G1762) - LatLonEHt Target CRS WGS 84 EGM2008 - OHt

Operation method Geographic3D to Gravity Related Height (EGM2008)

## 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	Und_min2.5x2.5_egm2008_isw=82_WGS84_Tidefree.gz
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## ISO Geodetic Registry

Item class OperationMethod

Name Geographic3D to Gravity Related Height

(EGM2008)

Item statusVALIDIdentifier90

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 EGM2008 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 EGM2008 model. For earlier model see Geographic3D to GravityRelatedHeight (EGM84) and Geographic3D to GravityRelatedHeight (EGM84).

Operation parameters

Geoid (height correction) model file