

ISO Geodetic Registry

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| Item class | OperationMethod |
| Name | Geographic3D to Gravity Related Height (NZgeoid) |
| Item status | VALID |
| Identifier | 92 |
| Data source | ISO Geodetic Registry |
| Remarks | <p>This transformation involves the application of a geoid-ellipsoid separation value interpolated from a quasi-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 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 normal orthometric height (H) in the target vertical CRS is then determined from: $H = h - N$ where h = the height above the ellipsoid in the source geographic 3D CRS.</p> |

Operation parameters

Geoid (height correction) model file