ISO Geodetic Registry

Item class	OperationMethod
Name	**VERTCON**
Item status	VALID
Identifier	84
Alias	Grid transformation using VERTCON 2.1
Data source	ISO Geodetic Registry
Remarks	The relationship between NGVD29 height and NAVD88 height vertical coordinate reference systems for the coterminous US is available through three gridded data files of offsets (sometimes called height differences). The vertical offset at a point is first interpolated within the grid of values using bi-linear interpolation. The interpolated offset is then applied as an offset: • If a NAVD88 height is desired when a NGVD29 height is given, add the interpolated offset to the NGVD29 height. • If a NGVD29 height is desired when a NAVD88 height is given, subtract the interpolated offset from the NAVD88 height. Most horizontal positions of the bench marks used to generate the VERTCON grids were scaled from USGS topographic maps. The estimated uncertainty of the scaled positions, 6 arc-seconds, is greater than the differences between NAD27 and NAD83 coordinates. Therefore the latitude and longitude used for interpolation of the grids can be referenced to either NAD27 or to NAD83(1986) or to any of the NAD83(NSRS) realisations (HARN, NSRS2007 or 2011).

Operation parameters

Height difference file