

NOAA Nautical Charting Calendar

VDatum

The coastal land-water interface depends on how water levels change and on how the land moves in space and time. To combine or compare coastal elevation data (land heights and water depths) from different sources, they must be referenced to the same vertical datum (a datum is the reference level to which geospatial data are gathered). Using inconsistent datums can cause artificial discontinuities that are problematic when producing maps.

NOAA has developed a revolutionary vertical datum transformation tool (VDatum) to address the inconsistent vertical datum problem. VDatum translates geospatial data among 36 different vertical reference systems, thereby removing a serious impediment to data sharing by allowing for the easy transformation of elevation data from one vertical datum to another. VDatum is a free software tool available from NOAA on the Internet at <http://vdatum.noaa.gov/download.html>.

Geospatial data can be seamlessly integrated with VDatum to benefit the U.S. public in applications such as Homeland Security and natural disaster preparedness. VDatum also allows NOAA to make full use of recent technological advances, such as integration of depth data from an aircraft using a laser (LIDAR), which will greatly improve the efficiency with which it acquires new, more accurate data for NOAA's nautical and geospatial products and services. VDatum will also improve the efficiency and accuracy of hydrographic surveys for nautical charts by eliminating the need for time-consuming water level corrections and post processing.



Ellipsoid Datums



Orthometric Datums



Tidal Datums

CONSEQUENCES

There once was a man named Dryland
Who built a new house on an island
His height data were corrupt
Then the tide came up
And now he's all wet and not smilin'!

  <h2 style="text-align: center;">October 2009</h2>						
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
Prepared by the Office of Coast Survey, National Ocean Service, NOAA, www.NauticalCharts.NOAA.gov , 1-301-713-2770. Note: Add your information to the Calendar using Adobe Reader 7 or later. The tools are found at the Tools -> Commenting, and Tools -> Drawing Markup features of Adobe Reader.				1	2	3
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