**National contour dataset digitally derived from elevation and hydrography. PRELIMINARY DATA. July 12, 2012.**

<https://www.usgs.gov/core-science-systems/eros/coastal-changes-and-impacts/contour-preliminary-contour-data>

**Abstract:**

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| These contour datasets were generated from the National Elevation Dataset (NED) and the National Hydrography Dataset (NHD) in a fully automated process. The input raster data source was the 1/3 arc-second version of the NED. The NED data were modified by the NHD flow lines, areas, and water bodies to facilitate improved integration between the hypsography and hydrography. These contour datasets were generated from the National Elevation Dataset (NED) and the National Hydrography Dataset (NHD) in a fully automated process. The input raster data source was the 1/3 arc-second version of the NED. The NED data were modified by the NHD flow lines, areas, and water bodies to facilitate improved integration between the hypsography and hydrography. These datasets are not the ones that appear on the U.S. Geological Survey's USTopo GeoPDFs. |

**Process Description:**

The contours were processed in 7.5' x 7.5' units, and are provided in state-based Zip files containing ESRI File Geodatabases. The coordinate system is Geographic, and the data are referenced to the NAD83 horizontal datum and the NAVD88 vertical datum. The 1/3 arc-second NED contains resampled data from the 1/9 arc-second layer of NED. Secondary input datasets include the high resolution flow lines, water bodies, and areas from the National Hydrography Dataset (NHD). The NHD layers are used to hydro-enforce the DEM prior to contour generation. The goals of the hydro-enforcement are to prevent contour lines from extending over the surface of water bodies, to align the contour reentrants with the NHD single-line streams, and to cross NHD rivers appropriately. These contour data are the result of scientific research aimed at developing nationwide contour data that are consistent, repeatable, fully automatic, GIS-ready, and follow cartographic rules. The complete methodology is contained in Tyler, D.J. and Greenlee, S.K., 2012 (pending review) Creation of Digital Contours that Approach the Characteristics of Cartographic Contours. **The data for the states in this section have not been reviewed to detect and address errors.**

**Data Dictionary:**

OBJECTID Unique ID, arbitrarily assigned by ArcGIS software.

Shape Defines what type of geometry is in the featureclass (line).

ContourElevation Elevation of each feature, expressed in ContourUnits.

ContourUnits 1 = Feet 2 = Meters (none in this dataset).

FCODE 10101 - Normal contour.

10102 - Normal index contour.

10104 - Depression contour.

10105 - Depression index contour.

ContourInterval Interval of contours.

Depression Provides more information on the contour classification, intended to help identify additional features as being depressions.

0 = Depression status is indeterminate.

1 = Feature is a depression contour.

2 = Feature is a normal contour.

IndexFlag 0 = Normal contour. Independent of depression status.

1 = Index contour. Independent of depression status.

Typically every 5th contour is flagged as an index.

CELL\_ID An integer representing a unique USGS catalog item. Replaces MapID.

ProcessDate The date the contours were generated.

MapID Old USGS catalog number on topographic quadrangles (for example 38097e1)

NEDResolution For future use.

NEDDate The most recent date of DEM source data in a quad.

Shape\_Length Feature length in decimal degrees.

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**Use constraints:**

There is no guarantee or warranty concerning the accuracy of the data.  Users should be aware that temporal changes may have occurred since these data were collected generated and that some parts of these data may no longer represent actual surface conditions.  Hydro-enforcement and generalization can also significantly alter the spatial characteristics of the contours. Users should not use these data for critical applications without a full awareness of its limitations.  Acknowledgement of the originating agencies would be appreciated in products derived from these data.  Any user who modifies the data is obligated to describe the types of modifications they perform.  User specifically agrees not to misrepresent the data, nor to imply that changes made were approved or endorsed by the USGS.  Any use of trade, firm, or product names is for descriptive purposes only and does not imply endorsement by the U.S. Government. Please refer to <http://www.usgs.gov/privacy.html> for the USGS disclaimer.