## DTED - Digital Terrain Elevation Data

1. What is DTED

DTED is a standard of digital datasets which consists of a matrix of terrain elevation values[[1]](#footnote-1). It is the oldest digital mapping format that we still use today. This standard was originally developed in the 1970s[[2]](#footnote-2) by NIMA - the National Imagery and Mapping Agency.

1. When we use DTED

DTED was originally developed to drive 3D milling machines and provide elevation data needed for cruise missile planning.

1. DTED file types

DTED format have 3 level

* Level 0
  + Has a post spacing of approximately 900 meters.
  + Elevation post spacing is 30 arc second
  + Derived from NIMA DTED Level 1 to support a federal agency requirement
  + DTED Level 0 may be of value to scientific, technical, and other communities for and applications that require terrain elevation, slope, and/or surface roughness information. It allows a gross representation of the Earth's surface for general modeling and assessment activities. Such reduced resolution data is not intended and should not be used for automated flight guidance or other precision activity involving the safety of the public[[3]](#footnote-3)
* Level 1
  + Has a post spacing of approximately 90 meters.
  + A uniform matrix of terrain elevation values with post spacing every 3 arc seconds
  + The information content is approximately equivalent to the contour information represented on a 250,000 scale map.[[4]](#footnote-4)
* Level 2
  + Has a post spacing of approximately 30 meters.
  + He basic high resolution elevation data source for all military activities and systems that require landform, slope, elevation, and/or terrain roughness in a digital format [[5]](#footnote-5)

1. DTED file Format

You can lookout DTED file format via the following PDF file:

https://dds.cr.usgs.gov/srtm/version2\_1/Documentation/MIL-PDF-89020B.pdf

1. https://en.wikipedia.org/wiki/DTED [↑](#footnote-ref-1)
2. http://www.mission-planning.com/DTED\_Part1.htm [↑](#footnote-ref-2)
3. http://fas.org/irp/program/core/dted.htm [↑](#footnote-ref-3)
4. http://fas.org/irp/program/core/dted.htm [↑](#footnote-ref-4)
5. http://fas.org/irp/program/core/dted.htm [↑](#footnote-ref-5)