# Importing LiDAR DEM Data into Carlson Civil

LiDAR DEM (Digital Elevation Model) data can be imported into Carlson Civil using the Grid File Utilities routine. This is located in the pull down menu **Surface > Modify Grid File > Grid File Utilities** or by typing in **GFU** into the commandline.

For this example, we're going to use the free data from ELVIS – Elevation and Depth – Foundation Spatial Data (https://elevation.fsdf.org.au/). Find an area of interest, draw a box around the location and a list of available datasets for that region will be presented. Tick the option under **DEMs** to download the data.

* Note: If you have Carlson Point Cloud, you could download **Point Cloud** data and import the *.LAS file.

* Carlson Software takes no responsibility of the quality of the data provided by the above website and data should always be verified by an independent survey.
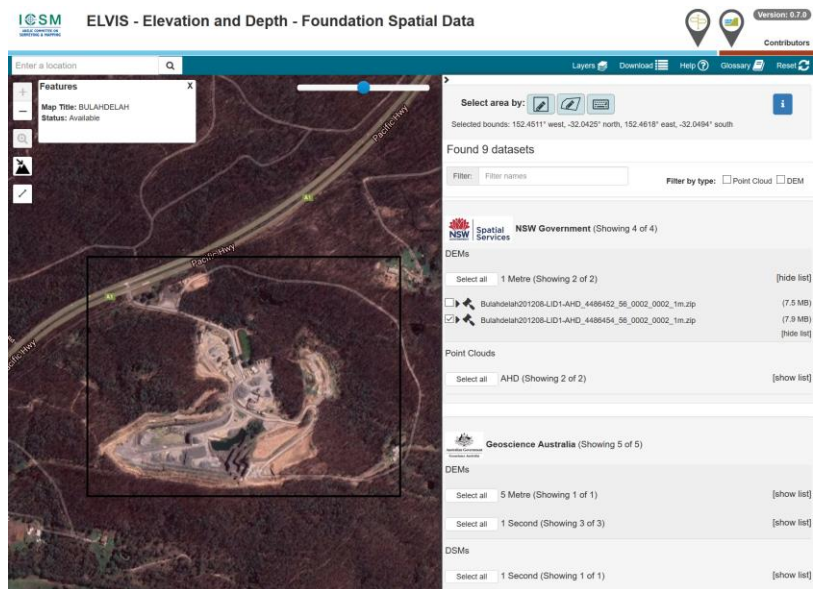

In Carlson Civil, run **Grid File Utilities** then click on **Import Grid** then **Import DEM.**

Navigate to the folder and choose the *.ASC file. In the **Import DEM File** dialog, leave the default options and click OK. If you have more then 1 ASC file to import (depending on the size and location of the data) repeat **Import DEM.** If not, click on **Exit.**

Navigate to the folder where the ASC data is stored and they'll be a newly-created Carlson **.GRD** files (multiple GRD files if multiple ASC files were used). This GRD file can now be used in Carlson Civil.
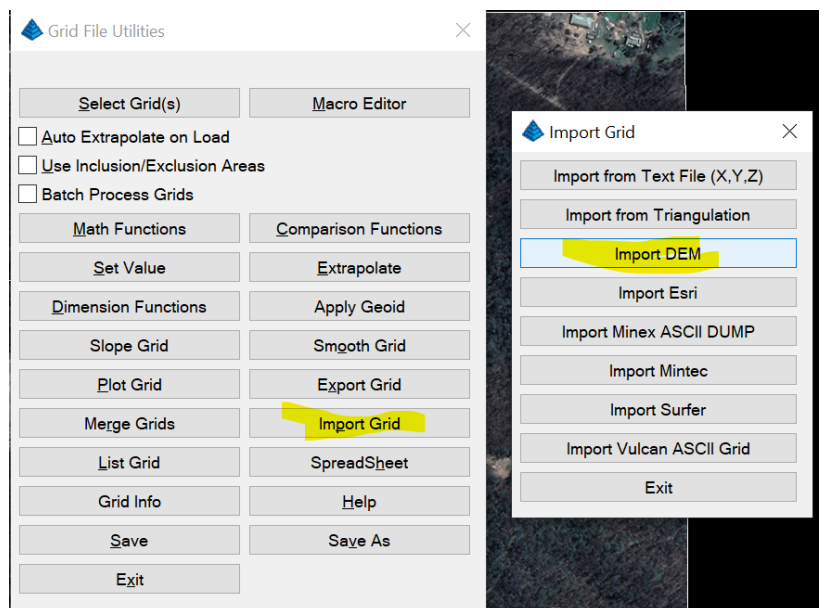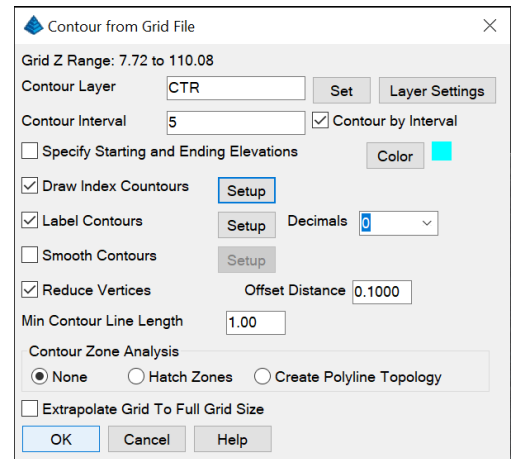
To confirm the data imported correctly, exit out of Grid File Utilities and go to **View > 3D View > Surface File Viewer.**
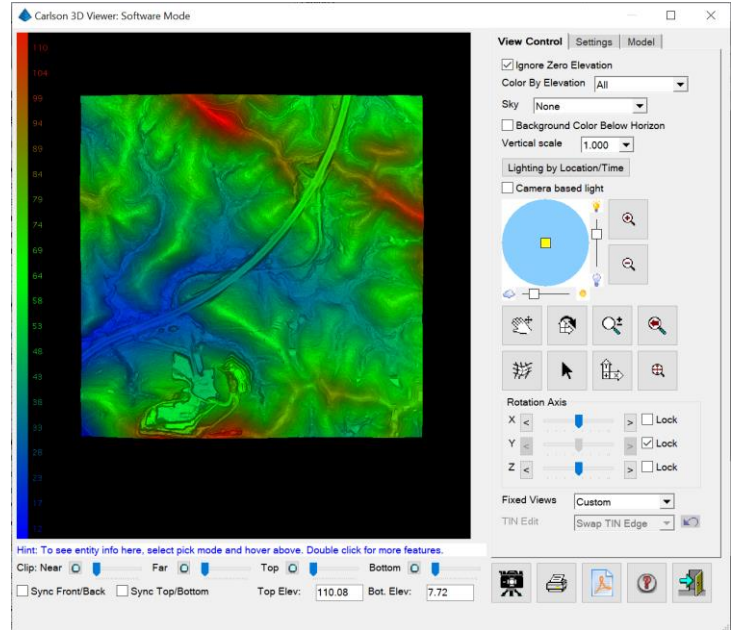
One example of using this data would be to draw contours for adjoining information or to obtain an approximate "lay of the land" (as this data has not, in most cases, been verified by a survey on the ground).

Go to **Surface > Contour From > Contour from Grid File.** Enter in the settings that suit (Contour Interval, Index Contours, etc) and click OK.

Contour data is drawn on screen.