



Using an XYZ Design File to Create CHN File for Volumes and DREDGEPACK®

By Christian Shaw

There is a little known option in the TIN MODEL Program that allows you to save your TIN Model as a CHN file. This is handy if you have an XYZ file of your design and want to run volumes against a CHN (Advance Channel File). This is also nice for those complicated designs that you just can't create with the CHANNEL DESIGN program. These CHN files are also good for dredging to a CHN template in DREDGEPACK®.

In this example, I have a XYZ file of a basin area that is defined by XYZ data points at 1' spacing. The tighter the XYZ spacing, the more accurate the model will be when TIN MODEL does its interpolations. This also means less editing in TIN MODEL to get the shape of your design correct.

FIGURE 1. Sample XYZ

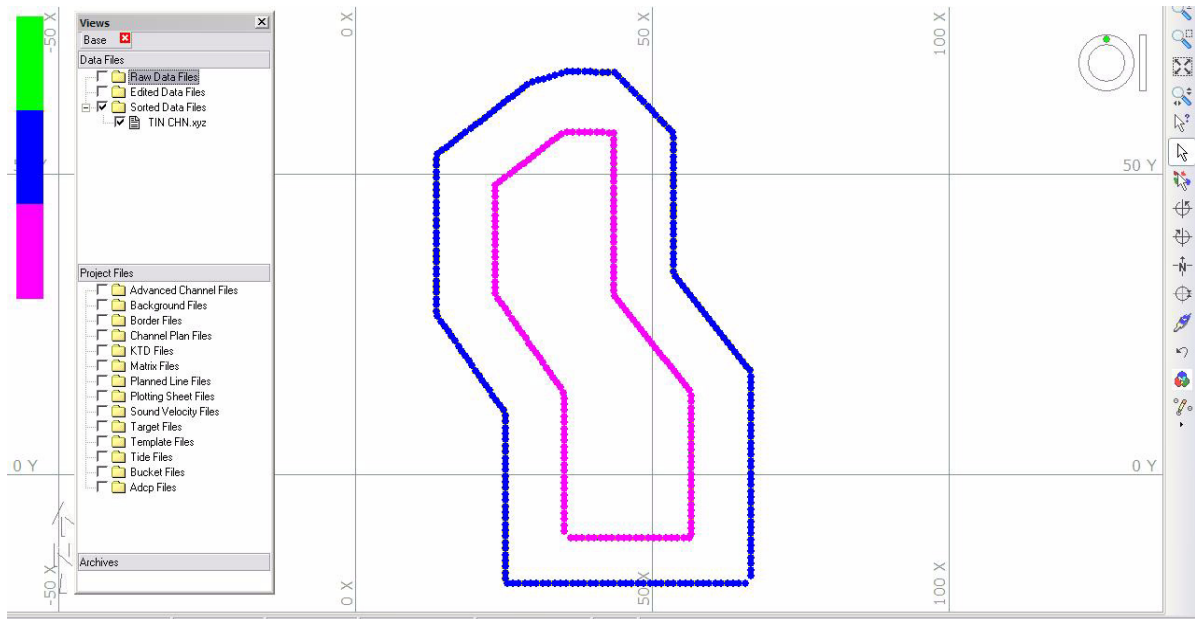
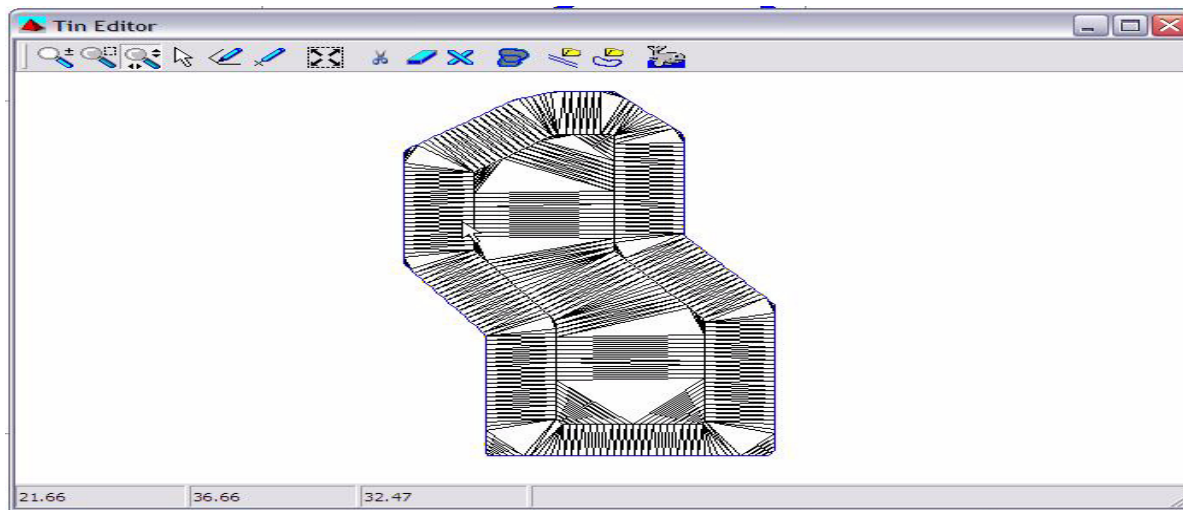
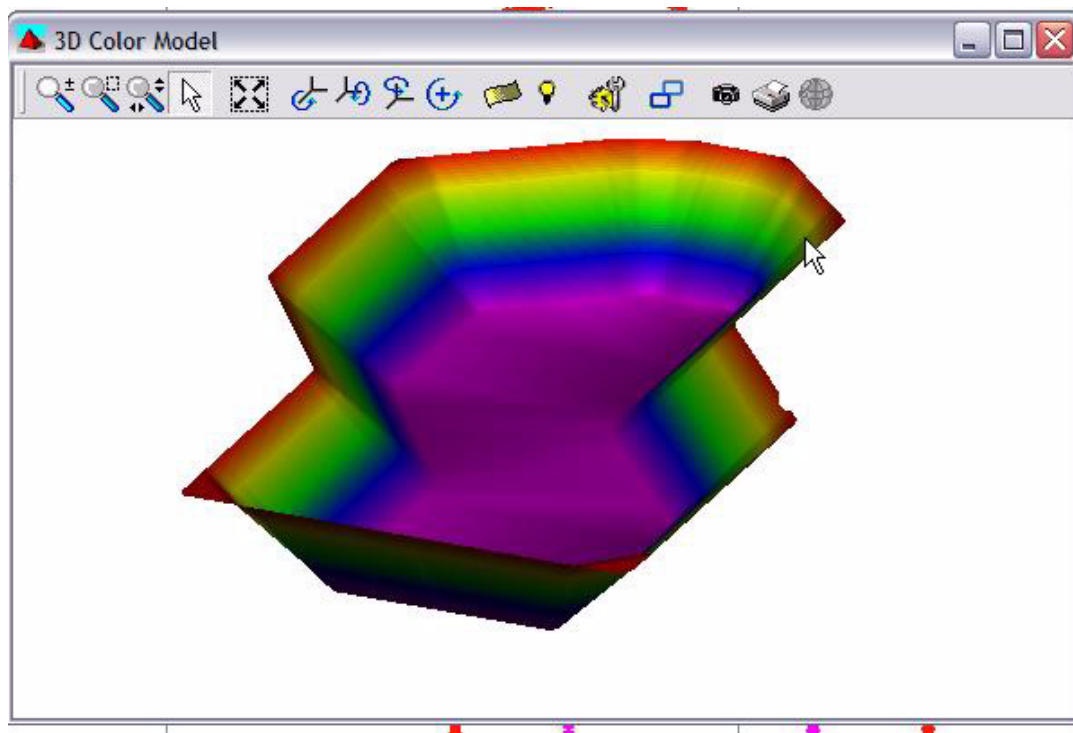


FIGURE 2. Resulting Channel File (*.CHN)



1. In **TINMODEL**, load your **XYZ** data set as the Input File and specify the TIN Max Side.
2. When the data is finished loading, use the Modify/Edit TIN Function to **edit out any erroneous triangles** being created around the corners.
3. Once happy with the edits, **view a 3D Model of your TIN** to make sure that it looks like it should. I will use my color scheme to help me make sure that all contours flow around the edges like they are suppose to. This is a good way to check to make sure that no erroneous faces are in my design.

FIGURE 3. TIN Model derived from the Sample XYZ



4. **Select FILE-SAVE AS and Save your TIN as a CHN** – You can open up this CHN in ADVANCE CHANNEL DESIGN to make any further modifications to your design surface.

FIGURE 4. Saving the TIN to a CHN (left), The CHN in ADVANCED CHANNEL DESIGN (right)

