Creating and modifying triangulated surfaces (TINs)

The 3D Analyst uses two types of models to represent surfaces: grids and TINS. Grids represent surfaces using a mesh of regularly spaced points. TINs represent surfaces using contiguous, non-overlapping, triangular facets. One can estimate a surface value anywhere in a triangulation by averaging nearby triangle node values, thus giving more weight and influence to those that are closer to the location being estimated.

Since TINs are variable resolution models, they can be more detailed in areas where the surface is complex and less detailed in areas where the surface is simple. The positional information of the source data is incorporated directly into the surface model so subsequent analysis will accurately reflect it.

How do you want to produce a TIN?

» Creating a TIN from vector features

» Creating a TIN from a grid

» Modifying an existing TIN