What Is Interpolation?

As discussed in the *Introduction*, interpolation is a process of estimating grid values using measured observations taken from a point table. New values calculated from the original point observations form a continuous, evenly spaced grid surface that "fills in the gaps" between the non-continuous points. Many mathematical formulae can be applied to estimating or interpolating grid values from an existing point file. There is no perfect solution and many techniques are in use. The validity of each depends entirely upon the type of data being interpolated and each method generates a unique style of interpolation surface. In a very generalized sense, there are three styles of surfaces that are appropriate for the most commonly encountered data types. As described above, *Vertical Mapper* currently supports five interpolation techniques to generate these unique surface styles.