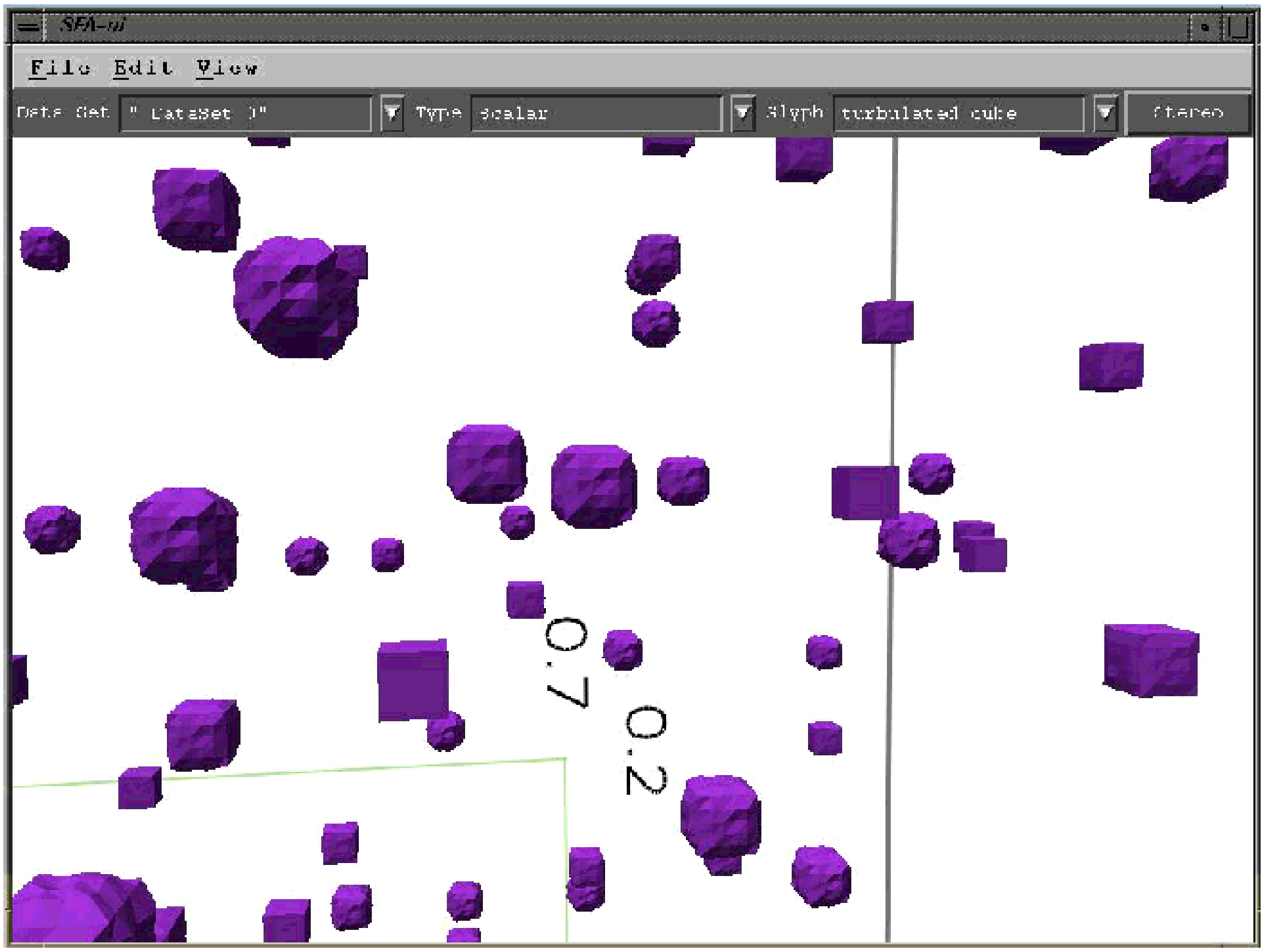
Visualization of continuous data using shape in glyph-based visualization.

The following images show some results of our work. These images are screen captures of the stereoscopic field analyzer. We are using a sample dataset with one of the data dimensions mapped to shape.

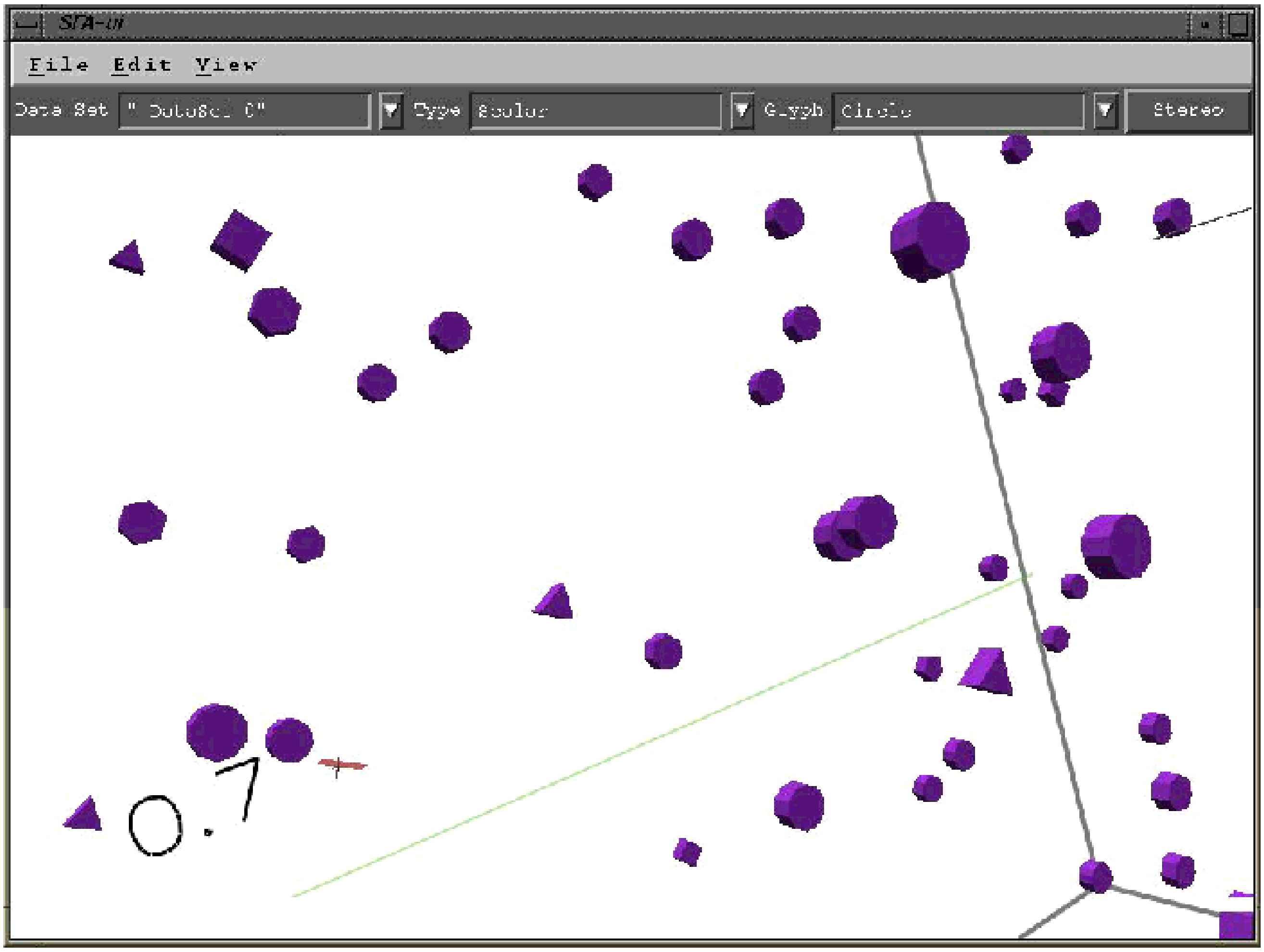
Glyph shape : Turbulence on a cube

In the first image, shape was generated using the turbulated cube algorithm. The glyphs which have a cube shape have their data value close to 0. Glyphs with data values close to 1.0 have a "fuzzy" cube appearance.



Glyph shape : Refinement of a circle

In this next image, the shape is generated using the refinement of shape algorithm. The basic shape that was used is circle or rather a cylinder. The minimum number of line segments used was 3. Ten distinct shapes were used for this particular image. This gives us a bucket size of 0.1. Glyphs with data values between 0.0 and 0.1 were rendered as an extended triangle. Glyphs with data values close to 1.0 were rendered as 12 sided cylinders.



Glyph shape : Warping from a pyramid to an octahedron

In this image, the shape is generated by warping between two pre-defined shapes. The particular shapes used here were the tetrahedron or pyramid and the octahedron. Glyphs with data values close to 0.0 are pyramids and glyphs with data values close to 1.0 are octahedrons.