**Introduction**

This poster displays highlights from the accompanying visualization submission to the IEEE VIS 2018 SciVis Contest. The goal of this visualization was to experiment with different cinematic effects and to use them to showcase the Deep Water Impact Data Set in a way that is informative, engaging, and artistic.

A screen capture from Blender’s viewport with no shading applied. The structure of the data is difficult to distinguish.

**Data**

The variables depicted are water fraction, meteor fraction, and pressure. Iso-surfaces were created at .5 for meteor and water variables and 100 bars for the pressure variable (for more information, please see the short paper).

**Shading**

Shaders applied to data objects using Blender Software’s Cycles rendering engine create various effects such as reflections and glossy surfaces. These shaders can help to connect the viewer to the data, for example, an emission shader can give the appearance of light or heat, while a glossy surface can give the impression of water.

The benefit of reflective shading applied to the pressure variable (right) versus flat shading (left).

The reflection makes the viewer envision water and also better shows the contour of the expanding pressure wave.

**Lighting**

Ray casting works hand-in-hand with shaders to give a sense of realism. The shadows from the light rays show the shape of the data and give the viewer a sense of direction.

**Camera Effects and Animation**

Various camera effects were utilized, such as panning and zooming around the data object and focusing the camera on different locations. These techniques enable the animator to act as a film director, allowing them to highlight key features in the data.

Focusing the camera can be used to bring the viewer’s attention to a particular area. The left image is focused toward the front of the water, while the right image is focused on the meteor trail.

Panning and zooming the camera around the data.

**Information**

For more information, please see the accompanying paper in the IEEE VIS 2018 conference proceedings and the full visualization on display during the conference. You can also preview the full movie using this QR code: