Assignment 4

Michael Swenson

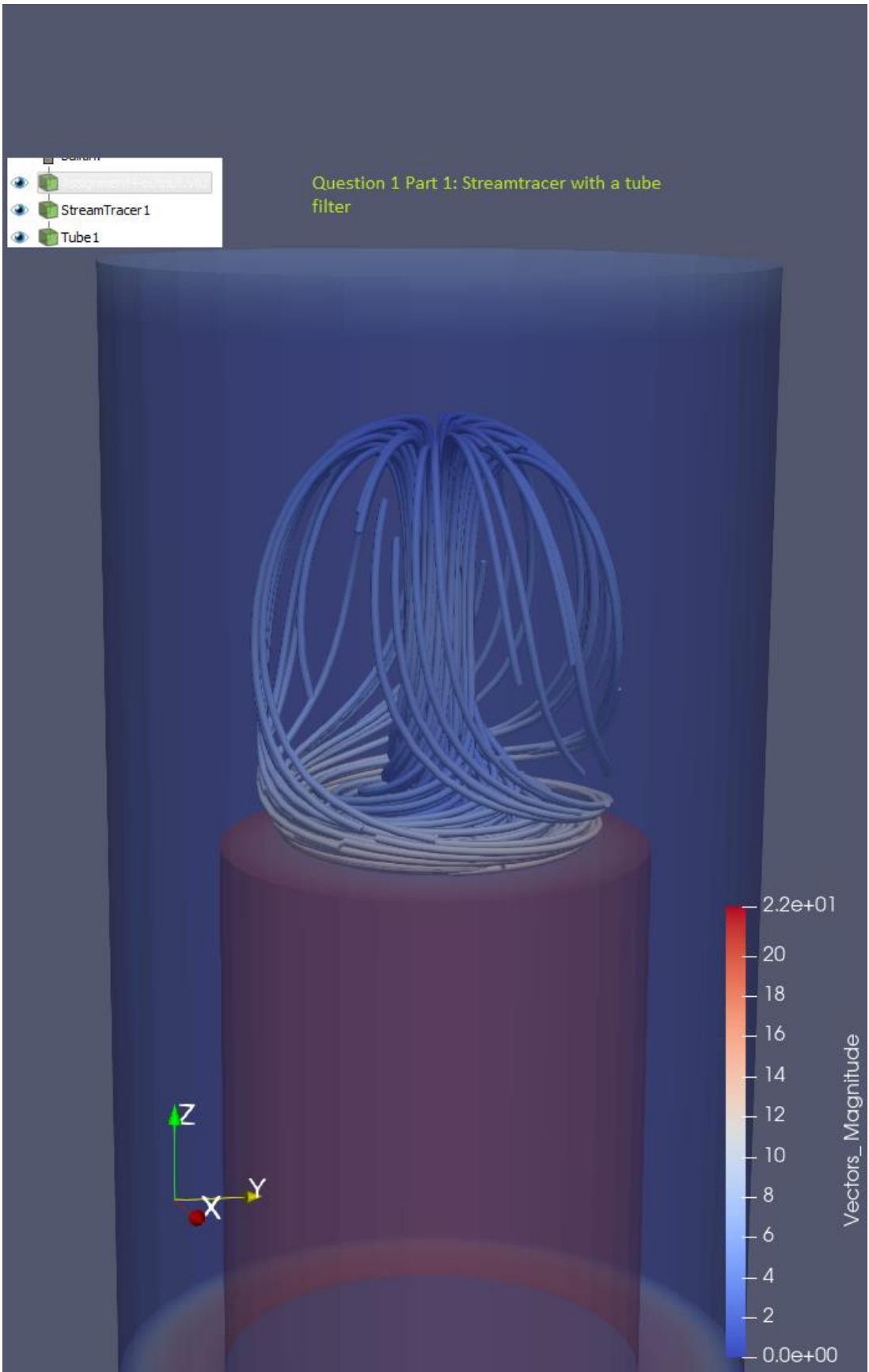# Q1_p1: Stream tracer and tubes

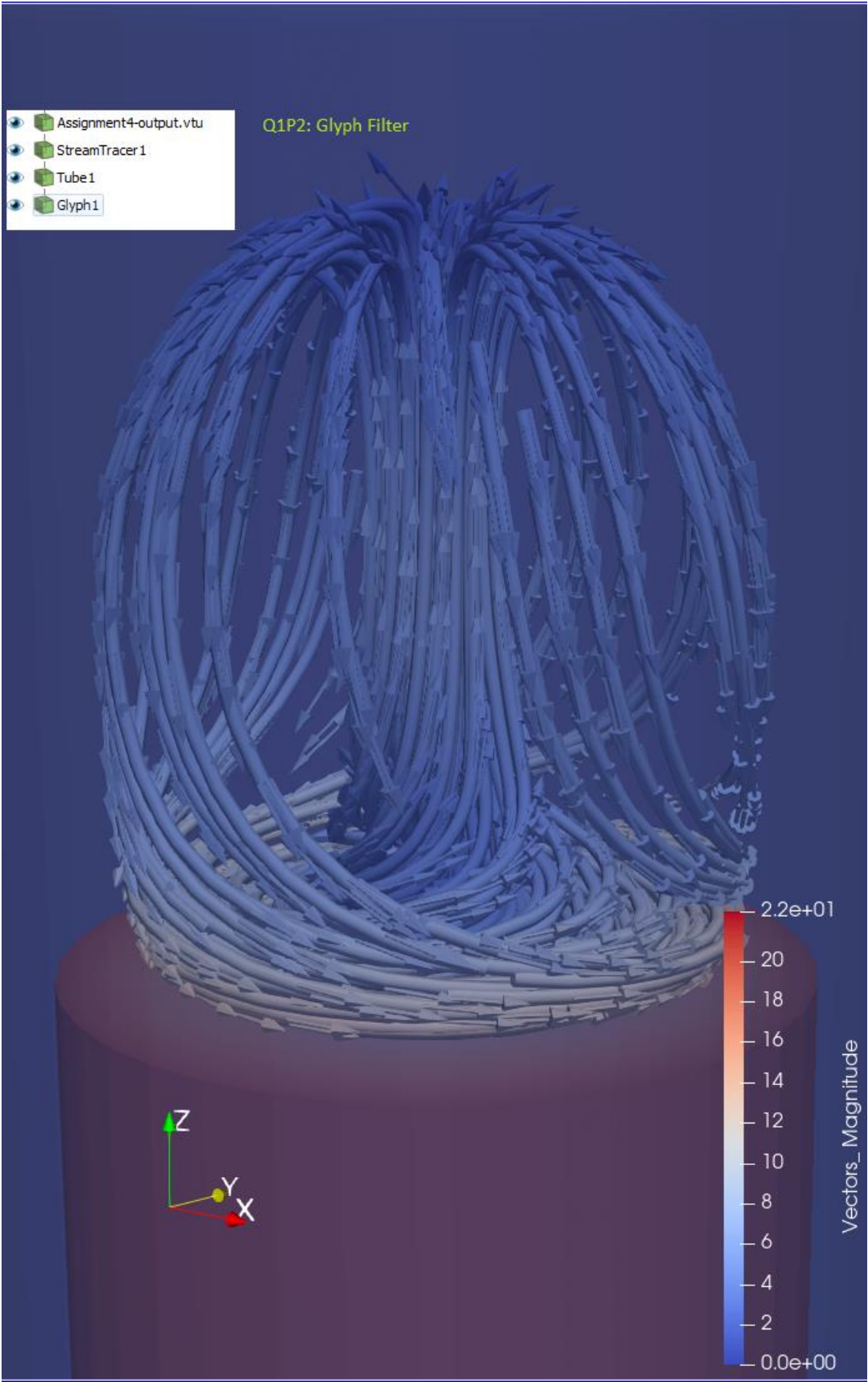*Figure 1: Tube Filter with Various Opacities*

Q2_p2: Glyphs

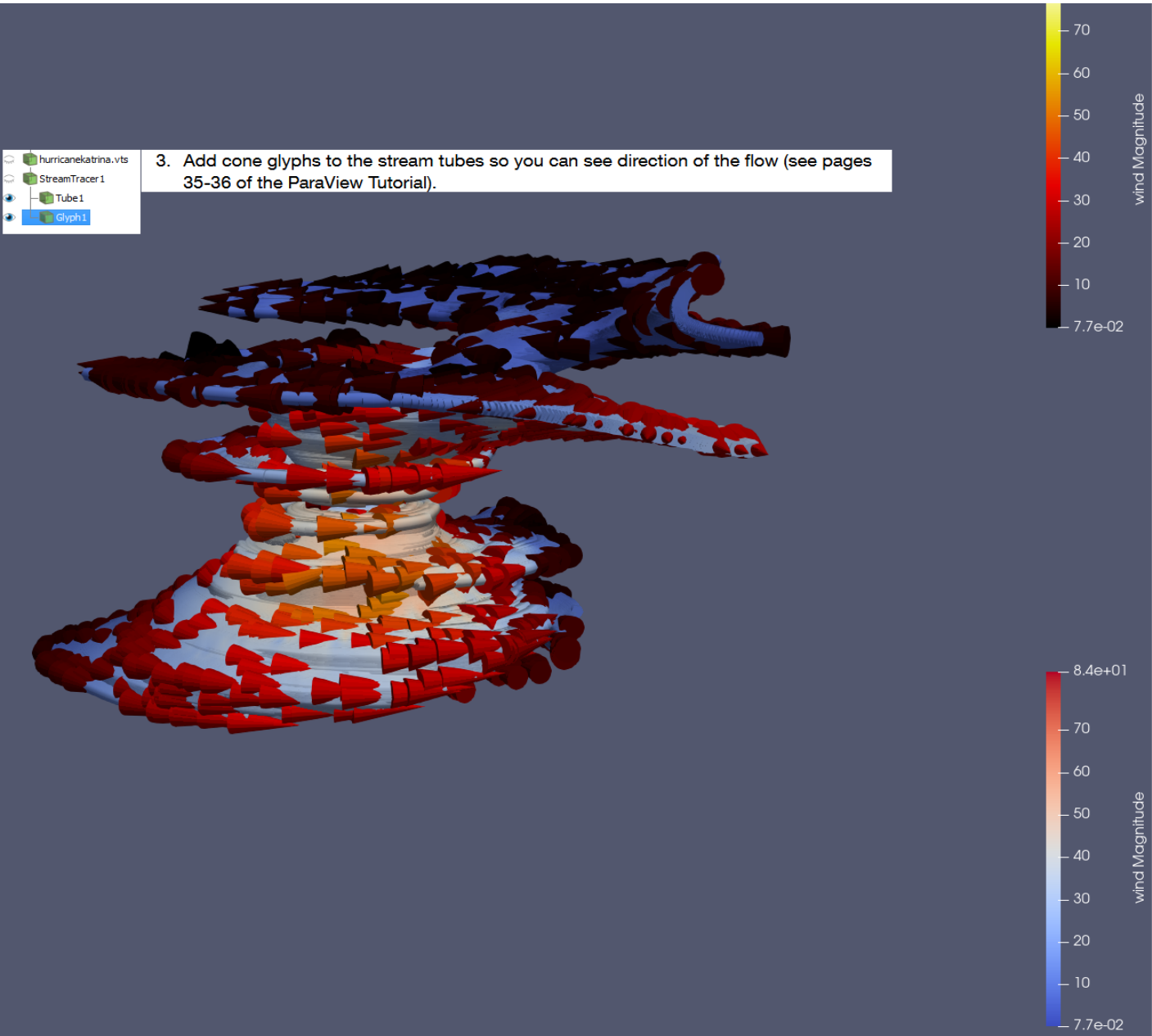*Figure 2: Glyphs to observe flow direction*

Figure 3: Inferno Cone Glyphs

I used high contrast colors between the glyphs and the stream lines because it preservers both sets of information. There probably are too many cones though.
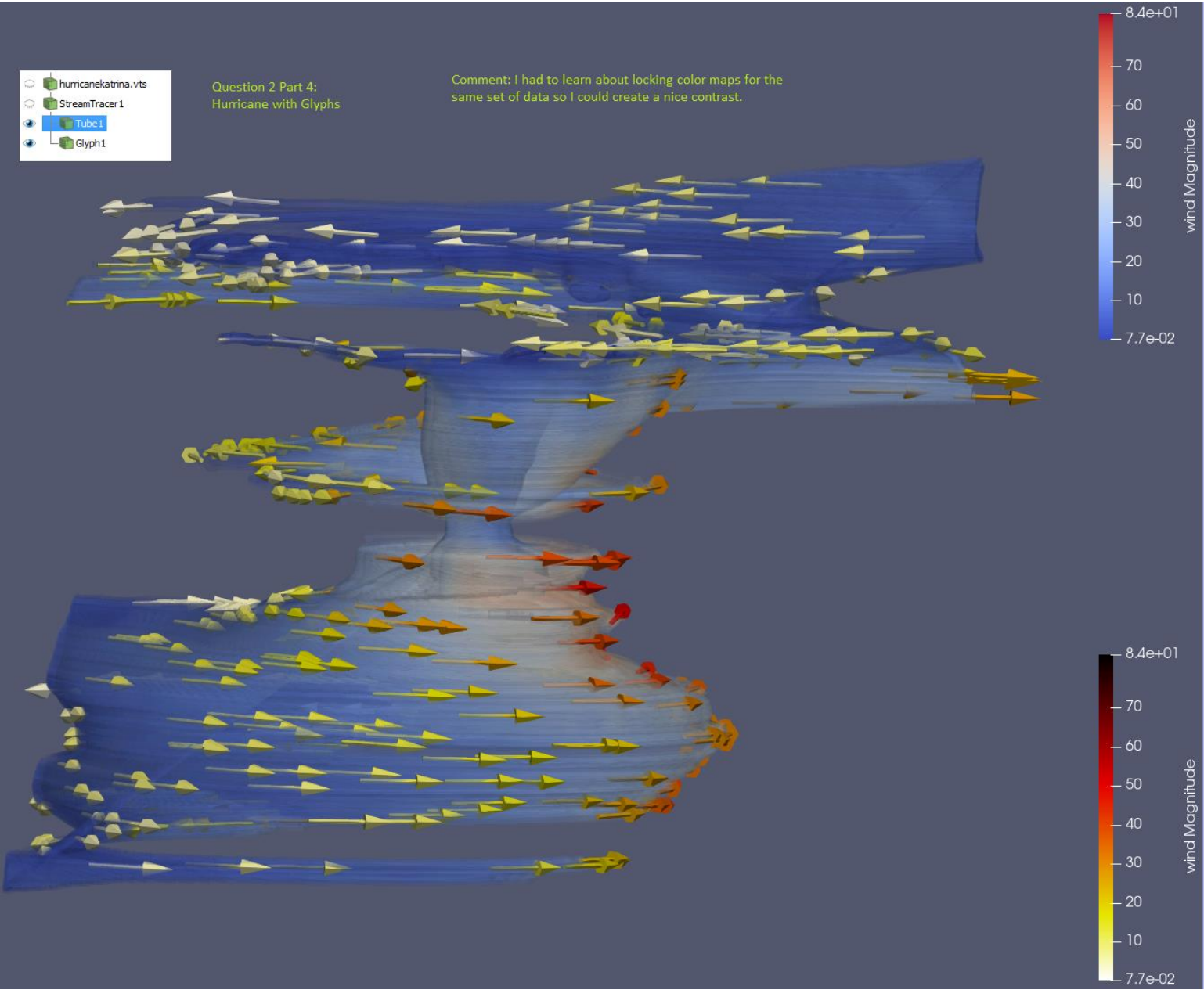
Q2 Part 4

Figure 4: Arrow Glyphs and Reduced in Number

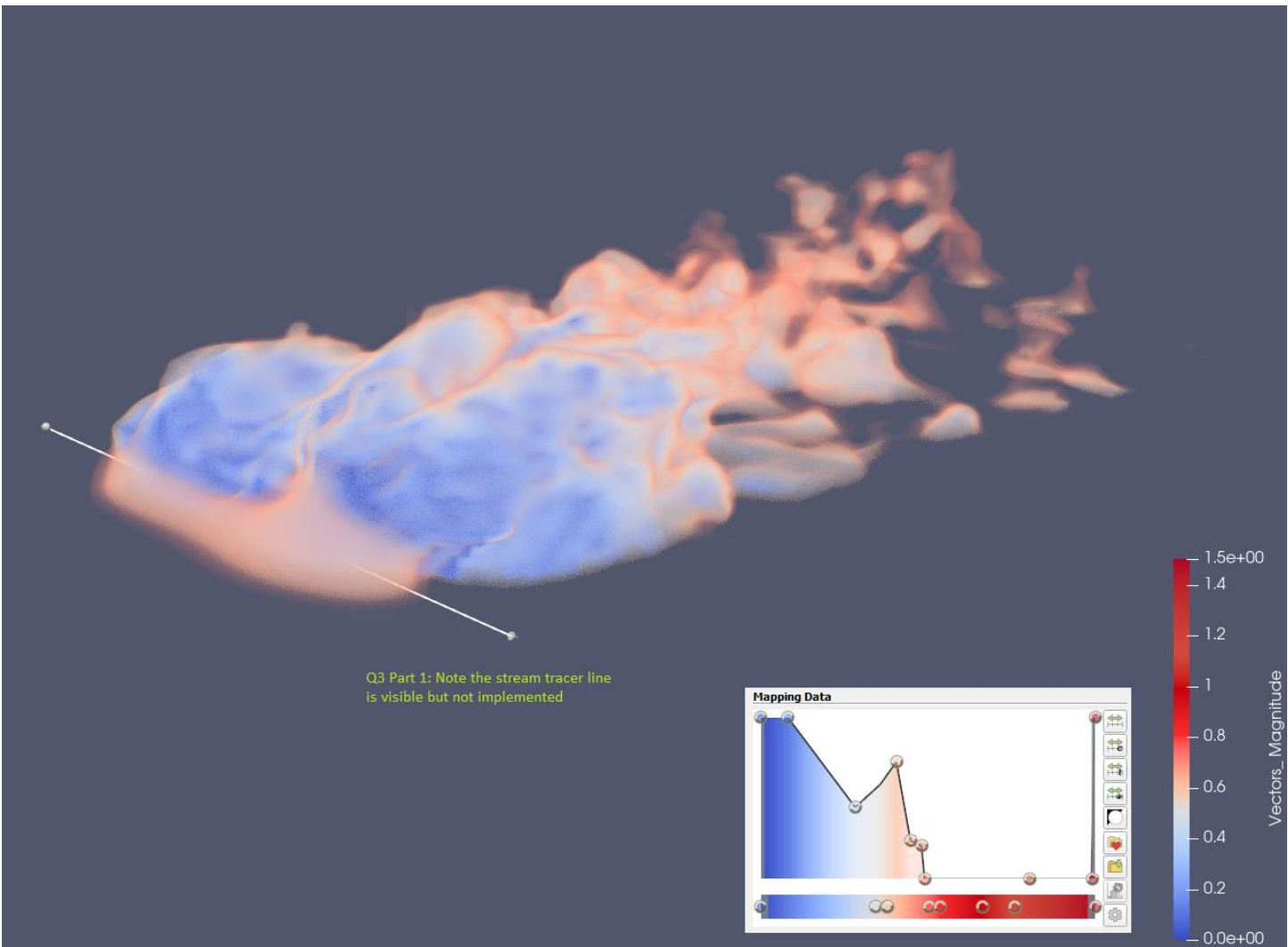I like this figure more because there isn't as much clutter and the change in opacity really gives an idea of flow while still preserving the stream data.

Figure 5: Custom Transfer Function

This is the volume rendering of a car that is attempting match an image supplied to us.
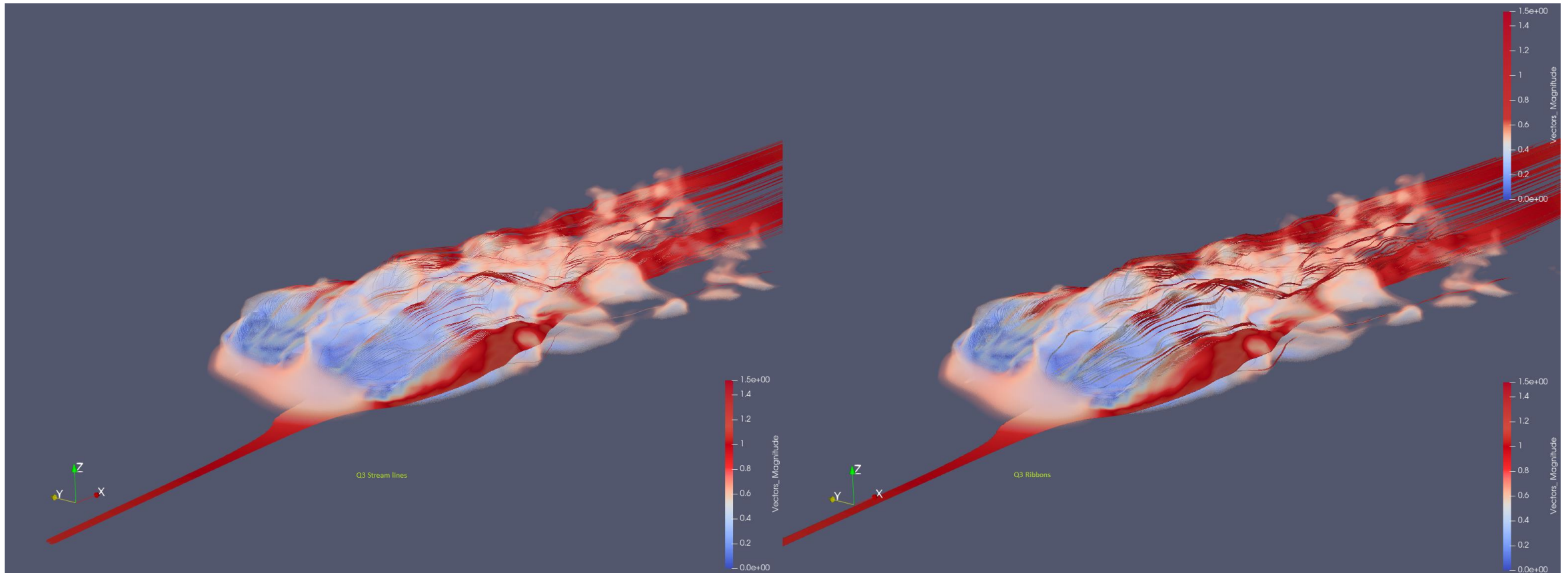
Figure 6: Stream and Ribbon Filters Side by Side

This shows how the ribbon filter can subtly change a stream line figure.

5. Create visualizations similar to image in question4 for two more seed configurations of your choice. Please include screenshots with brief description, and a PSVM file
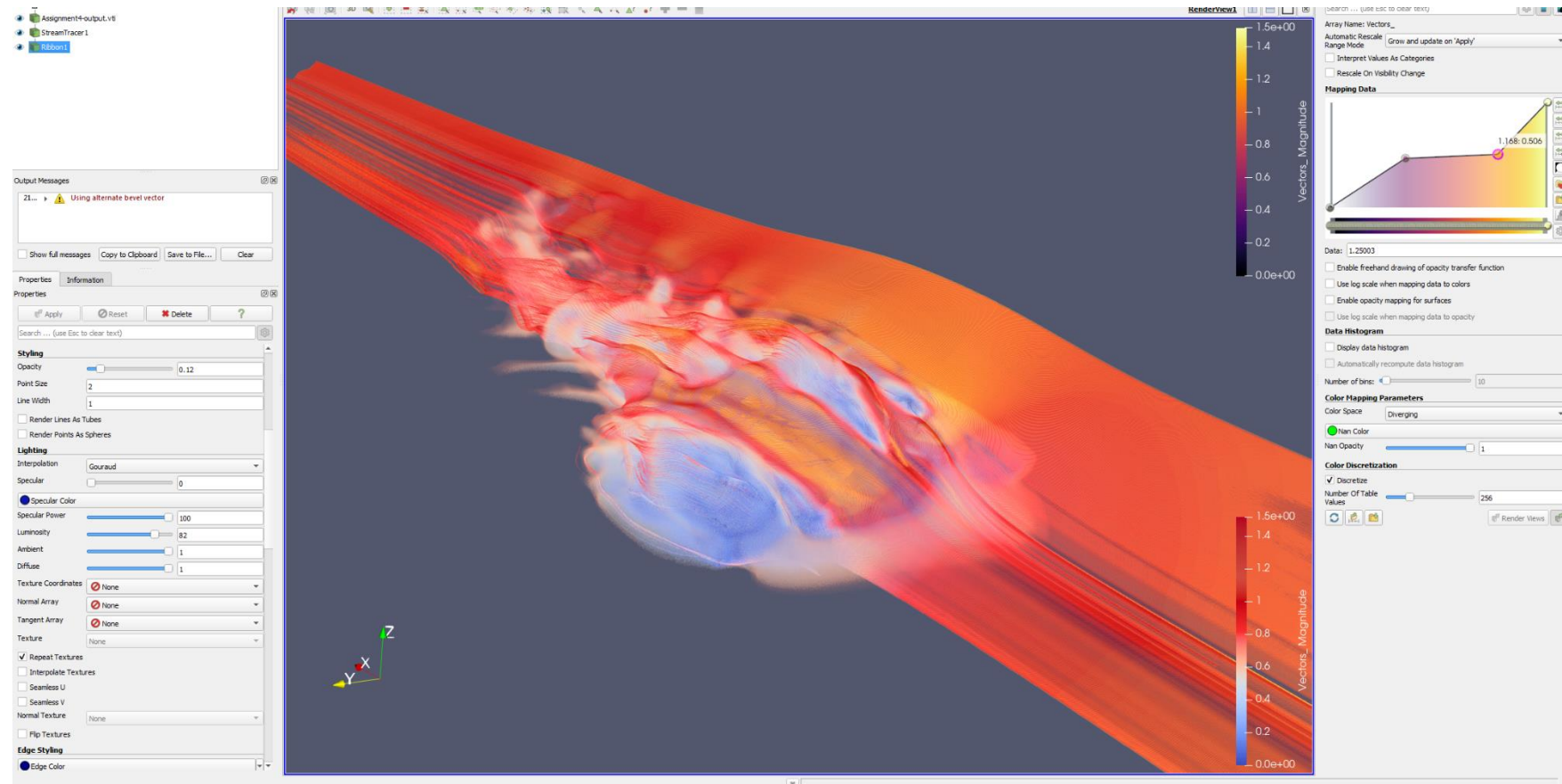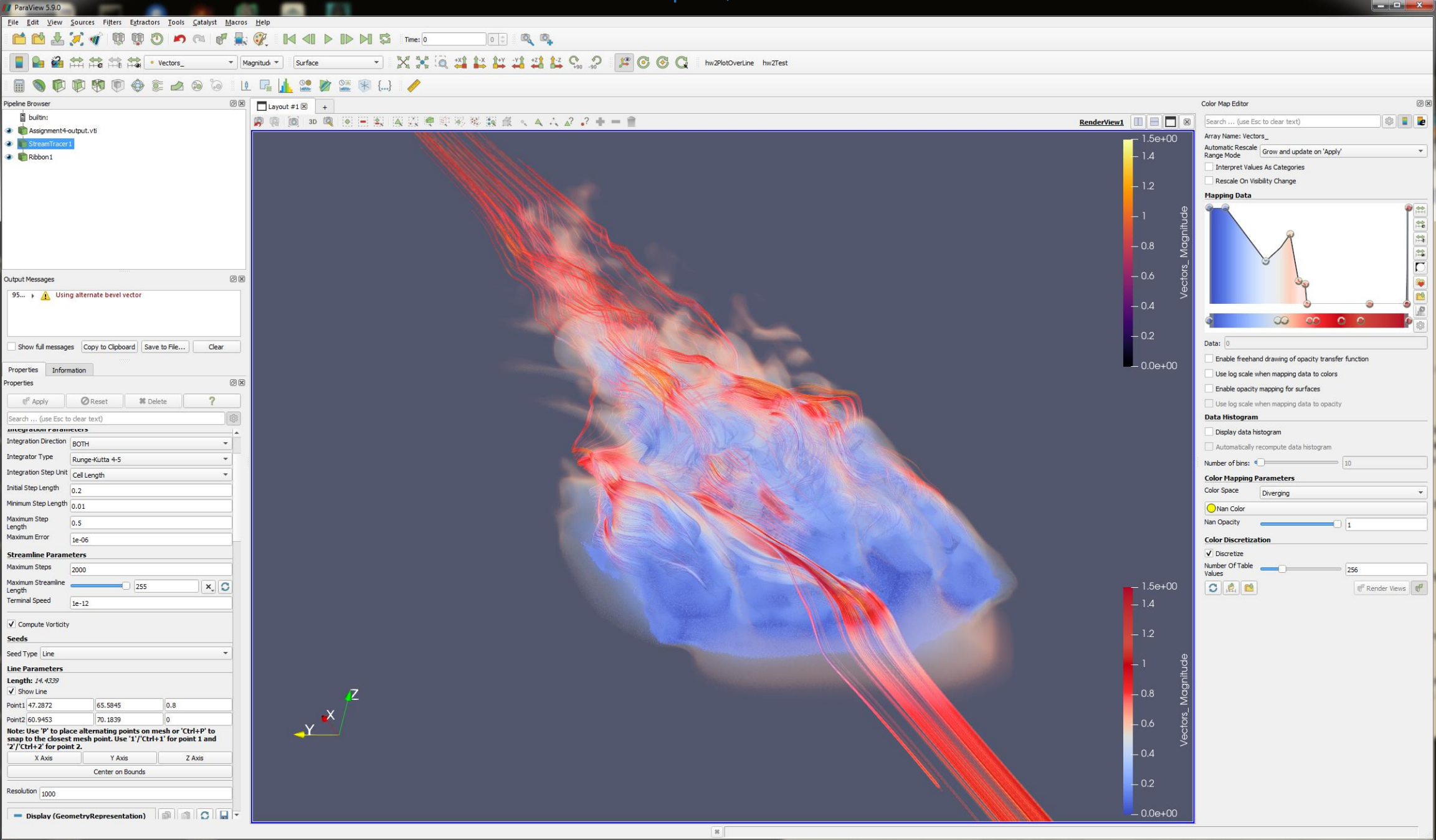

Figure 7: This was seeded from the front of the car and the viewer's left to the back right.

Figure 8: This was seeded pointed in the middle of the Car from Front to Back

6. Note any interesting observations for flow visualizations.

It seems to be a strange shape of a car, possible a vehicle that was designed to be especially aerodynamic. Something like this from motherearthnews.com
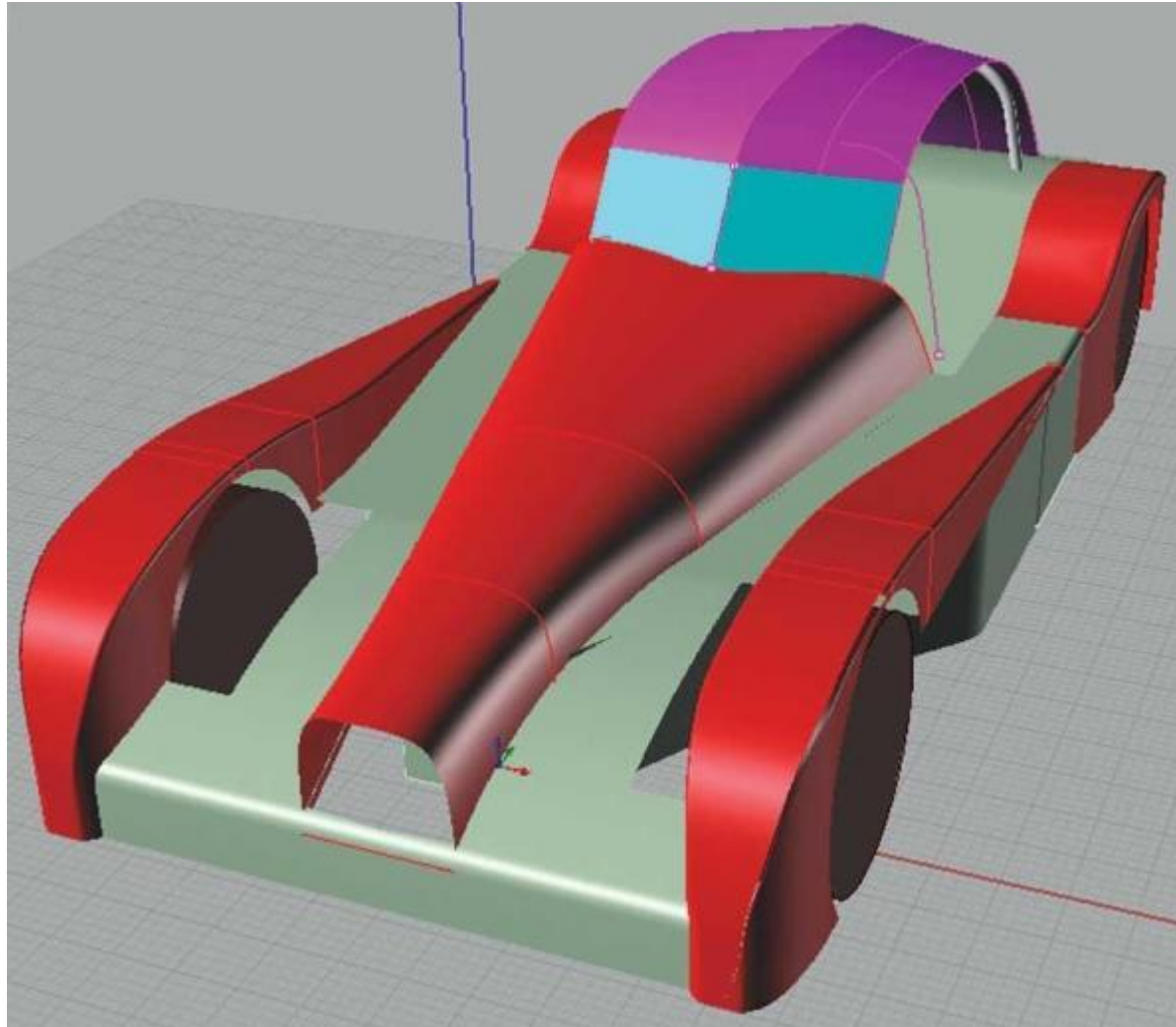
The other observation I had was that placing the stream line changed the observations significantly.