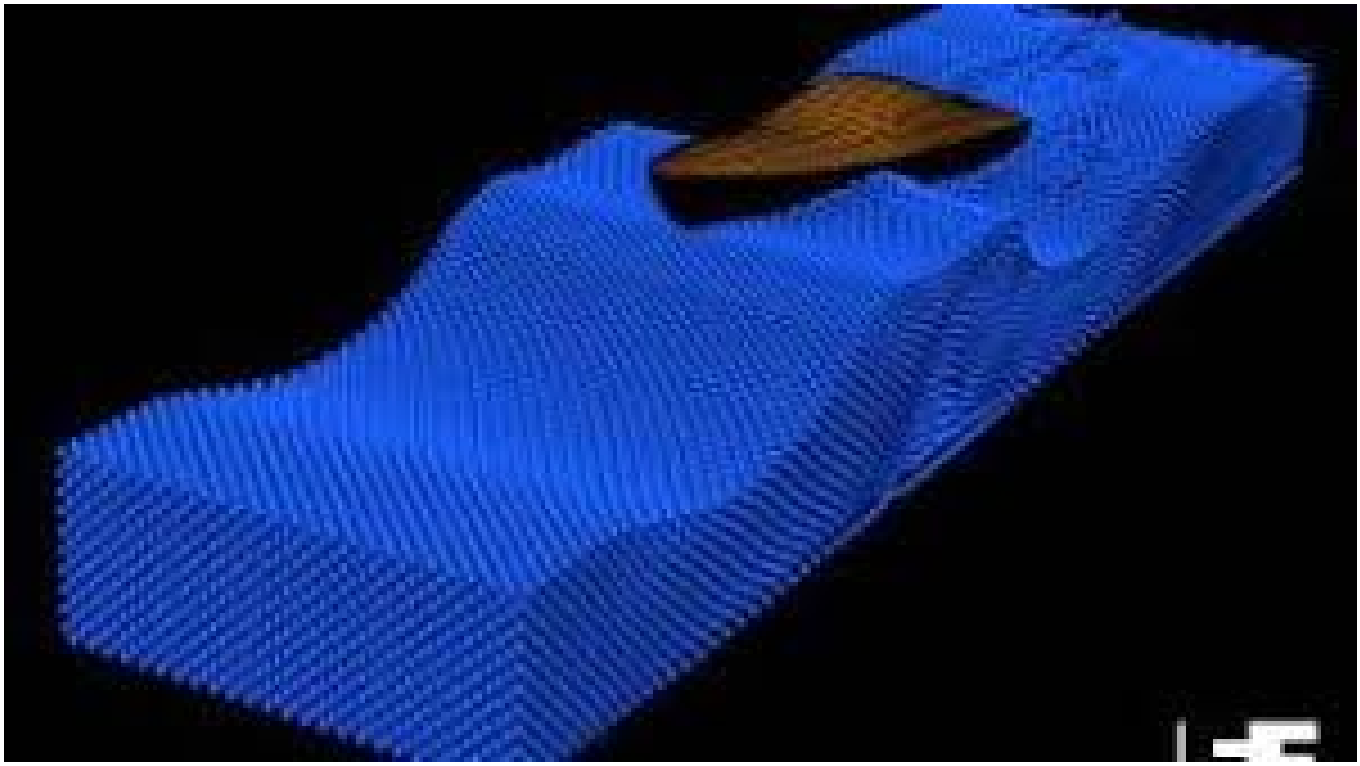
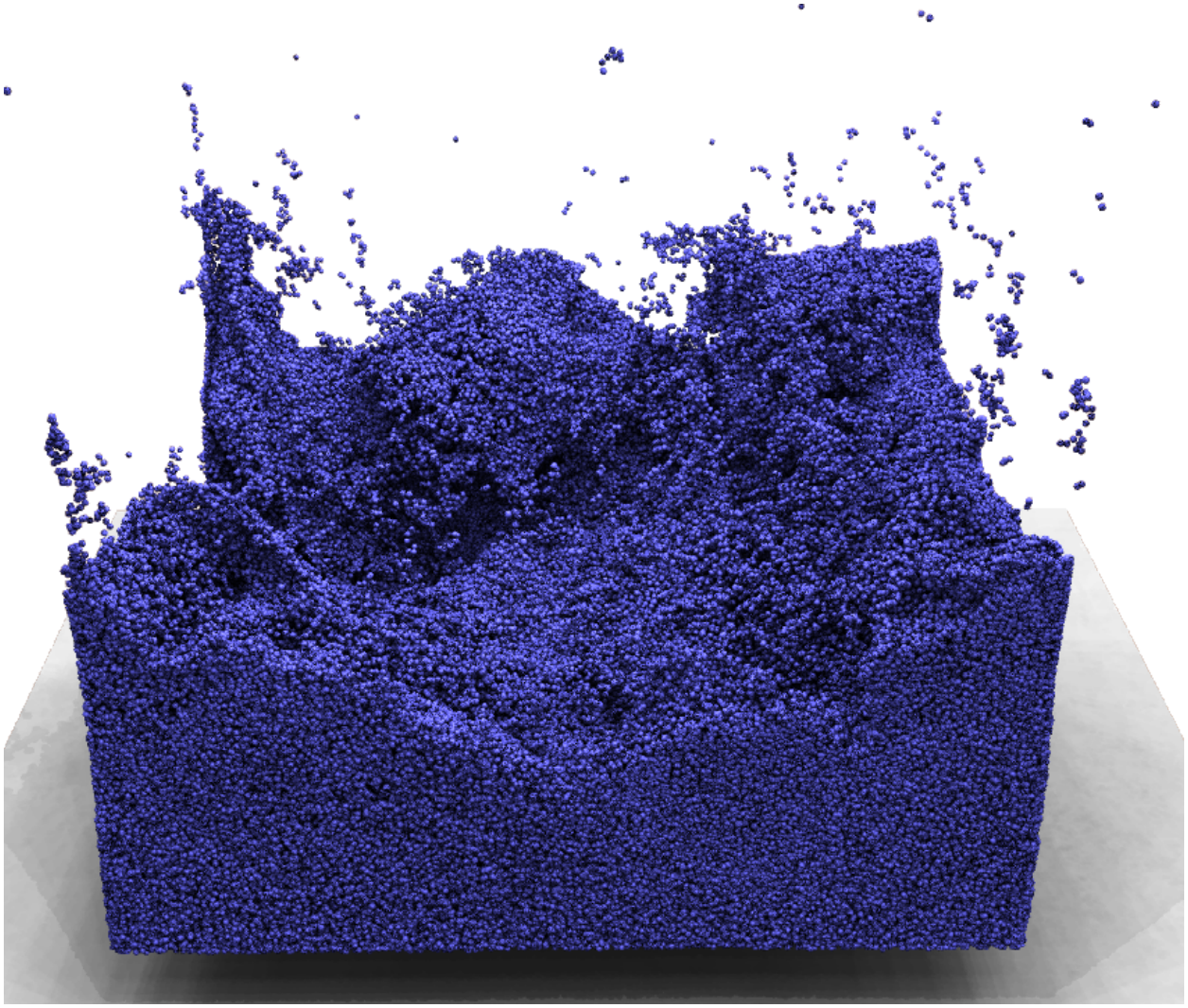
Part A
So just from reading off the list I found smooth-particle hydromechanics to be quite interesting. I think they are made by using particles as the title suggests but they are also smoothened (whatever that means) so that they can move more fluid which is what they are meant to mimic, fluids. Obviously the more jagged they look the less realistic it looks because liquids aren't sharp.I think they then group the particles close together and alter some parameters so it makes it looks as if they stick together so that they look like one giant body of maybe water or something.

I think a way of implementing this in GLSL would be to make a particle system similar to the one we saw in class but instead of one source where they all spawn from, they already exist and are their own individual piece. Some sort of equations would probably be needed so that we can make them mimic the movement of fluids. Aside from that change some parameters to keep the particles from colliding and bouncing away since they are supposed to stick / stay together to mimic fluids. All of this would probably happen in the vertex shader while in the fragment shader I think only the color would be programmed depending on what is being simulated. If it is water, a simple blue might do but if it is a lava flow then a texture to get the color of lava and the rock inside the lava would be required, etc…

Here are some pictures I found:





Part B:
Well since I'm turning in this assignment pretty late I am just going to write down my team members and what it is we are working on (since we already presented) which is different from what we researched.

I am working with Jay Parikh and Jacquelene Pham and we are working on making a simulation of a storm which includes clouds, rain, and lightning.