Deciding to park this project for now, until I get some help.

I have implemented an OpenGL 3D room interface into JUCE, and completed the code for processing the room reflections within this interface; to the extent that I have generated an IR wav file. The 3D cues still need adding, and completing the rest of the tasks in the ‘Room Reverb VST Plugin Software (C++).xlsx’ file (in the 3D sound documents folder).

The 3D cues have already been implemented in the Room Rever 6 Java application, and just need porting across to carry out the processing on the IR file. The front/back filtering will need thinking about, but this can be done with an FIR filter. I think processing the convolution with changing 3D cues in real-time may still be a problem, but I haven’t got there yet.

The Spatial Audio framework might also be an interesting inclusion for surround sound and Ambisonic encoding.