Testing terrain quadrant clipping

To test the terrain quadrant clipping (only processing 9 quadrants rather than all of them) the minimap from the game was used. This minimap allowed the user to view the scene from a bird's eye perspective. As the minimap was a game aspect, it was later removed – however it wasn't completely wasted as it was very useful for testing the terrain clipping.

First of all, the map was split into sub sections and just one terrain quadrant was processed (left image, the one the user was currently in). However this meant, when they were on the edge of that quadrant, they would not see the further in the distance. The tiny red square in the middle of the images is the user's position. These screenshots can be viewed at:

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So just processing 1 terrain quadrant was not enough. The user needed to be able to see the surrounding cells that they could move into. Therefore, further array indexing was done to process the current and touching terrain quadrants. In the right image, 5 cells are being processed – but the diagonal quadrants still were not.

The below image on the right shows the final 3x3 terrain quadrant clipping working. As you can see, only the user's cell and surrounding 8 cells are sent to the vertex shader to be processed. This means the user can see into the distance. The majority of the cells that the user cannot see, are not processed.