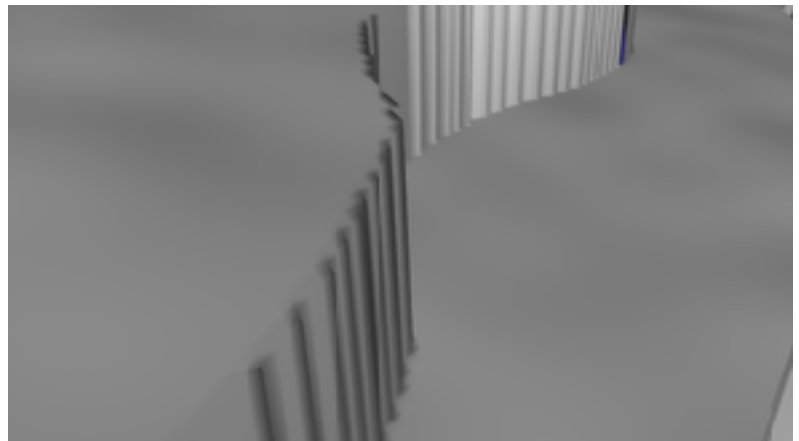1) **Smoothing out the edges** - We need to find a way to represent the crack edge in a "smoother" way.

To elaborate;

10	10	10	10	10	10	0	0
10	10	10	10	0	0	0	0
10	10	10	0	0	0	0	0
10	10	0	0	0	0	0	0
10	10	0	0	0	0	0	0
10	10	0	0	0	0	0	0
10	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0

Say we have the above simple height map. Rendering this now would look like this:

Easy to see what I mean from the image on the right taken from the renderer.

What we really want is the edge to look like this:

This means finding some way to turn a height map into a surface made up of points, which is more dense where there is more change, and is not necessarily an accurate

10	10	10	10	10	10	0	0
10	10	10	1	0	0	0	0
10	10	10	0	0	0	0	0
10	10	0	0	0	0	0	0
10	10	0	0	0	0	0	0
10	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
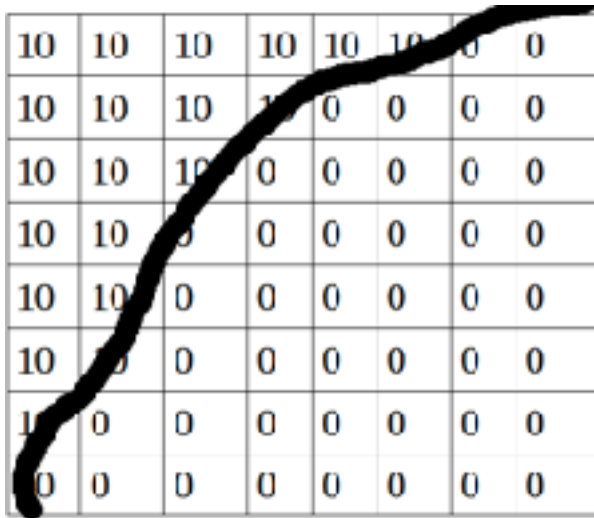
representation, but more accurate from a distance.

2) Design a more intuitive controller

At the moment we're using osgGA::TerrainManipulator and handling some extra keypresses to navigate the terrain. It'd be nice if we had some better controls, particularly some that work with laptops a bit nicer. Maybe have the ability to control like a drone, with a certain amount of momentum on forward keypresses. This would probably resemble the UFOManipulator.
Documentation for CameraManipulator class:

http://trac.openscenegraph.org/documentation/OpenSceneGraphReferenceDocs/a00104.html

First result googling, this guy seems to have done a similar thing; http://markmail.org/message/e6magjobl7fywbe6

3) Design some UI stuff

Check out http://trac.openscenegraph.org/projects/osg//wiki/Community/WindowingToolkits
Looking to create a small overlay, in something we can use to overlay such as Qt or SDL, so look for tutorials in that.

4)Find out if adding Node's to a Geode/Group in OpenSceneGraph is thread safe?