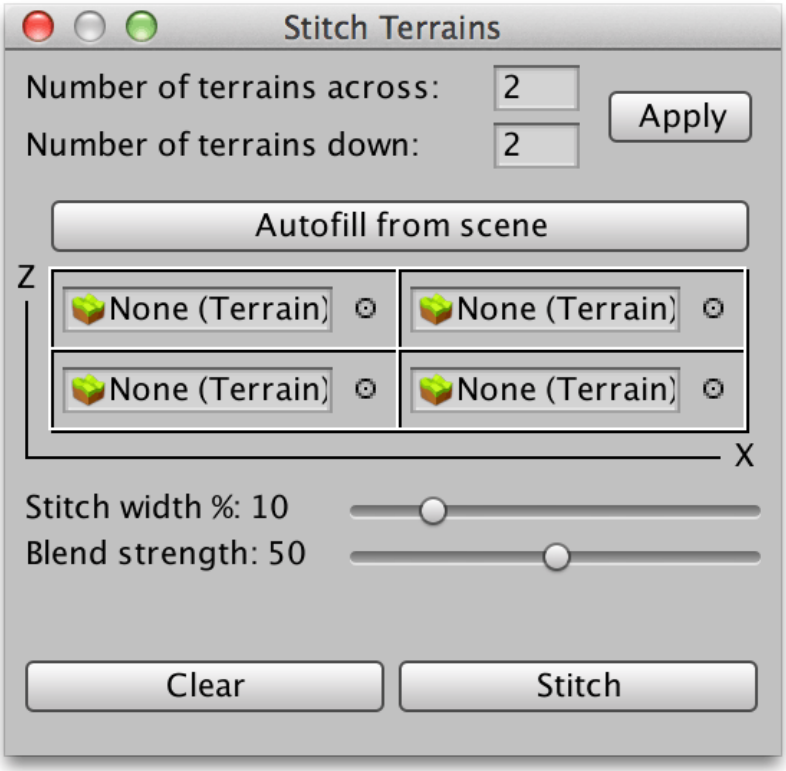
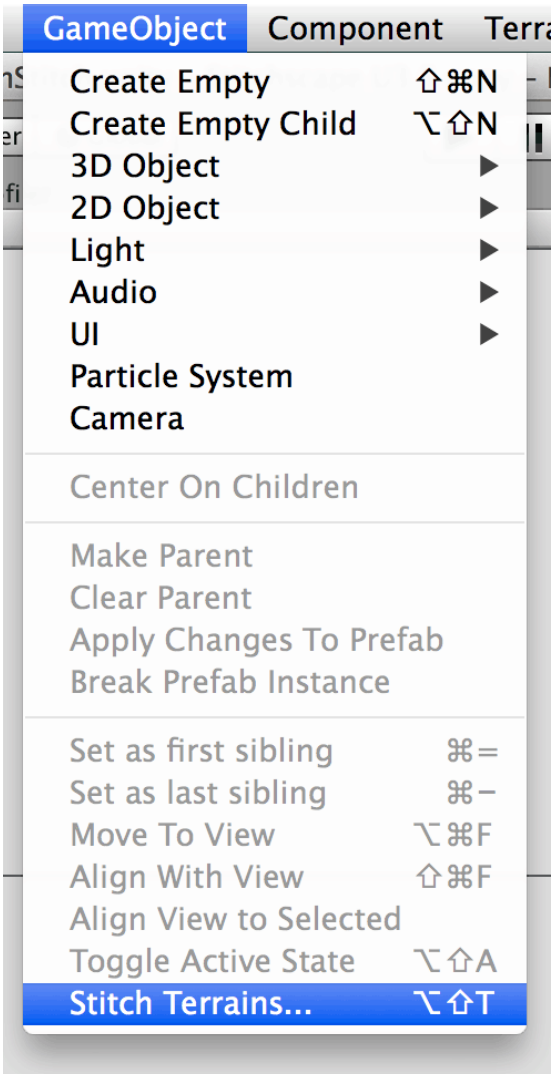
Welcome to Stitchscape! After importing, the Stitchscape editor script will be located in the Stitchscape/Editor folder. To use it, select the menu item in the GameObject menu called "Stitch Terrains...", or use the Alt-Shift-T keyboard shortcut.

This will bring up a “Stitch Terrains” window where you can set up the terrains that you want stitched:





Initially there aren’t any terrains assigned. You can assign terrains either manually or by using the “Autofill from scene” button. When setting up terrains manually, first change the number of terrains across and down if necessary, then click the “Apply” button. Note that “across” means arranged on the world X axis, and “down” means arranged on the world Z axis, as viewed from above when choosing “top” as the scene camera view. You can resize the Stitchscape window if needed if you have many terrains. Next, assign your terrains in the grid below. You can do this by either dragging terrain objects from the hierarchy view to the appropriate grid boxes in the Stitchscape window, or you can use the selector icons in the grid boxes to select terrains from a list of Terrain objects in the scene.

If you use the “Autofill from scene” button, Stitchscape will get a list of all terrains in the scene and attempt to order them into a grid. The terrains must be already set up as a grid in the scene, and positioned next to each other. Ideally they should match up exactly, so they look seamless after stitching, but autofill will still work if they are reasonably close (plus or minus one unit). It's not necessary to set the across and down fields when using autofill since those will be calculated automatically.

Note that for Stitchscape to work, all terrains must have the same heightmap resolution. Also, all terrains should be located at the same height (i.e., have the same value for the Y axis). They should be positioned on the X and Z axes so that there is no overlap or gaps between terrains. Stitchscape can only alter the terrain heightmaps, and doesn't make any other adjustments to the terrain objects.

Also note that if you use a terrain grid size of 1x1, then the single terrain will be made seamlessly repeatable with itself, so it can be tiled indefinitely. After stitching, you will need to duplicate and position the terrains yourself.

Below the terrain grid is the “Stitch width %” slider. This is the percentage of the terrain width from the edges of each terrain that will be affected by the stitching. The larger the number, the wider the band that will be affected. The minimum stitch width is 1%, and the maximum is 50%. For best results, you should use larger values for terrains that don't match very well, and small values for terrains that nearly match to begin with.

After that is the “Blend strength” slider. This ranges from 0 to 100, and affects how strongly Stitchscape will blend the terrain to the midpoint. When stitching a given terrain, Stitchscape uses detail from the opposite terrain to create a more natural look, but this can result in a somewhat “mirrored” look if the blend strength is set to 0. If it’s set to 100, then the result is similar to smoothing. The default of 50 typically works well, but this can be adjusted to suit different terrains.

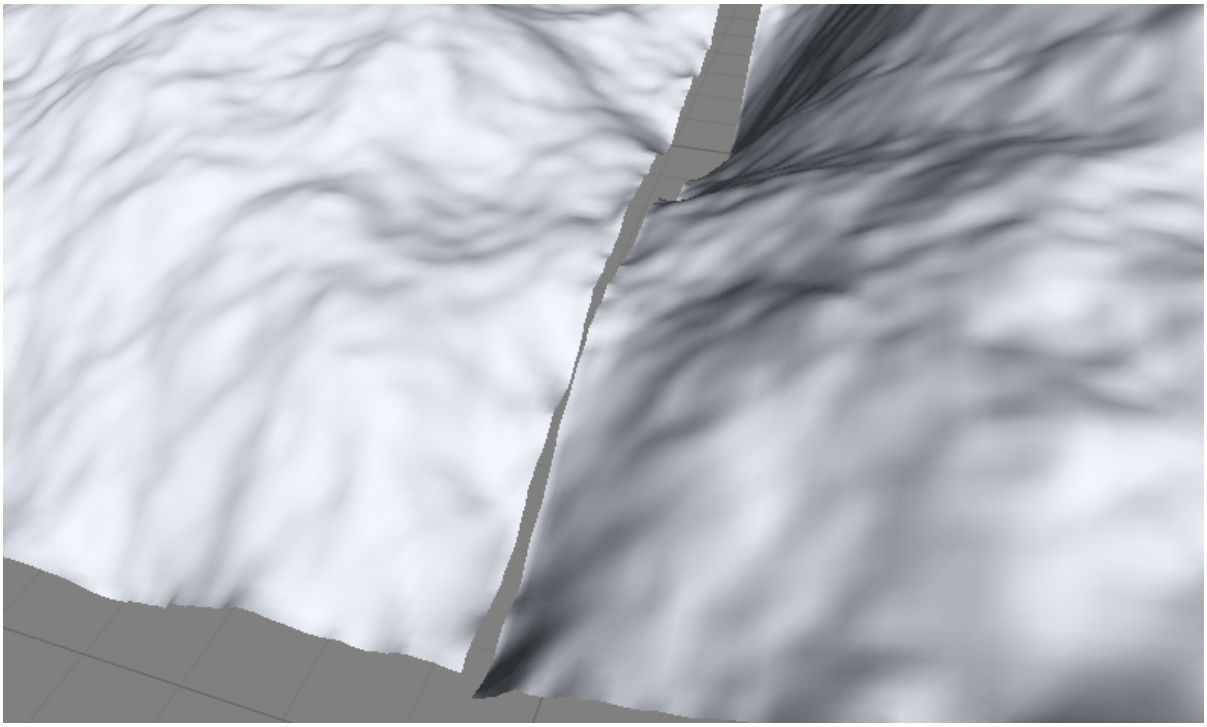
The “Clear” button will remove all terrains from the stitching grid (but doesn't affect the terrains themselves) in case you want to start over.

When you’re all set, click the “Stitch” button. This will alter the terrains so they match up seamlessly. You can undo the stitching using the Unity undo function, which is useful if you want to experiment with different settings.

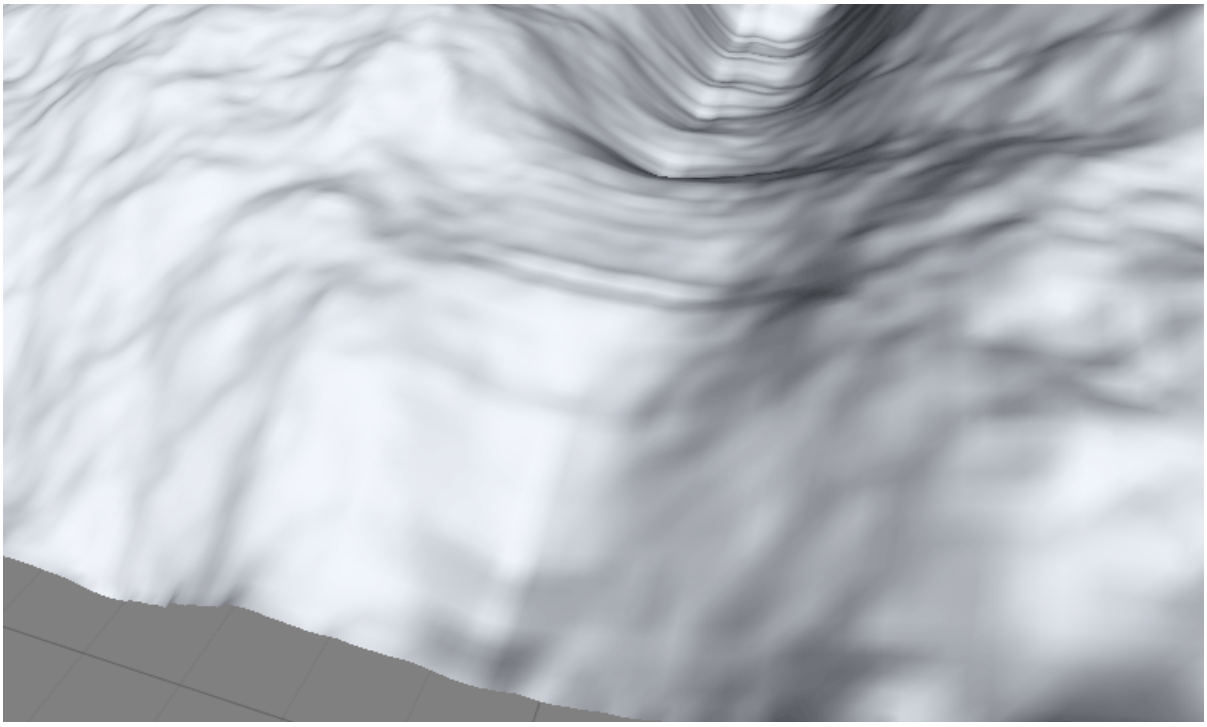
Note that proper use of the Terrain.SetNeighbors function in your scripts is still required in order for terrain LOD to match up correctly at a distance. Stitchscape can’t do this automatically.

On the next pages you can see the results of different Stitchscape settings.

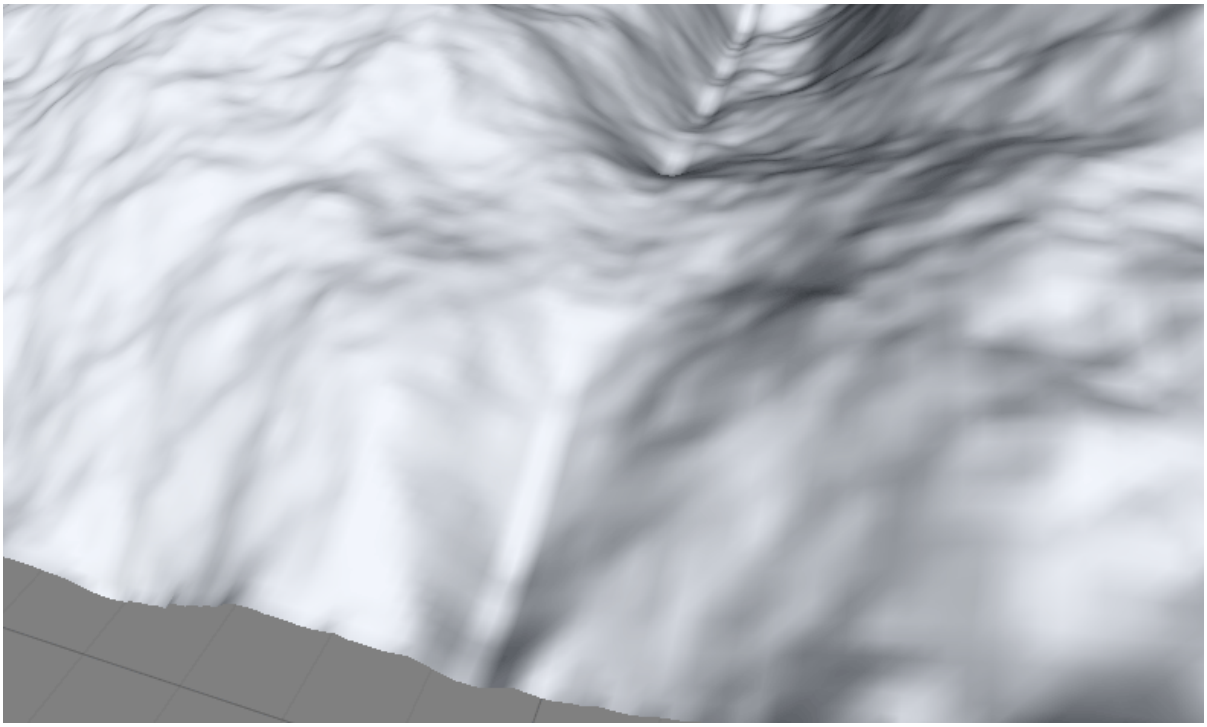
Here we have a pair of terrains that we'll stitch:



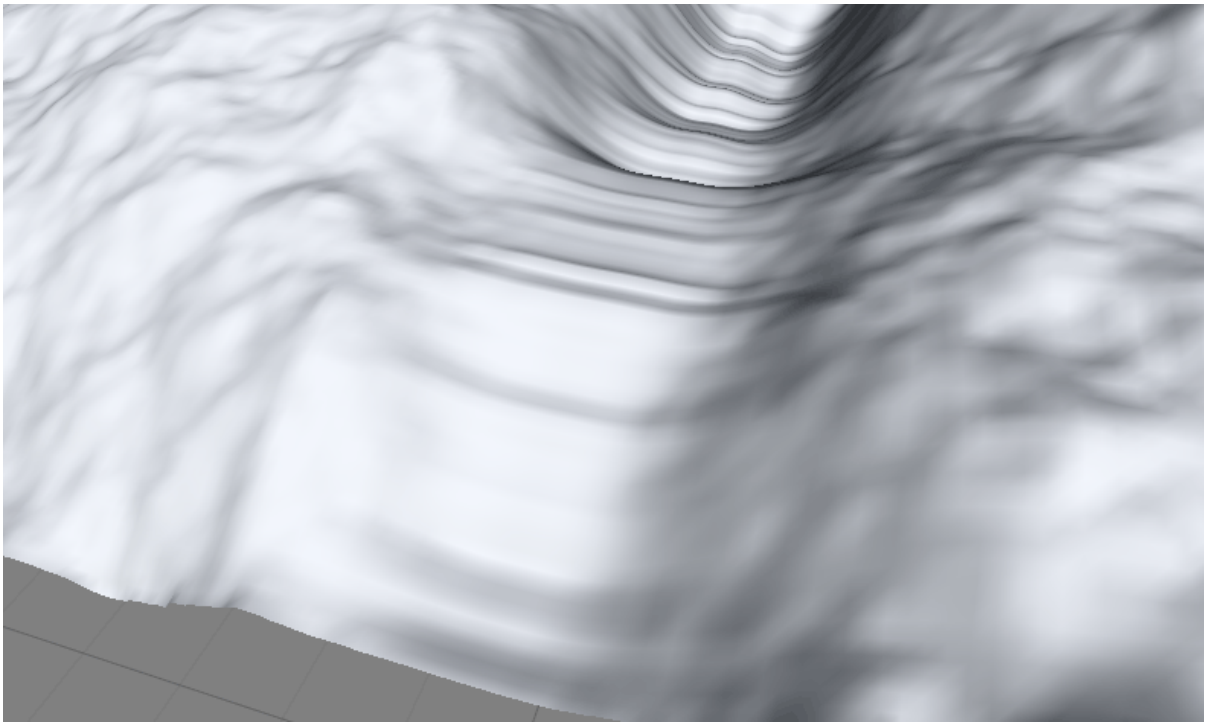
The default settings of 10% width and 50 strength results in this:



Setting the strength to 0 gives us this instead, where more detail is kept but some mirroring is visible:

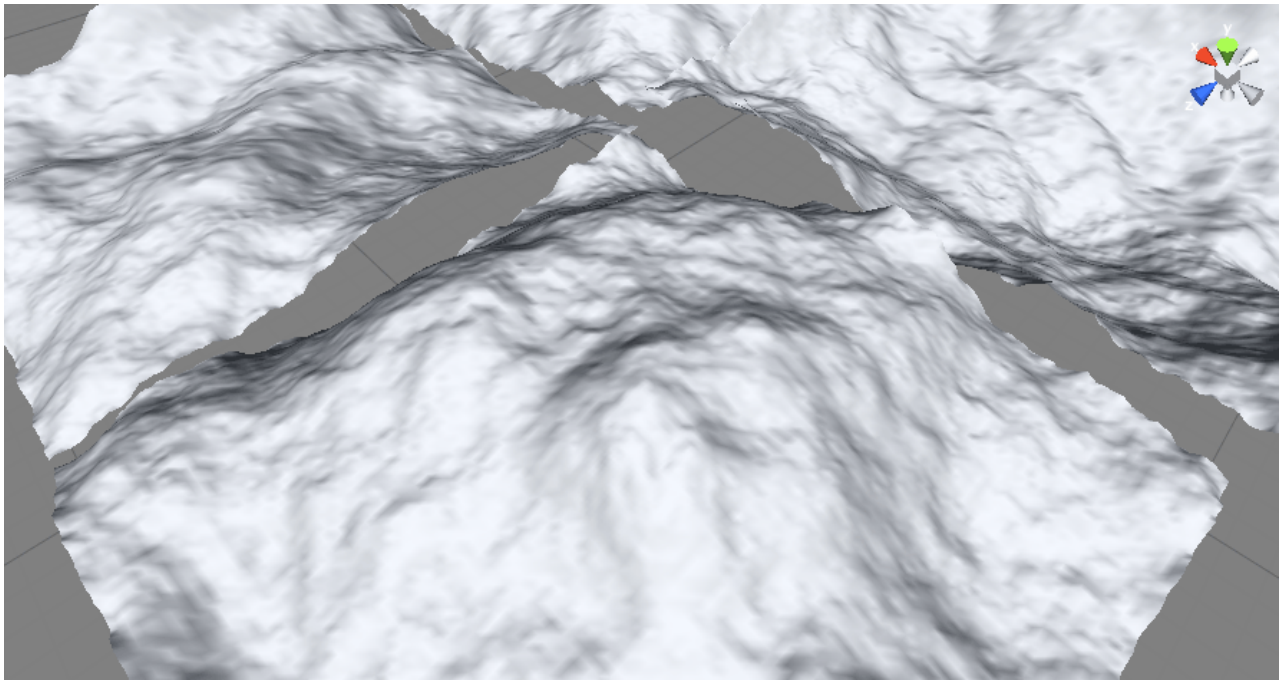


Setting the strength to 100 smooths out the terrain blending completely:

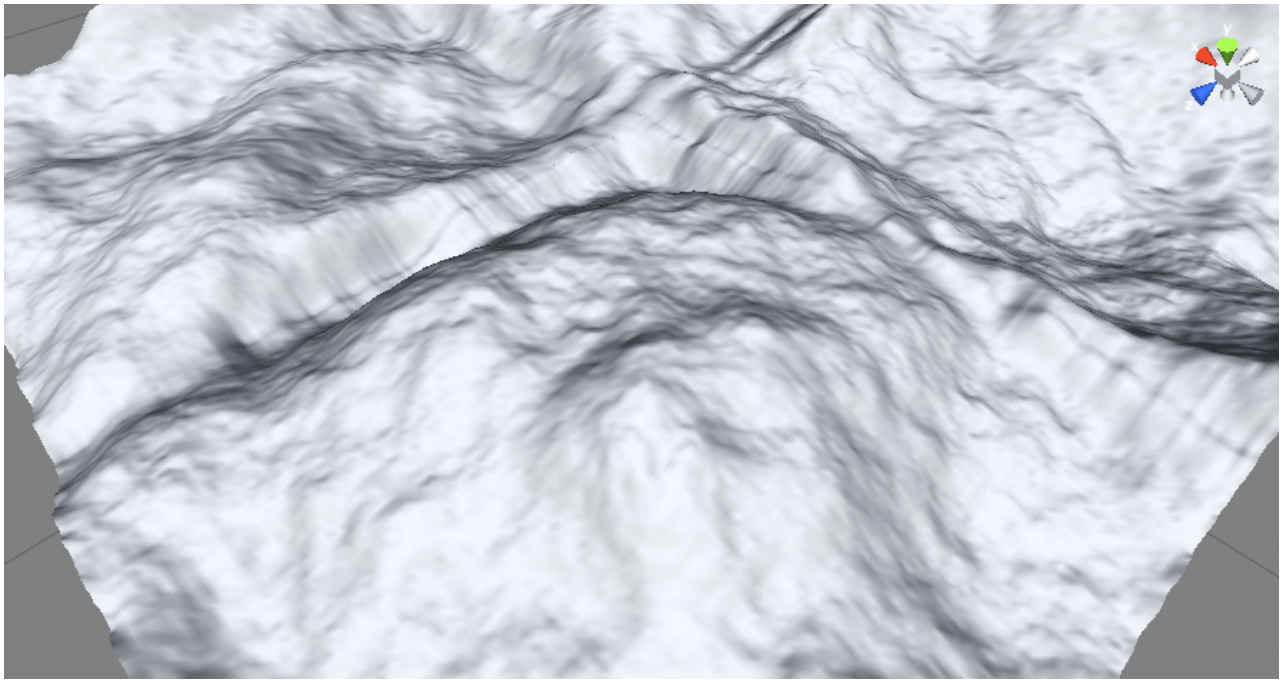


A high strength tends to look better with small stitch widths.

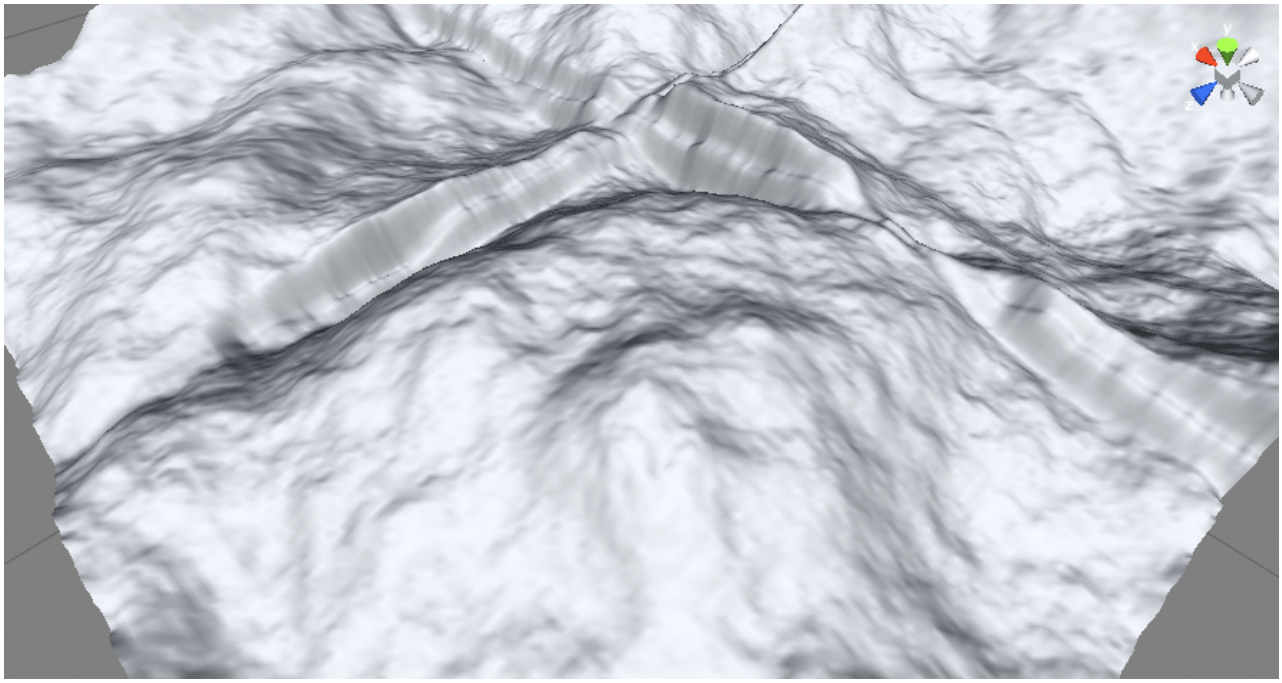
To see the effect of stitch width, let's zoom and and see four unstitched terrains:



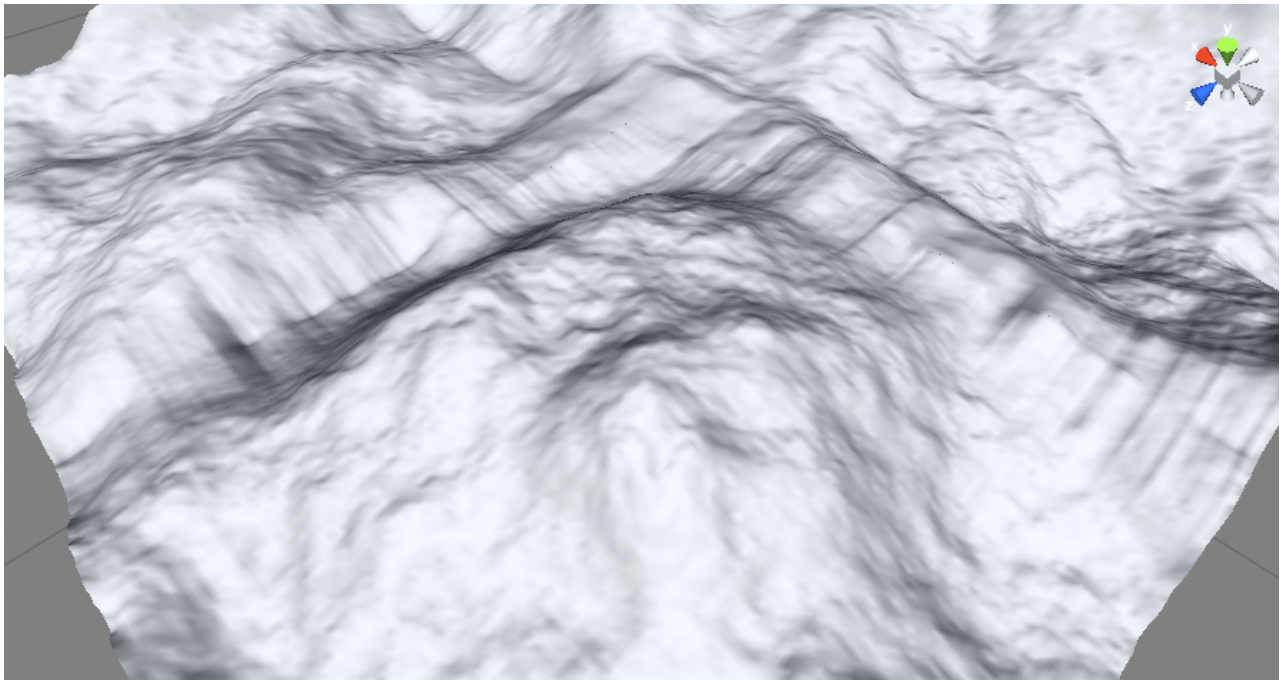
These terrains don't match up closely, but a 10% stitch width works reasonably well:



Reducing the width to 5% starts to show the limitations of stitching disparate terrains; it would work better with terrains that match up more closely:



A wider width of 25% works better for these terrains:



Since different settings work better or worse depending on the terrains involved, feel free to experiment and find the best match for your particular terrains. Happy stitching!