Progress Report

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A Procedural, Minimal Input, Natural Terrain Plug-in for Blender

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1 Previous Objectives

- Implement erosion as in [2].

- Implement multiple flattening locations.

- Consider and implement different flattening methods.

- Rewrite summary of [2].

2 Progress and Problems

The Python script was refactored such that the heightfield was stored in a 2D list and operations performed on this before using any Blender functionality, such as using a mesh. This allows for operations like flattening and erosion to be done regardless of implementation which is obviously a good feature to strive for.

Erosion as detailed in [2] was attempted and unfortunately has failed, due probably to some unnoticed bug in the script. At the moment it now takes substantially longer to run the script if erosion is included and produces the exact same output.

3 Objectives for Next Week

- Try to fix the erosion implementation.

- Write a summary of [1].

References

[1] Fares Belhadj and Pierre Audibert. Modeling landscapes with ridges and rivers: bottom up approach. In *GRAPHITE '05: Proceedings of the 3rd international conference on Computer graphics and interactive techniques in Australasia and South East Asia*, pages 447–450, New York, NY, USA, 2005. ACM Press.

[2] F. K. Musgrave, C. E. Kolb, and R. S. Mace. The synthesis and rendering of eroded fractal terrains. In *Proceedings of the 16th annual conference on Computer graphics and interactive techniques*, pages 41–50. ACM Press, 1989.