

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].
- Create bigger terrain
- Implement multiple flattening locations.
- Consider and implement different flattening methods.
- Write a summary on [2].

2 Progress

A summary of [2] was written.

3 Project Direction

After discussion the following were determined as short term goals for the project:

- Erosion [2].
- Physical river formation [1].
- Moving center of focus from the origin (moving camera location).

Since both the erosion and river formation are computationally expensive, potentially trying to combine the two methods and only apply them within the locally focused area, not over the whole map, only the close sections.

4 Objectives for Next Week

- Implement erosion as in [2].
- Implement multiple flattening locations.
- Consider and implement different flattening methods.

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.