Hydraulic Erosion

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World Generation

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- Multiple iterations along production
- Managed by a lot of people

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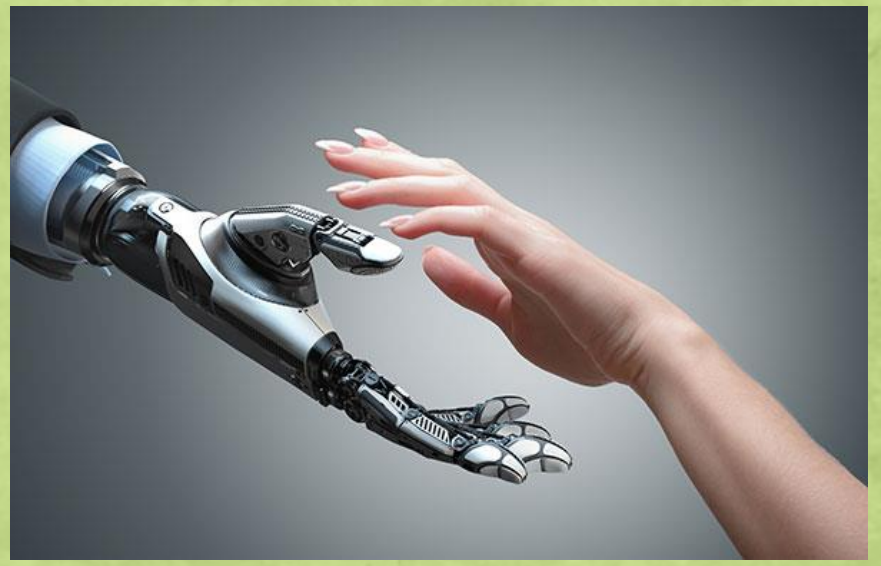
Let’s introduce procedural AI !



Procedural World Generation

- Fill up the World with nature

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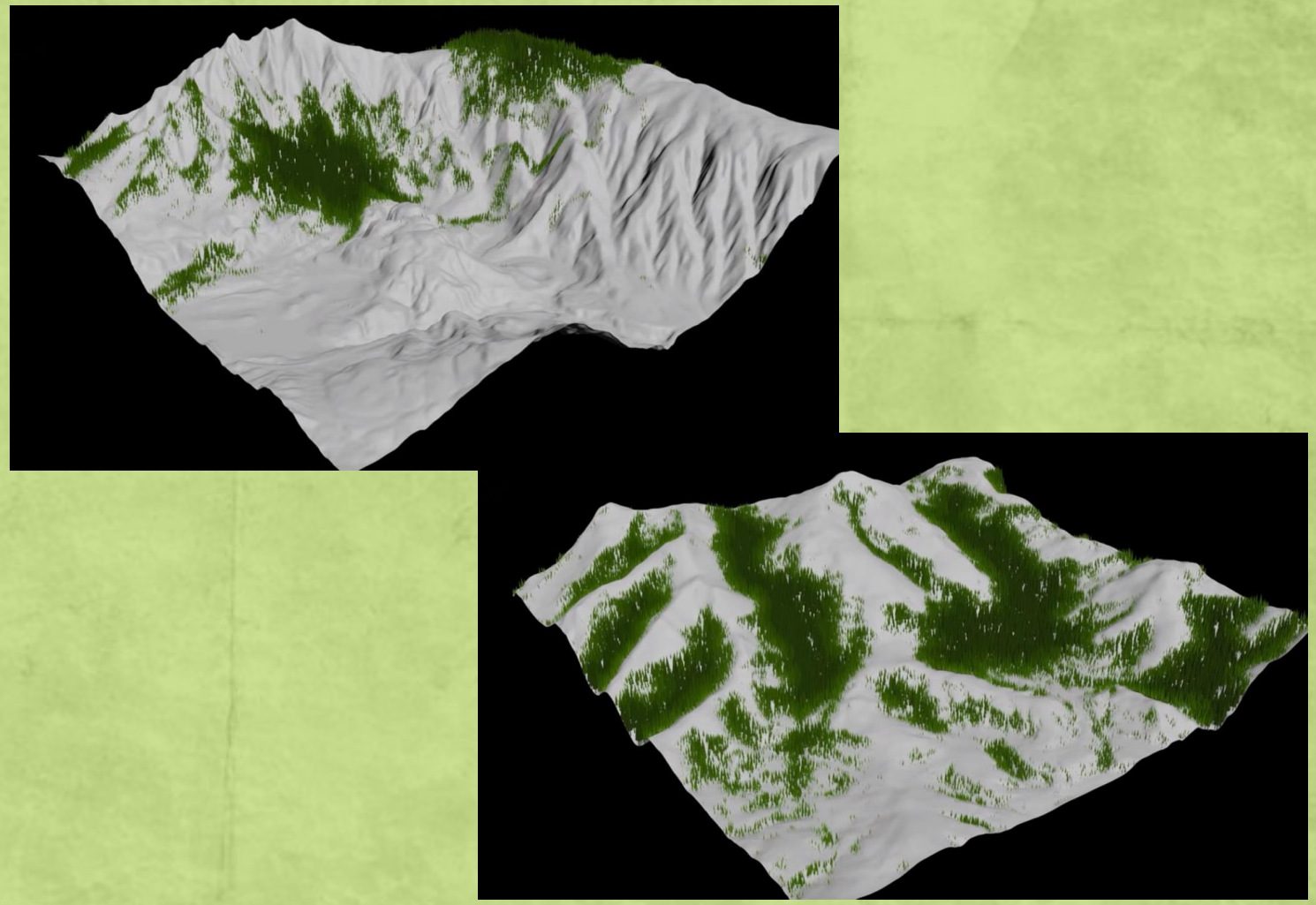
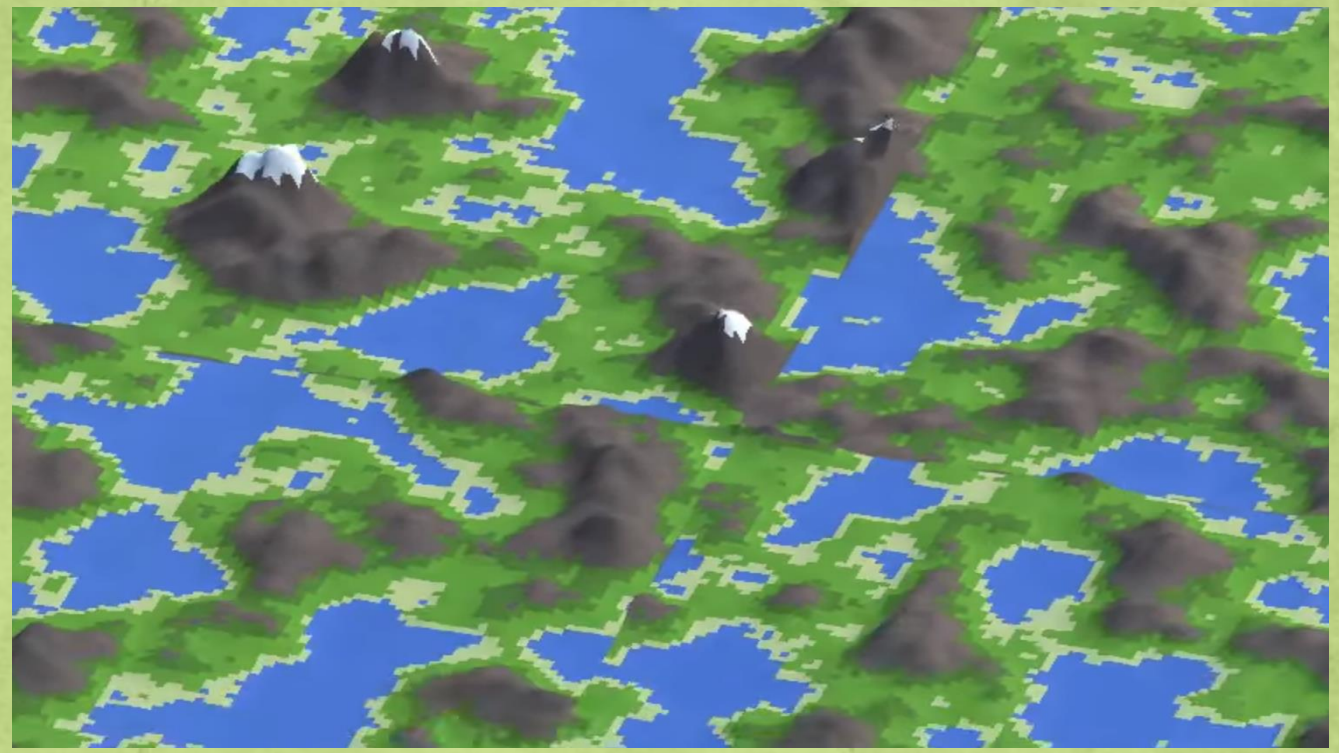
- Consistent with topology



Procedural World Generation

- Fill up the World with nature
- Consistent with topology
- Deterministic



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  - Powerful Engines & Machines
  - Updates fast (Nightly builds)

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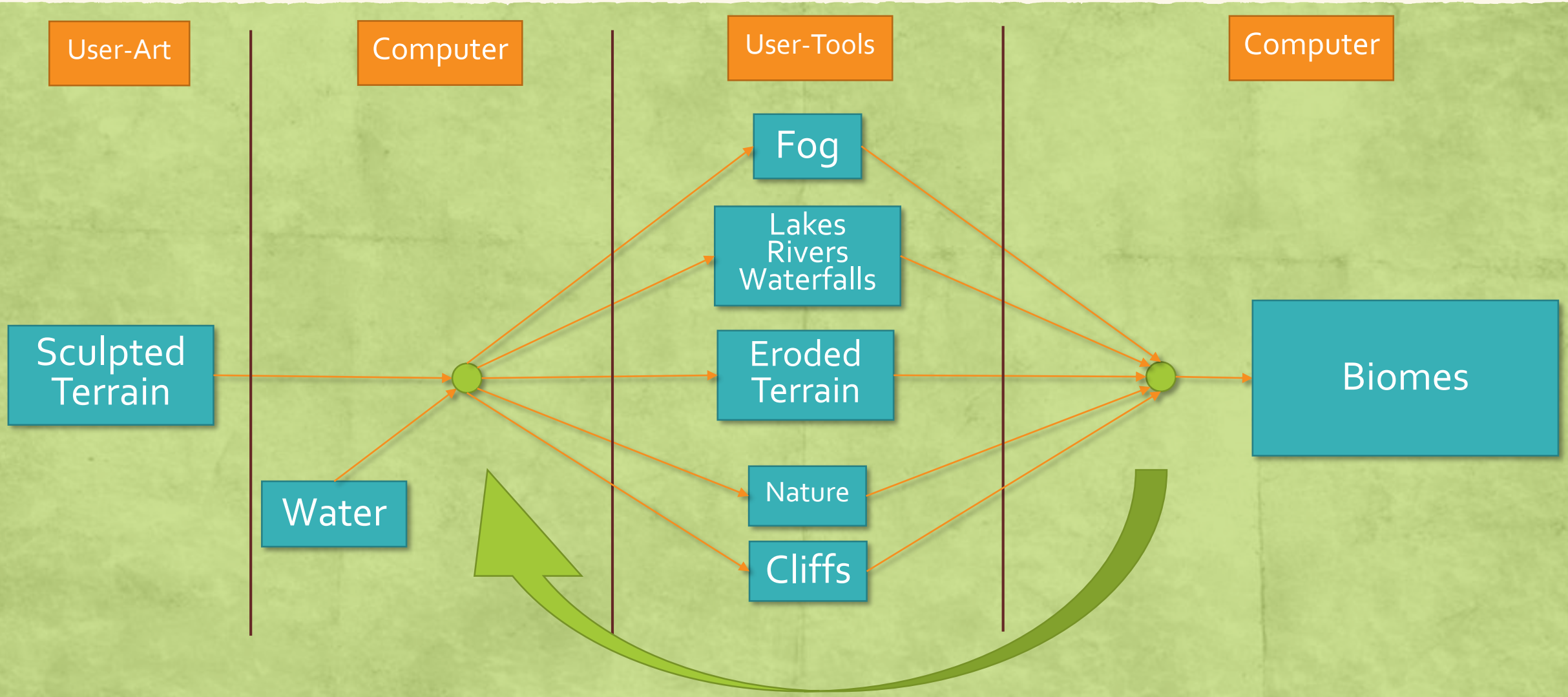
- Fill up the World with nature
- Consistent with topology
- Deterministic
- Automated
  - Powerful Engines & Machines
  - Updates fast (Nightly builds)
- All User Friendly

Tool Pipeline Example



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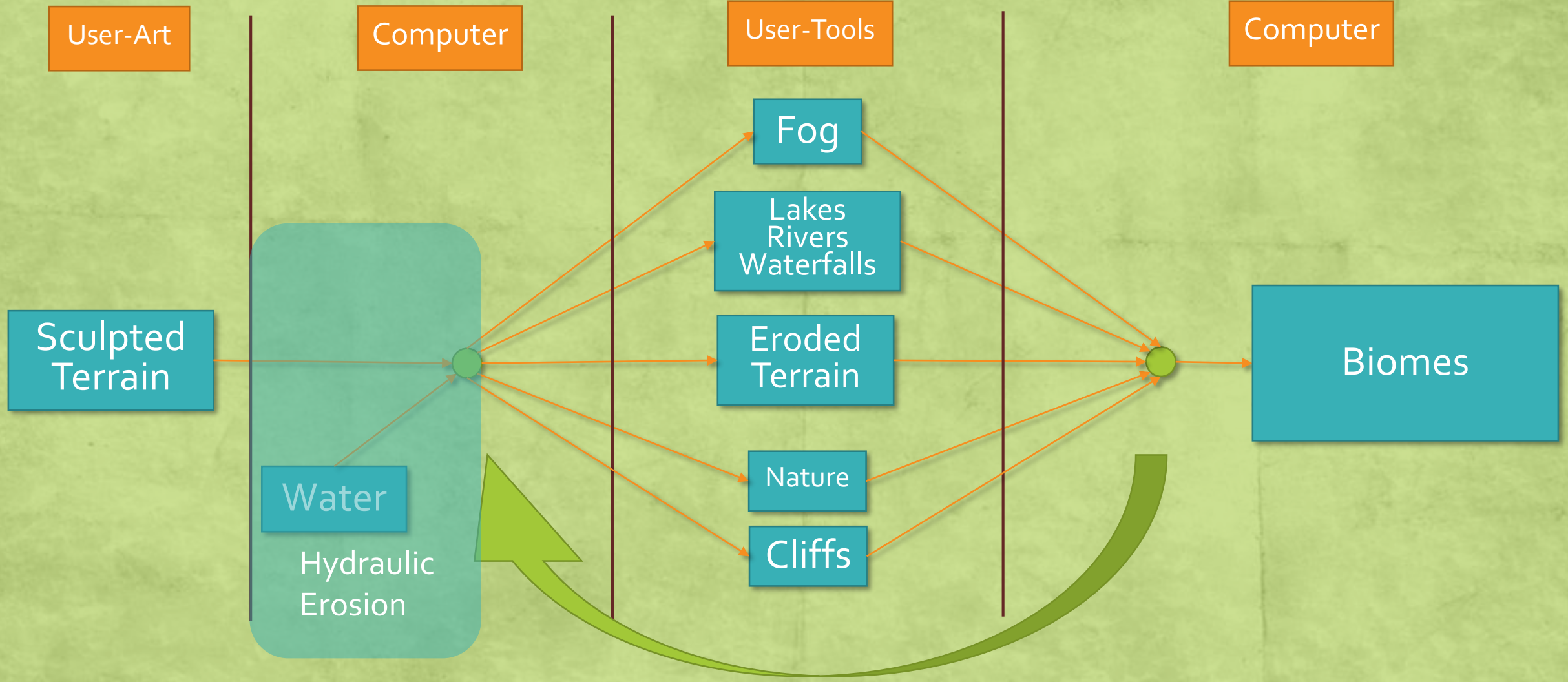
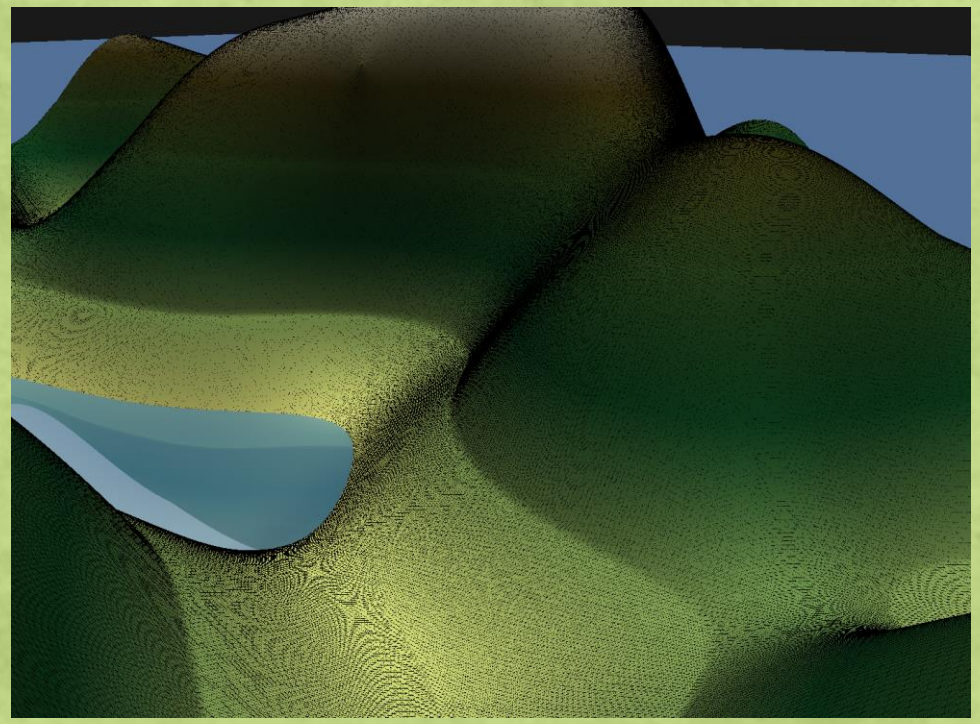


Hydraulic Erosion

- Iteration:
  - Simulate a water drop (particle)
  - Let the drop go downhill following the surface gradient
  - Erode sediment when being in steep slopes
  - Deposit sediment in more planar surfaces
  - Evaporate over time

- Iterate A LOT !

Hydraulic Erosion



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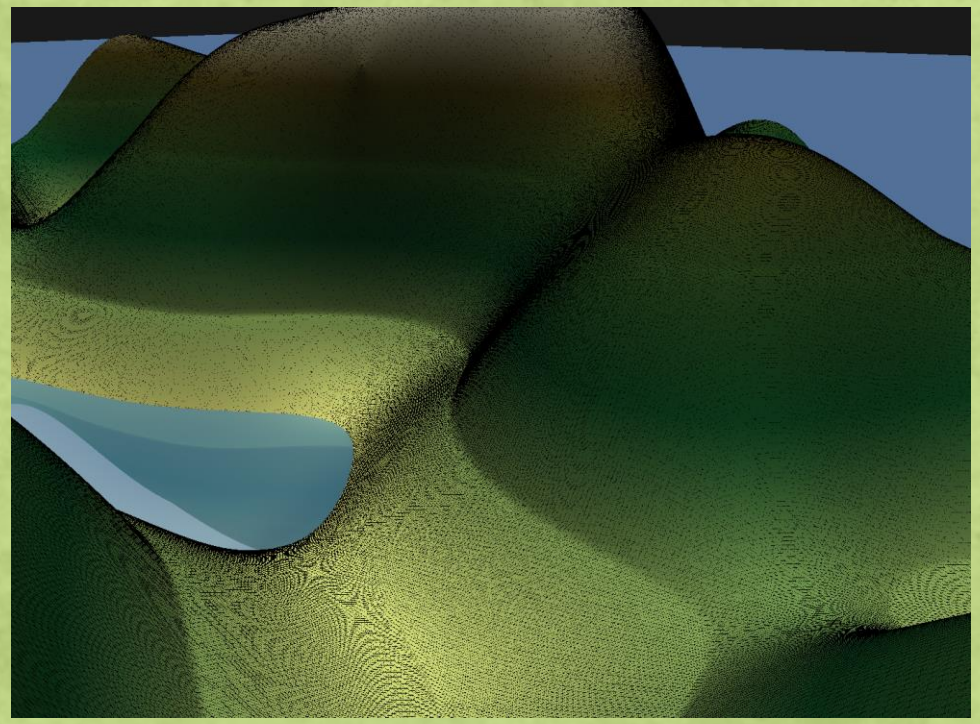
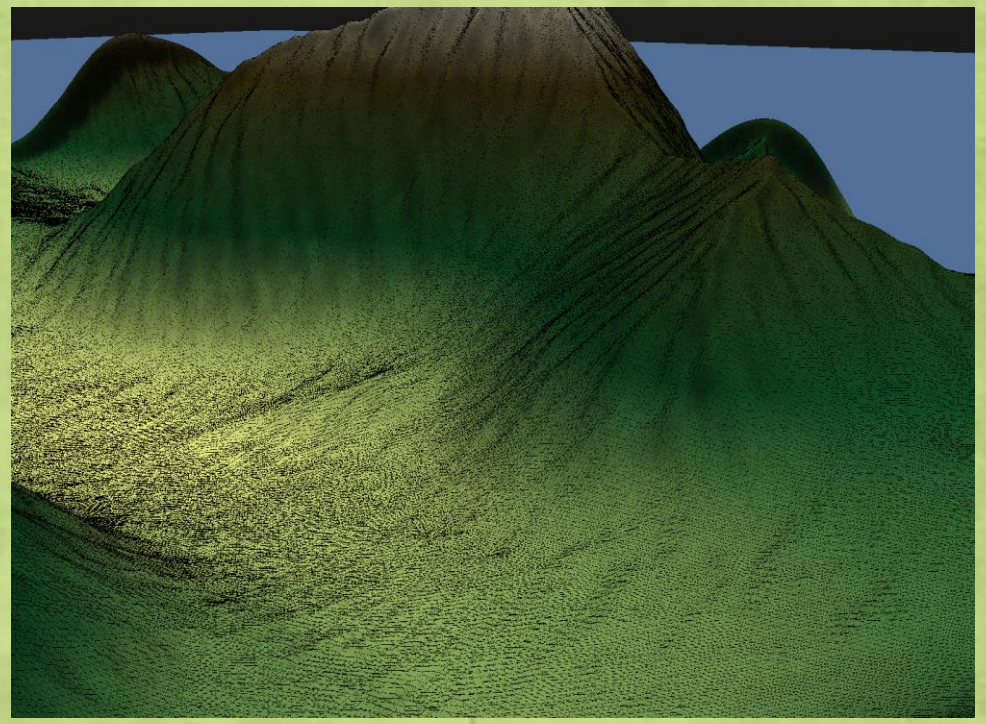


- Crispy Edges
- Ravines
- Flat Regions

After 3.000.000 iterations



Map Examples

Fog / Humidity

River / Lake / Waterfall

DEMO