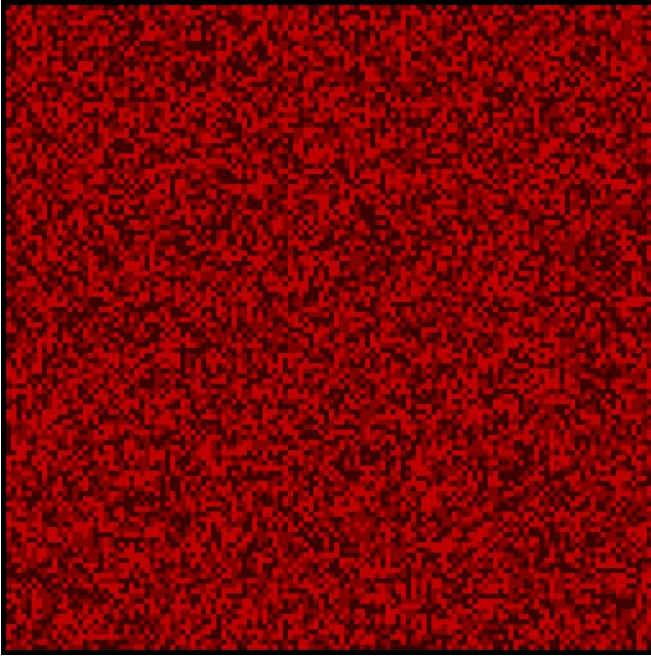


Sandbox



The Sandbox CA is a simple geological model. On a cell there may be at most 3 grains of sand. When the number of grains exceeds this value (by external influence), the cell „fires“, i. e. the 4 grains are distributed

to the neighboring cells. This behavior continues „until the CA gets into a stable state“.

However, this is exactly the problem. Since there is no global variable or global state at all in a Pixel Shader, it is very inefficient to determine whether anything is still going on.

A global accumulator register would be very useful in future GPUs, but its integration must not hurt the performance.