

Reversible World: Data set for simulating a reversible elementary triangular partitioned cellular automaton on Golly

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The file “Reversible_World_v2.zip” contains rule files and pattern files for simulating a particular reversible elementary triangular partitioned cellular automaton ETPCA 0347 on the well-known simulator Golly. ETPCA 0347 is a very simple reversible cellular automaton, but yet shows complex and interesting behavior. It is computationally universal, since it can simulate reversible Turing machines.

Golly is an excellent cellular automaton simulator developed by A. Trevorrow, T. Rokicki, et al. It can deal with a very large pattern of cellular automaton, and its simulation speed is quite fast. It is downloaded at: <http://golly.sourceforge.net/>

Putting the file “Reversible_World_v2.zip” in the “Patterns” folder of Golly, and accessing it from the simulator, one can see evolution processes of various patterns of ETPCA 0347. Note that the rule files of ETPCA 0347 are automatically installed by Golly. Explanations on ETPCA 0347 and the patterns contained in this file are found in “readme_reversible_world.pdf”.