

Data set for simulating a reversible elementary square partitioned cellular automaton with the ID number 01caef on Golly

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The file “ESPCA_01caef.zip” contains rule files and pattern files for simulating a particular *reversible elementary square partitioned cellular automaton* (ESPCA) with a hexadecimal ID number “01caef” on the well-known simulator *Golly*. ESPCA 01caef is a very simple reversible and conservative 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, T. Hutton 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 “ESPCA_01caef.zip” in the “Patters” folder of *Golly*, and accessing it from the simulator, one can see evolution processes of various patterns of ESPCA 01caef. Note that the rule files of ESPCA 01caef are automatically installed by *Golly*. Explanations on ESPCA 01caef and the patterns contained in this file are found in “readme_ESPCA_01caef.pdf”.