

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

Kenichi Morita  
morita.rcomp@gmail.com

December 2021

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 “Patterns” 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”.