CA-like error propagation in fuzzy cellular automata

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We describe and analyze the surprising evolution of an overflow error E which has spontaneously occurred during the simulation of a class of continuous complex systems called "cellular coupled map lattices" $(\kappa - CML)$ or fuzzy CA. In fact, this error evolves as a boolean cellular automaton (CA), regardless of and destroying the underlying system evolution.

The error and its evolution are fully reproducible, and its behavior can be fully characterized. An interesting and important aspect of this phenomenon is that it shows a quasi-natural occurrence of an artificial world.