



Rogue waves is a stable concentration of energy

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On the basis of computational experiments on the simulation of nonlinear surface waves it is shown that in this system there are sustainable local zones of concentration of kinetic energy.

These zones are move with constant speed and are a kind of "proto-rogue-waves".

It is shown that the process of formation of rogue waves is associated with sharp local increase in the concentration of energy by the energy waves that pass through the concentration zone. The increase in concentration occurs with exponential speed.

Our results can be used to predict the occurrence of rogue waves.