

Interactive
Comment

Interactive comment on “Collisions of two breathers at the surface of deep water” by A. I. Dyachenko et al.

Anonymous Referee #1

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In this manuscript the authors show via numerical computation that the compact form of the Zakharov equation that describes water waves in infinite water depth is not integrable. The authors consider two breathers (travelling waves) solution of the equation and use the numerical simulation in order to prove that the interaction is not elastic, i.e. after a number of interactions some high frequency oscillation appear in the computational domain. Previous work performed by Fedele and Dutykh, JFM 2012, suggested that the equation was integrable. The latter paper should be cited. Moreover, the discussion on the Petviashvili method should also include a reference. I find the manuscript acceptable for publication. English should be improved.

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., 1, 3023, 2013.

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Interactive Discussion

Discussion Paper

