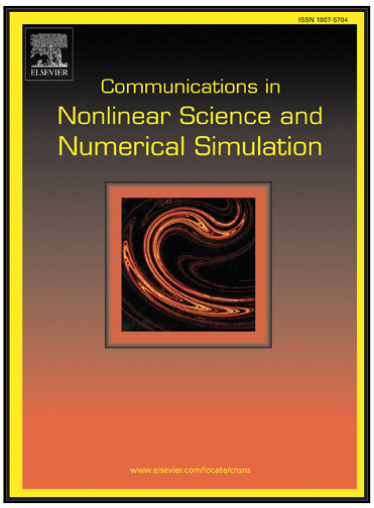
Accepted Manuscript



On the incomplete recurrence of modulationally unstable deep-water surface gravity waves

Alexey Slunyaev , Alexander Dosaev

PII: S1007-5704(18)30153-9
DOI: 10.1016/j.cnsns.2018.05.009
Reference: CNSNS 4526

To appear in: *Communications in Nonlinear Science and Numerical Simulation*

Received date: 4 October 2017
Revised date: 9 May 2018
Accepted date: 16 May 2018

Please cite this article as: Alexey Slunyaev , Alexander Dosaev , On the incomplete recurrence of modulationally unstable deep-water surface gravity waves, *Communications in Nonlinear Science and Numerical Simulation* (2018), doi: 10.1016/j.cnsns.2018.05.009

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT

Highlights

- The modulational instability within the full potential Euler equations for water waves is not
- recurrent in the strict sense
- The physical mechanisms responsible for the incomplete recurrence are identified
- The modulation-demodulation unimodal process is quasiperiodic; the wave demodulation is
- almost complete
- The stages of modulation or demodulation are fully determined by the dynamic phase of the
- unstable wave quartet

ACCEPTED MANUSCRIPT

Download English Version:

https://daneshyari.com/en/article/7154429

Download Persian Version:

https://daneshyari.com/article/7154429

Daneshyari.com