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[Volume 9, Issue 6 \(November 1979\)](#)

Journal of Physical Oceanography

Article: pp. 1139–1143 | [Abstract](#) | [PDF \(238K\)](#)

An Instability of Packets of Short Gravity Waves in Waters of Finite Depth

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(Manuscript received May 7, 1979, in final form August 4, 1979)

DOI: 10.1175/1520-0485(1979)009<1139:AIOPOS>2.0.CO;2

ABSTRACT

We consider the stability of a solitary wave packet of short gravity waves propagating in waters of moderate depth. It is shown that such wave packets are unstable to long transverse disturbances. The calculation indicates that steep swell may be more unstable to transverse disturbances when over the continental shelves than in deep waters.

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