



Abstract View

[Volume 5, Issue 1 \(January 1975\)](#)

Journal of Physical Oceanography

Article: pp. 47–50 | [Abstract](#) | [PDF \(343K\)](#)

Stokes Transport by Gravity Waves for Application to Circulation Models

John P. Ianniello and Richard W. Garvine

Marine Sciences Institute, The University of Connecticut, Groton 06340

(Manuscript received May 14, 1974, in final form August 29, 1974)

DOI: 10.1175/1520-0485(1975)005<0047:STBGWF>2.0.CO;2

ABSTRACT

Stokes mass transport by surface gravity waves is related to the often more interesting Lagrangian transport in a manner that is complicated by the earth's rotation. This paper discusses the conditions under which duration- and fetch-limited gravity wave transport will be important driving mechanisms for circulation models. Curves of duration and fetch-limited Stokes transport are given as functions of dimensionless time and fetch.

Options:

- [Create Reference](#)
- [Email this Article](#)
- [Add to MyArchive](#)
- [Search AMS Glossary](#)

Search CrossRef for:

- [Articles Citing This Article](#)

Search Google Scholar for:

- [John P. Ianniello](#)
- [Richard W. Garvine](#)

[top](#) ▲



© 2008 American Meteorological Society [Privacy Policy and Disclaimer](#)
 Headquarters: 45 Beacon Street Boston, MA 02108-3693
 DC Office: 1120 G Street, NW, Suite 800 Washington DC, 20005-3826
amsinfo@ametsoc.org Phone: 617-227-2425 Fax: 617-742-8718
[Allen Press, Inc.](#) assists in the online publication of AMS journals.