



Abstract View

[Volume 6, Issue 6 \(November 1976\)](#)

Journal of Physical Oceanography

Article: pp. 931–940 | [Abstract](#) | [PDF \(606K\)](#)

The Influence of Wind on the Surface Layer of a Stratified Inlet: Part I. Observations

D.M. Farmer and T.R. Osborn

Institute of Oceanography, The University of British Columbia, Vancouver, B. C., Canada

(Manuscript received June 11, 1974, in final form June 30, 1976)

DOI: 10.1175/1520-0485(1976)006<0931:TLOWOT>2.0.CO;2

ABSTRACT

Observations are described in an experiment undertaken to determine the response of a stratified inlet to changing conditions of wind, tide and runoff. Time series of conductivity profiles taken in Alberni Inlet, British Columbia, show marked fluctuations in surface layer thickness that appear to be related to strong winds. The effect of an up-inlet wind is to produce a rapid thickening of the fresh-water layer at the inlet head which may persist for several days. Strong winds were also associated with significant changes in the intensity of stratification.

Options:

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

Search CrossRef for:

- [Articles Citing This Article](#)

Search Google Scholar for:

- [D.M. Farmer](#)
- [T.R. Osborn](#)

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.