

# AMERICAN METEOROLOGICAL SOCIETY

**AMS Journals Online** 

AMS Home

Journals Home

Journal Archive

Subscribe

For Authors

Help

Advanced Search

Search



Due to technical problems, there is a delay in posting the full text version of articles. We hope to have this resolved soon. In the meantime please see the PDF version of articles.

## Abstract View

Volume 3, Issue 1 (January 1973)

## Journal of Physical Oceanography

Article: pp. 61–65 | Abstract | PDF (592K)

## The Instability of a Baroclinic Vortex

#### Peter M. Saunders

Woods Hole Oceanographic Institution, Woods Hole, Mass. 02543

(Manuscript received June 15, 1972)

DOI: 10.1175/1520-0485(1973)003<0061:TIOABV>2.0.CO;2

#### **ABSTRACT**

An experimental study is made of a baroclinic vortex produced in a two-layer fluid. After the equivalence between the experiment and the heated annulus experiment of Hide is established, it is argued that the Potential energy of the stratification is the source for wave-like instabilities which develop and split the vortex into separate, distinct circulations. The stability of sonic mesoscale oceanic vortices is examined.

#### Options:

- Create Reference
- Email this Article
- Add to MyArchive
- Search AMS Glossary

### Search CrossRef for:

• Articles Citing This Article

Search Google Scholar for:

• Peter M. Saunders



