



## Abstract View

[Volume 14, Issue 12 \(December 1984\)](#)

### Journal of Physical Oceanography

Article: pp. 1914–1920 | [Abstract](#) | [PDF \(542K\)](#)

# Circulation in the Bering Sea, 1982–83, Based on Satellite-Tracked Drifter Observations

**Thomas C. Royer**

*Institute of Marine Science, University of Alaska, Fairbanks, AK 99701*

**William J. Emery**

*Department of Oceanography, University of British Columbia, Vancouver, B.C., V6T 1W5, Canada*

(Manuscript received April 2, 1984, in final form July 26, 1984)

DOI: 10.1175/1520-0485(1984)014<1914:CITBSB>2.0.CO;2

### ABSTRACT

A satellite-tracked drifting buoy, deployed unintentionally in the Bering Sea in 1982, completed a circuit of that basin in about one year. During its cyclonic passage around the Bering Sea, it experienced many different flow regimes ranging from steady alongshelf motion at the shelf break to highly variable tidal flow on the shelf itself. The buoy trajectory differs from previous descriptions of the deep Bering Sea circulation, because it moved southwestward in the central Bering Sea rather than along the western boundary, as other depictions have suggested. Many of the Bering Sea mesoscale eddies reported earlier were evident, indicating that possibly these eddies are permanent features. The forces which caused the buoy to move between the various flow regimes are unclear, but the data suggest an annual period for the deep Bering Sea circulation.

#### Options:

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

#### Search CrossRef for:

- [Articles Citing This Article](#)

#### Search Google Scholar for:

- [Thomas C. Royer](#)
- [William J. Emery](#)



© 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](mailto:amsinfo@ametsoc.org) Phone: 617-227-2425 Fax: 617-742-8718  
[Allen Press, Inc.](#) assists in the online publication of *AMS* journals.