



Abstract View

[Volume 15, Issue 7 \(July 1985\)](#)

Journal of Physical Oceanography

Article: pp. 885–897 | [Abstract](#) | [PDF \(780K\)](#)

Strong Current Events Related to a Subtropical Front in the Northeast Atlantic

G. Siedler and W. Zenk

Institut für Meereskunde, Kiel University, F.R. Germany

W.J. Emery

University of British Columbia, Vancouver, B.C., Canada

(Manuscript received September 10, 1984, in final form February 20, 1985)

DOI: 10.1175/1520-0485(1985)015<0885:SCERTA>2.0.CO;2

ABSTRACT

Long-term temperature and current-meter records from moorings in the northern Canary Basin display strong current events with time scales between one and three months and large vertical scales of several thousand meters. The data are compared to hydrographic surveys in the area that show a meandering subtropical front. The strong current events are found to be related to the passage of the front through the mooring positions. An analysis of composite time series, for selected depths, indicates cases of westward and of eastward propagation of frontal meanders. The frontal pattern is also found in geopotential anomalies inferred from historical XBT data sets, suggesting that the front is a persistent feature of the density field. In two cases strong current events appear to be related to a Mediterranean Water lens.

Options:

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

Search CrossRef for:

- [Articles Citing This Article](#)

Search Google Scholar for:

- [G. Siedler](#)
- [W. Zenk](#)
- [W.J. Emery](#)



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.