

AMERICAN METEOROLOGICAL SOCIETY

AMS Journals Online

AMS Home

Journals Home

Journal Archive

Subscribe

For Authors

Help

Advanced Search

Search



Abstract View

Volume 1, Issue 2 (April 1971)

Journal of Physical Oceanography

Article: pp. 139–144 | Abstract | PDF (409K)

Oceanic Whitecaps

Edward C. Monahan

Dept. of Meteorology and Oceanography, The University of Michigan, Ann Arbor

(Manuscript received May 25, 1970) DOI: 10.1175/1520-0485(1971)001<0139:OW>2.0.CO;2

ABSTRACT

The variation of oceanic whitecap coverage with wind speed was determined from the analysis of group, of five or more photographs taken, along with measurements of wind speed and air and water temperatures, during each of 71 observation periods at locations on the Atlantic Ocean and adjacent salt water bodies. The fraction of the sea surface covered by whitecaps is always <0.1% for wind speeds V<4 m sec⁻¹. For winds from 4 to 10 m sec⁻¹ the maximum percentage of the sea surface covered by whitecaps is given by W=0.00135 $V^{3.4}$.

Options:

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

Search CrossRef for:

• Articles Citing This Article

Search Google Scholar for:

• Edward C. Monahan



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.