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[Volume 7, Issue 4 \(July 1977\)](#)

### Journal of Physical Oceanography

Article: pp. 567–571 | [Abstract](#) | [PDF \(315K\)](#)

# On the Variability of Surface Tension with Mean Wind Speed

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(Manuscript received October 12, 1976, in final form March 21, 1977)

DOI: 10.1175/1520-0485(1977)007<0567:OTVOST>2.0.CO;2

### ABSTRACT

*In situ* measurements of surface tension obtained by R.V. *Gauss* under coastal (North Sea of the Island of Sylt) and by R.V. *Meteor* under open sea conditions (GATE area) are compared with time variations of the surface mean wind speed. The results indicate that the surface tension of the sea surface may attain values which are  $21 \text{ dyn cm}^{-1}$  below the values obtained from the Fleming-Revelle formula, if the mean wind speed decreases steadily to less than  $5 \text{ m s}^{-1}$  and the biological productivity within the upper layers of the water is significant.

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