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Determination of Surface Stress by Seasat-SASS: A Case Study with JASIN Data

W. Timothy Liu

Jet propulsion Laboratory, California Institute of Technology, Pasadena 91109

W.G. Large

National Center for Atmospheric Research, Boulder, CO 80307

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ABSTRACT

The values of sea surface stress determined with the dissipation method and those determined with a surface-layer model from observations on F.S. *Meteor* during the Joint Air-Sea Interaction (JASIN) Experiment are compared with the backscatter coefficients measured by the scatterometer SASS on the satellite Seasat. This study demonstrates that SASS can be used to determine surface stress directly as well as wind speed. The quality of the surface observations used in the calibration of the retrieval algorithms, however, is important. This sample of measurements disagrees with the predictions by the existing wind retrieval algorithm under non-neutral conditions and the discrepancies depend on atmospheric stability.

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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
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