

## A REVIEW OF SATELLITE SURFACE WINDS OVER THE OCEAN

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The unprecedented spatial and temporal coverage over the global ocean of satellite measurements of surface wind speed and wind speed components (i. e., east-west and north-south components) was first demonstrated in 1978 by the Seasat spacecraft. A nearly continuous record of global-ocean wind speed was then obtained: 1979-1984 Nimbus-7 Scanning Multi-channel Microwave Radiometer (SMMR), 1985-1989 Geosat Altimeter, 1987-present Defence Meteorological Satellite Program (DMSP) Special Sensor Microwave Imager (SSM/I), 1991-present European Remote Sensing Satellite (ERS-1) Altimeter, and 1992-present TOPEX/Poseidon Altimeter. The long-term coverage of wind speed component measurements has not been as good compared to wind speed. The 1991-present ERS-1 Scatterometer provided the first wind vector measurements since Seasat. Availability of data, accuracy of measurements, importance of in-situ data sets, and several scientific results will be described.

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- 2 Symposium A.1
- 3 MSO: Dr. David Halpern
- 4 "Two overhead projectors
- 5 Oral Presentation