SATELLITE OBSERVATION OF SEA SURFACE WINDS: NA VY RESEARCH, APPLICATIONS AND PROGRAMS

Marie Colton

Office of Naval Research Code 321SR 800 N. Quincy St. Arlington, VA 22217 USA

ABSTRACT

Sea surface wind is a key observational requirement for the Navy as wind affects all at-sea operations, including ship movement, aircraft maneuvers off carriers, and weather forecasting. Because of the global nature of Navy operations, there has been a consistent interest and commitment in the development of satellite measurement of ocean wind using microwave systems.

This presentation will describe current Navy-supported research into the microwave remote sensing phenomenology of ocean surface wind, operational applications of wind data from existing satellite sensors, and the development of a space-based polarimetric radiometer, Windsat.