**SCATTEROMETER OCEAN SURFACE VECTOR WIND PRODUCTS AT NOAA**

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Abstract

Ocean surface vector wind data received from the NASA QuikSCAT revolutionized operational marine weather warnings, analyses, and forecasting. QuikSCAT data give forecasters the ability to see the detailed wind field over vast ocean areas, to see the inner structure of ocean storms, and to identify areas of ocean wind wave generation. Until the nominal QuikSCAT mission ended on November 23, 2009, its data were routinely used around the world to help provide accurate marine weather warnings and forecasts. Its users spanned government agencies, commercial companies (ship routing, offshore wind farms, weather information providers), and individual users (surfers, sailboat racers, recreational boaters). Satellite OSVW data from QuikSCAT impacted many facets of daily life in marine and coastal communities.

Fortunately, EUMETSAT and the Indian Space Research Organization (ISRO) have both launched and are operating scatterometer systems that today are providing timely data to the global community. EUMETSAT’s ASCAT and ISRO’s OSCAT sensors are being utilized today continuing the advancements made with QuikSCAT in marine weather forecasting and warning. At NOAA, the level 1b (normalized radar cross-section) data from both ASCAT and OSCAT are ingested in near real-time into its ocean wind data processing system to produce a variety of level 2 (ocean surface vector wind) products. These products are distributed to NOAA’s National Weather Service forecasters and a variety of other users around the world to support weather forecasting and warning. An overview of NOAA’s ocean wind data processing system will be presented including case studies, specialized products, validation and future plans.