

Estimation of sea surface salinity in the tropical Indian Ocean by synergistic use of SMOS and RAMA buoy data

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Abstract: In the present study, an attempt has been made to estimate sea surface salinity (SSS) by blending in situ observations from the National Oceanic and Atmospheric Administration/Pacific Marine Environmental Laboratory–Research Moored Array for African–Asian–Australian Monsoon Analysis and Prediction buoy with satellite data from the Soil Moisture and Salinity Mission using objective analysis approach. A preliminary analysis is done in the tropical Indian Ocean at monthly time scale for the year 2010 at 0.25° latitude \times 0.25° longitude resolution. Comparison with other independent in situ SSS observations suggests that the analyzed SSS takes the advantage of high spatial coverage by the satellite and accurate measurements from the buoy data and has potential for better SSS estimation.