

Review of recent evaluation of satellite estimates sea surface salinity in the tropical Indian Ocean

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Abstract: Aquarius is mission that aims to measure Sea surface salinity (SSS) from the space in order to provide the global salinity for climate studies. Accurate estimation of SSS is useful for the hydrological cycle, oceanographic processes, and climate. Recently the new version (V4) of Aquarius data releases with the improving the quality of the data and achieving the mission accuracy requirement globally on monthly scale. This paper highlight the results of recently release Aquarius V4, and version 3 (V3) data with agro observations on monthly time scale from 2012-2014 periods. The spatial distribution of mean SSS shows that both products capture the SSS variation very well. The Aquarius V4 SSS showed minor improvement over the Aquarius V3 SSS with less root mean square error over the central & eastern equatorial Indian Ocean (EEIO) & part of Bay of Bengal (BOB). The frequency distribution is also improved in Aquarius V4 compare to Aquarius V3 average over the different regions. However both the versions overestimates/underestimates the frequency of low/high salinity values.