Preliminary validation and error analysis on surface currents provided by CODAR system surrounding Taiwan

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Abstract

Coastal Ocean Dynamics Application Ra-dar (CODAR) system established and maintained by Taiwan Ocean Research Institute (TORI), Taiwan provides valuable surface currents information around Taiwan, in particular the variations of Kuroshio patterns east off Taiwan. However, it is a pity that a systematic analysis and validation on this set of CODAR data have not been conducted up to now. In this study, surface velocities retrieved from satellite-tracking Argo drifters are collected and analyzed for comparing with the surface velocities provided by CODAR to further understanding the skill of CODAR system surrounding Taiwan. In addition, spatial characteristics of differences between both datasets will be discussed and explained by linking a few possible background environmental factors contributions for further improving the data processing procedures of CODAR system in the near future.