

Effect of temporal and spatial smoothing in satellite altimetry data

Kaoru Ichikawa[1]

[1] RIAM, Kyushu Univ

<http://manatee.esst.kyushu-u.ac.jp/~ichkawa>

Generally, observations of the oceans are always insufficient, but satellite oceanography provides 'enormous' amount of high-resolution observations at the sea surface. Those data are distributed to public via internet after interpolation at time-space grid points. However, such interpolation forces temporal and spatial smoothing to the data. In the present paper, effect of the smoothing is studied by comparing geostrophic velocity (V_a) obtained from the satellite altimetry data, drifting velocity (V_b) of surface drifter buoys, and ship-observed ADCP velocity (V_c).

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