



Surface circulation and Kuroshio intrusion in the northern South China Sea during the winter monsoon

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323 drifting buoys, 75 of which drogued at 150m, were deployed in or near the Luzon Strait in fall months between October 2003 and December 2005 to map the strength of the inflow of the Kuroshio in the South China Sea, which is known to occur between October and January. The drifters that enter and stay within the South China Sea show that the mean northwestward flow has a speed of about 0.5 m/s, with peak values in excess of 1 m/s. The unbiased mean geostrophic velocity field for the fall period is computed by combing satellite altimetry and drifter observations and discussed together with various aspects of the circulation of the northern South China Sea.