



Surface currents observed by surface drifters in the tropical western Pacific Ocean in the El Niño year

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Twenty six and twenty three surface drifting buoys were deployed in the area $2\sim 7^{\circ}\text{N}$ on 165°E in June of 2014 and August of 2015, respectively, as the MOF/Korea-NOAA JPA project and the Global Drifters Program. The trajectories of drifters deployed in 2014 reveal the general features of the surface circulation in the northwestern Pacific Ocean, e.g., the North Equatorial Current (NEC), the separation of the NEC into the Kuroshio and Mindanao Current (MC), the retroflexion of the MC, the Kuroshio intrusion into the South and East China Seas etc. Consecutive small circular structures indicating inertial motion and mesoscale eddies were observed mainly in the northern part of the NEC and the western Philippine Sea. The NEC separation location appeared around 13°N in March and April of 2015. The North Equatorial Countercurrent was stronger with its speed up to about 2 kn in the period from June to September of 2015.