

## sea surface cooling in the northern South China Sea observed using Chinese underwater glider

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Based on 26 days of Chinese Sea-wing underwater glider and satellite microwave data, we documented cooling of the upper mixed layer in response to changes in the wind in 9.19-10.15, 2014. The sea-wing underwater glider measured 177 profiles of temperature, salinity, and pressure. we estimated temperature tendencies using a mixed layer model. The entrainment rate and latent heat flux were the two major components that regulated cooling of the mixed layer, and that the Ekman advection and sensible heat flux were small.

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