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# Supplemental Material

*Journal of Physical Oceanography*

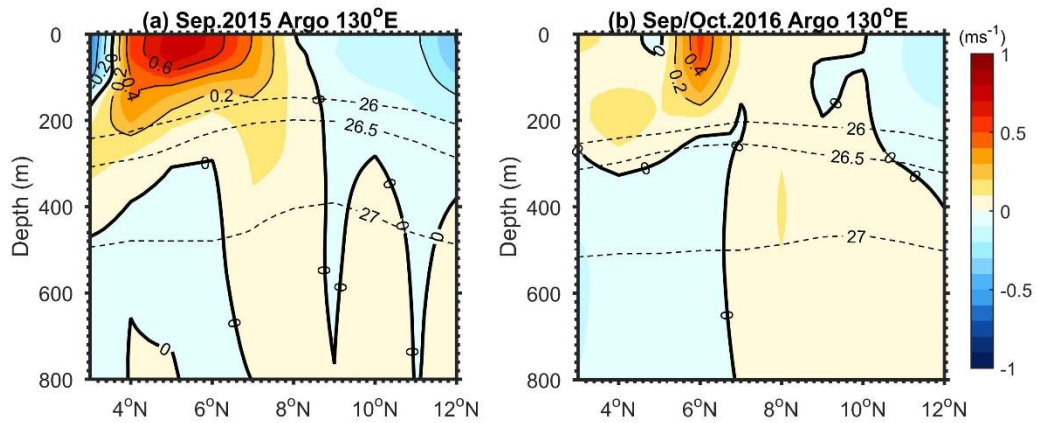
The Observed North Equatorial Countercurrent in the Far Western Pacific Ocean  
during the 2014–16 El Niño

<https://doi.org/10.1175/JPO-D-20-0293.1>

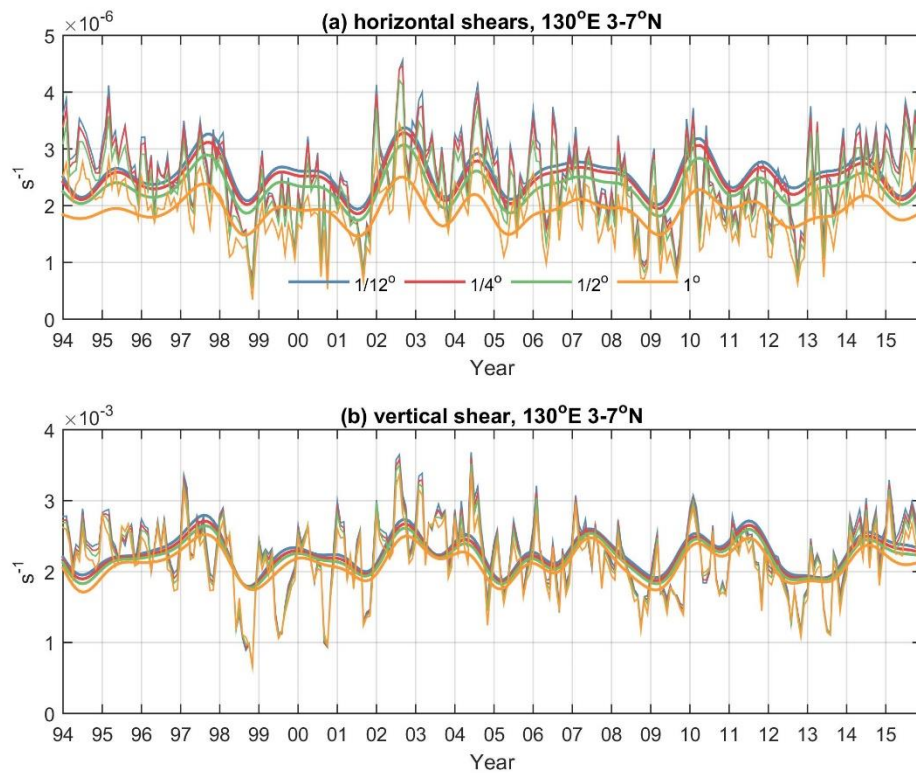
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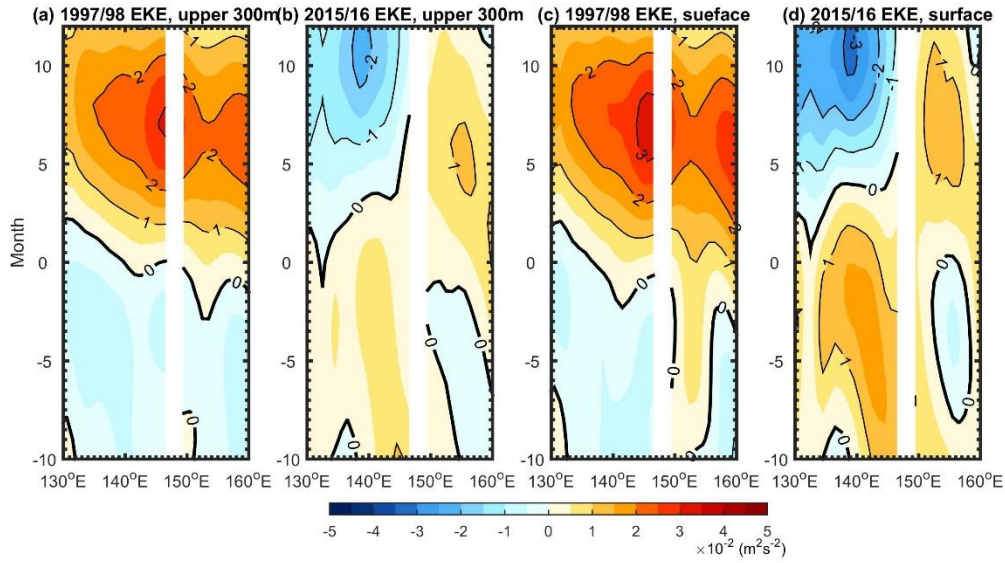
## Supplementary Figures



**Fig.s1** Latitude-depth sections of zonal geostrophic velocities ( $\text{m s}^{-1}$ ) calculated from Argo data along the  $130^\circ\text{E}$  transect with a reference level of 1500m during the (a) 2015 and (b) 2016 cruises, respective.



**Fig.s2** Sensitivity of (a) horizontal and (b) vertical shears to different resolutions ( $1/12^\circ$ ,  $1/4^\circ$ ,  $1/2^\circ$ , and  $1^\circ$ ) of the GOFS 3.1 data (<https://www7320.nrlssc.navy.mil/GLBhycomce1-12>). The smoothed curves are 500–2500-day-bandpassed to show their interannual variabilities.



**Fig.s3** Time-longitude plots of 500–2500-day-bandpass anomalies of EKE during (a, b) 1997/98 and 2015/16 El Niño calculated from ORA-S4 geostrophic velocity averaged between 3–7°N in the upper 300m and (c, d) in the surface of the NECC. The blank strips are caused by the topography when calculate the geostrophic velocity with a reference level of 1500m.