

# Supporting Information

for

## Eddy-induced chlorophyll profile characteristics and underlying dynamic mechanisms in the South Pacific Ocean

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Figures S1 to S5

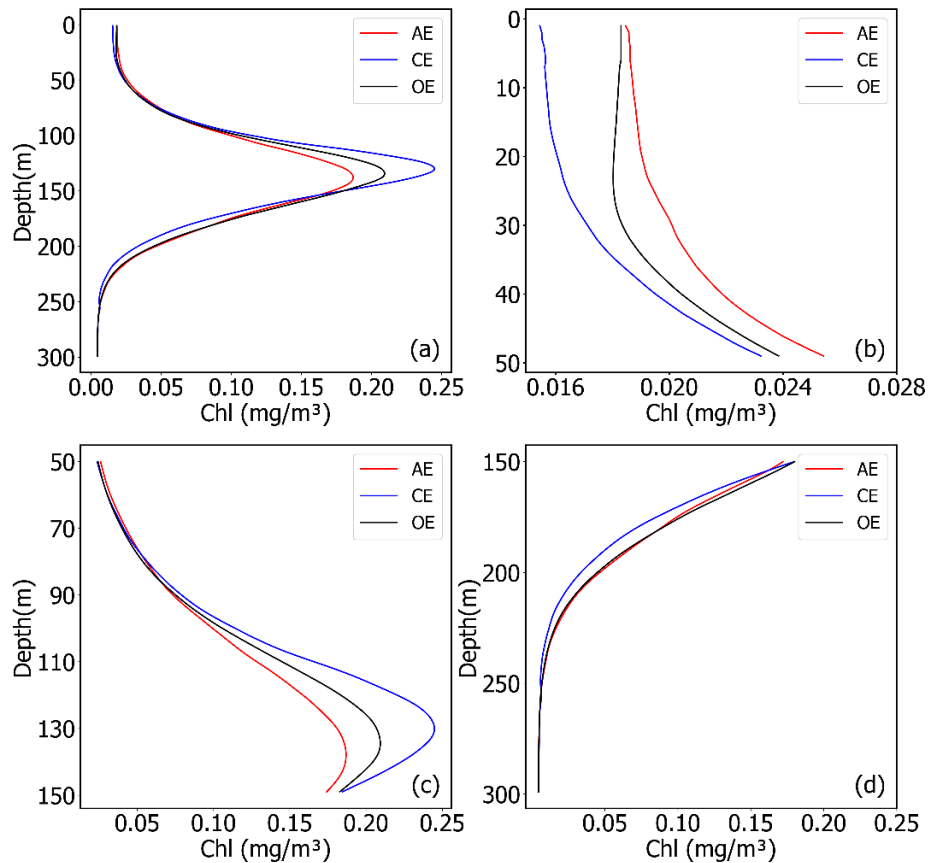


Fig. S1 Profiles of Chl in eddies of different polarity at different depths, red blue and black lines indicate that the profile is in AEs, CEs and OE, respectively. (a) 0-300m, (b) 0-50m, (c) 50-150m, (d) 150-300m.

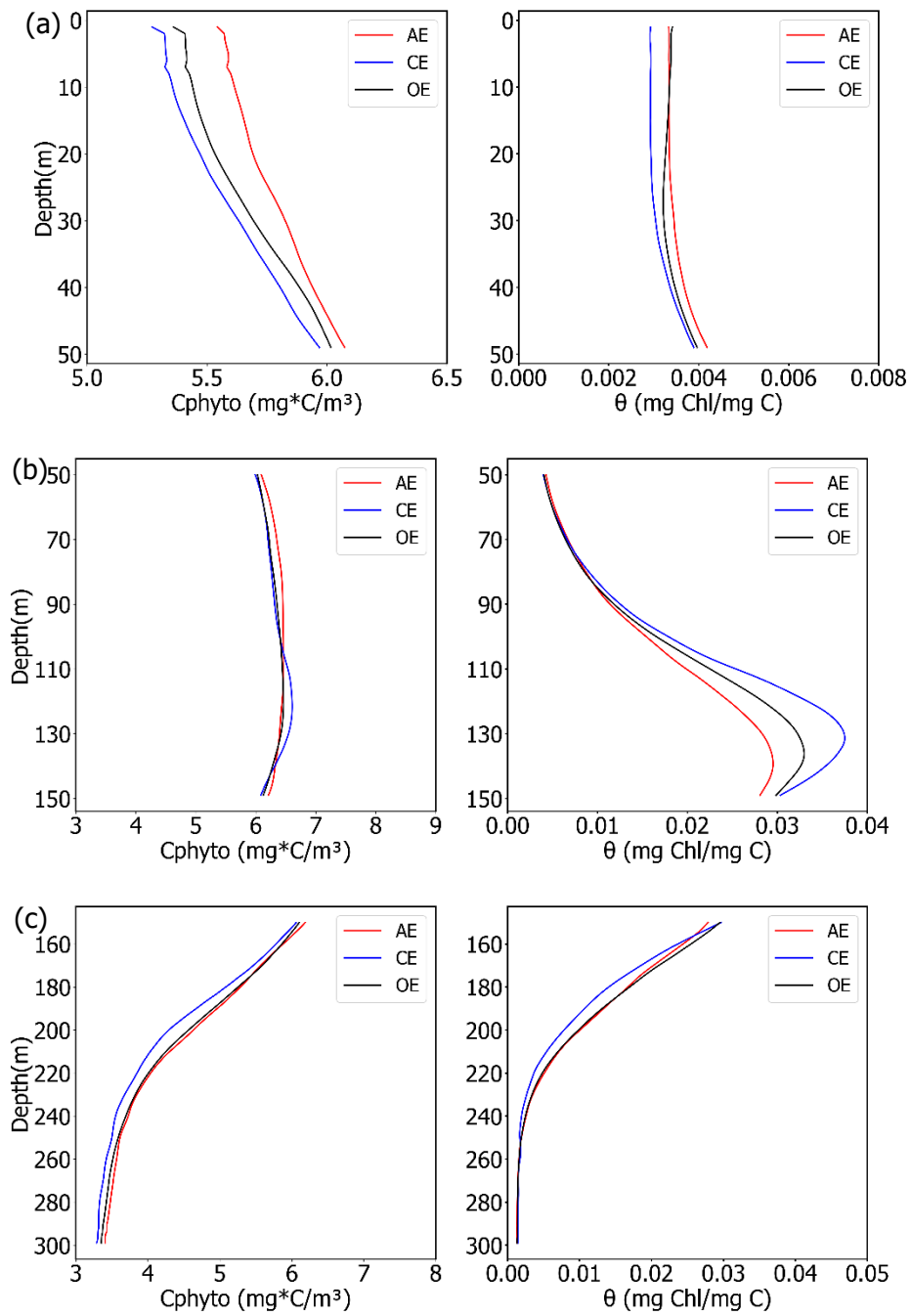


Fig. S2 Profiles of  $C_{phyto}$  and  $\theta$  in eddies of different polarity at different depths, red blue and black lines indicate that the profile is in AEs, CEs and OE, respectively. (a) 0-50m, (b) 50-150m, (c) 150-300m.

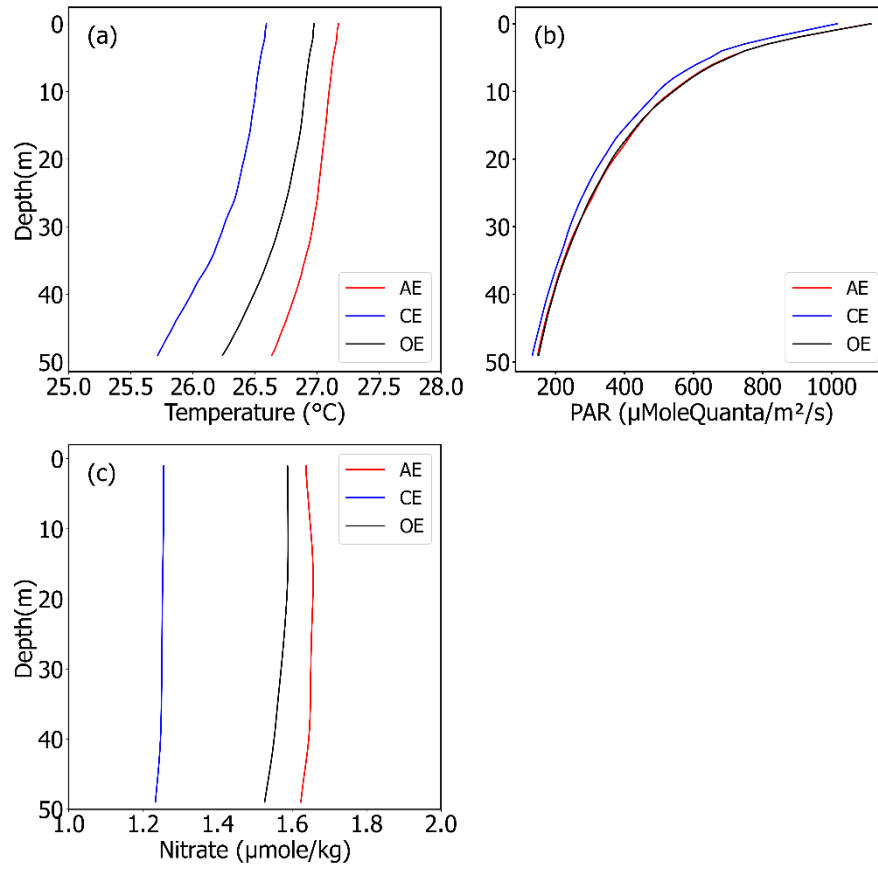


Fig. S3 (a, b and c) Profiles of Temperature, PAR and Nitrate in eddies of different polarity in 0-50m, red blue and black lines indicate that the profile is in AEs, CEs and OE, respectively.

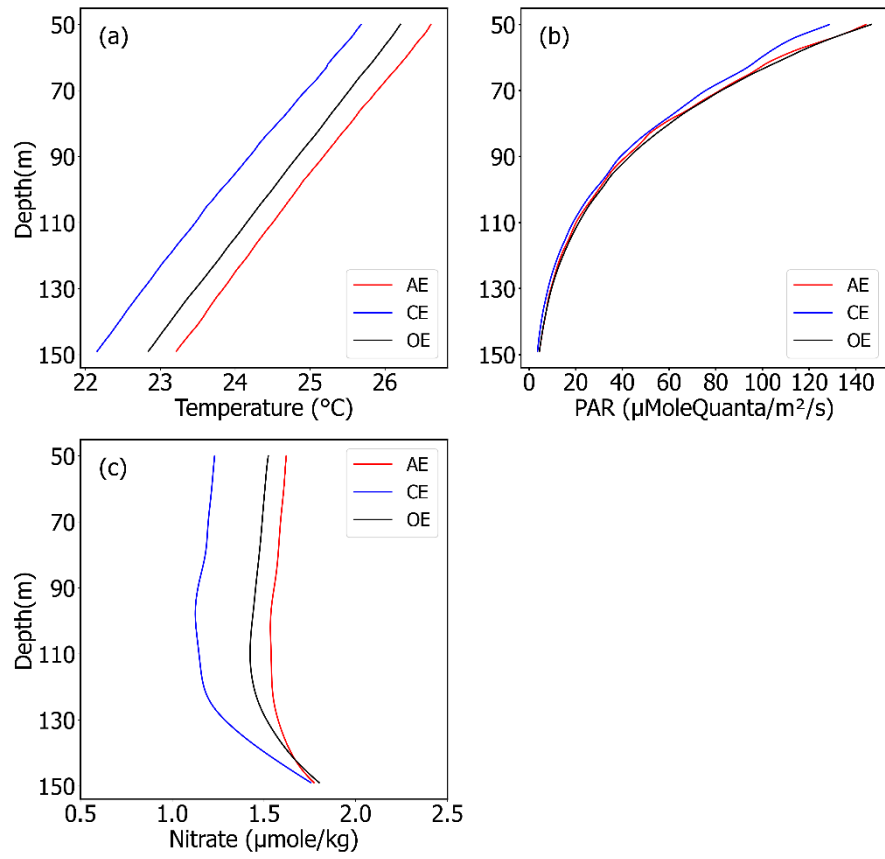


Fig. S4 (a, b and c) Profiles of Temperature, PAR and Nitrate in eddies of different polarity in 50-150m, red blue and black lines indicate that the profile is in AEs, CEs and OE, respectively.

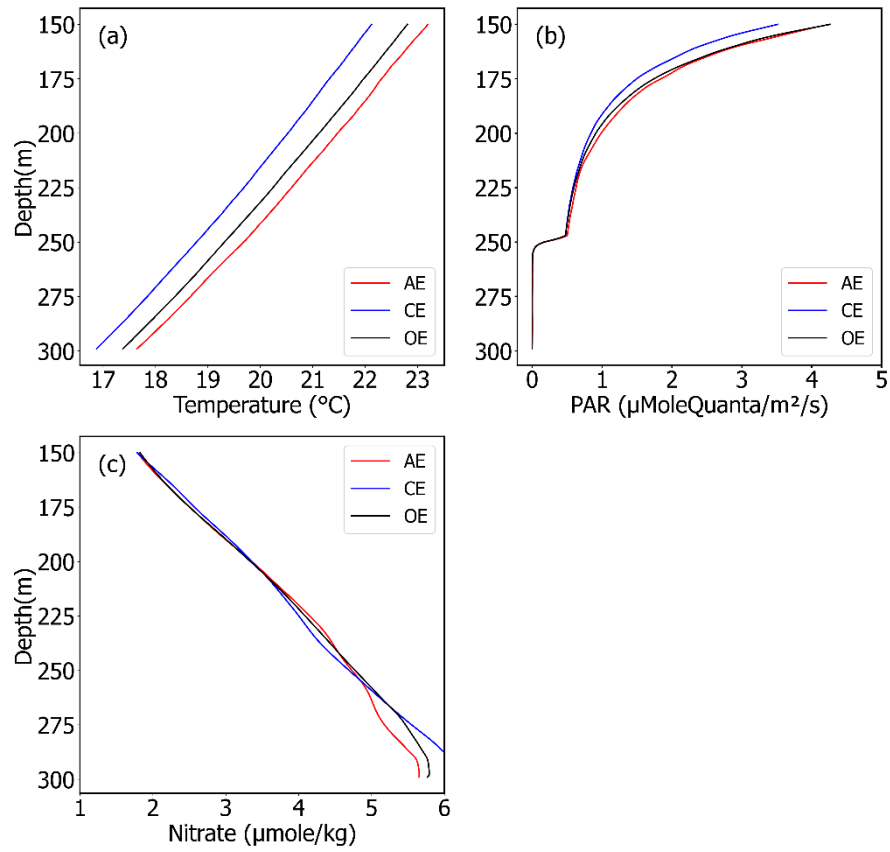


Fig. S5 (a, b and c) Profiles of Temperature, PAR and Nitrate in eddies of different polarity in 150-300m, red blue and black lines indicate that the profile is in AEs, CEs and OE, respectively.