

1 Supplementary Figures

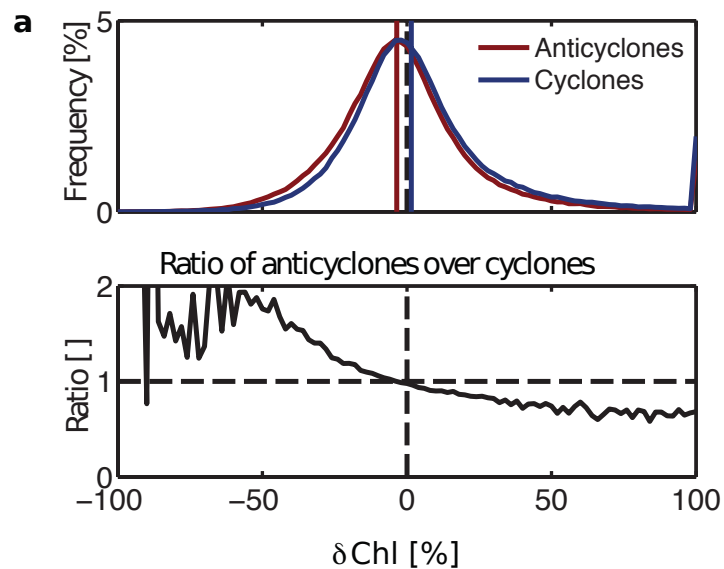


Figure S1. Chlorophyll anomaly (δChl) distribution associated with eddies; (upper panel) distribution of δChl (based on 2% bins) of eddies existing 3 weeks or longer; vertical colored lines mark the mean; (lower panel) shows the ratio of the two distributions, with anticyclones over cyclones.

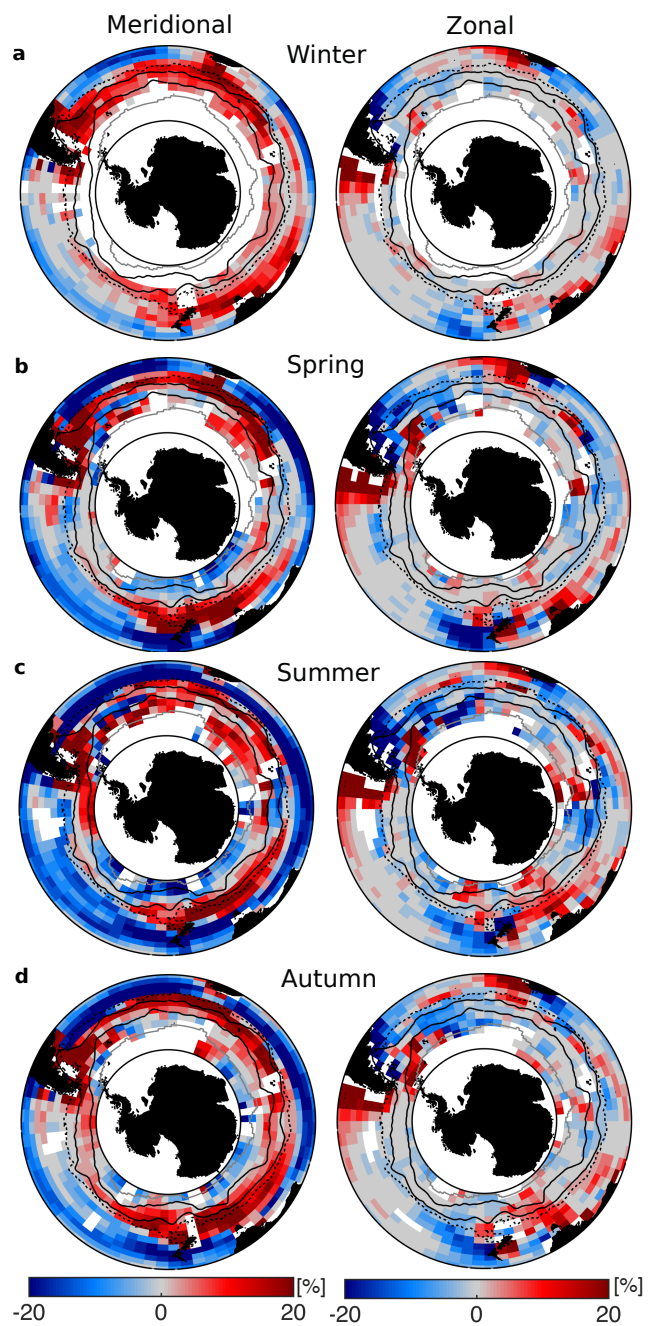


Figure S2. Seasonality of climatological chlorophyll (Chl) gradients; Austral a winter, b spring, c summer and d autumn; meridional gradient (left) and zonal gradient (right). Otherwise as Figure 2.

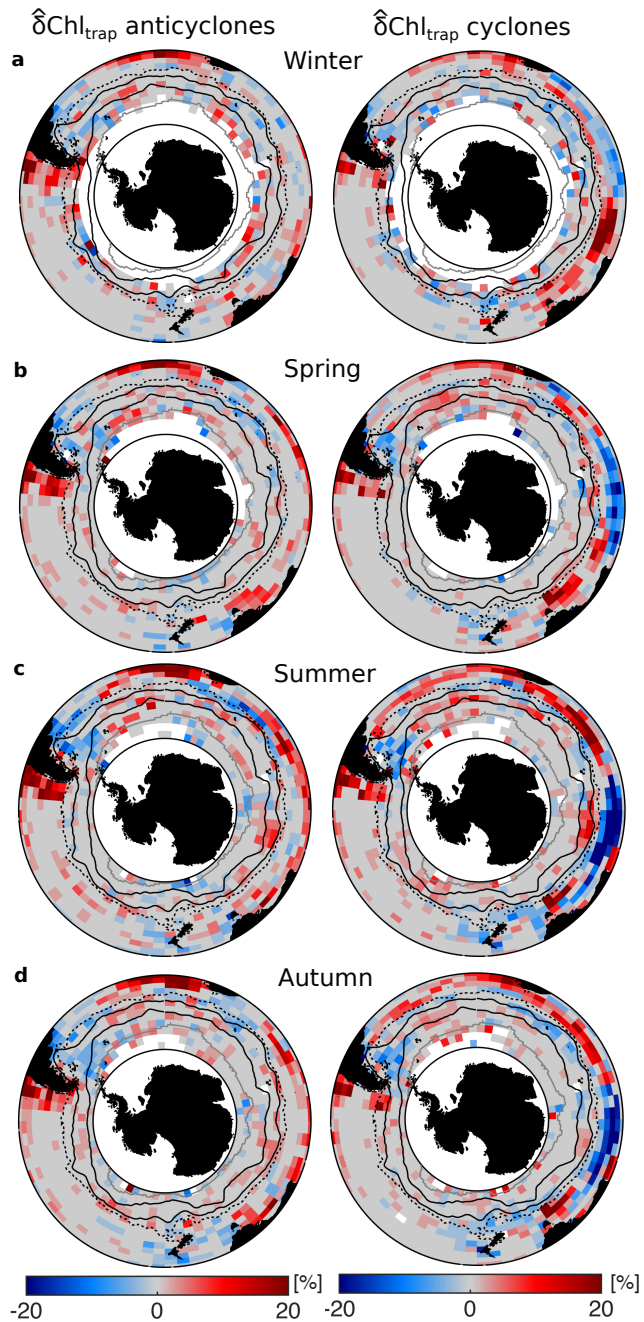


Figure S3. Seasonality of trapping potential of eddies ($\hat{\delta}\text{Chl}_{\text{trap}}$); Austral **a** winter, **b** spring, **c** summer and **d** autumn for anticyclones (left) and cyclones (right). Otherwise as Figure 2.