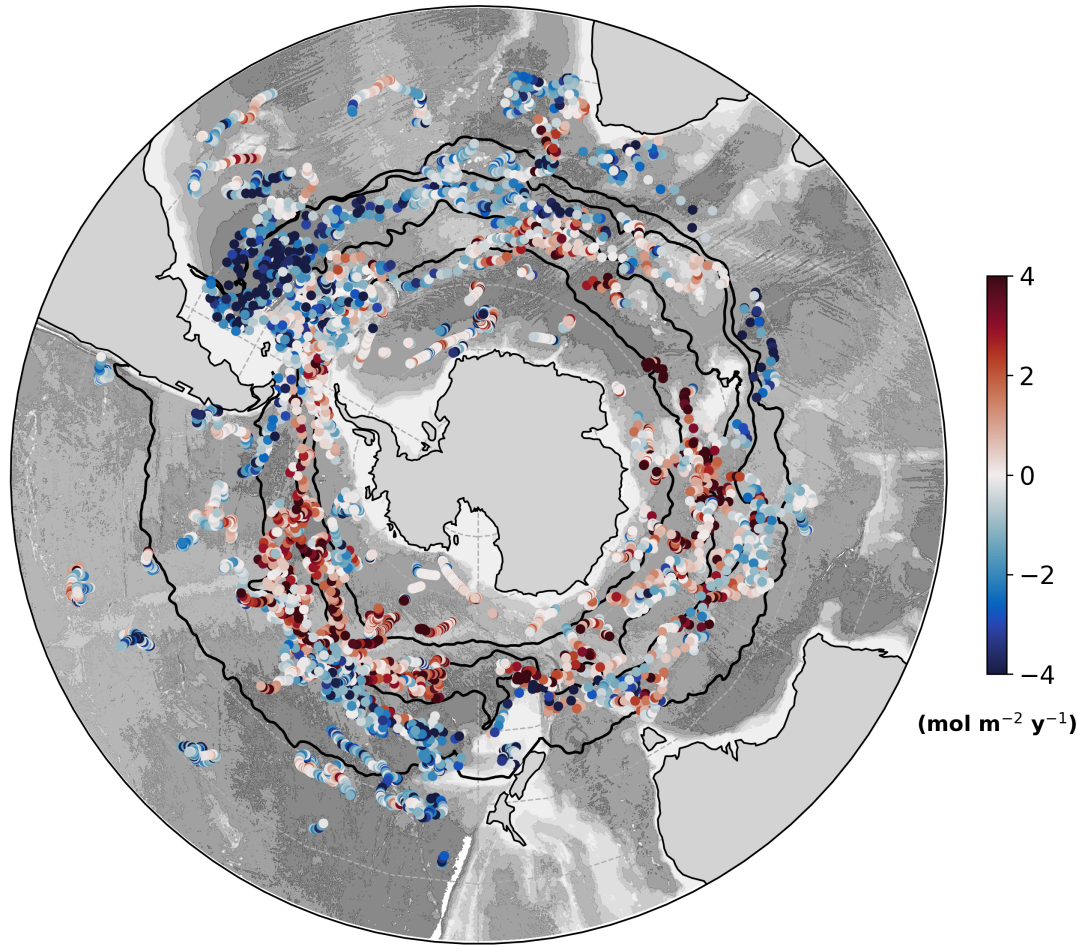


Zonal asymmetry of Southern Ocean air-sea carbon fluxes

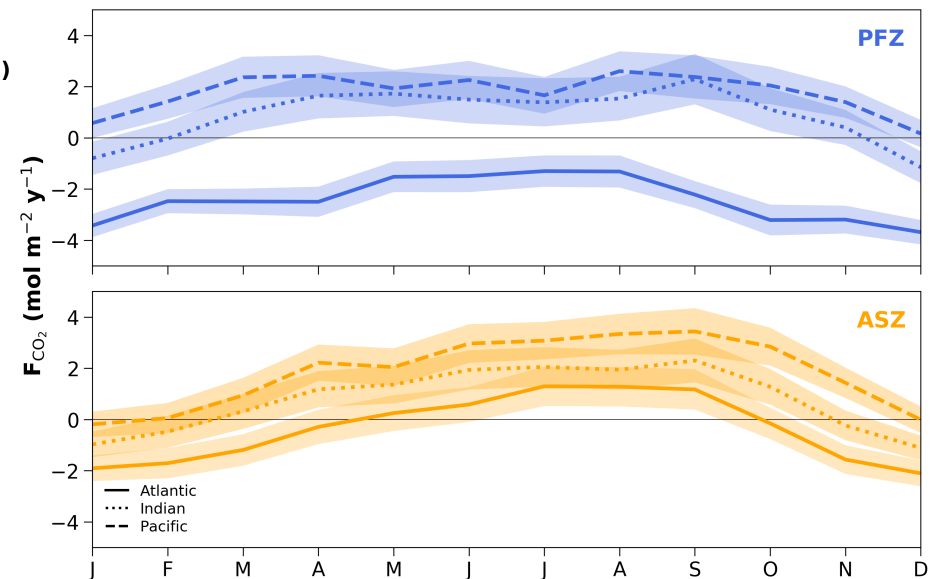
C.J. Prend, A.R. Gray, L.D. Talley, S.T. Gille, F.A. Haumann, K.S. Johnson, S.C. Riser, I. Rosso, J. Sauv e, & J.L. Sarmiento



Carbon outgassing occurs preferentially in the Indo-Pacific sector of the ACC due to asymmetry in the mixed-layer entrainment of upwelled, carbon-rich deep water.

$$F_{\text{CO}_2} = kK_0 (p\text{CO}_2^{\text{ocn}} - p\text{CO}_2^{\text{atm}})(1 - C_{\text{ice}})$$

Air-sea flux climatologies



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cprend@ucsd.edu