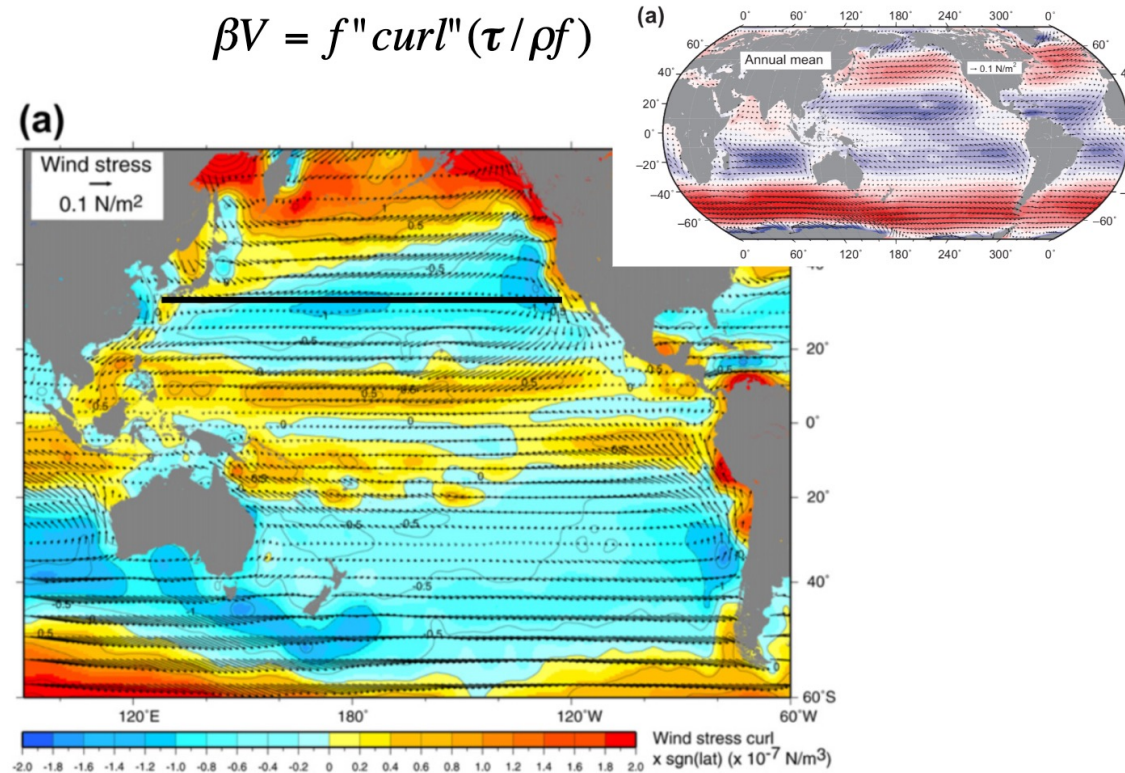


Data: Ekman upwelling/downwelling

$$\beta V = f \text{ "curl" } (\tau / \rho f)$$



Blue regions: Ekman pumping \rightarrow equatorward Sverdrup transport
Yellow-red regions: Ekman suction \rightarrow poleward Sverdrup transport

http://sam.ucsd.edu/ltalley/sio210/dynamics_sverdrup/index.html

Sverdrup Transport (theoretical)

$$\beta V = f \text{ "curl" } (\tau / \rho f)$$

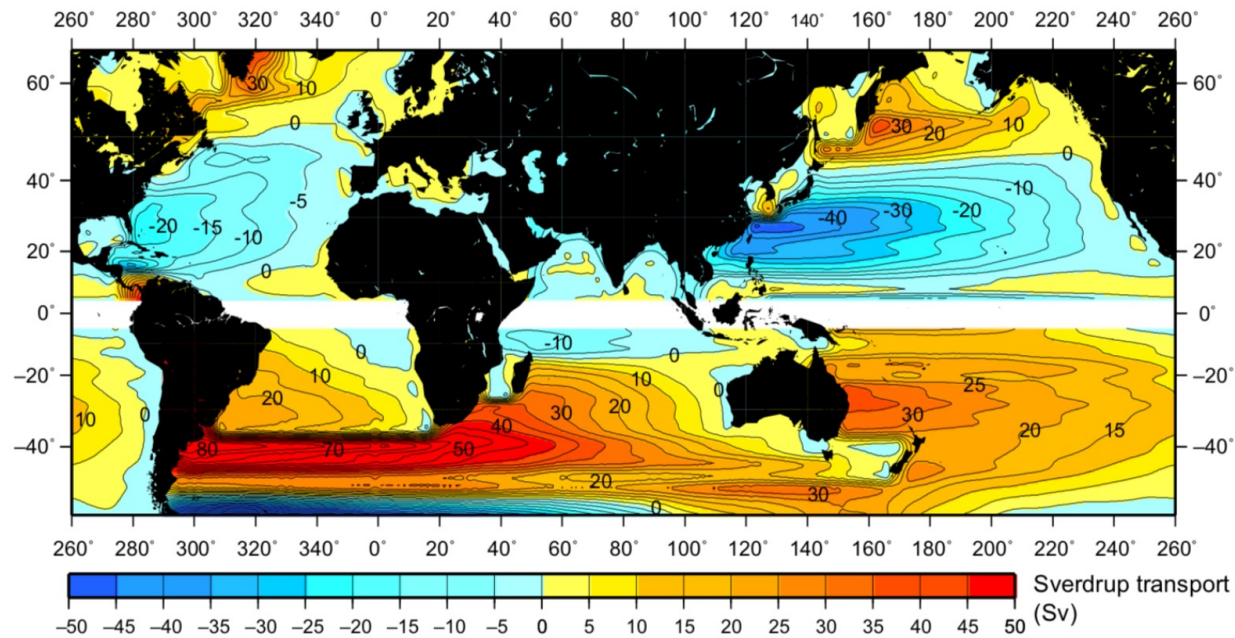
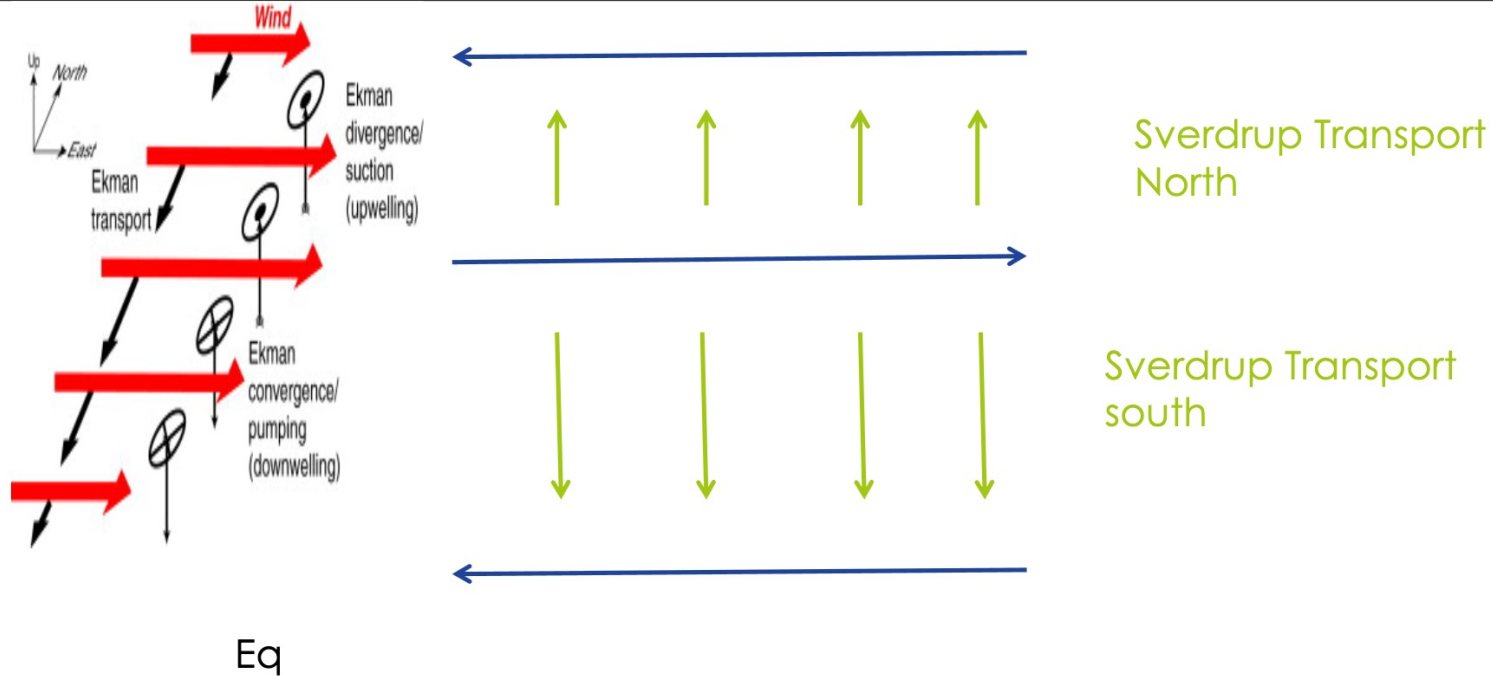


FIGURE 5.17 Sverdrup transport (Sv), where negative is clockwise and positive is counterclockwise circulation. Wind stress data are from the NCEP reanalysis 1968–1996 (Kalnay et al., 1996). The wind stress and wind stress curl used in this Sverdrup transport calculation are shown in the online supplement, Figure S5.10.

Sverdrup Transport



Why does the southward flow connect to the western boundary and not to the eastern boundary???