

SUPPLEMENTARY MATERIAL

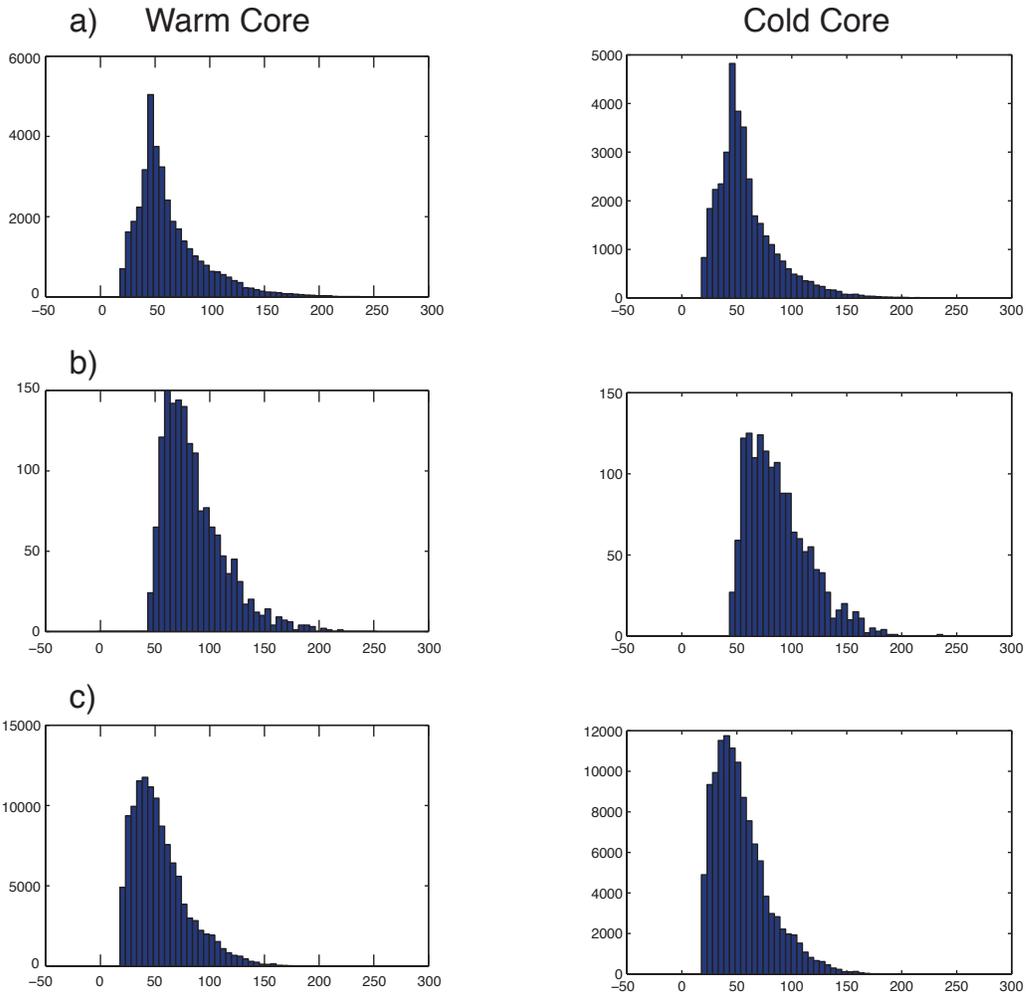


FIGURE 1. Histogram plots for Eddy Diameter a) Vector Geometry Model b)Satellite Observations Okubo-Weiss and c) Okubo-Weiss Model

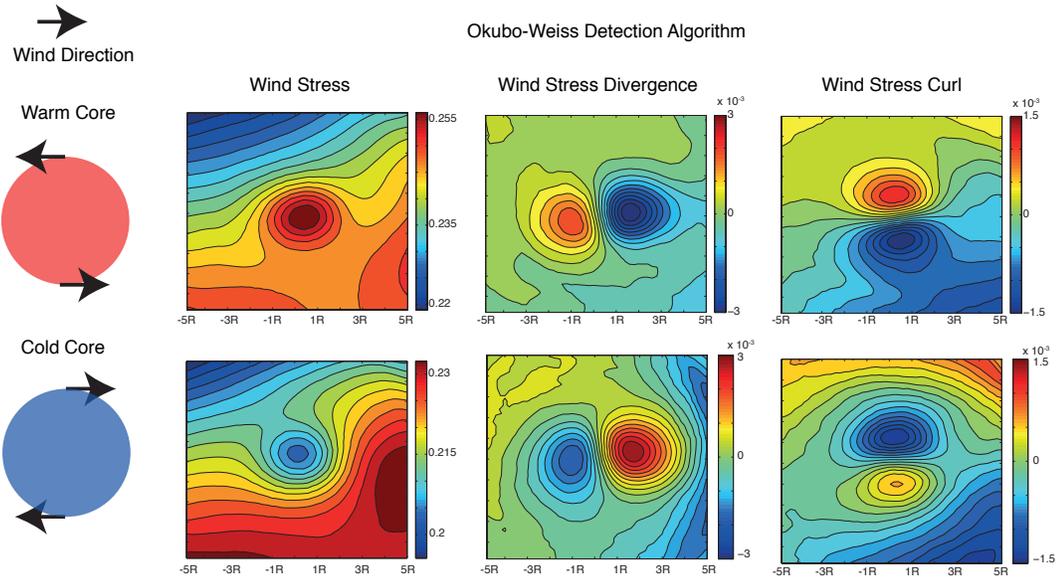


FIGURE 2. Wind stress anomalies above eddies. COSMO-ROMS model results where eddies are tracked using the Okubo-Weiss method. (a) wind stress, (b) divergence and (c) curl above Anticyclonic (warm core) and Cyclonic (cold core) eddies.

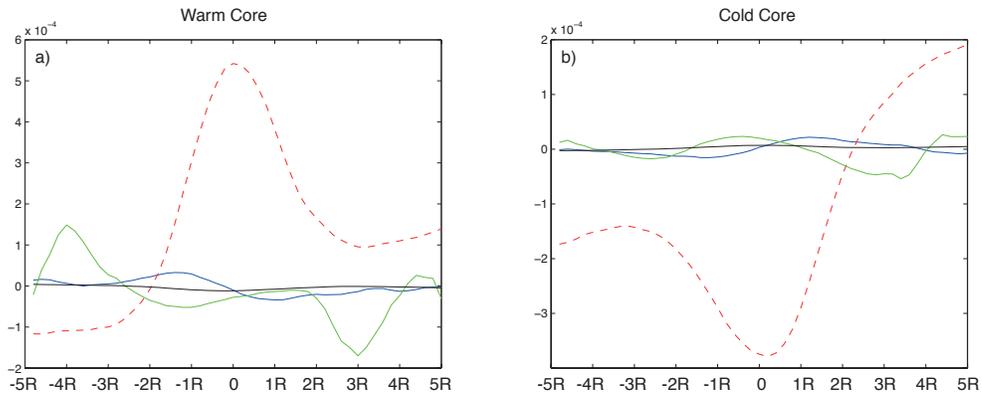


FIGURE 3. Lowest model level (~ 10 m) U-momentum balance of advection (blue), horizontal pressure gradient (green), coriolis (black) and mixing (red) terms, along a chord through the centre of the SST anomaly from upwind to downwind. Eddies Tracked with Okubo-Weiss Method.

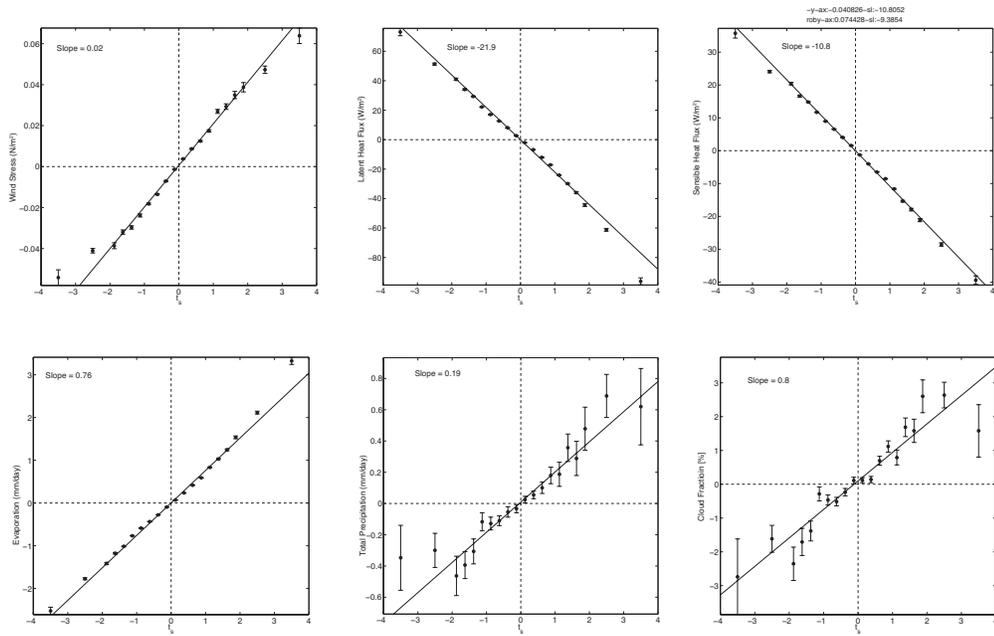


FIGURE 4. Coupling Strength calculated from model outputs with Okubo-Weiss Tracked eddies. a) WindStress b) Latent Heat Flux c) Sensible Heat Flux d) Evaporation e) Total Precipitation and f) Cloud Fraction