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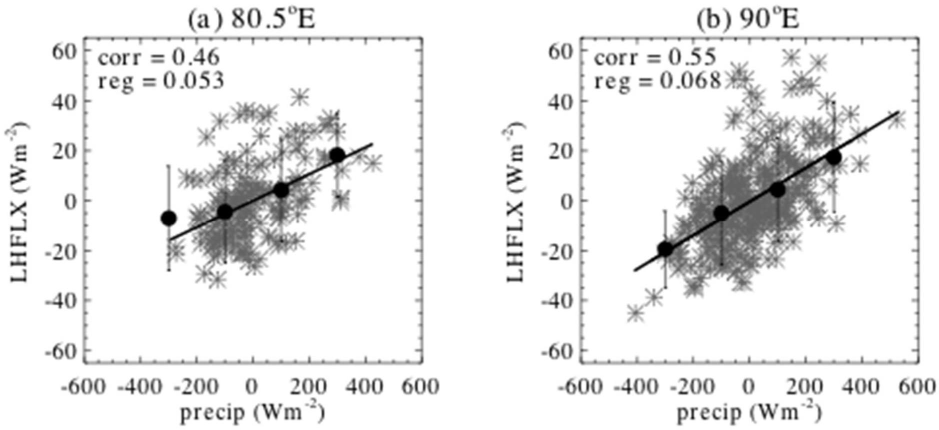

Figure 2 – Scatterplots of anomalous LHFLX vs. anomalous TRMM precipitation at the (a) 964 80.5°E and (b) 90°E buoy. Anomalies are relative to each continuous time chunks in Fig. 1 of the paper. Asterisks represent one day in the data record, where only every fourth day has been plotted. The solid line is the linear best-fit line that minimizes the chi-squared error statistic. Black dots indicate the mean of 200 Wm-2 wide LHFLX bins, while the error bars are the 90% confidence limit for each bin computed using the t-statistic.

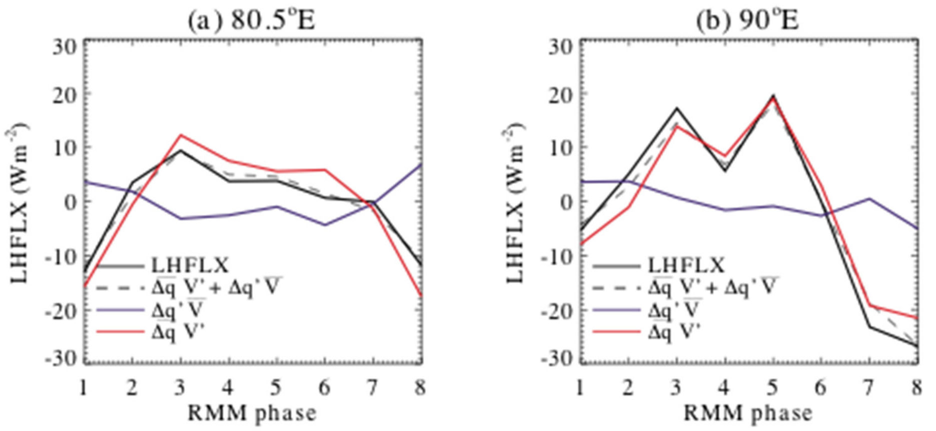

Figure 6 – Composite LHFLX anomalies and linearized LHFLX terms for RMM MJO phases at the (a) 80.5°E and (b) 90°E buoy. Bar represent average over an entire MJO cycle (i.e. all 8 RMM phases), while primes represent intraseasonal variations. See paper for more details.

- This study examined the relative importance of wind-induced surface flux feedbacks to MJO convective destabilization using two RAMA buoys along the equator at 80.5°E and 90°E.
- Fig. 2 shows that intraseasonal latent heat flux (LHFLX) anomalies are roughly 5-7% of TRMM precipitation anomalies at the buoys. Since moist static energy is exported by vertical motions at roughly 10-20% of precipitation (Yu et al. 1998, Sobel et al. 2014), we conclude that LHFLX are an important, though not sufficient, source of moisture for MJO destabilization.
- Fig. 6 shows that wind variability is the dominant contributor to LHFLX anomalies across MJO events, which highlights the importance of wind-induced fluxes to MJO convection.