



**AMS**  
American Meteorological Society

## Supplemental Material

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Supplemental Material for: The Boreal Summer  
Madden-Julian Oscillation and Moist Convective Morphology  
Over the Maritime Continent

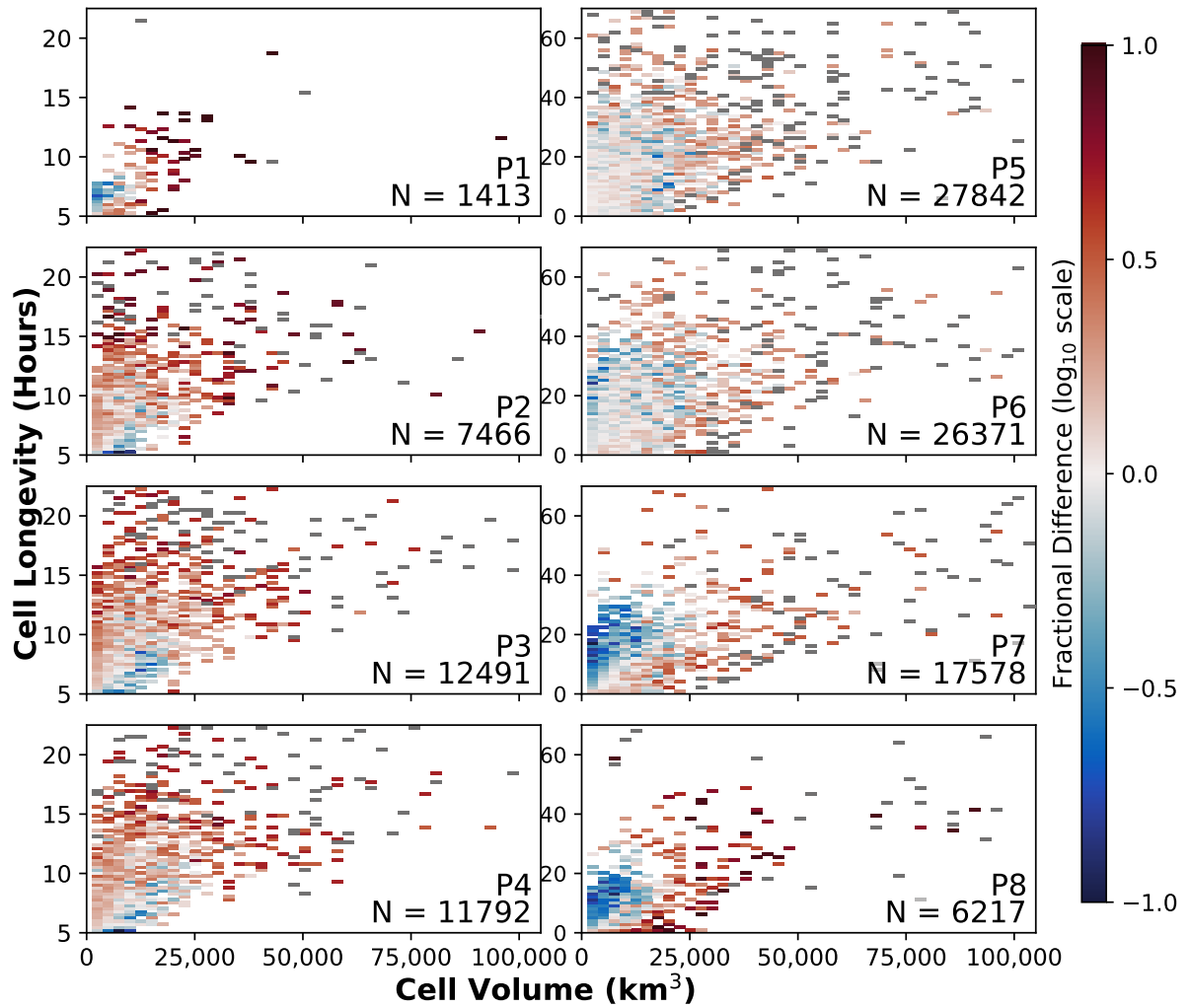


Figure 1: Two-dimensional histograms of cell longevity (y-axis) and cell volume (x-axis) for convectively enhanced regions within each phase of the MJO. Regions that are included within the convectively active portion of the MJO are defined as regions with negative OLR anomalies, as shown in Figure 4. The histograms show the anomalous fractional occurrence for each bin relative to the histogram for the entire domain and entire simulation. Red regions denote an increase in occurrences in the respective phase relative to the simulation mean, while blue regions denote a relative decrease. Gray patches indicate regions where all cases are attributed to a single phase. The number of convective cells included in each phase is listed in the bottom right corner of each histogram.

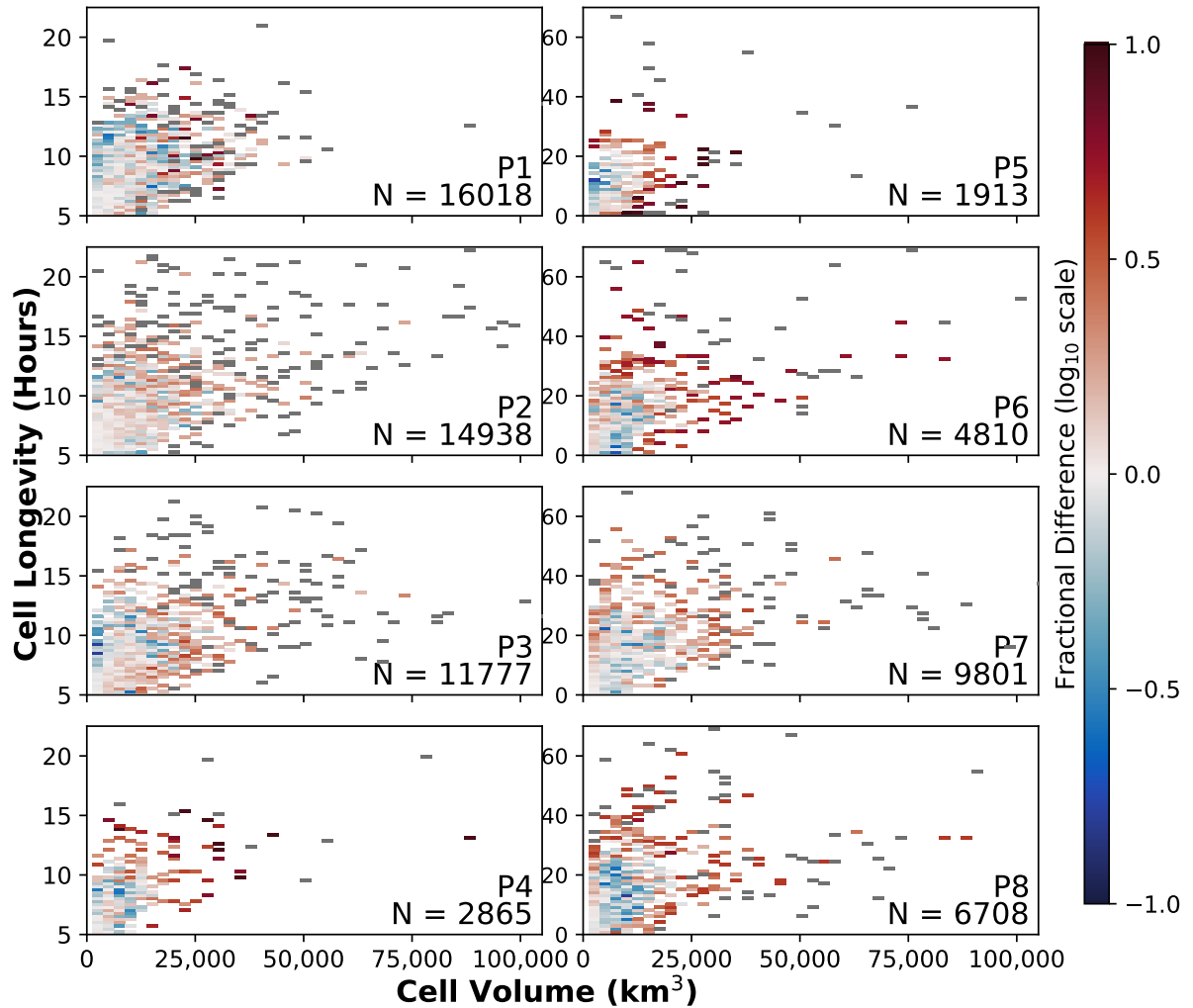


Figure 2: Two-dimensional histograms of cell longevity (y-axis) and cell volume (x-axis) for suppressed regions within each phase of the MJO. Regions that are included within the convectively active portion of the MJO are defined as regions with negative OLR anomalies, as shown in Figure 4. The histograms show the anomalous fractional occurrence for each bin relative to the histogram for the entire domain and entire simulation. Red regions denote an increase in occurrences in the respective phase relative to the simulation mean, while blue regions denote a relative decrease. Gray patches indicate regions where all cases are attributed to a single phase. The number of convective cells included in each phase is listed in the bottom right corner of each histogram.