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# Summertime precipitation patterns associated with the sea breeze and land breeze in southern Mississippi and eastern Louisiana

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A 3-yr study of sea/land breeze convection has been conducted for the Mississippi-Louisiana Gulf Coast. The base reflectivity product of the KLIX NEXRAD is used to calculate the areal precipitation coverage (APC), defined here to be a 4-h tabulation of rain-indicative pixels with reflectivity of 30 dBZ within a circular area covered by the KLIX NEXRAD. A reflectivity value of 30 dBZ typically corresponds to a rainfall rate of about 3 mm/h, and is used here as a threshold for the observance of convective precipitation. To account for signal attenuation in the outermost ranges of the NEXRAD data, the circular area of interest is constrained with a radius of 240 km (125 mi), measured outward from the KLIX NEXRAD site. Diurnal wind and precipitation patterns are consistent with other studies, with a few exceptions (such as regional offshore rain maximums), and will be discussed at the conference. To our knowledge, this is the first climatology study of seabreeze convection patterns in the region.