Poster Presentation

P1.15

Using the Real-time Multivariate Madden Julian Oscillation Indices to predict Rainfall in Queensland

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Madden Julian Oscillations (MJO) are large-scale, tropical atmospheric anomalies, originating in the Indian Ocean, and propagating eastward. An intraseasonal phenomenon, the MJO has a timescale ranging from about 30 to 60 days, with a frequency of 6 to 12 events per year. In its active phase, the MJO is associated with convection and rainfall. There is evidence to suggest that the MJO is closely correlated with rainfall events of northern Australia. The project investigates the spatial extent, and seeks to better define the influence of the MJO on rainfall in Queensland. Queensland rainfall data was analysed for underlying spatial and temporal patterns, utilising the Real-Time Multivariate MJO Index developed by the Bureau of Meteorology Research Centre. Correlations were identified between rainfall events in Queensland and the location of the active phase of the Madden Julian Oscillation, as defined by the Real-Time Multivariate MJO Index.

3:00 PM, Monday, 24 March 2003