

Future changes to intra-seasonal variability of Australian monsoon rainfall

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Indices derived from daily rainfall time series are used to measure monsoon "burst" and "break" features of the northern Australia monsoon, corresponding to one or more days of heavy rainfall for bursts. These indices include number of burst days, number and duration of burst events, and average intensity. The results using observational data show how these features can vary from one year to the next, and how they can vary from the point scale (Darwin) to the regional scale (northern Australia). The results from CMIP5 climate model simulations under both present day and future greenhouse gas conditions have also been analyzed and indicate how well models can capture these features and how they might change by the end of the 21st century. This talk will give an overview of our results.