

## **The Australian Monsoon: Modelled climate and projected changes of Australia's wet season**

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The Australian monsoon is a fundamental component of Southern Hemisphere summer circulation, and dominates rainfall distributions over northern Australia and adjacent regions. Changes to the Australian monsoon over the coming century could have profound consequences for Northern Australia and adjacent regions, for example affecting rainfall totals, distribution or intensity, yet possible changes to this component of the Asian/Australian monsoon has been relatively little studied and are poorly understood. We examine the ability of current generation models to simulate large scale Australian monsoon features such as winds, pressure and rainfall, including analysis of convective 'regimes' and associated precipitation. We also examine projected changes associated with global warming, including changes to monsoon extent and duration, and features such as temperatures, rainfall and winds.