



Progress in understanding and simulating the MJO

S.J. Woolnough, J.M. Slingo, P.M. Inness

NCAS-Climate, Walker Institute, University of Reading (s.j.woolnough@reading.ac.uk)

The Madden-Julian Oscillation is the major mode of sub-seasonal variability of tropical convection in the Indian Ocean and West Pacific and offers considerable potential for prediction out to 3-4 weeks in both the tropics and extratropics. Furthermore, through its role in the development of El Nino events the MJO has a strong influence on the evolution of the climate system on seasonal timescales.

However despite concerted efforts over the last 20 years, significant weakness remain in the representation of the MJO in GCMs used for NWP, seasonal forecasts and climate studies. This talk will review the progress (and the lack of it) in understanding and simulating the MJO over the last decade and look forward to the next 5 years of MJO simulation.