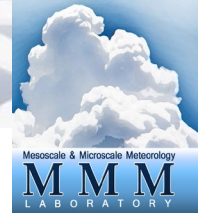


MMM SEMINAR SERIES



Upscale energy transfer and convectively coupled equatorial waves

Elliot McKinnon-Gray
University of Reading (UK)

Convectively Coupled Equatorial Waves (CCEWs) dominate atmospheric variability on timescales of 2–30 days in the Tropics, bringing episodes of widespread heavy precipitation. This study compares the representation of CCEWs and their connection to upscale energy transfer in two Met Office Unified Model simulations of the full tropical channel with identical km-scale resolution for the DYAMOND Summer period. The principal difference between the simulations is that one parametrizes convection (GAL9), while the other (RAL3) is convection permitting. The GAL9 convection scheme acts to remove vertical instability without explicitly representing the resolved-scale circulation associated with convective plumes. We present the first quantitative diagnosis of interscale energy transfer and its relation to CCEWs. ...[Link to Full Abstract and Bio.](#)

Thursday, 9 April 2026, 2:00PM

Refreshments 1:45PM

Please also join colleagues for refreshments and informal discussion after the seminar until 3:30PM

NCAR-Foothills Laboratory, 3450 Mitchell Lane

FL2-1022, Large Seminar

Seminar will also be live webcast

<https://sundog.ucar.edu/public/page/MMM>

Participants may ask questions during the seminar via Slido.



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