ABSTRACT

*Intraseasonal Variabilities: Structure and Feedback Analysis*

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The PIs will undertake a comprehensive and constructive evaluation of the synoptic to intraseasonal variabilities (time-scale 1 day - 100 days) in all three U.S. coupled climate models: NCAR, GFDL and GISS. The emphasis will be on their Madden-Julian Oscillation simulations. The work consists of two parts: (1) evaluation of the general features (variance and propagation) of all equatorially trapped wave modes, and the detailed wave structure of the intraseasonal (30-95 day) mode; and (2) analysis of the feedback mechanisms at the intraseasonal time-scale which may offer useful guidance on how to improve the model simulation.

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