



Tropospheric tropical variability and the Quasi Biennial Oscillation

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To investigate the interaction of tropospheric tropical variability and the QBO, results are presented from a small ensemble of multi-year simulations with a Middle Atmosphere General Circulation Model (MAGCM) that spontaneously simulates the QBO. Previous simulations of the QBO with the MAGCM have used climatological sea surface temperatures. In order to attain a realist representation of tropospheric tropical variability, including ENSO, the small ensemble uses observed sea surface temperatures. Enhanced tropical variability in the middle atmosphere arising from SSTs variability and affecting the QBO is expected, on the basis of previous simulations with a lower vertical resolution version of the model.