



Saharan Dust and TC genesis

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During the summer of 2006, the NASA African Monsoon Multidisciplinary Analyses (NAMMA-06) field campaign investigated interactions of African Easterly Waves, Saharan dust outbreaks, and interactions between the Saharan Air Layer and developing tropical cyclones. Several studies have indicated that aerosols can influence TC genesis by changing the characteristics of associated convection. The purpose of this study is to present satellite-based, aircraft, and surface-based observations of several systems investigated during NAMMA-06 detailing the differences in convective structure and intensity associated with TC genesis. Simulations of these cases using WRF-chem will also be presented to note changes in convection that could possibly be associated with varying aerosol concentrations, as well as how that compares with actual observations of dust/TC/AEW interactions.