



Effects of centrifugal drift on hurricane structure and intensity

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High (1km) resolution simulations of the 2005 hurricane Wilma were conducted using the UW-NMS which models the effect of horizontal precipitation drift due to centrifugal force. The extremely tight nature of Wilma's vortex suggests that there should be a measurable horizontal drift of precipitation, comparable to the vertical motion, that is due to centrifugal terminal velocity. These effects would likely unload the updraft in the central core of the storm. Explicit calculations of this effect will be presented at the oral presentation and implications of centrifugal horizontal drift to the general 3D structure of a tropical cyclone will be discussed.