



## **Modeling Results From the Space Weather Modeling Framework During a Variety of Storms**

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Using the Space Weather Modeling Framework (SWMF), we have modeled a number of storm time periods coupling together the BATSRUS MHD magnetospheric code, the Rice Convection Model (RCM) inner magnetospheric code, and an ionospheric electrodynamics model. These model runs have been compared to a wide variety of data including ground-based magnetometers, CHAMP, Geotail, GOES, and Wind satellite magnetic field data, and DMSP ion velocities. In addition we compare to global indices such as Dst and AL. Specifically, we will present results from the May 4, 1998; March 31, 2001; July 15, 2000; November 20, 2003; and October 29, 2003 storms. We will present the data-model comparisons during the storms and will examine the inner magnetospheric dynamics, specifically looking at the effects of charge-exchange on storm recovery and the composition on the dynamics.