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Magnetic reconnection during northward interplanetary magnetic field during the Whole Heliosphere Interval[1] SHREE BHATTARAI, RAMON LOPEZ, ROBERT BRUNTZ, KEVIN PHAM, YUE DENG, YANSHI HUANG, Univ. of Texas at Arlington — The Whole Heliosphere Interval (WHI) occurred from March 20 (DOY 80) to April 17 (DOY 107) of 2008. We used Lyon-Fedder-Mobarry (LFM) simulation to simulate the geospace response to the solar wind input throughout the WHI using real solar wind conditions and studied the variation of magnetic reconnection with changing interplanetary magnetic field (IMF). Magnetic reconnection is the process in which the geomagnetic field interconnects with the IMF causing transfer of energy from the solar wind to the geospace. We will present results showing behavior of the reconnection potential when the IMF is northward and discuss limitations in current formulations of the dayside reconnection rate for northward IMF.

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