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The viscous interaction during the Whole Heliosphere Interval, one solar rotation[1] ROBERT BRUNTZ, RAMON LOPEZ, SHREE BHATTARAI, YUE DENG, YANSHI HUANG, Univ. of Texas at Arlington — The Whole Heliosphere Interval (WHI) was a period of intense, coordinated observation and simulation of the Sun and solar system, lasting for one complete Carrington Rotation, March 20 – April 16, 2008. We ran the Lyon-Fedder-Mobarry (LFM) magnetohydrodynamic simulation of the near-Earth space (the magnetosphere), using the complete solar wind data from the WHI, as well as solar wind data with no interplanetary magnetic field (IMF). With no magnetic field, the solar wind-magnetosphere interaction occurs only through the viscous interaction. We will compare the results of the simulation with the full solar wind and the results for no IMF to study the influence of the viscous interaction and the influence of the interplanetary magnetic field.

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