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Birkeland currents during the Whole Heliosphere Interval for the Carrington Rotation 2068¹ KEVIN PHAM, RAMON LOPEZ, ROBERT BRUNTZ, YUE DENG, YANSHI HUANG, Univ. of Texas at Arlington — The Whole Heliosphere Interval (WHI), encompassing Carrington Rotation 2068 (March 20 – April 16, 2008), has been extensively studied through both observations and simulations. The Lyon-Fedder-Mobarry (LFM) global magnetohydrodynamic simulation was run for the duration of the WHI with a variety of inputs and then the Birkeland currents for each run were analyzed. The Birkeland currents are currents that flow along the Earth's magnetic field, connecting the magnetosphere to the high latitude ionosphere. A comparison of the Birkeland currents from the LFM runs will be discussed in detail.

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