

The Magnetic Reconnection Outflow in the Near-Earth Plasma Sheet

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In the near-Earth plasma sheet, earthward fast plasma flows over several hundred km/s are observed by in-situ satellites. These plasma flows are suddenly decelerated by the dominant dipolar magnetic field at around 10 Re. The following tailward rebound flows are also observed by them. In this paper, we studied the three dimensional evolution of these earthward and tailward flows using MHD simulation and analyses of GEOTAIL observation data during from 1995 to 2005.

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