RECONNECTION AND BURSTY BULK FLOW RELATED STATISTICS IN THE EARTH'S PLASMA SHEET

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Reconnection related fast flows in the Earth's plasma sheet can be associated with several accompanying phenomena, such as magnetic field dipolarization, current sheet thinning and turbulence. Statistical analysis of multi-scale properties of turbulence facilitates to understand the interaction of the plasma flow with the dipolar magnetic field and to recognize the remote or nearby temporal and spatial characteristics of reconnection. The main emphasis of this presentation is on differentiating between the specific statistical features of flow associated fluctuations at different distances from the reconnection site. Separated (Earthward or tailward) and multiple flow associated statistics will be also discussed.