Er-013 Room: C501 Time: June 7 9:00-9:15

Dawn - Dusk Asymmetry on the Motion and Thickness of Dayside Magnetopause Current Layer

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We have examined whether the motion and thickness of the dayside magnetopause current layer have dawn – dusk asymmetry. According to our results, the dawn side current layer was thinner than the dusk side that whose thickness varied in case of the multiple or single current layer crossing. While, the thickness of the dawn side current layer was constant regardless of the number of crossing.

These results indicate that the current layer thickness has the dawn – dusk asymmetry and depends on the number of crossing. As a cause of this asymmetry on the current layer thickness and motion, the differences of dawn – dusk upstream condition determined by the asymmetric bow shock structure, that is, the quasi-parallel and -perpendicular shock, in the dawn and dusk side concern.