

Field Aligned Current Observed in the Nightside Geo-space

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Field Aligned Current (FAC) is important for the Magnetosphere– Ionosphere Coupling. We studied the properties of the FAC using the data obtained by satellites of Cluster and DSP. The FAC cases/events were chosen in the nightside magnetosphere for the studying. The results shows that: (1) the FAC is mainly Earthward on dawn section and is mainly tailward on dusk section, (2) the current intensity of the tailward is great than that of the Earthward, and the current intensity of the dawn sector is great than that of the dusk sector, (3) the FAC events have a highest occurrence when AE was 100 to 200, and (4) the current intensity was with a biggest value of 500 - 1000.