

## THEMIS 衛星観測による尾部電流増大領域の形成と磁場の双極子化との関係

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### Formation of enhanced cross-tail current region and its relationship to the dipolarization: THEMIS observation

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Dipolarization is one of the most dramatic and key phenomena in the course of substorms. Before the dipolarization, spacecraft in the inner magnetosphere often observes the signature of enhanced cross-tail current, followed by the significant electron acceleration. Connections between the enhanced cross-tail current region and the dipolarization are important information to understand the substorm development. In this study, we examine, using the THEMIS multi-spacecraft observation, the spatial and temporal development of such an enhanced cross-tail current region and its relationship to the expansion of dipolarization region.