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Cluster/Double Star observation of dipolarizations at postmidnight sector

R. Nakamura (1), T. L. Zhang (1), C. M. Carr (2), A. Balogh (2), H. Reme (3), I. Dandouras (3), W. Baumjohann (1) and DSP/Cluster dipolarization study team
(1) IWF, (2) Imperial College, (3) CESR, (Contact: rumi.nakamura@oeaw.ac.at)

To study the initial onset and the subsequent expansion of the substorm disturbances, it is essential to observe simultaneously the midtail and regions closer to the Earth. Particularly, how these two key regions are linked in terms of fast flow and magnetic field disturbance relevant to dipolarization are yet to be determined. In this paper we compare and contrast two types of dipolarization events with different IMF condition when Cluster and Double Star (TC1) were located at the same local time in the dawn sector: August 07, 2004, 18-24 UT, during disturbed southward/northward IMF, and August 14, 2004, 21-24 UT, when IMF was stably northward. Cluster observed dipolarization as well as fast flows for both intervals but this was not the case for TC1. For both events the satellites crossed near the conjugate location of the MIRACLE stations. By using multi-point analysis techniques, the direction/speed of the propagation is determined within Cluster and is then compared with the disturbances at the Double Star to determine the spatial (temporal) scale of the possible sources.