



## **Probing spatial and temporal aspects of the magnetopause boundary layer and global magnetosphere perturbations under northward IMF using multi-spacecraft and ground based observations**

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On the 11th July 2006, during a period of northward IMF, the Geotail, Double Star 1 and Cluster spacecraft all crossed the magnetopause region within 2 hours (UT) of one another while separated by many hours in local time. During this time large-scale oscillations were observed in both ground based and spacecraft data. We utilize these numerous measurements to examine the evolution and extent of fluctuations in and around the magnetopause boundary layer as well as their global magnetospheric connection. This work was partly carried out via an International Space Science Institute (ISSI) working group on 'Comparative Cluster- Double Star measurements of the Magnetotail'.