Evolution of the Magnetopause Boundary Layer under Northward IMF conditions

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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 extent and evolution of fluctuations in and around the magnetopause boundary layer. This works is being carried out as part of an International Space Science Institute (ISSI) working group on ‘Comparative Cluster- Double Star measurements of the Magnetotail’.