



Filamentary currents in five FTEs observed by MMS

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We present observations of five flux transfer events (FTEs) which were observed within a twenty-minute period on 3 October 2016. We employ magnetic field, electric field and plasma measurements from the Magnetospheric Multiscale (MMS) spacecraft located on the dusk flank of the magnetopause during a period of predominantly duskward IMF. The FTEs observed are of reverse polarity, indicating that they are moving towards the Southern Hemisphere. Of the events observed, we determine that two of our events are crater-type FTEs whereas the other three do not show crater-type signatures. We observe filamentary bidirectional field-aligned current signatures during all but one of the FTEs, similar to recent observations of signatures during a crater FTE (Trenchi et al, submitted). We also observe larger regions of unidirectional field-aligned current in the two crater FTEs. We examine our results in the context of previous observations linking crater FTEs to the separatrix.