



Observation of Parallel Electric Fields in a Reconnecting Magnetosheath Current Sheet

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We present observations of symmetric reconnection in the Earth's magnetosheath by the Magnetospheric Multiscale (MMS) mission. The observed event has a guide field of 0.5 times the reconnecting magnetic field. The observations suggest that three of the four spacecraft encountered an electron jet in the direction of the magnetic field reversal, as well as hall magnetic field and electric field signatures. Coincident with the electron jet is enhanced dissipation of approximately 8 nW/m^2 and a parallel electric field of -4 mV/m . The parallel electric field is associated with electron phase space holes, suggesting that it is accelerating electrons in the electron jet.