



Kinetic scale current sheet observed at the magnetopause

Cecilia Norgren (1,2), Daniel Graham (1), Yuri Khotyaintsev (1), Mats André (1), Andris Vaivads (1), and the Magnetospheric Multiscale (MMS) Team

(1) Swedish Institute of Space Physics, Uppsala, Sweden, (2) Uppsala University, Uppsala, Sweden

Kinetic scale current sheets associated with sharp plasma boundaries are often formed in plasmas. Studying the processes responsible for plasma transport and acceleration operating within these thin boundaries require high-resolution data. We present an event observed by the Magnetospheric Multiscale (MMS) mission as the spacecraft cross a reconnection diffusion region at the magnetopause. We investigate the kinetic structure of the reconnection layer including particle distribution functions and waves and find what terms in the generalized Ohm's law balances the observed electric field.