



Magnetic energy conversion in magnetic reconnection of dayside magnetosheath: MMS case study

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Magnetic reconnection is a fundamental process leading to energy conversion in plasmas, which occurs in solar winds, magnetotail, magnetopause and magnetosheath. NASA's Magnetospheric Multiscale (MMS) enables high resolution measurements of both ions and electrons. Here we use high-resolution particle and magnetometer data from MMS taken in Earth's dayside magnetosheath to study the structure of magnetic reconnection and the heating of charged particles. Our observations help us achieve a better understanding of how magnetic energy converts into particle energy in magnetic reconnection of dayside magnetosheath.