

## The MMS Science Data Center: Data availability and Discovery Tools.

\*Kristopher William Larsen<sup>1</sup>, Christopher Pankratz<sup>1</sup>, James Craft<sup>1</sup>, April Hudspeth<sup>1</sup>, Jim burch<sup>2</sup>

1. Laboratory for Atmospheric and Space Physics, University of Colorado, Boulder, Colorado, 2. Southwest Research Institute

NASA's Magnetospheric MultiScale (MMS) mission is in its third year of flight operations, flying a constellation of four spacecraft in formation around the Earth, each with twenty-five on-board instruments that measure the particle and field environment. Data from the entire Solving Magnetospheric Acceleration, Reconnection, and Turbulence (SMART) instrument suite is available through the mission's Science Data Center (SDC), operated by the Laboratory for Atmospheric and Space Physics at the University of Colorado.

The focus of the MMS mission is to investigate magnetic reconnection. To examine this phenomenon, the SMART instrument suite captures data at very high temporal resolution (30ms) where reconnection is occurring, and at a lower temporal resolution (equal to other missions) through the rest of the orbit. Both the highest resolution 'burst' data covering areas of reconnection, as well as data from the interplanetary magnetic field, magnetosheath, magnetotail and measurements of the plasma and neutral sheets is available for investigators. The MMS observations available at the SDC are thus an invaluable tool for researchers into a wide variety of magnetic field problems.

In order to best disseminate all the data collected by MMS (currently the SDC manages in excess of 100TB of data), we have developed a wide range of tools to help the community find the critical data they need for their research. This presentation will demonstrate the ways researchers in magnetospheric sciences can access all the particle and field data returned by MMS through web tools, reference data bases, and interactive 3-d 'Quicklook' data browsers.

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