

[EE] Evening Poster | P (Space and Planetary Sciences) | P-EM Solar-Terrestrial Sciences, Space Electromagnetism & Space Environment

[P-EM15]Dynamics in magnetosphere and ionosphere

convener:Yoshimasa Tanaka(National Institute of Polar Research), Tomoaki Hori(Institute for Space-Earth Environmental Research, Nagoya University), Aoi Nakamizo(情報通信研究機構 電磁波研究所, 共同), Mitsunori Ozaki(Faculty of Electrical and Computer Engineering, Institute of Science and Engineering, Kanazawa University)

Mon. May 21, 2018 5:15 PM - 6:30 PM Poster Hall (International Exhibition Hall7, Makuhari Messe)

This session provides an opportunity to present recent results from satellite and ground-based observations and theoretical and simulation studies on the magnetosphere, ionosphere, and their coupling system. We invite contributions dealing with various phenomena related to the magnetosphere-ionosphere system: solar wind-magnetosphere interaction, magnetosphere-ionosphere convection, field-aligned current, magnetic storms/substorms, neutral-plasma interaction, ionospheric ion inflow and outflow, aurora phenomena, and so forth. Discussions on planetary and satellite ionosphere and magnetospheres, future missions and instrument developments are also welcome.

[PEM15-P16]The MMS Science Data Center: Data availability and Discovery Tools.

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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.