Project Details

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Project Title:
Data Environment - Restoration of AMPTE/CHEM Data

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Summary:
The Charge-Energy-Mass spectrometer (CHEM) on NASA s Active Magnetospheric Particle Tracer Explorers Charge Composition Explorer (AMPTE/CCE) mission made detailed measurements at high time resolution of energetic particle populations in the inner magnetosphere. This data contains a wealth of information about the behavior of the magnetosphere and the ring current. In particular, the high time resolution data is useful for studying sub-storm ion injection, as well as details about the relationship between Solar wind changes and magnetospheric response. Yet the high time resolution data for CHEM has never been readily available to the community. We will transition high time resolution CHEM data from its aging VAX/VMS-based storage and put online two new ASCII versions of the entire four and a half year dataset, one version calibrated, one version raw counts. The data will be placed on servers at JHU/APL and will also be archived with documentation in the NSSDC at Goddard. Furthermore, we will make the data available in an existing web-based tool for analyzing energetic particle data (the Mission Independent Data Layer or MIDL; see the web site at http://sd-www.jhuapl.edu/MIDL). Finally we will provide CHEM meta-data to emerging Virtual Observatory (VO) systems. Our comprehensive efforts will permanently restore to the LWS program a valuable dataset on the inner magnetosphere, a region which will soon be receiving increased attention with the launch of the LWS Geospace Storm Probes.

Publication References:

Summary: ''

Reference: Jon Vandegriff / Johns Hopkins University Applied Physics Laboratory-Data Environment - Restoration of AMPTE/CHEM Data