

ERG-Science Center Project: Importance of the integrated data analysis system for multi-kinds of geospace data

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Recent geospace sciences use multi-kinds of data from satellites, ground, and also simulation data for integrated studies. Although each data covers some limited areas and periods, the analysis by integrating many data sets provides better perspectives of the phenomena and enhances comprehensive understanding. However, the integrated data analysis is not always easy, because the data-handling of different data sets requires tremendous effort and time. The self-describing data files and the integrated data analysis tools are essential for seamless integration for data-sets. Today, the CDF (Common Data Format) developed by NASA/GSFC is a standard data format of space science data, and many CDF files of satellite and ground-based data are archived, which free the researchers from the time-consuming working for data-handling. Moreover, the THEMIS data analysis suite (TDAS) is powerful software to process the CDF files. Users who are not familiar with the data can easily use different kinds of data sets. Considering the recent development of the CDF and TDAS in the space physics community, the ERG Science Center team has been preparing the CDF files of the ERG project data and developing the plug-in tools for the TDAS. Some of the ground magnetometer data, SuperDARN HF radar data, VLF, and CNA data can be analyzed with TDAS. We also develop the web analysis toll (ERG-WAT) that is a web-based quick-look and simple analysis system. In this talk, we report the current status of our activity and demonstrate how the plug-in tool loads and visualizes the ERG-related data.

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