

COMBINING DATA ANALYSIS TOOLS (AMDA, CLWEB, QSAS) AND DISTRIBUTED DATA RESOURCES: A STEP TOWARD VIRTUAL OBSERVATORIES IN SPACE PHYSICS.

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The studies of space physics phenomena generally require to exploit multi-observatory and multi-instrument data. Taking into account the volume and sometimes the complexity of the data, searching events of interest, accessing the data, extracting sub-databases or building statistical databases often consist of a time and energy consuming work. For helping researchers to analyse the space physics data, some teams have developed tools or on-line services for public use. AMDA, QSAS and CLWEB are among these ones.

AMDA (Automated Multi-Dataset Analysis) is a web-based facility for on line analysis of space physics time series data coming from either its local database or distant ones. This tool allows the user to perform on line classical manipulations such as data visualization, parameter computation or data extraction. AMDA also offers innovative functionalities such as event search on the content of the data in either visual or automated way, and the generation, use and management of time-tables.

QSAS and CL are standalone flexible software for detailed analysis of space physics data. These tools allow to perform high level manipulations (distribution function, partial moment computation, CLUSTER-curlometer, ...) on many datasets (CLUSTER, THEMIS, GEOTAIL, STEREO, ...). CLWEB is an on-line version of CL.

We will show how these tools can be used in a complementary way by exploiting time-tables which can be seen as a brick of up-coming virtual observatories in space physics

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