

***CUSTOM DATA SUPPORT FOR THE FAST -PHYSICS SYSTEM TESTBED AND
RESEARCH (FASTER) PROJECT***

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ABSTRACT

The multi-institution FAsT -physics System Testbed and Research (FASTER) project, funded by the DOE Earth System Modeling program, aims to evaluate and improve the parameterizations of fast processes (those involving clouds, precipitation and aerosols) in global climate models, using a combination of numerical prediction models, single column models, cloud resolving models, large-eddy simulations, full global climate model output and ARM active and passive remote sensing and in-situ data.

This poster presents the Custom Data Support effort for the FASTER project. The effort will provide tailored datasets, statistics, best estimates and quality control data, as needed and defined by FASTER participants, for use in evaluating and improving parameterizations of fast processes in GCMs. The data support will include custom gridding and averaging, for the model of interest, using high time resolution and pixel level data from continuous ARM observations and complementary datasets. In addition to the FASTER team, these datasets will be made available to the ARM Science Team.

Initial efforts with respect to data product development, priorities, availability and distribution are summarized here with an emphasis on cloud, atmospheric state and aerosol properties as observed during the Spring 2000 Cloud IOP and the Spring 2003 Aerosol IOP at the ARM Southern Great Plains site.

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