

Getting to know SPICE

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The SPICE ancillary information system developed at NASA's Jet Propulsion Laboratory offers a flexible, multimission suite of data containers and related software--a subroutine library--for producing, archiving, distributing and accessing much of the "ancillary" data used in space science mission design, observation planning and data analysis. SPICE handles ephemerides of spacecraft and target bodies, target size/shape/orientation, spacecraft orientation, instrument field-of-view geometry, sequence of events and time conversions. SPICE software is portable to nearly any platform, has an open architecture and is freely distributed. SPICE is used on essentially all NASA planetary missions, and has been applied in the astrophysics, space physics and earth science domains as well. It was ready for use on the Russian Mars 96 mission and is available for any other international application.

SPICE data and companion software are used by cartographers at many institutions in the U.S. and elsewhere. This brief "tutorial" is intended to introduce SPICE to potential new users, to update current customers on recently added and planned new capabilities, to collect suggestions for improvements and to offer a few minutes for current and potential users to meet and exchange information on SPICE-based capabilities offered or needed.

Mr. Acton will provide information about SPICE products available from recent missions such as Galileo, Mars Pathfinder and Mars Global Surveyor, and will also discuss SPICE availability from past and future missions.