

What's happening with SPICE at NAIF? M. Costa Sitja¹, ¹Navigation and Ancillary Information Facility (NAIF), California Institute of Technology/Jet Propulsion Laboratory, MS T1721, 4800 Oak Grove Drive, Pasadena, CA 91109, Marc.Costa.Sitja@jpl.nasa.gov.

Introduction: SPICE is an information system the purpose of which is to provide scientists and engineers the observation geometry needed to plan scientific observation and to analyze the data returned from these observations. SPICE is comprised of a suite of data files, usually called kernels, and software -mostly sub-routines [1]. A user incorporates a few of the subroutines into their own program that is built to read SPICE data and compute the needed geometry parameters for whatever task is at hand.

SPICE is offered by The Navigation and Ancillary Information Facility (NAIF), a node of NASA's Planetary Data System (PDS).

Overview: This talk will provide an overview of the current activities that take place at and capabilities and data available from NAIF. It will briefly touch on the continuing development of the current SPICE toolkit [2], development of the next generation SPICE toolkit (SPICE2.0), recently released new versions of the web interface to SPICE, WebGeocalc, and the 3D mission trajectory visualization application, SPICE-Enhanced Cosmographia. It also discusses SPICE application within the current US and international planetary missions, and on-going archiving of SPICE data in the PDS.

References: [1] Acton, C.H. (1996) PSS, 44 No. 1, pp. 65-70. [2] Acton C.H., Bachman N.J., Semenov B.V., Wright E.D. PSS (2017), DOI 10.1016/j.pss.2017.02.013.

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