

NAIF Node

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**MC Face-to-Face Meeting
Westwood, California
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Mission Archiving

- Archiving for all on-going PDS3 missions is proceeding relatively smoothly and on time
- LADEE
 - Archive is in good shape, but is in PDS3 style (labels and organization)
 - The SPICE data are fully usable—no problems at all
 - NAIF must catch up in converting the archive to PDS4 style
 - Will happen very shortly
 - Delayed due to work on the N65 Toolkit
- Whether or not to convert completed and on-going archives to PDS4 remains an open question
- Restoration work for Magellan, Galileo, Phoenix and LCROSS remains on hold. (Some possible work on Voyager also remains on hold.)

Staffing

- “SPICE is SPICE,” so NAIF provides very little support to PDS4 working groups and tiger teams
- NAIF has a staffing issue outside of the PDS purview
 - Way behind on core SPICE development work
 - Newly requested DSN improvement and modernization tasks
 - Newly requested Air Force orbital debris tracking system
 - (not yet confirmed)

Software - 1

- Need to re-do pieces of software used to produce labels for SPICE in PDS4
 - Possibly the LACE tool could be used for part of this (TBD)
- WebGeocalc V 1.0 is seeing quite a bit of use from around the globe
 - Trying to find means to develop it further
- Building on efforts of two high school summer interns to demonstrate connecting SPICE with a mission visualization tool–Cosmographia
 - Both the tool and the connection process need work
 - Question as to whether PDS as a whole has any interest in seeing this move forward? Under what conditions?

Software - 2

- Version N65 SPICE Toolkit is available
 - 47 “environments” are offered
 - Offers substantial performance improvement in some scenarios, plus many other new and improved items
 - Read the “whats.new” file for details
- Focus now is on..
 - Finishing the tessellated plate portion of the Digital Shape Kernel (DSK), resulting in a new Toolkit release
 - Maybe this winter?
 - Finishing the Java Native Interface (JNI) Toolkits
 - Release in new Toolkit by ???
 - Lots of “small stuff” that didn’t make it into N65

Other News

- Rosetta is silently making substantial use of SPICE
 - Some folks appear to be using the alpha-test shape model (Digital Shape Kernel)
 - Supposedly to help with landing site selection, maybe more?
 - NAIF has been essentially disconnected from the project by NASA/JPL travel policies
 - At COSPAR Tom Duxbury was told by some Japanese they intend to use SPICE on Hayabusa-2
 - ESA's ExoMars 2016 Project has now officially requested substantial NAIF/SPICE support
 - Don't know if/how NAIF can handle this
 - Still a few openings in the October training class
- 8/27/14
- http://naif.jpl.nasa.gov/naif/WS2014_announcement.html