Rules Regarding Use of SPICE

https://naif.jpl.nasa.gov/naif/rules.html

IMPORTANT! Please read in its entirety this list of rules regarding use of SPICE components. Included in these rules, although not specifically called out as such, are provisions that collectively provide a "SPICE Software License." If you have any questions about these rules please contact the NAIF Manager before embarking on use of SPICE.

Only a Recommendation

While SPICE is widely used, its use is not a requirement of NASA's Planetary Science Division, NASA's Planetary Data System, or the International Planetary Data Alliance.

Acknowledgement

Acknowledgement in your publications, tools and findings of use of SPICE or NAIF/PDS resources, and of the teams that provided the data used to make SPICE kernels, is encouraged; such community support will help ensure NASA will continue to fund the maintenance and further development of the SPICE system. Please check here for details.

Getting Help from NAIF

NAIF is limited in the amount of help that may be offered with regard to SPICE. Prospective users of SPICE, including flight projects, proposers to NASA AOs, technology endeavors, and individual users, should carefully consider these limitations. Read the information on Support from NAIF available from this website.

Export

SPICE software has been designated "Technology and Software Publicly Available" (TSPA) for export control purposes. As a result the export of SPICE software and related documentation is not restricted, and is independent of and not limited by export agreements for specific flight projects.

However, anyone outside of the NAIF Group who produces a derived product incorporating SPICE software must obtain her/his own export designation.

It is the finding of NASA's export control official that none of the SPICE system data, software, training or consultation are used for or useful in the design, fabrication, or operations of spacecraft systems or instruments, and thus publication or provision is not restricted under ITAR.

To the extent that any SPICE information would take the form of software source code or non public technical data that is beyond the scope and nature of the scientific and performance information contained in the SPICE description provided to NASA, ITAR restrictions could apply.

Publication or provision of project-specific SPICE data could be restricted under a flight project's own programmatic rules unrelated to ITAR regulations.

Clearance for Distribution

JPL Document Review has issued Clearance CL#05-2438 for the distribution of SPICE products via the NAIF server.

Obtaining the SPICE Toolkit

To meet NASA/JPL requirements and to better ensure getting the correct products, persons wishing a copy of the NAIF-supported SPICE Toolkit or any auxiliary utility programs should obtain it/them from this web site or from an official NASA flight project distribution. (Also see "Toolkit Redistribution" below.)

Toolkit Redistribution

Redistribution of the unmodified SPICE Toolkit, such as from a mirror site, is prohibited without prior, written clearance from the NAIF manager. However, including the SPICE Toolkit modules (source and object code), documentation, and relevant SPICE Toolkit programs and allied User Guides as part of a package supporting a customer-built SPICE-based tool is entirely appropriate. This includes providing a new 3rd party interface to the SPICE Toolkit, subject to the relevant rules listed elsewhere on this webpage.

Limitation of Supported Environments

NAIF is unable to provide SPICE Toolkits for any environments other than those specifically listed on the "Toolkit" and "Utilities" links, and underlying pages.

Modifications to SPICE Code

To support code portability and to promote user understanding of the algorithms and models used within SPICE, NAIF has chosen to provide customers with well documented source code. NAIF cannot preclude you from modifying this code, but we strongly recommend against doing this. If you do modify any SPICE code NAIF will be unable to provide any customer support. If you do modify SPICE code be sure to clearly note this in the header so future users of the modified code will understand these circumstances.

Limitations of NAIF Support

NAIF is unable to provide support to users of 3rd party SPICE-based software, including any modified SPICE code and any new modules not written by NAIF. Questions or suggestions about SPICE Toolkits and utilities written by third parties in other languages should be directed to the relevant authors. Please also refer to the <u>Support</u> webpage.

SPICE and Open Source

NASA recently reviewed SPICE toolkit licensing in the process of moving PDS software to open source, and <u>specifically exempted</u> it from certain open source provisions. In addition to these exemptions, to provide flight project and science users with the highest assurance of correct operation, and further, to lessen the possibility of building in restrictions that might prohibit future evolution of the Toolkit code, NAIF has elected to not accept any external open-source-style contributions to the Toolkit. NAIF is open to receiving written suggestions for

additions or changes to Toolkit functionality, which might or might not be implemented by NAIF.

Kernels Distribution

SPICE kernels placed on the NAIF server may be downloaded and used by anyone, consistent with the other rules found on this web page.

Kernels Redistribution

Redistribution of SPICE kernels distributed by NAIF is permitted as long as they have not been modified. If a kernel distributed by NAIF has been modified in any way, any embedded or otherwise allied attribution of the original kernel producer must be replaced with the name and institution of whomever has made the last modification. Redistribution of kernels distributed by any other entity is subject to the rules on and of that entity.

Creation of SPICE Kernels

All users of SPICE may carefully create SPICE kernels, using appropriate methods (see "Intro to Kernels" in the <u>SPICE tutorials collection</u>). Such self-made kernels should be annotated with appropriate metadata (see <u>"comments" tutorial</u>) and validated before being used by yourself or distributed to others.

Modifications to SPICE Kernels

All users of SPICE may "modify" kernels received from any source, although such modifications must be limited to appropriate actions (see "Intro to Kernels" in the SPICE tutorial collection). Such self-modified kernels should be annotated with appropriate metadata (see "comments" tutorial) and validated before being used by yourself or distributed to others. The file name must also be changed to help avoid confusion.

Commercial Use of SPICE

Use of SPICE components in commercial products is allowed, subject to the substantial restrictions on user support noted under "Getting Help from NAIF" above. No fees or licensing are required. Acknowledgement of the use of NASA's SPICE system is encouraged.

Use of SPICE by Other than NASA Planetary Flight Projects

Decisions to use SPICE by other than NASA planetary projects, including international projects, are up to the responsible agency. In such cases NASA may or may not agree to provide some level of NAIF consultation or participation: the requesting agency and NASA's Planetary Science Division must decide such questions, with concurrence by NAIF.

Termination

NASA, JPL and NAIF reserve the right to terminate support of the SPICE system, or of NAIF support to any project or other entity, at any time.

Questions on Rules?

If you have any questions about the rules and requests listed above please contact the <u>NAIF Manager</u> or a cognizant NASA official before using SPICE components.

Sponsorship

The SPICE system is implemented and maintained by Caltech/Jet Propulsion Laboratory under contract to the National Aeronautics and Space Administration. It is sponsored by the Planetary Science Division of NASA's Science Mission Directorate.

Disclaimer applicable to all NAIF-provided software

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