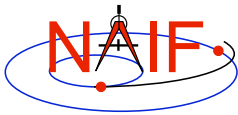# Finding SPICE Components

An Introduction to the NAIF Server
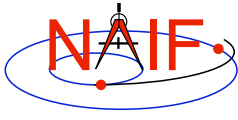
March 2006

- **In the U.S. many SPICE "products" are available from the NAIF server**
  - Access is via the http or ftp protocol
  - See next page for URLs

- **SPICE products made outside of JPL are controlled by the producing organization. Some may be available from the NAIF server, some may be available at other public servers, or on restricted servers, or not at all.**
  - Some of these SPICE products may eventually become accessible via NAIF after they are formally archived within NASA's Planetary Data System.

NAIF URLs

• **NAIF home page**
   http://naif.jpl.nasa.gov
      • **Here you may access all SPICE products available to NAIF***
         - **kernels (mission ops, mission archived, or generic)**
         - **software (Toolkits and individual application programs)**
         - **documents**
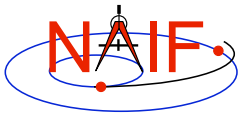   - **tutorials**
         - **problem solving tips**

• **SPICE announcements (by NAIF)**
   http://naif.jpl.nasa.gov/mailman/listinfo/spice_announce

• **SPICE discussion (by anyone)**
   http://naif.jpl.nasa.gov/mailman/listinfo/spice_discussion

* Note: some SPICE products made outside of JPL may not be available to NAIF
until formally archived with the Planetary Data System (PDS), or perhaps never.

Mission Ops Example - 1

ftp://naif.jpl.nasa.gov/pub/naif/CASSINI/kernels/

Mission Ops Example - 2

Navigation and Ancillary Information Facility

spk

…/CASSINI/kernels/spk

```
=============================================================
                  Jet Propulsion Laboratory
          * * *    W A R N I N G   * * *
                      Property of the
                  UNITED STATES GOVERNMENT

   This computer is funded by the United States Government and
operated by the California Institute of Technology in support of
ongoing U.S. Government programs and activities.  If you are not
authorized to access this system, disconnect now.  Users of this
system have no expectation of privacy. By continuing, you consent
     to your keystrokes and data content being monitored.
=============================================================
```
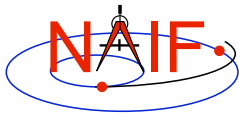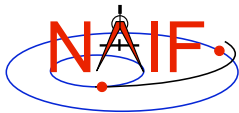
Login successful. Have fun.

Kernel file
Kernel file detached label (text)
Kernel file naming conventions

Path: [naif.jpl.nasa.gov][pub][naif][CASSINI][kernels][spk]

Name	Size	Kind	Last Modified
000202R_SK_LP0_V1P32.bsp	238K	Document	Thu, Feb 21, 2002, 12:00 AM
000202R_SK_LP0_V1P32.bsp.lbl	2K	Document	Thu, Feb 21, 2002, 12:00 AM
000202R_SK_V1P32_V2P12.bsp	502K	Document	Thu, Feb 21, 2002, 12:00 AM
000202R_SK_V1P32_V2P12.bsp.lbl	2K	Document	Thu, Feb 21, 2002, 12:00 AM
000202R_SK_V2P12_EP15.bsp	198K	Document	Thu, Feb 21, 2002, 12:00 AM
000202R_SK_V2P12_EP15.bsp.lbl	2K	Document	Thu, Feb 21, 2002, 12:00 AM
000203_SE_JUP156.bsp	4,968K	Document	Thu, Feb 21, 2002, 12:00 AM
000203_SE_JUP156.bsp.lbl	3K	Document	Thu, Feb 21, 2002, 12:00 AM
000331R_SK_LP0_V1P32.bsp	307K	Document	Thu, Feb 21, 2002, 12:00 AM
000331R_SK_LP0_V1P32.bsp.lbl	3K	Document	Thu, Feb 21, 2002, 12:00 AM
000331R_SK_V1P32_V2P12.bsp	622K	Document	Thu, Feb 21, 2002, 12:00 AM

aareadme.txt

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Generic Kernels Example - 1

Navigation and Ancillary Information Facility

generic_kernels

ftp://naif.jpl.nasa.gov/pub/naif/generic_kernels/

```
=============================================================
                  Jet Propulsion Laboratory
          * * *    W A R N I N G   * * *
                      Property of the
                  UNITED STATES GOVERNMENT

   This computer is funded by the United States Government and
operated by the California Institute of Technology in support of
ongoing U.S. Government programs and activities.  If you are not
authorized to access this system, disconnect now.  Users of this
system have no expectation of privacy. By continuing, you consent
     to your keystrokes and data content being monitored.
=============================================================
```
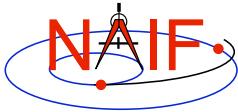
Login successful.

Path: [naif.jpl.nasa.gov][pub][naif][generic_kernels]

Name	Size	Kind	Last Modified
fk	-	Folder	Wed, Sep 19, 2001, 12:00 AM
lsk	-	Folder	Fri, Jul 17, 1998, 12:00 AM
pck	-	Folder	Sat, Apr 2, 2005, 1:07 AM
plate_model	-	Folder	Thu, Jan 13, 2005, 6:23 PM
spk	-	Folder	Thu, Oct 18, 2001, 12:00 AM
stars	-	Folder	Fri, May 7, 2004, 12:00 AM

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Generic Kernels Example - 2

Navigation and Ancillary Information Facility

ftp://naif.jpl.nasa.gov/pub/naif/generic_kernels/spk/satellites/

satellites

```
==================================================
|            Jet Propulsion Laboratory            |
| * * *      W A R N I N G      * * *             |
|              Property of the                    |
|          UNITED STATES GOVERNMENT               |
|                                                 |
|  This computer is funded by the United States Government and |
| operated by the California Institute of Technology in support of |
| ongoing U.S. Government programs and activities.  If you are not |
| authorized to access this system, disconnect now.  Users of this |
| system have no expectation of privacy. By continuing, you consent |
|     to your keystrokes and data content being monitored. |
==================================================
```
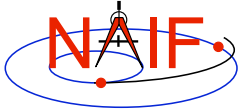
Login successful. Have fun.

Path: [naif.jpl.nasa.gov][pub][naif][generic_kernels][spk][satellites]

Name		Size	Kind	Last Modified
aa_summaries.txt	**"BRIEF" summary of all SPK files in the directory**	48K	ASCII Text	Wed, Apr 23, 2003, 2:17 AM
jup068.bsp		1,292K	Document	Wed, Jan 29, 1997, 12:00 AM
jup068.cmt	**Typical SPK file**	535 bytes	Document	Fri, Jun 13, 2003, 12:00 AM
jup069.bsp		1,314K	Document	Sat, Oct 23, 1999, 12:00 AM
jup069.cmt	**Comments, also placed inside the SPK file**	2K	Document	Sat, Oct 23, 1999, 12:00 AM
jup073-hst.bsp		10,408K	Document	Fri, Sep 25, 1998, 12:00 AM
jup073-hst.cmt		692 bytes	Document	Fri, Jun 13, 2003, 12:00 AM
jup073s.bsp		6,092K	Document	Thu, Oct 17, 1996, 12:00 AM
jup073s.cmt		592 bytes	Document	Thu, Oct 17, 1996, 12:00 AM
jup100-95-05.bsp		4,096K	Document	Sun, Nov 22, 1998, 12:00 AM
jup100-95-05.cmt		2K	Document	Fri, Jun 13, 2003, 12:00 AM

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Mission Archived Kernels

Navigation and Ancillary Information Facility

This is the PDS web page at which you'll arrive if you click on "PDS Archived SPICE Kernels" on NAIF's "Data" web page.

"Spice" data has been pre-selected for you.

Select a "Mission," or an "Instrument Host" (they are not always identical).

Select START and STOP dates if desired.

Then press "GO" and see what turns up!

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