

Navigation and Ancillary Information Facility

Using Module Headers

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Topics

Navigation and Ancillary Information Facility

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Module Header Purpose

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- **NAIF uses module “headers” to provide SPICE users with detailed information describing a module’s function and design.**
 - In FORTRAN, C and MATLAB the “headers” are comment blocks inserted in the source code
- **All Toolkit distributions include HTML versions of the module headers.**
- **Using the HTML formats is usually the best approach because of hyperlinking with other NAIF documentation**
- **The next charts provide the header locations**



Fortran Module Header Locations

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- **In FORTRAN Toolkits:**

- **<path to SPICELIB>/toolkit/src/spicelib/<name.f or <name>.for**
- In most cases there is a single “header” at the top of the source code. For cases where a FORTRAN module has multiple entry points, there are additional “headers” at each entry point. For example:

- » “keeper.f” has entries for:

- FURNISH, KTOTAL, KINFO, KDATA, KCLEAR, and UNLOAD

- **HTML versions of the headers:**

- **<path to SPICELIB>/toolkit/doc/html/spicelib/index.html**



C Module Header Locations

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- **In C Toolkits:**
 - **<path to CSPICE>/cspice/src/cspice/<name>_c.c**
- **HTML versions of the headers:**
 - **<path to CSPICE>/cspice/doc/html/cspice/index.html**



Icy Module Header Locations

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- In IDL (“Icy”) toolkits, two sets of headers are provided.
 - Icy headers in HTML format:
 - » `<path to icy>/icy/doc/html/icy/index.html`
 - CSPICE headers, in text and HTML formats:
 - » `<path to icy>/icy/src/cspice/<name>_c.c`
 - » `<path to icy>/icy/doc/html/cspice/index.html`
- The information provided in an “Icy” wrapper is minimal in some cases; the corresponding CSPICE wrapper provides more detail.
 - A link to the corresponding CSPICE wrapper is provided in the Icy wrapper.

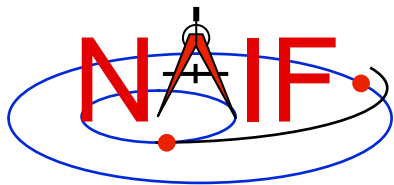


Mice Module Header Locations

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- In Matlab (“Mice”) toolkits, two sets of headers are provided.
 - Mice headers in HTML format:
 - » `<path to Mice>/mice/doc/html/mice/index.html`
 - » The user can also access the information presented in the HTML document via the Matlab `help` command, e.g.

```
>> help cspice_str2et
```
 - CSPICE headers, in text and HTML formats:
 - » `<path to Mice>/mice/src/cspice/<name>_c.c`
 - » `<path to Mice>/mice/doc/html/cspice/index.html`
- The information provided in a “Mice” wrapper is minimal in some cases; the corresponding CSPICE wrapper provides more detail.
 - A link to the corresponding CSPICE wrapper is provided in the Mice wrapper.



Examine a Typical Header

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- As example, look for and examine one of these headers:

FORTRAN	C	IDL (Icy)	MATLAB (Mice)
SPKEZR	spkezt_c	cspice_spkezt	cspice_spkezt
STR2ET	str2et_c	cspice_str2et	cspice_str2et