



# Using Module Headers

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## Module Header Purpose

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Navigation and Ancillary Information Facility

- **Module “headers” are provided for all Toolkit modules, whether FORTRAN, C, IDL, or MATLAB Toolkits.**
  - Depending on the language, these “headers” may be found within the source code, under the `.../doc` directory, or both. (All headers are available from the Toolkit API Reference Guide.)
- **This is the fundamental source for detailed user information and examples on how to use the module.**
  - For some families of modules (e.g. SPK), additional information about the whole family is provided in a “required reading” document (e.g. `.../doc/spk.req`)



## **FORTRAN Module Header Locations**

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- **For FORTRAN toolkits, the headers are provided within the source code modules.**
  - `<path to SPICELIB>/toolkit/src/spicelib/<name.f or <name>.for`
- **HTML versions of the headers are also available:**
  - `<path to SPICELIB>/toolkit/doc/html/spicelib/index.html`
- **In most cases there is a single “header” at the top of the source code.**
- **In a few 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



## **C Module Header Locations**

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- **For C toolkits the headers are provided in two formats, at two locations.**
  - Plain text, in the source code headers:
    - » `<path to CSPICE>/cspice/src/cspice/<name>_c.c`
  - HTML:
    - » `<path to CSPICE>/cspice/doc/html/cspice/index.html`

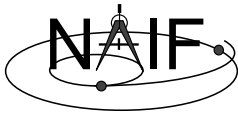


## Icy Module Header Locations

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- For IDL (“Icy”) toolkits, two kinds of headers are provided.
  - Icy wrappers in HTML format:
    - » `<path to icy>/icy/doc/html/icy/index.html`
    - » This is a restricted set of information, and refers the user to the corresponding cspice header for details.
  - 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; the corresponding CSPICE wrapper provides more detail.



## Mice Module Header Locations

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- For MATLAB (“Mice”) toolkits, two kinds of headers are provided.
  - Mice wrappers in HTML format:
    - » `<path to Mice>/mice/doc/html/mice/index.html`
    - » This is a restricted set of information, and refers the user to the corresponding cspice header for details.
    - » The user can also access the information presented in the HTML document via the MATLAB `help` command.
  - 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; the corresponding CSPICE wrapper provides more detail.



## Look at a Typical Header

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- **Check one out... whether FORTRAN, C, Icy or Mice.**
- **Suggestion, look for one of these headers:**
  - SPKEZR, spkezr\_c, cspice\_spkezr, cspice\_spkezr
  - STR2ET, str2et\_c, cspice\_str2et, cspice\_str2et