Help Documentation and Search Capabilities in the Herschel DP System

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(on behalf of the Herschel and Instrument Editorial Boards)

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Presentation Outline

- *<u>NOTE:</u> There is quite a bit of documentation → hierarchy.*

1. Documentation overview
2. User Manuals:
   a. *HowTos for HIPE*
   b. *User's Manual*
   c. *User's Reference Manual*
3. Instrument-specific Documentation
4. Searching the Documentation
5. Help and Context Help
6. Contributions and Updates

Overview of DP Help Documentation for Users

- Within HIPE – 3 direct forms of help from main HIPE pulldown menu.
  - Contents (provides full overview of all documentation).
  - **Help appears in default browser – new tab.**
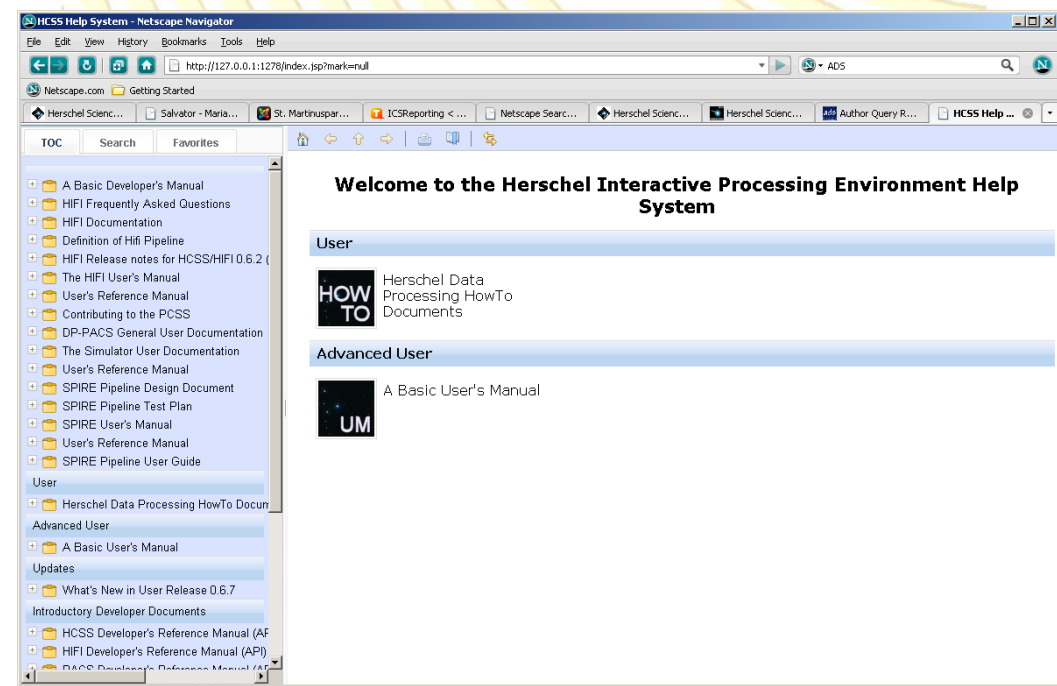
Overview of DP Documentation Cont.

- **Release notes and working in HIPE.** These access specific components (*What's New* in a given release, and *How to use HIPE* component of the HowTos document).

I. User Docs: HowTos Documentation for HIPE

- The main introductory document for using the HIPE interface to the Herschel DP system. Includes:
  - Introduction to HIPE and how to work with it.
  - Basics of displaying spectra/tables/images
  - Basics of how to run instrument pipelines from an interactive session (high level).

To get to a PDF view.

Click

On the <u>Browser</u> page of documentation. This provides a view of the PDF version of the manual – then print it!

Herschel Data Processing
HowTo Documents

version 0.4, Document Number: HERSCHEL-HSC-DOC-1199
14 November 2008

II. User Manuals: DP Basic User's Manual

- The DP system can be scripted. Running scripts can be done in either the HIPE or JIDE (development) environments.

A Basic User's Manual

Scripting in the Herschel Data Processing System

version 0.24.1730, Document Number: HERSCHEL-HSC-DOC-0517
14 October 2008

III. User's Manuals: User's Reference Manual

- This contains help on all task commands to be found in the system.

User's Reference Manual

Herschel Data Processing

version 0.2.226 , Document Number: HERSCHEL-HSC-DOC-0935
14 November 2008

Table of Contents

Instrument Specific DP Documentation

- For each of the ICCs there is a set of documentation that has *primarily* been created for their own *instrument and calibration scientists*.

- User manuals from the ICCs often contain developing or instrument-specific interactive software documentation.
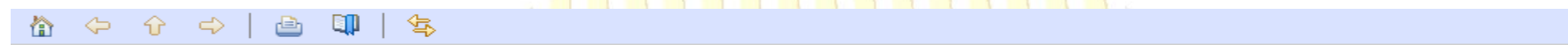
Help on a Given Task

- A right click on the Task name in the HIPE Tasks or Variables view provides a pull-down menu of options.

- Use of this context help takes the user to the User Reference Manual entry for the task.
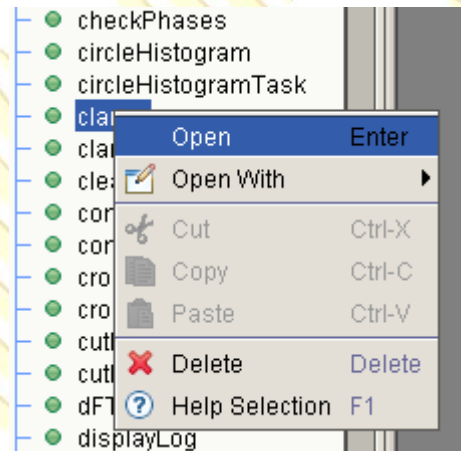
Context Help

3.125. GaussFitTask

Full Name:	herschel.ia.toolbox.fit.GaussFitTask
Alias:	GaussFitTask
Type:	Java Task -
Import:	from herschel.ia.toolbox.fit import GaussFitTask
Category:	generic task

Description

generic module: GaussFitTask

Task shell around the package herschel.ia.numeric.toolbox.fit. Both a command line and a GUI interface are provided. With the GUI interface there is more of the Fitter package accessible than on this tasks command line. However not everything possible within the fitter package is accessible via this task, GUI or otherwise. Most text fields in the GUI accept either numerics or JIDE variables or JIDE expressions.

Example

Example 1: GaussFitTask

```
<pre>
from herschel.hifi.generic.task import GaussFitTask
# Assume that `tt' and/or `data' are Double1d's
# usage on command line:
ft = GaussFitTask()( x=tt, y=data )
ft.fitter = "LevenbergMarquardtFitter"
```
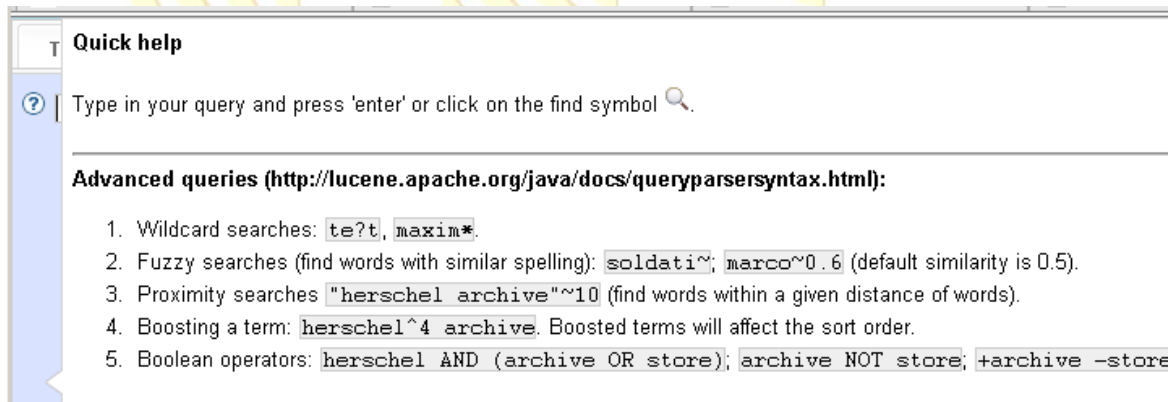
Searching the Documentation

- By default – Table of Contents (TOC) shown.
- Click on "Search" tab within the browser window to search for appropriate documentation.
- Hovering mouse over the ⑦ button provides information on possible search queries.

Quick help

Type in your query and press 'enter' or click on the find symbol 🔍.

Advanced queries (http://lucene.apache.org/java/docs/queryparsersyntax.html):

1. Wildcard searches: `te?t`, `maxim*`.
2. Fuzzy searches (find words with similar spelling): `soldati~`; `marco~0.6` (default similarity is 0.5).
3. Proximity searches `"herschel archive"~10` (find words within a given distance of words).
4. Boosting a term: `herschel^4 archive`. Boosted terms will affect the sort order.
5. Boolean operators: `herschel AND (archive OR store)`; `archive NOT store`; `+archive -store`.

Search Results

- Results are provided with the first dark blue line providing a link to the area of the documentation where the search result was found.

- Click on the link to show in the window.

Contributors and Updates

- *Herschel Editorial Board* (includes representatives from all parts of the system):
  - Monthly telecons
  - Updates to User's Manual and HowTo's approx. every 3 months
  - Future:
    - More HowTos on high-level tasks
    - Instrument-specific data reduction guides/manuals.

- *HIFI/PACS/SPIRE Editorial Boards*
  - Responsible for instrument-related manuals.
  - Typically can feed in to User's Manual and HowTo's.

More Help

- A set of Frequently Asked Questions (FAQs) is available in the documentation browser, and here we hope to get your contributions too – over the next 5 years or so.

- Website – with much general information as well as DP information – for HSC at
  - http://herschel.esac.esa.int

- Helpdesk:
  - If it isn't apparently documented, then you can ask the HSC Helpdesk
  - This is available via the HSC website at ESAC. Or more directly at.
    - http://herschel.esac.esa.int/esupport/
    - Login and post your question.
    - Note: further Helpdesk FAQs also presented here on general aspects of interacting with the HSC (not just Herschel DP).