



Help Documentation and Search Capabilities in the Herschel DP System

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Presentation Outline

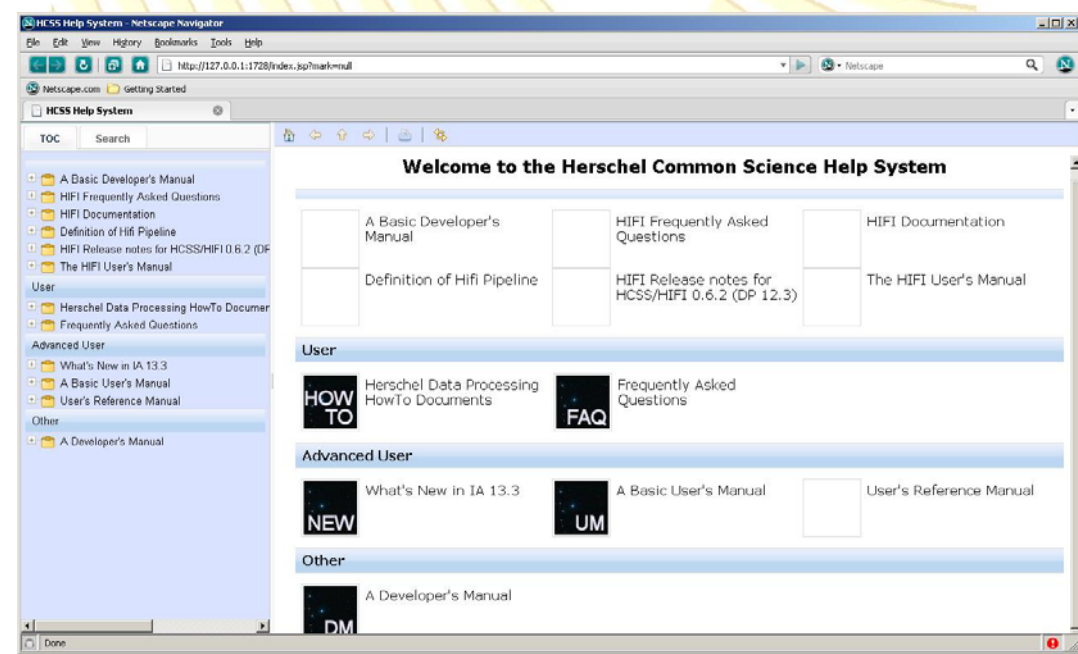
- NOTE: *There is quite a bit of documentation → hierarchy.*
- 1. Documentation overview
- 2. User Manuals:
 - a. *HowTos for HIPE*
 - b. *User Manuals: Basic User's Manual*
 - c. *User Manuals: User's Reference Manual*
- 3. Developer's Manual
- 4. Instrument-specific Documentation
- 5. Searching the Documentation
- 6. Help and Context Help
- 7. Contributions and Updates

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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.**

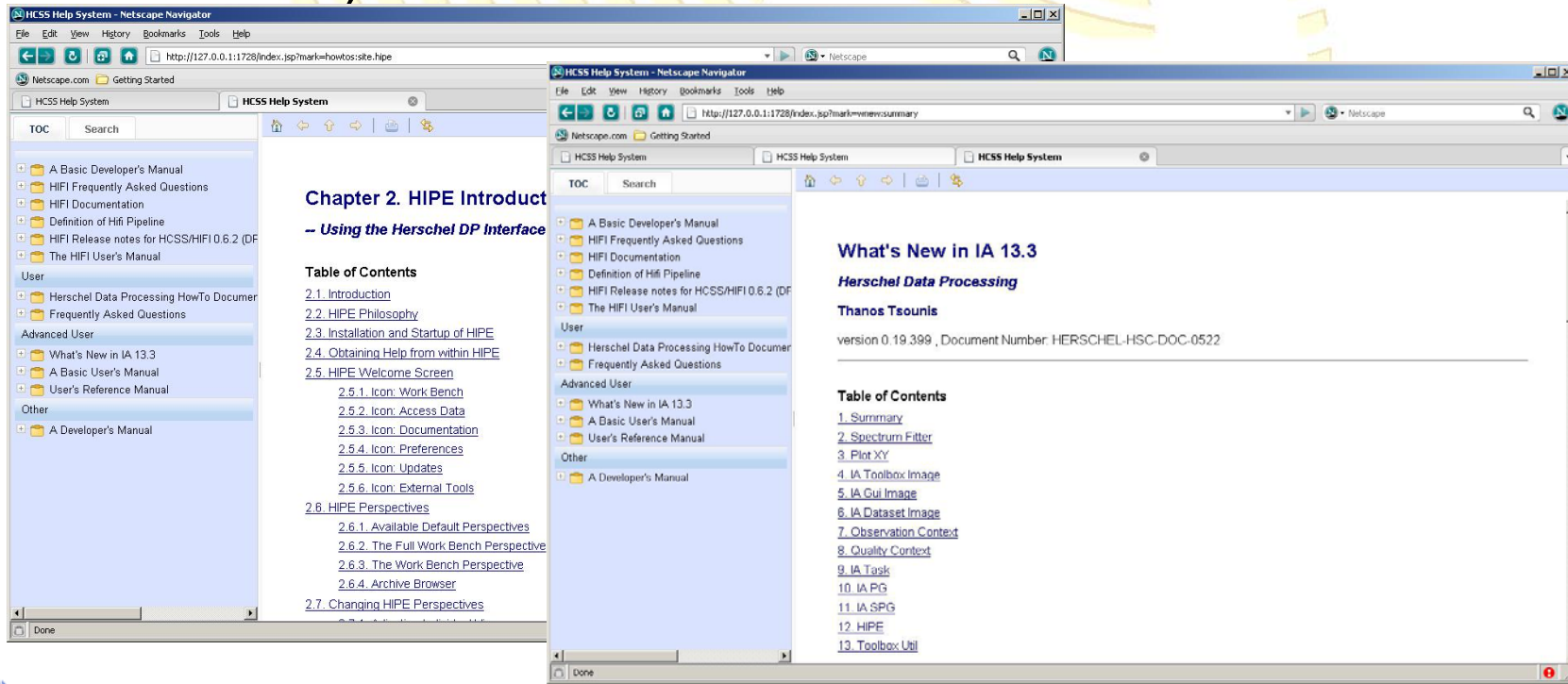


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Overview of DP Documentation Cont.

- 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).



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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 Browser 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



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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.
- DP Basic User's Manual explains more the command-line driven functions of the DP system (more advanced users).

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

Table of Contents

[The Herschel Common Science System and Data Processing \(DP\)](#)

- [1. Brief Overview](#)
- [2. Availability of DP and Operating Systems](#)
- [3. Related Documentation](#)
- [4. Versioning](#)
- [5. What's New and Previous Versions of DP User's Manual](#)
- [6. List of Contributors](#)

[1. HCSS Downloading and Installation](#)

- [1.1. Introduction](#)
- [1.2. Platform](#)
- [1.3. Minimum System Requirements](#)
- [1.4. Pre-Installation Requirements](#)
- [1.5. User Installation Procedure](#)
- [1.6. DP Property Initialisation](#)



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

- This contains help on all task commands to be found in the system.
- This manual is produced automatically from the software build, and examples and documentation come from tagged elements in the code by developers of the code.

User's Reference Manual

Herschel Data Processing

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

Table of Contents

[I. Categorized view of Commands](#)

[II. The Herschel Common Science System and Data Processing \(DP\)](#)

[II.1. Brief Overview](#)

[II.2. Availability of DP and Operating Systems](#)

[II.3. Related Documentation](#)

[II.4. Versioning](#)

[1. Numeric](#)

[1.1. Introduction](#)

[1.2. Quick Start](#)

[1.3. Import statements](#)

[1.4. Arrays](#)

[1.5. Toolboxes](#)

[2. Product Access Layer](#)

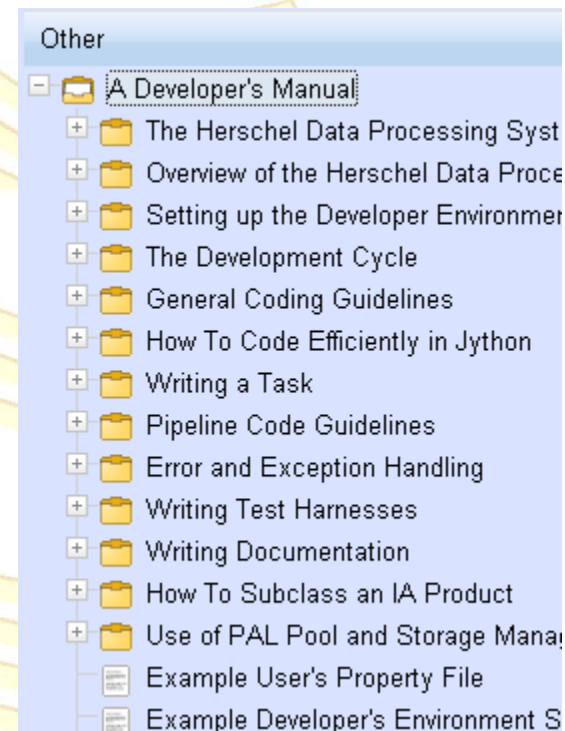
[2.1. Introduction](#)



A Developer's Manual

- This provides information to the potential developer or contributor to the Herschel DP on:

- Coding standards
- Coding guidelines
- Error and exception handling
- Writing documentation for the system
- ...



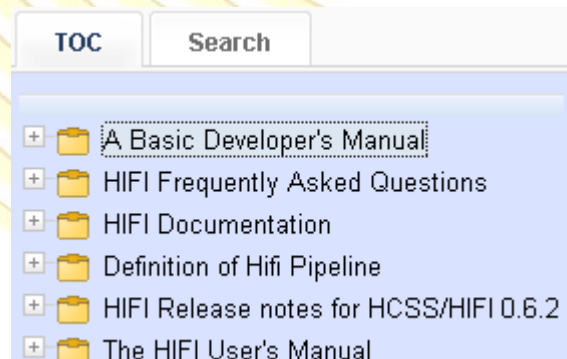
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Instrument Specific DP Documentation


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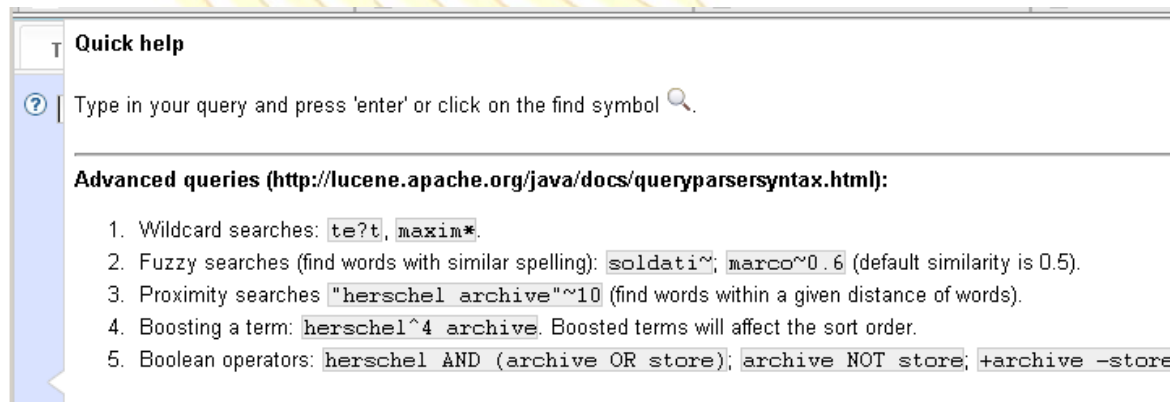
- For each of the ICCs there is a set of documentation that has *primarily* been created for their own *instrument and calibration scientists*.
- Documentation on *pipeline specifications* are particularly notable.
- User manuals from the ICCs often contain developing or instrument-specific interactive software documentation.





Searching the Documentation

- By default – Table of Contents (TOC) shown.
- Click on “Search” tab within the browser window to search for appropriate documentation.
- Search results provided with *context* (like Google) and in user documentation/relevance priority order (e.g. HowTo documents typically first).
- Hovering mouse over the  button provides information on possible search queries.





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.

TOC Search

clamp

2 hits in 1.61s

howtos - 14.6. Image Transformations
14.6. Image Transformations Image representations can be adjusted in the following ways: **Clamp**: or clipping an image. **Crop**: extract a subsection of an image. **Clamp**: or clipping an image. **Rotate**

urm - 3.95. clampTask
- Import: from `herschel.ja.toolbox.image.import.ClampTask` Category: `task/image` Description The **Clamp** ... image by constraining the range of pixels to defined "low" and "high" values. The **clamp** algorithm

14.6. Image Transformations

Image representations can be adjusted in the following ways:

- Clamp: or clipping an image.
- Crop: extract a subsection of an image.
- Clamp: or clipping an image.
- Rotate: rotate image by an arbitrary angle
- Scale: image rescaling in user-selected factors in X and Y.
- Translate: move positive or negative pixel or sky amount of image within the frame.
- Transpose: flip or rotate by $n \times 90$ degrees

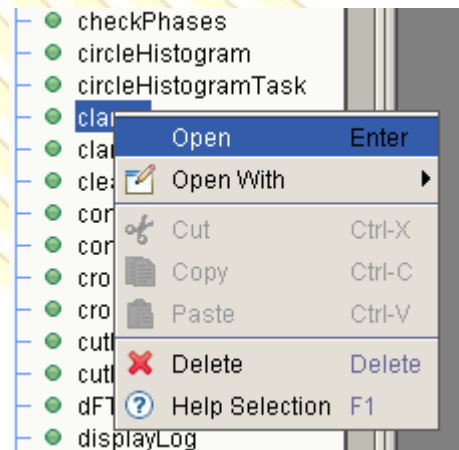
14.6.1. Applying Image Transformations

All image transformations can be applied in the same way. First, select a `simpleImage` in the "Variables" view, then go to the "Tasks" view and select -- from the Applicable Tasks folder -- the appropriate image transformation (*crop*, *clamp*, *rotate*, *scale*, *translate* or *transpose*). To select one of the transformation tasks, double-click on its name on the Tasks view. This will bring up a dialog for the task.



Help on a Given Task

- A right click on the Task name in the HIPE Tasks view provides a pull-down menu of options. The last option provides Help information on the task.
- Use of this context help takes the user to the User Reference Manual entry for the task.
- This can also be done on a variable by a right-click on it in the Variables view.





Contributors and Updates

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- *Herschel Editorial Board* (includes representatives from all parts of the system):
 - Monthly telecons
 - Updates to Basic User's Manual and HowTo's approx. every 3 months
 - Future:
 - More HowTos on high-level tasks (Deconvolution, Spectral Cubes, On-the-Fly Mapping, Point Source Extraction)
- *HIFI/PACS/SPIRE Editorial Boards*
 - Responsible for instrument-related manuals.
 - Typically can feed in to Basic 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).

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