



# Preparing HIPE for SPIRE work

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on behalf of the SPIRE ICC





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# Intro to HIPE and Setup for SPIRE

- Help and Documentation
- SPIRE-specific Setup





# Intro to HIPE and Setup for SPIRE

- Help and Documentation
  - Starting the Help system
  - User Guides, Tutorials and How-Tos
  - Search
  - SPIRE Observer's Manual
- SPIRE-Specific Setup



# The Help and Documentation are accessed in your web browser

- Start the *local* help system by 1 of 2 ways:
  - Menu “Help” -> Help Contents
  - Right-click on variable
    - Help in URM (Users Ref. Manual)
    - Help in DRM (Developers Ref. Manual)
- Also *online* at <http://herschel.esac.esa.int/hipe-doc-11.0/>

# The Help system includes user guides, tutorials and how-tos

TOC Search Glossary Favorites

hcss-9.0.30

Introductory

- Welcome
- Quick Start Guide
- HIPE Owner's Guide

Analysis Tools

- Data Analysis Guide
- Scripting Guide

PACS Data Reduction Guide: Photometry

PACS Data Reduction Guide: Spectroscopy

PACS Public Documents

Reference

- HCSS User's Reference Manual
- HIFI User's Reference Manual
- PACS User's Reference Manual
- SPIRE User's Reference Manual
- Herschel Products Definitions Document

Developer Reference ([how to use](#))

- HCSS Developer's Reference Manual (API)

Welcome to the Herschel Interactive Processing Environment Help System

## SPIRE

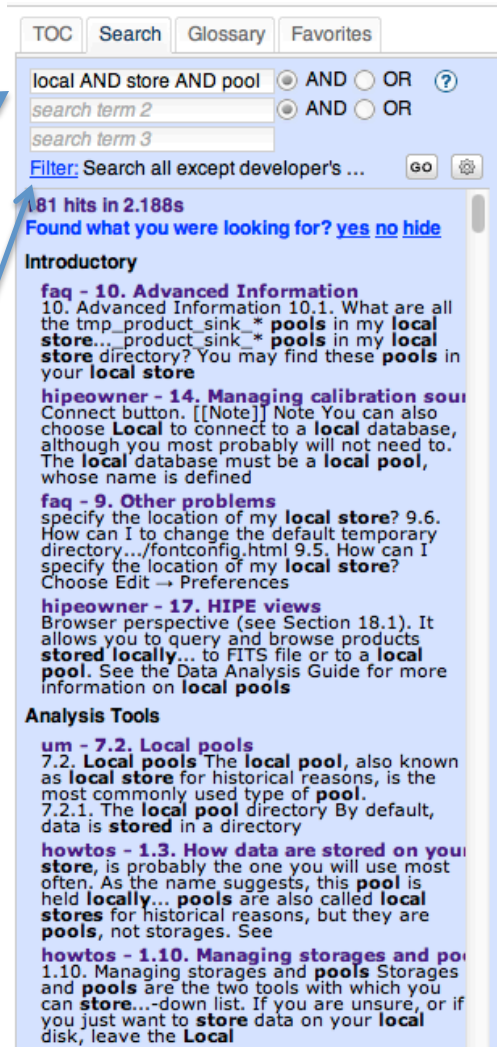
- SPIRE Data Reduction Guide
- Preface
- 1. Introduction
- 2. SPIRE Launch Pad: Data Reduction Overview
- 3. SPIRE Observation Context Data Structure
- 4. SPIRE Calibration Data
- 5. SPIRE Photometer Mode Cookbook
- 6. SPIRE Spectroscopy Mode Cookbook
- 7. SPIRE Visualisation Tools
- 8. Overview of Scripts in HIPE
- 9. Advanced HIPE Tips
- 10. Glossary
- 11. Reprocessing with the SPIA
- 12. References
- SPIRE Pipeline Specification Manual
- SPIRE Instrument and Calibration Page

! [HIPE known issues](#)

Watch us on Follow us on

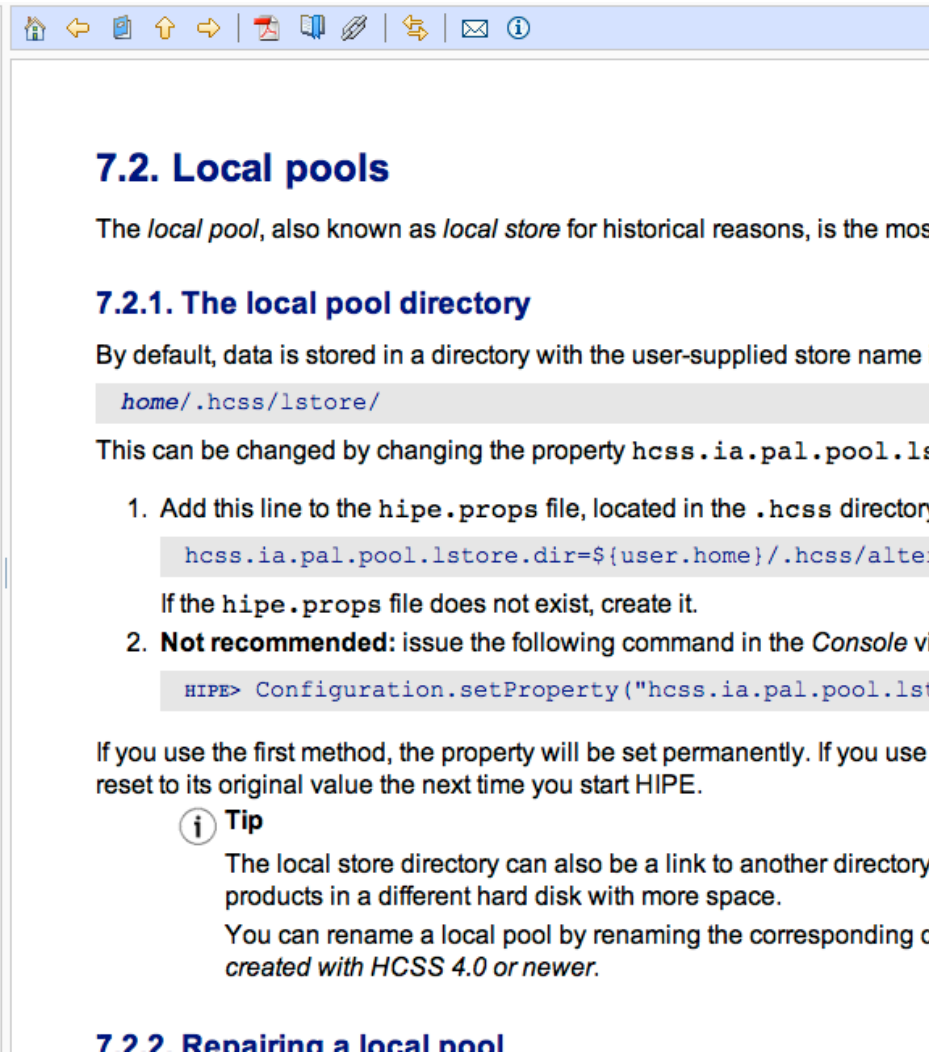
# The Search tab allows filtering by manual

Combine terms with AND for better results



The screenshot shows a search interface with a search bar containing the query "local AND store AND pool". Below the search bar, there are radio buttons for "AND" and "OR", with "AND" selected. The search results show "181 hits in 2.188s" and a list of results including "faq - 10. Advanced Information", "hipeowner - 14. Managing calibration sou", "faq - 9. Other problems", "hipeowner - 17. HIPE views", and "um - 7.2. Local pools".

Filter by specific manuals, or "all but developer's documentation"



The screenshot shows a web page titled "7.2. Local pools". The page content includes a section "7.2.1. The local pool directory" which explains that by default, data is stored in a directory with the user-supplied store name `home/.hcss/lstore/`. It provides instructions on how to change this by adding a line to the `hipe.props` file: `hcss.ia.pal.pool.lstore.dir=${user.home}/.hcss/alter`. A tip section notes that if the `hipe.props` file does not exist, it should be created. A second instruction, marked as "Not recommended", suggests using the `Configuration.setProperty` command in the `Console` view: `HIPE> Configuration.setProperty("hcss.ia.pal.pool.lstore.dir", "${user.home}/.hcss/alter")`. The page also includes a note that if the first method is used, the property will be set permanently, while the second method resets it to its original value.

# The SPIRE Observer's Manual contains essential calibration information

- The Observer's Manual is not included in your HIPE installation
- See “Documentation” on HSC website, or the SPIRE page on NHSC site  
[http://herschel.esac.esa.int/Docs/SPIRE/html/spire\\_om.html](http://herschel.esac.esa.int/Docs/SPIRE/html/spire_om.html)
- Chapter 5 (Calibration) covers several topics useful for understanding SPIRE data



# Intro to HIPE and Setup for SPIRE

- Help and Documentation
- SPIRE-specific Setup
  - Setting up SPIRE calibration
  - Installing the SPIA Plug-in
  - Installing the sample data
  - Checklist document





# A few additional steps will make HIPE ready for SPIRE work

- Detailed checklist is on agenda page
- Install the calibration tree
  - From a jarfile
- Install plug-in for interactive analysis
  - SPIA 1.11
- Install workshop data pools
  - Unpack tarballs in format you'd get for on-demand reprocessing

# Import the SPIRE calibration file from the jarfile we've provided (one-time only)

- Download `spire_cal_11_0.jar` from our site into any working directory
- Run

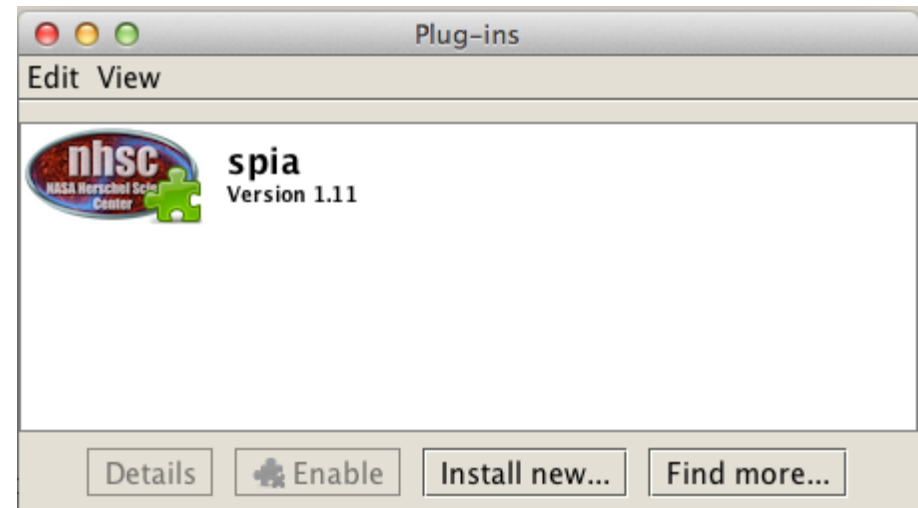
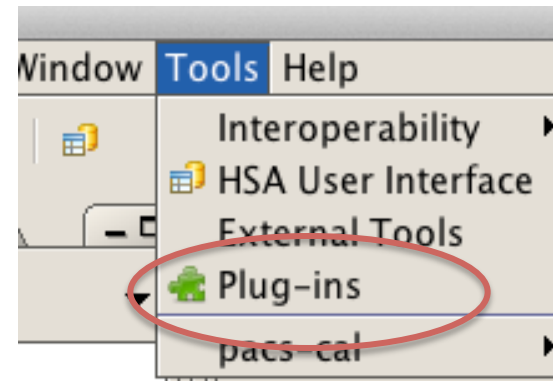
```
cal = spireCal(jarFile="<PATH-TO-FILE>/spire_cal_11_0.jar",saveTree=True)
```
- Output: `Saved to pool: spire_cal_11_0`
- What happens:
  - pool `spire_cal_11_0` is created in Istore directory
  - `~/.hcss/user.props` is created or modified with the `spire.cal.pool` property
- From now on, to load in again:

```
cal = spireCal()
```
- Output:

```
Reading from pool spire_cal_11_0
SpireCal: Calibration tree read from
spire_cal_11_0
```

# Plug-ins are add-on software for HIPE maintained elsewhere

- Install once, use in all HIPE versions
- SPIA plug-in covers Photometry mode
- CASSIS to be covered on Friday



# Follow the checklist linked from the agenda page for SPIA

- DP-SPIRE\_Aug2013\_InstallationChecklist.pdf

## **Install HIPE plugin for SPIRE Photometer Interactive Analysis (SPIA)**

Start up HIPE version 11.0.1

Open Tools -> Plug-ins and select “Install new plug-in”

Delete the <http://> and paste in this URL:

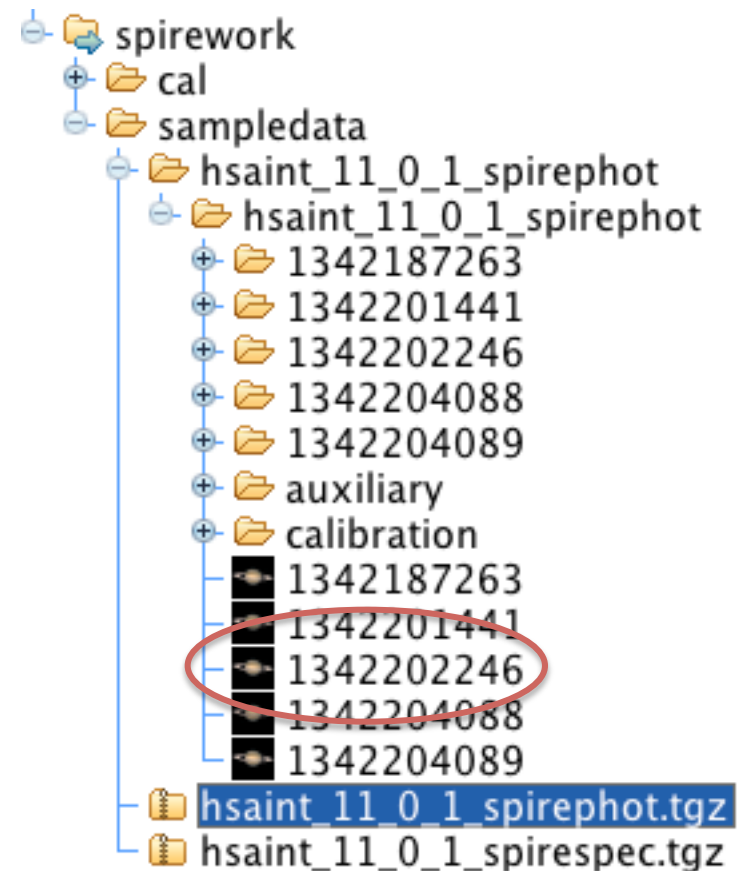
[https://nhscsci.ipac.caltech.edu/spire/DPsoftware/spia/scripts/spia\\_1.11.jar](https://nhscsci.ipac.caltech.edu/spire/DPsoftware/spia/scripts/spia_1.11.jar)

Click the “Install” button.

Now the message “Plug-in installed correctly” should pop up. (If not, please check the URL.). Click “OK”.

# Unpack sample data and register observations with HIPE

- Unpack the tarfiles using Navigator view
- Find the “Saturn” icons and double-click to load into HIPE
- Delete the tarfiles



# The sample data are packaged the same as if you requested HSA reprocessing

- Pools in your lstore directory
- Like HSA reprocessing with Level 3 added
- Lstore has indices only with the data in tarball directory





Wishing you every success  
with your SPIRE data