



Data Access Through the HSA

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HERSCHEL SPACE OBSERVATORY

Data Access: Access to HSA



Herschel Science Centre

http://herschel.esac.esa.int/Science_Archive.shtml

Research & Science Home | ESA Public Web Site | Sci-Tech Portal | Herschel Public Web Site | Herschel Sci-Tech Portal

esa | Herschel Science Centre | European Space Agency

Astrophysics Missions | Planetary Exploration Missions | Solar Terrestrial Science Missions | Fundamental Physics Missions | Science Faculty

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Herschel Science Archive (HSA)

Herschel data products systematically generated by the [Herschel Data Processing pipeline](#) are made available to the users through the Herschel Science Archive (HSA) immediately after the pipeline processing is completed, typically 1-2 days after an observation has been executed. Following the completion of some basic quality control checks, something which may take from a few additional days to weeks, depending on the circumstances, notification e-mails are sent to the data owners that can then be informed about any quality issue affecting their observations.

Access to Herschel Data

To Access the HSA through the **user interface** please use the following link:

Start the HSA User Interface Applet

To run the HSA your web browser must be Java compliant, if not please install the latest Java following the instructions provided [here](#). If you still have problems, go to the [HSA Troubleshooting FAQ](#)

Alternatively, you can access the HSA via a Java Desktop application:

Start the HSA User Interface Web Start

To run the HSA as a desktop application, you must have Java Web Start enabled. Details on what Java Web Start is can be found [here](#).

[HSA Troubleshooting FAQ](#)

By using the HSA, astronomers can search, browse, select and retrieve Herschel data products according to the observations proprietary rights as explained in Chapter 1 of the [Herschel Data Analysis Guide](#).

For every Herschel observation, data populating the HSA consist of the observational products generated by the pipeline containing the scientific data together with the calibration and auxiliary products as described in the [Herschel Data Products](#) section. In addition, associated quality information, generated to support archive users in the assessment of their scientific products, is also included.

The HSA provides data products as FITS format files at different levels of data reduction which can be used for further processing within [HIPE](#) or ...

Herschel General Information

- Herschel Science Centre Home
- Latest News
- Mission Overview
- Science Instruments
- Community Information
- Conferences/Workshops
- Press Releases
- e-News
- Useful links

Herschel Observing

- Introduction and Overview
- Observing Log
- Observing Schedule
- Documentation
- AOTs Release Status
- Tools
- Key Programmes
- Latest AO

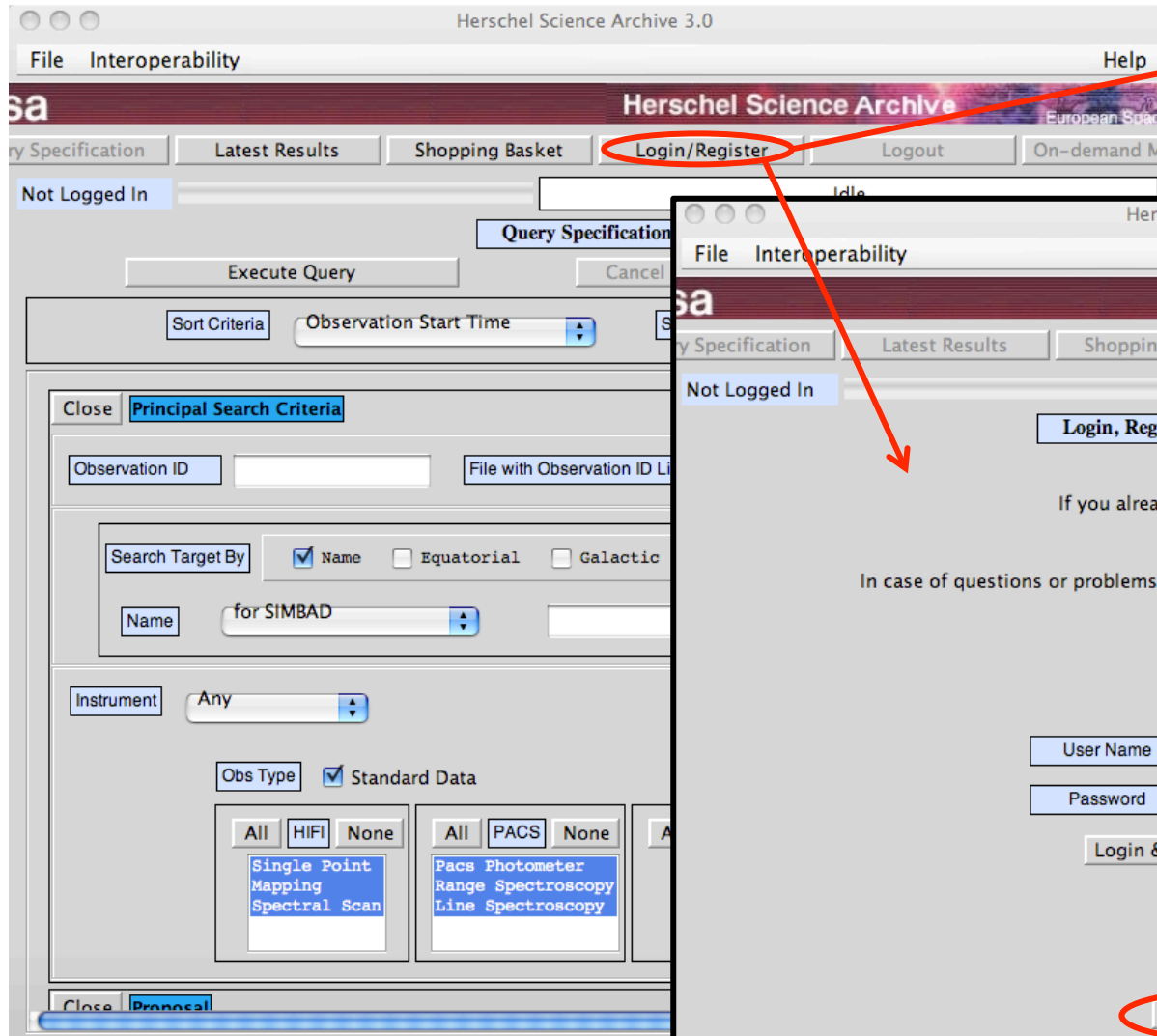
Herschel Data

- Data Processing
- Data Products
- HIPE Download
- HSA Access**

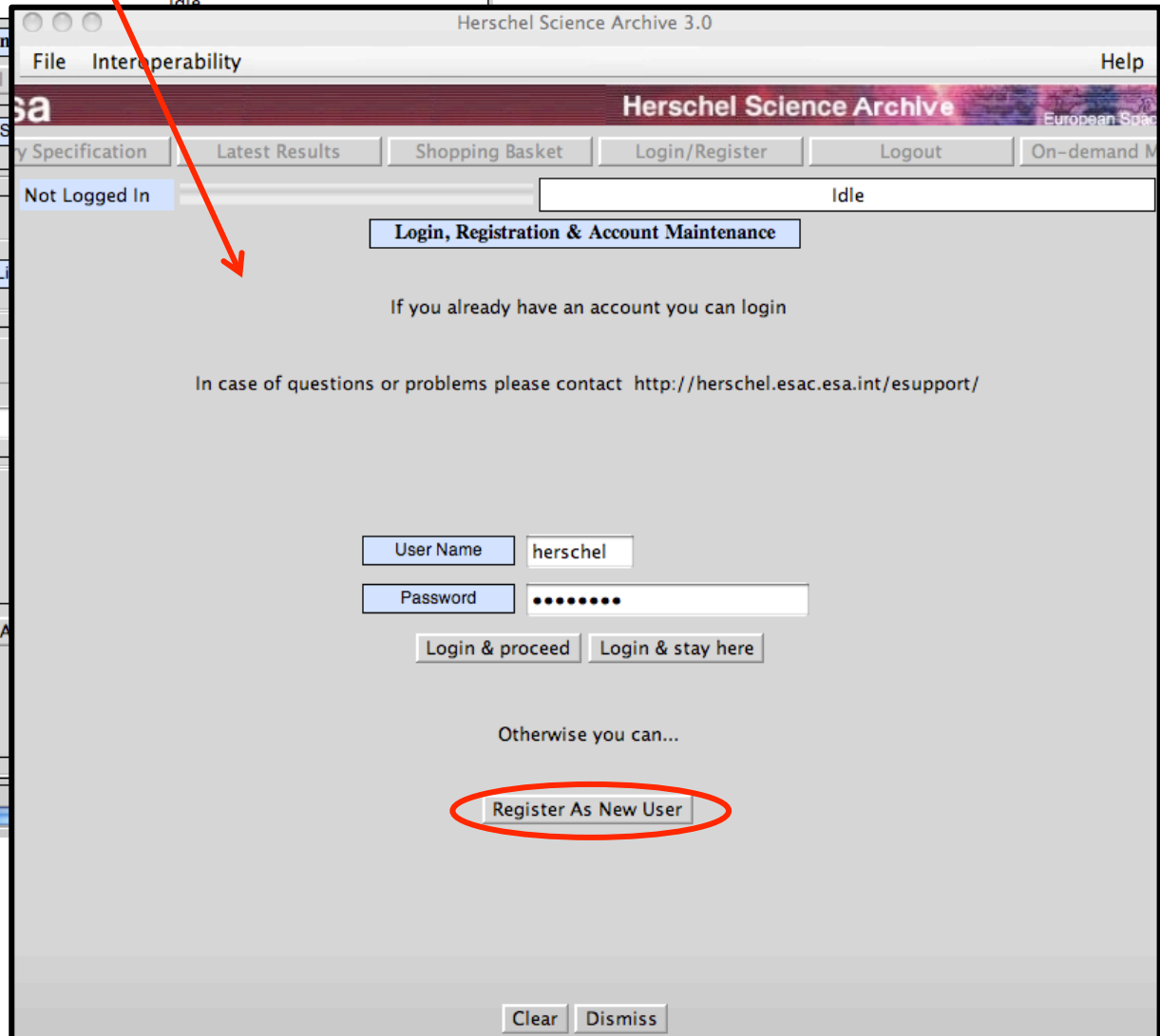
Herschel User Services

- Services Overview
- Helpdesk

HSA User Interface (I): Login



With your Herschel username/password



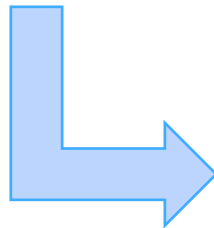
HSA User Interface (II): Queries



Organised by panels

Main query panel:

- Observation ID
- Target name/coord
- Instrument/AOT



The screenshot shows the 'Herschel Science Archive 3.1' web application. The main navigation bar includes 'esa', 'Herschel Science Archive', and 'European Space Agency'. Below this is a 'Query Specification' panel with buttons for 'Execute Query', 'Cancel Query', and 'View/Edit SQL'. A 'Sort Criteria' section shows 'Observation Start Time' and 'Ascending' order. The 'Principal Search Criteria' panel is open, showing search options for 'Observation ID', 'File with Observation ID List', and 'Locate File'. The 'Search Target By' section has radio buttons for 'Name' (checked), 'Equatorial', 'Galactic', and 'Ecliptic'. The 'Name' field contains 'for SIMBAD', and the 'Radius' is set to '5 arcmin'. The 'Instrument' dropdown is set to 'Any', and the 'Obs Type' is 'Standard Data'. At the bottom, there are four instrument-specific panels: 'HIFI' (Single Point, Mapping, Spectral Scan), 'PACS' (Pacs Photometer, Range Spectroscopy, Line Spectroscopy), 'SPIRE' (Photometer, Spectrometer), and 'SPIRE PACS' (Parallel Mode).

HSA User Interface (III): Queries



Herschel Science Archive 3.1

File Interoperability Help

esa Herschel Science Archive European Space Agency

Query Specification Latest Results Shopping Basket Login/Register Logout herschel On-demand Monitor

User: herschel Idle

Query Specification

Execute Query Cancel Query View/Edit SQL

Sort Criteria Observation Start Time Sort Order Ascending

Open **Principal Search Criteria** Clear

Close **Proposal** Clear

Observer Proposal ID

AOR label

Close **Timing Constraints** Clear

OD

Start Time Stop Time Observation Duration Time

HERSCHEL SPACE OBSERVATORY

HSA User Interface (IV): Result



Herschel Science Archive 3.1

File Interoperability Help

esa Herschel Science Archive European Space Agency

Query Specification Latest Results Shopping Basket Login/Register Logout herschel On-demand Monitor

User: herschel Idle

Move Selected to Basket Move All to Basket Send to External Application Mark All Delete Selected Refresh List

Observations 22. Shown: 1st and each until and including 5th 5 in Page

Search Centre: 17h45m40.04s -29d00'28.1" (J2000) Each One

Observations

Observation Info
Instrument Info
Proposal Info

<input type="checkbox"/>	Send to External Application	1342183070	GP field-1	17h45m30.19s -28d56'28.2"	272.52arcsec	112
	Retrieve	2009-09-02 16:09:48.0	2009-09-02 17:23:26.0	4418.0	27473	
		SPIRE		SpirePacsParallel		
		Calibration_pmode_1-PVParAOTVal_515C_StdPar_blu_fast_ortho_G_0002_60x60				pvpallel
		Calibration_pvpallel_2		Proprietary data	9999-09-09	
<input type="checkbox"/>	Send to External Application	1342183070	GP field-1	17h45m36.00s -28d56'00.0"	273.31arcsec	112
	Retrieve	2009-09-02 16:09:48.0	2009-09-02 17:23:26.0	4418.0	27595	
		PACS		SpirePacsParallel		
		Calibration_pmode_1-PVParAOTVal_515C_StdPar_blu_fast_ortho_G_0002_60x60				pvpallel
		Calibration_pvpallel_2		Proprietary data	9999-09-09	
<input type="checkbox"/>	Send to External Application	1342183071	GP field-1	17h45m36.00s -28d56'00.0"	273.31arcsec	112
	Retrieve	2009-09-02 17:25:28.0	2009-09-02 18:39:06.0	4418.0	27602	
		PACS		SpirePacsParallel		
		Calibration_pmode_1-PVParAOTVal_515C_StdPar_blu_fast_GP_0001_60x60_nom				pvpallel
		Calibration_pvpallel_2		Proprietary data	9999-09-09	
<input type="checkbox"/>	Send to External Application	1342183071	GP field-1	17h45m32.78s -28d55'54.6"	289.66arcsec	112
	Retrieve	2009-09-02 17:25:28.0	2009-09-02 18:39:06.0	4418.0	27465	
		SPIRE		SpirePacsParallel		
		Calibration_pmode_1-PVParAOTVal_515C_StdPar_blu_fast_GP_0001_60x60_nom				pvpallel
		Calibration_pvpallel_2		Proprietary data	9999-09-09	
<input type="checkbox"/>	Send to External Application	1342183480	GP field-1	17h45m36.06s -28d56'56.3"	218.13arcsec	117

Next End of List

HERSCHEL SPACE OBSERVATORY

HSA User Interface (V): Shopping basket



Herschel Science Archive 3.0

File Interoperability Help

esa Herschel Science Archive European Space Agency

Query Specification Latest Results **Shopping Basket** Login/Register Logout herschel On-demand Monitor

User: herschel Idle

Move Selected to Basket Move All to Basket Send to External Application Mark All Delete Selected Refresh List

Observations 27. Shown: 1st and each until and including 25th

25 in Page

Each One

Observations Observation Info Instrument Info Proposal Info

Calibration_pvhifi_50 Proprietary data 2010-05-02

<input checked="" type="checkbox"/>	1342192669 CII_G343.9+0.0 2010-03-23 11:51:43.0 HIFI Calibration_psp_2-SDP Calibration_pvhifi_50	Send to External Application Retrieve
<input checked="" type="checkbox"/>	1342192670 NGC6240 2010-03-23 12:11:47.0 HIFI PSP2_NGC6240 CII - blue KPGT_rquesten_1	Send to External Application Retrieve
<input type="checkbox"/>	1342192671 NGC6240 2010-03-23 12:18:17.0 HIFI PSP2_NGC6240 CII - red KPGT_rquesten_1	Send to External Application Retrieve
<input checked="" type="checkbox"/>	1342192672 chi Cyg 2010-03-23 12:31:45.0 HIFI PSP1_HStars-Set16 - chi Cyg KPGT_vbujarra_1	Send to External Application Retrieve

Start of List Previous

Herschel Science Archive 3.0

File Interoperability Help

esa Herschel Science Archive European Space Agency

Query Specification Latest Results **Shopping Basket** Login/Register Logout herschel On-demand Monitor

User: herschel Idle

Shopping Basket

Retrieve All On Demand Reprocessing systematic Submit Request Delete Selected Mark All Refresh

3 Observations. Shown: 1st and each until and including 3rd

5 in Page

Each One

<input type="checkbox"/>	1342192669 CII_G343.9+0.0 2010-03-23 11:51:43.0 HIFI Calibration_psp_2-SDP_wlanger_3-SDP_HPoint-0005 - CII_G343.9+0.0 Calibration_pvhifi_50 Proprietary data 2010-05-02	17h00m39.50s -42d12'42.8" ----- 313 29713
<input type="checkbox"/>	1342192670 NGC6240 2010-03-23 12:11:47.0 HIFI PSP2_NGC6240 CII - blue KPGT_rquesten_1 Proprietary data 2011-03-23	16h53m05.22s +02d24'06.8" ----- 313 29707
<input type="checkbox"/>	1342192672 chi Cyg 2010-03-23 12:31:45.0 HIFI PSP1_HStars-Set16 - chi Cyg KPGT_vbujarra_1 Proprietary data 2011-03-23	19h50m40.64s +32d54'30.0" ----- 313 29696

Start of List Previous Next End of List

DRY

HSA User Interface (VI): Data retrieval



Herschel Science Archive 3.0

File Interoperability

esa Herschel Science Archive European Science Agency

Query Specification Latest Results Shopping Basket Login/Register Logout herschel On-demand Monitor

User: herschel Idle

Confirmation of Request Page

Request Summary

User ID	herschel
Number of Items	3 Observations
Estimated Total Product Size, Mb	609.33
FTP Download Time	----- Not Yet Calculated -----

Perform Estimation

Tar Option

- tar (one file)
- no tar (files loose)
- compressed tar (one file)

Confirm Abort

Subject: Your HSA Science Archive Data request herschel16550673 has been processed

From: hsa-help@sciops.esa.int

Date: 25/3/10 15:09

To: hscsg@sciops.esa.int

Dear HSA User,

Your retrieval request has been successfully processed. The data may be retrieved from the following address where they will remain for 3 days.

Please follow the instructions below to access/browse the ftp area where your data are located:

```
ftp hsa.esac.esa.int
<your user name>
<your password>
prompt
cd herschel16550673
binary
dir
```

You can also access your files online from the browser at:
<ftp://herschel@hsa.esac.esa.int/herschel16550673/>
where you will be able to see some of the products on-line.

You can get more information about the Herschel project by accessing the Herschel web pages from the following URL:
<http://herschel.esac.esa.int/>

Best Regards,

The Herschel Science Data Archive team

.exported

1342187323

auxiliary

calibration

browseImageProduct

browseProduct

hspire134...332Z.fits

level0

level0_5

level1

level2

logObsContext

quality

.DS_Store

hmapcont...2122Z.fits

PLW

PMW

PSW

hspireplw...7838Z.fits

HSA FAQ



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Problems with the ftp?
Consult the HSA FAQ

Q11. When I try to retrieve data from the HSA I get an error message in the console about an invalid magic number for FITS file. What is going on?
A11 The reason is that the "data" being downloaded is in reality a small file containing an error message. Possibly your Herschel password has non-alphanumeric characters in it. Please change it to a password containing only letters and numbers.

Q12. I have downloaded FITS files in a TAR archive from the HSA, but they are corrupted. How can I fix them?
A12 You probably used WinZip, or some equivalent compression software, in Windows. WinZip has an option called TAR file smart CR/LF conversion, in the Miscellaneous tab of the Configuration dialogue window (at least for version 12.0), that is enabled by default and causes the corruption. Just disable the option to solve this problem. For more information, please see the [Data Analysis Guide](#): Section 1.3.5.2, "Corrupted FITS file after unzipping"

Q13. I have downloaded FITS files in a TAR archive from the HSA, but when untaring it I get the message "lone zero block".
A13 The untaring (depending on the command used to untar) could give a "lone zero block" message at the end. This message can be ignored. The tar is correctly untared and there are no problems with the FITS files.

Q14. When I retrieve a tar file with my MAC via ftp, the tar I got seems to be empty. In fact, the size of the tar is too small (1 few Kb) to contain any Herschel FITS file.
A14 The standard Mac FTP browser does not work properly with the HSA ftp when you use the URL. It tries to mount it as a local disk but only put the reference and it does not invoke the real download. You should open a terminal (or use another ftp client) and connect directly to the ftp server.

HERSCHEL SPACE OBSERVATORY