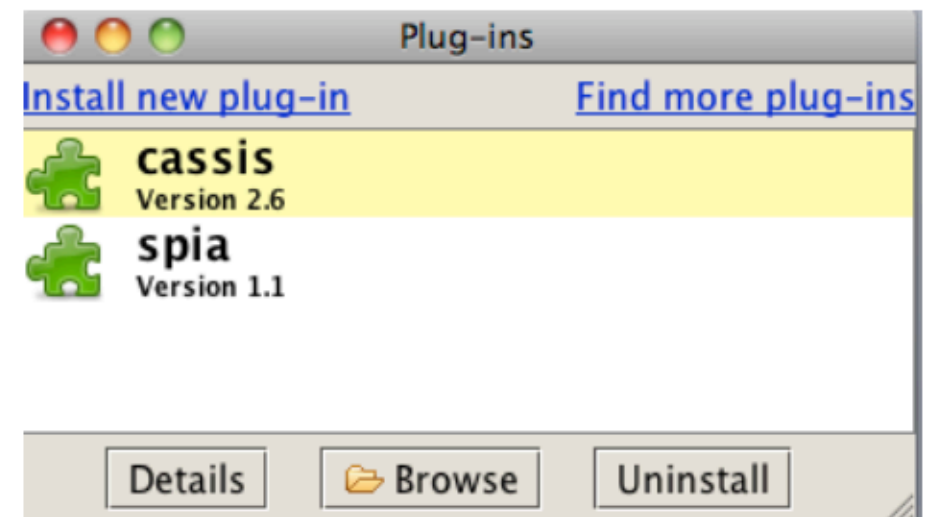
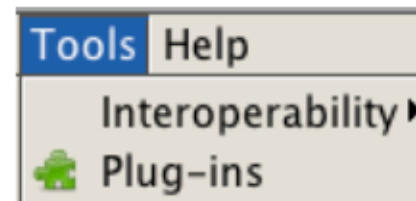


SPIRE Specific Setup

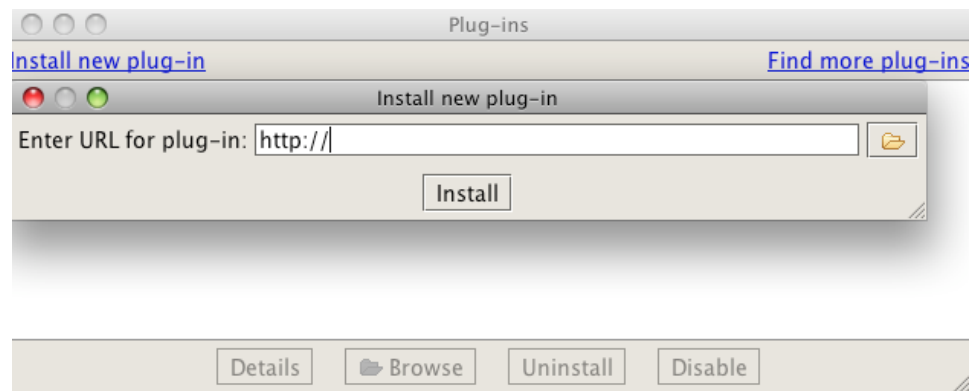
Chris Pearson
On behalf of the SPIRE-ICC

- HIPE version v.6.0.3
- Plug ins
- Local Store
- Data
- Calibration Files
- HIFI Data
- Scripts

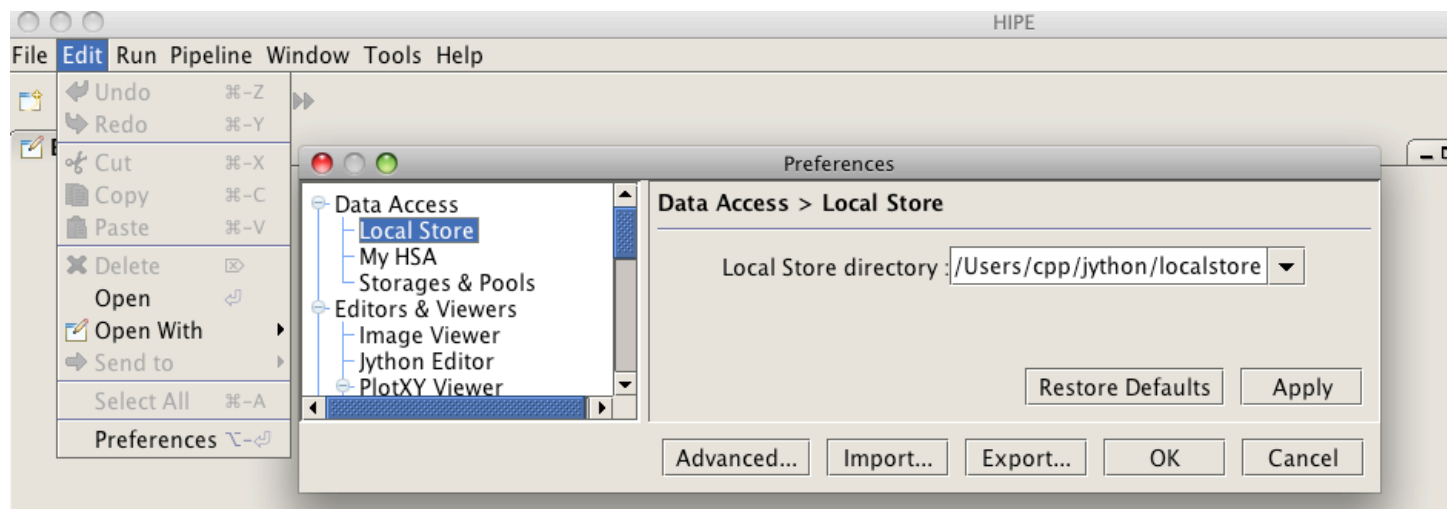
- Plug-ins are add-on software for HIPE, provided from and maintained elsewhere
 - Install once, use in all HIPE versions
 - SPIA Plug-in: Photometry interactive analysis (Friday)
 - CASSIS: Spectral analysis (Thursday)



- Install HIPE plugin for SPIRE
- Photometer Interactive Analysis (SPIA)
 1. Start up HIPE
 2. Open Tools -> Plug-ins and select “Install new plug-in”
 3. Delete the http:// and paste in this URL:
`https://nhscsci.ipac.caltech.edu/spire/DPsoftware/spia/scripts/spia_1.1.jar`
 4. Click the “Install” button.
 5. Now the message “Plug-in installed correctly” should pop up.
(If not, please check theURL.).
 6. Click “OK”
 7. Restart HIPE



- Your **local pool** containing all your data for HIPE processing should be stored in the **Istore** directory
- Defaults
 - Mac `/Users/{userid}/.hcss/Istore`
 - Linux `/home/{userid}/.hcss/Istore`
 - Win `C:\Documents and Settings\{userid}/.hcss/Istore`
- Default can be changed from HIPE from the **Edit -> Preferences -> Local Store** menu



- Data is available vis ftp from *ftp://ftp.sciops.esa.int/pub/hsc_wshop/*
- Data is in the form of tar gzip **HIFE pool** format
- SPIRE pools are summarized in a pdf handout
- Before use, the pools need to be unpacked
- We provide unpacking script on the web

- Edit location of your tgz files for your environment
- Should automatically pick up your lstore
- Get calibration files
- Comment out any data pools you have not got or do not want to decompress
- Get the HIFI data for joint session

```

12
13 # Define the directory where the .tgz files are located. The syntax
14 # depends on the operating system. Do not forget the trailing slash.
15 #
16 # For Mac and Linux it would be something like
17 #data_directory = "/Users/cpp/Downloads/"
18 #
19 # and for Windows, you will need double back-slashes for paths specified at the
20 # command line, for example
21 data_directory = "C:\\Users\\etp87\\downloads\\"
22
23 # Decompress and unpack the .tgz files into 'lstore' area on disk
24 #
25 # Get the location of the lstore directory from the Hipe property:
26 lstore_dir = Configuration.getProperty('hcss.ia.pal.pool.lstore.dir')
27 print lstore_dir
28
29 # Calibration tree (needed for both photometer and spectrometer demos)
30 decompress(archive=data_directory+'spire_cal_6_1.tgz', dirout=lstore_dir)
31
32 # SPIRE photometer data
33 decompress(archive=data_directory+"spirephot_bd303639.tgz", dirout=lstore_dir)
34 decompress(archive=data_directory+"spirephot_dark_od587.tgz", dirout=lstore_dir)
35 decompress(archive=data_directory+"spirephot_gammadra_rp.tgz", dirout=lstore_dir)
36 decompress(archive=data_directory+"spirephot_neptune_beams_rp.tgz", dirout=lstore_dir)
37 decompress(archive=data_directory+"spirephot_ngc5315_rp.tgz", dirout=lstore_dir)
38 decompress(archive=data_directory+"spirephot_ngc6946_orth_rp.tgz", dirout=lstore_dir)
39 decompress(archive=data_directory+"spirephot_ngc6946_nom_rp.tgz", dirout=lstore_dir)
40
41 # SPIRE spectrometer data
42 decompress(archive=data_directory+"spireSpec1342189124_NGC7027.tgz", dirout=lstore_dir)
43 decompress(archive=data_directory+"spireSpec1342189120_DarkSky.tgz", dirout=lstore_dir)
44 decompress(archive=data_directory+"spireSpec1342187893_Mrk231.tgz", dirout=lstore_dir)
45 decompress(archive=data_directory+"spireSpec1342187890_DarkSky.tgz", dirout=lstore_dir)
46 decompress(archive=data_directory+"spireSpec1342192180_NGC7023.tgz", dirout=lstore_dir)
47
48 # HIFI data for joint HIFI-SPIRE session
49 decompress(archive=data_directory+"1342205474_map_dbs_1b.tgz", dirout=lstore_dir)
50
51 print "Unpacking of files finished"
52

```

- Note: **Calibration Tree** is in the spectrometer ftp directory
spire_cal_6_1.tgz
- Photometer users also **need to download** this calibration tree

- Note: Spectrometer users will need to download the HIFI dataset

1342205474_map_dbs_1b.tgz

for the joint session on Spectral Tools
(Thursday)

- SPIRE scripts downloaded from workshop website;
 - `tgzfiles_to_lstore_spire.py`
(script to unpack data pools)
 - `OT1_Workshop_SPHOT_combine_obs.py`
(merge 2 maps together)
 - `OT1_Workshop_SPHOT_remove_glitches`
(example glitch removal script)
 - `SPIRE_photometer_baseline.py`
(example baseline removal script)
 - `SPIRE_Photometry_GammaDra.py`
(example of photometry)
 - `SpireSpectrumFitterDemo.py`
(script for spectral line fitting)
 - `spirelines.dat`
(list of lines used for spectral line fitting)