

Instructions for running TOGS commensally with a2010

(Dec 7 2005)

These are instructions for running GALSPECT commensally with a2010. The procedure consists of:

1. Starting GALSPECT before a2010 starts (TO)
2. Running the calibration script at the start of a2010 (observer)
3. Running the calibration script at the end of a2010 (observer)
4. Stopping GALSPECT (TO).

For each TOGS run there is a contact person on duty. To find out who to call in case of problems please check the ‘TOGS Contact Schedule’ in the control room (located in GALFA’s folder).

1. Starting GALSPECT

A few minutes before a2010 starts the TO should login to GALSPECT and start the datataking script with the following.

- (a) Check that ALFA is uncovered and its amplifiers are ON.
- (b) Login to *dataview* as user ‘guest’ (password is naic305m) and open an xterm window.
- (c) In this window login to *galfa1* computer by typing:

```
[guest@dataview guest]$ ssh -i galfa_key galfa@galfa1
```

 The prompt `#` appears.
- (d) In the same window type:

```
# /var/diag
```

 Let it run for some time, like 30 sec, you will see lots of messages, GALSPECT is warming up. Stop this by typing Control-C.
- (e) Then, type:

```
# /var/levels_togs
```

 If this gives the message **LO2: Set failed, got back: ERROR setting freq** follow the procedure given in the footnote¹. Typically, we want RMS values to be around 10. However, as we have not loaded the iflo setup yet the RMS values most likely won’t be close to 10. Do not worry about this! Once the observer starts the *galfa* calibration script everything will be fine.

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1. Open a new xterm on *dataview*.
2. Login to *wappserv* as user *wapp* (password=*wappme*) by typing `ssh wapp@wappserv`. It will ask for password, type **wappme**.
3. Type `source /share/wappsrc/bin/start_gpib`.
4. Return to the previous step and type again `/var/levels_togs` in the *galfa1* window.
 If this doesn’t work call the contact person.

(f) In the same window type:

```
# /var/togs
```

This will start taking data with GALSPECT. You will see a lot of numbers being printed every second or so. This will run the entire observing session.

2. Running the calibration script at the start

Once the primary (a2010) observer has logged in and started cima, she/he should run the galfa calibration script. The starting position for this calibration is listed in the a2010.cat file and is called 'galfasrc'. 'galfasrc' should be approximately the mean of the drift scan positions in a2010.cat and can be kept fixed over a period of 7-10 days. Of course, this position should be updated sooner if the positions of the a2010 observations change significantly (e.g., a completely different region is begun).

- (a) From "CIMA Observer's Interface" window select "Command File Observing".
- (b) A new window, "Command File Observing" will pop up. Click on "Command file" to go and browse for a file you want to run. Click on file "**command_galfasrc**", then click on "Start Command Line Observation".

This will load the IFLO setup file and perform the calibration pattern. It takes about 3 minutes to complete this step.

Please WATCH the "AO Observer Display" for a few minutes! It should show updated messages every few seconds. If you notice that observing is hanging (you don't see updated messages every few seconds) try re-starting WAPPs or call Snezana.

- (c) At any time during observing you can open "Quick Look Data Display" on *dataview* to make sure the spectra are being updated.
- (d) OPTIONAL STEP: You can also view data using GALSPECT's display.
 - i. Open a new xterm on dataview and type:

```
[guest@dataview guest]$ vncviewer galfa1
```
 - ii. This brings up a *plot window* entitled "TightVNC: Pixmap framebuffer". With the cursor on this window type "h", this will blow up the plot and make it easier to inspect spectra.
 - iii. G-ALFA folder in the control room explains how to change different display options

3. Running the calibration script at the end

At the end of a2010 observing run the calibration script should be run at the position where the last drift scan was finished.

Same as at the start just with using the file "**command_galfacurpos**".

4. Stopping GALSPECT at the end of the run

On *dataview's* *galfa1* window (the one which prints numbers all the time) press Control-C, and exit from this window.

Thank you very much!

TOGS members