

Useful SWIFT commands

Commands in `courier` can be issued from the command prompt on `swiftlcu` or `swiftws`

Command	Description
<code>tcs offset E.E N.N</code>	Offset the telescope E and N in arcseconds (non AO)
<code>p3k sci_motion n/s/e/w X.X</code>	Offset P3K (inc Telescope and SSMS) by X.X arcseconds in given direction (AO). 5" max steps recommended.
<code>halogen on/off</code>	Turn on/off the Halogen lamp
<code>halogen set 235mas/80mas/16mas</code>	Set the Halogen lamp voltage for given plate scale
<code>arcs on/off</code>	Turn on/off Arc lamps
<code>arcs set 235mas/80mas/16mas</code>	Set calibration iris size for given plate scale
<code>gortd</code>	Run the reconstructor on a given file number.

Quick tips

To **reconstruct a 2d image** from the data, run `gortd DARK# ../235mas.recon all FRAME#` from with the night's data directory. Image is displayed in the RTDDS9 window.

To **measure an offset in the RTD**, draw a "ruler" (default shape) from the object to where you want to go. Double click to bring up Ruler properties. Do Length->WCS and Length->Arcsec. Read-off the East and North from the Axis Length fields, and apply with `tcs offset` or `p3k sci_motion`. Zoom->Align will display the image with North up and East left.

To **measure seeing from a reconstructed image**, start-up `iraf` (desktop icon) and type `imexam`. The cursor on `rtdds9` will turn into a circle; move it over the star and hit 'r' (for a radial plot) or 'a' (for an aperture measure). FWHM is reported in pixels. Hit 'q' on the `rtdds9` window to quit `imexam`. Note, `iraf` will speak to the most recent `ds9` window opened, so to be safe quit and restart `rtdds9` before doing this.

To **see the instrument status**, open up a web-browser and go to <http://swiftlcu/php/status.php>. Check that UTC-TCS is being updated correctly, and if not ArcVIEW needs to be restarted.

To **check for saturation on images** in the data displayer windows, set Scale->Minmax and then View->Horizontal Graph. Mouse over to see any peaks above 65000. View->Vertical Graph can be used for arc

To **transfer images from the guider computer** (`swiftic`), connect using the icon on the `swiftws` desktop, which will provide a drive called "Data on `swiftws`". Drag images/folders in here. They will be copied over to `/home/swift/data/GuiderImages/` on `swiftws`.

To **change the guider position angle after rotating** the cass ring, in MaximDL on `swiftic` go to the Camera Control window and Guide tab, click "Settings" and change "Angle" in the "Manual Calibration" area. The Angle should be approximately cass Ring – 180 degrees.

Small moves can be made via **guider offsets**; increasing guider X moves the science object up in Y on the RTD (across slices). Increasing guider Y moves science object down in X on the RTD (along slice). 1 guider pixel (8x8 binning) is equivalent to 0.22".