Cheat Sheet WFC + IDS

1. Common commands

1.1. Zeroset

Check ENG mode and Oil Pump ON.
Put declination in 28 deg.
Put HA in 0 deg.
USER > **zeroset ha target**
USER > **zeroset dec target**
Move HA (-) until see the light.
Move DEC (+) until see the light.
USER > **cal def**

1.2. Others

SYS > **bin 1 1**
SYS > **rspeed {slow/fast}**
SYS > **glance {exp}**
*intdrpc*1 > **iraf (load IRAF)**
*intdrpc*1 > **unlearn_iraf**
USER > **out term (to see the catalog)**
USER > **erase (to remove the catalog)**
USER > **source name RA DEC J2000 (to define target)**
USER > **add (to add the target)**

2. WFC

2.1. Calibration Images

2.1.1. Bias

Check speed (fast/slow)
SYS > **multbias {n}**

2.1.2. Dome Flat

USER > **dome 242**
USER > **park flat**
SYS > **multflat {n} {exp}**

2.1.3. Manual Sky Flat

Find a suitable field in Table 38.
USER > **gocat {blank_field}**
SYS > **sky {exp}**
SYS > **offset arc {x} {y}**
and repeat this sequence.

2.1.4. Auto Sky Flat

SYS > **cd**
SYS > **cd jmcc/autoflat**
SYS > **/int/ObservingSystem SupportPackages/python-3.2.2/bin/python3.2 autoflat.py {nFlats} {slow/fast} {filters}**

2.2. Single Star Calibration

SYS > **agwin acq pos 1032 512**
SYS > **autotv on**
Put the cross in Autoguider:
Setup - Toggle Center Cross
USER > **cal faint**
Press Ctrl+Z
USER > **aper 5**
HANDSET (F6)
Center the star.
HANDSET (F6)
SYS > **point calibrate**
USER > **cal anal zero**
USER > **enter aperture 0 -251 326**
SYS > **autotv off**

2.3. Focus

USER > **gocat {standard_star}**
SYS > **window {n(all)} disable**
SYS > **focusrun &**
(Fill the options: Take **9** steps of **10** arcsec and **0.05**mm in focus. Start at **XX**mm focus (0.2mm below last focus). Expose each step for **15** seconds).
ecl > **wfc_starfocus** (load before wfc_ql)
Over the center of the star in ds9 press 'm'.
Repeat until 10-12 stars.
Press 'q' to finish.
USER > **focus {average_focus}**
0.2mm below last focus

2.4. Guiding

SYS > **autotv off**
USER > **gocat {target}**
SYS > **more /tmp/gsc.out**
(copy 'x' and 'y' of the brightest star)
SYS > **guide off**
SYS > **agwin acq pos {x} {y}**
SYS > **field**
SYS > **guide on star {n}**
Enable WFC-wfc_ag_sequencer.
Wait for the errors XY in TCS to be less than 0.3 to begin the run.
Before changing the target:
SYS > **guide off**

2.5. Observing

USER > **gocat {target}**
SYS > **filter {name}**
SYS > **run {exp}**
SYS > **multrun {n} {exp}**

2.6. Moving targets

USER > **gocat {target}**
USER > **diff_rates {RA $_{s/s}$} {DEC $_{''/s}$}**
USER > **next**
SYS > **multrun {n} {exp}**
To observe again in a 'normal' tracking:
USER > **diff_rates 0 0**
USER > **next**

3. IDS

3.1. Calibration Images

3.1.1. Bias

Check speed (fast/slow)
SYS > **multbias {n}**

3.1.2. Flat

SYS > **multflat {n} {exp}**

3.1.3. Arc

SYS > **arc {exp}**

3.2. Single Star Calibration

SYS > **aperture 0 0 0**
USER > **cal faint**
Press Ctrl+Z.
HANDSET (F6)
Center the star.
HANDSET (F6)
SYS > **point calibrate**
USER > **cal anal zero**

3.3. Focus

USER > **gocat {standard_star}**
SYS > **slitarc 4**
SYS > **focusrun.py** (Focus start value: 0.2mm below last focus / Step size: 0.05 mm / n exposures: 9 / Exp. time 15).
ecl > **!ids_starfocus**
In DS9 press 'g' on top of spectrum.
USER > **focus {average_focus}**

3.4. Observing

SYS > **slitarc {n.n}**
USER > **gocat {target}**
SYS > **run {exp}**
SYS > **multrun {n} {exp}**

3.5. Guiding

Enter coordinates and PA in GSS2.
SYS > **autoxy {xxxx yyyy}**
SYS > **field**
SYS > **guide on star {n}**
To stop the guiding:
SYS > **guide off**

3.6. Useful commands

SYS > **rotate sky {skyPA}**
At the end of the night:
USER > **park zenith**
USER > **rotate sky 0**

· The "*USER* >"prompt in the TCS computer, the "*SYS* >"prompt in the ICS.
· This Cheat Sheet is a reminder of most common commands and their syntax. A complete description of all the commands and observing procedures can be found in the corresponding manuals.

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