

Rolf's Modified VATT Warm Start Check List 2006-05-05

Last updated
Dec 12 2011 RAJ

2nd floor, 'VATT' data acquisition computer

1. take a test exposure (e.g., 'zero'); if the process does not hang, you're OK; if it does, reboot VATTCCD
(test camera is on in the dome, power cycle connection link in dome under box on South side of East fork)
2. view the image header of the test image. NB: if telemetry (RA, Dec, LST, HA, Airmass, etc..) is missing from the headers, verify that the "Enable Telescope" and "Enable Instrument" flags are set in the "Flags" tab of the "Preferences" menu in AzCamTool.

dome

1. fill the CCD dewar
2. open the four dome vents
3. plug in the dome power (yellow plug)
4. plug in the finder scope power (little black AC adapter that lies on top of an power/electronics box mounted on the South side of the East fork of the telescope)
5. open the finder cover (push the handle up then turn 180deg)
6. turn on the SBIG camera (switch with orange-red led on top of black electronics box on the West side of the dewar underneath the telescope)
7. check the derotator sensor position; the fixed and moving magnetic sensors on the North-east side of the derotator flange should be slightly mis-aligned with the moving one slightly N of the fixed one.
8. check for obstructions (including stow pins!); remove the fill tube from the CCD dewar and move the liquid nitrogen dewar tank flush against the South wall.
9. check the Azimuth alignment (the inverted "V" and the vertical mark on the Azimuth platform should line up to become an inverted "Y").
Don't attempt to fix a mis-alignment before turning on the oil-system!
10. check that the West door to the ladder leading up to the roof is closed and locked.

basement

1. turn on the oil chillers (pull out the mushroom button labeled #1). once either one or both of the chillers come on, check that the oil-flow (gauge on top of the chiller unit) is above "10". Then turn on the oil-pressure system by turning the knob labeled #2.
Once first the low-pressure, then the high-pressure pumps have come on, check the oil-flow is above "4".

2. turn on both the pier and the building fans (push both the green buttons on the left wall toward the back (as viewed from the elevator).

2nd floor pier

1. turn on the NESLAB by slightly opening the valve lever on the right side of the unit, starting the unit using the toggle switch in top, and fully open the valve within 2 sec after the machine starts.

2nd floor TCS/instrument room

1. press the tiny "reset motor drives" button on the guider electronics 3 times (or: reboot guider cpu, then reset motor drives)
2. reboot VATTtel by pressing the tiny maroon reset button **OLD: white square button** and wait until the "Pass" LED comes on (after an initial "Fail" interrupt /w loud click). The monitor should proclaim the Guider to be OK.
3. turn on the power amplifiers for derotator, azimuth, elevation and dome. Do ***NOT*** touch the amplifier for the counterweights.

d

2nd floor control room

1. turn on the dome fan (next to door to South balcony) and turn on the dome lights (on the other side of the door from the dome fan controls)
2. turn on the dome camera monitor
3. turn on the finder monitor
4. turn on the guider monitor
5. bring up the TCS GUI (from the gnome button, select the "VATT" menu, then select "TCS/IF GLUE")
6. bring up the VATT Guider Application GUI (VGAG) from that same menu
7. in the square TCS window, select the "mount control" view and turn on the mirror fans
8. in the square TCS window, select the "thermal" view and set the goal temperature (the temperature expected near the middle of the night), then enable the "setpoint" radio button. Note, that if you are starting up in a hurry, these buttons may initially be greyed out and the temperatures reported may be bogus.
9. In the VGAG window, select the "Camera" view and initialize the guider camera ("Init" button). Wait until the "Start" button is no longer greyed out, then start the camera with its default exposure time (0.5 sec; no dark subtraction).
10. Start XEphem from the "VATT" menu. In the main XEphem control GUI, hit the "Now" button immediately. From the "View" menu, select "Skyview".

From the "Telescope" menu, select "Configure" - should the new GUI come up with the "running" radio button enabled, turn it off and close the GUI. Then reopen it ("Telescope"→"Configure") and click on "running". A tiny GUI should pop up (may be partially hidden) stating that XEphem now has control of the telescope.

11. In the VGAG window, select "Reset Secondary" from the "Secondary" menu in the top-bar of that window. Once done, enter last nights values of "TipX" and "TipY" (and "Focus"), then select (enable) "Autocollimation" from the "Secondary" menu.
12. Open the dome shutter ("Open Slit")
13. After the dome is fully open, open the mirror cover ("Open M-Cover")
14. In the square TCS window, select the "mount control" view and hit "Enable drives". If the volume on the intercom is on, you should hear a click. You should also hear the break release.
15. Turn on "Dome tracking" in the main TCS GUI window
16. "Calibrate" the azimuth axis and check that the dome is following.
17. From the XEphem "skyview" window, send the telescope at Azimuth~180 to a star at Altitude~40-50deg, then back to zenith ("Stow" button on main TCS GUI).

Now, you're ready for taking twilight flats

Other Start Up Procedures

1. [Collimate VATT](#)

From:

<https://lavinia.as.arizona.edu/~tscopewiki/> - **MOON**

Permanent link:

https://lavinia.as.arizona.edu/~tscopewiki/doku.php?id=vatt:vatt_warm_startup_checklist_2011

Last update: **2018/02/03 22:42**

