

VATT Warm Start-Up Check List

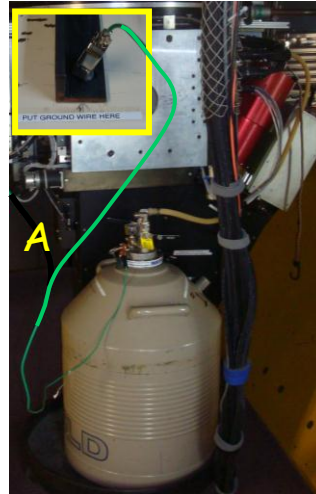
Aileen O'Donoghue & Jeff Miller, St. Lawrence University



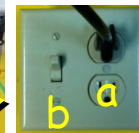
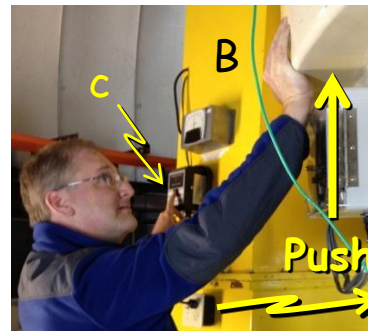
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Dome (light on post to left)

- Fill CCD Dewar (A) (& note in log)
- Place N₂ Dewar left of cable bundle
- Connect ground wire to bolt on telescope
- Hose between cable bundle & camera
- Wand goes down center of camera
- Jiggle past pole, all the way in, seat firmly
- Fill N₂ slowly until liquid spurts out



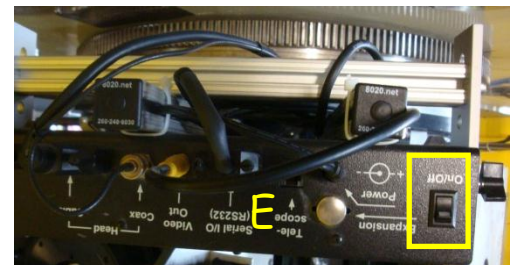
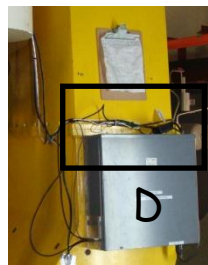
- Move elevation stow pins to out (B)
- On left support
- Plug in (a), flip switch (b)
- Push "unlock" to 100 (2 sec) (c)
- Push up on telescope to help unlock
- Flip switch off, unplug



- Open Finder Cover (C)
- Lift and turn CCW until it seats

- Plug in Finder Camera (D)
- On right support

- Turn on Guide Camera Power Switch (E)
- Left of camera, upside down



- Open air vents
- Around outside of dome
- Vent switch up => open



- Plug in Dome (south wall) (G)
- Check that short is out, plug connected to short

- Check De-rotator index position (X's aligned) (H)



- Check for obstructions

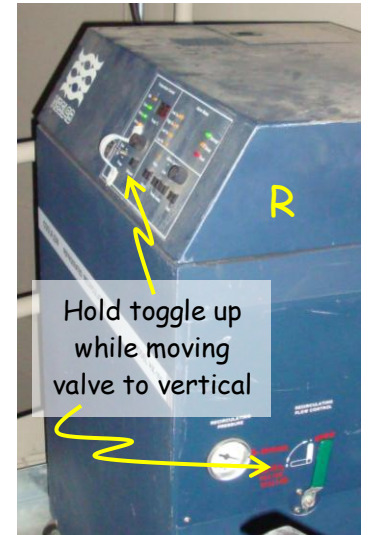
- Check Azimuth alignment (I)
- On base, view from lower level



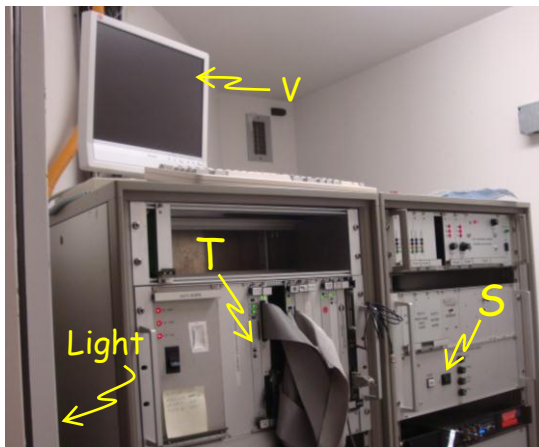
- Lock West Door
- The squirrels keep trying to get in (They may be LBT spies!)



- Basement** (light inside, around to right ... illuminated)
- Start dome fans (J)
 - Check compressed air dewpoint (< -30C) (K)
 - Turn on oil (white panel beside door)
 - Step 1 (L)
 - chillers should come on
 - check flow gauge above chillers > 10 GPM (M)
 - Step 2 (N)
 - gauges on panel left of chillers
 - pressure ~ 1180 (P), flow ~ 4 GPM (Q),



- 2nd Floor Silo** (straight from control room, light outside on left)
- Neslab Circulator (R)
 - Hold toggle up (start) while moving valve on side to vertical over ~2 sec



- 2nd Floor TCS Room** (right past elevator, light inside on left)
- Turn on Guider (S)
 - Reboot VATEL (T)
 - turn monitor on, light out, watch for "Guider OK" (V)
 - Switch on all four drive servo amplifiers (W)
 - Close corridor door when leaving

Control Room

Telescope control station

Bring up TCS Glue (A)

In VATT Paddle & Mount Control

Mount Control Tab (B)

Cell Fans on

Thermal Tab

Mirror Thermal Control on (C)

(takes a few minutes to become available)



VATT TCS Information Display

File Mount Help

UNION Stew Init. Coords Lights On Lights Off

Universal Time
19:42:13

Telescope Airmass
1.000 A

Local Sidereal Time
04:29:55.5

Telescope Right Ascension
04:29:07.3

Telescope Declination
+32:13:24

Telescope Hour Angle
00:00:01

Relative Humidity(%)

IR Sky Temperature

Dome Temperature
16.91C

TopFW
OK Clear ND-1.0 ND-2.0

BotFW
OK Clear S8612 GG-400 GG-475 GG-550

Dome - Not Tracking Azimuth
180.000 180.63

Altitude Derotator: 0.000 Tracking
89.72 0.01

VATT JD-Tronic Mk Va Human-Machine I/F

VATT Paddle and Mount Control

Paddle Mount Control Thermal

Enable Drives Calibrate Open M-Cover

Open Slit B **Cell Fans On** Brake Off

Panel 1A
8 7 6 5 4 3 2 1

Panel 1B
8 7 6 5 4 3 2 1

Panel 0B
8 7 6 5 4 3 2 1

Panel 0A
8 7 6 5 4 3 2 1

Autocollimation Enabled NextTab is On

Oil System 1 Oil System 2

VATT Paddle and Mount Control

Paddle Mount Control Thermal

Mirror Thermal Control Off Set Point On C

TCS Setpoint Setpoint
-20.00 10.000

Air Temp Mirror Temp.
16.50 12.75

Strut Temp. Mirror Air Temp.
15.18 11.77

Turn on Dome Fans
(right of patio door ... to 8)

Turn on TV's

dome cam monitor

sky monitor

guider monitor

finder monitor

Turn on Dome Intercom

Bring up Guider Application

Enter Focus, TipX, TipY

using previous night's trouble report

Under "Secondary"

Click "Auto Collimation"

VATT Guider Application

Catalog Video Guider Secondary Help

Secondary Control

Focus 0 TipX 130 TipY -160

Catalog AutoGuider Guide Box Camera

OffsetX Pos. Input User Offset
OK 0 1.33 0

VATT Guider Application

Catalog Video Guider Secondary Help

Secondary Control **Reset Secondary**

Focus 0 AutoCollimation TipY -160

Catalog AutoGuider Guide Box Camera

Init. Camera TEC Temp. Setpoint = 0 0 set TEC

In VATT Paddle & Mount Control

Mount Control Tab (B above)

Open slit

Open mirror cover

Enable drives

... Everything goes green

VATT Paddle and Mount Control

Paddle Mount Control Thermal

Enable Drives Calibrate **Open M-Cover**

Open Slit Cell Fans On Brake Off

Panel 1A
8 7 6 5 4 3 2 1

Panel 1B
8 7 6 5 4 3 2 1



In TCS Glue (A)

Turn on Dome tracking (Bottom left of TCS display)

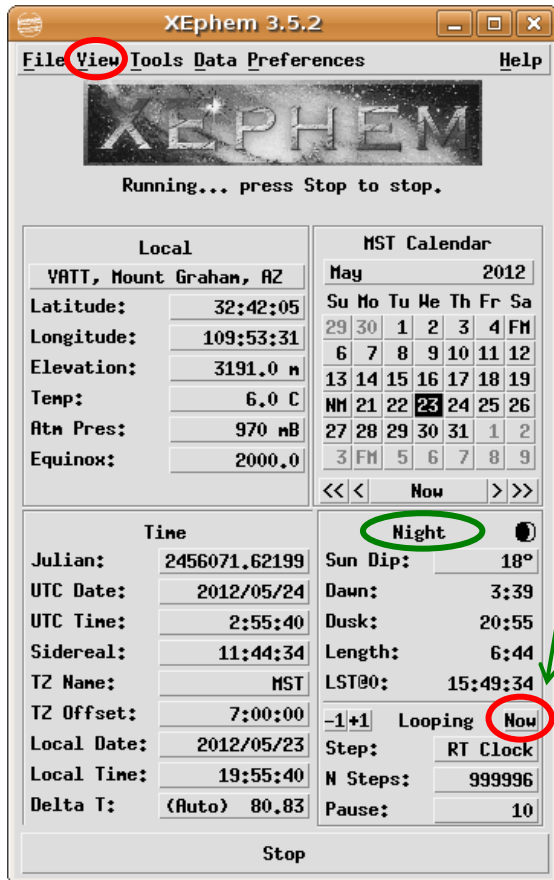
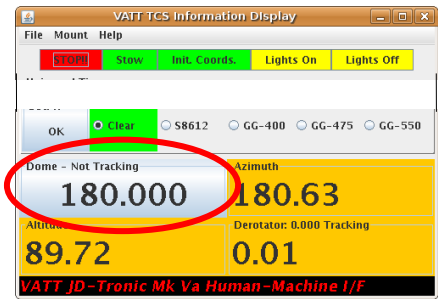
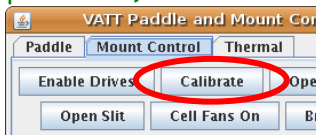
TURN ON DOME LIGHTS (left of patio door)

In VATT Paddle & Mount Control

Click "Calibrate" [for mount]

WATCH telescope move

& make sure dome also moves with it.

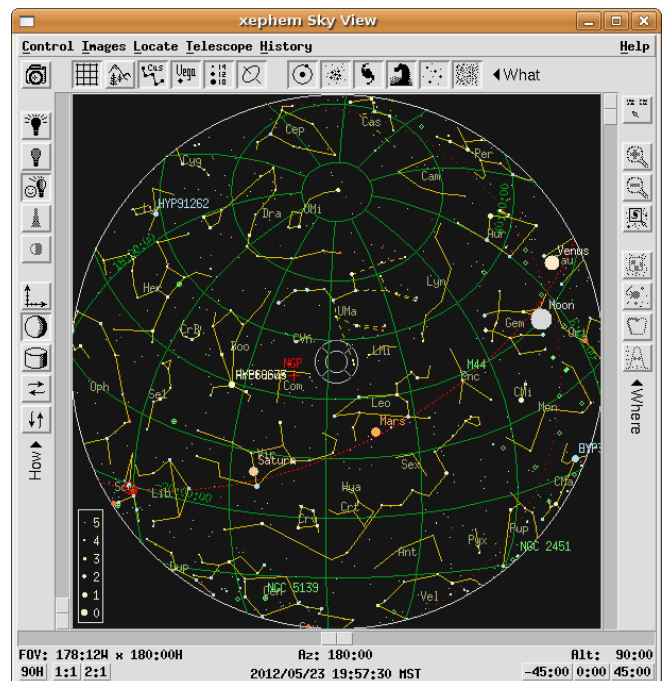
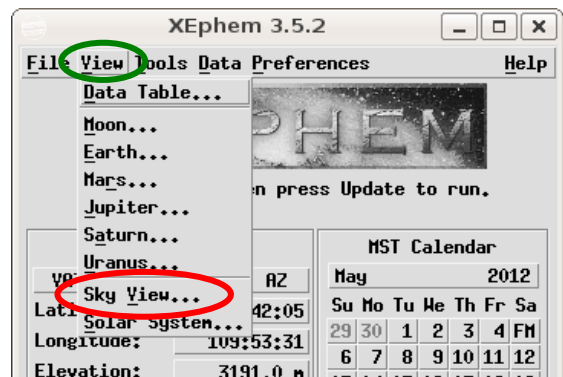


Bring up Xephem

click "now" in Night

under "View"

bring up Sky View



In Sky View

Under "Telescope"

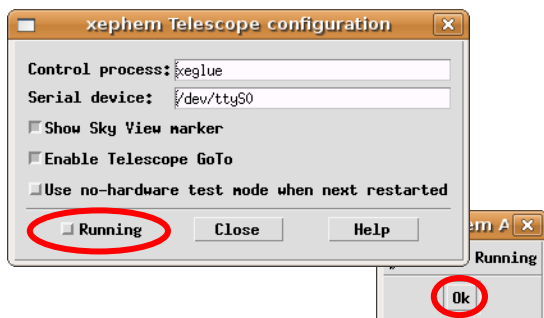
Open "Configure"

Click "Running"

(if on, click off, close, reopen)

Click "OK"

often under configure frame



Bring up Web Browser

Start trouble report

Begin Observing Program. Clear Skies!