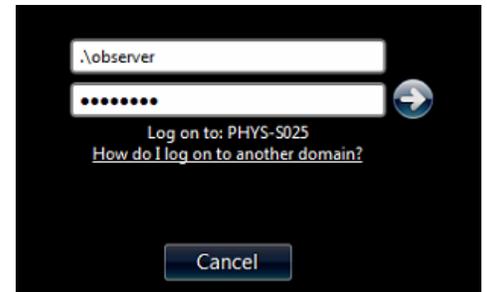


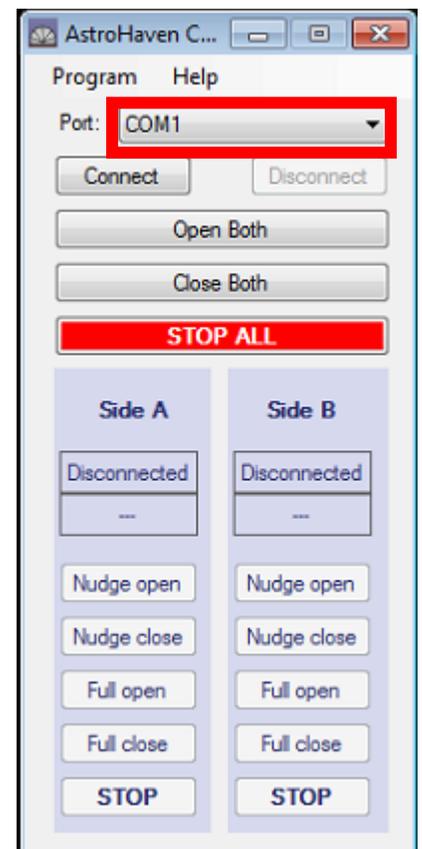
A guide to observing with VAO

1. Remove the covers from the telescope you will be using. **IF SOLAR OBSERVING, MAKE SURE ALL COVERS ARE ON THE OTHER TELESCOPES!!! IF YOU POINT AT THE SUN WITH THE COVERS OFF THE CDK17 OR PLANETARY REFRACTOR, YOU WILL DESTROY THE OPTICS AND THE CAMERAS!!!**



2. Log in to the observatory control computer using the .\observer user name. Ask your TA for the password.

3. Open *Astrohaven Control* program for dome control. The controls are mostly self-explanatory. "Side A" is the south side of the dome, while "Side B" is the north side. Be sure to set the port to **COM1** and press connect. For most normal observing, press **open both** and wait on the roof to finish opening.



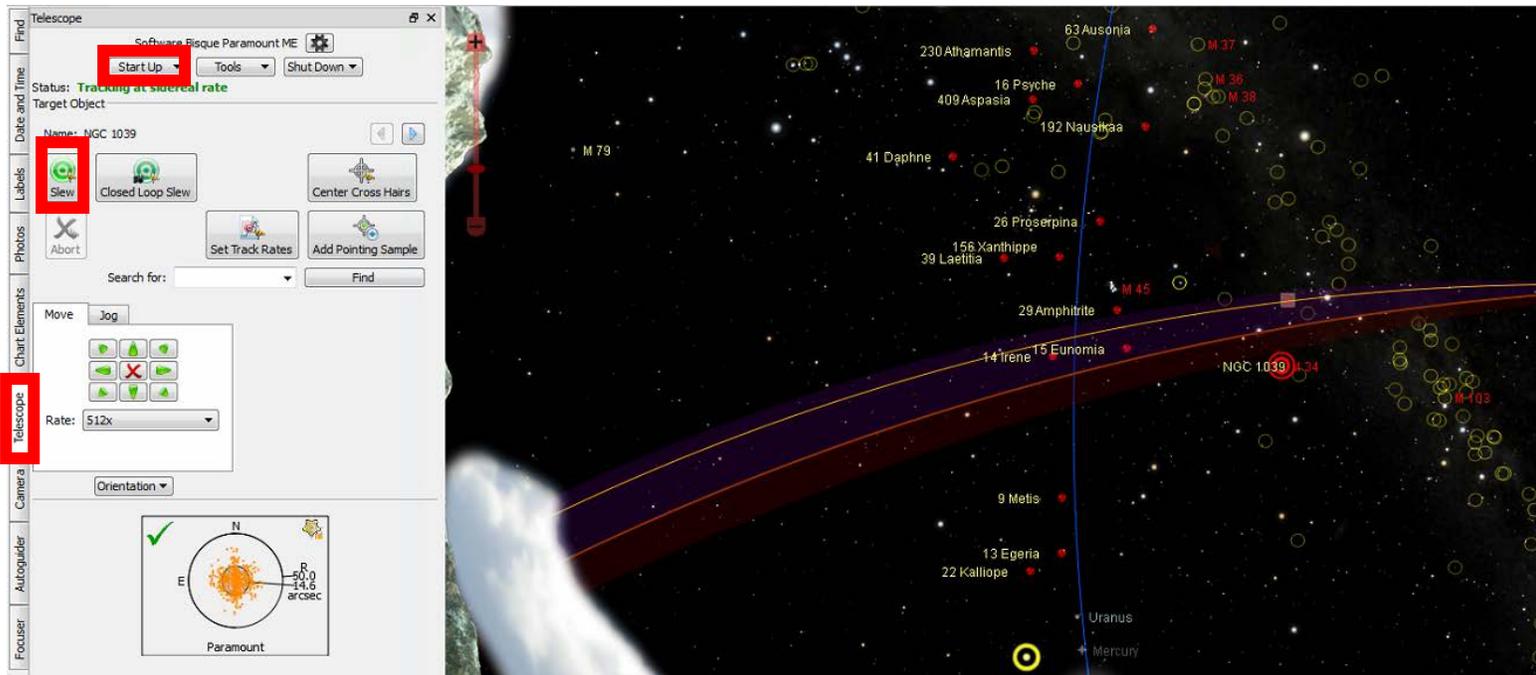
4. Open *Maxim DL 6*. After opening, do not click anything for several moments. When *Maxim DL* opens, all other software needed to control the telescope connect and connects to the telescope hardware.



5. After *Maxim DL* has loaded, go to *TheSkyX*.



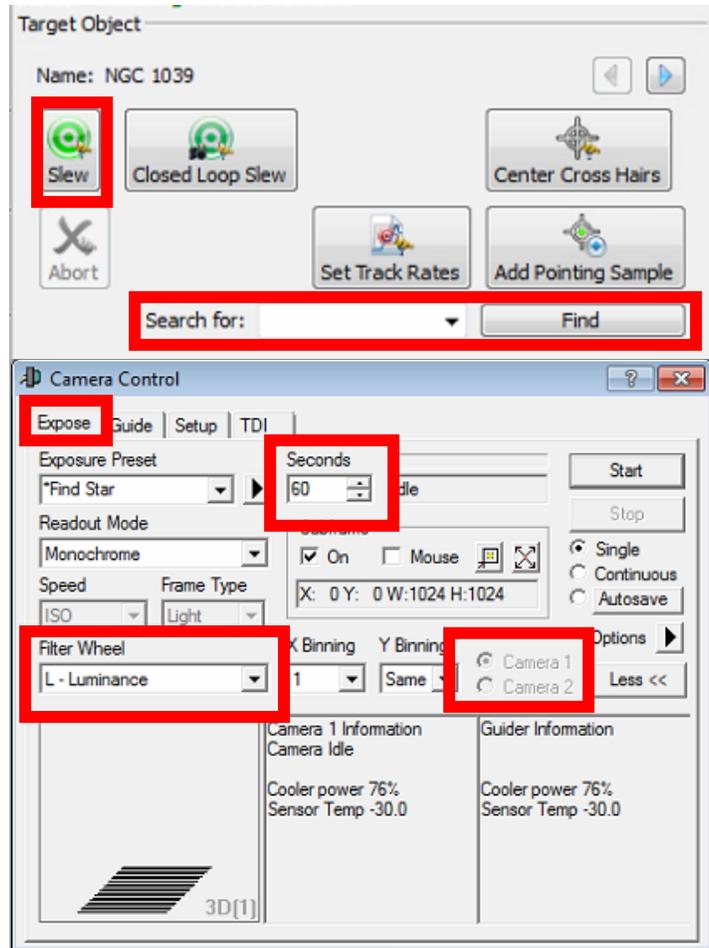
In *TheSkyX*, find the **telescope tab** on the left side of the window. Open the **start-up** menu and select **Home**. Wait for the telescope to finish homing before proceeding. When finished homing the telescope will emit a series of two beeps, and the status will change to "Tracking."



- Using the map on *TheSkyX*, click on a star cluster (marked with yellow circles) that is high in the sky. Use the **slew** button on the **telescope** tab to point the telescope to the object you selected.
- (Night-time observing only) Switch to the *PW13* window. Click on **Start AF**. The telescope will then go through the process of focusing the camera. This procedure should be repeated once per hour of observing.



8. Return to *TheSkyX* and **search for** the object you want to observe. After typing in the name of your source, click **find**, then **slew**. The telescope will move to your object.
9. Once you have pointed the telescope, return to the *Maxim DL* window. Go to the **camera control** window. Select the **Expose** tab, choose your **camera** if available (Camera 1 for night and Camera 2 for solar), and choose your **filter**. Then set your exposure time (**seconds**). After your filter is chosen, click **Start**. Maxim will then take your exposure. **Make sure to save your picture after you take it, or Maxim will delete it when you take your next photo!**
10. When finished observing, switch to the **Setup** tab in the **camera control** window and click **disconnect**. Close *Maxim DL*



11. Switch to *TheSkyX*, under the **telescope** tab, open the **shutdown** menu and click **park**. Wait on the telescope to finish moving to the park position and open the **shutdown** menu again. Select **Disconnect Telescope**. Close *TheSkyX* and close *PWI3*.
12. **Replace all covers removed from the telescope for observing.**
13. Using the *Astrohaven Control* window, click **Close Both**. After the dome closes, close the *Astrohaven Control Program* and log off.