# Schulman Telescope Shutdown Procedure

The steps to shutdown the telescope are somewhat the reverse of the Startup process- but greatly simplified. Knowledge of the Startup process as well as using the LCOGT GUI and moving the telescope are assumed in the steps below.

The final state of the shutdown in terms of electrical isolation (lightning shutdown) and protection from the elements (covering the telescope with plastic, rotating the dome to minimize weather effects of rain and snow etc...) are not covered in totality here. Please confer with mountain operations staff and cognizant observers and operators for more information.

## **Telescope and Dome**

- 1. Close the telescope Mirror Covers.
- 2. Close observatory Dome (if not already closed).
- 3. Park the telescope (or move it to the park position and turn the tracking off). Make certain telescope is not tracking.
- 4. Remove instrumentation- or if left in place, cover the primary mirror baffle tube with baffle cover. It is a good idea to leave the telescope in a balanced state.
- 5. Rotate Dome (any method) to chosen safe position. Park position is currently at 59 degrees Azimuth.

### Disconnect/Disable Devices (Software)

- 1. On the main observatory computer disconnect the telescope via ACP (if connected) and TIM unit.
- 2. Physically turn off the TIM unit at its rocker toggle switch.
- 3. Press the red button on the dome controller box to cut power to it.
- 4. Close any running software on the desktop.

# **Controller Shutdown**

- 1. Using VNC access PubSub.
- 2. Shutdown the Agent Platform:





4. Open a terminal using either the terminal icon at the top of the desktop or by Right Clicking on the desktop as shown below:



- 5.
- 6. At the prompt in the new terminal window type "sudo poweroff"  $\rightarrow$  This will shutdown PubSub.
- 7. Using VNC access the MIC computer.
- 8. Open a new terminal and again execute "subo poweroff"
- 9. Wait 2 minutes (to make certain these computers shutdown "nicely")
- 10. Turn the red controller switch to "Off"

#### Main Computer and UPS's

- 1. Turn off the Large UPS (for telescope controller) by pressing the "power" button. The screen indicates the instructions.
- 2. Unplug the Large UPS from the wall.
- 3. Shutdown main observatory computer.
- 4. Turn off small UPS (for computer and remote power outlets).
- 5. Unplug from power source.
- 6. In Warm room unplug the CAT5 cables that give service to the main observatory computer and the telescope controller.
- 7. Consider covering telescope, observatory desk and television.

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