

# Changing the Nitrogen Dewar Spartan IR Camera for the SOAR Telescope

Edwin D. Loh

Department of Physics & Astronomy  
Michigan State University, East Lansing, MI 48824

Loh@msu.edu 517 884-5614

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**To open remote panels needed for the autofiller**, open the URLs that are listed below.

- LiquidNitrogenValve, <http://soaric3.ctio.noao.edu/LiquidNitrogenValve.htm>, controls the valve. See Figure 1.
- LogTempPressure, <http://soaric3.ctio.noao.edu/LogTempPressure.htm>, monitors the many temperature sensors and the pressure inside the instrument. See Figure 2.

You can use only two computers, the operator's console and LoggerII, to control LiquidNitrogenValve.

## To remove a spent nitrogen dewar

1. Close the valve on the dewar.
2. Loosen the nut at the dewar, and remove the hose.

## To attach a full nitrogen dewar

1. Attach the hose to the dewar.
2. Verify that the vi for the liquid nitrogen valve is running and the valve is enabled. If it is disabled, press the button "Enable valve."
3. Make certain that the pressure is much less than 0.1 mtorr (on the LogTempPressure panel). If the pressure is high and the temperature of the N2Can is less than 80K, then something is wrong.

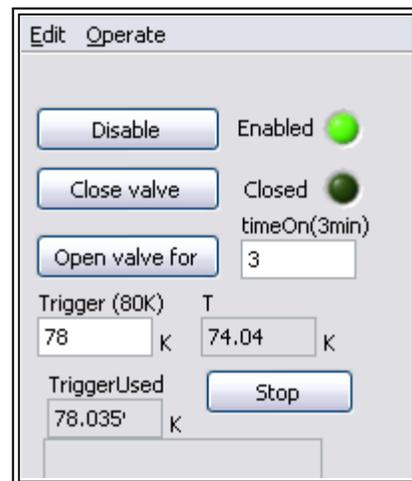


Figure 1: Panel for control for the liquid nitrogen auto filler.

- Open the valve on the dewar 20°, where 90° is fully open.

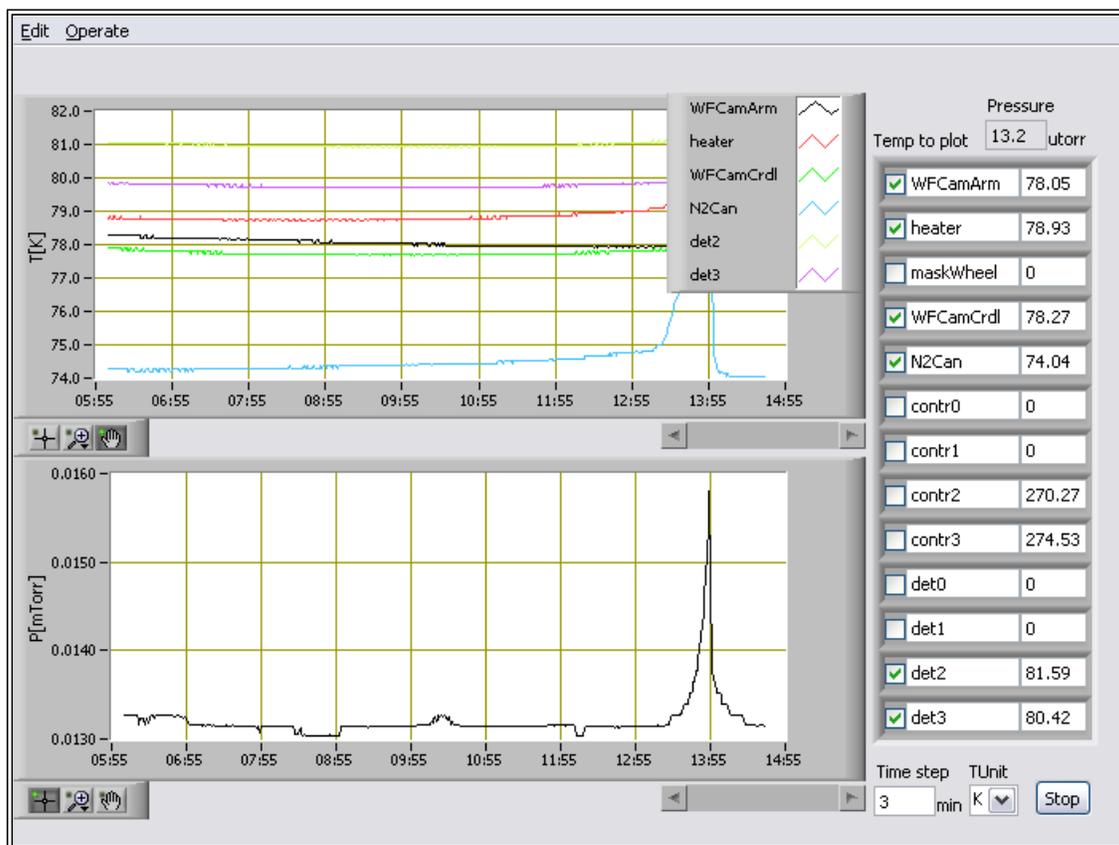


Figure 2: Temperature and pressure panel