

WIFIS Cryostat First Cool-down in Toronto Results

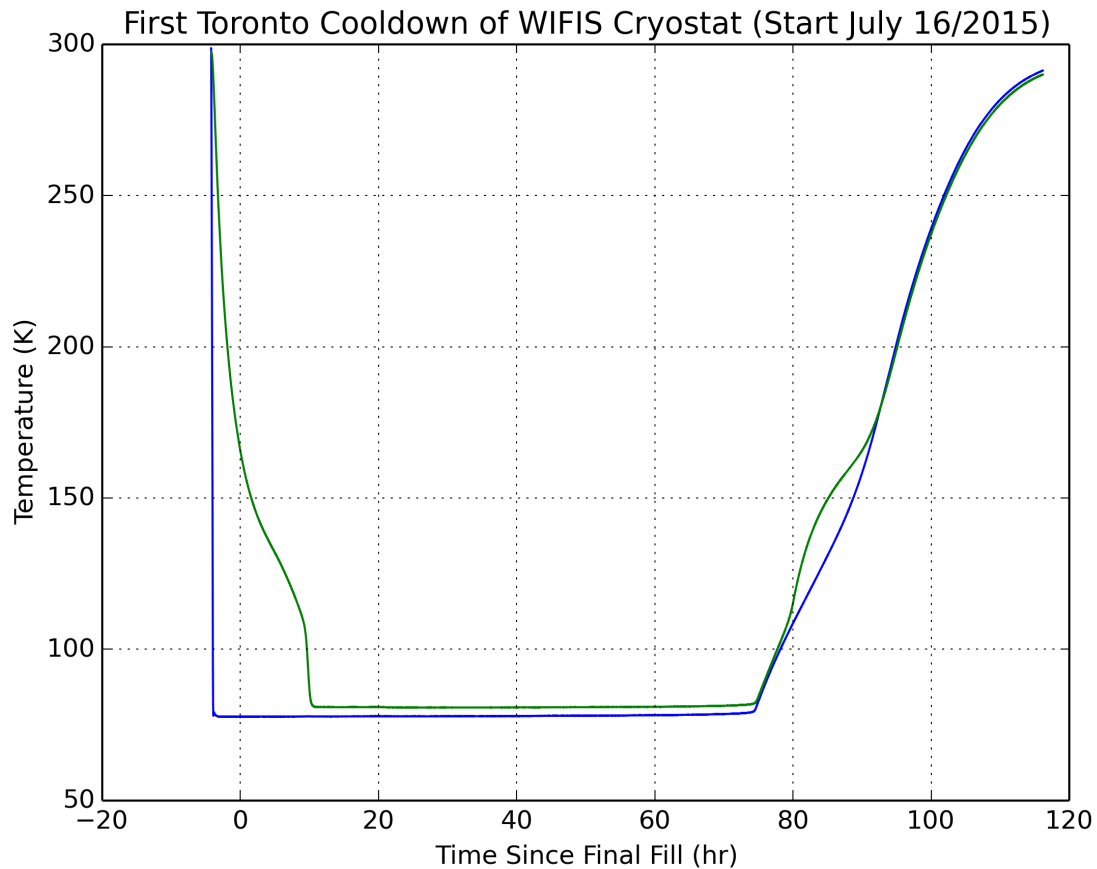
Test Notes:

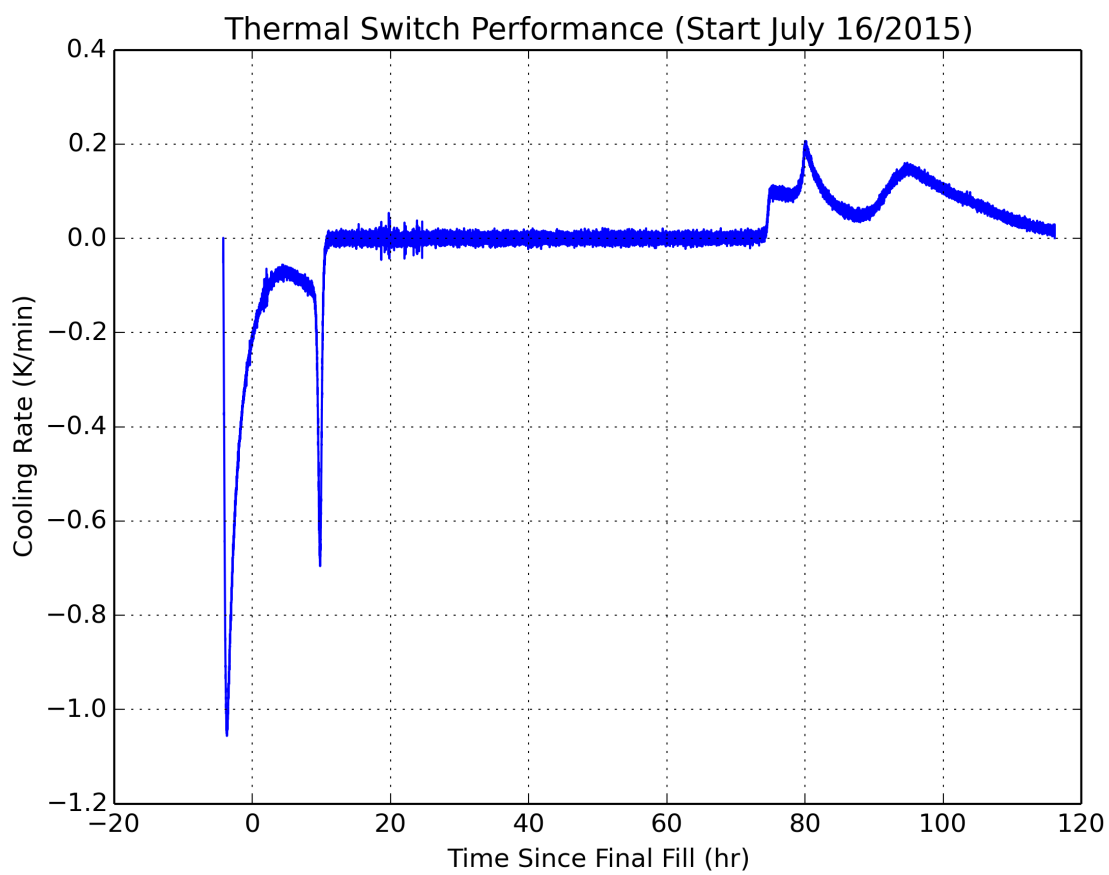
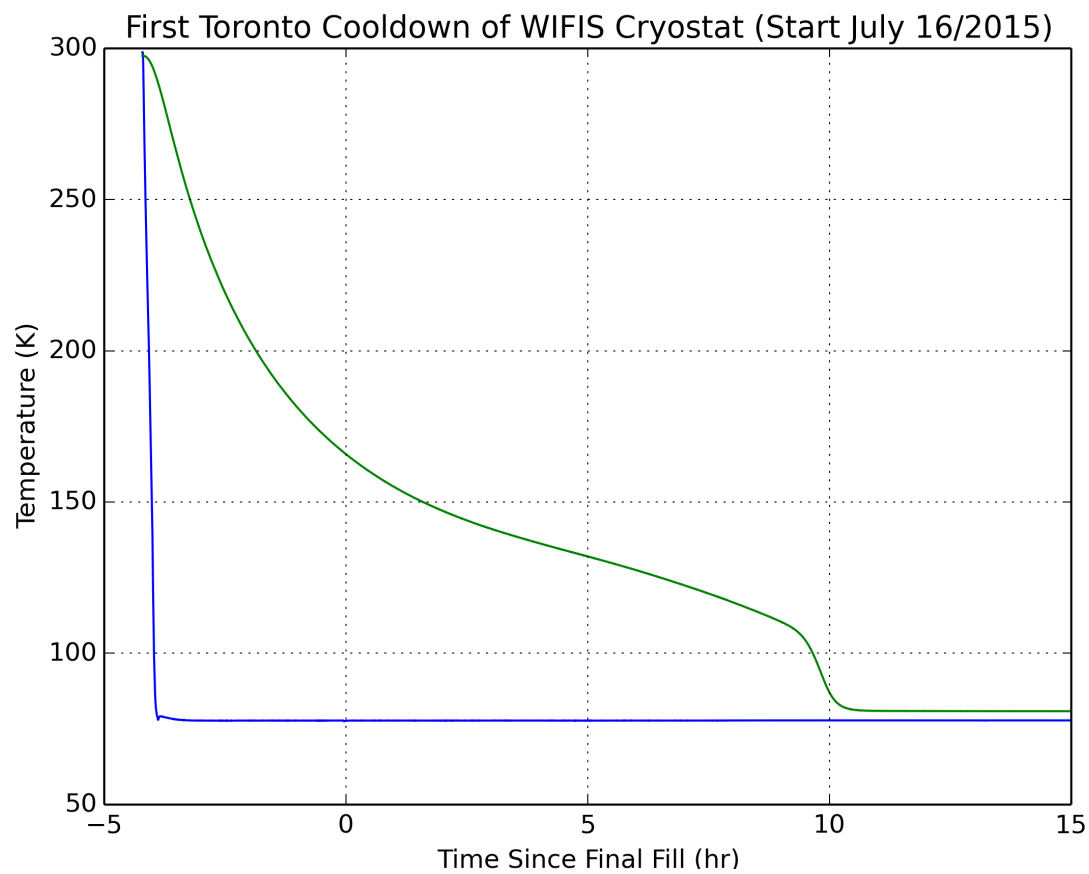
1. Cryostat in horizontal configuration with temperature sensors on work surface and hot end of thermal switch. No other components are present on the work surface.
2. Cool-down started at 11:45 on July 16, 2015.
3. LN2 top-up at 16:00 on July 16, 2015.
4. Test completed on July 21, 2015 after full warm-up of cryostat.

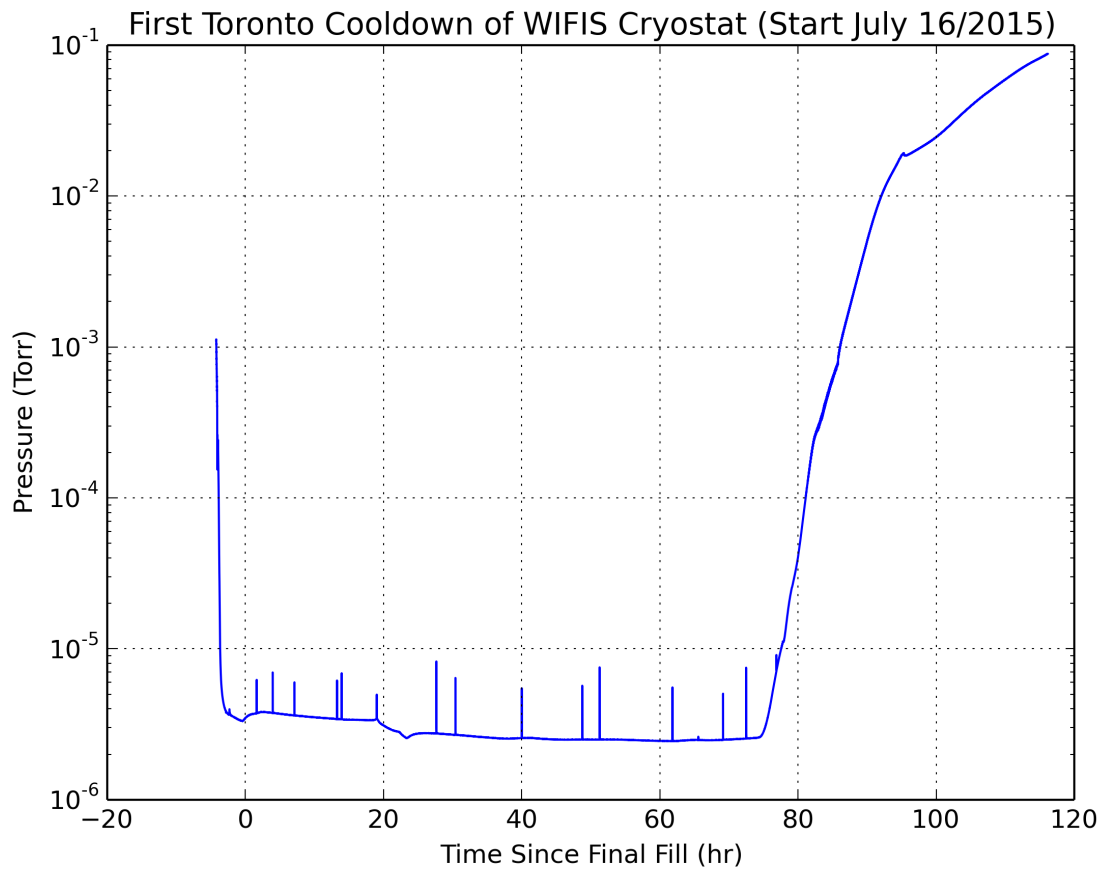
Results:

Blue: Work Surface Temperature

Green: Thermal Switch Temperature





**Conclusions:**

1. Hold time is 74.5 hours (3.1 days).
2. Thermal switch functions as expected. Cooling rate briefly exceeds 1.0K/min, but that is because there is a very small thermal mass attached to the hot end of the thermal switch.
3. Vacuum pressure is very good throughout test and holds at ~ 3 microTorr when cryogen is present.