

April 26-29 Status

Eric J. Mannel

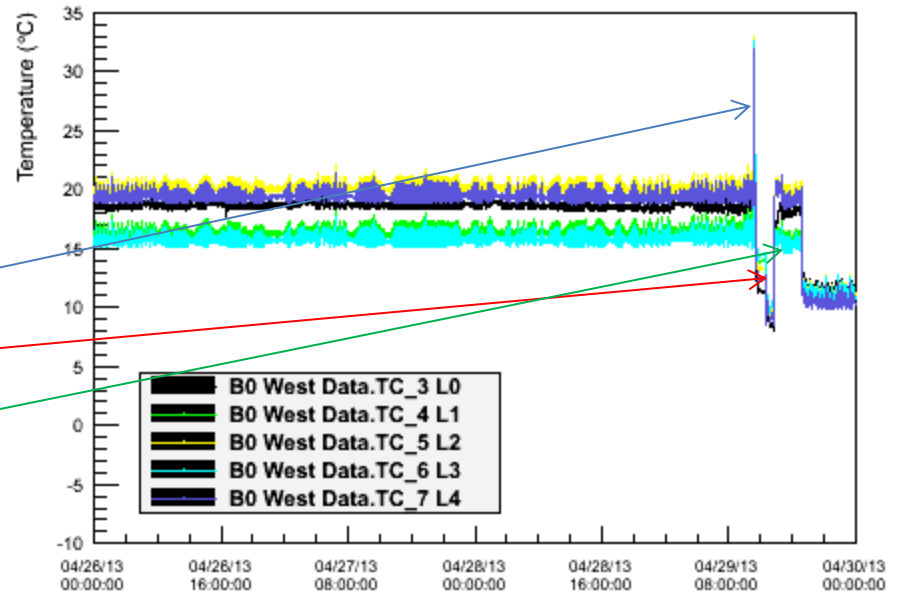


Temperatures

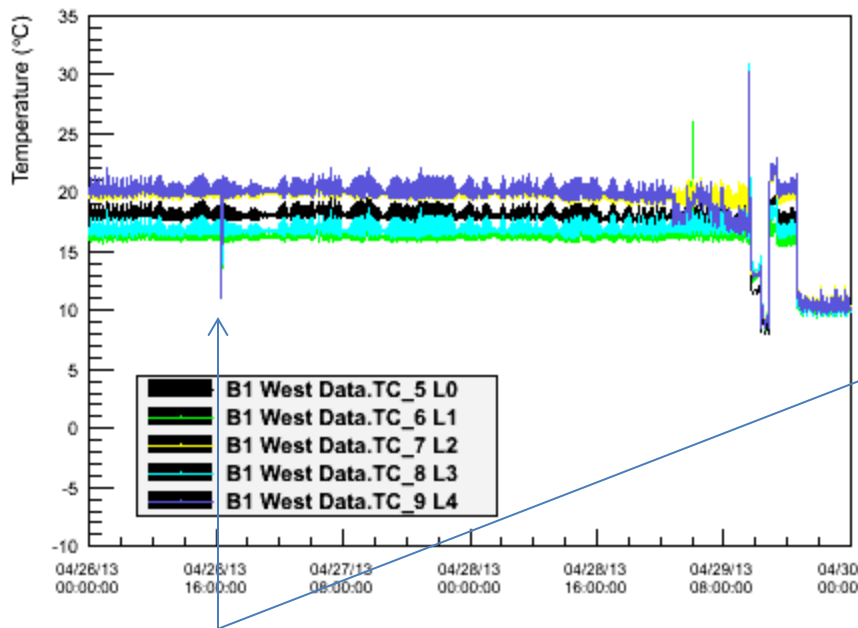
- One TC per VTX stave at the output end of the stave.
- FVTX TC are at top and bottom of each disk
- Recorded approximately every 4 minutes
- Thermocouples are not calibrated

VTX Thermocouples

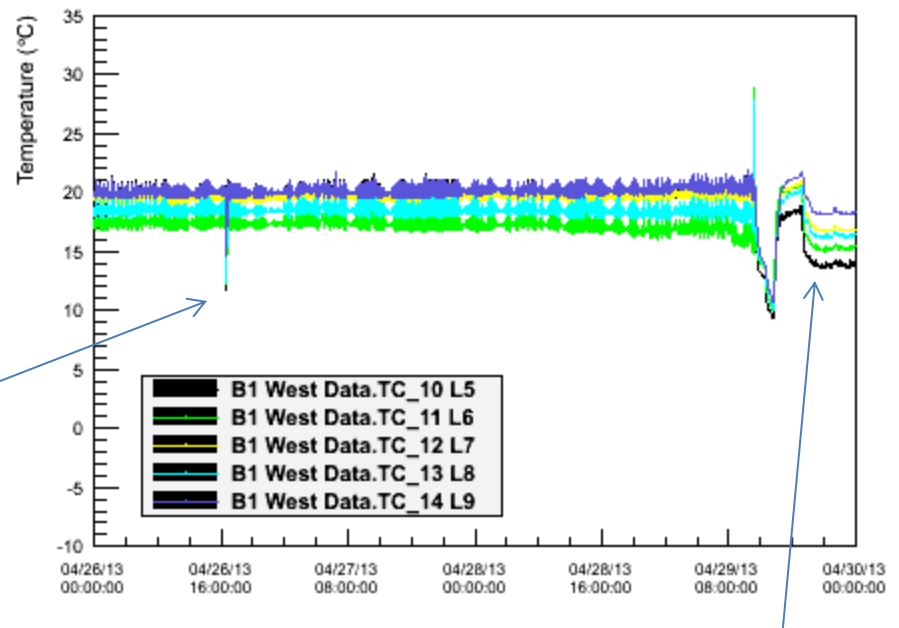
- B0 L0-L4 (West Ladders)
- Time period 28-Apr through 29-Apr.
- Start of access and testing
- Shutdown to inspect leak
- Post repair testing
- Similar features for B1 ladders (next slide)



VTX Thermocouples B1 L0-L9



Thermocouple trip,
RUN e-log ID 4204, tripped TC
not reported in log.

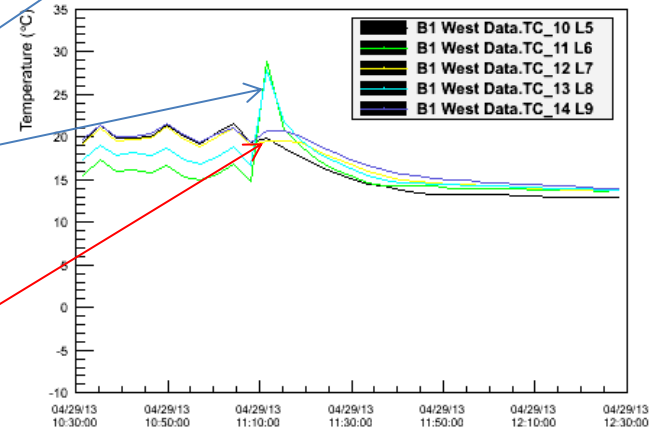
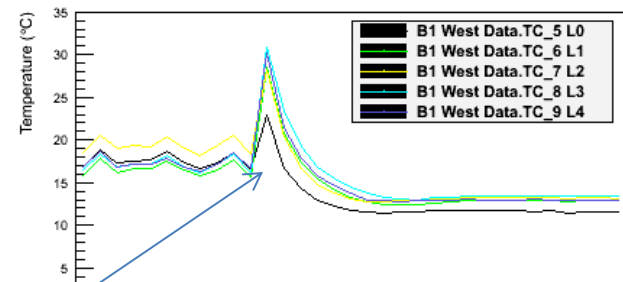
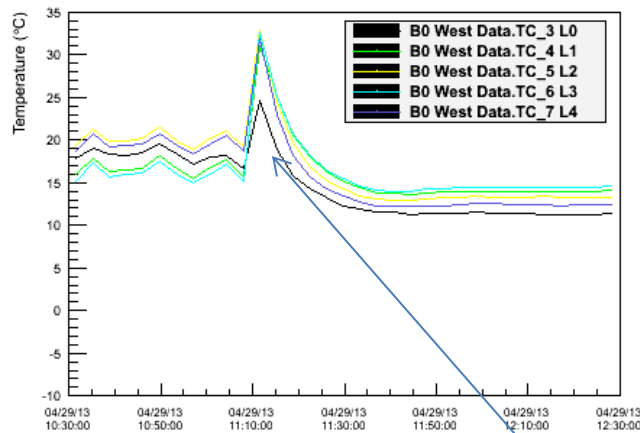


Coolant flow to the ladders has been stopped

Comments on Start of Access

- At start of access, shift crew was asked to turn off Bias and LV for VTX and FVTX.
- Techs were informed that LV and Bias were off for both systems. (~10:30).
- At ~11:00 E. Mannel arrived at counting room. Found FVTX LV off, but VTX LV switched on. Both were interlocked tripped due to coolant flow being off. Switched off VTX LV.
- Early in access, the techs lowered coolant flow on individual coolant loops for the PIXEL ladders.
- Temperatures during first few hours off access on next slide.

VTX Temperatures at Start of Access

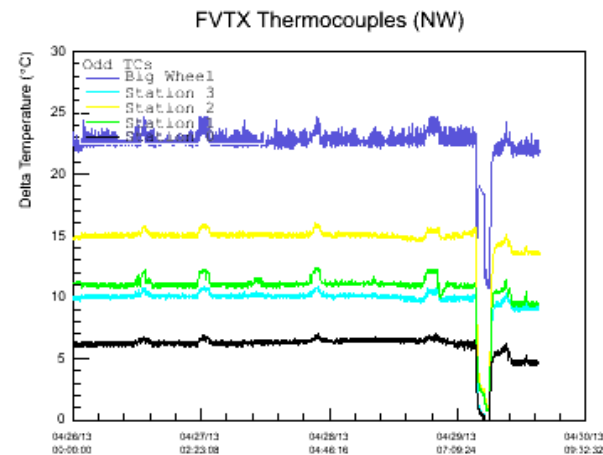
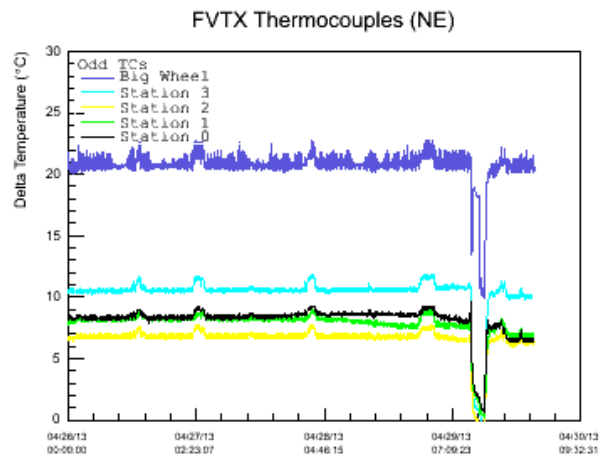
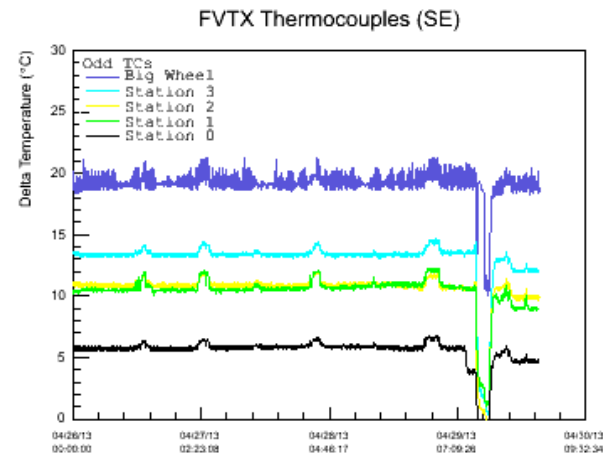
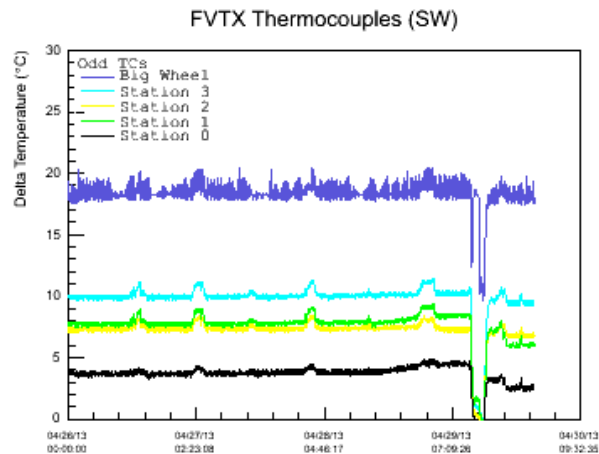


Coolant flow being interrupted?

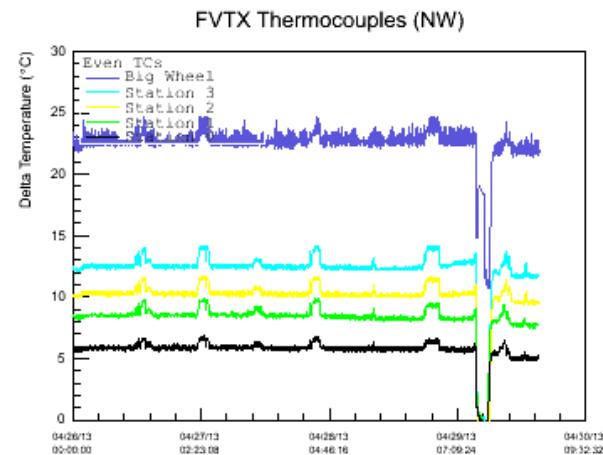
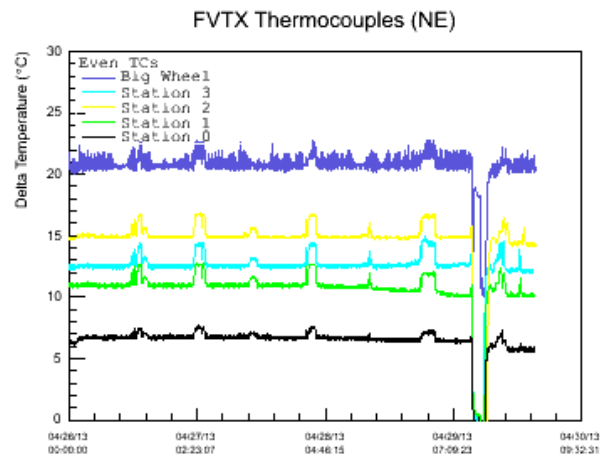
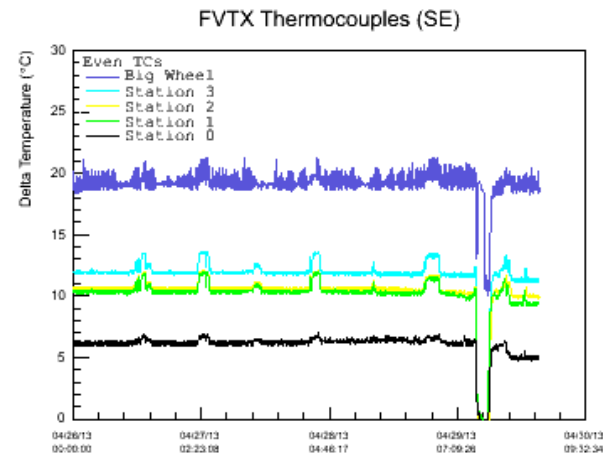
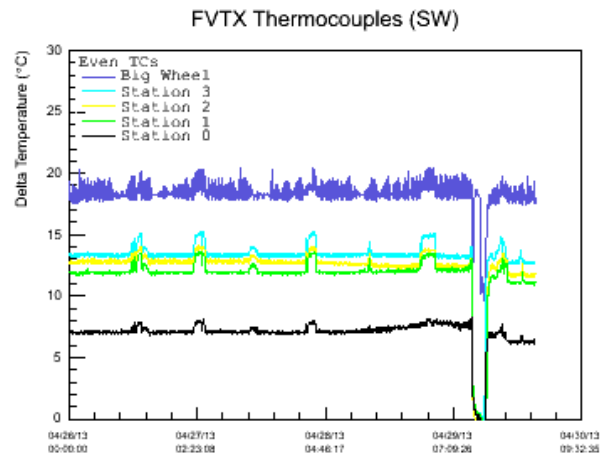
Maximum temperature 30C, trip temperature

Note: Only 3 ladders don't increase, L5, L7 and L8

FVTX Temperatures Odd (Top?) Numbered

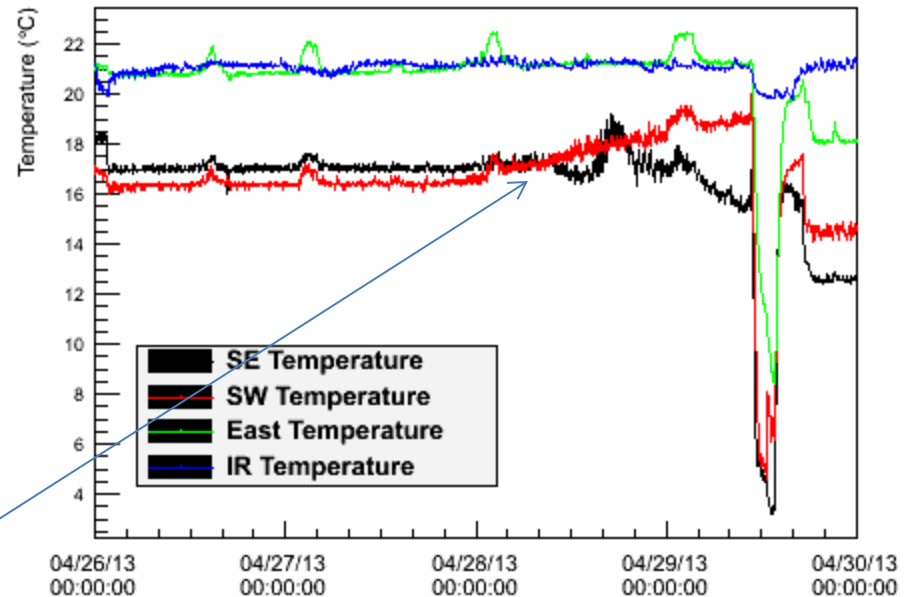


FVTX Temperatures Even (Bottom?) Numbered

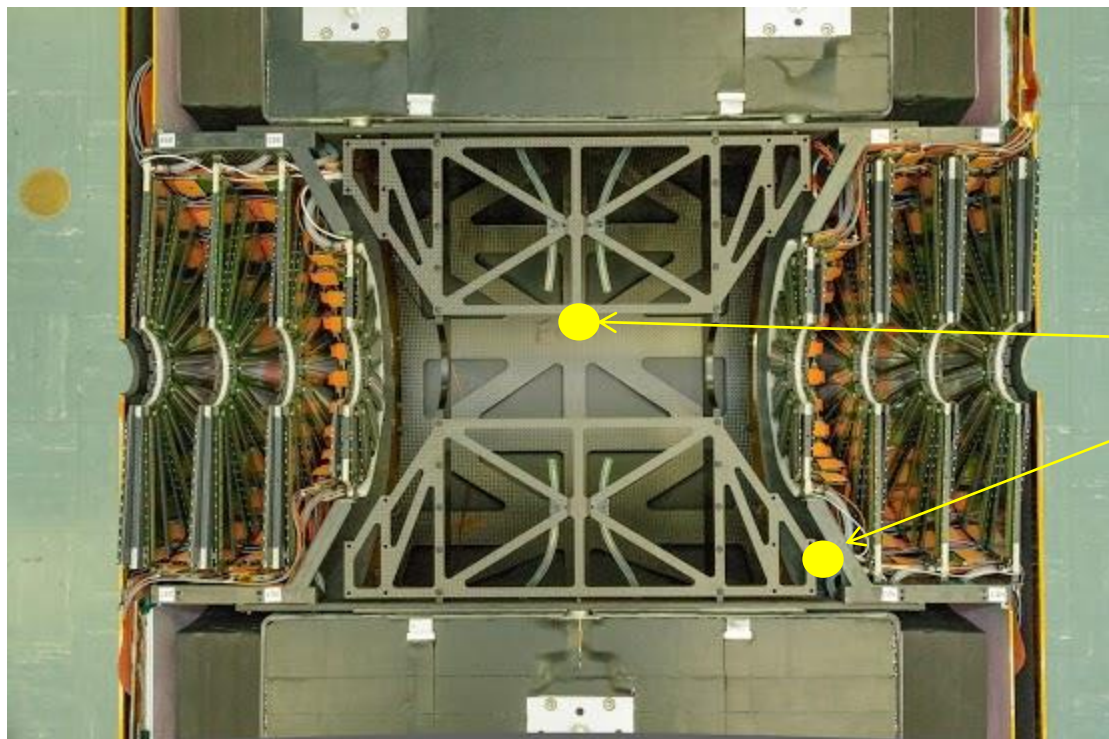


Aux Thermocouples

- IR temperature
- 2 thermocouples in the enclosure, 1 in center of East barrel, 2 on south end outside of FVTX cage on the bottom. See next slide.
- Note gradual increase in SW temperature over 36 hours.
- This is also can be seen in FVTX SW Station 0 temperatures



Location of Aux. Thermocouples



Approximate location of auxiliary thermocouples.
East thermocouple
Southeast thermocouple
Southwest (not shown) is in similar location on west side.
All TC's were installed "floating" so they would not touch any surfaces.

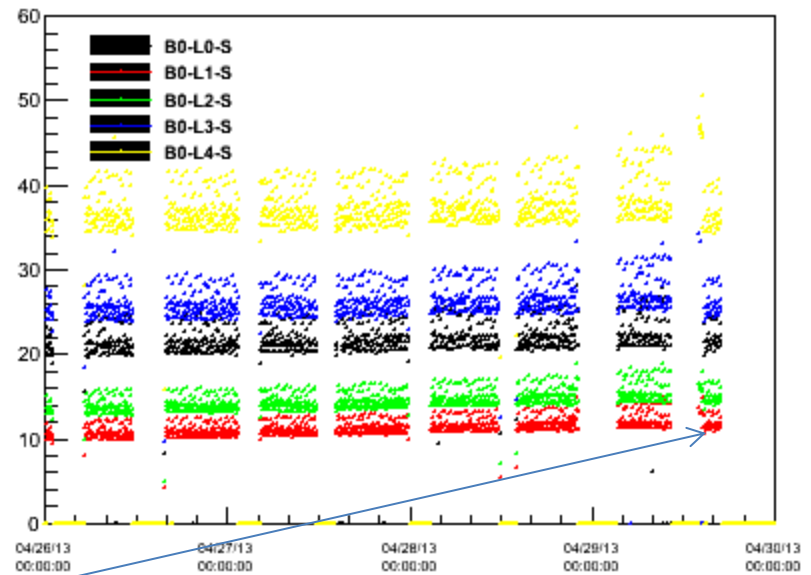
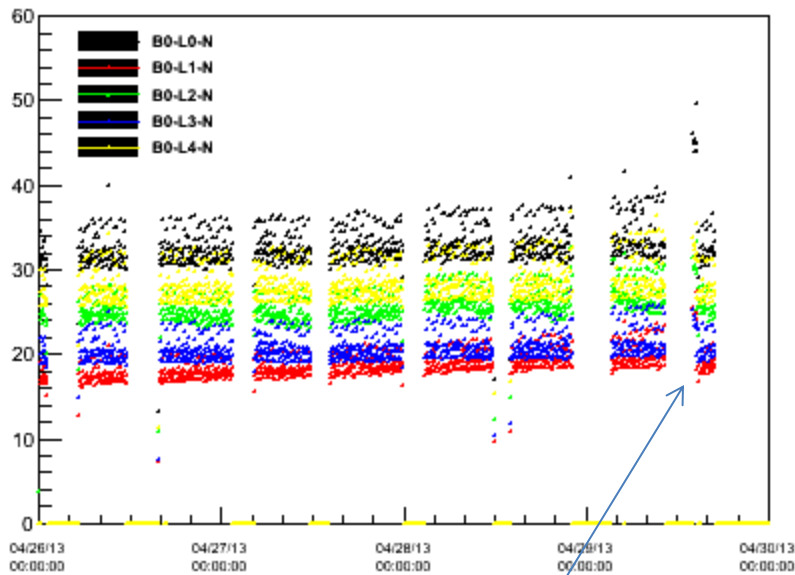
North

South

Bias Voltages

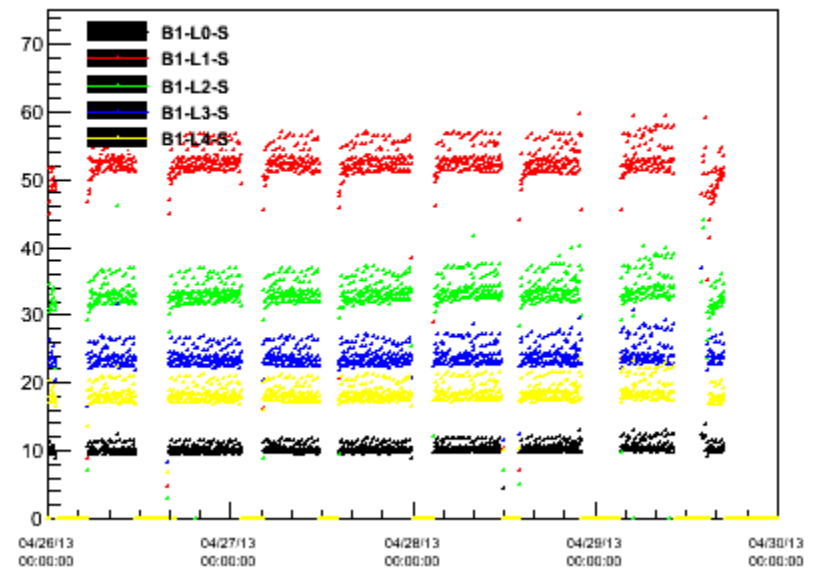
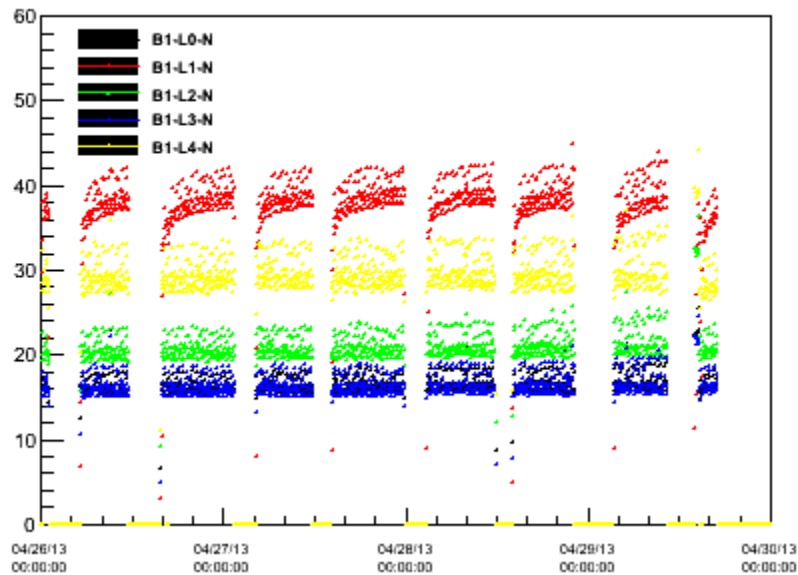
- Each VTX Pixel ½-ladder has an individual supply with current and voltage read back
- Supply readout approximately every 4 minutes
- Bias was ramped down prior to the beam being dumped

B0 L0-L4 April 26-30

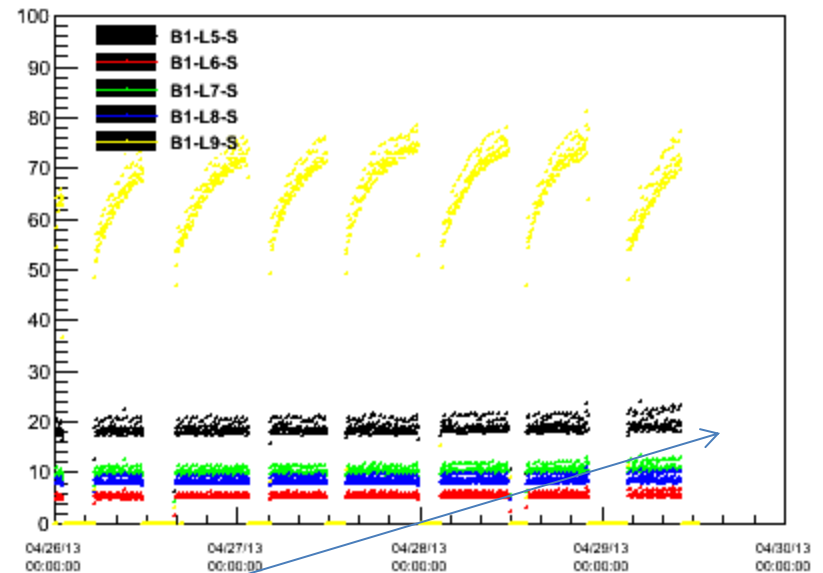
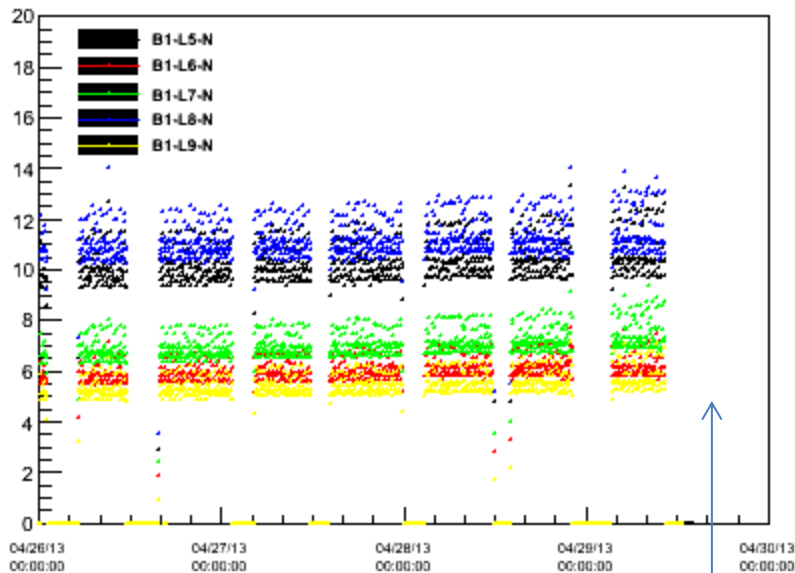


Post Access testing

B1 L0-L4 April 26-30

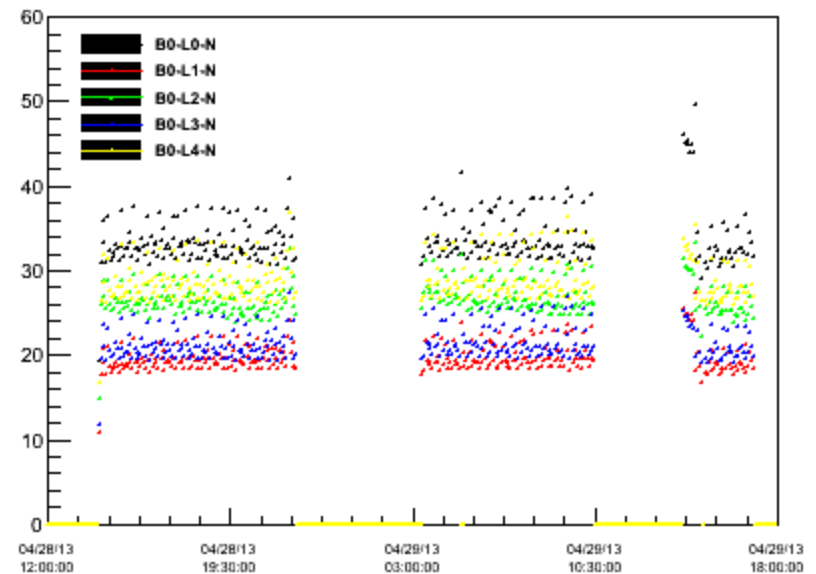
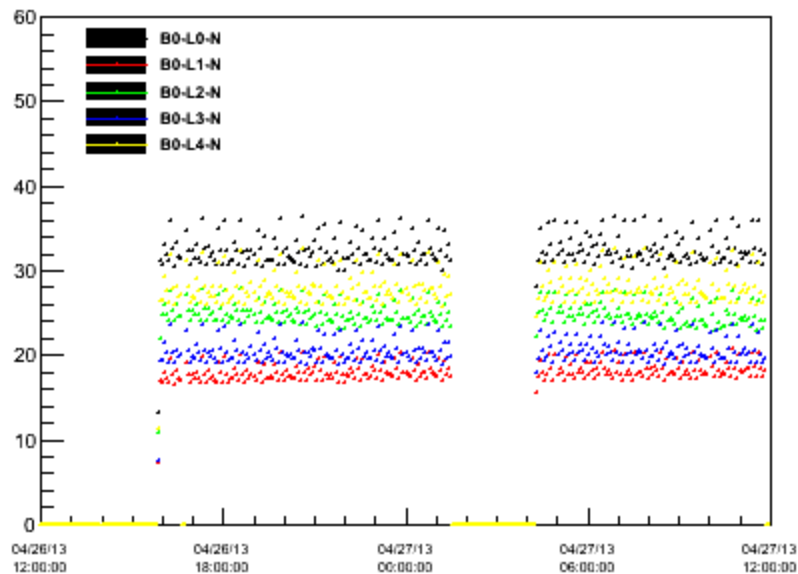


B1 L5-L9 April 26-30

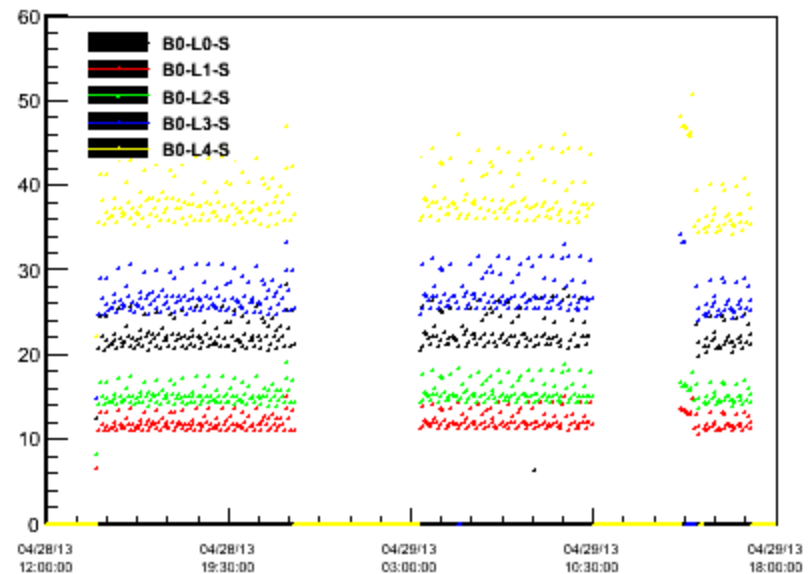
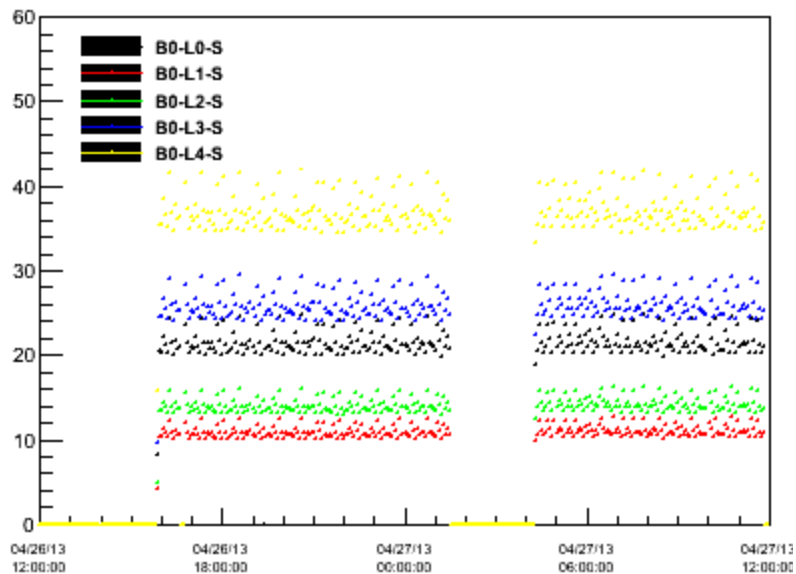


Ladder bias disabled after access

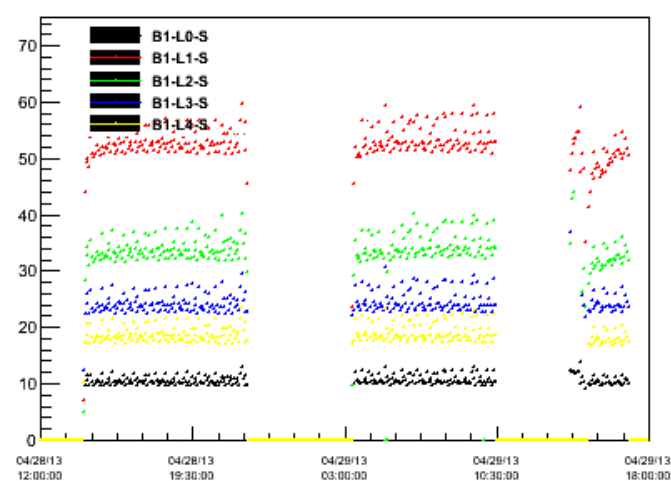
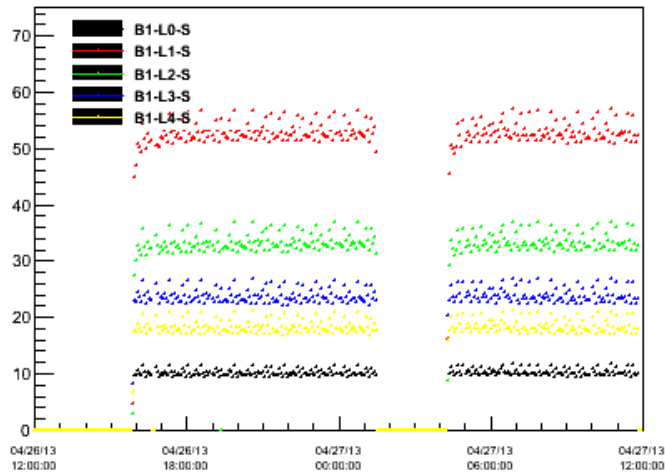
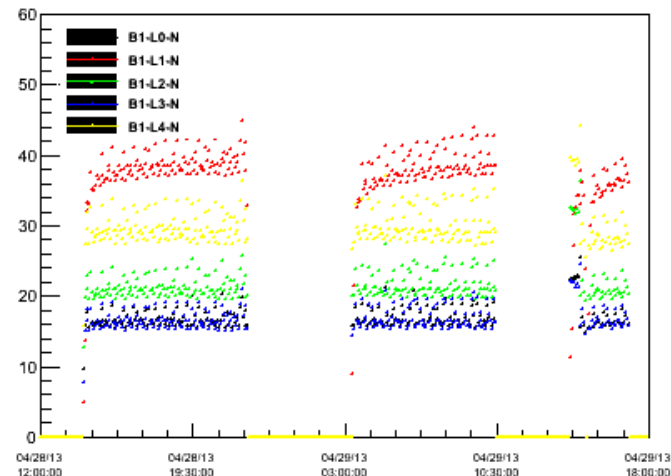
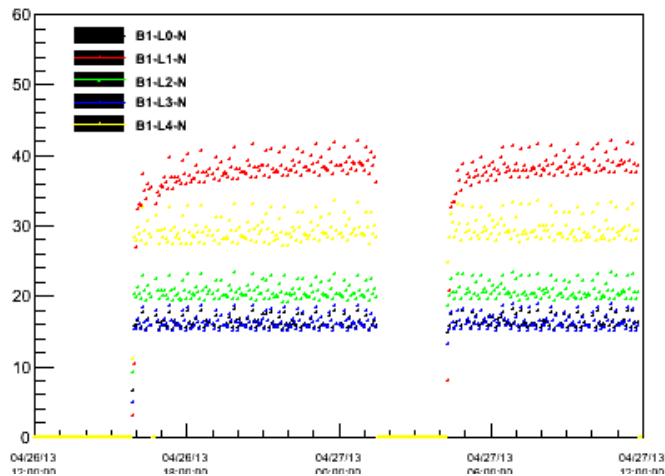
Detailed Comparison of April 26 and April 28



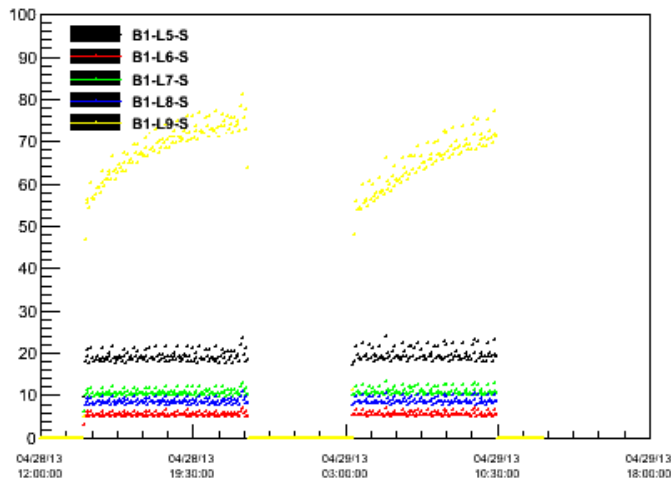
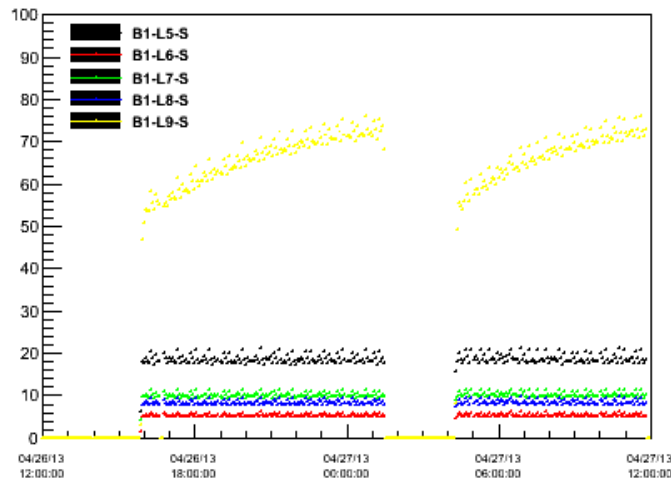
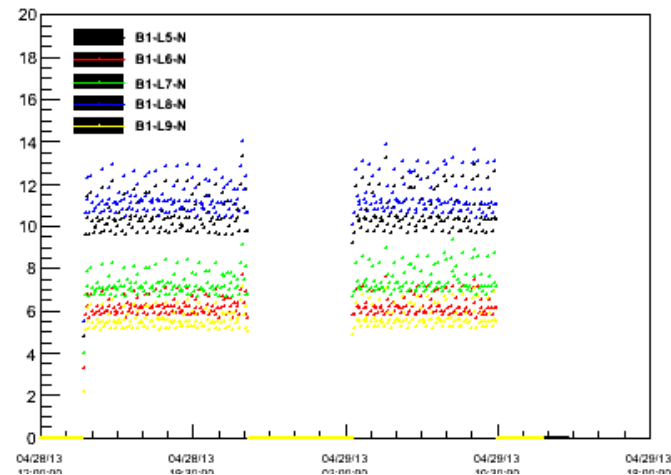
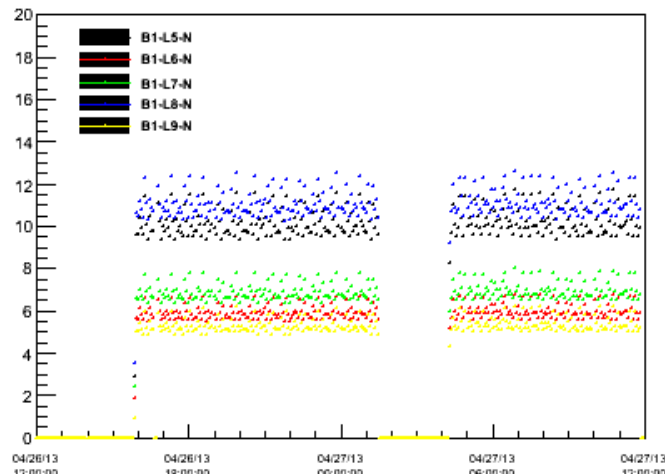
Detailed Comparison of April 26 and April 28



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Detailed Comparison of April 26 and April 28



Radiation Monitors

