

# Ckov status

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# Hardware status

- All PMTs installed, cabled, under HV for ~2 months now.
  - Recently increased HV to nominal running value: 2100V. No problems with HV.
- One remaining system: LED pulser.
  - Patch panel box on B. Jones' desk – in line behind other MIPP work.
    - Should be ready this week.
- Chamber filled with CO<sub>2</sub>
  - $\pi/K/p$  radiatate at 40 GeV

# CAMAC status

- Problems at time of last collaboration meeting now solved.
  - Seem to have robust branch highway to and between our crates.
- We do see problems most likely due to heat.
  - ADC/TDC modules don't always give lams
  - Problems gone this week
    - Added fans, cooler weather
    - Much of DC electronics off
    - Racks+crates no longer (very) hot to touch.
  - Need to monitor temperature near RR12 closely

# “Online” software status

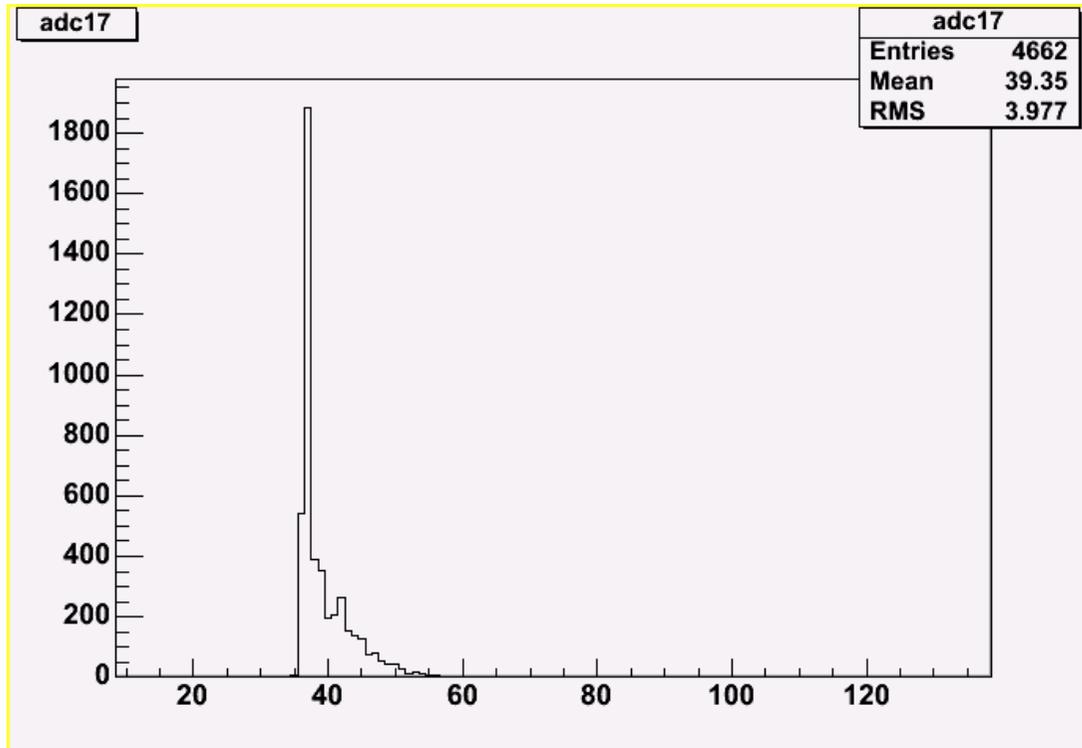
- CKOVDetector code written and debugged
- Code to decode raw data written and debugged.
  - In recent versions of Mipplo/raw2root
- Online monitoring code recently committed
  - Mirror by mirror adc and tdc plots
- Cabling map in the database.
- Success using anamipp to make histos
  - Until rewrite of EventDataModel/IoModules etc.
    - (Is it time for a ‘prelim bugs software mailing list so that fewer people independantly discover the same problem?)

# Timing concerns..

- TDC signals arrive ~240ns before gate from 2323 module:
  - Time for TDC signals from T00 ~ 110 ns
  - My understanding of trigger delays:
    - 30ns T00 to trigger rack
    - 150ns to leave trigger rack
    - 90ns on cables to rack
    - 10ns in 2323 (?)

=280ns
  - Estimate off by 70ns ... is 280ns verified?

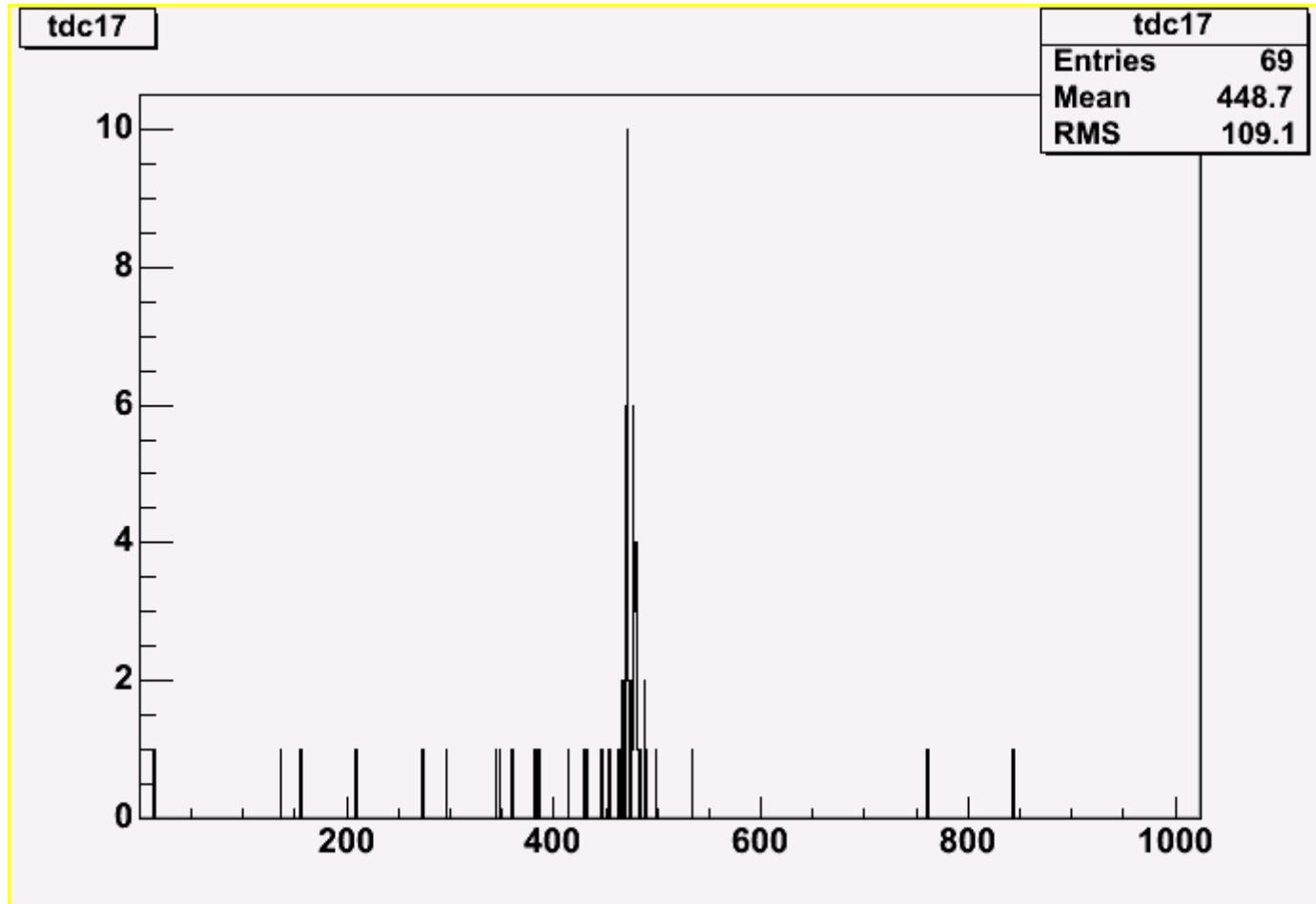
# Evidence of beam:



One mirror on beam axis sees  $>$  pedestal in essentially all events.

- Evidence for hits  $>$  pedestal in most other mirrors. In process of evaluating how many do/don't work properly.

# Many TDCs work too



Thresholds need to be lowered...

# Gas : Crisis du jour

- C4F10 Saga:
  - Planned to wait ‘as long as possible’ to order gas given \$\$ issues.
    - Vendor and rough quote in hand (3M)
  - In ~Feb found out that 3M stopped C4F10 production
    - Terry quickly found new vendor but at 2x \$.
    - Planned delivery date = April 1
      - Actual ~ April 20
  - Whoops: **vendor delivered the wrong gas.**

# C4F10 situation (II)

- Vendor looking at alternative suppliers
  - 1 so far: another 3x \$\$ and 4 weeks
  - Also straightening out with 1<sup>st</sup> vendor....
- Terry looking at alternative vendors
- Looking again at gas alternatives
  - Not many if any that will have similar physics performance.

# Conclusion

- PMTs look to be working
- Concerns:
  - Gas
  - Heat
  - Pulser system to be completed.
  - Need to think about event display..
  - Current problems in io classes