PHOBOS
22.4 & 62.4 GeV Cu+Cu

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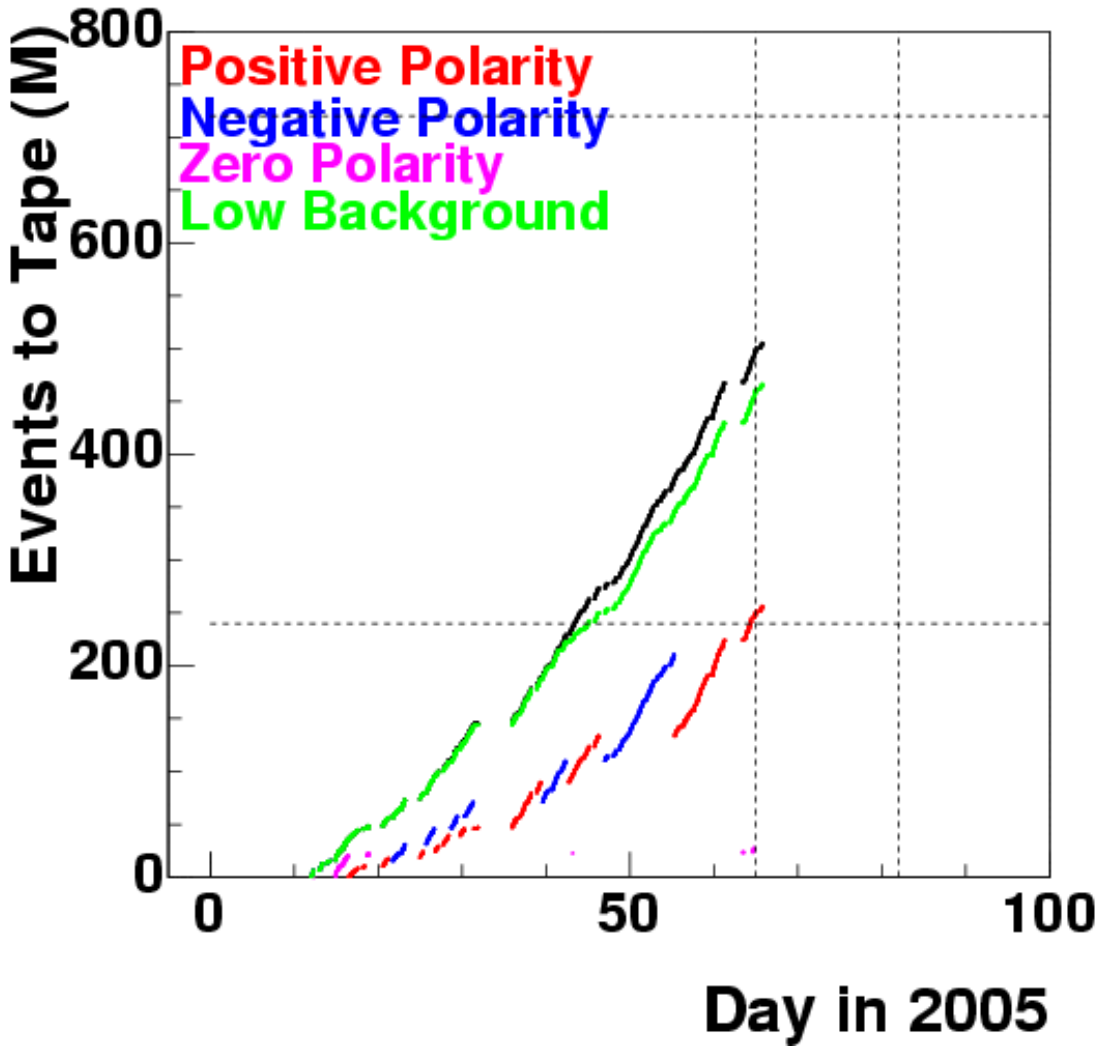
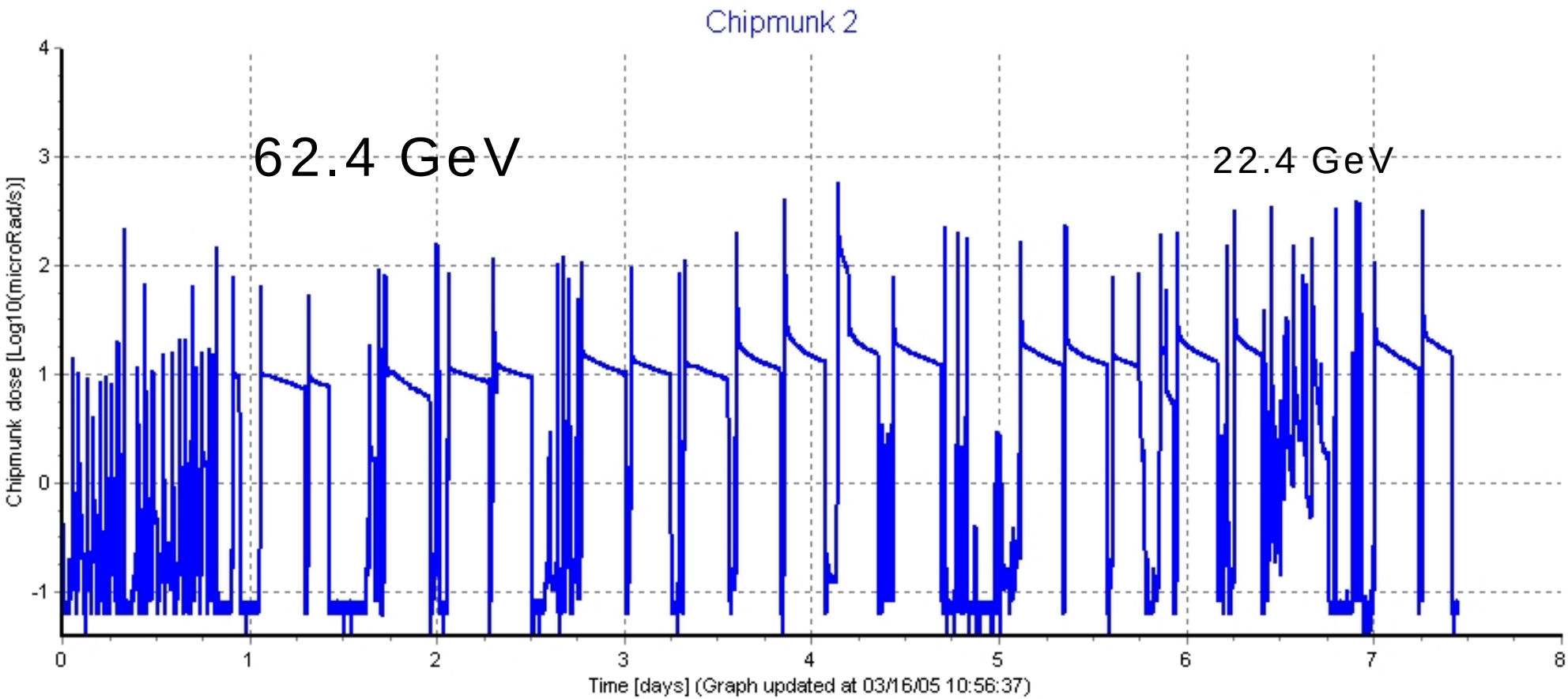
March 16, 2005

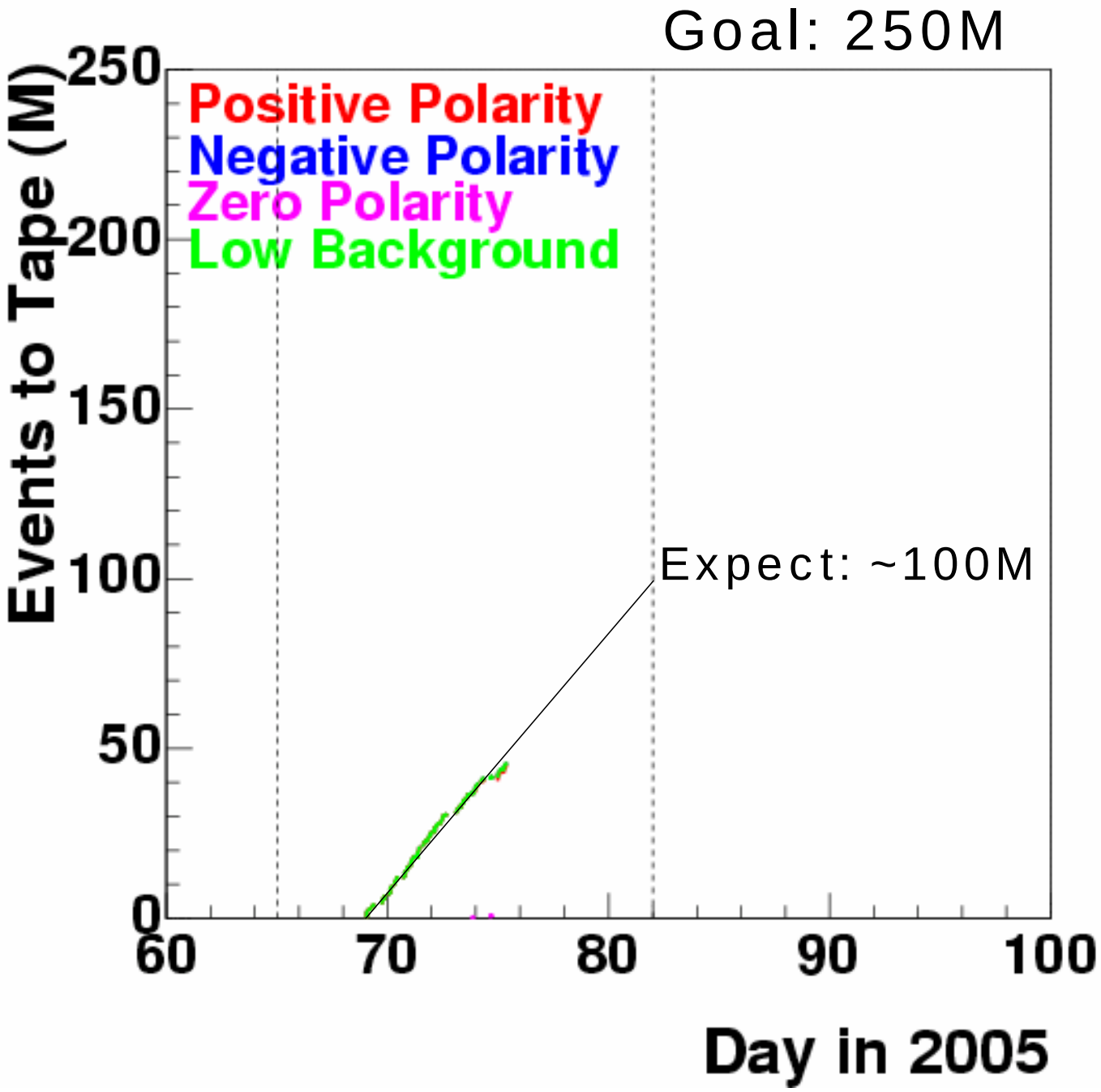
PHOBOS Cu+Cu 200 GeV



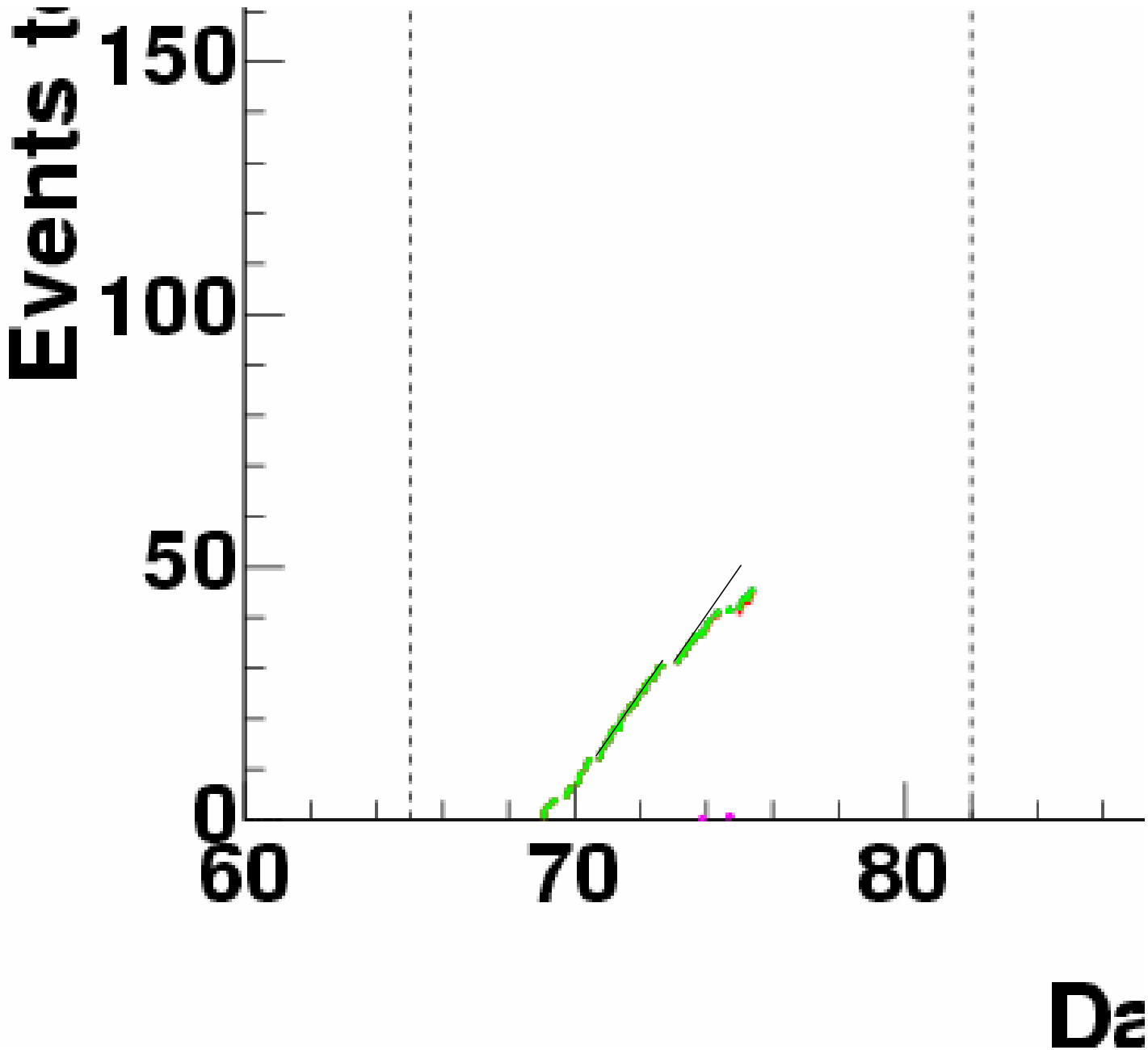
The Week in Chipmunk 2



Progress in 62.4 & 22.4 GeV



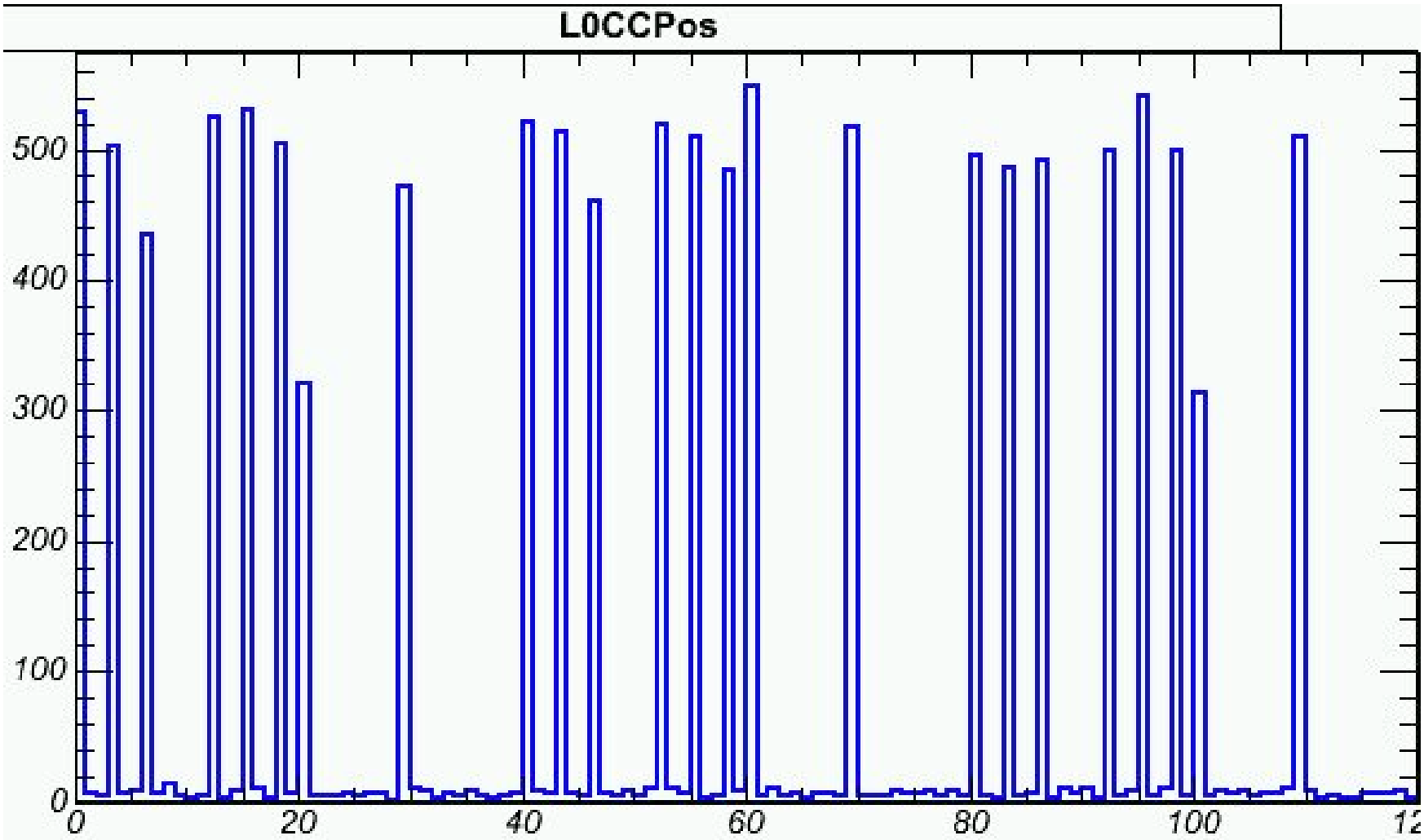
Progress in 62.4 & 22.4 GeV



Problem with Bunch Mask

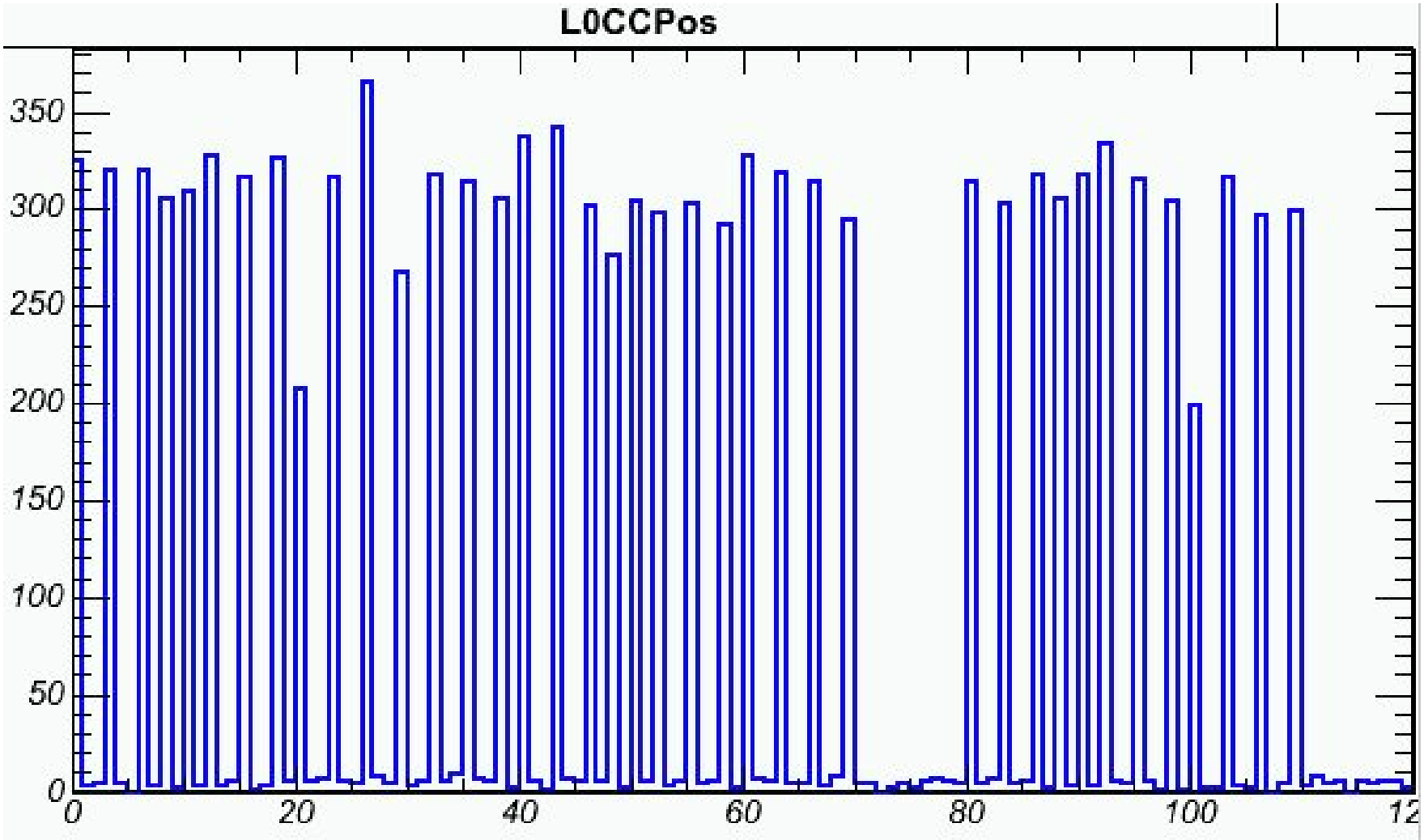
- Yesterday afternoon, we were getting ~120 Hz of collision trigger
- Only recording ~70 Hz to tape
- Everything appeared to be timed in properly
  - Don Barton applied 5ns corrections for going to 22 GeV (vs. <1 ns for 62.4 relative to 200 GeV)
- Problem traced down to using an older bunch mask file (no change since Saturday)
  - Server rebooted today around 9:45am

Up until Reboot



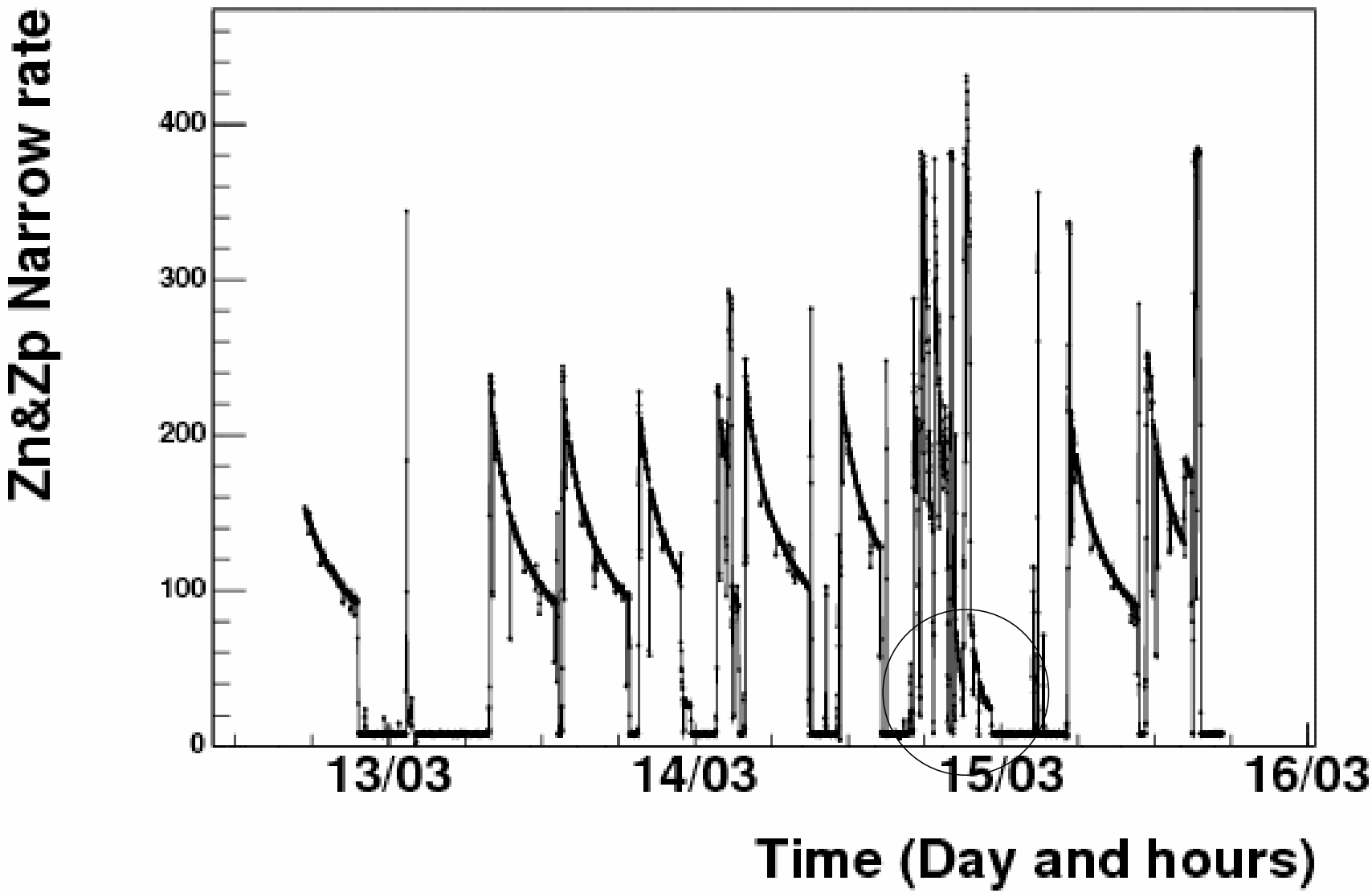
Bunch Number

After Reboot



Trigger Rates

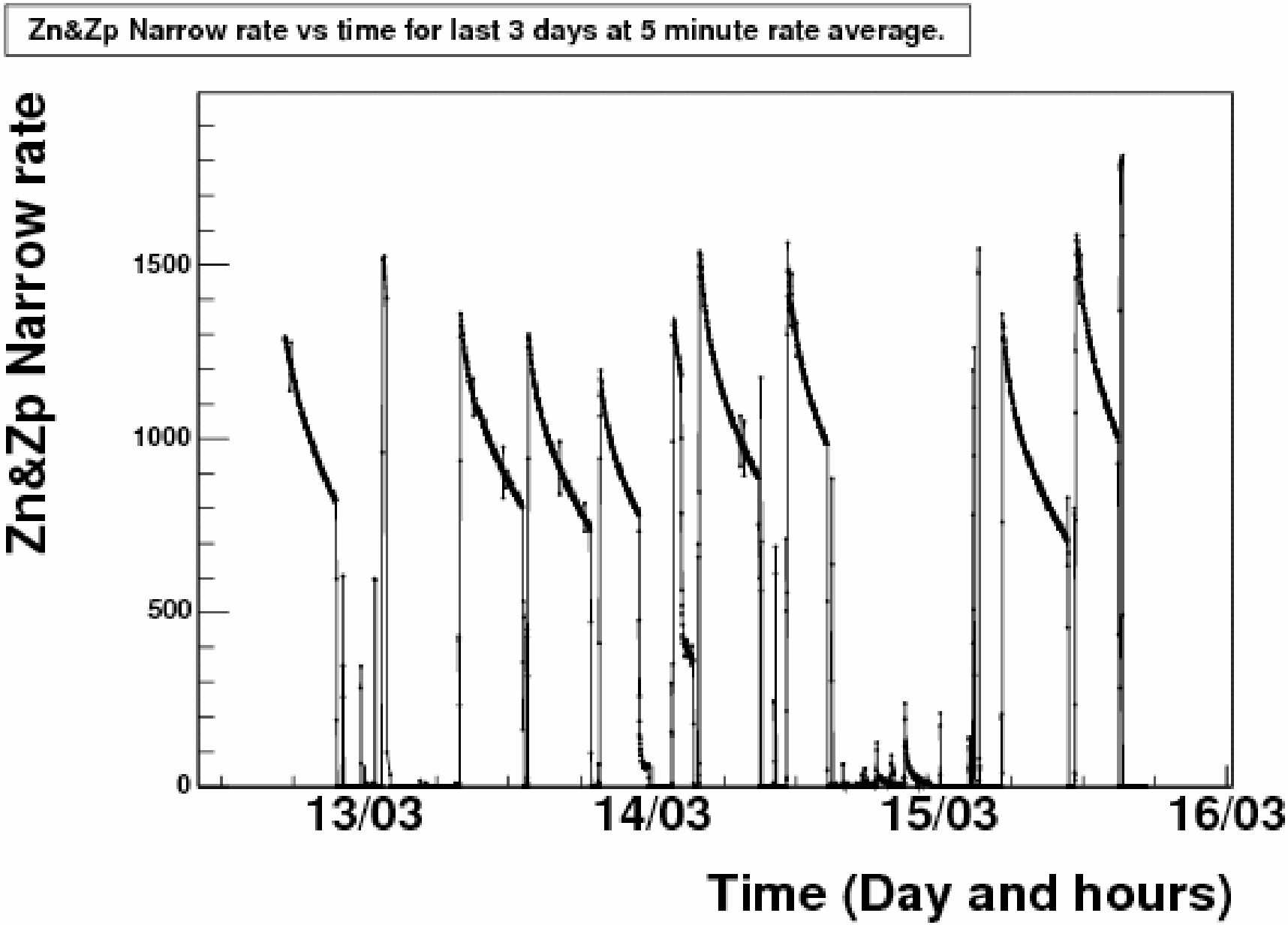
Recorded Triggers vs time for last 3 days at 5 minute rate average.



Updated Expectations for 22.4 GeV

- Might expect initial rates of 500-600Hz
  - O(10000)/(2*10) (beta* and gamma)
  - We only accept ~25% of this: 125-150 Hz
- This is approximately what we saw, accounting for the missing factor of ~2
- If we get 120 Hz and we get
  - 6+24+8 = ~38 hours run (6pm 3/22 - 8am 3/24)
  - Then 38 hours x 50% uptime = 8.2M events
- Adequate for our needs

ZDC Rates - not sure what is going on...



Special Requests for 62.4 GeV

- Polarity flips
  - 0: Thurs 3/17 9am
  - A: Thurs 3/17 1pm
- PHOBOS magnet induced unexpected “field-off” run
  - Only got ~200k physics events
  - Not enough for physics groups

Expectations for 62.4 GeV

- 12 Days, 50% uptime
- 450 Hz average trigger rate
- This gives about 250M events
  - Pushes out to ~5 GeV in p_T - to match PRL