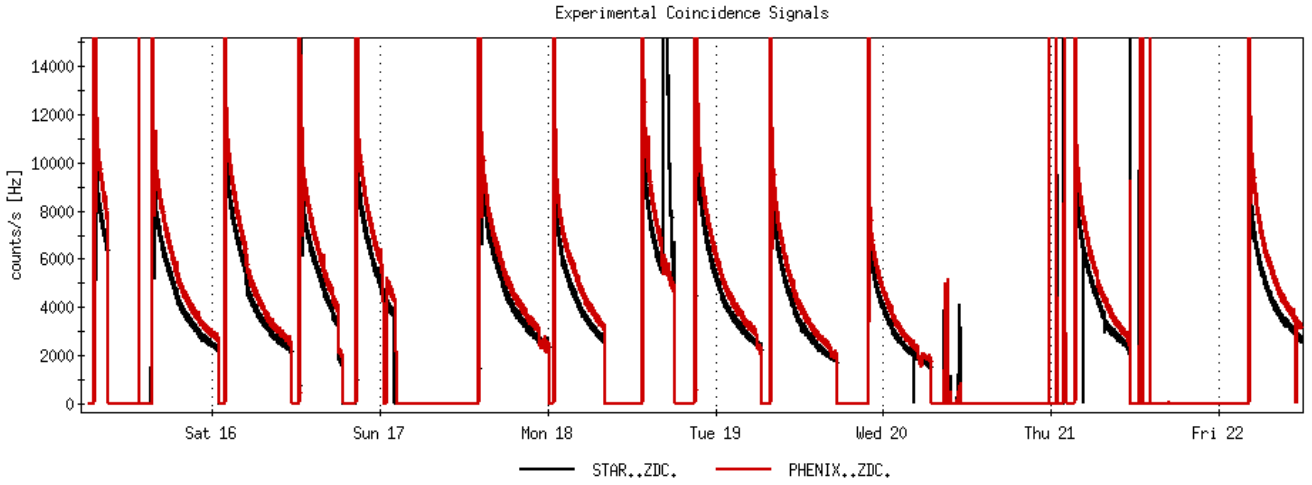
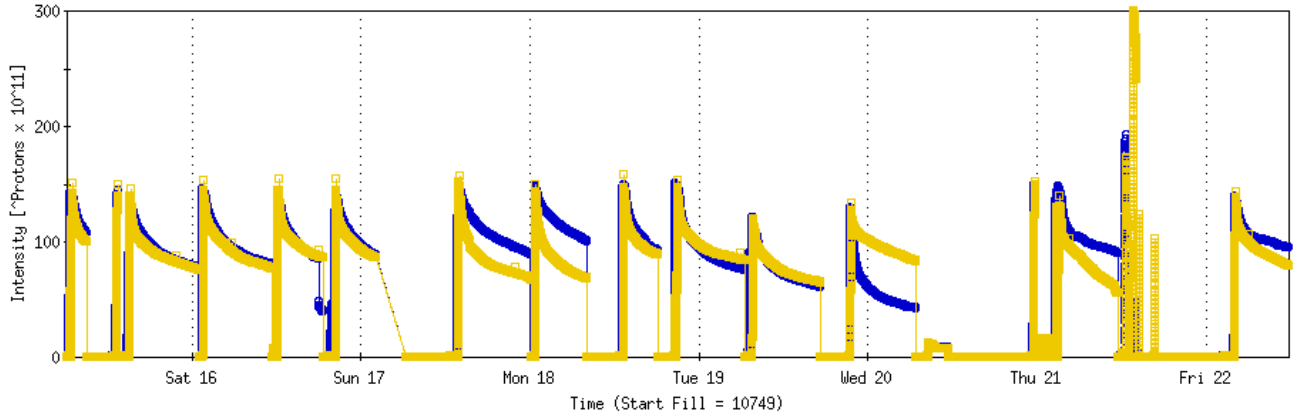
100 GeV Polarized Proton Run

http://www.cadops.bnl.gov/AP/Spin2009_100GeV/

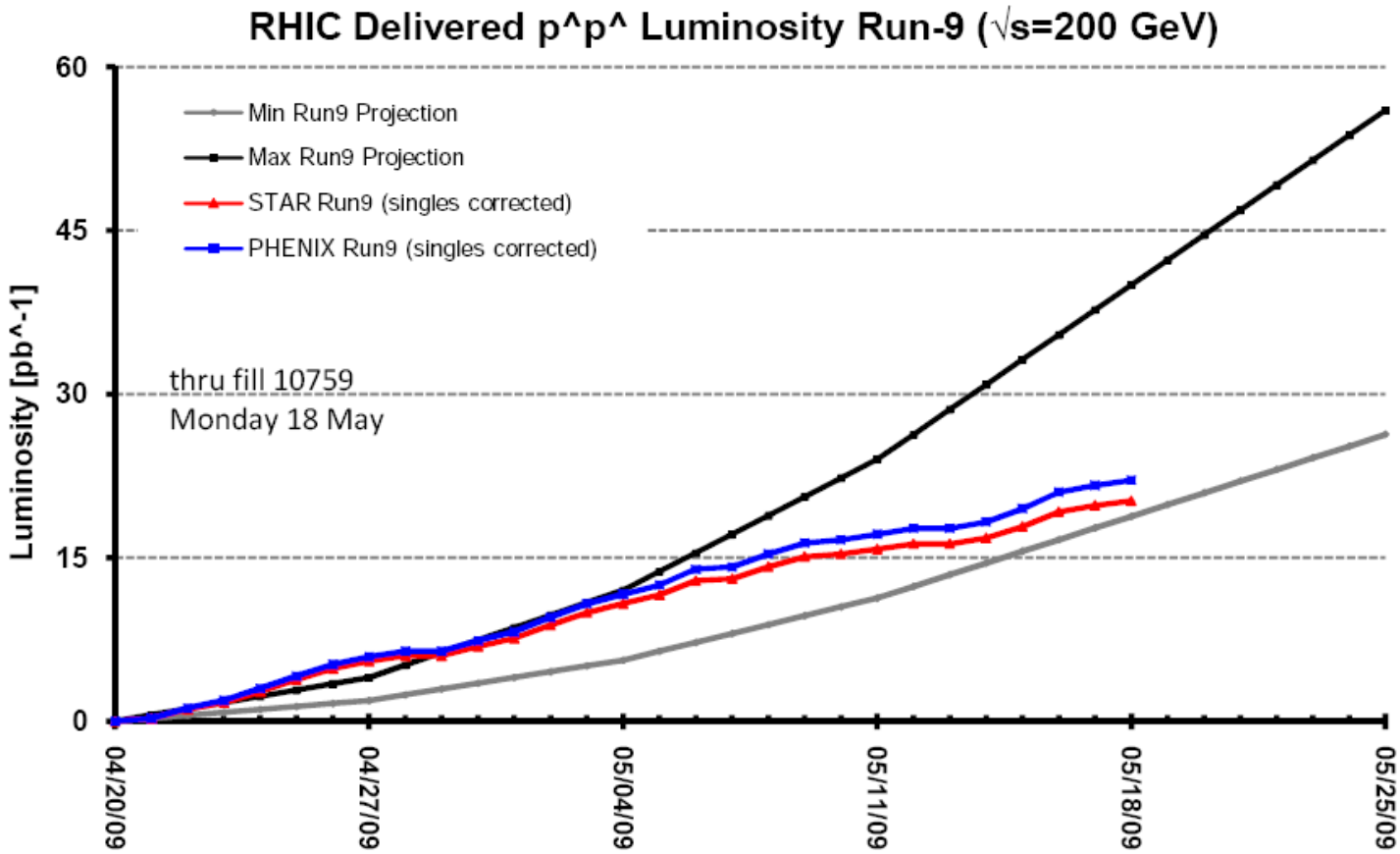
May 22, 2009

Present status

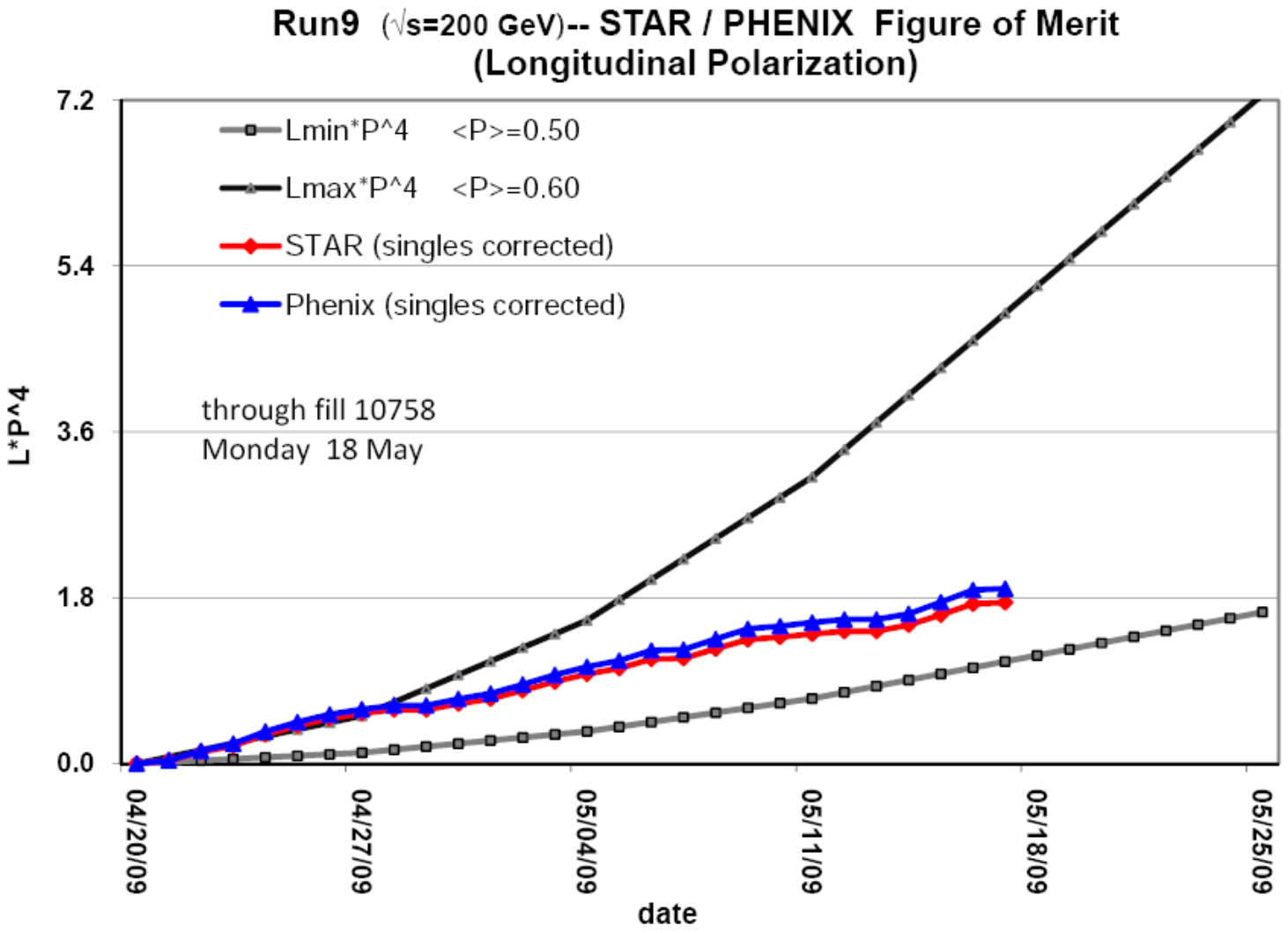




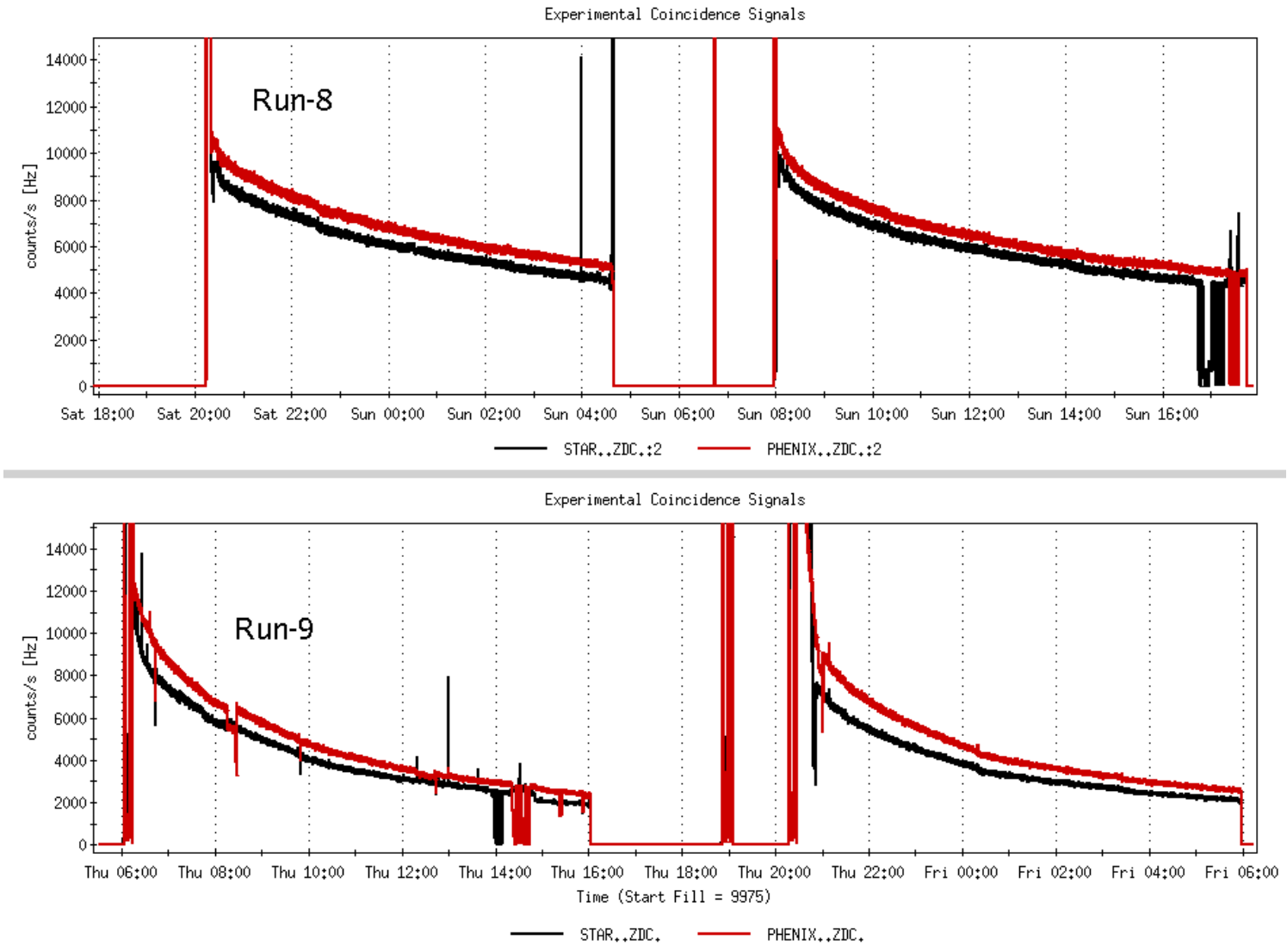
- Reasonably good uptime
- Power dip on Sunday, causing 12 h downtime
- APEX on Wednesday, 7 AM – 7 PM
- Various problems to get back to physics; first store at 03:40
- Vacuum scrubbing on Thursday, hampered by smoke detector alarms at Yellow abort kicker. Most likely radiation induced.
- Booster transformer failure on Thursday, 12 h downtime (only!!!)



Even with good uptime during last weekend, the slope only matches the minimum projection.



Same problem as with integrated luminosity.



Significantly shorter luminosity lifetime than in Run-8.

Plan for the week

- Physics running
- Investigate luminosity lifetime problem:
  1. Fewer bunches (done; helps ramp efficiency but not luminosity lifetime)
  2. No RF voltage ramping at store (done for one store, seems to help)
  3. Low intensity (1.0e11)
  4. Relax nonlinear chromaticity correction
  5. Unsqueeze at store, to 75 or 80 cm
- Spin flipper commissioning