

# 100 GeV Polarized Proton Run

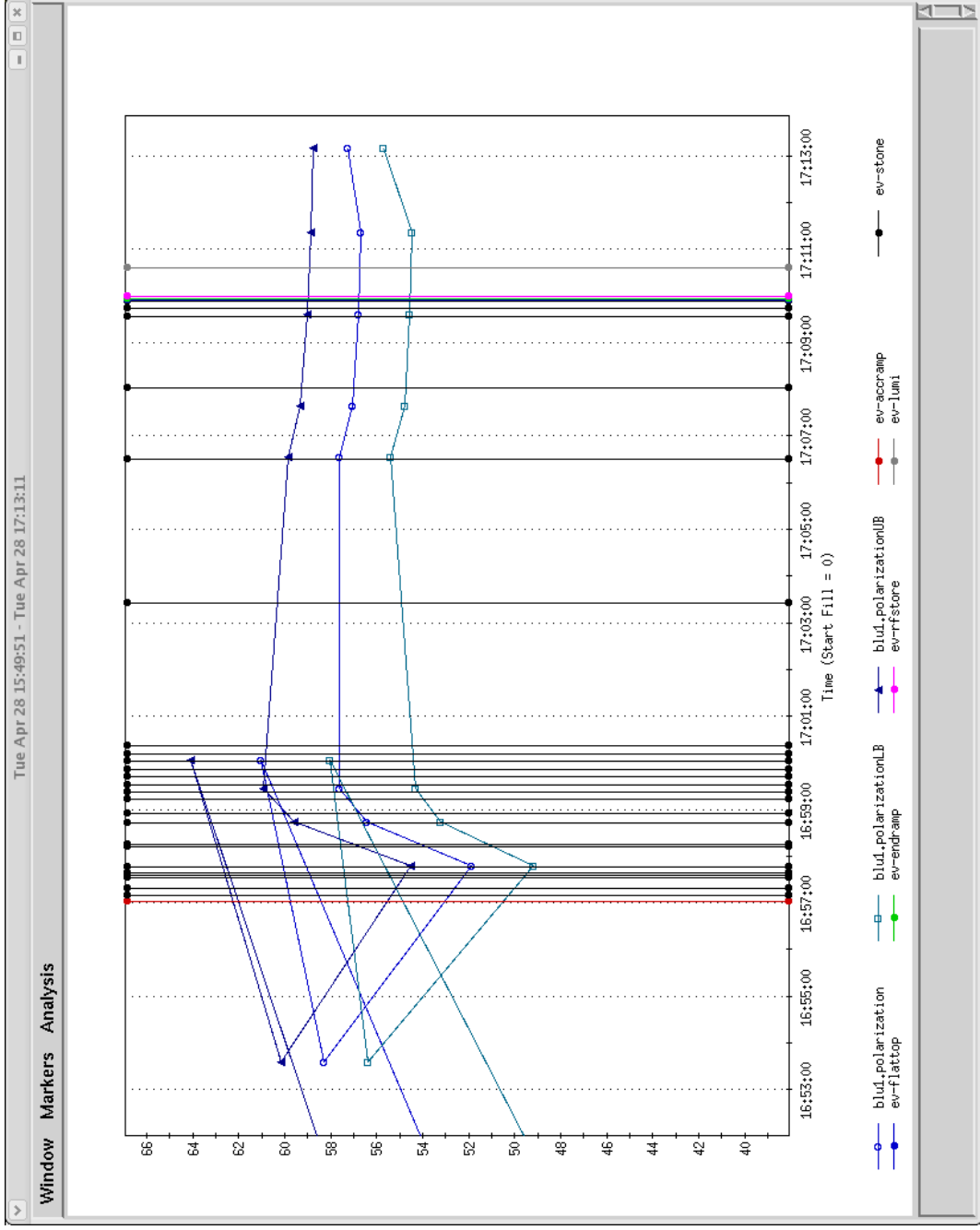
[http://www.cadops.bnl.gov/AP/Spin2009\\_100GeV/](http://www.cadops.bnl.gov/AP/Spin2009_100GeV/)

May 1, 2009

## Present status

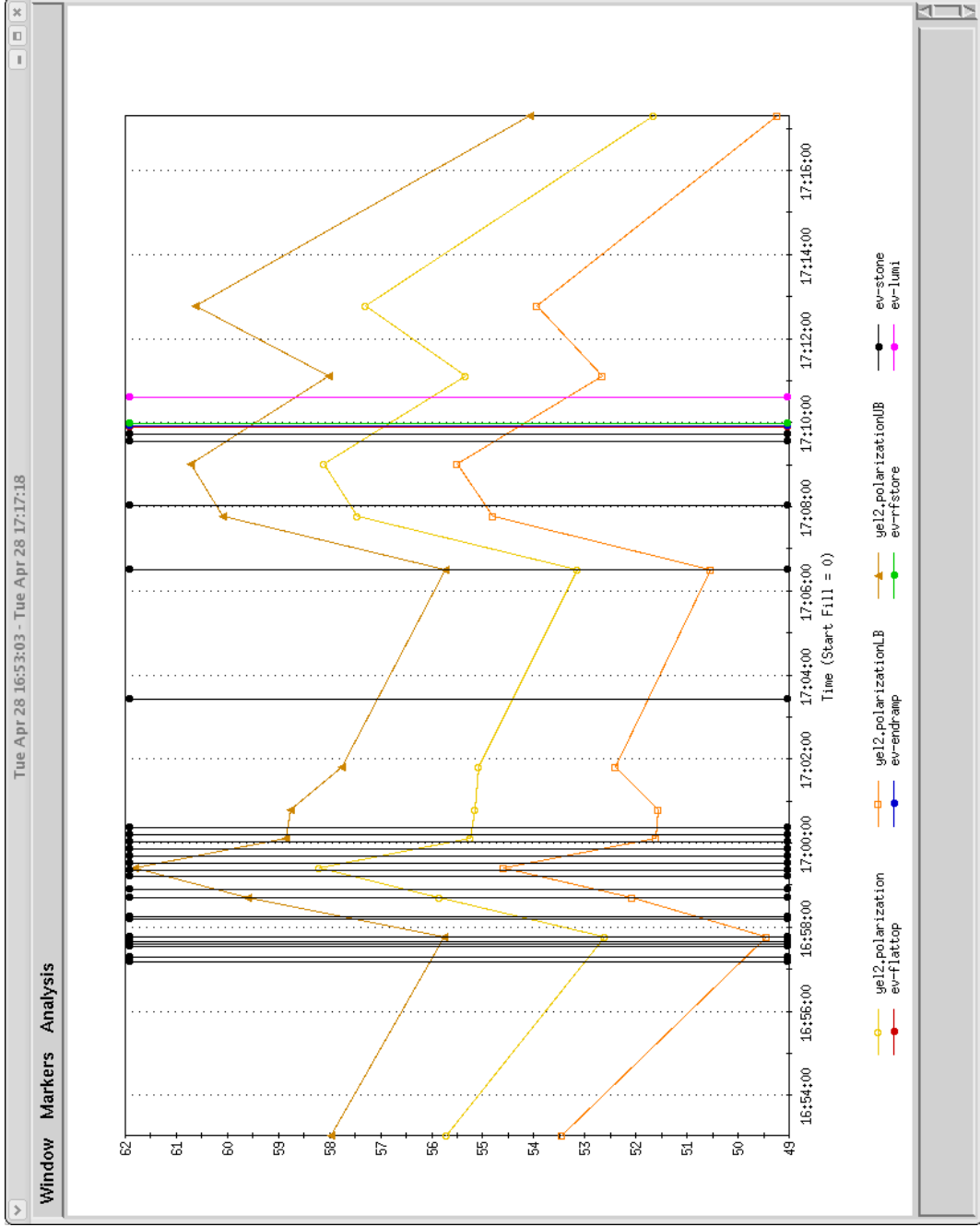
- Polarization somewhat deteriorated over past weekend, most likely due to lack of ramp orbit correction (24 h variation)
- 12x12 ramp for orbit correction on Monday, April 27 improved polarization
- Two low-luminosity stores for STAR on Tuesday
- Attempts at bunch shortening at injection fail (AGS quad mode pumping blows up transverse emittance, RF cavity counterphasing trips cavities)
- Two ramps for polarization ramp measurement on Tuesday show no polarization losses

# Blue offline polarization on the ramp, 10672

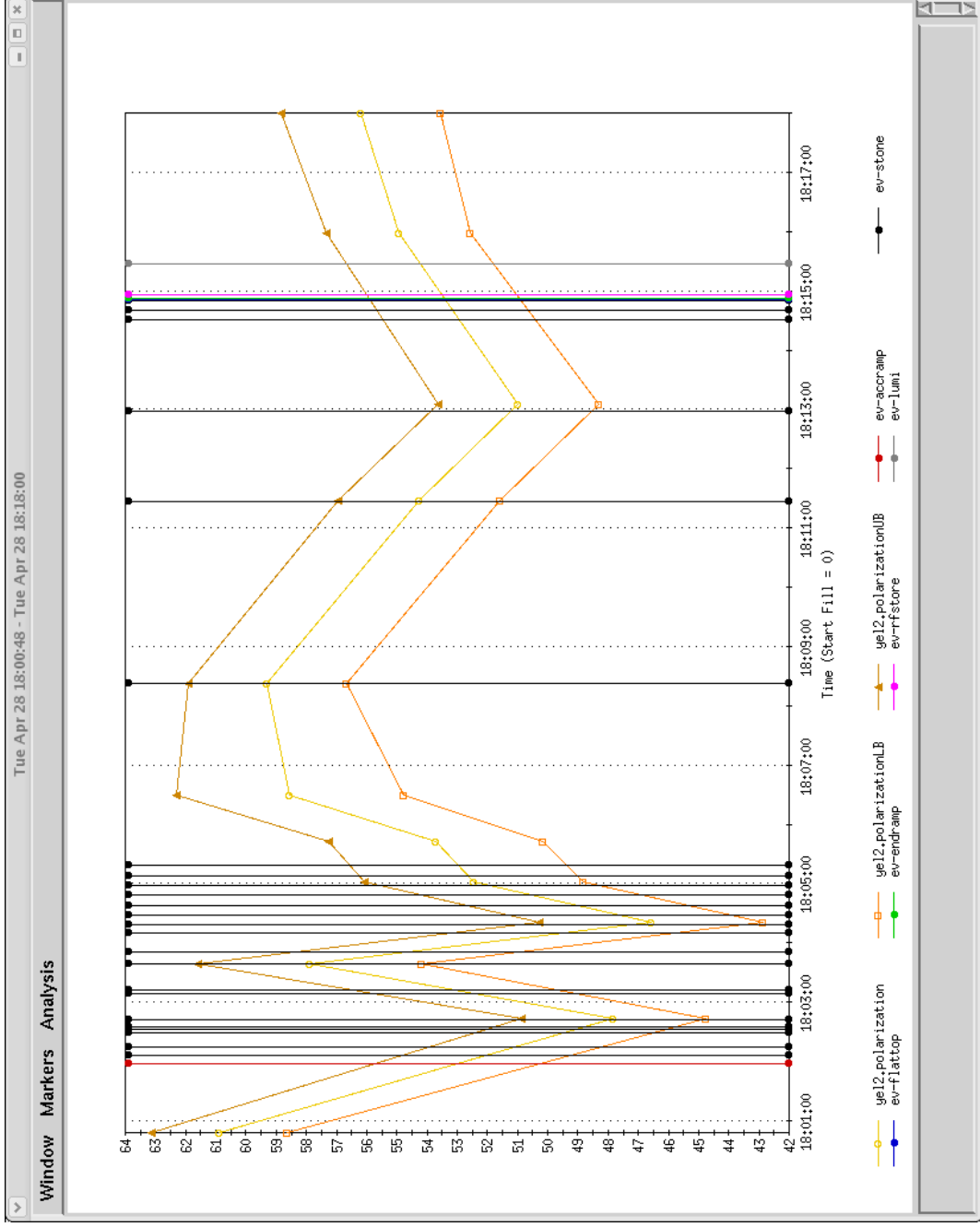




# Yellow offline polarization on the ramp, 10672

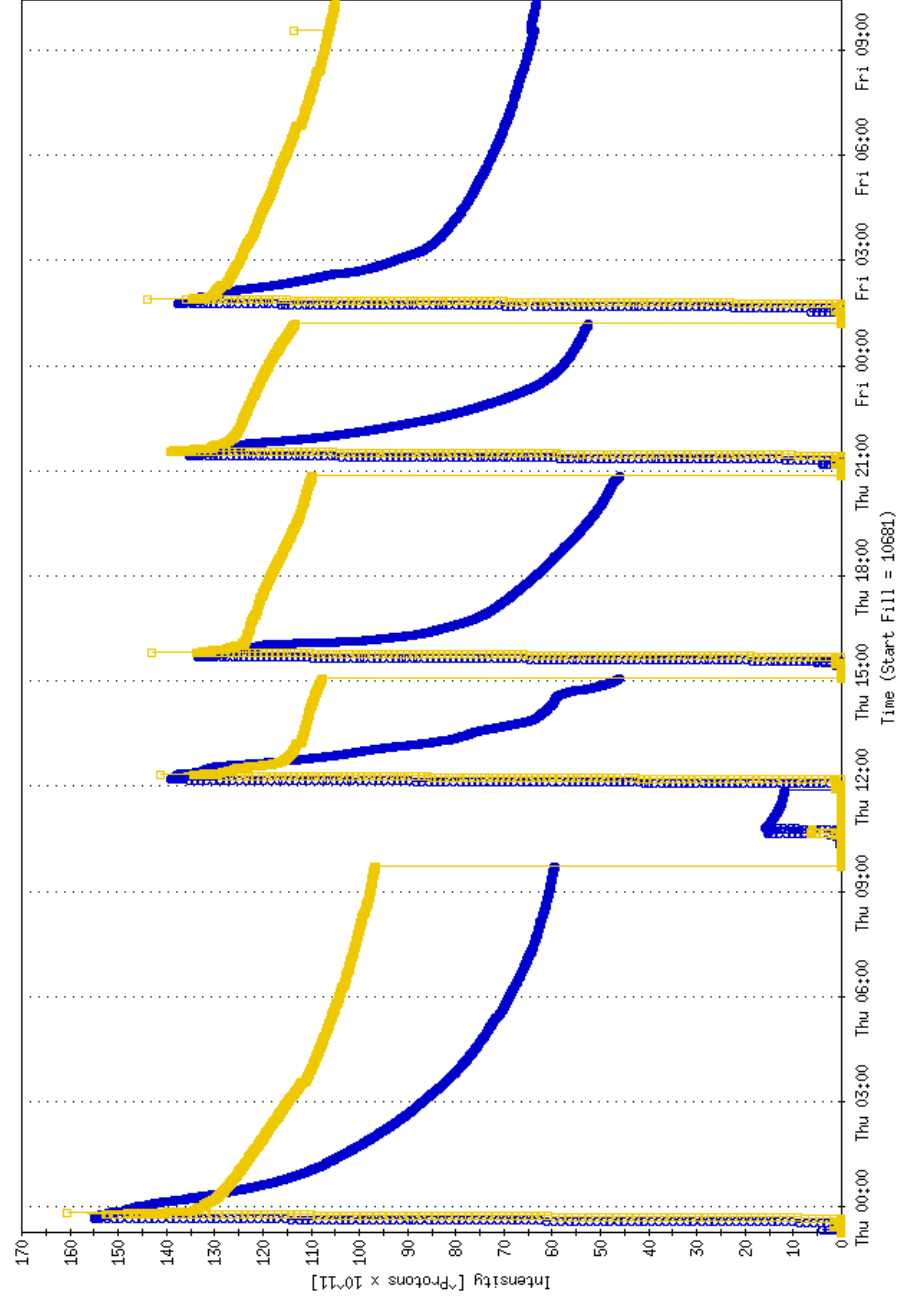


# Yellow offline polarization on the ramp, 10673



- (Peak) luminosity has reached values slightly above Run-8
- For further luminosity improvements, higher beam intensities are needed at small emittances
- Unknown noise source in Blue ring affects beam lifetime, luminosity lifetime

# Beam intensities since Wednesday





## Plan for the week

- Investigate Blue noise problem
- Vacuum scrubbing to allow for higher intensities at smaller emittances
- Physics running