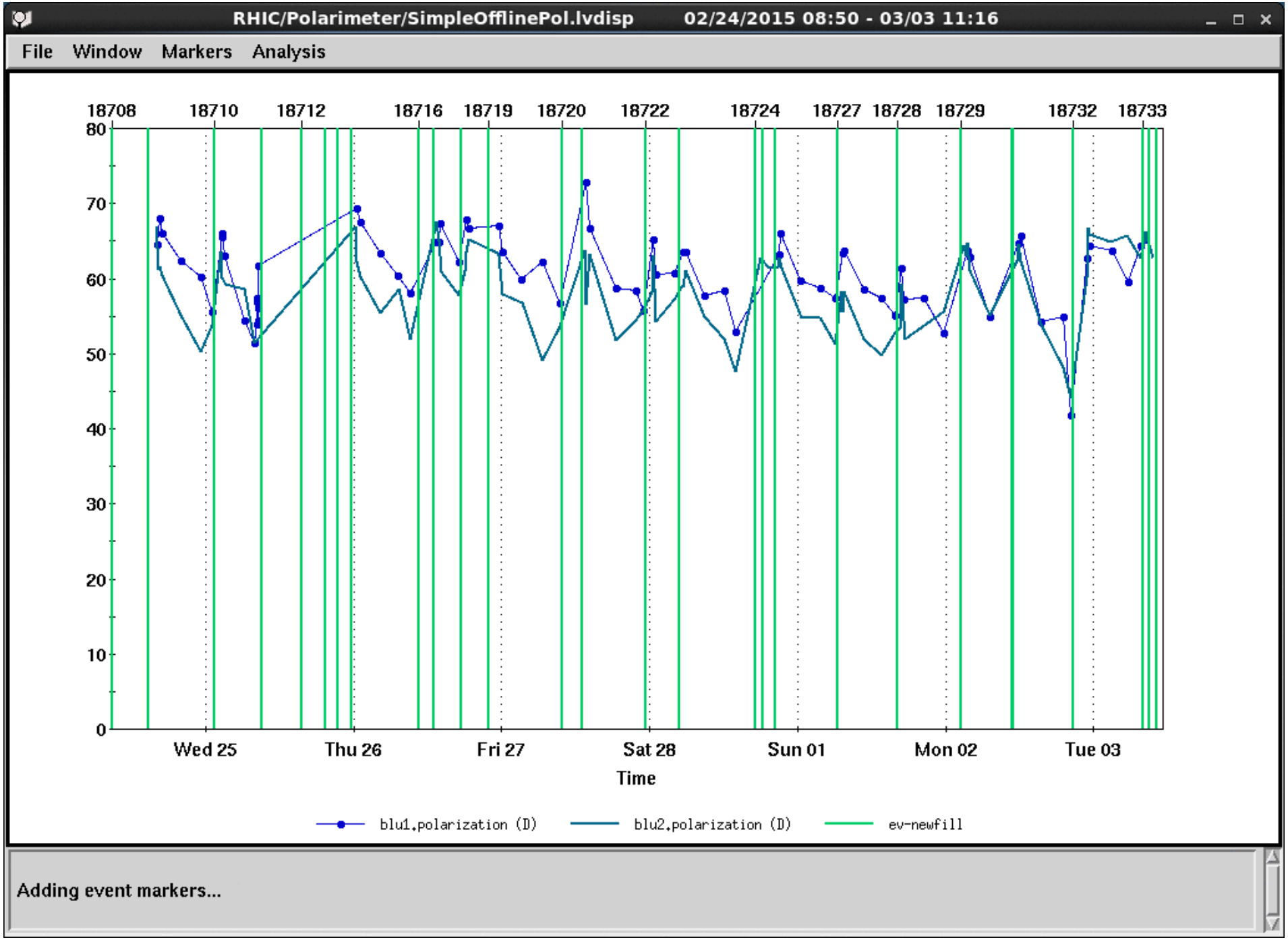
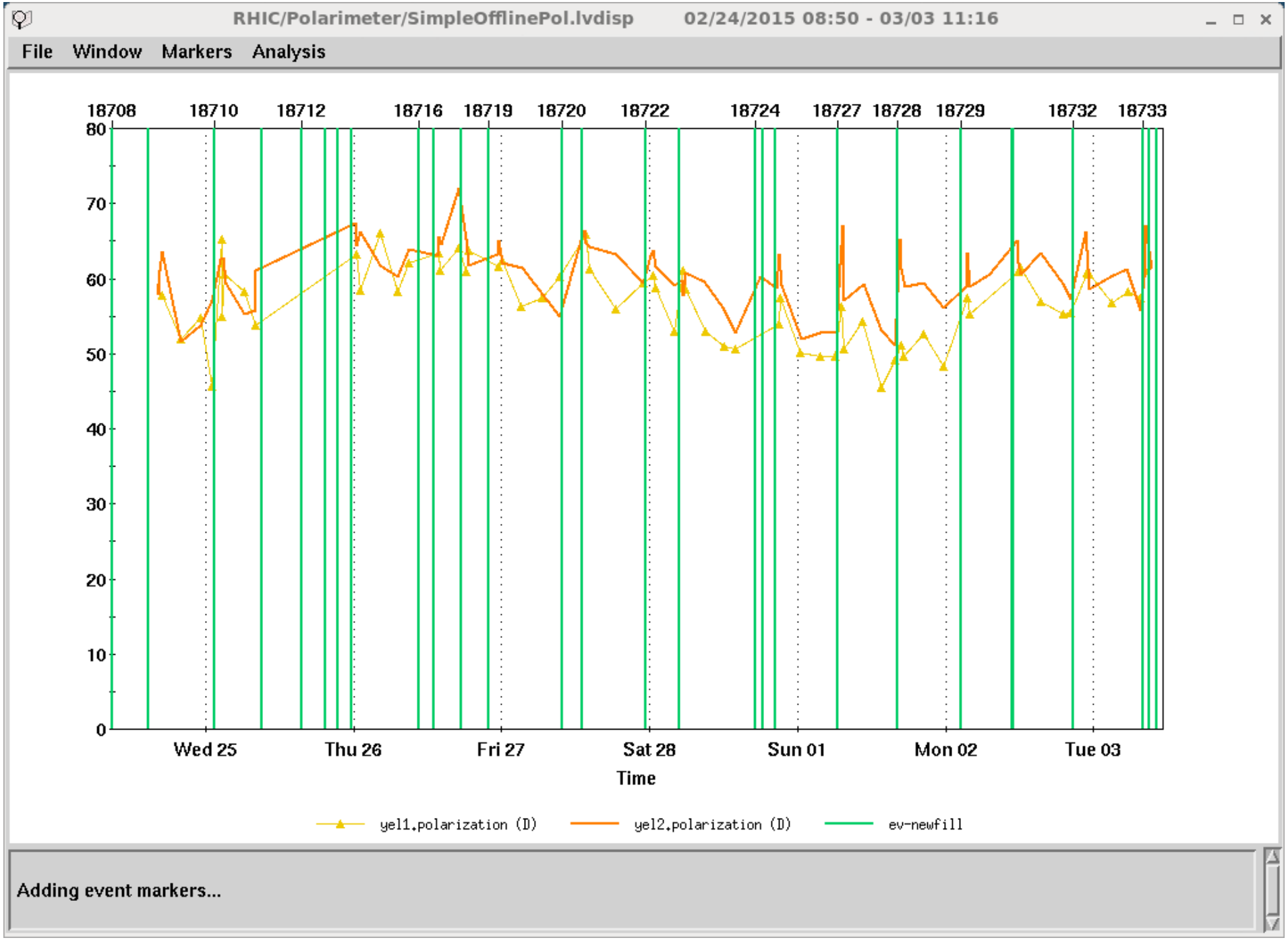
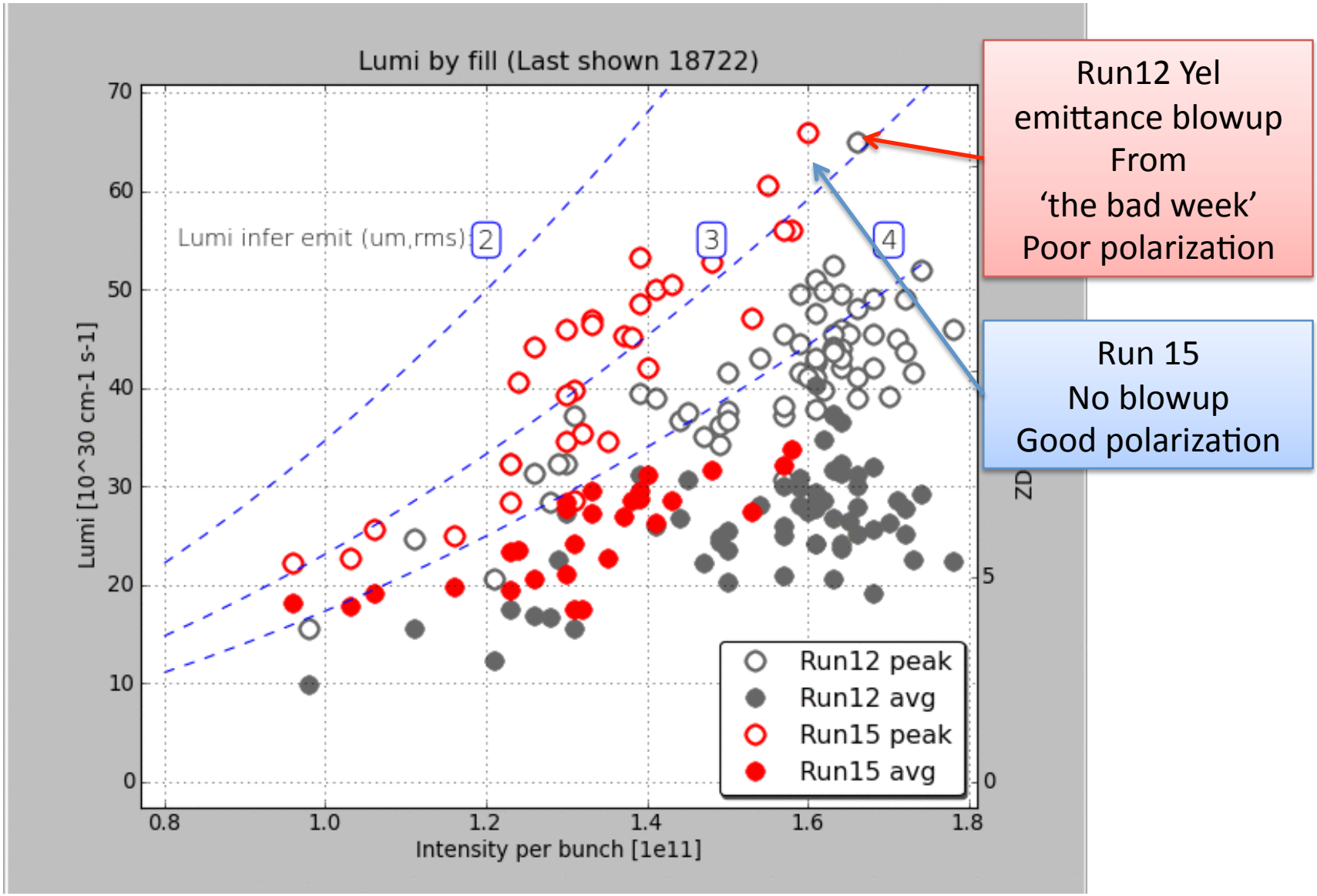
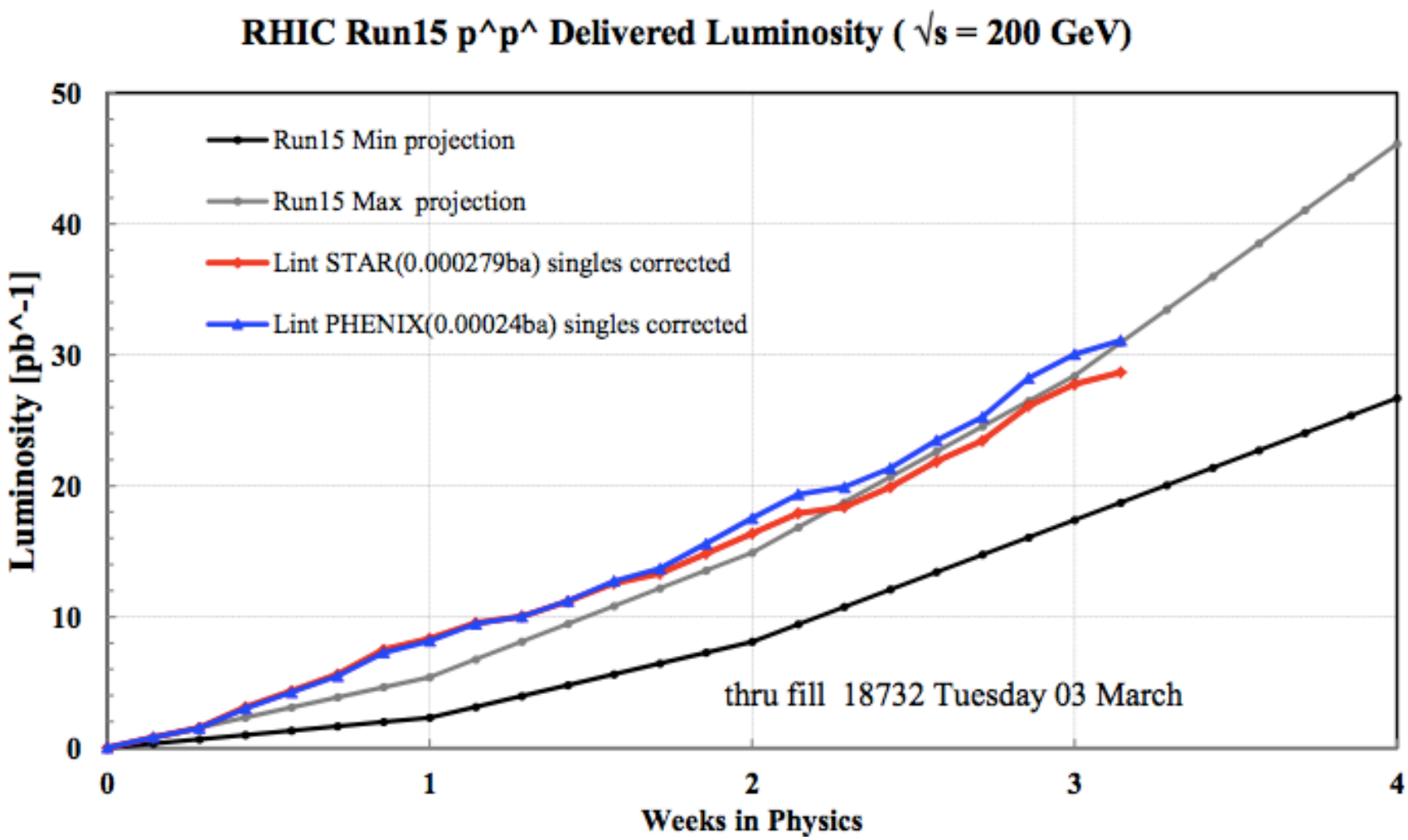
RHIC Status

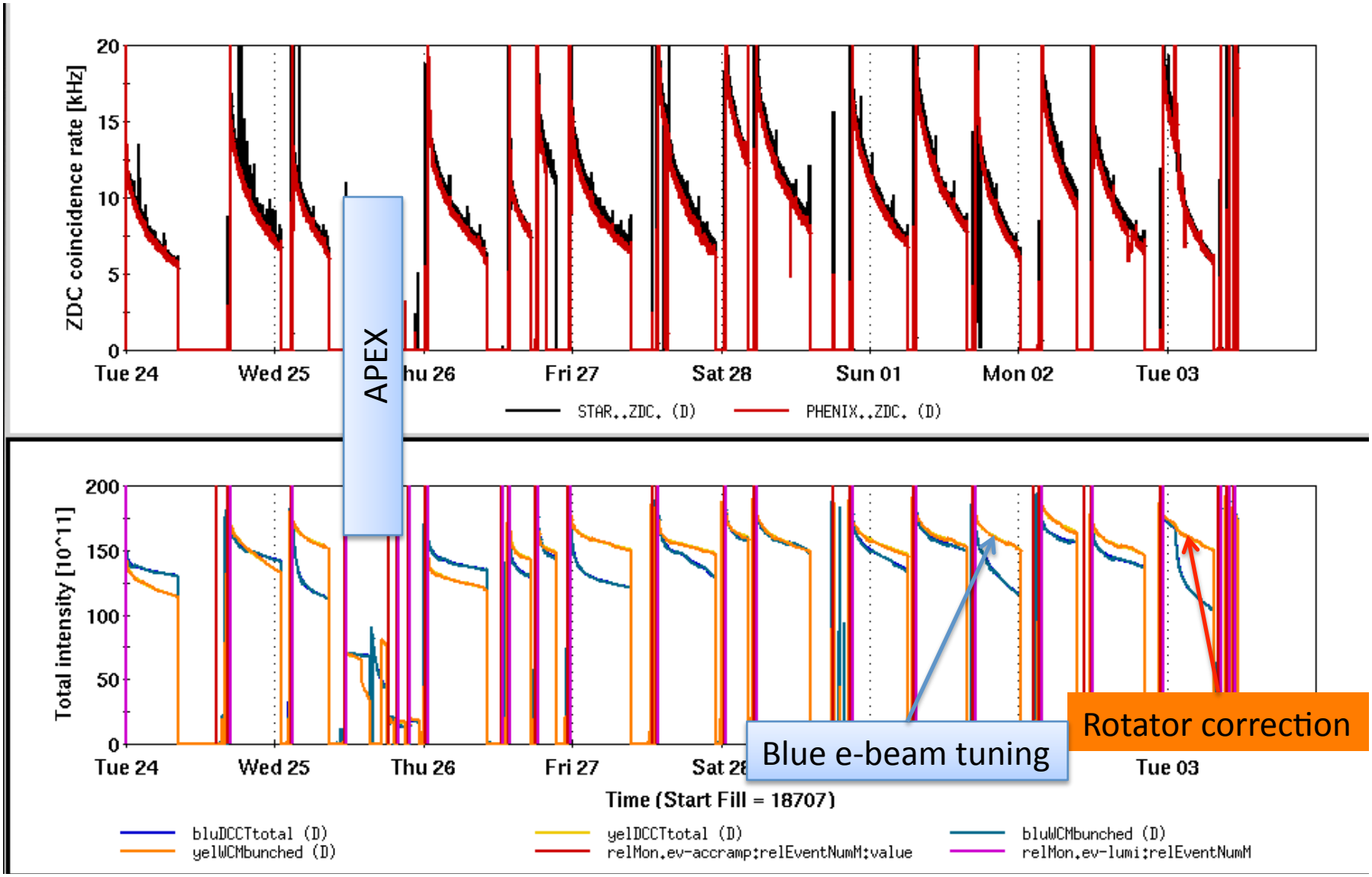
- Delivering regular stores, 1.7e11/bunch injected
- Blue e-lens in collision with the blue beam (at low electron current)
  - Some store tuning necessary over the weekend
  - Yellow continues at 400 mA.
- Yellow polarization lifetime dipped (now recovered)
- STAR spin direction problem
  - Large transverse component
  - Switch to transverse


RHIC/Polarimeter/SimpleOfflinePol.lvdisp 02/24/2015 08:50 - 03/03 11:16
File Window Markers Analysis
18708 18710 18712 18716 18719 18720 18722 18724 18727 18728 18729 18732 18733
80 70 60 50 40 30 20 10 0
Wed 25 Thu 26 Fri 27 Sat 28 Sun 01 Mon 02 Tue 03
Time
blu1.polarization (D)
blu2.polarization (D)
ev-newfill
Adding event markers...


RHIC/Polarimeter/SimpleOfflinePol.lvdisp
02/24/2015 08:50 - 03/03 11:16
File
Window
Markers
Analysis
18708
18710
18712
18716
18719
18720
18722
18724
18727
18728
18729
18732
18733
80
70
60
50
40
30
20
10
0
Wed 25
Thu 26
Fri 27
Sat 28
Sun 01
Mon 02
Tue 03
Time
yel1.polarization (D)
yel2.polarization (D)
ev-newfill
Adding event markers...


Lumi by fill (Last shown 18722)
Lumi infer emit (um,rms)
2
3
4
Lumi [10^30 cm-1 s-1]
Intensity per bunch [1e11]
ZD
Run12 peak
Run12 avg
Run15 peak
Run15 avg
Run12 Yel
emittance blowup
From
'the bad week'
Poor polarization
Run 15
No blowup
Good polarization


RHIC Run15 p^p^ Delivered Luminosity (√s = 200 GeV)
Run15 Min projection
Run15 Max projection
Lint STAR(0.000279ba) singles corrected
Lint PHENIX(0.00024ba) singles corrected
thru fill 18732 Tuesday 03 March
Luminosity [pb^-1]
Weeks in Physics
0
10
20
30
40
50
0
1
2
3
4


ZDC coincidence rate [kHz]
20
15
10
5
0
Tue 24
Wed 25
hu 26
Fri 27
Sat 28
Sun 01
Mon 02
Tue 03
STAR..ZDC. (D)
PHENIX..ZDC. (D)
APEX
Total intensity [10^11]
200
150
100
50
0
Tue 24
Wed 25
Thu 26
Fri 27
Sat 28
Tue 03
Time (Start Fill = 18707)
Blue e-beam tuning
Rotator correction
bluDCCTtotal (D)
yelWCMbunched (D)
yelDCCTtotal (D)
relMon.ev-accramp:relEventNumM:value
bluWCMbunched (D)
relMon.ev-lumi:relEventNumM