

Injector Status

Haixin Huang

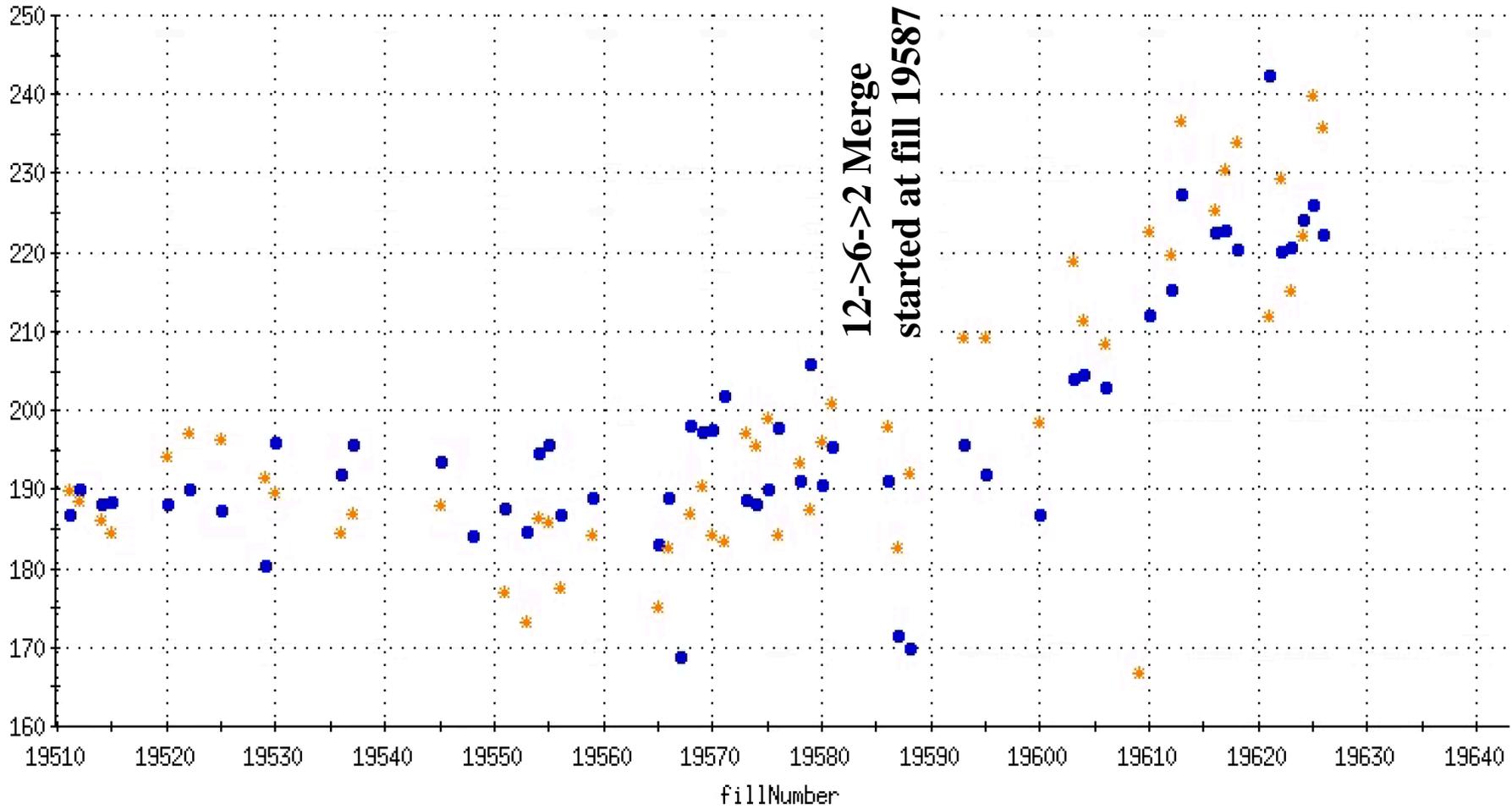
March 1, 2016
Time Meeting

Injector Status

- 12->6->2 merge has been used since 2/22. Gains in intensity and lumi. are visible. Bunch intensity have reached $2.7E9$, while $2.5-2.6E9$ was used for RHIC fills.
- Deuteron intensity is important input parameter to decide when to switch to d-Au operation. So we will test deuteron merges in the Booster and AGS next week.
- Ruthenium setup in the injector is scheduled in either the week of March 7 or 14, pending on the tandem availability (outside users). Tandem setup already started. The biggest unknown is the stripping efficiency in BtA line. Since the merge energy has changed in both Booster and AGS for gold, the bunch merge part has to be tested for ruthenium, too. The estimation is that we need three shifts.
- Polarized proton setup in the injectors is slow. Proton beam has been in the Booster last Friday briefly. The main problem is the AGS cold snake cold head seal issue. The attempt to replace a cold head failed last Friday. Cold replacement is hard so it is warmed up now. After the replacement on Wednesday, we will try again to fill helium to see if the leak is fixed. Then the PS test needs 8 hours (can be divided in several sessions). We are delayed by one week from the original schedule.
- The AGS injection stability issue last Friday: It took a long time to be fixed. The possible cause is still under investigation.

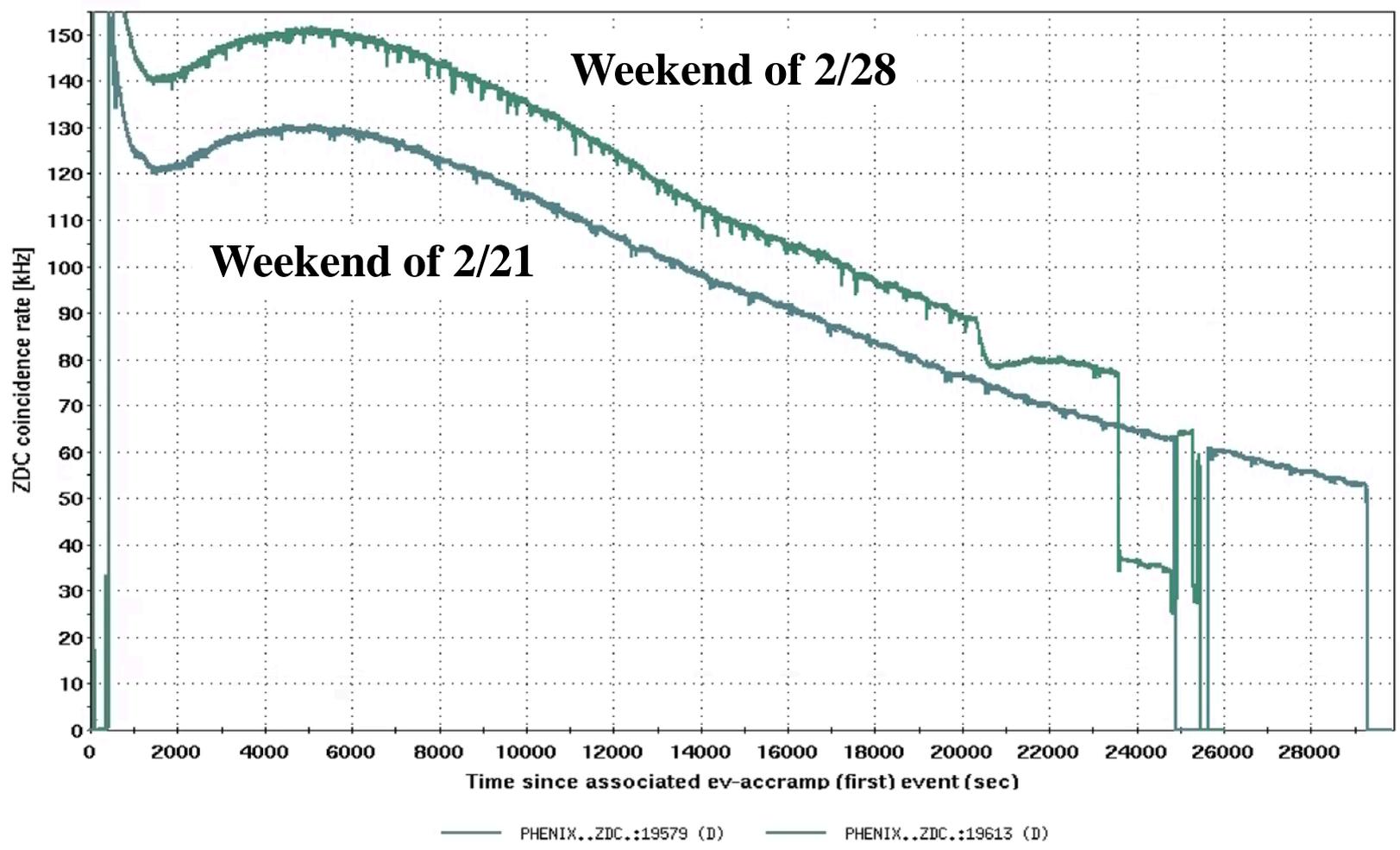
Total Intensities at the End of RHIC Ramp

rampStats WHERE runName = 'run_fy16'



● blueRampEndIntensity_run_fy16 * yellowRampEndIntensity_run_fy16

Examples of PHENIX Lumi of Two Stores



Time = Fri Feb 26 12:11:21 2016+0ms, PHENIX..ZDC. = 128.575
X Value = 4996, PHENIX..ZDC.:19613 = 150.804
X Value = 5347, PHENIX..ZDC.:19579 = 128.481