

RHIC status

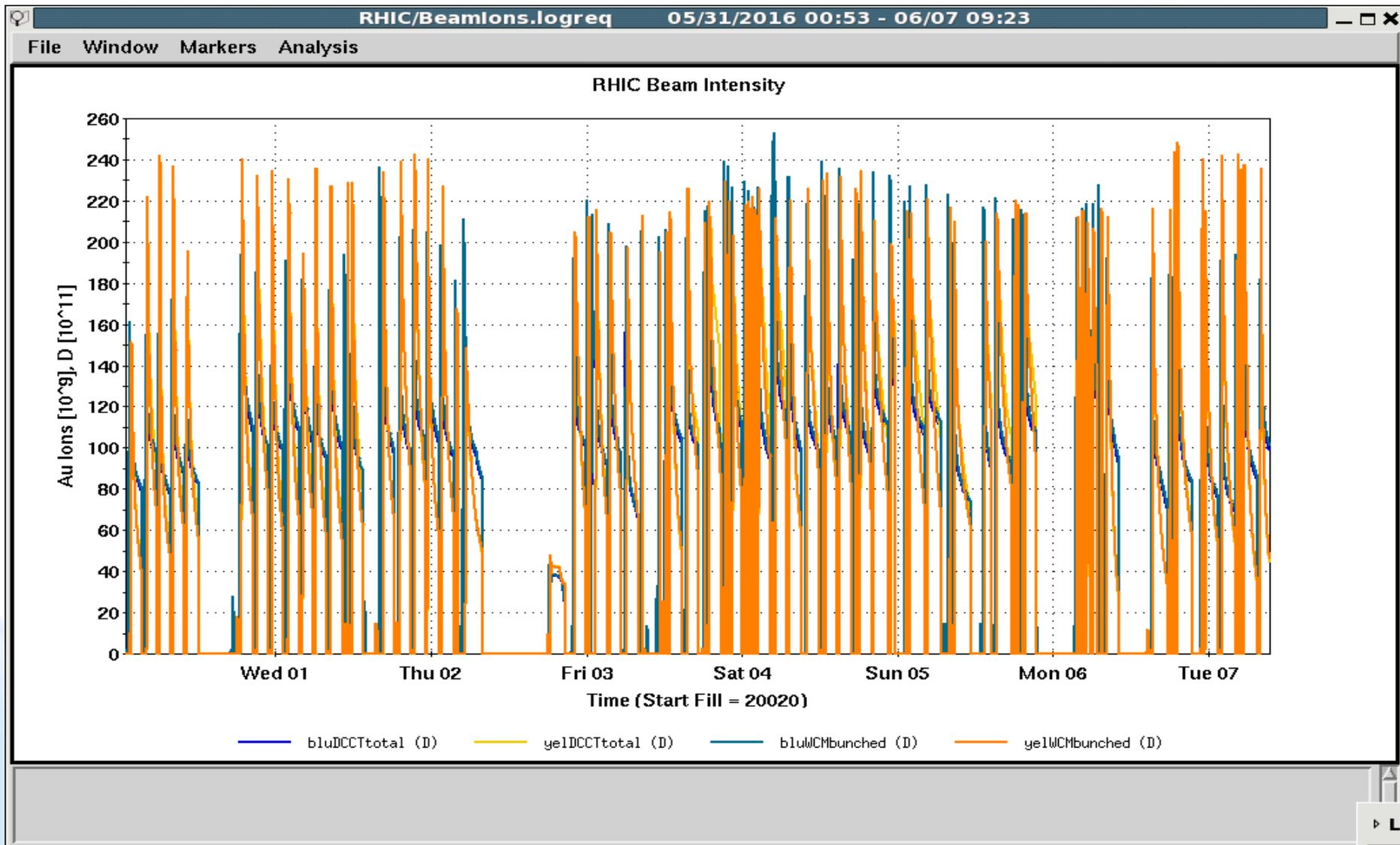
June 07, 2016



RHIC status

- RHIC has been delivering stores regularly since last Saturday for 19.6 GeV dAu program.
- APEX took place on last Thursday.
- We are prepared to switch to the 39 GeV dAu program.

19.6 GeV stores



Notes on 19.6GeV

- The store length is 1.5 hrs, compared to 0.5 hr AuAu store in 2011. Lattice with 3.5 m beta star improved injection efficiency and beam lifetime. Deuteron lifetime is better than that of Au.
- Before Saturday afternoon, beams were injected into collision, losing too much blue beam while injecting yellow. We switched to fill with separation and then collide, lose ramps sometimes mostly due to coherence.
- It is recommended not to run magnets through hysteresis for low energy program, however, we need to do it when magnets dropped to zero.
- The machine at low energy lacks long term stability. It is hard to reproduce a store with the same good settings.

39 GeV preparation

- New lattice was designed to engage cooling at this energy. The gamma-t was raised, the beam sizes at cooling pickups and kickers are checked.
- 39 GeV is the lowest energy at which the re-bucketing was ever done. Access is needed for tuning the frequency of storage cavity to the right range.
- Beam work to switch energy will start noon tomorrow, physics is expected on Friday.