

RHIC status

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Time meeting

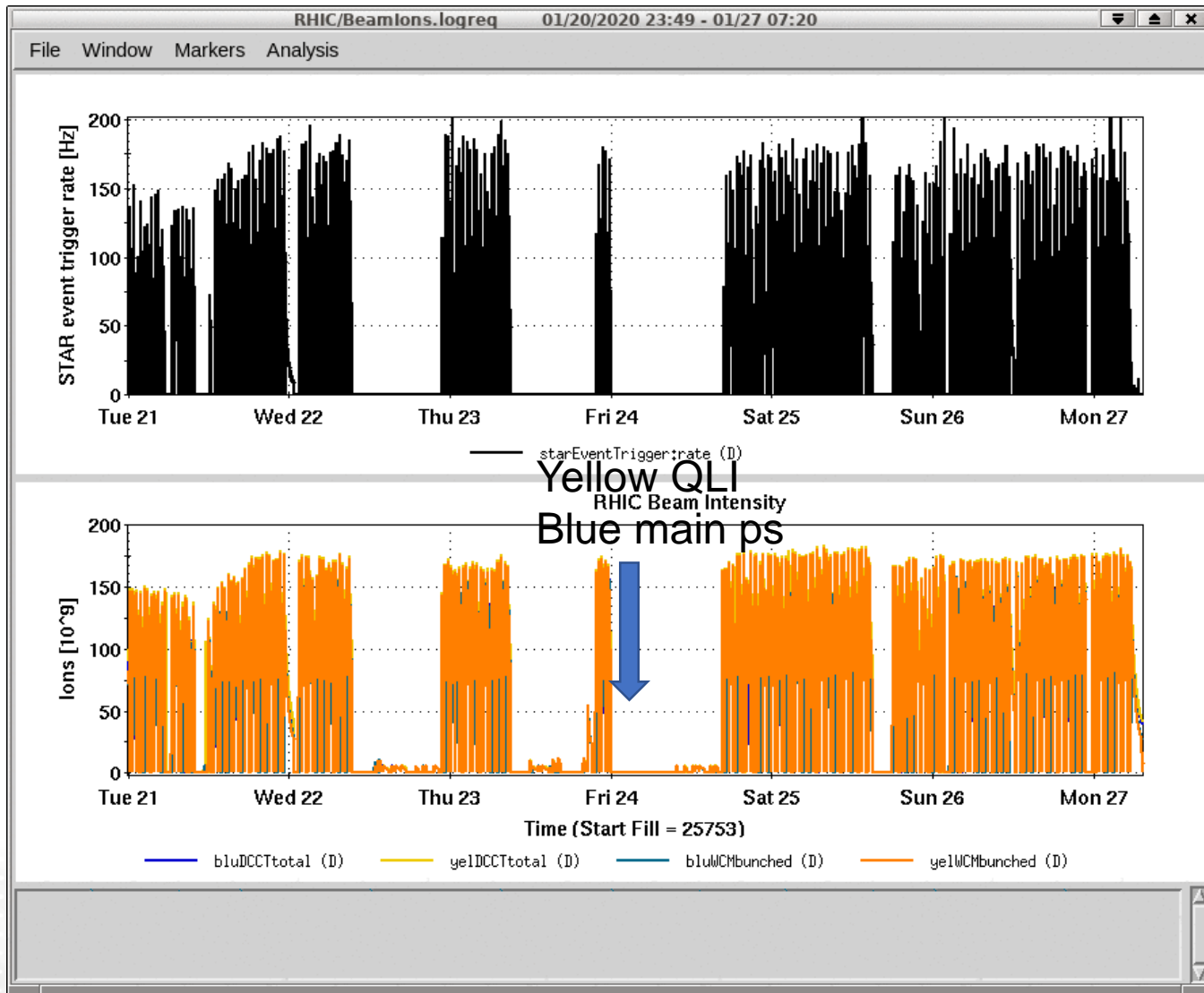
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BROOKHAVEN
NATIONAL LABORATORY



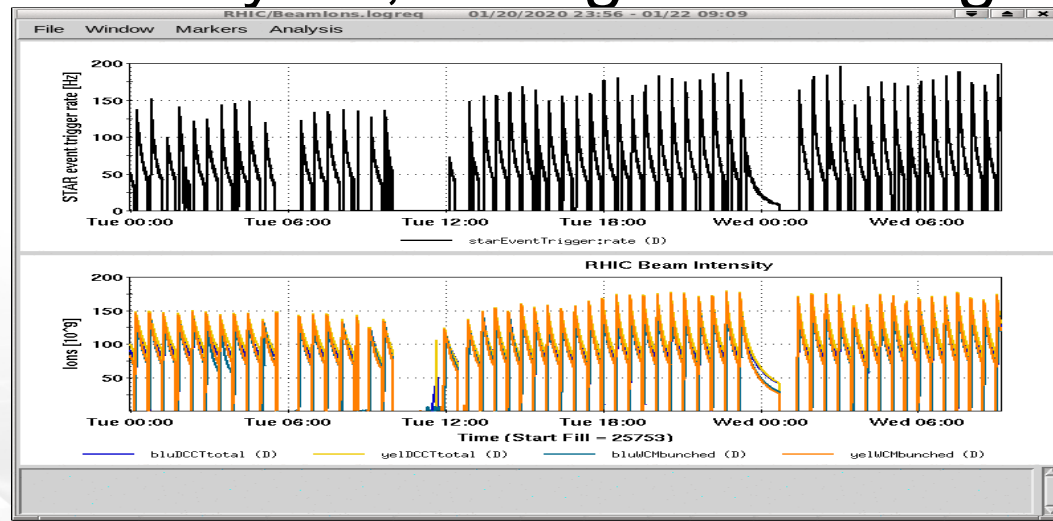
RHIC status

- RHIC has been running physics stores at beam energy 5.75 GeV/nucleon smoothly over last week.
- LEReC commissioning run 3 shifts.
- Integrated lumi was improved with AGS intensity limit raised to 8.8E9 ions per bunch.
- Beta squeeze was performed with LEReC cooling.



Beam intensity increase in AGS

- The beam intensity limit was raised $8.8E9$ ions per cycle on Tuesday Jan 21st.
- Flashes on the plunging stripping foil can be observed after and before intensity raise.
- The PSF was inspected visually on the maintenance Monday 27, no sign of damage was observed.



Beta squeeze for LEReC cooling

- Squeeze ramps from a design beta* 4.5 m to 3.5 m were executed successfully three times, first time over a minute and the later two in about 13 minutes.
- The squeeze will be performed continuously while electrons cool the ion beams over the course of 20-30 minutes store.
- This technique will be available for both 4.59 and 3.85 GeV.

Plans for the coming ~two weeks

- Goals: finish up fixed target experiments at 6 energies and optimize cooling performance for a better projection for the physics program at beam energy 4.59 GeV.
- For fixed target operation, we will start with the highest energy (31.2) and go down in sequence (19.5, 13.5, 9.8, 7.3, 5.75).
- The intermediate goal on Wednesday is to finish up beam setup so LEReC and FXT can interleave with more flexibility.
- The tentative switch-back to physics date is Feb. 7th.