

RHIC status

Chuyu Liu

Time meeting

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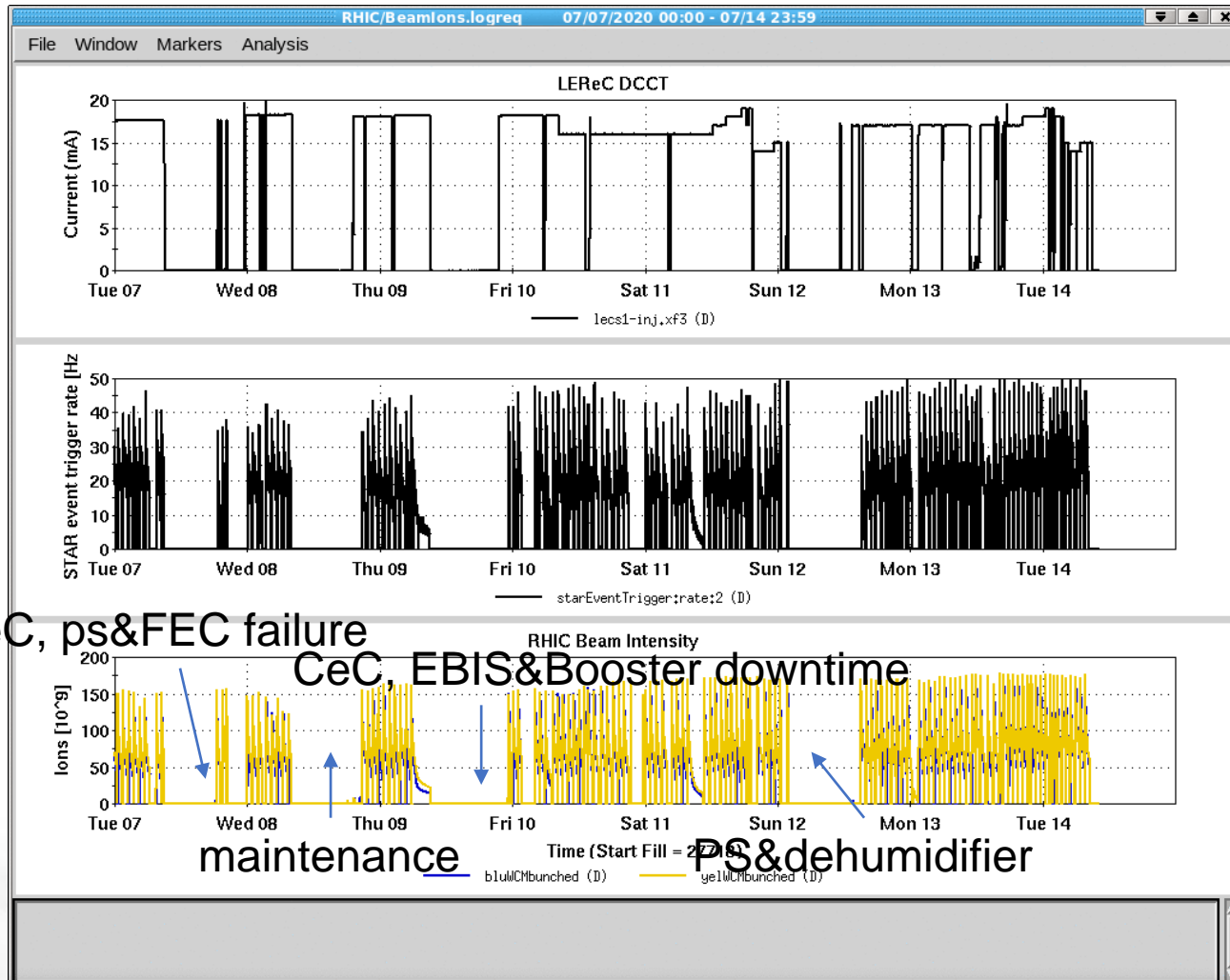
BROOKHAVEN
NATIONAL LABORATORY



RHIC status overview

- RHIC stores for physics program at 4.6 GeV have been running at high performance with “mismatch” problem solved and high intensity inputs.
- The intensity from EBIS and injectors are high and stable.
- LEReC cooling continues with robust performance and high up-time.
- CeC beam commissioning continues, with 2 12-hour shift dedicated time per week and making good use of RHIC down-time.

RHIC stores of last week



Fine-tuning of RHIC stores

- Adjustment of beam chromaticity helped improve both beam's lifetime and also reduce background during beta squeeze.
- ATR optics measurements and retuning helped improve the transmission efficiency.
- LEReC current scan for cooling efficiency optimization.
- As requested by JH, the cooled store length was reduced from 45 to 40 minutes.

Plans to understand ‘mismatch’

- Adjustment of chrom from -14 to -10, and different stripping foil stop position are the two changes made on the maintenance day which might relieve the ‘mismatch’ problem.
- One can revert either change and run a few stores to find out which one was the root cause of the problem.
- Beam simulation is planned to understand the effect of chrom on longitudinal dynamics, with space charge effect.