

Low Energy RHIC electron Cooling (LEReC)

RHIC Time Meeting
February 4, 2020

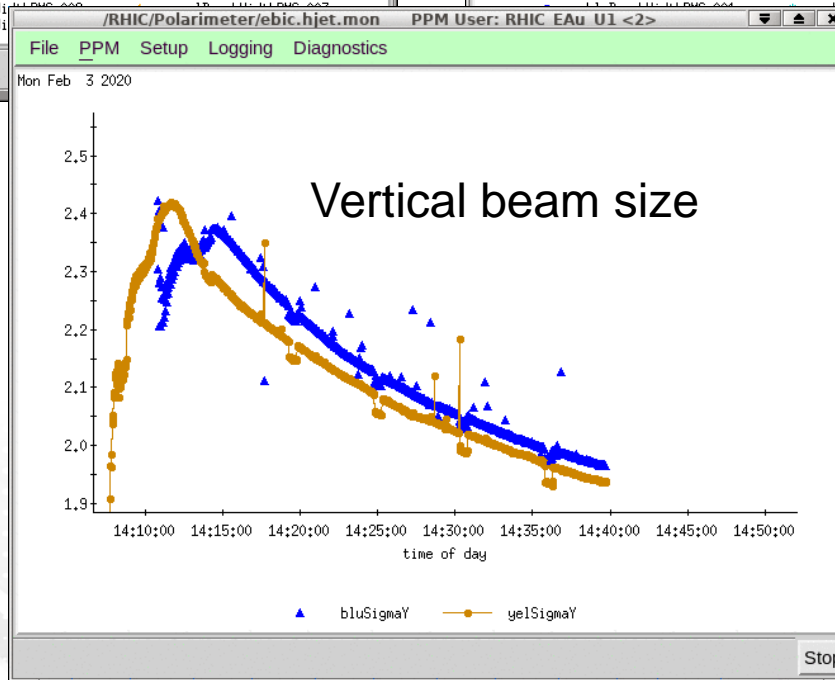
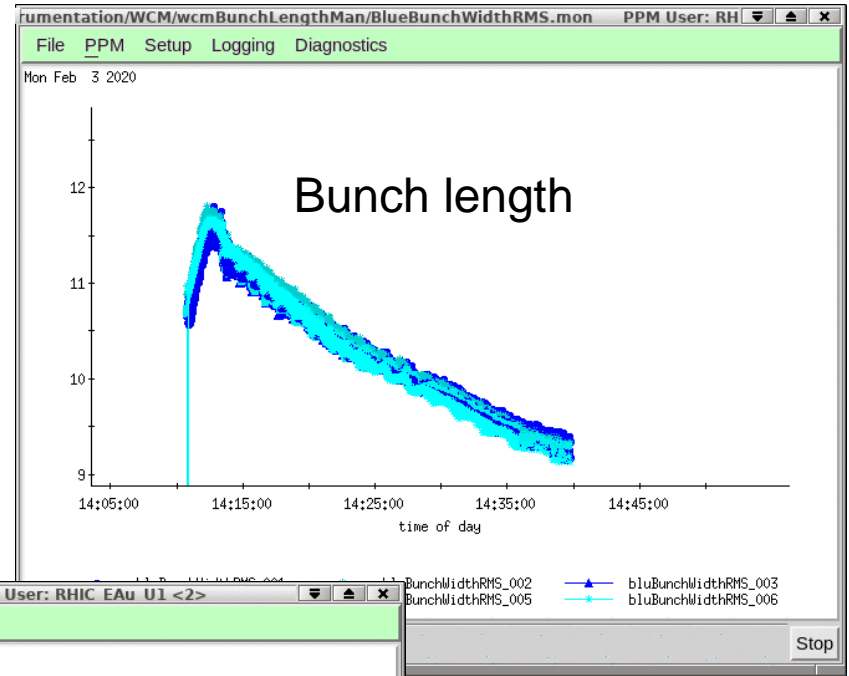
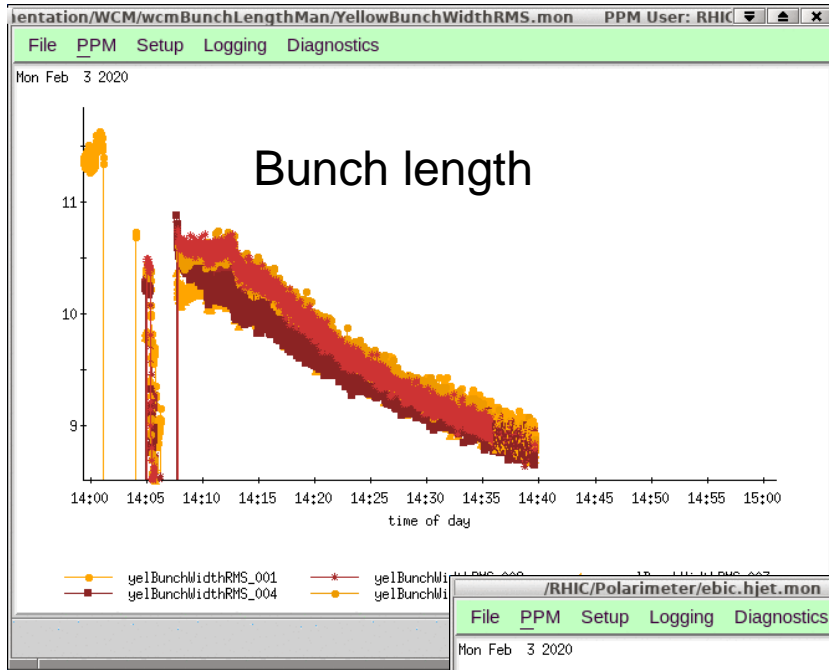
BROOKHAVEN
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ENERGY

LEReC progress/updates for January 28-February 3

- LEReC had three planned shifts during this period:
 - Thursday, Jan. 30: was used for physics setup at 9.2GeV c.m.
 - Friday, Jan. 31: technical problems with LEReC systems
 - Monday, February 3: setup cooling with detectors on to see effect on luminosity

6D cooling (without beta squeeze)



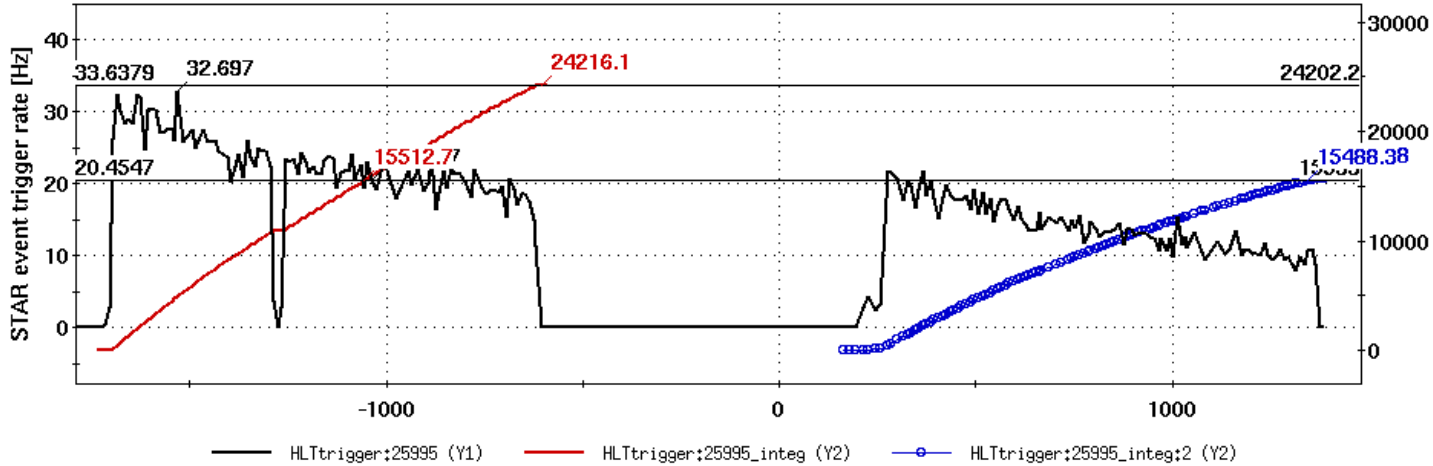
Cooling with detectors ON (no beta squeeze)

Cooling/no cooling

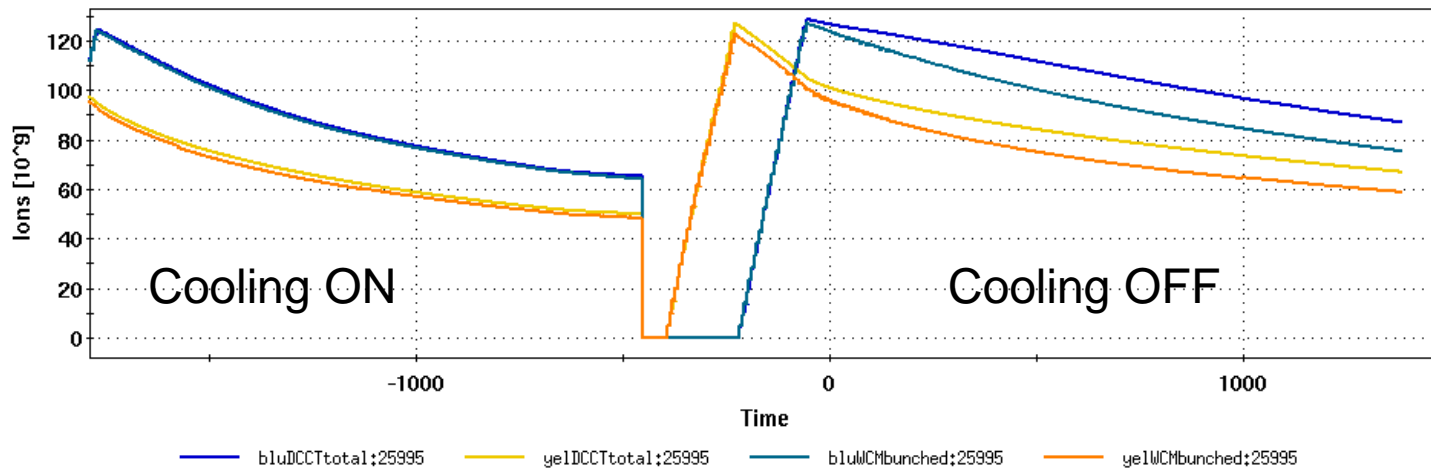
RHIC/BeamIons.logreq 02/03/2020 08:25 - 02/03 09:19 <@acnuser01.pbn.bnl.gov>

File Window Markers Analysis

StarEventTrigger.mon

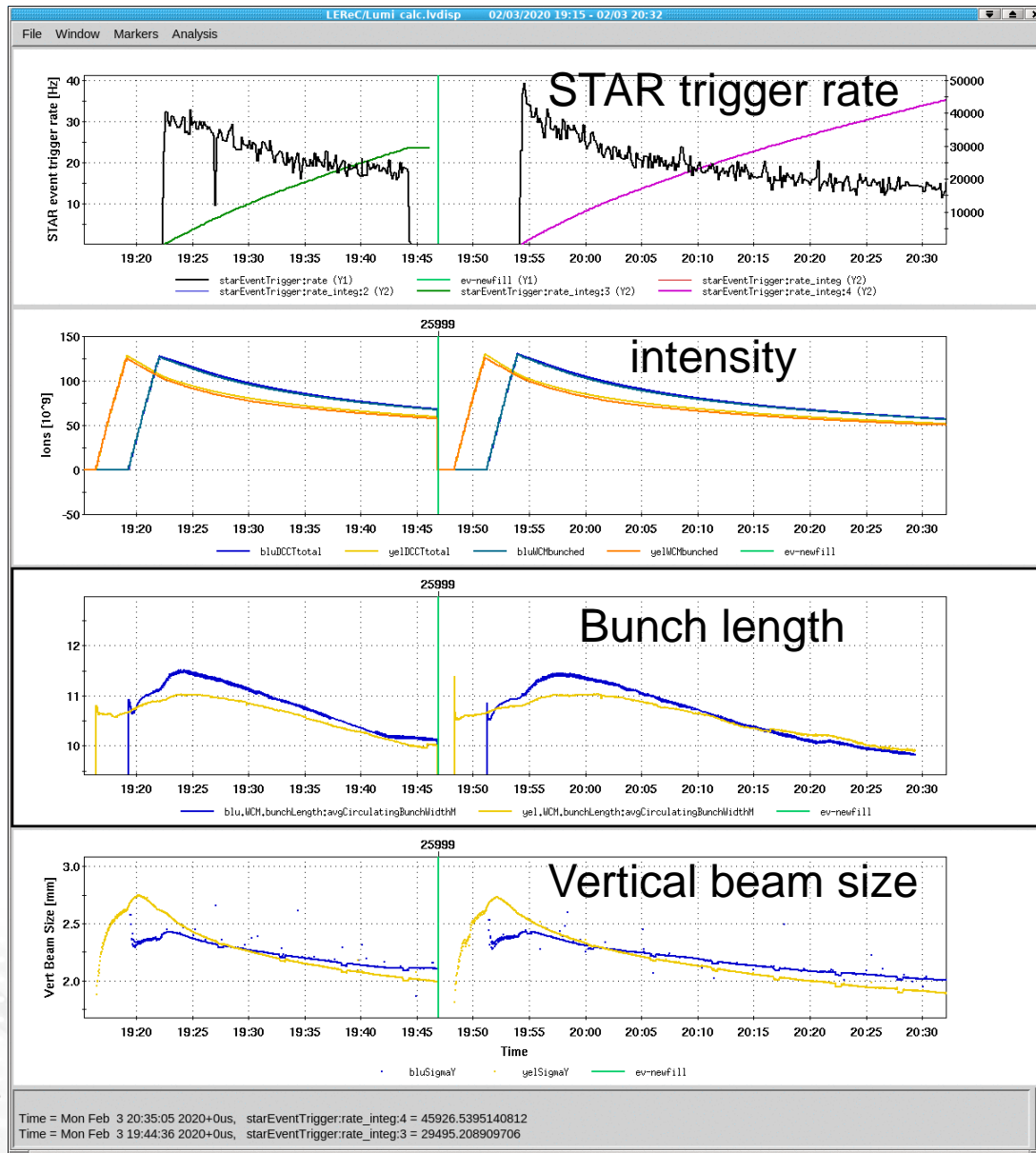


RHIC Beam Intensity

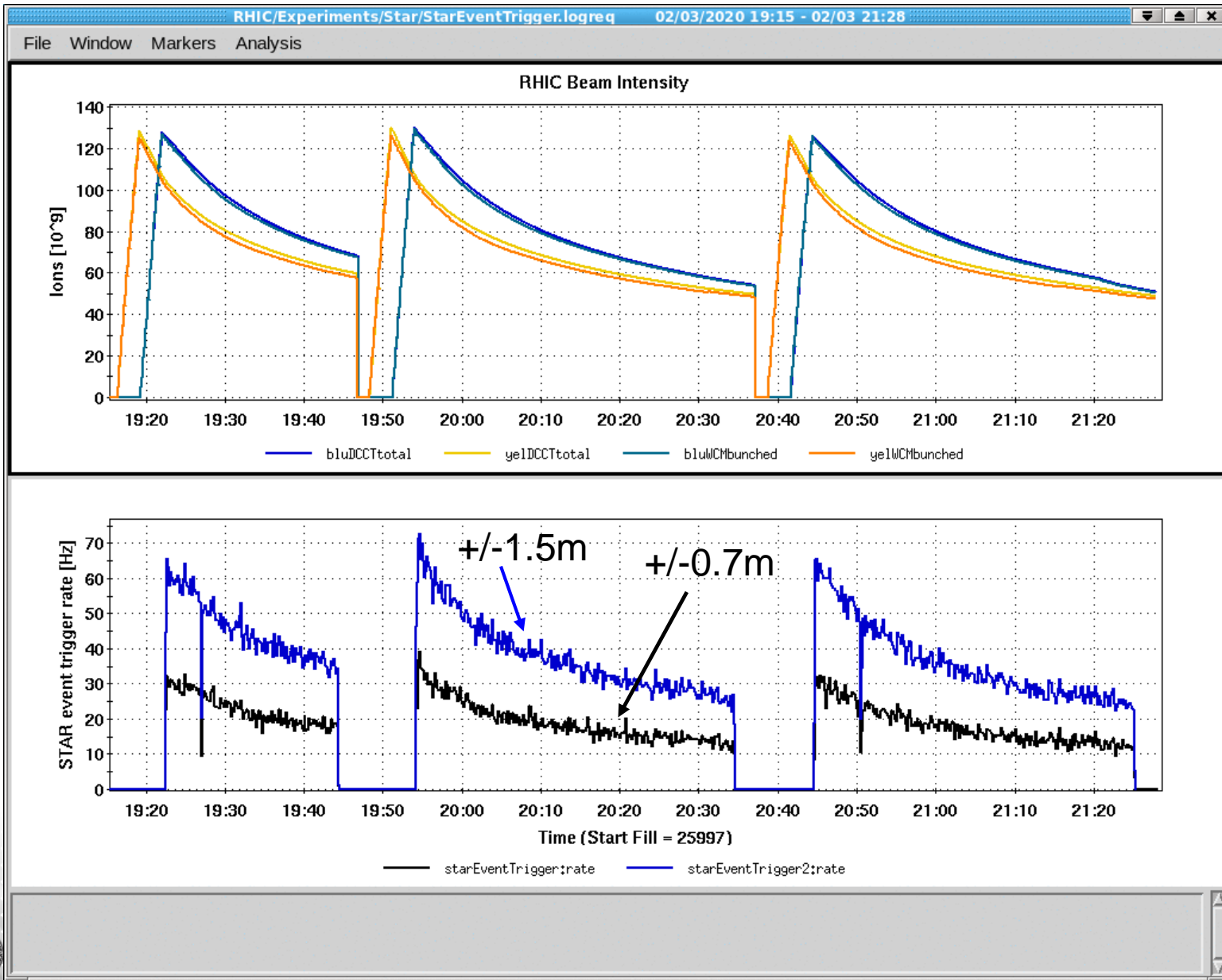


Checked for new files - none found.
Done updating plot 2.

Two stores with cooling



Three baseline stores with cooling (without beta squeeze)



LEReC status and plans

- RHIC was setup for collisions at 9.2 GeV c.m. in STAR
- Put first store with cooling and detectors on to establish baseline

Plans:

- February 5-9: Baseline Physics run at 9.2 GeV c.m.
- Some optimization/studies (including beta squeeze) will be done during DAY shifts, while EVE and OWL shifts will be putting physics stores for statistics.