Run 20 RHIC Machine/Experiments Meeting

September 8, 2020

Agenda:

- General discussion of Run 20 status, progress, and end
- RHIC Status
- STAR Status
- CeC Status
- All Other Business (AOB)

- W. Christie

- C. Liu

- JH Lee

- V. Litvinenko

BLUEJEANS CONNECTION INFO

Meeting URL

https://bluejeans.com/806756566?src=join_info

Meeting ID: 806 756 566

Want to dial in from a phone?

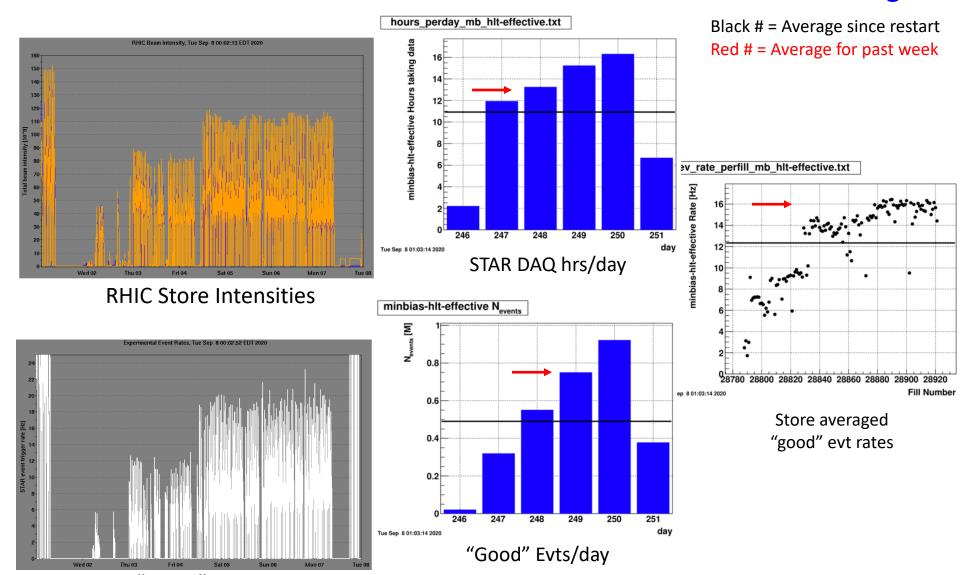
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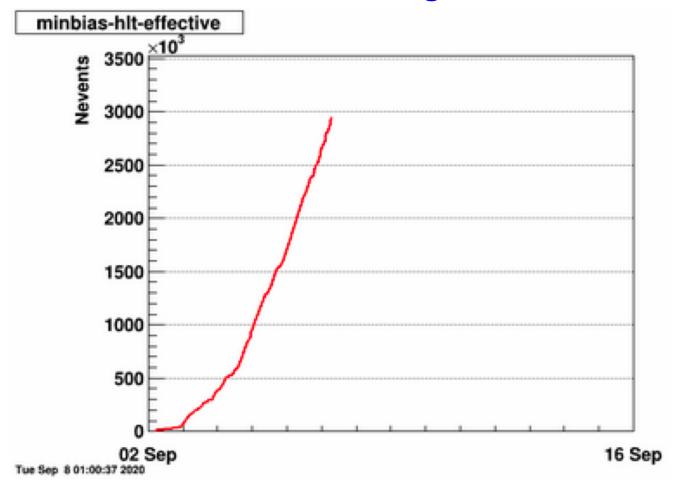
Some Performance Plots from 7.7 GeV Au –Au Commissioning



STAR "Good" Event rates

Commissioning 7.7 GeV Collisions after 40 weeks of Cryo Ops on a Holiday weekend!

7.7 GeV Accumulated "good" events



If next year we can maintain an average of **13 hrs/day** DAQ time, and a store averaged rate of **16 Hz**, we'd collect: 750 kevts/day, 5.2 Mevts/wk -> **100 Mevts/(5.2 Mevts/wk) = 19.2 weeks**

The Goal of 100 M "good" 7.7 GeV evts in 2021 looks to be within reach!

End Game

September						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
9.2 GeV P	hysics ———		HIC tup 2 LEReC	3 Setup/Test	4	5
	7 / Physics	8 Ce(9 C Dedicated r		11 spersed with	12 "other"
13	14 → END	15	16	17	18	19

From Tuesday morning, Sept. 8th, through 8 am Monday Sept. 14th:

- CeC dedicated running (~ 6 days possible)
- Further 7.7 GeV studies/optimizations
- Possible APEX
- Mix of the two when CeC wants to step back

Beam Operations end at 8 am on Monday, September 14th. High current and High Pot testing for about a shift, and then RHIC Run 2020 Ends. First Helium offload (truck) Tuesday morning.

The Cryo plant would have been operating for 41 weeks if we end on Sept. 14th.

Summary

- A very successful 2020 RHIC run!
- 11.5 GeV Au on Au data set goal completely achieved (235 M/230 M evt goal)
- 9.2 GeV Au on Au data set goal completely achieved (161.8 M/160 M evt goal)
- All Fxted target data set goals completely achieved
- LEReC Commissioning for 7.7 GeV demonstrated very good performance
- CeC Experiment still has time left for next five days, and have made good progress
- WOW!

This amazing achievement by all involved deserves some sort of Celebration! The usual End of Run party isn't COVID safety compliant, so need something else. STAR is encouraged to collect the usual funds for an End of Run party, with the hope that we figure out a creative way to use it for a celebration.

Department Management has tasked our Scheduling Physicist, Robert Pak, with the task of figuring out how we might execute this celebration. He can of course speak for himself, but my guess is that he will welcome any creative ideas people might have to offer.