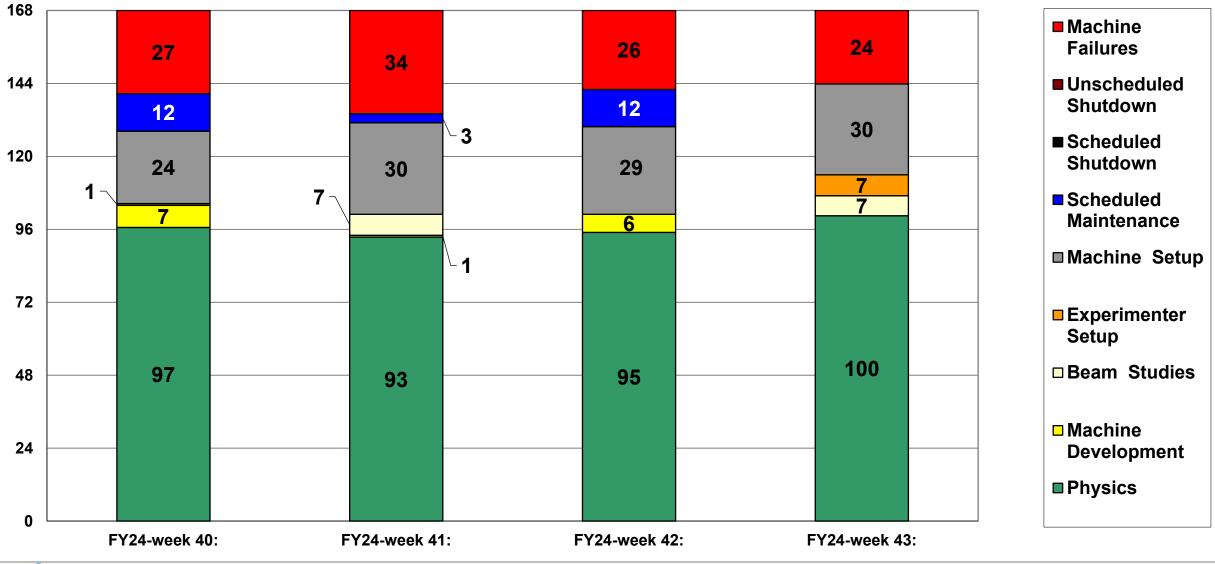
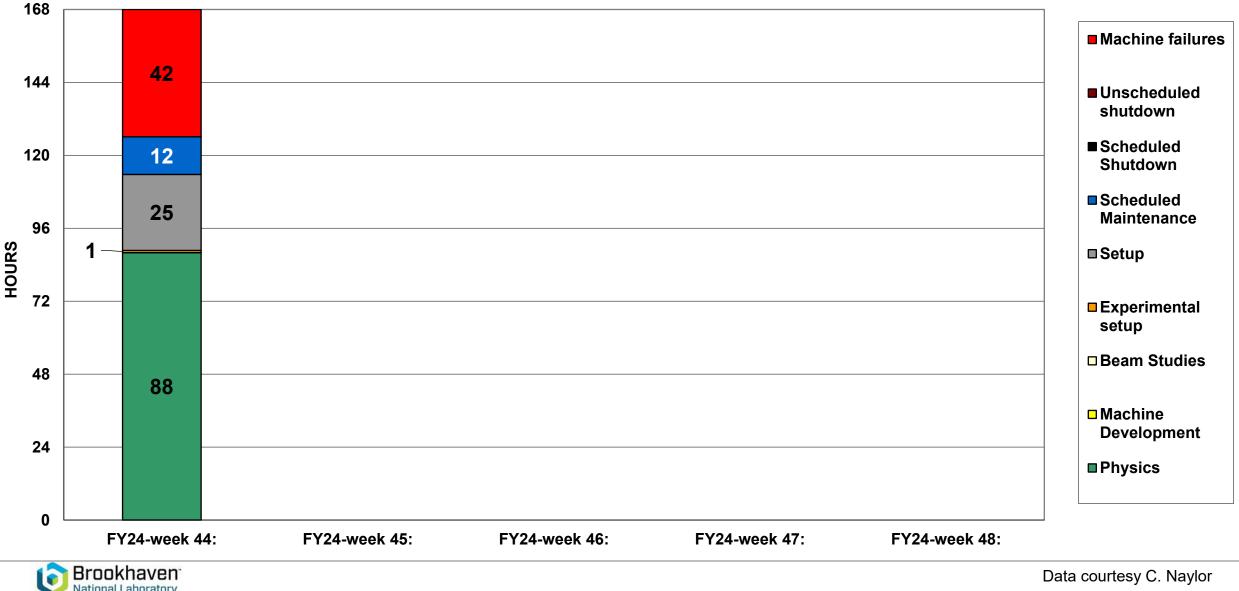
C-AD ACTIVITY July 2024





Data courtesy C. Naylor

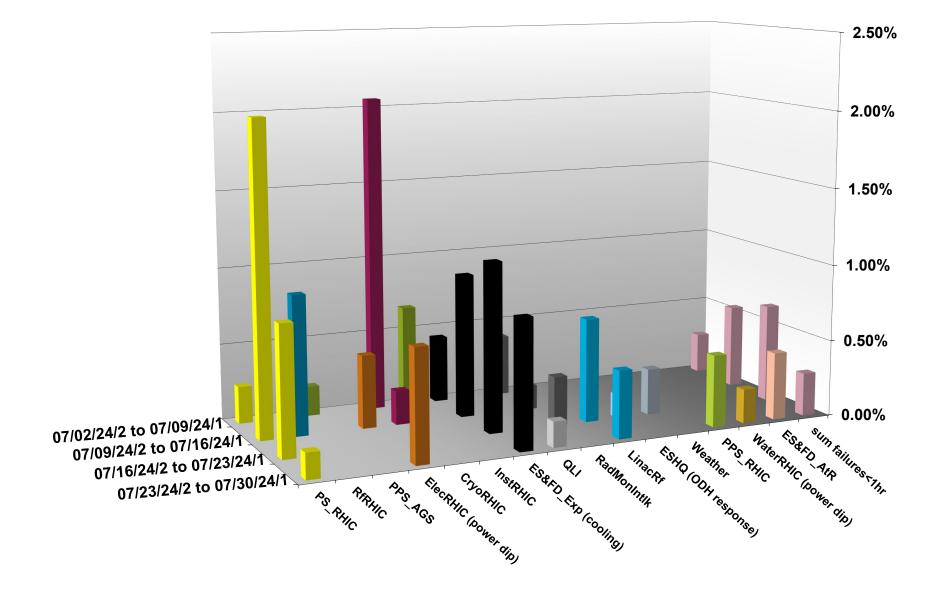
C-AD ACTIVITY **AUGUST 2024**



Brookhaven⁻ National Laboratory

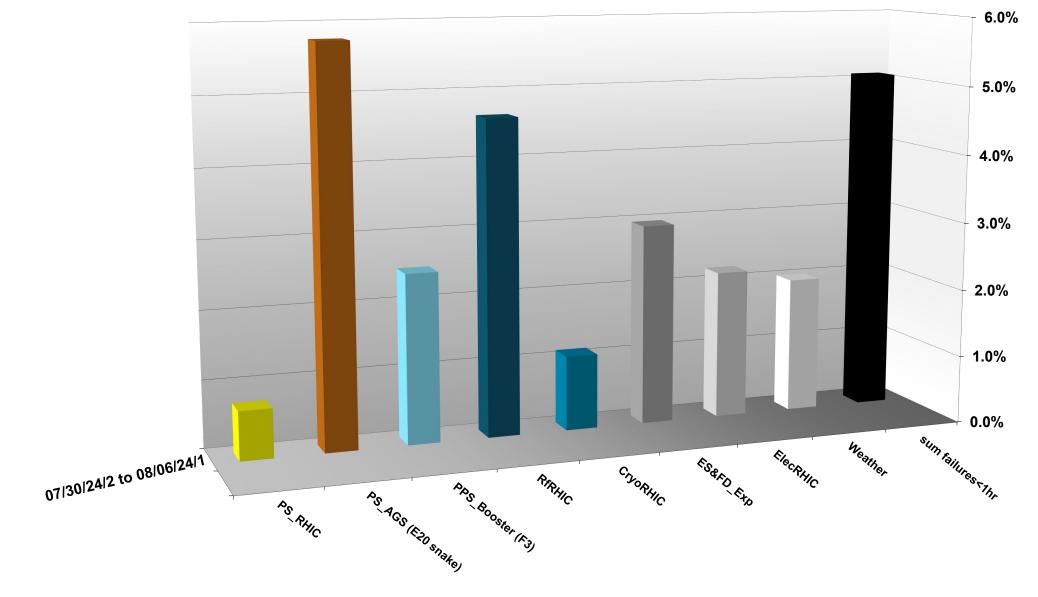
Data courtesy C. Naylor

INTEGRATED FAILURES (GREATER THAN ONE HOUR) BY SYSTEM -- July 2024





INTEGRATED FAILURES (GREATER THAN ONE HOUR) BY SYSTEM -- AUGUST 2024





Operations for BLIP

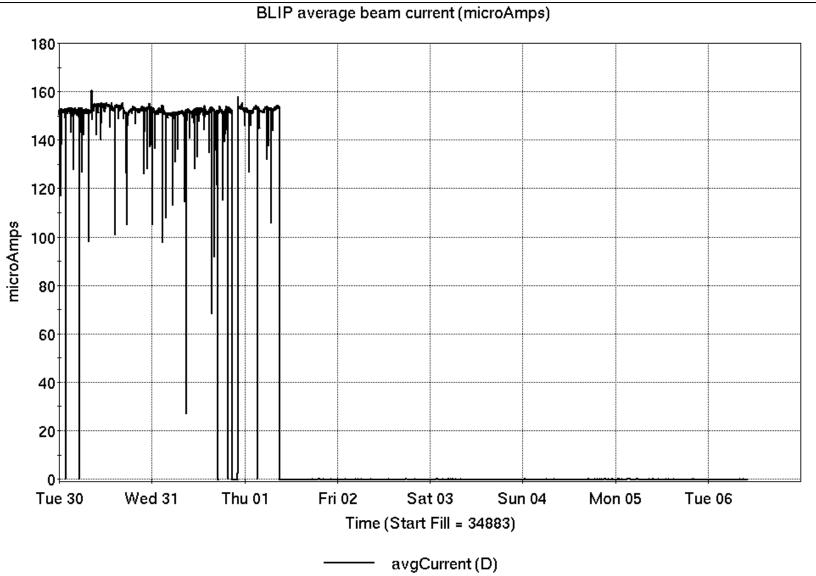
7/30-8/6/2024:

200 MeV Th target production concluded Thursday, marking end of season for BLIP production.

- 47.55 hr Production
- 1.45 hr Failure

Availability: 97%

96.2% for FY24 overall; over 3200 hours beam on targets. Longest streak, >130 hours without failure.





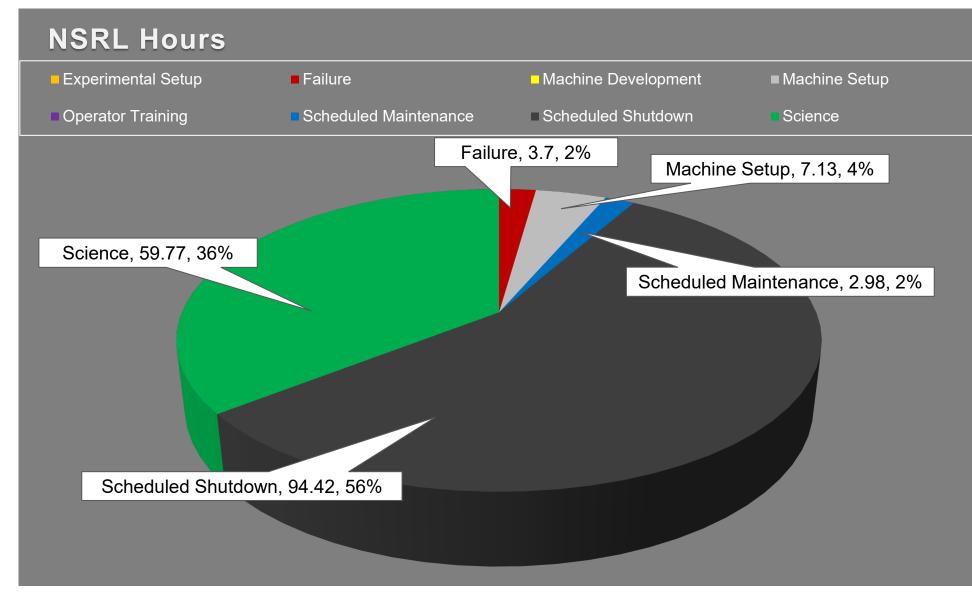
NSRL activity past week: 7/30-8/6/2024 (as of 0800)

Availability: 94.8%

NSRL continues running for multiple users.

8 EBIS ions in use. (Si, Ti, Fe, Nb, Ag, Tb, Bi, Au)

Running 24-C schedule since 22 May. Schedule posted, updates into September for beams & users up to November.





Notes from Operations

Notable failures (>1 hr)

- Accesses for experimental failure
 - ...including residual failure from power dip in previous week
- Cryo lead flow failure, I/O card replaced
- AGS BLM trips, extraction losses; unresolved •
- Power dip (3x) affecting multiple programs and systems; 2 during Maintenance period, with effects beyond
- E20 warm snake PS failure, contactor relay repaired •
- RHIC injection issues, RF required hard reset •
- EBIS RFQ failure from power dip, affecting NSRL
- Linac Mod 5 trip, breaker reset affecting BLIP •
- Access Controls failure sector 6; processor replaced
- Booster F3 kicker failure, access for tube replacement
- Multiple weather stand-down periods Other notes
- 2 sweeps lost due to inexperienced entrants.
- Booster circulating beam current transformer noise issues improved following access; cause TBD.
- Other misc EBIS, injector, RF trips, injector access



Some long repairs occur behind RHIC stores.

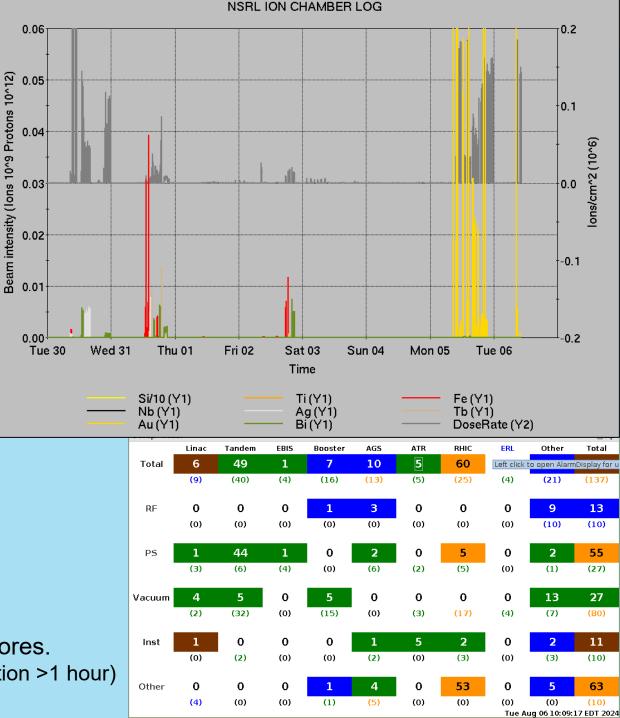
(29 failures, mild+severe, with duration >1 hour)

10^12)

Protons

(lons

intensity



Reminder from Operations

- MCR continues Operations for:
 - (not) BLIP shutdown.
 - NSRL users scheduled to run Mon-Fri this week and next.
 - AGS/Booster setups continue, additional to RHIC physics.
 - Injector Au setup as yet untested. Tandem Au setup pending.
 - Injector h setup, mode switching, RHIC setup for APEX
 - Skew quad & other polarized beam setups continue as beam time allows.
 - RHIC beam for Physics stores.
 - Other MD, Maintenance, APEX as noted in schedule
- CHECK YOUR CALLIN LIST: WCC and ECP updates needed
 - Initial failure response often involves ECP consult. Ensure your Group callin list contains this information.
 - Callin lists should be accurate in terms of personnel and time off.
 - <u>https://www.cadops.bnl.gov/Operations/personnel/call_in_lists/</u>
 - Note: Core Electrical contacts listed/managed on ESSHQ callin list
 https://www.cadops.bnl.gov/Operations/personnel/call in lists/call in list.php?group=esshq
- CHECK AND EDIT YOUR OWN CONTACT INFO
 - <u>http://directory.pbn.bnl.gov/</u>



FY24 Delivered Luminosity to STAR 100 GeV p^ x 100 GeV p^ STAR Integrated Lumi **Preliminary** delivered Luminosity, Figure of Merit (LP²) data for RHIC · Lumi Projected Lmin Lumi Projected Lmax FY24 Delivered Luminosity to sPHENIX 100 GeV p^ x 100 GeV p^ sPHENIX Integrated Lumi 200 Lumi Projected Lmin Lumi Projected Lmax cross section 0.228 mb [pb⁻¹] 10 150 Weeks in Physics FY24 Delivered FoM to STAR Luminosity 100 GeV p^ x 100 GeV p^ STAR Integrated FoM 100 100 STAR FoM Projected Lmin Integrated STAR FoM Projected Lmax 80 Merit [pb⁻¹] 50 60 ٩ Through "08/06/2024"; cross section 0.218 mb 0

10

8

Weeks in Physics

6

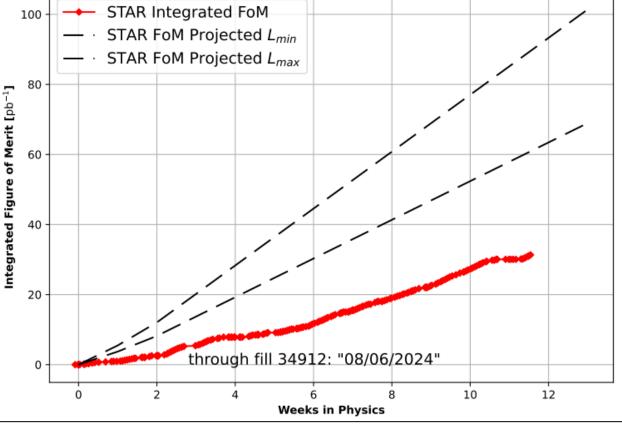
12

14

Courtesy R. Terheide

0





Availability: RHIC Run-24

