

Hall A RC Report

CREX (E12-12-004)
Chandan Ghosh
Feb 26 -March 4, 2020

Daily Activities (Feb 26 - March 3)

2/26:Wednesday **2.5h (ABU) - 1.28C (good charge); Avg eff = 9.8%**

- Hall Access ends ~15:00 hour. Compton tuning -straightening beam, 21:00 - started production - Having problem with ILMAD00D trip. Smooth production overnight with FFB on (fast feedforward off)

2/27: Thursday **4.4h (ABU) - 1.79C (good charge); Avg eff = 13.8%**

- 1L07 - cavity lost communication- no data overnight. 6:40 - lost communication the iocharp1 & software issue. 8:45 - production.
- Calibration on 208Pb, 40Ca, 1%C target and PITA scan for 40Ca for transverse running
- Fast feedback worked with fast feedforward
- ~23:30 having 1L17-7 cavity problem

2/28: Friday **3.6h (ABU) - 1.58C (good charge); Avg eff = 12.2%**

- 1L17 cavity recovery till 7:30.
- Software test for 'EastButton' for safer beam recovery - 8:30 - 12:00
- Detector alignment
- PITA for 48Ca target
- Production

2/29: Saturday **10.6h (ABU) - 3.84C (good charge); Avg eff = 29.6%**

- Production until 1:05 -septum magnet tripped.
- Recovered 11:30 - thanks to Bob, Jack!!
- Back to production 12:30

3/1: Sunday **15.7h (ABU) - 8.26C (good charge); Avg eff = 63.7%**

- Production data

3/2: Monday **10.8h (ABU) - 4.97C (good charge); Avg eff = 38.3%**

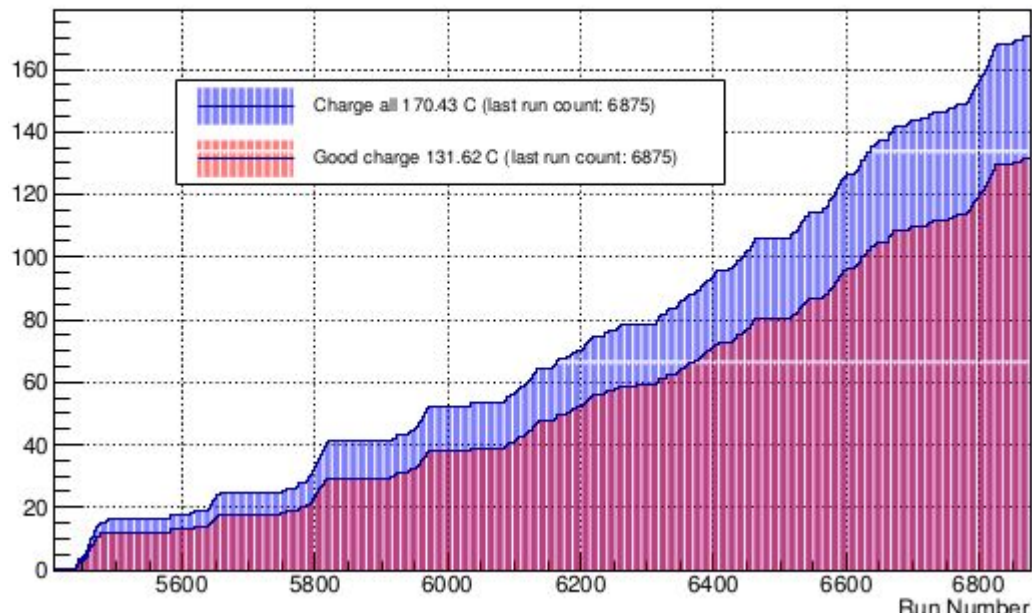
- Nice production till 11:00 - injector group started changing LASER spot on cathode. PQB studies -back to production 15:30. Continued till 18:10. Injector group was investigating vacuum issue.

3/3: Tuesday **2.2h.. (ABU) - 1.16C (good charge); Avg eff = 23.8%+...**

- Started production at 1:30.
- 5:40 started having injector problem.
- 9:00 started beam studies.

Accumulated good charge

Charge total vs run



Summary for this week

CREX (E12-12-004)

- Fast feedback
- Compton collimator and detector centering
- Detector alignment
- Calibration for different targets for transverse polarization running.
- PITA scan for ^{40}Ca and ^{48}Ca
- Production

Near future plan - Production