

RG-K Commissioning Run

Dec. 15 – 19, 2023

Experiment Coordinator: Annalisa D'Angelo

Physics Division Liaison: Daniel Carman

Run Coordinator: Bill Briscoe

Day #1 : December 15, 2023

- 07:00 – RG-D ends, beam off
- 08:00 – Hall B in Controlled Access
 - Torus and solenoid remain on
 - Detectors are turned off or put in safe mode
- 08:00 – 16:00:
 - ACC completes change from 5-pass to 3-pass beam
 - Target Group completes change from LD2 to LH2 target (**Chris Keith, James Brock**)
- 16:00 – 19:00 – Beam tuning
 - Tune beam to tagger dump yoke with necessary harp scans (**Eugene Pasyuk**)
 - Take Moller run (**Nathan Baltzell**)
 - Tune beam to Faraday cup with empty target (**Eugene Pasyuk**)
 - Fill LH2 target (**Chris Keith, James Brock**)
- 19:00 – 23:00 – Trigger validation (**Valery Kubarovsky**)
 - Complete trigger validation test plans with DAQ
 - Pin runs for immediate cooking
- 23:00 – 24:00 – Luminosity scans (shifters)
 - Take 1 hr runs at 10, 20, 30, 40, 50, 60, 75 nA

Day #2 : December 16, 2023

- 00:00 – 08:00 – Luminosity scans cont'd (shifters)
 - Take 1 hr runs at 10, 20, 30, 40, 50, 60, 75 nA
- 08:00 – 22:00 - DC test plan part I (**Florian Hauenstein**)
 - DC HV studies (75M trigger runs) – follow DC test plan document
 - Collect data for gain calibration CTOF, ECAL, FTOF, HTCC
 - Pin runs for immediate cooking
- 22:00 – 24:00 – Data collection (shifters)
 - Run with nominal trigger (no DC roads, 150 MeV ECAL threshold)
 - Use nominal DC setting defined by Florian

Day #3 : December 17, 2023

- 00:00 – 08:00 – Data collection (shifters)
 - Continued data taking from previous shift
- 08:00 – 11:00 – Streaming readout tests (**Sergey Boyarinov, David Lawrence**)
 - Run test plan with FT energized
- 11:00 – 22:00 – DC test plan part II (**Florian Hauenstein**)
- 22:00 – 24:00 – Data collection (shifters)
 - Run with nominal trigger
 - Use nominal DC setting defined by Florian

Day #4 : December 18, 2023

- 00:00 – 08:00 – Data collection cont'd (shifters)
 - Run with nominal trigger
 - Use nominal DC setting defined by Florian
- 08:00 – 14:00 – Reverse solenoid polarity (**Eugene Pasyuk, Engineering**)
- 14:00 – 24:00 – Data collection (shifters)
 - Run with nominal trigger
 - Use nominal DC setting defined by Florian

Day #5 : December 19, 2023

- 00:00 – 07:00 – Data collection cont'd (shifters)
 - Run with nominal trigger
 - Use nominal DC setting defined by Florian
- 07:00 – Beam off
- 07:00 – 08:00 – Prepare CLAS12 for accelerator down
 - Turn CLAS12 detectors off (shifters)
 - Ramp down magnets (**Eugene Pasyuk**)
 - Empty and secure target (**Chris Keith, James Brock**)