

SANE Short Term Run Plan – Thurs. 3/5 eve – Fri. 3/6 owl

RUN PLAN (SAVE previous run plans in the Run Plans binder)

Thur. 3/5 eve to Fri. 3/6 owl. Opportunistic accesses: when switching targets, during anneals (check with the target experts) or to delay or move up anneal times to avoid annealing between midnight and 6:00 AM. Keep < 30 min. long if possible.

Starting parallel data with 4.725 GeV beam

BEAM (for production runs):

Current : **85 to 105 nA**

- check that the **SR is ON** and configured for *20 mm diameter, 4.7 GeV beam.*
Wavetek generators Preset 5: spiral = 1.16 V; circles 1 & 2 = 1.10 V
- **fast raster 1 x 1 mm**
beam at $x = -2.7$, $y = 0.06$ mm on **BPM 3H00A**;
 $x = -3.8$, $y = 0.62$ mm on **BPM 3H00B** (run 72857 in hclog entry 177929)

DATA:

-- Center the beam on the target: put the cross hairs target in the beam. Ask for 70 nA, start with the approximate beam positions above. The target magnet is off, and the beam is straight through (chicane is off), so the beam horizontal (and vertical) center may have changed. The insert was removed and reinserted in the refrigerator, so the encoder settings need to be checked. Follow the usual procedure:

-- First, center the target vertically by looking at the slow raster y vs x ADC plot, adjust the encoder values until the horizontal cross hairs arms are centered.

-- Next, adjust the beam center by asking MCC to steer the beam left or right in steps of 0.5 mm, as needed. Don't steer the beam more than 3 mm in either direction. Watch for the target cup rims showing as bright areas on the raster ADC plot.

Take HMS data on the C target with 120 nA. A 1 cm thick lucite cover is on the HMS entrance window to approximate the forward tracker. Follow the order of momentum and angle settings on the table below. Take runs of the indicated length.

Polarity	Momentum MeV/c	Angle	HMS Settings			Time [min]	Overhead [min]
			Step	P or polarity changes	angle changes		
positrons	700	41.5	1			90	
		35	2		1	60	5
	1000	35	3	1		60	15
		41.5	4		2	90	5
	1200	41.5	5	2		90	15
		35	6		3	60	5
electrons	700	35	7	3		20	15
		41.5	8		4	30	5
	1000	41.5	9	4		30	15
		35	10		5	20	5
	1200	35	11	5		20	15
		41.5	12		6	30	5
Total [h]						10	1.75

Complete as much of the plan as time allows until 7:00 AM. Ask for controlled access at 7:00 for alignment survey. The magnet will not be ramped up until Friday afternoon.