

BPM status

Pengjia Zhu

Survey uncertainty

Survey x \rightarrow 0.1015 mm \longrightarrow Survey wire \rightarrow 0.1015mm
Survey y z \rightarrow 0.1217 mm

Survey angle \rightarrow no angle uncertainty

Harp scan minimum step \rightarrow 0.0657mm

Position uncertainty at bpm \rightarrow 0.15mm

Survey uncertainty + BPM uncertainty center position only

Run	type	curr	filter	BPMA	BPMB	target	
good							
2629-2769	optics	100nA	2Hz average	0.17/0.17	0.17/0.17	0.7/0.7	0.00088rad
2832-2856	optics	100nA	150Hz filter	0.26/0.24	0.31/0.24	1.3/1.1	0.0013/0.0015
3445-3542	prod	50nA	150Hz filter				
3543-3956	prod	50nA	150Hz filter	0.22/0.23	0.33/0.34	1.3/1.3	0.0015/0.0015
4137-4598	prod	50nA	150Hz filter	0.21/0.23	0.51/0.5	1.8/1.8	0.002/0.002
	prod	75nA	150Hz	0.17/0.19	0.25/0.25	1.0/1.0	0.0012/0.0011
4611-4623	prod						
5001-5102	prod						
5554-6218	prod	100nA	150Hz	0.16/0.18	0.21/0.21	0.85/0.87	0.001/0.001
		75NA	150Hz	0.2/0.22	0.37/0.29	1.4/1.1	0.0013/0.0016
		50NA	150Hz	0.22/0.23	0.44/0.34	1.65/1.3	0.0015/0.0018

If use 2Hz filter all of them below 1mm
 2Hz filter for center position
 150Hz for calibrating slow raster

bad

3153~3167	optics	100nA					
5104-5338	prod	50nA	new bpm receiver, only with field harp scan				
4722-4997	prod	50nA	high target offset				

todo

Still have problems by using BPM A and harp to calibrate BPMB

Do calibration for bad runs and uncertainty

Will try to finish in 1 week and show more results in next meeting

After done, calculate position for all of runs