

Run 0: 9/21/09

Prelim pulser test on CsI  
noisy! Chamber open, loose cables  
pulser ramp, 0-2.5V, 51 steps, 10s each  
Telescope 0

Run 1 9/21/09 3:04 pm

continue pulser ramp for tele 1-5

Run 3 9/22/09 5:42 pm

Cosmics-neutron wall run. Wrong fast gates.

Run 4 9/22/09 7:13 pm

Neutron wall singles

AmBe source in center of wall A shadow bar  
mount

Fast gates correct.

Run 5 9/22/09 8:34 pm

Neutron wall singles

Cosmics run with correct fast gate width.

Run 8 9/26/09 11:50 am

CsI pulser ramp after some preamps changed out  
one telescope at a time

0-2.6V, 27 steps, 10s each, negative.

Biased.

Not cooling preamps, Chamber closed, at atm.

Run 10 Junk. Elog test

Run 12 9/29/09

Si preamp pulser ramp

All telescopes daisy chained together

0-10V, 11 steps

Biased. Chamber closed, at atm.

Run 13 9/29/09  
Neutron wall cosmics. All thresholds = 110.

Run 14 9/29/09  
NW cosmics. All thresh = 20

Run 15 9/30/09  
LASSA Si  $\alpha$ -run. All Si biased to -60V  
No foil in front of detector, probably noisy.

Run 16 9/30/09  
 $\alpha$  run as above, but using correct  
biases, as below.

Position	Silicon	Bias (V)	05049 Current (uA)	IU Current (uA)
0	1194-17	-66	0.9	1.31
1	1674-12	-60	0.62	0.96
2	1140-21	-85	1.33	1.52
3	1674-9	-50	N/A	0.7
4	1140-19	-65	2.76	3.25
5	1742-4	-55	0.46	0.92
	CsI	40		

Telescope 1 has a much larger leakage current  
than listed; Leakages that I measure now, in  
vacuum: mA

0) 1.17  
1) 3.57

2) 1.39  
3) 0.88

4) 3.49  
5) 0.93

9/30/09

Time delay between individual gate & anode signal

~~Chart~~  
 We're going from anode signal input to the QDC  
 through a splitter & looking at the OR coming out  
 of CFD going through FIFO

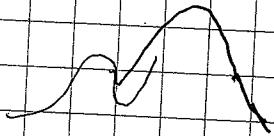
Ch #	time delay [ $\Delta t$ 2 ns]	Ch #	time delay [ns]
A left 0	<del>43 ns</del> 43 ns e 10 ns	B left 0	<del>41</del> 41 e 10
1	<del>41 ns</del> 41 ns e 10 ns	1	<del>38</del> 38
2	<del>41 ns</del> 41 ns e 10 ns	2	<del>42</del> 42 e 10
3	<del>41 ns</del> 41 ns e 10 ns	3	<del>31</del> 31
4	<del>41 ns</del> 41 ns e 10 ns	4	<del>42</del> 42 e 10
5	<del>41 ns</del> 41 ns e 5 ns	5	<del>42</del> 42 e 10
6	<del>41 ns</del> 41 ns e 10 ns	6	<del>37</del> 37 e 5
7	<del>41 ns</del> 41 ns e 10 ns	7	<del>31</del> 31
8	<del>41 ns</del> 41 ns e 10 ns	8	<del>35</del> 35
9	<del>41 ns</del> 41 ns e 10 ns	9	<del>35</del> 35
10	<del>41 ns</del> 41 ns e 10 ns	10	<del>35</del> 35 e 5
11	<del>41 ns</del> 41 ns e 10 ns	11	<del>36</del> 36
12	<del>41 ns</del> 41 ns e 10 ns	12	<del>32</del> 32 e 2
13	<del>41 ns</del> 41 ns e 10 ns	13	<del>32</del> 32
14	<del>41 ns</del> 41 ns e 10 ns	14	<del>41</del> 41 e 10
15	<del>41 ns</del> 41 ns e 10 ns	15	<del>32</del> 32
8	25 ns		30 ns e 0
9	37 ns		42 ns e 5 ns
10	37 ns		42 ns e 5
11	<del>42 ns</del>		42 ns
12	<del>42 ns</del>		42 ns
13	<del>42 ns</del>		42 ns
14	28 ns		33 ns
15	37 ns		41 ns

Ch #	time delay [ms]	Ch #	time delay [ms]
A right 0	<del>42</del> 44	B right 0	<del>45</del> 46
1	<del>42</del> 45es	1	<del>45</del> 45
2	<del>42</del> 45	2	<del>42</del> 45
3	42 44	3	<del>44</del> 45
4	42 44	4	<del>44</del> 45
5	42 44es	5	<del>45</del> 47
6	<del>42</del> 53e10	6	<del>44</del> 46
7	<del>42</del> 44	7	<del>45</del> 48
8	<del>42</del> 38	8	<del>42</del> 48
9	<del>42</del> 37	9	<del>42</del> 46
10	<del>42</del> 43	10	<del>42</del> 48
11	<del>38</del> 38	11	<del>42</del> 48
12	<del>38</del> 38	12	<del>45</del> 46
13	<del>38</del> 38	13	<del>42</del> 38
14	<del>34</del> 35	14	<del>38</del> 37
15	<del>42</del> 34e2	15	<del>42</del> 44

A left 16	41	B left 16	39
17	40	17	39
18	40	18	38
19	40	19	37
20	38	20	37
21	38	21	38
22	39	22	46
23	39	23	46

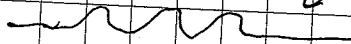
A right 16	38	B right 16	<del>38</del> 46
17	38	17	<del>38</del> 46
18	38	18	<del>38</del> 46
19	38	19	<del>38</del> 45
20	38	20	<del>38</del> 45
21	38	21	<del>38</del> 46
22	38	22	46
23	38	23	46

measured from start of OR to low energy peak.  
 At certain channels had a significant early component which is denoted by  $e\#$ , i.e. 53 e10 had a low energy peak 53 ns after the OR, but some signals came 10 ns early. Looking at these peaks on a large scale, they tended to be double humped Early peaks



where the second hump was larger & at the expected time.

Also noticed that if I had a discrim from a neighboring higher numbered channel on, signal tended to look normal ~~including time offset~~. e.g. if I am looking at the arade signal from AR 6 but have discrim AR 7 on, I see a normal looking signal peaked at 44 ns, but if instead discrim AR 6 is on, it is peaked at 53 ns. ~~When~~ If AR 5 discrim is on, the signal looks crappy & low & triple peaked.



10/1/09

Telescope (Position) ©

Channel 0	bad		
Channel 1	sparkly from Si to wirebond		
2	very noisy	(leakage measured at 1.8 uA at 30 V)	
3	sees sparkly		
15	<del>from</del> 30-40 nV discharge		
14	700 nV		
13	7 nV		
12	8 nV	5	8
11	8 nV	4	8
10	8 nV	3	8
9	8 nV	2	8
8	8 nV	1	8
7	8 nV	0	8
6	8 nV		

20 nV dis  
200 nV dis  
all over

10/0/09 Do not see leakage current on tele 1 at atmospheric high & the disconnected channel low noise on strip

37 V 0.7 mA  
 40 V 0.98 mA ← wbad!  
 Now ch 10 (strip 5) v. noisy

Noise on back <sup>strip</sup> ± 20 mV

45V 1.8 mA  
 EF ch 9, 11 noisy, ch 10 awful

2 Back 12 unbaised pnoise 10 mV  
 9 ~~40 mV~~  
 14+15 20 mV  
 12 baised @ 47V @ 1.15 mA weird noise just slowed  
 baised noise about 8 mV  
 14 baised 20 mV

3 Back 1+2 unbaised pnoise 10 mV  
 3 40 mV

Tele 3 50V 0.96 mA  
 3 baised 10 mV  
 2 10 mV + noise + baseline base  
 1 clean + d3 connected  
 6 40 mV

Tele 5  
 5 Back  
 0 unbaised 20 + random pats  
 1 40  
 2, 8, 10, 15 d3 connect  
 0 baised no d3  
 1 baised to 25V decrease in noise to ~10 mV

# LASSA S; problem channels 10/2

By ASIC channel

Tele	no pulser	no $\alpha$	discharging	other	TOI
0		no $\alpha$ EFO, <sup>EF1, 2, 9</sup> EB10, 15	EFO		3
1		EF10, EB1	EF10		2
2		EF9, EB 3, 12	EB2 (barely)	Ch 14, 15 coupled	5
3		EFO, EB 1, 2		EB2 noisy baseline	3
4		EF6		<del>EBO large gain</del>	<del>0.8</del>
5	<del>EB 8, 10, 15</del>	<del>EB 0, 2, 8, 10, 15</del>	EB 0 (barely)		2 <del>0.8</del>

revised 10/3

fixed 3 preamps, moved non functioning attenuator to tele 5 on bad strip

11/3/09 neutron

<sup>60</sup>Co wall runs. - 51  $\mu$  Ci taped to front of wall.

Taped near center of odd numbered bars, 10 inches from edge of wall (note: different from edge of bar). Change location every 5 mins.

Run 66 starts ~~with~~  
with wall 1, bar 23, wall right  
= top left corner of array as viewed from target.

then bar 21, 19, 17, etc.

Then wall left.

Also, only discs for neighboring bars turned on at a time, so max 3 bars (6 discs) on, so Compton edge isn't washed out by cosmic by running longer without the source than with it.

11/4/09

run 67: <sup>60</sup>Co run on wall 0, starting wall left, bar 23.  
Same setup as run 66

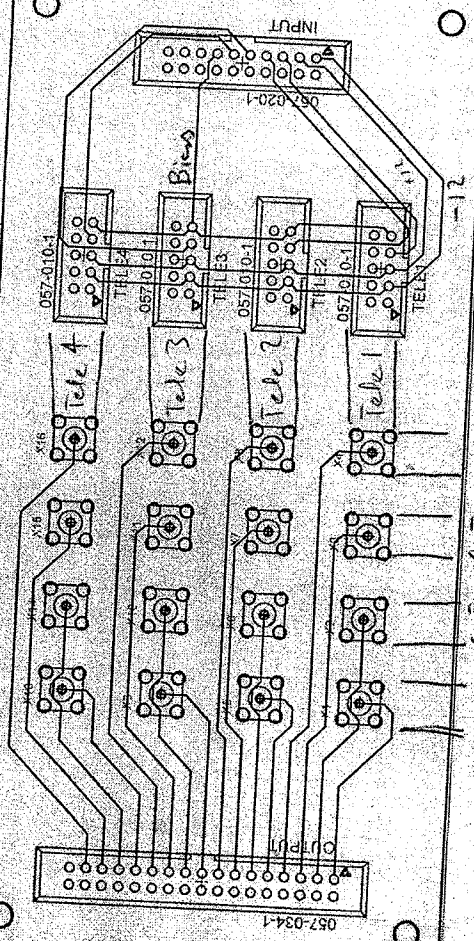
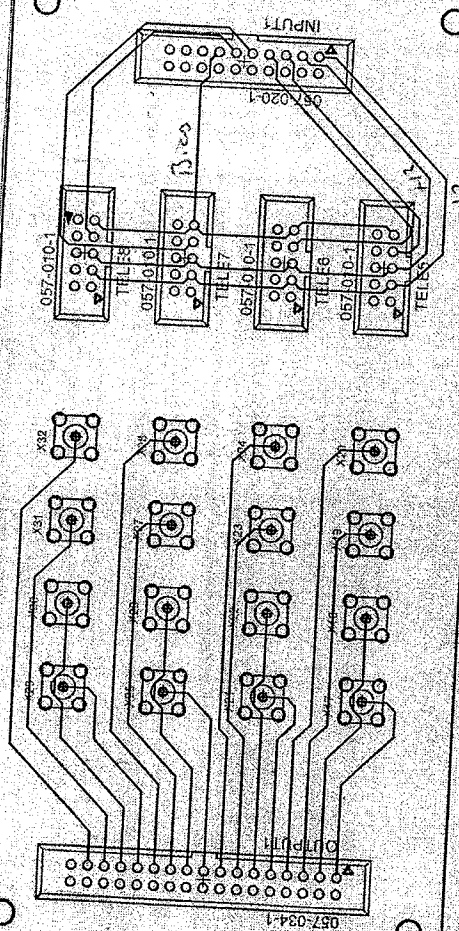


Pin 3 Signal -12  
 Pin 5 +12  
 Pin 7 Test  
 Pin 9 Bios  
 rest = GND

20 Pin  
 Pin 1 Signal -12  
 Pin 3 +12  
 Pin 5 Test 1  
 Pin 7 Test 2  
 Pin 9 Test 3  
 Pin 11 Test 4  
 Pin 13 Bios  
 even = GND  
 15, 17, 19 open

34 Pin  
 Pin 1 Signal -12  
 Pin 3 +12  
 Pin 5 Test 1  
 Pin 7 Test 2  
 Pin 9 Test 3  
 Pin 11 Test 4  
 Pin 13 Bios  
 Pin 15 -12  
 Pin 17 +12  
 Pin 19 Test 5  
 Pin 21 Test 6  
 Pin 23 Test 7

Pin 25 Signal  
 Pin 27 Test 8  
 Pin 29 Bios  
 even = GND  
 29, 31, 33 open



CsI CsI CsI CsI  
 1 2 3 4

CsI Mapping

11/3/09

## Neutron wall control mapping

discrim	channels 0-15
0	wall 0, left, bars 0-15
1	wall 1, left, bars 0-15
2	wall 0, right, bars 0-15
3	wall 1, right, bars 0-15
4	wall 0, left, bars 16-23; wall 1, left, bars 16-23
5	wall 0, right, bars 16-23; wall 1, right, bars 16-23

fast gates are set by four computer controllable CAEN gds, (opened by geom NEUT fast gates) with channels corresponding to the first four discriminators. The last two banks of fast gates come from a LeCroy 4415 and a LeCroy 4415a, which must be set by hand.

Disc 0 & 1 correspond to channels in the first set of QDCs, banks A & B respectively. Discs 2 & 3 correspond to the second set of QDCs, etc.

11/8/09

Alpha Calibration run 72 resolution very bad on tele 4 & 5. Redoing with same thresholds (Zibi's very low thresholds) as run 76 to check, then again with all thresh set ~~to~~ to  $\pm 15$  as run 77.

N walls were not usually taking time data previously, except for reference OR & prompt trig. widened coincidence gate in software so that it now covers  $-300 \text{ ns} \rightarrow +300 \text{ ns}$  w.r.t. trigger (was  $-250 \rightarrow +250$ ) and now see times. Will have to take cosmic again to check timing.

Scalers were all in place but a few showed occasional double counting, likely resulting from a failure to clear after a read. Moo Fanned out a pocket pulser to all channels and ran starting at  $\sim 7 \text{ min}$  into run 77. From then until end, master line showed 7 spikes of  $\sim$  double value. Should ask Ron about it tomorrow.

11/8/09 cont'd.

Talked w/ Ron Fox last week about speeding up readout. At high rates, most of our dead time came from long "inter-buffer" times associated w/ buffer transfers in spectrodaq. Increasing # of buffers per transfer reduced the rate of these but increased the length of each; no gain. Changing spectrodaq page count to 1 helped ~10%, but Ron put this back at the end of the session, because it needs to be the same on all spdaq boxes.

Ron suggested that moving to High Performance production readout would reduce normal buffer deadtime but not inter-buffer dead time. Maybe some gain, but requires rebuilding readout.

Run 78 - Neutron wall cosmetics with new timing window, and (presumably) working scalers.

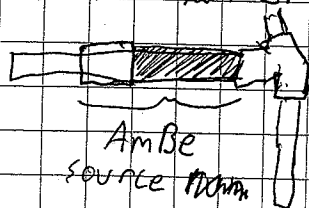
Miniball: Several channels in rings 7 & 8 have appeared dead. Last week, observed these same channels, or at least some of them, to have noisy input, no  $\gamma$ 's, and not discharge completely according to HV readout when voltage set 0. Good channels may also be noisy.

Yesterday, correlated these channels with malfunctioning discriminators. Cycled power on them, some channels working again. Today, all these channels working in pulser test. Want to do another  $^{60}\text{Co}$  run to check.

Alpha run w/ high ( $\pm 15$ ) thresholds had much better resolution than low thresholds. Proceeding w/ several runs to test - runs 79-84.

11/18/09

Run 172 - neutron wall AmBe run with 25 MeV gain. AmBe source is taped to railing near chamber.



top, beam left corner of railing looking upstream

← source side

11/19/09

Testing PV w/  $^{60}\text{Co}$  source. All shaper gains 125 all disc thresh 254, all Voltage = -1400 V.

run 176.

run 177  $V = -1500$  V

run 178  $V = -1600$  V

Bias	channel no
-1400	647
-1500	950
-1600	1400

$$\text{Gain} = \text{Voltage}^{5.78}$$

set 25 MeV to 1000 channel  
 $\Rightarrow$  160 channel at  $^{60}\text{Co}$  Compton

$\rightarrow$  set bias for PV at 1100 volt for 25 MeV dynamic range

### Beam tuning

run 179 - scalers for FA & CsI on, no beam. ~~Blank~~ target.

Run 180 Beam in ~~33~~ 33 epA F-C at end of beamline. FA counting ~ 10 Hz total. Still blank target

Run 181 Turned on NW, FA, MB, PV.  $^{124}\text{Sn}$ . 33 epA. FA counting around 250 Hz. 1K attenuation

Run 182 Factor of 10 more beam. Still only scalers running.

Position	Silicon	Bias (V)	09042 Current (uA)	05049 Current (uA)	IU Current (uA)
0	1194-17	-66	1.37	0.9	1.31
1	1674-12	-65	3.02	2.76	3.25
2	1140-21	-85	0.98	1.33	1.52
3	1674-9	-50	0.72		0.7
4	1140-19	-60	3.05	0.62	0.96
5	1742-4	-55	0.69	0.46	0.92
	Csl	40		0.03	

184 Target in 322 e<sub>p</sub>A, <sup>124</sup>Sn 50 MeV  
 420/s Mult 3 MB  
 2300/s FA  
 42300/s NW

185 Target in ~~322 e<sub>p</sub>A~~, <sup>124</sup>Sn 50 MeV  
 1600/s Mult 3 MB  
 7800/s FA  
 52000/s NW

Run 186 Blank in 1.03 e<sub>n</sub>A, <sup>124</sup>Sn 50 MeV  
 0/s Mult 3 MB  
 5/s FA  
 45000/s NW

Blank in 1.03 e<sub>n</sub>A,  
 0/s Mult 3 MB  
 6/s FA  
 45000/s NW

~~new detector~~  
 old detector

Blank in ~~1.03 e<sub>n</sub>A~~ 1.03 e<sub>n</sub>A  
 21/s Mult 3 MB  
 3-4/s FA  
 45000/s NW

new detector

11/19/2009 9:34pm

We have more counts in live MB than raw scaler. ?

Looking at FA+MB trigger condition.  
 Every coincidence (on scope) of FA width & MB width gives a trigger.  
 FA comes usually 60-80 ns before MB trigger, but occasionally as much as 130 ns.  
 Almost all MB mult 3 have associated FA. The reverse is not true.

Set FA full scale range to double what it was - 100 ps resolution  
 resolution  $\approx$  400 ns full scale

MB tail is missing.

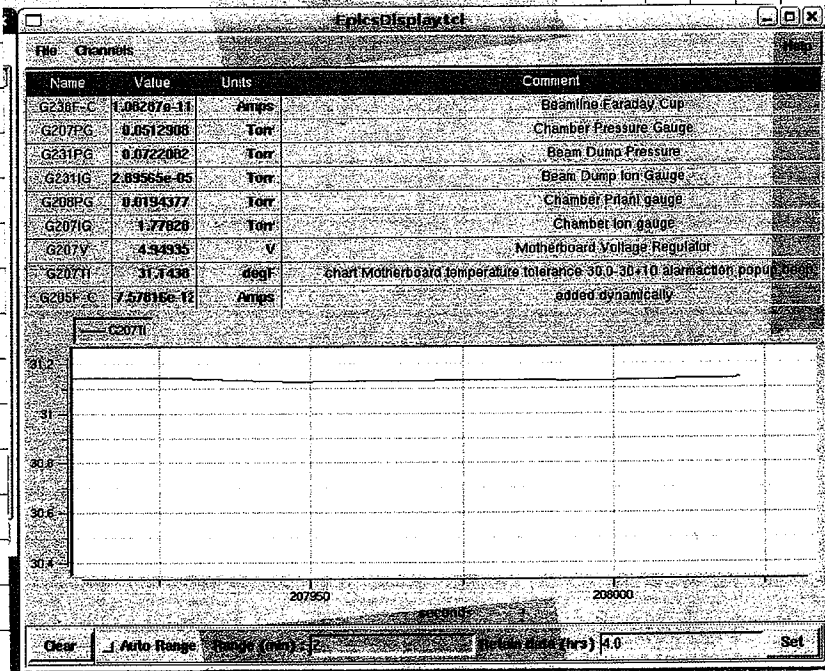
10:47pm.

- 1) Change the CSI threshold values (ADC) by looking at the pedestal runs
- 2) Found that the ~~CSI~~ Mapping of CSI 2 and CSI 3 is switched in file 0! Change the input file in Spentel & switch threshold values.

Run # 189/188	Date:	Start time:	Stop time:
Beam:			
Target:			
Trigger:		Miniball Multiplicity:	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/>	Your name:	
locations <input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
Live Time (%):		Master Trigger Rate:	
Notes: CSI threshold setting, pedestal Run. Change the CSI-adc-threshold file			

Run # 190	Date: 11/27/09	Start time:	Stop time:
Beam: <sup>220</sup> Sn - (20 MeV/A)			
Target: <sup>124</sup> Sn			
Trigger: FA + MB	Miniball Multiplicity: 3		
Shadow bar locations	B <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Your name: Jenny
Live Time (%): 86	Master Trigger Rate: 43		
Notes: Data Run. used MB-Bank 2-live Maybe problem (mapping or gain) in MB. Increase the beam intensity by factor of 3 (in the middle of Run) Attenuation factor is 100.			

LASSA Si	0	1	2	3	4	5
bias voltage	66.1	65.1	85	80	60	55
leakage current	1.54	3.16	1.35	0.82	3.16	0.26



Run # 191	Date: 11/20	Start time: 1 am	Stop time:
Beam: $^{124}\text{Sn}$ 120 MeV/A			
Target: $^{124}\text{Sn}$			
Trigger: FA + MB		Miniball Multiplicity: 3	
Shadow bar locations		Your name:	
B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Micha	
Live Time (%): 65		Master Trigger Rate: 206	
Notes:			

Run # 192	Date: 11/20	Start time: 1:30	Stop time:
Beam: $^{124}\text{Sn}$ 120 MeV/A			
Target: $^{124}\text{Sn}$			
Trigger: MB Singles		Miniball Multiplicity: 3	
Shadow bar locations		Your name:	
B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
Live Time (%): 70		Master Trigger Rate: 218	
Notes:			

Changing gates for CS singles  
 lowering coarse gain by half for all of them  
 T0 C1,3 - back to previous settings  
 Tel 5 - gain lowered by ~ 20%. of Fine Gain



Run # 193	Date: 11/20	Start time: 3:15	Stop time:
Beam: $^{124}\text{Sn}$ 120 MeV/A			
Target: $^{124}\text{Sn}$			
Trigger: FA+MB		Miniball Multiplicity: 3	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/>		Your name:	
locations <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		Micha	
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
Live Time (%): 73		Master Trigger Rate: 170/360	
Notes: run title wrong CSI gains changed prior to this run asked for more beam, Mike is playing w/ MB gains			

LASSA Si	0	1	2	3	4	5
bias voltage	66.1	65.1	85.0	50.1	60.0	55.1
leakage current	1.56	3.17	1.37	0.83	3.16	0.77

Run # 194	Date: 11/20	Start time: 4:19	Stop time:
Beam: $^{124}\text{Sn}$ 120 MeV/A			
Target: $^{124}\text{Sn}$			
Trigger: FA+MB		Miniball Multiplicity: 3	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/>		Your name:	
locations <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		Rachel	
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
Live Time (%): 40%		Master Trigger Rate: 400	
Notes: <del>CSI gains changed prior to the run</del> Mike is adjusting MB gains during run.			

Help

File Channels

G238F-C	1.43932e-10	Amps	Beamline Faraday Cup
G207PG	0.0530906	Torr	Chamber Pressure Gauge
G231PG	0.0741329	Torr	Beam Dump Pressure
G231IG	2.89356e-05	Torr	Beam Dump Ion Gauge
G208PG	0.0207344	Torr	Chamber Priani gauge
G207IG	1.77828	Torr	Chamber Ion gauge
G207V	4.93465	V	Motherboard Voltage Regulator
G207TI	31.2064	degF	chart Motherboard temperature tolerance 30.0-30+10 alarmaction popup,beep,
G205F-C	7.31684e-12	Amps	added dynamically

Five gain  
 GABAM FOR RUN 197  
 Rates for CSI slopes increased by 20% for

TOC 0,1  
 TIC 0,2,3  
 T2 C 0,1,2,3  
 T3 C 2,3  
 T4 C 2  
 T5 C -

New gauges saved in files  
 Chapter x - run 194. n 588

Run # 195	Date: 11/20	Start time: <del>17:04:35</del>	Stop time:
Beam: <sup>124</sup> Sn 120 MeV/A			
Target: <sup>124</sup> Sn			
Trigger: FA+MB		Miniball Multiplicity: 3	
Shadow bar locations		Your name:	
B <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Rachel	
Live Time (%): 35		Master Trigger Rate: 450	
Notes: Mike done adjusting MB gains, now adjusting FA gains during run.			

Run # 196	Date: 11/20	Start time: 4:49	Stop time:
Beam: <sup>124</sup> Sn 120 MeV/A			
Target: <sup>124</sup> Sn			
Trigger: FA+MB		Miniball Multiplicity: 3	
Shadow bar locations		Your name:	
B <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Rachel	
Live Time (%): 33		Master Trigger Rate: 450	
Notes: Mike finished adjustment of FA gains.			

Run # 197	Date: 11/20	Start time: 5:24	Stop time:
Beam: <sup>124</sup> Sn 120 MeV/A			
Target: <sup>124</sup> Sn			
Trigger: FA+MB		Miniball Multiplicity: 3	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/>	Your name: Rachel	
locations <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
Live Time (%): 33		Master Trigger Rate: 450	
Notes: <del>continue data</del> CSI gains changed prior to this run, see values on pg. 17.			

Run # 198: <sup>Fluor</sup> Gains for CSI Shaper increased by ~ 40% for some channels listed on p. 17 (Run 197)

Run # 198	Date: 11/20	Start time: 6:27	Stop time:
Beam: <sup>124</sup> Sn 120 MeV/A			
Target: <sup>124</sup> Sn			
Trigger: MB+FA		Miniball Multiplicity: 3	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/>	Your name: Rachel	
locations <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
Live Time (%): 30		Master Trigger Rate: 450	
Notes: CSI gains adjusted prior to run.			

LASSA Si	0	1	2	3	4	5
bias voltage	66.1	65.1	85.0	50.1	60.0	55.1
leakage current	1.60	3.19	1.39	0.84	3.18	0.79

Run #	199	Date:	11/20	Start time:	7:05	Stop time:	
Beam:	$^{124}\text{Sn}$ 120 MeV/A						
Target:	$^{124}\text{Sn}$						
Trigger:	MB+FA			Miniball Multiplicity: 3			
Shadow bar locations	B	<input type="checkbox"/>	<input type="checkbox"/>	A	<input type="checkbox"/>	<input type="checkbox"/>	Your name:
		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		Rachel
	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		
Live Time (%):	30			Master Trigger Rate:	450		
Notes:	data run,						

Run #	200	Date:	11/20	Start time:	7:16	Stop time:	
Beam:	$^{124}\text{Sn}$ 120 MeV/A						
Target:	$^{124}\text{Sn}$						
Trigger:	MB+FA			Miniball Multiplicity: 3			
Shadow bar locations	B	<input type="checkbox"/>	<input type="checkbox"/>	A	<input type="checkbox"/>	<input type="checkbox"/>	Your name:
		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		Rachel
	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		
Live Time (%):	30			Master Trigger Rate:	600		
Notes:	Neutron Wall pedestal run - NW only.						

Run # 201	Date: 11/20	Start time: 7:22	Stop time:
Beam: $^{124}\text{Sn}$ 120 MeV/A			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 3	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/>		Your name:	
locations <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>		Rachel	
Live Time (%): 60		Master Trigger Rate: 800	
Notes: data run			
only NW on. Discard Run.			

Run # 202	Date: 11/20	Start time: 7:31	Stop time:
Beam: $^{124}\text{Sn}$ 120 MeV/A			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 3	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/>		Your name:	
locations <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>		Rachel	
Live Time (%): 33		Master Trigger Rate: 446	
Notes: Previous run did not have all detectors on. Data run.			

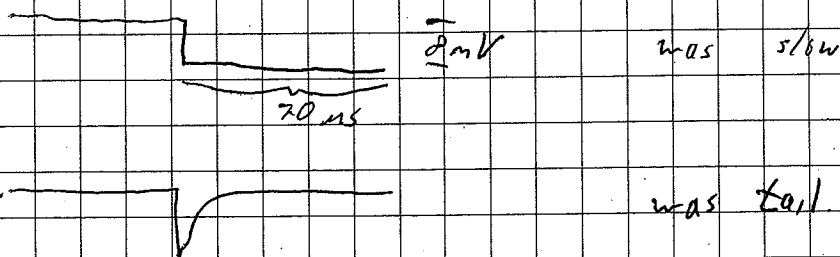
Run # 203	Date: 11/20	Start time: 7:56	Stop time:
Beam: $^{124}\text{Sn}$ 120 MeV/A			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 3	
Shadow bar locations		Your name:	
B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Alisher	
Live Time (%): 33		Master Trigger Rate: 450	
Notes: data run / Neutron wall old settings (bias & disc.). To see if PSD still looks bad.			

back to gain matched. No improvement in PSD. Switched

Run # 204	Date: 11/20	Start time: 8:24	Stop time:
Beam: $^{124}\text{Sn}$ 120 MeV/A			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 3	
Shadow bar locations		Your name:	
B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Alisher	
Live Time (%): 34		Master Trigger Rate: 450	
Notes: Data run with NW gain matched settings. Stopped the run so Dan could do a pulser test on miniballs in S2			

Run #205	Date: 11/20	Start time: 10:34 am	Stop time:
Beam: $^{129}\text{In}$			
Target: $^{124}\text{In}$			
Trigger: FA+MB		Miniball Multiplicity: 3	
Shadow bar locations		Your name:	
B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Alisher	
Live Time (%):		Master Trigger Rate:	
Notes: Inputs are changed in miniball for this run. (fast & tail). Looks like <del>it works</del> they are switched.			

Discovered that Miniball splitter outputs are not the same. Putting a large pulse into one channel and looking at the signal going into the QDC, what was the slow looked like



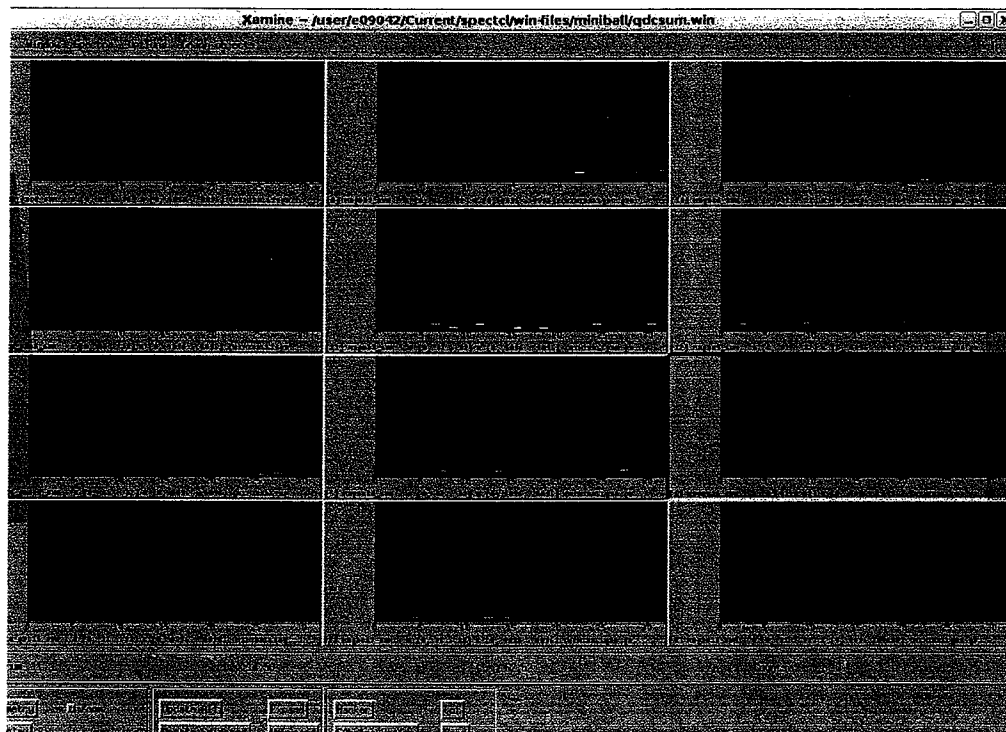
So we were sending a long signal where we needed a short one, and vice versa.

Switched gates on QDCs, so now what was a slow QDC, is now a TAIL QDC.

Adjusted pedestal offset currents to put pedestals near the bottom of the ADC range, then forced readout and took a pedestal run (run 206), which is on next page. Adjusted QDC thresholds.



run 206 MB QDC Summary Pedestal Run



pedestals

Run # 206	Date: 11/20	Start time: 11:24	Stop time: 11:30
Beam: <sup>124</sup> Sn			
Target: <sup>124</sup> Sn			
Trigger: MB+FA		Minibal Multiplicity: 3	
Shadow bar locations	B <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Your name: Alisher
Live Time (%):		Master Trigger Rate:	
Notes: Minibal pedestal run.			

Run # 207	Date: 11/20	Start time: 11:31	Stop time:
Beam: $^{124}\text{Sn}$			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 3	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/>		Your name:	
locations <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		Alisher	
<input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/>	
Live Time (%): 43		Master Trigger Rate: 375	
Notes: Normal data run. Proton veto paddles 13 & 14 are switched.			

Run # 208,209	Date: 11/20	Start time: 12:29	Stop time:
Beam: $^{124}\text{Sn}$			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 3	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/>		Your name:	
locations <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		Alisher	
<input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/>	
Live Time (%):		Master Trigger Rate:	
Notes: Normal data run after tuning. paddles, <sup>signals</sup> at their original places.			

Run # 210	Date: 11/20	Start time: 13:00	Stop time:
Beam: $^{124}\text{Sn}$			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity:	
Shadow bar B	<input type="checkbox"/>	<input type="checkbox"/>	A <input type="checkbox"/>
locations	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your name:			Alisher
Live Time (%): 45		Master Trigger Rate: 375	
Notes: Data-run.			

Run # 211	Date: 11/20	Start time: 13:26	Stop time:
Beam: $^{124}\text{Sn}$			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 3	
Shadow bar B	<input type="checkbox"/>	<input type="checkbox"/>	A <input type="checkbox"/>
locations	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your name:			Alisher
Live Time (%): 45		Master Trigger Rate: 375	
Notes: Data run. changed the bias on paddles from 1300 to 1400.			

Run # 212	Date: 11/20	Start time: 13:32	Stop time:
Beam: <sup>124</sup> Sn			
Target: <sup>124</sup> Sn			
Trigger: MB+FA		Miniball Multiplicity: 3	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> locations <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name: Alisher	
Live Time (%): 45		Master Trigger Rate: 375	
Notes: Data run. Paddle voltages back to 1300 v. Changing MB disc thresholds			

Run # 213	Date: 11/20	Start time: 19:25	Stop time:
Beam: <sup>124</sup> Sn			
Target: <sup>124</sup> Sn			
Trigger: MB+FA		Miniball Multiplicity: 1	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> locations <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name:	
Live Time (%): 75		Master Trigger Rate: 125	
Notes: MB multiplicity 1. Data run Dan and Bill are playing with MB discriminators.			

Run # 214	Date: 11/20	Start time: 3:43	Stop time: 4:07
Beam: $^{124}\text{Sn}$			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 1	
Shadow bar locations		Your name:	
B <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Alisher	
Live Time (%): 80		Master Trigger Rate: 97	
Notes: Changed CSI gains, MB gains and are changing MB discr.			

Run # 215	Date:	Start time: 4:11	Stop time: 4:34
Beam: $^{124}\text{Sn}$			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 1	
Shadow bar locations		Your name:	
B <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Jimmy	
Live Time (%): 73%		Master Trigger Rate: 122	
Notes: Changed CSI gains. Step 2 Mid Run: Changed the beam intensity. Live time = 45-50%			

Run # 216	Date: 11-20-09	Start time: 4:34	Stop time: 4:44
Beam: 124			
Target: 124			
Trigger: MB+FA		Miniball Multiplicity: 1	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/>		Your name:	
locations <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Jack	
Live Time (%): 45		Master Trigger Rate: 400	
Notes: CsI shaper gains changed.			

Run # 217	Date: 11-20	Start time: 5:04	Stop time:
Beam: 124			
Target: None: Target is completely lowered.			
Trigger: Neutron Singles		Miniball Multiplicity:	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/>		Your name:	
locations <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Jack	
Live Time (%): ~5%		Master Trigger Rate: 1800	
Notes: target is out. Trigger was changed. Looked at FA; Input to ch.4 wasn't connected, and shaper for ch.2 was "off"			

Run # 218	Date: 11-20	Start time: 5:40	Stop time: 6:13
Beam: 124			
Target: 124			
Trigger: N-singles		Miniball Multiplicity:	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/>		Your name:	
locations <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>		Jack	
Live Time (%): ~5%		Master Trigger Rate: ~1400	
Notes: target is back in.			

Run # 219	Date: 11-20	Start time: 6:37	Stop time: 7:35
Beam: 124			
Target: 124			
Trigger: MB+FA		Miniball Multiplicity: 3	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/>		Your name:	
locations <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>		Jack	
Live Time (%): 60%		Master Trigger Rate: ~200	
Notes: Changed trigger back to MB+FA			

Run # 220	Date: 11-20	Start time: 7:37	Stop time: 7:58
Beam: 124			
Target: 124			
Trigger: MB+FA		Miniball Multiplicity: 3	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> locations <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name: Jaek	
Live Time (%): <del>60%</del> 60% Master Trigger Rate: ~200			
Notes:			

Run # 221	Date: 11-20	Start time: 8:13	Stop time:
Beam: 124			
Target: 124			
Trigger: MB+FA		Miniball Multiplicity:	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> locations <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name: Jaek	
Live Time (%): 60% Master Trigger Rate: ~200			
Notes: Changed fast gate length. decreased MB disc <sup>fast</sup> gate by 25 ns. Also patched out some signals to Data-U for debugging.			



Run # 222	Date: 11-20	Start time: 8:44	Stop time: 9:28
Beam: 124			
Target: 124			
Trigger: MB + FA		Miniball Multiplicity: 3	
Shadow bar B locations		Your name:	
<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	
		Jack	
Live Time (%): ~60%		Master Trigger Rate: ~300	
Notes: Decreased fast gates on MB disc 4,3,5			

223 is junk

Run # 224	Date: 11-20	Start time: 9:29	Stop time: 9:50
Beam: 124			
Target: 124			
Trigger: MB + FA		Miniball Multiplicity: 3	
Shadow bar B locations		Your name:	
<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	
		Jack	
Live Time (%): 60%		Master Trigger Rate: ~200	
Notes: Widened MB TDC window			

Run # 225	Date:	Start time: 9:50	Stop time: 10:50
Beam: 124			
Target: 124			
Trigger: MB + FA		Miniball Multiplicity: 3	
Shadow bar B locations		Your name:	
<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	
		Jack	
Live Time (%): 60%		Master Trigger Rate: ~200-300	
Notes: Widened MB TDC window			

Run # 226	Date: 11-20	Start time: 12:30	Stop time:
Beam: 124			
Target: 124			
Trigger: MB+FA		Miniball Multiplicity: 3	
Shadow bar B locations		Your name:	
<input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		Micha	
Live Time (%): 45		Master Trigger Rate: 380	
Notes: MB channels fixed			

before 226

raised gain on PV by factor of 2

before 227 mult threshold doubled  $\sim N > 8$

Run # 227	Date: 11/21	Start time: 1:15	Stop time:
Beam: 124			
Target: 124			
Trigger: MB+FA		Miniball Multiplicity: $\sim 8$	
Shadow bar B locations		Your name:	
<input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		Micha	
Live Time (%): 55		Master Trigger Rate: 300	
Notes:			

after 227 changing a few MB gains  
 MB multiplicity actually  $\sim 25$  not  $> 8$

LASSA Si	0	1	2	3	4	5
bias voltage	-66	-65	-85	-50	-60	-55
leakage current	1.64	3.23	1.43	0.85	3.20	0.82

Run # 228	Date: 11/21	Start time:	Stop time:
Beam: 124	120 MeV		
Target: 124			
Trigger: MB+FA	Miniball Multiplicity: 5		
Shadow bar B locations	<input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/>	Your name:
	<input checked="" type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input type="checkbox"/>	Micha
	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	
Live Time (%):	Master Trigger Rate:		
Notes:			

Run # 229	Date:	Start time:	Stop time:
Beam: 124			
Target: 124			
Trigger: MB+FA	Miniball Multiplicity: 5		
Shadow bar B locations	<input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/>	Your name:
	<input checked="" type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input type="checkbox"/>	Micha
	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	
Live Time (%): 53	Master Trigger Rate: 270		
Notes: Mike playing w/ MB gain on few channels att 100			

Run # 230	Date: 11/21	Start time: 3:15	Stop time:
Beam: 124 Sn	120 MeV		
Target: 124 Sn			
Trigger: MB+FA	Miniball Multiplicity: >5		
Shadow bar B locations	<input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/>	Your name:
	<input checked="" type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input type="checkbox"/>	Micha
	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	
Live Time (%): 30	Master Trigger Rate: 400		
Notes: att 30 more beam			

Run # 231	Date: 11/21	Start time: 3:51	Stop time:
Beam: $^{124}\text{Sn}$ 120 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: >5	
Shadow bar B locations	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Your name: Rachel
Live Time (%): 30		Master Trigger Rate: 450	
Notes: data run. Beam is higher.			

Run # 232	Date: 11/21	Start time: 4:31	Stop time:
Beam: $^{124}\text{Sn}$ 120 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: >5	
Shadow bar B locations	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Your name: Rachel
Live Time (%): 32		Master Trigger Rate: 450	
Notes: data run.			

Run # 233	Date: 11/21	Start time: 5:10	Stop time:
Beam: $^{124}\text{Sn}$ 120 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: >5	
Shadow bar B locations	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Your name: Rachel
Live Time (%): 33		Master Trigger Rate: 450	
Notes: data run			

LASSA Si	0	1	2	3	4	5
bias voltage	66.1	65.1	85.0	50.1	60.0	55.1
leakage current	1.68	3.22	1.43	0.85	3.20	0.83

Run # 234	Date: 11/21	Start time: 5:48	Stop time:
Beam: $^{124}\text{Sn}$ 120 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: >5	
Shadow bar locations	B <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Your name: Rachel
Live Time (%): 30		Master Trigger Rate: 450	
Notes: data run			

Run # 235	Date: 11/21	Start time: 6:24	Stop time:
Beam: $^{124}\text{Sn}$ 120 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: >5	
Shadow bar locations	B <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Your name: Rachel
Live Time (%): 30		Master Trigger Rate: 450	
Notes: data run			

Run # 236	Date: 11/21	Start time: 7:02	Stop time:
Beam: $^{124}\text{Sn}$ 170 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: >5	
Shadow bar B locations <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>		A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	
Your name: Rachel			
Live Time (%): 35		Master Trigger Rate: 400	
Notes: data run			

Run # 237	Date: 11/21	Start time: 7:40	Stop time:
Beam: $^{124}\text{Sn}$ 170 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: >5	
Shadow bar B locations <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>		A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	
Your name: Rachel			
Live Time (%): 24		Master Trigger Rate: 470	
Notes: Beam dipped a little, control room adjusted to compensate just before this run. Beam at previous rate.			

LASSA Si	0	1	2	3	4	5
bias voltage	66.1	65.1	85.0	50.1	60.0	55.1
leakage current	1.68	3.22	1.43	0.86	3.20	0.83

Run # 238	Date: 11/21	Start time: 8:20	Stop time:
Beam: $^{124}\text{Sn}$ 120 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: >5	
Shadow bar locations		Your name:	
B <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		John	
Live Time (%): 25		Master Trigger Rate: 475	
Notes: data run			

Run # 239	Date: 11/21	Start time: 8:54	Stop time:
Beam: $^{124}\text{Sn}$ 120 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: >5	
Shadow bar locations		Your name:	
B <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		John	
Live Time (%): 25		Master Trigger Rate: 450	
Notes: data run			

Run # 240	Date: 11/21	Start time: 9:46	Stop time:
Beam: $^{124}\text{Sn}$ 120 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: >5	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/>		Your name:	
locations <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		John	
Live Time (%): 25		Master Trigger Rate: 470	
Notes: data run. had to wait to start run because disk quota was exceeded in the home directory			

Run # 241	Date: 11/21	Start time: 10:56	Stop time:
Beam: $^{124}\text{Sn}$ 120 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: >5	
Shadow bar B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/>		Your name:	
locations <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		John	
Live Time (%): 26		Master Trigger Rate: 460	
Notes: <del>changed</del> replaced proton veto paddle 13 reloaded high voltage file. First two minutes had no beam.			

LASSA Si	0	1	2	3	4	5
bias voltage	66.1	65.1	85.0	50.1	60.0	55.1
leakage current	1.69	3.22	1.43	0.85	3.20	0.82



11/21/09 11:18 am. Noticed an additional dead time contribution of order 150  $\mu$ s long, seen in groups of two every 4s, so about a 10% contribution. Changed scaler readout period, no effect.

Run # 242	Date: 11/21	Start time: 11:15	Stop time:
Beam: $^{124}\text{Sn}$ 120 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: >5	
Shadow bar B locations		Your name:	
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		John	
Live Time (%): 25		Master Trigger Rate: 430	
Notes: Changed shaper gain on paddle 13 Scaler <del>is</del> read out time to once every 10 seconds			

Run # 243	Date: 11/21	Start time: 11:22	Stop time:
Beam: $^{124}\text{Sn}$ 120 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: >5	
Shadow bar B locations		Your name:	
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		John	
Live Time (%): 25		Master Trigger Rate: 430	
Notes: changed gain on proton veto <del>to</del> 5 from 177 to 100. Scaler read out time changed back to once every 2 seconds			

Run # 244	Date: 11/21	Start time: 11:42	Stop time:
Beam: $^{124}\text{Sn}$ 120 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: >5	
Shadow bar locations		Your name:	
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		John	
Live Time (%): 25		Master Trigger Rate: 450	
Notes: Previous run was with wrong shaper file.			

Run # 245	Date: 11/21	Start time:	Stop time:
Beam: $^{124}\text{Sn}$ 120 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity:	
Shadow bar locations		Your name:	
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		John	
Live Time (%): 28		Master Trigger Rate: 440	
Notes: Started taking proton veto overflow data			

Run # 246	Date: 11/21	Start time: 12:54	Stop time:
Beam: $^{124}\text{Sn}$ 120 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: >5	
Shadow bar locations		Your name:	
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		John	
Live Time (%): 27		Master Trigger Rate: 450	
Notes: Changed Paddle voltages back to 1300 V			

Run # 247	Date: 11/21	Start time: 1:16	Stop time:
Beam: $^{124}\text{Sn}$ 120 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: >5	
Shadow bar B locations		Your name:	
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		John	
Live Time (%): 27%		Master Trigger Rate: 450	
Notes: Changed Proton veto voltages back to 1100 V.			

Run # 248	Date: 11/21	Start time: 1:33	Stop time:
Beam: $^{124}\text{Sn}$ 120 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: >5	
Shadow bar B locations		Your name:	
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		John	
Live Time (%):		Master Trigger Rate:	
Notes: data run after run control froze			

Run # 249	Date: 11/21	Start time: 2:08	Stop time:
Beam: $^{124}\text{Sn}$ 120 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: >5	
Shadow bar B locations		Your name:	
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		John	
Live Time (%): 31		Master Trigger Rate: 440	
Notes: data run			

LASSA Si	0	1	2	3	4	5
bias voltage	66.1	65.1	85.0	50.1	60.0	55.1
leakage current	1.69	3.21	1.43	0.85	3.19	0.81

Run # 250	Date: 11/21	Start time: 2:47	Stop time:
Beam: $^{124}\text{Sn}$ 120 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: >5	
Shadow bar B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/>		Your name:	
locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		John	
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
Live Time (%): 50		Master Trigger Rate: 250	
Notes: Set neutron wall left 3 discriminator to 100 from 75. Beam intensity dropped			

Run # 251	Date: 11/21	Start time:	Stop time:
Beam: $^{124}\text{Sn}$ <del>120</del> 120 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: >5	
Shadow bar B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/>		Your name:	
locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		John	
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
Live Time (%): 40		Master Trigger Rate: 400	
Notes: Neutron wall left 3 discriminator set back to 75 from 100.			

Run # 252	Date: 11/21	Start time: 3:08	Stop time:
Beam: $^{124}\text{Sn}$ 120 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity:	
Shadow bar B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/>		Your name:	
locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		John	
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
Live Time (%): 24		Master Trigger Rate: 475	
Notes: data run			

Run # 253	Date: 11/21	Start time: 3:38	Stop time:
Beam: $^{124}\text{Sn}$ 120 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: >5	
Shadow bar B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/>		Your name:	
locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		John	
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
Live Time (%): 12		Master Trigger Rate: 440	
Notes: data run			

LASSA Si	0	1	2	3	4	5
bias voltage	66	65	85	50	60	55
leakage current	1.69	3.21	1.43	.86	3.20	.83

Run # 254	Date: 11-21	Start time: 4:04	Stop time: 4:31
Beam: 124 120 MeV			
Target: 124			
Trigger: MB+FA		Miniball Multiplicity: 5	
Shadow bar locations		Your name:	
B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Jack	
Live Time (%): 20%		Master Trigger Rate: ~500	
Notes:			

Run # 255	Date: 11-21	Start time: 4:34	Stop time: 4:48
Beam: 124Sn 120 MeV			
Target: 124Sn			
Trigger: MB+FA		Miniball Multiplicity: 5	
Shadow bar locations		Your name:	
B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Jack	
Live Time (%): 20%		Master Trigger Rate: ~500	
Notes: Data may not have been recorded for this run, for whatever reason...			

Run # 256	Date: 11-21	Start time: 4:48	Stop time: 5:19
Beam: 124Sn 120 MeV			
Target: 124Sn			
Trigger: MB+FA		Miniball Multiplicity: 5	
Shadow bar locations		Your name:	
B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Jack	
Live Time (%): ~20%		Master Trigger Rate: ~500	
Notes:			

Run # 257	Date:	Start time: 5:19	Stop time: 5:19
Beam: 124Sn 120 MeV			
Target: 124Sn			
Trigger: MB + FA		Miniball Multiplicity: 5	
Shadow bar B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/>		Your name:	
locations <input type="checkbox"/> <input type="checkbox"/>		Jack	
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
Live Time (%): 20%		Master Trigger Rate: ~510	
Notes: Ended so that we could go into the vault.			

Changed Gains on FA <sup>Shaper Gains</sup> ~~down~~; Coarse gain down by 1 click

Most of them were lowered 1-2 Knobs.

Run # 258	Date: 11-21	Start time: <del>5</del> 6:17	Stop time: 6:49
Beam: 124Sn 120 MeV			
Target: 124Sn			
Trigger: MB + FA		Miniball Multiplicity: 5	
Shadow bar B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/>		Your name:	
locations <input type="checkbox"/> <input type="checkbox"/>		Jack	
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
Live Time (%): ~20%		Master Trigger Rate: ~500	
Notes: FA Shaper gains were decreased.			

Run # 259	Date: 11-21	Start time: 6:49	Stop time: 7:26
Beam: 124 Sn 120 MeV			
Target: 124 Sn			
Trigger: MB+FA		Miniball Multiplicity: 5	
Shadow bar locations		Your name:	
B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Jack	
Live Time (%): 24%		Master Trigger Rate: ~500	
Notes:			

Run # 260	Date: 11-21	Start time: 7:26	Stop time: <del>8:00</del> 8:36
Beam: 124 Sn 120 MeV			
Target: 124 Sn			
Trigger: MB+FA		Miniball Multiplicity: 5	
Shadow bar locations		Your name:	
B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Jack	
Live Time (%): ~25%		Master Trigger Rate: ~450	
Notes:			

Run # 261	Date: 11/21	Start time: 8:00	Stop time: 8:36
Beam: 124 Sn 120 MeV			
Target: 124 Sn			
Trigger: MB+FA		Miniball Multiplicity: 5	
Shadow bar locations		Your name:	
B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Krenn	
Live Time (%): ~25%		Master Trigger Rate: ~450	
Notes:			



Run # 202	Date: 11/21	Start time: 8:30	Stop time: 9:28																		
Beam: 124 Sn 120 MeV																					
Target: 124 Sn																					
Trigger: MB+FA		Miniball Multiplicity: 5																			
Shadow bar locations		Your name:																			
<table border="0"> <tr> <td>B</td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td>A</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table>		B	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	A	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	Brenna	
B	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	A	<input type="checkbox"/>	<input type="checkbox"/>																
	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>																
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>																
Live Time (%): 30%		Master Trigger Rate: ~400																			
Notes:																					

LASSA Si	0	1	2	3	4	5
bias voltage	66.1	65.1	85	50.1	60	55.1
leakage current	1.69	3.20	1.43	0.85	3.19	0.80

Run # 203	Date: 11/21	Start time: 9:18	Stop time: 9:48																		
Beam: 124 Sn 120 MeV																					
Target: 124 Sn																					
Trigger: MB+FA		Miniball Multiplicity: 5																			
Shadow bar locations		Your name:																			
<table border="0"> <tr> <td>B</td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td>A</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table>		B	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	A	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	Brenna	
B	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	A	<input type="checkbox"/>	<input type="checkbox"/>																
	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>																
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>																
Live Time (%): ~30%		Master Trigger Rate: ~400																			
Notes: "data type in terminating long wrong: 6" error message ended run & restarted																					

Run # 2104	Date: 11/21	Start time: 9:48	Stop time: 10:15
Beam: 124 Sn 120 MeV			
Target: 124 Sn			
Trigger: MB & FA		Miniball Multiplicity: 5	
Shadow bar B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name: Brenna	
Live Time (%): ~30%		Master Trigger Rate: ~400	
Notes: ended run to enter vault & change shadowbar positions			

Run # 2105	Date: 11/21	Start time: 10:30	Stop time: 11:13
Beam: 124 Sn 120 MeV			
Target: 124 Sn			
Trigger: MB & FA		Miniball Multiplicity: 5	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		Your name: Brenna	
Live Time (%): ~28%		Master Trigger Rate: ~400	
Notes: new shadowbar positions			

Run # 2106	Date: 11/21	Start time: 11:13	Stop time:
Beam: 124 Sn 120 MeV			
Target: 124 Sn			
Trigger: MB & FA		Miniball Multiplicity: 5	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		Your name: Brenna	
Live Time (%):		Master Trigger Rate:	
Notes:			

Run # 267	Date: 11/22	Start time: 11:03 AM	Stop time:
Beam: $^{124}\text{Sn}$ 120 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 5	
Shadow bar locations	B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	Your name: Mike
Live Time (%): 30%		Master Trigger Rate: 380	
Notes: Unplugged pulser cables from modules			

Run # 268	Date: 11/22	Start time: 1 AM	Stop time:
Beam: $^{124}\text{Sn}$ 120 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 5	
Shadow bar locations	B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	Your name: micha
Live Time (%): 50		Master Trigger Rate: 330	
Notes: data			

Run # 269	Date: 11/22	Start time: 1:45 am	Stop time:
Beam: $^{124}\text{Sn}$ 120 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 5	
Shadow bar locations	B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	Your name: micha
Live Time (%): 50		Master Trigger Rate: 370	
Notes:			

Run # 270	Date: 11/22	Start time: 2:30	Stop time:
Beam: $^{124}\text{Sn}$ 120 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 5	
Shadow bar locations B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	
Your name: Micha			
Live Time (%): 43		Master Trigger Rate: 370	
Notes: data			

Run # 271	Date: 11/22	Start time: 3:30	Stop time:
Beam: $^{124}\text{Sn}$ 120 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 5	
Shadow bar locations B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	
Your name: Micha			
Live Time (%): 40		Master Trigger Rate: 400	
Notes: triggers stopped at end of this run. Stopped run 271, started 272 & triggers came back.			

Run # 272	Date: 11/22	Start time: 4:01	Stop time:
Beam: $^{124}\text{Sn}$ 120 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 5	
Shadow bar locations B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	
Your name: Rachel			
Live Time (%): 40		Master Trigger Rate: 400	
Notes: data run			

Run # 273	Date: 11/22	Start time: 4:44	Stop time:
Beam: $^{124}\text{Sn}$ 120 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 5	
Shadow bar B locations	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	Your name: Rachel
Live Time (%): 43		Master Trigger Rate: 400	
Notes: data run			

LASSA Si	0	1	2	3	4	5
bias voltage :	66.1	65.1	85.0	80.1	60.0	55.1
leakage current	1.67	3.18	1.42	0.84	3.17	0.79

Run # 274	Date: 11/22	Start time: 5:32	Stop time:
Beam: $^{124}\text{Sn}$ 120 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 3	
Shadow bar B locations	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	Your name: Rachel
Live Time (%): 45		Master Trigger Rate: 350	
Notes: data run			

Run # 275	Date: 11/22	Start time: 6:19	Stop time:																		
Beam: $^{124}\text{Sn}$ 120 MeV																					
Target: $^{124}\text{Sn}$																					
Trigger: MB+FA		Miniball Multiplicity: 5																			
Shadow bar locations <table style="display: inline-table; vertical-align: middle;"> <tr> <td>B</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td> <td>A</td><td><input checked="" type="checkbox"/></td><td><input checked="" type="checkbox"/></td> </tr> <tr> <td></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td> <td></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td> </tr> <tr> <td></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td> <td></td><td><input checked="" type="checkbox"/></td><td><input checked="" type="checkbox"/></td> </tr> </table>		B	<input type="checkbox"/>	<input type="checkbox"/>	A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Your name: Rachel	
B	<input type="checkbox"/>	<input type="checkbox"/>	A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																
	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>																
	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																
Live Time (%): 42		Master Trigger Rate: 400																			
Notes: data run																					

Run # 276	Date: 11/22	Start time: 7:02	Stop time:																		
Beam: $^{124}\text{Sn}$ 120 MeV																					
Target: $^{124}\text{Sn}$																					
Trigger: MB+FA		Miniball Multiplicity: 5																			
Shadow bar locations <table style="display: inline-table; vertical-align: middle;"> <tr> <td>B</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td> <td>A</td><td><input checked="" type="checkbox"/></td><td><input checked="" type="checkbox"/></td> </tr> <tr> <td></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td> <td></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td> </tr> <tr> <td></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td> <td></td><td><input checked="" type="checkbox"/></td><td><input checked="" type="checkbox"/></td> </tr> </table>		B	<input type="checkbox"/>	<input type="checkbox"/>	A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Your name: Rachel	
B	<input type="checkbox"/>	<input type="checkbox"/>	A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																
	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>																
	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																
Live Time (%): 42		Master Trigger Rate: 400																			
Notes: data run																					

Run # 277	Date: 11/22	Start time: 7:46	Stop time:																		
Beam: $^{124}\text{Sn}$ 120 MeV																					
Target: $^{124}\text{Sn}$																					
Trigger: MB+FA		Miniball Multiplicity: 5																			
Shadow bar locations <table style="display: inline-table; vertical-align: middle;"> <tr> <td>B</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td> <td>A</td><td><input checked="" type="checkbox"/></td><td><input checked="" type="checkbox"/></td> </tr> <tr> <td></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td> <td></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td> </tr> <tr> <td></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td> <td></td><td><input checked="" type="checkbox"/></td><td><input checked="" type="checkbox"/></td> </tr> </table>		B	<input type="checkbox"/>	<input type="checkbox"/>	A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Your name: Rachel	
B	<input type="checkbox"/>	<input type="checkbox"/>	A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																
	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>																
	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																
Live Time (%): 42		Master Trigger Rate: 400																			
Notes: data run																					

LASSA Si	0	1	2	3	4	5
bias voltage	66.1	65.1	85.0	50.1	60.0	55.1
leakage current	1.67	3.18	1.42	0.84	3.18	0.80

Run # 278	Date: 11/22	Start time: 8:27	Stop time:
Beam: $^{124}\text{Sn}$ 120 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 5	
Shadow bar locations	B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	Your name: John
Live Time (%): 37		Master Trigger Rate: 400	
Notes: data run			

Run # 279	Date: 11/22	Start time: 9:08	Stop time:
Beam: $^{124}\text{Sn}$ 120 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 5	
Shadow bar locations	B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	Your name: John
Live Time (%): 40		Master Trigger Rate: <del>400</del> 410	
Notes: data run			

Run # 280	Date: 11/22	Start time: 9:50	Stop time:
Beam: $^{124}\text{Sn}$ 120 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 5	
Shadow bar locations	B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Your name: John
Live Time (%): 33		Master Trigger Rate: 430	
Notes: data run			

LASSA Si	0	1	2	3	4	5
bias voltage	66.1	65.1	85.0	50.1	60.0	55.1
leakage current	1.67	3.16	1.41	0.83	3.17	0.78

Between runs 280 & 281:

- took down shadowbar mounts
- inserted 2 Hz pulser into Si preamps at  $\pm 7V$ .
- Changed trigger logic to wait 800  $\mu\text{s}$  if we have a pulser event so LASSA can read out all chans.
- Pulser output TTL signal into CsI ADC channel 31, to distinguish pulser events. This will probably overflow, so started reading out overflows in run 282



Run # 281	Date: 11/22/09	Start time: 12:33	Stop time:
Beam: $^{124}\text{Sn}$			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 5	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/>		Your name:	
locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Alisher	
Live Time (%): 19		Master Trigger Rate: 500	
Notes: <del>Aided</del> shadowbars taken down. Look at the note above. Beam increased 3 times during the run. Data run			

Run # 282	Date:	Start time: 12	Stop time:
Beam: $^{124}\text{Sn}$			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 5	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/>		Your name:	
locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Alisher	
Live Time (%): 27		Master Trigger Rate: 430	
Notes: Started reading out overflows. Data run.			

Run # 283	Date: 11/22	Start time: 12:48	Stop time:
Beam: $^{129}\text{Sn}$			
Target: $^{129}\text{Sn}$			
Trigger: MB+FA	Miniball Multiplicity: 5		
Shadow bar locations	B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Your name: Alisher
Live Time (%): 34	Master Trigger Rate: 390		
Notes:	Data run		

Run # 284	Date: 11/22	Start time: 14:05	Stop time:
Beam: $^{129}\text{Sn}$			
Target: $^{129}\text{Sn}$			
Trigger: MB+FA	Miniball Multiplicity: 5		
Shadow bar locations	B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Your name: Alisher
Live Time (%): 37	Master Trigger Rate: 900		
Notes:	Data run		

Run # 285	Date: 11/22	Start time: 14:51	Stop time: 3:30
Beam: $^{124}\text{Sn}$			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 5	
Shadow bar locations B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name: Alisher	
Live Time (%): 32		Master Trigger Rate: 400	
Notes: Data run. Not taking overflow data anymore			

LASSA Si	0	1	2	3	4	5
bias voltage	66	65	85	50	60	58
leakage current	1.69	3.18	1.43	0.85	3.19	0.81

Run # 286	Date: 11/22	Start time: 3:30	Stop time: 4:05
Beam: $^{124}\text{Sn}$			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 5	
Shadow bar locations B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name: Jenny	
Live Time (%): 32		Master Trigger Rate: 400	
Notes: Data Run			

Run # 287	Date: 11/22	Start time: 4:05	Stop time: <del>4:31</del> 4:31
Beam: 124 Sn 120 MeV			
Target: 124 Sn			
Trigger: MB+FA		Miniball Multiplicity: 5	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name: Jack	
Live Time (%): ~28%		Master Trigger Rate: ~430	
Notes: Daq crapped out at the end of run.			

288 is empty

Run # <del>288</del> 288	Date: 11/22	Start time:	Stop time:
Beam:			
Target:			
Trigger:		Miniball Multiplicity:	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name:	
Live Time (%):		Master Trigger Rate:	
Notes: <del>it started sp</del>			

Run # 289	Date: 11/22	Start time:	Stop time:
Beam: 124 Sn 120 MeV			
Target: 124 Sn			
Trigger: MB+FA		Miniball Multiplicity: 5	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name: Jack	
Live Time (%): 30		Master Trigger Rate: ~450	
Notes: Before this run, we had to restart SPdaq 19, and therefore the motherboard controller, because the DAQ froze up.			

Run # 290	Date: 11-22	Start time: 5:28	Stop time: 6:06
Beam: 124 Sn 120 MeV			
Target: 124 Sn			
Trigger: MB+FA		Miniball Multiplicity: 5	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/>		Your name:	
locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Jack	
Live Time (%): 30		Master Trigger Rate:	
Notes: Normal Run.			

Run # 291	Date: 11-22	Start time: <del>6:06</del>	Stop time: <del>6:06</del> 6:51
Beam: 124 Sn 120 MeV			
Target: 124 Sn			
Trigger: MB+FA		Miniball Multiplicity: 5	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/>		Your name:	
locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Jack	
Live Time (%): ~30		Master Trigger Rate: ~400	
Notes: Normal Run			

Run # 292	Date: 11-22	Start time: 6:51	Stop time: 7:25
Beam: 124 Sn 120 MeV			
Target: 124 Sn			
Trigger: MB+FA		Miniball Multiplicity: 5	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/>		Your name:	
locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Jack	
Live Time (%): ~20%		Master Trigger Rate: ~400	
Notes:			

Run # 293	Date: 11-22	Start time: 7:30	Stop time: 7:31
Beam: 124Sn 120 MeV			
Target: <del>124Sn</del> <del>120 MeV</del> Blank			
Trigger: MB + FA		Miniball Multiplicity: 5	
Shadow bar locations		Your name:	
B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Jack	
Live Time (%): ~100% ?		Master Trigger Rate: 4	
Notes: Blank Run			

Run # 294	Date: 11-22	Start time: 7:31	Stop time: 7:38
Beam: 124Sn : 120 MeV			
Target: Blank			
Trigger: MB + FA		Miniball Multiplicity: 5	
Shadow bar locations		Your name:	
B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Jack	
Live Time (%): ~100% ?		Master Trigger Rate: 4	
Notes: Blank Run.			

Run # 295	Date: 11-22	Start time: 7:43	Stop time: 8:29
Beam: 124Sn 120 MeV			
Target: 124Sn			
Trigger: MB + FA		Miniball Multiplicity: 5	
Shadow bar locations		Your name:	
B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Jack	
Live Time (%):		Master Trigger Rate:	
Notes: Normal Run			

Run # 296	Date: 7/1/22	Start time: 8:29	Stop time: 9:30
Beam: 124 Sn 120 MeV			
Target: 124 Sn			
Trigger: MB + FA		Miniball Multiplicity: 5	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/>		Your name:	
locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Jack	
Live Time (%): ~30%		Master Trigger Rate: ~400	
Notes: Normal Run			

Run # 297	Date: 11/22	Start time: 9:30	Stop time: 9:32
Beam: 124 Sn 120 MeV			
Target: 124 Sn			
Trigger: MB + FA		Miniball Multiplicity: 5	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/>		Your name:	
locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Jimmy	
Live Time (%): ~30%		Master Trigger Rate: ~400	
Notes: Normal Run But - the Dad locked up just a few mins after run started			

- Restart VME in vault (cannot reboot the computer remotely)

Run # 298	Date:	Start time: 10:01	Stop time: 10:45 PM
Beam: 124 Sn	120 MeV		
Target: 124 Sn			
Trigger: FA + MB	Miniball Multiplicity: 5		
Shadow bar locations	B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Your name: Jimmy
Live Time (%): 30	Master Trigger Rate: 400		
Notes:	Normal run after VME reboot		

Run # 299	Date: 11/22	Start time: 10:46 PM	Stop time:
Beam: 124 Sn	120 MeV		
Target: 124 Sn			
Trigger: MB + FA	Miniball Multiplicity: 5		
Shadow bar locations	B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Your name: MLe
Live Time (%): 30	Master Trigger Rate: 400		
Notes:	Normal run		

LASSA Si	0	1	2	3	4	5
bias voltage	66.1	65.1	85.0	50.1	60.0	55.1
leakage current	1.70	3.18	1.44	0.80	3.19	0.81



Run # 300	Date: 11/22	Start time: 11:40 pm	Stop time:
Beam: 124 Sn 120 MeV			
Target: 124 Sn			
Trigger: MB&FA		Miniball Multiplicity: 5	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/>	Your name:	
locations <input type="checkbox"/>	<input type="checkbox"/>	Brenna	
<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
Live Time (%): ~21%		Master Trigger Rate: ~850	
Notes:			

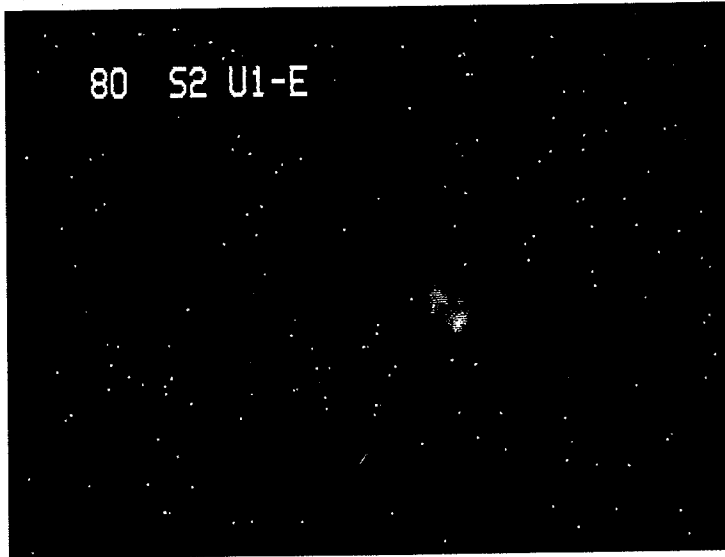
Run # 301	Date: 11/22	Start time: 12:40 am	Stop time:
Beam: 124 Sn 120 MeV			
Target: <del>124 Sn</del> blank			
Trigger: MB		Miniball Multiplicity: 1	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/>	Your name:	
locations <input type="checkbox"/>	<input type="checkbox"/>	Micha	
<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
Live Time (%): 100		Master Trigger Rate: 8	
Notes: target out			

Run # 302	Date: 11/22	Start time: 1 am	Stop time:
Beam: 124 Sn 120 MeV			
Target: 124 Sn			
Trigger: MB		Miniball Multiplicity: 1	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/>	Your name:	
locations <input type="checkbox"/>	<input type="checkbox"/>	Micha	
<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
Live Time (%): 100		Master Trigger Rate: 10	
Notes: target in			

Run # 303	Date: 11/22	Start time: 1:10 am	Stop time:
Beam: <sup>124</sup> Sn 120 MeV at 100			
Target: <sup>124</sup> Sn			
Trigger: MB		Miniball Multiplicity: 1	
Shadow bar locations B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
Your name: Micha			
Live Time (%): 80		Master Trigger Rate: 100	
Notes: raised beam to 100 beam started to drift down			

Run # 304	Date: 11/22	Start time: 1:25 am	Stop time:
Beam: <sup>124</sup> Sn 120 MeV at 100			
Target: blank			
Trigger: MB		Miniball Multiplicity: 1	
Shadow bar locations B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
Your name: Micha			
Live Time (%): 100		Master Trigger Rate: 10	
Notes: target out weird mult in ring			

Run # 305	Date: 11/22	Start time: 1:43 am	Stop time:
Beam: <sup>124</sup> Sn 120 MeV at 100			
Target: blank			
Trigger: MB		Miniball Multiplicity: 1	
Shadow bar locations B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
Your name: Micha			
Live Time (%): 100		Master Trigger Rate: 10	
Notes: target out still weird mult in ring			



Run # 306	Date: 11/22	Start time: 2:40	Stop time:
Beam: $^{124}\text{Sn}$ 120 MeV at 100			
Target: none - ladder out			
Trigger: MB		Miniball Multiplicity: 1	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/>	Your name:	
locations <input type="checkbox"/>	<input type="checkbox"/>	Micha	
<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
Live Time (%): 100		Master Trigger Rate: 8	
Notes: beam is low-hitting 12,13,14 FA elements			

beam drifted downward, got a return from 3-8  
doing minimum bias run w/ target sn for 10 min

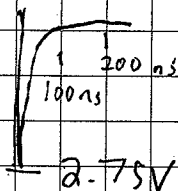
Run # 307	Date: 11/23	Start time: 8:12	Stop time:
Beam: $^{124}\text{In}$			
Target: $^{112}\text{Sn}$			
Trigger: MB		Miniball Multiplicity: 1	
Shadow bar B locations		A	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your name:		Alisher	
Live Time (%):		Master Trigger Rate:	
Notes: Minimum bias, target in, after the long			

Run # 308	Date:	Start time: 8:25	Stop time:
Beam: $^{124}\text{In}$			
Target: Blank			
Trigger: MB		Miniball Multiplicity:	
Shadow bar B locations		A	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your name:		Alisher	
Live Time (%):		Master Trigger Rate:	
Notes: Minimum bias, target out.			

LASSA Si	0	1	2	3	4	5
bias voltage	66.1	65.1	85.0	50.1	60.0	55.1
leakage current	1.68	3.15	1.42	0.84	3.19	0.80

Run # 309	Date: 11/23	Start time: 8:42	Stop time:
Beam: $^{124}\text{Sn}$			
Target: Ladder out			
Trigger: MB		Miniball Multiplicity: 1	
Shadow bar locations		Your name:	
B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
Live Time (%):		Master Trigger Rate:	
Notes: Minimum bias, target completely out			

Nov 23 10:32 am Downstream scint bias at -1200V  
 Set beam rate on scint to 180K.  
 Set scint discrim width to 100ns.  
 Pulse from scint  $\sim 2.75\text{V}$ , returns to 0V in 200ns



Run w/ MB only trigger, mult, first target completely out.

Run # 310	Date: 11/23	Start time: 10:40	Stop time:
Beam: <sup>124</sup> Sn			
Target: Ladder out			
Trigger: MB		Miniball Multiplicity: 1	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name: Alisher	
Live Time (%):		Master Trigger Rate:	
Notes: Target completely out. Downstream scint. in.			

Run # 311	Date: 11/23	Start time: 10:44	Stop time:
Beam: <sup>124</sup> Sn			
Target: Ladder out			
Trigger: MB		Miniball Multiplicity: 1	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name: Alisher	
Live Time (%):		Master Trigger Rate:	
Notes: Target completely out. DS in. 20 min run.			

Run # 312	Date: 11/23	Start time: 11:12	Stop time:
Beam: $^{124}\text{Sn}$	120 MeV/A		
Target: $^{124}\text{Sn}$			
Trigger: MB	Miniball Multiplicity: 1		
Shadow bar locations	B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Your name: Alisher
Live Time (%): 98	Master Trigger Rate: 9600		
Notes: Minimum bias, target in, downstream scintillator in			

Run # 313	Date: 11/23	Start time: 11:42	Stop time:
Beam: $^{124}\text{Sn}$			
Target: $^{124}\text{Sn}$			
Trigger: MB	Miniball Multiplicity: 1		
Shadow bar locations	B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Your name: Alisher
Live Time (%):	Master Trigger Rate:		
Notes: Scaler test. short run			

Run #	314	Date:	11/23	Start time:	12:30	Stop time:	
Beam:	$^{124}\text{Sn}$		$120\text{ MeV/A}$				
Target:	Ladder out						
Trigger:	MBFA			Miniball Multiplicity:	5		
Shadow bar locations	B	<input type="checkbox"/>	<input type="checkbox"/>	A	<input type="checkbox"/>	<input type="checkbox"/>	Your name:
		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	Alisher
		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	
Live Time (%):				Master Trigger Rate:			
Notes:	DS in. 20 min calibration Running configuration, normalization run. No target						

Run #	315	Date:	11/23	Start time:	12:56	Stop time:	
Beam:	$^{124}\text{Sn}$		$120\text{ MeV/A}$				
Target:	$^{124}\text{Sn}$						
Trigger:	MBFA			Miniball Multiplicity:	5		
Shadow bar locations	B	<input type="checkbox"/>	<input type="checkbox"/>	A	<input type="checkbox"/>	<input type="checkbox"/>	Your name:
		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	Alisher
		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	
Live Time (%):	96			Master Trigger Rate:	9		
Notes:	Target in. Normalization run with DS in (20 min).						

LASSA Si	0	1	2	3	4	5
bias voltage	66.1	85.1	83.0	50.1	60.0	55.1
leakage current	1.70	3.14	1.44	0.85	3.20	0.81



Nov 23 1:51 pm

Switched to MB singles trigger  
Ready for 50 MeV <sup>124Sn</sup> beam.  
Blank target.

2:55 pm  
Switched to 50 MeV/A beam

Run # 316	Date: 11/23	Start time: 14:37	Stop time:
Beam: <sup>124Sn</sup> 50 MeV/A			
Target: <sup>124Sn</sup>			
Trigger: MB		Miniball Multiplicity: 1	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/>		Your name:	
locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Alisher	
Live Time (%):		Master Trigger Rate:	
Notes: Right after beam change to 50 MeV/A <sup>124Sn</sup> . Minimum bias 20 min run, target in.			

Run # 317	Date: 11/23	Start time:	Stop time:
Beam: 50 MeV/A <sup>124Sn</sup>			
Target: <del>124Sn</del> Blank			
Trigger: MB		Miniball Multiplicity:	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/>		Your name:	
locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
Live Time (%):		Master Trigger Rate:	
Notes: Minimum bias run, blank target. 0 minutes. NO DS.			

Run # 318	Date: 11/23	Start time: 15:37	Stop time: 15:48
Beam: 50 MeV/A $^{124}\text{Sn}$			
Target: Blank			
Trigger: MB		Miniball Multiplicity: 1	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/>		A <input type="checkbox"/> <input type="checkbox"/>	
locations <input type="checkbox"/>		<input type="checkbox"/>	
<input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/>	
Your name:		Alisher	
Live Time (%):		Master Trigger Rate:	
Notes: Minimum bias Blank target with DS.			

Run # 319	Date:	Start time: 3:54	Stop time: 4:04
Beam: 50 MeV/A $^{124}\text{Sn}$			
Target: $^{124}\text{Sn}$			
Trigger: MB		Miniball Multiplicity: 1	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/>		A <input type="checkbox"/> <input type="checkbox"/>	
locations <input type="checkbox"/>		<input type="checkbox"/>	
<input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/>	
Your name:		Alisher	
Live Time (%):		Master Trigger Rate:	
Notes: Timed (10 minute) minimum bias run. DS in. With $^{124}\text{Sn}$ target.			

Run # 320	Date: 11-23	Start time: 4:04	Stop time: 4:06
Beam: 124Sn 50 MeV			
Target: 124Sn			
Trigger: MB		Miniball Multiplicity: 1	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name: Jack	
Live Time (%):		Master Trigger Rate:	
Notes: D.S. In. Minimum Bias			

Run # 321	Date: 11-23	Start time: 5:25	Stop time: 5:46
Beam: 124Sn 50 MeV			
Target: 124Sn			
Trigger: MB+FA		Miniball Multiplicity: $\geq 4$	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name: Jack	
Live Time (%): $\sim 95\%$		Master Trigger Rate: $\sim 6$	
Notes: Triggers set back to MB+FA, MB Mult $\geq 4$ Target In			

Run # 322	Date:	Start time: 5:53	Stop time:
Beam: 124Sn 50 MeV			
Target: Blank			
Trigger: MB+FA		Miniball Multiplicity: $\geq 4$	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name: Jack	
Live Time (%): 95-100		Master Trigger Rate: 2	
Notes: Target out			

Run # 323	Date: 11-23	Start time: 6:34	Stop time: 7:34
Beam: $^{124}\text{Sn}$ 50 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB + FA		Miniball Multiplicity: 4	
Shadow bar locations B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
Your name: Jack			
Live Time (%): ~50		Master Trigger Rate: ~450	
Notes: Data Run. Si - 1 tripped on this run. Was not caught until run 327 (Mike)			

Run # 325	Date:	Start time:	Stop time:
Beam: $^{124}\text{Sn}$ 50 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB + FA		Miniball Multiplicity: 4	
Shadow bar locations B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
Your name: Jenny			
Live Time (%): ~60		Master Trigger Rate: ~380	
Notes: Data Run. Beam intensity gets increased during the run			

Run # 326	Date:	Start time:	Stop time:
Beam: $^{124}\text{Sn}$ 50 MeV			
Target: $^{124}\text{Sn}$ <del>82</del>			
Trigger: MB + FA		Miniball Multiplicity: 4	
Shadow bar locations B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
Your name: Jenny			
Live Time (%): ~40		Master Trigger Rate: 500	
Notes: Normal Data Run.			

Run # 327	Date:	Start time:	Stop time:
Beam: $^{124}\text{Sn}$ SOMeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 4	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name: Jenny	
Live Time (%): ~ 40		Master Trigger Rate: ~ 500	
Notes: Normal Run			

Just find that there is no ~~base~~ bias on ~~the~~ Si: file 1. Biased up, and restarted run.

Run # 328	Date:	Start time:	Stop time:
Beam: $^{124}\text{Sn}$ SOMeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 4	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name: Jenny	
Live Time (%): ~ 45%		Master Trigger Rate: ~ 500	
Notes: Data Run After file 1 Si was biased up.			

LASSA Si	0	1	2	3	4	5
bias voltage	66	65	85	50	60	55
leakage current	1.72	3.18	1.46	0.86	3.22	0.82

~~Run~~ 323 →

Run # 329	Date:	Start time:	Stop time:
Beam: 124 Sn	50 MeV		
Target: 124 Sn			
Trigger: MB+FA	Miniball Multiplicity: 4		
Shadow bar locations	B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Your name: Jenny
Live Time (%): ~40%	Master Trigger Rate: <del>200</del> ~500		
Notes: Data Run			

Run # 330	Date: 11/24	Start time: 12 am	Stop time:
Beam: 124 Sn	50 MeV		
Target: 124 Sn			
Trigger: MB+FA	Miniball Multiplicity: 4		
Shadow bar locations	B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Your name: Micha
Live Time (%): 33	Master Trigger Rate: 625		
Notes: Micha + Jenny sucks			

Run # 331	Date: 11/24	Start time: 12:50	Stop time:
Beam: 124 Sn	50 MeV		
Target: 124 Sn			
Trigger: MB+FA	Miniball Multiplicity: 4		
Shadow bar locations	B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Your name: Micha
Live Time (%): 35	Master Trigger Rate: 600		
Notes:			

Run # 332	Date: 11/24	Start time: 1:30	Stop time:
Beam: $^{124}\text{Sn}$ 50 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 4	
Shadow bar locations		Your name:	
B	<input type="checkbox"/> <input type="checkbox"/>	A	<input type="checkbox"/> <input type="checkbox"/>
	<input type="checkbox"/>		<input type="checkbox"/>
	<input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/>
Live Time (%): 35		Master Trigger Rate: 600	
Notes:			

Changing shadow bars - asked for beam tune

Run # 333	Date: 11/24	Start time: 2:15	Stop time:
Beam: $^{124}\text{Sn}$ 50 MeV att 2			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 4	
Shadow bar locations		Your name:	
B	<input type="checkbox"/> <input type="checkbox"/>	A	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
	<input type="checkbox"/>		<input type="checkbox"/>
	<input type="checkbox"/> <input type="checkbox"/>		<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
Live Time (%): 30		Master Trigger Rate: 600	
Notes:			

ended run 333 due to errors in run control  
data type in terminating long wrong: 7

Run # 334	Date: 11/24	Start time: 2:30	Stop time:
Beam: $^{124}\text{Sn}$ 50 MeV at 1			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 4	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
locations <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		Your name: Micha	
Live Time (%): 29		Master Trigger Rate: 660	
Notes:			

Run # 335	Date: 11/24	Start time: 3:10	Stop time:
Beam: $^{124}\text{Sn}$ 50 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 4	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
locations <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		Your name: Micha	
Live Time (%): 33		Master Trigger Rate: 650	
Notes:			

Run # 336	Date: 11/24	Start time: 3:51	Stop time:
Beam: $^{124}\text{Sn}$ 50 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 4	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
locations <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		Your name: Rachel	
Live Time (%): 30		Master Trigger Rate: 700	
Notes:			



LASSA Si	0	1	2	3	4	5
bias voltage	66.1	65.2	85.0	50.1	60.0	55.1
leakage current	1.71	3.14	1.46	0.86	3.23	0.82

Run # 337	Date: 11/24	Start time: 4:31	Stop time:
Beam: $^{124}\text{Sn}$ 50 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 4	
Shadow bar locations	B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Your name: Rachel
Live Time (%): 30		Master Trigger Rate: 700	
Notes:			

Run # 338	Date: 11/24	Start time: 5:11	Stop time:
Beam: $^{124}\text{Sn}$ 50 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 4	
Shadow bar locations	B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Your name: Rachel
Live Time (%): 28		Master Trigger Rate: 700	
Notes:			

Run # 339	Date: 11/24	Start time: 5:49	Stop time:
Beam: $^{124}\text{Sn}$ 50 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 4	
Shadow bar B locations	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	Your name: Rachel
Live Time (%): 28		Master Trigger Rate: 700	
Notes:			

Run # 340	Date: 11/24	Start time: 6:29	Stop time:
Beam: $^{124}\text{Sn}$ 50 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 4	
Shadow bar B locations	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	Your name: Rachel
Live Time (%): 30		Master Trigger Rate: 700	
Notes:			

Run # 341	Date: 11/24	Start time: 7:14	Stop time:
Beam: $^{124}\text{Sn}$ 50 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 4	
Shadow bar B locations	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	Your name: Rachel
Live Time (%): 30		Master Trigger Rate: 670	
Notes:			

Run # 342	Date: 11/24	Start time: 7:53	Stop time:
Beam: $^{124}\text{Sn}$ 50 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 4	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		Your name: Rachel	
locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
Live Time (%): 30		Master Trigger Rate: 700	
Notes:			

Run # 343	Date: 11/24	Start time: 8:35 <del>am</del>	Stop time:
Beam: $^{124}\text{Sn}$ 50 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 4	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		Your name: Alisher	
locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
Live Time (%): 30p		Master Trigger Rate: 650	
Notes: Data run			

Run # 344	Date: 11/24	Start time: 9:21	Stop time:
Beam: $^{124}\text{Sn}$ 50 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 4	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		Your name: Alisher	
locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
Live Time (%): 32		Master Trigger Rate: 670	
Notes: Data run. A quick test of dead time was done before this run. Frequency of long dead times (2.4 sec) does not appear to depend on event rate.			

LASSA Si	0	1	2	3	4	5
bias voltage	66.1	65.2	85.0	50.1	60.0	55.1
leakage current	1.70	3.12	1.45	0.86	3.22	0.82

Run #	345	Date:	11/24	Start time:	10:53	Stop time:	
Beam:	$^{124}\text{Sn}$ 50 MeV						
Target:	$^{124}\text{Sn}$						
Trigger:	MB+FA			Miniball Multiplicity:	4		
Shadow bar locations	B	<input type="checkbox"/>	<input type="checkbox"/>	A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Your name:
		<input type="checkbox"/>			<input type="checkbox"/>		Alisher
		<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Live Time (%)	32		Master Trigger Rate:	670			
Notes:	Data run.						

Run #	346	Date:	11/24	Start time:	11:17	Stop time:	
Beam:	$^{124}\text{Sn}$						
Target:	$^{124}\text{Sn}$						
Trigger:	MB+FA			Miniball Multiplicity:	4		
Shadow bar locations	B	<input type="checkbox"/>	<input type="checkbox"/>	A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Your name:
		<input type="checkbox"/>			<input type="checkbox"/>		Alisher
		<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Live Time (%)	29		Master Trigger Rate:	680			
Notes:	Data run after spectrodaq free pages were full and spectrodaq restart						

Run #	347	Date:	11/24	Start time:	11:57	Stop time:	
Beam:	$^{124}\text{Sn}$ 50 MeV/A						
Target:	$^{124}\text{Sn}$						
Trigger:	MB + FA			Miniball Multiplicity: 4			
Shadow bar locations	B	<input type="checkbox"/>	<input type="checkbox"/>	A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Your name: Alisher
		<input type="checkbox"/>			<input type="checkbox"/>		
		<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Live Time (%)	30		Master Trigger Rate:	700			
Notes:	Data run. Ended after readout crashed.						

Run #	348	Date:		Start time:		Stop time:	
Beam:	$^{124}\text{Sn}$ 50 MeV/A						
Target:	$^{124}\text{Sn}$						
Trigger:	MB + FA			Miniball Multiplicity: 4			
Shadow bar locations	B	<input type="checkbox"/>	<input type="checkbox"/>	A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Your name: Alisher
		<input type="checkbox"/>			<input type="checkbox"/>		
		<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Live Time (%)	30		Master Trigger Rate:	680			
Notes:	Data run.						

Run # 349	Date: 11/24	Start time: 11:52	Stop time:
Beam: $^{124}\text{Sn}$ 50 MeV/A			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity:	
Shadow bar locations		Your name:	
B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		Alisher	
Live Time (%): 28		Master Trigger Rate: 700	
Notes: Data run			

Run # 350	Date: 11/24	Start time: 13:32	Stop time: 14:02
Beam: $^{124}\text{Sn}$ 50 MeV/A			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 4	
Shadow bar locations		Your name:	
B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		Alisher	
Live Time (%): 30		Master Trigger Rate: 700	
Notes: Data run Run ended before shadow bar change and beam tune.			

Run # 351	Date: 11/24	Start time: 2:52	Stop time:
Beam: $^{124}\text{Sn}$ 50 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 7	
Shadow bar locations		Your name:	
B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Alisher	
Live Time (%):		Master Trigger Rate:	
Notes: Data run shadow bars in the middle, multiplicity changed to 7. Readout crashed after 11 minutes.			

Run # 352	Date: 11/24	Start time: 3:03	Stop time: 3:43
Beam: $^{124}\text{Sn}$ 50 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 7	
Shadow bar locations		Your name:	
B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
Live Time (%): 30		Master Trigger Rate: 630	
Notes: Data run. After readout <del>rest</del> crash.			

Run # 353	Date: 11-24	Start time: 3:43	Stop time: 4:24
Beam: $^{124}\text{Sn}$ 50 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 7	
Shadow bar locations		Your name:	
B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Jack	
Live Time (%): 35%		Master Trigger Rate: ~100	
Notes: Data Run Ended because beam dropped out at source.			

LASSA Si	0	1	2	3	4	5
bias voltage	66	65	85	58	60	55
leakage current	1.70	3.12	1.46	.87	3.24	.83

Run # 354	Date: 11-24	Start time: 4:35	Stop time: 5:23
Beam: 124 Sn 50 MeV			
Target: 124 Sn			
Trigger: MB+FA		Miniball Multiplicity: 7	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/>		Your name:	
locations <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>		Jack	
Live Time (%): ~30%		Master Trigger Rate: 600	
Notes: Beam is back. Beam drops out for 1-3 seconds every few minutes.			

Run # 355	Date:	Start time: 5:23	Stop time: 6:11
Beam: 124 Sn 50 MeV			
Target: 124 Sn			
Trigger: MB+FA		Miniball Multiplicity: 7	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/>		Your name:	
locations <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>		Jack	
Live Time (%): ~30%		Master Trigger Rate: 600	
Notes: Data Run.			



Run # 356	Date: 11-23	Start time: 6:11	Stop time: 7:06
Beam: 124Sn 50 MeV			
Target: 124Sn			
Trigger: MB + FA		Miniball Multiplicity: 7	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/>		Your name:	
locations <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>		Jack	
Live Time (%): 40%		Master Trigger Rate: 550	
Notes: Data run			

Run # 357	Date: 11-23	Start time: 7:06	Stop time: 7:49
Beam: 124Sn 50 MeV			
Target: 124Sn			
Trigger: MB + FA		Miniball Multiplicity: 7	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/>		Your name:	
locations <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>		Jack	
Live Time (%): 40%		Master Trigger Rate: 550	
Notes: Data Run			

Run # 358	Date: 11-23	Start time: 7:49	Stop time: 8:22 PM
Beam: 124Sn 50 MeV			
Target: 124Sn			
Trigger: MB + FA		Miniball Multiplicity: 7	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/>		Your name:	
locations <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>		Jack	
Live Time (%): 40%		Master Trigger Rate: 550	
Notes: Data Run			

LASSA Si	0	1	2	3	4	5
bias voltage	66	65	85	50	60	55
leakage current	1.70	3.12	1.46	.87	2.24	.82

Run # 359	Date: 11/23	Start time: 8:22 PM	Stop time:
Beam: 124 Sn 50 MeV			
Target: 124 Sn			
Trigger: MB+FA		Miniball Multiplicity: 7	
Shadow bar B locations	<input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/>	Your name:
	<input checked="" type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input type="checkbox"/>	Mike
Live Time (%): 40%		Master Trigger Rate: <del>400</del> 550	
Notes: Live error ended previous run. Normal data run			

Run # 360	Date: 11/23	Start time:	Stop time: 9:51 PM
Beam: 124 Sn 50 MeV			
Target: 124 Sn			
Trigger: MB+FA		Miniball Multiplicity: 7	
Shadow bar B locations	<input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/>	Your name:
	<input checked="" type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input type="checkbox"/>	Mike
Live Time (%): 40		Master Trigger Rate: 550	
Notes: Normal data run			

Run # 361	Date: 11/24	Start time: 9:51 PM	Stop time: 10:32 PM
Beam: 124 Sn 50 MeV			
Target: 124 Sn			
Trigger: MB+FA		Miniball Multiplicity: 7	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/>		Your name:	
locations <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>		Mike	
Live Time (%): 35		Master Trigger Rate: 600	
Notes: Normal data run			

LASSA Si	0	1	2	3	4	5
bias voltage	66.1	65.2	85.0	50.1	60.0	55.1
leakage current	1.69	3.11	1.46	0.87	3.24	0.83

Run # 362	Date:	Start time: 10:32 PM	Stop time: 11:05
Beam: 124 Sn 50 MeV			
Target: 124 Sn			
Trigger: MB+FA		Miniball Multiplicity: 7	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/>		Your name:	
locations <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>		Mike	
Live Time (%): 35		Master Trigger Rate: 550	
Notes: Normal Data Run Line error			

Run # 363	Date: 11/24	Start time: 11:05 PM	Stop time: 11:47 PM
Beam: 124 Sn 50 MeV			
Target: 124 Sn			
Trigger: MB+FA		Miniball Multiplicity: 7	
Shadow bar B locations	<input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/>	Your name:
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	M. Ze
	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	
Live Time (%): 35		Master Trigger Rate: 550	
Notes: Normal Data Run			

Run # 364	Date: 11/24	Start time: 11:47 PM	Stop time:
Beam: 124 Sn 50 MeV			
Target: 124 Sn			
Trigger: MB+FA		Miniball Multiplicity: 7	
Shadow bar B locations	<input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/>	Your name:
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	M. Ze
	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	
Live Time (%): 35		Master Trigger Rate: 550	
Notes: Normal data run			

Run # 365	Date: 11/25	Start time: 12:30	Stop time:
Beam: 124 Sn 50 MeV			
Target: 124 Sn			
Trigger: MB+FA		Miniball Multiplicity: 7	
Shadow bar B locations	<input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/>	Your name:
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	M. Ze
	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	
Live Time (%): 32		Master Trigger Rate: 550	
Notes:			

Run # 366	Date: 11/25	Start time: 1:00 am	Stop time:
Beam: $^{124}\text{Sn}$ 50 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 7	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/>	Your name:	
locations <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Micha	
<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
Live Time (%): 35		Master Trigger Rate: 570	
Notes:			

Run # 367	Date: 11/25	Start time: 1:30	Stop time:
Beam: $^{124}\text{Sn}$ 50 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 7	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/>	Your name:	
locations <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Micha	
<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
Live Time (%): 33		Master Trigger Rate: 600	
Notes:			

changed shadow bars to B 4 cells  
got beam tune

Run # 368	Date: 11/25	Start time: 2:12	Stop time:
Beam: $^{124}\text{Sn}$ 50 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 7	
Shadow bar B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/>	Your name:	
locations <input type="checkbox"/>	<input type="checkbox"/>		
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
Live Time (%): 30		Master Trigger Rate: 600	
Notes: new shadow bar location			

Run # 369	Date: 11/25	Start time: 2:50	Stop time:
Beam: $^{124}\text{Sn}$ 50 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB + FA		Miniball Multiplicity: 7	
Shadow bar locations B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name: Micha	
Live Time (%): 30		Master Trigger Rate: 620	
Notes:			

Run # 370	Date: 11/25	Start time: 3:25	Stop time:
Beam: $^{124}\text{Sn}$ 50 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB + FA		Miniball Multiplicity: 7	
Shadow bar locations B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name: Micha	
Live Time (%): 31		Master Trigger Rate: 630	
Notes:			

LASSA Si	0	1	2	3	4	5
bias voltage	66.1	65.1	85.0	56.1	60.0	55.1
leakage current	1.69	3.11	1.47	0.88	3.25	0.84

Run # 371	Date: 11/25	Start time: 4:06	Stop time:
Beam: $^{124}\text{Sn}$ 50 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 7	
Shadow bar locations	B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Your name: Rachel
Live Time (%): 34		Master Trigger Rate: 600	
Notes:			

Run # 372	Date: 11/25	Start time: 4:46	Stop time:
Beam: $^{124}\text{Sn}$ 50 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 7	
Shadow bar locations	B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Your name: Rachel
Live Time (%): 32		Master Trigger Rate: 600	
Notes: Ended with line error. - Restarted run control + all fine			

Run # 373	Date: 11/25	Start time: 5:20	Stop time:
Beam: $^{124}\text{Sn}$ 50 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 7	
Shadow bar locations	B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Your name: Rachel
Live Time (%): 30		Master Trigger Rate: 620	
Notes:			

Run # 374	Date: 11/25	Start time: 6:00	Stop time:
Beam: $^{124}\text{Sn}$ 50 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 7	
Shadow bar B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name: Rachel	
Live Time (%): 32		Master Trigger Rate: 600	
Notes:			

Run # 375	Date: 11/25	Start time: 6:42	Stop time:
Beam: $^{124}\text{Sn}$ 50 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 7	
Shadow bar B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name: Rachel	
Live Time (%): 33		Master Trigger Rate: 580	
Notes:			

Run # 376	Date: 11/25	Start time: 7:23	Stop time:
Beam: $^{124}\text{Sn}$ 50 MeV			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 7	
Shadow bar B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name: Rachel	
Live Time (%): 33		Master Trigger Rate: 600	
Notes:			



LASSA Si	0	1	2	3	4	5
bias voltage	66.1	65.2	85.0	50.1	60.0	55.1
leakage current	1.69	3.12	1.47	0.88	3.26	0.84

Run #	377	Date:	11/25	Start time:	8:03	Stop time:	8:42
Beam:	124 Sn 50 MeV/A						
Target:	124 Sn						
Trigger:	MBtFA			Miniball Multiplicity: 7			
Shadow bar locations	B	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	A	<input type="checkbox"/>	<input type="checkbox"/>	Your name:
		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	Alisher
		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	
Live Time (%):	32		Master Trigger Rate: 600				
Notes:	Data.						

Run #	378	Date:	11/25	Start time:	8:43	Stop time:	
Beam:	124 Sn 50 MeV/A						
Target:	124 Sn						
Trigger:	MBtFA			Miniball Multiplicity: 7			
Shadow bar locations	B	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	A	<input type="checkbox"/>	<input type="checkbox"/>	Your name:
		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	Alisher
		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	
Live Time (%):	32		Master Trigger Rate: 600				
Notes:	Data run.						

Run # 379	Date: 11/25	Start time: 9:22	Stop time:
Beam: $^{124}\text{Sn}$ 50 MeV/A			
Target: $^{124}\text{Sn}$			
Trigger: MB+PA		Miniball Multiplicity: 7	
Shadow bar locations B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>		A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
Your name: Alisher			
Live Time (%): 39		Master Trigger Rate: 600	
Notes: Data run.			

Run # 380	Date: 11/25	Start time: 10:03	Stop time: 10:46
Beam: $^{124}\text{Sn}$ 50 MeV/A			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 7	
Shadow bar locations B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>		A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
Your name: Alisher			
Live Time (%): 38		Master Trigger Rate: 560	
Notes: Data run.			

Run # 381	Date: 11/25	Start time: 10:46	Stop time:
Beam: $^{124}\text{Sn}$ 50 MeV/A			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 7	
Shadow bar locations B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>		A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
Your name: Alisher			
Live Time (%): 34		Master Trigger Rate: 600	
Notes: Data run.			

LASSA Si	0	1	2	3	4	5
bias voltage	66.1	65.1	85.0	50.1	60.0	55.1
leakage current	1.69	3.12	1.48	0.88	3.26	0.84

Run # 382	Date: 11/25	Start time:	Stop time: 12:00
Beam: $^{124}\text{Sn}$	50 MeV/A		
Target: $^{124}\text{Sn}$			
Trigger: MB+FA	Miniball Multiplicity: 7		
Shadow bar locations	B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Your name: Alisher
Live Time (%): 35	Master Trigger Rate: 600		
Notes: Data run after beam tuning.			

Run # 383	Date: 11/25	Start time: 12:12	Stop time:
Beam: $^{124}\text{Sn}$	50 MeV/A		
Target: $^{124}\text{Sn}$			
Trigger: MB+FA	Miniball Multiplicity: 7		
Shadow bar locations	B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Your name: Tilak
Live Time (%): 33%	Master Trigger Rate: 600		
Notes: Data run			

Run # 384	Date: 11/25	Start time: 12:45	Stop time: 12:50
Beam: $^{124}\text{Sn}$			
Target: Blank			
Trigger: MBTFA		Miniball Multiplicity: 7	
Shadow bar B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name: Alisher	
Live Time (%):		Master Trigger Rate:	
Notes: Blank target run.			

Run # 385	Date: 11/25	Start time: 12:51	Stop time:
Beam: $^{124}\text{Sn}$ 50 MeV/A			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 7	
Shadow bar B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name: Alisher	
Live Time (%):		Master Trigger Rate:	
Notes: Data run. This run done when Dan & Ron were doing a data acquisition test. Might not be very good data.			

Dan: Discovered during daq test that the "little green bar" displaying the spectrodaq free pages is the source of the periodic 100-150ms dead times. Ron disabled the bar, and our livetime increased by 5-8%. The bar was apparently locking spectrodaq while it sampled the page count. Also, the periodic variation in the scaler "master" rate disappeared, confirming that this was the result of our 2 s scaler interval beating against the 2.4 s interval of the spectrodaq test.

Run # 386	Date: 11/25	Start time: 13:24	Stop time:
Beam: $^{124}\text{Sn}$			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 7	
Shadow bar B locations		Your name:	
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Alisher	
Live Time (%):		Master Trigger Rate:	
Notes: data run. After Ron fixed the long dead time problem. Stopped when dog died.			

Run # 387	Date: 11/25	Start time:	Stop time:
Beam: $^{124}\text{Sn}$ 50 MeV/A			
Target: $^{124}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 7	
Shadow bar B locations		Your name:	
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Alisher	
Live Time (%):		Master Trigger Rate:	
Notes: Data run.			

LASSA Si	0	1	2	3	4	5
bias voltage	66.1	65.1	85.0	50.1	60.0	55.1
leakage current	1.69	3.11	1.47	0.89	3.26	0.84

At 2 pm we gave the key to the operators, for MDT.

Before next beam, implemented a new MB trigger. This uses a high multiplicity trigger ORed with a downscaled low multiplicity trigger. To distinguish these, a signal indicating the high mult trigger is in Cst ADC channel 29, and a signal indicating the downscaled low mult trig is in channel 30. Also scaling these signals.

trigger	scaler	Cst ADC
downscaled low mult	1	30
high mult	28	29
orig. low mult	13	
MB trig	17	

Initial settings

high mult trig:  
-3.7V thresh = mult 7  
510 ns width

low mult trig:  
-2.2V thresh = mult 4  
530 ns width  
downscale 100

Run # 388-91	Date: 11/25	Start time:	Stop time:
Beam:			
Target:			
Trigger:		Miniball Multiplicity:	
Shadow bar locations	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A	Your name: Alisher
Live Time (%):		Master Trigger Rate:	
Notes: PV & saddle Co-60 calibration (rel).			

Run # <del>392</del> 393	Date: 11/23	Start time:	Stop time:
Beam:			
Target:			
Trigger:		Miniball Multiplicity:	
Shadow bar locations		Your name:	
B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
Live Time (%):		Master Trigger Rate:	
Notes: AmBe runs with AmBe source in center of wall 0 shadowbar mount.			

## Scalers

channel	before run 392	after run 391		
0	NW_OR_raw	NW_OR_raw	24	NW_BANK2_live
1	MB_mult_raw	MB_lowmult_downscale	25	master_veto
2	FA_OR_raw	FA_OR_raw	26	computer_busy
3	Csl_OR_raw	Csl_OR_raw	27	NW_fast_clear
4	PV_OR_raw	PV_OR_raw	28	
5	master_raw	master_raw	29	MB_fast_clear
6	pulser_raw	pulser_raw	30	downscint_raw
7	MB_BANK2_raw	MB_BANK2_raw	31	downscint_live
8	NW_BANK2_raw	NW_BANK2_raw	32	FA0
9	MB_and_FA	MB_and_FA	33	FA1
10	NW_or_Si	NW_or_Si	34	FA2
11	NW_and_FA	NW_and_FA	35	FA3
12	Si_and_notMB	Si_and_notMB	36	FA4
13	Si_OR	MB_lowmult	37	FA5
14	Si_and_master	Si_and_master	38	FA6
15	Si_complete	Si_complete	39	FA7
16	NW_OR_live	NW_OR_live	40	FA8
17	MB_mult_live	MB_trig_live	41	FA9
18	FA_OR_live	FA_OR_live	42	FA10
19	Csl_OR_live	Csl_OR_live	43	FA11
20	PV_OR_live	PV_OR_live	44	FA12
21	master_live	master_live	45	FA13
22	pulser_live	pulser_live	46	FA14
23	MB_BANK2_live	MB_BANK2_live	47	FA15

Run # 394	Date: 11/25	Start time: <del>18:25</del> 18:25	Stop time: 19:25
Beam:			
Target: X			
Trigger:		Miniball Multiplicity:	
Shadow bar locations		Your name:	
B	<input type="checkbox"/> <input type="checkbox"/>	A	<input type="checkbox"/> <input type="checkbox"/>
	<input type="checkbox"/>		<input type="checkbox"/>
	<input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/>
Live Time (%):		Master Trigger Rate:	
Notes: cosmic run			

11/27/09 beam tuning. Found vertical tail again.  
 Managed to cut it off using slits 6-183 Y6-R &  
 6-183 YC-R; Q1 chan - application to control.

$R = -0.491$   
 $S = -0.500$  ← values found that get rid of tail

$R = 5.003$   
 $S = 5.000$

Run # 395	Date: <del>11/25</del> 11-27	Start time: 6:05	Stop time: 6:16
Beam: 112Sn 120 MeV			
Target: 112Sn			
Trigger: MB		Miniball Multiplicity: 1	
Shadow bar locations		Your name:	
B	<input type="checkbox"/> <input type="checkbox"/>	A	<input type="checkbox"/> <input type="checkbox"/>
	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
	<input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/>
Live Time (%): ~50%		Master Trigger Rate: ~600	
Notes: Minimum Bias, Target in, Ran for 11 min 17 sec.			



Run # 396	Date: 11-27	Start time: 6:22	Stop time: 6:33
Beam: 112Sn 120 MeV			
Target: Blank			
Trigger: MB		Miniball Multiplicity: 1	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/>	Your name:	
locations <input checked="" type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input type="checkbox"/>	Jack	
<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
Live Time (%): 95%		Master Trigger Rate: ~9	
Notes: Minimum Bias, target out (Blank), 11 min (7 sec)			

Run # 397	Date: 11-27	Start time: 6:43	Stop time: 6:54
Beam: 112Sn 120 MeV			
Target: Blank			
Trigger: MB		Miniball Multiplicity: 1	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/>	Your name:	
locations <input checked="" type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input type="checkbox"/>	Jack	
<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
Live Time (%): 95%		Master Trigger Rate: -9	
Notes: DS In Minimum Bias Target out (blank) 10 Min			

Run # 398	Date: 11-27	Start time: 6:54	Stop time: 7:04
Beam: 112Sn 120 MeV			
Target: Blank			
Trigger: MB		Miniball Multiplicity: 1	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/>	Your name:	
locations <input checked="" type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input type="checkbox"/>	Jack	
<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
Live Time (%): 93%		Master Trigger Rate: ~9-10	
Notes: DS. In Minimum Bias Target out (blank) 10 Min (again)			

Run # 399	Date: 11-27	Start time: 7:10	Stop time: 7:30
Beam: 112 Sn 120 MeV			
Target: 112 Sn			
Trigger: MB		Miniball Multiplicity: 1	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/>		Your name:	
locations <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		Jack	
Live Time (%): 90%		Master Trigger Rate: ~40	
Notes: D.S. In Minimum Bias Target In			

Run # 400	Date: 11-27	Start time: 7:30	Stop time:
Beam: 112 Sn 120 MeV			
Target: 112 Sn			
Trigger: MB		Miniball Multiplicity: 1	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/>		Your name:	
locations <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		Jack	
Live Time (%): 90%		Master Trigger Rate: ~40	
Notes: Repeating last run because of beam issues, just to be sure. Minimum bias, Target In, D.S. In.			

Run # 401	Date:	Start time:	Stop time:
Beam: 112 Sn 120 MeV			
Target: 112 Sn			
Trigger: MB		Miniball Multiplicity: 1	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/>		Your name:	
locations <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		Jerry	
Live Time (%):		Master Trigger Rate:	
Notes: DS in, data run, target, mult > 6 = thrish 0.325V FA - MB trigger			

Run # 402	Date:	Start time:	Stop time:
Beam: $^{112}\text{Sn}$ @ 120 AMeV			
Target: Blank			
Trigger: FA+MB		Miniball Multiplicity: 7	
Shadow bar locations		Your name:	
B <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
Live Time (%):		Master Trigger Rate:	
Notes: like previous, but no target			

Run # 403	Date: 11/27	Start time: 8:50 pm	Stop time:
Beam: $^{112}\text{Sn}$ @ 120 AMeV			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 10 + 7 down 4	
Shadow bar locations		Your name:	
B <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
Live Time (%): 33%		Master Trigger Rate: 500	
Notes: Implemented MB two-mult triggers. High mult ~10 = -4.60V threshold always triggers, but low mult ~7 = -0.325V threshold is downscaled by a factor of 4			

LASSA Si	0	1	2	3	4	5
bias voltage	66	65	85	50.5	60.1	55.4
leakage current	1.53	305	1.37	0.87	3.17	0.82

Run # 404	Date: 11/27	Start time: 9:09 PM	Stop time: 9:41 PM
Beam: 112 Sn @ 120 MeV			
Target: 112 Sn			
Trigger: MB+FA		Miniball Multiplicity: 10 + 7 down 4	
Shadow bar B locations	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	A locations	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
		Your name: Mike	
Live Time (%): 35		Master Trigger Rate: 500	
Notes: Same as 403			

Run # 405	Date: 11/27	Start time: 9:41 PM	Stop time: 10:16
Beam: 112 Sn @ 120 MeV			
Target: 112 Sn			
Trigger: MB+FA		Miniball Multiplicity: 10 + 7 down 4	
Shadow bar B locations	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	A locations	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
		Your name: Mike	
Live Time (%): 35		Master Trigger Rate: 475	
Notes: Data run			

Run # 406	Date: 11/27	Start time: 10:16 PM	Stop time: 10:42 PM
Beam: 112 Sn @ 120 MeV			
Target: 112 Sn			
Trigger: MB+FA		Miniball Multiplicity: 10 + 7 down 4	
Shadow bar B locations	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	A locations	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
		Your name: Mike	
Live Time (%): 35		Master Trigger Rate: 500	
Notes: Data Run			

Run # 407	Date: 11/27	Start time: 10:19 PM	Stop time:
Beam: 112 Sn @ 120 MeV			
Target: 112 Sn			
Trigger: MB+ FA		Miniball Multiplicity: 10+7 down 4	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/>		Your name:	
locations <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		M. Le	
<input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/>	
Live Time (%): 35		Master Trigger Rate: 500	
Notes: Normal data run.			
spdaq created			

Run # 408	Date: 11/27	Start time: 11:31 PM	Stop time: 12:02 AM
Beam: 112 Sn @ 120 MeV			
Target: 112 Sn			
Trigger: MB+ FA		Miniball Multiplicity: 10+7 down 4	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/>		Your name:	
locations <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		M. Le	
<input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/>	
Live Time (%): 35		Master Trigger Rate: 500	
Notes: Run following an spdaq crash			

Run # 409	Date: 11/27	Start time: 12:02 AM	Stop time:
Beam: 112 Sn @ 120 MeV			
Target: 112 Sn			
Trigger: MB+ FA		Miniball Multiplicity: 10+7 down 4	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/>		Your name:	
locations <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		M. Le	
<input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/>	
Live Time (%): 35		Master Trigger Rate: 500	
Notes: normal data run			

LASSA Si	0	1	2	3	4	5
bias voltage	66	65	85	50.5	60.1	55.4
leakage current	1.56	3.07	1.39	0.87	3.19	0.83

Run # 410	Date: 11/28/09	Start time: 00:26	Stop time: 00:26
Beam:			
Target:			
Trigger:		Miniball Multiplicity:	
Shadow bar locations	B <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Your name: GIUSEPPE VERDE
Live Time (%):		Master Trigger Rate:	
Notes: JUNK RUN - Sorry!			

Run # 411	Date: 11/28/09	Start time: 00:30	Stop time:
Beam: 112 Sn $E/A = 120$ MeV			
Target: 112 Sn			
Trigger: FA+MB		Miniball Multiplicity: 10 + 7 scaled 4	
Shadow bar locations	B <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Your name: GIUSEPPE VERDE
Live Time (%): $\approx 33\%$		Master Trigger Rate: 500/sec	
Notes: Normal data Run			

Run # 412	Date: 7/28/03	Start time: 7:01 AM	Stop time:
Beam: 112 Sm		E/A = 120 MeV	
Target: 118 Sm			
Trigger: PA+NB		Miniball Multiplicity: 10+7 SCALD4	
Shadow bar locations	B <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Your name: PAOLO
Live Time (%): ~ 35		Master Trigger Rate: 480	
Notes: NORMAL DATA RUN			

Run # 413	Date: 7/28/03	Start time: 7:30 AM	Stop time:
Beam: 112 Sm		E/A = 120 MeV	
Target: 112 Sm			
Trigger: PA+NB		Miniball Multiplicity: 10+7 SCALD4	
Shadow bar locations	B <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Your name: PAOLO
Live Time (%): 35		Master Trigger Rate: 480	
Notes: NORMAL DATA RUN Run stopped at = 600 MB → Evolve M. 7			

Run # 414	Date: 11/28/09	Start time: 1:55	Stop time:
Beam: $^{112}\text{Sn}$ E/A = 120 MeV			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 70+7 Dows Scale 4	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/>		Your name:	
locations <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>		GIUSEPPEVERDE	
Live Time (%): 30		Master Trigger Rate: 500	
Notes: Normal Data Run			

Run # 415	Date: 11/28/09	Start time: 2:27AM	Stop time:
Beam: 112 E/A = 120 MeV			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 70+7 DOWNSCALE	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/>		Your name:	
locations <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>		POUW	
Live Time (%): ~37		Master Trigger Rate: 500	
Notes: NORMAL DATA RUN			



Run # 416	Date: 1/12/03	Start time: 2.59	Stop time:
Beam:	112Sm	OTAS 120 REV	
Target:	112Sm		
Trigger:	MB+PA	Miniball Multiplicity: 10+7	DOWN SCORING
Shadow bar locations	B <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Your name: PAOLO
Live Time (%):	34	Master Trigger Rate:	500
Notes:	NORMAL DATA RUN		

Run # 417	Date: 1/12/03	Start time: 3.33	Stop time:
Beam:	112Sm	OTAS 120 REV	
Target:	112Sm		
Trigger:	MB+PA	Miniball Multiplicity: 10+7	SCORING
Shadow bar locations	B <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Your name: PAOLO
Live Time (%):	34	Master Trigger Rate:	480
Notes:	NORMAL DATA RUN		

LASSA Si	0	1	2	3	4	5
bias voltage	66.0	65.0	85.0	50.5	60.1	55.4
leakage current	1.58	3.08	1.40	0.87	3.19	0.83

Run # 418	Date: 11/28	Start time: 4:07	Stop time:
Beam: $^{112}\text{Sn}$ 120 MeV			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: $10^7$ down 4	
Shadow bar locations	B <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Your name: Rachel
Live Time (%): 33		Master Trigger Rate: 480	
Notes: Data run.			

Run # 419	Date: 11/28	Start time: 4:37	Stop time:
Beam: $^{112}\text{Sn}$ 120 MeV			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: $10^7$ down 4	
Shadow bar locations	B <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Your name: Rachel
Live Time (%): 32		Master Trigger Rate: 480	
Notes: Normal data run.			

Run # 420	Date: 11/28	Start time: 5:12	Stop time:
Beam: $^{112}\text{Sn}$ 120 MeV			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: $10^7$ down 4	
Shadow bar locations	B <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Your name:
Live Time (%): 34		Master Trigger Rate: 490	
Notes: Normal data run			

Run # 421	Date: 11/28	Start time: 5:45	Stop time:
Beam: $^{112}\text{Sn}$ 120 MeV			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 10 + 7 down 4	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/>	Your name:	
locations <input checked="" type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input type="checkbox"/>	Rachel	
<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
Live Time (%): 33		Master Trigger Rate: 490	
Notes: Data run.			

Run # 422	Date: 11/28	Start time: 6:21	Stop time:
Beam: $^{112}\text{Sn}$ 120 MeV			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 10 + 7 down 4	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/>	Your name:	
locations <input checked="" type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input type="checkbox"/>	Rachel	
<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
Live Time (%): <del>33</del> 34		Master Trigger Rate: 470	
Notes: Data Run			

Run # 423	Date: 11/28	Start time: 6:53	Stop time:
Beam: $^{112}\text{Sn}$ 120 MeV			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 10 + 7 down 4	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/>	Your name:	
locations <input checked="" type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input type="checkbox"/>	Rachel	
<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
Live Time (%): 34		Master Trigger Rate: 470	
Notes: Data run.			

Run # 424	Date: 11/28	Start time: 7:28	Stop time:
Beam: $^{112}\text{Sn}$ 120 MeV			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 10 + 7 down 4	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/>	Your name:	
locations <input checked="" type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input type="checkbox"/>	Rachel	
Live Time (%): 34		Master Trigger Rate: 470	
Notes: data run			

Run # 425	Date: 11/28	Start time:	Stop time:
Beam: $^{112}\text{Sn}$ 120 MeV			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 10 + 7 down 4	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/>	Your name:	
locations <input checked="" type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input type="checkbox"/>	<del>Rachel</del> Alisher	
Live Time (%): 35		Master Trigger Rate: 475	
Notes: Data run			

LASSA Si	0	1	2	3	4	5
bias voltage	66.0	65.0	85.0	50.5	60.1	55.4
leakage current	1.59	3.10	1.42	0.87	3.19	0.83

Run # 426	Date: 11/28	Start time:	Stop time:
Beam: $^{112}\text{Sn}$ 120 MeV			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 10 + 7 down 4	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/>	Your name:	
locations <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Alisher	
<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
Live Time (%):		Master Trigger Rate:	
Notes: Data run. Patched out a few things before this run (FA common stop). Changed shadow bars to wall @ corners after.			

Run # 427	Date: 11/28	Start time:	Stop time:
Beam: $^{112}\text{Sn}$ 120 MeV			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 10 + 7 down 4	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/>	A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	Your name:	
locations <input type="checkbox"/>	<input type="checkbox"/>	Alisher	
<input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		
Live Time (%): 32		Master Trigger Rate: 460	
Notes: Data run.			

Run # 428	Date: 11/28	Start time: 9:57	Stop time:
Beam: $^{112}\text{Sn}$ 120 MeV			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 10 + 7 down 4	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/>	A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	Your name:	
locations <input type="checkbox"/>	<input type="checkbox"/>	Alisher	
<input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		
Live Time (%): 32		Master Trigger Rate: 460	
Notes: Data run			

Run # 429	Date: 11/28	Start time:	Stop time:
Beam: $^{112}\text{Sn}$ 120 MeV/A			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 10+7 down 4	
Shadow bar B locations	<input type="checkbox"/> <input type="checkbox"/>	A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	Your name: Alisher
	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	
Live Time (%):		Master Trigger Rate:	
Notes: Data run after readout crash. Restarted spdag 19. crashed again in 3 min.			

Run # 430	Date:	Start time:	Stop time:
Beam: $^{112}\text{Sn}$ 120 MeV/A			
Target: $^{112}\text{Sn}$			
Trigger:		Miniball Multiplicity: 10+7 down 4	
Shadow bar B locations	<input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/>	Your name: Alisher
	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	
Live Time (%): 34		Master Trigger Rate: 500	
Notes: Data run			

Run # 431	Date:	Start time:	Stop time:
Beam: $^{112}\text{Sn}$ 120 MeV			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 10+7 down 4	
Shadow bar B locations	<input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/>	Your name: Alisher
	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	
Live Time (%): 35		Master Trigger Rate: 490	
Notes: Data run			

Run # 432	Date: 11/28	Start time:	Stop time:
Beam: $^{112}\text{Sn}$ 120 MeV			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 10+7 down 4	
Shadow bar B	<input type="checkbox"/>	<input type="checkbox"/>	A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
locations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
Your name:			Alisher
Live Time (%):	35	Master Trigger Rate:	490
Notes: Data run			

LASSA Si	0	1	2	3	4	5
bias voltage	66.0	65.0	85.0	50.5	60.1	55.4
leakage current	1.60	3.12	<del>1.42</del>	<del>0.82</del>	<del>3.20</del>	0.84

Run # 433	Date: 11/28	Start time:	Stop time:
Beam: $^{112}\text{Sn}$ 120 MeV			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 10+7 down 4	
Shadow bar B	<input type="checkbox"/>	<input type="checkbox"/>	A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
locations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
Your name:			Alisher
Live Time (%):	35	Master Trigger Rate:	490
Notes: Data run			

Run # 434	Date: 11/28	Start time:	Stop time:
Beam: $^{112}\text{Sn}$ 120 MeV/A			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 10 + 7 down 4	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		Your name:	
locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Alisher	
Live Time (%): 35		Master Trigger Rate: 490	
Notes: Data run			

Run # 435	Date: 11/28	Start time:	Stop time:
Beam: $^{112}\text{Sn}$ 120 MeV/A			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 10 + 7 down 4	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		Your name:	
locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Alisher	
Live Time (%): 35		Master Trigger Rate: 480	
Notes: Data run			

Run # 436	Date: 11/28	Start time:	Stop time:
Beam: $^{112}\text{Sn}$ 120 MeV/A			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 10 + 7 down 4	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		Your name:	
locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Alisher	
Live Time (%): 36		Master Trigger Rate: 470	
Notes: Data run			



Run # 437	Date: 11/28	Start time:	Stop time:
Beam: $^{112}\text{Sn}$ 120 MeV			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 10+7 down 4	
Shadow bar B locations	<input type="checkbox"/> <input type="checkbox"/>	A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	Your name: Alisher
	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input checked="" type="checkbox"/>	
Live Time (%): 37	Master Trigger Rate: 470		
Notes: Data run			

Run # 438	Date: 11/28	Start time: 3:55	Stop time: 4:30
Beam: $^{112}\text{Sn}$ 120 MeV			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 10+7 down 4	
Shadow bar B locations	<input type="checkbox"/> <input type="checkbox"/>	A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	Your name: Alisher
	<input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	
Live Time (%): 36	Master Trigger Rate: 470		
Notes: Data run			

LASSA Si	0	1	2	3	4	5
bias voltage	<del>66</del> 66	65	85	50.5	60	55.4
leakage current	1.61	3.12	1.42	.88	3.20	.84

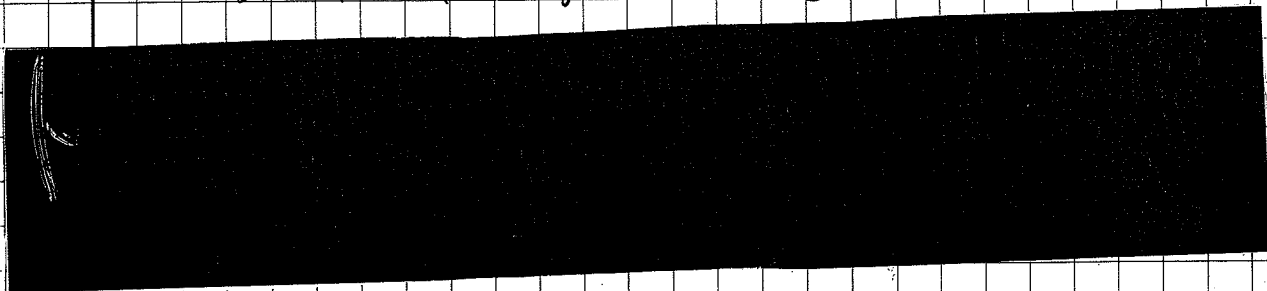
Run # 439	Date: 11-28	Start time: 4:37	Stop time: 5:57
Beam: 112Sn 120 MeV			
Target: 112Sn			
Trigger: MB + FA		Miniball Multiplicity: 10 + 7 down 4	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> locations <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		Your name: Jack	
Live Time (%): <del>00%</del>		Master Trigger Rate: <del>1111111</del> ~215	
Notes: Decreased beam by factor of Four, to look at efficiency of Si.			

Run # 440	Date: 11-28	Start time: 5:59	Stop time: 6:36
Beam: 112Sn 120 MeV			
Target: 112Sn			
Trigger: MB + FA		Miniball Multiplicity: 10 + 7 down 2	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> locations <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		Your name: Jack	
Live Time (%): 40%		Master Trigger Rate: ~440	
Notes: Data Run. Intensity is back up.			

Run # 441	Date: 11-28	Start time: 6:36	Stop time: 7:16
Beam: 112Sn 120 MeV			
Target: 112Sn			
Trigger: MB + FA		Miniball Multiplicity: 10 + 7 down 4	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> locations <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		Your name: Jack	
Live Time (%): 40		Master Trigger Rate:	
Notes: Data Run.			

Run # 442	Date: 11-28	Start time: 7:16	Stop time: 7:56
Beam: 112Sn 120 MeV			
Target: 112Sn			
Trigger: MB+FA		Miniball Multiplicity: 10 + 7 down 4	
Shadow bar locations	B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	Your name: Jack
Live Time (%): ~50%		Master Trigger Rate: ~415	
Notes: Data Run.			

Bill Made a change in the timing:



Run # 443	Date: 11-29	Start time:	Stop time:
Beam: 112Sn 120 MeV			
Target: 112Sn			
Trigger: MB+FA		Miniball Multiplicity: 10 + 7 down 4	
Shadow bar locations	B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Your name: Jack
Live Time (%): ~50%		Master Trigger Rate: ~430	
Notes: Data Run. Note change described above			

## \* Shadow Bar Change \*

Run # 444	Date: 11-28	Start time: 9:35 PM	Stop time: 9:45 PM
Beam: 112 Sn 120 MeV			
Target: 112 Sn			
Trigger: MB+FA		Miniball Multiplicity: 10+ 7 down 4	
Shadow bar B locations <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
Your name: Jack			
Live Time (%): ~50%		Master Trigger Rate: <del>460</del> 410	
Notes: Shadow bar change. 10 minute run with driver pulser <del>off</del> off			

Run # 445	Date: 11/28	Start time:	Stop time:
Beam: 112 Sn @ 120 MeV			
Target: 112 Sn			
Trigger: MB+FA		Miniball Multiplicity: 10+ 7 down 4	
Shadow bar B locations <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
Your name:			
Live Time (%):		Master Trigger Rate:	
Notes: Checked NW trigger. All seems ok. Then an SPDAQ crash			

Run # 446	Date: 11/28	Start time: 11:06 PM	Stop time:
Beam: 112 Sn @ 120 MeV			
Target: 112 Sn			
Trigger: MB+FA		Miniball Multiplicity: 10+ 7 down 4	
Shadow bar B locations <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
Your name: Mike			
Live Time (%): 90		Master Trigger Rate: 450	
Notes: Normal run following an SPDAQ crash Locked			

Run # 117	Date: 11/28	Start time: 11:37 PM	Stop time:
Beam: 112 Sn @ 120 MeV			
Target: 112 Sn			
Trigger: MB+FA		Miniball Multiplicity: 10+7 down 4	
Shadow bar locations	B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Your name: Mile
Live Time (%):		Master Trigger Rate:	
Notes: Follows a lockup (not crash) of spooly.			

Run # 448	Date: 11/29/09	Start time: 00:20	Stop time:
Beam: 112 Sn @ 120 MeV/u			
Target: 112 Sn			
Trigger: MB+FA		Miniball Multiplicity: 10+7 down 4	
Shadow bar locations	B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Your name: GIUSEPPE
Live Time (%): 34		Master Trigger Rate: 490	
Notes: Normal data run (NDR)			

Run # 449	Date: 11/29	Start time: 0.29	Stop time: 1:44
Beam: 112 Sn @ 120 MeV			
Target: 112 Sn			
Trigger: MB + FA		Miniball Multiplicity: 10 + 7 down 4	
Shadow bar B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/>		Your name:	
locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Zbigniew	
Shadow bar <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/>			
locations <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
Live Time (%): 34		Master Trigger Rate: 490	
Notes: NDR			

Run # 450	Date: 11/29	Start time: 1:45	Stop time: 2:24
Beam: 112 Sn @ 120 MeV			
Target: 112 Sn			
Trigger: MB + FA		Miniball Multiplicity: 10 + 7 down 4	
Shadow bar B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/>		Your name:	
locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Zbigniew	
Shadow bar <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/>			
locations <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
Live Time (%): 35		Master Trigger Rate: 490	
Notes: NDR			

LASSA Si	0	1	2	3	4	5
bias voltage	-66	-65	-85	-50	-60	-55
leakage current	1.62	3.11	1.42	0.87	3.20	0.84

Run # 451	Date: 11/29	Start time: 2:25	Stop time:
Beam: 112 cm @ 120 AMW			
Target: 112 cm @ 120			
Trigger: MB + FA		Miniball Multiplicity: 10 + 7 down 4	
Shadow bar B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name: Zbigniew	
Live Time (%): 35		Master Trigger Rate: 480	
Notes: NDR			

Run # 452	Date: 11/29	Start time: 2:57	Stop time:
Beam: 112 cm @ 120 AMW			
Target: 112 cm			
Trigger: MB + FA		Miniball Multiplicity: 10 + 7 down 4	
Shadow bar B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name: Zbigniew	
Live Time (%): 33		Master Trigger Rate: 480	
Notes: NDR			

Run # 453	Date: 11/29	Start time: 3:48	Stop time:
Beam: 112 cm @ 120 AMW			
Target: 112 cm			
Trigger: MB + FA		Miniball Multiplicity: 10 + 7 down 4	
Shadow bar B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name: Zbigniew	
Live Time (%):		Master Trigger Rate:	
Notes: NDR			

Run # 454	Date: 11/29	Start time: 4:21	Stop time:
Beam: $^{112}\text{Sn}$ 120 MeV			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 10 + 7 down 4	
Shadow bar locations	B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Your name: Rachel
Live Time (%): 35		Master Trigger Rate: 490	
Notes: data run			

Run # 455	Date: 11/29	Start time: 4:55	Stop time:
Beam: $^{112}\text{Sn}$ 120 MeV			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 10 + 7 down 4	
Shadow bar locations	B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Your name: Rachel
Live Time (%): 34		Master Trigger Rate: 500	
Notes: Data run			

Run # 456	Date: 11/29	Start time: 5:26	Stop time:
Beam: $^{112}\text{Sn}$ 120 MeV			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 10 + 7 down 4	
Shadow bar locations	B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Your name: Rachel
Live Time (%): 35		Master Trigger Rate: 496	
Notes: Normal Data run.			



Run # 457	Date: 11/29	Start time: 5:59	Stop time:
Beam: $^{112}\text{Sn}$ 120 MeV			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 10 <sup>+</sup> 7 down 4	
Shadow bar locations		Your name:	
B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Rachel	
Live Time (%): 35		Master Trigger Rate: 500	
Notes: data run			

Run # 458	Date: 11/29	Start time: 6:32	Stop time:
Beam: $^{112}\text{Sn}$ 120 MeV			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 10 <sup>+</sup> 7 down 4	
Shadow bar locations		Your name:	
B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Rachel	
Live Time (%): 35		Master Trigger Rate: 500	
Notes: data run			

LASSA Si	0	1	2	3	4	5
bias voltage	66.0	65.0	85.0	50.5	60.1	55.4
leakage current	1.63	3.12	1.42	0.88	3.20	0.84

Run # 459	Date: 11/29	Start time: 7:04	Stop time:
Beam: $^{112}\text{Sn}$ 120 MeV			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 10 + 7 down 4	
Shadow bar B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name: Rachel	
Live Time (%): 35		Master Trigger Rate: <del>480</del> 490	
Notes: Normal Data Run.			

Run # 460	Date: 11/29	Start time: 7:36	Stop time:
Beam: $^{112}\text{Sn}$ 120 MeV			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 10 + 7 down 4	
Shadow bar B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name: Rachel	
Live Time (%): 35		Master Trigger Rate: 490	
Notes: Normal data run.			

Run # 461	Date: 11/29	Start time: 8:10	Stop time:
Beam: $^{112}\text{Sn}$ 120 MeV			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 10 + 7 down 4	
Shadow bar B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name: Alisher	
Live Time (%): 37		Master Trigger Rate: 490	
Notes: Normal data run.			

Run # 462	Date: 11/29	Start time: 9:08	Stop time:
Beam: $^{112}\text{Sn}$			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 10 + 7 downy	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name: Alisher	
Live Time (%): 34		Master Trigger Rate: 470	
Notes: Changed shadowbars before this run (no shadowbars).			

Run # 463	Date: 11/29	Start time: 09:48	Stop time:
Beam: $^{112}\text{Sn}$ 120 MeV			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 10 + 7 downy	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name: Alisher	
Live Time (%): 35		Master Trigger Rate: 480	
Notes: Data run.			

LASSA Si	0	1	2	3	4	5
bias voltage	66.0	65.0	85.0	50.5	60.1	55.4
leakage current	1.62	3.12	1.42	0.88	3.20	0.89

Run # 465	Date: 11/29	Start time: 10:22	Stop time:
Beam: <sup>112</sup> Jn 120 MeV			
Target: <sup>182</sup> Jn			
Trigger: MB+FA		Miniball Multiplicity: 10 + 7 down 4	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/>	Your name:	
locations <input type="checkbox"/>	<input type="checkbox"/>	Alisher	
<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
Live Time (%): 38	Master Trigger Rate: 480		
Notes: Data run			

Run # 466	Date: 11/29	Start time: 10:55	Stop time:
Beam: <sup>112</sup> Jn 120 MeV			
Target: <sup>112</sup> Jn			
Trigger: MB+FA		Miniball Multiplicity: 10 + 7 down 4	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/>	Your name:	
locations <input type="checkbox"/>	<input type="checkbox"/>	Alisher	
<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
Live Time (%): 35	Master Trigger Rate: 490		
Notes: Data run			

Run # 467	Date: 11/29	Start time:	Stop time:
Beam: <sup>112</sup> Jn 120 MeV			
Target: <sup>112</sup> Jn			
Trigger: MB+FA		Miniball Multiplicity: 10 + 7 down 4	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/>	Your name:	
locations <input type="checkbox"/>	<input type="checkbox"/>	Alisher	
<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
Live Time (%): 34	Master Trigger Rate: 500		
Notes: Data run			

Run # 468	Date: 11/29	Start time: 12:17	Stop time:
Beam: $^{112}\text{Sn}$ 120 MeV			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 10+7 down 4	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/>	Your name:	
locations <input type="checkbox"/>	<input type="checkbox"/>	Alisher	
<input type="checkbox"/>	<input type="checkbox"/>		
Live Time (%): 35	Master Trigger Rate:		490
Notes: Data run			

Run # 469	Date:	Start time: 12:56	Stop time:
Beam: $^{112}\text{Sn}$ 120 MeV			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 10+7 down 4	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/>	Your name:	
locations <input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/>	<input type="checkbox"/>		
Live Time (%): 36	Master Trigger Rate:		470
Notes: Data run			

Run # 470	Date:	Start time: 13:56	Stop time:
Beam: $^{112}\text{Sn}$ 120 MeV			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 10+7 down 4	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/>	Your name:	
locations <input type="checkbox"/>	<input type="checkbox"/>	Alisher	
<input type="checkbox"/>	<input type="checkbox"/>		
Live Time (%): 37	Master Trigger Rate:		470
Notes: Data run			

Run # 471	Date: 11/29	Start time:	Stop time:
Beam: 112 Sn			
Target: 112 Sn			
Trigger: MB+FA		Miniball Multiplicity: 10+7 downy	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name: Alisher	
Live Time (%): 39		Master Trigger Rate: 490	
Notes: Data run			

Run # 472	Date: 11-29	Start time: 6:01	Stop time: 6:11
Beam: 112Sn 50 MeV			
Target: 112Sn			
Trigger: MB <del>FA</del>		Miniball Multiplicity: <del>10+7 downy</del>	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name: Jack	
Live Time (%): 60		Master Trigger Rate: 550	
Notes: Inserted pulser into CSI preamps at 2Hz target in			

Run # 473	Date: 11-29	Start time: 6:16	Stop time: 6:26
Beam: 112Sn 50 MeV			
Target: Blank			
Trigger: MB <del>FA</del>		Miniball Multiplicity:	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name: Jack	
Live Time (%): 95%		Master Trigger Rate: 7	
Notes: target out.			

Run # 474	Date: 11-29	Start time: 6:51	Stop time: 7:11
Beam: 112Sn 50 MeV			
Target: 112Sn			
Trigger: MB <del>MB</del>		Miniball Multiplicity: 1	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name: Jack	
Live Time (%): 95%		Master Trigger Rate: ~25	
Notes: DS IN, target in DS Rate Live: 160 K DS voltage 1080V			

Run # 475	Date: 11-29	Start time: 7:22	Stop time: 7:43
Beam:			
Target: Blank			
Trigger: MB		Miniball Multiplicity: 1	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name: Jack	
Live Time (%):		Master Trigger Rate:	
Notes: DS IN target out			

Run # 476	Date:	Start time:	Stop time:
Beam:			
Target: 112Sn			
Trigger: MB + PA		Miniball Multiplicity: 8 + 5 down 4	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> locations <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name: Jack	
Live Time (%): 95%		Master Trigger Rate: 6	
Notes: DS IN target in Trigger is running condition. Mult 5 threshold is ~.225 Mult 8 threshold is ~.375 DS Rate Live 110 K			



Run # 477	Date: 11/29	Start time: 8:35 pm	Stop time: 9:20
Beam: 112 Sn	E/A 250 MeV		
Target: 112 Sn			
Trigger: MB+FA	Miniball Multiplicity: 5054.8		
Shadow bar B <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/>	Your name:	
locations <input checked="" type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input type="checkbox"/>	Betty	
Live Time (%): 44%	Master Trigger Rate: 620		
Notes: Normal Data Run.			

LASSA Si	0	1	2	3	4	5
bias voltage	106.1	105.0	85.0	50.4	59.9	55.1
leakage current	1.63	3.10	1.42	0.87	3.18	0.83

Run # 478	Date: 11/29	Start time: 9:20 PM	Stop time: 10:03 PM
Beam: 112 Sn	@ 50 MeV		
Target: 112 Sn			
Trigger: MB+FA	Miniball Multiplicity: 8+5000+		
Shadow bar B <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/>	Your name:	
locations <input checked="" type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input type="checkbox"/>	Mike	
Live Time (%): 40	Master Trigger Rate: 625		
Notes: normal data run			



Run # 479	Date: 11/29	Start time: 10:03	Stop time: 10:46 PM
Beam: 112 Sn @ 50 MeV			
Target: 112 Sn			
Trigger: MB+FA		Miniball Multiplicity: 8+5 down 4	
Shadow bar B locations	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Your name: Mike
Live Time (%): 45		Master Trigger Rate: 600	
Notes: normal run			

Run # 480	Date: 11/29	Start time: 10:46 PM	Stop time: 11:28 PM
Beam: Sn 112 @ 50 MeV			
Target: 112 Sn			
Trigger: MB+FA		Miniball Multiplicity: 8+5 down 4	
Shadow bar B locations	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Your name: Mike
Live Time (%): 45		Master Trigger Rate: 600	
Notes: normal run			

LASSA Si	0	1	2	3	4	5
bias voltage	60.1	65.0	65.0	50.7	59.9	55.1
leakage current	1.62	3.09	1.41	0.84	3.18	0.82

Run # 481	Date: 11/29	Start time: 11:28 PM	Stop time: 12:08 AM
Beam: 112 Sn @ 50 MeV			
Target: 112 Sn			
Trigger: MB+FA		Miniball Multiplicity: 8+5 down 4	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/>	Your name: M. Le	
locations <input checked="" type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input type="checkbox"/>		
<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
Live Time (%): 45		Master Trigger Rate: 620	
Notes: All good w/ data runs			

Run # 482	Date: 11/29	Start time: 12:08 AM	Stop time:
Beam: 112 Sn @ 50 MeV			
Target: 112 Sn			
Trigger: MB+FA		Miniball Multiplicity: 8+5 down 4	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/>	Your name: M. Le	
locations <input checked="" type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input type="checkbox"/>		
<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
Live Time (%): 40		Master Trigger Rate: 650	
Notes: normal run ended w/ DAA error			

Run # 483	Date: 11/30	Start time: 1:06	Stop time:
Beam: 112 Sn @ 50 MeV			
Target: 112 Sn			
Trigger: MB+FA		Miniball Multiplicity: 8+5 down 4	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/>	Your name: Zbigniew	
locations <input checked="" type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input type="checkbox"/>		
<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
Live Time (%): 42		Master Trigger Rate: 660	
Notes: NDR			

Run # 484	Date: 11/30	Start time: 1:46	Stop time:
Beam: 112 m @ 50 AMW			
Target: 112 m			
Trigger: MB + FA		Miniball Multiplicity: 8 + 5 down 4	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/>	Your name:	
locations <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Zbigniew	
<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
Live Time (%): 41	Master Trigger Rate: 680		
Notes: NDR ended w/ DAE error			

Run # 485	Date: 11/30	Start time: 1:59	Stop time:
Beam: 112 m @ 50 AMW			
Target: 112 m			
Trigger: MB + FA		Miniball Multiplicity: 8 + 5 down 4	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/>	Your name:	
locations <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Zbigniew	
<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
Live Time (%): 41	Master Trigger Rate: 670		
Notes: NDR			

Run # 486	Date: 11/30	Start time: 2:36	Stop time:
Beam: 112 m @ 50 AMW			
Target: 112 m			
Trigger: MB + FA		Miniball Multiplicity: 8 + 5 down 4	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/>	Your name:	
locations <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Zbigniew	
<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
Live Time (%): 40	Master Trigger Rate: 670		
Notes: Normal Data			

Run # 487	Date: 11/30	Start time: 3:16 am	Stop time:
Beam: 112 m @ 50 AMeV			
Target: 112 m			
Trigger: MB + FA		Miniball Multiplicity: 8 + 5 down 4	
Shadow bar B locations <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>		A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	
		Your name: Zbigniew	
Live Time (%): 40		Master Trigger Rate: 670	
Notes: Normal data			

Run # 488	Date: 11/30	Start time: 3:58	Stop time:
Beam: 112 m @ 50 AMeV			
Target: 112 m			
Trigger: MB + FA		Miniball Multiplicity: 8 + 5 down 4	
Shadow bar B locations <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>		A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	
		Your name: Zbigniew	
Live Time (%): 41		Master Trigger Rate: 670	
Notes: Data run			

Run # 489	Date: 11/30	Start time: 4:38	Stop time:
Beam: 112 m @ 50 AMeV			
Target: 112 m			
Trigger: MB + FA		Miniball Multiplicity: 8 + 5 down 4	
Shadow bar B locations <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>		A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	
		Your name: Zbigniew	
Live Time (%): 41		Master Trigger Rate: 690	
Notes: Normal data Run			

4:30 AM

LASSA Si	0	1	2	3	4	5
bias voltage	66.1	65.0	85.0	50.0	59.9	55.1
leakage current	1.62	3.07	1.42	0.86	3.19	0.83

Run # 490	Date: 11/30	Start time: 5:17	Stop time:
Beam: $^{112}\text{Sn}$ 50 MeV			
Target: $^{112}\text{Sn}$			
Trigger: MB + FA		Miniball Multiplicity: 8+5 down 4	
Shadow bar B locations	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Your name: Rachel
Live Time (%): 46		Master Trigger Rate: 690	
Notes: Normal data run. Ended with beam flat.			

Run # 491	Date: 11/30	Start time: 5:31	Stop time:
Beam: $^{112}\text{Sn}$ 50 MeV			
Target: $^{112}\text{Sn}$			
Trigger: MB + FA		Miniball Multiplicity: 8+5 down 4	
Shadow bar B locations	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Your name: Rachel
Live Time (%): 40		Master Trigger Rate: 680	
Notes: Restart run, beam as normal			

Run # 492	Date: 11/30	Start time: 6:07	Stop time:
Beam: $^{112}\text{Sn}$ 50 MeV			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 8+5 down 4	
Shadow bar B locations	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Your name: Rachel
Live Time (%): 39		Master Trigger Rate: 700	
Notes: Data run			

Run # 493	Date: 11/30	Start time: 6:45	Stop time:
Beam: $^{112}\text{Sn}$ 50 MeV			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 8+5 down 4	
Shadow bar B locations	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Your name: Rachel
Live Time (%): 40		Master Trigger Rate: 700	
Notes: Normal data run.			

Run # 494	Date: 11/30	Start time: 7:27	Stop time:
Beam: $^{112}\text{Sn}$ 50 MeV			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 8+5 down 4	
Shadow bar B locations	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Your name: Rachel
Live Time (%): 40		Master Trigger Rate: 690	
Notes: Data run			

Run # 495	Date: 11/30	Start time: 8:16	Stop time:
Beam: $^{112}\text{Sn}$ 50 MeV			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 8+5 down 4	
Shadow bar B locations	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	Your name: Alisher
Live Time (%): 41		Master Trigger Rate: 680	
Notes: Data run. Changed shadow bars to wall 0 corners.			

LASSA Si	0	1	2	3	4	5
bias voltage	66.1	65.0	85.0	50.0	59.9	55.1
leakage current	1.63	3.07	1.42	0.86	2.20	0.83

Run # 496	Date:	Start time: 8:56	Stop time:
Beam: $^{112}\text{Sn}$ 50 MeV			
Target: $^{112}\text{Sn}$			
Trigger:		Miniball Multiplicity: 8+5 down 4	
Shadow bar B locations	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	Your name: Alisher
Live Time (%): 40		Master Trigger Rate: 690	
Notes: Data run. Ended with readout error.			

Run # 497	Date: 11/30	Start time: 9:18	Stop time:
Beam: $^{112}\text{Sn}$ 50 MeV			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 8+5 down 4	
Shadow bar locations	B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	Your name:
Live Time (%): 41		Master Trigger Rate: 670	
Notes: Data run			

Run # 498	Date: 11/30	Start time: 9:59	Stop time:
Beam: $^{112}\text{Sn}$ 50 MeV			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 8+5 down 4	
Shadow bar locations	B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	Your name:
Live Time (%): 41		Master Trigger Rate: 680	
Notes: Data run Ended with readout error.			

Run # 499	Date: 11/30	Start time: 10:13	Stop time:
Beam: $^{112}\text{Sn}$ 50 MeV			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 8+5 down 4	
Shadow bar locations	B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	Your name: Alesher
Live Time (%): 460		Master Trigger Rate: 600	
Notes: Data run.			



Run # 500	Date: 11/30	Start time: 10:53	Stop time:
Beam:			
Target:			
Trigger:		Miniball Multiplicity: 8+5 downy	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/>	A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	Your name:	
locations <input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		
Live Time (%): 45		Master Trigger Rate: 610	
Notes: Data run. Ended when the beam went down.			

Run # 501	Date: 11/30	Start time: 11:39	Stop time:
Beam: 112 Sn @ 50 MeV/A			
Target: 112 Sn			
Trigger: MB+FA		Miniball Multiplicity: 8+5 downy	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/>	A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	Your name: Tilak	
locations <input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		
Live Time (%): 15		Master Trigger Rate: 605	
Notes: Data run after the beam is given back			

Run # 502	Date: 11/30	Start time: 12:27	Stop time: 12:59
Beam: 112 Sn @ 50 MeV			
Target: 112 Sn			
Trigger: MB+FA		Miniball Multiplicity: 8+5 downy	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/>	A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	Your name: PAOLO	
locations <input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		
Live Time (%): 45		Master Trigger Rate: 610	
Notes: NORMAL DATA RUN			

Run # 503	Date: 11/30	Start time: 12:59	Stop time:
Beam: $^{112}\text{Sn}$ @ 50 MeV/A			
Target: $^{112}\text{Sn}$			
Trigger: MB + FA		Miniball Multiplicity: 8+5 down 4	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		Your name: Tilak	
Live Time (%): 41%		Master Trigger Rate: 650	
Notes: normal data run			

Run # 504	Date: 11/30	Start time: 13:24	Stop time:
Beam: $^{112}\text{Sn}$ @ 50 MeV			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 8+5 down 4	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		Your name: Alisher	
Live Time (%): 41		Master Trigger Rate: 650	
Notes: Data run.			

Run # 505	Date: 11/30	Start time: 2:03	Stop time:
Beam: $^{112}\text{Sn}$			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 8+5 down 4	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		Your name: Alisher	
Live Time (%): 41		Master Trigger Rate: 670	
Notes: Data run			

Run # 506	Date: 11/30	Start time: 2:45p	Stop time: 3:03
Beam: $^{112}\text{Sn}$ 50 MeV			
Target: $^{112}\text{Sn}$			
Trigger:		Miniball Multiplicity: 8+5 down 5	
Shadow bar locations	B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Your name: Alisher
Live Time (%): 41		Master Trigger Rate: 670	
Notes: Data run. Ended w/ readout error.			

Run # 507	Date: 11/30	Start time: 3:33p	Stop time: 4:13
Beam: $^{112}\text{Sn}$ 50 MeV			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 8+T down 4	
Shadow bar locations	B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Your name: Brenna/Ali
Live Time (%): 76		Master Trigger Rate: 260	
Notes: Data run w/ 4 times less beam. ended w/ error msg: data type in terminating long wrong: 7			

LASSA Si	0	1	2	3	4	5
bias voltage	66.1	65.0	85.0	50.0	59.9	55.1
leakage current	1.73	3.16	1.50	0.92	3.29	0.88

Run # 508	Date: 11-30	Start time: 4:15	Stop time: 4:55
Beam: 112Sn 50 MeV			
Target: 112Sn			
Trigger: MB+FA		Miniball Multiplicity: 8 + 5 down 4	
Shadow bar B locations	<input type="checkbox"/> <input type="checkbox"/>	A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	Your name:
	<input type="checkbox"/>	<input type="checkbox"/>	Jack
	<input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	
Live Time (%): 45%		Master Trigger Rate: 600	
Notes: Data Run, back to normal beam intensity.			

Run # 509	Date: 11-30	Start time: 4:55	Stop time: 5:35
Beam: 112Sn 50 MeV			
Target: 112Sn			
Trigger: MB+FA		Miniball Multiplicity: 8 + 5 down 4	
Shadow bar B locations	<input type="checkbox"/> <input type="checkbox"/>	A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	Your name:
	<input type="checkbox"/>	<input type="checkbox"/>	Jack
	<input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	
Live Time (%): 43%		Master Trigger Rate: 640	
Notes: Data Run.			

Run # 510	Date: 11-30	Start time: 5:35	Stop time: 6:16
Beam: 112Sn 50 MeV			
Target: 112Sn			
Trigger: MB+FA		Miniball Multiplicity: 8 + 5 down 4	
Shadow bar B locations	<input type="checkbox"/> <input type="checkbox"/>	A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	Your name:
	<input type="checkbox"/>	<input type="checkbox"/>	Jack
	<input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	
Live Time (%): 43%		Master Trigger Rate: 630	
Notes: Data Run.			

Run # 511	Date: 11-30	Start time: 6:16	Stop time: 6:54
Beam: 112 Sn 50 MeV			
Target: 112 Sn			
Trigger: MB+FA		Miniball Multiplicity: 8 + 5 down 4	
Shadow bar locations	B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	Your name: Jack
Live Time (%): 43%		Master Trigger Rate: 630	
Notes: Data Run			

Run # 512	Date: 11-30	Start time: 6:54	Stop time: 7:38
Beam: 112 Sn 50 MeV			
Target: 112 Sn			
Trigger: MB+FA		Miniball Multiplicity: 8-5 down 2	
Shadow bar locations	B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	Your name: Jack
Live Time (%): 43		Master Trigger Rate: 6:30	
Notes: Data Run.			

Run # 513	Date: 11-30	Start time: 7:38	Stop time: 8:19
Beam: 112 Sn 50 MeV			
Target: 112 Sn			
Trigger: MB+FA		Miniball Multiplicity: 8 + 5 down 4	
Shadow bar locations	B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	Your name: Jack
Live Time (%):		Master Trigger Rate:	
Notes: Data Run			

# ~~Shadow Bar Charge~~

Run # 514	Date: 11-30	Start time: 8:27	Stop time: 8:32
Beam: 112Sn 50 MeV			
Target: <del>Blank</del> Blank			
Trigger: MB+FA		Miniball Multiplicity: 8+5down4	
Shadow bar B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name: Jack	
Live Time (%):		Master Trigger Rate:	
Notes: Blank Run to check if beam is hitting anything. It was Not			

Run # 515	Date: 11-30	Start time: 8:36	Stop time: 9:20
Beam: 112Sn 50 MeV			
Target: <del>Blank</del> 112Sn			
Trigger: MB+FA		Miniball Multiplicity: 8+5down4	
Shadow bar B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name: Jack	
Live Time (%):		Master Trigger Rate:	
Notes: Normal Run			

Run # 516	Date: 11/30	Start time: 9:20p	Stop time: 10:04
Beam: 112Sn 50MeV			
Target: 112Sn			
Trigger: MB+FA		Miniball Multiplicity: 8+5down4	
Shadow bar B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name: Brennan	
Live Time (%): 45%		Master Trigger Rate: 1000	
Notes: normal run			

LASSA Si	0	1	2	3	4	5
bias voltage	66.1	65.0	85.0	50.0	59.9	55.1
leakage current	1.77	3.19	1.53	0.94	3.33	0.90

Run # 517	Date: 11/30	Start time: 10:04p	Stop time: 10:28
Beam: 112 Sn 50 MeV			
Target: 112 Sn			
Trigger: MB+FA		Miniball Multiplicity: 8+5down4	
Shadow bar B locations	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A locations	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
		Your name: Brenna	
Live Time (%): ~45		Master Trigger Rate: ~600	
Notes: normal data run → ended w/ error msg			

Run # 518	Date: 11/30	Start time: 10:23	Stop time: 11:08
Beam: 112 Sn 50 MeV			
Target: 112 Sn			
Trigger: MB+FA		Miniball Multiplicity: 8+5down4	
Shadow bar B locations	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A locations	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
		Your name: Brenna	
Live Time (%): ~45		Master Trigger Rate: ~600	
Notes: back to normal run			

Run # 519	Date: 11/30	Start time: 11:08	Stop time: 11:58
Beam: 112 Sn 50 MeV			
Target: 112 Sn			
Trigger: MB+FA		Miniball Multiplicity: 8+5down4	
Shadow bar B locations	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A locations	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
		Your name: Brenna	
Live Time (%): ~50		Master Trigger Rate: ~550	
Notes: normal run			

Run # 520	Date: 11/30-12/1	Start time: 11:58 p	Stop time:
Beam: 112 Sn 50 MeV			
Target: 112 Sn			
Trigger: MB+FA		Miniball Multiplicity: 8+5 down 4	
Shadow bar B locations <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
Your name: Brenna			
Live Time (%): ~50		Master Trigger Rate: ~550	
Notes: normal run			

Run # 521	Date: 12/01	Start time: 00:55	Stop time:
Beam: 112 Sn 50 MeV/u			
Target: 112 Sn			
Trigger: MB+FA		Miniball Multiplicity: 8+5 down 4	
Shadow bar B locations <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
Your name: GIUSEPPE VERDE			
Live Time (%): 48		Master Trigger Rate: 590	
Notes: Normal Run			

Run # 522	Date: 12/01	Start time: 2:12	Stop time:
Beam: 112 Sn @ 50 AMU			
Target: 112 Sn			
Trigger: MB+FA		Miniball Multiplicity: 8+5 down 4	
Shadow bar B locations <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
Your name: Zigniew			
Live Time (%): 48		Master Trigger Rate: 570	
Notes: NDR			



Run # 523	Date: 12/01	Start time: 3:28	Stop time:
Beam: $^{112}\text{Sn}$ @ 50 MeV			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 8 + 5 down 4	
Shadow bar B locations	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Your name: Dignines
Live Time (%): 50		Master Trigger Rate: 550	
Notes: NDR			

Run # 524	Date: 12/11	Start time: 4:17	Stop time:
Beam: $^{112}\text{Sn}$ 50 MeV			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 8 + 5 down 4	
Shadow bar B locations	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Your name: Rachel
Live Time (%): 51		Master Trigger Rate: 500	
Notes: Normal data run			

LASSA Si	0	1	2	3	4	5
bias voltage	66.1	65.0	85.0	50.0	59.9	55.1
leakage current	1.81	3.22	1.57	0.95	3.35	0.91

Run # 525	Date: 12/11	Start time: 5:02	Stop time:
Beam: $^{112}\text{Sn}$ 50 MeV			
Target: $^{112}\text{Sn}$			
Trigger: MB+FA		Miniball Multiplicity: 8 + 5 down 4	
Shadow bar B locations	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Your name: Rachel
Live Time (%): 48		Master Trigger Rate: 600	
Notes: Normal data run.			

Run # 526	Date: 12/11	Start time: 5:48	Stop time:
Beam: <sup>112</sup> Sn 50 MeV			
Target: <sup>112</sup> Sn			
Trigger: MB+FA		Miniball Multiplicity: 8 + 5 down 4	
Shadow bar locations B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name: Rachel	
Live Time (%): 50		Master Trigger Rate: 560	
Notes: Normal Data Run			

Run # 527	Date: 12/11	Start time: 6:35	Stop time:
Beam: <sup>112</sup> Sn 50 MeV			
Target: <sup>112</sup> Sn			
Trigger: MB+FA		Miniball Multiplicity: 8 + 5 down 4	
Shadow bar locations B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name: Rachel	
Live Time (%): 52		Master Trigger Rate: 540	
Notes: Normal Data Run			

Run # 528	Date: 12/11	Start time: 7:15	Stop time:
Beam: <sup>112</sup> Sn 50 MeV			
Target: <sup>112</sup> Sn			
Trigger: MB+FA		Miniball Multiplicity: 8 + 5 down 4	
Shadow bar locations B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name: Rachel	
Live Time (%): 52		Master Trigger Rate: 540	
Notes: Normal Data Run			

Run # 529	Date: 12/1	Start time: 8:15	Stop time:
Beam: 112 Sn 50 MeV/A			
Target: 112 Sn			
Trigger: MB + FA		Miniball Multiplicity: 8 + 5 down 4	
Shadow bar locations		Your name:	
B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
Live Time (%): 51 %		Master Trigger Rate: 550	
Notes: normal run shadow bar <del>was</del> is removed. NO shadowbar now.			

LASSA Si	0	1	2	3	4	5
bias voltage	66.1	65.0	85.0	50.0	59.9	55.1
leakage current	1.82	3.22	1.58	0.96	3.36	0.91

Run # 530	Date: 12/1	Start time: 9:00	Stop time:
Beam: 112 Sn 50 MeV/A			
Target: 112 Sn			
Trigger: MB + FA		Miniball Multiplicity: 8 + 5 down 4	
Shadow bar locations		Your name:	
B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
Live Time (%): 52 %		Master Trigger Rate: 530	
Notes: normal data run			

Run # 531	Date: 12/1	Start time: 9:44	Stop time:
Beam: 112 Sn 50 MeV/A			
Target: 112 Sn			
Trigger: MB + FA		Miniball Multiplicity: 8+5 down 4	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name: gilan	
Live Time (%): 51%		Master Trigger Rate: 530	
Notes: normal data run			

Run # 532	Date: 12/1	Start time: 10:29	Stop time:
Beam: 112 Sn 50 MeV/A			
Target: 112 Sn			
Trigger: MB + FA		Miniball Multiplicity: 8+5 down 4	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name: gilan	
Live Time (%): 51%		Master Trigger Rate: 520	
Notes: normal data run			

Run # 533	Date: 12/1	Start time: 11:15	Stop time:
Beam: 112 Sn , 50 MeV/A			
Target: 112 Sn			
Trigger: MB + FA		Miniball Multiplicity: 8+5 down 4	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name: gilan	
Live Time (%): 53%		Master Trigger Rate: 530	
Notes: normal data run			

Run # 534	Date: 12/1	Start time: 12:00	Stop time:
Beam: $^{112}\text{Sn}$ 50 MeV/A			
Target: $^{112}\text{Sn}$			
Trigger: MB + FA		Miniball Multiplicity: 8 + 5 down 4	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name: <i>Silvan</i>	
Live Time (%): 52%		Master Trigger Rate: 530	
Notes: normal data run			

Run # 535	Date: 12/1	Start time: 12:45	Stop time:
Beam: $^{112}\text{Sn}$ 50 MeV/A			
Target: $^{112}\text{Sn}$			
Trigger: MB + FA		Miniball Multiplicity: 8 + 5 down 4	
Shadow bar B <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> locations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Your name: <i>Silvan</i>	
Live Time (%): 46		Master Trigger Rate: 600	
Notes: normal data run			

LASSA Si	0	1	2	3	4	5
bias voltage	66.1	65.0	85.0	50.0	59.9	55.1
leakage current	1.84	3.24	1.60	0.97	3.39	0.92