

Run	Type	Energy [MeV]	Current [uA]	~T_C [C]	~Pressure [Psi]	Run Time [s]	# Events	Comment
1	COSMICS					~1860	19	
2	COSMICS					~1190	11	
3	?					?	?	File not found
4	COSMICS					~8930	45	
5	COSMICS			18.6	88	~1020	10	
6	COSMICS			18.8	88	~310	4	
7	COSMICS			19	90	~1310	14	Single events don't seem to go back to superheat, which is an extreme with our labview problem. Rebooting machine
8	COSMICS					~12970	112	background rate seems to have changed. Longer time between events noticed
9	COSMICS?					~180	3	
10	NEUTRON TEST (1/R^2 TEST)				88-90	~1770	80	2.8m from chamber
11						~1800	92	30mCi AmBe source, 72 inches from cell
12		No Run 12 ?		A 30mCi AmBe source was placed at 2.8, 1.8, and 0.9m from the chamber and about 80-90 events were collected for each setting. Rates were done by fitting to a decaying exponential. A 0.01 Hz rate was subtracted based on previous background runs. The source was close to the ground, so maybe a lot of reflections?				
13						~1210	85	
14	COSMICS					~6820	64	Gumby shutter out, and disabled
15	COSMICS					~3900	39	
16	COSMICS					~5580	40	
17	COSMICS					~1930	18	
18	COSMICS					~4760	59	
19	COSMICS					~4010	54	
20	BAD RUN							BAD RUN
21	COSMICS?					~4260	151	Run 21 looked to be cosmics in the logbook, but looks like it became sensitive to beam around 00:40 on plot (clock is in CT) which corresponds to beam on xray screen.

Run	Type	Energy [MeV]	Current [uA]	~T_C [C]	~Pressure [Psi]	Run Time [s]	# Events	Comment
22	TEST BEAM	5.25	0.10			~3490	261	
23	TEST BEAM	5.25	0.05			~3520	244	
24	TEST BEAM	5.25	0.10			~1430	93	We are doing a position scan. The horizontal correctors were adjusted to move the center of the beam 1 cm to the right.
25	TEST BEAM	5.25	0.10			~1450	100	
26	TEST BEAM	5.25	0.10			~1470	104	
27	TEST BEAM	5.25	0.10			~1010	101	
28	COSMICS			19	88	?	?	File not found
29	?					?	?	File not found
30	COSMICS					~800	15	
31	COSMICS					~3080	41	changed warm volume temp +1.5 deg (on chiller control)
32	COSMICS					~6080	62	
33	COSMICS			18	87	~6280	68	
34	COSMICS				86	~7440	65	
35	COSMICS					~1440	12	Restart Computer
36	COSMICS					~30	2	Bellow pos set to 3.5, rest on defaults
37	COSMICS			18		16136	289	Start of beam on target, run stopped as some gamma events may occur
38	INACTIVITY TEST	5.25	1.00	17.5		?	0?	Beam on rad, max bellow set to 3.5.
39	DATA COMM	5.25	1.00	18	90	~1340	124	
40	INACTIVITY TEST	5.25	1.00			?	0?	Max bellow pos set to 3.5 to leave shutter open for beam current check.
41	DATA COMM	5.25	1.00	18	90	~3720	345	Max Bellows pos set back to 5.5
42	DATA COMM	5.25	0.50	18	90	~4510	410	

Run	Type	Energy [MeV]	Current [uA]	~T_C [C]	~Pressure [Psi]	Run Time [s]	# Events	Comment
43	CURRENT SCAN	5.25	0.25			~4540	400	
44	BAD RUN	5.25	0.10			~540	13	BAD RUN
45	CURRENT SCAN	5.25	0.10			~3330	101	Left 5D Faraday Cup in - affected runs: 45,46,47 This affected bubble runs. The FC was the radiator
46		5.25	0.16			~3320	101	
47		5.25	0.25			~1040	44	
48		5.25	0.10			~4940	401	
49	?	?	?			?	?	BAD RUN? No file found
50	POS SCAN	5.25	0.10			~3560	105	'Right by 1cm'
51	POS SCAN	5.25	0.10			~2020	140	'Left by 5 mm' position scan
52	POS SCAN	5.25	0.10			~2530	108	'Down by 5mm'
53	POS SCAN	5.25	0.10	18	90	~730	56	'Up 5mm'
54	HIGH INT TEST	5.25	50.00			~900	0	Set maximum bellows position to a value well under actual position. Set hydraulic pressure superheat point to 1000
55	POS SCAN	5.25	0.10			~1060	82	\+ 5 mm vertical offset
56	COSMICS			18	86	~700	10	
57	DATA	5.05	2.00			~100	3	Energy is ready without the full energy measurement. Warned the energy spread may be considerably wider. FC WAS IN
58	DATA	5.05	2.00			~340	9	Slit is wider, beam not 100% tuned, but going to get rough initial rates
59	DATA	5.05	8.00			~1100	36	BAD RUN - beam now better focussed, discovered at event 30 that the active volume was not superheated, the Temp/pressure.vi was not running
60	DATA	5.05	8.00			~4660	191	
61	DATA	5.05	8.00			~4800	348	beam 1mm x 0.150microns approx, gumby shutter at 95 threshold
62	TEMP SCAN	5.05	8.00	17.5-16		~1150	8	Set Chiller from 14.5C to 7.5C
63	TEMP SCAN	5.05	8.00	16-17.5	88	~3480	132	Set Chiller from 7.5C to 14.5C

Run	Type	Energy [MeV]	Current [uA]	~T_C [C]	~Pressure [Psi]	Run Time [s]	# Events	Comment
64	DATA	5.05	8.00	17.8	89	~10160	479	
65	DATA	5.05	8.00	17.9	91	~3570	186	
66	DATA	5.05	8.00	18	90	~7200	396	
67	DATA	5.05	8.00	18	88	~7240	405	
68	DATA	5.05	8.00	18	90	~7170	396	
69	COSMICS			18	90	~1190	68	The Beam might still be on, rate far too high for cosmics
70	COSMICS					~3900	42	
71	COSMICS					~7210	72	Brad went down to adjust the temperature on RTC from 18 to 17.4-17.5, Start cosmics run 71 as temperature changes
72	DATA	5.05	12.00	17.5	89.00	~6560	300	Bellows ~4.7
73	DATA	5.05	12.00			~980	42	
74	COSMICS / TEMP					~1700	26	taking controlled access to raise temp slightly in Bubble chamber, raise chiller temp by 0.1, reduce superheat pressure by 2psi
75	DATA	5.05	12.00			~4600	290	12.6 on chiller now
76	DATA	5.25	0.50			~390	35	
77	DATA	5.25	0.10	17.4	88.6	4338	349	Going to lower current for lower rate
78	COSMICS					10900	126	
79	COSMICS			17	86	~8980	111	
80	DATA	4.85	50.00	17		6971	442	Beam diameter 1 mm
81	DATA	4.85	50.00			8943	597	
82	DATA	4.85	50.00	17	87	~2590	100	BEAM STOPPED, Laser not putting out power. NO FSD. Rate Dropped Significantly
83	DATA	4.85	50.00	17	87	~3560	185	Beam tripped several time during run
84	DATA	4.85	50.00	17	84	~7200	448	

Run	Type	Energy [MeV]	Current [uA]	~T_C [C]	~Pressure [Psi]	Run Time [s]	# Events	Comment
85	DATA	4.85	50.00			~3960	242	
86	COSMICS					~4260	57	Going to lower superheat pressure by 0.5-1 psi or so to improve early time efficiency
87	DATA	4.85	50.00			~6400	302	Pressure about 2psi lower - starting now at 85psi, BEAM DROP at some point during run
88	DATA	4.85	50.00			~890	60	
89	DATA	4.00	50.00			~1630	66	
90	COSMICS					~3060	42	
91	DATA	4.00	50.00			~4780	262	
92	COSMICS					7222	72	
93	COSMICS					~9530	105	
94	DATA	4.75	50.00	17	88	3562	268	
95	DATA	4.75	50.00			4351	323	
96	DATA	4.75	50.00			3542	264	
97	DATA	4.75	50.00			3587	262	
98	DATA	4.75	50.00			3562	263	
99	DATA	4.75	50.00			3578	262	
100	DATA	4.75	50.00			3563	260	
101	DATA	4.75	50.00			3577	263	
102	DATA	4.75	50.00			3579	263	
103	DATA	4.75	50.00			~2650	198	
104	DATA	4.75	20.00			~2290	146	
105	DATA	4.75	5.00			~4850	231	Stop run for access to insert poly

Run	Type	Energy [MeV]	Current [uA]	~T_C [C]	~Pressure [Psi]	Run Time [s]	# Events	Comment
106	POLY TEST	4.75	5.00			~5650	264	Start boreated poly test, Poly block was roughly 2"x2"x1"
107	DATA	4.75	1.00			~390	7	BAD RUN. Took access to remove the borated poly - was left under the radiator table. Temp and Pressure vi was not running
108	DATA	4.75	1.00			7472	205	
109	COSMICS			17.5	85	12458	124	Changing Beam to T=5.15 MeV @ 0.1 uA
110	COSMICS			17.5	85	6868	59	
111	COSMICS			17.5	85	5522	56	
112	DATA	5.15	0.10	17.5	85	6331	90	T=5.15MeV setup complete. Current disparity between BCM ~60uA but Picoam ~0.1uA <-trusted
113	DATA	5.15	0.10	17.5	85	7212	90	
114	DATA	5.15	2.00	17.5	85	3264	120	
115	DATA	5.15	2.00	17.5	85	3673	137	
116	DATA	5.15	2.00	17.5	85	3456	128	
117	DATA	5.15	3.00	17.5	85	2374	112	Current raised to 3uA to study rate dependance
118	DATA	5.15	2.00	17.5	85	~3070	114	with altered beam orbit in progress at 2 uA to study rate dependence at the end of shift
119	TEST BEAM	5.15	2.00			~3690	241	Put in the xray viewer and worked with Mike and Joe to get steered onto center. Looked like it was beam right 3-4mm and the vertical size was 1.4mm. Centered visually and rounded out beam.
120	TEST BEAM	5.25	1.00	17.3	88	1768	158	xray viewer in
121	TEST BEAM	5.05	1.00	17	85	293	121	TEST RUN TO CHECK RATES, xray viewer in
122	DATA	5.15	2.00	17	85	7202	317	xray viewer removed and collimator put back in.
123	DATA	5.15	2.00	17	85	7218	332	
124	DATA	4.95	10.00	17	86	5707	328	
125	DATA	4.95	10.00	17	85	7158	438	
126	DATA	4.95	10.00	17	83	3522	213	

