

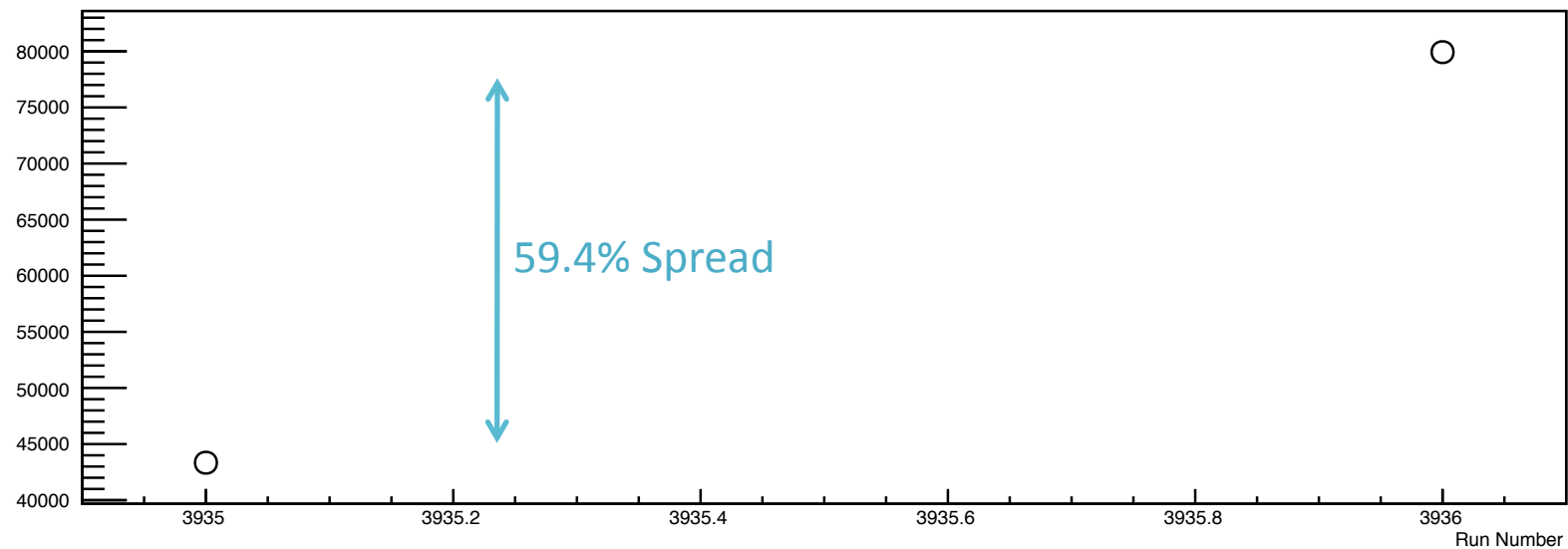
Problem Settings for 2.2 GeV, 2.5T, Transverse

M. Cummings

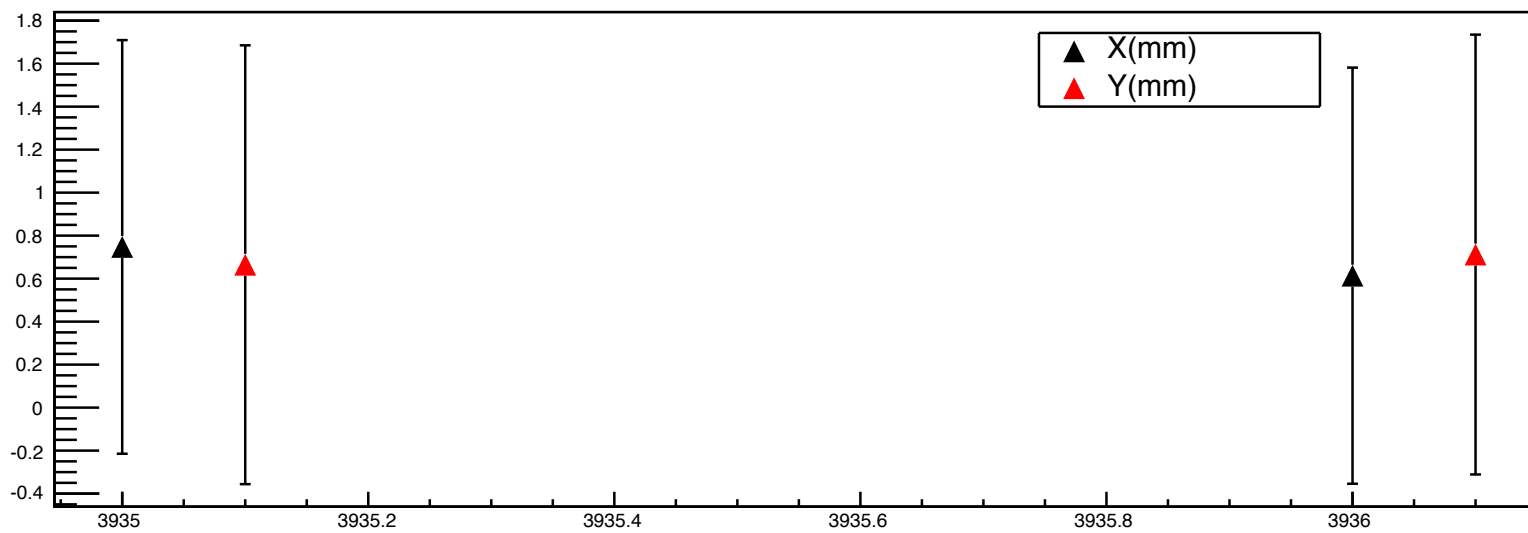
11/19/14

Setting 1 – E = 2.2 GeV, Target Field = 2.5T, Transverse												
LHRS							RHRS					
p0	mat #	max	min	Spread (%)	# Runs		p0	mat #	max	min	Spread (%)	# Runs
541	7	79927.8	43339.8	59.4	2		541	7	35208.1	34903.9	0.868	2
582	7	49506.7	49407.1	0.201	4		582	7	40770.2	3996.5	1.92	3
626	7	57067.4	56795.9	0.477	3		626	7	45461.6	45336.4	0.276	2
673	7	65571.1	65334.3	0.362	4		673	7	51773.1	51642.8	0.252	3
724	7	74847.8	73378.8	1.98	4		724	7	61050.6	58345.9	4.53	4
778	8	83478.8	83066.9	0.494	4		778	8	65989.2	65367.6	0.946	4
837	8	92767.6	92573.4	0.21	5		837	8	72304.7	71964.5	0.472	3
900	8	101871	101215	0.646	4		900	8	78259.1	64507.6	19.26	4
968	8	111134	109454	1.52	3		968	8	83762	83732.6	0.035	2
1003	8	110324	102146	7.7	8							
1041	8	116586	115476	0.957	4		1041	8	88697.6	87498.5	1.36	3
1078	8	109887	108752	1.04	3		1078	8	91576.7	86827.3	5.32	10
1119	7	119206			1		1119	7	91649.4	89340.8	2.55	2
	8	123193	122666	0.429	2			8	93252.1	92859	0.422	2
1159	7	123035	121573	1.2	9		1159	7	105482	103308	2.08	9
1203	7	129006	126646	1.85	7		1203	7	102761	101891	0.85	6
1247	7	136430	129456	5.25	14		1247	7	111518	99355.6	11.54	13
1294	7	137413	136123	0.943	7		1294	7	109530	108928	0.55	4
1340	7	141584	138866	1.94	9		1340	7	116387	113394	2.61	10
1391	7	149121	147195	1.3	6		1391	7	120264	118772	1.25	5
1441	7	154797	146999	5.17	9		1441	7	128997	125401	2.83	8
1496	7	162066	161156	0.563	5		1496	7	135539	139248	3.24	9
1550	7	166257	161155	3.12	7		1550	7	142353	129683	9.31	8
	8	158112	157768	0.218	3			8	135030	133572	1.09	4
1608	8	188107	183608	2.42	10		1608	8	158610	148892	6.32	10
1667	7	193106	187403	3	8		1667	7	157562	153434	2.65	7
1729	8	224041	222290	0.785	7		1729	8	349755	184921	61.66	7
1792	7	290037	244691	17	16		1792	7	250736	218171	13.89	13
	8	283394	282078	0.465	5			8	232979	227649	2.31	5
1859	8	324952			1		1859	8	297103	245327	19.06	4
1927	7	403822	386582	4.36	10		1927	7	329099	312109	5.3	11
	8	348906	346902	0.576	15			8	354842	348426	1.82	14
1940	7	396999	392507	1.14	12		1940	7	325362	322345	0.932	7
2072	7	503901	447464	11.86	14		2072	7	447011	416745	7.01	14
	8	471151	435160	7.94	12			8	510611	424103	18.51	11
2228	7	2022000	1995950	1.3	10		2228	8	1646690	1582250	3.99	4

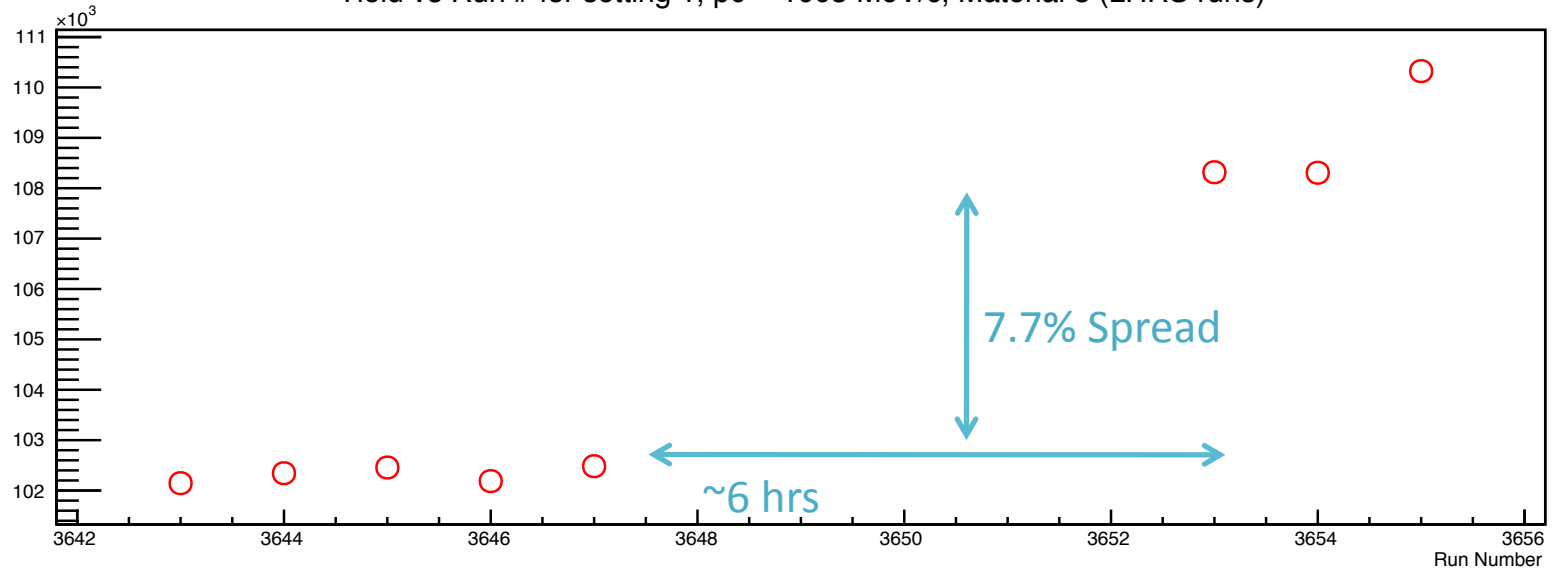
Yield vs Run # for setting 1, $p_0 = 541$ MeV/c, Material 7 (LHRS runs)



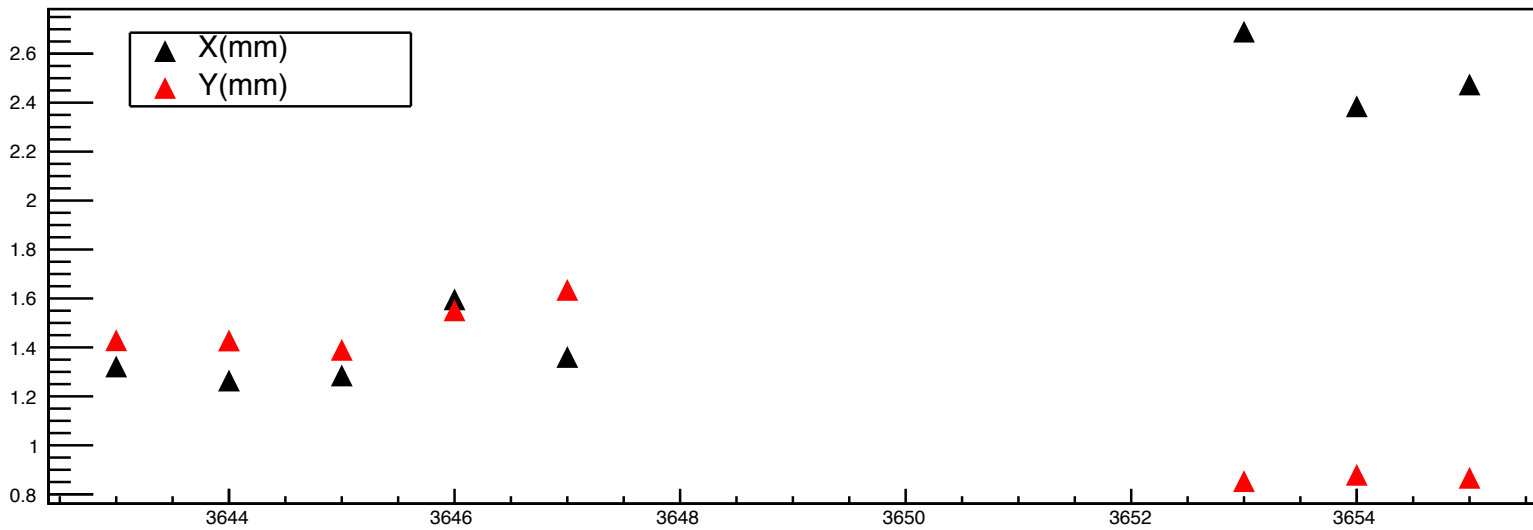
Beam Position vs Run # for setting 1, $p_0 = 541$ MeV/c, Material 7



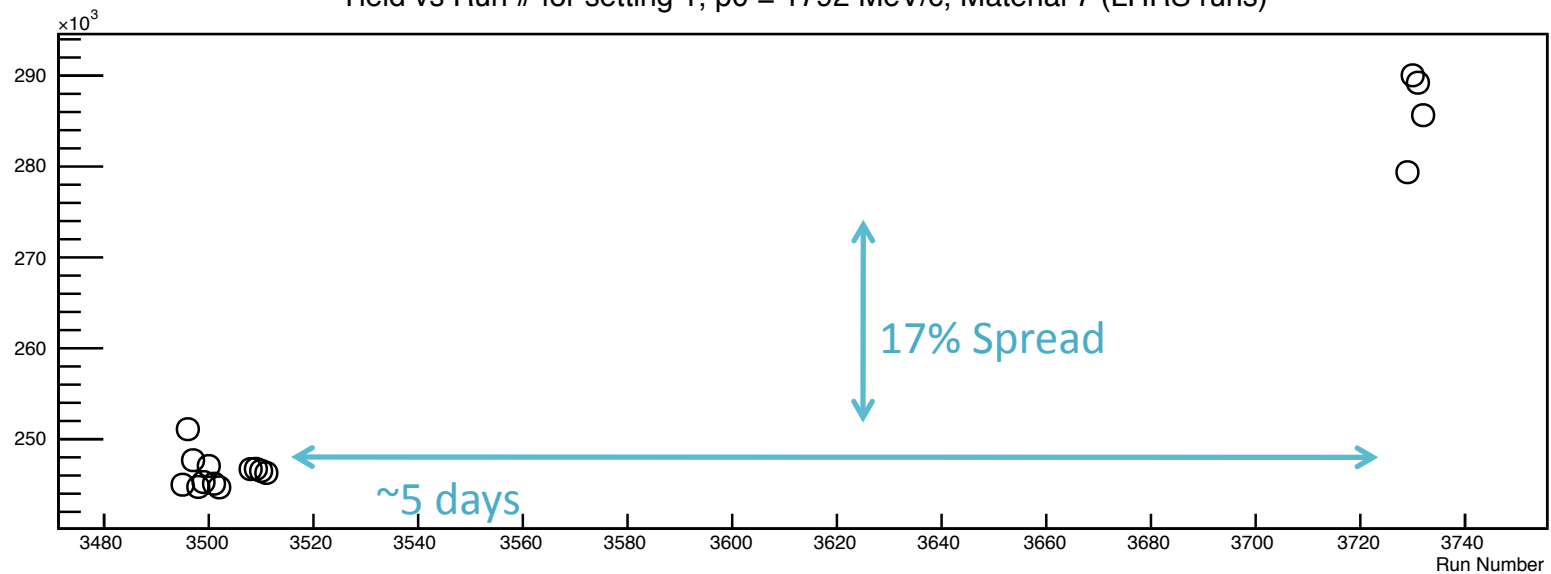
Yield vs Run # for setting 1, $p_0 = 1003$ MeV/c, Material 8 (LHRS runs)



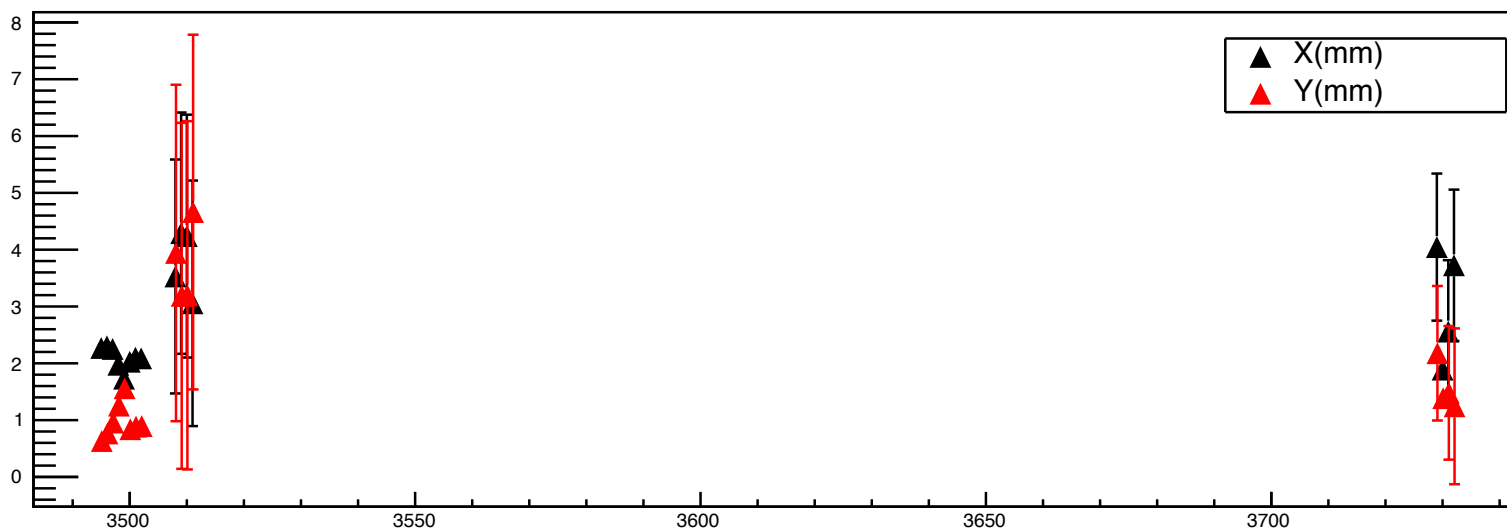
Beam Position vs Run # for setting 1, $p_0 = 1003$ MeV/c, Material 8



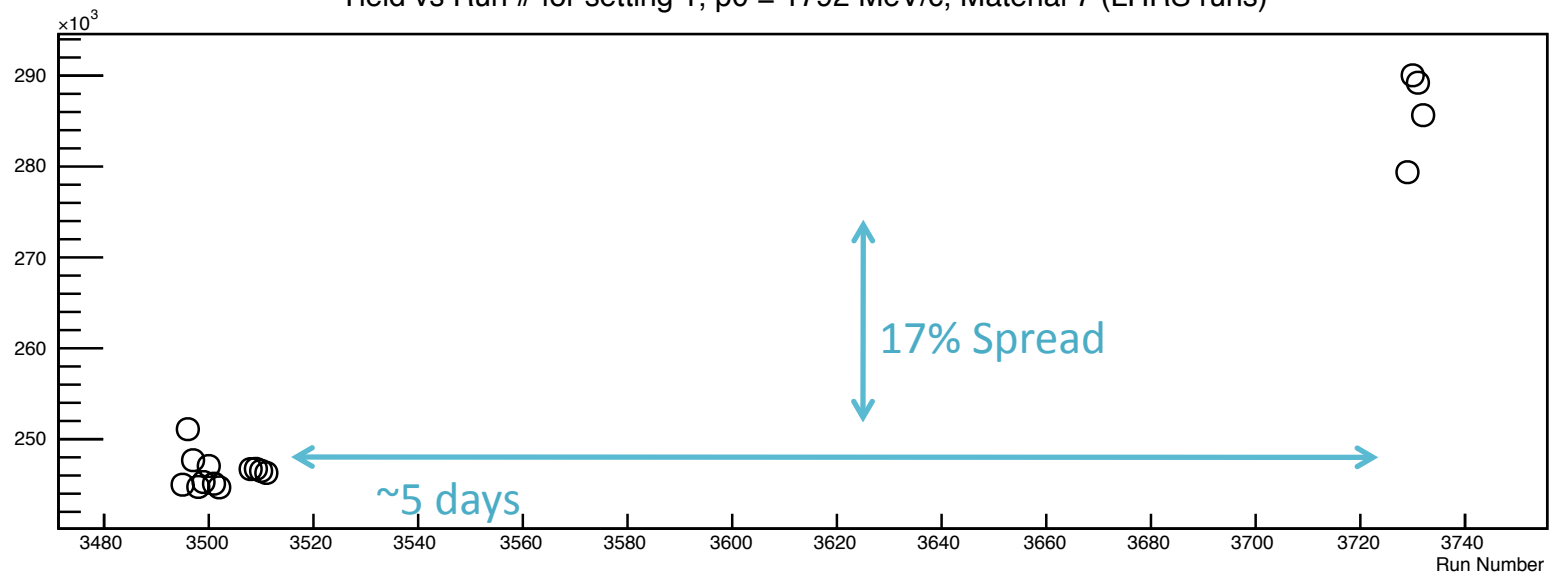
Yield vs Run # for setting 1, $p_0 = 1792$ MeV/c, Material 7 (LHRS runs)



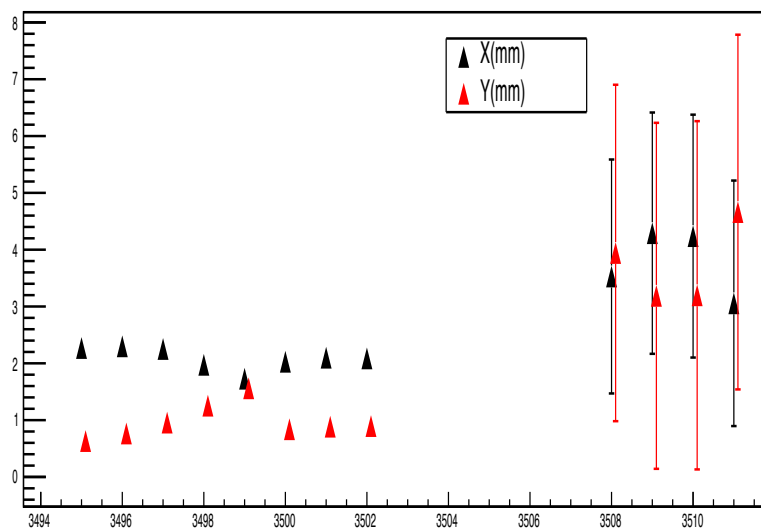
Beam Position vs Run # for setting 1, $p_0 = 1792$ MeV/c, Material 7



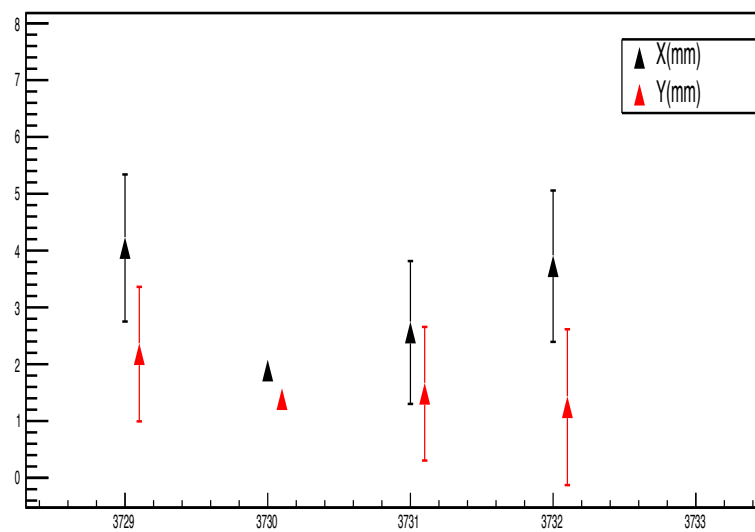
Yield vs Run # for setting 1, $p_0 = 1792$ MeV/c, Material 7 (LHRS runs)



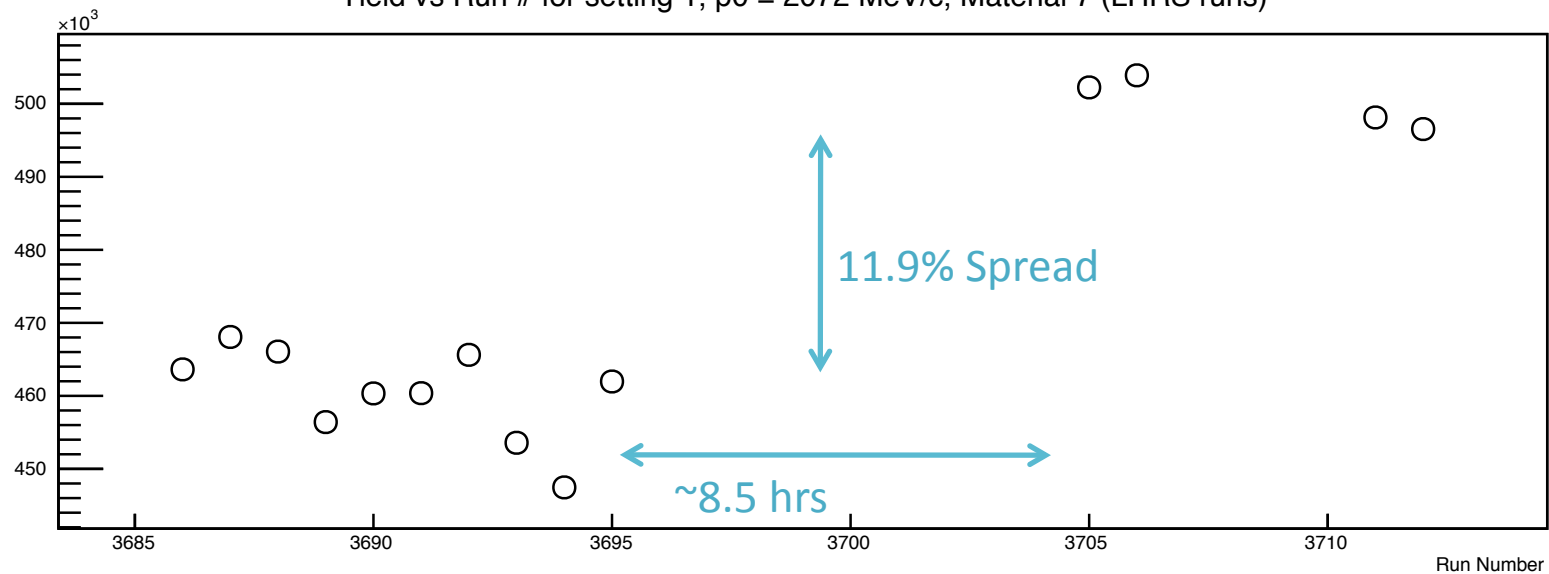
Beam Position vs Run # for setting 1, $p_0 = 1792$ MeV/c, Material 7



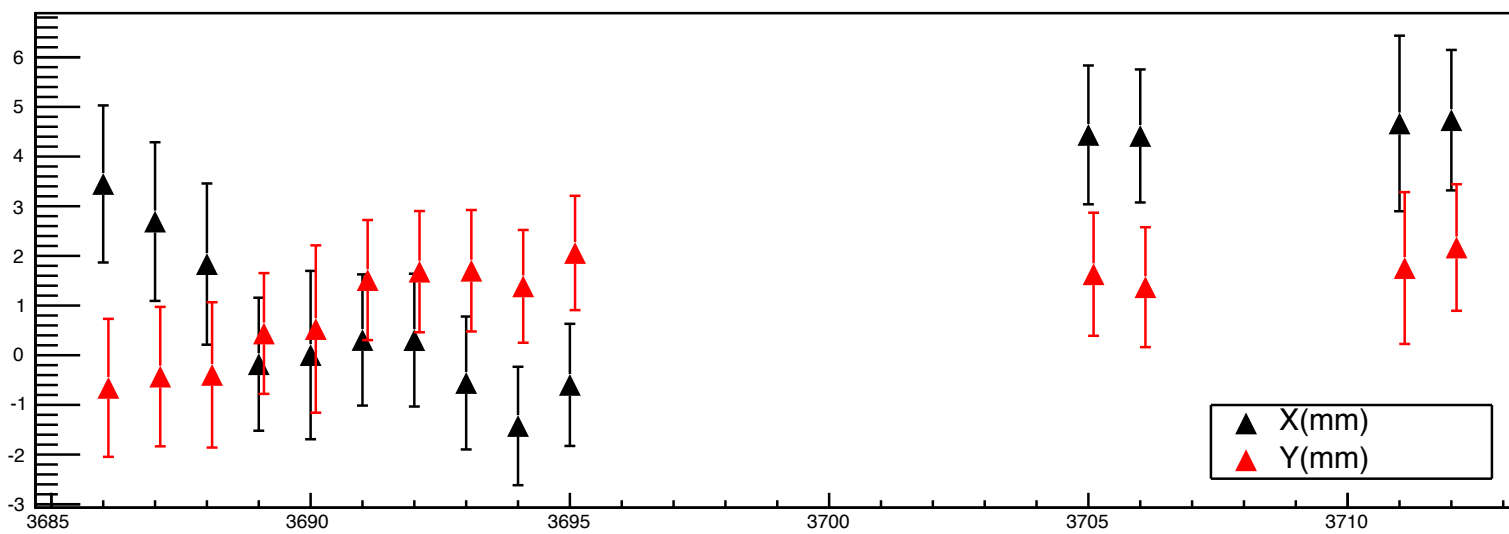
Beam Position vs Run # for setting 1, $p_0 = 1792$ MeV/c, Material 7



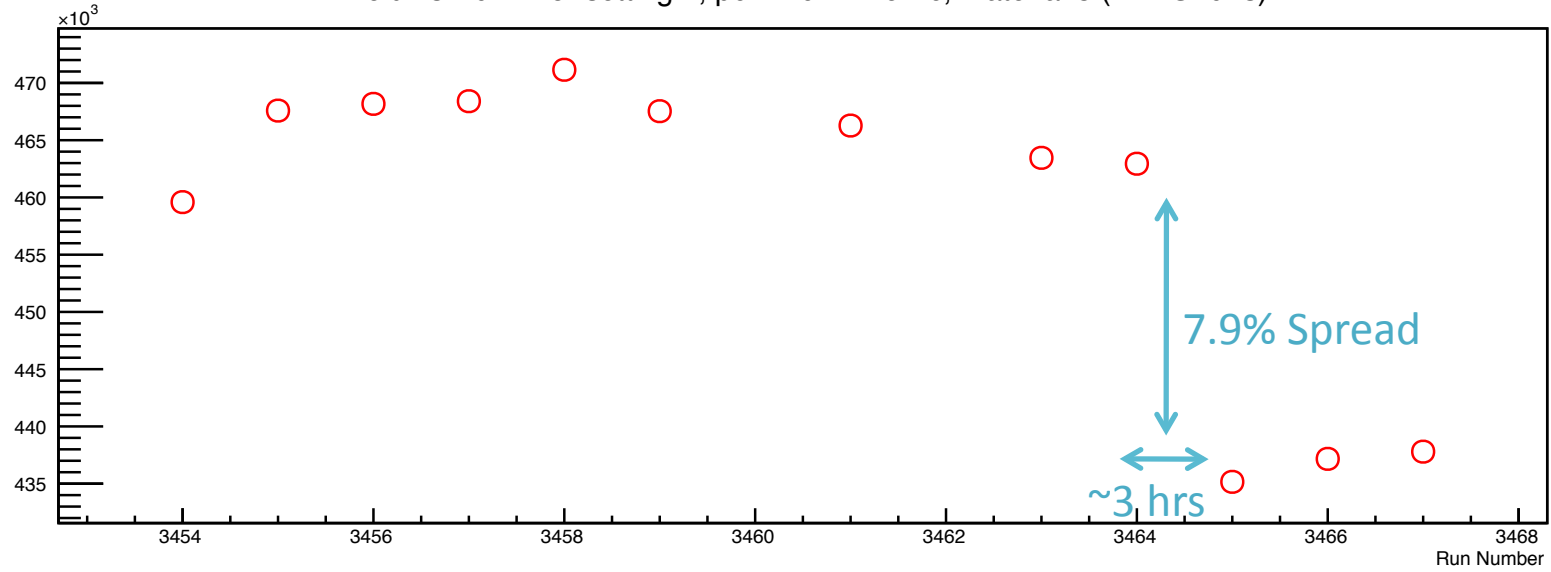
Yield vs Run # for setting 1, $p_0 = 2072$ MeV/c, Material 7 (LHRS runs)



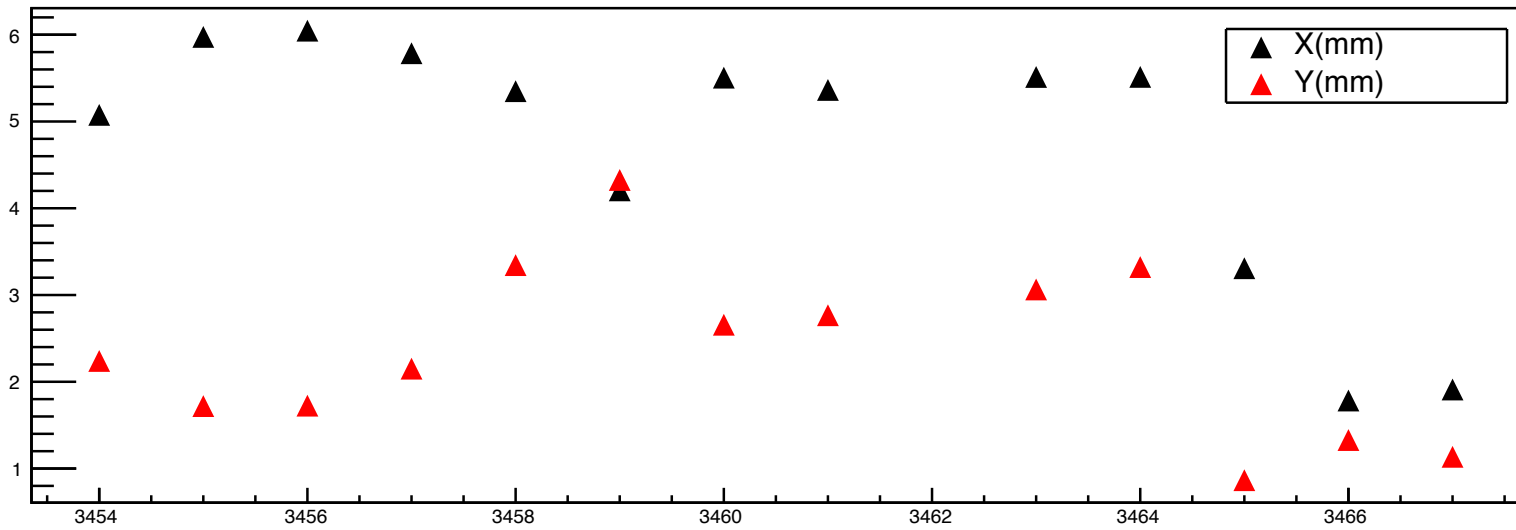
Beam Position vs Run # for setting 1, $p_0 = 2072$ MeV/c, Material 7



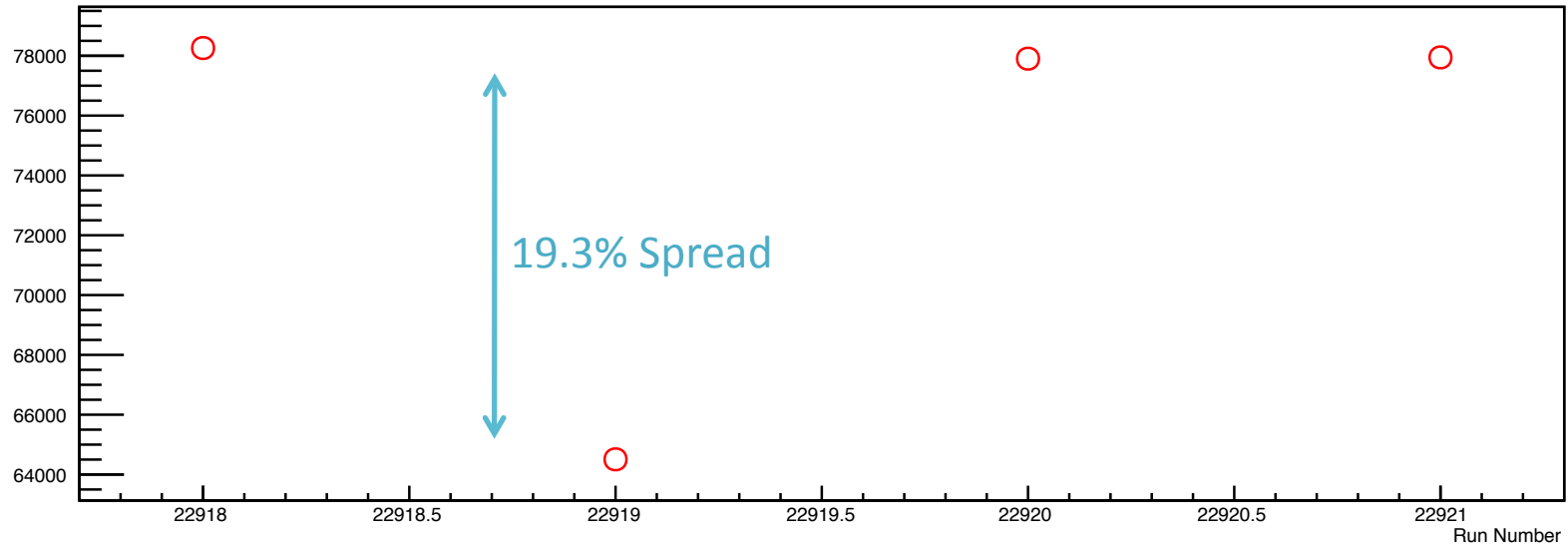
Yield vs Run # for setting 1, $p_0 = 2072$ MeV/c, Material 8 (LHRS runs)



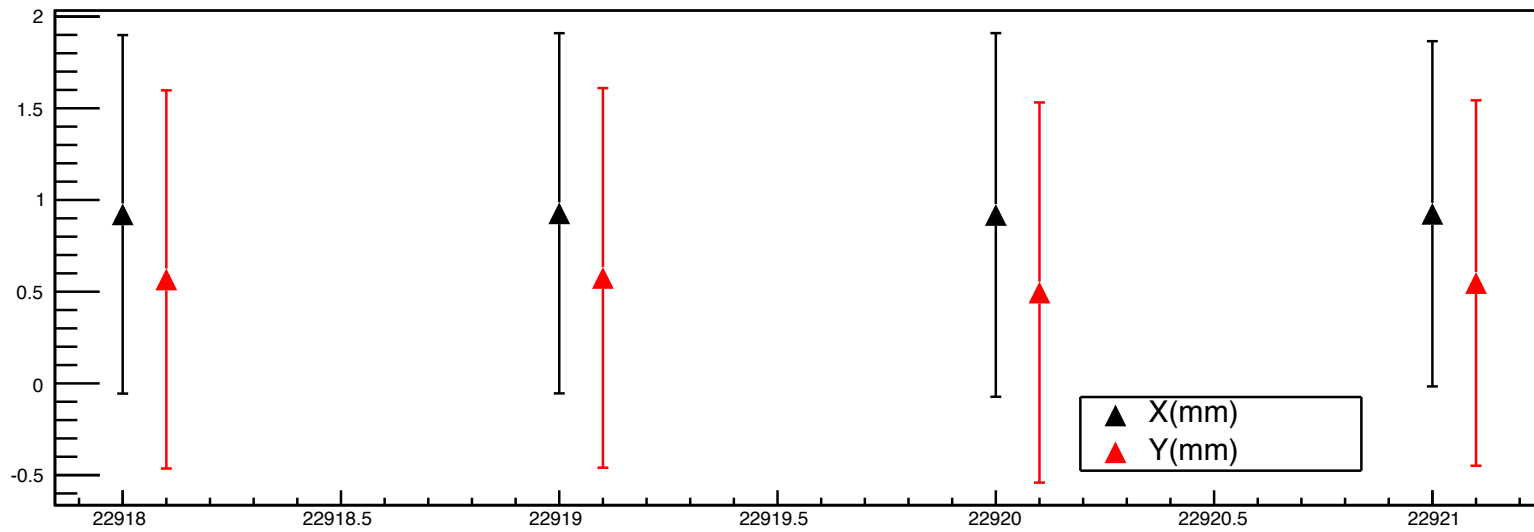
Beam Position vs Run # for setting 1, $p_0 = 2072$ MeV/c, Material 8



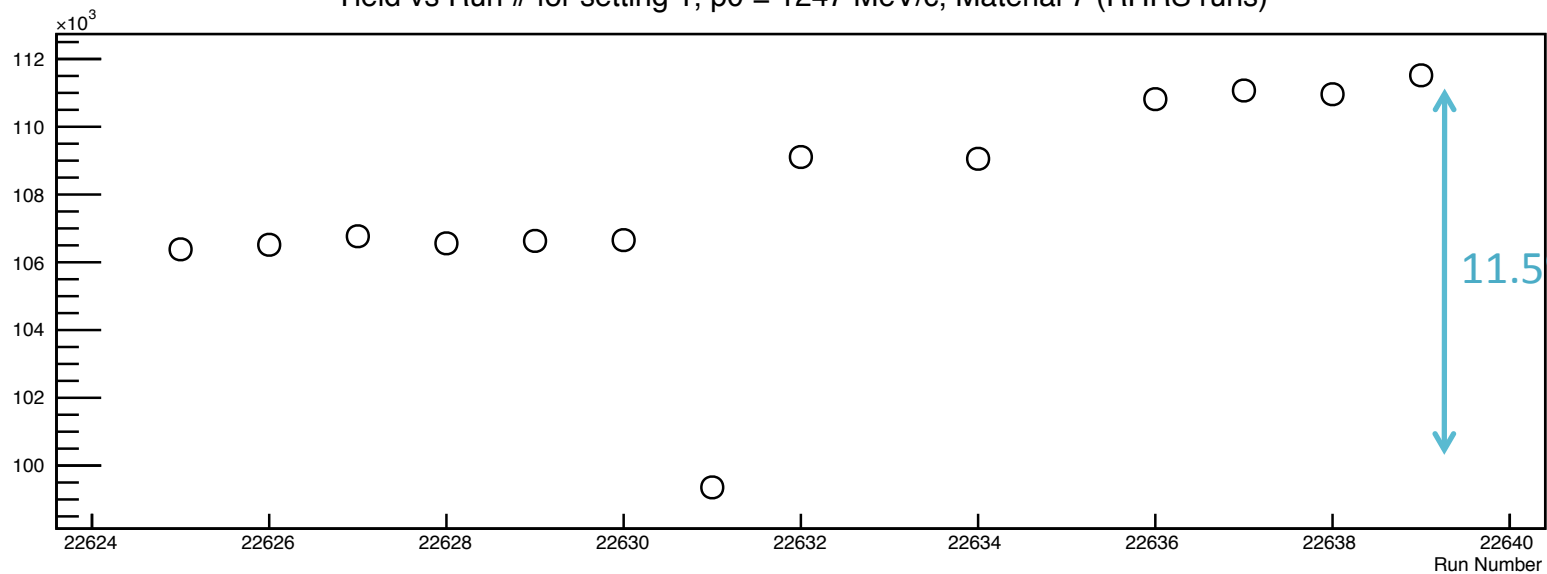
Yield vs Run # for setting 1, $p_0 = 900$ MeV/c, Material 8 (RHRS runs)



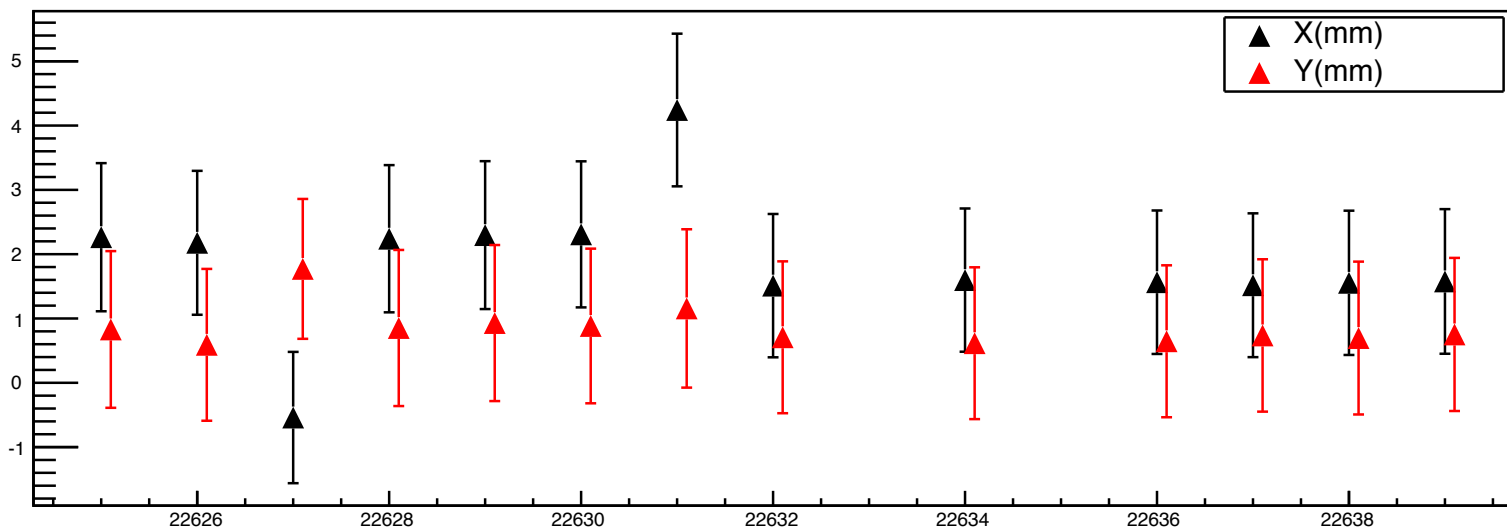
Beam Position vs Run # for setting 1, $p_0 = 900$ MeV/c, Material 8



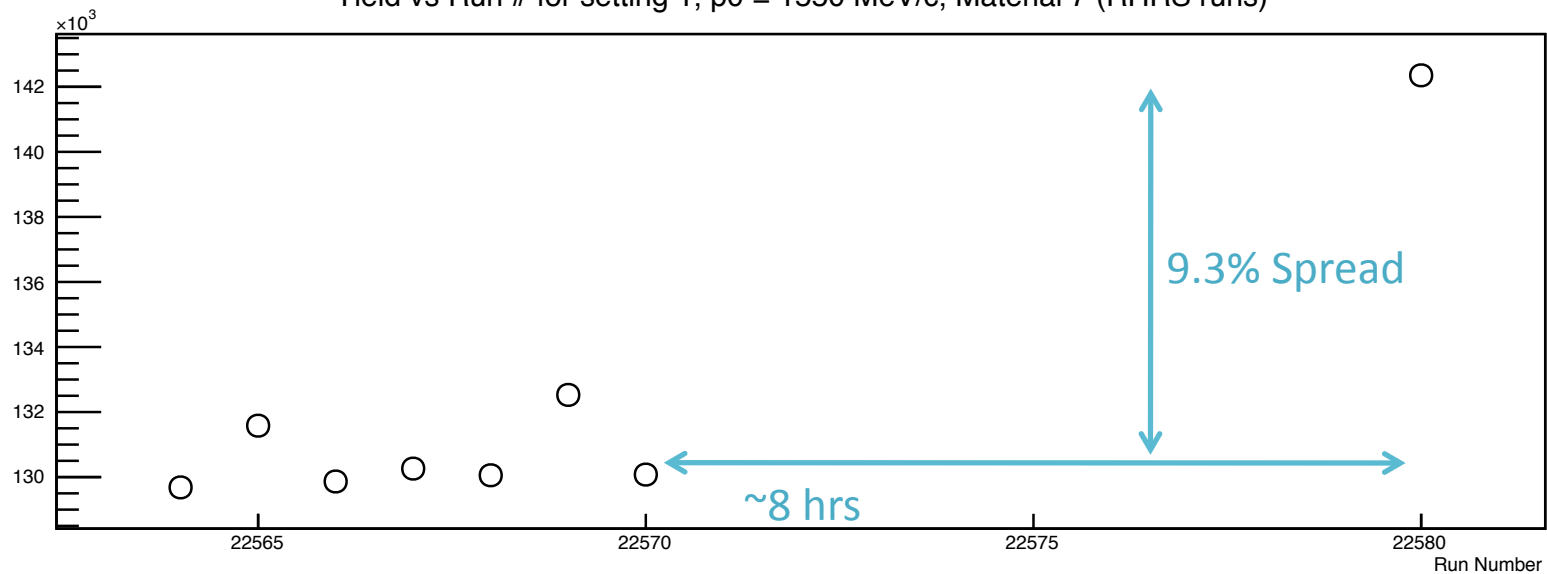
Yield vs Run # for setting 1, $p_0 = 1247$ MeV/c, Material 7 (RHRS runs)



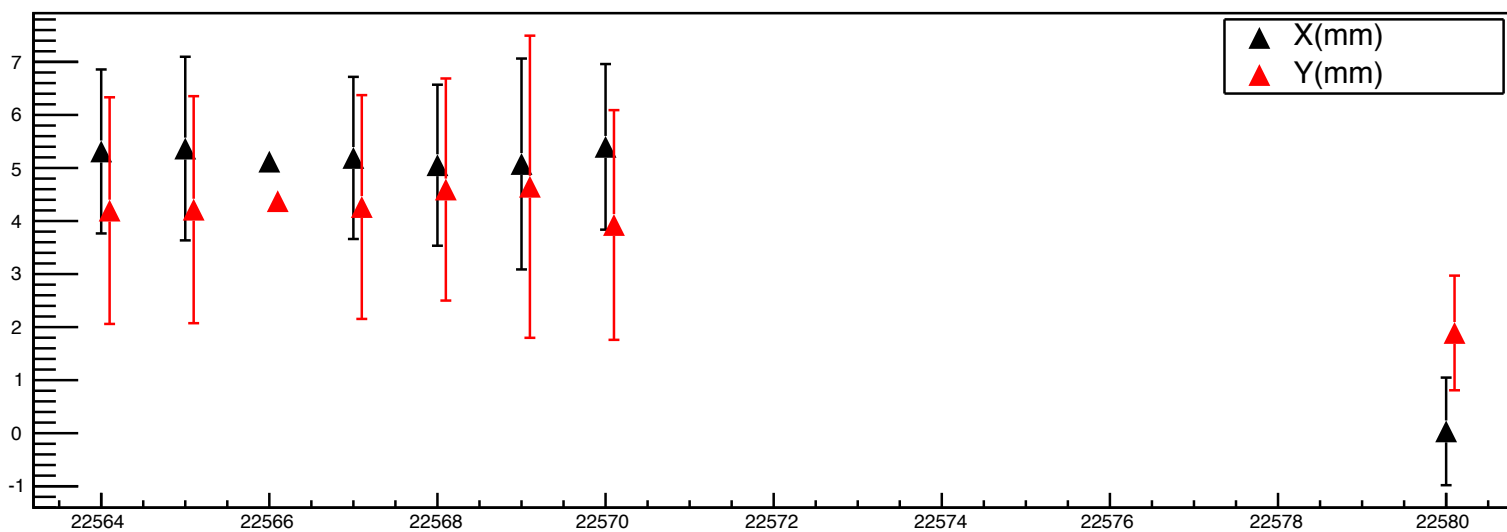
Beam Position vs Run # for setting 1, $p_0 = 1247$ MeV/c, Material 7



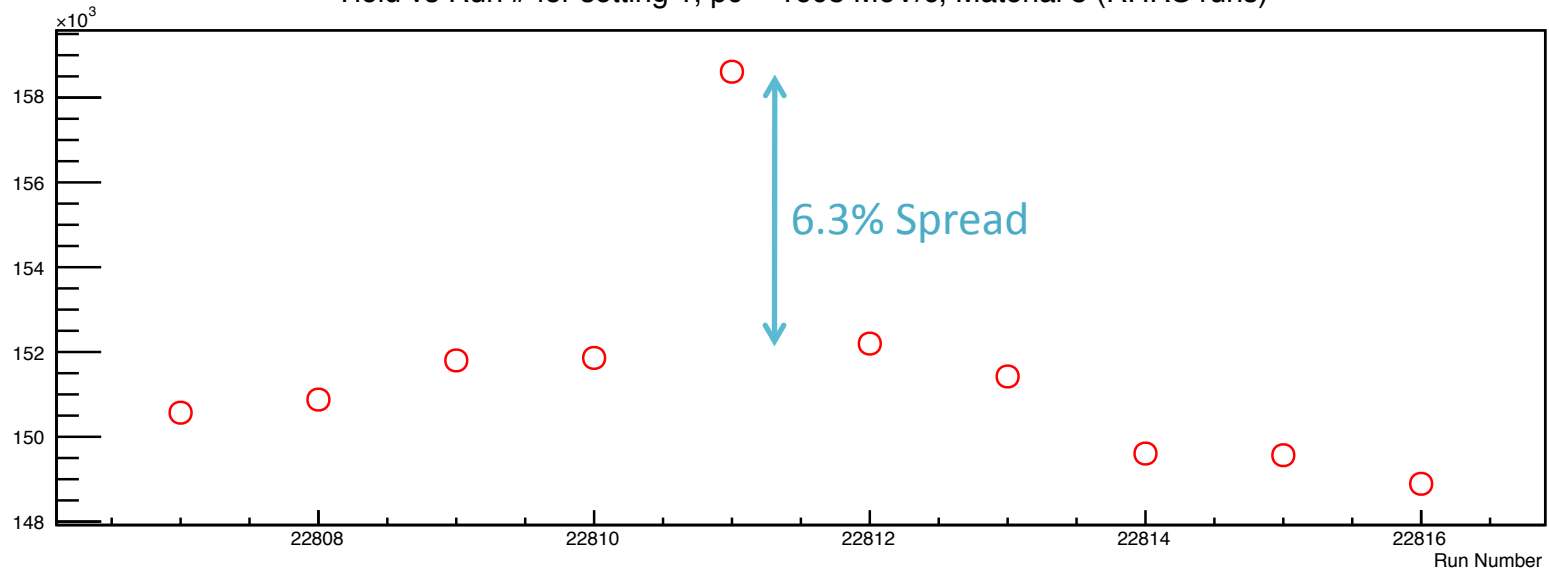
Yield vs Run # for setting 1, $p_0 = 1550$ MeV/c, Material 7 (RHRS runs)



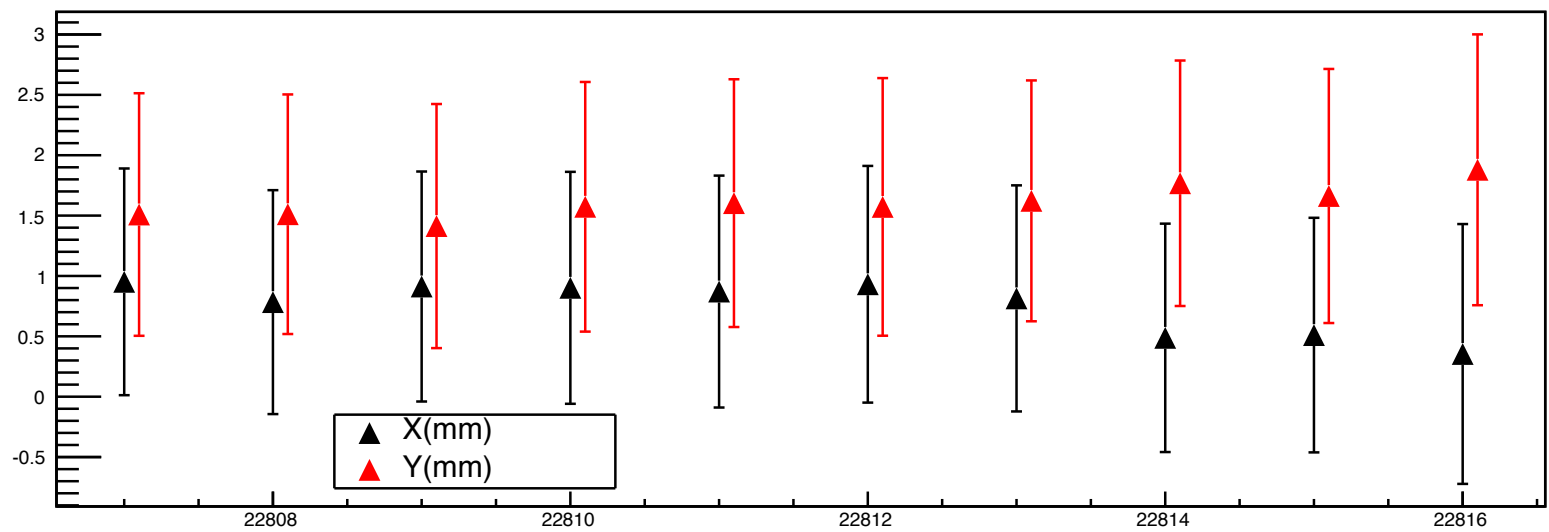
Beam Position vs Run # for setting 1, $p_0 = 1550$ MeV/c, Material 7



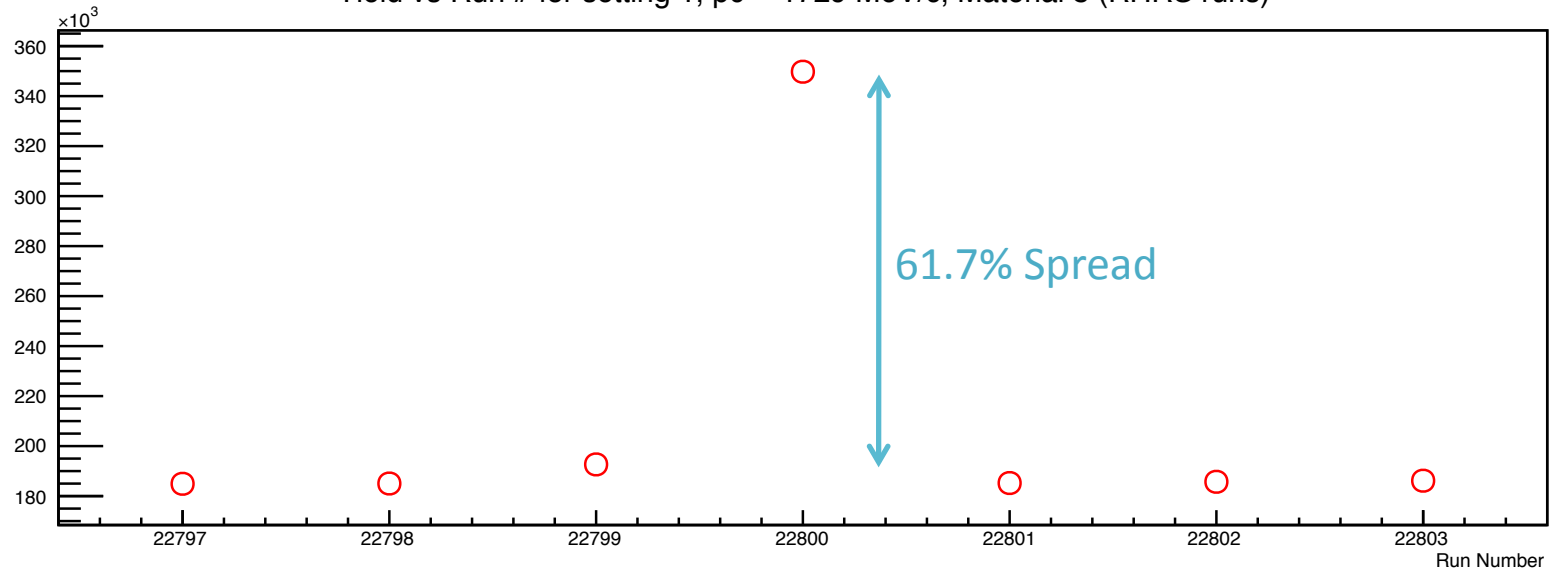
Yield vs Run # for setting 1, $p_0 = 1608$ MeV/c, Material 8 (RHRS runs)



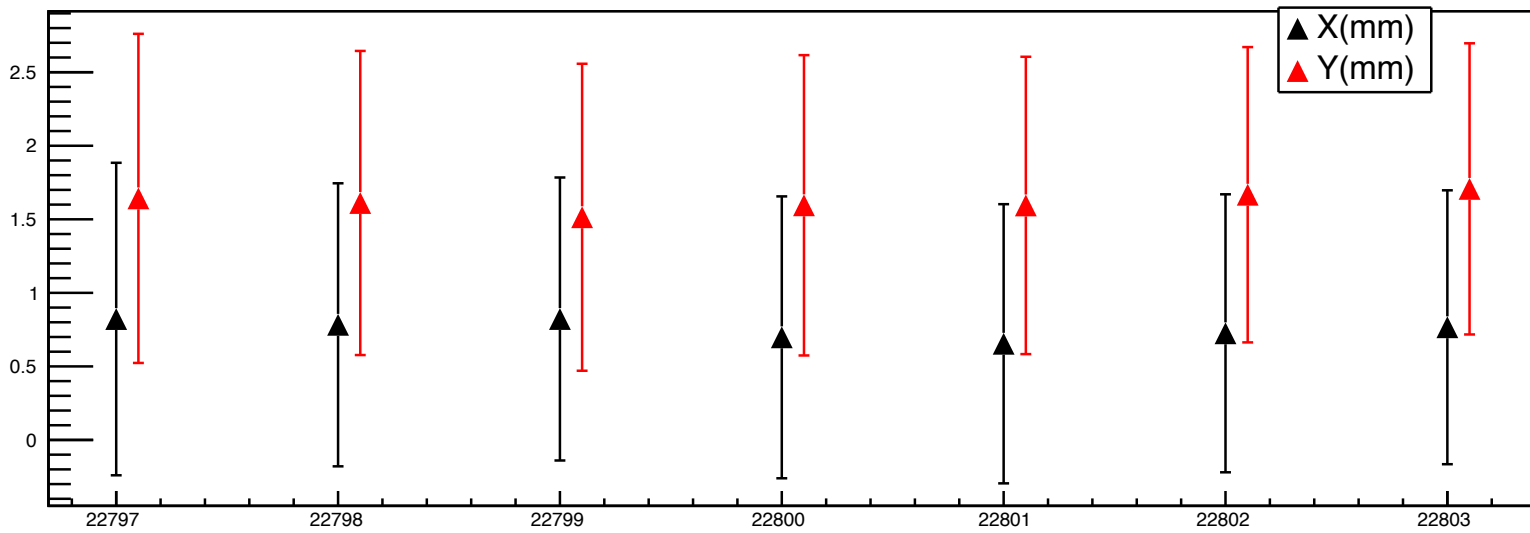
Beam Position vs Run # for setting 1, $p_0 = 1608$ MeV/c, Material 8



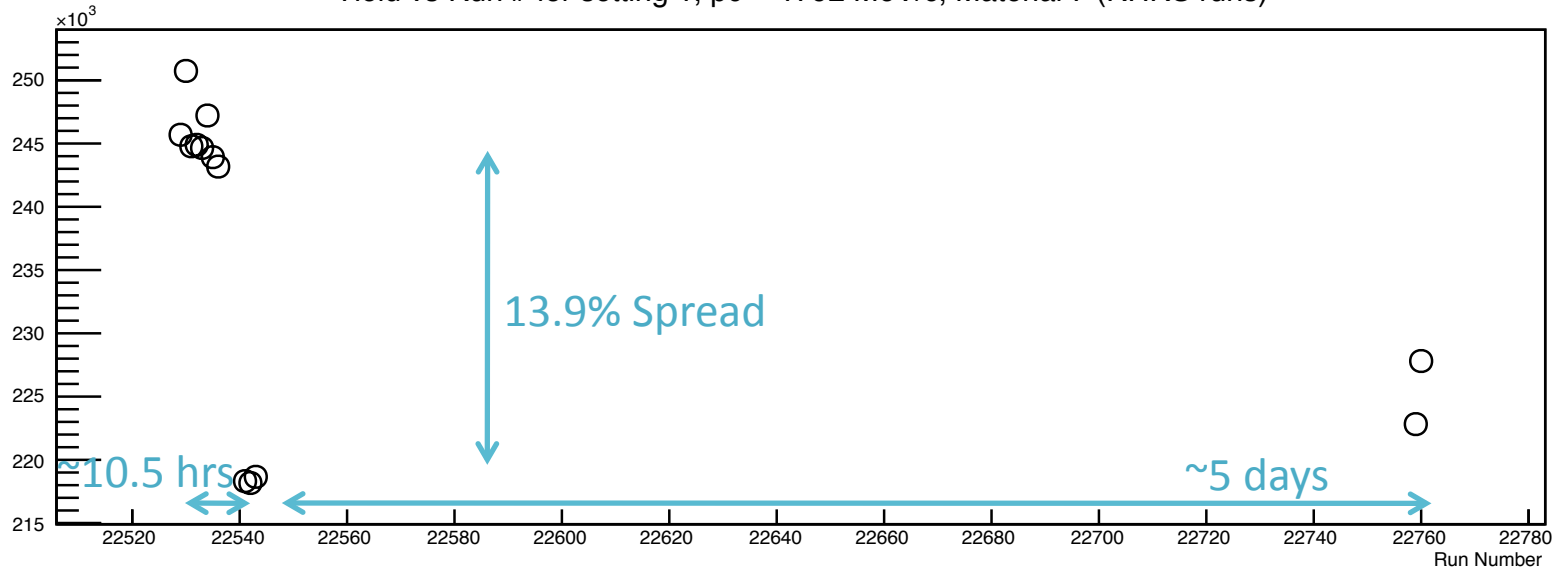
Yield vs Run # for setting 1, $p_0 = 1729$ MeV/c, Material 8 (RHRS runs)



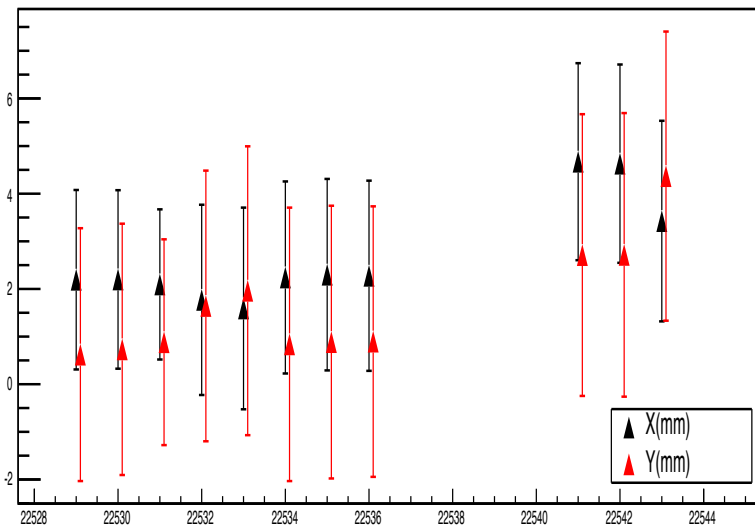
Beam Position vs Run # for setting 1, $p_0 = 1729$ MeV/c, Material 8



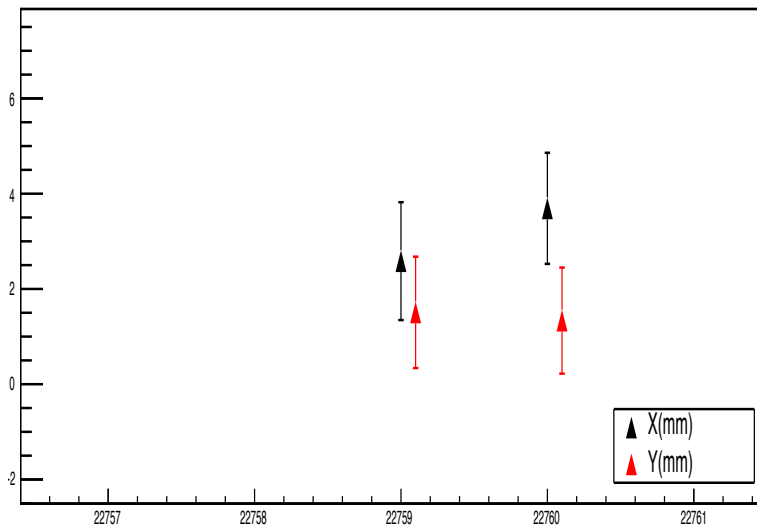
Yield vs Run # for setting 1, $p_0 = 1792$ MeV/c, Material 7 (RHRS runs)



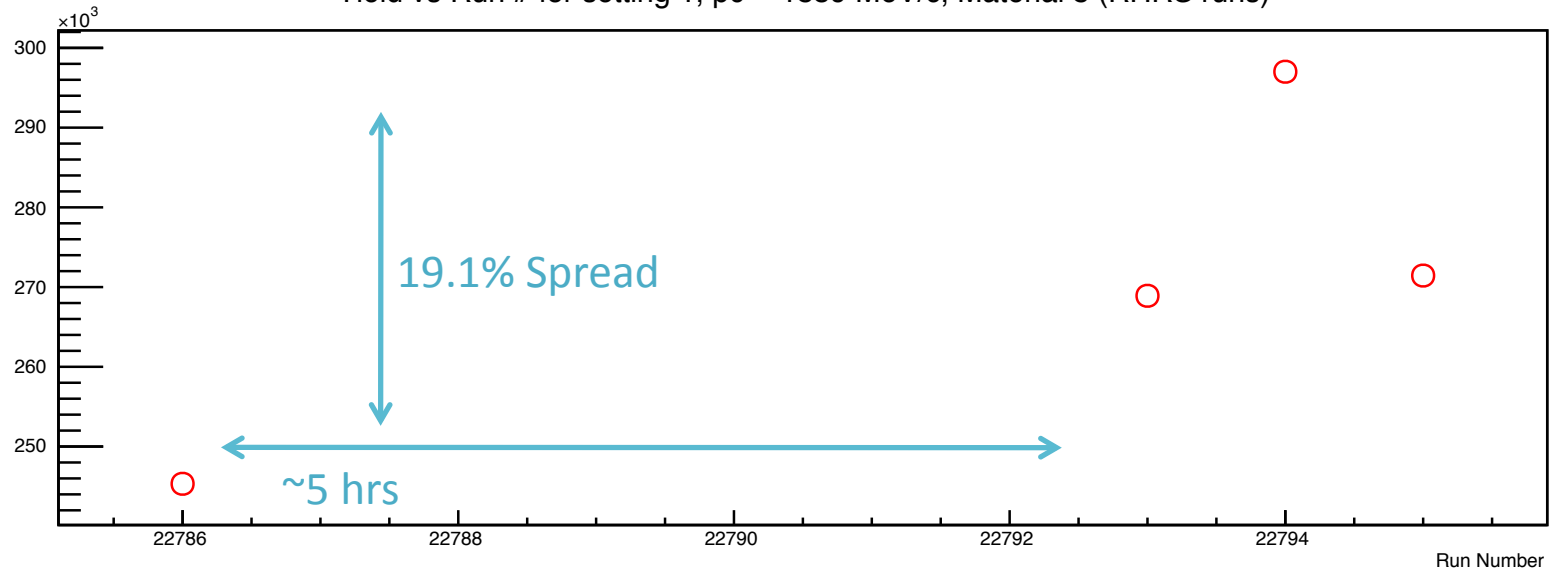
Beam Position vs Run # for setting 1, $p_0 = 1792$ MeV/c, Material 7



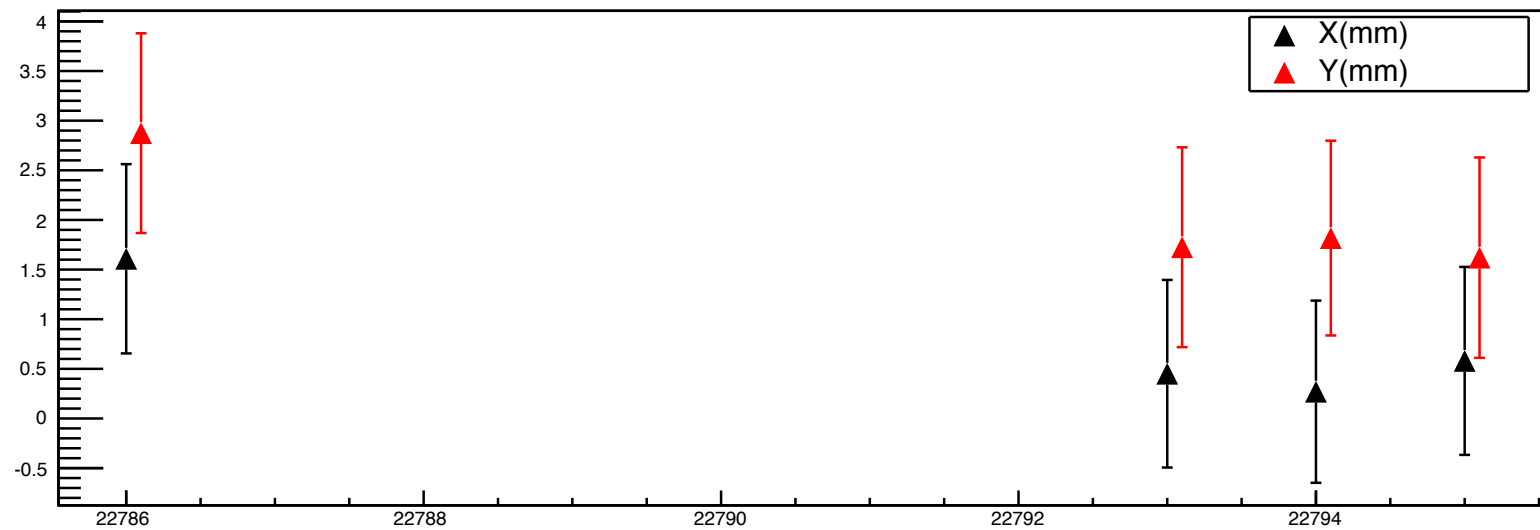
Beam Position vs Run # for setting 1, $p_0 = 1792$ MeV/c, Material 7



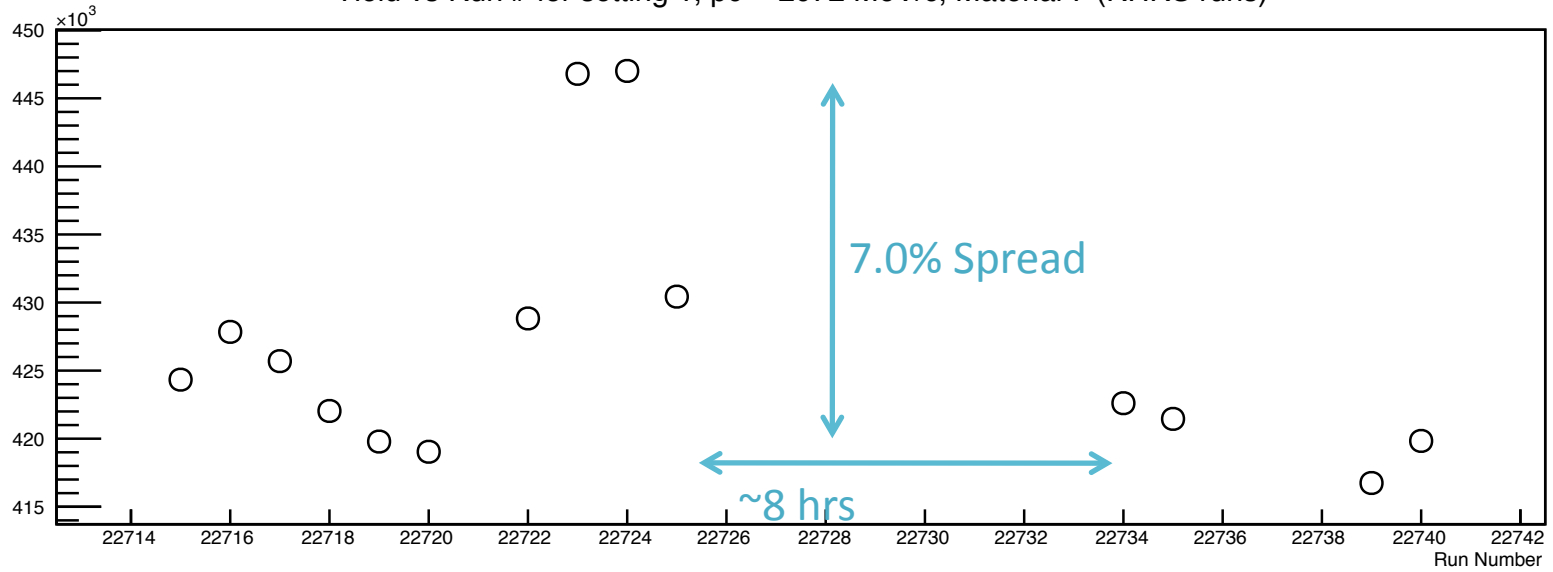
Yield vs Run # for setting 1, $p_0 = 1859$ MeV/c, Material 8 (RHRS runs)



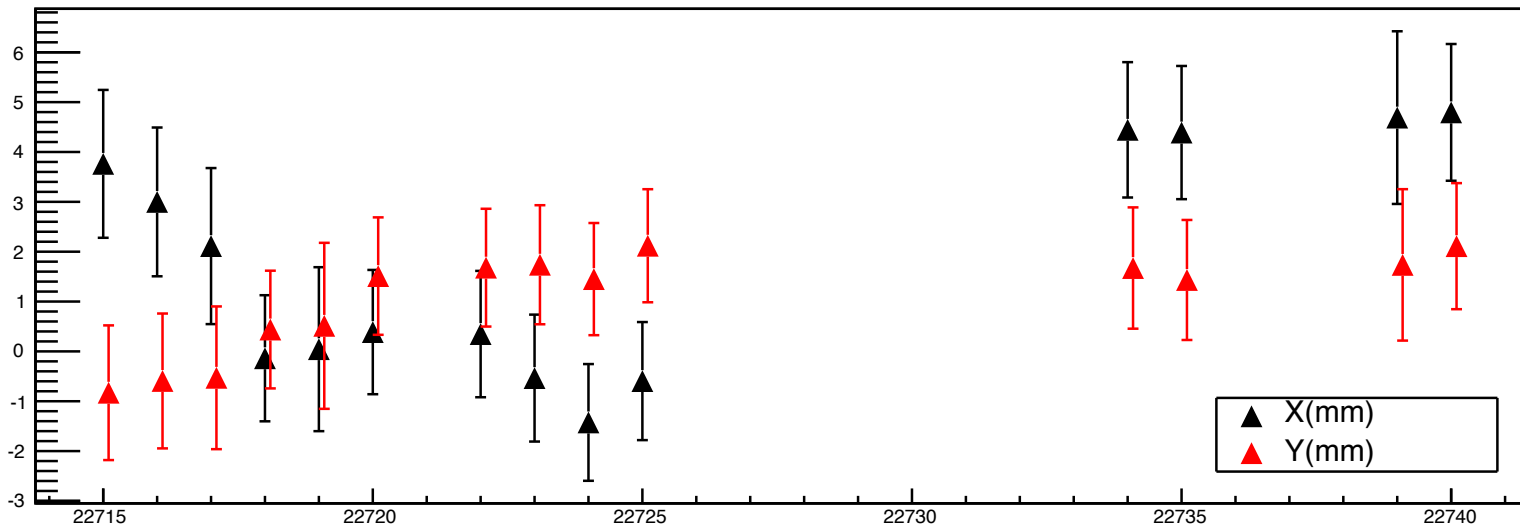
Beam Position vs Run # for setting 1, $p_0 = 1859$ MeV/c, Material 8



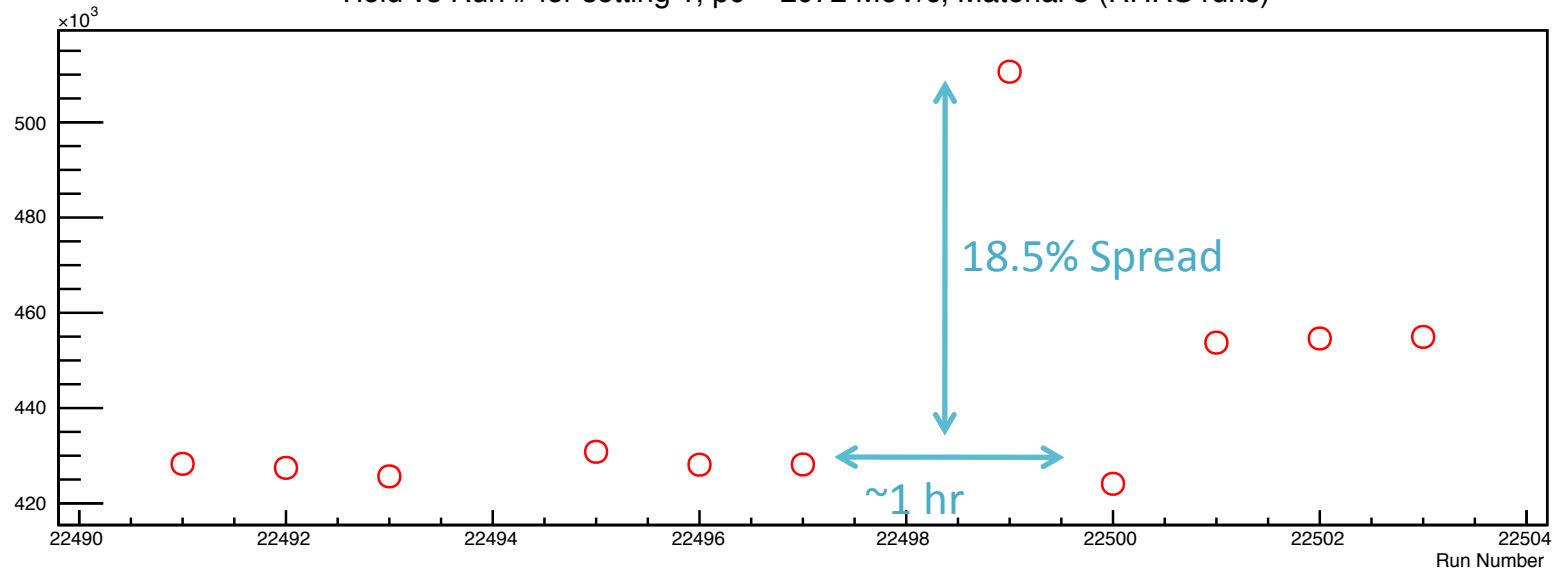
Yield vs Run # for setting 1, $p_0 = 2072$ MeV/c, Material 7 (RHRS runs)



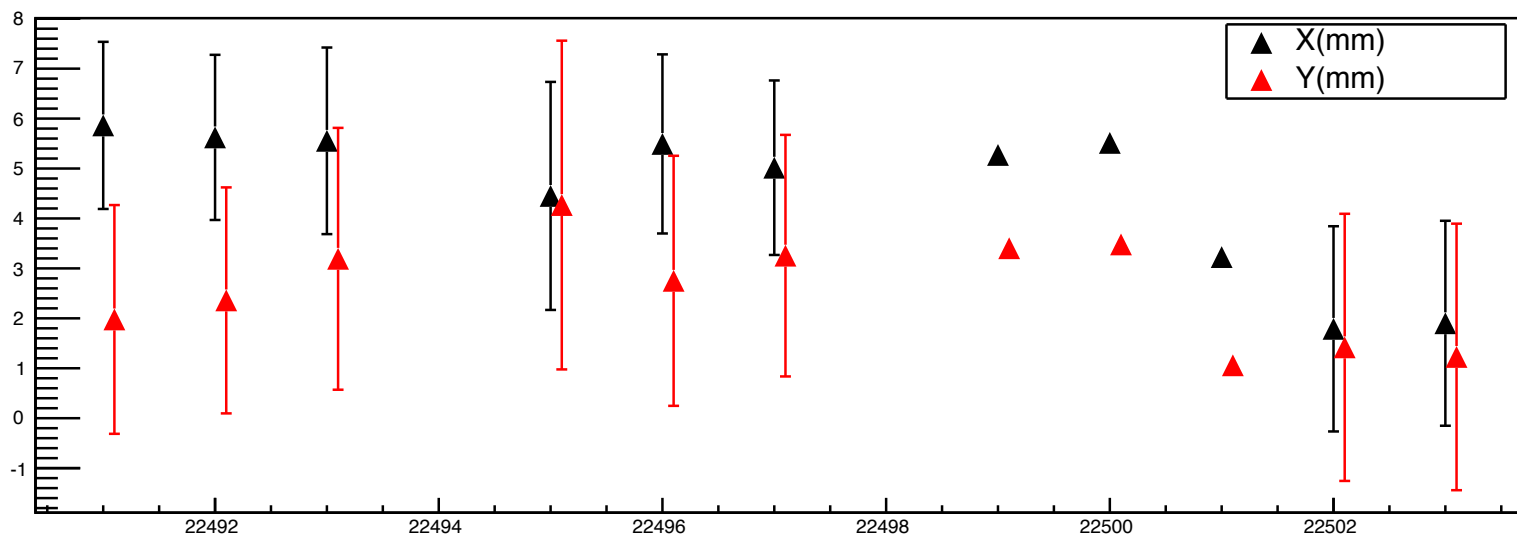
Beam Position vs Run # for setting 1, $p_0 = 2072$ MeV/c, Material 7



Yield vs Run # for setting 1, $p_0 = 2072$ MeV/c, Material 8 (RHRS runs)

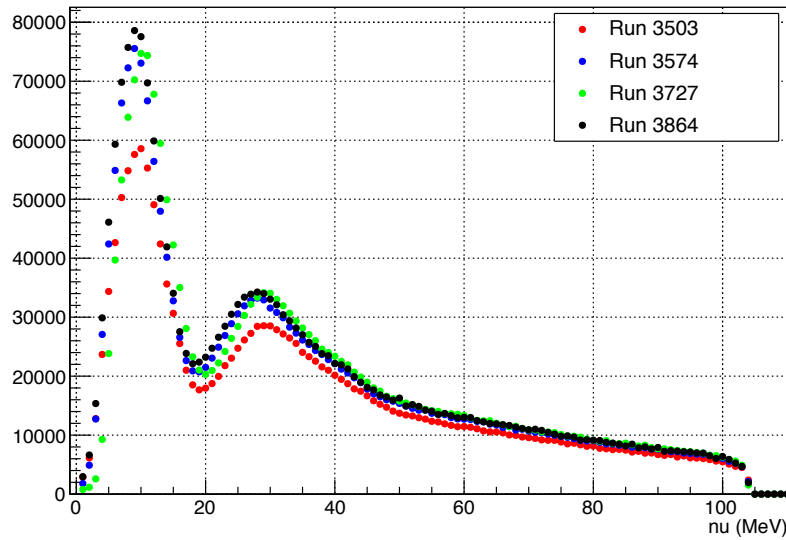


Beam Position vs Run # for setting 1, $p_0 = 2072$ MeV/c, Material 8

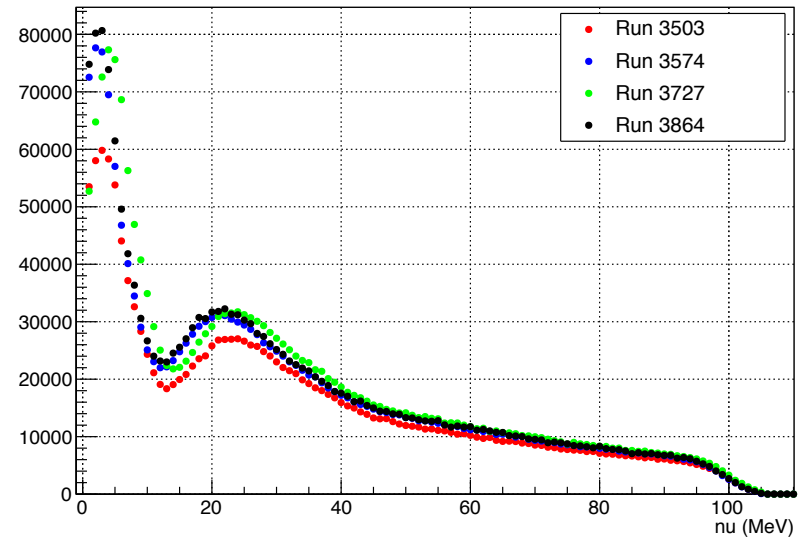


2.2 GeV, 2.5T, Transverse, Material 7 Packing Fraction Runs

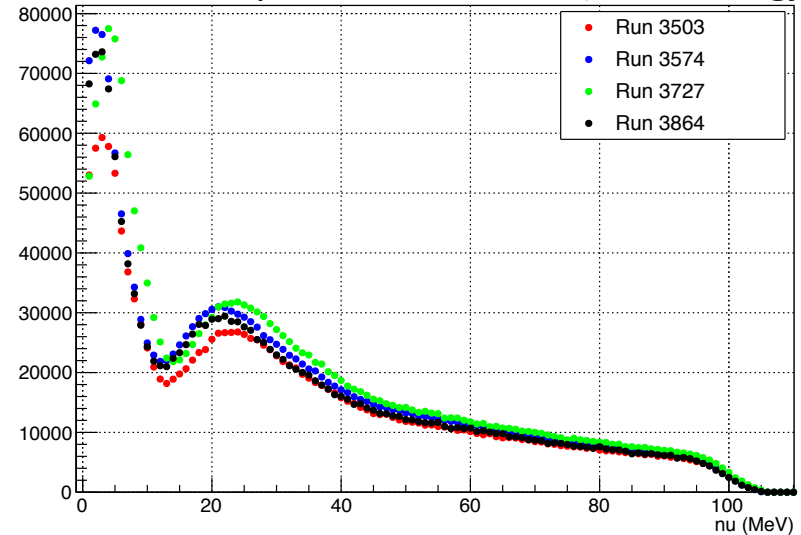
Pass 2



Pass 3

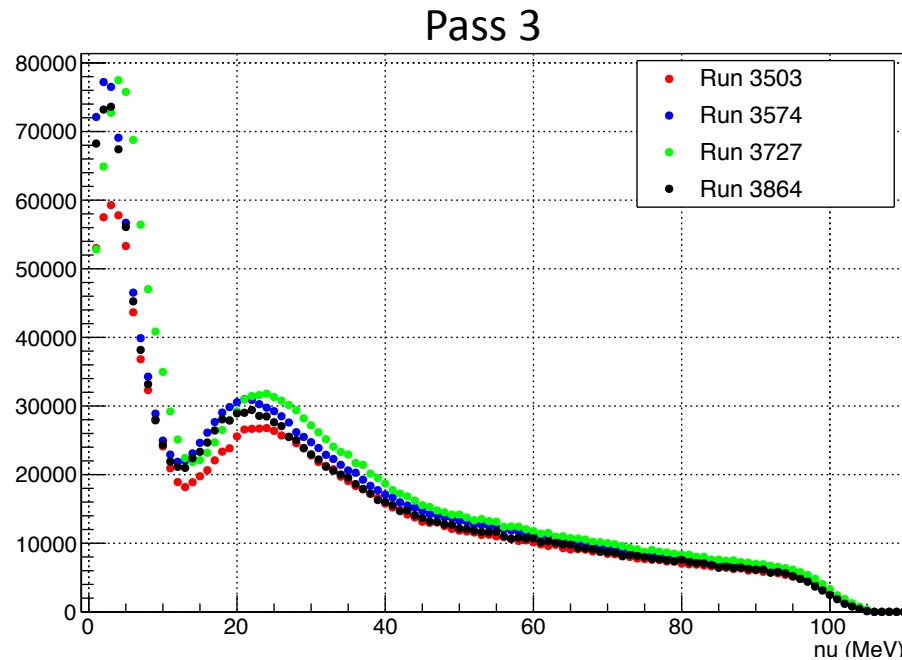


Pass 3 – updated Q values (from Pengjia)



Run	Old Q_{tot}	New Q_{tot}
3503	14.3773	14.5084
3574	18.8081	18.9126
3727	16.5868	16.5521
3864	8.1311	8.9107

2.2 GeV, 2.5T, Transverse, Material 7 Packing Fraction Runs



- Moller measurement was taken after run 3503, before 3574
- Beam appeared to be scraping after coming back from Moller
 - 3rd arm rate spiked from 3kHz – 18kHz
- Raster size was decreased from 2cm to 1.8cm
 - 3rd arm rate dropped back down

Beam Position vs Run # for setting 1, $p_0 = 2228$ MeV/c, Material 7

