

FCal Calibration Testbeam 2003 Run Summary

Version 1 11-Nov-03

Date	Energy (GeV)	Beam	Position	First Run	Last Run	N/run	Events	logbook page	Upstream Material	Comments
25-Jun	200	pi-	4L	1749	1765	12000	204000	95	none	BPC cal events written to separate data file
25-Jun	200	e-	4L	1777	1779	12000	36000	95	none	says pi- in run header. Pb target possibly in beam
25-Jun	200	e-	4L	1781	1793	12000	156000	95	none	Pb target possibly in beam
25-Jun	200	e-	4H	1794	1798	12000	60000	99	poly slanted	poly material too low ? Pb target possibly in beam
25-Jun	200	e-	4H	1799	1802	12000	48000	99	poly slanted	poly material too low ? Pb target possibly in beam
25-Jun	200	pi-	4H	1816	1836	12000	252000	100	poly slanted	poly material too low ?
25-Jun	200	pi-	4H	1843	1850	12000	96000	102	poly slanted	poly material too low ?
26-Jun	200	pi-	1	1852	1868	12000	204000	117	Al block	
26-Jun	200	e-	1	1869	1877	12000	108000	118	Al block	Pb target possibly in beam
26-Jun	200	e-	2	1880	1889	12000	120000	119	none	Pb target possibly in beam
26-Jun	200	pi-	2	1915	1918	12000	48000	121	none	
26-Jun	200	pi-	2	1922	1938	12000	204000	122	none	
26-Jun	200	pi-	3	1939	1973	12000	420000	123	none	
27-Jun	200	e-	3	1974	1984	12000	132000	123	none	Pb target possibly in beam
27-Jun	200	pi-	1	1985	2005	12000	252000	126	Al block	

27-Jun	200	pi-	2	2007	2011	12000	60000	127	none	
27-Jun	200	pi-	2	2012	2021	12000	120000	128	none	
27-Jun	200	pi-	4H	2022	2022	12000	12000	129	poly slanted	poly midpoint 133cm above concrete blocks
28-Jun	200	pi-	4H	2083	2118	12000	432000	131	poly slanted	poly midpoint 133cm above concrete blocks
28-Jun	200	e-	4H	2119	2121	12000	36000	132	poly slanted	Pb target possibly in beam
28-Jun	200	e-	4H	2122	2136	12000	180000	132	poly slanted	coll 3 opened to +/- 6mm during 2123/24 Pb target possibly in beam
28-Jun	150	pi-	4H	2139	2139	5000	5000	138	poly slanted	discovered presence of 6mm Pb target in beam
28-Jun	150	pi-	4H	2140	2144	12000	60000	138	poly slanted	poly target in beam
28-Jun	150	pi-	4H	2145	2179	12000	420000	141	poly slanted	6mm Pb target in beam
29-Jun	150	e-	4H	2180	2196	12000	204000	143	poly slanted	air target for electron running
29-Jun	200	pi-	4H	2197	2230	12000	408000	143	poly straight	air target
29-Jun	200	e-	4H	2231	2247	12000	204000	147	poly straight	air target
29-Jun	120	pi-	4H	2251	2283	12000	396000	155	poly slanted	Pb target (6mm) (BPC data problem ?)
30-Jun	200	pi-	4L	2284	2313	12000	360000	156	none	Pb target (6mm)
30-Jun	200	pi-	4L	2315	2323	12000	108000	156	none	Pb target (6mm)
30-Jun	200	e-	4L	2324	2340	12000	204000	158	none	target/absorber = air/air
30-Jun	150	pi-	4L	2344	2367	12000	288000	160	none	Pb target (6mm)
30-Jun	150	pi-	4L	2375	2384	12000	120000	165	none	Pb target (6mm)

1-Jul	150	e-	4L	2385	2401	12000	204000	165	none	target/absorber = air/air
2-Jul	200	e-	1	2402	2418	12000	204000	169	Al block	target/absorber = air/air
2-Jul	200	e-	2	2419	2435	12000	204000	171	none	target/absorber = air/air
2-Jul	200	e-	3	2436	2437		22320	171	none	target/absorber = air/air run stopped for MD
3-Jul	120	e+	4H	2442	2459	12000	216000	176	poly angled	low electron content
4-Jul	120	pi+	4H	2460	2489	12000	360000	179	poly angled	
4-Jul	120	pi+	4H	2501	2504	12000	48000	185	poly angled	
4-Jul	120	pi+	4L	2505	2538	12000	408000	185	none	CEDAR good as of ~ start of this run series Some tuning done during first couple of runs
4-Jul	80	e+	4L	2543	2560	12000	216000	191	none	Target = Pb (6mm), Absorber = Air
5-Jul	80	pi+	4L	2561	2594	12000	408000	196	none	CEDAR tuned for 80 GeV pions Target = poly, Absorber = Pb (18mm)
5-Jul	100	e+	4L	2595	2612	12000	216000	197	none	Target = Pb (6mm), Absorber = Air
6-Jul	100	pi+	4L	2613	2648	12000	414000	200	none	CEDAR tuned for 100 GeV pions Target = poly, Absorber = Pb (18mm)
6-Jul	100	pi+	4H	2649	2685	12000	444000	202	poly angled	Absorber changed to Pb (8mm)

6-Jul	100	e+	4H	2687	2704	12000	216000	204	poly angled	Target/Abs presumably changed to Pr(6mm) and Air, but no notes in log book !
6-Jul	80	e+	4H	2705	2723	12000	228000	210	poly angled	Target/Abs = Pb(6mm)/Air
6-Jul	80	pi+	4H	2725	2727	12000	36000	210	poly angled	CEDAR set for pions Target/Abs = Poly/Pb(8mm)
6-Jul	80	pi+	4H	2730	2781	12000	624000	211	poly angled	CEDAR set for pions Target/Abs = Poly/Pb(8mm)
7-Jul	60	pi+	4H	2784	2804	12000	252000	220	poly angled	CEDAR set for 60 GeV pions
7-Jul	60	pi+	4H	2815	2827	12000	156000	221	poly angled	CEDAR set for 60 GeV pions Modulo 8 noise fixed as of 2815
7-Jul	60	e+	4H	2828	2836	12000	108000	224	poly angled	CEDAR set for 60 GeV pions
7-Jul	40	e+	4H	2845	2853	12000	108000	226	poly angled	CEDAR set for 40 GeV electrons
8-Jul	80	pi+	4L	2856	2889	12000	408000	230	none	CEDAR set for 80 GeV pions
9-Jul	200	e-	3	2948	2965	12000	216000	251	none	
9-Jul	200	e-	4H	2967	2985	12000	228000	251	poly angled	
9-Jul	200	pi-	4H	3043	3059	12000	204000	262	poly angled	
9-Jul	150	pi-	4H	3060	3076	12000	204000	266	poly angled	CEDAR set for 150 GeV pions
10-Jul	120	pi-	4H	3077	3093	12000	204000	266	poly angled	CEDAR set for 120 GeV pions
10-Jul	120	pi-	4L	3094	3110	12000	204000	270	none	CEDAR set for 120 GeV pions

10-Jul	150	pi-	4L	3111	3127	12000	204000	270	none	CEDAR set for 150 GeV pions
10-Jul	200	e-	4L	3128	3136	12000	108000	272	none	stability point
10-Jul	200	pi-	1	3139	3155	12000	204000	272	Al block	CEDAR set for 200 GeV pions
10-Jul	200	pi-	2	3156	3172	12000	204000	275	none	CEDAR set for 200 GeV pions
10-Jul	200	pi-	3	3173	3189	12000	204000	278	none	CEDAR set for 200 GeV pions
11-Jul	200	e-	4L	3224	3233	12000	120000	283	none	Nominal HV point of HV scan
11-Jul	60	e-	4L	3242	3258	12000	204000	288	none	e-/pi- beam H6.81 Target/Abs = Air/Air CEDAR on electrons
11-Jul	60	pi-	4L	3259	3285	12000	324000	292	none	e-/pi- beam H6.81 Target/Abs = Pb(6mm)/Air
11-Jul	60	pi-	4L	3286	3292	12000	84000	292		CEDAR on pions
12-Jul	60	pi-	4H	3294	3327	12000	408000	296		e-/pi- beam H6.81 Target/Abs = Pb(6mm)/Air CEDAR on pions
12-Jul	60	e-	4H	3328	3339	12000	144000	296		e-/pi- beam H6.81 Target/Abs = Air/Air CEDAR on electrons

9-Sep	100	e+	4L	3429	3445	12000	204000	309	???	Tertiary beam H6.78 Target/Abs = Pb(6mm)/Air CEDAR on pions. POLY UPSTREAM MATERIAL I N ?
9-Sep	60	e+	4L	3446	3463	12000	216000	312	???	Tertiary beam H6.62 Target/Abs = Pb(6mm)/Air CEDAR on pions. POLY UPSTREAM MATERIAL I N ?
10-Sep	80	e+	4L	3464	3480	12000	204000	315	???	Tertiary beam H6.61 Target/Abs = Pb(6mm)/Air CEDAR on pions. POLY UPSTREAM MATERIAL I N ?

10-Sep	80	pi+	4L	3481	3506	12000	312000	322	???	Tertiary beam H6.61 Target/Abs = Poly/Pb(8mm) CEDAR on pions. POLY UPSTREAM MATERIAL I N ?
10-Sep	60	pi+	4L	3508	3513	12000	62000	323	???	Tertiary beam H6.62 Target/Abs = Poly/Pb(8mm) CEDAR on pions. POLY UPSTREAM MATERIAL I N ?
10-Sep	10	e+	4L	3516	3518	12000	28000	324	???	POLY UPSTREAM MATERIAL I N ?
10-Sep	10	e+	4L	3519	3547	12000	348000	327	???	POLY UPSTREAM MATERIAL I N ?
10-Sep	20	e+	4L	3548	3567	12000	240000	329	???	Tertiary beam. Target/Abs = Pb(6mm)/Air CEDAR pressure not tuned. Run header says 10 GeV ? POLY UPSTREAM MATERIAL I N ?
11-Sep	20	e+	4L	3568	3572	12000	60000	333	none	Tertiary beam. Target/Abs = Pb(6mm)/Air CEDAR set for 20 GeV electrons
11-Sep	40	e+	4L	3574	3591	12000	216000	334	none	Tertiary beam. Target/Abs = Pb(6mm)/Air CEDAR set for 40 GeV electrons
11-Sep	40	pi+	4L	3593	3606	12000	168000	338	none	90% muons. CEDAR still set for electrons
11-Sep	10	e-	4L	3608	3623	12000	192000	342	none	opposite polarity for systematic check CEDAR set for electrons
11-Sep	10	e+	4L	3624	3640	12000	204000	345	none	
11-Sep	20	e+	4L	3641	3658	12000	216000	346	none	no note on CEDAR
11-Sep	20	e-	4L	3662	3680	12000	228000	351	none	opposite polarity for systematic check
11-Sep	20	pi+	4L	3683	3716	12000	408000	354	none	CEDAR set to 10.194 (see logbook page 357) So tagging electrons - nominal 10.201
12-Sep	10	e+	4H	3719	3734	12000	192000	359	poly slanted	CEDAR set for electrons

12-Sep	20	e+	4H	3736	3751	12000	192000	360	poly slanted	CEDAR set for electrons
12-Sep	40	e+	4H	3753	3768	12000	192000	361	poly slanted	CEDAR set for electrons
12-Sep	20	pi+	4H	3770	3803	12000	408000	363	poly slanted	No note on CEDAR
13-Sep	40	pi+	4H	3812	3827	12000	192000	365	poly slanted	CEDAR on electrons 10.1909 actual Set for pions (10.384) during run 3822 Stopped early for 5 GeV running
13-Sep	5	e+	4H	3829	3845	12000	204000	366	poly slanted	run header says 10 GeV because no 5 GeV option CEDAR left on 40 GeV pions
13-Sep	5	e+	4L	3848	3864	12000	204000	368	none	run header says 10 GeV because no 5 GeV option
13-Sep	5	e-	4L	3866	3867	12000	24000	371	none	run header says 10 GeV because no 5 GeV option
13-Sep	40	pi+	4L	3870	3919	12000	600000	372	none	CEDAR set for pions
14-Sep	40	pi+	4H	3924	3972	12000	588000	375	poly slanted	CEDAR set for pions
14-Sep	40	pi+	4L	3973	3997	12000	300000	377	none	CEDAR set for pions
15-Sep	10	pi+	4L	4006	4012	12000	84000	380	none	secondary beam from H8=30 GeV. CEDAR adjusting to pion setting the whole time
15-Sep	10	pi+	4L	4023	4024	21000	42000	381		CEDAR set for pions
15-Sep	10	pi+	4L	4059	4106	12000	552000	383	none	10 GeV beam retuned by Ilias Runs 4079, 4080 not recorded
15-Sep	10	pi+	4H	4112	4145	12000	408000	385	poly slanted	
16-Sep	10	pi+	4H	4148	4169	12000	264000	387	poly slanted	

16-Sep	10	pi+	4H	4184	4207	12000	288000	388	poly slanted	Target/Abs = air/Pb(8mm) instead of air/Pb(6mm)
16-Sep	10	pi+	4L	4212	4245	12000	408000	390	none	Target/Abs = air/Pb(8mm) instead of air/Pb(6mm)
17-Sep	20	mu+	4L	4272	4315	12000	528000	391	none	NB MUONS !