

## E570 run summary

Run #	Title	Time	Start time	Stop time	remarks
1	TDC calibration	0:00			
2	Cosmic ray	1:07	2005.9.22 19:23	2005.9.22 20:30	
3	Cosmic ray	0:49	2005.9.24 15:22	2005.9.24 16:11	
4	Cosmic ray	2:20	2005.9.24 16:13	2005.9.24 18:33	
5	Cosmic ray	2:17	2005.9.24 21:29	2005.9.24 23:46	CMS table changed (ver 6.6)
6	Cosmic ray	3:28	2005.9.25 16:44	2005.9.25 20:12	CMS table changed (ver 6.7)
7	TDC calibration	0:02	2005.9.27 13:53	2005.9.27 13:55	C=3; M=1,2,3,4; range=80ns, period=10ns
8	TDC calibration	0:02	2005.9.27 14:02	2005.9.27 14:04	C=3; M=5,6,7; range=80ns, period=10ns
9	TDC calibration	0:01	2005.9.27 14:13	2005.9.27 14:14	C=3; M=8,9,10,11; range=80ns, period=10ns
10	TDC calibration	0:02	2005.9.27 14:21	2005.9.27 14:23	C=2; M=1,2,3,4; range=80ns, period=10ns
11	TDC calibration	0:03	2005.9.27 14:26	2005.9.27 14:29	C=2; M=5,6,7,12; range=80ns, period=10ns
12	TDC calibration	0:02	2005.9.27 14:41	2005.9.27 14:43	C=2; M=8,9,10,11; range=80ns, period=10ns
13	TDC calibration	0:05	2005.9.27 15:09	2005.9.27 15:14	C=0; M=1,2,4,6; range=160ns, period=10ns
14	TDC calibration	0:02	2005.9.27 15:20	2005.9.27 15:22	C=0; M=7,9,10,11; range=160ns, period=10ns
15	TDC calibration	0:02	2005.9.27 15:45	2005.9.27 15:47	C=0; M=12,13; range=160ns, period=10ns
16	Test run	0:52	2005.9.30 12:22	2005.9.30 13:14	To check healthy status of all counters and chambers with beam
17		0:00			
18	Junk run	0:13	2005.10.1 7:00	2005.10.1 7:13	JUNK run. No BLC data
19	K+ beam run	0:31	2005.10.1 8:12	2005.10.1 8:43	K+ beam run, exceeds 2GB
20	pi+ beam run	0:19	2005.10.1 8:46	2005.10.1 9:05	
21	K+ stop run	0:27	2005.10.1 9:26	2005.10.1 9:53	exceeds 2GB
22	K+ stop run	0:29	2005.10.1 10:44	2005.10.1 11:13	exceeds 2GB
23	K+ stop run	0:39	2005.10.1 11:15	2005.10.1 11:54	
24	pi+ run	0:26	2005.10.1 12:32	2005.10.1 12:58	for side
25	pi+ run	0:19	2005.10.1 13:01	2005.10.1 13:20	for side
26	pi+ run	0:19	2005.10.1 13:23	2005.10.1 13:42	for up-down
27	pedestal run	0:14	2005.10.1 18:19	2005.10.1 18:33	C=0,m=17,19 pedestal thick. Saw at Oct.02
28	SDD timing check	0:32	2005.10.2 1:59	2005.10.2 2:31	Mass slit changed to reduce pi- intensity (pi- 250k, K- 1k per burst)
29	SDD timing check	1:38	2005.10.2 3:22	2005.10.2 5:00	same as run29
30	SDD timing check	0:38	2005.10.2 5:49	2005.10.2 6:27	SDD timing and ADC gate check
31	Production	0:52	2005.10.2 10:17	2005.10.2 11:09	
32	Production	0:36	2005.10.2 11:12	2005.10.2 11:48	
33	Production	2:29	2005.10.2 11:59	2005.10.2 14:28	SDD gain changed
34	Production	2:28	2005.10.2 15:00	2005.10.2 17:28	SDD condition not constant
35	Production	0:28	2005.10.2 17:30	2005.10.2 17:58	SDD gain changed
36	Production	1:01	2005.10.2 17:59	2005.10.2 19:00	SDD self was not in trigger
37	Production	0:38	2005.10.2 19:04	2005.10.2 19:42	
38	Production	2:09	2005.10.2 19:59	2005.10.2 22:08	
39	Production	2:16	2005.10.2 22:56	2005.10.3 1:12	
40	Production	1:48	2005.10.3 1:14	2005.10.3 3:02	F-ADC on
41	Production	1:35	2005.10.3 3:46	2005.10.3 5:21	F-ADC 3:48-
42	Production	2:15	2005.10.3 5:22	2005.10.3 7:37	F-ADC on sometime
43	Production	0:58	2005.10.3 8:02	2005.10.3 9:00	
44	Cosmic ray	4:27	2005.10.3 9:30	2005.10.3 13:57	
45	Production	0:25	2005.10.3 14:29	2005.10.3 14:54	KSV not connected
46	Production	0:15	2005.10.3 15:37	2005.10.3 15:52	F-ADC run started
47	Production	1:17	2005.10.3 16:07	2005.10.3 17:24	All TDC signals are shifted
48	Production	0:05	2005.10.3 18:41	2005.10.3 18:46	
49	Production	2:14	2005.10.3 19:21	2005.10.3 21:35	T0-1-1-L HV was not constant visual scaler reset after this run
50	Production	2:03	2005.10.3 21:37	2005.10.3 23:40	
51	Production	1:06	2005.10.3 23:42	2005.10.4 0:48	ADC for NC-L 5A-5G up missing
52	Production	0:45	2005.10.4 2:44	2005.10.4 3:29	ADC for NC-L-5A-5G up missing. SDD self trigger OFF
53	Production	0:59	2005.10.4 3:30	2005.10.4 4:29	ADC for NC-L-5A-5G up missing. SDD self trigger ON
54	Production	1:34	2005.10.4 4:29	2005.10.4 6:03	ADC for NC-L-5A-5G up recovered. SDD#5 Scaler and TDC wrong
55	Production	2:00	2005.10.4 6:30	2005.10.4 8:30	
56	pi-, VTC	0:30	2005.10.4 8:34	2005.10.4 9:04	pi- scattering data
57	pi-, PA*PB	0:59	2005.10.4 9:07	2005.10.4 10:06	pi- scattering data
58	Production	2:02	2005.10.4 10:08	2005.10.4 12:10	
59	Production	1:39	2005.10.4 12:14	2005.10.4 13:53	Strange VDC spectrum is arised RUN stopped to fix it
60	Production	2:16	2005.10.4 14:31	2005.10.4 16:47	VDC spectrum looks normal
61	Production	1:32	2005.10.4 16:48	2005.10.4 18:20	During this run, FOUT for SDD#5 (CMS=2.22.7) was shortly disconnected
62	Production	0:10	2005.10.4 19:46	2005.10.5 19:56	
63	Production	1:53	2005.10.4 19:59	2005.10.4 21:52	Due to DAQ hang-up, this run has been stopped. DAQ restarted
64	Production	1:00	2005.10.4 22:00	2005.10.4 23:00	Due to DAQ hang-up, this run has been stopped. DAQ restarted
65	Production	0:58	2005.10.4 23:16	2005.10.5 0:14	Due to DAQ hang-up, this run has been stopped. DAQ restarted
66	Production	1:11	2005.10.5 0:15	2005.10.5 1:26	Flash ADC stopped at 1:31
67	Production	0:22	2005.10.5 1:36	2005.10.5 1:58	Beam intensity very low
68	Production	0:04	2005.10.5 2:37	2005.10.5 2:41	SDS_all read out mode, scaler (RFF) study
69	Production	0:29	2005.10.5 2:44	2005.10.5 3:13	collector freeze...
70	Production	0:27	2005.10.5 3:16	2005.10.5 3:43	DAQ hang at 3:33
71	Production	1:03	2005.10.5 3:47	2005.10.5 4:50	Scaler reset forgot.
72	Production	0:55	2005.10.5 4:50	2005.10.5 5:45	FADC same time running. Scaler reset done
73	Production	1:10	2005.10.5 5:27	2005.10.5 6:37	FADC same time running. Scaler reset done, Crate#4 SMP freeze
74	Production	0:04	2005.10.5 6:40	2005.10.5 6:44	very short run
75	Production	0:13	2005.10.5 7:01	2005.10.5 7:14	TKO Box hang up. DAQ hang up again "Reset_local" ed
76	Production	0:07	2005.10.5 7:16	2005.10.5 7:23	TKO Box#6 hang. Reset local
77	Production	0:28	2005.10.5 7:25	2005.10.5 7:53	TKO Box4 hang
78	Production	0:22	2005.10.5 7:56	2005.10.5 8:18	Bvd#2 freeze, reset local
79	Production	0:48	2005.10.5 8:21	2005.10.5 9:09	
80	Cosmic ray	0:56	2005.10.5 9:18	2005.10.5 10:14	Due to DAQ problem, the run stopped (cosmic + self)

81	Cosmic ray	4:01	2005.10.5 10:26	2005.10.5 14:27	
82	Production	0:26	2005.10.5 17:21	2005.10.5 17:47	
83	Production	1:50	2005.10.5 18:04	2005.10.5 19:54	
84	Production	1:09	2005.10.5 19:56	2005.10.5 21:05	
85	Production	0:31	2005.10.5 21:05	2005.10.5 21:36	
86	Production	1:06	2005.10.5 22:13	2005.10.5 23:19	Kstop TDC added (3,20,8) VME scaler swapped (SDD#4 to E549 #3)
87	Production	1:29	2005.10.5 23:35	2005.10.6 1:04	Scaler#3 is dummy data!
88	Production	0:42	2005.10.6 1:36	2005.10.6 2:18	
89	Production	1:49	2005.10.6 2:47	2005.10.6 4:36	
90	Production	1:59	2005.10.6 7:03	2005.10.6 9:02	
91	Production	2:03	2005.10.6 9:04	2005.10.6 11:07	
92	Production	2:03	2005.10.6 11:08	2005.10.6 13:11	SDD#2 upper threshold changed during this run
93	Production	1:55	2005.10.6 13:13	2005.10.6 15:08	
94	Production	2:32	2005.10.6 15:41	2005.10.6 18:13	
95	Production	1:14	2005.10.6 18:15	2005.10.6 19:29	
96	Production	1:58	2005.10.6 19:44	2005.10.6 21:42	20:35-20:56 LN2 refilled
97	Production	2:04	2005.10.6 21:44	2005.10.6 23:48	
98	Production	2:03	2005.10.6 23:49	2005.10.7 1:52	
99	Production	1:57	2005.10.7 1:53	2005.10.7 3:50	
100	Production	1:37	2005.10.7 4:23	2005.10.7 6:00	
101	Production	1:12	2005.10.7 6:34	2005.10.7 7:46	
102	Production	2:00	2005.10.7 7:59	2005.10.7 9:59	
103	Production	2:14	2005.10.7 10:00	2005.10.7 12:14	
104	Production	2:00	2005.10.7 12:14	2005.10.7 14:14	
105	Production	0:55	2005.10.7 14:15	2005.10.7 15:10	
106	Production	1:14	2005.10.7 15:42	2005.10.7 16:56	Up to this run VME scaler #3 pair mode dip switches were ON
107	Production	2:07	2005.10.7 17:01	2005.10.7 19:08	
108	Production	2:04	2005.10.7 19:24	2005.10.7 21:28	
109	Production	1:52	2005.10.7 21:28	2005.10.7 23:20	
110	Production	1:58	2005.10.7 23:27	2005.10.8 1:25	Before this run, spill was installed to TKO scaler
111	Production	2:01	2005.10.8 1:25	2005.10.8 3:26	
112	Production	1:59	2005.10.8 3:58	2005.10.8 5:57	
113	Production	1:53	2005.10.8 5:58	2005.10.8 7:51	
114	Production	2:02	2005.10.8 8:05	2005.10.8 10:07	
115	Production	2:02	2005.10.8 10:08	2005.10.8 12:10	
116	Production	2:00	2005.10.8 12:10	2005.10.8 14:10	
117	Production	1:27	2005.10.8 14:12	2005.10.8 15:39	
118	Production	2:09	2005.10.8 17:49	2005.10.8 19:58	
119	Production	1:00	2005.10.8 19:58	2005.10.8 20:58	
120	Production	2:10	2005.10.8 21:13	2005.10.8 23:23	
121	Production	1:52	2005.10.8 23:23	2005.10.9 1:15	During this run, all SDDs gain strange noise
122	Production	1:39	2005.10.9 1:29	2005.10.9 3:08	The data taken in this run cannot use for SDD side analysis
123	Production	1:35	2005.10.9 5:21	2005.10.9 6:56	
124	Production	1:32	2005.10.9 7:22	2005.10.9 8:54	
125	Production	1:57	2005.10.9 9:08	2005.10.9 11:05	
126	Production	2:03	2005.10.9 11:10	2005.10.9 13:13	
127	Production	2:03	2005.10.9 13:14	2005.10.9 15:17	
128	Production	1:20	2005.10.9 15:17	2005.10.9 16:37	
129	Production	2:00	2005.10.9 17:15	2005.10.9 19:15	Prescale factor for Kbeam was changed many times. Now it is set to 82
130	Production	1:46	2005.10.9 19:15	2005.10.9 21:01	Prescale factot for Kbeam is 82
131	Production	2:02	2005.10.9 21:22	2005.10.9 23:24	
132	Production	1:48	2005.10.9 23:25	2005.10.10 1:13	
133	Production	0:35	2005.10.10 1:16	2005.10.10 1:51	
134	Production	2:05	2005.10.10 2:38	2005.10.10 4:43	Before this run, there was a study of Linac troubles
135	Production	1:04	2005.10.10 4:52	2005.10.10 5:56	
136	Production	2:02	2005.10.10 6:29	2005.10.10 8:31	
137	Production	2:00	2005.10.10 8:31	2005.10.10 10:31	
138	Production	0:43	2005.10.10 10:31	2005.10.10 11:14	
139	Production	2:06	2005.10.10 11:32	2005.10.10 13:38	
140	Production	2:14	2005.10.10 13:39	2005.10.10 15:53	
141	Production	1:58	2005.10.10 15:54	2005.10.10 17:52	
142	Production	1:56	2005.10.10 17:53	2005.10.10 19:49	
143	Production	1:59	2005.10.10 20:25	2005.10.10 22:24	
144	Production	2:14	2005.10.10 22:25	2005.10.11 0:39	
145	Production	2:02	2005.10.11 0:54	2005.10.11 2:56	
146	Production	2:44	2005.10.11 2:56	2005.10.11 5:40	
147	Production	2:04	2005.10.11 5:41	2005.10.11 7:45	
148	Production	1:15	2005.10.11 7:45	2005.10.11 9:00	
149	Cosmic ray	2:29	2005.10.11 9:17	2005.10.11 11:46	
150	Cosmic ray	4:15	2005.10.11 11:53	2005.10.11 16:08	
151	pedestal run	0:02	2005.10.11 16:17	2005.10.11 16:19	
152	Cosmic ray	7:59	2005.10.11 17:02	2005.10.12 1:01	
153	Cosmic ray	8:00	2005.10.12 1:02	2005.10.12 9:02	
154	Cosmic ray	6:24	2005.10.12 9:02	2005.10.12 15:26	
155	Production	2:24	2005.10.12 15:29	2005.10.12 17:53	Beam is very unstable
156	Production	2:01	2005.10.12 18:16	2005.10.12 20:17	SDD#3 preamp turned off
157	Production	2:07	2005.10.12 20:19	2005.10.12 22:26	
158	Production	0:21	2005.10.12 23:01	2005.10.12 23:22	NC L73d HV channel switch; not usable for Knucl neutron run
159	Production	2:04	2005.10.12 23:38	2005.10.13 1:42	
160	Production	1:52	2005.10.13 1:43	2005.10.13 3:35	
161	Production	1:59	2005.10.13 3:52	2005.10.13 5:51	NC R61d R71d voltage unstable
162	Production	2:01	2005.10.13 5:51	2005.10.13 7:52	

163	Production	2:06	2005.10.13 7:52	2005.10.13 9:58	
164	Production	0:11	2005.10.13 9:59	2005.10.13 10:10	Before or during this run NC R51d was turned off by mistake
165	Production	2:00	2005.10.13 10:10	2005.10.13 12:10	
166	Production	2:01	2005.10.13 12:44	2005.10.13 14:45	
167	Production	1:51	2005.10.13 14:45	2005.10.13 16:36	
168	Production	2:00	2005.10.13 16:50	2005.10.13 18:50	
169	Production	2:00	2005.10.13 18:50	2005.10.13 20:50	
170	Production	2:00	2005.10.13 20:50	2005.10.13 22:50	
171	Production	2:11	2005.10.13 22:50	2005.10.14 1:01	
172	Production	2:06	2005.10.14 1:32	2005.10.14 3:38	
173	Production	2:02	2005.10.14 3:38	2005.10.14 5:40	
174	Production	2:05	2005.10.14 5:52	2005.10.14 7:57	Kst*VTC*VDCV-bar --> Kst*VTC (trigger bias study for Knucl data)
175	Production	2:03	2005.10.14 7:59	2005.10.14 10:02	
176	Production	2:01	2005.10.14 10:03	2005.10.14 12:04	
177	Production	0:48	2005.10.14 12:04	2005.10.14 12:52	
178	Production	1:58	2005.10.14 13:19	2005.10.14 15:17	
179	Production	1:50	2005.10.14 15:17	2005.10.14 17:07	
180	Production	2:00	2005.10.14 17:22	2005.10.14 19:22	
181	Production	2:00	2005.10.14 19:23	2005.10.14 21:23	
182	Production	2:00	2005.10.14 21:23	2005.10.14 23:23	
183	Production	2:06	2005.10.14 23:23	2005.10.15 1:29	Prescale factor of Kbeam/prescale was changed (82->482) during the run
184	Production	2:02	2005.10.15 2:01	2005.10.15 4:03	
185	Production	1:27	2005.10.15 4:04	2005.10.15 5:31	
186	Production	2:01	2005.10.15 5:44	2005.10.15 7:45	
187	Production	1:59	2005.10.15 7:46	2005.10.15 9:45	
188	Production	2:02	2005.10.15 9:45	2005.10.15 11:47	
189	Production	1:11	2005.10.15 11:48	2005.10.15 12:59	
190	Production	1:13	2005.10.15 13:29	2005.10.15 14:42	
191	Production	2:00	2005.10.15 16:27	2005.10.15 18:27	
192	Production	2:19	2005.10.15 18:28	2005.10.15 20:47	
193	Production	2:00	2005.10.15 21:01	2005.10.15 23:01	
194	Production	1:06	2005.10.15 23:01	2005.10.16 0:07	
195	Cosmic ray	2:15	2005.10.16 0:08	2005.10.16 2:23	Main ring condition was bad. So beam was always off during this run.
196	Production	2:23	2005.10.16 2:27	2005.10.16 4:50	Network trouble occurred. f-ADC stopped until 4:00
197	Production	2:38	2005.10.16 5:27	2005.10.16 8:05	Spill and beam were still unstable and dirty.
198	Production	2:03	2005.10.16 8:08	2005.10.16 10:11	f-ADC writing directory was changed to "%online/dat2/frun***"
199	Production	2:03	2005.10.16 10:11	2005.10.16 12:14	
200	Production	2:04	2005.10.16 12:48	2005.10.16 14:52	Resetting the visual scaler was not done.
201	Production	1:15	2005.10.16 14:52	2005.10.16 16:07	
202	Production	2:00	2005.10.16 16:22	2005.10.16 18:22	f-ADC directory was returned to original "data/frun***" before this run.
203	Production	2:00	2005.10.16 18:27	2005.10.16 20:27	
204	Production	1:59	2005.10.16 20:28	2005.10.16 22:27	
205	Production	1:10	2005.10.16 22:29	2005.10.16 23:39	
206	Production	2:08	2005.10.17 0:08	2005.10.17 2:16	
207	Production	2:06	2005.10.17 2:17	2005.10.17 4:23	
208	Production	1:53	2005.10.17 4:36	2005.10.17 6:29	
209	Production	1:51	2005.10.17 6:30	2005.10.17 8:22	
210	Production	0:37	2005.10.17 8:22	2005.10.17 9:00	
211	Cosmic ray	5:56	2005.10.17 9:04	2005.10.17 15:00	
212	Production	1:47	2005.10.17 15:00	2005.10.17 16:47	
213	Production	1:59	2005.10.17 18:55	2005.10.17 20:54	
214	Production	2:00	2005.10.17 20:55	2005.10.17 22:55	
215	Production	2:00	2005.10.17 22:55	2005.10.18 0:55	
216	Production	0:49	2005.10.18 0:55	2005.10.18 1:44	
217	Production	0:11	2005.10.18 2:18	2005.10.18 2:29	
218	Production	0:25	2005.10.18 3:25	2005.10.18 3:50	
219	Production	2:03	2005.10.18 4:38	2005.10.18 6:41	
220	Production	2:19	2005.10.18 6:42	2005.10.18 9:01	
221	Production	1:00	2005.10.18 9:02	2005.10.18 10:02	
222	pi+ beam run	0:16	2005.10.18 10:41	2005.10.18 10:57	pi+ beam prescaled
223	pi+ scattering	1:01	2005.10.18 10:59	2005.10.18 12:00	pi+ *PA*PB: side scattering run
224	pi+ scattering	0:42	2005.10.18 12:18	2005.10.18 13:00	pi+ * VTC : top/bottom scattering run
225	K+ stop run	1:30	2005.10.18 13:07	2005.10.18 14:37	K+ beam/60 + K+*PA*PB : beam & side
226	K+ stop run	1:36	2005.10.18 14:38	2005.10.18 16:14	K+ beam/60 + K+*PA*PB : beam & side
227	K+ stop run	0:53	2005.10.18 16:17	2005.10.18 17:10	K+ * VTC : top/bottom
228	Production	0:16	2005.10.18 17:48	2005.10.18 18:04	
229	Production	1:40	2005.10.18 18:33	2005.10.18 20:13	
230	Cosmic ray	0:32	2005.10.18 20:15	2005.10.18 20:47	
231	Production	2:00	2005.10.18 21:00	2005.10.18 23:00	
232	Production	2:00	2005.10.18 23:01	2005.10.19 1:01	
233	Production	2:02	2005.10.19 1:01	2005.10.19 3:03	
234	Production	1:48	2005.10.19 3:03	2005.10.19 4:51	Kst*VTC*VDCV-bar --> Kst*VTC (trigger bias study for Knucl data)
235	Production	2:16	2005.10.19 5:34	2005.10.19 7:50	Kst*VTC*VDCV-bar --> Kst*VTC (trigger bias study for Knucl data)
236	Production	2:00	2005.10.19 8:04	2005.10.19 10:04	Kst*VTC*VDCV-bar --> Kst*VTC (trigger bias study for Knucl data)
237	Production	1:59	2005.10.19 10:05	2005.10.19 12:04	Kst*VTC*VDCV-bar --> Kst*VTC (trigger bias study for Knucl data)
238	Production	2:25	2005.10.19 12:05	2005.10.19 14:30	Kst*VTC*VDCV-bar --> Kst*VTC (trigger bias study for Knucl data)
239	Production	1:44	2005.10.19 15:30	2005.10.19 17:14	Kst*VTC*VDCV-bar --> Kst*VTC (trigger bias study for Knucl data)
240	Production	2:01	2005.10.19 17:30	2005.10.19 19:31	Kst*VTC*VDCV-bar --> Kst*VTC (trigger bias study for Knucl data)
241	Production	1:39	2005.10.19 19:31	2005.10.19 21:10	Kst*VTC continued: NTL0AD PMT HV set=2000V error found: Earthquake!!
242	Production	2:03	2005.10.19 21:11	2005.10.19 23:14	Kst*VTC continued: NTL0AD PMT HV set to original value
243	Production	2:01	2005.10.19 23:14	2005.10.20 1:15	Kst*VTC continued: F-ADC data only after 23:20 due to "moge" hung up
244	Production	1:37	2005.10.20 1:51	2005.10.20 3:28	Kst*VTC*VDCV-bar --> Kst*VTC (trigger bias study for Knucl data)

245	Production	2:01	2005.10.20 3:47	2005.10.20 5:48	Kst*VTC*VDCV-bar --> Kst*VTC (trigger bias study for Knucl data)
246	pi- beam run	0:24	2005.10.20 5:52	2005.10.20 6:16	pi- beam prescaled
247	Production	2:01	2005.10.20 6:17	2005.10.20 8:18	Return to normal production run Kst*VTC*VDCV-bar
248	Production	2:04	2005.10.20 8:19	2005.10.20 10:23	
249	Production	1:56	2005.10.20 10:27	2005.10.20 12:23	
250	Production	2:00	2005.10.20 13:02	2005.10.20 15:02	
251	Production	2:03	2005.10.20 15:02	2005.10.20 17:05	
252	Production	0:43	2005.10.20 17:05	2005.10.20 17:48	
253	Production	2:00	2005.10.20 18:06	2005.10.20 20:06	Gas flow for chambers was stopped during this run
254	Production	2:00	2005.10.20 20:06	2005.10.20 22:06	
255	Production	2:00	2005.10.20 22:06	2005.10.21 0:06	
256	Production	2:32	2005.10.21 0:06	2005.10.21 2:38	
257	Production	2:04	2005.10.21 3:04	2005.10.21 5:08	
258	Production	1:57	2005.10.21 5:09	2005.10.21 7:06	
259	Production	1:58	2005.10.21 7:23	2005.10.21 9:21	
260	Production	2:02	2005.10.21 9:21	2005.10.21 11:23	
261	Production	1:56	2005.10.21 11:23	2005.10.21 13:19	
262	Production	1:05	2005.10.21 13:19	2005.10.21 14:24	
263	Production	2:00	2005.10.21 15:06	2005.10.21 17:06	
264	Production	2:00	2005.10.21 17:06	2005.10.21 19:06	
265	Production	1:24	2005.10.21 19:06	2005.10.21 20:30	
266	Production	2:00	2005.10.21 20:47	2005.10.21 22:47	
267	Production	2:00	2005.10.21 22:47	2005.10.22 0:47	
268	Production	2:01	2005.10.22 0:47	2005.10.22 2:48	
269	Production	1:59	2005.10.22 2:48	2005.10.22 4:47	
270	Production	1:56	2005.10.22 5:18	2005.10.22 7:14	
271	Production	2:03	2005.10.22 7:31	2005.10.22 9:34	
272	Production	2:01	2005.10.22 9:35	2005.10.22 11:36	
273	Production	2:00	2005.10.22 11:37	2005.10.22 13:37	
274	Production	2:00	2005.10.22 13:38	2005.10.22 15:38	
275	Cosmic ray	0:37	2005.10.22 15:40	2005.10.22 16:17	
276	Production	1:08	2005.10.22 16:18	2005.10.22 17:26	
277	Production	2:00	2005.10.22 18:06	2005.10.22 20:06	
278	Production	1:28	2005.10.22 20:07	2005.10.22 21:35	
279	Production	2:00	2005.10.22 21:50	2005.10.22 23:50	
280	Production	2:00	2005.10.22 23:50	2005.10.23 1:50	
281	Production	1:59	2005.10.23 1:51	2005.10.23 3:50	Begining of this run LN2 level was lower than 20% (for 30 min).
282	Production	2:00	2005.10.23 3:50	2005.10.23 5:50	
283	Production	2:08	2005.10.23 6:25	2005.10.23 8:33	
284	Production	2:00	2005.10.23 8:46	2005.10.23 10:46	
285	Production	2:00	2005.10.23 10:46	2005.10.26 12:46	
286	Production	2:00	2005.10.23 12:47	2005.10.23 14:47	
287	Production	2:16	2005.10.23 14:47	2005.10.23 17:03	
288	Production	2:25	2005.10.23 17:39	2005.10.23 20:04	
289	Production	2:00	2005.10.23 20:18	2005.10.23 22:18	
290	Production	2:00	2005.10.23 22:18	2005.10.24 0:18	
291	Production	2:01	2005.10.24 0:18	2005.10.24 2:19	
292	Production	2:00	2005.10.24 2:19	2005.10.24 4:19	
293	Production	2:01	2005.10.24 4:51	2005.10.24 6:52	
294	Production	1:55	2005.10.24 7:07	2005.10.24 9:02	
295	Cosmic ray	12:14	2005.10.24 9:02	2005.10.24 21:16	
296	Cosmic ray	3:46	2005.10.24 21:17	2005.10.25 1:03	
297	Cosmic ray	8:04	2005.10.25 1:03	2005.10.25 9:07	
298	Cosmic ray	1:05	2005.10.25 9:07	2005.10.25 10:12	
299	Cosmic ray	5:34	2005.10.25 10:13	2005.10.25 15:47	
300	Production	1:34	2005.10.25 15:49	2005.10.25 17:23	
301	Production	2:11	2005.10.25 18:36	2005.10.25 20:47	During this run, Linuc#2 was down. LHe might not be completely filled for target cell.
302	Cosmic ray	3:00	2005.10.25 20:47	2005.10.25 23:47	Accrding to the beam channel, beam will be stopped until 23:00
303	Production	2:00	2005.10.25 23:58	2005.10.26 1:58	
304	Production	2:00	2005.10.26 1:58	2005.10.26 3:58	
305	Production	2:00	2005.10.26 3:58	2005.10.26 5:58	
306	Production	2:05	2005.10.26 5:58	2005.10.26 8:03	
307	Production	0:06	2005.10.26 8:05	2005.10.26 8:11	
308	Production	2:02	2005.10.26 9:08	2005.10.26 11:10	
309	Production	0:43	2005.10.26 11:17	2005.10.26 12:00	
310	Cosmic ray	2:24	2005.10.26 12:01	2005.10.26 14:25	
311	Production	0:17	2005.10.26 14:25	2005.10.26 14:42	
312	Production	2:03	2005.10.26 14:42	2005.10.26 16:45	
313	Production	2:29	2005.10.26 16:46	2005.10.26 19:15	
314	Production	2:04	2005.10.26 19:53	2005.10.26 21:57	
315	Production	2:00	2005.10.26 22:10	2005.10.27 0:10	
316	Production	2:00	2005.10.27 0:12	2005.10.27 2:12	
317	Production	2:00	2005.10.27 2:12	2005.10.27 4:12	
318	Production	2:01	2005.10.27 4:12	2005.10.27 6:13	
319	Production	0:59	2005.10.27 6:13	2005.10.27 7:12	
320	Production	1:59	2005.10.27 7:42	2005.10.27 9:41	
321	Production	1:35	2005.10.27 9:41	2005.10.27 11:16	
322	Production	2:02	2005.10.27 11:30	2005.10.27 13:32	
323	Production	2:00	2005.10.27 13:32	2005.10.27 15:32	
324	Production	2:00	2005.10.27 15:33	2005.10.27 17:33	
325	Production	1:59	2005.10.27 17:34	2005.10.27 19:33	
326	Production	0:45	2005.10.27 19:34	2005.10.27 20:19	

327	Production	1:59	2005.10.27 20:51	2005.10.27 22:50	
328	Production	1:56	2005.10.27 22:51	2005.10.28 0:47	
329	Production	2:00	2005.10.28 1:08	2005.10.28 3:08	
330	Production	2:00	2005.10.28 3:08	2005.10.28 5:08	
331	Production	2:00	2005.10.28 5:09	2005.10.28 7:09	
332	Production	1:59	2005.10.28 7:09	2005.10.28 9:08	
333	Production	2:39	2005.10.28 9:40	2005.10.28 12:19	
334	Production	2:29	2005.10.28 12:31	2005.10.28 15:00	
335	Production	2:03	2005.10.28 15:00	2005.10.28 17:03	
336	Production	2:00	2005.10.28 17:03	2005.10.28 19:03	
337	Production	2:07	2005.10.28 19:04	2005.10.28 21:11	
338	Production	1:59	2005.10.28 21:46	2005.10.28 23:45	
339	Production	2:00	2005.10.28 23:46	2005.10.29 1:46	
340	Production	2:00	2005.10.29 2:01	2005.10.29 4:01	
341	Production	2:00	2005.10.29 4:02	2005.10.29 6:02	
342	Production	2:00	2005.10.29 6:02	2005.10.29 8:02	
343	Production	2:01	2005.10.29 8:02	2005.10.29 10:03	
344	Cosmic ray	0:26	2005.10.29 10:04	2005.10.29 10:30	
345	Production	0:28	2005.10.29 10:33	2005.10.29 11:01	Cooling water of MR leaked. It will take a few hours to fix.
346	Cosmic ray	3:23	2005.10.29 11:07	2005.10.29 14:30	
347	Production	0:59	2005.10.29 14:31	2005.10.29 15:30	Spill and beam are unstable and dirty
348	Cosmic ray	0:35	2005.10.29 15:31	2005.10.29 16:06	According to beam channel, the beam will stop for about 1hour.
349	Production	1:59	2005.10.29 16:07	2005.10.29 18:06	
350	Production	2:00	2005.10.29 18:07	2005.10.29 20:07	
351	Production	2:09	2005.10.29 20:08	2005.10.29 22:17	
352	Production	1:59	2005.10.29 22:52	2005.10.30 0:51	HV setting for TCt.D.L_5 was higher (2270V) till 23:14
353	Production	2:02	2005.10.30 0:51	2005.10.30 2:53	
354	Production	2:02	2005.10.30 3:11	2005.10.30 5:13	F-ADC local HDD had no space. Not available F-ADC data from frun354-00052.dat
355	Production	2:00	2005.10.30 5:18	2005.10.30 7:18	moge HDD has been cleand up before this run.
356	Production	2:01	2005.10.30 7:19	2005.10.30 9:20	
357	Production	1:45	2005.10.30 9:20	2005.10.30 11:05	
358	Cosmic ray	0:35	2005.10.30 11:06	2005.10.30 11:41	Ion source down. The beam will back 12:00
359	Production	2:09	2005.10.30 11:42	2005.10.30 13:51	
360	Production	2:00	2005.10.30 14:05	2005.10.30 16:05	
361	Production	2:01	2005.10.30 16:05	2005.10.30 18:06	
362	Production	2:00	2005.10.30 18:06	2005.10.30 20:06	
363	Production	2:00	2005.10.30 20:08	2005.10.30 22:08	
364	Production	2:12	2005.10.30 22:40	2005.10.31 0:52	
365	Production	2:00	2005.10.31 1:07	2005.10.31 3:07	
366	Production	2:00	2005.10.31 3:08	2005.10.31 5:08	
367	Production	2:00	2005.10.31 5:08	2005.10.31 7:08	
368	Production	1:52	2005.10.31 7:08	2005.10.31 9:00	The end of E570 1st cycle beam time
369	Cosmic ray	2:02	2005.10.31 9:42	2005.10.31 11:44	
370	TDC calibration	0:05	2005.10.31 12:11	2005.10.31 12:16	c=0, m=1,2,4,6 range=160ns period=10ns
371	TDC calibration	0:05	2005.10.31 12:22	2005.10.31 12:27	c=0, m=7,9,10,11 range=160ns period=10ns
372	TDC calibration	0:05	2005.10.31 12:30	2005.10.31 12:35	c=0, m=12,13 range=160ns period=10ns
373	TDC calibration	0:05	2005.10.31 12:50	2005.10.31 12:55	c=2, m=1,2,3,4 range=160ns period=10ns
374	TDC calibration	0:05	2005.10.31 13:11	2005.10.31 13:16	c=2, m=5,6,7,8 range=160ns, period=10ns
375	TDC calibration	0:05	2005.10.31 13:19	2005.10.31 13:24	c=2, m=9,10,11,12 range=160ns period=10ns
376	TDC calibration	0:05	2005.10.31 13:34	2005.10.31 13:39	c=3, m=1,2,3,4 range=160ns period=10ns
377	TDC calibration	0:05	2005.10.31 13:41	2005.10.31 13:46	c=3, m=5,6,7,8 range=160ns period=10ns
378	TDC calibration	0:06	2005.10.31 13:51	2005.10.31 13:57	c=3, m=9,10,11 range=160ns period=10ns
379	TDC calibration	0:15	2005.10.31 14:30	2005.10.31 14:45	c=3, m=19 range=10240ns, period=640ns for SDD
380	TDC calibration	1:20	2005.10.31 14:47	2005.10.31 16:07	c=3, m=20 range=10240ns, period=640ns for SDD
381	Cosmic ray	13:38	2005.10.31 16:10	2005.11.1 5:48	without VDC vetos
382	Cosmic ray	5:29	2005.11.1 5:49	2005.11.1 11:18	without VDC vetos
383	Cosmic ray	6:46	2005.11.1 11:18	2005.11.1 18:04	without VDC vetos
384	TDC calibration	0:14	2005.11.1 20:42	2005.11.1 20:56	For all chambers (BLC & VDC & PDC); period=80ns, range=5120ns
385	pedestal run	0:01	2005.11.1 21:13	2005.11.1 21:14	
386	TDC calibration	0:06	2005.12.9 17:39	2005.12.9 17:45	For all chambers, period=80nsec, range=5120 nsec
387	TDC calibration	0:19	2005.12.10 15:02	2005.12.10 15:21	For all chambers, period=80nsec, range=5120 nsec
388	junk	4:59	2005.12.11 11:37	2005.12.11 16:36	
389	junk	4:36	2005.12.11 17:33	2005.12.11 22:09	
390	Cosmic ray	2:41	2005.12.11 22:32	2005.12.12 1:13	
391	junk	11:40	2005.12.12 2:14	2005.12.12 13:54	
392	Cosmic ray	0:53	2005.12.12 13:55	2005.12.12 14:48	
393	Cosmic ray	1:33	2005.12.12 15:12	2005.12.12 16:45	
394	Cosmic ray	1:57	2005.12.12 20:32	2005.12.12 22:29	
395	pedestal run	0:07	2005.12.13 9:19	2005.12.13 9:26	
396	Cosmic ray	1:45	2005.12.13 10:21	2005.12.13 12:06	
397	Cosmic ray	1:15	2005.12.13 12:07	2005.12.13 13:22	
398	Cosmic ray	0:34	2005.12.13 14:31	2005.12.13 15:05	
399	preproduction	1:15	2005.12.14 2:55	2005.12.14 4:10	writing test
400	preproduction	1:06	2005.12.14 6:19	2005.12.14 7:25	Beam on for half a hour
401	preproduction	0:10	2005.12.14 7:27	2005.12.14 7:37	
402	preproduction	2:01	2005.12.14 12:39	2005.12.14 14:40	
403	K+ beam run	0:12	2005.12.14 15:31	2005.12.14 15:43	
404	pi+ beam run	0:18	2005.12.14 15:45	2005.12.14 16:03	
405	pi+ scattering	1:13	2005.12.14 16:06	2005.12.14 17:19	pi+ *PA*PB: side scatting run
406	pi+ scattering	1:00	2005.12.14 17:24	2005.12.14 18:24	pi+ * VTC : top/botom scatting run
407	K+ stop run	0:36	2005.12.14 18:29	2005.12.14 19:05	K+ beam/60 + K+*PA*PB : beam & side R arm is not stable
408	K+ stop run	0:02	2005.12.14 19:29	2005.12.14 19:31	K+ beam/60 + K+*PA*PB : beam & side R arm is not stable

409	K+ stop run	1:12	2005.12.14 19:46	2005.12.14 20:58	K+ beam/60 + K+*PA*PB : beam & side R arm is not stable
410	K+ stop run	2:28	2005.12.14 20:58	2005.12.14 23:26	K+ beam/60 + K+*PA*PB : beam & side R arm is not stable
411	K+ stop run	0:30	2005.12.14 0:04	2005.12.14 0:34	K+ beam/60 + K+*PA*PB : beam & side R arm is stable, but PB-L6C and L24u off
412	K+ stop run	1:39	2005.12.14 0:35	2005.12.14 2:14	K+ beam/60 + K+*PA*PB : beam & side
413	K+ stop run	1:44	2005.12.14 2:19	2005.12.14 4:03	K+ beam/60 + K+*PA*PB : beam & side
414	K+ stop run	2:21	2005.12.14 4:47	2005.12.14 7:08	K+ beam/60 + K+*PA*PB : beam & side
415	K+ stop run	0:58	2005.12.14 7:31	2005.12.14 8:29	K+ * VTC : top/bottom
416	K+ stop run	0:58	2005.12.14 8:31	2005.12.14 9:29	K+ * VTC : top/bottom
417	Production	1:51	2005.12.15 12:32	2005.12.15 14:23	(c.m.s)=(0,18,14), (0,18,15) are not taken.
418	Production	2:00	2005.12.15 14:41	2005.12.15 16:41	sdd 7,8 lower TDC signal problem has been fixed AFTER this run.
419	Production	2:46	2005.12.15 17:17	2005.12.15 20:03	Real production starts here.
420	Production	2:00	2005.12.15 20:18	2005.12.15 22:18	
421	Production	1:58	2005.12.15 22:20	2005.12.16 0:18	
422	Production	2:00	2005.12.16 0:20	2005.12.16 2:20	
423	Production	1:59	2005.12.16 2:21	2005.12.16 4:20	
424	Production	1:11	2005.12.16 4:21	2005.12.16 5:32	
425	Production	2:01	2005.12.16 6:04	2005.12.16 8:05	
426	Production	1:27	2005.12.16 8:05	2005.12.16 9:32	
427	Production	2:00	2005.12.16 9:51	2005.12.16 11:51	
428	Production	2:00	2005.12.16 11:54	2005.12.16 13:54	
429	Production	2:22	2005.12.16 13:54	2005.12.16 16:16	
430	Production	0:58	2005.12.16 16:19	2005.12.16 17:17	
431	Production	1:54	2005.12.16 17:18	2005.12.16 19:12	PDC HV was changed to 1.25kV.
432	Production	2:01	2005.12.16 19:47	2005.12.16 21:48	PDC threshold was changed to 782 mV. PDC HV was returned back to 1.27kV..
433	Production	2:00	2005.12.16 22:03	2005.12.17 0:03	
434	Production	1:59	2005.12.17 0:03	2005.12.17 2:02	
435	Junk	0:19	2005.12.17 2:03	2005.12.17 2:22	SDD#3 signal trigger rate was too large because of bad connection of coincidence module.
436	Production	0:52	2005.12.17 2:23	2005.12.17 3:15	High signal rate again. Coincidence module is replaced after this run.
437	Junk	1:21	2005.12.17 3:16	2005.12.17 4:37	
438	Production	1:03	2005.12.17 6:26	2005.12.17 7:29	T2 discriminator has been replaced from this run.
439	Production	1:42	2005.12.17 7:57	2005.12.17 9:39	
440	Production	2:01	2005.12.17 9:52	2005.12.17 11:53	Wilkinson PH ADC input connector was changed. SDD6 threshold 163.3->213.5mV for the run.
441	Production	2:00	2005.12.17 11:54	2005.12.17 13:54	
442	Production	1:59	2005.12.17 13:54	2005.12.17 15:53	
443	Production	2:36	2005.12.17 15:54	2005.12.17 18:30	
444	Production	2:16	2005.12.17 19:00	2005.12.17 21:16	
445	Production	2:00	2005.12.17 21:30	2005.12.17 23:30	
446	Production	2:00	2005.12.17 23:31	2005.12.18 1:31	Huge tail appears on PDC
447	Production	1:59	2005.12.18 1:33	2005.12.18 3:32	Huge tail disappears after PDC HV 1.27 -> 1.25 kV
448	Production	2:01	2005.12.18 3:32	2005.12.18 5:33	
449	Production	1:00	2005.12.18 5:33	2005.12.18 6:33	
450	Production	1:57	2005.12.18 7:05	2005.12.18 9:02	
451	Production	0:45	2005.12.18 9:02	2005.12.18 9:47	
452	Production	2:00	2005.12.18 10:04	2005.12.18 12:04	
453	Production	2:00	2005.12.18 12:04	2005.12.18 14:04	
454	Production	2:00	2005.12.18 14:04	2005.12.18 16:04	
455	Production	2:14	2005.12.18 16:04	2005.12.18 18:18	
456	Production	1:49	2005.12.18 18:48	2005.12.18 20:37	
457	Production	1:59	2005.12.18 21:01	2005.12.18 23:00	SDD #6 H.V. was disconnected from this run
458	Production	1:58	2005.12.18 23:01	2005.12.19 0:59	
459	Production	1:59	2005.12.19 1:00	2005.12.19 2:59	
460	Production	2:07	2005.12.19 3:00	2005.12.19 5:07	
461	Production	2:00	2005.12.19 5:37	2005.12.19 7:38	
462	Production	1:23	2005.12.19 7:38	2005.12.19 9:01	
463	Cosmic ray	4:07	2005.12.19 9:18	2005.12.19 13:25	
464	Cosmic ray	0:49	2005.12.19 14:05	2005.12.19 14:54	
465	Cosmic ray	1:04	2005.12.19 14:55	2005.12.19 15:59	
466	Production	2:00	2005.12.19 16:04	2005.12.19 18:04	
467	Production	2:00	2005.12.19 18:05	2005.12.19 20:05	
468	Production	1:47	2005.12.19 20:46	2005.12.19 22:33	
469	Production	0:18	2005.12.19 23:09	2005.12.20 23:28	Leeroy #1 ch22 broken? --> recovered by itself.
470	Cosmic ray	2:53	2005.12.20 0:16	2005.12.20 3:10	
471	Production	0:34	2005.12.20 3:15	2005.12.20 3:49	Very unstable beam
472	Production	1:57	2005.12.20 4:08	2005.12.20 6:05	Very unstable beam
473	Production	2:00	2005.12.20 6:06	2005.12.20 8:06	Very unstable beam
474	Production	1:43	2005.12.20 8:38	2005.12.20 10:21	Unstable beam: REPIC new-1 alarm
475	Production	0:27	2005.12.20 10:30	2005.12.20 10:57	REPIC new-1 HV off --> on
476	Production	2:00	2005.12.20 11:09	2005.12.20 13:09	
477	Production	0:53	2005.12.20 13:09	2005.12.20 14:02	SDD 4th channel TDC missing
478	Production	2:01	2005.12.20 14:03	2005.12.20 16:04	SDD 4th channel TDC --> moved tp 6th TDC channel : CMS table updated
479	Production	0:39	2005.12.20 16:04	2005.12.20 16:43	SDD 4th channel TDC missing again, CAEN HV crate 6,7 are not accessible remotely
480	Production	1:58	2005.12.20 16:46	2005.12.20 18:44	SDD 4th channel TDC --> returned to 4th TDC channel (previous one) : CMS table updated
481	Production	2:15	2005.12.20 18:45	2005.12.20 21:00	After this run bak was rebooted
482	Production	1:51	2005.12.20 21:37	2005.12.20 23:28	
483	Production	1:59	2005.12.20 23:44	2005.12.21 1:43	
484	Production	1:58	2005.12.21 1:44	2005.12.21 3:42	
485	Production	2:03	2005.12.21 3:44	2005.12.21 5:47	
486	Production	2:14	2005.12.21 5:47	2005.12.21 8:02	
487	Production	2:07	2005.12.21 8:42	2005.12.21 10:50	PDC TDC tail structure appeared
488	Production	2:02	2005.12.21 11:15	2005.12.21 13:17	PDC threshold was changed 603 -> 645 mV at the DC supply, the tail structure disappeared
489	Production	2:01	2005.12.21 13:18	2005.12.21 15:19	
490	Production	1:50	2005.12.21 15:19	2005.12.21 17:09	K5 production targetting performed

491	Production	1:44	2005.12.21 17:09	2005.12.21 18:53	
492	Production	2:03	2005.12.21 19:27	2005.12.21 21:30	
493	Production	1:59	2005.12.21 21:43	2005.12.21 23:42	
494	Production	1:59	2005.12.21 23:42	2005.12.22 1:42	
495	Production	1:59	2005.12.22 1:42	2005.12.22 3:42	
496	Production	1:59	2005.12.22 3:42	2005.12.22 5:41	
497	Production	1:49	2005.12.22 5:42	2005.12.22 7:32	
498	Production	1:58	2005.12.22 8:06	2005.12.22 10:05	
499	Production	0:10	2005.12.22 10:06	2005.12.22 10:16	
500	Production	0:14	2005.12.22 10:27	2005.12.22 10:41	Lecroy1 ch22 (PB-L7d) dead
501	Production	1:55	2005.12.22 10:59	2005.12.22 12:54	Lecroy1 dead ch was moved to Lecroy3 ch30, VDC five channels had noise, they disappeared by it self
502	Production	1:56	2005.12.22 12:55	2005.12.22 14:51	PB signal was disconnected about 10 minute
503	Production	1:59	2005.12.22 14:52	2005.12.22 16:51	FADC : input function generator to SDD6's ch, some NIM on the bridge are unstable (PB_L, NC_L, VETO)
504	Production	2:03	2005.12.22 16:51	2005.12.22 18:54	
505	Production	1:49	2005.12.22 19:27	2005.12.22 21:17	VDC still have noise.
506	Production	0:36	2005.12.22 21:32	2005.12.22 22:08	VDC still have noise.
507	Production	0:09	2005.12.22 22:30	2005.12.22 22:39	VDC UP threshold = 1.350V (VDC UP threshold was changed from 1.150V to 1.350V.)
508	Production	1:02	2005.12.22 22:52	2005.12.22 23:54	VDC UP threshold = 1.550V (VDC UP threshold was changed from 1.350V to 1.550V.)
509	Production	2:00	2005.12.23 0:05	2005.12.23 2:05	VDC UP threshold = 1.400V (VDC UP threshold was changed from 1.550V to 1.400V.)
510	Production	2:02	2005.12.23 2:06	2005.12.23 4:08	
511	Production	1:57	2005.12.23 4:08	2005.12.23 6:06	
512	Production	1:53	2005.12.23 6:32	2005.12.23 8:26	
513	Production	2:00	2005.12.23 8:39	2005.12.23 10:39	VDC still had noise.
514	Production	2:01	2005.12.23 10:39	2005.12.23 12:40	At the end of this run, VDC noise disappeared
515	pi- beam run	0:19	2005.12.23 12:45	2005.12.23 13:05	pi- beam/350 + cosmic + sdd self, VDC top HV was changed 2.60/2.35 -> 2.70/2.44
516	pi- scattering	1:00	2005.12.23 13:07	2005.12.23 14:07	pi- * PA * PB + cosmic + sdd self
517	pi- scattering	1:00	2005.12.23 14:12	2005.12.23 15:12	pi- *VTC + cosmic + sdd self
518	K- stop run	0:59	2005.12.23 15:18	2005.12.23 16:17	Kstop only + cosmic + sdd self
519	Production	2:00	2005.12.23 16:19	2005.12.23 18:19	
520	Production	1:56	2005.12.23 18:52	2005.12.23 20:48	
521	Production	2:01	2005.12.23 21:03	2005.12.23 23:04	
522	Production	1:59	2005.12.23 23:04	2005.12.24 1:03	
523	Production	2:00	2005.12.24 1:05	2005.12.24 3:05	
524	Production	2:01	2005.12.24 3:05	2005.12.24 5:06	
525	Production	2:00	2005.12.24 5:32	2005.12.24 7:32	
526	Production	0:31	2005.12.24 7:35	2005.12.24 8:07	
527	Production	1:59	2005.12.24 8:17	2005.12.24 10:17	
528	Production	2:00	2005.12.24 10:18	2005.12.24 12:18	
529	Production	2:00	2005.12.24 12:18	2005.12.24 14:18	
530	Production	2:00	2005.12.24 14:18	2005.12.24 16:18	
531	Production	0:47	2005.12.24 16:19	2005.12.24 17:07	
532	Production	2:03	2005.12.24 17:36	2005.12.24 19:39	
533	Production	0:56	2005.12.24 19:41	2005.12.24 20:37	
534	Production	1:59	2005.12.24 20:51	2005.12.24 22:50	
535	Production	2:00	2005.12.24 22:50	2005.12.25 0:50	
536	Production	1:59	2005.12.25 0:51	2005.12.25 2:50	
537	Production	2:00	2005.12.25 2:52	2005.12.25 4:52	
538	Production	2:00	2005.12.25 5:19	2005.12.25 7:19	
539	Production	2:27	2005.12.25 7:19	2005.12.25 9:47	
540	Production	2:00	2005.12.25 9:59	2005.12.25 12:00	
541	Production	1:58	2005.12.25 12:00	2005.12.25 13:58	t0 gain shifted again
542	Production	2:00	2005.12.25 13:59	2005.12.25 15:59	t0 gain shifted yet
543	Production	1:57	2005.12.25 15:59	2005.12.25 17:57	beginning of this run Lecroy 2 & 3 power downed, Mom.slit shifted by itself..., t0 gain shited yet
544	Production	1:35	2005.12.25 17:58	2005.12.25 19:33	
545	Production	2:08	2005.12.25 20:01	2005.12.25 22:09	
546	Production	2:00	2005.12.25 22:21	2005.12.26 0:22	
547	Production	2:00	2005.12.26 0:22	2005.12.26 2:22	
548	Production	1:59	2005.12.26 2:23	2005.12.26 4:22	
549	Production	2:01	2005.12.26 4:22	2005.12.26 6:23	1 ch of VDC oscillated
550	Production	1:36	2005.12.26 6:25	2005.12.26 8:01	1 ch of VDC oscillated yet
551	Production	1:50	2005.12.26 8:31	2005.12.26 10:21	VDC oscillation disappeared
552	Production	0:58	2005.12.26 10:22	2005.12.26 11:20	PDC had the tail structure, beam intensity was increased (EP1 SEC : 540->580)
553	Production	2:00	2005.12.26 11:32	2005.12.26 13:32	
554	Production	2:00	2005.12.26 13:32	2005.12.26 15:32	
555	Production	1:57	2005.12.26 15:32	2005.12.26 17:30	
556	Production	2:06	2005.12.26 17:30	2005.12.26 19:36	
557	Production	2:34	2005.12.26 20:08	2005.12.26 22:42	Ar/isobutane mixture went down to 100/18 isobutane second pressure was 0 for some time
558	Production	1:58	2005.12.26 22:56	2005.12.27 0:55	
559	Production	2:00	2005.12.27 0:55	2005.12.27 2:56	
560	Production	2:02	2005.12.27 2:57	2005.12.27 4:59	
561	Production	2:01	2005.12.27 4:59	2005.12.27 7:01	
562	Production	1:06	2005.12.27 7:02	2005.12.27 8:08	
563	Production	2:00	2005.12.27 8:35	2005.12.27 10:35	t0 gain shifted -> returned by it self
564	Production	1:43	2005.12.27 10:35	2005.12.27 12:19	
565	Production	0:21	2005.12.27 12:31	2005.12.27 12:53	PDC had the tail structure
566	Production	0:39	2005.12.27 12:54	2005.12.27 13:33	PDC HV was changed 1.25 -> 1.22
567	Production	1:57	2005.12.27 13:35	2005.12.27 15:33	PDC HV was changed 1.22 -> 1.19
568	Production	2:01	2005.12.27 15:36	2005.12.27 17:37	PDC HV was changed 1.19 -> 1.15
569	Production	1:58	2005.12.27 17:37	2005.12.27 19:35	
570	Cosmic	0:56	2005.12.27 19:35	2005.12.27 20:31	
571	Production	0:41	2005.12.27 20:32	2005.12.27 21:13	BLC and PDC HV was changed to 1.0kV
572	Junk	0:01	2005.12.27 21:12	2005.12.27 21:13	

573	Production	0:36	2005.12.27 21:15	2005.12.27 21:26	BLC Pot. 1.25, Cat. 1.20 BDC Pot. 1.25, Cat. 1.25
574	Production	0:36	2005.12.27 21:55	2005.12.27 22:31	BLC Pot. 1.25, Cat. 1.19 BDC Pot. 1.15, Cat. 1.15
575	Junk	0:01	2005.12.27 22:32	2005.12.27 22:33	BLC Pot. 1.25, Cat. 1.20 BDC Pot. 1.20, Cat. 1.20
576	Production	0:30	2005.12.27 22:34	2005.12.27 23:05	
577	Production	0:31	2005.12.27 23:07	2005.12.27 23:38	
578	Production	0:21	2005.12.27 23:38	2005.12.27 23:59	BLC Pot. 1.30, Cat. 1.25 BDC Pot. 1.30, Cat. 1.30
579	Production	1:30	2005.12.28 0:15	2005.12.28 1:45	PDC threshold changed from 682mV -> 504mV
580	Production	2:00	2005.12.28 1:58	2005.12.28 3:58	
581	Production	2:00	2005.12.28 3:59	2005.12.28 5:59	
582	Production	2:00	2005.12.28 5:59	2005.12.28 7:59	
583	Production	1:01	2005.12.28 7:59	2005.12.28 9:01	END of E570 beam time !!!
584	Gosmic	0:58	2005.12.28 9:02	2005.12.28 10:00	
585	TDC calibration	0:02	2005.12.28 10:34	2005.12.28 10:37	c=0, m=1,2,4 range=160ns period=10ns
586	TDC calibration	0:01	2005.12.28 10:40	2005.12.28 10:41	c=0, m=6,7,9 range=160ns period=10ns
587	TDC calibration	0:01	2005.12.28 10:47	2005.12.28 10:48	c=0, m=10,11,12 range=160ns period=10ns
588	TDC calibration	0:01	2005.12.28 10:50	2005.12.28 10:51	c=0, m=13 range=160ns period=10ns
589	TDC calibration	0:01	2005.12.28 11:05	2005.12.28 11:06	c=2, m=1,2,3 range=160ns period=10ns
590	TDC calibration	0:01	2005.12.28 11:09	2005.12.28 11:10	c=2, m=4,5,6 range=160ns period=10ns
591	TDC calibration	0:01	2005.12.28 11:23	2005.12.28 11:24	c=2, m=7 range=160ns period=10ns
592	TDC calibration	0:01	2005.12.28 11:26	2005.12.28 11:27	c=2, m=8,9 range=160ns period=10ns
593	TDC calibration	0:01	2005.12.28 11:29	2005.12.28 11:30	c=2, m=10,11,12 range=160ns period=10ns
594	TDC calibration	0:01	2005.12.28 11:34	2005.12.28 11:35	c=3, m=1,2,3 range=160ns period=10ns
595	TDC calibration	0:01	2005.12.28 11:38	2005.12.28 11:39	c=3, m=4,6 range=160ns period=10ns
596	TDC calibration	0:01	2005.12.28 11:41	2005.12.28 11:42	c=3, m=5,7,9 range=160ns period=10ns
597	TDC calibration	0:01	2005.12.28 11:46	2005.12.28 11:47	c=3, m=10,11,12 range=160ns period=10ns : Chamber HV all OFF
598	TDC calibration	0:01	2005.12.28 11:48	2005.12.28 11:49	c=3, m=20 range=160ns period=10ns : Counter HV all OFF
599	TDC calibration	0:08	2005.12.28 12:16	2005.12.28 12:25	swapped TDC calib start<-->stop for SDD TDC calib: c=7,m=1 range=5.12musec period 0.32musec
600	TDC calibration	0:14	2005.12.28 12:28	2005.12.28 12:42	c=7, m=2,5 (+1 also) : (c,m,s)=(7,5,7) found to be dead
601	TDC calibration	0:05	2005.12.28 13:04	2005.12.28 13:09	BLC & PDC chamber TDC calibration: range=1.28musec period=20ns
602	TDC calibration	0:08	2005.12.28 13:18	2005.12.28 13:27	VDC chamber (DOWN only) TDC calibration: range=1.28musec period=80ns