List of all comments to all files in RUN48 (3+4/96)

Isotope	DLT	File	Comment
^{90}Zr	**R48_1**	F1	position calibration of SC21, zeros in ΔT spectra due to coincidences with SC41, D3 down
	R48_1	F2	as file F1, but without coincidence with SC41
	R48_1	F3	test of setup with fragments and study of fragmentation / fission
	R48_1	F4	cont. of F3, only slits at S1 changed
	R48_1	F5	HFSQT11–13, TS4QT11–13 set to zero, defocussed beam
	R48_1	F6	cont. of F5
	R48_1	F7	new defocussation, only HFSQT11–13 are switched off
	R48_1	F8	cont of F7, stop due to problems with SEETRAM
	R48_1	F9	cont. of F8, SEETRAM okay, **Scanlist 3**, change in FastBus setup
	R48_1	F10	cont. of F9
	R48_1	F11	Test of Twin: HV of both anodes now +500V, setting as before
	R48_1	F12	threshold of SC21 + SC41 (l+r) CFDs decreased to gain more triggers, now the main part of fragments jumps over the threshold
^{238}U	R48_1	F13	primary beam at S2, MW21, MW22 SC21 check (calibration setting of RUN46, Feb. 1996)
	R48_1	F14	looking for charge states at S1, magnetic setting of F13
	R48_1	F15	primary beam at S4, all settings as before, no MW21, MW22 in beam
^{238}U	R48_1	F16	no degrader, niobium stripper only, **Active Target lifted out of setup**, Twin test in coincidence with MUSIC, TS4KY1+2 = 10V (was 0V)
	R48_2	F17	same as F16, but defocus with HFSQT12 in y (set to zero), Twin anodes again 1000V
	R48_2	F18	sweeping beam at S4, stopped due to low intensities because of defocussing at S2
	R48_2	F19	sweeping beam at S4, defocussed at S2 and S4 (0 to -150mm), Twin: 3. anode (upper chamber) has no signals (VV?)
	R48_2	F20	same as F19, Twin_lr(3) might be deteriorated in first part of file, file stopped because pulser was still connected to the Twin
	R48_2	F21	same as F20, 3. anode (upper chamber) of Twin still missing
	R48_2	F22	same as F21, Twin, upper chamber: 1. anode: main ampl. = MA8000, 0.7μs, 2. anode: main ampl. Tennelec, 2μs
	R48_2	F23	same as F22, beam back on Soll values, shaping time 2. anode (Twin, upper chamber) set to 0.5μs
	R48_2	F24	Tennelec set to an amplification of 45, all anodes set to 750V

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Isotope	DLT	File	Comment
^{238}U	**R48_3**	F25	**degrader calibration**, -20% setting, beam not centered at S4, file not readable on DLT
^{238}U	R48_3	F26	beam centered at S4, file not readable on DLT
^{238}U	R48_3	F27	-10% setting, centered with -1.8mm, file not readable on DLT
^{238}U	R48_3	F28	+10% setting, nearly centered with 2.7mm, file not readable on DLT
^{238}U	R48_3	F29	+20% setting, centered 1.9mm, file not readable on DLT
^{238}U	R48_3	F30	check position at S4
	R48_3	F31	check spectra at S3, MW31 is trigger
	R48_3	F32	check spectra at S2, MW21 is trigger
	R48_3	F33	check setting at S1, primary beam is 14mm off at S1
^{238}U	R48_3	F34	energy loss set to ^{90}Zr setting in 2. stage of FRS
^{90}Zr	R48_3	F35	primary beam with 550 A·MeV, focussed fragments around Zr, additional trigger MW11, S1 slits to ± 35mm
	R48_3	F36	fragments now defocussed, during file quadrupoles were dejusted, result: 2.8V HFSQT12, 4.0V TS4QT12, setting as F35
	R48_3	F37	same as F36, trigger MW11 switched off
	R48_3	F38	same as F37
	R48_3	F39	paddle SW_6—SW_10 (l+r): HV increased by +100V
	R48_3	F40	paddle 7+8 tested with NIM CFD for ToF2 resolution
	R48_3	F41	— file does not exist —
	R48_3	F42	paddle 7+8 tested with NIM CFD, voltage on paddle 7 1390(l) 1330(r) and on paddle 8 1400(l) 1245(r)
normal trigger mode			
^{229}Pa	**R48_4**	F43	played with SC42 time signals, **Scanlist** 4
	R48_3	F44	same as F43
	R48_4	F45	cont. F44, up to 19:49 (first 11 min.) played with ToF_U
	R48_4	F46	cont. F45, voltage at SC21L adjusted, new direct coincidence with SC41 for master trigger, **change position and ToF calibration due to voltage change**
	R48_4	F47	cont. F46, new timing of ToF2, see protocol book, SC21L voltage too low, **position and TOF changed**
new ToF2 with improved master trigger			
	R48_4	F48	cont. F47, SC21 now under full HV, **first setting with unchanged electronics** (new HV, ToF2 okay)
	R48_4	F49	cont. F48
	R48_4	F50	cont. F49, steerer at S2 changed, curious spill structure at file end
	R48_4	F51	cont. F50
	R48_4	F52	cont. F51, steerer TS4KY1 adjusted
	R48_4	F53	cont. F52
	R48_4	F54	— file does not exist —

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Isotope	DLT	File	Comment
	R48_4	F55	— file does not exist —
	R48_4	F56	cont. F55
	R48_4	F57	cont. F56
	R48_4	F58	cont. F57
	R48_4	F59	cont. F58
	R48_4	F60	cont. F59
	R48_4	F61	cont. F60, stop file due to acquisition crash, file closed correctly
	R48_5	F62	cont. F61
	R48_5	F63	cont. F62
	R48_5	F64	cont. F63
fission trigger mode			
	R48_5	F65	cont. F64, **fission trigger**
	R48_5	F66	cont. F65
	R48_5	F67	cont. F66
	R48_5	F68	cont. F67
	R48_5	F69	cont. F68
	R48_5	F70	cont. F69
	R48_5	F71	cont. F70
	R48_5	F72	cont. F71
	R48_5	F73	cont. F72
	R48_5	F74	cont. F73, but start TDC ToF2 with ECL from front to rear rack, **change of timing**
	R48_5	F75	cont. F74
	R48_5	F76	cont. F75
	R48_5	F77	cont. F76
	R48_5	F78	cont. F77
	R48_5	F79	cont. F78, HV of ToF2 chrashed at file end
	R48_5	F80	cont. F79, paddle 9 has to broad pedestrals
	R48_5	F81	— file does not exist —
	R48_5	F82	cont. F81, paddle 9 left: pedestral okay
ToF2 resolution improved by shielded delay lines			
	R48_5	F83	cont. F82, **changes in ToF wall timing**, slits at S1 were closed shortly, delay lines changed to versions with shielded channels
	R48_5	F84	cont. F83, higher SEETRAM rate, breakdown of HV of ToF wall at file end
	R48_5	F85	cont. F84, HV restored
	R48_5	F86	cont. F85
	R48_5	F87	cont. F86
	R48_5	F88	cont. F87, paddle 8: open outputs were closed with 50Ω, beam in y adjusted, equal intensities in paddle 7+9, paddle 8 disconnected from CFD
	R48_5	F89	cont. F88, SEETRAM sensitivity now at 10^{-9}

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Isotope	DLT	File	Comment
	R48_6	F90	cont. F89
	R48_6	F91	cont. F90
	R48_6	F92	cont. F91
	R48_6	F93	cont. F92
	R48_6	F94	cont. F93
	R48_6	F95	cont. F94
	R48_6	F96	cont. F95
fission trigger mode			
^{222}Th	R48_6	F97	**new setting with fission trigger**, paddle 8 in again
	R48_6	F98	cont. F97
	R48_6	F99	cont. F98
	R48_6	F100	cont. F99
	R48_6	F101	cont. F100
	R48_6	F102	cont. F101
	R48_6	F103	cont. F102
	R48_6	F104	cont. F103, TS1QD12 breakdown for a short period
	R48_6	F105	cont. F104
	R48_6	F106	cont. F105, people played on Twin time signals during this file, **time signals of Twin are all mixed up** (since when?)
	R48_6	F107	cont. F106
	R48_6	F108	cont. F107
	R48_6	F109	cont. F108
	R48_7	F110	cont. F109
	R48_7	F111	cont. F110
	R48_7	F112	cont. F111, closed because of problems with ion source
	R48_7	F113	cont. F112, low counting rate, only 6 minutes
	R48_7	F114	cont. F113, counting rate is increasing
	R48_7	F115	cont. F114
	R48_7	F116	cont. F115
	R48_7	F117	cont. F116
	R48_7	F118	cont. F117
	R48_7	F119	cont. F118
	R48_7	F120	cont. F119
	R48_7	F121	cont. F120
	R48_7	F122	cont. F121
	R48_7	F123	cont. F122, file was opened twice
	R48_7	F124	cont. F123
	R48_7	F125	cont. F124
	R48_7	F126	cont. F125
	R48_7	F127	cont. F126
	R48_7	F128	cont. F127
	R48_7	F129	cont. F128
	R48_7	F130	cont. F129
	R48_8	F131	cont. F130

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Isotope	DLT	File	Comment
	R48_8	F132	cont. F131
	R48_8	F133	cont. F132
	R48_8	F134	cont. F133
normal trigger mode			
	R48_8	F135	cont. F134, normal fission trigger mode, closed due to change of source
	R48_8	F136	cont. F135, continue with new ion source
	R48_8	F137	cont. F136
	R48_8	F138	cont. F137
	R48_8	F139	cont. F138
normal trigger mode			
^{215}Ac	R48_8	F140	**new setting with normal trigger**, ToF2 high voltage chrashed
	R48_8	F141	cont. F140, opened twice by accident
	R48_8	F142	cont. F141
	R48_8	F143	cont. F142
	R48_8	F144	cont. F143
	R48_8	F145	cont. F144
	R48_8	F146	cont. F145
fission trigger mode			
	R48_8	F147	cont. F146, set to fission trigger, **but wrong trigger**
	R48_8	F148	cont. F147, stopped due to missing FastBus data
	R48_8	F149	cont. F148, **fist correct file of ^{215}Ac**
	R48_8	F150	cont. F149
	R48_8	F151	cont. F150
	R48_9	F152	cont. F151, closed due to source problems
	R48_9	F153	cont. F152, beam back, but weak
	R48_9	F154	cont. F153, closed because no beam anymore
	R48_9	F155	cont. F154
	R48_9	F156	cont. F155
	R48_9	F157	cont. F156
	R48_9	F158	cont. F157
	R48_9	F159	cont. F158
	R48_9	F160	cont. F159
	R48_9	F161	cont. F160
	R48_9	F162	cont. F161
	R48_9	F163	cont. F162
	R48_9	F164	cont. F163
	R48_9	F165	cont. F164, no "F" in filename
	R48_9	F166	cont. F165
normal trigger mode			
^{211}Ra	R48_10	F167	**new setting with normal trigger**, TS4KY1 = 0 V
	R48_10	F168	cont. F167

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Isotope	DLT	File	Comment
	R48_10	F169	cont. F168, TS4KY1 = 6 V
	R48_10	F170	cont. F169
	R48_10	F171	cont. F170
fission trigger mode			
	R48_10	F172	cont. F171
	R48_10	F173	cont. F172
	R48_10	F174	cont. F173
	R48_10	F175	cont. F174
	R48_10	F176	cont. F175
	R48_10	F177	cont. F176, beam loss
	R48_10	F178	cont. F177
	R48_10	F179	cont. F178
	R48_10	F180	cont. F179
	R48_10	F181	cont. F180
	R48_10	F182	cont. F181
	R48_10	F183	cont. F182
	R48_10	F184	cont. F183
	R48_10	F185	cont. F184
	R48_10	F186	cont. F185
	R48_11	F187	cont. F186
	R48_11	F188	cont. F187
	R48_11	F189	cont. F188
	R48_11	F190	cont. F189
	R48_11	F191	cont. F190
fission trigger mode			
^{226}Pa	R48_11	F192	**new setting with fission trigger**, TS4KY1 = 6 V
	R48_11	F193	cont. F192
	R48_11	F194	cont. F193
	R48_11	F195	cont. F194
	R48_11	F196	cont. F195
	R48_11	F197	cont. F196
	R48_11	F198	cont. F197
	R48_11	F199	cont. F198
	R48_11	F200	cont. F199
	R48_11	F201	cont. F200
	R48_11	F202	cont. F201
	R48_11	F203	cont. F202
	R48_11	F204	cont. F203
	R48_11	F205	cont. F204
	R48_11	F206	cont. F205
	R48_11	F207	cont. F206
	R48_11	F208	cont. F207
	R48_12	F209	cont. F208
	R48_12	F210	cont. F209

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Isotope	DLT	File	Comment
	R48_12	F211	cont. F210
	R48_12	F212	cont. F211
	R48_12	F213	cont. F212
	R48_12	F214	cont. F213
	R48_12	F215	cont. F214
	R48_12	F216	Position calibration at S2
	R48_12	F217	cont. F215
	R48_12	F218	cont. F217
	R48_12	F219	cont. F218
	R48_12	F220	cont. F219
	R48_12	F221	cont. F220
	R48_12	F222	cont. F221
normal trigger mode			
	R48_12	F223	cont. F222
	R48_12	F224	cont. F223
	R48_12	F225	cont. F224
	R48_12	F226	cont. F225
fission trigger mode			
	R48_12	F227	cont. F226, source change
	R48_13	F228	cont. F227
	R48_13	F229	cont. F228, 5 s spills
	R48_13	F230	cont. F229
	R48_13	F231	cont. F230
	R48_13	F232	cont. F231
	R48_13	F233	cont. F232
	R48_13	F234	cont. F233, spill length increased to 8 s during this file
	R48_13	F235	cont. F234, spill length 8 s
	R48_13	F236	cont. F235
	R48_13	F237	cont. F236