241Am inside

1.5us window

LEGe, MSD12, MSD26

Run 75 152Eu is back. Placed outside of Chamber for this run.

Only 241Am is in the chamber.

Run names with "CFDdelay\_adjusted" means CFD delay = 0.304 us for LEGe, 0.160 us for XtRa, and 0.304 us for MSD.

Run 79 (26 h)

Run 80 (38 h)

Run 81 (41 h)

Run 82 (62 h)

Run 83 (104 h 2 min)

Run 84 (76 h)

Run 85 (105 h 36 min) Room hot.

Run 86 (42 h 32 min) Room hot as hell.

Run 87 (25 h 17 min) Room hot as hell.

Run 88 (5 d 9 h 31 min) Room warm.

Run 89 (8 d 2 h 21 min). Room fine. Hot as hell later. MSD26 0.17 uA

Run 90 (3 d 3h 15 min). Room warm.

AC unit installed.

Run 91 (1 d 5h 40 min) Room cool. 0.002 uA, 0.123 uA

MSD12 removed. MSD26 remains. 2 mm collimator added in front of 241Am.

Run 92 (15 h 1.5 min) Room cool. MSD26 0.093 uA.

Run 93 (3 d 11 h 21 min) Room cool. MSD26 0.091 uA -> 0.118 uA.

I'm going to NYC.

Run 94 (6 d 17 h 39 min) Room between cool and warm. 0.102 uA.

12/31/2023 14:22:41 error: EventLogManager: Unexpected event log error! child killed: segmentation violation.

Run 95 (2 d 20 h 20 min). Room cool. 0.097 uA. pxct\_LEGe\_MSD26\_241Am\_inChamber\_2mmCollimator\_1.5uswindow

Run 96 (1 h) 241Am inside, facing LEGe 15-16 mm away from LEGe entrance window. 147 cps.

Run 97 (3 h) 152Eu inside. For XtRa efficiency, 14-15 mm away from the LEGe entrance window.

Run 98 (12.5 h) 152Eu inside. For XtRa efficiency, 14-15 mm away from the LEGe entrance window. XtRas are dangerously close to the chamber, 10 mm from the surface of flanges. XtRa 900 cps. LEGe 2100 cps.

Run 99 (7 h) 152Eu inside. For XtRa efficiency consistency check. Two flanges swapped. XtRa 900 cps. LEGe 2800 cps.

Run 7 (5 h 45 min) 152Eu inside under vacuum. 1.5 us window. For LEGe efficiency. LEGe 1100 cps.

Run 9 (12 h) same as Run 7.

Run 10 (7 h 20 min) same as Run 7 and 9, but with 500 ns event build window.

Run 16 (16 h 40 min) same as Run 10.

Run 100 (16 h 37 min) back to 241Am lifetime measurement. Same as Run 95. 0.080->0.063 uA.

Run 101 (150 h) same as Run 100. 47115ch=5443keV; 47481=5486keV

Run 102 (6 h) same as Run 100. 0.064 uA.

Run 103 (150 h) same as Run 100. 0.064 uA.

Run 104 (96.35 h) same as Run 100. 0.067 uA.

Run 105 (17 h 55 min). same as Run 100. 0.068 uA.

Run 106 (2 d 20 h 20 min). same as Run 100. 0.065 uA.

Run 107 (6 d 1 h 31 min). same as Run 100. 0.067 uA.

Run 108 same.

Run 109 same. 0.067 uA.

Run200, 201, 202 137Cs (M4038). For efficiency test. North 16 mm South 12 mm from the flange.

Run203, 152Eu (Z2707). For efficiency calibration.

+/- 1.5us window. LEGe+XtRa+MSD26. Both XtRa 12 mm from the flange.

LEGe 2995 cps. North 958 cps. South 819 cps. MSD26 1023 cps.

Run204, 152Eu (Z2707). For efficiency calibration. Both XtRa 12 mm from the flange.

+/- 1.5us window. LEGe and MSD26 are turned off in CSRA. Only the two XtRa are on.

Run205, 212 152Eu (Z2707). For XtRa efficiency calibration. Both XtRa 12 mm from the flange.

+/- 0.3us window. LEGe and MSD26 are turned off in CSRA. Only the two XtRa are on.

Run206, 207 152Eu (Z2707). For XtRa efficiency check. Both XtRa 220 mm from the flange.

+/- 0.3us window. LEGe and MSD26 are turned off in CSRA. Only the two XtRa are on.

Run208, 209, 210, 211 152Eu (Z2707) For random coincidence test. +/- 0.1us, 1.5us, 0.02us, 10us window, respectively. XtRa and MSD26 are turned off in CSRA. Only the LEGe is on.

Readout Event Build Window only affects coincidences between detectors and does not affect coincidences in a single detector.

Run213 North Only 152Eu On the cap. Extreme summing for fun. 0.02us Window

Run214 XtRa+LEGe+MSD26. 60Co (I7281) on target holder at chamber center. Vacuum. 0.02us Window. Both XtRa 12 mm from the flange.

Run215 XtRa+LEGe+MSD26. 60Co (I7281) on target holder at chamber center. Vacuum. 1us Window. Both XtRa 12 mm from the flange.

XtRa and LEGe DDAS Analog Gain 4.0 -> 1.0 to see higher energy gammas.

Run216, 217, 218 XtRa+LEGe+MSD26. 60Co (I7281) on target holder at chamber center. Vacuum. 1us Window. Both XtRa 12 mm from the flange.

Run219, 60Co (I7281) Test CFD Delay 0.16us -> 0.50us. TriggerRise 0.15us; TriggerGap 0.10us. For both XtRa.

Run220, 60Co (I7281) Test TriggerRise 0.15us -> 0.50us; TriggerGap 0.10us -> 0.50us; CFD Delay remains 0.50us. For both XtRa.

Run221, 152Eu (Z2707) in chamber atmosphere. Test CFD enabled.

Run222, 152Eu (Z2707) in chamber atmosphere. Test CFD disabled.

Run223, 152Eu (Z2707) in Chamber atmosphere. XtRa+LEGe. Test CFD Delay 0.16us -> 0.50us. TriggerRise 0.15us; TriggerGap 0.10us. For both XtRa. FastTrigger Delay 0.328->0.528 us for LEGe to make LEGE trigger slower.

Run224, 152Eu (Z2707) in Chamber atmosphere. XtRa+LEGe. Same as Run223 but CFD is turned off in CSRA, i.e., leading edge.

By now, I've learned that the existing Timing filter, CFD, and FastTrigger parameters are fine. No need to change them. I only changed the CFD delay for two XtRa from 0.16 to 0.30 us.

Run225, 152Eu (Z2707) in Chamber atmosphere. XtRa+LEGe. CFD delay for two XtRa 0.30 us.

Run226 North Only 152Eu On the cap. Extreme summing for fun. 1us Window.

Run227 North Only 152Eu On the cap. Extreme summing for fun. 0.02us Window.

Run228-229-230 LEGe+XtRa+MSD26 152Eu (Z2707) in Chamber. 17.5mm from 4 rods. Vacuum. XtRa 12 mm from flange. 1us Window. For all efficiency. 0.063 uA.

Run231 LEGe+XtRa+MSD26 152Eu (Z2707) in Chamber. 17.5mm from 4 rods. Vacuum. XtRa 12 mm from flange. 0.02us Window. Test efficiency. 0.063 uA.

Run232 LEGe+XtRa+MSD26 152Eu (Z2707) in Chamber. 17.5mm from 4 rods. Vacuum. XtRa 12 mm from flange. 10us Window. Test efficiency. 0.063 uA.

Run233 LEGe+XtRa Room background run. XtRa 12 mm from flange. 1us Window. For background subtraction.

Run234 XtRa 60Co (I7281) at edge of chamber. LED Timing Test with Trigger Rise 0.016us, Trigger Gap 1.000us.

Run235 XtRa 60Co (I7281) at edge of chamber. CFD Timing Test with Trigger Rise 0.016us, Trigger Gap 1.000us, CFD Delay 0.504us.

Run236 XtRa 60Co (I7281) in the middle of North and South with 8 cm from each entrance window. LED Timing Test with Trigger Rise 0.016us, Trigger Gap 1.000us, Threshold 10000.

Run236 XtRa 60Co (I7281) in the middle of North and South with 8 cm from each entrance window. LED Timing Test with Trigger Rise 0.016us, Trigger Gap 1.000us, Threshold 16384.

Run238-239 XtRa 60Co (I7281) in the middle of North and South with 8 cm from each entrance window. LED Timing Test with Trigger Rise 0.016us, Trigger Gap 1.000us, Threshold 5000.

Run240 XtRa 60Co (I7281) in the middle of North and South with 8 cm from each entrance window. LED Timing Test with Trigger Rise 0.016us, Trigger Gap 1.000us, Threshold 500, 950.

Run241 XtRa 60Co (I7281) in the middle of North and South with 8 cm from each entrance window. LED Timing Test with Trigger Rise 0.016us, Trigger Gap 1.000us, Threshold 2000, 2000.

Run242 XtRa 60Co (I7281) in the middle of North and South with 8 cm from each entrance window. CFD Timing Test with Trigger Rise 0.016us, Trigger Gap 1.000us, Threshold 530, 1020. CFD Delay 0.504 us.

Module 0 channel 3 input 3123.84 output 1837.66 livetime 26.2046 runtime 26.2132

Module 0 channel 5 input 3158.17 output 1695.94 livetime 26.2047 runtime 26.2132

Run243 XtRa 60Co (I7281) in the middle of North and South with 8 cm from each entrance window. CFD Timing Test with Trigger Rise 0.016us, Trigger Gap 1.000us, Threshold 530, 1020. CFD Delay 0.104 us.

Run244 XtRa 60Co (I7281) in the middle of North and South with 8 cm from each entrance window. LED Timing Test with Trigger Rise 0.064us, Trigger Gap 0.952us, Threshold 260, 610. CFD Disabled.

Run245 XtRa 60Co (I7281) in the middle of North and South with 8 cm from each entrance window. LED Timing Test with Trigger Rise 0.104us, Trigger Gap 0.912us, Threshold 210, 340. CFD Disabled.

Module 0 channel 3 input 2322.96 output 2071.08 livetime 50.1821 runtime 50.1994

Module 0 channel 5 input 2510.01 output 1994.21 livetime 50.1766 runtime 50.1994

Run246 XtRa 60Co (I7281) in the middle of North and South with 8 cm from each entrance window. LED Timing Test with Trigger Rise 0.200us, Trigger Gap 0.816us, Threshold 190, 330. CFD Disabled.

Module 0 channel 3 input 2236.09 output 2068.41 livetime 24.1377 runtime 24.1456

Module 0 channel 5 input 2291.26 output 2031.84 livetime 24.1365 runtime 24.1456

Run247 XtRa 60Co (I7281) in the middle of North and South with 8 cm from each entrance window. LED Timing Test with Trigger Rise 0.104us, Trigger Gap 0.912us, Threshold 2520, 2520. CFD Disabled.

Module 0 channel 3 input 2038.44 output 1930.45 livetime 34.1702 runtime 34.1802

Module 0 channel 5 input 2056.05 output 1902.36 livetime 34.1665 runtime 34.1802

Run248 XtRa 60Co (I7281) in the middle of North and South with 8 cm from each entrance window. CFD Timing Test with Trigger Rise 0.064us, Trigger Gap 0.504us, Threshold 260, 610. CFD 0.504us.

Module 0 channel 3 input 2411.04 output 2037.44 livetime 10.4403 runtime 10.445

Module 0 channel 5 input 7435.26 output 1861.09 livetime 10.4401 runtime 10.445

Run249 XtRa 60Co (I7281) in the middle of North and South with 8 cm from each entrance window. CFD Timing Test with Trigger Rise 0.064us, Trigger Gap 0.952us, Threshold 260, 610. CFD 0.504us. Scale 0

Module 0 channel 3 input 2435.96 output 2057.56 livetime 11.1537 runtime 11.1593

Module 0 channel 5 input 2573.87 output 1967.51 livetime 11.1544 runtime 11.1593

Run250 XtRa 60Co (I7281) in the middle of North and South with 8 cm from each entrance window. CFD Timing Test with Trigger Rise 0.064us, Trigger Gap 0.952us, Threshold 260, 610. CFD 0.504us. Scale 4

Module 0 channel 3 input 2409.62 output 2041.37 livetime 9.75923 runtime 9.76303

Module 0 channel 5 input 2564.98 output 1960.76 livetime 9.75954 runtime 9.76303

Run251 XtRa 60Co (I7281) in the middle of North and South with 8 cm from each entrance window. CFD Timing Test with Trigger Rise 0.064us, Trigger Gap 0.952us, Threshold 260, 610. CFD 0.504us. Scale 7

Module 0 channel 3 input 2430.55 output 2034.41 livetime 14.6267 runtime 14.6327

Module 0 channel 5 input 2542.38 output 1970.86 livetime 14.6261 runtime 14.6327

Run252 XtRa 60Co (I7281) in the middle of North and South with 8 cm from each entrance window. CFD Timing Test with Trigger Rise 0.064us, Trigger Gap 0.952us, Threshold 260, 610. CFD 0.104us. Scale 7

Module 0 channel 3 input 2423.47 output 2051.47 livetime 21.3285 runtime 21.3359

Module 0 channel 5 input 2536.43 output 1948.74 livetime 21.3272 runtime 21.3359

Run253 XtRa 60Co (I7281) in the middle of North and South with 8 cm from each entrance window. LED Timing Test with Trigger Rise 0.048us, Trigger Gap 0.968us, Threshold 270, 720.

Module 0 channel 3 input 2373.87 output 2008.39 livetime 17.375 runtime 17.3806

Module 0 channel 5 input 2648.35 output 1967.54 livetime 17.3731 runtime 17.3806

Run254 XtRa 60Co (I7281) in the middle of North and South with 8 cm from each entrance window. LED Timing Test with Trigger Rise 0.032us, Trigger Gap 0.984us, Threshold 330, 860.

Module 0 channel 3 input 2373.87 output 2008.39 livetime 17.375 runtime 17.3806

Module 0 channel 5 input 2648.35 output 1967.54 livetime 17.3731 runtime 17.3806

Run255 XtRa 60Co (I7281) in the middle of North and South with 8 cm from each entrance window. CFD Timing Test with Trigger Rise 0.064us, Trigger Gap 0.952us, Threshold 300, 700. CFD 0.008us. Scale 7

Module 0 channel 3 input 2358.29 output 2064.11 livetime 49.5342 runtime 49.5512

Module 0 channel 5 input 2438.41 output 1950.53 livetime 49.5327 runtime 49.5512

Run256 XtRa 60Co (I7281) in the middle of North and South with 8 cm from each entrance window. LED Timing Test with Trigger Rise 0.016us, Trigger Gap 1.000us, Threshold 550, 1500.

Module 0 channel 3 input 2926.62 output 1861.03 livetime 27.9968 runtime 28.0081

Module 0 channel 5 input 2835.11 output 1713.32 livetime 27.9968 runtime 28.0081

Run257 XtRa 60Co (I7281) in the middle of North and South with 8 cm from each entrance window. CFD Timing Test with Trigger Rise 0.064us, Trigger Gap 0.952us, Threshold 300, 700. CFD 0.200us. Scale 7

Module 0 channel 3 input 2338.67 output 2032.99 livetime 24.0385 runtime 24.0468

Module 0 channel 5 input 2445.12 output 1944.25 livetime 24.0373 runtime 24.0468

Run258 XtRa 60Co (I7281) in the middle of North and South with 8 cm from each entrance window. CFD Timing Test with Trigger Rise 0.064us, Trigger Gap 0.952us, Threshold 300, 700. CFD 0.064us. Scale 7

Module 0 channel 3 input 2315.27 output 2027.9 livetime 14.8449 runtime 14.8513

Module 0 channel 5 input 2393.32 output 1932.49 livetime 14.8459 runtime 14.8513

Run259 XtRa 60Co (I7281) in the middle of North and South with 8 cm from each entrance window. CFD Timing Test with Trigger Rise 0.064us, Trigger Gap 0.952us, Threshold 300, 700. CFD 0.064us. Scale 4

Module 0 channel 3 input 2331.24 output 2052.15 livetime 11.0366 runtime 11.0401s

Module 0 channel 5 input 2396.54 output 1936.21 livetime 11.0368 runtime 11.0401

Run260 XtRa 60Co (I7281) in the middle of North and South with 8 cm from each entrance window. CFD Timing Test with Trigger Rise 0.064us, Trigger Gap 0.952us, Threshold 300, 700. CFD 0.120us. Scale 7

Module 0 channel 3 input 2311.69 output 2028.1 livetime 19.5926 runtime 19.5986

Module 0 channel 5 input 2441.2 output 1938.81 livetime 19.592 runtime 19.5986

Run261 XtRa 60Co (I7281) in the middle of North and South with 8 cm from each entrance window. LED Timing Test with Trigger Rise 0.064us, Trigger Gap 0.952us, Threshold 300, 700.

Run262 XtRa 60Co (I7281) outside of Chamber wall. LED Timing Test with Trigger Rise 0.064us, Trigger Gap 0.952us for All 3 Ge, Threshold 150, 300, 700 for LEGe, North, South.

Module 0 channel 1 input 138.485 output 135.087 livetime 37.9752 runtime 37.9755

Module 0 channel 3 input 2153.06 output 1872.63 livetime 37.9642 runtime 37.9755

Module 0 channel 5 input 2282.9 output 1803.11 livetime 37.9631 runtime 37.9755

Run263 XtRa 60Co (I7281) on the white cap of LEGe. CFD Timing Test with Trigger Rise 0.064us, Trigger Gap 0.952us for All 3 Ge, Threshold 150, 300, 700 for LEGe, North, South. CFD 0.120us. Scale 7. Over Night Run 8 hours. Returned 60Co to Stephen on 4/25/2024.

Module 0 channel 1 input 847.326 output 826.059 livetime 20.3393 runtime 20.3399

Module 0 channel 3 input 1735.25 output 1525.82 livetime 20.3331 runtime 20.3399

Module 0 channel 5 input 1991.64 output 1595.92 livetime 20.3329 runtime 20.3399

Run264 XtRa 152Eu (Z2707) taped 2 cm from LEGe window. LED Timing Test with Trigger Rise 0.064us, Trigger Gap 0.952us for All 3 Ge, Threshold 310, 300, 730 for LEGe, North, South.

Module 0 channel 1 input 1904.28 output 1640.77 livetime 19.2797 runtime 19.3788

Module 0 channel 3 input 1702.3 output 1470.27 livetime 19.372 runtime 19.3788

Module 0 channel 5 input 2154.21 output 1357.36 livetime 19.3728 runtime 19.3788

Run265 XtRa 152Eu (Z2707) taped 2 cm from LEGe window. CFD Timing Test with Trigger Rise 0.064us, Trigger Gap 0.952us for All 3 Ge, Threshold 310, 300, 730 for LEGe, North, South. CFD 0.120us. Scale 7.

Module 0 channel 1 input 1905.5 output 1638.5 livetime 10.7767 runtime 10.8331

Module 0 channel 3 input 1718.98 output 1492.84 livetime 10.8308 runtime 10.8331

Module 0 channel 5 input 2135.29 output 1342.56 livetime 10.8299 runtime 10.8331

Run266 XtRa 152Eu (Z2707) taped 2 cm from LEGe window. CFD Timing Test with Trigger Rise 0.064us, Trigger Gap 0.952us for All 3 Ge, Threshold 310, 300, 730 for LEGe, North, South. CFD 0.200us. Scale 7.

Module 0 channel 1 input 1885.22 output 1628.28 livetime 10.1272 runtime 10.1782

Module 0 channel 3 input 1728.98 output 1486.9 livetime 10.1742 runtime 10.1782

Module 0 channel 5 input 2146.86 output 1331.37 livetime 10.1748 runtime 10.1782

Run267 XtRa 152Eu (Z2707) taped 2 cm from LEGe window. CFD Timing Test with Trigger Rise 0.064us, Trigger Gap 0.952us for All 3 Ge, Threshold 310, 300, 730 for LEGe, North, South. CFD 0.304us. Scale 7.

Module 0 channel 1 input 1895.49 output 1642.36 livetime 8.65685 runtime 8.69907

Module 0 channel 3 input 1714.54 output 1468.09 livetime 8.69678 runtime 8.69907

Module 0 channel 5 input 2129.57 output 1339.68 livetime 8.69613 runtime 8.69907

Run268 XtRa 152Eu (Z2707) taped 2 cm from LEGe window. CFD Timing Test with Trigger Rise 0.064us, Trigger Gap 0.952us for All 3 Ge, Threshold 310, 300, 730 for LEGe, North, South. CFD 0.400us. Scale 7.

Module 0 channel 1 input 1897.93 output 1634.54 livetime 11.6348 runtime 11.6944

Module 0 channel 3 input 1686.45 output 1474.47 livetime 11.6914 runtime 11.6944

Module 0 channel 5 input 2136.3 output 1353.21 livetime 11.6917 runtime 11.6944

Run269 XtRa 152Eu (Z2707) taped 2 cm from LEGe window. CFD Timing Test with Trigger Rise 0.200us, 0.064us, Trigger Gap 0.816us, 0.952us for LEGe and XtRa, Threshold 310, 300, 730 for LEGe, North, South. CFD 0.200us. Scale 7.

Module 0 channel 1 input 1884.74 output 1634.63 livetime 14.1261 runtime 14.199

Module 0 channel 3 input 1693.34 output 1472.01 livetime 14.195 runtime 14.199

Module 0 channel 5 input 2108.79 output 1343.06 livetime 14.1939 runtime 14.199

Run270 XtRa 152Eu (Z2707) taped 2 cm from LEGe window. CFD Timing Test with Trigger Rise 0.064us, 0.064us, Trigger Gap 0.600us, 0.952us for LEGe and XtRa, Threshold 310, 300, 730 for LEGe, North, South. CFD 0.304us. Scale 7.

Module 0 channel 1 input 1906.97 output 1649.06 livetime 8.70807 runtime 8.75223

Module 0 channel 3 input 1681.95 output 1455.86 livetime 8.74939 runtime 8.75223

Module 0 channel 5 input 2186.25 output 1361.6 livetime 8.75015 runtime 8.75223

Run271 XtRa 152Eu (Z2707) taped 2 cm from LEGe window. CFD Timing Test with Trigger Rise 0.064us, Trigger Gap 0.952us for LEGe and XtRa, Threshold 310, 300, 730 for LEGe, North, South. CFD 0.120 and 0.304us. Scale 3 and 7.

Module 0 channel 1 input 1916.13 output 1645.57 livetime 11.9413 runtime 12.005

Module 0 channel 3 input 1714.93 output 1472.72 livetime 12.0017 runtime 12.005

Module 0 channel 5 input 2135.15 output 1315.96 livetime 12.001 runtime 12.005

Run272 XtRa 152Eu (Z2707) taped 2 cm from LEGe window. CFD Timing Test with Trigger Rise 0.064us, Trigger Gap 0.952us for LEGe and XtRa, Threshold 310, 300, 730 for LEGe, North, South. CFD 0.304us and 0.120us. Scale 7.

Run273 XtRa 152Eu (Z2707) taped 2 cm from LEGe window. CFD Timing Test with Trigger Rise 0.064us, Trigger Gap 0.952us for LEGe and XtRa, Threshold 310, 300, 730 for LEGe, North, South. CFD 0.120us and 0.120us. Scale 0 and 7.

Run274 XtRa 152Eu (Z2707) taped 2 cm from LEGe window. CFD Timing Test with Trigger Rise 0.064us, Trigger Gap 0.952us for LEGe and XtRa, Threshold 310, 300, 730 for LEGe, North, South. CFD 0.120us. Scale 7. 3 hours run. Setting same as Run265

Run275 XtRa 152Eu (Z2707) taped 2 cm from LEGe window. CFD Timing Test with Trigger Rise 0.064us, Trigger Gap 0.952us for LEGe and XtRa, Threshold 310, 300, 730 for LEGe, North, South. CFD 0.120us. Scale 2 and 7.

Run276 XtRa 152Eu (Z2707) taped 2 cm from LEGe window. CFD Timing Test with Trigger Rise 0.064us, Trigger Gap 0.952us for LEGe and XtRa, Threshold 310, 300, 730 for LEGe, North, South. CFD 0.304us. Scale 7. 5 hour run. arguably optimized.

Run277 XtRa 152Eu (Z2707) taped 2 cm from LEGe window. CFD Timing Test with Trigger Rise 0.064us, Trigger Gap 0.304us and 0.952us for LEGe and XtRa, Threshold 310, 300, 730 for LEGe, North, South. CFD 0.304us. Scale 7. 1 hour run.

Run278 XtRa 152Eu (Z2707) taped 2 cm from LEGe window. CFD Timing Test with Trigger Rise 0.200us and 0.064us, Trigger Gap 0.104us and 0.952us for LEGe and XtRa, Threshold 250, 300, 730 for LEGe, North, South. CFD 0.304us. Scale 0 and 7. 1 hour run.

Module 0 channel 1 input 1977.7 output 1709.79 livetime 40.1663 runtime 40.3781

Module 0 channel 3 input 1719.36 output 1473.92 livetime 40.3673 runtime 40.3781

Module 0 channel 5 input 2143.15 output 1336.32 livetime 40.3676 runtime 40.3781

Run279 XtRa 152Eu (Z2707) taped 2 cm from LEGe window. CFD Timing Test with Trigger Rise 0.064us, Trigger Gap 0.952us, Threshold 310, 300, 730 for LEGe, North, South. CFD 0.104 and 0.304us. Scale 7. 1 hour run.

Module 0 channel 1 input 1980.94 output 1704.07 livetime 58.9805 runtime 59.2934

Module 0 channel 3 input 1707.72 output 1474.89 livetime 59.2767 runtime 59.2934

Module 0 channel 5 input 2088.67 output 1362.18 livetime 59.2774 runtime 59.2934

Run280, Pulser 1kHz Rep Mode. Split by a BNC Tee to Ch 2,4, 1000ns Window. Trigger Rise 0.064us, Trigger Gap 0.952us, Threshold 300,730 for Ch2,4. LED.

Run281, Pulser 1kHz Rep Mode. Ch 2,4, 1000ns Window. Trigger Rise 0.064us, Trigger Gap 0.952us, Threshold 300,730 for Ch2,4. CFD0.304us, Scale 7.

Run282, Pulser 1kHz Rep Mode. Split by a BNC Tee to Ch 2,4, 1000ns Window. Trigger Rise 0.064us, Trigger Gap 0.952us, Threshold 300 for Ch2,4. LED.

Run283, Pulser 1kHz Rep Mode. Ch 2,4, 1000ns Window. Trigger Rise 0.064us, Trigger Gap 0.952us, Threshold 300 for Ch2,4. CFD0.304us, Scale 7.

Run284 XtRa 152Eu (Z2707) taped 2 cm from LEGe window. CFD Timing Test with Trigger Rise 0.064us, Trigger Gap 0.952us for LEGe and XtRa, Threshold 310, 300, 730 for LEGe, North, South. CFD 0.304us. Scale 7. reinstalled 152Eu and reproduce Run276

Module 0 channel 1 input 1996.34 output 1719.6 livetime 110.497 runtime 111.081

Module 0 channel 3 input 1677.91 output 1441.28 livetime 111.051 runtime 111.081

Module 0 channel 5 input 2163.15 output 1350.12 livetime 111.049 runtime 111.081

Run285 XtRa 152Eu (Z2707) taped 2 cm from LEGe window. CFD Timing Test with Trigger Rise 0.064us, Trigger Gap 0.952us for LEGe and XtRa, Threshold 310, 300, 730 for LEGe, North, South. CFD 0.200us and 0.304us. Scale 7.

Run286 XtRa 152Eu (Z2707) taped 2 cm from LEGe window. CFD Timing Test with Trigger Rise 0.064us, Trigger Gap 0.952us for LEGe and XtRa, Threshold 310, 300, 730 for LEGe, North, South. CFD 0.200us and 0.304us. Scale 4 and 7.

Run287 XtRa 152Eu (Z2707) taped 2 cm from LEGe window. CFD Timing Test with Trigger Rise 0.064us, Trigger Gap 0.952us for LEGe and XtRa, Threshold 310, 300, 730 for LEGe, North, South. CFD 0.200us and 0.304us. Scale 1 and 7.

Run288 XtRa 152Eu (Z2707) taped 2 cm from LEGe window. CFD Timing Test with Trigger Rise 0.200us and 0.064us, Trigger Gap 0.104us and 0.952us for LEGe and XtRa, Threshold 310, 300, 730 for LEGe, North, South. CFD 0.304us. Scale 0 and 7. 0.7 hour run. Almost same as Run278

Run289 XtRa 152Eu (Z2707) taped 2 cm from LEGe window. LED Timing Test with Trigger Rise 0.064us, Trigger Gap 0.952us for All 3 Ge, Threshold 310, 300, 730 for LEGe, North, South.

Module 0 channel 1 input 2375.61 output 2031.8 livetime 55.1057 runtime 55.4603

Module 0 channel 3 input 1668.05 output 1437.39 livetime 55.4456 runtime 55.4603

Module 0 channel 5 input 2113.23 output 1309.37 livetime 55.4421 runtime 55.4603

Run290 XtRa 152Eu (Z2707) taped 2 cm from LEGe window. LED Timing Test with Trigger Rise 0.016 and 0.064us, Trigger Gap 1.000 and 0.952us for LEGe and XtRa, Threshold 330, 300, 730 for LEGe, North, South.

Run291 XtRa 152Eu (Z2707) taped 2 cm from LEGe window. LED Timing Test with Trigger Rise 0.112 and 0.064us, Trigger Gap 0.904 and 0.952us for LEGe and XtRa, Threshold 270, 300, 730 for LEGe, North, South.

Run292 XtRa 152Eu (Z2707) taped 2 cm from LEGe window. LED Timing Test with Trigger Rise 0.200 and 0.064us, Trigger Gap 0.816 and 0.952us for LEGe and XtRa, Threshold 240, 300, 730 for LEGe, North, South.

Run293 XtRa 152Eu (Z2707) taped 2 cm from LEGe window. LED Timing Test with Trigger Rise 0.304 and 0.064us, Trigger Gap 0.712 and 0.952us for LEGe and XtRa, Threshold 210, 300, 730 for LEGe, North, South.

Run294 XtRa 152Eu (Z2707) taped 2 cm from LEGe window. LED Timing Test with Trigger Rise 0.400 and 0.064us, Trigger Gap 0.616 and 0.952us for LEGe and XtRa, Threshold 190, 300, 730 for LEGe, North, South.

Run295 LEGe+MSD 241Am (Z7117) at chamber center. LED Timing Test with Trigger Rise 0.064 and 0.064 and 0.112us, Trigger Gap 0.952 and 0.952 and 0.904us for LEGe and MSD12 and MSD26, Threshold 350, 2400, 500 for LEGe, MSD12, MSD26.

Run296 LEGe+MSD 241Am (Z7117) at chamber center. CFD Timing Test with Trigger Rise 0.064 and 0.064 and 0.112us, Trigger Gap 0.952 and 0.952 and 0.904us for LEGe and MSD12 and MSD26, Threshold 350, 2400, 500 for LEGe, MSD12, MSD26. CFD 0.304us. Scale 7. 17 hour long run.

Module 0 channel 1 input 36.9377 output 35.0021 livetime 16.5414 runtime 16.5419

Module 0 channel 6 input 188.31 output 175.252 livetime 16.5419 runtime 16.5419

Module 0 channel 8 input 196.048 output 194.234 livetime 16.5419 runtime 16.5419

Run297 LEGe+MSD 241Am (Z7117) at chamber center. LED Timing Test with Trigger Rise 0.064 and 0.016 and 0.016us, Trigger Gap 0.952 and 1.000 and 1.000us for LEGe and MSD12 and MSD26, Threshold 350, 2700, 1000 for LEGe, MSD12, MSD26. 5 hour run.

Module 0 channel 1 input 34.5005 output 33.145 livetime 125.564 runtime 125.569

Module 0 channel 6 input 205.504 output 158.454 livetime 125.569 runtime 125.569

Module 0 channel 8 input 192.046 output 190.15 livetime 125.569 runtime 125.569

Run298 LEGe+MSD 241Am (Z7117) at chamber center. CFD Timing Test with Trigger Rise 0.064 and 0.016 and 0.016us, Trigger Gap 0.952 and 1.000 and 1.000us for LEGe and MSD12 and MSD26, Threshold 350, 2700, 1000 for LEGe, MSD12, MSD26. LEGe is still LED. CFD 0.304us and Scale 7 for MSD. 5 hour run.

Run299 LEGe+MSD 241Am (Z7117) at chamber center. CFD Timing Test with Trigger Rise 0.064 and 0.016 and 0.016us, Trigger Gap 0.952 and 1.000 and 1.000us for LEGe and MSD12 and MSD26, Threshold 350, 2700, 1000 for LEGe, MSD12, MSD26. All CFD 0.304us and Scale 7. 10 hour run.

Pulser DB-2 -> Ch0, Energy Rise: 2.944 us; Energy Gap: 0.768 us; Trigger Rise: 0.2 us; Trigger Gap: 0.1 us.

Run300, Pulser DB-2, 100Hz, 10ns Window.

Run301, Pulser 100Hz, 1000ns Window.

Run302, Pulser 10kHz, 10ns Window.

Run303, Pulser 10kHz, 1000ns Window.

Run304, Pulser 100kHz, 10ns Window.

Run305, Pulser 100kHz Rep Mode, 1000ns Window.

Run306, Pulser 100kHz Rep Mode, 10000ns Window.

Run307, Pulser 100kHz Rep Mode, 20000ns Window.

Run308, Pulser 100kHz Rep Mode, 30000ns Window.

Run309, Pulser 10kHz Rep Mode, 10000ns Window.

Run310, Pulser 99kHz Rep Mode. 10ns Window.

Run311, Pulser 99kHz Rand Mode. 10ns Window.

Run312, Pulser 99kHz Rand Mode. 100ns Window.

Run313, Pulser 99kHz Rep Mode. 100ns Window.

Run314, Pulser 99kHz Rand Mode. 1000ns Window

Run315, Pulser 99kHz Rand Mode. 10000ns Window

Run316, Pulser 99kHz Rand Mode. 20000ns Window

Run317, Pulser 10kHz Rep Mode, 1000ns Window.

Run318, Pulser 10kHz Rand Mode. 1000ns Window.

Run319, Pulser 2kHz Rep Mode, 1000ns Window.

Run320, Pulser 2kHz Rand Mode. 1000ns Window.

Run321, Pulser 3kHz Rand Mode. Ch 0,2,4,9. 100ns Window. 0,2,4 match LEGe, North, South energy filter parameters. 9 uses 0.256us and 0.512us for energy filter parameters.

Run322, Pulser 3kHz Rand Mode. Ch 0,2,4,9. 100ns Window. Pileup Rejection Enabled.

Run323, Pulser 1kHz Rand Mode. Ch 0,2,4,9. 100ns Window. Pileup Rejection Disabled.

Run324, Pulser 3kHz Rand Mode. Ch 0,2,4,7,9. 1000ns Window.

Run325, Pulser 5kHz Rand Mode. Ch 0,2,4,7,9. 1000ns Window.

Run326, Pulser 1kHz Rand Mode. Ch 0,2,4,7,9. 1000ns Window.

Run327, Pulser 500Hz Rand Mode. Ch 0,2,4,7,9. 1000ns Window.

Run328 LEGe+MSD 241Am (Z7117) at chamber center. CFD Timing Test with Trigger Rise 0.064 and 0.016 and 0.016us, Trigger Gap 0.952 and 1.000 and 1.000us for LEGe and MSD12 and MSD26, Threshold 350, 2700, 1000 for LEGe, MSD12, MSD26. All CFD 0.104us and Scale 7. 2 hour run.

Run329 LEGe+MSD 241Am (Z7117) at chamber center. CFD Timing Test with Trigger Rise 0.064 and 0.016 and 0.016us, Trigger Gap 0.952 and 1.000 and 1.000us for LEGe and MSD12 and MSD26, Threshold 350, 2700, 1000 for LEGe, MSD12, MSD26. All CFD 0.504us and Scale 7. 2 hour run.

Run330 LEGe+MSD 241Am (Z7117) at chamber center. CFD Timing Test with Trigger Rise 0.064 and 0.016 and 0.016us, Trigger Gap 0.952 and 1.000 and 1.000us for LEGe and MSD12 and MSD26, Threshold 350, 2700, 1000 for LEGe, MSD12, MSD26. All CFD 0.304us and Scale 7. Same as Run299. MSD12: 0.001 uA. MSD26: 0.067 uA.

Last run of my life.

Module 0 channel 1 input 34.665 output 33.4596 livetime 346.344 runtime 346.358

Module 0 channel 6 input 206.128 output 157.456 livetime 346.358 runtime 346.358

Module 0 channel 8 input 190.956 output 189.607 livetime 346.357 runtime 346.358

Module 0 channel 0 input 1000.56 output 986.786 livetime 294.677 runtime 294.677

Module 0 channel 1 input 7.52042 output 0 livetime 294.665 runtime 294.677

Module 0 channel 2 input 1000.56 output 978.604 livetime 294.677 runtime 294.677

Module 0 channel 3 input 0.51141 output 0 livetime 293.307 runtime 294.677

Module 0 channel 4 input 1000.56 output 978.6 livetime 294.677 runtime 294.677

Module 0 channel 5 input 13.1849 output 0 livetime 293.441 runtime 294.677

Module 0 channel 6 input 0 output 0 livetime 294.677 runtime 294.677

Module 0 channel 7 input 1000.56 output 976.836 livetime 294.677 runtime 294.677

Module 0 channel 8 input 0 output 0 livetime 294.677 runtime 294.677

Module 0 channel 9 input 1000.52 output 996.434 livetime 294.677 runtime 294.677

Module 0 channel 0 input 5030.8 output 4684.19 livetime 317.568 runtime 317.568

Module 0 channel 1 input 7.72777 output 0 livetime 317.556 runtime 317.568

Module 0 channel 2 input 5031.3 output 4493.09 livetime 317.568 runtime 317.568

Module 0 channel 3 input 1.70829 output 0 livetime 316.105 runtime 317.568

Module 0 channel 4 input 5031.34 output 4493.03 livetime 317.568 runtime 317.568

Module 0 channel 5 input 8.6482 output 0 livetime 316.135 runtime 317.568

Module 0 channel 6 input 0 output 0 livetime 317.568 runtime 317.568

Module 0 channel 7 input 5030.84 output 4453 livetime 317.568 runtime 317.568

Module 0 channel 8 input 0 output 0 livetime 317.568 runtime 317.568

Module 0 channel 9 input 5029.18 output 4925.83 livetime 317.568 runtime 317.568

Module 0 channel 0 input 507.033 output 503.456 livetime 779.592 runtime 779.592

Module 0 channel 1 input 7.36054 output 0 livetime 779.563 runtime 779.592

Module 0 channel 2 input 507.036 output 501.357 livetime 779.592 runtime 779.592

Module 0 channel 3 input 0.365977 output 0 livetime 776.005 runtime 779.592

Module 0 channel 4 input 507.036 output 501.356 livetime 779.592 runtime 779.592

Module 0 channel 5 input 14.0041 output 0 livetime 775.99 runtime 779.592

Module 0 channel 6 input 0 output 0 livetime 779.592 runtime 779.592

Module 0 channel 7 input 507.033 output 500.925 livetime 779.592 runtime 779.592

Module 0 channel 8 input 0 output 0 livetime 779.592 runtime 779.592

Module 0 channel 9 input 507.023 output 506.003 livetime 779.592 runtime 779.592

Module 0 channel 0 input 1998.02 output 1941.73 livetime 369.112 runtime 369.112

Module 0 channel 1 input 7.37744 output 0 livetime 369.098 runtime 369.112

Module 0 channel 2 input 1998.1 output 1909.72 livetime 369.112 runtime 369.112

Module 0 channel 3 input 0.4763 output 0 livetime 367.415 runtime 369.112

Module 0 channel 4 input 1998.1 output 1909.7 livetime 369.112 runtime 369.112

Module 0 channel 5 input 11.3243 output 0 livetime 367.439 runtime 369.112

Module 0 channel 6 input 0 output 0 livetime 369.112 runtime 369.112

Module 0 channel 7 input 1998.02 output 1902.58 livetime 369.112 runtime 369.112

Module 0 channel 8 input 0 output 0 livetime 369.112 runtime 369.112

Module 0 channel 9 input 1997.8 output 1981.76 livetime 369.112 runtime 369.112

Module 0 channel 0 input 3002.07 output 2875.85 livetime 288.928 runtime 288.928

Module 0 channel 1 input 7.52464 output 0 livetime 288.917 runtime 288.928

Module 0 channel 2 input 3002.2 output 2804.96 livetime 288.928 runtime 288.928

Module 0 channel 3 input 0.62583 output 0 livetime 287.618 runtime 288.928

Module 0 channel 4 input 3002.21 output 2804.96 livetime 288.928 runtime 288.928

Module 0 channel 5 input 10.6522 output 0 livetime 287.64 runtime 288.928

Module 0 channel 6 input 0 output 0 livetime 288.928 runtime 288.928

Module 0 channel 7 input 3002.08 output 2790.36 livetime 288.928 runtime 288.928

Module 0 channel 8 input 0 output 0 livetime 288.928 runtime 288.928

Module 0 channel 9 input 3001.48 output 2963.65 livetime 288.928 runtime 288.928

Module 0 channel 0 input 4011.03 output 3790.62 livetime 549.87 runtime 549.87

Module 0 channel 1 input 7.20376 output 0 livetime 549.852 runtime 549.87

Module 0 channel 2 input 4011.37 output 3665.92 livetime 549.87 runtime 549.87

Module 0 channel 3 input 0.442114 output 0 livetime 547.37 runtime 549.87

Module 0 channel 4 input 4011.38 output 3665.9 livetime 549.87 runtime 549.87

Module 0 channel 5 input 10.8411 output 0 livetime 547.364 runtime 549.87

Module 0 channel 6 input 0 output 0 livetime 549.87 runtime 549.87

Module 0 channel 7 input 4011.04 output 3640.75 livetime 549.87 runtime 549.87

Module 0 channel 8 input 0 output 0 livetime 549.87 runtime 549.87

Module 0 channel 9 input 4010.05 output 3944.47 livetime 549.87 runtime 549.87

Module 0 channel 0 input 101.345 output 101.145 livetime 788.484 runtime 788.484

Module 0 channel 1 input 7.10501 output 0 livetime 788.458 runtime 788.484

Module 0 channel 2 input 101.345 output 101.047 livetime 788.484 runtime 788.484

Module 0 channel 3 input 0.42426 output 0 livetime 784.896 runtime 788.484

Module 0 channel 4 input 101.345 output 101.047 livetime 788.484 runtime 788.484

Module 0 channel 5 input 11.0914 output 0 livetime 784.934 runtime 788.484

Module 0 channel 6 input 0 output 0 livetime 788.484 runtime 788.484

Module 0 channel 7 input 101.345 output 101.025 livetime 788.484 runtime 788.484

Module 0 channel 8 input 0 output 0 livetime 788.484 runtime 788.484

Module 0 channel 9 input 101.344 output 101.28 livetime 788.484 runtime 788.484