

Mugast DSSD Energy Calibration Report

1 Calibration Summary

Experiment : MUGAST_LISE23test

OperatorApp. Date : 09/02/24

Source : 3 alpha peaks ²³⁹Pu, ²⁴¹Am, ²⁴⁴Cm

Dead Layer : Al 0.3 μ m + Si 0 μ m

Comment : Mugast

Calibration Method : ZeroExtrapolation

Telescope Treated : 2

Strip Treated : 1 to 128

DSSD Side : X

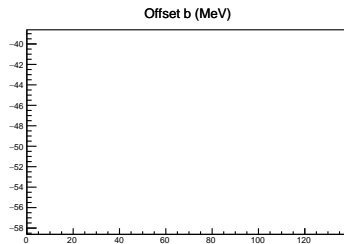
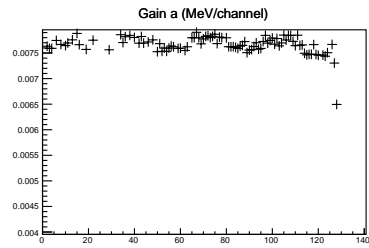
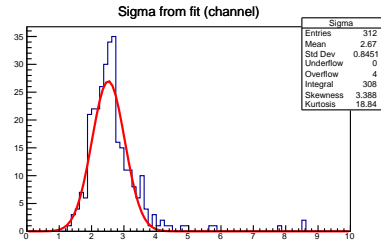
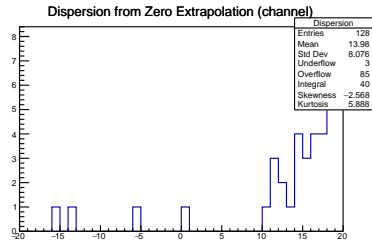
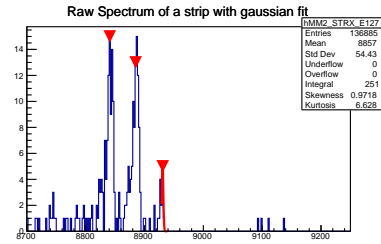
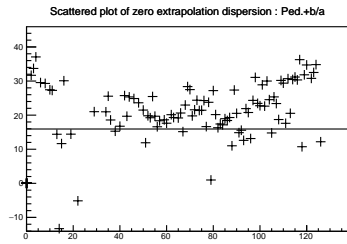
Source Description :

Isotope	Original Energy (MeV)	Branching Ratio
²³⁹ Pu	5.15659	70.77
²³⁹ Pu	5.14438	17.11
²³⁹ Pu	5.1055	11.94
²⁴¹ Am	5.48556	84.8
²⁴¹ Am	5.4428	13.1
²⁴¹ Am	5.388	1.66
²⁴⁴ Cm	5.80477	76.4
²⁴⁴ Cm	5.76264	23.6

2 Telescope 2

Bad Strip :

Strip Number	Problem
1	0 peak(s) found ; zero extrapolation too high :8203.4channels ;
2	zero extrapolation too high :31.6889channels ;
3	zero extrapolation too high :33.697channels ;
4	zero extrapolation too high :37.0758channels ;
5	0 peak(s) found ; zero extrapolation too high :8203.4channels ;
7	0 peak(s) found ; zero extrapolation too high :8203.4channels ;
9	0 peak(s) found ; zero extrapolation too high :8203.4channels ;
16	zero extrapolation too high :30.0875channels ;
17	0 peak(s) found ; zero extrapolation too high :8203.4channels ;
18	0 peak(s) found ; zero extrapolation too high :8203.4channels ;
20	0 peak(s) found ; zero extrapolation too high :8203.4channels ;
21	0 peak(s) found ; zero extrapolation too high :8203.4channels ;
23	0 peak(s) found ; zero extrapolation too high :8203.4channels ;
24	0 peak(s) found ; zero extrapolation too high :8203.4channels ;
25	0 peak(s) found ; zero extrapolation too high :8203.4channels ;
26	0 peak(s) found ; zero extrapolation too high :8203.4channels ;
27	zero extrapolation too high :1320.55channels ;
28	zero extrapolation too high :-196.409channels ;
30	0 peak(s) found ; zero extrapolation too high :8203.4channels ;
31	0 peak(s) found ; zero extrapolation too high :8203.4channels ;
32	0 peak(s) found ; zero extrapolation too high :8203.4channels ;
33	0 peak(s) found ; zero extrapolation too high :8203.4channels ;
37	0 peak(s) found ; zero extrapolation too high :8203.4channels ;
39	0 peak(s) found ; zero extrapolation too high :8203.4channels ;
41	0 peak(s) found ; zero extrapolation too high :8203.4channels ;
45	0 peak(s) found ; zero extrapolation too high :8203.4channels ;
47	0 peak(s) found ; zero extrapolation too high :8203.4channels ;
49	0 peak(s) found ; zero extrapolation too high :8203.4channels ;
58	zero extrapolation too high :1288.94channels ;
61	0 peak(s) found ; zero extrapolation too high :8203.4channels ;
64	0 peak(s) found ; zero extrapolation too high :8203.4channels ;
98	zero extrapolation too high :31.0699channels ;
103	zero extrapolation too high :30.0013channels ;
109	zero extrapolation too high :30.1846channels ;
112	zero extrapolation too high :30.7009channels ;
114	zero extrapolation too high :30.454channels ;
115	zero extrapolation too high :31.1791channels ;
116	zero extrapolation too high :30.3316channels ;
117	zero extrapolation too high :36.2761channels ;
119	zero extrapolation too high :31.8292channels ;
120	zero extrapolation too high :34.7183channels ;
121	zero extrapolation too high :-34.1741channels ;
122	zero extrapolation too high :30.786channels ;
123	zero extrapolation too high :32.5149channels ;
124	zero extrapolation too high :34.8236channels ;
125	zero extrapolation too high :-213.316channels ;
127	zero extrapolation too high :49.9131channels ;
128	zero extrapolation too high :189.088channels ;



Sigma fit centroid : 2.51917
Sigma fit sigma : 0.506282