

Mugast DSSD Energy Calibration Report

1 Calibration Summary

Experiment : MUGAST_{LISE23}LaurieandHugo

Operator App. Date : 24/05/23

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 : 1

Strip Treated : 1 to 128

DSSD Side : X

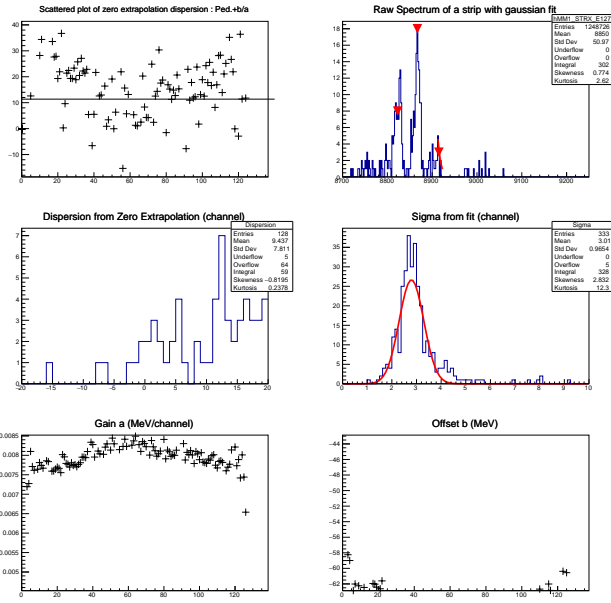
Source Description :

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 1

Bad Strip :

Strip Number	Problem
1	2 peak(s) found ; zero extrapolation too high :8203.4channels ;
2	zero extrapolation too high :-14788channels ;
3	zero extrapolation too high :94.7599channels ;
4	zero extrapolation too high :82.0728channels ;
6	zero extrapolation too high :41.2142channels ;
7	zero extrapolation too high :46.8579channels ;
8	zero extrapolation too high :299.772channels ;
9	zero extrapolation too high :47.675channels ;
11	zero extrapolation too high :34.384channels ;
12	zero extrapolation too high :48.63channels ;
13	zero extrapolation too high :-131.242channels ;
14	zero extrapolation too high :49.726channels ;
15	zero extrapolation too high :49.468channels ;
16	2 peak(s) found ; zero extrapolation too high :8203.4channels ;
17	zero extrapolation too high :33.5847channels ;
22	zero extrapolation too high :36.7217channels ;
38	2 peak(s) found ; zero extrapolation too high :8203.4channels ;
42	2 peak(s) found ; zero extrapolation too high :8203.4channels ;
45	2 peak(s) found ; zero extrapolation too high :8203.4channels ;
49	2 peak(s) found ; zero extrapolation too high :8203.4channels ;
53	2 peak(s) found ; zero extrapolation too high :8203.4channels ;
54	2 peak(s) found ; zero extrapolation too high :8203.4channels ;
60	2 peak(s) found ; zero extrapolation too high :8203.4channels ;
61	2 peak(s) found ; zero extrapolation too high :8203.4channels ;
65	2 peak(s) found ; zero extrapolation too high :8203.4channels ;
71	0 peak(s) found ; zero extrapolation too high :8203.4channels ;
76	zero extrapolation too high :30.3359channels ;
79	2 peak(s) found ; zero extrapolation too high :8203.4channels ;
88	2 peak(s) found ; zero extrapolation too high :8203.4channels ;
89	2 peak(s) found ; zero extrapolation too high :8203.4channels ;
90	2 peak(s) found ; zero extrapolation too high :8203.4channels ;
114	zero extrapolation too high :-100.189channels ;
115	zero extrapolation too high :35.1915channels ;
119	zero extrapolation too high :-173.729channels ;
121	zero extrapolation too high :36.3914channels ;
123	zero extrapolation too high :52.4242channels ;
125	zero extrapolation too high :53.8312channels ;
126	zero extrapolation too high :205.622channels ;
127	zero extrapolation too high :-307.183channels ;
128	0 peak(s) found ; zero extrapolation too high :8203.4channels ;



Sigma fit centroid : 2.79672
 Sigma fit sigma : 0.499951