

Mugast DSSD Energy Calibration Report

1 Calibration Summary

Experiment : MUGAST_{LISE23LaurieandHugo}
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 : Y

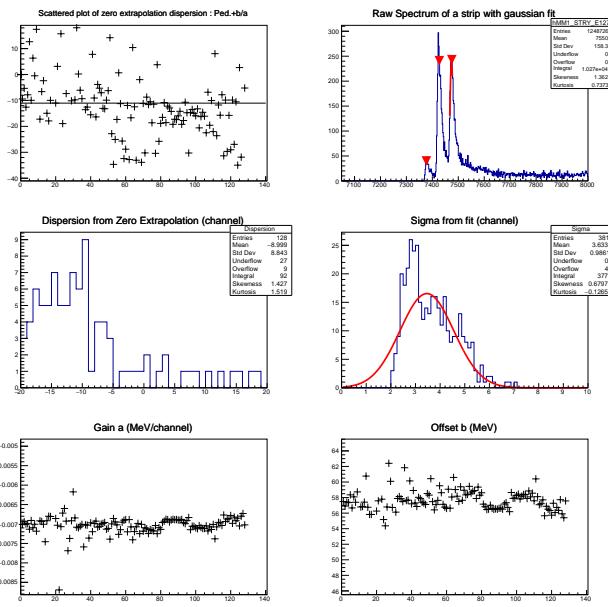
Source Description :

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
10	zero extrapolation too high :210.215channels ;
14	zero extrapolation too high :41.6978channels ;
18	2 peak(s) found ; zero extrapolation too high :8181.16channels ;
19	zero extrapolation too high :250.457channels ;
22	zero extrapolation too high :156.914channels ;
25	zero extrapolation too high :-43.8771channels ;
27	zero extrapolation too high :73.7413channels ;
28	zero extrapolation too high :39.6289channels ;
30	zero extrapolation too high :-117.914channels ;
36	zero extrapolation too high :43.5165channels ;
53	zero extrapolation too high :-34.6533channels ;
59	zero extrapolation too high :-32.4167channels ;
62	zero extrapolation too high :-32.7992channels ;
66	zero extrapolation too high :-33.0601channels ;
67	zero extrapolation too high :-40.7881channels ;
69	zero extrapolation too high :-33.8555channels ;
71	zero extrapolation too high :-30.2344channels ;
77	zero extrapolation too high :-30.4007channels ;
96	zero extrapolation too high :-30.2693channels ;
116	zero extrapolation too high :-31.3592channels ;
124	zero extrapolation too high :-34.9551channels ;
126	zero extrapolation too high :-31.865channels ;
127	zero extrapolation too high :-40.8683channels ;



Sigma fit centroid : 3.46187

Sigma fit sigma : 1.09063