Mugast DSSD Energy Calibration Report

1 Calibration Summary

Experiment : MUGAST_LISE23
Operator : test
App. Date : 09/02/24
Source : 3 alpha peaks ^{239}Pu, ^{241}Am, ^{244}Cm
Dead Layer : Al 0.3μm + Si 0μm
Comment : Mugast

Calibration Method : ZeroExtrapolation
Telescope Treated : 1
Strip Treated : 1 to 128
DSSD Side : Y

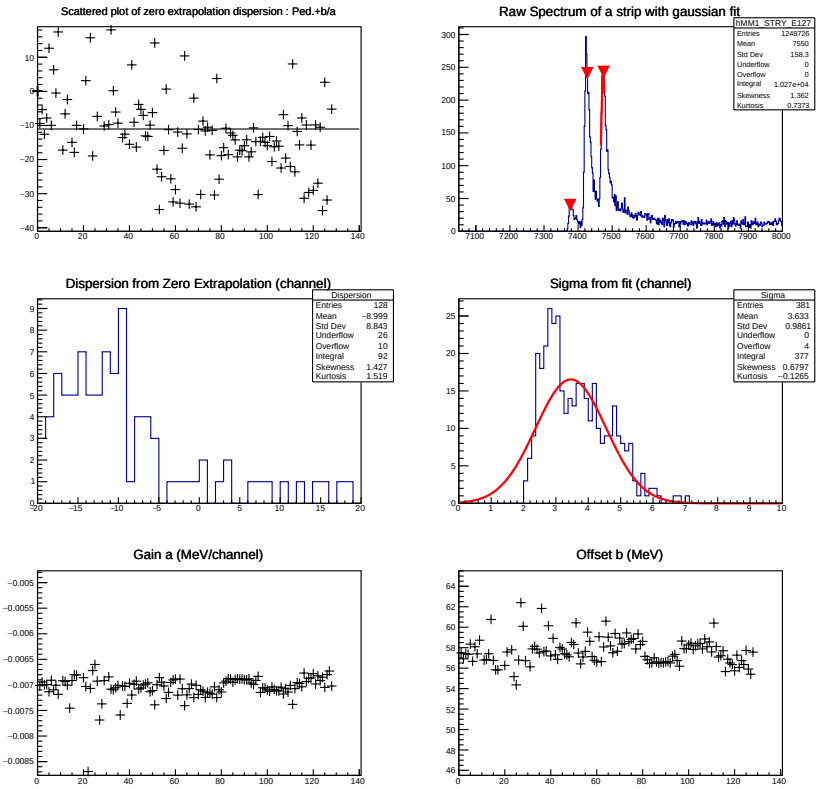
Source Description :

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 :209.924channels ;
14	zero extrapolation too high :41.6978channels ;
18	2 peak(s) found ; zero extrapolation too high :8181.16channels ;
19	zero extrapolation too high :252.242channels ;
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 :239.449channels ;
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 :-40.8684channels ;



Sigma fit centroid : 3.46187

Sigma fit sigma : 1.09063