

MUST2 DSSD Energy Calibration Report

1 Calibration Summary

Experiment : MUGAST_{LISE23} Valerian and Hugo
Operator App. Date : 16/02/23
Source : 3 alpha peaks ²³⁹Pu, ²⁴¹Am, ²⁴⁴Cm
Dead Layer : Al 0.3 μ m + Si 0 μ m
Comment : MUST2

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

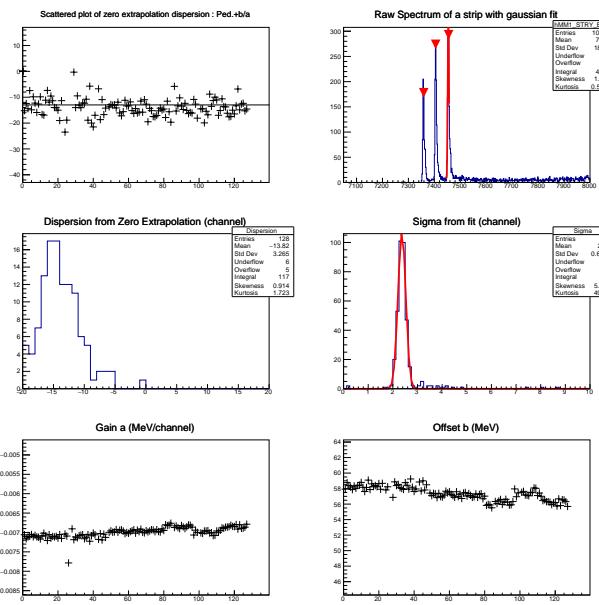
Source Description :

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
23	zero extrapolation too high :-901.299channels ;
26	zero extrapolation too high :-206.16channels ;
27	2 peak(s) found ; zero extrapolation too high :8181.16channels ;
28	zero extrapolation too high :-41.8741channels ;
42	zero extrapolation too high :-709.048channels ;
48	0 peak(s) found ; zero extrapolation too high :8181.16channels ;
85	0 peak(s) found ; zero extrapolation too high :8181.16channels ;
100	0 peak(s) found ; zero extrapolation too high :8181.16channels ;
128	0 peak(s) found ; zero extrapolation too high :8181.16channels ;



Sigma fit centroid : 2.36769
Sigma fit sigma : 0.15862