

MUST2 DSSD Energy Calibration Report

1 Calibration Summary

Experiment : MUGAST_{LISE23V}*ValerianandHugo*

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

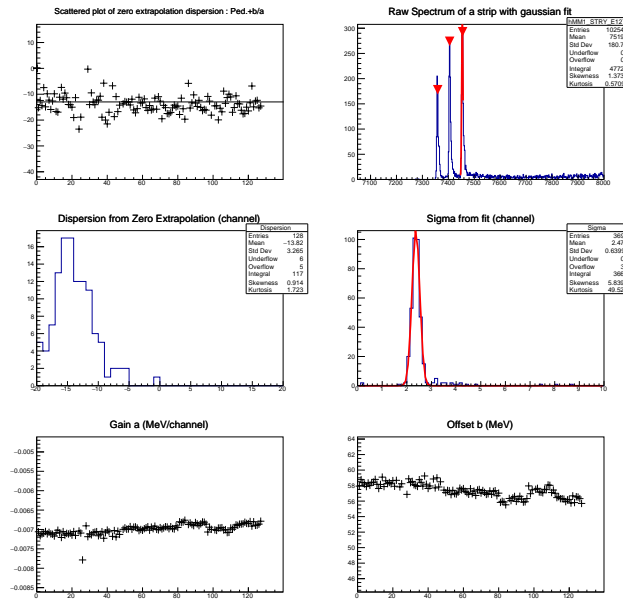
Source Description :

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