

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 : 5

Strip Treated : 1 to 128

DSSD Side : Y

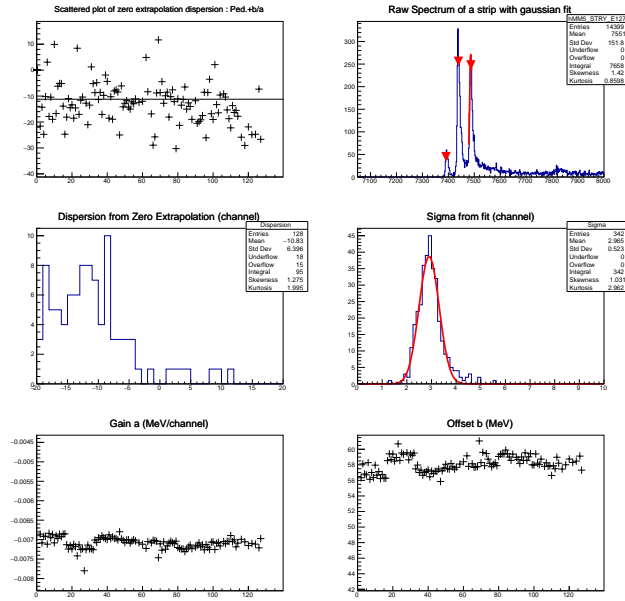
Source Description :

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 5

Bad Strip :

Strip Number	Problem
1	0 peak(s) found ; zero extrapolation too high :8181.16channels ;
27	zero extrapolation too high :38.4886channels ;
57	0 peak(s) found ; zero extrapolation too high :8181.16channels ;
59	0 peak(s) found ; zero extrapolation too high :8181.16channels ;
61	0 peak(s) found ; zero extrapolation too high :8181.16channels ;
64	0 peak(s) found ; zero extrapolation too high :8181.16channels ;
79	zero extrapolation too high :-30.2826channels ;
89	0 peak(s) found ; zero extrapolation too high :8181.16channels ;
105	0 peak(s) found ; zero extrapolation too high :8181.16channels ;
115	0 peak(s) found ; zero extrapolation too high :8181.16channels ;
117	0 peak(s) found ; zero extrapolation too high :8181.16channels ;
119	0 peak(s) found ; zero extrapolation too high :8181.16channels ;
121	0 peak(s) found ; zero extrapolation too high :8181.16channels ;
123	0 peak(s) found ; zero extrapolation too high :8181.16channels ;
125	0 peak(s) found ; zero extrapolation too high :8181.16channels ;
128	0 peak(s) found ; zero extrapolation too high :8181.16channels ;



Sigma fit centroid : 2.90394
Sigma fit sigma : 0.407091