

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 : 3

Strip Treated : 1 to 128

DSSD Side : Y

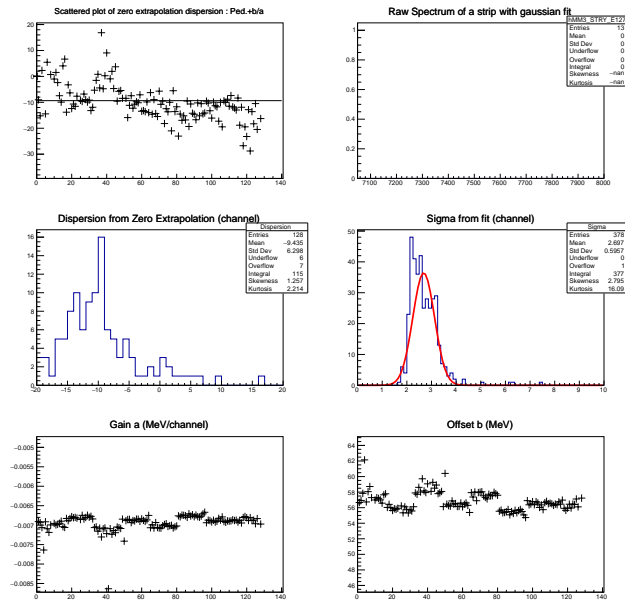
Source Description :

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 3

Bad Strip :

Strip Number	Problem
4	zero extrapolation too high :56.6837channels ;
9	zero extrapolation too high :194.496channels ;
24	0 peak(s) found ; zero extrapolation too high :8181.16channels ;
41	zero extrapolation too high :125.626channels ;
50	zero extrapolation too high :42.3212channels ;
127	0 peak(s) found ; zero extrapolation too high :8181.16channels ;



Sigma fit centroid : 2.68348
Sigma fit sigma : 0.439687