

Mugast DSSD Energy Calibration Report

1 Calibration Summary

Experiment : MUGAST_{LISE23test}

OperatorApp. Date : 09/02/24

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 : X

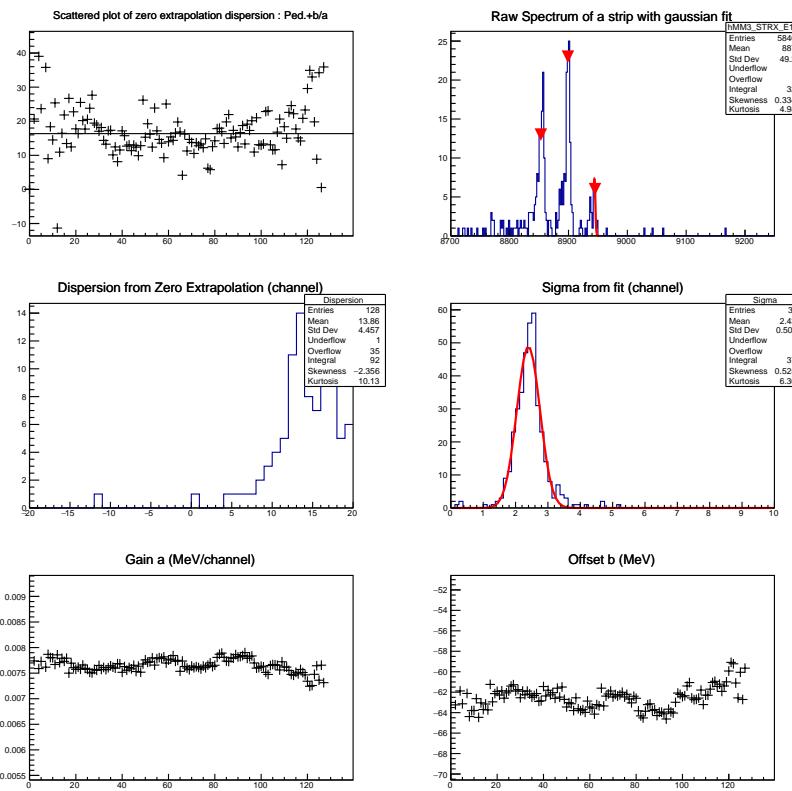
Source Description :

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
1	zero extrapolation too high :722.957channels ;
3	zero extrapolation too high :-194.501channels ;
4	zero extrapolation too high :39.0344channels ;
6	2 peak(s) found ; zero extrapolation too high :8203.4channels ;
7	zero extrapolation too high :35.7892channels ;
121	zero extrapolation too high :34.921channels ;
122	zero extrapolation too high :32.9782channels ;
125	zero extrapolation too high :34.224channels ;
127	zero extrapolation too high :35.916channels ;
128	zero extrapolation too high :1538.56channels ;



Sigma fit centroid : 2.39749

Sigma fit sigma : 0.358625