

Mugast DSSD Energy Calibration Report

1 Calibration Summary

Experiment : MUGAST_LISE23

Operator : test

App. Date : 09/02/24

Source : 3 alpha peaks ^{239}Pu , ^{241}Am , ^{244}Cm

Dead Layer : Al $0.3\mu\text{m}$ + Si $0\mu\text{m}$

Comment : Mugast

Calibration Method : ZeroExtrapolation

Telescope Treated : 4

Strip Treated : 1 to 128

DSSD Side : Y

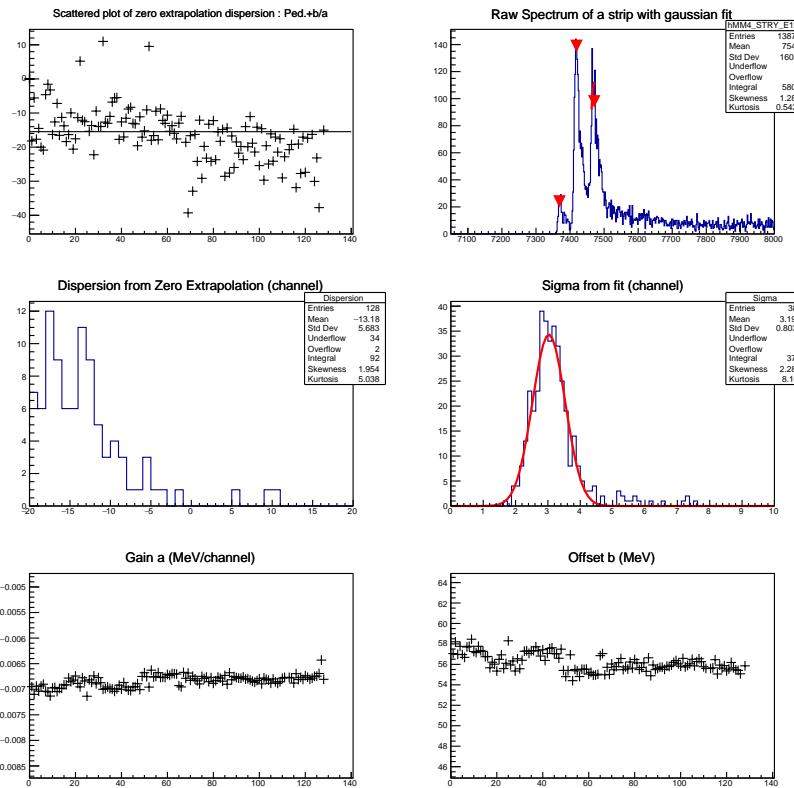
Source Description :

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 4

Bad Strip :

Strip Number	Problem
67	zero extrapolation too high :-50.2383channels ;
69	zero extrapolation too high :-39.2822channels ;
71	zero extrapolation too high :-32.9257channels ;
112	0 peak(s) found ; zero extrapolation too high :8181.16channels ;
116	zero extrapolation too high :-31.8717channels ;
122	zero extrapolation too high :-64.6072channels ;
124	zero extrapolation too high :-30.0565channels ;
126	zero extrapolation too high :-37.7411channels ;
127	zero extrapolation too high :-72.9872channels ;



Sigma fit centroid : 3.02953
Sigma fit sigma : 0.506006