

# Mugast DSSD Energy Calibration Report

## 1 Calibration Summary

**Experiment :** MUGAST<sub>LISE23LaurieandHugo</sub>  
**Operator App. Date :** 24/05/23  
**Source :** 3 alpha peaks <sup>239</sup>Pu, <sup>241</sup>Am, <sup>244</sup>Cm  
**Dead Layer :** Al 0.3 $\mu$ m + Si 0 $\mu$ m  
**Comment :** Mugast

**Calibration Method :** ZeroExtrapolation  
**Telescope Treated :** 5  
**Strip Treated :** 1 to 128  
**DSSD Side :** Y

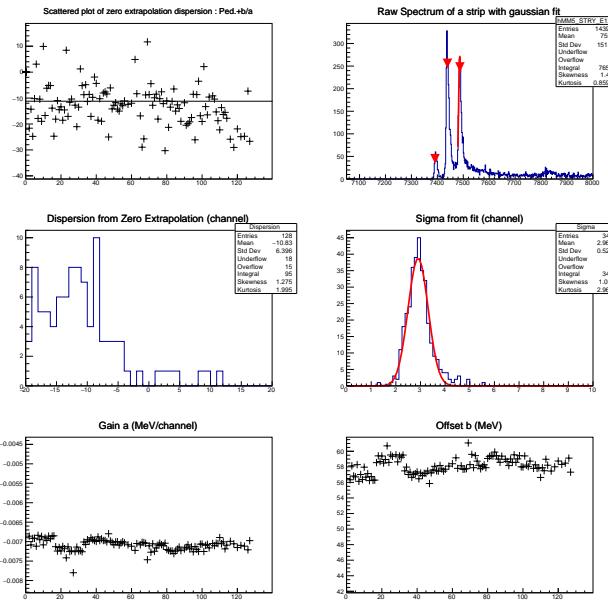
### Source Description :

Isotope	Original Energy (MeV)	Branching Ratio
<sup>239</sup> Pu	5.15659	70.77
<sup>239</sup> Pu	5.14438	17.11
<sup>239</sup> Pu	5.1055	11.94
<sup>241</sup> Am	5.48556	84.8
<sup>241</sup> Am	5.4428	13.1
<sup>241</sup> Am	5.388	1.66
<sup>244</sup> Cm	5.80477	76.4
<sup>244</sup> 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