

# MUST2 DSSD Energy Calibration Report

## 1 Calibration Summary

**Experiment :** MUGAST *LISE23LaurieandHugo*

**Operator App. Date :** 24/05/23

**Source :** 3 alpha peaks  $^{239}\text{Pu}$ ,  $^{241}\text{Am}$ ,  $^{244}\text{Cm}$

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

**Comment :** MUST2

**Calibration Method :** ZeroExtrapolation

**Telescope Treated :** 3

**Strip Treated :** 1 to 128

**DSSD Side :** Y

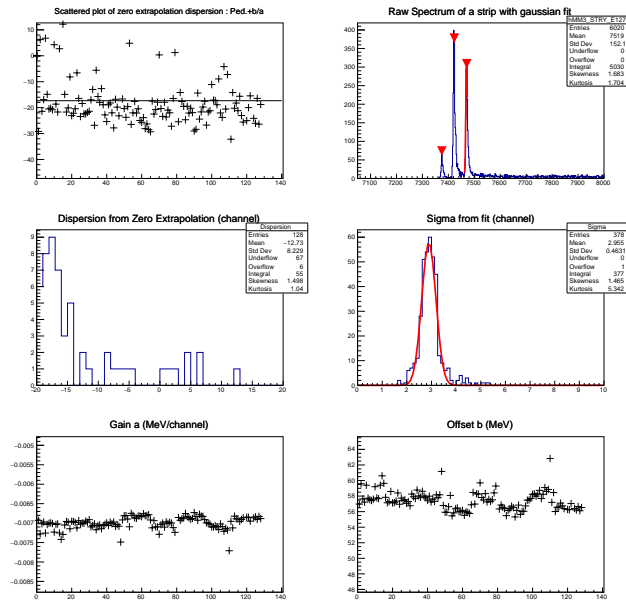
### Source Description :

Isotope	Original Energy (MeV)	Branching Ratio
$^{239}\text{Pu}$	5.15659	70.77
$^{239}\text{Pu}$	5.14438	17.11
$^{239}\text{Pu}$	5.1055	11.94
$^{241}\text{Am}$	5.48556	84.8
$^{241}\text{Am}$	5.4428	13.1
$^{241}\text{Am}$	5.388	1.66
$^{244}\text{Cm}$	5.80477	76.4
$^{244}\text{Cm}$	5.76264	23.6

## 2 Telescope 3

Bad Strip :

Strip Number	Problem
80	zero extrapolation too high :165.058channels ;
110	zero extrapolation too high :42.7041channels ;
111	zero extrapolation too high :-32.1837channels ;
119	0 peak(s) found ; zero extrapolation too high :8181.16channels ;
123	0 peak(s) found ; zero extrapolation too high :8181.16channels ;



Sigma fit centroid : 2.89267  
Sigma fit sigma : 0.288098