

MUST2 DSSD Energy Calibration Report

1 Calibration Summary

Experiment : MUGAST *LISE23LaurieandHugo*

Operator App. Date : 24/05/23

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

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

Comment : MUST2

Calibration Method : ZeroExtrapolation

Telescope Treated : 1

Strip Treated : 1 to 128

DSSD Side : X

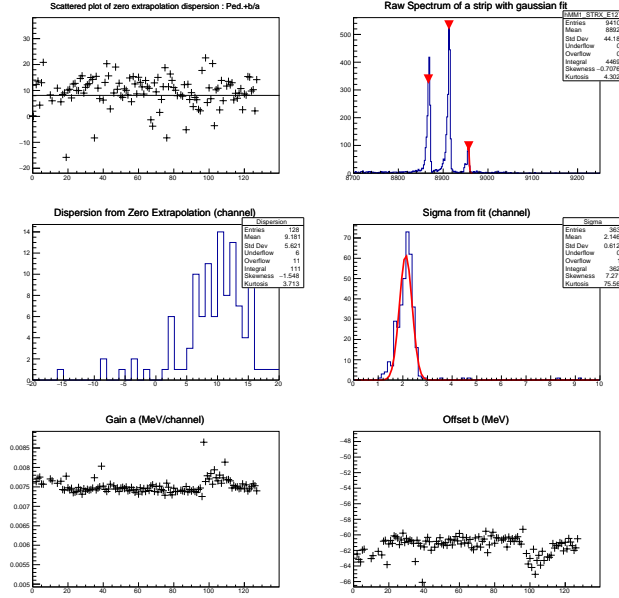
Source Description :

| 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 1

Bad Strip :

| Strip Number | Problem |
|--------------|---|
| 1 | 0 peak(s) found ; zero extrapolation too high :8203.4channels ; |
| 7 | zero extrapolation too high :-147.001channels ; |
| 8 | 0 peak(s) found ; zero extrapolation too high :8203.4channels ; |
| 9 | 0 peak(s) found ; zero extrapolation too high :8203.4channels ; |
| 12 | 2 peak(s) found ; zero extrapolation too high :8203.4channels ; |
| 13 | zero extrapolation too high :-205.949channels ; |
| 15 | zero extrapolation too high :-168.369channels ; |
| 39 | zero extrapolation too high :-37.6513channels ; |
| 45 | 2 peak(s) found ; zero extrapolation too high :8203.4channels ; |
| 83 | 0 peak(s) found ; zero extrapolation too high :8203.4channels ; |
| 97 | zero extrapolation too high :-60.8845channels ; |
| 128 | 0 peak(s) found ; zero extrapolation too high :8203.4channels ; |



Sigma fit centroid : 2.11876
Sigma fit sigma : 0.256929