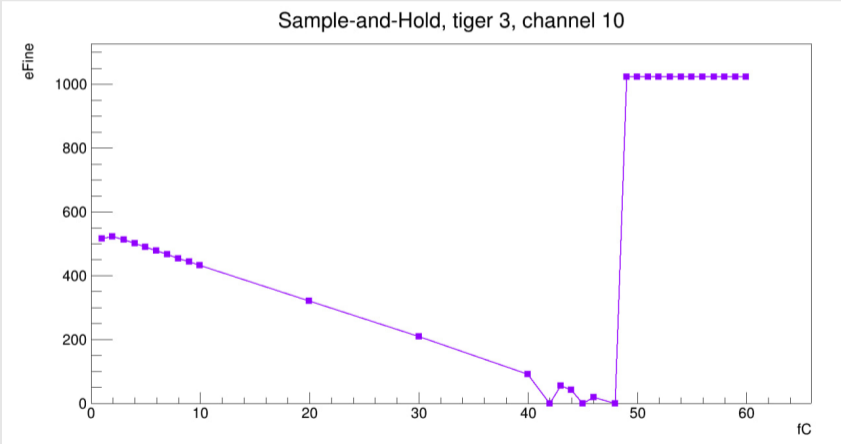


TIGER calibration, *[2023-08-02 Mi]*

Straw TB team

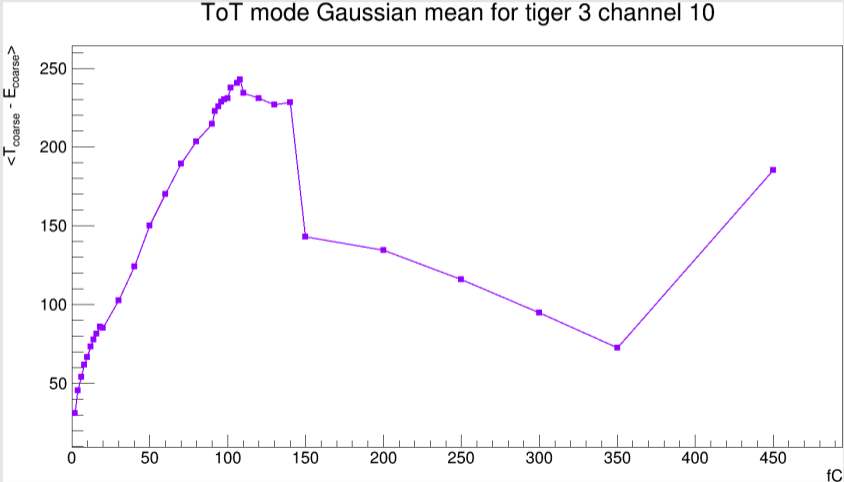
August 2, 2023

SH mode calibration result



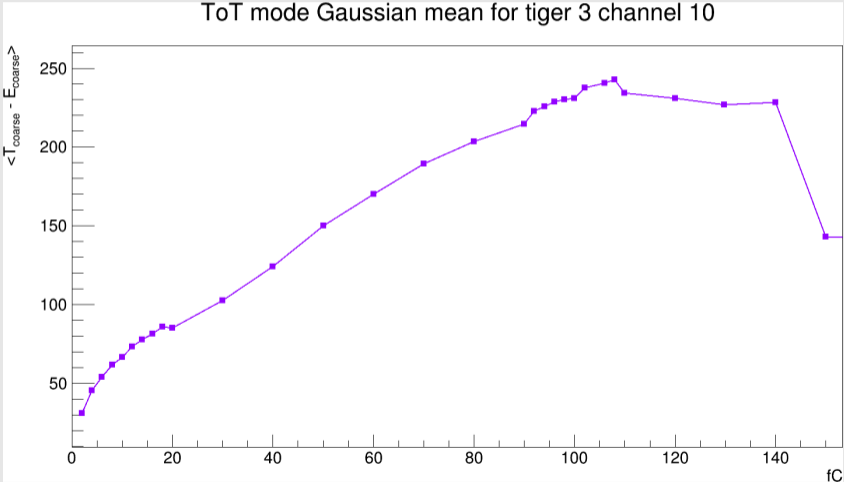
calibration: ToT mode

ToT mode calibration result



calibration: ToT mode

ToT mode calibration result



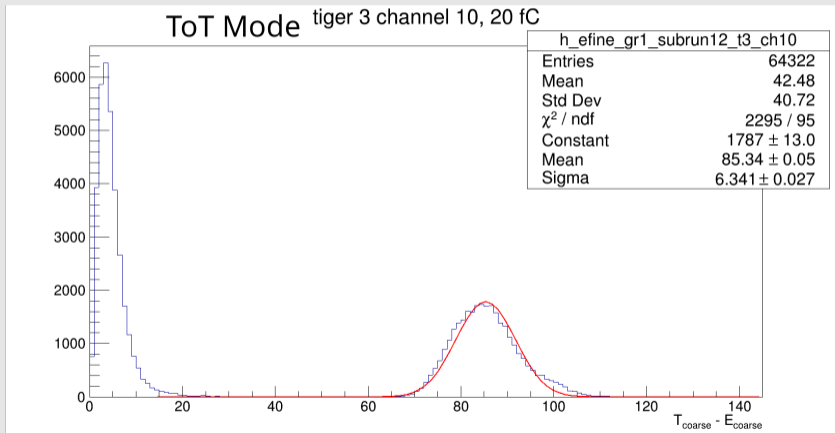
calibration: ToT mode – description

Description

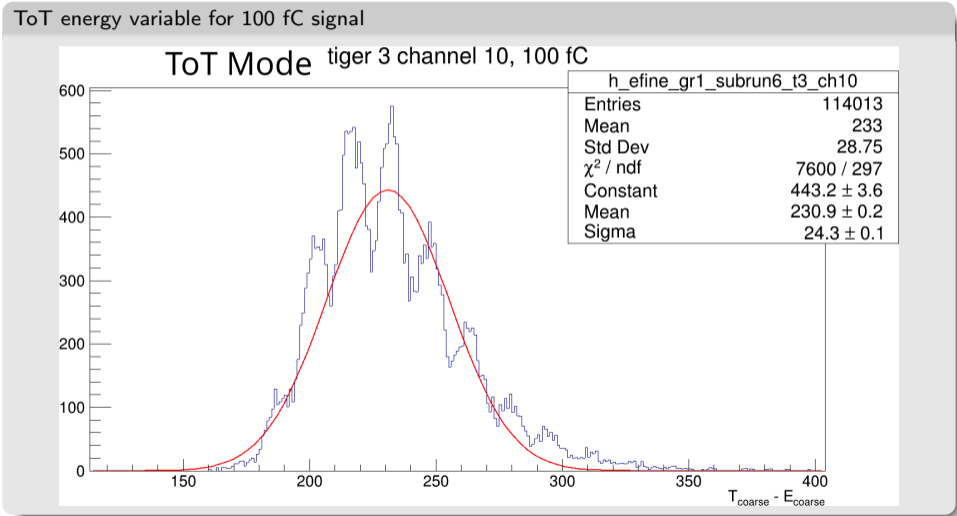
- For low values (less than 150 fC) we have good wide signal peak.
- Saturation started around 100 units (where unit is Tiger coarse time, 6.25ns).
- Started from 150fC tigers have completely unpredictable behavior – additional narrow peak appears at low "charge" values and moves to high values with the signal charge increasing.
- At the same time, wide peak starts to move to zero.
- Also, histograms for only one channel are plotted now, but global behavior checked on most channels during calibration (not in details, though).

calibration: ToT mode - in detail

ToT energy variable for 20 fC signal

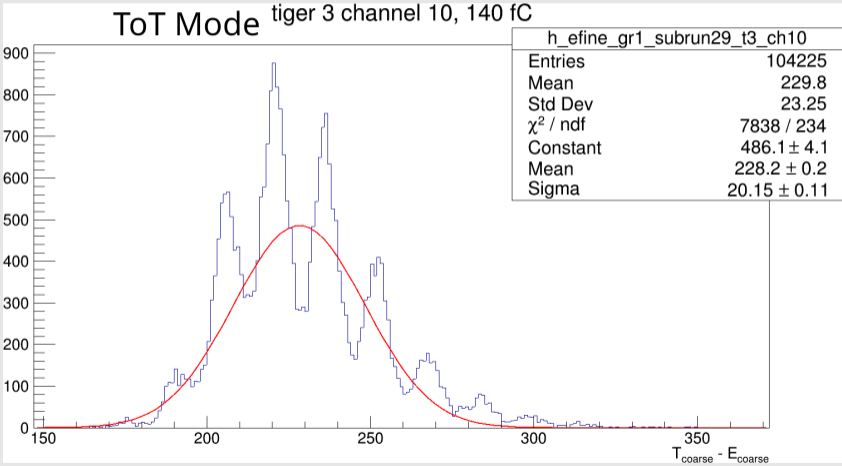


calibration: ToT mode - in detail



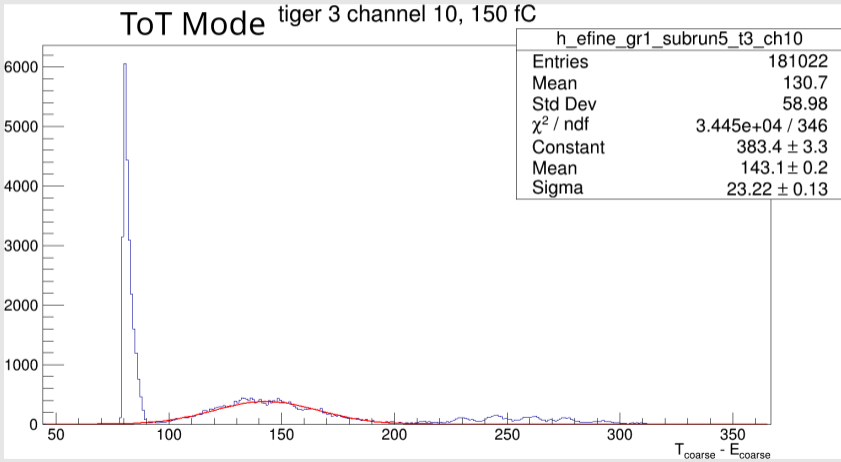
calibration: ToT mode - in detail

ToT energy variable for 140 fC signal



calibration: ToT mode - in detail

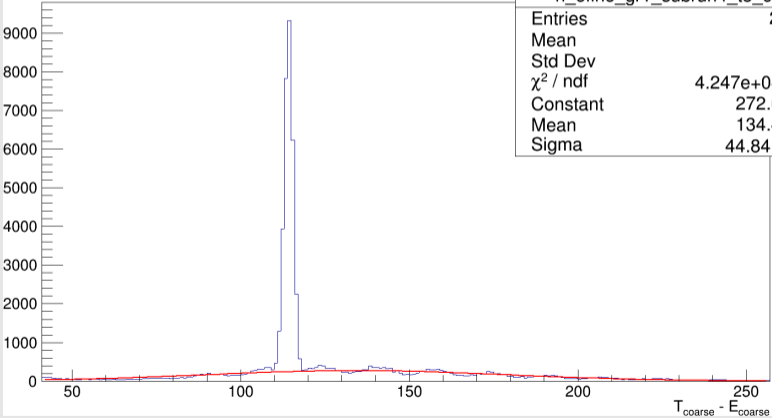
ToT energy variable for 150 fC signal



calibration: ToT mode - in detail

ToT energy variable for 200 fC signal

ToT Mode tiger 3 channel 10, 200 fC

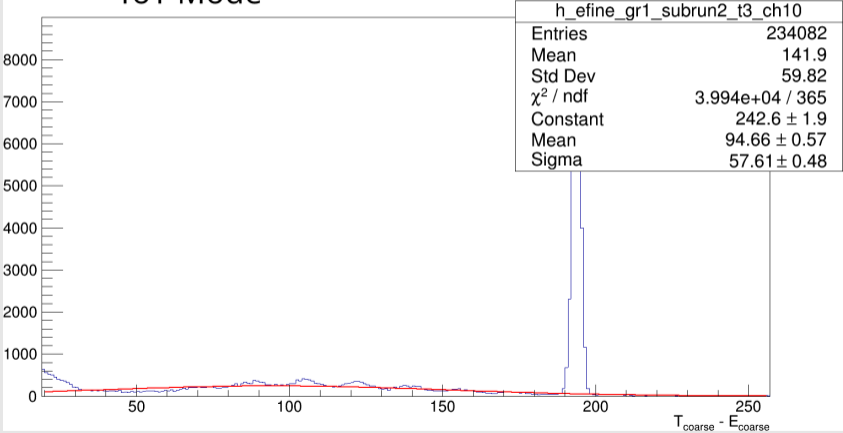


h_efine_gr1_subrun4_t3_ch10	
Entries	222971
Mean	126.1
Std Dev	32.44
χ^2 / ndf	4.247e+04 / 406
Constant	272.6 \pm 2.6
Mean	134.4 \pm 0.3
Sigma	44.84 \pm 0.34

calibration: ToT mode - in detail

ToT energy variable for 300 fC signal

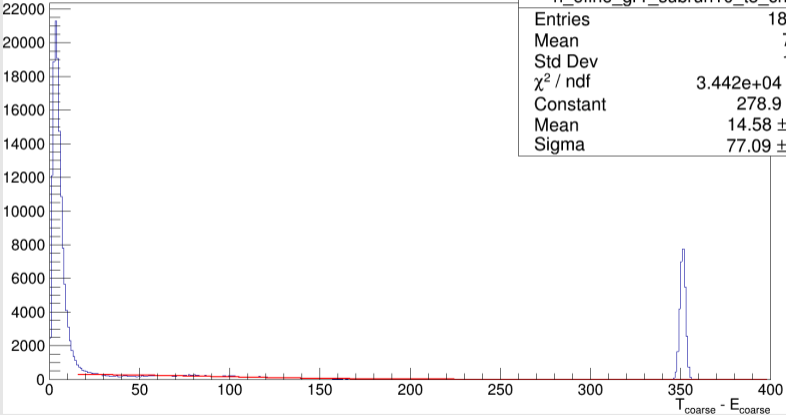
ToT Mode tiger 3 channel 10, 300 fC



calibration: ToT mode - in detail

ToT energy variable for 500 fC signal

ToT Mode tiger 3 channel 10, 500 fC



h_fine_gr1_subrun10_t3_ch10	
Entries	187020
Mean	71.99
Std Dev	126.4
χ^2 / ndf	3.442e+04 / 298
Constant	278.9 \pm 5.0
Mean	14.58 \pm 3.12
Sigma	77.09 \pm 1.27