LY Studies

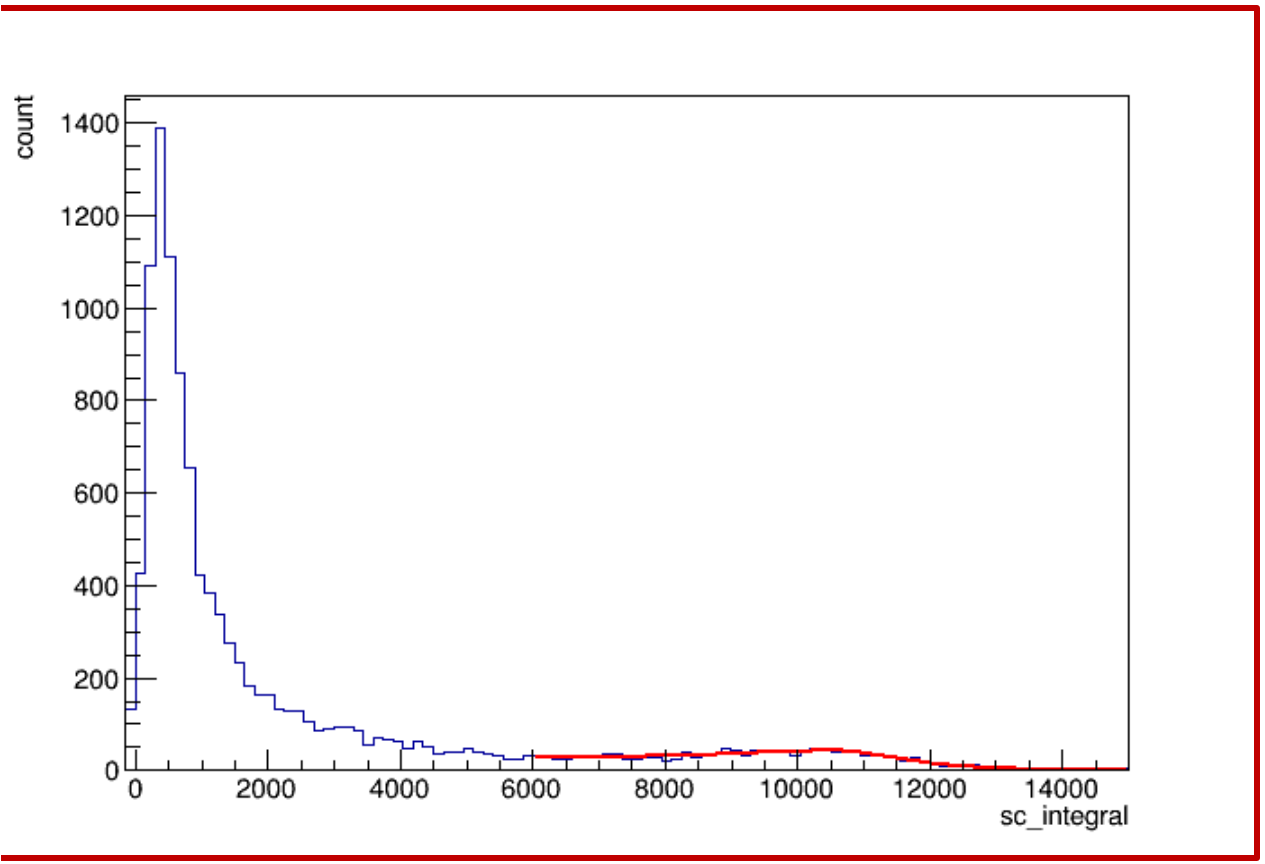
Variables definitions:

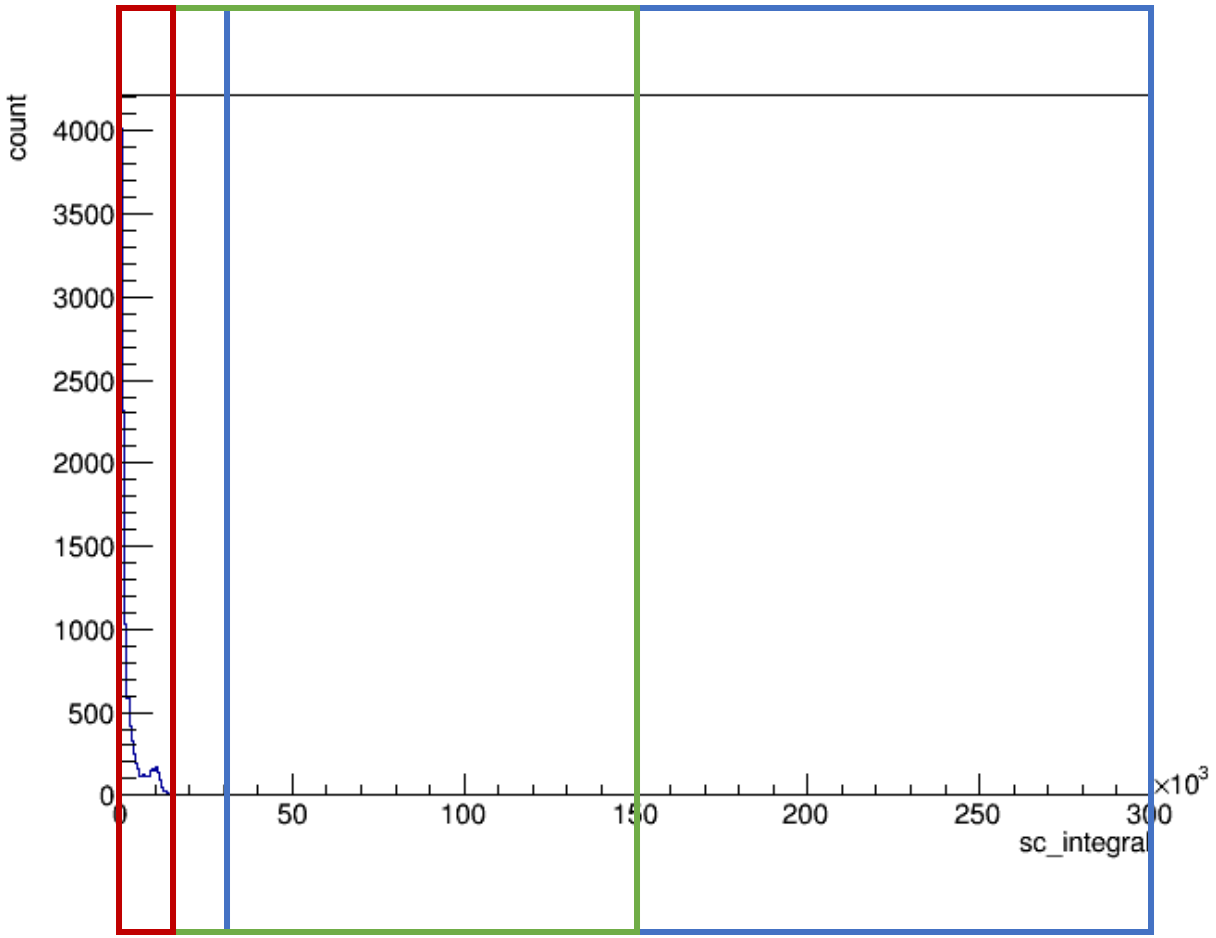
LY_15 = Mean in the range [15k ; 150k] of the sc_integral distribution

LY_30 = Mean in the range [30k ; 300k] of the sc_integral distribution

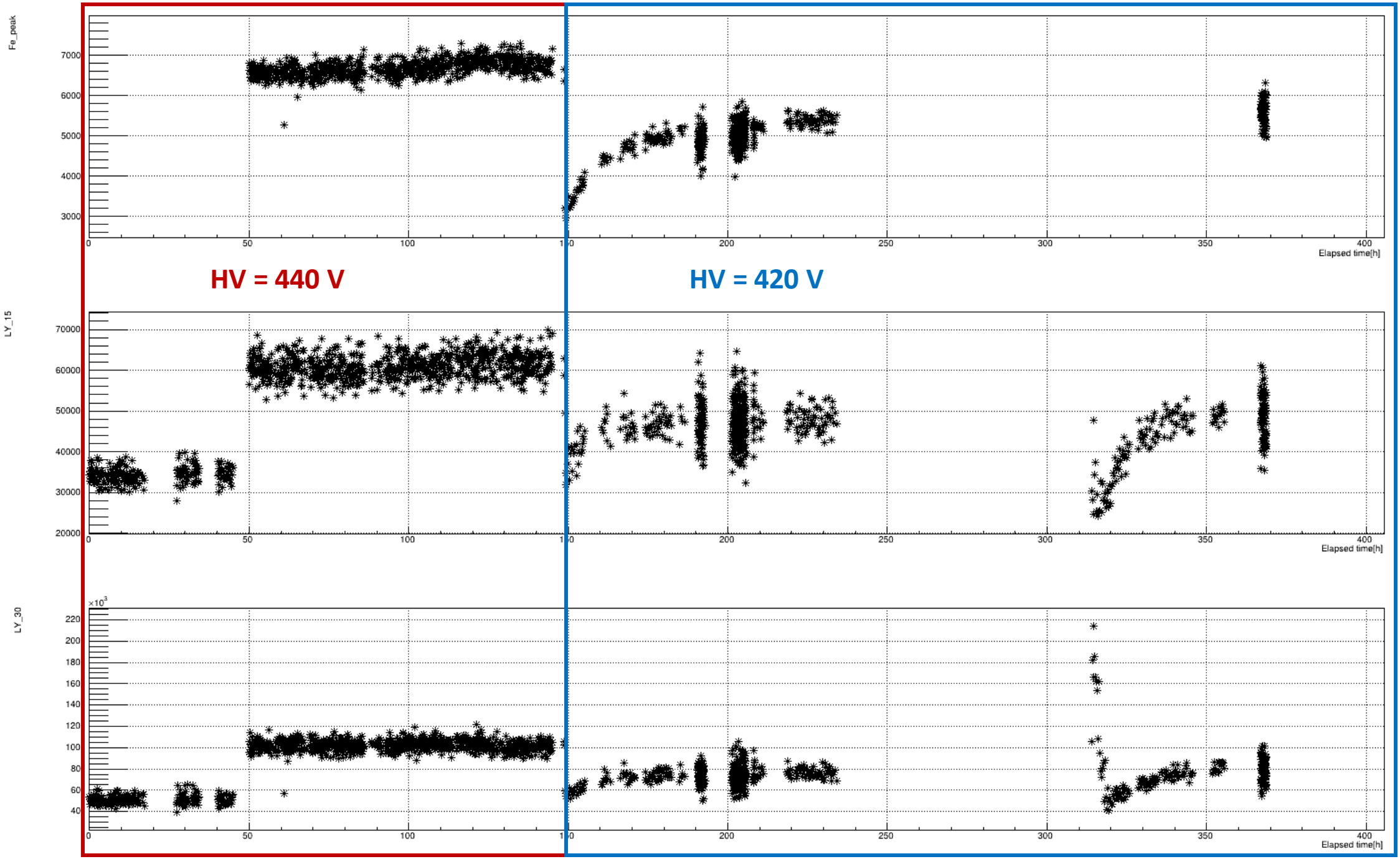
The ^{55}Fe peak is fitted with the **Cruijff function** and the mean of the function defines the ^{55}Fe peak

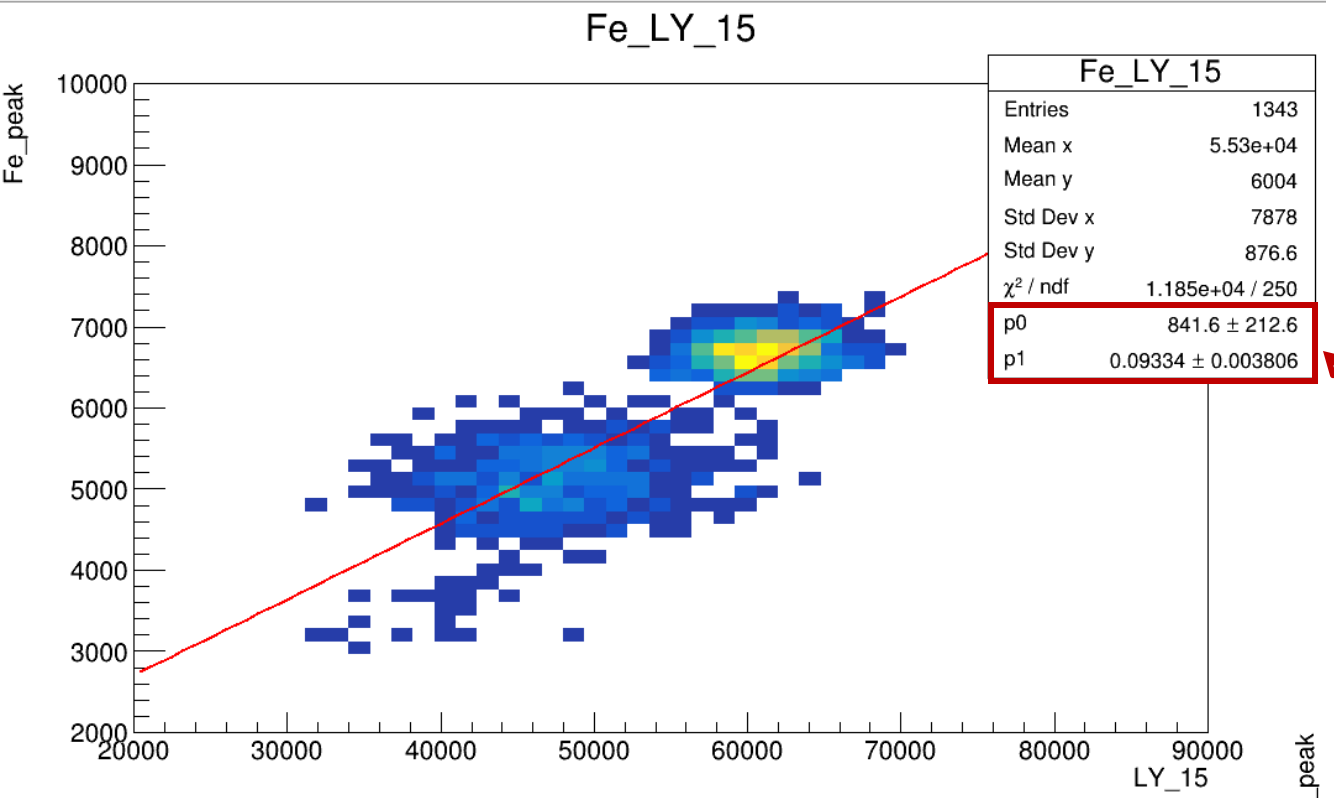
Example: run 17400





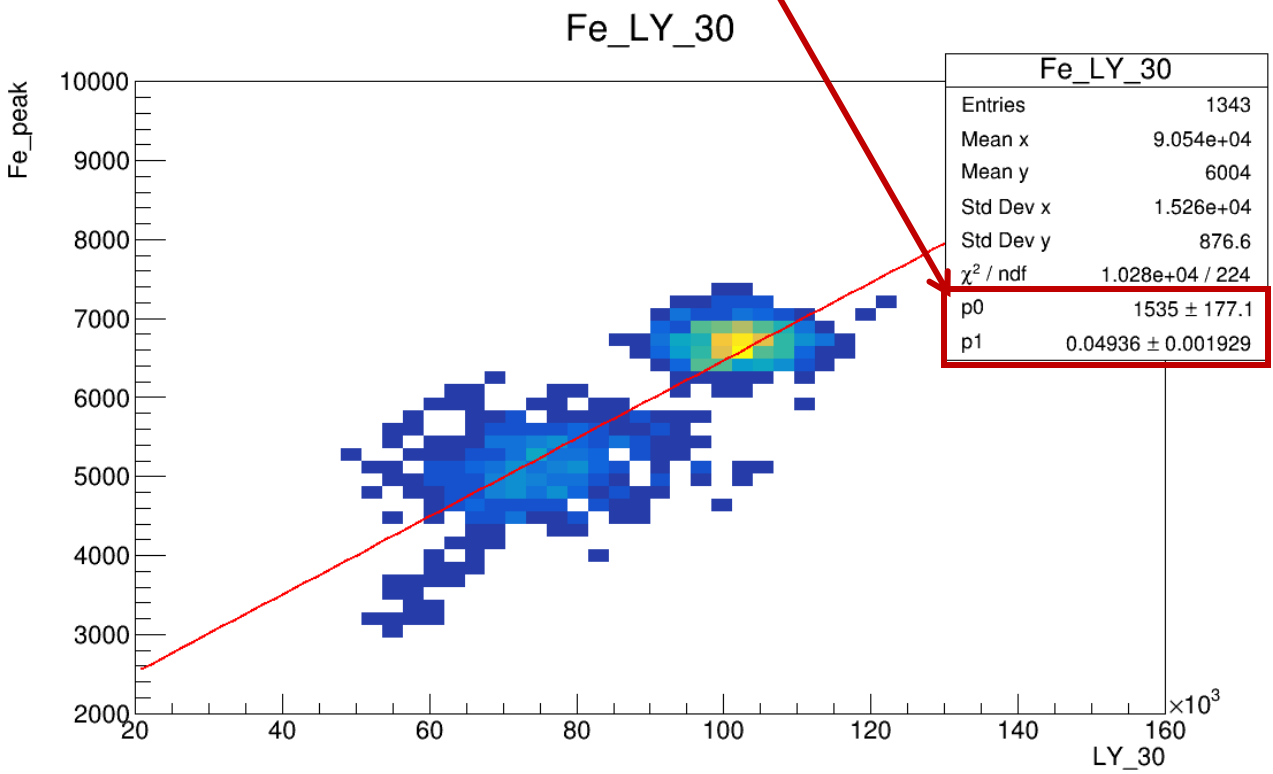
RUN2

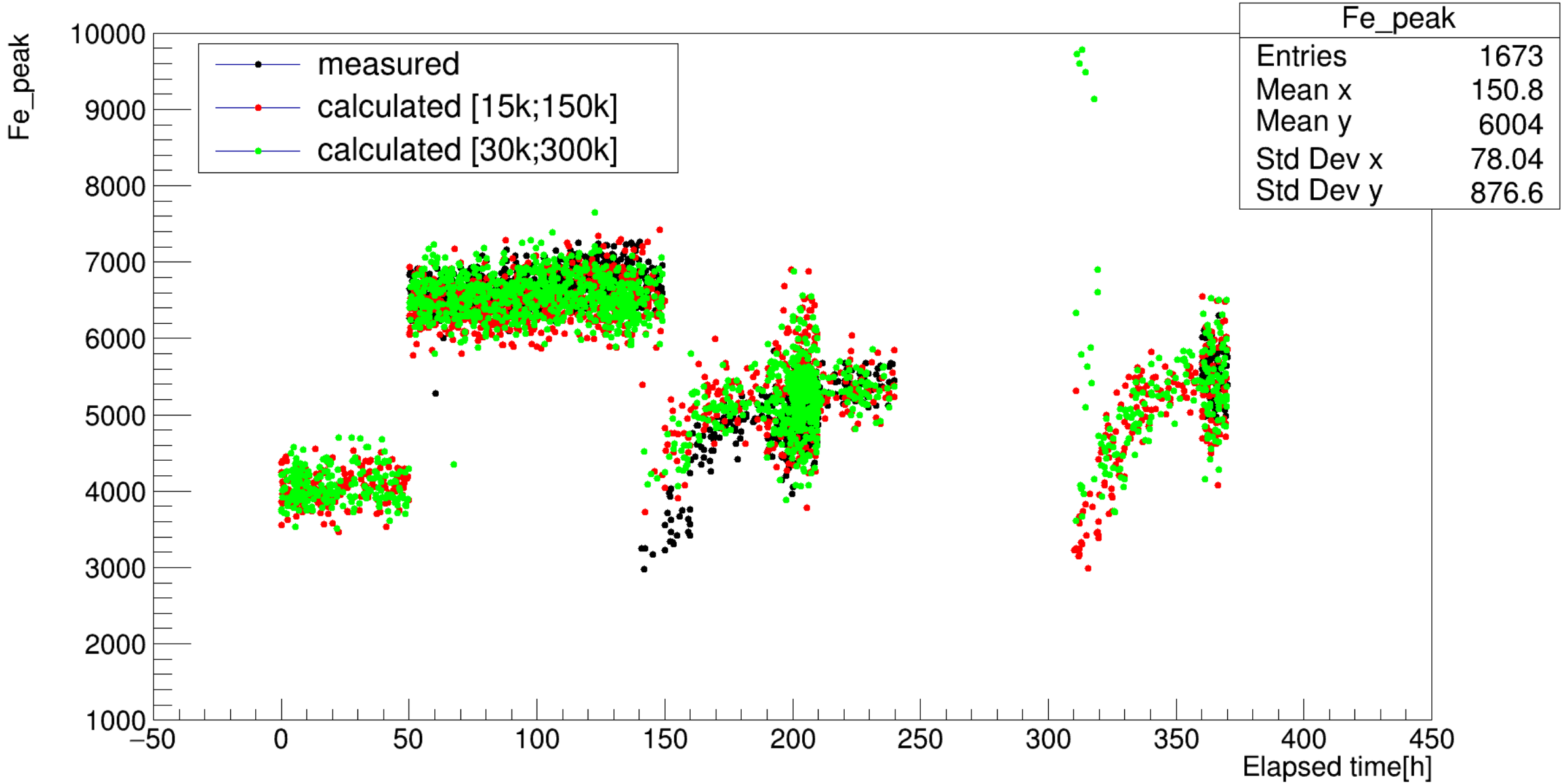




All the run with the 55Fe peak are taken and 55Fe peak vs LY is plotted and a linear fit is performed

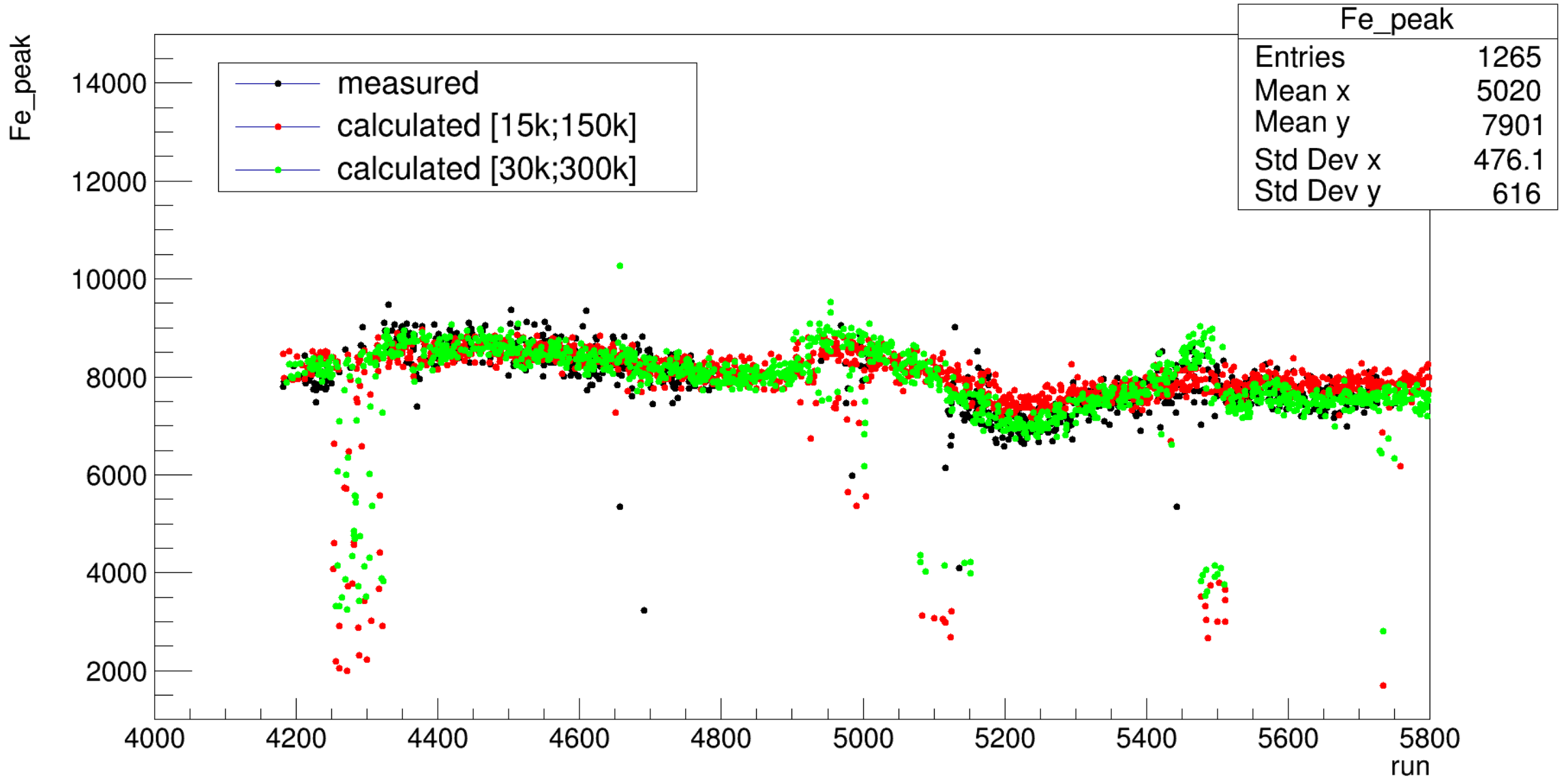
The parameters are used to evaluate the ^{55}Fe peak from the LY -> in order to "calculate" the ^{55}Fe peak





calculated [15k ; 150k] and **calculated [30k; 300k]** are comparible

RUN1


Fe_peak
measured
calculated [15k;150k]
calculated [30k;300k]
Fe_peak
Entries 1265
Mean x 5020
Mean y 7901
Std Dev x 476.1
Std Dev y 616
14000
12000
10000
8000
6000
4000
2000
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
run

Conclusions

- The LY_15 and LY_30 variables appear to be valid;
- We are studying the LY_15 and LY_30 to validate these variables in order to correct the runs;
- We are studying also the Run3

Work in progress