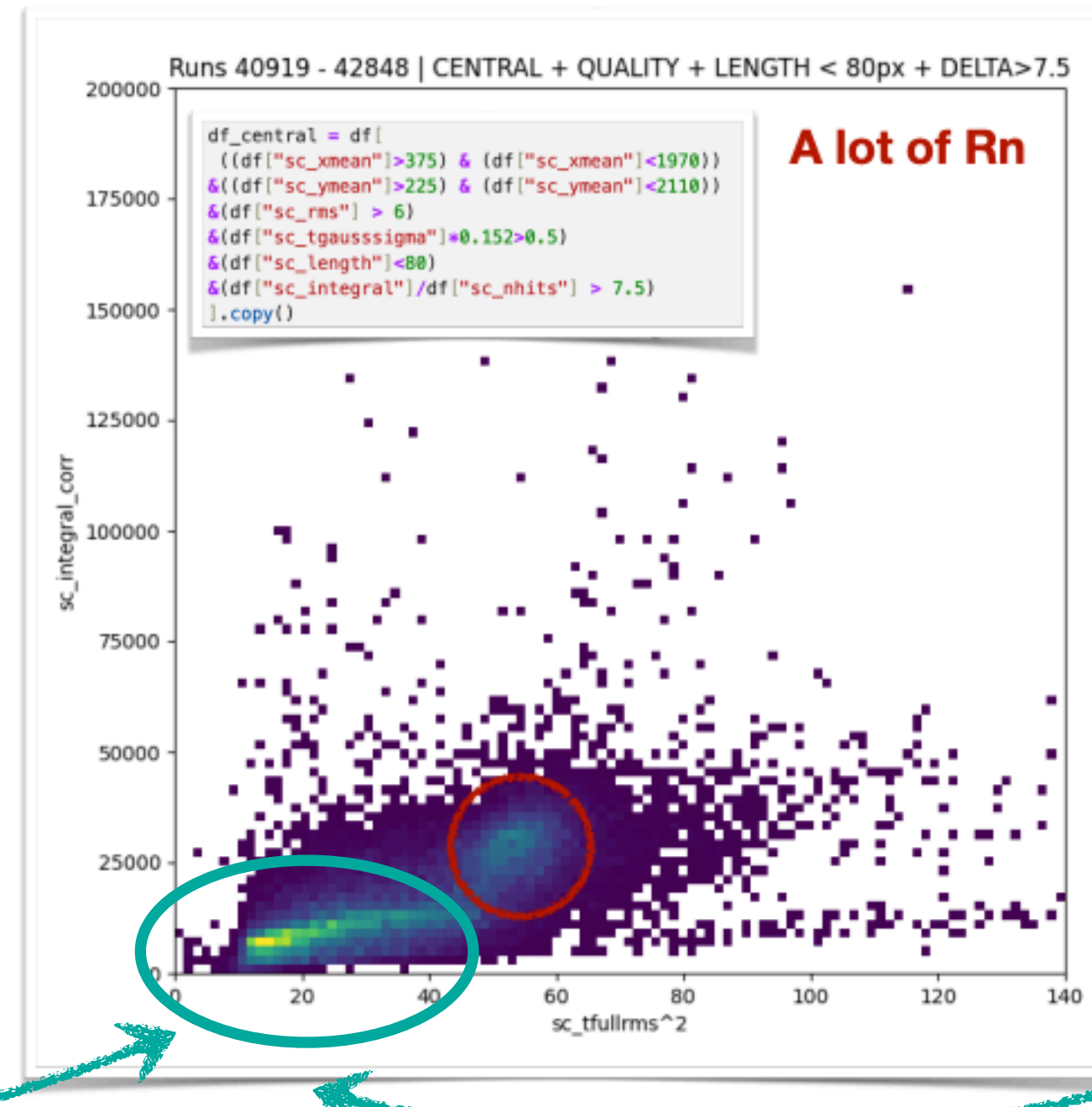
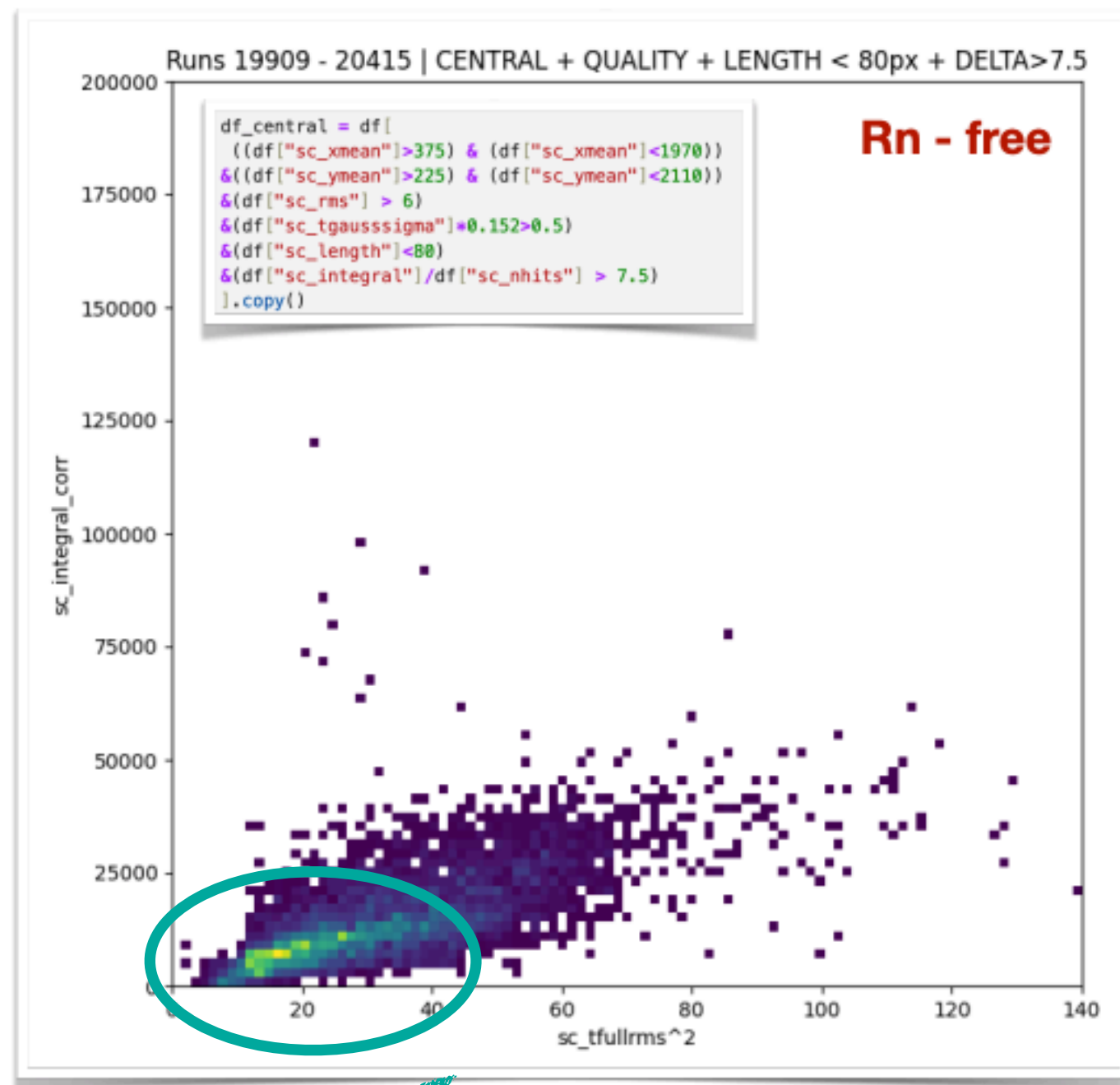


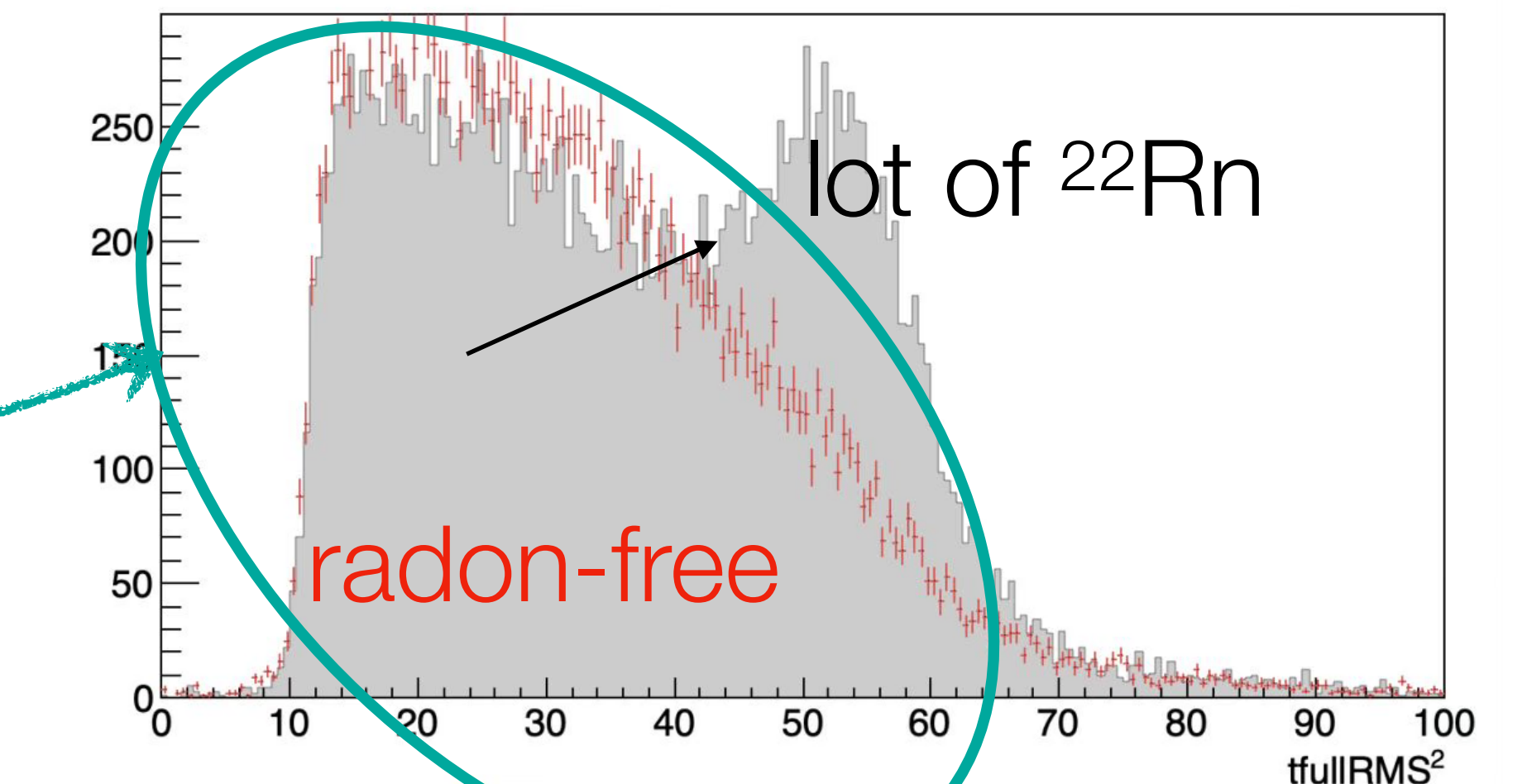
Boh nd MC

The boh peak

It is present also in run with a low level of Radon (while the other almost disappears)

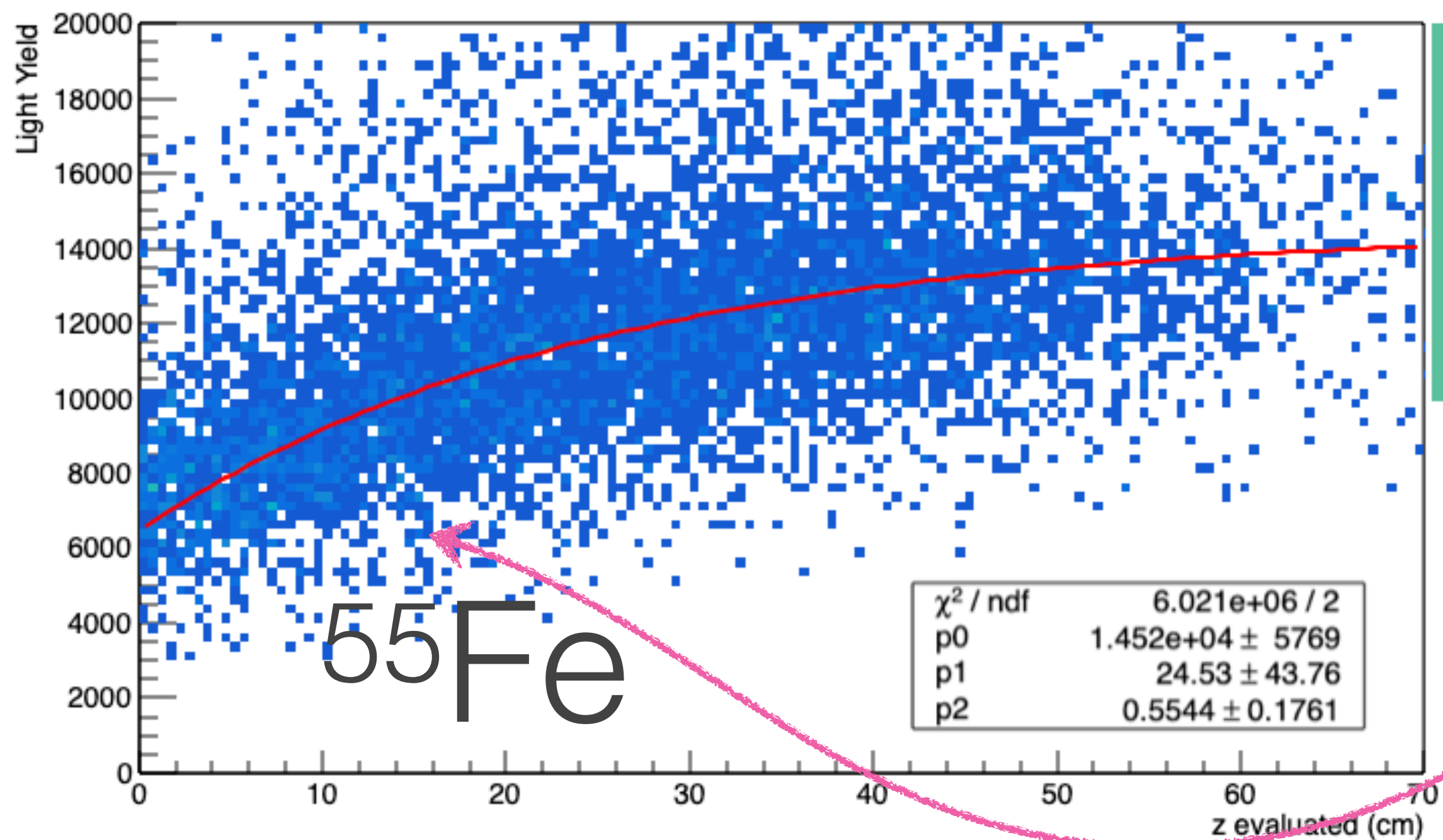


In the distribution of the $t_{fullRMS}^2$ values normalised by the number of runs (not perfect normalization) the two behaviors are confirmed

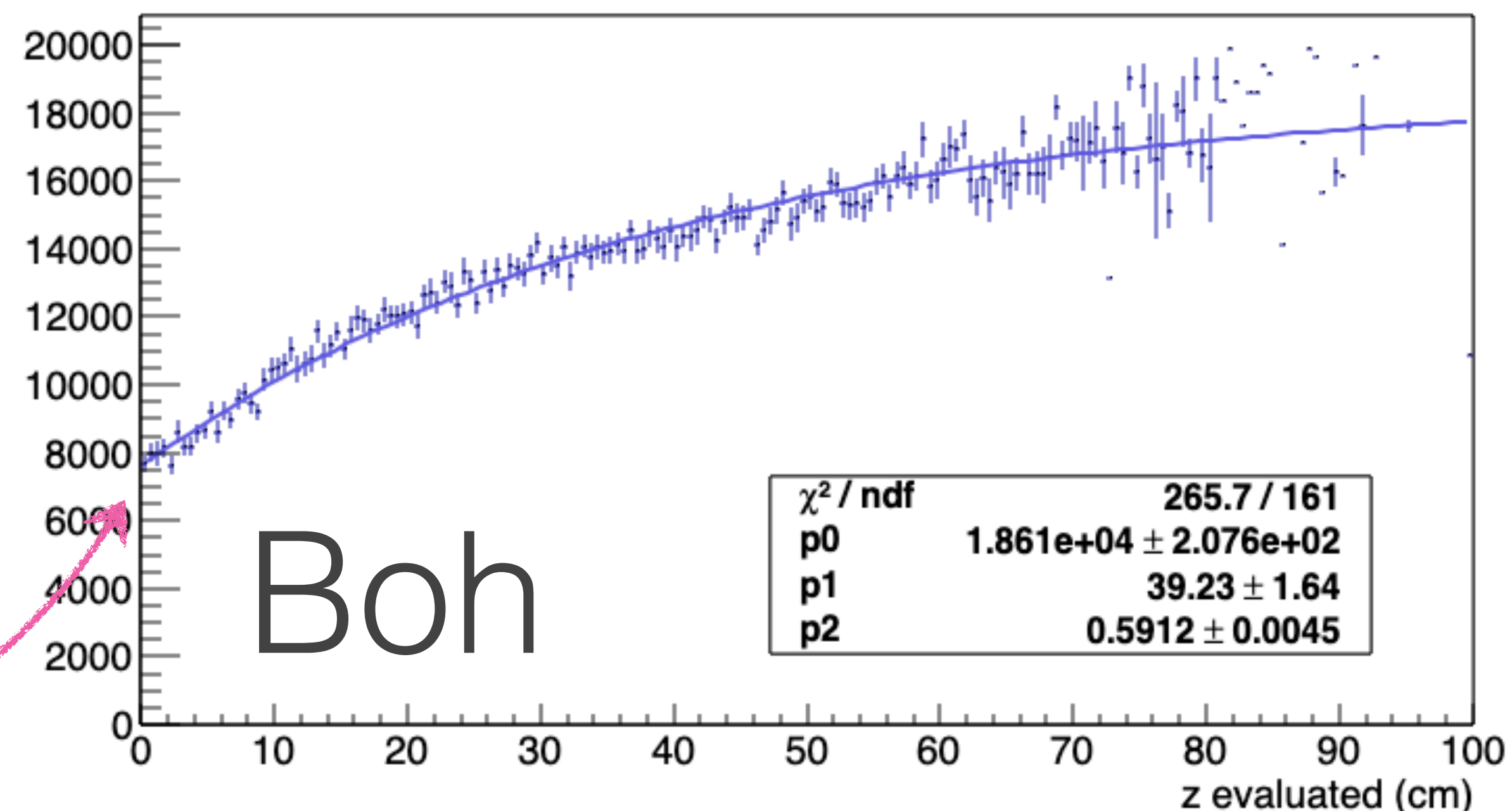


Let's focus on these

Light yield behaviour



Same function



Element	$K\alpha_1$	$K\alpha_2$
22 Ti	4,510.84	4,504.86
23 V	4,952.20	4,944.64
24 Cr	5,414.72	5,405.509
25 Mn	5,898.75	5,887.65
26 Fe	6,403.84	6,390.84
27 Co	6,930.32	6,915.30
28 Ni	7,478.15	7,460.89
29 Cu	8,047.78	8,027.83
30 Zn	8,638.86	8,615.78

From the comparison of the fit plateaux, we can expect about 7.5 keV for these events;

Nichel or most probably copper from the GEM

The Cu component

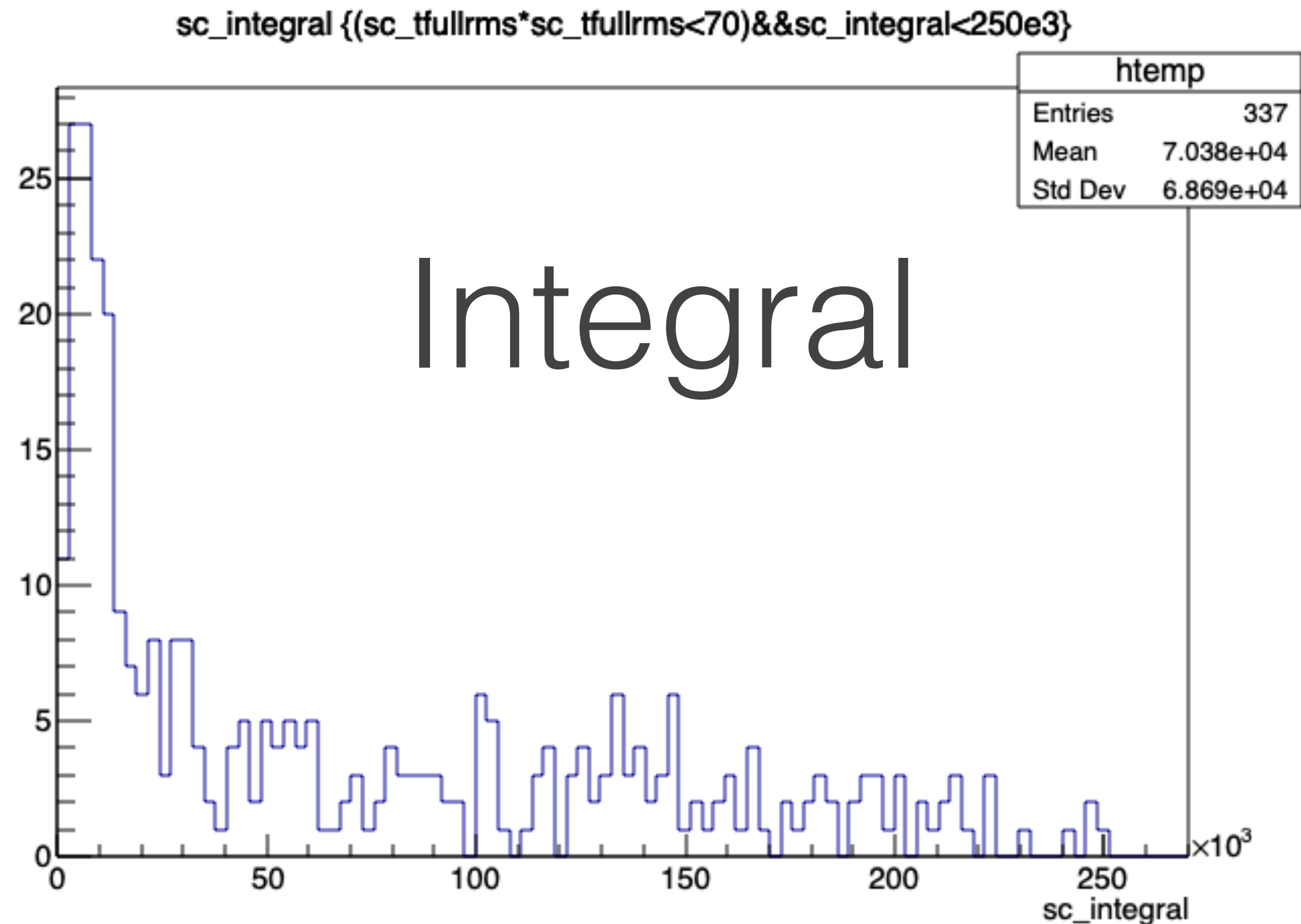
There is a large presence of Cu background, very likely induced by radioactivity in GEM (and confirmed by the test with sources);

It can be useful to look at it because:

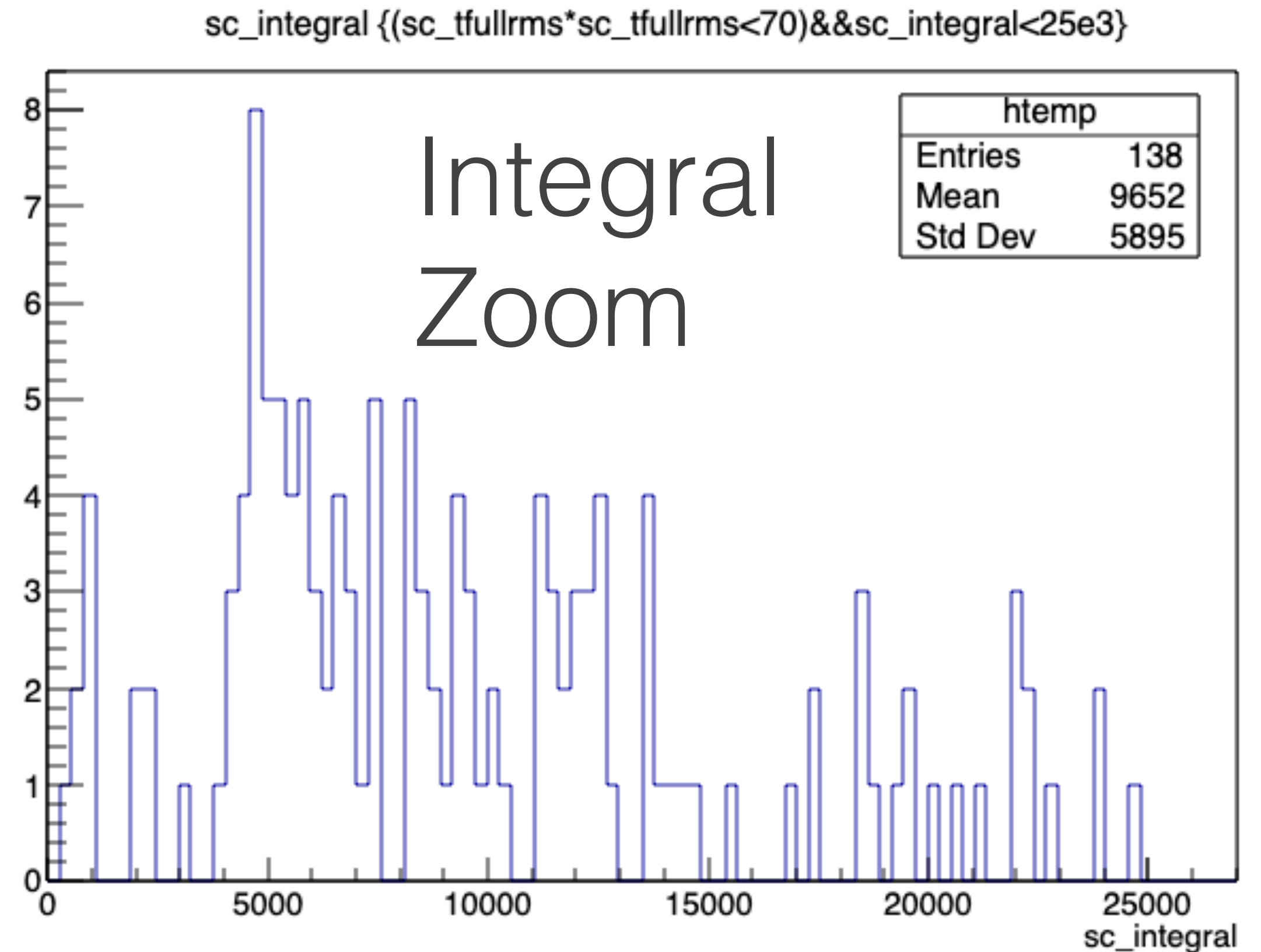
- it will be a possible impossible important background of CYGNO04 (field cage and cathode GEM-like);
- it would help to check the saturation and its simulation in an energy value where probably they are very effective
- can we use it to check our z-reco?

Giulia and Emanuele are working at the simu-digi-reco of this bkg

The Cu component



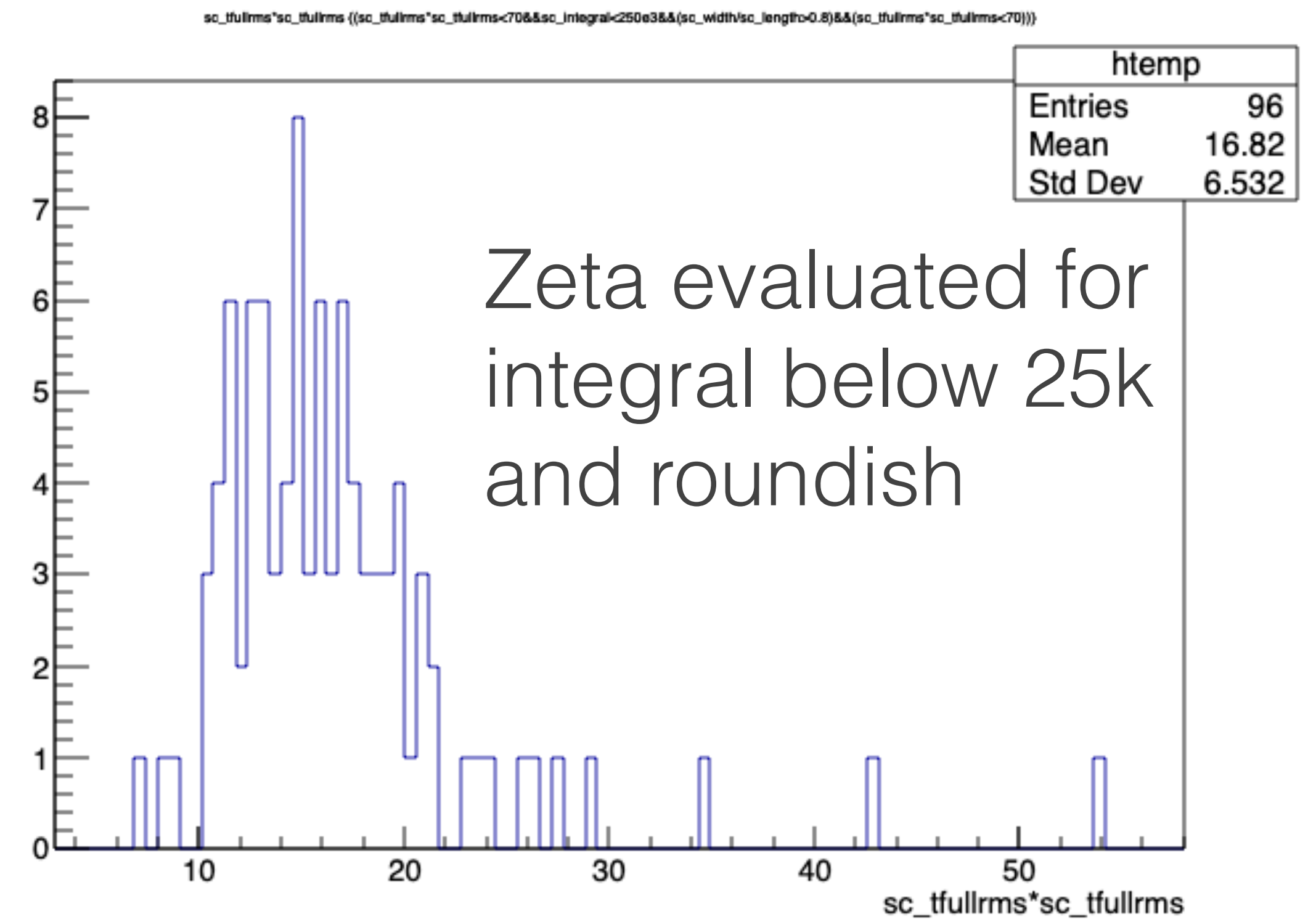
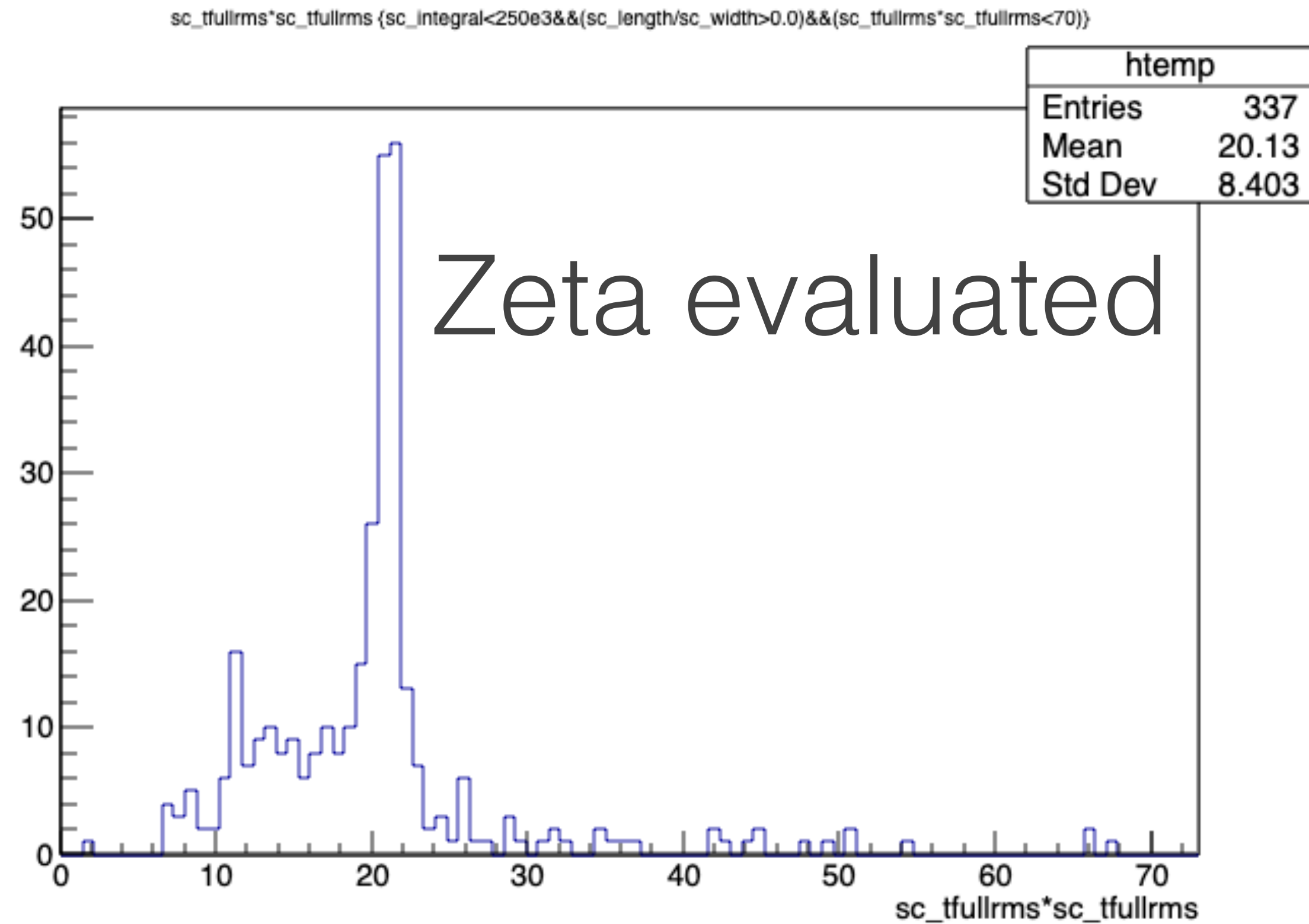
Too few events, we need to increase statistics



Even at small z (see next slide) for these events we expect a LY of at least 8000

V_{GEM} was set to 420V by mistake

The Cu component



The Cu component

