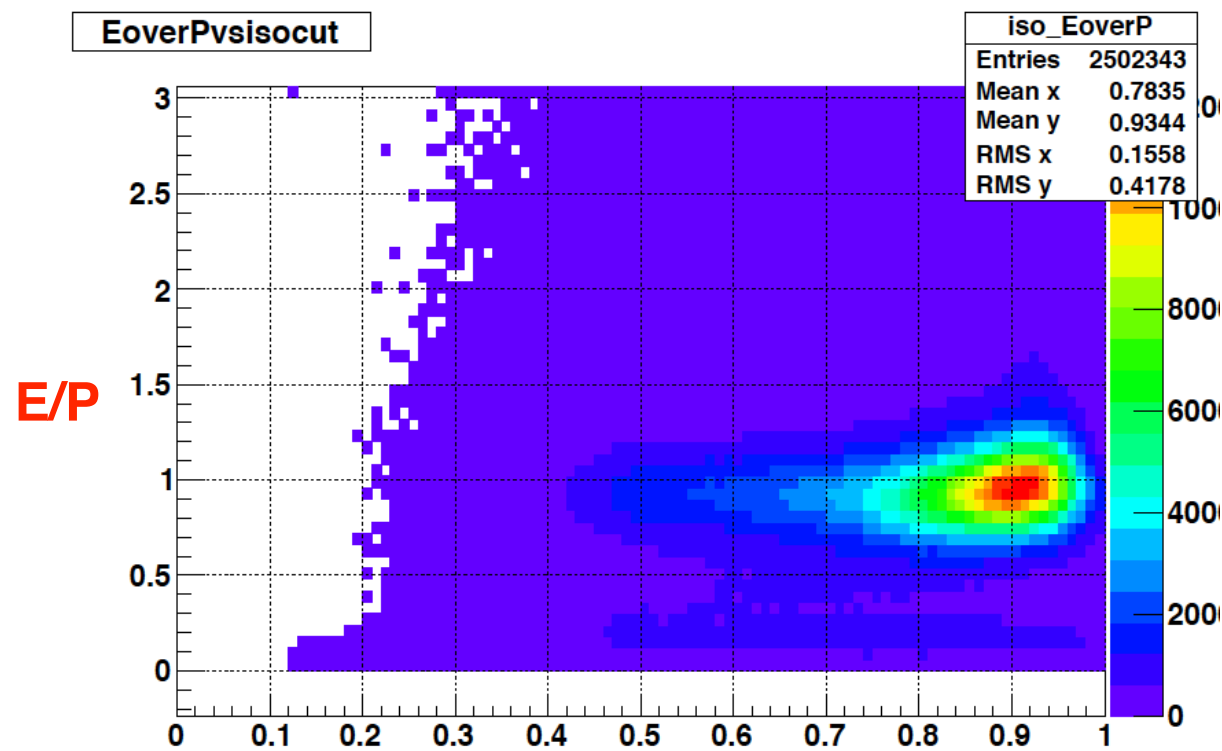
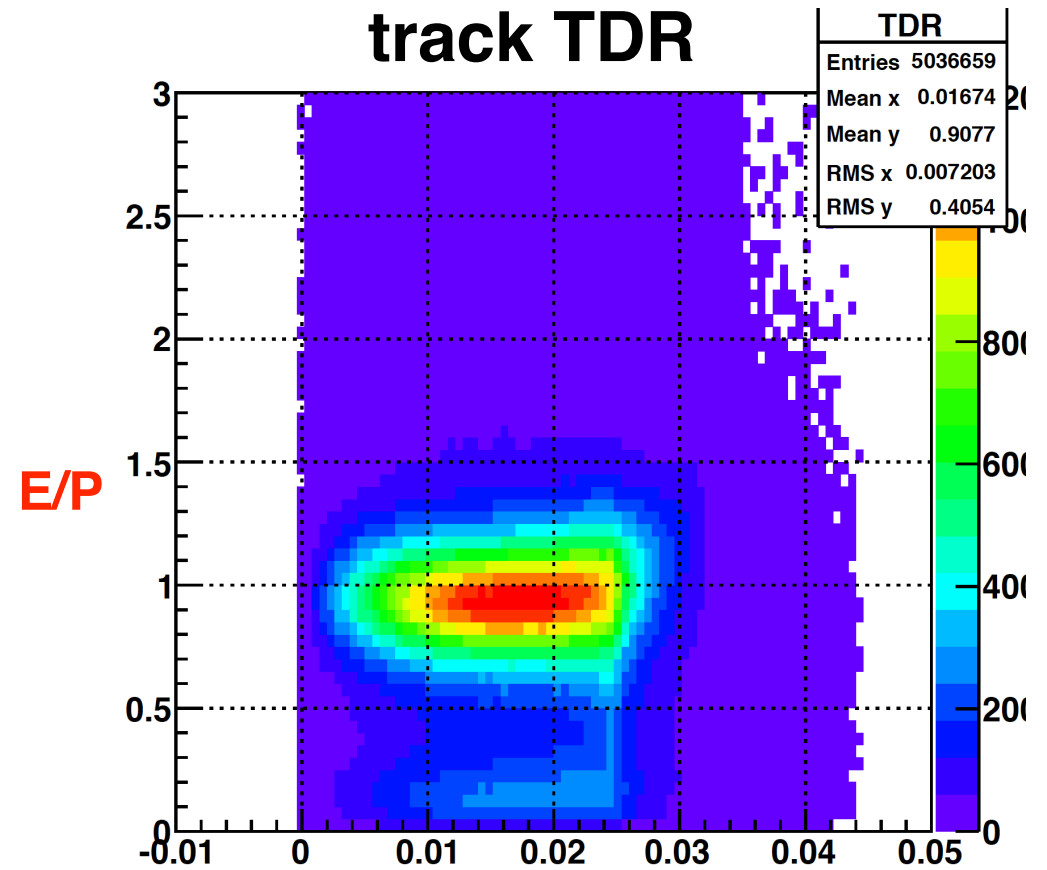
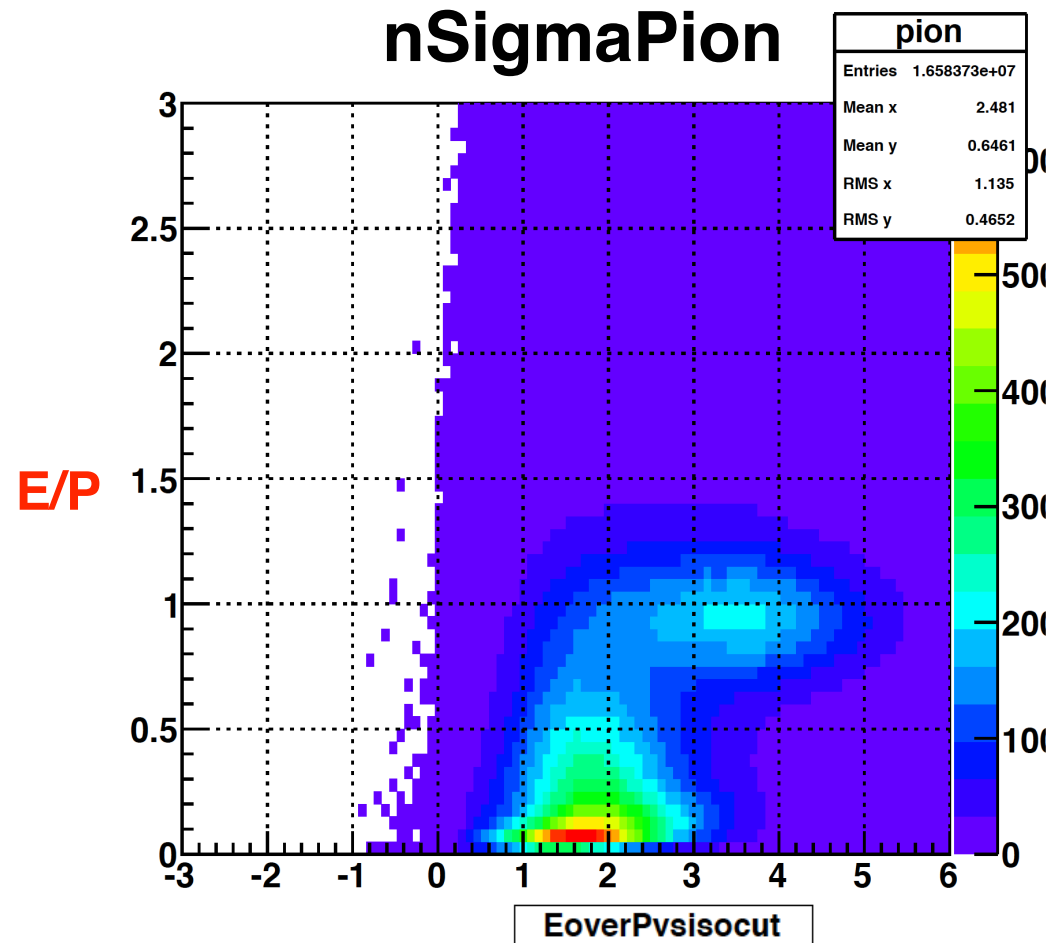


Systematic Studies

Main Cuts:



**Isolation:
tower energy /
3x3 cluster
sum**

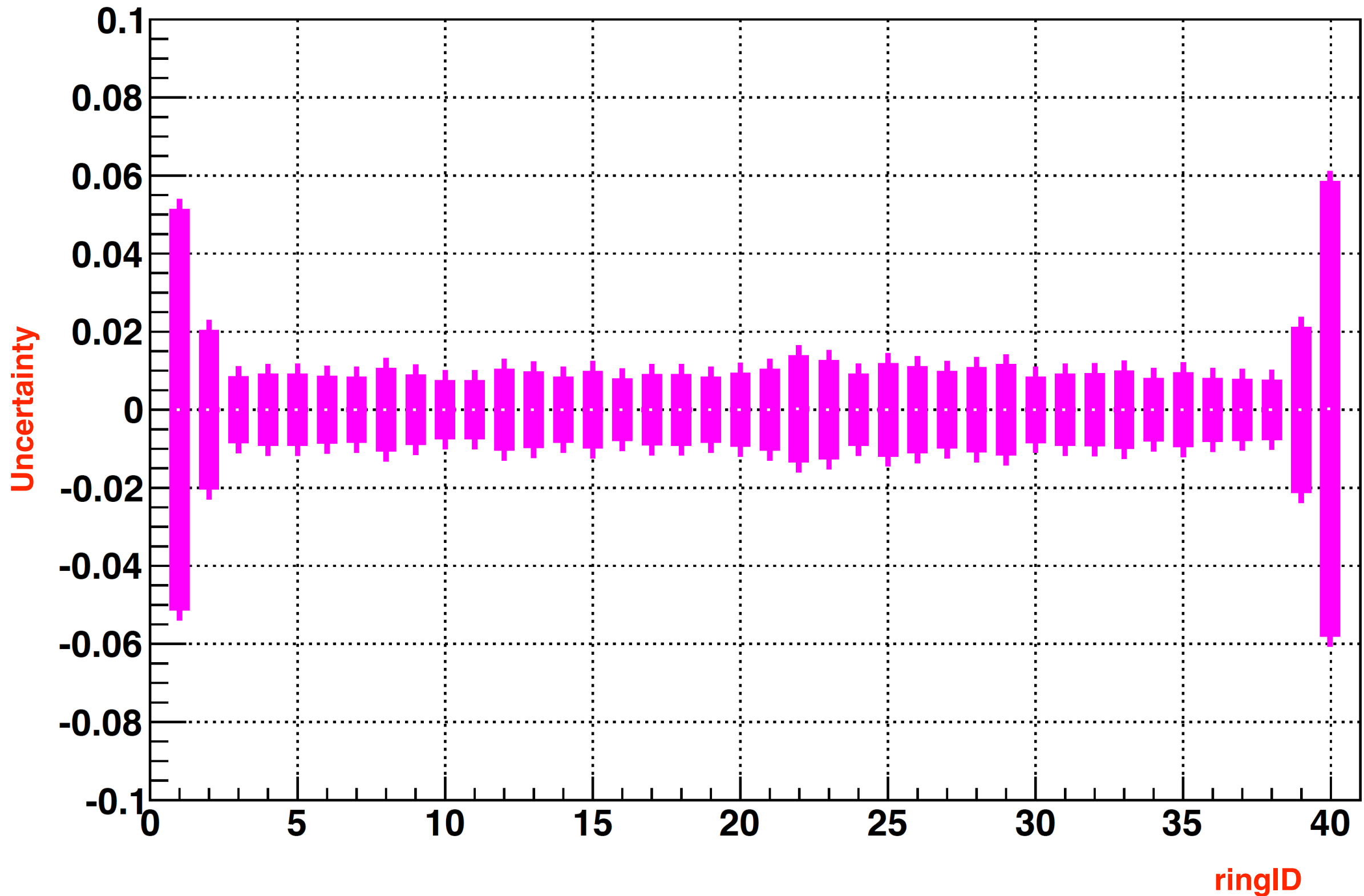
Systematic Studies

- Cut Set 1:
 - 1) $n_{\text{sigmaPion}}$, from 3.0 to 4.0 with step 0.2, 6 points
 - 2) momentum low cut, from 1.5 to 2.0 with step 0.1, 6 points
 - 3) tower Track Dr, from 0.018 to 0.022, with step 0.001, 5 points
 - 4) isolation cuts, from 0.5 to 0.9, with step 0.1, 5 points

Run-13 period 1 -Systematic Uncertainty

Uncertainty = ring RMS / ring Mean

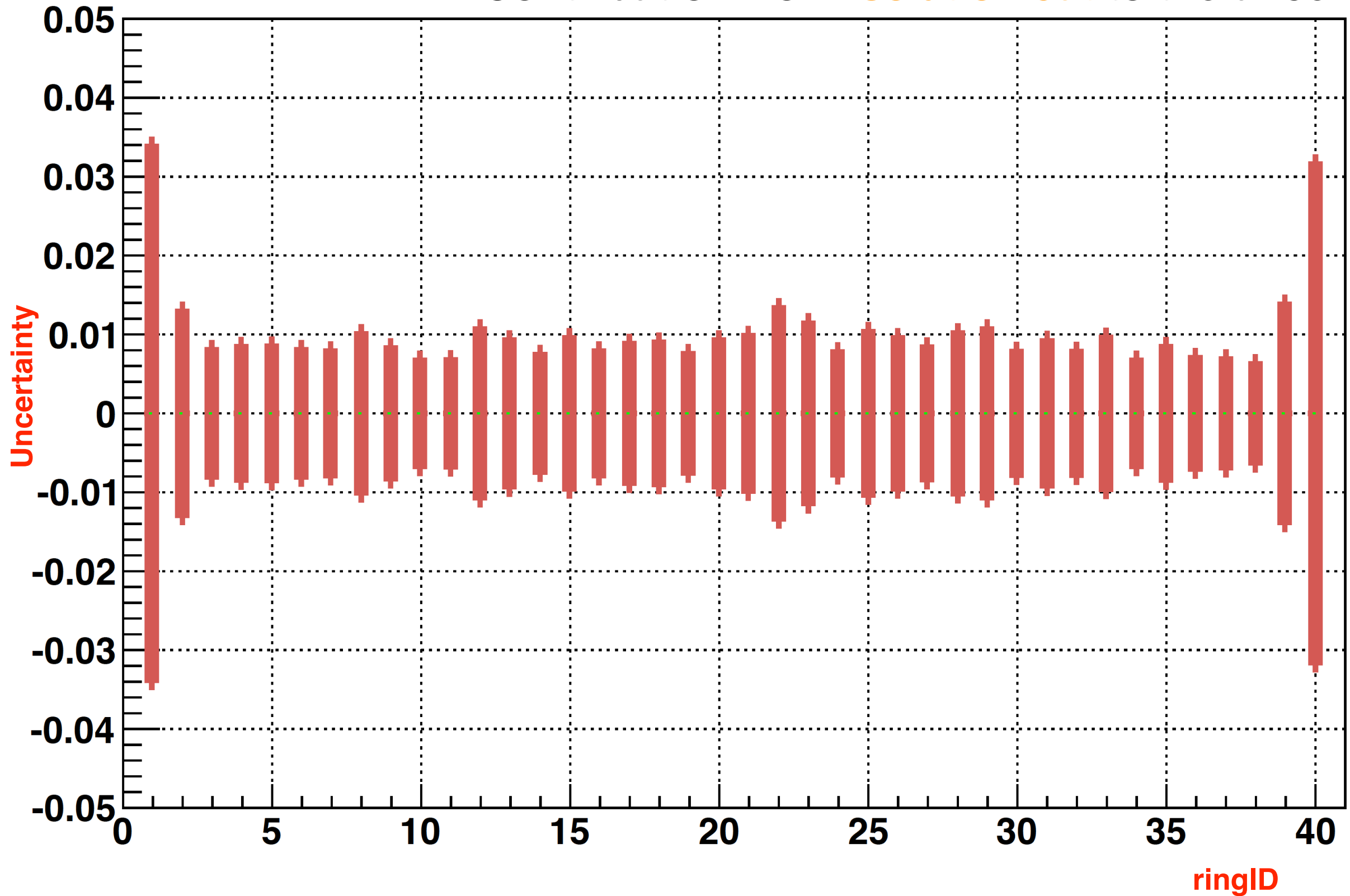
BHT3-trigger



Uncertainty = ring RMS / ring Mean

Isolation cut changed from 0.8 to 0.9

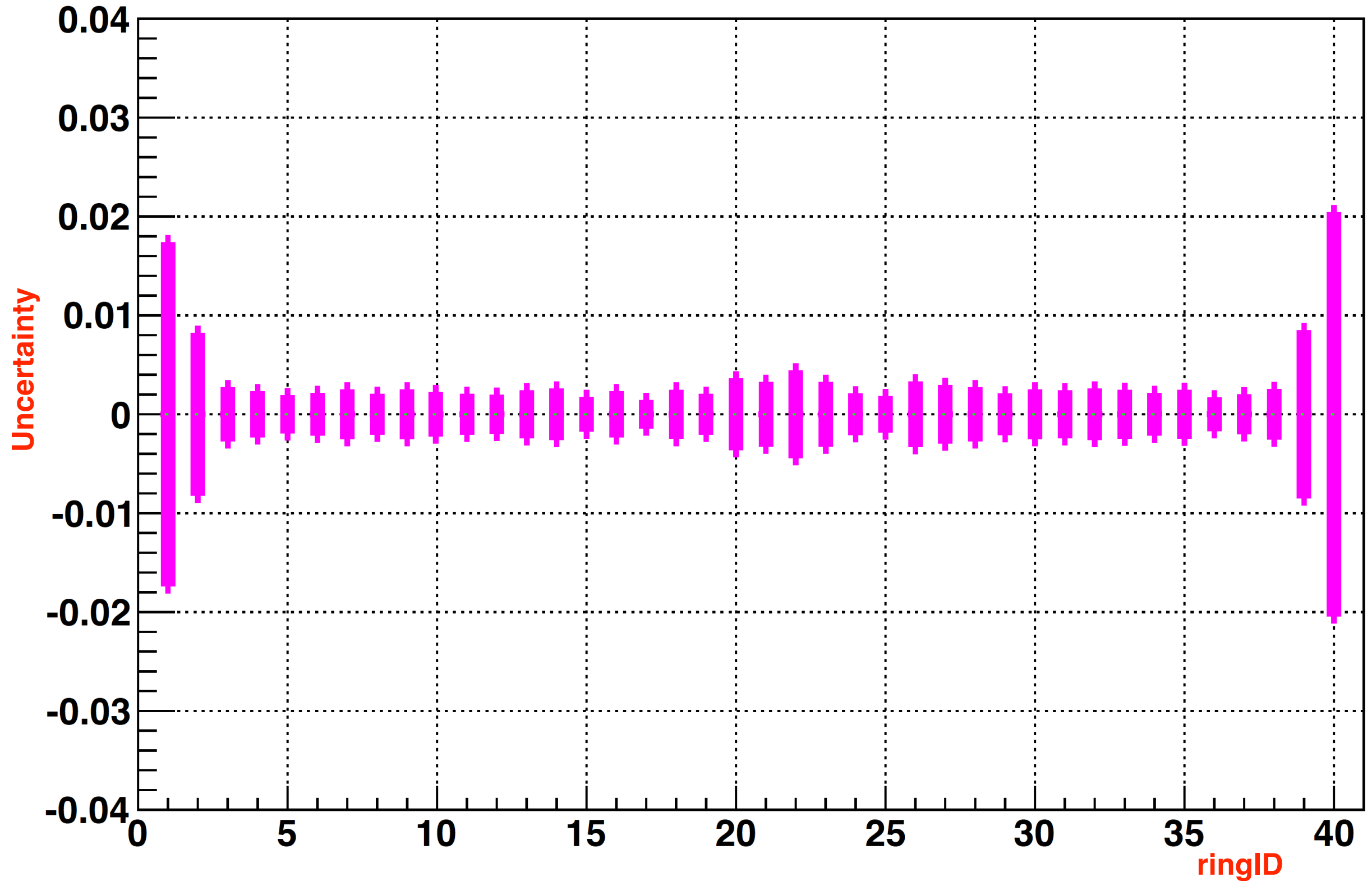
Contribution from **Isolation cut** to the uncertainty



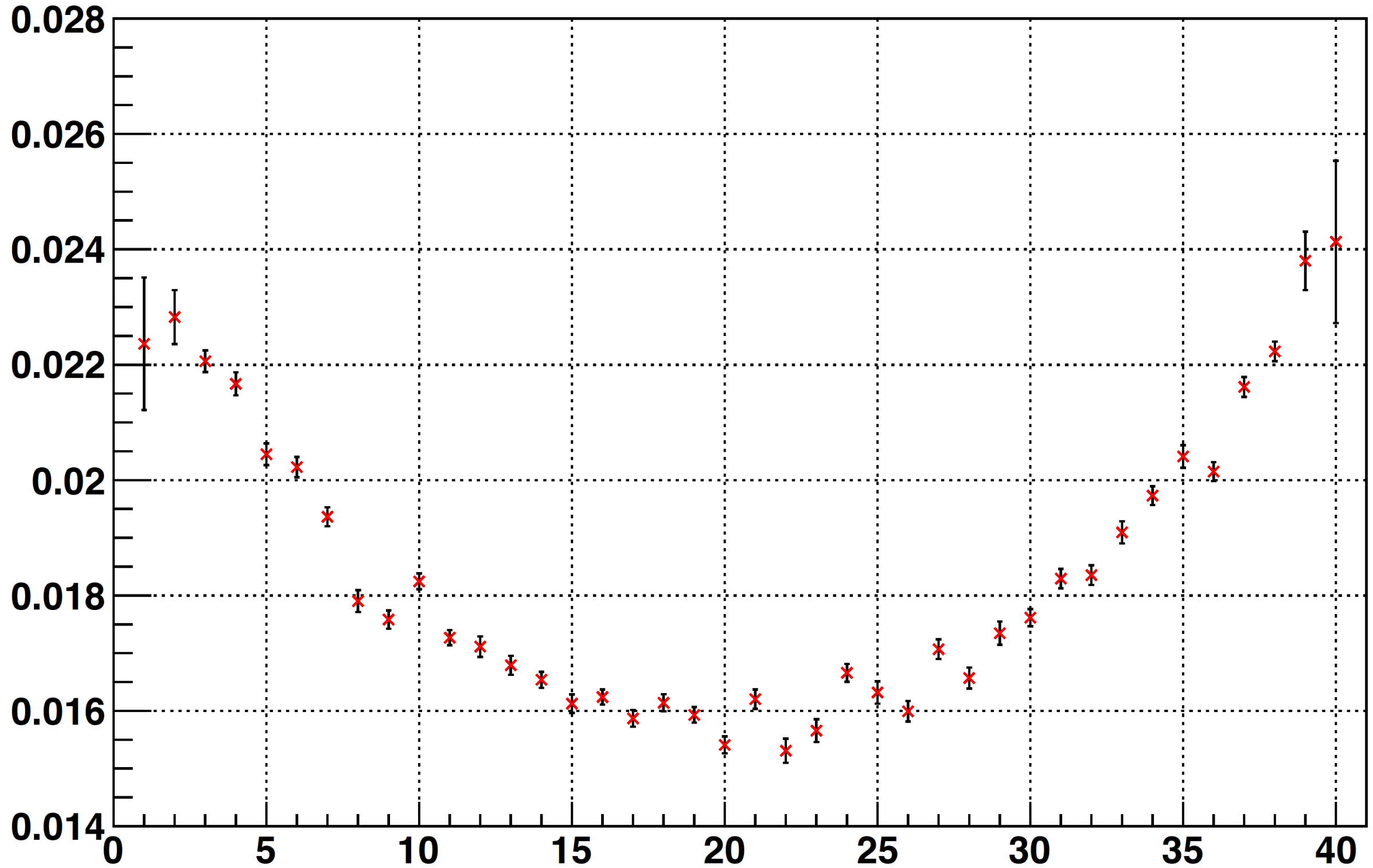
Uncertainty = ring RMS / ring Mean

Isolation cut changed from 0.5 to 0.6

Contribution from **Isolation cut** to the uncertainty

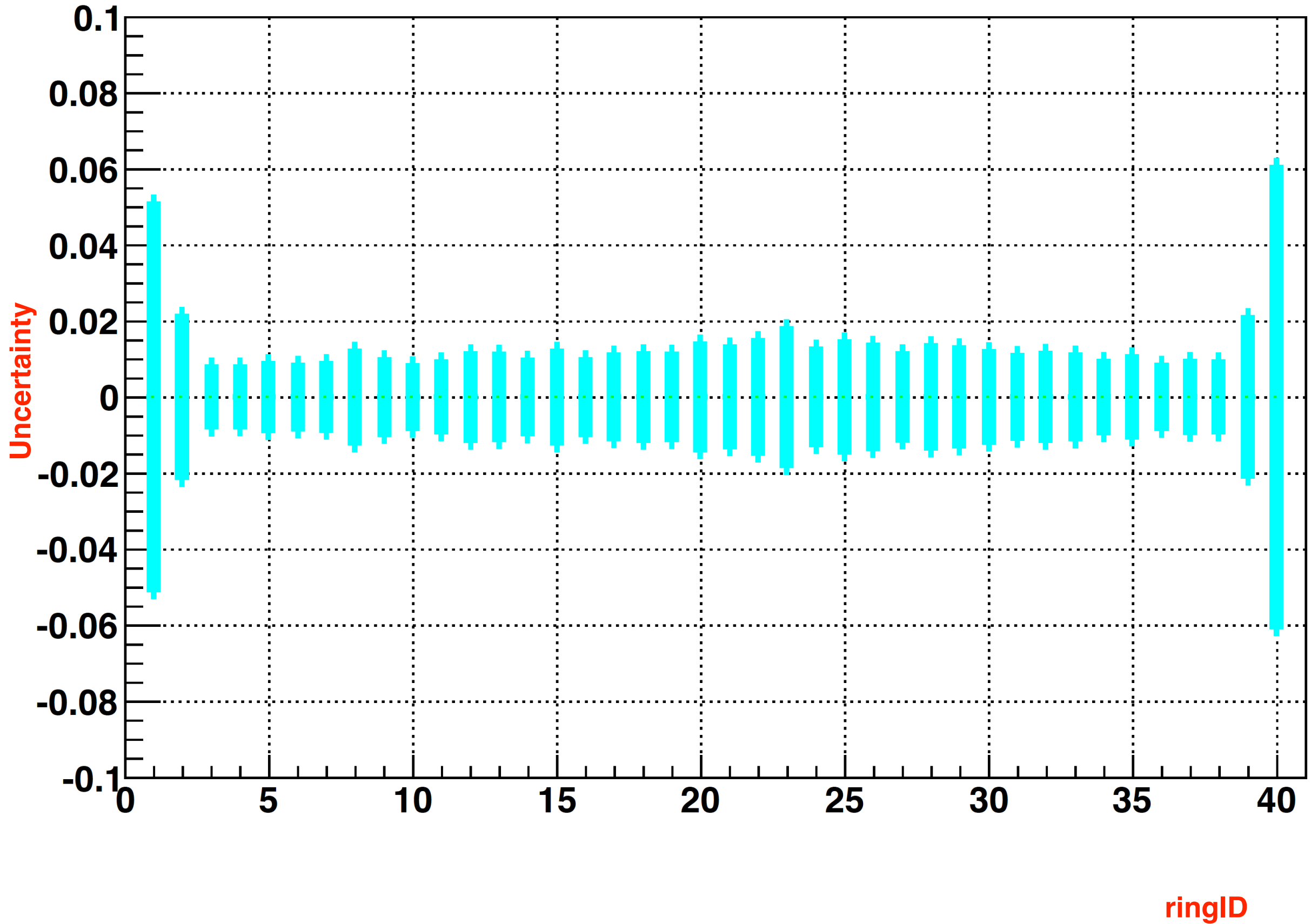


Gain with central values and RMS - period1



Uncertainty = ring RMS / ring Mean

JP2-trigger



- Cut Set 2:

1) $n_{\text{sigmaPion}}$, from 2.8 to 3.2 with step 0.1, 5 points

2) momentum low cut, from 1.5 to 2.0 with step 0.1, 6 points

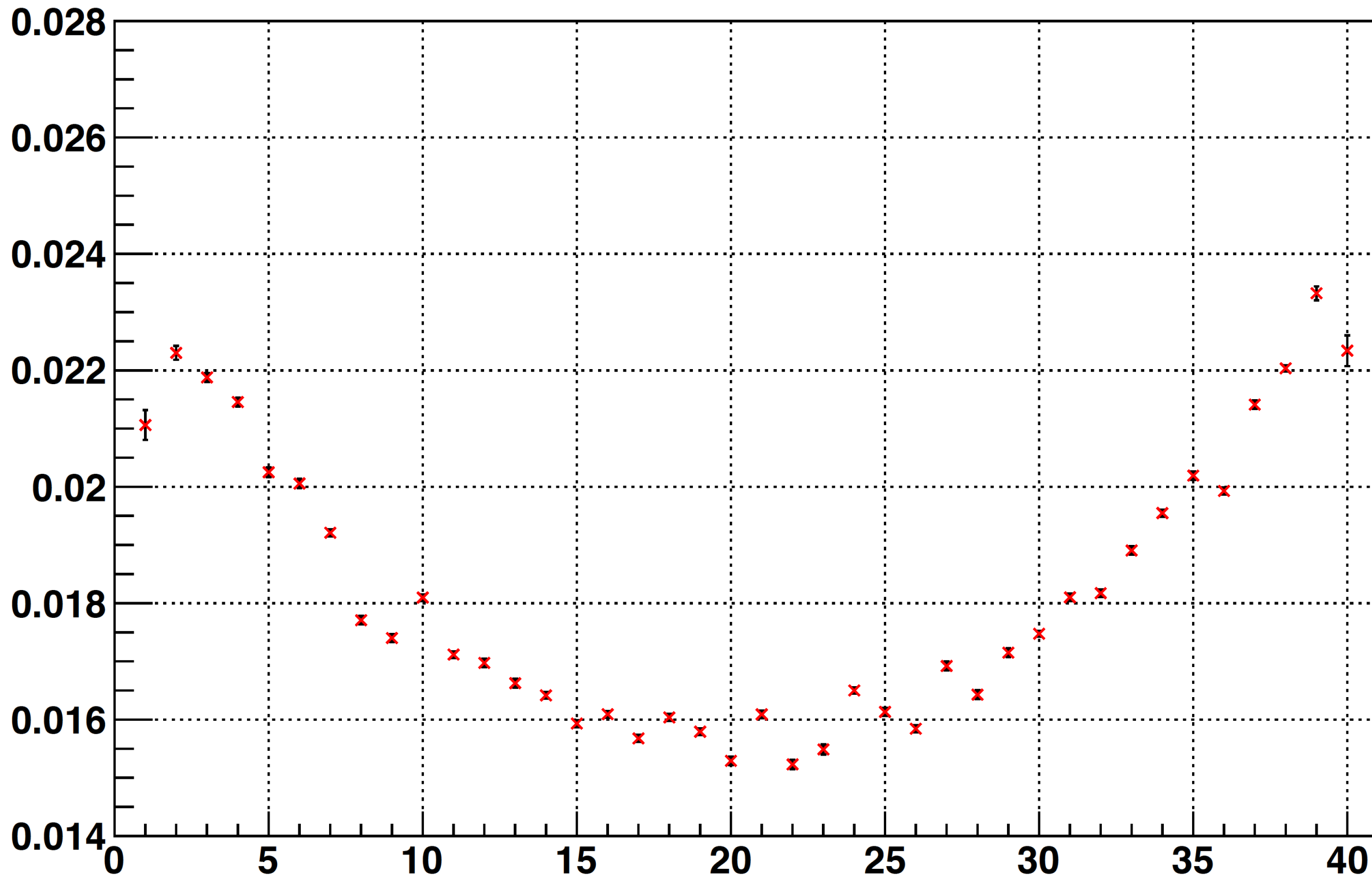
3) tower Track Dr, from 0.018 to 0.022, with step 0.001, 5 points

4) isolation cuts, from 0.85 to 0.9, with step 0.02, 3 points

5) electron cut from -1.0 to -1.5 , with step 0.2 , 3 points

Cut Set 2:

Gain with central values and RMS - period1 — new cut set



Uncertainty = ring RMS / ring Mean

Cut Set 2:

