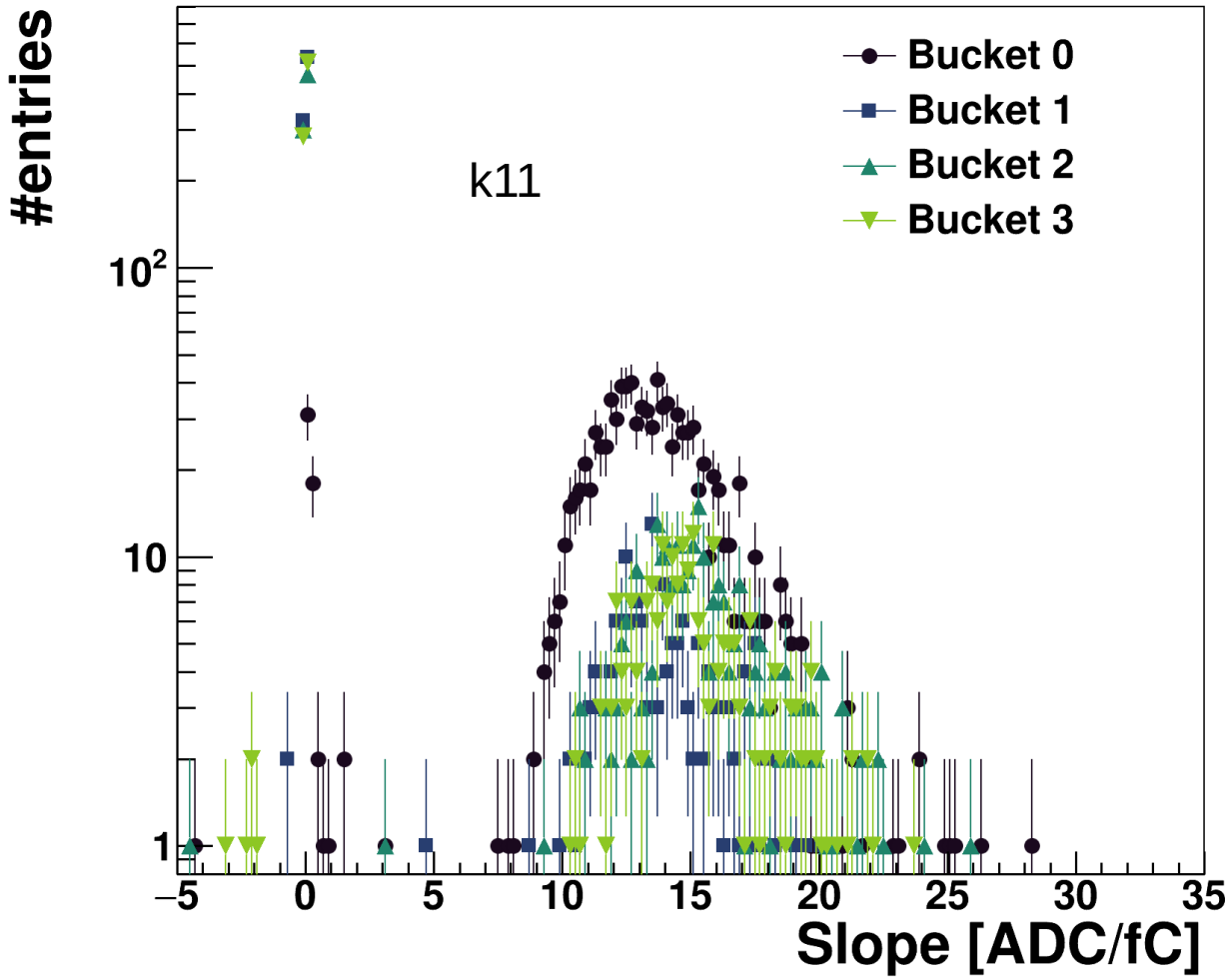
Bucket Deficiency

- Dieter was not aware that we also had issues Calibrating buckets 1 to 3. As such I took a calibration with all buckets enabled
- To the right is the slope distributions for the 4 different buckets (in log scale as otherwise the number of 0 slopes for bucket 1 to 3 would dominate the distribution)
- This is the case for all KPiX except k05 and k06 which are on different sensor.



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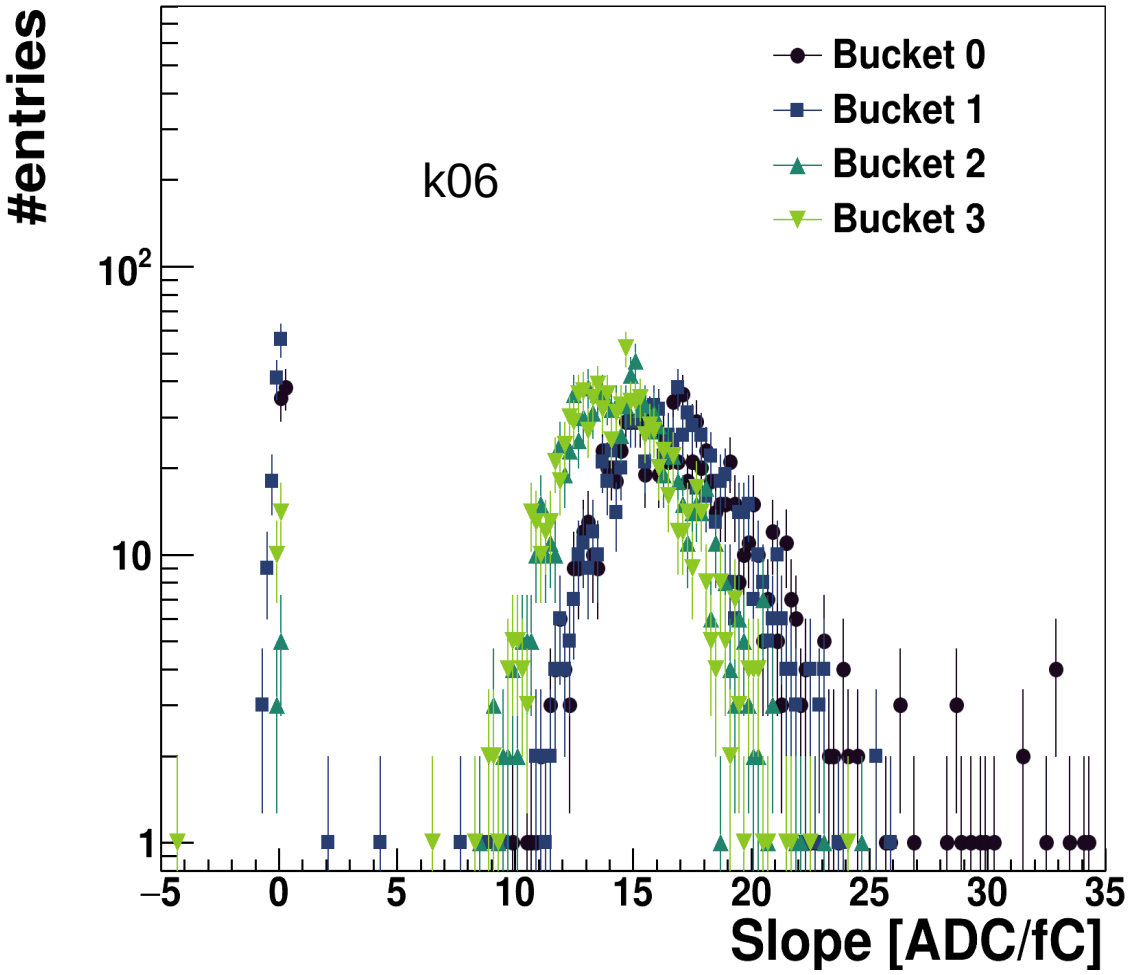


See backup for all of them

Fake Tracks

- One open question was, how many fake tracks do I find with my algorithm?
- For this purpose I took data at the test beam without any beam
  - Once using an auto trigger system with the beam shutter closed.
  - Once with the telescope moved out of the beam using still the beam for triggering
- I used the same analysis as previously used for a normal data file.
- In that normal data file I find 23800 tracks within 20000 events.

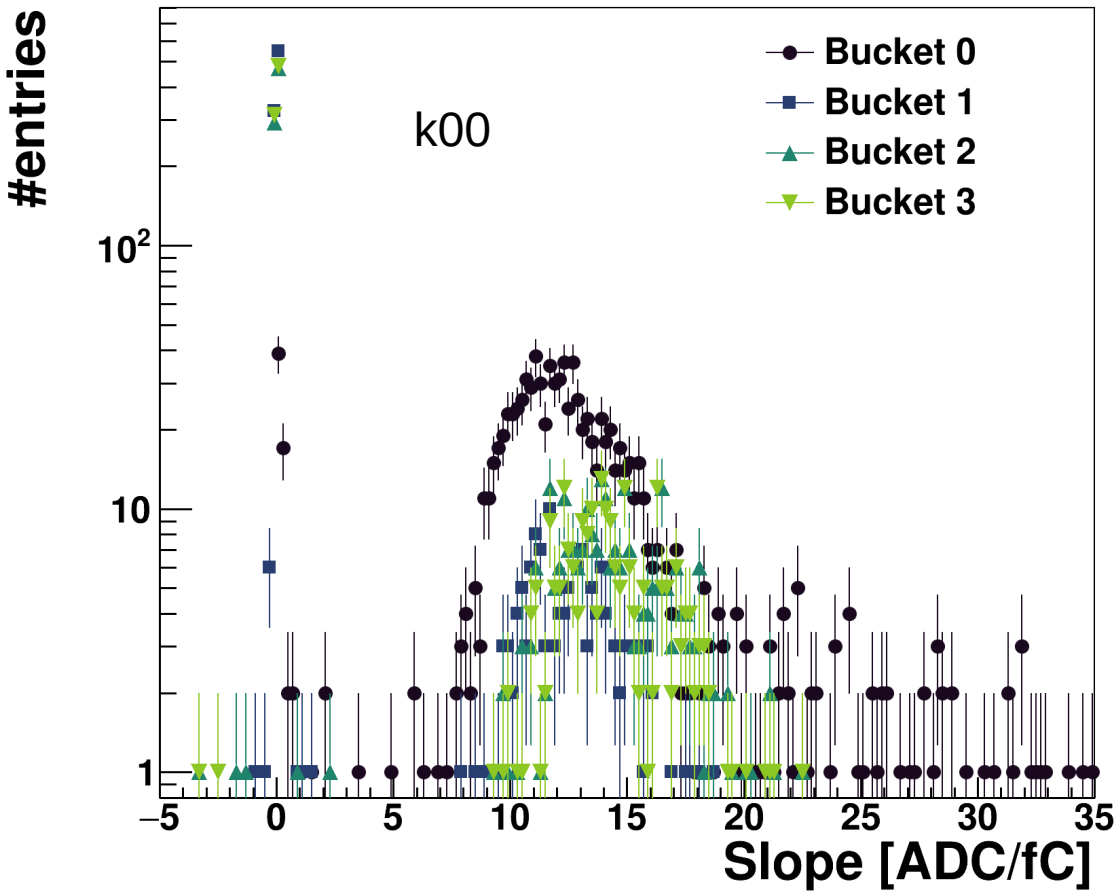
- In the auto trigger file I find 25 tracks in 20000 events
- In the file where the telescope was moved out of the beam by hand but the system is still triggered by the beam I find 41 tracks in 20000 events.

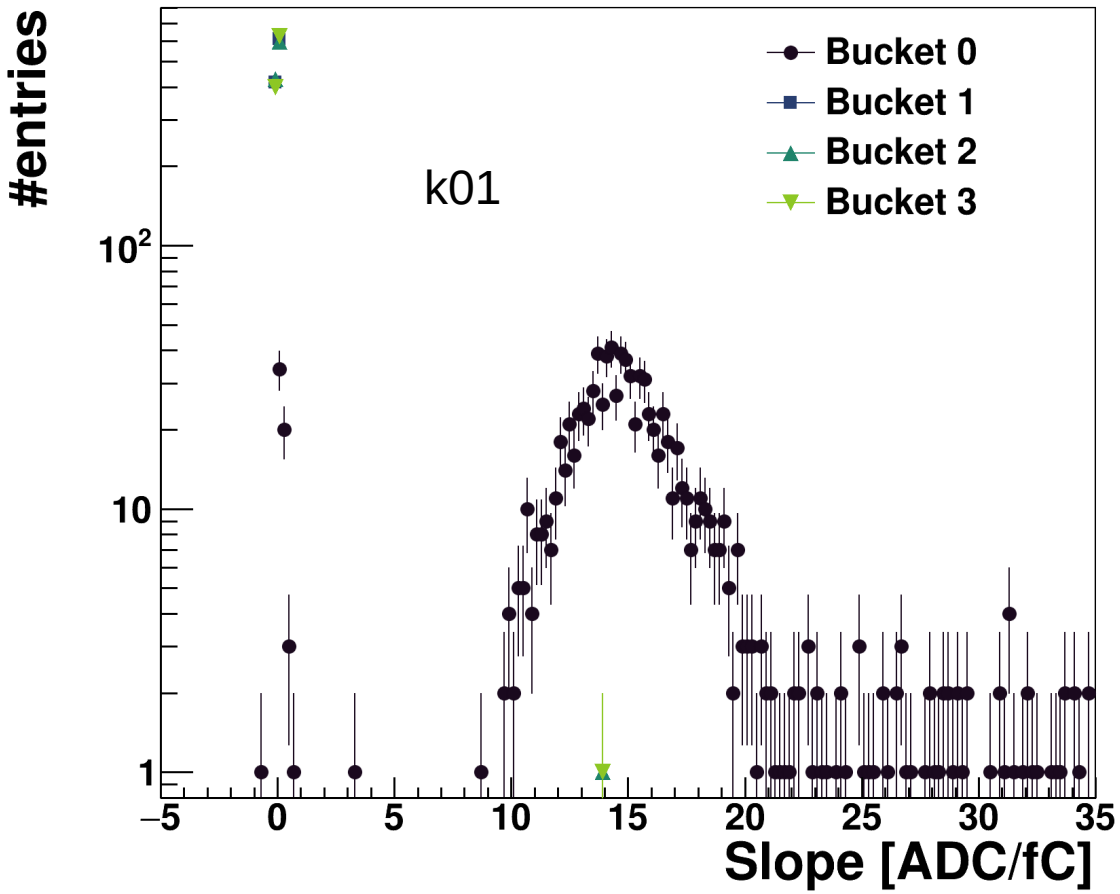
Backup Bucket

Please note that all plots are with a log scale as such the differences in height might not seem significant but they are often a factor 10 more channels with bad calibration slope

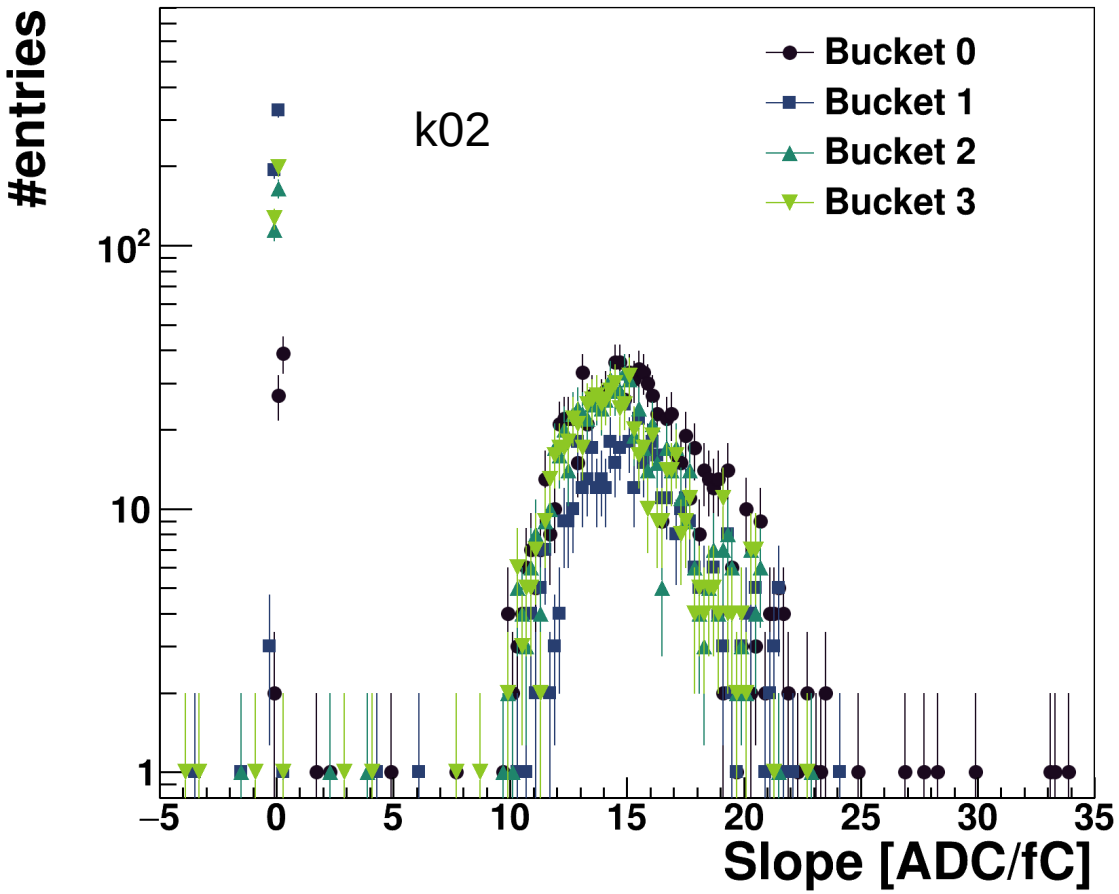
For example k07 has 70 bad channels for bucket 0, 400 for bucket 2 and 600 for bucket 1.

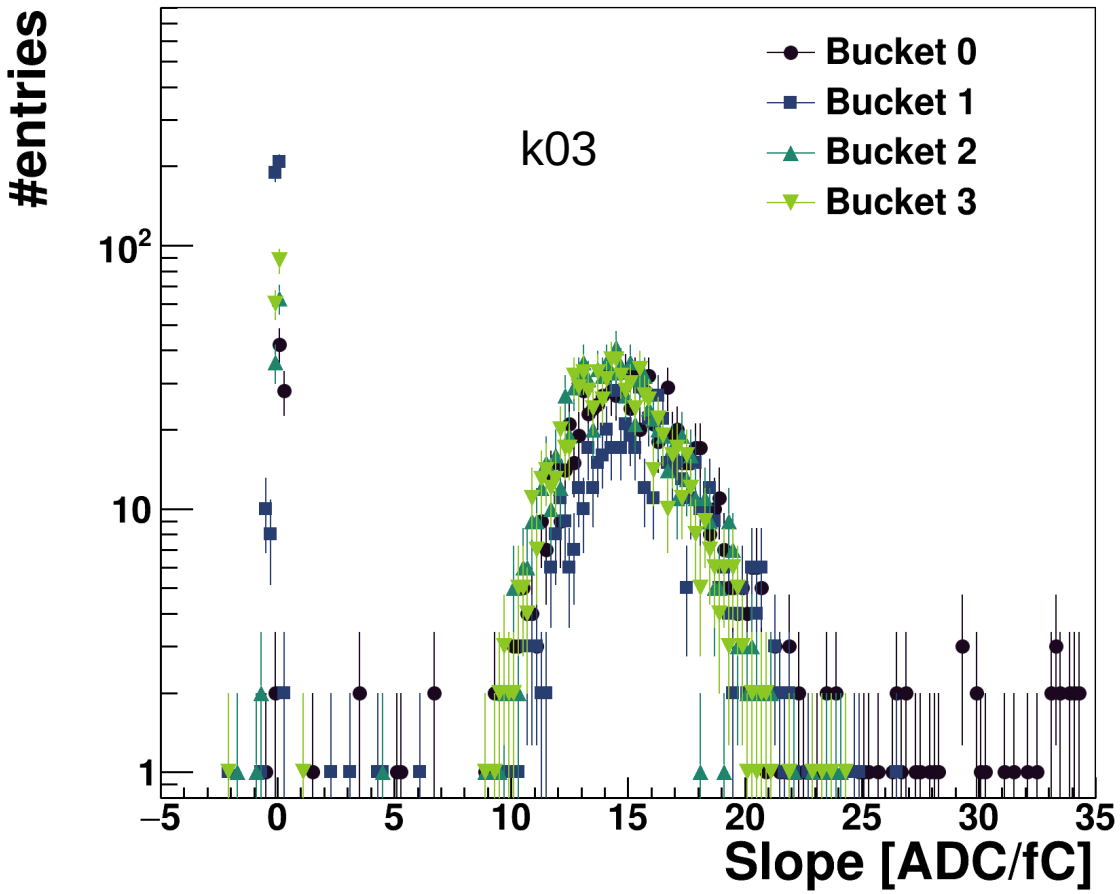
Backup Bucket



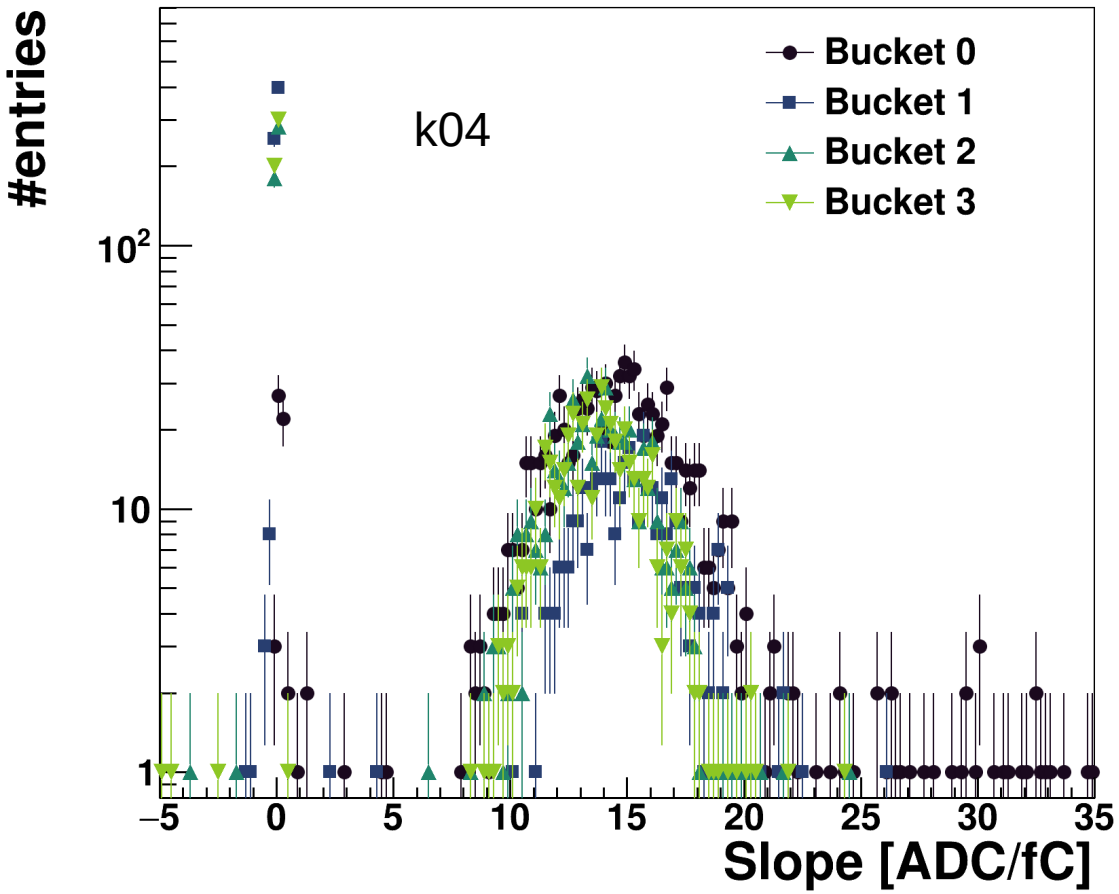


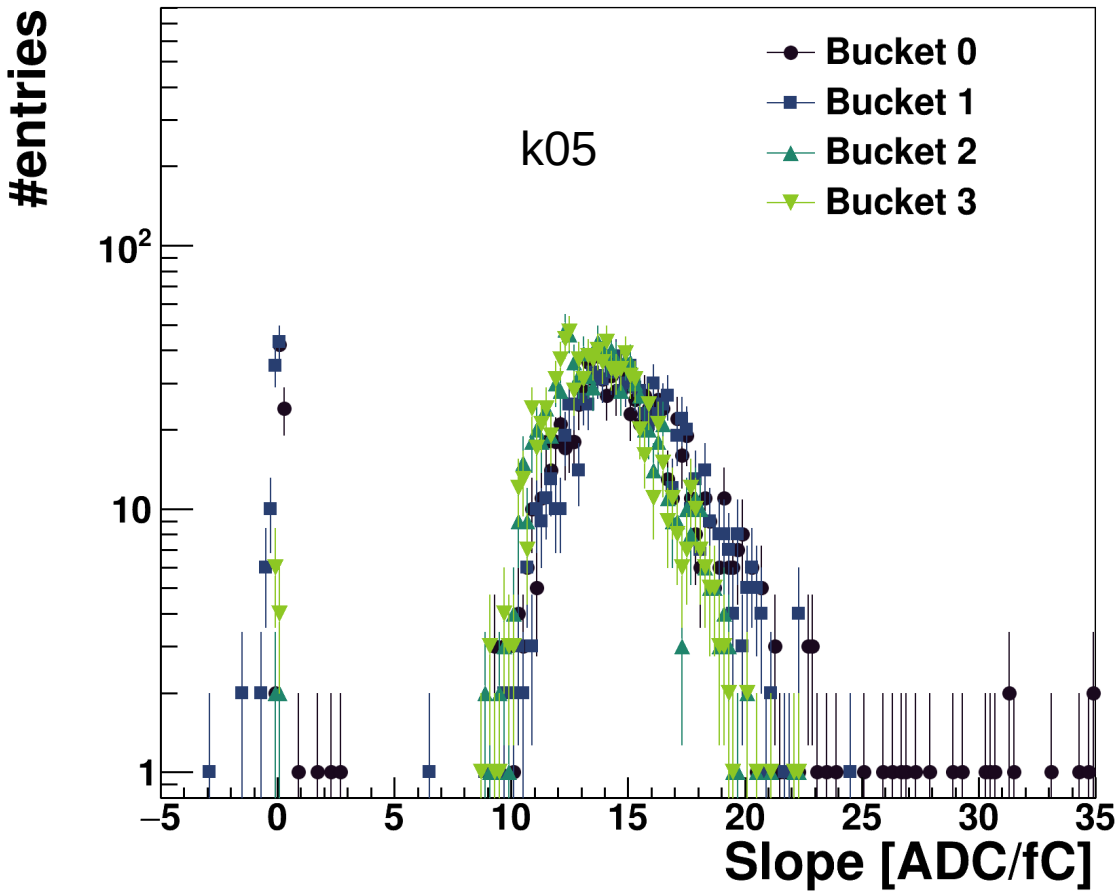
Backup Bucket



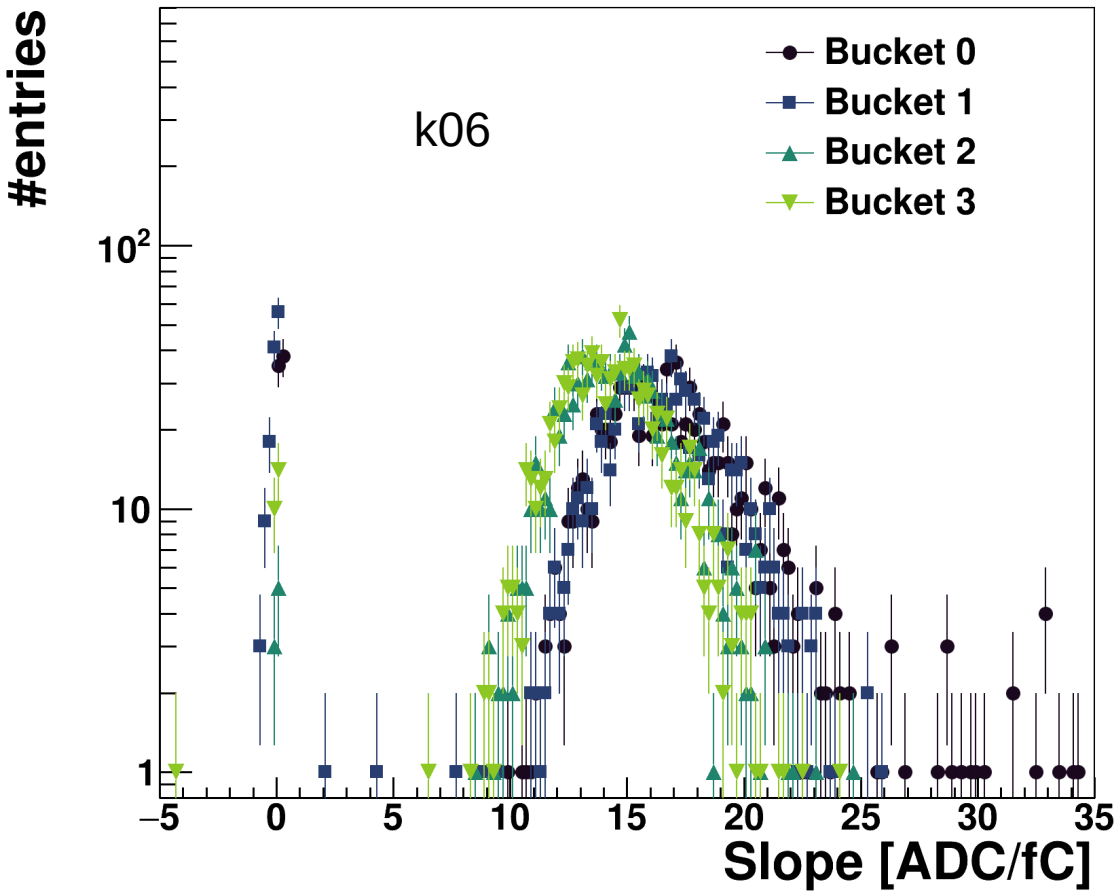


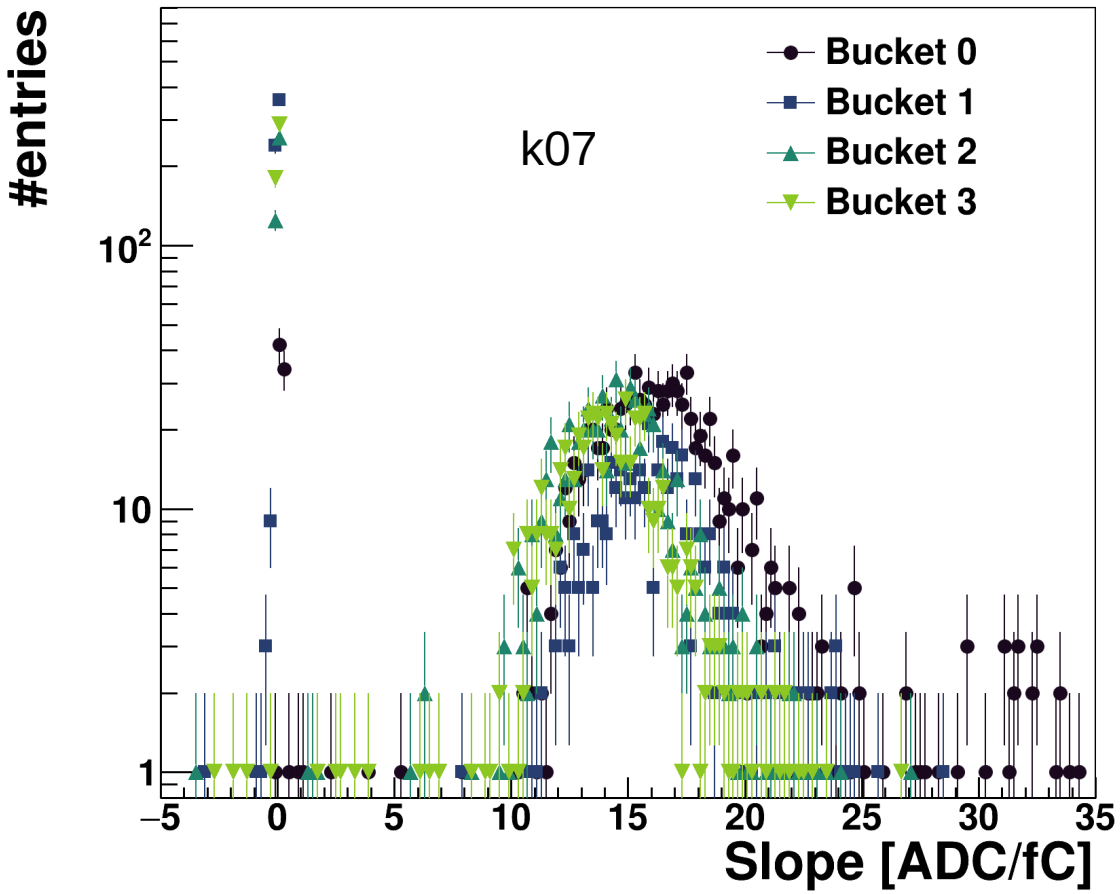
Backup Bucket



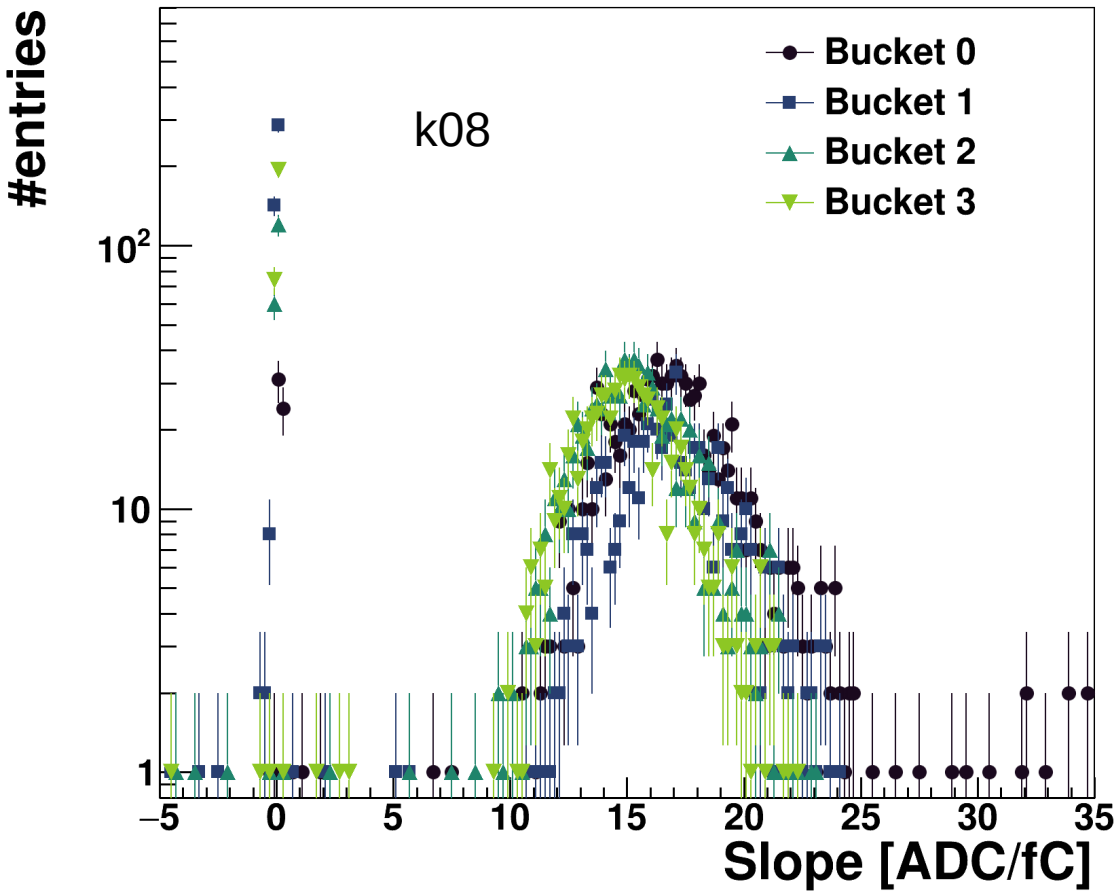


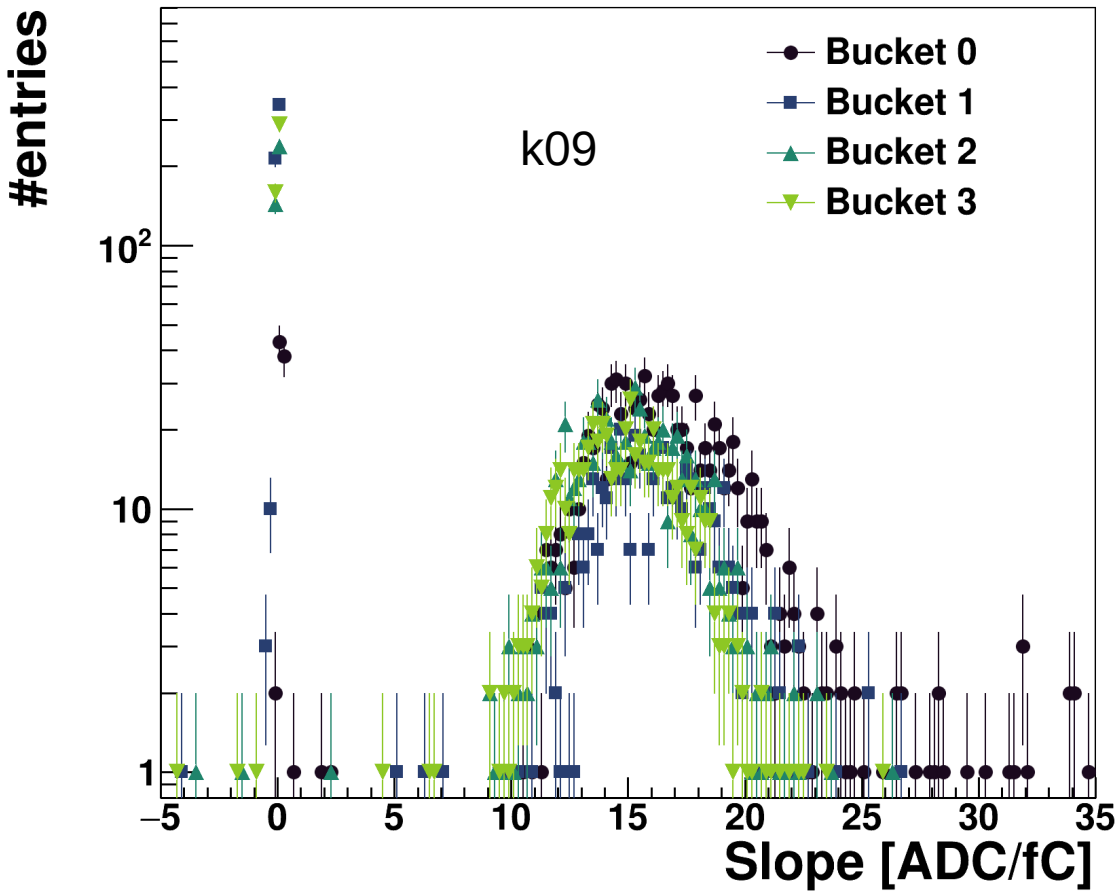
Backup Bucket





Backup Bucket





Backup Bucket