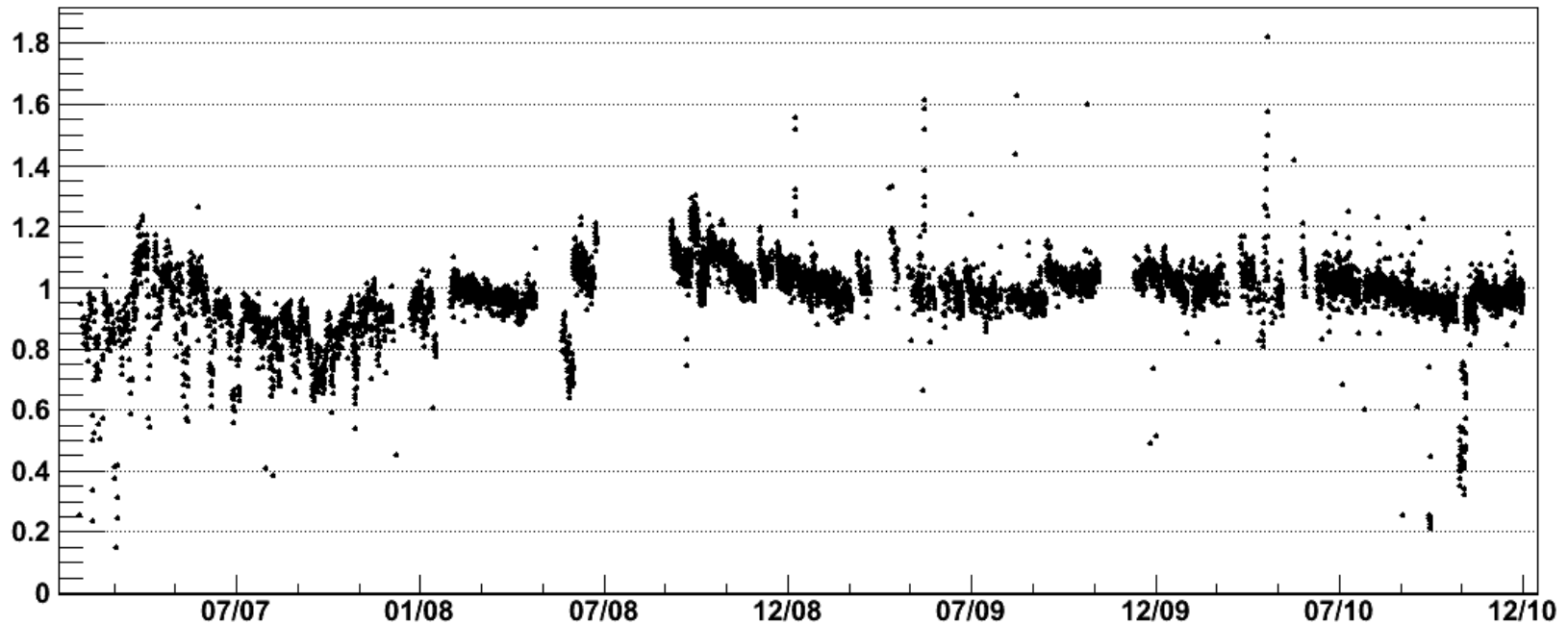


# High level DQ control

Vladimir Kulikovskiy

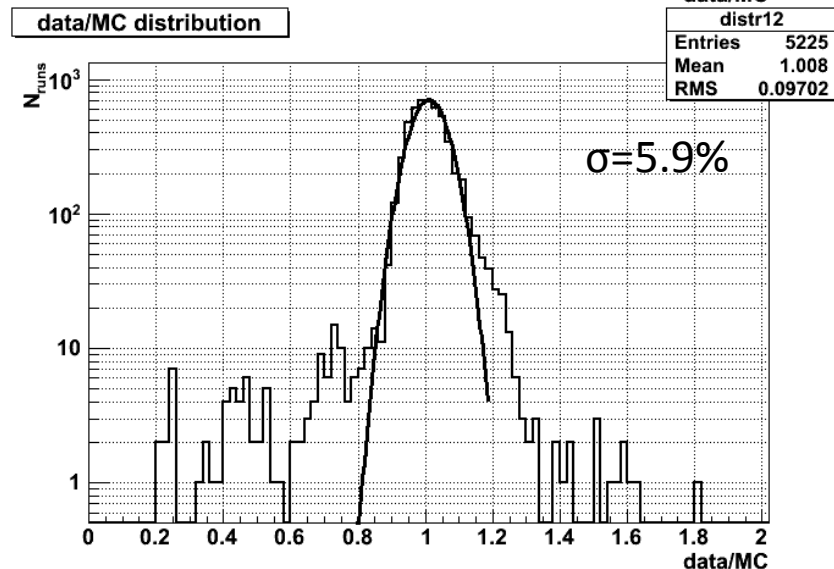
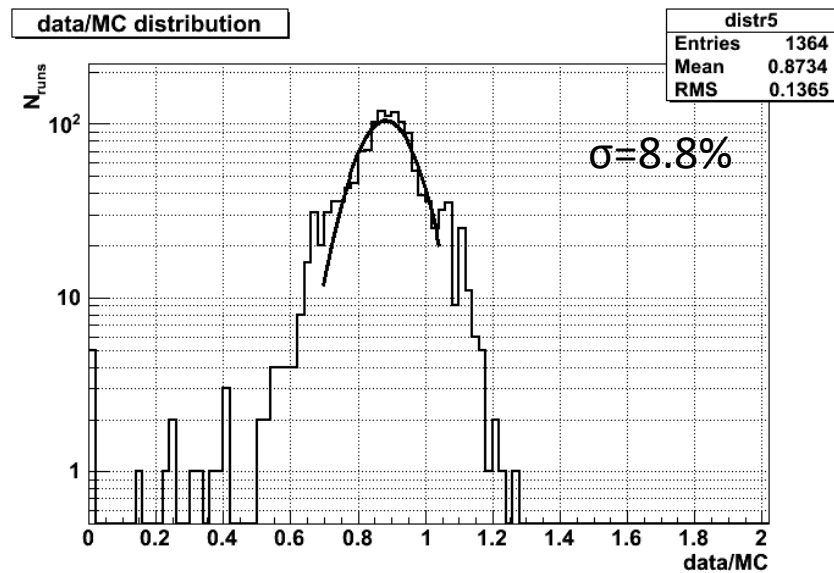
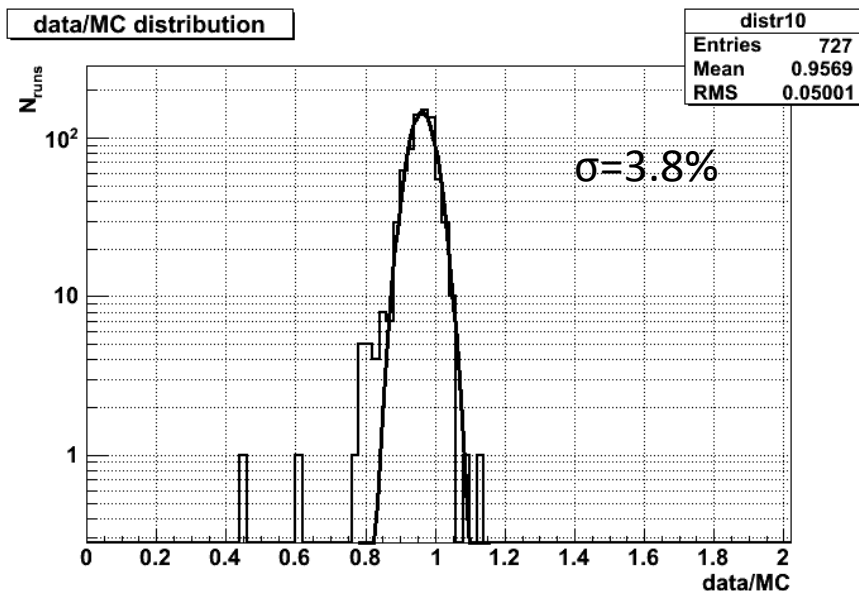
# Data/MC 3N trigger only.

- The same plot as in Colas presentation, but only for 3N trigger.
- NB the 20% correction for 5 line data



# Data/MC 3N trigger only.

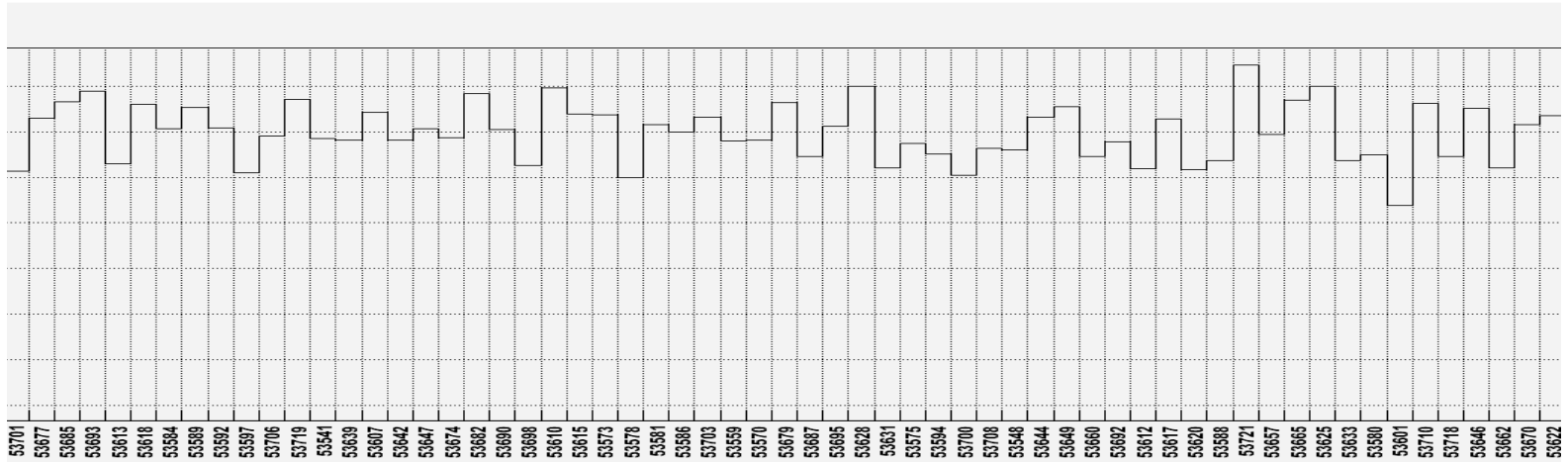
- Colas presentation – ratio seems to be different for different trigger setups.
- Should we separate the events by trigger?
- 3N trigger selection of events
- Other trigger selections?
- New DQ parameter?



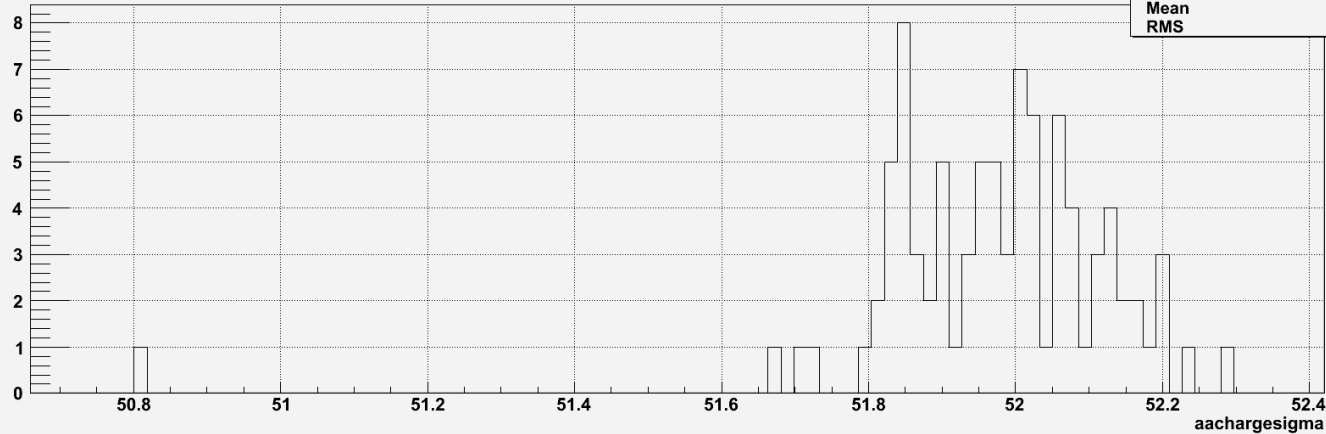
# A Seatray module.

- Wiki->Data->Quality Assessment (bottom)
- It's a SeaTray module (antares-qa used as a base) to be added in future to the production chain.
- It has a root file output with plots (1D, 2D histograms, graphs) and ntuple (one row – runnumber and quality parameters).
- There are also a root files for each run with data and plotgraphs.py which creates all the gif plots.

# Aafit charge sigma



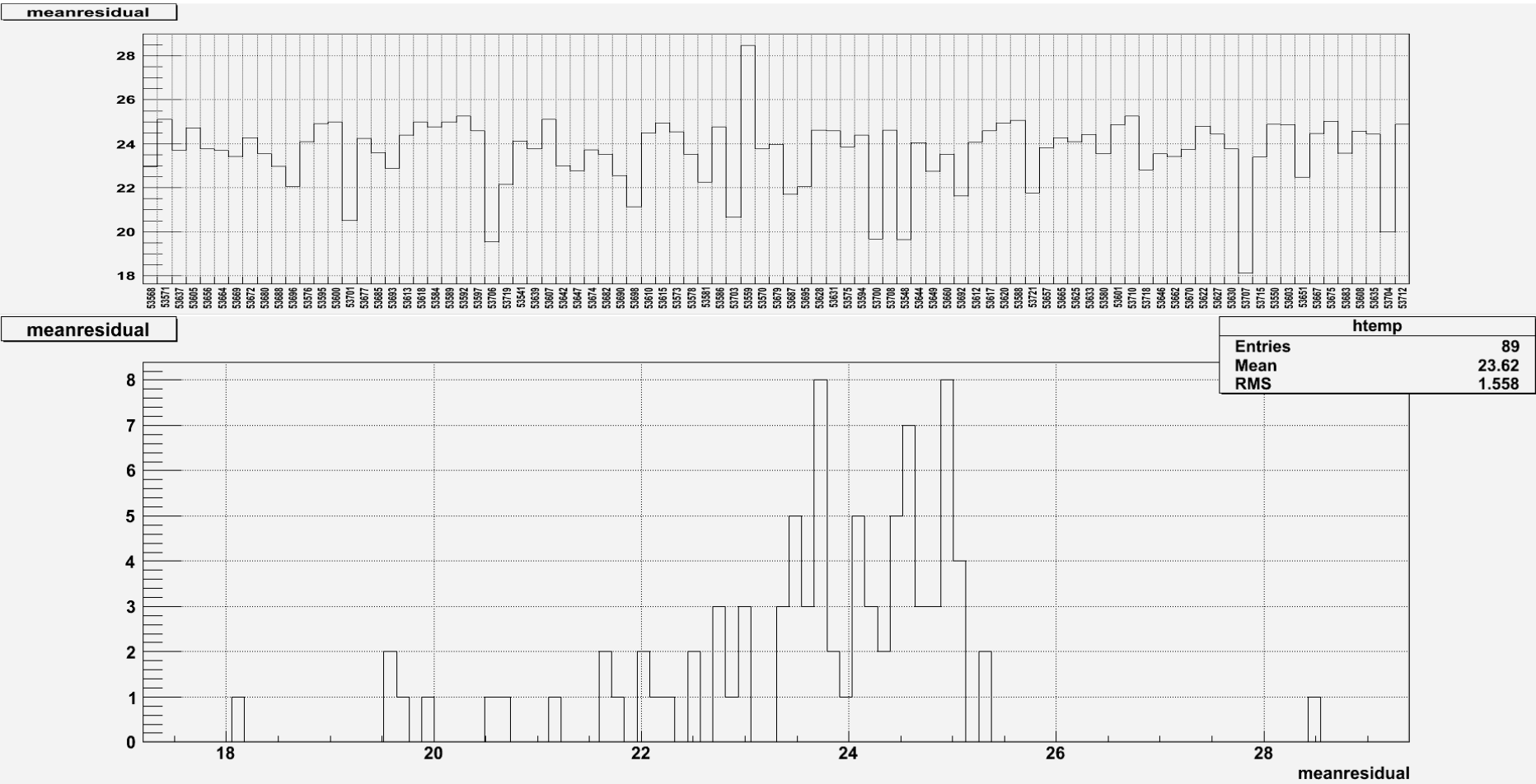
aachargesigma



htemp	
Entries	89
Mean	51.97
RMS	0.1754

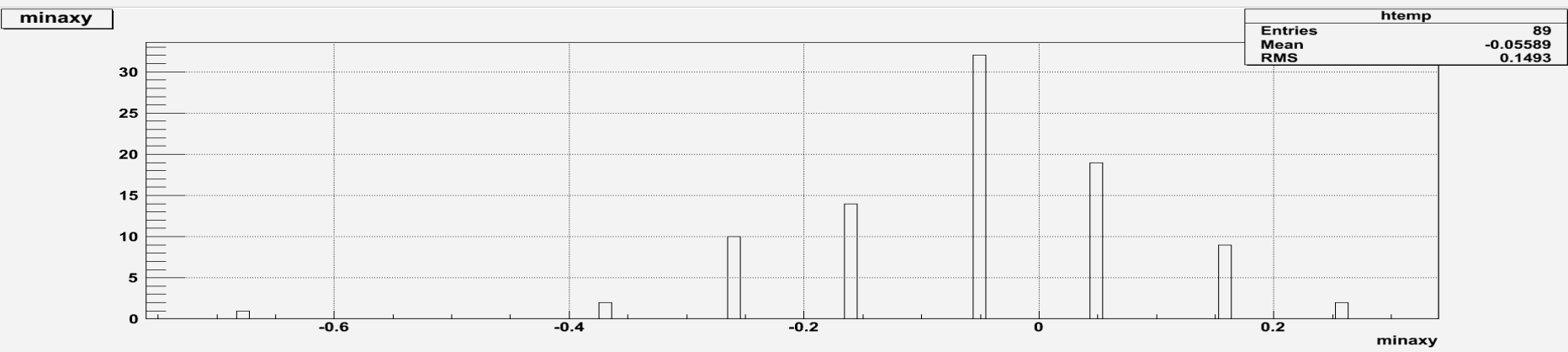
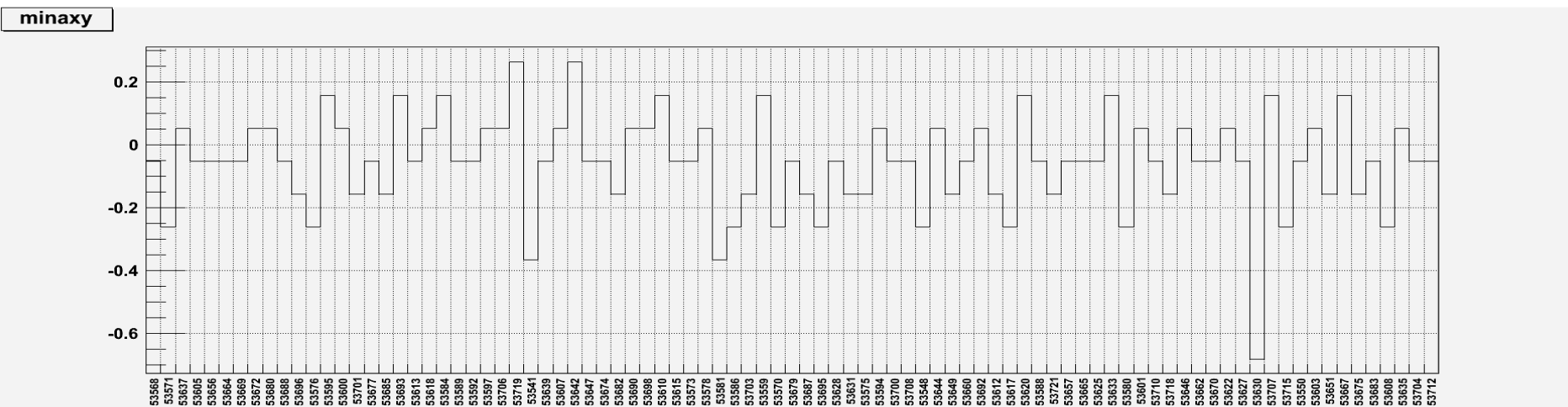
$\text{aachargesigma} = \text{AafitChargePerOM RMS} / \text{MEAN} * 100\%$

# Residual



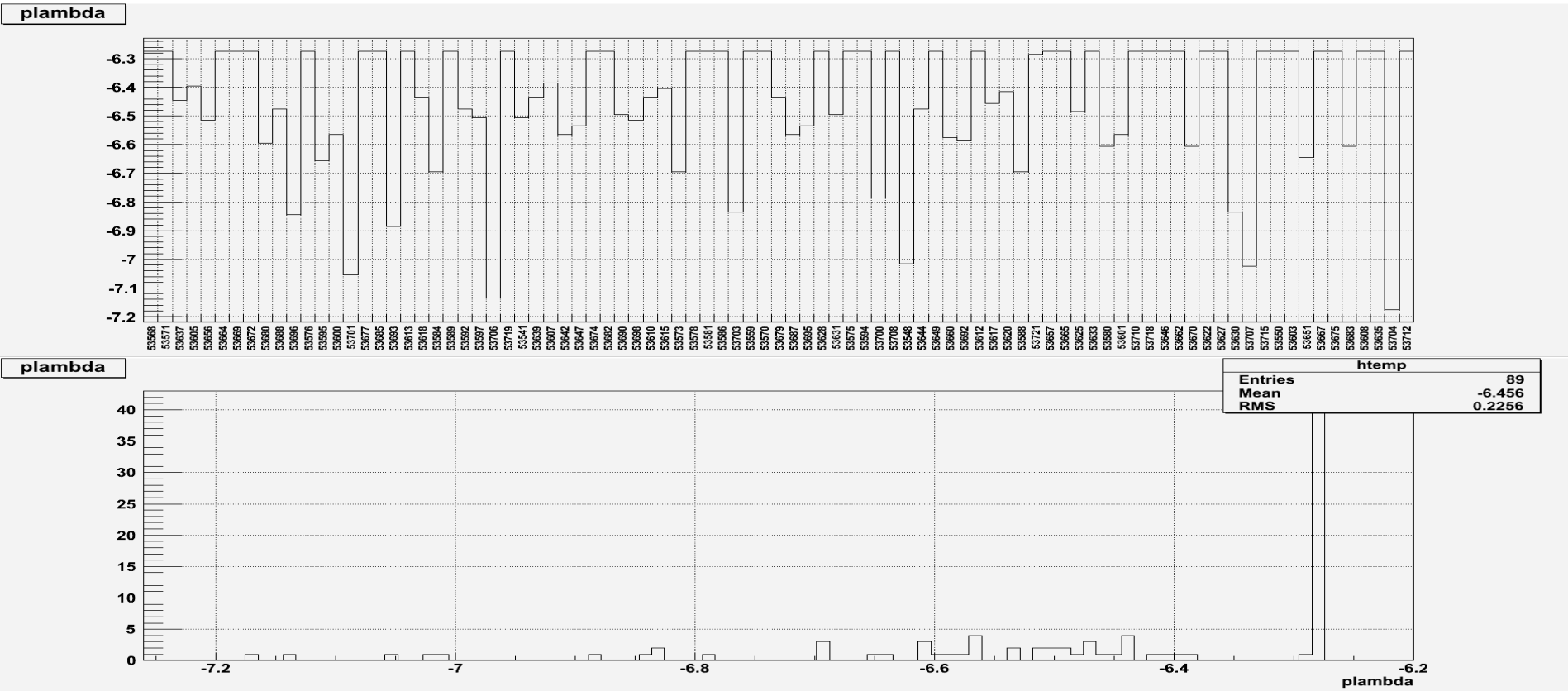
Residual – time(ns) difference between real hit time and expected hit time from Aafit reconstructed track. Only hits, used in the ImPDF Aafit were used (since all Calibrated pulses aren't reachable in the last production i3 files)

# AXY



AXY - an angle (rad) between photons and OMs (photon direction is obtained from Aafit reconstructed track)

# plambda



plambda - maximum bin X of Lambda distribution (the most probable value)



# Summary

- All cumulative distributions look rather stable in time.
- Do analysis for all runs.
- Design some quality cut and check it together with QB cuts, ExpectedMuonPerMin-ExpectedMuonPerMin cut, 3N data/mc cut..