VEM A/P profiles

for noisy PMTs

310119 Long term performance meeting
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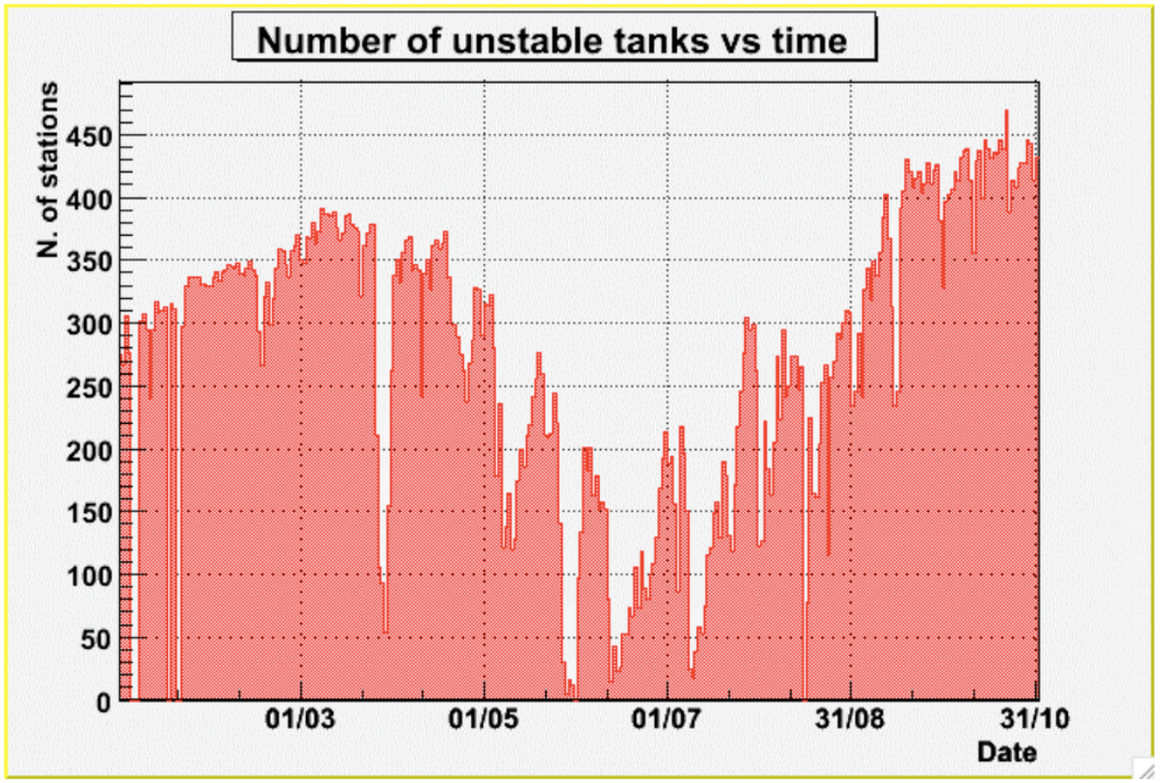
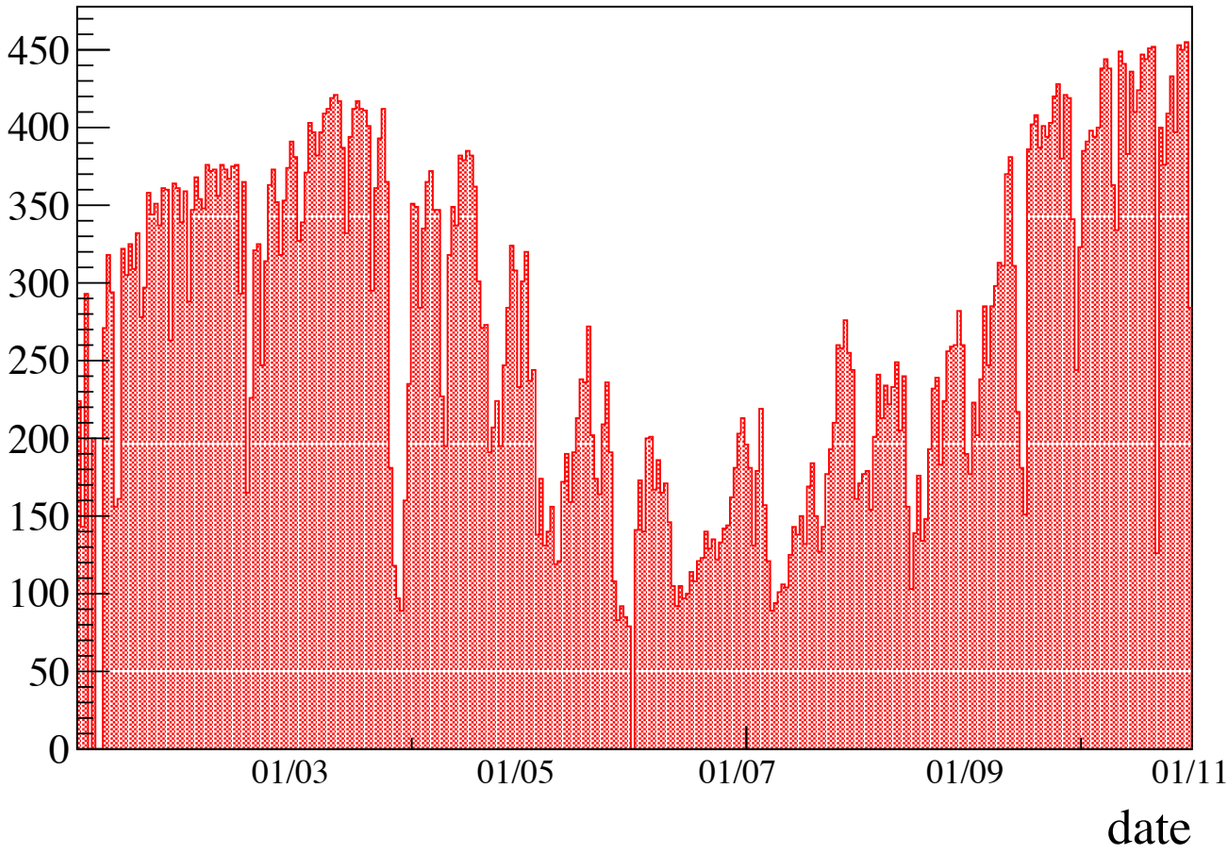
Raining stations

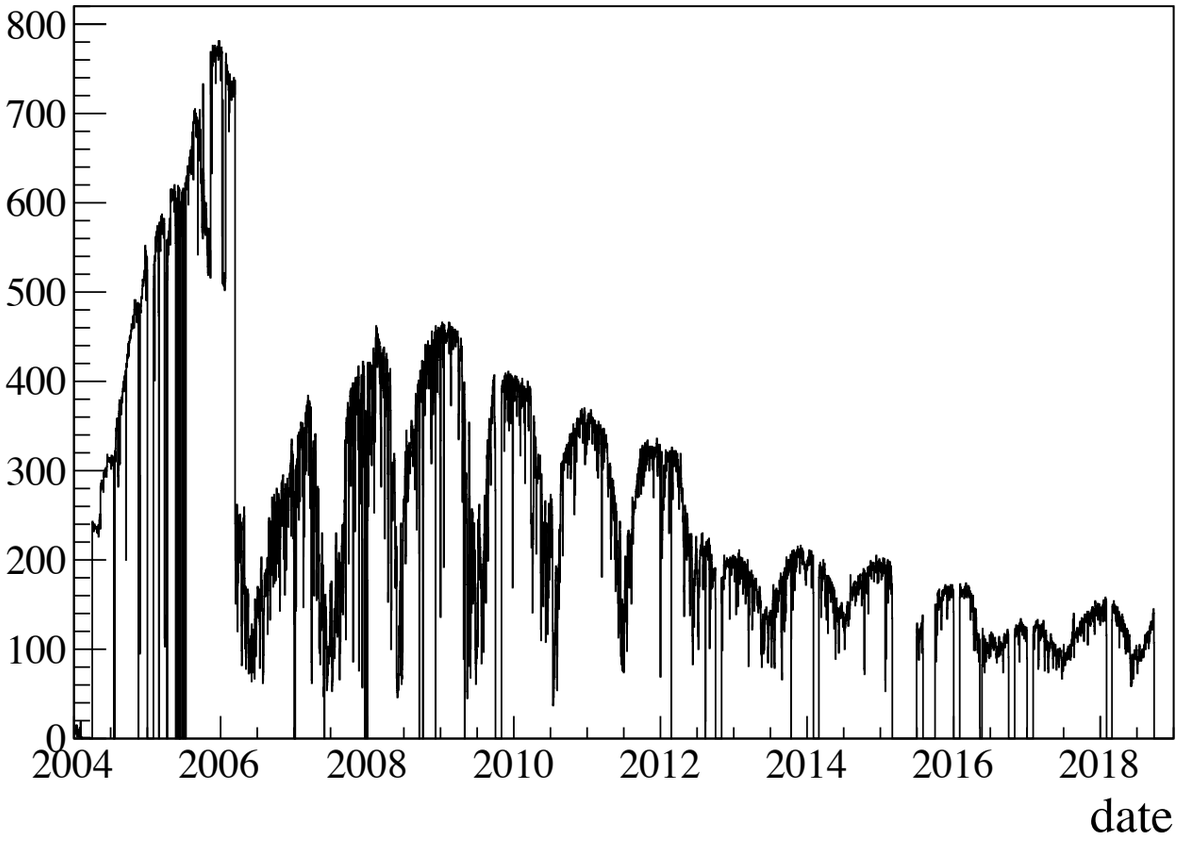


GAP note 2007_132
rtot > 1.1
variance dinode/anode > 0.5



my reproduction
rtot > 1.1
variance dinode/anode > 0.5

Raining PMTs vs noisy PMTs(RMS > 10σ)



“raining stations”

rtot > 1.1

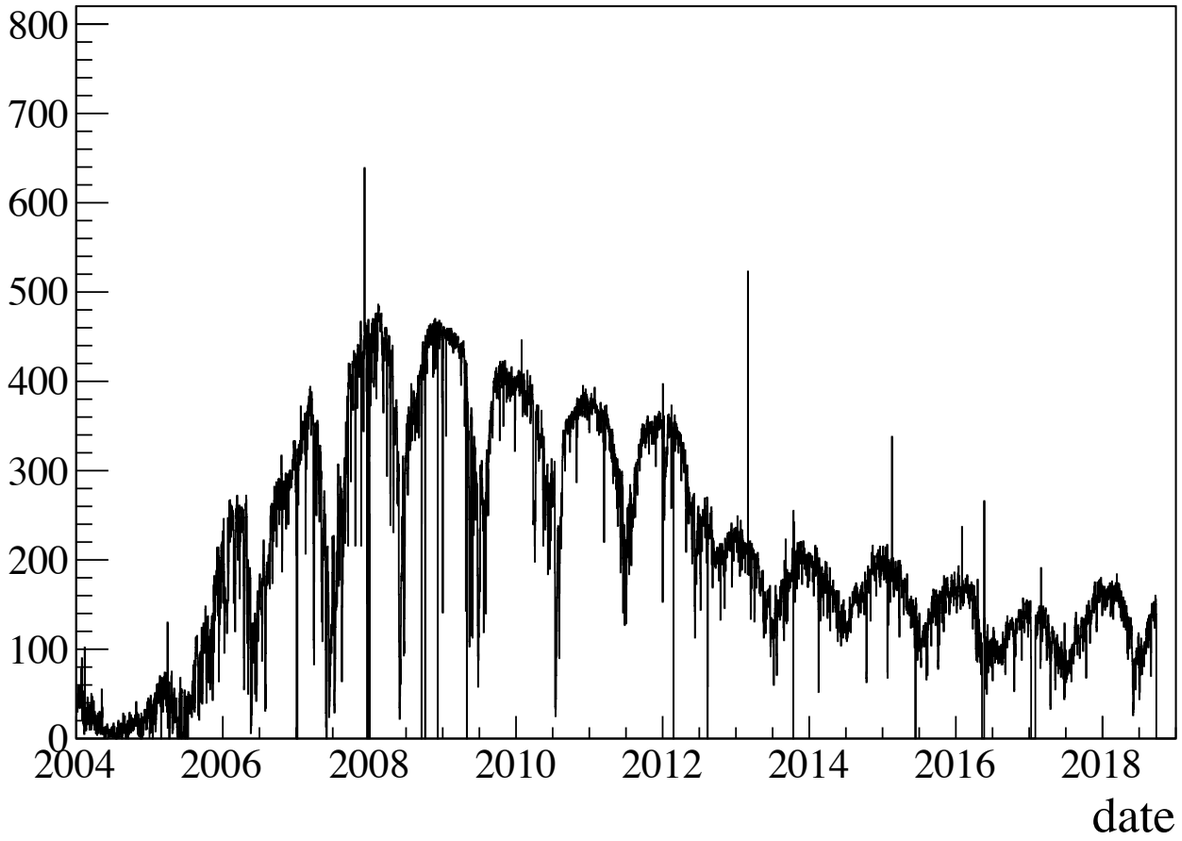
variance dinode/anode > 0.5

T1 != 0

fTubeMask = 7 or 15

9 <= fArea <= 1000

9 <= fPeak <= 200



“noisy stations”

RMS > 10σ

variance dinode/anode > 4.5

T1 != 0

fTubeMask = 7 or 15

9 <= fArea <= 1000

9 <= fPeak <= 200

Summary

- The "raining stations”(as defined in 2007_132) decreased to 100~200 in 2012 and continue to be so.
  Noisy PMTs are not largely different from them, currently ~364 PMTs are being noisy & the number started settling since 2012.

- Yet difference is observed between two cuts - after investigating further, we may consider updating our result using the official raining cut.