

Status of BCM1F ADC Studies

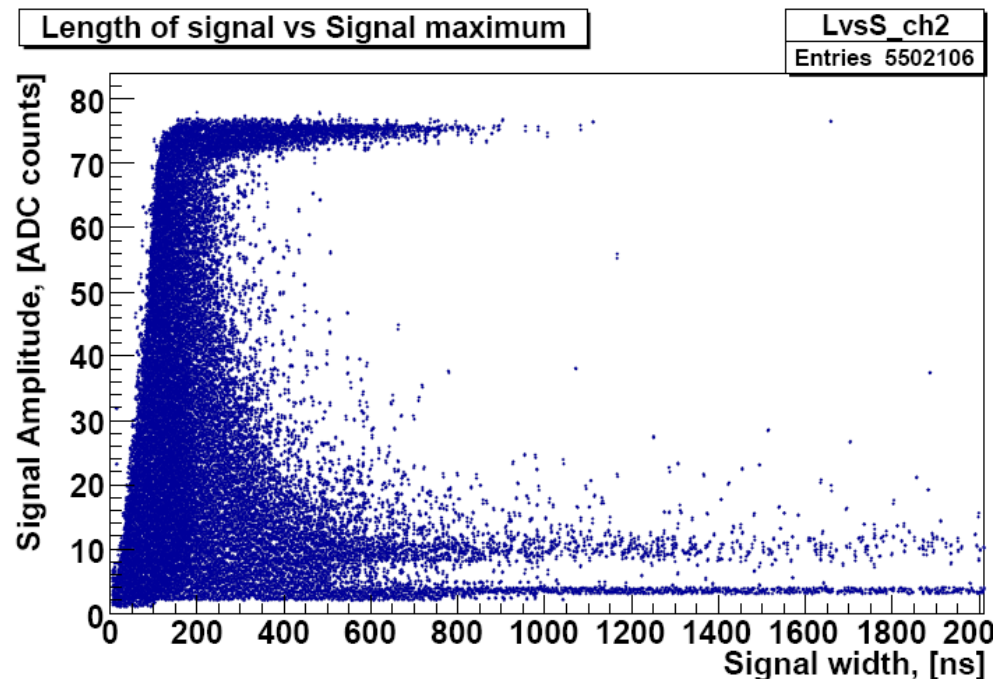
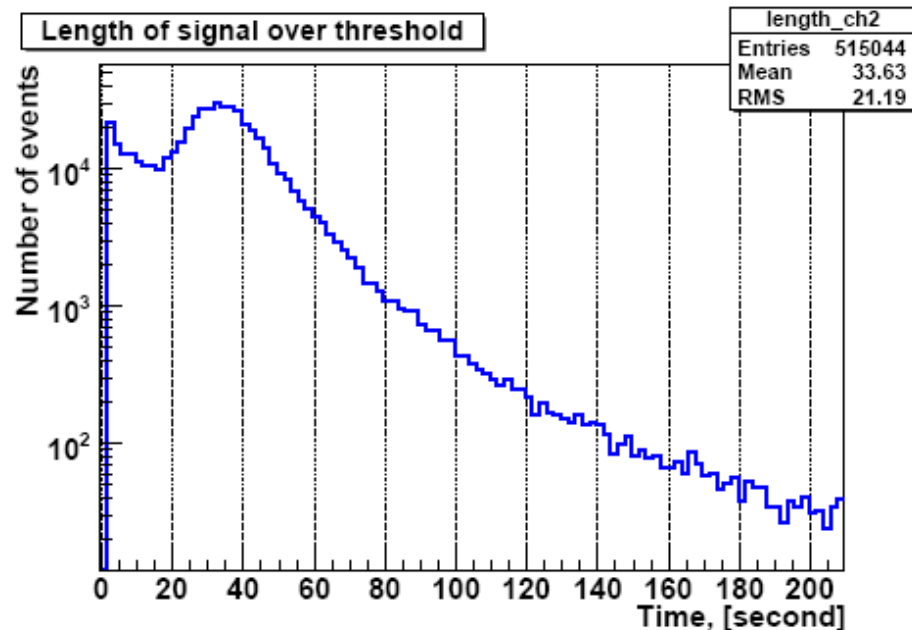
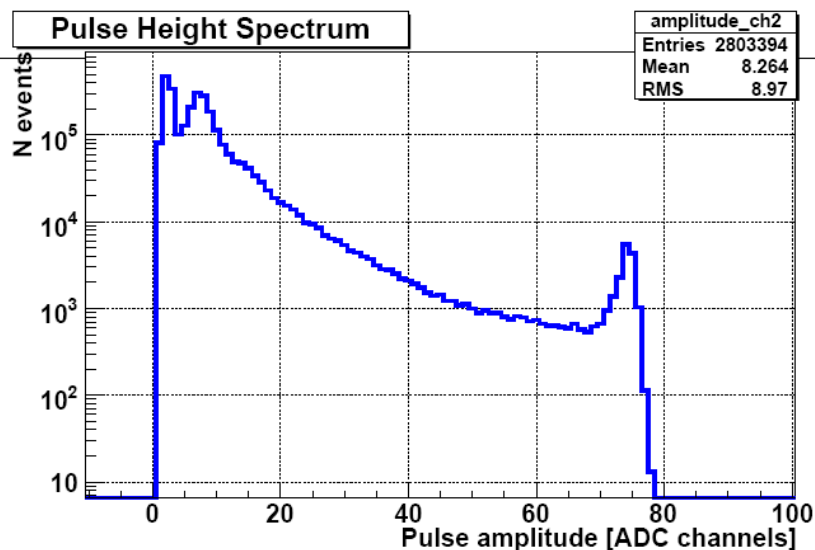
Olga Novgorodova

Rates of signals vs Lumi in one proton Fill 1966

Baseline influence is shown

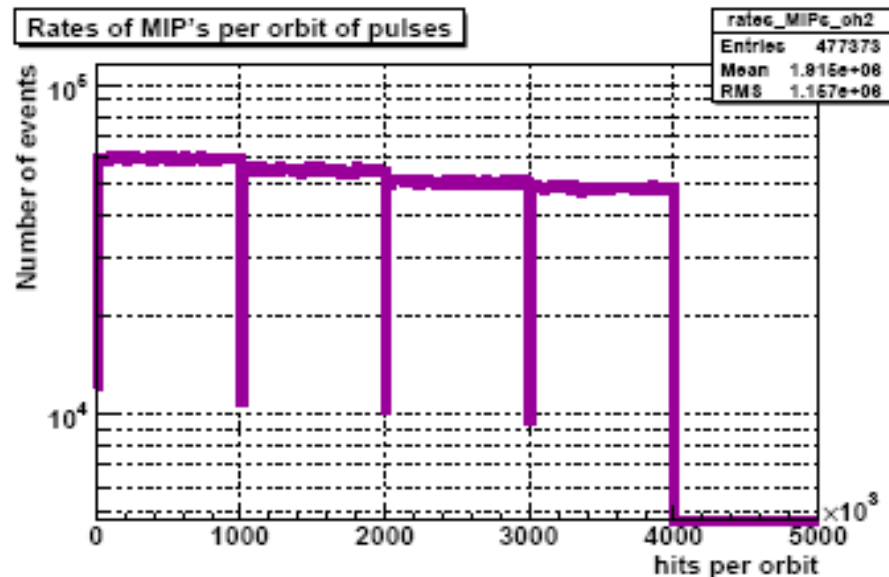
Flat top measurements are postponed due to no access to BRMBCMCTRL3

Standard baseline calculations

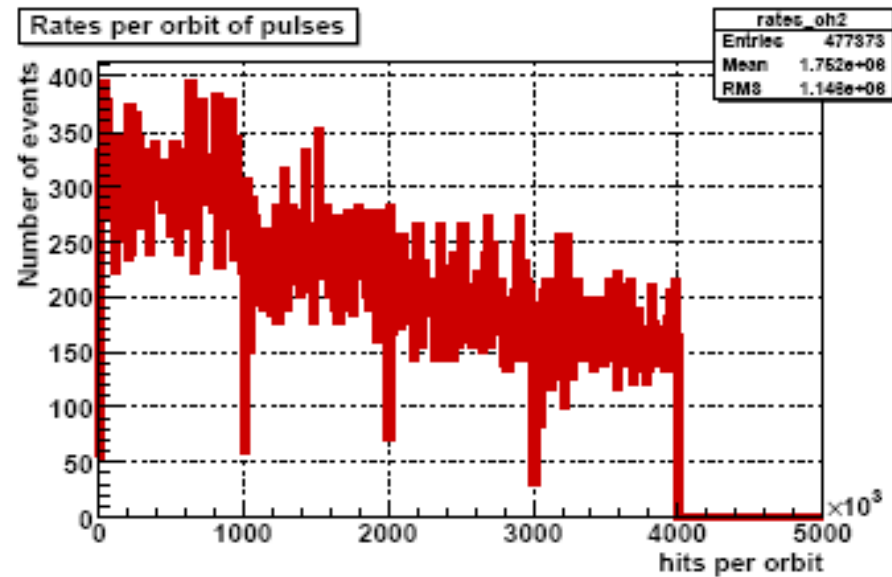


Rates of signals

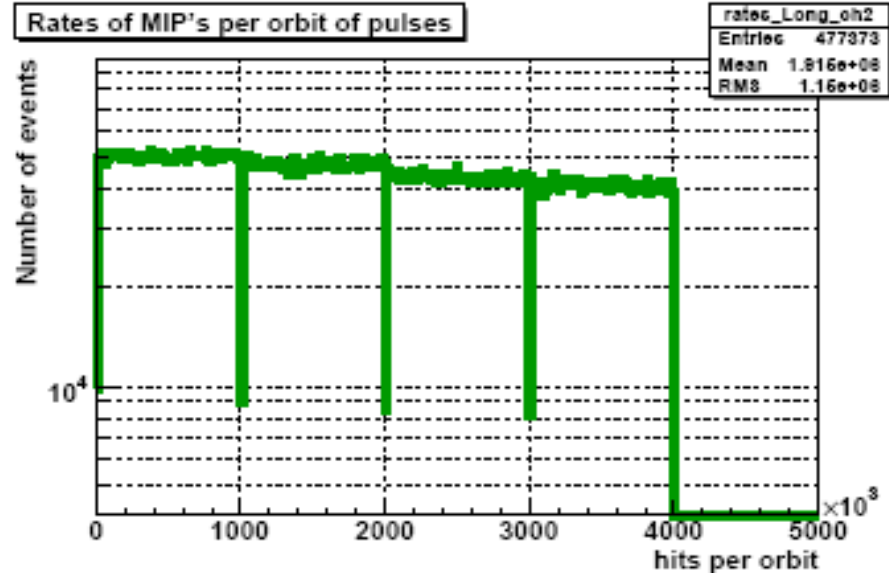
Rates of MIP's per orbit of pulses



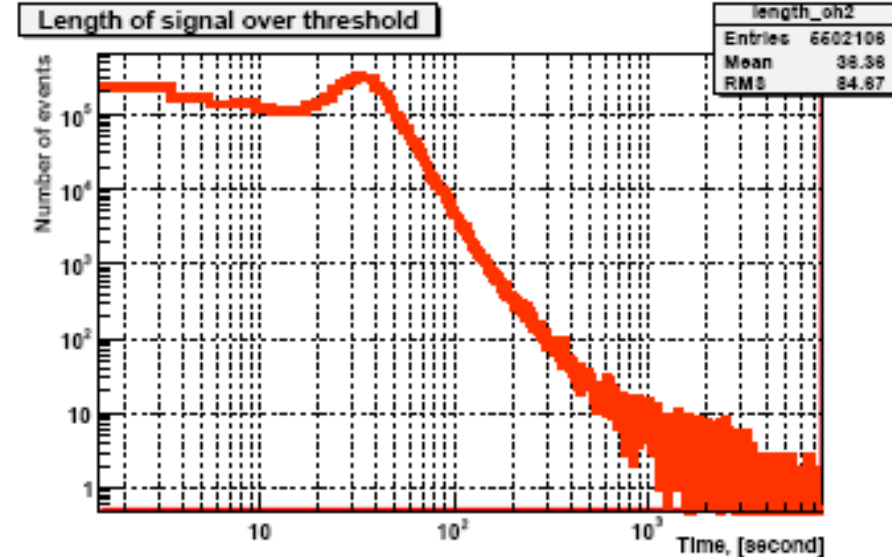
Rates per orbit of pulses



Rates of MIP's per orbit of pulses



Length of signal over threshold



Baseline definition

- Baseline is defined :
- 1. 100 samples for each trigger in board gap
- 2. 100 triggers baselines averaged

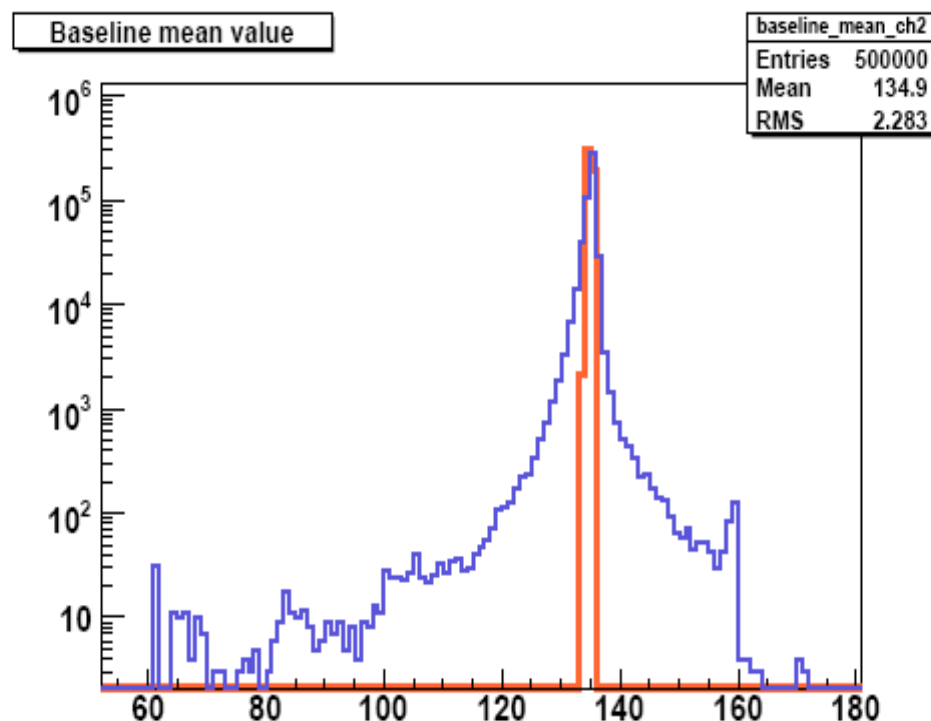


Figure 1.7: Baseline obtained by calculation in each separate event (blue) and by averaging last 100 event's baselines (red), proton run fill 1966.

Amplitude spectra

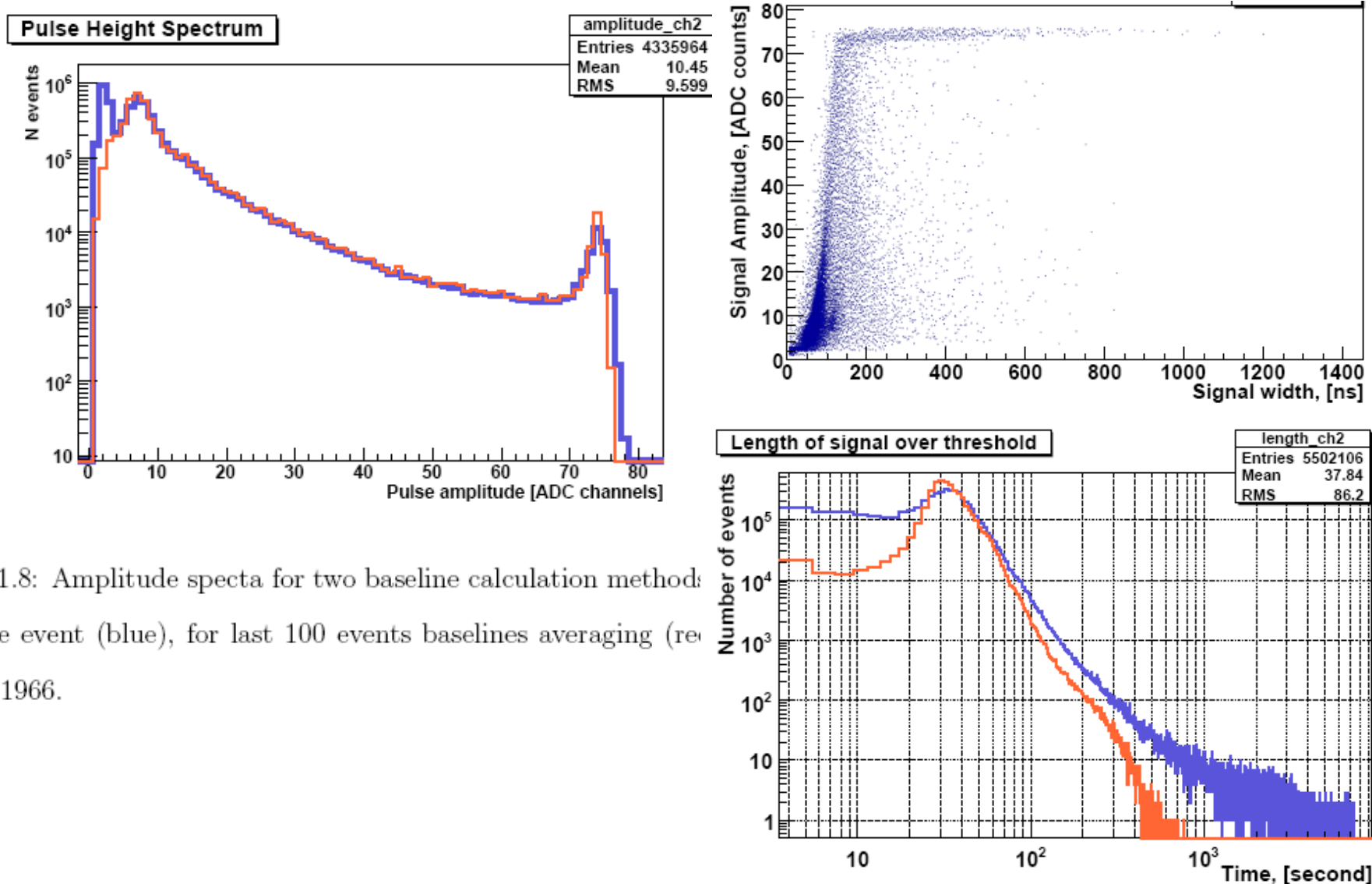


Figure 1.8: Amplitude spectra for two baseline calculation methods: separate event (blue), for last 100 events baselines averaging (red). Run fill 1966.

Rise Time

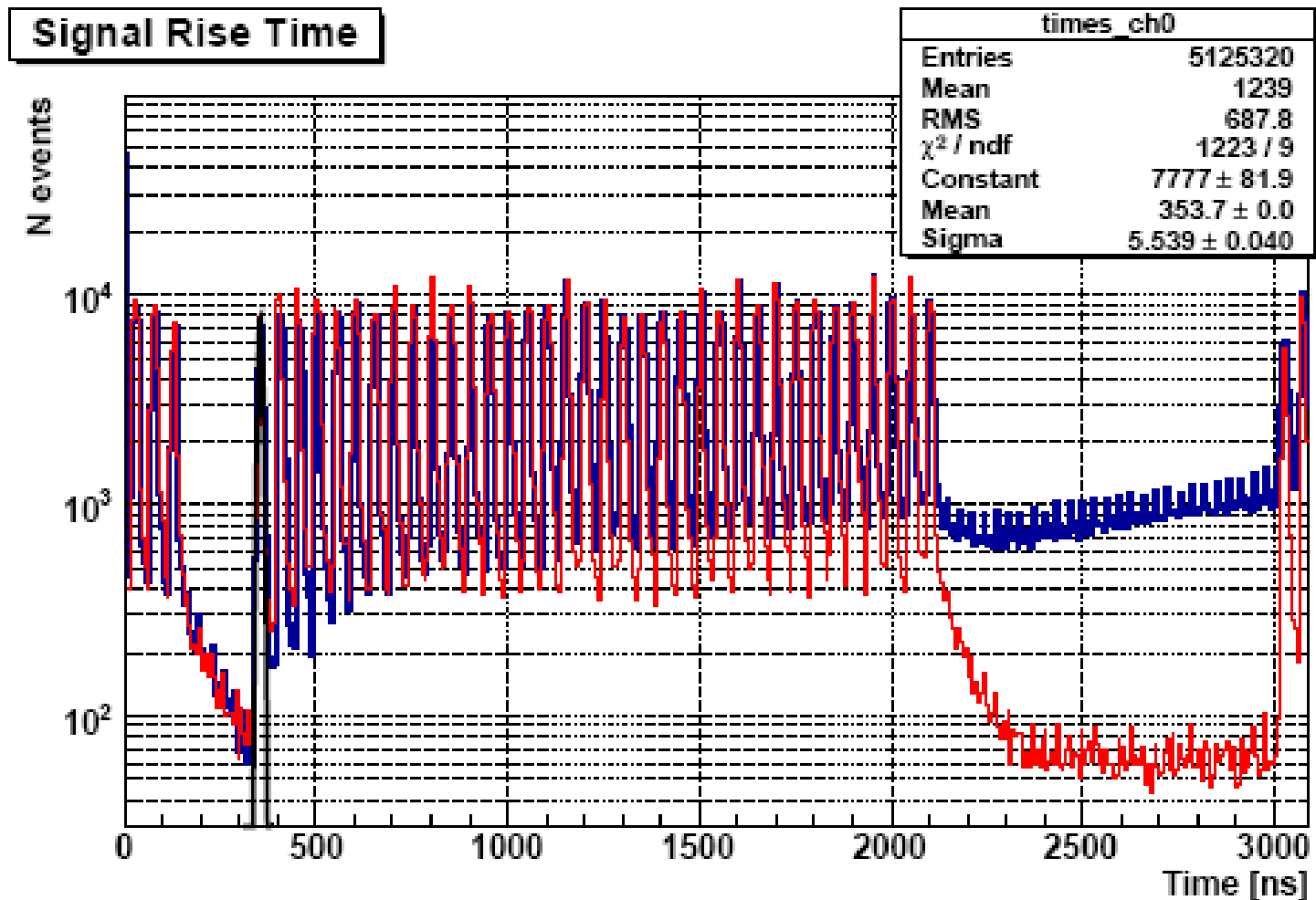


Figure 1.6: Time rise of signals in Fill 1966 measured by BCM1F ADC.



Rates

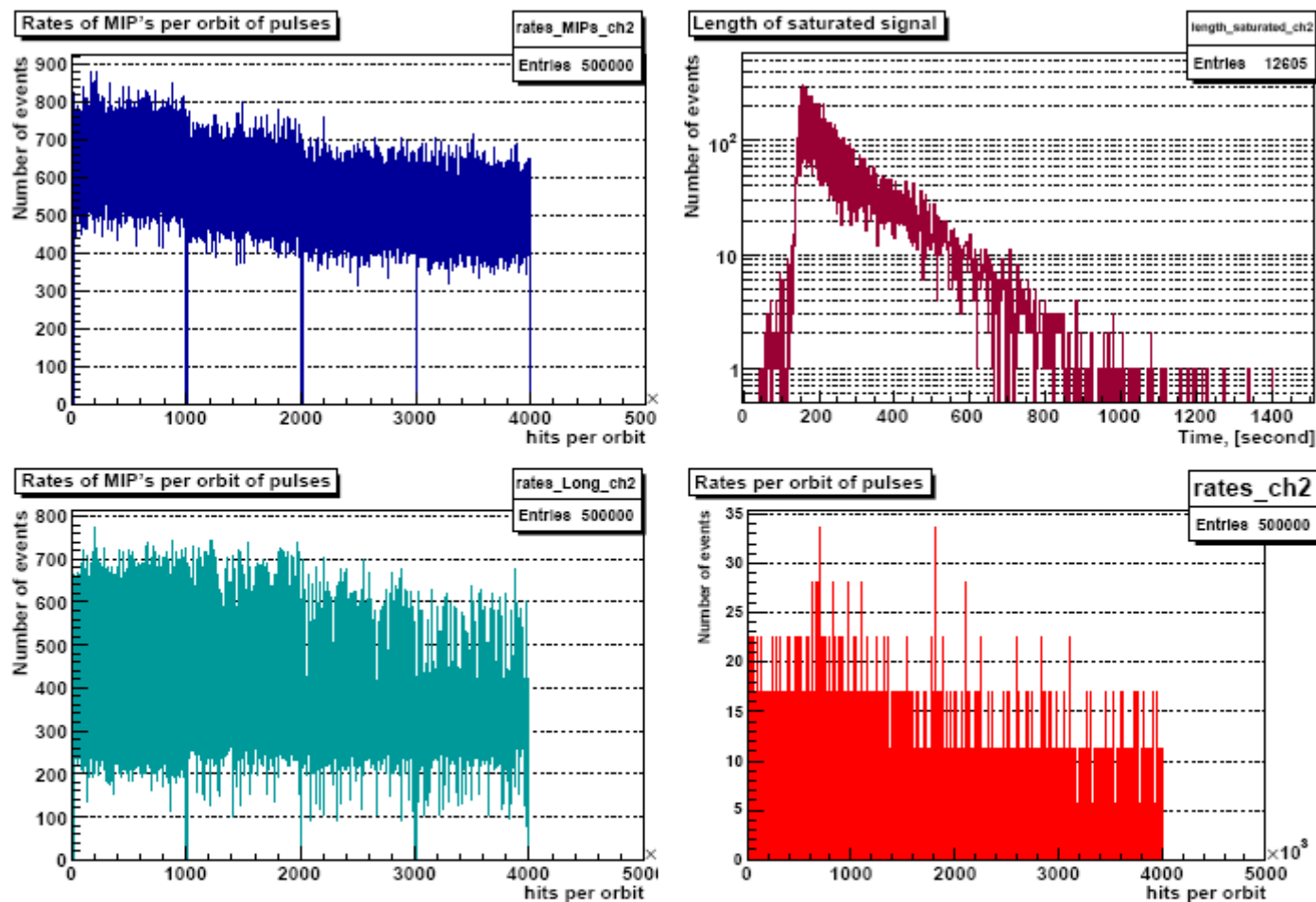


Figure 1.11: Rates of MIP's (left top), rates of signals longer then 40 ns (left down), rates of saturated signals (right down), ??????

Rebinning of rates

