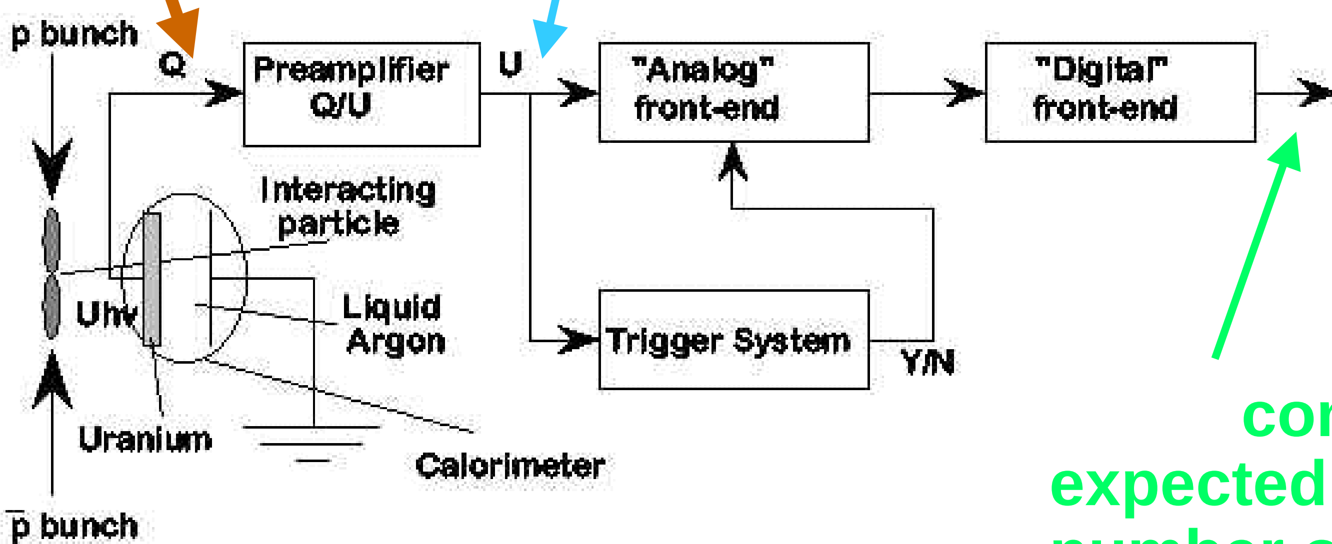
The Pulsers and the Energy-crisis

inject pulser signal

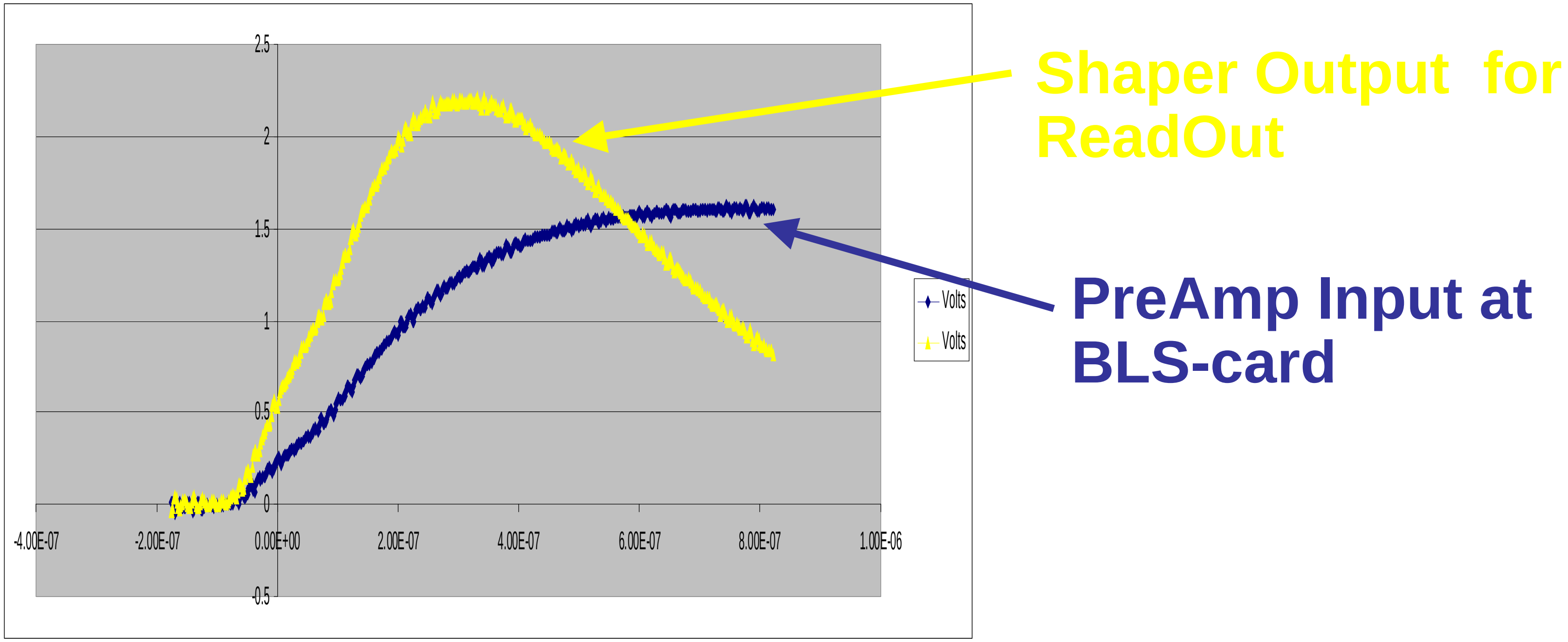
measure signal with scope



compare expected number of ADC counts with measured

Scope Measurement

- 1 em-channel (crate 8 ADC 6 BLS 0 Tower 3 Depth 3)



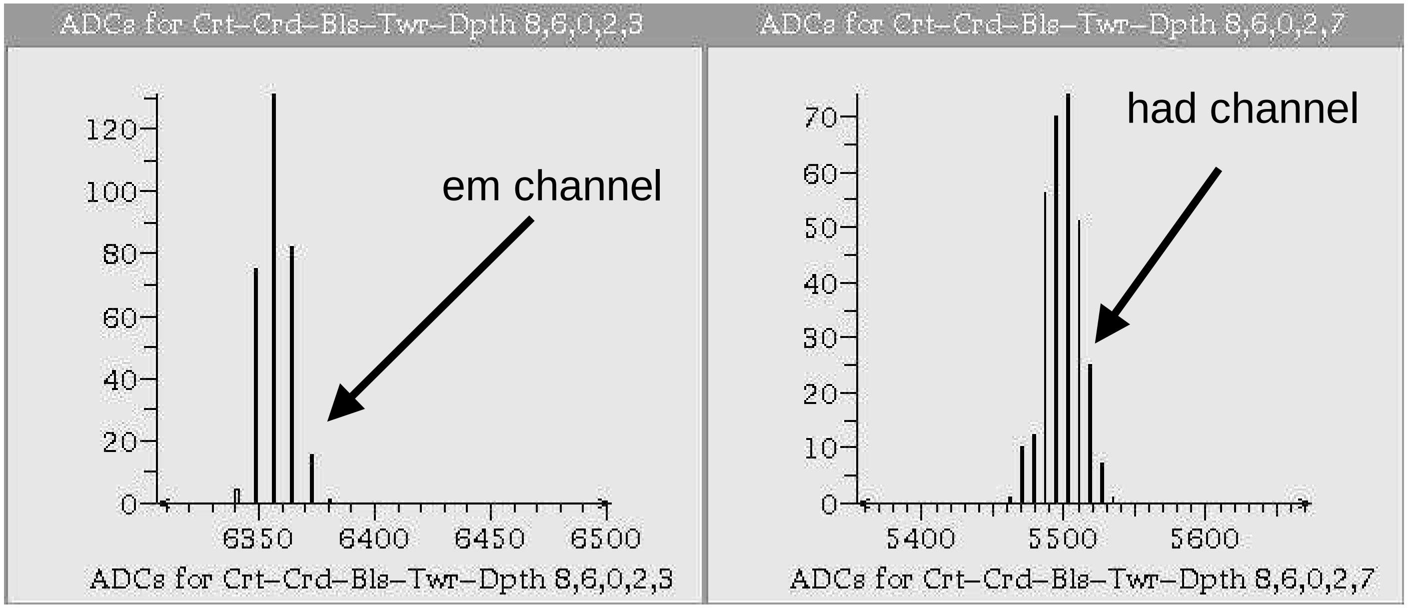
- DAC=25k shaper Output=2.2V ⇒ SCA (after gain selection) 1.1V
- Electronics Design: 4V in SCA = 32000 Adc counts

⇒ estimation: 25k = 1.1V= 8800 Adc Counts

ADC-counts from cal_elec

- using pulser with DAC=25k delay=0

- T&C: x889, BLS: Base-2ticks, ADC: 0-sign suppressed



- ADC measurement:

DAC=25k ADC counts: 6355

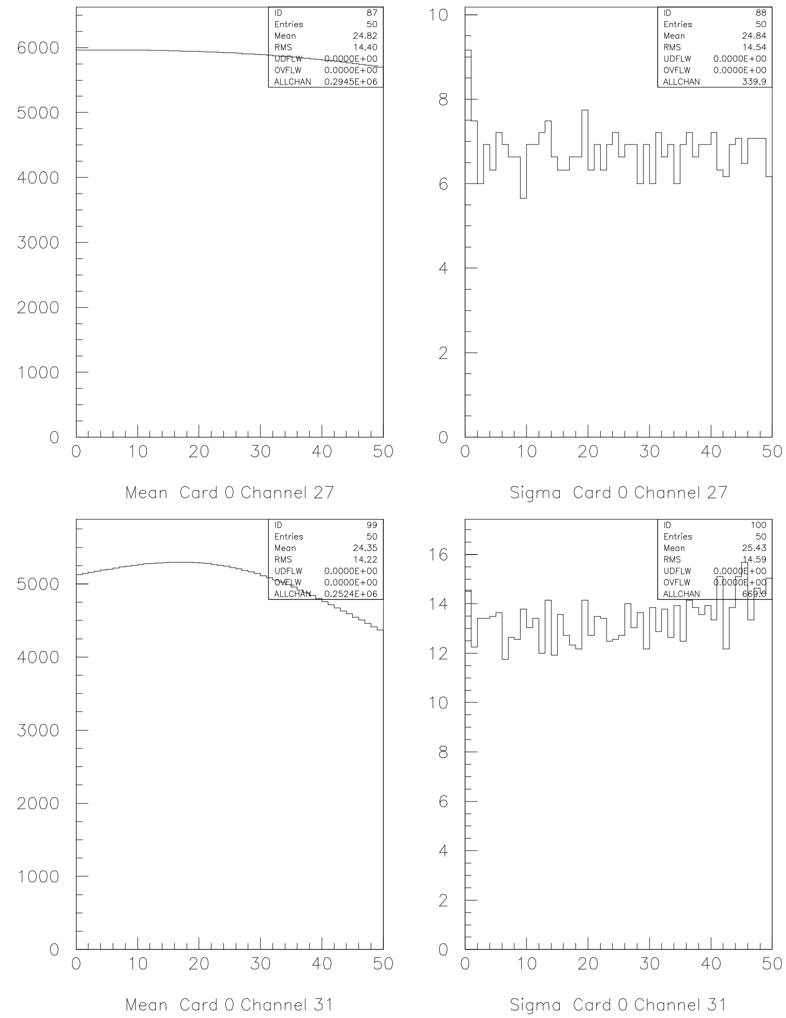
Check of signal max

em channel

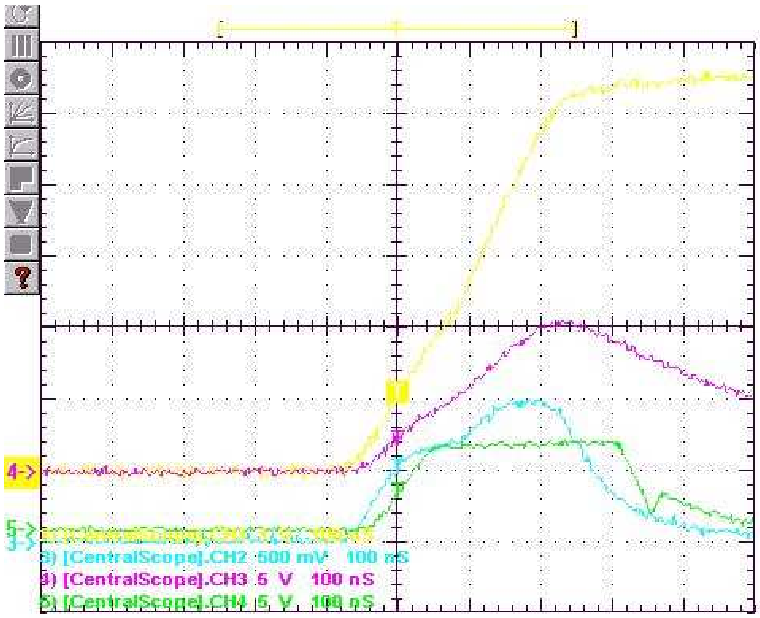
⇒ ~ signal max

⇒ 300 ADC count difference to signle run?

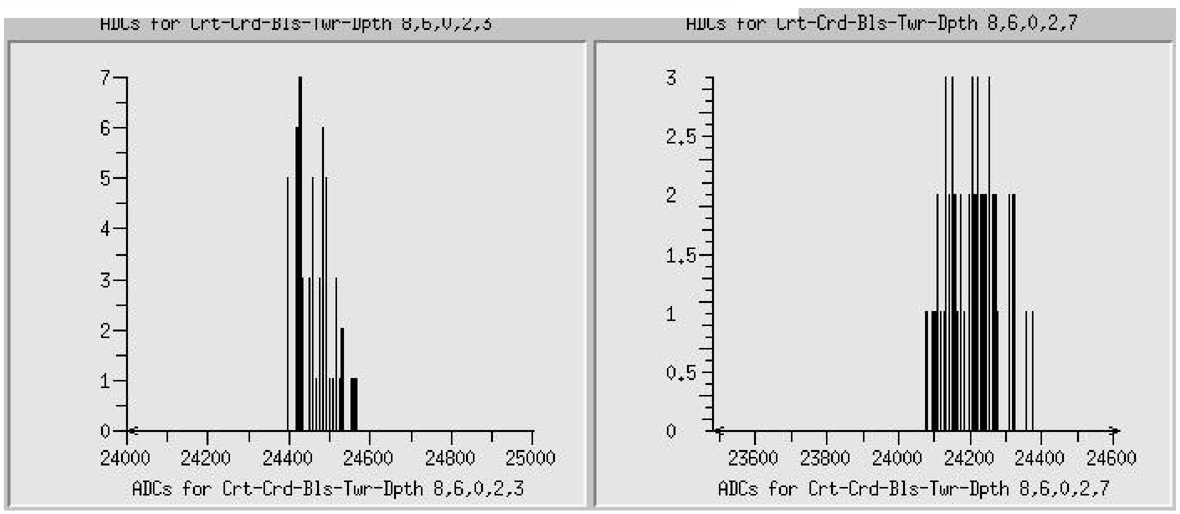
had channel



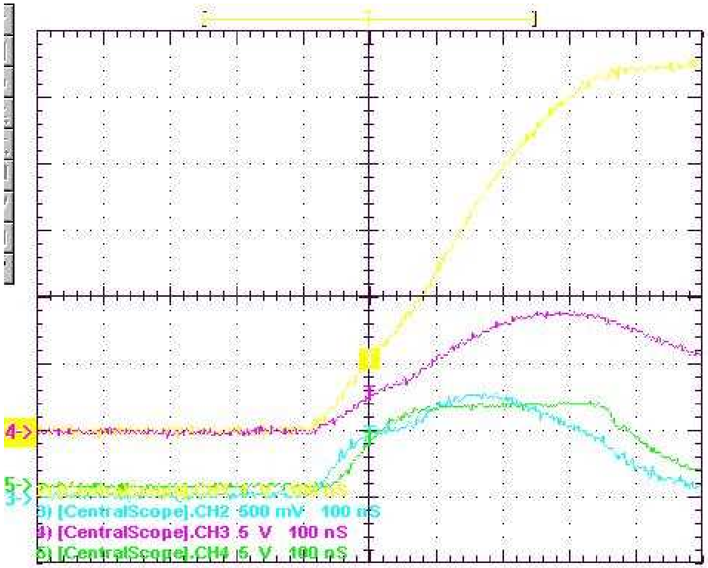
Saturation



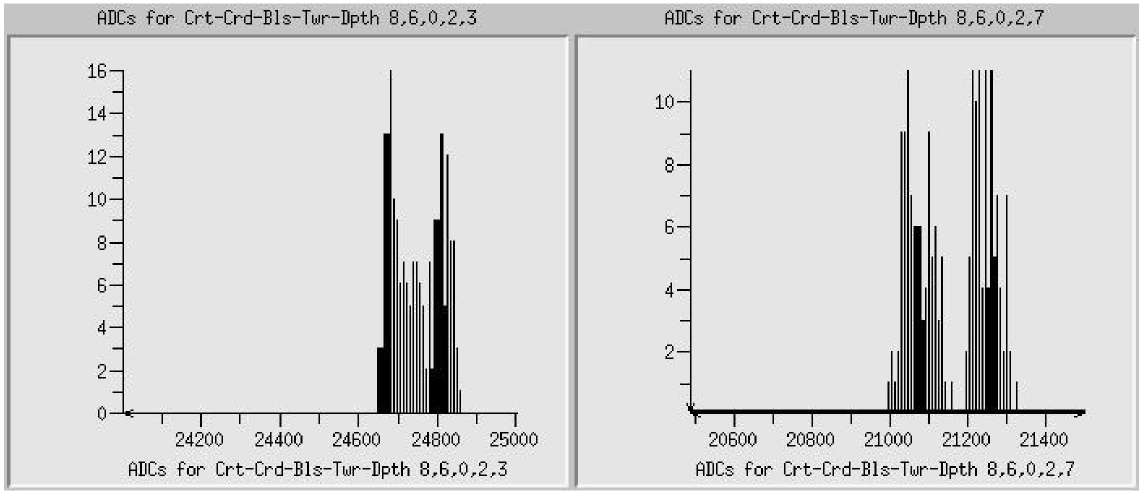
- DAC=130k del=0
- shaping max: 10.6 V
- ADC counts: (0-sign suppr., base-2) ~24500



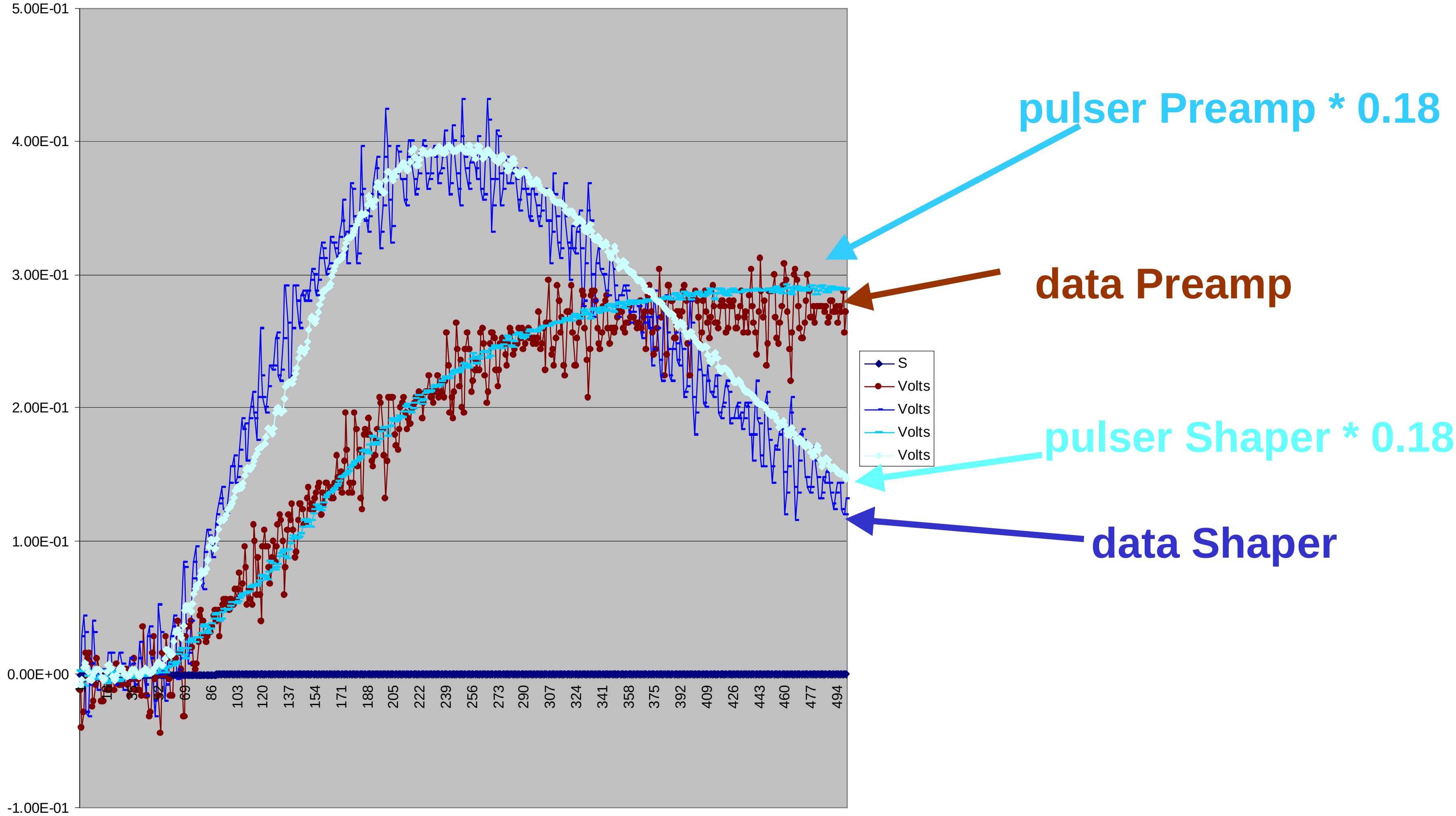
Saturation



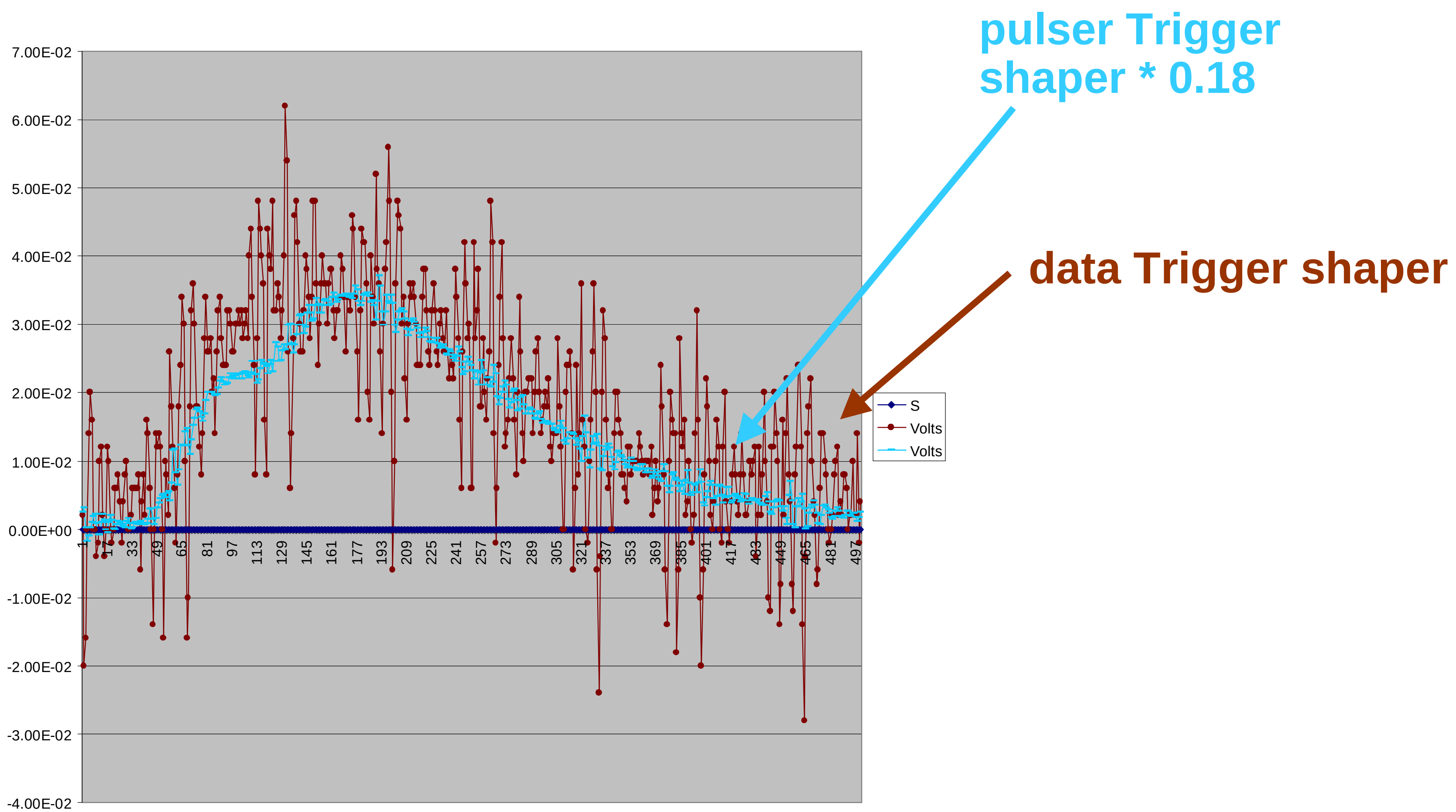
- DAC=100k del=0
- shaping max: 9 V
- ADC counts: (0-sign suppr., base-2) ~24700



Comparison of signal shapes



Comparison of signal shapes



Comparison of signal shapes