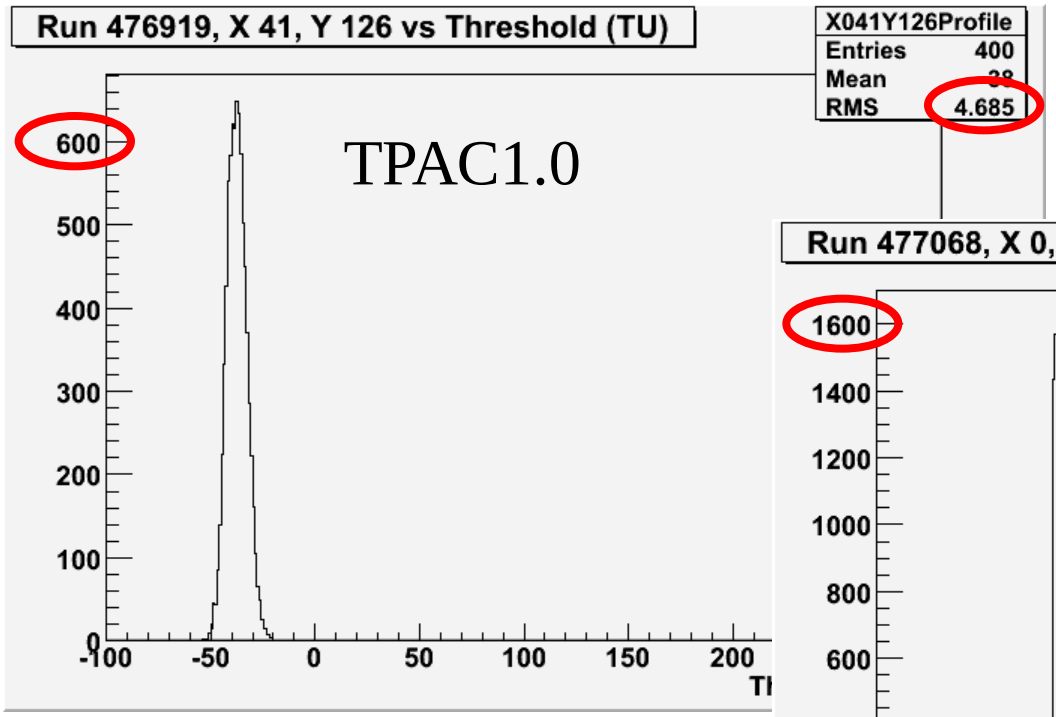
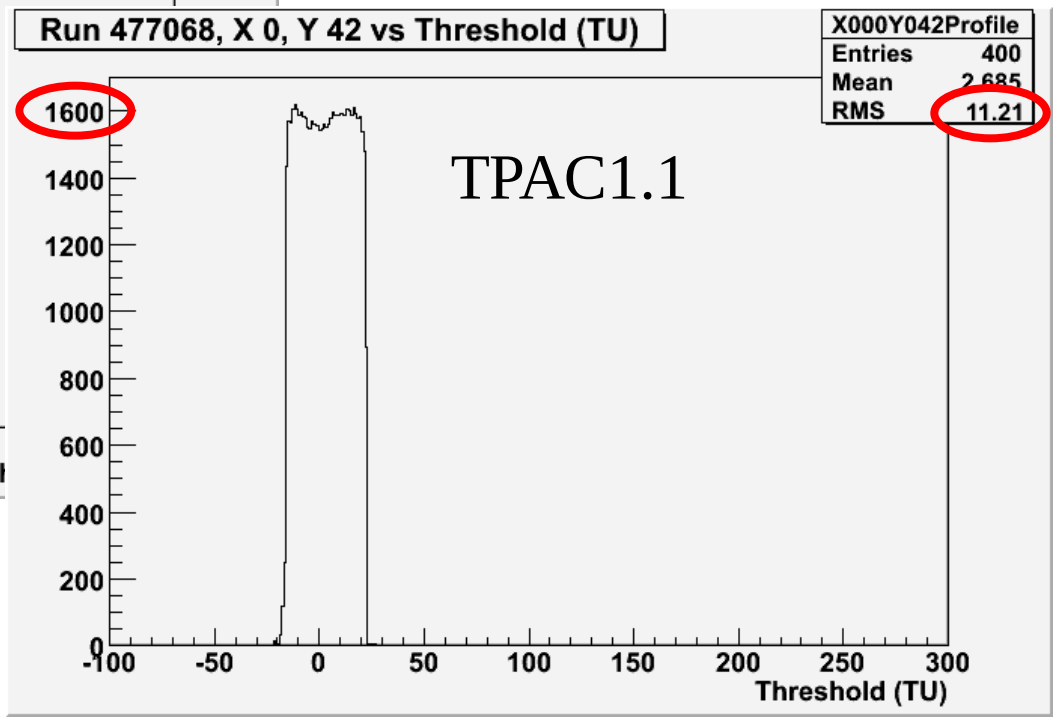
Some tests on TPAC1.1

Paul Dauncey

Pixel noise

- Do threshold scan with only one unmasked channel
  - Minimise any pickup



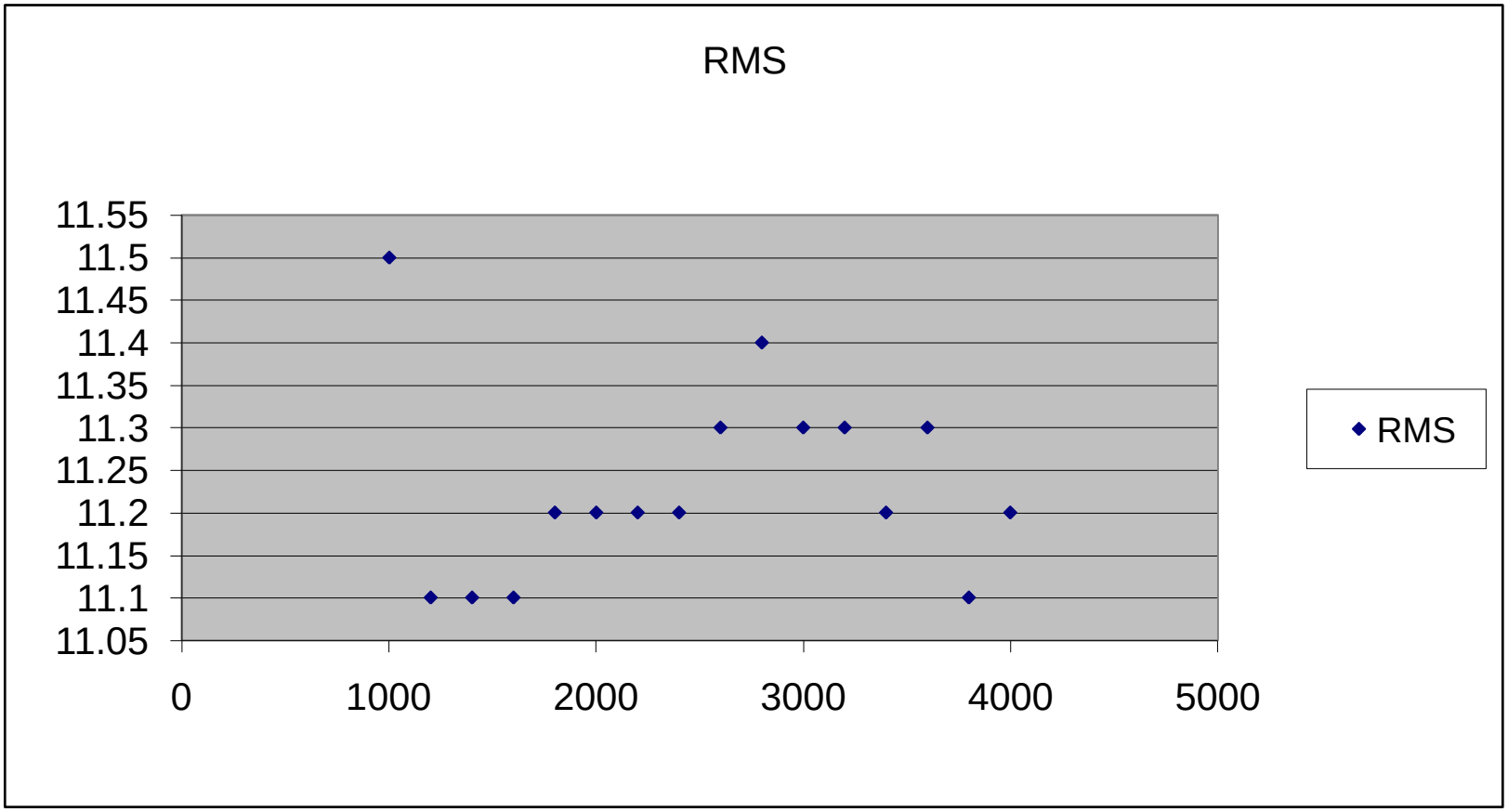


Note difference in y axis scales

Total of 100 bunch trains with 19 maximum hits/bunch train

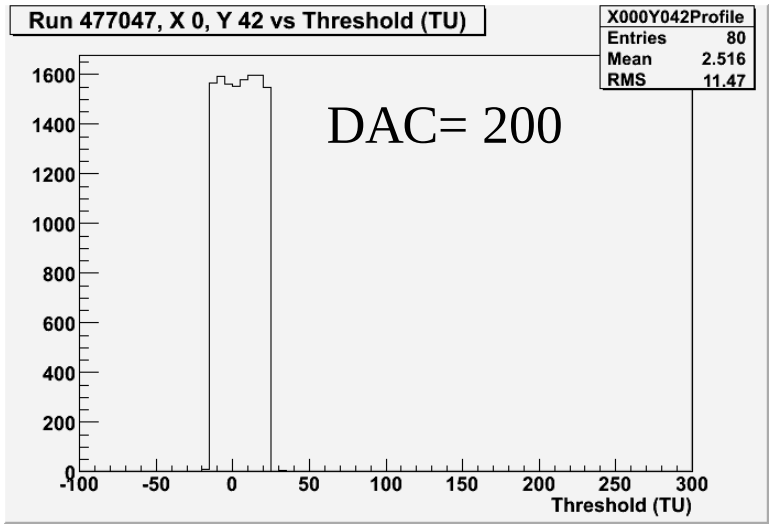
Pixel noise (cont)

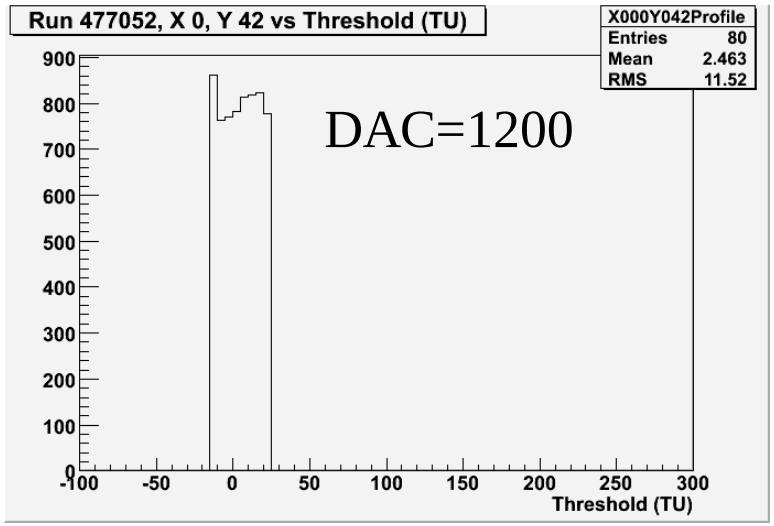
- Check as function of i12CompBiasTrim
  - No significant effect

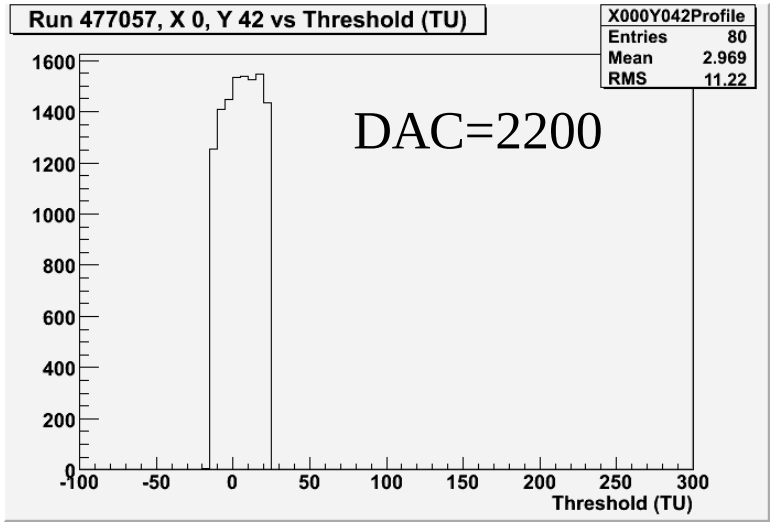


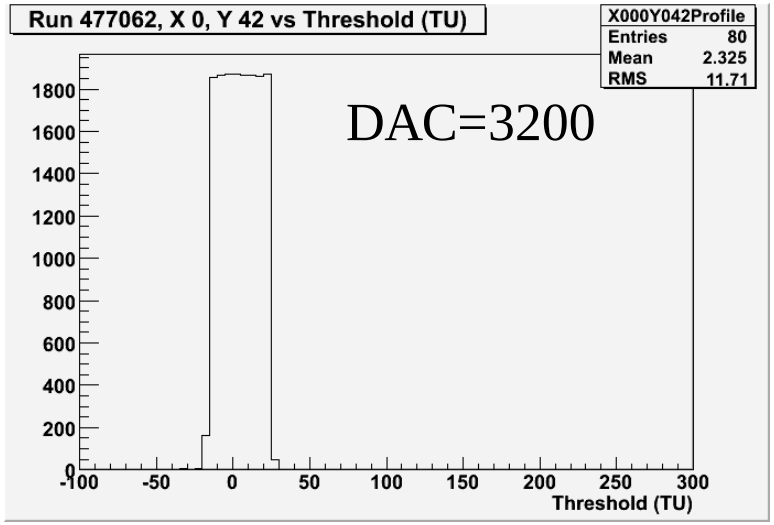
Pixel noise (cont)

- Check as function of monostable length; i12MSOBias1







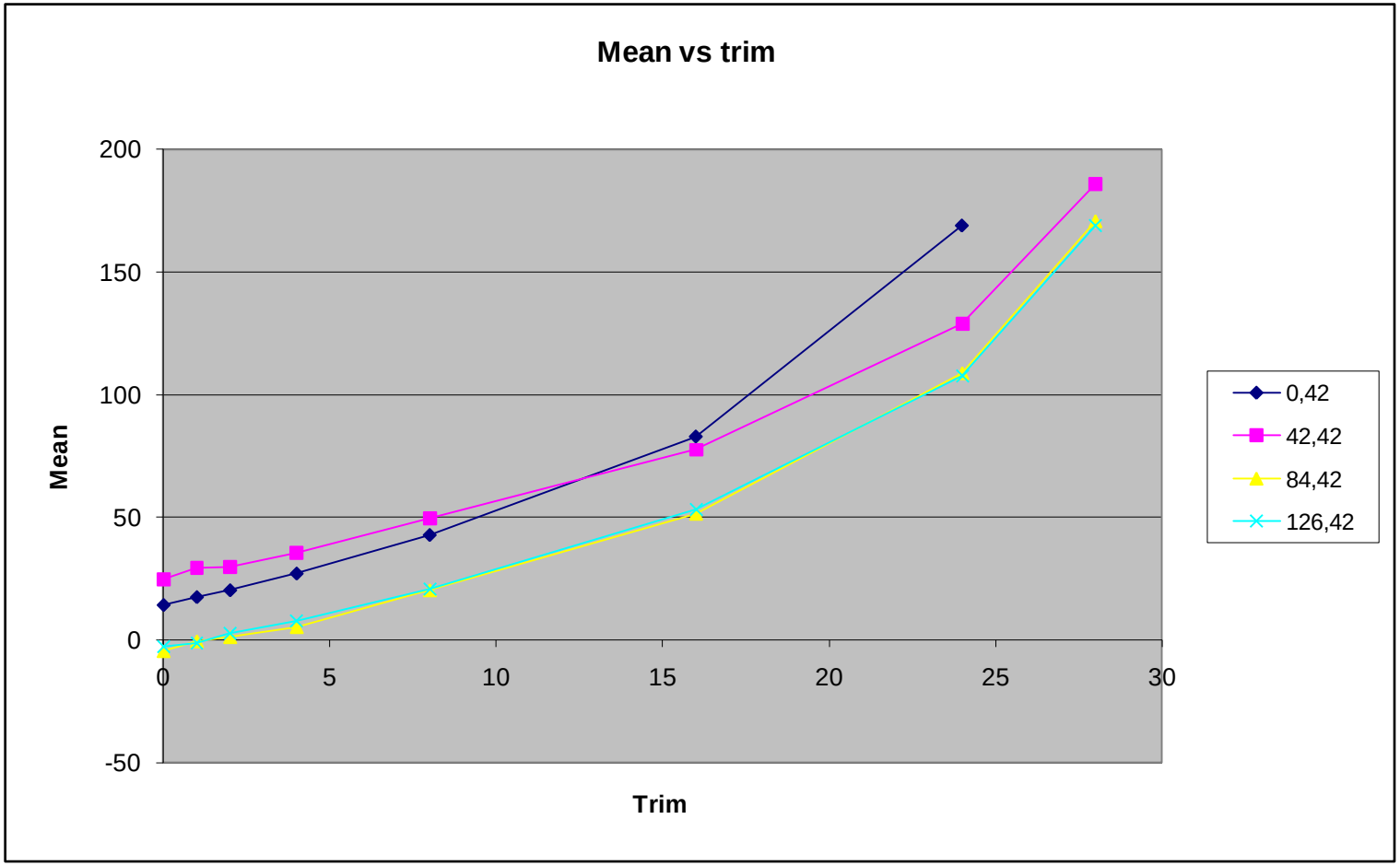


Hit override

- Force write to memory independent of hit/no-hit
  - Memory fills in less than three bunch crossings
- Predictable memory values
  - Possibly exception: pixel hit bits
  - Fully mask sensor to set all to zero
- Two sensors tested
  - Sensor #26: no errors
  - Sensor #36: column 70 error (region 1) intermittently sets a pixel hit for a random row. Otherwise no errors

Trim bits

- Increased from 4 to 6 bits; range now 0-63
- Pedestal shift for four typical channels; ~4TU/trim unit



Trim bits (cont)

- Also check for RMS changes