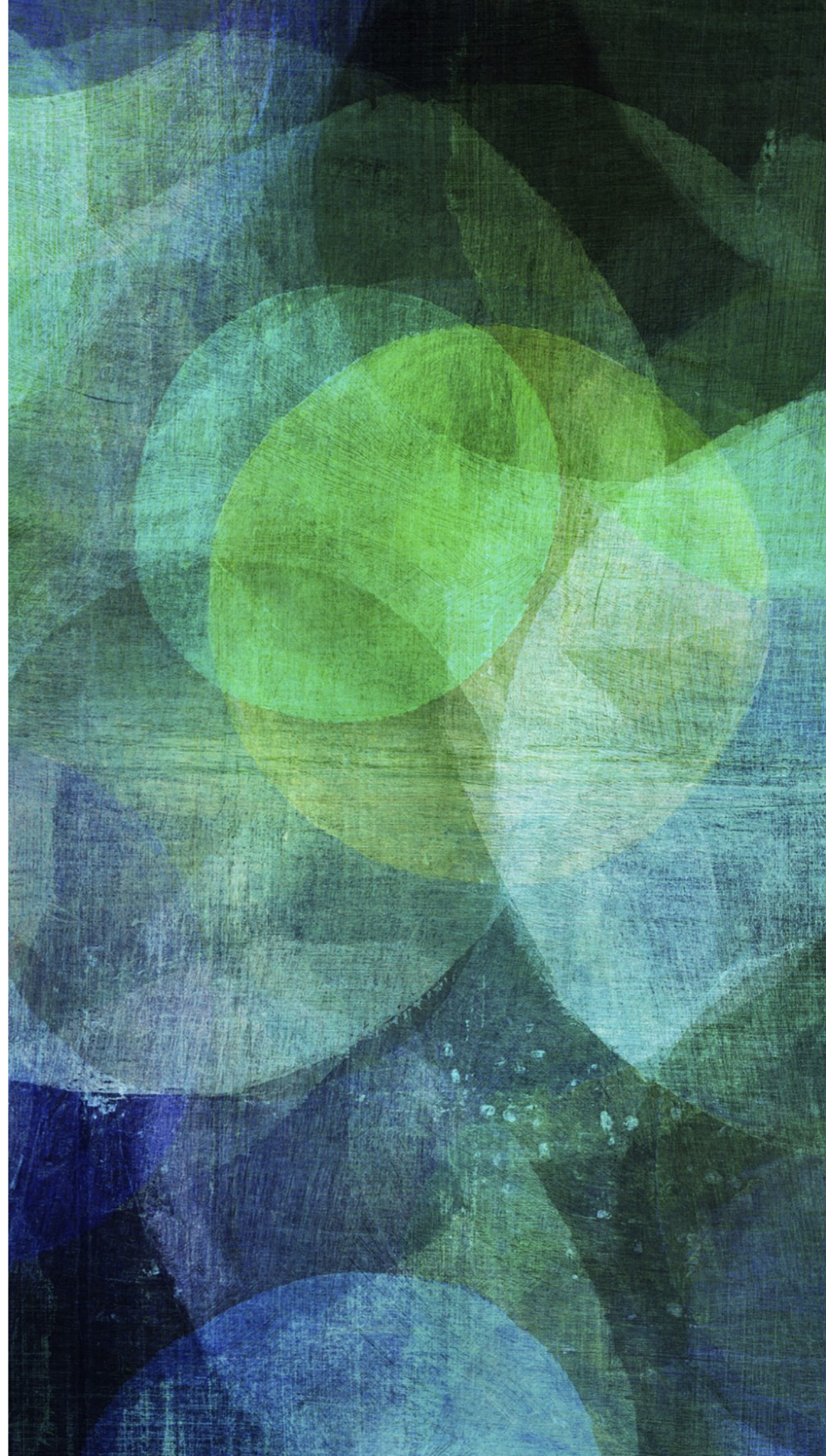


# SKIROC2/2A TESTS AT LLR

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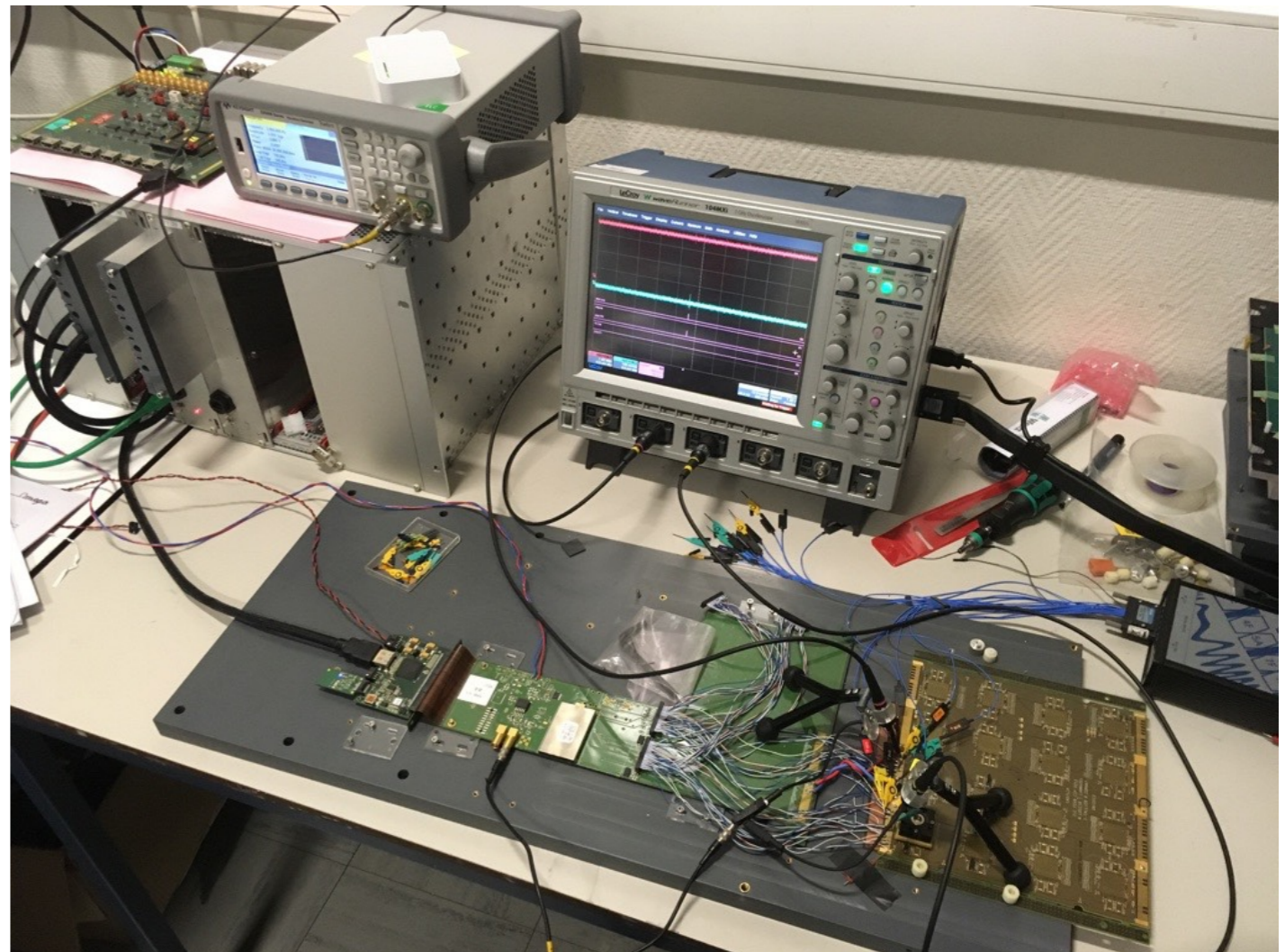
*Shriddha Chaitanya,  
Artur Lobanov*



# BENCH TESTS OF SKIROC2/2A AT LLR

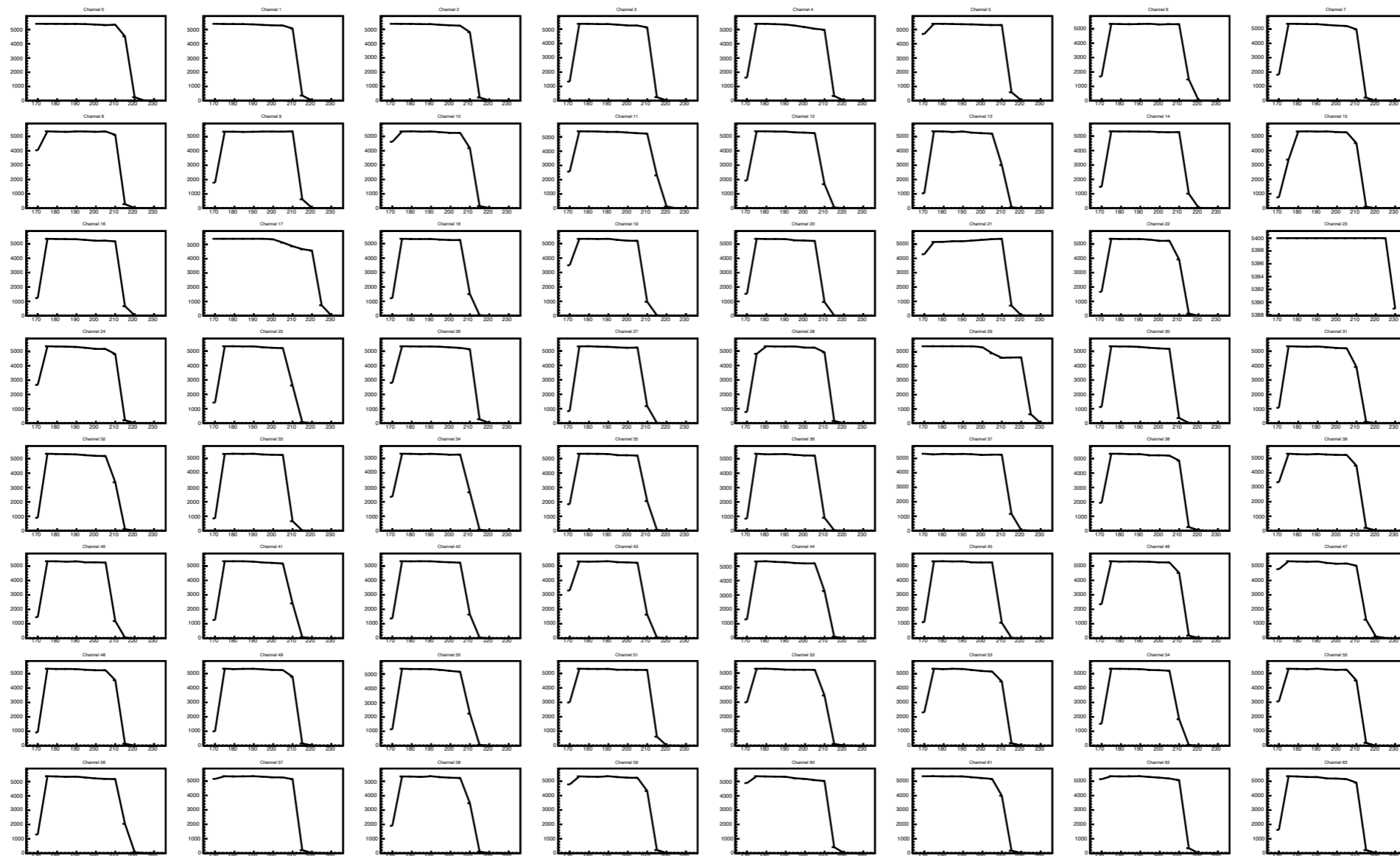
---

- Test bench at LLR:
  - FEV8 with single ASIC socket, SMB v3
  - FCLK: 50MHz, SCLK: 2.5MHz
  - CCC, LDA, DIF
- DAQ software:
  - Pyrame/Calicoes v2-3 (development branch)



# TRIGGER SCURVES FOR SK2A

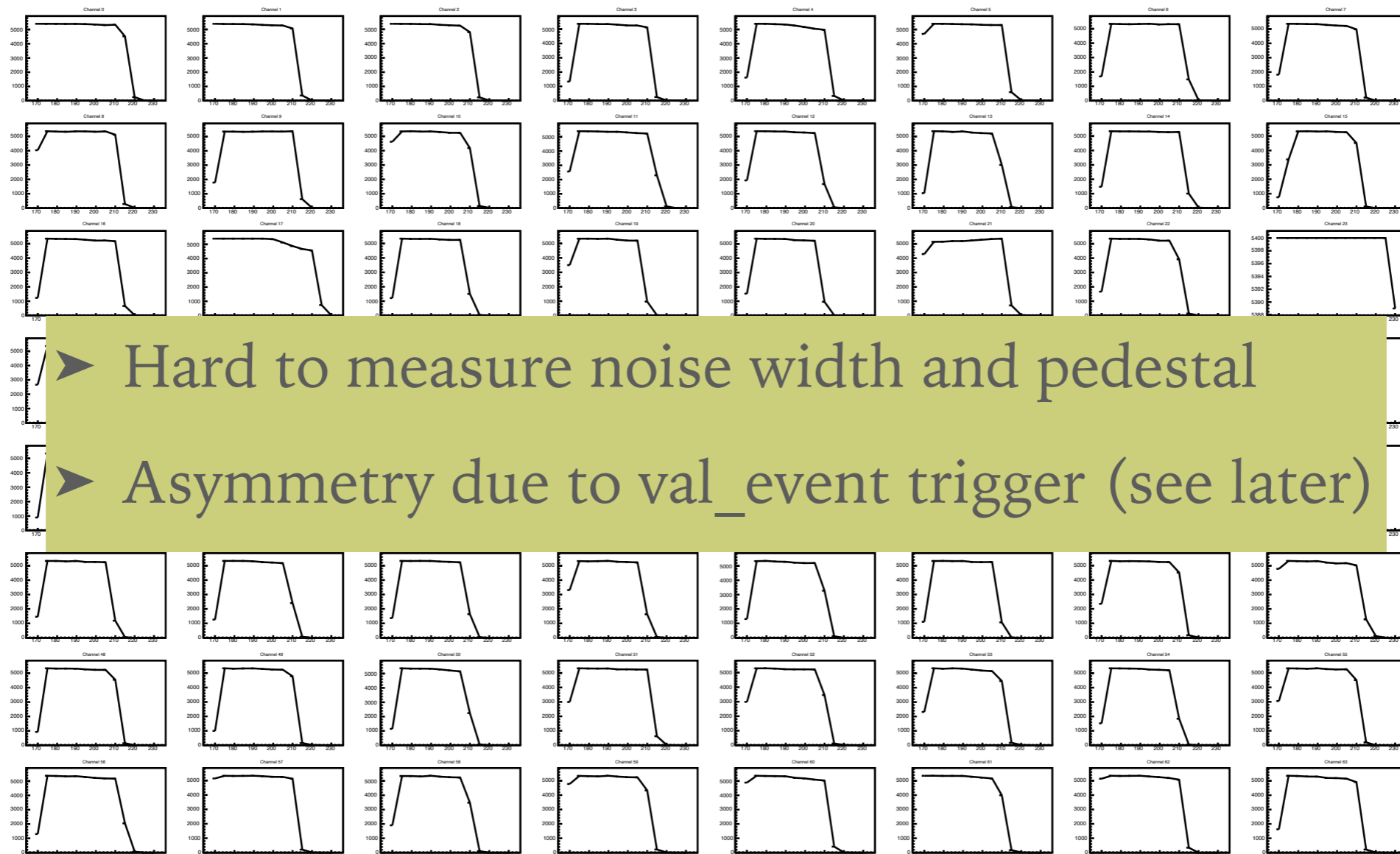
- Default spill duration was  $\sim 30\text{ms}$  (startAcq limited to 5ms)
- Long duration = high probability to saturate at pedestal
- All by 1 scruves (all other channels masked) for SK2a:



Bad  
chan

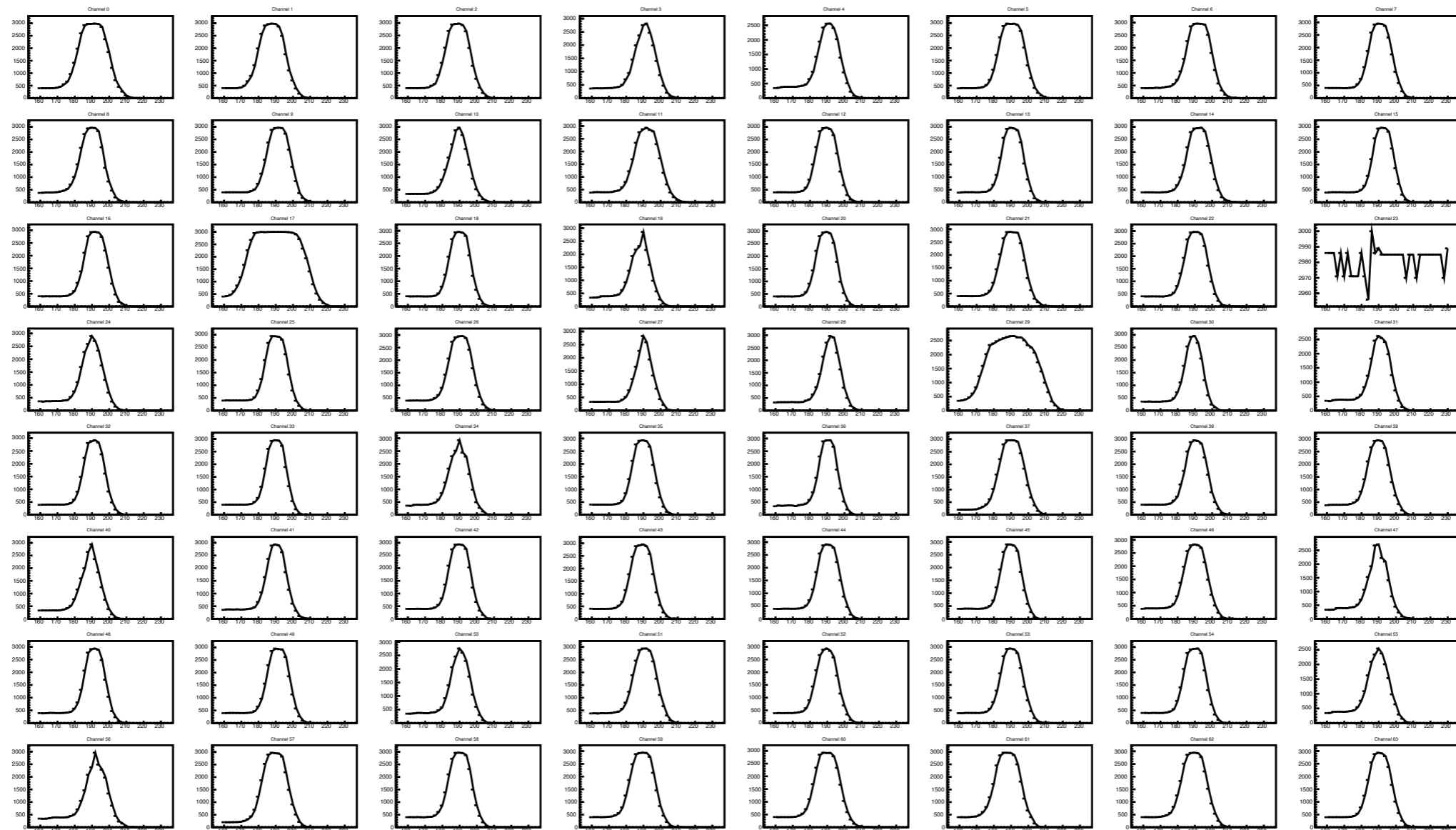
# TRIGGER SCURVES FOR SK2A

- ▶ Default spill duration was  $\sim 30\text{ms}$  (startAcq limited to 5ms)
  - ▶ Long duration = high probability to saturate at pedestal
- ▶ All by 1 scruves (all other channels masked) for SK2a:



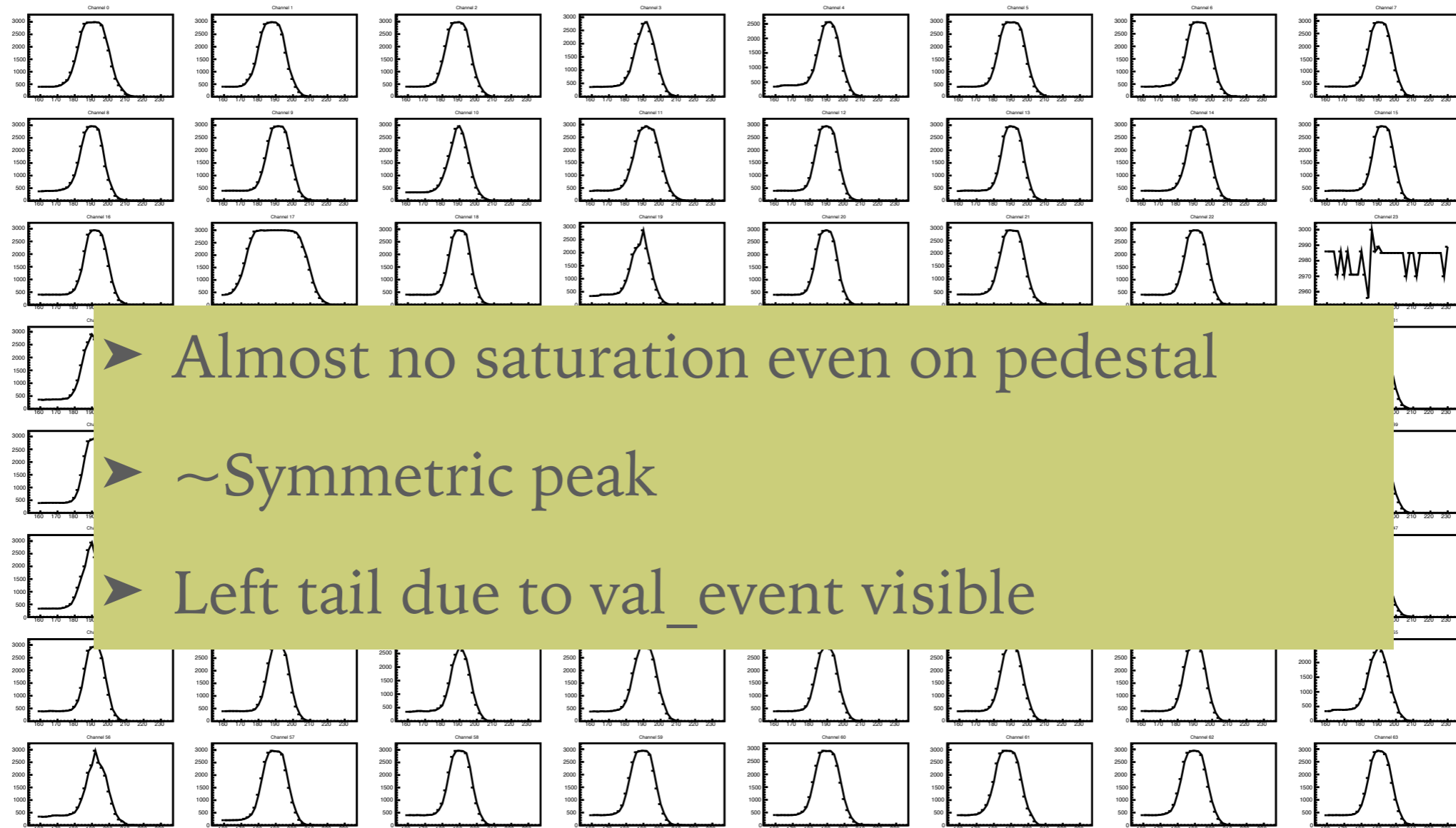
# TRIGGER SCURVES FOR SK2A

- ▶ Decreasing spill length to 1.410ms
  - ▶ Effective acquisition length:  $\sim 10\mu\text{s}$
- ▶ All by 1 scruves (all other channels masked) for SK2a:

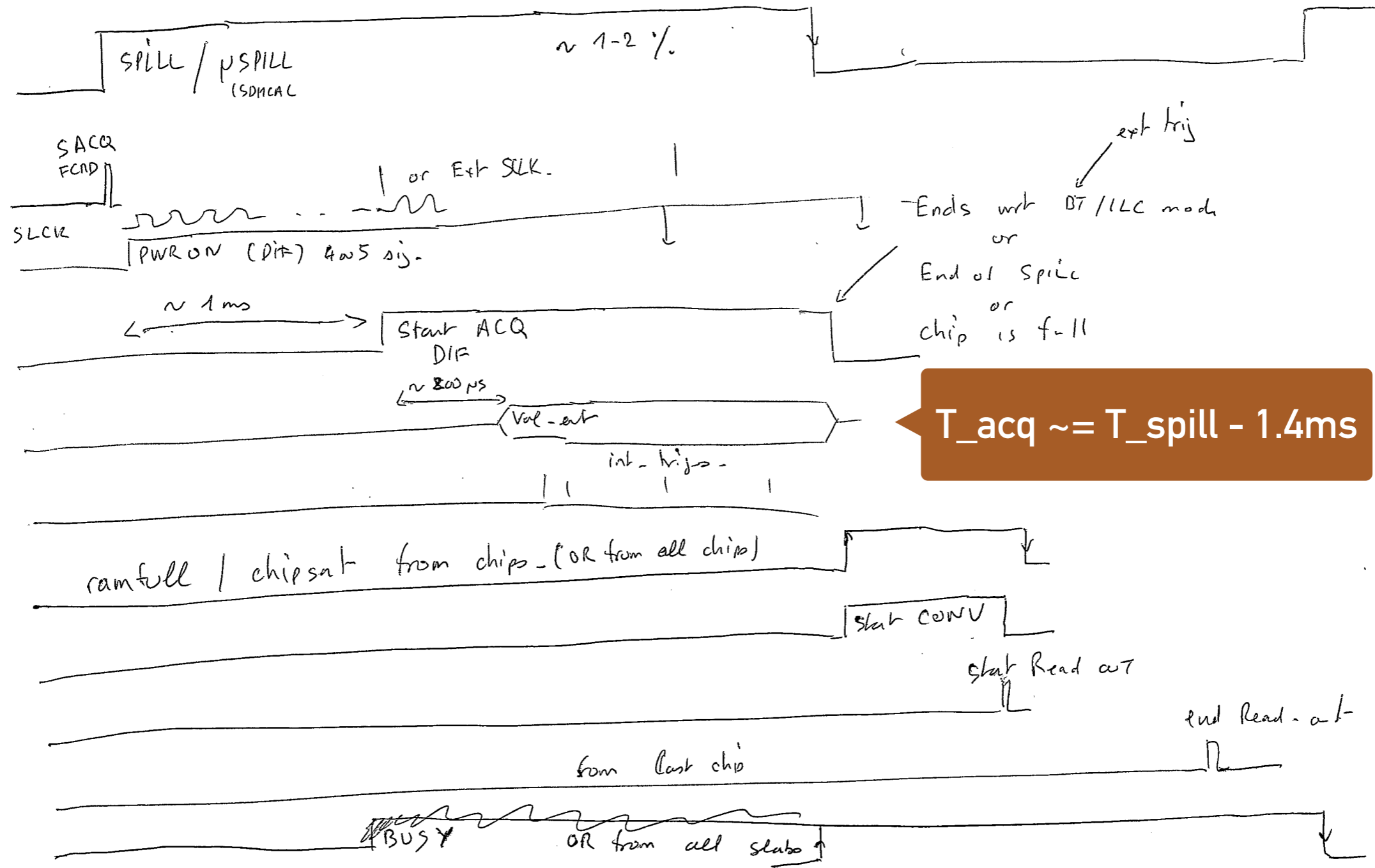


# TRIGGER SCURVES FOR SK2A

- ▶ Decreasing spill length to 1.410ms
  - ▶ Effective acquisition length:  $\sim 10\mu\text{s}$
- ▶ All by 1 scruves (all other channels masked) for SK2a:



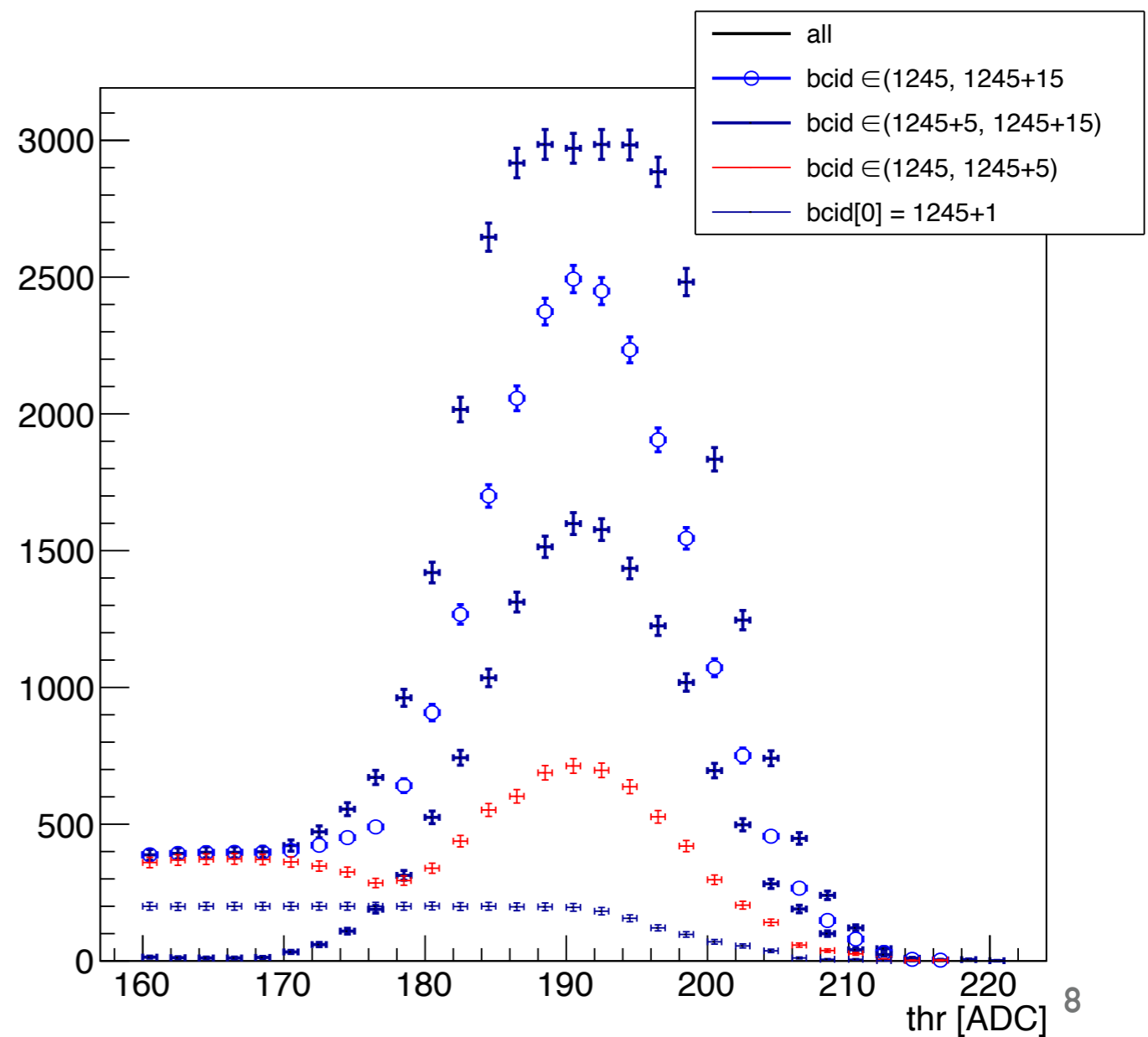
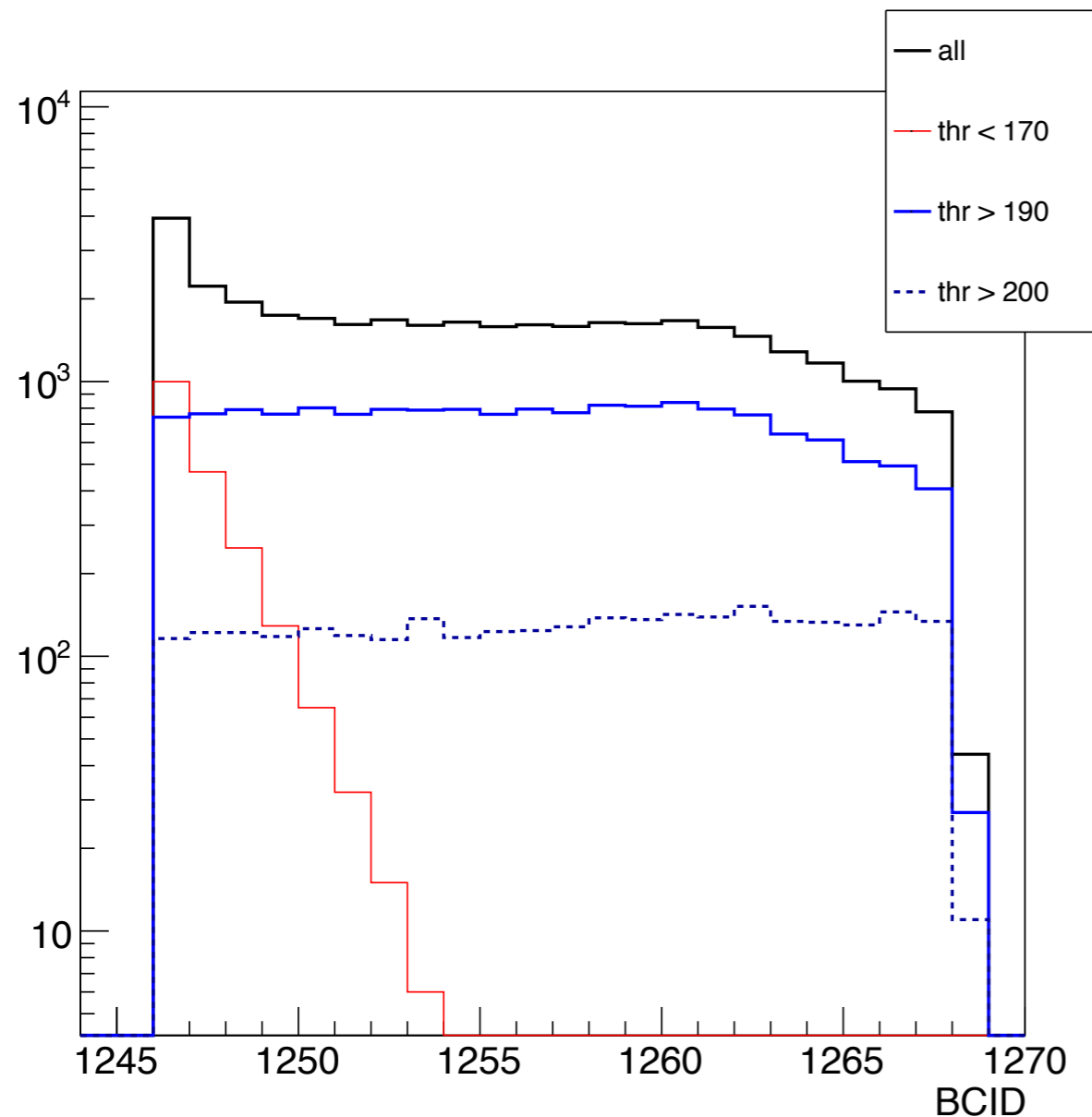
# SIGNAL TIMING FOR SK2(A)



$T_{acq} \approx T_{spill} - 1.4\text{ms}$

# TRIGGER SCURVES FOR SK2A

- BCID structure for short acquisition (10us) – all 15 SCA
- Val\_event triggers often first 5-6 SCA (red, left)
- BCID cut allows to filter out val\_event triggers (blue, right)





# TRIGGER SCURVES FOR SK2

► Same short spill (1.4ms) for SKIROC2

