JUSTUS-LIEBIG-
UNIVERSITÄT
GIESSEN

PASTA
tests update

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II. Physikalisches
Institut

PANDA LIX. Collaboration Meeting

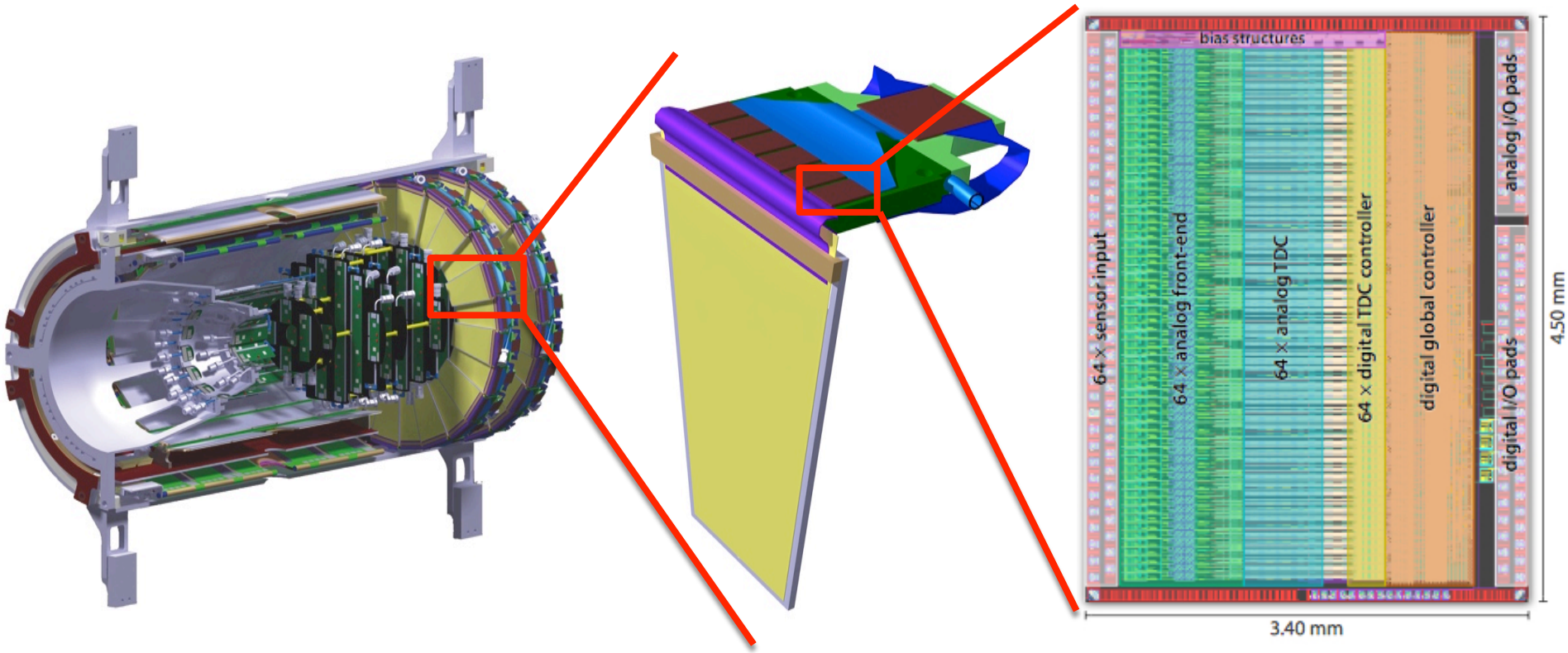
Contents

PAnda STrip Asic (PASTA)

Micro Vertex Detector

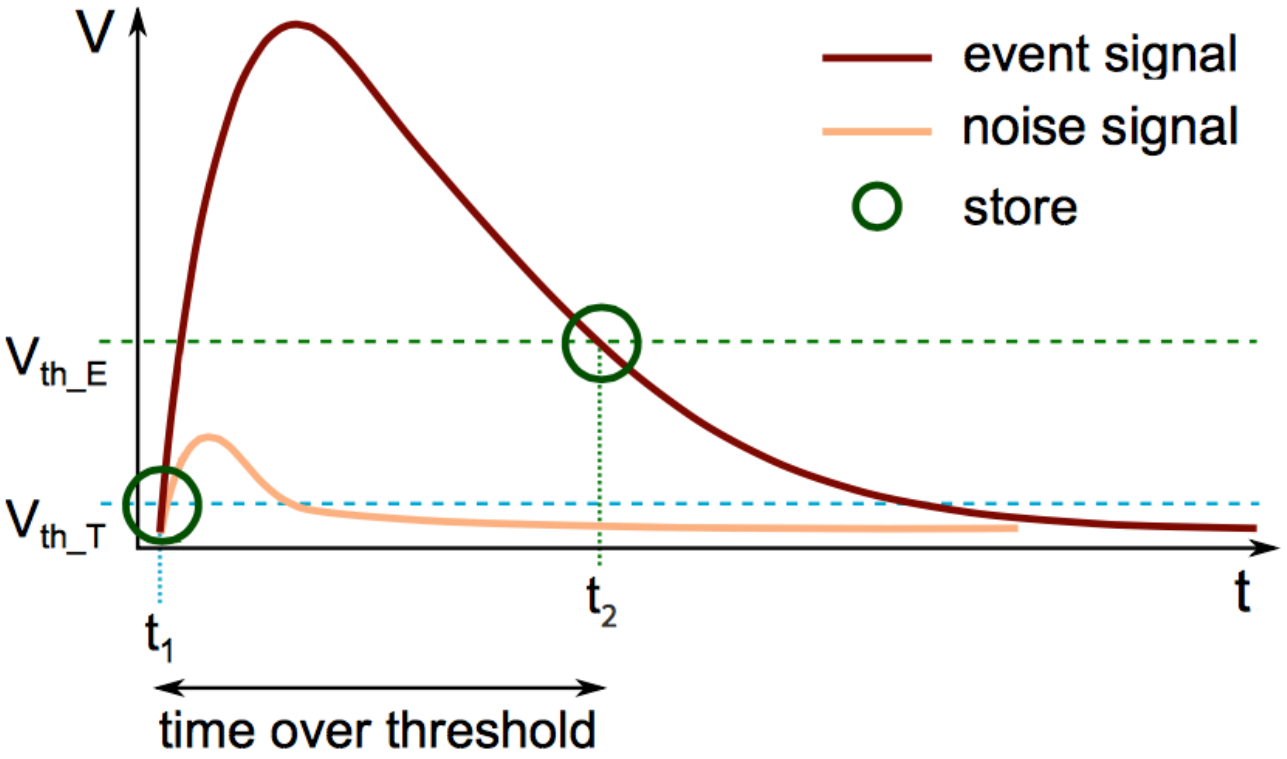
Sensor Module

Readout ASIC

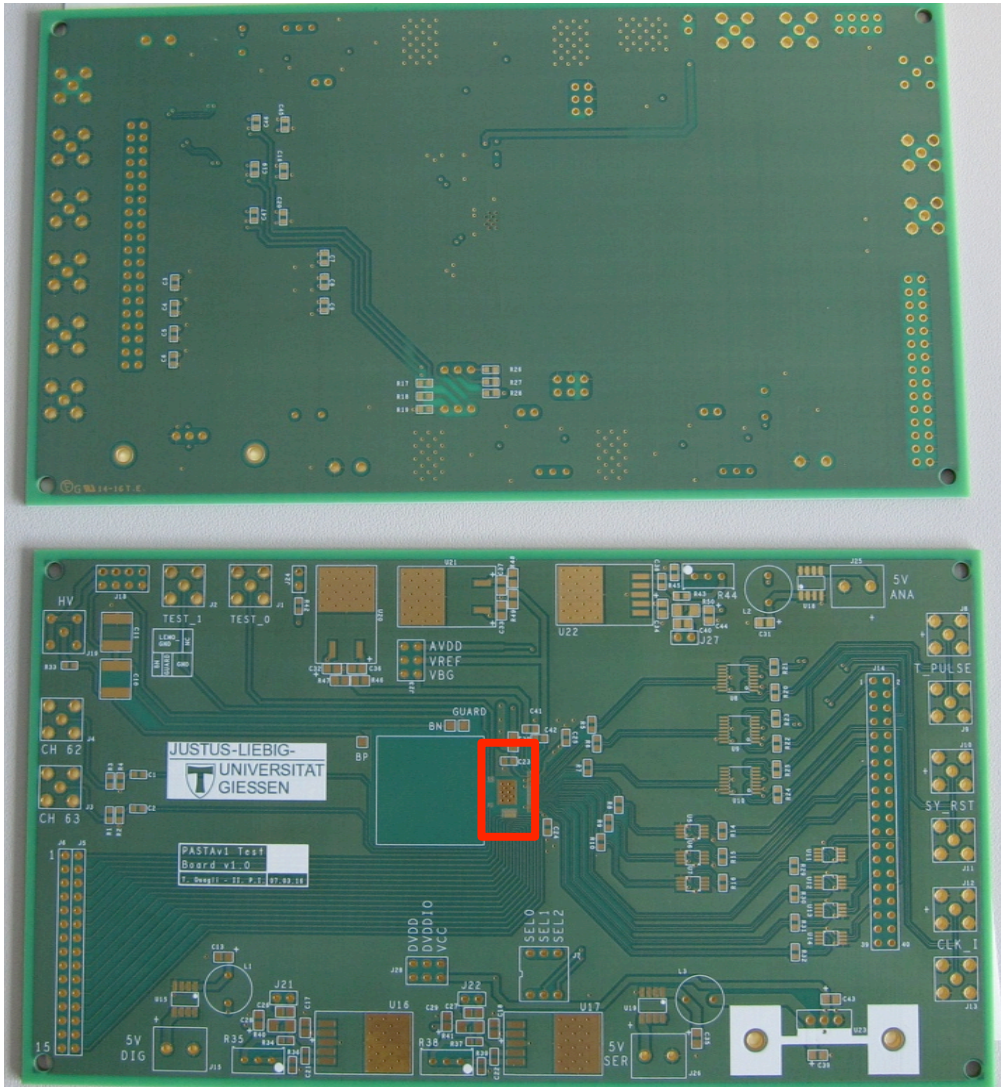


Measurement Concept

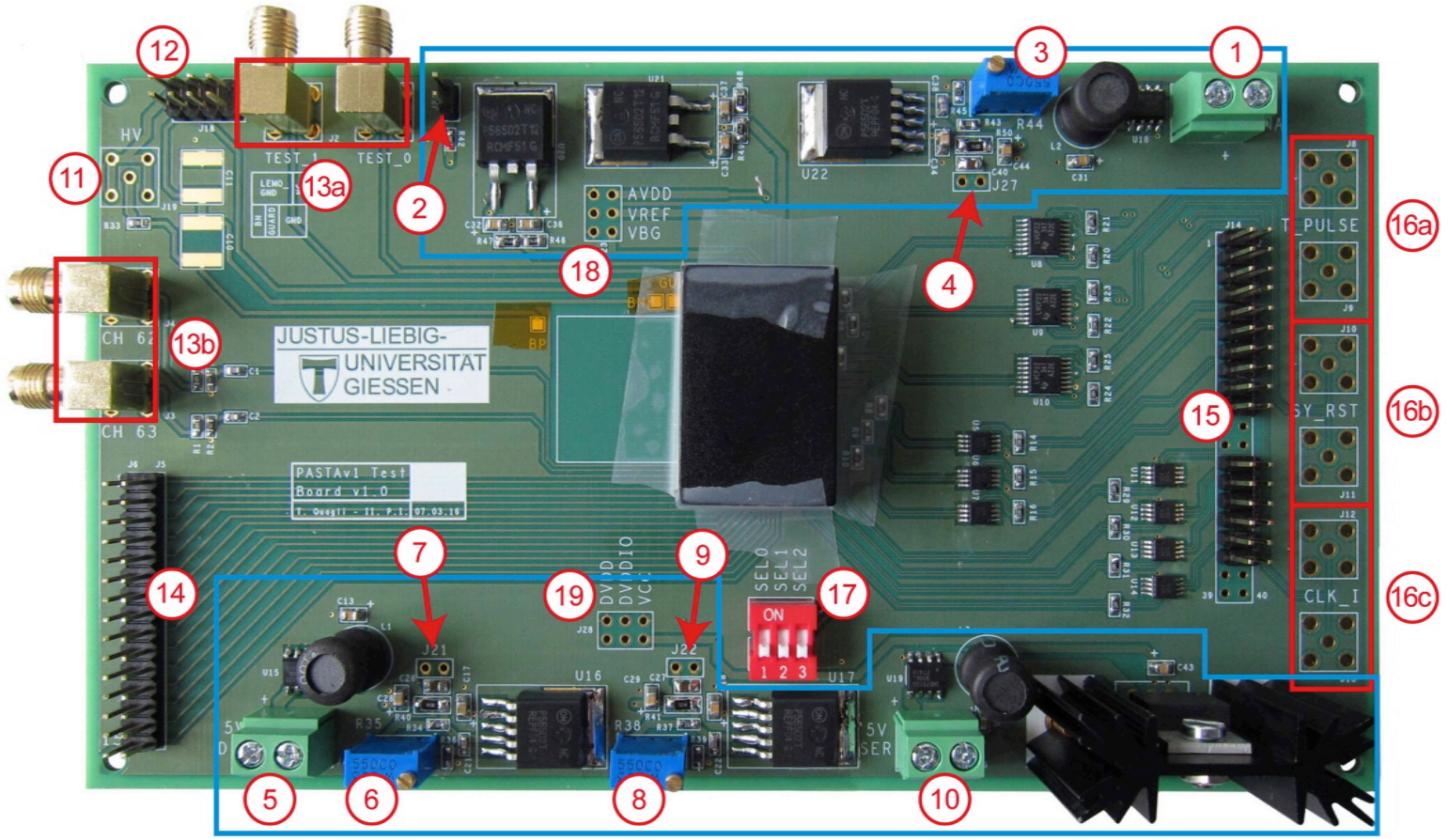
- Low threshold: better time stamp resolution
- High threshold: better jitter performance



Digital Interface for Strip data Handling (DISH)



DISH assembled

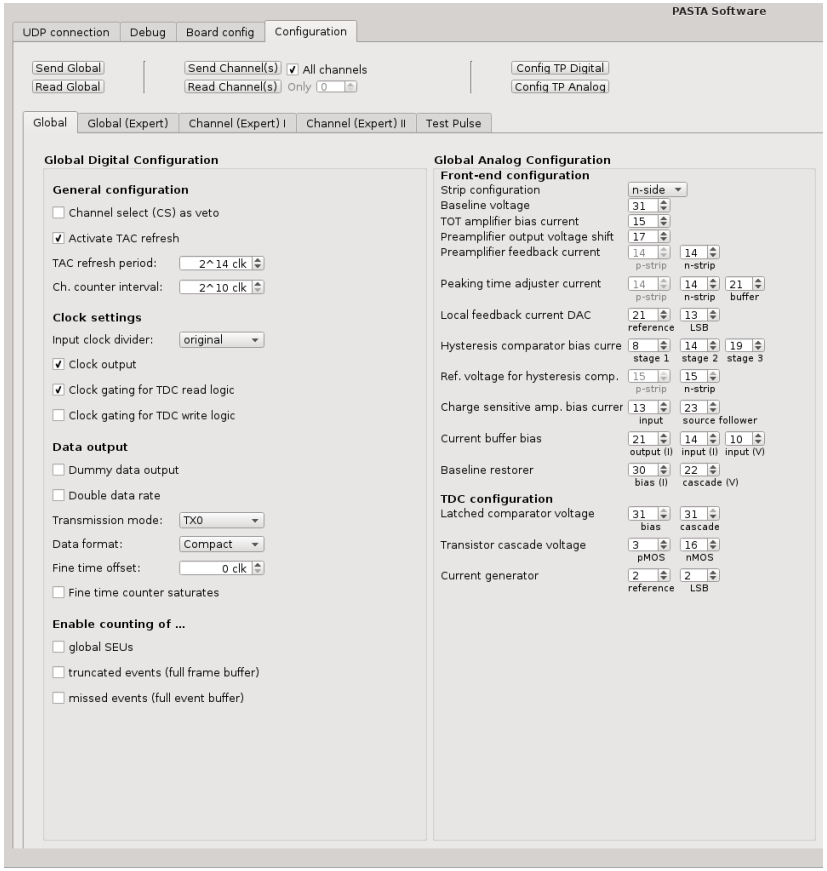


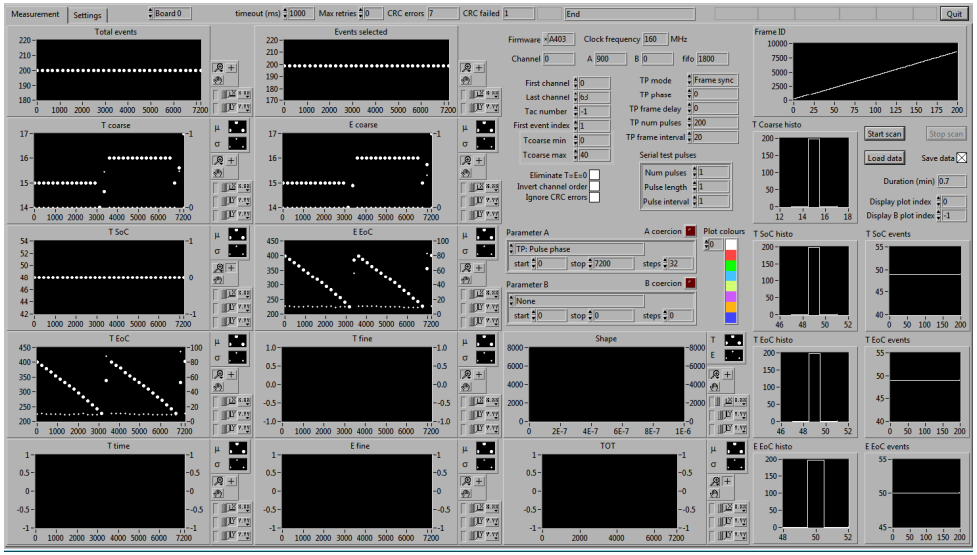
- 3 Boards equipped with PASTA
- 2 Boards with PASTA and a strip sensor

Readout softwares

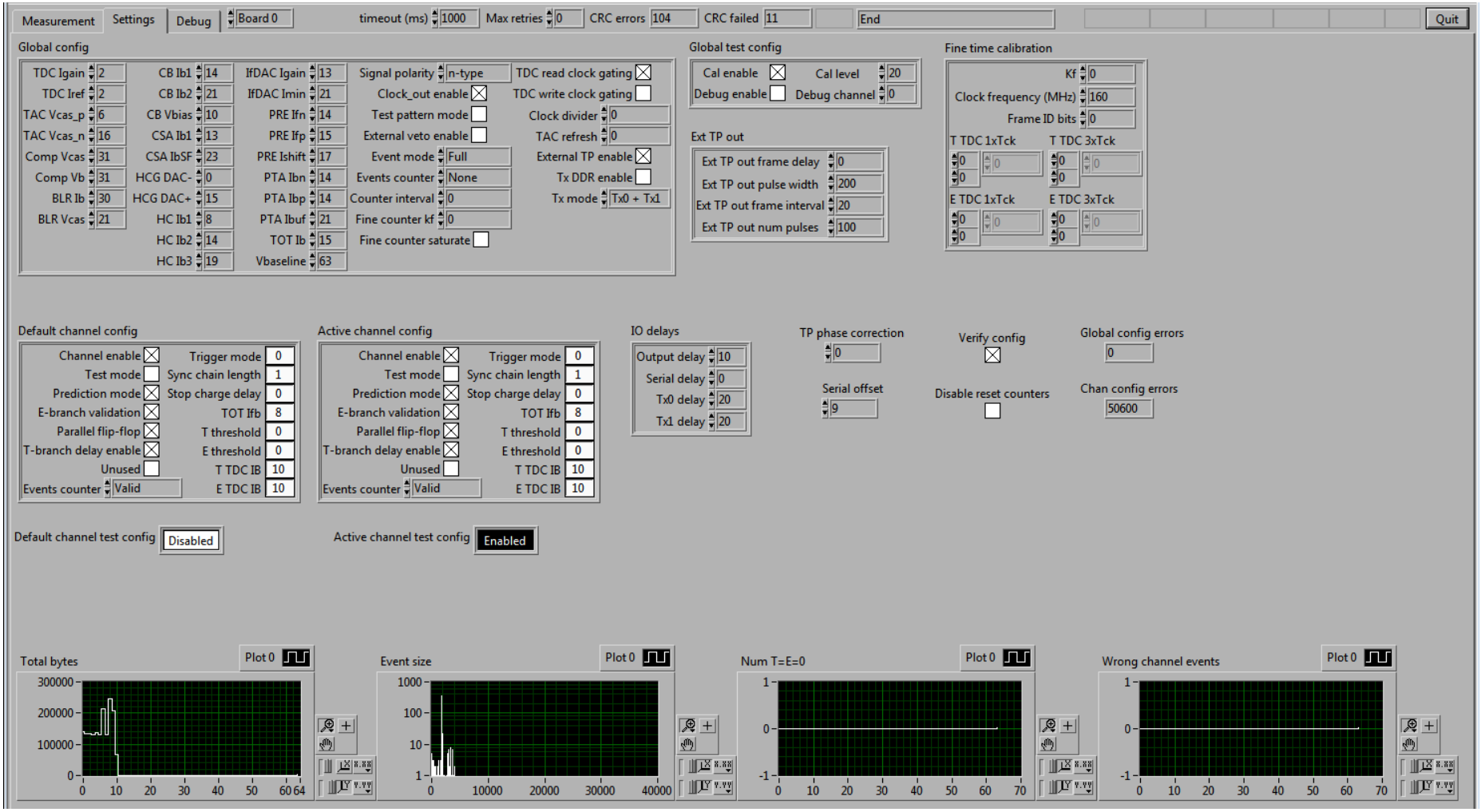
JDRS - Julich

LabView - Turin

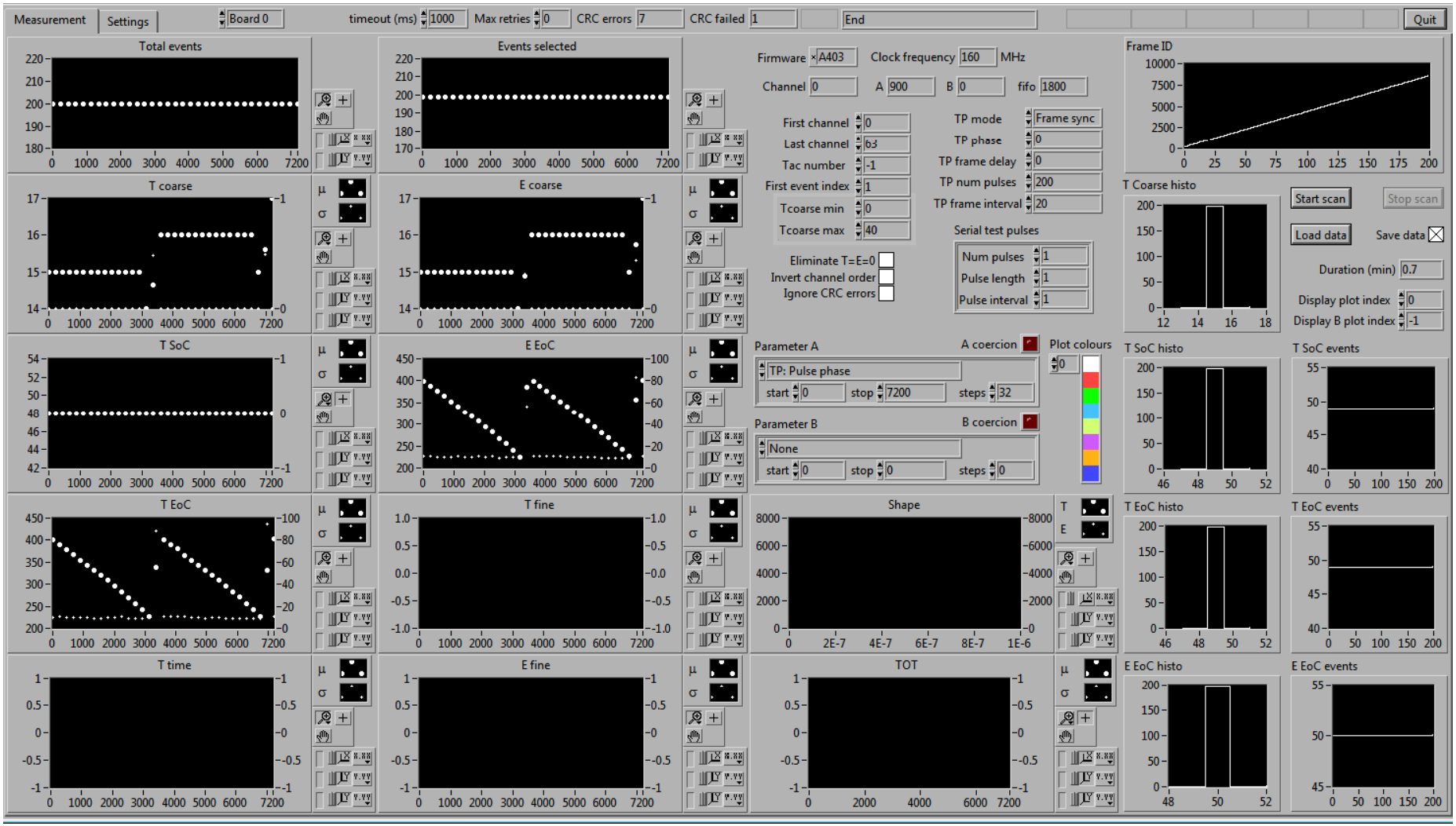




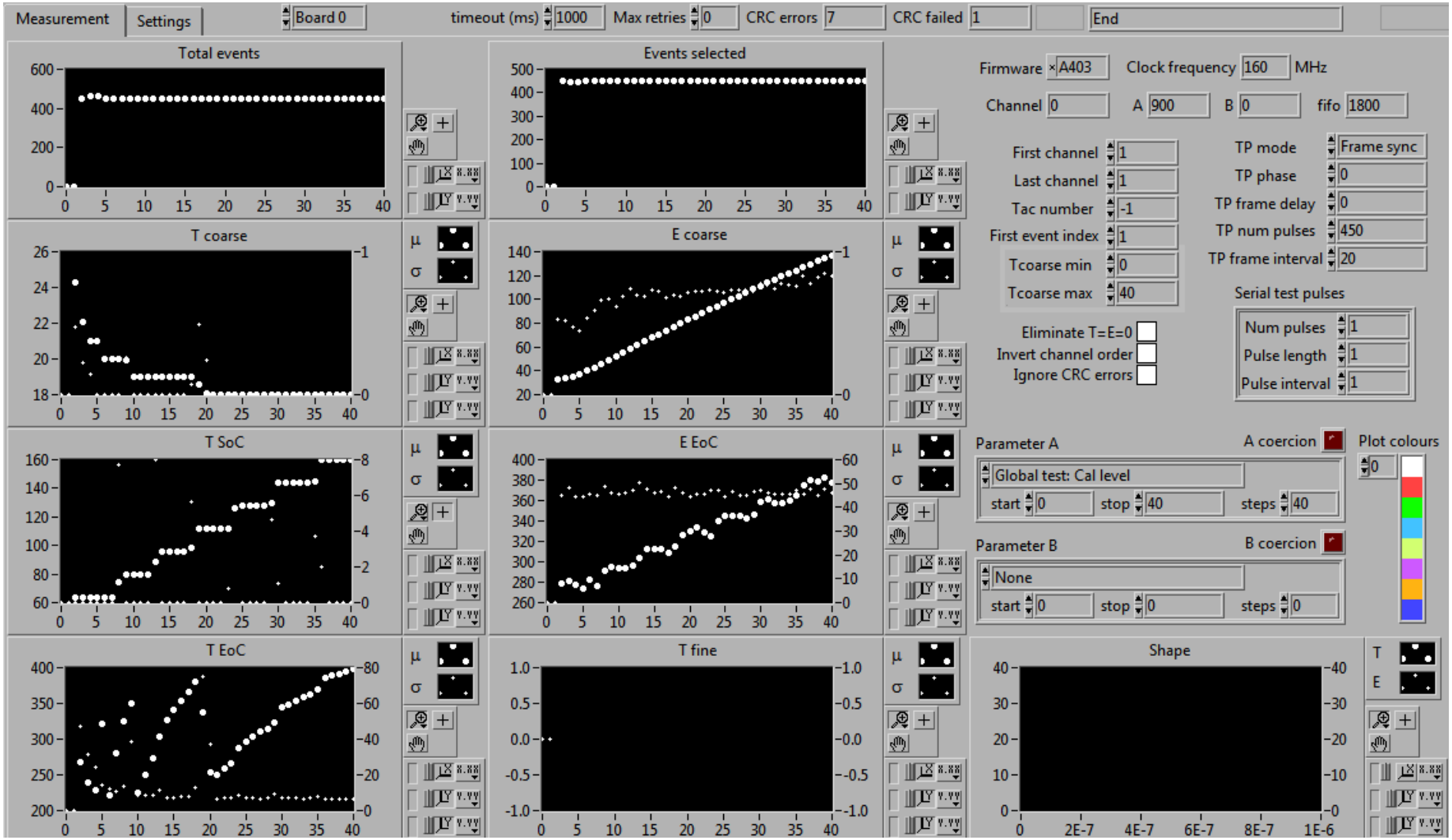
Configuration interface



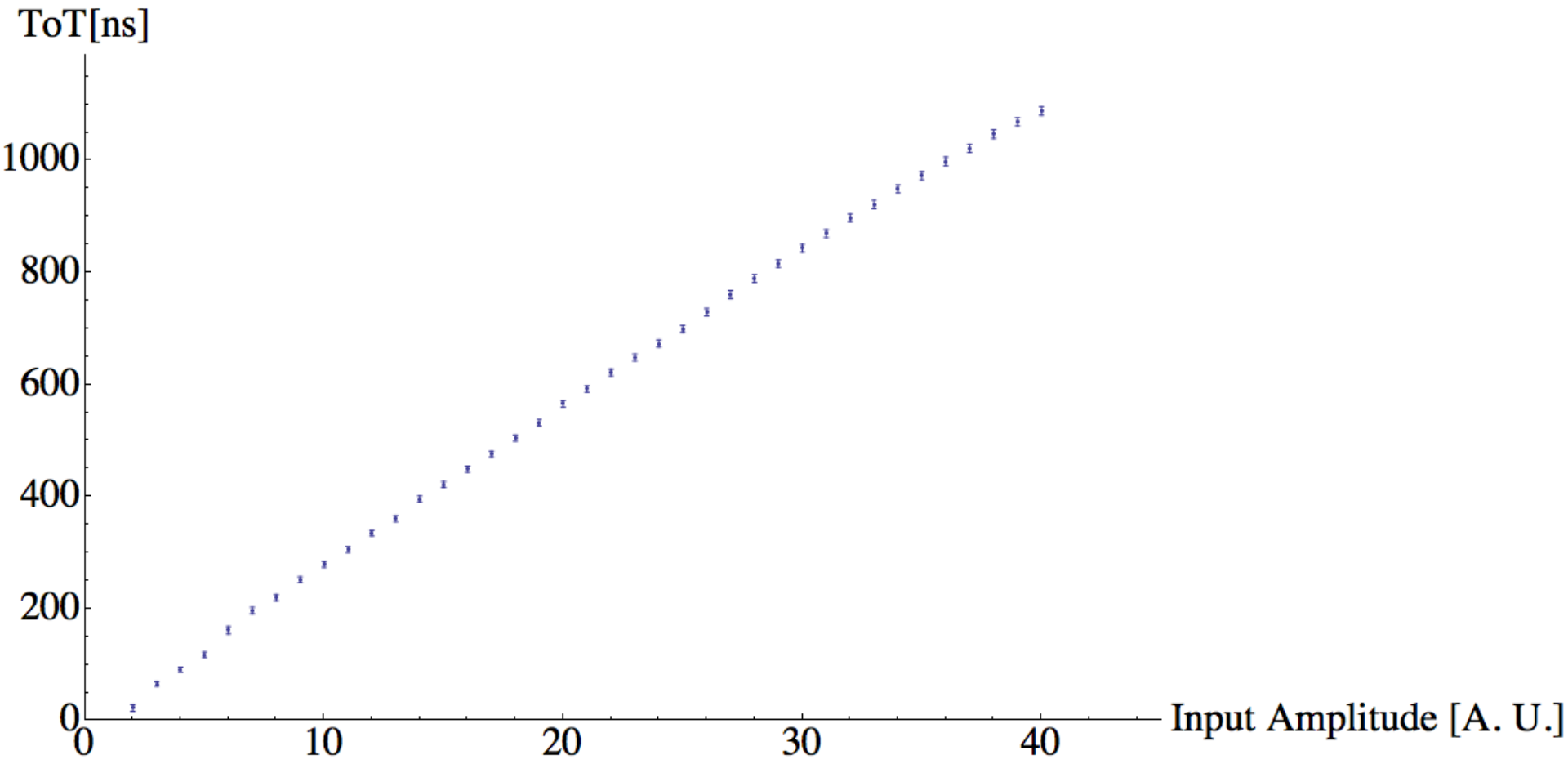
Measurements interface



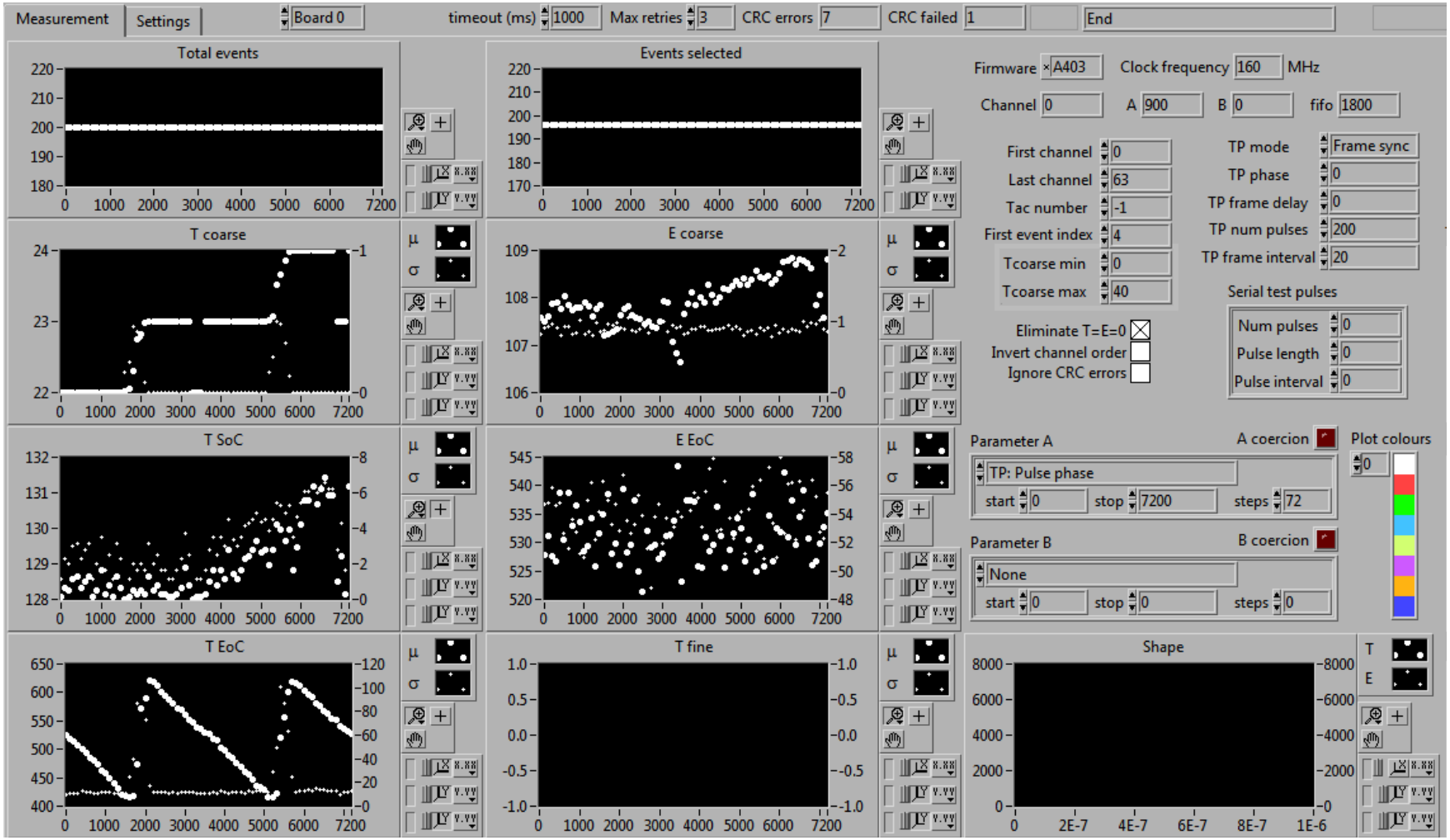
Preliminary FE linearity (1)



Preliminary FE linearity (2)

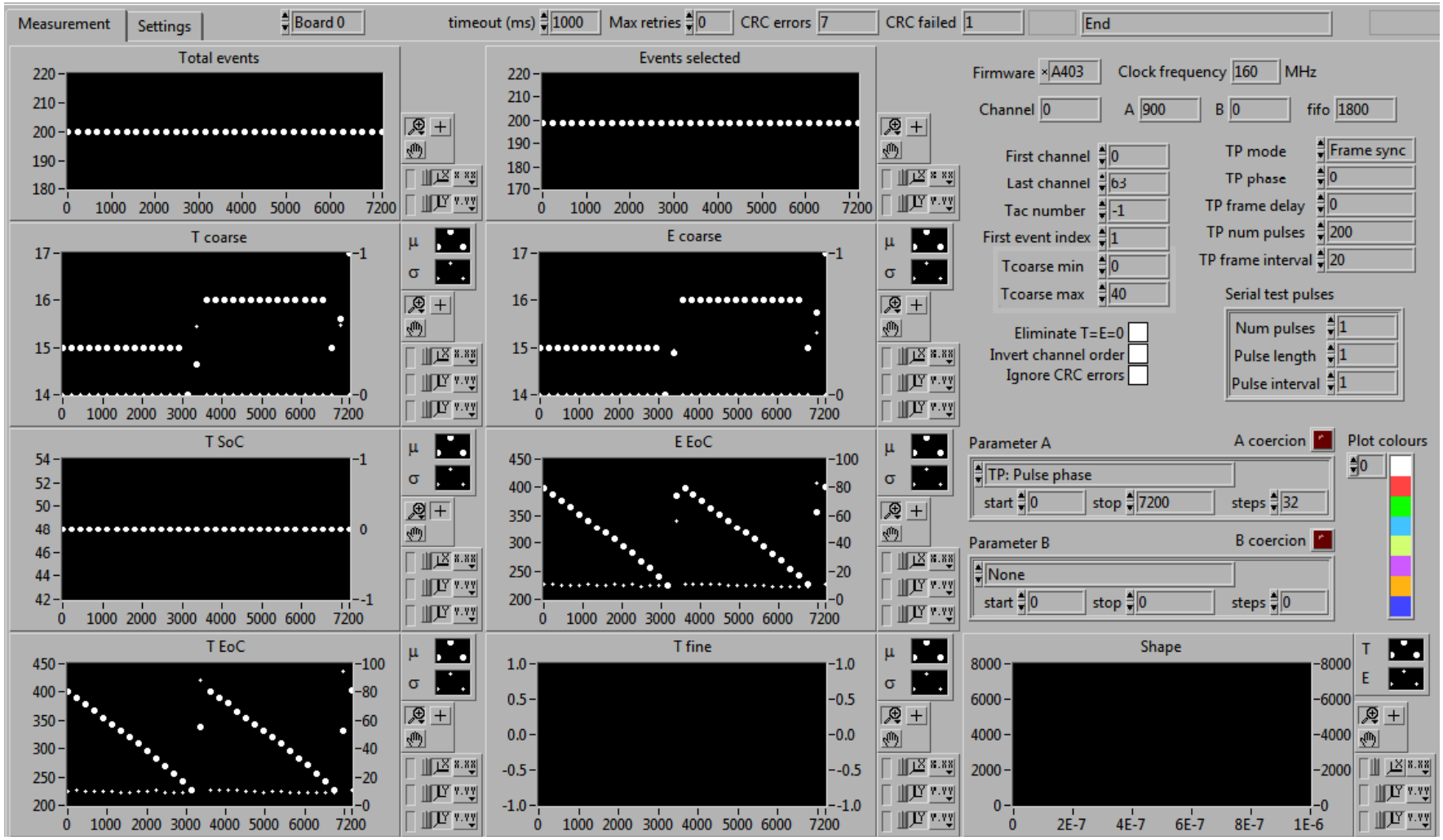


Preliminary TDC results (1)



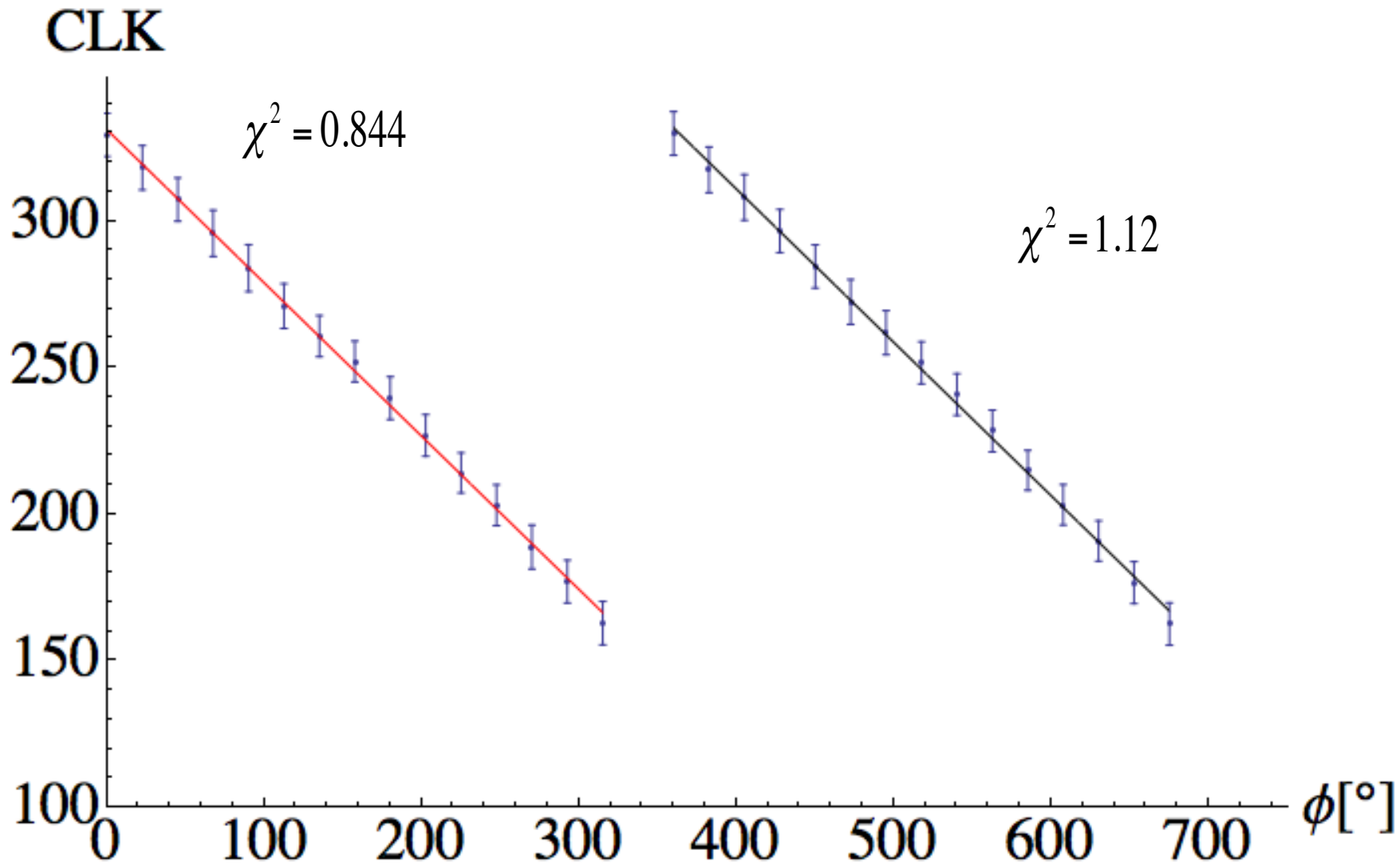
Input test pulses injected at the input of the Front End preamplifier

Preliminary TDC results (2)

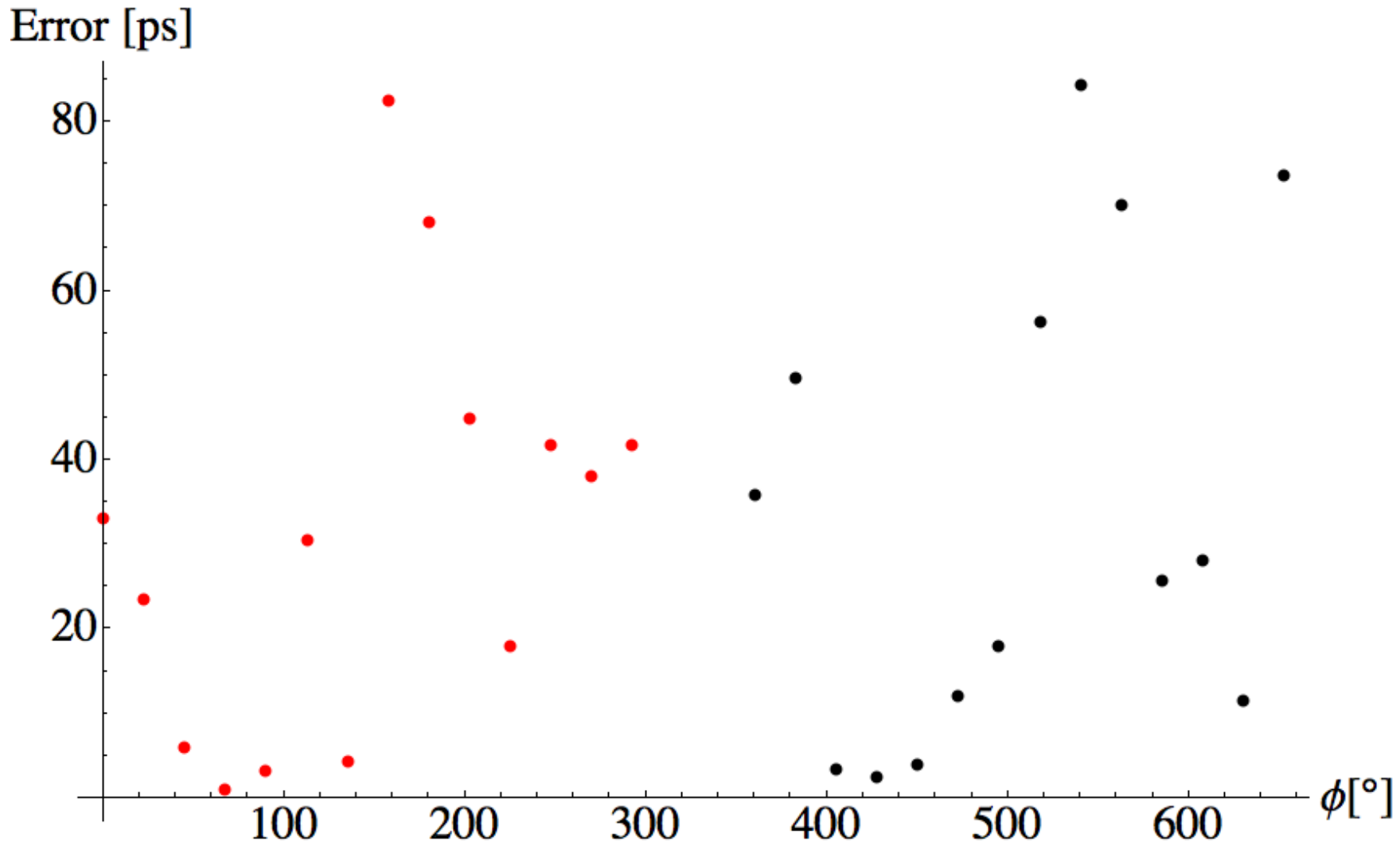


Input test pulse injected directly into the TDC

TDC linearity



TDC errors

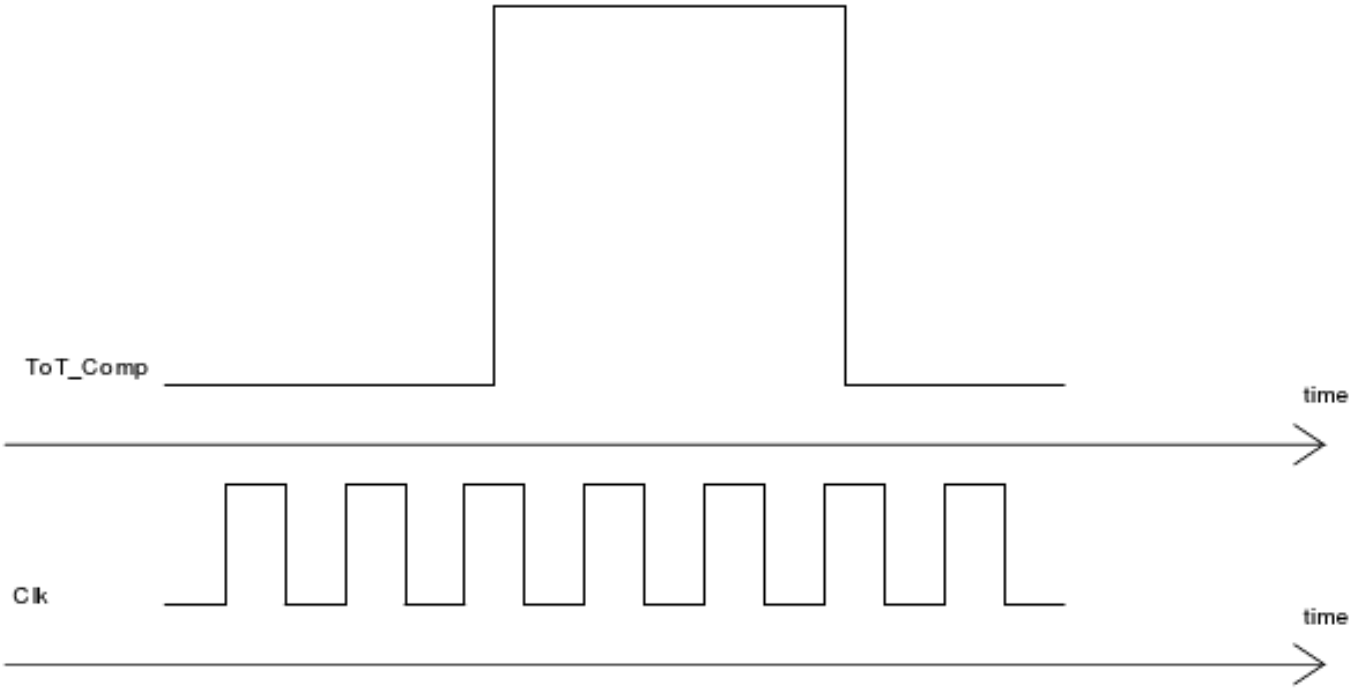


Conclusion

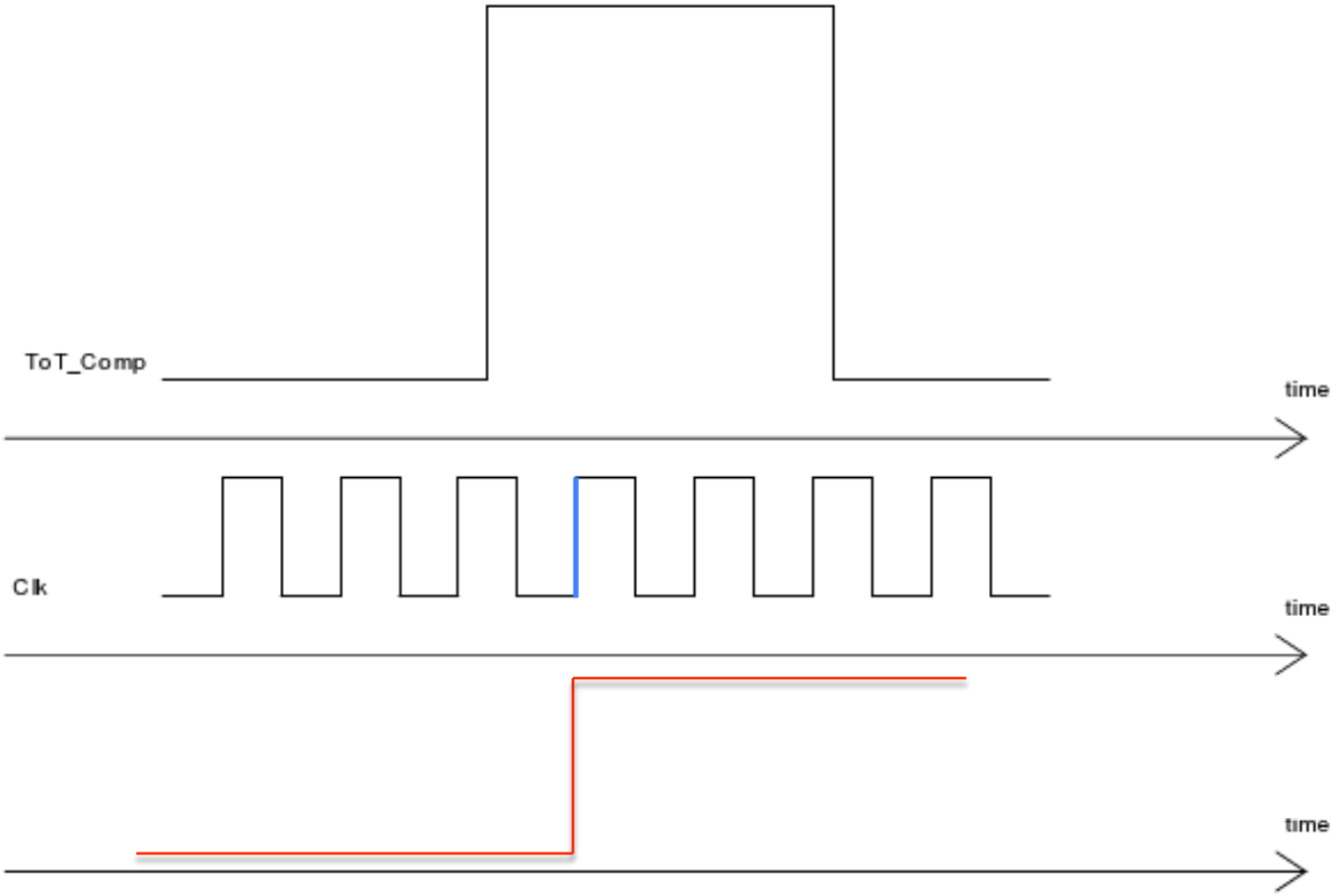
- PASTA is connected to the tests boards
- A complete readout system is under development
- PASTA characterization is started and the preliminary results are encouraging

Thank you for your attention

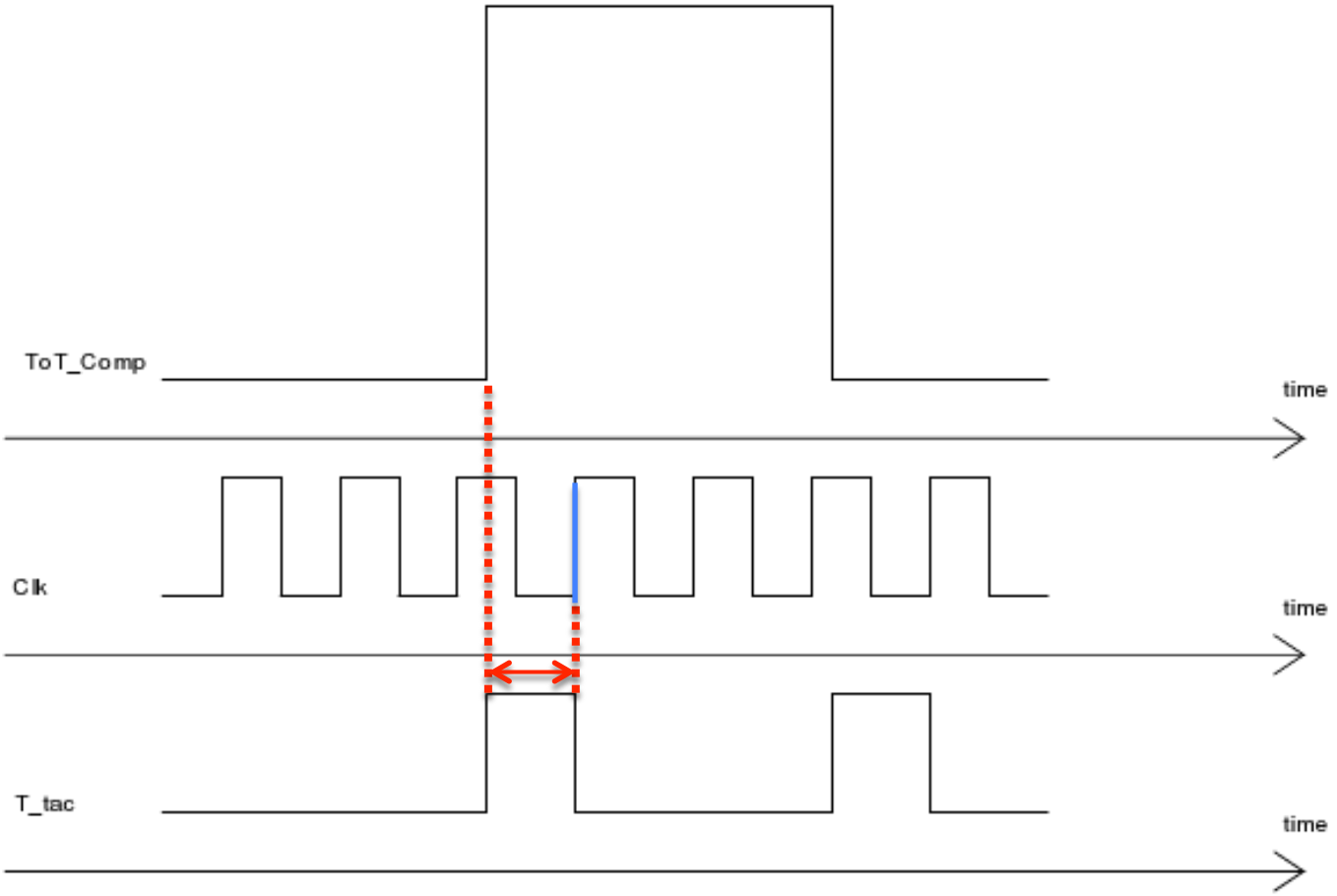
Timing



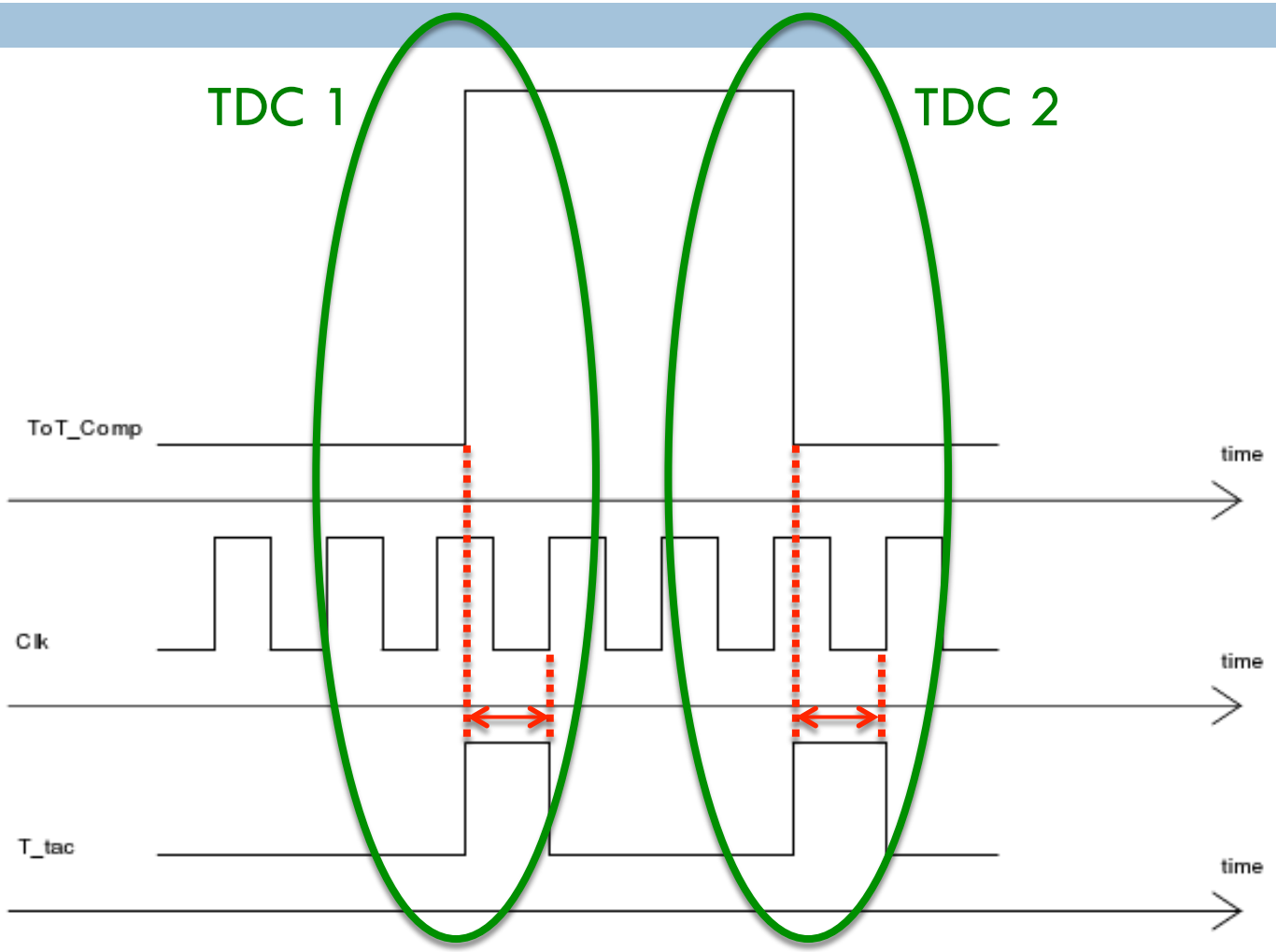
Timing



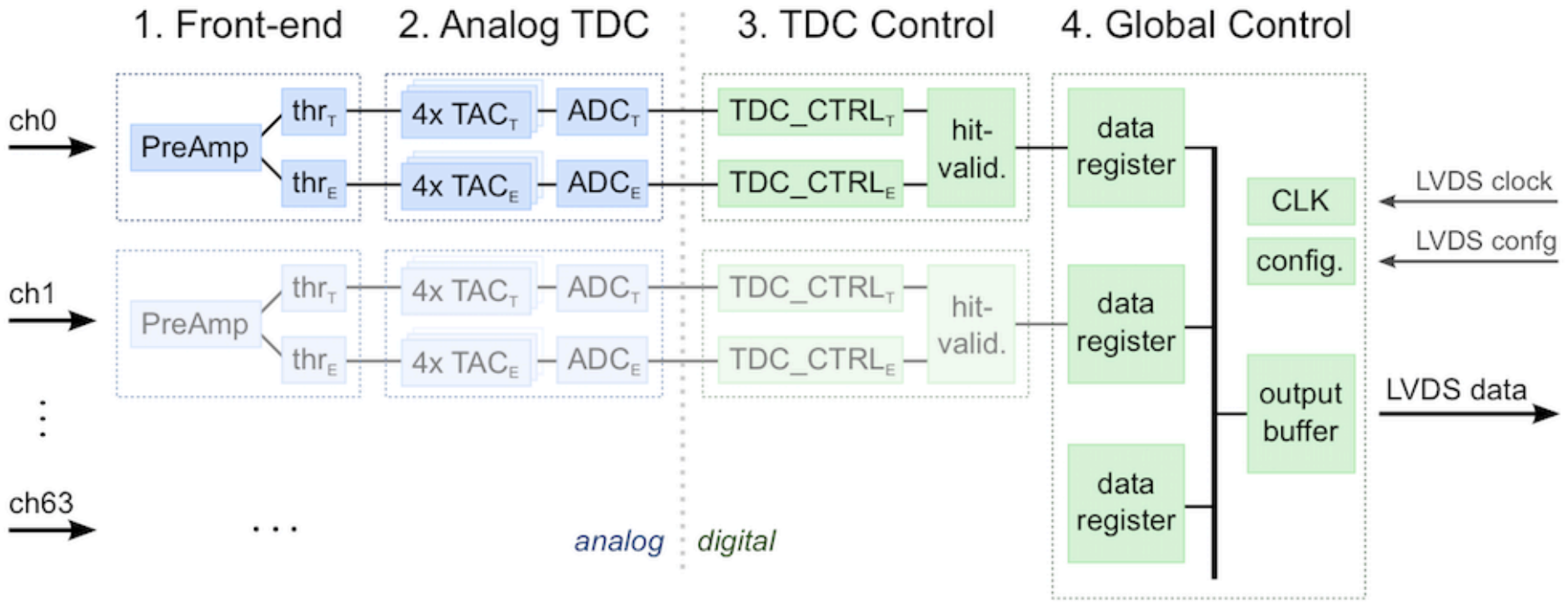
Timing



Timing



PASTA Architecture



Analog TDC Performance