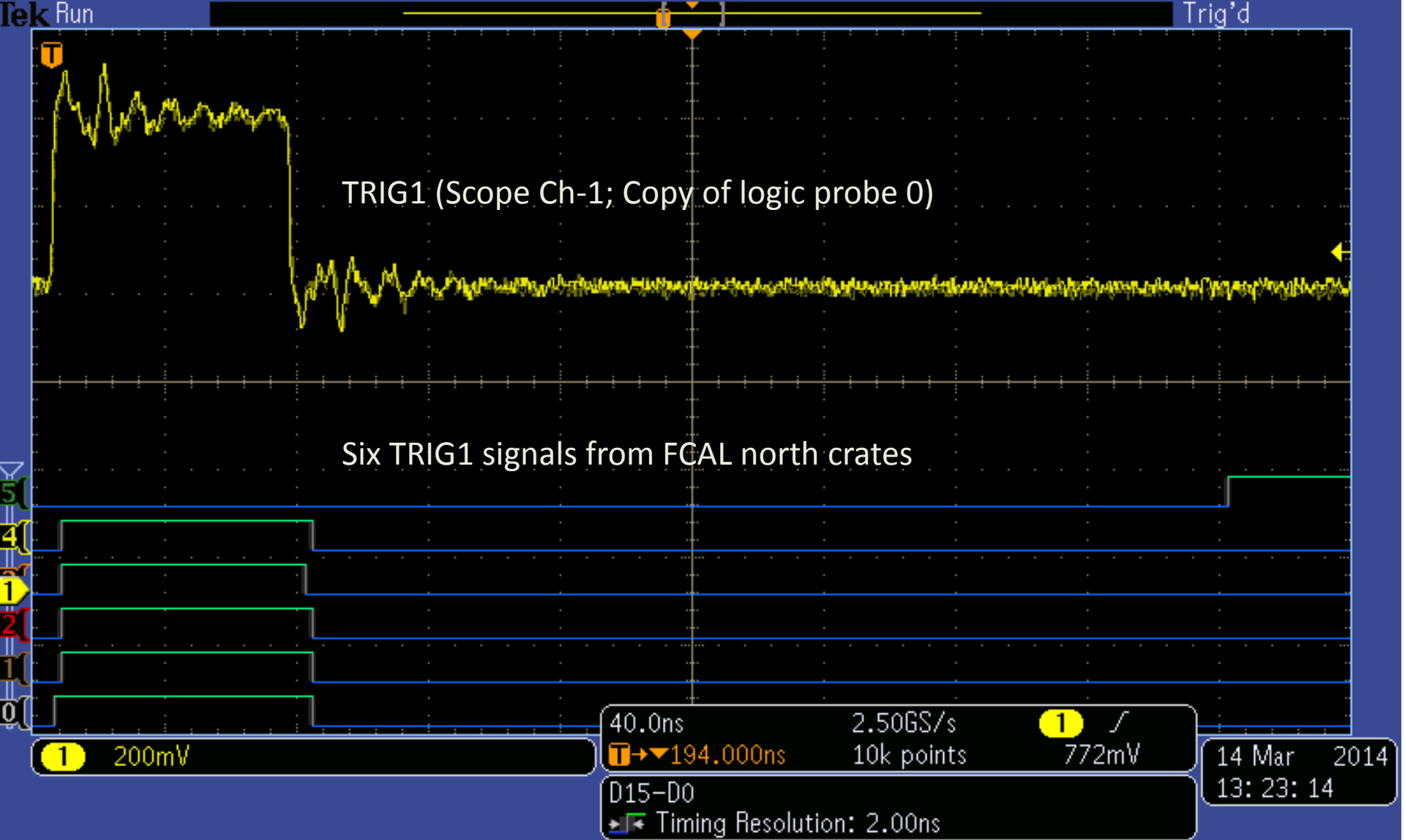
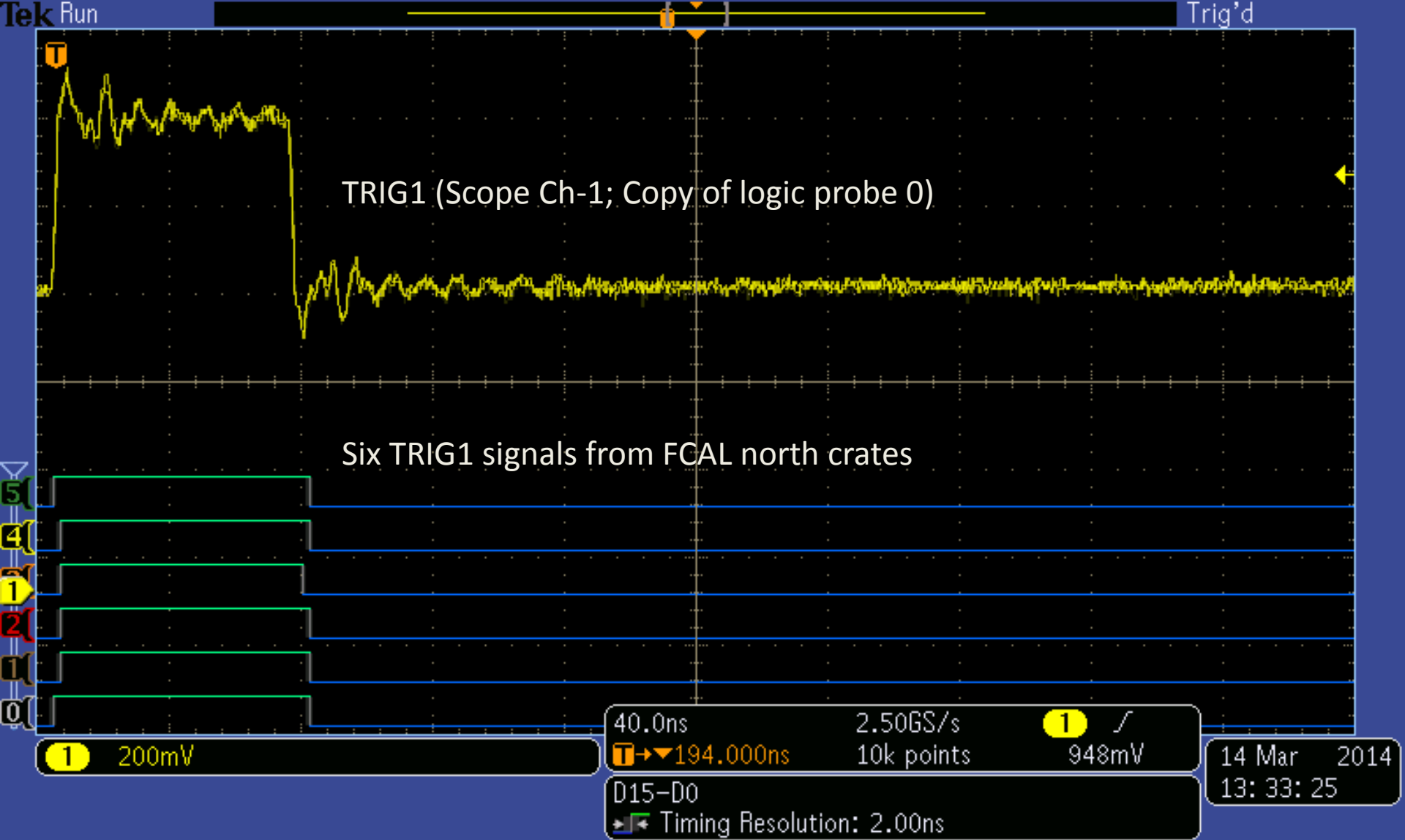


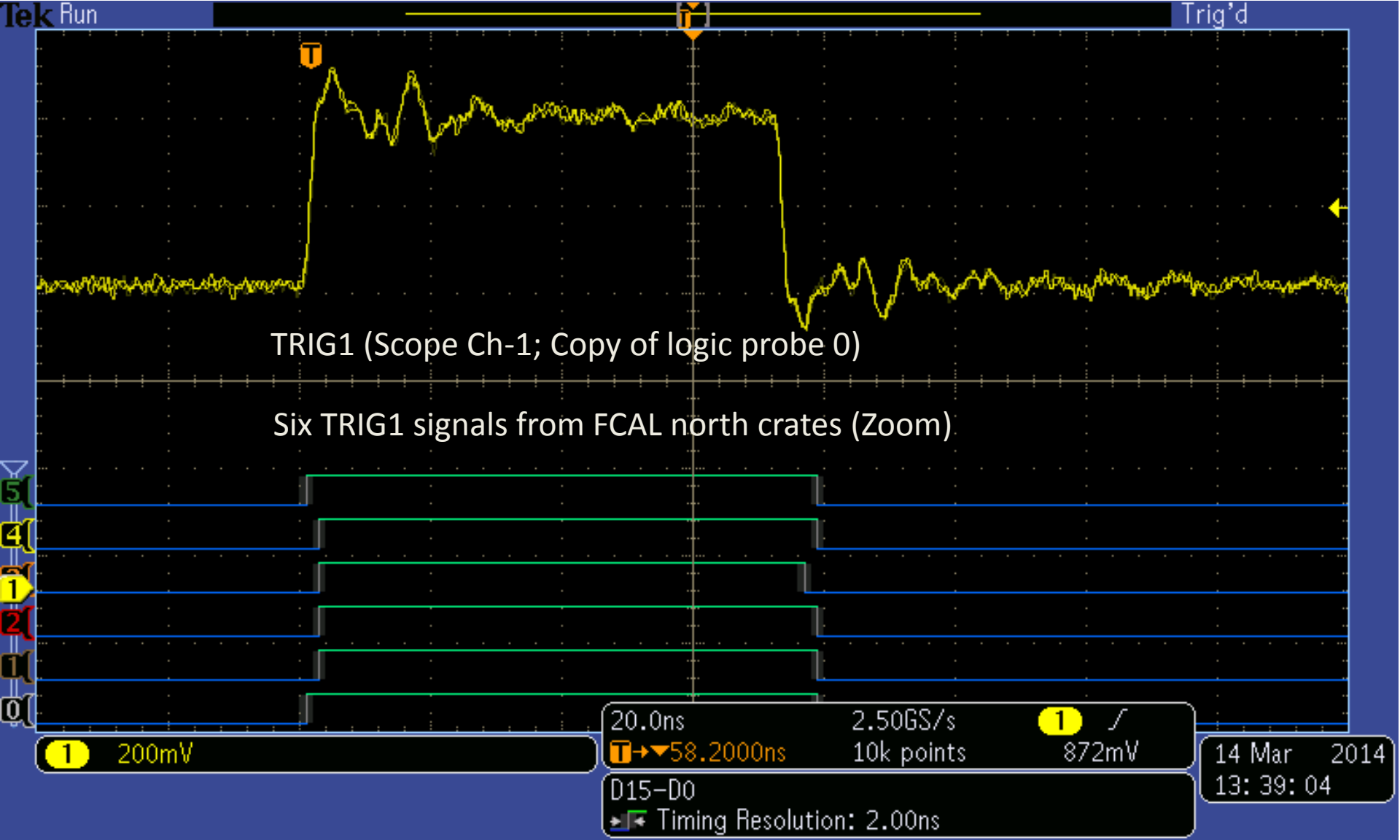
TRIG1 measurements on FCAL North
Problem TI in one crate?



Zoom in of TRIG1 alignment
Note problem with one of the TRIG1 signals
Why the extra delay??



Replaced TI – Signals are now in alignment for TRIG1



Replaced TI and all Trig1 signals are in alignment



Zoom in of TRIG1 alignment

lek Stop



Zoom in of TRIG1 alignment



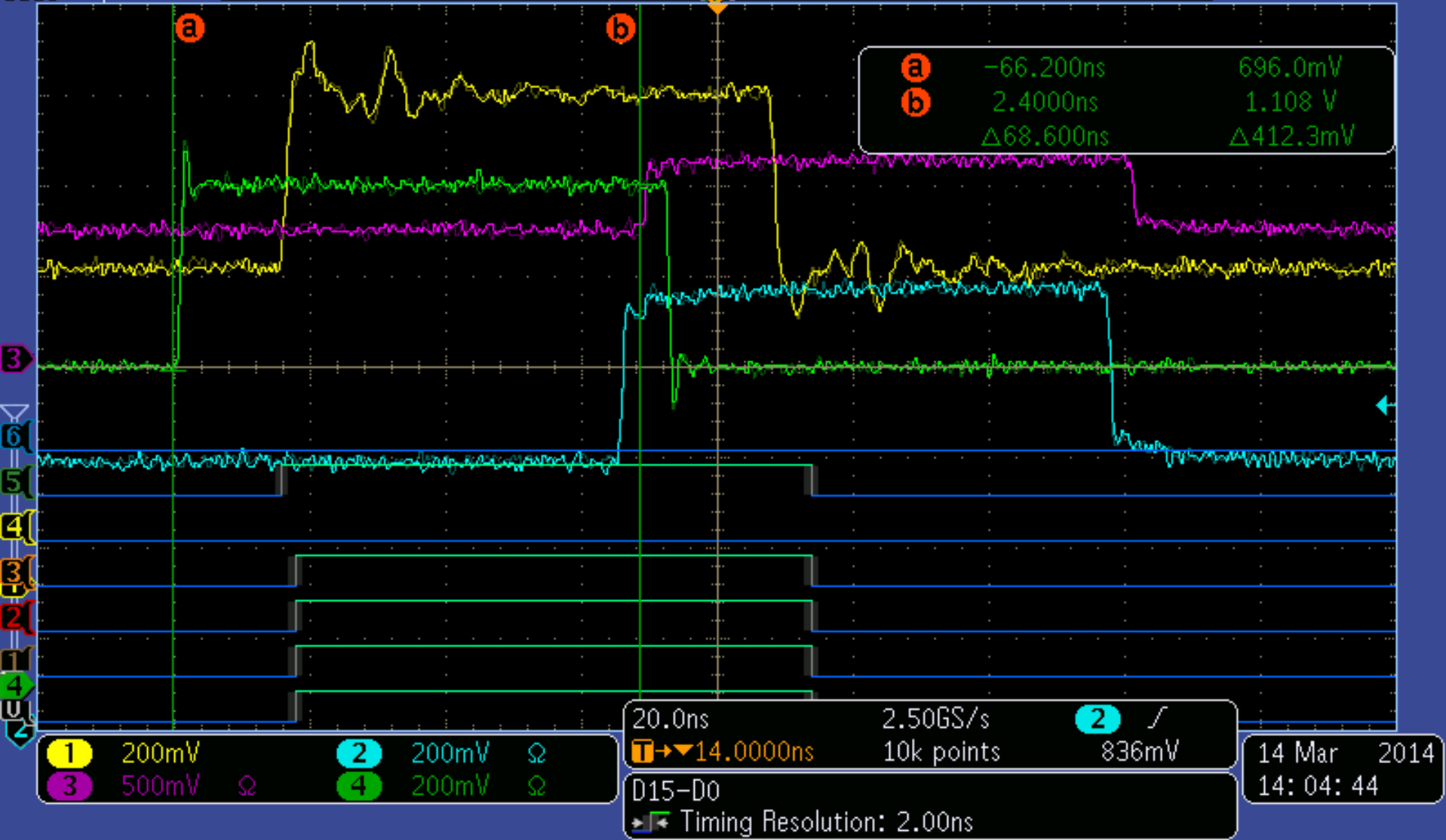
Zoom in of TRIG1 alignment

O'scope digital logic probe used for up to 8 signals

Note jitter uncertainty is shown with grey area

O'scope is triggered with probe on 1st crate's TRIG1 signal

lek Stop

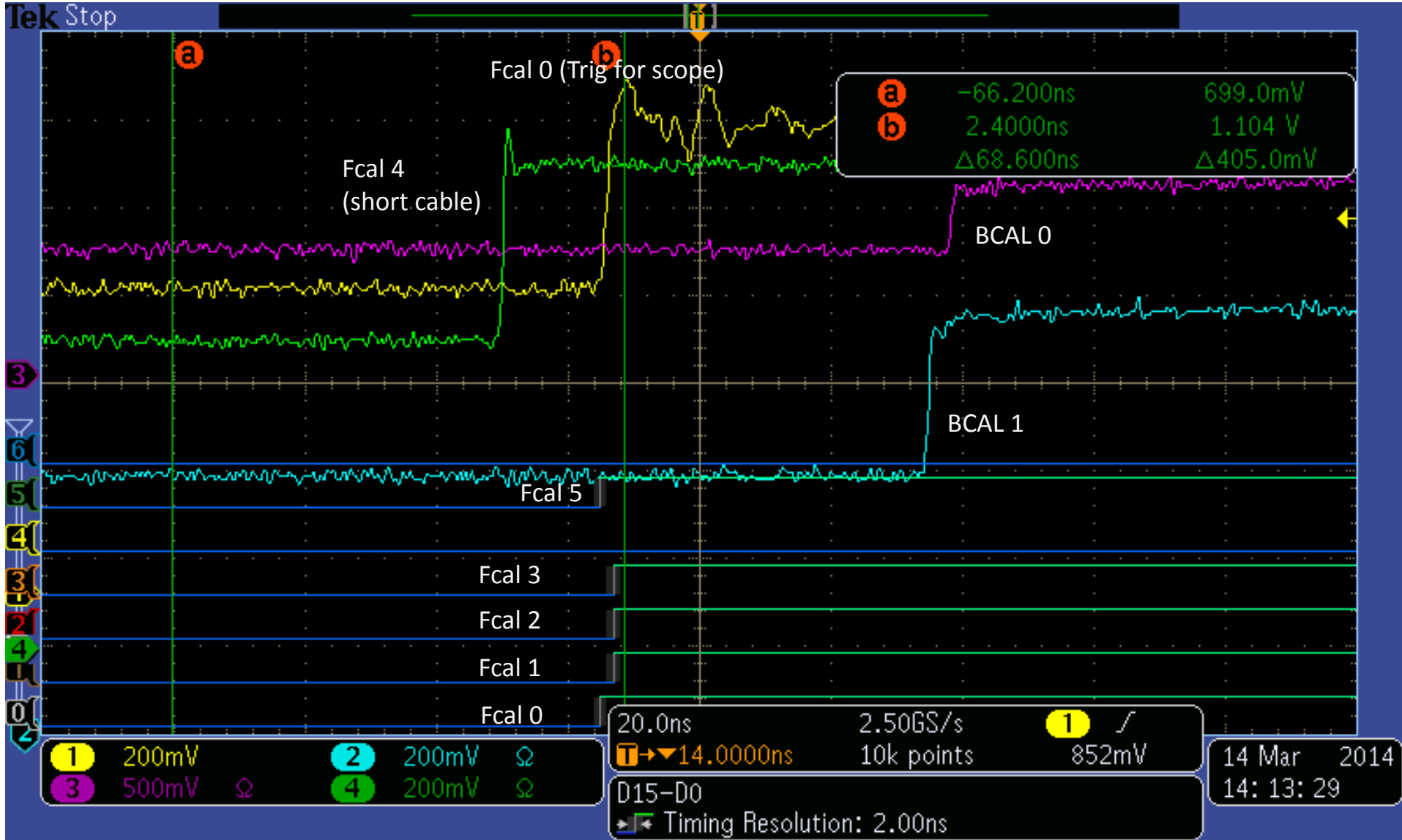


BCAL and FCAL TRIG1 signals --- OK!



- 2: BCAL south-1
- 3: BCAL south-2
- 4: FCAL north-2(short cable)
- 1: FCAL north-1(Probe)

TRIG1 signals from SD front panel



SYNC signals for FCAL north crates and two(2) BCAL south crates

Alignment looks fine. Note additional delay for BCAL signals matches extra cable length needed for measurement.



10ns SYNC pulse from SD front panel
 Only occurs at end of CODA "download"
 "Download" reloads the TI firmware and apparently this pulse is created when the FPGA is done loading. Not a serious issue, but this pulse occurs every time the TI is 'downloaded'