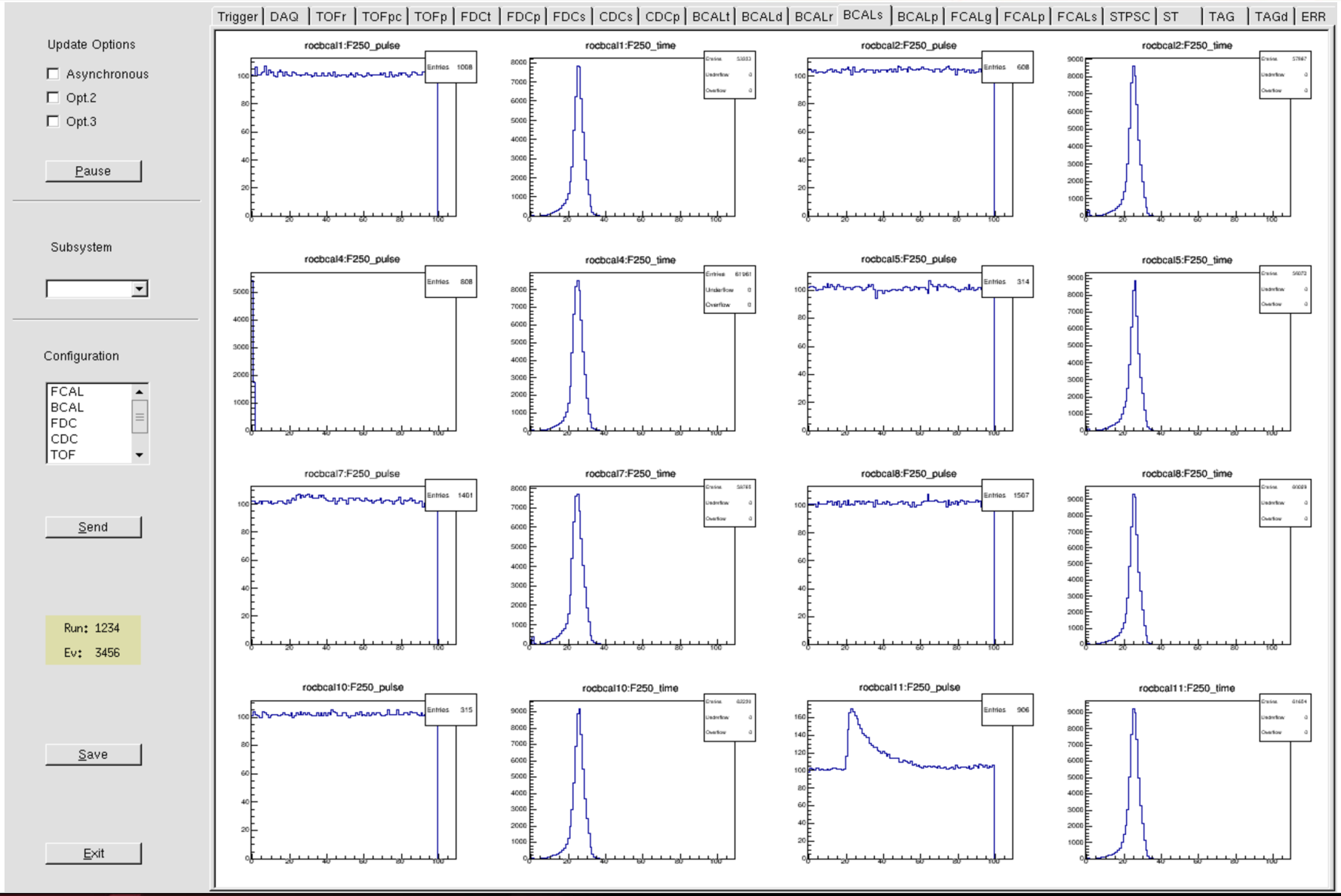
DAQ status

S.Furletov
RC meeting
12/17/2014

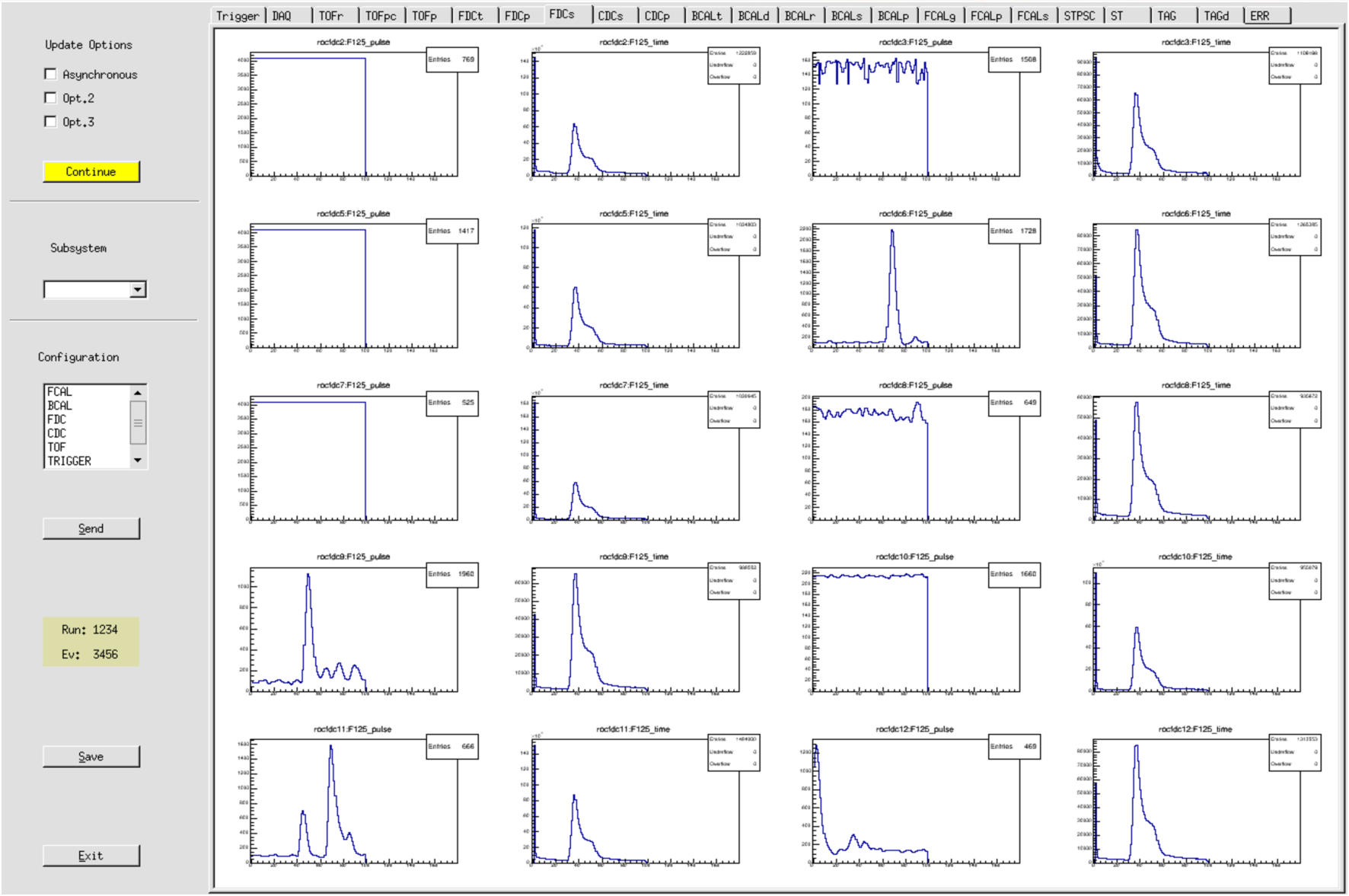
Outline

- DAQ monitor
- FADC calibration
- DAQ performance

DAQ monitor / BCAL signal

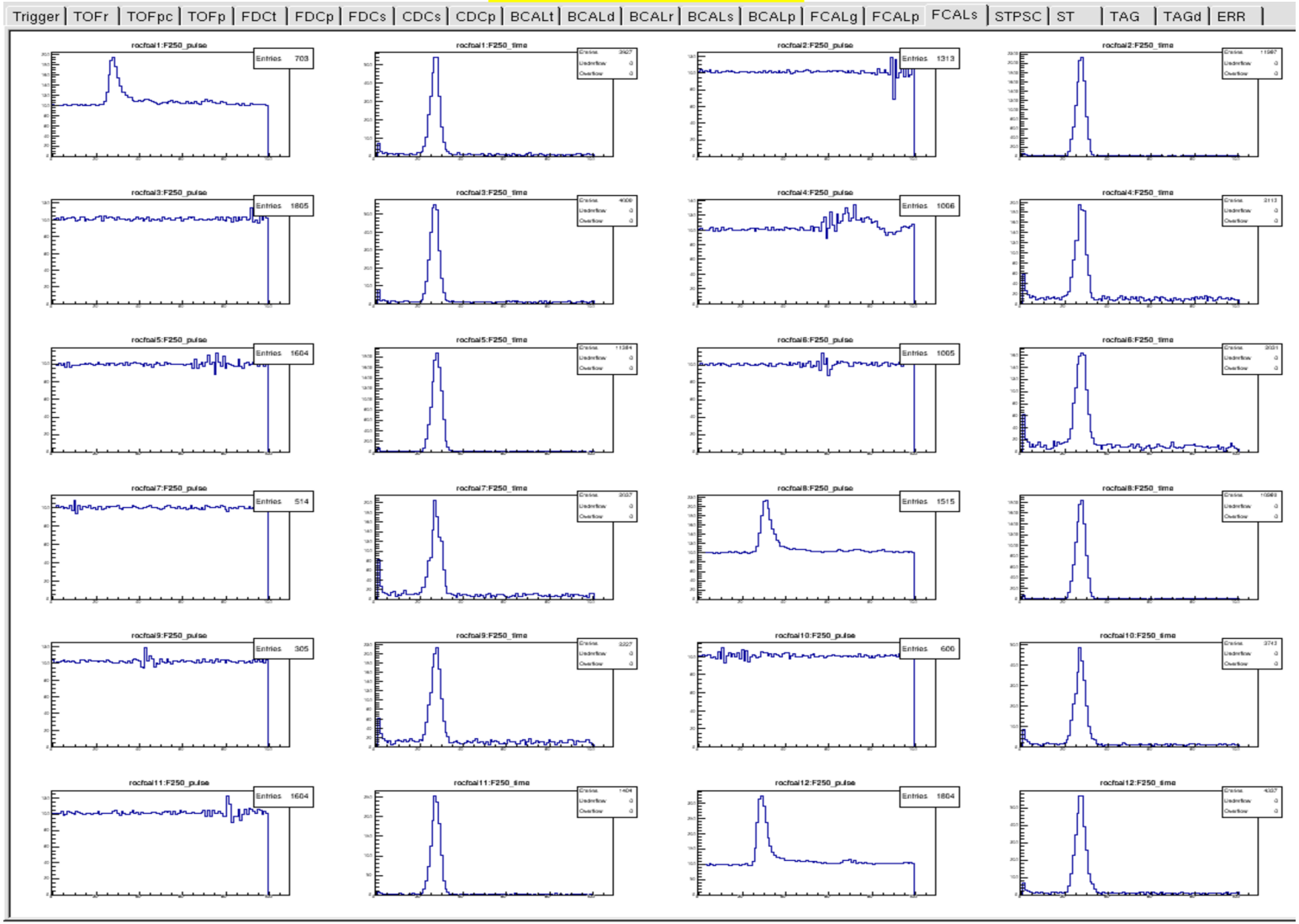


DAQ monitor / FDC signals



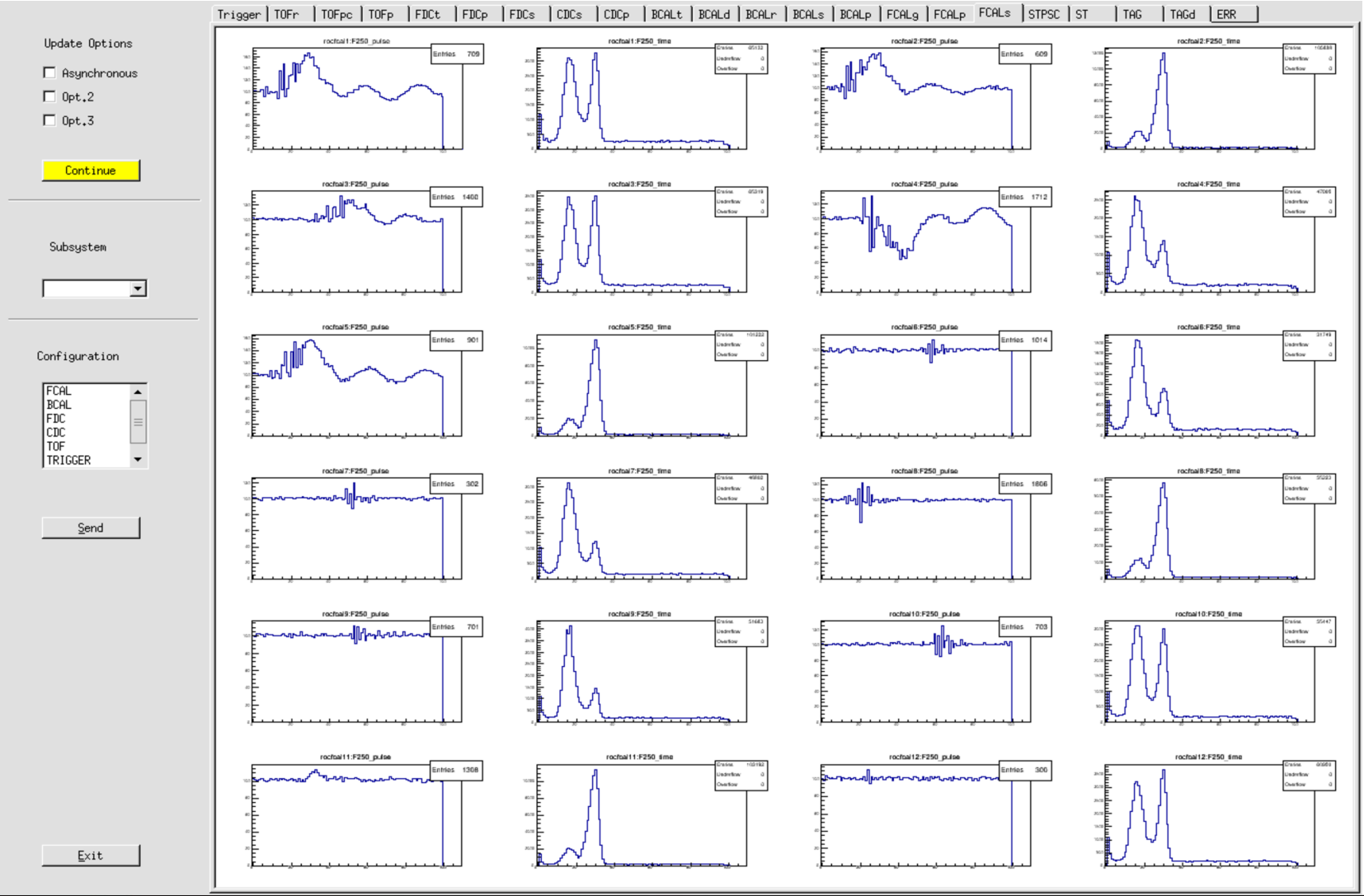
DAQ monitor / FCAL signal

High Threshold

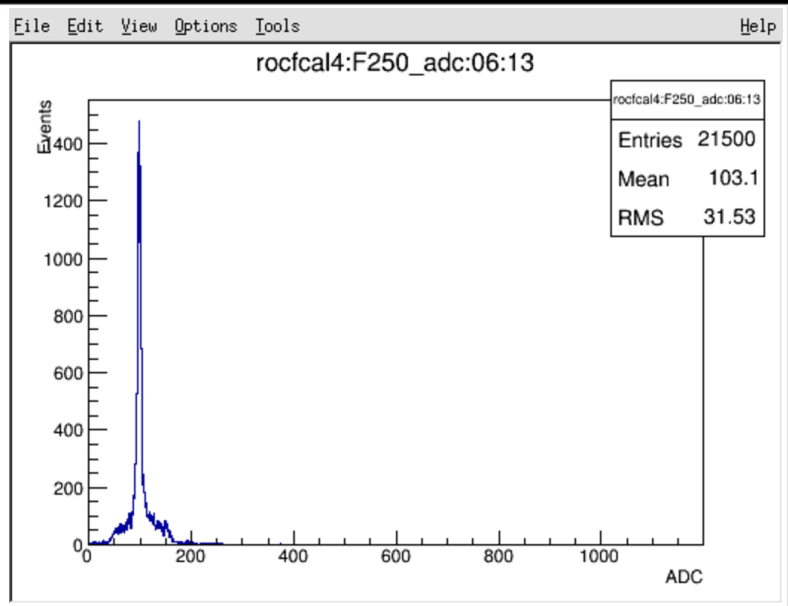


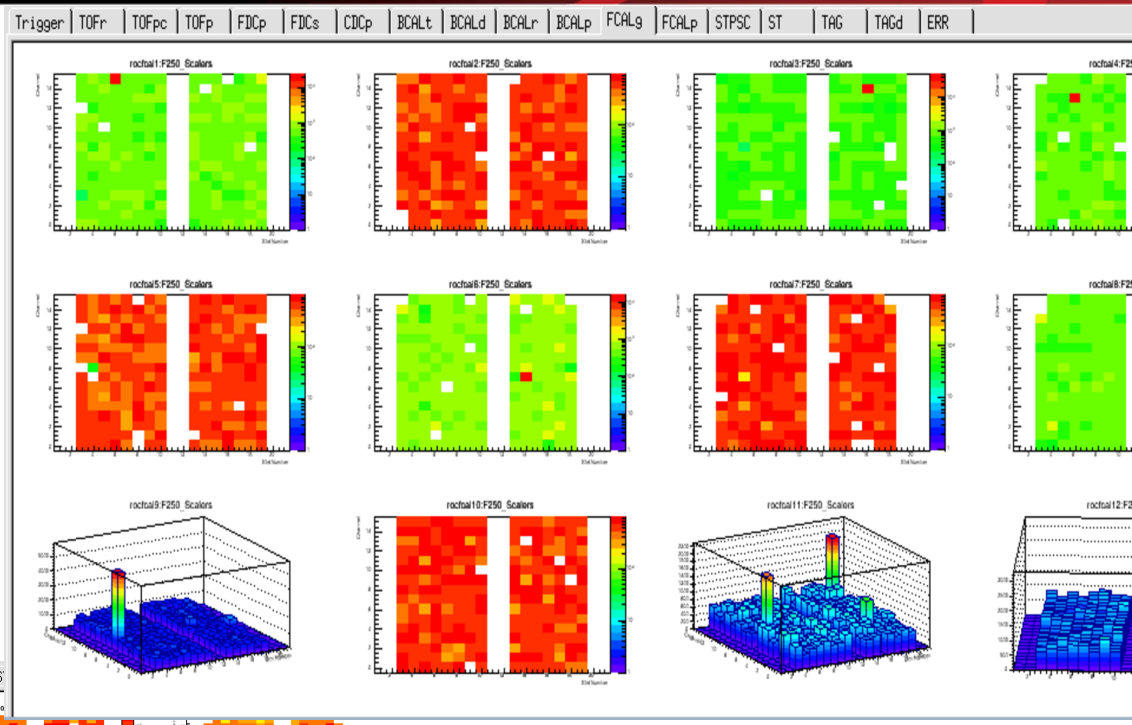
DAQ monitor / FCAL signal

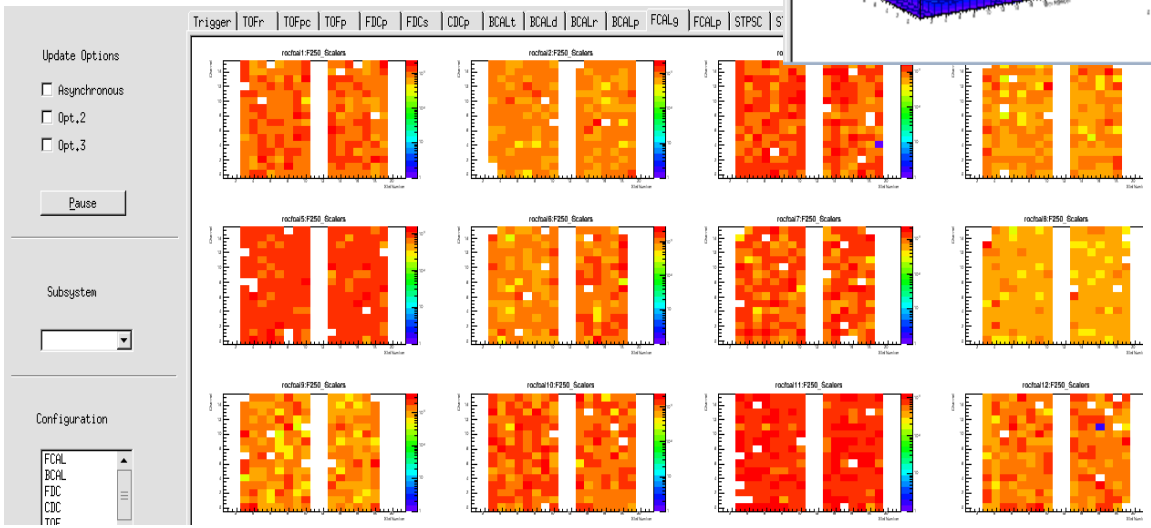
Low Threshold



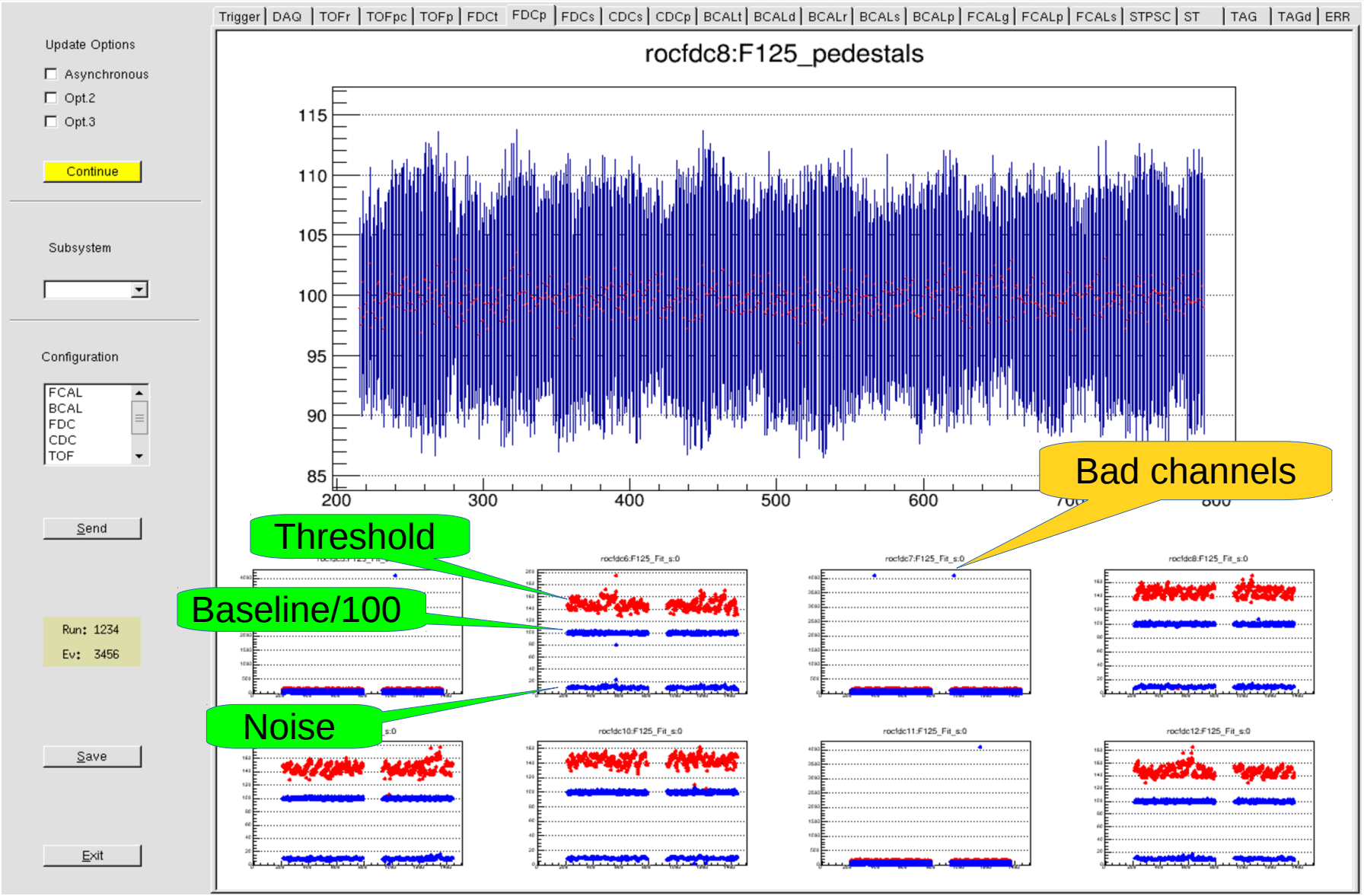
DAQ monitor / FCAL noise



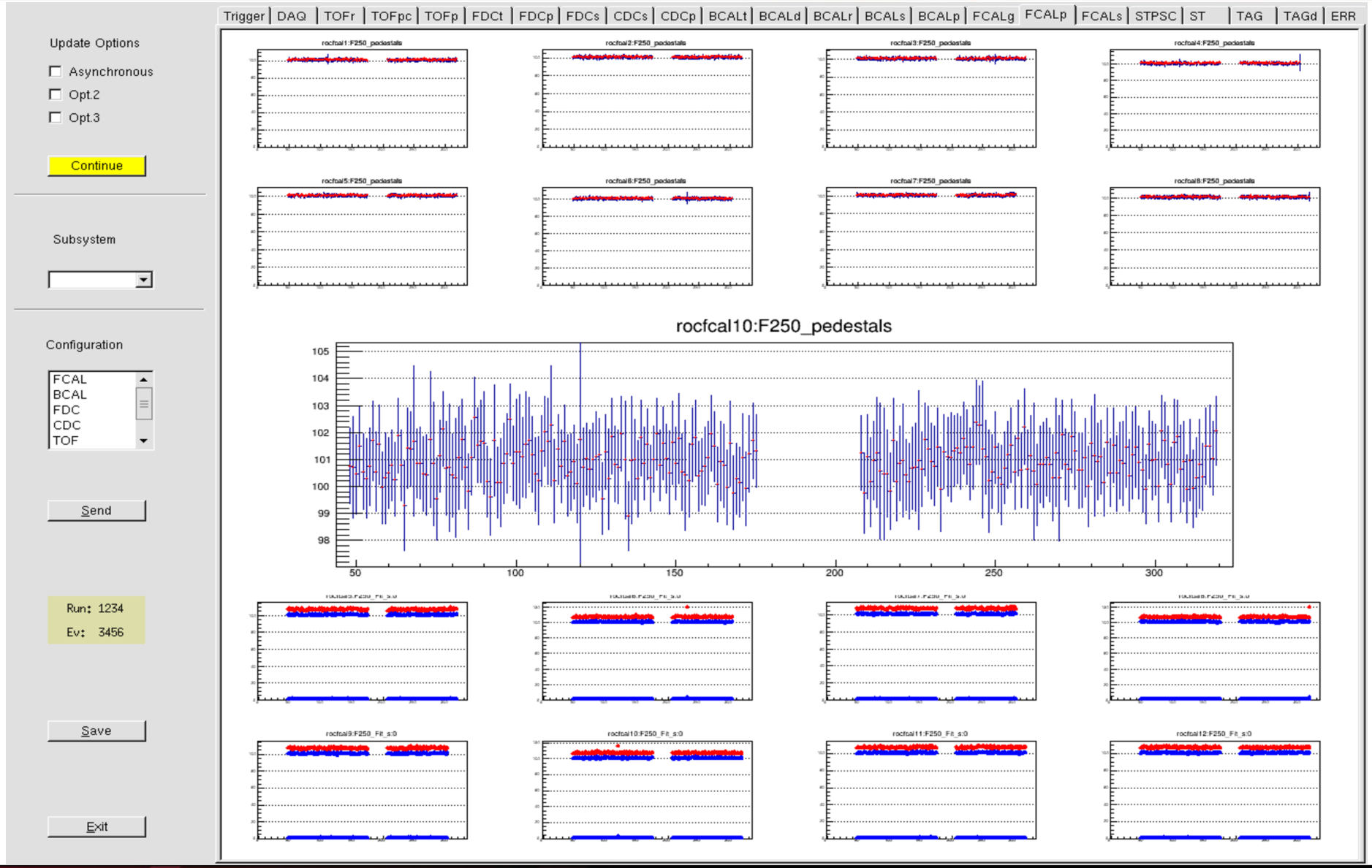




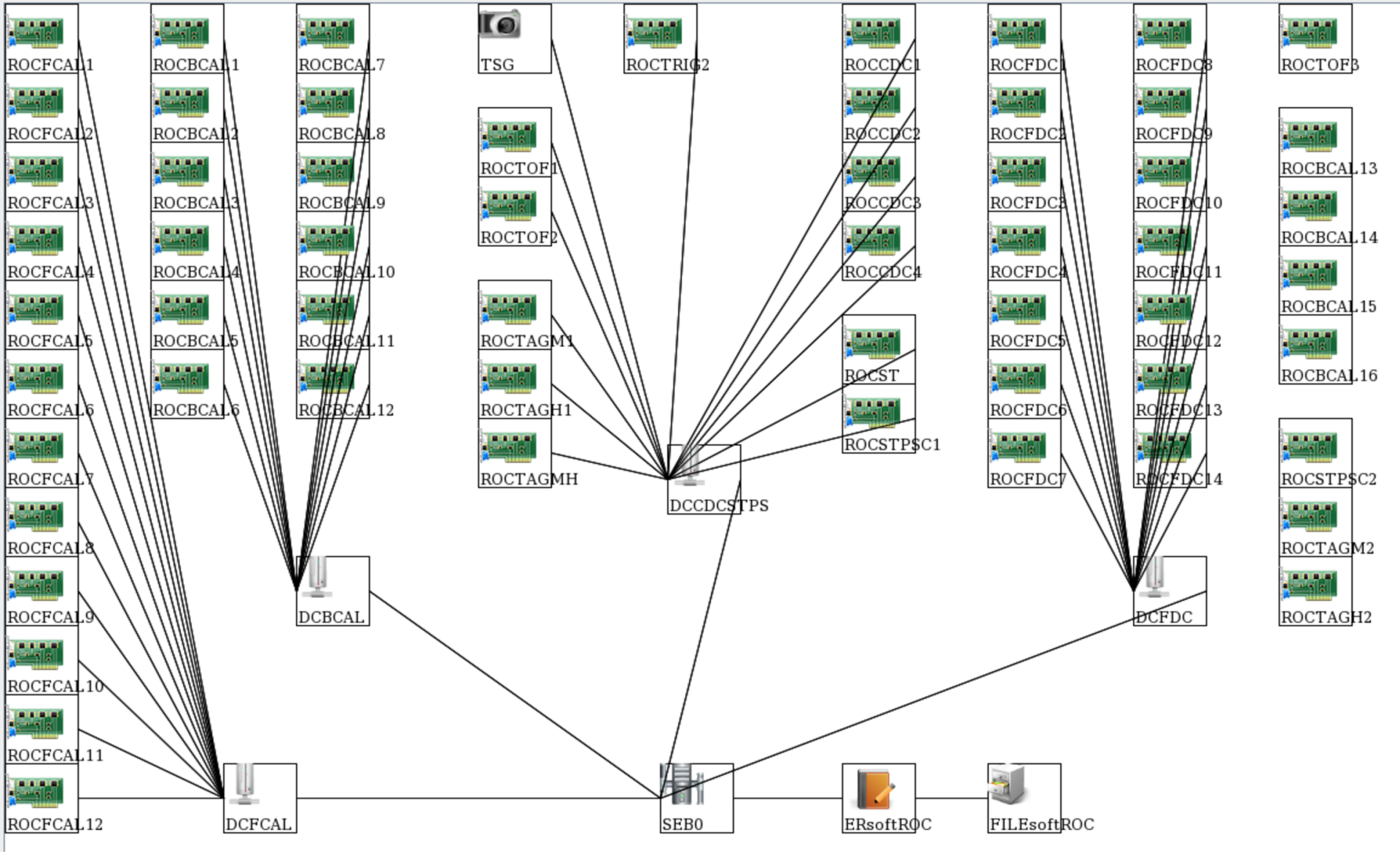
FADC calibration / FDC / fa125



FADC calibration / FCAL / fa250



DAQ structure

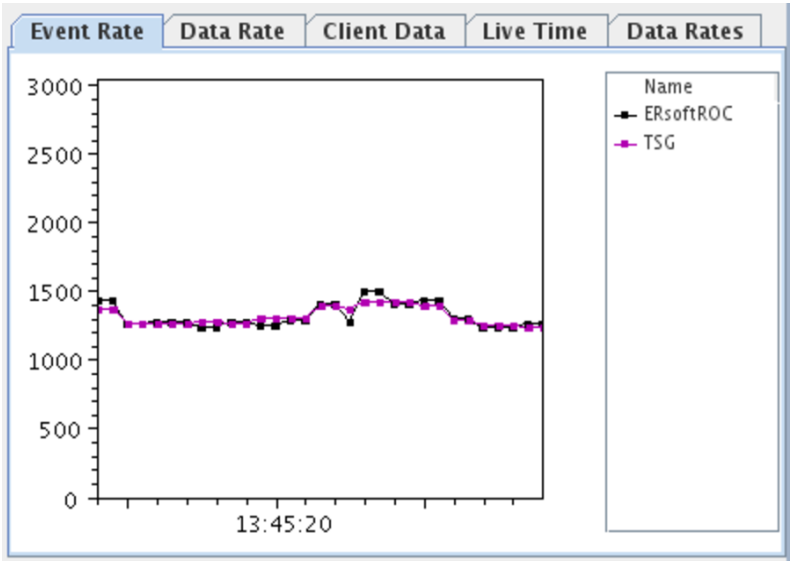


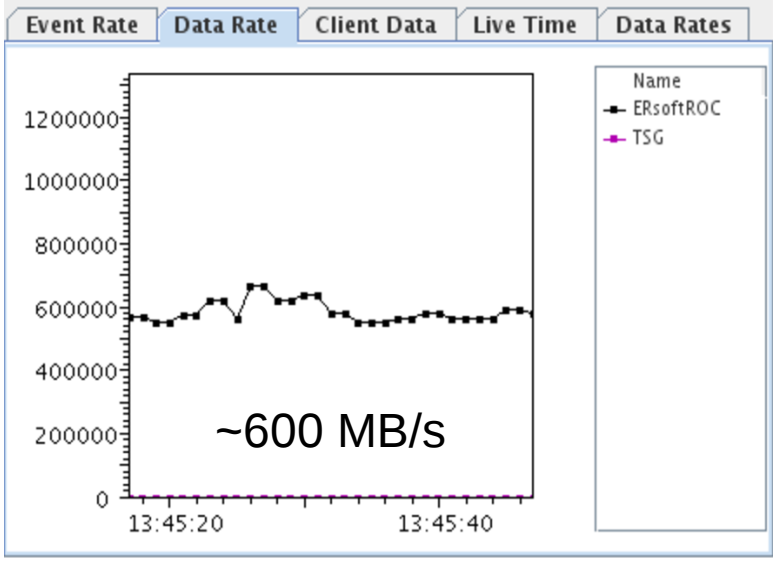
Performance

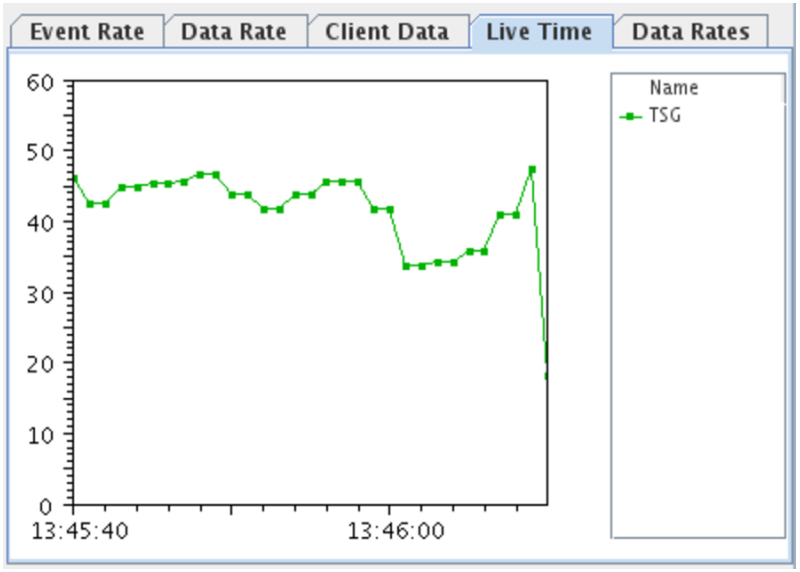
Beam current ~40 – 50 nA
FCAL: Energy=1500 Trig.THR=150 READ_THR=104
BCAL: Energy=2000 Trig.THR=120 READ_THR=105
Setup: hd_all.tsg-single

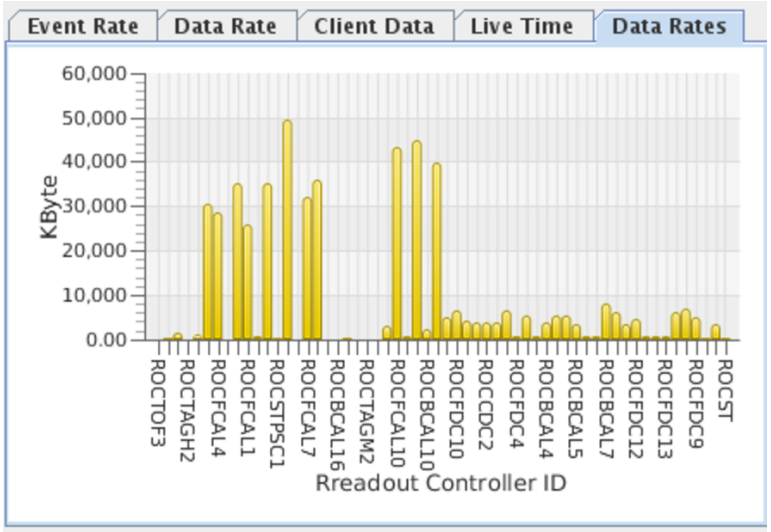
Trigger	Run	Event rate	Data rate	Live time
fcal_m8	2096	~1500 Hz	~600 MB/s	50%
fcal_m7	2097	~2000 Hz	~150 MB/s	65%
bcal_m8	2098	~1200 Hz	~220 MB/s	55%
bcal_m7	2099	~1500 Hz	100 MB/s	70%
fcal_bcal_m8	2100	~1500 Hz	700 MB/s	45%
fcal_bcal_m7	2101	~2000 Hz	150 MB/s	60%

Performance

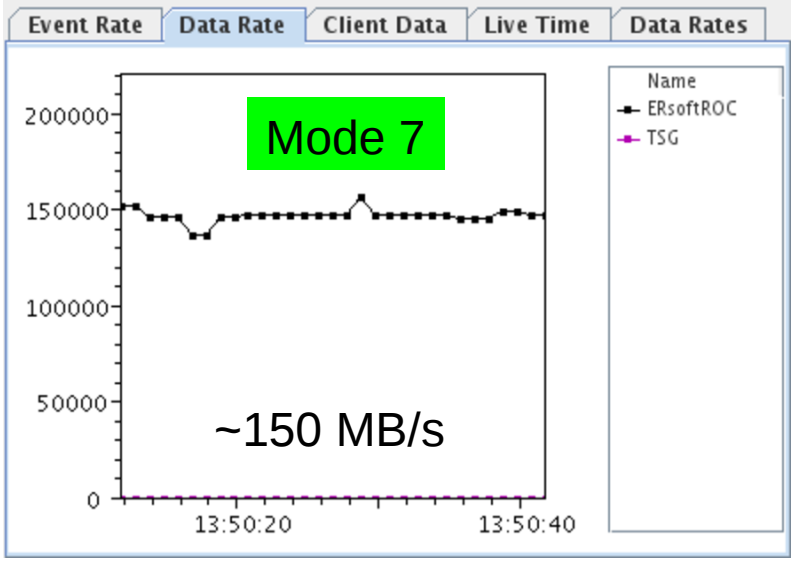


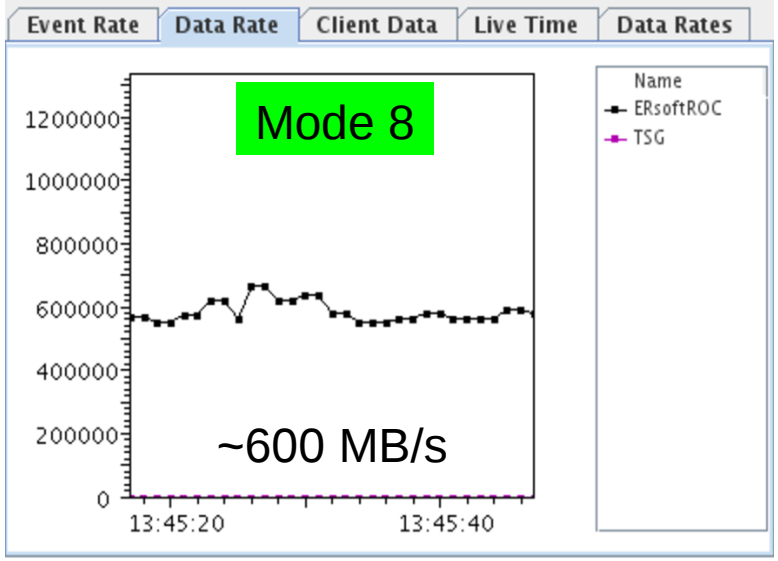


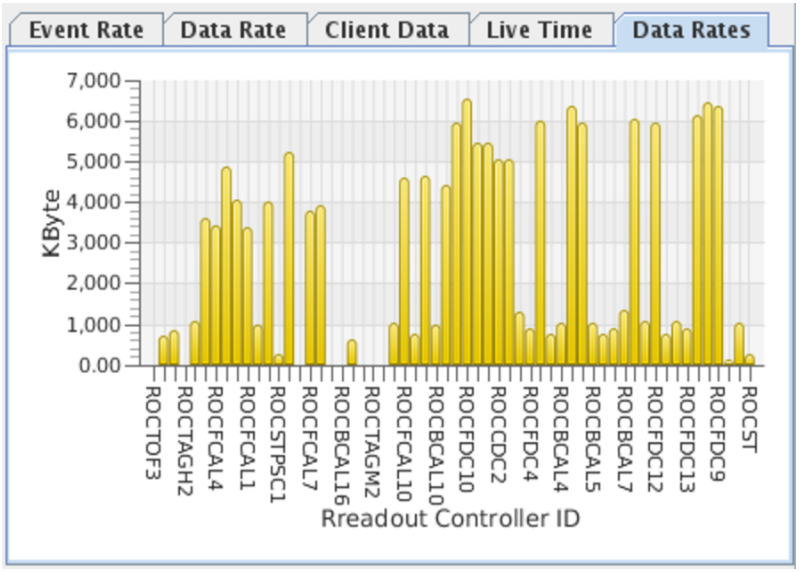


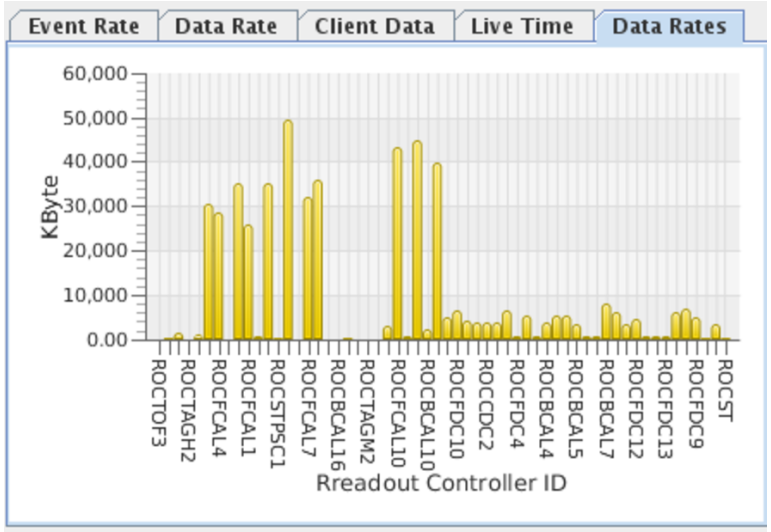


Performance

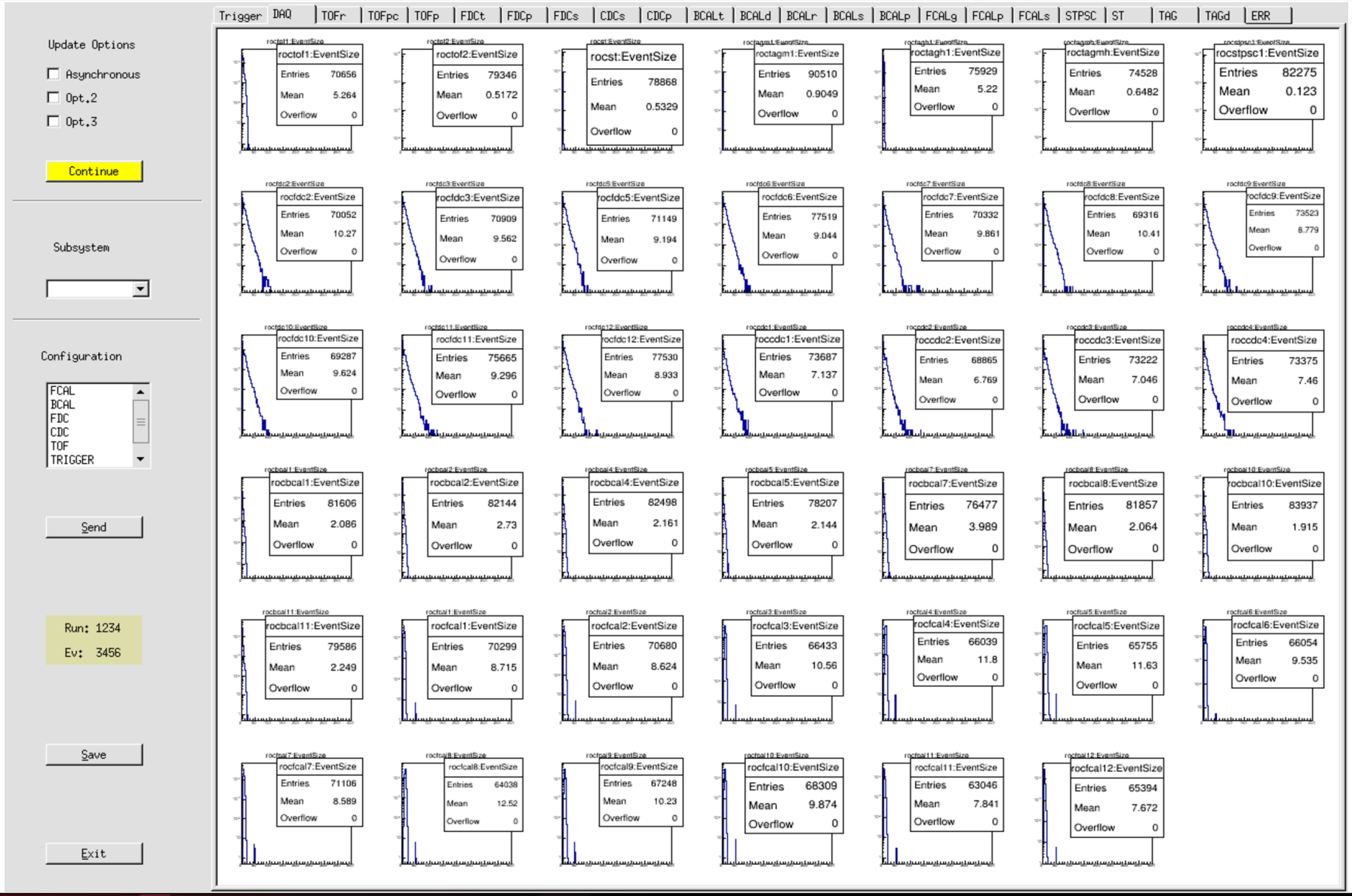




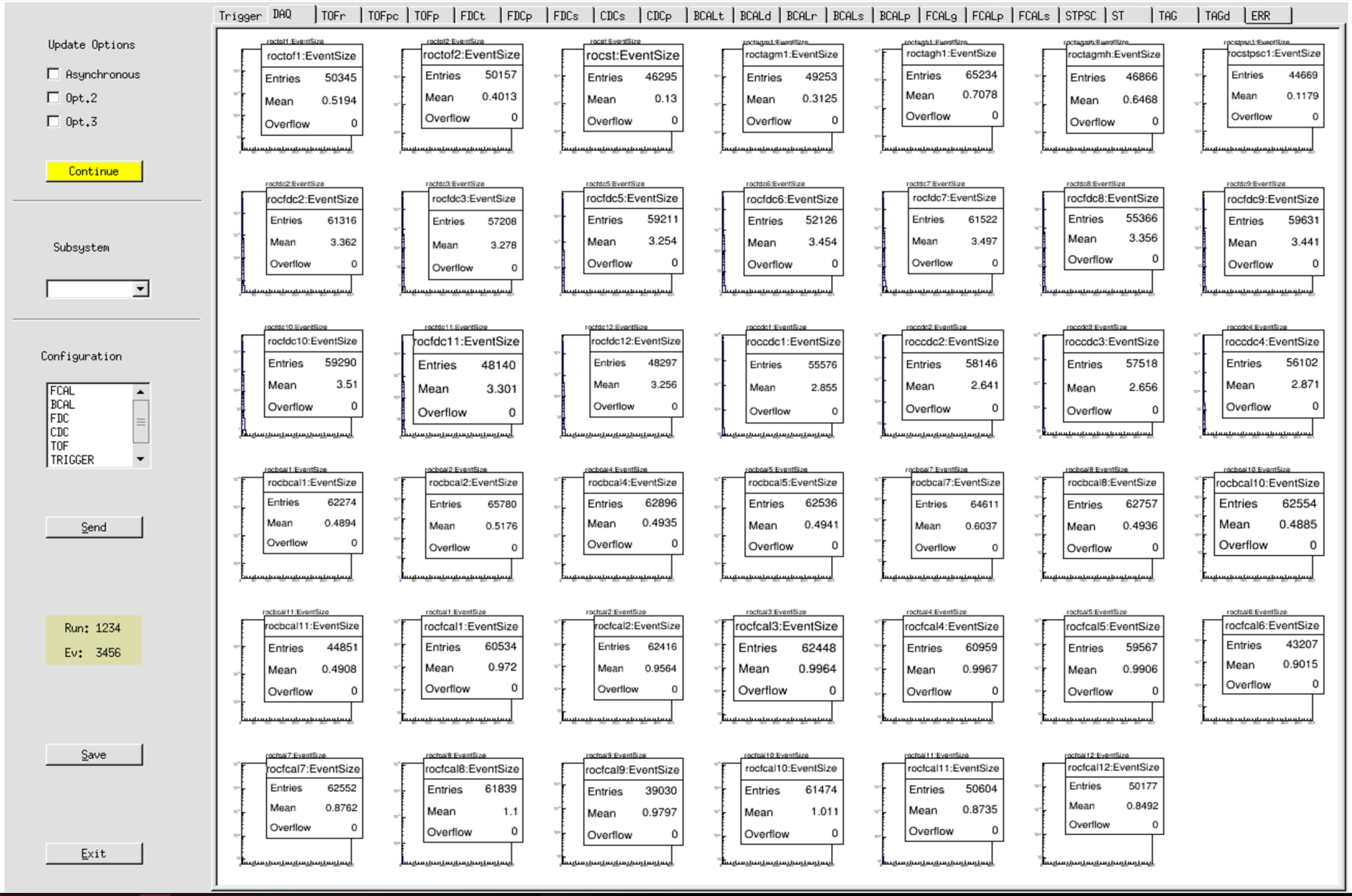




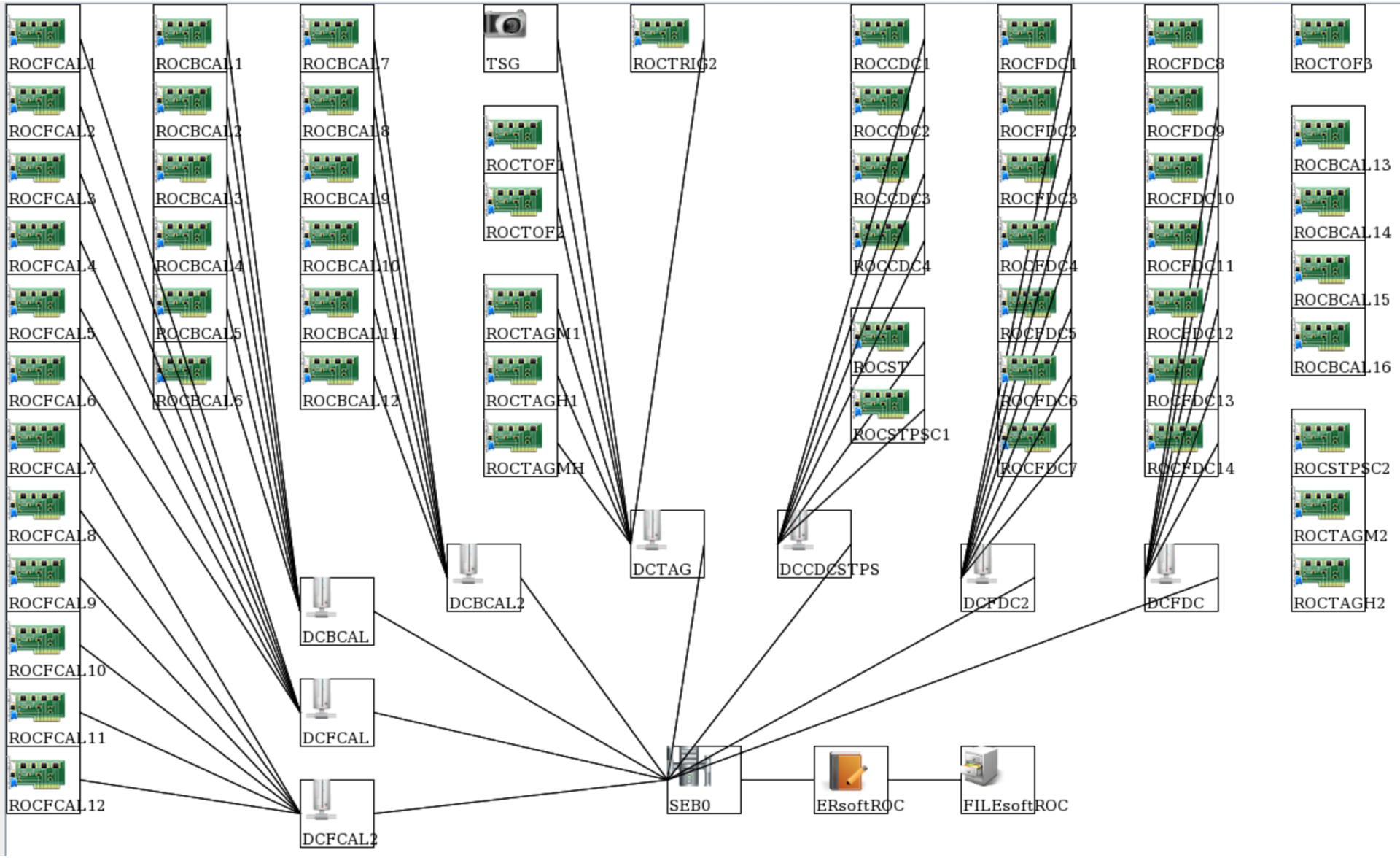
Event size mode8



Event size mode7



DAQ structure 2 (example)



Performance 2

Beam current ~120 nA
FCAL: Energy=1500 Trig.THR=150 READ_THR=104
BCAL: Energy=2000 Trig.THR=120 READ_THR=105

Trigger/Setup	Run	Event rate	Data rate	Live time
fcal_bcal_m8 hd_all.tsg-m8	2224	~1800 Hz	~500 MB/s	18%
fcal_bcal_m7 hd_all.tsg-m7	2225	~3000 Hz	~200 MB/s	45%
fcal_bcal_m7 hd_all.tsg-m7 Trigger delay/2	2228	~3200 Hz	~220 MB/s	44%

Outlook

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