

Status Report of Noise Hunting

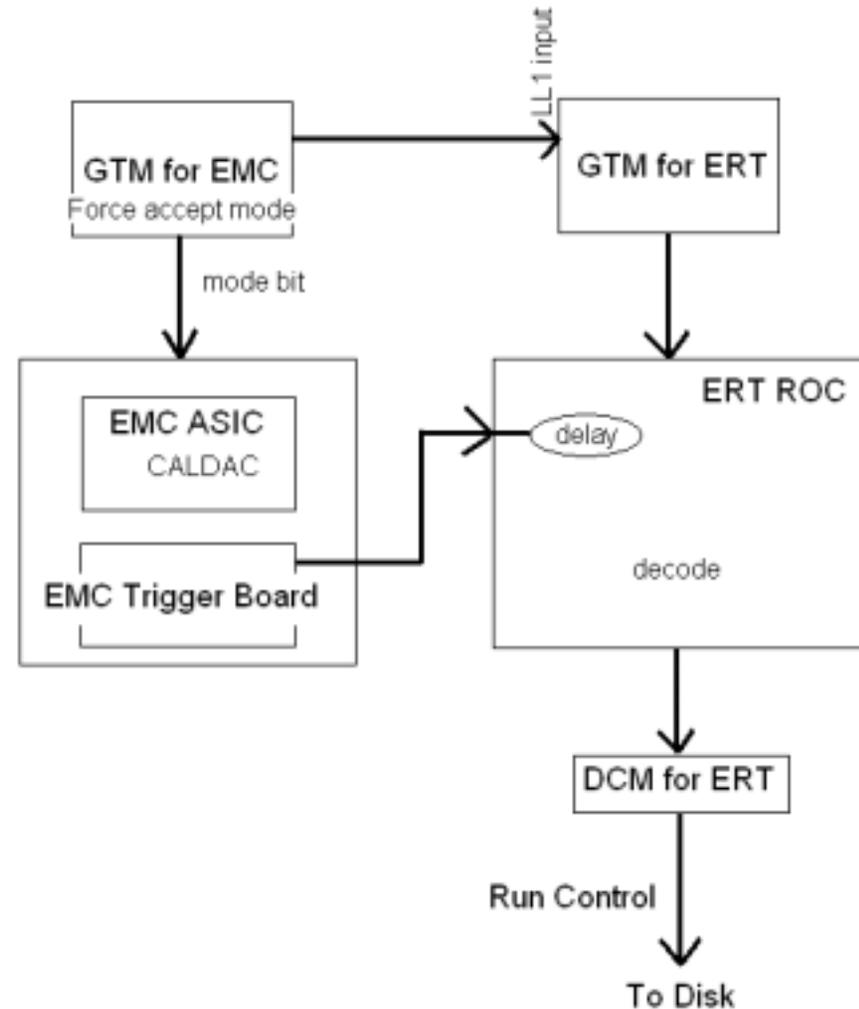
H.Torii(Kyoto Univ.), K.Okada(RBRC)

ERT lvl1 meeting

2002/Oct/25

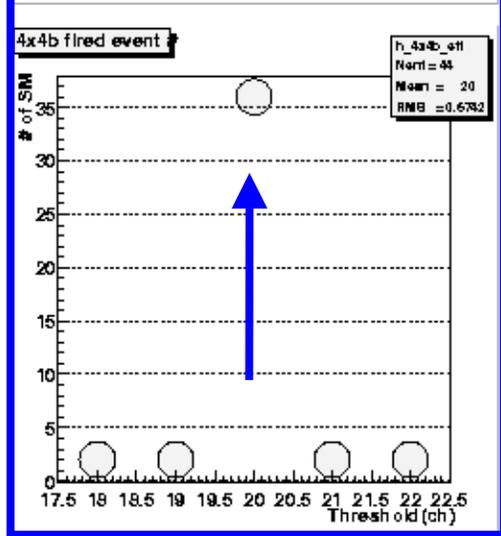
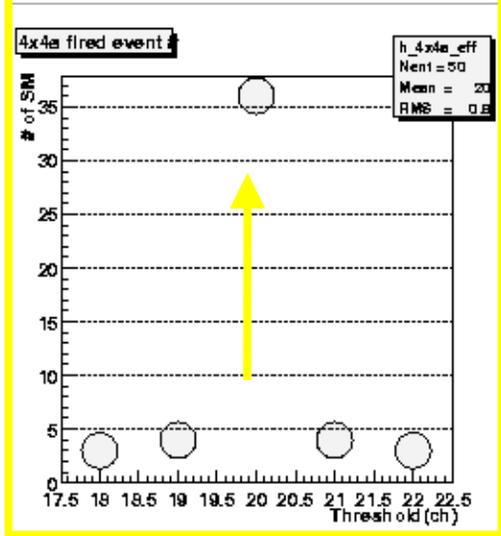
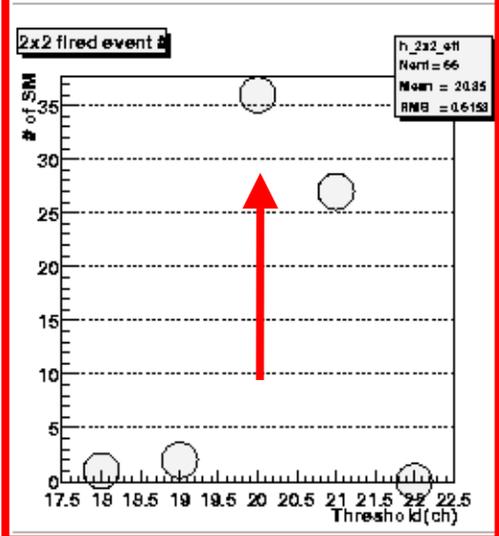
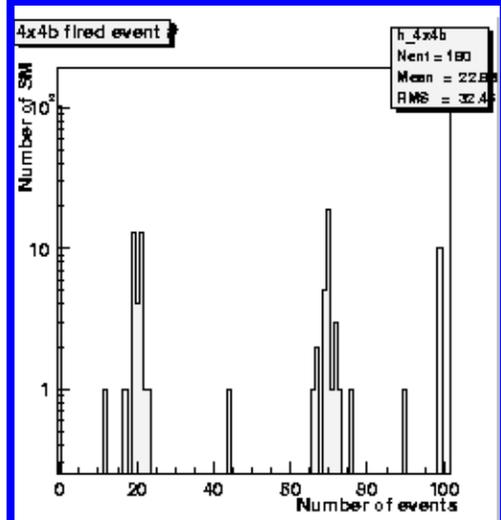
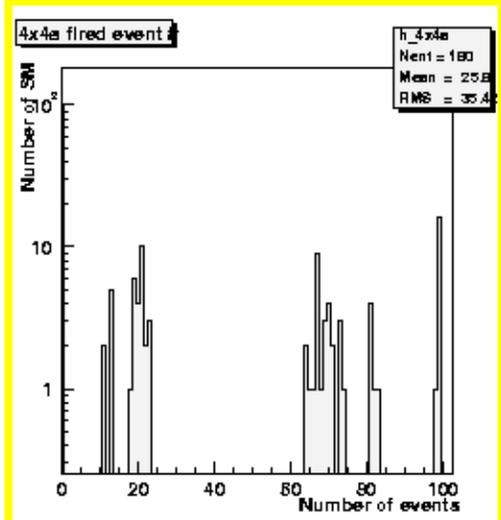
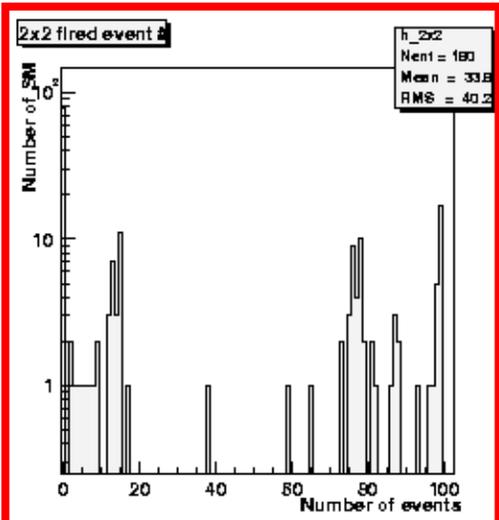
Trial of two GTM

- Two GTMs (EMC.W.B & ERT.W)
- Condition of GTMs
 - No PPG
 - Used Internal clock
 - No coincidence of two clocks...
 - Send mode bit of CALDAC fire at 80Hz
 - After a certain latency, send a LL1 trigger to the GTM for ERT.
- Condition of EMC FEE
 - Threshold was set enough higher than normal noise level
 - 2x2 23
 - 4x4 32
 - Set CALDAC at the maximum(63)
 - Set CALDAC enable for all West Bottom channels(5184)
 - EMCal Trigger board worked like an analog board, not digital.



Latency Scan

Succeeded!!!



2x2

4x4A

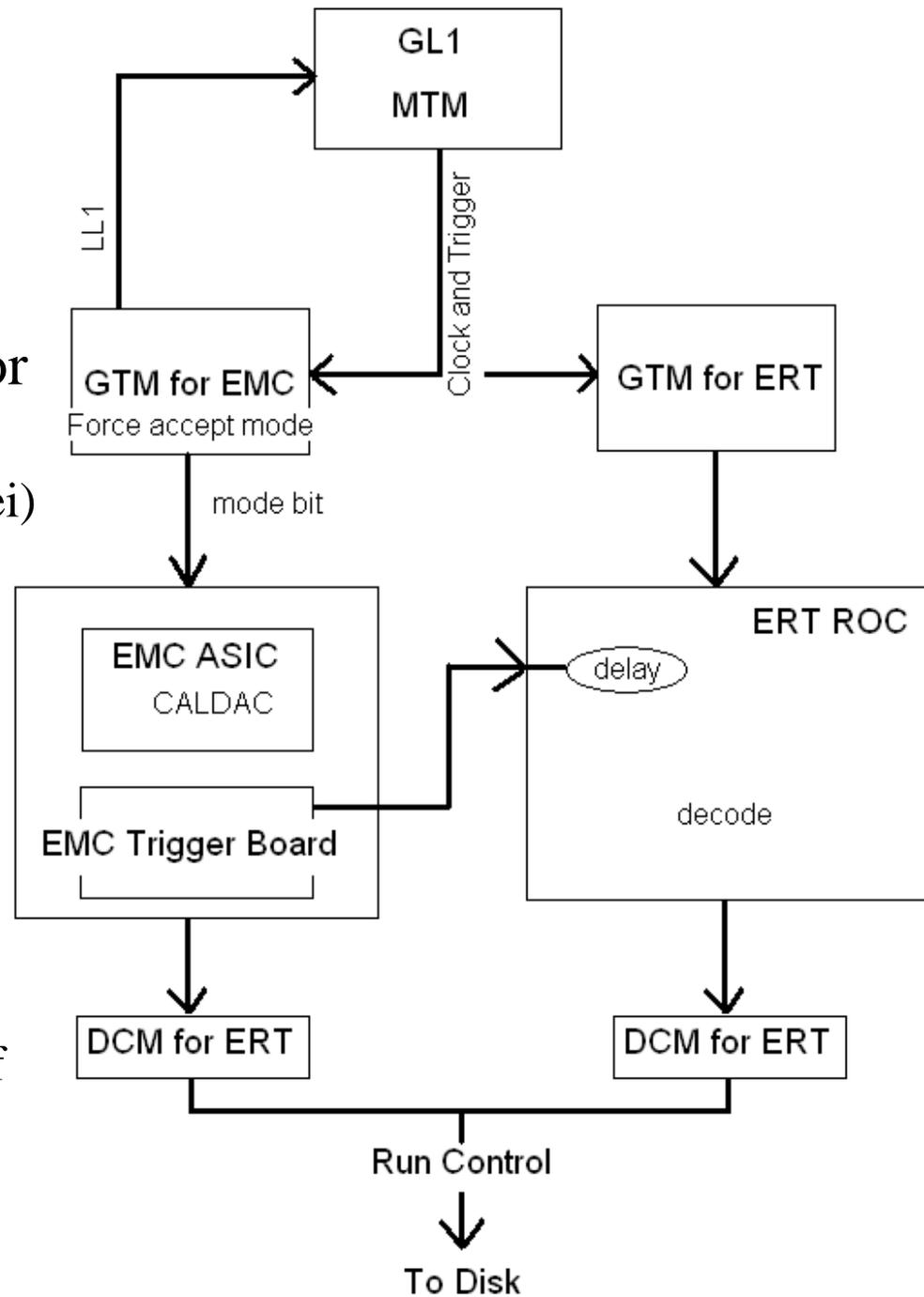
4x4B

Upper figure: # of trigger out of 100 events

Lower figure: # of SM with more than 50 trigger out of 100 events

For improvement

- Actually, we spend 2.5 nights for more sophisticated way
 - Special partition (Thanks to Sergei) including
 - EMC.W.T
 - EMC.W.B
 - ERT.W
 - Not standalone mode RC
- Failed to run the EMC DCM
 - Got an error message.
 - No idea how fix until next week when people finish the upgrade of the oncs software.



Summary and Future

- We are almost ready for the noise hunting
 - The efficiency is not 100%, but enough for this purpose
 - If the MTM is working, we can use it as the external clock.
- Two issues from last week.
 - One dead receiver board or ROC
 - Became alive this week!!! Need investigation
 - Too noisy only for 2x2.
 - Especially at the west top(W2,W3) sectors
 - No idea how to fix.
- Next week plan
 - Start multiplicity/channel scan for noise hunting