Trigger decoding

Name	CrateSerial	Slot	BoardSerial
TDC72VHL	0x076D3892	18	0x076D180A
TDC72VHL	0x076D3892	20	0x06E9DA9E
TQDC16VS	0x076D3892	13	0x046F0C75

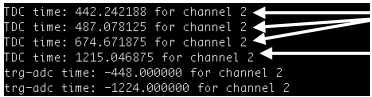
Det	Mod	Serial	Slot	Channel
TQDC_BC1	2	0x076D3892	13	0
TQDC_BC2	2	0x076D3892	13	9
TQDC_VC	2	0x076D3892	13	12
BC1	1	0x076D3892	18	14
BC2	0	0x076D3892	18	9
BC2	1	0x076D3892	18	18
BC3	0	0x076D3892	18	4
BC3	1	0x076D3892	18	6
VC	0	0x076D3892	18	0
VC	1	0x076D3892	18	10
BD	0	0x076D3892	18	12
BD	1	0x076D3892	18	42
BD	2	0x076D3892	18	46
BD	3	0x076D3892	18	39
BD	4	0x076D3892	18	38
BD	5	0x076D3892	18	16
BD	6	0x076D3892	18	47
BD	7	0x076D3892	18	36
BD	8	0x076D3892	18	40
BD	9	0x076D3892	18	43
BD	10	0x076D3892	18	20
BD	11	0x076D3892	18	37
BD	12	0x076D3892	18	41

Trigger decoding

TQDC Module Complications

Recall data structure:

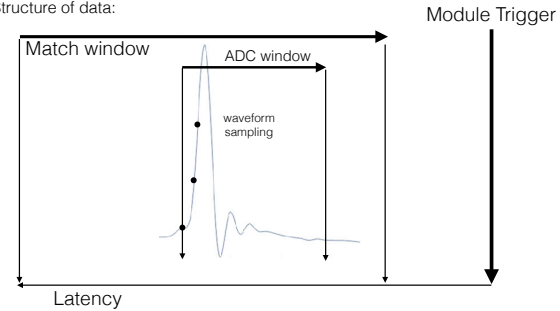
- ADC Window = 296ns (so TDC value differences < 296 means they come from same ADC)
- TDC time ~ (ADC - Trigger Time) — clocks aren't exactly sync'd & different resolution



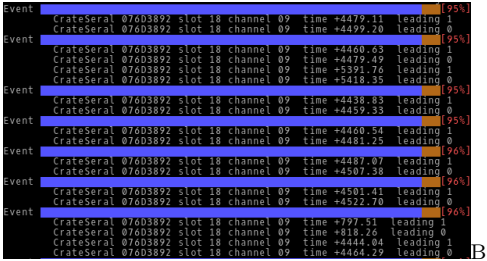
Trigger decoding

TQDC Module Data Structure

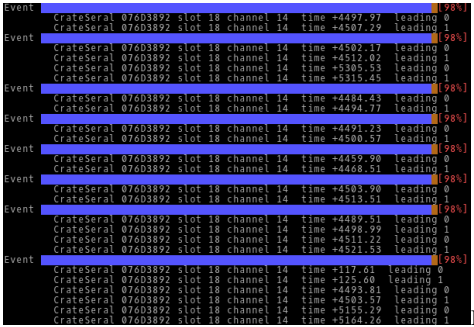
- FIXED: reading correct raw data structure
  - There were issues reading timestamp, and skipping over entries due to increasing indexing inappropriately
  - Structure of data:



Trigger decoding

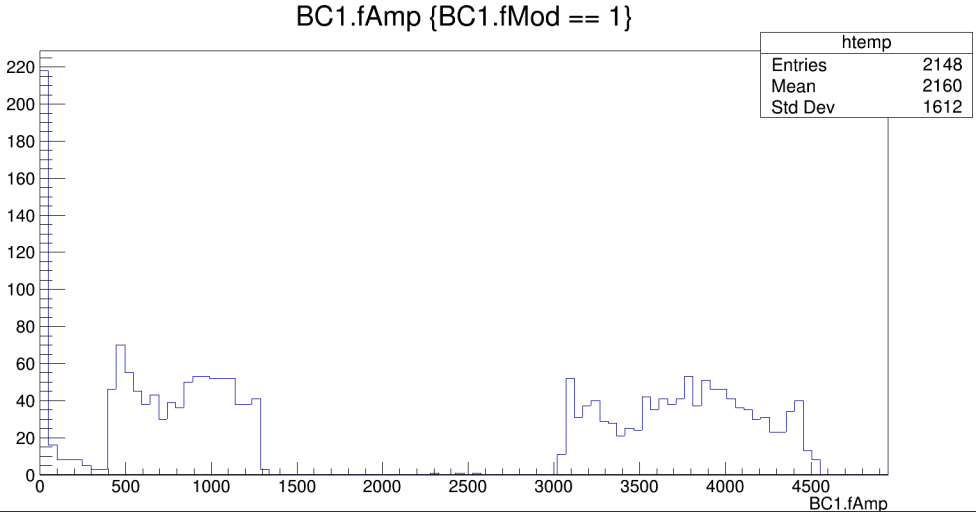


BC2



BC1

Trigger decoding



Trigger decoding