



BD - detector



Trigger mask

# BD – detector / Run-7830(dst) / Xe + CsI

/eos/nica/bmn/exp/dst/run8/24.02.0

Trigger: CCT2;

**iEv = 18730**

**$N(BC1) = 6$  (Xe)**

BC1Time = 644.092 [ns]  
BC1Time = 713.33 [ns]  
BC1Time = 744.393 [ns]  
BC1Time = 769.219 [ns]  
**BC1Time = 2055.75 [ns]**  
BC1Time = 2801.62 [ns]

**$N(BC2) = 6$  (Xe)**

BC2Time = 632.774 [ns]	<b>M(BD) = 1 [ch]</b>
BC2Time = 706.983 [ns]	<b>M(BD) = 3 [ch]</b>
BC2Time = 732.445 [ns]	<b>M(BD) = 0 [ch]</b>
BC2Time = 758.209 [ns]	<b>M(BD) = 1 [ch]</b>
<b>BC2Time = 2044.54 [ns]</b>	<b>M(BD) = 17[ch]</b>
BC2Time = 2790.26 [ns]	<b>M(BD) = 2 [ch]</b>

→ **Trigger ion**

**$N(VC) = 1$  (Xe)**

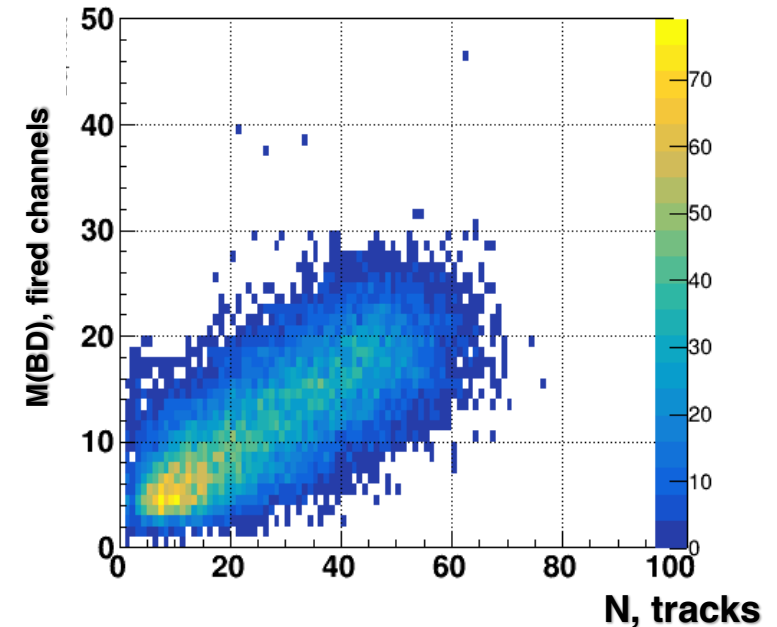
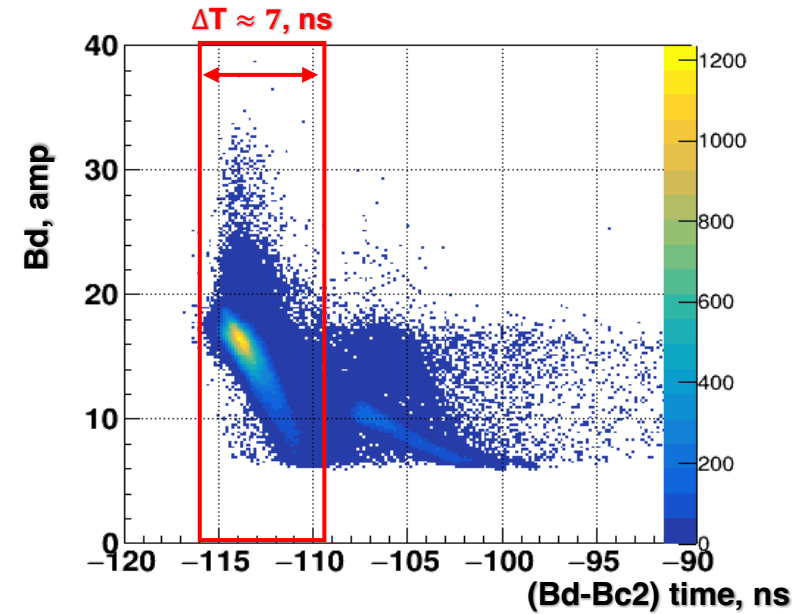
VCTime = 713.427 [ns]

**$N(FD) = 5$  (Xe)**

FDDTime = 763.084 [ns]  
FDDTime = 837.116 [ns]  
FDDTime = 863.22 [ns]  
FDDTime = 888.661 [ns]  
FDDTime = 2920.51 [ns]

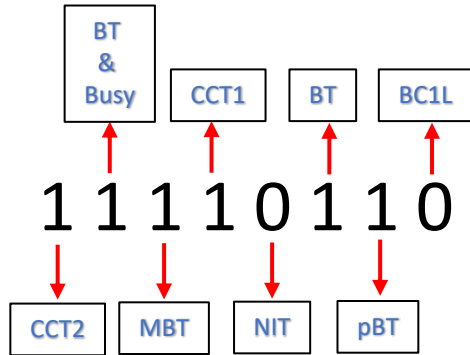
$\Delta t(BC1-BC2) \approx 11, ns$

$\Delta t(FD-BC2) \approx 130, ns$



# Run-7830(dst) / Xe + CsI

TrigMask:



```
int checkbit(const int value, const int position) {
    return ((value & (1 << position)) != 0);
}
```

```
iTriggerMaskBR = trigInfo->GetInputSignalsBR();
iTriggerMaskAR = trigInfo->GetInputSignalsAR();
```

```
if(checkbit(iTriggerMaskBR, 7) != 1) continue;
```

BC1 - 1Xe

```
AR(CCT2) = 36376
AR(MBT) = 1066 (x 35)
AR(CCT1) = 165. (x 230)
```

Trigger: CCT2;

iEv = 1582

N(BC1) = 8

```
BC1Time = 306.557 [ns]
BC1Time = 676.166 [ns]
BC1Time = 1553.3 [ns]
BC1Time = 2018.76 [ns]
BC1Time = 2037.26 [ns]
BC1Time = 2054.77 [ns]
BC1Time = 3398.58 [ns]
BC1Time = 3464.25 [ns]
```

N(BC2) = 8

```
BC2Time = 294.697 [ns]
BC2Time = 665.037 [ns]
BC2Time = 1542.03 [ns]
BC2Time = 2007.41 [ns]
BC2Time = 2025.46 [ns]
BC2Time = 2043.03 [ns]
BC2Time = 3387.46 [ns]
BC2Time = 3452.62 [ns]
```

N(VC) = 3

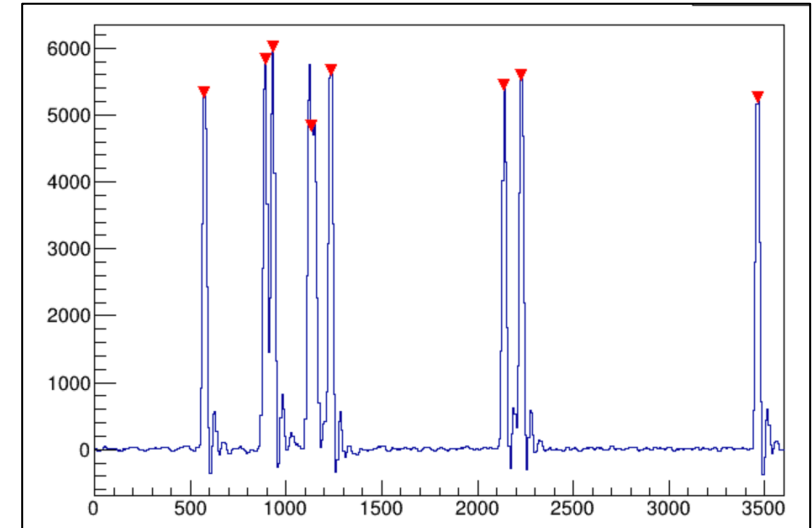
```
VCTime = 306.01 [ns]
VCTime = 2019.19 [ns]
VCTime = 3463.72 [ns]
```

N(FD) = 8

```
FDTime = 425.292 [ns]
FDTime = 795.101 [ns]
FDTime = 1672.34 [ns]
FDTime = 2137.56 [ns]
FDTime = 2156.79 [ns]
FDTime = 2174.37 [ns]
FDTime = 3517.72 [ns]
FDTime = 3582.95 [ns]
```

N(Tracks) = 1

BC1 - Waveform



- GetPeak()
- Search()
- SearchHighRes() -

**Thank you for your  
attention**