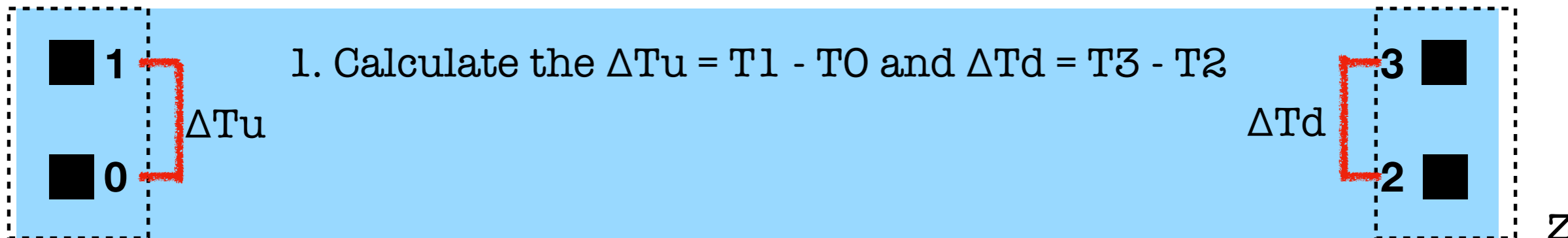


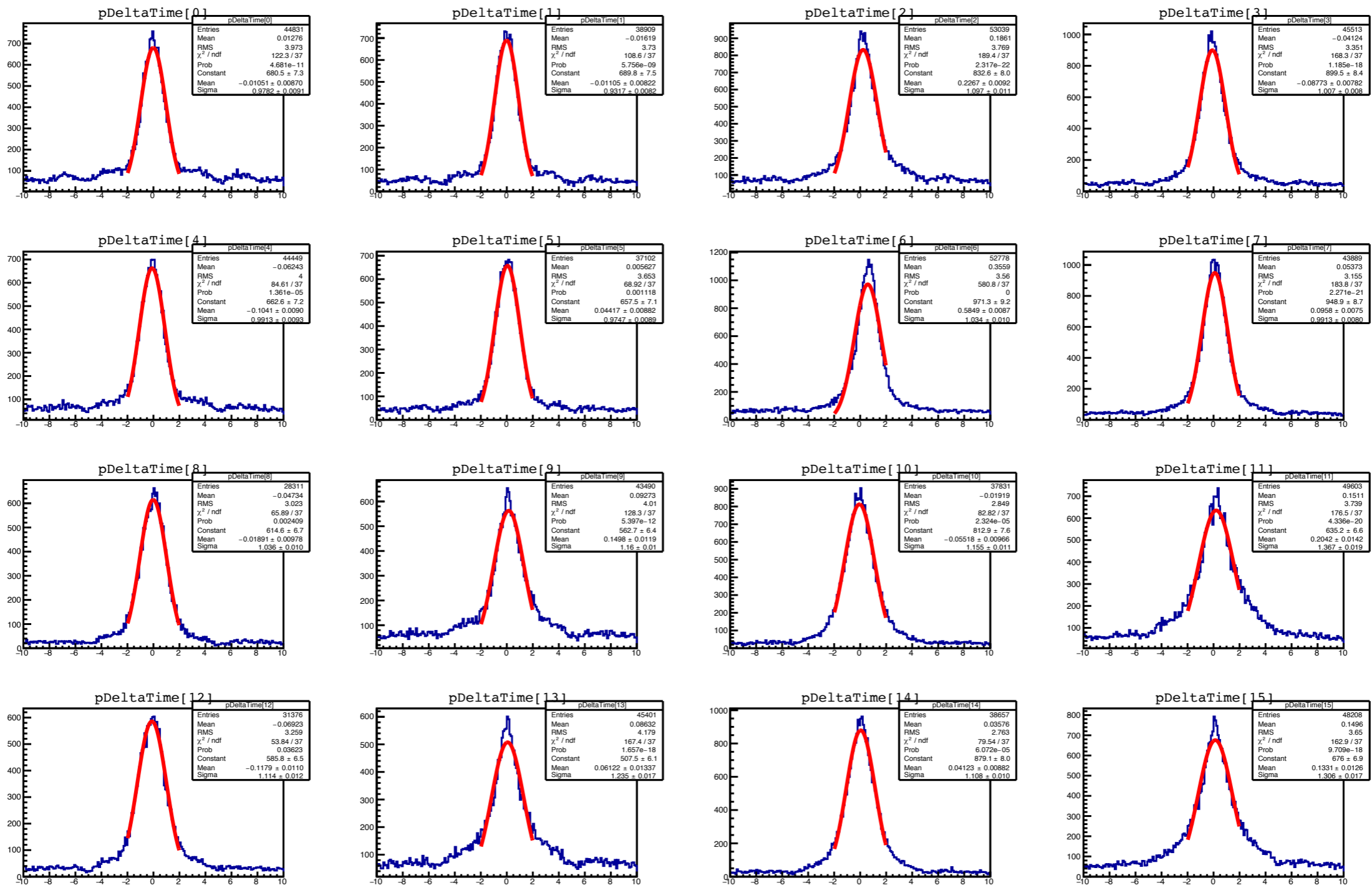
Daily report

16 October, 2019
HongMin KIM

- DCV Self Trigger data analysis



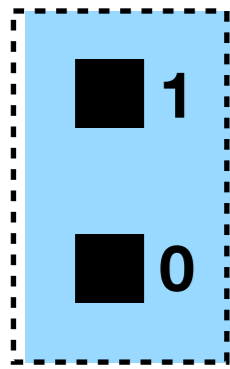
Events



8 Modules, 16 Pairs

Time[8ns]

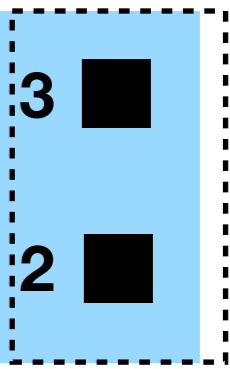
Tu



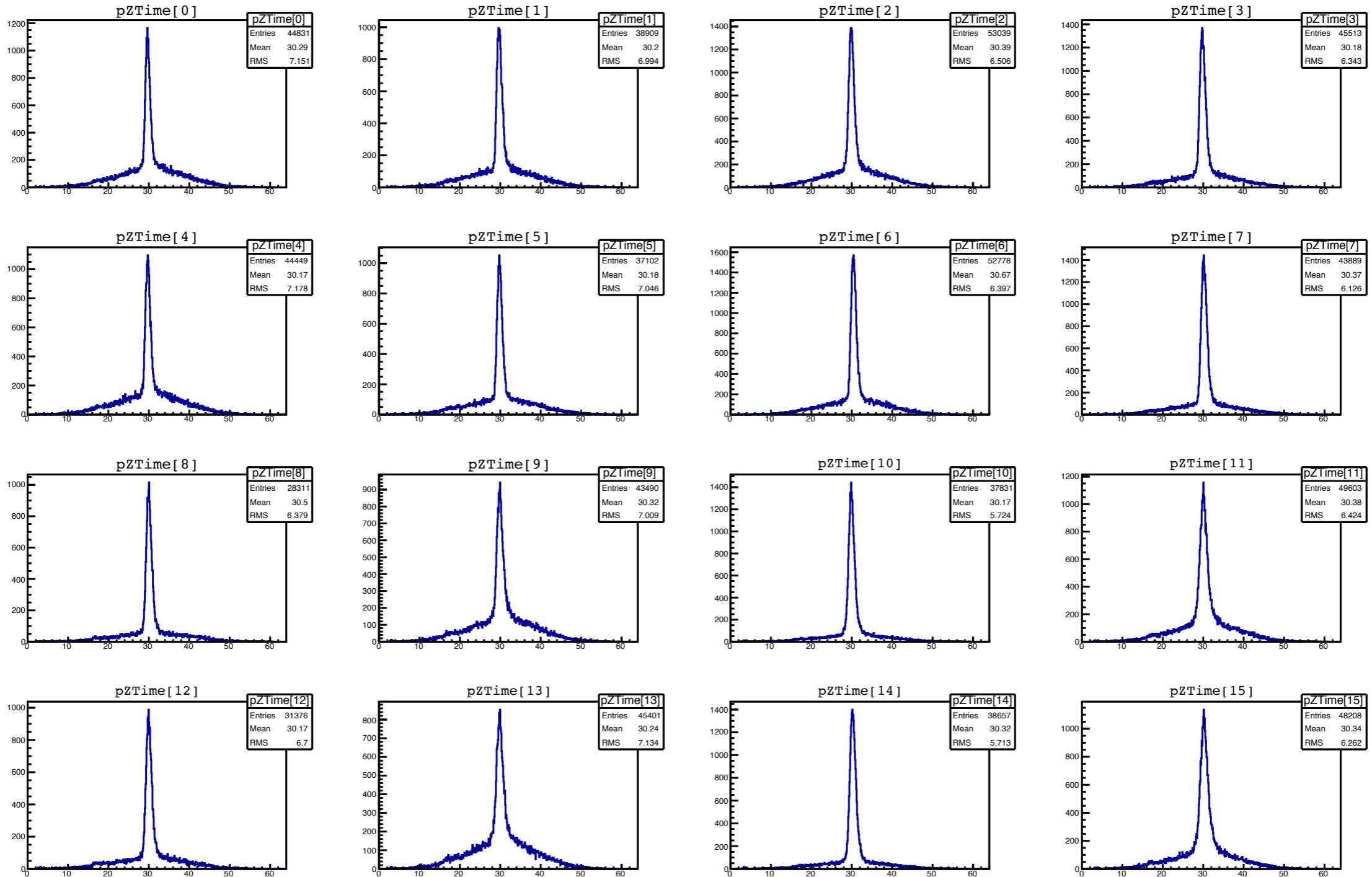
2. Get the Z-Time.(Tu and Td)

$$T_u = (T_1 + T_0 + \Delta T_u) / 2$$

$$T_d = (T_2 + T_3 + \Delta T_d) / 2$$



Z
Td

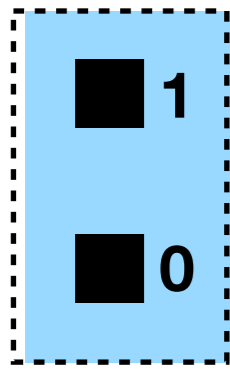


Events

8 Modules, 16 Pairs

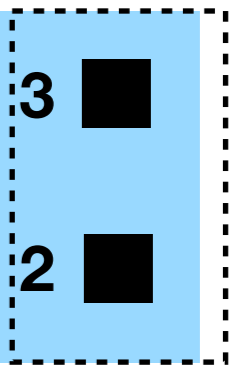
Time[8ns]

Tu



3. Calculate with Tu and Td.

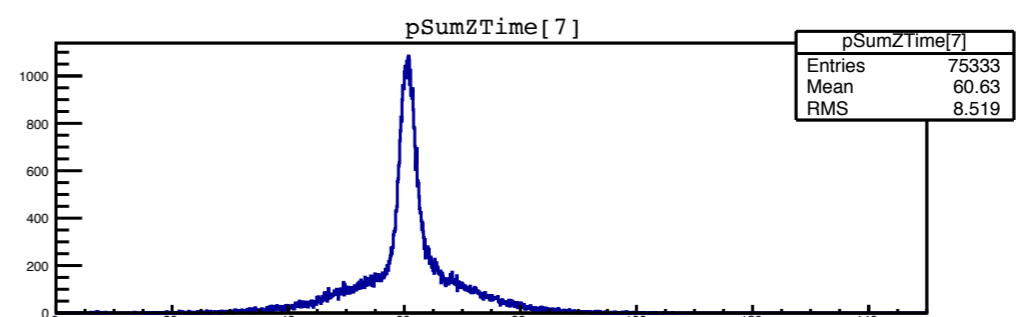
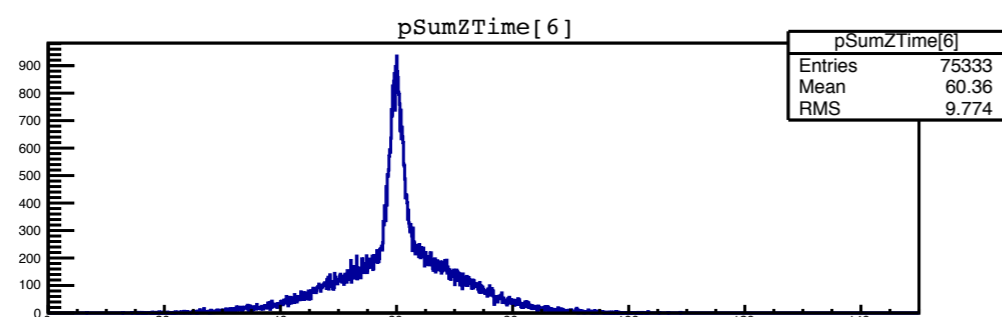
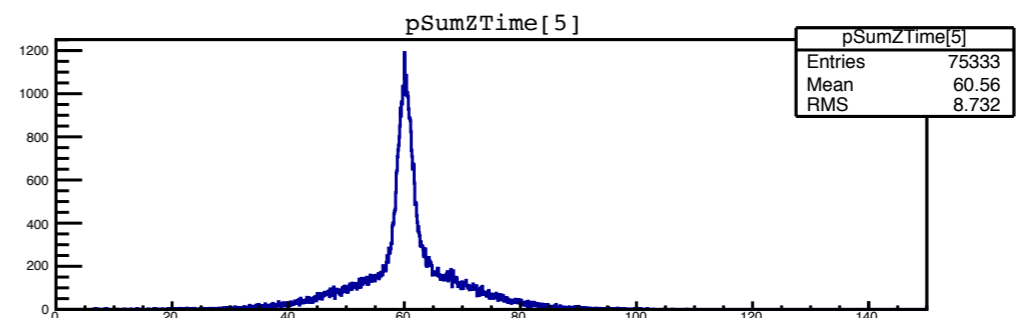
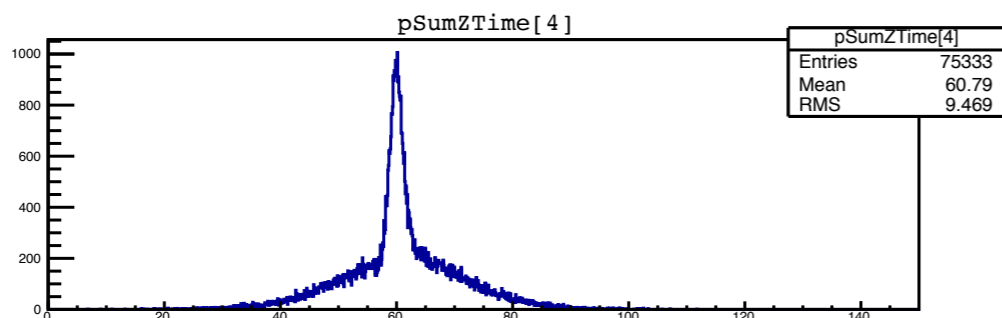
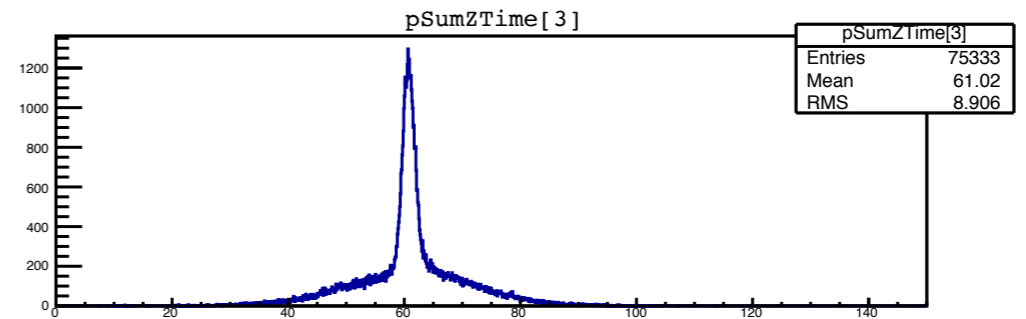
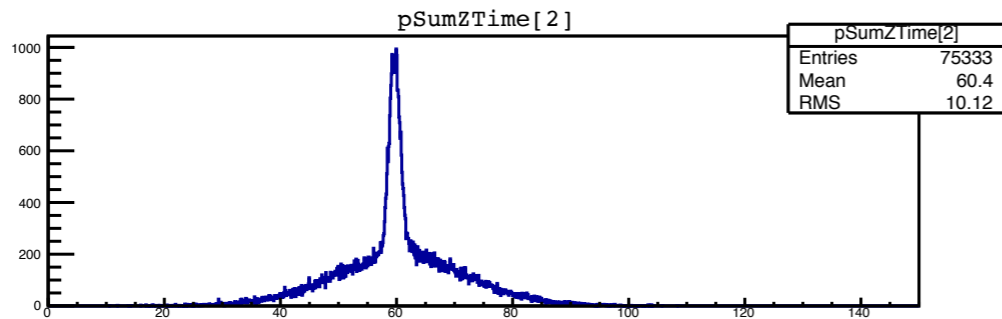
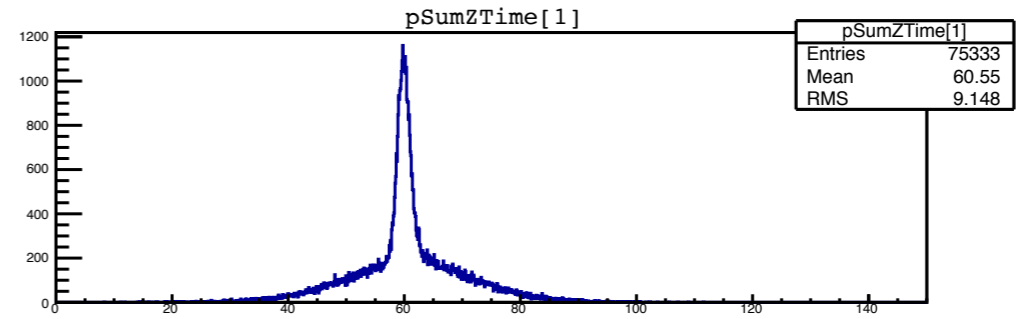
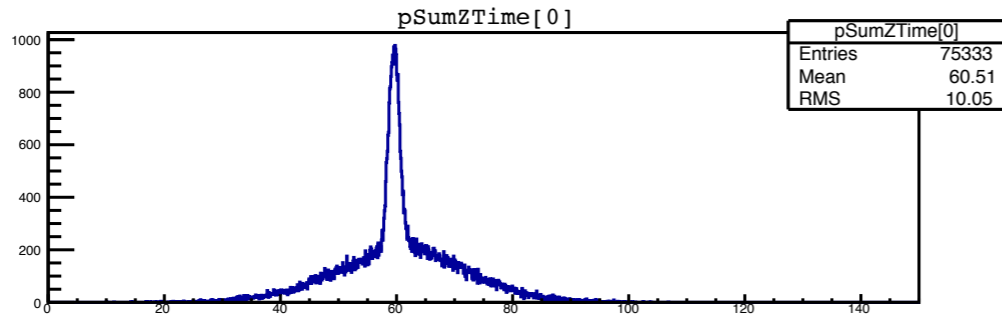
$$\text{SumZTime} = T_u + T_d$$



Z

Td

Events



8 Modules

Time[8ns]

Tu

1
0

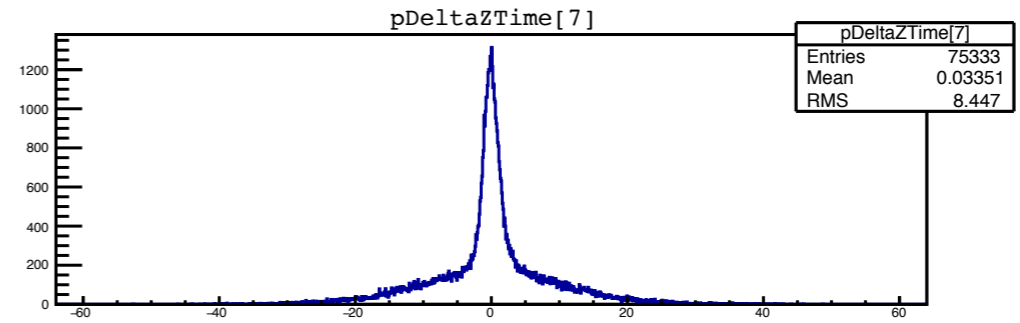
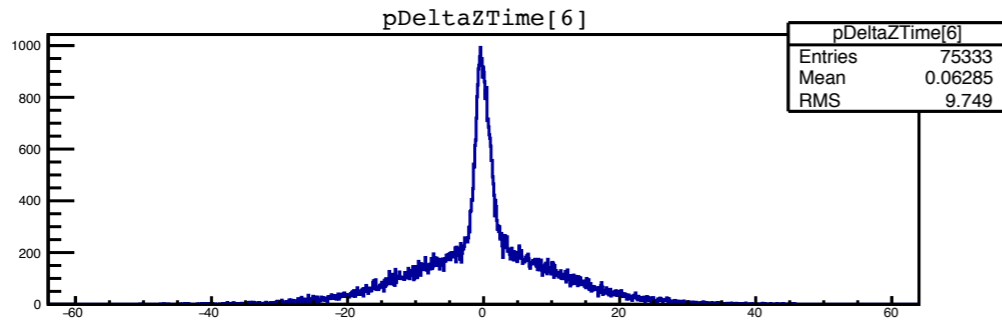
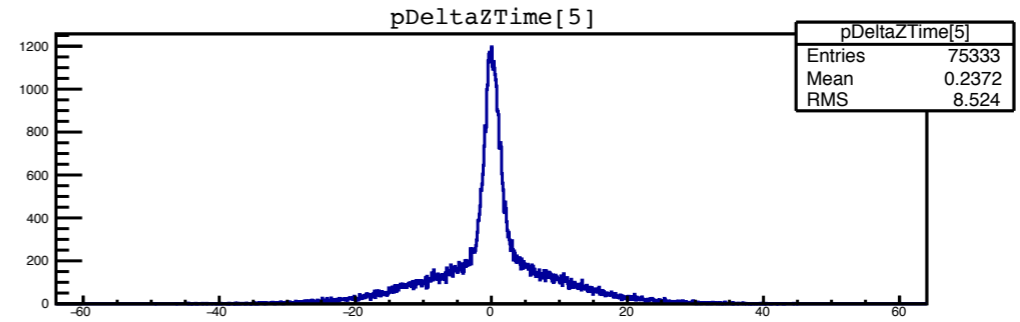
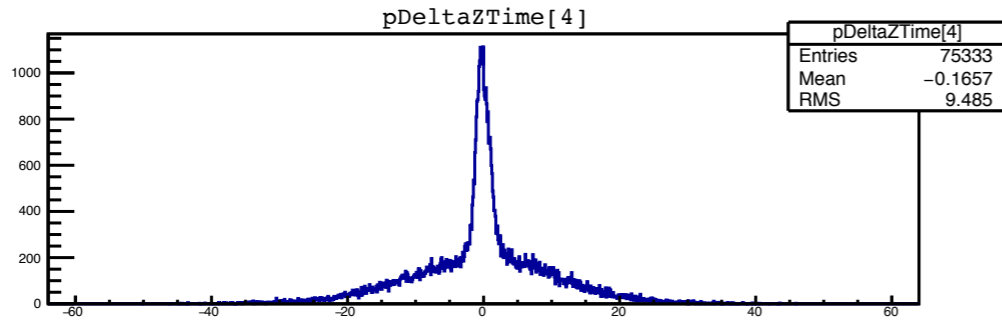
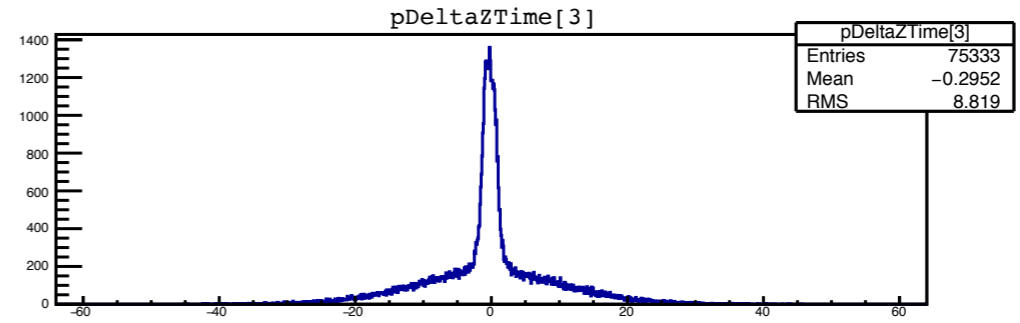
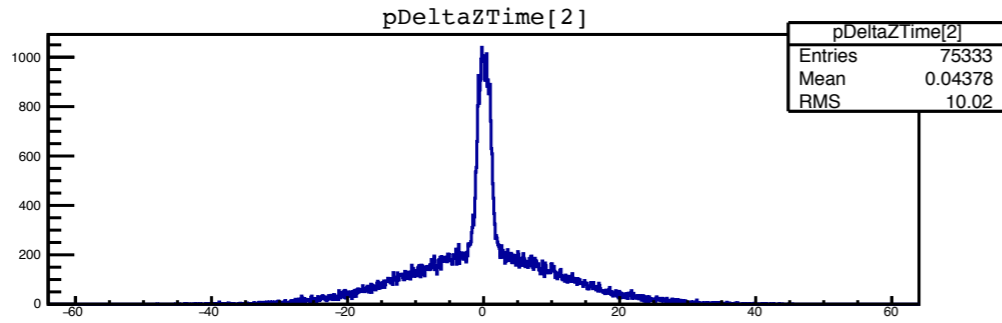
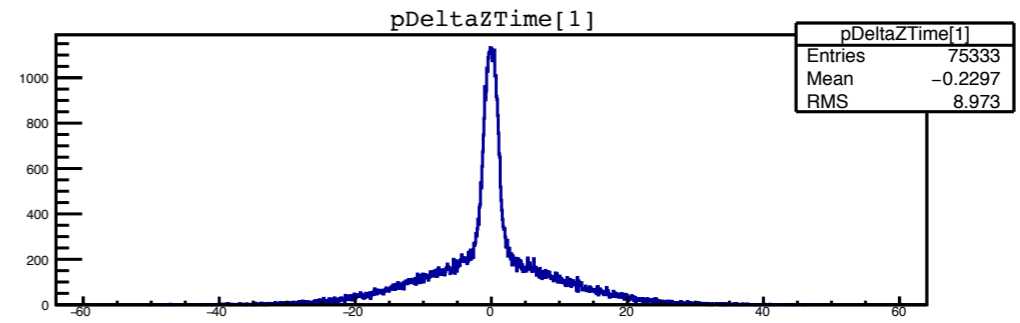
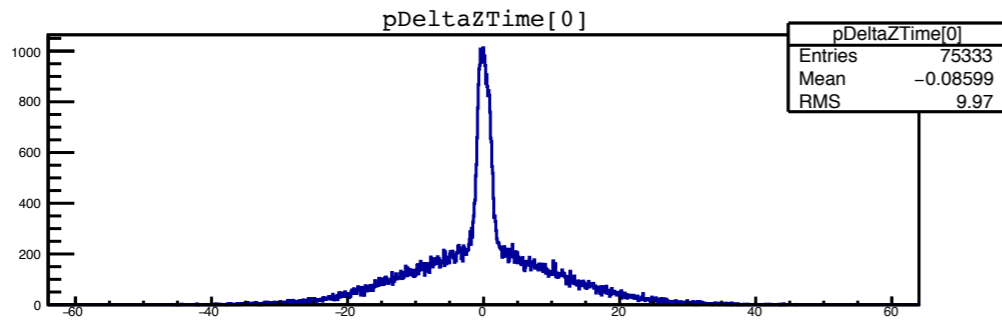
4. Calculate with Tu and Td.

$$\Delta ZTime = T_u - T_d$$

3
2

Z
Td

Events



8 Modules

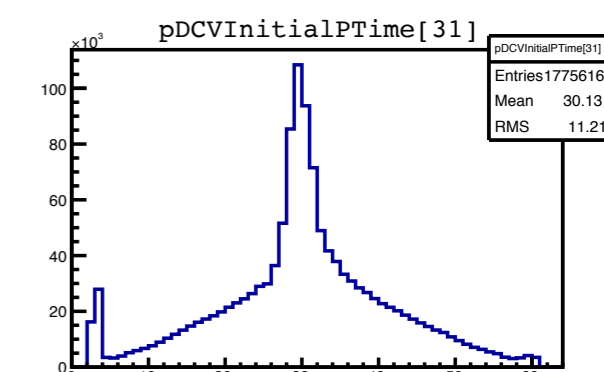
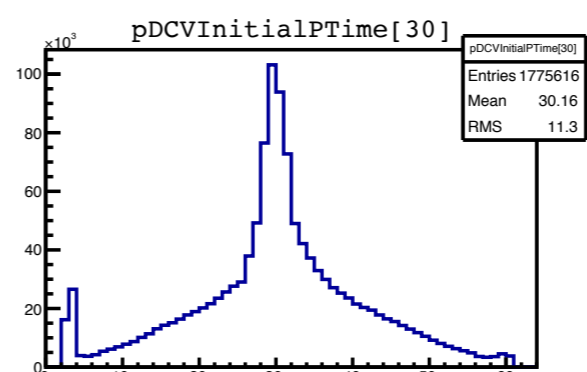
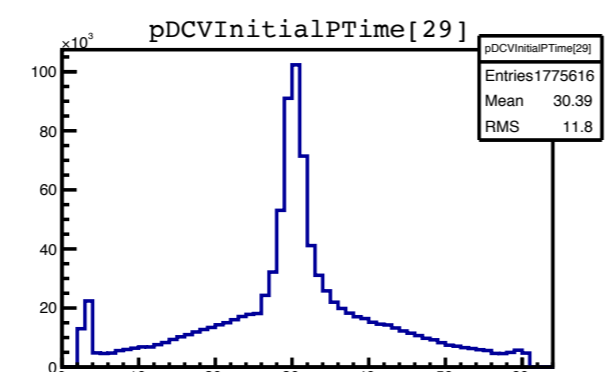
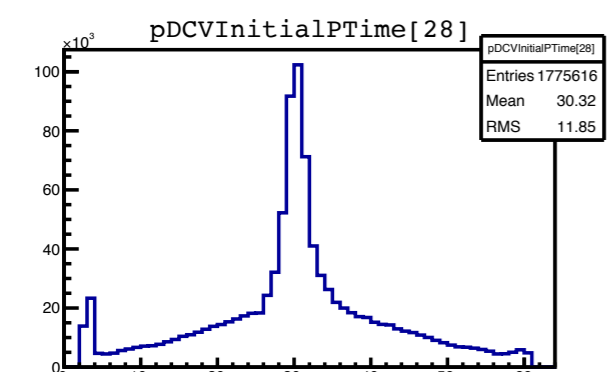
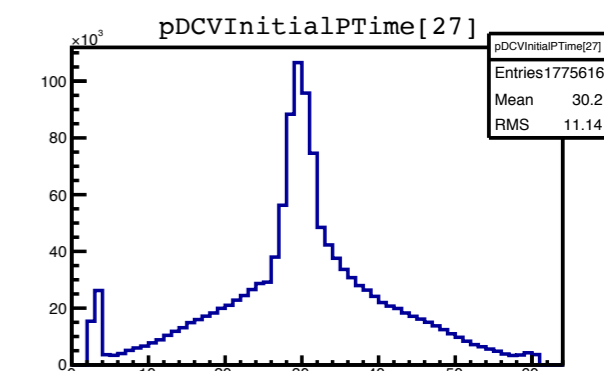
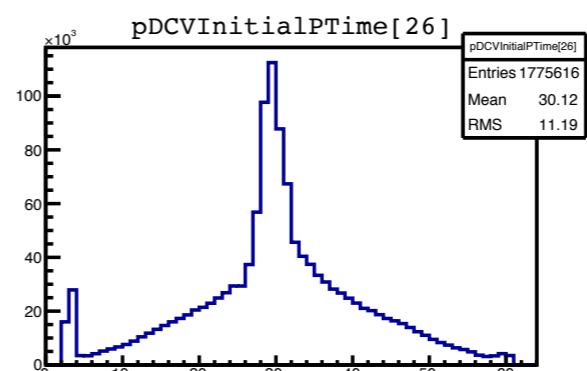
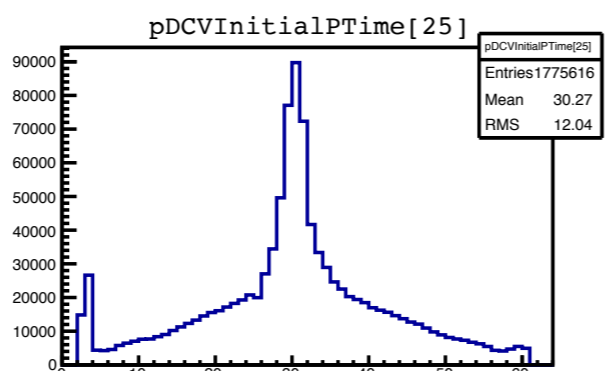
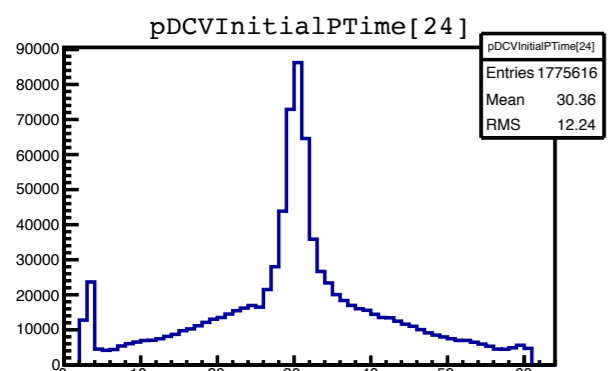
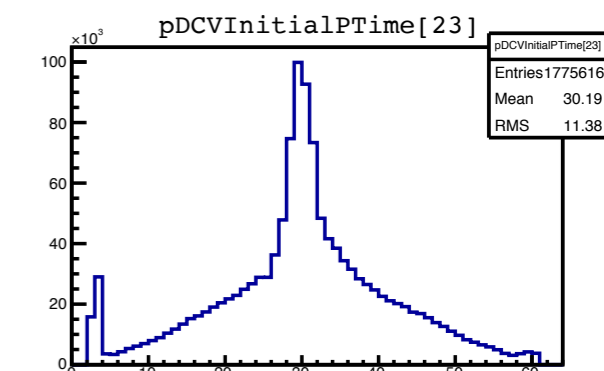
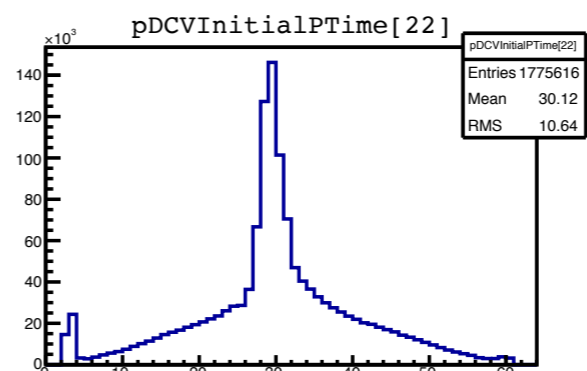
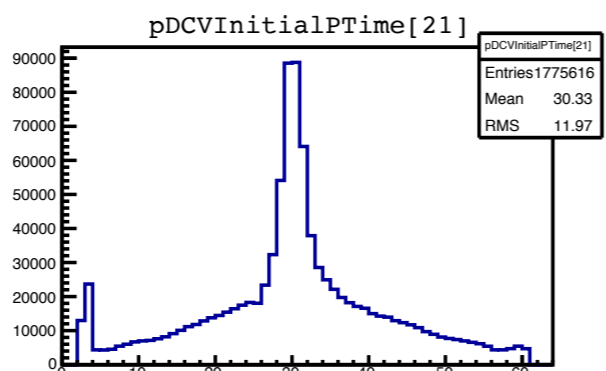
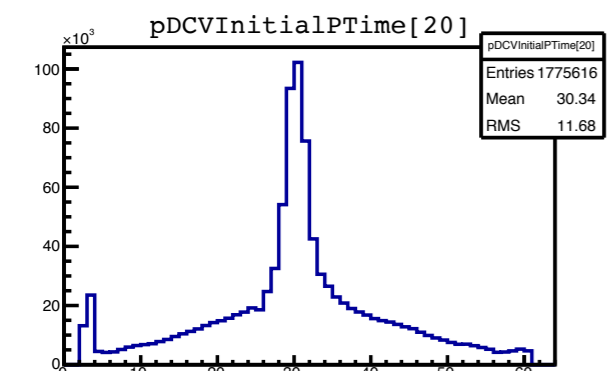
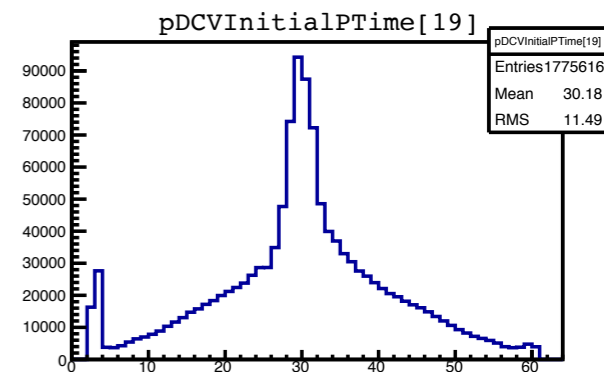
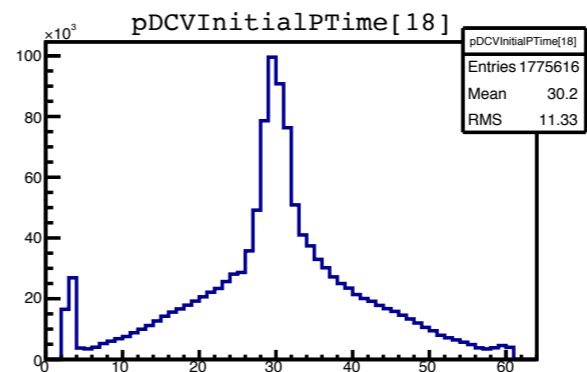
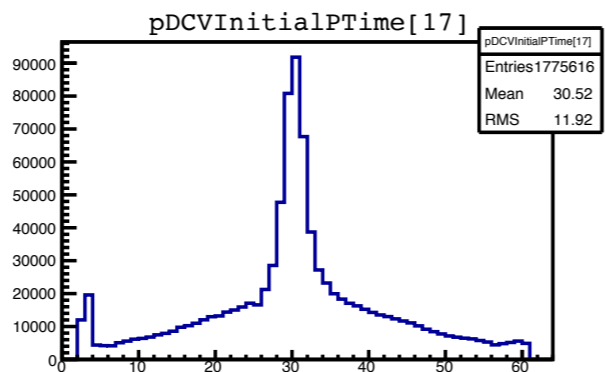
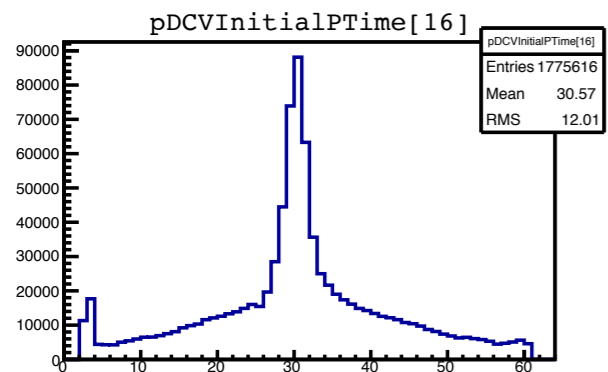
Time[8ns]

BACK UP

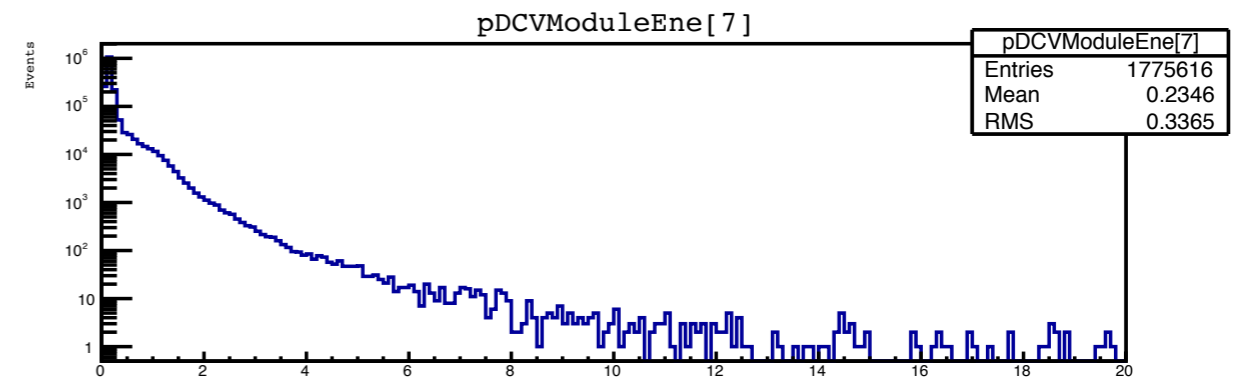
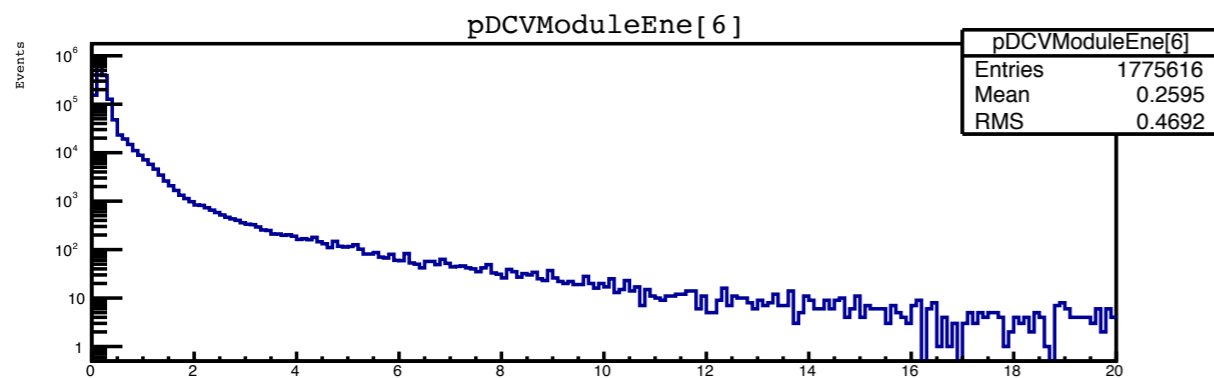
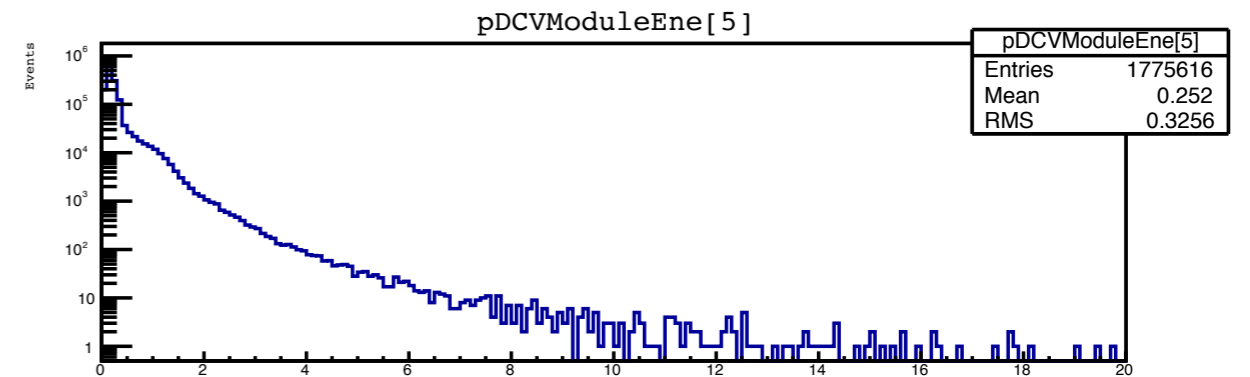
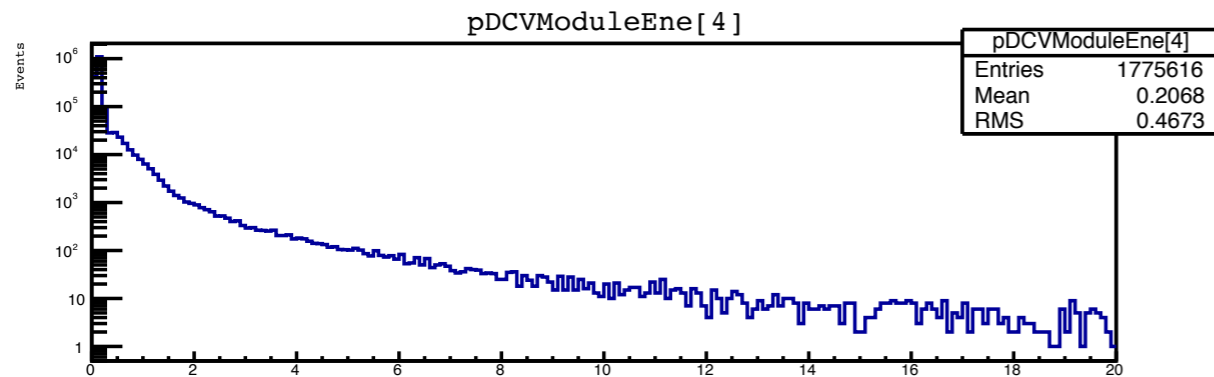
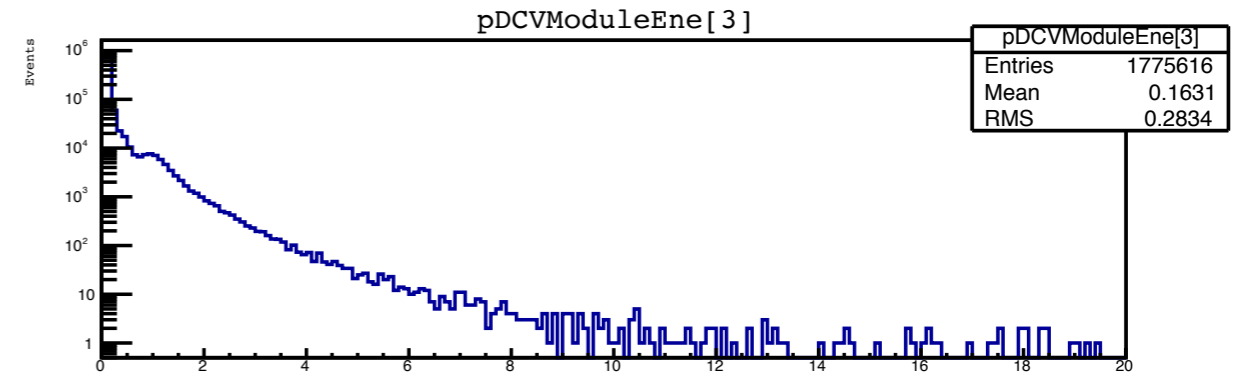
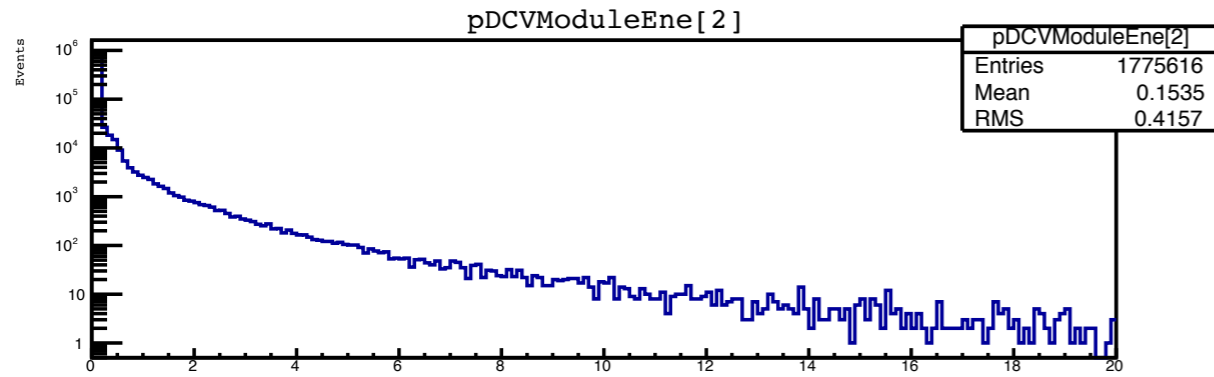
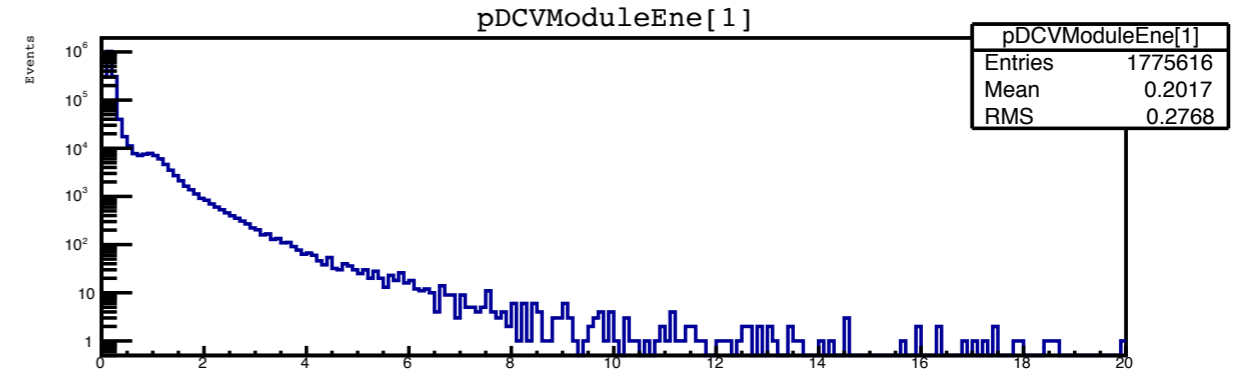
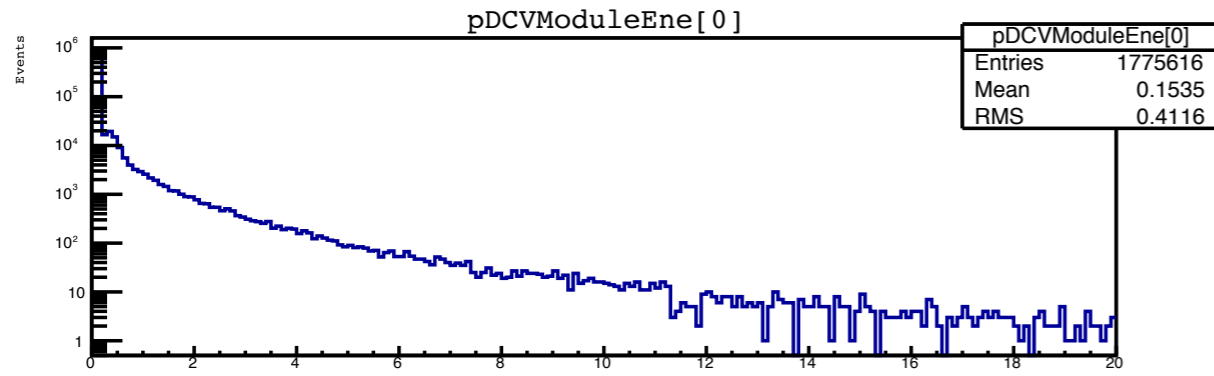
Event Condition

```
if( i == 0 ) continue;  
if( ScaledTrigBit != 4 ) continue;  
if( DetectorBit != 1024 ) continue;  
if( ExtTrigType != 0 ) continue;  
if( DeltaTrig != 0 ) continue;  
if( TRIGGERTAGIntegratedADC[2] > 1000 ) continue;
```

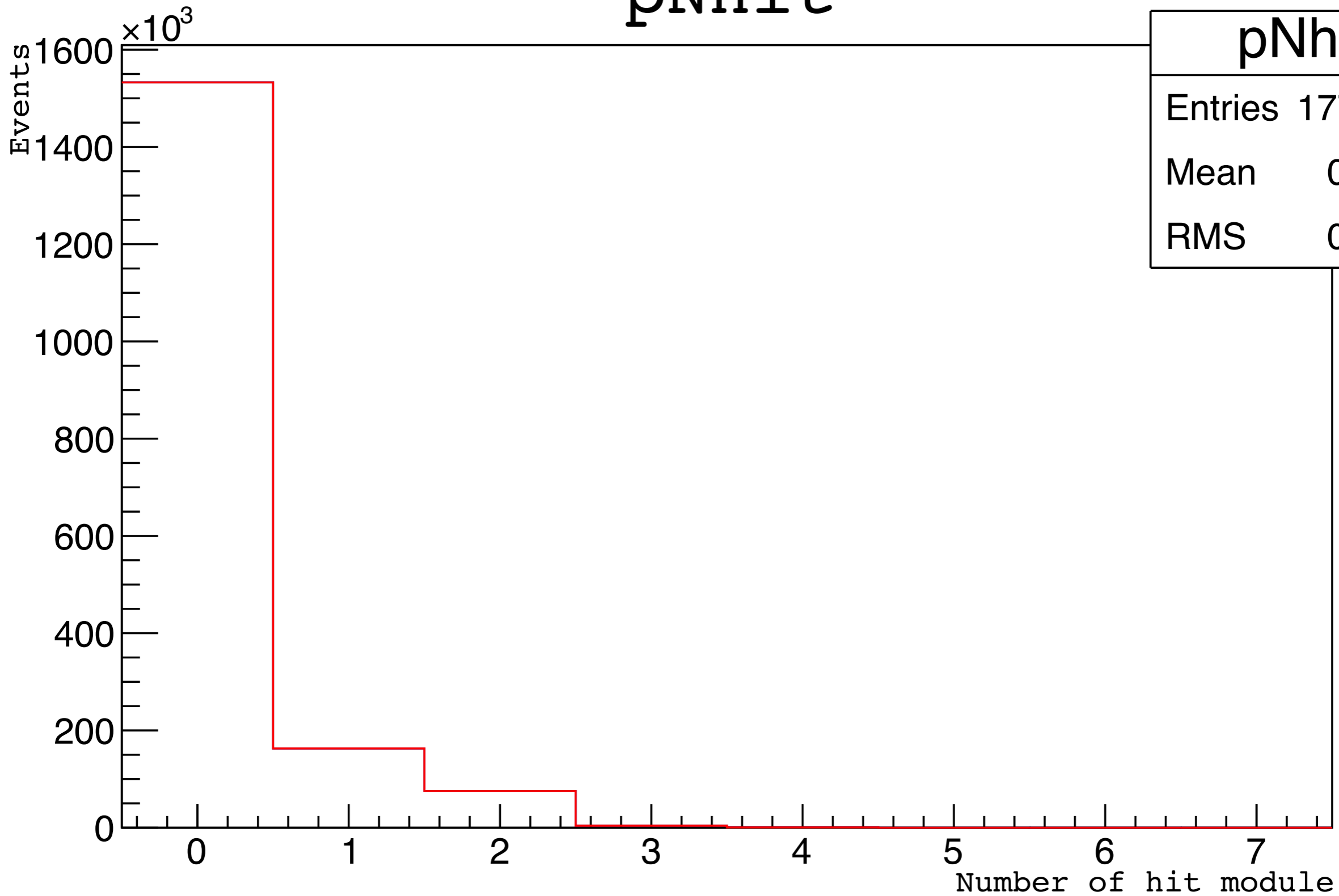

DCVInitialPTime Dist.(DCV2)



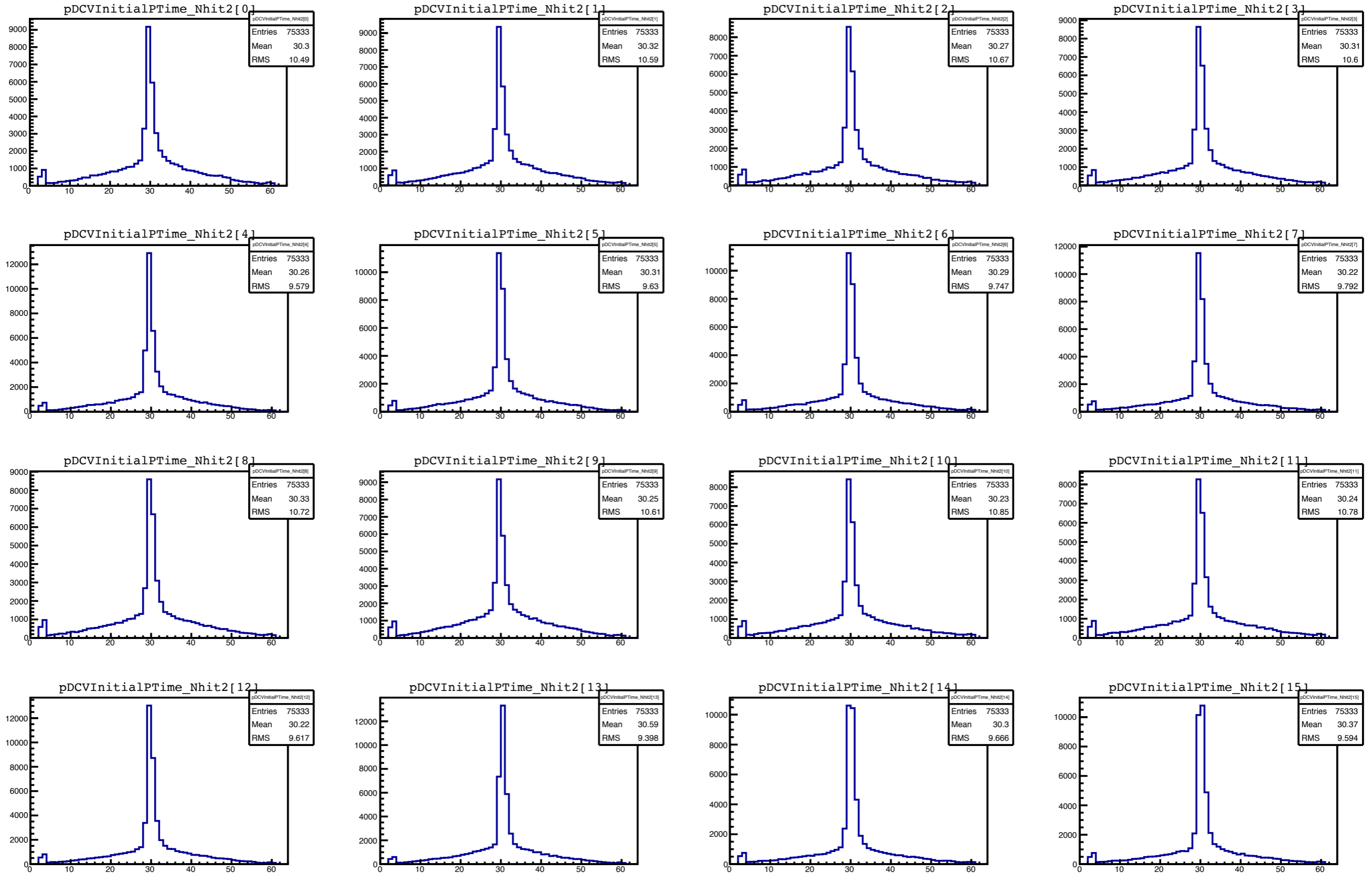
DCVModuleEne Dist.



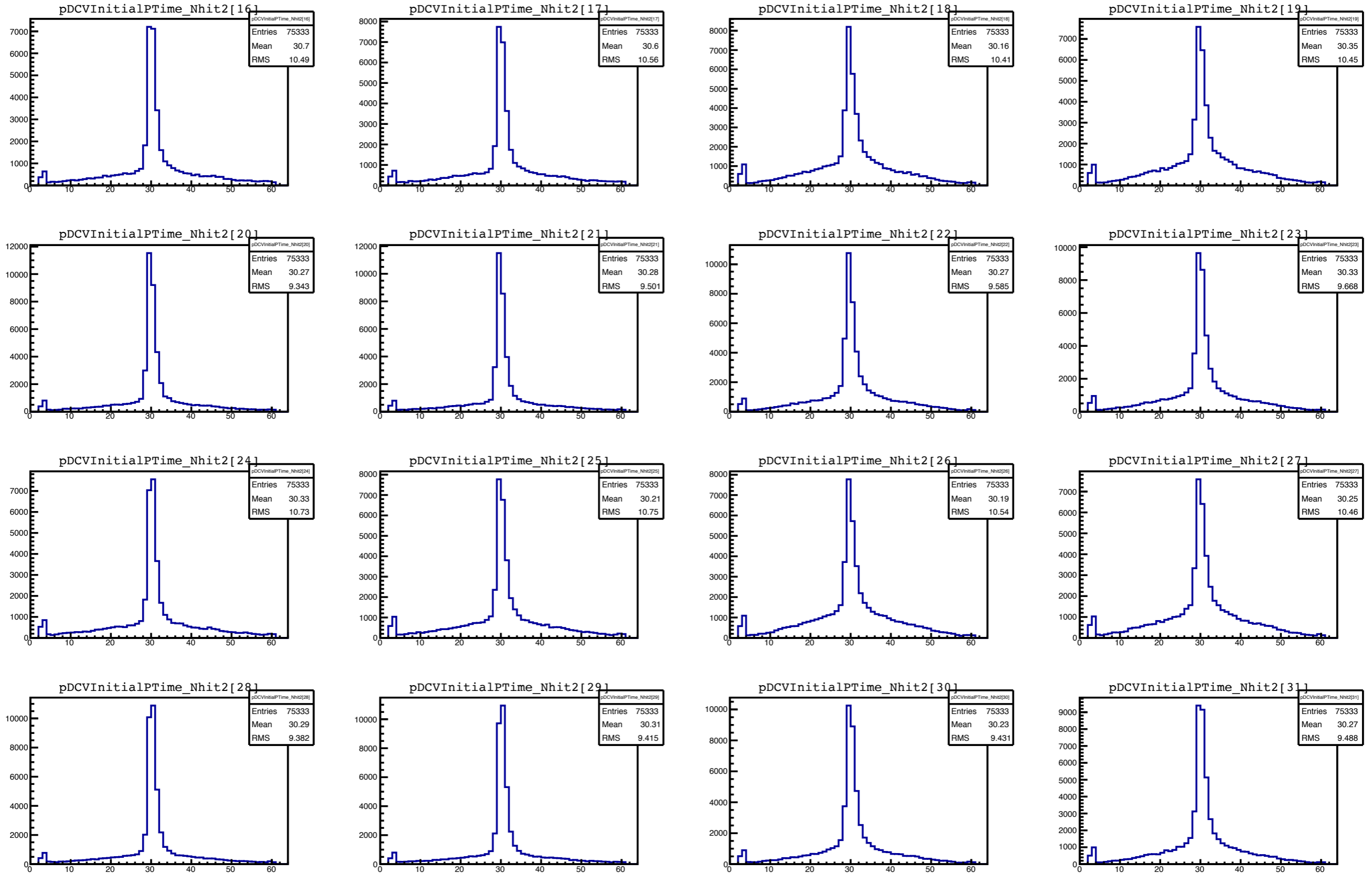
pNhit



DCVInitialPTime Dist.(DCV1) Nhit == 2



DCVInitialPTime Dist.(DCV2) Nhit == 2



DCVModuleEne Dist. Nhit == 2

