

TDC Alignment for Pair Spectrometer(III)

Lingling Ma

08/17/12

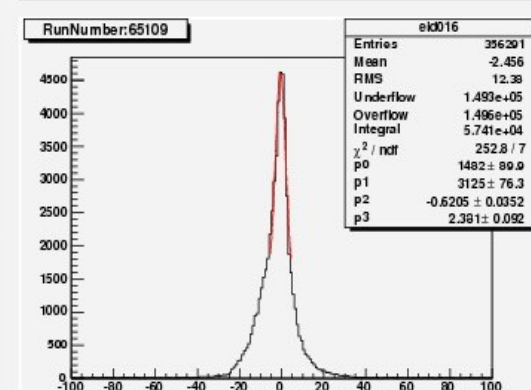
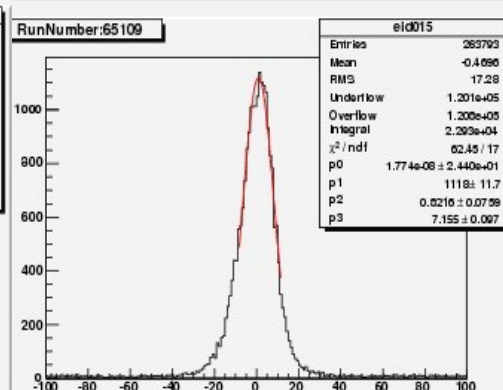
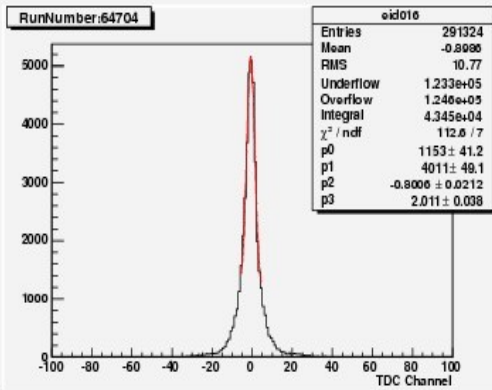
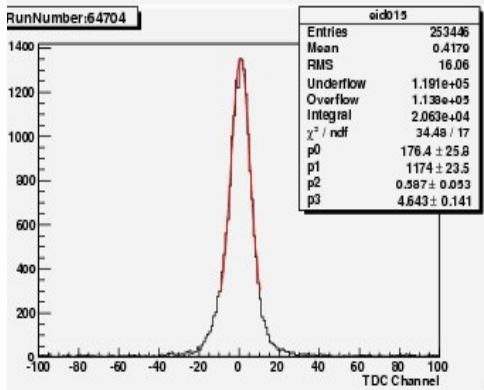
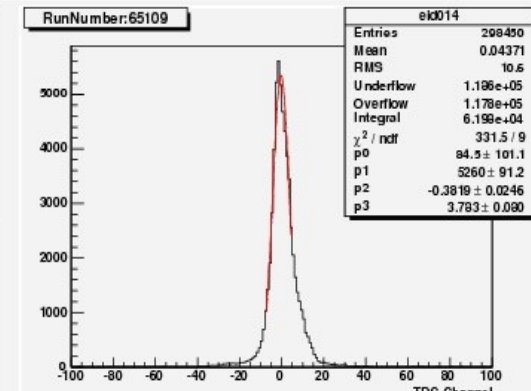
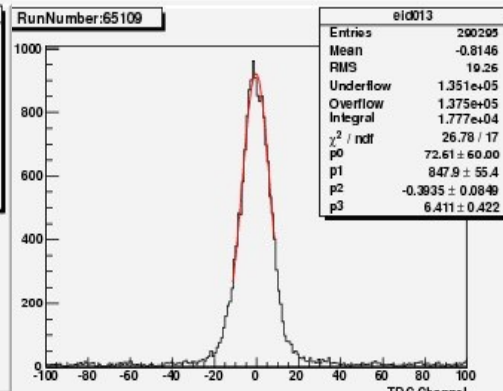
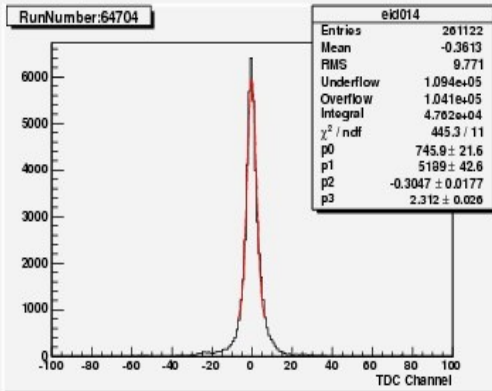
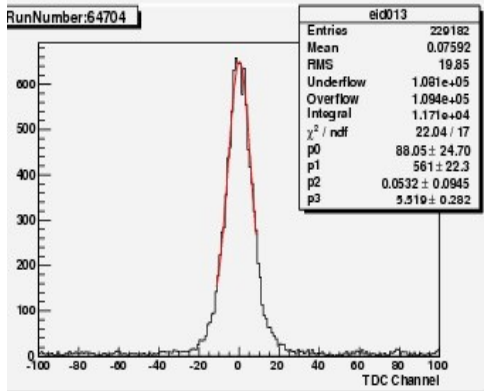
Outline:

1. Alignment results for run #64704 and #65109
2. Distribution of time difference for events reconstructed in
Tagger and PS
3. Using one T-counter to do alignment for PS counters

1. Alignment between two overlapping counters:

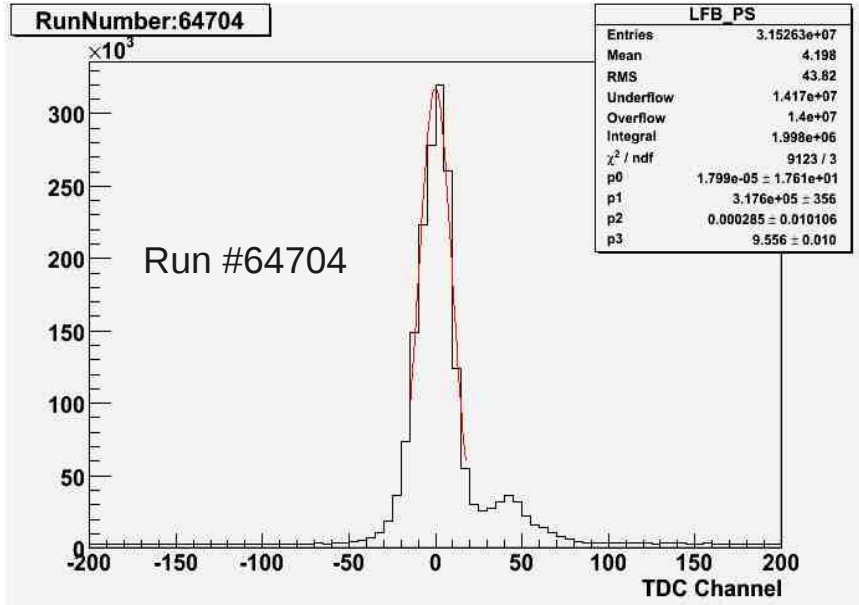
Run #64704

Run #65109

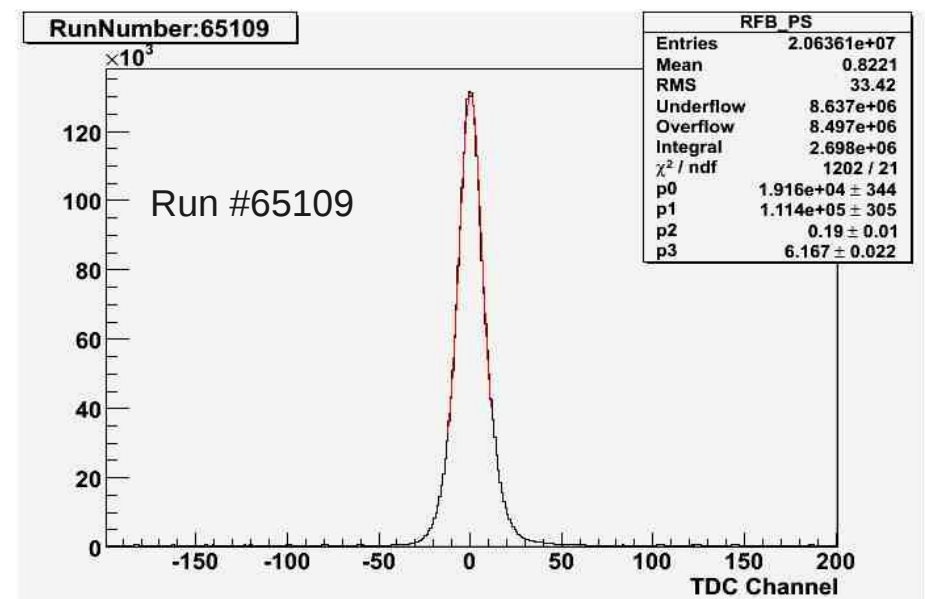
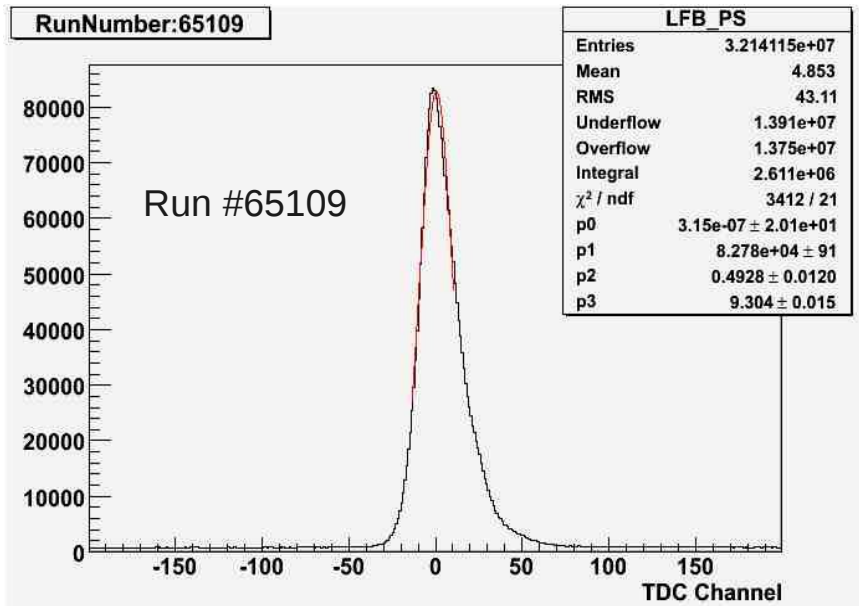
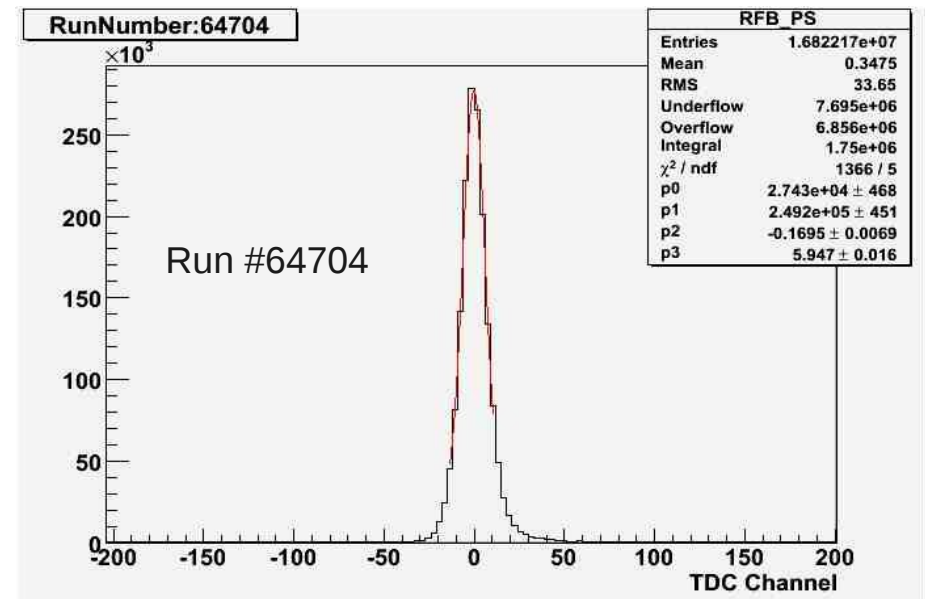


2) Alignment between Front counters and Back counters for each arm

Time diff. between Front and Back counters for left arm

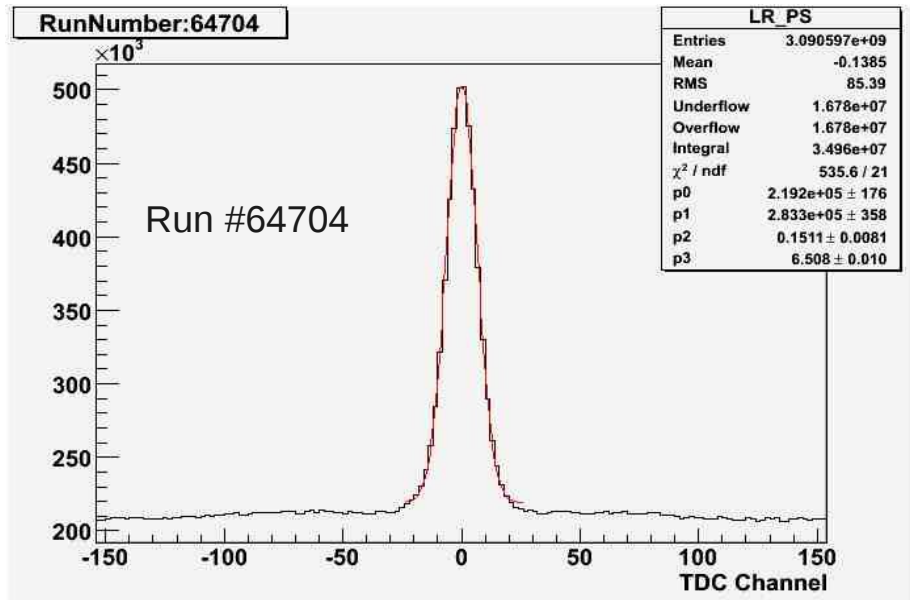


Time diff. between Front and Back counters for right arm

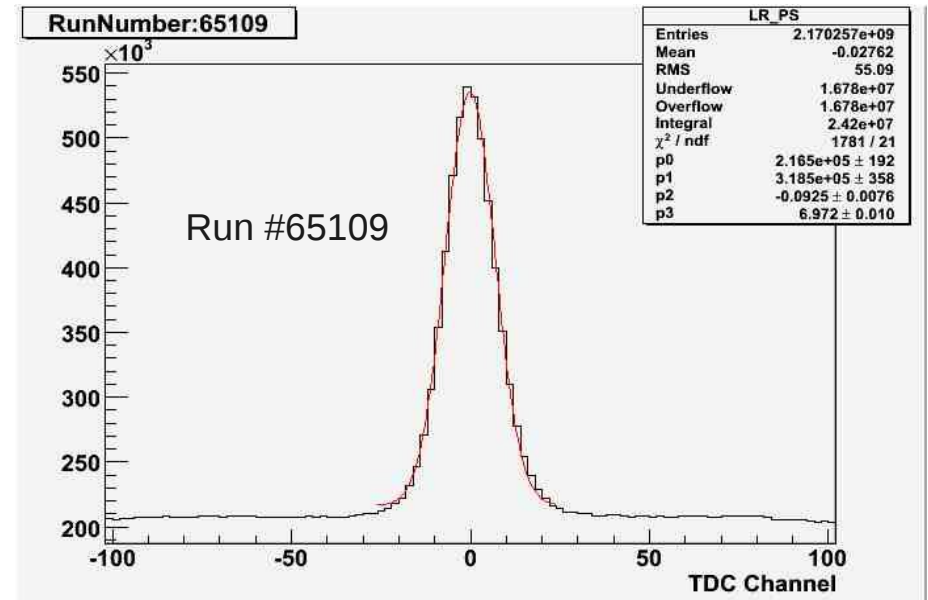


3) Alignment between two arms

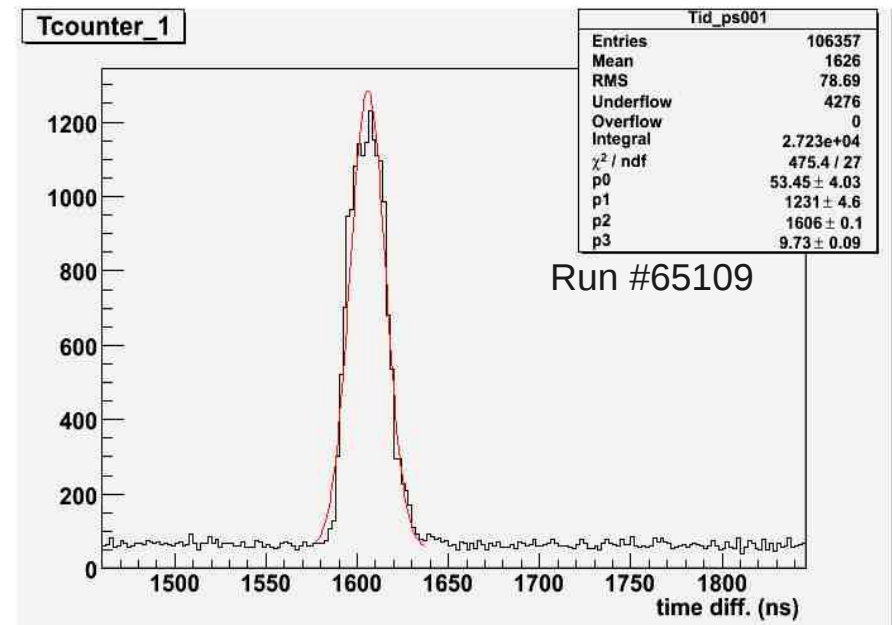
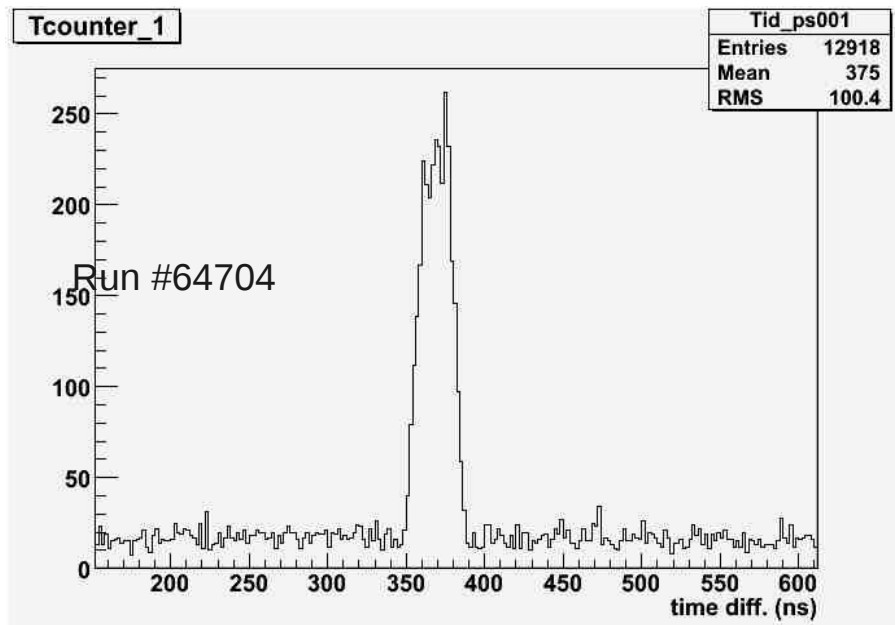
Tdc difference between right and left arm



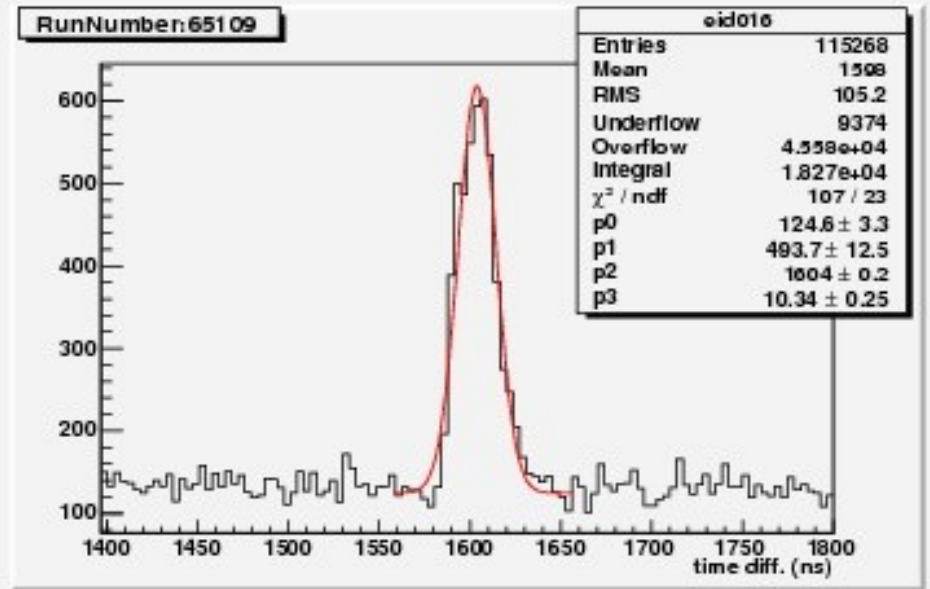
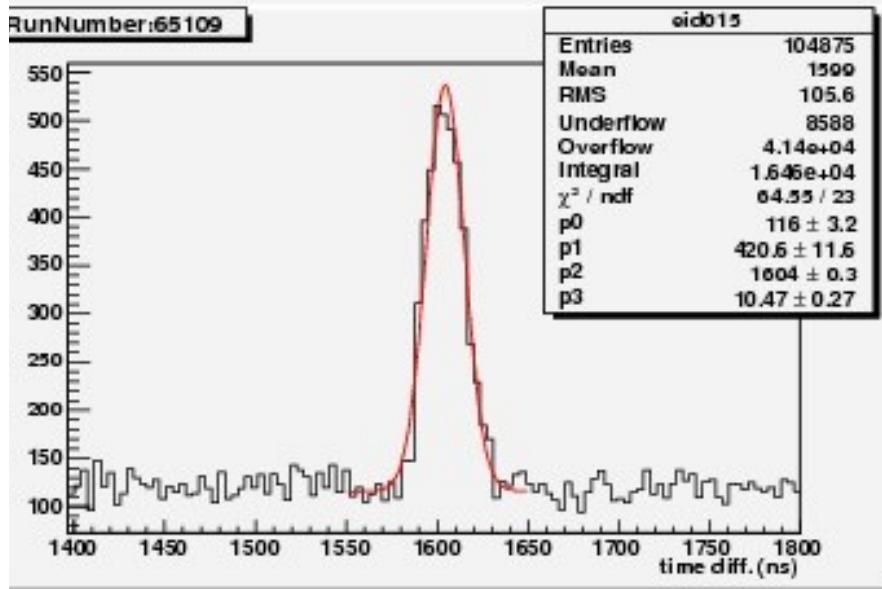
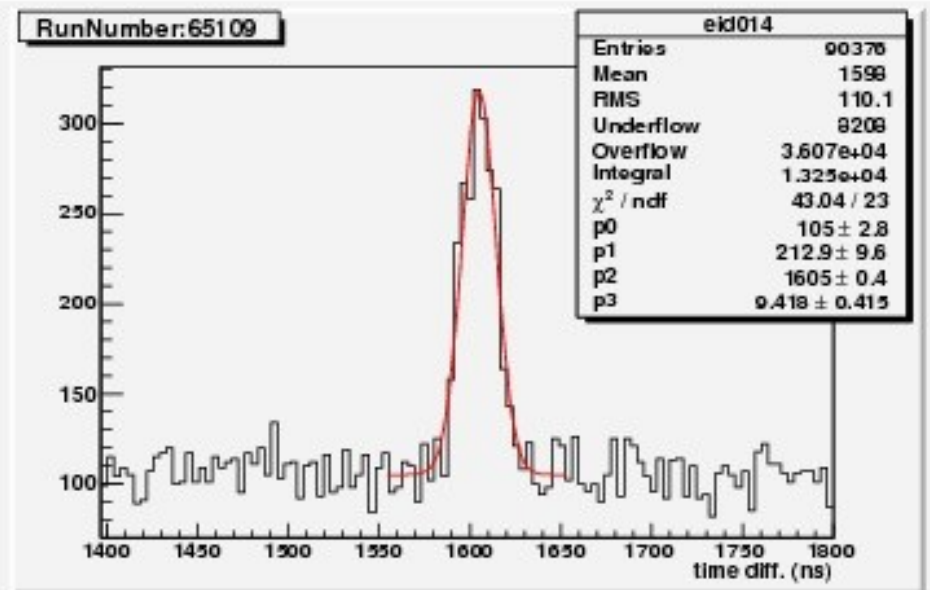
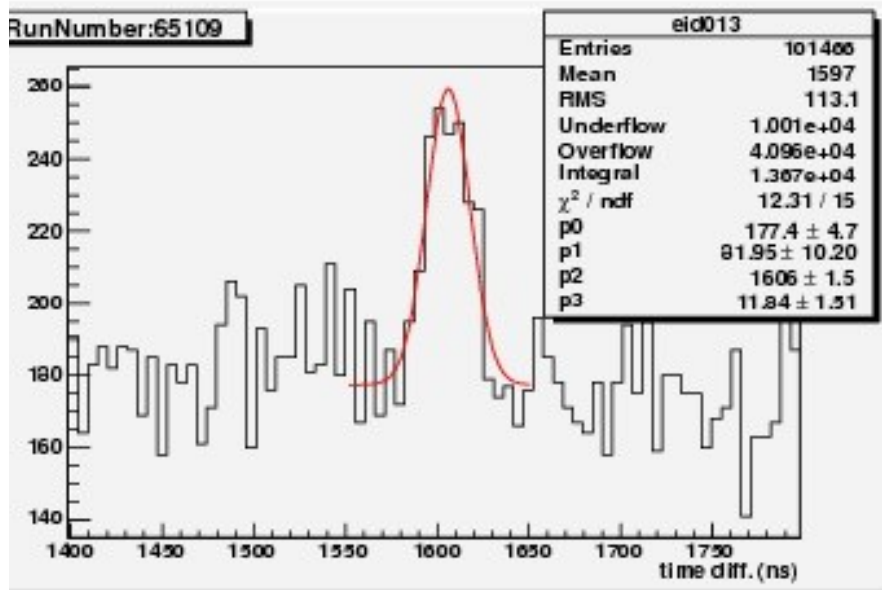
Tdc difference between right and left arm



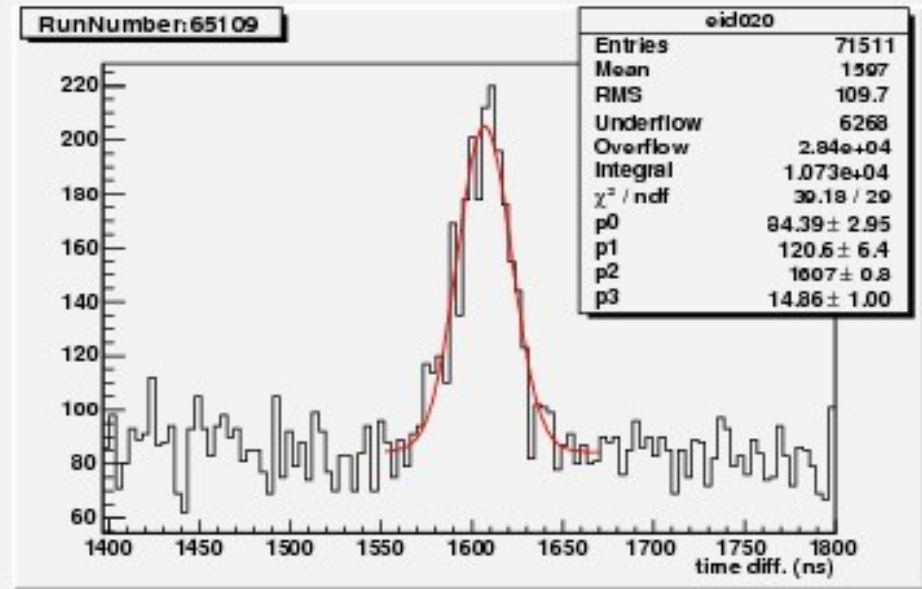
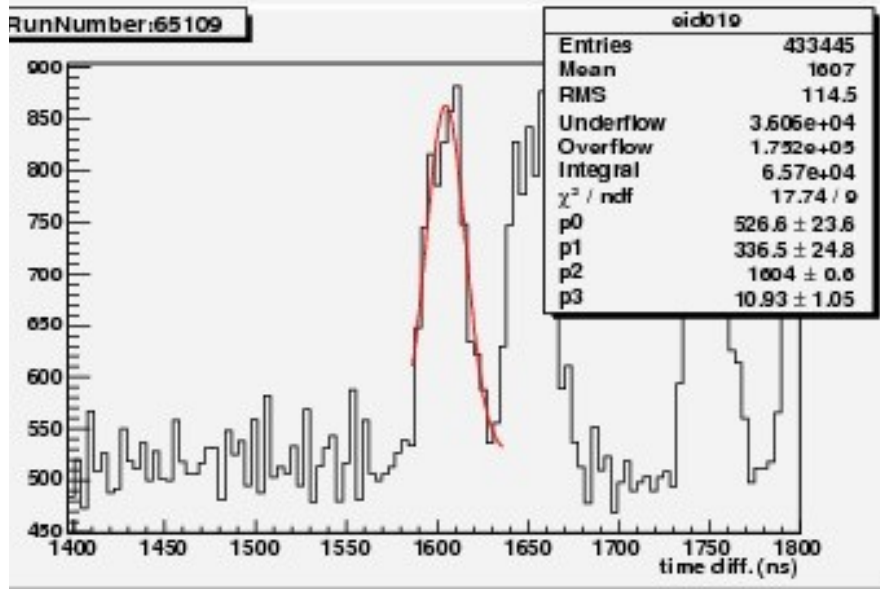
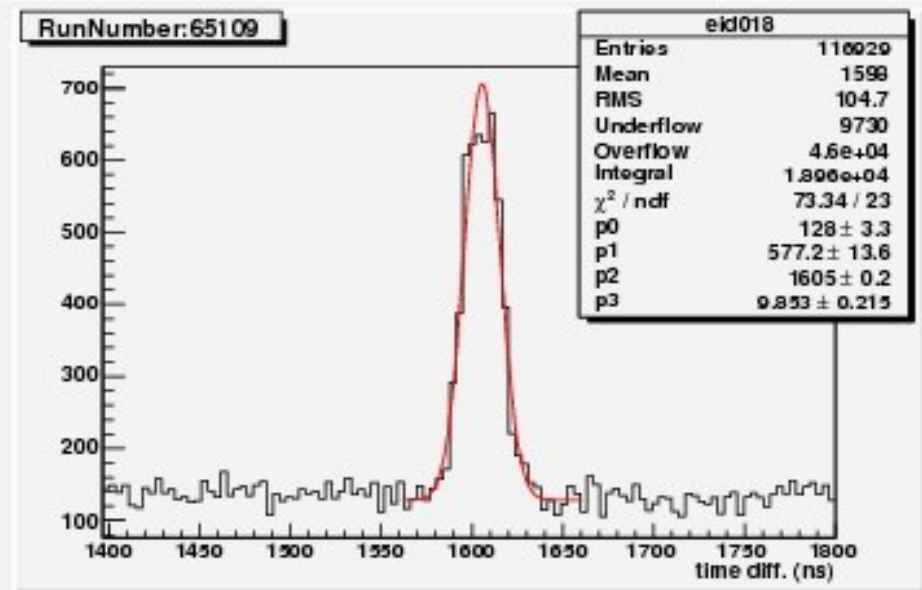
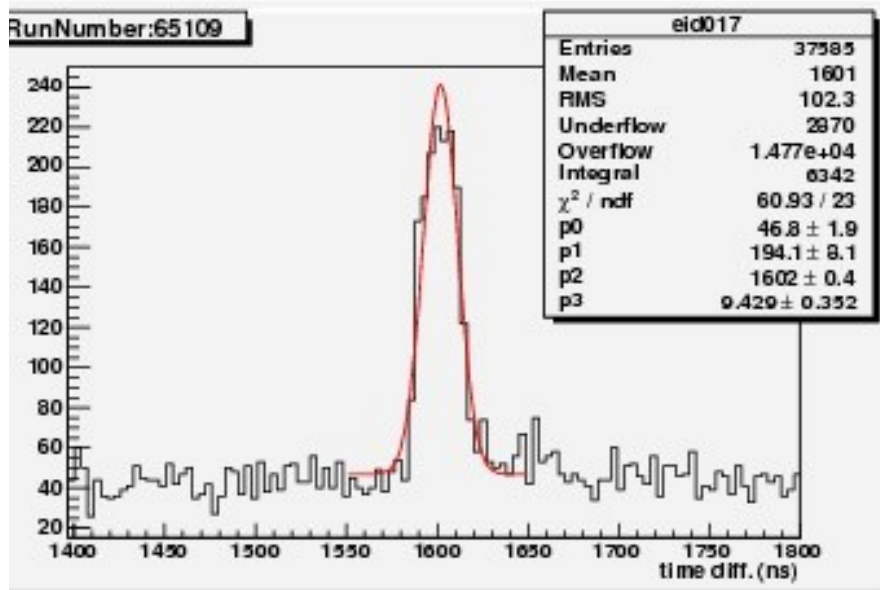
II. Distribution of time difference for events reconstructed in Tagger and PS



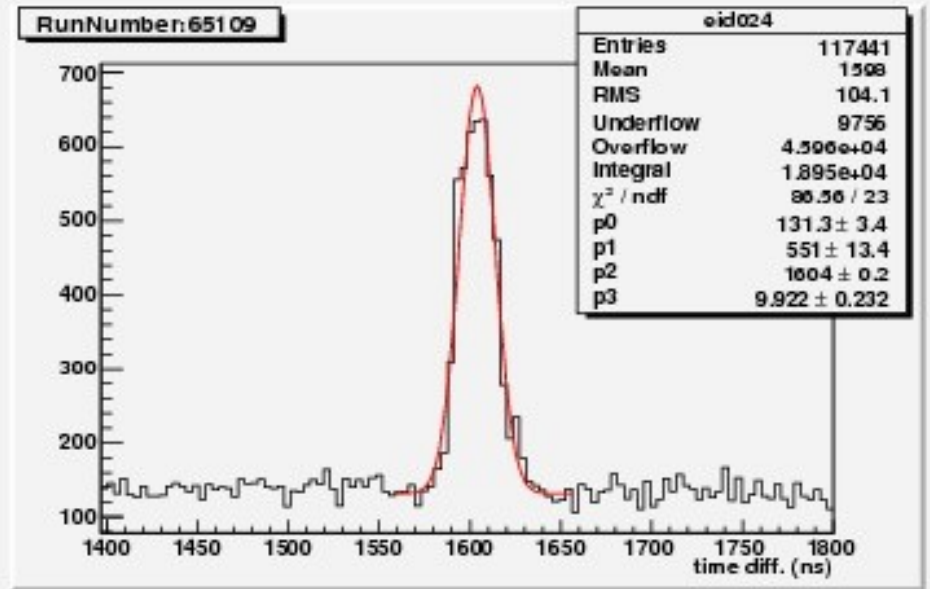
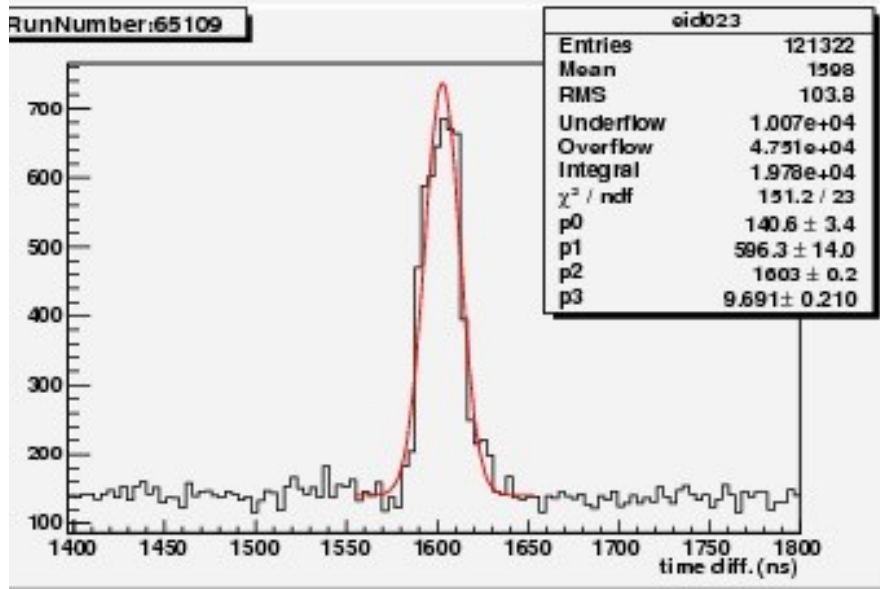
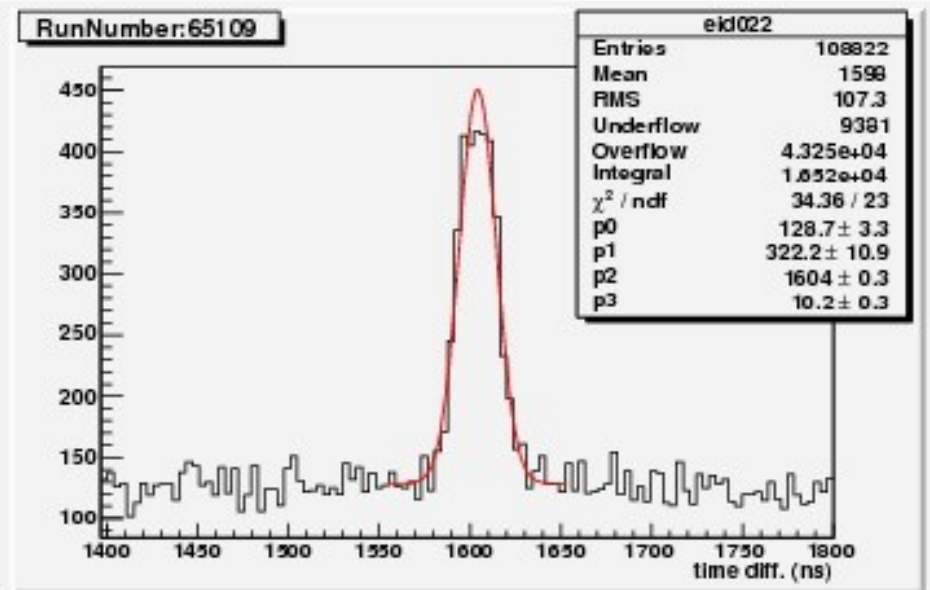
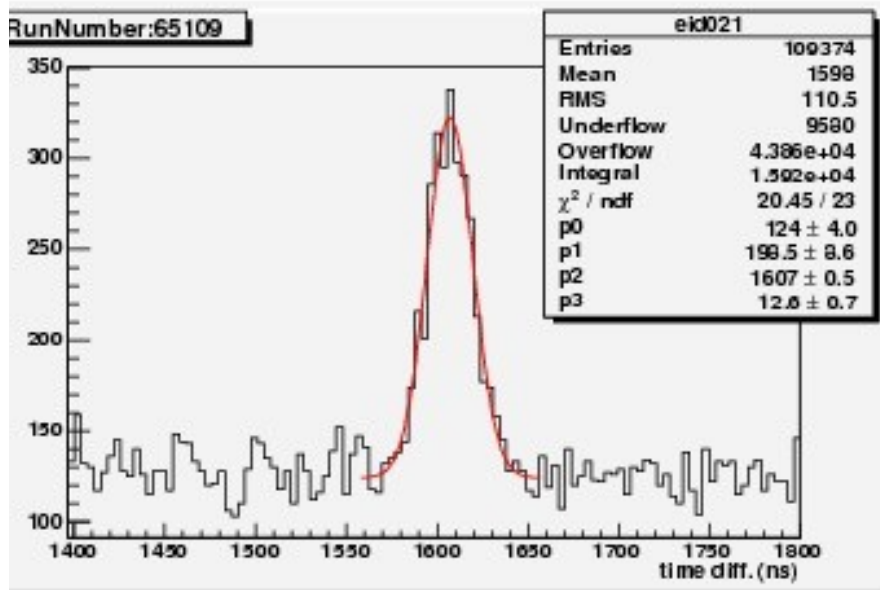
Time diff. Between T-counter #10 and each PS counter



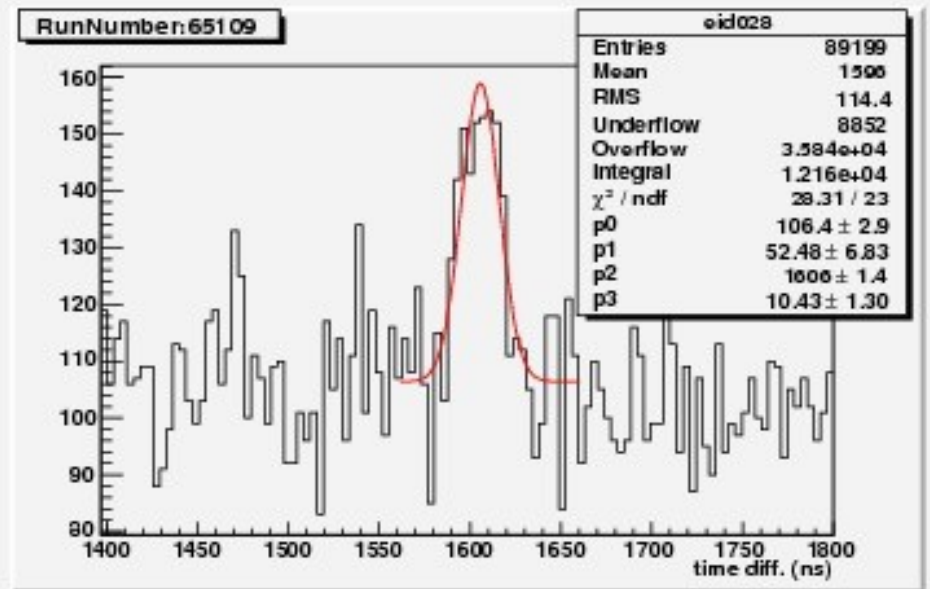
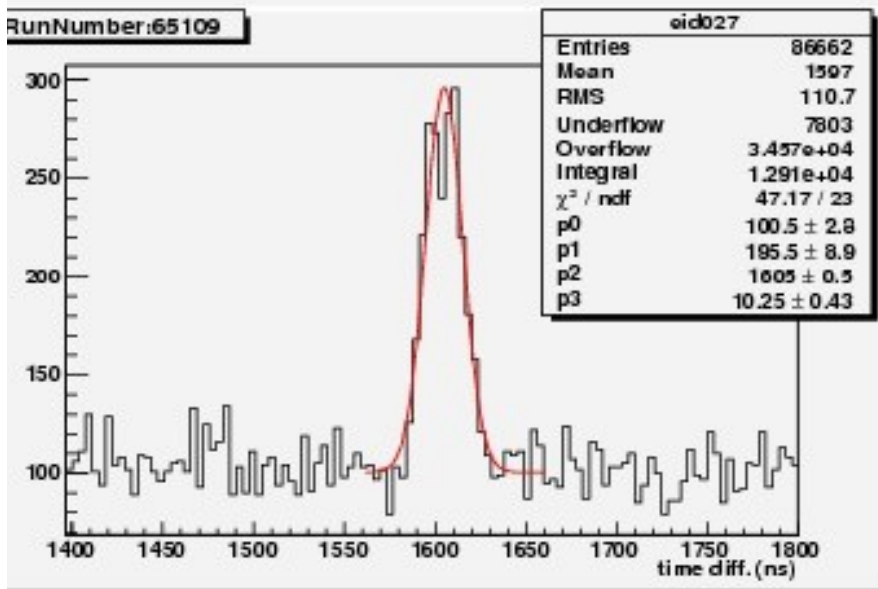
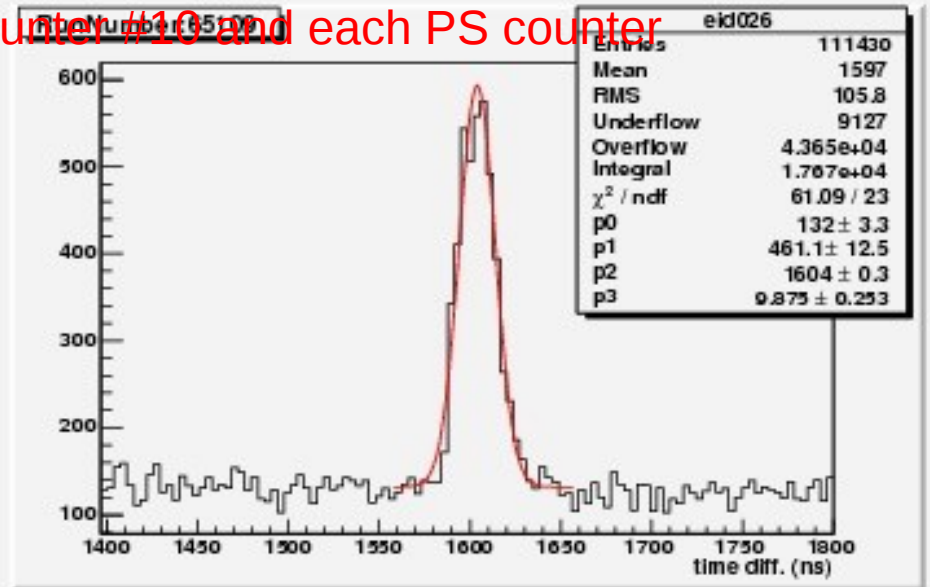
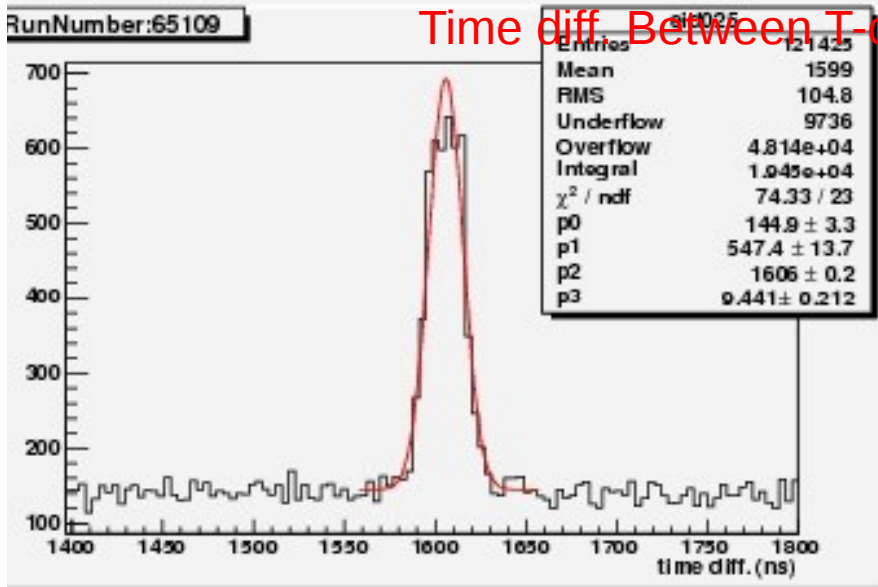
Time diff. Between T-counter #10 and each PS counter



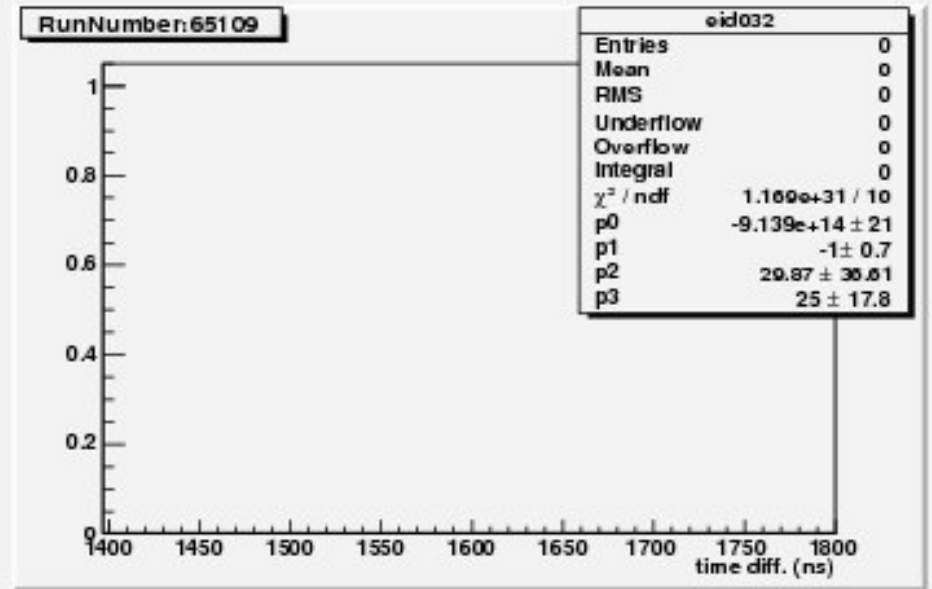
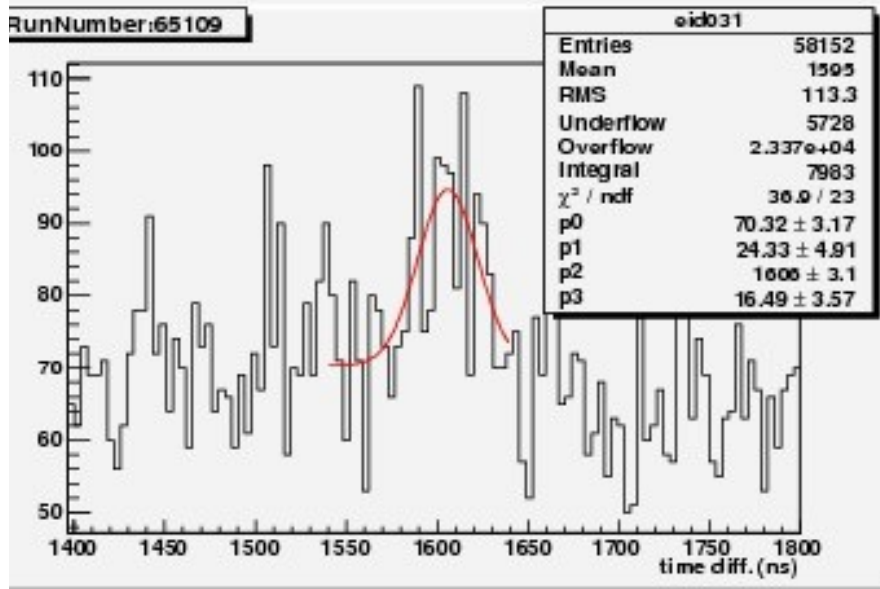
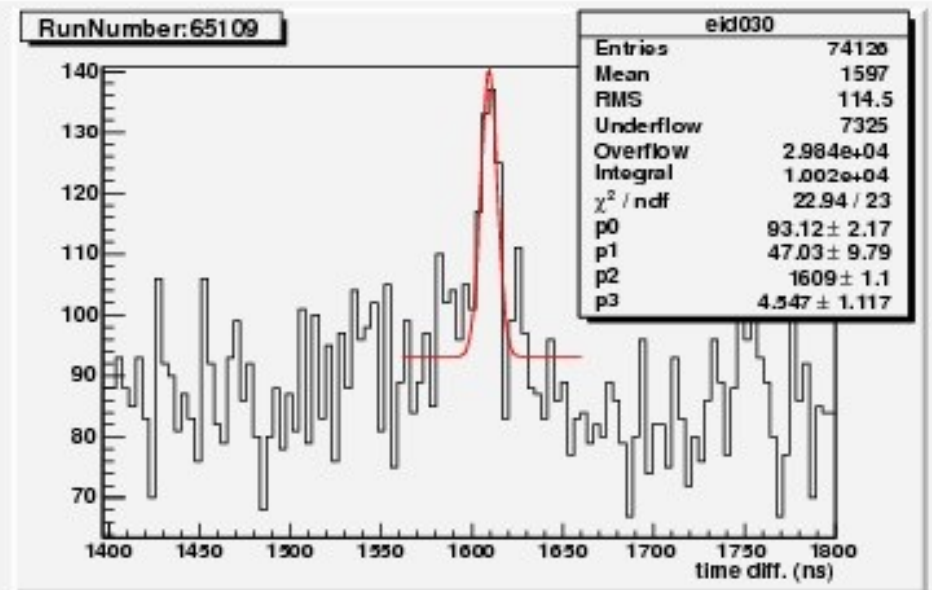
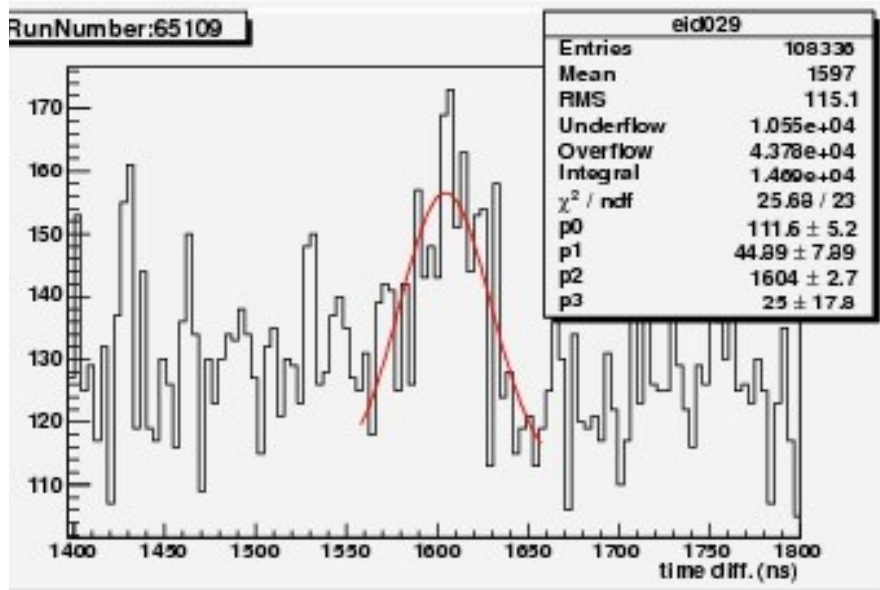
Time diff. Between T-counter #10 and each PS counter



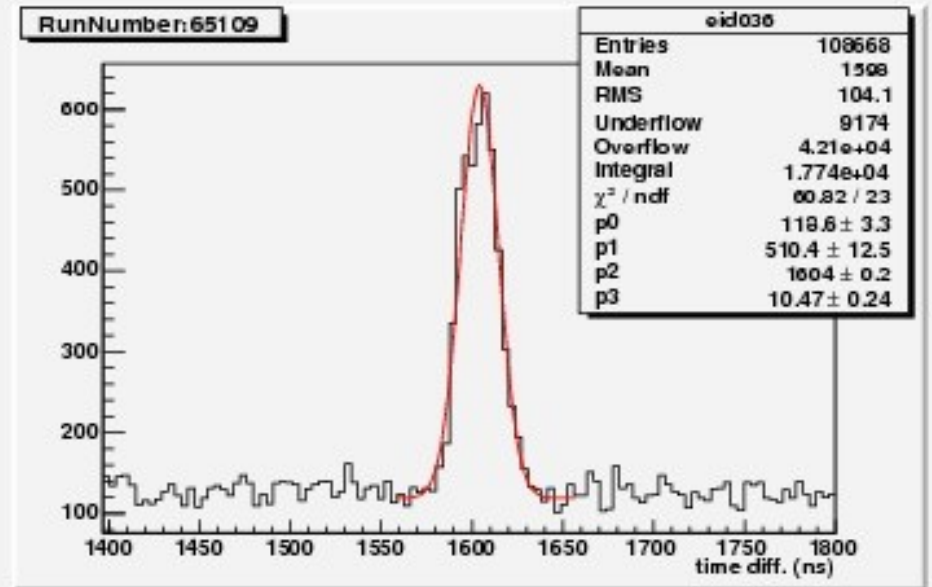
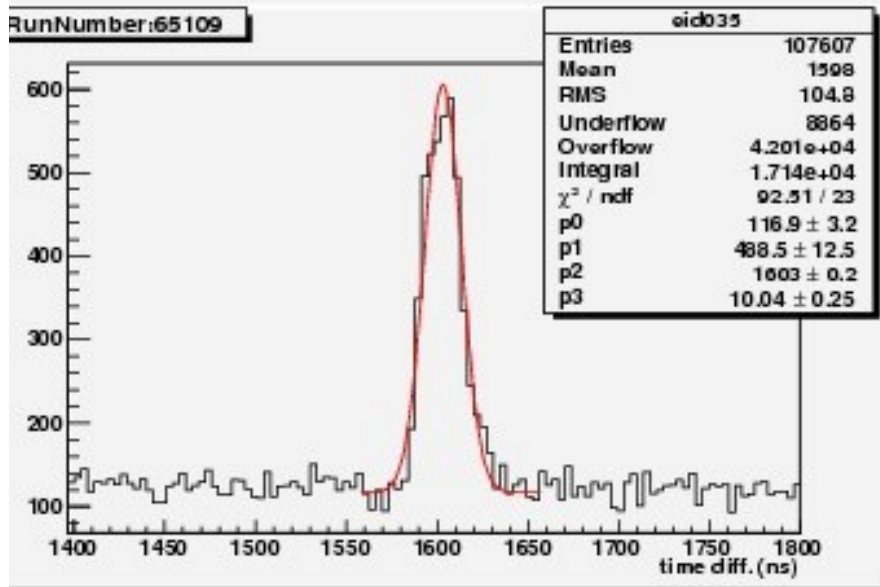
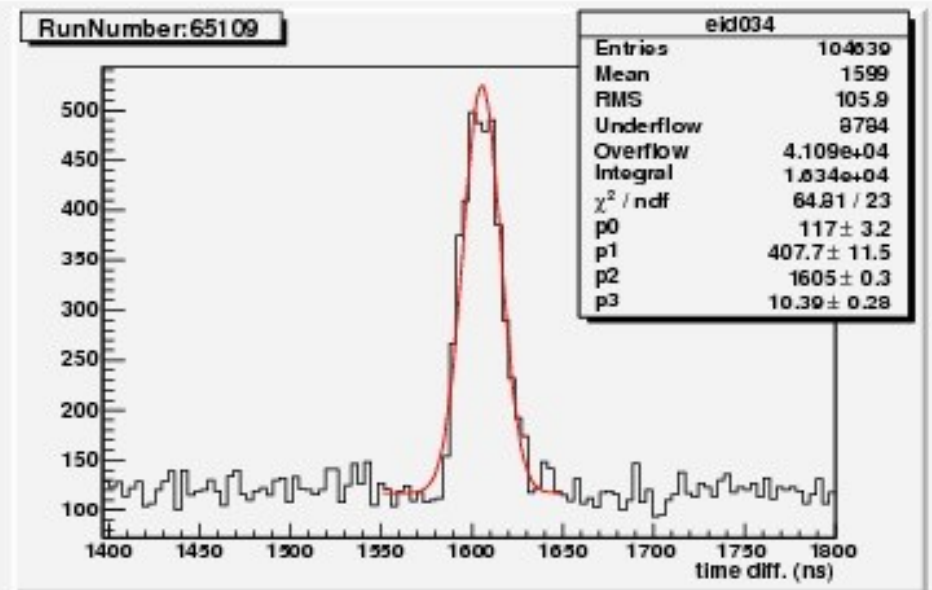
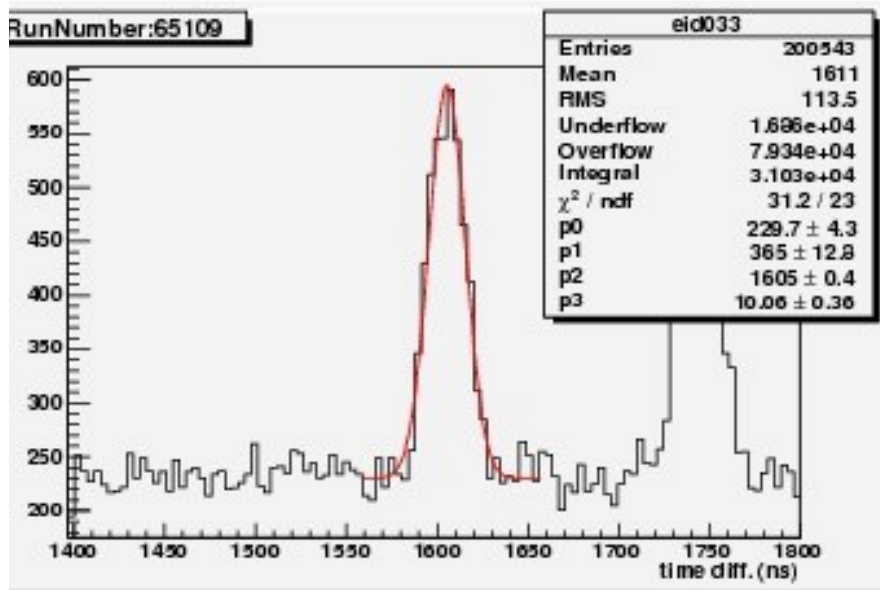
Time diff. Between T-counter #10 and each PS counter



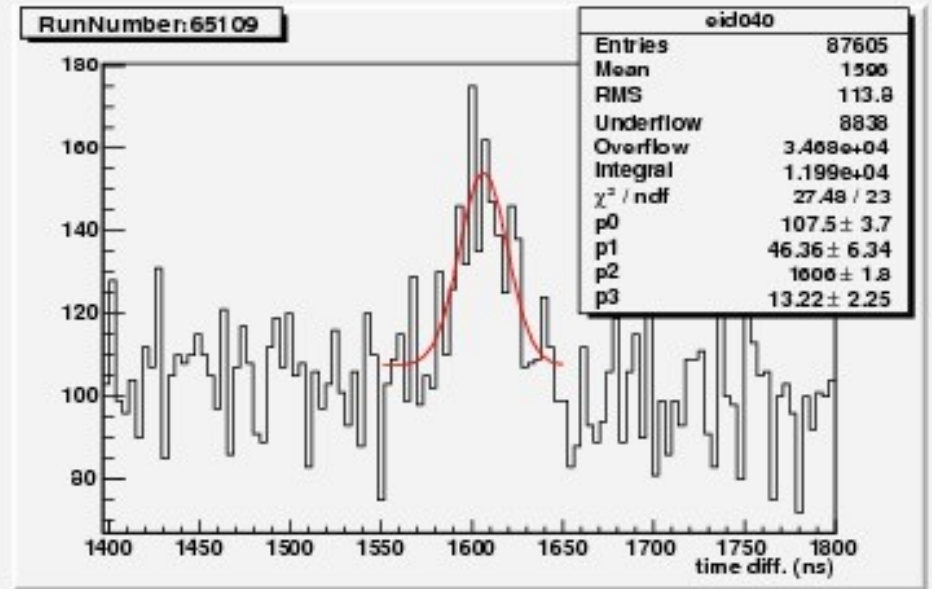
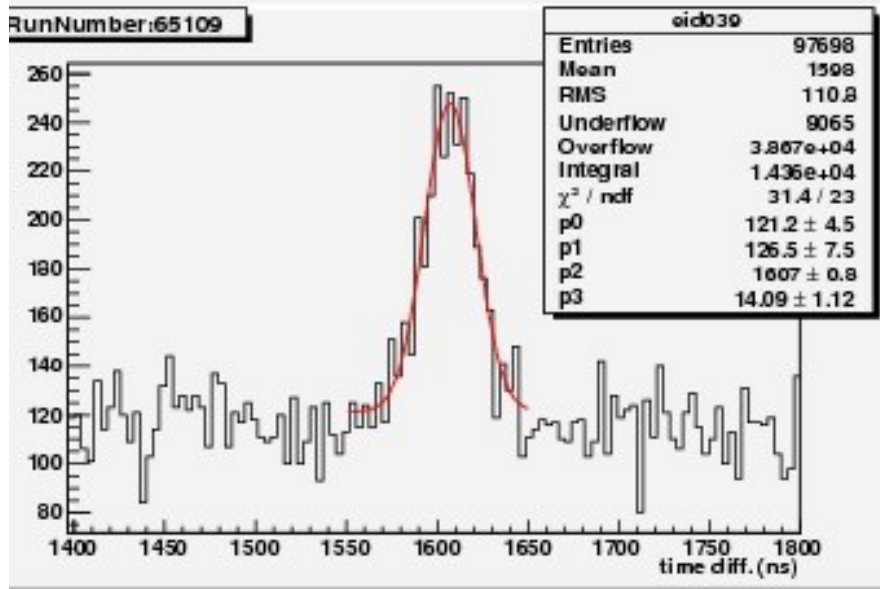
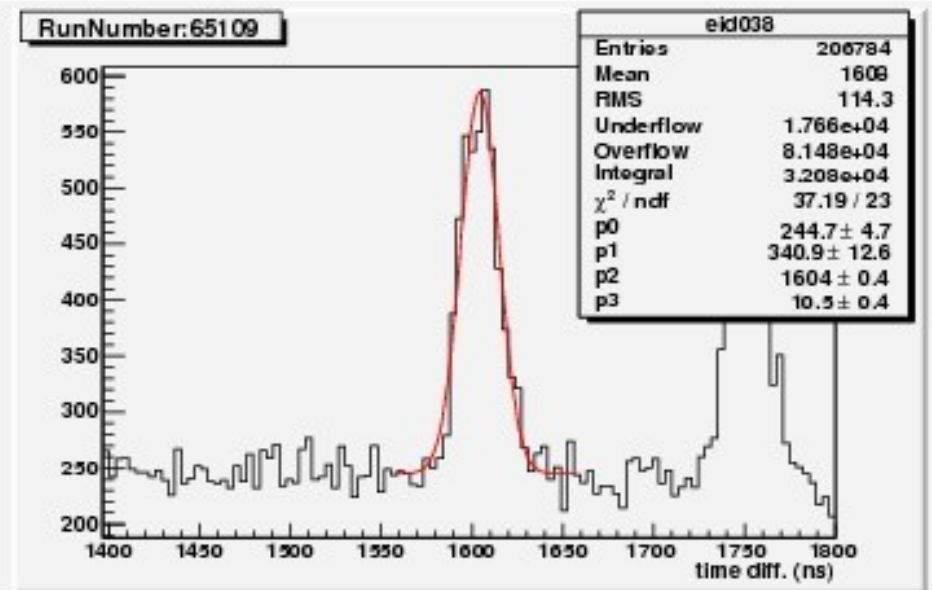
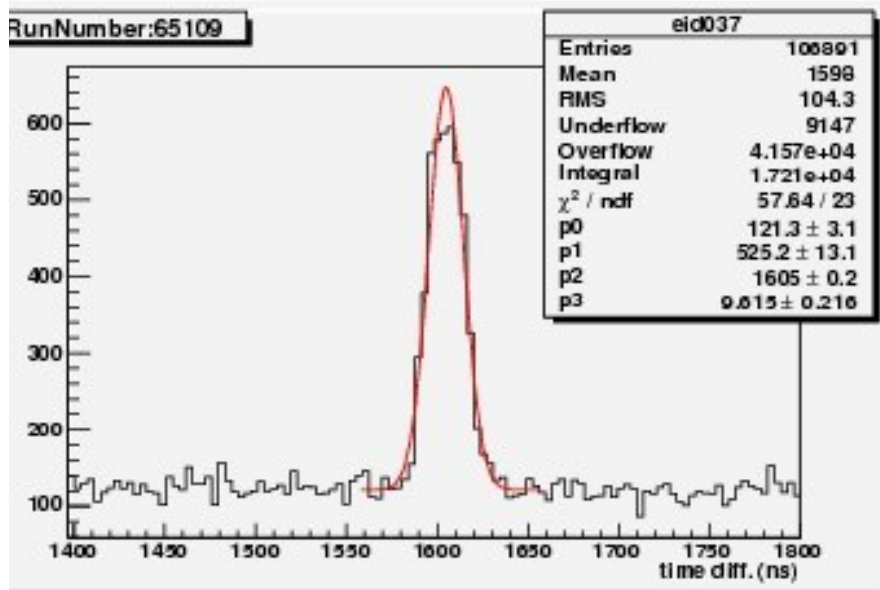
Time diff. Between T-counter #10 and each PS counter



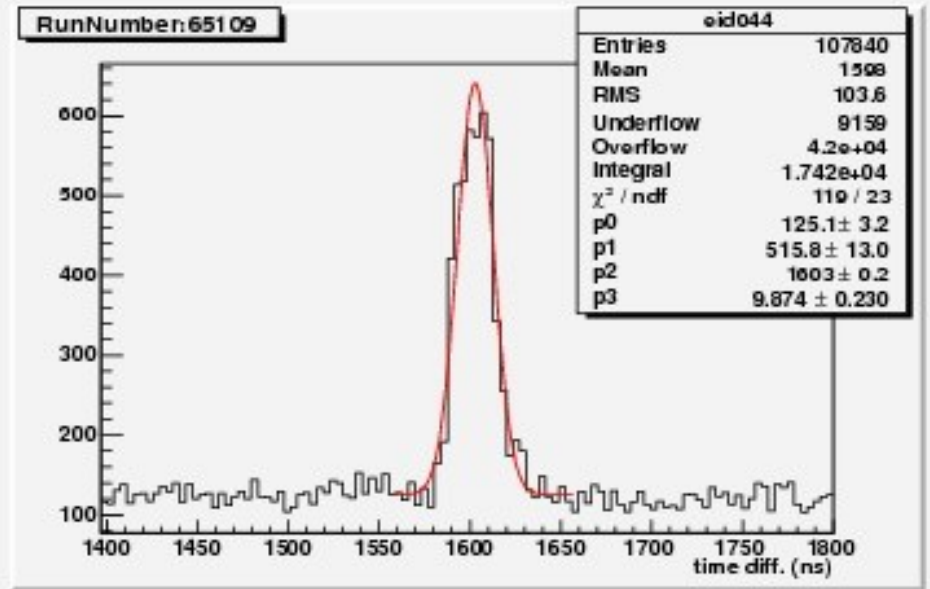
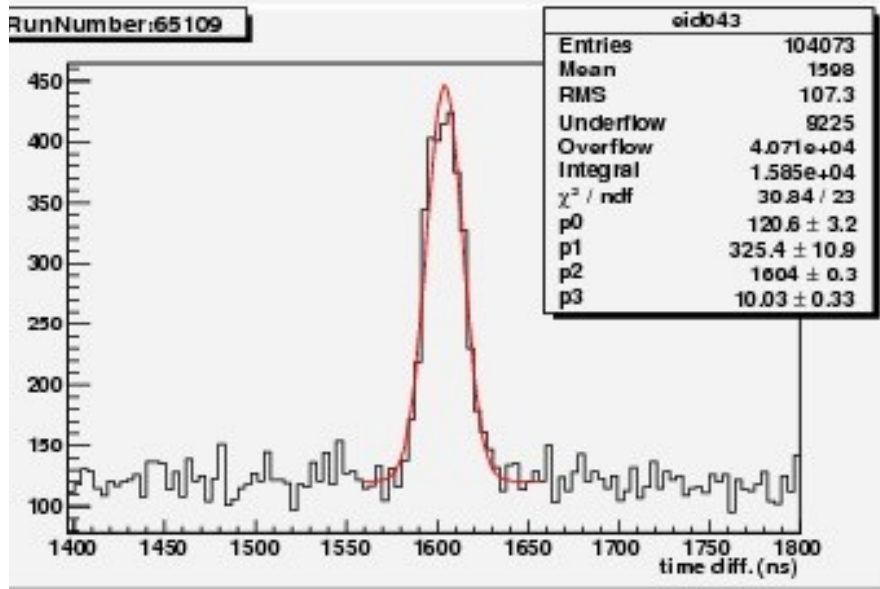
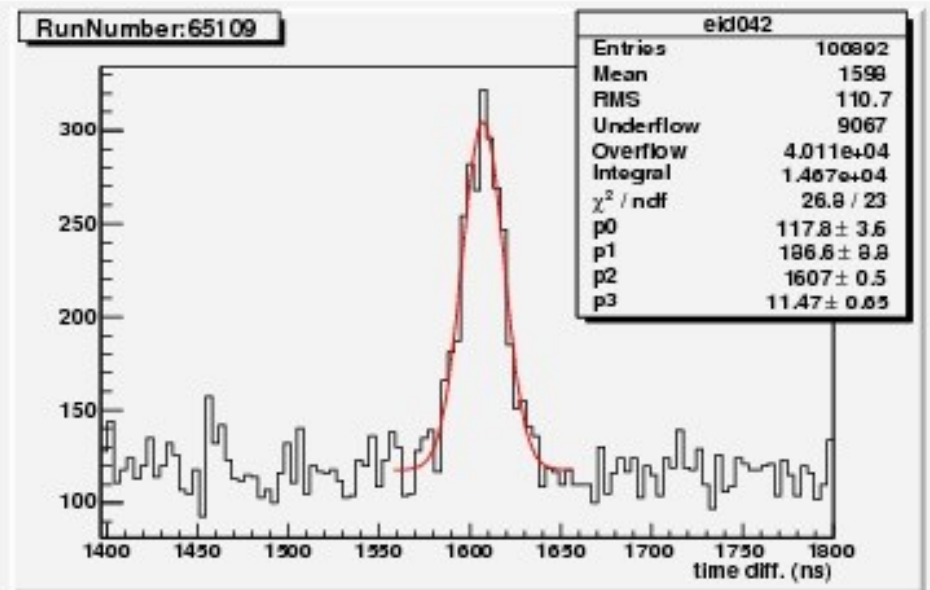
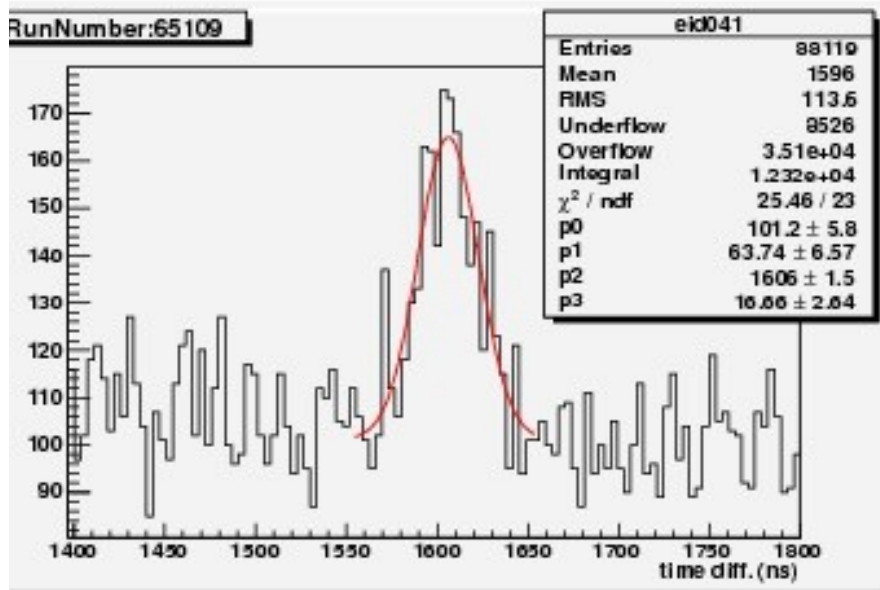
Time diff. Between T-counter #10 and each PS counter



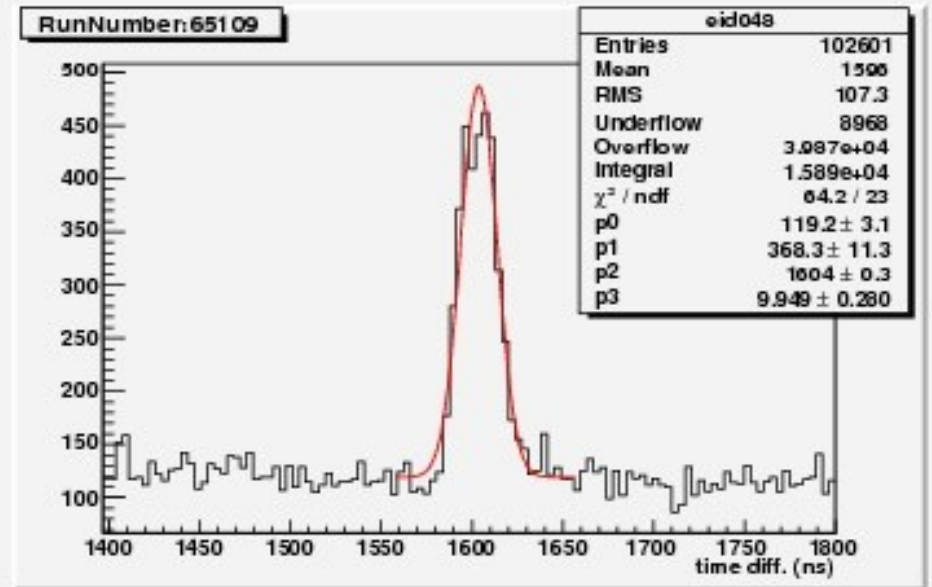
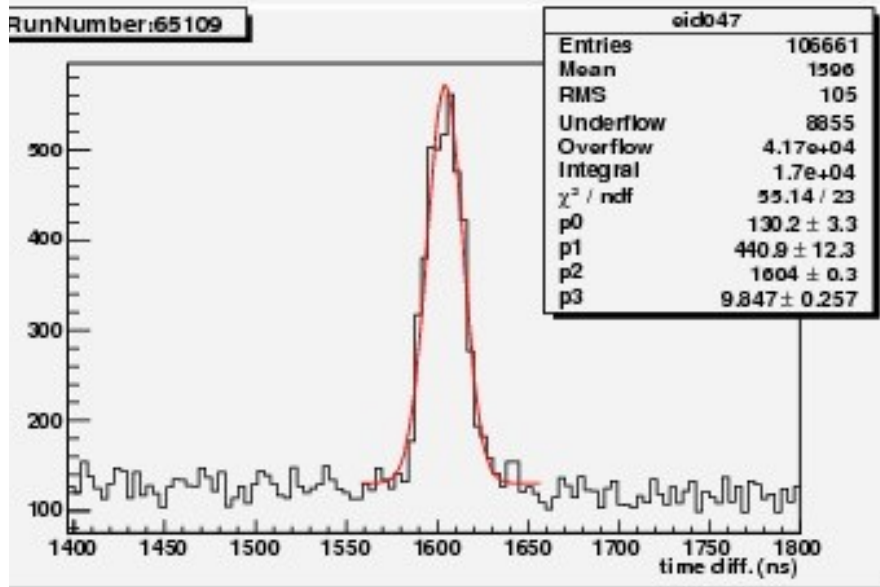
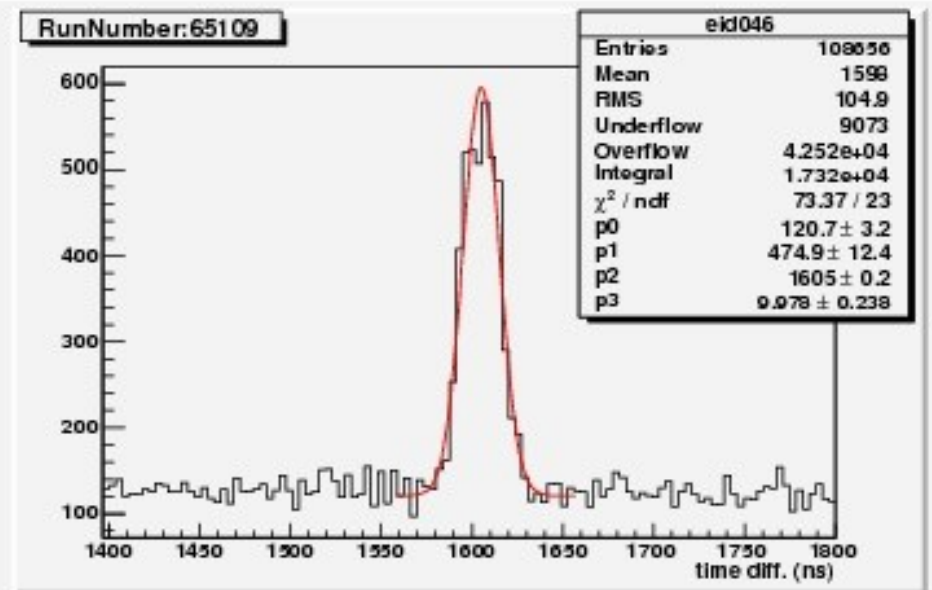
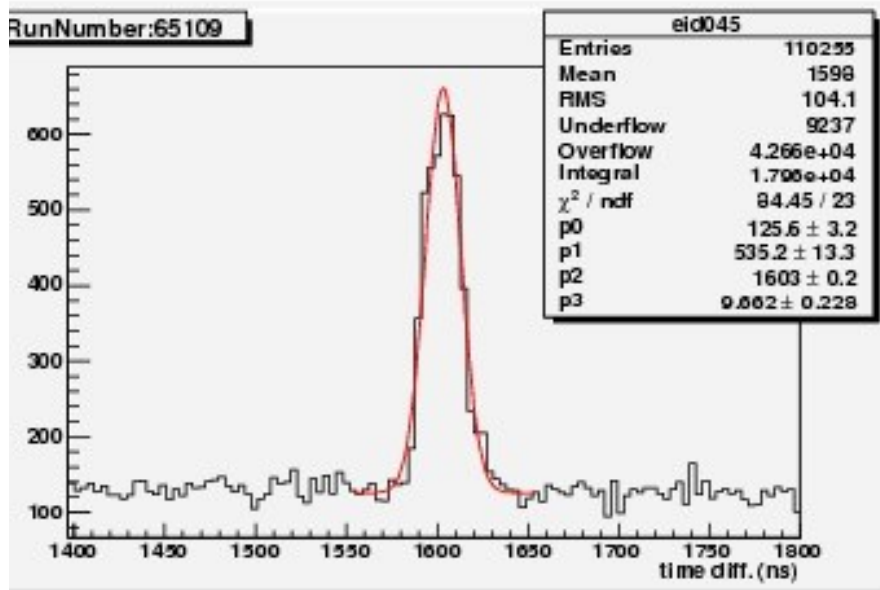
Time diff. Between T-counter #10 and each PS counter



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Time diff. Between T-counter #10 and each PS counter



- Conclusion:

The time resolution of time diff. between Tagger and PS is not good and the sigma is 10ns around.