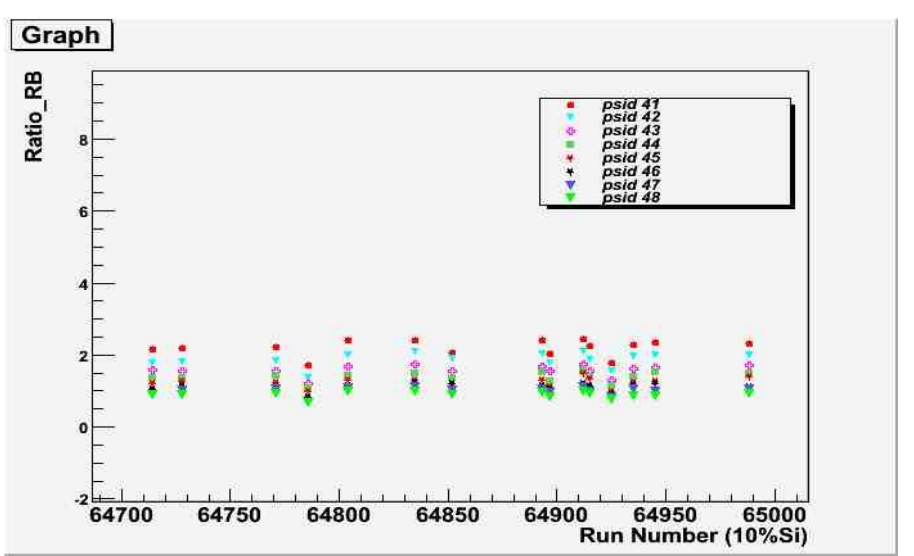
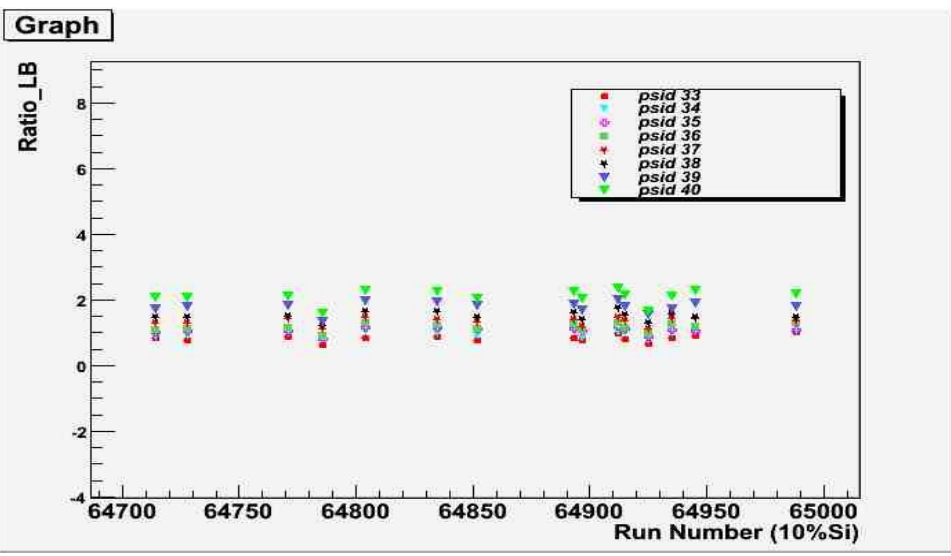
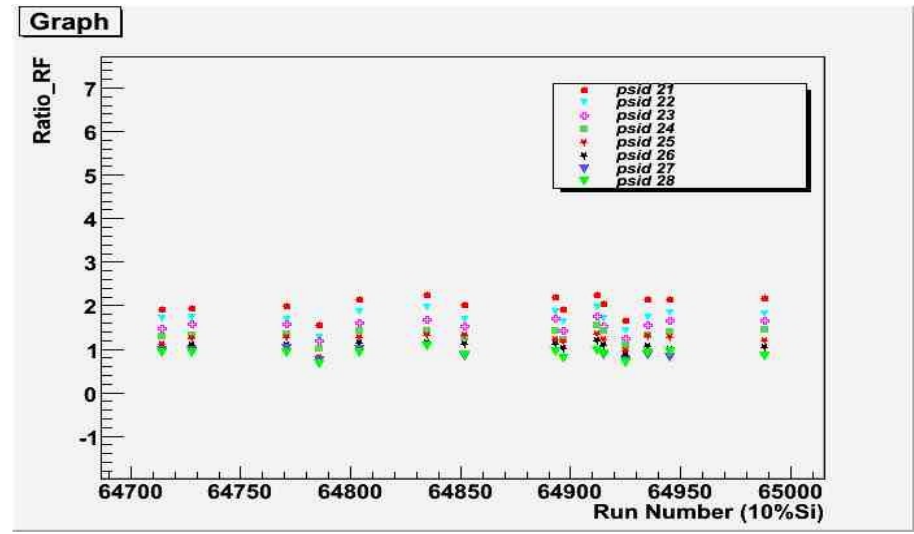
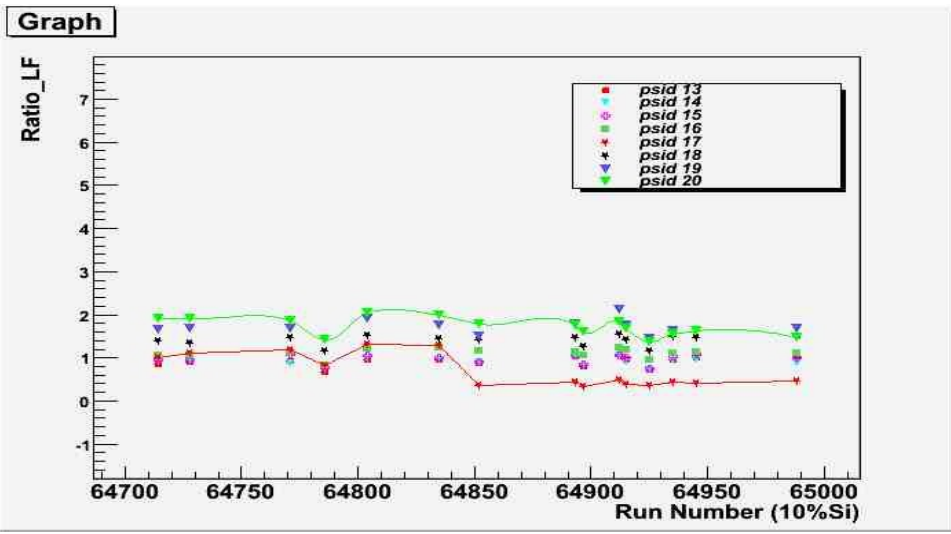
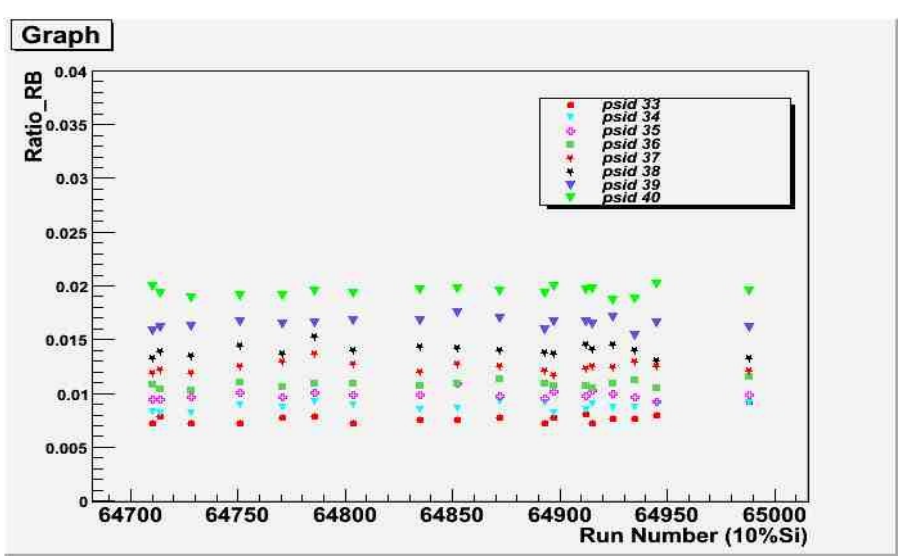
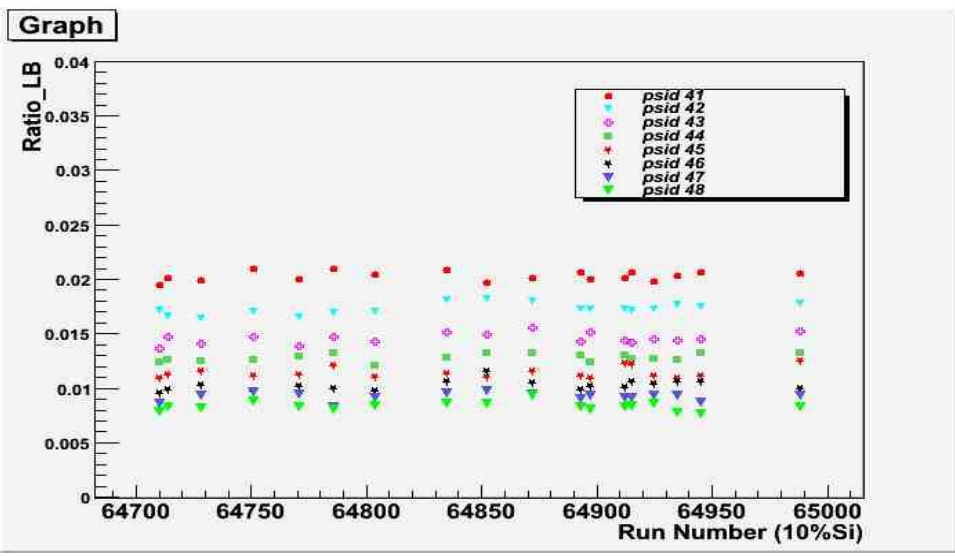
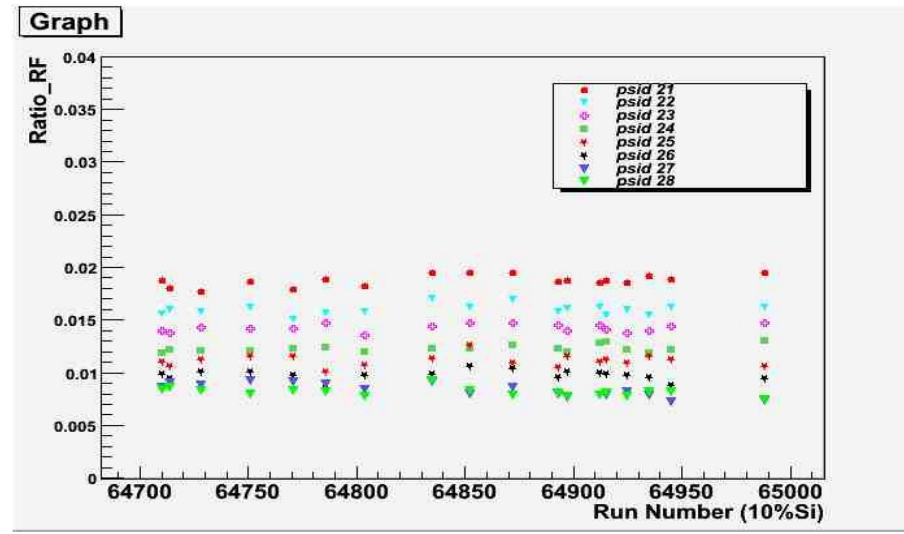
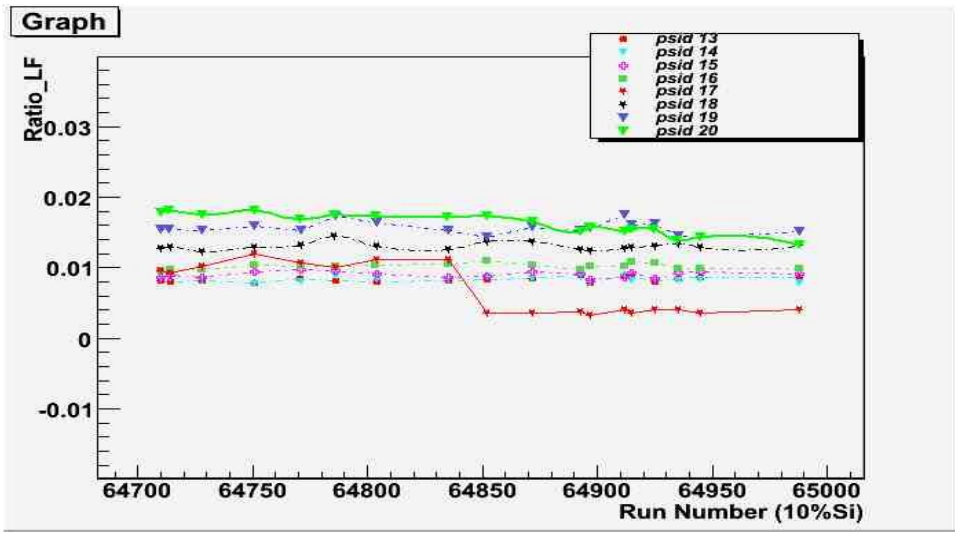


- 1) The rate of hits for each ps counter vs. run number
- 2) the ratio of each ps counter total hits to the number of events VS. run number
- 3) the ratio of coincidence signal of tagger and each ps counter to beam e- VS. run number

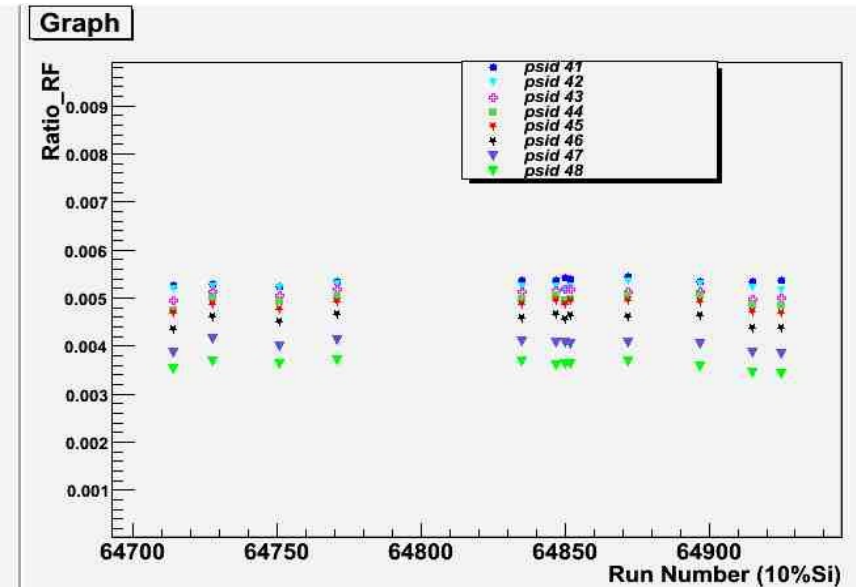
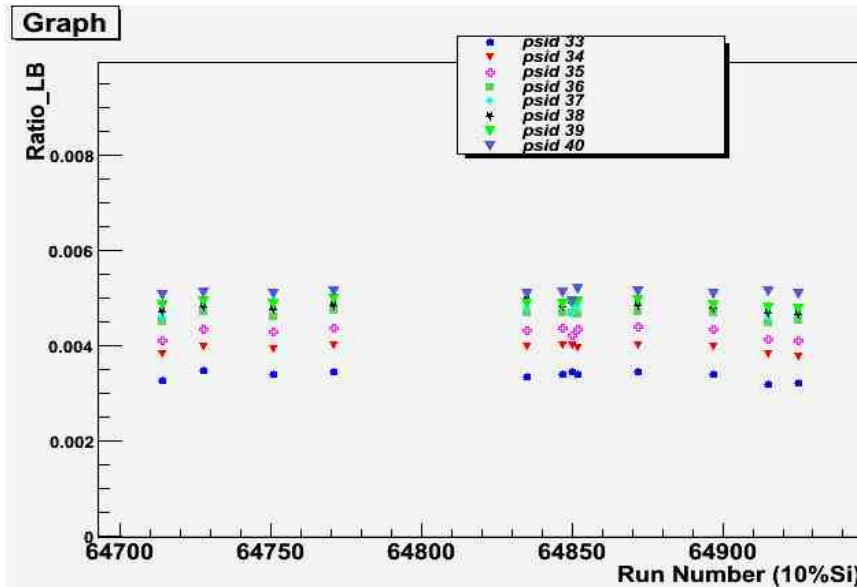
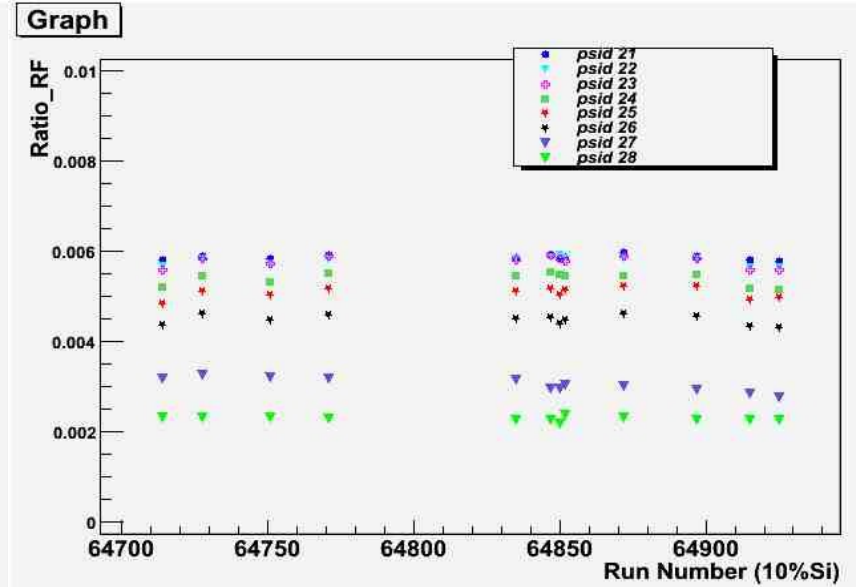
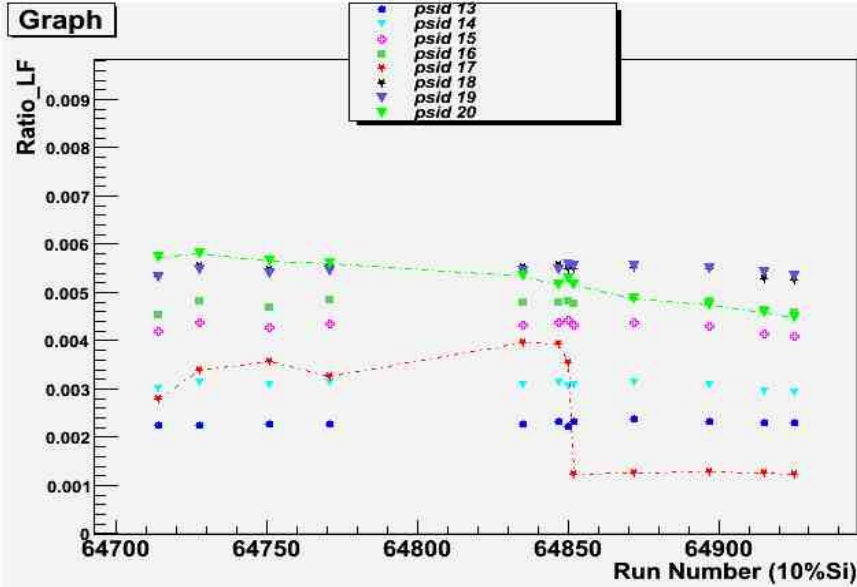
Y axis: The hits rate of each ps counters: **number of hits/(time\* bc)**  
 X axis: Run Number



Y axis: number of hits/ number of events (event\_class = 1, MOR)  
X axis: Run Number



Y axis : the ratio of coincidence signal of tagger and each ps counter to beam e-  
 X axis: Run number

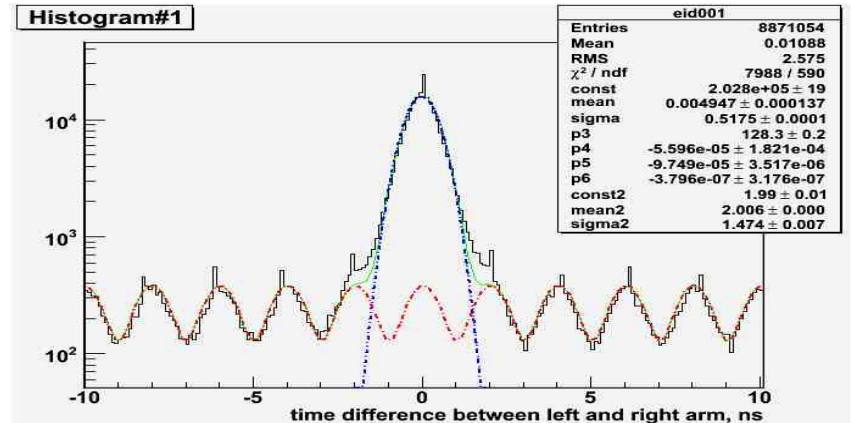


## Tdiff of left and right track

Used all ps counters:

Sigma: 0.518 ns

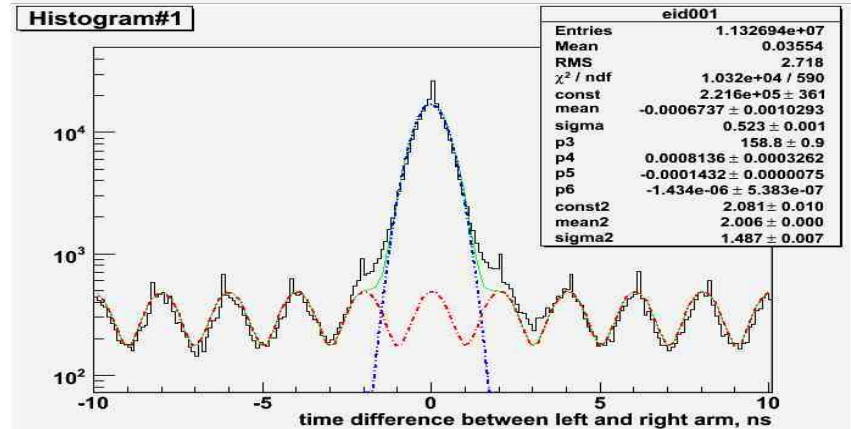
Signal to noise ratio:14.70



Exclude ps\_id 17 and 20:

Sigma: 0.523 ns

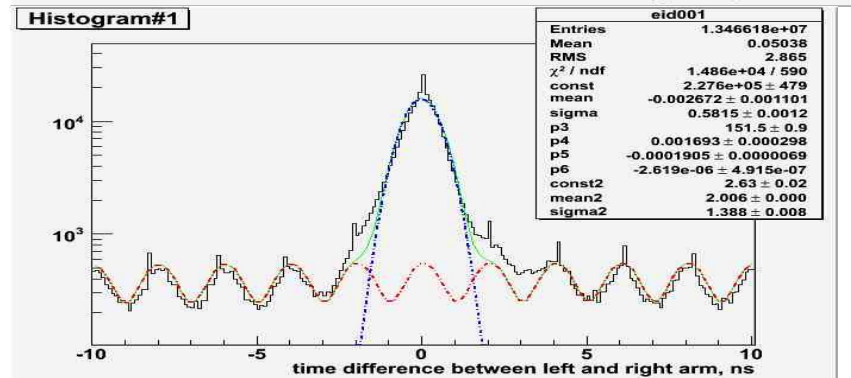
Signal to noise ratio:12.40



Exclude all left-front ps counters:

Sigma: 0.582 ns

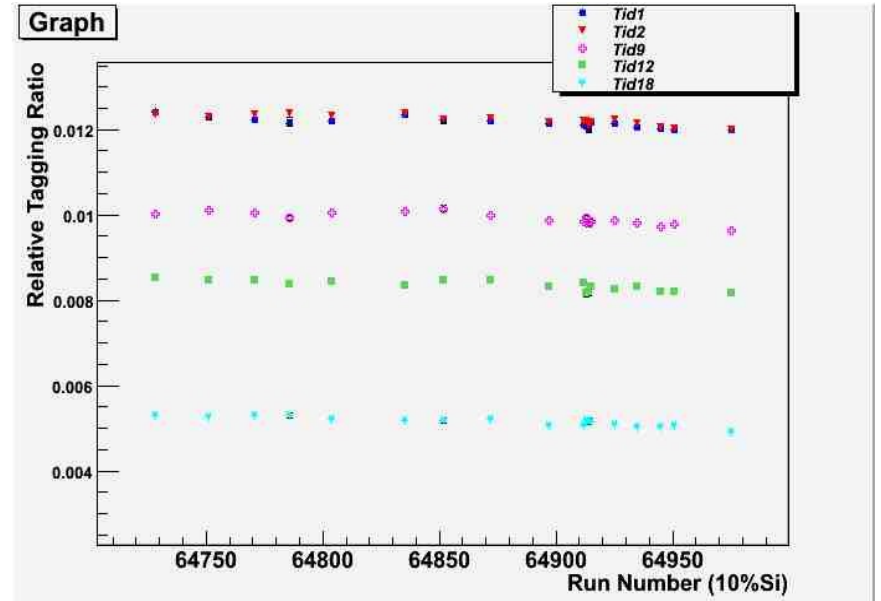
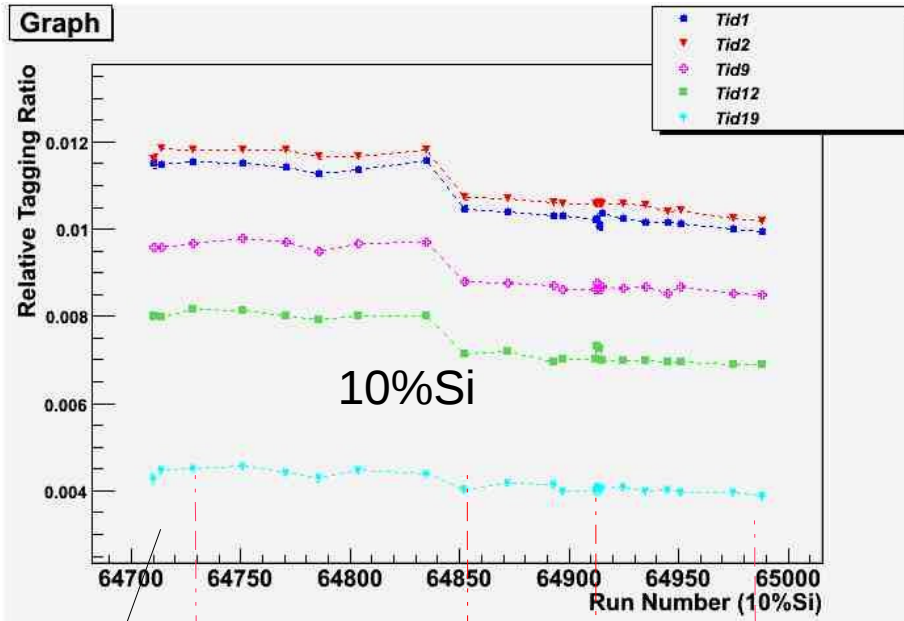
Signal to noise ratio:9.99



Relative tagging ratio of Tid1,Tid2,Tid9,Tid12,Tid19 as function of run number of 22 runs spanning all production runs with Si target (clock trigger)

Before excluding psid #17,20

After excluding psid #17,20

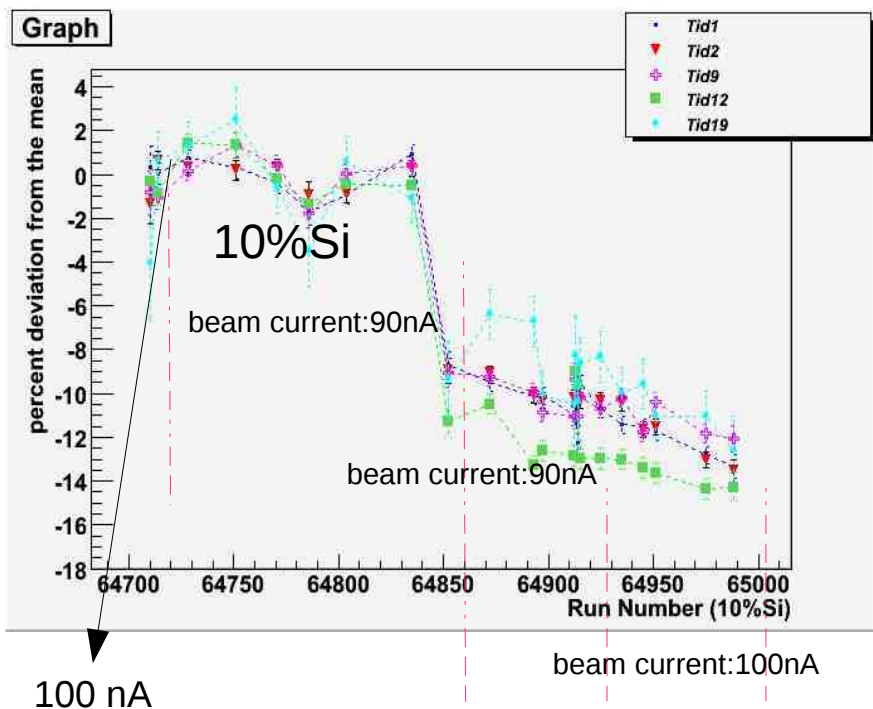


100 nA  
 1 beam current:90nA  
 2 beam current:90nA  
 3 beam current:100nA

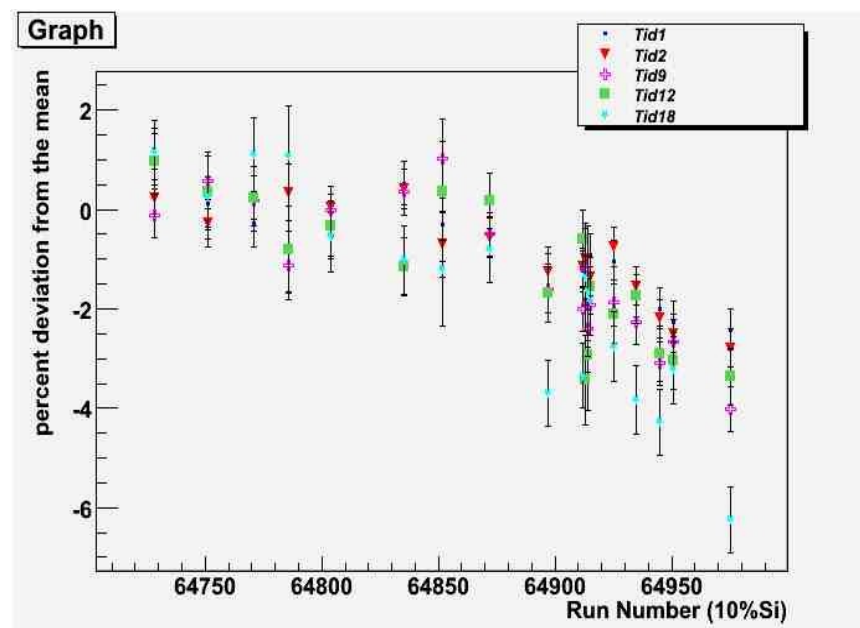
1. Run Number( 90nA ): 64710, 64714(100nA), 64728, 64751, 64771, 64786, 64804, 64835
2. Run Number(90nA): 64852, 64872, 64893, 64897, 64912, 64913
3. Run Number(100nA): 64914, 64915,64925,64935,64945,64951,64975,64988

Percent deviation from the average mean value as the function of run numbers, and the average mean values were calculated for each T-counters from 7 of 20 runs at the range from 64728 to 64850

Before excluding psid #17,20



After excluding psid #17,20



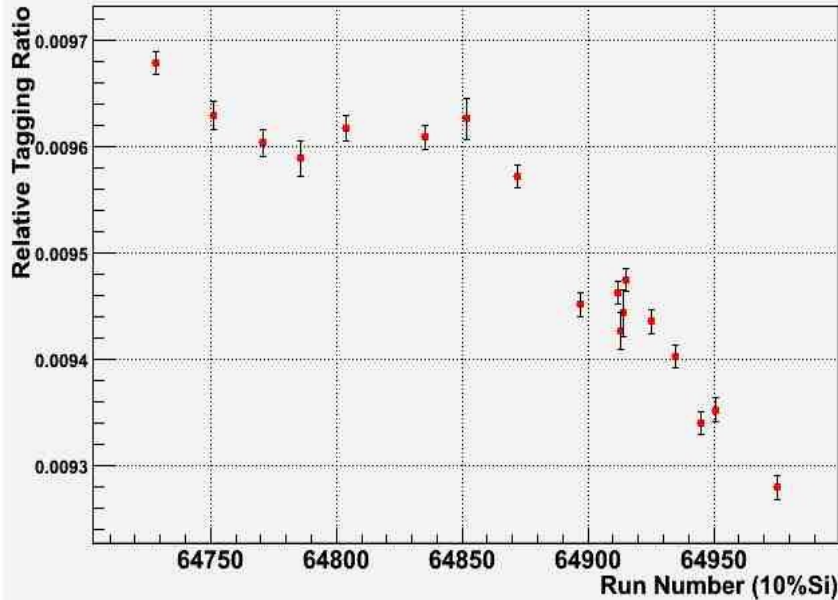
1. Run Number( 90nA ): 64710, 64714(100nA), 64728, 64751, 64771, 64786, 64804, 64835
2. Run Number(90nA): 64852, 64872, 64893, 64897, 64912, 64913
3. Run Number(100nA): 64914, 64915, 64925, 64935, 64945, 64951, 64975, 64988

## After excluding psid #17,20

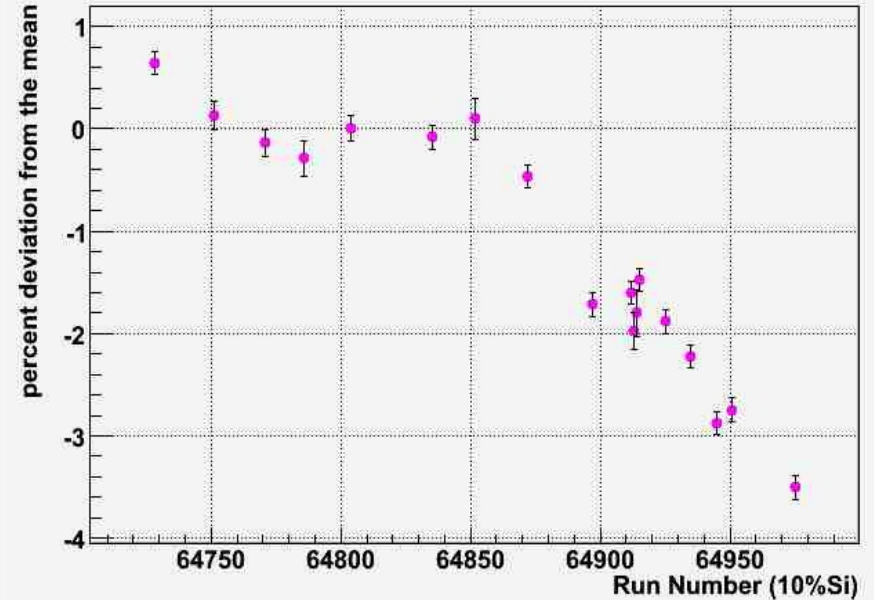
Relative tagging ratio and percent deviation of combined all T-counters as function of run number of 20 runs spanning all production runs with Si target (clock trigger)

Percent deviation of combined all T-counters as function of run number of 20 runs spanning all production runs with Si target (clock trigger)

Graph



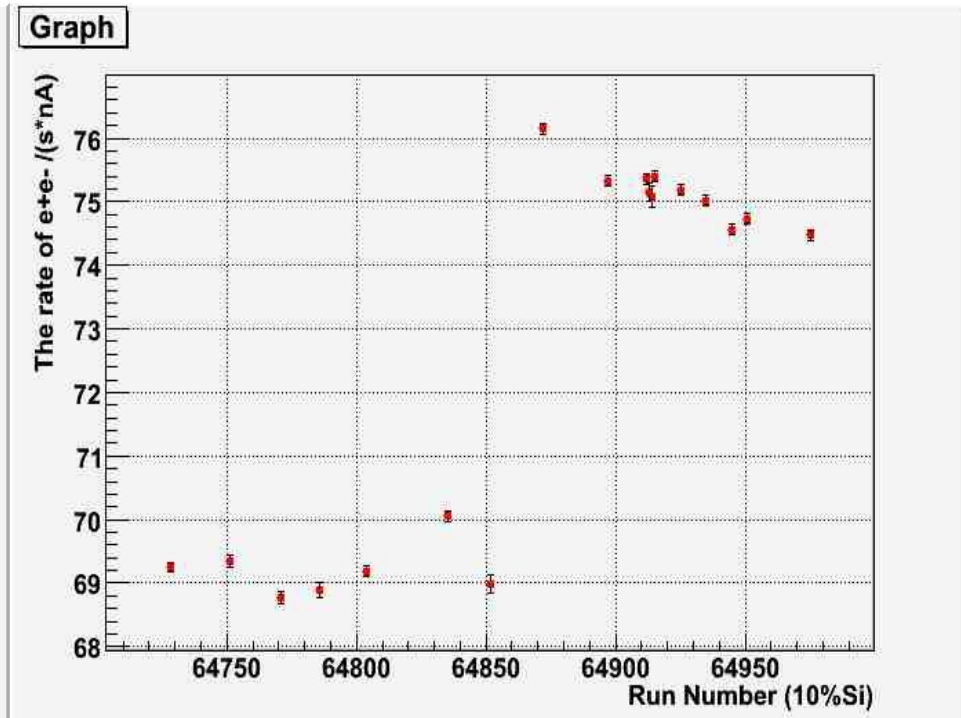
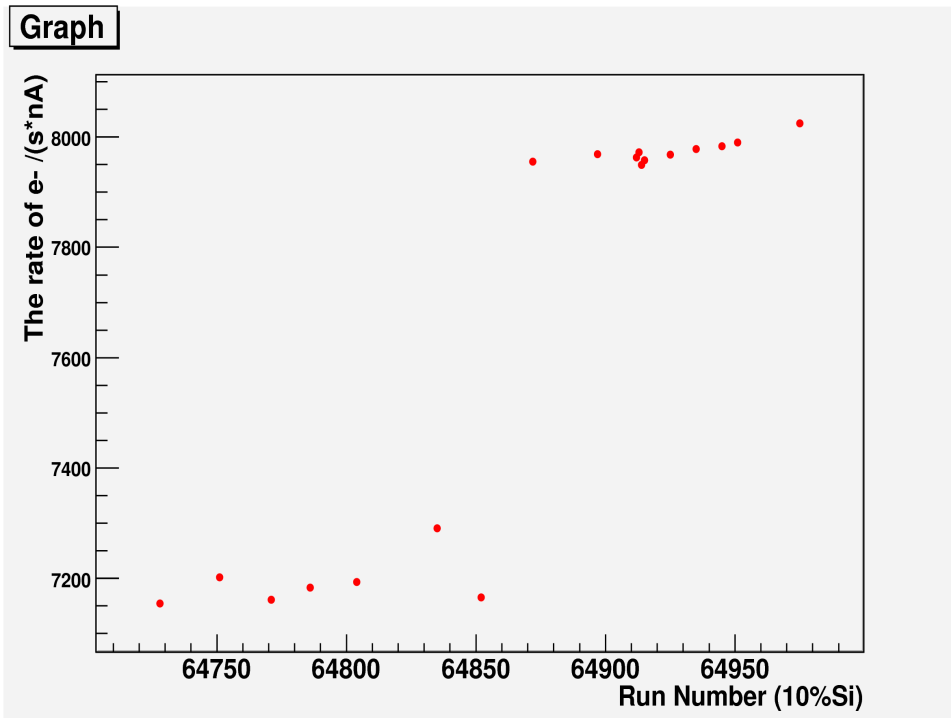
Graph



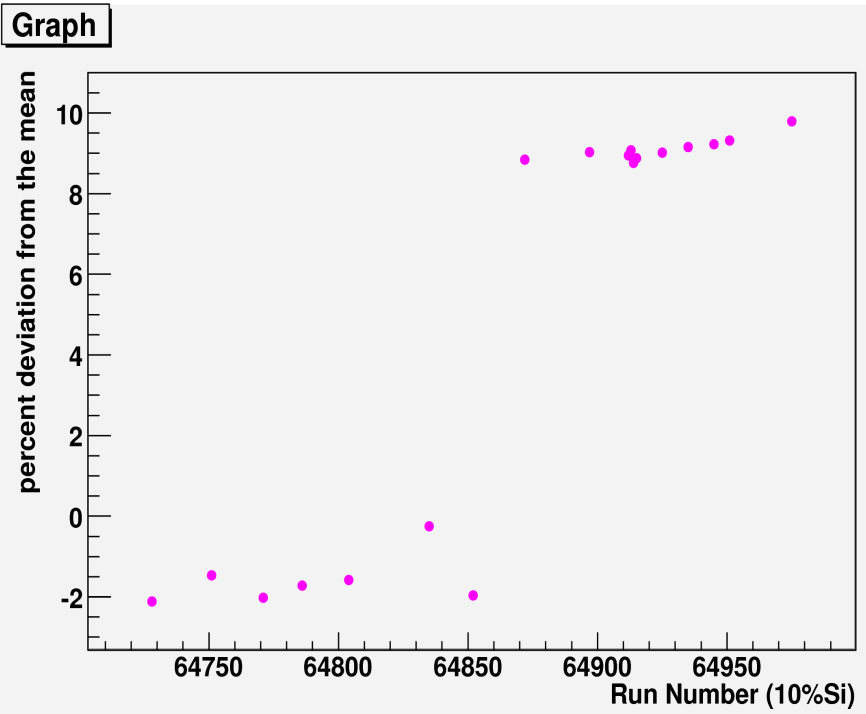


The average e- rate for each event

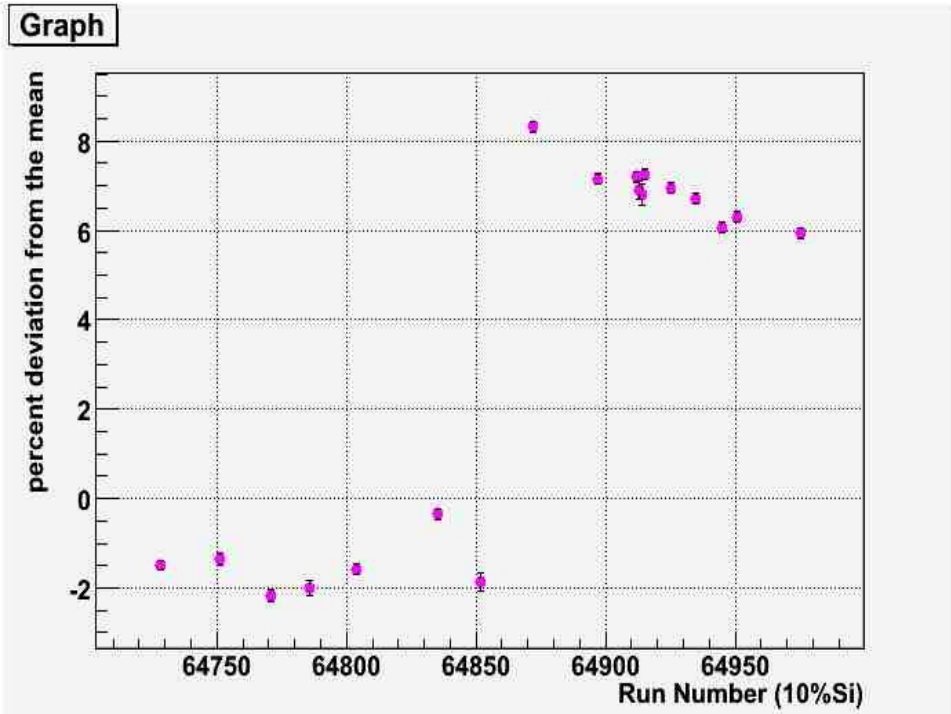
The average e+e- rate for each event



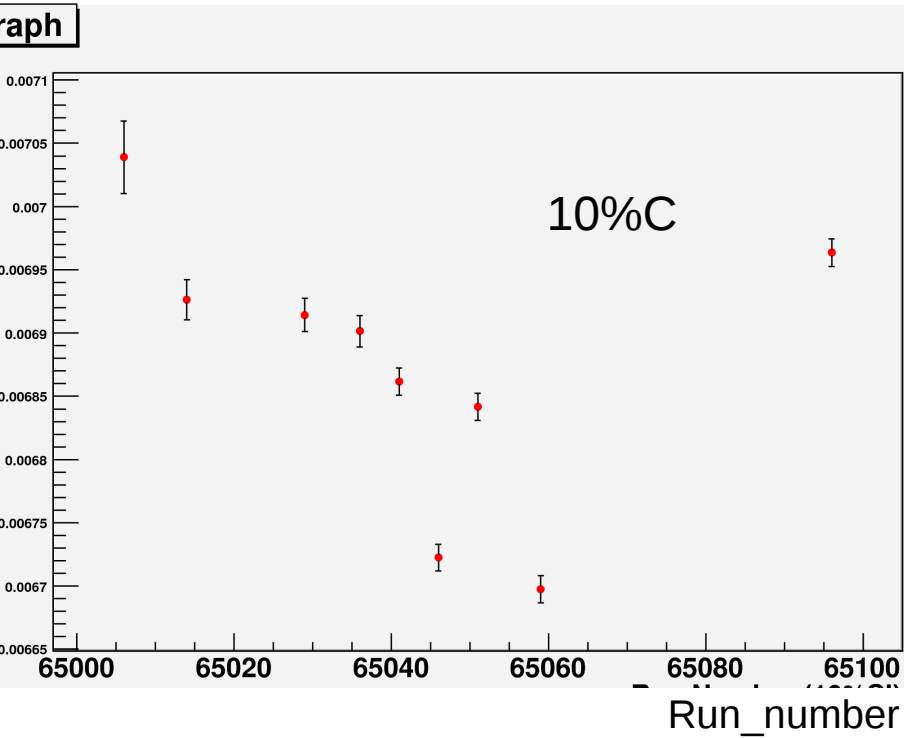
The percent deviation from average mean for e-



The percent deviation from average mean for e+e+



Relative tagging ratio and percent deviation of combined all T-counters as function of run number (clock trigger)



Percent deviation of combined all T-counters as function of run number (clock trigger)

