T-B configuration

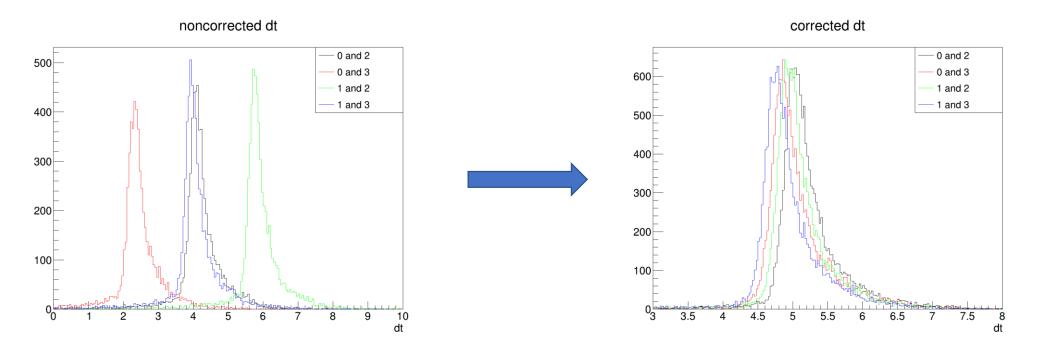
- Determine T-B time difference distribution.
- There were 2 problems.
- It does not match with simulation. (about 600 ps)

125cm

- Distribution shift (~300 ps)
- They might be the same problem?

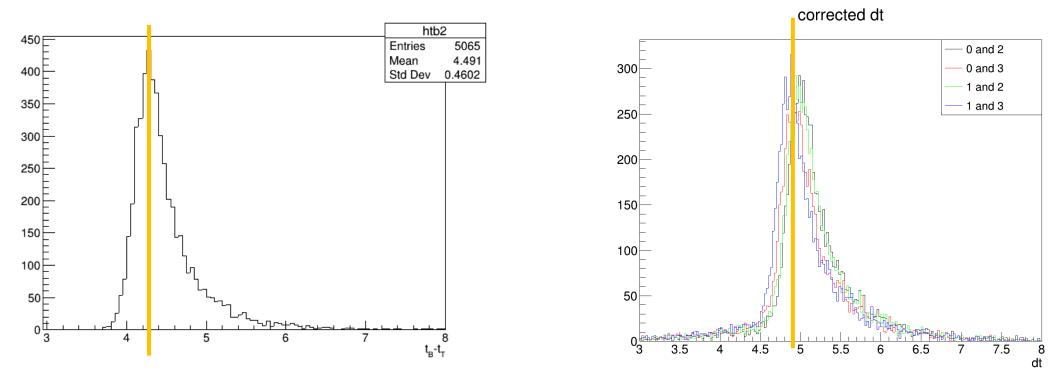


- Correction has been given to each channel with a function generator.
- Our concern is relative time difference, so set reference time as ch1.
- PMT transit time is not considered.



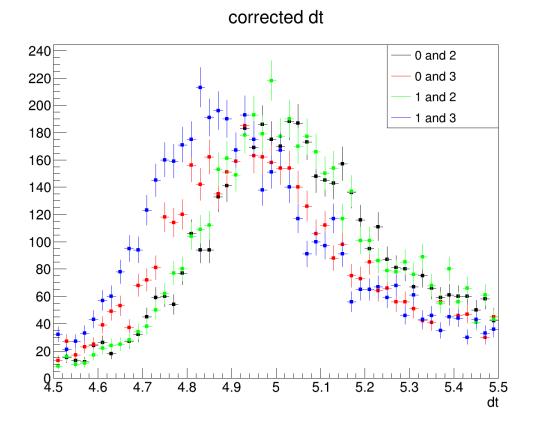
Comparison with simulation

- Left : simulation, right : data
- Peak positions are different. (about 600ps)
- 1.25[m]/c = 4.16 [ns]



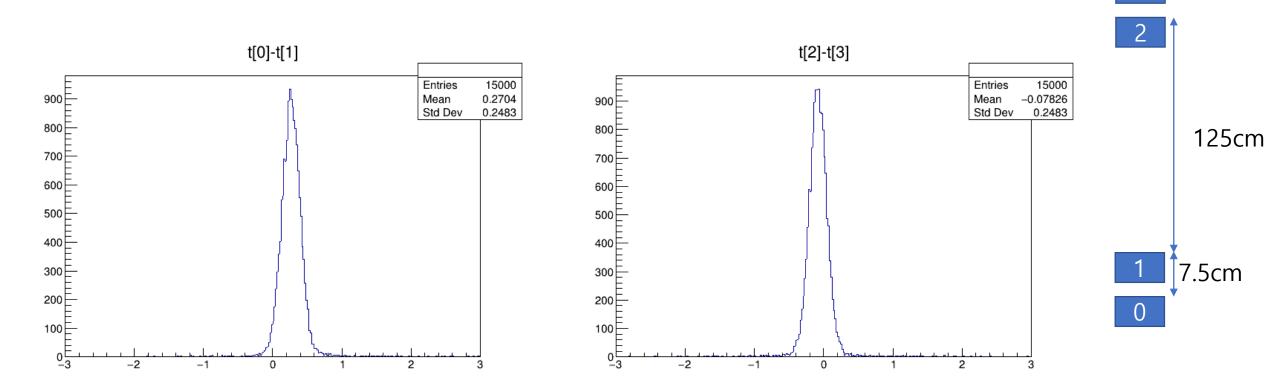
Distribution shift

• 0-2, 1-3 sets should have smaller dt than 0-3, 1-2.



Distribution shift

- We have taken data under below configuration.
- 7.5[cm]/c = 250 ps



3

Other correction?

- What makes difference between simulation data?
- Scintillation?
- PMT?
- Giving correction based on the simulation?