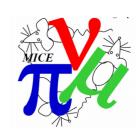
System performance paper

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Imperial College London MICE Analysis Workshop April, 16 2019



Introduction



- Comments received during last meetings for most of the sections
- Only plots considered so far
- Updates received for
 - TOF
 - EMR
 - LH2 absorber
- KL: Mariyan working on his contribution
- Tracker: I will run CH code while he is away

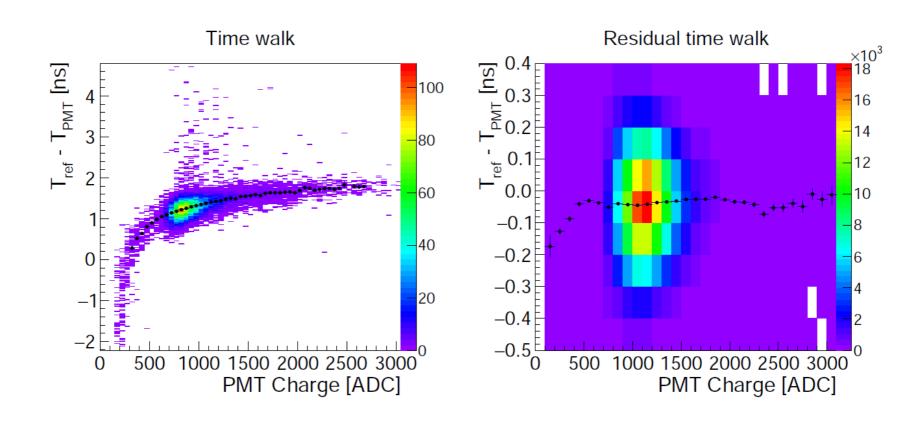
Introduction



- Work to have uniform analysis
 - MAUS release
 - Plotting styles
 - Common set of cuts and datasets where possible

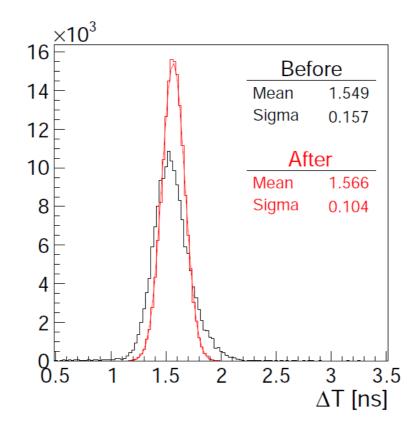


- Time walk correction
 - ΔT between horizontal and vertical slabs



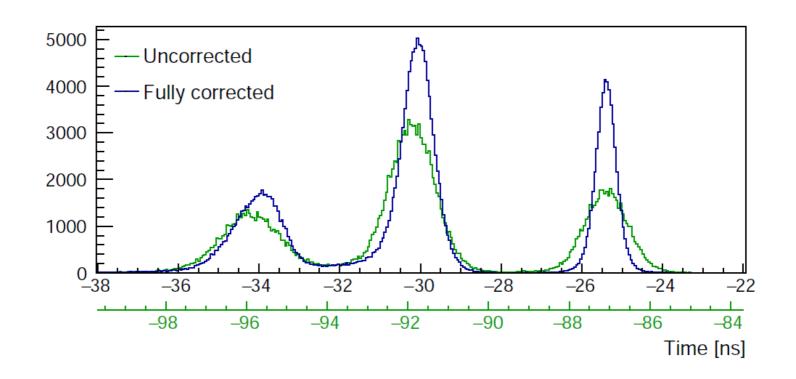


• Example of Δt between horizontal and vertical slabs, before and after the time walk corrections



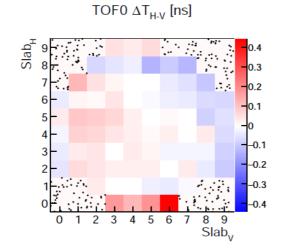


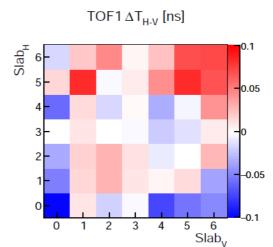
Time distribution before and after the corrections

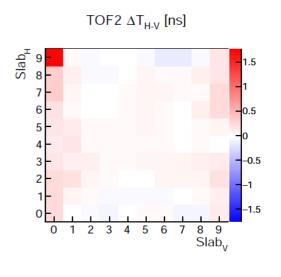




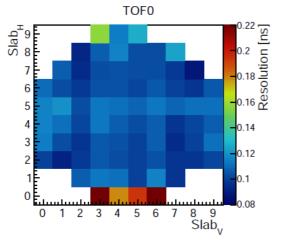
• Offset in slab Δt

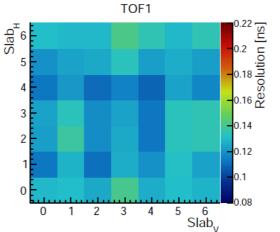


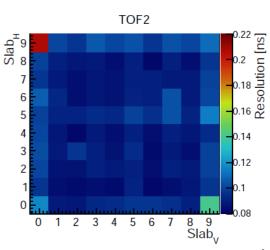




• Resolution in slab Δt

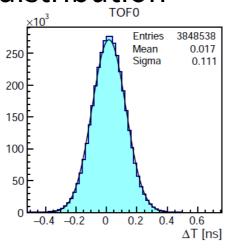


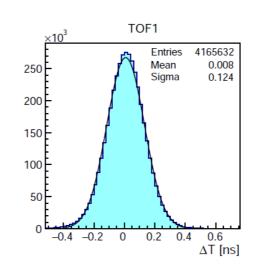


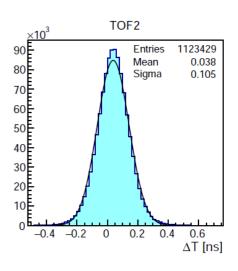




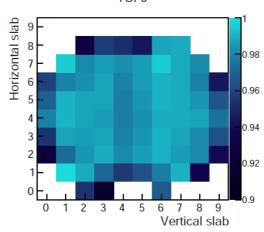
• Overall ∆t distribution

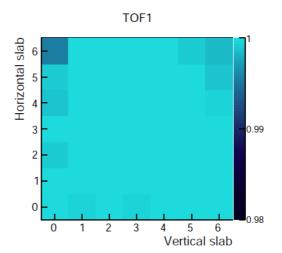


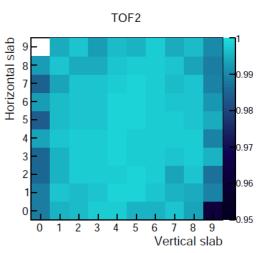




Efficiency in SP creation





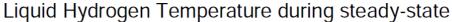


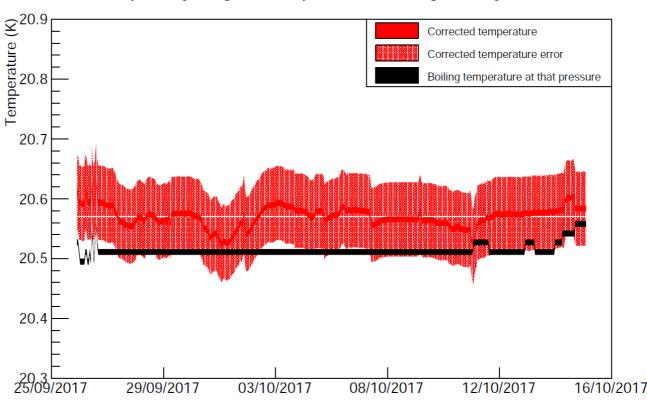
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Liquid hydrogen absorber



Steady state interval with systematic error





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Details



Referees: Alan B., Ludovico T.

• Repository:

https://github.com/pfranchini/MICE-systems-performance-paper

• Few more details

https://micewww.pp.rl.ac.uk/projects/analysis/wiki/2018-09-18_system_paper

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