

Comparing timing of PE and Reco pulses

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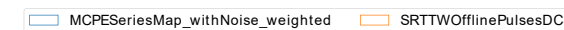
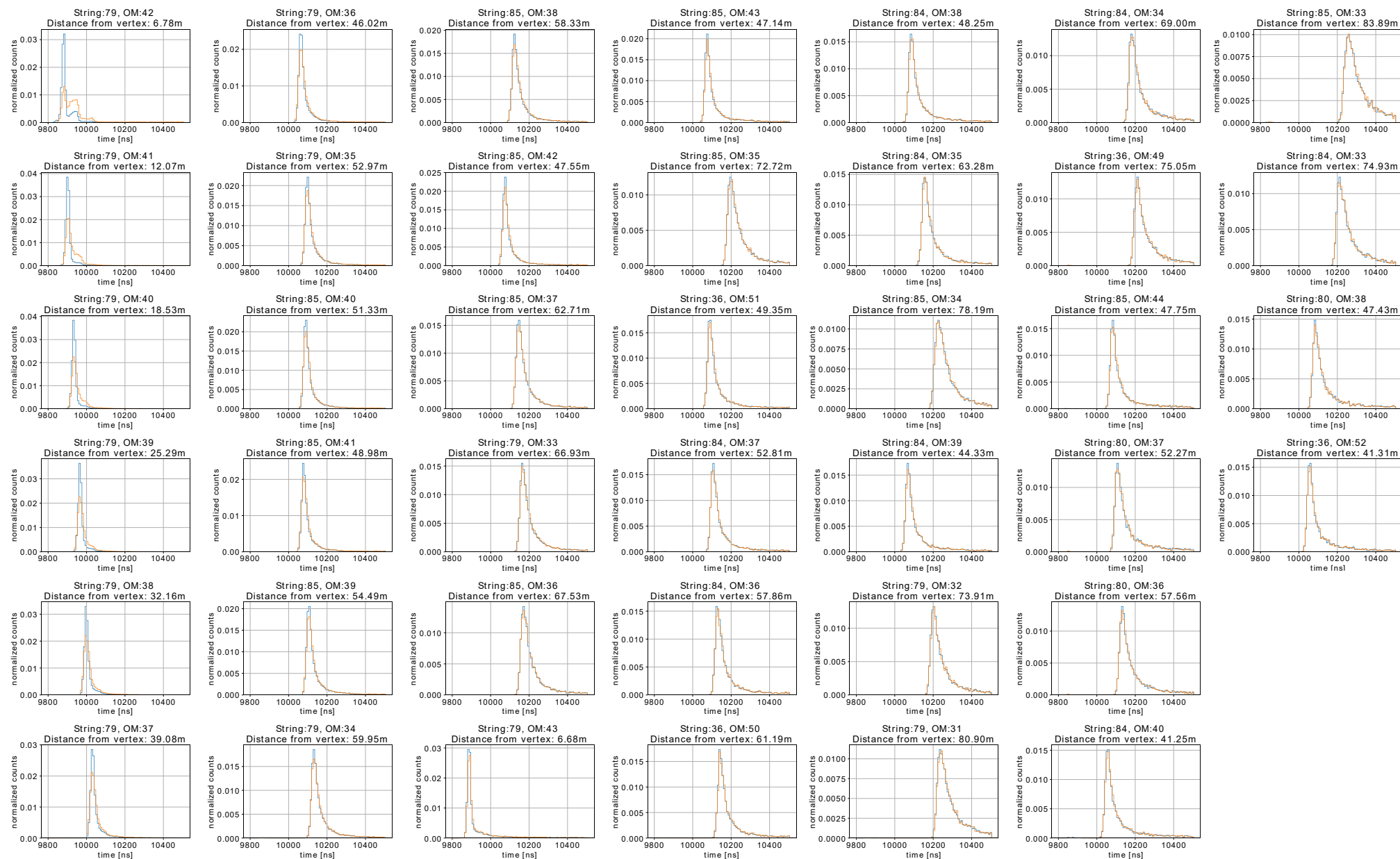


Comparison

- Here I am comparing the simulated PE pulses from step3 of the simulation to the reconstructed pulses in level2
- I am comparing the time of the pulses
- All pulses are binned using the binning from direct reco hypothesis
 - Range = (9800 ns , 10500 ns)
 - Binwidth 8 ns

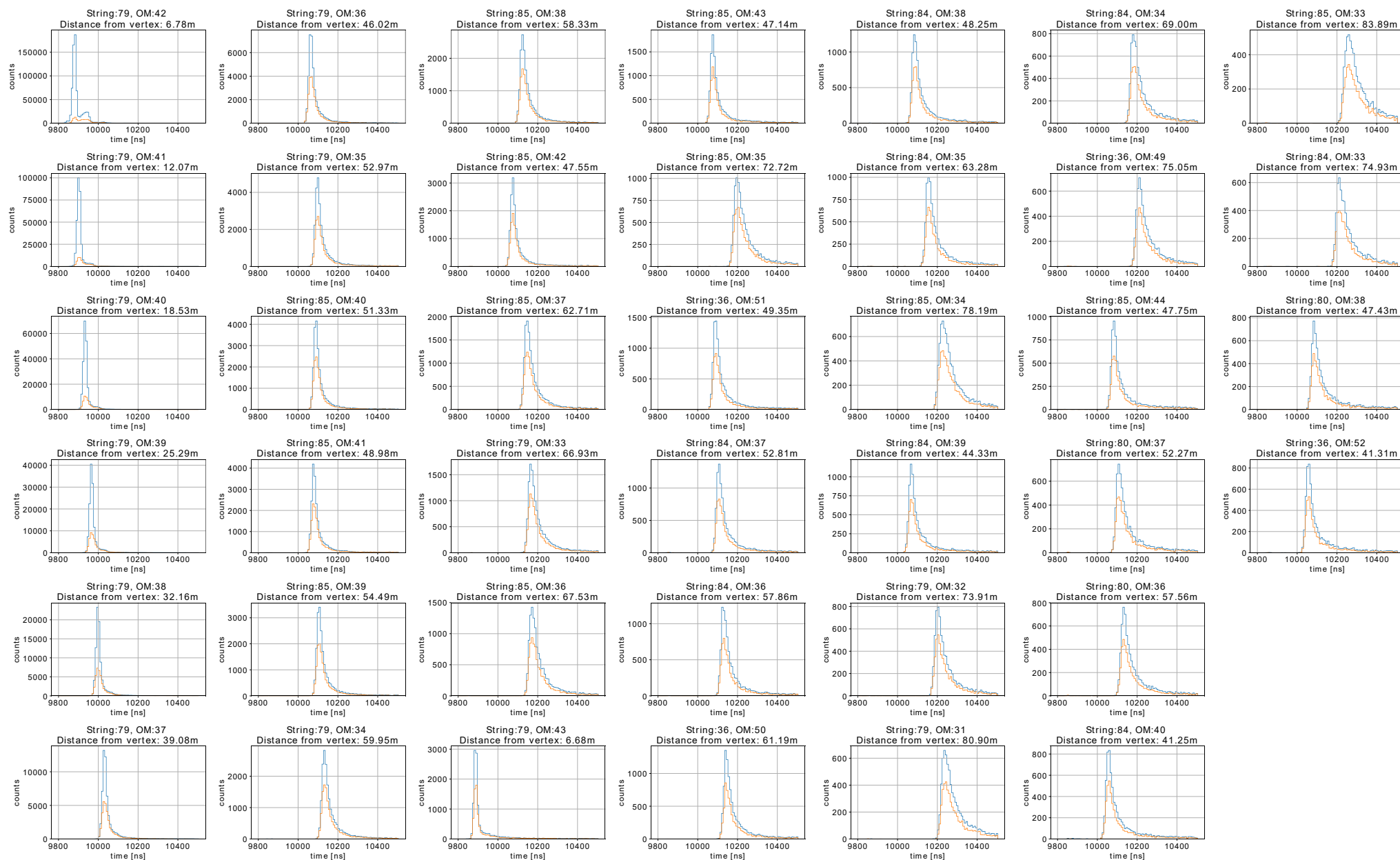
- At OMs close to vertex, the Reco pulses seem to shift the time
- In Oms further away, looks great
- Assumption of PMT and ReadOut simulation cancels out isn't valid for near Oms (In terms of timing)

pulse time comparison in OMs (Normalized)

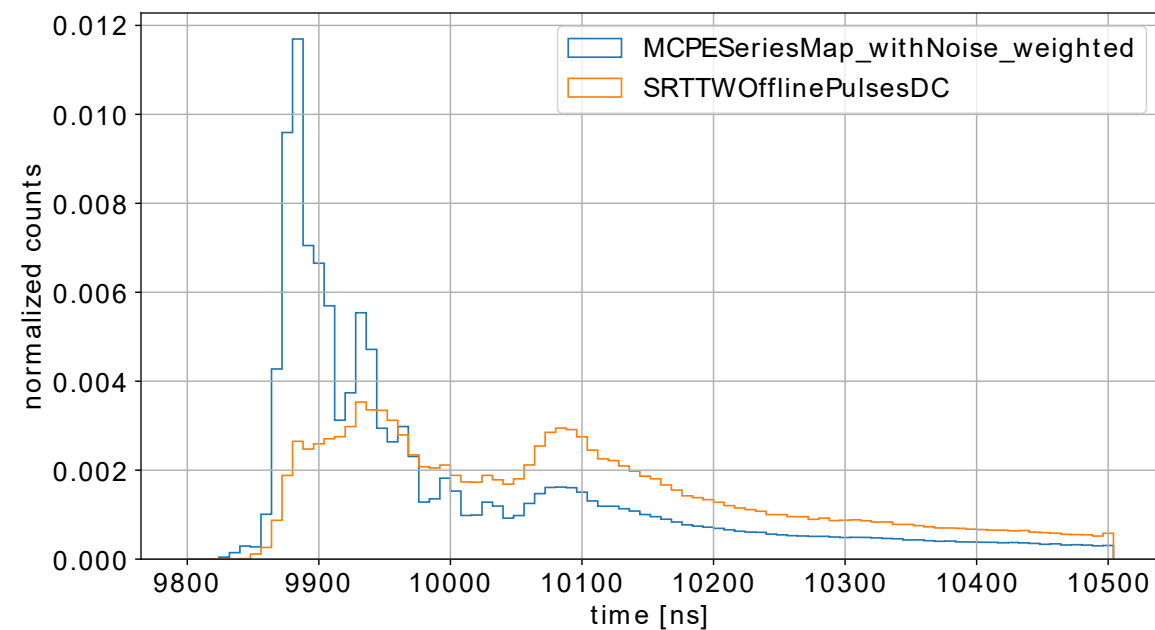
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pulse time comparison in OMs

- Overall not quite good yet.
- We will make new MC data with a more reasonable vertex to avoid time shifting in near OMs and find a solution to said issue.

All pulse times comparison (Normalized)



All pulse times comparison

