

Slab DT Offset

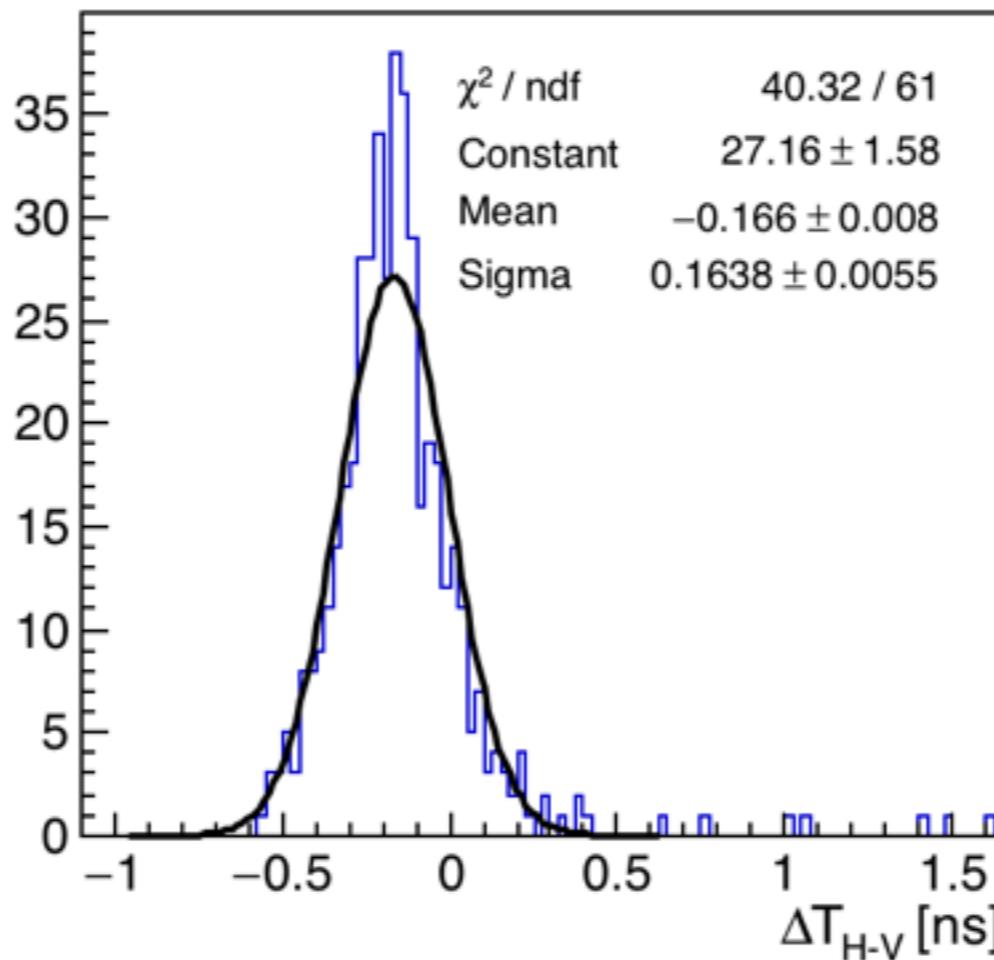
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Slab DT

TOF2 H:9 V:5



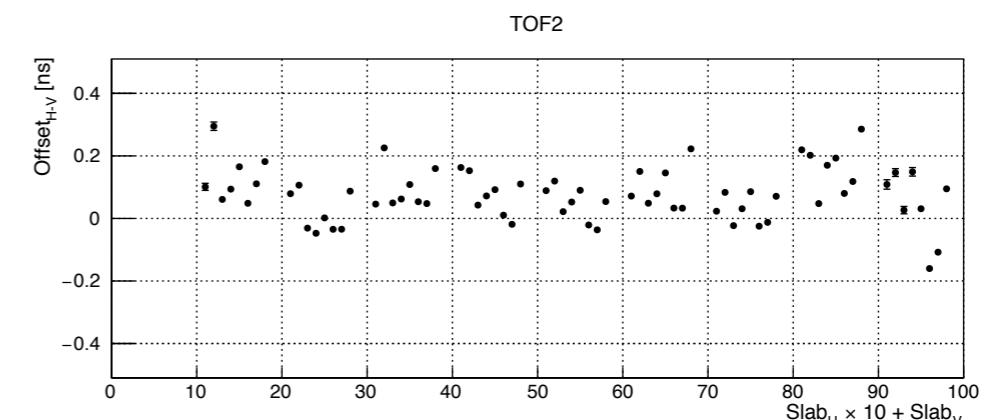
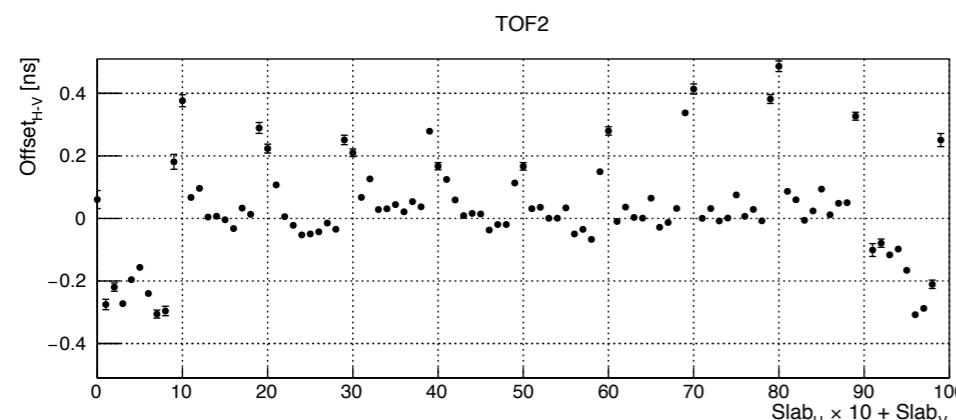
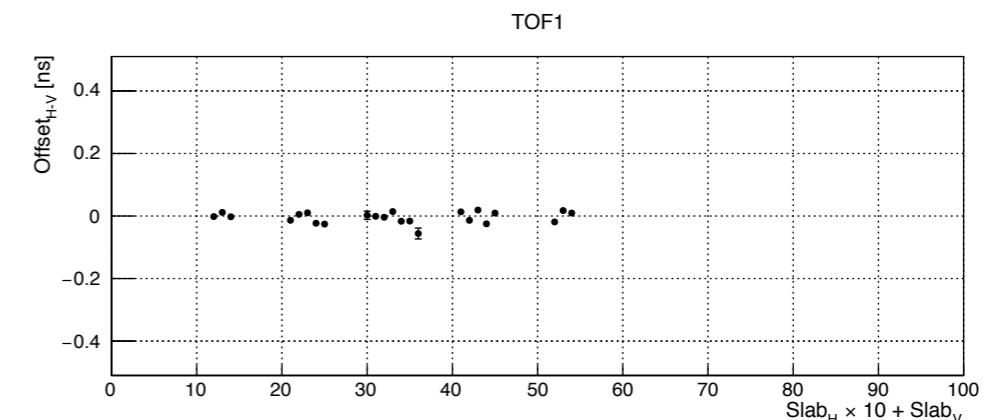
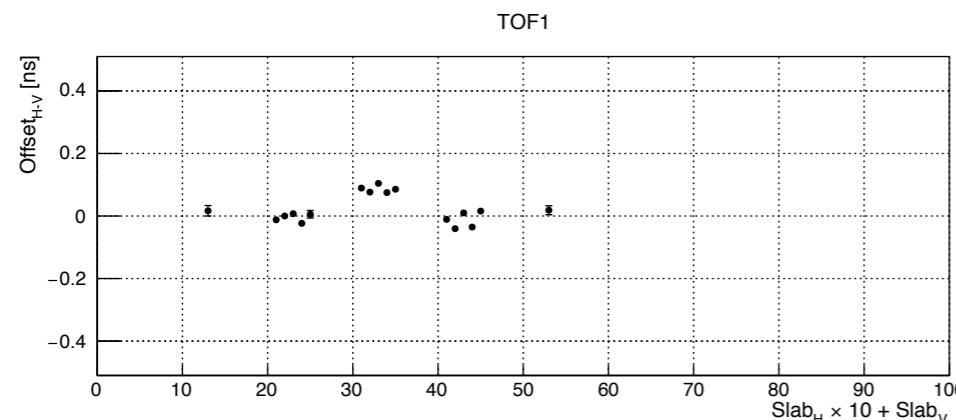
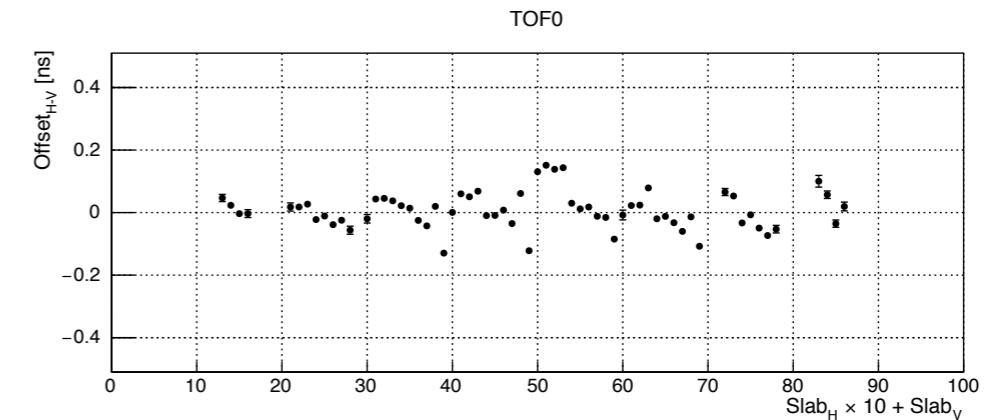
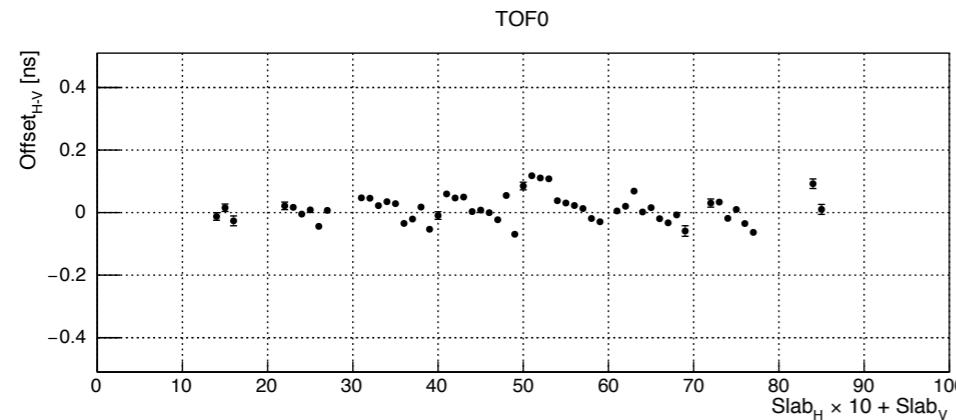
- Example of slab DT distribution for hits in one particular pixel
 - TOF2, last horizontal slab (9), central vertical slab (5)
- Especially in outer slabs, the distribution has offset from 0 ns

Slab DT

Offsets by pixel

10248

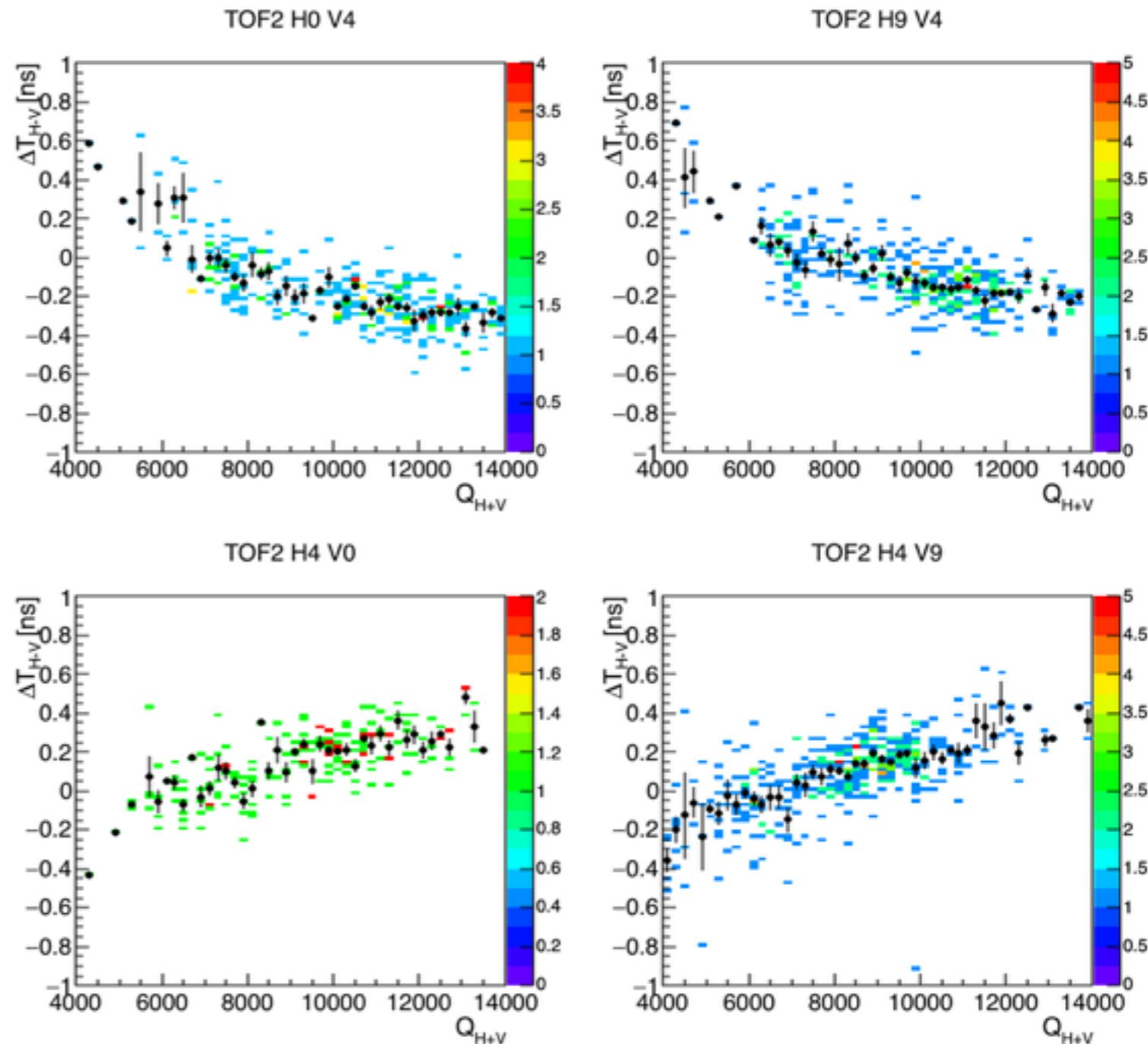
09799



Slab DT

Correlation with charge

- DT offset is correlated with total charge seen
- Suggests issues with time-walk correction
- Significant correlation observed only in the outer slabs



Slab DT

Summary

- Poor time-walk calibration would explain some of the slab DT offsets, namely in the outer slabs
- DT offsets in other slabs are within ~0.2 ns
- Cause of those is unclear