COT Hit Width Distributions

Chris Hays
Duke University

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Data Sets

Separate into CMUP+CMX and CMUP only

- CMX trigger has ϕ structure
- CMUP trigger isolates low $\cot\theta$ tracks, smaller hit widths

Samples

- $W \rightarrow \mu\nu$
- Cosmics from beam data (2 tracks/event)
- $W \rightarrow e\nu$

$W \rightarrow \mu\nu$ CMUP only

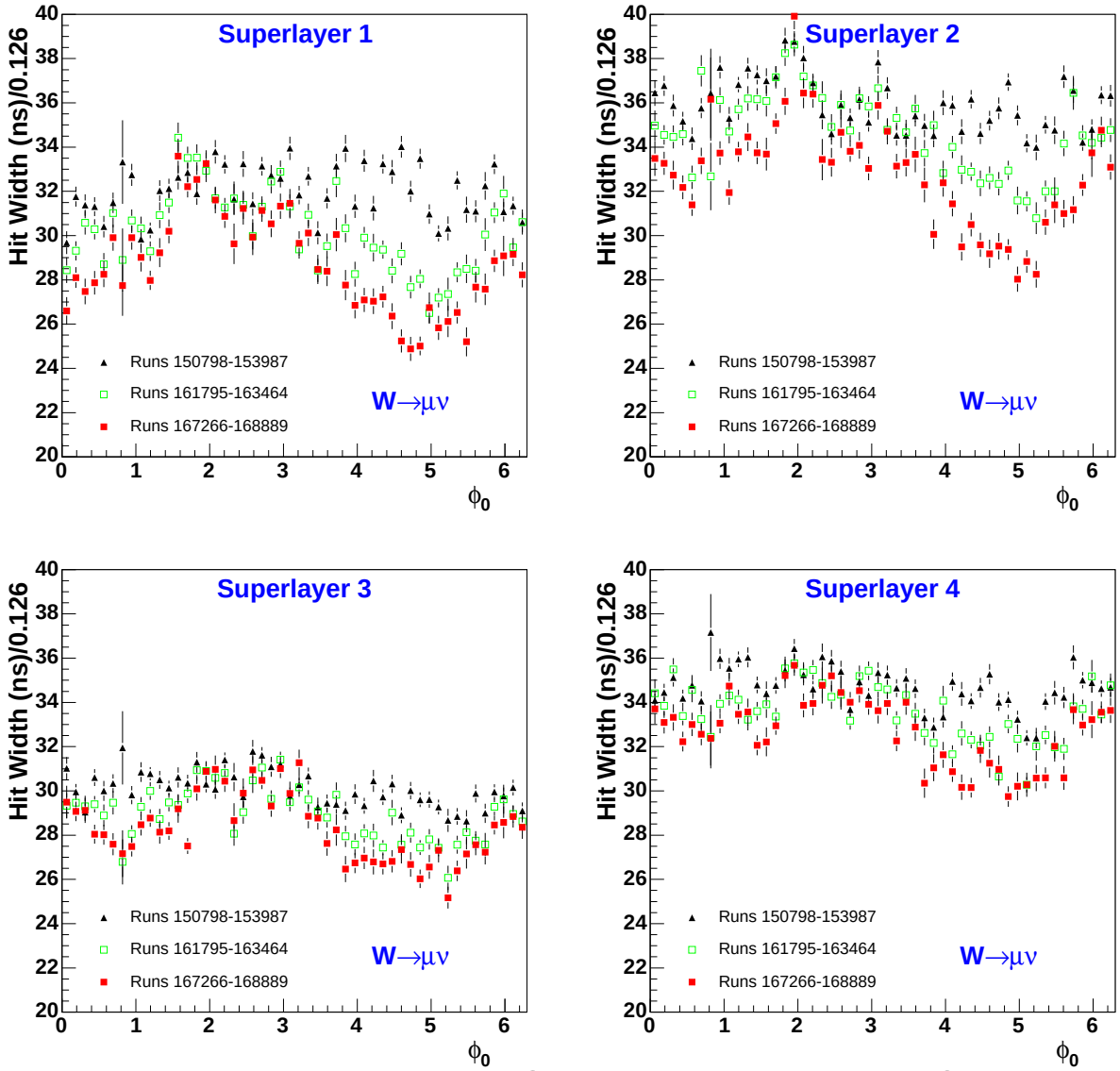

Figure 1: *The hit width versus ϕ_0 for superlayers 1-4 for $W \rightarrow \mu\nu$ events.*

$W \rightarrow \mu\nu$ CMUP only

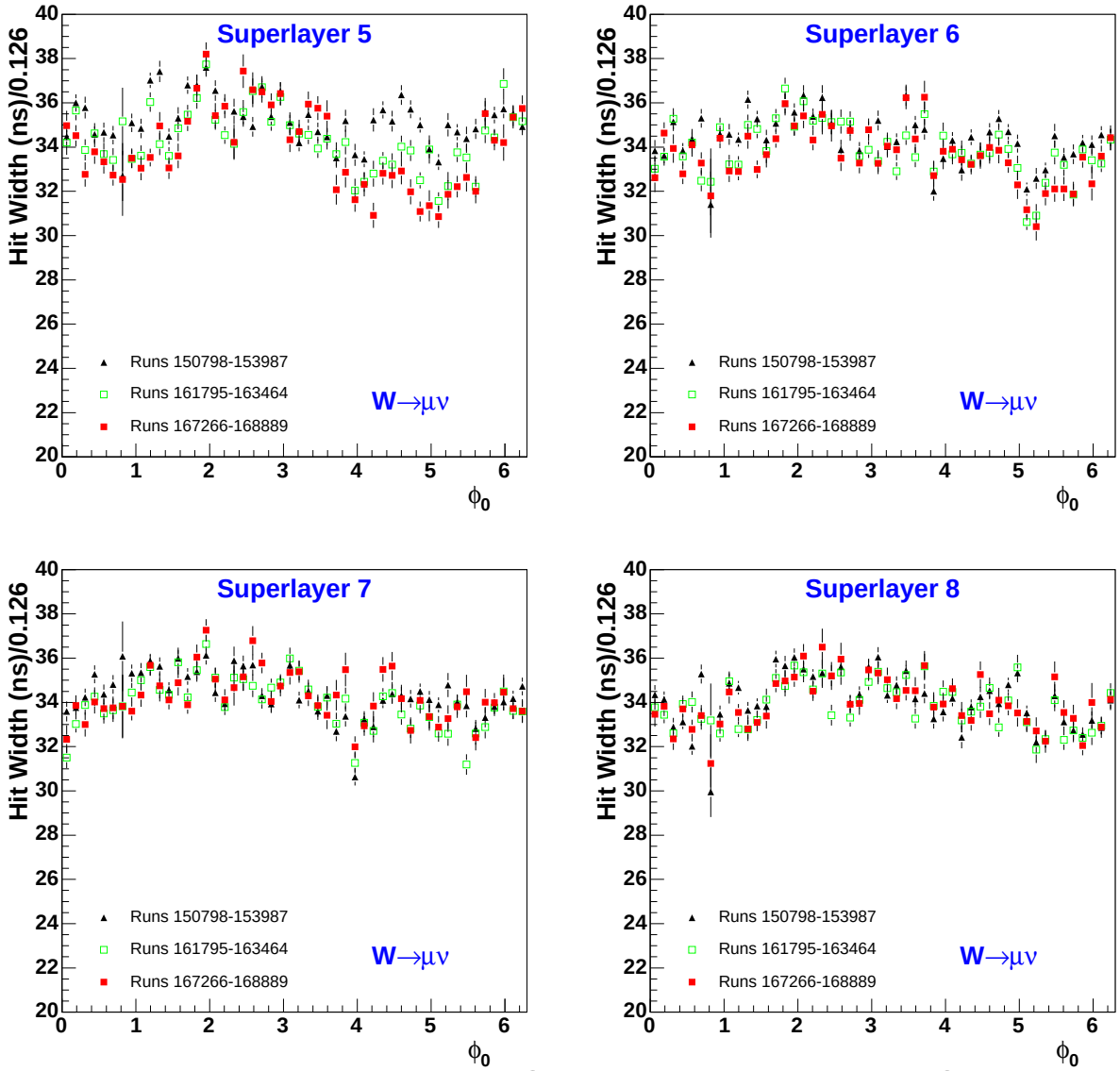

Figure 2: *The hit width versus ϕ_0 for superlayers 5-8 for $W \rightarrow \mu\nu$ events.*

Cosmics CMUP only

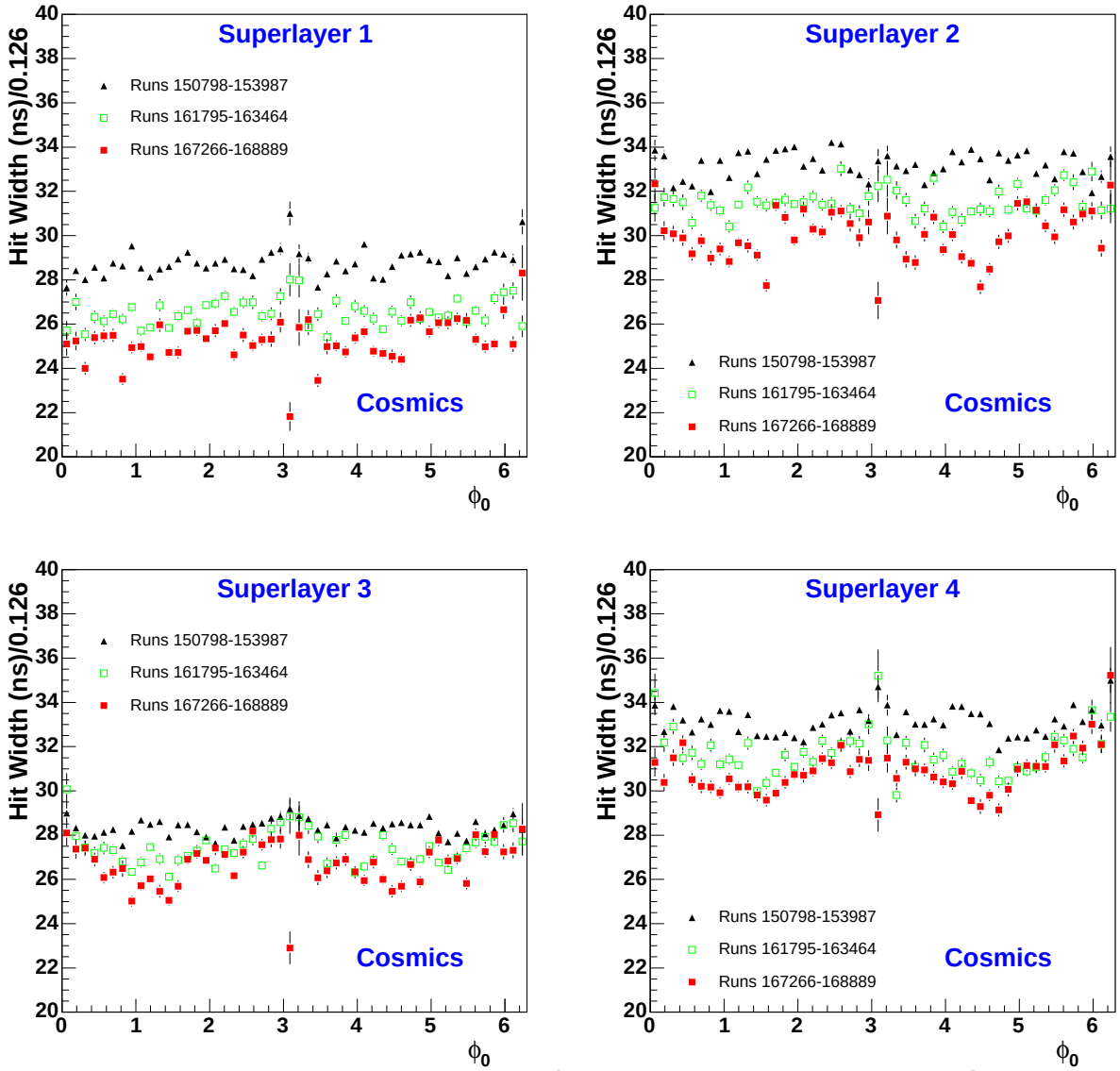

Figure 3: *The hit width versus ϕ_0 for superlayers 1-4 for cosmic events.*

Cosmics CMUP only

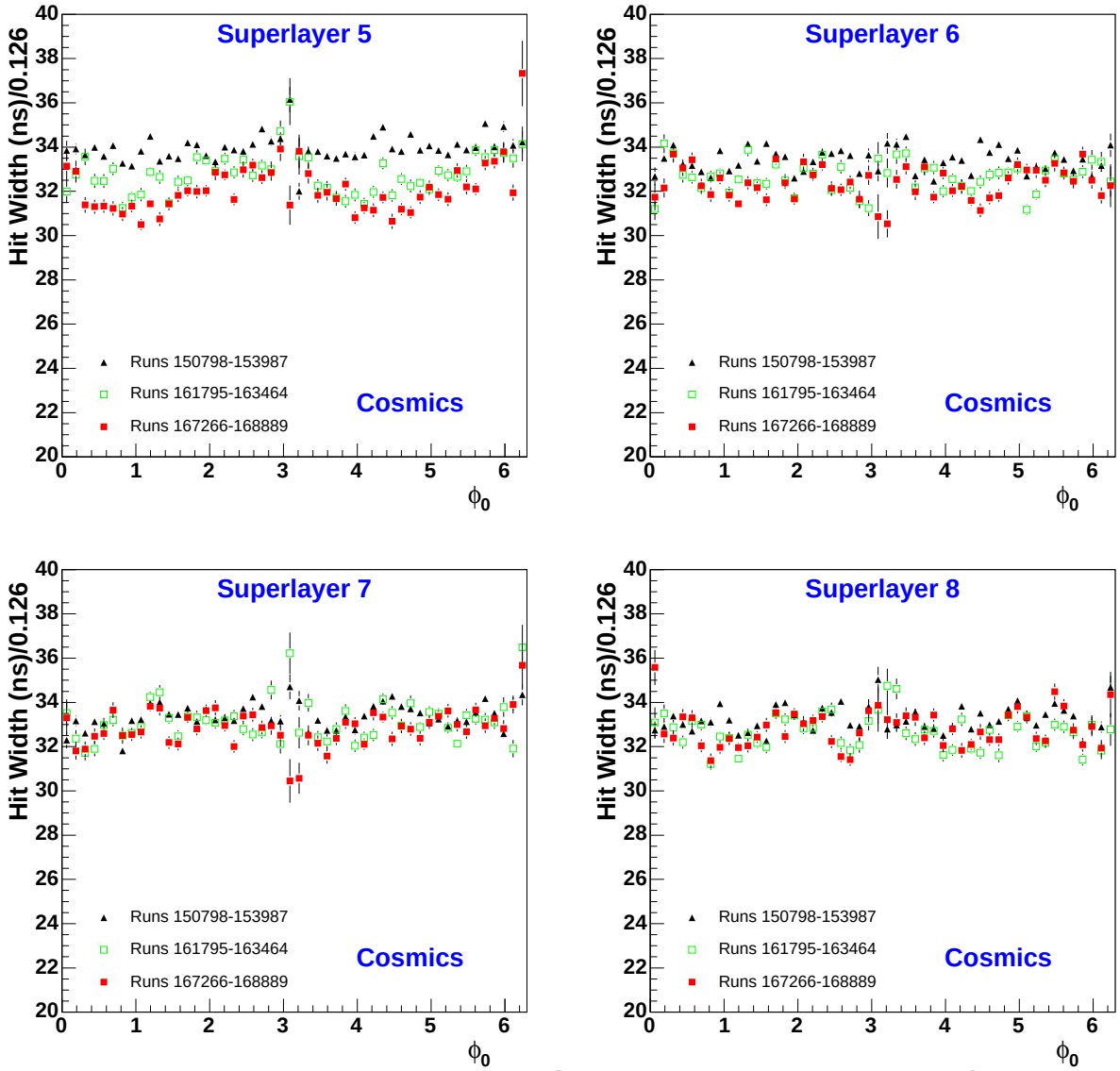

Figure 4: *The hit width versus ϕ_0 for superlayers 5-8 for cosmic events.*

$W \rightarrow \mu\nu$ CMUP+CMX

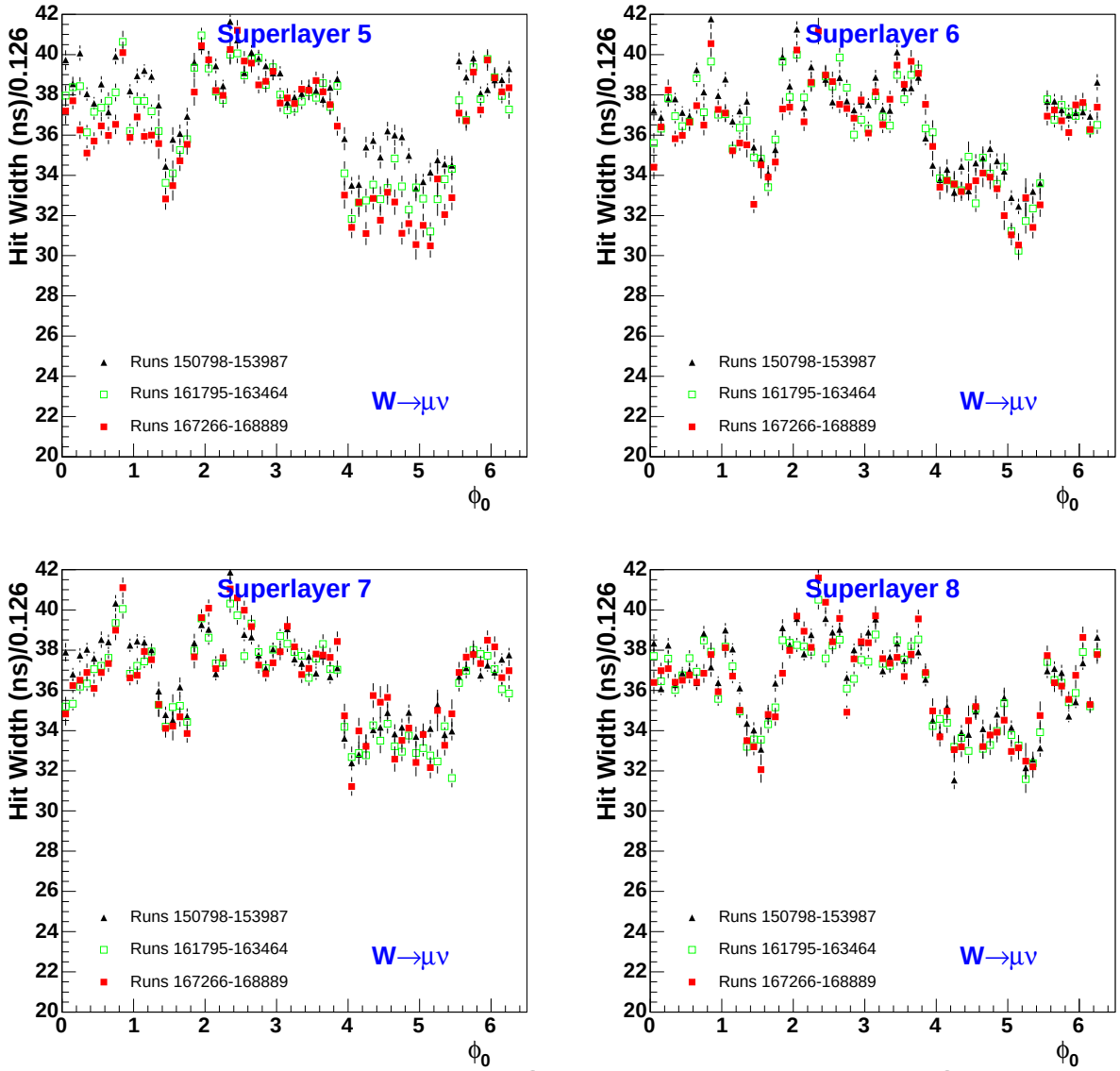

Figure 5: *The hit width versus ϕ_0 for superlayers 5-8 for $W \rightarrow \mu\nu$ events.*

$W \rightarrow \mu\nu$ CMUP only

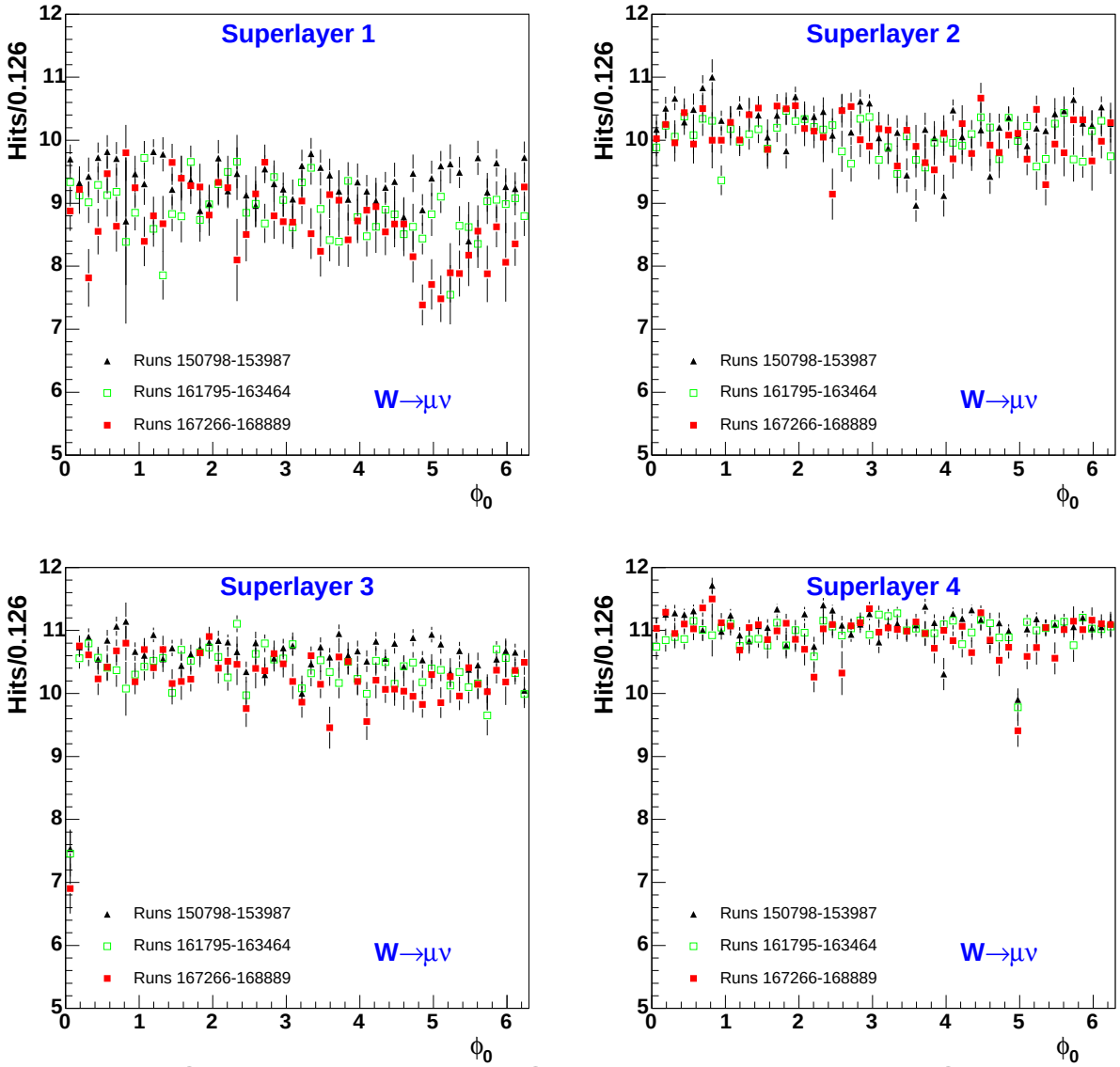

Figure 6: *The # of hits versus ϕ_0 for superlayers 1-4 for $W \rightarrow \mu\nu$ events.*

Conclusions

Hit widths clearly decreasing with time

- W muons show strong ϕ dependence
- Cosmic muons show small (if any) ϕ dependence

Hit usage decreasing with time

- ϕ depenendence in inner superlayer