

INTT chip saturation issue

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Chip saturation

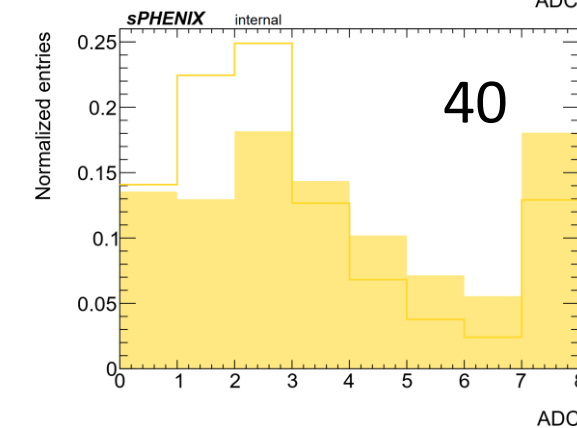
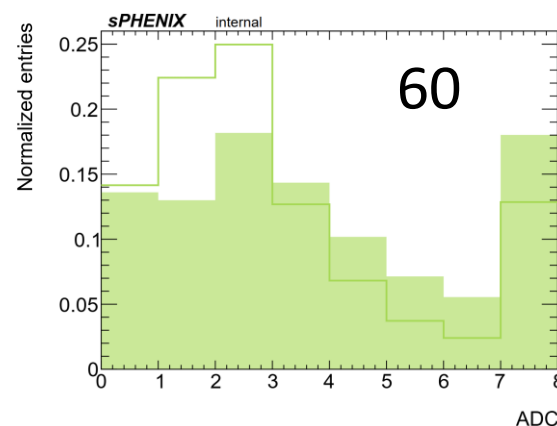
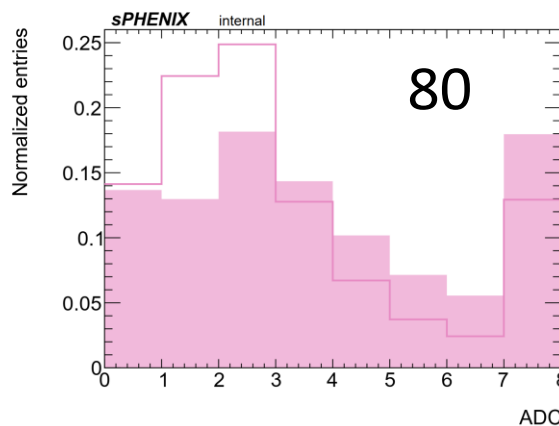
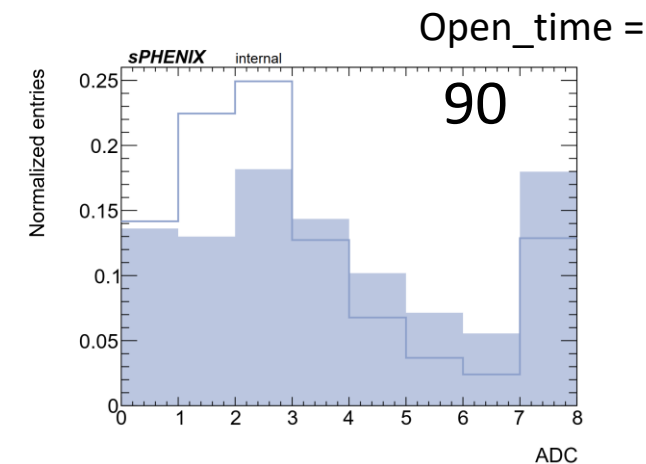
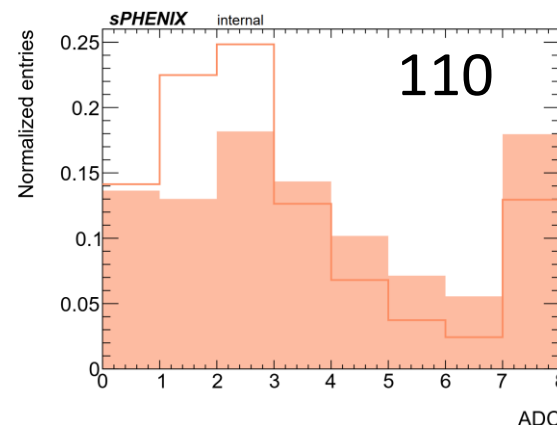
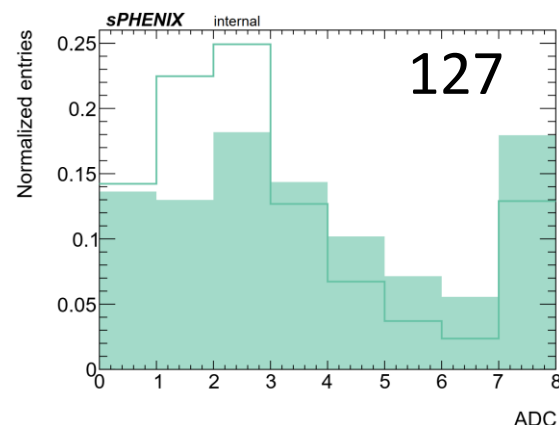
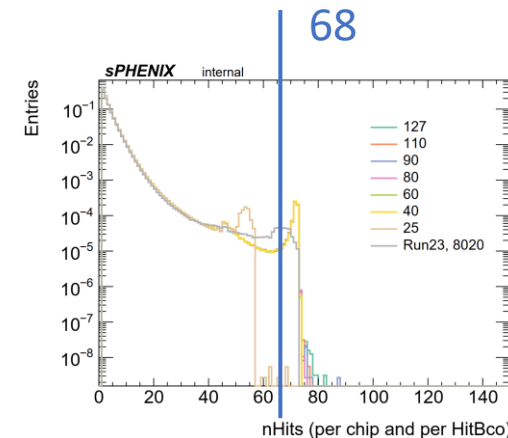
- Use Cheng-Wei's module

Current focus runs

Date/Time	Run#	Run Type	Mag	Link	DAC0	L1 Delay	n_coll	open time
2025/6/15 13:09	67542	beam	On	plot	35	108	100	127
2025/6/15 13:16	67544	beam	On	plot	35	108	100	110
2025/6/15 13:22	67545	beam	On	plot	35	108	100	90
2025/6/15 13:27	67546	beam	On	plot	35	108	100	80
2025/6/15 13:33	67547	beam	On	plot	35	108	100	60
2025/6/15 13:39	67548	beam	On	plot	35	108	100	40
2025/6/15 13:45	67549	beam	On	plot	35	108	100	25

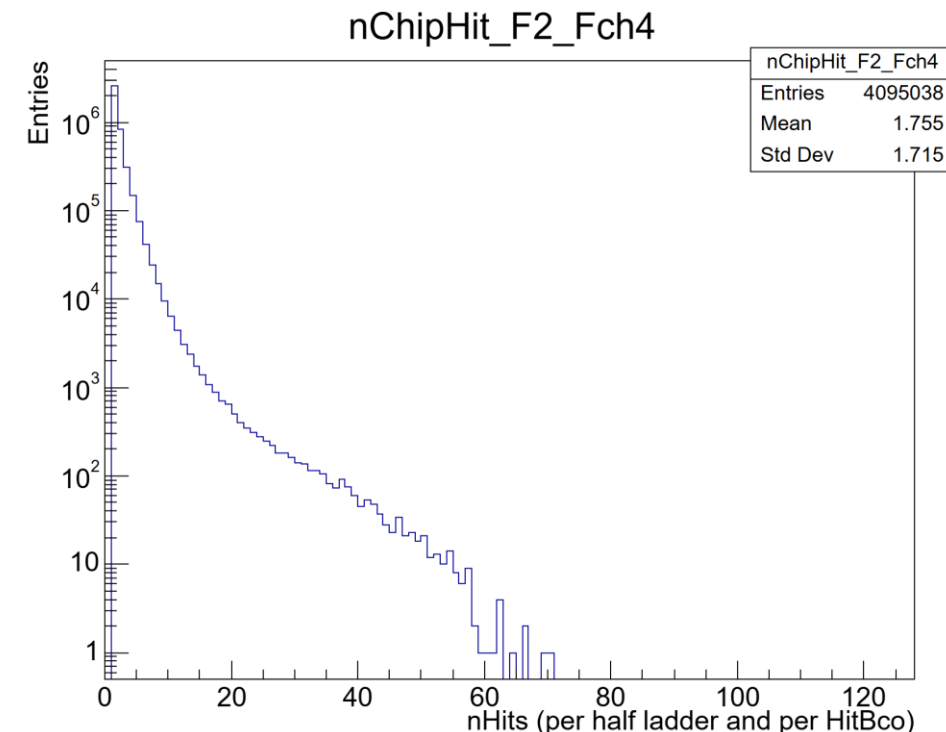
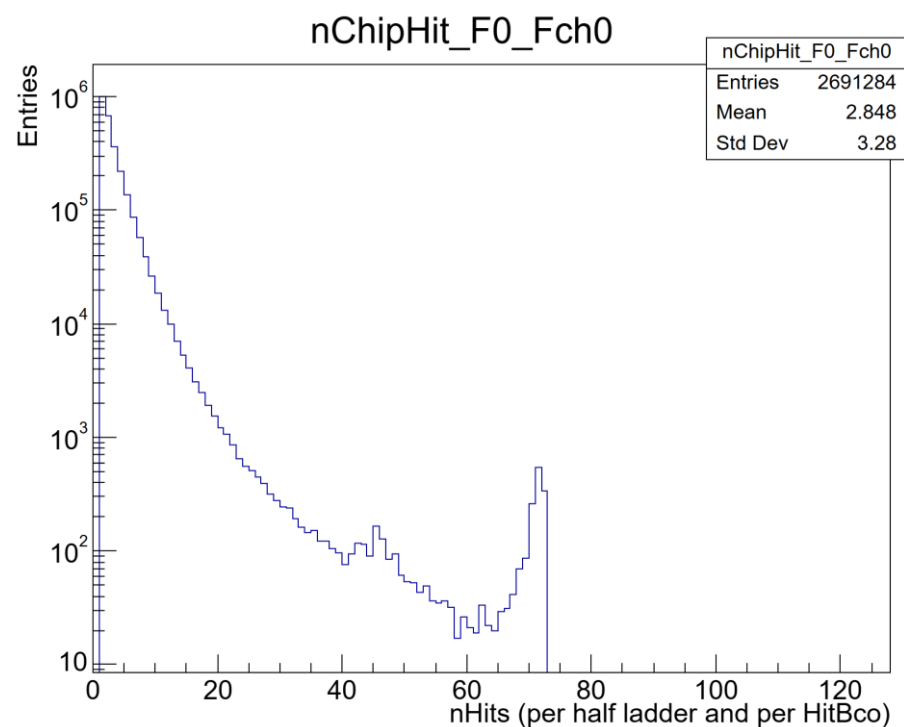
ADC distribution

- Filled $\rightarrow$ chip total hits < 68
- Line $\rightarrow$ chip total hits ≥ 68



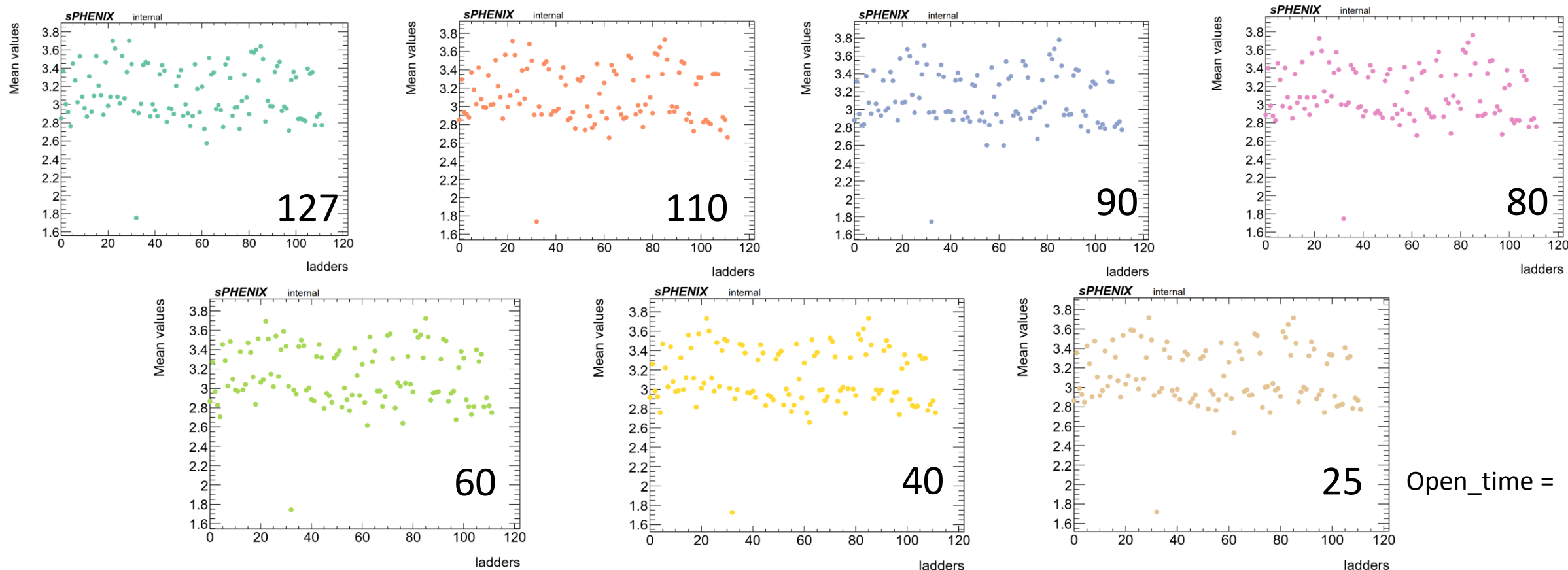
Chip Hits per ladders

- Stack 26 chip total hit distributions → half-ladder level
- All of them have similar distributions, except F2_Fch4
 - We now mask this ladder in the online map



Chip Hits mean values per ladders

- $\text{Ladders} = \text{Felix_ID} * 14 + \text{Felix_channel_ID}$
- Similar tendency for all of the ladders, except F2_Fch4 (ladder = 32)

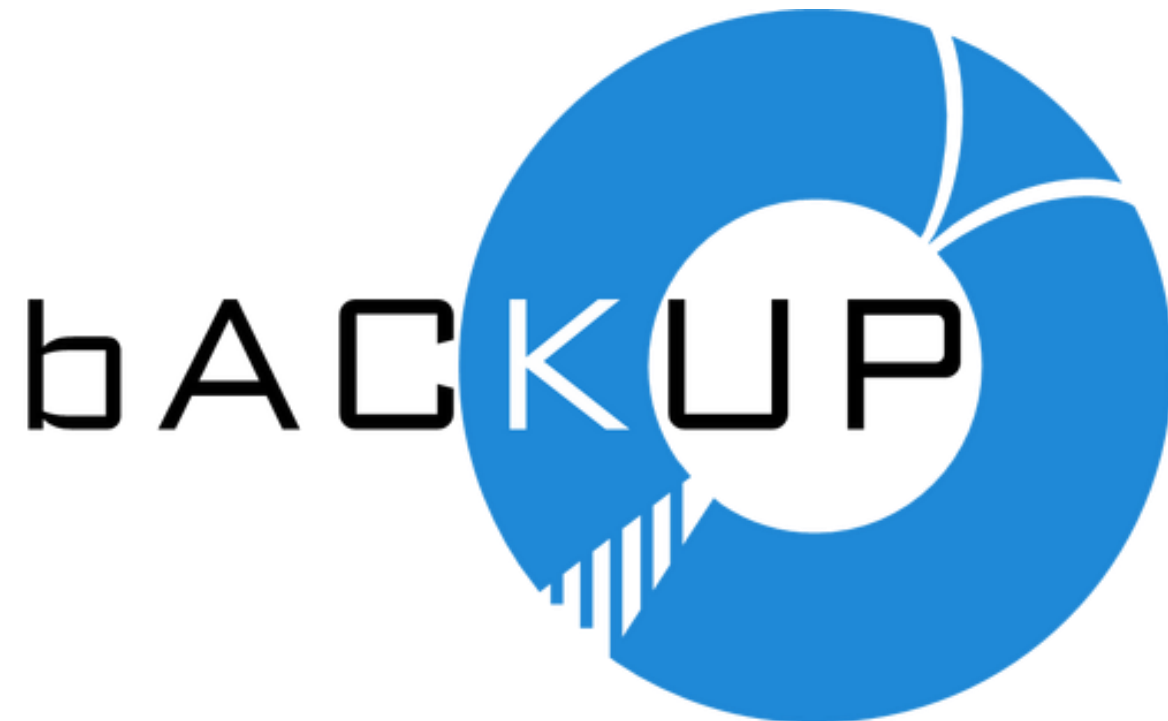


Summary

- The ADC distributions with 68 chip total hits as threshold are shown
- For half-ladder level, there are still the saturation issues

To-do:

- Check other runs (ex: different n_{coll})



Chip Hits mean values per ladders

- $\text{Ladders} = \text{Felix_ID} * 14 + \text{Felix_channel_ID}$
- Similar tendency for all of the ladders, except F2_Fch4

