pTDR comments on Barrel HCal

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TIC Meeting

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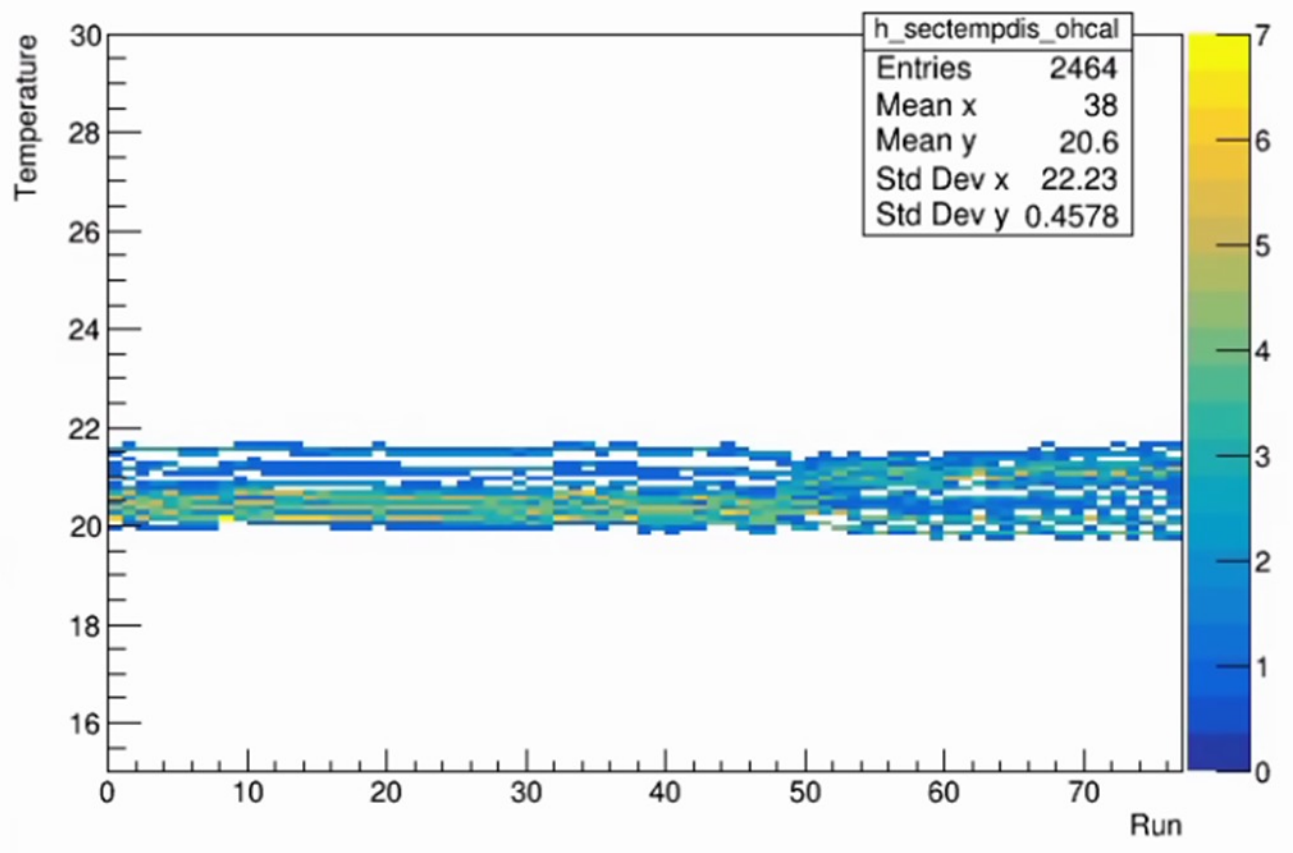
Summary of comments

- Useful feedback from Sevil Salur and Anthony Hodges
- Have addressed comments that address text readability already
- Discussed questions raised in recent BHCal meeting
- Beyond the comments, there is additional updates we need to make to the text and figures
- Also need to update the plot captions according to guidelines for documenting simulations

Temperature Fluctuations

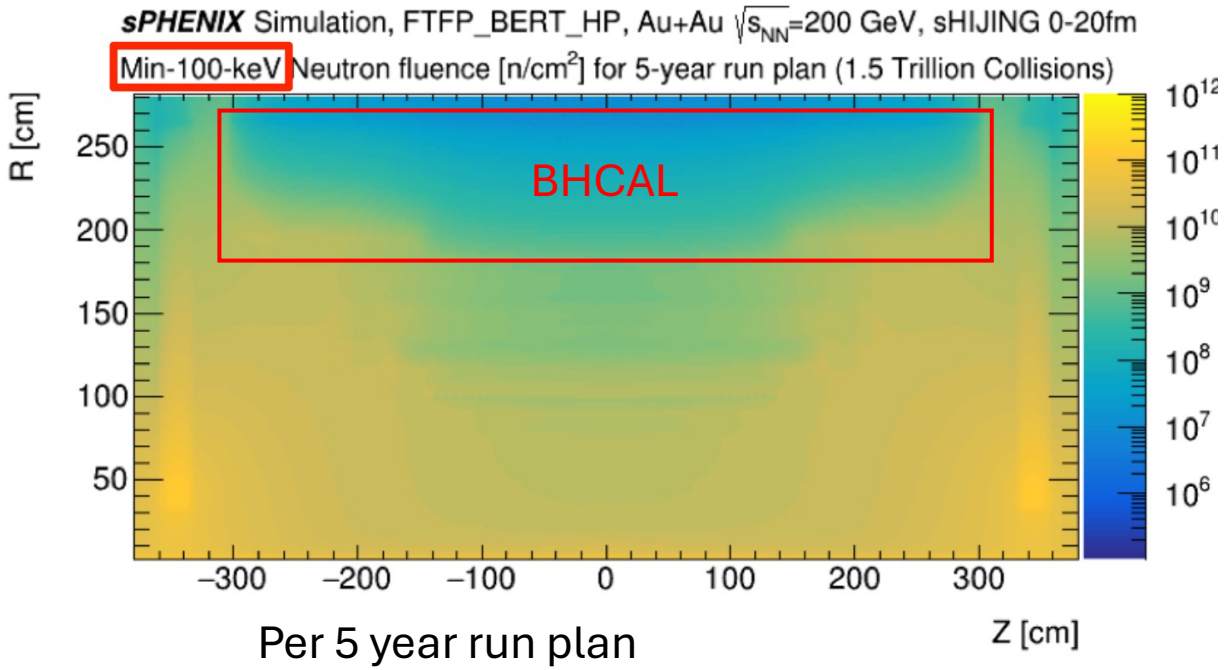


Per sector average temperatures of all sectors for all LED runs taken with sPHENIX in Run 2023

All T fall within 20.0 and 21.5 C. So the upper limit of T fluctuations is +/- 0.75 C.
Most of that range comes from a position dependence (top sectors have higher T than bottom sectors).
The actual per sector fluctuations are much smaller than 0.75 C.

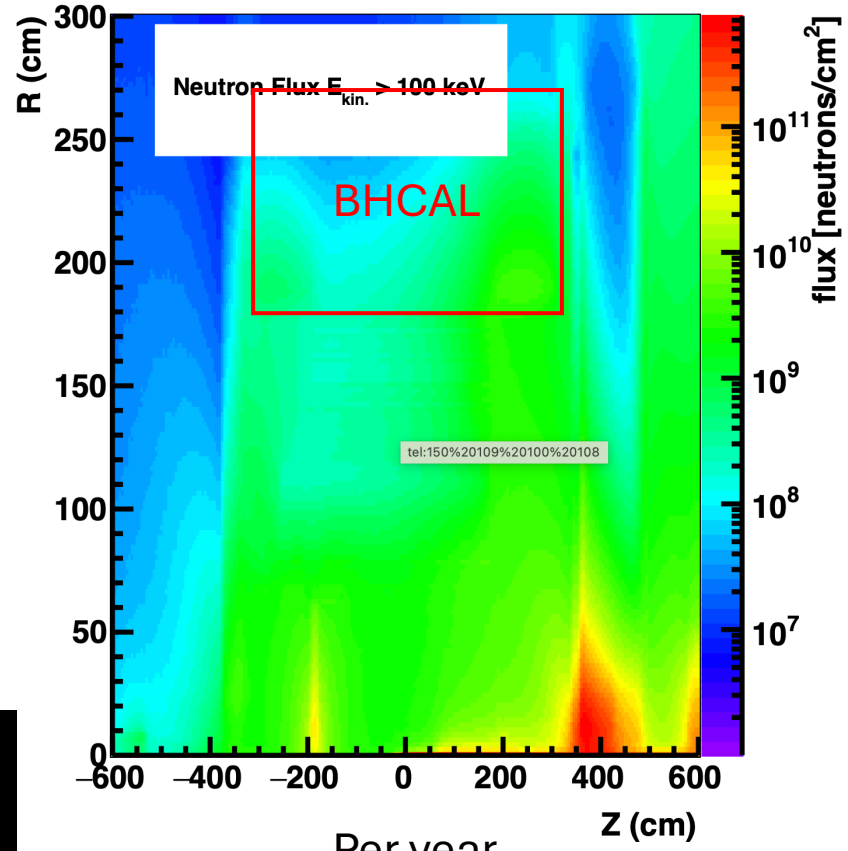
Neutron Flux

sPHENIX



Per 5 year run plan

ePIC



Per year

Neutron fluxes are similar:
- sPHENIX: 1e9 - 1e10 cm^-2 in 5 years
- - ePIC: 1e8 - 1e9 cm^-2 per run

sPHENIX Director's Review
Calorimeter Electronics:
WBS 1.05.01 Silicon Photomultipliers
Christine Aidala, University of Michigan
April 9-11, 2019 BNL

https://indico.bnl.gov/event/19524/contributions/76511/attachments/47542/80662/Jentsch_dosimetry_ePIC_May_16_2023.pdf

Following the TIC meeting

- Will respond to reviewers directly regarding above points
- Version 1 was originally due Dec 1
- THE DEADLINE IS NOW MOVED TO FRIDAY DECEMBER 6
- Next steps will be discussed at the January collaboration meeting
- You are requested to indicate the collaborating institutions and their contributions (gross features) using table format.
- Please, follow the "Guidelines for Reproducing TDR Plots”
- Status of new plots?