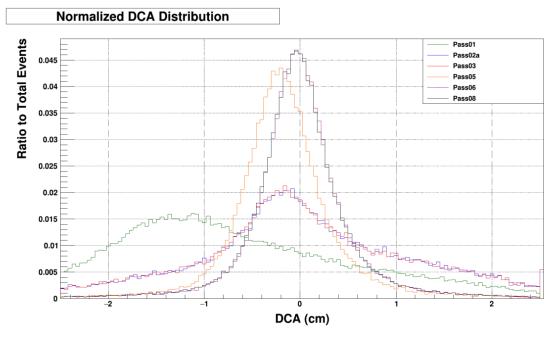
# Discussion: Run 22 production status

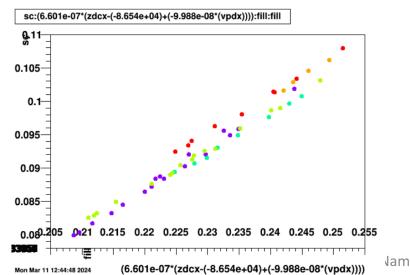




# **TPC Space Charge Calibration**



- SC calibration with a small sample (5 consecutive fills) stable after 6<sup>th</sup> iteration (Pass6→8)
- Fill dependence in SC identified
   → fill-by-fill SC calibration
- The current SC will be used as initial seed



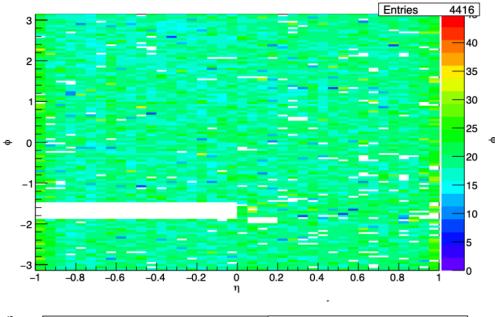
- Fill-by-fill calibration will require 4-8
   DAQ files per run
   → ~150 TB disk space (Gene)
- Rich anticipates full calibration to be completed by late Jun or early July





## **BEMC Calibration**





Run22: All space
Run22: All but Crate 8 Space
Run22: All but Crate 8 Space

Trigger Selection

Trigger Selection

Tower Selection

Tower Selection

- Current effort based on preview sample with TPC SC Pass 3
- Towers located at crate 8 with significantly low number of selected MIP signal
- Associated towers in this region are largely rejected at tower-level selection (ADC, Pedestal related)
- Charles has begun looking into unusual characteristics of pedestals in this region

√am

## **FCS** calibration

- David requested Run 22 st\_fwd production <u>without</u> TPC, forward tracking
- Aim is HCAL/ECAL calibration, forward tracking software QA, along with pi0-TSSA

PWGC meeting Apr 12, 2024

- 3) Data production priorities
- Request from coldQCD to produce Run 22 st\_fwd stream with only the raw data from FCS, sTGC and FST - no TPC, no forward tracking
  - Gene informs it will take 3 6 weeks to finish the production for this request
- Current Priorities: Reproduction of FXT datasets from Run20 with SL24a (fix for tracking acceptance issue + ETOF update for status flag and partial readout) > Run 22 st\_fwd stream (?) > FXT datasets from Run21 [Run21 3.85 FXT I (3.0) > 3.85 FXT II (3.0) > (Run20+21) 26.5 FXT (7.2) > 44.5 FXT (9.2) > 70 FXT (11.5) > 100 FXT (13.7)] with SL24a (fix for tracking acceptance issue, no ETOF calibration) > FXT datasets from Run21 with ETOF calibration
- Subscribe
- Production request received by Sooraj,
   DAQ retrieval will commence ASAP alongside Run 20 FXT
- Gene anticipates ~6 weeks for full reproduction





## Summary

### TPC SC calibration

- Significant progresses have been made with the initial sample
- Full fill-by-fill calibration is planned
- Estimate: late June early July until completion

#### BEMC calibration

- Current effort focuses on relative gain calibration with preview sample
- Suggestion:
   TPC SC calibration on the horizon → formation of BEMC task force
- Any help with people power always welcome

### FCS calibration

- St fwd production requested
- ~6 weeks for production



