

ITS - TRD/TOF interpolation. TPC space point distortion calibration.

Marian Ivanov, Ernst Hellbar

ATO-108 - ITS - TRD/TOF interpolation. TPC space point distortion calibration.

- <https://alice.its.cern.ch/jira/browse/ATO-108>
- <https://indico.cern.ch/event/374111/contribution/6/material/slides/0.pdf>
- Code implemented and used for open gating grid analysis
 - <https://alice.its.cern.ch/jira/browse/ATO-16>

•(ATO-230) Fit of the distortion maps from open gating grid analysis with ANALYTICAL models

- <https://alice.its.cern.ch/jira/browse/ATO-230>
- <https://indico.cern.ch/event/360660/contribution/5/material/slides/0.pdf>
 - Ongoing activities with RUN3 preparation

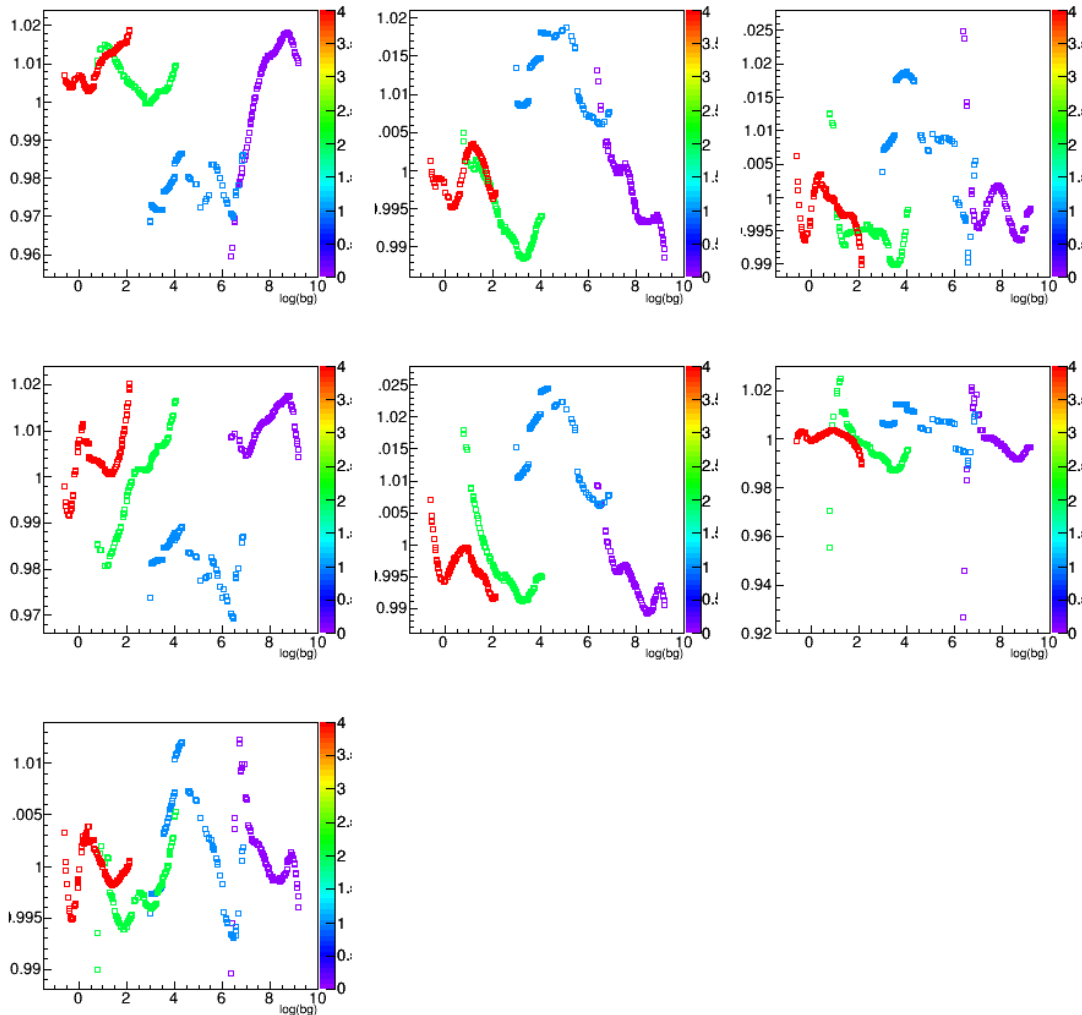
Current status

- Code in the macros
- Test with calibration components starts this week using raw data
- Merging procedure to be solved
 - trees - grouping in chunks of $O(1 \text{ GBy})$
- AliNDLocalRegression for representation of residual distortions
- Parameters of analytical distortion models as a QA

Transfer function calibration

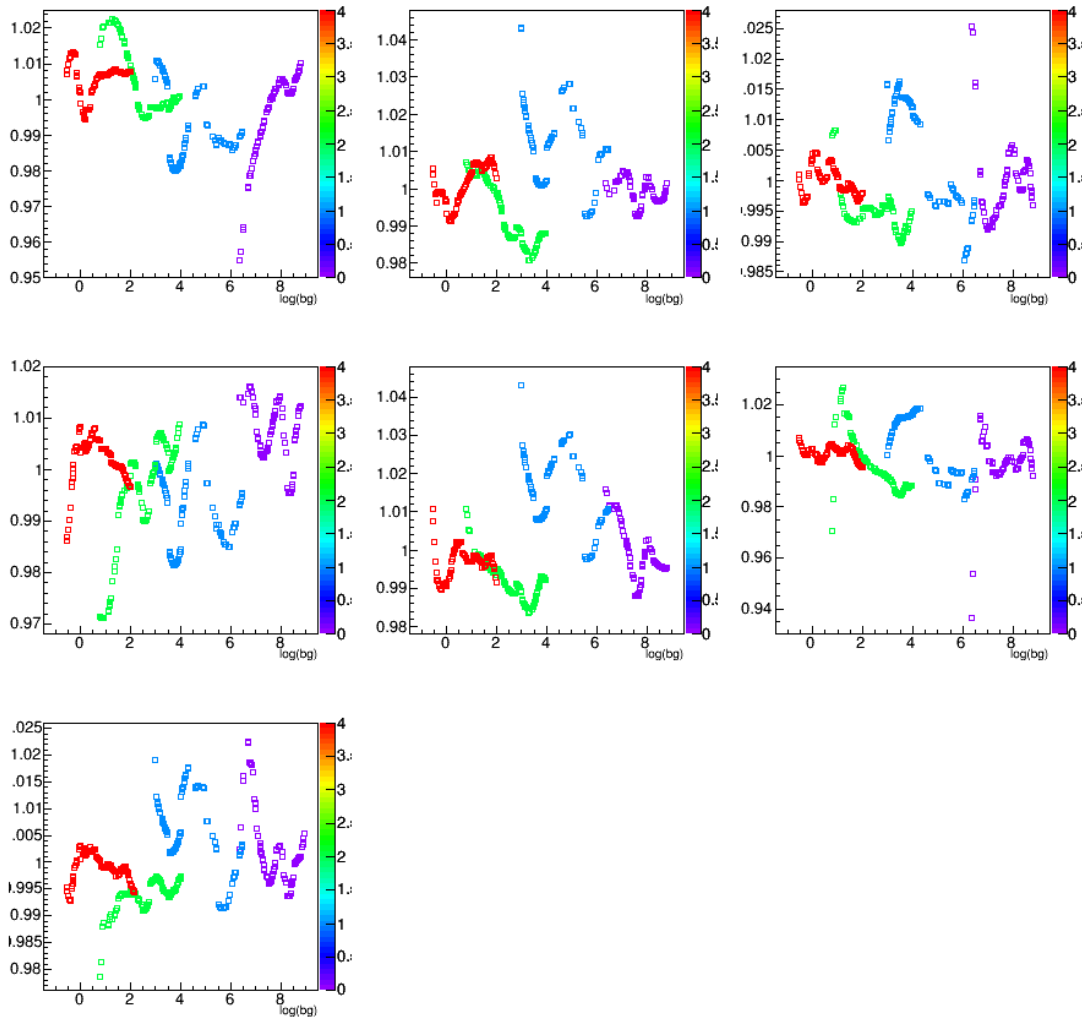
- Comsic selected muon and V0 selected particles used in global $dE/dx(BG)$ and transfer function fit

Transfer function calibration - LHC10e



- TPC dedx in different pad region corrected for “simple” transfer function

Transfer function calibration - LHC10d



- TPC dedx in different pad region corrected for “simple” transfer function