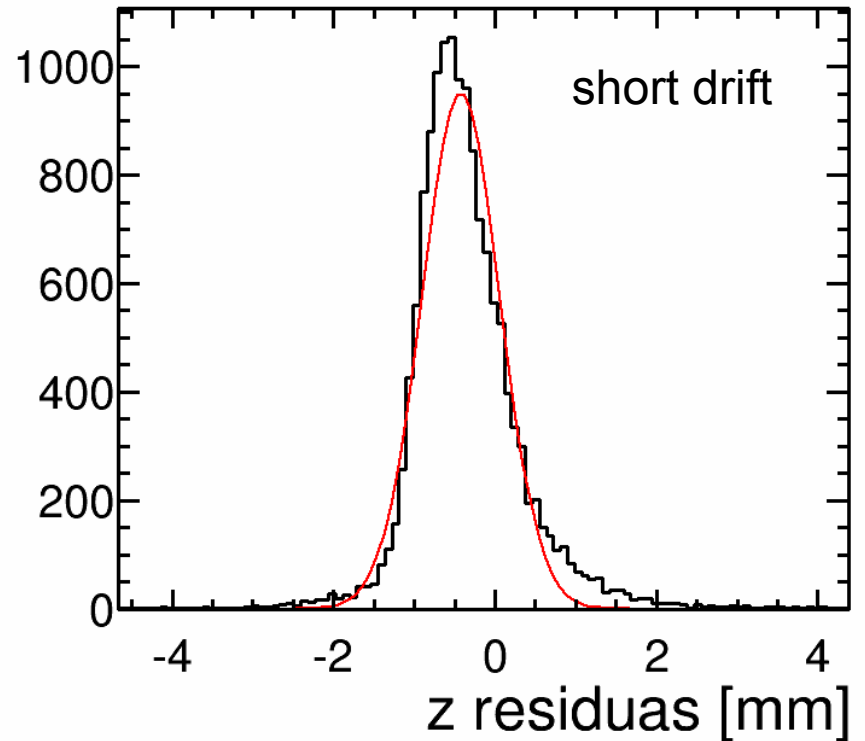
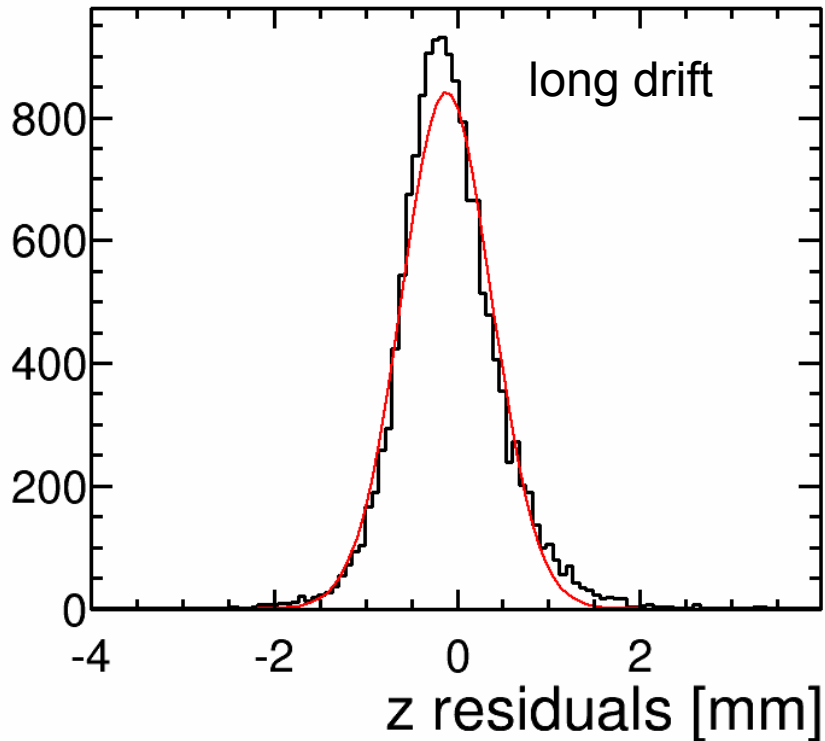


Longitudinal Spatial Resolution

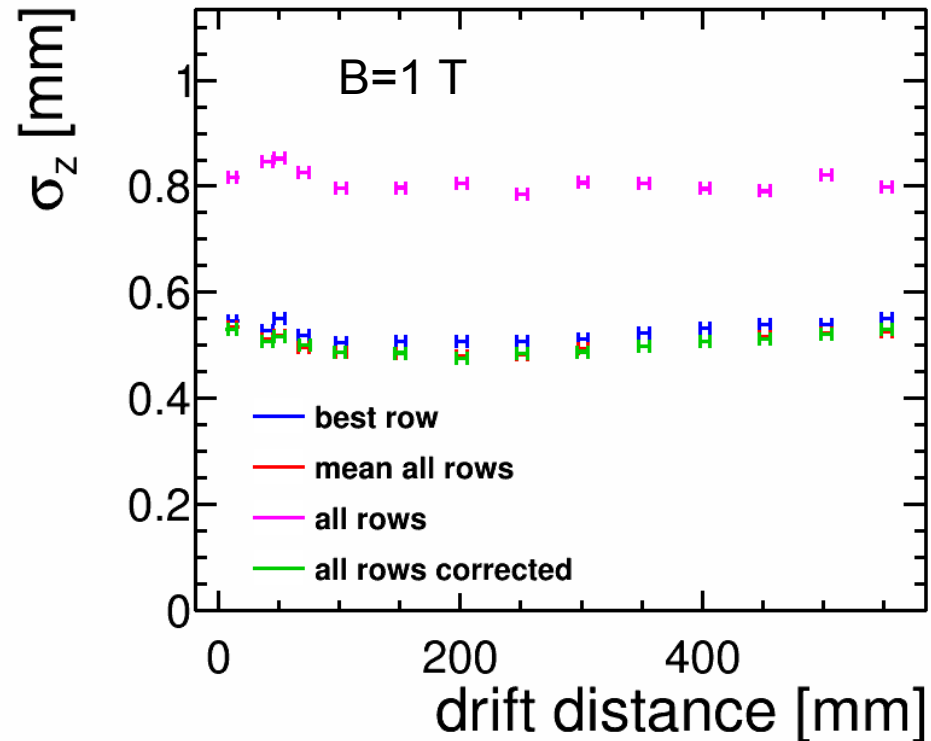
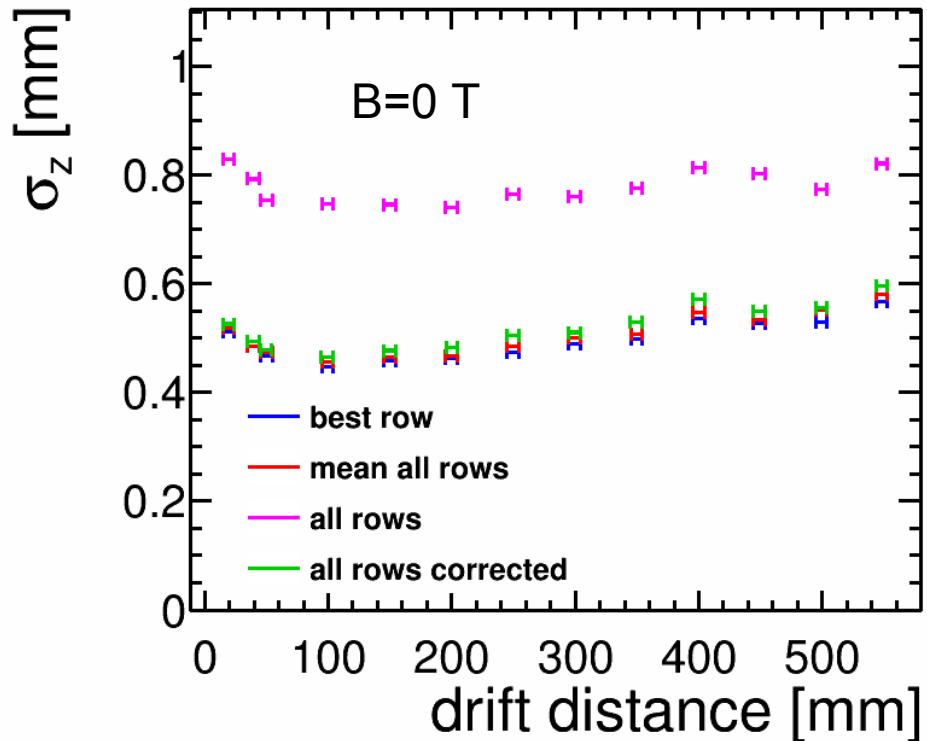
Residual Distribution

- Asymmetric residual distributions observed; especially for short drift distances



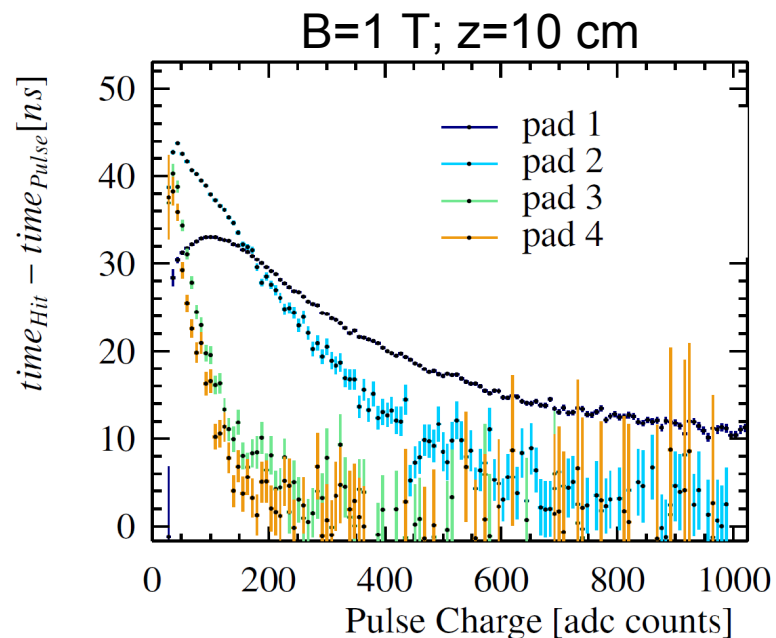
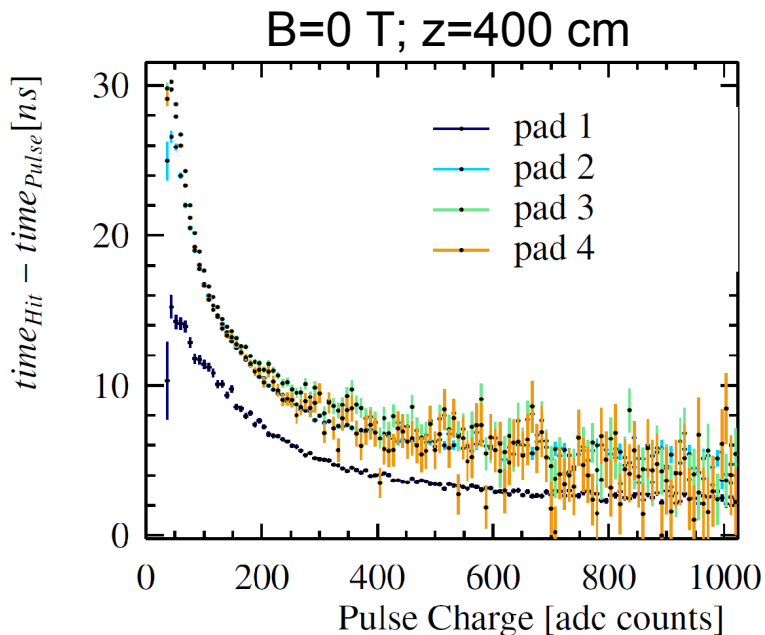
Resolution

- The tail of the distribution increases the RMS90 considerably



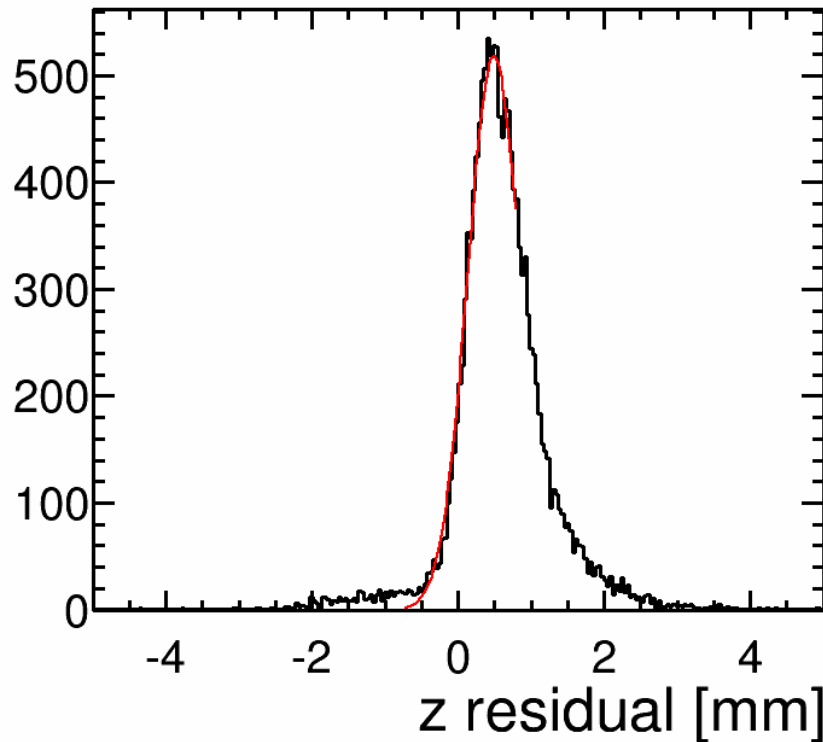
Charge Dependence Time

- A charge dependence of the time estimation can be observed
- Many other dependencies also visible-> calibration very difficult
- Two possibilities to get an estimate for the best possible z resolution of the detector:
 - Use only high charge pulses which reduces statistics a lot
 - or



Or...

- Do it like the Bonn group
- Low charges are always earlier than the rest and cause the long tail
- Perform a Gaussian fit to the left side of the residual distribution



Z Resolution

- The overall resolution drops but the main systematic is still the same
 - Larger rise for 0T data than for 1T data
 - Slightly worse σ_0 for 1T data
- What N_{eff} is expected for z resolution? Same as for $r\phi$ resolution?

