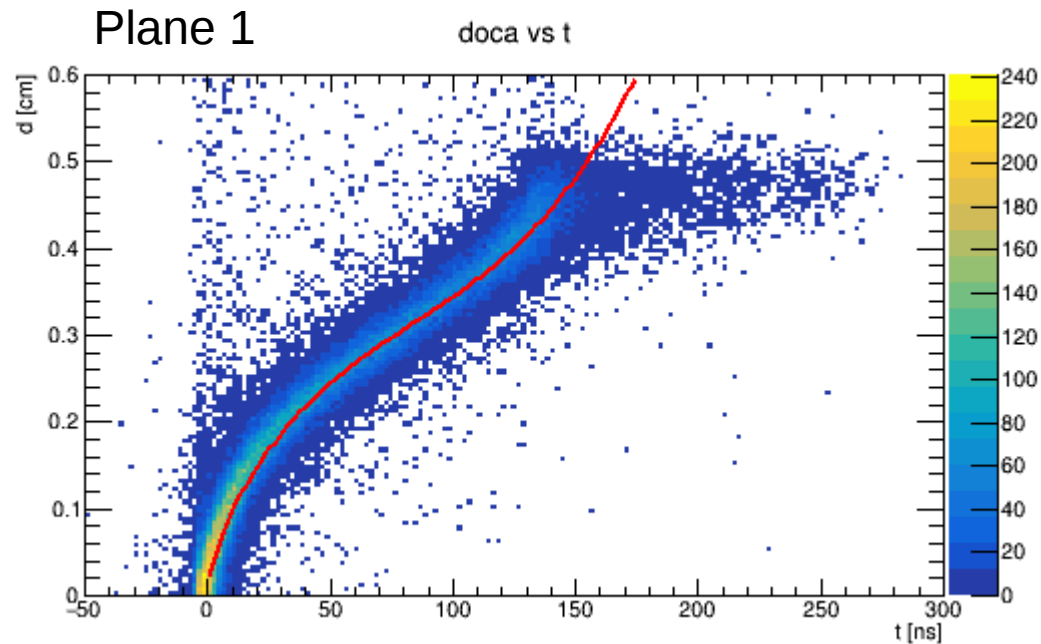


# FDC position resolutions using straight tracks (Run 40847)

Simon Taylor / JLab

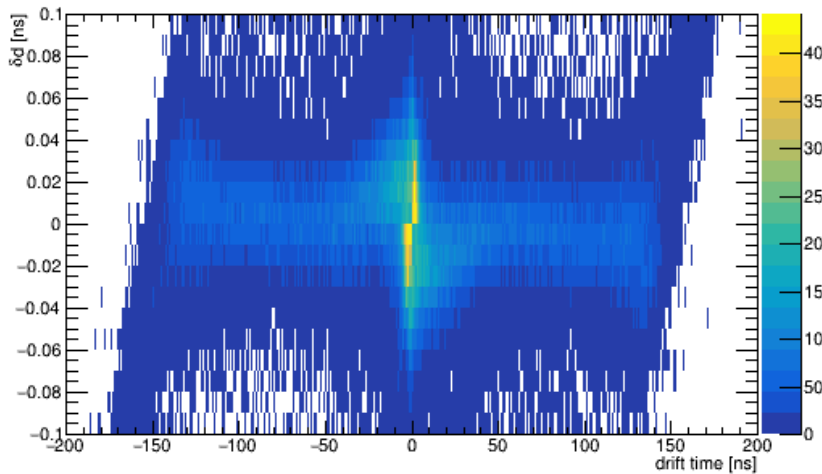
- Fit tracks excluding one plane, measure resolutions for this plane
- Find average resolution over all wires/strips in this plane



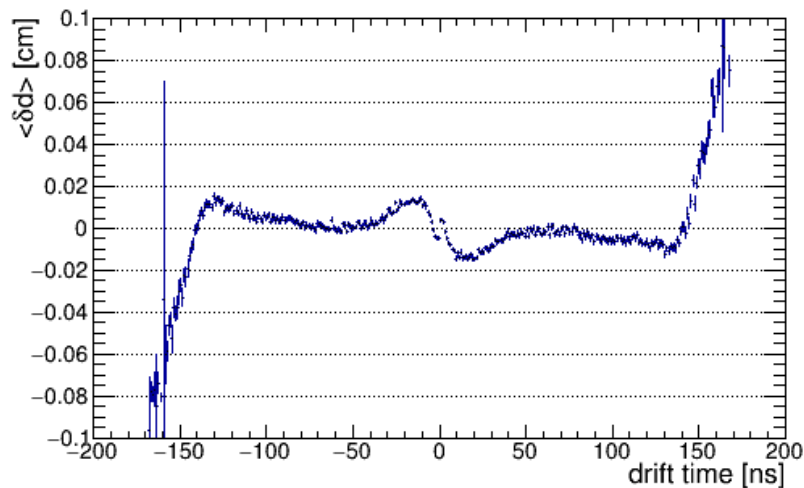
$$d(t) = 0.022\sqrt{t} + 0.00306t - 3.25 \times 10^{-5}t^2 + 1.44 \times 10^{-7}t^3$$

# Plane 1: transverse direction

Residual for coordinate transverse to wire

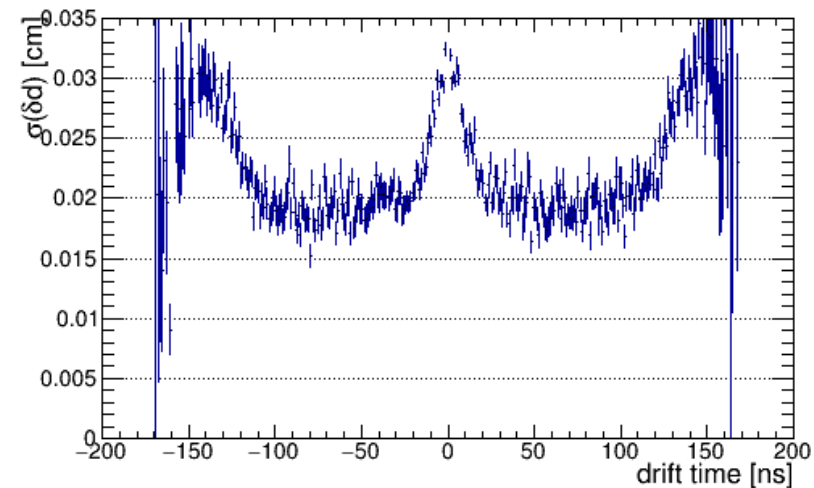


Fitted value of par[1]=Mean



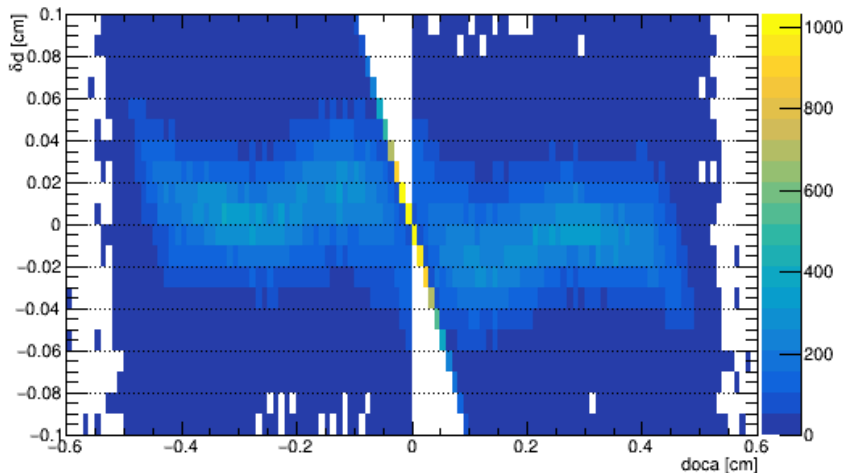
mean

Fitted value of par[2]=Sigma

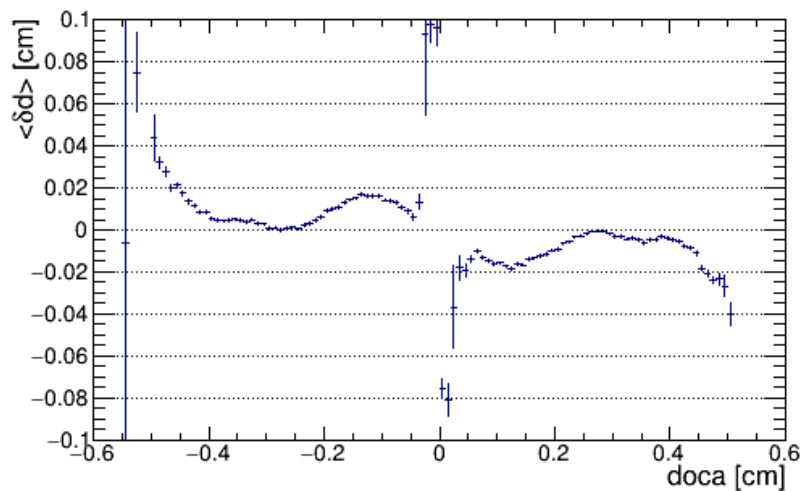


sigma

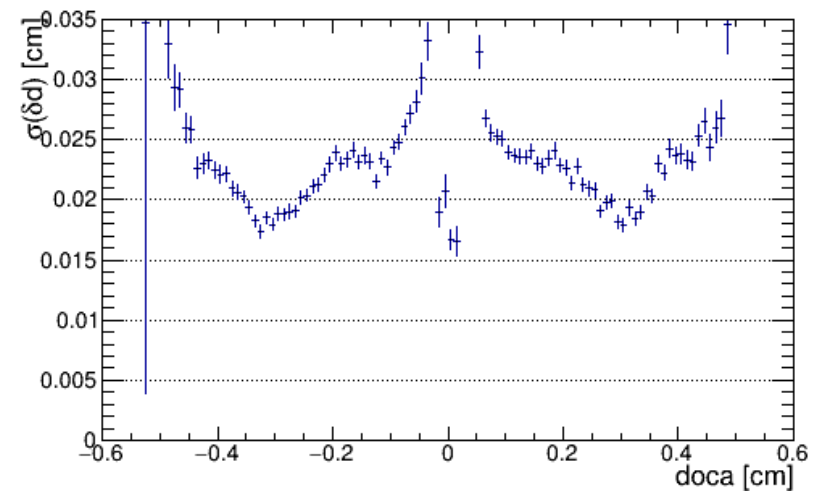
Residual for coordinate transverse to wire



Fitted value of par[1]=Mean

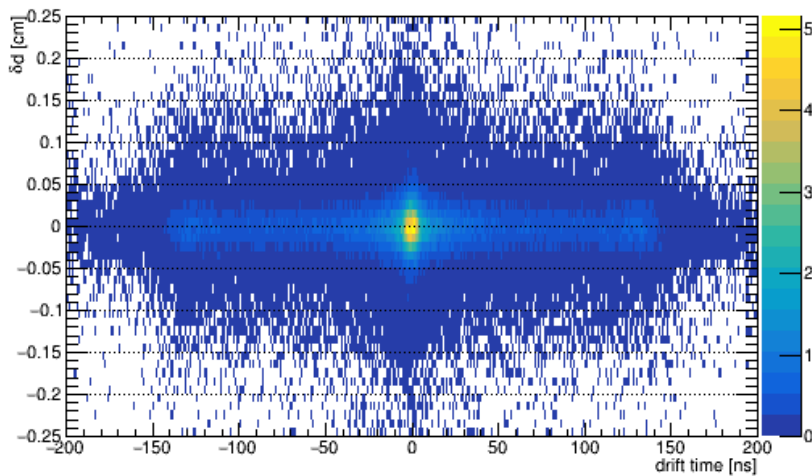


Fitted value of par[2]=Sigma

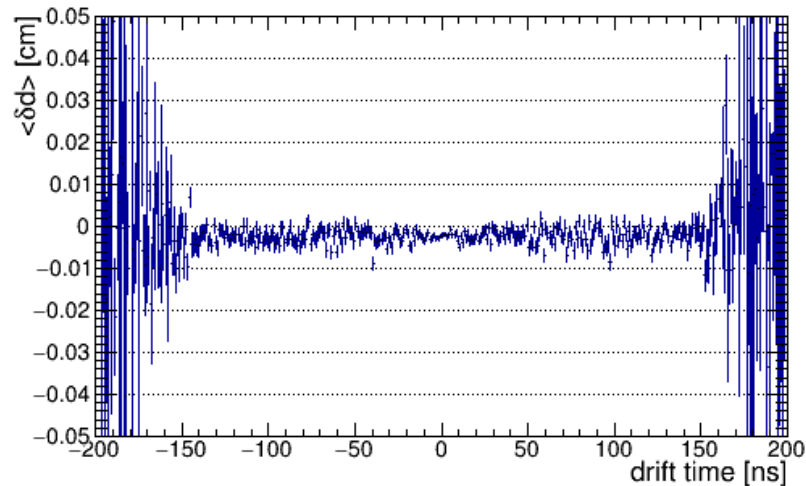


# Plane 1: along wire direction

Residual for coordinate along wire

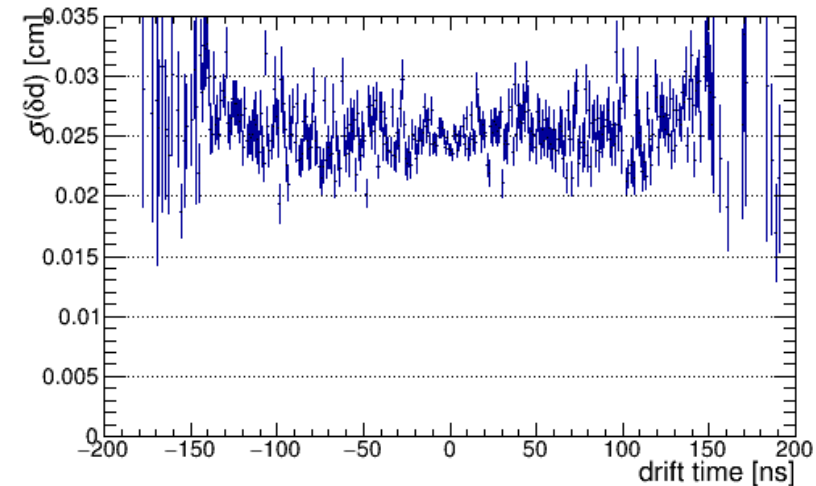


Fitted value of par[1]=Mean



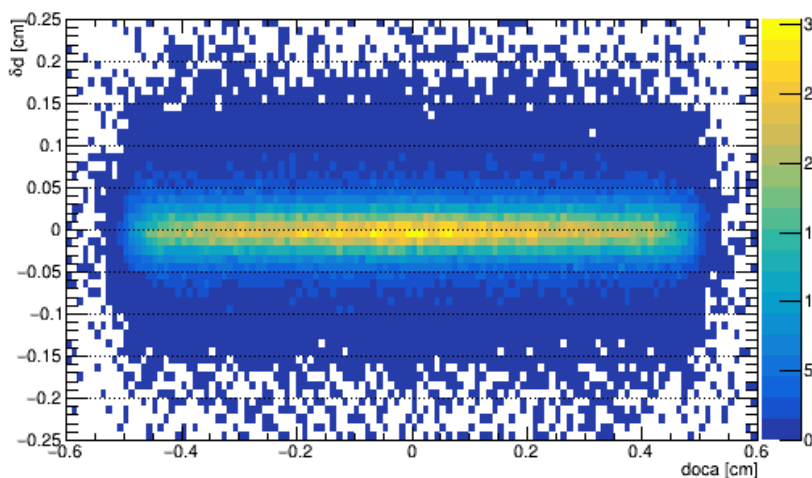
mean

Fitted value of par[2]=Sigma

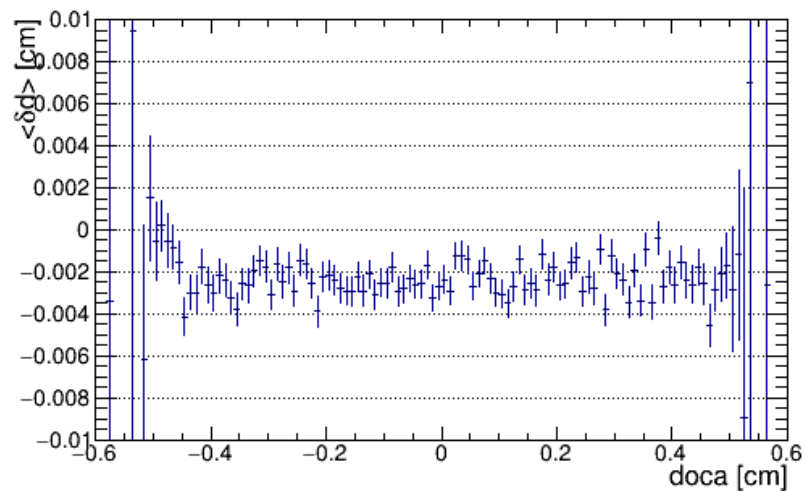


sigma

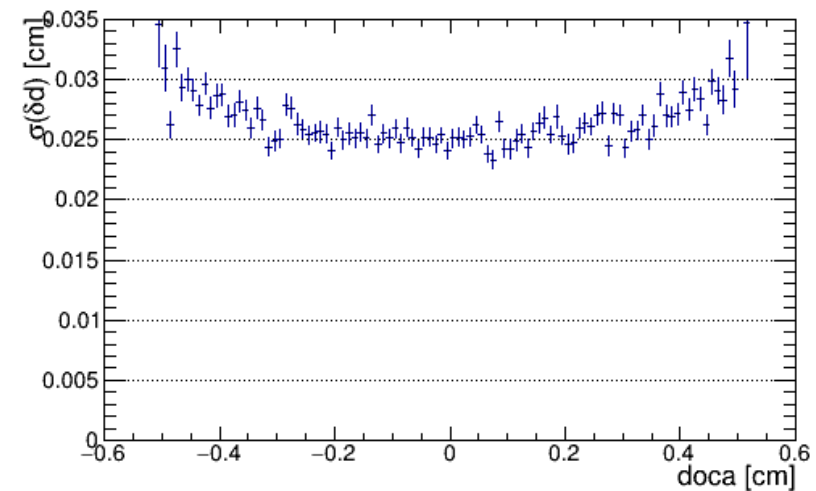
Residual for coordinate along wire



Fitted value of par[1]=Mean

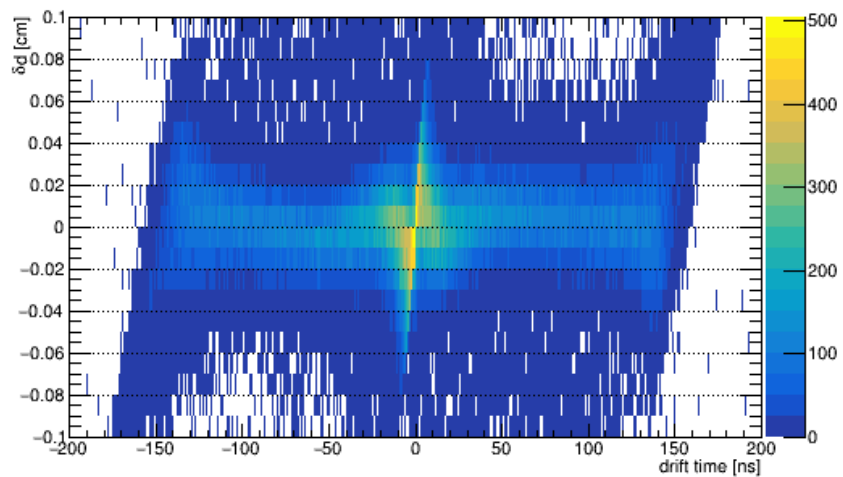


Fitted value of par[2]=Sigma

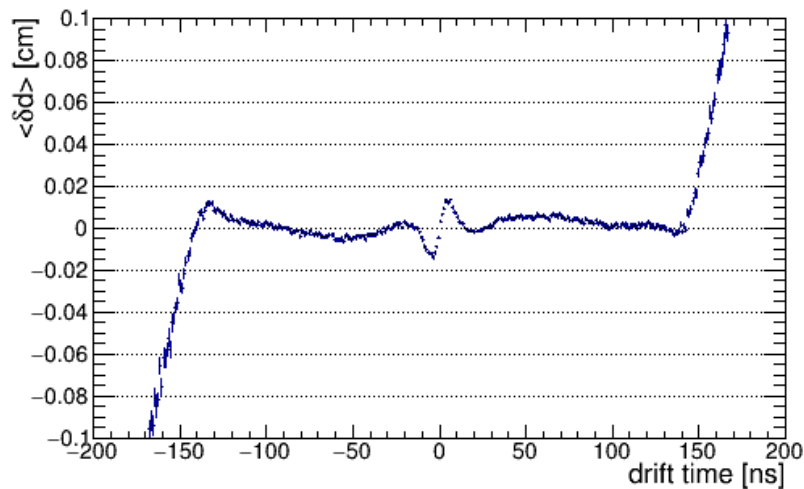


# Plane 19: transverse direction

Residual for coordinate transverse to wire

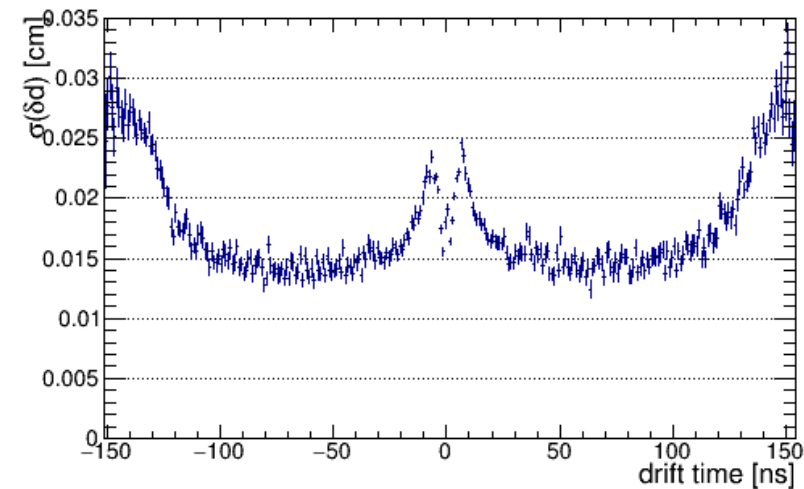


Fitted value of par[1]=Mean



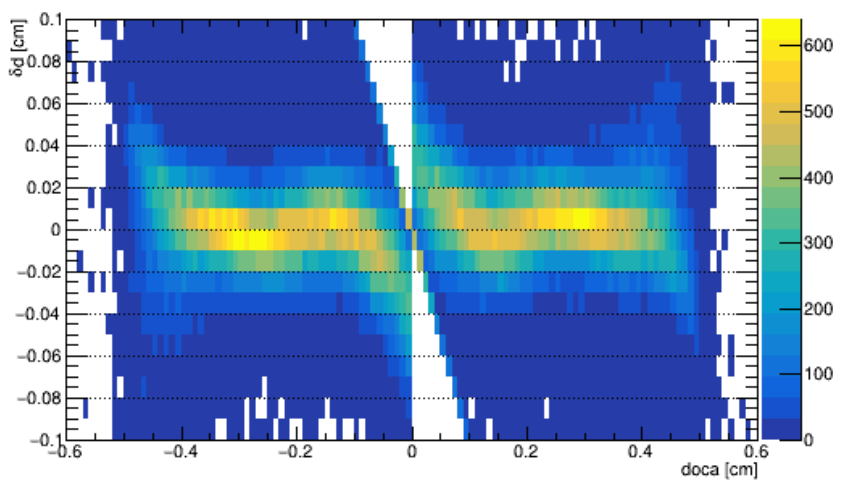
mean

Fitted value of par[2]=Sigma

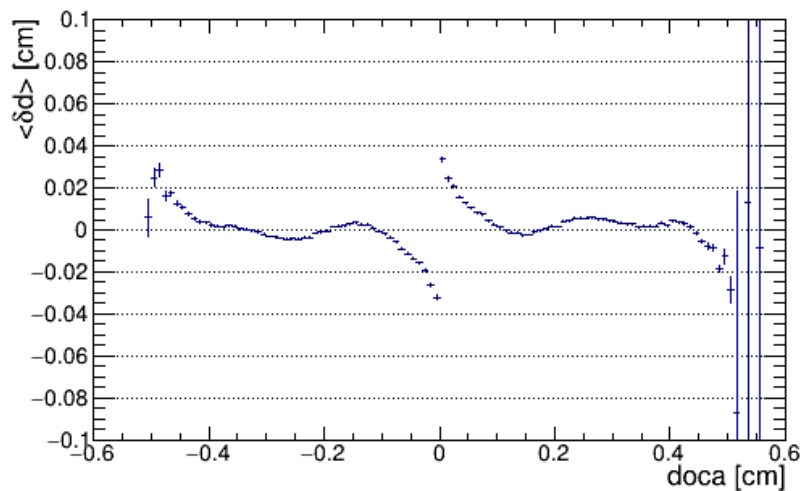


sigma

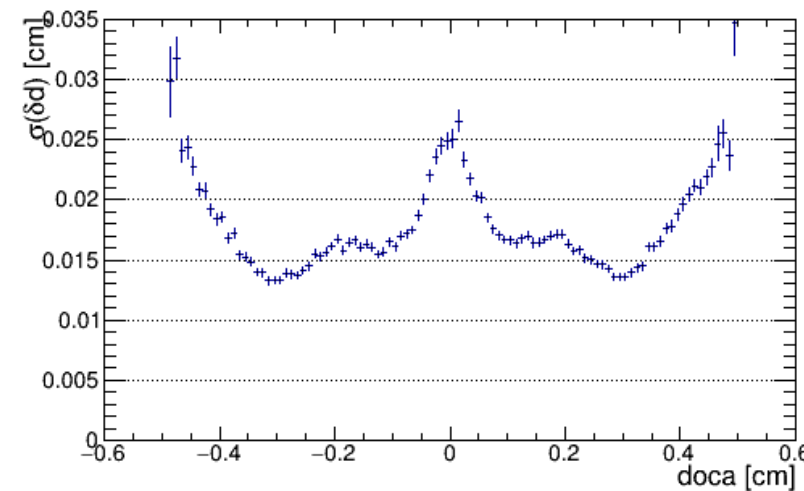
Residual for coordinate transverse to wire



Fitted value of par[1]=Mean

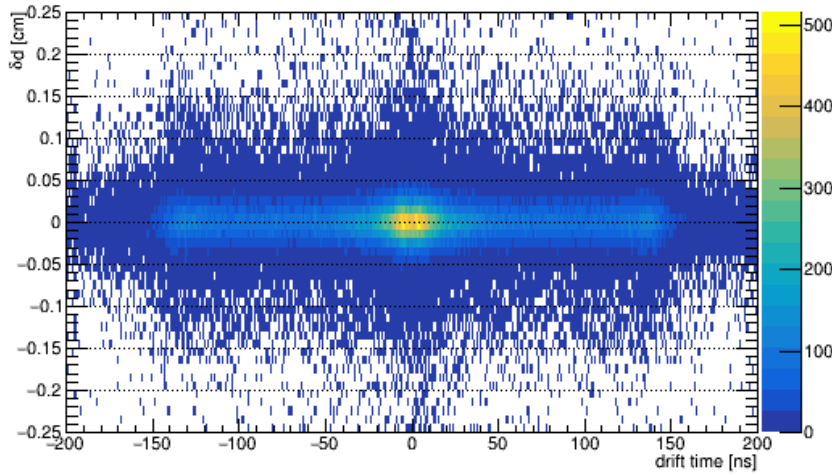


Fitted value of par[2]=Sigma

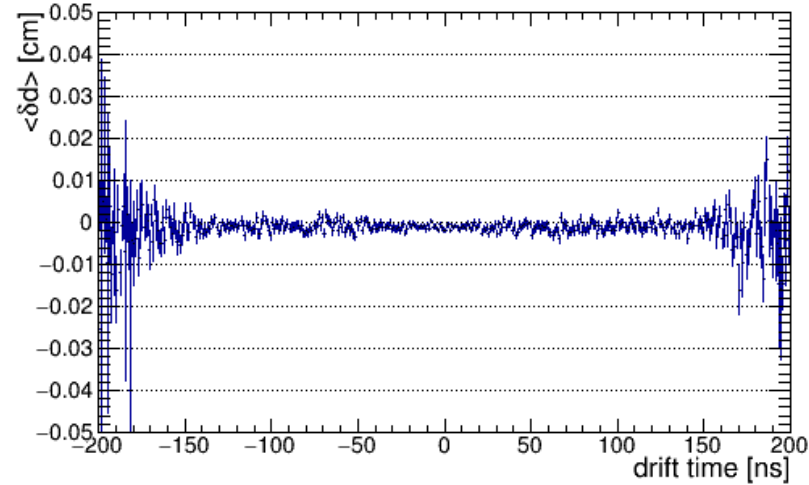


# Plane 19: along wire direction

Residual for coordinate along wire

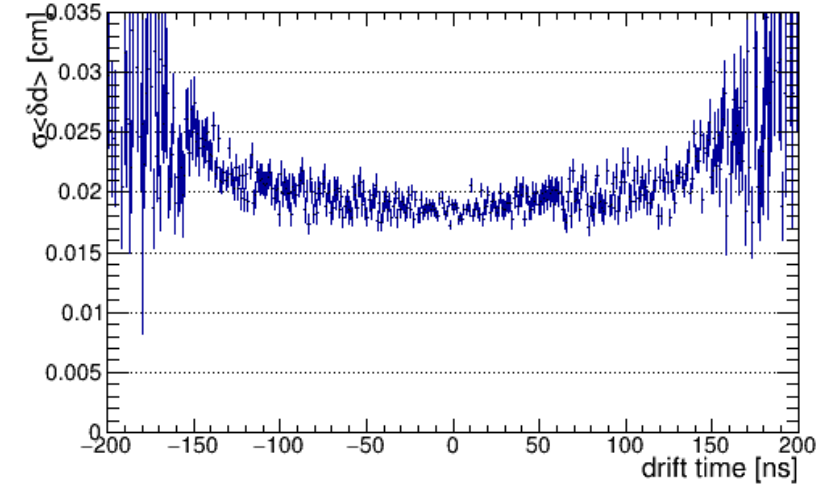


Fitted value of par[1]=Mean



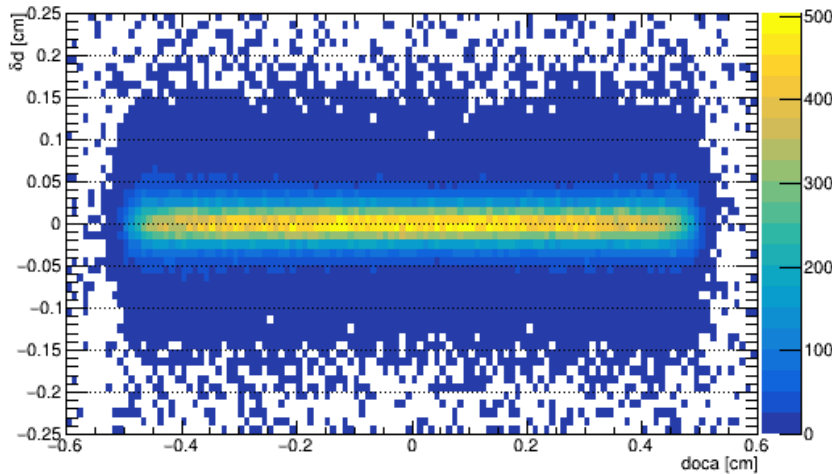
mean

Fitted value of par[2]=Sigma

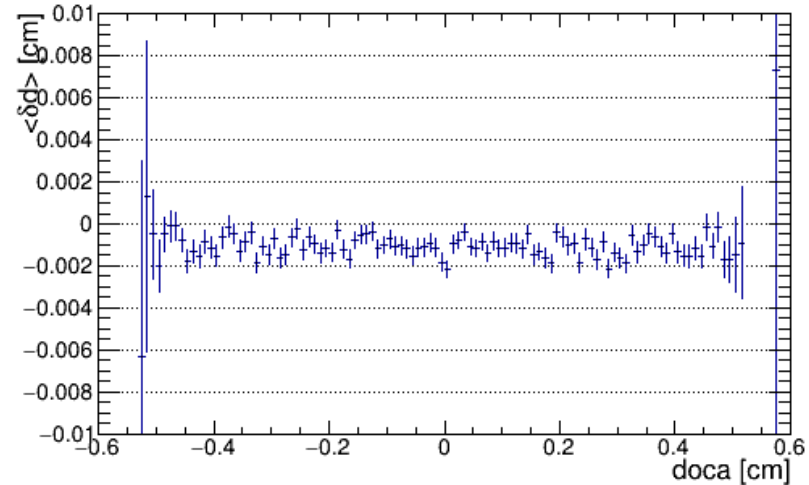


sigma

Residual for coordinate along wire



Fitted value of par[1]=Mean



Fitted value of par[2]=Sigma

