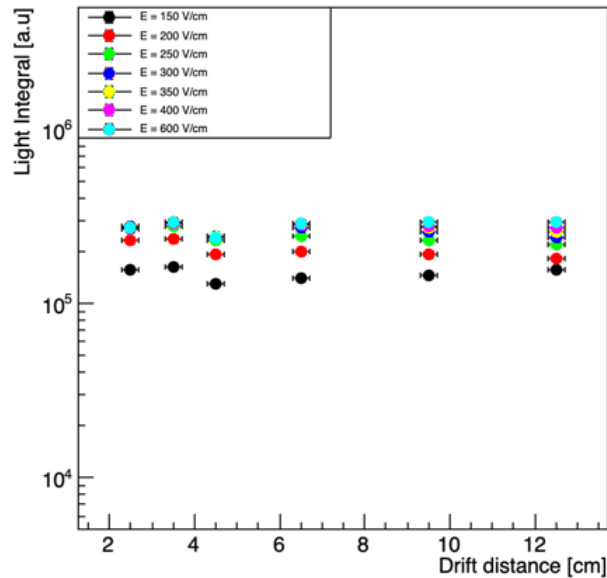


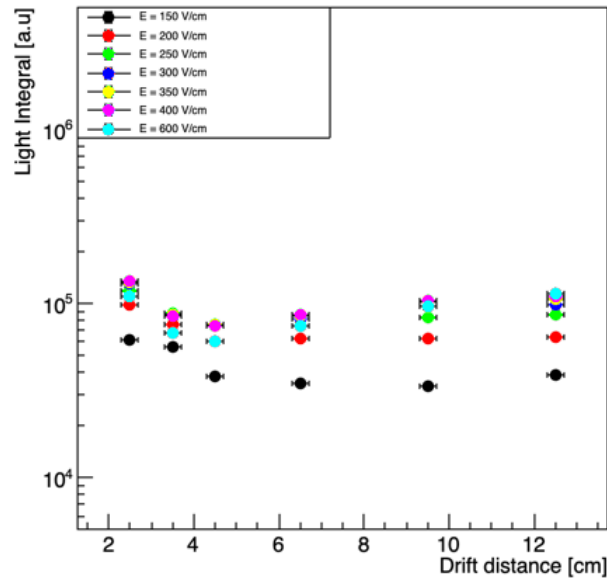
Update on NID

Light yield vs field vs distance

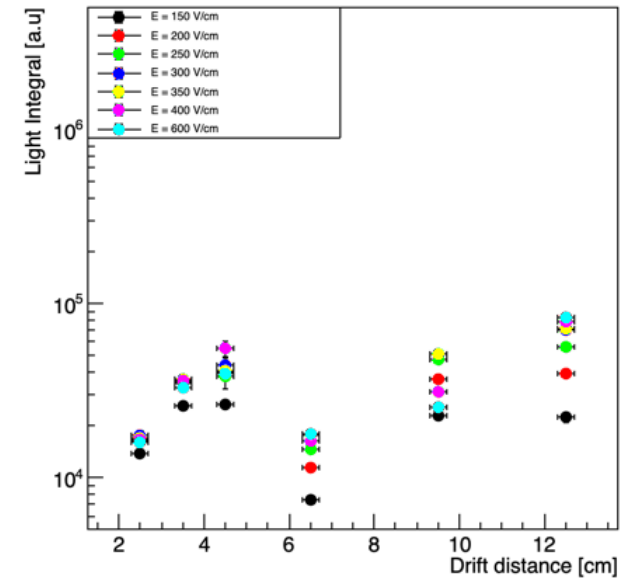
He:CF₄ 60:40 @ 650mbar Light Integral



He:CF₄:SF₆ 59:39.4:1.6 @ 650mbar Light Integral

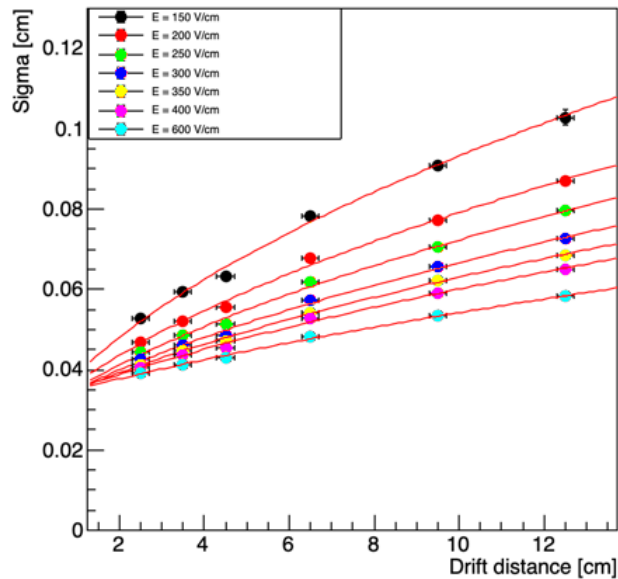


CF₄:SF₆ 98.4:1.6 @ 305mbar Light Integral

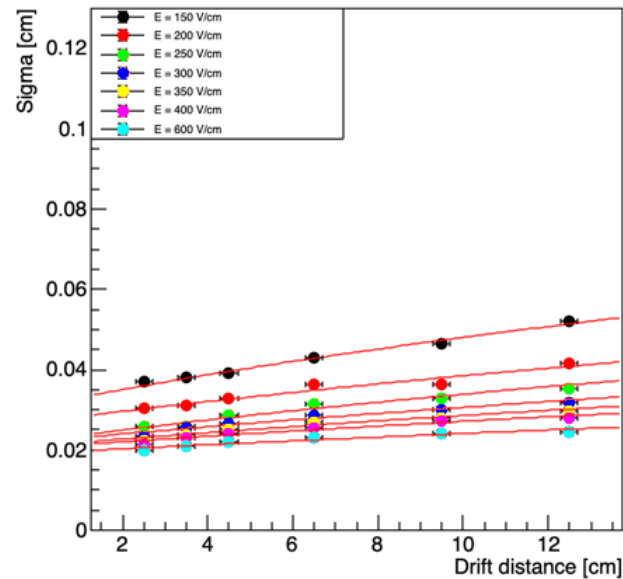


Diffusion vs field vs distance

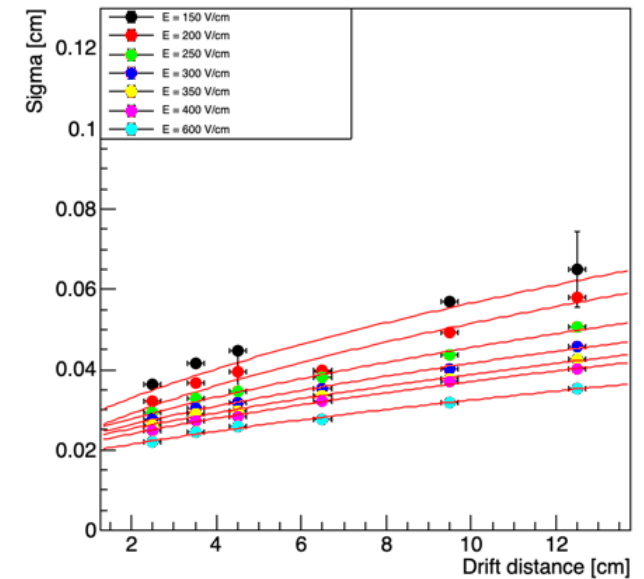
He:CF₄ 60:40 @ 650 mbar Transverse Profile Sigma



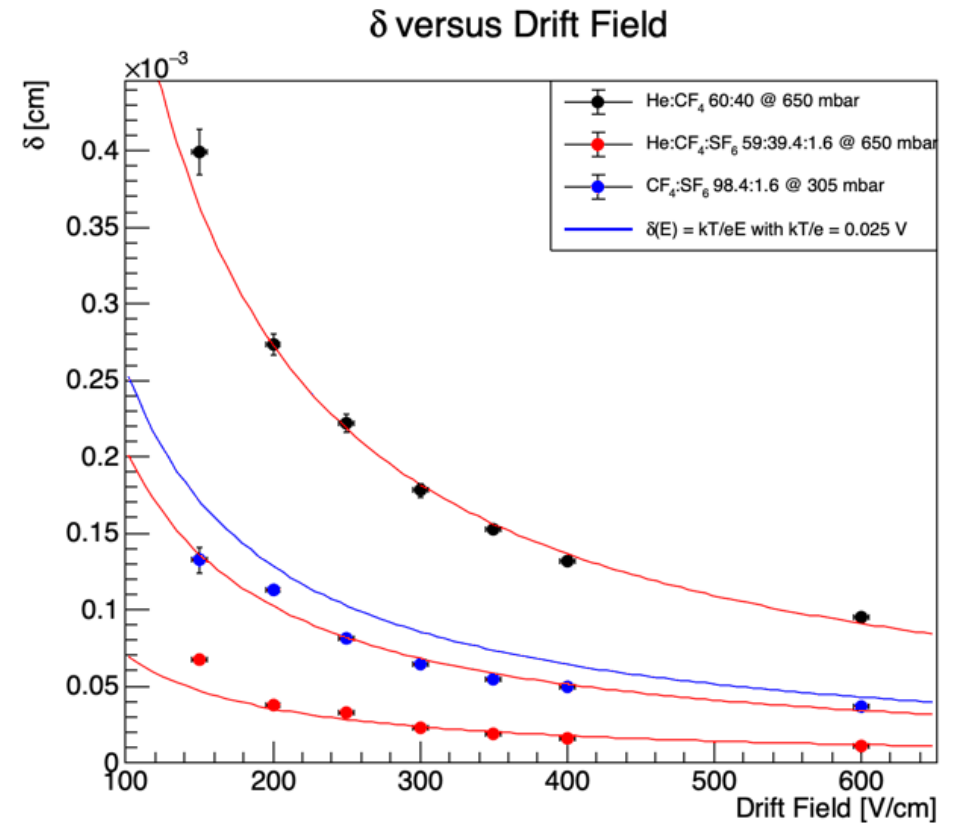
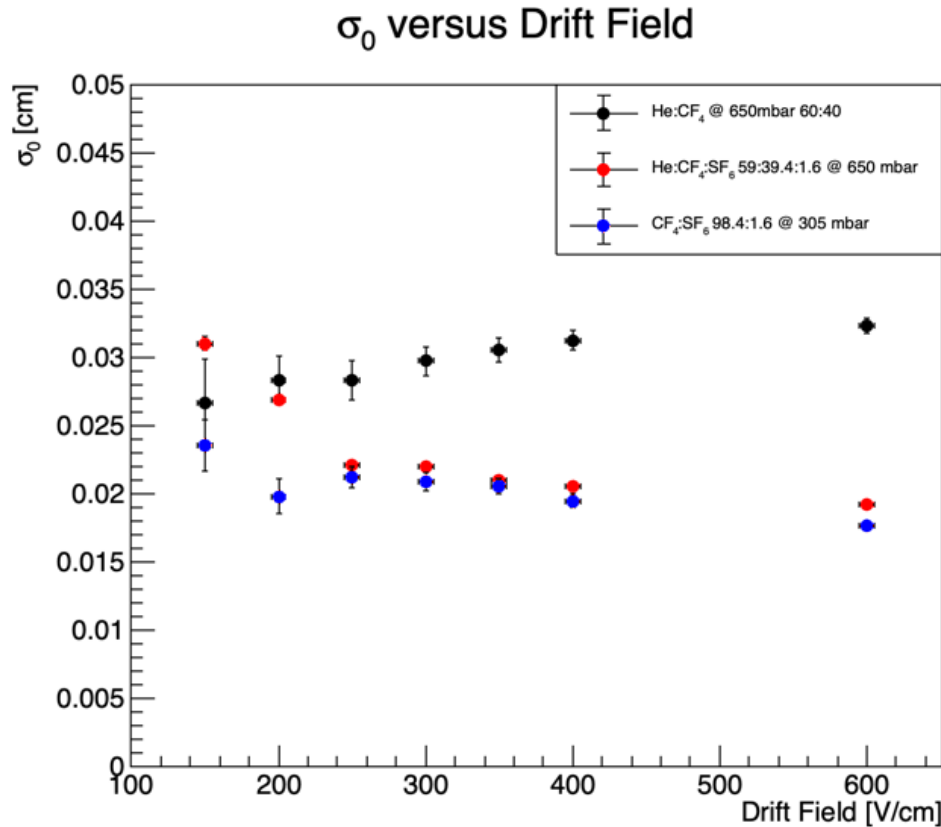
He:CF₄:SF₆ 59:39.4:1.6 @ 650mbar Transverse Profile Sigma



CF₄:SF₆ 98.4:1.6 @ 305 mbar Transverse Profile Sigma



Sigma_0 and delta vs field



He:CF₄ $kT_{\text{eff}}/e = 0.0546 \pm 0.0006$ V

CF₄:SF₆ $kT_{\text{eff}}/e = 0.0204 \pm 0.0003$ V

He:CF₄:SF₆ $kT_{\text{eff}}/e = 0.0070 \pm 0.0001$ V

- Measured diffusion of $\text{CF}_4\text{:SF}_6$ near the thermal limit and larger than $\text{He:CF}_4\text{:SF}_6$
- Measured light yield of $\text{CF}_4\text{:SF}_6$ smaller than $\text{He:CF}_4\text{:SF}_6$
- i.e. diffusion do not depend on light yield
- σ_0 consistent among NID