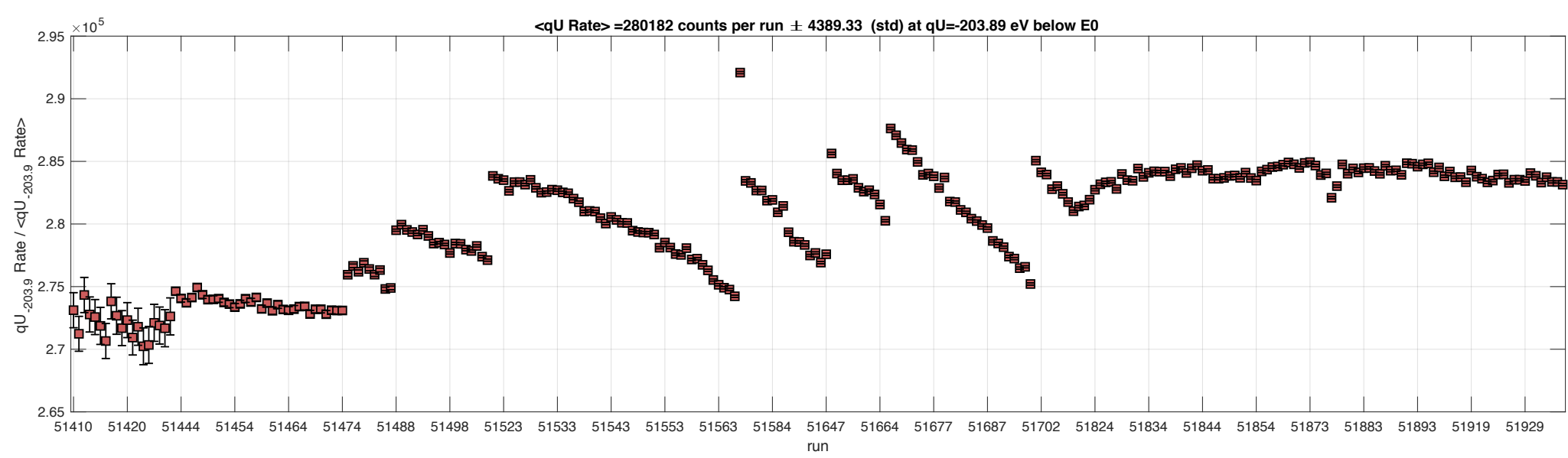
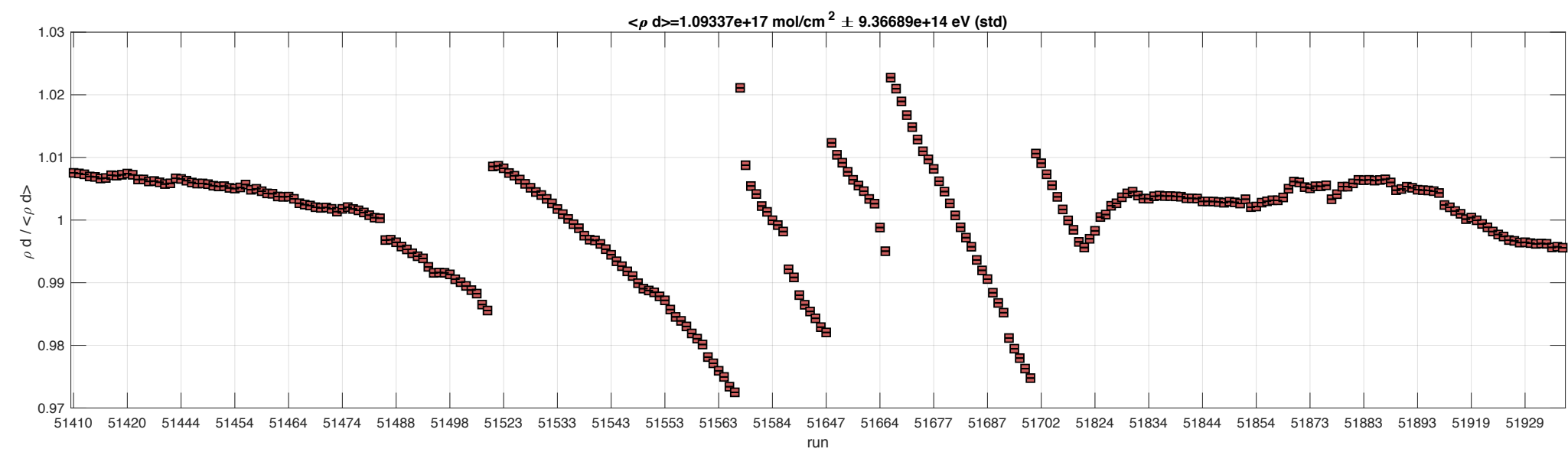
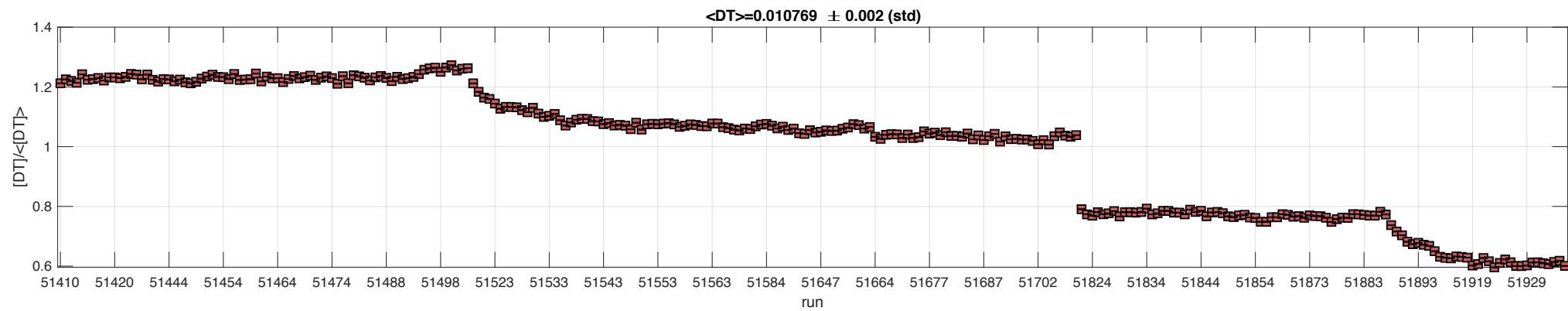
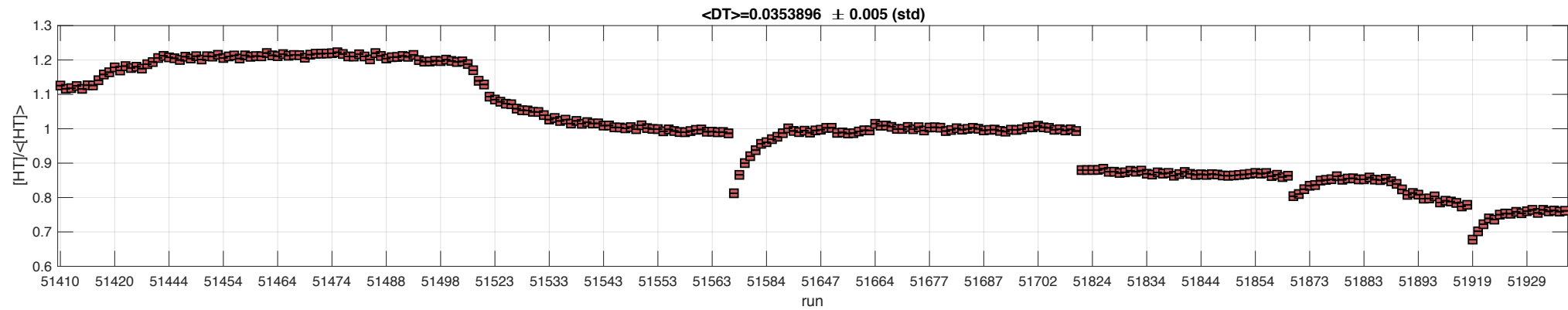
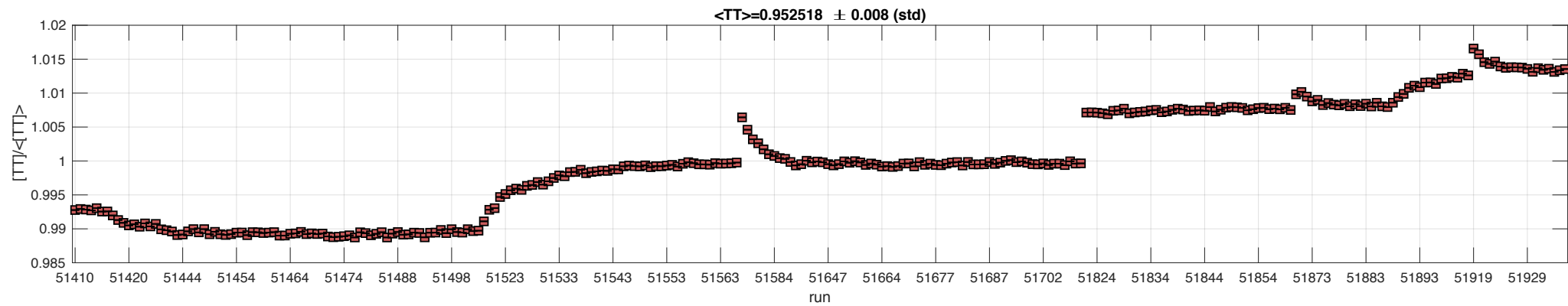


KNM1 Data Taking	April 04 – April 10 2019	April 10 – April 12 2019	April 12 2019 – May 13 2019
Runs	59 runs - 51279 – 51401	17 runs - 51410 – 51426	261 runs - 51541 – 51936
Effective $\beta$ -scan Data Taking Time	4.9 days	23.7 days (over 32.5 real days – $\epsilon$ = 73%)	
Rear Wall bias Voltage	+175 mV	-183 mV	-150 mV
$E_0$ Radial Dependence	Sizable (30 meV / ring)	No sizable dependence	
$\rho \cdot d$ (22% of nominal)	1.1e17 mol/cm <sup>2</sup> (6e13 mol/cm <sup>2</sup> std)	1.1e17 mol/cm <sup>2</sup> (1e15 mol/cm <sup>2</sup> std – residual drift) Regular adjustment of throughput & WGTS Warm-up/Cooling	
Endpoint Stability	18573.5 eV (0.12 eV std) Run-wise stable	18573.7 eV (0.15 eV std) Run-wise stable	
Background Stability (117 pixels)	294 mcps (11 mcps std) stable	294 mcps (11 mcps std) stable	

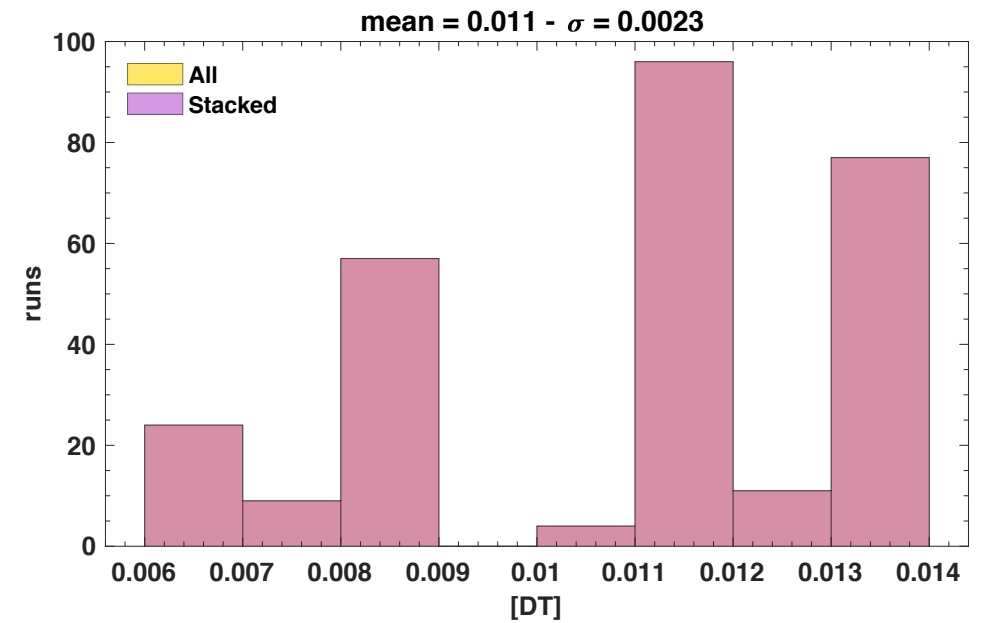
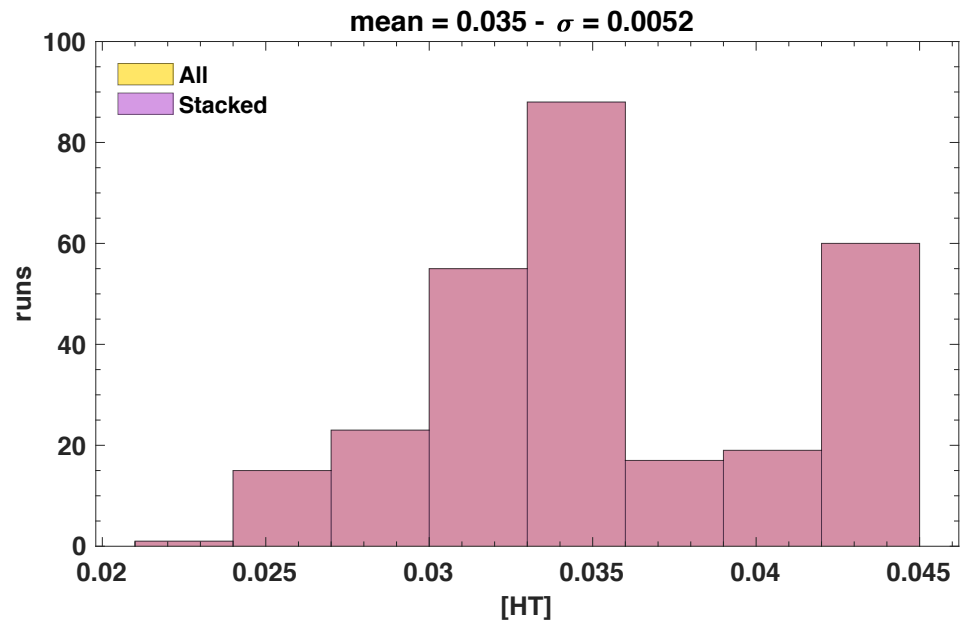
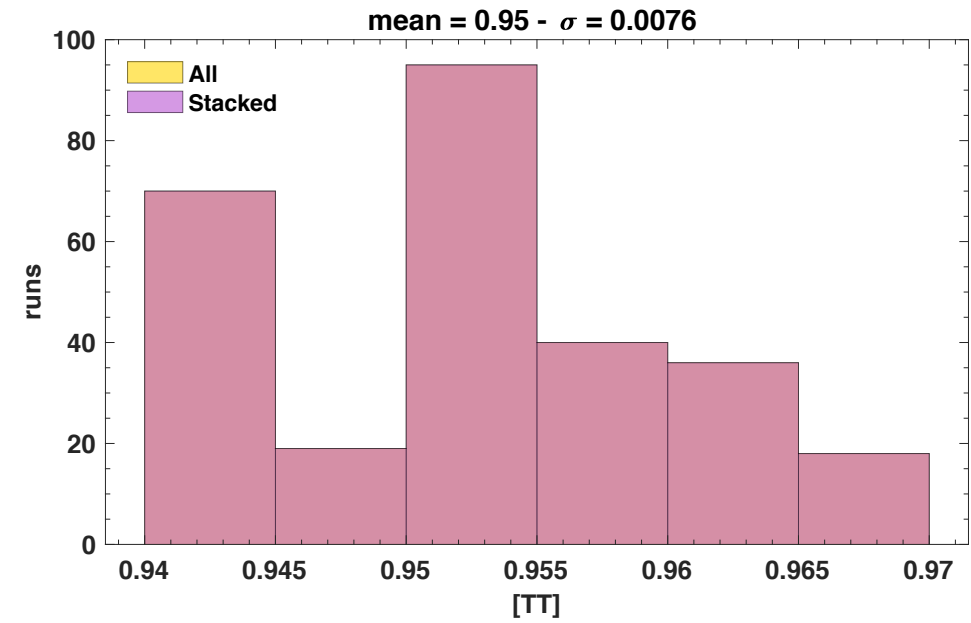
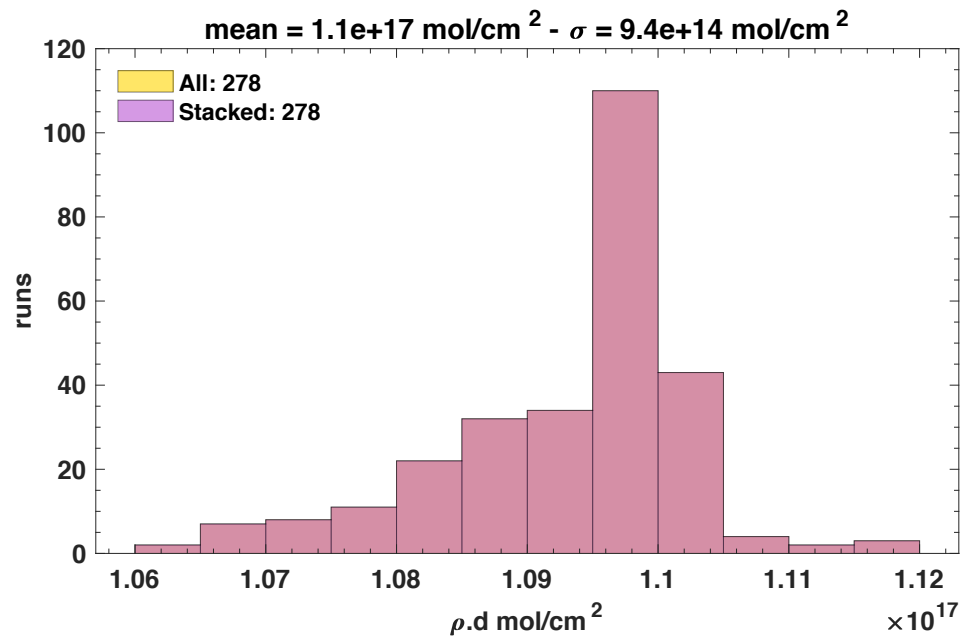
# KATRIN First Tritium - Slow Control Parameters - Column Density



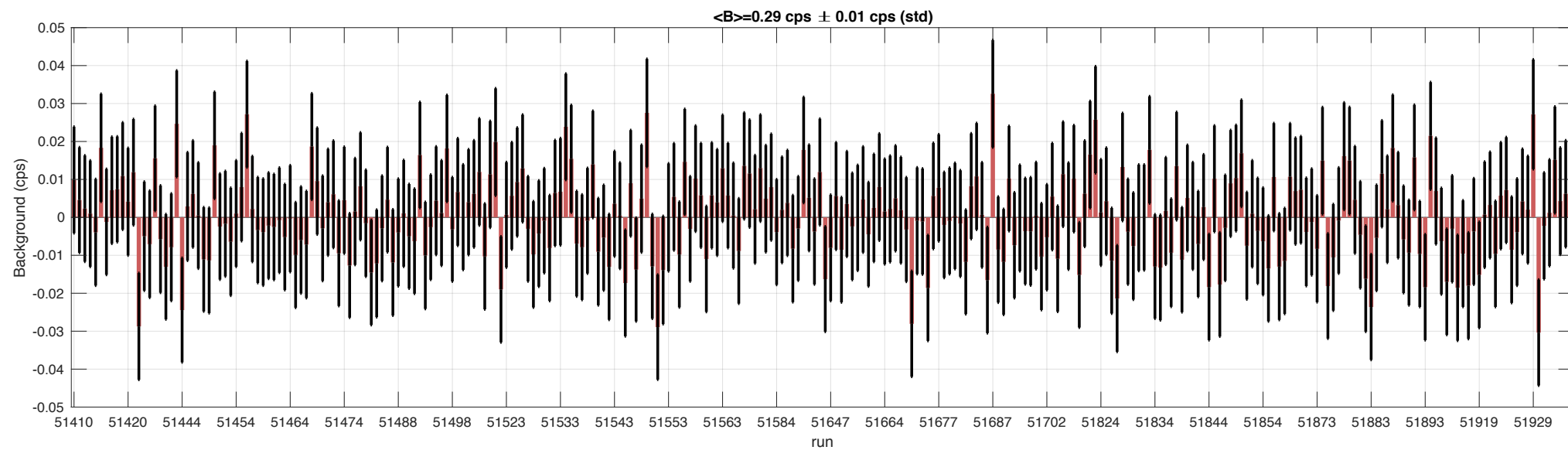
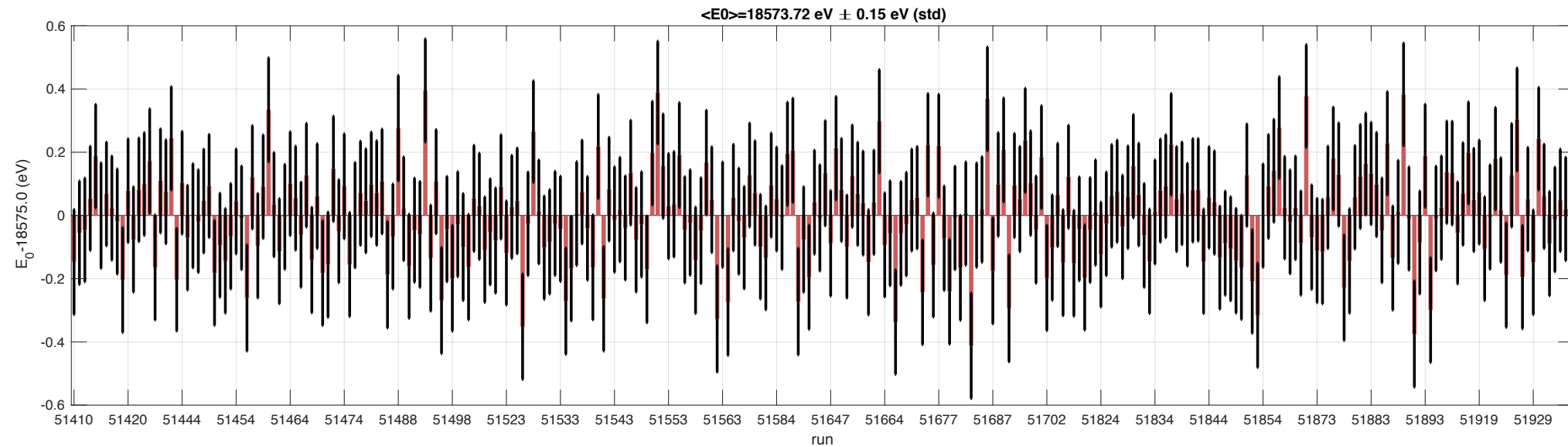
# KATRIN First Tritium - Slow Control Parameters - Isotopologues



# KATRIN: Slow Control Parameter Distributions



# KATRIN Run-wise Fit - 278 Runs (chi2Stat 9.389891e+01) - eV below E0



# KATRIN: Single Runs Stacked: Fit Parameter Distributions

