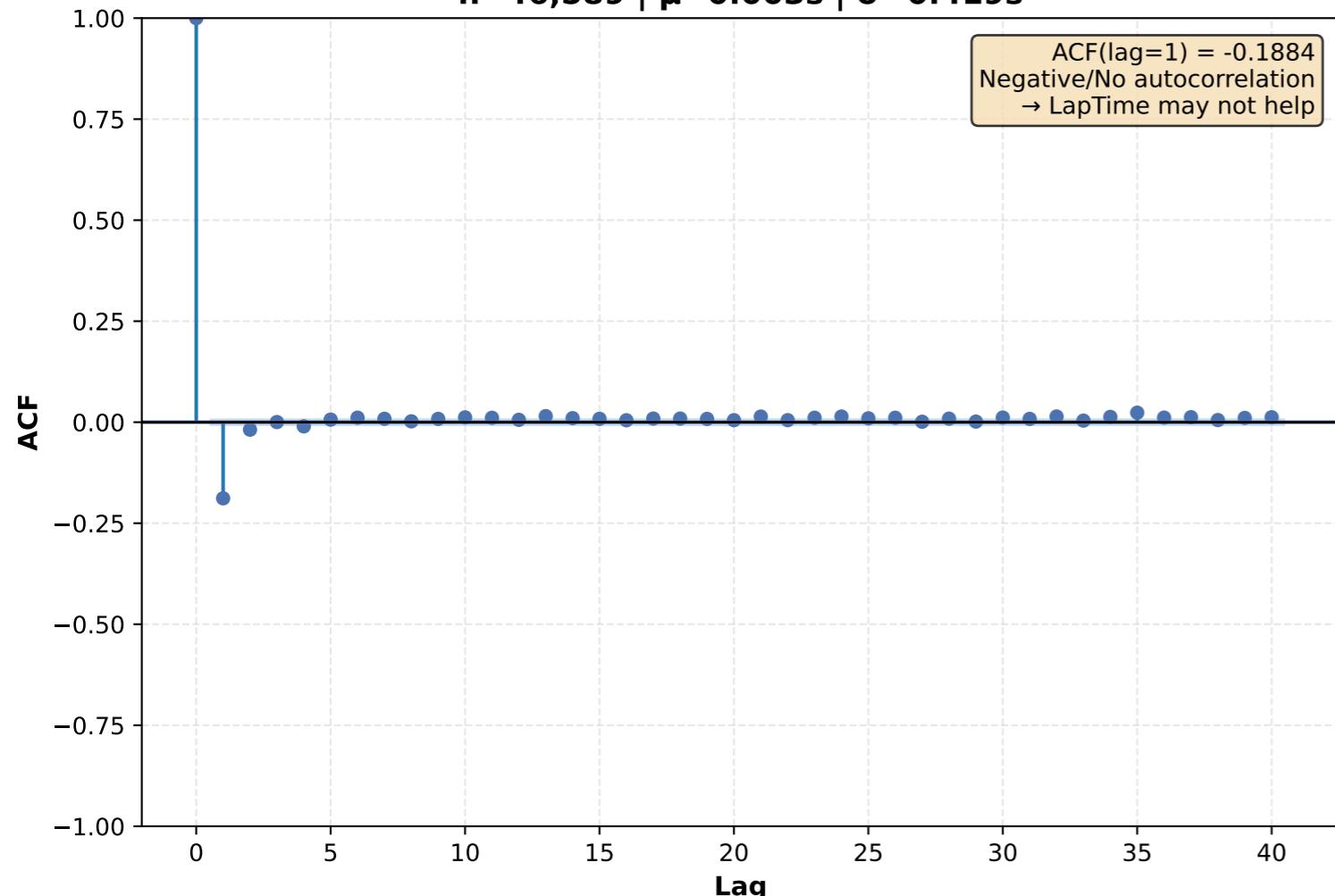
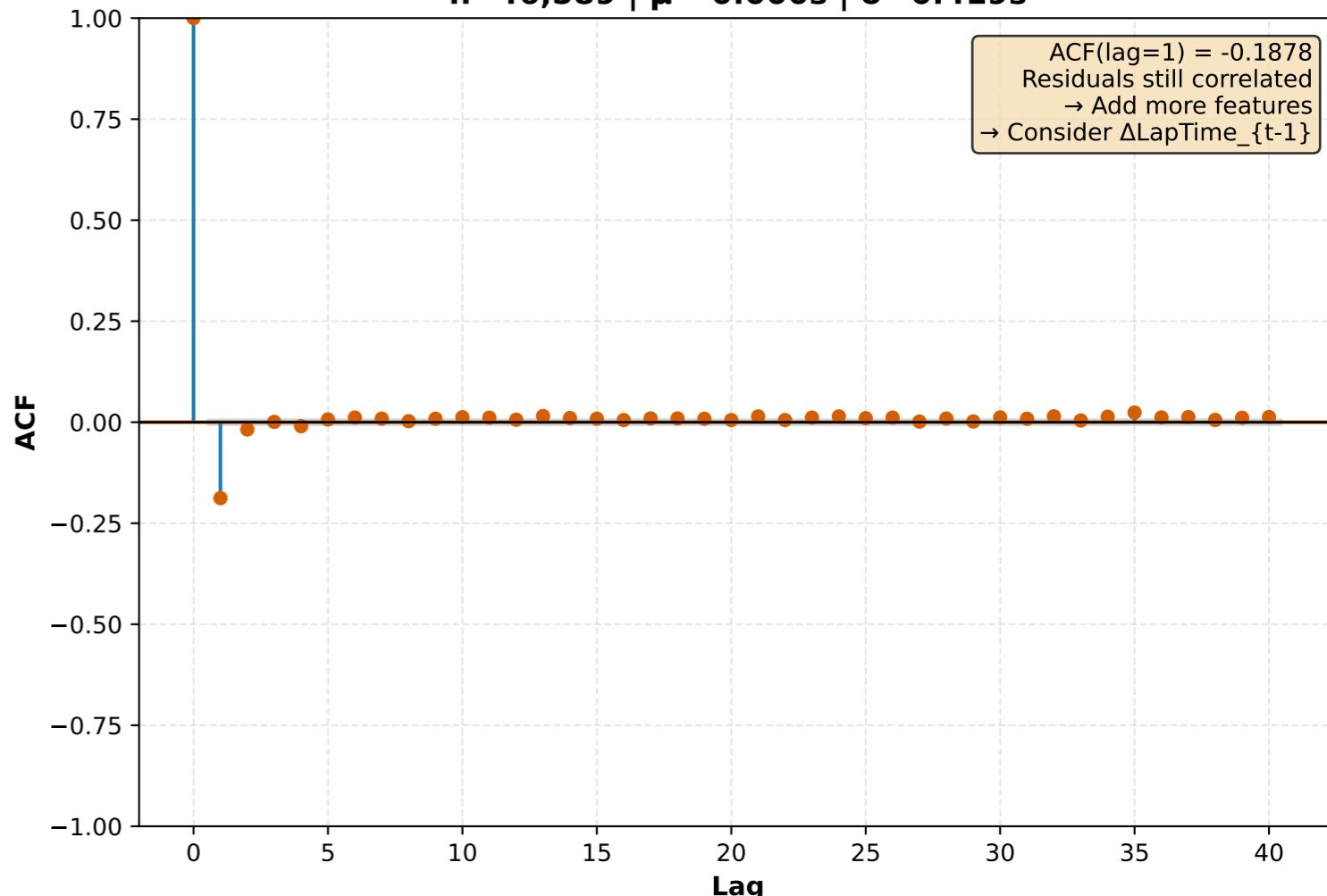


# Autocorrelation Analysis: $\Delta\text{LapTime}$ and Baseline Model Residuals

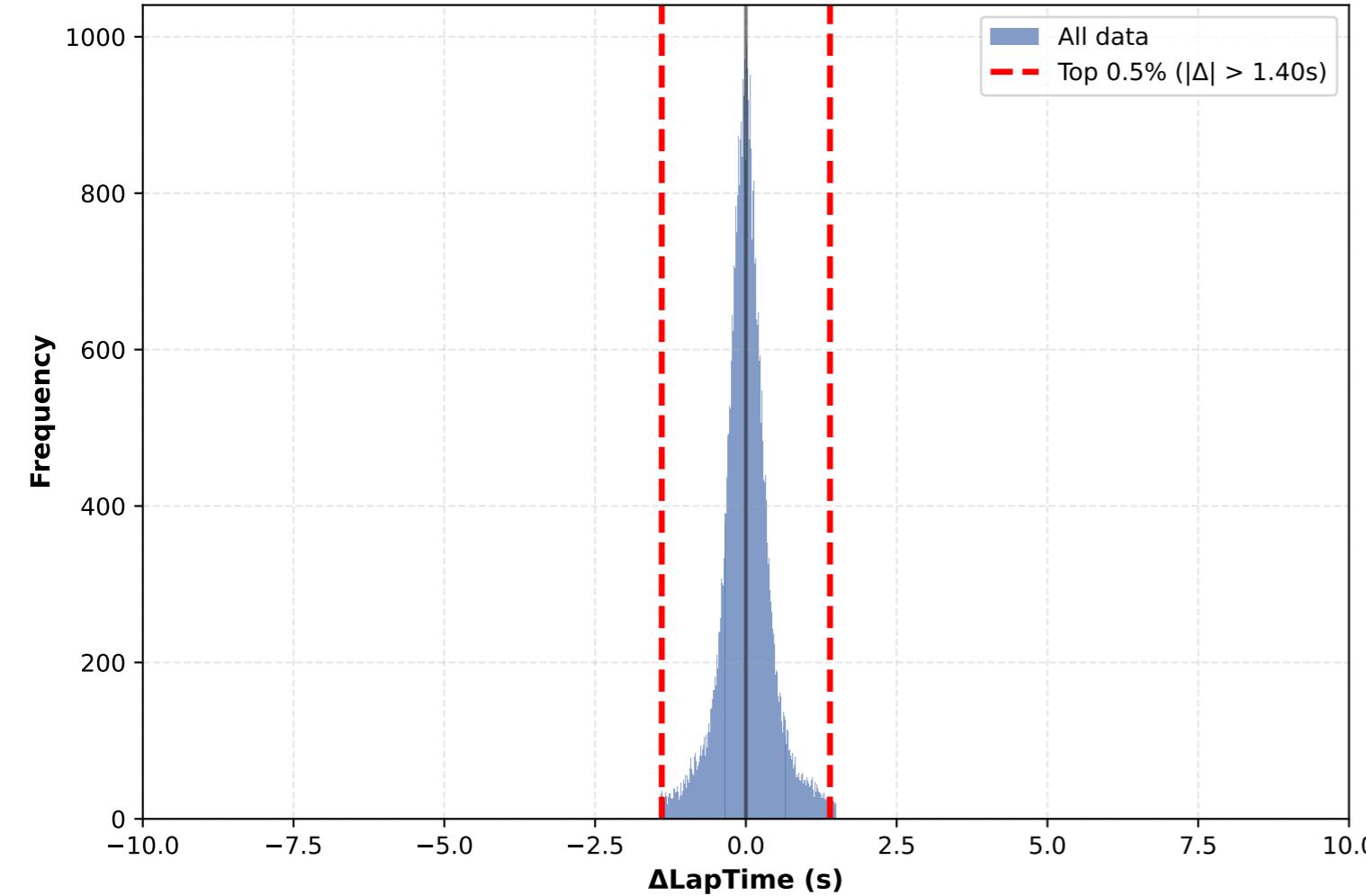
**Autocorrelation Function (ACF) of  $\Delta\text{LapTime}$**   
 $n=46,589$  |  $\mu=0.003\text{s}$  |  $\sigma=0.419\text{s}$



**ACF of Residuals ( $\Delta\text{LapTime} \sim \text{LapTime}$ )**  
 $n=46,589$  |  $\mu=-0.000\text{s}$  |  $\sigma=0.419\text{s}$



**$\Delta\text{LapTime}$  Distribution with Outliers ( $\pm 10\text{s}$  view)**  
Outliers: 518 (1.11%)



**Residual Plot: Baseline Model Diagnostics**  
Check for patterns (should be random around 0)

