

GRB181222B: Very short, bright. Precursor starts at around  $T_0=2018-12-22T20:11:37.0514$

$T_{90}$  starts at peak in the precursor and ends at the end of the burst.

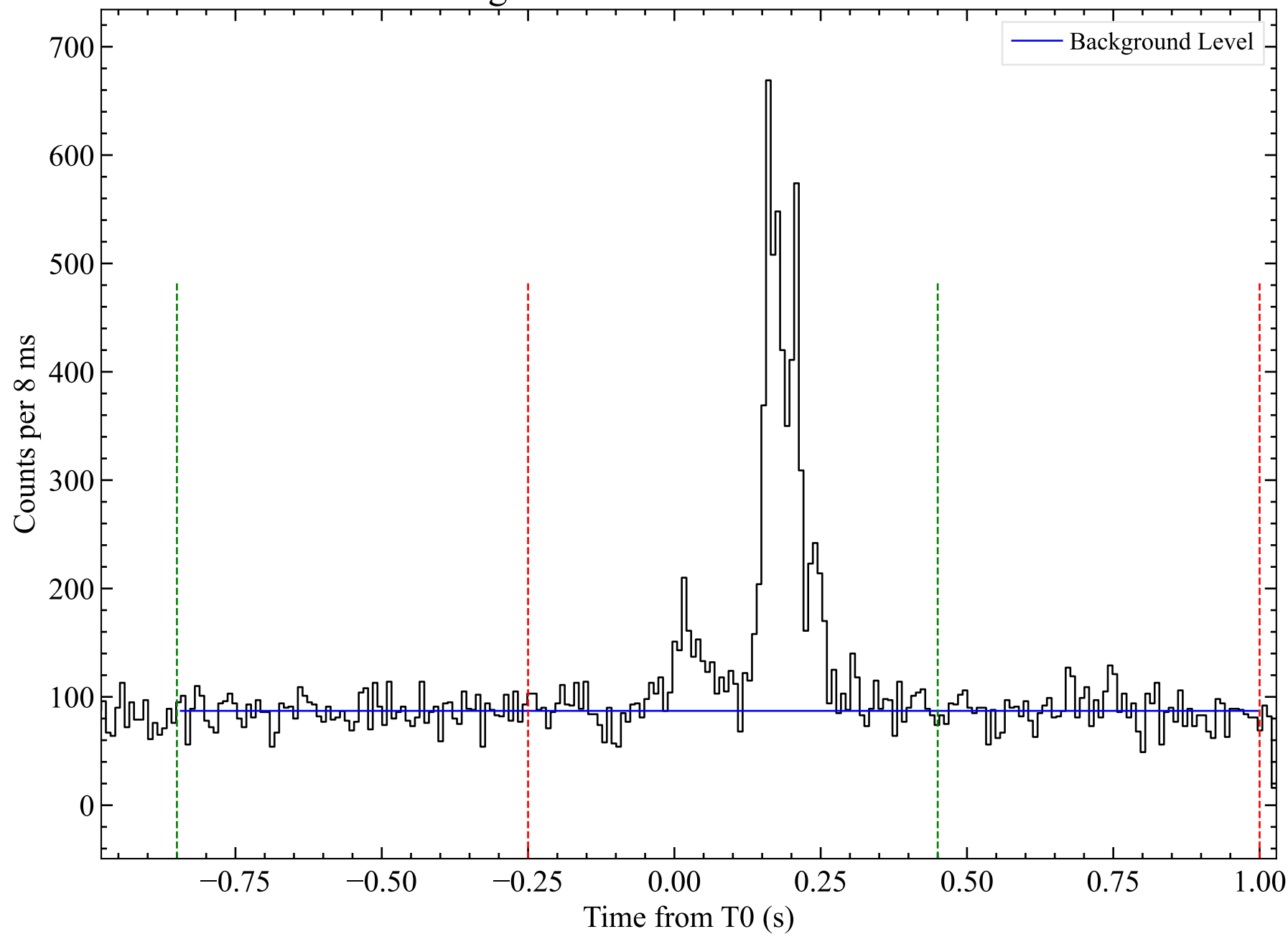
Background: Stable. Polynomial approximation (0-th degree). First interval  $t_i=T_0-0.85$  s,  $t_f=T_0-0.25$  s.

Second interval:  $t_i=T_0+0.45$  s  $t_f=T_0+1.0$  s

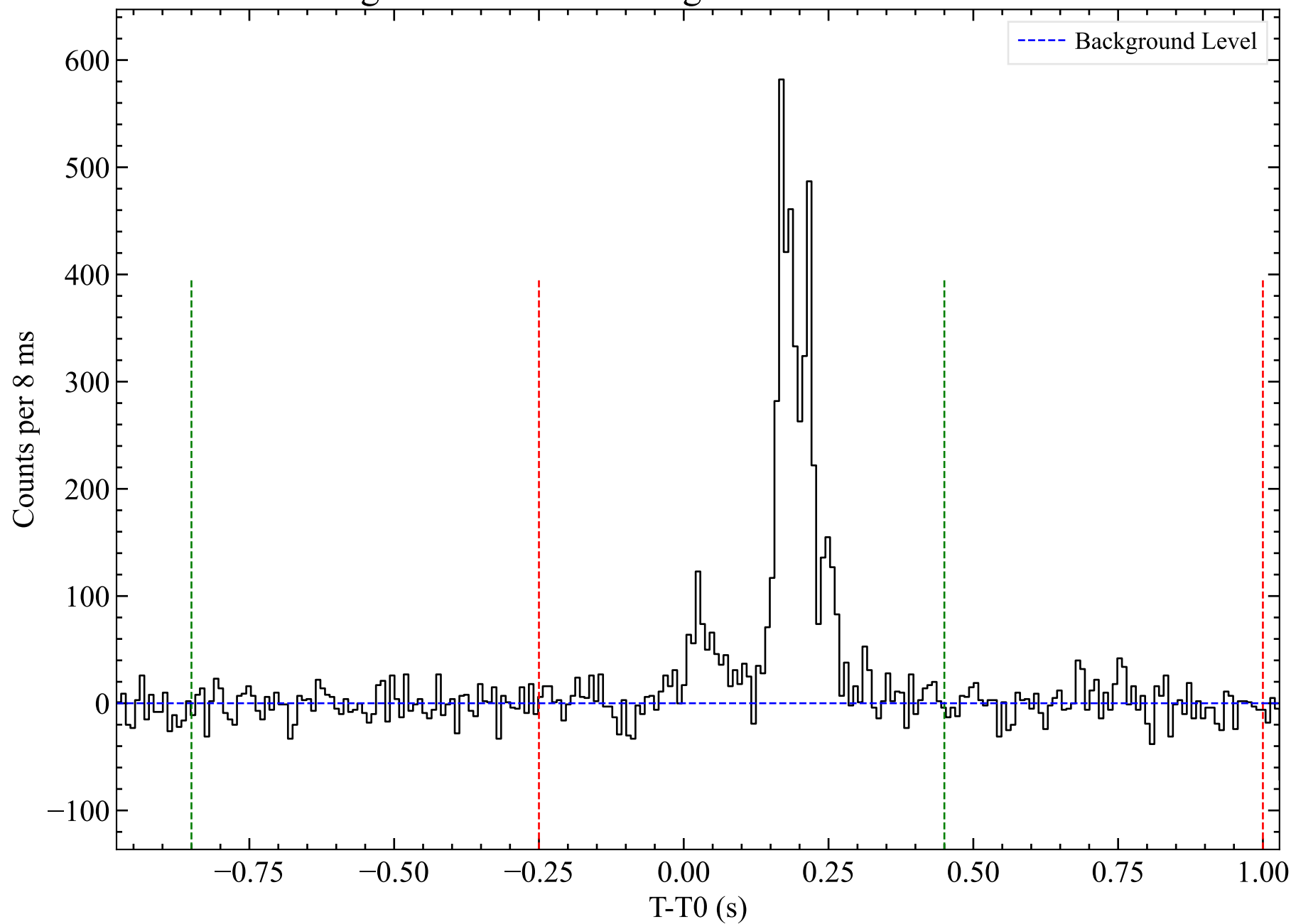
$T_{90}$  estimations (binsize, Start time of the estimation of the mean total counts,  $T_{90}$ ):

- 1ms,  $T_0+0.5$  s: 0.244 s
- 2ms, -  $T_0+0.5$  s: 0.246 s
- 4ms, -  $T_0+0.5$  s: 0.236 s
- 8ms,  $T_0+0.5$  s: 0.232 s
- 16ms,  $T_0+0.5$  s: 0.224 s

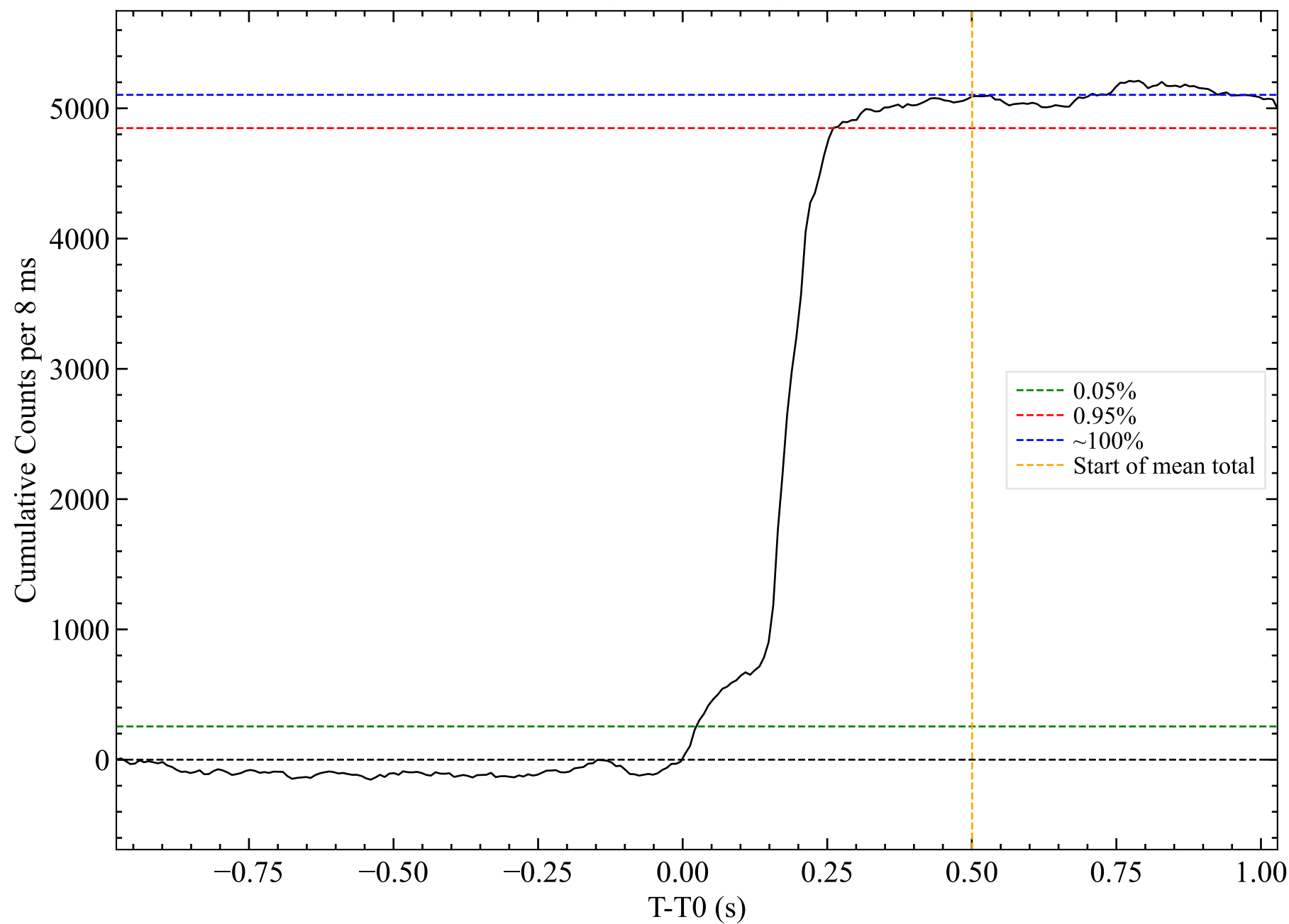
# Light Curve for GRB181222B



# Background Subtracted Light Curve for GRB181222B



# Cumulative Counts for GRB181222B



# Background Subtracted Light Curve for GRB181222B with T90

