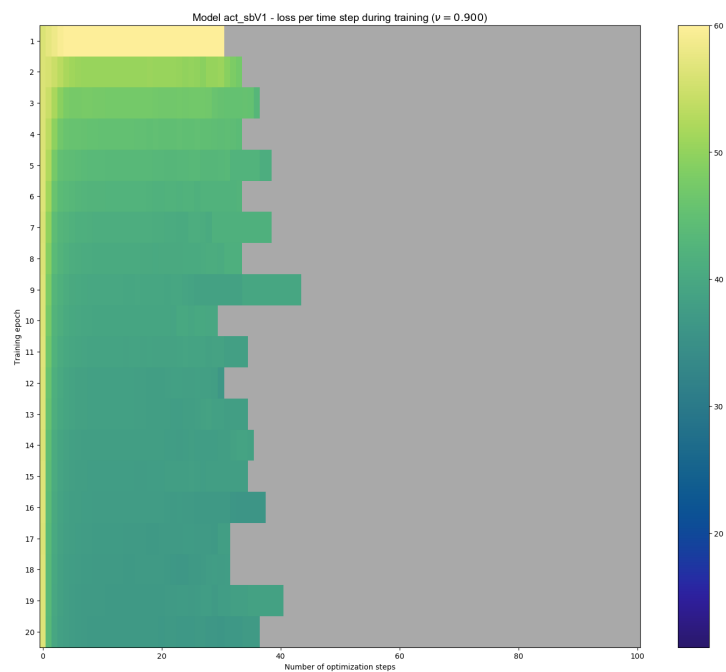
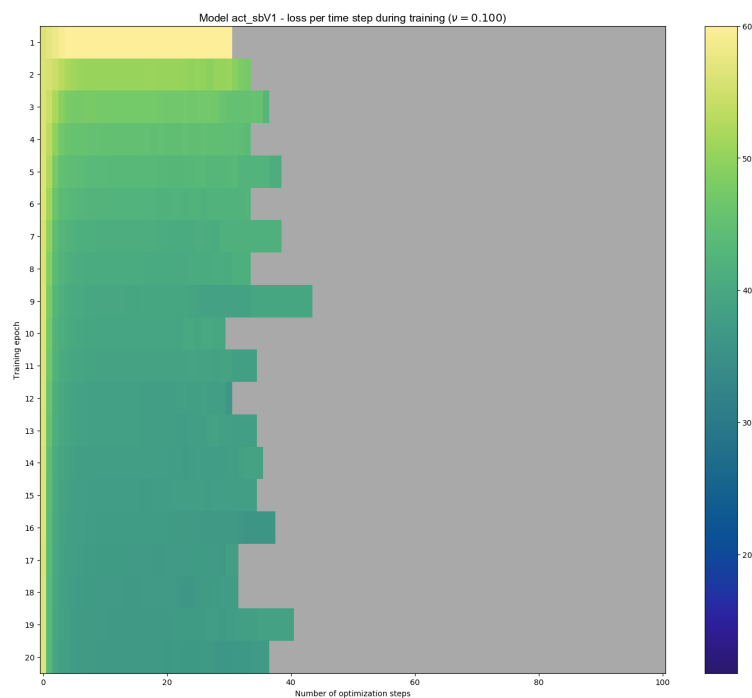


# Illustrate *behavior* of ACT-SB models during training with different prior shape parameters ( $\nu$ ) - **step loss figures and $q(t|x)$ during training**

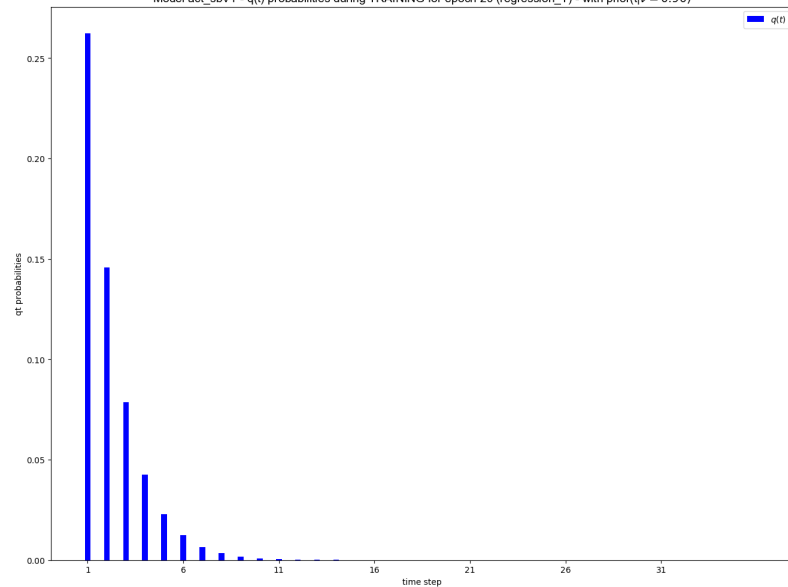
$\nu = 0.90$



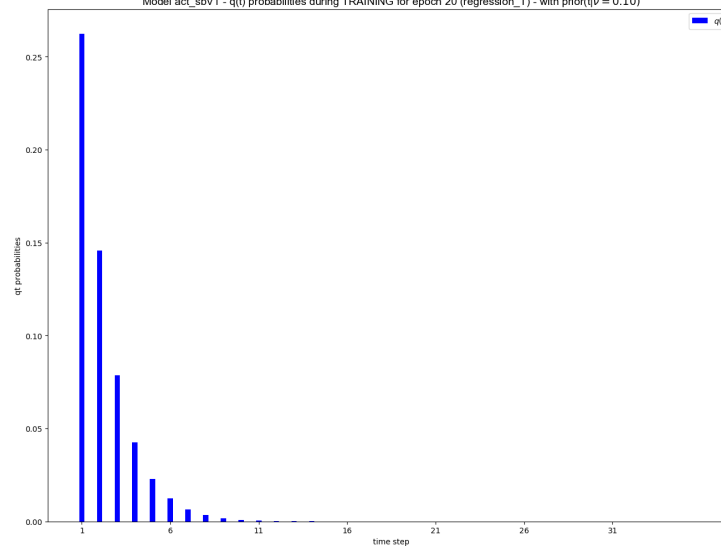
$\nu = 0.1$



Model act\_sbV1 -  $q(t)$  probabilities during TRAINING for epoch 20 (regression\_T) - with prior( $\nu = 0.90$ )

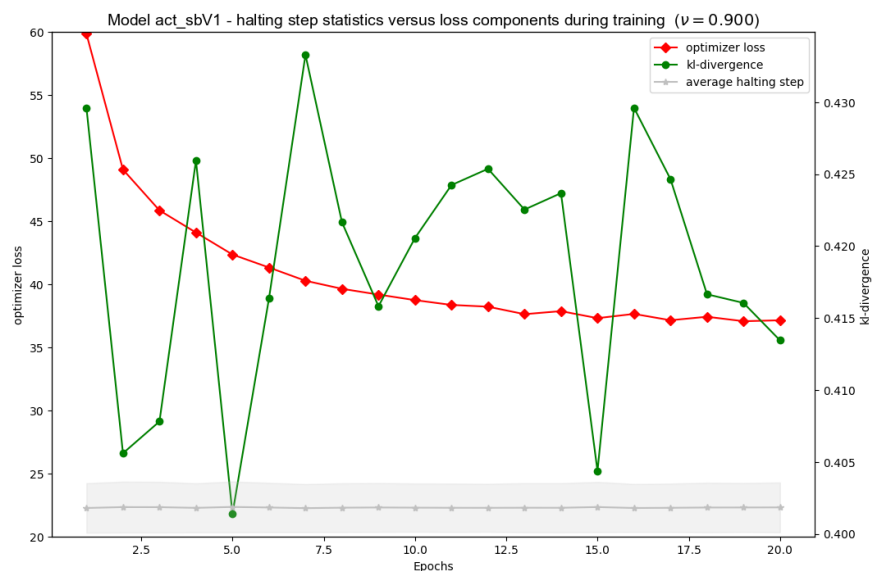


Model act\_sbV1 -  $q(t)$  probabilities during TRAINING for epoch 20 (regression\_T) - with prior( $\nu = 0.10$ )

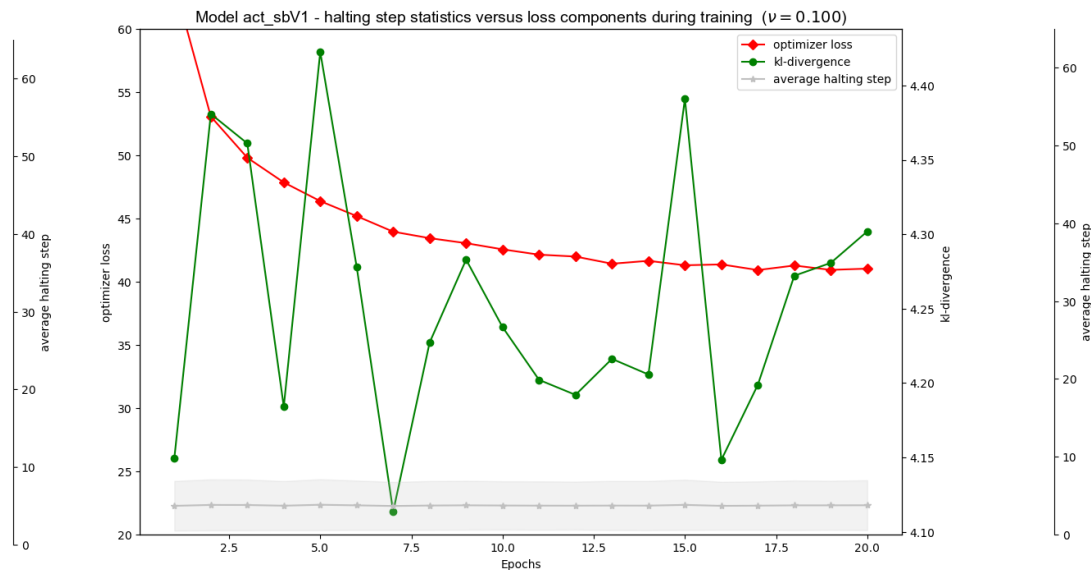


# Illustrate *behavior* of ACT-SB models during training with different prior shape parameters ( $\nu$ ) - **optimizer loss - gradient statistics**

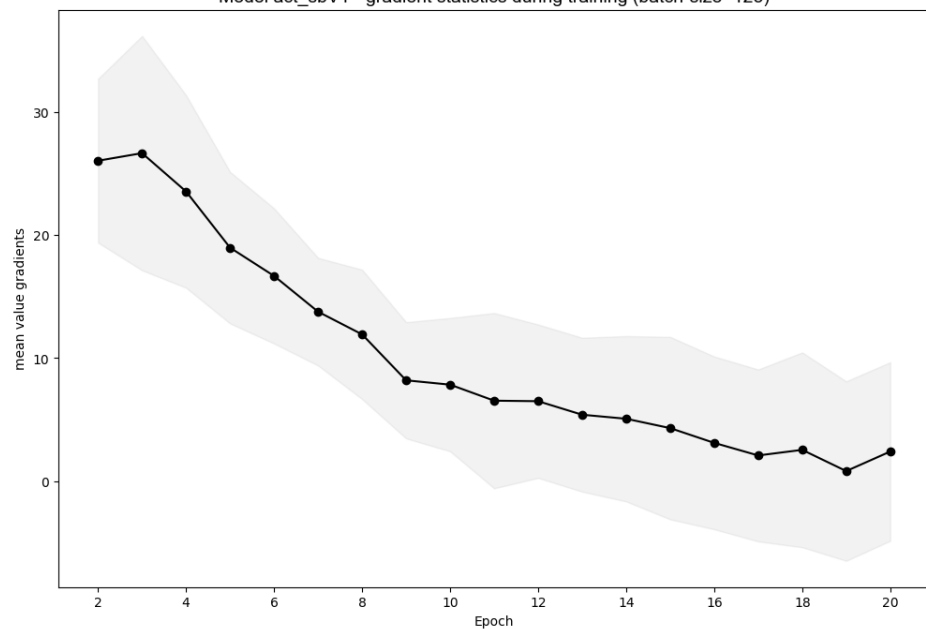
$\nu = 0.90$



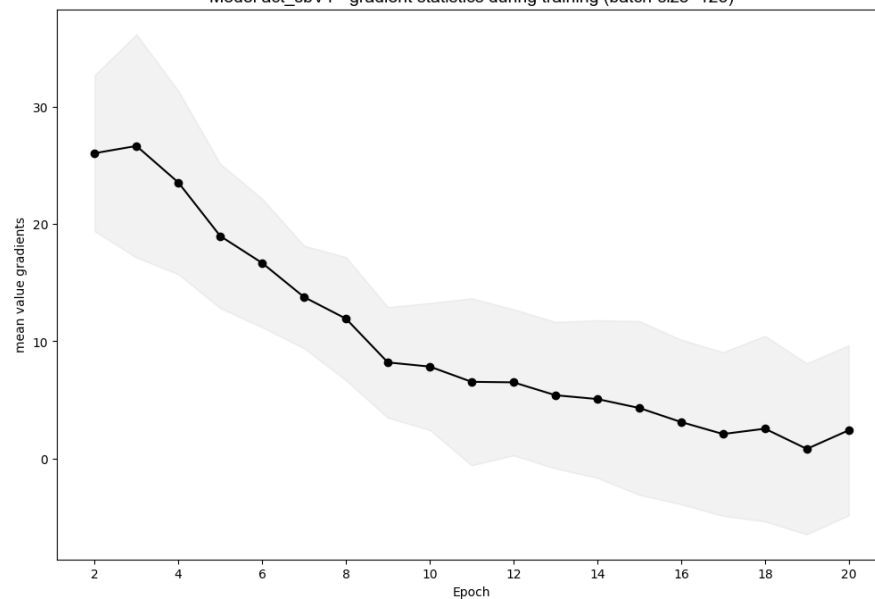
$\nu = 0.1$



Model act\_sbV1 - gradient statistics during training (batch-size=125)

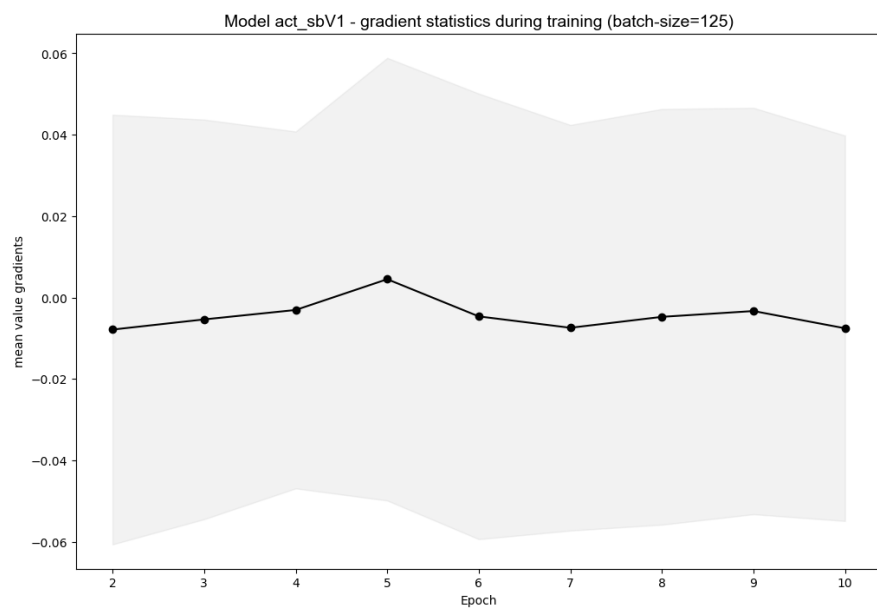


Model act\_sbV1 - gradient statistics during training (batch-size=125)

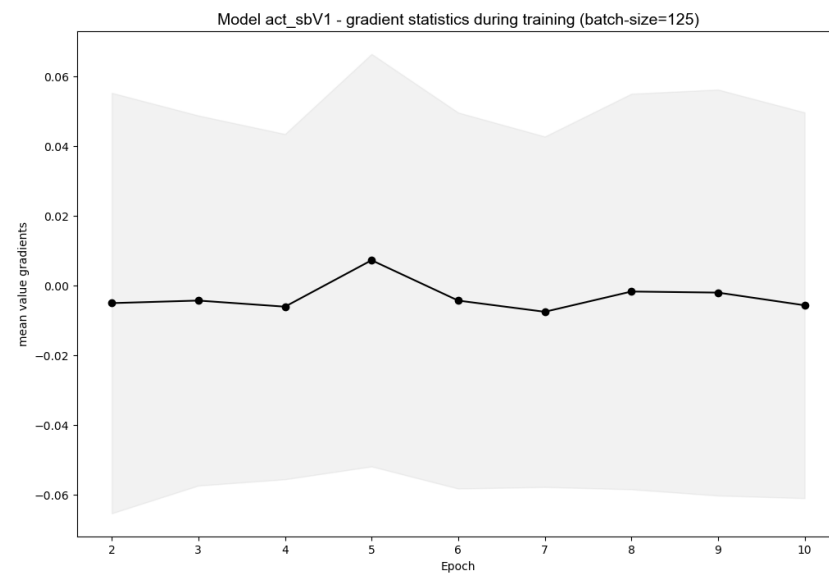


Illustrate *behavior* of ACT-SB models during training with different prior shape parameters ( $\nu$ ) - **gradients produced only by KL term**

$$\nu = 0.90$$

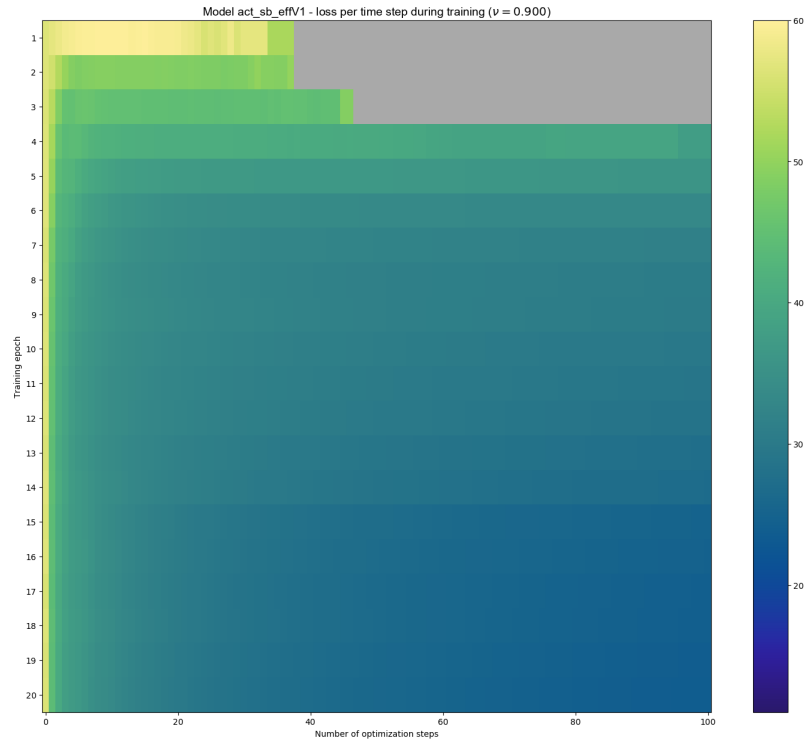


$$\nu = 0.1$$

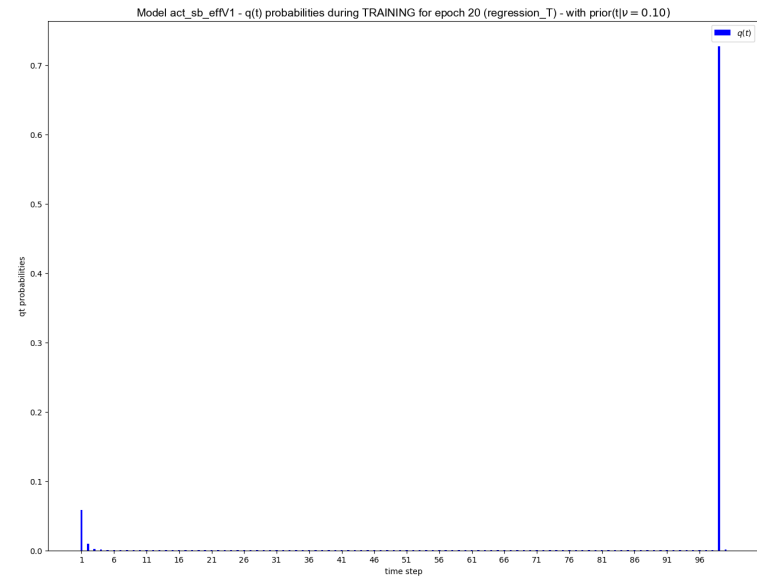
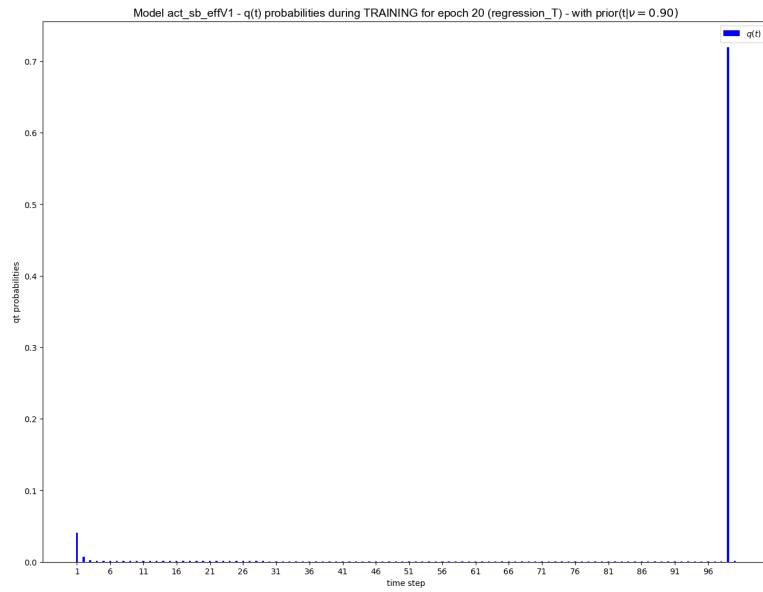
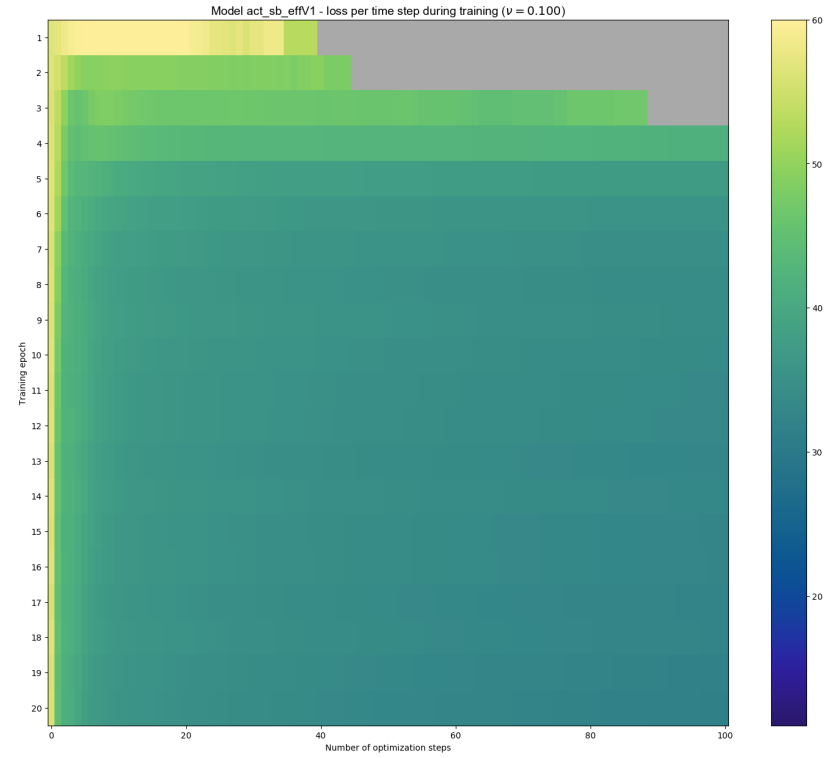


# Illustrate *behavior* of **ACT-SB-ExT** models during training with different prior shape parameters ( $\nu$ ) - **step loss figures and $q(t|x)$ during training**

$\nu = 0.90$

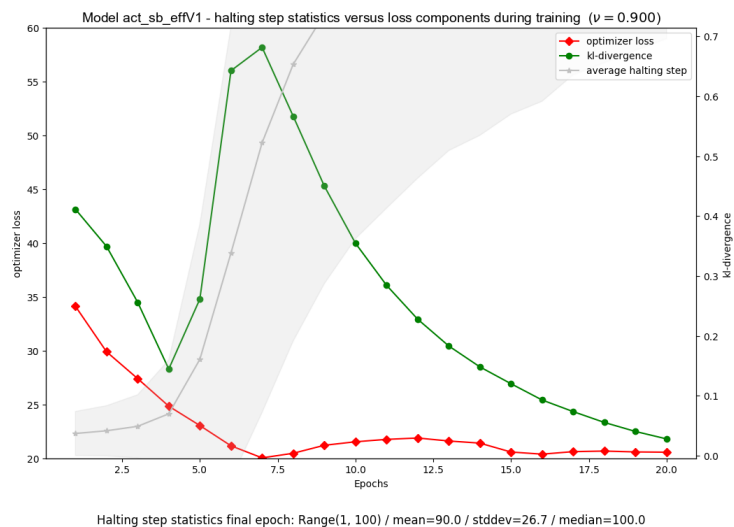


$\nu = 0.1$



# Illustrate *behavior* of ACT-SB-ExT models during training with different prior shape parameters ( $\nu$ ) - optimizer loss - gradient statistics

$\nu = 0.90$



$\nu = 0.1$

