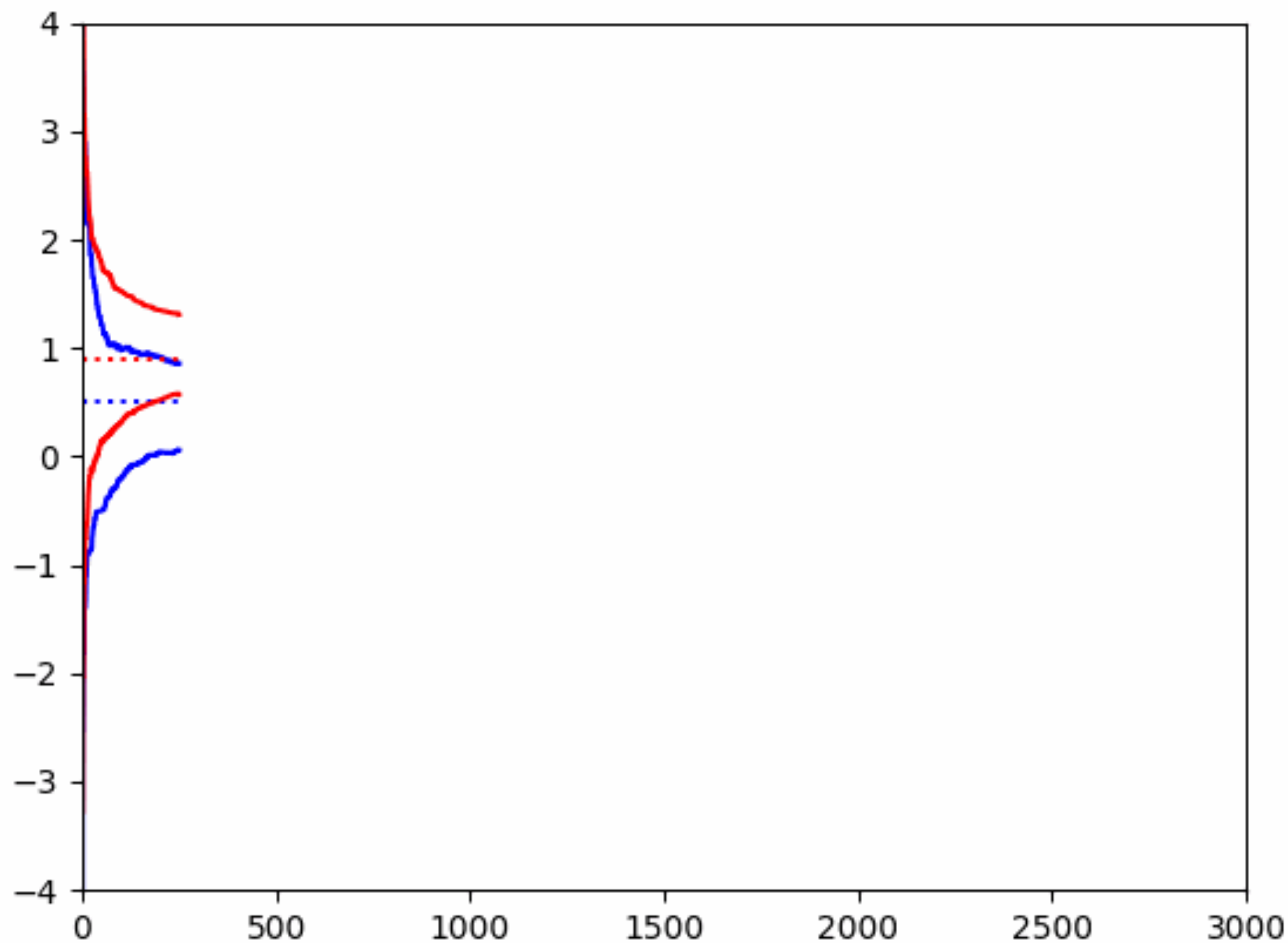


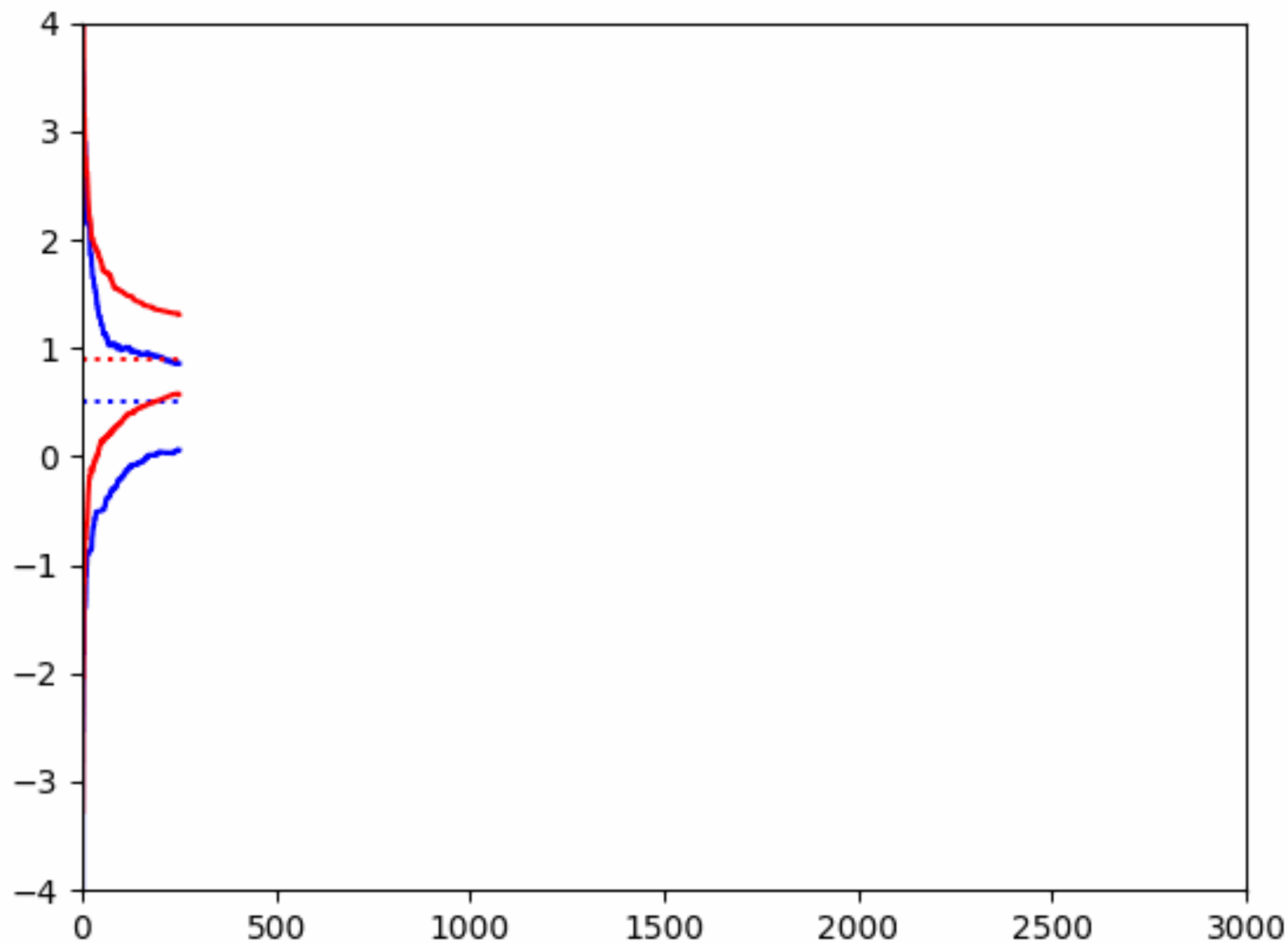


Successful rejections

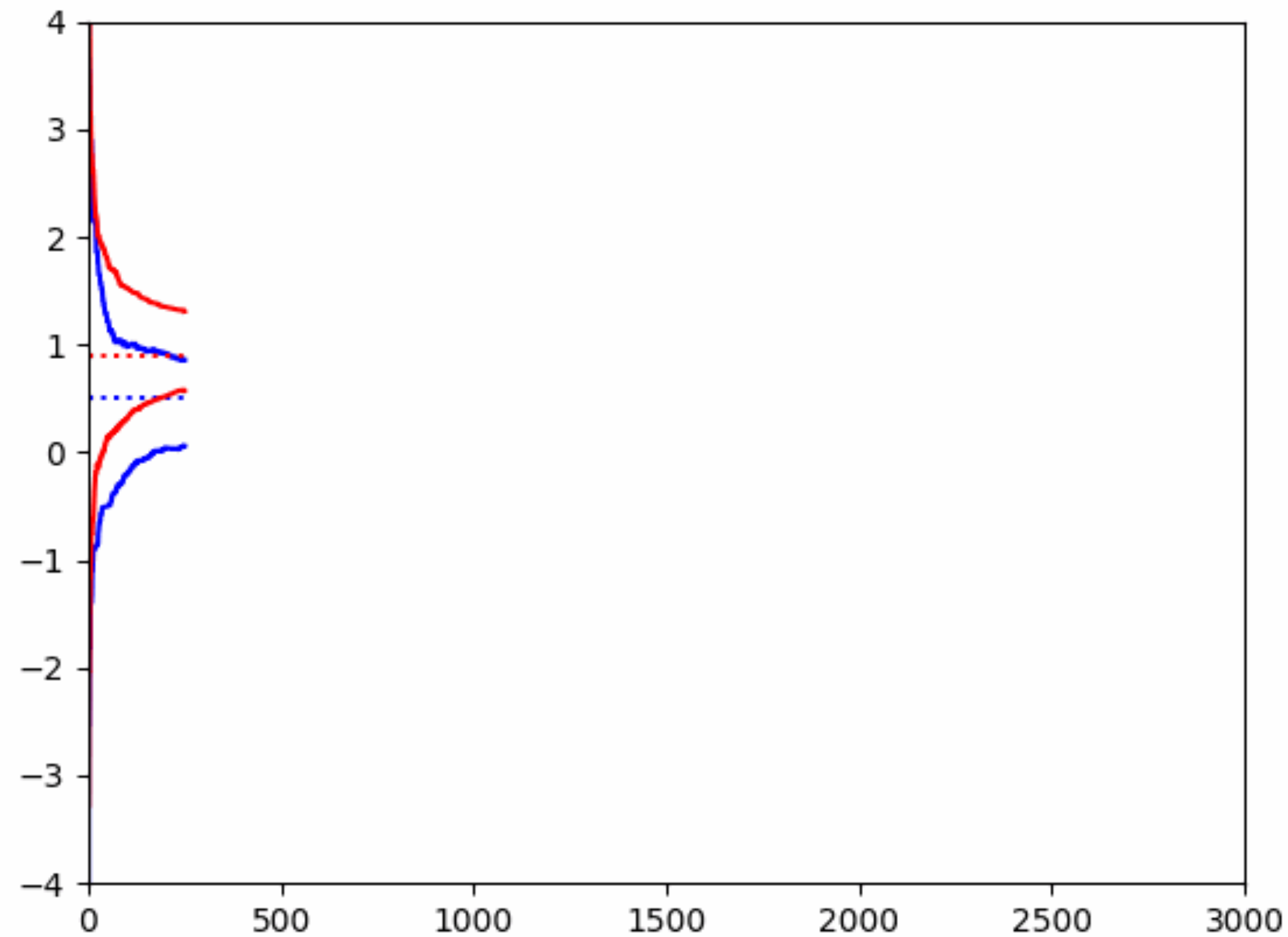
**SR working for two coins with probability of**

**head 0.9 (red) and 0.5 (blue)**





# Successive reject working



SR working for two coins with probability of  
head 0.9 (**red**) and 0.5 (**blue**)

# Optimism in the Face of Uncertainty

- Despite our lack of knowledge in what actions are best we will construct an **optimistic guess** as to how good the expected reward of each action is, and pick the action with the **highest guess**.
- If our **guess is wrong**, then our optimistic guess will **quickly decrease** and we'll be compelled to switch to a different action.
- But if we pick well, we'll be able to exploit that action and incur little regret. In this way we balance exploration and exploitation.