

Meeting

Po Hsun Wu

December 19, 2022

Progress report

Table 1: Step performance

	β	ϕ
Rise time(sec)	$\mu=0.4032$ $\sigma=0.3421$	$\mu=0.3509$ $\sigma=0.3151$
2% Settling time(sec)	$\mu=8.4321$ $\sigma=2.5834$	$\mu=7.3648$ $\sigma=3.3271$
5% Settling time(sec)	NaN	NaN
Overshoot(%)	$\mu= 8.9073$ $\sigma=17.9520$	$\mu= 8.6334$ $\sigma=20.2596$
Undershoot(%)	$\mu= 2.0701$ $\sigma=14.9125$	$\mu=2.0323$ $\sigma=13.5009$
Steady-state error(deg)	$\mu= 0.2864$ $\sigma=0.1891$	$\mu=0.0178$ $\sigma=0.2292$

Progress report

- ϕ settling time

$$\mu = 7.3648$$

$$\sigma = 3.3271$$

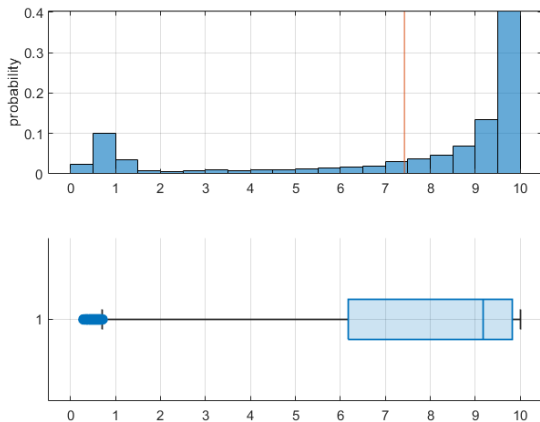


Figure 1: ϕ 2% settling time

Progress report

- ϕ overshoot
 $\mu = 8.6334$
 $\sigma = 20.2596$

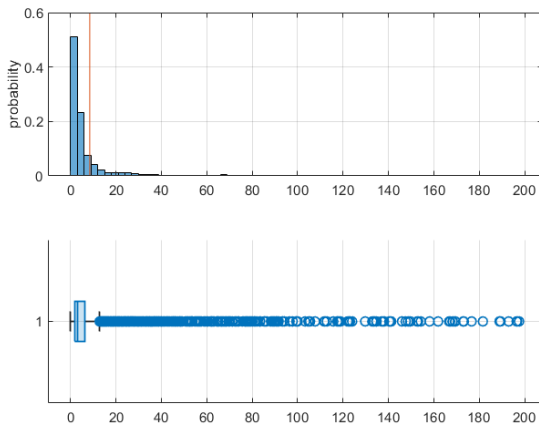


Figure 2: ϕ overshoot

Zoom In

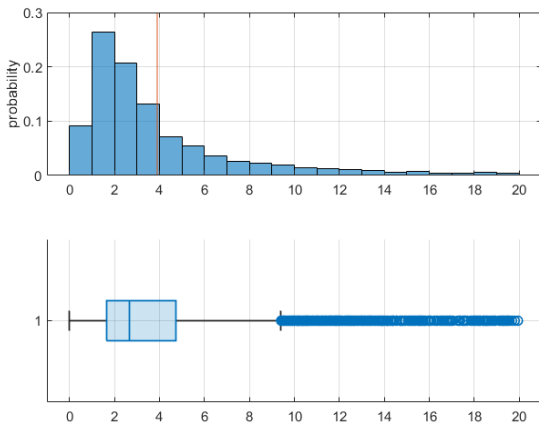


Figure 3: Zoom in the plot