

Postlab 02 Report

Group 3_2

Q1)

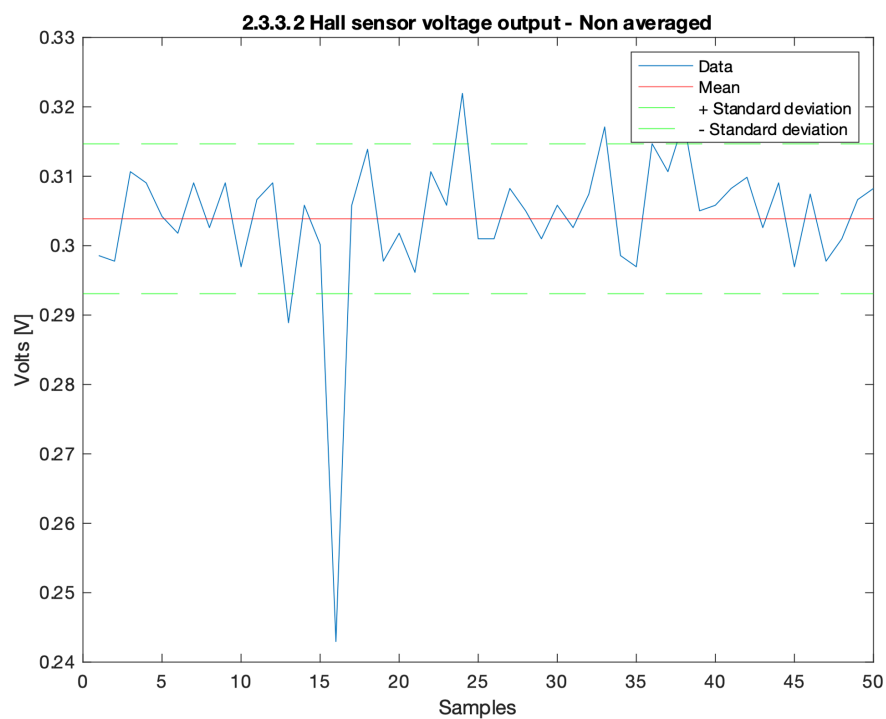
See code

Q2)

No averaging

Mean: 0.3039 Volts

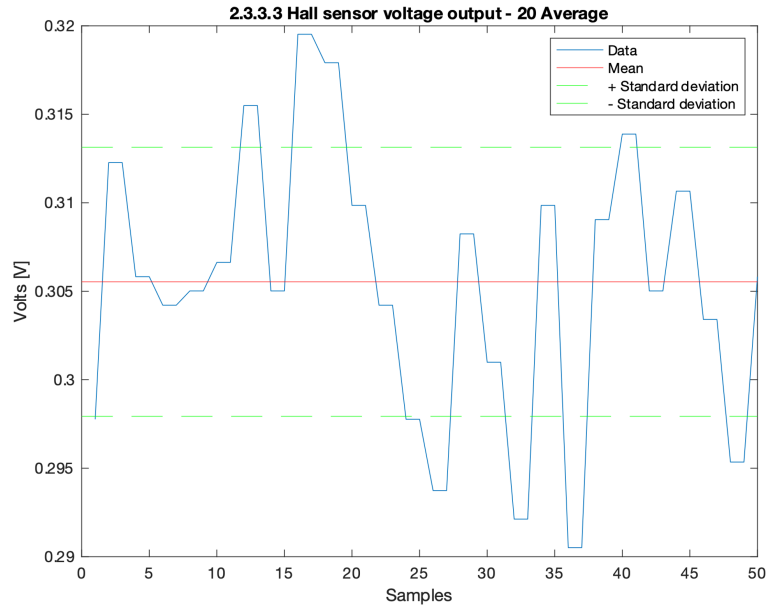
Standard Deviation: 0.0108 Volts



Averaged over 20 samples:

Mean: 0.3055 Volts

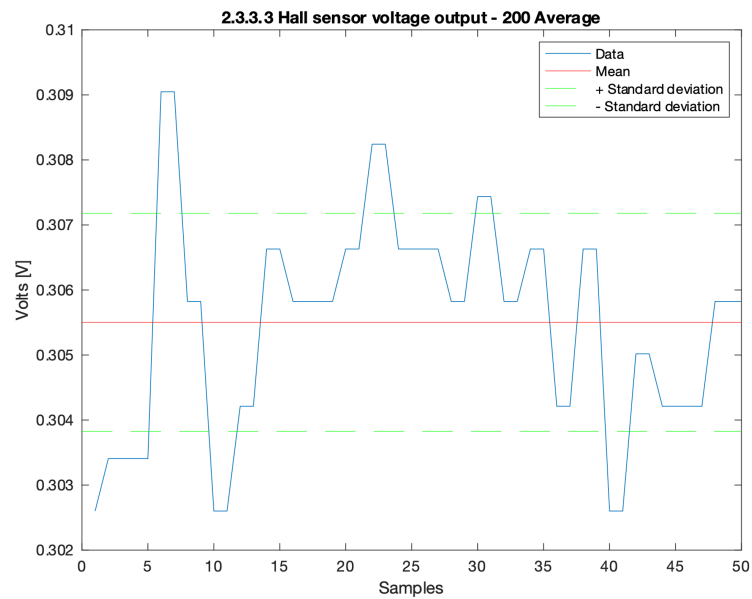
Standard Deviation: 0.0076 Volts



Averaged over 200 samples:

Mean: 0.3055 Volts

Standard Deviation: 0.0017 Volts



Explanation:

Increasing the number of samples for the evaluation of the mean and the standard deviation has an effect on the magnitude of the standard deviation (Law of large numbers). As can be seen from the calculations, the standard deviation reduces from 0.0108 Volts down to 0.0017 Volts. The mean of the measurement is consistent over the multiple experiments.

Q3)

