

Opposition

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1. Clarity of Data Collection Description

Is the description of data collection clear? Are the methods used for data collection described in sufficient detail so that the experiments can be performed by someone else?

The description of the data collection is easy to understand and well written. Maybe the preprocessing of the data can be moved section 2.3?

The explanation of using a sampling time around 1/20th of the time constant is good. To strengthen it, consider briefly explaining why this guideline is effective in capturing system dynamics.

It would be helpful to clarify how the step response helped estimate the time constant (between 0.2 and 0.3 seconds).

Overall, I believe this report provides enough detail to make the lab fully reproducible.

2. Solutions to All Tasks

Are there clear descriptions of the solutions to all tasks? Discuss all the items in Section 3 separately.

A spectral analysis have been made and connected to the EFTE-model. Furthermore, some interesting reading about why estimation of higher frequencies is difficult.

The discussion about parameter values is well written. It would have been interesting to also see ARMAX and OE models.

The observation that both models have similar impulse responses is a good sign of model validity. To reinforce this, consider explaining that this similarity suggests both models capture the primary dynamics effectively, aligning with what is expected from the correlation analysis. It would be interesting to see the model fitting plot for all the models.

Pole/zero diagram for the relevant models have been made and discussed clearly, very good!

3. Agreement with Conclusions

Do you agree with the presented conclusions? What would you like to change in the conclusions based on the data, the experiments, and the results?

The conclusion is reasonable given the presented information. I would add the armax and oe models and compare them also, only to model-types is not much.

4. Greatest Strength of the Report

What is the greatest strength of the report? Discuss the content, not the format.

The best part of the report is the explanation of the pole/zero-diagram since it is very clear and easy to understand. Also the overall description of the assignment and the data collection is very good. It feels like I would be able to the lab with only this report in mind.