

ÍÐN113F Time Series Analysis Project 2022

The aim:

Analyze given data, identify several models, and estimate the model parameters.
Then validate the models and propose application for them.

The data:

- ✓ Data that the students find themselves or with help from the teacher (see e.g. www.hagstofan.is or some other web-sites)
- ✓ Data from experiments.
- ✓ Input and output data are needed, and the length of the series need to be at least 100-200 datapoints

The process:

- ✓ Data analysis.
- ✓ Model building.
- ✓ Report.
- ✓ Short presentation in the end of November (25th).

The content:

The following should be investigated among other things:

- ✓ The spectrum of the data.
- ✓ Should the data be transformed?
- ✓ Estimate of the impulse response.
- ✓ Try to estimate the time constants (optional).
- ✓ Identify useful model.
- ✓ Estimate the parameters (sign. tests).
- ✓ Validate the models.
- ✓ Are there any ARCH/GARCH effects?

The report and presentation:

Good description of the project, the identification and estimation process and the results.

The grading:

In the grading we consider the model, the report, and the presentation. The project weights 15% in the final grade.

The groups:

Up to three in group is OK. The dead-line for forming groups and find data is October 28th.