

# How to use the scripts and read the data

In the EXCEL file LogbookFinal.xlsx all the information of all measurements is reported.

The raw measurement data can be found in the folder 'raw data'.

- All files with a name that looks like 't001' are velocity measurements performed with the EMSs.
- All files with a name that looks like 's001' are data of the rotational speed of the propeller during the stability tests
- All files with a name that looks like 'rotationalspeed1' are data of the rotational speed of the propeller in order to determine the relation between the rotational frequency of the frequency regulator and the voltage output of the tachograph.

The raw data of the velocity measurements can be found in the MATLAB Data file with the name: RawData.mat

The processed data of the velocity measurements can be found in the MATLAB Data file with the name: ProcessedData.mat

The MATLAB script used to create the RawData.mat is named as MSc01\_DataProcess\_ObtainRawData.m

The MATLAB script used to create the ProcessedData.mat is named as MSc02\_DataProcess\_RawDataToProcessedData.m

The functions used for these MATLAB scripts are:

- getadata.m
- data2struct.m
- readmeas.m
- readseqfile.m
- readsetfile.m
- readstruct.m
- scaledata.m

All other MATLAB scripts used to plot the figures in the report start with MSc03\_.... to MSc16\_.... and contain the name of the chapter where the plots can be found.