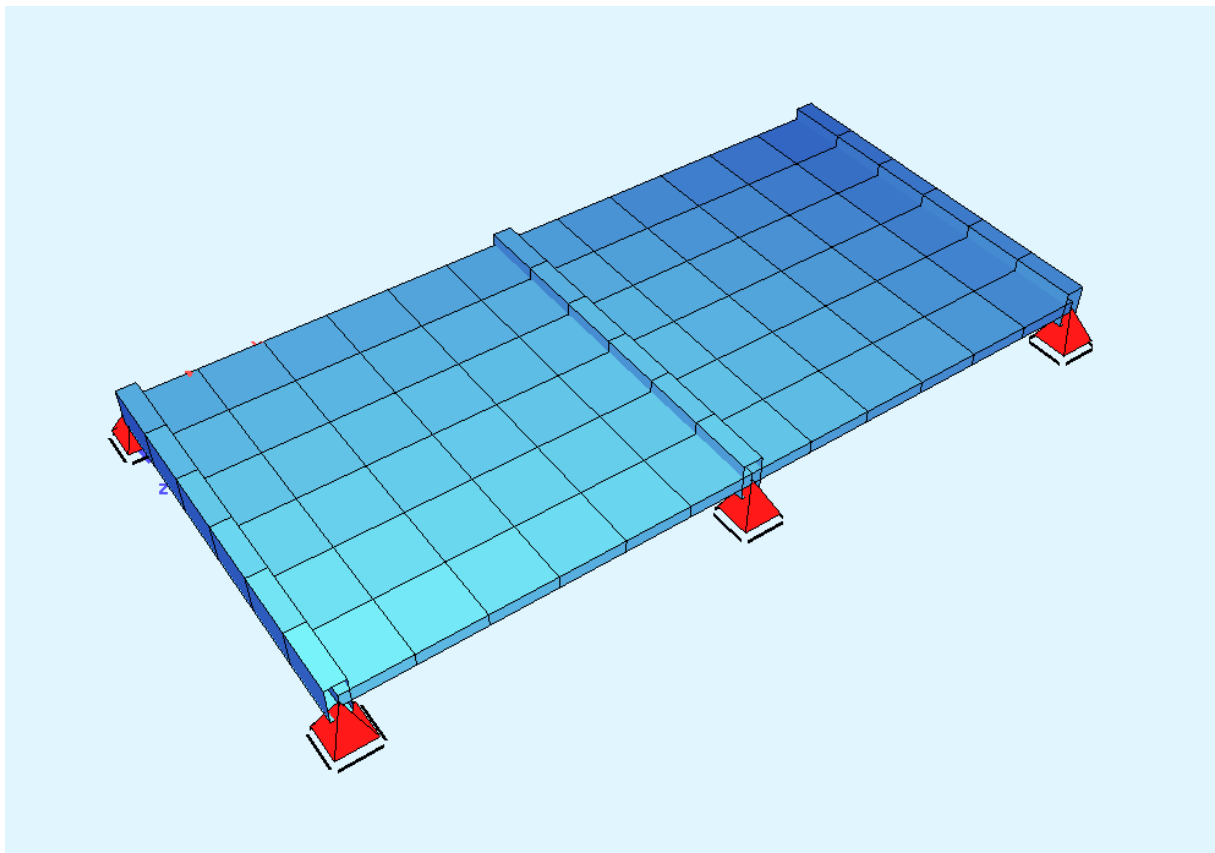SOFiSTiK

Feature Example

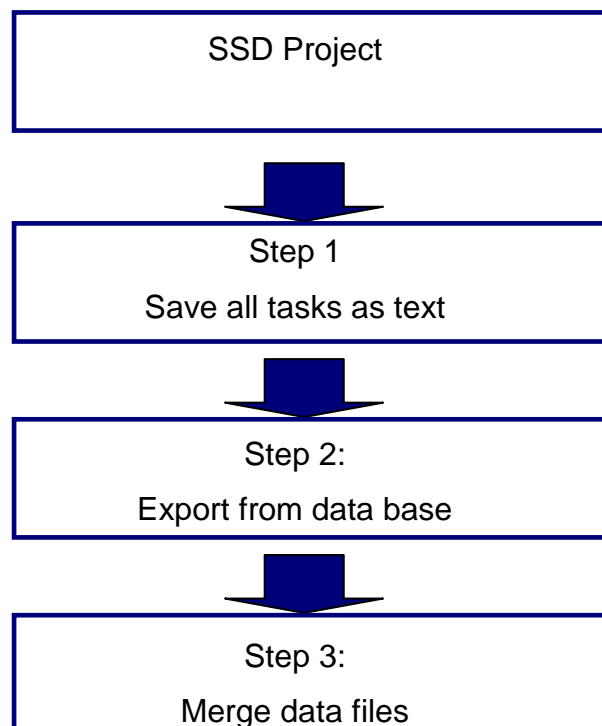# Export data from

SSD / SOFiPLUS

1   Preface

Projects defined in SSD / SOFiPLUS always use a TEDDY input file which is generated in the background. Sometimes it is important to create a complete TEDDY input file for example for external computation. This example shows the general workflow to create such a data file.
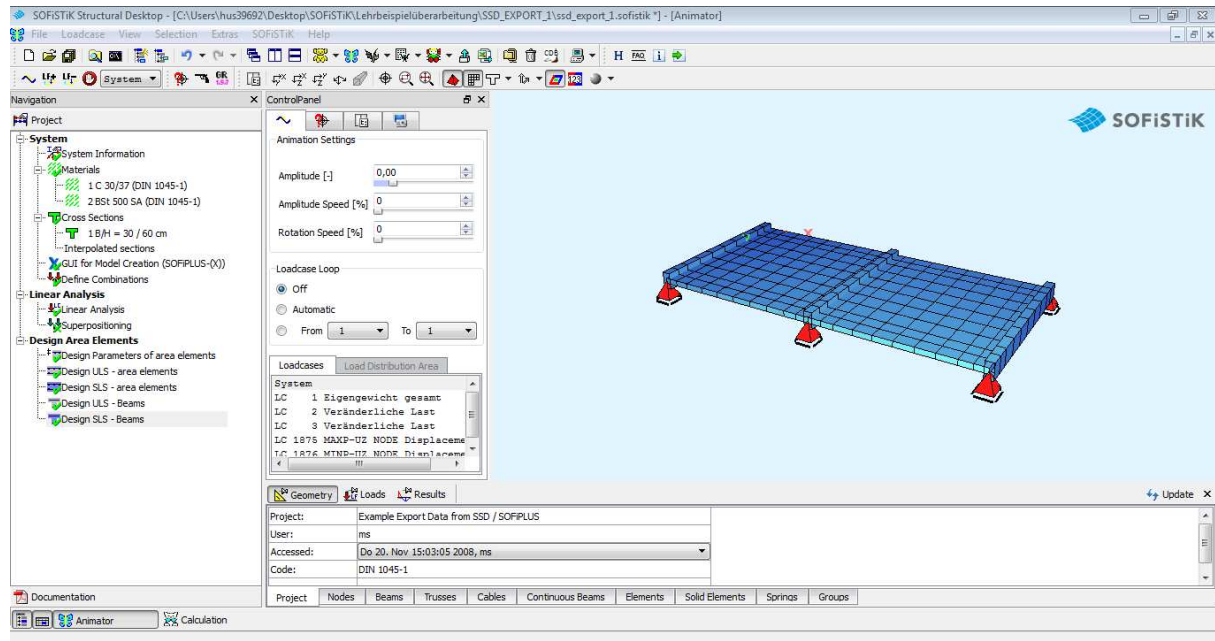
2   General Workflow

For the data export you have to follow three steps. First you export the numerical input created by the SSD tasks. Then export all the information regarding material, cross sections, analytical model, superpositioning, design parameters and tendons from the central database. Finally merge the different input files together to one complete input file.

```
┌─────────────────────────────┐
│        SSD Project          │
└─────────────────────────────┘
              ▼
┌─────────────────────────────┐
│          Step 1             │
│    Save all tasks as text   │
└─────────────────────────────┘
              ▼
┌─────────────────────────────┐
│          Step 2:            │
│    Export from data base    │
└─────────────────────────────┘
              ▼
┌─────────────────────────────┐
│          Step 3:            │
│      Merge data files       │
└─────────────────────────────┘
```
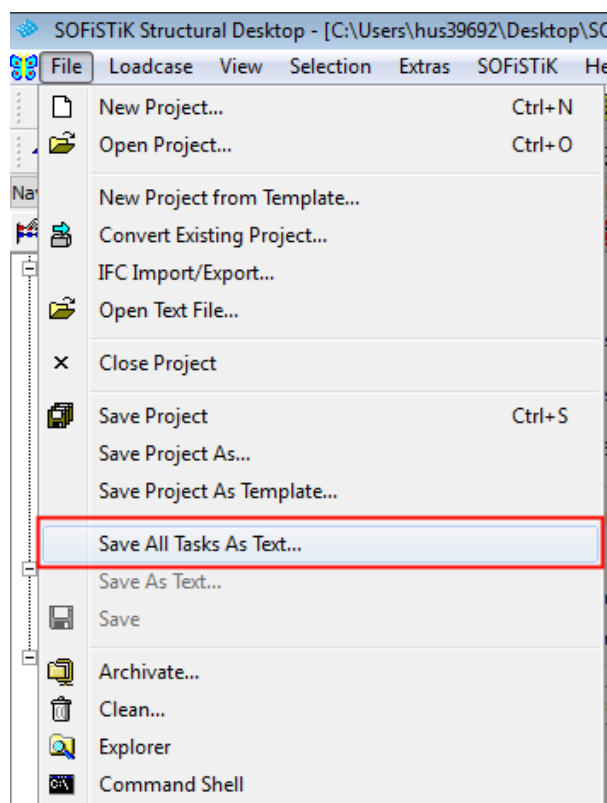
3 Step by step instructions

▪ Open SSD project

First open your SSD project and make sure you have all tasks you want. It is necessary that your project is completely analysed.
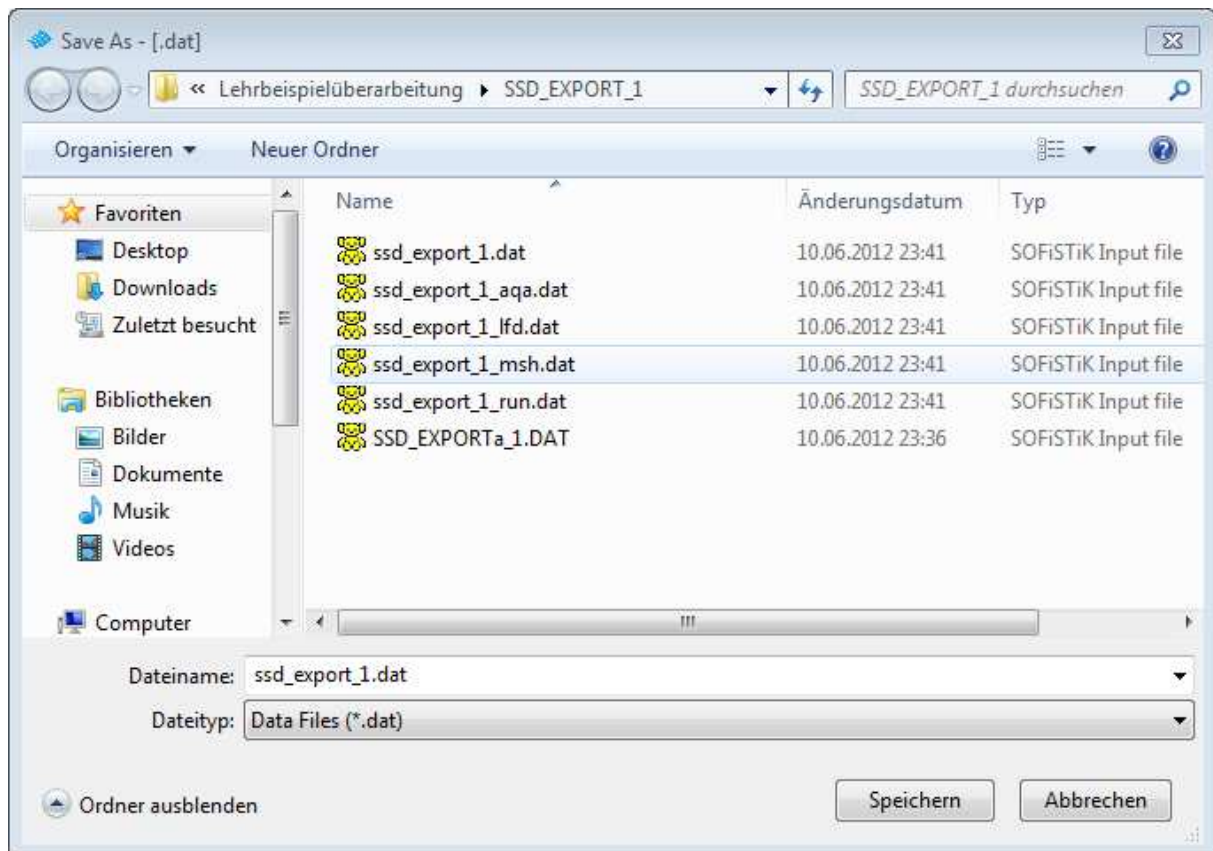

▪ Save all tasks as text (step 1)

Now we start to save all tasks as text in a separate TEDDY input file.

Choose any name for your export data file. Normally you can use the filename suggested by the program (name_database.dat).
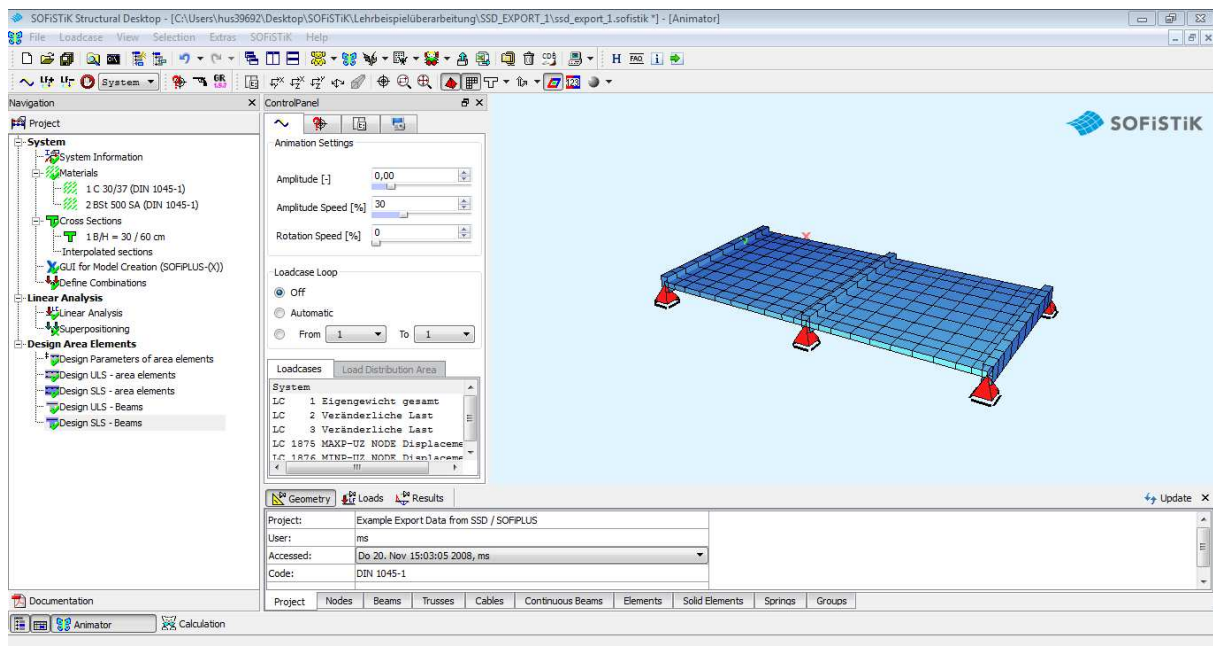

If you do so, the programm asks if you like to overwrite the existing file.

> ⚠️ The file ssd_export_1.dat was created by SOFiPLUS when exporting the system into the database. You may use SOFiPLUS without the SSD, therefore creating an input file is part of the program features.
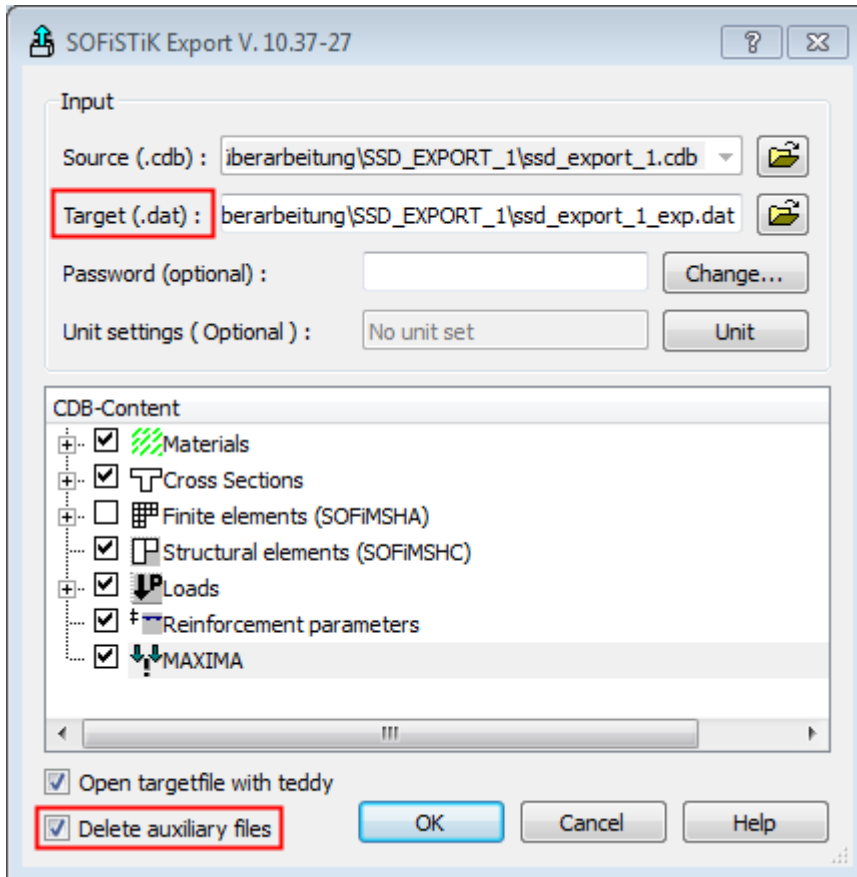
Now we have finished step 1.

▪   Export from data base (step 2)

After converting all tasks in a text file relevant data according to material, cross sections, system geometry, loading, superpositioning, design parameters and tendons (if existing) are still missing. For that use the command "Export to DAT". Alternatively you can start this command over the menu "SOFiSTiK > Database Tools > Export to DAT ".
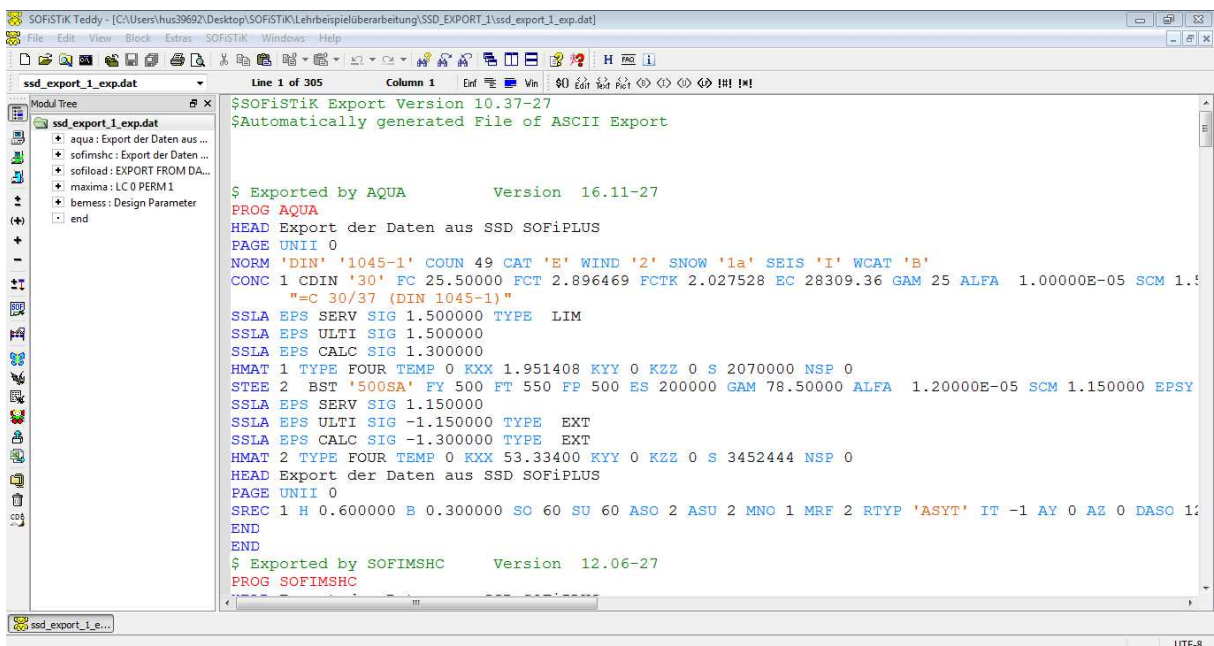

Simply select directory, file name and all the information you like to export from the database. While exporting, some auxiliary files will be created. You may delete these files without any problem.

Please not: you may select either an export of the Finite Elements (SOFiMSHA) or the Structural Elements (SOFiMSHC).
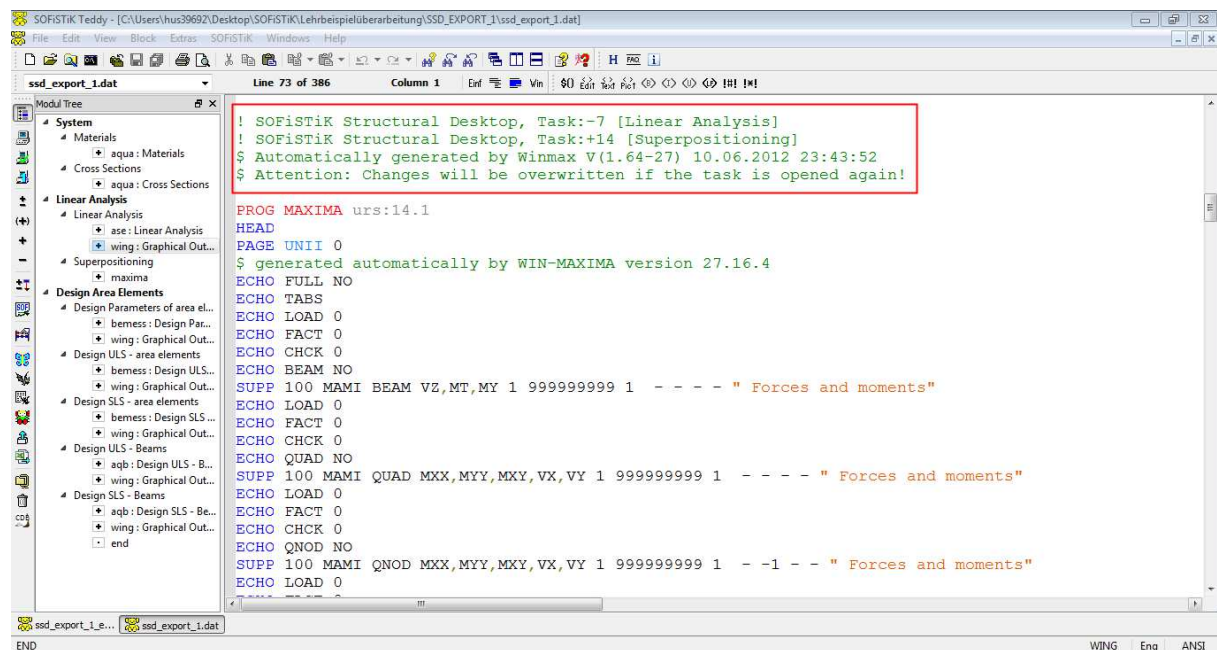
As soon as the export is finished Teddy will be opened with the compiled file.

- Merge both TEDDY files (Step 3)

Now we have to merge the file from SSD (SSD_export_1.dat) with this file. We will do this inside TEDDY.

Open SSD export file and delete all comments. They are no longer necessary for our purpose, thus we recommend deleting them all.
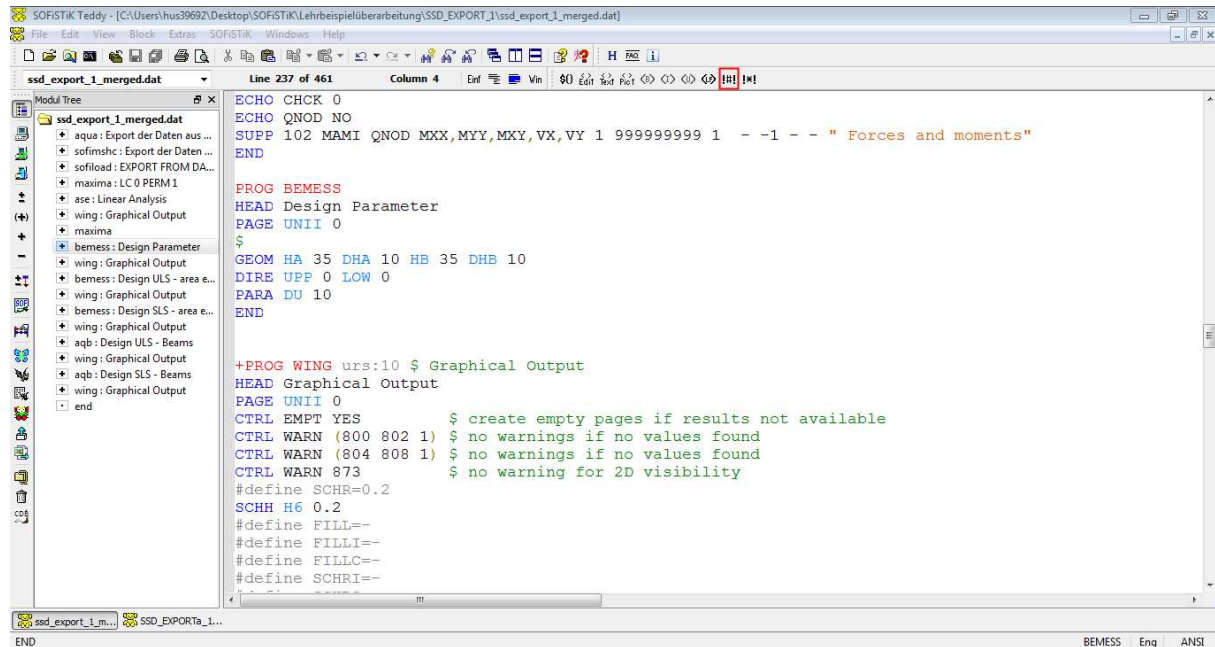

Now we start to copy the program blocks AQUA, SOFiMSHC, SOFiLOAD, MAXIMA, and BEMESS and paste or replace them in the right place in the SSD_export_1.dat input file. You may use copy and paste function CTRL+C und CTRL +V.

- Add chapters for a better overview

For a better navigation inside your TEDDY input file we recommend to add chapters. Use the button Chapter in the menu line, as shown below. After adding the chapters you will see them also in the module tree.
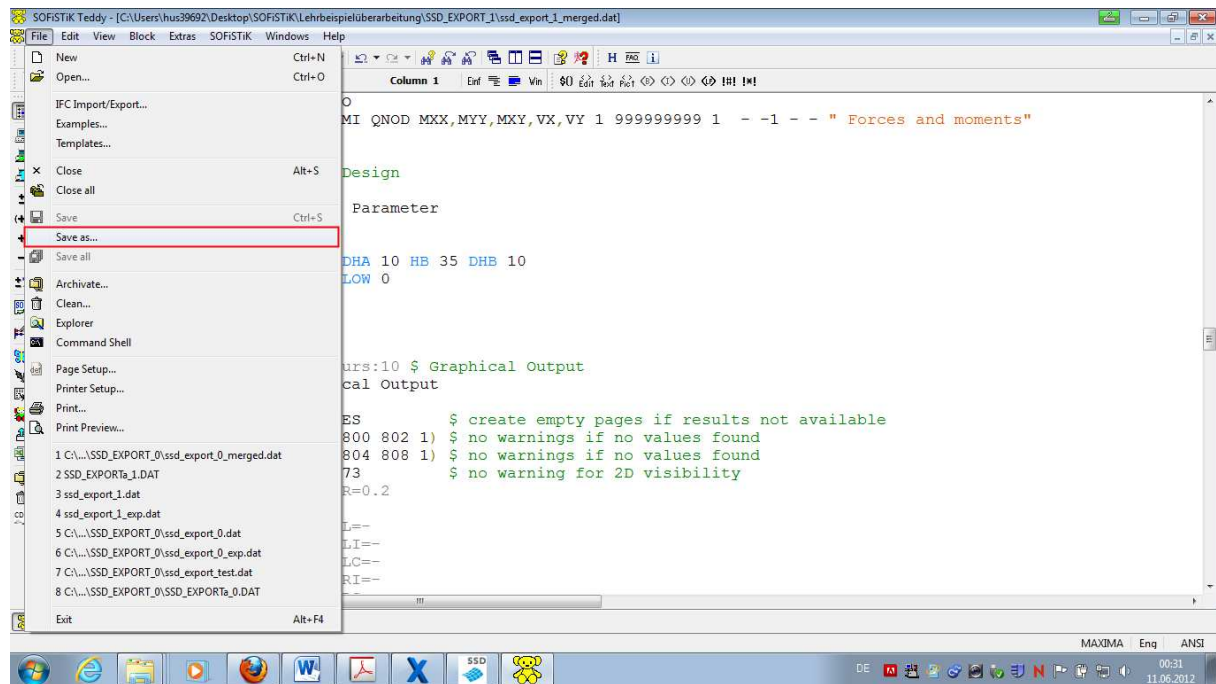

Use the variables !#!Chapter for a better overview in the module tree.

- Rename input file

Finally we recommend to rename the manually created input file.

Now the export is finished and you are able to start an analysis directly out of

TEDDY or sent this file to a remote desktop and do the analysis there.

> If you are looking for the correct numerical input, you may simply use SSD/ SOFiPLUS and create your system graphically. After that you go through the export procedure and you have the numerical input for further use.