

Import Data:

First, we must select the folder that we will work on. It can be in any location of our O/S, it can be an existing folder or a new one that we will create on the dialog-box. Then we must browse the input data file which is displayed in the table. If we want, we can change, with double click, the headers' names. We can see also the number of time steps and the number of channels. In order to proceed the user must push the submit button. Lastly, there is the Clear Set-up button that clears a whole set-up, to start from the beginning a new analysis.

Geometry:

We must browse the txt files with the nodes' coordinates and connectivity to visualize our structure. Pushing the button Create Geometry we can see the structure. In the table Assign Channels to DOF we can insert in the proper index of the table (Channel_x, Channel_y, Channel_z) the name of the channel (that is shown in the combo-box Channels' name) in the node that we want. In the combo-box we can see the exact assignments of the channels.

Preprocessing:

First, we must select the parameters of the problem, some default values are assigned, and then we run the FDD_svp function. In the figure we can select the peak that we want and with the button Add, it is added in the list of the identified peaks. The rest buttons are to help us with the list (Delete a single item or Clear the whole list). With the submit button we are locking the selection and we are ready to proceed with the analysis.

FDD:

We are clicking in the checkboxes the methods that we want and then Run FDD. In the dropdown menu there are the available plots, the figures are changing with the selection the desired mode.

FDD_res:

We can see in tables all the results derived from the analyses. All of the results (also the figures) are automatically saved in the working folder ../Results/FDD

FDD_geom:

In this tab the final deformations are presented in several forms. By selecting the desired mode, the figure is changing. In the table, the deformation of each node is presented while extra abilities for the plot are provided. The checkbox Deformed shape illustrate in the same figure the deformed structure, the checkbox Show values on plot is activating the functionality to illustrate the information of the table directly to the plot, while 4 scaling factors are also provided.

The rest TABS (for the **SSI** method) are equivalent with the **FDD** method