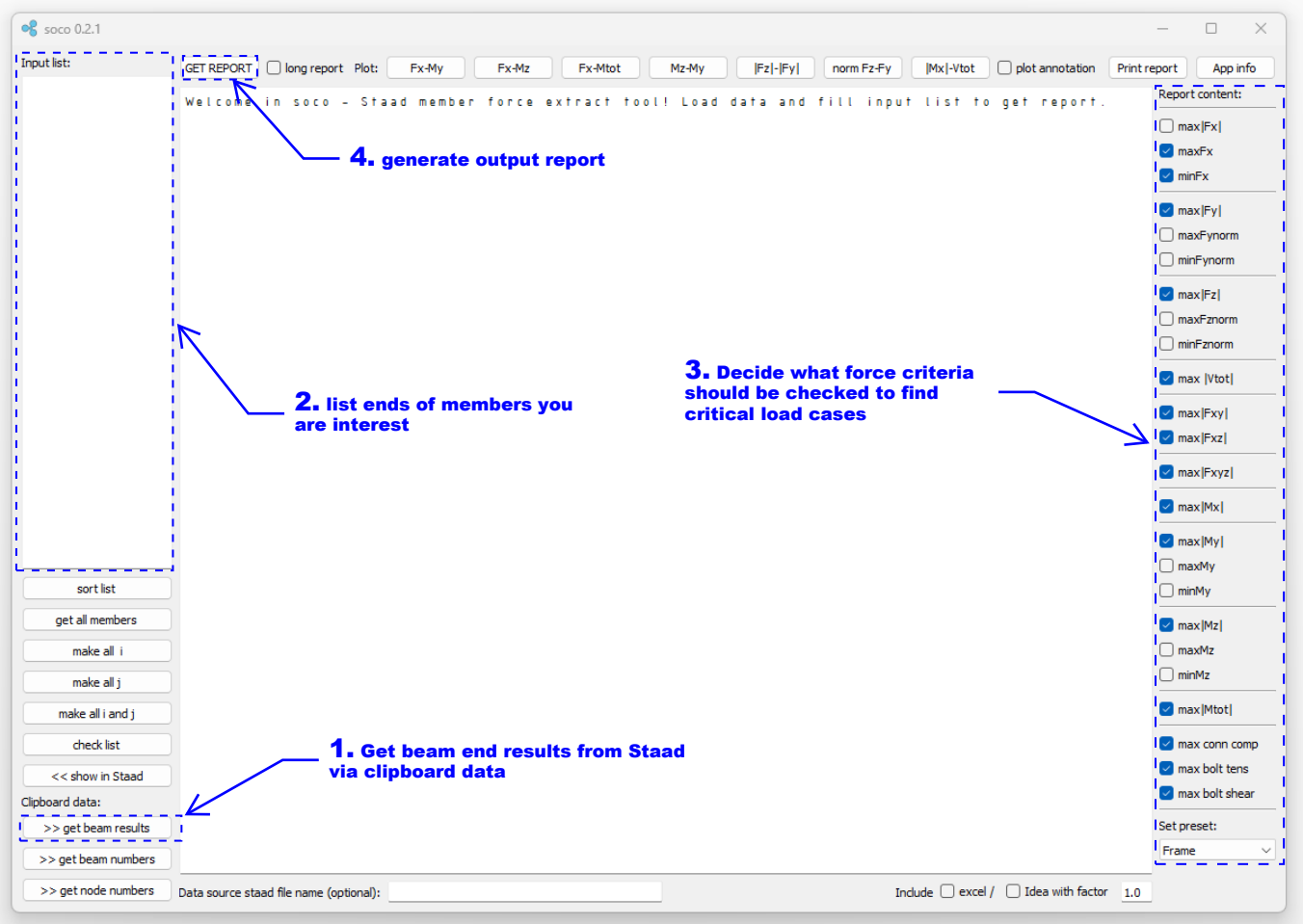
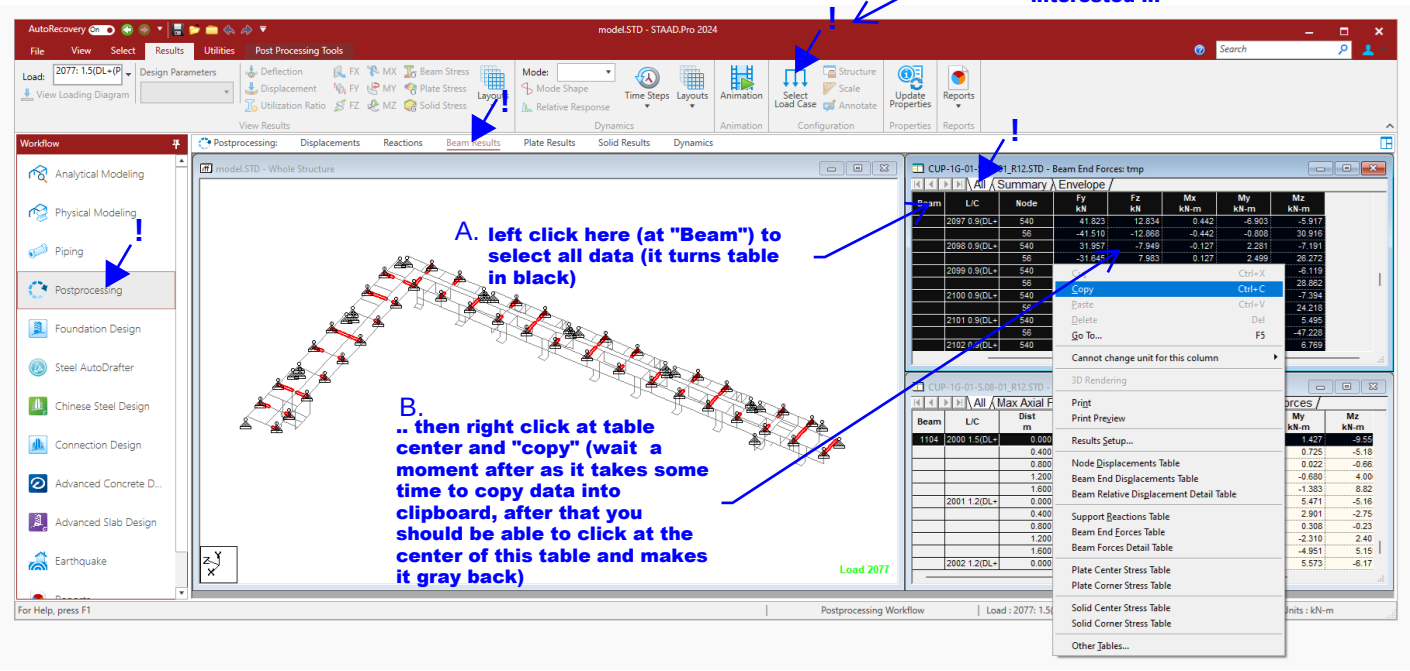
Basic workflow steps (each step explained in details on next pages)

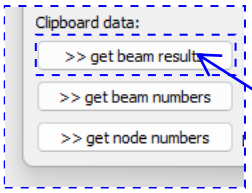


1. Geting beam end results from Staad via clipboard data

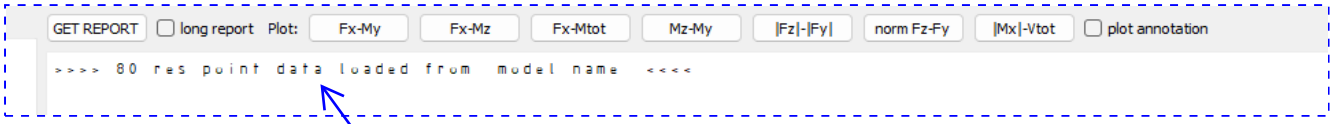
Note - here decide what load combinations you are interested in



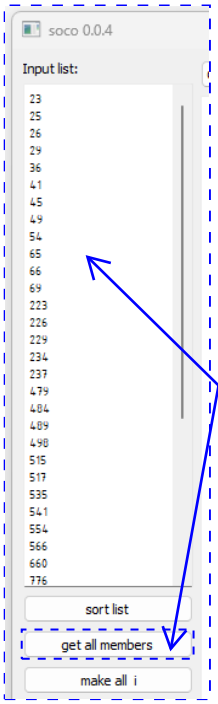
C. go to SOCO



D. **click on "get beam results" button**

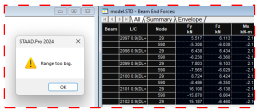


E. **you should see confirmation that member results has been received by SOCO**

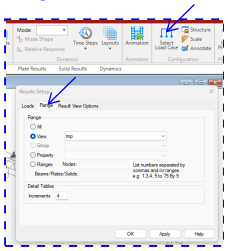


F. **you can use "get all members" button to see what member results are available**

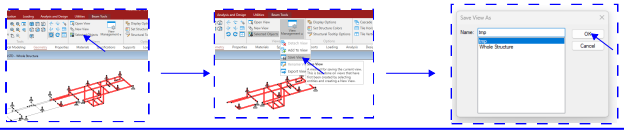
"Range too big." issue.



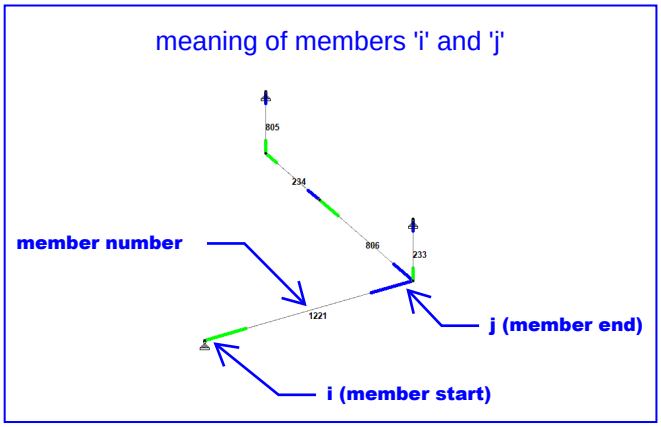
For big models or/and many load combinations results table can be to big to copy all members results for entire. For that case you need to reduce the table size by using some criteria as shown below.



Using 'View' option is most flexible as you can define views in fly with no impact on std file and no need recalculate model when create new view. See below how to crate new named view in Staad.

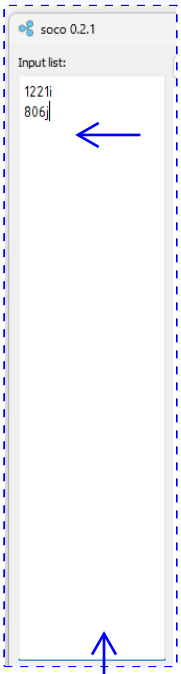


2. Listing ends of members you are interested in



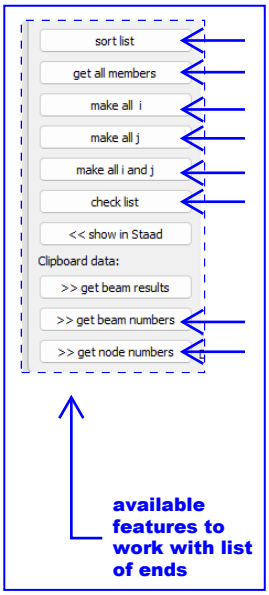
There are two options how to specify list of ends

Option 1. Just write it manually



List of ends need to be specified here

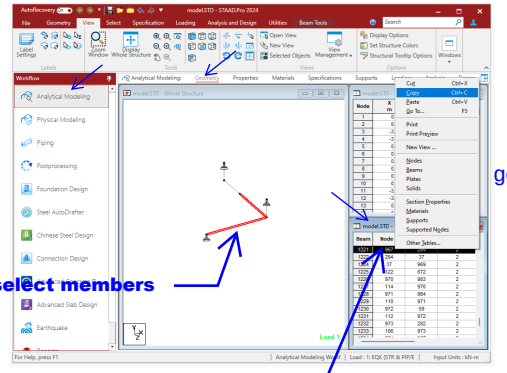
Option 2. Use Soco build in features that make it easer to create and menage the list



available features to work with list of ends

Specifying list of ends based on Staad member and point selection is shown below.

Fist get beam numbers based on Staad selection:



1. select members

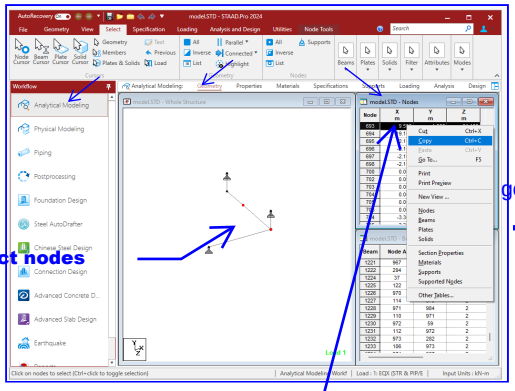
2. right click here and copy

go to SOCO

3. click 'get beam numbers'

beam numbers will appear

.. then get node numbers based on Staad selection to define beam ends (i, j):



4. select nodes

5. right click here and copy

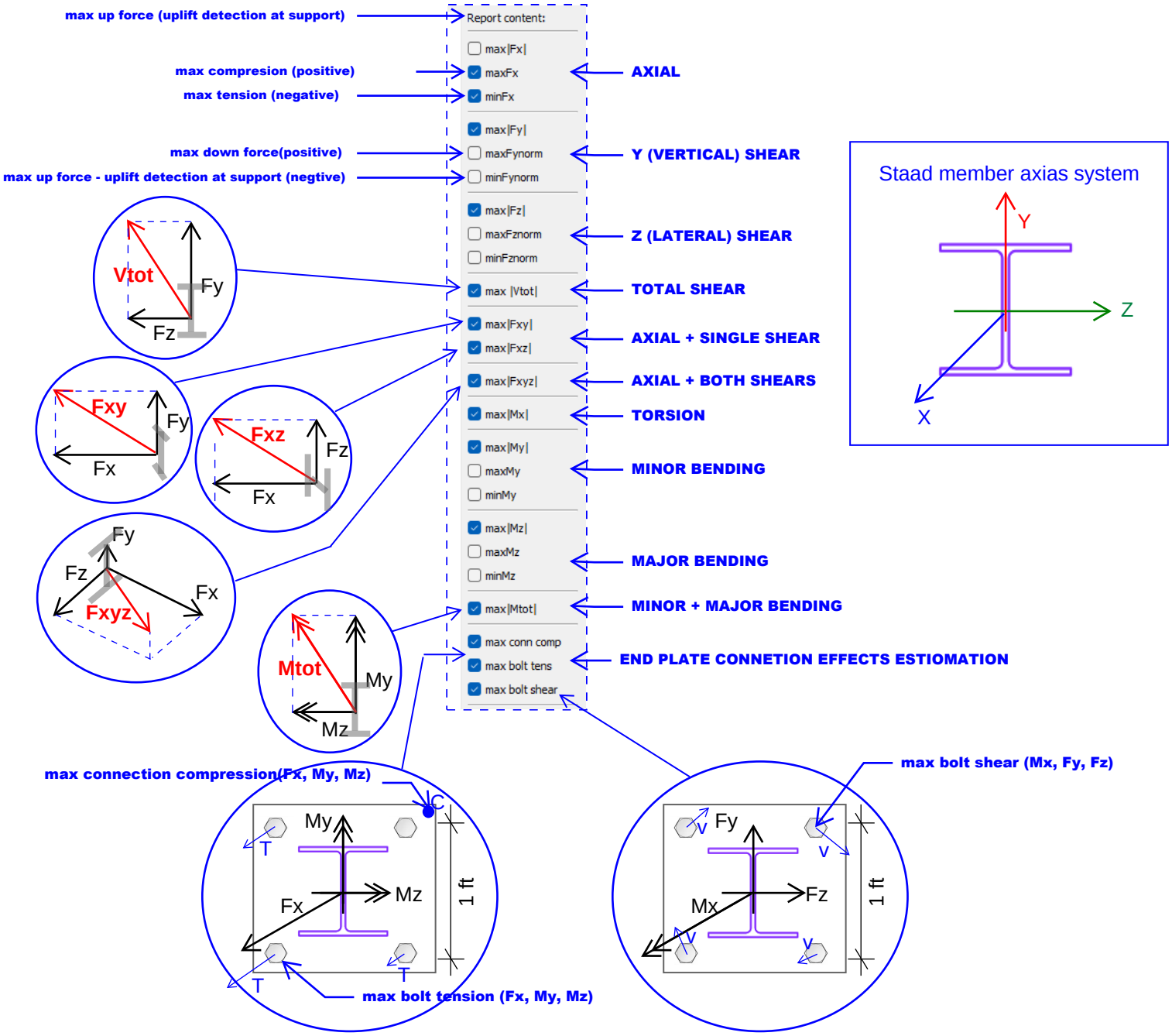
go to SOCO

6. click 'get node numbers

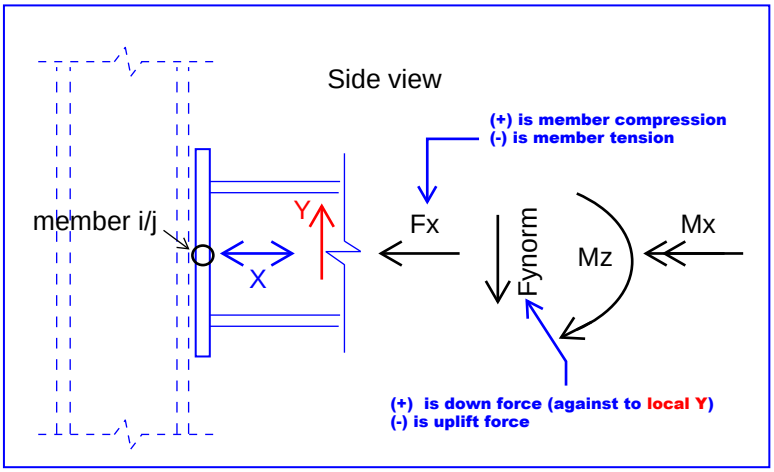
i and j will appear appropriately

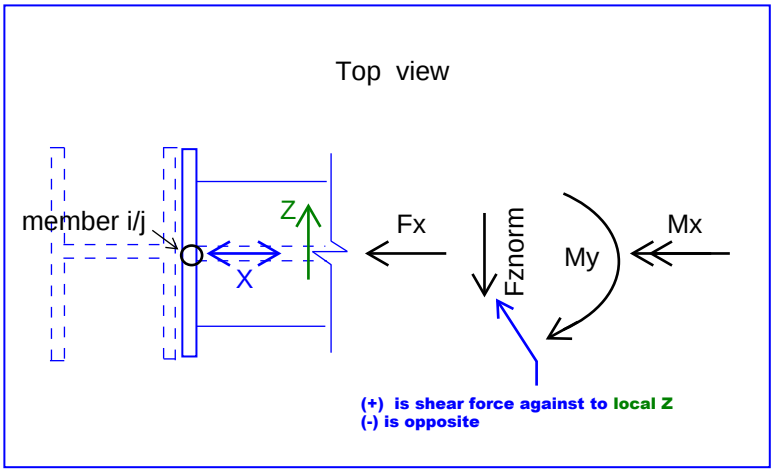
3. Decide what force criteria should be checked to find critical load cases

There are several options that can be selected to get output report, see below.

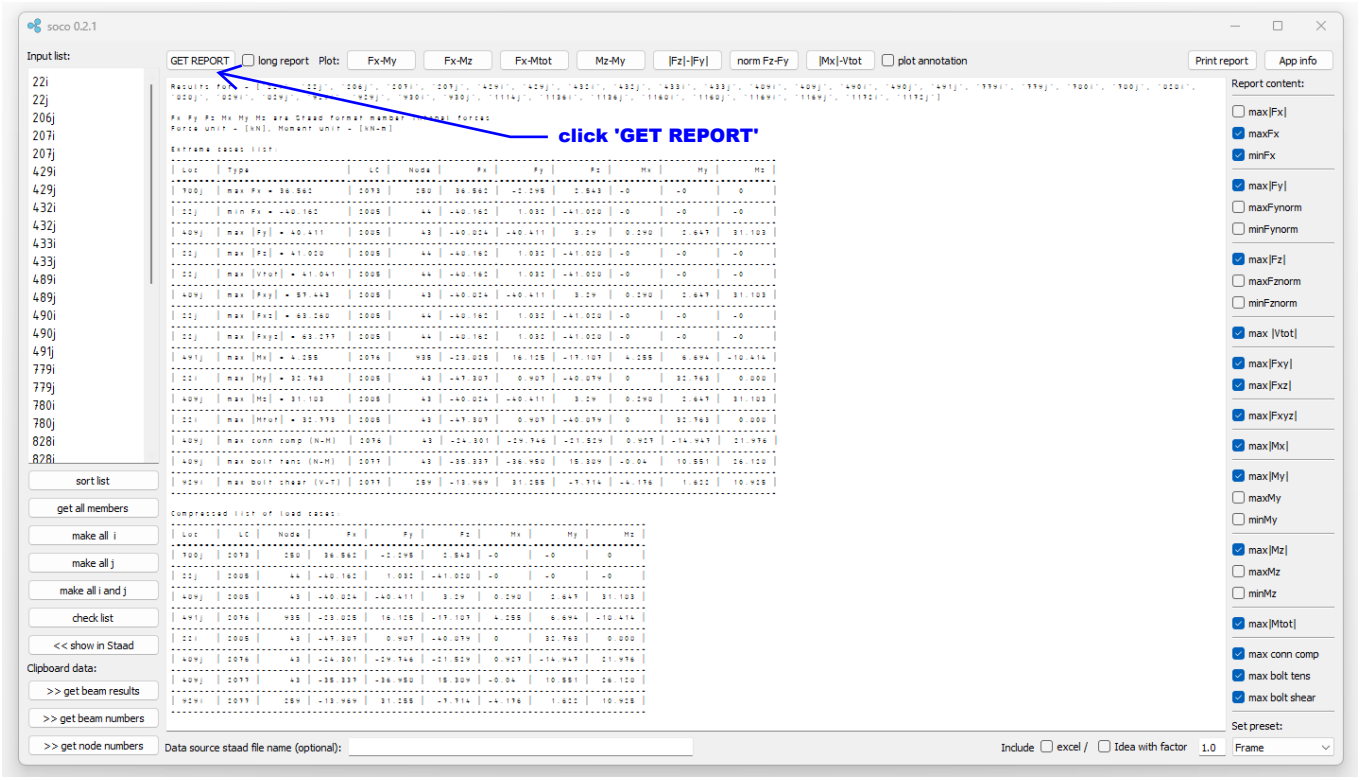


Force sign convention



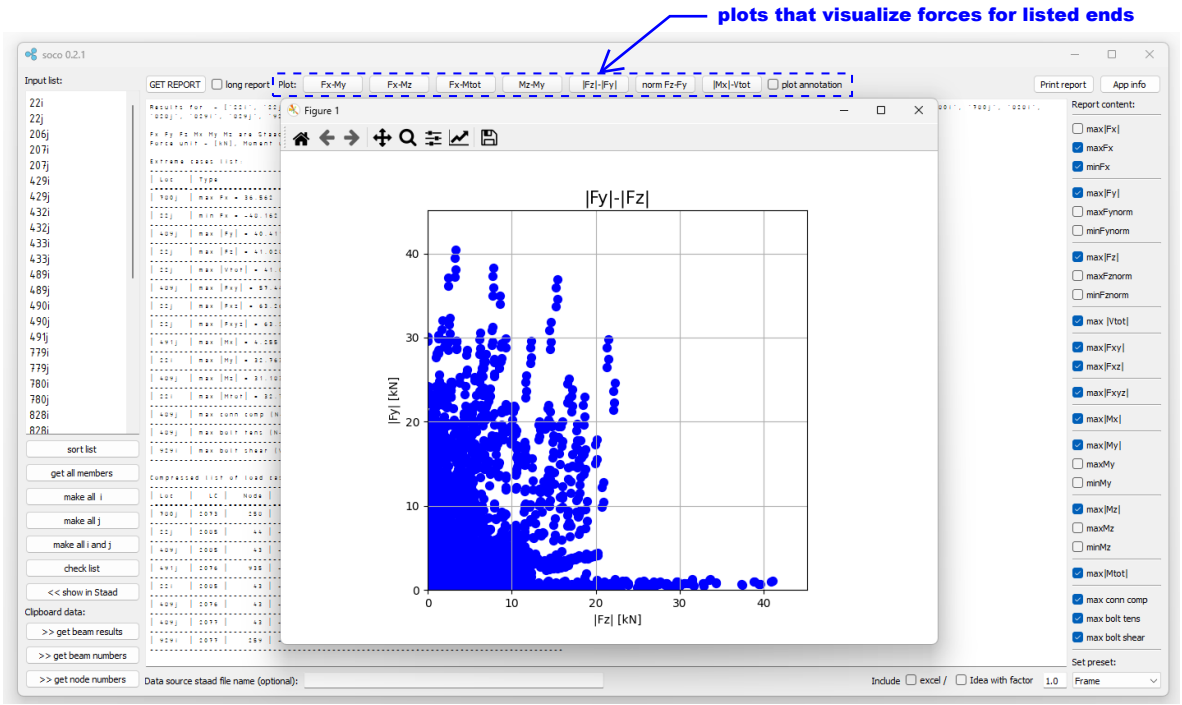


4. Generating output report

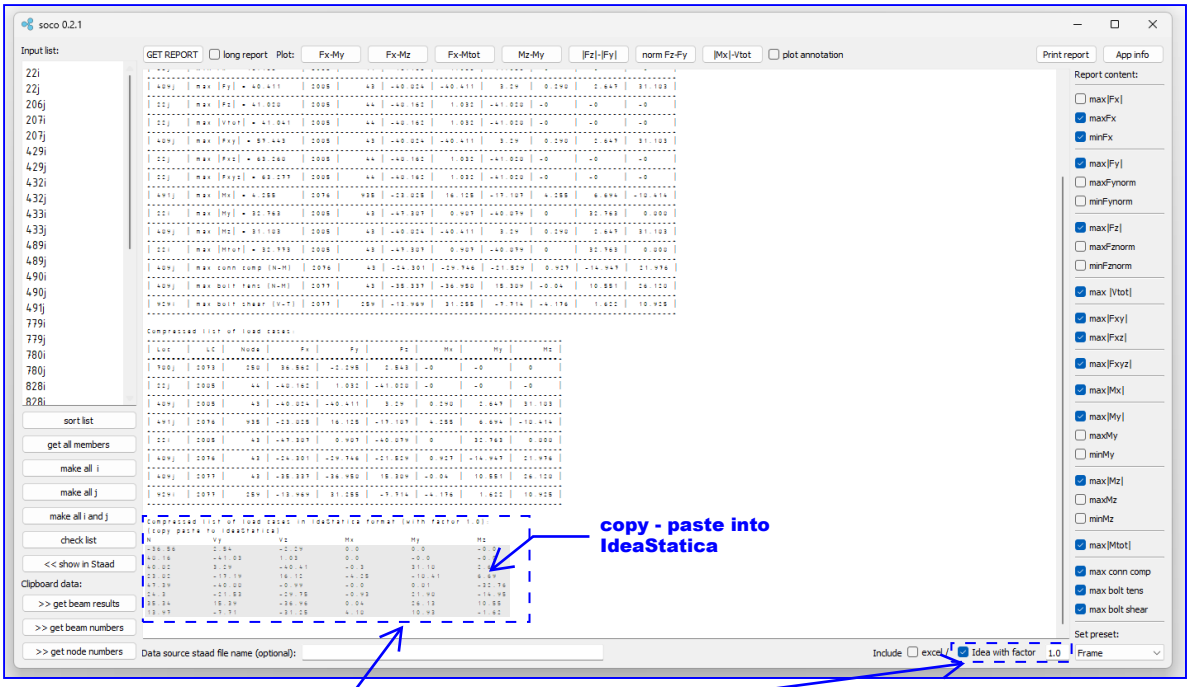


Additional features

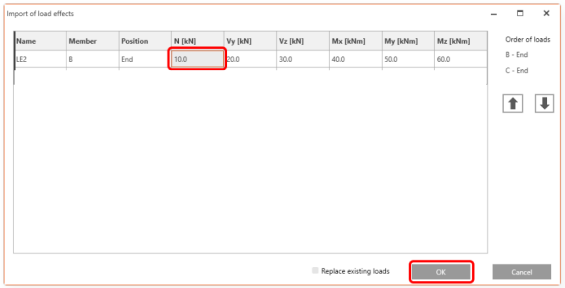
Plots



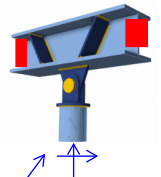
Transfering force to IdeaStatica



Copy area as show above.
In IDEA StatiCa Connection, select the XLS Import command from the ribbon.
Finally, select the indicated cell below and Paste (Ctrl+V) the values.

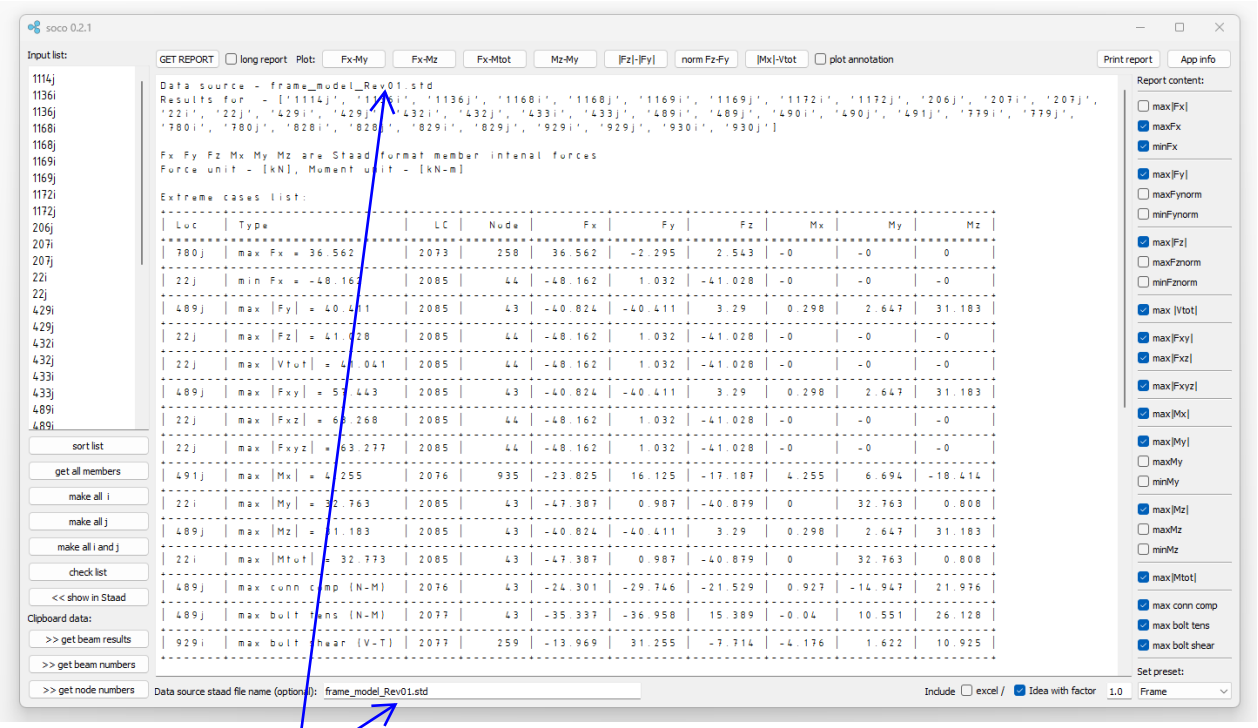


"One branch loaded" model example

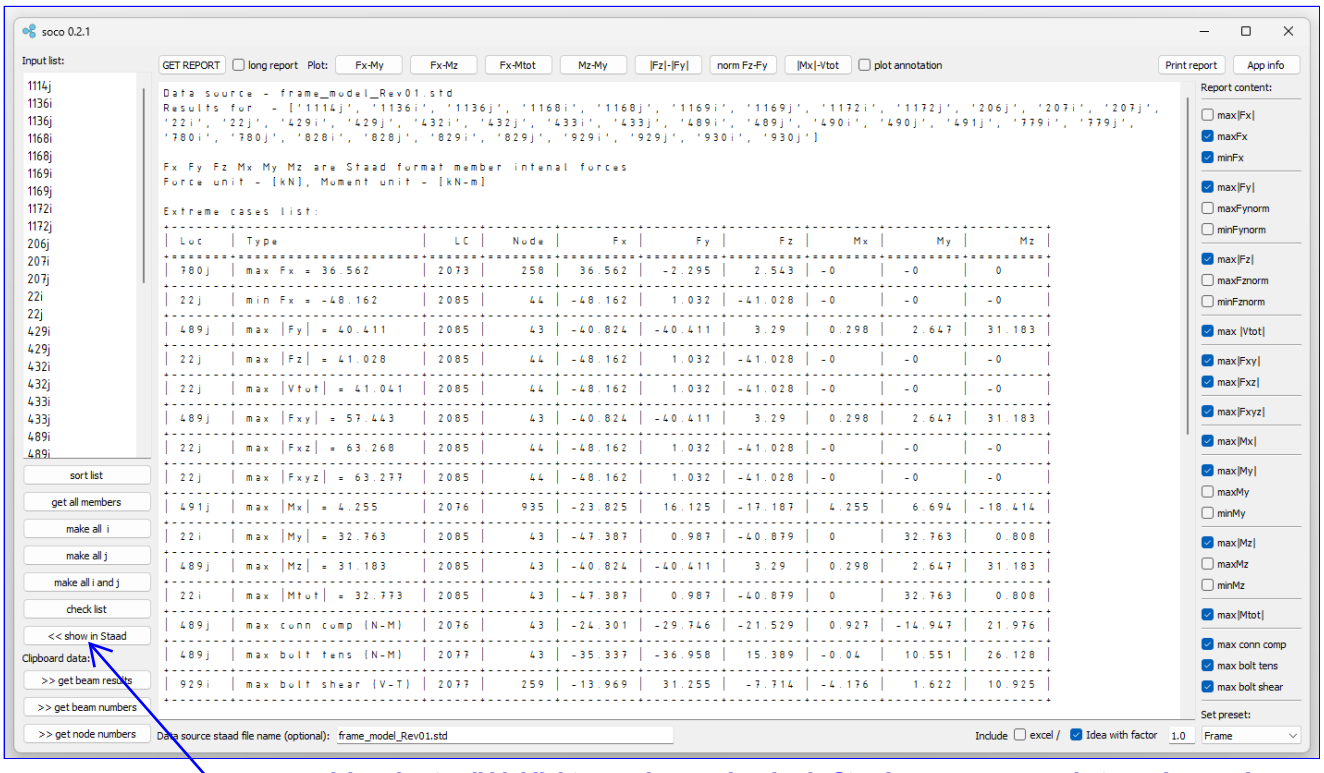


Note. This procedure is assumed to be used for IdeaStatic connection model with only one branch loaded.

Showing Staad model file name in report



Highlighting members and nodes in Staad



- END OF TUTORIAL -

Project website:
https://github.com/lukaszlaba/soco

Download latest version from:
https://github.com/lukaszlaba/soco/releases