Instructions for the demo application ALSowExt in the following paper;
“Efficient extraction of related literature utilizing citation networks by Academic-landscape/Future-prediction system; Case study of enzyme-related literature selection”

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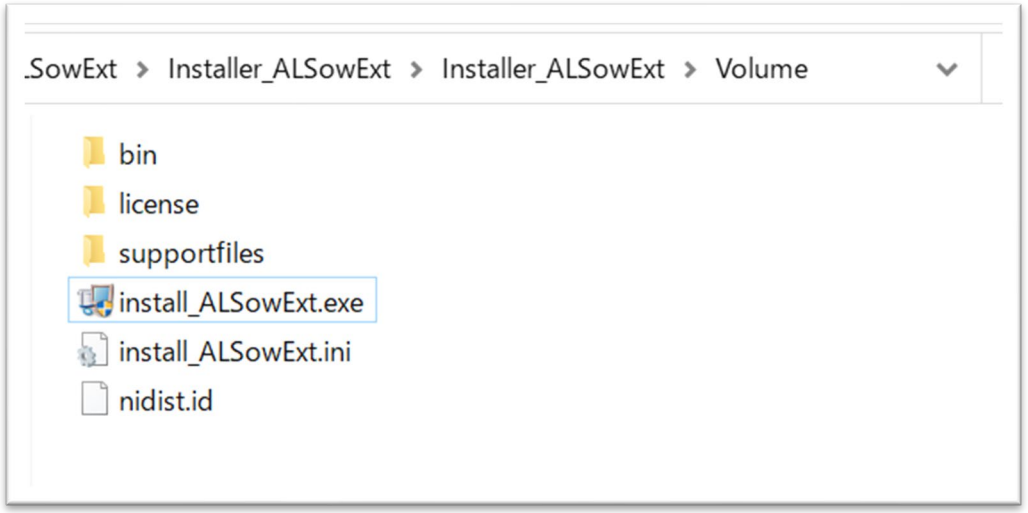
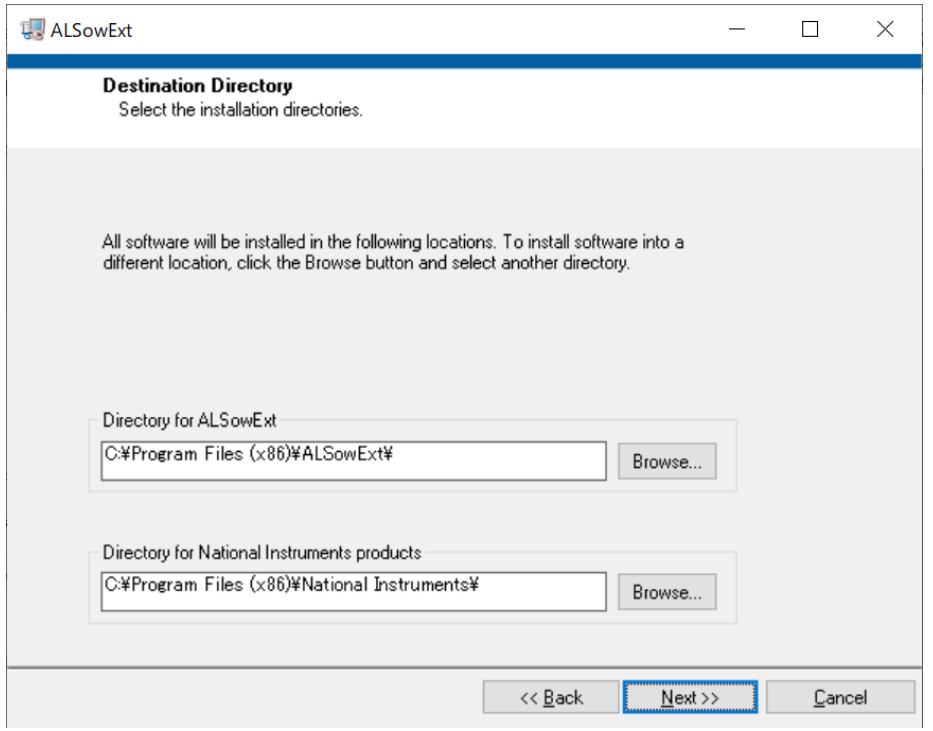
Installation of ALSowExt (for Windows 10)

By unzipping the file, installer_ALSowExt folder will be created. install_ALSowExt.exe file will be In the Volume folder.
Please execute it as an administrator.

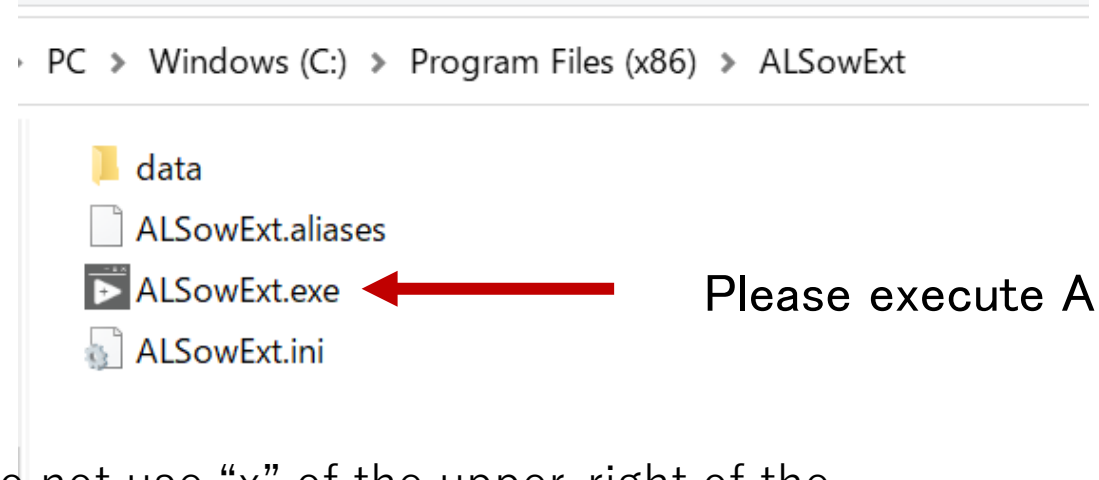


By executing the exe file, installer will appear.
Please click the Next button to continue it..



Installation of ALSowExt (for Windows 10)

Finally, the ALSowExt folder will be created in the ‘Program Files (x86)’ folder.

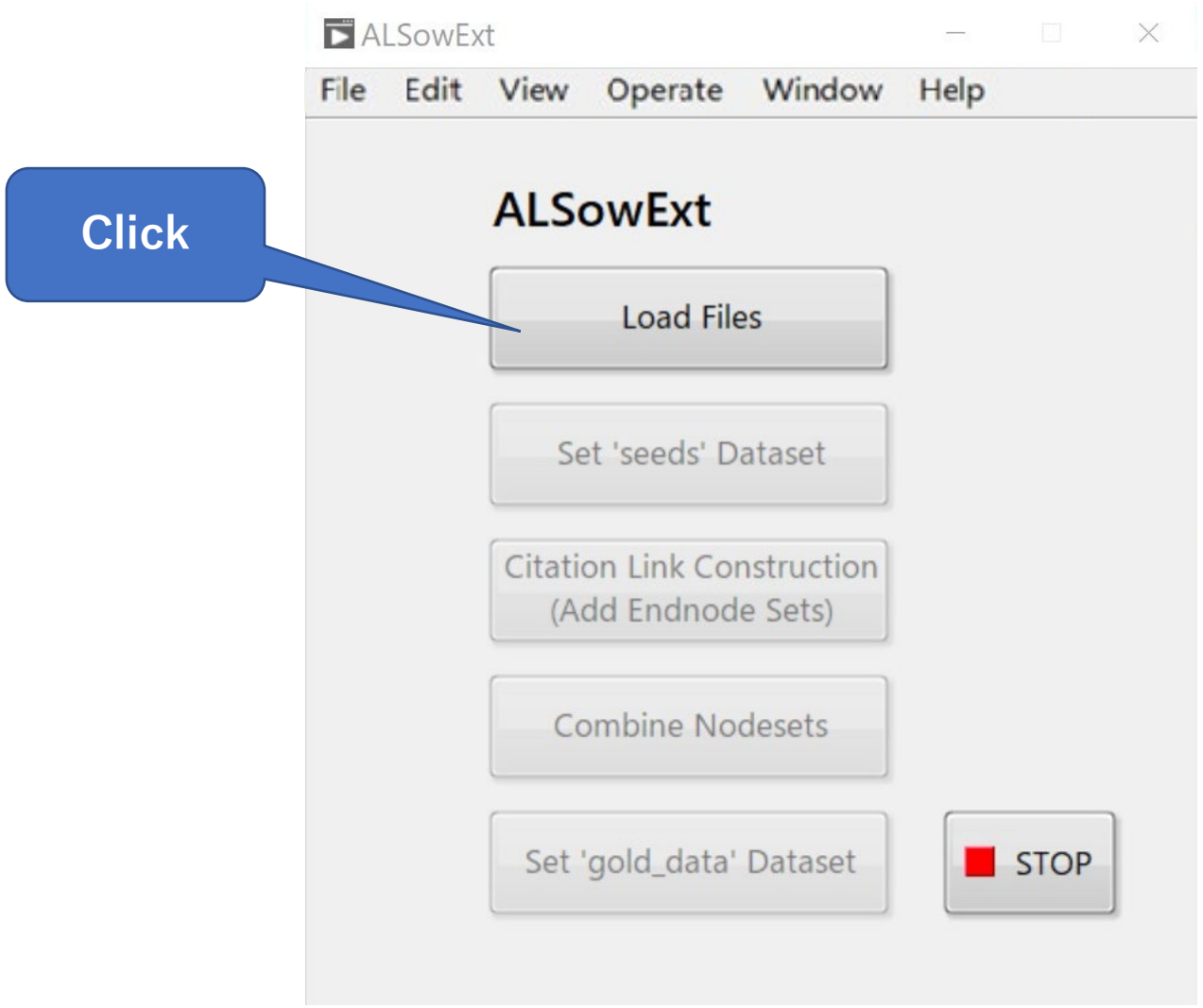


Please execute ALSowExt.exe to start it.

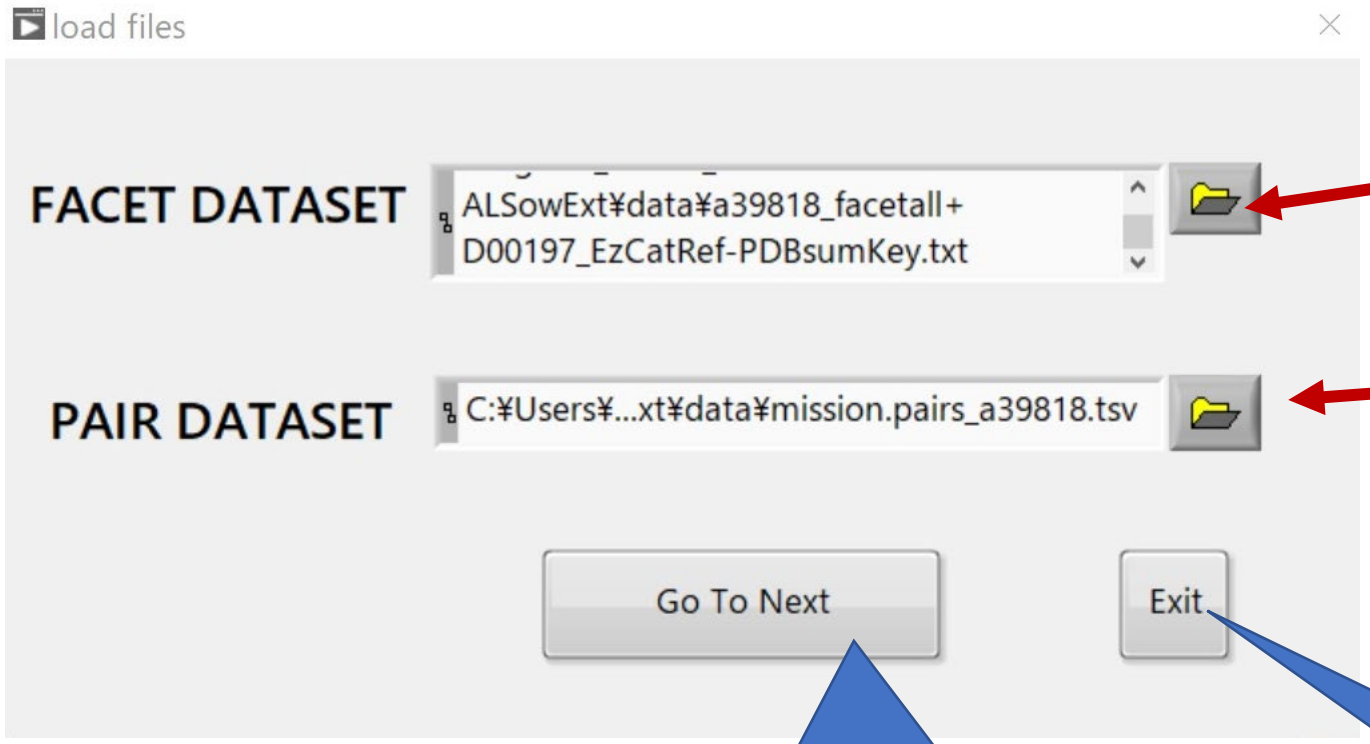
Warning: please do not use “x” of the upper-right of the window to close sub-windows. Please click the “back” (or “OK”, etc.) buttons to go back to the upper-level window.

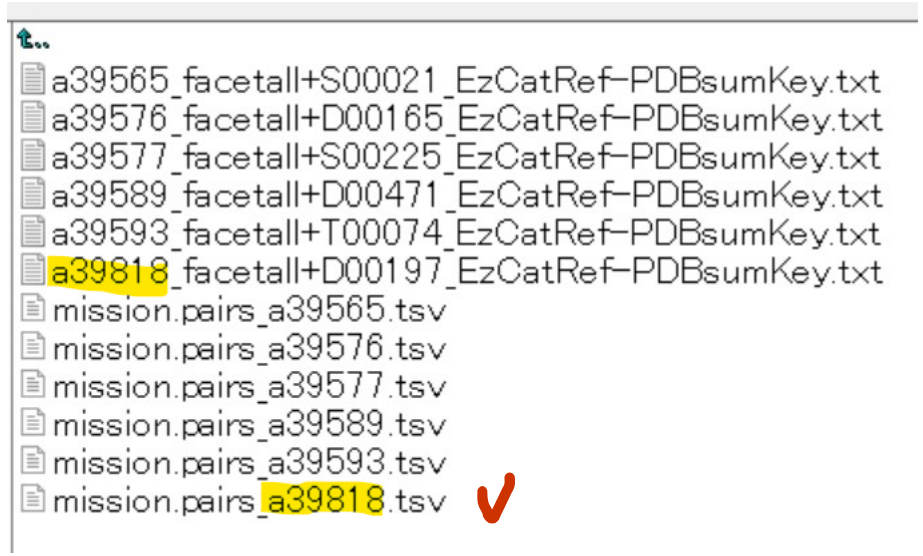
Please move the ‘data’ folder to your Documents folder before executing ALSowExt.

Start of ALSowExt



Loading files





Please load the pair for the protein.
Relations of data detailed in the next slide.

Click to go to next step.
The window will close.

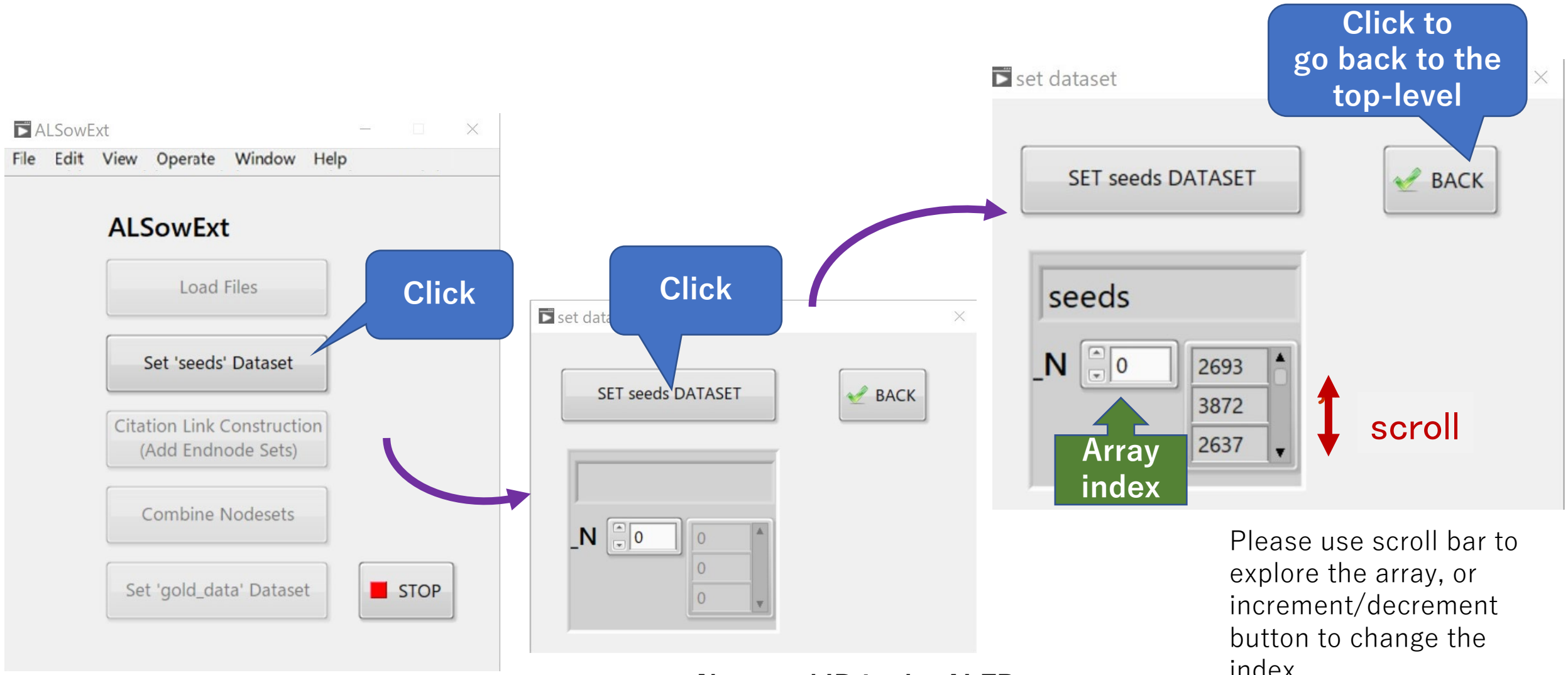
Use this bottun
to go back to
the top-level

Comparison of ALFP data and sample data file in this application

Datasets (EzCatDB ID)	ALFP analyzed data described in the paper	Data files included in this application
Lysozyme (S00021)	a39565/mission.facet.all.tsv	a39565_facetall+S00021_EzCatRef-PDBsumKey.txt
	a39565/mission.pairs.tsv	mission.pairs_a39565.tsv
a-Amylase (D00165)	a39576/mission.facet.all.tsv	a39576_facetall+D00165_EzCatRef-PDBsumKey.txt
	a39576/mission.pairs.tsv	mission.pairs_a39576.tsv
Triosephosphate isomerase (TIM) (S00225)	a39577/mission.facet.all.tsv	a39577_facetall+S00225_EzCatRef-PDBsumKey.txt
	a39577/mission.pairs.tsv	mission.pairs_a39577.tsv
HIV-1 retropepsin (D00471)	a39589/mission.facet.all.tsv	a39589_facetall+D00471_EzCatRef-PDBsumKey.txt
	a39589/mission.pairs.tsv	mission.pairs_a39589.tsv
Thrombin (T00074)	a39593/mission.facet.all.tsv	a39593_facetall+T00074_EzCatRef-PDBsumKey.txt
	a39593/mission.pairs.tsv	mission.pairs_a39593.tsv
Trypsin (D00197)	a39818/mission.facet.all.tsv	a39818_facetall+D00197_EzCatRef-PDBsumKey.txt
	a39818/mission.pairs.tsv	mission.pairs_a39818.tsv

Gold data and seed data were combined with facet.all data described in the paper, to make facetall+EzCatRef-PDBsumKey files.

Setting Seeds of Dataset for the further step

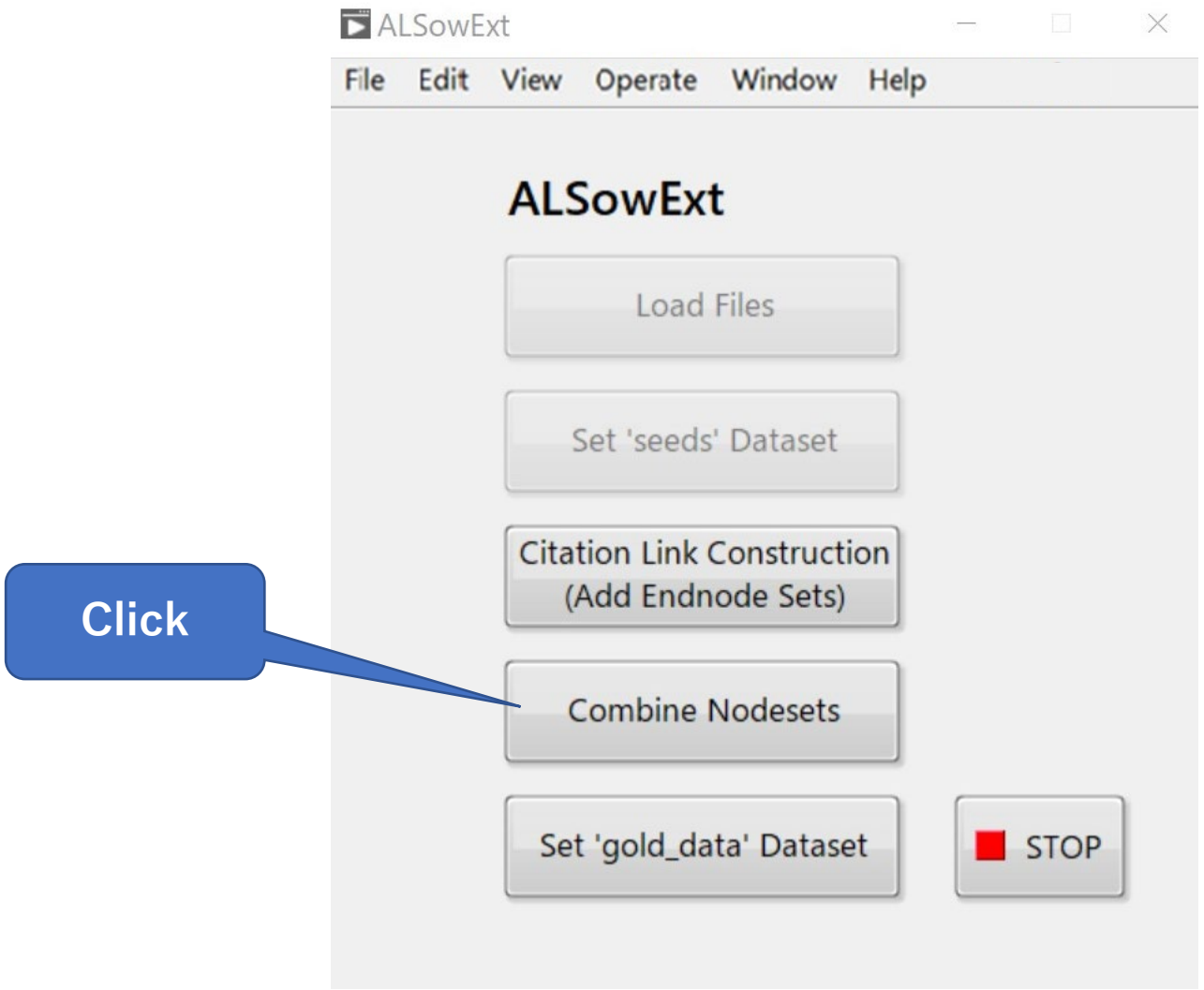


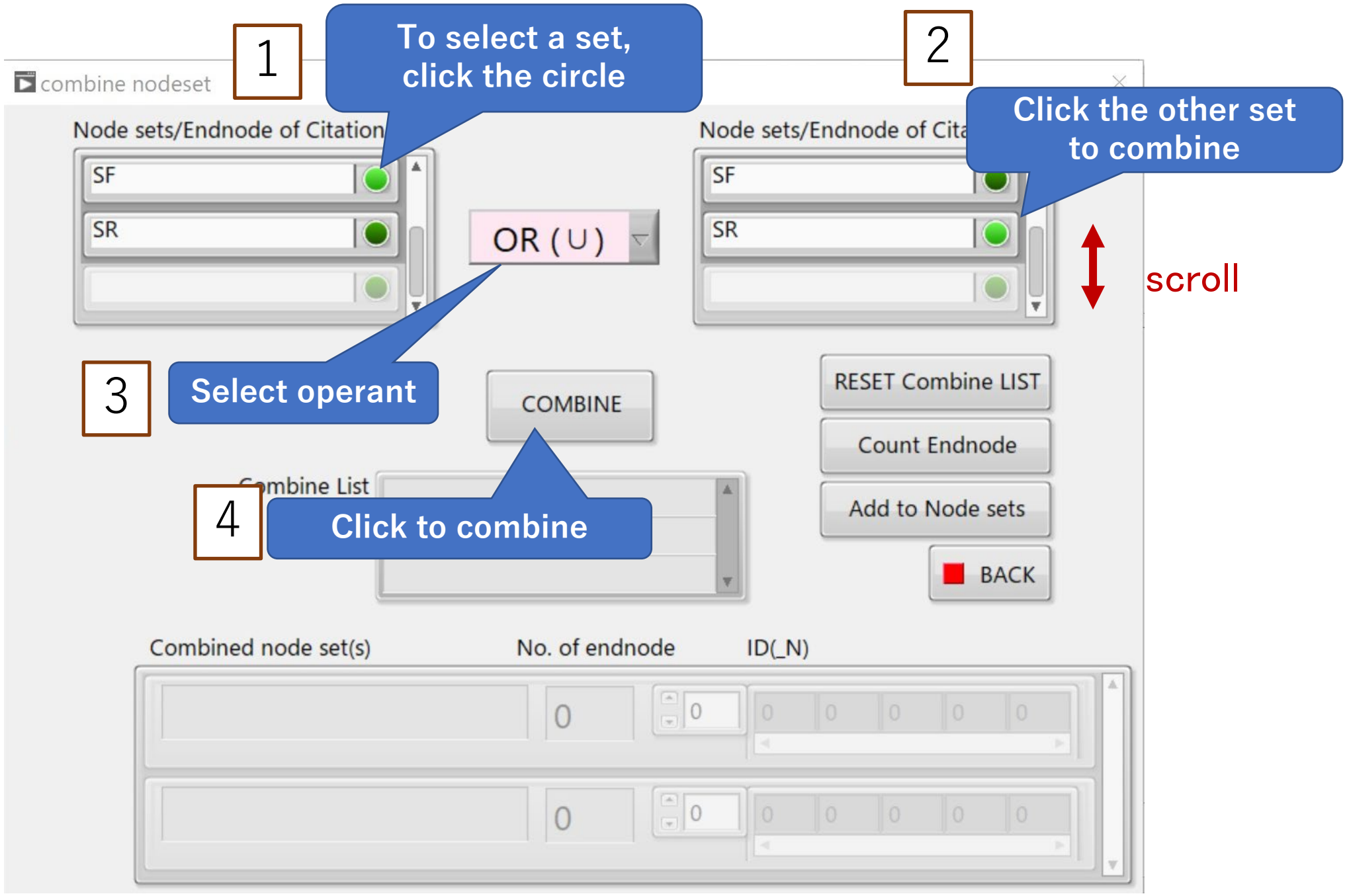
_N: record ID in the ALFP system

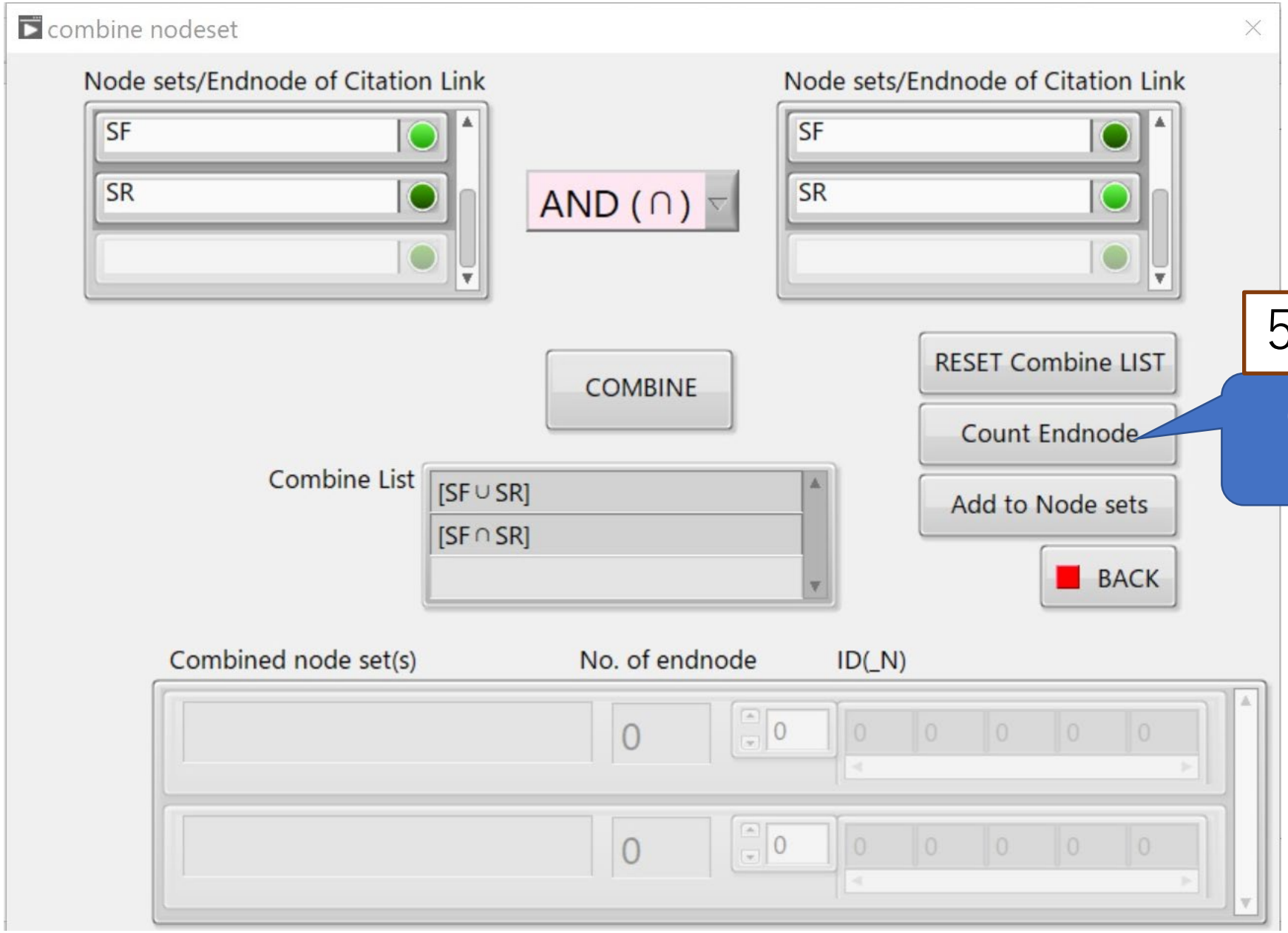
Please use scroll bar to explore the array, or increment/decrement button to change the index.

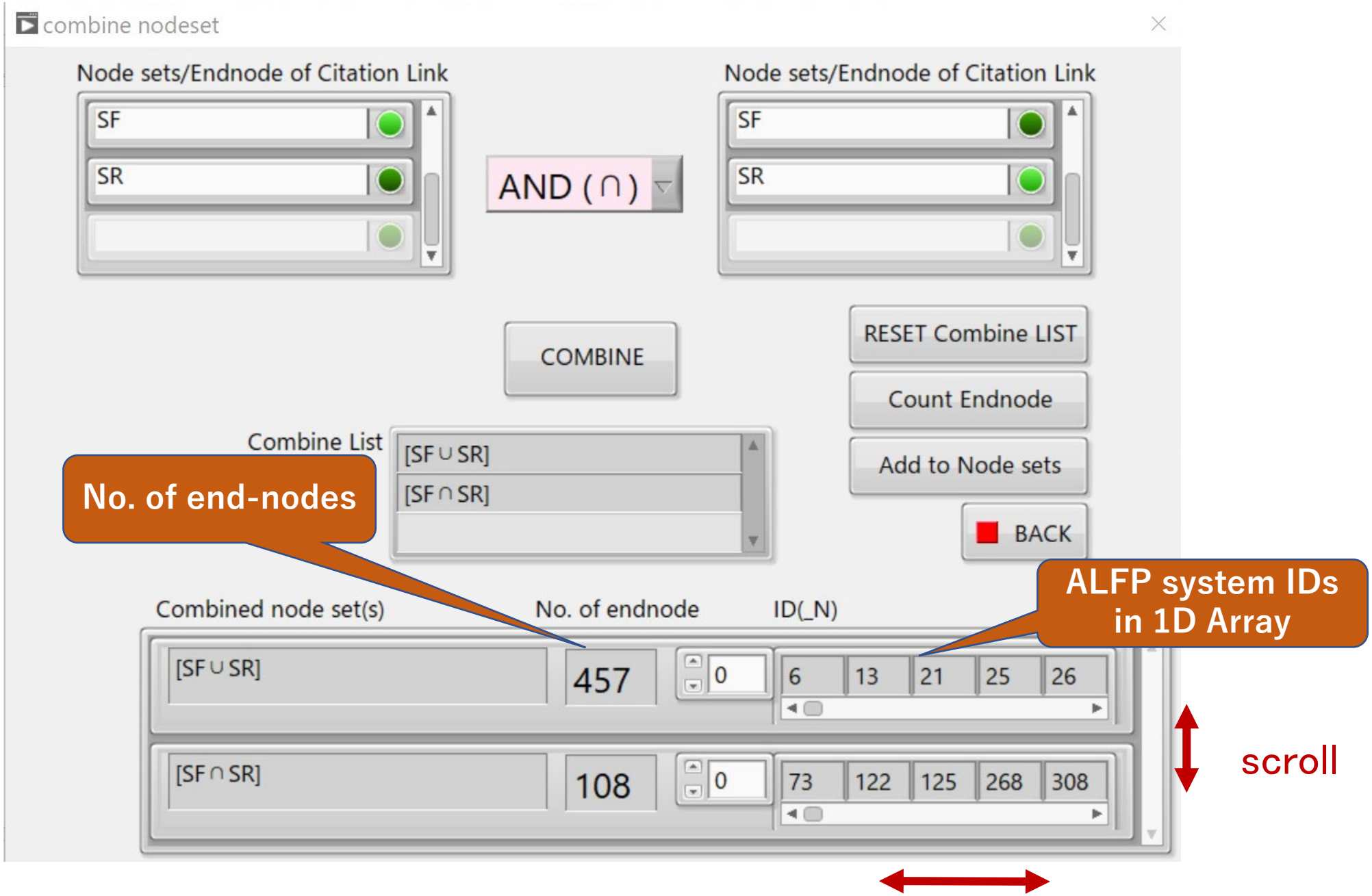
Citation Link Construction

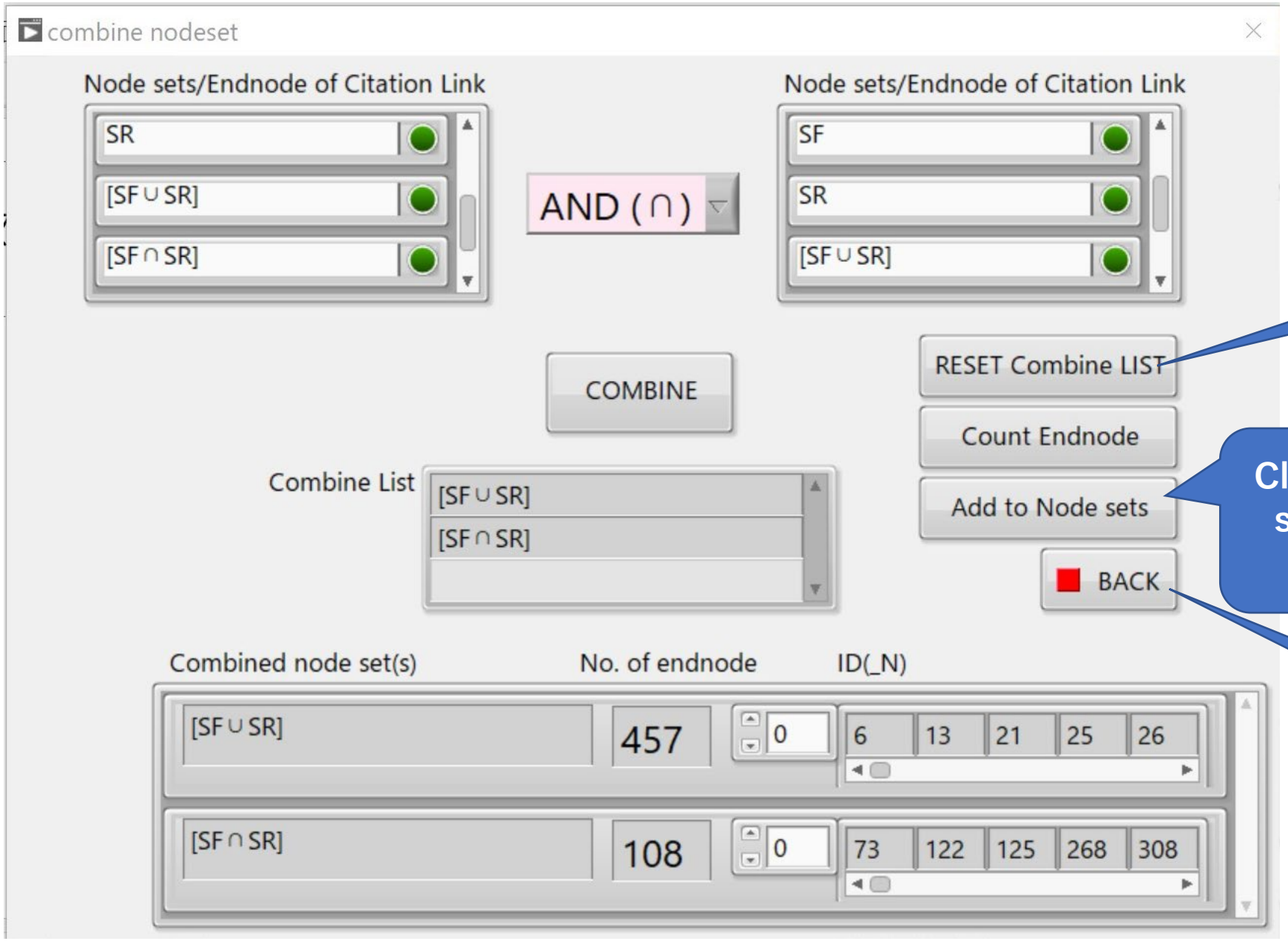
Combining Node set




combine nodeset
1
To select a set, click the circle
2
Click the other set to combine
Node sets/Endnode of Citation
Node sets/Endnode of Cita
SF
SR
SF
SR
OR (U)
scroll
3
Select operant
COMBINE
RESET Combine LIST
Count Endnode
Add to Node sets
BACK
4
Click to combine
Combine List
Combined node set(s)
No. of endnode
ID(_N)
0
0
0
0


combine nodeset
Node sets/Endnode of Citation Link
SF
SR
AND (∩)
Node sets/Endnode of Citation Link
SF
SR
COMBINE
RESET Combine LIST
Count Endnode
Add to Node sets
BACK
Combine List
[SF ∪ SR]
[SF ∩ SR]
Combined node set(s)
No. of endnode
ID(_N)
0
0
0
0
5
Click to count end-nodes


combine nodeset
Node sets/Endnode of Citation Link
SF
SR
AND (∩)
Node sets/Endnode of Citation Link
SF
SR
COMBINE
RESET Combine LIST
Count Endnode
Add to Node sets
BACK
Combine List
[SF∪SR]
[SF∩SR]
No. of end-nodes
ALFP system IDs in 1D Array
Combined node set(s)
No. of endnode
ID(_N)
[SF∪SR]
457
0
6
13
21
25
26
[SF∩SR]
108
0
73
122
125
268
308
scroll



7

Please reset combine list before creating a new list

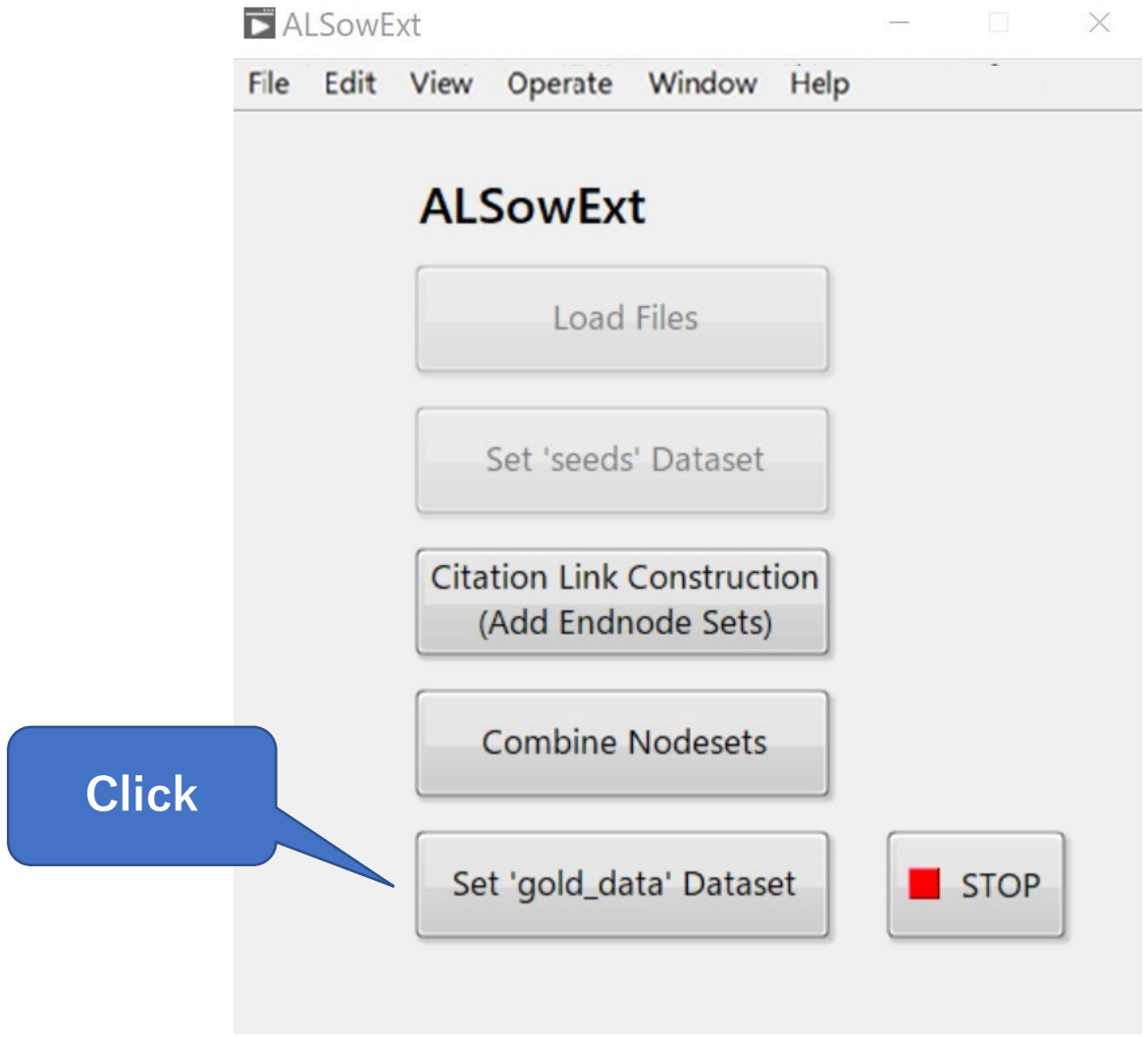
6

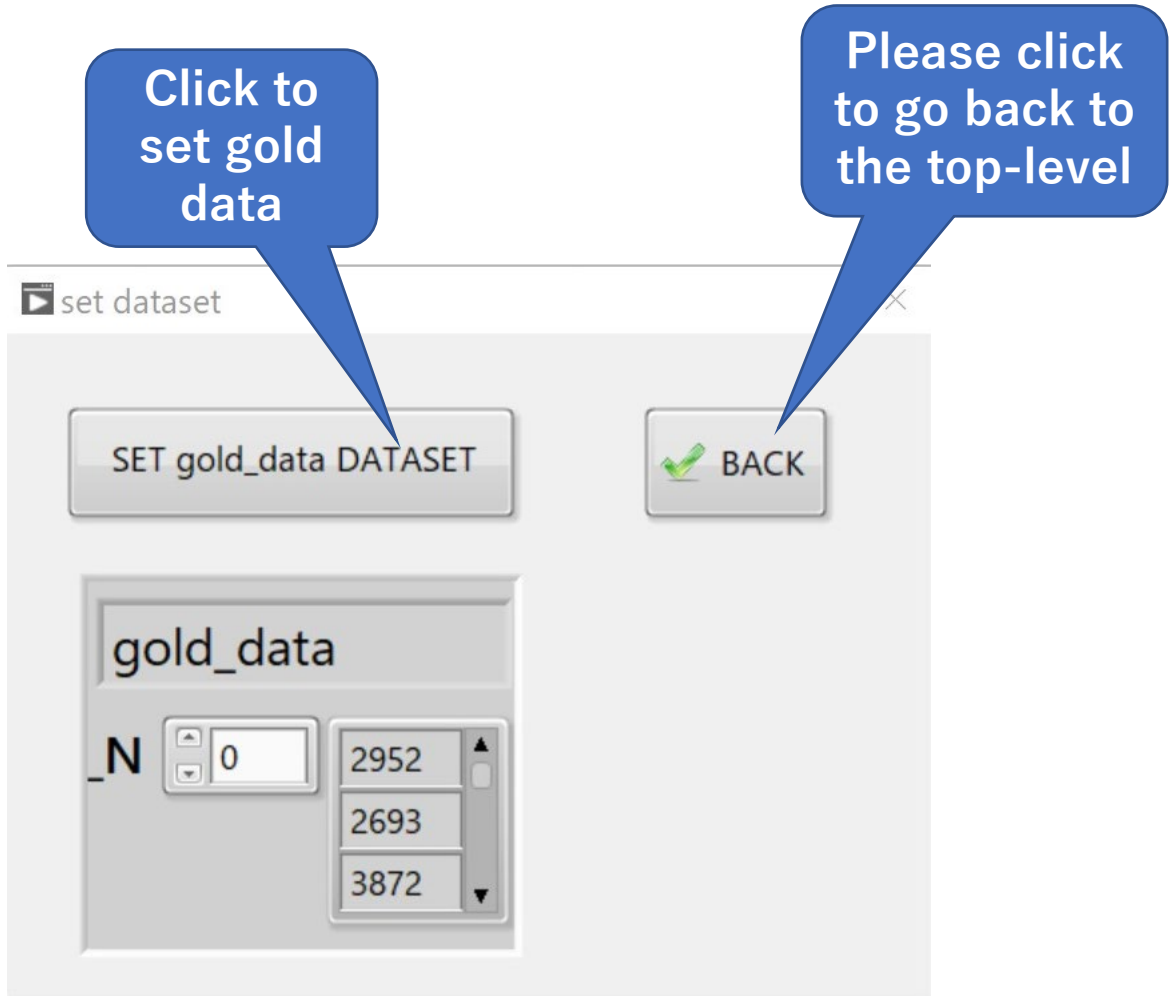
Click, then new end-node sets will be available in the upper lists

8

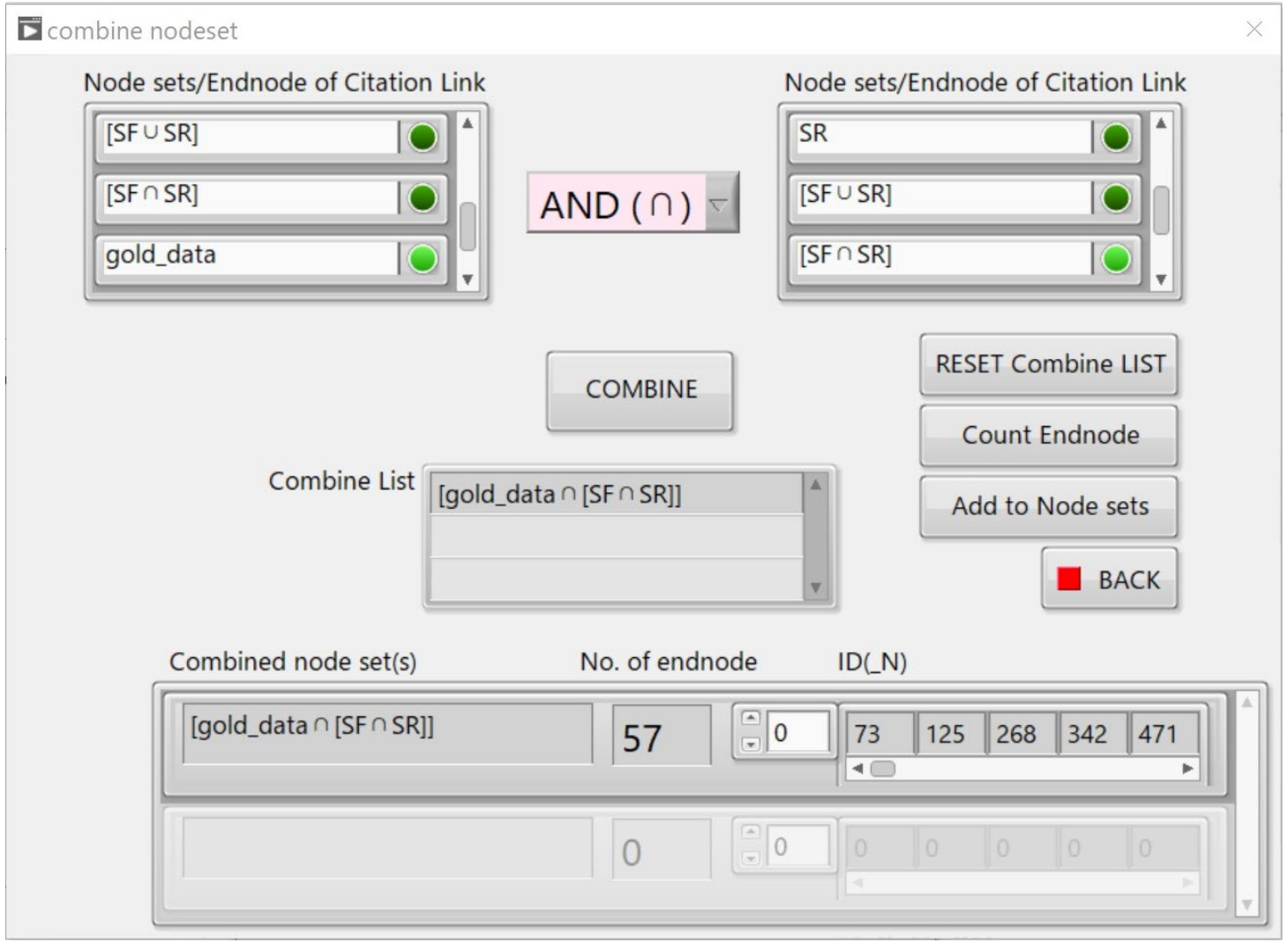
Please click to go back to the top-level

Setting gold data for the further evaluation

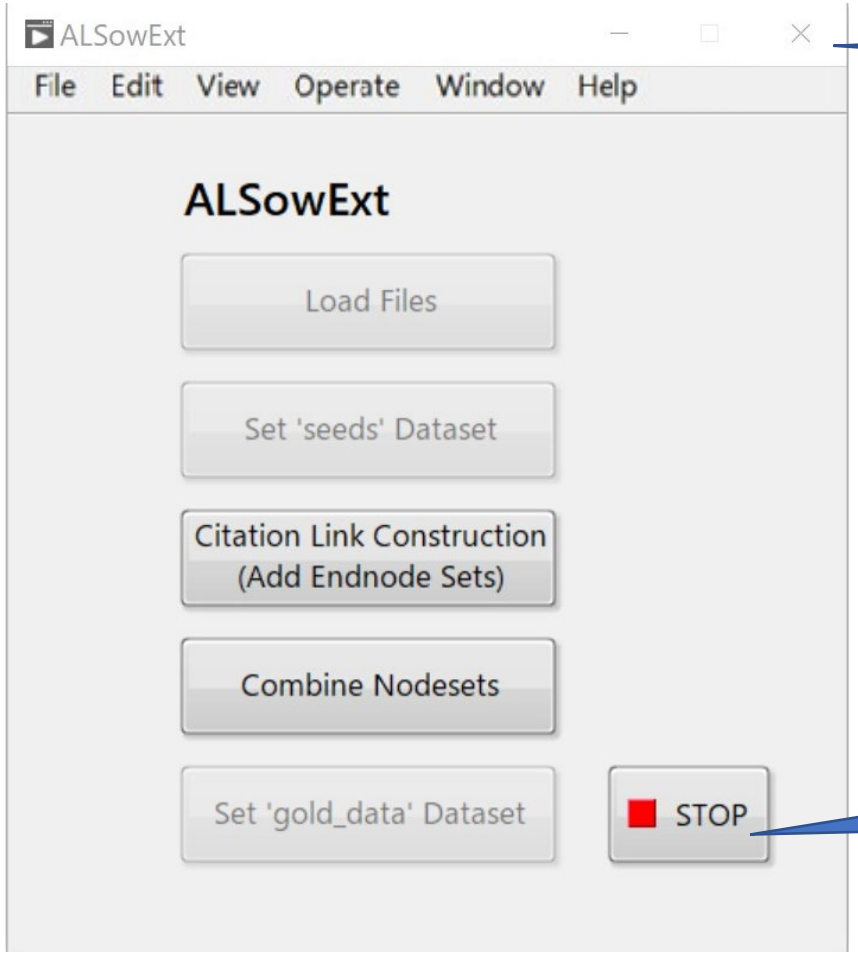




A sample of evaluation with gold data



Exit of ALSowExt



2

Click to close

1

Click to stop the application