This tutorial contains navigation buttons that enable you to move throughout the tutorial.

Please use the navigation buttons and not the page up/page down or arrow keys to navigate through the tutorials.

This is the 'Next' button. It takes you to the next frame or stop point.

This is the 'Previous' button. It takes you to the previous frame or stop point.

This is the 'Go to frame' button. It takes you to a specified frame.

This is the 'Go to URL' button. It takes you to a website link.

Press the 'Next' button below to start this tutorial.
Data Selection Panel

These are the main input data that will be used in further analysis unless you specify otherwise. Use the drop down menus to select the data and information you want to use in your analysis.

<table>
<thead>
<tr>
<th>Name of Data Matrix</th>
<th>Name of Variable Matrix</th>
<th>Name of Filename Matrix</th>
<th>Name of Totalcounts Matrix</th>
<th>Name of Samplenames Matrix</th>
</tr>
</thead>
<tbody>
<tr>
<td>data</td>
<td>exactmass</td>
<td>filenames</td>
<td>totalcounts</td>
<td>Select Samples</td>
</tr>
</tbody>
</table>

This tutorial will cover how to use the 'Delete Variables (Peaks) function.

NOTE: The original data is not changed when using this function. New variables are created which contain the modified data.
From the 'Data Pre-Processing' menu choose -> 'Delete Variables(Peaks)'

<table>
<thead>
<tr>
<th>Name of Data Matrix</th>
<th>Name of Variable Matrix</th>
<th>Name of Filename Matrix</th>
<th>Name of Totalcounts Matrix</th>
<th>Name of Samplenames Matrix</th>
</tr>
</thead>
<tbody>
<tr>
<td>data</td>
<td>exacmass</td>
<td>filenames</td>
<td>totalcounts</td>
<td>samplenames</td>
</tr>
<tr>
<td>exactmass</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ndataset</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>nommass</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>samplenames</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>totalcounts</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select Samples</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Data Selection Panel

These are the main input data that will be used in further analysis unless you specify otherwise. Use the drop down menus to select the data and information you want to use in your analysis.

Name of Data Matrix
Name of Variable Matrix
Name of Filename Matrix
Name of Totalcounts Matrix
Name of Samplenames Matrix

Delete Variables Panel

Make sure the proper data is selected within the 'Data Selection Panel'

This is particularly important when deleting peaks since removing peaks will affect the normalization of your data if you choose to normalize by the sum of selected peaks.

Output Names

Name for output
Variable names
Name for output
data matrix

Add Data to Selection Panel

Use the button above to add the output names to their respective list in the selection panel.

You can also import the data from the matlab workspace later if you wish.

Undo Delete Variables
Delete Variable
Close Panel
Data Selection Panel

These are the main input data that will be used for further analysis unless you specify otherwise. Use the drop down menus to select the data and information you want to use in your analysis.

<table>
<thead>
<tr>
<th>Name of Data Matrix</th>
<th>Name of Variable Matrix</th>
<th>Name of Filename Matrix</th>
<th>Name of Totalcounts Matrix</th>
<th>Name of Samples Matrix</th>
</tr>
</thead>
<tbody>
<tr>
<td>data</td>
<td>exactmass</td>
<td>filenames</td>
<td>totalcounts</td>
<td>Select Samples</td>
</tr>
</tbody>
</table>

Delete Variables Panel

Select the variables and datamatrix for the set of data you want to work with.

Current Variable List
Choose a peak to delete and press the delete button below.

Output Names

Add Data to Selection Panel
Use the button above to add the output names to their respective list in the selection panel. You can also import the data from the matlab workspace later if you wish.

Press the 'Load Selected Data' button.
Data Selection Panel

These are the main input data that will be used in further analysis unless you specify otherwise. Use the drop-down menus to select the data and information you want to use in your analysis.

<table>
<thead>
<tr>
<th>Name of Data Matrix</th>
<th>Name of Variable Matrix</th>
<th>Name of Filename Matrix</th>
<th>Name of Totalcounts Matrix</th>
<th>Name of Samplenames Matrix</th>
</tr>
</thead>
<tbody>
<tr>
<td>data</td>
<td>exactmass</td>
<td>filenames</td>
<td>totalcounts</td>
<td>Select Samples</td>
</tr>
</tbody>
</table>

Delete Variables Panel

Select the variables and datamatrix for the set of data you want to work with.

Load Selected Data

Current Variable List

Choose a peak to delete and press the delete button below.

11.9999
13.0080
14.0162
15.9963
17.0030
24.0008
25.0070
31.9726
32.9796
34.9757
36.0015
37.0086
38.0166
39.0242
45.9900
49.0089
51.0244
56.9807
58.9866

Output Names

Name for output Variable names:

A list of the peaks within the selected data set is shown here.

You can also import the data from the matlab workspace later if you wish.
Data Selection Panel

These are the main input data that will be used in further analysis unless you specify otherwise. Use the drop down menus to select the data and information you want to use in your analysis.

Name of Data Matrix
- Name
- exactmass
- filenames
- hommass
- samplenames
- totalcounts

Name of Variable Matrix
- data
- exactmass

Name of Filename Matrix
- filenames

Name of Totalcounts Matrix
- totalcounts

Name of Samples Matrix
- Select Samples

Delete Variables Panel

Select the variables and datamatrix for the set of data you want to work with.

Current Variable List

Choose a peak to delete and press the delete button below.

Output Names

Name for output Variable names
- 

Name for output data matrix
- 

Add Data to Selection Panel

Use the button above to add the output names to their respective list in the selection panel.

You can also import the data from the matlab workspace later if you wish.

Delete Variable
Data Selection Panel
These are the main input data that will be used in further analysis unless you specify otherwise. Use the drop down menus to select the data and information you want to use in your analysis.

- Name of Data Matrix: data
- Name of Variable Matrix: exactmass
- Name of Filename Matrix: filenames
- Name of Totalcounts Matrix: totalcounts
- Name of Samplenames Matrix: Select Samples

Delete Variables Panel
Select the variables and datamatrix for the set of data you want to work with.

Now click on a peak you want to remove from the list.

Current Variable List
Choose a peak to delete and press the delete button below

Output Names
- Name for output Variable names: newvariables
- Name for output data matrix: newdata

Add Data to Selection Panel
Use the button above to add the output names to their respective list in the selection panel.
You can also import the data from the matlab workspace later if you wish.
### Data Selection Panel

These are the main input data that will be used in further analysis unless you specify otherwise. Use the drop down menus to select the data and information you want to use in your analysis.

<table>
<thead>
<tr>
<th>Name of Data Matrix</th>
<th>Name of Variable Matrix</th>
<th>Name of Filename Matrix</th>
<th>Name of Totalcounts Matrix</th>
<th>Name of Samplenames Matrix</th>
</tr>
</thead>
<tbody>
<tr>
<td>data</td>
<td>exactmass</td>
<td>filenames</td>
<td>totalcounts</td>
<td>Select Samples</td>
</tr>
</tbody>
</table>

### Delete Variables Panel

Select the variables and datamatrix for the set of data you want to work with.

#### Current Variable List

Choose a peak to delete and press the delete button below.

<table>
<thead>
<tr>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.9999</td>
</tr>
<tr>
<td>13.0080</td>
</tr>
<tr>
<td>14.0162</td>
</tr>
<tr>
<td>15.9963</td>
</tr>
<tr>
<td>17.0030</td>
</tr>
<tr>
<td>18.0008</td>
</tr>
<tr>
<td>19.0003</td>
</tr>
<tr>
<td>20.0007</td>
</tr>
<tr>
<td>21.1726</td>
</tr>
<tr>
<td>32.9796</td>
</tr>
<tr>
<td>32.9796</td>
</tr>
<tr>
<td>34.9757</td>
</tr>
</tbody>
</table>

#### Output Names

- Name for output Variable names: newvariables
- Name for output data matrix: newdata

#### Add Data to Selection Panel

Use the button above to add the output names to their respective list in the selection panel.

You can also import the data from the matlab workspace later if you wish.

---

**And press the 'Delete Variable' button.**

- Load Selected Data
- Loaded Variables: exactmass
- Loaded Data: data

**Unde**

![Image of delete variable function](image-url)
Data Selection Panel

These are the main input data that will be used in further analysis unless you specify otherwise. Use the drop down menus to select the data and information you want to use in your analysis.

Name of Data Matrix: data
Name of Variable Matrix: exactmass
Name of Filename Matrix: filenames
Name of Totalcounts Matrix: totalcounts
Name of Samplenames Matrix: Select Samples

Delete Variables Panel

Select the variables and datamatrix for the set of data you want to work with.

The variable is deleted.

Loaded Variables: exactmass
Loaded Data: data

Current Variable List

Choose a peak to delete and press the delete button below:

13.0000
14.0162
15.9963
17.0030
24.0008
25.0078
31.9726
32.9796
34.9757
36.0015
37.0066
38.0166
39.0242
45.9900
49.0089
51.0244
56.9007
58.9966
61.9885

Output Names

Name for output Variable names: newvariables
Name for output data matrix: newdata

Add Data to Selection Panel

Use the button above to add the output names to their respective list in the selection panel.

You can also import the data from the matlab workspace later if you wish.
Data Selection Panel

These are the main input data that will be used in further analysis unless you specify otherwise. Use the drop down menus to select the data and information you want to use in your analysis.

<table>
<thead>
<tr>
<th>Name of Data Matrix</th>
<th>Name of Variable Matrix</th>
<th>Name of Filename Matrix</th>
<th>Name of Totalcounts Matrix</th>
<th>Name of Samplenames Matrix</th>
</tr>
</thead>
<tbody>
<tr>
<td>data</td>
<td>exactmass</td>
<td>filenames</td>
<td>totalcounts</td>
<td>Select Samples</td>
</tr>
</tbody>
</table>

Delete Variables Panel

Select the variables and datamatrix for the set of data you want to work with.

Current Variable List

Choose a peak to delete and press the delete button below.

Output Names

- Name for output Variable names: newvariables
- Name for output data matrix: newdata

Continuing to press the 'Delete Variable' button will continue to delete peaks from where you last selected.

Add Data to Selection Panel

Use the button above to add the output names to their respective list in the selection panel.

You can also import the data from the matlab workspace later if you wish.

Close Panel
Data Selection Panel

These are the main input data that will be used in further analysis unless you specify otherwise. Use the drop-down menus to select the data and information you want to use in your analysis.

- Name of Data Matrix: data
- Name of Variable Matrix: exactmass
- Name of Filename Matrix: filenames
- Name of Totalcounts Matrix: totalcounts
- Name of Samplenames Matrix: Select Samples

Delete Variables Panel

Select the variables and datamatrix for the set of data you want to work with.

Current Variable List

Choose a peak to delete and press the delete button below:

- 25.0070
- 31.9726
- 32.9796
- 34.9757
- 36.0015
- 37.0086
- 38.0166
- 39.0242
- 45.9900
- 49.0089
- 51.0244
- 56.9807
- 58.9966
- 61.9995
- 79.9577

Output Names

- Name for output Variable names: newvariables
- Name for output data matrix: newdata

Add Data to Selection Panel

Use the button above to add the output names to their respective list in the selection panel. You can also import the data from the matlab workspace later if you wish.

Undo Delete Variables

Use this button to undo your delete action.

If you make a mistake, you can press the 'Undo Delete Variables' button to restore the original data.

Close Panel
Data Selection Panel

These are the main input data that will be used in further analysis unless you specify otherwise. Use the drop down menus to select the data and information you want to use in your analysis.

Delete Variables Panel

Select the variables and datamatrix for the set of data you want to work with.

Current Variable List

Choose a peak to delete and press the delete button below.

Output Names

The data is restored and the list is populated with the original peak list.

Add Data to Selection Panel

Use the button above to add the output names to their respective list in the selection panel.

You can also import the data from the matlab workspace later if you wish.
Data Selection Panel

These are the main input data that will be used in further analysis unless you specify otherwise. Use the drop down menus to select the data and information you want to use in your analysis.

- Name of Data Matrix: data
- Name of Variable Matrix: exactmass
- Name of Filename Matrix: filenames
- Name of Totalcounts Matrix: totalcounts
- Name of Samplenames Matrix: Select Samples

Delete Variables Panel

Select the variables and datamatrix for the set of data you want to work with.

- Load Selected Data

Current Variable List

Choose a peak to delete and press the delete button below.

- 11.9999
- 13.0080
- 14.0162
- 15.9963
- 17.0030
- 24.0008
- 25.0078
- 31.9726
- 32.9796
- 34.9757
- 36.0015
- 37.0086
- 38.0166
- 39.0242
- 45.9900
- 49.0089
- 51.0244
- 56.9807
- 58.9866

Output Names

- Name for output: newvariables
- Name for output data matrix: newdata

You can then re-start your peak deletion wherever you want.

You can also import the data from the matlab workspace later if you wish.

- Delete Variable
- Close Panel
Data Selection Panel

These are the main input data that will be used in further analysis unless you specify otherwise. Use the drop down menus to select the data and information you want to use in your analysis.

Name of Data Matrix
- data

Name of Variable Matrix
- exactmass

Name of Filename Matrix
- filenames

Name of Totalcounts Matrix
- totalcounts

Name of Samplenames Matrix
- Select Samples

Delete Variables Panel

Select the variables and datamatrix for the set of data you want to work with.

Load Selected Data

Current Variable List
Choose a peak to delete and press the delete button below.

Output Names

Name for output Variable names
- newvariables

Name for output data matrix
- newdata

Loaded Variables: exactmass

Loaded Data: data

When you are done and want to load the new data into the spectragui, press the 'Add Data to Selection Panel' button.

Add Data to Selection Panel

Use the button to put the new data matrices into the names in the selection panel.

You can also import the data from the R, MATLAB, or Data Display panel later if you wish.
Data Selection Panel

These are the main input data that will be used in further analysis unless you specify otherwise. Use the drop down menus to select the data and information you want to use in your analysis.

Name of Data Matrix | Name of Variable Matrix | Name of Filename Matrix | Name of Totalcounts Matrix | Name of Samplenames Matrix
--- | --- | --- | --- | ---
data | oxactmass | filenames | totalcounts | Select Samples

Delete Variables Panel

The new data is loaded into the respective drop down menus.

Output Names

Name for output Variable names | newvariables
Name for output data matrix | newdata

Add Data to Selection Panel

Use the button above to add the output names to their respective list in the selection panel.

You can also import the data from the matlab workspace later if you wish.
Data Selection Panel

These are the main input data that will be used in further analysis unless you specify otherwise. Use the drop down menus to select the data and information you want to use in your analysis.

<table>
<thead>
<tr>
<th>Name of Data Matrix</th>
<th>Name of Variable Matrix</th>
<th>Name of Filename Matrix</th>
<th>Name of Totalcounts Matrix</th>
<th>Name of Samplenames Matrix</th>
</tr>
</thead>
<tbody>
<tr>
<td>data</td>
<td>exactmass</td>
<td>filenames</td>
<td>totalcounts</td>
<td>Select Samples</td>
</tr>
</tbody>
</table>

Select Variables
- exactmass
- nommass
- newvariables

Select the variables and datamatrices for the set of data you want to work with.

Load Selected Data

Loaded Variables: exactmass
Loaded Data: data

Delete Variables Panel

The new variable list will be appended to the bottom of the 'Variable Matrix' drop down menu.

Delete Variable

Close Panel
The new data matrix will be appended to the bottom of the 'Data Matrix' drop down menu.
Data Selection Panel

These are the main input data that will be used in further analysis unless you specify otherwise. Use the drop down menus to select the data and information you want to use in your analysis.

<table>
<thead>
<tr>
<th>Name of Data Matrix</th>
<th>Name of Variable Matrix</th>
<th>Name of Filename Matrix</th>
<th>Name of Totalcounts Matrix</th>
<th>Name of Samplenames Matrix</th>
</tr>
</thead>
<tbody>
<tr>
<td>newdata</td>
<td>newvariables</td>
<td>filenames</td>
<td>totalcounts</td>
<td>Select Samples</td>
</tr>
</tbody>
</table>

That's it for this tutorial.

Press the green button on the left to go back to the previous step. Press the button the right to go back to the beginning of the tutorial.