

### 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
Select Data	Select Variables	Select Filenames	Select Totalcounts	Select Samples

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.



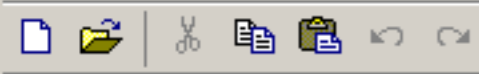
This is the 'Go to frame' button. It takes you to a specified frame.



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



Press the 'Next' button below to start this tutorial.



Workspace

- Name
- data
- exactmass
- filenames
- labels
- loads
- model
- ndatass
- nommass
- samplenames
- scores
- totalcounts
- variance

Command History

---%-- 10/5/10 10:04 A

- Plot Raw Data
- Make Multiple Raw Data Figures
- Plot Scores with Confidence Limit**
- Plot Loadings
- Label Loadings Plot

### Raw Data Selection Panel

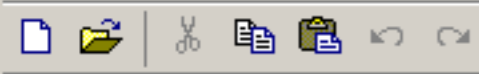
data that will be used in further analysis unless you specify otherwise. to select the data and information you want to use in your analysis.

Name of Data Matrix	Name of Variable Matrix	Name of Filename Matrix	Name of Totalcounts Matrix	Name of Samplenames Matrix
ndatass	exactmass	filenames	totalcounts	samplenames

This tutorial will cover creating scores plots with 95% confidence limits.

Choose 'Plot Scores with Confidence Limits' from the 'Data Display' Menu.

← →



Workspace

- Name
- data
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- nommass
- samplenames
- scores
- totalcounts
- variance

Command History

---%-- 10/5/10 10:04 A

### Raw 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:

### MVA Data Selection Panel

Name of Scores Matrix:  Name of Loadings Matrix:  Name of % Variance Matrix:  Name of Model Matrix:

### Plot Scores

Choose the appropriate data from the 'MVA Data Selection Panel'

← →

Scores:

Samples:

Variance:

X-Axis:

Y-Axis:

Confidence Limit:

Workspace

Name

- data
- exactmass
- filenames
- labels
- loads
- model
- ndatass
- nommass
- samplenames
- scores
- totalcounts
- variance

Current Directory Workspace

Command History

```

>> 10/5/10 10:04 A

```

### Raw 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:

### MVA Data Selection Panel

Name of Scores Matrix:  Name of Loadings Matrix:  Name of % Variance Matrix:  Name of Model Matrix:

### Plot Scores

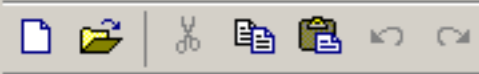
Load Selected Data

Press the 'Load Selected Data' button.

Scores:   
 Samples:   
 Variance:

X-Axis   
 Y-Axis

Confidence Limit  
 %



Workspace

Workspace panel showing a list of variables:

- data
- exactmass
- filenames
- labels
- loads
- model
- ndatass
- nommass
- samplenames
- scores
- totalcounts
- variance

Command History

Command History panel showing a single command:

```
---%-- 10/5/10 10:04 A
```

### Raw 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.

Raw Data Selection Panel controls:

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

### MVA Data Selection Panel

MVA Data Selection Panel controls:

- Name of Scores Matrix:
- Name of Loadings Matrix:
- Name of % Variance Matrix:
- Name of Model Matrix:

### Plot Scores

Load Selected Data

Plot Scores configuration:

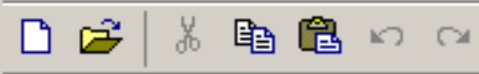
- Scores: **scores**
- Samples: **samplenames**
- Variance: **variance**

The data is loaded and is highlighted in red.

Axis selection controls:

- X-Axis:
- Y-Axis:

Confidence Limit



Workspace

Workspace

Name

- data
- exactmass
- filenames
- labels
- loads
- model
- ndatass
- nommass
- samplenames
- scores
- totalcounts
- variance

Current Directory Workspace

Command History

Command History

```

>> 10/5/10 10:04 A

```

### Raw 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:

### MVA Data Selection Panel

Name of Scores Matrix:  Name of Loadings Matrix:  Name of % Variance Matrix:  Name of Model Matrix:

### Plot Scores

Load Selected Data  
Load Selected Data

Scores: **scores**  
Samples: **samplenames**  
Variance: **variance**

X-Axis:   
Y-Axis:

1  
2  
3  
4  
5

Click on the values you want to use for the X and Y axis.  
In this case we will plot the PC 1 loadings (y-axis) vs the sample names (x-axis).

Confidence Limit

Plot Scores Save Scores Plot

Close Panel

**Workspace**

Name

- data
- exactmass
- filenames
- labels
- loads
- model
- ndatass
- nommass
- samplenames
- scores
- totalcounts
- variance

Current Directory Workspace

**Command History**

```

>> %-- 10/5/10 10:04 A

```

### Raw 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:

### MVA Data Selection Panel

Name of Scores Matrix:  Name of Loadings Matrix:  Name of % Variance Matrix:  Name of Model Matrix:

### Plot Scores

Load Selected Data

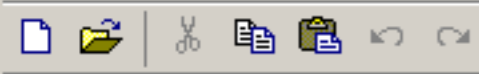
Scores: **scores**  
Samples: **samplenames**  
Variance: **variance**

X-Axis:  Y-Axis:

Confidence Limit:

Choose the 95% value from the drop down menu.

For now this is the only option since I'm not sure if other confidence limits are of interest.



Workspace

Name

- data
- exactmass
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- labels
- loads
- model
- ndatass
- nommass
- samplenames
- scores
- totalcounts
- variance

Command History

```

>> %-- 10/5/10 10:04 A

```

### Raw 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:

### MVA Data Selection Panel

Name of Scores Matrix:     Name of Loadings Matrix:     Name of % Variance Matrix:     Name of Model Matrix:

### Plot Scores

Load Selected Data

Scores: **scores**  
Samples: **samplenames**  
Variance: **variance**

X-Axis      Y-Axis

sample      1

1            2

2            3

3            4

4            5

5

Confidence Limit

Press the 'Plot Scores' button.



Workspace

Name

- data
- exactmass
- filenames
- labels
- loads
- model
- ndatass
- nommass
- samplenames
- scores
- totalcounts
- variance

Current Directory Workspace

Command History

```
---%-- 10/5/10 10:04 A
```

### Raw 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:

### MVA Data Selection Panel

Name of Scores Matrix:

Name of Loadings Matrix:

Name of % Variance Matrix:

Name of Model Matrix:

### Plot Scores

Load Selected Data  
Load Selected Data

Scores: **scores**

Samples: **samplenames**

Variance: **variance**

X-Axis:

Y-Axis:

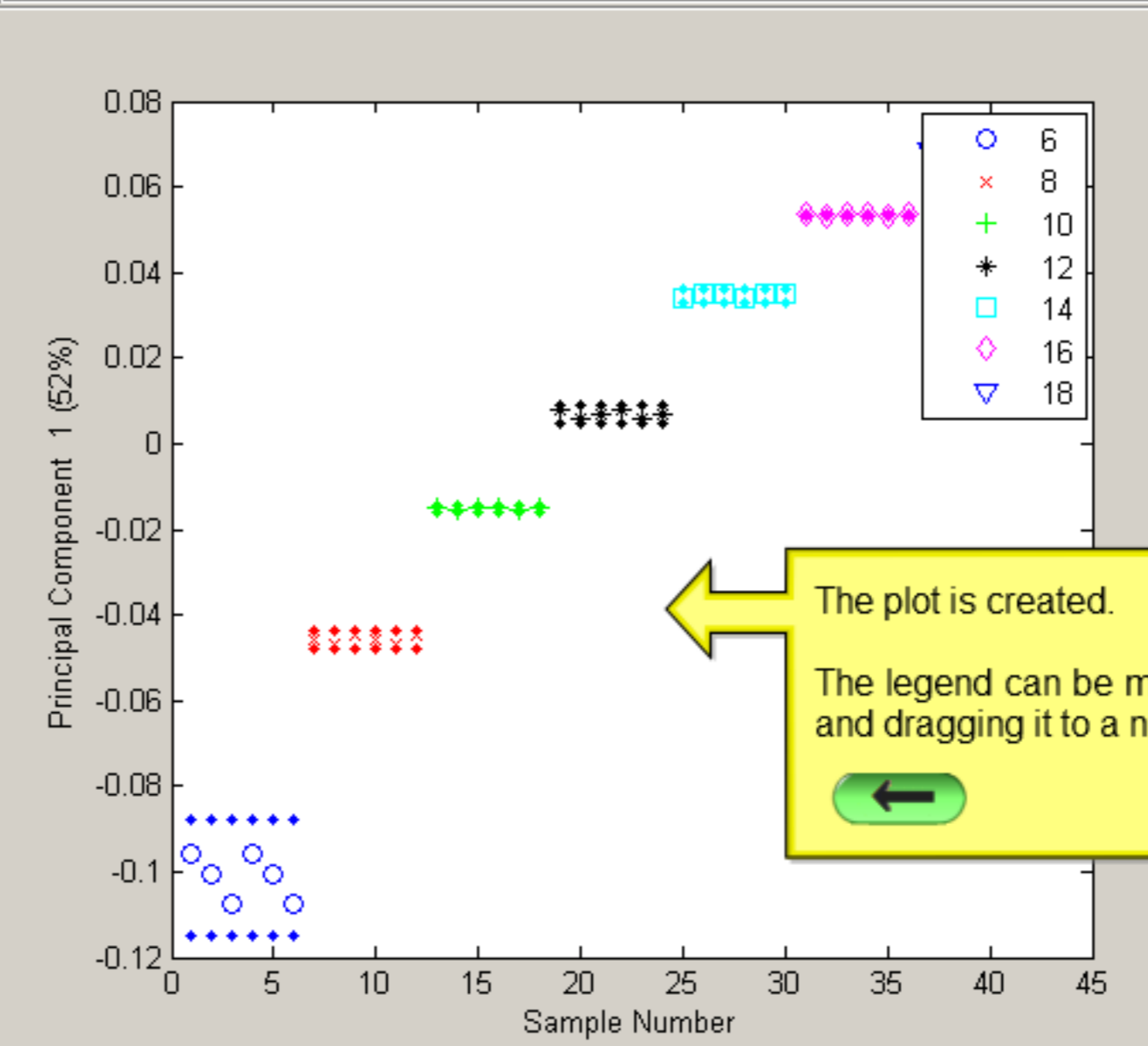
Confidence Limit:

### Export CL data from Scores Plot

This will export the confidence limits from plots of PCx vs sample number. The files will be saved into the chosed folder.

topscorelimit = mean+confidence limit

bottomscorelimit = mean-confidence limit



The plot is created.

The legend can be moved by clicking on it and dragging it to a new location.

Workspace

Name

- data
- exactmass
- filenames
- labels
- loads
- model
- ndatass
- nommass
- samplenames
- scores
- totalcounts
- variance

Current Directory Workspace

Command History

```

>> 10/5/10 10:04 A

```

### Raw 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:

### MVA Data Selection Panel

Name of Scores Matrix:  Name of Loadings Matrix:  Name of % Variance Matrix:  Name of Model Matrix:

### Plot Scores

Load Selected Data

Load Selected Data

Scores: **scores**  
 Samples: **samplenames**  
 Variance: **variance**

X-Axis:   
 Y-Axis:

Confidence Limit:

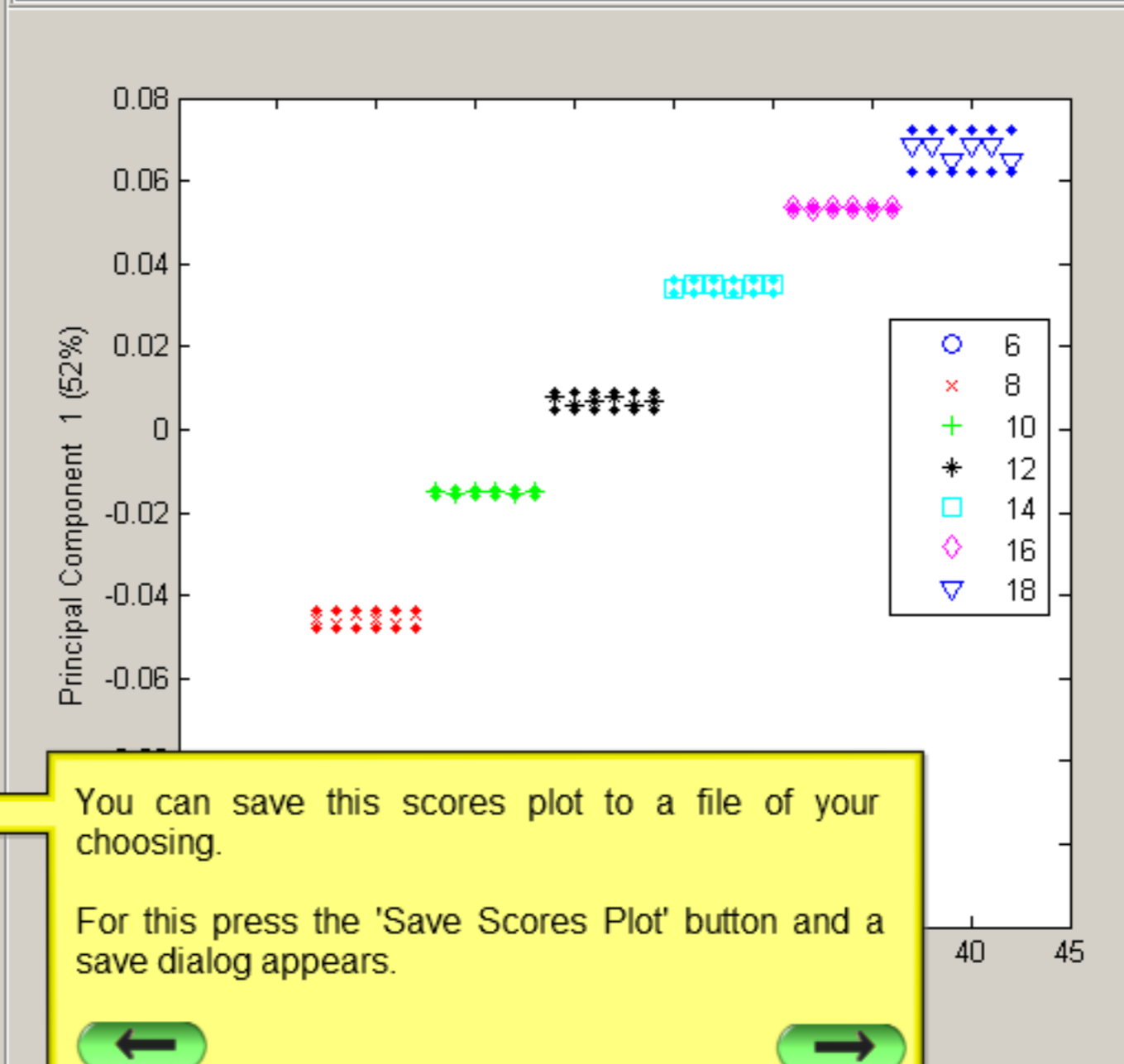
Plot Scores Save Scores Plot Close Panel

### Export CL data from Scores Plot

This will export the confidence limits from plots of PCx vs sample number. The files will be saved into the chosed folder.

topscorelimit = mean+confidence limit  
 bottomscorelimit = mean-confidence limit

Export X,Y Data



You can save this scores plot to a file of your choosing.

For this press the 'Save Scores Plot' button and a save dialog appears.

Shortcuts How to Add What

**Workspace**

Name

- data
- exactmass
- filenames
- labels
- loads
- model
- ndatass
- nommass
- samplenames
- scores
- totalcounts
- variance

My Recent Documents

Desktop

My Documents

My Computer

My Network Places

Current Directory Workspace

**Command History**

10/5/10 10:04

Save in: work

25micronScan3micronfeatures.jpg

File name: default

Save as type: jpeg (\*.jpg)

panel

analysis unless you specify otherwise.  
tion you want to use in your analysis.

Name of Totalcounts Matrix: totalcounts

Name of Samplenames Matrix: samplenames

Name of Model Matrix: model

plots saved

X,Y Data

You can choose where to save the file and give it whatever name you want.

You can choose from several graphic formats from the 'Save as type' drop down menu.

Samples: samplenames

Variance: variance

X-Axis: sample

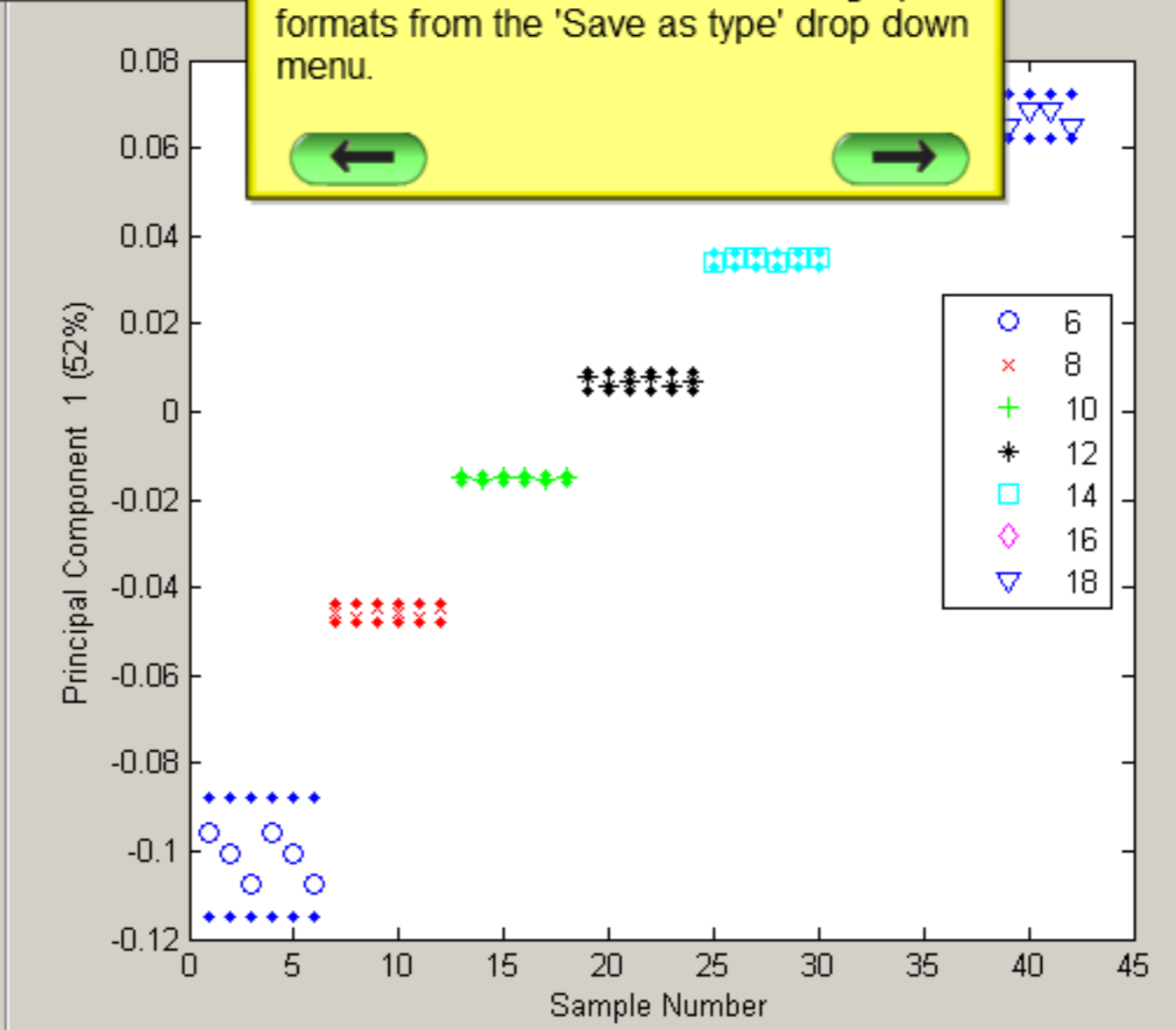
Y-Axis: 1

Confidence Limit: 95

Plot Scores

Save Scores Plot

Close Panel



Shortcuts How to Add What

**Workspace**

Name

- data
- exactmass
- filenames
- labels
- loads
- model
- ndatass
- nommass
- samplenames
- scores
- totalcounts
- variance

My Recent Documents

Desktop

My Documents

My Computer

My Network Places

Current Directory Workspace

**Command History**

10/5/10 10:04

Save in: work

25micronScan3micronfeatures.jpg

File name: scoresplot

Save as type: jpeg (\*.jpg)

Save Cancel

panel

analysis unless you specify otherwise.  
tion you want to use in your analysis.

Name of Totalcounts Matrix: totalcounts

Name of Samplenames Matrix: samplenames

Name of Model Matrix: model

plots saved

Export Y Y Data

Press 'Save' to save the plot.

Samples: samplenames

Variance: variance

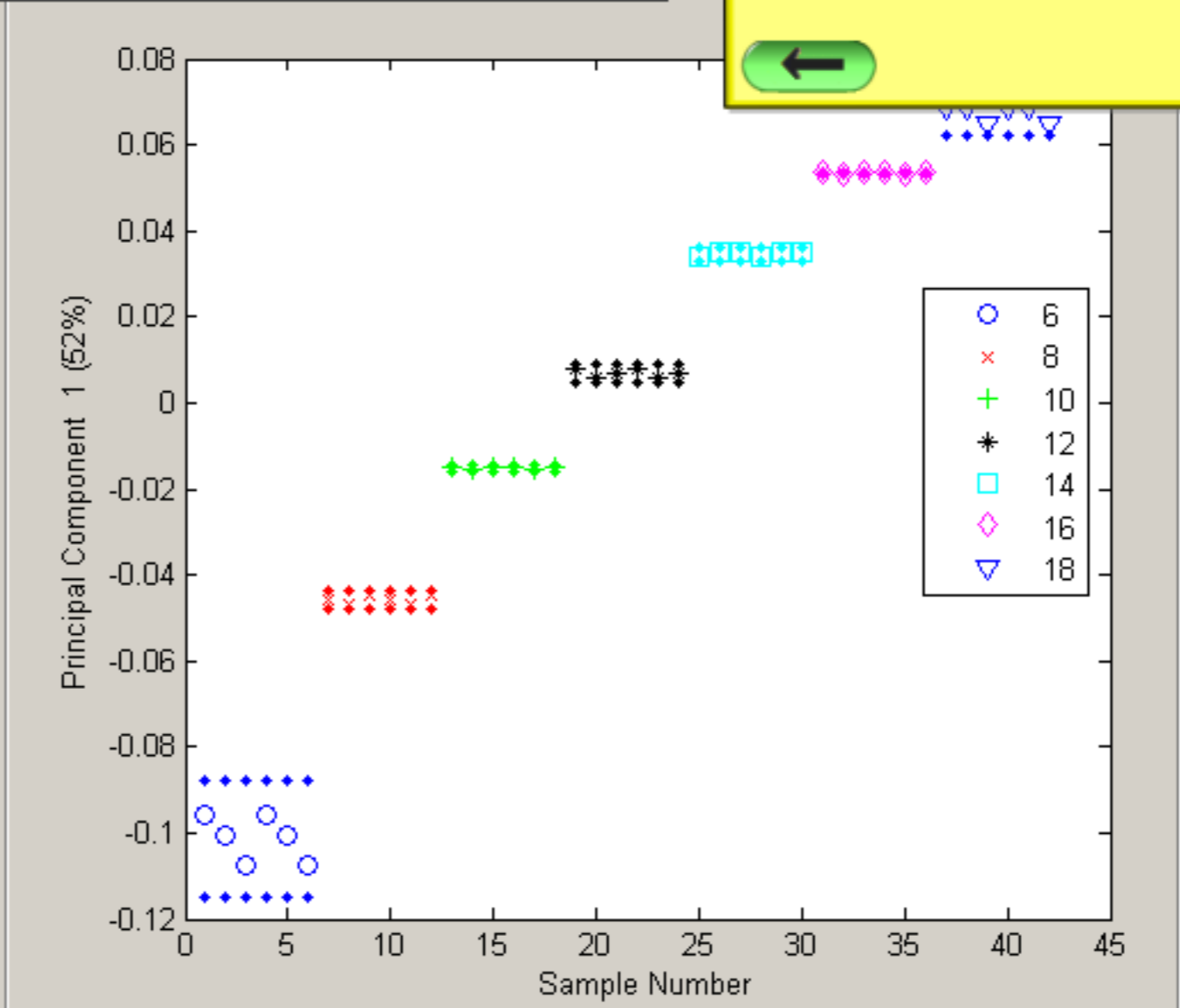
X-Axis: sample

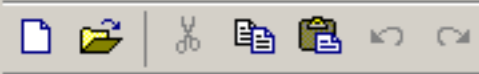
Y-Axis: 1

Confidence Limit: 95

Plot Scores Save Scores Plot

Close Panel





Shortcuts How to Add What

**Workspace**

Name

- data
- exactmass
- filenames
- labels
- loads
- model
- ndatass
- nommass
- samplenames
- scores
- totalcounts
- variance

Current Directory Workspace

**Command History**

```

>> 10/5/10 10:04 A

```

### Raw 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:

### MVA Data Selection Panel

Name of Scores Matrix:  Name of Loadings Matrix:  Name of % Variance Matrix:  Name of Model Matrix:

### Plot Scores

Load Selected Data

Load Selected Data

Scores: **scores**  
 Samples: **samplenames**  
 Variance: **variance**

X-Axis:   
 Y-Axis:   
 2  
 3  
 4  
 5

Confidence Limit:

Plot Scores Save Scores Plot

Close Panel

### Export CL data from Scores Plot

This will export the confidence limits from plots of PCx vs sample number. The files will be saved into the chosed folder.

topscorelimit = mean+confidence limit  
 bottomscorelimit = mean-confidence limit

Export X,Y Data

You can also save the confidence limit data to a text file so you can plot it in your favorite data plotting program.

For this press the 'Export X,Y Data' button and choose where you want to save the data.

Principal Component 1

Sample Number

- 6
- × 8
- + 10
- \* 12
- 14
- ◇ 16
- ▽ 18

Workspace

- data
- exactmass
- filenames
- labels
- loads
- model
- ndatass
- nommass
- samplenames
- scores
- totalcounts
- variance

Address: C:\temp

Name	Size	Type	Date Modified
CoolPlayer219_Bin.zip	264 KB	Compressed (zippe...)	9/28/2010 11:45 AM
coolplayer.exe	496 KB	Application	6/1/2008 1:38 PM
coolplayer.ini	2 KB	Configuration Settings	9/28/2010 4:29 PM
default.m3u	29 KB	M3U file	9/28/2010 4:29 PM
minusoutputscorelimits.txt	1 KB	Text Document	10/5/2010 1:49 PM
plusoutputscorelimits.txt	1 KB	Text Document	10/5/2010 1:49 PM
removable.m	B	M3U file	9/28/2010 11:58 AM

Folders: backup\_2010\_07\_13, backup\_2010\_07\_21, backup\_2010\_08\_03\_presparse, backup\_2010\_08\_10, backup\_2010\_09\_01, backup\_2010\_09\_02, backup\_2010\_10\_01\_NBVersion, beta\_2010\_02\_04\_good, beta\_2010\_02\_12\_good, Tutorial, Spe, zcorrec, zcorrec, zcorrec, zcorrec, OldImaging, Python, sfgplotting, zcorrector, sub-gui.zip, OthersCode, Papers, PapersToReview, SARC, Software, Teaching, testingfiles, WorkingData, openclipart, Program Files, protein\_analysis, Python26, Python27, runspec, SFSCHLR, stage positions, temp, Tofdata, TOFPAK, Tofsims, WINDOWS

Type: Text Document  
Date Modified: 10/5/2010 1:49 PM  
Size: 43 bytes

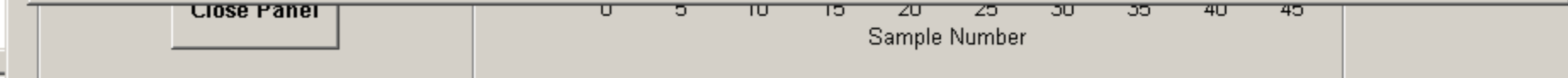
The data is saved in the directory you specified.

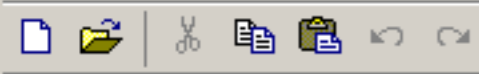
NOTE: this is the confidence limit data. The scores data is exported using the 'Export MVA Data' option from the 'MVA' menu.

Command History

```

>> %-- 10/5/10 10:04 A
  
```





Workspace

Workspace panel showing a list of variables:

- data
- exactmass
- filenames
- labels
- loads
- model
- ndatass
- nommass
- samplenames
- scores
- totalcounts
- variance

Command History

Command History panel showing a single command:

```
---%-- 10/5/10 10:04 A
```

### Raw 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.

Raw Data Selection Panel controls:

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

### MVA Data Selection Panel

MVA Data Selection Panel controls:

- Name of Scores Matrix:
- Name of Loadings Matrix:
- Name of % Variance Matrix:
- Name of Model Matrix:

### Plot Scores

Plot Scores controls:

- Load Selected Data
- Load Selected Data

Plot Scores configuration:

- Scores: **scores**
- Samples: **samplenames**
- Variance: **variance**

Plot Scores axes:

- X-Axis:
- Y-Axis:

Plot Scores confidence limit:

- Confidence Limit:

Plot Scores buttons:

- Plot Scores
- Save Scores Plot

Plot Scores close button:

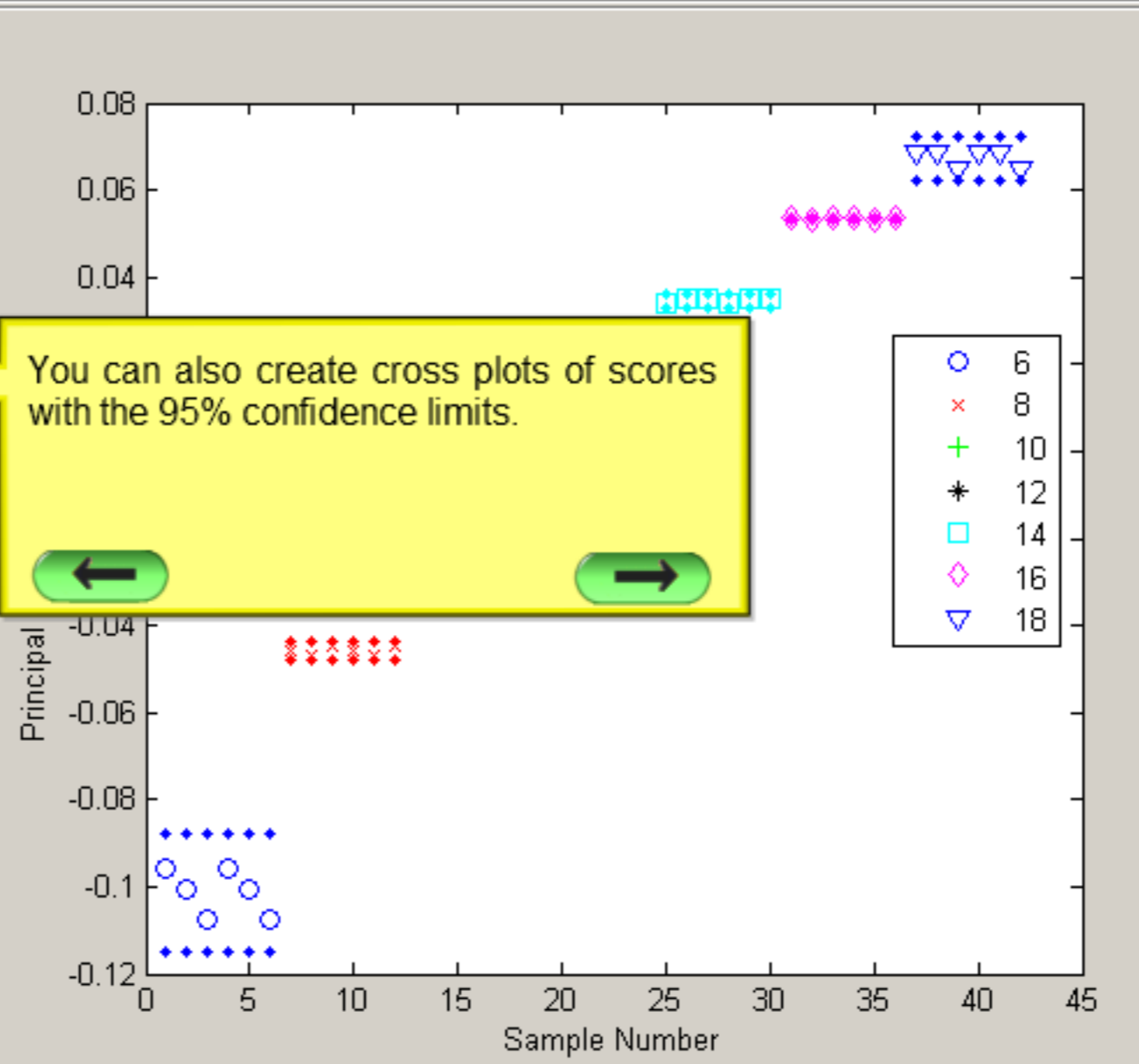
- Close Panel

### Export CL data from Scores Plot

This will export the confidence limits from plots of PCx vs sample number. The files will be saved into the chosed folder.

topscorelimit = mean+confidence limit  
bottomscorelimit = mean-confidence limit

Export X,Y Data



You can also create cross plots of scores with the 95% confidence limits.

Workspace

Name

- data
- exactmass
- filenames
- labels
- loads
- model
- ndatass
- nommass
- samplenames
- scores
- totalcounts
- variance

Current Directory Workspace

Command History

```

>> 10/5/10 10:04 A
  
```

### Raw 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:

### MVA Data Selection Panel

Name of Scores Matrix:  Name of Loadings Matrix:  Name of % Variance Matrix:  Name of Model Matrix:

### Plot Scores

Load Selected Data

Load Selected Data

Scores: **scores**

Samples: **samplenames**

Variance: **variance**

X-Axis:

Y-Axis:

1  
2  
3  
4  
5

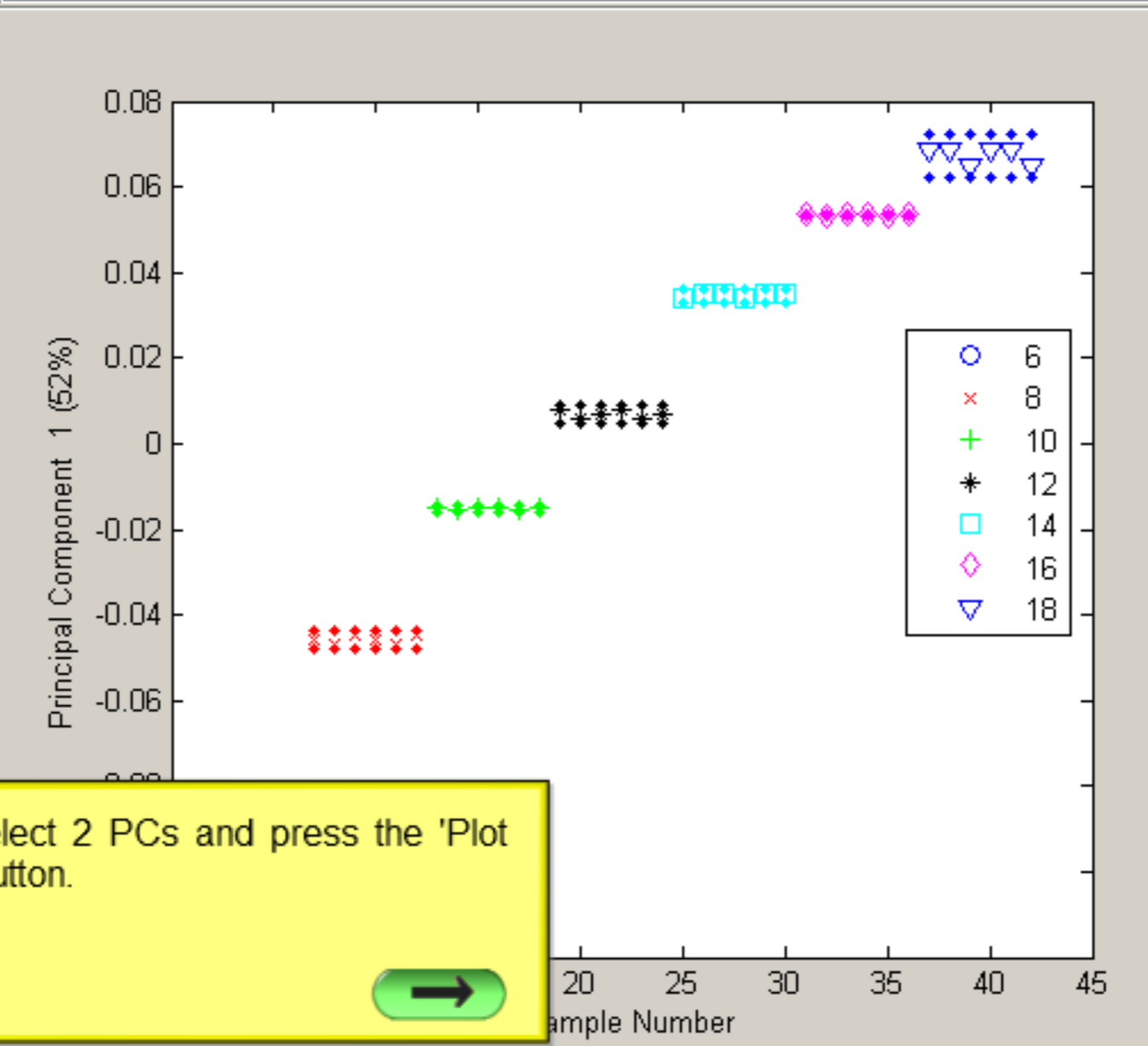
Confidence Limit

### Export CL data from Scores Plot

This will export the confidence limits from plots of PCx vs sample number. The files will be saved into the chosed folder.

topscorelimit = mean+confidence limit

bottomscorelimit = mean-confidence limit



Simply select 2 PCs and press the 'Plot Scores' button.



Workspace

Name

- Xdata
- Ydata
- data
- exactmass
- filenames
- labels
- loads
- model
- ndatass
- nommass
- samplenames
- scores
- totalcounts
- variance

Current Directory Workspace

Command History

```

>> 10/5/10 10:04
  
```

### Raw Data Selection Panel

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

### MVA Data Selection Panel

Name of Scores Matrix:  Name of Loadings Matrix:  Name of % Variance Matrix:  Name of Model Matrix:

### Plot Scores

Load Selected

Load Selected

Scores:

Samples:

Variance:

The plot is updated here as before.

The plot can be saved as shown before.

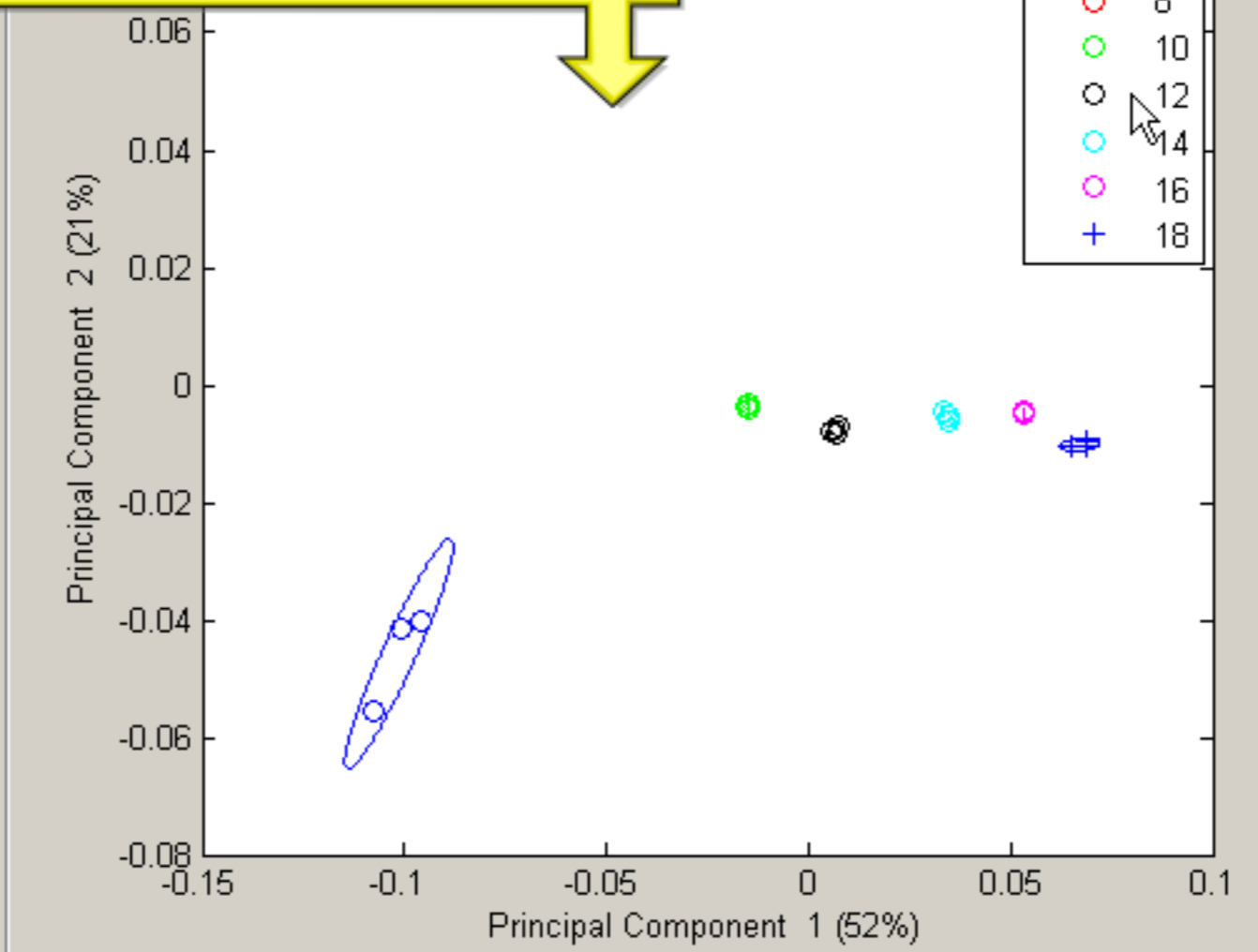
In the case of a cross plot of 2 pcs, the x,y scores data and x,y confidence limit data are saved to files when you press the 'Export X,Y Data' button.



X-Axis:

Y-Axis:

Confidence Limit:



### Export Scores Plot

and confidence

actory.

amples

amples

limits

limits

### 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 ndatat	Name of Variable Matrix exactmass	Name of Filename Matrix filenames	Name of Totalcounts Matrix totalcounts	Name of Samplenames Matrix samplenames
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### MVA Data Selection Panel

Name of Scores Matrix scores	Name of Loadings Matrix loads	Name of % Variance Matrix var	Name of Model Matrix model
---------------------------------	----------------------------------	----------------------------------	-------------------------------

### Plot Scores

Load Selected Data

Load Selected Data

Scores: scores  
Samples: samplenames  
Variance: var

X-Axis

Y-Axis

sample	1
1	2
2	3
3	4
4	

Confidence Limit

95

Plot Scores

Save Scores Plot

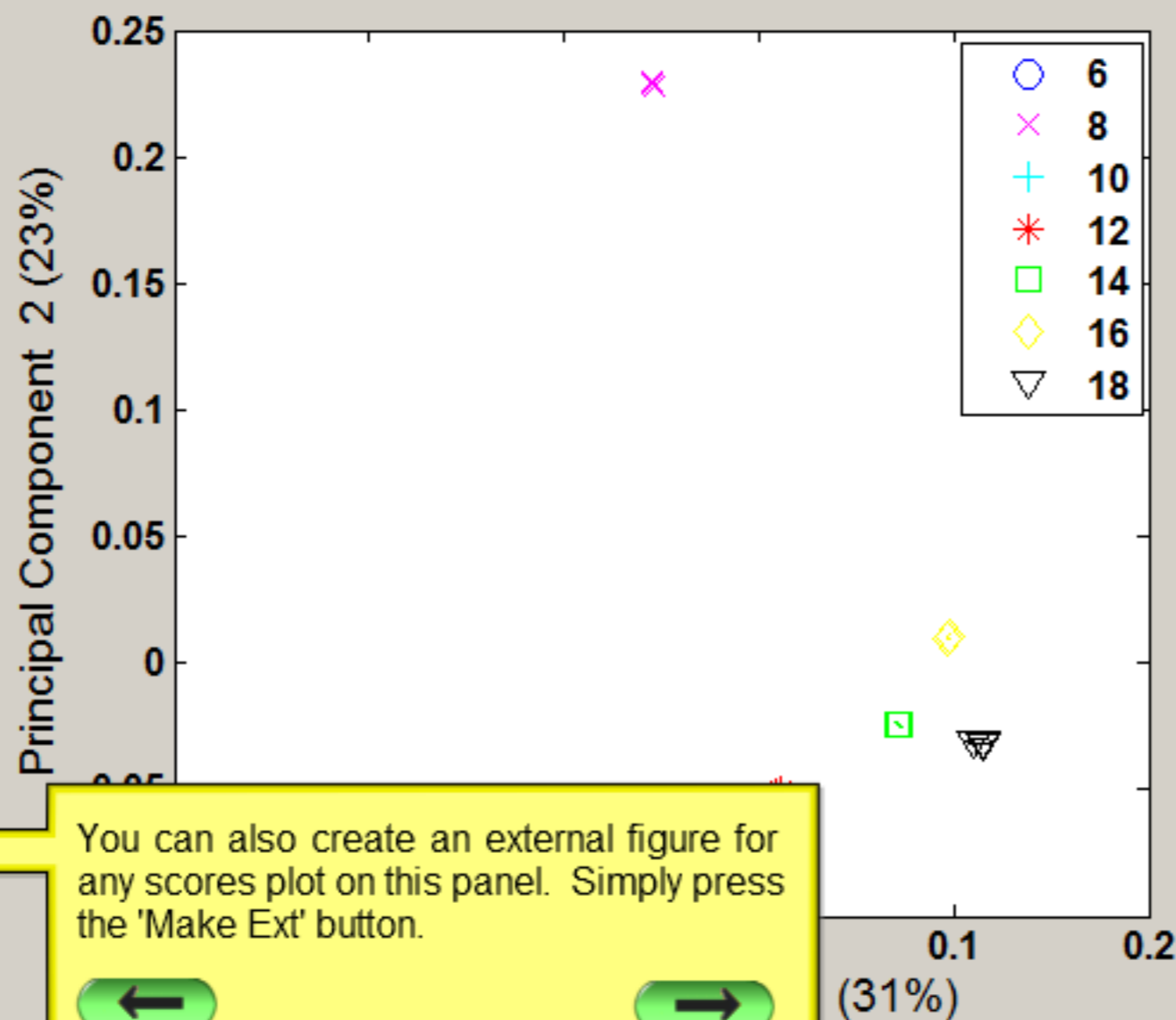
Make Ext

Close Panel

### Export X,Y data from Scores Plot

This will export the X,Y data for the data points and confidence limits into 4 files within the chosen directory.  
xsample data = x coordinates for samples  
ysample data = y coordinates for samples  
xcldata = x coordinates for confidence limits  
ycldata = y coordinates for confidence limits

Export X,Y Data



You can also create an external figure for any scores plot on this panel. Simply press the 'Make Ext' 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.

Name of Data Matrix

ndatat

Name of Samplenames Matrix

samplenames

Name of Scores Matrix

scores

### Plot Score

Load Selected D

Load Selected D

Scores: scores  
Samples: samplename  
Variance: var

X-Axis Y

sample

- 1
- 2
- 3
- 4

- 1
- 2
- 3
- 4

Confidence Limit

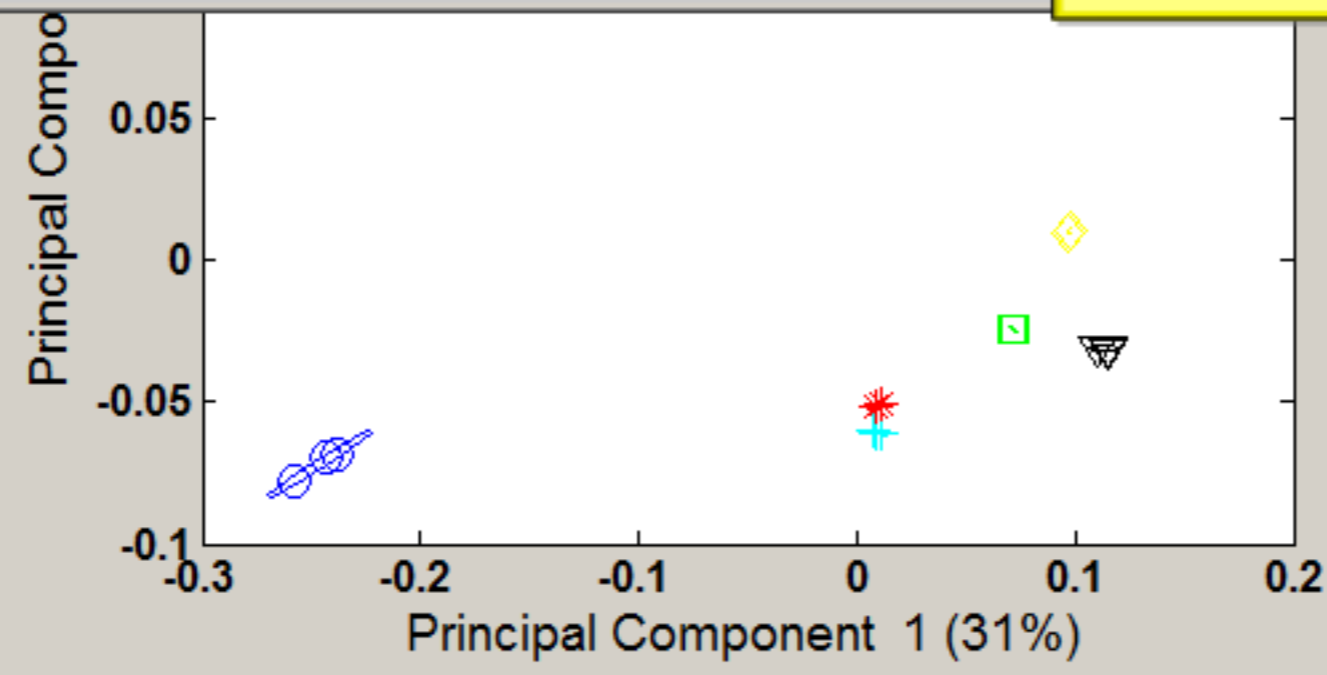
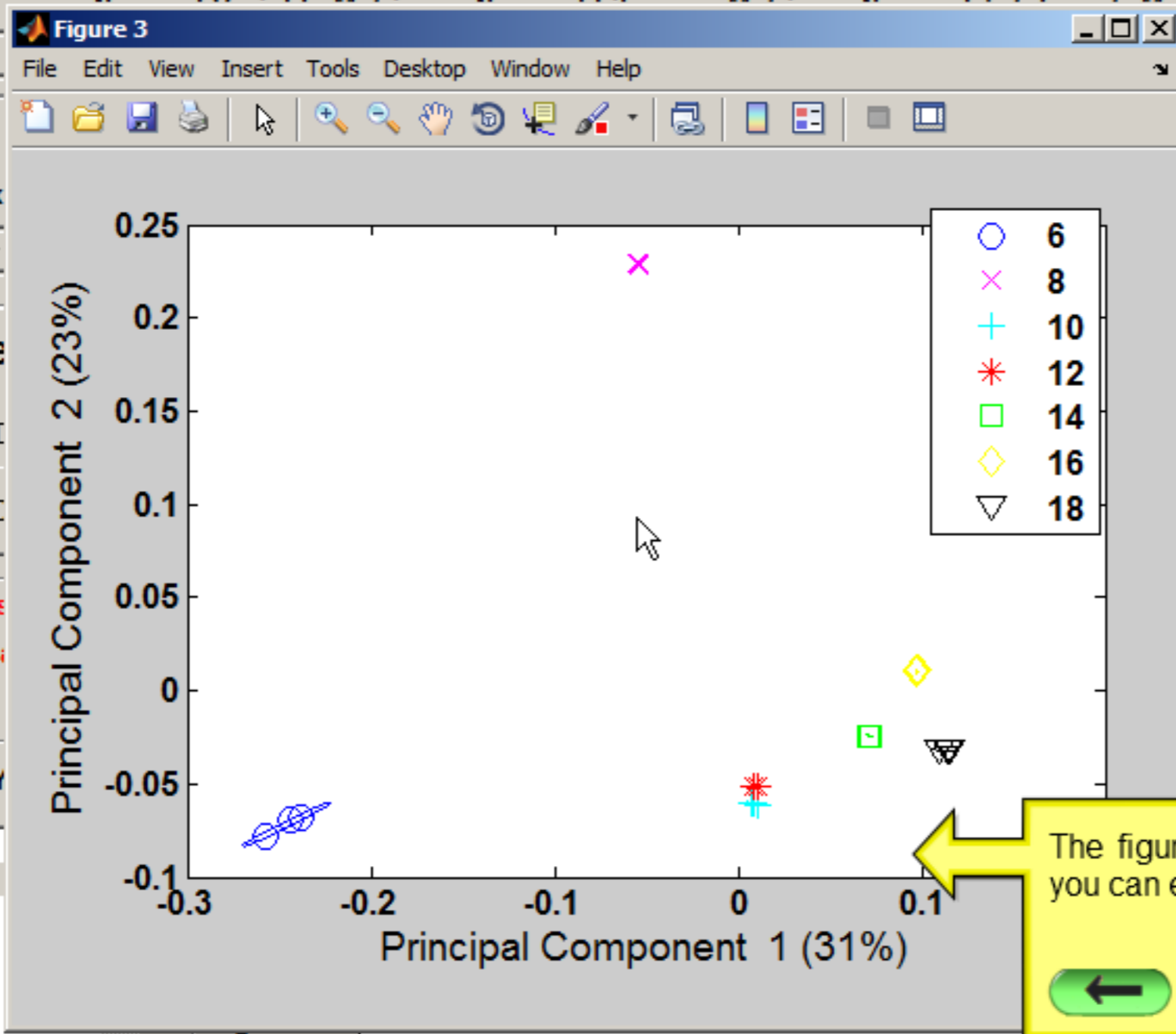
95

Plot Scores

Save Scores Plot

Make Ext

Close Panel





**Workspace**

Name

- data
- exactmass
- filenames
- labels
- nommass
- totalcounts

Current Directory

**Command History**

```
>> spe
>>
```

### Raw Data Selection Panel

These are the main input data that will be used in further analysis unless you specify otherwise

Name of Data Matrix	Name of Variable Matrix	Name of Filename Matrix	Name of Totalcounts Matrix	Name of Samplenames Matrix
Select Data	Select Variables	Select Filenames	Select Totalcounts	Select Samples

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.

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