

Data Selection Panel

Name of Image Matrix

Select Data ...

Name of Variable Matrix

Select Variables ...

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

Name of Image Matrix

imagedata_dan01

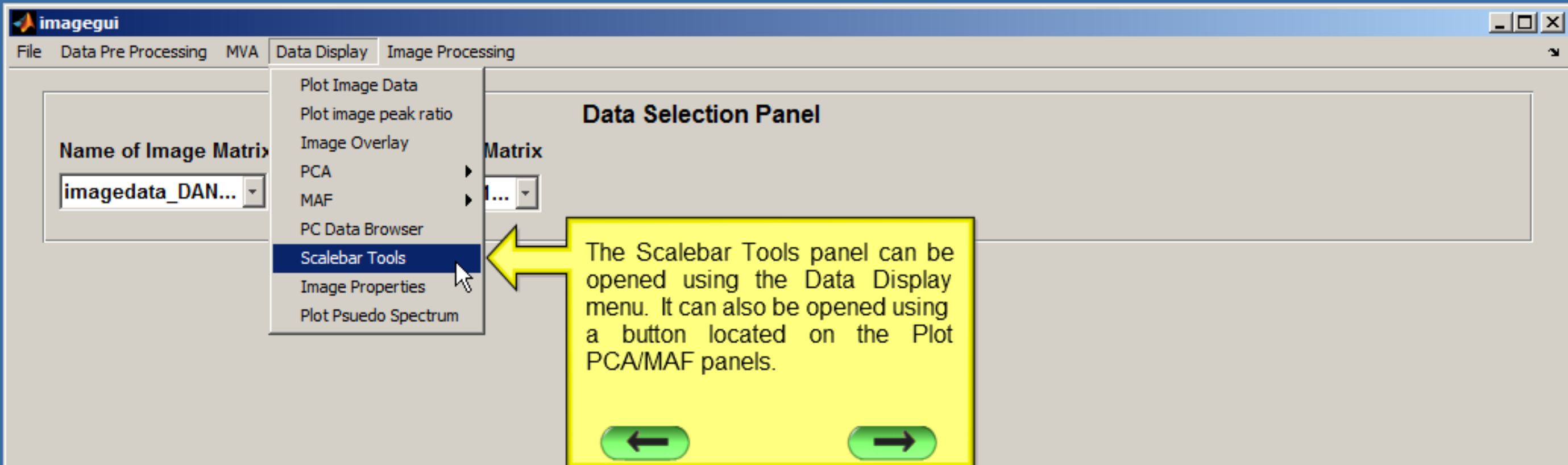
Name of Variable Matrix

exactmass_dan01

This tutorial will demonstrate the Scalebar Tool function.

The Scalebar Tools can be used with images generated using the Plot Image Data panel, Plot PCA Scores panel, Plot MAF Scores panel, and the Image Overlay panel.





Data Selection Panel

Name of Image Matrix

imagedata_DAN...

Name of Variable Matrix

exactmass_DAN01...

Values can be entered in the boxes below manually, or one can use the 'Show Image Size' button.

Before pressing the button, we must first enter the correct image size in microns into the Image Properties panel.

Let's do that now...



Scalebar Maker

Show Image Size

Image size (pixels)

X

Y

Image size (microns)

X

Y

Scalebar location

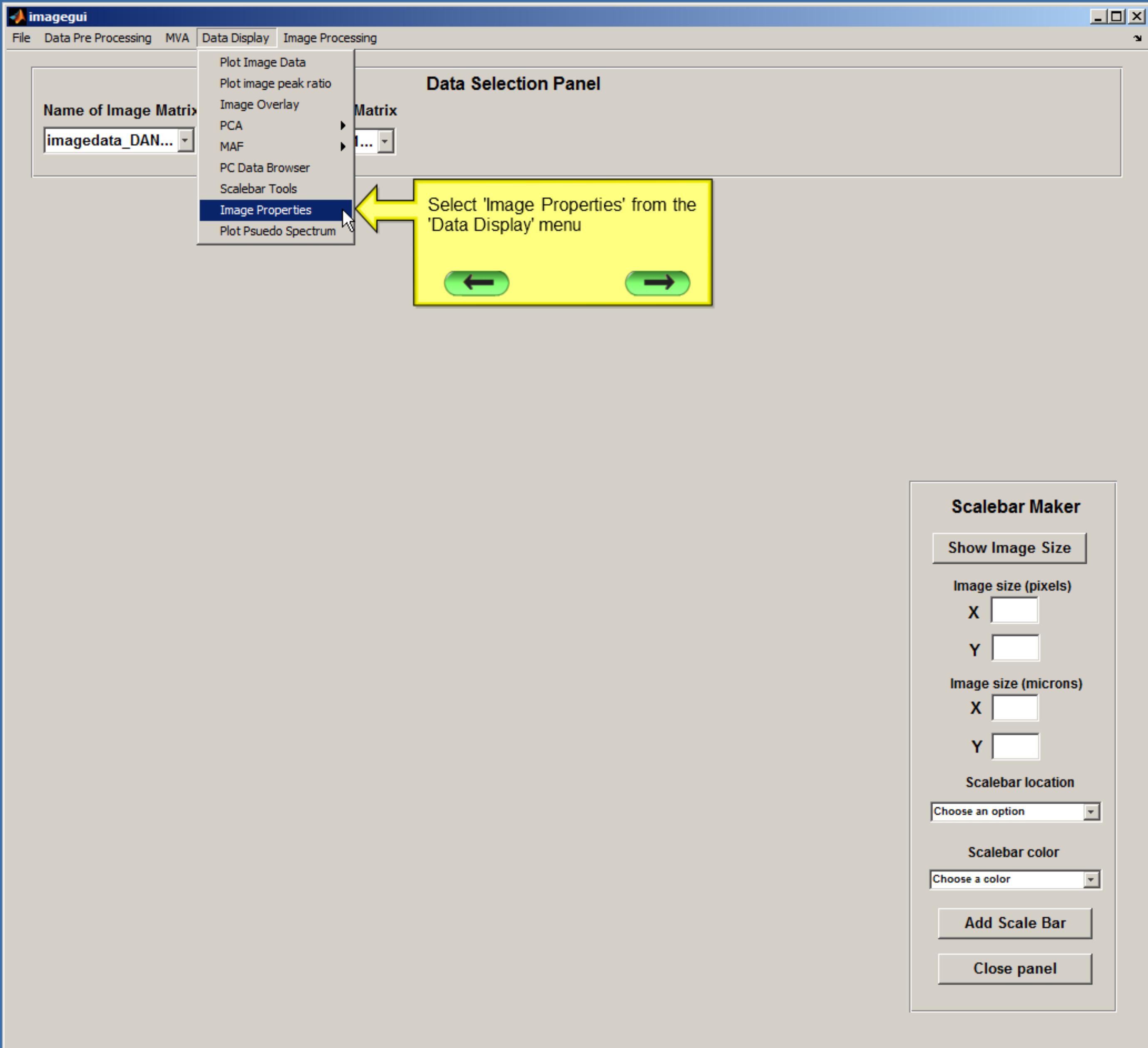
Choose an option

Scalebar color

Choose a color

Add Scale Bar

Close panel



Name of Image Matrix

imagedata_DAN...

- Plot Image Data
- Plot image peak ratio
- Image Overlay
- PCA
- MAF
- PC Data Browser
- Scalebar Tools
- Image Properties**
- Plot Psuedo Spectrum

Data Selection Panel

Matrix

1...

Select 'Image Properties' from the
'Data Display' menu



Scalebar Maker

Show Image Size

Image size (pixels)

X

Y

Image size (microns)

X

Y

Scalebar location

Choose an option

Scalebar color

Choose a color

Add Scale Bar

Close panel

Data Selection Panel

Name of Image Matrix

imagedata_DAN...

Name of Variable Matrix

exactmass_DAN01...

Now press the 'Show Image Size' button.



Scalebar Maker

Show Image Size

Image size (pixels)

X

Y

Image size (microns)

X

Y

Scalebar location

Choose an option

Scalebar color

Choose a color

Add Scale Bar

Close panel

Data Selection Panel

Name of Image Matrix

imagedata_DAN...

Name of Variable Matrix

exactmass_DAN01...

The correct image sizes are entered in the respective boxes.

Scalebar Maker

Show Image Size

Image size (pixels)

X 256

Y 256

Image size (microns)

X 100

Y 100

Scalebar location

Choose an option

Scalebar color

Choose a color

Add Scale Bar

Close panel

Data Selection Panel

Name of Image Matrix

imagedata_DAN...

Name of Variable Matrix

exactmass_DAN01...

Scalebar Maker

Show Image Size

Image size (pixels)

X 256

Y 256

Image size (microns)

X 100

Y 100

Scalebar location

Choose an option
Choose an option
Top Right
Top Left
Bottom Right
Bottom Left

Add Scale Bar

Close panel

This menu allows the user to choose where you want the scale bar located



Data Selection Panel

Name of Image Matrix

imagedata_DAN...

Name of Variable Matrix

exactmass_DAN01...

Scalebar Maker

Show Image Size

Image size (pixels)

X 256

Y 256

Image size (microns)

X 100

Y 100

Scalebar location

Choose an option

Scalebar color

Choose a color

Choose a color

Blue

Green

Red

Cyan

Magenta

Yellow

Black

This menu allows the user to choose a color for the scalebar. It is best to choose a color that will contrast well with the image.



Data Selection Panel

Name of Image Matrix

imagedata_DAN...

Name of Variable Matrix

exactmass_DAN01...

Scalebar Maker

Show Image Size

Image size (pixels)

X 256

Y 256

Image size (microns)

X 100

Y 100

Scalebar location

Choose an option

Scalebar color

Choose a color

Add Scale Bar

Close panel

This button will add the scale bar to the main image on the given panel.



Name of Image Matrix

imagedata_DAN...

- Plot Image Data
- Plot image peak ratio
- Image Overlay
- PCA
- MAF
- PC Data Browser
- Scalebar Tools**
- Image Properties
- Plot Psuedo Spectrum

Load Sel

Image: imagedata_DAN01

Variables exactmass_DAN01

Variable List

15.9971
25.0051
26.0054
31.9732
32.9727
34.9663
42.0052
58.9992
63.9539
71.0156
79.9478
96.9589
104.959
152.948
196.926
228.915
249.099

Variables to Plot

Choose display mode

Add to Plot

Reset Plot

Name for Combined Selected Variable Image

Save Combined Variable Image

Close Panel

Matrix

1...

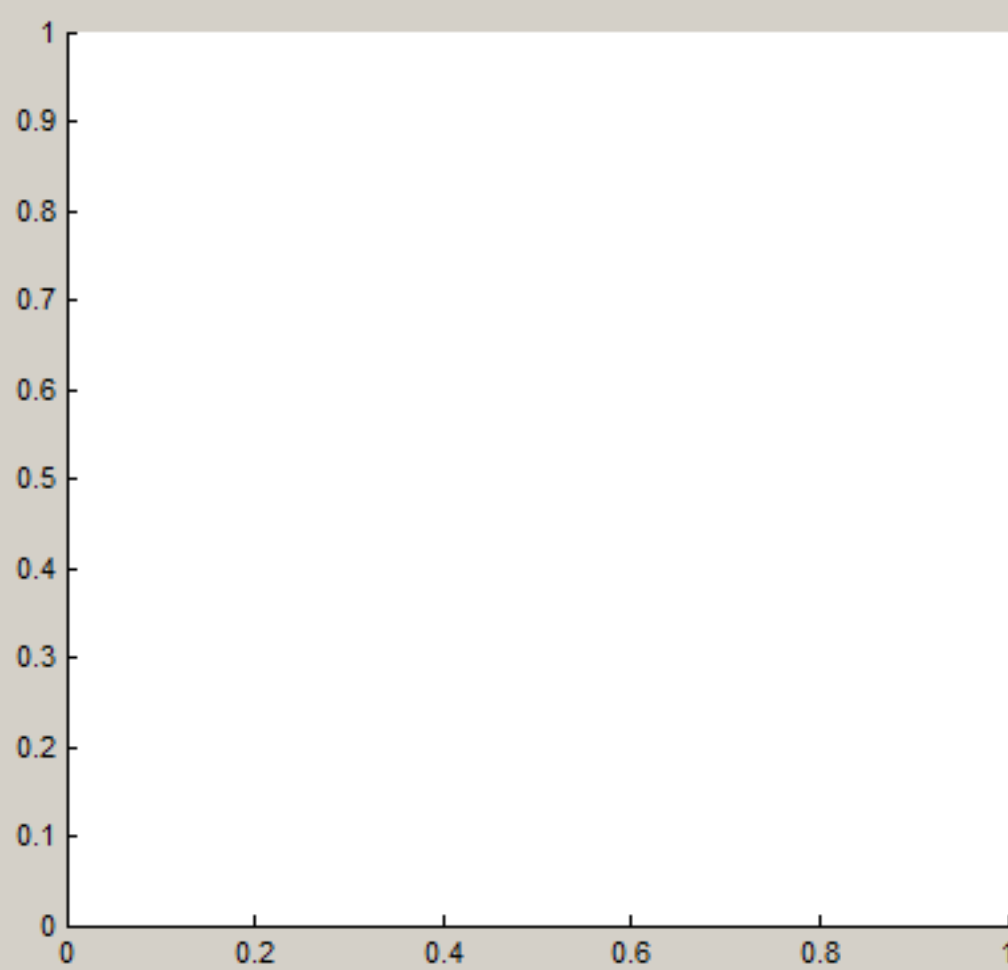
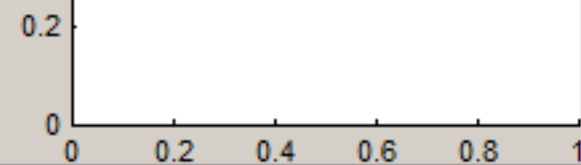
Now we will look at how to access the Scalebar Tool from various other panels.

From the Plot Image Data panel, open the Scalebar Tools using the Data Display menu.



Peaks

Browse all Peak Images



Create ext Figure

Save Plot to File

Data Selection Panel

Name of Image Matrix

Name of Variable Matrix

imagedata_DAN...

exactmass_DAN01...

Load Selected Data

Image: **imagedata_DAN01**

Variables **exactmass_DAN01**

Variable List

Variables to Plot

15.9971
25.0051
26.0054
31.9732
32.9727
34.9663
42.0052
58.9992
63.9539
71.0156
79.9478
96.9589
104.959
152.948
196.926
228.915
249.099

Choose display mode

Add to Plot

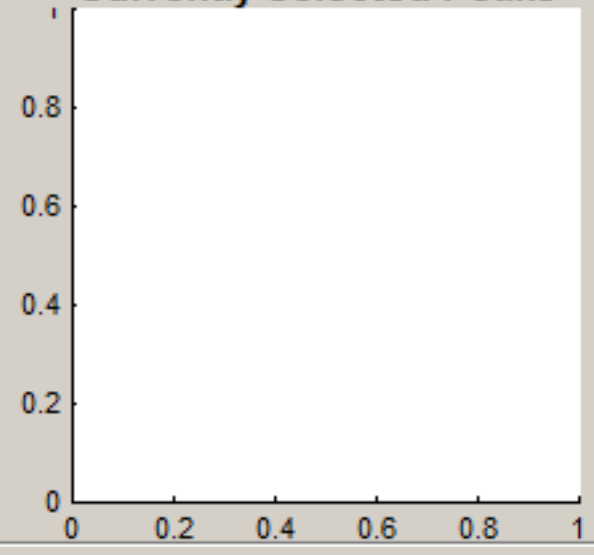
Reset Plot

Name for Combined Selected Variable Image

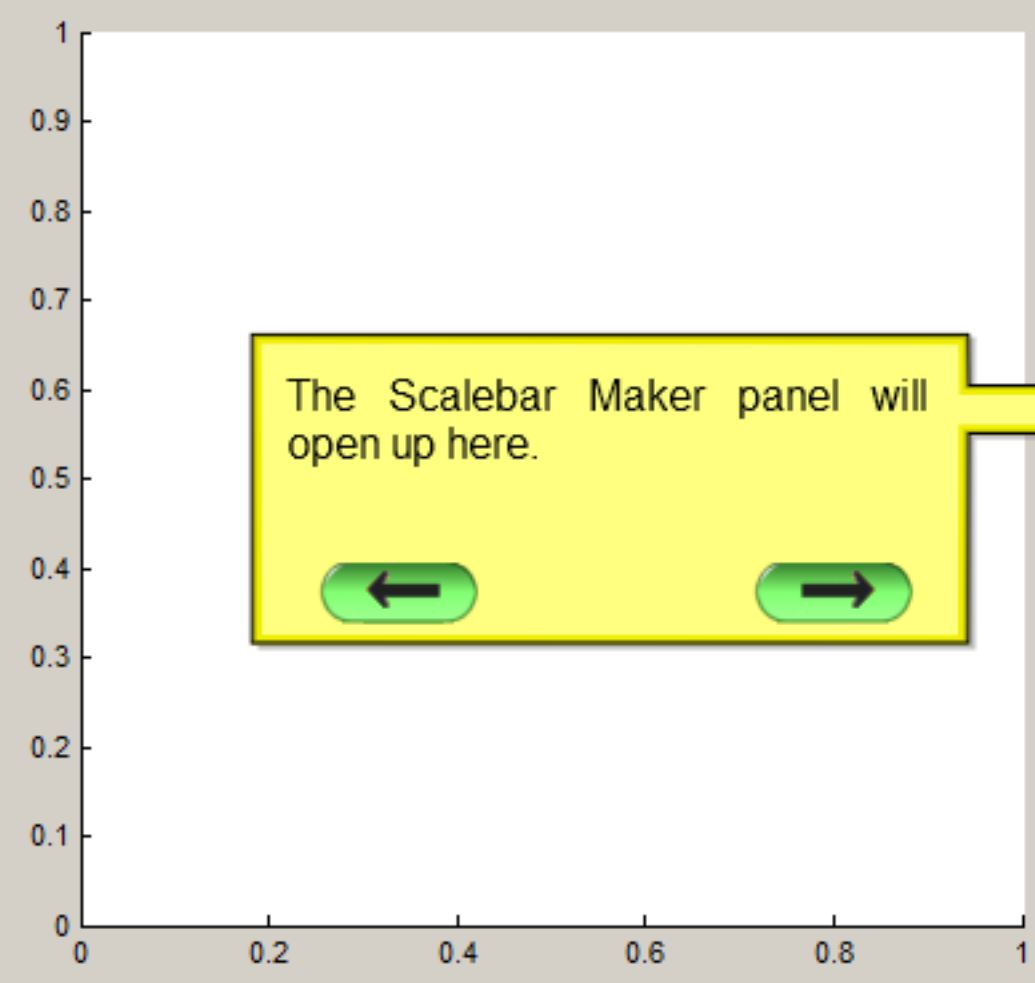
Save Combined Variable Image

Close Panel

Currently Selected Peaks



Browse all Peak Images



Scalebar Maker

Show Image Size

Image size (pixels)

X

Y

Image size (microns)

X

Y

Scalebar location

Choose an option

Scalebar color

Choose a color

Add Scale Bar

Close panel

Create ext Figure

Save Plot to File

Data Selection Panel

Name of Image Matrix

imagedata_DAN...

Name of Variable Matrix

exactmass_DAN01...

Scores

Select Scores ...

Loadings

Select Loadings ...

Variance

Select Variance ...

Load Selected Scores

Scores Matrix:

None

PC To Plot:

PC#

Plot Options:

Traditional

Plot PCA Scores

Show Scalebar Tools Panel

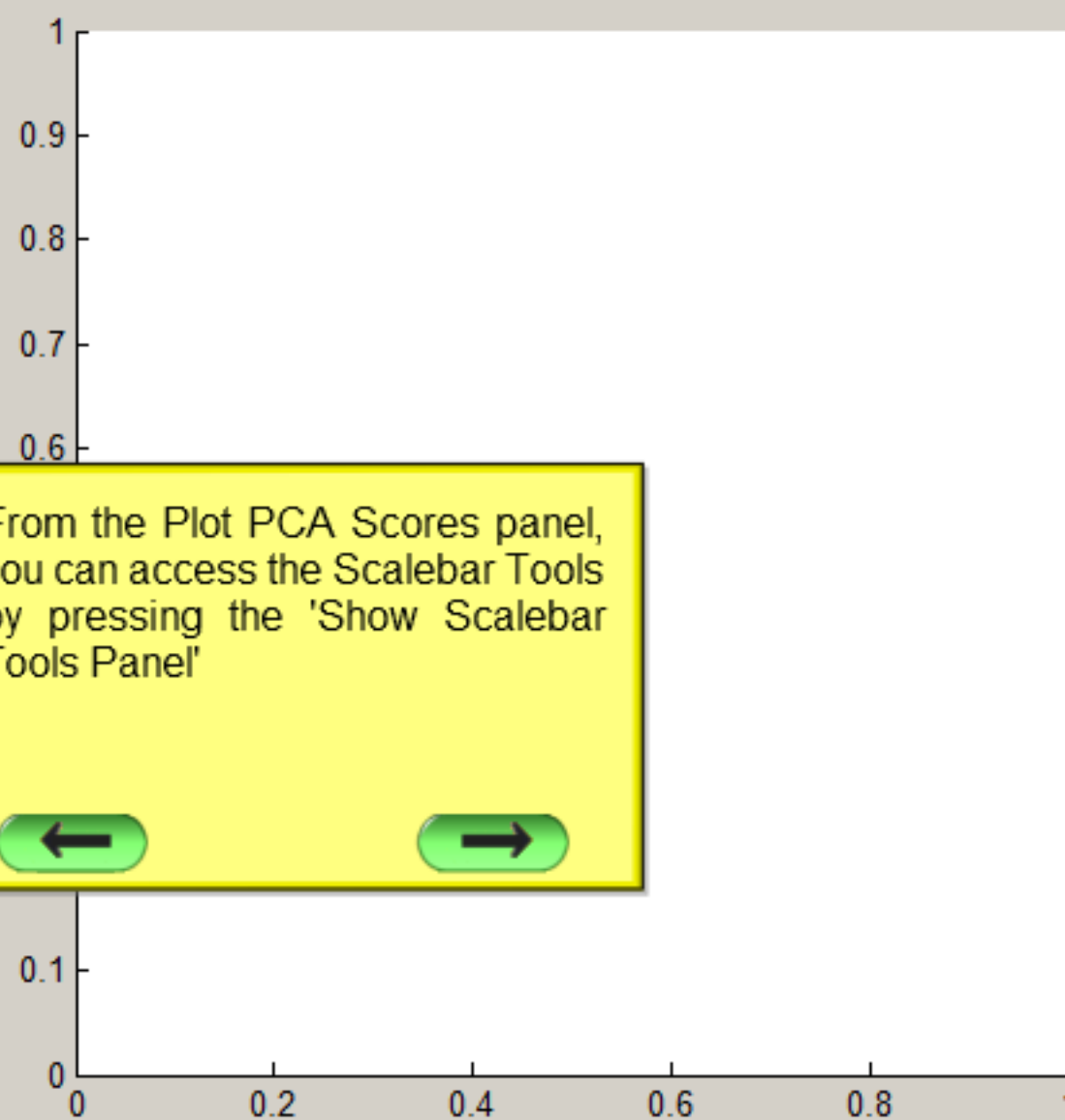
Show Image Properties Panel

Save Score Image

Make Ext Figure

Add Score Image To Overlay List

Close Panel



From the Plot PCA Scores panel, you can access the Scalebar Tools by pressing the 'Show Scalebar Tools Panel'



Data Selection Panel

Name of Image Matrix

imagedata_DAN...

Name of Variable Matrix

exactmass_DAN01...

Scores

Select Scores ...

Loadings

Select Loadings ...

Variance

Select Variance ...

Load Selected Scores

Scores Matrix:

None

PC To Plot:

PC#

Plot Options:

Traditional

Plot PCA Scores

Show Scalebar Tools Panel

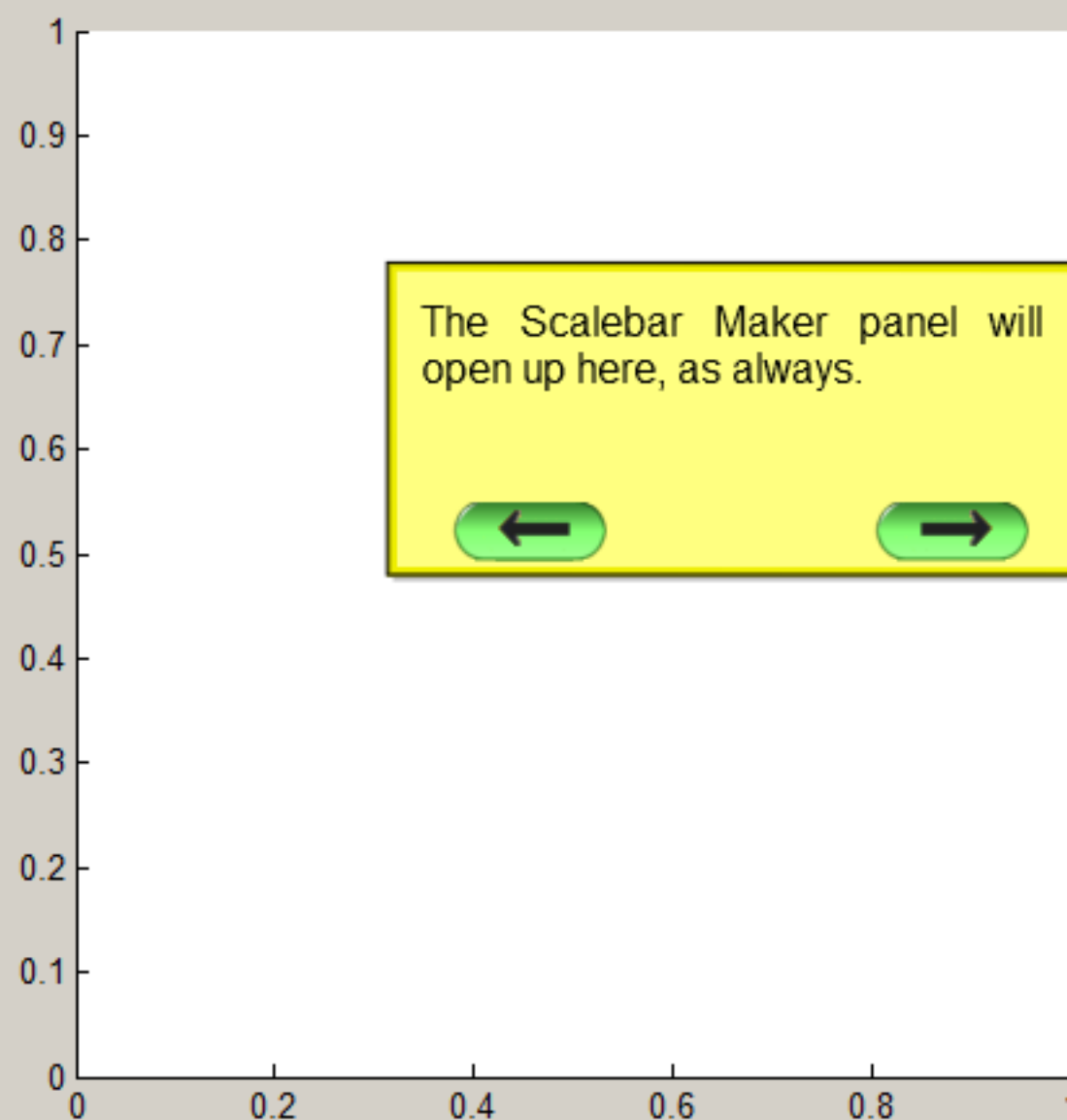
Show Image Properties Panel

Save Score Image

Make Ext Figure

Add Score Image To Overlay List

Close Panel



Scalebar Maker

Show Image Size

Image size (pixels)

X

Y

Image size (microns)

X

Y

Scalebar location

Choose an option

Scalebar color

Choose a color

Add Scale Bar

Close panel

Data Selection Panel

Name of Image Matrix

imagedata_DAN...

Name of Variable Matrix

exactmass_DAN01...

Scores

Select Scores ...

Loadings

Select Loading...

Variance

Select Variance ...

Load Selected Scores

Scores Matrix: None

PC To Plot: PC#

Plot Options: Traditional

Plot MAF Scores

Show Scalebar Tools Panel

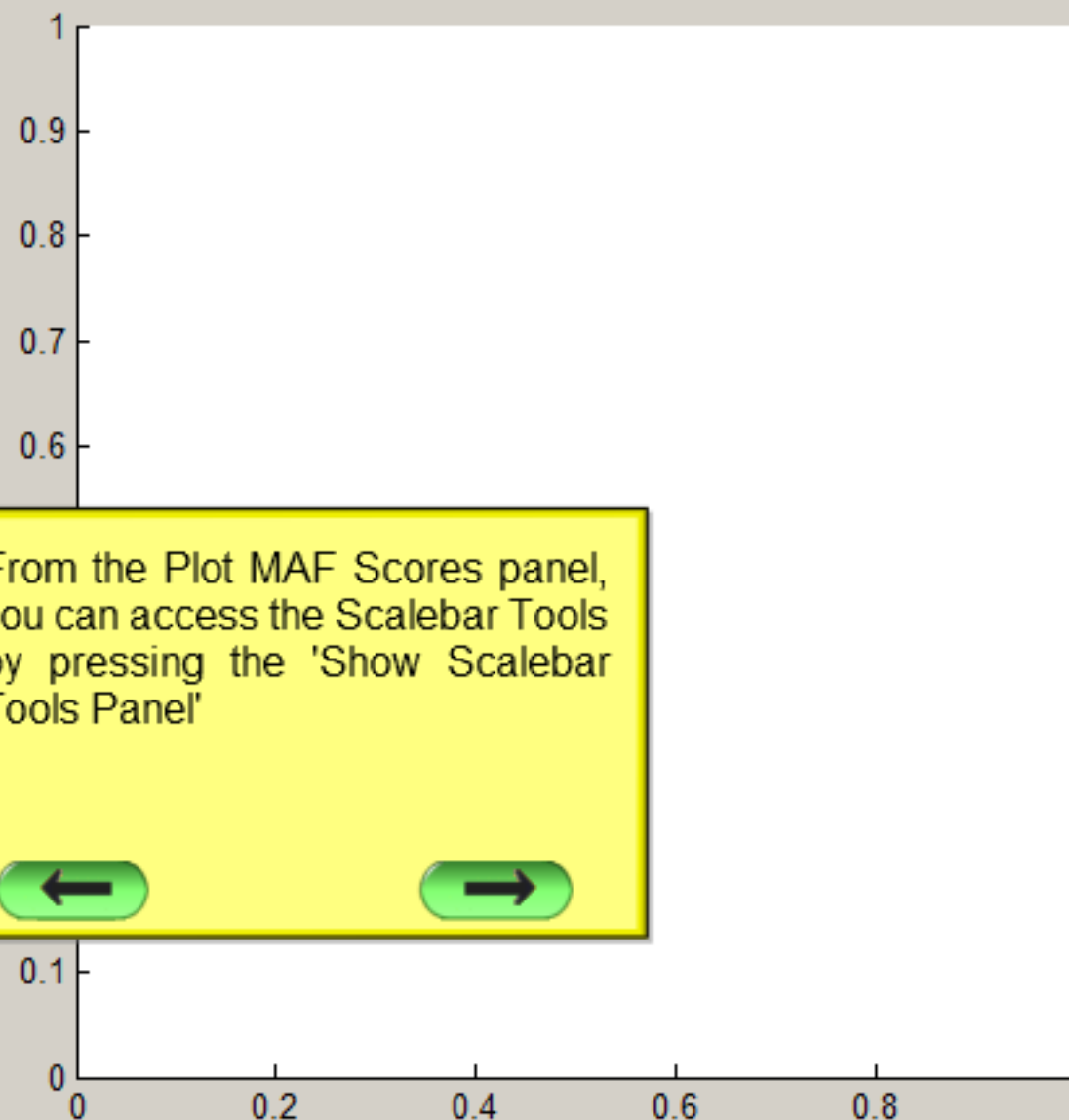
Show Image Properties Panel

Make Ext Figure

Save Score Image

Add Score Image To Overlay List

Close Panel



From the Plot MAF Scores panel, you can access the Scalebar Tools by pressing the 'Show Scalebar Tools Panel'



Data Selection Panel

Name of Image Matrix

imagedata_DAN...

Name of Variable Matrix

exactmass_DAN01...

Scores

Select Scores ...

Loadings

Select Loading...

Variance

Select Variance ...

Load Selected Scores

Scores Matrix: None

PC To Plot: PC#

Plot Options: Traditional

Plot MAF Scores

Show Scalebar Tools Panel

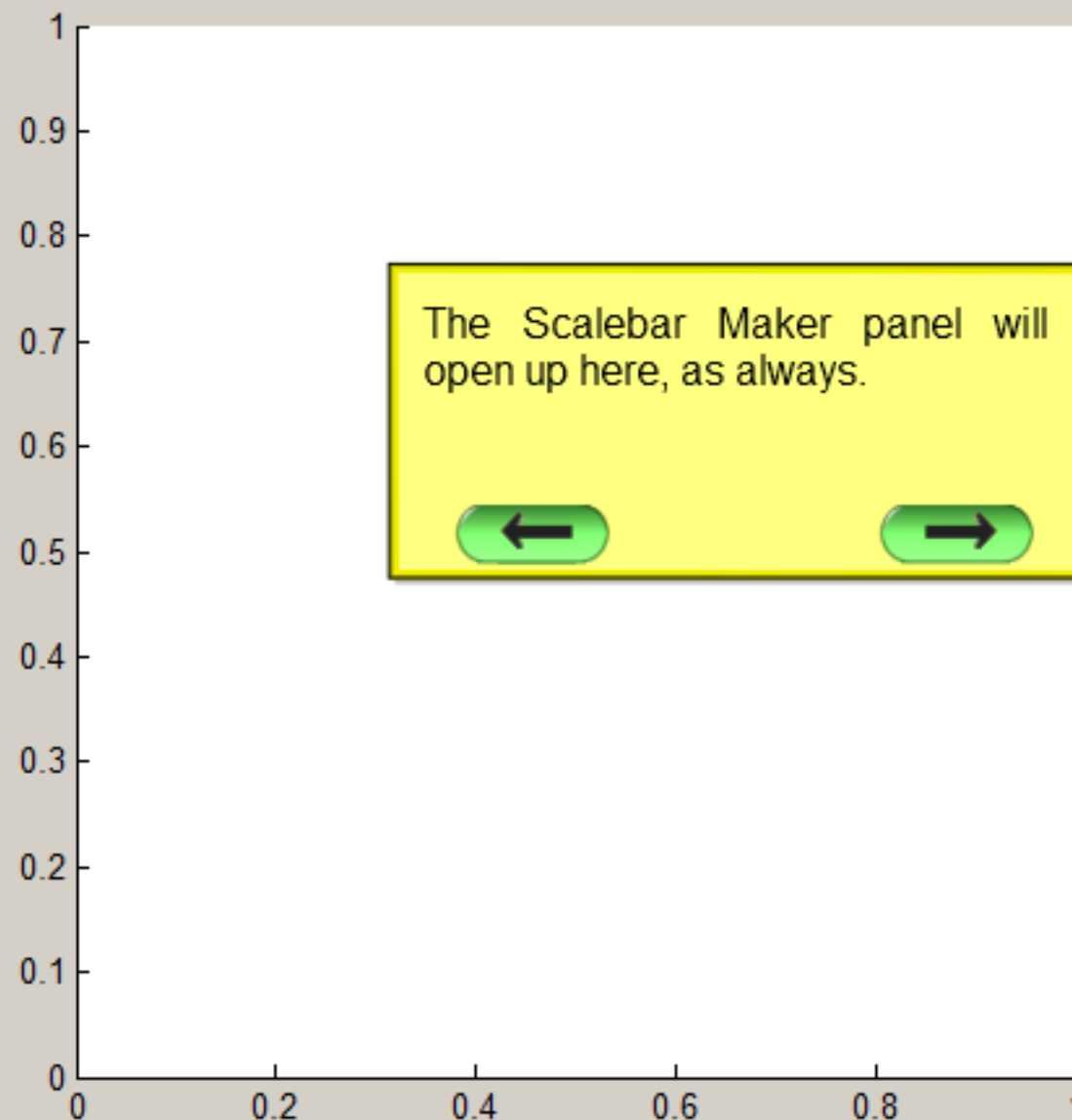
Show Image Properties Panel

Make Ext Figure

Save Score Image

Add Score Image To Overlay List

Close Panel



Scalebar Maker

Show Image Size

Image size (pixels)

X

Y

Image size (microns)

X

Y

Scalebar location

Choose an option

Scalebar color

Choose a color

Add Scale Bar

Close panel

Name of Image Matrix

imagedata_DAN...

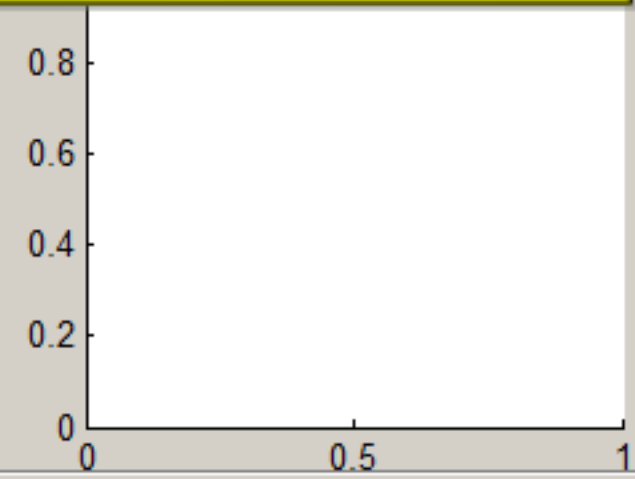
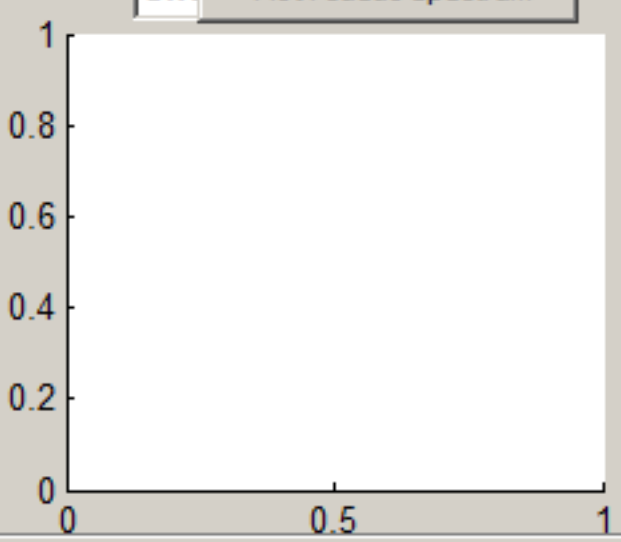
- Plot Image Data
- Plot image peak ratio
- Image Overlay
- PCA
- MAF
- PC Data Browser
- Scalebar Tools
- Image Properties
- Plot Psuedo Spectrum

Data Selection Panel

Matrix

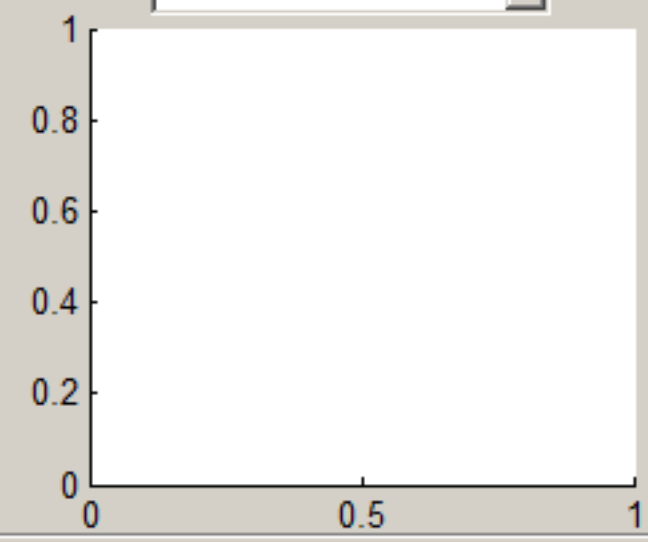
1

From the Image Overlay panel, you can access the Scalebar Tools from the Data Display menu.



BLUE

Choose A Peak... ..



Create R G B

Create R G

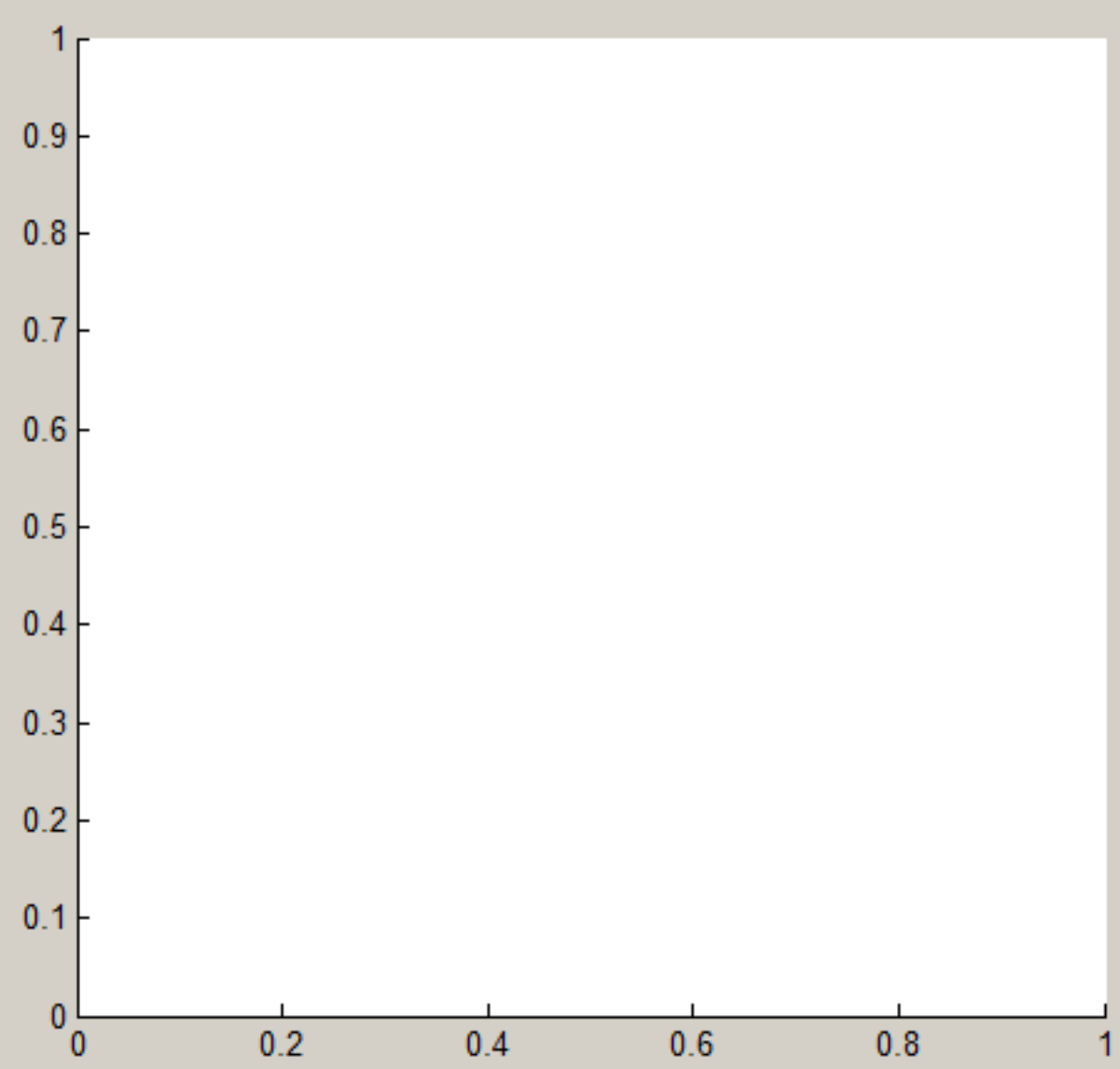
Create R B

Create G B

Save Overlay

Make Ext

Close Panel



Data Selection Panel

Name of Image Matrix

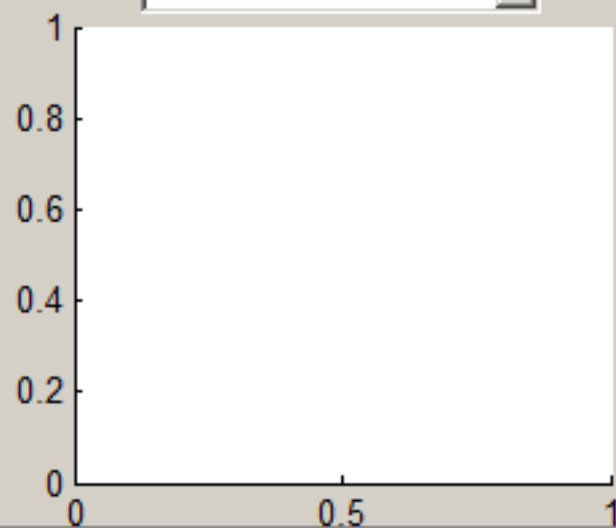
imagedata_DAN...

Name of Variable Matrix

exactmass_DAN01...

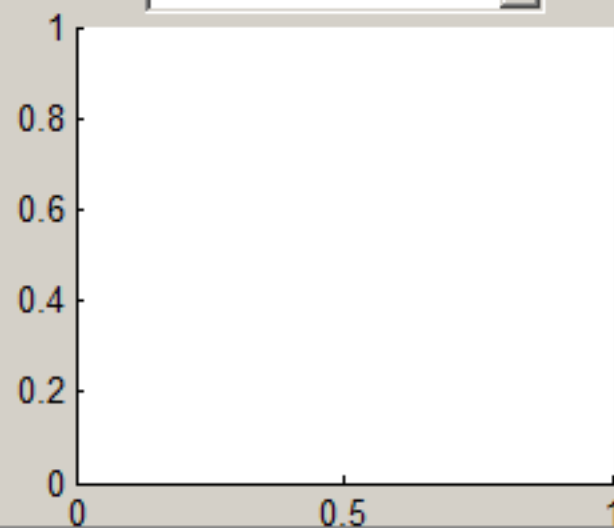
RED

Choose A Peak... ...



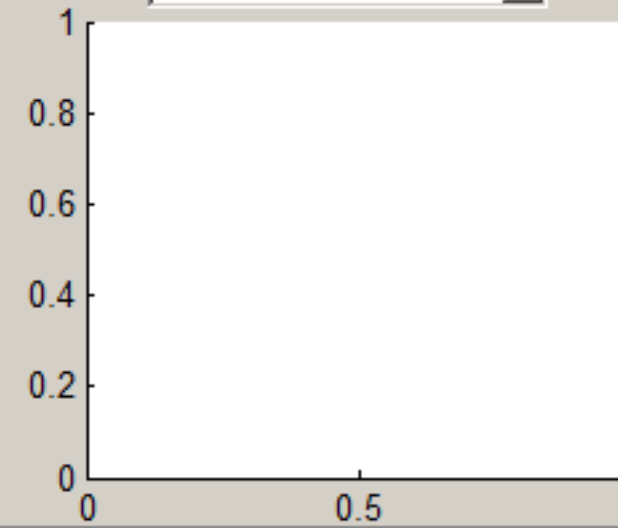
GREEN

Choose A Peak... ...



BLUE

Choose A Peak... ...



Create R G B

Create R G

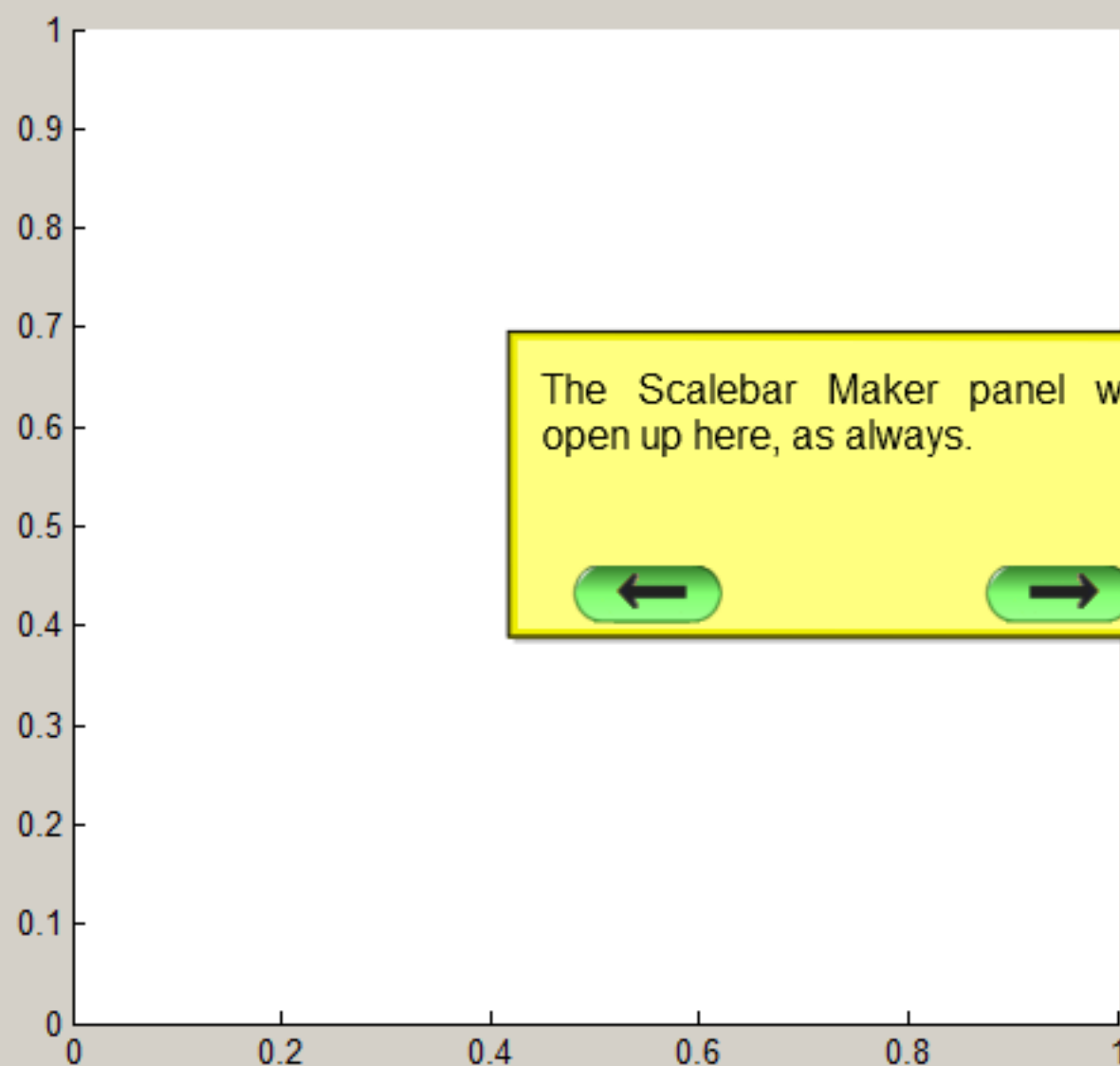
Create R B

Create G B

Save Overlay

Make Ext

Close Panel



The Scalebar Maker panel will open up here, as always.

Scalebar Maker

Show Image Size

Image size (pixels)

X

Y

Image size (microns)

X

Y

Scalebar location

Choose an option



Scalebar color

Choose a color



Add Scale Bar

Close panel

Data Selection Panel

Name of Image Matrix Name of Variable Matrix

imagedata_DAN...

exactmass_DAN01...

Load Selected Data

Image: **imagedata_DAN01**

Variables **exactmass_DAN01**

Variable List

Variables to Plot

15.9971
25.0051
26.0054
31.9732
32.9727
34.9663
42.0052
58.9992
63.9539
71.0156
79.9478
96.9589
104.959
152.948
196.926
228.915
249.099

26.0054

Data (actual counts)

Add to Plot

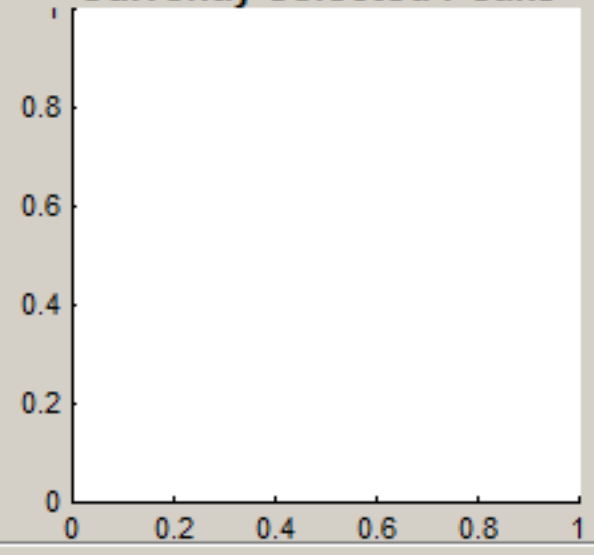
Reset Plot

Name for Combined Selected Variable Image

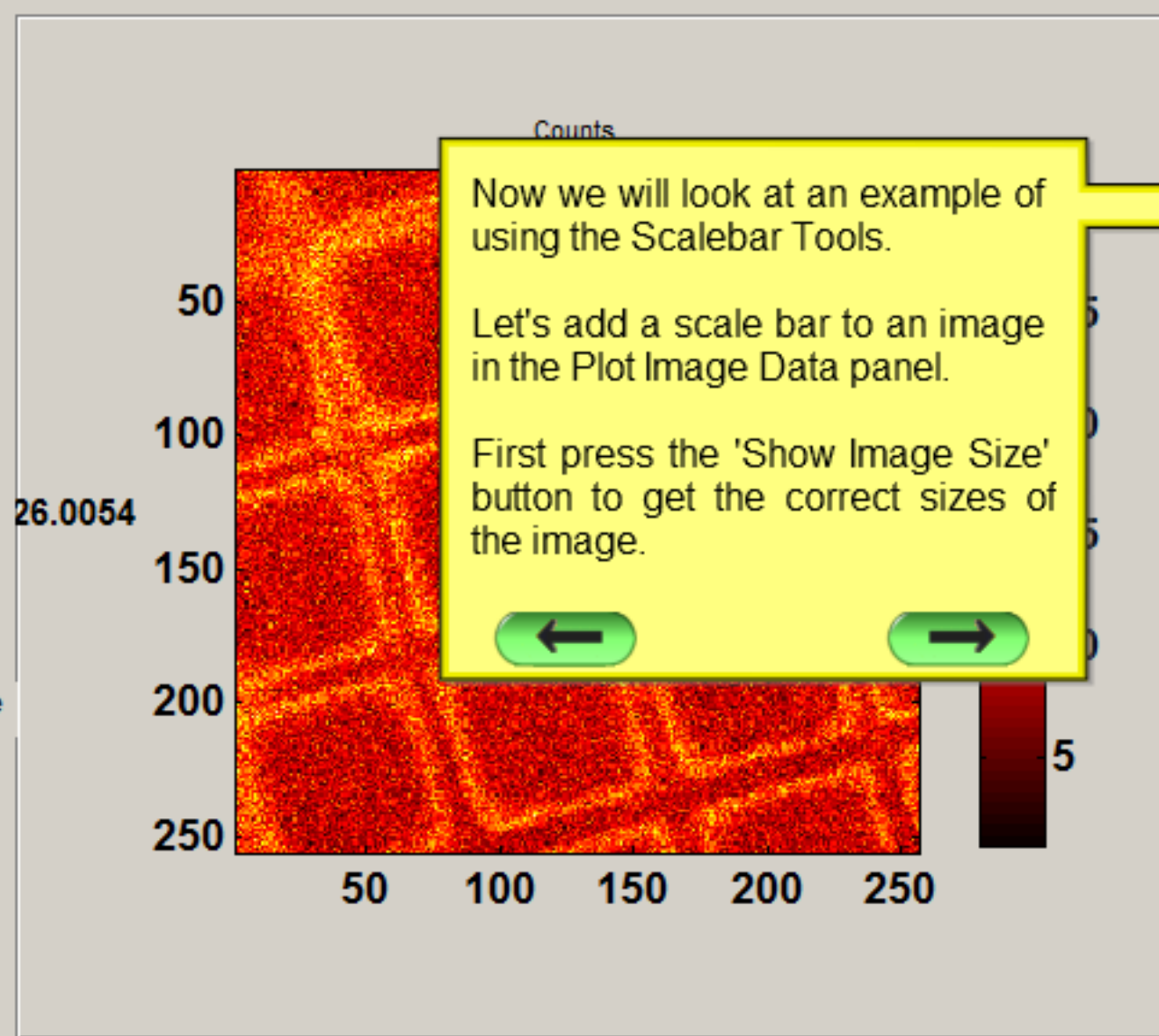
Save Combined Variable Image

Close Panel

Currently Selected Peaks



Browse all Peak Images



Scalebar Maker

Show Image Size

Image size (pixels)

X

Y

Image size (microns)

X

Y

Scalebar location

Choose an option

Scalebar color

Choose a color

Add Scale Bar

Close panel

Create ext Figure

Save Plot to File

Data Selection Panel

Name of Image Matrix Name of Variable Matrix

imagedata_DAN...

exactmass_DAN01...

Load Selected Data

Image: **imagedata_DAN01**
Variables **exactmass_DAN01**

Variable List

26.0054

Variables to Plot

15.9971
25.0051
26.0054
31.9732
32.9727
34.9663
42.0052
58.9992
63.9539
71.0156
79.9478
96.9589
104.959
152.948
196.926
228.915
249.099

Data (actual counts)

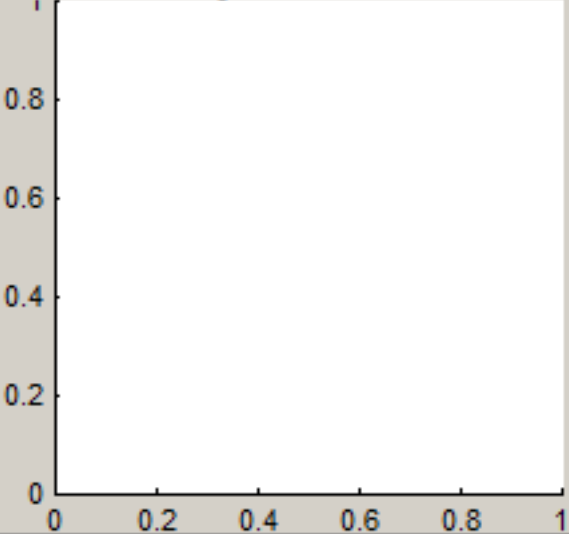
Add to Plot Reset Plot

Name for Combined Selected Variable Image

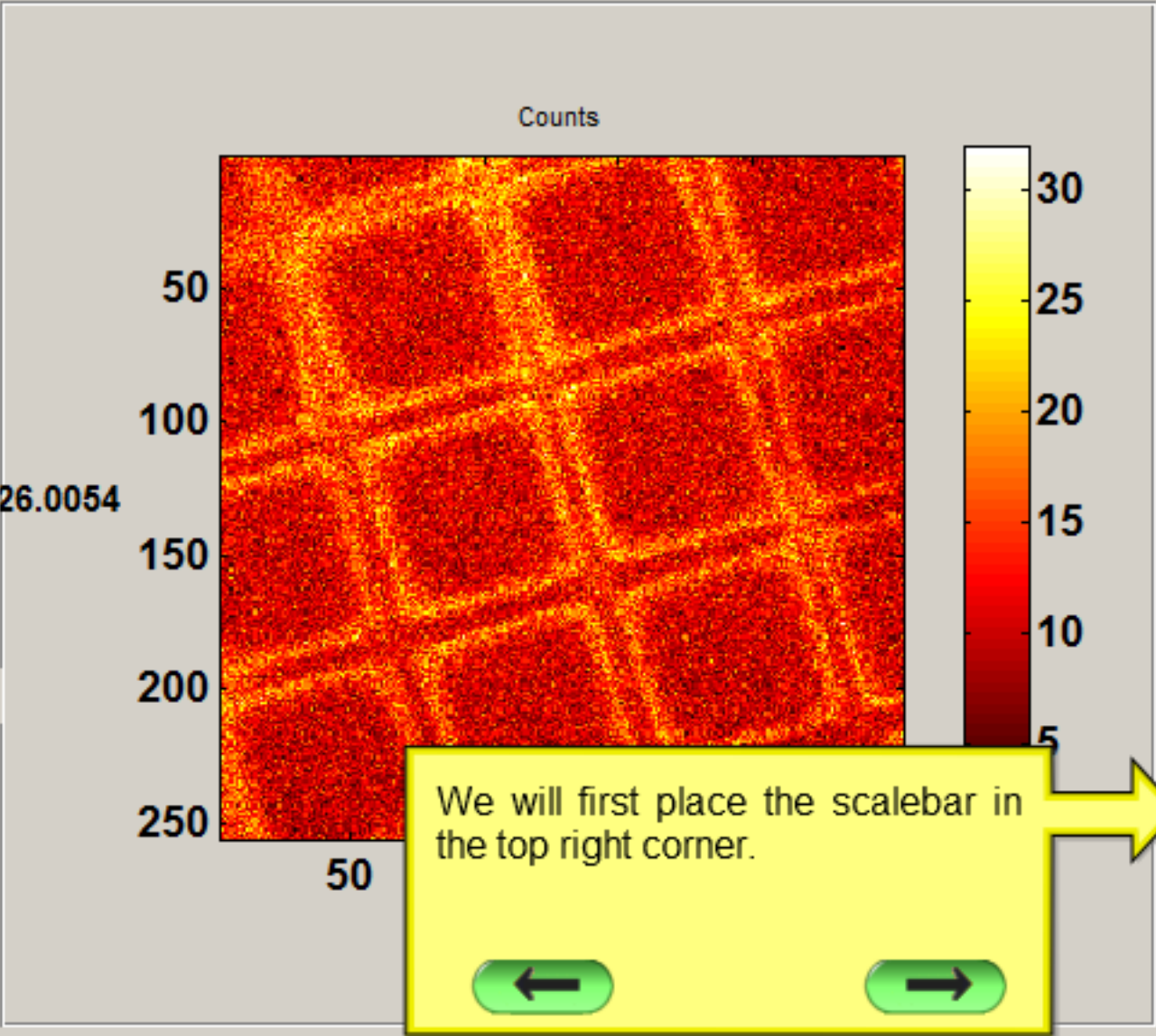
Save Combined Variable Image

Close Panel

Currently Selected Peaks



Browse all Peak Images



Scalebar Maker

Show Image Size

Image size (pixels)

X 256

Y 256

Image size (microns)

X 100

Y 100

Scalebar location

Choose an option

Choose an option

Top Right

Top Left

Bottom Right

Bottom Left

Add Scale Bar

Close panel

Create ext Figure

Save Plot to File

Data Selection Panel

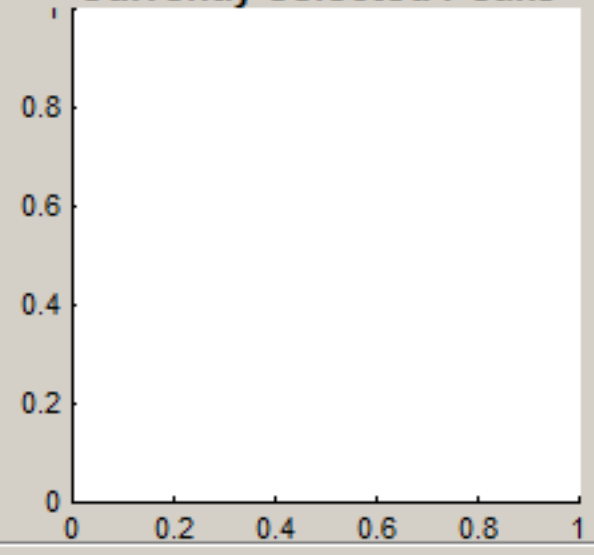
Name of Image Matrix
imagedata_DAN...

Name of Variable Matrix
exactmass_DAN01...

Load Selected Data

Image: **imagedata_DAN01**
Variables **exactmass_DAN01**

Currently Selected Peaks



Browse all Peak Images

Variable List

- 15.9971
- 25.0051
- 26.0054
- 31.9732
- 32.9727
- 34.9663
- 42.0052
- 58.9992
- 63.9539
- 71.0156
- 79.9478
- 96.9589
- 104.959
- 152.948
- 196.926
- 228.915
- 249.099

Variables to Plot

- 26.0054

Data (actual counts)

Add to Plot

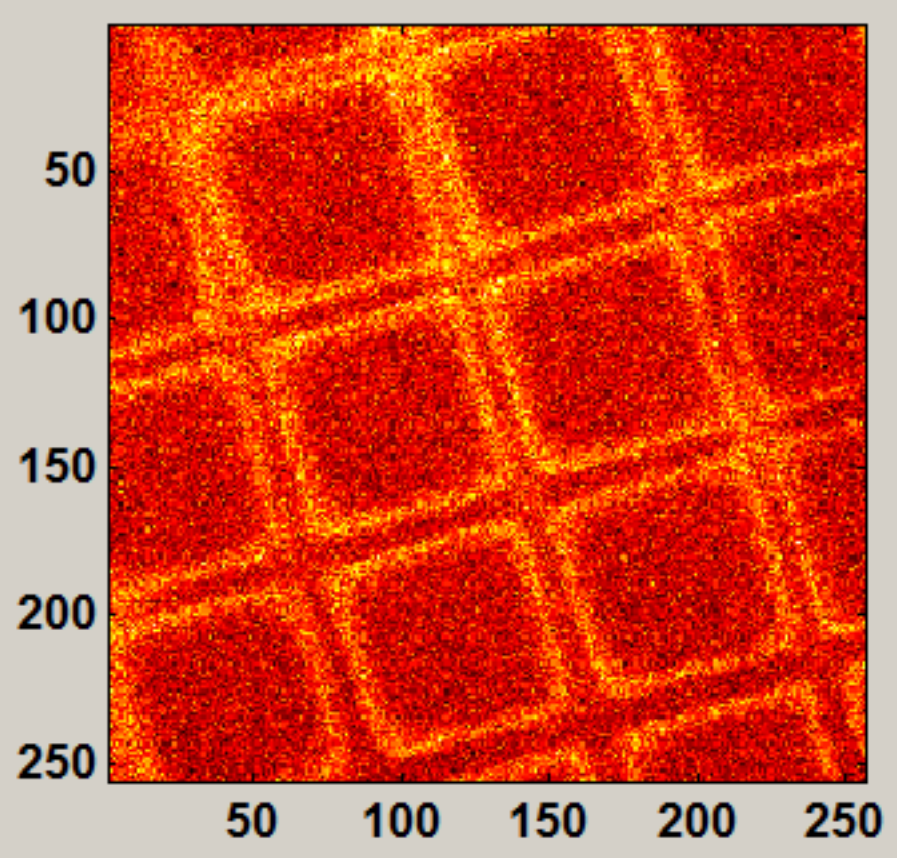
Reset Plot

Name for Combined Selected Variable Image

Save Combined Variable Image

Close Panel

Counts



Scalebar Maker

Show Image Size

Image size (pixels)

X 256

Y 256

Image size (microns)

X 100

Y 100

Scalebar location

Top Right

Scalebar color

Choose a color

- Choose a color
- Blue
- Green
- Red
- Cyan
- Magenta
- Yellow
- Black

And we will make it blue.

Create ext

Data Selection Panel

Name of Image Matrix

imagedata_DAN...

Name of Variable Matrix

exactmass_DAN01...

Load Selected Data

Image: **imagedata_DAN01**

Variables **exactmass_DAN01**

Variable List

15.9971
25.0051
26.0054
31.9732
32.9727
34.9663
42.0052
58.9992
63.9539
71.0156
79.9478
96.9589
104.959
152.948
196.926
228.915
249.099

Variables to Plot

26.0054

Data (actual counts)

Add to Plot

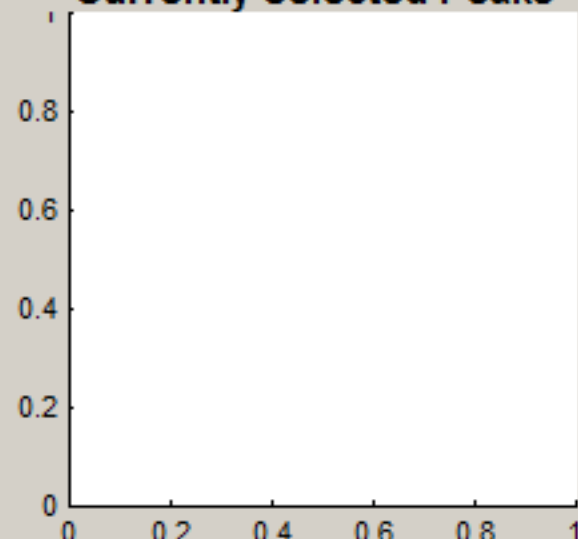
Reset Plot

Name for Combined Selected Variable Image

Save Combined Variable Image

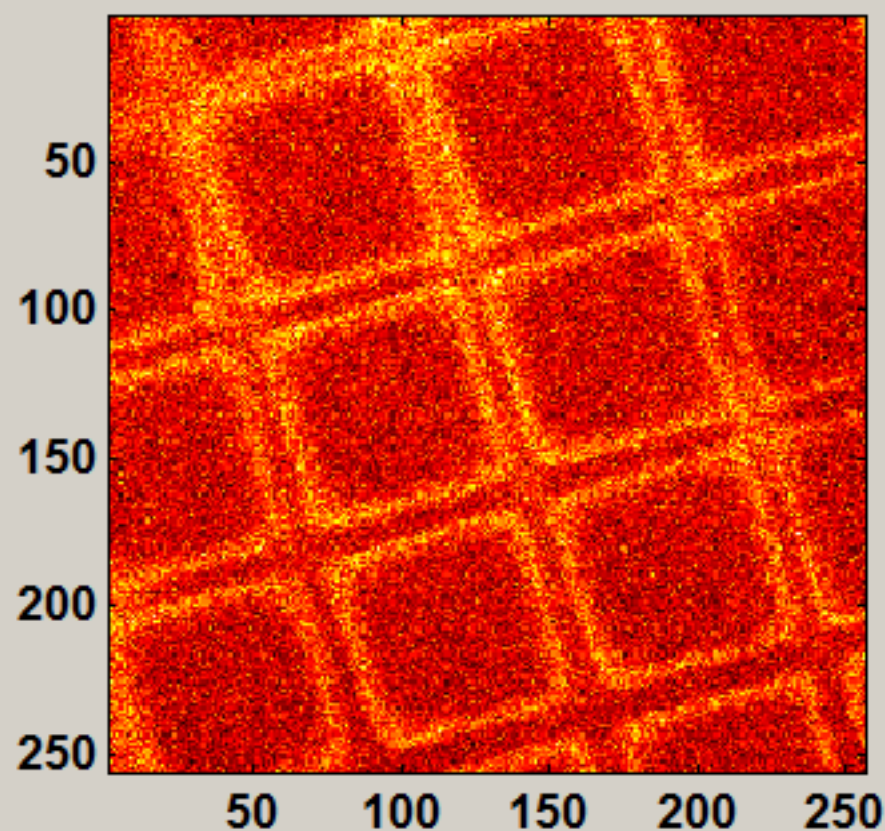
Close Panel

Currently Selected Peaks



Browse all Peak Images

Counts



Scalebar Maker

Show Image Size

Image size (pixels)

X 256

Y 256

Image size (microns)

X 100

Y 100

Scalebar location

Top Right

Scalebar color

Blue

Add Scale Bar

Close panel

Press the 'Add Scale Bar' button to add the scalebar to the image.

Create ext P

Data Selection Panel

Name of Image Matrix Name of Variable Matrix

imagedata_DAN...

exactmass_DAN01...

Load Selected Data

Image: **imagedata_DAN01**

Variables **exactmass_DAN01**

Variable List

Variables to Plot

15.9971
25.0051
26.0054
31.9732
32.9727
34.9663
42.0052
58.9992
63.9539
71.0156
79.9478
96.9589
104.959
152.948
196.926
228.915
249.099

26.0054

Data (actual counts)

Add to Plot

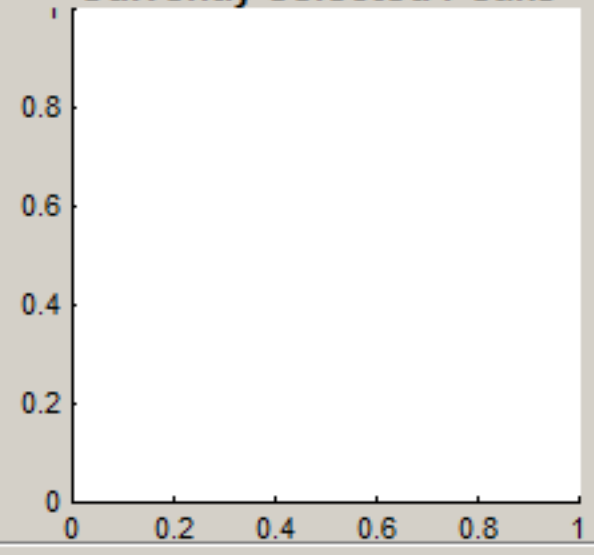
Reset Plot

Name for Combined Selected Variable Image

Save Combined Variable Image

Close Panel

Currently Selected Peaks

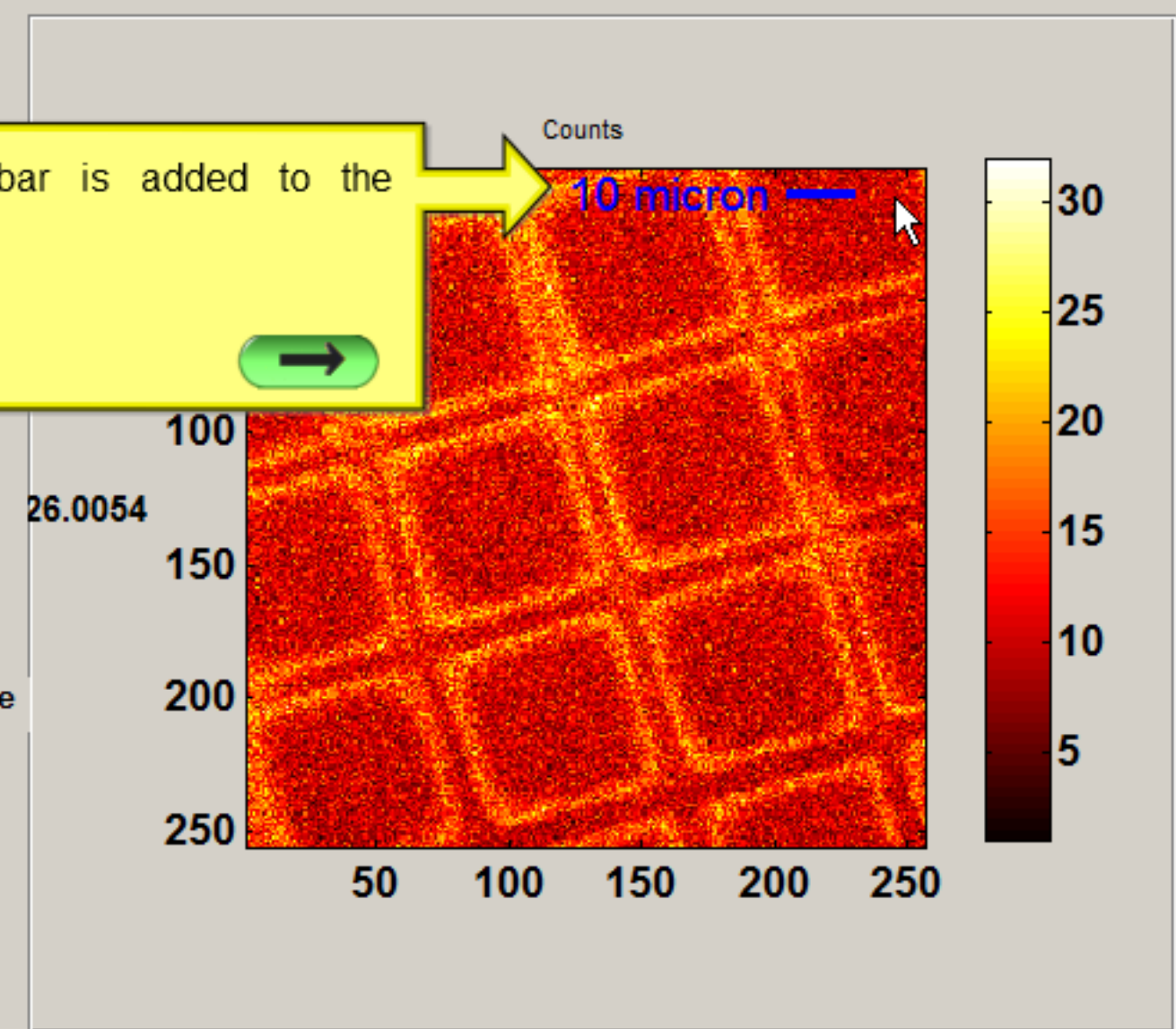


Browse all Peak Images

The scalebar is added to the image.



Counts



Scalebar Maker

Show Image Size

Image size (pixels)

X 256

Y 256

Image size (microns)

X 100

Y 100

Scalebar location

Top Right

Scalebar color

Blue

Add Scale Bar

Close panel

Create ext Figure

Save Plot to File

Data Selection Panel

Name of Image Matrix Name of Variable Matrix

imagedata_DAN...

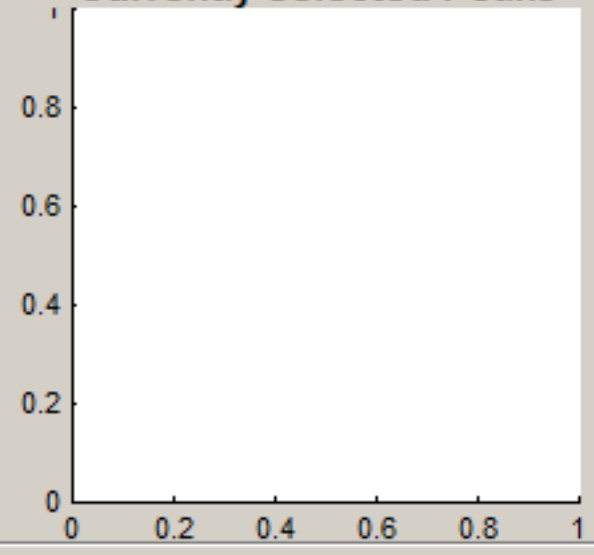
exactmass_DAN01...

Load Selected Data

Image: **imagedata_DAN01**

Variables **exactmass_DAN01**

Currently Selected Peaks



Browse all Peak Images

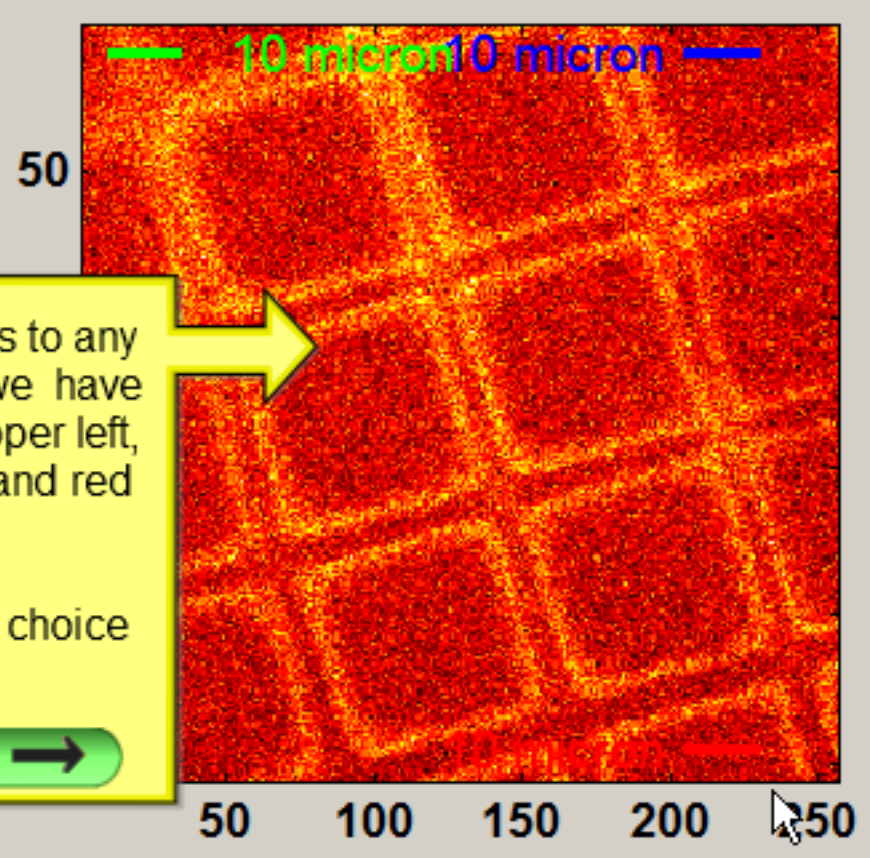
Variable List

Variables to Plot

- 15.9971
- 25.0051
- 26.0054
- 31.9732
- 32.9727
- 34.9663
- 42.0052
- 58.9992
- 63.9539
- 71.0156
- 79.9478
- 96.9589
- 104.959
- 152.948
- 196.926
- 228.915
- 249.099

- 26.0054

Counts



Scalebar Maker

Show Image Size

Image size (pixels)

X 256

Y 256

Image size (microns)

X 100

Y 100

Scalebar location

Bottom Right

Scalebar color

Red

Add Scale Bar

Close panel

Data (actual counts)

Add to Plot

Name for Combined Selection

Save Combined Variable Image

Close Panel

Create ext Figure

Save Plot to File

Data Selection Panel

Name of Image Matrix Name of Variable Matrix

imagedata_DAN...

exactmass_DAN01...

Load Selected Data

Image: **imagedata_DAN01**

Variables **exactmass_DAN01**

Variable List

Variables to Plot

15.9971
25.0051
26.0054
31.9732
32.9727
34.9663
42.0052
58.9992
63.9539
71.0156
79.9478
96.9589
104.959
152.948
196.926
228.915
249.099

26.0054

Data (actual counts)

Add to Plot

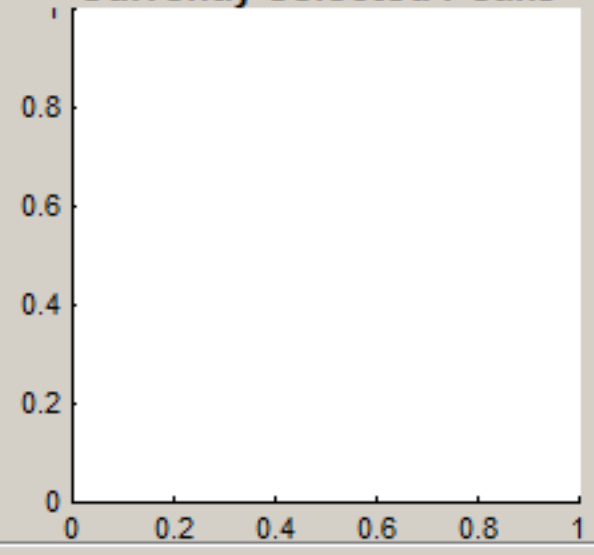
Reset Plot

Name for Combined Selected Variable Image

Save Combined Variable Image

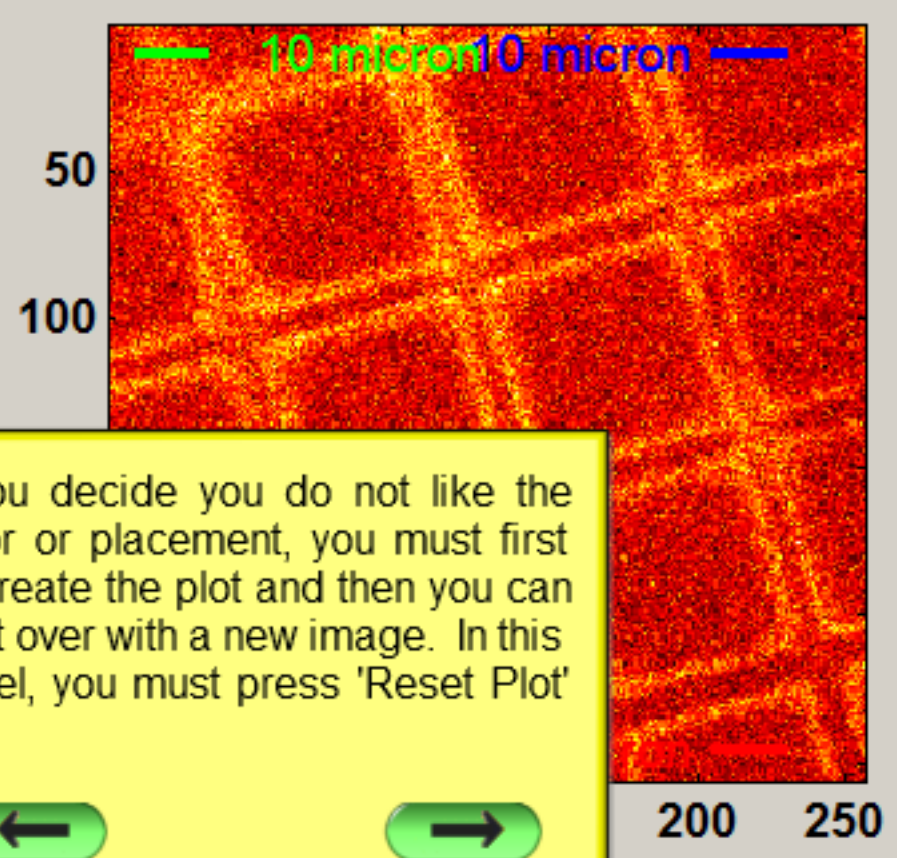
Close Panel

Currently Selected Peaks



Browse all Peak Images

Counts



26.0054

If you decide you do not like the color or placement, you must first re-create the plot and then you can start over with a new image. In this panel, you must press 'Reset Plot' first.



Scalebar Maker

Show Image Size

Image size (pixels)

X 256

Y 256

Image size (microns)

X 100

Y 100

Scalebar location

Bottom Right

Scalebar color

Red

Add Scale Bar

Close panel

Create ext Figure

Save Plot to File

Data Selection Panel

Name of Image Matrix
imagedata_DAN...

Name of Variable Matrix
exactmass_DAN01...

Load Selected Data

Image: **imagedata_DAN01**
Variables **exactmass_DAN01**

Variable List

Variables to Plot

15.9971
25.0051
26.0054
31.9732
32.9727
34.9663
42.0052
58.9992
63.9539
71.0156
79.9478
96.9589
104.959
152.948
196.926
228.915
249.099

26.0054

Data (actual counts)

Add to Plot

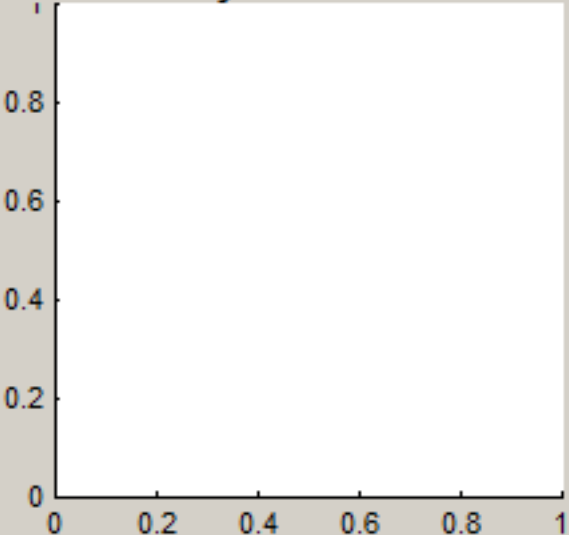
Reset Plot

Name for Combined Selected Variable Image

Save Combined Variable Image

Close Panel

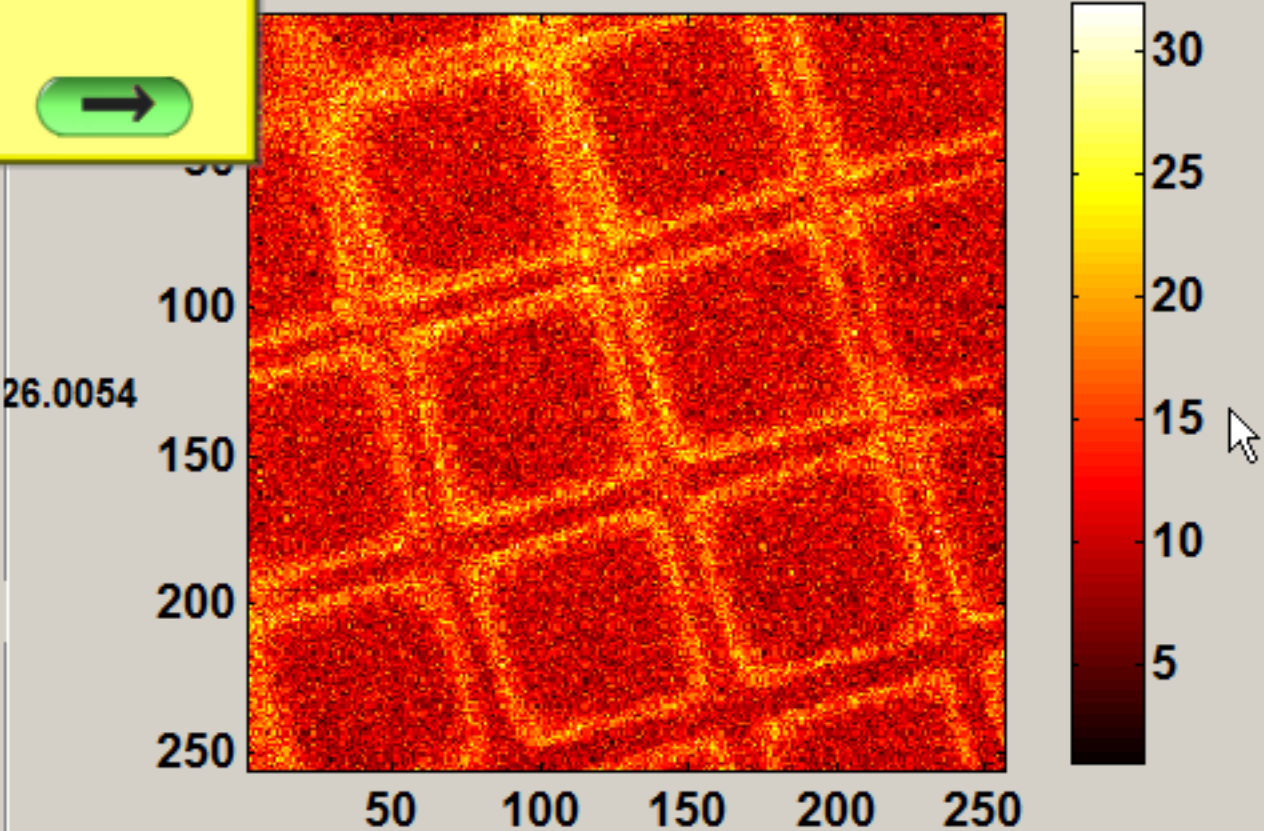
Currently Selected Peaks



Browse all Peak Images

You can then recreate the plot and
add a new scale bar.

Counts



Scalebar Maker

Show Image Size

Image size (pixels)

X 256

Y 256

Image size (microns)

X 100

Y 100

Scalebar location

Bottom Right

Scalebar color

Red

Add Scale Bar

Close panel

Create ext Figure

Save Plot to File

Data Selection Panel

Name of Image Matrix

imagedata_DAN...

Name of Variable Matrix

exactmass_DAN01...

Load Selected Data

Image: **imagedata_DAN01**

Variables **exactmass_DAN01**

Variable List

15.9971
25.0051
26.0054
31.9732
32.9727
34.9663
42.0052
58.9992
63.9539
71.0156
79.9478
96.9589
104.959
152.948
196.926
228.915
249.099

Variables to Plot

26.0054

Data (actual counts)

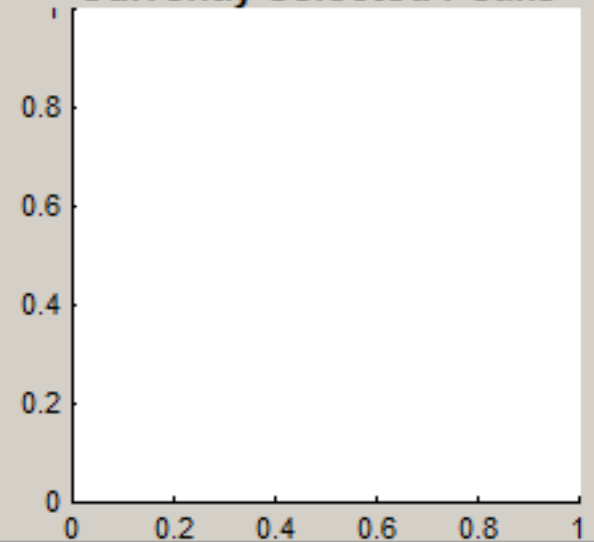
Add to Plot

Reset Plot

Name for Combined Selected Variable Image

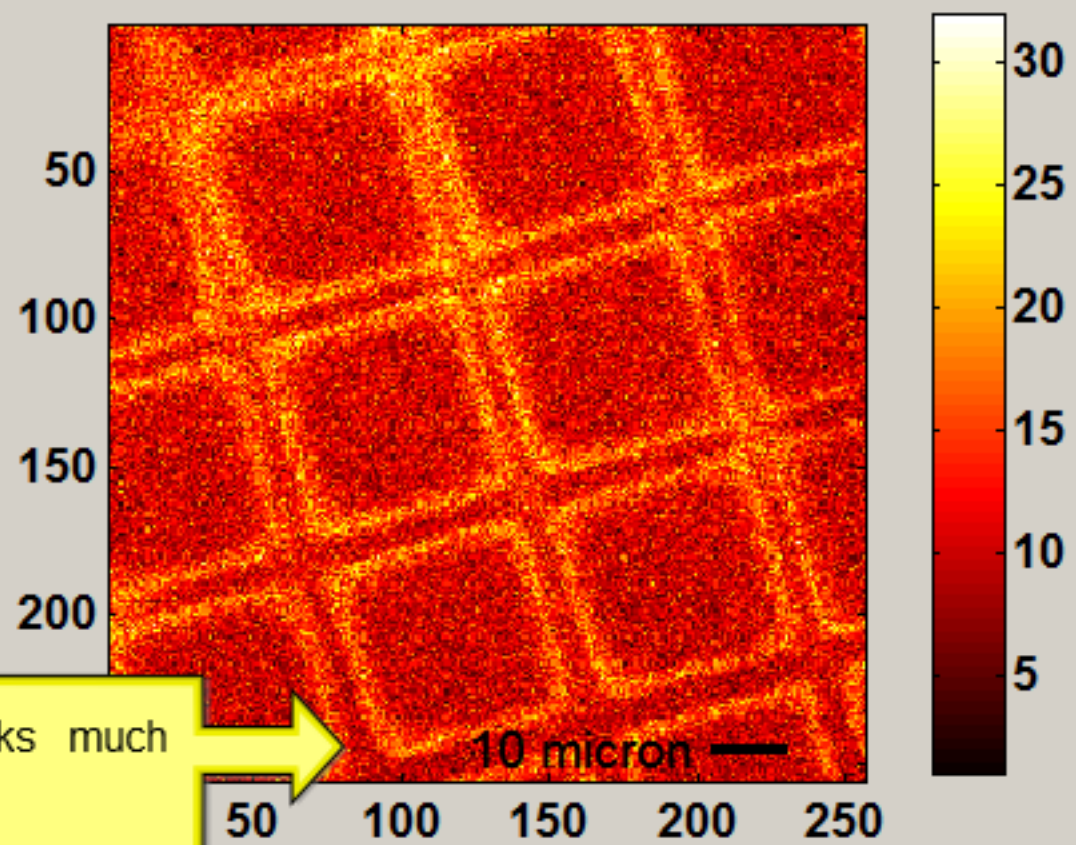
Save Combined Va

Currently Selected Peaks



Browse all Peak Images

Counts



Scalebar Maker

Show Image Size

Image size (pixels)

X 256

Y 256

Image size (microns)

X 100

Y 100

Scalebar location

Bottom Right

Scalebar color

Black

Add Scale Bar

Close panel

A black scale bar looks much better.



Create ext Figure

Save Plot to File

Data Selection Panel

Name of Image Matrix Name of Variable Matrix

imagedata_DAN...

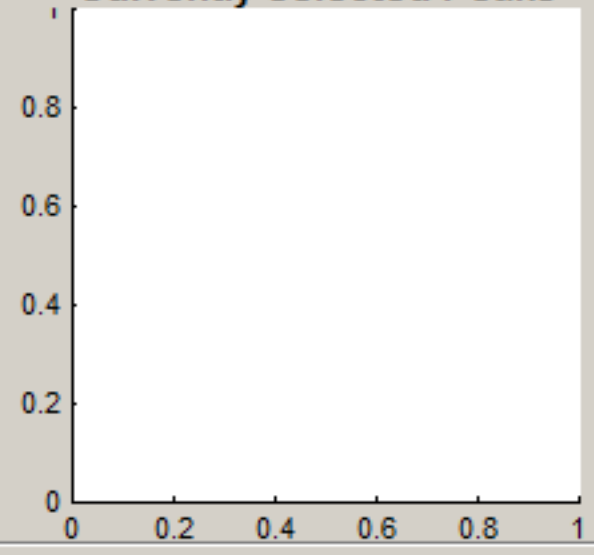
exactmass_DAN01...

Load Selected Data

Image: **imagedata_DAN01**

Variables **exactmass_DAN01**

Currently Selected Peaks



Browse all Peak Images

Variable List

Variables to Plot

- 15.9971
- 25.0051
- 26.0054
- 31.9732
- 32.9727
- 34.9663
- 42.0052
- 58.9992
- 63.9539
- 71.0156
- 79.9478
- 96.9589
- 104.959
- 152.948
- 196.926
- 228.915
- 249.099

- 26.0054

Data (actual counts)

Add to Plot

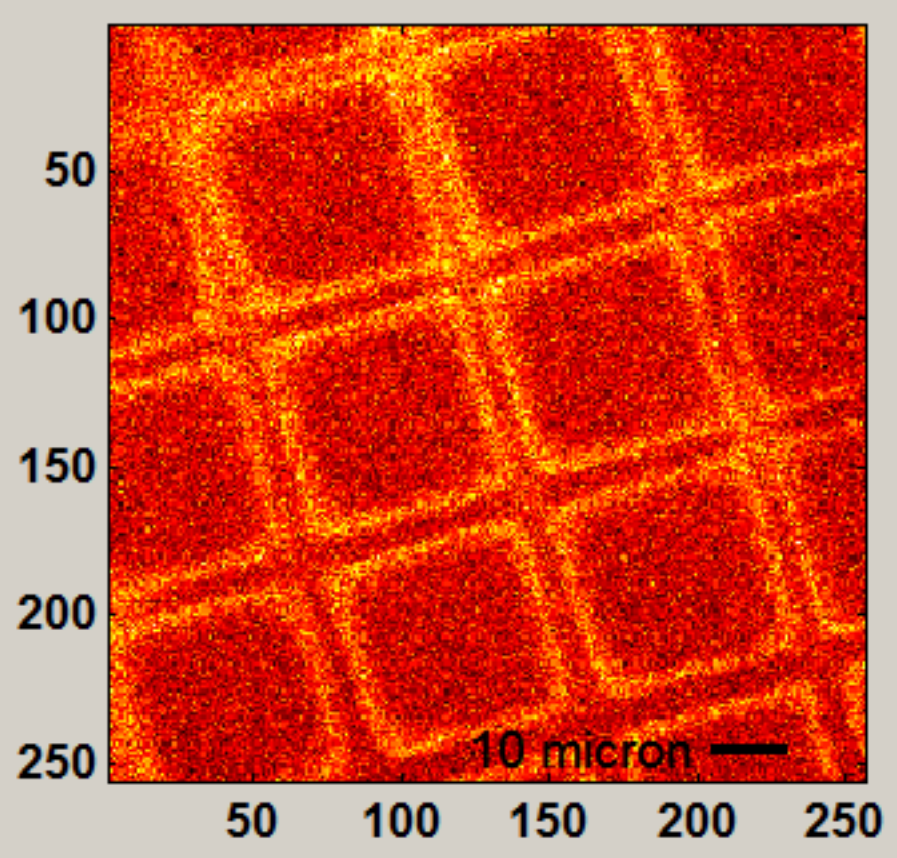
Reset Plot

Name for Combined Selected Variable Image

Save Combined Variable Image

Close Panel

Counts



Scalebar Maker

Show Image Size

Image size (pixels)

X 256

Y 256

Image size (microns)

X 100

Y 100

Scalebar location

Bottom Right

Scalebar color

Black

Add Scale Bar

Close panel

Save Plot to File

You can close all open panels by pressing the close button of the main panel.



Data Selection Panel

Name of Image Matrix

imagedata_dan01

Name of Variable Matrix

exactmass_dan01

That ends this tutorial. Press the button on the left to go back to the previous step. Press the button on the right to start the tutorial over.

