

Data Selection Panel

Name of Image Matrix

Name of Variable Matrix

imagedata_s214...

exactmass_s2149_...

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

Name of Variable Matrix

imagedata_s214...

exactmass_s2149_...

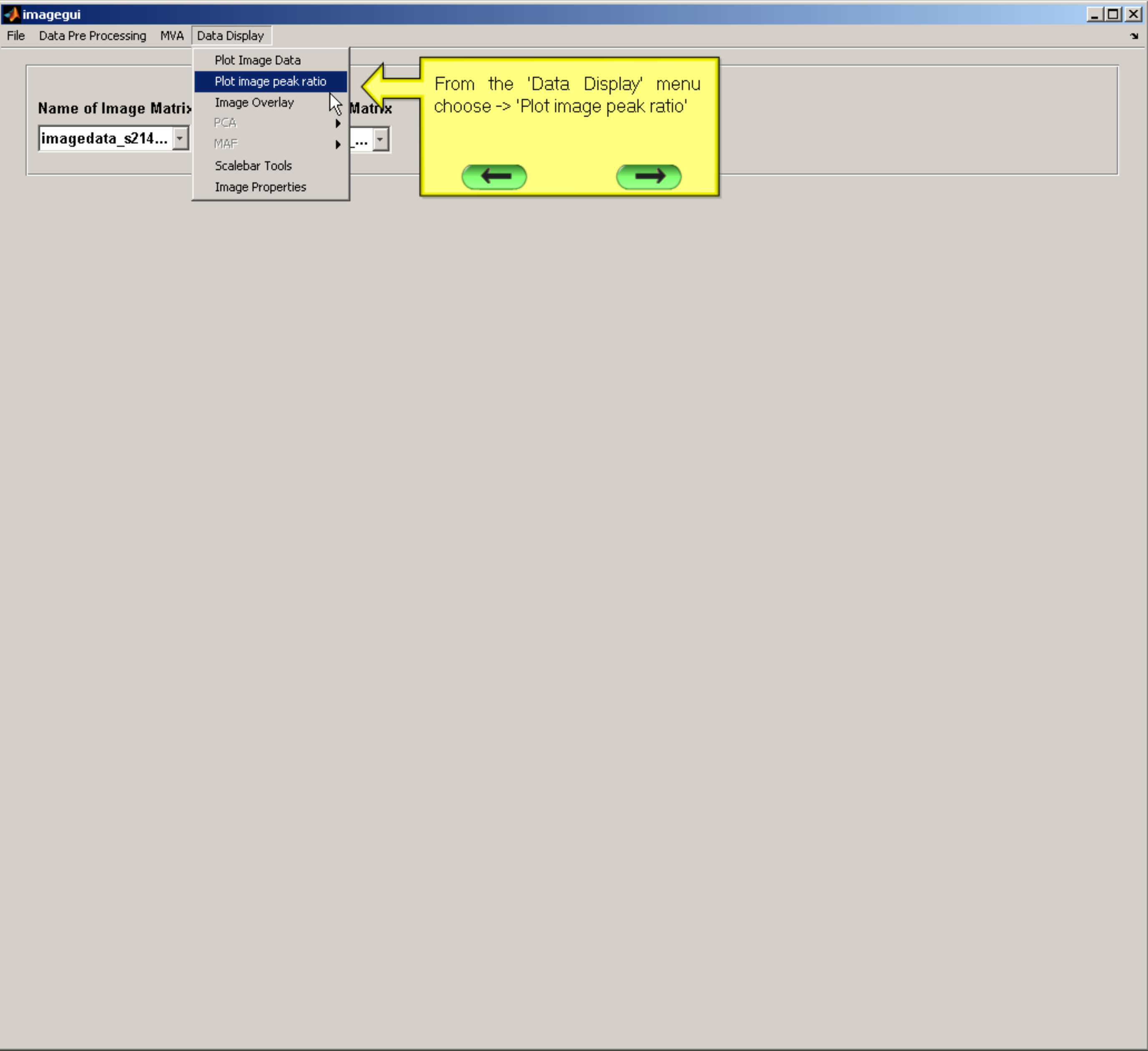
This tutorial will cover how to use the image peak ratio panel.

This panel allows you to create a ratio of peaks for every pixel within an image.

The resulting ratio is displayed as a peak ratio image. This peak ratio image can be exported and saved to a file.

Image peak ratios can be useful when looking at the relative amounts of the chosen peaks across an image.





Data Selection Panel

Name of Image Matrix

Name of Variable Matrix

imagedata_s214...

exactmass_s2149_...

Load Selected Data

Image:

None

Variables:

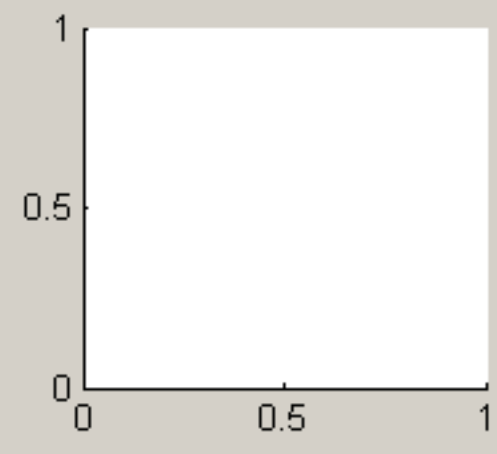
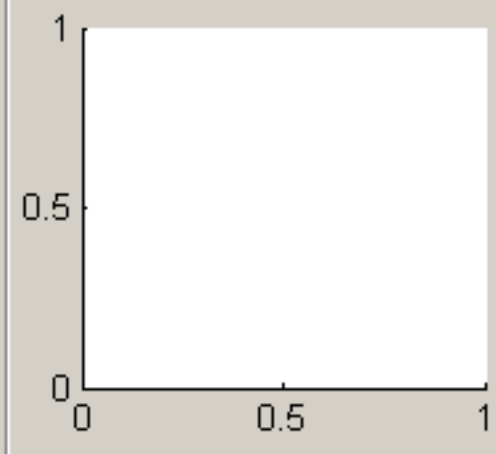
None

Choose Peak1

none

Choose Peak2

none

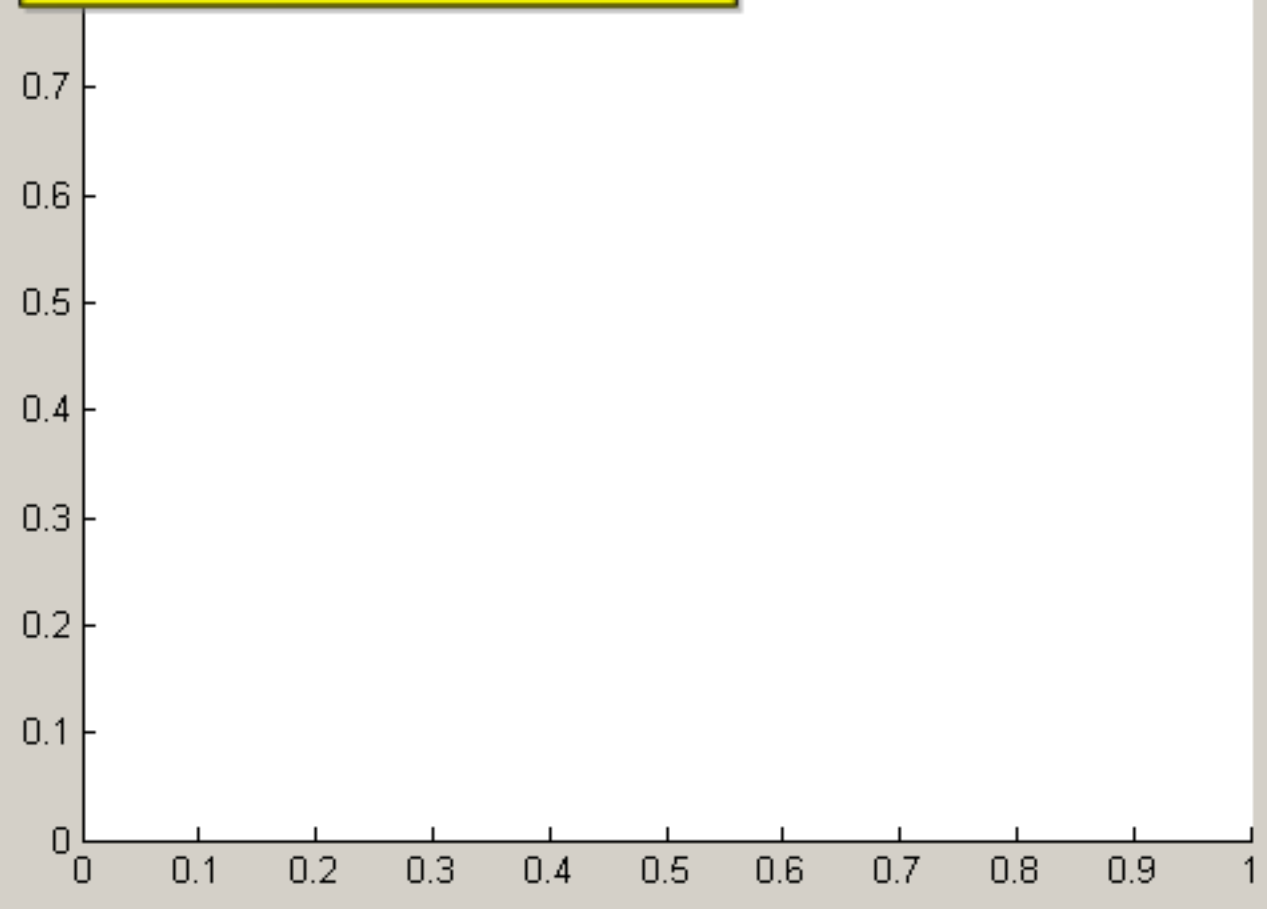


If a value of Peak 2 is zero
the value for that pixel ratio is
set to zero.

Calculate peak ratio

Close

The image peak ratio panel opens.



Save plot to file

Make ext figure

Data Selection Panel

Name of Image Matrix

Name of Variable Matrix

imagedata_s214...

exactmass_s2149_...

Load Selected Data

Image:

None

Variables:

None

Select the data you want to use from the drop down menus above and press the 'Load Selected Data' button.

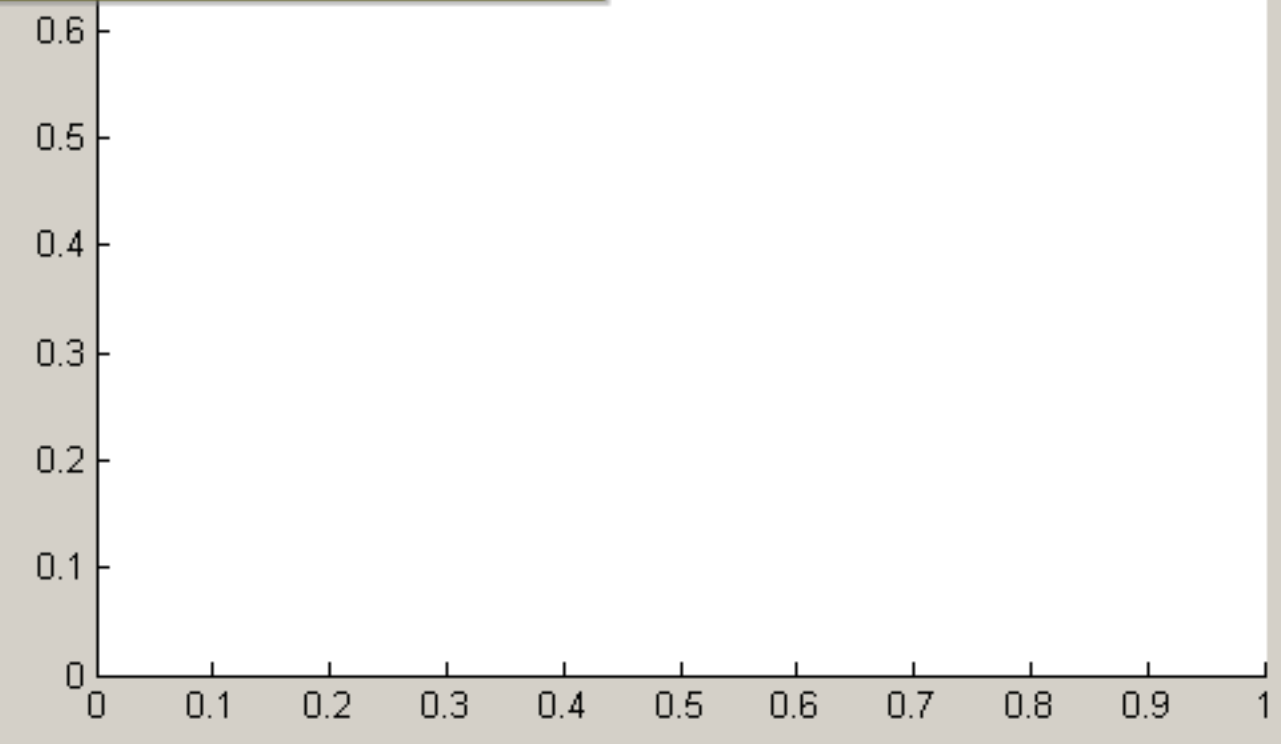
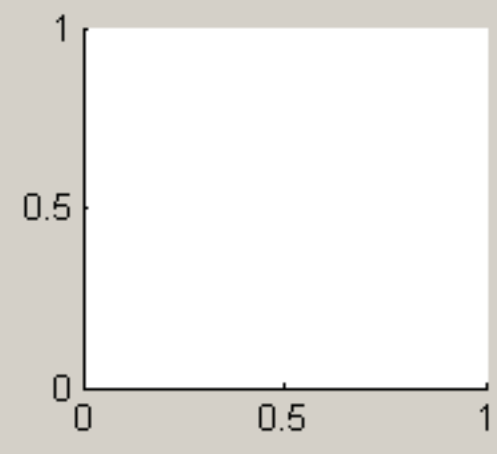
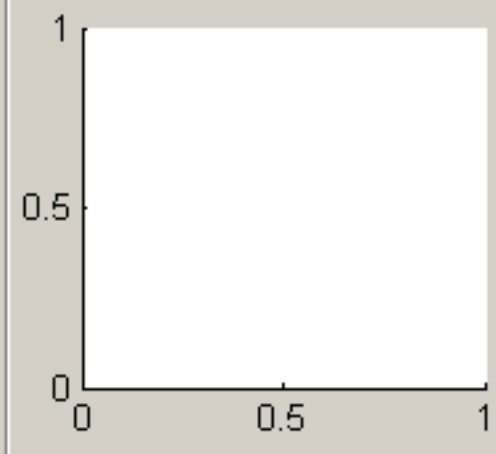


Choose Peak1

none

Choose Peak2

none



If a value of Peak 2 is zero the value for that pixel ratio is set to zero.

Calculate peak ratio

Close

Save plot to file

Make ext figure

Data Selection Panel

Name of Image Matrix

Name of Variable Matrix

imagedata_s214...

exactmass_s2149_...

Load Selected Data

Image: **imagedata_s2149_allpos**

Variables: **exactmass_s2149_allpos**

Choose Peak1

Choose Peak2

- Choose one
- Choose one
 - 15.0244
 - 18.0376
 - 22.9923
 - 27.0239
 - 27.9765
 - 28.0197
 - 28.0327
 - 29.0023
 - 29.0401
 - 30.0368
 - 30.9976
 - 31.0205
 - 31.0441
 - 32.053
 - 33.0363
 - 37.0069
 - 38.0147
 - 38.9671
 - 39.0241

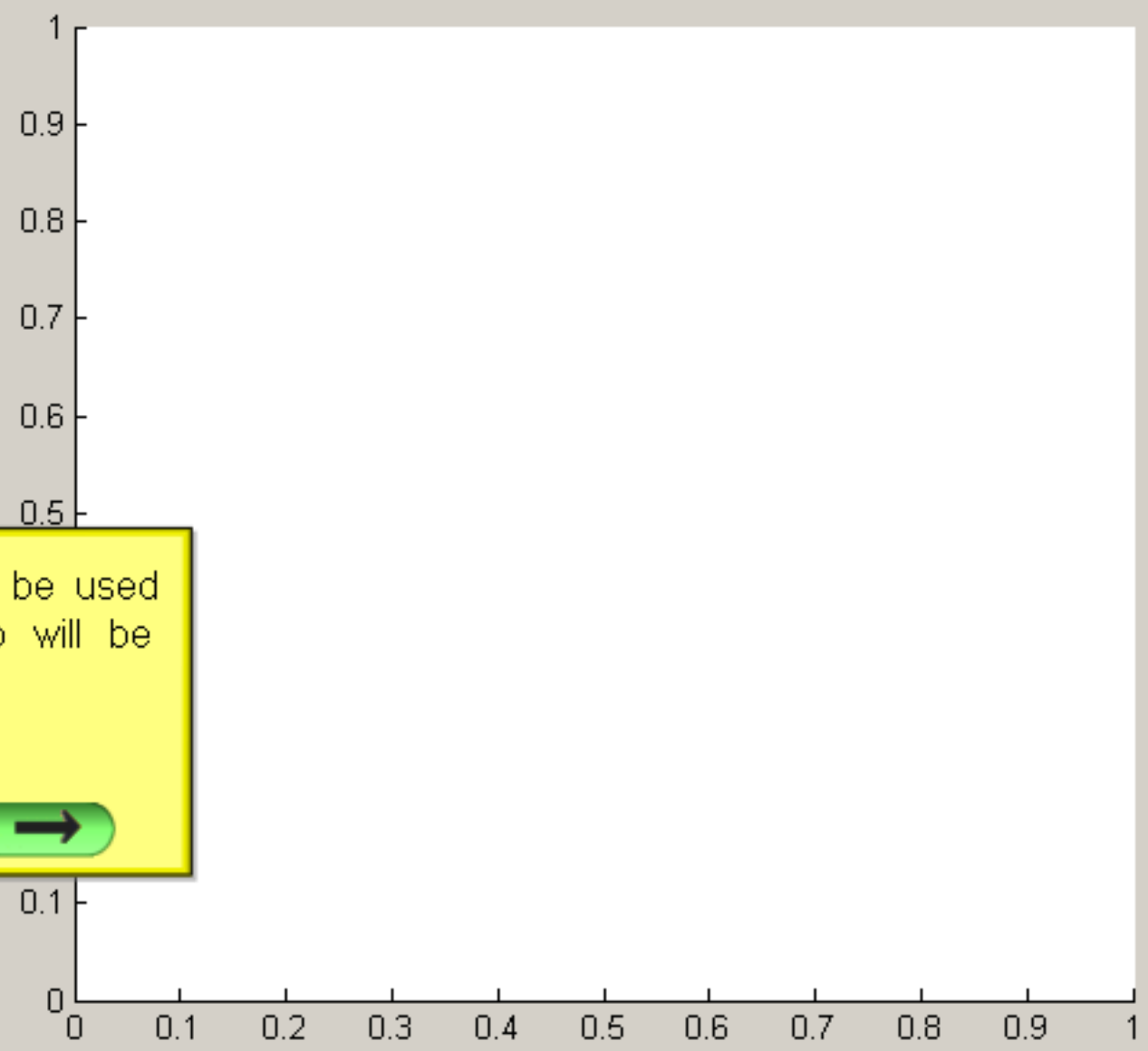
Choose which peak will be used for peak 1. The ratio will be calculated as: Peak1/Peak2



Value of Peak 2 is zero
The ratio for that pixel is
set to zero.

Calculate peak ratio

Close



Save plot to file

Make ext figure

Data Selection Panel

Name of Image Matrix

Name of Variable Matrix

imagedata_s214...

exactmass_s2149_...

Load Selected Data

Image: **imagedata_s2149_allpos**

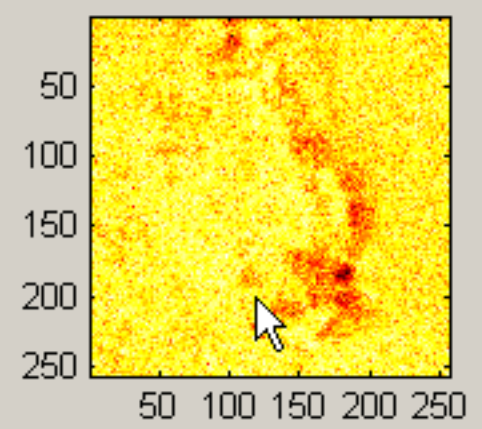
Variables: **exactmass_s2149_allpos**

Choose Peak1

73.0656

Choose Peak2

Choose one



Here we will choose the 73 peak. This is a PDMS peak.

After selecting the peak, the peak image appears in the plot below the drop down menu.



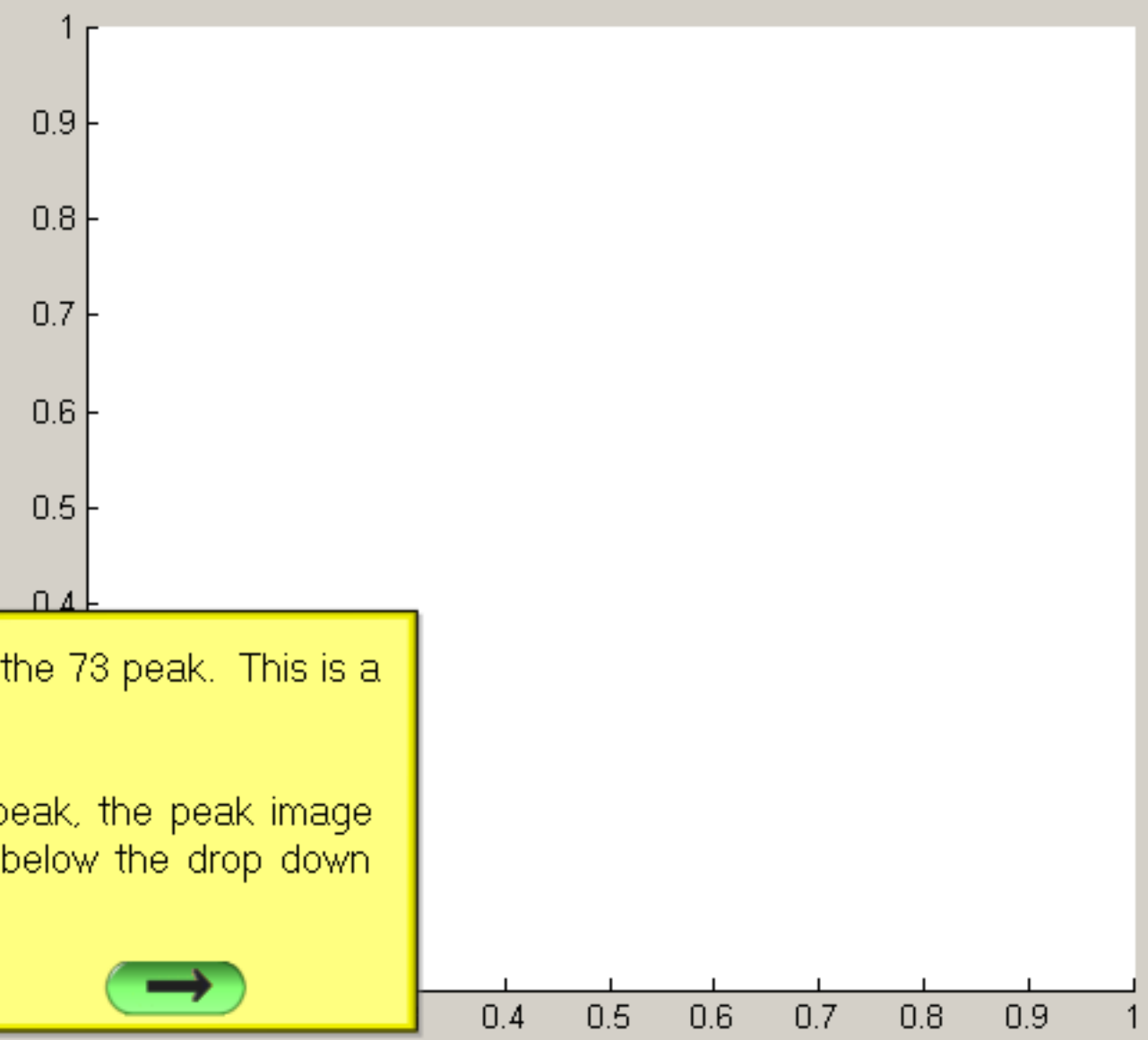
If a value of Peak 2 is zero
the value for that pixel ratio is
set to zero.

Calculate peak ratio

Close

Save plot to file

Make ext figure



Data Selection Panel

Name of Image Matrix

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imagedata_s214...

exactmass_s2149_...

Load Selected Data

Image: **imagedata_s2149_allpos**

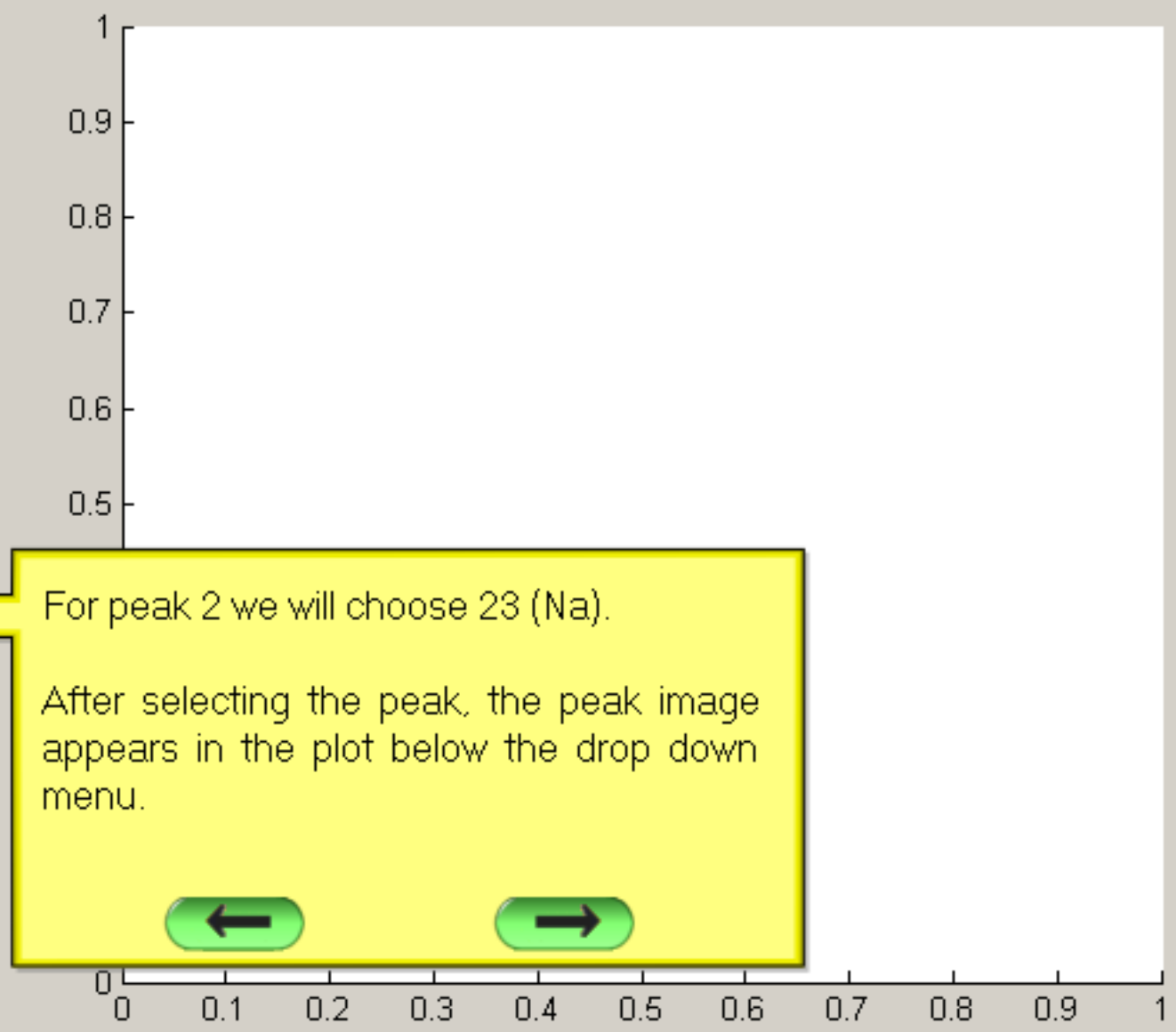
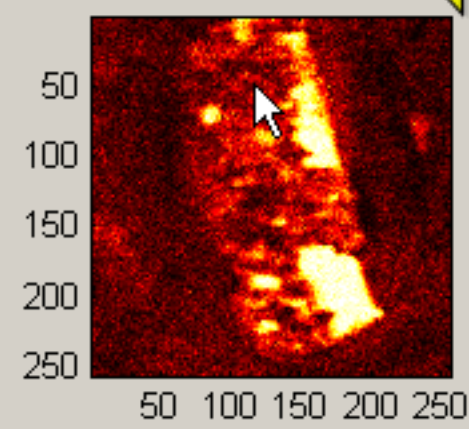
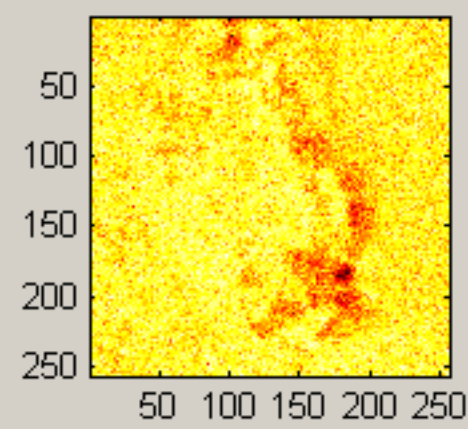
Variables: **exactmass_s2149_allpos**

Choose Peak1

73.0656

Choose Peak2

22.9923



For peak 2 we will choose 23 (Na).

After selecting the peak, the peak image appears in the plot below the drop down menu.



If a value of Peak 2 is zero
the value for that pixel ratio is
set to zero.

Calculate peak ratio

Close

Save plot to file

Make ext figure

Data Selection Panel

Name of Image Matrix

Name of Variable Matrix

imagedata_s214...

exactmass_s2149_...

Load Selected Data

Image: **imagedata_s2149_allpos**

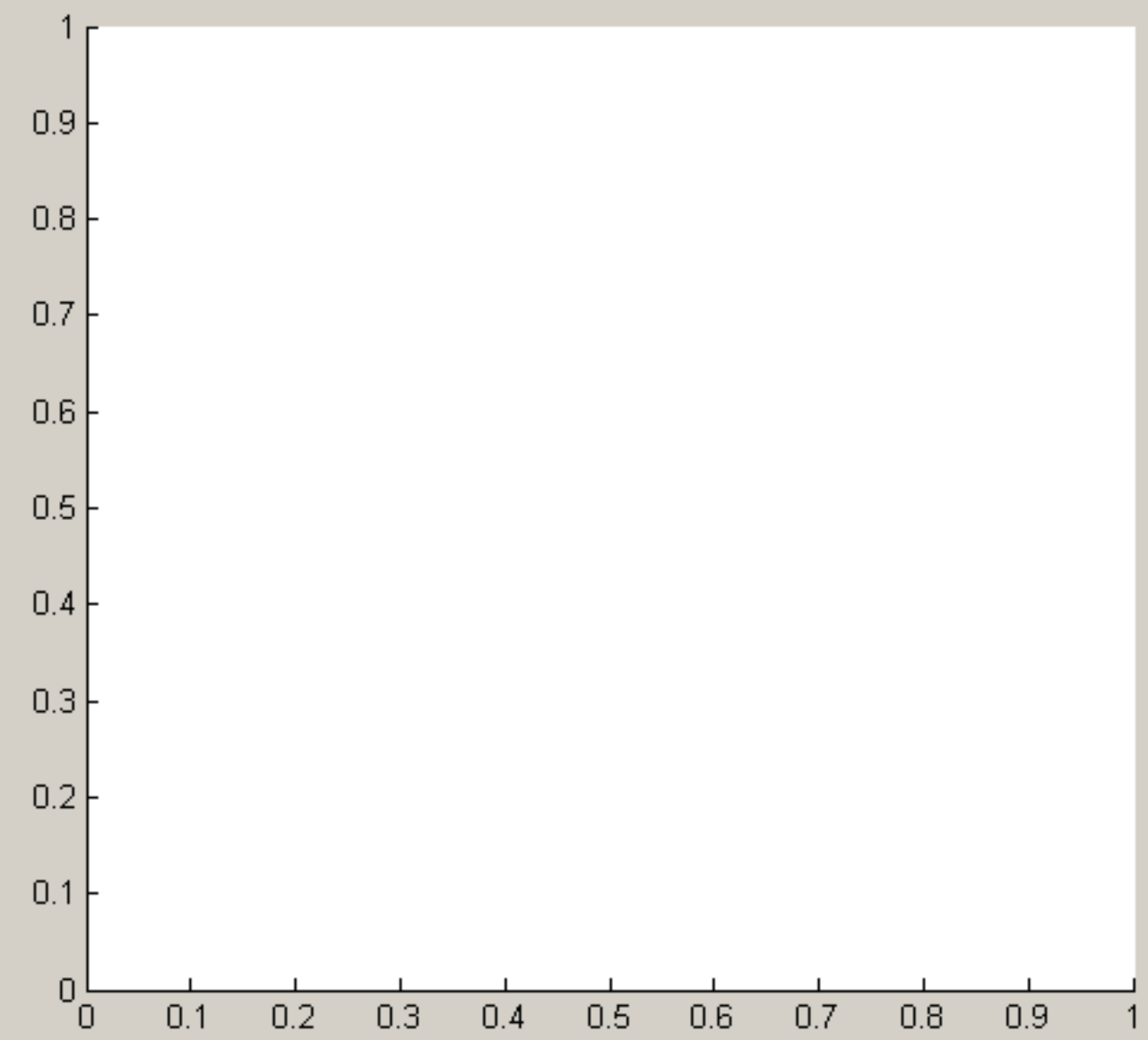
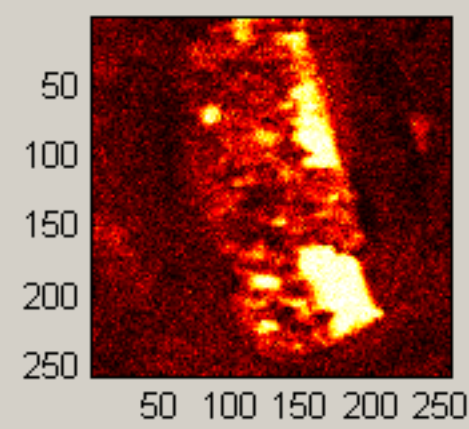
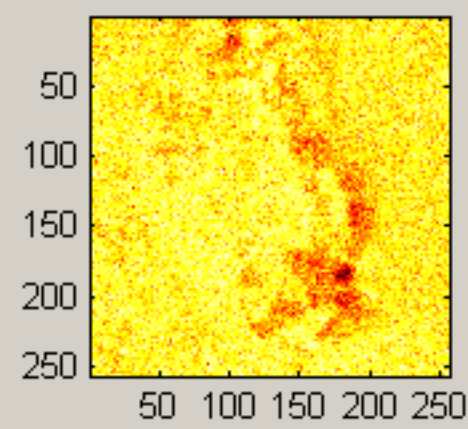
Variables: **exactmass_s2149_allpos**

Choose Peak1

Choose Peak2

73.0656

22.9923



If a value of Peak 2 is zero
the value for that pixel ratio is
set to zero.

Save plot to file

Make ext figure

Calculate peak ratio

Close

Press the 'Calculate peak ratio' button.



Data Selection Panel

Name of Image Matrix

Name of Variable Matrix

imagedata_s214...

exactmass_s2149_...

Load Selected Data

Image: **imagedata_s2149_allpos**

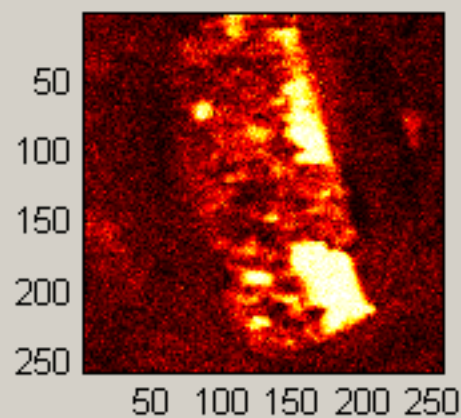
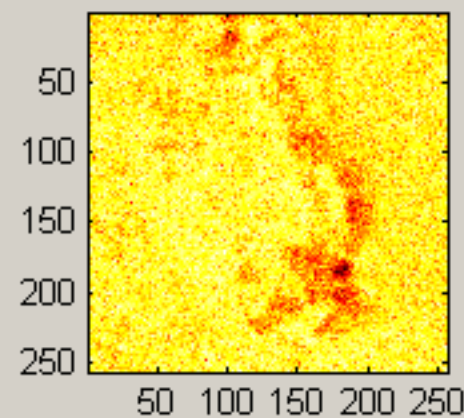
Variables: **exactmass_s2149_allpos**

Choose Peak1

73.0656

Choose Peak2

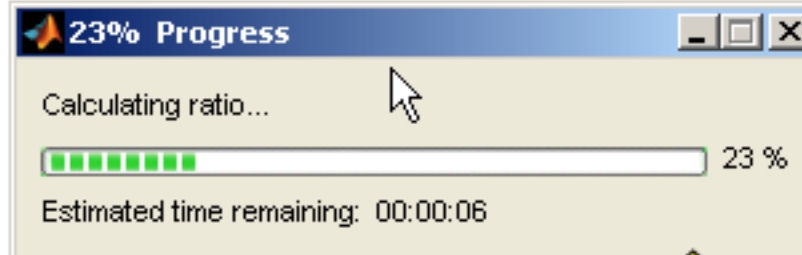
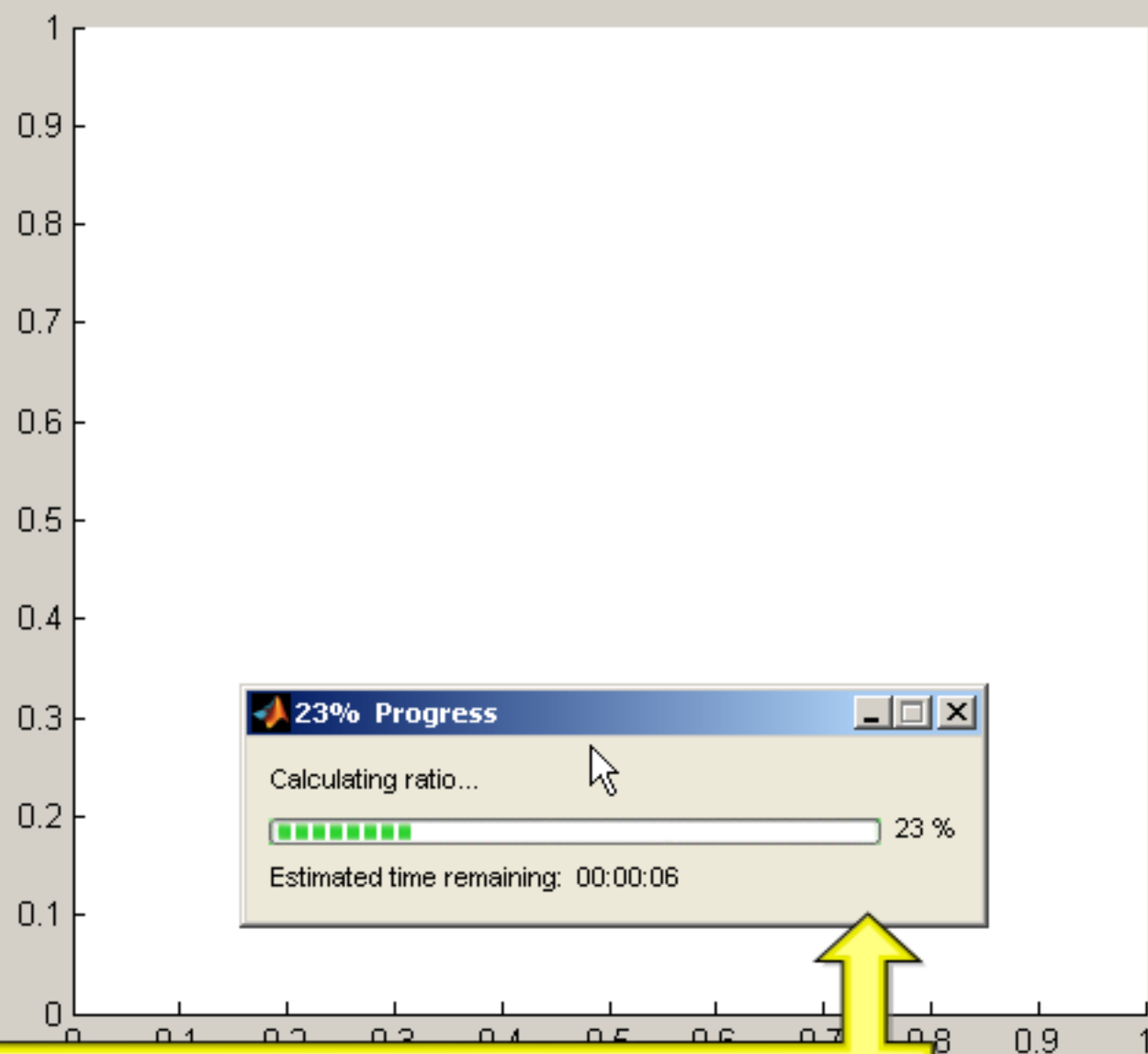
22.9923



If a value of Peak 2 is zero
the value for that pixel ratio is
set to zero.

Calculate peak ratio

Close



A progress bar will show how long it will take to
calculate the ratio.



Data Selection Panel

Name of Image Matrix

Name of Variable Matrix

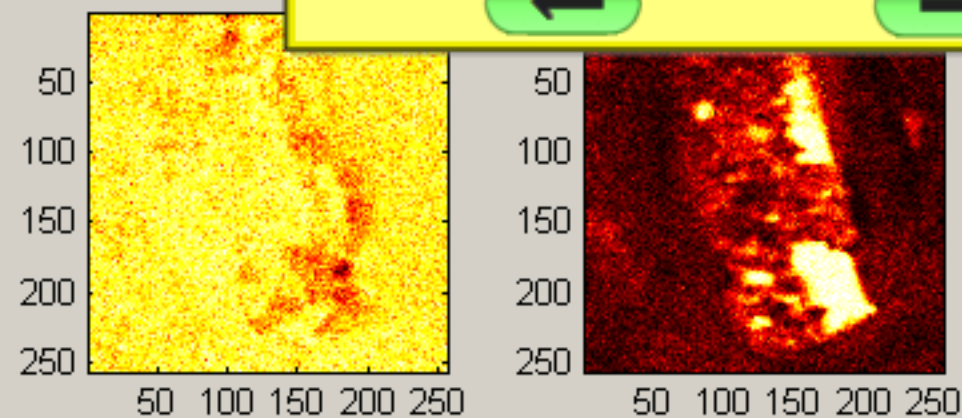
imagedata_s214...

exactmass_s2149_...

When the calculation is finished the peak ratio image will be displayed in this box.

The peaks used in the ratio will be shown at the top of the figure.

Here we see the ratio of the 73(PDMS) to 23 (Na) peak. For this data set this shows that the PDMS and Na are mostly located in different areas. Where Na is highest there is little PDMS Signal.

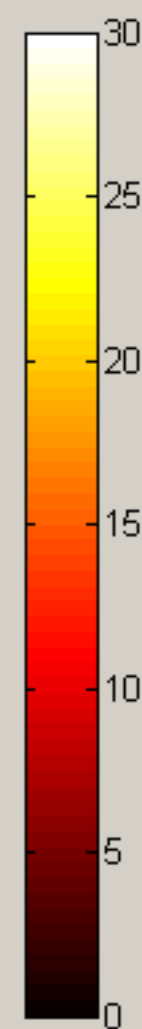
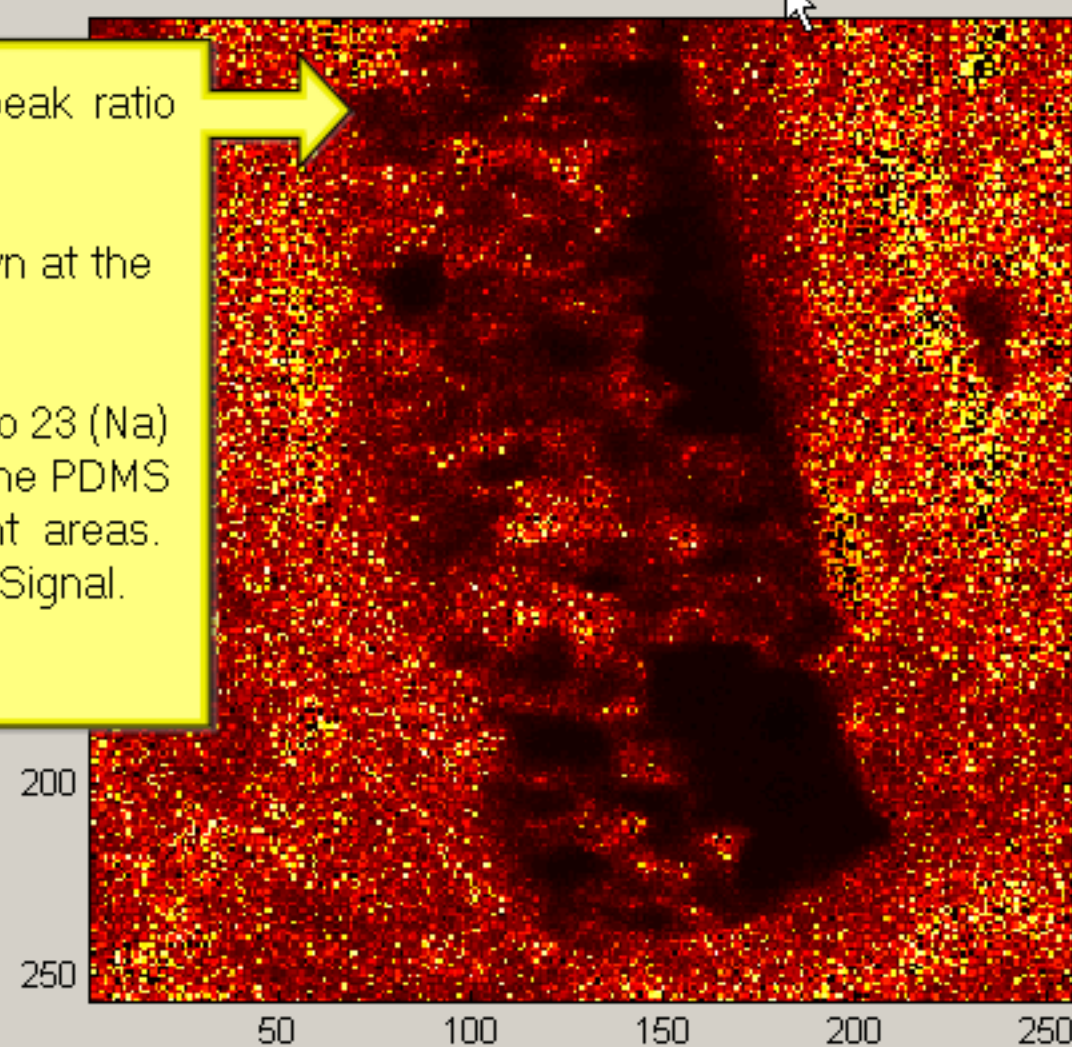


If a value of Peak 2 is zero
the value for that pixel ratio is
set to zero.

Calculate peak ratio

Close

ratio=73.0656/22.9923



Save plot to file

Make ext figure

Data Selection Panel

Name of Image Matrix

Name of Variable Matrix

imagedata_s214...

exactmass_s2149_...

Load Selected Data

Image: imagedata_s2149_allpos

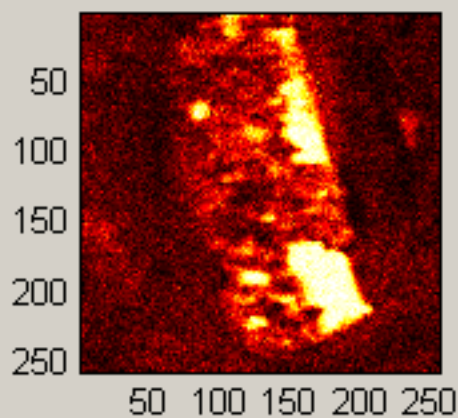
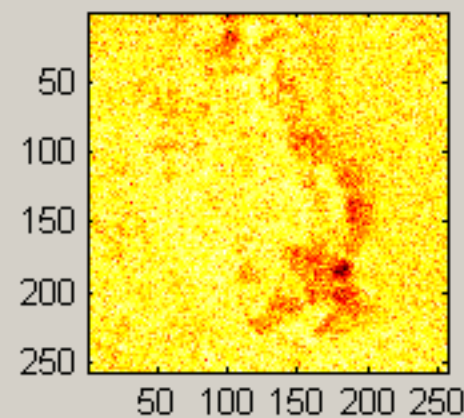
Variables: exactmass_s2149_allpos

Choose Peak1

Choose Peak2

73.0656

22.9923

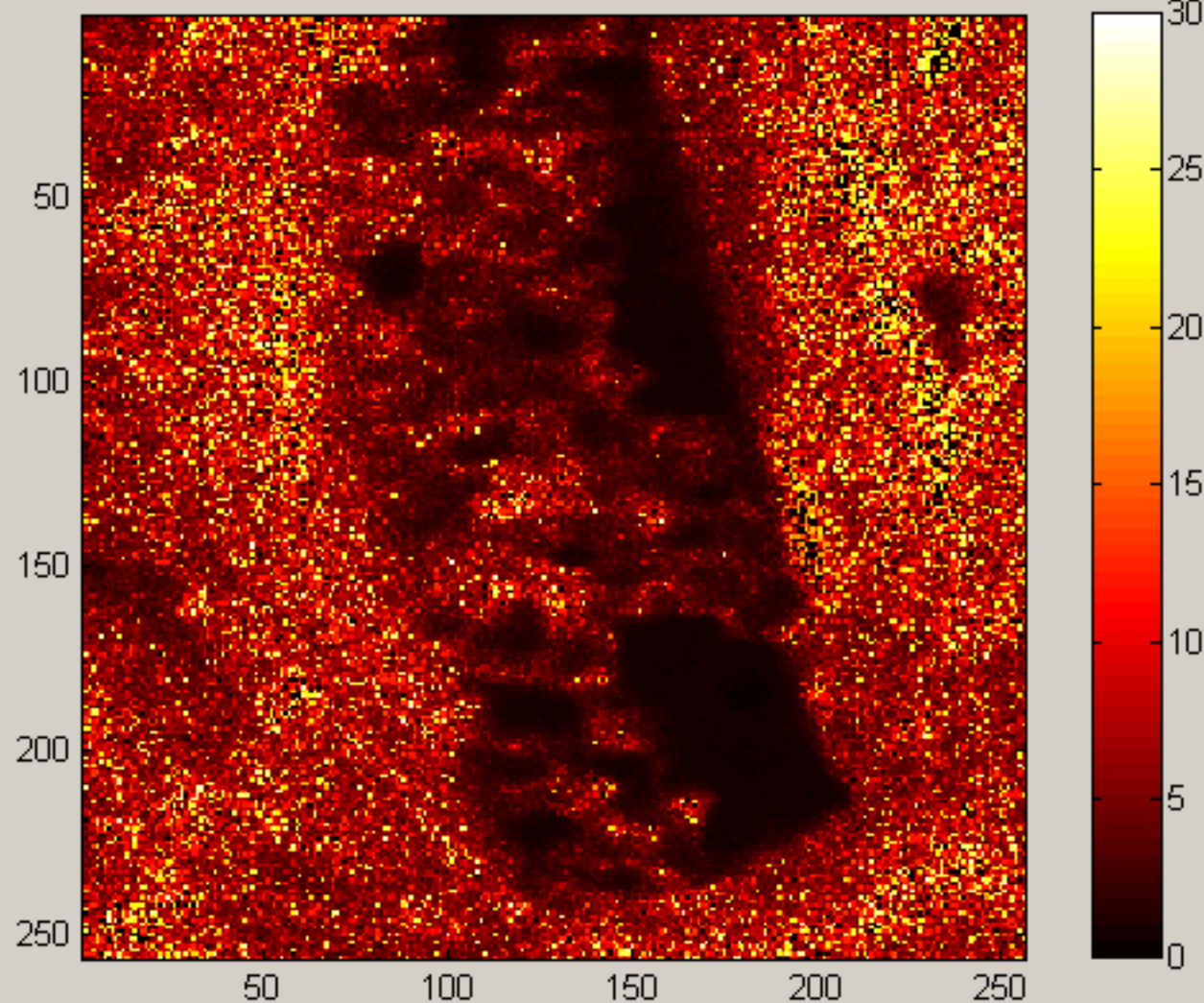


If a value of Peak 2 is zero
the value for that pixel ratio is
set to zero.

Calculate peak ratio

Close

ratio=73.0656/22.9923



Save plot to file

Press the 'Save plot to file' button to save a copy of the peak ratio image.



Save picture as

Save in: work

frames
C12toAuratio.jpg

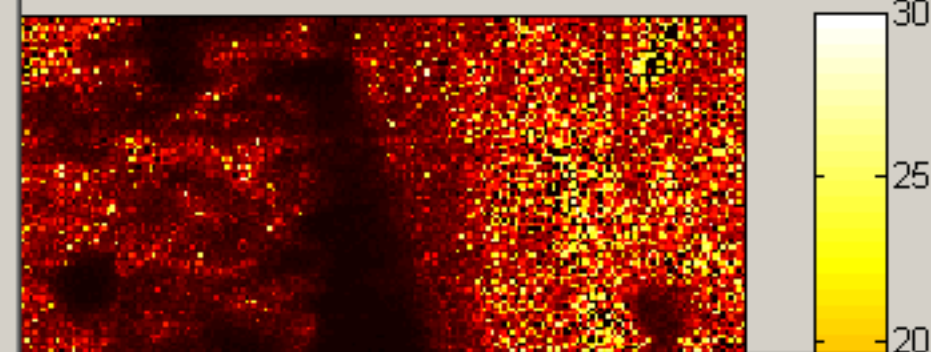
File name: Ratio73to23

Save as type: jpeg (*.jpg)

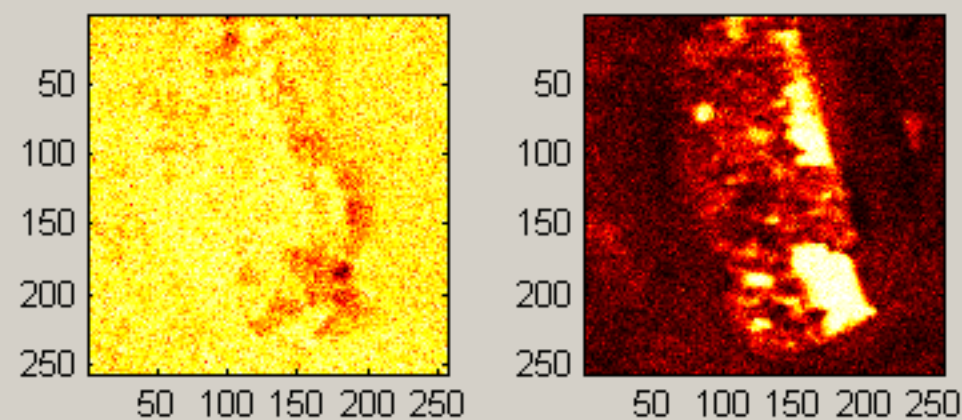
Save

Cancel

ratio=73.0656/22.9923



Choose where you want to save the file, give the file a name and press the 'Save' button to save the file.



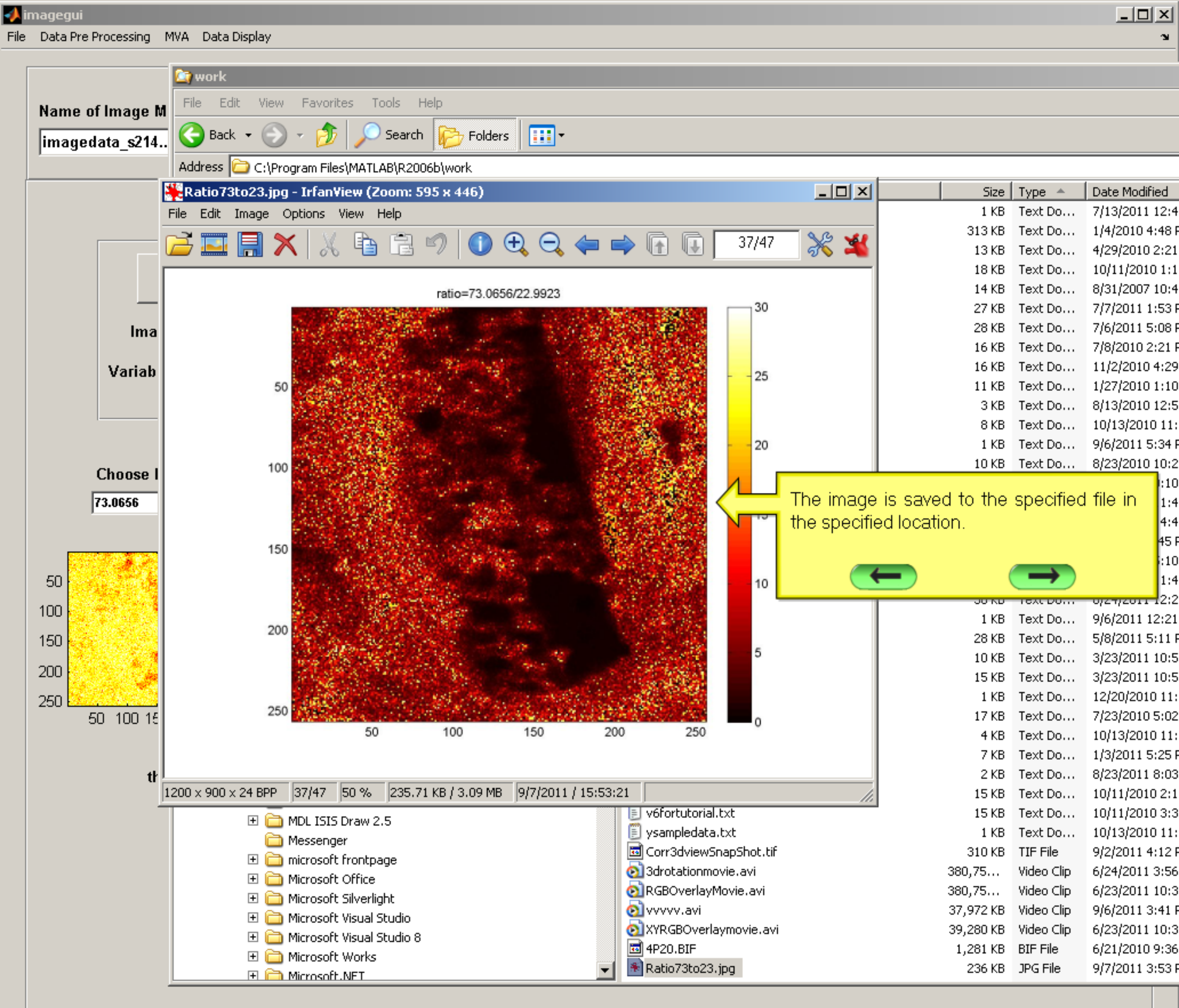
If a value of Peak 2 is zero
the value for that pixel ratio is
set to zero.

Calculate peak ratio

Close

Save plot to file

Make ext figure



Data Selection Panel

Name of Image Matrix

Name of Variable Matrix

imagedata_s214...

exactmass_s2149_...

Load Selected Data

Image: imagedata_s2149_allpos

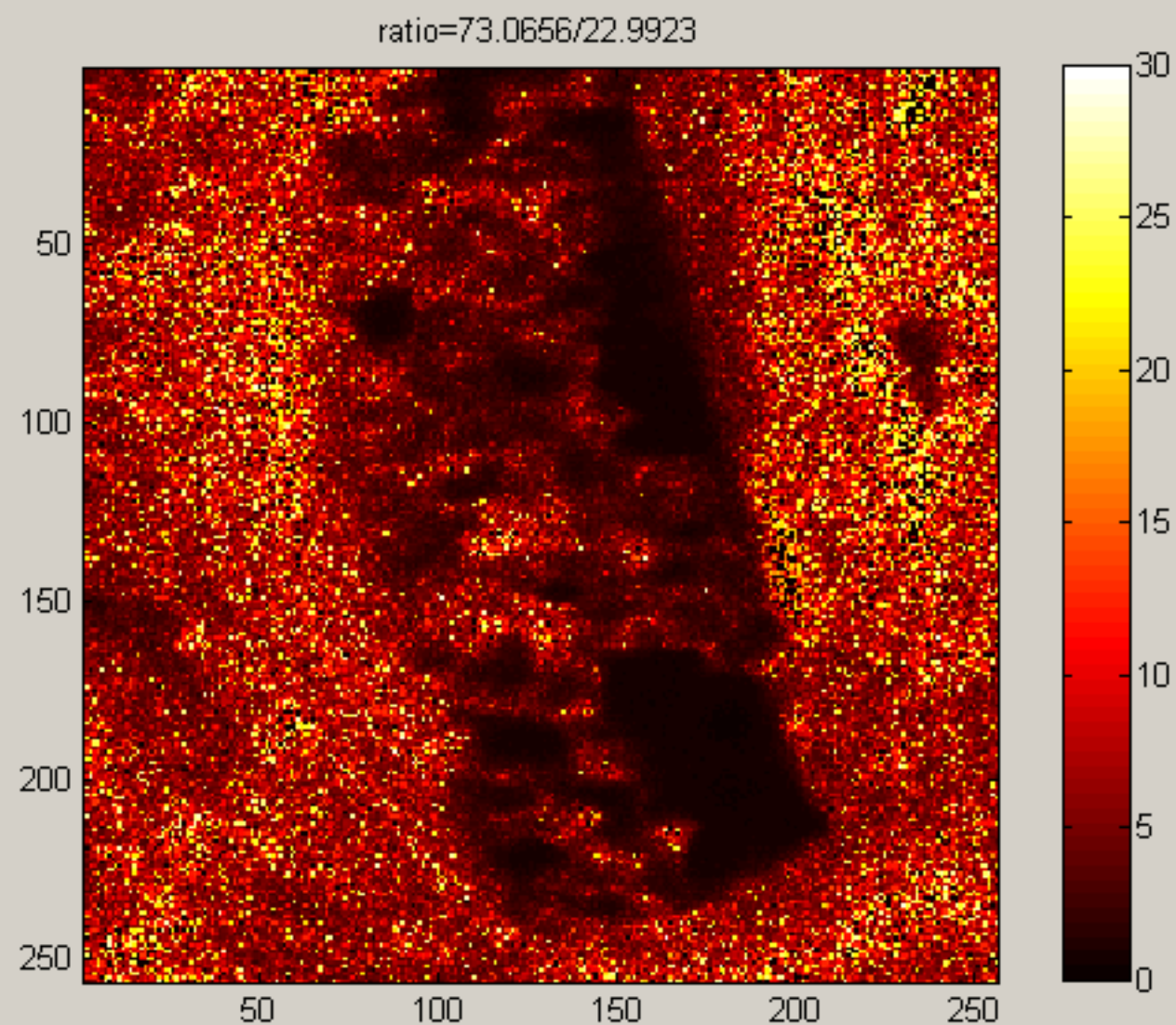
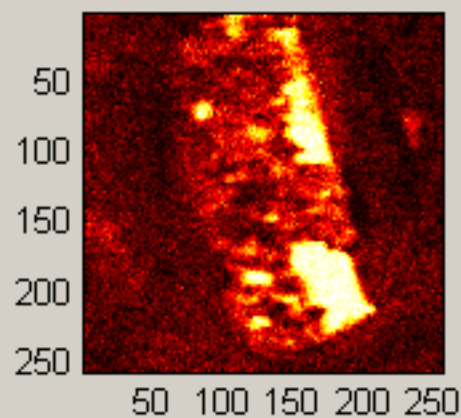
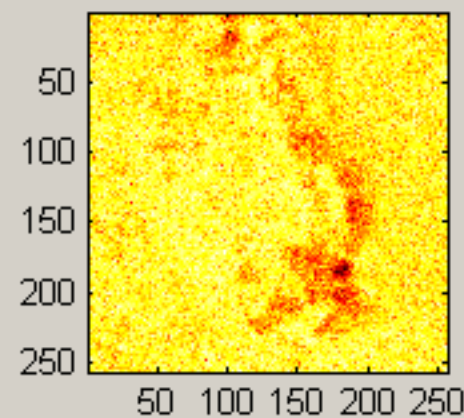
Variables: exactmass_s2149_allpos

Choose Peak1

73.0656

Choose Peak2

22.9923



If a value of Peak 2 is zero
the value for that pixel ratio
set to zero.

Calculate peak ratio

Close

You can also export the data to an external
Matlab figure. To do this, press the 'Make
ext figure' button.

Make ext figure

Name of Image Matrix

imagedata_s214...

Name of Variable Mat

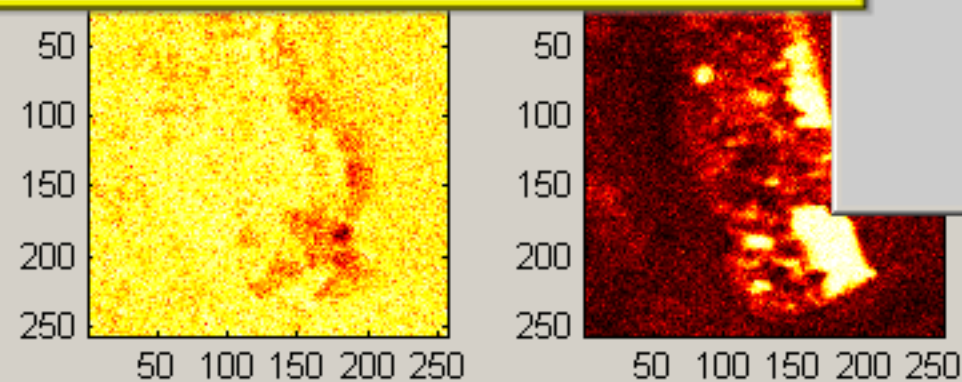
exactmass_s2149_...

Load Selected Data

Image: imagedata_s2149_allpos

Variables: exactmass_s2149_allpos

The image is exported to a Matlab figure window. You can then make any changes and save it as desired.

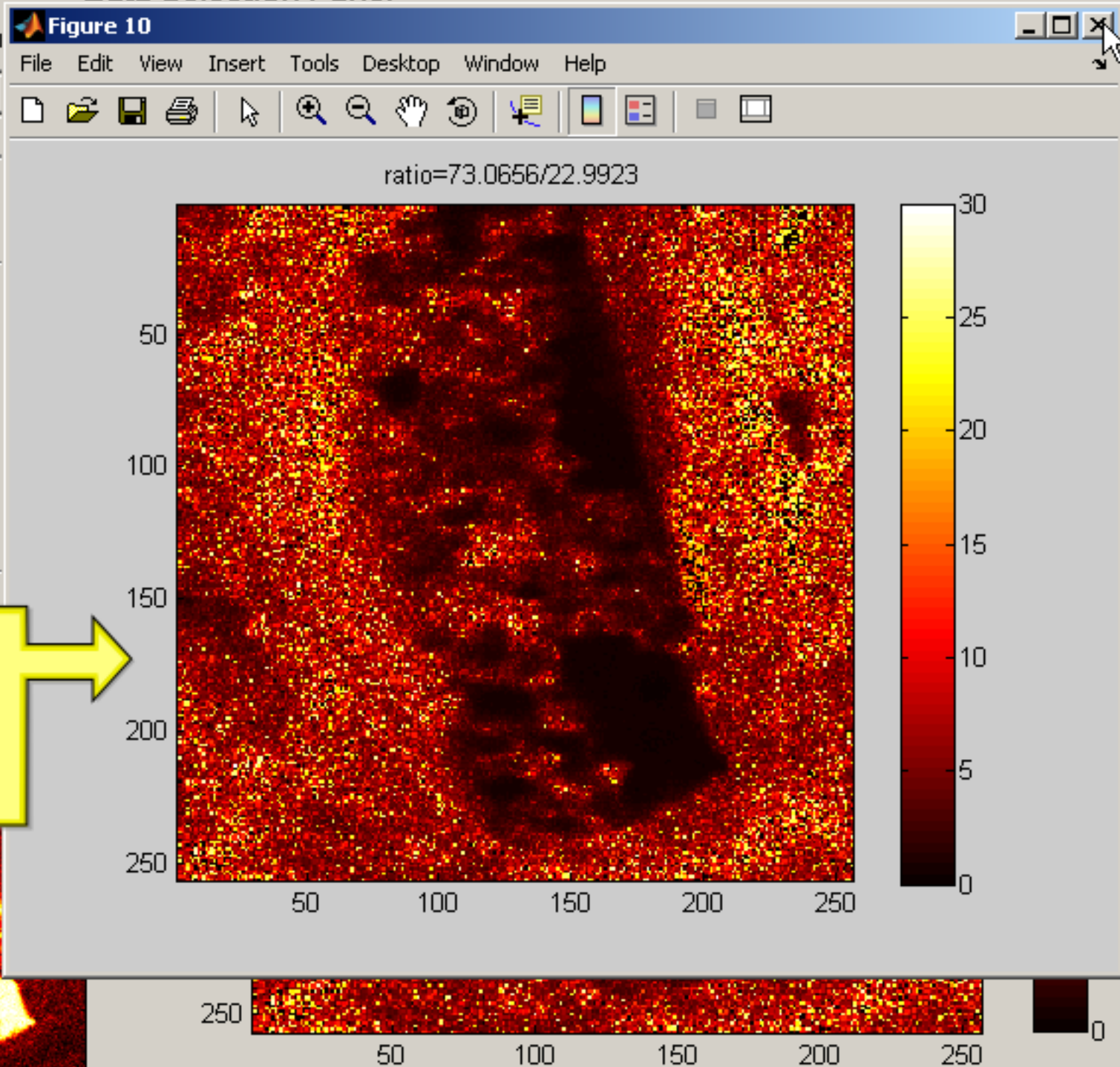


If a value of Peak 2 is zero
the value for that pixel ratio is
set to zero.

Calculate peak ratio

Close

Data Selection Panel



Save plot to file

Make ext figure

Data Selection Panel

Name of Image Matrix

Name of Variable Matrix

imagedata_s214...

exactmass_s2149_...

Load Selected Data

Image: imagedata_s2149_allpos

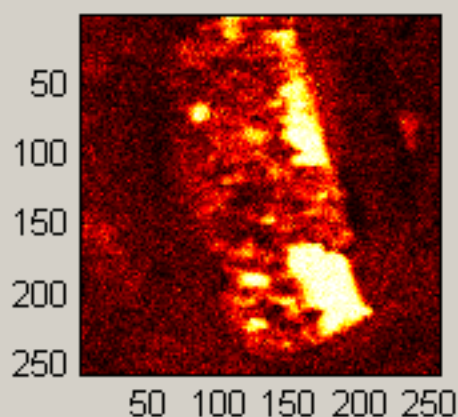
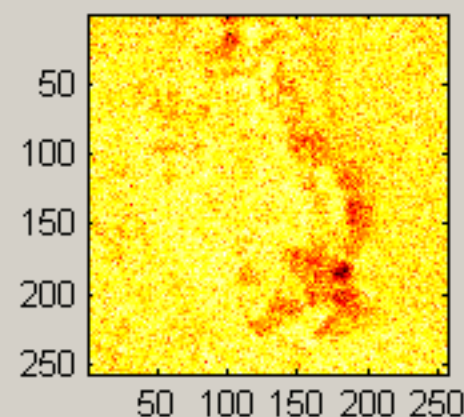
Variables: exactmass_s2149_allpos

Choose Peak1

73.0656

Choose Peak2

22.9923



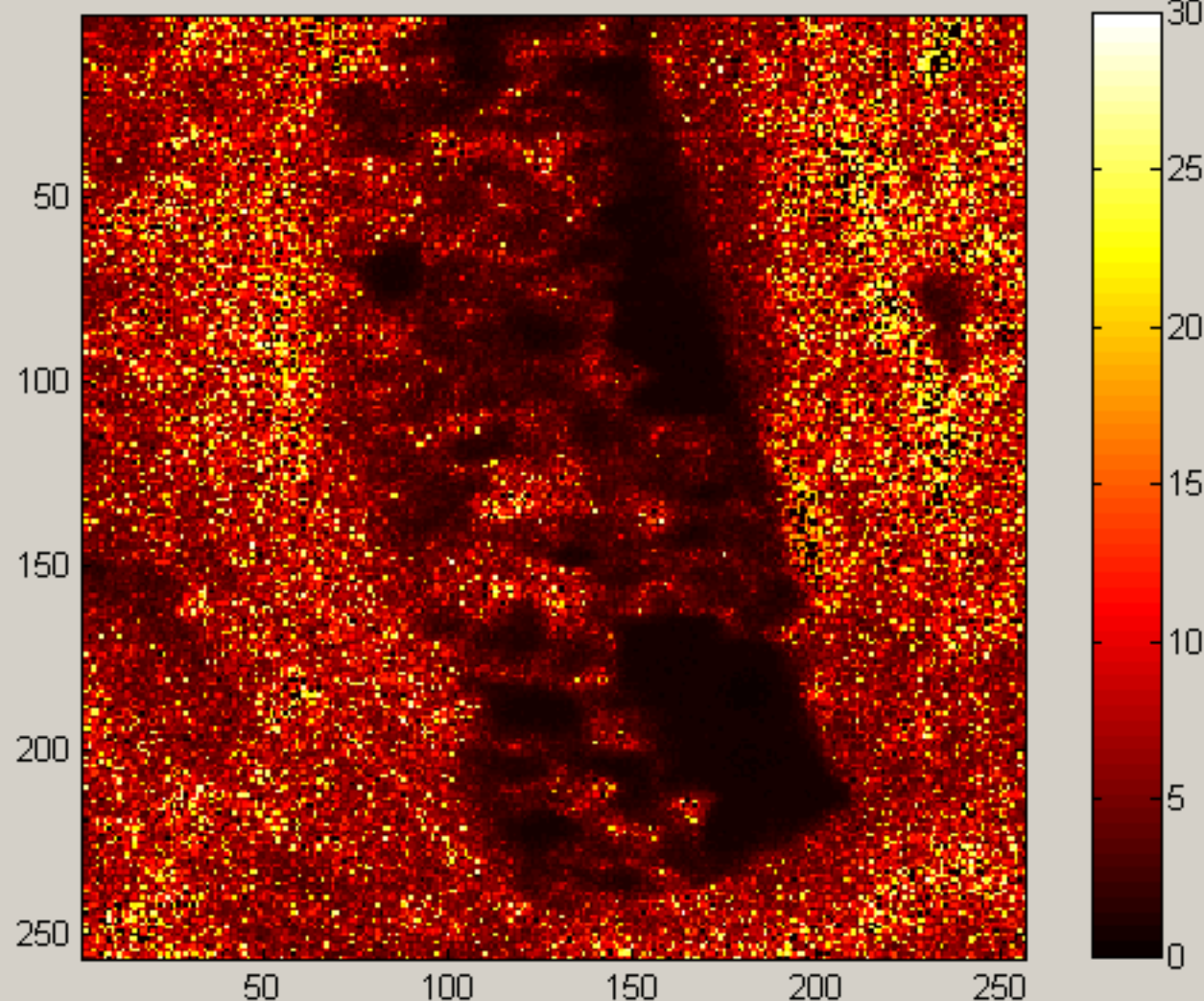
If a value of Peak 2 is zero
the value for that pixel ratio is
set to zero.

Calculate peak ratio

Close

When you are done, you can close the panel by pressing the 'Close' button.

ratio=73.0656/22.9923



Save plot to file

Make ext figure

Data Selection Panel

Name of Image Matrix

Name of Variable Matrix

imagedata_s214...

exactmass_s2149_...

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.

