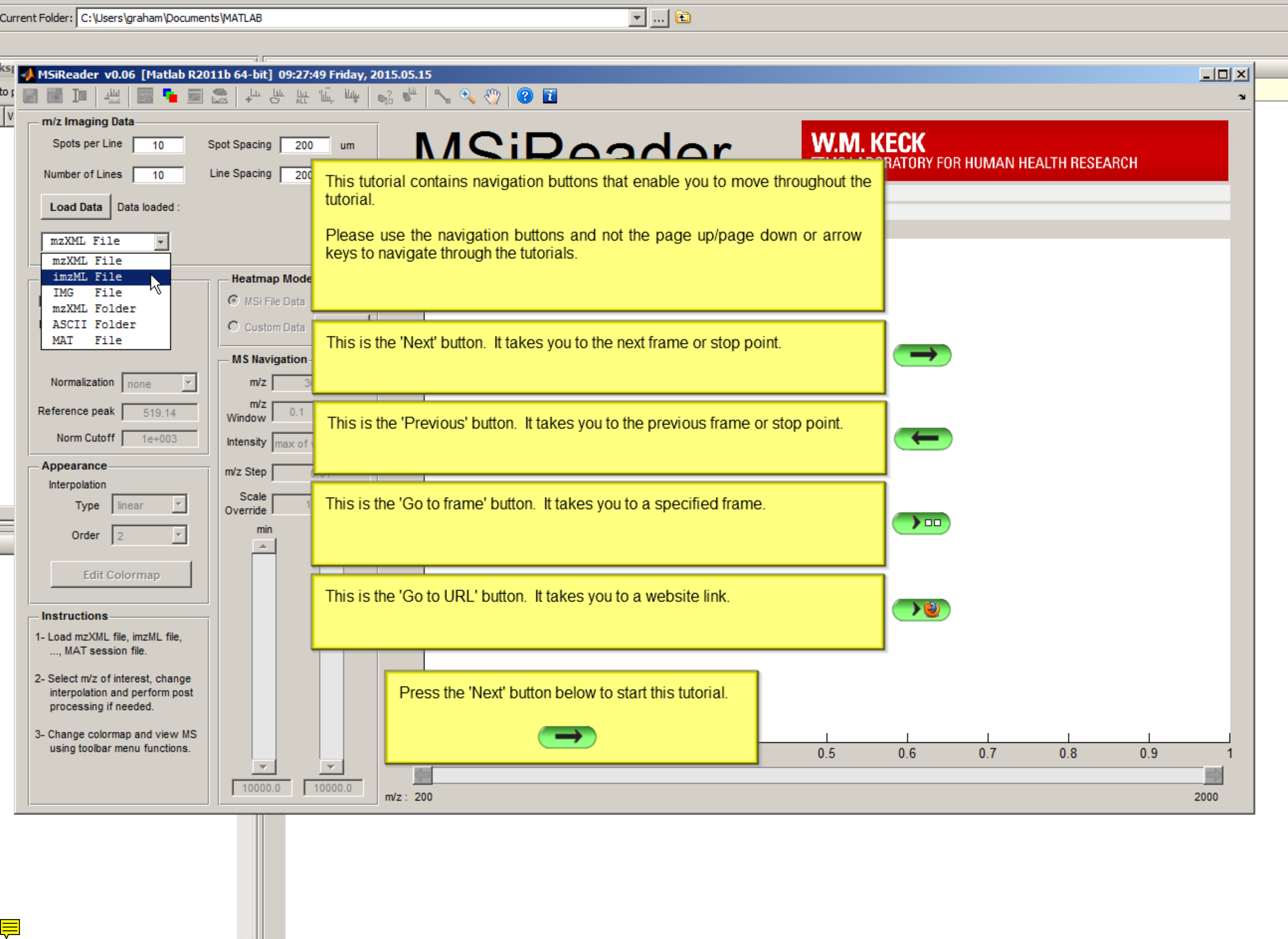


Current Folder: C:\Users\graham\Documents\MATLAB

MSiReader v0.06 [Matlab R2011b 64-bit] 09:27:49 Friday, 2015.05.15

m/z Imaging Data

Spots per Line: 10

Spot Spacing: 200 um

Number of Lines: 10

Line Spacing: 200

Data loaded :

Instructions

1- Load mzXML file, imzML file, ..., MAT session file.

2- Select m/z of interest, change interpolation and perform post processing if needed.

3- Change colormap and view MS using toolbar menu functions.

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.

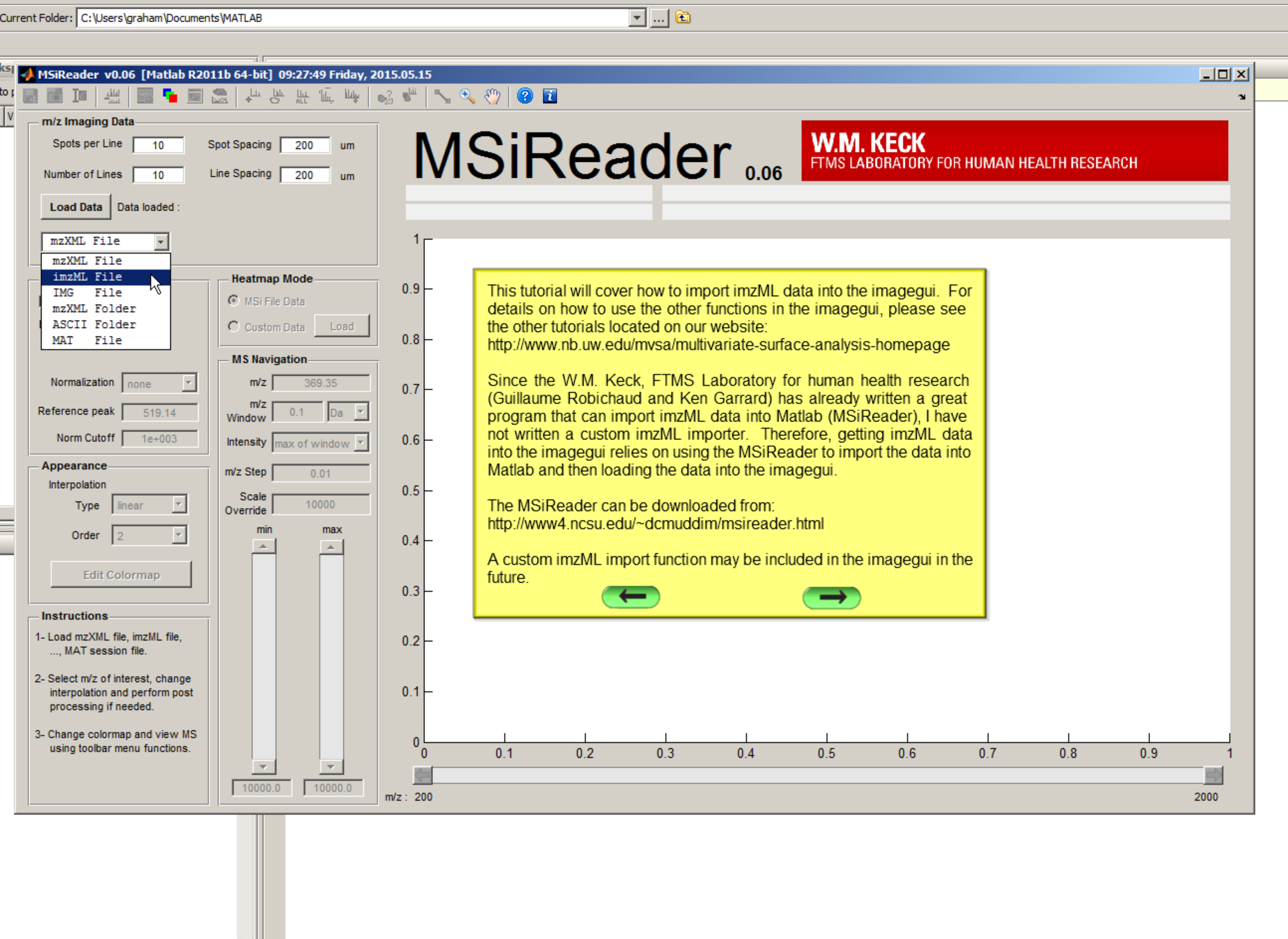
This is the 'Next' button. It takes you to the next frame or stop point.

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.



Spots per Line 10
Spot Spacing 200 um
Number of Lines 10
Line Spacing 200 um
Normalization none
Reference peak 519.14
Norm Cutoff 1e+003
m/z 369.35
m/z Window 0.1 Da
Intensity max of window
m/z Step 0.01
Scale Override 10000
Type linear
Order 2
min 10000.0
max 10000.0

1- Load mzXML file, imzML file, ..., MAT session file.

2- Select m/z of interest, change interpolation and perform post processing if needed.

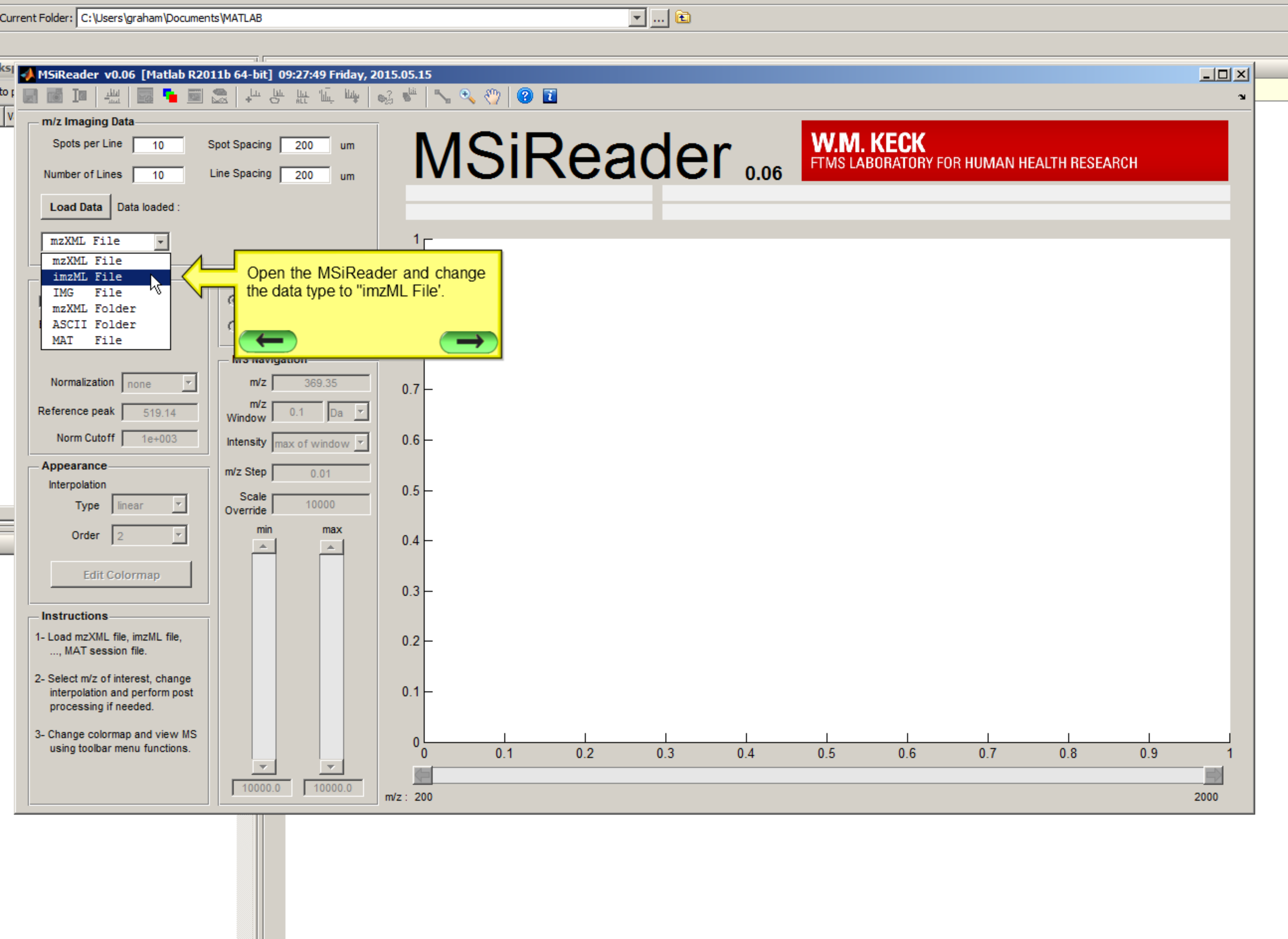
3- Change colormap and view MS using toolbar menu functions.

This tutorial will cover how to import imzML data into the imagegui. For details on how to use the other functions in the imagegui, please see the other tutorials located on our website:
http://www.nb.uw.edu/mvsa/multivariate-surface-analysis-homepage

Since the W.M. Keck, FTMS Laboratory for human health research (Guillaume Robichaud and Ken Garrard) has already written a great program that can import imzML data into Matlab (MSiReader), I have not written a custom imzML importer. Therefore, getting imzML data into the imagegui relies on using the MSiReader to import the data into Matlab and then loading the data into the imagegui.

The MSiReader can be downloaded from:
http://www4.ncsu.edu/~dcmuddim/msireader.html

A custom imzML import function may be included in the imagegui in the future.



Open the MSiReader and change the data type to "imzML File'.

Spots per Line 10
Spot Spacing 200 um
Number of Lines 10
Line Spacing 200 um
Data loaded :

Normalization none
Reference peak 519.14
Norm Cutoff 1e+003

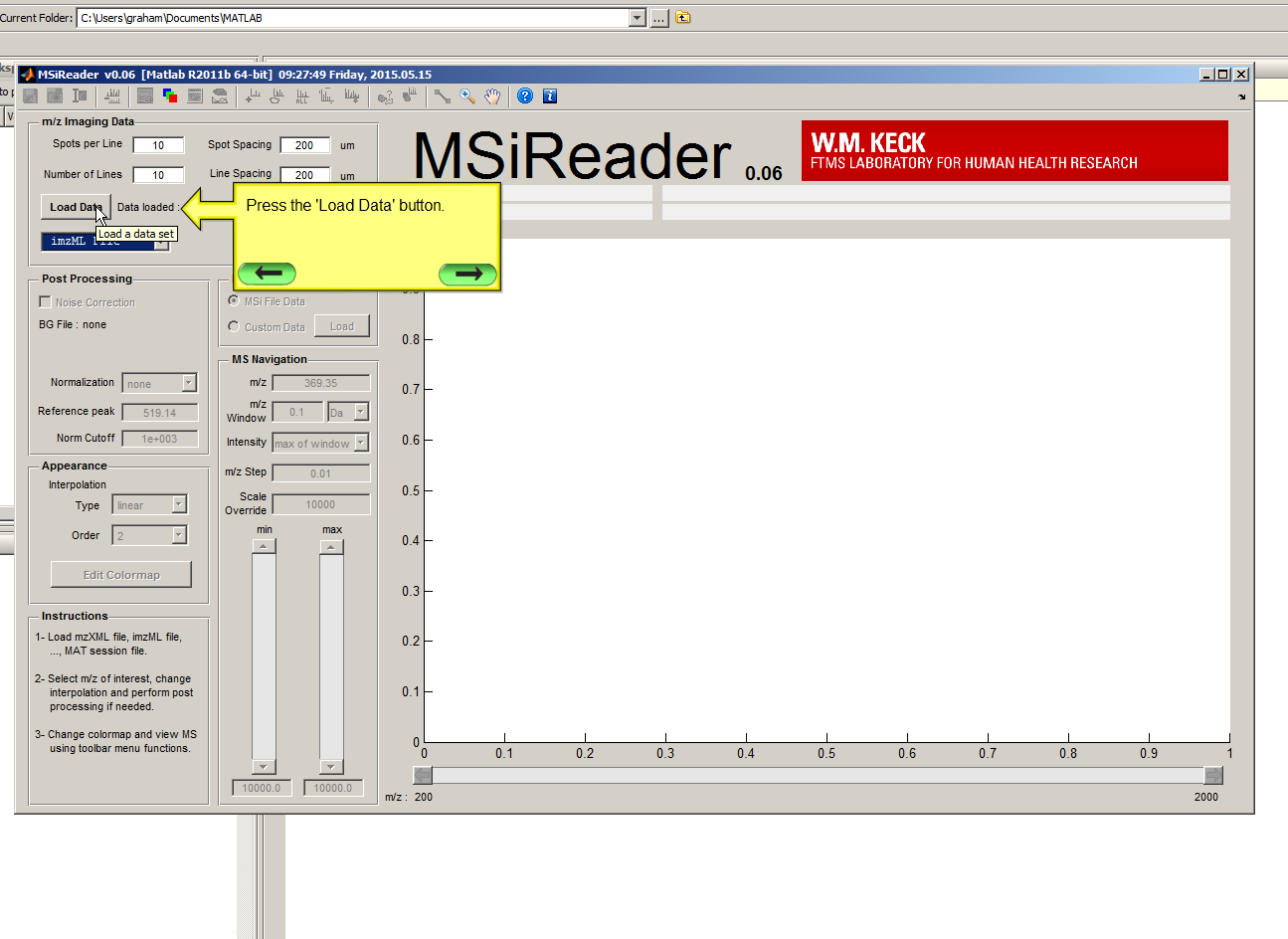
m/z 369.35
m/z Window 0.1 Da
Intensity max of window
m/z Step 0.01
Scale Override 10000
10000.0
10000.0

Interpolation
Type linear
Order 2

1- Load mzXML file, imzML file, ..., MAT session file.

2- Select m/z of interest, change interpolation and perform post processing if needed.

3- Change colormap and view MS using toolbar menu functions.



Current Folder: C:\Users\graham\Documents\MATLAB

MSiReader v0.06 [Matlab R2011b 64-bit] 09:27:49 Friday, 2015.05.15

Press the 'Load Data' button.

m/z Imaging Data

Spots per Line: 10

Spot Spacing: 200 um

Number of Lines: 10

Line Spacing: 200 um

Data loaded :

imzML file

Post Processing

☐ Noise Correction

BG File : none

Normalization: none

Reference peak: 519.14

Norm Cutoff: 1e+003

● MSi File Data

○ Custom Data

Appearance

Interpolation

Type: linear

Order: 2

MS Navigation

m/z: 369.35

m/z Window: 0.1 Da

Intensity: max of window

m/z Step: 0.01

Scale Override: 10000

min: 10000.0

max: 10000.0

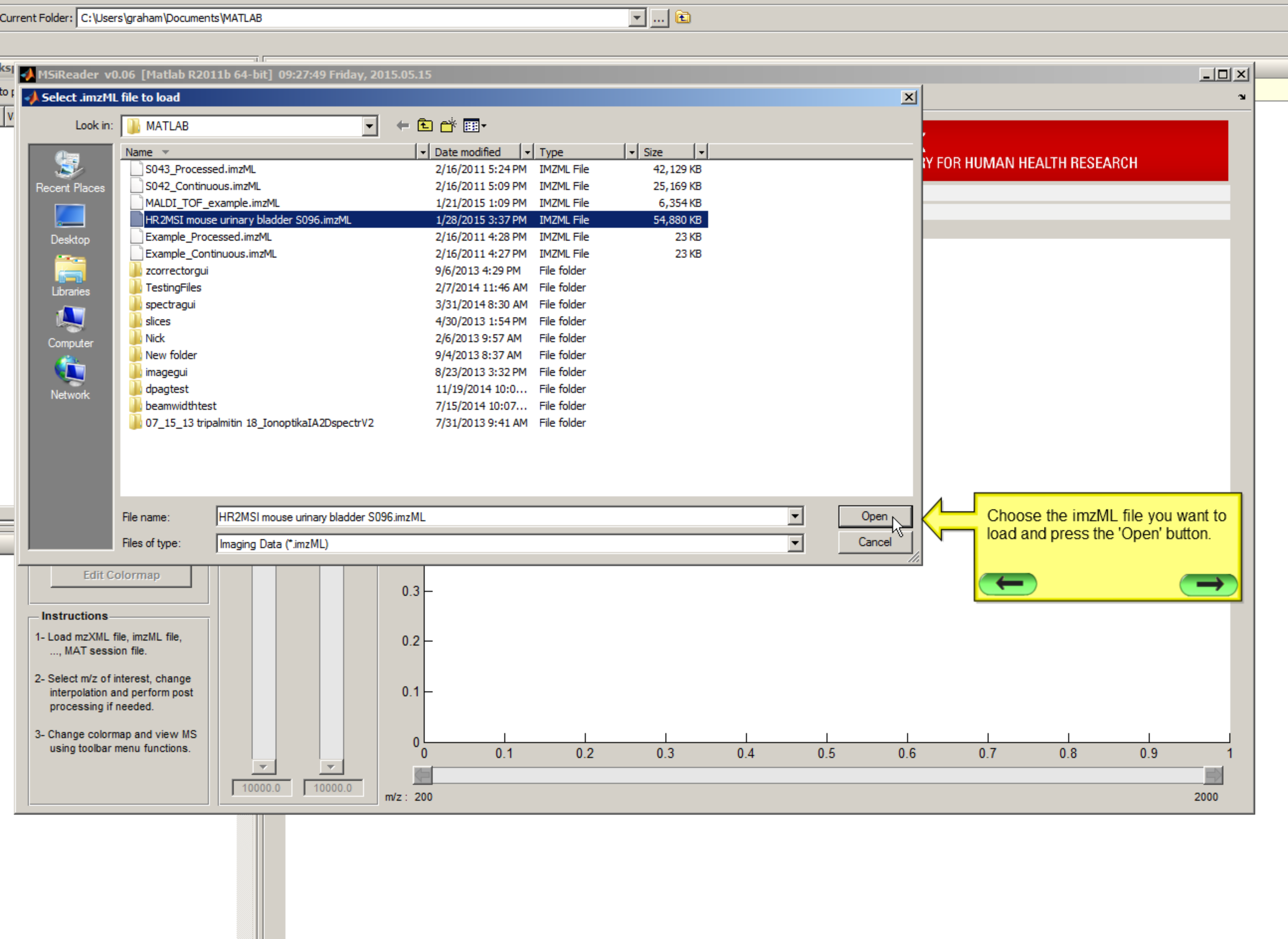
m/z : 200 2000

Instructions

1- Load mzXML file, imzML file, ..., MAT session file.

2- Select m/z of interest, change interpolation and perform post processing if needed.

3- Change colormap and view MS using toolbar menu functions.



Name	Date modified	Type	Size
S043_Processed.imzML	2/16/2011 5:24 PM	IMZML File	42,129 KB
S042_Continuous.imzML	2/16/2011 5:09 PM	IMZML File	25,169 KB
MALDI_TOF_example.imzML	1/21/2015 1:09 PM	IMZML File	6,354 KB
HR2MSI mouse urinary bladder S096.imzML	1/28/2015 3:37 PM	IMZML File	54,880 KB
Example_Processed.imzML	2/16/2011 4:28 PM	IMZML File	23 KB
Example_Continuous.imzML	2/16/2011 4:27 PM	IMZML File	23 KB
zcorrectorgui	9/6/2013 4:29 PM	File folder	
TestingFiles	2/7/2014 11:46 AM	File folder	
spectragui	3/31/2014 8:30 AM	File folder	
slices	4/30/2013 1:54 PM	File folder	
Nick	2/6/2013 9:57 AM	File folder	
New folder	9/4/2013 8:37 AM	File folder	
imagegui	8/23/2013 3:32 PM	File folder	
dpagtest	11/19/2014 10:0...	File folder	
beamwidthtest	7/15/2014 10:07...	File folder	
07_15_13 tripalmitin 18_IonoptikaIA2DspectrV2	7/31/2013 9:41 AM	File folder	

File name: HR2MSI mouse urinary bladder S096.imzML

Files of type: Imaging Data (*.imzML)

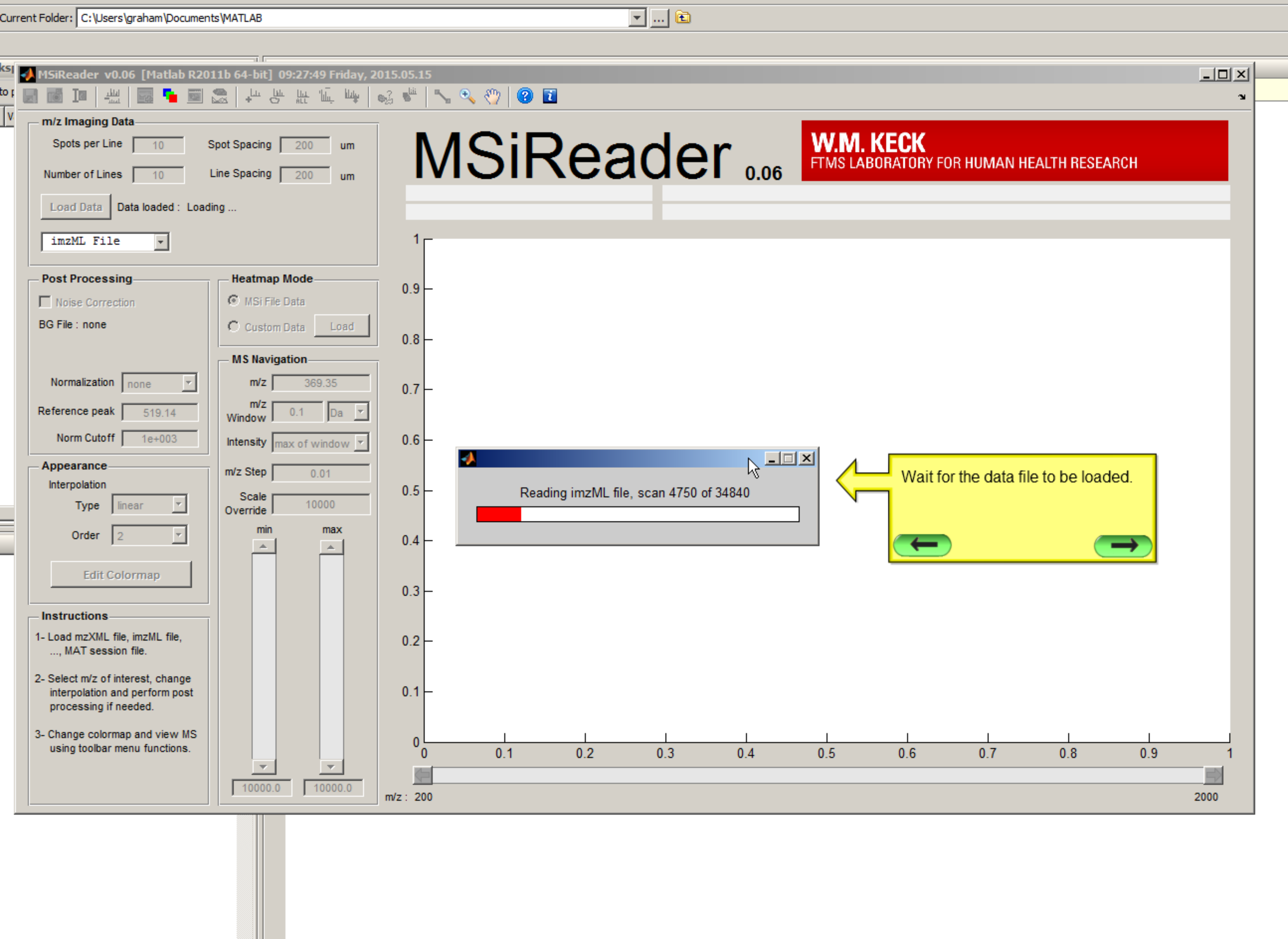
Choose the imzML file you want to load and press the 'Open' button.

Instructions

1- Load mzXML file, imzML file, ..., MAT session file.

2- Select m/z of interest, change interpolation and perform post processing if needed.

3- Change colormap and view MS using toolbar menu functions.



Current Folder: C:\Users\graham\Documents\MATLAB

MSiReader v0.06 [Matlab R2011b 64-bit] 09:27:49 Friday, 2015.05.15

m/z Imaging Data

Spots per Line: 10
Spot Spacing: 200 um
Number of Lines: 10
Line Spacing: 200 um
Data loaded : Loading ...
imzML File

Post Processing

☐ Noise Correction
BG File : none
Normalization: none
Reference peak: 519.14
Norm Cutoff: 1e+003

Heatmap Mode

● MSi File Data
○ Custom Data

MS Navigation

m/z: 369.35
m/z Window: 0.1 Da
Intensity: max of window
m/z Step: 0.01
Scale Override: 10000
min: 10000.0
max: 10000.0

Appearance

Interpolation
Type: linear
Order: 2

Instructions

1- Load mzXML file, imzML file, ..., MAT session file.

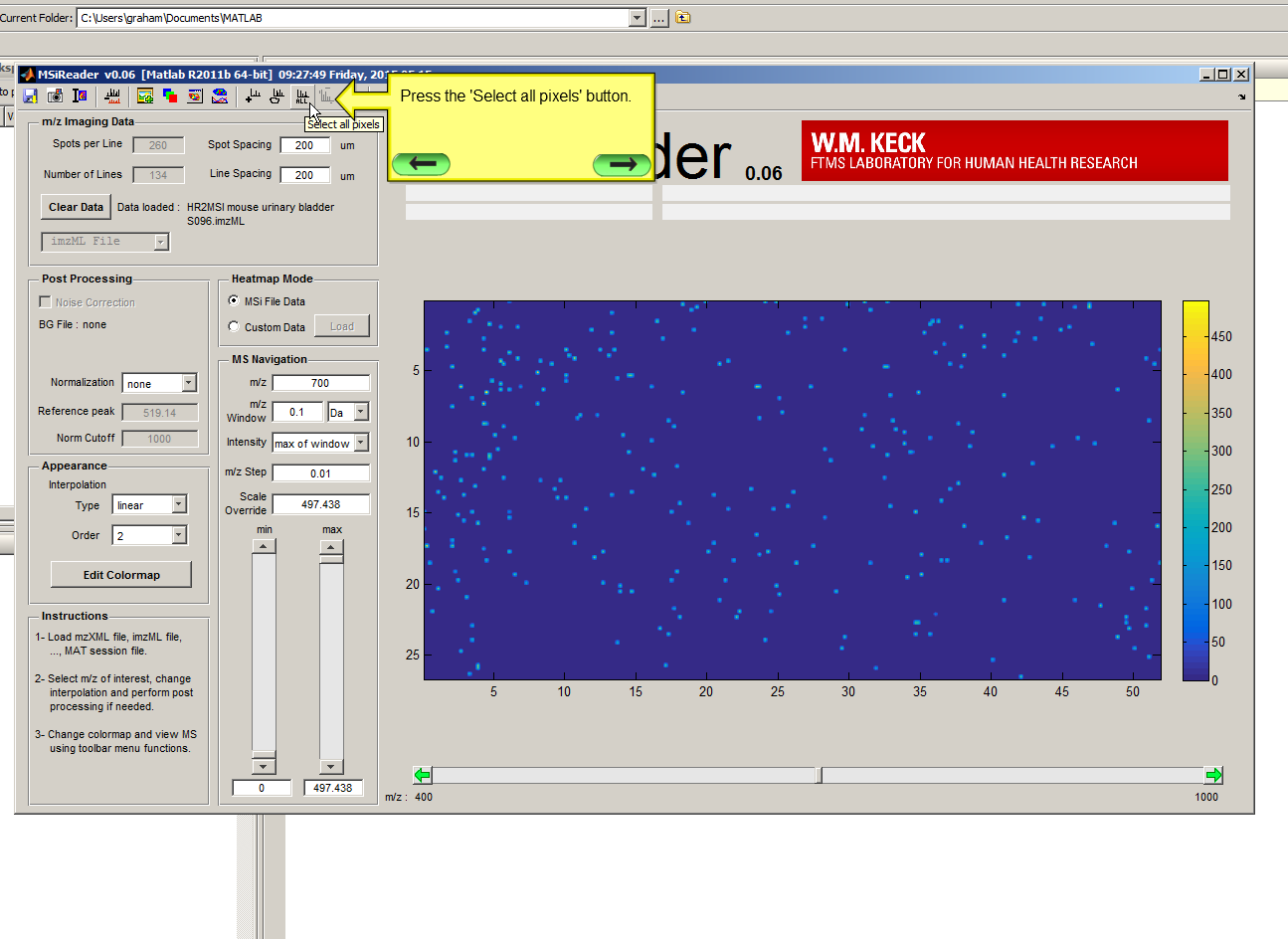
2- Select m/z of interest, change interpolation and perform post processing if needed.

3- Change colormap and view MS using toolbar menu functions.

Reading imzML file, scan 4750 of 34840

Wait for the data file to be loaded.

m/z : 200
2000



Current Folder: C:\Users\graham\Documents\MATLAB

MSiReader v0.06 [Matlab R2011b 64-bit] 09:27:49 Friday, 20

Press the 'Select all pixels' button.

m/z Imaging Data

Spots per Line: 260

Spot Spacing: 200 um

Number of Lines: 134

Line Spacing: 200 um

Data loaded : HR2MSI mouse urinary bladder S096.imzML

Post Processing

☐ Noise Correction

BG File : none

Normalization: none

Reference peak: 519.14

Norm Cutoff: 1000

Heatmap Mode

● MSi File Data

○ Custom Data

MS Navigation

m/z: 700

m/z Window: 0.1 Da

Intensity: max of window

m/z Step: 0.01

Scale Override: 497.438

min: 0

max: 497.438

Appearance

Interpolation

Type: linear

Order: 2

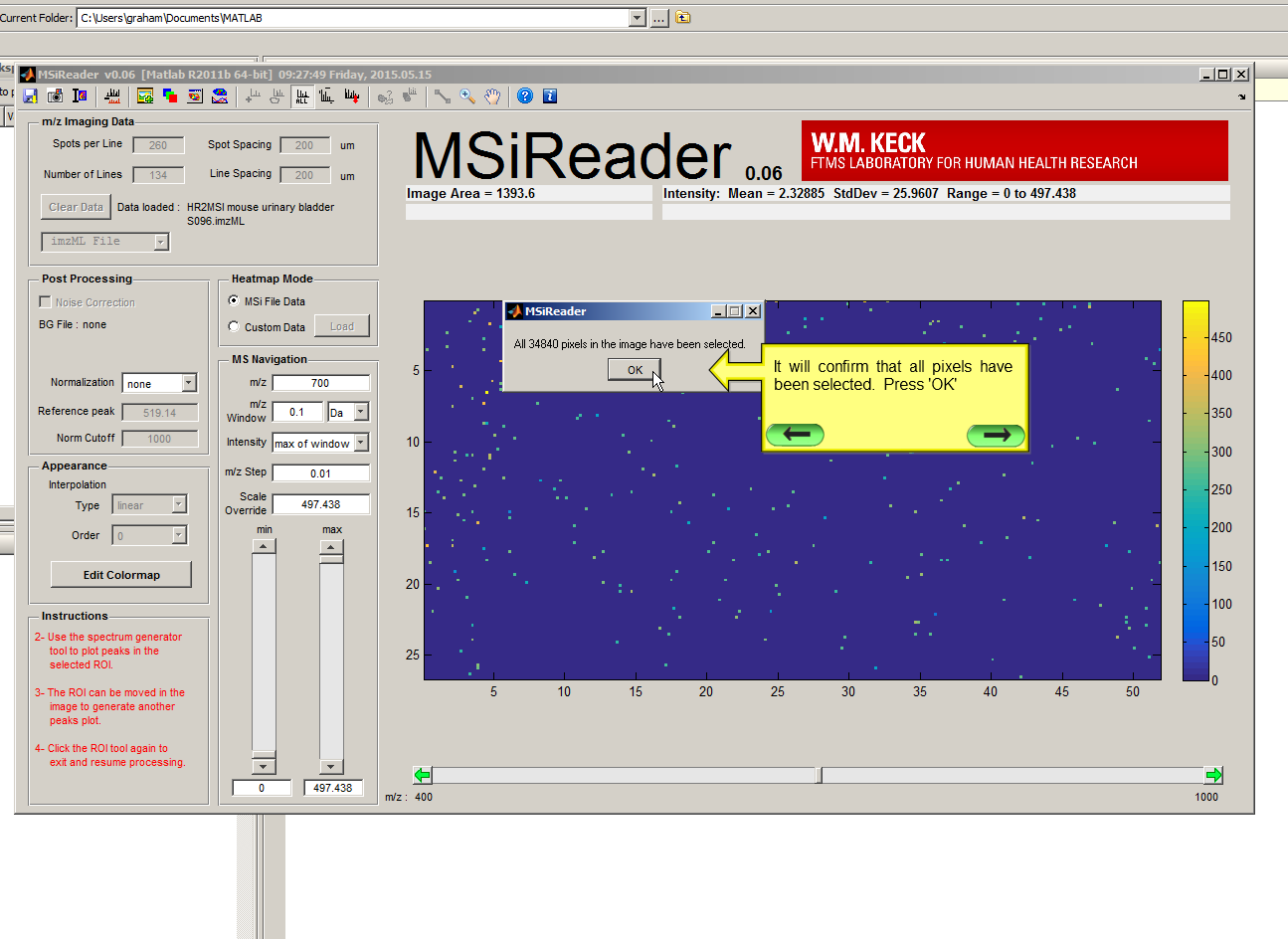
Instructions

1- Load mzXML file, imzML file, ..., MAT session file.

2- Select m/z of interest, change interpolation and perform post processing if needed.

3- Change colormap and view MS using toolbar menu functions.

m/z : 400 … 1000



MSiReader v0.06 [Matlab R2011b 64-bit] 09:27:49 Friday, 2015.05.15

m/z Imaging Data

Spots per Line: 260
Spot Spacing: 200 um
Number of Lines: 134
Line Spacing: 200 um
Clear Data
Data loaded : HR2MSI mouse urinary bladder S096.imzML
imzML File

Post Processing

☐ Noise Correction
BG File : none
Normalization: none
Reference peak: 519.14
Norm Cutoff: 1000

Heatmap Mode

● MSi File Data
○ Custom Data
Load

MS Navigation

m/z: 700
m/z Window: 0.1 Da
Intensity: max of window
m/z Step: 0.01
Scale Override: 497.438
min: 0
max: 497.438

Appearance

Interpolation
Type: linear
Order: 0
Edit Colormap

Instructions

2- Use the spectrum generator tool to plot peaks in the selected ROI.

3- The ROI can be moved in the image to generate another peaks plot.

4- Click the ROI tool again to exit and resume processing.

Image Area = 1393.6

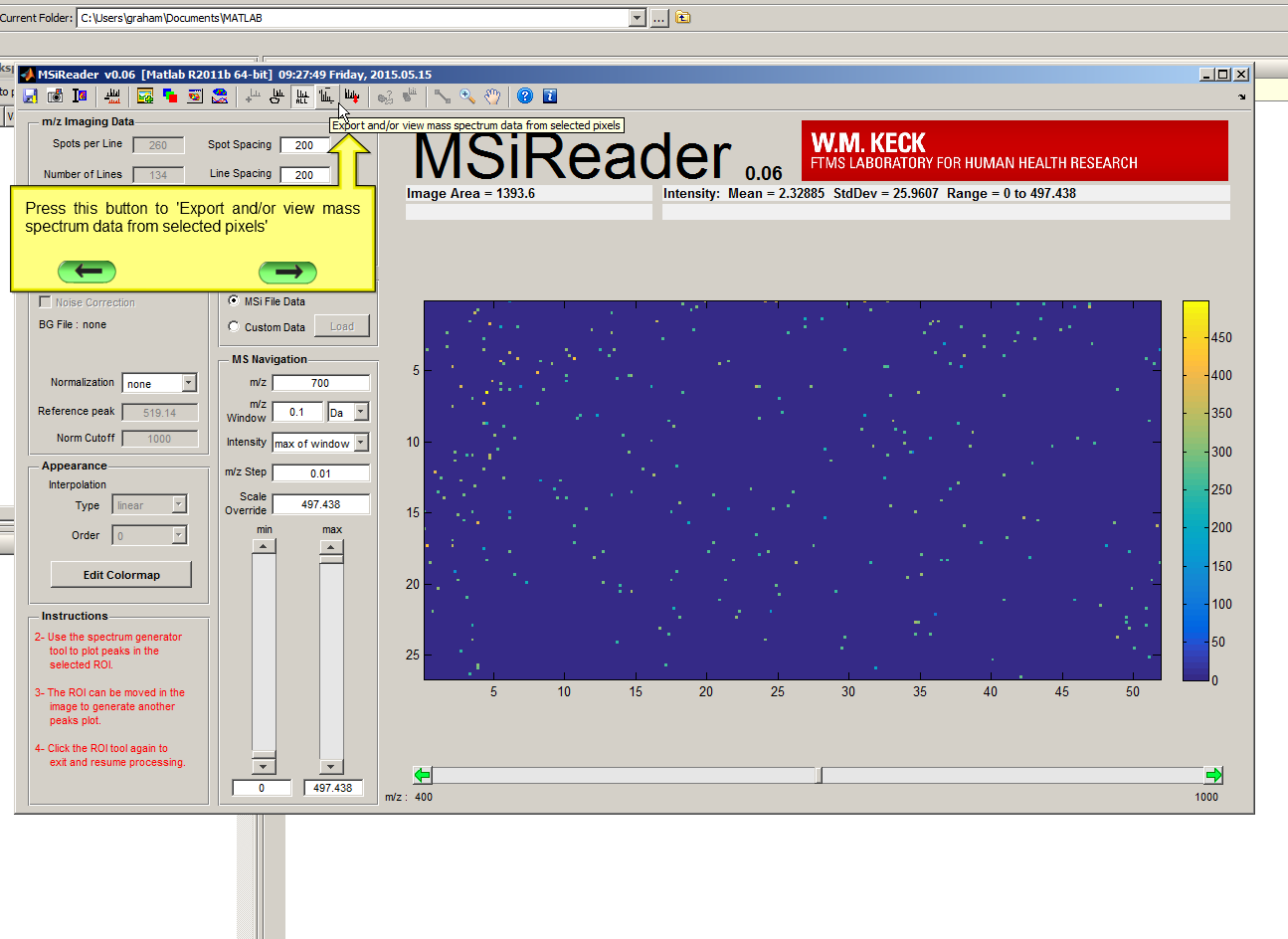
Intensity: Mean = 2.32885 StdDev = 25.9607 Range = 0 to 497.438

MSiReader

All 34840 pixels in the image have been selected.

OK

It will confirm that all pixels have been selected. Press 'OK'



Current Folder: C:\Users\graham\Documents\MATLAB

MSiReader v0.06 [Matlab R2011b 64-bit] 09:27:49 Friday, 2015.05.15

Export and/or view mass spectrum data from selected pixels

Press this button to 'Export and/or view mass spectrum data from selected pixels'

m/z Imaging Data

Spots per Line: 260
Spot Spacing: 200
Number of Lines: 134
Line Spacing: 200

☐ Noise Correction
BG File : none

Normalization: none
Reference peak: 519.14
Norm Cutoff: 1000

● MSi File Data
○ Custom Data

MS Navigation

m/z: 700
m/z Window: 0.1 Da
Intensity: max of window
m/z Step: 0.01
Scale Override: 497.438
min: 0
max: 497.438

Appearance

Interpolation
Type: linear
Order: 0

Instructions

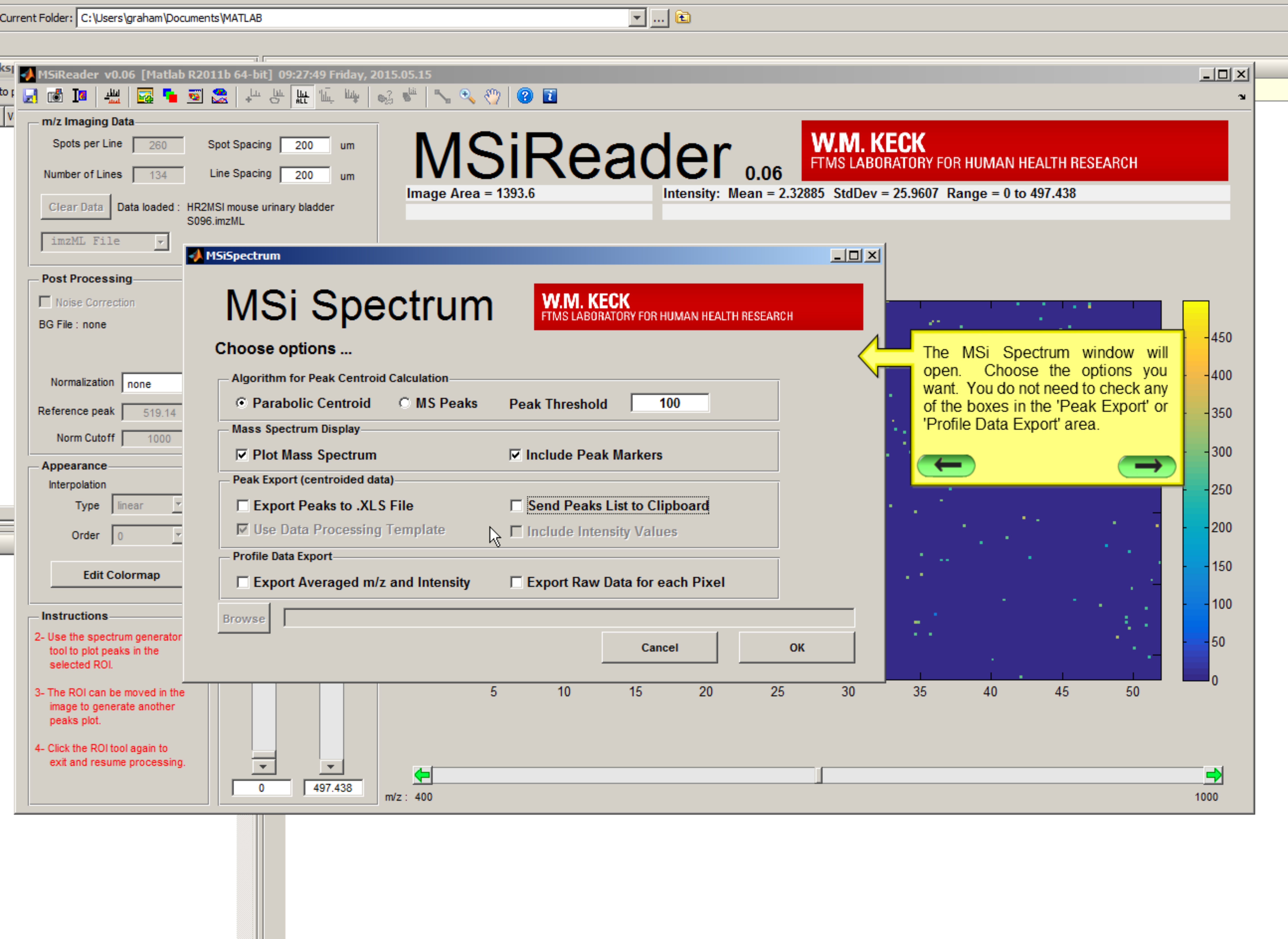
2- Use the spectrum generator tool to plot peaks in the selected ROI.

3- The ROI can be moved in the image to generate another peaks plot.

4- Click the ROI tool again to exit and resume processing.

Image Area = 1393.6

Intensity: Mean = 2.32885 StdDev = 25.9607 Range = 0 to 497.438



Current Folder: C:\Users\graham\Documents\MATLAB

MSiReader v0.06 [Matlab R2011b 64-bit] 09:27:49 Friday, 2015.05.15

m/z Imaging Data

Spots per Line: 260
Spot Spacing: 200 um
Number of Lines: 134
Line Spacing: 200 um
Data loaded : HR2MSI mouse urinary bladder S096.imzML

Post Processing

☐ Noise Correction
BG File : none
Normalization: none
Reference peak: 519.14
Norm Cutoff: 1000

Appearance

Interpolation
Type: linear
Order: 0

Instructions

2- Use the spectrum generator tool to plot peaks in the selected ROI.

3- The ROI can be moved in the image to generate another peaks plot.

4- Click the ROI tool again to exit and resume processing.

Image Area = 1393.6

Intensity: Mean = 2.32885 StdDev = 25.9607 Range = 0 to 497.438

MSiSpectrum

Choose options ...

Algorithm for Peak Centroid Calculation

● Parabolic Centroid ○ MS Peaks Peak Threshold: 100

Mass Spectrum Display

☑ Plot Mass Spectrum ☑ Include Peak Markers

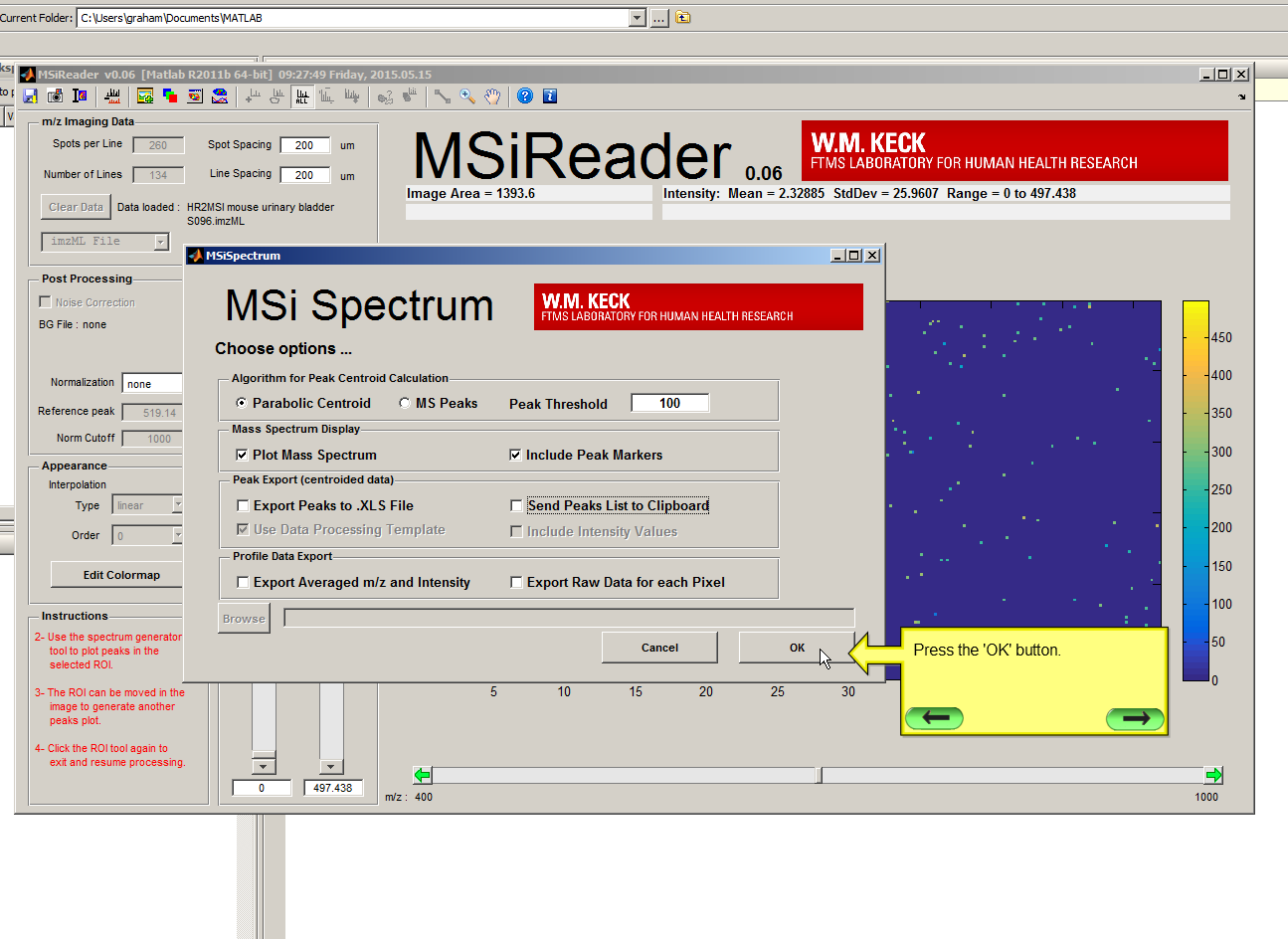
Peak Export (centroided data)

☐ Export Peaks to .XLS File ☐ Send Peaks List to Clipboard
☑ Use Data Processing Template ☐ Include Intensity Values

Profile Data Export

☐ Export Averaged m/z and Intensity ☐ Export Raw Data for each Pixel

The MSi Spectrum window will open. Choose the options you want. You do not need to check any of the boxes in the 'Peak Export' or 'Profile Data Export' area.



Current Folder: C:\Users\graham\Documents\MATLAB

MSiReader v0.06 [Matlab R2011b 64-bit] 09:27:49 Friday, 2015.05.15

m/z Imaging Data

Spots per Line: 260
Spot Spacing: 200 um
Number of Lines: 134
Line Spacing: 200 um
Data loaded : HR2MSI mouse urinary bladder S096.imzML

Post Processing

☐ Noise Correction
BG File : none
Normalization: none
Reference peak: 519.14
Norm Cutoff: 1000

Appearance

Interpolation Type: linear
Order: 0

Instructions

2- Use the spectrum generator tool to plot peaks in the selected ROI.

3- The ROI can be moved in the image to generate another peaks plot.

4- Click the ROI tool again to exit and resume processing.

Image Area = 1393.6

Intensity: Mean = 2.32885 StdDev = 25.9607 Range = 0 to 497.438

MSiSpectrum

Choose options ...

Algorithm for Peak Centroid Calculation
● Parabolic Centroid ○ MS Peaks Peak Threshold: 100

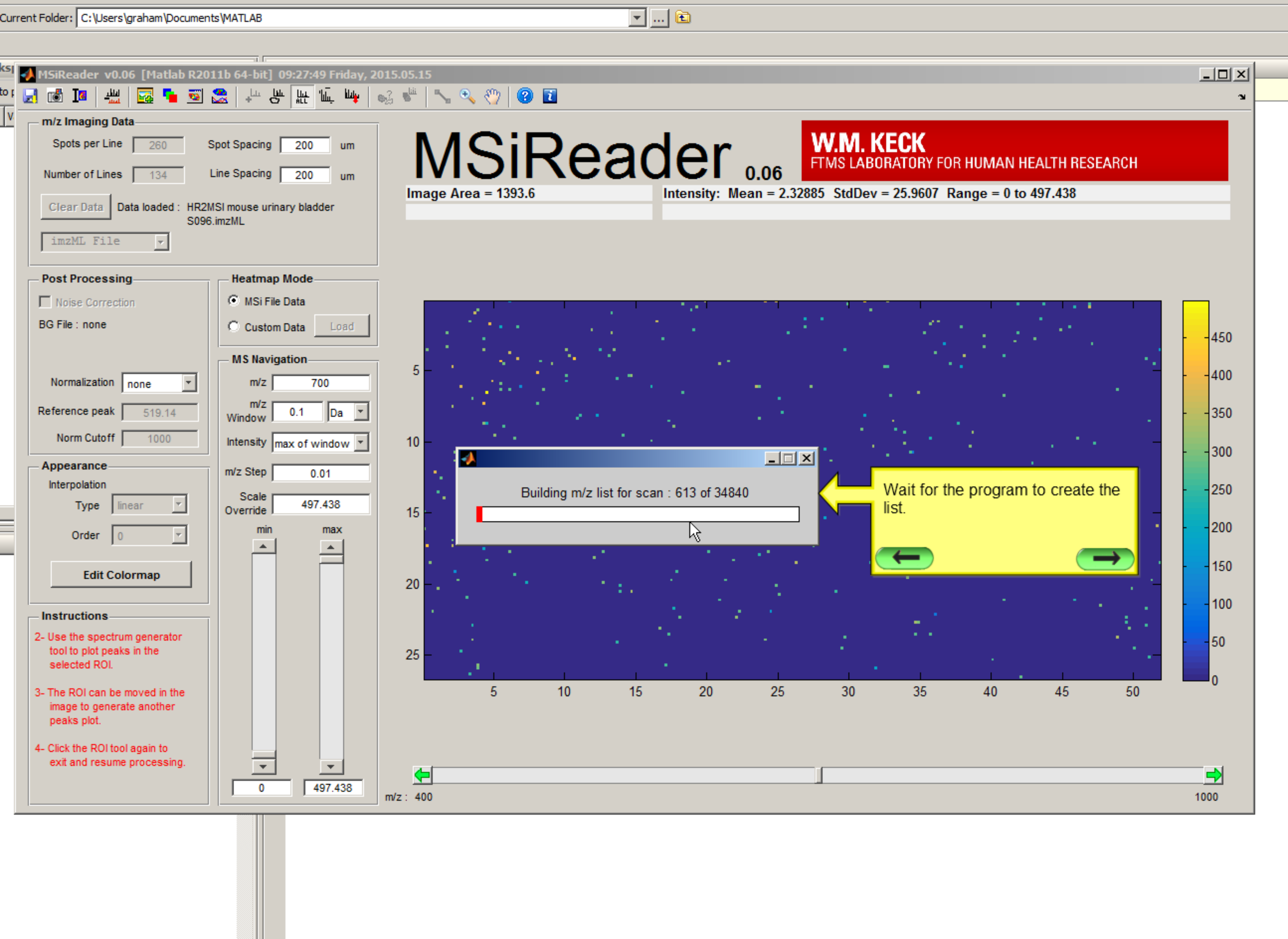
Mass Spectrum Display
☑ Plot Mass Spectrum ☑ Include Peak Markers

Peak Export (centroided data)
☐ Export Peaks to .XLS File ☐ Send Peaks List to Clipboard
☑ Use Data Processing Template ☐ Include Intensity Values

Profile Data Export
☐ Export Averaged m/z and Intensity ☐ Export Raw Data for each Pixel

Press the 'OK' button.

m/z : 400 … 1000



Current Folder: C:\Users\graham\Documents\MATLAB

MSiReader v0.06 [Matlab R2011b 64-bit] 09:27:49 Friday, 2015.05.15

m/z Imaging Data

Spots per Line: 260
Spot Spacing: 200 um
Number of Lines: 134
Line Spacing: 200 um
Data loaded : HR2MSI mouse urinary bladder S096.imzML
imzML File

Post Processing

☐ Noise Correction
BG File : none
Normalization: none
Reference peak: 519.14
Norm Cutoff: 1000

Heatmap Mode

● MSi File Data
○ Custom Data

MS Navigation

m/z: 700
m/z Window: 0.1 Da
Intensity: max of window
m/z Step: 0.01
Scale Override: 497.438
min: 0
max: 497.438

Appearance

Interpolation
Type: linear
Order: 0

Instructions

2- Use the spectrum generator tool to plot peaks in the selected ROI.

3- The ROI can be moved in the image to generate another peaks plot.

4- Click the ROI tool again to exit and resume processing.

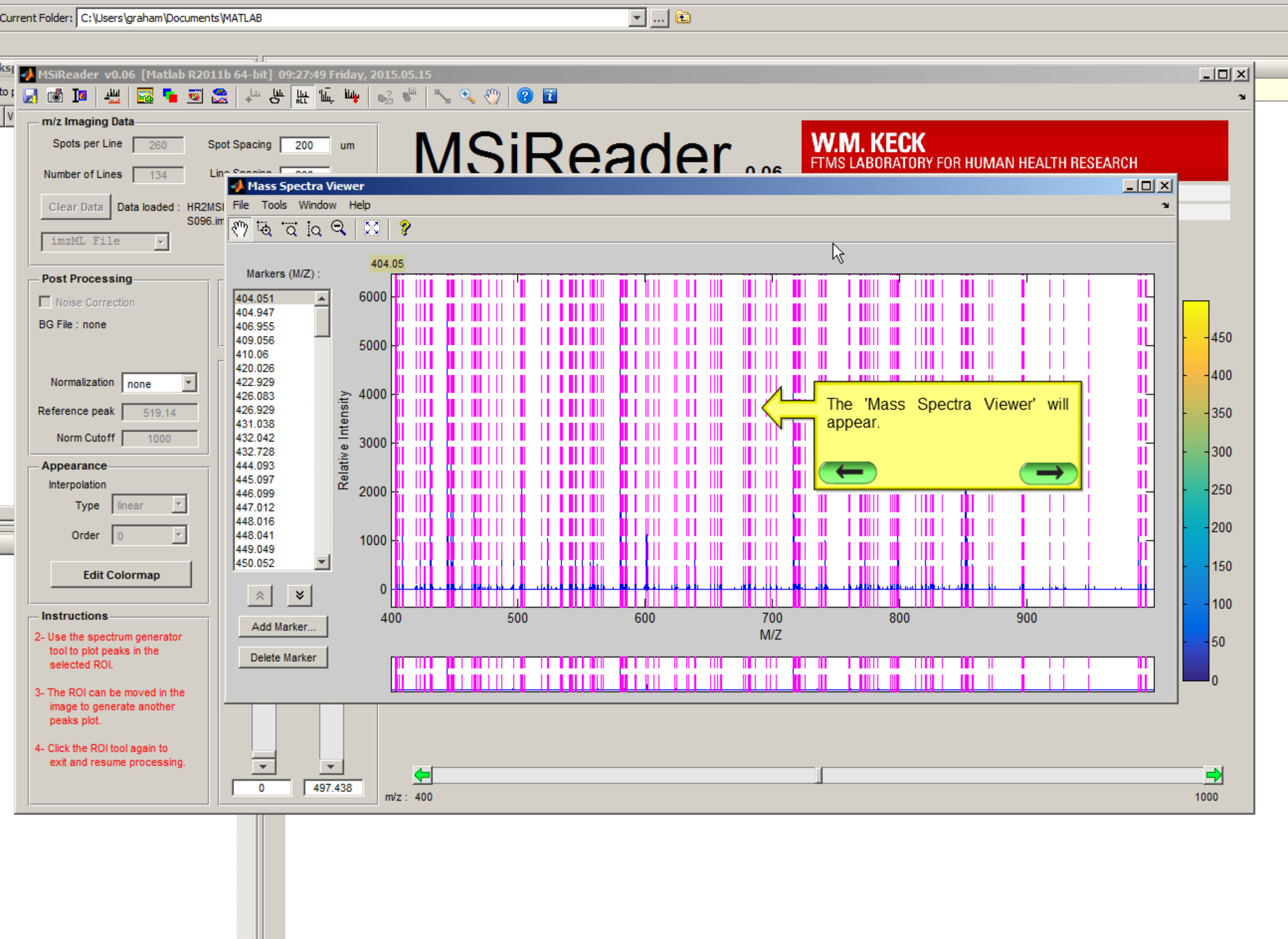
Image Area = 1393.6

Intensity: Mean = 2.32885 StdDev = 25.9607 Range = 0 to 497.438

Building m/z list for scan : 613 of 34840

Wait for the program to create the list.

m/z : 400 … 1000



Current Folder: C:\Users\graham\Documents\MATLAB

MSiReader v0.06 [Matlab R2011b 64-bit] 09:27:49 Friday, 2015.05.15

m/z Imaging Data

Spots per Line: 260

Spot Spacing: 200 um

Number of Lines: 134

Data loaded : HR2MSI S096.im

imzML File

Post Processing

☐ Noise Correction

BG File : none

Normalization: none

Reference peak: 519.14

Norm Cutoff: 1000

Appearance

Interpolation

Type: linear

Order: 0

Instructions

2- Use the spectrum generator tool to plot peaks in the selected ROI.

3- The ROI can be moved in the image to generate another peaks plot.

4- Click the ROI tool again to exit and resume processing.

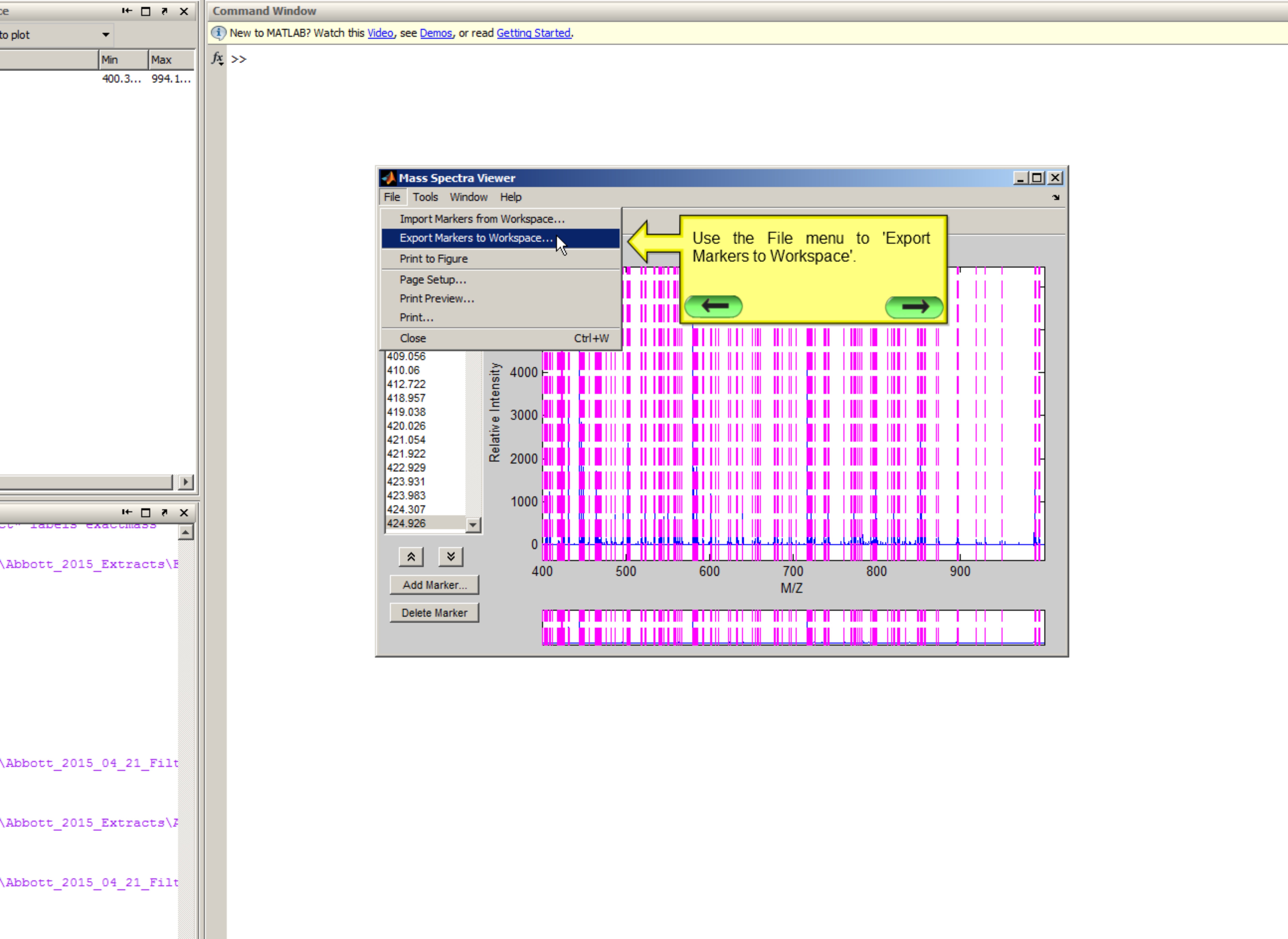
Mass Spectra Viewer

Markers (M/Z) :

404.051
404.947
406.955
409.056
410.06
420.026
422.929
426.083
426.929
431.038
432.042
432.728
444.093
445.097
446.099
447.012
448.016
448.041
449.049
450.052

The 'Mass Spectra Viewer' will appear.

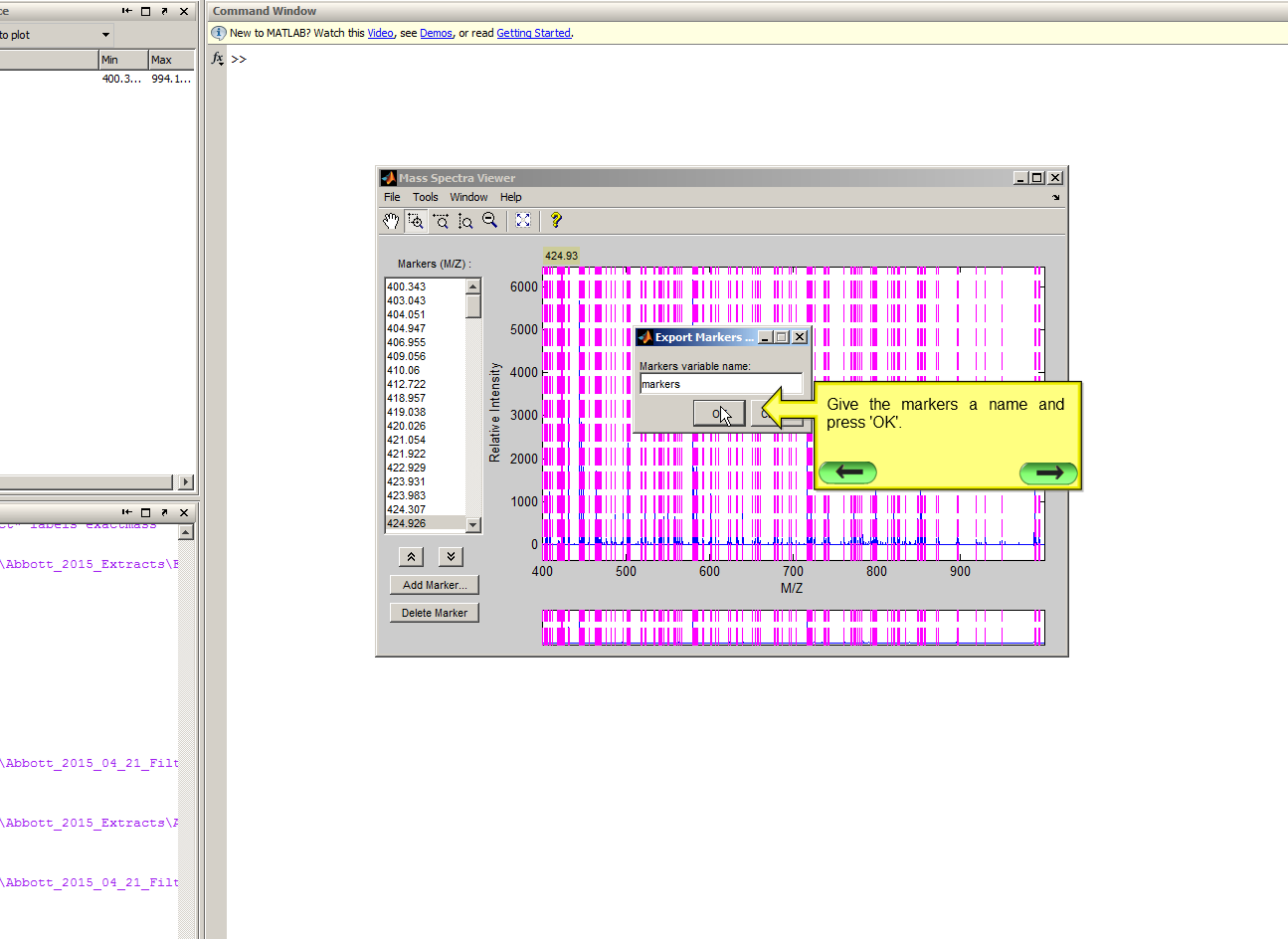
m/z : 400 1000



New to MATLAB? Watch this Video, see Demos, or read Getting Started.

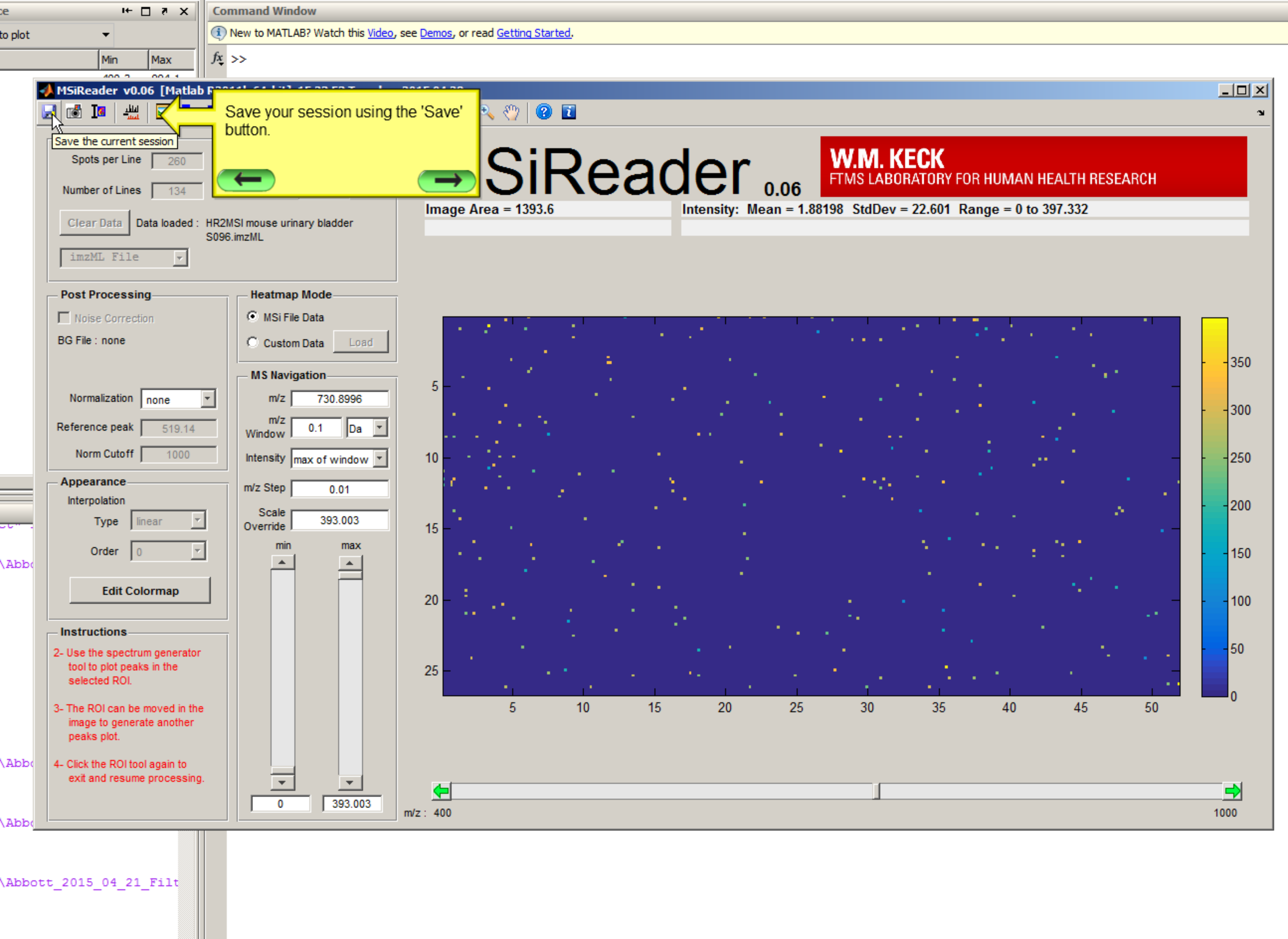
```
>>
```

Use the File menu to 'Export Markers to Workspace'.



Markers variable name: markers

Give the markers a name and press 'OK'.



Save your session using the 'Save' button.

Save the current session

New to MATLAB? Watch this Video, see Demos, or read Getting Started.

Spots per Line 260

Number of Lines 134

Data loaded : HR2MSI mouse urinary bladder S096.imzML

Post Processing

☐ Noise Correction

BG File : none

Normalization none

Reference peak 519.14

Norm Cutoff 1000

Heatmap Mode

● MSi File Data

○ Custom Data

MS Navigation

m/z 730.8996

m/z Window 0.1 Da

Intensity max of window

m/z Step 0.01

Scale Override 393.003

min 0

max 393.003

Appearance

Interpolation

Type linear

Order 0

Instructions

2- Use the spectrum generator tool to plot peaks in the selected ROI.

3- The ROI can be moved in the image to generate another peaks plot.

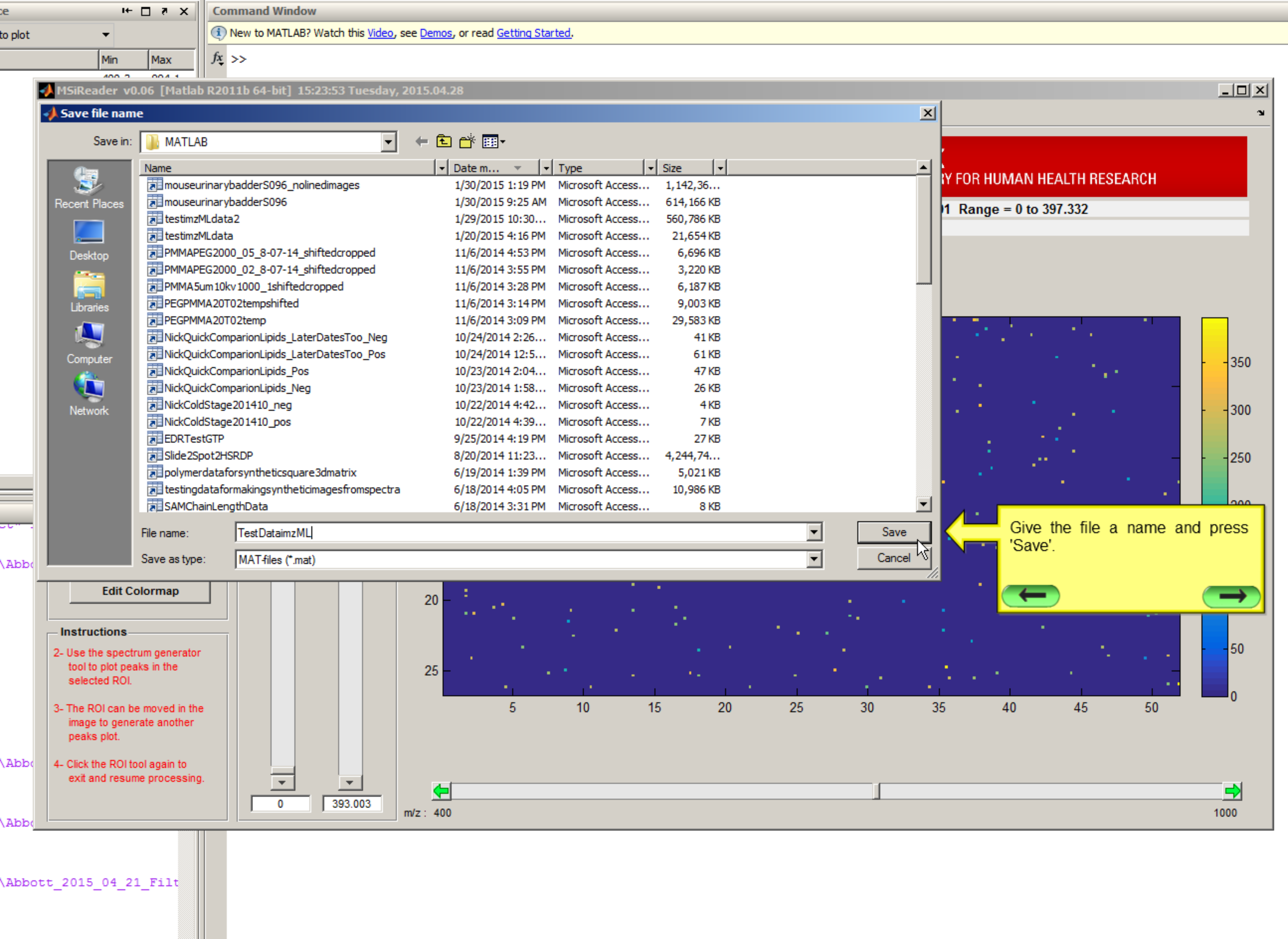
4- Click the ROI tool again to exit and resume processing.

Image Area = 1393.6

Intensity: Mean = 1.88198 StdDev = 22.601 Range = 0 to 397.332

m/z : 400

1000



New to MATLAB? Watch this Video, see Demos, or read Getting Started.

MSiReader v0.06 [Matlab R2011b 64-bit] 15:23:53 Tuesday, 2015.04.28

Save file name

Save in: MATLAB

Name	Date m...	Type	Size
mouseurinarybadderS096_nolinedimages	1/30/2015 1:19 PM	Microsoft Access...	1,142,36...
mouseurinarybadderS096	1/30/2015 9:25 AM	Microsoft Access...	614,166 KB
testimzMLdata2	1/29/2015 10:30...	Microsoft Access...	560,786 KB
testimzMLdata	1/20/2015 4:16 PM	Microsoft Access...	21,654 KB
PMMAPEG2000_05_8-07-14_shiftedcropped	11/6/2014 4:53 PM	Microsoft Access...	6,696 KB
PMMAPEG2000_02_8-07-14_shiftedcropped	11/6/2014 3:55 PM	Microsoft Access...	3,220 KB
PMMA5um10kv1000_1shiftedcropped	11/6/2014 3:28 PM	Microsoft Access...	6,187 KB
PEGPMMA20T02tempshifted	11/6/2014 3:14 PM	Microsoft Access...	9,003 KB
PEGPMMA20T02temp	11/6/2014 3:09 PM	Microsoft Access...	29,583 KB
NickQuickComparionLipids_LaterDatesToo_Neg	10/24/2014 2:26...	Microsoft Access...	41 KB
NickQuickComparionLipids_LaterDatesToo_Pos	10/24/2014 12:5...	Microsoft Access...	61 KB
NickQuickComparionLipids_Pos	10/23/2014 2:04...	Microsoft Access...	47 KB
NickQuickComparionLipids_Neg	10/23/2014 1:58...	Microsoft Access...	26 KB
NickColdStage201410_neg	10/22/2014 4:42...	Microsoft Access...	4 KB
NickColdStage201410_pos	10/22/2014 4:39...	Microsoft Access...	7 KB
EDRTestGTP	9/25/2014 4:19 PM	Microsoft Access...	27 KB
Slide2Spot2HSRDP	8/20/2014 11:23...	Microsoft Access...	4,244,74...
polymerdataforsyntheticsquare3dmatrix	6/19/2014 1:39 PM	Microsoft Access...	5,021 KB
testingdataformakingsyntheticimagesfromspectra	6/18/2014 4:05 PM	Microsoft Access...	10,986 KB
SAMChainLengthData	6/18/2014 3:31 PM	Microsoft Access...	8 KB

File name: TestDataimzML

Save as type: MAT-files (*.mat)

1 Range = 0 to 397.332

Give the file a name and press 'Save'.

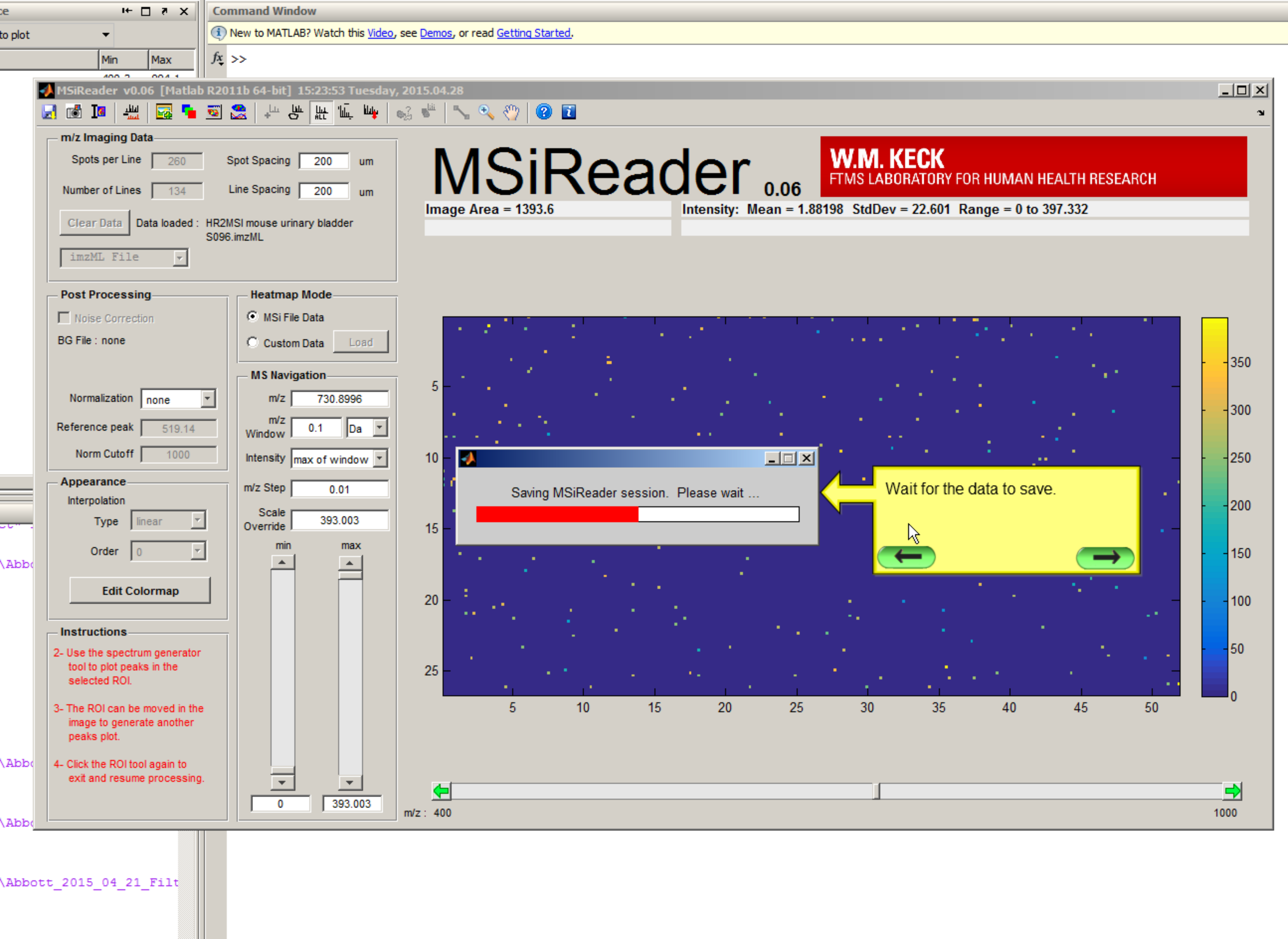
Instructions

2- Use the spectrum generator tool to plot peaks in the selected ROI.

3- The ROI can be moved in the image to generate another peaks plot.

4- Click the ROI tool again to exit and resume processing.

\Abbott_2015_04_21_Filt



New to MATLAB? Watch this Video, see Demos, or read Getting Started.

MSiReader v0.06 [Matlab R2011b 64-bit] 15:23:53 Tuesday, 2015.04.28

m/z Imaging Data

Spots per Line: 260
Spot Spacing: 200 um
Number of Lines: 134
Line Spacing: 200 um
Data loaded : HR2MSI mouse urinary bladder S096.imzML
imzML File

Post Processing

☐ Noise Correction
BG File : none
Normalization: none
Reference peak: 519.14
Norm Cutoff: 1000

Heatmap Mode

● MSi File Data
○ Custom Data

MS Navigation

m/z: 730.8996
m/z Window: 0.1 Da
Intensity: max of window
m/z Step: 0.01
Scale Override: 393.003
min: 0
max: 393.003

Appearance

Interpolation
Type: linear
Order: 0

Instructions

2- Use the spectrum generator tool to plot peaks in the selected ROI.

3- The ROI can be moved in the image to generate another peaks plot.

4- Click the ROI tool again to exit and resume processing.

MSiReader 0.06

W.M. KECK
FTMS LABORATORY FOR HUMAN HEALTH RESEARCH

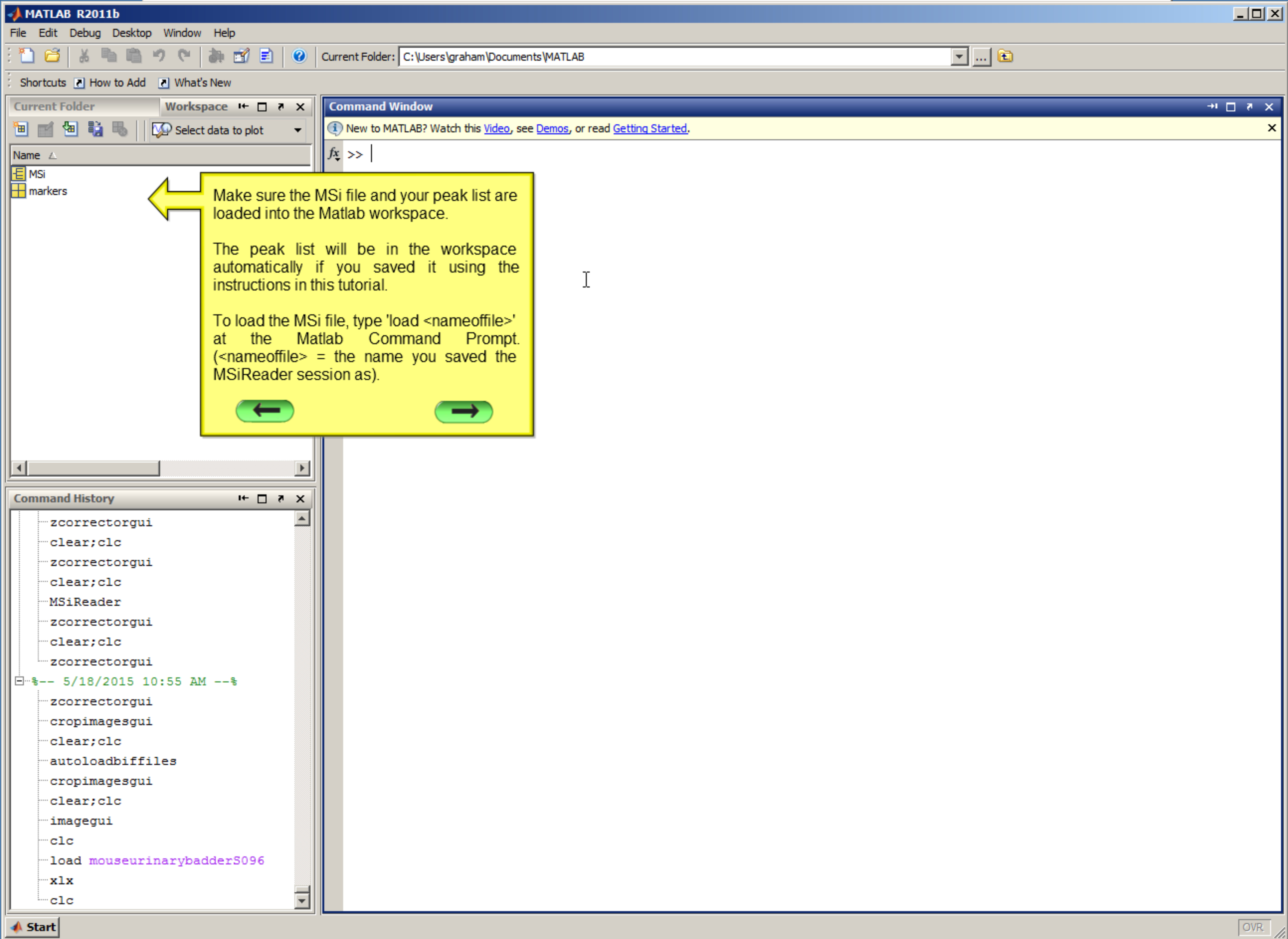
Image Area = 1393.6

Intensity: Mean = 1.88198 StdDev = 22.601 Range = 0 to 397.332

Saving MSiReader session. Please wait ...

Wait for the data to save.

m/z : 400
1000



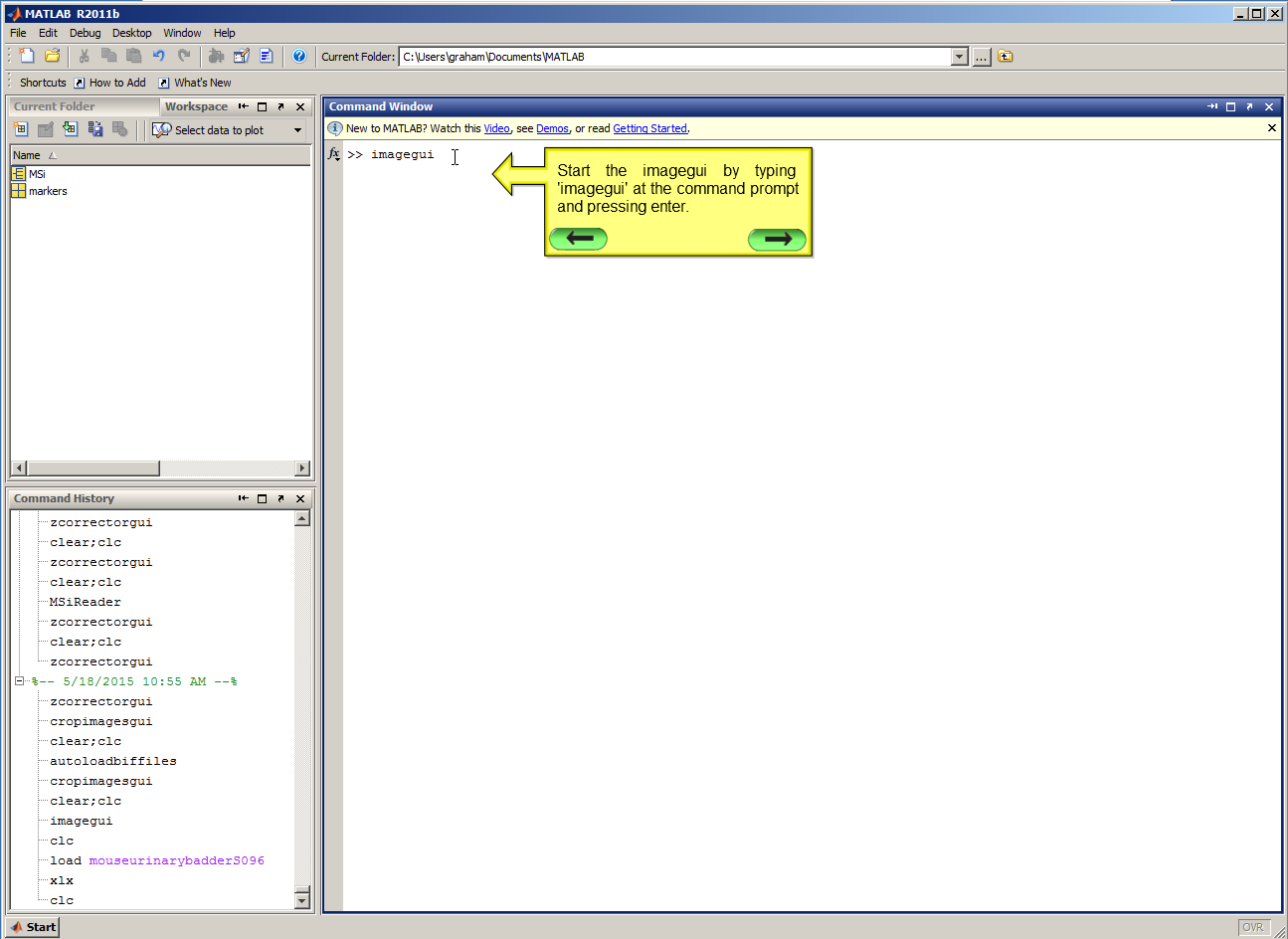
```
>> 
```

Make sure the MSi file and your peak list are loaded into the Matlab workspace.

The peak list will be in the workspace automatically if you saved it using the instructions in this tutorial.

To load the MSi file, type 'load <nameoffile>' at the Matlab Command Prompt. (<nameoffile> = the name you saved the MSiReader session as).

```
zcorrectorgui
clear;clc
zcorrectorgui
clear;clc
MSiReader
zcorrectorgui
clear;clc
zcorrectorgui
%-- 5/18/2015 10:55 AM --%
zcorrectorgui
cropimagesgui
clear;clc
autoloadbiffiles
cropimagesgui
clear;clc
imagegui
clc
load mouseurinarybadderS096
xlx
clc
```



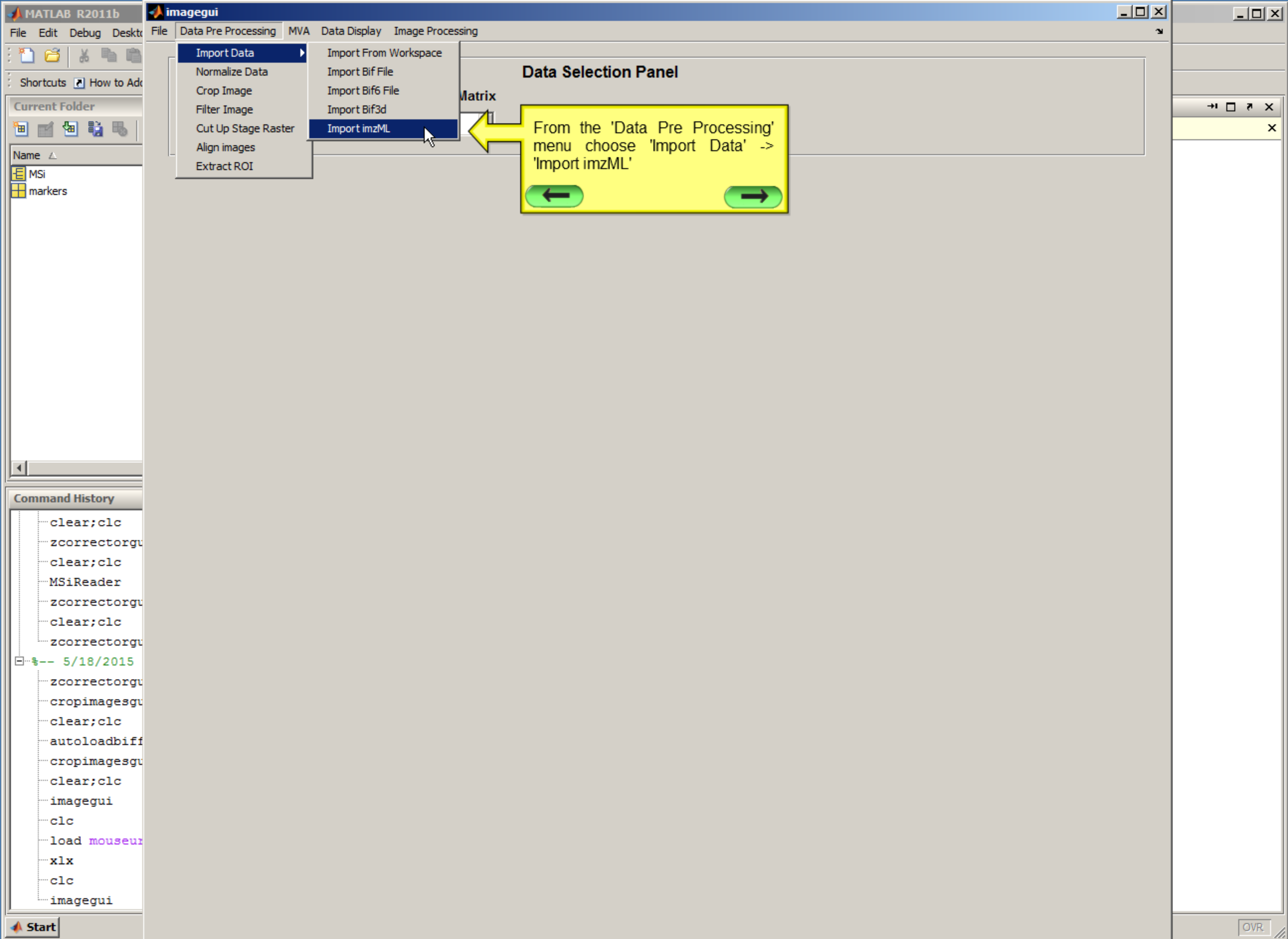
Current Folder: C:\Users\graham\Documents\MATLAB

New to MATLAB? Watch this Video, see Demos, or read Getting Started.

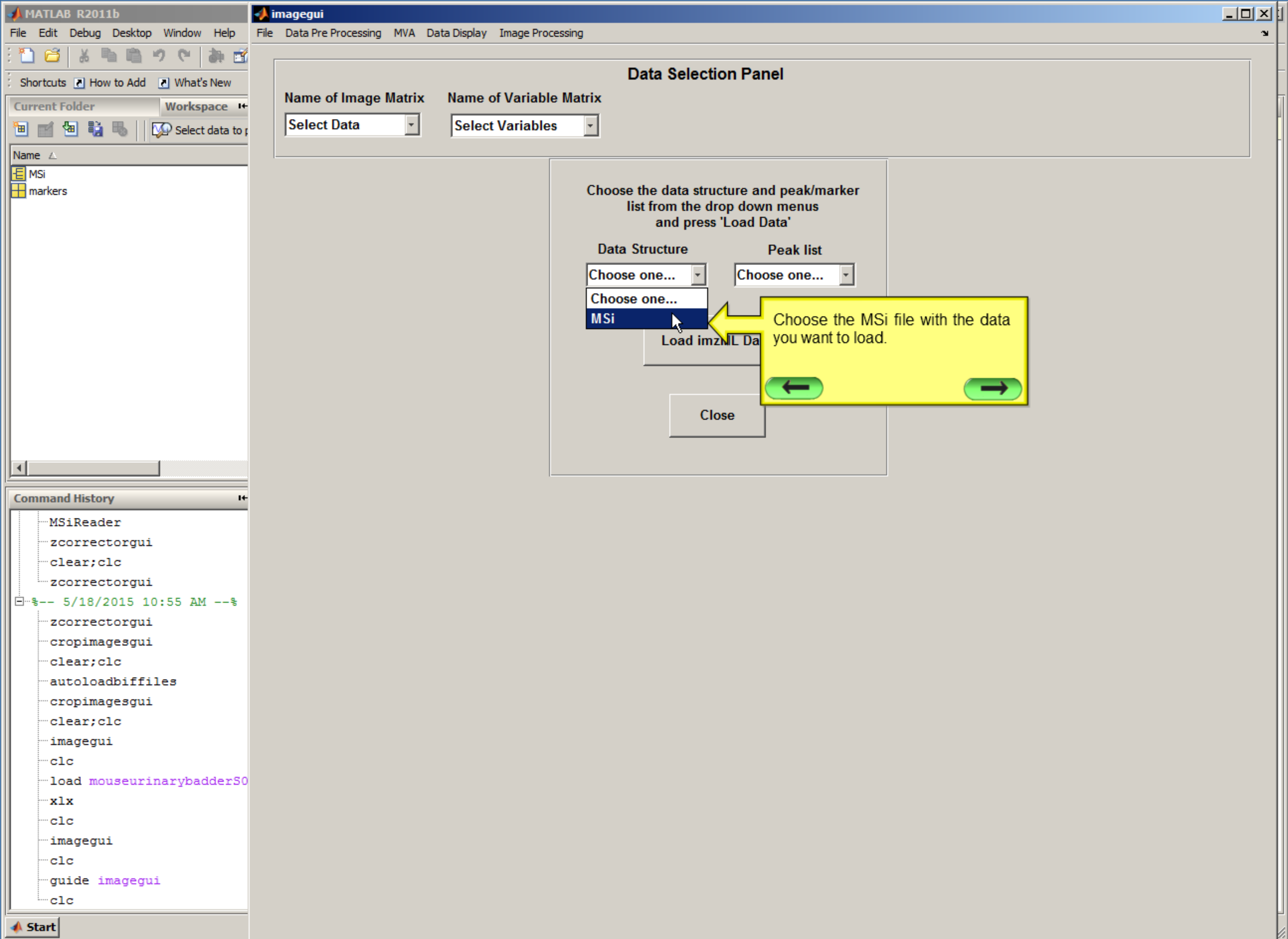
```
>> imagegui
```

Start the imagegui by typing 'imagegui' at the command prompt and pressing enter.

```
zcorrectorgui
clear;clc
zcorrectorgui
clear;clc
MSiReader
zcorrectorgui
clear;clc
zcorrectorgui
%-- 5/18/2015 10:55 AM --%
zcorrectorgui
cropimagesgui
clear;clc
autoloadbiffiles
cropimagesgui
clear;clc
imagegui
clc
load mouseurinarybadderS096
xlx
clc
```



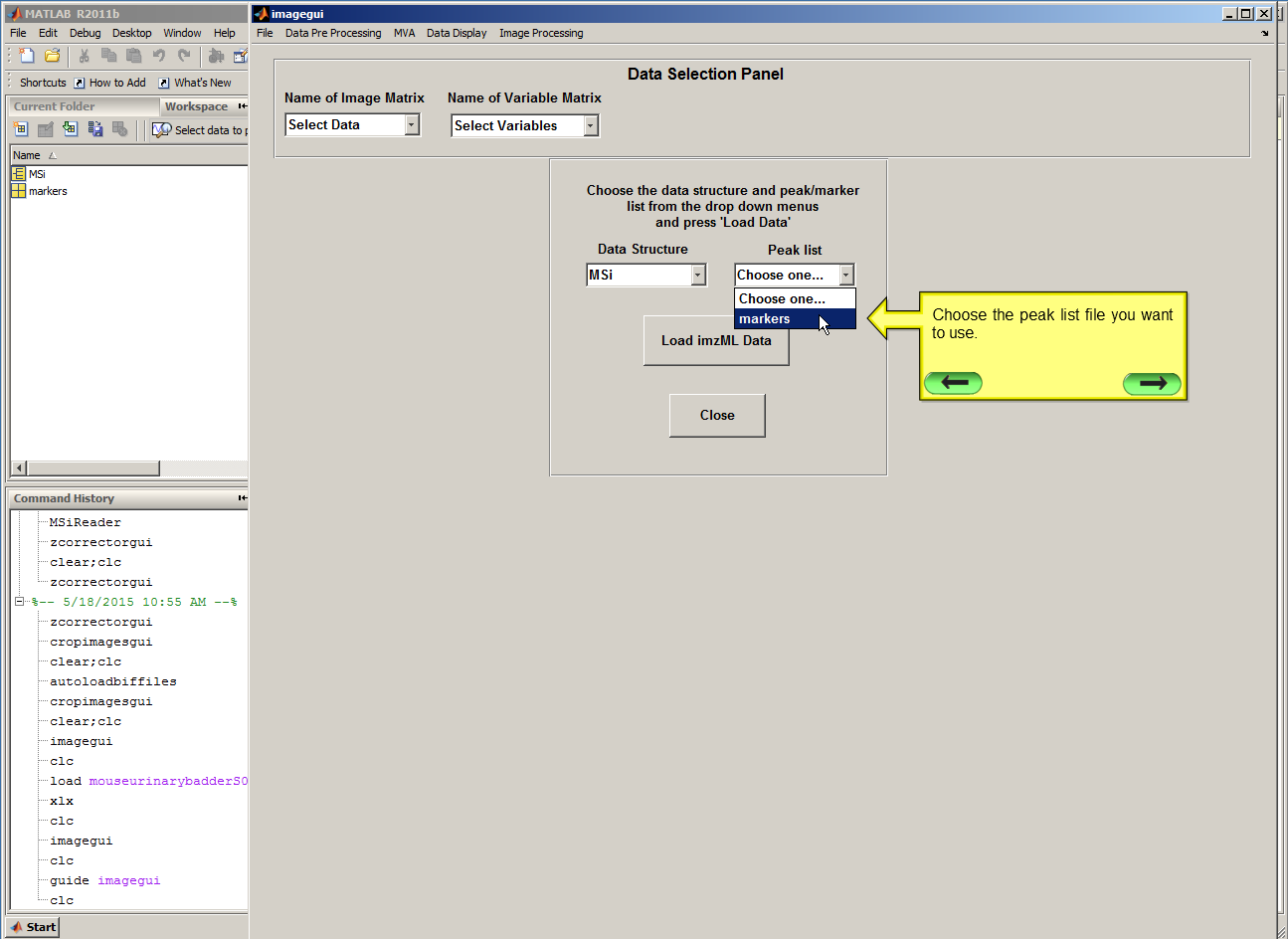
From the 'Data Pre Processing' menu choose 'Import Data' -> 'Import imzML'



```
MSiReader
zcorrectorgui
clear;clc
zcorrectorgui
%-- 5/18/2015 10:55 AM --%
zcorrectorgui
cropimagesgui
clear;clc
autoloadbiffiles
cropimagesgui
clear;clc
imagegui
clc
load mouseurinarybadderS0
xlx
clc
imagegui
clc
guide imagegui
clc
```

Choose the data structure and peak/marker list from the drop down menus and press 'Load Data'

Choose the MSi file with the data you want to load.



Data Selection Panel

Name of Image Matrix: Select Data

Name of Variable Matrix: Select Variables

Choose the data structure and peak/marker list from the drop down menus and press 'Load Data'

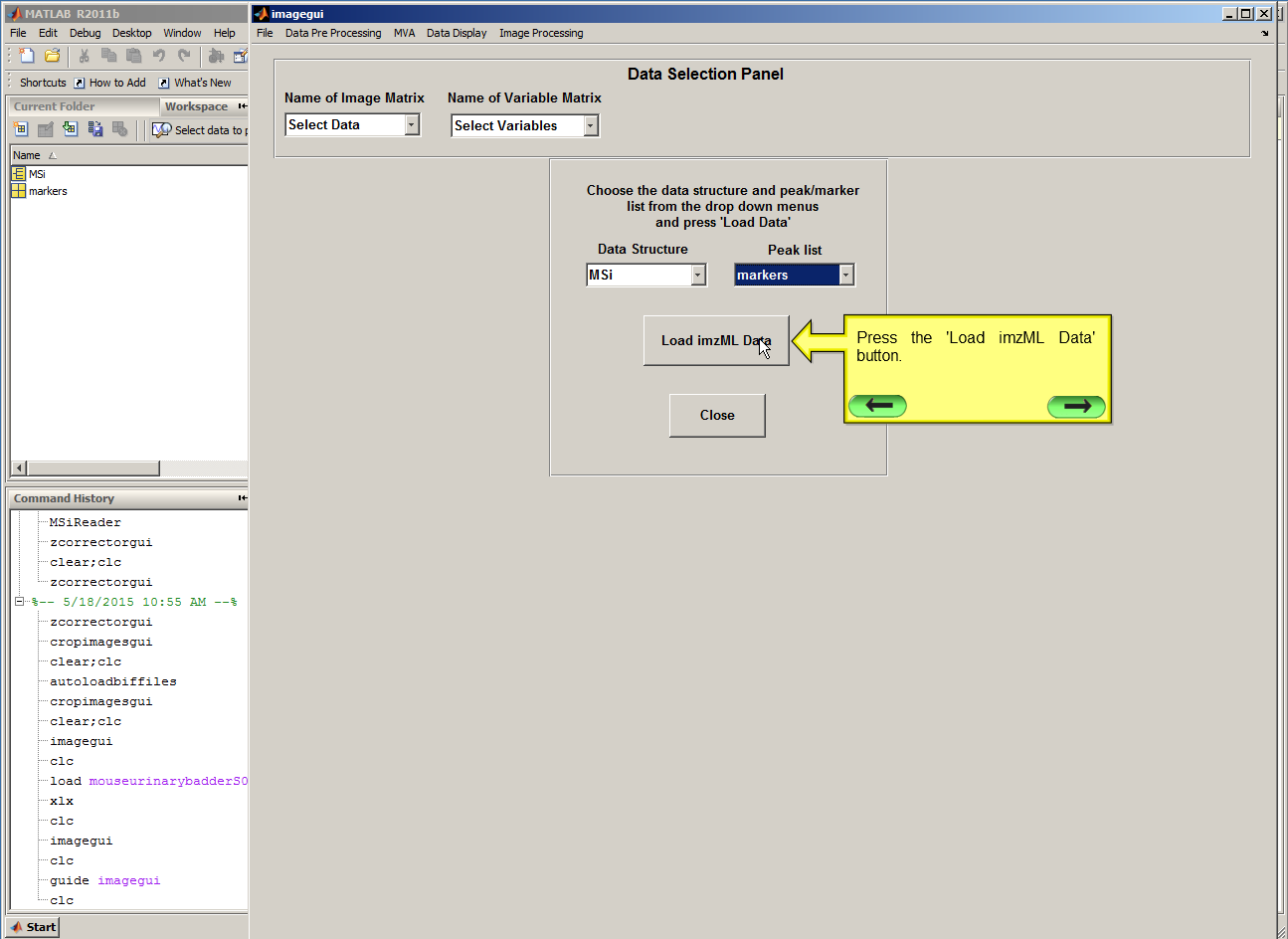
Data Structure: MSi

Peak list: Choose one...

- Choose one...
- markers

Choose the peak list file you want to use.

```
MSiReader
zcorrectorgui
clear;clc
zcorrectorgui
%-- 5/18/2015 10:55 AM --%
zcorrectorgui
cropimagesgui
clear;clc
autoloadbiffiles
cropimagesgui
clear;clc
imagegui
clc
load mouseurinarybadderS0
xlx
clc
imagegui
clc
guide imagegui
clc
```



Data Selection Panel

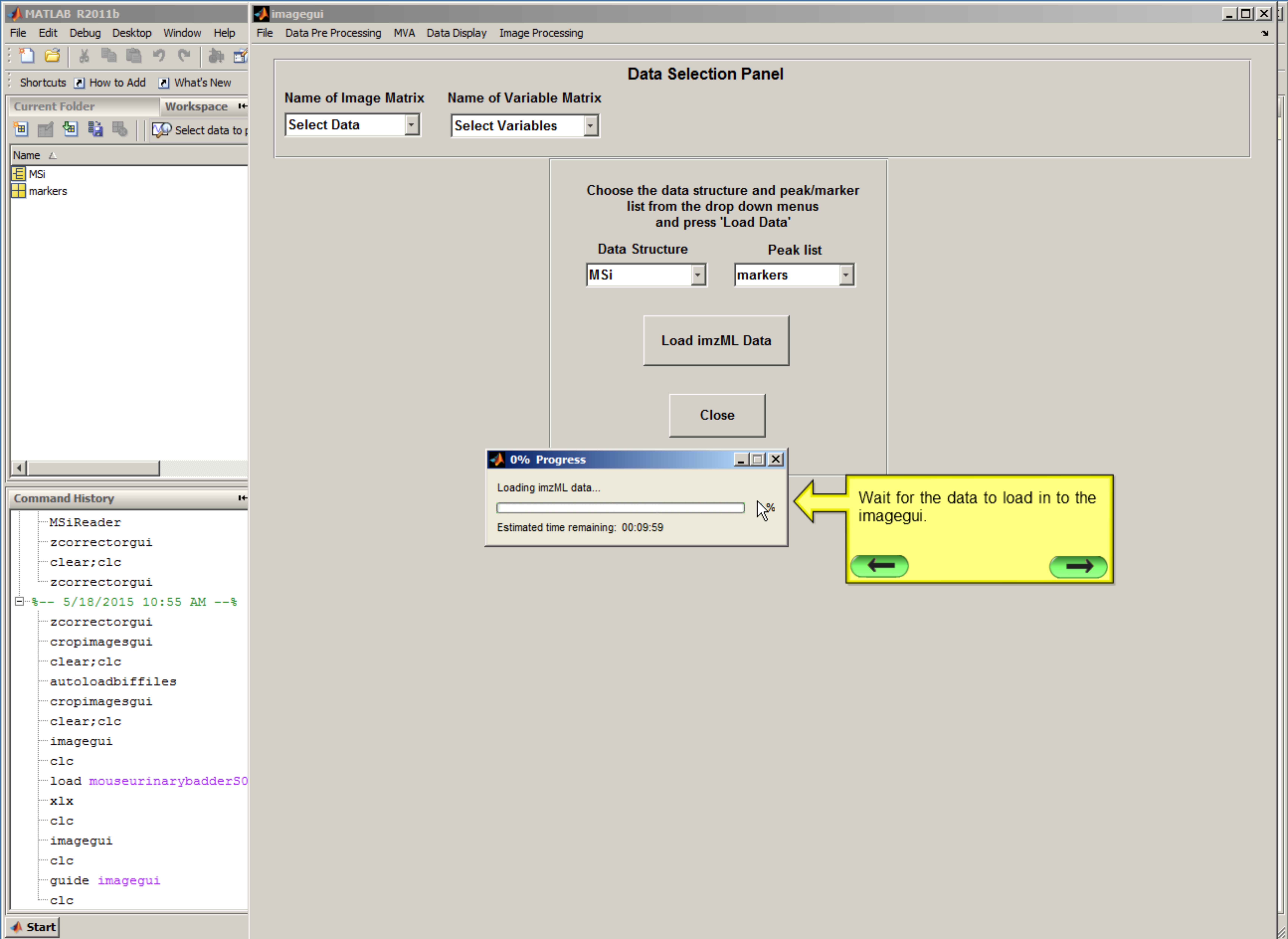
Choose the data structure and peak/marker list from the drop down menus and press 'Load Data'

Data Structure: MSi

Peak list: markers

Press the 'Load imzML Data' button.

```
MSiReader
zcorrectorgui
clear;clc
zcorrectorgui
%-- 5/18/2015 10:55 AM --%
zcorrectorgui
cropimagesgui
clear;clc
autoloadbiffiles
cropimagesgui
clear;clc
imagegui
clc
load mouseurinarybadderS0
xlx
clc
imagegui
clc
guide imagegui
clc
```



Data Selection Panel

Name of Image Matrix: Select Data

Name of Variable Matrix: Select Variables

Choose the data structure and peak/marker list from the drop down menus and press 'Load Data'

Data Structure: MSi

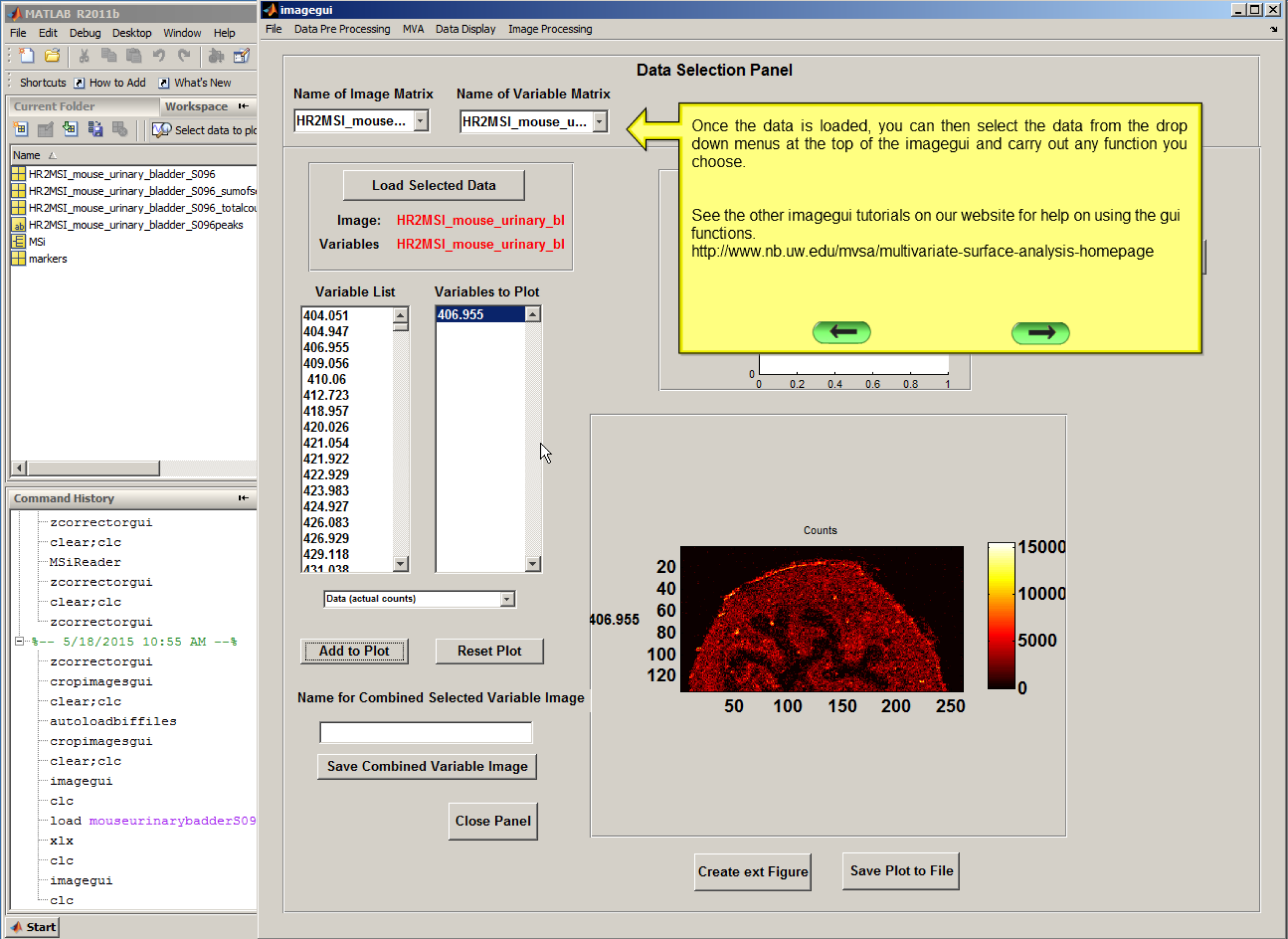
Peak list: markers

Loading imzML data...

Estimated time remaining: 00:09:59

Wait for the data to load in to the imagegui.

```
MSiReader
zcorrectorgui
clear;clc
zcorrectorgui
%-- 5/18/2015 10:55 AM --%
zcorrectorgui
cropimagesgui
clear;clc
autoloadbiffiles
cropimagesgui
clear;clc
imagegui
clc
load mouseurinarybadderS0
xlx
clc
imagegui
clc
guide imagegui
clc
```



Name of Image Matrix: HR2MSI_mouse...

Name of Variable Matrix: HR2MSI_mouse_u...

Image: HR2MSI_mouse_urinary_bl

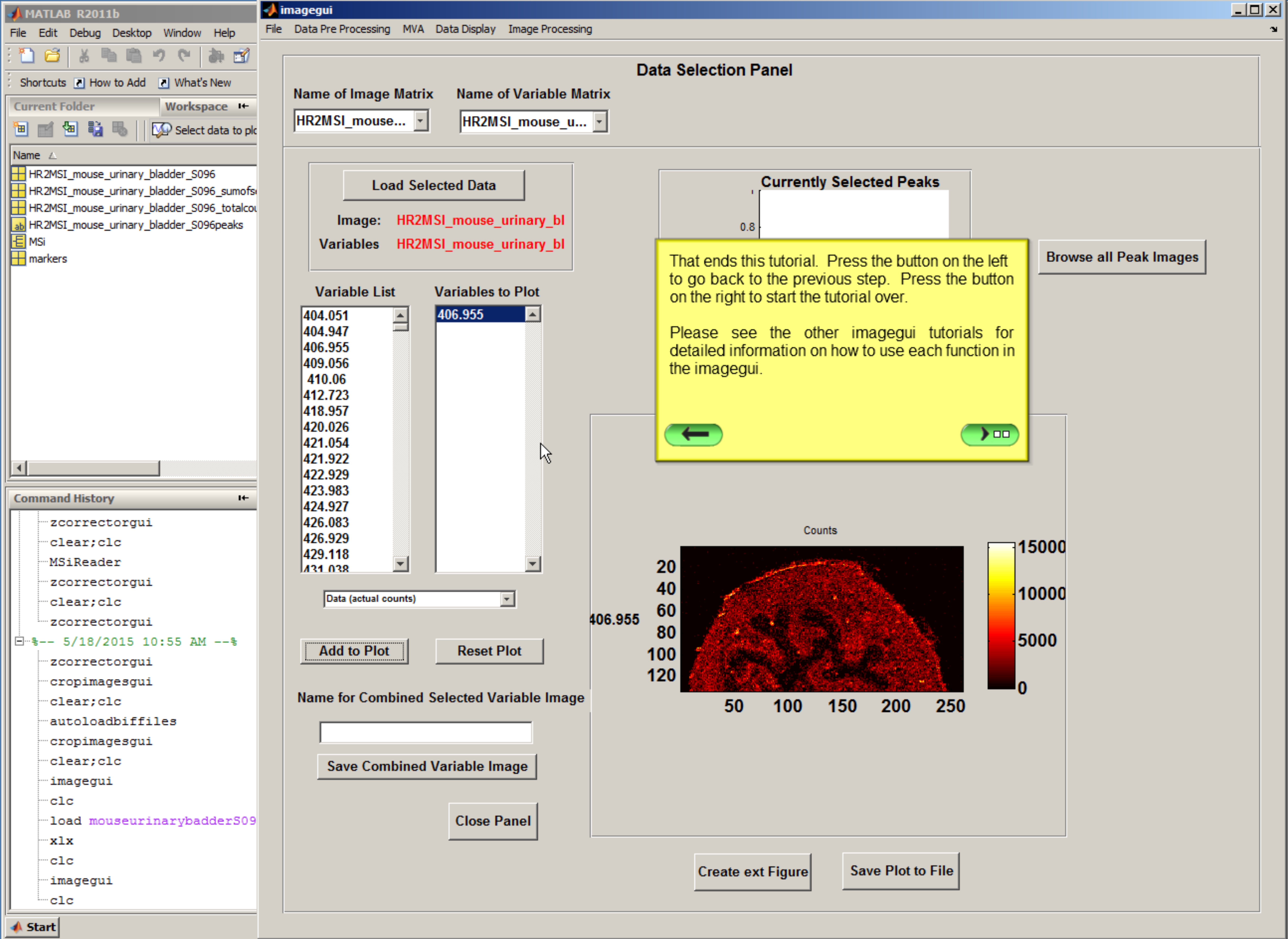
Variables HR2MSI_mouse_urinary_bl

Data (actual counts)

```
zcorrectorgui
clear;clc
MSiReader
zcorrectorgui
clear;clc
zcorrectorgui
%-- 5/18/2015 10:55 AM --%
zcorrectorgui
cropimagesgui
clear;clc
autoloadbiffiles
cropimagesgui
clear;clc
imagegui
clc
load mouseurinarybadderS09
xlx
clc
imagegui
clc
```

Once the data is loaded, you can then select the data from the drop down menus at the top of the imagegui and carry out any function you choose.

See the other imagegui tutorials on our website for help on using the gui functions.
http://www.nb.uw.edu/mvsa/multivariate-surface-analysis-homepage



Name of Image Matrix: HR2MSI_mouse...

Name of Variable Matrix: HR2MSI_mouse_u...

Image: HR2MSI_mouse_urinary_bl

Variables HR2MSI_mouse_urinary_bl

Data (actual counts)

```
zcorrectorgui
clear;clc
MSiReader
zcorrectorgui
clear;clc
zcorrectorgui
%-- 5/18/2015 10:55 AM --%
zcorrectorgui
cropimagesgui
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autoloadbiffiles
cropimagesgui
clear;clc
imagegui
clc
load mouseurinarybadderS09
xlx
clc
imagegui
clc
```

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.

Please see the other imagegui tutorials for detailed information on how to use each function in the imagegui.