zcorrectorgui

Import Data From Directory

Import

Loaded Data

Number of image layers: 56

Down binning the data cannot be undone. You must reload the original data in order to restore the original matrix.

Downbin Data

Adjust Total Counts Threshold Value

Work with Uncorrected Data

Close

Overlay Tools

3D Tools

Data Being Displayed
Total_Counts

Initialize Corrected Data

Peak List

Z corrected image XY

< ------ X ------ >

^ | Y | v

Total_Co
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

56

0

Layer number: 1

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.

If you want to save the movie frames check this box before creating the movie.

Create XY Corr Slice Movie

Create XZ Corr Slice Movie

Create YZ Corr Slice Movie

Thresholded total c

Z corrected image XZ

< ------ X ------ >

^ | Z | v

0 column # 1 256

Save Corr XZ

Thresholded total

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

Z corrected image YZ

< ------ Y ------ >

^ | Z | v

0 row # 1 256

Save Corr YZ

zcorrectorgui

Import Data From Directory

Import

Loaded Data

Number of image layers: 56

Down binning the data cannot be undone. You must reload the original data in order to restore the original matrix.

Downbin Data

Adjust Total Counts Threshold Value

Work with Uncorrected Data

Close

Overlay Tools

3D Tools

Data Being Displayed
Total_Counts

Initialize Corrected Data

Peak List

Total_Counts
58.10555

Z corrected image XY

< ------ X ------ >

^ | Y | v

56

0

Layer number: 1

56

0

If you want to save the movie frames check this box before creating the movie.

Create XY Corr Slice Movie

Create XZ Corr Slice Movie

Create YZ Corr Slice Movie

This tutorial will introduce the functions on the 3D Tools window of the ZcorrectorGui.

This tutorial assumes that you have already read through the tutorial on the main window and know how to load and prepare your data.

See the tutorial Zcorrectorgui_01_MainPage for more information.

Thresholded total counts XZ

Z line XZ

Z corrected image XZ

< ------ X ------ >

^ | Z | v

0 column # 1 256

Save Corr XZ

Thresholded total counts YZ

Z line YZ

Z corrected image YZ

< ------ Y ------ >

^ | Z | v

0 row # 1 256

Save Corr YZ

zcorrectorgui

Import Data From Directory

Import

Loaded Data

Number of image layers: 56

Down binning the data cannot be undone. You must reload the original data in order to restore the original matrix.

Downbin Data

Adjust Total Counts Threshold Value

Close

Work with

Initialize C

To open the 3D Tools panel press the '3D Tools' button.

3D Tools

Data Being Displayed
Total_Counts

Peak List

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

< ------ X ------ >

^ | Y | v

56

0

Layer number: 1

Z correcte

< ------

^ | Y | v

0

Layer number: 1

If you want to save the movie frames check this box before creating the movie.

Create XY Corr Slice Movie

Create XZ Corr Slice Movie

Create YZ Corr Slice Movie

Thresholded total counts XZ

Z line XZ

Z corrected image XZ

< ------ X ------ >

^ | Z | v

0 column # 1 256

Save Corr XZ

Thresholded total counts YZ

Z line YZ

Z corrected image YZ

< ------ Y ------ >

^ | Z | v

0 row # 1 256

Save Corr YZ

zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

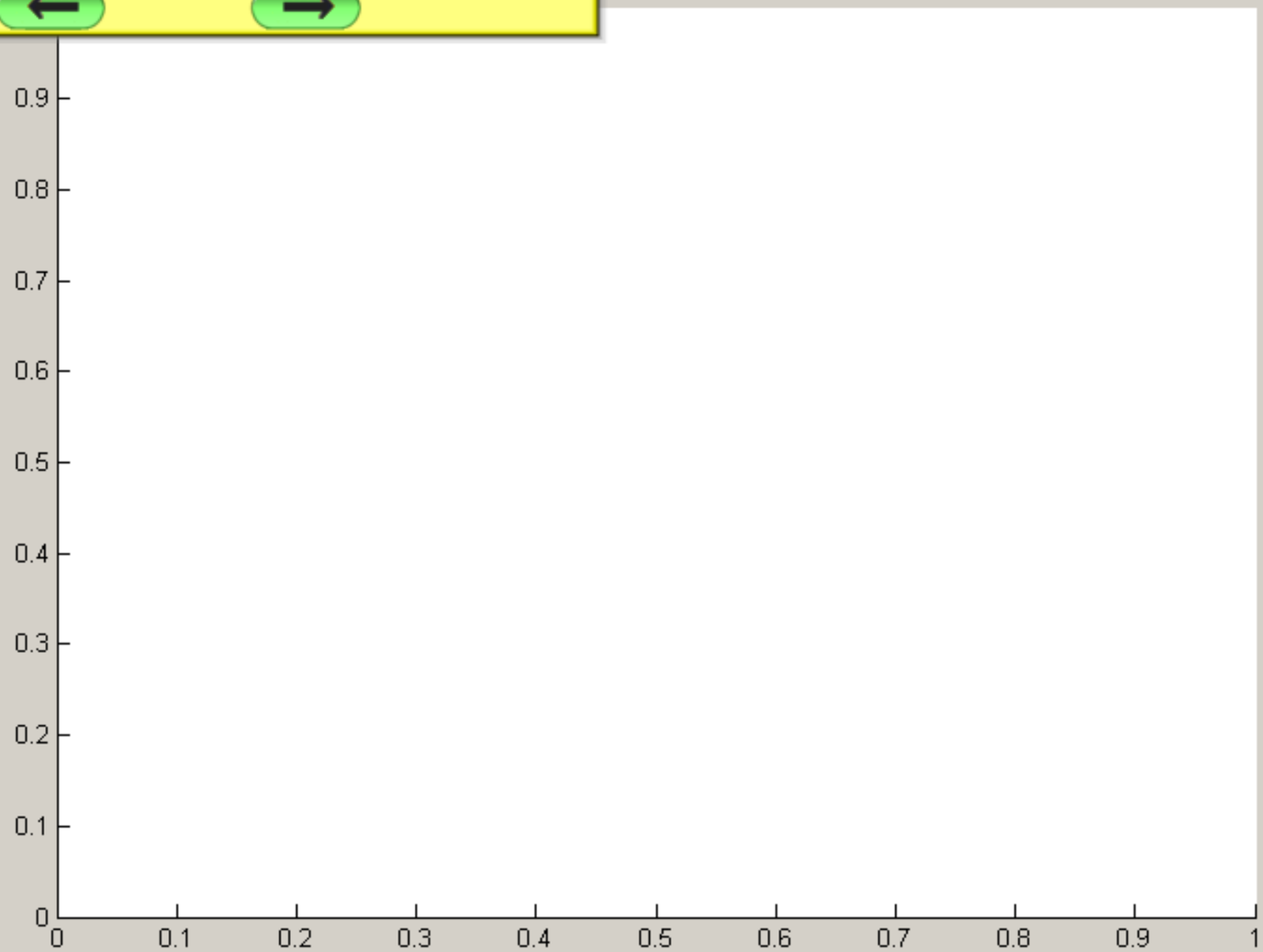
Hot

Choose Background Color

Current background color

Close Panel

This is the 3D Tools panel. Additional options are available after you create your first 3D plot.



zcorrectorgui

Choose peak(s) to plot

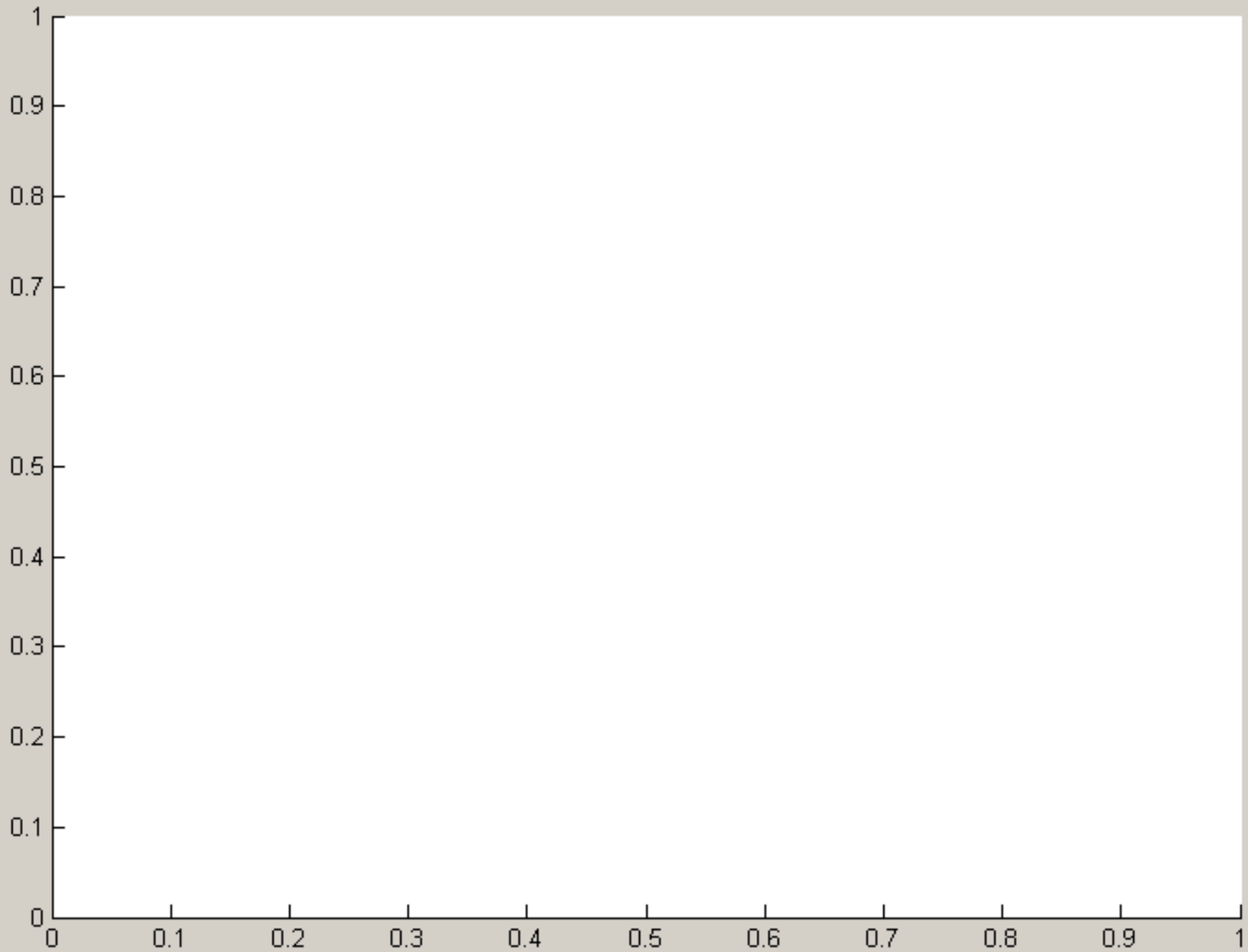
Check Box To Smooth Data For Display

Close Panel

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

To start, select the peak(s) you want to plot in 3D.

Click on a peak to select it.



zcorrectorgui

Choose peak(s) to plot

Check Box To Smooth Data For Display

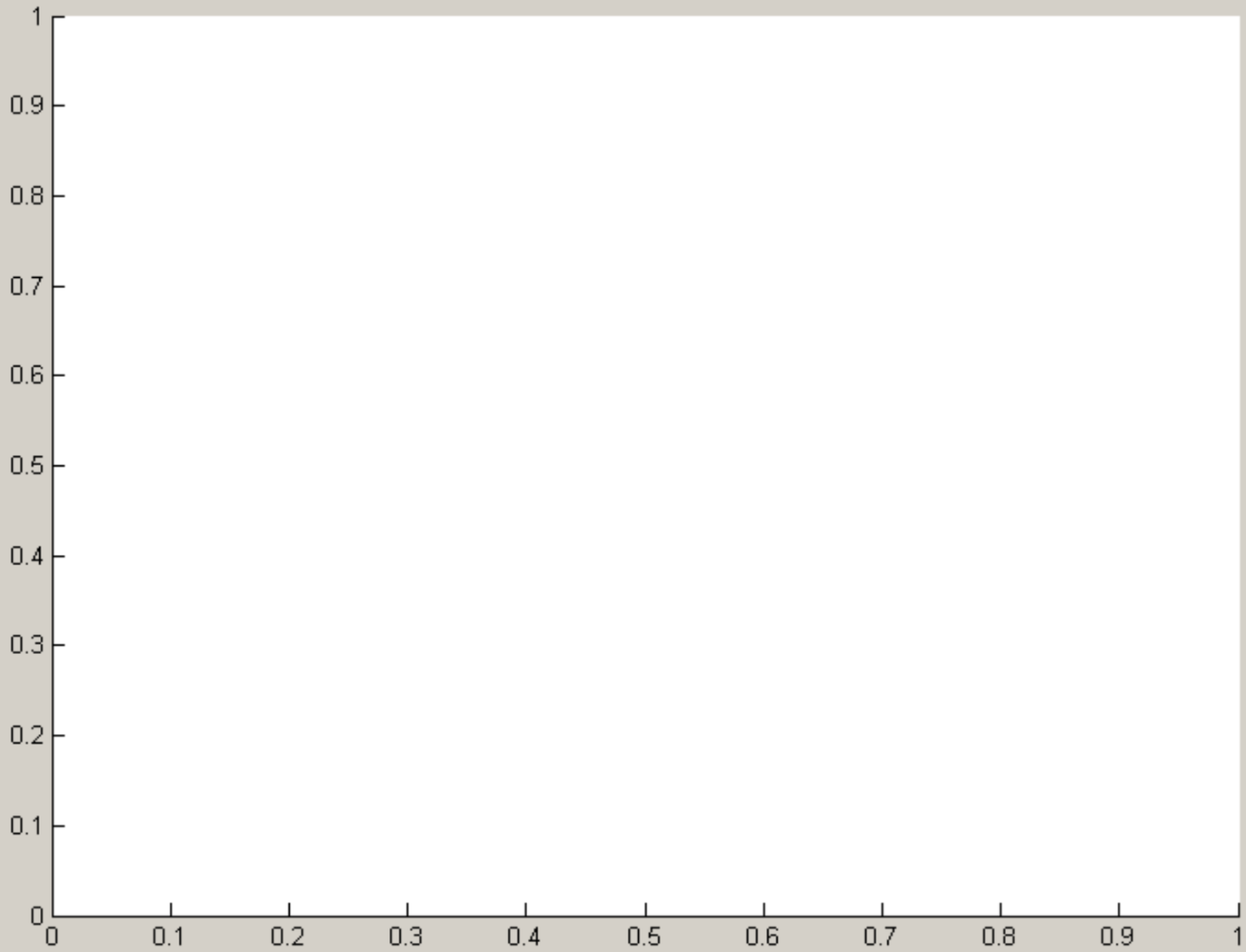
Close Panel

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

View in 3D

You can select multiple peaks by using 'Shift + Click' or 'Ctrl + Click'.

Here we select the 58 and 184 peaks.



zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

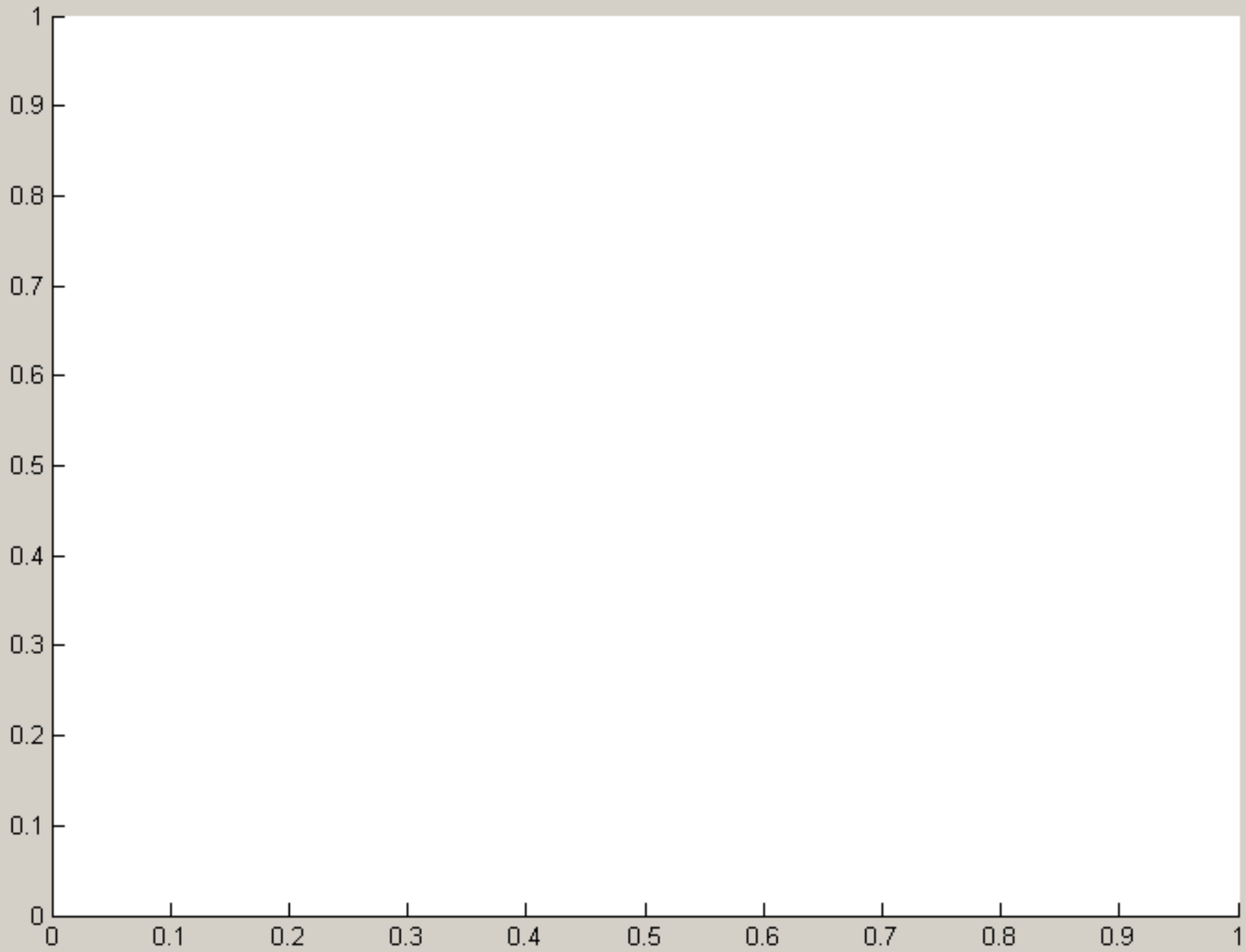
Choose Background Color

Current background color

Once you have selected the peaks you want to plot, press the 'View in 3D' button to see the 3D plot.

This button can be used to reset the 3D plot back to its original form at any time.

Close Panel



zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

Choose Background Color

Current background color

Multicolor Overlay Panel

Check which axes you want to rotate around

X Y Z

Number of degrees for rotation

360

Preview

Create 3D Movie

Close Panel

Tools To Isolate Specific Voxel Intensities

Use the sliders below to select the intensity range that you want to isolate in the 3d plot. Then hit the update button.

NOTE: The value of Min cannot be more than Max

Choose Color

Current color

MIN 1 1 43

MAX 43

Update

Rotation and Scaling Options

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical

10

Z scale factor = 1

0

Take Snap Shot

The 3D plot is created and other options are shown.

The 3D plot can be rotated at any time by clicking and dragging on the 3D plot.

Be Pa

Top sl

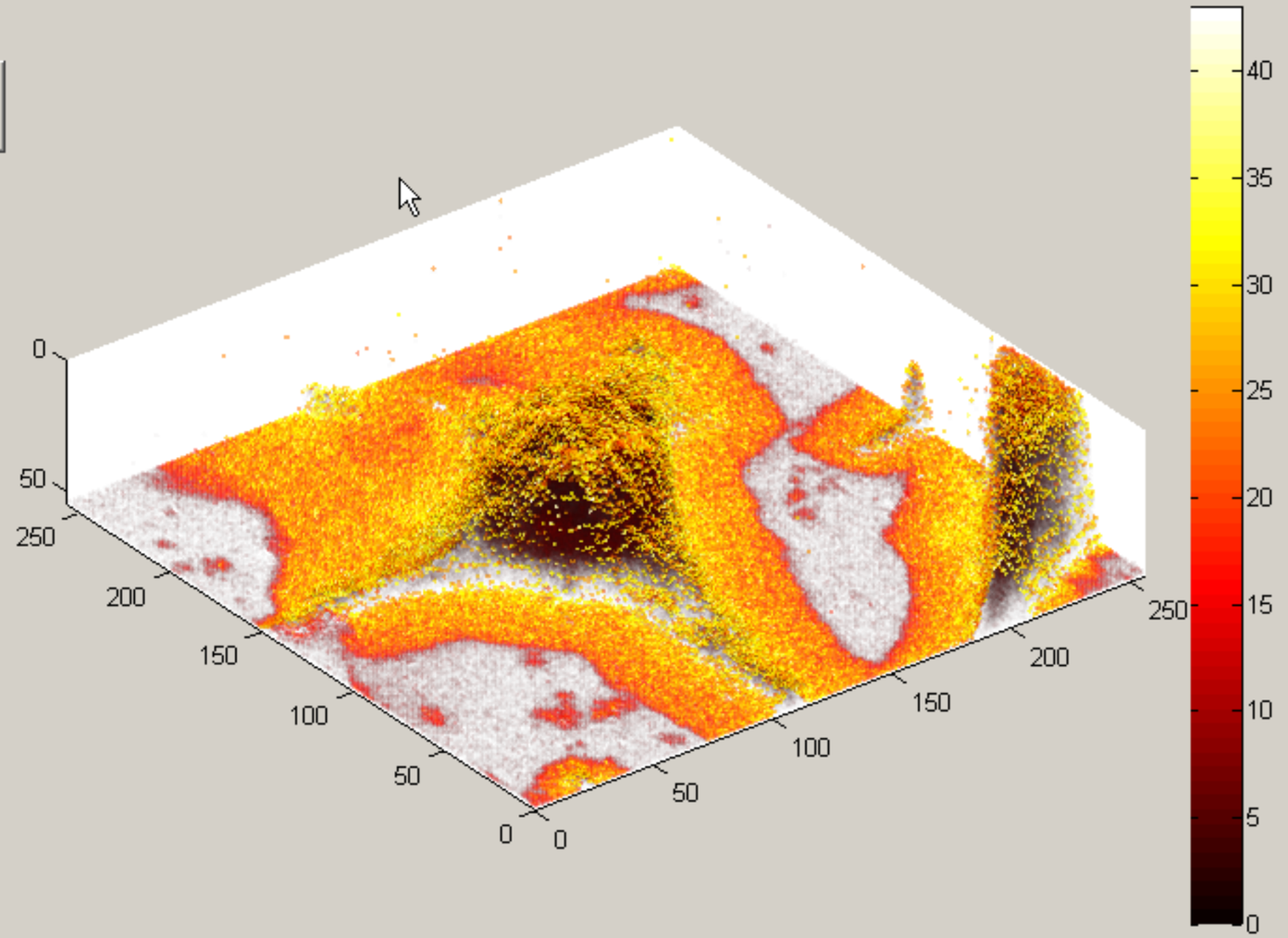
56 1 1

1 0.5 0

56 1 1

1 0.5 0

Update



zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

By checking this box you can use data smoothing in the 3D plot. This does a simple smoothing of the data, and is basically for visual appeal.

View in 3D

Choose Colormap

Hot

Choose Background Color

Current background color

Multicolor Overlay Panel

Preview

Create 3D Movie

Close Panel

Isolate Specific Voxel Intensities

sliders below to select the intensity
at you want to isolate in the 3d plot.
Then hit the update button.

NOTE: The value of Min cannot be more than Max

MIN 1 1 43

MAX 43

Choose Color

Current color

Update

Rotation and Scaling Options

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical Elevation= 30

10

Z scale factor = 1

0

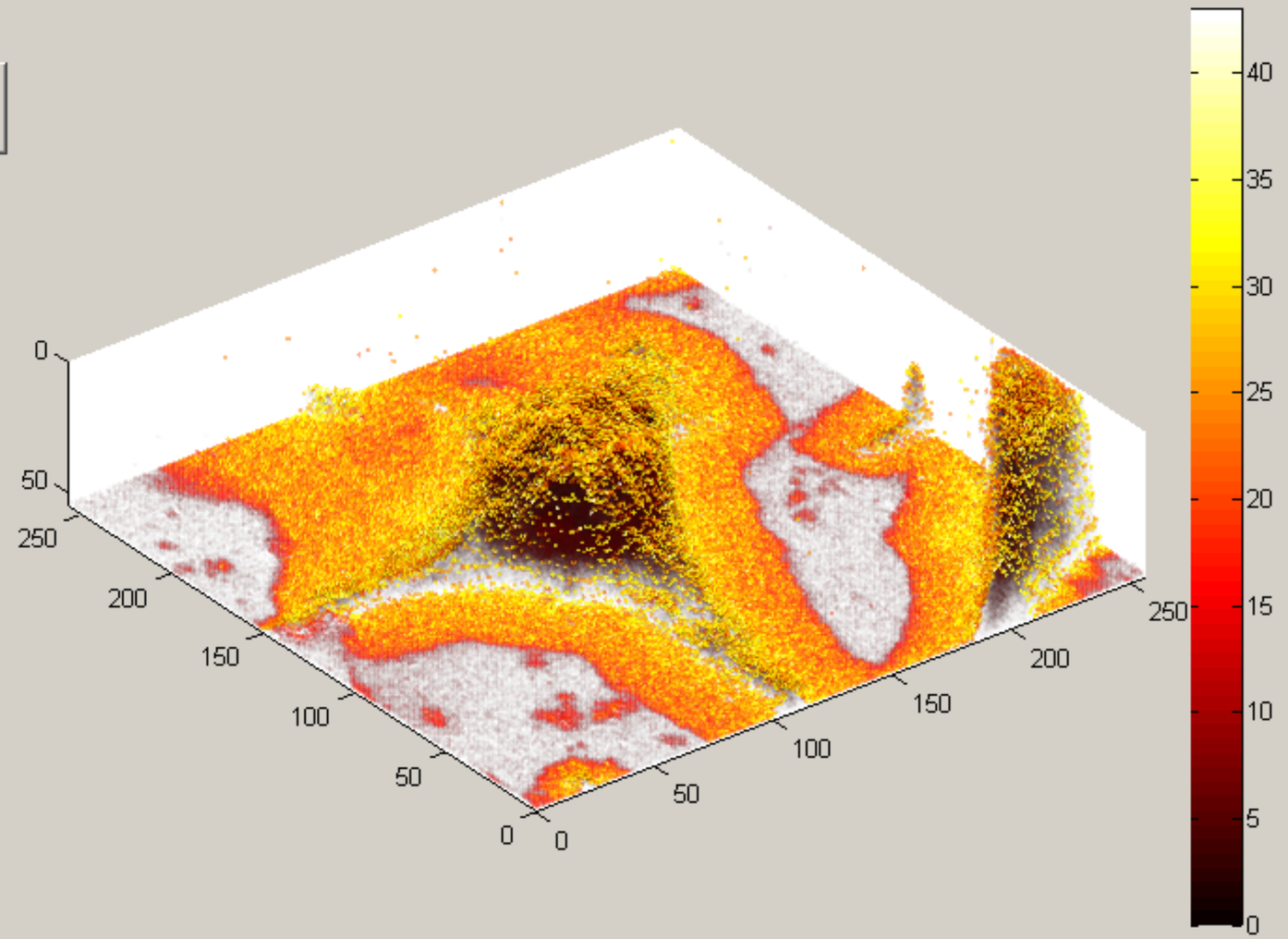
Take Snap Shot

Transparency Options

Be Patient This Works Very Slowly!

Alpha down			Alpha up		
Top slice		Alpha	Bottom slice		Alpha
56		1	56		1
1		0.5	1		0.5
1		0	1		0

Update



zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

Choose Background Color

Current background color

Multicolor Overlay Panel

To update the plot, press the 'View in 3D' button.

Close Panel

Preview

Create 3D Movie

ols To Isolate Specific Voxel Intensities

lse the sliders below to select the intensity
ange that you want to isolate in the 3d plot.
Then hit the update button.

The value of Min cannot be more than Max

MIN 1 1 43

MAX 43

Choose Color

Current color

Update

Rotation and Scaling Options

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

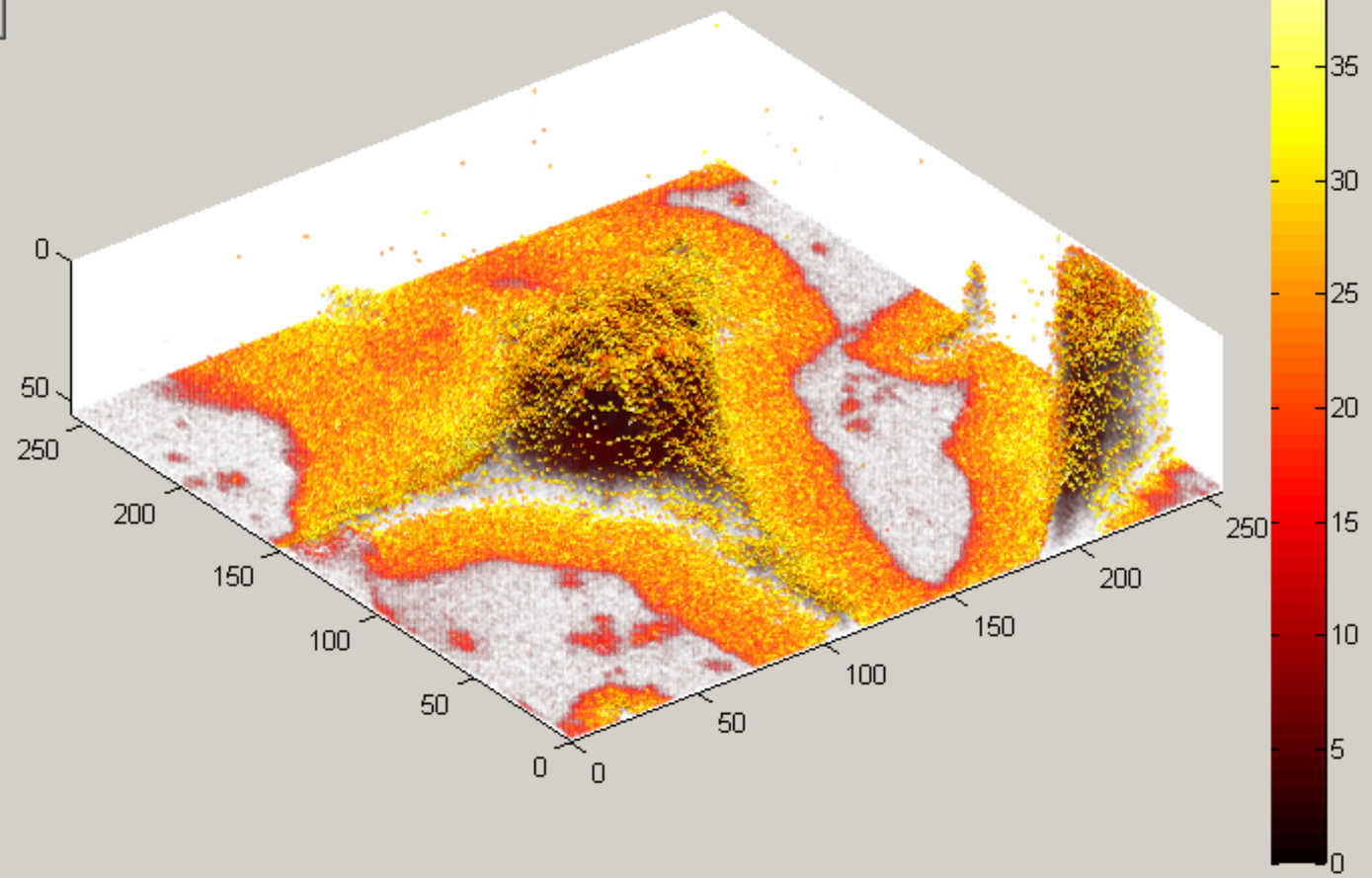
Vertical Elevation= 30

10

Z scale factor = 1

0

Take Snap Shot



Transparency Options

Be Patient This Works Very Slowly!

Alpha down

Top slice 56 1 1

Alpha 1 0.5 0

Alpha up

Bottom slice 56 1 1

Alpha 1 0.5 0

Update

zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

Choose Background Color

Current background color

Multicolor Overlay Panel

Check which axes you want to rotate around

X Y Z

Number of degrees for rotation

360

Preview

Create 3D Movie

Close Panel

Tools To Isolate Specific Voxel Intensities

Use the sliders below to select the intensity range that you want to isolate in the 3d plot. Then hit the update button.

NOTE: The value of Min cannot be more than Max

Choose Color

Current color

MIN 1 1 43

MAX 43

Update

Rotation and Scaling Options

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical Elevation=

10

Z scale factor = 1

0

Take Snap Shot

The smoothed data is shown in the 3D viewer.

Transp

Be Patient Thi

Alpha down

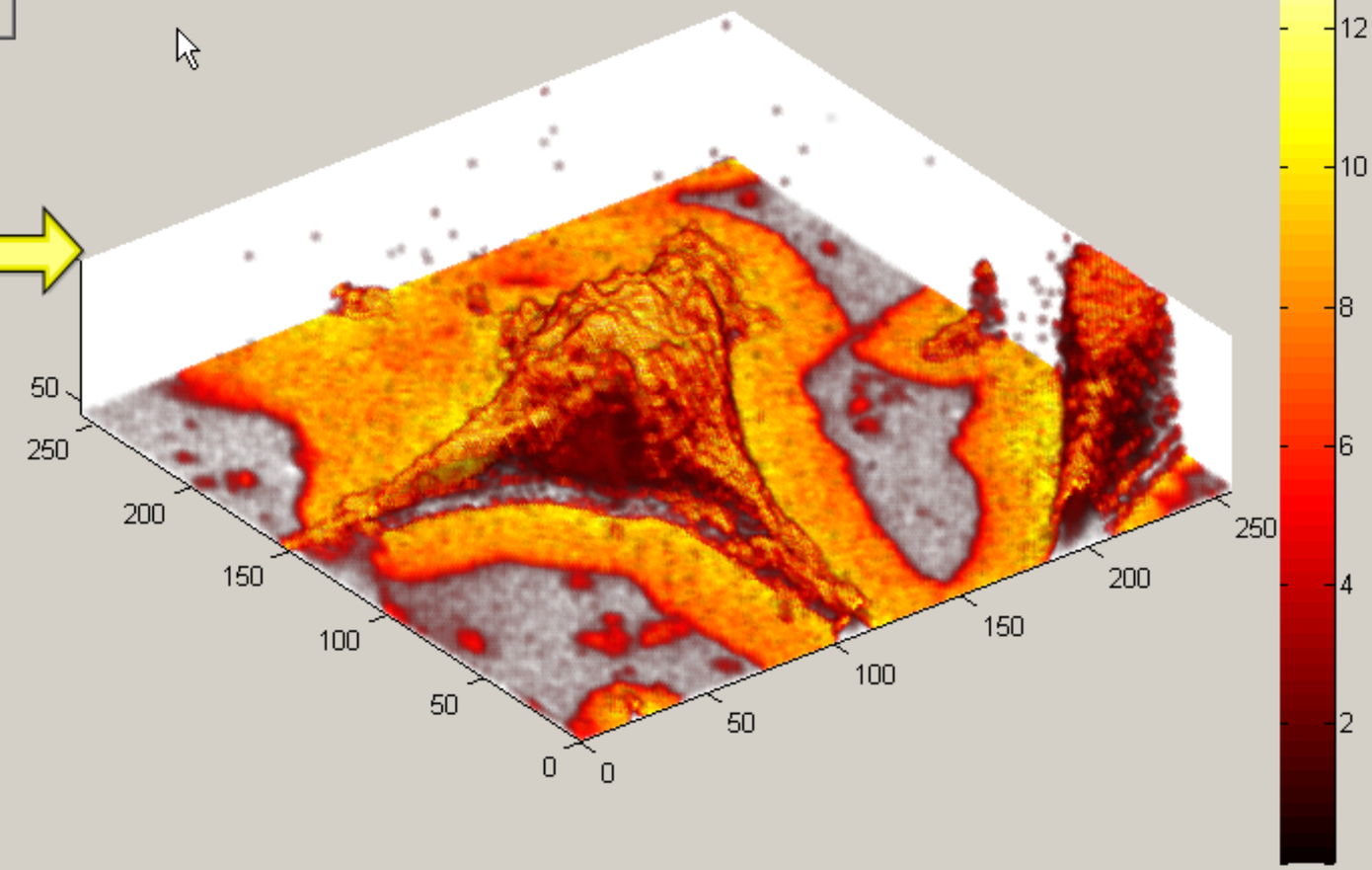
Top slice 56 1 1

Alpha 1 0.5 0

56 1 1

1 0.5 0

Update



zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

- Hot
- Jet
- Gray
- Summer
- Autumn
- Winter
- Cool
- Bone
- Copper

The default color map is 'Hot'. This can be changed at any time by selecting a new colormap from the drop down menu.

The color map defines the colors used in the plot.

Check which axes you want to rotate around

X Y Z

Number of degrees for rotation

360

Close Panel

Tools To Isolate Specific Voxel Intensities

Use the sliders below to select the intensity range that you want to isolate in the 3d plot. Then hit the update button.

NOTE: The value of Min cannot be more than Max

1

1 43

43

Choose Color

Current color

Update

Rotation and Scaling Options

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical Elevation= 30

10

0

Z scale factor = 1

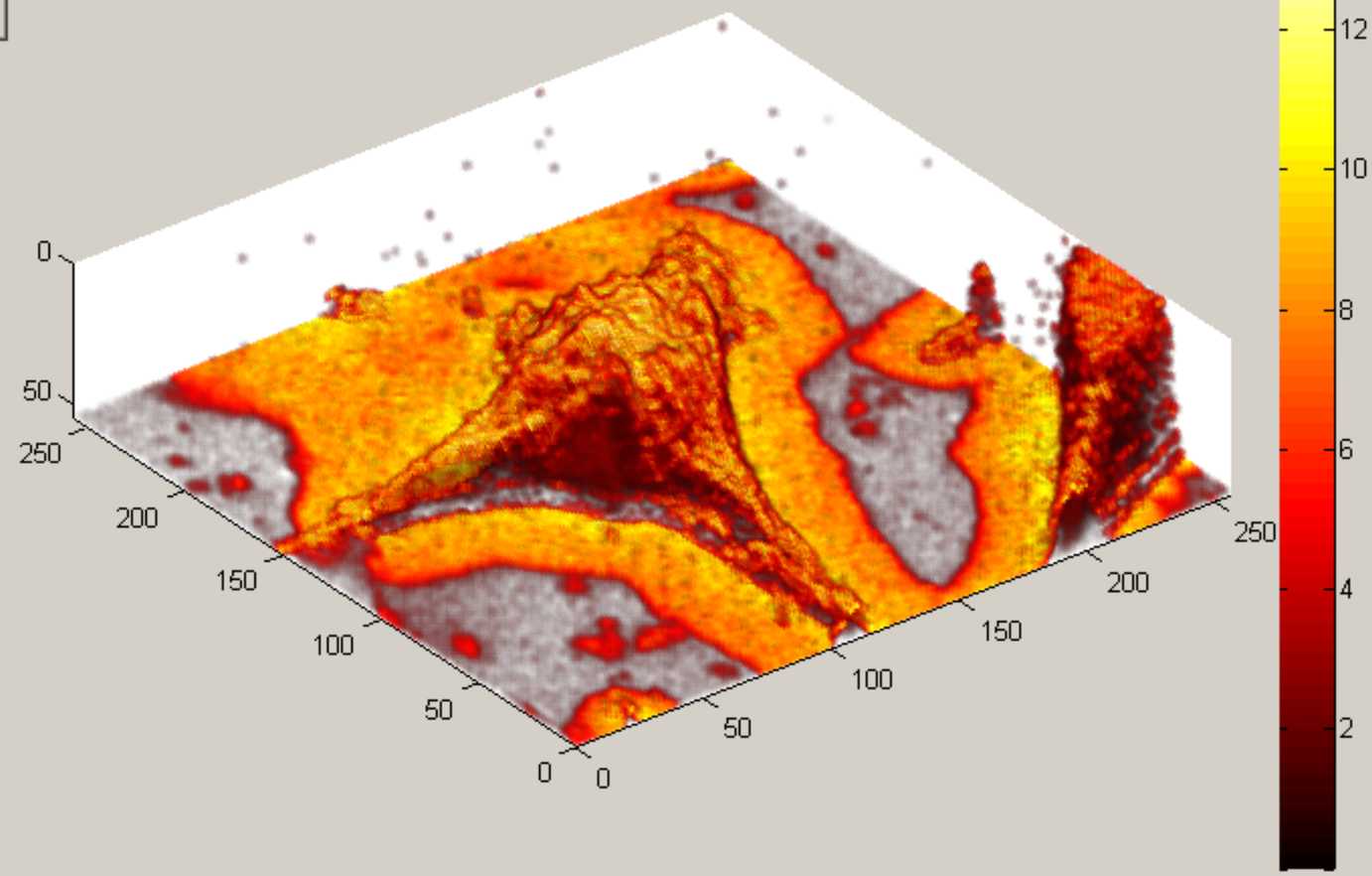
Take Snap Shot

Transparency Options

Be Patient This Works Very Slowly!

Alpha down			Alpha up		
Top slice		Alpha	Bottom slice		Alpha
56		1	56		1
	1			1	
		0.5			0.5
1		0	1		0

Update



zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Gray

Choose Background Color

Current background color

Multicolor Overlay Panel

Check which axes you want to rotate around

X Y Z

Number of degrees for rotation

360

Preview

Create 3D Movie

Close Panel

Tools To Isolate Specific Voxel Intensities

Use the sliders below to select the intensity range that you want to isolate in the 3d plot. Then hit the update button.

Choose Color

NOTE: The value of Min cannot be more than Max

Current color

MIN 1 1 43

MAX 43

Update

Rotation and Scaling Options

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical Elevation=

10

Z scale factor = 1

0

Take Snap Shot

This is the smoothed data shown with the 'Gray' colormap.

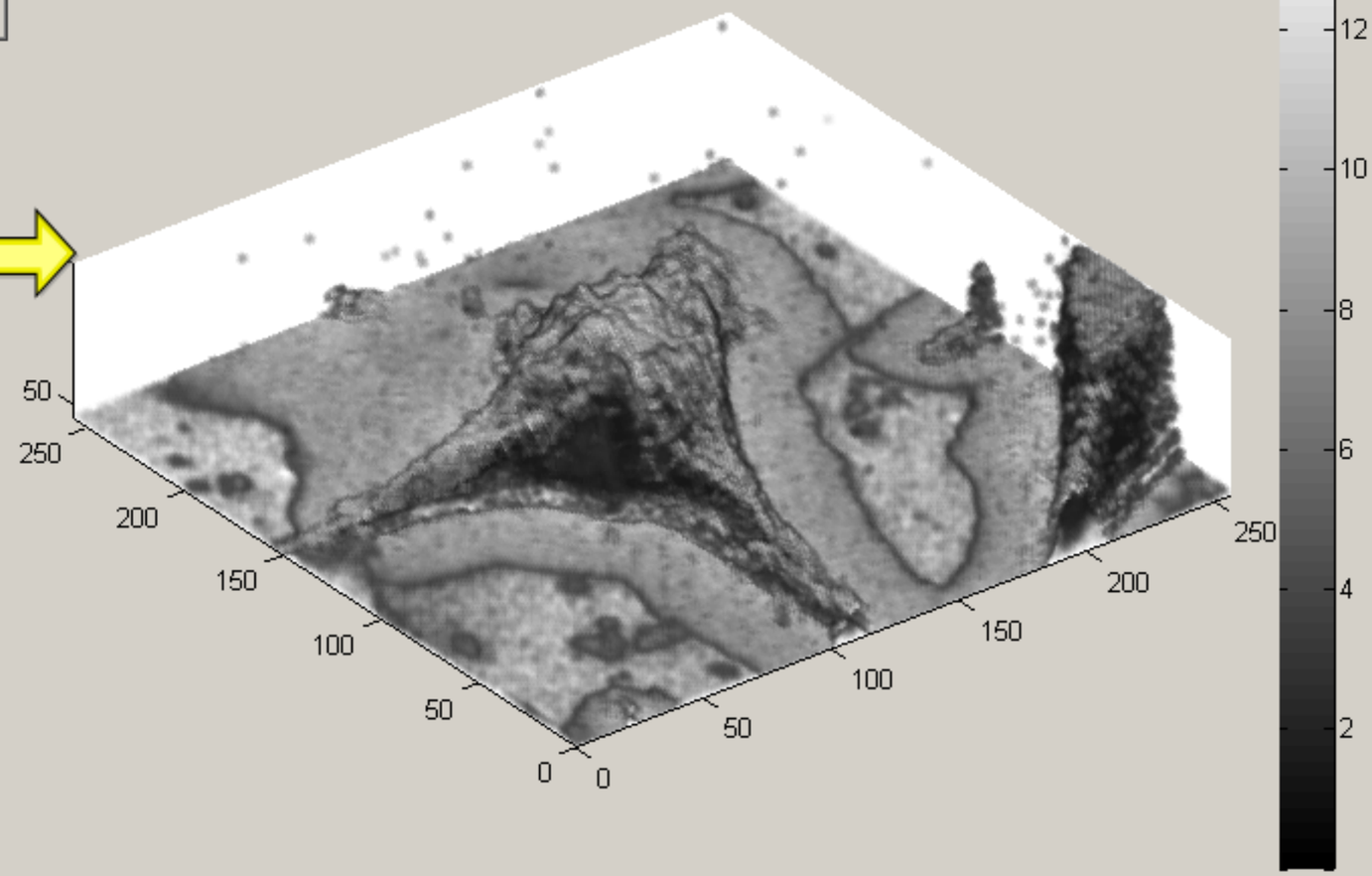
Transp

Be Patient Thi

Alpha down

Top slice	Alpha		
56	1	56	1
1	0.5	1	0.5
1	0	1	0

Update



zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

Choose Background Color

Current background color

Multicolor Overlay Panel

Let's reset the plot by selecting the 'Hot' colormap again and unchecking the smooth data option and pressing the 'View in 3D' button.

Create 3D Movie

Close Panel

ools To Isolate Specific Voxel Intensities

Use the sliders below to select the intensity range that you want to isolate in the 3d plot. Then hit the update button.

Choose Color

: The value of Min cannot be more than Max

Current color

1

1 43

MAX

43

Update

Rotation and Scaling Options

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical Elevation= 30

10

Z scale factor = 1

0

Take Snap Shot

Transparency Options

Be Patient This Works Very Slowly!

Alpha down

Top slice 56 1 1

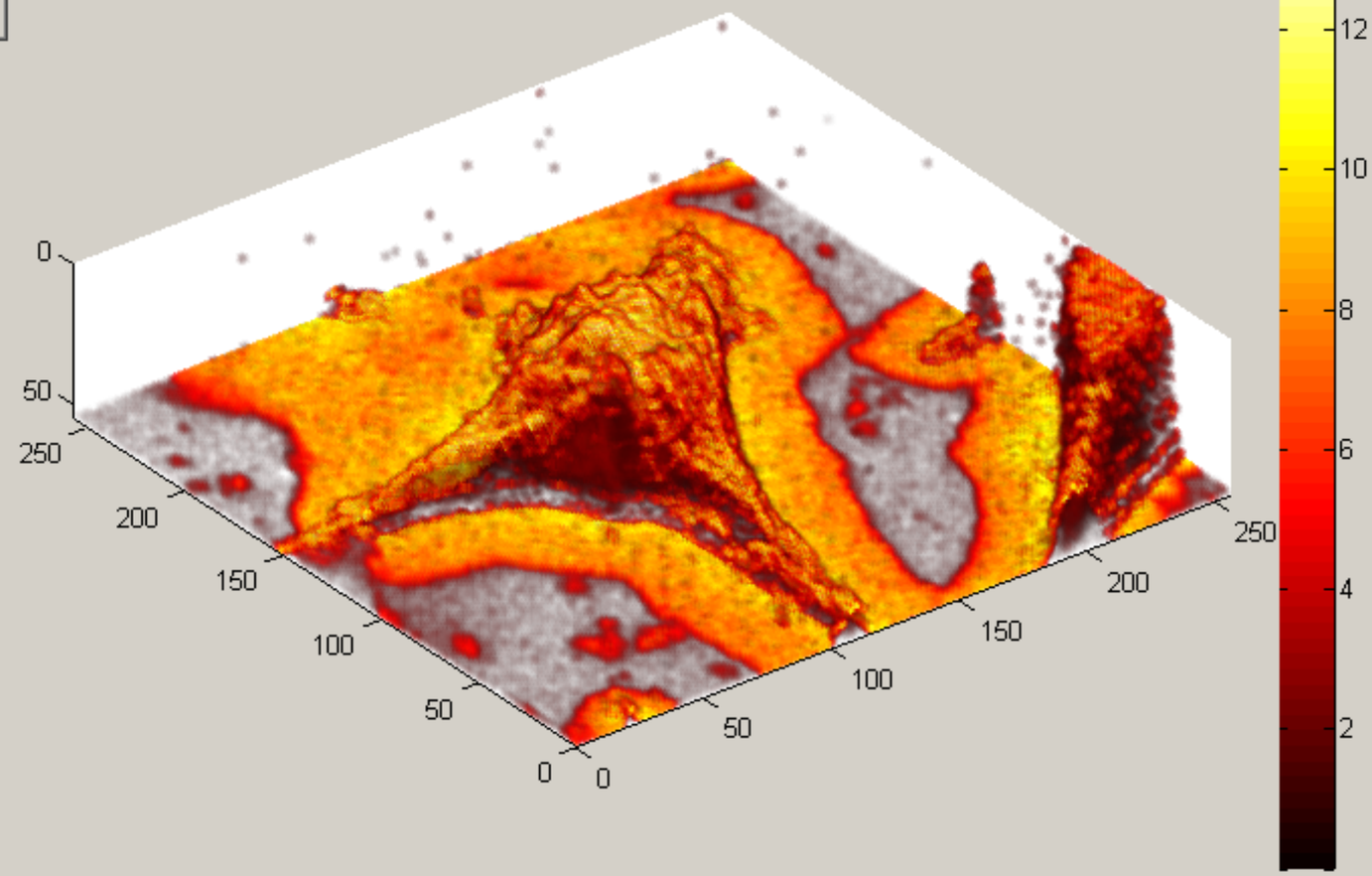
Alpha 1 0.5 0

Alpha up

Bottom slice 56 1 1

Alpha 1 0.5 0

Update



zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

Choose Background Color

Current background color

Multicolor Overlay Panel

Check which axes you want to rotate around

X Y Z

Number of degrees for rotation

360

Preview

Create 3D Movie

Close Panel

Tools To Isolate Specific Voxel Intensities

Use the sliders below to select the intensity range that you want to isolate in the 3d plot. Then hit the update button.

NOTE: The value of Min cannot be more than Max

MIN 1 1 43

MAX 43

Choose Color

Current color

Update

Rotation and Scaling Options

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical Elevation= 30

10

Z scale factor = 1

0

Tak

Now, let's look at some of the other options available on the 3D Tools panel.

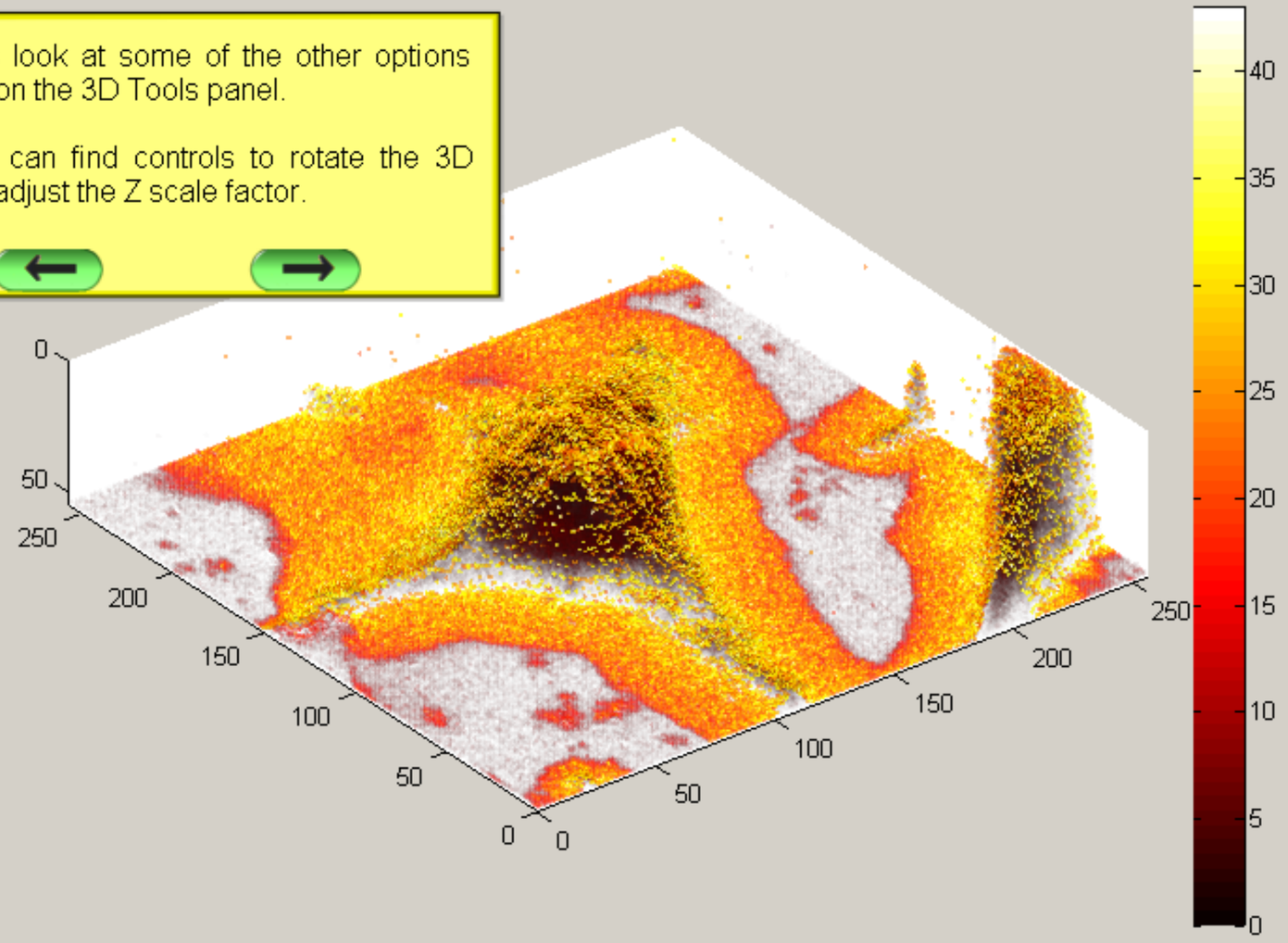
Here you can find controls to rotate the 3D view and adjust the Z scale factor.

Transparency Options

Be Patient This Works Very Slowly!

Alpha down			Alpha up		
Top slice		Alpha	Bottom slice		Alpha
56		1	56		1
	1	0.5		1	0.5
1		0	1		0

Update



zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

Choose Background Color

Current background color

Multicolor Overlay Panel

Check which axes you want to rotate around

X Y Z

Number of degrees for rotation

360

Preview

Create 3D Movie

Close Panel

Tools To Isolate Specific Voxel Intensities

Use the sliders below to select the intensity range that you want to isolate in the 3d plot. Then hit the update button.

NOTE: The value of Min cannot be more than Max

MIN 1 1 43

MAX 43

Choose Color

Current color

Update

Rotation and Scaling Options

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical Elevation= 30

10

Z scale factor = 1

0

Take Snap Shot

The Z axis scale in the Matlab 3D volume plots is somewhat arbitrary. It scales according to the number of layers in the 3D profile. With more layers the plot will become taller. This however may not be realistic based on the sample.

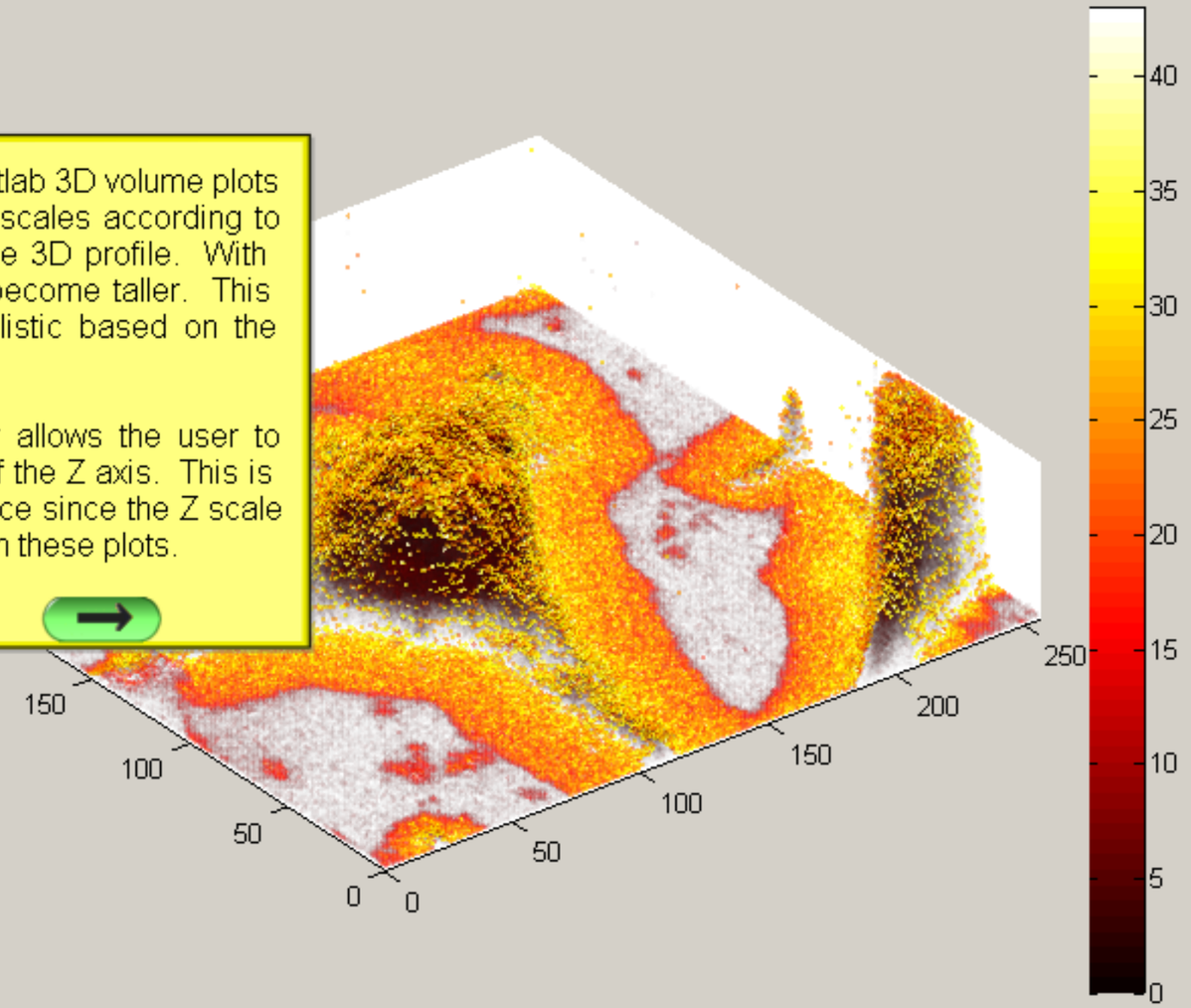
The Z scale factor slider allows the user to change the aspect ratio of the Z axis. This is purely for visual appearance since the Z scale has no physical meaning in these plots.

Transparency Options

Be Patient This Works Very Slowly!

Alpha down			Alpha up		
Top slice	56	1	Bottom slice	56	1
Alpha	1	0.5	Alpha	1	0.5
	0			0	

Update



zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

Choose Background Color

Current background color

Multicolor Overlay Panel

Check which axes you want to rotate around

X Y Z

Number of degrees for rotation

360

Preview

Create 3D Movie

Close Panel

Tools To Isolate Specific Voxel Intensities

Use the sliders below to select the intensity range that you want to isolate in the 3d plot. Then hit the update button.

NOTE: The value of Min cannot be more than Max

Choose Color

Current color

MIN 1 1 43

MAX 43

Update

Rotation and Scaling Options

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical Elevation= 30

10

Z scale factor = 3

0

Take Snap Shot

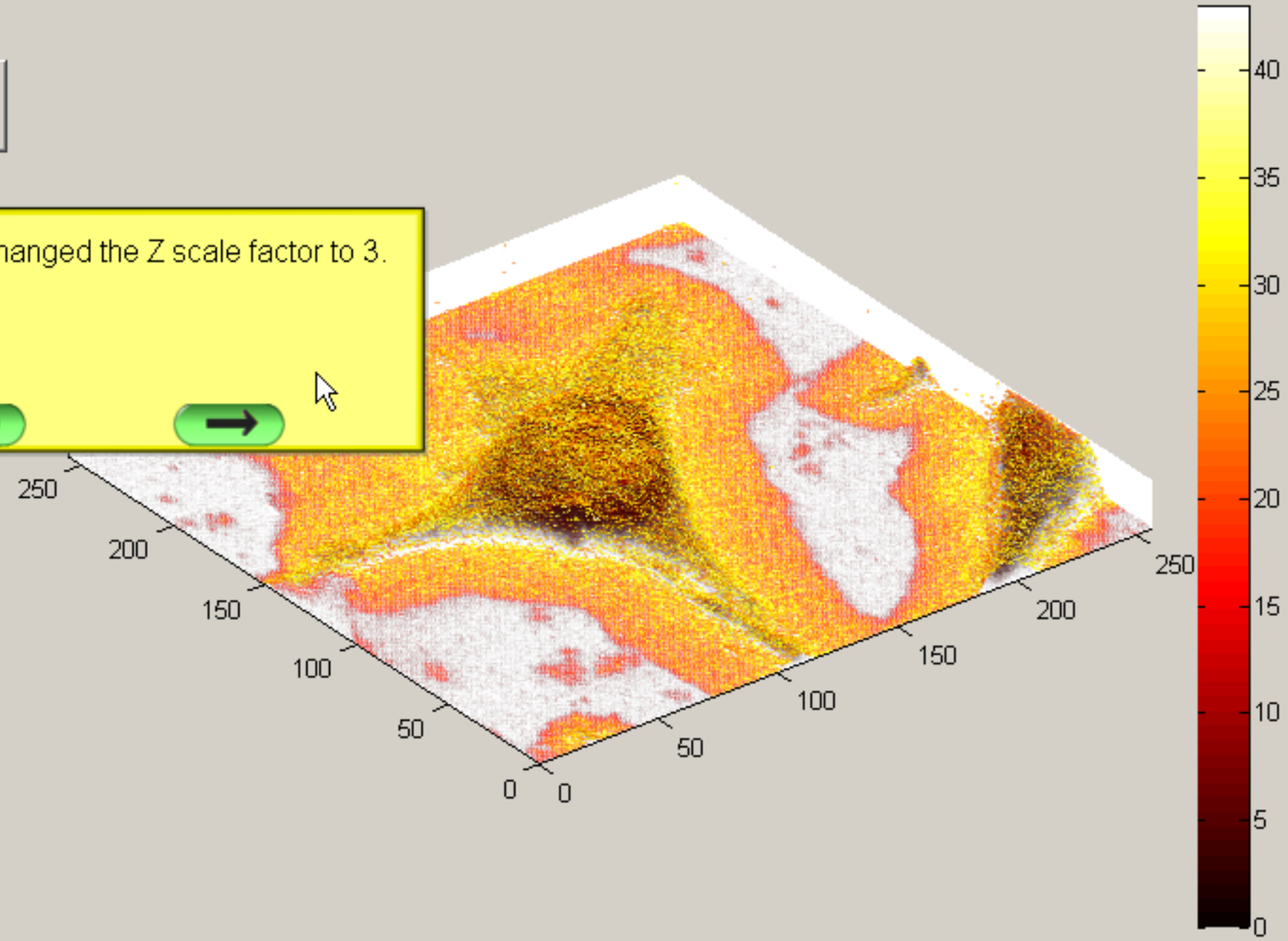
Here we have changed the Z scale factor to 3.

Transparency Options

Be Patient This Works Very Slowly!

Alpha down			Alpha up		
Top slice		Alpha	Bottom slice		Alpha
56	1	1	56	1	1
1	0.5	0	1	0.5	0

Update



zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

Choose Background Color

Current background color

Multicolor Overlay Panel

Check which axes you want to rotate around

X Y Z

Number of degrees for rotation

360

Preview

Create 3D Movie

Close Panel

Tools To Isolate Specific Voxel Intensities

Use the sliders below to select the intensity range that you want to isolate in the 3d plot. Then hit the update button.

NOTE: The value of Min cannot be more than Max

MIN 1 1 43

MAX 43

Choose Color

Current color

Update

Rotation and Scaling Options

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical Elevation=

10

Z scale factor = 3

0

Take Snap Shot

If we rotate the 3D view we can see the Z axis has been compressed.

Transpa

Be Patient This

Alpha down

Alpha up

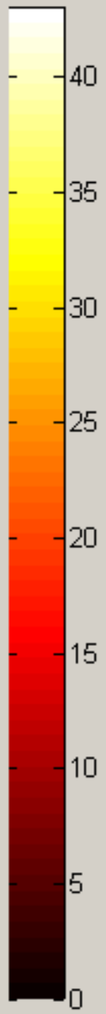
Top slice 56 1 1

Alpha 1 0.5 0

Bottom slice 56 1 1

Alpha 1 0.5 0

Update



zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap: Hot

Choose Background Color

Current background color

Multicolor Overlay Panel

Check which axes you want to rotate around

X Y Z

Number of degrees for rotation: 360

Preview

Create 3D Movie

Close Panel

Tools To Isolate Specific Voxel Intensities

Use the sliders below to select the intensity range that you want to isolate in the 3d plot. Then hit the update button.

NOTE: The value of Min cannot be more than Max

MIN 1 (1 / 43)

MAX 43

Choose Color

Current color

Update

Rotation and Scaling Options

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical Elevation= 30

10

Z scale factor = 1

0

Take Snap Shot

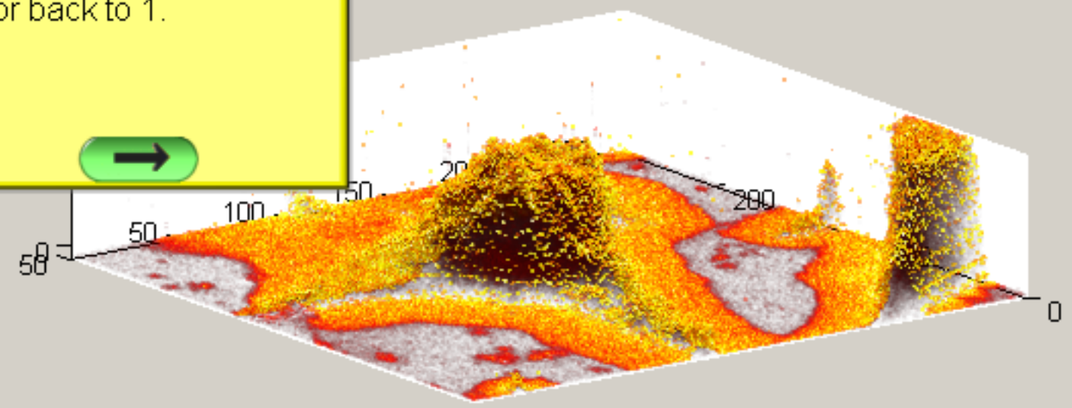
Since it does not affect the data, we will change the Z scale factor back to 1.

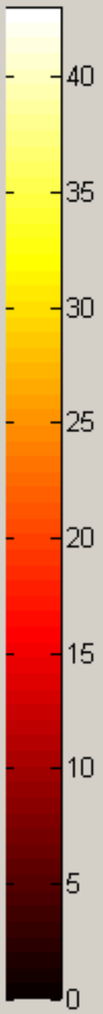
Transparency Options

Be Patient This Works Very Slowly!

Alpha down		Alpha up	
Top slice	Alpha	Bottom slice	Alpha
56 / 1 / 1	1 / 0.5 / 0	56 / 1 / 1	1 / 0.5 / 0

Update





zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

Choose Background Color

Current background color

Multicolor Overlay Panel

Check which axes you want to rotate around

X Y Z

Number of degrees for rotation

360

Preview

Create 3D Movie

Close Panel

Tools To Isolate Specific Voxel Intensities

Use the sliders below to select the intensity range that you want to isolate in the 3d plot. Then hit the update button.

NOTE: The value of Min cannot be more than Max

Choose Color

Current color

MIN 1 1 43

MAX 43

Update

Rotation and Scaling Options

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical Elevation= 30

10

Z scale factor = 1

0

Take Snap Shot

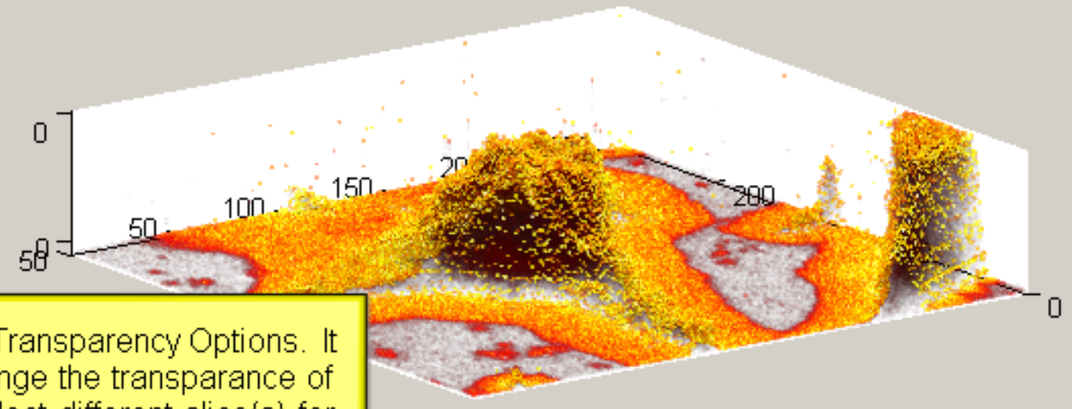
Transparency Options

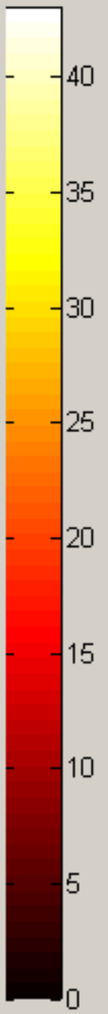
Be Patient This Works Very Slowly!

Alpha down			Alpha up		
Top slice		Alpha	Bottom slice		Alpha
56		1	56		1
1		0.5	1		0.5
1		0	1		0

Update

This box contains the Transparency Options. It allows the user to change the transparance of the 3D image and select different slice(s) for display in the 3D plot.





zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

Choose Background Color

Current background color

Multicolor Overlay Panel

Check which axes you want to rotate around

X Y Z

Number of degrees for rotation

360

Preview

Create 3D Movie

Close Panel

Tools To Isolate Specific Voxel Intensities

Use the sliders below to select the intensity range that you want to isolate in the 3d plot. Then hit the update button.

NOTE: The value of Min cannot be more than Max

MIN 1 1 43

MAX 43

Choose Color

Current color

Update

Rotation and Scaling Options

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical Elevation= 30

10

Z scale factor = 1

0

Take Snap Shot

Transparency Options

Be Patient This Works Very Slowly!

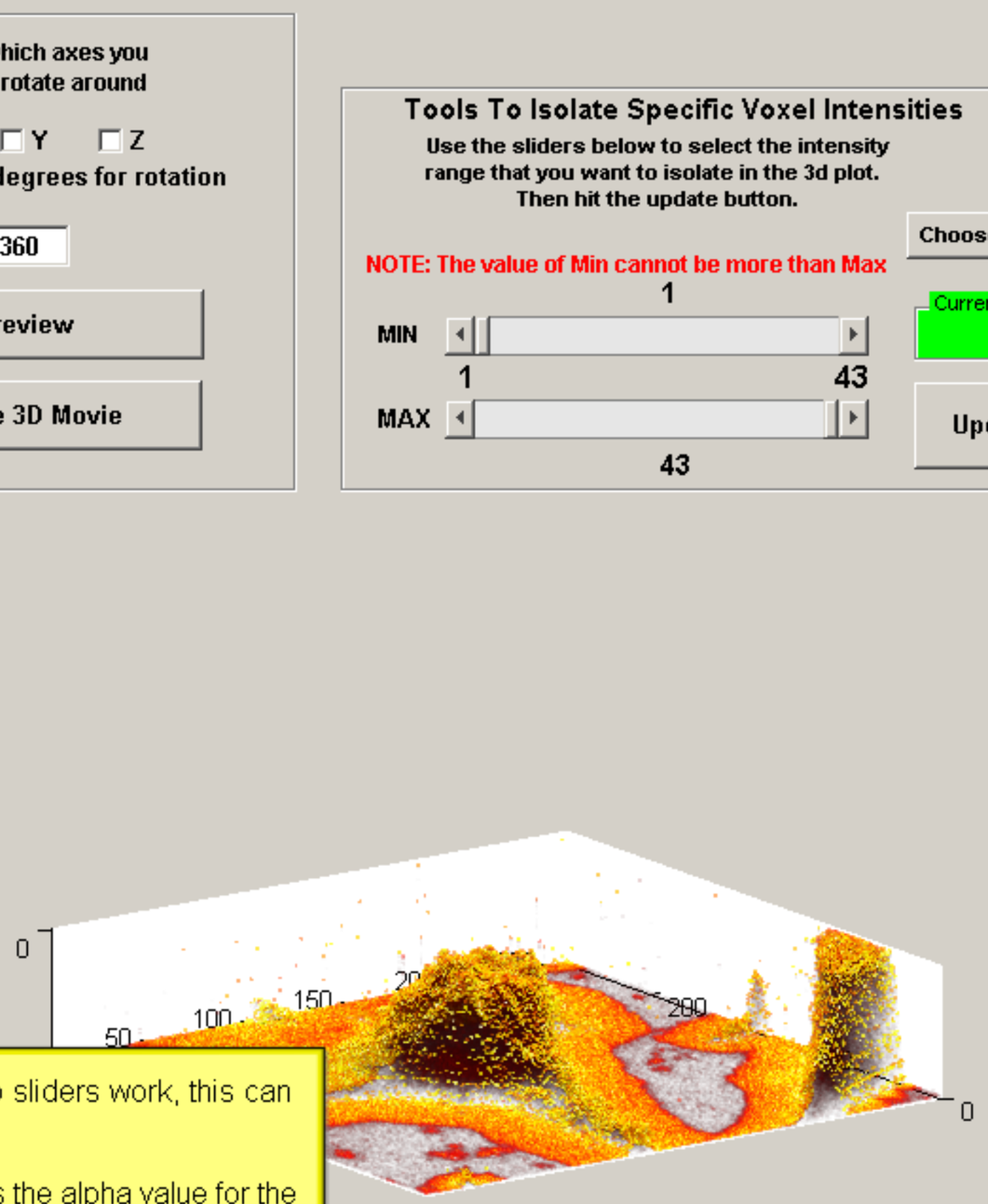
Alpha down			Alpha up		
Top slice		Alpha	Bottom slice		Alpha
56		1	56		1
1		0.5	1		0.5
1		0	1		0

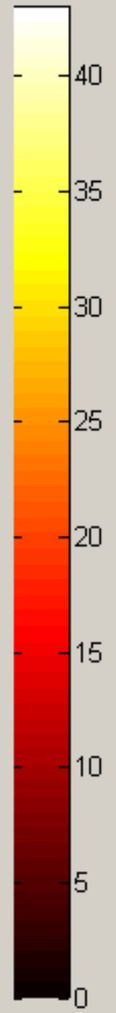
Update

Because of how Matlab sliders work, this can be a bit confusing.

The Alpha down defines the alpha value for the slices starting at the top of the 3D volume. To change the alpha value of the whole volume, all slices must be selected (Top slice = 56). This is the default.

The Alpha up defines the alpha value for the slices starting at the bottom of the 3D voume.





zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

Choose Background Color

Current background color

Multicolor Overlay Panel

Check which axes you want to rotate around

X Y Z

Number of degrees for rotation

360

Preview

Create 3D Movie

Close Panel

Tools To Isolate Specific Voxel Intensities

Use the sliders below to select the intensity range that you want to isolate in the 3d plot. Then hit the update button.

NOTE: The value of Min cannot be more than Max

MIN 1 1 43

MAX 43

Choose Color

Current color

Update

Rotation and Scaling Options

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical Elevation= 30

10

Z scale factor = 1

0

Take Snap Shot

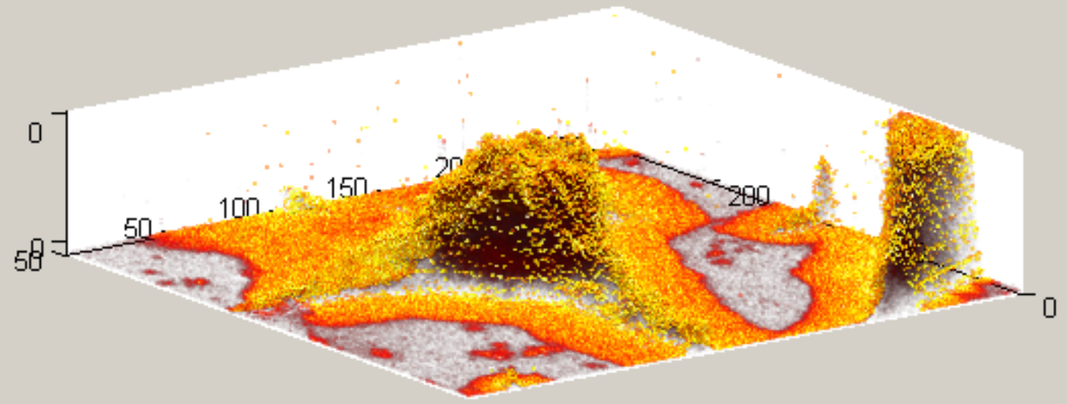
Transparency Options

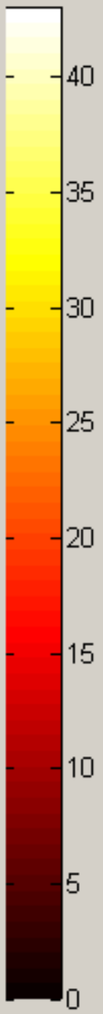
Be Patient This Works Very Slowly!

Alpha down			Alpha up		
Top slice		Alpha	Bottom slice		Alpha
56		1	56		1
	1	0.04		1	0.5
1		0	1		

Update

Let's adjust the transparency of all slices to 0.04 by adjusting the Alpha down Alpha slider to 0.04 and pressing the 'Update' button.





zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

Choose Background Color

Current background color

Multicolor Overlay Panel

Check which axes you want to rotate around

X Y Z

Number of degrees for rotation

360

Preview

Create 3D Movie

Close Panel

Tools To Isolate Specific Voxel Intensities

Use the sliders below to select the intensity range that you want to isolate in the 3d plot. Then hit the update button.

NOTE: The value of Min cannot be more than Max

MIN 1 1 43

MAX 43

Choose Color

Current color

Update

Rotation and Scaling Options

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical Elevation= 30

10

Z scale factor = 1

0

Take Snap Shot

Transp

Be Patient Thi

Alpha down

Top slice 56 1 1

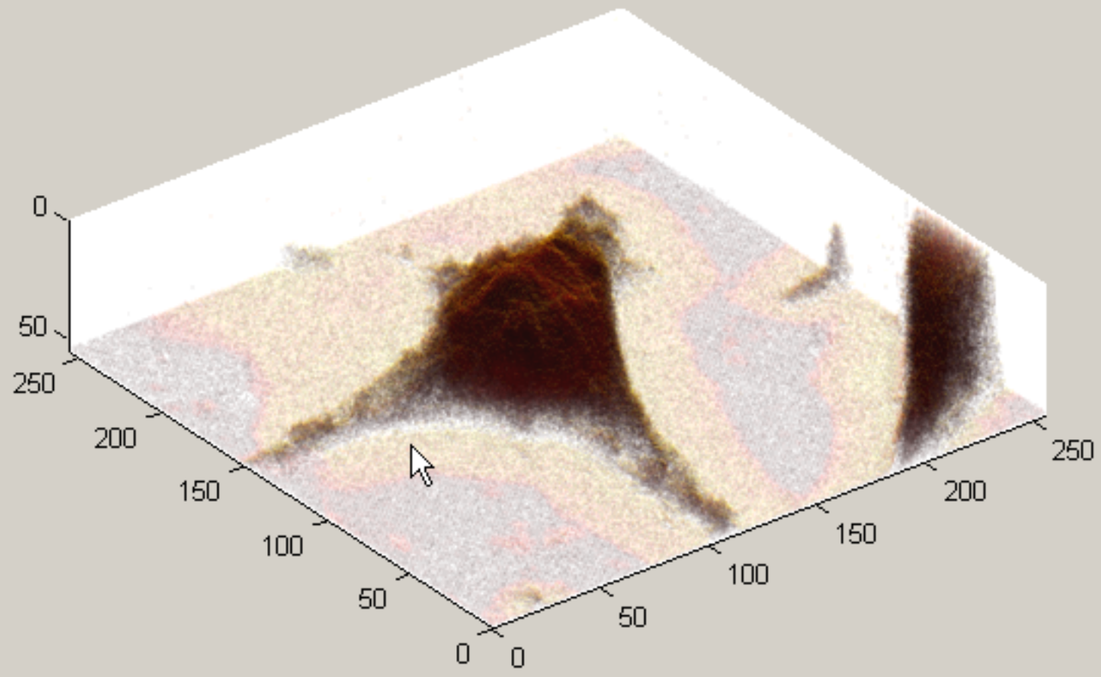
Alpha 1 0.04 0

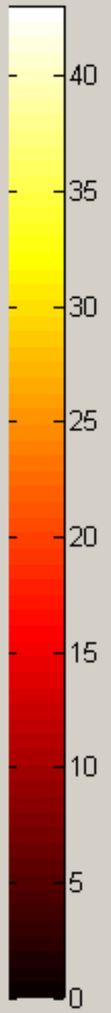
56 1 1

1 0.5 0

Update

The plot is updated with the new transparency value.





zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

Choose Background Color

Current background color

Multicolor Overlay Panel

Check which axes you want to rotate around

X Y Z

Number of degrees for rotation

360

Preview

Create 3D Movie

Close Panel

Tools To Isolate Specific Voxel Intensities

Use the sliders below to select the intensity range that you want to isolate in the 3d plot. Then hit the update button.

NOTE: The value of Min cannot be more than Max

Choose Color

Current color

MIN 1 1 43

MAX 43

Update

Rotation and Scaling Options

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical Elevation= 30

10

Z scale factor = 1

0

Take Snap Shot

Transp

Be Patient Thi

Alpha down

Top slice 56 1 1

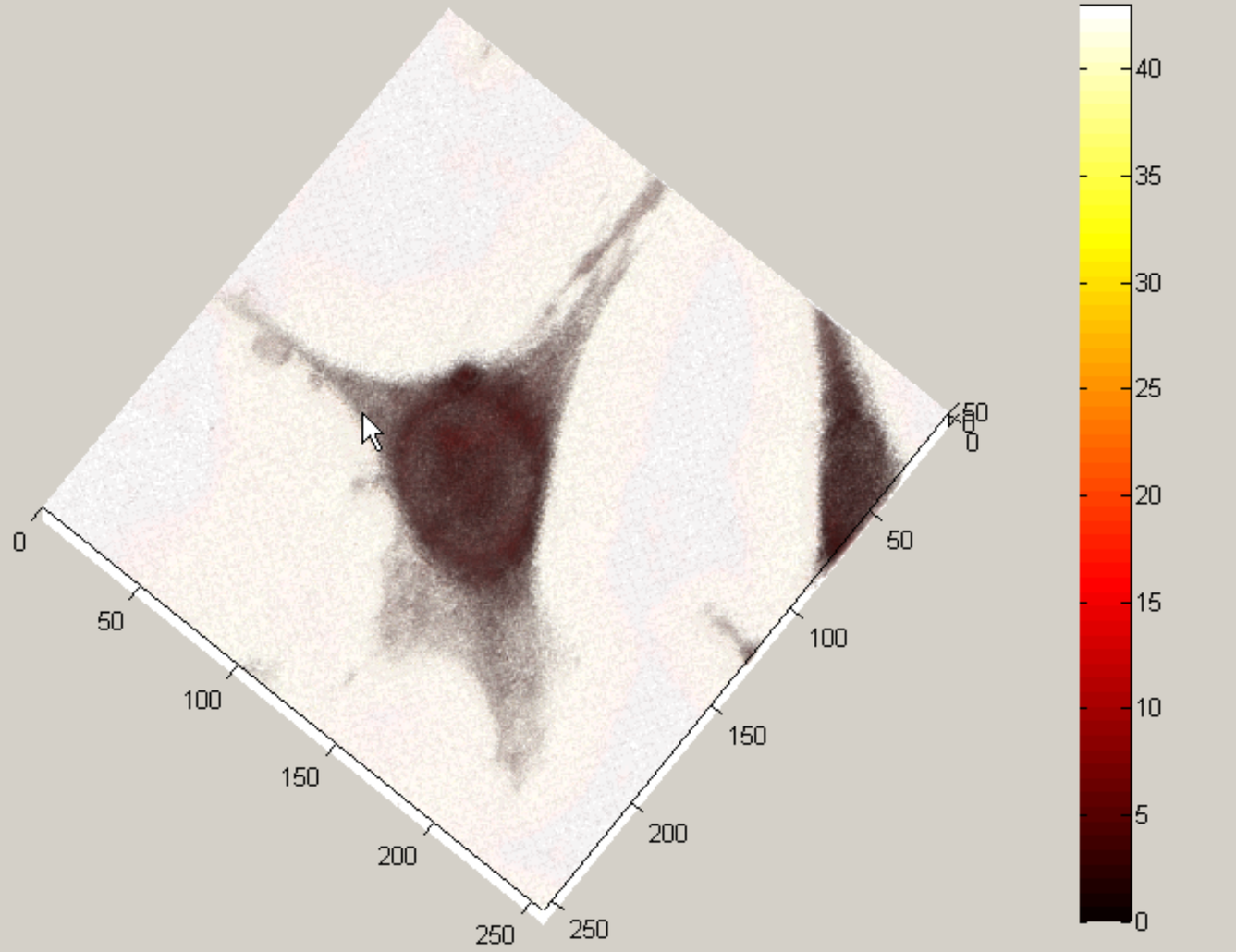
Alpha 1 0.04 0

56 1 1

1 0.5 0

Update

Rotating the sample makes the transparency affect clearer to see.



zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Let's reset the 3D plot by hitting the 'View in 3D' button.

Close Panel

Choose Colormap

Hot

Choose Background Color

Current background color

Multicolor Overlay Panel

Preview

Create 3D Movie

ools To Isolate Specific Voxel Intensities

Use the sliders below to select the intensity range that you want to isolate in the 3d plot. Then hit the update button.

: The value of Min cannot be more than Max

Choose Color

Current color

MIN 1 1 43

MAX 43

Update

Rotation and Scaling Options

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical Elevation= 30

10

Z scale factor = 1

0

Take Snap Shot

Transparency Options

Be Patient This Works Very Slowly!

Alpha down

Top slice 56 1 1

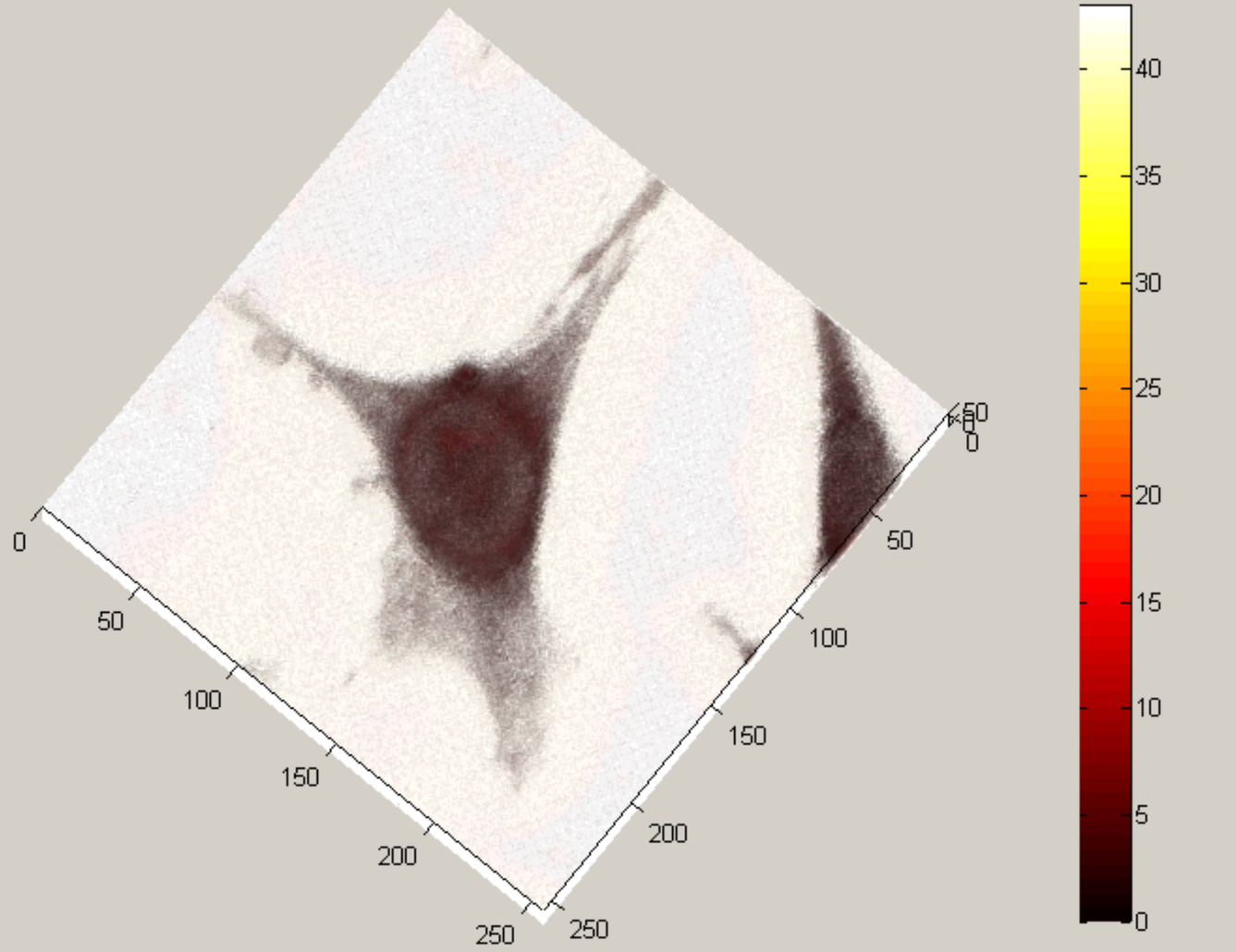
Alpha 1 0.04 0

Alpha up

Bottom slice 56 1 1

Alpha 1 0.5 0

Update



zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

Choose Background Color

Current background color

Multicolor Overlay Panel

Check which axes you want to rotate around

X Y Z

Number of degrees for rotation

360

Preview

Create 3D Movie

Close Panel

Tools To Isolate Specific Voxel Intensities

Use the sliders below to select the intensity range that you want to isolate in the 3d plot. Then hit the update button.

NOTE: The value of Min cannot be more than Max

Choose Color

Current color

MIN 1 1 43

MAX 43

Update

Rotation and Scaling Options

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical Elevation= 30

10

Z scale factor = 1

0

Take Snap Shot

Transparency Options

Be Patient This Works Very Slowly!

Alpha down

Top slice 56 32 1

Alpha 1

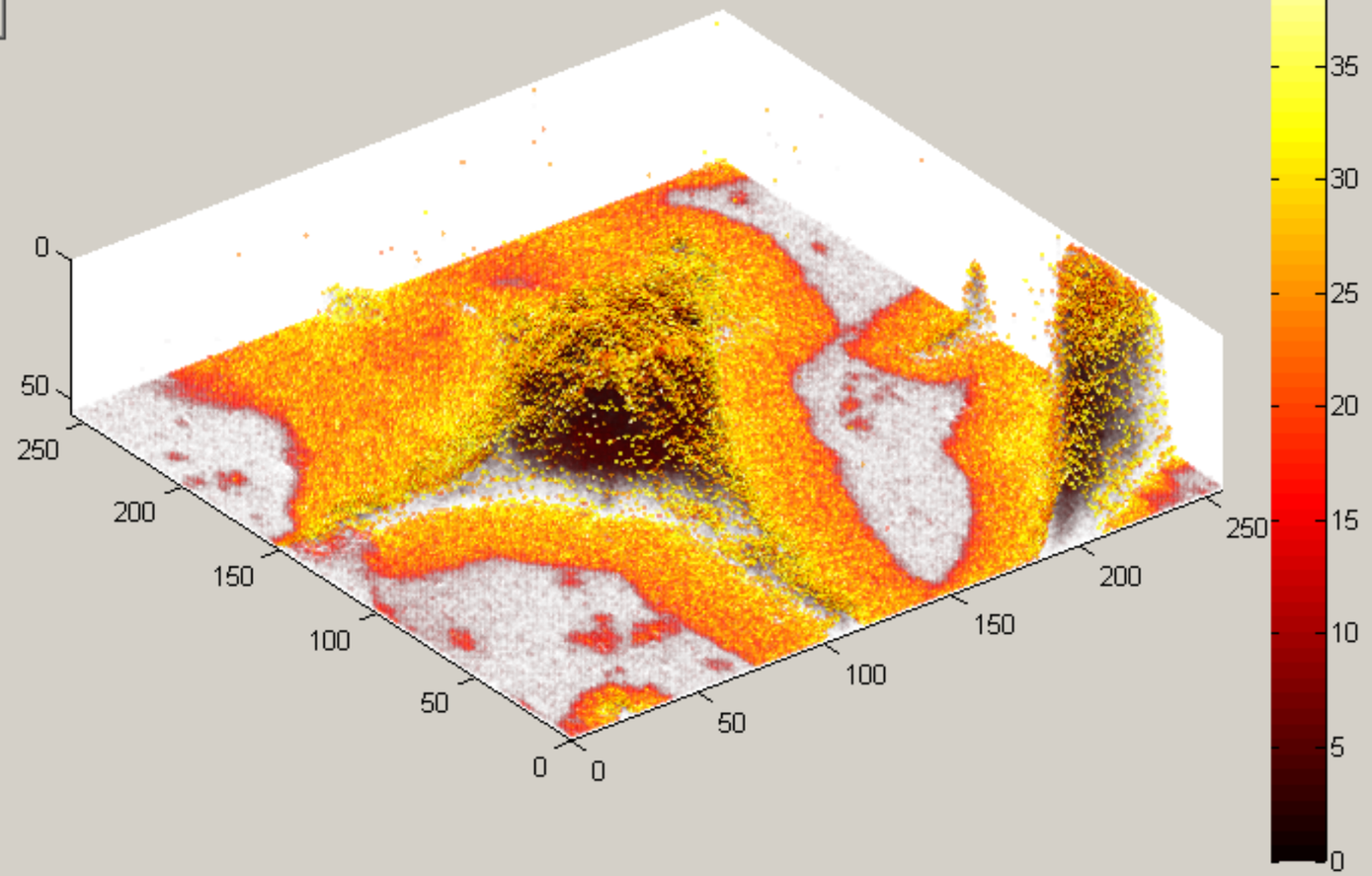
Alpha up

Bottom slice 56

Alpha 1

Now let's explore how to look at different slices of the data. First let's set the Top slice slider number to something around the middle. Here we choose 32.

The Alpha value is left at 0.04.



zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

Choose Background Color

Current background color

Multicolor Overlay Panel

Check which axes you want to rotate around

X Y Z

Number of degrees for rotation

360

Preview

Create 3D Movie

Close Panel

Tools To Isolate Specific Voxel Intensities

Use the sliders below to select the intensity range that you want to isolate in the 3d plot. Then hit the update button.

NOTE: The value of Min cannot be more than Max

Choose Color

Current color

MIN 1 1 43

MAX 43

Update

Rotation and Scaling Options

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical Elevation= 30

10

Z scale factor = 1

0

Take Snap Shot

Transparency Options

Be Patient This Works Very Slowly!

Alpha down

Top slice 56 32 1

Alpha 1 0.04 0

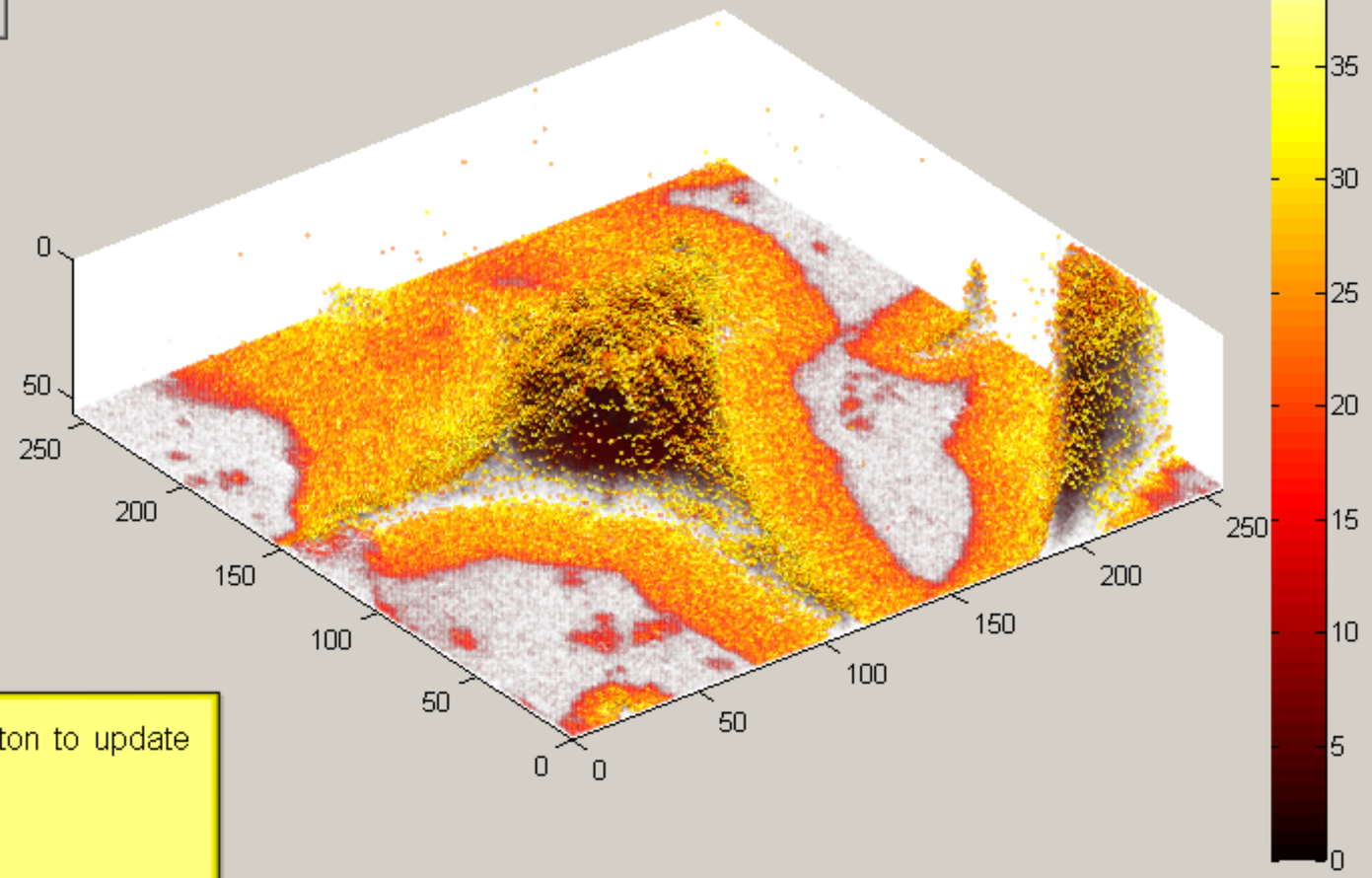
Alpha up

Bottom slice 56 1 1

Alpha 1 0.5 0

Update

Now we press the 'Update' button to update the plot.



zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

Choose Background Color

Current background color

Multicolor Overlay Panel

Check which axes you want to rotate around

X Y Z

Number of degrees for rotation

360

Preview

Create 3D Movie

Close Panel

Tools To Isolate Specific Voxel Intensities

Use the sliders below to select the intensity range that you want to isolate in the 3d plot. Then hit the update button.

NOTE: The value of Min cannot be more than Max

Choose Color

Current color

MIN 1 1 43

MAX 43

Update

Rotation and Scaling Options

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical Elevation= 30

10

Z scale factor = 1

0

Take Snap Shot

Transp

Be Patient Thi

Alpha down

Top slice 56 32 1

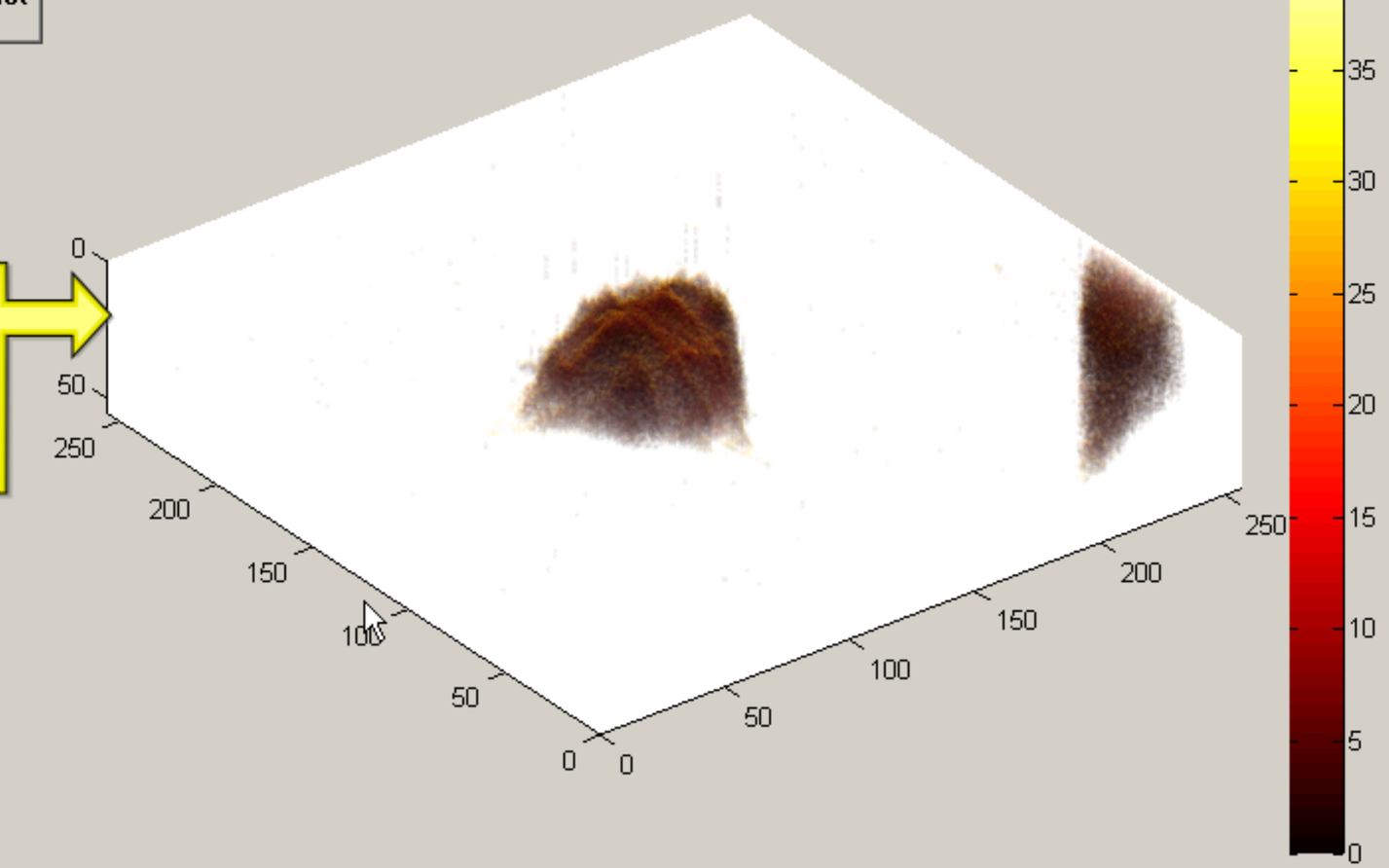
Alpha 1 0.04 0

56 1 1

1 0.5 0

Update

Now only the top 32 slices of the data set are shown with the current alpha value (0.04).



zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

Choose Background Color

Current background color

Multicolor Overlay Panel

Check which axes you want to rotate around

X Y Z

Number of degrees for rotation

360

Preview

Create 3D Movie

Close Panel

Tools To Isolate Specific Voxel Intensities

Use the sliders below to select the intensity range that you want to isolate in the 3d plot. Then hit the update button.

NOTE: The value of Min cannot be more than Max

Choose Color

Current color

MIN 1 1 43

MAX 43

Update

Rotation and Scaling Options

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical Elevation= 30

10

Z scale factor = 1

0

Take Snap Shot

Transp

Be Patient Thi

Alpha down

Top slice 56 32 1

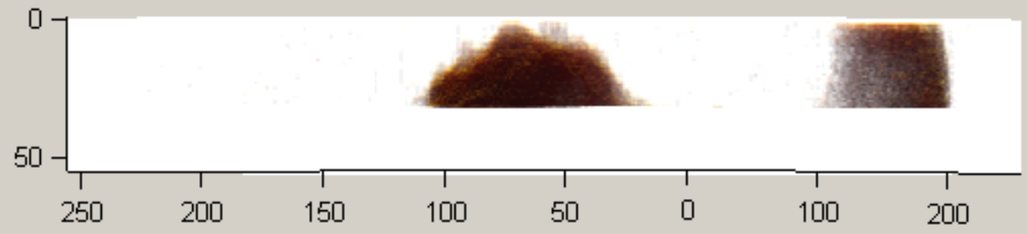
Alpha 1 0.04 0

56 1 1

1 0.5 0

Update

Rotating the view (click and drag) shows this more clearly.



zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

Choose Background Color

Current background color

Multicolor Overlay Panel

Check which axes you want to rotate around

X Y Z

Number of degrees for rotation

360

Preview

Create 3D Movie

Close Panel

Tools To Isolate Specific Voxel Intensities

Use the sliders below to select the intensity range that you want to isolate in the 3d plot. Then hit the update button.

NOTE: The value of Min cannot be more than Max

MIN 1 1 43

MAX 43

Choose Color

Current color

Update

Rotation and Scaling Options

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical Elevation= 30

10

Z scale factor = 1

0

Take Snap Shot

Transparency Options

Be Patient This Works Very Slowly!

Alpha down

Top slice 56 32 1

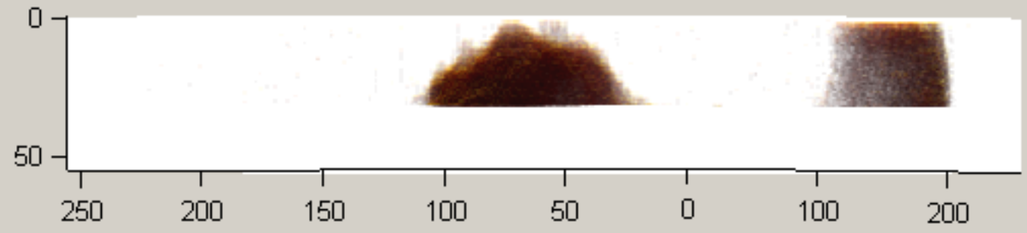
Alpha 1 0.04 0

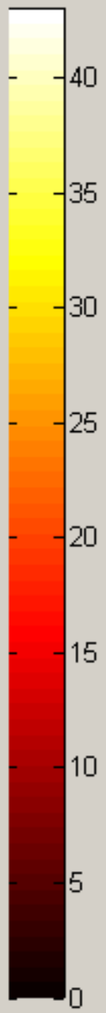
Alpha up

Bottom slice 56 1 1

Alpha 1 0.5 0

Update





Different layers can be displayed using different alpha values.

zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

Choose Background Color

Current background color

Multicolor Overlay Panel

Check which axes you want to rotate around

X Y Z

Number of degrees for rotation

360

Preview

Create 3D Movie

Close Panel

Tools To Isolate Specific Voxel Intensities

Use the sliders below to select the intensity range that you want to isolate in the 3d plot. Then hit the update button.

NOTE: The value of Min cannot be more than Max

Choose Color

Current color

MIN 1 1 43

MAX 43

Update

Rotation and Scaling Options

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical Elevation= 30

10

Z scale factor = 1

0

Take Snap Shot

Transparency Options

Be Patient This Works Very Slowly!

Alpha down

Top slice 56 32 1

Alpha 1 0.04 0

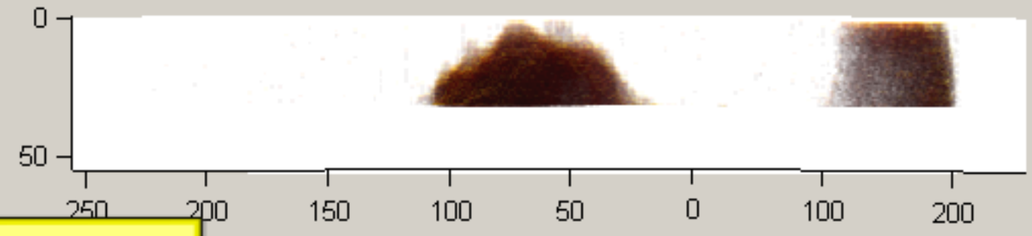
Alpha up

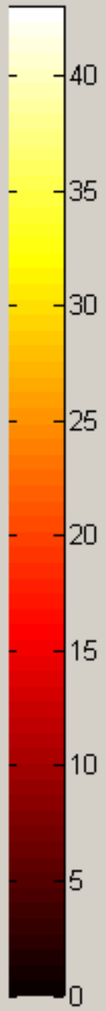
Bottom slice 56 56 1

Alpha

Update

By selecting all slices in the Alpha up Bottom slice slider (56 in this data set) we can make the bottom of the cell visible. The Alpha down settings overides the Alpha up for the top slices (here 32).





zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

Choose Background Color

Current background color

Multicolor Overlay Panel

Check which axes you want to rotate around

X Y Z

Number of degrees for rotation

360

Preview

Create 3D Movie

Close Panel

Tools To Isolate Specific Voxel Intensities

Use the sliders below to select the intensity range that you want to isolate in the 3d plot. Then hit the update button.

NOTE: The value of Min cannot be more than Max

MIN 1 1 43

MAX 43

Choose Color

Current color

Update

Rotation and Scaling Options

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical Elevation= 30

10

Z scale factor = 1

0

Take Snap Shot

Transparency Options

Be Patient This Works Very Slowly!

Alpha down

Top slice 56 32 1

Alpha 1 0.04 0

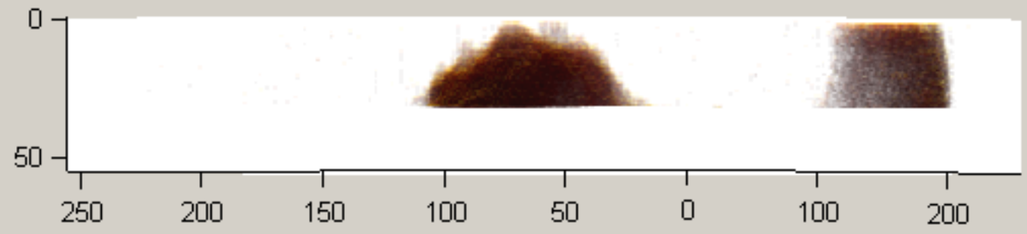
Alpha up

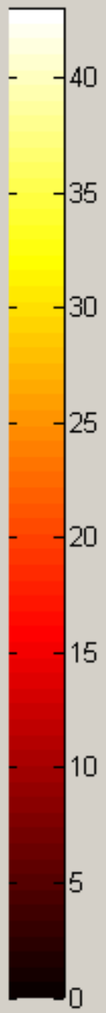
Bottom slice 56 56 1

Alpha 1 0.5 0

Update

Pressing the 'Update' button will show how this works.





zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

Choose Background Color

Current background color

Multicolor Overlay Panel

Check which axes you want to rotate around

X Y Z

Number of degrees for rotation

360

Preview

Create 3D Movie

Close Panel

Tools To Isolate Specific Voxel Intensities

Use the sliders below to select the intensity range that you want to isolate in the 3d plot. Then hit the update button.

NOTE: The value of Min cannot be more than Max

MIN 1 1 43

MAX 43

Choose Color

Current color

Update

Rotation and Scaling Options

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical Elevation= 30

10

Z scale factor = 1

0

Take Snap Shot

Transp

Be Patient Thi

Alpha down

Top slice 56 32 1

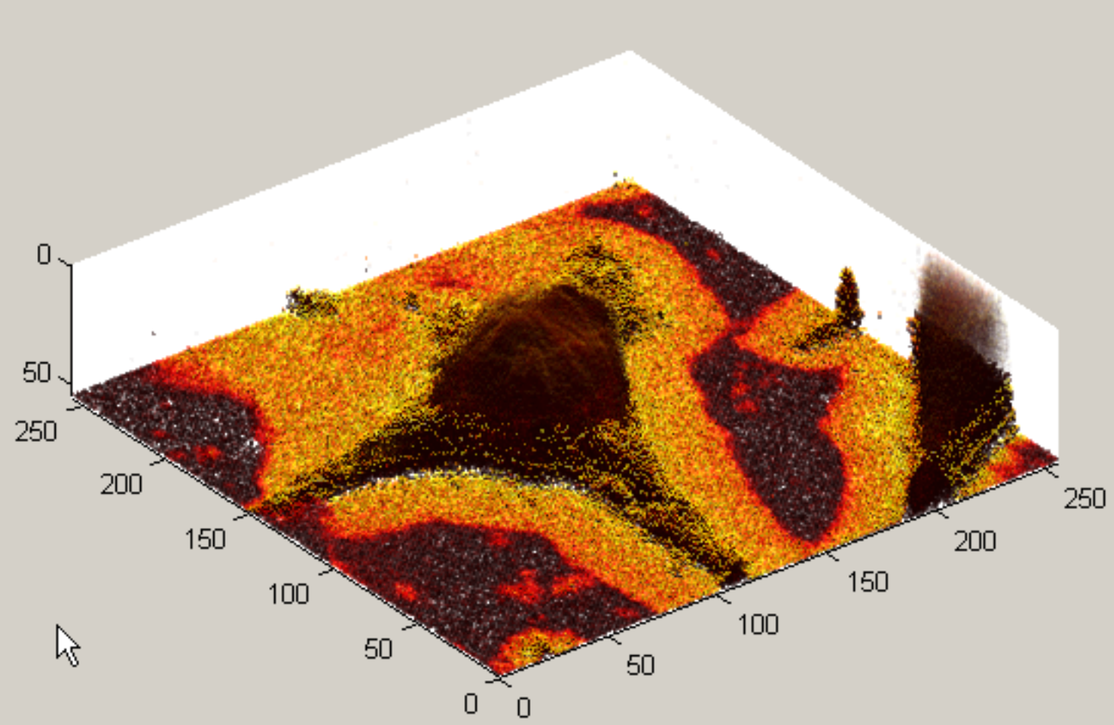
Alpha 1 0.04 0

56 56 1

1 0.5 0

Update

Now only the top 32 slices of the data set are shown with the current Alpha down value (0.04) and the remaining bottom slices are shown with the current Alpha up settings (0.5).



zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

Choose Background Color

Current background color

Multicolor Overlay Panel

Check which axes you want to rotate around

X Y Z

Number of degrees for rotation

360

Preview

Create 3D Movie

Close Panel

Tools To Isolate Specific Voxel Intensities

Use the sliders below to select the intensity range that you want to isolate in the 3d plot. Then hit the update button.

NOTE: The value of Min cannot be more than Max

Choose Color

Current color

MIN 1 1 43

MAX 43

Update

Rotation and Scaling Options

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical Elevation= 30

10

Z scale factor = 1

0

Take Snap Shot

Transp

Be Patient Thi

Alpha down

Top slice 56 32 1

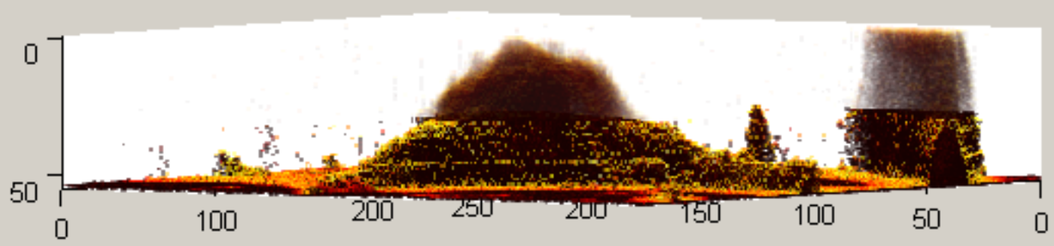
Alpha 1 0.04 0

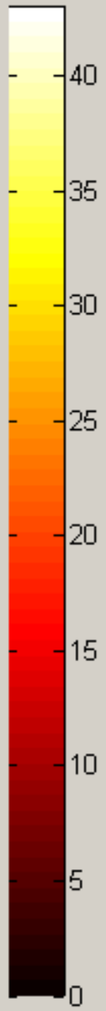
56 56 1

1 0.5 0

Update

Rotating the data set (click and drag) shows this more clearly.





zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

Choose Background Color

Current background color

Multicolor Overlay Panel

Check which axes you want to rotate around

X Y Z

Number of degrees for rotation

360

Preview

Create 3D Movie

Close Panel

Tools To Isolate Specific Voxel Intensities

Use the sliders below to select the intensity range that you want to isolate in the 3d plot. Then hit the update button.

NOTE: The value of Min cannot be more than Max

Choose Color

Current color

MIN 1 1 43

MAX 43

Update

Rotation and Scaling Options

0 Rotate Left/Right

Horizontal Rotation=

0 Rotate Up/Dow

Vertical Elevation=

Shot

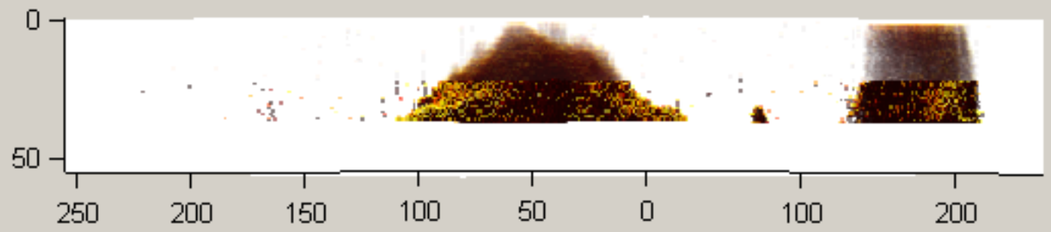
Different sets of slices can be visualized by using the sliders. Here we set it up so the top 23 slices of the cell is transparent and then the next 14 are opaque (37 - 23=14).

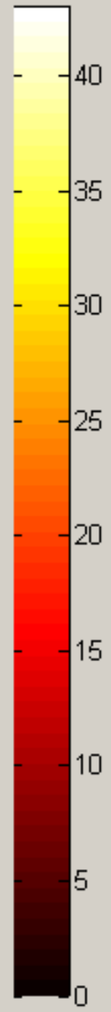
Transparency Options

Be Patient This Works Very Slowly!

Alpha down			Alpha up		
Top slice	Alpha		Bottom slice	Alpha	
56	1		56	1	
23	0.04		37	0.5	
1	0		1	0	

Update





zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

Choose Background Color

Current background color

Multicolor Overlay Panel

Check which axes you want to rotate around

X Y Z

Number of degrees for rotation

360

Preview

Create 3D Movie

Close Panel

Tools To Isolate Specific Voxel Intensities

Use the sliders below to select the intensity range that you want to isolate in the 3d plot. Then hit the update button.

NOTE: The value of Min cannot be more than Max

Choose Color

Current color

MIN 1 1 43

MAX 43

Update

Rotation and Scaling Options

0 Rotate Left/Right 360

10

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical Elevation= 30

Take Snap Shot

By setting the Alpha down Alpha setting to 0 you can isolate a set of slices in the middle of the volume. Here we select 14 slices near the middle (37-23=14).

Transparency Options

Be Patient This Works Very Slowly!

Alpha down

Top slice 56 23 1

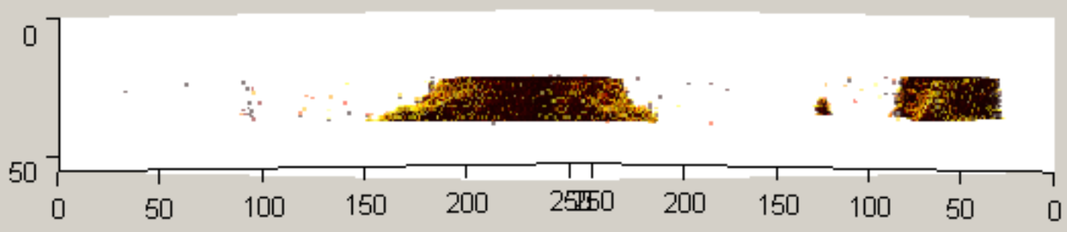
Alpha 1 0 0

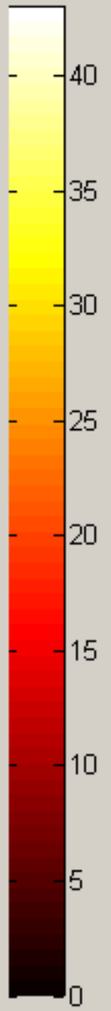
Alpha up

Bottom slice 56 37 1

Alpha 1 0.5 0

Update





zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

Choose Background Color

Current background color

Multicolor Overlay Panel

Check which axes you want to rotate around

X Y Z

Number of degrees for rotation

360

Preview

Create 3D Movie

Close Panel

Tools To Isolate Specific Voxel Intensities

Use the sliders below to select the intensity range that you want to isolate in the 3d plot. Then hit the update button.

NOTE: The value of Min cannot be more than Max

Choose Color

Current color

MIN 1 1 43

MAX 43

Update

Rotation and Scaling Options

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical Elevation= 3

10

Z scale factor = 1

Take Snap Shot

Transpar

Be Patient This

Alpha down

Top slice 56 23 1

Alpha 1 0 0

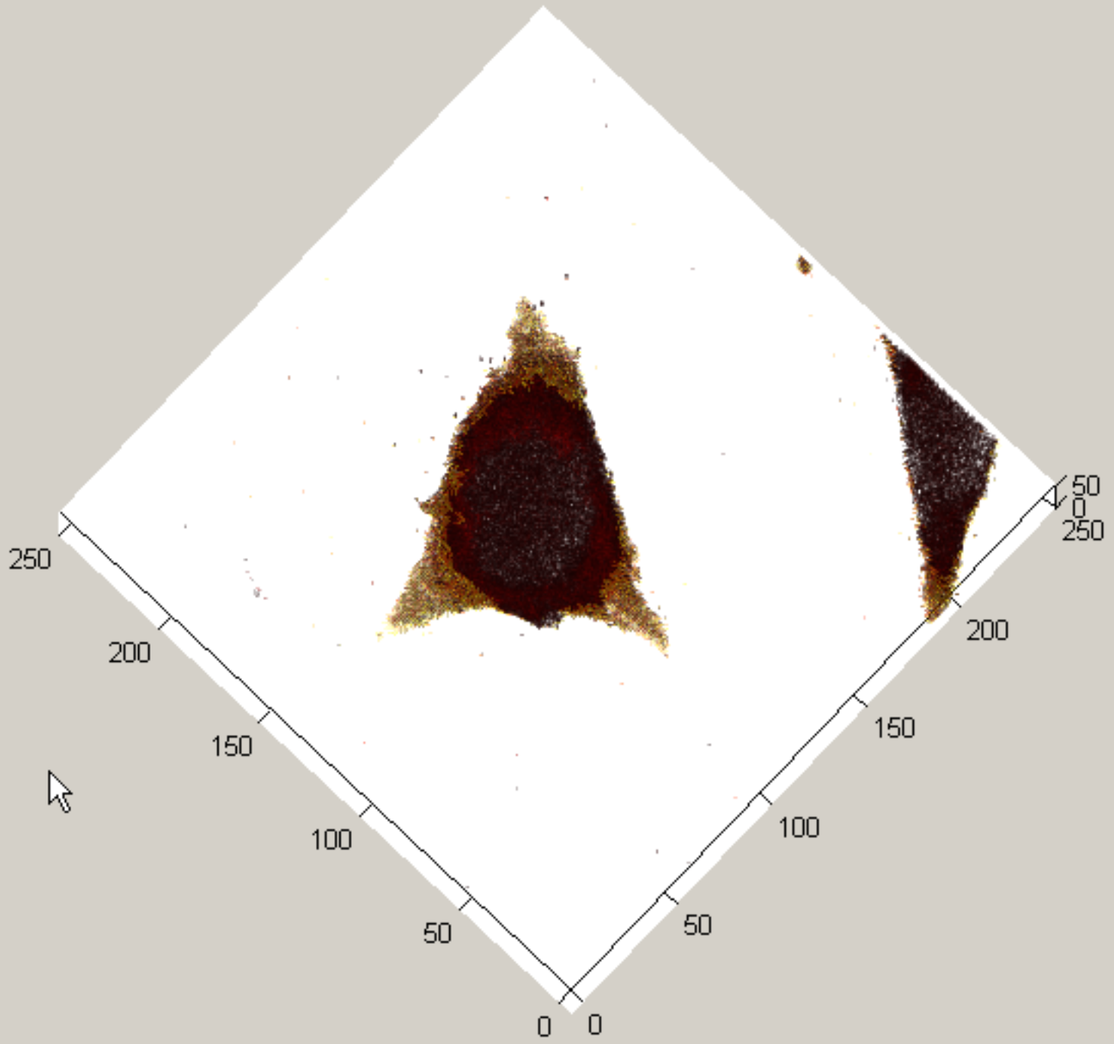
56 37 1

1 0.246 0

Update

By adjusting the transparency of the Alpha up settings you can make the slices transparent.

Here we set it to 0.25 to give a semi transparent view.



zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

Check which axes you want to rotate around

X Y Z

Number of degrees for rotation

360

Close Panel

Another way to visualize the 3D volume is to select and plot a subset of voxel intensities. This is analogous to viewing an isosurface. In the ZcorrectorGui you can select a single intensity or a range of intensities to plot.

This enables you to look at regions of the volume that differ in intensity. Sometimes this is useful to isolate different features within the volumn. Though it should be noted that differences in intensity could be due to matrix effects and may not be due to chemical differences. However even if they are due to matrix effects, it often makes it easy to isolate out different part of the volume.

For this the 'Min' value must be smaller than or equal to the 'Max'.

Tools To Isolate Specific Voxel Intensities

Use the sliders below to select the intensity range that you want to isolate in the 3d plot. Then hit the update button.

NOTE: The value of Min cannot be more than Max

Choose Color

Current color

MIN 1 1 43

MAX 43

Update

Rotation and Scalin

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

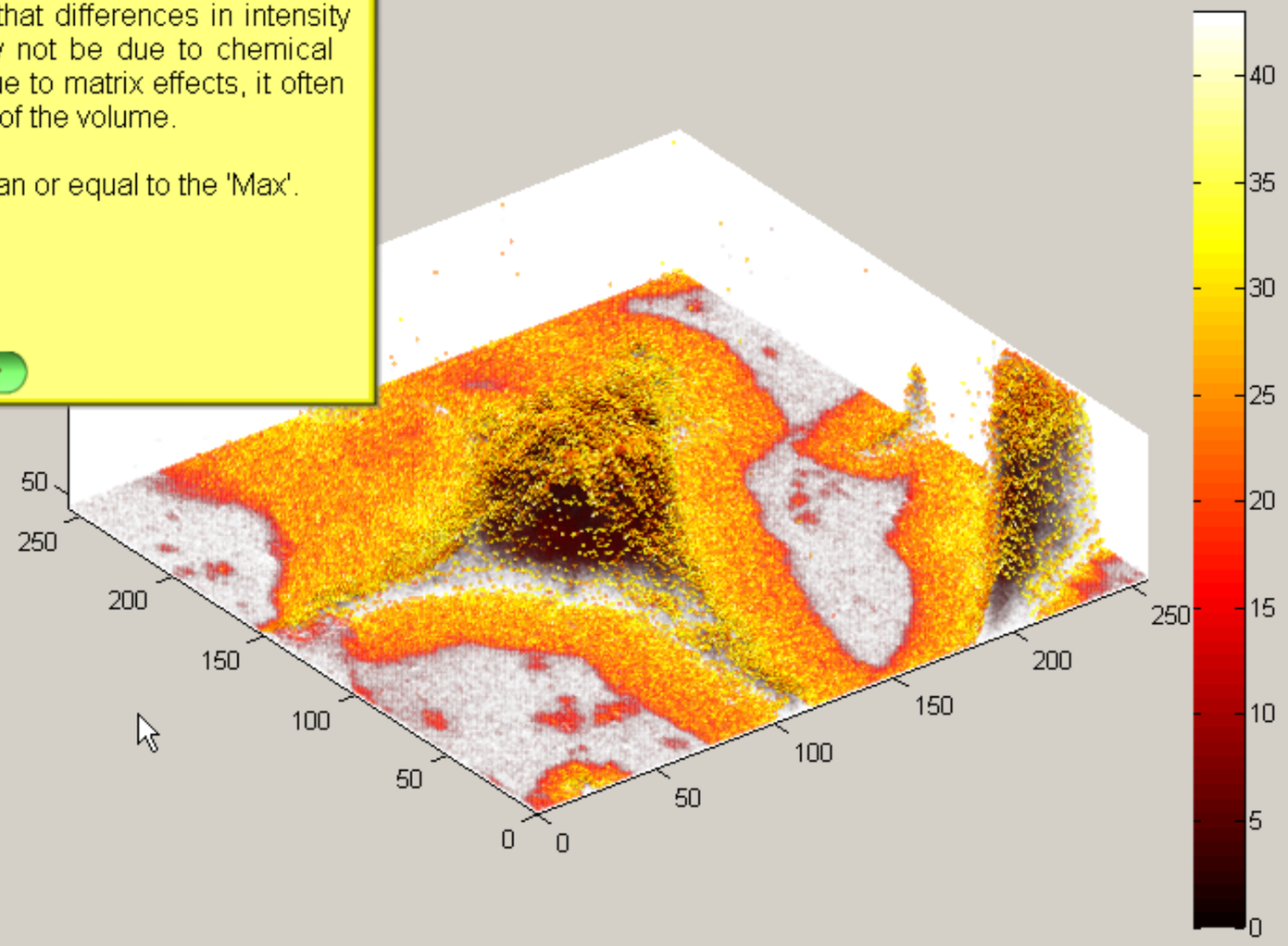
Vertical Elevation= 30

Transparency Options

Be Patient This Works Very Slowly!

Alpha down			Alpha up		
Top slice		Alpha	Bottom slice		Alpha
56		1	56		1
23		0	37		0.246
1		0	1		0

Update



zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

Choose Background Color

Current background color

Multicolor Overlay Pan

Check which axes you want to rotate around

X Y Z

Number of degrees for rotation

360

Preview

Close Panel

Tools To Isolate Specific Voxel Intensities

Use the sliders below to select the intensity range that you want to isolate in the 3d plot. Then hit the update button.

Choose Color

NOTE: The value of Min cannot be more than Max

6

MIN 1 43

MAX 9

Current color

Update

Set the min and max sliders to the values you want to visualize. and press the 'Update' button.

Rotation and Scaling Options

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical Elevation= 30

10

Z scale factor = 1

0

Take Snap Shot

Transparency Options

Be Patient This Works Very Slowly!

Alpha down

Top slice 56 23 1

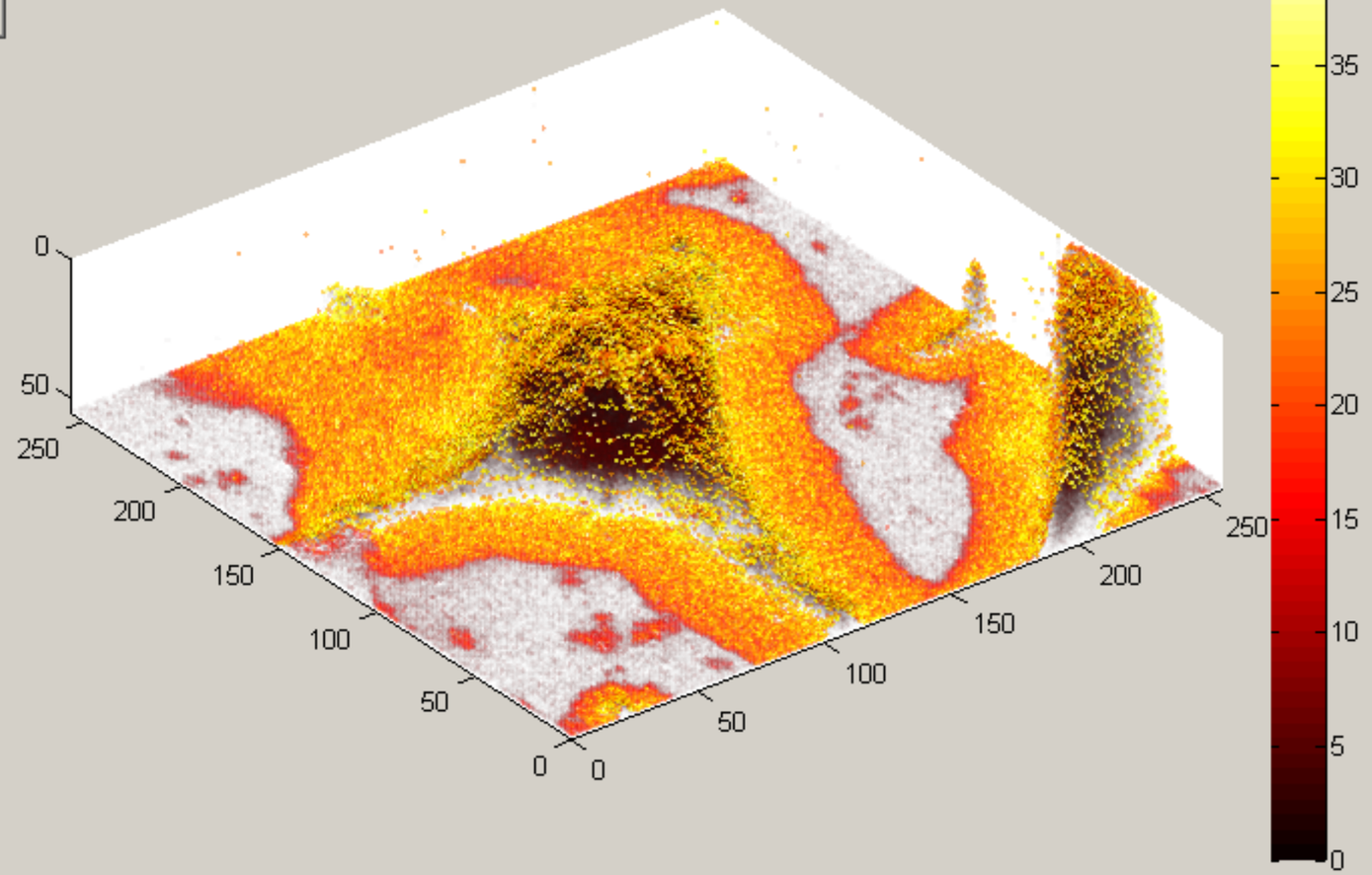
Alpha 1 0 0

Alpha up

Bottom slice 56 37 1

Alpha 1 0.246 0

Update



zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

Choose Background Color

Current background color

Multicolor Overlay Panel

Check which axes you want to rotate around

X Y Z

Number of degrees for rotation

360

Preview

Create 3D Movie

Close Panel

Tools To Isolate Specific Voxel Intensities

Use the sliders below to select the intensity range that you want to isolate in the 3d plot. Then hit the update button.

NOTE: The value of Min cannot be more than Max

Choose Color

Current color

MIN 6 1 43

MAX 9

Update

Rotation and Scaling Options

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical Elevation=

10

Z scale factor = 1

0

Take Snap Shot

Transpa

Be Patient Thi

Alpha down

Top slice 56 23 1

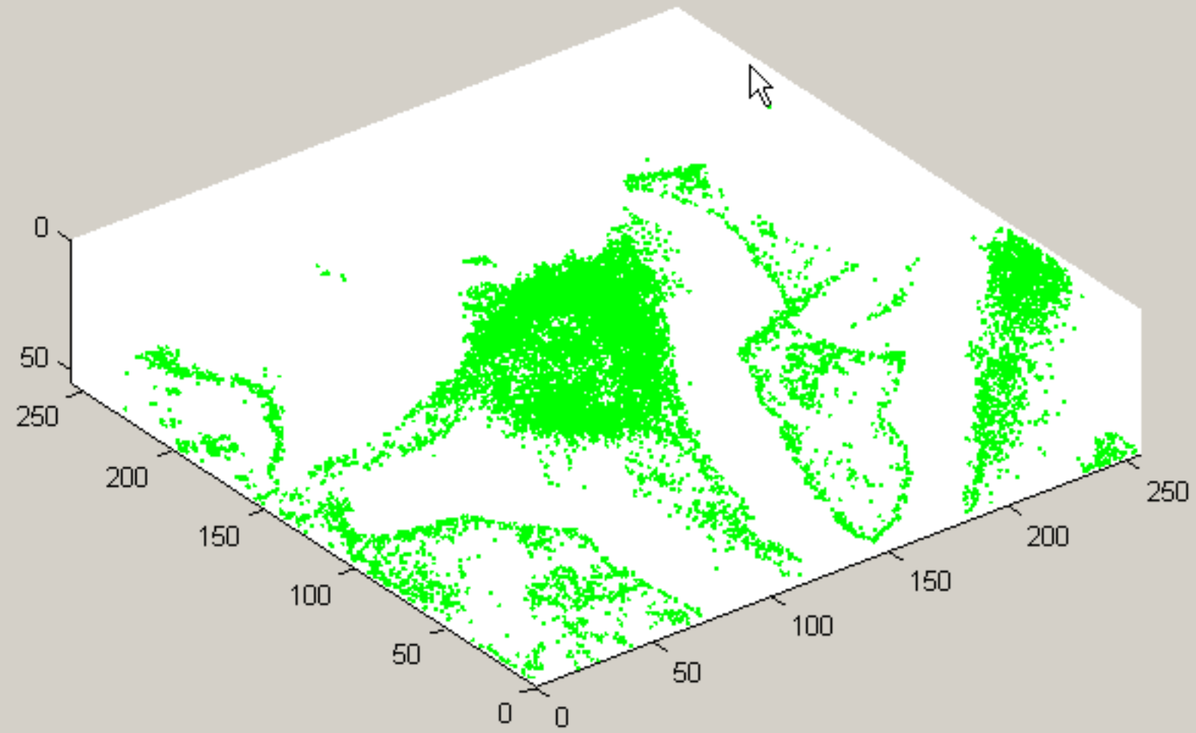
Alpha 1 0 0

Bottom slice 56 37 1

Alpha 1 0.246 0

Update

All of the voxels within the intensity range selected are plotted in the color chosen within the 'Tools to isolate specific voxel intensities' box.



zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

Choose Background Color

Current background color

Multicolor Overlay Panel

Check which axes you want to rotate around

X Y Z

Number of degrees for rotation

360

Preview

Create 3D Movie

Close Panel

Tools To Isolate Specific Voxel Intensities

Use the sliders below to select the intensity range that you want to isolate in the 3d plot. Then hit the update button.

Choose Color

NOTE: The value of Min cannot be more than Max

Current color

6

MIN

1 43

MAX

9

Update

Rotation and Scaling Options

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical Elevation= 30

10

Z scale factor = 1

Take Snap Shot

As usual you can rotate the 3D volume by clicking and dragging to get a different perspective view of the data.

This intensity range seems to somewhat isolate voxels within the center of the cell.

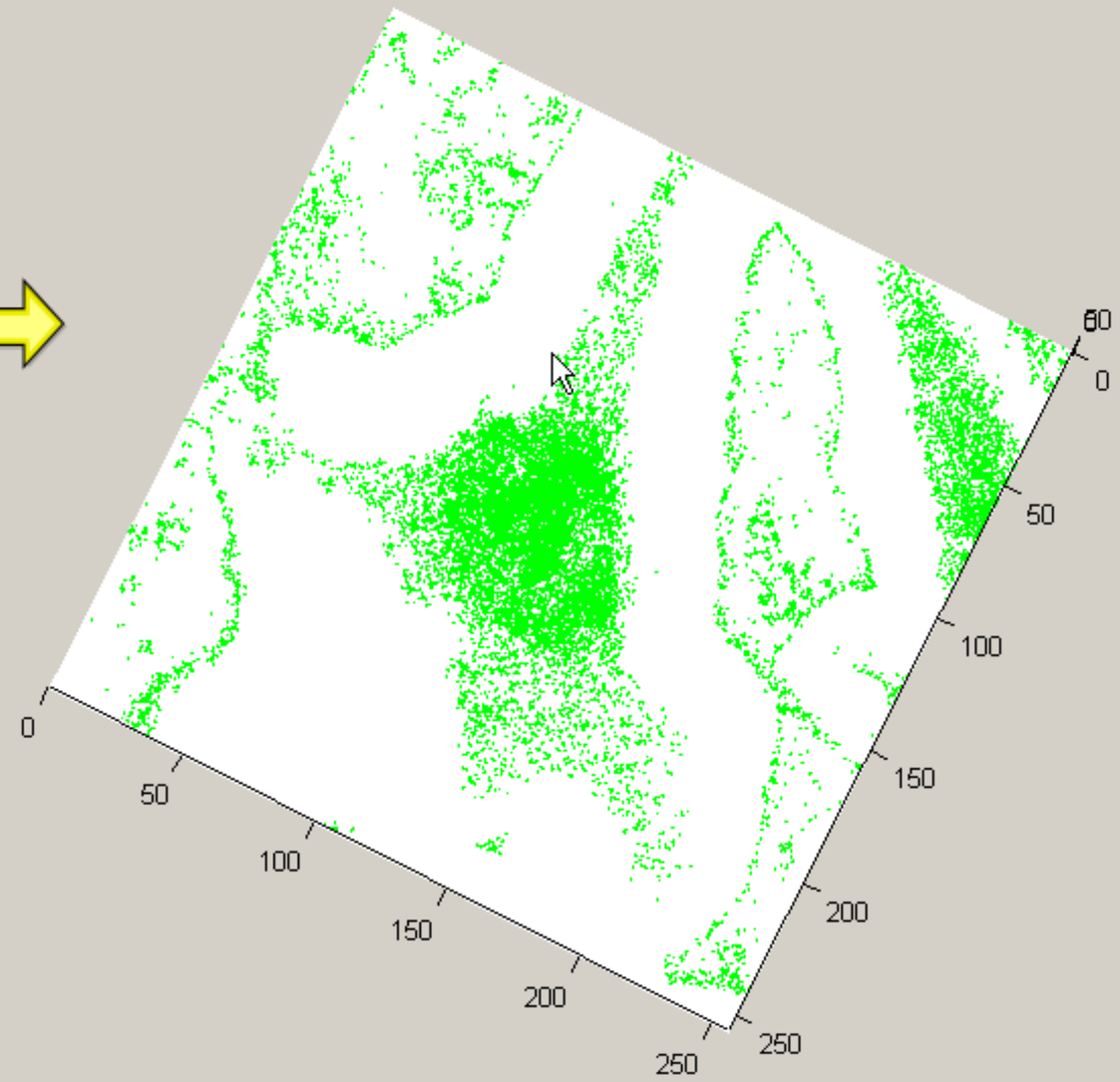
Transparency C

Be Patient This Works

Alpha down

Top slice	Alpha	Bottom slice	Alpha
56	1	56	1
23	0	37	0.246
1	0	1	0

Update



zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

Choose Background Color

Current background color

Multicolor Overlay Pan

Check which axes you want to rotate around

X Y Z

Number of degrees for rotation

360

Preview

Close Panel

Tools To Isolate Specific Voxel Intensities

Use the sliders below to select the intensity range that you want to isolate in the 3d plot. Then hit the update button.

Choose Color

NOTE: The value of Min cannot be more than Max

13

MIN 1 43

MAX 30

Current color

Update

Let's change the intensity ranges to 13 to 30 and press the 'Update' button.

Take Snap Shot

Rotation and Scaling Options

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical Elevation= 30

10

Z scale factor = 1

0

Transparency Options

Be Patient This Works Very Slowly!

Alpha down

Top slice 56 23 1

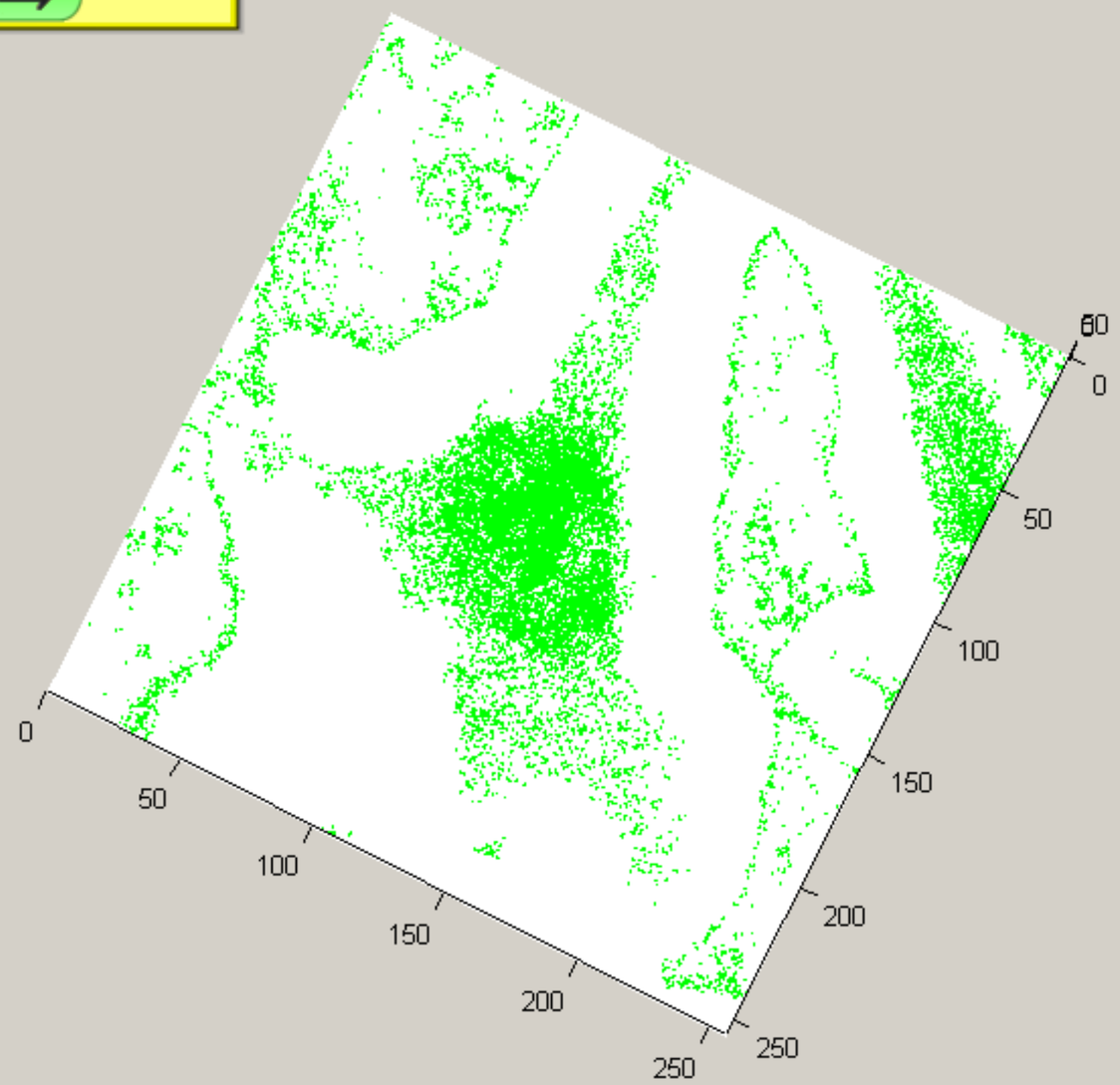
Alpha 1 0 0

Alpha up

Bottom slice 56 37 1

Alpha 1 0.246 0

Update



zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

Choose Background Color

Current background color

Multicolor Overlay Panel

Check which axes you want to rotate around

X Y Z

Number of degrees for rotation

360

Preview

Create 3D Movie

Close Panel

Tools To Isolate Specific Voxel Intensities

Use the sliders below to select the intensity range that you want to isolate in the 3d plot. Then hit the update button.

NOTE: The value of Min cannot be more than Max

MIN 13 1 43

MAX 30

Choose Color

Current color

Update

Rotation and Scaling Options

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical Elevation= 30

10

Z scale factor = 1

0

Take Snap Shot

Transparency

Be Patient This Wor

Alpha down

Top slice 56 23 1

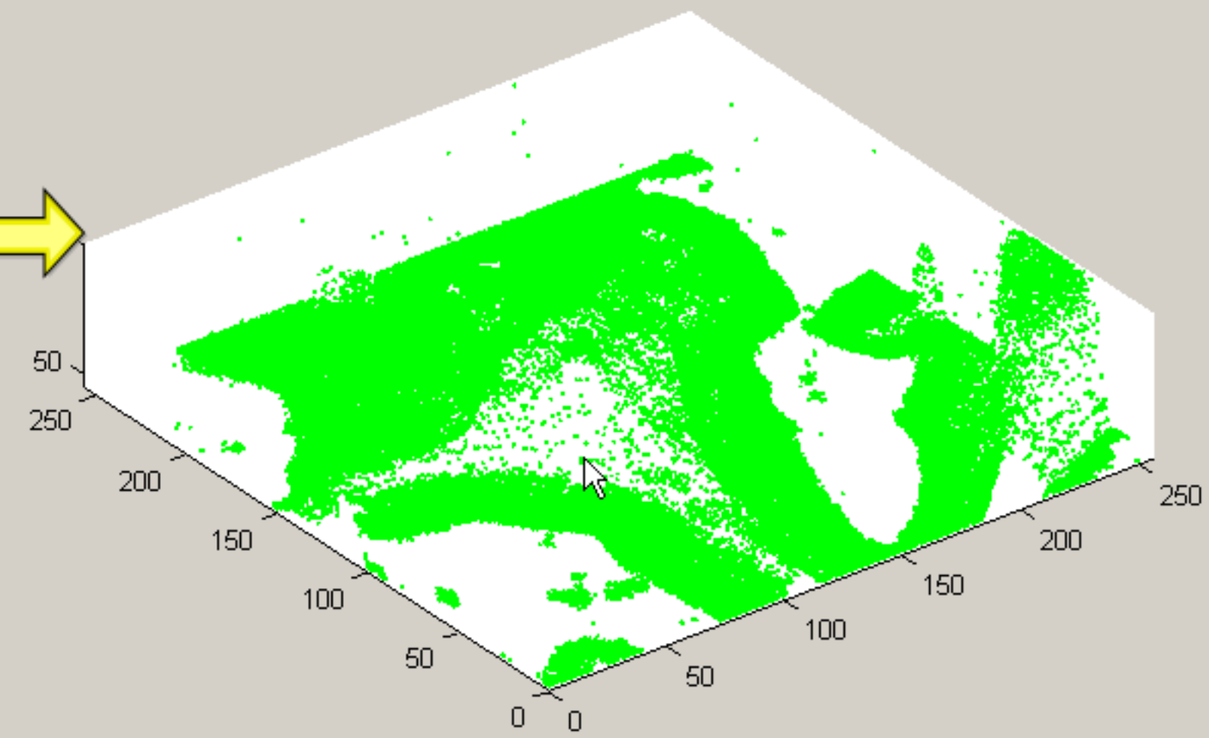
Alpha 1 0 0

Bottom slice 56 37 1

Alpha 1 0.246 0

Update

This intensity range seems to isolate voxels on the outer part of the cell.



zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

Choose Background Color

Current background color

Multicolor Overlay Panel

Check which axes you want to rotate around

X Y Z

Number of degrees for rotation

360

Preview

Create 3D Movie

Close Panel

Tools To Isolate Specific Voxel Intensities

Use the sliders below to select the intensity range that you want to isolate in the 3d plot. Then hit the update button.

NOTE: The value of Min cannot be more than Max

Choose Color

Current color

MIN 13 (1 – 43)

MAX 30

Update

Rotation and Scaling Options

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical Elevation= 30

10

Z scale factor = 1

0

Take Snap Shot

Transparency Op

Be Patient This Works V

Alpha down

Top slice 56 (23, 1)

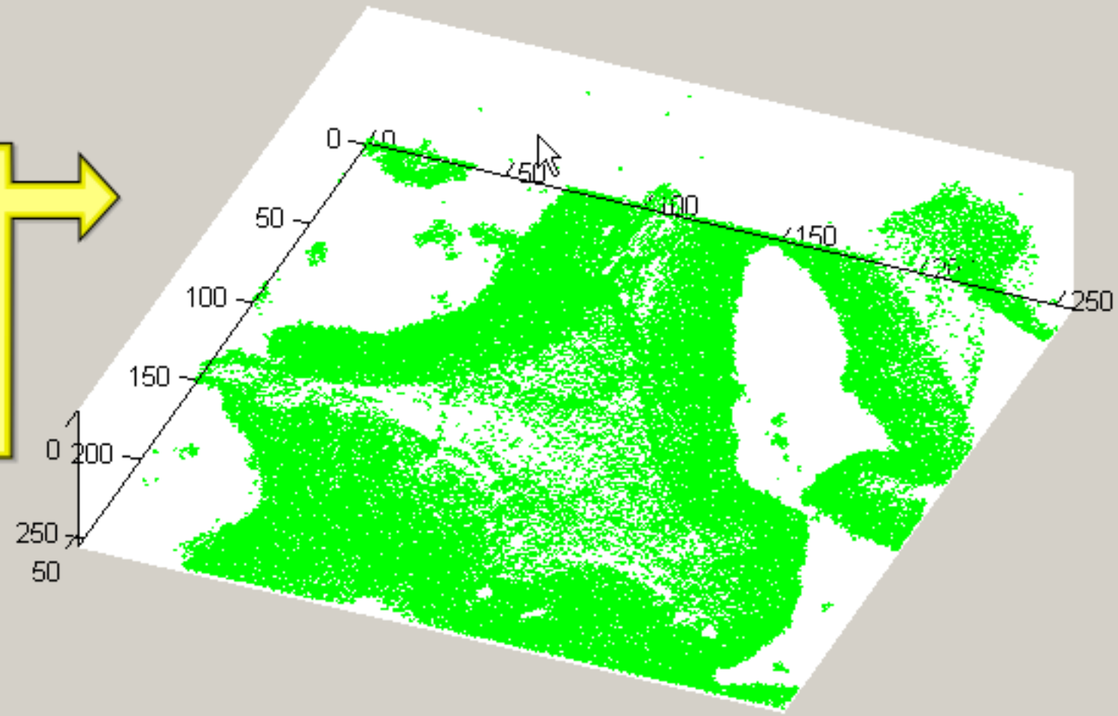
Alpha 1 (0, 0)

Bottom slice 56 (37, 1)

Alpha 1 (0.246, 0)

Update

It's a bit hard to see here, but this is the bottom view of the 13-30 intensity range data. The underside of the volume is empty and looks like it is coming mostly from the outer cell membrane.



zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

Choose Background Color

Current background color

Multicolor Overlay Panel

Check which axes you want to rotate around

X Y Z

Number of degrees for rotation

360

Preview

Create 3D Movie

Close Panel

Tools To Isolate Specific Voxel Intensities

Use the sliders below to select the intensity range that you want to isolate in the 3d plot. Then hit the update button.

NOTE: The value of Min cannot be more than Max

Choose Color

Current color

MIN 13 1 43

MAX 30

Update

Now that we have seen a couple of different intensity ranges that seem to isolate different parts of the cell, let's use the 'Multicolor Overlay Panel' to create an overlay plot.

Rotation and Scaling Options

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical Elevation= 30

10

Z scale factor = 1

0

Transparency Options

Be Patient This Works Very Slowly!

Alpha down

Top slice 56 23 1

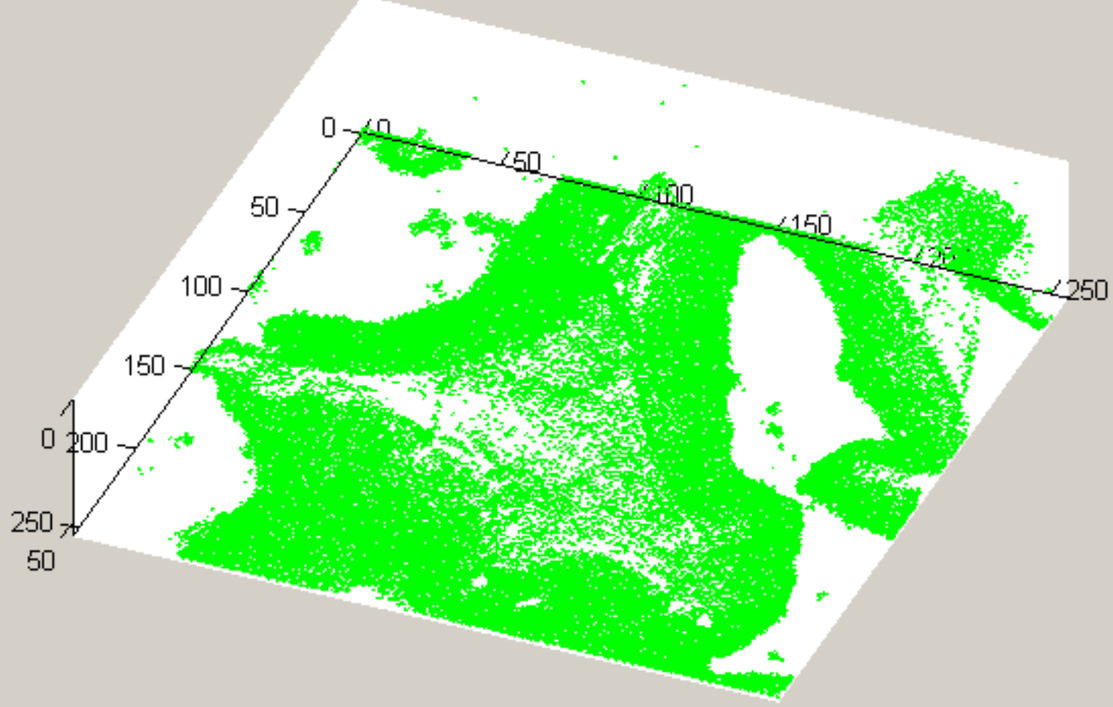
Alpha 1 0 0

Alpha up

Bottom slice 56 37 1

Alpha 1 0.246 0

Update



zcorrectorgui

Choose peak(s) to plot

Check Box To Smooth Data For Display

Total_Counts

58.1055
70.1347
86.1924
104.241
125.150
166.264
184.303
224.397

This is the multicolor overlay plot panel. The multicolor ovelay differs from an RGB overlay plot in that the multicolor overlay is an overlay of different intensity values using different colors. While the RGB overlay plots in the ZcorrectorGui are RGB overlays of different peaks.

Multicolor Overlay Panel

Enable Color 1

Enable Color 2

Enable Color 3

Create Multicolor Overlay

Close Panel

Close Panel

Rotation and Scaling Options

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical Elevation= 30

10

Z scale factor = 1

0

Take Snap Shot

Transparency Options

Be Patient This Works Very Slowly!

Alpha down

Top slice 56 23 1

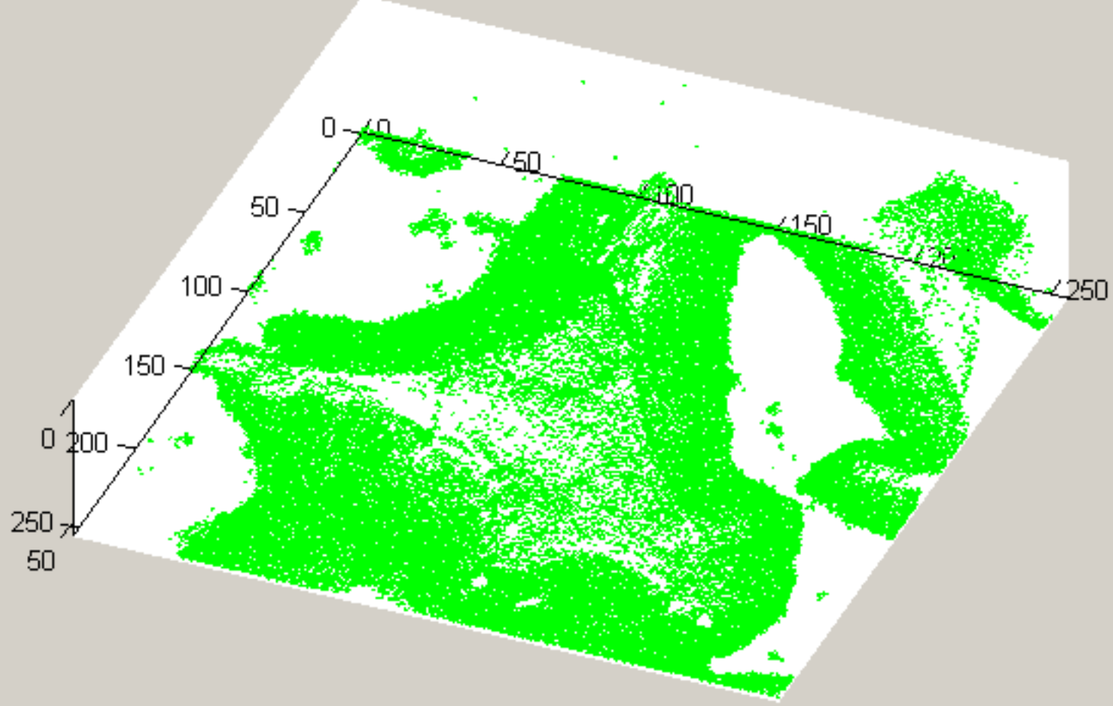
Alpha 1 0 0

Alpha up

Bottom slice 56 37 1

Alpha 1 0.246 0

Update



zcorrectorgui

Choose peak(s) to plot

Total_C
58.1055
70.1347
86.1924
104.241
125.150
166.264
184.303
224.397

You can choose how many colors you want to use in the overlay by checking the box for the colors you want to include.

Current background color

Multicolor Overlay Panel

Enable Color 1

Intensity Range 1

to

Color 1

Alpha 1= 0.5

0 1

Enable Color 2

Enable Color 3

Create Multicolor Overlay

Close Panel

Close Panel

Rotation and Scaling Options

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical Elevation= 30

10

Z scale factor = 1

0

Take Snap Shot

Transparency Options

Be Patient This Works Very Slowly!

Alpha down

Top slice 56 23 1

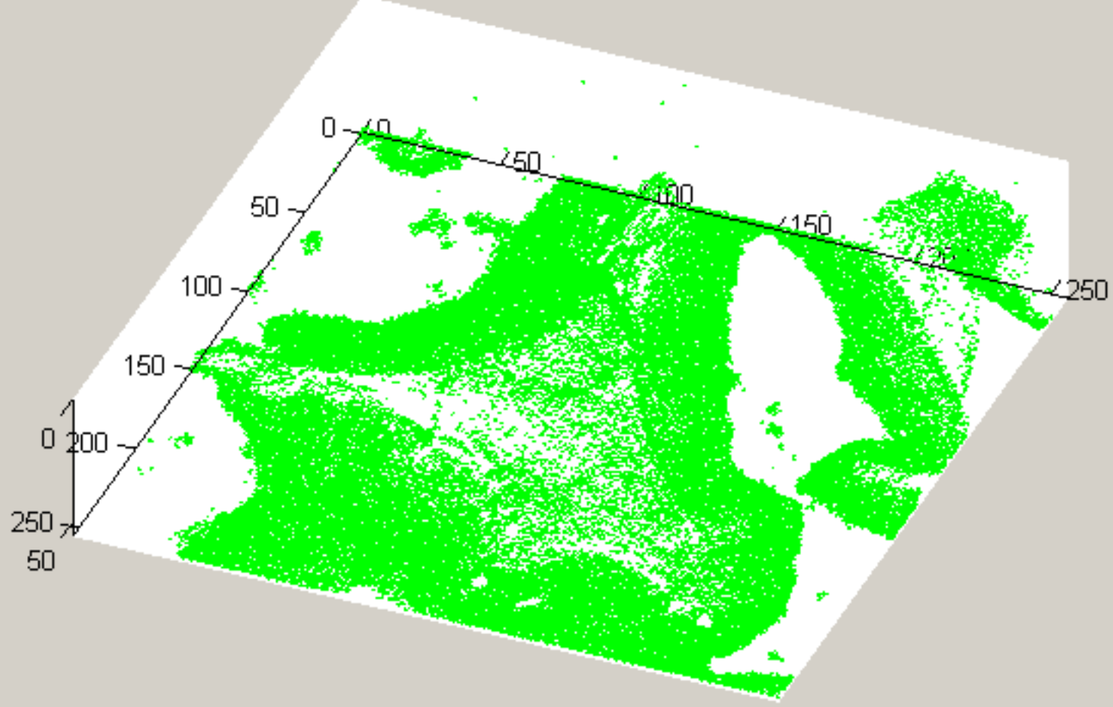
Alpha 1 0 0

Alpha up

Bottom slice 56 37 1

Alpha 1 0.246 0

Update



zcorrectorgui

Choose peak(s) to plot

Total_Cou
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Enter the intensity range in the boxes provided (min first then max).

hot

Choose Background Color

Current background color

Multicolor Overlay Panel

Enable Color 1

Intensity Range 1

1 to 4

Color 1

Alpha 1= 0.5

0 1

Enable Color 2

Enable Color 3

Create Multicolor Overlay

Close Panel

Close Panel

Rotation and Scaling Options

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical Elevation= 30

10

Z scale factor = 1

0

Take Snap Shot

Transparency Options

Be Patient This Works Very Slowly!

Alpha down

Top slice 56 23 1

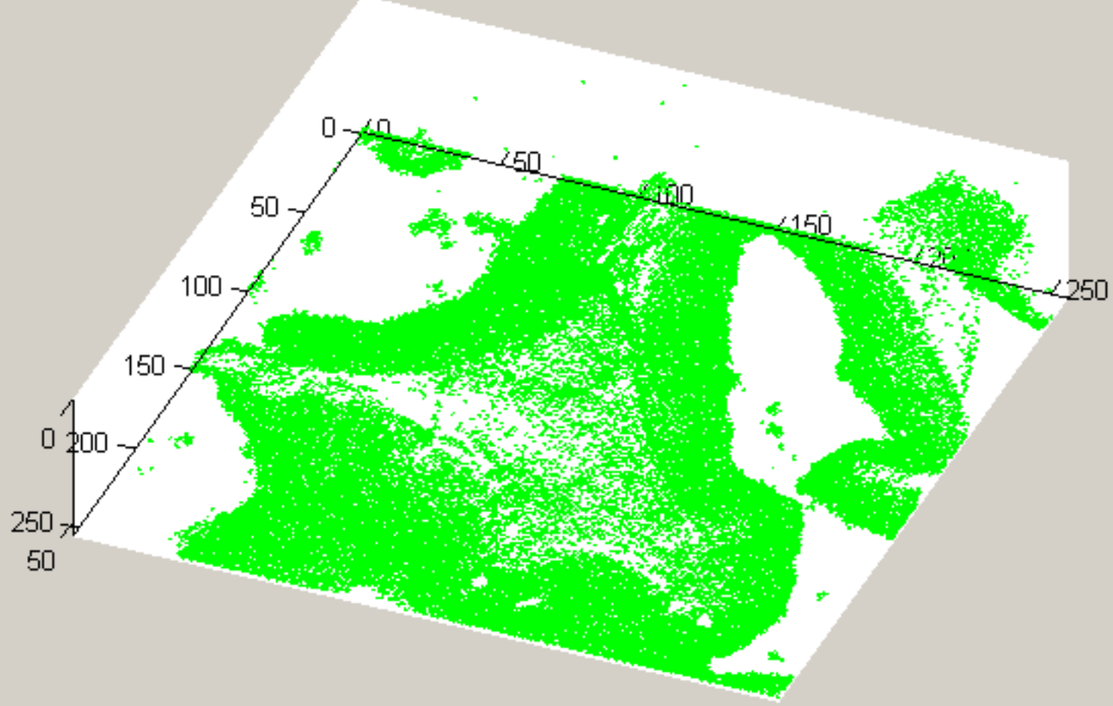
Alpha 1 0 0

Alpha up

Bottom slice 56 37 1

Alpha 1 0.246 0

Update



zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.24
125.15
166.26
184.30
224.39

Check Box To Smooth Data For Display

View in 3D

Here we'll show a 3 color overlay. You can change the colors for the overlay if you want, by pressing the respecitve color button ('Color 1', 'Color 2' or 'Color 3').

Multicolor Overlay Panel

Enable Color 1

Intensity Range 1: 1 to 4

Color 1

Alpha 1= 0.5 (0 — 1)

Enable Color 2

Intensity Range 2: 5 to 9

Color 2

Alpha 2= 0.5 (0 — 1)

Enable Color 3

Intensity Range 3: 10 to 25

Color 3

Alpha 3= 0.5 (0 — 1)

Create Multicolor Overlay

Close Panel

Close Panel

Rotation and Scaling Options

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical Elevation= 30

10

Z scale factor = 1

0

Take Snap Shot

Transparency Options

Be Patient This Works Very Slowly!

Alpha down

Top slice: 56 / 23 / 1

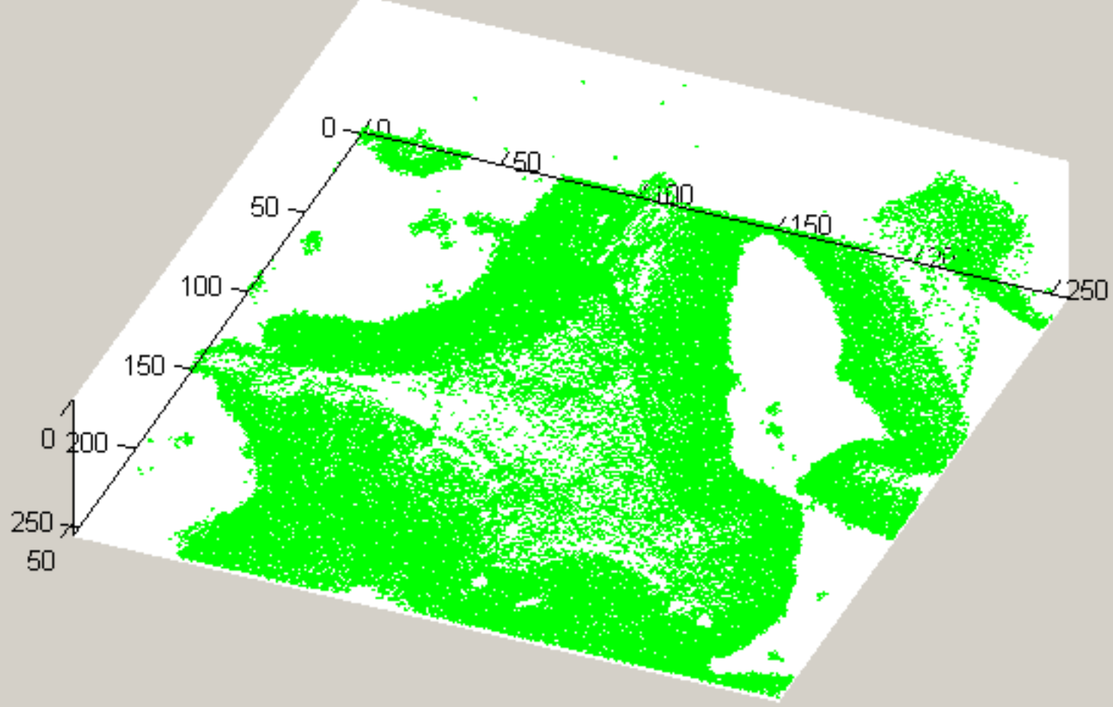
Alpha: 1 / 0 / 0

Alpha up

Bottom slice: 56 / 37 / 1

Alpha: 1 / 0.246 / 0

Update



zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

Choose Background Color

Current background color

Multicolor Overlay Panel

Enable Color 1

Intensity Range 1

1 to 4

Color 1

Alpha 1= 0.08

0 1

Enable Color 2

Intensity Range 2

Alpha 2= 0.09

0 1

Alpha 3= 0.13

0 1

Close Panel

Close Panel

Here we lower the alpha value for each color. This is not required, but can make it easier to see overlapping colors. These alpha values are independent of those in the 'Transparency Options' box.

Rotation and Scaling Options

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical Elevation= 30

10

Z scale factor = 1

0

Take Snap Shot

Transparency Options

Be Patient This Works Very Slowly!

Alpha down

Top slice 56 23 1

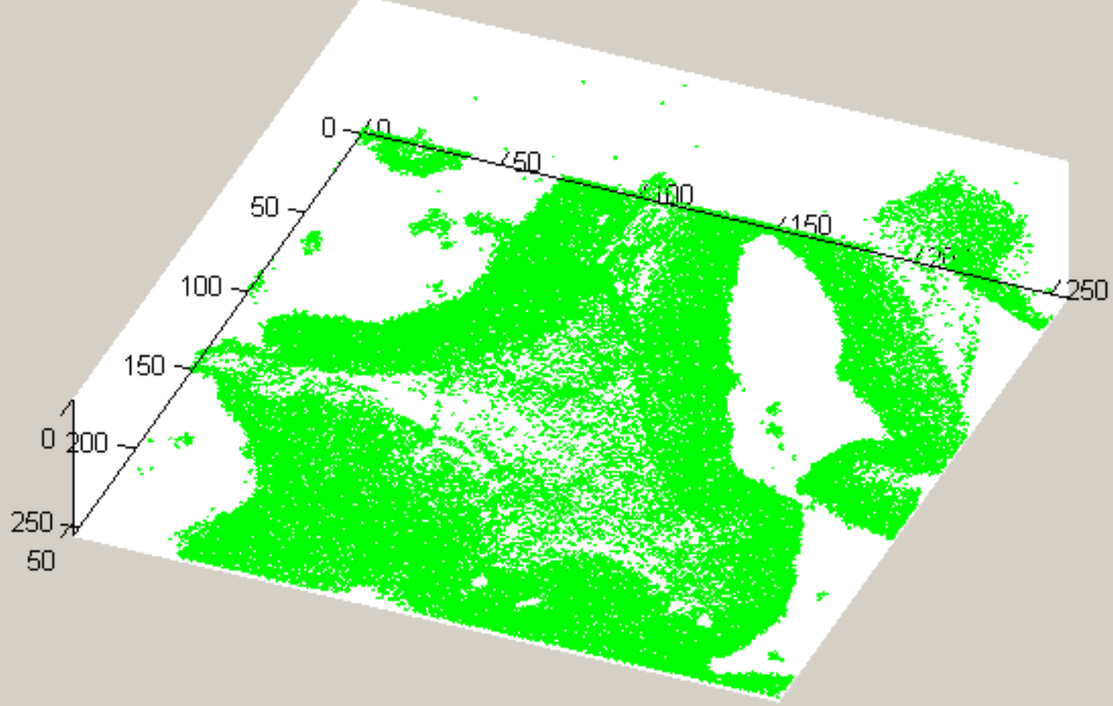
Alpha 1 0 0

Alpha up

Bottom slice 56 37 1

Alpha 1 0.246 0

Update



zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

Choose Background Color

Current background color

Enable Color 1

Intensity Range 1

1 to 4

Color 1

Alpha 1= 0.08

0 1

Enable Color 2

Intensity Range 2

5 to 9

Color 2

Alpha 2= 0.09

0 1

Enable Color 3

Intensity Range 3

10 to 25

Color 3

Alpha 3= 0.13

0 1

Create Multicolor Overlay

Close Panel

Close Panel

Once the desired settings are chosen, press the 'Create Multicolor Overlay' button.

Rotation ar

0 Rotate Left/Right

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical Elevation= 30

Z scale factor = 1

0

Transparency Options

Be Patient This Works Very Slowly!

Alpha down

Top slice 56 23 1

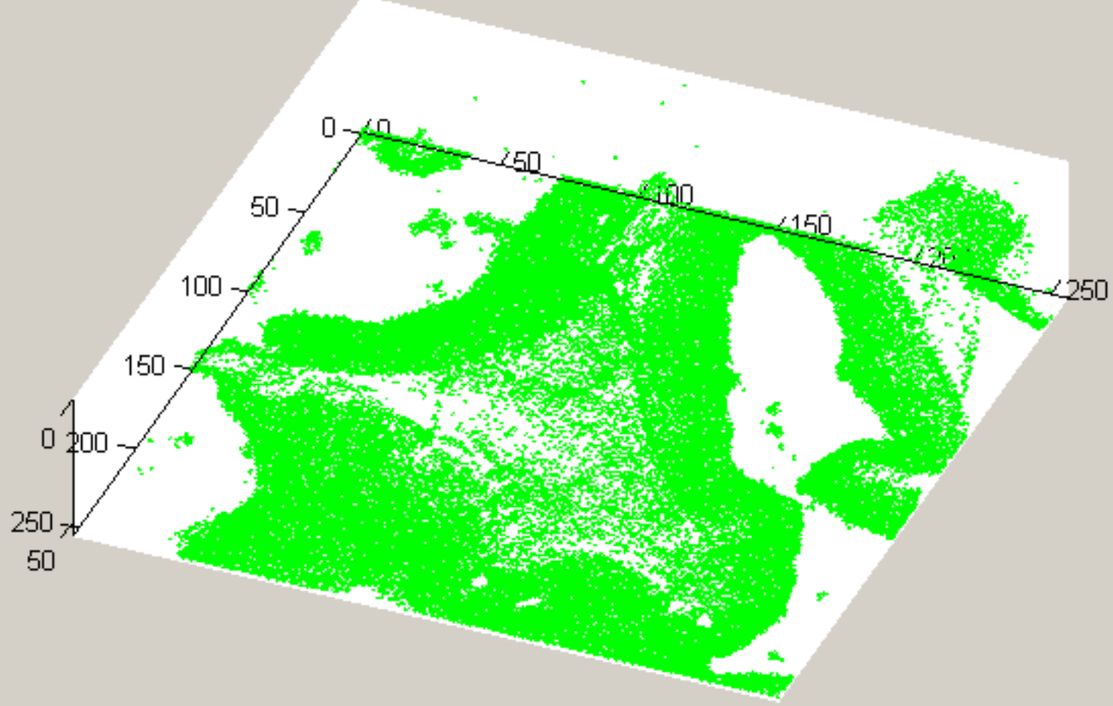
Alpha 1 0 0

Alpha up

Bottom slice 56 37 1

Alpha 1 0.246 0

Update



zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

Choose Background Color

Current background color

Multicolor Overlay Panel

Enable Color 1

Intensity Range 1

1 to 4

Color 1

Alpha 1= 0.08

0 1

Enable Color 2

Intensity Range 2

5 to 9

Color 2

Alpha 2= 0.09

0 1

Enable Color 3

Intensity Range 3

10 to 25

Color 3

Alpha 3= 0.13

0 1

Create Multicolor Overlay

Close Panel

Close Panel

Rotation and Scaling Options

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical Elevation= 30

10

Z scale factor = 1

0

Take Snap Shot

The desired plot is created.

Transparency Op

Be Patient This Works V

Alpha down

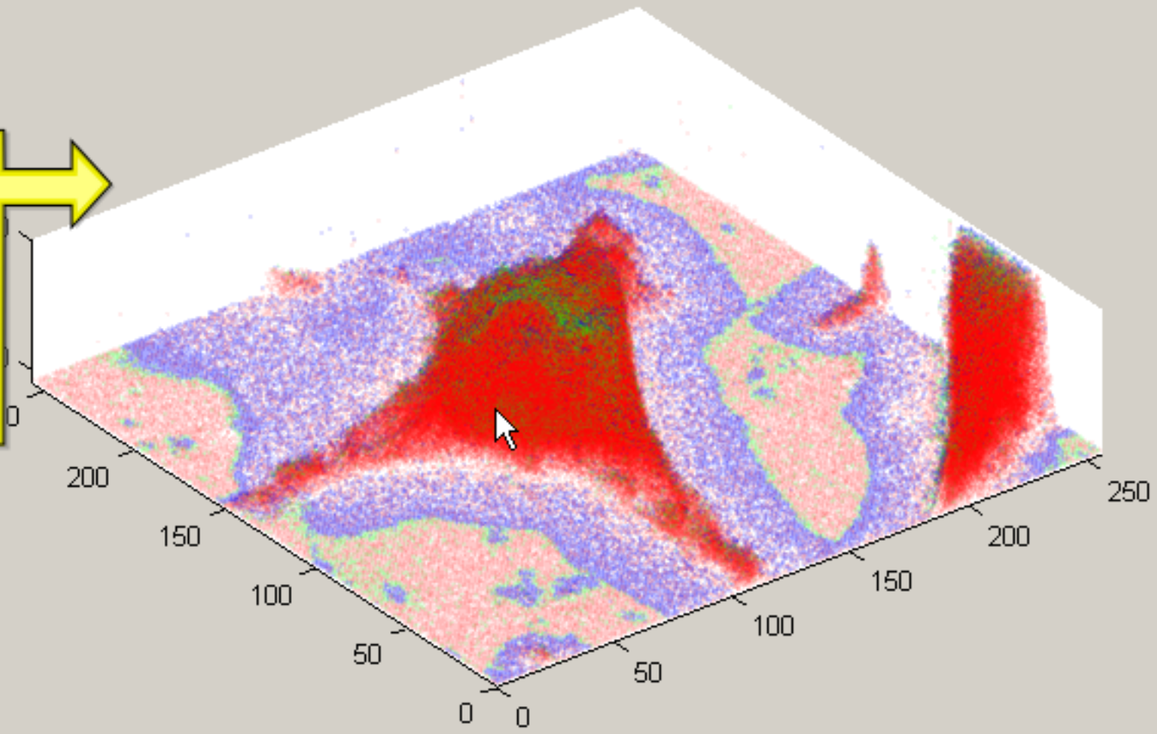
Top slice 56 23 1

Alpha 1 0 0

Bottom slice 56 37 1

Alpha 1 0.246 0

Update



zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

Choose Background Color

Current background color

Multicolor Overlay Panel

Enable Color 1

Intensity Range 1

1 to 4

Color 1

Alpha 1= 0.08

0 1

Enable Color 2

Intensity Range 2

5 to 9

Color 2

Alpha 2= 0.09

0 1

Enable Color 3

Intensity Range 3

10 to 25

Color 3

Alpha 3= 0.13

0 1

Create Multicolor Overlay

Close Panel

Close Panel

Rotation and Scaling Options

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical Elevation= 30

10

Z scale factor = 1

0

Take Snap Shot

If we rotate the plot we can see the green is not showing up too well. So we should lower the red alpha value.

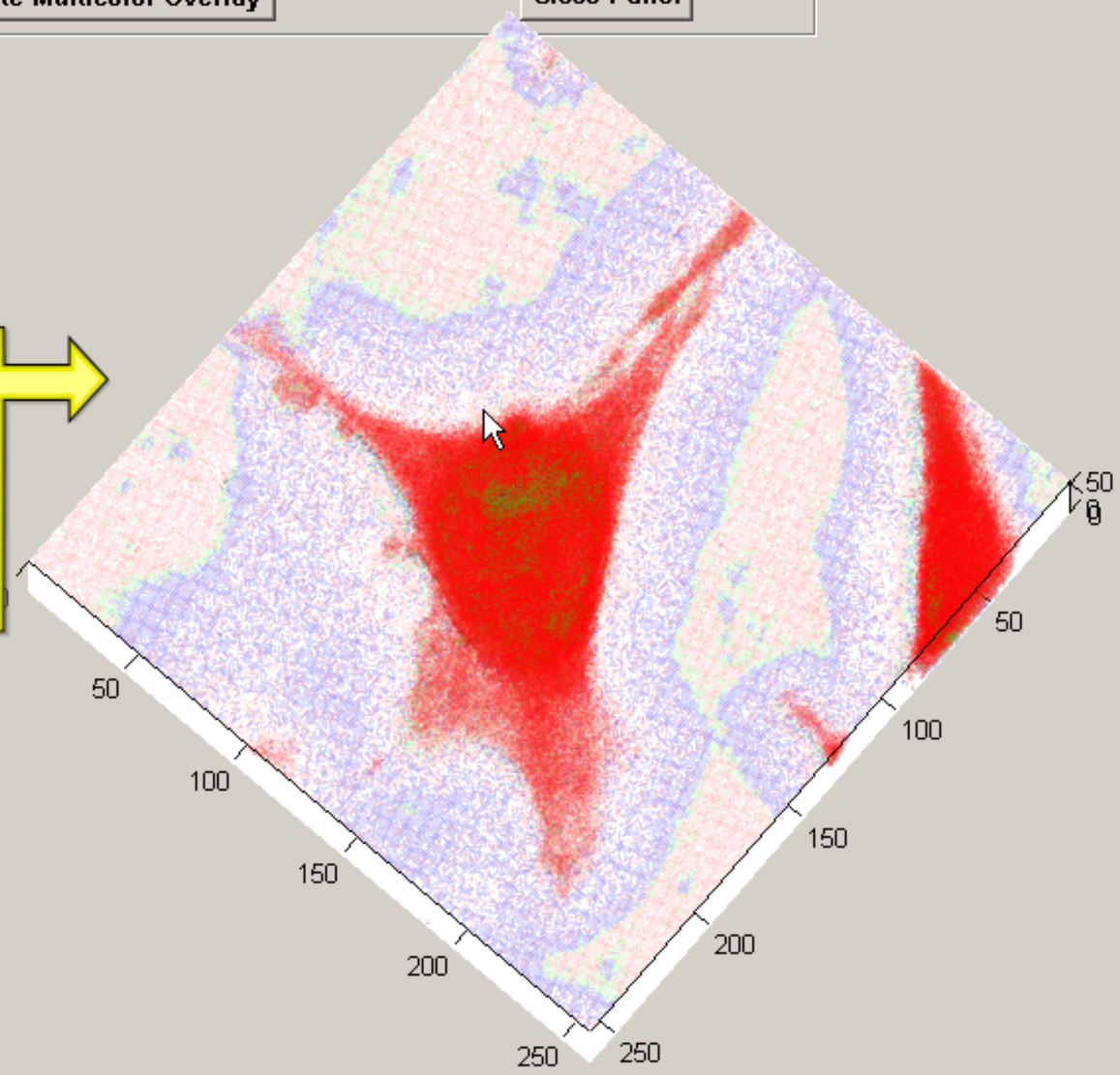
Transparency Op

Be Patient This Works V

Alpha down

Top slice	Alpha	Bottom slice	Alpha
56	1	56	1
23	0	37	0.246
1	0	1	0

Update



zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

Choose Background Color

Current background color

Enable Color 1

Intensity Range 1

1 to 4

Color 1

Alpha 1= 0.03

0 1

Enable Color 2

Intensity Range 2

5 to 9

Color 2

Alpha 2= 0.09

0 1

Enable Color 3

Intensity Range 3

10 to 25

Color 3

Alpha 3= 0.13

0 1

Create Multicolor Overlay

Close Panel

Close Panel

Here we lowered the red alpha value to 0.03 and press the 'Create Multicolor Overlay' button to update the plot.

Rotation

0 Rotate Left/Right

Horizontal Rotation=

Z scale factor = 1

0 Rotate Up/Down 360

0

Vertical Elevation= 30

Transparency Options

Be Patient This Works Very Slowly!

Alpha down

Top slice 56 23 1

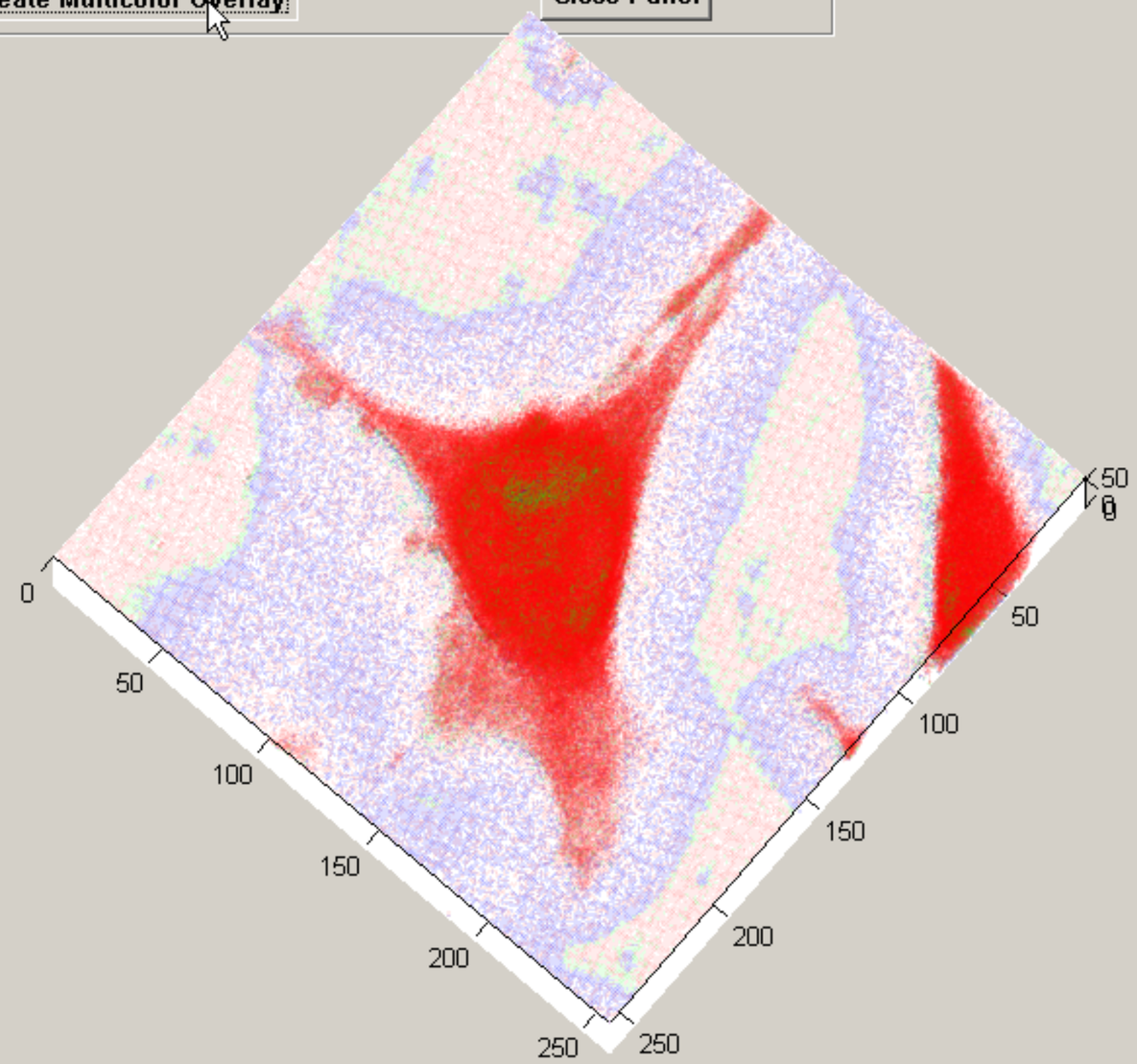
Alpha 1 0 0

Alpha up

Bottom slice 56 37 1

Alpha 1 0.246 0

Update



zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

Choose Background Color

Current background color

Multicolor Overlay Panel

Enable Color 1

Intensity Range 1

1 to 4

Color 1

Alpha 1= 0.03

0 1

Enable Color 2

Intensity Range 2

5 to 9

Color 2

Alpha 2= 0.09

0 1

Enable Color 3

Intensity Range 3

10 to 25

Color 3

Alpha 3= 0.13

0 1

Create Multicolor Overlay

Close Panel

Close Panel

Rotation and Scaling Options

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical Elevation= 30

10

Z scale factor = 1

0

Take Snap Shot

Transparency Op

Be Patient This Works V

Alpha down

Top slice 56 23 1

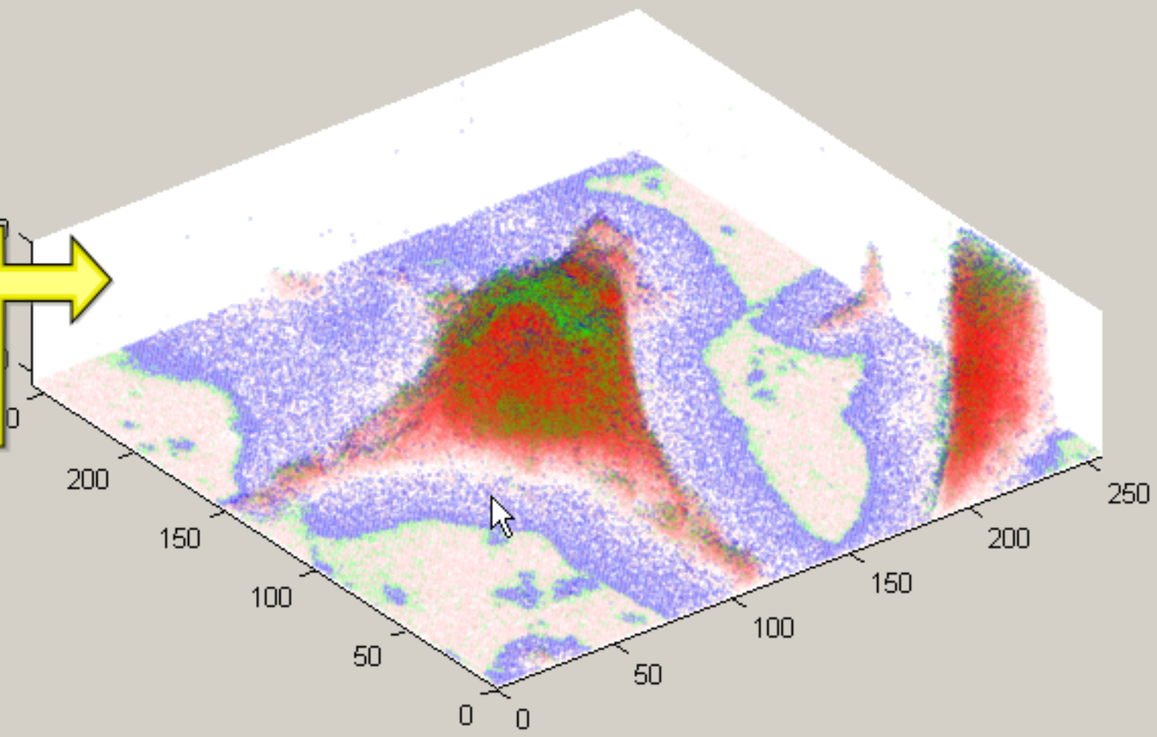
Alpha 1 0 0

Bottom slice 56 37 1

Alpha 1 0.246 0

Update

Now the green data is easier to see.



zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

Choose Background Color

Current background color

Multicolor Overlay Panel

Enable Color 1

Intensity Range 1

1 to 4

Color 1

Alpha 1= 0.03

0 1

Enable Color 2

Intensity Range 2

5 to 9

Color 2

Alpha 2= 0.09

0 1

Enable Color 3

Intensity Range 3

10 to 25

Color 3

Alpha 3= 0.13

0 1

Create Multicolor Overlay

Close Panel

Close Panel

Rotation and Scaling Options

At any time you can save a snapshot of the 3D view by pressing this button.

Take Snap Shot

0

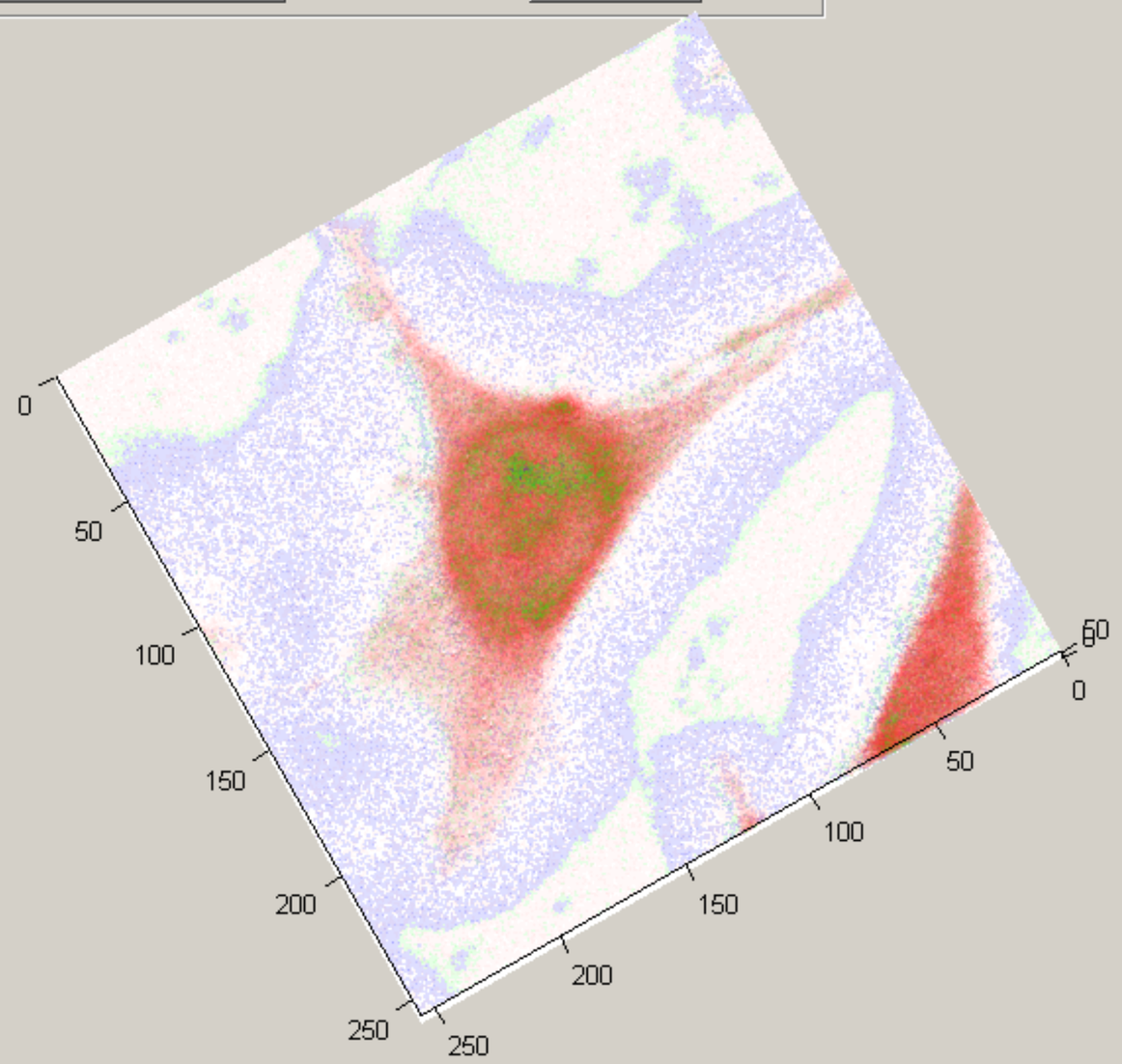
Vertical Elevation= 30

Transparency Options

Be Patient This Works Very Slowly!

Alpha down			Alpha up		
Top slice		Alpha	Bottom slice		Alpha
56		1	56		1
23		0	37		0.246
1		0	1		0

Update



zcorrectorgui

Choose peak(s) to p

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Rotati

0 Rotate Left/Rig

Horizontal Rotati

0 Rotate Up/Do

Vertical Elevatio

Trar

Be Patient

Alpha dov

Top slice

56

23

1

Close Panel

work

File Edit View Favorites Tools Help

Back Search Folders

Address C:\Program Files\MATLAB\R2006b\work

Go

Folders

- DebugMode
- Dell
- EndNote X1
- ESCA 2000
- FileZilla
- FileZilla FTP Client
- GIMP-2.0
- gs
- Hewlett-Packard
- HighChem
- HxD
- ImageJ
- Inkscape
- InstallShield Installation Information
- Intel
- Internet Explorer
- ION-TOF
- IrfanView
- Java
- MATLAB
  - R2006b
    - bin
    - demos
    - extern
    - help
    - ja
    - java
    - jhelp
    - notebook
    - sys
    - toolbox
    - uninstall
    - work
      - frames

Name	Size	Type	Date Modified
tetraglyme	675 KB	Microsof...	3/2/2011 4:59 PM
verytemporarybarnesfiles	4,974 KB	Microsof...	5/11/2010 2:36 PM
peakidtest.csv	5 KB	Microsof...	3/26/2010 4:34 PM
AcuNegData.txt	5 KB	Text Do...	12/21/2010 1:36 PI
AcuPosData.txt	22 KB	Text Do...	12/21/2010 1:57 PI
AllNeg20110131.txt	6 KB	Text Do...	1/31/2011 1:48 PM
allpeaksimpos.txt	71 KB	Text Do...	3/17/2010 3:03 PM
AllPos20110131.txt	23 KB	Text Do...	2/1/2011 11:18 AM
asbposdata.txt	16 KB	Text Do...	8/17/2010 3:11 PM
bv.txt	1 KB	Text Do...	10/13/2010 11:56 .
CH3NEV.TXT	313 KB	Text Do...	1/4/2010 4:48 PM
controldata.txt	13 KB	Text Do...	4/29/2010 2:21 PM
fortutorial.txt	18 KB	Text Do...	10/11/2010 1:10 PI
FRE-HYD-old.TXT	14 KB	Text Do...	8/31/2007 10:49 A
hs_err_pid2624.log	16 KB	Text Do...	7/8/2010 2:21 PM
hs_err_pid2792.log	16 KB	Text Do...	11/2/2010 4:29 PM
iontof.txt	11 KB	Text Do...	1/27/2010 1:10 PM
it6files.txt	3 KB	Text Do...	8/13/2010 12:56 PI
la.txt	8 KB	Text Do...	10/13/2010 11:56 .
negative.txt	10 KB	Text Do...	8/23/2010 10:24 A
NegativeInkdata_95.txt	324 KB	Text Do...	5/4/2011 10:10 AM
negnewdata.txt	34 KB	Text Do...	7/27/2010 11:44 A
NEGTEST.TXT	17 KB	Text Do...	10/11/2010 4:40 PI
newcln.txt	54 KB	Text Do...	1/4/2010 4:45 PM
newlabelsmethane.txt	2 KB	Text Do...	2/28/2011 5:10 PM
NHS-BARE.TXT	7 KB	Text Do...	11/8/2007 11:45 A
positive.txt	28 KB	Text Do...	5/8/2011 5:11 PM
pp1314neg.txt	10 KB	Text Do...	3/23/2011 10:55 A
pp1314pos.txt	15 KB	Text Do...	3/23/2011 10:54 A
prueba99.txt	1 KB	Text Do...	12/20/2010 11:11 .
redpos.txt	17 KB	Text Do...	7/23/2010 5:02 PM
sa.txt	4 KB	Text Do...	10/13/2010 11:56 .
test3.txt	7 KB	Text Do...	1/3/2011 5:25 PM
testv6.txt	15 KB	Text Do...	10/11/2010 2:15 PI
v6fortutorial.txt	15 KB	Text Do...	10/11/2010 3:39 PI
ysampledata.txt	1 KB	Text Do...	10/13/2010 11:57 .
Corr3dviewSnapShot.tif	747 KB	TIF File	6/24/2011 12:06 PI
3drotationmovie.avi	380,75...	Video Clip	6/24/2011 11:43 A
RGBOverlayMovie.avi	380,75...	Video Clip	6/23/2011 10:36 A
XYRGBOverlaymovie.avi	39,280 KB	Video Clip	6/23/2011 10:34 A

The file is automatically saved as 'Corr3dViewSnapShot.tif' in the currently active Matlab directory.

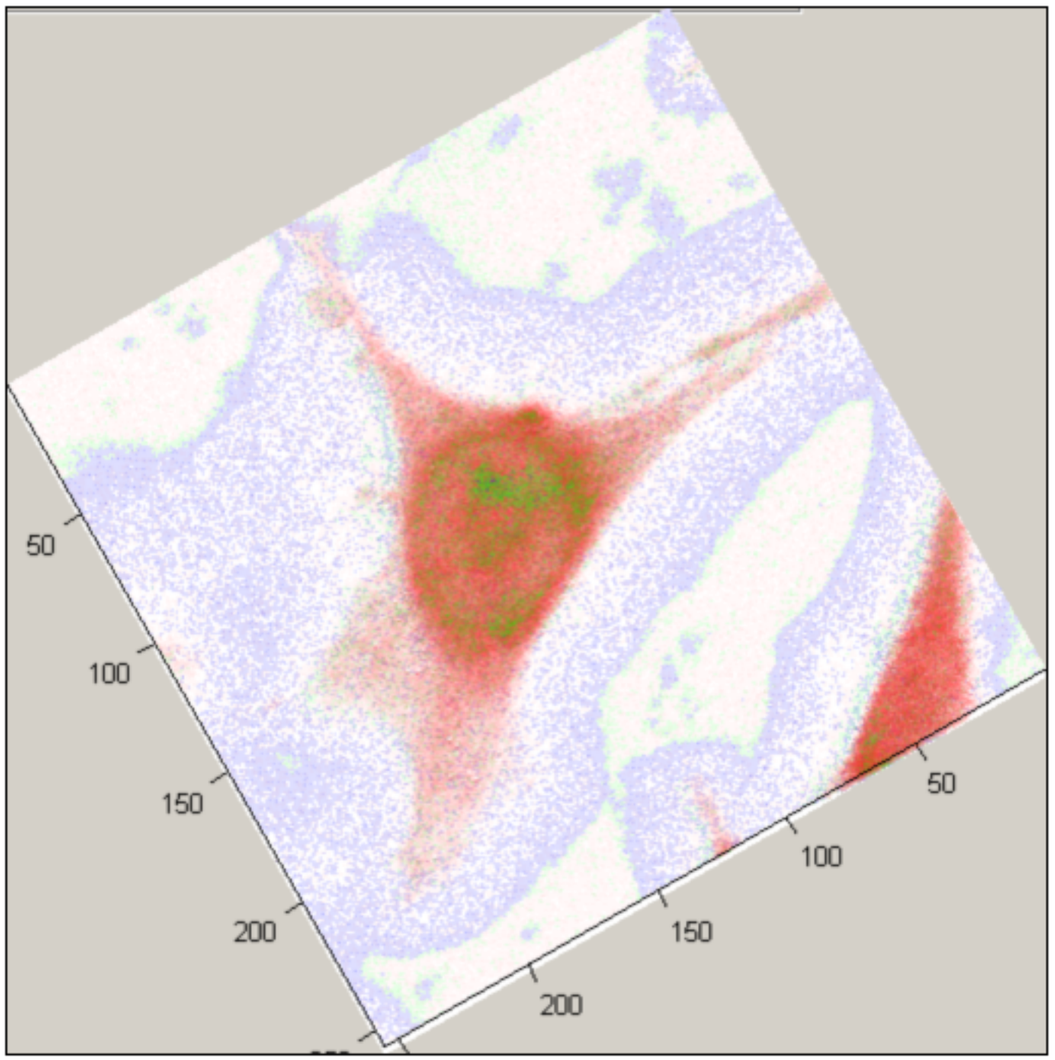
60

0

50

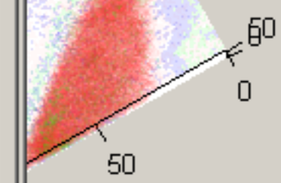
250

250



The image is saved as desired.

Close Panel



zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

Choose Background Color

Current background color

Multicolor Overlay Panel

Enable Color 1

Intensity Range 1

1 to 4

Color 1

Alpha 1= 0.03

0 1

Enable Color 2

Intensity Range 2

5 to 9

Color 2

Alpha 2= 0.09

0 1

Enable Color 3

Intensity Range 3

10 to 25

Color 3

Alpha 3= 0.13

0 1

Close Panel

Close Panel

Once you are done you can close the 'Multicolor Overlay Panel'

Take

Rotation and Scaling Options

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical Elevation= 30

10

Z scale factor = 1

0

Transparency Options

Be Patient This Works Very Slowly!

Alpha down

Top slice 56 23 1

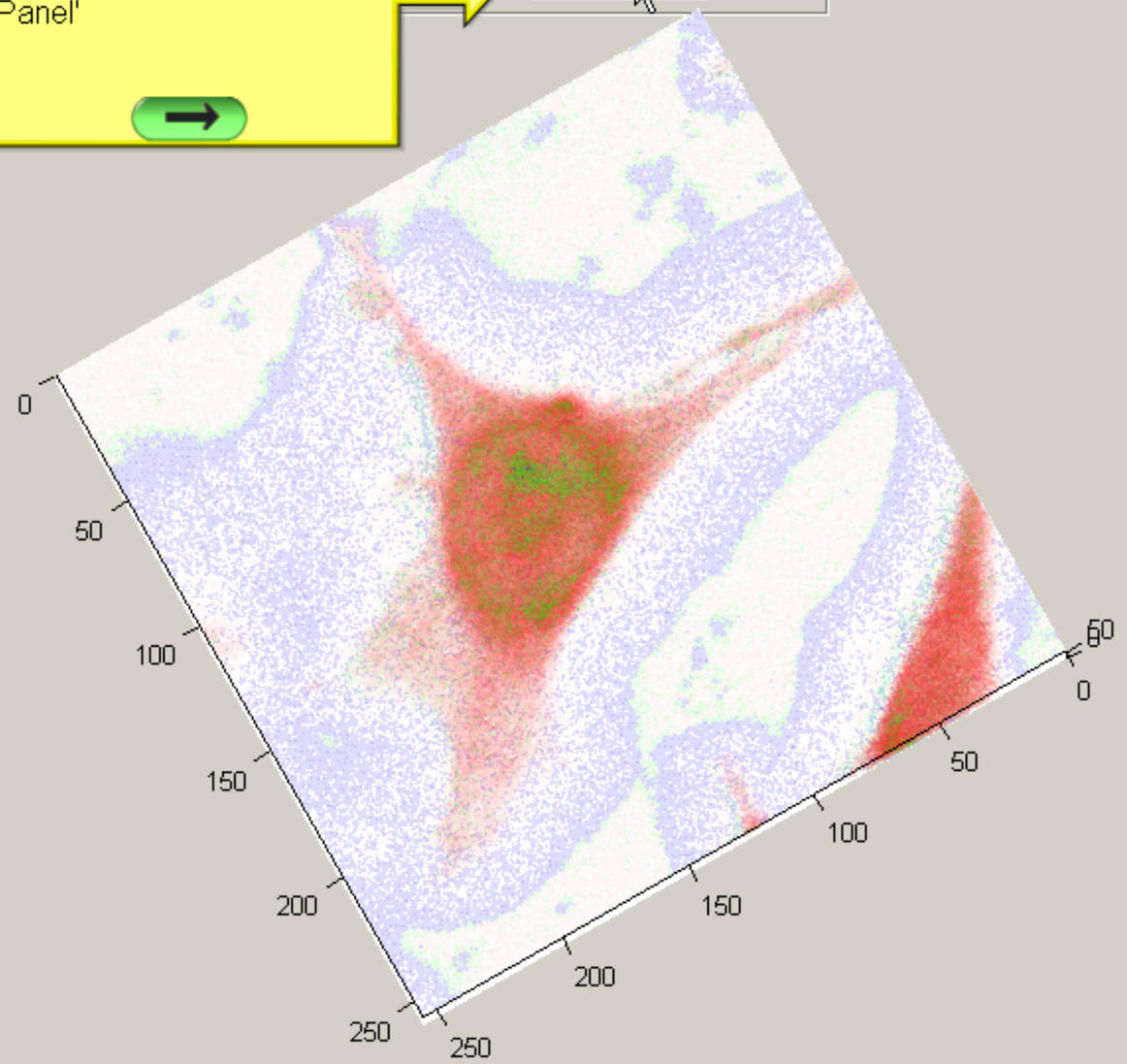
Alpha 1 0 0

Alpha up

Bottom slice 56 37 1

Alpha 1 0.246 0

Update



zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Let's reset the plot by pressing the main "View in 3D' button and look at how to make a movie of the 3D view.

Current background color

Multicolor Overlay Panel

Check which axes you want to rotate around

X Y Z

Number of degrees for rotation

360

Preview

Create 3D Movie

Close Panel

Tools To Isolate Specific Voxel Intensities

Use the sliders below to select the intensity range that you want to isolate in the 3d plot. Then hit the update button.

Choose Color

NOTE: The value of Min cannot be more than Max

MIN 13 (1 – 43)

MAX 30

Current color

Update

Rotation and Scaling Options

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical Elevation= 30

10

Z scale factor = 1

0

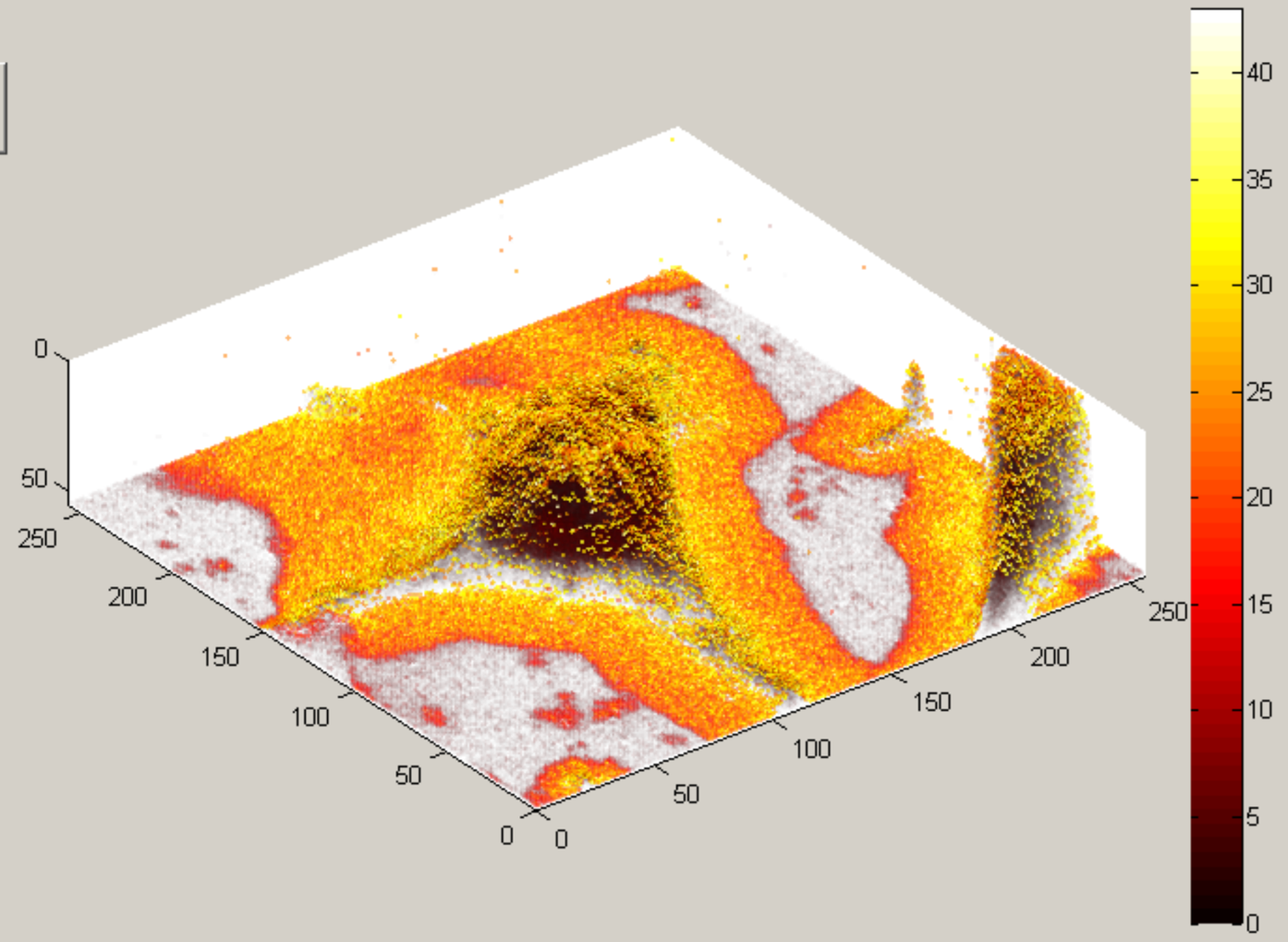
Take Snap Shot

Transparency Options

Be Patient This Works Very Slowly!

Alpha down			Alpha up		
Top slice	56 / 23 / 1	Alpha	1 / 0 / 0	Bottom slice	56 / 37 / 1
Alpha	1 / 0.101 / 0				

Update



zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

First check the axes you want to rotate the data around and enter the number of degrees to rotate in the field provided (default = 360).

Current background color

Multicolor Overlay Panel

Check which axes you want to rotate around

X Y Z

Number of degrees for rotation

360

Preview

Create 3D Movie

Close Panel

Tools To Isolate Specific Voxel Intensities

Use the sliders below to select the intensity range that you want to isolate in the 3d plot. Then hit the update button.

NOTE: The value of Min cannot be more than Max

Choose Color

Current color

MIN 13 1 43

MAX 30

Update

Rotation and Scaling Options

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical Elevation= 30

10

Z scale factor = 1

0

Take Snap Shot

Transparency Options

Be Patient This Works Very Slowly!

Alpha down

Top slice 56 23 1

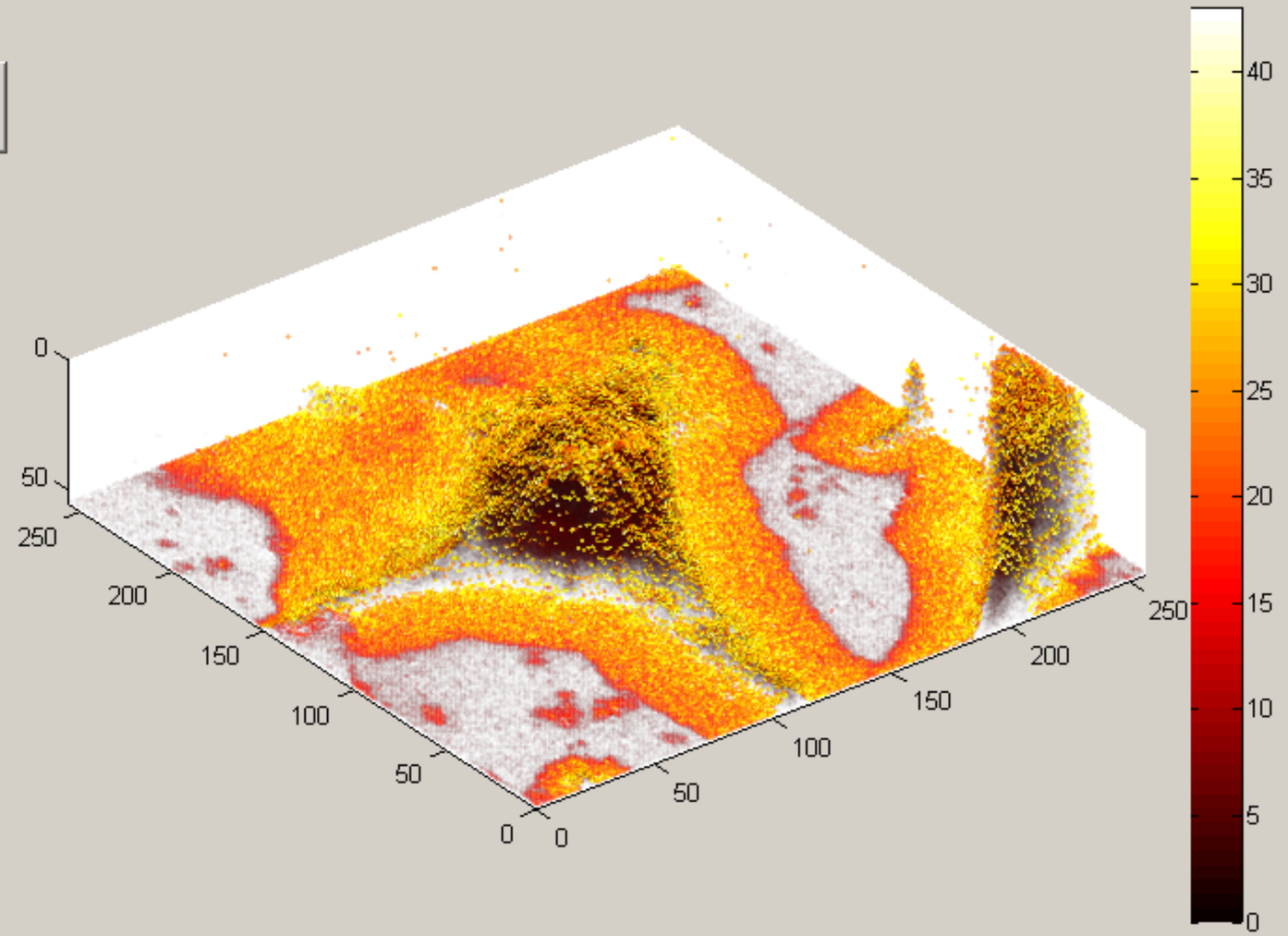
Alpha 1 0 0

Alpha up

Bottom slice 56 37 1

Alpha 1 0.101 0

Update



zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

Choose Background Color

Current background color

Then press the 'Create 3D Movie' button.

Check which axes you want to rotate around

X Y Z

Number of degrees for rotation

360

Preview

Create 3D Movie

Close Panel

Tools To Isolate Specific Voxel Intensities

Use the sliders below to select the intensity range that you want to isolate in the 3d plot. Then hit the update button.

NOTE: The value of Min cannot be more than Max

Choose Color

Current color

MIN 13 1 43

MAX 30

Update

Rotation and Scaling Options

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical Elevation= 30

10

Z scale factor = 1

0

Take Snap Shot

Transparency Options

Be Patient This Works Very Slowly!

Alpha down

Top slice 56 23 1

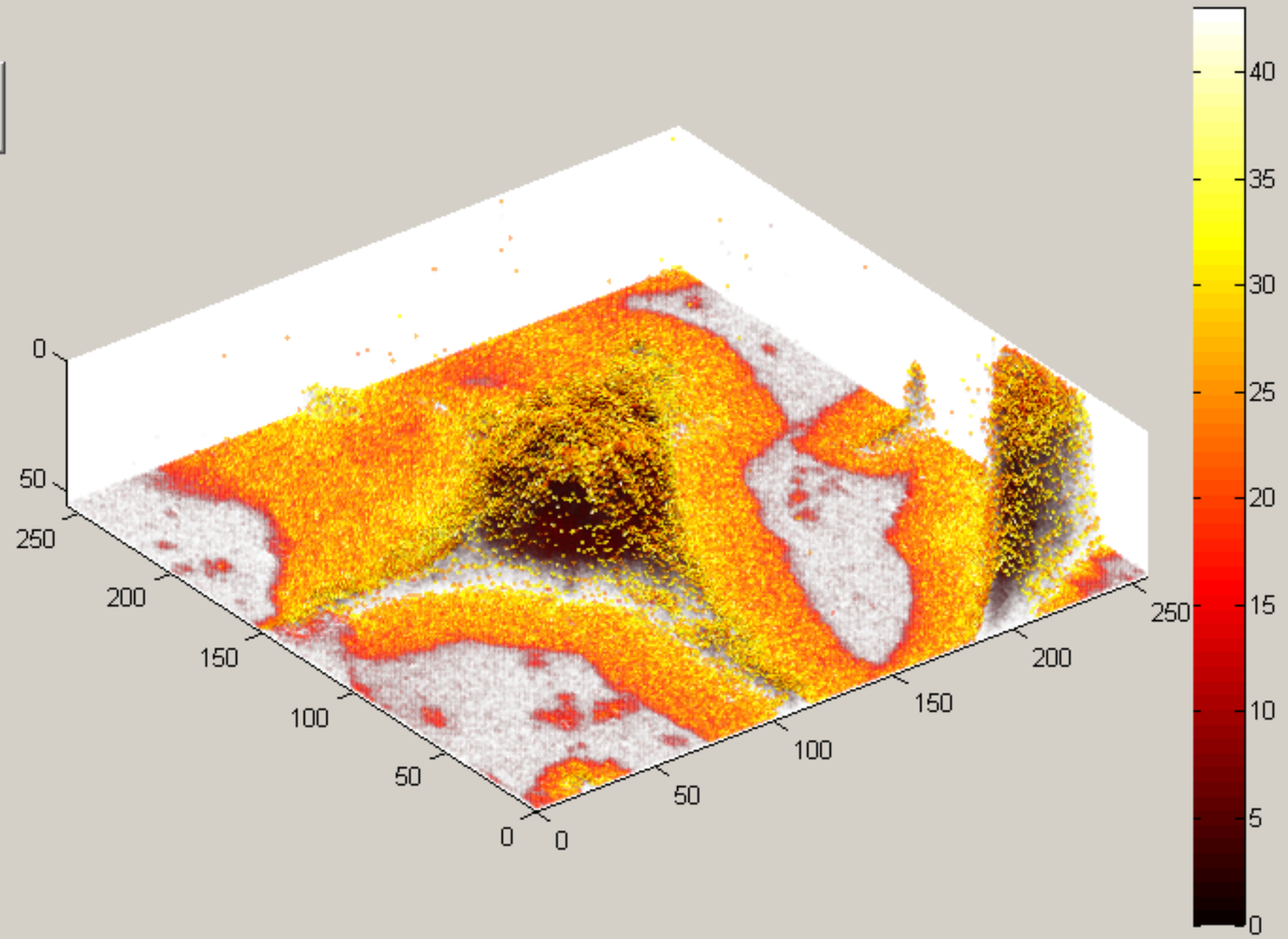
Alpha 1 0 0

Alpha up

Bottom slice 56 37 1

Alpha 1 0.101 0

Update



zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

Choose Background Color

Current background color

Check which axes you want to rotate around

X Y Z

Number of degrees for rotation

360

Preview

Create 3D Movie

Close Panel

Tools To Isolate Specific Voxel Intensities

Use the sliders below to select the intensity range that you want to isolate in the 3d plot. Then hit the update button.

NOTE: The value of Min cannot be more than Max

MIN 13 1 43

MAX 30

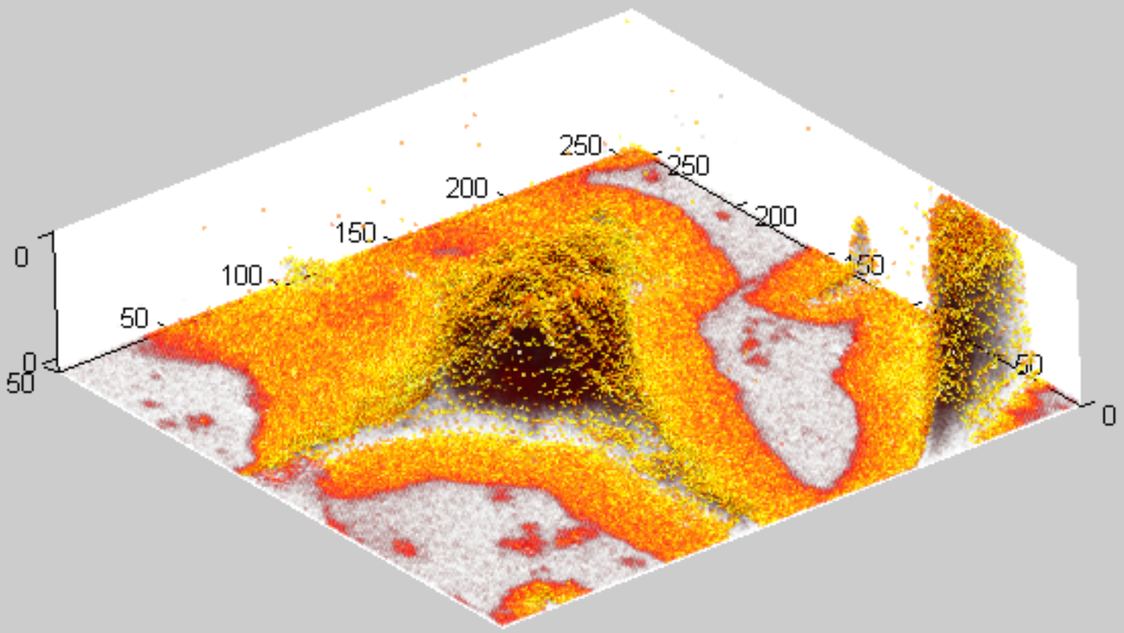
Choose Color

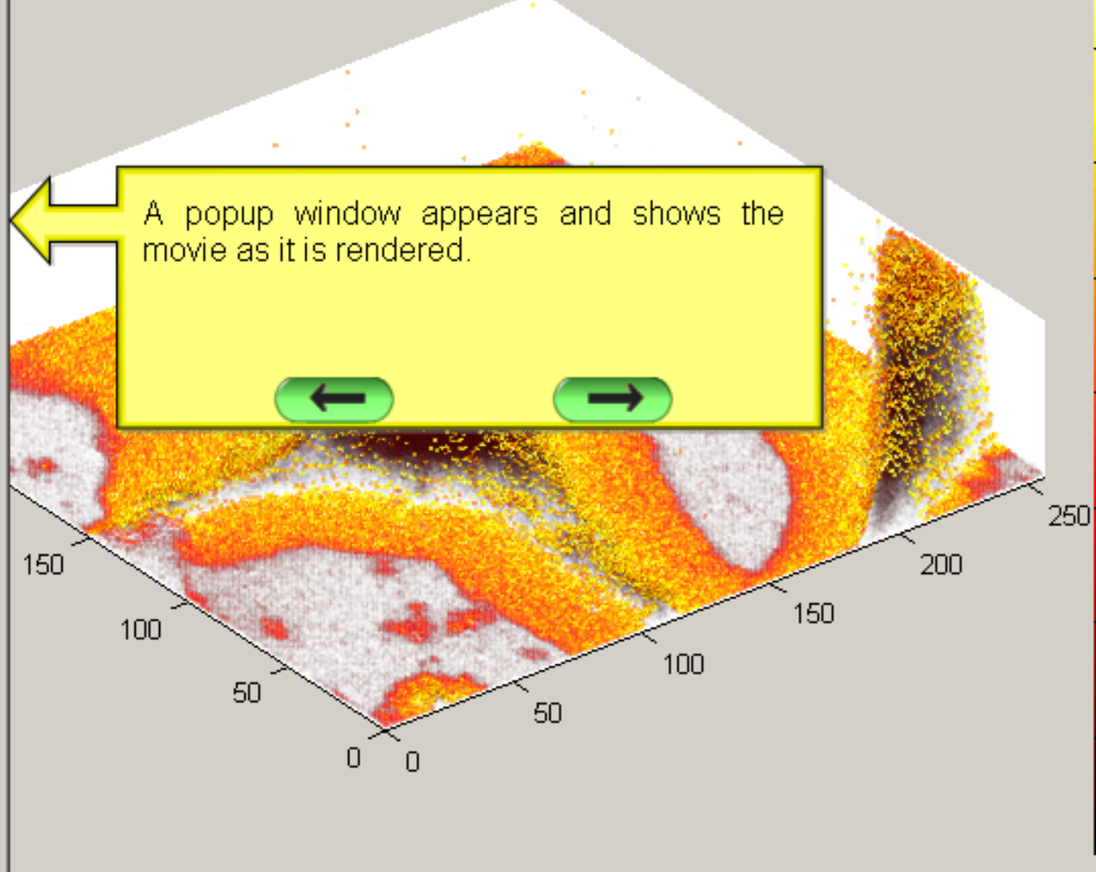
Current color

Update

Figure 4

File Edit View Insert Tools Desktop Window Help





zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

Choose Background Color

Current background color

Check which axes you want to rotate around

X Y Z

Number of degrees for rotation

360

Preview

Create 3D Movie

Close Panel

Tools To Isolate Specific Voxel Intensities

Use the sliders below to select the intensity range that you want to isolate in the 3d plot. Then hit the update button.

NOTE: The value of Min cannot be more than Max

MIN 13 1 43

MAX 30

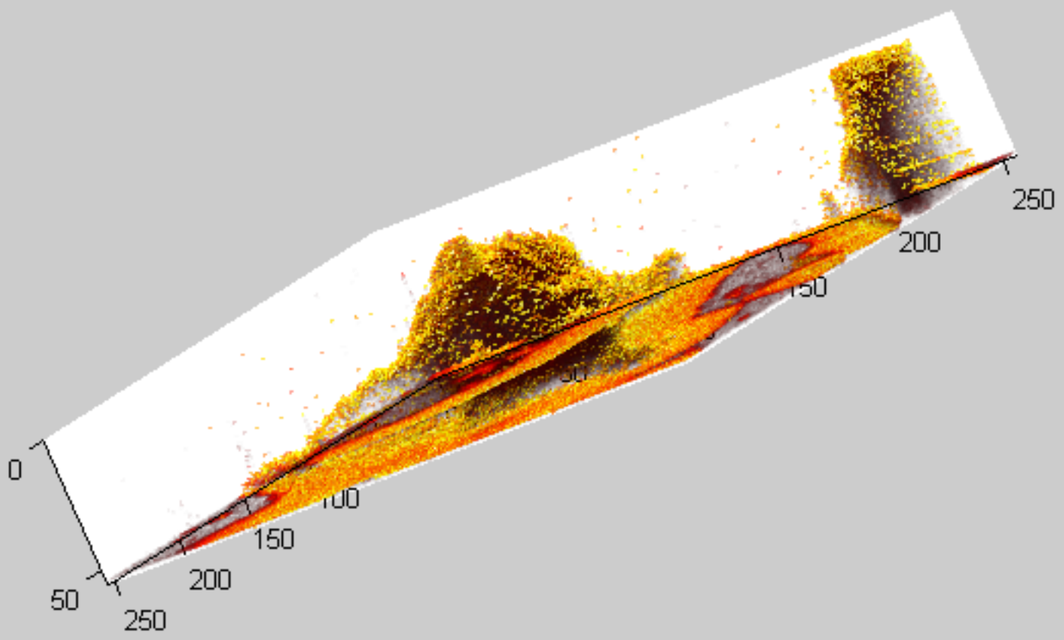
Choose Color

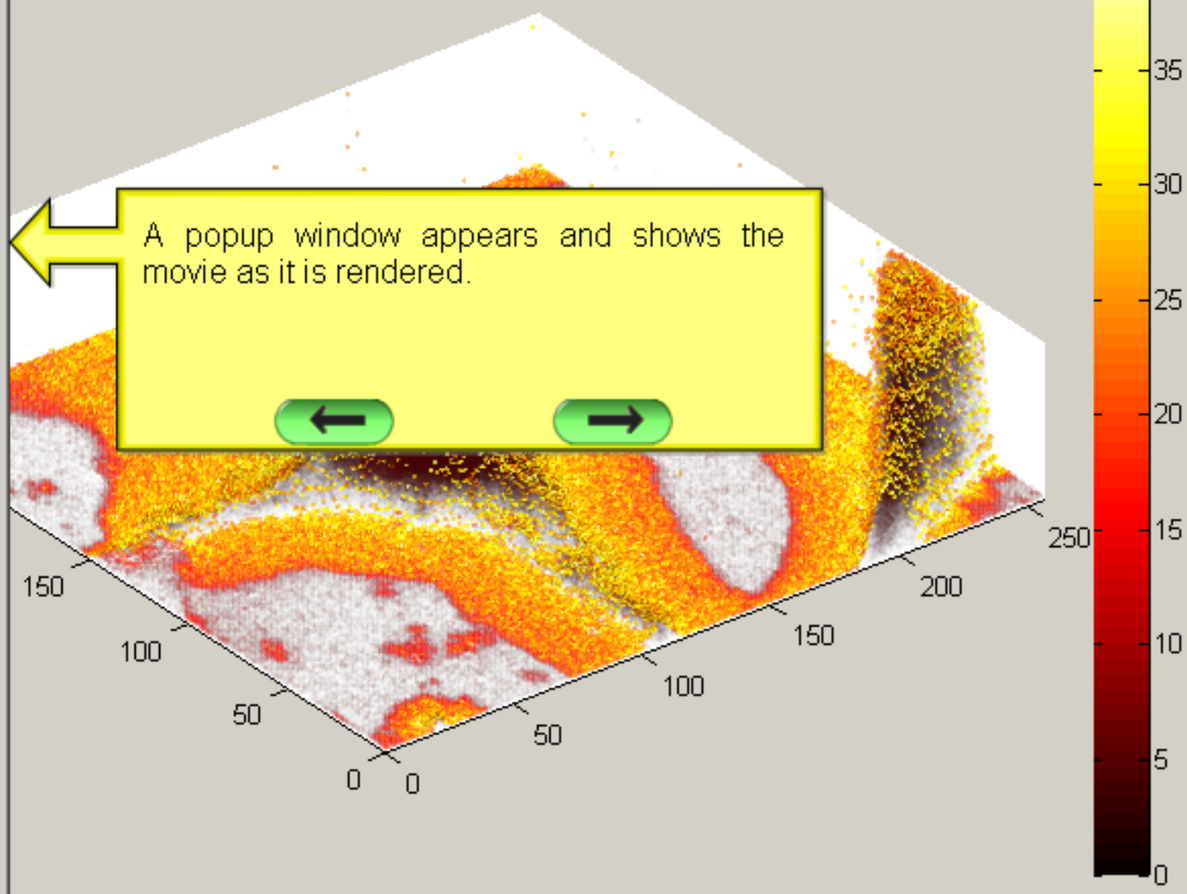
Current color

Update

Figure 4

File Edit View Insert Tools Desktop Window Help





zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

Choose Background Color

Current background color

Check which axes you want to rotate around

X Y Z

Number of degrees for rotation

360

Preview

Create 3D Movie

Close Panel

Tools To Isolate Specific Voxel Intensities

Use the sliders below to select the intensity range that you want to isolate in the 3d plot. Then hit the update button.

NOTE: The value of Min cannot be more than Max

Choose Color

Current color

MIN 13 1 43

MAX 30

Update

Figure 4

Select File to Write

Save in: work

My Recent Documents
Desktop
My Documents
My Computer
My Network Places

frames
3drotationmovie.avi
example.avi
RGBOverlayMovie.avi
XYRGBOverlaymovie.avi

File name: 3drotationmovie.avi

Save as type: avi (*.avi)

Save

Cancel

When it is done choose where to save the file, give the file a name and press the 'Save' button.

0 0

250 200 150

40 35 30 25 20 15 10 5 0

zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

Choose Background Color

Current background color

Check which axes you want to rotate around

X Y Z

Number of degrees for rotation

360

Preview

Create 3D Movie

Close Panel

Tools To Isolate Specific Voxel Intensities

Use the sliders below to select the intensity range that you want to isolate in the 3d plot. Then hit the update button.

Choose Color

NOTE: The value of Min cannot be more than Max

13

MIN

1

43

MAX

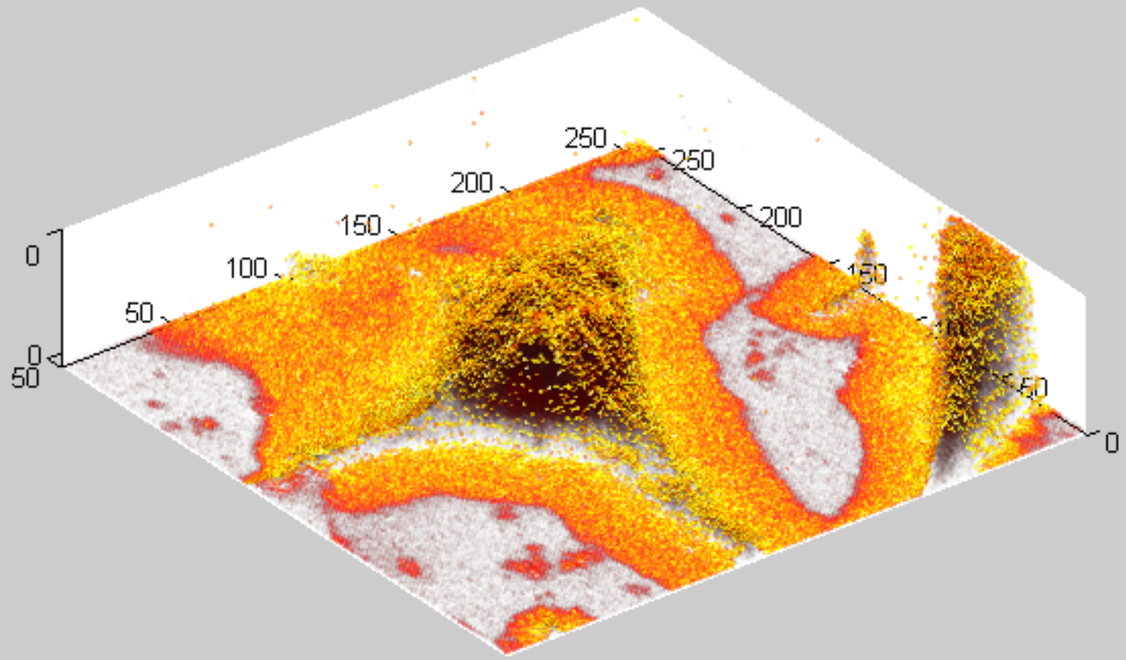
Current color

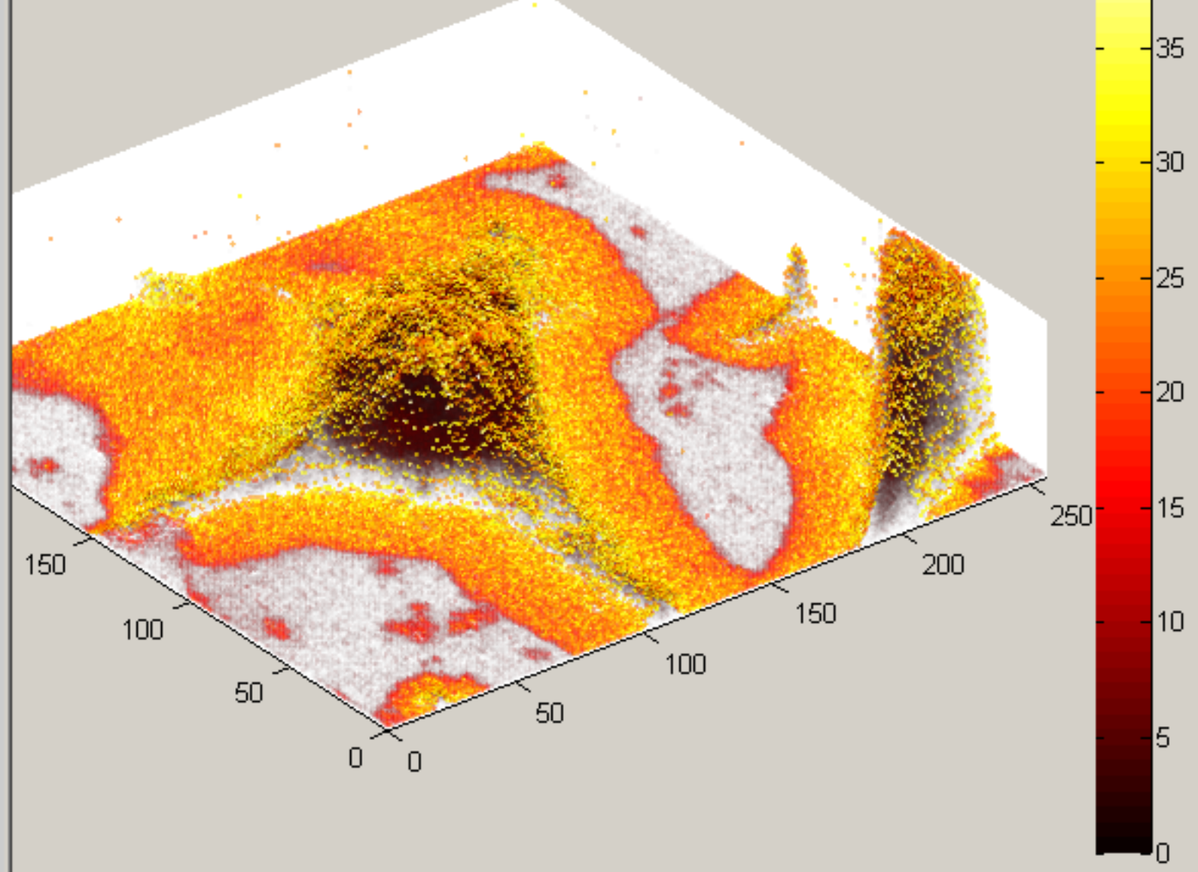
Update

Figure 4

File Edit View Insert Tools Desktop Window Help

When it is done saving you can close the popup window.





zcorrectorgui

Choose peak(s) to plot

Total_Counts
58.10555
70.13471
86.19242
104.2413
125.1504
166.2641
184.3038
224.3978

Check Box To Smooth Data For Display

View in 3D

Choose Colormap

Hot

Choose Background Color

Current background color

Multicolor Overlay Panel

Check which axes you want to rotate around

X Y Z

Number of degrees for rotation

360

Preview

Create 3D Movie

When you are done with the 3D Tools panel, you can close it by pressing the 'Close Panel' button.

Close Panel

ities

Then hit the update button.

NOTE: The value of Min cannot be more than Max

13

MIN

1 43

MAX

30

Choose Color

Current color

Update

Rotation and Scaling Options

0 Rotate Left/Right 360

Horizontal Rotation= 322.5

0 Rotate Up/Down 360

Vertical Elevation= 30

10

Z scale factor = 1

0

Take Snap Shot

Transparency Options

Be Patient This Works Very Slowly!

Alpha down

Top slice 56 23 1

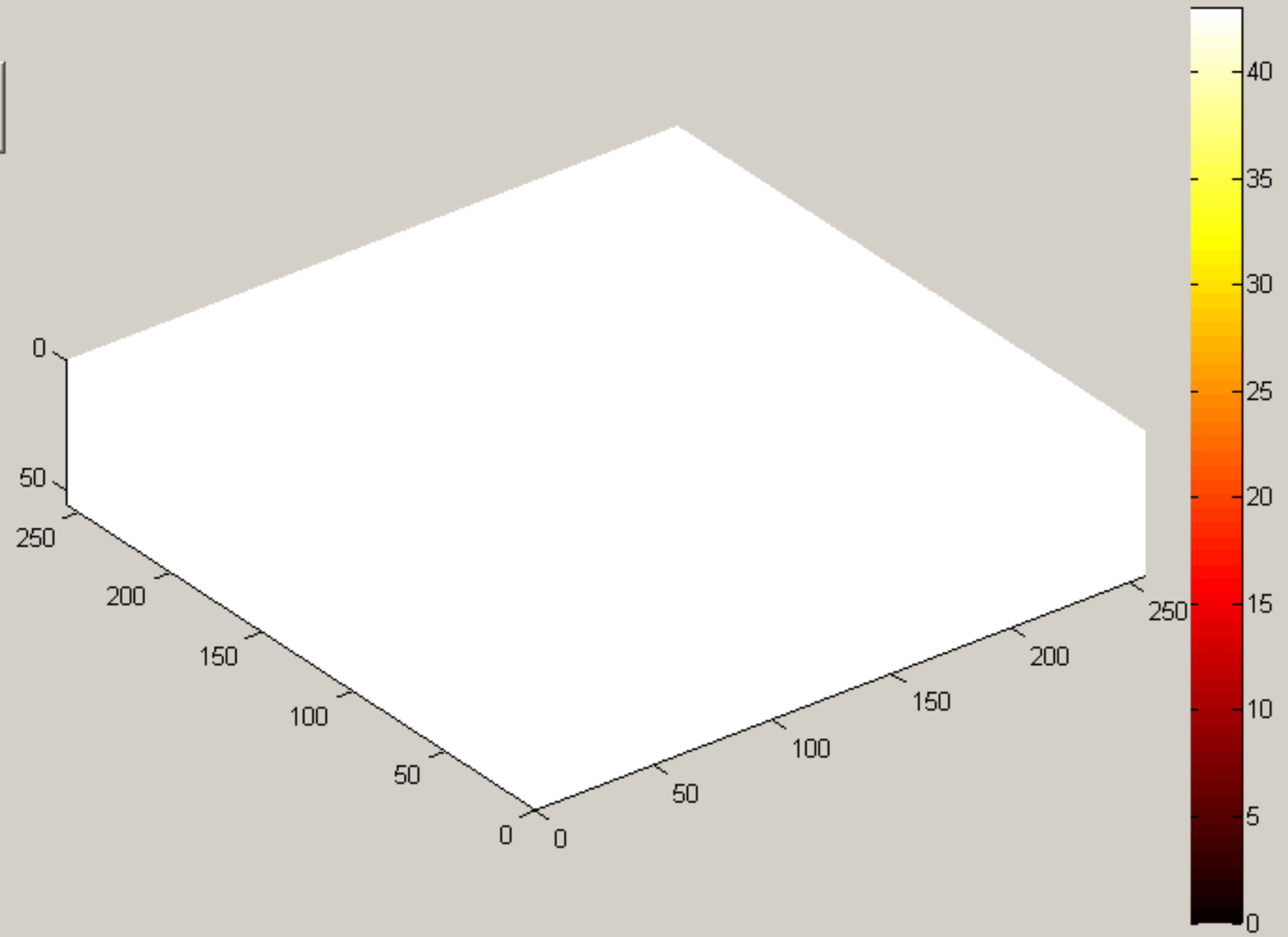
Alpha 1 0 0

Alpha up

Bottom slice 56 37 1

Alpha 1 0.101 0

Update



zcorrectorgui

Import Data From Directory

Import

Loaded Data

Number of image layers: 56

Down binning the data cannot be undone. You must reload the original data in order to restore the original matrix.

Downbin Data

Adjust Total Counts Threshold Value

Work with Uncorrected Data

Close

Overlay Tools

3D Tools

Data Being Displayed
Total_Counts

Peak List

Initialize Corrected Data

Z corrected image XY

< ------ X ------ >

^ | Y | v

56

0

Total_Counts
58.10555
70.13471
86.19242
104.2413

That's it for the 3D Tools panel of the ZcorrectorGui.

Continue on to another tutorial to learn how to The Overlay Tools.

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.

Layer number: 1

1

If you want to save the movie frames check this box before creating the movie.

Create XY Corr Slice Movie

Create XZ Corr Slice Movie

Create YZ Corr Slice Movie

< ------ X ------ >

^ | Z | v

0 column # 1 256

Thresholded total counts XZ

Z line XZ

Z corrected image XZ

Save Corr XZ

< ------ Y ------ >

^ | Z | v

0 row # 1 256

Thresholded total counts YZ

Z line YZ

Z corrected image YZ

Save Corr YZ