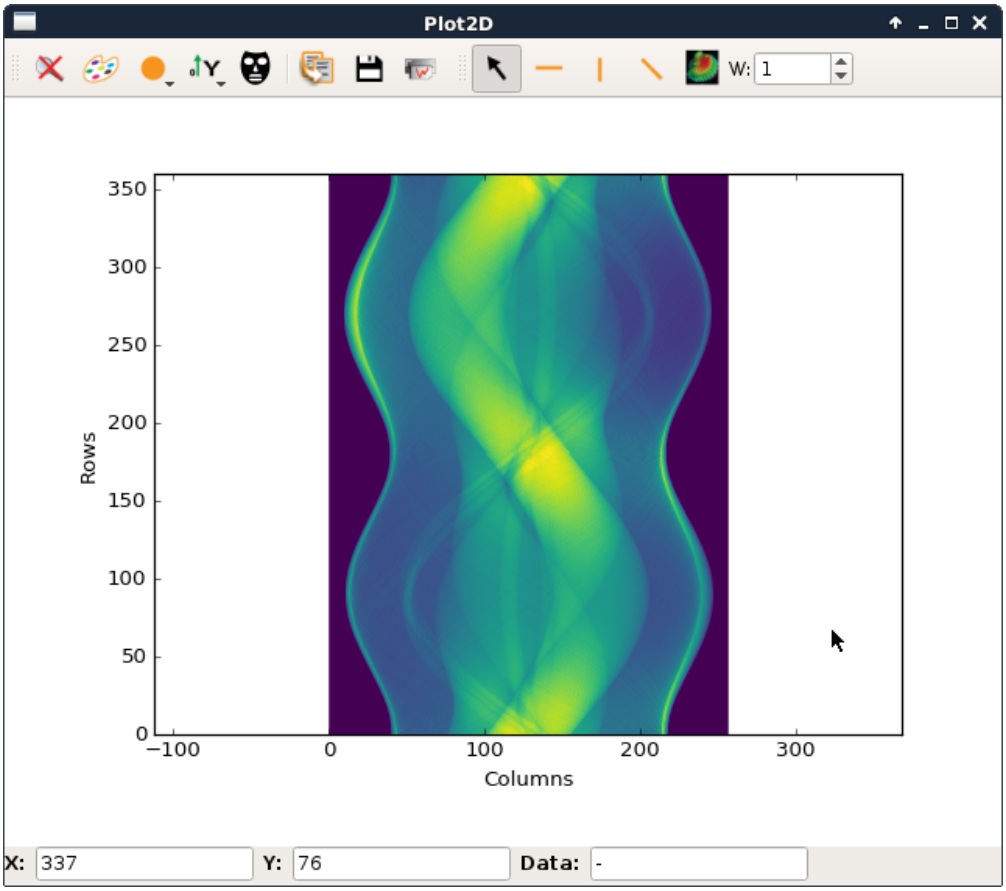
Plot2DExercise

November 11, 2016

1 Simple plot of a 2D image



plot2D

- http://www.silx.org/doc/silx/dev/modules/gui/plot/plotwindow.html
- http://www.silx.org/doc/silx/dev/modules/gui/plot/getting_started.html

1.1 load data from data/lena.hdf5

```
In [ ]: import numpy
        from silx.gui.plot import Plot2D
```

```
from fabio import edfimage
edfReader=edfimage.edfimage().read('data/sinogram.edf')
data=edfReader.getData()
```

1.2 Plot the image

```
In [ ]: ...
```

1.3 Change the color map

```
In [ ]: ...
```

1.4 origin keyword

- define the center of the image to (100, 100)

```
In [ ]: ...
```

1.5 scale keyword

- scale the image of a factor (0.1, 0.1) during the call of addImage

```
In [ ]: ...
```

2 multiple image

create the lenas plot (data is in data/lena.hdf5) using only :

- data
- Plot2D functions

2.1 load data

```
In [ ]: # input using .hdf5
        import h5py
        dataPath='data/lena.hdf5'
        f=h5py.File(dataPath)
        data=data = numpy.array(f['lena'], dtype='float64')
```

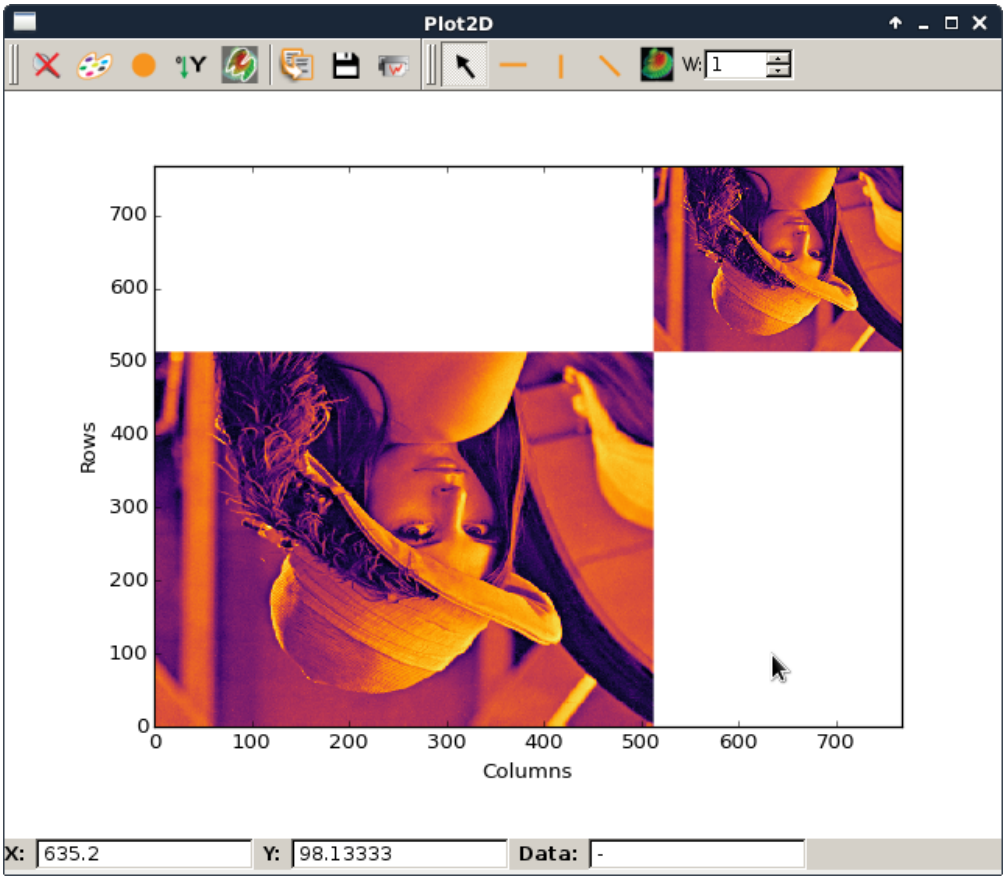
2.2 plot data

```
In [ ]: ...
```

2.3 Control axes

- change title, X and Y labels

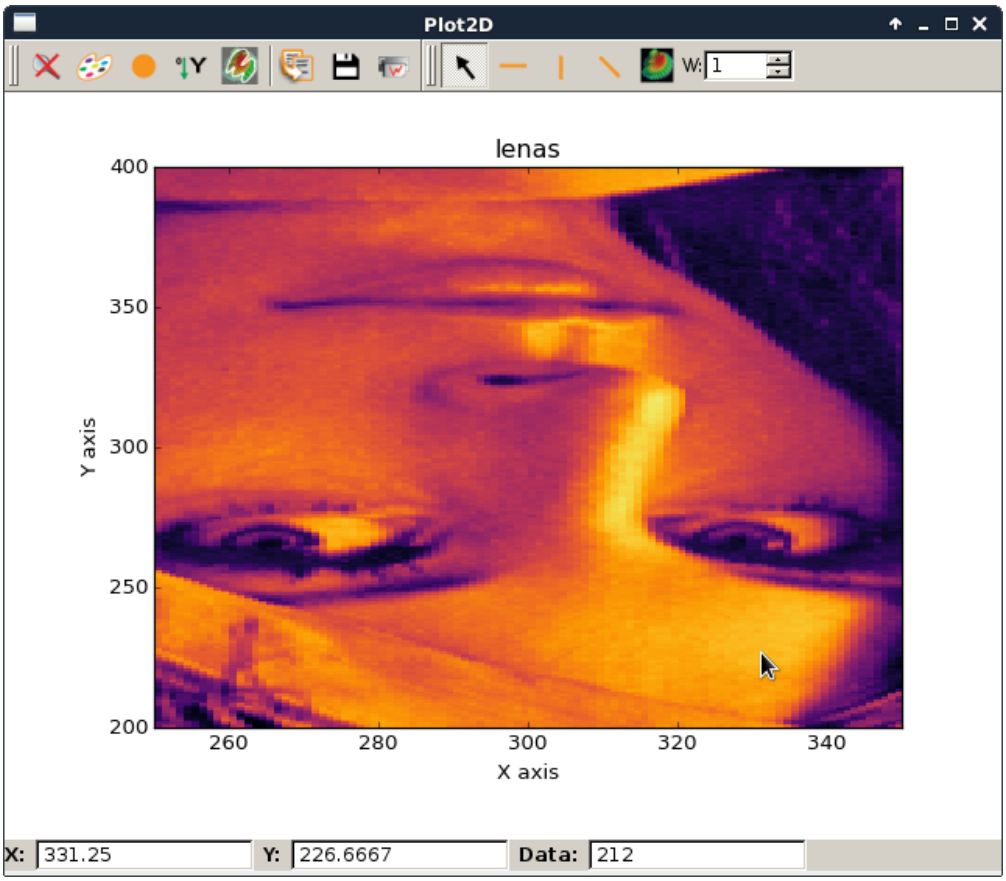
```
In [ ]: ...
```


Plot2D
W:
1
700
600
500
400
300
200
100
0
Rows
0
100
200
300
400
500
600
700
Columns
X:
635.2
Y:
98.13333
Data:
-

lenas plot

2.4 x and y limits

get the following display:



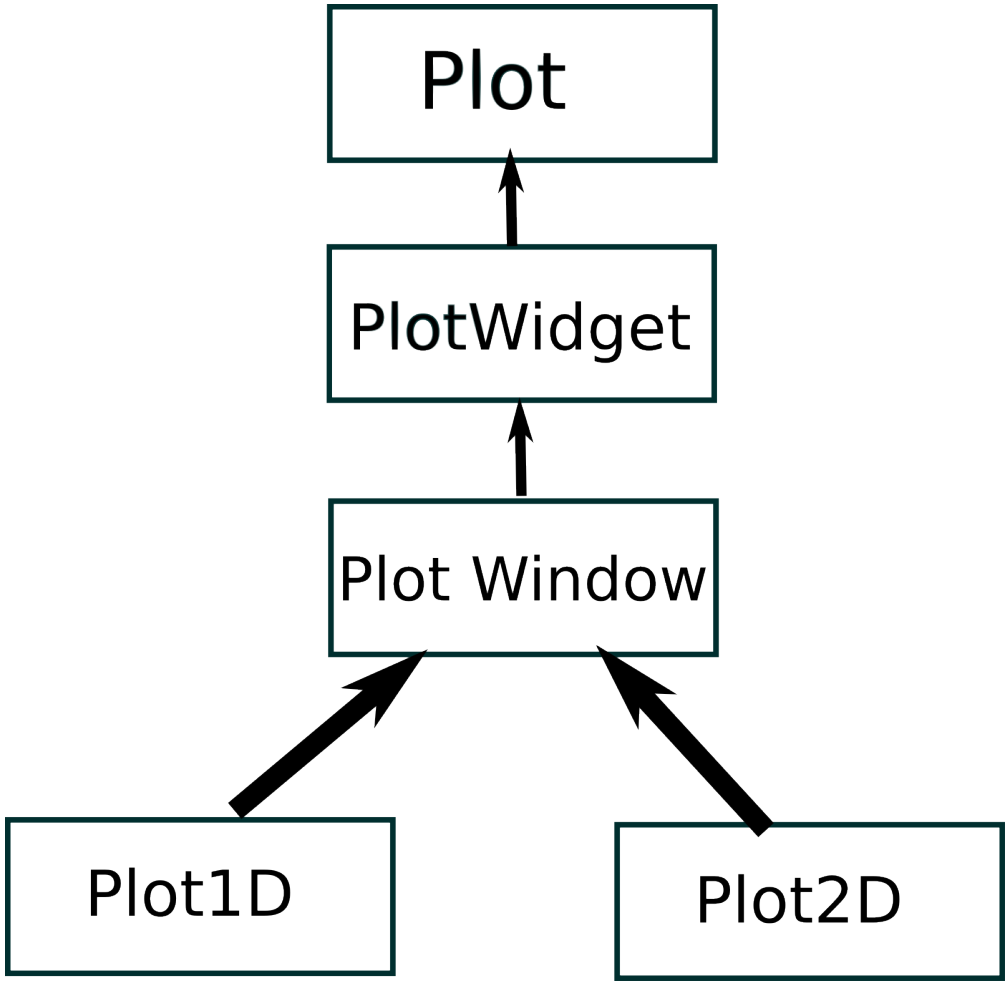
lena

.

```
In [ ]: ...
```

Plot class diagram

```
In [ ]:
```



plot class diagram