

The figures were named the same as their labels in the paper.

1 line plots

```
>> uiopen('l.fig',1)%For example, open the file named 'l.fig'. The file should be located in the current folder of Matlab.
>> ax=gca %get the handle

ax =

Axes with properties:
    XLim: [0.3844 1]
    YLim: [2.3000 12]
    XScale: 'linear'
    YScale: 'linear'
    GridLineStyle: '-'
    Position: [0.1300 0.1683 0.7750 0.7567]
    Units: 'normalized'

Show all properties

>> ax.Children %Show the data lines

ans =

2x1 Line array:
    Line (sg=-10,h=10d)
    Line (sg=-10,h=0d)

>> line1=ax.Children(1) %get data from the first line

line1 =

Line (sg=-10,h=10d) with properties:
    Color: [0.8627 0.1373 0.4314]
    LineStyle: '-'
    LineWidth: 2
    Marker: 'none'
    MarkerSize: 6
    MarkerFaceColor: 'none'
    XData: [0.9991 0.9897 0.9822 0.9760 0.9706 0.9655 0.9607 0.9562 0.9519 0.9477 0.9437 0.9398 0.9361 0.9324 0.9288 0.9253 0.9219 0.9185 0.9152 0.9119 0.9087 0.9055 0.9023 0.8991 0.8959 0.8927 ... ]
    YData: [2.4960 5.5109 7.1941 8.1262 8.7112 9.1073 9.3805 9.5741 9.7033 9.7903 9.8418 9.8647 9.8657 9.8492 9.8191 9.7782 9.7288 9.6716 9.6103 9.5442 9.4770 9.4053 9.3344 9.2621 9.1891 9.1179 ... ]

Show all properties

>> line1.XData(1:10) %For example, display the first 10 x-axis data.

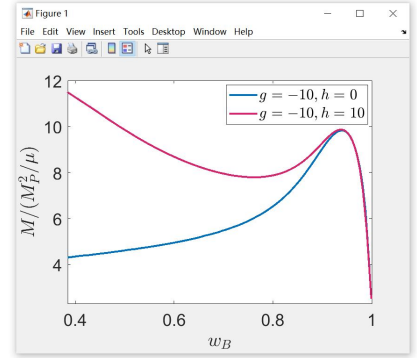
ans =

    0.9991    0.9897    0.9822    0.9760    0.9706    0.9655    0.9607    0.9562    0.9519    0.9477

>> line1.YData(1:10) %For example, display the first 10 y-axis data.

ans =

    2.4960    5.5109    7.1941    8.1262    8.7112    9.1073    9.3805    9.5741    9.7033    9.7903
```



2 2D plots

```
>> uioopen('6.fig',1)%For another example, open the file named '6.fig'.
>> fig=gcf %get the handle
```

```
fig =
```

```
Figure (1) with properties:
```

```
Number: 1
Name: ''
Color: [0.9400 0.9400 0.9400]
Position: [470.3333 52.3333 1200 900]
Units: 'pixels'
```

```
Show all properties
```

```
>> ax=fig.Children %show all objects containing data
```

```
ax =
```

```
18x1 graphics array:
```

```
ColorBar (sw=5.0000)
Axes (sw=2.5000)
ColorBar (sw=1.5750)
Axes (sw=5.0000)
ColorBar (sw=2.5000)
Axes (sw=1.6675)
ColorBar (sw=5.0000)
Axes (sw=2.5000)
ColorBar (sw=1.6675)
ColorBar (sw=5.0000)
Axes (sw=2.5000)
ColorBar (sw=1.7610)
```

```
>> %The ColorBar contains the maximum and minimum values of each 2D figure. However, they are not crucial, as we can also extract them directly from the 2D figures.
```

```
%The 2D figures are labeled in the inverse order from how they are displayed.
```

```
fig9=ax(2)%extract data from the last 2D figure
```

```
fig9 =
```

```
Axes (sw=5.0000) with properties:
```

```
XLim: [-2 2]
YLim: [-2 2]
XScale: 'linear'
YScale: 'linear'
GridLineStyle: '-'
Position: [0.6916 0.1100 0.1587 0.2032]
Units: 'normalized'
```

```
Show all properties
```

```
>> img=fig9.Children%show all objects containing data
```

```
img =
```

```
2x1 graphics array:
```

```
Scatter
Image
```

```
>> img(1) %extract position of the scatter
```

```
ans =
```

```
Scatter with properties:
```

```
Marker: 'o'
MarkerEdgeColor: 'none'
MarkerFaceColor: 'flat'
LineWidth: 0.5000
XData: 0.2000
YData: 0
SizeData: 20
CData: [1 0 0]
```

```
Show all properties
```

```
>> %The values of XData and YData represent the coordinates of the scatter plot.
```

```
>> img(2) %extract data from 2D figure
```

```
ans =
```

```
Image with properties:
```

```
CData: [21x21 double]
CDataMapping: 'scaled'
```

```
Show all properties
```

```
>> img(2).CData(1:3,1:3) %display some z-data located at the bottom-left of the 2D figure
```

```
ans =
```

```
0.9926 0.9919 0.9912
0.9927 0.9920 0.9912
0.9929 0.9921 0.9913
```

