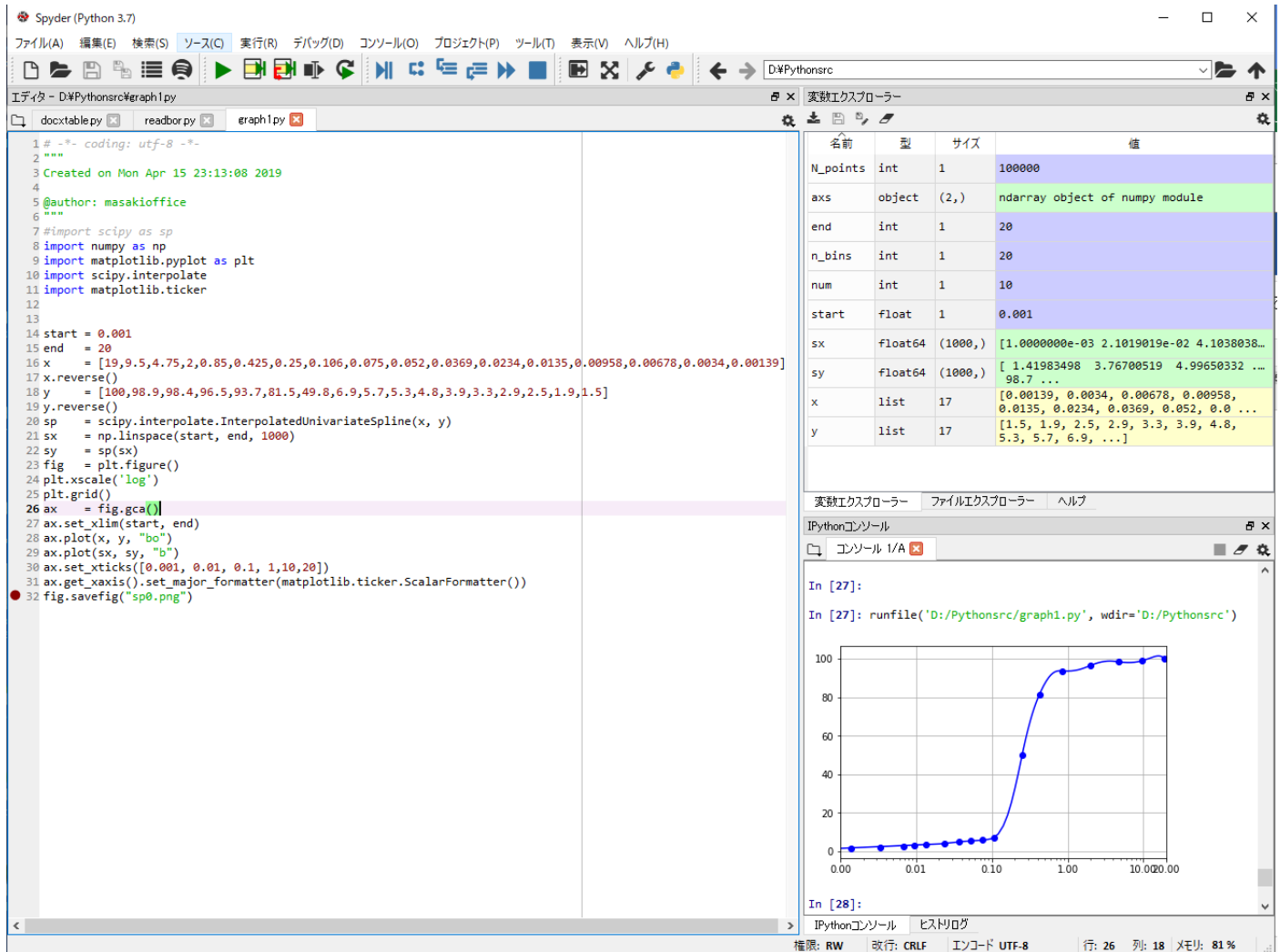


ひとり情シスのIです。

今日は、Python で粒径加積曲線を作ってみます。

間違っていないが、どうもいま一つです。



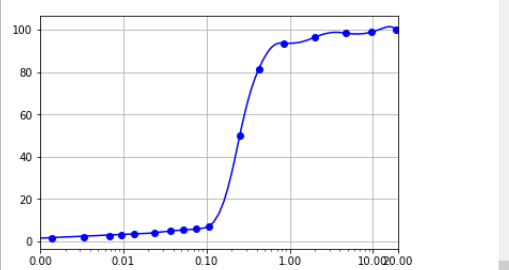
The screenshot shows the Spyder Python IDE interface. The main editor displays a Python script for generating a cumulative distribution function (CDF) plot of particle sizes. The script uses numpy, scipy, and matplotlib. The plot shows a curve that rises sharply between 0.1 and 1.0 on a logarithmic x-axis, reaching a plateau near 100% at higher particle sizes.

```
1 #-*- coding: utf-8 -*-
2 """
3 Created on Mon Apr 15 23:13:08 2019
4
5 @author: masakioffice
6 """
7 #import scipy as sp
8 import numpy as np
9 import matplotlib.pyplot as plt
10 import scipy.interpolate
11 import matplotlib.ticker
12
13
14 start = 0.001
15 end = 20
16 x = [19,9.5,4.75,2,0.85,0.425,0.25,0.106,0.075,0.052,0.0369,0.0234,0.0135,0.00958,0.00678,0.0034,0.00139]
17 x.reverse()
18 y = [100,98.9,98.4,96.5,93.7,81.5,49.8,6.9,5.7,5.3,4.8,3.9,3.3,2.9,2.5,1.9,1.5]
19 y.reverse()
20 sp = scipy.interpolate.InterpolatedUnivariateSpline(x, y)
21 sx = np.linspace(start, end, 1000)
22 sy = sp(sx)
23 fig = plt.figure()
24 plt.xscale('log')
25 plt.grid()
26 ax = fig.gca()
27 ax.set_xlim(start, end)
28 ax.plot(x, y, "bo")
29 ax.plot(sx, sy, "b")
30 ax.set_xticks([0.001, 0.01, 0.1, 1, 10, 20])
31 ax.get_xaxis().set_major_formatter(matplotlib.ticker.ScalarFormatter())
32 fig.savefig("sp0.png")
```

名前	型	サイズ	値
N_points	int	1	100000
axs	object	(2,)	ndarray object of numpy module
end	int	1	20
n_bins	int	1	20
num	int	1	10
start	float	1	0.001
sx	float64	(1000,)	[1.0000000e-03 2.1019019e-02 4.1038038...
sy	float64	(1000,)	[1.41983498 3.76700519 4.99650332 ...
x	list	17	[0.00139, 0.0034, 0.00678, 0.00958, 0.0135, 0.0234, 0.0369, 0.052, 0.0...
y	list	17	[1.5, 1.9, 2.5, 2.9, 3.3, 3.9, 4.8, 5.3, 5.7, 6.9, ...]

Console output:

```
In [27]:
In [27]: runfile('D:/Pythonsrc/graph1.py', wdir='D:/Pythonsrc')
```



In [28]:

IPythonコンソール ヒストリログ

権限: RW 改行: CRLF エンコード UTF-8 行: 26 列: 18 メモリ: 81%

今日はこんなところでしょうか。それでは、また明日。(I)