Subject: Slither with matplotlib.mlab.PCA makes IDL crash
Posted by Fabzi on Wed, 25 Jun 2014 14:18:02 GMT
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Hi all,

I am using the Slither dlm (python3.3, linux_x64). I know this is not precisely an IDL question, but does anyone have an idea how to solve the following problem?

The matplotlib.mlab.PCA function (http://matplotlib.org/api/mlab_api.html#) works fine under my python distrib.

I wanted to call it from IDL but this makes IDL chrash quite badly.

After several tests I noticed that it is not in the linkage between IDL and python but rather in python (called from IDL) that the problem comes from. To come to this conclusion, I made a small script.

The following works fine in python3:

import matplotlib.mlab as mlab
import numpy as np
import random as r
n = 50
a = np.array([r.random() for n in range(n)]).reshape(1,n)
b = np.array([r.random() for n in range(n)]).reshape(1,n)
r = np.concatenate((a,b), 0).transpose()
p = mlab.PCA(r)
[/python code]

But the exact same called called from with IDL with the exec() syntax crashes:

py = pyimport('__main__')

py->exec, 'print(sys.version)'
; LOOKS OK: 3.3.2+ (default, Feb 28 2014, 00:56:04)

py->exec, 'import matplotlib.mlab as mlab'
py->exec, 'import numpy as np'
py->exec, 'import random as r'
py->exec, 'n = 50'
py->exec, 'a = np.array([r.random() for n in range(n)]).reshape(1,n)'
py->exec, 'b = np.array([r.random() for n in range(n)]).reshape(1,n)'
py->exec, 'r = np.concatenate((a,b), 0).transpose()'

py->exec, 'p = mlab.PCA(r)' ; it crashes here

Any hint on where I should look at first?

Thanks!

Fabien