

```
In [1]: import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
from mpl_toolkits import mplot3d
import scipy
from scipy import stats
import pyatomdb
import pylab
import timeit
```

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-----
ModuleNotFoundError                                Traceback (most recent call last)
Input In [1], in <cell line: 7>()
      5 import scipy
      6 from scipy import stats
----> 7 import pyatomdb
      8 import pylab
      9 import timeit

ModuleNotFoundError: No module named 'pyatomdb'
```

```
In [2]: pip install pyatomdb
```

Collecting pyatomdb

Using cached pyatomdb-0.10.8.tar.gz (19.4 MB)

Requirement already satisfied: requests in c:\users\ramon\anaconda3\lib\site-packages (from pyatomdb) (2.27.1)

Requirement already satisfied: wget in c:\users\ramon\anaconda3\lib\site-packages (from pyatomdb) (3.2)

Requirement already satisfied: numpy>=1.9.0 in c:\users\ramon\anaconda3\lib\site-packages (from pyatomdb) (1.21.5)

Requirement already satisfied: scipy>=1.4.0 in c:\users\ramon\anaconda3\lib\site-packages (from pyatomdb) (1.7.3)

Requirement already satisfied: joblib in c:\users\ramon\anaconda3\lib\site-packages (from pyatomdb) (1.1.0)

Requirement already satisfied: mock in c:\users\ramon\anaconda3\lib\site-packages (from pyatomdb) (4.0.3)

Requirement already satisfied: astropy in c:\users\ramon\anaconda3\lib\site-packages (from pyatomdb) (5.0.4)

Requirement already satisfied: pycurl in c:\users\ramon\anaconda3\lib\site-packages (from pyatomdb) (7.44.1)

Requirement already satisfied: PyYAML>=3.13 in c:\users\ramon\anaconda3\lib\site-packages (from astropy->pyatomdb) (6.0)

Requirement already satisfied: pyerfa>=2.0 in c:\users\ramon\anaconda3\lib\site-packages (from astropy->pyatomdb) (2.0.0)

Requirement already satisfied: packaging>=19.0 in c:\users\ramon\anaconda3\lib\site-packages (from astropy->pyatomdb) (21.3)

Requirement already satisfied: pyparsing!=3.0.5,>=2.0.2 in c:\users\ramon\anaconda3\lib\site-packages (from packaging>=19.0->astropy->pyatomdb) (3.0.4)

Requirement already satisfied: idna<4,>=2.5 in c:\users\ramon\anaconda3\lib\site-packages (from requests->pyatomdb) (3.3)

Requirement already satisfied: urllib3<1.27,>=1.21.1 in c:\users\ramon\anaconda3\lib\site-packages (from requests->pyatomdb) (1.26.9)

Requirement already satisfied: certifi>=2017.4.17 in c:\users\ramon\anaconda3\lib\site-packages (from requests->pyatomdb) (2021.10.8)

Requirement already satisfied: charset-normalizer~=2.0.0 in c:\users\ramon\anaconda3\lib\site-packages (from requests->pyatomdb) (2.0.4)

Building wheels for collected packages: pyatomdb

Building wheel for pyatomdb (setup.py): started

Building wheel for pyatomdb (setup.py): finished with status 'error'

Running setup.py clean for pyatomdb

Failed to build pyatomdb

Installing collected packages: pyatomdb

Running setup.py install for pyatomdb: started

Running setup.py install for pyatomdb: finished with status 'error'

Note: you may need to restart the kernel to use updated packages.

```

ERROR: Command errored out with exit status 1:
  command: 'C:\Users\Ramon\anaconda3\python.exe' -u -c 'import io, os, sys, setup
tools, tokenize; sys.argv[0] = ''''C:\\Users\\Ramon\\AppData\\Local\\Temp\\pip-in
stall-osod6ots\\pyatomdb_b7587e93d9a0439a8e5e5c5cb003308f\\setup.py''''; __file__
= ''''C:\\Users\\Ramon\\AppData\\Local\\Temp\\pip-install-osod6ots\\pyatomdb_b7587
e93d9a0439a8e5e5c5cb003308f\\setup.py''''; f = getattr(tokenize, ''''open'''' , o
pen)(__file__) if os.path.exists(__file__) else io.StringIO('''''from setuptools i
mport setup; setup()''''');code = f.read().replace('''''\r\n'''' , ''''\n''''');
f.close();exec(compile(code, __file__, ''''exec''''))' bdist_wheel -d 'C:\Users
\Ramon\AppData\Local\Temp\pip-wheel-km4q961w'
  cwd: C:\Users\Ramon\AppData\Local\Temp\pip-install-osod6ots\pyatomdb_b7587e
93d9a0439a8e5e5c5cb003308f\
  Complete output (27 lines):
  running bdist_wheel
  running build
  running build_py
  creating build
  creating build\lib.win-amd64-3.9
  creating build\lib.win-amd64-3.9\pyatomdb
  copying pyatomdb\apec.py -> build\lib.win-amd64-3.9\pyatomdb
  copying pyatomdb\atomdb.py -> build\lib.win-amd64-3.9\pyatomdb
  copying pyatomdb\atomic.py -> build\lib.win-amd64-3.9\pyatomdb
  copying pyatomdb\const.py -> build\lib.win-amd64-3.9\pyatomdb
  copying pyatomdb\spectrum.py -> build\lib.win-amd64-3.9\pyatomdb
  copying pyatomdb\test_dep.py -> build\lib.win-amd64-3.9\pyatomdb
  copying pyatomdb\util.py -> build\lib.win-amd64-3.9\pyatomdb
  copying pyatomdb\__init__.py -> build\lib.win-amd64-3.9\pyatomdb
  creating build\lib.win-amd64-3.9\tests
  copying tests\test1.py -> build\lib.win-amd64-3.9\tests
  copying tests\__init__.py -> build\lib.win-amd64-3.9\tests
  running build_ext
  building 'linear_approx' extension
  creating build\temp.win-amd64-3.9
  creating build\temp.win-amd64-3.9\Release
  "C:\Program Files\Microsoft Visual Studio\2022\Community\VC\Tools\MSVC\14.31.311
03\bin\HostX86\x64\cl.exe" /c /nologo /O2 /W3 /GL /DNDEBUG /MD -DMAJOR_VERSION=1 -
DMINOR_VERSION=0 -IC:\Users\Ramon\anaconda3\include -IC:\Users\Ramon\anaconda3\Inc
lude "-IC:\Program Files\Microsoft Visual Studio\2022\Community\VC\Tools\MSVC\14.3
1.31103\ATLMFC\include" "-IC:\Program Files\Microsoft Visual Studio\2022\Community
\VC\Tools\MSVC\14.31.31103\include" "-IC:\Program Files (x86)\Windows Kits\10\incl
ude\10.0.19041.0\ucrt" "-IC:\Program Files (x86)\Windows Kits\10\include\10.0.190
41.0\shared" "-IC:\Program Files (x86)\Windows Kits\10\include\10.0.19041.0\um"
"-IC:\Program Files (x86)\Windows Kits\10\include\10.0.19041.0\winrt" "-IC:\Prog
ram Files (x86)\Windows Kits\10\include\10.0.19041.0\cppwinrt" /Tclinear_approx.
c /Fobuild\temp.win-amd64-3.9\Release\linear_approx.obj
  linear_approx.c
  "C:\Program Files\Microsoft Visual Studio\2022\Community\VC\Tools\MSVC\14.31.311
03\bin\HostX86\x64\link.exe" /nologo /INCREMENTAL:NO /LTCG /DLL /MANIFEST:EMBED,ID
=2 /MANIFESTUAC:NO /LIBPATH:C:\Users\Ramon\anaconda3\libs /LIBPATH:C:\Users\Ramon
\anaconda3 /LIBPATH:C:\Users\Ramon\anaconda3\PCbuild\amd64 "/LIBPATH:C:\Program Fi
les\Microsoft Visual Studio\2022\Community\VC\Tools\MSVC\14.31.31103\ATLMFC\lib\x6
4" "/LIBPATH:C:\Program Files\Microsoft Visual Studio\2022\Community\VC\Tools\MSVC
\14.31.31103\lib\x64" "/LIBPATH:C:\Program Files (x86)\Windows Kits\10\lib\10.0.19
041.0\ucrt\x64" "/LIBPATH:C:\Program Files (x86)\Windows Kits\10\lib\10.0.19041.0
\um\x64" /EXPORT:PyInit_linear_approx build\temp.win-amd64-3.9\Release\linear_app
rox.obj /OUT:build\lib.win-amd64-3.9\linear_approx.cp39-win_amd64.pyd /IMPLIB:buil
d\temp.win-amd64-3.9\Release\linear_approx.cp39-win_amd64.lib
  LINK : error LNK2001: símbolo externo PyInit_linear_approx sin resolver
  build\temp.win-amd64-3.9\Release\linear_approx.cp39-win_amd64.lib : fatal error
LNK1120: 1 externos sin resolver
  error: command 'C:\\Program Files\\Microsoft Visual Studio\\2022\\Community\\VC
\\Tools\\MSVC\\14.31.31103\\bin\\HostX86\\x64\\link.exe' failed with exit code 112
0
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```

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ERROR: Failed building wheel for pyatomdb
ERROR: Command errored out with exit status 1:
  command: 'C:\Users\Ramon\anaconda3\python.exe' -u -c 'import io, os, sys, set
uptools, tokenize; sys.argv[0] = ''''C:\\Users\\Ramon\\AppData\\Local\\Temp\\pip-
install-osod6ots\\pyatomdb_b7587e93d9a0439a8e5e5c5cb003308f\\setup.py''''; __file
__ = ''''C:\\Users\\Ramon\\AppData\\Local\\Temp\\pip-install-osod6ots\\pyatomdb_b75
87e93d9a0439a8e5e5c5cb003308f\\setup.py''''; f = getattr(tokenize, ''''open''''
, open)(__file__) if os.path.exists(__file__) else io.StringIO('''''from setuptools
import setup; setup()'''''); code = f.read().replace('''''\r\n''''', ''''\n'''');
f.close(); exec(compile(code, __file__, ''''exec''''))' install --record 'C:\User
s\Ramon\AppData\Local\Temp\pip-record-hq7ghmu\install-record.txt' --single-versio
n-externally-managed --compile --install-headers 'C:\Users\Ramon\anaconda3\Include
\pyatomdb'
  cwd: C:\Users\Ramon\AppData\Local\Temp\pip-install-osod6ots\pyatomdb_b758
7e93d9a0439a8e5e5c5cb003308f\
  Complete output (29 lines):
  running install
  C:\Users\Ramon\anaconda3\lib\site-packages\setuptools\command\install.py:34: S
etuptoolsDeprecationWarning: setup.py install is deprecated. Use build and pip and
other standards-based tools.
    warnings.warn(
  running build
  running build_py
  creating build
  creating build\lib.win-amd64-3.9
  creating build\lib.win-amd64-3.9\pyatomdb
  copying pyatomdb\apec.py -> build\lib.win-amd64-3.9\pyatomdb
  copying pyatomdb\atomdb.py -> build\lib.win-amd64-3.9\pyatomdb
  copying pyatomdb\atomic.py -> build\lib.win-amd64-3.9\pyatomdb
  copying pyatomdb\const.py -> build\lib.win-amd64-3.9\pyatomdb
  copying pyatomdb\spectrum.py -> build\lib.win-amd64-3.9\pyatomdb
  copying pyatomdb\test_dep.py -> build\lib.win-amd64-3.9\pyatomdb
  copying pyatomdb\util.py -> build\lib.win-amd64-3.9\pyatomdb
  copying pyatomdb\__init__.py -> build\lib.win-amd64-3.9\pyatomdb
  creating build\lib.win-amd64-3.9\tests
  copying tests\test1.py -> build\lib.win-amd64-3.9\tests
  copying tests\__init__.py -> build\lib.win-amd64-3.9\tests
  running build_ext
  building 'linear_approx' extension
  creating build\temp.win-amd64-3.9
  creating build\temp.win-amd64-3.9\Release
  "C:\Program Files\Microsoft Visual Studio\2022\Community\VC\Tools\MSVC\14.31.3
1103\bin\HostX86\x64\cl.exe" /c /nologo /O2 /W3 /GL /DNDEBUG /MD -DMAJOR_VERSION=1
-DMINOR_VERSION=0 -IC:\Users\Ramon\anaconda3\include -IC:\Users\Ramon\anaconda3\In
clude "-IC:\Program Files\Microsoft Visual Studio\2022\Community\VC\Tools\MSVC\14.
31.31103\ATLMFC\include" "-IC:\Program Files\Microsoft Visual Studio\2022\Communit
y\VC\Tools\MSVC\14.31.31103\include" "-IC:\Program Files (x86)\Windows Kits\10\inc
lude\10.0.19041.0\ucrt" "-IC:\Program Files (x86)\Windows Kits\10\include\10.0.19
041.0\shared" "-IC:\Program Files (x86)\Windows Kits\10\include\10.0.19041.0\um
" "-IC:\Program Files (x86)\Windows Kits\10\include\10.0.19041.0\winrt" "-IC:\P
rogram Files (x86)\Windows Kits\10\include\10.0.19041.0\cppwinrt" /Tclinear_appr
ox.c /Fobuild\temp.win-amd64-3.9\Release\linear_approx.obj
  linear_approx.c
  "C:\Program Files\Microsoft Visual Studio\2022\Community\VC\Tools\MSVC\14.31.3
1103\bin\HostX86\x64\link.exe" /nologo /INCREMENTAL:NO /LTCG /DLL /MANIFEST:EMBED,
ID=2 /MANIFESTUAC:NO /LIBPATH:C:\Users\Ramon\anaconda3\libs /LIBPATH:C:\Users\Ramo
n\anaconda3 /LIBPATH:C:\Users\Ramon\anaconda3\PCbuild\amd64 "/LIBPATH:C:\Program F
iles\Microsoft Visual Studio\2022\Community\VC\Tools\MSVC\14.31.31103\ATLMFC\lib\x
64" "/LIBPATH:C:\Program Files\Microsoft Visual Studio\2022\Community\VC\Tools\MSV
C\14.31.31103\lib\x64" "/LIBPATH:C:\Program Files (x86)\Windows Kits\10\lib\10.0.1
9041.0\ucrt\x64" "/LIBPATH:C:\Program Files (x86)\Windows Kits\10\lib\10.0.19041.
0\um\x64" /EXPORT:PyInit_linear_approx build\temp.win-amd64-3.9\Release\linear_ap
prox.obj /OUT:build\lib.win-amd64-3.9\linear_approx.cp39-win_amd64.pyd /IMPLIB:bui
ld\temp.win-amd64-3.9\Release\linear_approx.cp39-win_amd64.lib

```

```
LINK : error LNK2001: símbolo externo PyInit_linear_approx sin resolver
build\temp.win-amd64-3.9\Release\linear_approx.cp39-win_amd64.lib : fatal erro
r LNK1120: 1 externos sin resolver
error: command 'C:\\Program Files\\Microsoft Visual Studio\\2022\\Community\\V
C\\Tools\\MSVC\\14.31.31103\\bin\\HostX86\\x64\\link.exe' failed with exit code 11
20
```

```
-----
ERROR: Command errored out with exit status 1: 'C:\\Users\\Ramon\\anaconda3\\python.ex
e' -u -c 'import io, os, sys, setuptools, tokenize; sys.argv[0] = '''C:\\Users
\\Ramon\\AppData\\Local\\Temp\\pip-install-osod6ots\\pyatomdb_b7587e93d9a0439a8e5e
5c5cb003308f\\setup.py''''; __file__='''C:\\Users\\Ramon\\AppData\\Local\\Temp
\\pip-install-osod6ots\\pyatomdb_b7587e93d9a0439a8e5e5c5cb003308f\\setup.py'''';f
= getattr(tokenize, '''open''', open)(__file__) if os.path.exists(__file__) el
se io.StringIO(''''from setuptools import setup; setup()''');code = f.read().re
place('''\r\n''', '''\n''');f.close();exec(compile(code, __file__, '''ex
ec'''))' install --record 'C:\\Users\\Ramon\\AppData\\Local\\Temp\\pip-record-hq7ghhmu
\\install-record.txt' --single-version-externally-managed --compile --install-heade
rs 'C:\\Users\\Ramon\\anaconda3\\Include\\pyatomdb' Check the logs for full command out
put.
```

In [ ]: