Saturday, February 5, 2022

Title: METcalcpy into PyPI

METcalcpy

* Verified metcalcpy name not taken (metplotpy not taken either, no metdatadb, metadata, metdatapy)
* Created PyPI account (name: main, password: see keypassium vault)
* Also create account on testPyPI
* How do I get the package owned by DTCenter????
* Created wheel for METcalcpy v1.0.0:

*python setup.py sdist bdist\_wheel*

A dist directory is created with metcalcpy-1.0.0-py3-none-any.whl and metcalcpy-1.0.0.tar.gz

Run *tar -ztfv metcalcpy-1.0.0.tar.gz* to verify it has all the modules you expect

Run the following to get all available commands from distutils:

*python setup.py —help-commands*

Run twine check on the files created in dist:

t*wine check dist/\**

Everything passed

Uploading package to PyPI:

*twine upload —repository-url* <https://test.pypi.org/legacy/> *dist/\**

Had error in the classifiers, the syntax for Apache license wasn’t what was expected. Went to this page and copied and pasted the license:

<https://pypi.org/classifiers/>

Updated setup.py develop branch:

And committed changes.

Inside of a “basic” conda environment for python 3.6.3, numpy, spicy, scikit-learn, scikit-image, xarray, pip installed pingouin,

pip install -i [https://test.pypi.org/simple](https://test.pypi.org/smple) metcalcpy==1.0.0

Then in a REPL, do simple verification:

*from metcalcpy.util import utils*

help(utils)

utils.round\_half\_up(0.5)

Now install on PyPI:

Starting on a fresh clone:

* remember to go into the main\_v1.0 branch and modify the setup.py classifiers with the correct format for the apache license. Do an actual ‘copy’ from the website using the ‘copy’ button or you may end up with EOL while scanning string literal error
* Don’t forget to do a pip install twine if this isn’t already installed in your conda env

Verify “pass” for the tar file and wheel file (from the METcalcpy root directory)

*twine check dis*t/\*

t*wine upload dist/\**

Enter username and password for PyPI

Fingers crossed…

pip install metcalcpy or pip install metcalcpy==1.0.0

Import inside a REPL works, but warning about an out of date version of pingouin in my conda env.

Now let’s try to upload the latest beta version

Clone the METcalcpy repo

Git branch checkout

Go to Github site, click on the Releases tag to get the full name of the pre-release you want:

click on the release

on the next page look at the top left: Release / v1.1.0-beta5

*git checkout v1.1.0-beta5*

You are now working in a headless state- don’t panic

Modify the setup.py classifiers section with the correct format for the Apache license, etc.

python setup.py sdist bdist\_wheel

twine check dist/\*

*twine upload dist/\**

Provide username and password

Fingers crossed… yay!

*pip install metcalcpy==1.1.0b5*