

STATE OF THE IOOS TOOLS

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LONGER TITLE

The State of IOOS (and some non-IOOS) (Python)
tools (and its 105 repositories!?)

whoami

ocefpar

whoami

ocefpa

- Physical Oceanographer

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ocefpa*f*

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I'll probably have to add "GH Marie Kondo" after this presentation.

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- year 05: CIs maintenance, Data Demo Center(?), new tools(?), packaging.

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Spoiler: our tools are 100% py3k compatible!

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Secret motivation: make year 06 all about new tools and the Data Demo Center!

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- Consolidate similar tools.
- Adding auto-PyPI *sdist* publication.
- Adopt a Release Early Release Often (RERO) policy.
- Write documentation of GH good practices.

IOOS TOOLS “HEALTH METRIC”

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IOOS TOOLS

software	last commit	last release	contributors	py3k testing
compliance-checker	2019-04-24	2019-02-27	28	py37
erddapy	2019-04-21	2019-03-06	3	py37
cc-plugin-glider	2019-02-20	2019-02-20	8	py36
cc-checker-ugrid	2019-01-09	2019-01-09	5	py36
pyoos	2019-02-24	2017-03-30	11	py35
ciso	2019-02-07	2019-02-07	2	py37
cc-plugin-ncei	2019-01-16	2017-10-17	4	py36
sensorml2iso	2018-09-12	2018-08-22	6	py36
odvc	2019-04-27	2018-03-02	3	py37
thredds_crawler	2018-03-16	2018-03-16	5	py36
petulant-bear	2016-02-03	2016-02-03	6	py35
wicken	2016-02-03	2016-02-03	5	py35
qartod	2016-14-14	NA	4	py35
cc-plugin-sgrid	2016-02-04	NA	1	py35

OTHER TOOLS (PYOCEANS)

- gridgeo
- ioos_tools
- pocean-
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There are more [tools in the pyoceans org](#). I only listed those that I know are used by IOOS in some places.

OTHER TOOLS (ASA-RPS)

WARNING: This list is not comprehensive! Also, we are not expecting any action from ASA-RPS! The goal is to identify what tools here are useful to the IOOS community!

OTHER TOOLS (ASA-RPS) LIST

- qartod (not a rare pókemon)
- paegan
- paegan-viz
- paegan-transport
- sci-wms
- thredds_crawler_matlab
- udunitspy (compliance-checker adopted cf-units instead)

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OTHER TOOLS (AXIOM) LIST

- pyncml
- epic2cf
- wera2netcdf
- codar2netcdf
- modflow2netcdf
- gutils (lives in the SECOORA organization)

OTHER TOOLS (AXIOM) CONTINUATION

- `pygc`
- `pngpack`
- `pyaxiom` (predecessor of `pocean-core`)
- `sci-wms` (déjà vu)
- `ioos_qc` (qartod pokemon evolved form)

OTHER-OTHER TOOLS

- MetOffice stack: `iris`, `cartopy`, `nc-time-axis`, and `cf-units`
- PyViz: `bokeh`, `panel`, `hvplot`
- `matplotlib`
- `windrose`
- `folium`
- `geopandas`
- `gsw`
- `utide`

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Feel free to add more in the hackpad.

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Some of these are part of the [PyOpenSci packaging guide](#).

REPOSITORIES

- catalog-docker-base
- catalog-docker-ckan
- catalog-docker-ckan-harvest
- catalog-docker-pycsw
- comt
- comt_1_archive
- comt_2
- configuration-management
- configuration-management-hugo

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<https://repohealth.info/report/pyoceans/python-ctd>

CODE GALLERY



The IOOS Data Demo Center

Code Gallery

Video Tutorials

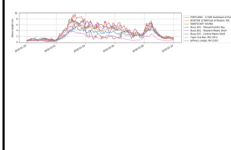
Contact Us

OTHER RESOURCES

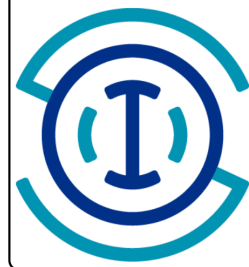
1. Installing the IOOS conda environment
2. Opening netCDF files - hints from AODN
3. Unidata Jupyter notebook gallery
4. Extracting and enriching OBIS data with R
5. USGS-R examples

Code Gallery

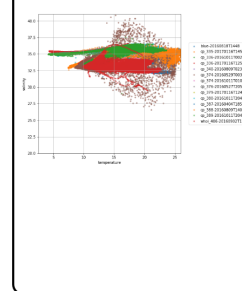
Coastal Ocean Wave Height Assessment



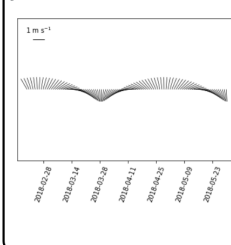
Investigating ocean models skill for sea surface height with IOOS catalog and Python



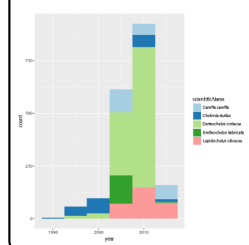
erddapy: a python client/URL builder for ERDDAP



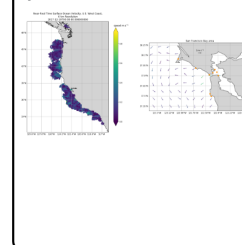
Creating a CF-1.6 timeSeries using pocean



Using r-obistools and r-obis to explore the OBIS database



Fetching data from a CSW catalog with Python tools

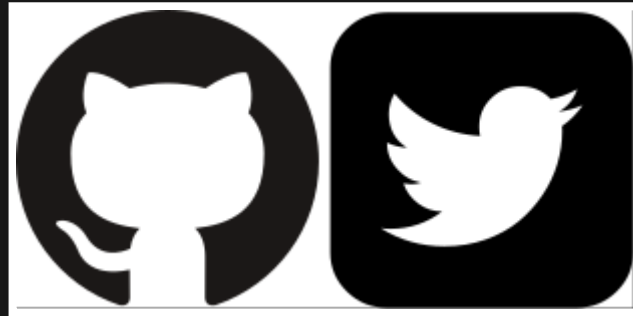


http://ioos.github.io/notebooks_demos/code_gallery

PYVIZ DEMO



END



(ocefpa)

<https://ocefpa.github.io/2019-DMAC>