



What's new and what's next

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What's HoloViz.org?



holo-: whole, complete, entire

HoloViz is a set of compatible tools to make it easier to see and understand your data at *every* stage from discovery to delivery.



Panel



hvPlot



HoloViews



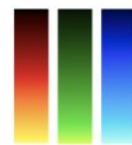
GeoViews



Datashader



Param



Colorcet



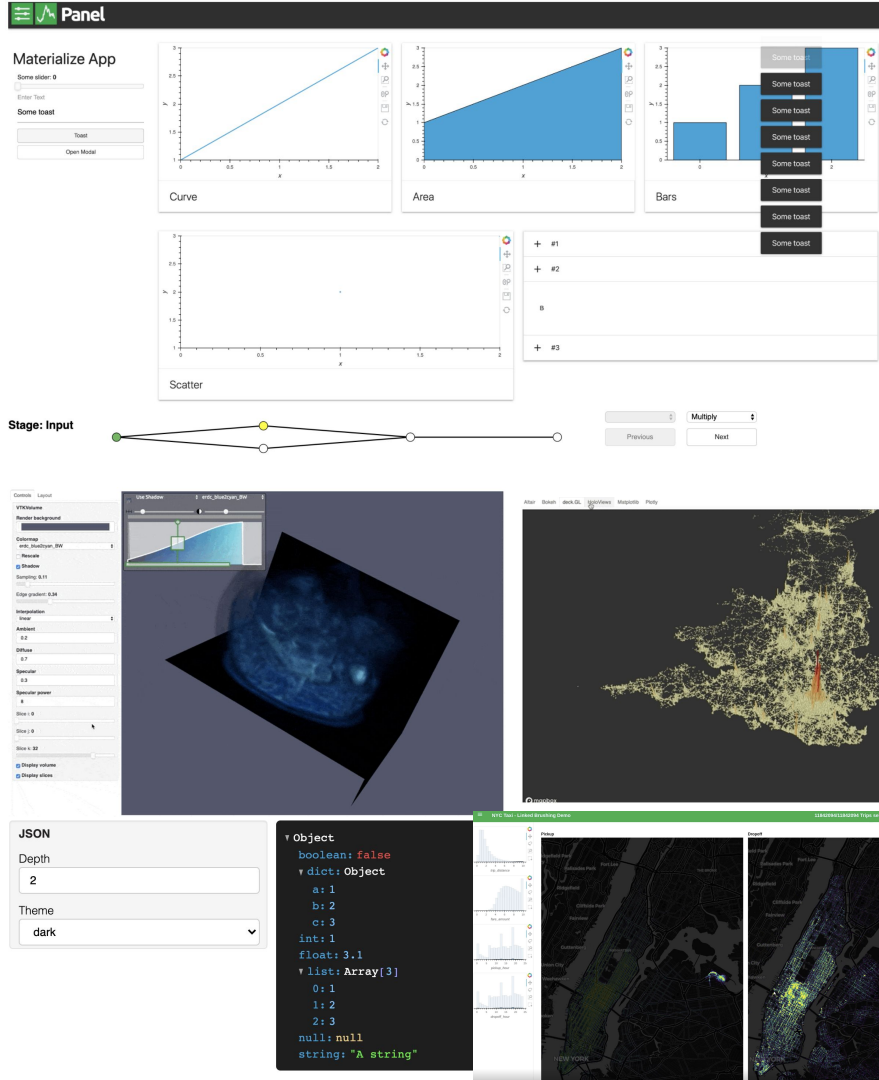
Panel

*Easy apps and dashboards
for any viz library.*

*Fully reactive, Pythonic API
for Jupyter or standalone use*

What's new:

- Now has easy templates for sophisticated apps
- New support for:
 - ipywidgets/voila, flask
 - 3D VTK, Deck.gl
 - responsive layouts, progress indicators, better static linking
 - ACE editor, etc., etc.



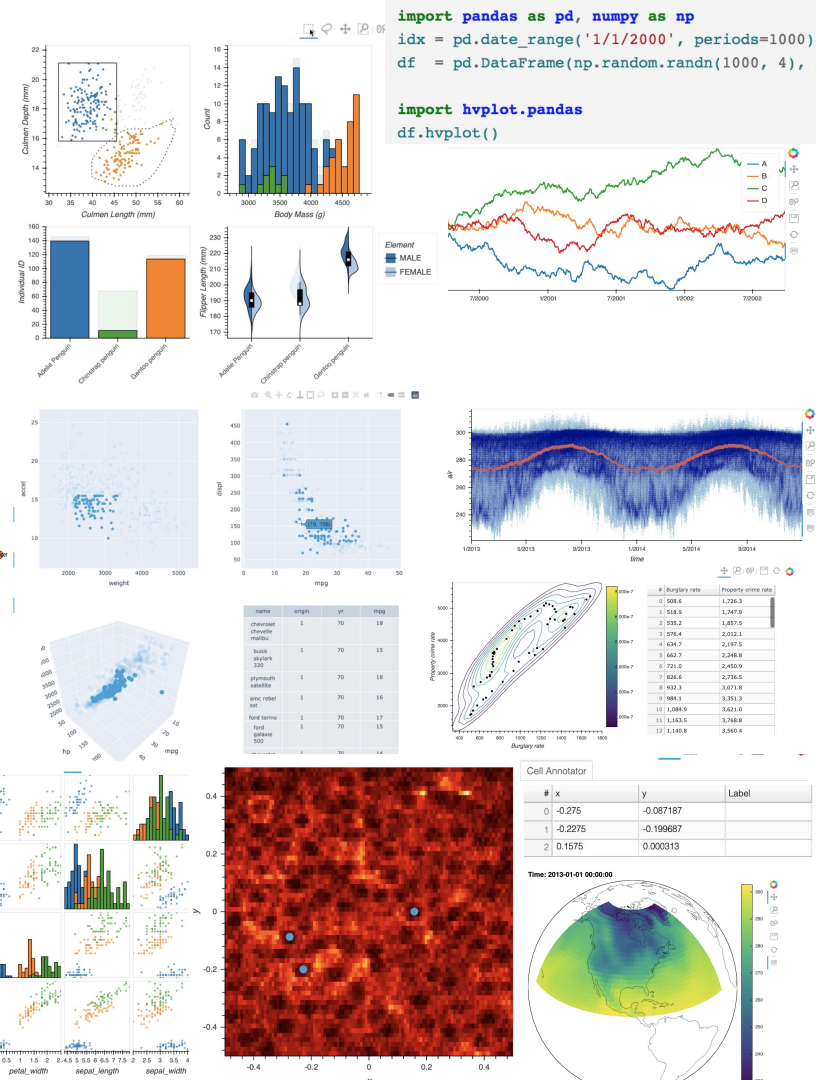


High-level viz.analysis for Bokeh, MPL, Plotly

hvPlot: Interactive plots
from Pandas .plot()

What's new:

- hvPlot now supports cuDF and spatialpandas data (plus pandas, xarray, dask, intake, streamz, geopandas, and networkx)
- New: automatic linked brushing for instant dashboards
- See the holoviz.org tutorial



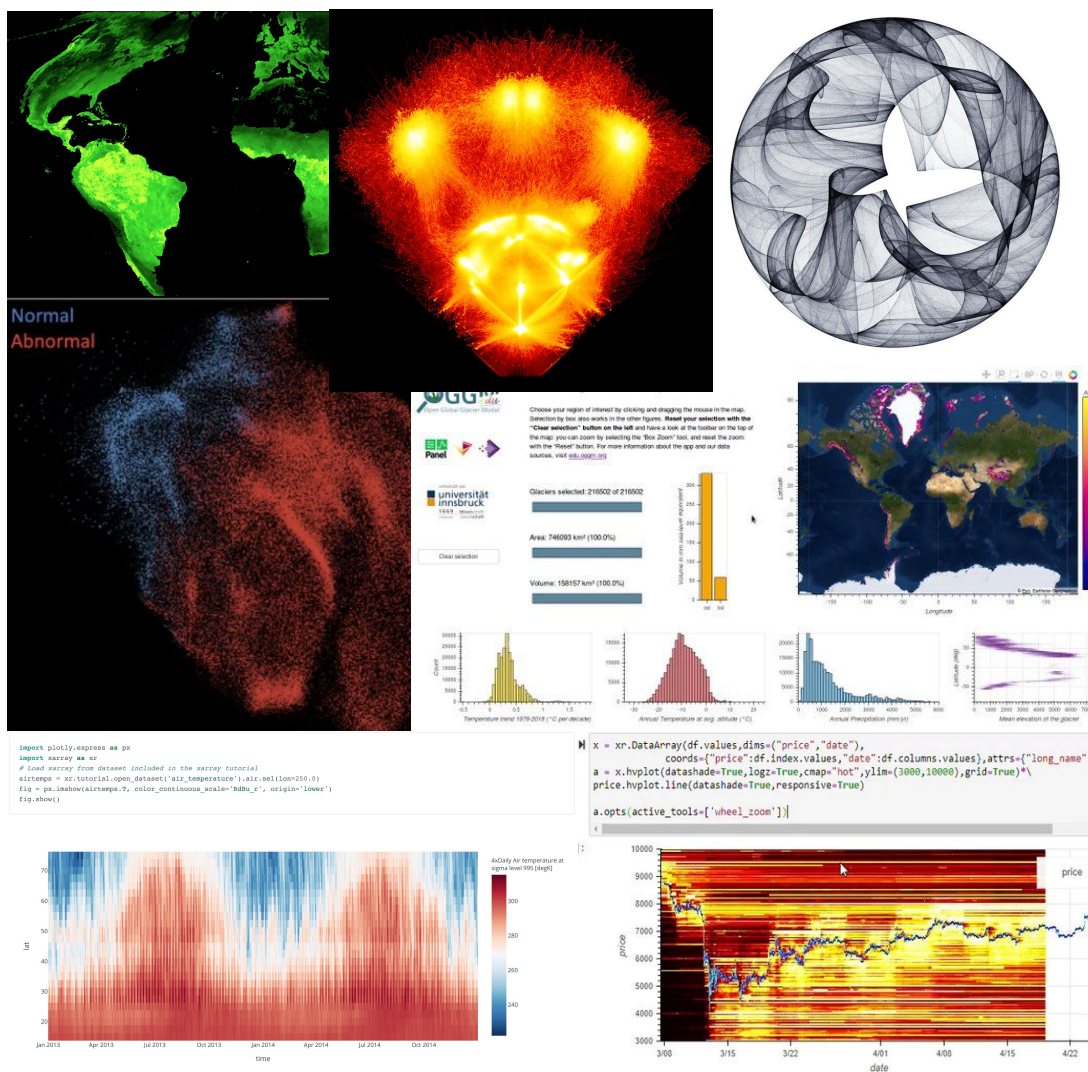


Datashader

Accurate server-side
rendering of the
largest datasets

What's new:

- Major new support for Dask and cuda (GPU) rendering
- Adding to point, line, raster, now renders areas, spikes, quadmeshes, polygons
- All aggregates can now be categorical
- Geo toolbox now pulled out into [xarray-spatial](#)

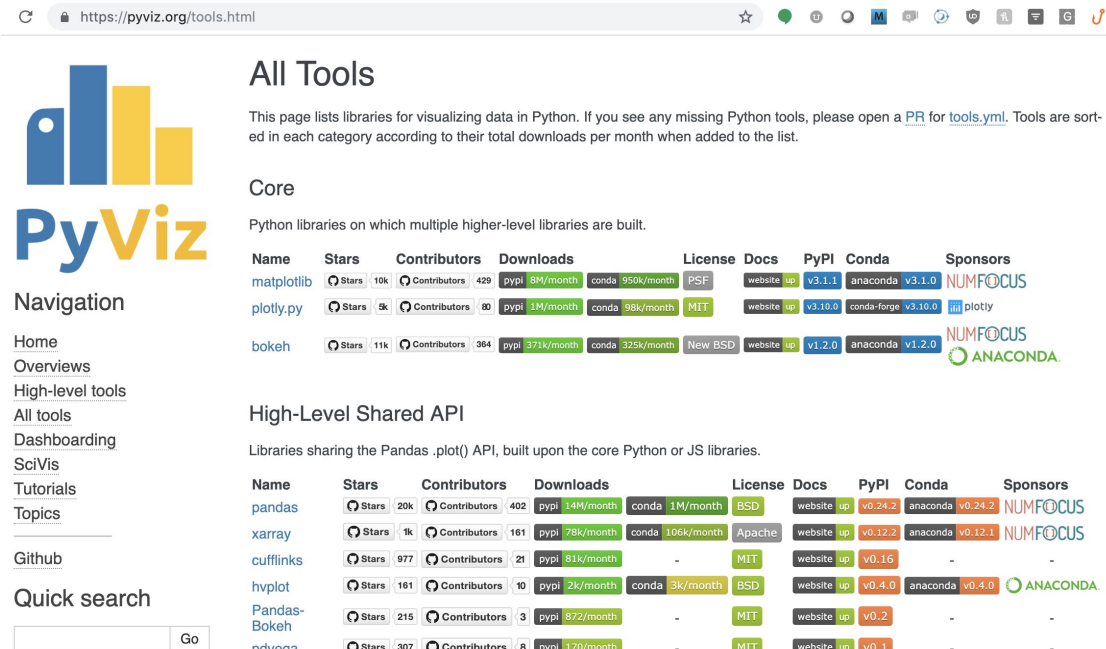


What's next:

- Better docs about deployments, parameters
- Authenticated deployments
- Easier drill-downs and interactive pipelines
- Simpler, more powerful Panel templates
- Datashader-style colormapping in Bokeh
- Anti-aliasing in Datashader
- REST/dashboard monitoring framework
- Ibis (Pythonic SQL) backend for HoloViews, maybe hvPlot
- More examples at examples.pyviz.org

Also see *PyViz.org*

- An open, non-partisan guide to Python Viz libraries.
- Live status of 90+ tools
- Overviews, comparisons, tutorials



https://pyviz.org/tools.html

All Tools

This page lists libraries for visualizing data in Python. If you see any missing Python tools, please open a [PR](#) for [tools.yml](#). Tools are sorted in each category according to their total downloads per month when added to the list.

Core

Python libraries on which multiple higher-level libraries are built.

| Name | Stars | Contributors | Downloads | License | Docs | PyPI | Conda | Sponsors |
|----------------------------|-----------|------------------|-------------------------------------|---------|------------|---------|---------------------|----------------------|
| matplotlib | Stars 10k | Contributors 429 | pypi 8M/month conda 950k/month | PSF | website up | v3.1.1 | anaconda v3.1.0 | NUMFOCUS |
| plotly.py | Stars 5k | Contributors 80 | pypi 1M/month conda 98k/month | MIT | website up | v3.10.0 | conda-forge v3.10.0 | plotly |
| bokeh | Stars 11k | Contributors 364 | pypi 371k/month conda 325k/month | New BSD | website up | v1.2.0 | anaconda v1.2.0 | NUMFOCUS ANACONDA |

High-Level Shared API

Libraries sharing the Pandas .plot() API, built upon the core Python or JS libraries.

| Name | Stars | Contributors | Downloads | License | Docs | PyPI | Conda | Sponsors |
|------------------------------|-----------|------------------|------------------------------------|---------|------------|------------|------------------|----------|
| pandas | Stars 20k | Contributors 402 | pypi 14M/month conda 1M/month | BSD | website up | v0.24.2 | anaconda v0.24.2 | NUMFOCUS |
| xarray | Stars 1k | Contributors 161 | pypi 78k/month conda 106k/month | Apache | website up | v0.12.2 | anaconda v0.12.1 | NUMFOCUS |
| cufflinks | Stars 977 | Contributors 21 | pypi 81k/month | - | MIT | website up | v0.16 | - |
| hvplot | Stars 161 | Contributors 10 | pypi 2k/month conda 3k/month | BSD | website up | v0.4.0 | anaconda v0.4.0 | ANACONDA |
| Pandas-Bokeh | Stars 215 | Contributors 3 | pypi 872/month | - | MIT | website up | v0.2 | - |
| pdevga | Stars 307 | Contributors 8 | pypi 170/month | - | MIT | website up | v0.1 | - |