



Interactive data exploration in a notebook with hvPlot

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About HoloViz and hvPlot

About HoloViz and hvPlot



HoloViz (holoviz.org)

- An ecosystem of OSS libraries dedicated to making **data visualisation** easier in Python
- Focus on the user experience in the browser (notebooks, web apps, pyodide)
- Integrates well with the PyData ecosystem
- Tight relationships with Bokeh

HoloViz-maintained libraries



Panel



hvPlot



HoloViews



GeoViews



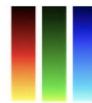
Datashader



Lumen



Param



Colorcet

About HoloViz and hvPlot



HoloViz (holoviz.org)

- A long time in the making 😊 : Param (2003), HoloViews (2013), Datashader (2016), hvPlot (2018)
- Funding model: mostly through consulting contracts at Anaconda
- Growing number of contributors and members
- Background in science and engineering
- Fresh from the oven: set up a governance with a steering committee and sponsored by NumFocus



HoloViz-maintained libraries



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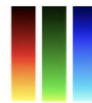
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About HoloViz and hvPlot



hvPlot (hvplot.holoviz.org)

- High-level library for data exploration
- The easiest way to enter the HoloViz ecosystem when it comes to data exploration



.hvplot()

Versatile Pandas-like
.plot() API



.interactive()

Interactive data pipelines
controlled by widgets

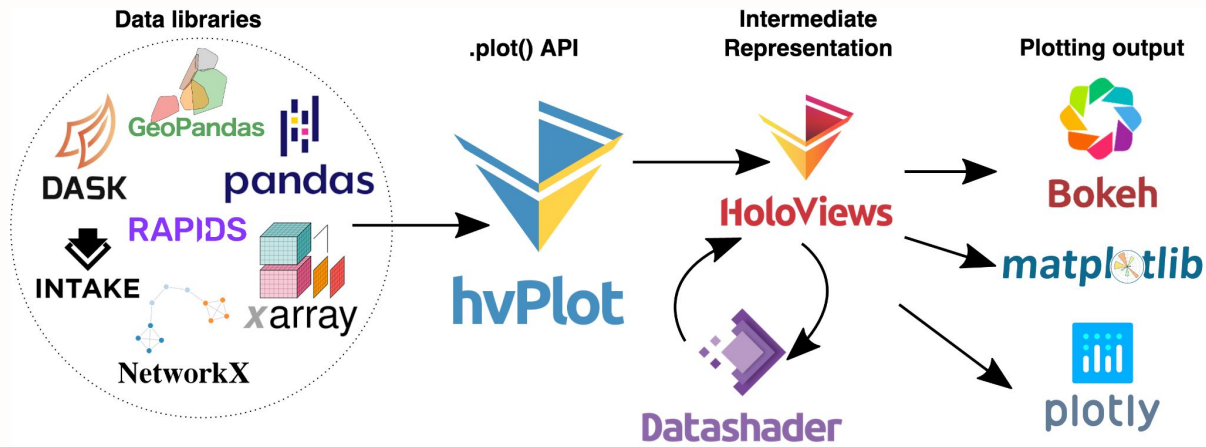


explorer()

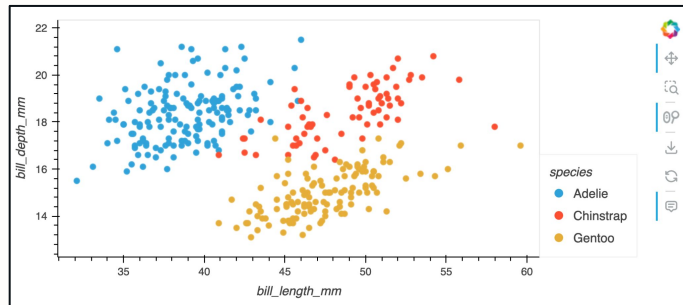
Low-code data explorer

hvPlot: Interactive plotting

hvPlot: Interactive plotting



- Interface with many data structures of the PyData ecosystem
- A simple *flat* API with `.hvplot()`
- Wrapper around HoloViews/Geoviews
- Rendering with Bokeh (default), Matplotlib or Plotly

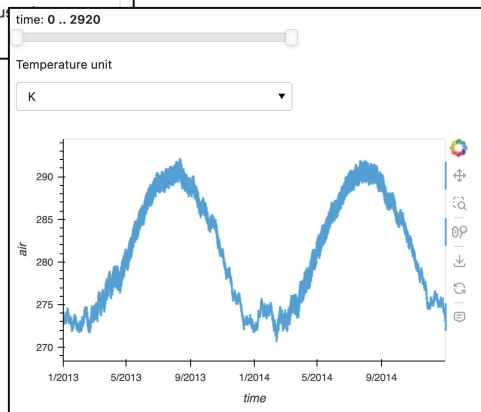


hvPlot: Interactive data pipelines

hvPlot: Interactive data pipelines



- Support for GeoPandas, Pandas, Dask, and Xarray
- Allows replacing parameters in a data pipeline with a widget
- Support for Panel and Jupyter widgets
- Works well with ``hvplot()``

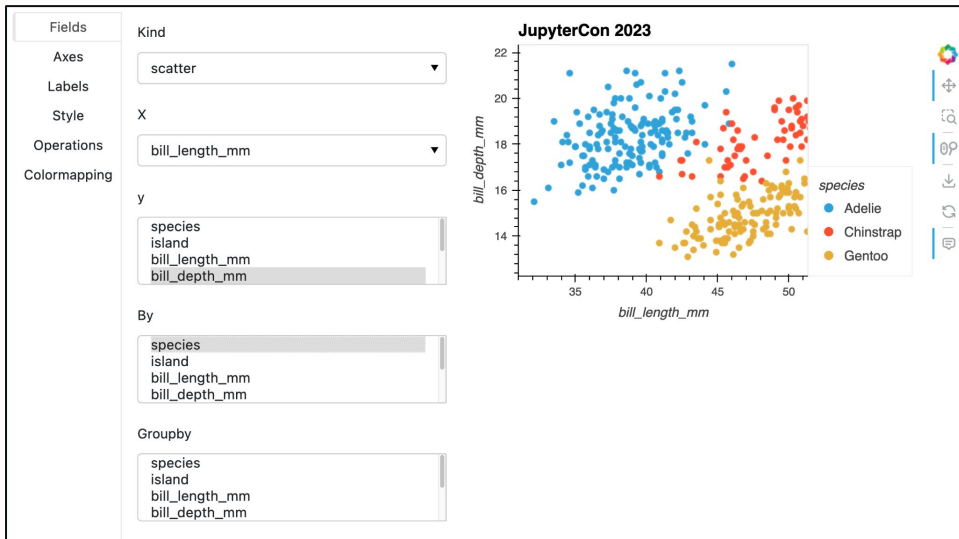


hvPlot: Low-code data explorer

hvPlot: Low-code data explorer



- Support for Pandas. More data structures support to come soon (Xarray, GeoPandas, ...)
- Panel-based app
- Pretty new; not yet very pretty 😊
- Inspired by other data viewers (Perspective, Apache Superset, ...)



HoloViz-maintained libraries



Panel



hvPlot



HoloViews



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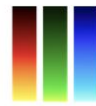
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Thank You!