



# Altair: Matplotlib Alternative

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# What is Altair?

- Python data visualization library
- Developed by Jake Vanderplas and Brian Granger in close collaboration with the UW Interactive Data Lab.
- Jupyter Notebook / Lab tool

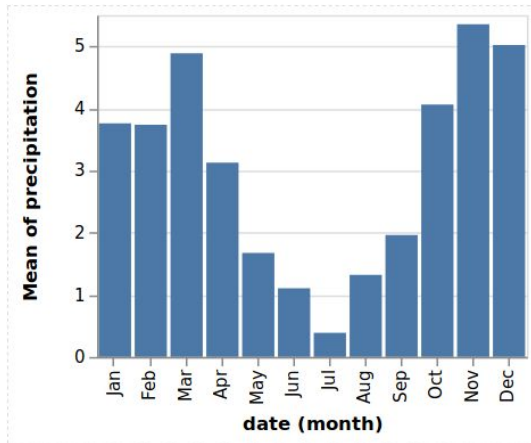


From Github page:

“Altair is the brightest star in the constellation Aquila, and along with Deneb and Vega forms the northern-hemisphere asterism known as the Summer Triangle.”

# Characteristics

- Vega-Lite compiler
  - JSON encoding
- Optimized for use with pandas
- Declarative grammar
- **Interactive**



```
{
  "data": {"url": "data/seattle-weather.csv"},
  "mark": "bar",
  "encoding": {
    "x": {
      "timeUnit": "month",
      "field": "date",
      "type": "ordinal"
    },
    "y": {
      "aggregate": "mean",
      "field": "precipitation",
      "type": "quantitative"
    }
  }
}
```

Instantiate w/ data

Type of chart

The guts

```
[36]: import altair as alt
```

```
alt.Chart(df).mark_point().encode(
```

```
    x=,
```

```
    y=,
```

```
    color=,
```

```
    ??? =
```

```
) .??? (
```

Other fun stuff!

Other fun stuff!

# Thank you!

Try it out.

**Lab:** `conda install -c conda-forge altair vega_datasets`

**Notebook:** `conda install -c conda-forge altair vega_datasets vega`