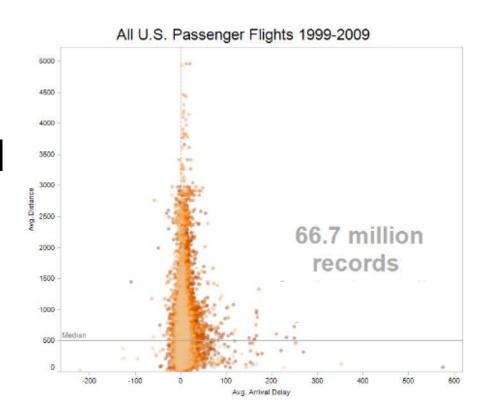
Introducing Tableau

datascience@berkeley

About Tableau

- VizQL graphical query language
- exploration & visual analysis
- Variety of data formats, good with large data



Data Source Connections

- Excel
- Text
- JSON
- Spatial for geo
- Statistical (SPSS, R)

- Tableau Server
- SQL Server
- MySQL
- Redshift
- Oracle and 100s of other data sources!

Combining Data

Joining: Combine data tables from the same source (e.g., Oracle DB)

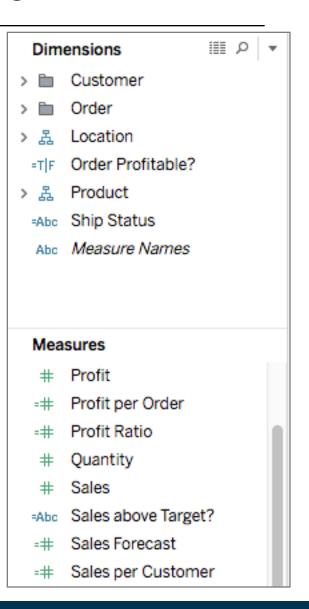
Blending: Combine data from different sources (e.g., Excel and Oracle DB)

Other Language Integrations

- SQL
- R
- Python API (TabPy beta)
- JavaScript API

Dimension: Discrete variables such as dates and categories (names, geographical locations, etc.)

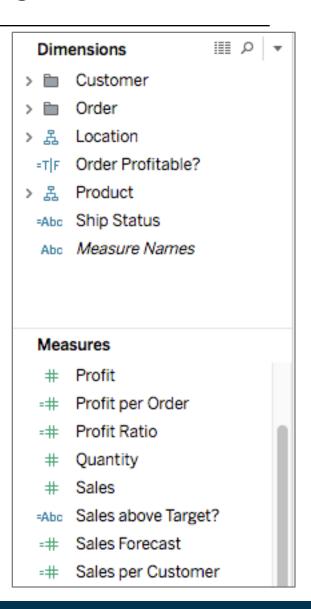
Measure: Data values that can be aggregated (average, sum, count, etc.). Tableau transforms these by default!



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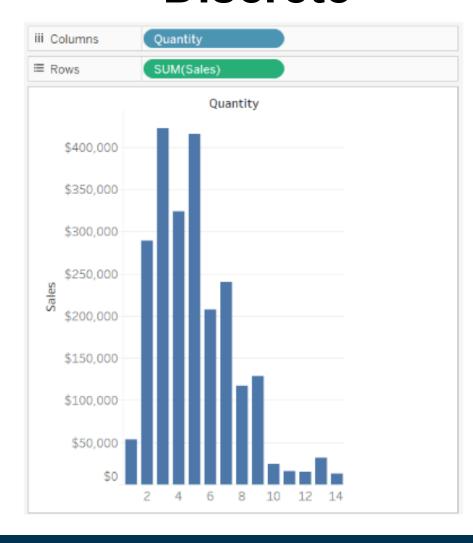


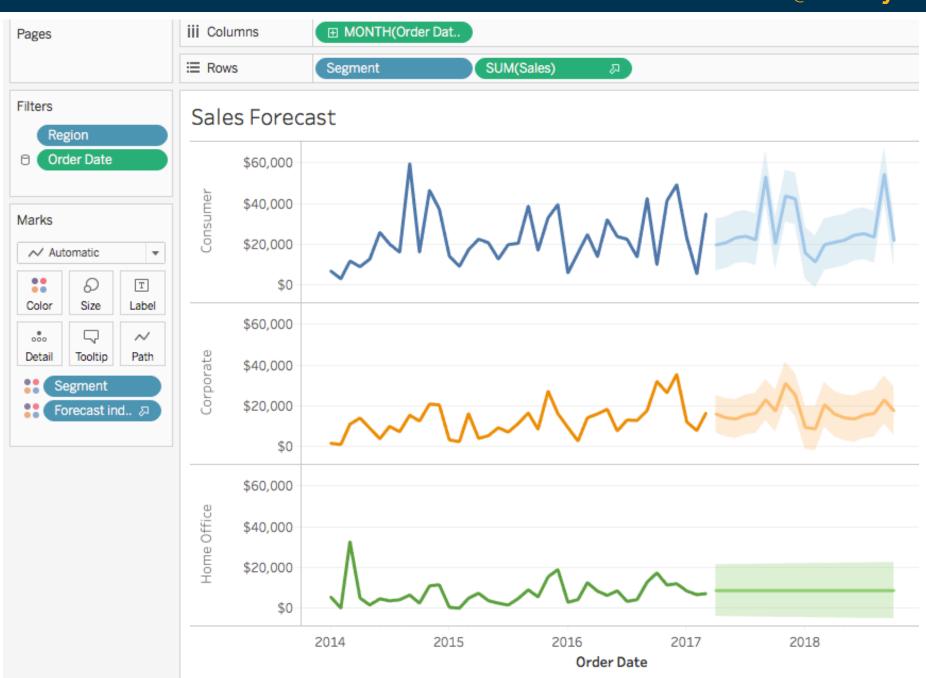
- Dimensions are NOT aggregated, default as Discrete (blue)
- Discrete fields become row or column headings
- Measures are aggregated, default as Continuous (green)
- Continuous fields become axes

Continuous

iii Columns Quantity ≡ Rows SUM(Sales) \$400,000 \$350,000 \$300,000 \$250,000 \$200,000 \$150,000 \$100,000 \$50,000 \$0 0 12 2 10 14 Quantity

Discrete





Exploration Mantras

Be skeptical: What assumptions have been made?

Explore iteratively: Start simple, keep asking questions.

Avoid fixation: Use a variety of graphics to inspect more angles.

Berkeley school of information