INF358:

D3 Temporal Data Visualization
(Ex03 hand-in, Temporal Data Visualization)
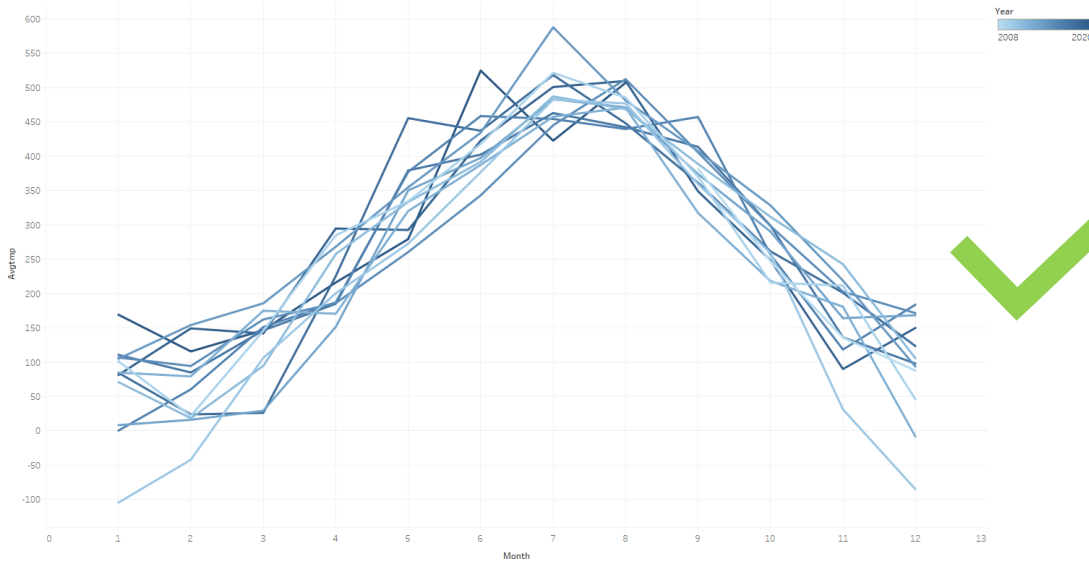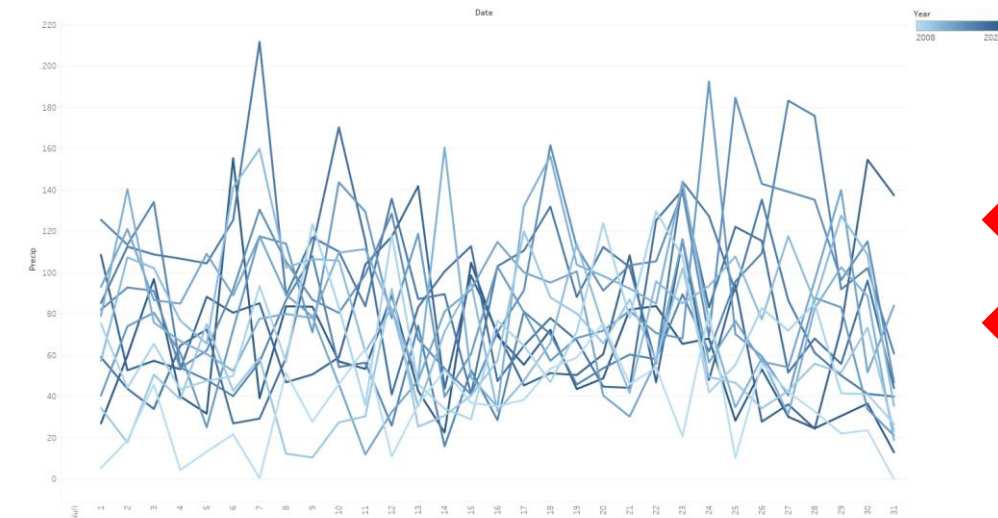
Anders Syvertsen,
21.09.20

- **Rain over time**
- Sum of months are clearer than separate days
- Differentiated by year
- Comparable
- Accuracy importance?

- **Snow per year**
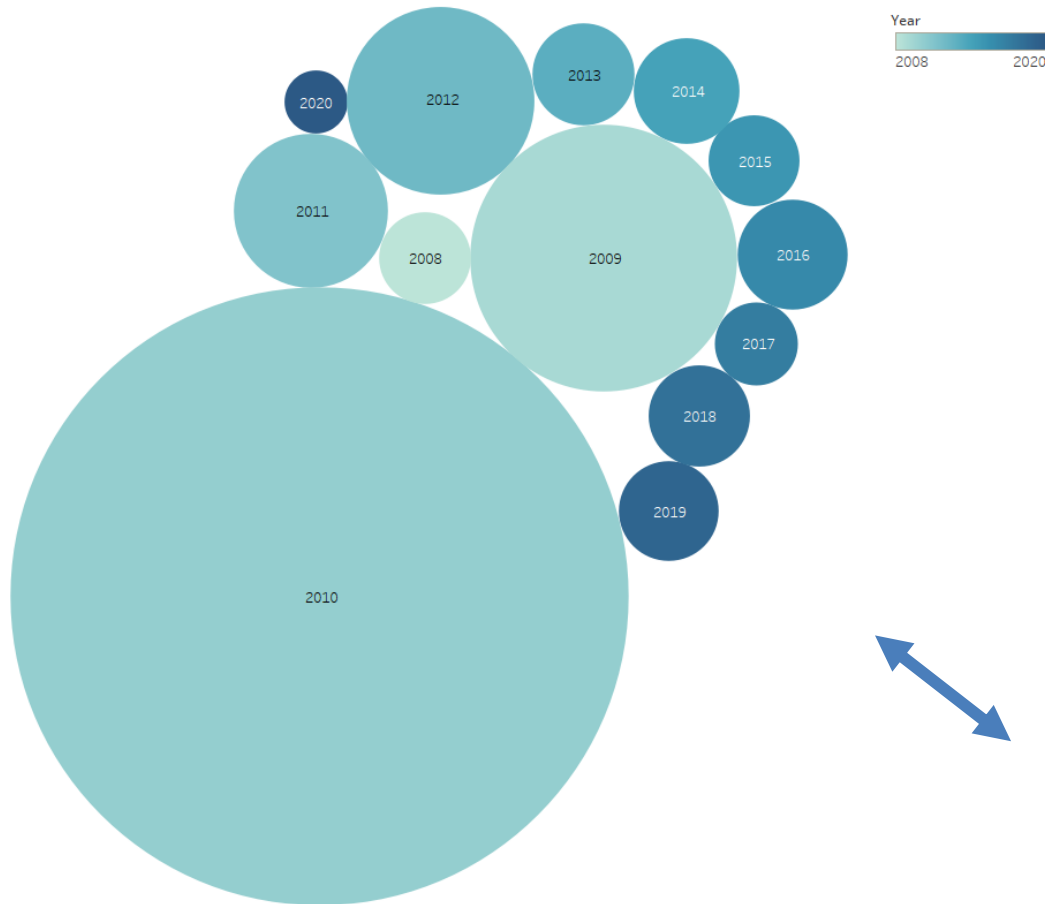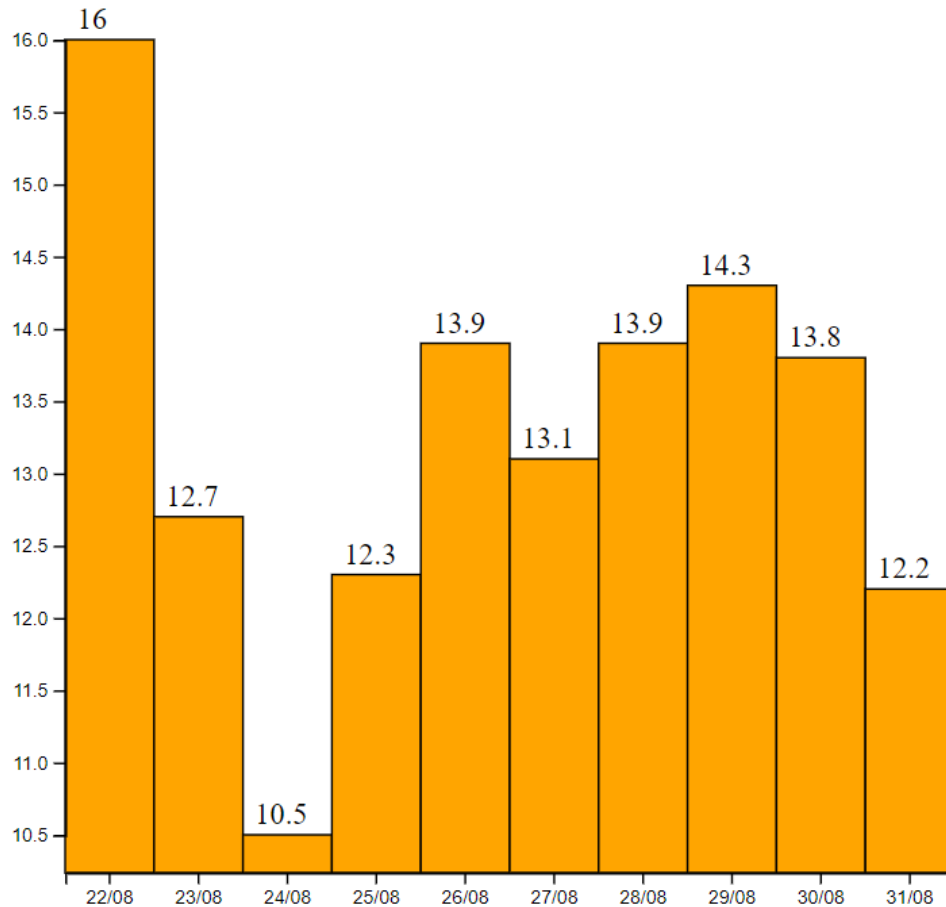- Comparable
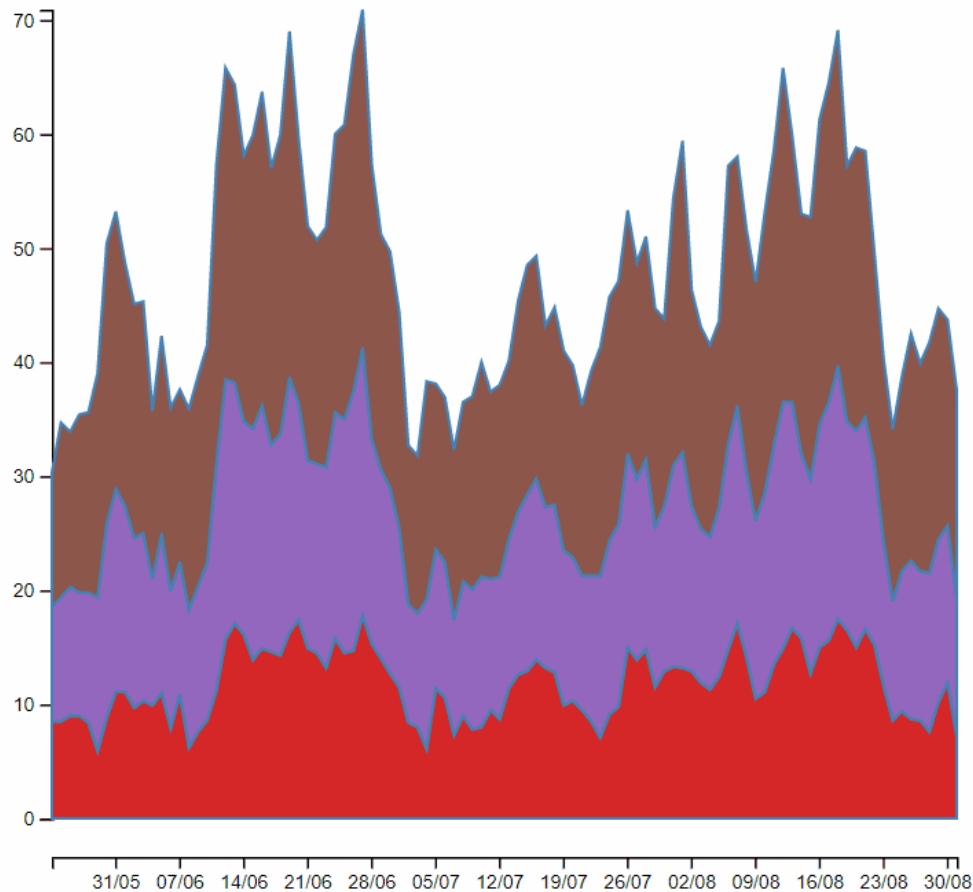- Size channel
- Color channel?
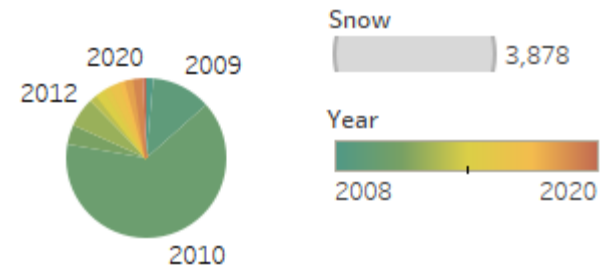
Example graph of something...

- Bar graph
- Data origin uncertain
- For learning purposes
- Axis direction important
  - Also reverse of browser

Min, avg and max temp comparison over a set of 100 days:

- Area graph of min, avg and max temperature
- Interractable by data input
- Comparable
- Terrible choice for temperature readoffs
  - Values on top of other areas gets distorted
  - Y-axis means nothing
- Wrong direction on x-axis with slider
- Unpleasant, but easily distinguishable color scheme

Min, avg and max temp for full dataset in incrementing sets of 10s
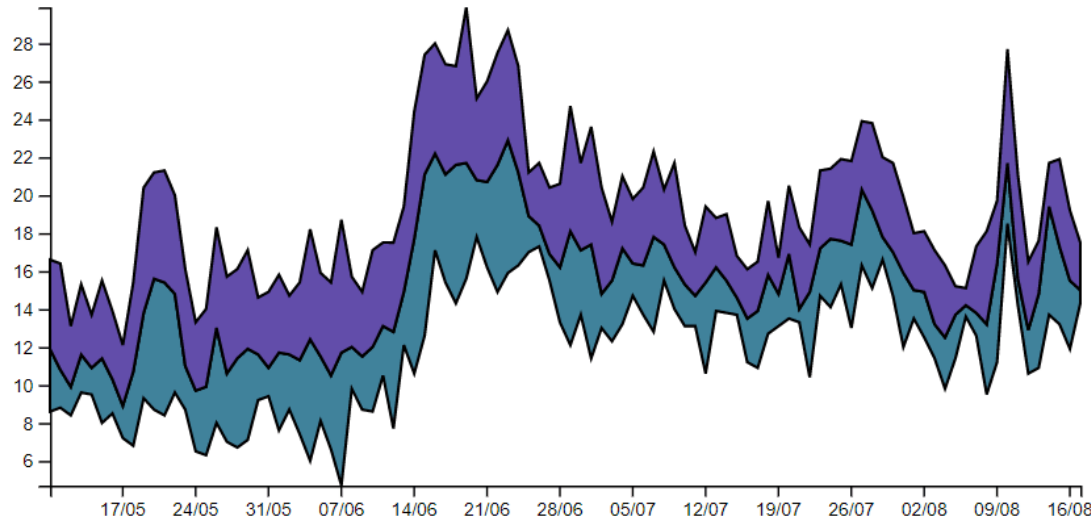
- Area graph of min, avg and max temperature
- Increments dataset with time
- Good for change comparisons
- Morphing animation makes it difficult to see context
- Correct readoff-values
- Would be handy with user control over dataset range.

Snow amount comparison over years (Click on elements to focus)

- Sunburst pie chart with zoom showing amount of snow per time
- Comparable
- Changable scope
  - Minimizes problem with sunburst values being hard to read off the further out from the center you are
- Slightly boring color palette
  - Should've added color specter in leaf values aswell
- Sources:
  - https://observablehq.com/@d3/sunburst
  - https://observablehq.com/@d3/zoomable-sunburst
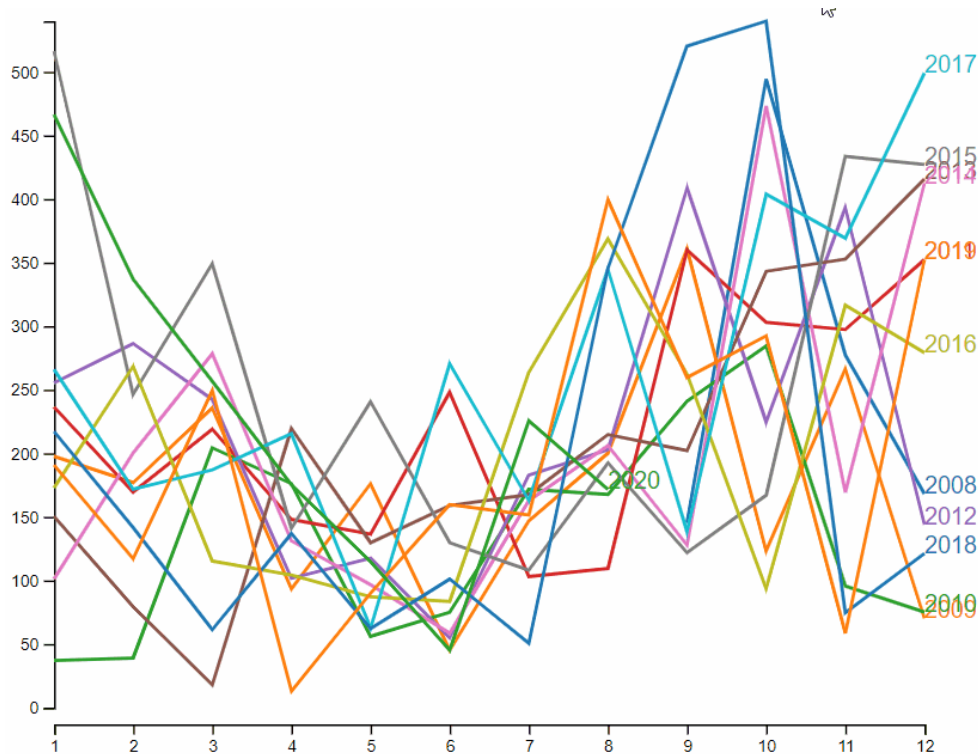
- Line chart with selectable values showing rain amount (sum) per month
- Focusable values
    o Much better readability
- Crazy color scheme
    o Very differentiable colors
    o Difficult to look at
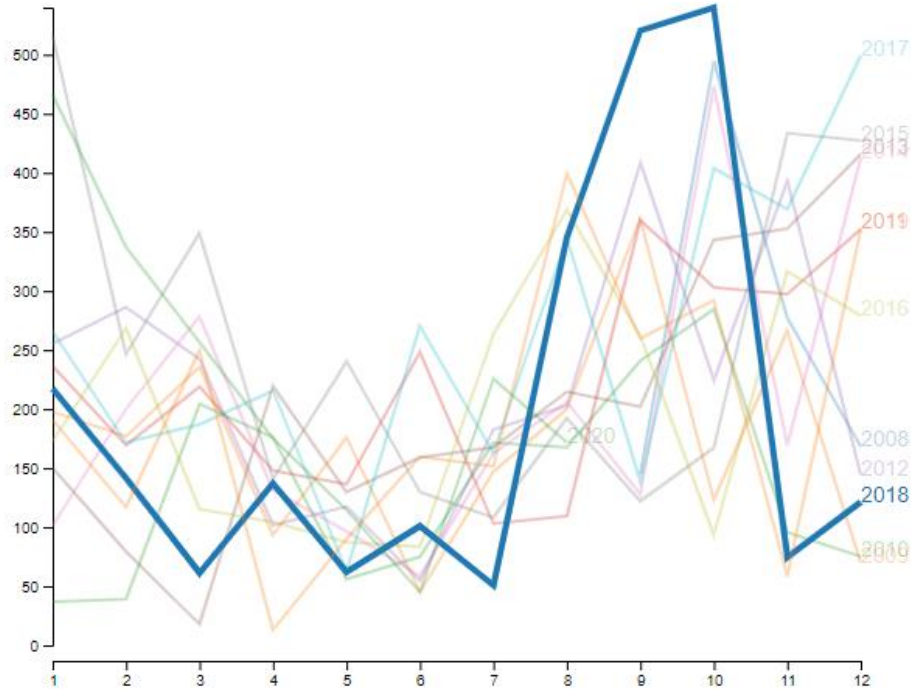- Readable values but sum of rain amount doesn't tell much
- Missing labels for axis
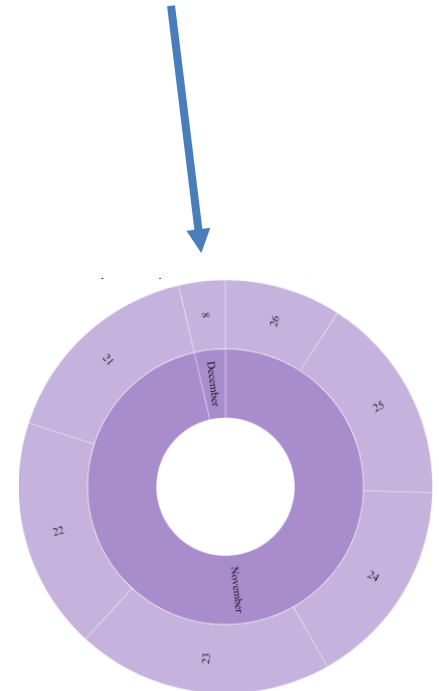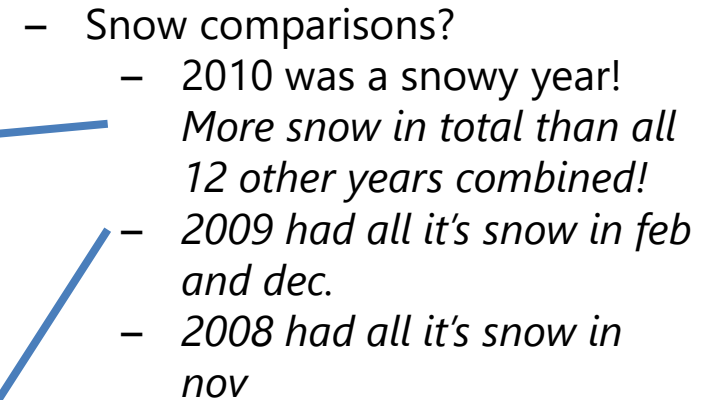
Ex03: Investigations
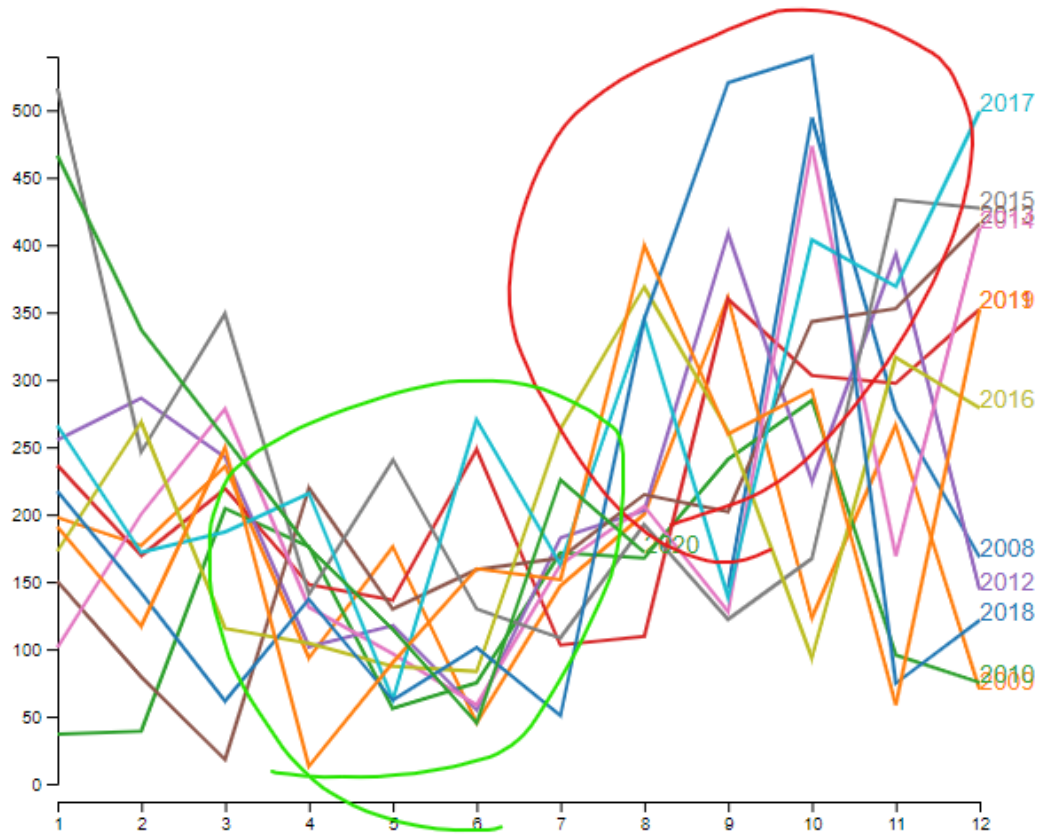
- Which months are wet?
  - Sep, Oct
- Which months are not?
  - May, Jun

– Interessting periods?
  – 2018: Little rain except for sept and oct which has the most out of all years

- Snow comparisons?
  - 2010 was a snowy year! *More snow in total than all 12 other years combined!*
  - *2009 had all it's snow in feb and dec.*
  - *2008 had all it's snow in nov*

Ex03: D3

Check em out:

– Repository: https://github.com/andesyv/d3-data-visualization

– Live examples: https://andesyv.github.io/d3-data-visualization/

Ex02: Wrap-Up

Hours used to work out Ex02: *40(?), 1 week of learning and 1 week of working on exercise*

Lessons learned

- D3!
- A lot of JavaScript and HTML
- Formatting of data

Challenges

- D3
- Formatting and structure of data
- Working environment setup