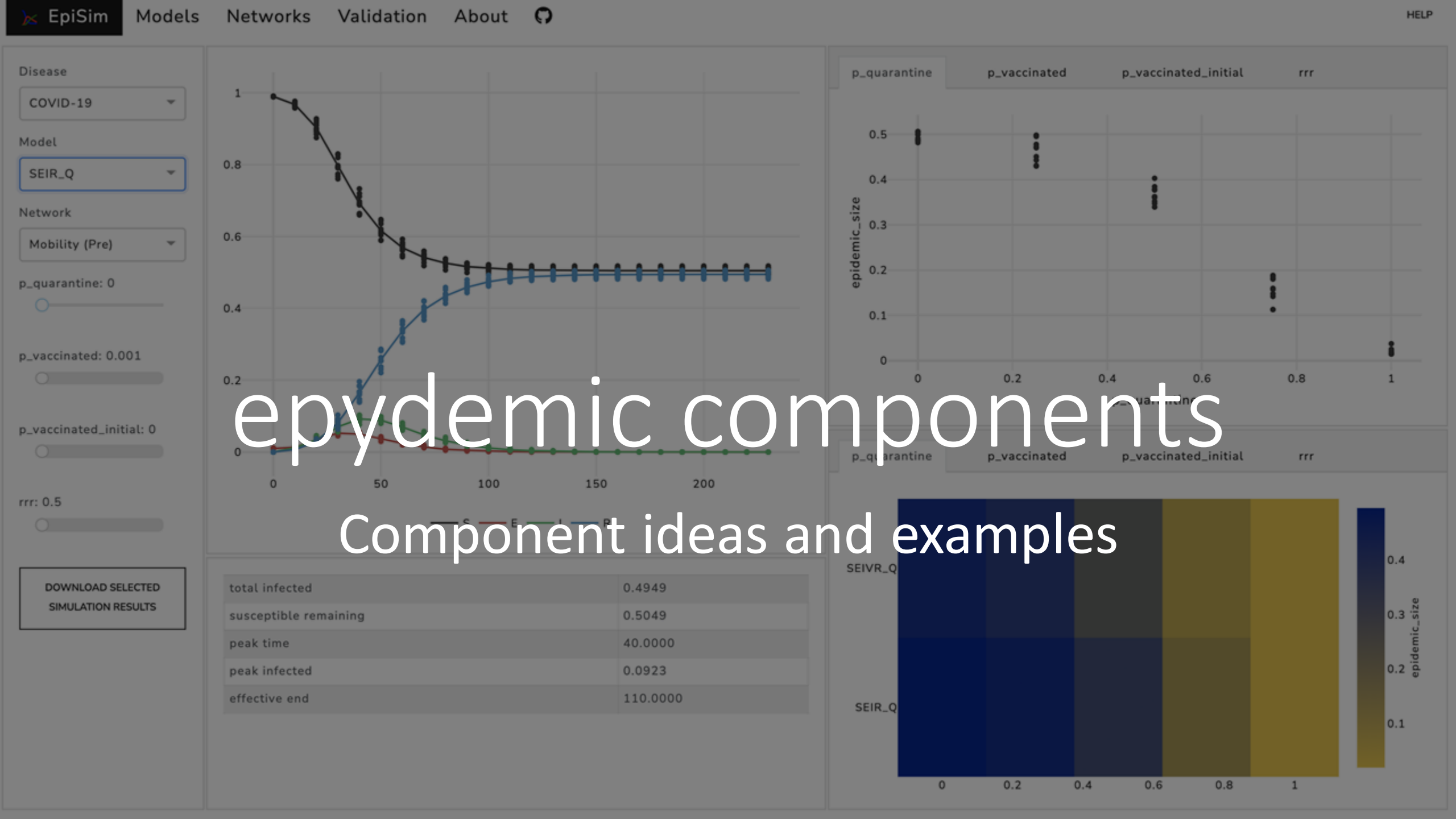


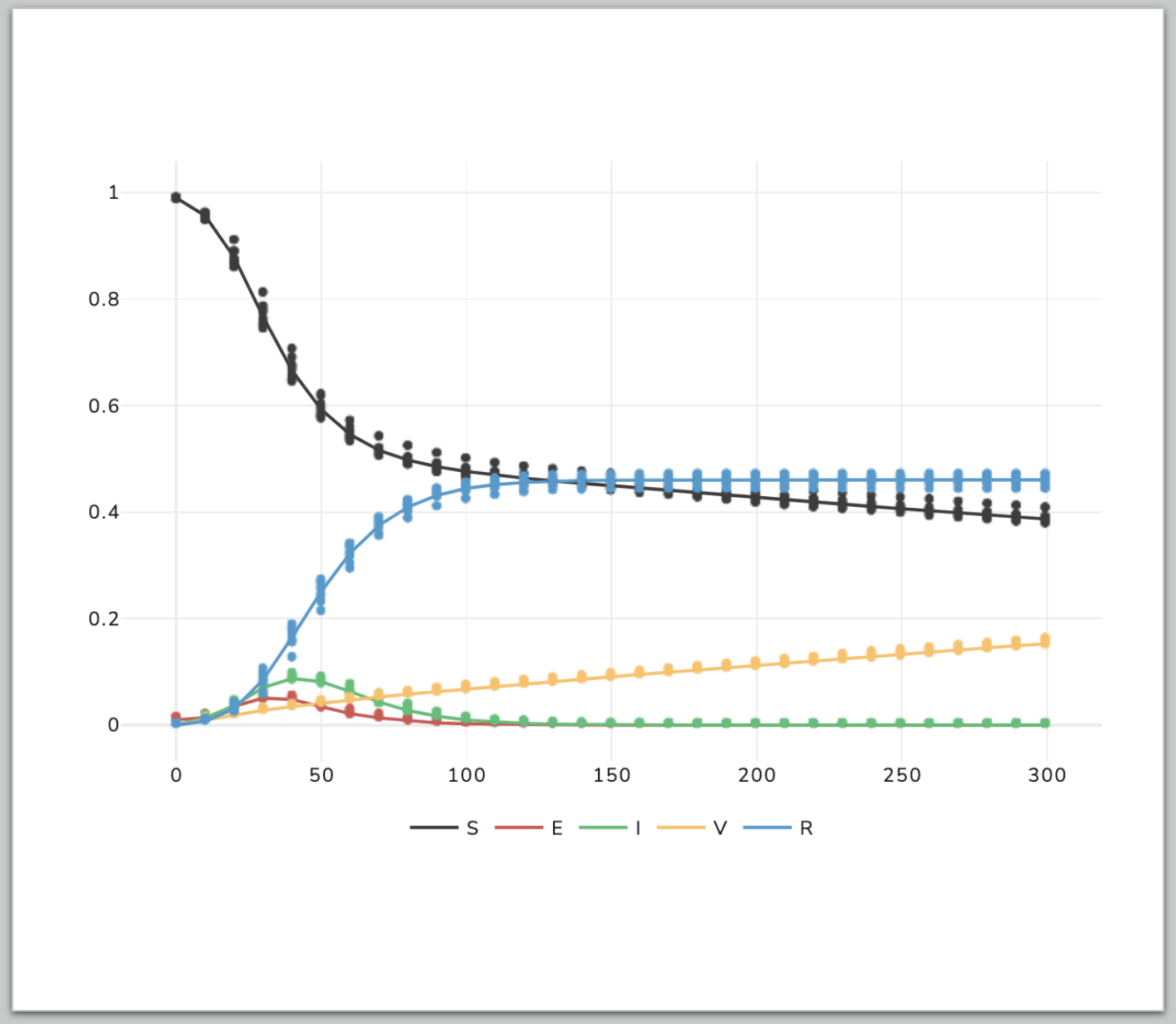
epydemic components

Component ideas and examples

Compartments line graph

- Basic line graph showing the progression of the compartments
- Include error bars/boxplots + show mean

- Examples:
  - http://epi-sim.live
  - *https://gabgoh.github.io/COVID/index.html*



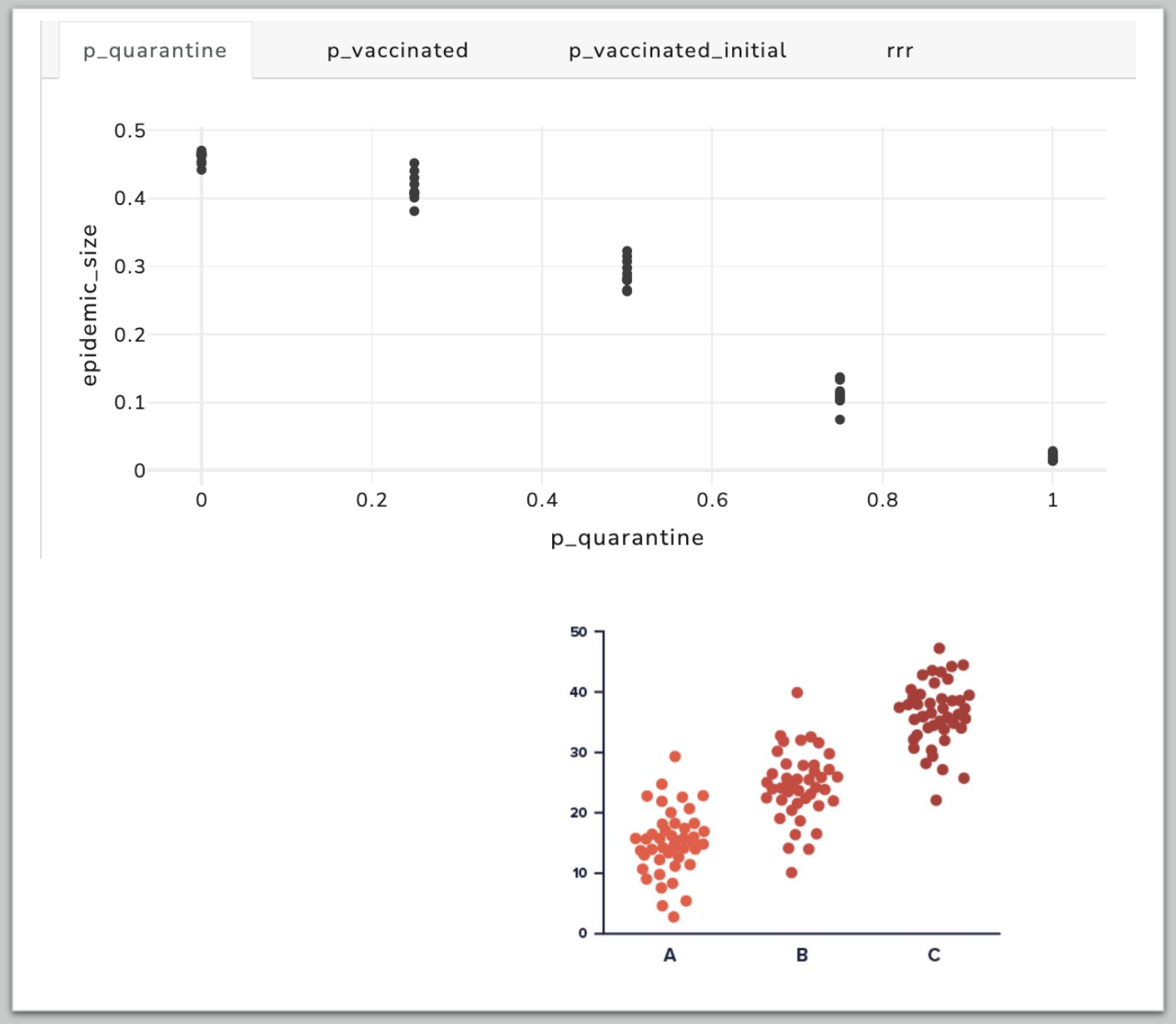
Compartments streamgraph

- same as before but as a streamgraph
- Compartments add up to 1
- No support for error bars etc

Scatter plot for marginal effects

- Show marginal effect on, e.g., epidemic size when changing a parameter
- Include error bars/boxplot and show mean
- Alternatively, use jitter plot

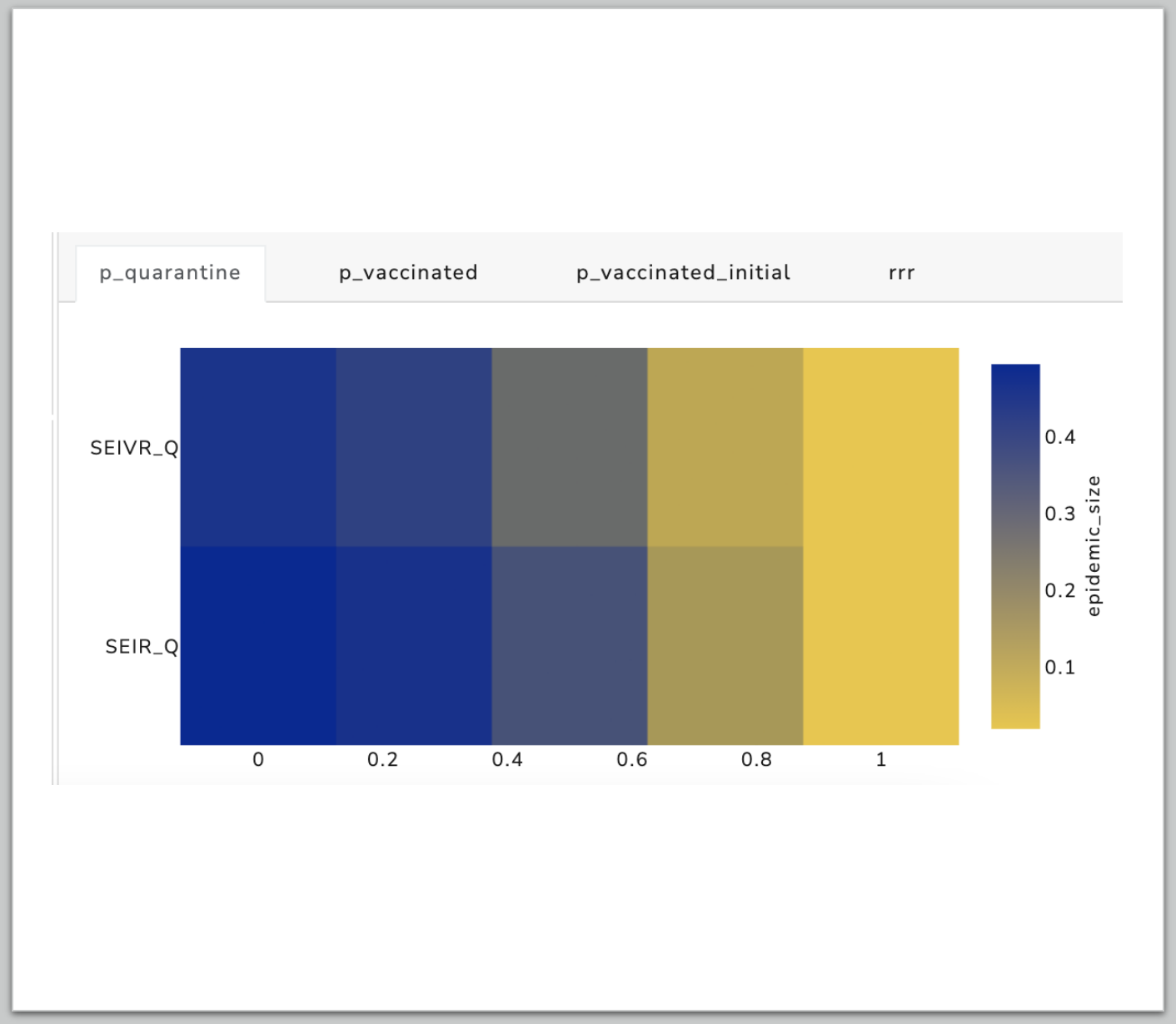
- Examples
  - http://epi-sim.live
  - https://datavizproject.com/data-type/jitter-plot/



Heatmap for marginal effects

- Same as scatter plot but allows comparison of different models
- No support for error bars etc.

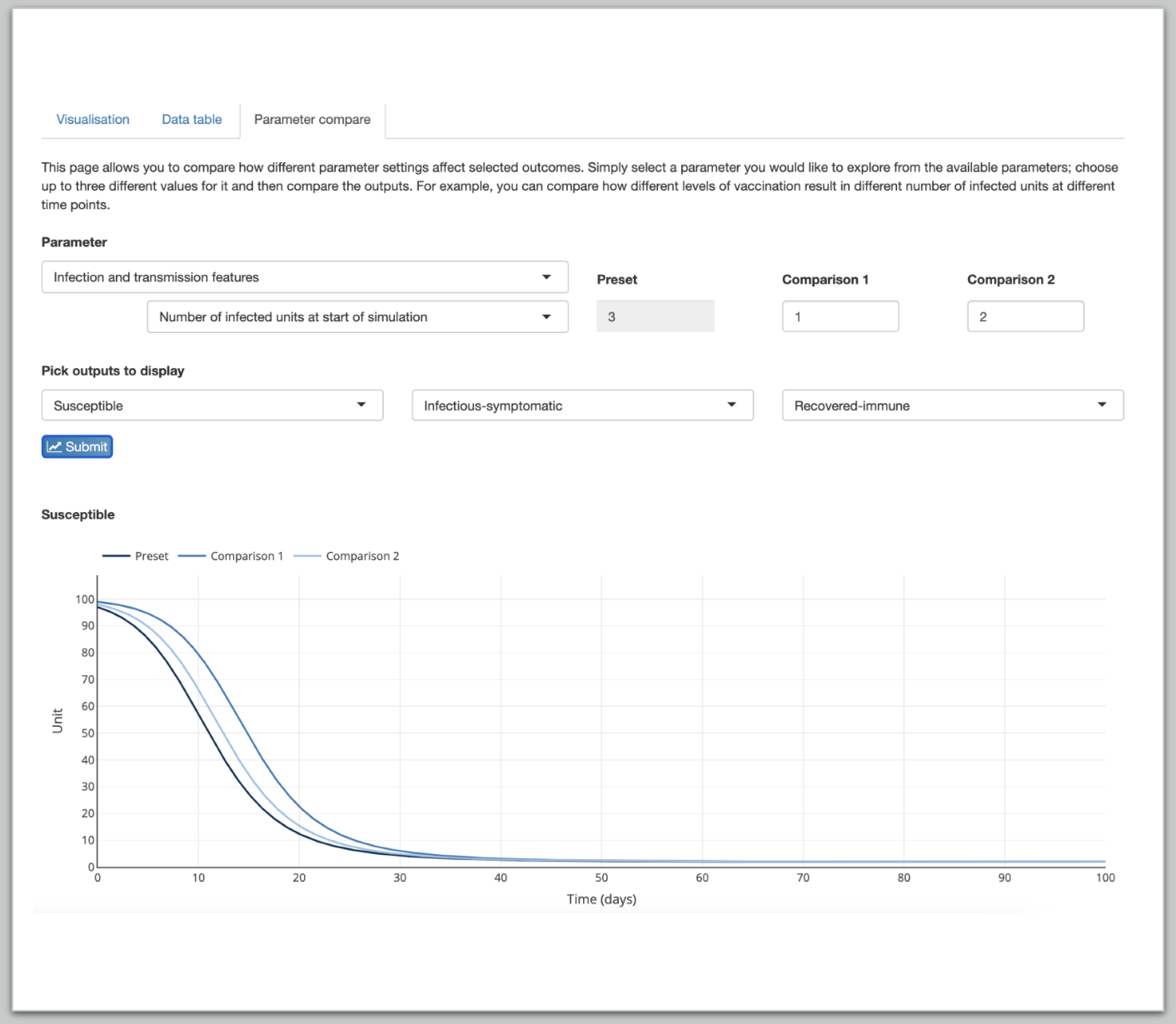
- Examples
  - http://epi-sim.live



Line chart for single compartment under different parameter settings

- Shows effect of parameters on certain compartments
- Could include scatter/error bar for each line
- Show mean for each line

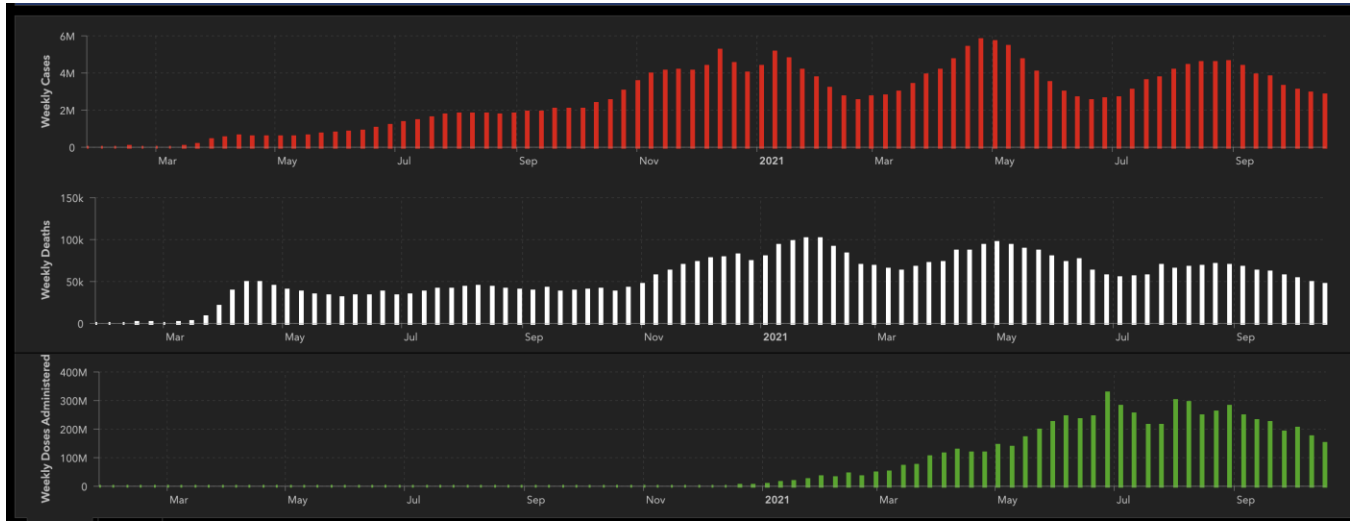
- Examples
  - https://models.epidemix.app/
  - https://www.sciencedirect.com/science/article/pii/S1755436517300270



Line chart for new cases per time step

- Common representation for empirical data
- Allows comparison of model to empirical data
- Add error bars / show mean

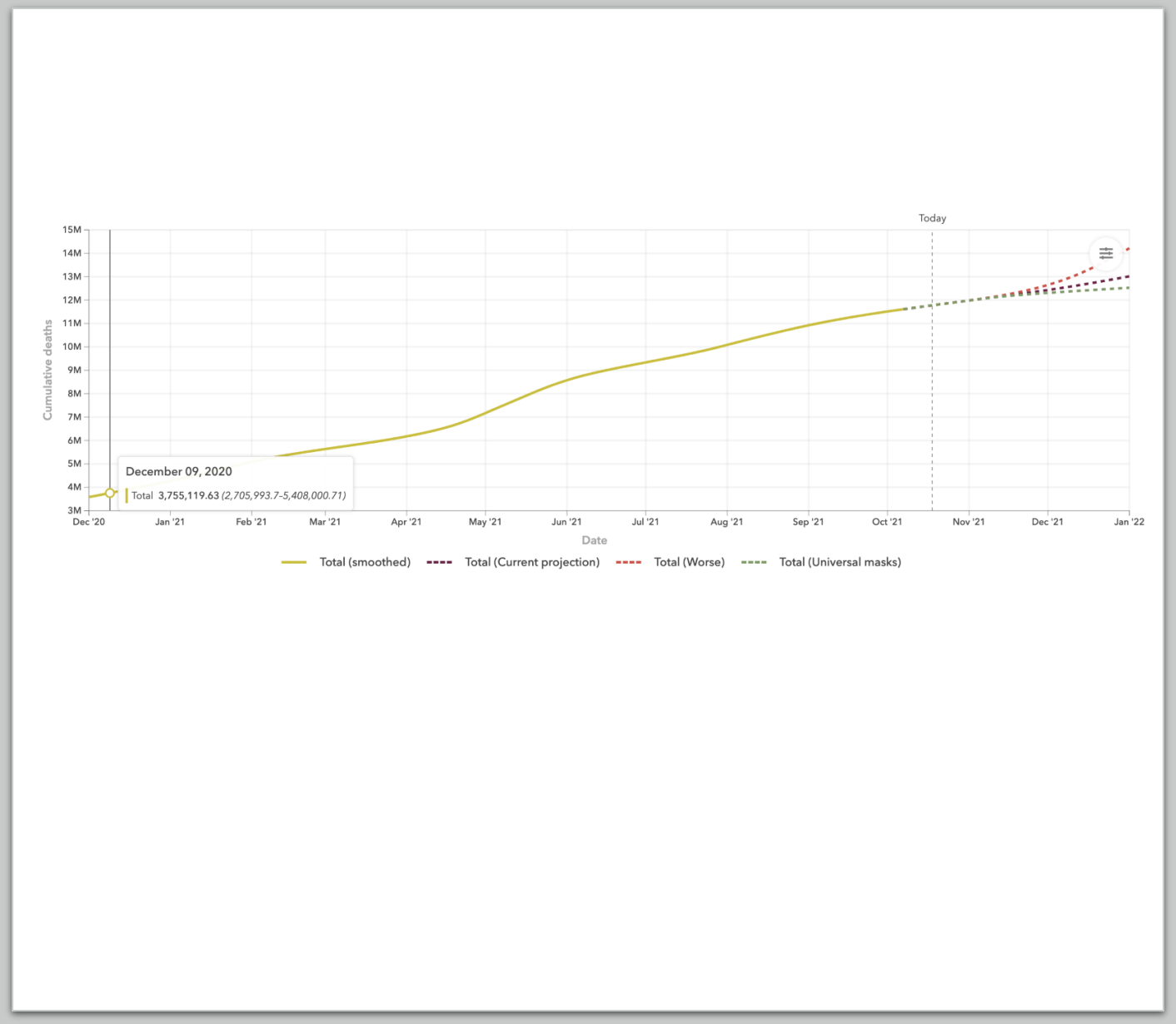
- Examples
  - https://coronavirus.jhu.edu/map.html



Line chart for cumulative cases per time step

- Common representation for empirical data
- Allows comparison of model to empirical data
- Add error bars / show mean

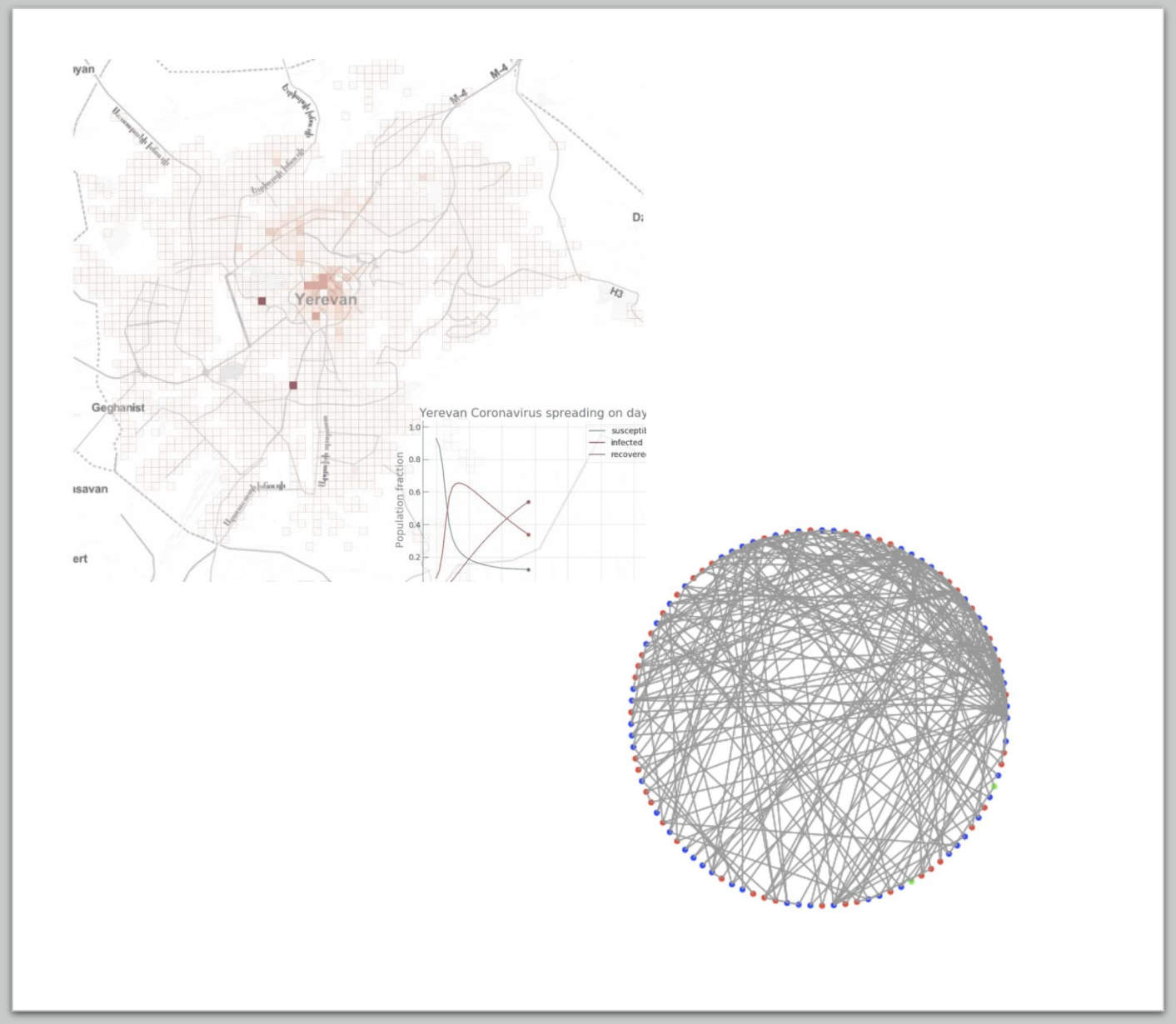
- Examples
  - https://covid19.healthdata.org/global?view=cumulative-deaths&tab=trend



Graph visualizations of spread in the network

- Show compartment membership of nodes over times
- Highlight edges when transmission happens
- NOTE: Requires network at every time step -> only for small networks

- Examples
  - *http://agilevisualization.com/AgileVisualization/EpidemiologicalModels/0301-EpidemiologicalModels.html*
  - *https://towardsdatascience.com/modelling-the-coronavirus-epidemic-spreading-in-a-city-with-python-babd14d82fa2*



Graph visualization/arc diagram of compartment size/transitions

- Show each compartment as node
- Change size of node depending on size
- Highlight etc. Edges on transition
- NOTE: Requires network at every time step -> only for small networks

- Examples
  - https://pagerank-vis.herokuapp.com/
  - https://datavizproject.com/data-type/arc-diagram/