

Corona Virus Science

This blog explains some of the science related to the corona virus (COVID-19) € perspective. Most posts contain links to the underlying research.

COVID-19 Model Projections

This page contains graphs with the latest COVID-19 projections for the US from the "Data Trend Model". Previous predictions can be downloaded from Github.

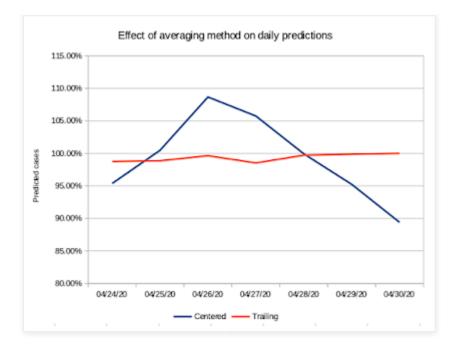
Last model run

April 29, 2020 with Johns Hopkins Data from 4/28/2020.

- Total deaths predicted by 6/28/2020: 182,502 (yesterday:171,461 until 6/27)
- Excluding New York & New Jersey: 125,568 (yesterday: 115,607 until 6/27)
- Predicted daily death on 6/28/2020: 1,739 (~ 104,000 per 2 months)

Summary

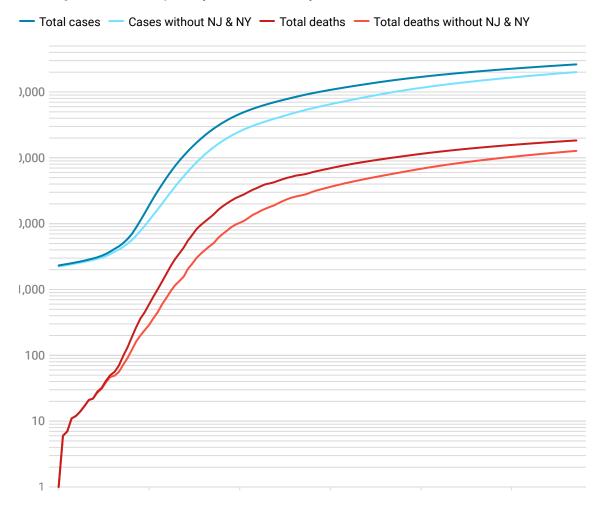
Today's numbers are slightly higher than yesterday's numbers. This is mostly a result of a small change in how the model calculates averages. As I explained yesterday, the model had used "centered" 7-day averages, which meant that the average for the last 3 days included *fewer* than 7 days (only 4 days for the last day). This meant that any changes in the last 3 days had a large influence on the predictions. This has now been changed to trailing 7-day averages, where every point is the average of the previous seven days. This removes the "in-week" fluctuations of test numbers, and makes the predictions more stable. Here's a graph that shows the effect that the different ways of calculating the averages have:



While the previously used "centered" method resulting in prediction changes of about plus or minus 10% percent, the "trailing" method reduces variations to about 2% or less.

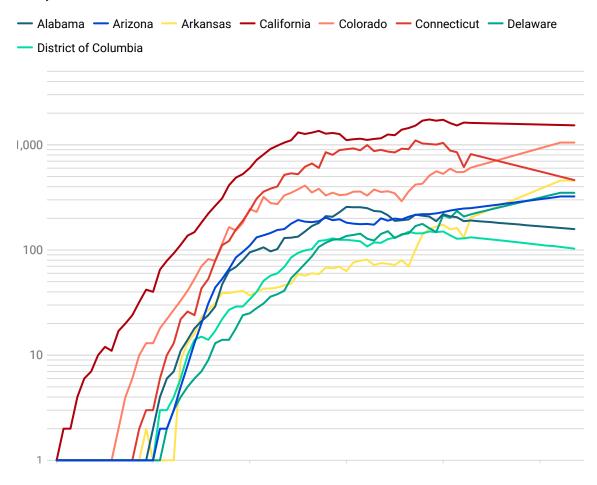
Total projected COVID-19 cases and deaths

Future growth in cases per day limited to 14 days



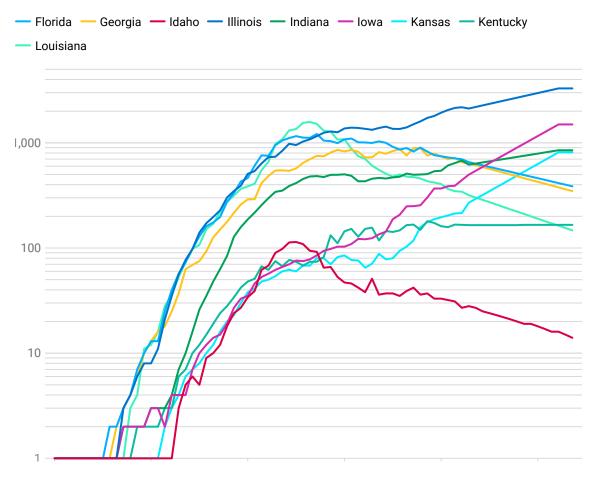
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Actual and projected daily COVID-19 cases by state (AL-DC)



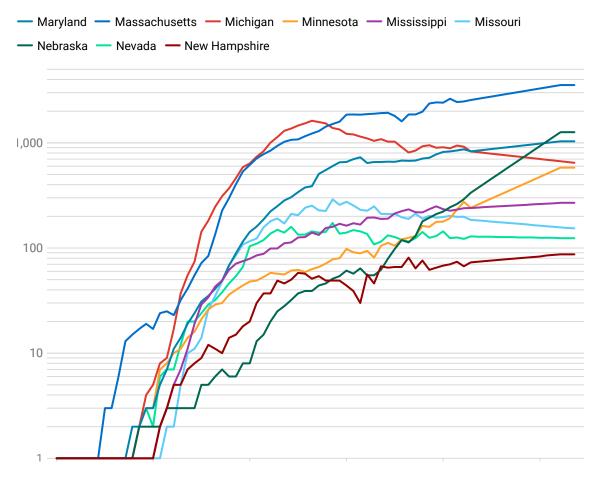
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Actual and projected daily COVID-19 cases by state (FL-LA)



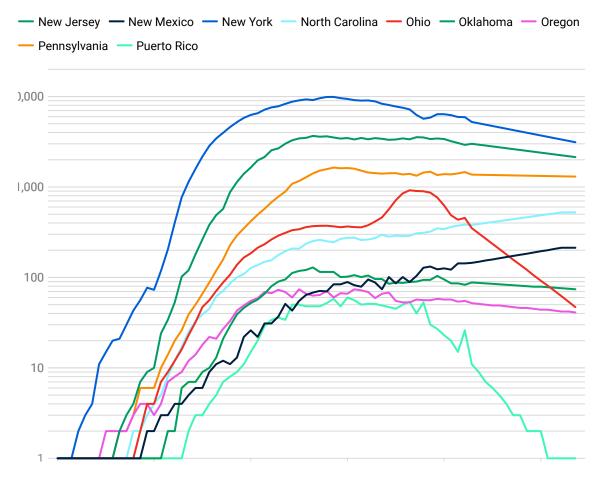
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Actual and projected daily COVID-19 cases by state (MD-NH)

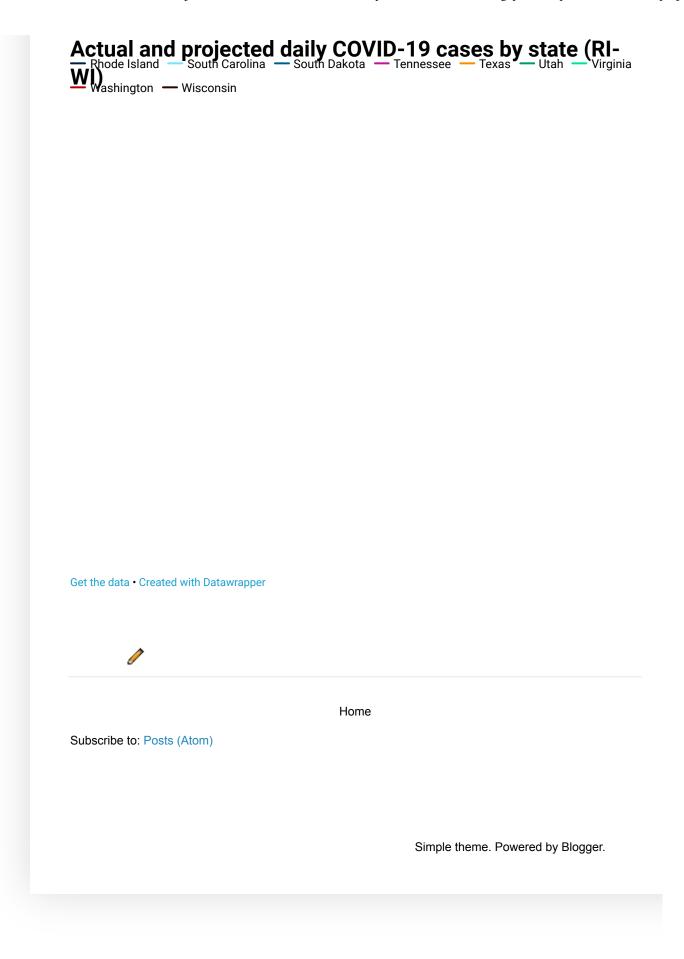


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Actual and projected daily COVID-19 cases by state (NM-PR)



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