

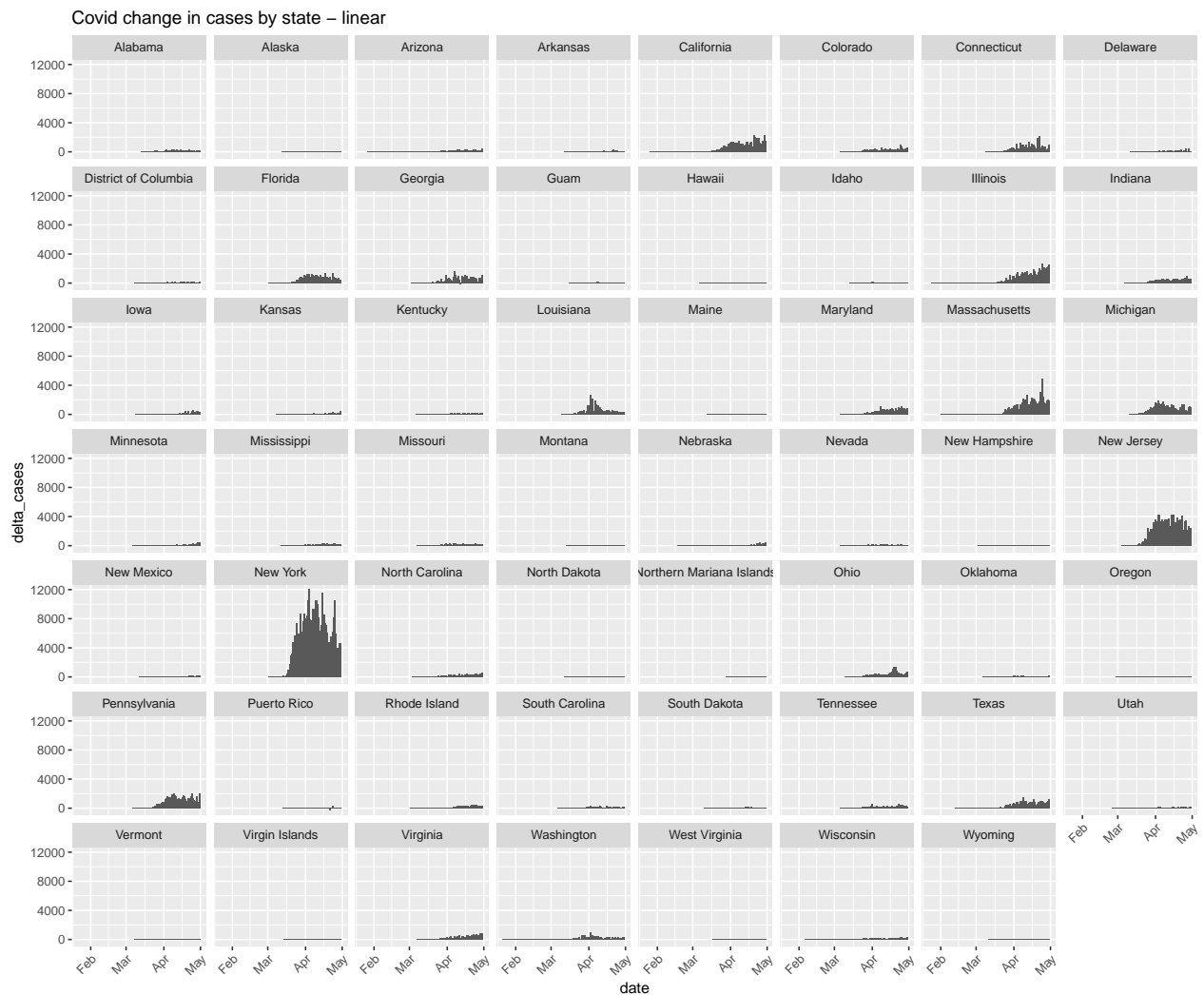
Change Analysis

Another experiment to look at rate of change. Idea here is to compare the reported change against the cumulative sum.

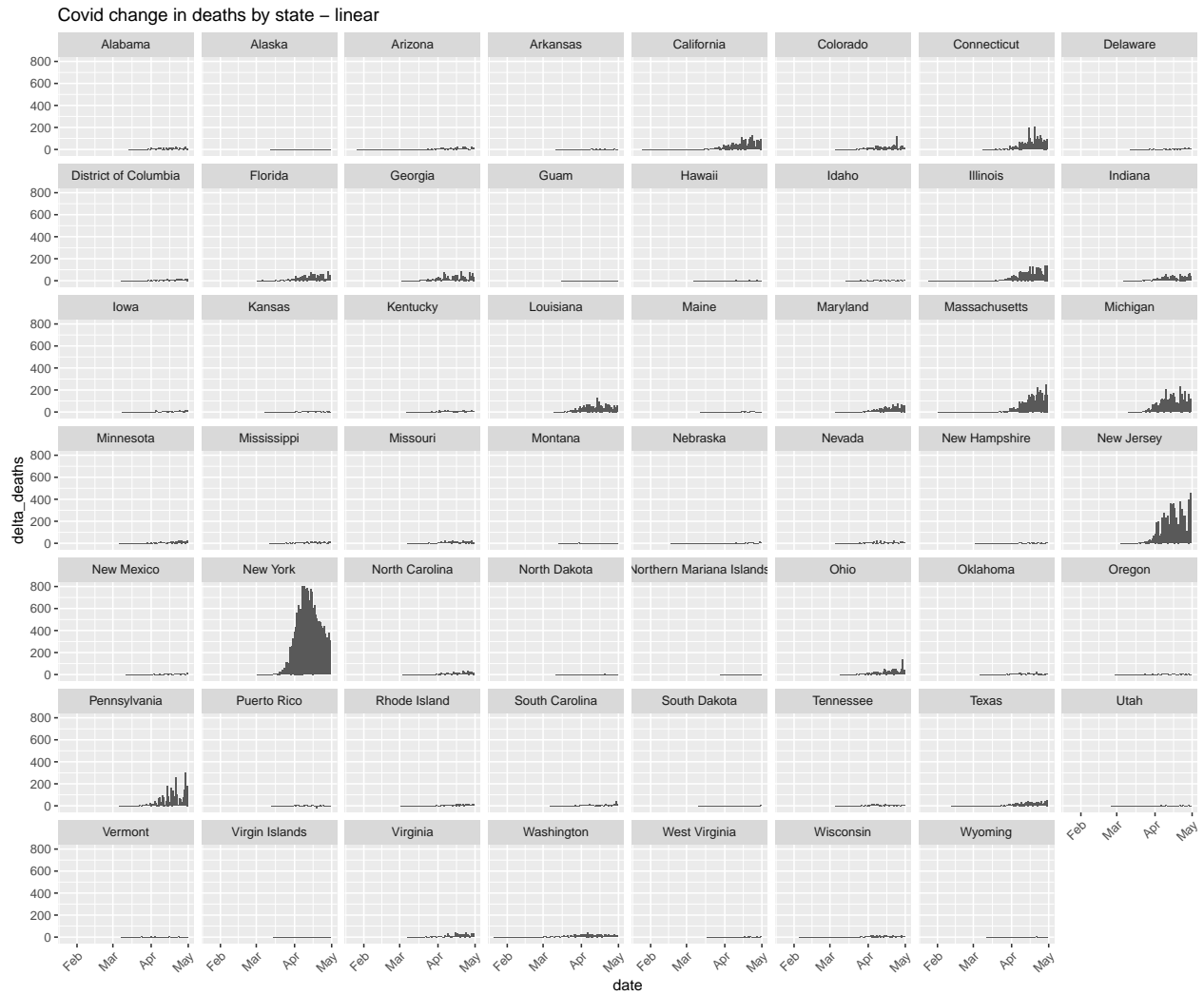
Last date for states data is 2020-04-30

Extract daily changes

Daily Cases



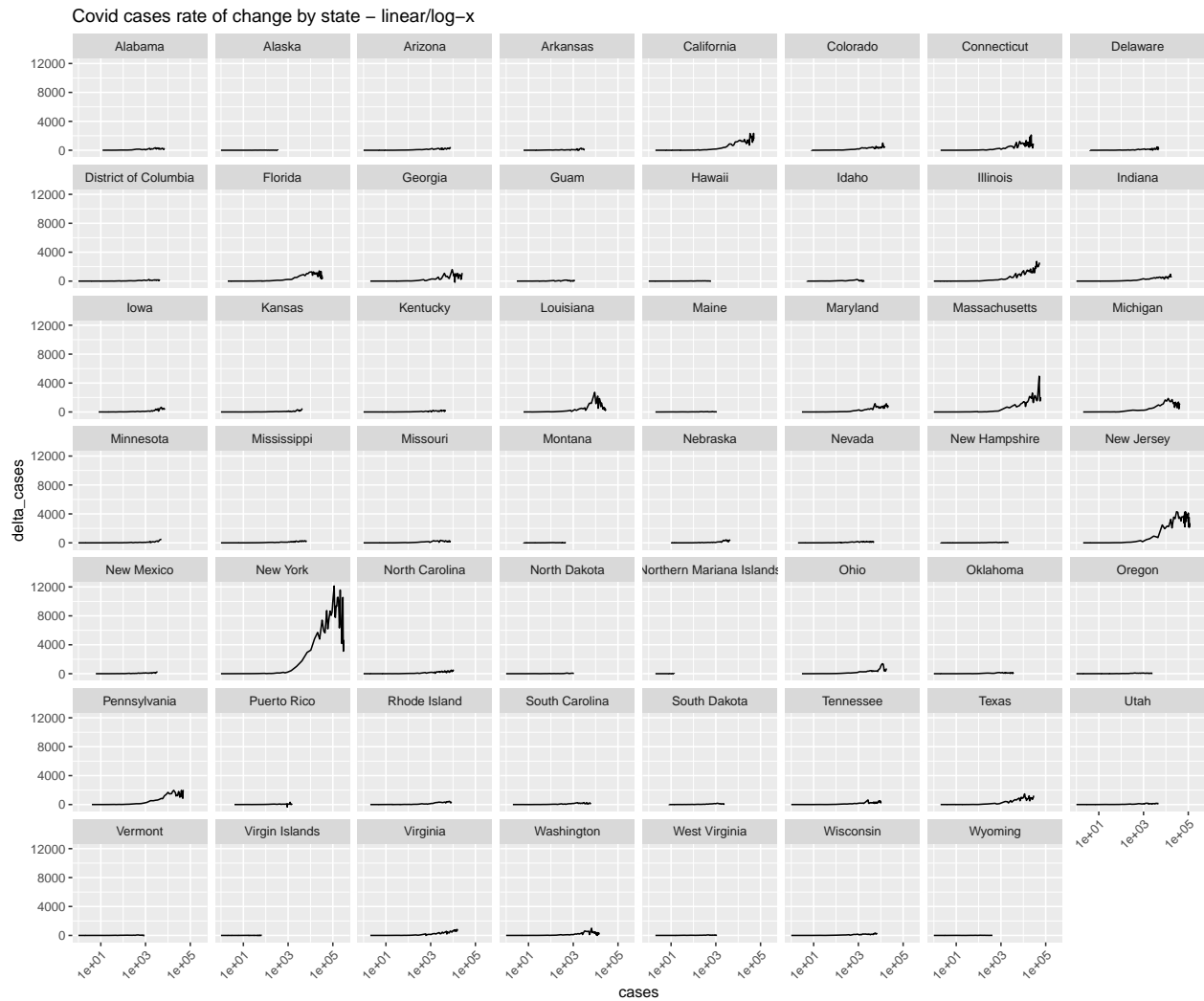
Daily Deaths



Change over Cumulative Sum

Change in Cases over Cumulative Sum

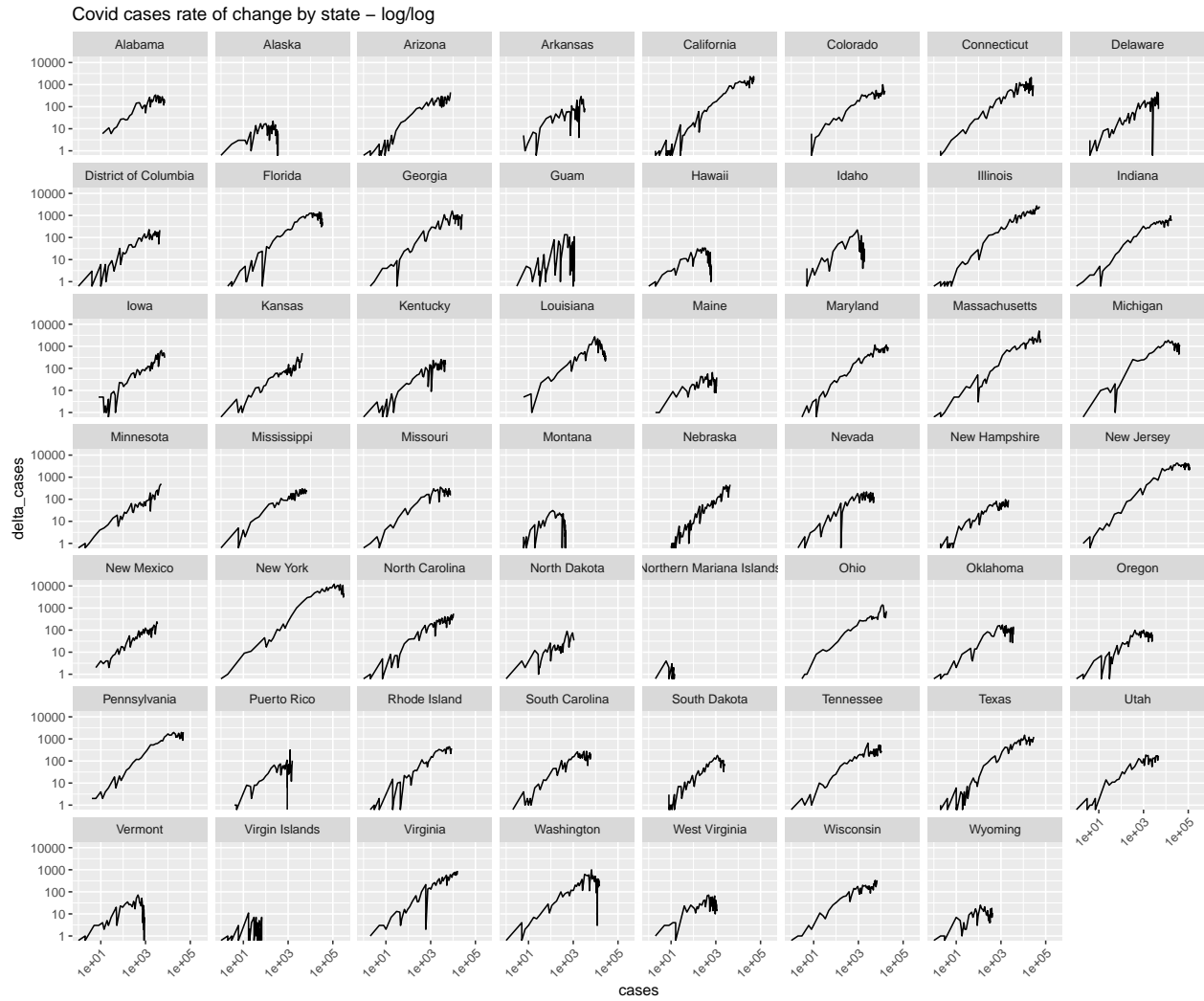
Use the log of the cumulative sum to better scale the values.



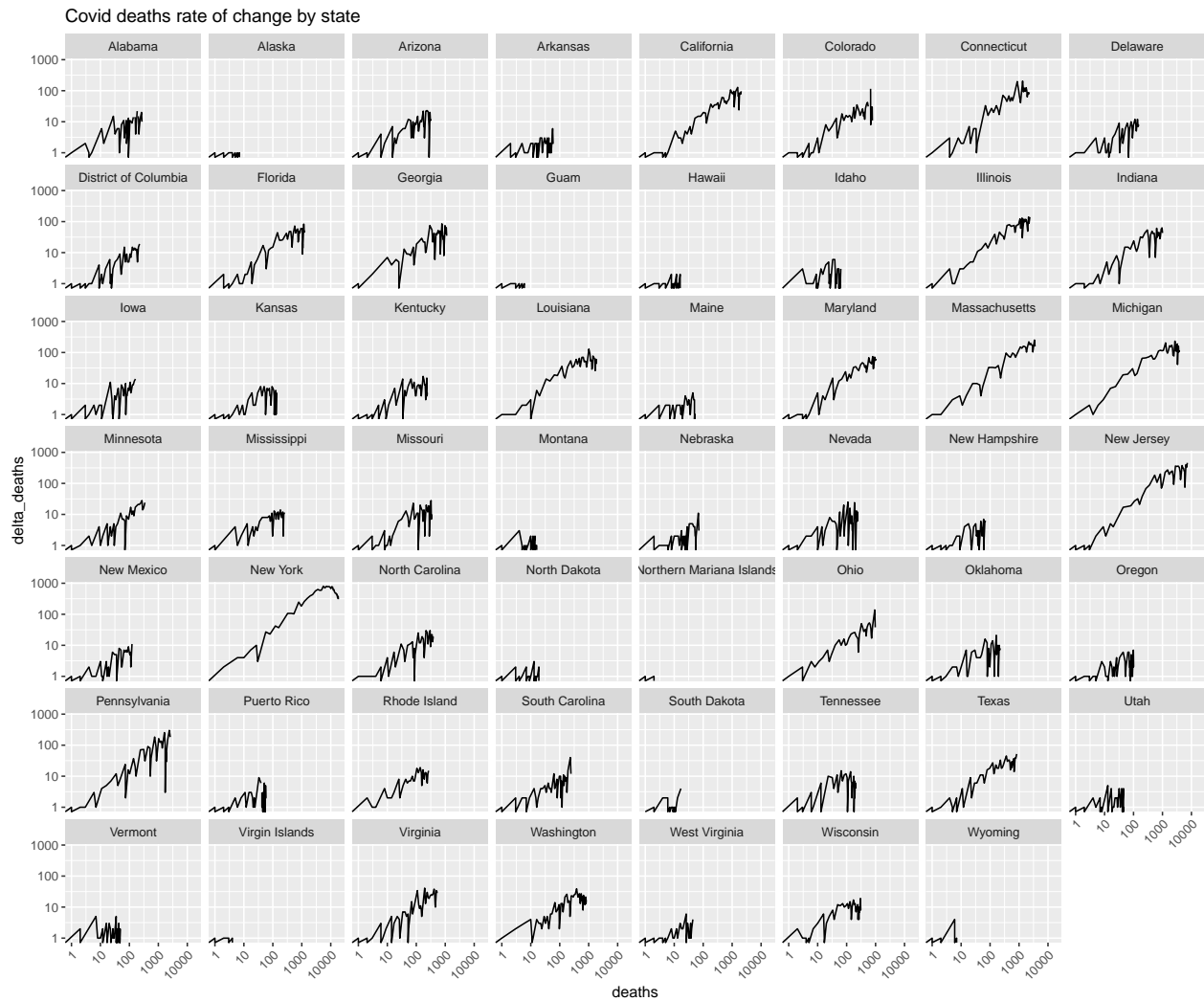
Log of Change Over Cumulative Sum

Linear values are skewed by higher-magnitude values, so use a $\log(10)$ on each axis. this better fits the exponential nature of the data anyway.

Log/Log of Cases Over Cumulative Sum



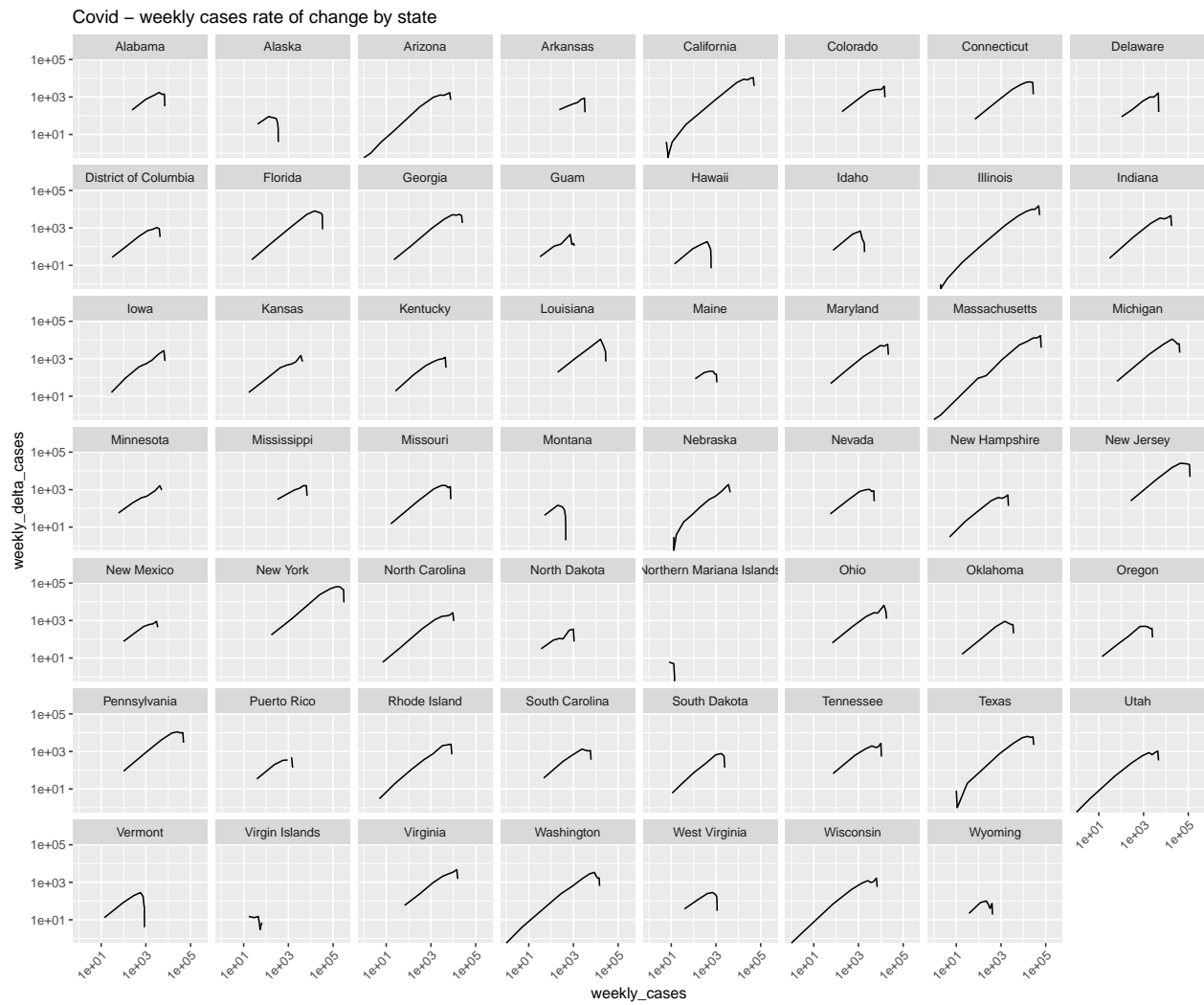
Log/Log of Deaths over Cumulative Sum



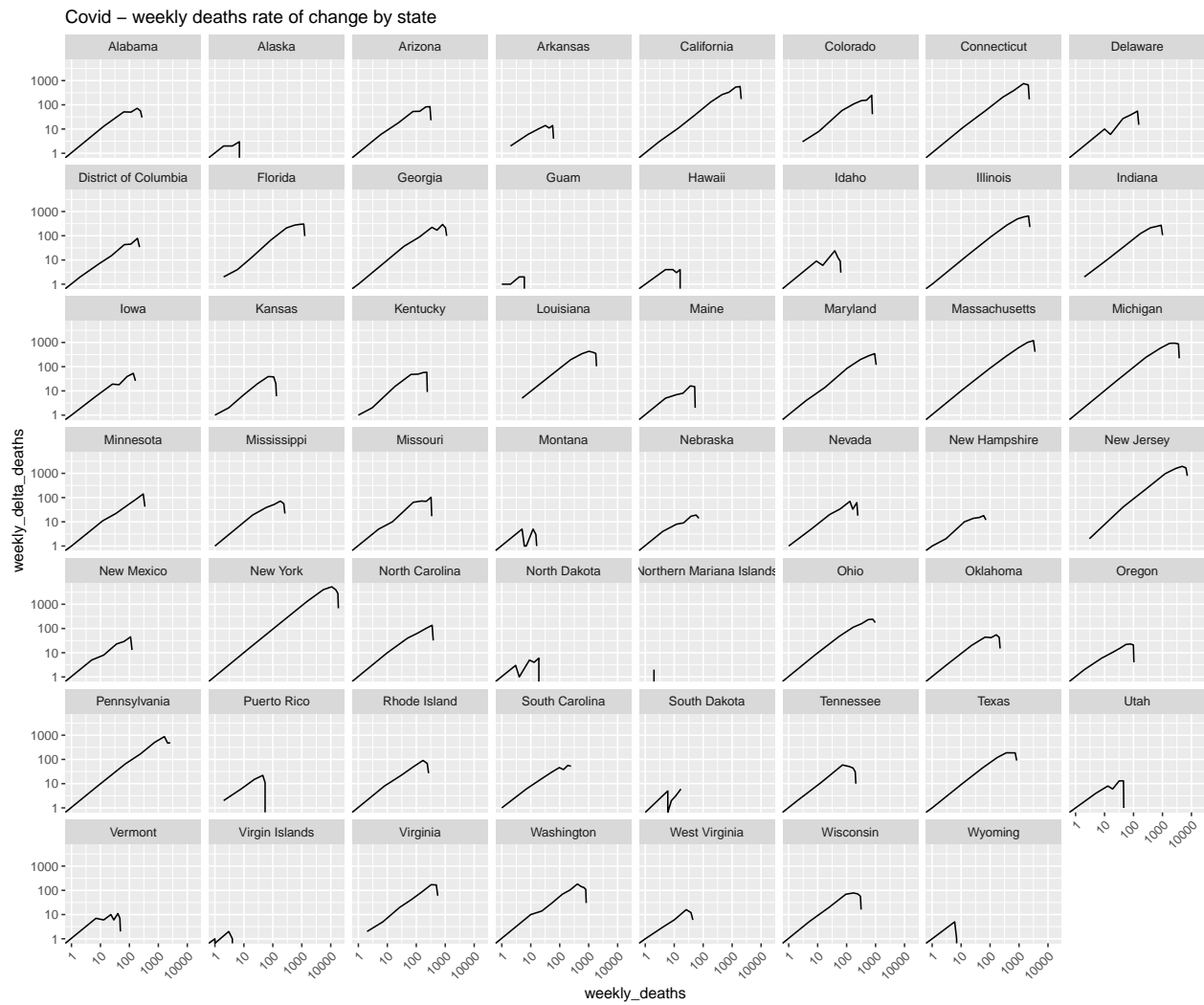
Weekly Rate of Changes

In order to smooth out the curves in the previous graphs, look at them on a weekly basis.

Weekly Range of Change of Cases by State



Weekly Range of Change of Deaths by State



Washington Counties

