

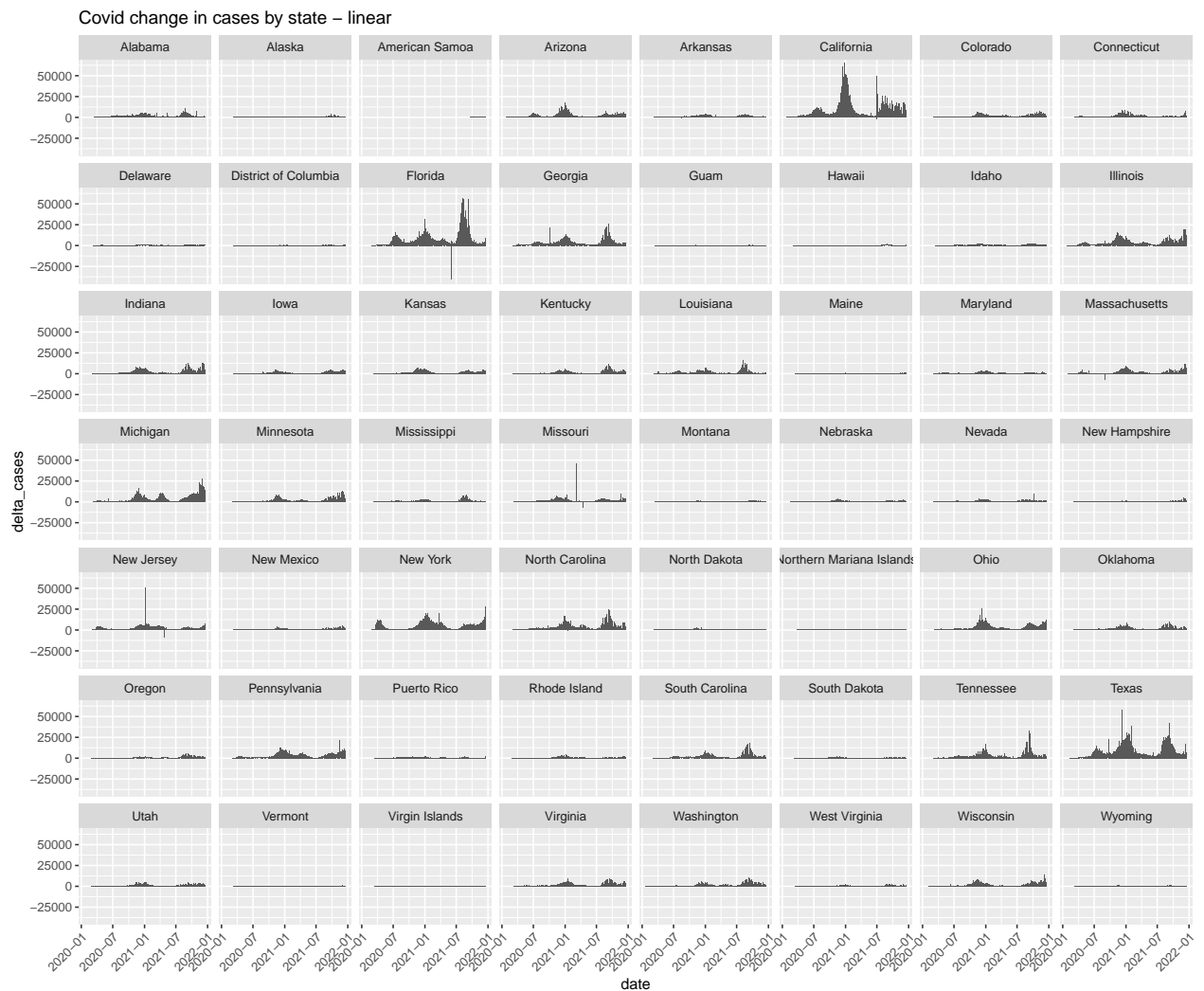
Change Analysis

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

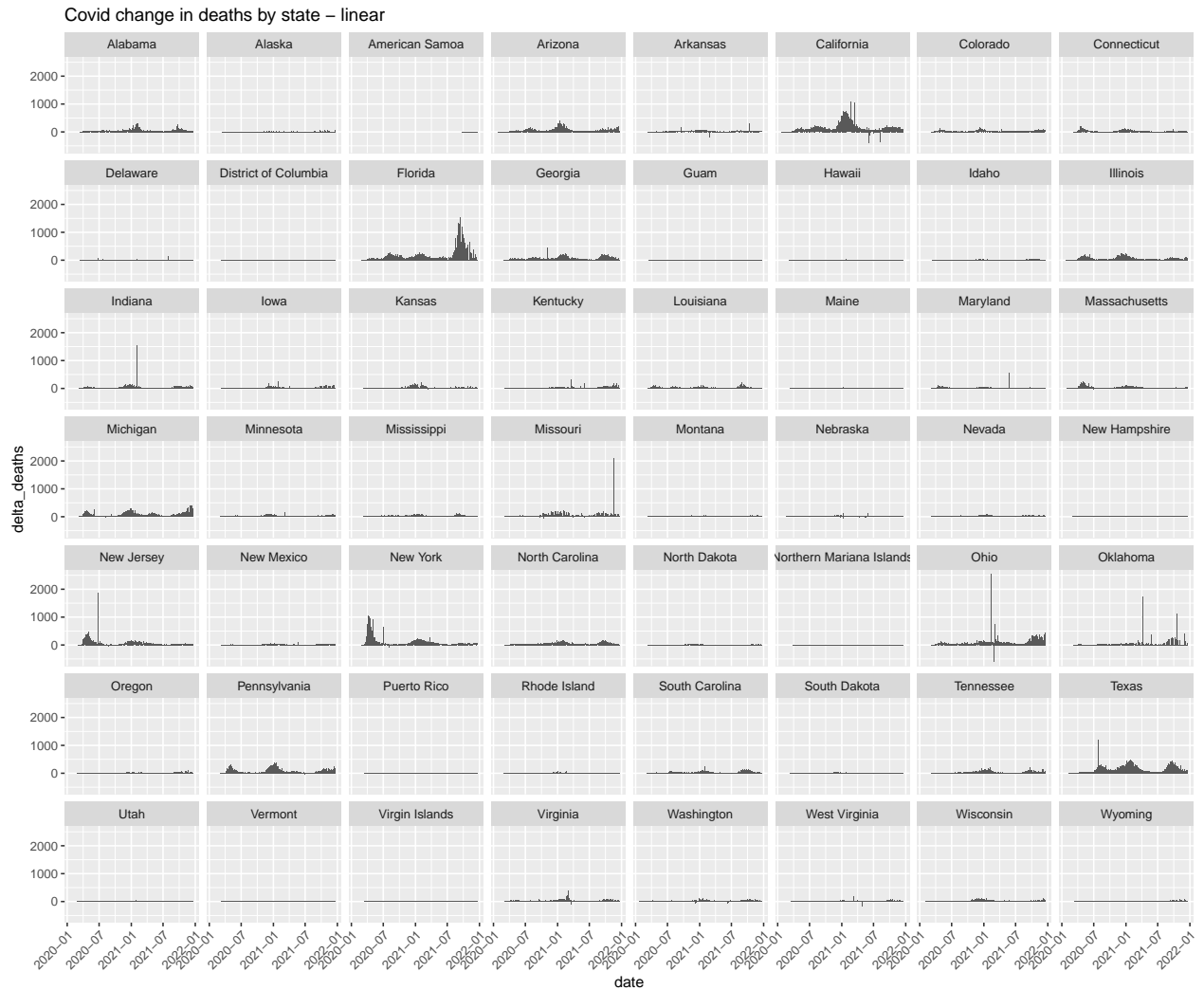
Last date for states data is 2021-12-19

Extract daily changes

Daily Cases



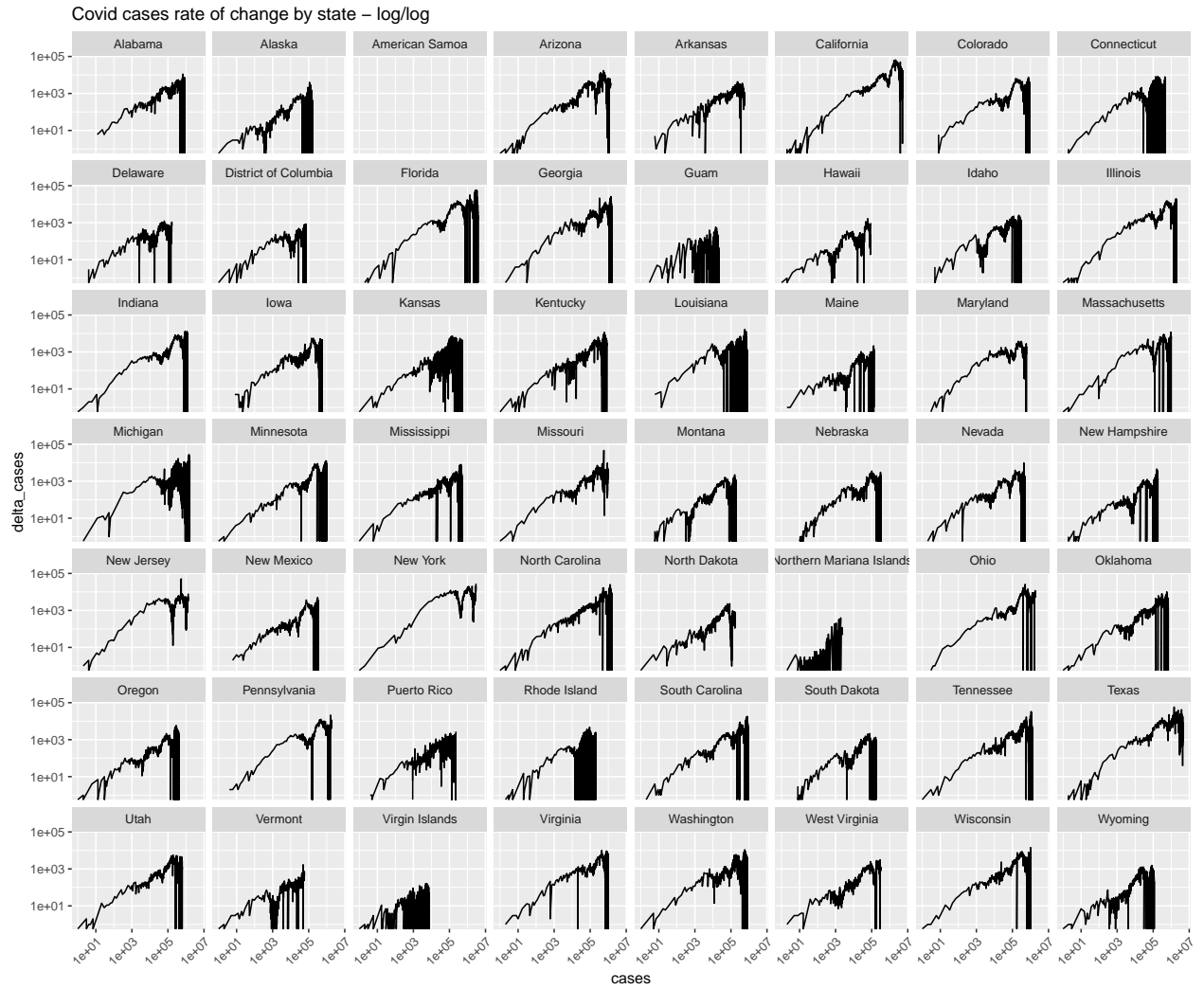
Daily Deaths



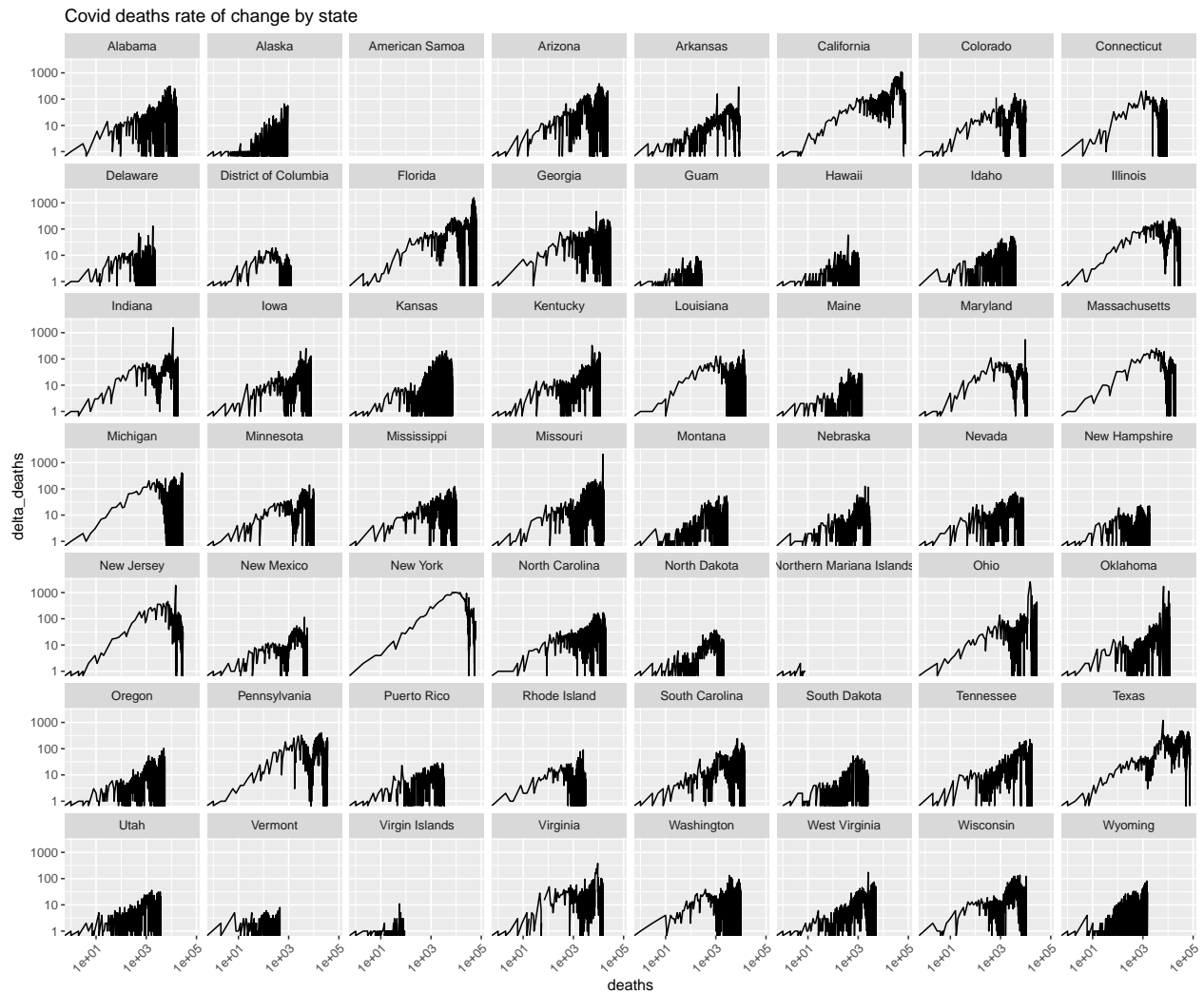
Log of Change Over Cumulative Sum

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

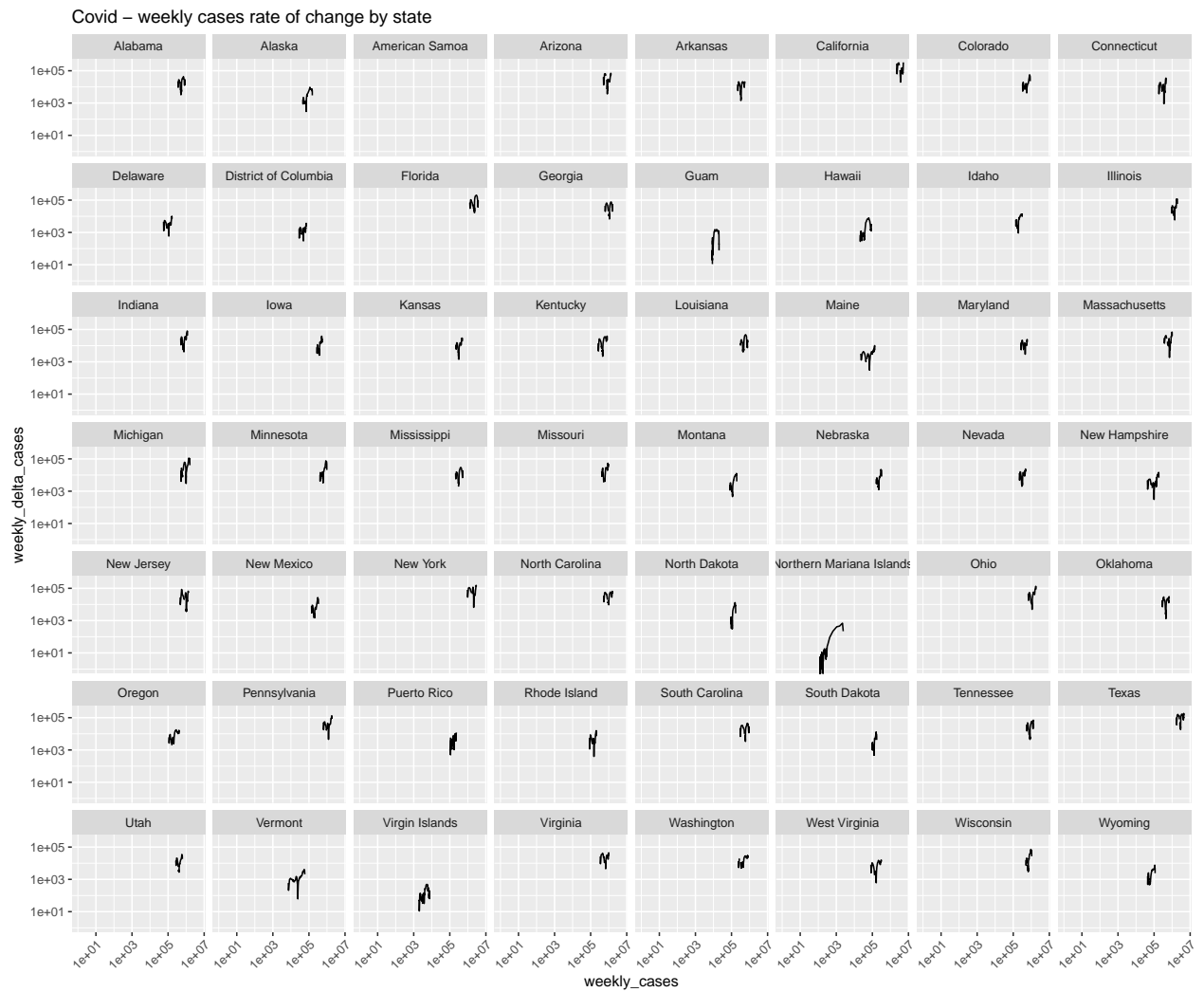


Weekly Rate of Changes

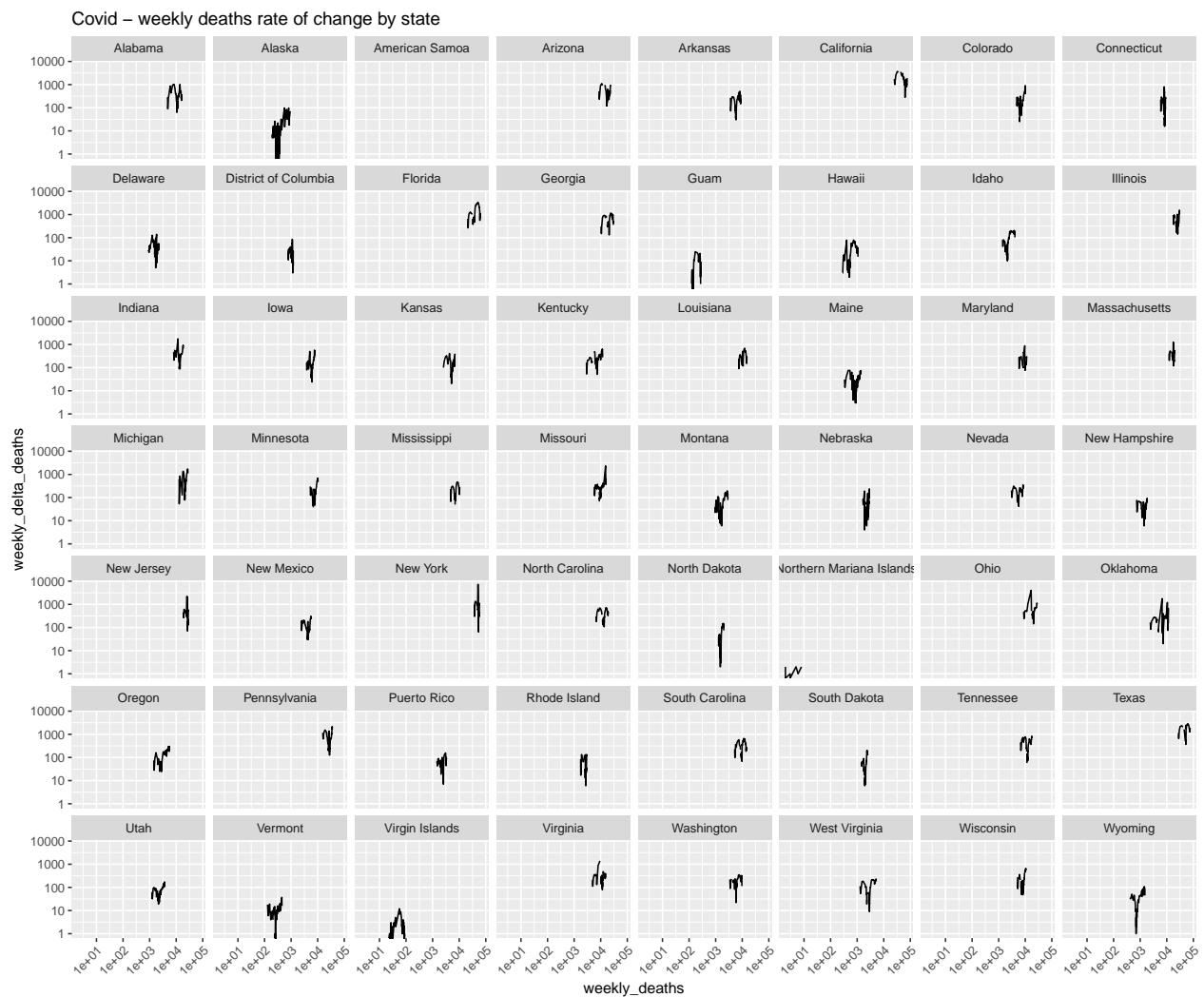
In order to smooth out the curves in the previous graphs, look at them on a weekly basis.

``summarise()`` has grouped output by 'state'. You can override using the ``groups`` argument.

Weekly Range of Change of Cases by State



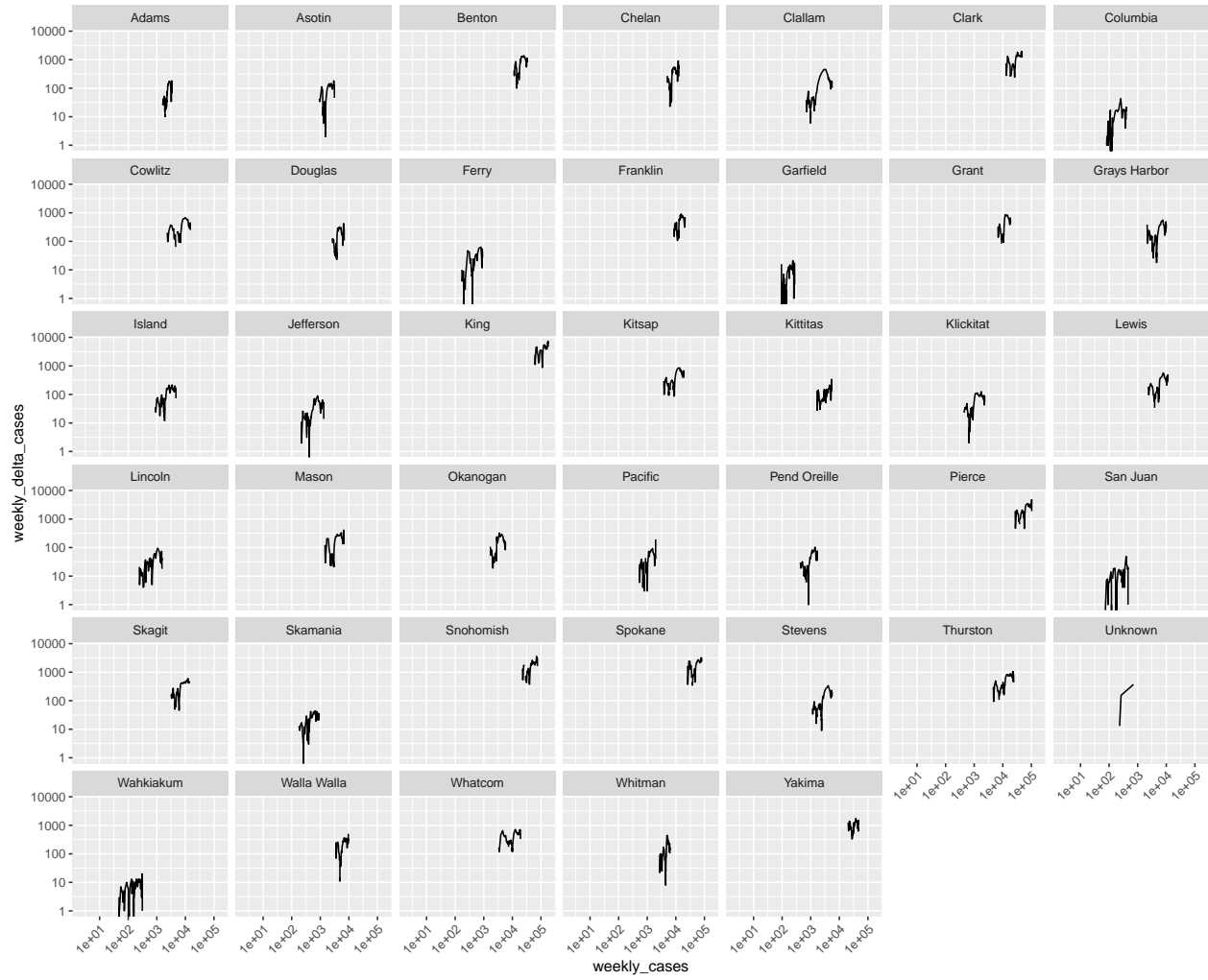
Weekly Range of Change of Deaths by State



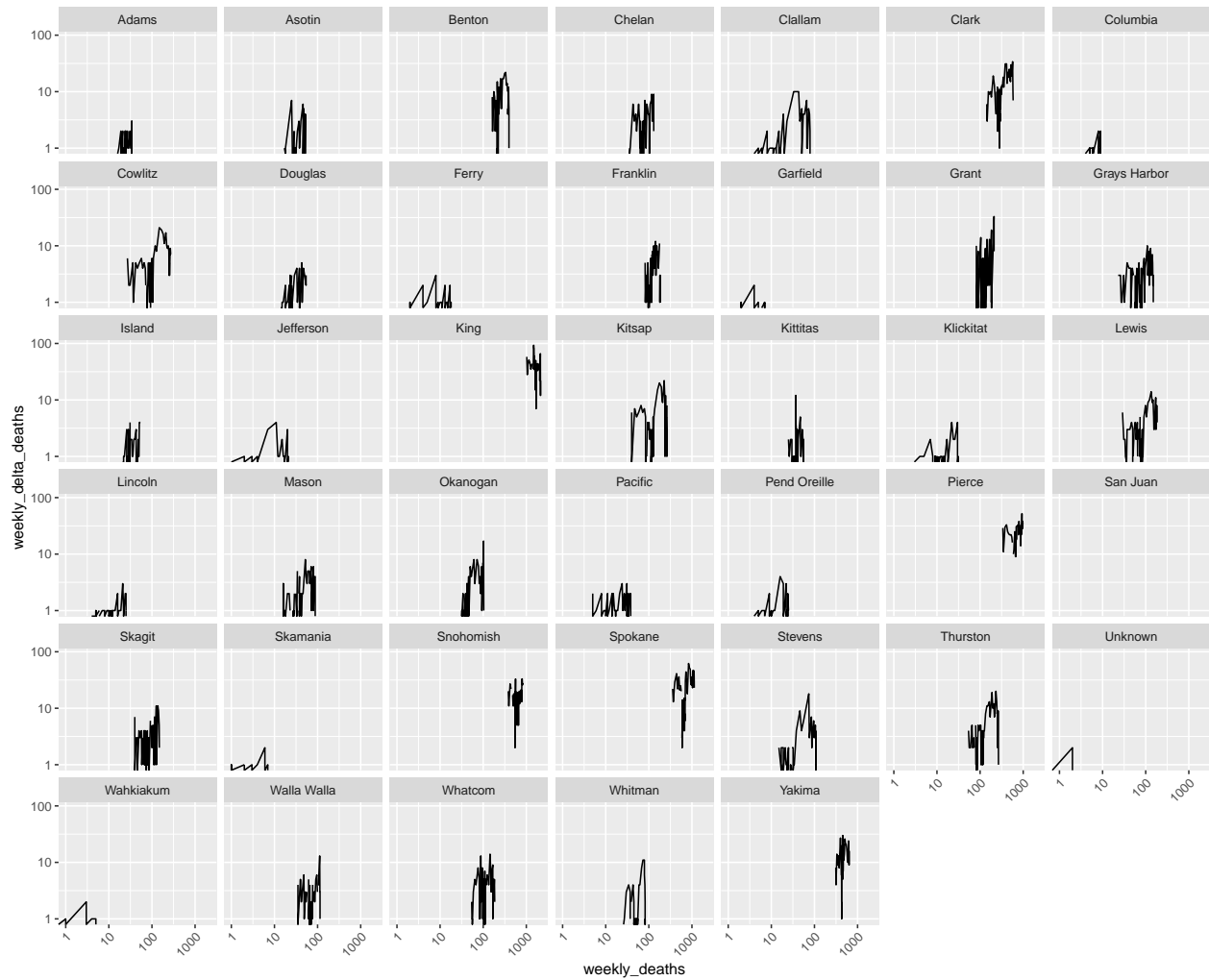
Washington Counties

`summarise()` has grouped output by 'county'. You can override using the `.groups` argument.

Covid – log/log weekly cases rate of change by WA Counties



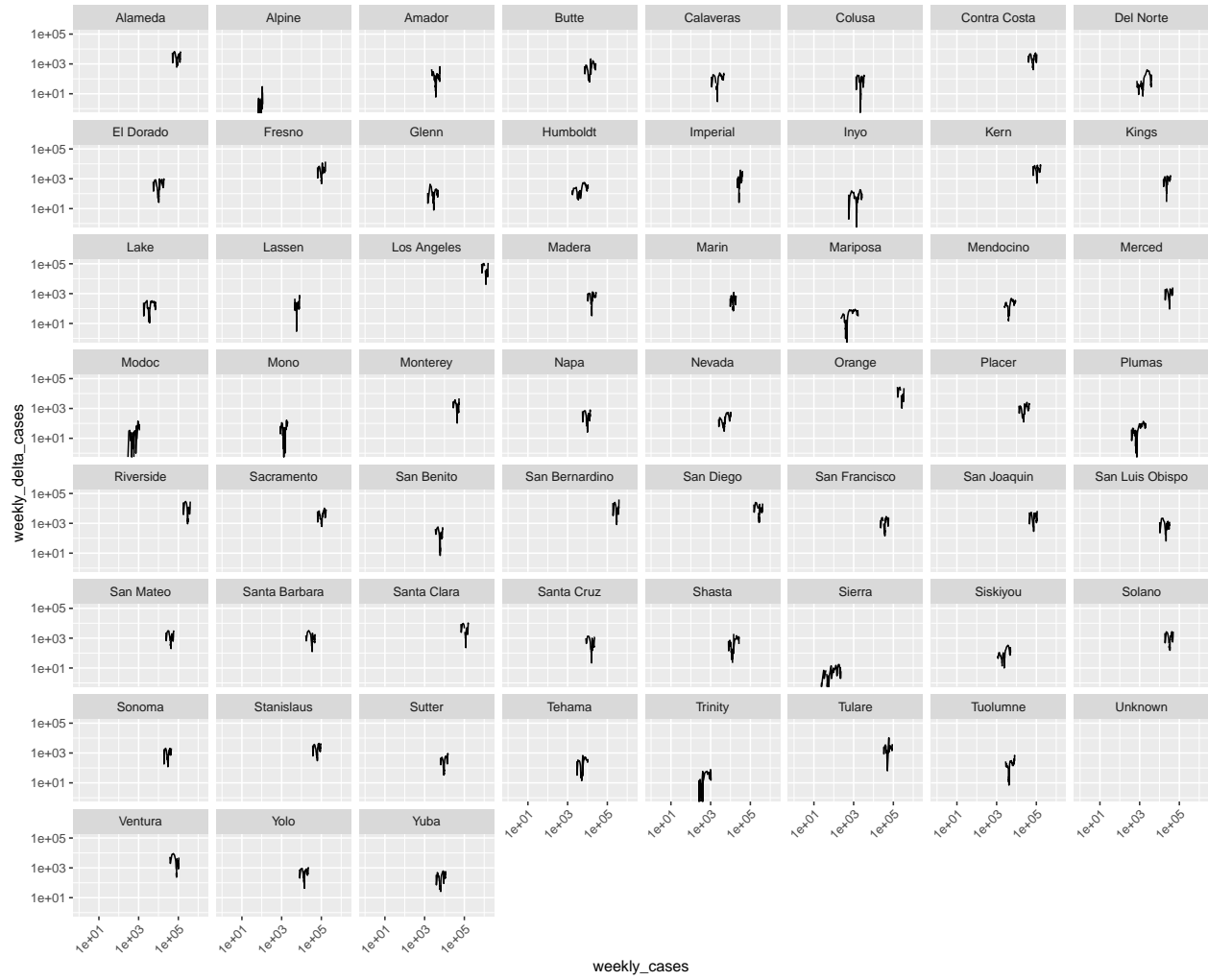
Covid – log/log weekly deaths rate of change by WA Counties



California Counties

``summarise()`` has grouped output by 'county'. You can override using the ``.groups`` argument.

Covid – log/log weekly cases rate of change by CA Counties



Covid – log/log weekly deaths rate of change by CA Counties

