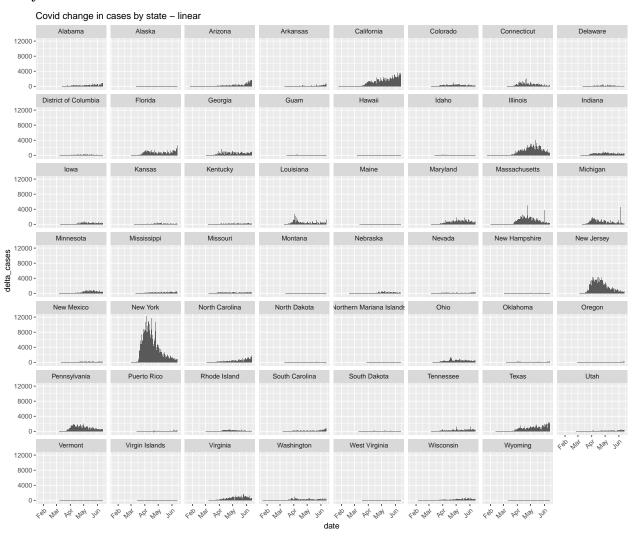
# Change Analysis

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 2020-06-13

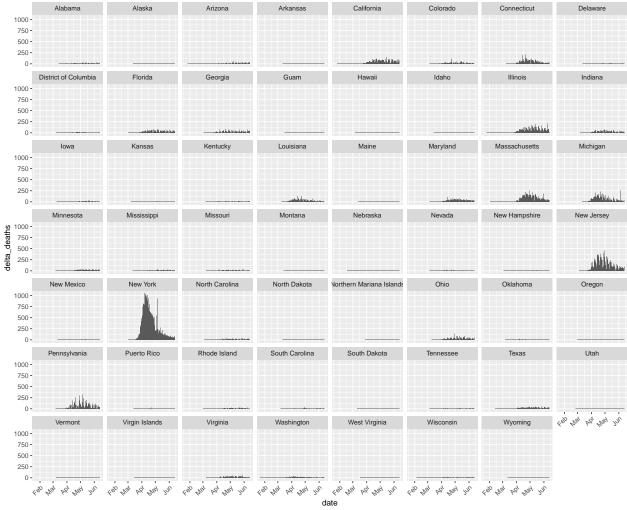
### Extract daily changes

#### Daily Cases



#### Daily Deaths

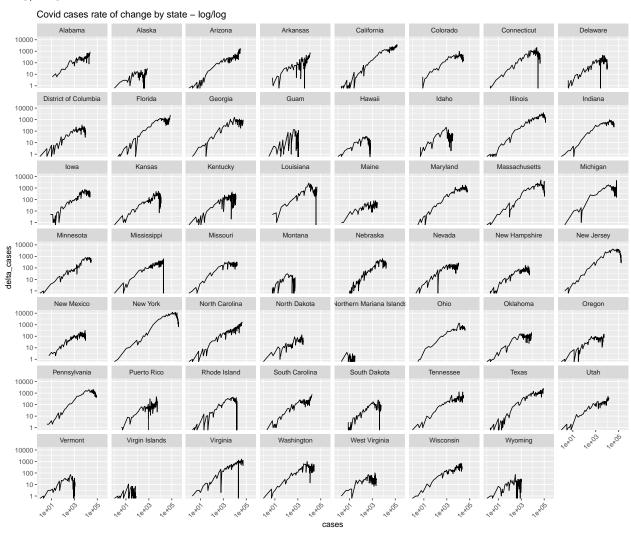




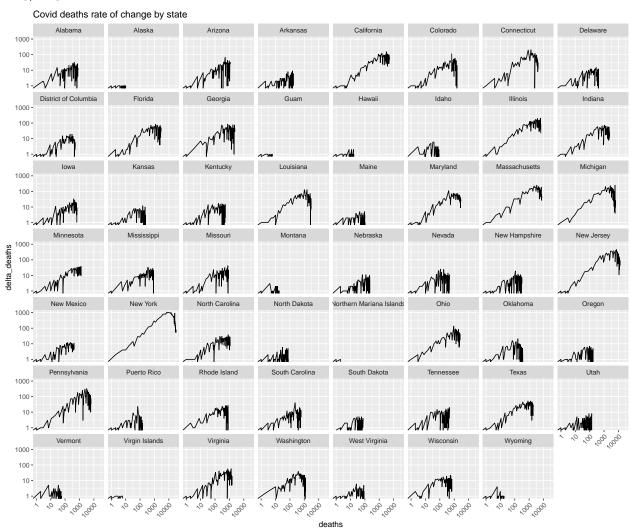
## Log of Change Over Cumulative Sum

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



# $\operatorname{Log}/\operatorname{Log}$ of Deaths over Cumulative Sum

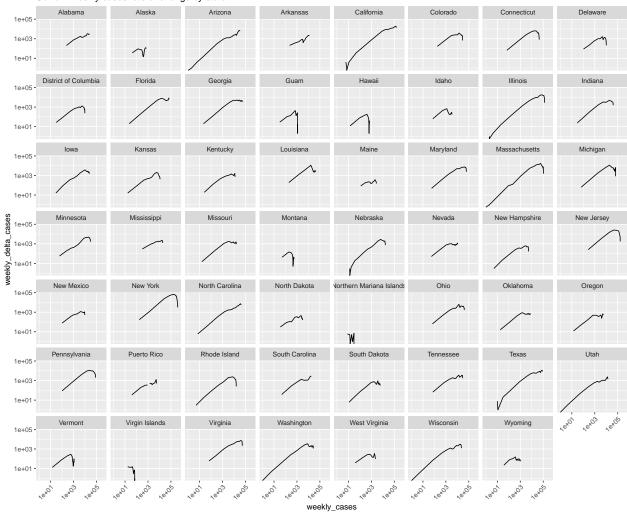


## Weekly Rate of Changes

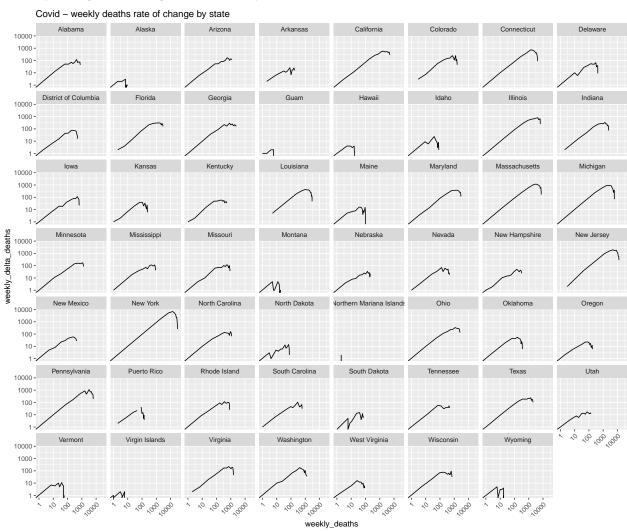
In order to smooth out the curves in the previous graphs, look at them on a weekly basis.

#### Weekly Range of Change of Cases by State

Covid – weekly cases rate of change by state

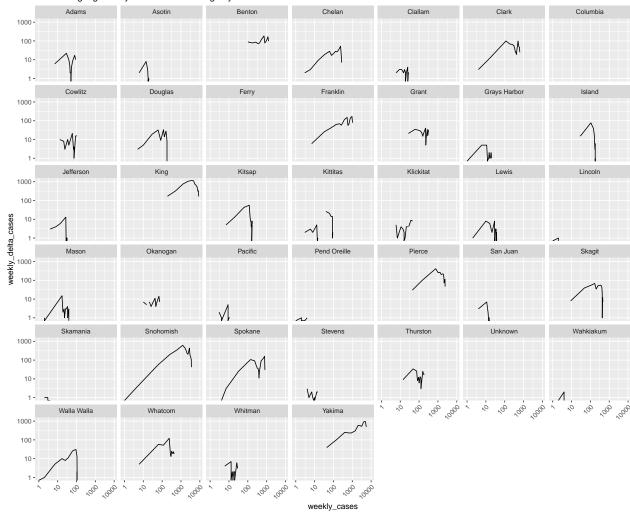


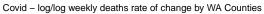
#### Weekly Range of Change of Deaths by State

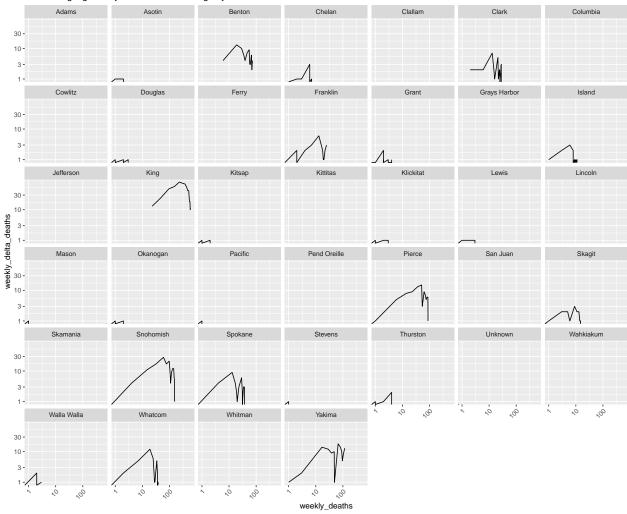


# Washington Counties

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







### California Counties

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

