Change Analysis

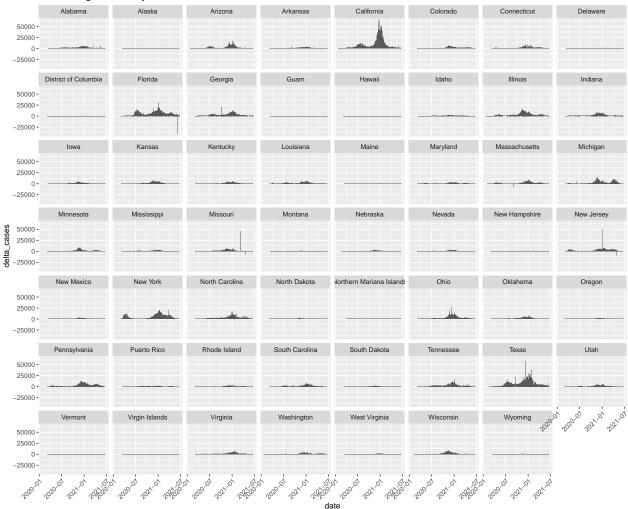
Another experiment to look at rate of change. Idea here is to compare the reported change against the cumulative sum.

Last date for states data is 2021-06-23

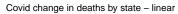
Extract daily changes

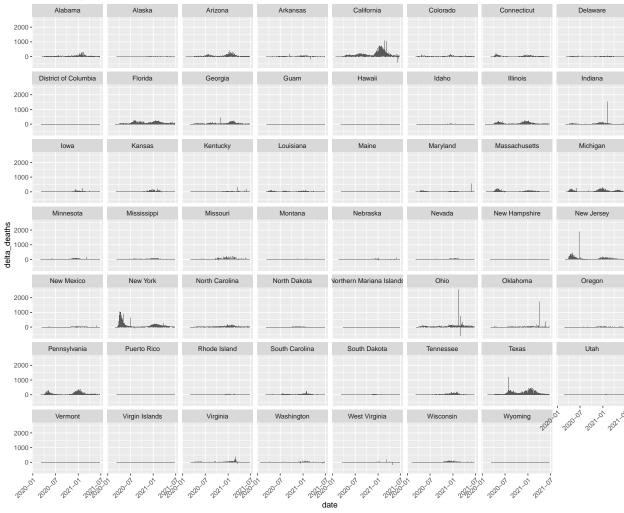
Daily Cases

Covid change in cases by state - linear



Daily Deaths

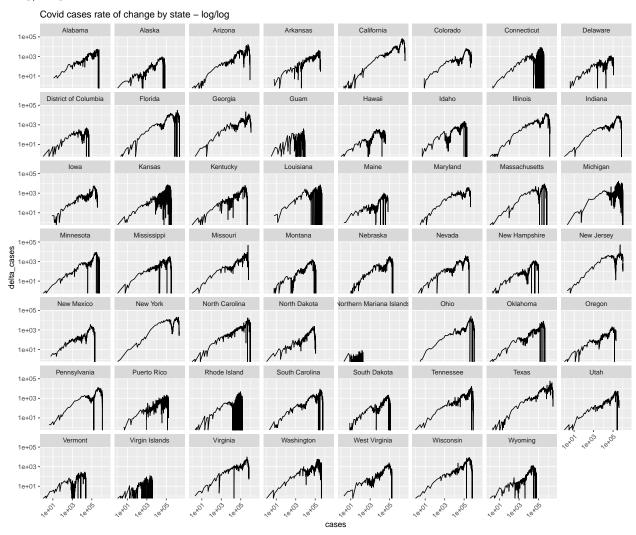




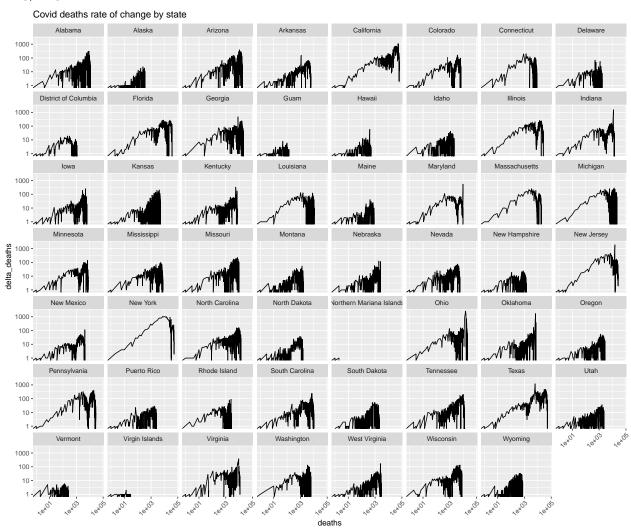
Log of Change Over Cumulative Sum

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.

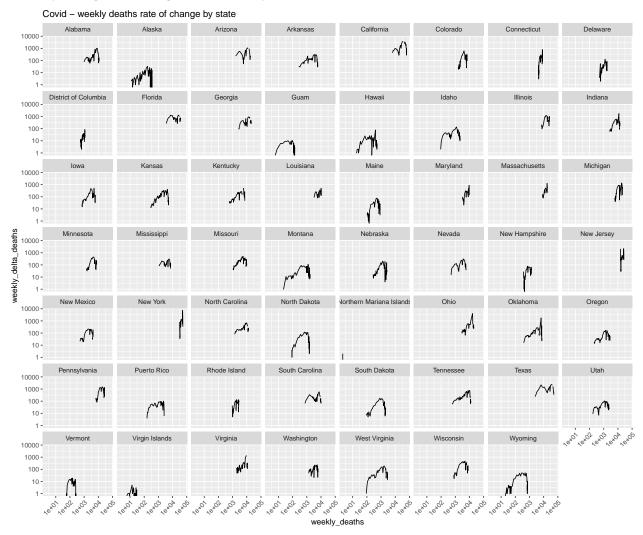
`summarise()` has grouped output by 'state'. You can override using the `.groups` argument.

Weekly Range of Change of Cases by State

Covid – weekly cases rate of change by state

	Alabama	Alaska	Arizona	Arkansas	California	Colorado	Connecticut	Delaware
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	Iowa	Kansas	Kentucky	Louisiana	Maine	Maryland	Massachusetts	Michigan
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	Minnesota	Mississippi	Missouri	Montana	Nebraska	Nevada	New Hampshire	New Jersey
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	New Mexico	New York	North Carolina	North Dakota	Northern Mariana Islands	Ohio	Oklahoma	Oregon
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	Pennsylvania	Puerto Rico	Rhode Island	South Carolina	South Dakota	Tennessee	Texas	Utah
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	Vermont	Virgin Islands	Virginia	Washington	West Virginia	Wisconsin	Wyoming	erol eros erok eros er
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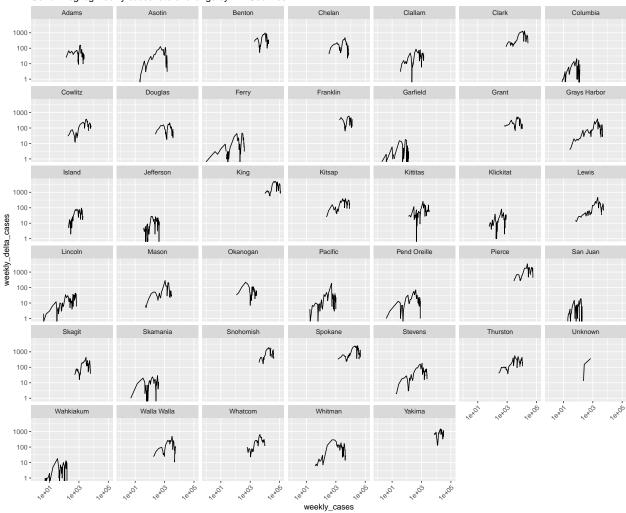
Weekly Range of Change of Deaths by State

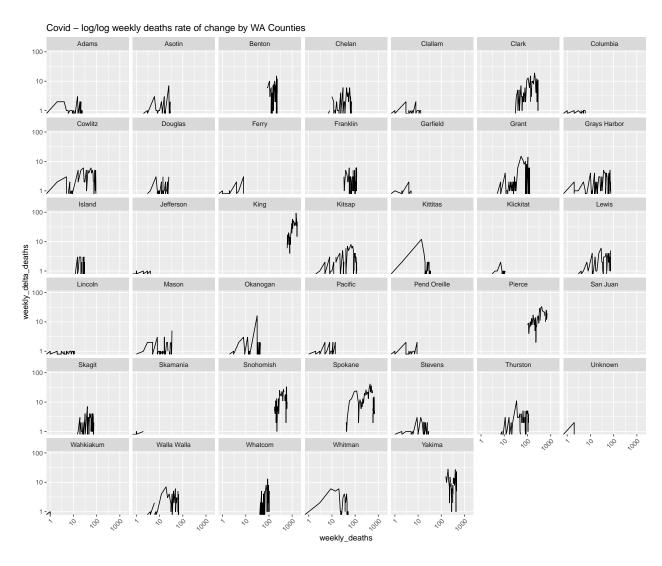


Washington Counties

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

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





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

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1e+01 -			\sim 1	~~^\n\	/~Y ⁿ i	-1/1		Apr ^h			
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	Lake	Lassen	Los Angeles	Madera	Marin	Mariposa	Mendocino	Merced			
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10105-	Modoc	Mono	Monterey	Napa	Nevada	Orange	Placer	Plumas			
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	San Mateo	Santa Barbara	Santa Clara	Santa Cruz	Shasta	Sierra	Siskiyou	Solano			
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4 . 05	Sonoma	Stanislaus	Sutter	Tehama	Trinity	Tulare	Tuolumne	Unknown			
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