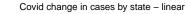
Change Analysis

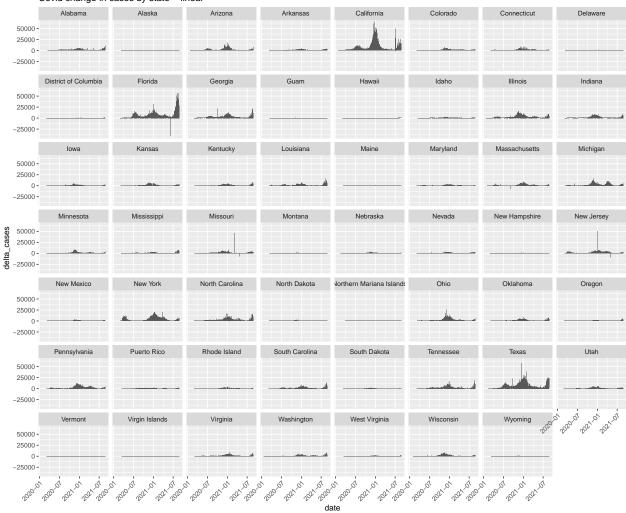
Another experiment to look at rate of change. Idea here is to compare the reported change against the cumulative sum.

Last date for states data is 2021-08-27

Extract daily changes

Daily Cases

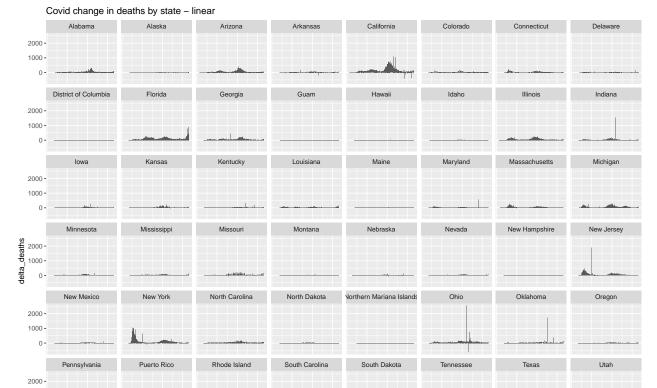




Daily Deaths

1000 -

2000

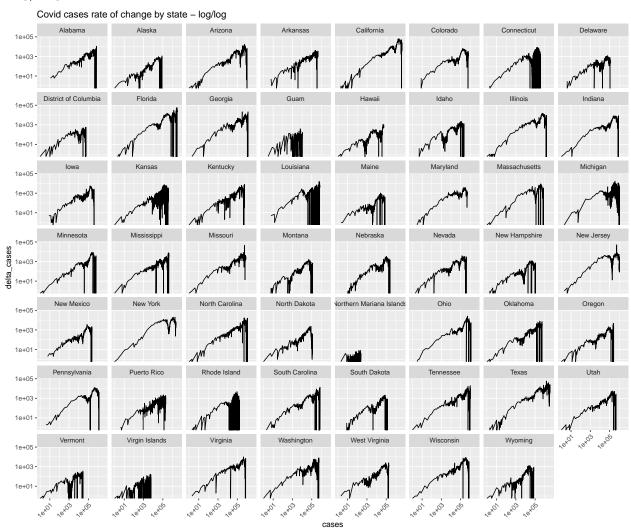


Log of Change Over Cumulative Sum

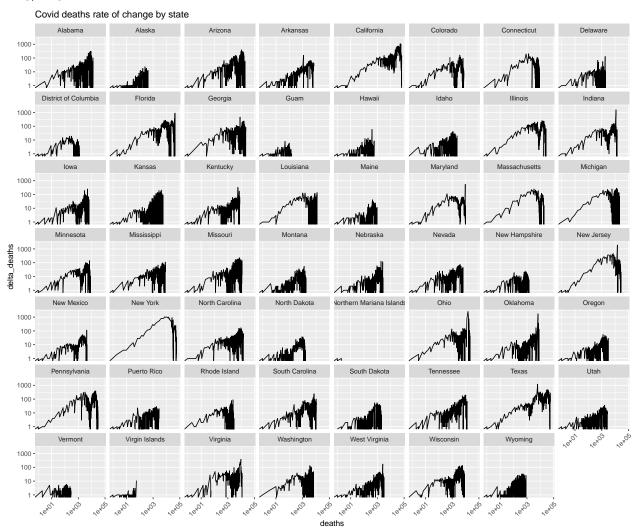
Virgin Islands

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.

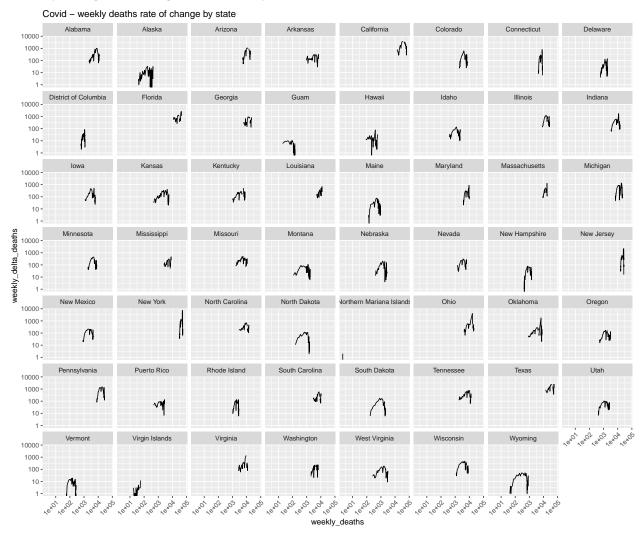
`summarise()` has grouped output by 'state'. You can override using the `.groups` argument.

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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e+01 -								
	District of Columbia	Florida	Georgia	Guam	Hawaii	Idaho	Illinois	Indiana
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	Iowa	Kansas	Kentucky	Louisiana	Maine	Maryland	Massachusetts	Michigan
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e+01 -								
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e+05 -	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	koy ekoy ekoy
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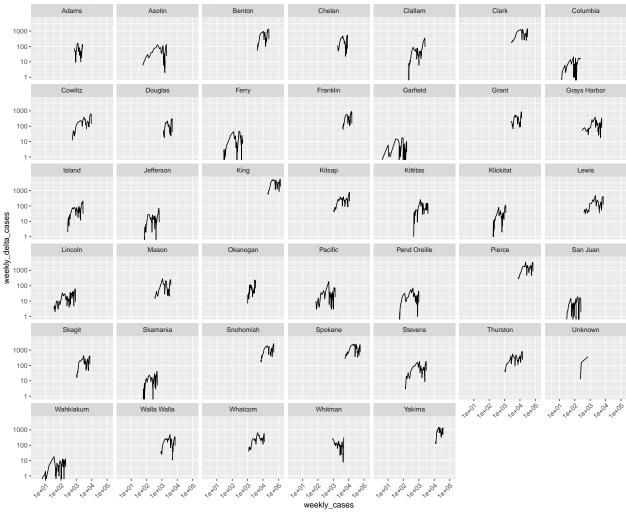
Weekly Range of Change of Deaths by State

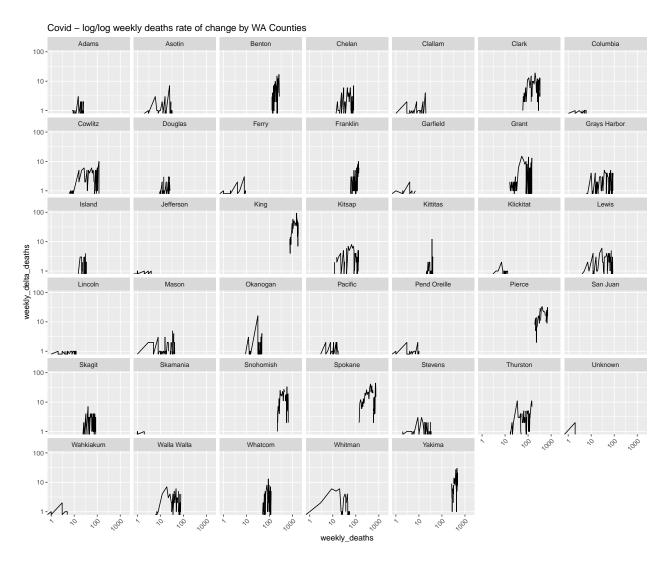


Washington Counties

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





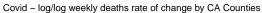


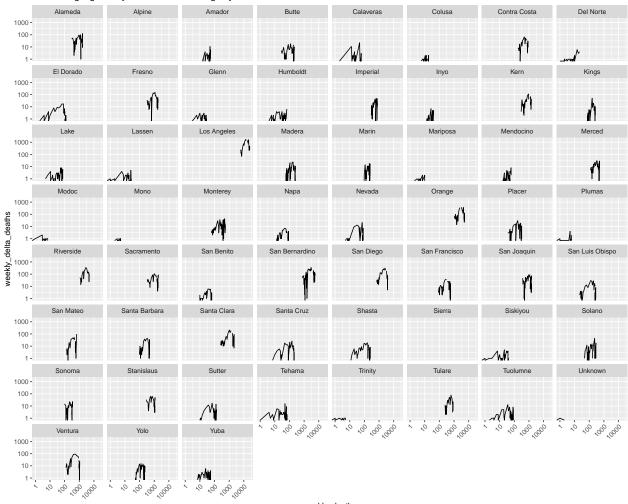
California Counties

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

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

Alameda	Alpine	Amador	Butte	Calaveras	Colusa	Contra Costa	Del Norte
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El Dorado	Fresno	Glenn	Humboldt	Imperial	Inyo	Kern	Kings
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Lake	Lassen	Los Angeles	Madera	Marin	Mariposa	Mendocino	Merced
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Modoc	Mono	Monterey	Napa	Nevada	Orange	Placer	Plumas
	M	<i>^</i> 1	Λή	M	Λı	N	M
Riverside	Sacramento	San Benito	San Bernardino	San Diego	San Francisco	San Joaquin	San Luis Obisp
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San Mateo	Santa Barbara	Santa Clara	Santa Cruz	Shasta	Sierra	Siskiyou	Solano
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Sonoma	Stanislaus	Sutter	Tehama	Trinity	Tulare	Tuolumne	Unknown
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Ventura	Yolo	Yuba	Perol Peros Peros	"ero, "ero, "ero,	"exo, "exo, "exo,	"exo, "exo, "exop	Vetoy Vetog Vet
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	El Dorado Lake Modoc Riverside San Mateo Ventura	El Dorado Fresno Al Lake Lassen Modoc Mono Riverside Sacramento Al San Mateo Santa Barbara Sonoma Stanislaus Ventura Yolo	El Dorado Fresno Glenn Lake Lassen Los Angeles Modoc Mono Monterey Riverside Sacramento San Benito San Mateo Santa Barbara Santa Clara Sonoma Stanislaus Sutter Ventura Yolo Yuba	El Dorado Fresno Glenn Humboldt M Lake Lassen Los Angeles Madera M Modoc Mono Monterey Napa Riverside Sacramento San Benito San Bernardino San Mateo Santa Barbara Santa Clara Santa Cruz Sonoma Stanislaus Sutter Tehama Ventura Yolo Yuba **Broth************************************	El Dorado Fresno Glenn Humboldt Imperial Lake Lassen Los Angeles Madera Marin Modoc Mono Monterey Napa Nevada Nevada Riverside Sacramento San Benito San Bernardino San Diego San Mateo Santa Barbara Santa Clara Santa Cruz Shasta Sonoma Stanislaus Sutter Tehama Trinity Ventura Yolo Yuba Recht R	El Dorado Fresno Glenn Humboldt Imperial Inyo Lake Lassen Los Angeles Madera Marin Mariposa MM	El Dorado Fresno Glenn Humboldt Imperial Inyo Kern A A A A A A A A A A A A A





weekly_deaths