# COVID19 - INDIA

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Agenda

1. Data Source

2. Inter - Intra Geographical Distribution

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8. Cases OverTime

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DataSource Information

- **Coronaviruses** are a large family of viruses which may cause illness in animals or humans. In humans, several coronaviruses are known to cause respiratory infections ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS). The most recently discovered coronavirus causes coronavirus disease COVID-19 - World Health Organisation

- Data used from volunteer-driven, crowdsourced database for COVID-19 stats & patient tracing in India

- Acknowledgements - Thanks to Indian Ministry of Health & Family Welfare for making the data available to general public & Thanks to covid19india.org for making the individual level details and testing details available to general public.

Covid-19 Cases Geographical Distribution

No. of foreign citizens
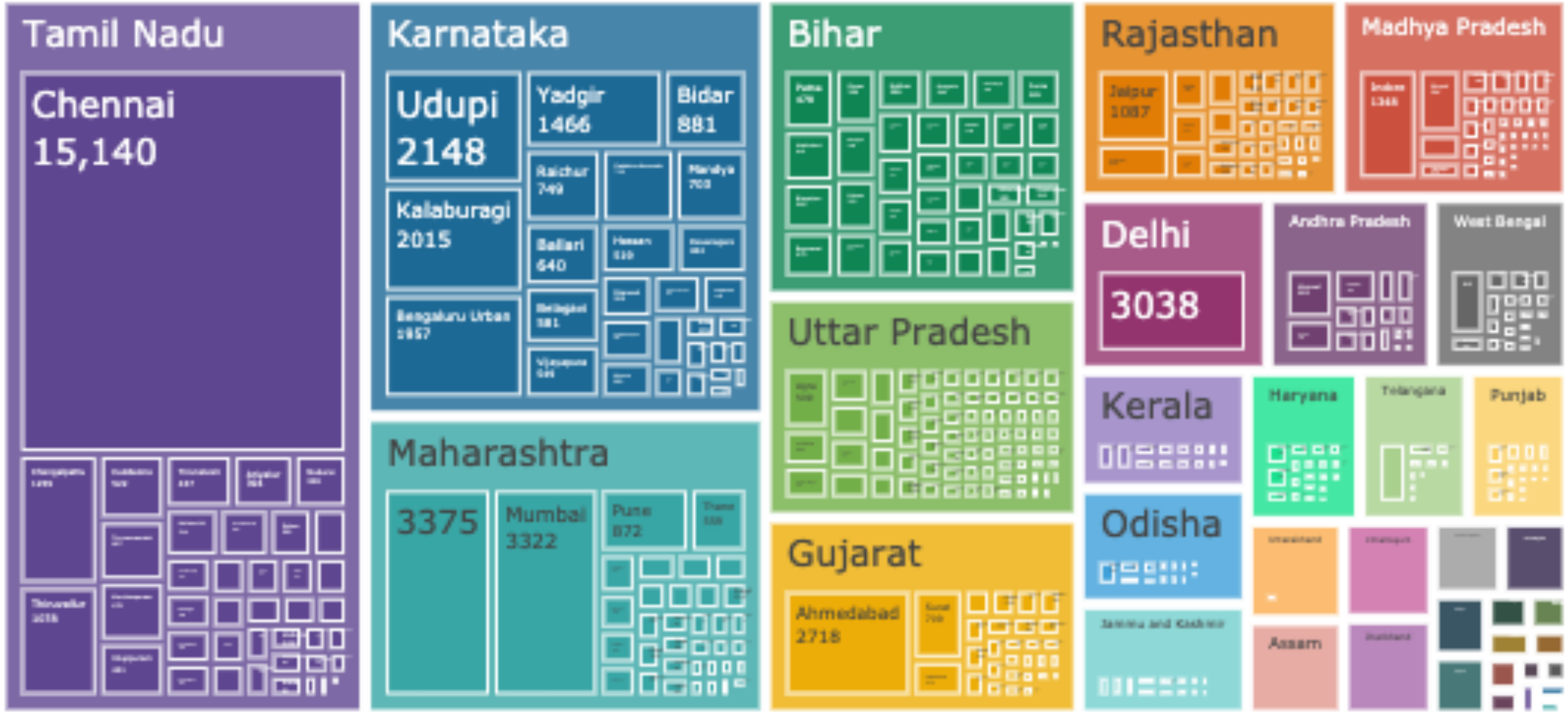
Covid19 cases based on State
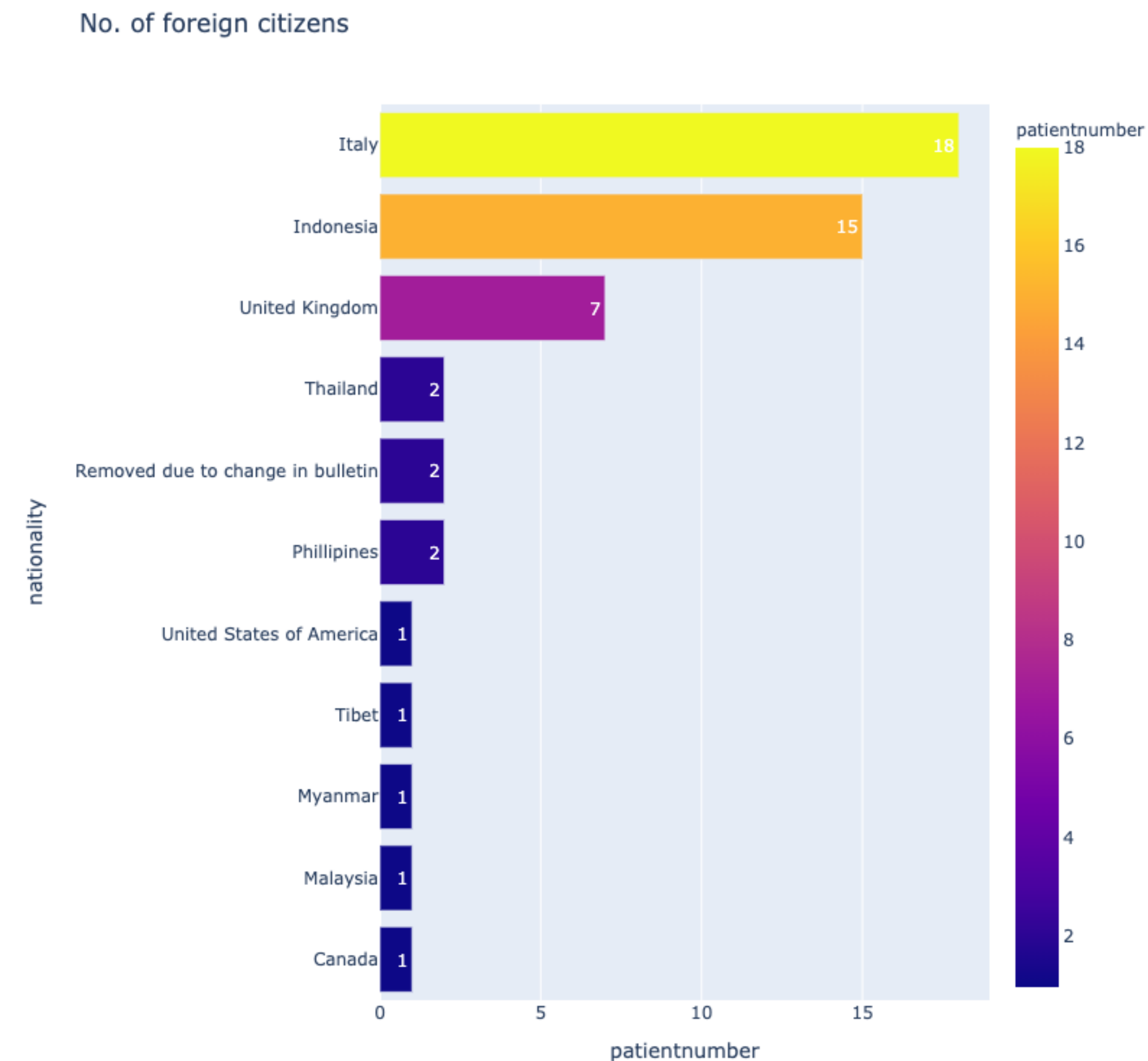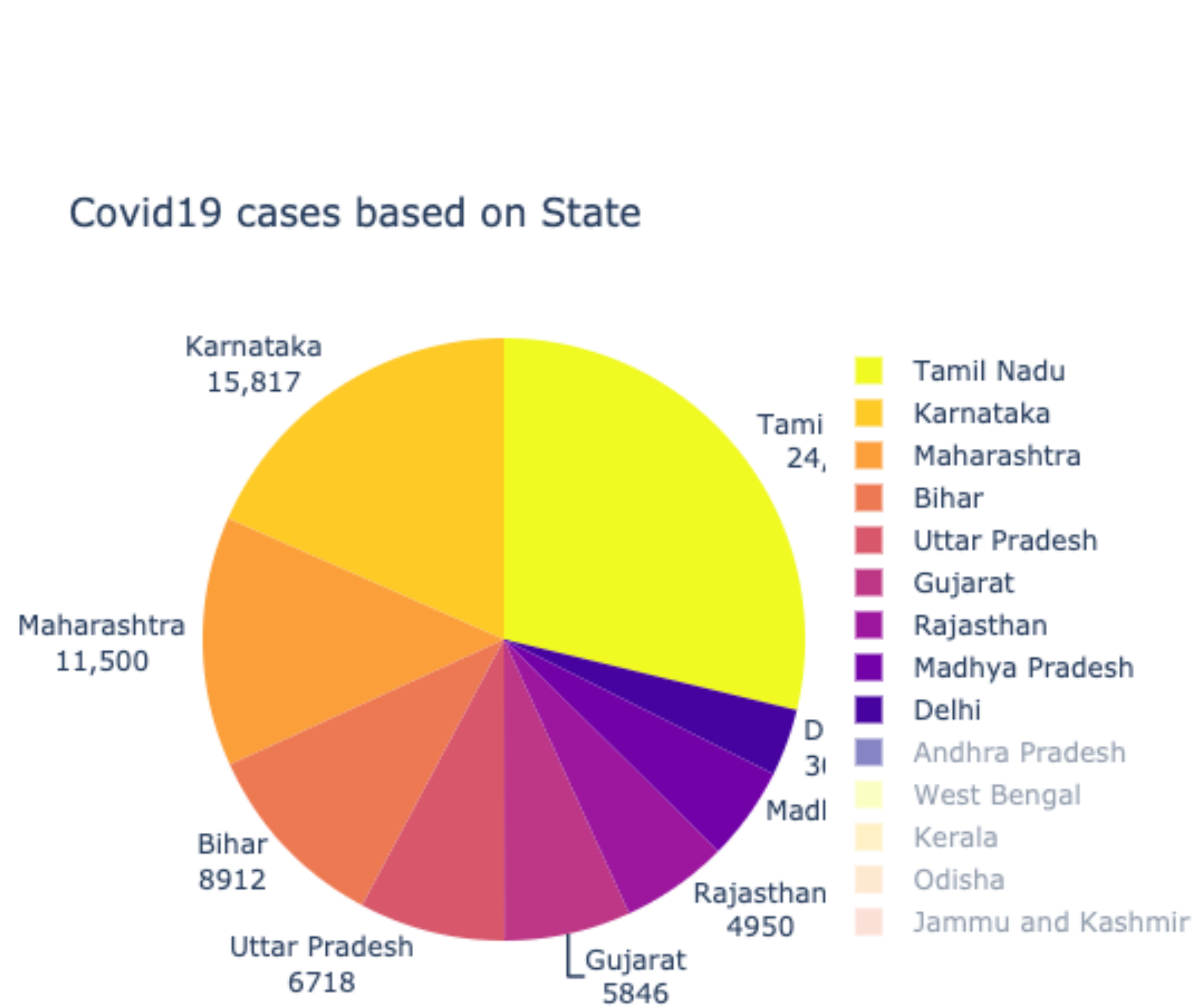
Covid-19 Cases - Age - Gender Distribution
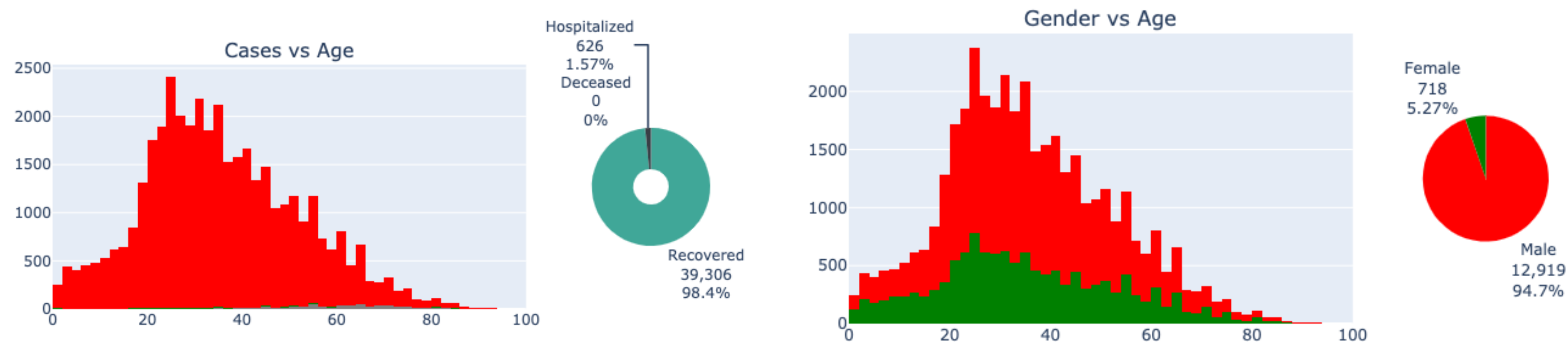
Covid-19 State-wise Confirmed Cases

Number of Confirmed Cases

Covid-19 State-wise Total Cases

|	state	active	confirmed	deaths	recovered	death_rate (per 100)	recovery_rate (per 100)
1	Maharashtra	62833	139010	6531	69631	4.7	50.09
3	Delhi	24988	66602	2301	39313	3.45	59.03
2	Tamil Nadu	28431	64603	833	35339	1.29	54.7
4	Gujarat	6197	28429	1711	20521	6.02	72.18
5	Uttar Pradesh	6189	18893	588	12116	3.11	64.13
6	Rajasthan	3049	15627	365	12213	2.34	78.15
7	West Bengal	4930	14728	580	9218	3.94	62.59
8	Madhya Pradesh	2401	12261	525	9335	4.28	76.14
9	Haryana	4844	11520	178	6498	1.55	56.41
12	Andhra Pradesh	5123	9834	119	4592	1.21	46.7
11	Karnataka	3563	9721	150	6004	1.54	61.76
14	Telangana	5109	9553	220	4224	2.3	44.22
13	Bihar	1969	8050	54	6027	0.67	74.87
10	State Unassigned	8015	8015	0	0	0	0
15	Jammu and Kashmir	2507	6236	87	3642	1.4	58.4
16	Assam	2078	5853	9	3763	0.15	64.29
17	Odisha	1458	5470	24	3988	0.44	72.91
18	Punjab	1245	4397	105	3047	2.39	69.3

|	state	active	confirmed	deaths	recovered	death_rate (per 100)	recovery_rate (per 100)
19	Kerala	1620	3452	23	1807	0.67	52.35
20	Uttarakhand	886	2535	30	1602	1.18	63.2
21	Chhattisgarh	817	2356	12	1527	0.51	64.81
22	Jharkhand	660	2140	11	1469	0.51	68.64
23	Tripura	480	1263	1	782	0.08	61.92
24	Ladakh	783	932	1	148	0.11	15.88
27	Manipur	663	921	0	258	0	28.01
25	Goa	702	909	2	205	0.22	22.55
26	Himachal Pradesh	323	775	7	432	0.9	55.74
28	Chandigarh	90	418	6	322	1.44	77.03
29	Puducherry	228	402	9	165	2.24	41.04
30	Nagaland	189	330	0	141	0	42.73
32	Arunachal Pradesh	120	158	0	38	0	24.05
31	Mizoram	123	142	0	19	0	13.38
34	Dadra and Nagar Haveli and Daman and Diu	93	121	0	27	0	22.31
33	Sikkim	49	78	0	29	0	37.18
35	Andaman and Nicobar Islands	10	50	0	40	0	80
36	Meghalaya	4	46	1	41	2.17	89.13

Covid-19 State-wise Recovery Rate

Recovery Rate (per 100)
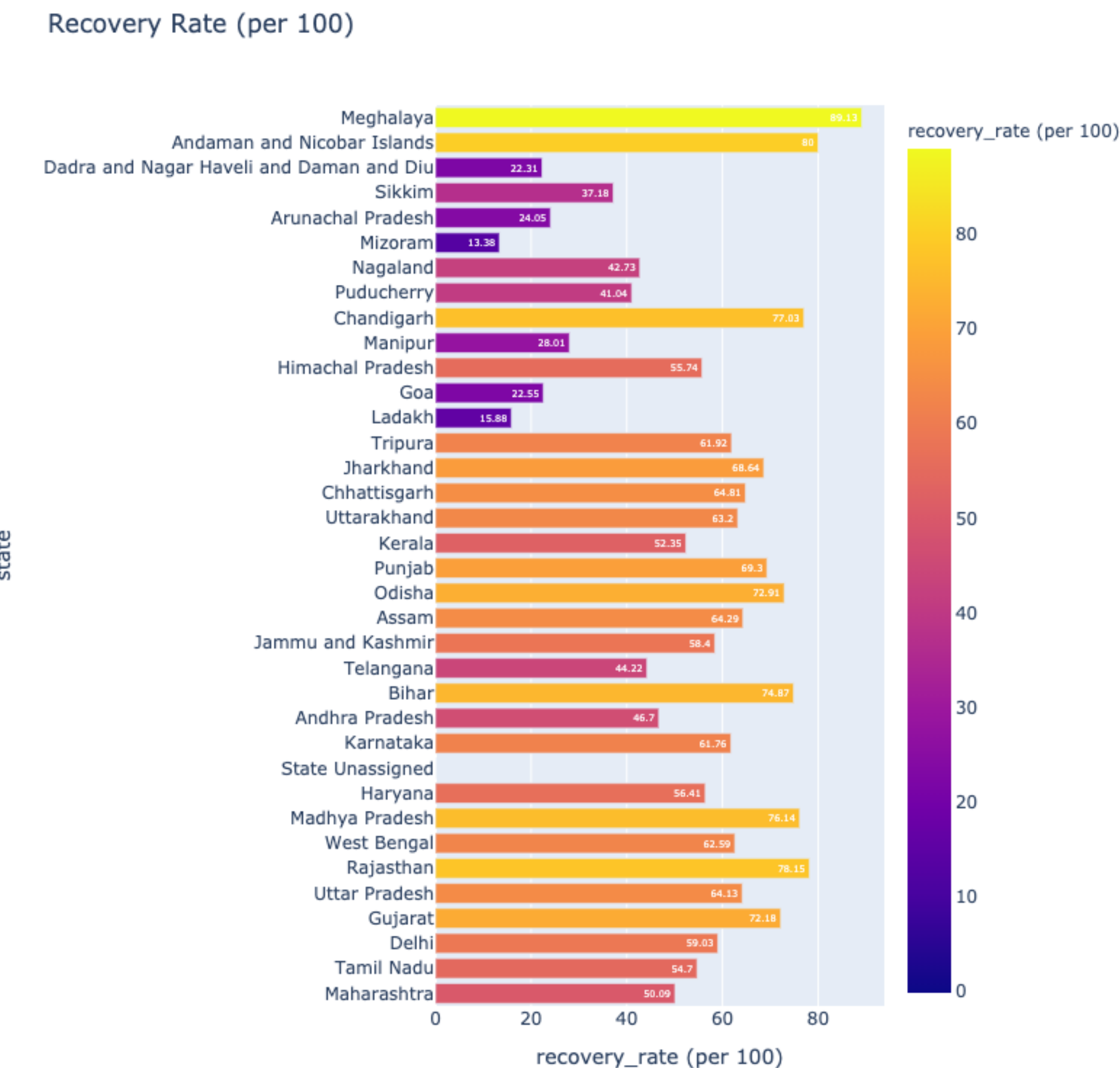
Covid-19 Day-wise Confirmed and Deceased Cases
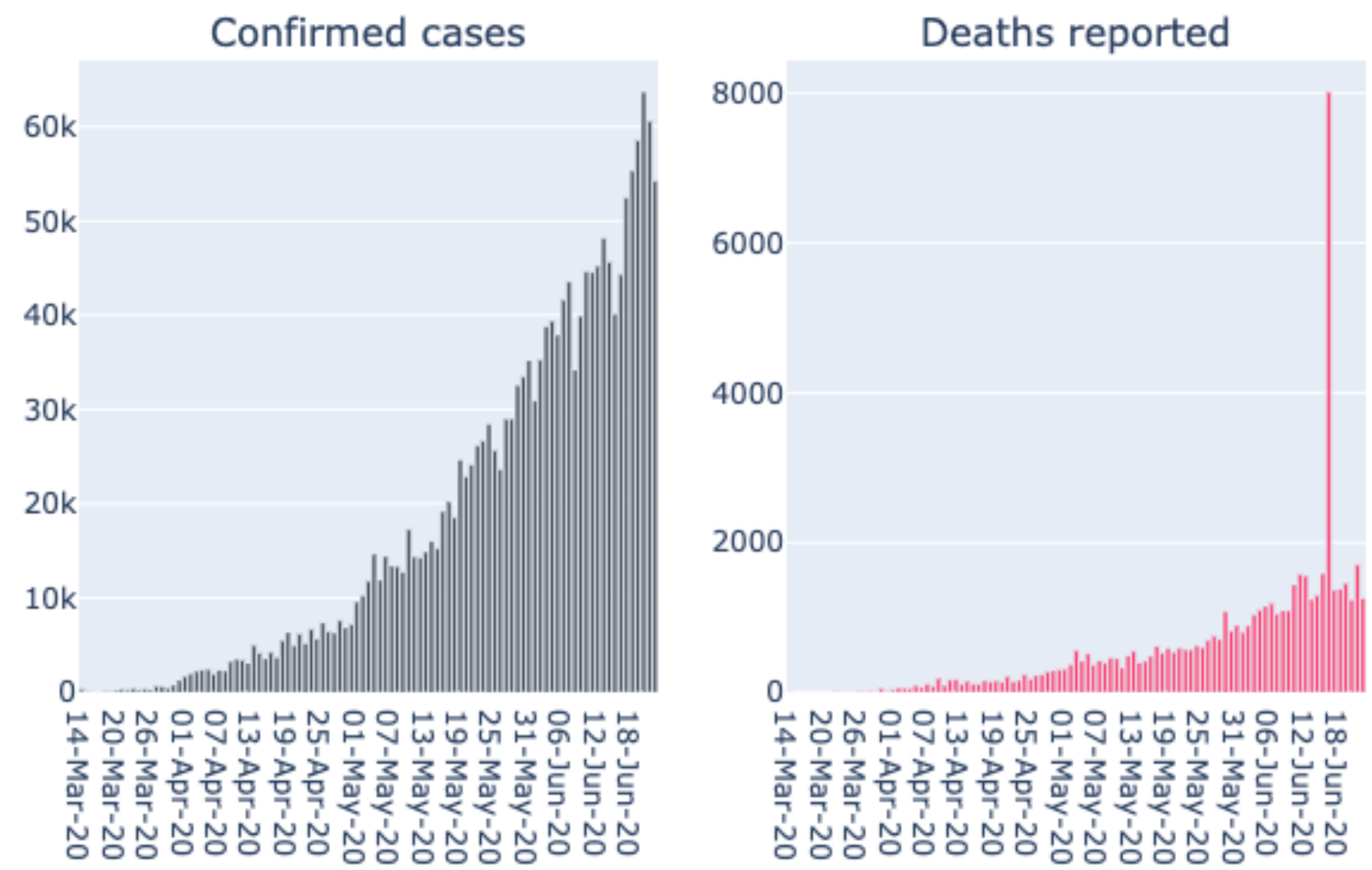
Covid-19 Cases OverTime
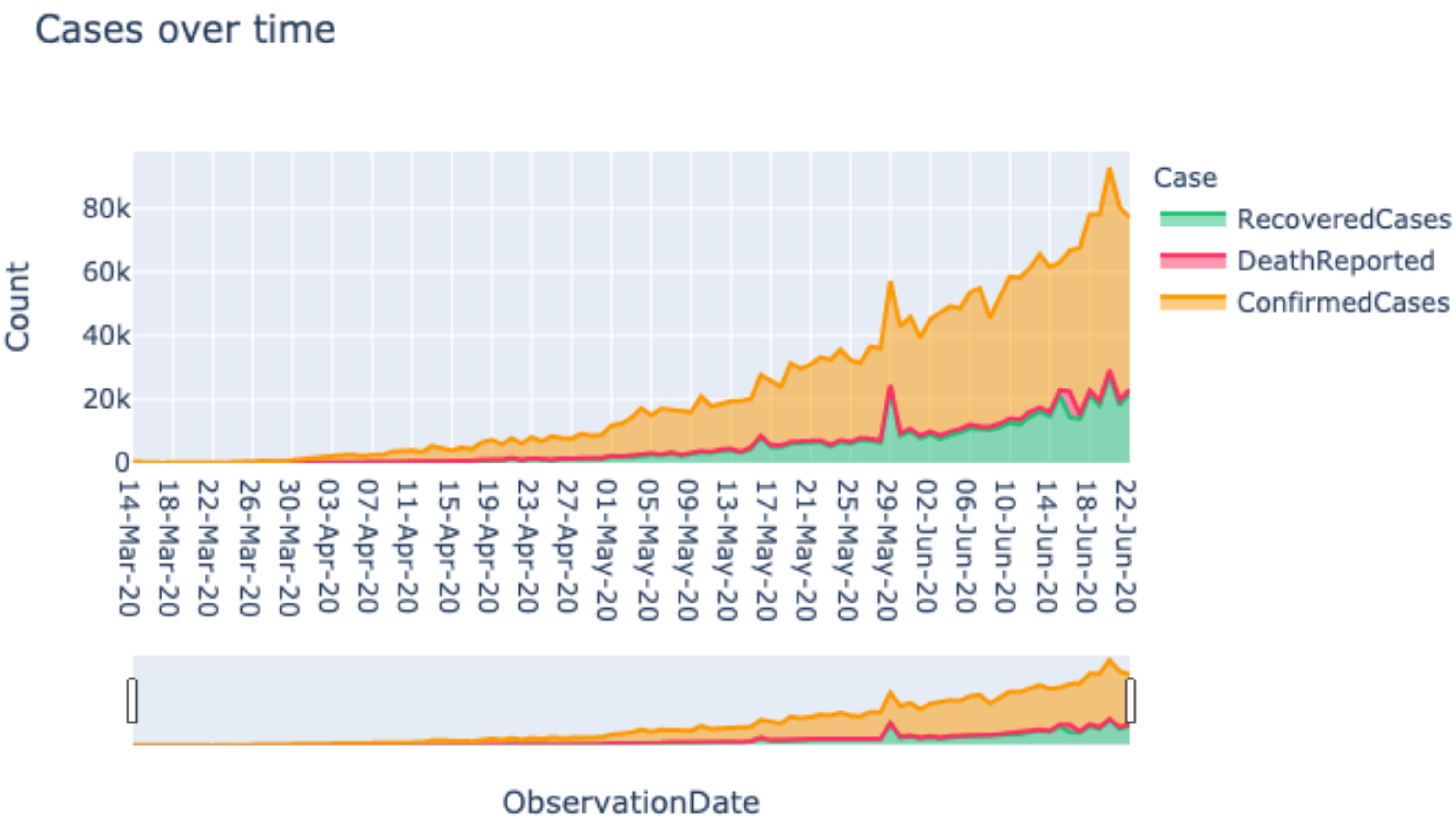
Covid-19 TimeSeries Prediction

Values	Normal	Log Scale Transformation	Log Scale - Moving Average Transformation	Exponential Decay Transformation	LogScale Minus Exponential MovingAverage	Log Time Shift Transformation
				Transformation		
Test Statistic	2.081854	-3.232222	-2.693855	-4.090569	-1.587925	-2.575909
p-value	0.99877	0.018194	0.075108	0.001004	0.489657	0.098079
#Lags Used	12	12	12	11	12	11
Number of Observations Used	79	79	68	80	79	79
Critical Value (1%)	-3.515977	-3.515977	-3.530399	-3.514869	-3.515977	-3.515977
Critical Value (5%)	-2.898886	-2.898886	-2.905087	-2.898409	-2.898886	-2.898886
Critical Value (10%)	-2.586694	-2.586694	-2.590001	-2.586439	-2.586694	-2.586694
Result	Data is not Stationary	Data is Stationary	Data is not Stationary	Data is Stationary	Data is not Stationary	Data is not Stationary
				df_exp_decay_wgt_Avg		

Actual Vs Predicated Total Deceased
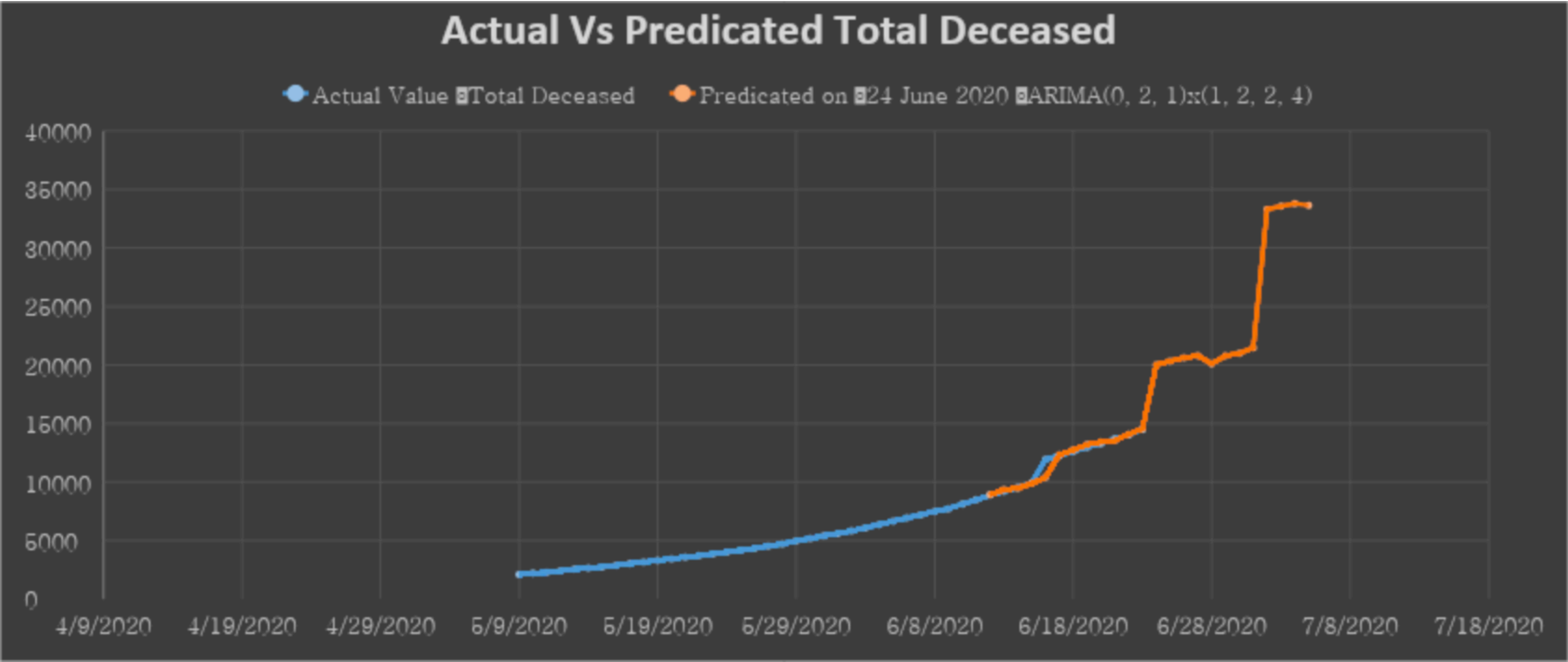
Thank you!

Interested folks can connect with us and learn together @ DataScience Friends!