

coronavirus_analysis_v0_2020-03-14

March 14, 2020

Analysis of recent coronavirus data for different countries and regions.

Javier Moldon. More info in https://github.com/jmoldon/coronavirus_analysis

1 Load the data

Data comes from Johns Hopkins University at <https://github.com/CSSEGISandData/COVID-19> that is updated daily.

Names of available countries (Note, some countries are divided in province/State

List of most affected countries (sorted by number of confirmed cases)

	Confirmed	Deaths	Recovered
Country/Region			
China	67786	3062	51553
Italy	17660	1266	1439
Iran	11364	514	2959
Korea, South	7979	66	510
Spain	5232	133	193
Germany	3675	7	46
France	3661	79	12
Switzerland	1139	11	4
Norway	996	0	1
Sweden	814	1	1
Netherlands	804	10	0
Denmark	801	0	1
United Kingdom	798	8	18
Cruise Ship	706	7	325
Japan	701	19	118

List of most affected countries/provinces (sorted by number of deaths)

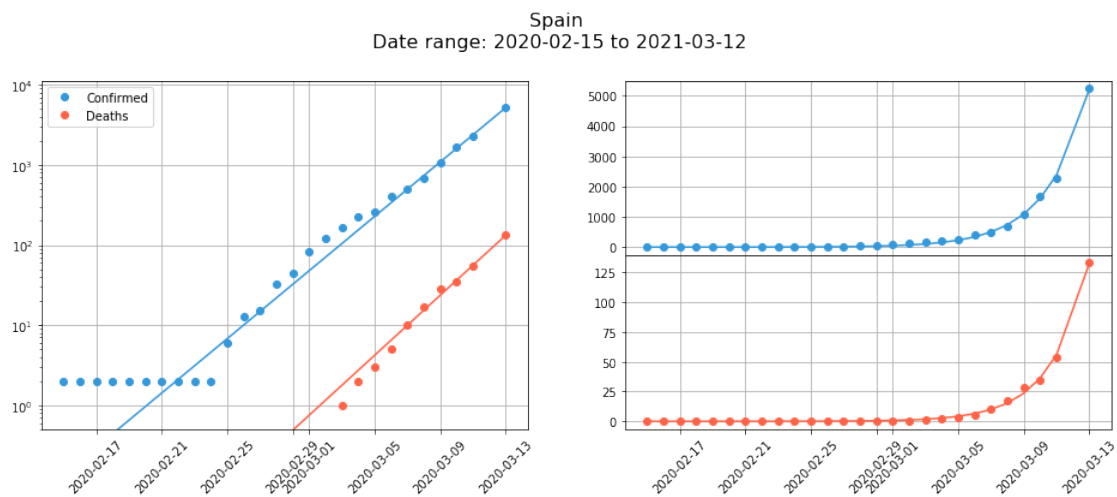
		Confirmed	Deaths	Recovered
Country/Region	Province/State			
China	Hubei	67786	3062	51553
Italy		17660	1266	1439
Iran		11364	514	2959
Spain		5232	133	193

France	France	3661	79	12
Korea, South		7979	66	510
US	Washington	568	37	1
China	Henan	1273	22	1249
Japan		701	19	118
US	King County, WA	83	17	1
China	Heilongjiang	482	13	446
Switzerland		1139	11	4
Netherlands		804	10	0
Iraq		101	9	24
China	Guangdong	1356	8	1296

2 Evolution of Confirmed cases and Death per country

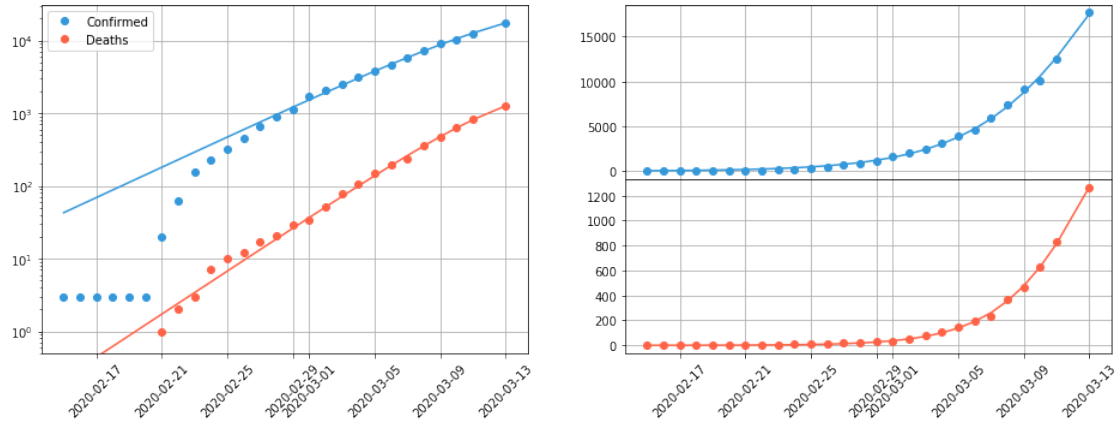
Left: log scale, right: linear scale, separating cases and deaths. The fit is a logistic growth when possible. If the fit does not converge (early stages), then a simple exponential is used.

Spain



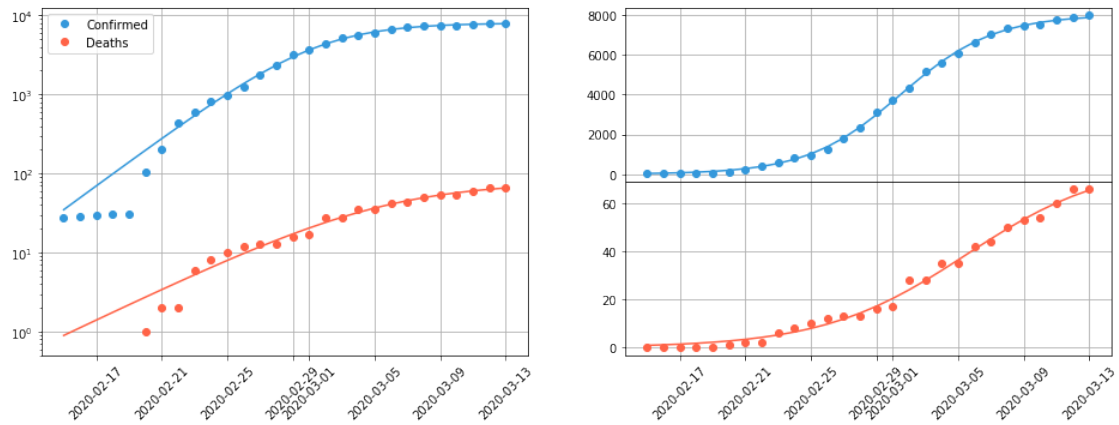
Italy

Italy
Date range: 2020-02-15 to 2021-03-12



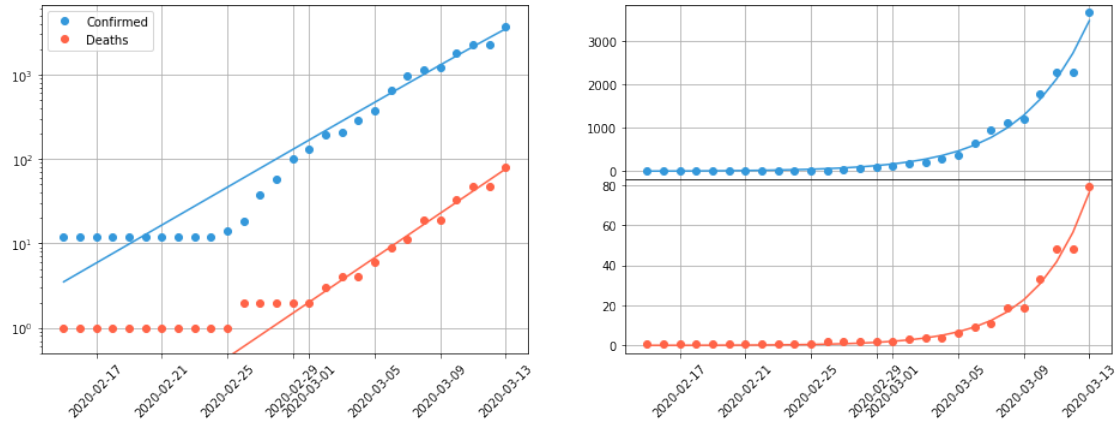
Korea, South

Korea, South
Date range: 2020-02-15 to 2021-03-12



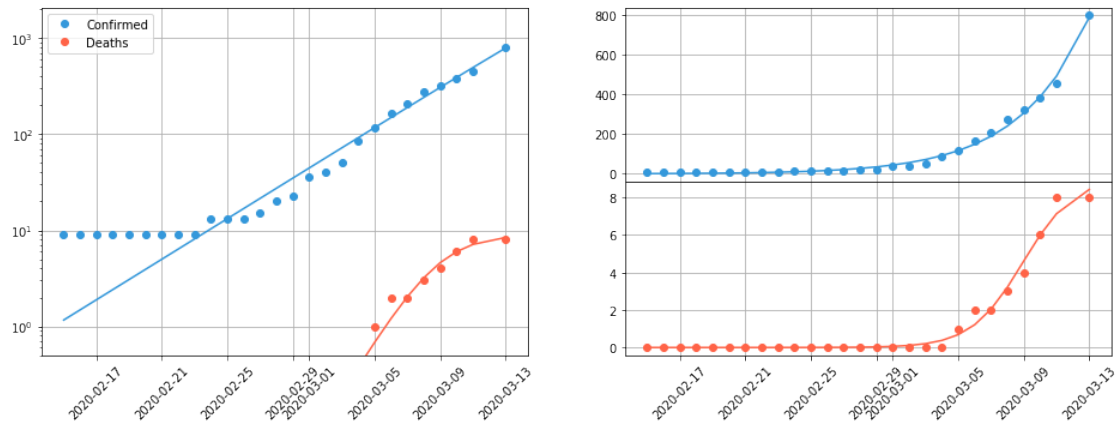
France France

France France
Date range: 2020-02-15 to 2021-03-12



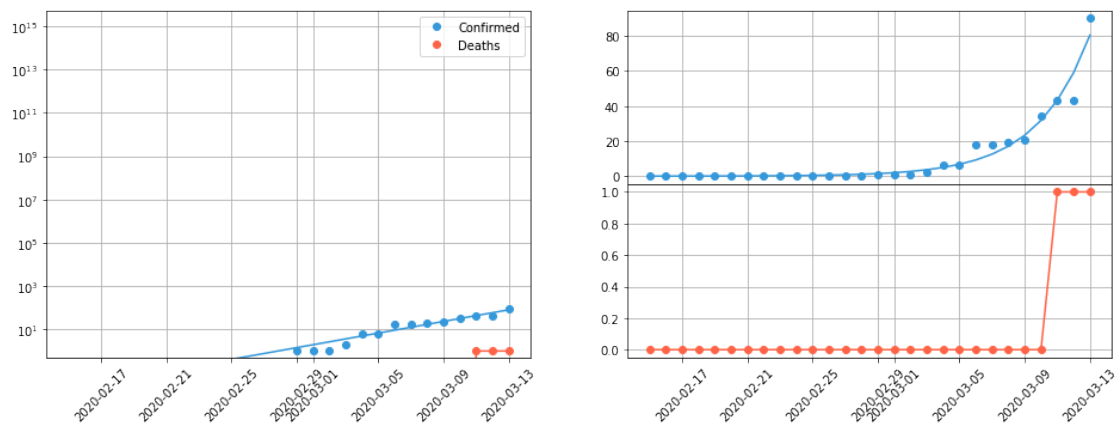
United Kingdom United Kingdom

United Kingdom United Kingdom
Date range: 2020-02-15 to 2021-03-12



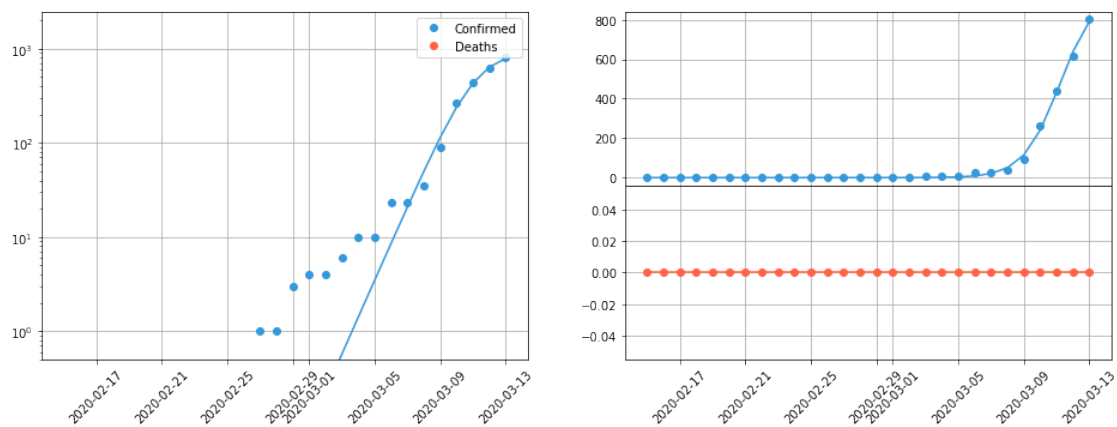
Ireland

Ireland
Date range: 2020-02-15 to 2021-03-12



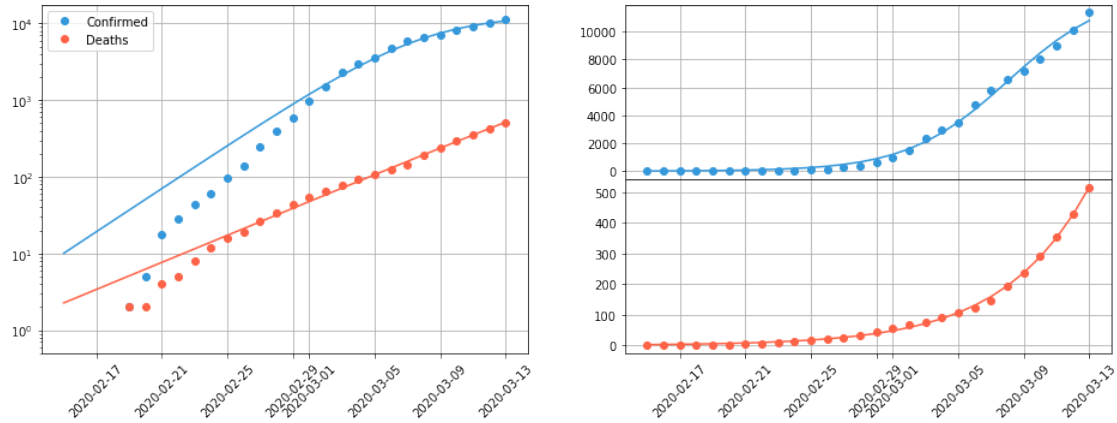
Denmark Denmark

Denmark Denmark
Date range: 2020-02-15 to 2021-03-12



Iran

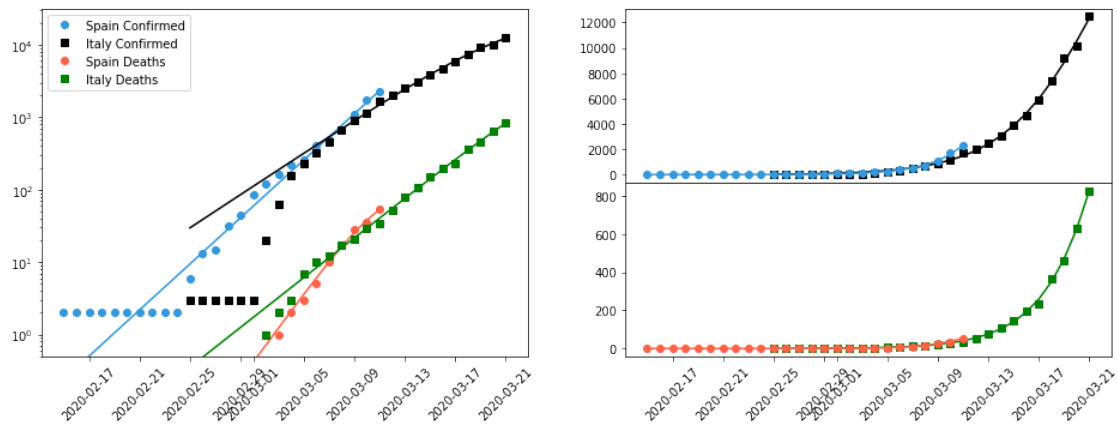
Iran
Date range: 2020-02-15 to 2021-03-12



3 Comparison of two countries, with a manual time delay to align them

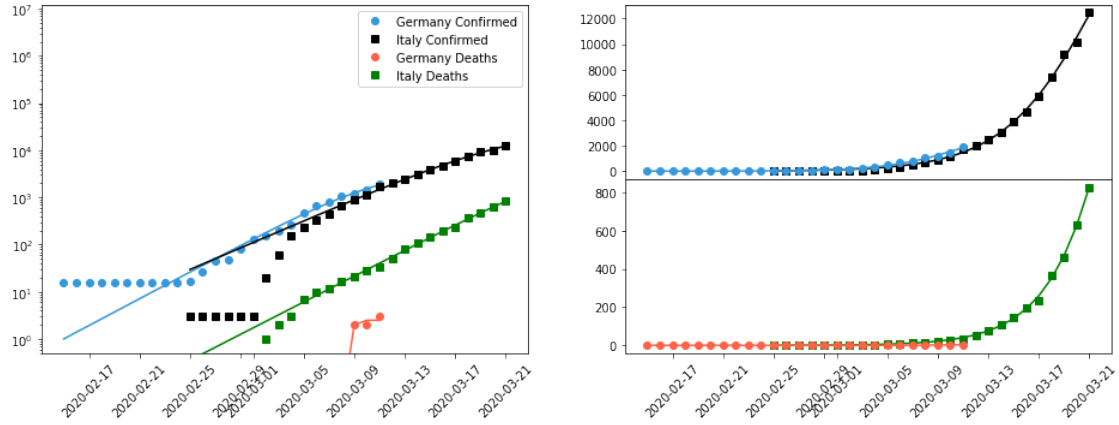
Spain
Italy

Spain vs Italy
Time delay added: 10 days



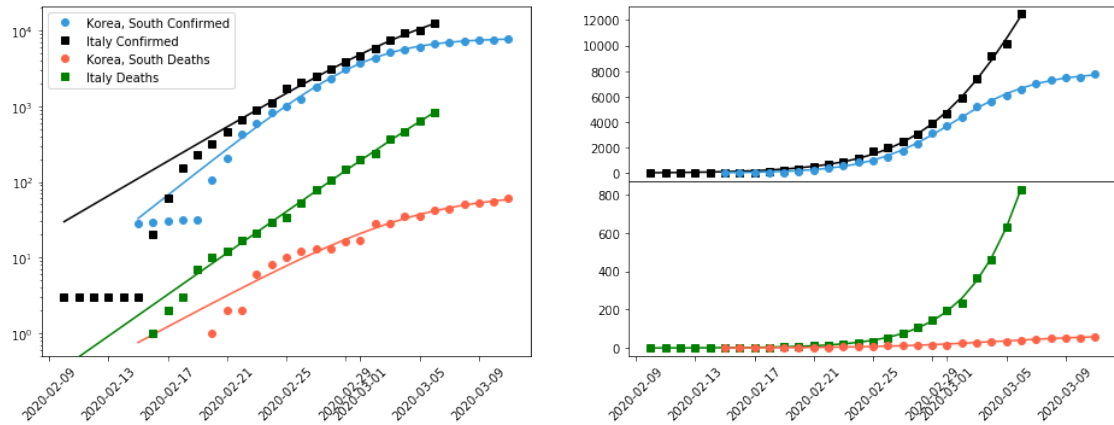
Germany
Italy

Germany vs Italy
Time delay added: 10 days



Korea, South
Italy

Korea, South vs Italy
Time delay added: -5 days



4 Additional plots for other countries

Show plots for the most affected country/province

China Hubei

Italy

Iran

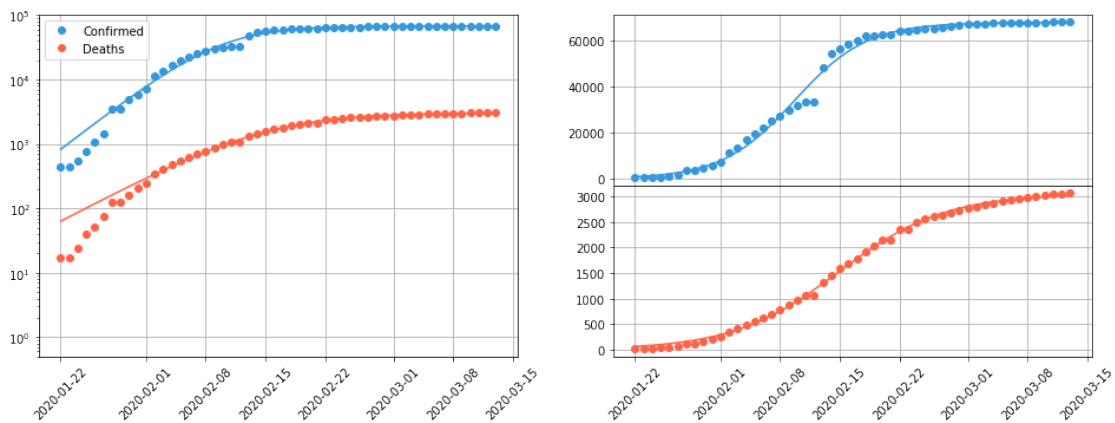
Korea, South

China Henan

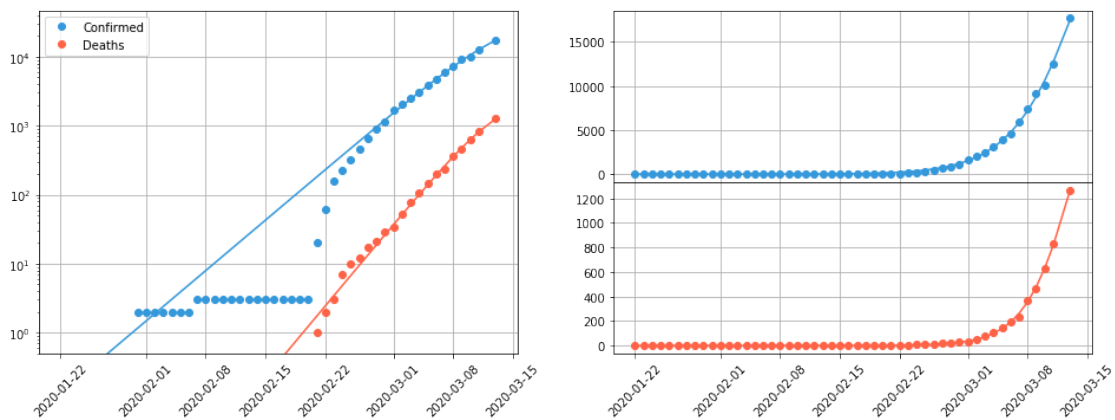
China Heilongjiang

France France
 Spain
 China Beijing
 China Chongqing
 China Anhui
 China Guangdong
 China Hebei
 China Hainan
 China Shandong
 Japan
 US Washington
 China Hunan
 Cruise Ship Diamond Princess
 China Tianjin

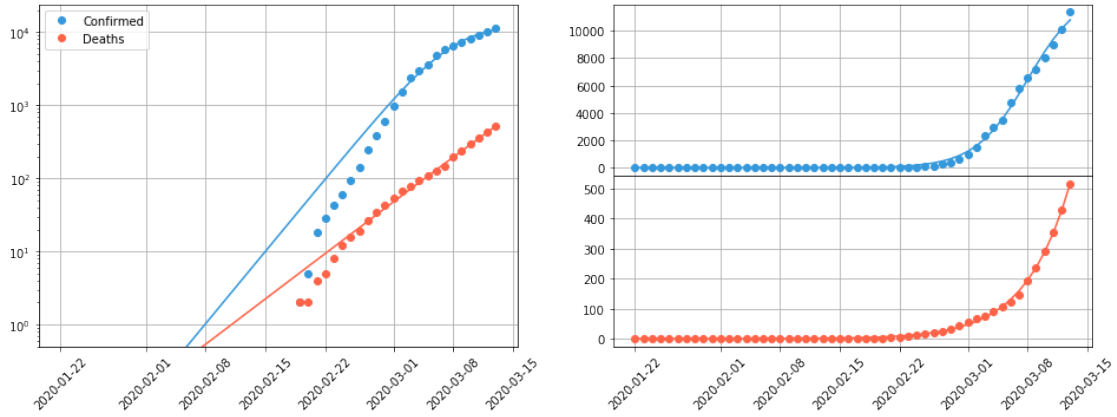
China Hubei
 Date range: 2020-01-02 to 2021-03-12



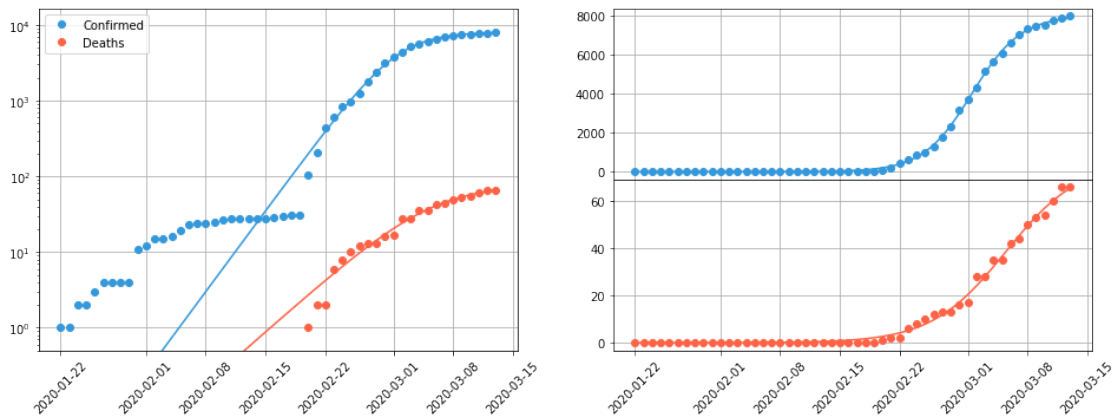
Italy
 Date range: 2020-01-02 to 2021-03-12



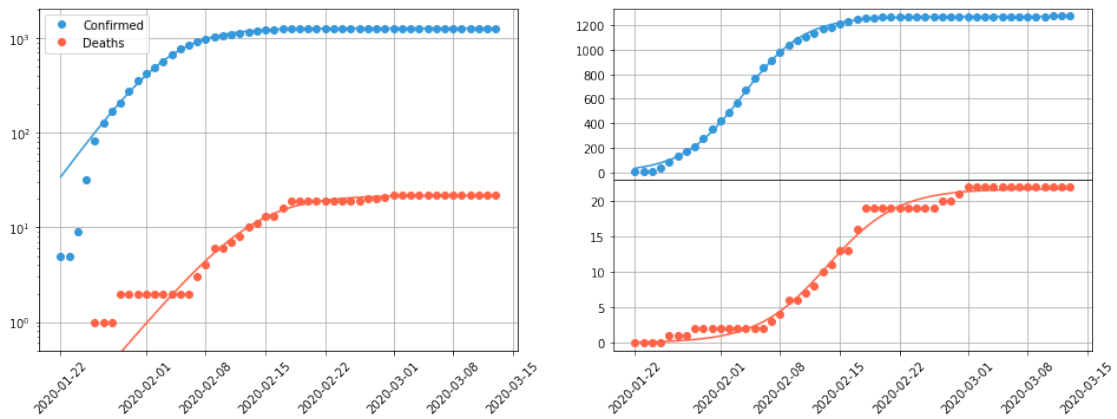
Iran
Date range: 2020-01-02 to 2021-03-12



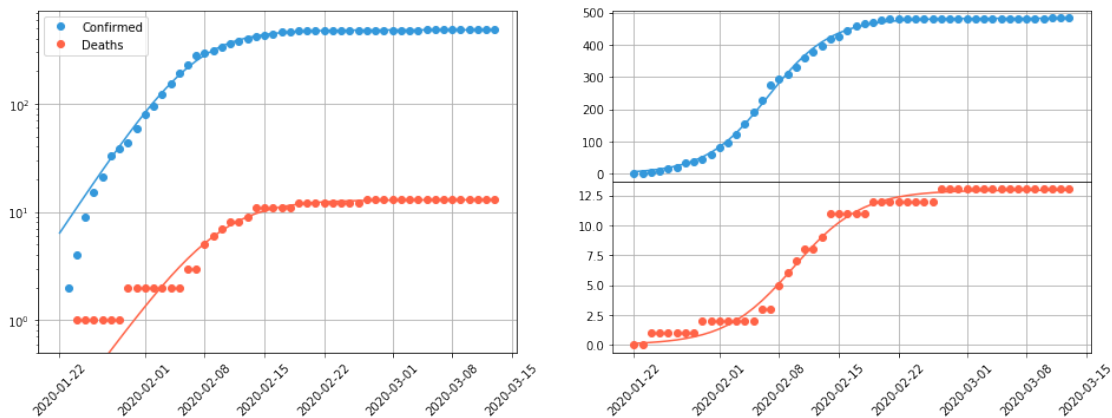
Korea, South
Date range: 2020-01-02 to 2021-03-12



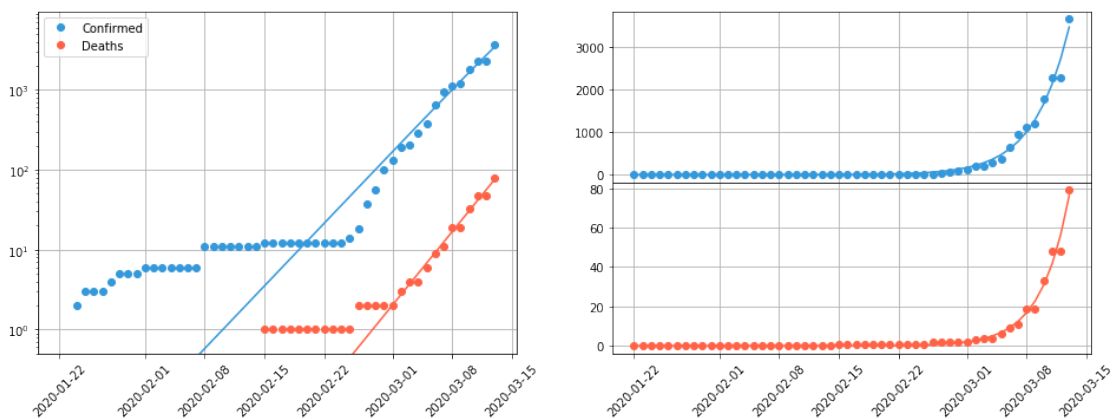
China Henan
Date range: 2020-01-02 to 2021-03-12



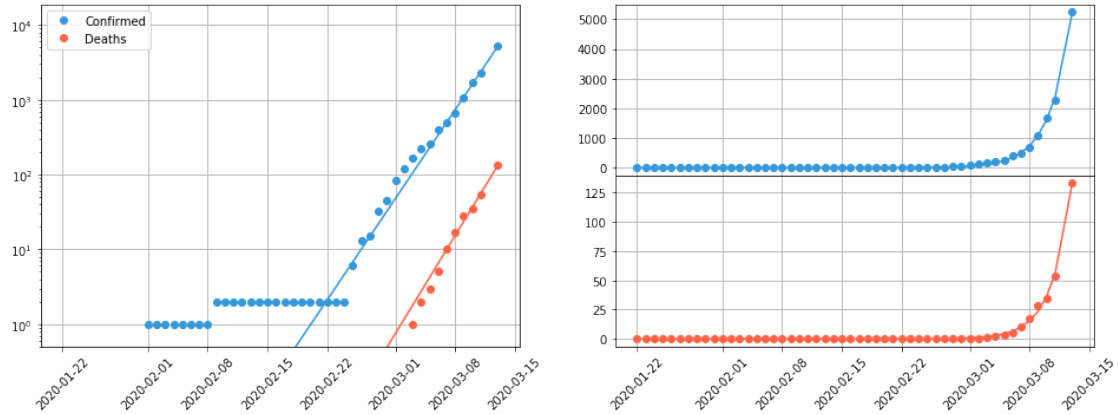
China Heilongjiang
Date range: 2020-01-02 to 2021-03-12



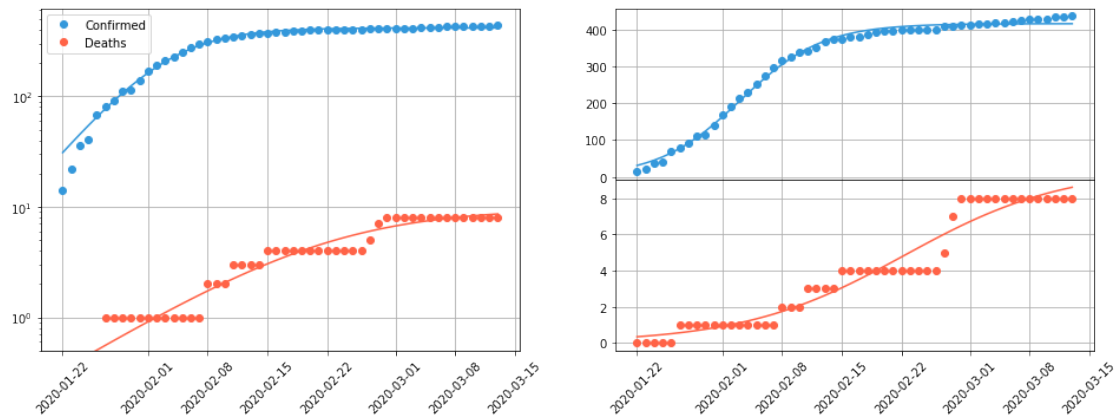
France France
Date range: 2020-01-02 to 2021-03-12



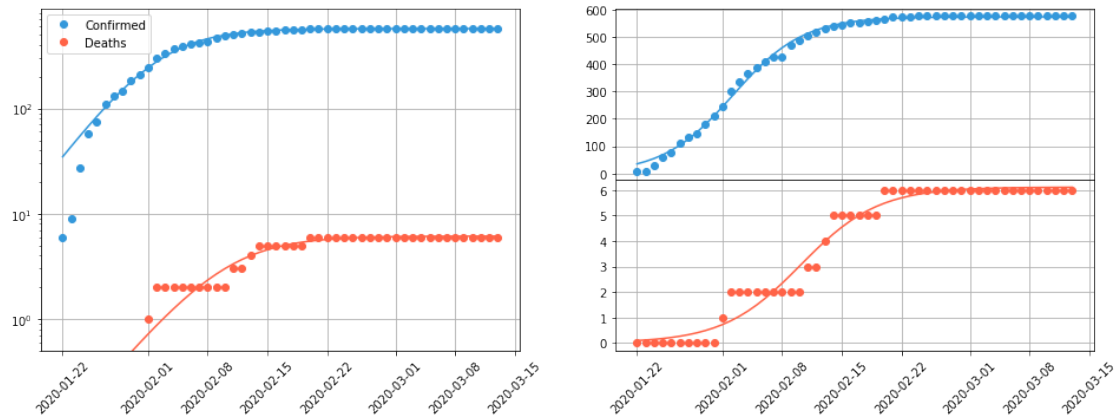
Spain
Date range: 2020-01-02 to 2021-03-12



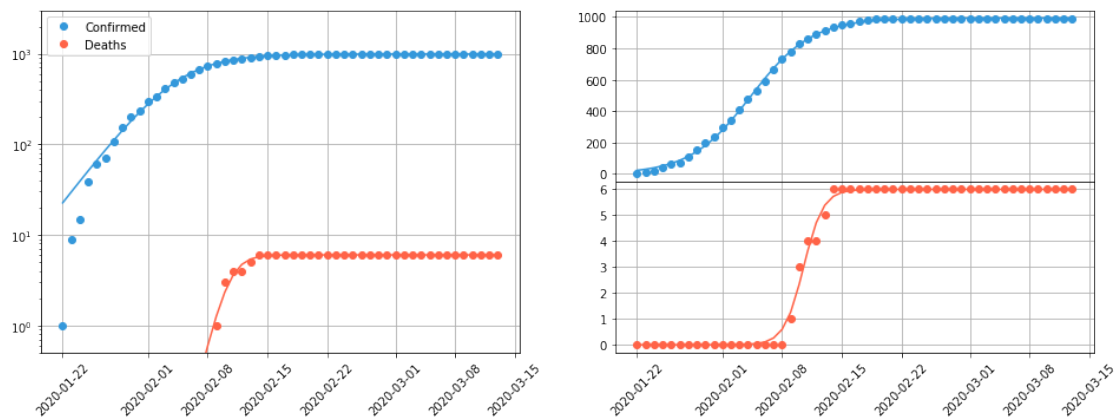
China Beijing
Date range: 2020-01-02 to 2021-03-12



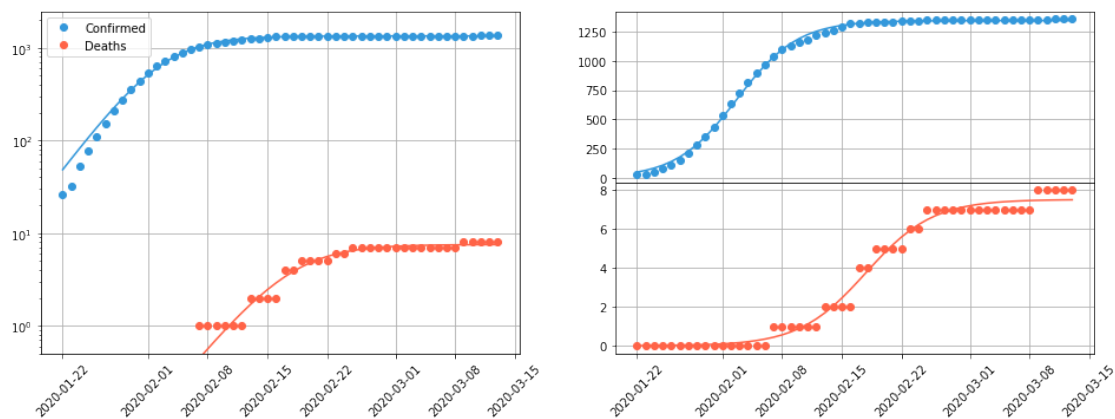
China Chongqing
Date range: 2020-01-02 to 2021-03-12



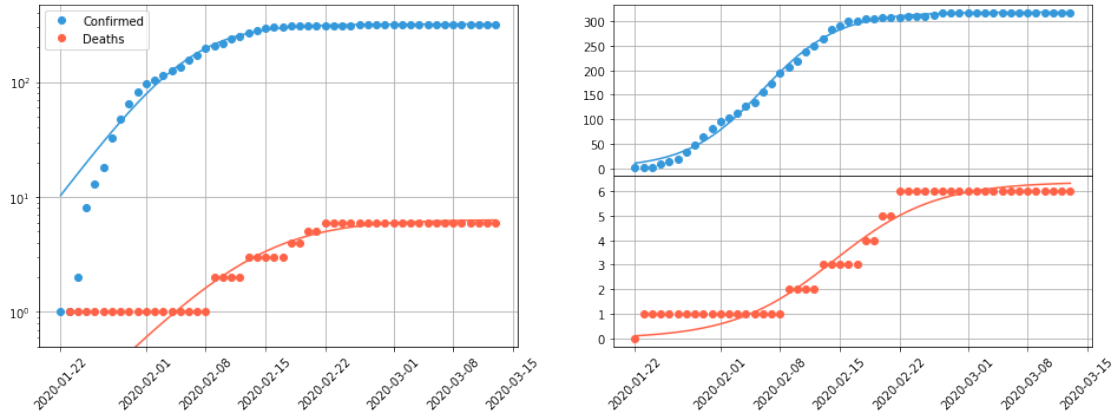
China Anhui
Date range: 2020-01-02 to 2021-03-12



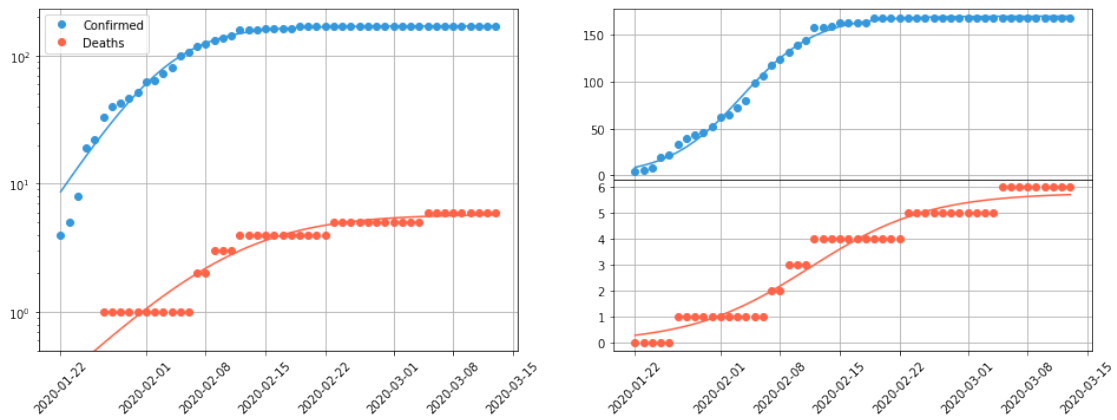
China Guangdong
Date range: 2020-01-02 to 2021-03-12



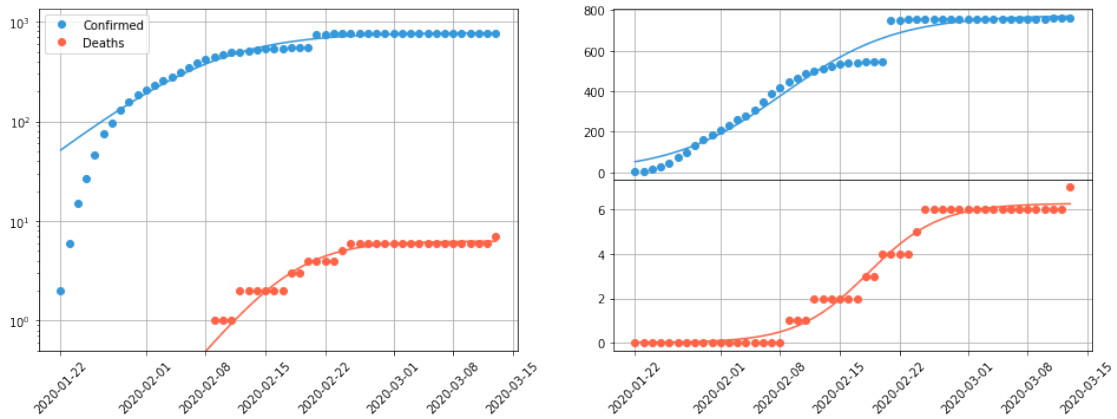
China Hebei
Date range: 2020-01-02 to 2021-03-12



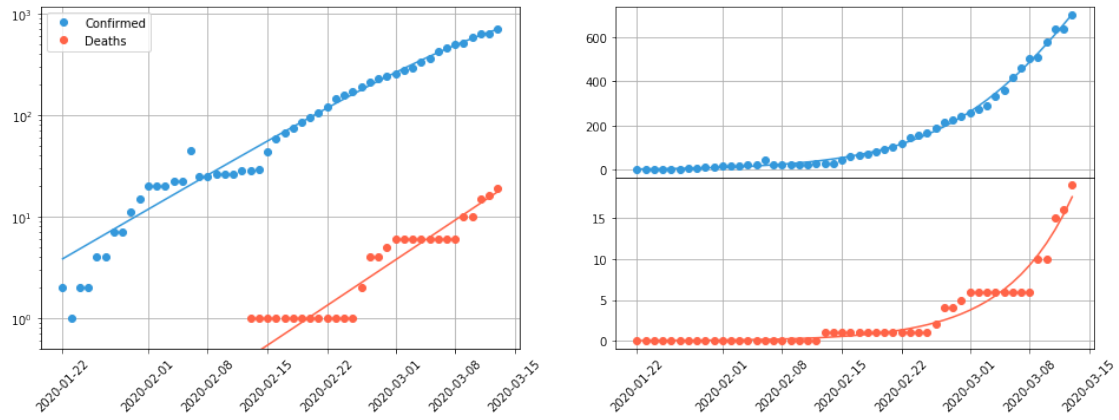
China Hainan
Date range: 2020-01-02 to 2021-03-12



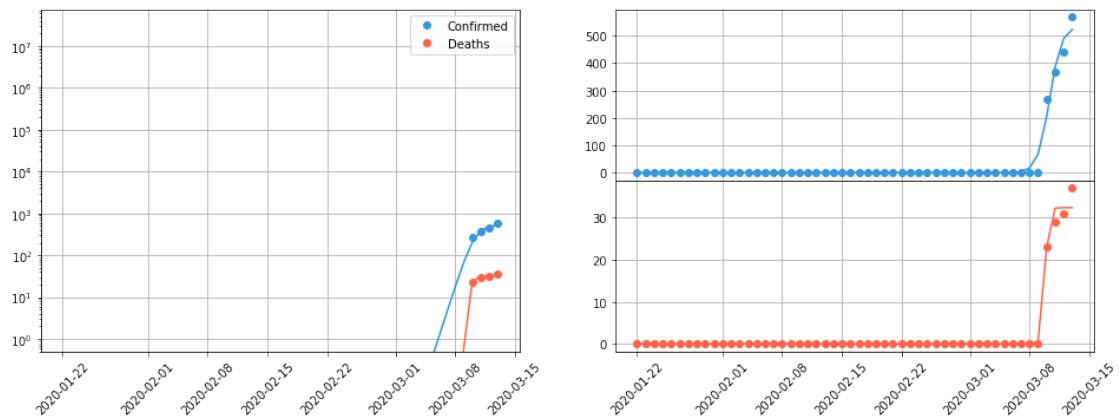
China Shandong
Date range: 2020-01-02 to 2021-03-12



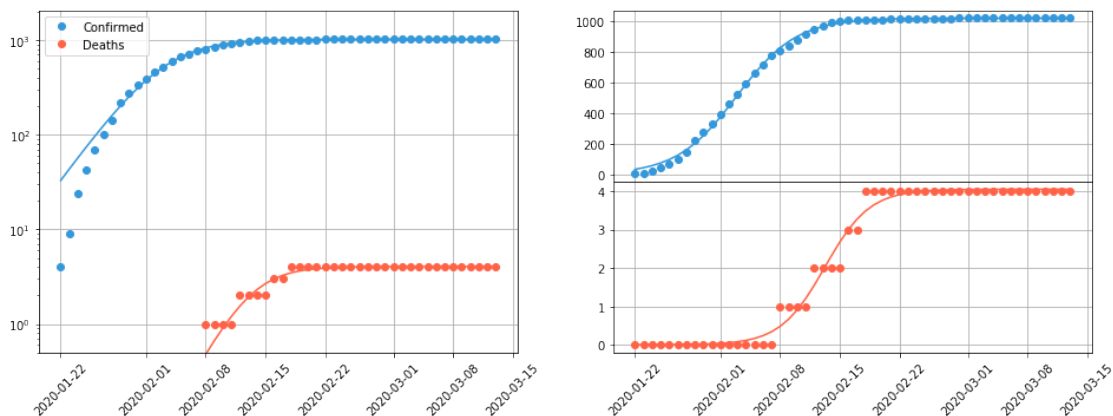
Japan
Date range: 2020-01-02 to 2021-03-12



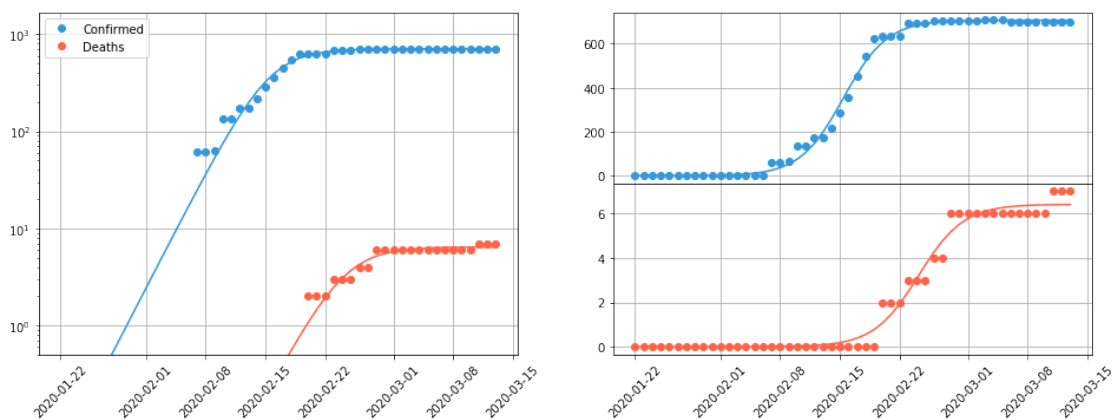
US Washington
Date range: 2020-01-02 to 2021-03-12



China Hunan
Date range: 2020-01-02 to 2021-03-12



Cruise Ship Diamond Princess
Date range: 2020-01-02 to 2021-03-12



China Tianjin
Date range: 2020-01-02 to 2021-03-12

