

COVID19_SPA_VISUAL

COVID-19 in SPAIN

Done by: Aitor del Rio

Official Data Source: <https://www.mscbs.gob.es/>

Official Data in pdf (2020-03-03 to Today):

Official Data in .csv (2020-03-03 to Today):

- 1) COVID19_SPA.csv the data correspond to the whole of the Spanish State.
- 2) COVID19_SPA_AC.csv the data has been classified by Autonomous Communities (Regions).

Dataset Info

Each dataset contains 9 columns:

- **Region**
- **Date**
- ¹ **Total** : Total Confirmed Cases.
- ² **AI(14d)** : Accumulated Incidence in the last 14 days.
- ³ ⁴ **Hospitalized**
- ⁴ **ICU**
- ³ **Deaths**
- ³ **Recovered**
- **New** : New Confirmed Cases

¹ The Total Confirmed Cases do not come from the sum of Hospitalized, Recovered and Dead patients, since they are not exclusive.

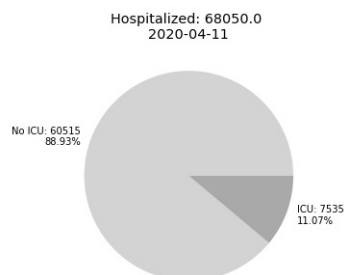
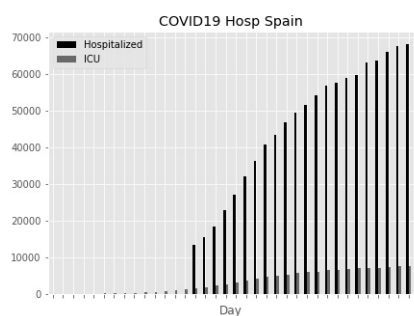
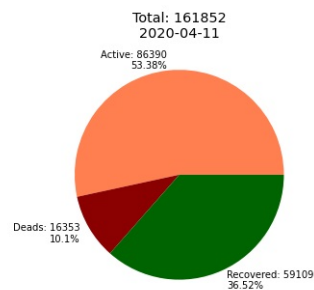
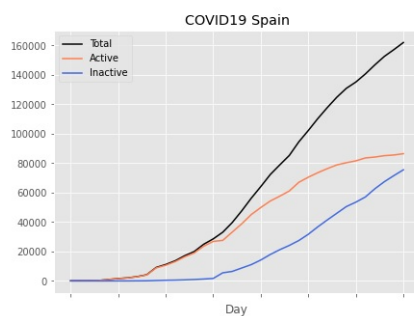
² AI: Accumulated incidence (cases accumulated per 100,000 inhabitants).

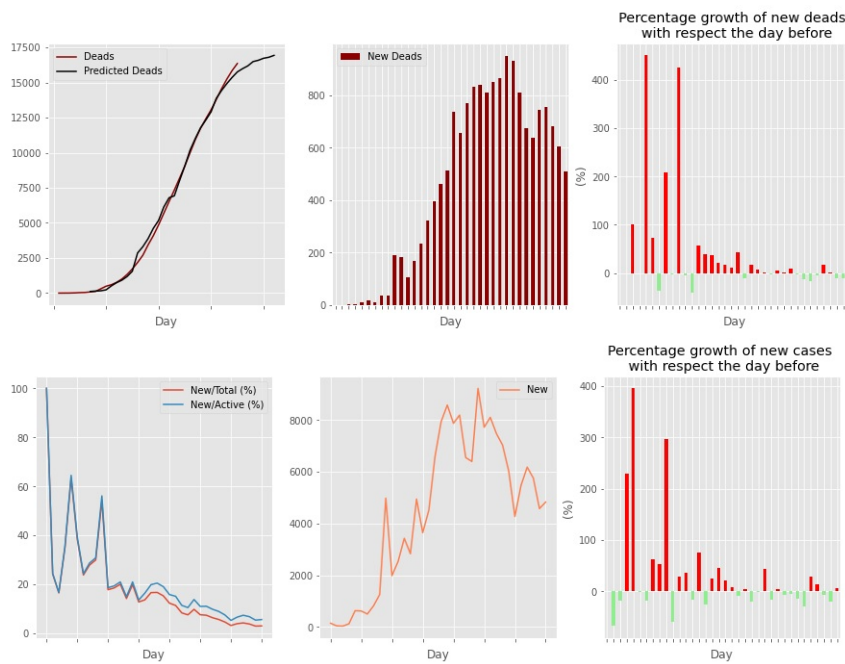
³ Dead and Recovered patients may have been hospitalized and therefore compute in both groups.

⁴ Patients who have required ICU also compute in patients who have been hospitalized.

COVID19 in the Spanish State

Data Visualization of COVID19_SPA.csv





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Region Date
SPAIN 2020-04-07 6.560165
      2020-04-08 7.347172
      2020-04-09 6.768341
      2020-04-10 5.351358
      2020-04-11 5.590925
Name: New/Active (%), dtype: float64

```

Percentage growth of new cases

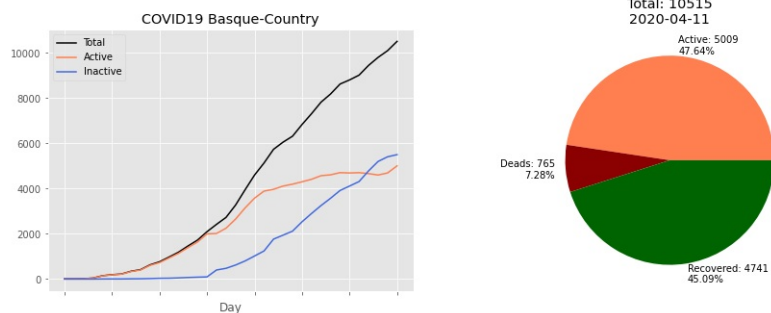
- i , day
- N_i , new cases on day i
- Percentage growth of new cases, $\frac{N_i - N_{i-1}}{N_{i-1}} \cdot 100$ (%)

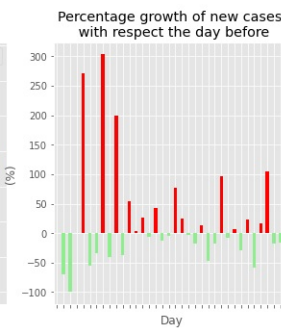
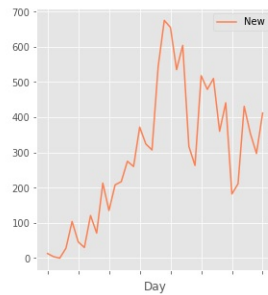
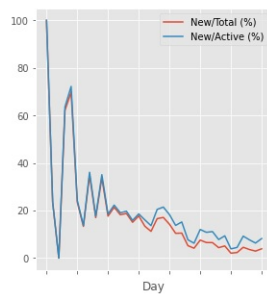
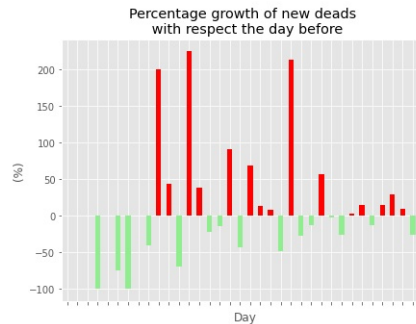
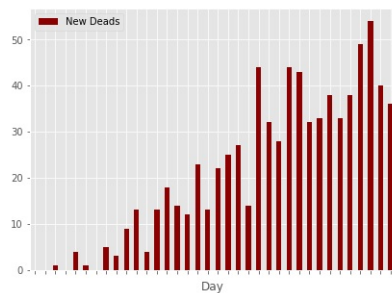
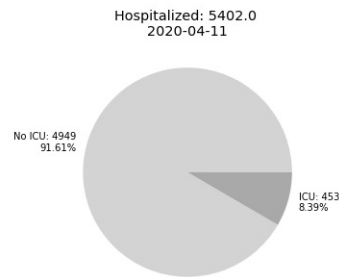
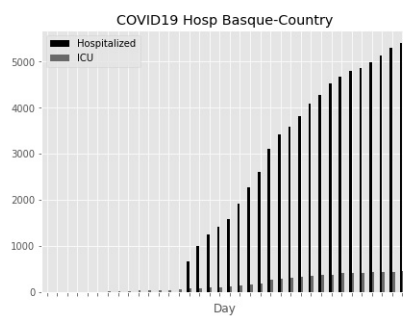
Notable changes in the percentage growth of reported new cases:

- 2020-03-06
 - **+228.2%** more new cases than on 2020-03-05.
- 2020-03-07 **No Data.**
- 2020-03-08 **No Data.**
- 2020-03-09
 - **+395.3%** more new cases than on 2020-03-06.
- 2020-03-14
 - **Lockdown measures are implemented**
- 2020-03-16
 - **+295.7%** more new cases than on 2020-03-15.

COVID19 in the Basque Country

Data Visualization of COVID19_SPA_AC.csv





```

31 4.482685
32 9.237034
33 7.690637
34 6.327226
35 8.225195
Name: New/Active (%), dtype: float64

```

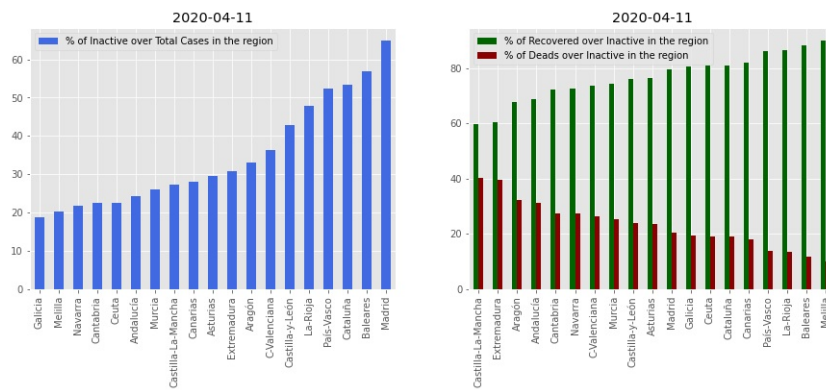
COVID19 compare regions¶

Autonomous Communities:

['Andalucía', 'Aragón', 'Asturias', 'Balears', 'Canarias', 'Cantabria', 'Castilla-La-Mancha', 'Castilla-y-León', 'Cataluña', 'Ceuta', 'C-Valenciana', 'Extremadura', 'Galicia', 'Madrid', 'Melilla', 'Murcia', 'Navarra', 'Pais-Vasco', 'La-Rioja']

In an attempt to stop COVID19, **lockdown** measures were established the 2020-3-14. Since then, COVID19 is hitting the society and its **Universal Health-Care System** severely. The Political-&Administrative model in Spain delegates to the Autonomous Communities the management of the Health-Care System in each region. Thus, analysing and comparing the progress of the COVID19 pandemia by Autonomous Communities makes sense.

- The **% of Inactive Cases over Total Cases in the region** gives a measure about **how close** an Autonomous Community is to defeat COVID19. While **high** percentages indicate that the Autonomous Communities are about to end with COVID19, **low** percentages show the opposite. In any case, this values are only a *proximity* indicator towards the end of the COVID19 crisis and **can not be used to state how well Autonomous Communities Health-Care Systems are dealing with the infected population**.
- The **% of Recovered&Deaths over Inactive Cases in the region** shows a picture of the Recovered-Dead ratio over Inactive cases at the present moment. This values must be treated just as "objective-data" and **can not be used to compare how well or how badly Autonomous Communities Health-Care Systems are dealing with the infected population** since the scope of COVID19-Scenario differs in a large amount from region to region.



In order to understand the graph below watch: <https://www.youtube.com/watch?v=54XLXg4fYsc>

