# CSC 454 Project Proposal

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## Where did I find the data

https://www.kaggle.com/c/covid19-global-forecasting-week-4/data

It is the data used for the covid19 contest, but a person merged it with weather data.

## Information

- Number of objects: **25353**
- Number of attributes: **21**

### Early Visualizations

Current confirmed cases of the world:

### Ethical or privacy issues

I don't see much currently. The data is pretty well taken away from people, the only information being the number of cases and location.

### Hypothesis

*A more moist environment increases the rate of infection for covid19.*

### What I will study:

I will break apart the data based upon the observed infection rates of the virus and their environments, and I will attempt to gauge if it is more probable that a moist environment has a higher infection rate than a dry one.

I will probably build several models after I find (if any) interesting factors of the data, and I will test these models to help prove or disprove the hypothesis.

I will be using a combination of the orange software and a jupyter notebook which can be found at:
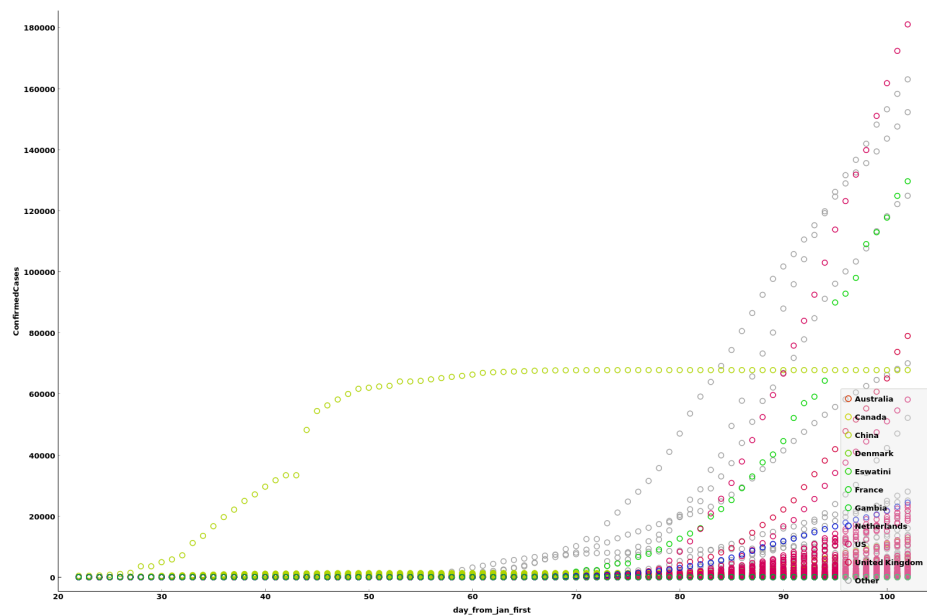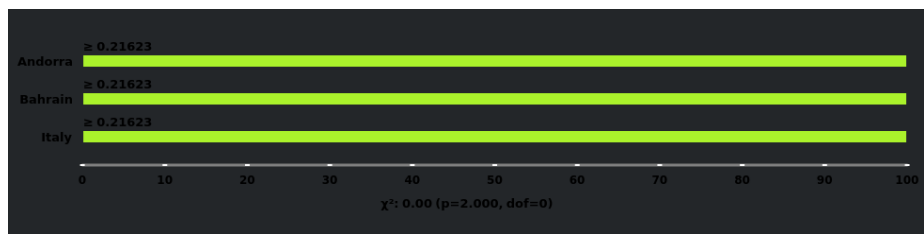
Figure 1: World Cases Confirmed



Figure 2: High infection rate countries

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| | # ^ | Infain | Gaitio | Gini |
|---|---|---|---|---|
| C Lat | 3 | 0.059 | 0.037 | 0.032 |
| C dewp | 3 | 0.058 | 0.037 | 0.031 |
| C min | 3 | 0.051 | 0.032 | 0.028 |
| C temp | 3 | 0.051 | 0.032 | 0.028 |
| C max | 3 | 0.047 | 0.030 | 0.026 |
| C ConfirmedCases | 3 | 0.020 | 0.013 | 0.012 |
| C Long | 3 | 0.018 | 0.011 | 0.007 |
| C Fatalities | 3 | 0.018 | 0.016 | 0.011 |
| C ah | 3 | 0.017 | 0.010 | 0.009 |
| C stp | 3 | 0.013 | 0.008 | 0.005 |
| C rh | 3 | 0.006 | 0.004 | 0.003 |
| C slp | 3 | 0.004 | 0.003 | 0.003 |
| C prcp | 3 | 0.002 | 0.002 | 0.001 |
| C wdsp | 3 | 0.002 | 0.001 | 0.000 |
| C day_froman_first | 3 | -0.000 | -0.000 | 0.000 |
| C Date | 3 | -0.000 | -0.000 | 0.000 |
| C fog | 2 | 0.002 | 0.002 | 0.000 |

Figure 3: Rankings

https://github.com/dustinc555/csc454_project/blob/master/Project.ipynb