Master thesis proposal Identifying outliers related to the spread of the SARS–CoV–2 virus

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There are multiple time series that are associated with the spread of the SARS–CoV–2 virus: confirmed cases, case fatalities, percentage of positive tests, tests, total mortality, excess mortality, e.t.c. All of these can be further scaled by population size and subdivided by age or sex (depending on data availability). Such variables can be considered on the national or regional level. When comparing time series from various regions/countries between each other one will often see single peaks from some country/region. The aim of the work will be to develop a methodology to identify outlier points from time series and test if they are not solely a small population effect. For the thesis publicly available COVID–19 and mortality connected data will be used. There is some flexibility on the choice of countries for analyzing.