|  |
| --- |
|  |
| **Figure 01. The distribution of the analyzed data is not Gaussian.** The values of (A) population, (B) confirmed cases and (C) deaths are log-normal distribution. |

|  |
| --- |
|  |
| **Figure 02. Population has a positive correlation (R = 0.6) with the confirmed cases.** Spearman correlation between population, confirmed cases, deaths, confirmed/100k habitants and death rate in all 542 cities (A) or 540 cities with population lowest of 6.000.000 (B). |

|  |
| --- |
|  |
| **Figure 03. Positive correlation (R = 0.6994) between population and confirmed cases occurs only in cities with population up to 296.844 habitants.** Spearman correlation and linear regression model (95% confidence) between population and confirmed cases in 5 quartiles distribution of population. (A) 1149 – 23.286, (B) 23.286 – 56.428, (C) 56.428 – 132.709, (D) 132.709 – 296.844 and (E) 296.844 – 12.252.023 population |

|  |
| --- |
|  |
| **Figure 04. Positive correlation (R = 0.6449) between population and deaths occurs only in cities with population up to 296.844 habitants.** Spearman correlation and linear regression model (95% confidence) between population and deaths in 5 quartiles distribution of population. (A) 1149 – 23.286, (B) 23.286 – 56.428, (C) 56.428 – 132.709, (D) 132.709 – 296.844 and (E) 296.844 – 12.252.023 population. |
|  |

|  |
| --- |
|  |
| **Figure 05. The number of confirmed cases and ratio of confirmed / 100k inhabitants shows a clear upward trend.** Decomposition of the time series of the daily values of number of confirmed cases (blue), deaths (orange) and ratio of confirmed / 100k inhabitants (green), in components (A) raw data, (B) trends, (C) seasonality and (D) randomness. |

|  |
| --- |
|  |
| **Figure 06. Average estimate of 63,638 confirmed cases in 30 days.** ARIMA model (1,2,2) of forecast of confirmed cases until 05/10/2020. Confirmed cases (blue), forecast (orange), model fit analysis (green) and forecast interval with 95% confidence (gray). Up to the end date, between 56,829 and 70,447 cases are expected. |