

Report:

My data understanding:

1. Describing the quality control procedure applied for a data report for reporting time.
2. Refers to a complete set of parameters at a specific date.
3. Reach best quality check level QN=5.

4. Assumptions:

- 4.1. Procedure can reach the best quality check level. when Qualitaet_Niveau value is greater than or equal to 5.
- 4.2. So filtered out the values measured which have values for column Qualitaet_Niveau less than 5 only for years 2015, 2016, 2017, 2018.
- 4.3. Observations:
 - 4.3.1. Whereas for years 2019 and 2020 we can't interpolate as there are very few of the data points available for Qualitaet_Niveau is less than 5.
 - 4.3.2. For the year 2019 count of instances are 23 for column Qualitaet_Niveau:5,6,7.
 - 4.3.3. For 2020 with Qualitaet_Niveau : 5,6,7=count of instances are nil and with Qualitaet_Niveau : 0 count of instances are 1345.

5. Approach:

- 5.1. Filtered values are then grouped for year,month,day.
- 5.2. Interpolated the series for every 15 minutes.
- 5.3. Collected the hottest and coldest day statistics and stored in csv and plotted the hottest and coldest series w.r.t 6 years.