



Analysis of Subdaily Meteorological Measurements by Louis Morin in the Late Maunder Minimum 1665 – 1713 in Paris

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Based on copies of the original data (source: Oeschger Center for Climate Change Research) we perform climate reconstructions for Paris. The focus lies on the following meteorological variables: temperature, cloudiness, moving direction of clouds and precipitation. We assess the early instrumental temperature dataset with state of the art statistical methods to get further knowledge of inhomogeneities. There are already several studies showing monthly and yearly means of the temperature, but a detailed statistical analysis based on the original measurements has not been done yet. Due to the lack of metadata, we do a qualitative analysis. With rare contemporary time series, like the CET (Central England Temperature), and proxydata, like grape harvest dates, we attempt to make a quantitative statement. We analyse and discuss the documentary datasets of the cloudiness and the moving direction of the clouds relating to the cooling in the Late Maunder Minimum. Because of the subjective character of documentary records, we compare these results with available data from former publications. Precipitation is given in terms of intensity and duration. We calculate indices like rainfall frequency and average rainfall per year/season/month.