



Evolutionary spectral analysis of temperature and pressure European series

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Five long historical time series of temperature and atmospheric pressure, with lengths from 149 to 279 years, three measured in Northern Italy and two in Sweden, have been analysed from the stationary and evolutionary spectral point of view, by means of the Wavelet Transform and of Singular Spectrum Analysis. The main periodicities revealed in the series of temperature show interesting differences between the behaviours of Italian and Scandinavian stations. The time intervals in which a cyclicity gives a particularly high power contribution have also been studied for all series. For example, in the second half of the twentieth century, a coupling between temperature and pressure around a scale of 30 years was found in Milan (Italy), while it is absent in Scandinavian stations.