



## **The Sun's variability during last 2200 years by historical data: The solar wind and sunspots**

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By using of two continuous parts of Schove's series (BC 214 – 196AD and 296 – 2006 AD respectively) the large scale oscillations of solar activity has been studied. On the base of time series models for the both parts a reconstruction of Schove's series during the 3<sup>rd</sup> century (196-296 AD) has been obtained. The structure of solar 2200-2500 year oscillation is clear shown. The evolution of quasy- centurial and bicenturial oscillation by using of “moving epoch” procedure has been analysed. A comparison with three other types of data ( the <sup>14</sup>C tree rings series BC 220-1950 AD, “Chinese “ simple eye visible sunspots series BC 165- 1684 AD and “Antarctic “ <sup>10</sup>Be series 850- 1900 AD) has been provided. The stability and evolution of relationships between above said data series by using of cross-correllation procedure over “moving epochs” is studied. Some evidences for weakening of “Forbush-effect” phenomena during the supercenturial solar minimums such as these of Maunder and Dalton are given.