

Maunder Minimum According to Archive Data and Dynamo Theory

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Fortunately for modern solar physics, the last exceptional epoch in solar activity, i.e. Maunder minimum is well-recorded through instrumental astronomical observations performed in XVII - XVIII centuries at Observatoire de Paris. This observational project invented after the direct influence of the king Louis XIV covers the epoch when the minimum of solar activity was most pronounced as well as the end of the Maunder minimum. The beginning of the Maunder minimum is covered to some extent due to observational efforts of many individual observers who was active that time in various countries. Basing on this bulk of observational data, we suggest a scenario of the Maunder minimum. The scenario is embedded into the context of solar dynamo theory which explains the solar activity cycle as a result of joint action of solar differential rotation, helical convective motions and, perhaps, meridional circulation.