Algorithm 'nearest neighbor' for 24 hours ahead foF2 forecast

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One of questions concerning the space weather is the prediction of the ionospheric characteristics variations. This study concerns the possibility of the critical frequency F2 layer forecasting by means of the 'nearest neighbor' algorithm. The data base used describes the history of the behaviour of the relationships between the ionospheric parameters and geophysical indices. It consists of foF2 characteristic from Juliusruh/Rugen for the years 1959-1997, as well as ap index, solar 10.7 cm flux and epoch. The paper presents the method and the results of calculations of the 24 hours ahead forecast for chosen 12 UT and its accuracy. The effectiveness of the applied method is discussed.