



Forecasting of the ionosphere conditions using the Nearest Neighbour (k-NN) algorithm

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The nearest neighbour method is a case based on statistical approach used to predict the ionospheric conditions. This algorithm belongs to the group of the deduction methods by analogy. Description of the condition of the ionosphere is important for the space weather. The paper presents the k-NN method modification in space weather applications and the use of this method for the forecast of the ionospheric characteristics, as foF2, M(3000)F2. Data from more than one solar cycle yields to create wide data bases for two classes of files: learning (the period 1975-1997) and test (the period 1998-2005). The results for the stations from different geographical regions are compared and analysed. The approach for world-wide forecasting maps obtaining based of the described algorithm is presented.