عنوان مقاله:

Estimation of groundwater table, using SVM model case study: Lamerd plain

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خلاصه مقاله:

Underground water reservoirs are considered as the most important water supplies, especially in dry regions. It should be mentioned that gaining water from these dry regions is more importance in comparison to those located in wet regions. It is clearly a necessity to monitor and plan in order to protect underground water resources and perform quantity control in different regions, especially in hot and dry climates like Lamerd plain. In this paper, simulating underground water level and forecasting water table of Lamerd plain are the goals. Using complicated models of artificial intelligence for modeling hydrological events with multi-function dependence, complication complexity and uncertainty have been points of interest for researches, especially during last years. With these history of applying and usage in this article authors have tried to forecast and simulate underground water level by the usage of data like observed water level of wells in Lamerd plain for the time period of 1998-2013 average monthly temperature, precipitation and evaporation of Lamerd plain. Results of modeling using SVM (poly kernel type) showed closer correlation to results gained in comparison to results obtained from other kernels. Correlation coefficient of applied methods had 0,9992 and 0,9962 for train and test data, respectively

کلمات کلیدی:

Lamerd plain, underground water level, SVM model, Poly kernel and correlation coefficient