

عنوان مقاله:

A SURVEY UPON WIND ENERGY, THE PREDICTING PROCEDURE FOR LONG-TERM WIND SPEED IN DAMAVAND MOUNTAINS AREA

محل انتشار:

اولین همایش ملّی انرژی های نو ویاک (سال: 1392)

تعداد صفحات اصل مقاله: 7

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خلاصه مقاله:

This Article, proposes a new hybrid model for long-term wind speed forecasting based on the first definite season index method and the Autoregressive Moving Average (ARMA) models or the Generalized Autoregressive Conditional Heteroskedasticity (GARCH) forecasting models. Energy crisis has made it urgent to find alternative energy sources for sustainable energy supply; wind energy is one of the attractive alternatives. Within a wind energy system, the wind speed is one key parameter; accurately forecasting of wind speed can minimize the scheduling errors and in turn increase the reliability of the electric power grid and reduce the power market ancillary service costs. The forecasting errors are analyzed and compared with the ones obtained from the ARMA, GARCH model, and Support Vector Machine (SVM); the simulation process and results show that the developed method is simple and quite efficient for .daily average wind speed forecasting in the area which is done

کلمات کلیدی: Wind,speed,ARMA,GARCH,SVM

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https://civilica.com/doc/210182

