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Raw wind data pre-processing using data ware housing based ETL approach for analysing the wind characteristics

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Abstract

In this paper the wind speed characteristics are analysed for the five year data (2007-2011) collected at Colorado mountain region in USA (United States of America). Initially Data ware housing based ETL (Extract, Transform & Load) approach is performed for pre-processing the collected raw wind data. In order to check the suitability for locating and installing the wind turbines, the wind speed analysis has to be carried out for different seasons and hub heights. From the analysis report wind power density and wind power class was high for winter season with 100 meter hub height. But mean wind speed from wind shear analysis seems to be good for summer season at 100 meter hub height. © 2021 IEEE

Author keywords

Data ware housing; ETL; Wind energy; Wind power density

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