GENERATION OF TYPICAL METEOROLOGICAL YEAR WEATHER DATA OF TEMPERATURE FOR KLANG VALLEY

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ABSTRACT

THE GENERATION OF TYPICAL METEOROLOGICAL YEAR OF WEATHER DATA FOR TEMPERATURE IN KLANG VALLEY

The generation of the typical meteorological year (TMY) is importance for successful building energy simulation in IES, DAS, EnergyPlus, DOE-2 and TRNSYS simulation software. The TMY has provided hourly weather data for that software with represent the long term weather data over a year. The Sandia method with the Filkelstein-Schafer (FS) statistics was applied to analyze of a period weather data between year 1994 to year 2000 in Klang Valley and 12 months were selected from different years based on considering the lowest value of the Filkelstein-Schafer statistical. A computer with Microsoft Office Excel was used for calculation and analyzing data. In the calculation of FS statistics, the cumulative distribution function (CDF) for short term temperature a year was compared with the CDF for the long term all the year. The generated TMY was compared with long term mean for all year and validate with real data from Photovoltaic Monitoring Centre in Uitm, Shah Alam, Selangor.

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