

**GENERATIONAL OF TYPICAL METEOROLOGICAL YEAR  
WEATHER DATA FOR WIND SPEED FOR KLANG VALLEY**

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This Final Year Project Report entitled “Generational of typical meteorological year weather data for wind speed for klang valley” was submitted by Muhamad Ilham Tunisman, in partial fulfilment of the requirements for the Degree of Bachelor of Science (Hons.) Physics, in the Faculty of Applied Sciences, and was approved by



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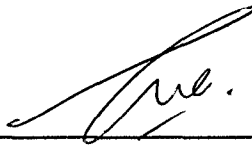
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**Muhamad ilham Tunisman**

## **ABSTRACT**

### **GENERATION OF TYPICAL METEOROLOGICAL YEAR WEATHER DATA OF WIND SPEED FOR KLANG VALLEY**

Generation of Typical Meteorological Year (TMY) for six years weather data between years 1996 to year 2000 was developed. The primary selection of the month for the Typical Meteorological Year was made using data from Malaysia Meteorological Department at Petaling Jaya stations for the six-year period from year 1994 to year 2000. Years are ranked according to the Filkenstein– Schafer (FS) statistic. Then the generated TMY data for wind speed was compared with the long term mean (LTM) wind speed data. The validity of generated TMY was made by comparing the generated TMY data with the Real Weather Data from Photovoltaic Monitoring Center at UiTM Shah Alam. The comparisons of the Typical Meteorological Year with long term mean and Real Weather Data have been made by monthly average of wind speed weather data, by daily average of wind speed weather data and hourly wind speed weather data. The result shows that the generated TMY is best to representing the long-term mean weather data by hourly analysis. A computer with Microsoft Excel software was use for do some calculation and statistical analysis while generating this TMY.

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