

ABSTRACT

Weather is an air condition that occurs in an area or region in a certain period. Weather occurs due to differences in temperature and humidity from one place to another. This difference can occur because of the different angles of solar heating from one place to another due to differences in the earth's latitude. Whereas climate is an average weather condition within one year whose research is carried out over a long period of time (at least 30 years) and covers a large area. TMY or a typical meteorological year is a set of meteorological data with data values for each hour within a year that best represent weather or climatic conditions over a period of one year. In this study, researchers performed procedures for missing data, performed calculations for one day, built data for one month, performed the calculation process for one year and smoothed it. Most of the weather data has a time interval of 3 hours, for use in thermal simulations or annual energy calculations, the data used must be interpolated into one hour intervals. To calculate the missing data, use the Fourier series. Location measurements use data at Huesin Sastranegara airport. This research aims to read / create data from 10 years to 1 year and estimate the cauca for development.

Keyword: TMY (*typical meteorological year*), time interval, weather, development.