

ABSTRACT

Currently, the solar radiation value in one place can be known using certain tools or technology that can provide additional information about temperature, humidity and other weather components. However, there is no formula that can calculate the value of solar radiation in one area based on the known value of weather components, hence the value of solar radiation cannot be calculated anytime and anywhere when needed.

This study aims to develop a calculated solar radiation formula using available weather components such as temperature with degrees of Celsius (°C) and humidity. By applying the weather component variable data of Bandung City in one full year which is then partitioned based on weather situation, researcher used R Studio software to develop several formulas that can be used to calculate the value of solar radiation in Bandung City.

Keywords: *Solar Radiation Value, Temperature, Humidity, Solar Radiation Formula, Bandung City*