

ANALYZING THE RADIOSSIDE SIGNAL PROCESSING USING
DIGICORA IN SYSTEM IN WEATHER FORECASTING

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**ANALYZING THE RADIOSONDE SIGNAL PROCESSING USING
DIGICORA III SYSTEM IN WEATHER FORECASTING**

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ABSTRACT

Radiosonde use to be a minor contributor in Malaysia since it was introduced. Radiosonde is a inexpensive, highly stable and easily maintained tool that can fly vertically up to 80,000 feet before it's ballon burst and cause the radiosonde fall back to ground. Essentially, this tool is said to help people in aviation field, but not to forecast weather. However, this tool has undeniable extension. Hence, an idea to develop a program that would able to forecast weather in Malaysia jumped in, using radiosonde. The fulfillment of the idea requires thorough understanding about two major components. The first part is the combination of radiosonde and the ground check system, since radiosonde alone will not produce anything unless accompanied by a ground check. Meanwhile another part is the meteorological theories. The capability of radiosonde to collect weather variables from different heights, played an important role in conducting this study. The data, commonly known as raw data gained from radiosonde and the ground check, which act as a UHF receiver were manipulated so that weather can be forecasted. Weather element recorded in the raw data such as temperature, pressure, relative humidity, wind speed and wind direction is linked to each other in order to produce forecast. This project focus on develop a new method that can used as a 'user friendly' to public in all ages. Means that, to forecast weather the public just have to fill up a few data and without have to analyze all the graph and Tephigram, the public will know either the weather is sunny, cloudy or raining. As one of the staff in Malaysian Meteorological Department (MMD), this project will help a lot because to forecast weather using the right equipment is not easy and a person need to be trained and knowlegdeable about the weather.

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