

**Abstract**

All airports require a weather station to provide weather info on the aircraft that will fly and land. However not all airports are equipped with adequate weather stations (as they are expensive and some are damaged). Meanwhile, small new and old airports require the presence of weather stations. Therefore, this research was done, namely developing mini weather station equipment that is affordable (cheap, domestic components). Development until testing of this tool is carried out in Cipageran Cimahi which represents the natural weather in Indonesia. After doing some testing obtained sufficient weather data results and approached the actual weather station conditions. The equipment used is hardware (Rainboard or Arduino Uno, and some domestic component sensors) at affordable prices and displayed data using Android-based applications then compared to data in the application calibrator tool (heles) and BMKG Info. After several tests, the weather data in the sensor and in the calibrator (heles) were obtained symmetrical results when up and down, when compared to BMKG Info is different, because BMKG coverage area is wide while for sensors and calibrators (heles) measure local weather. This equipment can be refined when using better sensor components and already calibrated.

Keywords – Weather, Rainboard, Arduino, Android, Sensor