

CHAPTER 1

INTRODUCTION

1.1 BACKGROUND OF STUDY

Weather and climate are among the foremost factors which determine how a society develops in geographical region. Weather usually describes the particular event or condition for the short period of time such as hours or days whereas climate refers to the behavior of the atmosphere to a place over many years. On the other hand, weather includes current atmospheric conditions such as the temperature, precipitation, humidity and the wind while climate describes the general weather conditions of a certain area over a long period of time.

Weather data are important in our daily life. The data collected such as rainfall and temperature can be used to serve as a precautionary measure to against natural calamity or disaster such as flood and drought. Besides that, it is important for others to plan the works. For example, in the construction industry, the weather data is important for a project manager to plan their schedule so that the project will complete on time. The weather data collected for a long period are use to predict the climate change in future trends. The weather data collected for the past decade can be used to analysis in order to identify the pattern of climate change.

Weather station is one of the devices to collect the weather data. The weather data such as precipitation, humidity, temperature, and wind speed can be collected by using this device. The usage of weather station is increasing popularity among the nation.

Weather station is a device that can update the weather data in a more quickly and frequent way. It can collect the data in minute or hourly based on the setting mode. The user can change the setting mode according to the purpose of the project respectively. Weather station has now been increasingly accepted as the technology that facilities faster and more up to date monitoring of the earth atmosphere system. In particular, it is becoming increasingly important in the study of hydrology pattern.

1.2 PROBLEM STATEMENT

Human activity is influenced by weather conditions, monitoring of weather conditions can help in controlling the activity. The weather change is not same at the Gambang area and the nearest place. It is important to monitor and study the pattern of weather at surrounding. The pattern and trend of weather at Gambang and closed area can be identify by making analysis study of hydrological data from hydrological station.

1.3 RESEARCH OBJECTIVES

The objectives of this study are as following:

- i. To compare the different between rainfall data collect by using rain guage and weather station in Kolej Kediaman 2 in UMP Gambang.
- ii. To determine the trend of rainfall event at UMP Gambang.

1.4 SCOPES OF STUDY

- i. The study will conduct at Kolej Kediaman 2 at UMP Gambang.
- ii. This study will focus to collect the data such as wind speed, temperature and rainfall data.
- iii. Analyze the hydrological data from JPS hydrological station with hydrological data collected used weather station at UMP Gambang.
- iv. Develop temporal pattern for selected hydrology station.

1.5 SIGNIFICANT OF STUDY

This study can help many future construction company and future researchers for planning their schedule to complete their project on the time and avoid delay in construction process. All the result result collected in this study will be compile and a weather database for UMP can be recorded. The study also can identify the rainfall pattern of Gambang area.