Clouds are an important part of our weather and climate systems. They influence our daily lives and play a crucial role in predicting weather patterns and understanding climate change. To make accurate weather forecasts and monitor climate conditions, meteorological departments need precise measurements of cloud coverage. However, traditional methods of measuring cloud amount have limitations, such as being time-consuming and prone to human errors. In response to these challenges, a cloud amount measurement project has been developed specifically for use in meteorological department. This project aims to improve the accuracy and efficiency of cloud measurements by using advanced technologies and techniques like image processing and greyscale coding with image integration. By doing so, it will enhance weather predictions and climate monitoring capabilities. The project employs a combination of remote sensing techniques and cutting-edge algorithms to capture cloud data. Ground-based instruments to gather information about cloud coverage.This project can calculate clouds by using grayscale coding technique. Implementing this cloud amount measurement project in a meteorological department will offer several benefits. It enhances weather forecasting accuracy, enabling more precise predictions of rain, storms, and other weather events. It also contributes to climate modeling efforts, helping scientists better understand the impacts of clouds on our climate system. Additionally, the project has the potential to improve environmental monitoring by providing