

**SUNSPOT MONITORING BY USING OPTICAL TELESCOPE**

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**Final Year Project Report Submitted in  
Partial Fulfillment of the Requirements for the  
Degree of Bachelor of Science (Hons.) Physics  
Faculty of Applied Sciences  
Universiti Teknologi Mara**

**JULY 2018**

## **ABSTRACT**

### **SUNSPOT MONITORING BY USING OPTICAL TELESCOPE**

Sunspots are temporary phenomena on the sun's photosphere that appears as spots darker than surroundings area. It is the regions where the temperature is lowers than others region. It is caused by the concentrations of magnetic field flux that inhibit convection. This spots may last for a few months, however it will eventually decay. It comes in many shapes and sizes but often appear in groups. The numbers of sunspots follows on 11 year cycle. The objectives of this research to assist potential data user in the data mining and retrieving process, to study the sun's behavior from sunspot monitoring, to compare the image of the sun atf different wavelength, to understand how the sun work and also to develop a future capacity of sunspot prediction, thereby contributing to the global forecasting the variable, space weather conditions. To monitor the sunspot, we need to observe it and take a picture of it everyday. From the picture we will compare it day by day with the data from the Solar Dynamic Observatory at different wavelength. This research can be perform efficiently if the weather is clear for the optical telescope.

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