

Measurement of global solar radiation in Kota Kinabalu Malaysia

Abstract

This paper presents the global solar radiation in Universiti Malaysia Sabah, Kota Kinabalu, Sabah, Malaysia (6.0367°N, 116.1186°E) over period of one year from 2013 to 2014 using LI-200 pyronometer data logger set. Daily and monthly average global solar radiation values were calculated from 10 minutes average recorded values. Daily maximum global solar radiation were 1056.10 W/m² was recorded on August 18, 2013 while the highest daily average global solar radiation of 495.90 W/m² was recorded on August 28, 2013. Global solar radiation of Kota Kinabalu were compared to other cities in Malaysia. From the data collected we can see that Kota Kinabalu receive ample global solar radiation and has a very strong potential for solar energy development.