



Measurements of solar irradiance, surface temperature, and relative humidity during the total solar eclipse over Indonesia on 9th March 2016

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The total solar eclipse 9th March 2016 passed over a large part of Indonesian regions and hence provided excellent opportunity to assess impacts of the eclipse to meteorological parameters. A campaign of meteorological measurements was carried out in 32 BMKG weather stations, covering not only locations within the totality path but also those experienced partial eclipse, spreading from Padang (0.79° S, 100.28° E), Palangkaraya (2.23° S, 113.95° E), to Ternate (0.69° N, 127.45° E). This wide coverage allowed us to analyse the data measured at the same event but occurred at different time of day in different locations and various degrees of solar obscuration. Here we present our analysis on changes in solar irradiance, surface temperature, and relative humidity measured during the eclipse event. The results corroborate and enrich previous reports on impacts of solar eclipse on meteorological parameters, most of which were based on measurements in a single site or a few sites during a single event of solar eclipse.