PM_{10} DISTRIBUTION USING REMOTELY SENSED DATA AND GIS TECHNIQUES; KLANG VALLEY, MALAYSIA

TECHNOLOGY DESCRIPTION

The technology is a technique to monitor air quality using GIS environment.

TECHOLOGY FEATURES

This is a practical and the most reliable technique to monitor air pollution. The data is obtained by using Aerosal Optical Thickness (AOT) value retrieved from Moderate Resolution Imaging Spectroadiometer (MODIS). These data are used to interpolation formation in GIS to PM10 distribution measurement. Based on the studies conducted, the remote sensing data is able to produce better distribution of PM10 data as compared to the ground station data. It can be used over large spatial scale.

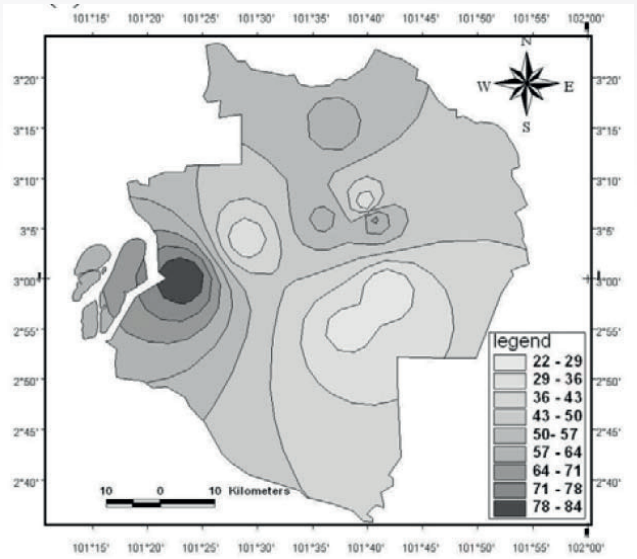
ADVANTAGES

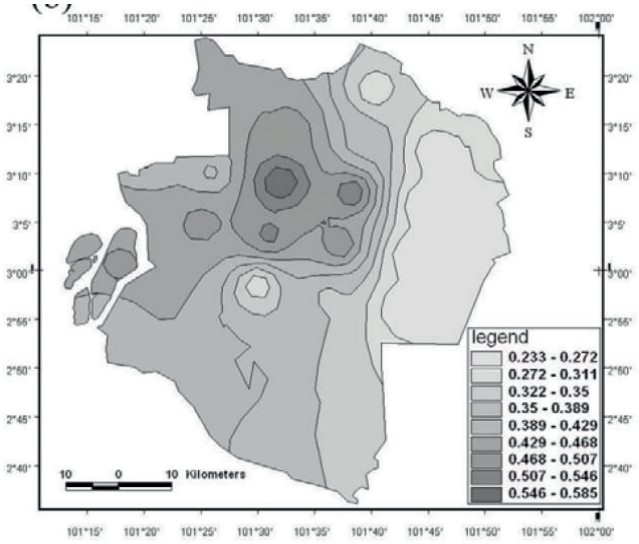
- Global coverage
- Non-destructive
- Cost effective
- Reliable
- Practical

INDUSTRY OVERVIEW

Prospects: Air quality monitor stations, remote sensing technologies market

In 2011, the annual average value of PM10 in the ambient air was 43 µg/m3 which is below the Malaysian Ambient Air Quality Guidelines value of 50 µg/m3. There was a slight increase on the annual average of PM10 compared to 2010 which was 39 µg/m3. Besides Klang Valley, other areas which had occasionally exceeded the Malaysian Ambient Air Quality Guidelines for PM10 were Nilai in Negeri Sembilan, Sibu and Sri Aman in Sarawak, and these were also due to transboundary haze pollution. As of 2011, in addition to the 52 stations in the National Continuous Air Quality Monitoring Network, manual air quality monitoring stations were also established at 14 different sites to detect any significant change in the air quality. This technology is expected to contribute the growth of remote sensing technologies market. Globally, the remote sensing technologies market valued at USD9.1 billion in 2012 and it is projected to reach to USD12.4 billion in 2017 at a CAGR of 6.4%.





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