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EFFECT OF LAND SURFACE TEMPERATURE TO NITROGEN
DIOXIDE CONCENTRATION USING SENTINEL – 5P IN
PENINSULAR MALAYSIA

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COLLEGE OF BUILT ENVIRONMENT
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**Thesis submitted to the Universiti Teknologi MARA Malaysia
in partial fulfilment for the award of the degree of the
Bachelor of Surveying Science and Geomatics (Honours)**

AUGUST 2023

DECLARATION

I declare that the work on this dissertation was carried out in accordance with the regulations of Universiti Teknologi MARA (UiTM). This project/dissertation is original and it is the result of my work, unless otherwise indicated or acknowledged as referenced work.

In the event that my project/dissertation be found to violate the conditions mentioned above, I voluntarily waive the right of conferment of my degree of the Bachelor of Surveying Science and Geomatics (Honours) and agree be subjected to the disciplinary rules and regulations of Universiti Teknologi MARA.

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ABSTRACT

Air of cities especially in the developing parts of the world is turning into a serious environmental interest. The complicated combination of harmful chemicals' dispersion and emission from factories is what causes the air pollution. Air pollution caused due to the introduction of dust particles, gases and smoke into the atmosphere exceeds the air quality levels. Nitrogen dioxide (NO_2) is a highly poisonous gas. Air pollutants are the precursor of photochemical smog and acid rain that causes the asthmatic problems leading into serious illness of lung cancer, dull headache, depletes the stratospheric ozone and contributes in global warming. In the present industrial economy era, air pollution is an unavoidable product that cannot be completely removed but stern actions can reduce it. The objectives of this study to determine nitrogen dioxide (NO_2) and LST and to analyze the relationship of nitrogen dioxide with temperature in peninsular, Malaysia. Pollution can be multiple sources of air pollution, which are industries, fossil fuels, agro – waste and vehicular emissions. The method of this study using Sentinel – 5 Precursor and Moderate Resolution Imaging Spectroradiometer (MODIS). The action to reduce the severity are necessary to reduce the threat of air pollution using the various applicable technologies like CO_2 sequestering, industrial energy efficiency, improving the combustion processes of the vehicular engines and reducing the gas production form agriculture cultivations.

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