## World Academy of Science, Engineering and Technology International Journal of Geotechnical and Geological Engineering Vol:10, No:05, 2016

## Best Timing for Capturing Satellite Thermal Images, Asphalt, and Concrete Objects

Authors: Toufic Abd El-Latif Sadek

**Abstract:** The asphalt object represents the asphalted areas like roads, and the concrete object represents the concrete areas like concrete buildings. The efficient extraction of asphalt and concrete objects from one satellite thermal image occurred at a specific time, by preventing the gaps in times which give the close and same brightness values between asphalt and concrete, and among other objects. So that to achieve efficient extraction and then better analysis. Seven sample objects were used un this study, asphalt, concrete, metal, rock, dry soil, vegetation, and water. It has been found that, the best timing for capturing satellite thermal images to extract the two objects asphalt and concrete from one satellite thermal image, saving time and money, occurred at a specific time in different months. A table is deduced shows the optimal timing for capturing satellite thermal images to extract effectively these two objects.

Keywords: asphalt, concrete, satellite thermal images, timing

Conference Title: ICEGE 2016: International Conference on Earthquake and Geological Engineering

**Conference Location :** Tokyo, Japan **Conference Dates :** May 26-27, 2016