

Modelling Tropical Forest Microclimate with Remotely-Sensed Data

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SUMMARY

Forest plays an important role in maintaining the environmental quality and the ecological balance of their surrounding areas. Therefore, understanding the effects of tropical rainforest destruction and fragmentation on the microclimate is critically needed. National Park, Pahang is one of the oldest tropical rainforest where the surrounding areas are facing critical threats due to tourism activities and infrastructure development. Solar radiation (I), air temperature (Ta), relative humidity (h), wind speed (v) and rainfall were measured at six different locations under the forest canopy, built-up area, trail, campsite, fragmented forest and village area. All the microclimate variables show significant differences at the measured locations. These results further the understanding of the responses to forest fragmentation in the tropical forests created by human activities, and provide a useful basis for evaluating the implications of forest management practices.