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An Empirical Estimation of Underground Thermal Performance for Malaysian Climate

(Conference Paper) [\(Open Access\)](#)Mukhtar, A. [✉](#), Yusoff, M.Z., Ching, N.K.

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Abstract

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In this study, the soil temperature profile was computed based on the harmonic heat transfer equations at various depths. The meteorological data ranging from January, 1st 2016 to December, 31st 2016 measured by local weather stations were employed. The findings indicated that as the soil depth increases, the temperature changes are negligible and the soil temperature is nearly equal to the mean annual air temperature. Likewise, the results have been compared with those reported by other researchers. Overall, the predicted soil temperature can be readily adopted in various engineering applications in Malaysia. © Published under licence by IOP Publishing Ltd.

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