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Estimation of reference Evapotranspiration (ET0) using temperature data for Nwanedi area, Vhembe district Municipality, Limpopo Province, South Africa.

Quantification of reference evapotranspiration (ETO) for a particular area is necessary in many applications in agriculture like, crop production, water resources, scheduling of irrigation, environmental assessment, etc. Estimation of evapotranspiration is one of the major hydrological components for determining the water budget, and components for determining the water flow analysis. The Nwanedi small scale rural farming area is developing in different farming categories which lead to the use of more water in the area. In the current study two models have been selected to estimate the evapotranspiration of Nwanedi area using temperature data obtained from the ARC Nwanedi station. Comparison between the estimated and the measured evapotranspiration was performed using the two proposed models. Using the solar radiation based method we obtained the maximum monthly average value of 4.735 mm/d compared to a value of 4.770 mm/d in the month of January 2009 and the minimum value of 2.776 mm/d compared to 2.658 mm/d in the month of July 2009.

Apply to be
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No

Level for award
 (Hons, MSc,
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N/A

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