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# Study of trends in weather parameters at Akola using moving average technique

■ R.V. MESHRAM, M.M. DESHMUKH, M.V. KAWLE AND S.B. WADATKAR

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See end of the Paper for authors' affiliation

Correspondence to :

**M. M. DESHMUKH**
Department of Irrigation and Drainage Engineering, Dr. Panjabrao Deshmukh Krishi Vidyapeeth, AKOLA (M.S.) INDIA
Email : mahendradeshmukh@yahoo.com

■ **ABSTRACT :** Climatic parameters (maximum temperature, minimum temperature, wind speed, bright sunshine hours, morning relative humidity, evening relative humidity and open pan evaporation) for 37 years (1971-2007) were collected from Agricultural Meteorological Observatory Dr. PDKV, Akola. Mean monthly climatic data for the period were used to determine reference evapotranspiration ($ET_0$) by FAO-56 Penman-Monteith method. The trends of change of these parameters were analyzed by working out seven years moving average and forming regression equations. The mean monthly maximum air temperature showed slightly decreasing trend for most of the months during the year except February, August and December. Whereas, there was unsteady variation in minimum air temperature and showed linear increasing trend during monsoon period. There was strong variation in wind speed and bright sunshine hours and showed continuous linear decreasing trend. However, mean monthly morning and evening relative humidity showed the linear increasing trend for most of the period of the year. The mean monthly pan evaporation also showed the decreasing trend throughout year. There was major variation in monthly reference evapotranspiration and showed linear decreasing trend for all the months of the year.

■ **KEY WORDS :** Moving averages, Reference evapotranspiration, Trend analysis

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