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Abstract

Wavelet analysis is a powerful tool that is already in use throughout science and engineering. The versatility and attractiveness of the wavelet approach lie in its decomposition properties, principally its time scale localization. The applications of wavelet analysis are systematically increasing in the Meteorology. In the present paper, we study correlation between time series of five meteorological parameters of Jammu and Kashmir for the period 1995-2010 using wavelet methods. We also obtain the wavelet spectrum and compute the cross-correlation coefficient between the two same meteorological parameters, of the two different locations using statistical methods. In general, for all pairs of stations the time series for temperature and rainfall data were adjudged to be highly correlated, whereas wind speed, pressure and relative humidity comparatively less correlated.

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