



Characteristics of extreme temperature in China during transitional season

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Extreme air temperature events more likely occur in spring and autumn in China but at the same time they are easily neglected. Based on 1930 homogenized stations data in China from 1961 to 2015, this paper is aimed to investigate the characteristics of warm day frequency and its relationship with atmospheric circulation during transitional season from winter to summer using EOF analysis, wave flux diagnosis and other statistical methods. It was found that the number of stations with significant trend is at peak in March throughout the year. From March to May, all first modes show uniform anomaly in whole area for warm day frequency and the second and third modes are dipole patterns and triple patterns. The second modes of warm day frequency in March and May and the third mode of warm day frequency in April are linked with the wave train patterns over Eurasia closely.