



Relationship between west pacific subtropical high and ENSO and its influence on rainfall distribution of rainy season in Fujian

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Relationship between the variations of West Pacific subtropical high indices in the summer half of the year and preceding SST in North Pacific was examined based on a data set of 1951-2003. The correlation between the subtropical high indices and preceding SST in the equatorial East Pacific was the strongest among the others, and has great persistency from last autumn to spring. It is indicated that ENSO events appeared about six months earlier than the change of the subtropical high activities, and the subtropical high intensities enhanced(weakened) and western ridge point was westward (eastward) in the year of El Nino (La Nina) events. It was also observed that there were similar interdecadal oscillation and their abrupt variations between Nino3 SST and subtropical high intensities and rainfall of rainy season in Fujian. Therefore, experiments were made on rainfall distribution of rainy season in Fujian. The results showed that the distribution was direct affected by the subtropical high activities, pronouncedly caused by ENSO effect.