

DOUBLE ITCZ OVER THE EQUATORIAL EASTERN PACIFIC

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There are several studies why there is an ITCZ over the northern hemisphere over the eastern Pacific (i.e. Xie, 1994). However, recently it is documented that there is a double ITCZ over the eastern Pacific by several authors (Hung(2000), Zhang(2000)). They show that in March and April over the eastern Pacific the ITCZ is located not only over the northern hemisphere but also the southern hemisphere.

In this study we represent the characteristics of the structure of the double ITCZ over the eastern Pacific by using several satellite data (TRMM, SSM/I and ERS-2).

The result shows that most enhanced wind convergence near the surface can be found in March through May at 5 deg. S from 130 - 90 deg. W and actually the wind convergence exists all year around near the same location. This convergence will bring the rainfall over the region. The surface wind is southerly over the region and the speed becomes minimum at the equator, thus suggesting the wind convergence south of the equator. In addition the sea surface temperature becomes maximum in boreal spring of the year. This will also enhance the convergence over the region.