



The Climate Regime Shift over the Pacific during 1996/1997

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A climate regime shift (CRS) of the sea surface temperature (SST) warming over the equatorial western Pacific (WP) and mid-latitude North and South Pacific, accompanied with an SST cooling in the equatorial central Pacific (CP) was identified in 1996/1997. The large-scale atmospheric circulation change associated with the CRS exhibits a pair of low-level anticyclonic (cyclonic) gyres in the WP (CP) and a zonal-vertical overturning circulation anomaly in the equatorial Pacific. Both the EOF and SVD analyses indicate that the CRS in 1996/1997 is a robust signal. A mixed layer heat budget was analyzed to investigate the physical processes to lead the CRS.