

# **Enhancement of Interdecadal Linkage between the Tropical Central Pacific and the Extratropical North Pacific SSTs in the Late 1980s**

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## **Abstract**

The second dominant mode (empirical orthogonal function, EOF2) of North Pacific sea surface temperature anomaly (SSTa), as well known as the Victoria Mode (VM), has been remarked as an ocean bridge through the extratropical atmospheric variability to influence ENSO. The wavelet spectrum reveals that the VM experienced a significant interdecadal variation, occurring since the late 1980s and continuing to 2010s. Simultaneously, a significant interdecadal fluctuation of SST in the tropical central Pacific (TCP) was identified in the late 1980s. The linkage and the underlying mechanism between the interdecadal change of the TCP-SST and the VM in the late 1980s was discussed in this study. It revealed that the interdecadal warming of TCP-SST in the late 1980s may force a “Rossby wave-like” teleconnection, which provided favorable large-scale atmospheric circulation for the formation and maintenance of the VM in the interdecadal timescale.

Keywords: central Pacific (CP), Victoria mode (VM), interdecadal variation, sea surface temperature (SST)