

Interdecadal Amplitude Modulation of ENSO and its Impacts on TPDV

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ENSO is a major climate mode in the tropical Pacific, and its interdecadal variabilities in ENSO characteristics (e.g. amplitude, propagation, period) are investigated as responses to background mean state change. On the other hand, tropical Pacific decadal variability (TPDV) is known as a major decadal-interdecadal variability, and coupled-GCM has revealed that ENSO also acts to TPDV. This study shows that the GFDL coupled-GCM (GFDL-CM2.1) also captures significant relationship between ENSO amplitude modulation and TPDV in interdecadal timescale. Furthermore, importance of ENSO rectification on TPDV is investigated by OGCM sensitivity experiments.

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