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A teleconnection pattern of 10-30-day atmospheric oscilations over North Pacific during summer: Chracteristics and maintainance mechanism

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The present study investigates the intraseasonal variations of meridional winds over North Pacific during summer based on reanalysis datasets. It is shown that the band of 10-30 days is the main component of total intraseasonal varaitions. We identified a teleconnection pattern over North Pacific at this band . This teleconnection pattern is characterized by a zonally-oriented wave-like structure with a zonal wavenumber 5, and does not show a phase-locking feature. In addition, the anomalies associated with the teleconnection pattern exhibit a roughly baratropic structure. Further analyses suggest that the teleconnection pattern can gain energy from the basic flow through the baroclinic energy conversion, while the barotropic energy conversion plays a trivial role.