The low-level circulation over the central region of the Northeastern Tropical Pacific (NETP) is mainly directed westward from November to May and undergoes wind direction changes during summer, from weak westerlies in June to easterlies in July and August and changing back to westerlies in September October. This circulation pattern during midsummer is associated with the Tehuantepec and Papagayo wind jets, which slightly strengthen favoured by the westward elongation and intensification of the Azores Bermuda High. There is a high correlation, in the seasonal, monthly, and synoptic timescales among the zonal winds over the central NETP, the Tehuantepec and Papagayo wind jets, the meridional pressure gradients in the Isthmus of Tehuantepec and the Caribbean Sea, and the precipitation rates in central-southern Mexico and Central America, where the midsummer drought occurs. The westward low-level circulation observed over the central-eastern region of the NETP during midsummer, that occurs simultaneously with the strengthening of the wind jets, induces westward moisture fluxes in the lower layers of the atmosphere, displaces convergence areas away from the coasts, and causes the relatively strong convergence in the easternmost NETP to remain confined south of the area of influence of the wind jets and the associated westward winds over the central NETP. These factors play a major role in determining the midsummer drought in central-southern Mexico and Central America.

**SEASONAL SCALE**

![Seasonal Cycle of Wind Components](image1)

**SYNOPTIC SCALE**

![Time Series of Daily and 30-Day Running Means](image2)

![SLP Scenarios During Summer](image3)

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