



Interactions between Oscillating Pacific-Japan Patterns and Summertime Wave Patterns associated with Tropical-cyclone Tracks over the Western North Pacific

Ken-Chung KO and Jyun-Hong LIU
Taiwan (kko@nknu.edu.tw)

The Pacific-Japan (PJ) pattern exhibits a quasiperiodic fluctuating feature with a periodicity of 5–16 days in the East Asian summer monsoon region. In the PJ high phase, the submonthly wave pattern propagates northwestward from the western North Pacific tropics to an area near northern Luzon and is then forced to move westward because of a stationary, anomalous high-pressure system over southern Japan. The tropical cyclones (TCs) associated with an anomalous low-pressure system follow a straight-moving propagation route through the northern South China Sea. However, in the PJ low phase, the wave pattern and TCs undergoes a recurving propagation route toward higher latitudes. Therefore, wave patterns under the influence of the quasiperiodic PJ pattern affect the propagation routes of the wave patterns as well as the TC tracks.