

## Seasonal Responses of Pacific Japan Teleconnection on Indo-China Peninsula

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Summer monsoon precipitation provides a valuable support to the livelihood of the people live in Southeast Asia where the population density is very high. But monsoon precipitation shows high variation in seasonal and yearly time scales affecting daily life of the people in the regions such Indo-China Peninsula where most of the countries depend on agricultural economy. Tropical cyclones (TCs) and westward-propagation disturbances (WDs) are some of the major summer precipitation providing weather systems of this region. Pacific-Japan (PJ) teleconnection is a meridional teleconnection pattern which dominate the summer in Western North Pacific (WNP). TC locations were identified by TC best track dataset and WDs were detected subjectively using reanalysis dataset. PJ pattern timeseries is represented as 1<sup>st</sup> principle component seasonal average of relative vorticity at 850 hPa. High interannual and interseasonal variation of occurrence frequency was observed in Indo-China Peninsula which is not understood well enough. TC occurrence and genesis showed increasing trend in PJ pattern whereas it is negative for WDs. TCs and WDs have positive correlation with landfall in Indo-China Peninsula.

Keywords: Pacific Japan teleconnection, westward-propagating disturbance