

Recent changes in teleconnection related to summer climate anomalies over Northeast Asia

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The Asian summer monsoon system can be divided into the western North Pacific, the Indian, and the Northeast Asian summer monsoons. These subsystems interact with each other on wide range of temporal and spatial scales. Previous studies have reported the inverse relationship between the western North Pacific and the Northeast Asian summer monsoons. Such a close relationship is based on the delayed impact of El Nino/Southern Oscillation (ENSO) during mature and decay phases. Thus this linkage has been regarded as a potential predictor for seasonal forecast of Northeast Asia summer climate. Recently, changes in the relationship between the western North Pacific and the Northeast Asian summer monsoons are detected on a decadal time scale. Such drastic changes in phase relationship can be attributed to changes in teleconnections not only from tropics but from extratropics. One of the potential factors triggering ENSO is North Pacific Oscillation (NPO), which conveys mid-latitude signals to the tropical region via seasonal footprinting mechanism (SFM). We would like to focus on the possible impacts of overlapped and delayed teleconnection on the Northeast Asia climate anomalies during summer season.