

Interannual variation in the summer monsoon onset dates over South China sea

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Kajikawa and Wang(2012) pointed out an advance in the onset dates for 15 years average on the South China Sea summer monsoon around 1993/94. In this study, we compare meteorological fields around South China Sea in the change of onset dates not only for 15 years averages but also the annual variability. For analysis, we use the 850hPa horizontal wind from the JRA-25/JCDAS and OLR (Outgoing Longwave Radiation) from NOAA. We define South China Sea monsoon onset date as the area averaged zonal wind changed from easterly to westerly over 5-15 degrees north latitude, 110-120 degrees east longitude. 4 groups divided by 1979-1993 (prior period) and 1994-2008 (later period) and by 3 years early onset dates and 3 years late onset dates are compared the meteorological fields around South China Sea.

In the result, in the group of early onset dates in prior period, the convective activity in Bay of Bengal are strong in late April, but the genesis of convection in the South China Sea are delayed after the onset. And, the variation of South China Sea summer monsoon onset dates is different defined as OLR between zonal winds.

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