

Climatological seasonal changes of rainfall and circulation in the Philippines

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Climatological seasonal changes of rainfall and lower tropospheric circulation in the Philippines were analyzed by utilizing 5-day mean TRMM 3B-42 and station rainfall data provided by PAGASA, and ERA-Interim wind data for the period 1998-2013. In particular, climatological onset and withdrawal processes of the southwest monsoon were investigated.

It was found that the onset of southwest monsoon occurred abruptly in mid-May. It started from the north in the Philippines both in rainfall and wind, which showed a peculiar feature in this region. After the onset, anti-cyclonic flow from the Pacific high was predominant, and it changed into cyclonic flow in mid-June. Easterlies still remained in the south until early July, afterwards SW monsoon covered the whole country and enhanced from late July.

Southwest monsoon began to retreat from the north in mid- September, and fully retreated from the southern tip of the Philippines in late October.

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