

An investigation for the routes of cutoff lows approaching the Japan area

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We have developed the detection and tracking scheme for cutoff lows to understand their physics and climatologies. In this study, we investigate the routes of cutoff lows approaching the Japan area. The detection scheme, which we have developed, evaluates the degree of depression with the aid of geometry. We will introduce the detection scheme in session A-CG36. The tracking scheme, which we have newly developed, connects the overlapping area of estimated area of cutoff lows. The tracks of cutoff lows are collected from 1979 to 2020 (42 years) and divided by the seasons, intensities, sizes, and levels. The results show that general cutoff lows approach the Japan area from west northwest or northwest, and, in only summer and autumn at 200 hPa, from south or southeast. Strong cutoff lows tend to approach the most frequently in spring. These characters are consistent with previous studies. We will introduce more detail results of the analysis using those tracking data.

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