ABSTRACT

The statistical results on cyclones around Japan are reported. The period covered is the 10 years from December 1968 to November 1978. The daily weather maps published by the Japan Meteorological Agency are used. That is, the latitude and the longitude of the position and the central pressure of individual cyclones on the sea level synoptic charts at 00Z and 12Z are picked up and used as data. If the position 12 hours before can be identified, the latitude and the longitude of the position and the central pressure of that time are added to the data mentioned above. By doing this, we may calculate the deepening and the displacement of individual cyclones during 12 hours.

The nine statistical elements, that is, the total number, the formation number, the passing number, the mean central pressure, the minimum central pressure, the mean deepening, the maximum deepening, the mean displacement and the maximum displacement of the cyclone are selected. These elements are calculated on the pseudo-quadrangle surrounded by successive even latitude circles and meridians. The domain of the latitude band $0-70°N$ and the longitude band $76°E - 160°W$ is selected for the statistics.

The statistical results are shown by two ways. They are a diagrammatical illustration on the stereographic projection chart and a numerical one on the Mercator projection chart. In the diagrammatical illustration, the mean and the maximum displacements of a cyclone are represented by vectorized arrows, and the other elements are classified into 7 classes. On the other hand, in the numerical illustration, all the statistical results are shown within three figures.

Brief explanations are offered for all the above nine statistical elements. All statistical results are summarized in the plates by two explanations, i.e., a diagram explanation and a numerical one, at the end of the book. We may obtain the general characteristics of the statistical results from the diagram explanations. If anyone wants to extend the statistical period before or later than these 10 years, the numerical explanations will be useful as original data.

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