DAILY SYNOPTIC SURFACE REPORTS

Method of Presentation:

In preparing the data for publication, the entire collection of teletype reports for the 1200Z synoptic reports has been reviewed. The reports are sorted numerically within areas according to their index number and the geographical collective into which they fall. Thus, except where a station fails to fill a synoptic report, the reports appear in the same order each day. All land observations have been edited into a single numerical code which is explained below. Ship observations take more than one form. Most ships which take observations from fixed positions have their assigned names and report in a land-form code. Some ships, which are moving but near one of the fixed positions, are given the index number of the position. Although their reports appear to be a duplication of index numbers, they are actually additional reports from the approximate position. Other moving ships, however, report in ship code which includes octant, latitude, and longitude. These ships have been grouped by octant; they appear in numerical order by latitude within an octant and are reported in a ship code form which is explained below.

Description of Codes:

Data from various sections of the world are received in greatly varied codes. For the purpose of presenting synoptic data in a consistent code, the reports have been edited, and the data for all land stations are presented in a single code form in this publication. In addition, the ships which operate at or near a fixed position and report in a land code are reported in the same single code and are clearly indicated as ships with fixed positions. Moving ships which report their positions in code have been treated separately and appear in this publication in one of several codes which will be enumerated below. Where complete 5-digit groups were garbled or missing in the teletype reports at the end of a message, these groups have been left blank. Where a 5-digit group was garbled or missing in the text of a message, or portions of a 5-digit group were missing, garbled or unreported, diagonals (//) have been used to indicate the missing elements. Temperatures reported in °C have been converted to °F, and the temperatures of the dew point have been calculated for stations which report only the first 5 groups of the International Code. In this calculation, the temperature being given, a value of relative humidity was assumed equal to the midpoint of the relative humidity range reported by the single-digit code.

The form of code used for land stations and fixed ships is as follows:

\[ \text{ILIC}C_n \text{wWBN} \text{DDFNF} \text{PPPTT} \text{UC} \text{app} \text{T} \text{r} \text{h} \text{R} \text{nR} \text{R} \text{RRR} \text{PPF} \text{9} \text{GG} \]

Codes used for the non-fixed ships are as follows:

\[ \text{LLLL} \text{DDFNF} \text{PPPTT} \text{UC} \text{app} \text{T} \text{r} \text{h} \text{R} \text{nR} \text{R} \text{RRR} \text{PPF} \text{9} \text{GG} \]

The meaning of symbols in the above codes, whose values are found in tables of international codes and symbols, is as follows:

- Characteristic of the barometric tendency in preceding three hours.
- Form of low cloud.
- Form of middle cloud.
- Form of high cloud.
- Wind direction.
- Direction from which wind comes (8-point scale).
- Direction toward which the wind is moving (8-point scale).
- Wind speed on Beaufort scale, 0-9.
- Amount of wind speed over Beaufort scale 9.
- Greenwich time (12 noon: 11 P.M., etc.).
- Height of the lowest clouds.
- Weight of ceiling in hundreds of feet.
- International Index number.
- State of swell in open sea.
- Latitude in degrees and tenths, with initial hundreds digit omitted.
- Method of determining ceiling.
- Total amount of sky covered by clouds.
- Amount of sky covered by clouds whose height is reported by h.
- Pressure in whole millibars, first figure (9 or 10) omitted.
- Pressure in millibars, first figure (9 or 10) omitted.
- Amount of barometric tendency for preceding three hours in fifths of millibars.
- Time precipitation began or ended.
- Amount of precipitation in 6-hour period preceding time of observation.
- Amount of precipitation over ninety-nine in the 6-hour period preceding time of observation.
- Amount of 24-hour precipitation in tenths and hundredths.
- State of the sea.
- Temperature difference between air and water.
- Temperature in whole degrees.
- Temperature of the dew point in whole degrees.
- Relative humidity.
- Horizontal visibility.
- Speed of the ship.
- Past weather.
- Present weather.
- Group indicator in certain ship codes.