The sources of data, methods of accumulation, and index numbers used for the daily synoptic upper-air reports are quite similar to those used for the surface data and have been explained under "Daily Synoptic Surface Reports". However, the time of observations is different. For upper air reports, the observation at or nearest to 0000Z is shown in all cases. The time of the observation, to the nearest hour, is shown for each station.

Method of Presentation:

1. Upper air wind data for all days for stations reporting in the new code.
2. Upper air wind data for all days for stations reporting in the old code.
3. Raobs data for all days for stations reporting in the new code.
4. Raobs data for all days for stations reporting in other than new code.

As in the surface data, it is expected that all stations will be reporting in the new code in the near future. At such time, data of each type will be combined. The data in each group are presented numerically by block numbers (where applicable) and numerically by stations within each block. Upper air wind data are also shown for raobs where the raob balloon was tracked by radar or radar methods.

Upper Air Wind Observations:

Each group of the upper air wind data contains all balloons, raobs, and raobs received for that category. The data are shown in two tabulations, the first containing values of wind direction and speed for levels through 20,000 feet, and the second the same type of information for levels above 20,000 feet.

Symbol headings used for upper air winds reported in the new code, referred to as Type I above, is as follows:

- dd: Direction to 36 points.
- ff: Speed in knots.

Where an upper air wind observation is not taken and the reason for the missed observation is known, the reason is indicated under surface winds in the following code:

- 01: No balloons
- 02: Low clouds
- 03: Thick dust
- 04: Fog
- 05: No gas
- 11: High or gusty surface wind

Reports from ships are similar to those from land stations except that position is given instead of station name.

Reports from Russia are shown in the following manner:

- DDDG: Station number.
- GG: Time (Moscow).
- dd: Wind direction to 36 points.
- ff: Wind speed (m.p.h.)

Height levels are indicated as follows:

- 0: Surface.
- 200 meters.
- 500 meters.
- 1000 meters.
- 2000 meters.
- etc.

0° to 10,000 meters.

Remarks on carrying upper observation as follows:

- 0 Entered cloud
- 1-Lost in fog
- 2-Lost in mist
- 3-Lost accidentally
- 4-Lost in precipitation

H_h: Height at which observation was discontinued in tenths of meters.

C: Predominant cloud.

Explanation of other codes used by individual stations can be found in H.O. 206, 1946.

Raobs Data:

Raobs data are shown in three different tabulations. The first shows the station index number, the station name, and values of height, temperature, and dew point (and wind direction and speed where raobs or radar methods were utilized), for the 1,000 mb, 800 mb, 700 mb, and 500 mb. The second tabulation shows data for the same elements for the 300 mb, 250 mb, and 100 mb. The third tabulation shows values of pressure, temperature, and dew point for significant levels. In all cases, the first significant level contains the surface data. Although station names are not indicated in the latter two tabulations, the index numbers are identical to those used in the first tabulation, which shows the station name for each number. Thus, any station may be easily identified from each tabulation.

Where a raob is not taken and the reason for the missed observation is known, the reason is indicated under 1000 mb in the "100" additional data indicator code as adopted by the IMO.

Symbol headings used for raobs reported in the new code, referred to as Type III above, are as follows:

- h: Height in tens of feet above mean sea level. The tens of thousands figure is shown. Wind direction and speed for levels through 20,000 feet, and the second the same type of information for levels above 20,000 feet.
- TT: Temperature to whole degrees; the 10ths value being dropped.
- T9d: Temperature of the dew point to whole degrees, the 10ths being dropped.
- TX: Approximate tenths value of air and dew point temperatures. The tenths values of T and T9d can be determined from the following table.

<table>
<thead>
<tr>
<th>Symbol</th>
<th>T and T9d</th>
<th>Tenths Value</th>
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</tbody>
</table>

dd = Wind direction to 36 points, even though code indicates whole degree.

ff = Wind speed in knots. When value in over 100 knots, 20 is added to direction and the 100 figure dropped from the speed. Wind direction 32, speed 103 is shown as 72 - 08.

TT = Temperature in whole degrees, the 10ths value being dropped.

TT = Temperature in whole degrees.

TX = Approximate tenths value of air and dew point temperatures. The tenths values of T and T9d can be determined from the following table.

Explanations of other codes used by individual stations can be found in H.O. 206, 1946.

Block 03 - British Isles - no significant levels sent. Occasionally ship reports are received at Corac Code. These are identified as such.

Explanation of the Russian code is as follows:


H_H : Height in hundreds of geodetic meters.

H_H : Height in feet above mean sea level.

H_H : Height in tens of feet above mean sea level.

H_H : Height in tens of feet or tens of meters, depending on NN.

H_H : Height in 100's of feet or tens of meters according to regional agreement.

H_H : Height in feet above mean sea level. M.S.L. : Mean sea level.

PP = Pressure in tens of millibars.

PPP = Pressure in whole millibars.

PP = Pressure in millibars.

P = Pressure in tens of millibars of 1st, 2nd, etc. levels.

P = Pressure in millibars of 1st, 2nd, etc. levels.

P = Units figure of pressures for following levels which report in tens of millibars.

XXX = Russian code - Mixing ratio in grams per kilogram of dry air.

n_m = Mixing ratio in grams of water vapor per kilogram of dry air.

n = Significant levels given consecutively.

h = Given height of level in 100's of feet or tens of meters according to regional agreement.

m_p = Mixing ratio in grams per kilogram of dry air.

h = Height in 100's of feet or tens of meters, depending on NN.

m = Significant levels given consecutively.

m = Given height of level in 100's of feet or tens of meters, depending on NN.

m = Significant levels given consecutively.

m = Given height of level in 100's of feet or tens of meters, depending on NN.

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