DAILY SYNOPTIC SURFACE REPORTS

The daily synoptic reports shown in this publication are accumulated from special forms prepared by the various countries in the Northern Hemisphere, from published data prepared by those countries, and from teletype reports from all collectives available to all of the services cooperating in the preparation of the publication. Wherever possible, data are taken from the first two named sources, and teletype data are used to complete the presentation. Data for stations in the United States are tabulated from punched cards prepared on the stations for this purpose and mailed to the Tabulating Unit at New Orleans. Only the 1230Z observations are shown herein. In preparation of this bulletin, it has been the aim to present as complete a coverage for the Northern Hemisphere as is possible. With this consideration in mind, it was deemed advisable to delete data from certain stations where the coverage was already considered adequate, and to show all reports for areas where data are sparse, even though those data might not be available for all days. The data are subject to observational and transmission errors which have been corrected insofar as personnel and time considerations permit.

Station Names and Index Numbers:

All stations for which data are presented are identified by the station name and the station index number. The numbers assigned in accordance with IMO agreements effective January 1, 1949, are used in all cases.

Method of Presentation:

In preparing the data for publication, the entire collection of reports (mailed, published, and teletype) have been placed on punched cards, then sorted by block numbers, and numerically by station number within blocks. The data are presented in that manner. It is further divided into 2 groups as follows:

1. Data for all days for land stations.
2. Data for all days for ship reports.

Description of Codes:

Two different codes are at present being used in reporting surface synoptic data. We shall call these Type I and II for purposes of identification. Type I is the synoptic code adopted by the IMO for use effective January 1, 1949. Type II is used by ships reporting weather. The form of codes used is not shown here since it is apparent from the headings.

The meaning of the heading symbols are as follows:

Type I -

1. iii Station number (the block number is at the head of each group of station numbers.)
   T_dT_d Temperature of the dew point, to nearest whole degree F.
2. N Total amount of clouds. IMO Code -1-149.
   dd Wind direction from which wind is blowing, to 36 points.
   ff Wind speed in knots.
3. VV Visibility. IMO Code 1-1-49.
   ww Present weather. IMO Code 1-1-49.
   W Past weather. IMO Code 1-1-49.
4. PPP Pressure, mean sea level - 10's, units, and 10th of mbs - hundreds figures are omitted.
   TT Temperature, to nearest degree F.
5. N_h Amount of cloud whose height is reported for "h". IMO Code 1-1-49.
   C_L Clouds of genera Sc, St, Cu, Cb. IMO Code 1-1-49.
   h Height above ground of base of cloud. IMO Code 1-1-49.
   C_M Clouds of genera Ac, As, Ns. IMO Code 1-1-49.
   C_H Clouds of genera Ci, Cs, Cc. IMO Code 1-1-49.
6. 6 Indicator figure.
   D_C Direction from which clouds are moving, 8 points. IMO Code 1-1-49.
   a Characteristic of barograph trace, 3 hours. IMO Code 1-1-49.
   pp Pressure tendency, 3 hours. IMO Code 1-1-49.
7. 7 Indicator figure.
   R Whole inches of rain, used when inch or over.
   RR Amount of rain, last 6 hours - 100ths of inch precipitation.
   R_t Time rain began or ended. IMO Code 1-1-49.
   s Depth of snow on ground, nearest whole inch.

Exceptions to above:

It should be noted that most stations outside of North America only report the first 6 groups. This absence of group 7 does not therefore definitely indicate the lack of rain. The occurrence of this phenomena can be detected from the reports of present and past weather in group 3.

Iceland stations sometimes report temperature in degrees C.

French stations sometimes report temperature in degrees C, sometimes °F.

Certain Spanish stations reduce surface pressure to 1 Km. rather than to sea level.

Mexican and Italian stations, group 7, RRR are in millimeters.

South Pacific stations - report $3RRD_LD_M$ in place of the 7 group where R is rainfall; D_L and D_M are directions of low and middle clouds. RR is listed under 7RR.

European stations - changes group 6 to $6a_xapp$, where a_x is additional information on pressure change.

Asian stations - group 6 is reported $6D_capp$ where D_c is direction of lowest cloud observed.

South American stations - group 6 is reported as 6Eapp with E as state of ground.

India stations, blocks 42 and 43 - group 7 shown as $7RRT_eT_e$ where T_eT_e is extreme temperature. In most cases only 7RR is shown.

Japanese stations in block 47 - same as India above.

Type II - Ship reports.

1. Y Day of week.
   Q Quadrant of globe. (see table II)
   $L_aL_aL_a$ Latitude in degrees and tenths.
2. $L_oL_oL_o$ Longitude in degrees and tenths, the 1 being omitted if ship is 100 degrees or more.
   GG Time of observation, GCT.
   Note: 30 added to time indicates that (D_sV_sapp) group is not sent and appears blank in listing.
3. Nddff (Explanation for 3, 4, 5 and 6 are the same as
4. VVwwW for land code above.)
5. PPPTT
6. $N_hC_LhC_MC_H$
7. D_s Ships course - direction toward which ship is moving (see table XIV).
   v_s Speed of ship, in knots (see table XV).
   a Characteristic of barometer tendency, 3 hours (see table XVI).
   pp Amount of barometric change, 3 hours (see table XVII).
8. O Group designator.
   T_sT_s Difference between air temperature and sea temperature, whole degrees F. If air temperature is below sea temperature, 50 is added to value of difference.
   T_dT_d Temperature of dew point - whole degrees F.
9. 1 Group designator.
   d_wd_w Direction from which waves are coming (see table IV).
   P_w Period (in seconds) of waves (see table XX).
   H_w Mean maximum height of waves (see table XXI).

All references are to "International Code For Radio Weather Reports From Ships".

Russian synoptic surface reports -

Code Form: IIiii $Nddf_mf_m$ VVwwW PPPTT $N_hC_LhC_MC_H$ T_dT_dapp $7RRRR_ts$

Above code form varies only slightly from regular IMO code.

1. Effective January, 1950, the U.S.S.R. Zones and Sectors are indicated by a single number, 1 thru 9, but for expediency in processing and listing these reports are shown under block numbers 21 thru 29.
2. The dewpoint (T_dT_d) is transposed during final listing so that it appears under the symbol heading printed at the top of pages.
3. Please read under (ff) in printed code headings, for all stations using Russian code form, wind speed in meters per second. No conversion has been attempted at this time.
4. Since the last two places of the 7-group do not conform to most of the other stations, only 7RR are shown in order not to confuse information under printed code symbols.
5. Stations in POLAND, HUNGARY, RUMANIA, BULGARIA, the U.S.S.R. Zone of Germany, and U.S.S.R. section of Korea are necessarily included in the group using the Russian Code Form. Where only a part of the block uses the Russian code, the stations are indicated by the sign (&). Station coordinates are shown for those stations where name is not known.

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