

"DAILY WEATHER MAPS"

WEEKLY SERIES

The charts in this publication are a continuation of the principal charts of the Weather Bureau publication, Daily Weather Map. They include the Surface Weather Map, the 500-Millibar Chart, the Highest and Lowest Temperatures Chart, and the Daily Precipitation Chart. All of the charts for one day are arranged on a single page of this publication. They are copied from operational weather maps prepared by the National Meteorological Center, Weather Bureau. The symbols used on the Surface Weather Map and the 500-Millibar Chart are the same as those used previously in Daily Weather Map. (The seven maps for a week are issued in a single booklet mailed to subscribers by Superintendent of Documents, G. P. O., Washington, D. C. 20402.)

The Surface Weather Map presents station data and the analysis for 7:00 a.m./e.s.t. The tracks of well-defined

low pressure areas are indicated by chains of arrows; the locations of these centers at times 6, 12, and 18 hours preceding map time are indicated by small black squares enclosing white crosses. Areas of precipitation are indicated by shading. The weather reports that are printed here are only a fraction of those that are included in the operational weather maps, and on which the analyses are based. Occasional apparent discrepancies between the printed station data and the analyses result from those station reports that cannot be included in the published maps because of lack of space.

The 500-Millibar Chart presents the height contours and isotherms of the 500-millibar surface at 7:00 a.m./e.s.t. The height contours are shown as continuous lines, and are labeled in feet above sea level. The isotherms are shown as dashed lines, and are labeled in degrees Celsius. The arrows show

the wind direction and speed at the 500-millibar level.

The Highest and Lowest Temperatures Chart presents the maximum and minimum values for the 24 hour period ending at 1:00 a.m./e.s.t. The names of the reporting points can be obtained from the Surface Weather Map. The maximum temperature is plotted above the station location, and the minimum temperature is plotted below this point.

The Precipitation Areas and Amounts Chart indicates by means of shading the areas that had precipitation during the 24 hours ending at 1:00 a.m. Amounts in inches to the nearest hundredth of an inch are for the same period. Incomplete totals are underlined. "T" indicates a trace of precipitation. Dashed lines show the depth of snow on the ground in inches as of 7:00 a.m. of the previous day.

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ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
Environmental Data Service

EXPLANATION OF THE WEATHER MAP

Weather maps showing the development and movement of weather systems are among the principal tools used by the weather forecaster. Of the several types of maps used, some portray conditions near the surface of the earth, while others depict conditions at various heights in the atmosphere. Some cover the entire Northern Hemisphere, while others cover only local areas as required for special purposes. The maps used for daily forecasting by the Weather Bureau are similar in many respects to the printed Daily Weather Map. At Weather Bureau offices, maps showing conditions at the earth's surface are drawn four times daily. Maps of upper level temperature, pressure, and humidity are prepared twice each day. A more detailed explanation of weather forecasting from synoptic charts appears in the pamphlet "Weather Forecasting," U. S. Department of Commerce, Weather Bureau, 1952, and is for sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.

PRINCIPAL SURFACE WEATHER MAP

To prepare the surface map and present the information quickly and pictorially, two actions are necessary: (1) Weather observers at many places must go to their posts at regular times each day to observe the weather and send the information by wire or radio to the offices where the maps are drawn; and (2) the information must be quickly transcribed to the maps. In order that the necessary speed and economy of space and transmission time may be realized, codes have been devised for sending the information and for plotting it on the maps.

CODES AND MAP PLOTTING

A great deal of information is contained in a brief coded weather message. If each item were named and described in plain language, a very lengthy message would be required, and it would be confusing to read and difficult to transfer to a map. Use of a code permits the message to be condensed to a few five-figure numeral groups, each figure of which has a meaning depending on its position in the message. Persons trained in the use of the code can read the message as easily as plain language.

The location of the reporting station is printed on the map as a small circle (the station circle). A definite arrangement of the data around the station circle, called the station model, is used (see block 1). When the report is plotted in these fixed positions around the station circle on the weather map, many of the code figures are transcribed exactly as sent. Entries in the station model which are not made in code figures or actual values found in the message are usually in the form of symbols which graphically represent the element concerned. In some cases, certain of the data may or may not be reported by the observer, depending on local weather conditions. Precipitation and clouds are examples. In such cases the absence of an entry on the map is interpreted as non-occurrence or non-observance of the phenomena. The letter "M" is entered where data are normally observed but not received by teletypewriter.

Both the code and the station model are based on international agreements. Through such standardized use of numerals and symbols, a meteorologist of one country can use the weather reports and weather maps of another country even though he does not understand the language. Weather codes are, in effect, an international language making possible complete interchange and use of worldwide weather reports so essential in present-day activities.

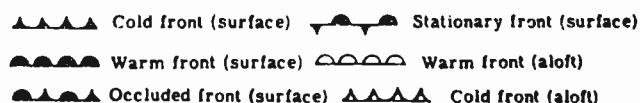
The international code form for surface reports used by the Weather Bureau beginning January 1, 1955, is shown in abridged form in block 1 together with a corresponding sample message. Also included are the symbolic station model used on the printed map, a sample station model entered from the sample message, and an explanation of the symbols with remarks on map entries in block 2.

Many of the elements in the plotting model are entered in values which can be interpreted directly. However, some require reference to code tables. These tables are given in the numbered blocks 3 through 11 to the right of the station model and explanation of symbols and map entries. Those who wish a more complete explanation of the code are referred to the Manual for Synoptic Code (WBAN) which is for sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D.C. Specify "Federal Meteorological Handbook No. 2, Synoptic Code" (Latest Edition).

FRONTS AND AIR MASSES

The boundary between two different air masses is called a "front." Important changes in weather, temperature, wind direction, and clouds, often occur with the passage of a front. Half circles and/or triangular symbols are placed on the lines representing fronts to indicate the kind of front. The side on which the symbols are placed indicates the direction of frontal movement. The boundary of relatively cold air of polar origin advancing into an area occupied by warmer air, often of tropical origin, is called a "cold front." The boundary of relatively warm air advancing into an area occupied by colder air is called a "warm front." The line along which a cold front has overtaken a warm front at the ground is called an "occluded front." A boundary between two air masses, which shows at the time of observation little tendency to advance into either the warm or cold areas, is called a "stationary front." Air mass boundaries are known as "surface fronts" when they intersect the ground, and as "upper air fronts" when they do not. Surface fronts are drawn in solid black, fronts aloft are drawn in outline only.

Front symbols are given below:



A front which is disappearing or is weak and decreasing in intensity is labeled "Frontolysis."

A front which is forming is labeled "Frontogenesis."

A "squall line" is a line of thunder storms or squalls usually accompanied by heavy showers and shifting winds, and is indicated as

The paths followed by individual disturbances are called storm tracks and are shown as → → . The symbols □ indicate past positions of the low pressure center at 6-hour intervals.

"HIGH" (H) and "LOW" (L) indicate the centers of high and low barometric pressure.

Solid lines are isobars and connect points of equal sea level barometric pressure. The spacing and orientation of these lines on weather maps are an indication of speed and direction of wind flow. In general, wind direction is parallel to these lines with low pressure to the left of observer looking downwind. Speed is directly proportional to the closeness of the lines (termed pressure gradient). Isobars are labeled in the metric unit, millibars, and may be converted to inches of mercury by use of the scale in block 12.

Isotherms are lines connecting points of equal temperature. Two isotherms are drawn on the large surface weather map when applicable. The freezing or 32° F. isotherm is drawn as a dashed line (---), the 0° F. isotherm is drawn as a dash-dot (-·-·-) line.

Masses of air are classified to indicate their origin and basic characteristics. For example, the letter P (Polar) denotes relatively cold air from northern regions, and the letter T (Tropical) denotes relatively warm air from southern regions. Letters placed before P and T indicate air of maritime characteristics (m) or continental characteristics (c). Letters placed after P and T show that the air mass is colder (k) or warmer (w) than the surface over which it is moving. A plus sign (+) between two air mass symbols indicates mixed air masses, and an arrow → between two symbols indicates a transitional air mass changing from one type to the other. Two air mass symbols, one above the other and separated by a line, indicate one air mass aloft and another at lower levels. Air mass symbols are formed by combinations of the following letters:

- m = Maritime; c = Continental; A = Arctic; P = Polar, T = Tropical; E = Equatorial; S = Superior (a warm, dry air mass having its origin aloft);
- k = colder, and w = warmer than the surface over which the air mass is moving.

Areas where precipitation is occurring at the time of observation are shaded.

SYMBOLIC FORM OF MESSAGE 1
 iii Nddff VVwwW PPPTT NChCC TTapp 7RRRs
h L M H d d t
 Note: This Abridged Code Shows Only Data Normally Plotted on Printed Maps

SAMPLE CODED MESSAGE

405 83220 12716 24731 67292 30228 74542

SYMBOLIC STATION MODEL **SAMPLE PLOTTED REPORT**

ff
 TT dd C_H C_M PPP
 VV ww (N) ± ppa
 T_d T_d C_L N_h WR_t
 h RR

31 247
 3/4 * * ● +28
 30 --- 6 . 4
 2 45

PPP	Barometric Pressure (in millibars) reduced to sea-level 247 = 1024.7 mb.	Coded and plotted in tens, units, and tenths of millibars. The initial 9 or 10 and the decimal point are omitted. See block 11.
TT	Current air temperature 31 = 31° F.	Coded and plotted in actual value in whole degrees F. See block 11.
N_h	Fraction of sky covered by low or middle cloud 6 = 7 or 8 tenths	Observed and coded in tenths of cloud cover. Plotted on map as code figure in message. See block 7.
C_L	Cloud type 7 = Fractostratus and/or Fractocumulus of bad weather (scud)	Predominating clouds of types in C _L table (block 3) are coded from that table and plotted in corresponding symbols.
h	Height of base of cloud 2 = 300 to 599 feet	Observed in feet and coded and plotted as code figures according to code table in block 5.
C_M	Cloud type 9 = Altocumulus of chaotic sky	See C _M table in block 3.
C_H	Cloud type 2 = Dense cirrus in patches	See C _H table in block 3.
T_d T_d	Temperature of dewpoint 30 = 30° F.	Coded and plotted in actual value in whole degrees F.
a	Characteristic of barograph trace 2 = rising steadily or unsteadily	Coded according to table in block 10 and plotted in corresponding symbols.
PP	Pressure change in 3 hours preceding observation 28 = 2.8 millibars	Coded and plotted in units and tenths of millibars.
7	Indicator figure	Not plotted.
RR	Amount of precipitation 45 = 0.45 inches	Coded and plotted in inches to the nearest hundredth of an inch.
R_t	Time precipitation began or ended 4 = 3 to 4 hours ago	Coded and plotted in figures from table in block 4.
S	Depth of snow on ground	Not plotted.

EXPLANATION OF SYMBOLS AND MAP ENTRIES 2

Symbols in order as they appear in the message

	Explanation of symbols and decode of example above	Remarks on coding and plotting
iii	Station number 405 = Washington	Usually printed on manuscript maps below station circle. Omitted on Daily Weather Map in favor of printed station names.
N	Total amount of cloud 8 = completely covered	Observed in tenths of cloud cover and coded in Oktas (eighths) according to code table in block 3. Plotted in symbols shown in same table.
dd	True direction from which wind is blowing 32 = 320° = NW	Coded in tens of degrees and plotted as the shaft of an arrow extending from the station circle toward the direction from which the wind is blowing.
ff	Wind speed in knots 20 = 20 knots	Coded in knots (nautical miles per hour) and plotted as feathers and half-feathers representing 10 and 5 knots, respectively, on the shaft of the wind direction arrow. See block 9.
VV	Visibility in miles and fractions 12 = 12/16 or 3/4 miles	Decoded and plotted in miles and fractions up to 3 1/8 miles. Visibilities above 3 1/8 miles but less than 10 miles are plotted to the nearest whole mile. Values higher than 10 miles are omitted from the map.
WW	Present weather 71 = continuous slight snow	Coded in figures taken from the "ww" table (block 1) and plotted in the corresponding symbols same block. Entries for code figures 00, 01, 02, and 03 are omitted from this map.
W	Past weather 6 = rain	Coded in figures taken from the "W" table (block 1) and plotted in the corresponding symbols same block. No entry made for code figures 0, 1, or 2.

CLOUD ABBREVIATION	CL	DESCRIPTION (Abridged from W M O Code)	CM	DESCRIPTION (Abridged from W M O Code)	CH	DESCRIPTION (Abridged from W M O Code)	DESCRIPTION (Abridged from W M O Code)
St or Fs-Stratus or Fractostratus		Cu of fair weather, little vertical development and seemingly flattened	1	Thin As (most of cloud layer semi-transparent)	1	Filaments of Ci, or "mares tails," scattered and not increasing	3
Ci-Cirrus		Cu of considerable development, generally towering, with or without other Cu or Sc bases all at same level	2	Thick As, greater part sufficiently dense to hide sun (or moon), or Ns	2	Dense Ci in patches or twisted sheaves, usually not increasing, sometimes like remains of Cb, or towers or tufts	
Cs-Cirrostratus		Cb with tops lacking clear-cut outlines, but distinctly not cirriform or anvil-shaped; with or without Cu, Sc, or St	3	Thin Ac, mostly semi-transparent; cloud elements not changing much and at a single level	3	Dense Ci, often anvil-shaped, derived from or associated with Cb	
Cc-Cirrocumulus		Sc formed by spreading out of Cu; Cu often present also	4	Thin Ac in patches; cloud elements continually changing and/or occurring at more than one level	4	Ci, often hook-shaped, gradually spreading over the sky and usually thickening as a whole	
Ac-Alto cumulus		Sc not formed by spreading out of Cu	5	Thin Ac in bands or in a layer gradually spreading over sky and usually thickening as a whole	5	Ci and Cs, often in converging bands, or Cs alone; generally overspreading and growing denser; the continuous layer not reaching 45° altitude	
As-Altostratus		St or Fs or both, but no Fs of bad weather	6	Ac formed by the spreading out of Cu	6	Ci and Cs, often in converging bands, or Cs alone; generally overspreading and growing denser; the continuous layer exceeding 45° altitude	
Sc-Stratocumulus		Fs and/or Fc of bad weather (scud)	7	Double-layered Ac, or a thick layer of Ac, not increasing; or Ac with As and/or Ns	7	Veil of Cs covering the entire sky	
Ns-Nimbostratus		Cu and Sc (not formed by spreading out of Cu) with bases at different levels	8	Ac in the form of Cu-shaped tufts or Ac with turrets	8	Cs not increasing and not covering entire sky	
Cu or Fc-Cumulus or Fractocumulus		Cb having a clearly fibrous (cirriform) top, often anvil-shaped, with or without Cu, Sc, St, or scud	9	Ac of a chaotic sky, usually at different levels; patches of dense Ci are usually present also	9	Cc alone or Cc with some Ci or Cs, but the Cc being the main cirriform cloud	
Cb-Cumulonimbus							

Rt	TIME OF PRECIPITATION	h	HEIGHT IN FEET (Rounded Off)	HEIGHT IN METERS (Approximate)	N	SKY COVERAGE (Total Amount)	Nh	SKY COVERAGE (Low And/Or Middle Clouds)
0	No Precipitation	0	0 - 149	0 - 49	○	No clouds	0	No clouds
1	Less than 1 hour ago	1	150 - 299	50 - 99	◐	Less than one-tenth or one-tenth	1	Less than one-tenth or one-tenth
2	1 to 2 hours ago	2	300 - 599	100 - 199	◑	Two-tenths or three-tenths	2	Two-tenths or three-tenths
3	2 to 3 hours ago	3	600 - 999	200 - 299	◒	Four-tenths	3	Four-tenths
4	3 to 4 hours ago	4	1,000 - 1,999	300 - 599	◓	Five-tenths	4	Five-tenths
5	4 to 5 hours ago	5	2,000 - 3,499	600 - 999	◔	Six-tenths	5	Six-tenths
6	5 to 6 hours ago	6	3,500 - 4,999	1,000 - 1,499	◕	Seven-tenths or eight-tenths	6	Seven-tenths or eight-tenths
7	6 to 12 hours ago	7	5,000 - 6,499	1,500 - 1,999	◖	Nine-tenths or over-cast with openings	7	Nine-tenths or over-cast with openings
8	More than 12 hours ago	8	6,500 - 7,999	2,000 - 2,499	◗	Completely overcast	8	Completely overcast
9	Unknown	9	At or above 8,000, or no clouds	At or above 2,500, or no clouds	⊗	Sky obscured	9	Sky obscured

WW PRESENT WEATHER (Descriptions Abridged from W. M. O. Code)

3

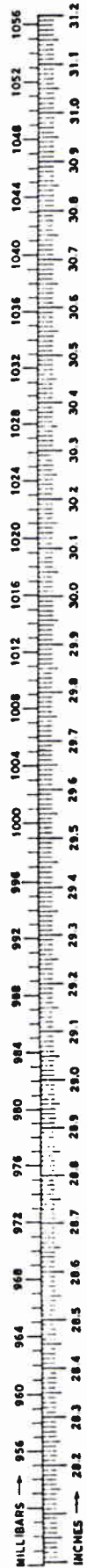
00	Cloud development NOT observed or NOT observable during past hour	0	State of sky on the whole unchanged during past hour	1	Clouds generally developing or becoming less developed during past hour	2	Clouds generally forming or developing during past hour	3	Clouds generally forming or developing during past hour	4	Visibility reduced by smoke	5	Widespread dust in suspension in the air, NOT raised to ground, at time of observation	6	Dust or sand raised by wind, at time of observation	7	Dust or sand raised by wind, at time of observation	8	Well developed dust devil(s) within past hour	9	Dust storm or sand storm within sight of or at station during past hour
10	Light fog	1	Patches of shallow fog at station, NOT deeper than 6 feet on land	2	Lightning visible, no thunder heard	3	Lightning visible, no thunder heard	4	Lightning visible, no thunder heard	5	Precipitation within sight, reaching the ground, but distant from station	6	Precipitation within sight, reaching the ground, near to but NOT at station	7	Thunder heard, but no precipitation at the station	8	Squalls within eight during past hour	9	Funnel cloud(s) within sight during past hour	0	Thunderstorm (with or without precipitation) during past hour, but NOT at time of observation
20	Drizzle (NOT freezing and NOT falling as showers) during past hour, but NOT at time of observation	1	Snow (NOT falling as showers) during past hour, but NOT at time of observation	2	Rain and snow (NOT falling as showers) during past hour, but NOT at time of observation	3	Rain and snow (NOT falling as showers) during past hour, but NOT at time of observation	4	Severe dust storm or sand storm, has increased during past hour	5	Fog, sky NOT discernible, has become thinner during past hour	6	Fog, sky NOT discernible, has become thicker during past hour	7	Heavy drifting snow, generally low	8	Fog during past hour, but NOT at time of observation	9	Thunderstorm (with or without precipitation) during past hour, but NOT at time of obs.	0	Thunderstorm (with or without precipitation) during past hour, but NOT at time of obs.
30	Slight or moderate dust storm or sand storm, has decreased during past hour	1	Slight or moderate dust storm or sand storm, has increased during past hour	2	Severe dust storm or sand storm, has decreased during past hour	3	Severe dust storm or sand storm, has increased during past hour	4	Fog, sky discernible, has become thinner during past hour	5	Intermittent drizzle (NOT freezing), slight at time of observation	6	Intermittent drizzle (NOT freezing), thick at time of observation	7	Fog, sky NOT discernible, has begun or become thicker during past hour	8	Slight or moderate drifting snow, generally high	9	Heavy drifting snow, generally high	0	Fog, depositing rime, sky NOT discernible
40	Fog at distance at time of observation, but NOT at station during past hour	1	Fog in patches	2	Continuous drizzle (NOT freezing), slight at time of observation	3	Continuous drizzle (NOT freezing), moderate at time of observation	4	Continuous rain (NOT freezing), moderate at time of observation	5	Intermittent drizzle (NOT freezing), slight at time of observation	6	Intermittent drizzle (NOT freezing), thick at time of observation	7	Moderate or thick freezing drizzle	8	Drizzle and rain, slight	9	Drizzle and rain, moderate or heavy	0	Rain or drizzle and snow, moderate or heavy
50	Intermittent drizzle (NOT freezing), slight at time of observation	1	Intermittent rain (NOT freezing), slight at time of observation	2	Intermittent rain (NOT freezing), moderate at time of observation	3	Intermittent rain (NOT freezing), heavy at time of observation	4	Intermittent rain (NOT freezing), heavy at time of observation	5	Intermittent rain (NOT freezing), heavy at time of observation	6	Intermittent rain (NOT freezing), heavy at time of observation	7	Moderate or heavy freezing rain	8	Rain or drizzle and snow, slight	9	Rain or drizzle and snow, moderate or heavy	0	Ice pellets (sleet, U.S. definition)
60	Intermittent fall of snowflakes, slight at time of observation	1	Intermittent fall of snowflakes, moderate at time of observation	2	Intermittent fall of snowflakes, heavy at time of observation	3	Intermittent fall of snowflakes, heavy at time of observation	4	Intermittent fall of snowflakes, heavy at time of observation	5	Intermittent fall of snowflakes, heavy at time of observation	6	Intermittent fall of snowflakes, heavy at time of observation	7	Granular snow (with or without fog)	8	Isolated starlike snow crystals (with or without fog)	9	Ice pellets (sleet, U.S. definition)		
70	Intermittent fall of snowflakes, slight at time of observation	1	Intermittent fall of snowflakes, moderate at time of observation	2	Intermittent fall of snowflakes, heavy at time of observation	3	Intermittent fall of snowflakes, heavy at time of observation	4	Intermittent fall of snowflakes, heavy at time of observation	5	Intermittent fall of snowflakes, heavy at time of observation	6	Intermittent fall of snowflakes, heavy at time of observation	7	Slight shower(s) of soft or small hail with or without rain, or rain and snow mixed	8	Moderate or heavy shower(s) of soft or small hail with or without rain, or rain and snow mixed	9	Slight shower(s) of soft or small hail with or without rain, or rain and snow mixed, not associated with thunder		
80	Slight rain shower(s)	1	Moderate or heavy rain shower(s)	2	Violent rain shower(s)	3	Slight snow or rain and snow mixed	4	Slight snow shower(s) of rain and snow mixed	5	Slight snow shower(s) of rain and snow mixed	6	Moderate or heavy shower(s) of rain and snow mixed	7	Moderate or heavy shower(s) of soft or small hail with or without rain, or rain and snow mixed	8	Moderate or heavy shower(s) of soft or small hail with or without rain, or rain and snow mixed	9	Moderate or heavy shower(s) of soft or small hail with or without rain, or rain and snow mixed, not associated with thunder		
90	Moderate or heavy shower(s) of hail, with or without rain or snow mixed, not associated with thunder	1	Moderate or heavy rain at time of observation, thunderstorm during past hour, but NOT at time of observation	2	Moderate or heavy rain at time of observation, thunderstorm during past hour, but NOT at time of observation	3	Moderate or heavy rain at time of observation, thunderstorm during past hour, but NOT at time of observation	4	Moderate or heavy rain at time of observation, thunderstorm during past hour, but NOT at time of observation	5	Moderate or heavy rain at time of observation, thunderstorm during past hour, but NOT at time of observation	6	Moderate or heavy rain at time of observation, thunderstorm during past hour, but NOT at time of observation	7	Moderate or heavy rain at time of observation, thunderstorm during past hour, but NOT at time of observation	8	Moderate or heavy rain at time of observation, thunderstorm during past hour, but NOT at time of observation	9	Moderate or heavy rain at time of observation, thunderstorm during past hour, but NOT at time of observation		

ff	(MILES) (Statute) Per Hour	9 KNOTS
☉	Calm	Calm
—	1 - 2	1 - 2
┆	3 - 8	3 - 7
┆┆	9 - 14	8 - 12
┆┆┆	15 - 20	13 - 17
┆┆┆┆	21 - 25	18 - 22
┆┆┆┆┆	26 - 31	23 - 27
┆┆┆┆┆┆	32 - 37	28 - 32
┆┆┆┆┆┆┆	38 - 43	33 - 37
┆┆┆┆┆┆┆┆	44 - 49	38 - 42
┆┆┆┆┆┆┆┆┆	50 - 54	43 - 47
┆┆┆┆┆┆┆┆┆┆	55 - 60	48 - 52
┆┆┆┆┆┆┆┆┆┆┆	61 - 66	53 - 57
┆┆┆┆┆┆┆┆┆┆┆┆	67 - 71	58 - 62
┆┆┆┆┆┆┆┆┆┆┆┆┆	72 - 77	63 - 67
┆┆┆┆┆┆┆┆┆┆┆┆┆┆	78 - 83	68 - 72
┆┆┆┆┆┆┆┆┆┆┆┆┆┆┆	84 - 89	73 - 77
┆┆┆┆┆┆┆┆┆┆┆┆┆┆┆┆	119 - 123	103 - 107

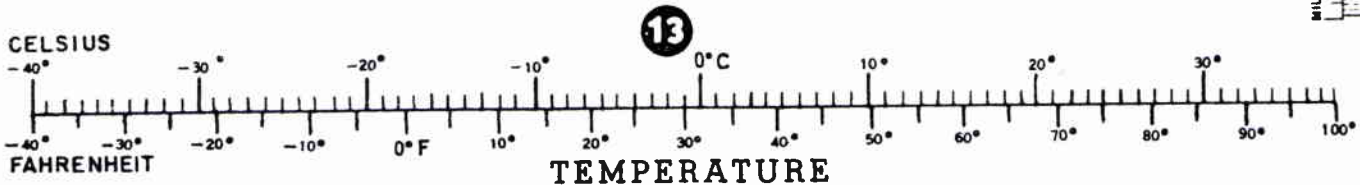
Code Number	d	BAROMETRIC TENDENCY	10
0	∧	Rising, then falling	} Barometer now higher than 3 hours ago } } Barometer now lower than 3 hours ago
1	∕	Rising, then steady; or rising, then rising more slowly	
2	∕	Rising steadily, or unsteadily	
3	✓	Falling or steady, then rising; or rising, then rising more quickly	
4	—	Steady, same as 3 hours ago	
5	∨	Falling, then rising, same or lower than 3 hours ago	
6	∖	Falling, then steady; or falling, then falling more slowly	
7	∖	Falling steadily, or unsteadily	
8	∩	Steady or rising, then falling; or falling, then falling more quickly	

Code Number	W	PAST WEATHER	11
0		Clear or few clouds	} Not Plotted
1		Partly cloudy (scattered) or variable sky	
2		Cloudy (broken) or overcast	
3	☉+	Sandstorm or dust-storm, or drifting or blowing snow	
4	≡	Fog, or smoke, or thick dust haze	
5	∩	Drizzle	
6	•	Rain	
7	*	Snow, or rain and snow mixed, or ice pellets (sleet)	
8	∇	Shower(s)	
9	⚡	Thunderstorm, with or without precipitation	

12



PRESSURE



13

AUXILIARY MAPS

TEMPERATURE MAP

Temperature data are entered from selected weather stations in the United States. The figures entered above the station dot denote maximum temperatures reported from these stations during the 24 hours ending 1:00 a.m., E.S.T.; the figures entered below the station dot denote minimum temperature during the 24 hours ending at 1:00 p.m., E.S.T., of the previous day. The letter "M" denotes missing data. Shaded areas labeled "HIGHER" or "LOWER" indicate the areas where temperatures recorded at 1:00 a.m., E.S.T., are at least 10° warmer or colder than 24 hours ago.

PRECIPITATION MAP

Precipitation data are entered from selected weather stations in the United States. When precipitation has occurred at any of these stations in the 24-hour period ending at 1:00 a.m., E.S.T., the total amount, in inches and hundredths, is entered above the station dot. When the figures for total precipitation have been compiled from incomplete data and entered on the map, the amount is underlined. "T" indicates a trace of precipitation, and the letter "M" denotes missing data. The geographical areas where precipitation has fallen during the 24 hours ending at 1:00 a.m., E.S.T., are shaded.

CONTINENTAL MAP

The insert map of nearly the entire North American continent shows the surface pressure pattern and frontal analysis twelve hours earlier than the principal map. Areas of precipitation at map time are shaded.

SURFACE FORECAST MAP

The insert map portrays surface pressure and frontal patterns expected at 7:00 p.m., E.S.T. today, or 18 hours after the principal map. Comparison of this map with the principal map will show forecast movements and changes in the surface pressure and frontal patterns.

500-MILLIBAR MAP

Contour lines, isotherms, and wind arrows are shown on the insert map for the 500-millibar contour level. Solid lines are drawn to show height above sea level and are labeled in feet. Dashed lines are drawn at 5° intervals of temperature, and labeled in degrees Celsius. A temperature conversion table is shown in block 13. True wind direction is shown by "arrows" which are plotted as flying with the wind. The wind speed is shown by flags and feathers, each flag representing 50 knots, each full feather 10 knots, and each half-feather 5 knots. For conversion to miles per hour, refer to block 9.

INQUIRIES

Inquiries regarding these maps may be addressed to Chief, U.S. Weather Bureau, Washington, D.C., 20235.

WEATHER MAP



LEGEND



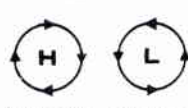
COLD FRONT



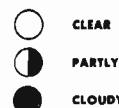
WARM FRONT



STATIONARY FRONT



P.F.ESSURE



CLOUDS



PRECIPITATION