

1962

INSTRUCTIONS FOR W. B. FORM 612-14

Section A.—TAKING THE OBSERVATIONS

1. *Reading the Thermometers.* Read the minimum temperature first, before either thermometer is touched. The minimum temperature is the reading of the right-hand end of the index. Next, slowly lower the maximum thermometer to the vertical position. The maximum temperature is the reading of the top of the mercury column. After both the minimum and maximum temperatures have been read, whirl the maximum thermometer until the reading is the same as the reading of the top of the alcohol column in the minimum thermometer. They should then agree within one degree. A greater difference should be reported in "Remarks" on the Form 612-14. Set the minimum thermometer by raising the bulb to allow the index to slide to the top of the alcohol column. Return both thermometers to the nearly horizontal position.

You may read your thermometers as many times a day as you wish but they must not be reset except at the time you have written at the heading of your form. Similarly, you may measure the precipitation as frequently as you wish but the rain gage must not be emptied except at your regular time of measurement.

2. *Measuring Liquid Precipitation.* Insert the measuring stick into the measuring tube. After two or three seconds, withdraw the stick. The amount of precipitation is the upper limit of the wet portion of the stick. If the measuring tube is full, it will measure 2.00 inches. Carefully empty the tube. Then pour some or all of the water from the overflow can into the tube and measure the amount poured. The total precipitation for the day will be the total of the individual measurements. Be sure the overflow can and tube are both empty after you have completed your measurement.
3. *Measuring Frozen Precipitation.* When snow, sleet, or hail is likely to occur, remove the funnel and measuring tube from the overflow can. Melt the snow, sleet, or hail by pouring a measured amount of warm water into the can. After the precipitation has all melted, measure the contents of the can the same as you measure liquid precipitation. Subtract the amount of water you poured into the can. The result is the total precipitation (melted) for the day.
- a. *Measuring Snowfall.* Measure the depth of the new snow in several places and average the measurements.
- b. *Measuring Snow and Ice on the Ground.* The snow or ice depth is the average of several measurements taken where the snow has not drifted.

Section B.—ENTERING THE DATA

1. *Filling in the Heading of the Form.*
 - a. Write in the name of your station.
 - b. Write in the name of your county and State.
 - c. Write in the month and year.
 - d. Write in the time that you usually read your thermometers and the time that you usually measure the precipitation. Show whether you use Eastern, Central, Mountain, or Pacific standard time or, if you are on daylight saving time, enter a "D" after Eastern, Central, Mountain, or Pacific, whichever is appropriate.
2. *Filling in the Columns of the Form.* Temperatures, rainfall, snowfall, and snow depths should be entered on the lines corresponding to the dates on which the measurements were made. For temperature readings below zero, use a minus sign (—) preceding the temperature values. The period of time during which precipitation occurred, and the weather types should be indicated on the lines corresponding to the actual dates of occurrence.
- a. *Maximum Temperature Column.* Write in the temperature indicated by the top of the mercury column of the maximum thermometer after it has been slowly lowered to the vertical position. The maximum temperature should not be lower than the "temperature at observation" recorded on the previous day.
- b. *Minimum Temperature Column.* Write in the temperature indicated by the right-hand end of the index in the minimum thermometer. It should not be higher than the "temperature at observation" on the previous day.
- c. *Temperature at "Time of Observation" Column.* Write in the temperature indicated by the top of the alcohol column in the minimum thermometer. This temperature may also be obtained by reading the top of the mercury column of the maximum thermometer after it has been whirled but while it is still in the vertical position. The "temperature at observation" will never be higher than the maximum temperature nor lower than the minimum for the same day.
- d. *"Duration of Precipitation" Blocks.* Draw a straight line (—) through the hours when precipitation was known to have occurred, and a wavy line (~~~~) through the hours when precipitation probably occurred unobserved. These lines should be on the date-lines of occurrence.
- e. *Rain, Melted Snow, etc., Column.* Write in the 24-hour amounts of rain, drizzle, or the water resulting from melted snow, sleet, hail, etc., which fell since the previous day's observation. This amount should be recorded on the date of measurement even though some or all of the precipitation may have fallen on the previous day after that day's observation. The amount should

- be recorded to the nearest .01 inch. Write in "T" for a trace, and "O" when no precipitation occurred.
- f. *Snow, Sleet, and Hail Column.* Write in the depth of the new snow, sleet, or hail which fell since the previous day's observation. Record the depth of the new snow to the nearest .1 inch. Write "T" for an amount too small to measure.
 - g. *Snow, Sleet, Hail, Ice on Ground Column.* Write in the depth of the snow or ice on the ground at the time of observation to the nearest inch. If the depth was less than half inch or if the snow was only in patches, write in "T" for trace.
 - h. *"Weather" Columns.* Indicate with the letter "X" the days on which fog, sleet, glaze, thunder, hail, or damaging wind occurred.
 - i. *Time of Observation if Different from the Above.* The column headed "Time of Observation if Different from the Above" is to be used only when for some reason it has been impossible to take the observation at the proper time (or within one hour of the proper time). On such days the actual time of the observation should be entered in this column. In the event the time refers to the precipitation only, the time entry should be circled.
 - j. *Remarks.* In this column describe other important or unusual weather facts that occurred on the calendar day.
 3. *Filling in the Bottom of the Form.* Sign your name and write in the name of your Post Office, your station, and the month and year. List any supplies you need.
 4. *Before Mailing your Form.*
 - a. Inspect your report to see that the information needed at the top and bottom is entered completely.
 - b. Check your daily temperature entries. All temperatures should have been entered on the dates you made the readings. The "temperature at observation" for any day should not be higher than the maximum temperature nor lower than the minimum temperature for that day nor for the following day.
 - c. Check your precipitation entries. Do you have an amount in the "rain, melted snow" column for every day on which some form of precipitation was measured? Remember, the precipitation may have fallen at any time after the previous measurement. There should be an entry in the "snowfall" column if snow, sleet, or hail fell since the previous observation. There should be an entry in the "snow-on-the-ground" column if snow, sleet, hail, or ice remains on the ground at the time of observation.
 - d. Always mail the original and one carbon copy of your report promptly after the end of the month to the Weather Records Processing Center unless you have other instructions.

Section C.—DEFINITIONS OF TERMS USED

1. *Maximum Temperature.* The highest temperature during the 24-hour period ending at the time of observation.
 2. *Minimum Temperature.* The lowest temperature during the 24-hour period ending at the time of observation.
 3. *Temperature at Observation.* The temperature at the time the thermometers are read.
 4. *Duration of Precipitation.* The time during which rain, snow, or other form of precipitation was occurring.
 5. *Some Liquid Forms of Precipitation.*
 - a. *Rain.* Precipitation which reaches the ground as drops of water.
 - b. *Drizzle.* Precipitation which falls from low clouds and as very small and numerous droplets which seem to float in the air and which cause poor visibility.
 6. *Some Frozen Forms of Precipitation.*
 - a. *Snow.* Precipitation which falls as flakes or ice crystals.
 - b. *Sleet.* Precipitation which falls as hard grains of ice. They may be white or transparent. They bounce but seldom burst when they fall on a hard surface.
 - c. *Hail.* Precipitation which falls as balls or irregular lumps of ice. They range in size from smaller than peas to larger than baseballs. They are associated with thunderstorm activity.
 - d. *Snow Pellets.* Snow that falls as round or conical white grains. They are crisp and easily compressible. They bounce and often burst when they fall on hard ground.
 - e. *Snow Grains.* Snow grains resemble snow pellets but are much smaller. They do not noticeably bounce and burst when they fall on hard ground.
 - f. *Glaze.* A coating of smooth ice formed by the freezing of rain or drizzle on outdoor objects.
 - g. *Rime.* A coating of white granular ice formed on outdoor objects by the freezing of fog particles or fine drizzle.
 7. *Fog.* Very small water droplets that float in the air and reduce visibility.
 8. *Thunder.* Thunder heard at your station whether accompanied by precipitation or not.
 9. *Damaging Winds.* Strong winds that damage vegetation, buildings, or other property.
- Complete instructions for cooperative observers are in *Instructions for Climatological Observers, Circular B.*

RECORD OF CLIMATOLOGICAL OBSERVATIONS

(REVISED 1956)

Station - Your Station

County - Yuan County

State your state

Time of observation (local time) if once daily 6P ;

Month Sample -----, 1956

If at different times, temperature -----, precipitation -----

Standard time in use

[illegible]

1 93 61 81 .01 X X X
2 101 57 86 .24 X X X
3 97 67 82 2.03 .5 0
4 100 71 87 0
5 98 63 73 .08
6 84 59 75 0
7 81 49 72 0
8 79 53 71 .27
9 74 47 64 0
10 69 38 60 0
11 63 34 55 0
12 58 46 54 T
13 63 50 57 .07
14 59 45 53 .22
15 54 43 45 .15
16 49 26 32 0
17 34 15 19 T
18 23 0 5 T
19 8 -9 -5 T
20 -4 -18 -3 0
21 0 -10 0 0
22 19 0 11 0
23 28 8 25 .46 7.5 7 X
24 32 22 30 .45 4.8 10
25 44 27 41 0 8
26 47 26 43 .03 3 6
27 53 34 46 0 3
28 58 38 49 0 T
29 52 33 35 .02 0
30 49 28 43 .12
31 57 42 51 0
Sum Avg Ext

Station your name
Post Office
Observer
Post Office

Check ☒ when additional sheet is used for remarks
List forms or supplies needed Carbon paper, envelope & continuation sheet
Station your station Month sample 1956

Strong winds & severe thunder
hail up to 1" in dia.
8P
During the several weeks reported
See continuation sheet
Severe blizzard by drifting snow

U.S. DEPARTMENT OF COMMERCE, WEATHER BUREAU
RECORD OF CLIMATOLOGICAL OBSERVATIONS
Station BAR HARBOR
County MAINE
Month JANUARY 1962
Time of observation (local time) if once daily 5
Standard time in use
If at different times, temperature, precipitation

Date	TEMPERATURE °F		PRECIPITATION		WEATHER (CALENDAR DAY)		Important weather conditions not included in 'Weather' block; remarks, etc.
	24 hrs. ending at observation	At obsn.	Draw a straight line (—) through hours precipitation was observed, and a wavy line (~~~~) through hours precip. probably occurred unobserved.	24-hr. amounts	At obsn.	Mark 'X' for all types occurring each day	
	Max.	Min.		Rain, Melted snow, etc. (ins. & hundredths)	Snow, Sleet, Hail, Ice (ins. & hundredths)	Fog, Glaze, Thunder, Hail, Damping Wind	
1	35	13	28				CLEAR
2	28	12	18				CLEAR
3	33	10	32				CLOUDY
4	34	5	6				CLEAR
5	15	-2	15				CLOUDY
6	36	15	25				CLEAR
7	50	23	45				CLOUDY
8	46	40	41				CLEAR
9	41	31	52				CLEAR
10	22	18	20				CLEAR
11	23	7	22				CLEAR
12	31	18	24				CLEAR
13	26	15	24				CLEAR
14	35	9	35				CLEAR
15	46	34	45				CLOUDY
16	50	27	37				CLEAR
17	34	15	34				overcast
18	24	-3	19				CLOUDY
19	27	12	20				CLEAR
20	22	10	21				SNOW
21	25	8	22				CLEAR
22	40	19	40				RAIN
23	38	29	27				CLEAR
24	31	8	31				PART CLOUDY
25	44	30	39				CLEAR
26	40	16	25				CLOUDY
27	45	15	16				Cloudy + Overcast
28	16	7	13				CLOUDY
29	13	-4	6				CLEAR
30	35	-2	32				CLOUDY
31	32	-4	2				Part Cloudy
Sum	1012	49	714				
Avg	33	14	25				
Ext	50	-4					

Observer
Post Office
Check ☐ when additional sheet is used for remarks
List forms or supplies needed

17-0371-32

Handwritten notes and data on the left side of the page, including station information and weather observations.

RECORD OF CLIMATOLOGICAL OBSERVATIONS
Time of observation (local time) if once daily
If at different times, temperature, precipitation

TEMPERATURE °F		PRECIPITATION												24-hr. amounts		At obsn.		WEATHER (CALENDAR DAY)		Time of obsn.		Important weather conditions not included in 'Weather' block, remarks, etc.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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RECORD OF CLIMATOLOGICAL OBSERVATIONS
Station BAR HARBOR
County HANCOCK
State MAINE
Month MARCH
Time of observation (local time) if once daily 5 PM
Standard time in use EST

Table with columns for Date, Temperature (Max, Min), Precipitation, and Weather. Includes a summary section at the bottom with totals for temperature and precipitation.

17-0371-32

RECORD OF CLIMATOLOGICAL OBSERVATIONS
Station BAR HARBOR
County HANCOCK
State MAINE
APRIL 1962
Time of observation (local time) if once daily 2 PM
If at different times, temperature 5 PM, precipitation 2 PM

Table with columns for Date, Temperature (Max, Min), Precipitation (24-hr amounts), and Weather (Calendar Day). Includes a summary section at the bottom with totals for the month.

17-0371-32
Station Month
Check when additional sheet is used for remarks

1962 MAY 1962
 Standard time in use E
 RECORD OF CLIMATOLOGICAL OBSERVATIONS
 Time of observation (local time) if once daily, _____
 If at different times, temperature 5 P.M., precipitation 1 P.M.
 Station BAR HARBOR
 County HANCOCK
 State MAINE

[illegible]

RECORD OF CLIMATOLOGICAL OBSERVATIONS
Station: BAY HARBOR
County: HAMCOCK
State: MAINE
Date: July 1962
Time of observation (local time) if once daily: 2 PM
If at different times, temperature: 5 PM, precipitation: 2 PM

Table with columns for Date, Temperature (Max, Min), Precipitation (24-hr amounts), and Weather (Calendar Day). Includes handwritten data for July 1962, such as temperatures ranging from 49 to 74 and various weather conditions like 'clear', 'overcast', and 'cloudy'.

Table with 31 columns (50-80) and 31 rows (50-80). Includes sections for METEOROLOGICAL OBSERVATIONS, RECORD OF CLIMATOLOGICAL OBSERVATIONS, and RECORD OF CLIMATOLOGICAL OBSERVATIONS. Contains handwritten data for temperature, precipitation, and other meteorological factors.

STATION Bar Harbor
COUNTY Hancock
STATE Maine
Time of observation (local time) if once daily 5:30 PM
If at different times, temperature 5:30 PM precipitation 2 PM

Table with 31 columns (80-110) and 31 rows (80-110). Includes sections for WEATHER (CALENDAR DAY), PRECIPITATION, and TEMPERATURE. Contains handwritten data for weather conditions, precipitation amounts, and temperature readings.

Handwritten notes and data on the left side of the page, including station information and a large grid for recording observations.

RECORD OF CLIMATOLOGICAL OBSERVATIONS
Station Burton
County Hancock
State Maine

TEMPERATURE °F		PRECIPITATION														WEATHER CALENDAR DATA																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
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Handwritten notes and data on the left side of the page, including station information and weather observations.

RECORD OF CLIMATOLOGICAL OBSERVATIONS
County: Hancock
State: Maine
Time of observation (local time) if once only: 2:00
If at different times, temperature, precipitation

TEMPERATURE °F		PRECIPITATION												WEATHER (CALENDAR DAY)										Important weather conditions not included in 'Weather' block; remarks, etc.
Date	24 hrs. ending at observation		Draw a straight line (—) through hours precipitation was observed, and a wavy line (~~~~) through hours precip. probably occurred unobserved.												Mark 'X' for all types occurring each day				Time of Obsn. if different from the above					
	Max.	Min.	At obsn.												Fog	Sleet	Glaze	Thunder			Hail	Damaging Wind		
			24-hr. amounts																					
			Rain, Melted snow, etc. (ins. & hundredths)																					
			Snow, Sleet, Hail, and other (ins. & hundredths)																					
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Table with 31 rows and 10 columns. Columns include Date, Max, Min, and various weather observations. The table contains handwritten data for the month of November 1962.

STATION BAR HARBOR
COUNTY HANCOCK
STATE MAINE
RECORD OF CLIMATOLOGICAL OBSERVATIONS
Time of observation (local time) if once daily
If at different times, temperature 5 P.M., precipitation 2 P.M.

Table with 31 rows and 10 columns. Columns include Date, Max, Min, and various weather observations. The table contains handwritten data for the month of November 1962.

