

The Weather Bureau is making the fullest use of the weather observations which you enter on MONTHLY RECORDS by transferring them to punched cards. This permits more detailed and earlier summarization of these data by machine, and makes the records more accessible for many purposes. It provides for national preparedness as far as weather records are concerned. The Army and Navy found that the only way to solve weather problems rapidly during World War II was with punched cards. In peacetime these card records make possible summaries helpful to agriculture, manufacturing, transportation, and other human activities.

In order to handle these records economically and rapidly, it is desired that the original and one carbon copy of your monthly observational form be forwarded promptly after the close of the month.

Taking and Recording Observations.

1. Begin a new form on the first of every month. Temperature at observation and precipitation beginnings and endings for the last day of the preceding month should be entered in the spaces just above the line for the first of the month. Each day's entries should be on a separate line. Fill in the heading completely.

2. Observations should be taken at a regular hour each day and this time should be entered in the heading. The preferred time is from 6 p. m. to 8 p. m. However, if it is necessary to measure precipitation in the morning, the thermometers should be read at the same time. Observations should be taken at the same time during the entire year. Take only one observation per day unless instructed otherwise. Continuity of record is very important. A member of the observer's family, or some other competent person, should, therefore, be taught to take and record observations in the event of the observer's absence or illness.

3. Temperature ($^{\circ}$ F.). To obtain maximum temperature, slowly lower the maximum thermometer to a vertical position. Then read the temperature shown by the top of the mercury column. The thermometer bulb should not be touched. The minimum temperature is obtained by reading the temperature scale opposite the end of the small steel index; that is, the end farthest from the bulb of the minimum thermometer. This is done while the thermometer is in its horizontal position.

3a. The maximum thermometer is set by whirling it two or three times. It should then be returned to its nearly horizontal position, with the bulb slightly elevated. The minimum thermometer is set by raising the bulb sufficiently to allow the small steel index to slide to the end of the alcohol column and then lowering the thermometer to a horizontal position. After setting, the temperatures shown by the maximum and minimum thermometers should agree within one degree; a greater difference should be reported to the Section Center.

3b. The current temperature may be obtained at any time by reading the end of the alcohol column in the minimum thermometer without disturbing the instrument. The current temperature may also be obtained by reading the maximum thermometer after it has been whirled while it is still in a vertical position. When the temperature is below zero, place a minus sign in front of the reading.

3c. Enter maximum temperature, minimum temperature, and temperature at time of observation in the proper columns to the nearest whole degree. Enter on line for date of observation. If the temperature is below zero, place a minus sign in front of the reading.

4. Precipitation. The correct measurement of precipitation is a vital part of the observational work. Show times of precipitation by a solid horizontal line through the hour columns for the period of occurrence of precipitation. If beginnings and endings were not observed, draw a waved line through the period of probable occurrence. These lines should be entered on the dates of occurrence of the precipitation.

4a. Record the total depth of rain, hail, sleet, or snow for the preceding 24 hours, regardless of whether it fell on the day of observation or after observation time on the preceding day. The amount should be entered on the date of measurement. The gage is so constructed that the depth of water in the measuring tube is magnified ten times by allowing it to collect in the smaller tube. The measuring stick supplied with the gage is graduated in such a manner that its smallest division represents 0.01 inch of actual precipitation. If the amount of the catch is too small to measure, "T" (trace) will be entered as the amount. Every entry of measurable precipitation must be recorded to two decimal figures. The dotted line on the form will take the place of the decimal point. Entries as 0.5 or just .5 should never be made. If the amount is .05 it should be entered as .05, and if it is .50, it should be entered as .50. When no precipitation falls during the entire month, a zero (0) should be entered in each space so that there will be no doubt as to whether any rain fell.

4b. In freezing weather when snow and/or sleet are likely to fall, remove the funnel and inner tube of the rain gage and leave only the large can exposed. Melt the catch of snow or sleet by adding a tube full of warm water. After the catch is melted in the can, pour off a tube of water, being careful not to spill any, and throw it out; then pour the remaining water into the tube and measure it the same as rainfall. The resulting figures are the water equivalent of the snow or sleet and should be entered as the amount of precipitation.

If solid precipitation falls when the funnel and tube have not been removed and it is thought the gage has caught only a portion of the fall, it will provide a more accurate measurement to proceed as follows:

Select a place where the snowfall is as little disturbed as possible, cut out a section by sinking the inverted gage through the snow and cover the mouth with a sheet of tin or thin board. This section should then be melted as indicated above and measured to obtain the water equivalent.

4c. Snowfall (24 hours). Measure the depth of new snow, sleet, or hail which has fallen during the preceding 24 hours only. Separate falls which melt during the 24-hour period are to be added together. Enter the unmelted amount in inches and tenths. Where drifting occurs, measurements should be made at several points where drifting is least and the average of these should be entered. If frozen precipitation melts as it falls, enter the amount as "T" (trace) with a note "Melted as it fell." If the total unmelted fall is less than 0.1 (one-tenth) inch the amount should be entered as "T" (trace). If there is an entry in the snowfall column, there must be an entry for the same date in the precipitation column to show the water equivalent of snow.

5. Snow on Ground. Under Snow, Sleet, Ice on Ground enter to the nearest inch the average depth remaining on the ground at time of observation in the vicinity of the station. This depth includes any new fall accumulated on top of older snow, sleet, ice, or hail. Enter "T" for one-half inch or less.

6. Weather. Under "Weather" enter an "X" in the proper space of each type or types that occur during the calendar day, midnight to midnight. Times of unusual weather phenomena may be entered under "Remarks" at the side of the form.

7. Under "Remarks" write a brief report of any unusual weather conditions, giving times and dates. Record here the dates of killing frost in the spring and fall.

8. Enter station, month, year, and your name on the bottom of the form. Enter name of your post office only if it is different from the name of your station.

9. Sums, means, and extremes need not be entered by the observer.

Budget Bureau No 41-R 230.2
Approval Expires Dec. 31, 1950

Standard of Time in use E.S.T. Meridian _____
Time of Observation 5:00 pm. M (local time)

LIST FORM OR SUPPLIES NEEDED

U. S. DEPARTMENT OF COMMERCE, WEATHER BUREAU
MONTHLY RECORD OF CLIMATOLOGICAL OBSERVATIONS

Budget Bureau No 41-R 230.2
Approval Expires Dec. 31, 1950

Month February, Year 1949

Station Bar Harbor
County Hancock State Maine

Standard of Time in use E.S.T. Meridian _____Time of Observation 5:08 P.M. M(local time)[illegible]

REMARKS:

Highways were icy much of the month.

LIST ENOW: NO SHIPPING NEEDED

U. S. DEPARTMENT OF COMMERCE, WEATHER BUREAU
MONTHLY RECORD OF CLIMATOLOGICAL OBSERVATIONS

Month MARCH, Year 19 49

Station Bar Harbor
County Hancock State Maine

Standard of Time in use EST Meridian

Time of Observation 5:00 PM M (local time)[illegible]

LIST FORM OR SUPPLIES NEEDED

Budget Bureau No 41-R 230.2
Approval Expires Dec. 31, 1950

Standard of Time in use E.S.T. Meridian
Time of Observation 5:00 PM M (local time)

Station Bay Harbor
County Hancock State Maine

EDST ↓

REMARKS:

NOT FROM AN UNRELIABLE SOURCE

MONTHLY RECORD OF CLIMATOLOGICAL OBSERVATIONS

Budget Bureau No. 44-R 2302
Approval Expires Dec. 31, 1950

Time of Observation 5:00 PM M (local time)

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LIST FORM OR SUPPLIES NEEDED

MONTHLY RECORD OF CLIMATOLOGICAL OBSERVATIONS

Budget Bureau No. 44-R 2302
Approval Expires Dec. 31, 1950

Month June, Year 1949

Station Bar Harbor
County Hancock State Maine

Standard of Time in use EDST Meridian _____
Time of Observation 6:24 M (local time)

[illegible]

LIST FORM OR SUPPLIES NEEDED

MONTHLY RECORD OF CLIMATOLOGICAL OBSERVATIONS

Budget Bureau No. 46-B 2302
Approved Expires Dec. 31, 1950

Month July, Year 1949

Station Bar Harbor
County Hancock State Maine

Standard of Time in use EAST MeridianTime of Observation 5:30 PM *M (local time)*[illegible]

U. S. DEPARTMENT OF COMMERCE, WEATHER BUREAU
MONTHLY RECORD OF CLIMATOLOGICAL OBSERVATIONS

Budget Bureau No. 44-8 250.2
Approval Expires Dec. 31, 1970

Month August _____, Year 19 49

Station Bar Harbor
County Hancock State Maine

Standard of Time in use EDST Meridian

Time of Observation 5:00 PM M (local time)[illegible]

MONTHLY RECORD OF CLIMATOLOGICAL OBSERVATIONS

Budget Bureau No. 42-8 2302
Approval Expires Dec. 31, 1955

Month September, Year 1949

Station Bar Harbor

County Hancock - State Maine

Standard of Time in use EDST Meridian

Time of Observation 5:00 PM M (local time)[illegible]

MONTHLY RECORD OF CLIMATOLOGICAL OBSERVATIONS

Budget Number: 40-8 1951
Approved Expense Date: 11/19/51

Month OCTOBER, Year 19 49

Station Bar Harbor
County Hancock State Maine

Standard of Time in use Z57 Meridian _____Time of Observation 3:00 PM M (local time)[illegible]

LIST FORM OR SUPPLIES NEEDED

U. S. DEPARTMENT OF COMMERCE, BUREAU OF WEATHER SERVICE

Budget Bureau, New York, New York
 December 1, 1947

Month November Year 19 49

Station Bar Harbor
County Hancock State Maine

Standard of Time in Use EST Meridian

Time of Observation 5:00 PM M (local time)[illegible]

10

REMARKS: Lt. Snow & glaze on mtns Nov. 6.

Nov. 17. 1833. Traces of a new

Nov 26 - 1st complete snow cover - low & high elevations.

LIST FORM OR SUPPLIES NEEDED

Revised: February 1994
Approved: February 1994

Standard of Time in use EST Meridian _____
Time of Observation 5:35 PM M (local time) _____

Please send a pad of W.B. Form 1009 -

LIST FORM OR SUPPLIES NEEDED