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The Trade Wind Zone Oceanography Pilot Study
Part VIII: Sea-Level Meteorological Properties
and Heat Exchange Processes
July 1963 to June 1965

By Gunter R. Seckel

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ABSTRACT

Meteorological data were summarized and large-scale heat exchange processes computed, in 5° square units of the area lat. 0° to 35° N., long. 130° to 170° W., for each month. The results complement time-sequence oceanographic observations of the Trade Wind Zone Oceanography Pilot Study in the area lat. 10° to 26° N., long. 148° to 157° W., February 1964 to June 1965. The source and processing of meteorological data, and the computation of the radiation from sun and sky, the effective back radiation, the heat of evaporation, and the conduction of sensible heat are described. The results are consistent with monthly heat exchange processes computed from long-term mean meteorological properties in the North Pacific. Despite inadequacies in the distribution and quality of data, the meteorological data summaries and the derived heat exchange processes are adequate for interseason and interyear comparisons of large-scale, sea-air interactions.

INTRODUCTION

This report contains monthly summaries of sea-level meteorological observations and derived heat exchange processes at the sea surface in the area bounded by lat. 0° and 35°N. and long. 130° and 170° W., July 1963 through June 1965. The meteorological data complement the TWZO (Trade Wind Zone Oceanography) Pilot Study oceanographic data that were published in the first six reports of this series (Charnell, Au, and Seckel, 1967a-f).

The TWZO Pilot Study is designed to further an understanding of the mechanisms that change the distribution of sea-water properties and water masses in the North Pacific trade wind zone (Seckel, 1968). The meteorological processes are an essential part of these mechanisms.

The oceanographic field work took place from February 1964 through June 1965 in the area from lat. 10° to 26° N. and long. 148° to 157° W. Oceanographic stations in a fixed grid were occupied at monthly intervals.

Meteorological processes at the sea surface are intimately related to the behavior of the trade wind system. The area of interest, therefore, encompasses the region of strongest trade winds, which is located between the North Pacific high and the equatorial low pressure regions. Figure 1 shows the areas of the TWZO oceanographic and meteorological observations. Because the results reported here begin in July 1963, they antecede and cover the oceanographic study period.

Meteorological data summaries and the derived heat exchange processes are presented in two tables, which show the information for every month of the 2-year study period. Table A contains mean values per 5° square of the air temperature, the difference between water and air
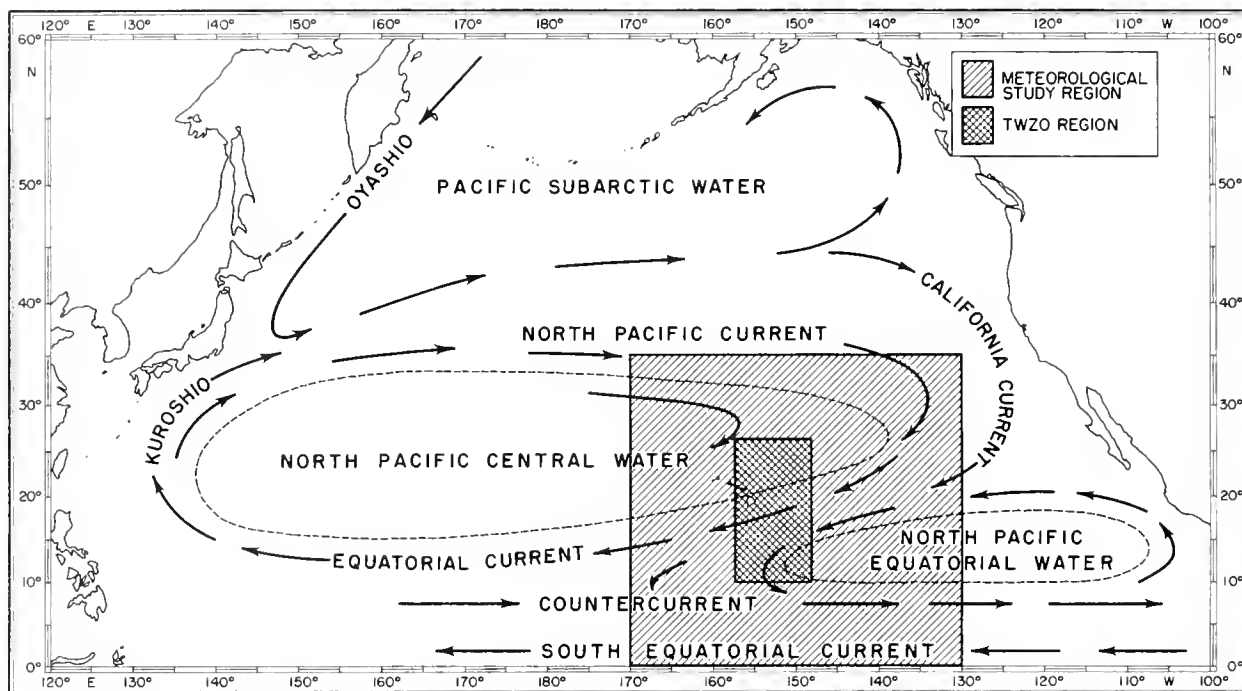
Figure 1.--The oceanographic and meteorological observational regions for the Trade Wind Zone Oceanography Pilot Study.

temperature, the difference between the saturation vapor pressure of water and air vapor pressure, the vapor pressure of the air, the cloud cover, the sea level atmospheric pressure, the wind speed, and the zonal and meridional components of the wind velocity. Table B contains interpolated values for the center of each 5° square of the sea-water temperature, the air temperature, the vapor pressure of the air, the cloud cover, and the wind speed. Tabulated alongside these meteorological properties are the derived heat exchange processes: the radiation from sun and sky, the back radiation, the heat of evaporation, the conduction of sensible heat, and the net heat exchange across the sea surface. Interpolated meteorological properties and their derived heat exchange processes are presented in geographic format to facilitate contouring.

The magnetic tape containing the data that were used for the summaries and for the derived heat exchange processes computed for each weather record is kept on file to permit a more detailed analysis than is presented here.

The sources of data, the methods of processing, and the computation of heat exchange processes, as well as an evaluation of the results, are presented below.

SOURCES OF DATA

About 80,000 sets of meteorological observations were used in the preparation of this report. Their principal source was the surface marine observations Card Deck No. 128 of the National Weather Records Center. To those data were added the meteorological observations recorded on board the BCF (Bureau of Commercial Fisheries) research vessels Townsend Cromwell and Charles H. Gilbert which were not already a part of the surface marine deck.

Meteorological data in latitudes of the central North Pacific south of Hawaii are scarce. It is therefore valuable to add to the surface marine observations those made on Johnston Island (lat. 16°45' N., long. 169°30' W.) and on Christmas Island (lat. 1°51' N., long. 157°23' W.). Because both islands are atolls, the early morning meteorological conditions would approximate those over the adjacent ocean.

Johnston Island sea level observations were obtained from the National Weather Records

Center, Card Deck No. 144. To these data were added the sea surface temperatures measured weekly at Johnston Island for BCF, Honolulu. At Christmas Island, meteorological observations are made three times daily and the sea surface temperature is measured daily for BCF. The sea surface temperatures and the 1800 G.m.t. synoptic meteorological observations from the two islands (0800 local time, Christmas Island, and 0700 local time, Johnston Island) have been combined with the surface marine data.

At the time of the initial sorting, derived properties and heat exchange processes were also computed. Thus the data tape referred to in the introduction contains in chronological order by day and by 1° square the sea surface temperature, the dry and wet bulb air temperatures, the sea level atmospheric pressure, the cloud cover, the sea-air vapor pressure difference, the vapor pressure of the air, the wind speed and direction, the zonal and meridional components of the wind velocity, the radiation from sun and sky, the effective back radiation, the heat of evaporation, and the conduction of sensible heat.

I planned originally to summarize the meteorological data for periods of, possibly, 5 days and then, by summation, obtain values for the monthly sea-air interaction processes. The spatial and temporal distribution of marine surface observations, however, proved inadequate to permit this procedure; I had to use the traditional climatic approach.

PROCESSING OF DATA

The meteorological data were initially sorted chronologically by day and by 1° square units of area. When more than one set of observations occurred in a 1° square per day, the meteorological properties, including the wind speeds and the zonal and meridional components of the wind velocity, were averaged. In consequence only one set of meteorological observations can occur per day in any 1° square.

Quality control over the large number of data proved to be a major task. In the initial sorting process, "flagging" values that fell outside the climatic limits proved unsuccessful. This procedure had been used in the preparation of the Indian Ocean meteorological atlas (Ramage, Miller, and Jefferies, in press). Too many observations that were consistent with surrounding data fell outside the climatic limits during the

2 years of this study. An initial listing of the data was therefore inspected without computer aid. Only obviously erroneous values, determined by comparison with values in the same geographic region and within a few days, were eliminated.

Of the original marine surface and island decks, I sorted only those meteorological data that enter into the computation of large-scale, sea-air interactions: the dry and wet bulb air temperatures; the sea-air temperature difference; the sea-level atmospheric pressure; the speed and direction of wind; and the total cloud cover.

The meteorological properties were, therefore, summarized by 5° square units of area and by months and are presented in table A. The summaries for each property contain the mean value, the highest and lowest values observed, the standard deviation if there were more than four observations, and the number of observations. In addition, the summary also includes the mean location of observations.

Smoothed charts of the sea surface temperature, the air temperature, the vapor pressure of the air, the cloud cover, and the wind speed were obtained by contouring the summarized data plotted at the mean location of the observations. This procedure had been used in the preparation of the Indian Ocean meteorological atlas (Ramage et al., in press). In turn, the smoothed charts were used to obtain interpolated values at the center of each 5° square, and to compute the radiation from sun and sky, the effective back radiation, the heat of evaporation, the conduction of sensible heat, and the net heat exchange across the sea surface. Table B presents both the interpolated values and the derived heat exchange processes.

When table B is used in combination with table A, it is possible to judge the reliability of the results in any area and month covered by this report.

HEAT EXCHANGE COMPUTATIONS

Sea-air interaction processes cannot, in general, be measured directly except for the radiative energy exchange. Radiation measurements over the oceans, however, are scarce. Quantitative evaluation of these processes, therefore, depends on computations in which empirically derived formulas are used. These formulas were reviewed by Laevastu (1960) and the more general subject of large-scale, sea-air inter-

actions has been discussed in detail by Malkus (1962). The empirical formulas are still the subject of intensive research and may change. Should changes be made, the derived results of this paper can be adjusted, since the original meteorological properties are also given.

Two criteria are important in the computation of the heat exchange processes presented in table B. First, the results must satisfy the needs of the TWZO investigation, in which relative changes from month to month and season to season are of primary interest. Secondly, there must be a basis for comparison with the results in the North Pacific such as were obtained by Wyrtki (1966).

The net heat gain or loss to the sea water as a result of the exchange processes at the sea surface is of interest to the oceanographer and is expressed in the budget equation

$$Q(N) = Q(S) - Q(B) - Q(E) - Q(C).$$

The net heat exchange across the sea surface, $Q(N)$, is positive when the sea water gains heat. The terms on the right side of the equation are: $Q(S)$, the radiation from sun and sky; $Q(B)$, the effective back radiation; $Q(E)$, the heat of evaporation; and $Q(C)$, the conduction of sensible heat.

The following formulas have been used to compute the heat exchange processes in table B:

$$Q(S) = 0.98 \, Q_o \, (1 - 0.30C - 0.38C^2)$$

$$Q(B) = 1.14 \, (10)^{-7} \, (273.16 + T_w)^4 \, (0.39 - 0.05\sqrt{e_a}) \\ (1 - 0.6C^2) + 4.58 \, (10)^{-7} \, (273.16 + T_w)^3 \\ (T_w - T_a)$$

$$Q(E) = 3767 \, C_D \, (0.98e_w - e_a) \, W$$

$$Q(C) = 4(T_w - T_a) \, W.$$

Tne heat exchange components are expressed in cal. $cm.^{-2} \, day^{-1}$ and the symbols are:

C , the cloudiness in tenths of sky covered;

e_a , the vapor pressure of the air in millibars;

e_w , the saturation vapor pressure over pure water at the sea-water temperature, in millibars;

T_a , the temperature of the air in degrees Celsius;

T_w , the temperature of the water in degrees Celsius;

W , the wind speed in meters per second;

Q_o , the radiation from sun and cloudless sky in calories per square centimeter per day;

C_D , the nondimensional drag coefficient.

The values of e_a and e_w were computed from formulas given by List (1951: p. 366) and Murray (1967). The methods of computing Q_o and C_D are given below in the discussion for each formula. In the computation of $Q(B)$, $Q(E)$, (e_w), and $Q(C)$, the sea surface temperature based on surface marine observations was reduced by $0.7°$ C. (Saur, 1963).

Although different workers agree about the meteorological properties that affect the heat exchange processes, the coefficients used in the empirical formulas vary. To allow comparisons of the results in this paper with those of other workers, each of the heat exchange processes and the choice of coefficient used here are discussed below.

Q(S), Radiation from Sun and Sky

Departures from the formulas used by Wyrtki (1966), Roden (1959), and Laevastu (1960, 1965) are based on direct pyranometer measurements of radiation from sun and sky during the cruises of the TWZO Pilot Study. It was possible to integrate the analog traces for clear sky and solid overcast conditions by means of a polar planimeter. The clear sky direct and diffuse radiation values for a transmission coefficient of 0.6 given in the Smithsonian tables (List, 1951: tables 132 and 136), when multiplied by 1.03, corresponded to the measured values. These results agree with the values given by Bolsenga (1964). The albedo factor, 0.95, when multiplied by 1.03 gives the coefficient, 0.98, used in the equation.

To facilitate the calculation of Q_o by computer, the harmonic analysis of the clear sky direct and diffuse radiation values of the Smithsonian tables gives

$$Q_o = A_o + A_1 \cos\Theta + B_1 \sin\Theta + A_2 \cos 2\Theta + B_2 \sin2\Theta$$

where $\Theta = \frac{2\pi}{T}(t - 21)$, t is the time in days beginning with January 1, T the number of days in a year, and the A's and B's are coefficients in the harmonic series. Table 1 lists the coefficients for lat. $0°$, $10°$, $20°$, $30°$, and $40°$ N. Coefficients applicable for the computation of Q_o at intermediate latitudes were obtained by linear interpolation.

Expressions that have been used in the Pacific area for the cloud correction of the clear sky radiation range from linear to cubic functions of cloudiness: Tabata (1958) used the Ångström factor (1 − 0.71C). Roden (1959) used the Budyko factor (1 − kC) where k ranges from 0.65 at the Equator to 0.68 at lat. 35° N. Johnson, Flittner, and Cline (1965) and Wyrtki (1966) used the quadratic Beriland factor $(1 - aC - 0.38C^2)$. (Johnson et al. listed for the coefficient "a" the values 0.38, 0.40, 0.39, 0.37, 0.35, 0.36, 0.38, corresponding to lat. 0°, 5°, 10°, 15°, 20°, 25°, 30°, and 35° N., respectively, and Wyrtki used "a" = 0.38.) Finally, Laevastu (1960, 1965) suggested the use of a cubic cloud factor $(1 - 0.6C^3)$.

In this paper I use the Beriland expression. Qualitatively, the pyranometer records of the TWZO cruises indicate that a linear decrease of Q(S) with increasing cloudiness is too rapid and a cubic decrease is initially too slow. The coefficient "a" = 0.3 has been chosen for the Beriland expression and is based on pyranometer records for 21 days of solid overcast which gave an average cloud factor of 0.32. This factor compares with others for solid overcast as follows: Tabata 0.29, Roden 0.32 to 0.35, Wyrtki 0.24, Johnson et al. 0.22 to 0.27, and Laevastu 0.4.

Table 1.--Coefficients in the harmonic series for the computation of Q_o at lat. 0°, 10°, 20°, 30°, and 40° N.

Latitude north	A_0	A_1	B_1	A_2	B_2
0°	595.83	18.55	-4.97	-15.42	25.26
10°	589.42	-46.84	30.16	-17.08	28.15
20°	555.42	-112.46	66.72	-14.58	26.70
30°	507.50	-169.24	100.21	-10.83	20.21
40°	447.50	-218.56	126.76	-2.50	8.66

Q(B), Effective Back Radiation

The seasonal and spatial variations in effective back radiation are relatively small compared with those of the radiation received from sun and sky. Wyrtki (1966) calculated a range of 60 to 200 cal. $cm.^{-2}$ day^{-1} for the North Pacific; Tabata (1958) reported 85 to 130 cal. $cm.^{-2}$ day^{-1} off the British Columbia coast; Roden (1959) calculated 84 to 138 cal. $cm.^{-2}$ day^{-1} for the region off California and Baja California; and Seckel (1962) estimated 115 to 150 cal. $cm.^{-2}$ day^{-1} for the Hawaiian region.

During the TWZO cruises, the net long wave radiation was measured by means of a Suomi-Kuhn net radiometer (Charnell, 1967). These measurements indicate a range of 58 to 173 cal. $cm.^{-2}$ day^{-1}.

Roden (1959), Johnson et al. (1965), and Wyrtki (1966) used the Beriland expression for the computation of the effective back radiation in which the coefficient to correct for cloudiness ranges from 0.5 at the Equator to 0.65 at lat. 35° N. Charnell (1967) computed this coefficient for solid overcast conditions to be, on the average, 0.6. In this report I have used the Beriland expression for Q(B) with cloud coefficient 0.6 and have neglected the variation with latitude.

Q(E), the Heat of Evaporation

Together with the radiation from sun and sky, the heat used for evaporation is the most important term affecting the net heat exchange across the sea surface. In the expressions used by all of the workers cited above, the evaporation depends on the difference between the saturation vapor pressure over sea water at the sea surface temperature and the actual vapor pressure of the air above the sea surface (in this paper termed sea-air vapor pressure difference[1]), the wind speed, and a coefficient. The evaporation coefficient is affected by the wind speed and the stability of the air above the sea surface. The height above the sea surface at which psychrometric and wind measurements are made can also be important in the computation of evaporation, depending on the vertical gradients of humidity and wind speed near the height of measurement. Laevastu (1960) and Malkus (1962) have discussed the unresolved uncertainties concerning the choice of the coefficient.

The evaporation coefficient computed from the expression discussed by Malkus (1962) depends on the drag coefficient and varies with the wind speed from 3 (winds below 4 m. sec.$^{-1}$) to 9 (winds above 12 m. sec.$^{-1}$). Most workers use a constant coefficient for the computation of climatic averages of the evaporation. Wyrtki (1966) used a coefficient of 6 obtained from the Malkus formula, which corresponds to a wind speed of 8 m. sec.$^{-1}$ at 10 m. height. Tabata

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[1]Subsequently in this paper the difference between the saturation vapor pressure over sea water at the sea surface temperature and the actual vapor pressure of the air above the sea surface is referred to as the sea-air vapor pressure difference.

(1958) and Johnson et al. (1965) used 4.7 for wind measurements at 20 m. height. The coefficient of Laevastu (1960) varies with wind speed but at 10 m. sec.$^{-1}$ the evaporation would be about the same as that computed by Wyrtki. Below this wind speed, values would be higher and above this speed they would be lower than Wyrtki's values. For a wind speed of 8 m. sec.$^{-1}$ measured at 10 m. above sea level, Roden's (1959) coefficient is also 6.

In this paper the formula suggested by Malkus has been used. In the trade wind zone it is reasonable to assume neutral stability at the usual height of marine wind measurements. The uncertainties in this height are therefore not critical, and the drag coefficient for neutral stability (Malkus, 1962: fig. 6, p. 110) can be used. Inspection of the wind summaries in table A and the smoothed values in table B show that the spatial and temporal variations in the wind speed generally lie in the range of 4 to 12 m. sec.$^{-1}$ Within this range the nondimensional drag coefficient changes rapidly. In the calculations of this paper the variable nature of the coefficient has therefore been taken into account.

The equation

$$C_D = \left[\frac{\arctan (W - 8)}{1.96} + 1.6 \right] 10^{-3}$$

approximates the curve for the drag coefficient, C_D, as a function of wind speed, W (in m. sec.$^{-1}$), under conditions of neutral stability given by Malkus, and facilitates the computation of the evaporation.

In the evaporation equation of this paper the saturation vapor pressure over pure water has been multiplied by 0.98 to account for the salt effect (Miyake, 1952). Also the computer program was written so that for negative sea-air vapor pressure differences, the computed heat of evaporation would be 0. This part of the computer program does not affect the results of table B since monthly mean values of the sea-air vapor pressure difference are always positive (see table A). The program, however, affects results based on evaporation rates computed for each set of meteorological observations.

Since fog is rarely reported except, possibly, in the northern region of the area considered in this paper (McDonald, 1938), minimum sea-air vapor pressure differences that are negative in table A are probably due to erroneous observations. The computer program, therefore, reduces the error if evaporation rates of individual sets of observations are summed. Where a negative sea-air temperature difference may actually have occurred, the computer program reflects the belief that the heat of condensation gained by the ocean is small (Roden, 1959).

Q(C), Conduction of Sensible Heat

The exchange of sensible heat across the sea surface is the smallest term in the net heat exchange across the sea surface. It is generally computed from the ratio of Q(C) to Q(E), the Bowen ratio, and depends upon the temperature difference between water and air and the wind speed. Wyrtki (1966) used the form suggested by Malkus (1962) with a conduction factor of 3.86. Johnson et al. (1965) used a factor of 3 and Roden (1959), 3.96. Laevastu's (1965) factor again varies with the wind speed but at 10 m. sec.$^{-1}$ it is essentially the same as that used by Wyrtki or Roden. When the sea-air temperature difference is negative, Laevastu used the same form as other workers with a factor of 3.

Here a factor of 4 is used and no change is made when the sea-air temperature difference becomes negative.

EVALUATION OF RESULTS

Uncertainties in the estimation of large-scale, sea-air interaction processes calculated in this paper are due to (1) inadequacies in the distribution and quality of the data, (2) the methods of processing which must be used because of inadequate spatial and temporal distribution of observations, and (3) uncertainties in the empirical formulas. The empirical formulas which are the subject of intensive research, and their uncertainties have been thoroughly treated in the literature cited here, and elsewhere. The evaluation is, therefore, concerned with the data inadequacies, effects of these inadequacies on the heat exchange results, and the effects on the results of the processing methods which must be used because of data inadequacies. Finally, comparisons with other results in the North Pacific and interseason and interyear comparisons are made.

Inadequacies in the Distribution and Quality of Data

Table A shows that south of lat. 15° N. the number of observations per month is small and that some 5° squares have no observations. For these latitudes the results presented in table B

must therefore be regarded with caution, except at lat. 2° N., long. 157° W. where daily observations from Christmas Island have been used.

North of lat. 15° N. sampling is more adequate, particularly from Hawaii northward, in the latitudes that contain the shipping lanes from North America to the Far East and to Hawaii. Reliable results in table B are those from lat. 17° N., long. 167° W., an area which contains the daily Johnston Island observations, and from lat. 32° N., long. 142° W., which, in addition to a large number of observations from merchant vessels, contains those from the U.S. Coast Guard Weather Station November.

Of the interpolated meteorological properties in table B, the cloudiness and the wind speed are most subject to error due to insufficient observations. The cloud cover may materially change during timespans of less than an hour and from day to day. A large number of observations is therefore necessary to provide a measure of the monthly cloudiness. Only in the latitudes north of Hawaii are the observations, on average, more frequent than once per day.

In the trade wind zone, similar wind speeds and directions have a greater persistence than the amount of cloud cover but may show relatively large variations in timespans of a few days. South of lat. 15° N. the interpolated winds and cloudiness of table B are heavily biased by the values obtained from a few monthly observations which, although they may be correctly measured, do not necessarily reflect the monthly mean value.

Despite the sparse data south of lat. 15° N., interpolated results of the smoothed charts are presented in table B. As a consequence large evaporation rates of more than 700 cal. cm.$^{-2}$ day^{-1} may appear as, for example, in the eastern portion of the region at lat. 2° N. during September and October 1963. These evaporation rates are due to relatively few observations with wind speeds of more than 10 m. sec.$^{-1}$ (see table A). The choice in the preparation of table B was either to leave the area in question blank or to present values based on the limited observations. The latter course was chosen since it draws attention to the high winds which may occur in this area and cause high evaporation rates.

Inadequacies in the quality of marine meteorological observations are well known. Visual inspection of the data used in this report again served to draw attention to the primary causes which reduce the quality of data. Because the quality can be so easily improved, the causes for the inadequacies and their effect on the heat exchange results are reviewed. Errors in the marine surface data are not so much due to incorrect reading of instruments and recording of observations as to improper placement and calibration of the instruments, improper techniques of measurement, and errors in data reduction at sea.

To illustrate--high values for the wet and dry bulb air temperatures indicate that the instruments were placed in a warm location aboard ship or that the psychrometric measurements were not made in air freshly flowing off the sea. It was previously stated that negative values in the minimum sea-air vapor pressure differences of table A are probably due to erroneous observations. Improper techniques in the psychrometric measurement are believed to be the primary cause. If the dry and wet bulb temperatures are not noted when the minimum wet bulb temperature is reached, an overestimate of the vapor pressure of the air results. Consequently, the sea-air vapor pressure difference will be too low and may be negative.

In an analysis of sea surface temperatures taken aboard merchant ships, Saur (1963) found that deviations from mean values were large and that the "injection temperatures," which are often used in marine weather observations, are measured in enginerooms and tend to be too high. The large temperature deviations, in terms of use in oceanography or meteorology, may be due to improper placement and calibration of engineroom thermometers. Saur suggested a correction of -0.7° C. for average seawater temperatures obtained from the marine surface meteorological observations.

Errors in air and water temperatures affect primarily the sea-air vapor pressure difference and so the heat of evaporation. Overestimating the sea-water temperature by 0.7° C. would mean an overestimate of the saturation vapor pressure of water by 0.8 mb. at 15° C. and 1.6 mb. at 28° C. Errors of similar magnitude occur in the vapor pressure of the air owing to wrong psychrometric measurements. The sea-air vapor pressure differences of table A are generally below 10 mb. and often below 5 mb. The possible error in the heat of evaporation may therefore be relatively large.

Visual inspection of data also indicated that erroneous data reduction is the probable cause for wrong wind speeds and directions. For example, in areas with a large number of obser-

vations showing an easterly wind, an observation with a westerly wind may appear. A reversal in wind direction can easily occur in the vector addition of the measured apparent wind and the speed and direction of the ship. Incorrect vector addition also results in wrong wind speeds and directions which are not as readily detected as a 180° error in wind direction.

Effects of Data Inadequacies
on the Heat Exchange Results

The effects of data inadequacies in the trade wind zone on the estimates of heat exchange processes are best illustrated by examples. Most critical are uncertainties in the cloudiness, since it affects the primary process in the net heat exchange across the sea surface, the heat of radiation from sun and sky.

The cloudiness (table B) shows remarkable consistency both in spatial and temporal distribution. This consistency may, however, be misleading. The average obtained from only a few cloud observations per month that range from clear sky to solid overcast quickly converges to a value representing a semiovercast condition. With at least daily observations, however, the monthly average may shift to a higher or lower value.

If an error of 0.1 is assumed for the cloudiness, the cloud factor would be in error from about 5 percent for low values in cloudiness to over 20 percent for high values in cloudiness. For example, at lat. 7° N., long. 142° W., July 1963, table B shows that C = 0.9 and $Q(S)$ = 247 cal. $cm^{-2} day^{-1}$. An error of 0.1 in cloudiness would change the heat of radiation from sun and sky about 50 cal. $cm^{-2} day^{-1}$. A similar error at lat. 22° N., long. 157° W., July 1963 with C = 0.4 and $Q(S)$ = 529 cal. $cm^{-2} day^{-1}$ would produce a change of 30 to 40 cal. $cm^{-2} day^{-1}$ in the heat of radiation from sun and sky.

The error in the monthly cloud estimate may be larger than 0.1, and other factors, such as the type and thickness of clouds, that have not been considered here may introduce errors of similar magnitude.

Values for the effective back radiation of table B show that they fall within the limits of observation during the TWZO cruises (Charnell, 1967) and are small compared with the magnitude of the radiation from sun and sky. The effect of variations in effective back radiation on the net heat exchange is also smaller than that of variations in the radiation from sun and sky.

Again, cloudiness enters into the effective back radiation, since the long wave radiation from the sky reduces the magnitude of the long wave radiation which escapes into space from the sea surface. An error of 0.1 in the cloudiness introduces a relative error in the cloud factor that ranges from 1 percent for low values of cloudiness to about 20 percent for high values of cloudiness. In terms of the results listed in table B, to use an extreme example, the effective back radiation at lat. 7° N., long. 142° W., July 1963, for a solid overcast would be 52 cal. $cm^{-2} day^{-1}$ instead of 65 cal. $cm^{-2} day^{-1}$ for 0.9 cloudiness.

In low latitudes the thickness of the humid, tropical air layer may be as important as the cloudiness. Charnell (1967) reported that the variations of long wave radiation measured during clear sky conditions were of the same magnitude as the differences between clear sky and overcast conditions. He pointed out that radiosonde data indicate variations of thickness of the tropical air mass of the order of 1,000 m. within a few days. Such variations in the thickness of the humid air layer may have an effect on the long wave radiation similar to that of a varying cloud cover. Although the factor containing the vapor pressure in the effective back radiation equation partially accounts for the humid air mass effect, in low latitudes the effect of variations in the thickness of the humid air mass should also be considered.

The conduction of sensible heat is a small quantity as compared with the other heat exchange processes. Uncertainties in this term due to the shortcomings of the meteorological observations have a negligible effect on the estimate of net heat exchange across the sea surface.

Since the heat of evaporation is a large quantity, errors in this process due to data uncertainties may seriously affect the net heat exchange results. The heat of evaporation depends on the sea-air vapor pressure difference and the nonlinear function of the wind speed when a variable drag coefficient is used. The effect on the former due to erroneous sea-water temperature or psychrometric measurements has already been considered. The latter is affected by the manner of processing the meteorological data.

Effects of Processing Techniques
on the Heat Exchange Results

Ideally, if interest lies in the total of a heat exchange process for an area such as a 5° square about the Hawaiian Islands, for a month, an area integral should first be obtained for each day (or more frequently) and then be summed for the month. If interest is concerned with a process at a single location, values should be obtained for each day (or more frequently) at that location and then be summed for the month. With some exceptions, the spatial and temporal distribution of meteorological data has been inadequate to follow these processing procedures. It has therefore been necessary in the past as well as here, to estimate monthly mean values of the required meteorological properties for relatively large areas and then to compute the exchange processes.

This procedure involves the question of how large is the difference between the mean of the product and the product of mean values, since all the empirical heat exchange expressions are products of independently varying properties. Malkus (1962) discussed this problem and cited examples where the conduction of sensible heat and the heat of evaporation were computed by the two methods. The use of mean meteorological properties resulted in an underestimate of about 7 percent.

Table 2 lists for the three locations where daily observations are available--lat. 2° N., long. 157° W. (Christmas Island), lat. 16° N., long. 169° W. (Johnston Island), and lat. 30° N., long. 140° W. (Ocean Weather Station November)--for each month, the exchange processes as based on the values computed daily (subscripts 1), and those computed from mean monthly meteorological properties (subscripts 2). In general, for each of the sample locations, $Q(S_1)$ is smaller than $Q(S_2)$, $Q(B_1)$ is smaller than $Q(B_2)$, $Q(E_1)$ is larger than $Q(E_2)$, and $Q(C_1)$ is about the same as $Q(C_2)$. In consequence of these differences, $Q(N_1)$ would be smaller than $Q(N_2)$ due to $Q(S_1)$ and $Q(E_1)$ but larger due to $Q(B_1)$ and $Q(C_1)$. At Christmas Island the differences in the exchange processes are small both in absolute and in relative terms. At Johnston Island and Ocean Weather Station November, the differences (in the exchange processes) are about the same as at Christmas Island except for the heat of evaporation, which is significantly larger both in absolute and in relative terms. The month-to-month variation in the difference between $Q(E_1)$ and $Q(E_2)$ can also be

relatively large. Values of $Q(C_1) - Q(C_2)$ are unimportant. The differences in each of the exchange processes due to the manner of computation are reflected in the 2-year mean values which are also tabulated.

It is evident from the tabulation that at Johnston Island and at Ocean Weather Station November the relatively large values of $Q(E_1) - Q(E_2)$ have a pronounced effect on the differences between $Q(N_1)$ and $Q(N_2)$. An important cause for the relatively large differences in the heat of evaporation is the use of a variable drag coefficient.

Consider the portion of the evaporation equation which depends on the wind speed, the heat of evaporation per unit difference in sea-air vapor pressure,

$$G(W) = 3.77 \left[\frac{\arctan (W - 8)}{1.96} + 1.6 \right] W$$

$$\text{cal. cm.}^{-2} \text{ day}^{-1} \text{ mb.}^{-1}$$

It is apparent from figure 2, where G(W) is plotted as a function of wind speed, that the evaporation factor changes most rapidly between 6 and 10 m. sec.$^{-1}$ Below and above these speeds the change is about linear. Wind speeds in the trade wind zone generally fall within the range where the change of G(W) is nonlinear. One would therefore not expect the wind factor, $G(\overline{W})$, of the mean wind to be the same as the mean wind factor, $\overline{G(W)}$. For example, in Feb-
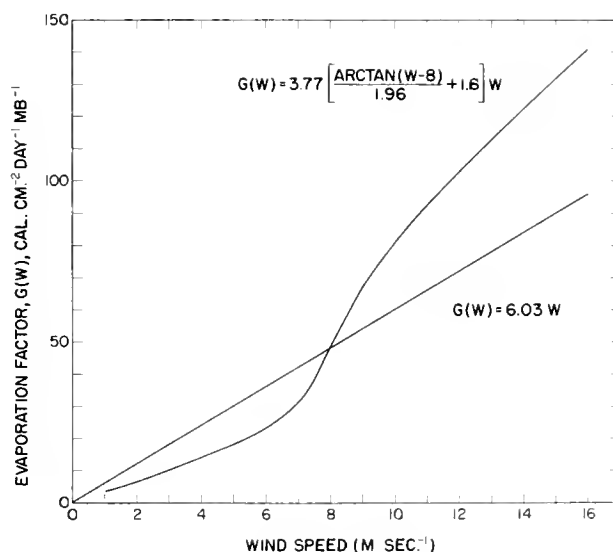
Figure 2.--The heat of evaporation per unit difference in sea-air vapor pressure as a function of the wind speed.

Table 2.--Heat exchange processes for each month, cal. cm.$^{-2}$ day $^{-1}$, July 1963 to June 1965, at Christmas Island, lat. 2° N., long. 157° W.; Johnston Island, lat. 16° N., long. 169° W.; and Ocean Weather Station November, lat. 30° N., long. 140° W. Subscripts 1, exchange processes computed daily; subscripts 2, exchange processes computed from mean monthly meteorological properties

	Year	Month	$Q(S_1)$	$Q(S_2)$	$Q(B_1)$	$Q(B_2)$	$Q(E_1)$	$Q(E_2)$	$Q(C_1)$	$Q(C_2)$	$Q(N_1)$	$Q(N_2)$
							Cal. cm.$^{-2}$day^{-1}					
Christmas Island												
	1963	July	409	421	88	93	69	67	-2	-3	250	264
	1963	Aug.	408	424	84	89	81	81	-6	-4	248	258
	1963	Sept.	452	471	84	90	83	83	-15	-13	299	311
	1963	Oct.	408	427	77	82	147	106	-16	-15	201	254
	1963	Nov.	382	395	80	84	89	88	-9	-9	221	232
	1963	Dec.	369	380	78	81	124	102	-10	-10	176	207
	1964	Jan.	357	368	74	78	81	78	-10	-8	212	220
	1964	Feb.	400	417	80	85	70	69	-8	-7	258	270
	1964	Mar.	378	397	68	74	50	44	-9	-10	273	289
	1964	Apr.	397	407	72	74	89	83	-19	-20	254	270
	1964	May	387	401	78	82	101	101	-22	-21	229	239
	1964	June	412	430	84	92	88	95	-19	-19	259	264
	1964	July	417	434								
	1964	Aug.	441	460	84	91	116	105	-30	-30	271	295
	1964	Sept.	436	463					-33	-33		
	1964	Oct.	455	478					-34	-32		
	1964	Nov.	431	452					-42	-41		
	1964	Dec.	426	444					-22	-22		
	1965	Jan.	430	457					-29	-25		
	1965	Feb.	468	494	85	93	73	72	-22	-20	331	349
	1965	Mar.	442	472	72	81	54	53	-19	-17	335	355
	1965	Apr.	438	460	72	78	50	47	-13	-13	330	348
	1965	May	392	413	63	69	38	39	-14	-13	302	318
	1965	June	372	392	74	81	56	55	-7	-5	254	261
	2-year average		413	432	78	83	81	76	-18	-17	261	278
Johnston Island												
	1963	July	382	399	73	76	141	123	-18	-18	174	218
	1963	Aug.	378	403	72	80	145	131	-13	-14	172	206
	1963	Sept.	420	434	93	94	178	153	-2	-1	136	188
	1963	Oct.	292	306	69	73	169	142	-6	-7	80	98
	1963	Nov.	321	329	95	100	210	168	5	6	6	55
	1963	Dec.	264	278	102	111	317	249	24	26	-191	-108
	1964	Jan.	305	312	101	106	398	390	0	1	-216	-185
	1964	Feb.	310	323	94	103	367	347	7	9	-191	-136
	1964	Mar.	387	402	107	115	233	192	12	15	35	80
	1964	Apr.	343	360	81	86	164	134	2	2	62	138
	1964	May	444	472	98	106	148	128	4	4	190	234
	1964	June	403	421	93	98	203	174	0	0	114	149
	1964	July	469	483	103	108	231	194	-5	-5	151	186
	1964	Aug.	347	371	82	90	232	204	3	4	19	73
	1964	Sept.	315	347	82	90	166	147	10	11	87	99
	1964	Oct.	389	416	107	116	201	185	15	16	41	99
	1964	Nov.	332	353	113	117	203	166	17	21	50	49
	1964	Dec.	320	333	118	126	174	143	17	22	-4	42
	1965	Jan.	292	306	126	134	229	166	28	29	-56	-23
	1965	Feb.	356	386	136	149	565	538	43	40	-357	-341
	1965	Mar.	434	450	132	137	256	184	16	15	62	114
	1965	Apr.	461	491	118	123	174	159	-3	-2	178	211
	1965	May	442	462	100	109	182	143	0	1	144	209
	1965	June	451	473	103	110	381	387	6	5	-50	-29
	2-year average		369	388	100	107	236	206	7	8	27	68

Table 2.--Heat exchange processes for each month, cal. cm.$^{-2}$day^{-1}, July 1963 to June 1965, at Christmas Island, lat. 2° N., long. 157° W.; Johnston Island, lat. 16° N., long. 169° W.; and Ocean Weather Station November, lat. 30° N., long. 140° W. Subscripts 1, exchange processes computed daily; subscripts 2, exchange processes computed from mean monthly meteorological properties--Continued

	Year	Month	$Q(S_1)$	$Q(S_2)$	$Q(B_1)$	$Q(B_2)$	$Q(E_1)$	$Q(E_2)$	$Q(C_1)$	$Q(C_2)$	$Q(N_1)$	$Q(N_2)$
							Cal. cm.$^{-2}$day^{-1}					
Ocean Weather Station November												
	1963	July	354	364	92	96	122	94	-2	-4	141	178
	1963	Aug.	387	408	104	110	94	81	-2	-3	191	220
	1963	Sept.	387	398	117	120	140	112	1	2	128	164
	1963	Oct.	304	314	132	136	177	137	20	18	-26	23
	1963	Nov.	191	198	118	122	135	124	20	19	-82	-67
	1963	Dec.	177	182	105	110	100	85	-5	-2	-23	-11
	1964	Jan.	167	169	108	112	190	132	11	11	-143	-86
	1964	Feb.	230	234	122	126	266	192	22	23	-180	-107
	1964	Mar.	230	235	98	102	248	207	13	16	-130	-90
	1964	Apr.	239	243	91	93	221	183	21	22	-95	-55
	1964	May	333	344	115	120	188	150	30	30	-1	44
	1964	June	345	360	96	101	114	94	7	6	128	159
	1964	July	338	348	91	94	110	94	0	0	136	160
	1964	Aug.	395	409	112	116	114	94	6	6	162	193
	1964	Sept.	315	328	107	111	190	163	3	3	14	51
	1964	Oct.	284	296	113	117	155	106	1	3	13	71
	1964	Nov.	202	209	116	120	227	152	11	10	-153	-73
	1964	Dec.	173	177	98	102	66	64	-14	-9	22	20
	1965	Jan.	182	185	100	105	133	91	-6	-5	-44	-6
	1965	Feb.	195	204	92	96	252	213	2	0	-151	-105
	1965	Mar.	258	267	103	106	205	128	10	9	-61	24
	1965	Apr.	316	326	100	104	161	134	-3	-2	57	90
	1965	May	306	329	97	106	165	122	12	14	36	87
	1965	June	407	421	115	120	157	118	8	8	125	175
	2-year average		280	290	106	110	164	128	7	7	3	44

ruary 1964, at lat. 30° N., long. 140° W., $Q(E_1)$ = 266 cal. cm.$^{-2}$ day^{-1} and $Q(E_2)$ = 192 cal. cm.$^{-2}$ day^{-1}. The evaporation computed from mean monthly meteorological properties was 28 percent below that computed daily. The mean wind speed for this month was 6.4 m. sec.$^{-1}$ giving $G(6.4)$ = 26 cal. cm.$^{-2}$ day^{-1}mb.$^{-1}$ The average daily value of $G(W)$ was 38.3 cal. cm.$^{-2}$ day^{-1}mb.$^{-1}$ Here $G(6.4)$ was 32 percent below $\overline{G(W)}$. Because of the nonlinearity of $G(W)$, a changing frequency distribution of wind speeds from month to month would contribute to the changing differences between $Q(E_1)$ and $Q(E_2)$ in the above listing for the three locations.

The differences between $Q(E_1)$ and $Q(E_2)$ at Christmas Island are small because winds are generally below 6 m. sec.$^{-1}$, so that they fall in the approximately linear portion of $G(W)$ (fig.2).

The discussion concerning the effect of temporal changes in wind speed on the mean value of $G(W)$ applies also to spatial changes in wind speed. It can be shown, however, that the effect of wind gradients of the magnitude occurring in the trade wind zone on the area mean of $G(W)$ is small.

The dependence of the computed heat of evaporation on the method of processing can be demonstrated further for the 5° square lat. 25° to 29° N., long. 140° to 144° W., where the number of observations were 164 to 225 per month. Three methods of computations were used: (1) the heat of evaporation was computed for each set of meteorological data and the daily mean value of the heat of evaporation was then used to obtain the monthly average, which is designated $\overline{Q(E)}$; (2) mean daily meteorological properties for the 5° square were used to compute the daily heat of evaporation from which the monthly means were then obtained--these values are equivalent to those in the above listing of the three locations which were designated $Q(E_1)$; (3) from the daily mean values for the 5° square the monthly mean meteorological properties were computed which, in turn, were used to ob-

tain the monthly heat of evaporation--these values are equivalent to $Q(E_2)$ of the above listing. The results of the three methods of computation are presented in figure 3.

In method 1, if for each day the meteorological observations were uniformly distributed in the 5° square, $\overline{Q(E)}$ would represent the mean monthly evaporation for the area. In methods 2 and 3, $Q(E_1)$ and $Q(E_2)$ represent the results for the mean location of observations. Since the heat exchange processes in table B are based on the interpolated, mean meteorological properties, they, too, represent values at the locations listed rather than for the 5° square.

For the 24 months, the differences between $\overline{Q(E)}$ and $Q(E_1)$ range from 2 to 32 cal. cm.$^{-2}$ day^{-1} and average 17 cal. cm.$^{-2}$ day^{-1}. The differences between $Q(E_1)$ and $Q(E_2)$ range from -56 to 69 cal. cm.$^{-2}$ day^{-1} and average 35 cal. cm.$^{-2}$ day^{-1}. The average difference between $\overline{Q(E)}$ and $Q(E_1)$ is less than 7 percent, about as reported by Malkus (1962), and reflects the effects of variability in the data. The differences between $Q(E_1)$ and $Q(E_2)$ are about the same as those for the computations at Johnston Island and Weather Station November, listed above.

Figure 3 shows that in all months $Q(E_2)$ is the lowest value except for December 1964, when it was 10 cal. cm.$^{-2}$ day^{-1} above $Q(E_1)$, and February 1965, when it was 56 cal. cm.$^{-2}$ day^{-1} above $Q(E_1)$. The large deviation in $Q(E_1)$ - $Q(E_2)$ during February 1965 from the common occurrence illustrates that fluctuations in the evaporation are not only due to the variable wind factor, $G(W)$, but also due to changes in the sea-air vapor pressure difference. Daily values showed that meteorological conditions departed from those commonly observed in this 5° square. During February 1965, a relatively high frequency of winds above 10 m. sec.$^{-1}$ corresponded with low values of the sea-air vapor pressure difference. The winds below 10 m. sec.$^{-1}$ corresponded with higher sea-air vapor pressure differences. In consequence, the mean monthly meteorological properties yielded a higher evaporation rate than the mean daily evaporation rates. The departure in meteorological conditions for this month is apparent from the data summaries in table A (lat. 25°-29° N., long. 140°-144° W.). Relatively strong southeasterly winds with a lower sea-air vapor pressure difference contrasted with northeast-
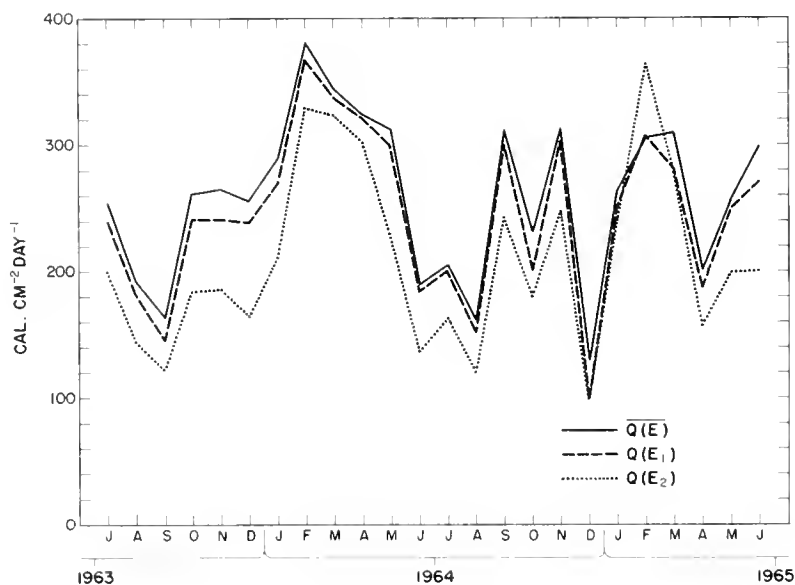
Figure 3.--Monthly heat of evaporation, cal. cm.$^{-2}$day^{-1}, lat. 25° to 29° N., long. 140° to 144° W., July 1963 to June 1965, $\overline{Q(E)}$, mean heat of evaporation based on computations made for each set of meteorological observations, $Q(E_1)$, mean heat of evaporation based on daily mean meteorological properties, and $Q(E_2)$, mean heat of evaporation based on monthly mean meteorological properties.

erly or easterly winds of lower speed and with a higher sea-air vapor pressure difference as, for example, during February 1964.

A relative difference in the heat of evaporation, possibly 20 percent, due to the difference in processing methods can cause a much larger relative error in the net heat exchange, whose absolute value ranges from 0 to 200 cal. cm.$^{-2}$ day^{-1}. This effect is apparent in figure 4, where the net heat exchange across the sea surface has been plotted by using the three methods of computation described for the heat of evaporation, in the area lat. 25° to 29° N., long. 140° to 144° W. The 2-year average of $Q(N_1)$ is -32 cal. cm.$^{-2}$ day^{-1} and that of $Q(N_2)$ is 7 cal. cm.$^{-2}$day^{-1}. In the trade wind zone such differences in the ocean heat budget are significant.

Comparison with Other Results in the North Pacific

It remains to compare the results of table B with other heat exchange values for the North Pacific. Most suitable for comparison are the monthly charts of the heat of evaporation and the net heat exchange across the sea surface prepared by Wyrtki (1966). His charts are based on 1947 to 1960 averages of marine surface meteorological data. He calculated the heat exchange processes with the same empirical formulas as were used here except for minor differences in the coefficients and for his use of constant drag coefficient in the evaporation equation. The comparison, therefore, primarily shows the differences between the monthly exchange processes of individual years and those
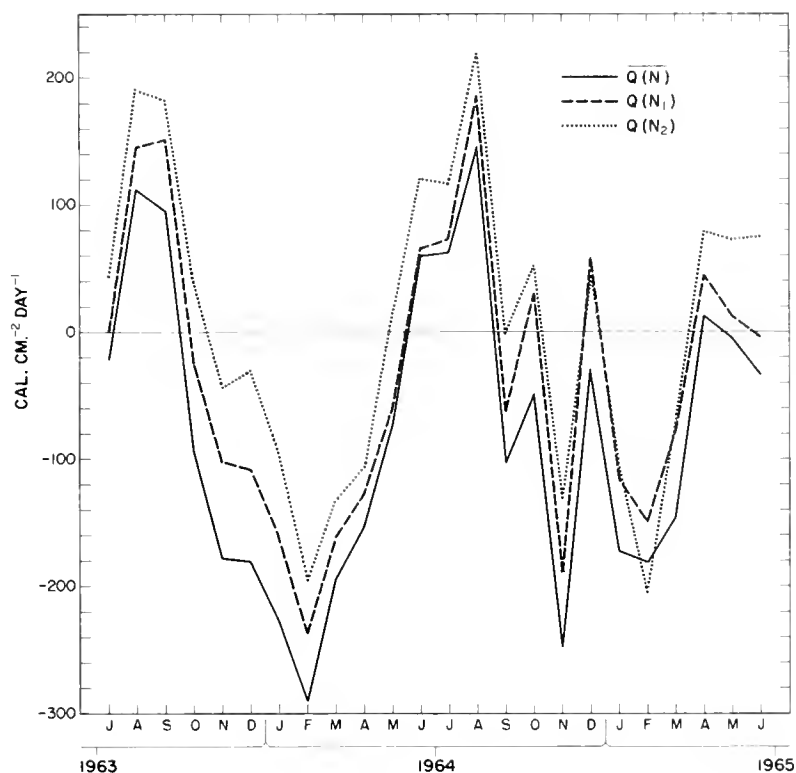
Figure 4.--Monthly net heat exchange across the sea surface (cal. cm.$^{-2}$day^{-1}) lat. 25° to 29° N., long. 140° to 144° W., July 1963 to June 1965. $\overline{Q(N)}$, mean net heat exchange based on computations made for each set of meteorological observations, $Q(N_1)$, mean net heat exchange based on daily mean meteorological properties, and $Q(N_2)$, mean net heat exchange based on monthly mean meteorological properties.

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based on long-term mean meteorological data. Differences resulting from the use of a constant instead of a variable drag coefficient in the evaporation equation also become apparent.

Results from two locations were chosen for comparisons: (1) lat. 17° N., long. 152° W., in the trade wind region, (2) lat. 2° N., long. 157° W., in the equatorial region. The heat of evaporation and the net heat exchange across the sea surface from the trade wind region are shown in figure 5 and those from the equatorial region are shown in figure 6.

In the trade wind zone (fig. 5), the large fluctuations in Q(E), which change from year to year, make it difficult to discern a seasonal trend. A seasonal trend in the variation of Q(N), however, is not obscured even though the effects of the large fluctuations of Q(E) are apparent. The relatively large amplitude in the seasonal cycle of Q(S) must, therefore, be a dominant factor in the net heat exchange across the sea surface at lat. 17° N.

In view of the large variability in the heat of evaporation, the month-to-month trend of Wyrtki's Q(E) values is not expected to correspond with those during either of the 2 years from 1963 to 1965. As was true for the results of table B, Wyrtki's Q(E) fluctuations do not obscure the seasonal trend of Q(N).

Comparison of Q(E) and Q(N) averages shows good agreement. The 1963 to 1965 average Q(E) is about 260 cal. cm^{-2} day^{-1} and Wyrtki's annual average Q(E) is about 270 cal. cm^{-2} day^{-1}. Similar mean values of Q(N) are about 30 cal. cm^{-2} day^{-1} and 50 cal. cm^{-2} day^{-1}, respectively.

In the equatorial example (fig. 6), fluctuations in Q(E) during 1963 to 1965 are less pronounced than in the trade wind zone and a seasonal trend is apparent; evaporation is high during summer and autumn and low during winter and spring. Year-to-year changes in Q(N), however, are larger than expected from the differences in Q(E), particularly from November to February. In the equatorial region the amplitude of the seasonal variations in the clear sky radiation, Q_o, is relatively small so that year-to-year differences in cloudiness must play an important role in the net heat exchange across the sea surface. This variability in Q(S) also obscures the seasonal trend of the heat of evaporation in Q(N).
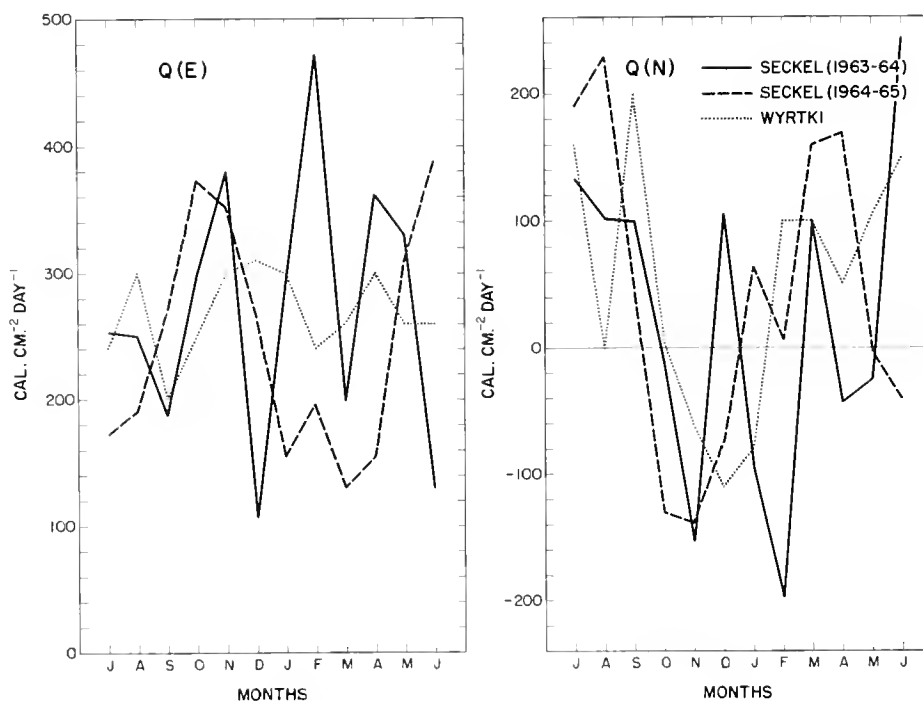
Figure 5.--The heat of evaporation, Q(E), and the net heat exchange across the sea surface, Q(N), at lat. 17° N., long. 152° W., July 1963 to June 1965 (from table B), and interpolated values from climatic charts by Wyrtki (1966).

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The seasonal trend in Wyrtki's Q(E) values is consistent with those during 1963 to 1965. Again, in view of the variability in Q(N) near the Equator during 1963 to 1965, the trend of Wyrtki's month-to-month values of Q(N) is not expected to be similar to either of the 2 years.

In contrast to the good agreement in average values of Q(E) and Q(N) in the trade wind zone, those in the equatorial region differ considerably. The 1963 to 1965 average Q(E) is about 100 cal. $cm^{-2} day^{-1}$, whereas Wyrtki's annual average Q(E) is about 200 cal. $cm^{-2} day^{-1}$. Similar mean values of Q(N) are about 240 cal. $cm^{-2} day^{-1}$ and 160 cal. $cm^{-2} day^{-1}$, respectively. The difference in Q(E) is primarily due to the use of different drag coefficients in the evaporation equation. The average wind speed at lat. 2° N., long. 157° W., July 1963 to June 1965 (table B) was 4.7 m. sec^{-1} for which the drag coefficient is 0.96 x 10^{-3}. Wyrtki used a constant drag coefficient, $C_D = 1.55$ x 10^{-3}. Thus, the difference in drag coefficients accounts for the major portion of the difference in the evaporation rates and therefore also in the difference of the net heat exchange across the sea surface.

Within the limitation discussed above, the results for the two sample areas show that the heat exchange processes computed here are consistent with those based on long-term average data presented by Wyrtki.

Interseason and Interyear Comparisons

In a previous section it was shown that the manner of processing affects mainly the heat of evaporation and, therefore, also the results for the net heat exchange across the sea surface. Figures 3 and 4 show that, regardless of the manner of computation, the month-to-month trends in the heat of evaporation and the net heat exchange across the sea surface are similar. Here, then, the importance of absolute magnitudes in interseason and interyear comparisons is examined.

Results for the area, lat. 25° to 29° N., long. 140° to 144° W., which were previously used, are also used to compute the differences between principal extremum values of $Q(E_1)$ and $Q(E_2)$--see figure 3--and $Q(N_1)$ and $Q(N_2)$ (fig. 4). These differences, listed in table 3, show that the trends of change (increasing or decreasing) are the same whether the exchange processes are based on daily or mean monthly meteorological properties. The magnitudes of change are also similar but agreement tends to be better in spring and summer than during autumn and winter.
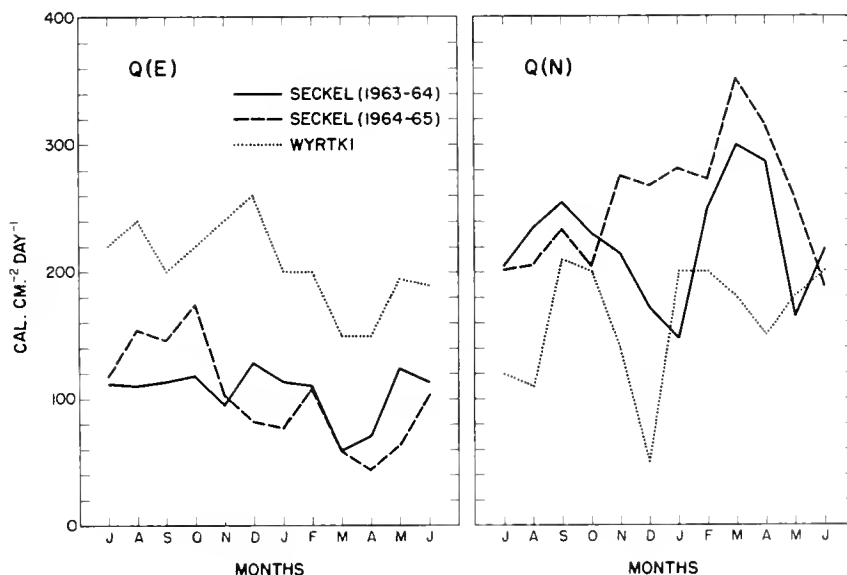
Figure 6.--The heat of evaporation, Q(E), and the net heat exchange across the sea surface, Q(N), at lat. 2° N., long. 157° W., July 1963 to June 1965 (from table B), and interpolated values from climatic charts by Wyrtki (1966).

Table 3.--Differences in extremum values of $Q(E_1)$, $Q(E_2)$, $Q(N_1)$, and $Q(N_2)$, lat. 25° to 29° N., long. 140° to 144° W.

Time period	$Q(E_1)$	$Q(E_2)$
	Cal. cm.$^{-2}$day^{-1}	Cal. cm.$^{-2}$day^{-1}
Sept.-Nov. 1963	95	62
Nov.-Dec. 1963	-3	-19
Dec. 1963-Feb. 1964	129	163
Feb.-June 1964	-183	-191
June-July 1964	17	24
July-Aug. 1964	-49	-40
Aug.-Sept. 1964	148	121
Sept.-Oct. 1964	-98	-63
Oct.-Nov. 1964	100	67
Nov.-Dec. 1964	-203	-138
Dec. 1964-Feb. 1965	207	253
Feb. 1965-Apr. 1965	-119	-205

	$Q(N_1)$	$Q(N_2)$
	Cal. cm.$^{-2}$day^{-1}	Cal. cm.$^{-2}$day^{-1}
Aug. 1963-Feb. 1964	-380	-385
Feb.-Aug. 1964	420	414
Aug.-Sept. 1964	-246	-220
Sept.-Oct. 1964	92	54
Oct.-Nov. 1964	-218	-182
Nov.-Dec. 1964	246	173
Dec. 1964-Jan. 1965	-205	-246
Feb.-Apr. 1965	191	282

Table 4. Interyear comparisons of 4-month averages of $Q(E_1)$ and $Q(E_2)$, lat. 25° to 29° N., long. 140° to 144° W.

Time period	$Q(E_1)$	$Q(E_2)$
	Cal. cm.$^{-2}$day^{-1}	Cal. cm.$^{-2}$day^{-1}
Aug.-Nov. 1963 average	200	158
Aug.-Nov. 1964 average	237	196
Interyear difference	37	38
Jan.-Apr. 1964 average	321	287
Jan.-Apr. 1965 average	254	257
Interyear difference	-67	-30

Table 5.--Interyear comparisons of 3-month averages of $Q(N_1)$ and $Q(N_2)$, lat. 25° to 29° N., long. 140° to 144° W.

Time period	$Q(N_1)$	$Q(N_2)$
	Cal. cm.$^{-2}$day^{-1}	Cal. cm.$^{-2}$day^{-1}
July-Sept. 1963 average	98	136
July-Sept. 1964 average	67	113
Interyear difference	-31	-23
Jan.-May 1964 average	-183	-139
Jan.-Mar. 1965 average	-111	-123
Interyear difference	·72	16

For month-to-month differences of $Q(E_1)$ and $Q(E_2)$ the averages of the absolute magnitudes are 96 cal. cm.$^{-2}$ day^{-1} and 84 cal. cm.$^{-2}$day^{-1}, respectively, and for $Q(N_1)$ and $Q(N_2)$ 66 cal. cm.$^{-2}$ day^{-1} and 64 cal. cm.$^{-2}$ day^{-1}, respectively.

For interyear comparisons of similar seasons figure 3 shows that the maximum evaporation period was longer during the first part of 1964 than during the first part of 1965 and that the differences were marked in the summer and autumn evaporation of 1963 and 1964. Table 4 shows 4-month averages of $Q(E_1)$ and $Q(E_2)$ at lat. 25° to 29° N., long. 140° to 144° W., for August to November and January to April.

Figure 4 shows that values of the net heat exchange across the sea surface are highest during late summer and early autumn and lowest during winter. For interyear comparisons, 3-month averages of $Q(N_1)$ and $Q(N_2)$ (lat. 25° to 29° N., long. 140° to 144° W.) are listed in table 5.

The trend of change is the same, but interyear differences based on results computed daily are larger than differences based on results computed from monthly mean meteorological properties. When the interyear differences are compared, it should be remembered that those for $Q(E)$ are not expected to be the same as those for $Q(N)$ since in the latter the interyear differences of $Q(S)$ and $Q(B)$ are also involved.

Generalizing the results of these comparisons, a tendency exists to underestimate the interyear differences of the heat of evaporation and of the net heat exchange across the sea surface presented in table B. The underestimates will be largest in areas and at times of greatest variability in the meteorological properties that affect the heat exchange processes.

The use of table B for interyear comparisons is illustrated below for three sample areas, each of which lies in a different climatic zone. The trade wind zone extends over the largest portion of the region under consideration here. This region, however, also extends into two other climatic zones. The northern portion of the region lies near the North Pacific pressure ridge and generally has low wind speeds but, during the winter, may come under the influence of the Northwest Pacific atmospheric circulation. The southern portion of the region lies in the equatorial zone.

Consider first the northern zone. The absolute magnitude of interyear differences of $Q(E)$ and $Q(N)$ at lat. 32° N., long. 167° W. in table B

from April to November are relatively low and average 28 cal. cm.$^{-2}$ day^{-1} and 56 cal. cm.$^{-2}$day^{-1}, respectively. From December to March these interyear differences, however, are an order of magnitude larger (table 6).

Consider next lat. 17° N., long. 152° W. (table B) in the trade wind zone, where the variations of Q(E) are large and where the most pronounced interyear differences occur during January to April (fig. 5). Table 7 lists average values of Q(E) and Q(N) for the 4 months January to April.

Finally, in the equatorial zone, lat. 2° N., long. 157° W. (table B, fig. 6), interyear differences are primarily reflected by the net heat exchange across the sea surface. From November 1964 to May 1965, Q(N) was larger than during the same months 1 year earlier. Table 8 lists average values of Q(E) and Q(N) for the 4 months November to February, the period of largest interyear difference in Q(N).

The illustrations based on the results of table B show that interyear differences of Q(E) and Q(N) during the 2-year period under consideration were larger than the variations to be expected from the data uncertainties discussed earlier in this paper. Furthermore, the interyear differences in the northern zone and in the trade wind zone are probably underestimated.

The interyear differences in the northern zone and in the trade wind zone are also consistent with the monthly mean sea-level pres-

sure distributions (Northern Hemisphere charts of mean sea-level atmospheric pressure, Extended Forecast Division, National Meteorological Center, Environmental Science Services Administration). During the winter and spring of 1964, the trade winds were well developed and contributed to the large evaporation rates in the trade wind zone. During the winter of 1965 the trade winds were weak and the northern zone came under the influence of the Northwest Pacific circulation. In consequence evaporation rates were high in the northern zone but low in the trade wind zone.

Table 8.--Interyear differences of Q(E) and Q(N), lat. 2° N., long. 157° W. (from table B)

Time period	Q(E)	Q(N)
	Cal. cm.$^{-2}$day^{-1}	Cal. cm.$^{-2}$day^{-1}
Nov. 1963 to Feb. 1964 average	112	195
Nov. 1964 to Feb. 1965 average	93	274
Interyear difference	-19	79

CONCLUSION

Despite the limitations of the marine surface meteorological data, meaningful measures of the month-to-month and year-to-year changes in the large-scale heat exchange processes have been obtained for a large portion of the North Pacific trade wind region. The results presented in table B, therefore, satisfy the needs of the TWZO investigation.

Beyond this application, the need for monthly measures of large-scale, sea-air interaction processes in the trade wind zone will continue and increase; the experience gained in the preparation of this paper may be of help in future work. Some suggestions to facilitate the calculations and improve the results are therefore made.

The mechanics of processing large quantities of meteorological and oceanographic observations for the computation of sea-air interaction processes are still in the developmental stages. In the work reported here, quality control procedures involved laborious visual inspection of original data. Obvious errors that were initially overlooked could usually be corrected during the preparation of the smoothed charts. By using the statistics of table A, it is now possible

Table 6.--Interyear differences of Q(E) and Q(N), lat. 32° N., long. 167° W. (from table B)

Time period	Q(E)	Q(N)
	Cal. cm.$^{-2}$day^{-1}	Cal. cm.$^{-2}$day^{-1}
Dec. 1963	568	-638
Dec. 1964	351	-354
Interyear difference	-217	284
Jan.-Mar. 1964 average	104	49
Jan.-Mar. 1965 average	273	-206
Interyear difference	169	-255

Table 7.--Interyear differences of Q(E) and Q(N), lat. 17° N., long. 152° W. (from table B)

Time period	Q(E)	Q(N)
	Cal. cm.$^{-2}$day^{-1}	Cal. cm.$^{-2}$day^{-1}
Jan.-Apr. 1964 average	441	-44
Jan.-Apr. 1965 average	134	100
Interyear difference	-307	144

to impose limits so that for a second pass of the data through the computer, programs can be written to reject erroneous data.

A more sophisticated use of computers to summarize oceanographic and meteorological data was suggested by Frye (1968), who reported a regression analysis of sea-surface-temperature patterns for the North Pacific Ocean. For limited areas of the ocean, such as the trade wind region, it may in the future be possible to develop suitable models so that the distribution of properties can be expressed as functions of latitude, longitude, and time.

In the previous section the effect of shortcomings in the distribution and quality of data on the heat exchange values was illustrated. A most difficult distribution to estimate from isolated ships' observations is the cloudiness. This property affects the most important term in the heat budget, the radiation from sun and sky. In this area of uncertainty greatest improvement may come from satellite observations of the cloud cover. It may also be possible to compute the effective back radiation from direct satellite measurements.

The mainstay of data for the computations of large-scale, sea-air interactions will, nevertheless, remain the synoptic observations made by ships at sea. It was shown that the inability to compute the heat of evaporation daily may lead to relatively large underestimates of this important process. In a large portion of the trade wind zone, observations are sufficiently frequent to permit daily computation of the heat of evaporation. In critical areas of the low latitudes, however (see table A), the sampling frequency should be increased; this may be accomplished by an effort to enlist in the synoptic weather observations program the cooperation of all ships which travel through these areas.

Since ships' observations will continue to provide the largest number of data for the computation of sea-air interaction processes, an effort should be made to improve the quality of data. Most important are the sea surface temperature, psychrometric, and wind measurements. These observations can be materially improved by the calibration of instruments, particularly those for the measurement of the sea surface temperature. The observations can also be improved by proper location of instruments and by instruction of observers in proper techniques of measurement.

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APPENDIX TABLE A

Observed meteorological properties, lat. 0° to 35° N., long. 130° to 170° W.,
summarized by 5° square units of area and by months, July 1963 to June 1965

List of notations

T(A)   Air temperature, degrees Celsius.

T(W)   Sea surface temperature, degrees Celsius.

E(W)   Saturation vapor pressure over pure water at sea surface temperature, millibars.

E(A)   Vapor pressure of air, millibars.

C   Cloudiness, proportion of sky covered.

P   Atmospheric pressure, millibars minus 1,000.

W   Wind speed, meters per second.

W(X)   East-west component of wind velocity, meters per second; wind from the east is negative.

W(Y)   North-south component of wind velocity, meters per second; wind from the north is negative.

Example

Sample column for July 1963, lat. 30° to 35° N., long. 170° to 165° W.

        170   165

T(A)   4   2   Mean location of observations: 30 + 4 = 34° N. lat., 165 + 2 = 167° W. long.

       23.5   Mean value of observations.

       27.5   Highest value.

       18.0   Lowest value.

        2.0   Standard deviation.

        28   Number of observations.

This example applies to the tabulations of all properties except that in the columns for W(X) and
W(Y) the number of observations is not repeated from the column for W.

20

AUGUST 1963

	170	165	160	155	150	145	140	135	130
LONGITUDE WEST									

T(A)

T(W)-T(A)

E(W)-E(A)

EA

C

P

W

W(X)

W(Y)

JULY 1963

	170	165	160	155	150	145	140	135	130
LONGITUDE WEST									

T(A)

T(W)-T(A)

E(W)-E(A)

EA

C

P

W

W(X)

W(Y)

OCTOBER 1963

LATITUDE 30° – 35° N.

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	25.0 / 20.0 / 17.6 / 1.8 / 69	22.5 / 28.0 / 15.5 / 2.4 / 101	21.5 / 27.0 / 15.5 / 2.2 / 95	20.8 / 25.5 / 15.5 / 1.8 / 89	20.8 / 27.0 / 16.0 / 2.0 / 107	20.5 / 27.0 / 16.0 / 2.0 / 107	19.6 / 25.5 / 15.5 / 1.6 / 107	19.6 / 23.2 / 15.5 / 1.5 / 182	19.1 / 23.7 / 15.0 / 1.5 / 263
T(W)–T(A)	1.3 / 6.2 / 2.2- / 1.5 / 68	1.5 / 7.6 / 4.5- / 2.0 / 98	2.0 / 8.2 / 3.0- / 2.0 / 94	2.0 / 6.5 / 1.5- / 1.6 / 86	1.6 / 6.5 / 4.0- / 1.8 / 103	1.6 / 5.5 / 4.0- / 1.7 / 102	1.7 / 5.5 / 3.8- / 1.7 / 179	1.7 / 5.7 / 1.7- / 2.0 / 261	1.2 / 5.7 / 1.7- / 2.0 / 261
E(W)–E(A)	4.6 / 11.0 / 9.2- / 3.3 / 66	5.7 / 14.0 / 4.0- / 4.0 / 93	7.5 / 16.2 / 2.0- / 4.0 / 89	7.2 / 13.1 / 2.0- / 3.1 / 82	7.0 / 16.7 / 2.0- / 3.5 / 98	7.0 / 13.8 / 2.8- / 3.2 / 96	6.8 / 14.2 / 3.3- / 3.5 / 177	6.6 / 13.2 / 9.1- / 3.0 / 261	6.6 / 13.2 / 9.1- / 3.0 / 261
EA	24.0 / 35.6 / 14.6 / 3.7 / 66	22.3 / 34.7 / 11.7 / 4.2 / 93	26.3 / 29.7 / 10.5 / 4.1 / 89	19.0 / 28.2 / 10.5 / 3.2 / 82	18.1 / 34.7 / 11.5 / 3.0 / 98	17.0 / 22.3 / 10.2 / 2.0 / 103	17.1 / 25.5 / 9.6 / 3.0 / 177	16.1 / 32.5 / 9.7 / 2.7 / 261	16.1 / 32.5 / 9.7 / 2.7 / 261
C	0.7 / 1.0 / 0.0 / 0.4 / 66	0.7 / 1.0 / 0.0 / 0.3 / 90	0.6 / 1.0 / 0.0 / 0.3 / 82	0.6 / 1.0 / 0.0 / 0.3 / 85	0.6 / 1.0 / 0.0 / 0.3 / 98	0.6 / 1.0 / 0.0 / 0.3 / 103	0.6 / 1.0 / 0.0 / 0.3 / 165	0.6 / 1.0 / 0.0 / 0.3 / 264	0.6 / 1.0 / 0.0 / 0.3 / 264
P	20.0 / 29.0 / 8.0 / 3.7 / 71	21.2 / 29.5 / 11.6 / 3.5 / 90	20.0 / 29.6 / 10.6 / 4.0 / 83	22.3 / 30.0 / 7.5 / 4.3 / 85	22.0 / 30.0 / 9.2 / 4.2 / 101	22.1 / 29.0 / 1.6 / 4.8 / 103	20.7 / 29.0 / 2.0 / 4.6 / 165	19.5 / 27.0 / 3.8 / 4.5 / 248	19.5 / 27.0 / 3.8 / 4.5 / 248
H	7.8 / 24.6 / 0.0 / 4.7 / 73	7.3 / 15.3 / 0.6 / 3.3 / 101	6.5 / 21.5 / 0.6 / 3.8 / 92	6.6 / 23.1 / 0.0 / 4.0 / 87	6.7 / 16.5 / 0.5 / 3.1 / 107	6.5 / 15.3 / 0.5 / 3.2 / 104	7.1 / 17.5 / 0.0 / 3.2 / 180	6.2 / 16.5 / 0.0 / 3.1 / 257	6.2 / 16.5 / 0.0 / 3.1 / 257
W(X)	0.8- / 11.6 / 23.0- / 0.5 / 73	0.6- / 12.0 / 6.0- / 0.5 / 92	0.4 / 13.6 / 5.8 / 1.1 / 87	0.4- / 14.6 / 8.6- / 1.1 / 85	0.4- / 13.0 / 6.0- / 1.2 / 101	0.2 / 14.1 / 9.5- / 1.8 / 104	0.8 / 16.0 / 13.0- / 2.5 / 180	1.0 / 14.5 / 8.7- / 4.5 / 257	1.0 / 14.5 / 8.7- / 4.5 / 257
W(Y)	17.6 / 13.0- / 6.3	12.0 / 10.7- / 5.2	16.0 / 10.7- / 4.8	17.8 / 14.3- / 4.7	15.6 / 12.6- / 4.5	15.3- / 4.5	14.0- / 5.0	14.5- / 12.5- / 4.8	14.5- / 12.5- / 4.8

SEPTEMBER 1963

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	24.2 / 27.6 / 20.5 / 1.3 / 70	24.0 / 27.3 / 20.5 / 1.3 / 80	25.3 / 27.0 / 20.5 / 1.5 / 109	23.0 / 27.0 / 19.2 / 1.5 / 71	22.5 / 26.5 / 18.7 / 1.6 / 88	21.6 / 26.0 / 17.0 / 1.7 / 86	21.6 / 27.0 / 18.1 / 1.2 / 132	21.0 / 20.0 / 17.6 / 1.1 / 234	21.3 / 20.0 / 17.6 / 1.1 / 240
T(W)–T(A)	0.5 / 5.5 / 4.2- / 2.0 / 62	1.0 / 6.5 / 4.3- / 1.7 / 72	1.0 / 6.0 / 5.0- / 1.6 / 95	1.0 / 7.2 / 4.3- / 1.6 / 58	1.1 / 7.1 / 3.0- / 1.6 / 82	1.0 / 6.6 / 4.0- / 1.6 / 74	1.0 / 6.6 / 4.0- / 1.6 / 124	1.1 / 4.3 / 2.1- / 1.1 / 240	0.9 / 5.0 / 4.0- / 1.2 / 240
E(W)–E(A)	4.2 / 12.1 / 4.3- / 3.5 / 62	5.1 / 13.8 / 2.2- / 3.8 / 71	6.0 / 16.3 / 5.5- / 3.8 / 91	6.0 / 18.6 / 3.5- / 4.3 / 56	5.6 / 16.1 / 0.8- / 3.8 / 78	5.7 / 13.2 / 1.1- / 3.1 / 70	5.7 / 13.2 / 1.1- / 3.1 / 121	5.5 / 13.7 / 2.0- / 2.5 / 234	5.5 / 13.7 / 2.0- / 2.5 / 235
EA	25.2 / 30.6 / 17.5 / 3.2 / 71	24.7 / 32.1 / 16.0 / 3.6 / 71	22.5 / 30.2 / 13.8 / 3.7 / 91	22.0 / 31.2 / 12.8 / 4.0 / 56	21.5 / 30.0 / 9.6 / 4.5 / 85	20.3 / 26.0 / 13.5 / 3.1 / 70	19.7 / 26.5 / 13.0 / 3.0 / 121	19.5 / 26.0 / 3.6- / 2.8 / 235	19.5 / 26.0 / 3.6- / 2.8 / 235
C	0.5 / 1.0 / 0.0 / 0.5 / 70	0.5 / 1.0 / 0.3 / 82	0.6 / 1.0 / 0.3 / 108	0.5 / 1.0 / 0.3 / 72	0.5 / 1.0 / 0.3 / 87	0.6 / 1.0 / 0.3 / 88	0.5 / 1.0 / 0.3 / 132	0.5 / 1.0 / 0.3 / 250	0.5 / 1.0 / 0.3 / 250
P	19.6 / 24.5 / 13.6 / 2.6 / 67	19.6 / 26.0 / 3.3 / 82	20.5 / 28.0 / 11.7 / 108	20.0 / 29.0 / 10.7 / 71	19.0 / 28.0 / 9.6 / 85	17.6 / 28.0 / 7.5 / 83	16.7 / 27.0 / 6.6 / 126	16.0 / 26.0 / 6.0 / 232	16.0 / 26.0 / 6.0 / 232
H	5.7 / 15.3 / 0.0 / 2.7 / 71	5.7 / 13.3 / 0.0 / 71	5.5 / 13.8 / 0.0 / 107	5.5 / 13.8 / 2.8 / 88	6.2 / 12.8 / 2.7 / 88	6.1 / 15.3 / 3.7 / 82	6.6 / 20.5 / 3.3 / 131	5.6 / 16.0 / 2.8 / 249	5.6 / 16.0 / 2.8 / 249
W(X)	1.5 / 10.0 / 14.5- / 4.1	1.5 / 10.2 / 7.6- / 4.1	0.9 / 10.5 / 7.5- / 4.0	0.9 / 10.7 / 4.5	1.8 / 10.7 / 4.6	2.0 / 13.0 / 4.0	1.0 / 13.8 / 4.8	1.0 / 13.0 / 4.1	1.1 / 13.0 / 4.1
W(Y)	1.3 / 10.7 / 4.5	10.1 / 11.5- / 4.7	10.7 / 12.8- / 4.0	9.8 / 12.0- / 4.3	9.8 / 12.0- / 4.5	8.1- / 11.8 / 12.4- / 4.8	11.5- / 12.5 / 20.1- / 5.0	11.0- / 15.0- / 4.5	11.0- / 15.0- / 4.5

NOVEMBER 1963

LONGITUDE WEST

T(A)	170	165	160	155	150	145	140	135	130
T(A)	20.0	20.0	19.2	19.1	19.0	17.6	18.0	17.7	
	25.0	27.0	25.0	24.0	25.0	23.7	24.0	24.2	
	15.0	15.2	14.0	14.0	13.7	13.0	12.5	14.0	
	2.0	2.3	2.0	2.1	2.0	2.0	1.8	1.8	
	88	109	91	100	129	112	157	280	
T(W)-T(A)	1.5	1.5	1.8	1.5	1.2	1.6	1.5	1.5	
	5.5	5.5	6.1	5.6	7.2	6.1	5.0	5.6	
	2.1-	4.8-	2.0-	6.0-	3.0-	4.0-	2.3-	8.1-	
	1.0	2.0	1.7	1.8	1.8	2.0	1.5	1.8	
	85	105	87	97	127	111	154	277	
E(W)-E(A)	6.1	0.6	6.5	5.3	5.0	5.2	5.1	5.5	
	17.5	16.0	15.1	15.2	15.3	12.8	13.1	12.5	
	2.7-	1.5-	2.5-	5.6-	1.8-	3.3-	1.5-	5.2-	
	4.5	4.3	4.0	4.1	3.8	3.6	3.3	3.0	
	82	97	82	91	121	108	149	268	
EA	16.3	17.7	17.3	17.6	17.5	15.8	16.0	15.5	
	26.3	26.3	26.0	25.0	25.7	23.6	23.7	23.3	
	9.6	3.0-	4.0	3.6	6.5	8.5	9.0	9.0	
	4.3	4.5	4.0	3.6	3.5	3.2	3.3	3.0	
	82	97	82	91	121	108	149	268	
C	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	
	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	
	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	
	87	110	94	101	128	111	156	278	
P	16.8	19.5	19.5	19.5	21.0	21.3	20.8	20.7	
	30.0	31.6	32.5	29.5	29.5	30.5	29.5	31.5	
	5.5-	3.0-	2.2	0.6	9.1	11.7	7.5	4.8	
	8.0	6.3	6.5	5.7	3.5	4.7	4.7	5.5	
	86	109	91	98	122	108	152	281	
H	9.5	7.2	8.0	7.6	7.8	8.0	7.5	7.0	
	23.1	18.0	23.1	18.0	20.5	18.0	20.5	18.5	
	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	
	4.1	4.0	5.0	3.7	3.5	3.5	3.5	3.1	
	89	109	93	101	128	109	154	275	
W(X)	0.6	1.1	2.5	2.2	2.2	1.5	2.2	2.6	
	17.0	17.7	23.1	13.6	14.5	12.1	17.7	17.3	
	17.5-	12.0-	8.1-	10.1-	15.8-	12.0-	12.3-	13.6-	
	0.6	5.6	6.6	5.6	6.0	5.5	5.1	4.5	
W(Y)	1.1	0.4	0.1-	0.5	0.5	2.1	1.1	0.7-	
	15.6	17.0	22.7	16.0	16.3	11.5	9.7	12.3	
	23.1-	11.5-	11.0-	12.3-	12.6-	15.6-	17.6-	13.8-	
	7.7	6.0	6.3	6.0	6.0	6.1	6.0	5.5	

DECEMBER 1963

LATITUDE 30° – 35° N.

LONGITUDE WEST

T(A)	170	165	160	155	150	145	140	135	130
T(A)	15.8	15.7	16.5	17.5	18.5	18.3	18.3	17.3	
	21.0	21.0	22.0	24.0	24.2	22.0	22.0	21.6	
	11.0		11.0	10.0	13.6	13.7	13.7	13.1	
	2.2	2.1	2.5	2.3	2.1	1.6	1.5	1.5	
	45	63	55	54	74	92	145	271	
T(W)-T(A)	2.7	3.0	2.1	1.0	0.6	0.6	0.9	1.1	
	7.7	8.5	5.5	5.3	5.6	4.3	5.3	5.6	
	2.1-	1.0-	2.1-	1.7-	3.5-	4.5-	2.5-	4.0-	
	1.0	2.0	1.8	1.6	1.6	1.7	1.5	1.6	
	41	58	52	48	67	84	140	265	
E(W)-E(A)	6.6	7.3	5.8	3.0	3.0	2.8	3.8	4.3	
	13.7	13.1	12.8	8.6	8.7	9.5	11.0	14.0	
	0.5-	1.3-	0.7	2.3-	2.0-	3.1-	3.1-	3.0-	
	3.5	3.3	2.8	2.5	2.5	2.7	3.0	3.0	
	41	58	52	48	66	82	136	263	
EA	13.5	13.0	14.5	17.1	17.6	17.7	17.1	15.6	
	22.0	23.3	22.6	24.7	23.7	23.3	22.6	21.6	
	8.1	8.0	8.7	11.1	11.0	11.3	11.1	7.7	
	3.3	3.0	3.3	3.5	2.7	2.5	2.5	2.5	
	41	58	52	48	66	82	136	263	
C	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	
	1.0	0.1	0.1	0.1	1.0	1.0	1.0	1.0	
	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	
	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	
	45	62	55	55	73	93	147	272	
P	12.2	11.2	9.8	11.5	13.0	16.0	20.6	22.3	
	22.5	21.1	21.5	24.0	21.0	25.2	27.0	31.0	
	1.0-	1.0-	2.5-	4.3-	13.0-	0.0	0.8-	7.6	
	6.2	6.3	6.1	6.2	7.0	6.3	4.6	3.6	
	43	64	55	53	72	90	143	271	
H	10.0	10.6	10.5	9.6	9.6	7.7	6.5	6.2	
	19.5	28.2	23.1	21.5	36.0	21.5	17.1	18.0	
	4.7	4.0	4.0	4.2	5.5	4.2	3.2	3.5	
	45	64	56	55	76	94	146	260	
W(X)	6.8	8.0	6.2	4.3	3.8	2.5	0.2-	0.1-	
	19.2	26.6	18.0	16.3	16.7	17.7	16.7	16.3	
	2.6-	4.5-	6.7-	11.2-	6.0-	7.2-	9.0-	9.6-	
	5.2	4.5	6.7	6.5	5.3	5.5	4.6	3.6	
W(Y)	1.2-	2.0-	1.1	2.5	5.2	5.5	3.7	2.0	
	15.1	12.6	15.0	17.2	35.5	17.6	17.0	17.7	
	13.5-	12.6-	12.6-	17.5-	8.6-	7.7-	12.0-	12.3-	
	6.1	5.2	6.2	6.5	7.1	4.5	4.6	5.8	

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FEBRUARY 1964

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	3	3	3	3	3	3	2	3	2
	16.5	16.5	16.5	16.8	16.5	15.7	15.7	14.5	14.5
	21.0	21.2	21.0	21.0	21.0	20.1	20.0	19.2	19.2
	12.0	11.5	11.5	11.8	11.5	11.0	12.6	11.0	11.0
	2.0	2.0	2.0	2.0	1.7	1.8	1.5	1.5	1.5
	75	79	79	66	72	86	110	156	241
T(W)-T(A)	3	3	3	3	3	3	3	3	2
	0.2	0.5	1.0	0.5	0.6	1.0	1.2	1.5	1.5
	5.0	5.5	5.0	4.7	5.0	5.5	6.1	6.0	5.0
	3.5	2.5-	3.0-	3.7-	3.0	5.0-	3.0-	4.8-	4.8-
	1.5	1.6	1.6	1.6	1.5	1.6	1.6	1.5	1.5
	71	76	77	63	69	84	102	153	231
E(W)-E(A)	3	3	3	3	3	3	3	3	2
	1.5	2.0	1.0	2.5	3.0	4.3	4.7	5.8	5.1
	8.3	9.6	9.0	8.5	8.2	11.5	10.1	10.8	12.5
	2.0-	1.5-	1.0-	1.3-	1.5-	1.0-	2.5-	2.0-	3.6-
	2.2	2.5	3.0	2.5	2.6	2.6	2.5	2.0	2.1
	52	57	64	51	59	73	82	136	216
EA	3	3	3	3	3	3	3	3	2
	16.3	15.6	16.6	15.5	15.0	14.7	13.7	13.0	12.1
	20.8	20.2	9.1	20.6	20.5	20.5	17.1	20.6	18.5
	10.0	9.0	2.5	9.1	9.3	4.2	9.2	8.6	7.6
	2.5	3.0	2.5	2.2	2.8	2.8	2.3	1.7	1.7
	52	57	57	51	59	73	82	136	218
C	3	3	3	3	3	4	3	3	2
	0.7	1.0	1.0	0.6	0.6	0.6	0.8	0.8	0.8
	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	0.3	0.0	0.3	0.0	0.0	0.3	0.0	0.0	0.0
	74	78	64	70	59	73	110	156	-240
P	3	3	3	3	3	3	3	3	2
	19.3	23.0	24.5	25.7	27.1	28.0	27.7	27.0	27.7
	29.0	33.5	35.0	34.7	36.0	35.5	34.5	34.5	34.7
	5.0	5.6	5.8	13.0	13.5	16.5	20.0	20.5	20.5
	6.3	6.3	6.6	5.3	4.2	4.5	3.3	3.3	3.5
	73	77	66	69	87	108	150	236	
X	3	3	3	3	3	3	2	3	2
	8.5	7.2	6.3	6.1	6.7	7.1	7.0	7.3	
	21.0	15.3	20.5	13.8	15.3	14.3	12.8	15.3	
	0.0	0.0	0.0	2.7	0.0	0.0	0.0	1.5	
	3.7	3.0	3.5	2.7	2.8	2.5	2.7	3.0	
	75	73	67	73	89	110	153	236	
W(X)	3	3	3	3	3	3	3	3	3
	1.7	1.5-	1.6-	2.7-	3.3-	4.2-	4.6-	3.3-	
	21.0	7.5	9.0	5.8	8.1	2.8	6.0	9.5	
	11.0-	10.5-	10.2-	12.8-	12.0-	12.8-	12.0-	12.0-	
	6.2	3.8	3.5	3.3	3.8	3.7	3.7	4.1	
W(Y)	3	3	3	3	3	3	3	3	
	3.0	3.0	2.8	2.5	1.8	0.0	2.5	4.7-	
	12.3	15.1	20.5	13.0	15.1	10.5	12.3	6.2	
	12.0-	12.8-	7.7-	12.0-	9.6-	12.8-	12.8-	15.1-	
	5.8	6.0	5.5	4.5	5.0	5.0	3.5	3.5	

JANUARY 1964

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	3	3	3	3	3	3	2	3	3
	16.2	16.3	16.0	16.5	16.5	16.3	16.5	16.5	15.7
	22.0	21.0	20.2	21.0	21.0	21.5	22.0	22.0	20.0
	12.0	12.0	12.0	12.0	12.0	11.0	11.0	11.8	10.7
	1.7	2.0	2.1	2.0	2.2	2.0	1.8	1.3	1.3
	86	114	93	81	92	105	181	181	259
T(W)-T(A)	3	3	3	3	3	3	2	3	3
	0.1	0.3	0.4	0.1	1.3	1.1	1.3	1.2	1.2
	3.3	5.5	4.5	5.0	10.0	6.0	6.0	6.0	8.3
	4.1-	3.5-	7.5-	4.0-	2.0-	3.0-	5.0-	5.0-	3.8-
	1.5	1.6	1.7	1.7	1.8	2.0	2.0	1.8	1.5
	80	104	82	74	86	99	172	172	249
E(W)-E(A)	3	3	3	3	3	3	2	3	3
	2.1	2.5	2.3	2.1	4.0	3.5	5.0	5.0	4.3
	8.5	12.2	9.1	10.1	15.7	9.8	10.5	10.5	10.3
	4.0-	3.5-	5.5-	2.1-	1.5-	2.2-	1.1-	1.1-	3.0-
	2.6	3.1	3.5	3.0	3.1	2.7	2.5	2.5	2.2
	55	67	52	46	67	86	151	151	236
EA	3	3	3	3	3	3	2	3	3
	15.2	15.6	15.7	16.2	15.3	15.5	14.5	14.5	14.0
	20.0	21.8	22.5	21.5	20.8	20.8	22.3	22.3	19.8
	8.2	9.3	8.1	9.3	9.2	9.2	8.5	8.5	8.3
	3.0	3.0	3.5	3.1	3.1	2.7	2.2	2.2	1.8
	55	67	52	46	67	86	151	151	236
C	3	3	3	3	3	3	3	3	2
	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.7
	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	85	110	96	79	93	107	187	187	265
P	3	3	3	3	3	3	3	3	2
	19.7	20.2	21.5	23.2	24.0	25.2	26.0	26.0	25.7
	44.0	47.0	39.0	37.0	24.0	35.7	36.0	36.0	37.1
	4.5	5.0	2.0	2.0	2.0	2.2	1.5	1.5	1.5
	8.5	8.7	7.5	6.5	6.6	5.5	5.5	5.5	5.7
	86	113	98	82	94	107	188	188	263
X	3	3	3	3	3	3	3	3	2
	9.0	8.3	7.6	7.5	7.5	8.5	7.1	7.1	6.6
	23.1	20.5	15.3	15.3	18.0	19.5	20.5	20.5	20.5
	4.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	0.5
	3.7	4.5	3.6	2.8	3.0	3.5	4.0	4.0	3.5
	87	114	94	79	94	106	186	186	256
W(X)	3	3	3	3	3	3	3	3	2
	4.5	3.5	2.6	1.6	0.7	2.0	1.6	1.6	1.5
	16.8	15.6	13.5	10.6	11.5	16.3	16.0	16.0	17.8
	6.7	9.0-	11.6-	8.8-	8.6-	9.1-	11.3-	11.3-	12.6-
	6.0	6.0	5.5	4.8	4.8	5.5	5.6	5.6	5.5
	4.0	2.5	2.0	2.5	0.9	0.3	1.5-	1.5-	1.5-
W(Y)	3	3	3	3	3	3	3	3	2
	17.8	14.5	13.3	12.0	16.8	19.5	13.1	13.1	13.3
	8.6-	13.3-	10.0-	9.6-	12.8-	14.5-	17.7-	17.7-	12.0-
	5.1	5.8	5.5	5.6	6.3	7.0	5.5	5.5	4.6

MARCH 1964

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	3	3	3	3	3	3	3	3	3
	15.7	16.1	16.3	16.5	16.5	15.8	15.3	14.3	
	21.0	22.7	22.0	21.5	21.0	21.0	20.5	24.2	
	11.5	12.0	11.0	12.0	12.0	12.0	11.5	11.0	
	1.8	2.1	2.3	2.1	1.7	1.7	1.6	1.6	
	111	129	126	118	136	152	197	300	
T(W)-T(A)	3	3	3	3	3	3	3	3	2
	0.4	0.6	0.5	1.0	1.0	1.1	1.5	1.2	
	4.0	5.2	4.8	6.0	6.1	5.5	6.3	5.0	
	7.7-	6.6-	3.0-	3.5-	4.0-	5.6-	3.3-	8.7-	
	2.0	2.0	2.0	2.0	1.8	1.6	1.7	1.6	
	109	125	119	111	127	143	191	291	
E(W)-E(A)	3	3	3	3	3	3	2	3	2
	3.5	3.5	3.0	3.1	4.0	4.0	4.5	4.0	
	9.3	11.0	10.2	10.5	11.1	10.2	13.0	10.5	
	4.7-	7.0-	3.0-	2.1-	2.6-	1.0-	5.2-	6.5-	
	3.0	3.5	3.3	3.0	3.0	2.2	2.3	2.1	
	84	100	104	101	115	135	182	279	
EA	3	3	3	3	3	3	3	3	2
	14.0	14.7	15.1	15.5	15.1	14.1	13.5	12.7	
	21.2	20.8	22.2	20.8	21.6	20.0	22.2	23.5	
	4.3	8.2	2.0	9.3	4.2	9.0	9.6	8.2	
	2.8	3.1	3.5	3.0	2.6	2.1	1.8	2.1	
	84	100	104	101	115	135	182	279	
C	3	3	3	3	3	3	3	3	2
	0.6	0.8	0.7	0.7	0.7	0.7	0.7	0.8	
	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	
	100	125	114	117	136	153	196	297	
P	3	3	3	3	3	3	3	3	2
	22.8	23.3	24.7	25.1	25.0	26.2	26.0	24.5	
	34.4	34.0	34.7	36.0	41.5	46.2	47.6	35.5	
	2.5	2.1	2.0	11.1	2.5	2.2	2.2	2.1	
	7.2	6.5	5.5	5.5	7.8	8.3	8.1	7.7	
	109	128	122	109	133	152	196	299	
K	3	3	3	3	3	2	3	3	2
	7.3	7.1	7.0	7.0	7.5	7.0	7.5	7.6	
	14.3	18.0	16.5	18.0	20.5	18.0	18.0	15.3	
	3.0	1.0	0.0	0.0	0.0	0.0	1.5	1.0	
	3.6	3.2	3.5	4.2	4.3	3.3	3.0	3.1	
	111	128	124	116	137	148	192	292	
M(K)	3	3	3	3	3	3	3	3	2
	2.1-	2.3-	1.3-	0.2	0.2	0.6-	0.8-	0.5	
	13.8	11.2	5.5	12.0	15.1	11.2	10.6	13.0	
	12.8-	16.0-	14.5-	11.6-	13.8-	13.0-	10.5-	13.0-	
	5.3	4.0	4.2	4.7	5.5	5.5	5.0	4.3	
M(Y)	3	3	3	3	3	3	3	3	
	1.1	1.3-	1.3-	1.6-	1.0-	4.1-	2.7-	4.2-	
	14.3	10.7	12.0	12.0	11.0	11.6	17.7	14.5	
	10.7-	14.1-	16.5-	18.0-	20.1-	16.8-	16.8-	14.5-	
	5.3	5.6	7.0	7.1	6.6	5.3	5.6	5.5	

APRIL 1964

LATITUDE 30° – 35° N.

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	3	3	3	3	3	3	3	3	2
	16.0	16.8	16.9	16.8	16.8	16.7	16.0	15.3	14.0
	22.0	21.0	21.0	24.2	22.0	22.0	21.0	21.5	21.0
	10.6	12.0	11.0	11.0	12.0	11.5	11.6	11.5	10.5
	2.5	2.3	2.2	2.2	2.0	1.8	1.6	1.6	1.5
	106	115	122	122	102	118	114	177	252
T(W)-T(A)	3	3	3	3	3	3	3	3	2
	0.5	0.4	0.5	0.2	0.3	0.3	0.9	1.2	1.6
	5.6	5.5	5.3	4.5	5.6	6.0	5.5	5.5	6.0
	4.0-	5.3-	5.3-	5.5-	4.0-	6.0-	5.5-	4.5-	6.7-
	2.1	2.0	2.0	1.5	1.5	1.7	1.7	1.7	1.6
	99	108	107	107	91	107	135	166	241
E(W)-E(A)	3	3	3	3	3	3	3	3	2
	4.7	2.7	2.7	2.1	2.7	3.5	4.0	5.0	7.5
	7.5	11.5	9.5	9.5	9.3	9.2	9.1	9.5	7.6
	2.2-	2.0-	4.0-	3.5-	3.0-	3.6-	0.8-	6.2-	2.5-
	2.7	2.6	3.0	2.3	2.2	2.5	2.3	2.1	2.0
	81	93	100	100	85	95	96	159	236
EA	3	3	3	3	3	3	3	3	2
	15.0	15.8	16.5	16.5	15.8	15.0	15.4	12.3	12.1
	22.6	8.1	8.1	23.0	20.8	19.2	19.6	24.5	17.5
	3.1	2.8	3.0	3.0	8.7	9.6	7.8	8.1	8.2
	3.1	2.8	3.0	3.0	2.5	2.1	2.2	1.8	1.6
	81	93	93	100	85	95	96	159	236
C	3	3	3	3	3	3	3	3	2
	0.8	0.7	0.7	0.7	0.8	0.8	0.9	0.9	0.8
	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.1
	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2
	108	118	120	120	119	118	115	176	252
P	3	3	3	3	3	3	3	3	2
	23.1	23.1	23.2	24.6	27.2	29.0	29.7	29.0	27.5
	34.5	34.0	34.5	34.5	34.7	34.7	37.0	39.0	35.0
	6.1	6.1	10.0	10.6	18.0	23.0	24.5	22.5	15.7
	6.7	7.1	7.1	5.8	3.7	2.6	3.1	3.5	3.5
	107	116	116	119	101	118	115	177	252
K	3	3	3	3	3	3	3	3	2
	8.3	8.3	7.0	7.0	7.1	6.6	6.3	6.5	7.2
	20.5	19.3	19.3	14.3	14.3	14.3	12.8	12.8	20.5
	1.5	0.0	1.5	1.0	0.6	3.0	2.2	1.0	1.1
	4.0	4.0	4.0	4.0	3.0	3.0	2.3	2.6	3.0
	106	110	122	110	101	115	110	176	247
M(K)	3	3	3	3	3	3	3	3	2
	1.7-	3.1-	3.1-	3.0-	3.5-	3.7-	3.7-	4.0-	2.3-
	13.8	13.8	12.6	12.6	9.1	8.6	7.5	5.8	7.6
	15.0-	17.0-	15.0-	13.0-	13.0-	14.1-	12.0-	12.0-	10.5-
	2.3	4.8	4.8	4.8	4.8	4.6	3.7	3.5	3.5
M(Y)	3	3	3	3	3	3	3	3	2
	2.5-	0.4-	0.4	0.7	1.0	0.5	1.3-	3.0-	5.8-
	12.6	12.3	11.7	11.7	7.8	7.8	9.7	7.0	2.5
	10.6-	18.0-	14.1-	14.1-	12.0-	7.7-	8.5-	9.6-	20.5-
	6.0	5.0	5.0	5.3	4.8	4.0	3.8	3.1	3.0

LATITUDE 30°–35° N.

MAY 1964

	LONGITUDE WEST								
	170	165	160	155	150	145	140	135	130
T(A)	17.2	19.3	18.5	18.5	17.6	16.5	16.2	14.8	
	26.0	27.0	24.0	24.0	24.2	22.6	60.0	58.0	
	13.7	15.5	15.0	13.0	13.0	13.1	12.0	10.0	
	1.8	1.0	1.8	2.1	1.7	1.7	4.2	3.1	
	63	79	63	63	53	64	125	229	
T(W)–T(A)	0.3	0.3	0.4	0.9	1.0	1.2	1.0	0.8	
	3.5	4.2	6.5	6.5	6.0	4.5	5.5	6.0	
	4.0-	4.0-	3.0-	6.0-	6.0-	4.0-	5.5-	5.0-	
	1.5	1.7	1.8	2.1	2.1	1.8	1.7	1.5	
	54	71	56	43	43	56	117	225	
E(W)–E(A)	2.3	3.5	4.5	5.1	5.5	4.8	4.5	3.0	
	9.1	12.8	13.6	14.5	11.3	8.1	9.8	8.6	
	1.0-	3.1-	1.8-	1.2-	0.7	0.7	1.5-	1.3-	
	2.5	3.3	3.5	3.0	2.0	2.0	2.1	2.0	
	52	68	51	41	54	53	114	218	
EA	19.0	18.0	16.0	14.7	13.5	13.0	13.5	12.8	
	24.1	24.0	21.0	19.5	17.7	18.6	19.8	18.6	
	11.1	11.0	11.0	9.1	8.5	9.5	9.3	8.6	
	2.0	2.5	2.8	2.6	1.7	1.7	2.2	2.0	
	52	68	51	41	54	53	114	218	
C	0.7	0.6	0.0	0.7	0.7	0.8	0.8	0.7	
	1.0	0.0	1.0	1.0	1.0	0.0	1.0	1.0	
	0.0	0.0	0.0	0.0	0.3	0.3	0.1	0.0	
	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	
	52	79	63	55	55	67	128	227	
P	23.0	24.1	25.0	26.0	27.0	26.0	25.1	24.1	
	29.0	31.5	36.0	30.7	36.0	37.7	37.0	33.5	
	13.7	16.5	11.7	11.0	15.0	9.0	5.1	8.1	
	3.6	3.2	5.2	6.1	5.8	5.1	4.5	4.5	
	63	80	63	55	66	67	128	229	
H	8.3	7.2	7.0	7.0	7.0	6.7	7.0	7.1	
	14.3	16.0	14.3	10.7	13.8	14.3	18.0	17.5	
	1.8	1.5	1.5	1.5	1.5	1.5	0.5	0.0	
	3.0	3.0	2.7	2.5	2.5	2.7	3.0	2.8	
	62	80	63	55	54	65	121	225	
W(X)	0.1-	4.8-	3.3-	3.2-	3.0-	0.2-	1.2-	0.3	
	12.8	12.8	12.8	10.0	12.0	13.6	15.1	17.2	
	14.3-	12.8-	4.8-	5.0-	5.0-	13.6-	10.1-	10.0-	
	4.0	4.0	4.8	5.0	5.0	5.7	4.2	4.0	
W(Y)	2.1	1.2	4.0	0.2-	1.7-	2.0-	2.5-	3.6-	
	12.6	14.5	13.5	7.0	4.8	11.1	17.7	13.5	
	5.0-	9.1-	10.2-	10.0-	11.0-	8.6-	12.6-	13.0-	
	3.7	4.5	4.0	4.0	3.6	4.0	5.5	5.5	

JUNE 1964

	LONGITUDE WEST								
	170	165	160	155	150	145	140	135	130
T(A)	21.0	21.5	21.5	20.5	19.7	18.2	18.3	17.0	
	26.0	28.0	26.0	26.0	25.6	26.0	26.5	25.0	
	16.0	17.0	17.0	15.0	15.5	15.0	14.2	13.0	
	2.1	2.1	2.0	2.0	1.8	1.7	1.8	1.6	
	62	87	71	77	94	96	171	272	
T(W)–T(A)	0.5-	0.3-	0.3-	0.2-	0.4-	0.1	0.1	0.1-	
	2.7	3.0	3.0	4.0	4.0	3.3	4.0	3.5	
	0.0-	5.0-	5.0-	5.5-	5.0-	6.6-	6.5-	7.5-	
	1.7	1.6	1.6	2.0	1.7	1.6	1.7	1.6	
	57	73	59	68	84	88	160	266	
E(W)–E(A)	1.7	2.0	2.0	2.3	2.0	2.1	2.8	2.3	
	8.5	10.0	7.0	9.5	10.6	7.1	10.1	7.7	
	4.7-	3.0	2.5-	2.6-	3.5-	2.1	3.7-	4.0-	
	2.7	3.2	2.7	2.8	2.8	2.1	2.1	2.2	
	53	68	51	60	76	81	152	258	
EA	21.3	21.8	21.7	20.1	19.1	17.6	17.1	15.8	
	26.7	29.0	26.0	25.0	26.8	22.6	22.6	21.5	
	13.5	13.8	16.3	15.5	14.2	13.5	11.5	11.5	
	3.2	3.2	2.1	2.1	2.5	2.1	2.0	2.0	
	53	68	51	60	76	81	152	258	
C	0.6	0.6	0.6	0.7	0.7	0.8	0.8	0.9	
	1.0	1.0	1.0	0.0	1.0	0.0	0.0	0.1	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	
	67	90	74	75	94	94	171	271	
P	19.0	19.8	21.0	22.2	21.5	21.6	22.5	22.3	
	28.6	30.2	31.0	31.0	31.5	33.1	31.0	30.0	
	6.0	3.1	7.0	11.0	5.0	1.0	4.0-	10.5	
	6.3	6.7	6.3	5.8	7.5	8.2	6.1	3.6	
	68	90	74	78	96	96	166	262	
H	6.3	6.2	6.1	5.5	6.0	6.8	6.5	6.6	
	12.8	17.5	15.3	12.8	12.8	15.3	23.1	15.3	
	1.0	0.0	0.5	0.0	0.0	2.0	0.0	0.0	
	2.7	3.8	3.3	2.5	2.6	3.0	3.1	2.7	
	68	89	76	80	93	97	167	271	
W(X)	2.0	1.2	1.1	0.8	0.6	0.8	0.6	0.6	
	12.8	12.6	11.6	12.6	12.8	13.2	14.6	9.0	
	7.6	7.7-	8.0-	8.0-	12.0-	8.6-	10.0-	8.5-	
	5.0	4.5	4.3	4.3	4.8	5.2	4.6	3.5	
W(Y)	1.5	2.6	2.8	1.8	1.5	0.1-	1.0-	3.6-	
	9.0	16.5	13.5	10.1	12.0	14.1	17.8	13.5	
	8.8-	7.3-	6.6-	7.7-	11.0-	8.8-	8.7-	13.6-	
	4.0	5.0	4.5	3.5	4.0	5.2	5.5	5.0	

AUGUST 1964

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	25.0 28.0 23.0 1.1 34	25.0 28.0 20.5 1.5 42	27.0 27.0 21.5 1.2 42	23.8 27.0 21.5 1.2 35	23.0 27.0 20.0 1.6 39	22.3 31.5 20.0 1.5 62	21.8 27.0 19.2 1.5 71	21.5 27.0 18.7 1.2 146	20.3 25.0 17.6 1.2 243
T(W)–T(A)	0.7 3.0 3.0– 1.2 29	0.4 5.0 3.8– 1.6 37	0.4 5.0 3.8– 1.3 37	1.5 5.5 1.0– 1.3 35	1.3 5.0 3.0– 1.5 39	1.0 4.2 6.0– 1.3 62	1.0 5.0 2.7– 1.3 71	0.8 3.8 5.5– 1.3 146	0.4 3.8 5.3– 1.5 243
E(W)–E(A)	5.8 11.0 2.0 2.0 29	0.5 12.5 1.0 2.3 37	7.0 12.5 1.8 2.6 35	6.0 14.7 1.2 3.0 37	5.8 15.1 0.1 2.5 59	5.5 14.8 1.6 2.0 64	5.5 11.2 0.4 2.1 144	4.5 11.8 3.5– 2.3 243	
EA	24.8 30.2 20.3 2.0 29	24.0 28.5 20.3 2.0 37	23.1 28.5 18.1 2.0 35	22.3 26.6 16.1 2.3 37	25.1 25.7 15.0 2.5 59	20.6 26.7 15.6 2.0 64	20.0 24.5 13.7 2.1 144	18.6 23.3 13.0 1.8 240	
C	0.5 1.0 0.2 0.2 34	0.5 1.0 0.2 0.3 37	1.0 1.0 0.3 0.3 42	1.0 1.0 0.1 0.3 37	1.0 1.0 0.1 0.3 43	1.0 1.0 0.3 0.3 73	0.7 1.0 0.3 0.3 82	0.7 1.0 0.1 0.3 244	
P	23.0 30.0 14.5 4.0 34	22.5 30.0 14.1 4.1 43	22.6 29.0 18.5 2.8 42	24.0 30.5 18.5 2.8 43	23.7 28.6 19.1 2.2 72	23.5 28.0 17.0 2.1 82	22.0 28.0 15.5 2.5 154	20.6 26.5 13.2 2.6 244	
W	5.8 12.8 1.5 3.0 32	5.8 12.8 1.0 3.6 36	5.2 13.8 0.5 3.5 35	6.0 11.7 0.0 3.0 44	6.0 11.5 0.0 2.7 68	6.2 12.8 2.0 2.3 78	5.2 12.8 0.5 2.5 153	5.0 15.3 0.0 2.6 243	
W(X)	2.7– 5.8 12.8– 5.1	2.7– 4.0 12.8– 1.5	2.8– 2.2 13.0– 4.5	3.5– 2.2 13.0– 4.0	4.2– 3.5 13.0– 3.5	3.1– 3.5 12.6– 4.2	2.3– 5.8 11.0– 3.6	0.9– 6.1 10.0– 3.0	
W(Y)	1.5 0.8 6.2 5.1 2.7	0.8 7.1 6.6 2.7	0.2– 10.0 6.6– 3.2	0.8– 7.7 9.1 4.0	0.8– 5.7 2.6	0.8– 4.0 7.8 2.7	2.8– 4.0 10.5– 2.5	3.2– 7.0 13.3– 3.3	

JULY 1964

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	24.5 27.0 22.0 1.1 42	24.2 28.0 22.0 1.2 47	23.3 30.0 21.0 1.8 44	22.7 28.0 20.5 1.5 44	21.1 27.6 18.0 1.7 51	20.6 24.2 17.6 1.3 49	19.6 23.1 17.0 1.1 136	18.6 22.6 13.7 1.2 253	
T(W)–T(A)	0.2 3.0 3.5– 1.3 40	0.2 3.0 4.0– 1.5 42	0.8 3.3 4.0– 1.3 34	0.7 5.0 4.0– 1.6 35	0.8 4.0 4.0– 1.7 41	0.5 4.0 3.2– 1.6 42	1.0 4.5 3.2– 1.3 122	0.3 3.5 5.5– 1.6 242	
E(W)–E(A)	4.7 8.5 0.5 2.1 39	5.0 10.2 0.9– 2.7 41	6.3 10.5 1.7 2.0 33	4.5 8.8 1.5 2.6 34	5.1 10.5 1.0– 2.6 37	4.5 9.5 0.8– 2.8 38	4.0 9.5 0.4– 2.1 117	3.3 9.5 3.3– 2.1 232	
EA	24.3 29.5 21.1 2.0 39	24.0 27.6 19.2 2.0 41	22.1 27.5 18.0 2.0 33	22.1 28.7 18.7 1.8 37	20.0 24.3 16.3 2.3 37	19.0 23.0 13.8 2.3 38	18.2 22.3 12.3 1.6 117	17.2 22.0 12.0 1.6 232	
C	0.5 1.0 0.0 0.3 43	0.5 1.0 0.0 0.3 48	0.6 1.0 0.1 0.3 43	0.6 1.0 0.1 0.3 45	0.7 1.0 0.1 0.3 53	0.7 1.0 0.3 0.3 50	0.8 1.0 0.2 0.2 137	0.8 1.0 0.2 0.2 248	
P	26.5 29.5 22.5 1.5 41	26.5 30.0 22.2 1.6 48	27.3 32.0 22.2 2.0 44	27.2 32.0 21.1 2.0 44	25.6 32.0 20.5 2.3 52	25.0 32.0 19.1 2.6 49	23.3 30.0 18.0 2.1 134	22.1 26.7 16.5 2.5 252	
W	5.5 11.2 1.5 2.2 42	6.7 15.3 1.0 3.3 47	7.0 15.5 2.5 3.3 42	5.6 11.2 1.5 2.6 42	5.6 10.7 0.0 2.6 50	5.5 12.3 0.0 3.0 51	4.8 12.3 0.5 2.2 131	5.5 13.3 0.0 2.6 248	
W(X)	4.3– 1.6 11.2– 2.8	5.2– 3.0 15.1– 1.2	4.6– 5.2 15.1– 2.0	2.0– 5.2 9.7– 2.1	2.0– 5.2 10.5– 3.1	0.9– 6.1 6.6– 3.1	1.5– 6.0 9.5– 2.5	0.5– 6.7 9.5– 4.0	
W(Y)	0.7 6.8 6.0– 3.0	1.3– 10.7 2.8	2.0– 4.6 8.0– 2.8	3.6 10.2– 3.6	4.7 10.7– 3.5	5.8 12.3– 4.3	6.6 11.5– 3.1	7.2 12.8– 3.5	

LATITUDE 30° – 35° N.

OCTOBER 1964

		LONGITUDE WEST							
	170	165	160	155	150	145	140	135	130
T(A)	3	3	3	3	3	3	3	3	3
	21.6	21.3	20.6	20.6	20.3	19.7	19.7	20.0	19.0
	26.5	28.5	28.1	25.0	25.0	24.0	23.0	23.0	25.5
	16.5	16.5	15.0	15.0	13.0	13.1	13.1	14.2	14.0
	2.0	2.2	2.0	2.0	2.2	2.1	1.7	1.2	1.3
	101	118	112	105	123	117	190	186	284
T(W)-T(A)	3	3	3	3	3	3	3	3	3
	1.7	1.6	2.0	2.0	1.8	1.3	0.9	0.9	0.5
	6.6	6.8	7.1	8.0	8.0	7.7	7.7	7.0	5.0
	2.1-	4.5-	3.1-	3.0-	3.0-	2.6-	2.5-	2.5-	6.6-
	2.0	2.1	2.1	2.0	2.0	1.7	1.5	1.5	1.6
	98	114	109	98	119	111	111	186	279
E(W)-E(A)	3	3	3	3	3	3	3	3	3
	7.0	7.0	7.0	7.2	7.0	5.2	4.5	4.5	3.7
	15.5	16.3	16.6	16.0	14.7	12.0	11.2	11.2	9.5
	1.1-	2.7-	1.3-	1.5-	1.5-	0.7-	2.1-	2.1-	4.0-
	4.0	4.2	4.0	4.0	3.1	2.6	2.3	2.3	2.5
	91	106	103	93	116	106	179	179	273
EA	3	3	3	3	3	3	3	3	3
	20.1	19.5	18.8	18.0	17.5	18.1	18.5	18.7	17.5
	27.3	26.7	25.0	26.6	26.3	24.8	24.8	28.2	22.6
	12.0	11.2	11.0	9.2	8.5	11.1	12.5	7.6	13.1
	4.1	4.0	3.5	4.2	3.5	2.8	2.0	4.2	1.6
	91	106	103	93	116	106	179	179	273
C	3	3	3	3	3	3	3	3	3
	0.6	0.6	1.0	1.0	0.7	0.6	0.7	0.7	0.7
	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0
	102	118	109	101	123	118	191	191	285
P	3	3	3	3	3	3	3	3	3
	23.2	23.0	22.1	21.2	20.0	18.3	18.7	18.2	18.5
	32.7	34.0	34.0	32.0	29.5	27.0	28.2	25.6	25.6
	13.7	9.0	8.0	9.0	6.5	5.0	7.6	2.2	2.2
	4.3	5.0	5.1	5.1	5.6	5.7	4.2	5.1	5.1
	97	109	102	98	116	107	178	275	275
X	3	3	3	3	3	3	3	3	3
	7.3	7.2	7.6	8.0	7.6	8.1	7.0	6.0	6.0
	15.3	18.0	17.0	24.1	20.5	18.5	17.0	17.5	17.5
	1.0	0.0	1.5	0.9	0.0	0.0	0.0	0.0	0.0
	3.5	4.2	3.8	4.1	4.0	4.3	3.5	3.0	3.0
	100	117	107	107	120	119	187	277	277
W(X)	0.9-	0.8-	2.1-	2.6-	2.6	2.2	0.9	0.9	0.8
	13.3	12.8	12.1	15.6	15.8	15.3	12.0	13.0	13.0
	11.6-	12.5-	9.7-	9.2-	9.0-	14.0-	11.5-	9.5-	9.5-
	5.5	5.1	5.0	5.5	5.3	5.8	5.0	4.2	4.2
	2.0-	10.1	5.0	5.1	5.3	1.5-	0.2	1.2-	1.2-
	9.1	17.6-	10.0	12.0	12.0	18.0-	17.0	17.1	17.1
W(Y)	5.5	6.1	16.5-	18.3-	18.0-	15.7-	15.8-	13.3-	13.3-
			5.5	6.2	5.8	6.5	6.0	5.0	5.0

SEPTEMBER 1964

		LONGITUDE WEST							
	170	165	160	155	150	145	140	135	130
T(A)	3	3	3	3	3	3	2	3	3
	24.5	24.0	24.3	23.5	22.5	21.5	20.5	19.2	
	28.0	31.0	31.0	27.6	29.5	26.0	24.2	24.2	
	28.0	19.0	20.0	21.0	18.0	18.7	17.0	16.5	
	1.7	1.7	1.7	1.1	1.5	1.5	1.1	1.3	
	67	7+	69	69	88	103	152	232	
T(W)-T(A)	3	3	3	3	3	3	2	3	
	1.5	1.0	0.9	0.9	4.5	1.0	1.0	0.8	
	6.0	4.6	4.1	4.5	4.5	5.7	5.0	5.5	
	2.0-	5.5-	4.0-	3.8-	6.5-	5.0-	4.2-	5.0-	
	1.5	1.6	1.7	1.7	1.6	1.6	1.5	1.5	
	63	71	65	67	84	99	150	230	
E(W)-E(A)	3	3	3	3	3	3	3	3	
	7.0	7.0	7.5	7.5	7.2	6.5	6.1	5.5	
	17.1	17.6	18.0	16.5	12.8	14.2	14.0	11.5	
	3.7	2.0-	3.3	2.7	1.1-	0.9-	1.5-	1.5-	
		3.0	3.3	2.5	2.5	2.6	2.5	2.3	
	62	68	61	63	79	95	145	227	
EA	3	3	3	3	3	3	2	3	
	23.8	24.0	23.0	21.5	20.0	19.1	18.0	16.5	
	29.7	28.0	28.8	27.1	31.0	26.5	24.8	24.8	
	14.2	14.0	15.2	17.1	14.0	14.0	12.3	12.3	
	3.8	3.0	2.6	2.5	2.8	2.5	2.2	2.1	
	62	68	61	63	79	95	145	227	
C	3	3	3	3	3	3	3	3	
	0.5	0.5	0.4	0.4	0.5	0.7	0.8	0.8	
	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.0	
	69	78	71	72	88	102	151	234	
P	3	3	3	3	3	3	2	3	
	20.6	20.5	22.3	23.5	24.1	24.8	23.2	22.0	
	24.5	26.2	26.7	28.0	30.5	32.0	32.7	29.5	
	14.0	13.0	15.2	17.0	14.0	19.0	16.0	13.0	
	2.8	3.0	3.3	2.2	3.0	2.5	3.0	3.0	
	65	74	70	66	85	98	148	231	
X	3	3	3	3	3	3	2	3	
	5.5	5.5	4.8	5.0	5.2	5.6	6.5	7.0	
	13.0	13.0	10.2	10.7	10.2	12.8	12.8	18.0	
	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	
	3.5	3.0	2.2	2.3	2.3	3.0	2.7	3.2	
	65	76	67	67	85	102	150	235	
W(X)	2.0-	1.3-	2.5-	2.7-	4.0-	4.2-	4.3-	2.6-	
	9.0	9.0	5.0	3.8	2.3	3.2	3.2	6.0	
	11.2-	12.0-	8.1-	10.6-	10.2-	12.6-	12.6-	12.0-	
	4.2	3.8	2.5	3.0	2.7	3.3	3.3	3.1	
	0.5-	0.1	1.1	2.0	0.7-	3.5-	3.5-	5.7-	
	7.0	9.1	10.2	9.2	7.7	5.0	1.1-	3.8-	
W(Y)	12.6-	13.6-	10.2-	7.5-	8.0-	11.1-	9.6-	18.0-	
	4.5	4.6	3.7	3.2	3.1	2.6	2.2	3.2	

NOVEMBER 1964

				LONGITUDE WEST				
	170	165	160	155	150	145	140	135	130

T(A)	170	165	160	155	150	145	140	135	130
	3	3	3	3	3	3	3	3	3
	19.6	19.0	18.5	18.3	18.3	18.3	17.8	17.5	17.0
	25.0	24.0	24.0	24.0	22.1	23.1	23.7	23.5	22.5
	15.5	14.0	13.0	14.0	13.0	13.0	13.0	13.5	13.1
	1.7	1.7	2.0	1.6	1.8	1.8	1.7	1.6	1.3
	120	143	142	145	154	164	207	207	302

T(W)-T(A)	170	165	160	155	150	145	140	135	130
	3	3	3	3	3	3	3	3	3
	1.3	1.3	1.7	1.6	1.5	1.2	1.2	1.7	1.1
	6.2	10.0	9.0	7.0	9.0	8.0	8.0	8.0	5.5
	2.0-	2.5-	3.5-	2.5-	3.3-	3.1-	3.1-	4.5-	4.5-
	1.8	2.2	2.2	2.0	2.0	1.7	1.7	1.7	1.6
	115	143	135	137	141	150	195	195	289

E(W)-E(A)	170	165	160	155	150	145	140	135	130
	3	3	3	3	3	3	3	3	3
	5.7	5.6	6.0	5.7	5.0	4.3	4.7	4.7	4.5
	14.0	17.0	14.0	13.2	13.7	11.5	12.5	12.5	12.0
	2.7-	1.7-	2.6-	2.0-	4.0-	2.7-	3.5-	3.0-	3.0-
	3.8	3.7	4.0	4.1	3.7	3.6	3.6	3.1	3.1
	106	130	121	131	129	139	184	184	279

EA	170	165	160	155	150	145	140	135	130
	3	3	3	3	3	3	3	3	3
	17.7	17.0	16.5	16.3	16.7	16.5	15.6	15.0	15.0
	25.5	24.0	24.8	24.8	26.5	23.0	23.3	22.2	22.2
	7.7	8.5	9.0	9.3	8.0	8.0	9.2	9.2	9.2
	3.3	3.0	3.5	3.6	4.6	3.5	3.0	2.6	2.6
	106	130	121	131	129	139	184	184	279

C	170	165	160	155	150	145	140	135	130
	3	3	3	3	3	3	3	3	3
	0.7	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.7
	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	117	137	140	141	152	157	202	202	294

P	170	165	160	155	150	145	140	135	130
	3	3	3	3	3	3	3	3	3
	16.5	16.3	21.0	21.6	22.5	22.5	22.0	21.2	21.2
	34.5	34.5	35.5	37.0	35.5	35.5	33.5	33.0	33.0
	10.5	8.8	2.7-	2.8-	6.2	5.0	9.0	9.0	9.0
	12.3	13.2	11.0	10.0	8.2	6.0	4.6	4.8	4.8
	114	138	139	141	154	163	206	206	302

M	170	165	160	155	150	145	140	135	130
	3	3	3	3	3	3	3	3	3
	10.2	9.5	8.0	7.5	8.0	8.7	7.6	7.6	7.5
	25.6	23.1	18.0	19.5	18.0	23.1	18.0	18.0	25.6
	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.5
	4.5	4.0	3.5	3.3	3.3	3.5	3.5	3.5	3.5
	121	143	144	143	158	166	208	208	301

W(X)	170	165	160	155	150	145	140	135	130
	3	3	3	3	3	3	3	3	3
	0.3	0.9-	1.7-	0.6-	0.1-	0.0	0.9	1.3
	23.1	22.7	12.6	14.1	15.5	11.1	11.8	13.5
	13.3	16.7	17.7	14.1	11.1	10.2	10.2	8.7-
	8.0	7.5	5.6	5.5	5.0	4.8	4.8	4.8

W(Y)	170	165	160	155	150	145	140	135	130
	3	3	3	3	3	3	3	3	3
	22.1	16.8	15.1	19.5	18.0	21.7	14.0	22.2	25.6-
	17.6-	17.6-	13.5-	12.3-	13.5-	15.8-	17.0-	25.6-	6.1
	7.1	6.3	6.2	6.1	7.1	8.0	6.6	6.1

DECEMBER 1964

				LONGITUDE WEST				
	170	165	160	155	150	145	140	135	130

T(A)	170	165	160	155	150	145	140	135	130
	3	3	3	3	3	3	3	3	3
	16.7	16.8	16.8	17.5	16.0	18.1	18.5	18.0	17.0
	21.0	21.0	21.0	24.0	24.2	23.7	22.0	22.0	20.7
	13.0	12.0	12.0	11.0	12.0	12.0	11.5	11.5	12.5
	1.8	2.0	2.0	2.1	2.0	2.0	1.7	1.5	1.6
	77	113	108	93	100	112	142	199	282

T(W)-T(A)	170	165	160	155	150	145	140	135	130
	3	3	3	3	3	3	3	3	3
	1.6	2.0	1.8	1.1	1.0	1.0	0.3	0.5	0.3
	7.0	6.0	6.0	5.3	5.2	6.0	6.5	7.1	6.0
	2.0-	2.0-	2.0-	4.0-	4.2-	3.0-	5.5-	4.8-	4.1-
	2.0	1.8	1.8	1.6	1.8	1.8	1.7	1.7	1.7
	71	108	95	67	95	107	133	193	274

E(W)-E(A)	170	165	160	155	150	145	140	135	130
	3	3	3	3	3	3	3	3	3
	4.7	5.1	5.1	3.3	3.1	3.2	1.8	2.2	1.8
	14.0	13.6	13.6	13.8	10.0	10.3	9.5	12.2	9.6
	1.6-	3.5-	3.5-	2.8-	3.5-	2.8-	7.3-	3.6-	4.3-
	3.5	3.5	3.5	3.2	3.2	3.5	3.0	2.8	2.7
	67	101	101	82	96	103	122	190	267

EA	170	165	160	155	150	145	140	135	130
	3	3	3	3	3	3	3	3	3
	15.2	15.3	15.3	17.0	17.6	17.6	18.5	17.7	16.7
	21.2	22.0	22.0	24.1	24.1	24.8	24.8	24.8	23.3
	8.6	9.5	9.5	9.0	10.1	8.5	10.3	8.0	8.6
	3.0	3.2	3.2	3.3	3.3	3.5	3.5	2.7	2.7
	67	101	101	82	92	103	122	190	267

C	170	165	160	155	150	145	140	135	130
	3	3	3	3	3	3	3	3	3
	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.8
	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	0.1	0.1	0.1	0.3	0.3	0.3	0.3	0.3	0.3
	68	103	103	81	92	107	138	189	263

P	170	165	160	155	150	145	140	135	130
	3	3	3	3	3	3	3	3	3
	12.2	13.0	13.0	14.8	15.8	15.8	15.3	19.0	20.5
	26.6	26.0	26.0	29.0	32.5	31.5	29.5	32.5	32.0
	19.3	14.0	14.0	10.0	3.0	3.0	6.8-	3.0	6.6
	12.1	9.7	9.7	6.0	7.7	8.2	8.0	6.0	5.1
	77	111	111	90	97	108	135	194	283

M	170	165	160	155	150	145	140	135	130
	3	3	3	3	3	3	3	3	3
	9.7	10.0	10.0	9.7	8.8	8.1	8.3	7.3	6.6
	30.2	27.2	27.2	21.5	19.5	23.1	20.5	18.5	18.5
	0.0	0.0	0.0	0.0	1.0	1.5	0.5	0.0	0.0
	6.3	5.0	5.0	3.5	4.0	4.1	4.3	3.7	3.5
	78	113	113	92	100	111	142	189	275

W(X)	170	165	160	155	150	145	140	135	130
	3	3	3	3	3	3	3	3	3
	1.2	2.5	2.5	0.8	2.5	2.7	4.1	2.5	2.2
	18.0	16.0	16.0	16.0	19.5	20.5	20.5	11.7	17.0
	24.5-	25.5-	25.5-	13.8-	13.3-	15.3-	5.7-	11.8-	10.7-
	9.0	7.6	7.6	7.5	6.1	6.1	4.0	6.0	6.6

W(Y)	170	165	160	155	150	145	140	135	130
	3	3	3	3	3	3	3	3	3
	15.8	18.8	18.8	21.5	15.6	15.1	18.5	14.2	16.5
	19.2-	12.3-	12.3-	12.0-	11.7-	11.1-	12.0-	16.8-	17.3-
	7.3	7.5	7.5	6.1	6.1	5.5	5.6	5.8	5.5

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	170	165	160	155	150	145	140	135	130
T(A)	3 2	3 3	3 3	3 3	3 3	3 3	3 3	3 3	3 2
	14.3	14.5	15.0	15.0	15.5	16.0	16.7	16.6	14.7
	19.0	19.0	20.0	21.0	21.0	21.0	21.0	22.0	20.0
	11.5	10.6	10.5	10.5	10.0	12.0	12.0	12.0	10.5
	1.7	1.7	1.7	1.8	2.1	2.1	1.7	1.3	2.0
	33	57	54	54	54	78	89	150	259
T(W)–T(A)	4 2	3 3	3 3	3 3	3 3	3 3	3 3	3 3	3 2
	1.0	1.5	1.5	1.3	1.3	1.3	1.2	0.9	1.0
	4.3	5.0	5.0	4.5	7.0	6.5	5.5	6.0	5.8
	2.0	3.0	3.1	4.1	4.1	2.8	3.8	4.3	4.3
	1.6	1.7	1.7	1.7	2.5	2.0	1.7	1.5	2.0
	31	55	55	49	47	73	83	141	254
E(W)–E(A)	4 2	3 3	3 3	3 3	3 3	3 3	3 3	3 3	3 2
	4.2	5.1	4.5	4.5	3.6	3.5	4.0	3.5	3.6
	8.6	9.3	8.8	9.2	9.2	11.2	11.2	11.0	9.7
	2.0	0.7	0.8	1.8	1.8	1.8	3.8	2.8	3.2
	2.7	2.1	2.5	3.0	3.3	3.3	2.7	2.5	2.5
	31	55	48	47	73	73	82	137	245
EA	4 2	3 3	3 3	3 3	3 3	3 3	3 3	3 3	3 2
	12.2	12.0	12.8	14.3	15.8	15.2	15.2	15.2	13.2
	16.7	16.5	19.5	21.2	21.5	21.5	21.5	20.0	19.5
	9.0	7.2	7.0	7.7	7.0	7.8	7.8	7.8	8.1
	2.0	2.0	2.5	3.5	3.2	3.3	2.5	2.2	2.5
	31	55	48	47	73	73	82	137	245
C	3 2	3 3	3 3	3 3	3 3	3 3	3 3	3 3	3 2
	0.7	0.7	0.7	0.8	0.8	0.9	0.8	0.8	0.8
	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	0.1	0.3	0.1	0.1	0.3	0.2	0.0	0.1	0.0
	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3
	32	54	54	54	52	74	87	144	260
P	3 2	3 3	3 3	3 3	3 3	3 3	3 3	3 3	3 2
	21.3	21.6	29.2	20.2	19.0	18.8	19.1	20.0	22.6
	30.6	29.5	29.5	29.5	28.6	28.6	34.0	34.0	36.0
	5.0	6.0	5.0	5.0	2.7	2.5	1.0	3.0	1.7
	5.3	5.2	5.7	5.7	5.6	5.0	8.1	7.6	6.7
	33	57	55	54	78	78	89	146	264
W	3 2	3 3	3 3	3 3	3 3	3 3	3 3	3 3	3 2
	9.0	7.7	8.3	9.3	11.7	9.3	9.3	8.5	7.1
	15.3	17.0	29.8	28.2	23.1	18.0	18.0	20.5	18.0
	2.5	0.0	0.0	1.0	0.0	3.0	3.0	1.0	0.0
	33	58	55	53	78	78	89	149	258
W(X)	0.1	0.4	2.7	2.7	1.7	4.5	4.0	3.8	3.0
	8.6	16.1	13.3	8.6	8.6	8.6	13.8	12.0	12.7
	9.5	10.6	15.1	11.6	11.6	5.7	13.5	11.6	9.5
	5.2	2.0	5.6	4.0	4.0	5.0	5.0	5.0	3.7
W(Y)	0.5	2.0	4.3	4.3	1.7	1.7	0.3	2.5	0.4
	14.5	9.0	10.6	10.6	10.2	15.5	14.1	17.6	15.5
	12.6	15.1	29.8	28.2	21.7	21.7	17.1	14.5	17.0
	7.7	6.0	6.1	8.1	9.8	9.8	7.6	6.0	6.7

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	170	165	160	155	150	145	140	135	130
T(A)	3 2	3 3	3 3	3 3	3 3	3 3	3 3	3 3	3 2
	14.0	15.3	16.3	16.1	16.8	17.5	17.5	17.1	15.3
	19.0	20.5	20.0	21.0	21.0	25.0	21.0	21.0	21.5
	9.3	10.0	11.0	11.0	12.6	12.6	12.6	13.1	11.5
	2.5	2.5	2.5	2.3	2.0	2.2	1.7	1.5	1.6
	63	76	81	81	75	82	104	181	273
T(W)–T(A)	3 2	3 3	3 3	3 3	3 3	3 3	3 3	3 3	3 2
	2.0	2.0	1.5	1.5	1.0	1.0	0.6	0.7	1.0
	6.8	6.5	6.8	6.8	6.0	6.0	6.0	5.5	6.1
	1.2	2.1	2.0	2.0	2.5	5.0	3.0	5.3	3.8
	1.7	1.7	2.0	2.0	1.8	2.0	1.8	1.6	1.5
	61	72	77	77	72	79	102	177	265
E(W)–E(A)	3 2	3 3	3 3	3 3	3 3	3 3	3 3	3 3	3 2
	5.0	5.1	3.8	3.8	3.8	3.5	2.5	3.1	3.5
	11.0	12.3	12.3	11.6	11.6	12.0	10.8	10.0	10.7
	0.4	1.4	1.5	1.5	2.5	3.5	4.2	4.3	2.8
	2.5	3.1	3.0	3.1	3.1	3.8	3.1	3.1	2.5
	61	72	77	77	71	78	102	173	26C
EA	3 2	3 3	3 3	3 3	3 3	3 3	3 3	3 3	3 2
	13.0	13.7	15.2	15.2	15.5	16.6	17.1	17.1	14.0
	20.0	22.1	22.0	22.0	22.0	23.0	22.0	22.0	20.5
	3.2	6.0	6.7	6.7	7.8	9.0	9.3	8.6	6.6
	3.1	3.0	3.0	3.6	3.2	4.0	3.0	3.0	2.2
	61	72	77	77	71	78	102	173	26C
C	3 2	3 3	3 3	3 3	3 3	3 3	3 3	3 3	3 2
	0.7	0.6	0.7	0.7	0.7	0.6	0.6	0.7	0.7
	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	0.0	0.0	0.0	0.3	0.0	0.3	0.0	0.0	0.0
	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	64	73	77	85	72	77	100	178	268
P	3 2	3 3	3 3	3 3	3 3	3 3	3 3	3 3	3 2
	10.7	11.0	11.1	12.6	12.6	14.3	16.0	21.2	22.6
	24.0	26.0	24.7	26.6	23.0	31.2	34.0	35.5	36.7
	16.0	12.3	14.0	9.5	3.0	0.5	0.5	6.0	3.0
	10.0	9.7	7.0	7.0	4.0	8.3	7.3	6.6	6.5
	63	77	83	75	82	82	107	177	272
R	3 2	3 3	3 3	3 3	3 3	3 3	3 3	3 3	3 2
	8.3	7.8	9.0	9.0	8.5	7.5	8.5	8.1	6.5
	20.0	15.3	24.5	23.1	20.5	21.0	21.0	17.5	17.5
	1.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	64	75	80	80	73	79	103	177	274
W(X)	4.0	2.0	1.5	1.6	2.0	2.0	1.0	0.6	0.3
	19.7	15.3	15.6	19.7	15.3	15.3	13.6	16.6	16.6
	12.0	12.0	18.5	15.6	6.8	12.8	13.5	12.0	12.0
	6.0	6.5	6.0	6.2	4.5	4.3	4.7	5.1	0.3
W(Y)	13.8	13.6	0.3	0.4	12.8	17.6	20.7	16.3	15.3
	12.6	13.3	23.1	21.6	12.8	19.3	15.8	15.3	15.3
	5.5	5.5	8.7	8.0	8.0	0.5	7.1	7.0	5.0

MARCH 1965

LATITUDE 30° – 35° N.

	170	165	160	155	150	145	140	135	130
		LONGITUDE WEST							
T(A)		0	3 / 15.5 21.0 12.0 2.0 48	3 / 16.0 22.6 13.0 1.6 60	3 / 17.1 22.6 13.0 1.7 74	3 / 16.8 22.0 12.2 1.5 94	2 / 16.3 23.0 12.0 1.6 182	3 / 14.0 22.0 9.2 1.6 294	3
T(W)-T(A)		0	3 / 0.9 3.8 6.6- 2.0 41	3 / 0.8 0.0 5.0- 1.5 57	3 / 0.5 5.0 6.5- 1.8 66	3 / 0.9 7.0 4.2- 2.0 88	2 / 0.9 4.1 4.2- 1.5 175	2 / 1.2 7.0 6.5- 1.8 288	2
E(W)-E(A)		0	3 / 3.5 12.5 4.8- 3.3 41	3 / 2.5 9.5 1.8- 2.3 57	3 / 2.5 10.5 2.8- 2.6 63	3 / 4.0 11.0 3.1- 3.0 76	2 / 4.3 9.0 2.0- 2.3 170	2 / 4.5 10.5 2.2- 2.0 287	2
EA		0	3 / 13.8 20.1 9.6 2.8 41	3 / 15.5 20.8 10.0 2.5 57	3 / 16.3 20.5 10.0 2.5 63	3 / 15.0 23.3 9.3 2.8 76	3 / 14.0 20.8 8.6 2.3 170	2 / 11.8 19.3 7.6 1.6 287	2
C		0	3 / 0.7 1.0 0.0 0.3 47	3 / 0.8 0.0 0.0 0.3 59	3 / 0.8 0.0 0.0 0.3 67	3 / 0.7 0.0 0.0 0.3 94	2 / 0.7 0.0 0.0 0.3 179	2 / 0.7 1.0 0.0 0.3 295	2
P		0	3 / 15.7 28.0 2.5 6.3 49	3 / 14.2 25.0 3.0 4.6 63	3 / 18.0 28.2 7.0 4.6 73	3 / 21.5 32.0 9.6 4.8 94	2 / 22.3 31.6 8.0 4.7 180	2 / 21.0 31.6 2.0 6.5 294	2
W		0	3 / 10.0 17.8 2.5 3.5 50	3 / 8.1 18.0 0.0 3.6 63	3 / 7.7 13.8 0.0 3.3 74	3 / 6.5 15.3 0.0 3.5 94	2 / 7.3 19.5 0.0 3.5 178	2 / 6.7 23.1 0.0 4.0 288	2
W(X)		0	1.8 15.1 6.2 1.7	9.6 11.6- 5.0	2.5- 9.8 12.8- 5.0	2.5- 12.5 11.1- 4.8	2.3- 11.6 12.0- 4.6	0.9 19.3 5.1 3.5-	
W(Y)			17.8 14.5 14.1- 8.1	5.0 13.8- 7.5	1.7- 13.0- 6.1	15.1 12.5- 5.0	0.4 12.0- 19.5- 6.1	0.7- 10.1 15.6- 4.6	

APRIL 1965

LATITUDE 30° – 35° N.

	170	165	160	155	150	145	140	135	130
		LONGITUDE WEST							
T(A)	4 / 15.3 22.6 10.0 2.5 63	3 / 15.8 22.0 11.0 2.1 47	3 / 16.0 19.5 11.0 1.8 78	3 / 16.5 28.1 13.1 2.3 79	3 / 16.5 24.0 12.0 2.0 101	3 / 16.2 22.0 9.2 2.0 111	2 / 16.1 20.5 11.0 1.8 172	3 / 14.7 20.5 11.0 1.7 248	2
T(W)-T(A)	4 / 0.4 4.7 5.0- 2.1 61	3 / 0.4 5.0 5.0- 1.7 76	3 / 0.6 5.0 4.5- 2.0 76	3 / 0.8 5.5 8.1- 2.0 79	3 / 1.0 4.5 5.0- 1.8 99	3 / 1.1 6.5 4.0- 2.1 109	3 / 1.0 6.6 4.0- 1.8 169	3 / 0.6 6.1 5.6- 2.0 243	2
E(W)-E(A)	4 / 2.7 9.6 3.1- 3.5 59	3 / 2.8 10.0 4.6- 2.8 94	3 / 3.0 10.0 5.0- 3.3 75	3 / 3.7 11.2 7.5- 3.3 76	3 / 4.8 11.6 5.2- 3.1 99	3 / 4.2 11.5 3.7- 3.0 102	2 / 4.6 11.0 1.5- 2.6 165	3 / 3.5 9.1 3.0- 2.6 240	2
EA	4 / 14.0 20.6 7.5 3.6 59	3 / 14.5 20.0 9.0 3.0 75	3 / 14.8 21.0 9.0 3.1 75	3 / 14.6 29.5 8.8 3.5 76	3 / 14.1 22.7 8.7 3.1 99	3 / 14.1 23.3 9.1 2.6 102	2 / 13.8 20.8 7.8 2.6 165	2 / 13.0 19.0 7.0 2.5 240	2
C	4 / 0.7 1.0 0.0 0.3 67	3 / 0.7 0.0 0.0 0.3 93	3 / 0.8 0.1 0.1 0.2 79	3 / 0.8 1.0 0.1 0.3 78	3 / 0.8 0.0 0.0 0.3 99	3 / 0.7 1.0 0.0 0.3 111	2 / 0.7 1.0 0.0 0.3 167	3 / 0.7 1.0 0.0 0.3 245	2
P	4 / 22.7 32.0 6.0 7.1 67	3 / 22.8 35.7 5.0 8.6 99	3 / 21.8 35.0 2.2 9.2 78	3 / 24.8 35.5 3.5 7.5 80	3 / 25.0 35.5 4.0 7.1 99	3 / 25.2 35.0 7.0 6.0 106	3 / 23.0 31.0 6.0 6.0 165	3 / 21.0 31.5 7.6 5.8 244	2
W	4 / 7.6 18.5 0.0 3.6 66	3 / 7.0 17.0 0.0 3.0 98	3 / 7.5 18.0 1.5 3.3 76	3 / 6.6 12.8 0.0 2.7 80	3 / 7.0 18.0 1.0 3.0 101	3 / 7.0 18.0 1.0 3.2 111	2 / 7.2 18.0 0.0 3.5 169	3 / 7.5 19.0 0.0 3.8 246	2
W(X)	2.0 7.0 18.2 4.7	2.5- 12.8 16.7- 5.2	2.8- 9.5 10.0- 5.3	3.2- 10.6 10.0- 4.7	1.6 10.2 15.5- 4.6	0.4- 10.2 9.7- 4.2	0.4- 13.2 10.0- 4.7	1.7 14.6 7.7- 4.3	
W(Y)	1.1 13.0- 13.0- 6.5	1.2 10.5 12.8- 5.0	0.0 13.0- 13.5- 5.5	0.8- 12.3 9.0- 4.2	1.5- 11.2 13.0- 5.5	2.3- 11.1 17.7- 6.0	2.6- 14.1 17.7- 6.0	3.0- 16.5 18.0- 6.2	

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LATITUDE 30° – 35° N.

JUNE 1965

					LONGITUDE WEST				
	170	165	160	155	150	145	140	135	130
T(A)	3	3	3	3	3	3	2	3	2
	19.7	20.5	20.3	20.6	20.2	20.2	18.5	19.5	16.8
	25.0	25.5	25.5	26.5	25.5	25.5	24.2	25.0	24.5
	13.7	15.0	15.7	15.7	15.0	17.0	14.2	25.0	12.6
	2.5	2.2	1.8	1.8	2.0	1.5	1.6	1.7	1.5
	63	79	75	75	76	96	144	112	225
T(W)-T(A)	3	3	3	3	3	3	2	3	2
	0.5	0.0	0.9	0.9	1.0	0.9	1.1	1.0	0.5
	5.5	6.0	4.6	5.5	5.0	5.0	5.1	5.5	5.0
	4.5	4.3-	3.2-	3.2-	3.3-	4.2-	4.2-	4.7-	8.5-
	1.7	1.8	1.8	1.6	1.8	1.7	1.5	1.7	1.6
	62	79	75	75	75	92	144	108	220
E(W)-E(A)	3	3	3	3	3	3	2	3	2
	3.0	3.2	4.5	4.5	4.8	5.1	5.0	5.5	3.5
	8.7	10.3	12.1	12.1	11.7	14.0	16.0	18.0	9.2
	3.1	1.7-	3.7-	3.7-	2.7-	4.1-	0.4	2.1-	5.0-
	3.0	2.8	3.5	3.5	3.1	3.0	2.3	3.5	2.3
	60	78	70	70	71	87	144	104	220
EA	3	3	3	3	3	3	3	3	2
	19.5	20.1	19.5	18.7	18.7	18.3	16.5	17.0	15.1
	27.1	25.7	25.7	25.5	25.5	25.6	26.1	24.0	26.6
	10.3	11.0	9.6	11.6	11.6	12.5	9.7	10.5	11.3
	4.0	3.5	3.2	3.0	3.0	2.6	2.5	2.8	2.0
	60	78	70	71	71	87	144	104	220
C	3	3	3	3	3	3	2	3	2
	0.7	1.0	1.0	0.5	0.7	0.7	0.7	0.7	0.7
	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0
	59	82	72	76	77	96	143	111	222
P	3	3	3	3	3	3	3	3	2
	22.1	23.0	23.8	24.6	25.8	25.8	25.3	25.5	23.3
	28.0	27.5	29.6	32.5	34.1	34.1	33.0	34.5	29.5
	12.5	14.7	13.5	15.0	15.7	15.7	18.0	15.5	7.0
	3.1	2.5	2.7	3.3	3.5	3.5	2.7	3.8	2.8
	61	79	71	77	92	92	143	109	221
N	3	3	3	3	3	3	3	3	2
	5.7	5.6	5.0	4.6	5.2	5.2	5.8	5.6	6.3
	12.8	13.3	12.8	10.2	10.7	10.7	12.8	12.8	13.8
	0.7	0.0	1.0	0.0	1.0	1.0	1.3	0.0	1.0
	2.7	2.8	2.5	2.5	2.5	2.5	2.3	2.7	2.6
	62	79	73	75	90	90	140	109	222
W(X)	2.5	1.5	0.2	0.7	0.9-	0.9-	1.3-	1.0-	0.1
	9.7	12.6	12.0	9.5	7.7	7.7	10.5-	12.0	10.6
	6.5-	7.5-	9.2-	9.6-	10.0-	10.0-	10.5-	10.5-	9.7-
	3.8	4.1	3.8	3.7	4.5	4.5	4.0	5.0	3.2
W(Y)	1.2	1.6	1.2	0.2	0.3-	0.3-	3.3-	0.8-	5.1-
	9.1	10.2	8.1	9.0	10.5	10.5	6.7	8.6	5.2
	8.1-	7.7-	10.2-	9.2-	9.0-	9.0-	9.6-	7.5-	13.1-
	4.2	4.0	3.7	3.6	3.5	3.5	3.2	3.7	3.2

MAY 1965

					LONGITUDE WEST				
	170	165	160	155	150	145	140	135	130
T(A)	3	3	3	3	3	3	3	3	3
	16.5	16.7	17.8	18.3	18.3	17.8	17.0	15.2	
	28.1	21.6	24.2	24.2	26.0	23.7	23.7	23.0	
	13.0	12.0	13.7	15.5	13.1	14.2	13.1	11.0	
	4.3	1.8	1.8	1.7	1.8	1.8	1.8	1.8	
	79	128	111	110	127	129	185	248	
T(W)-T(A)	3	3	3	3	3	3	3	3	
	0.7	0.7	0.1	0.2-	0.1-	0.4	1.0	1.0	
	5.5	5.5	4.0	3.8	3.3	4.3	5.5	6.6	
	11.0-	3.0-	7.0-	6.0-	6.0-	4.0-	6.6-	6.0-	
	2.1	1.5	1.8	1.7	1.7	1.7	1.8	1.8	
	79	127	111	107	126	128	180	243	
E(W)-E(A)	3	3	3	3	3	3	3	3	
	3.2	3.0	2.3	1.6	2.2	3.6	5.0	4.2	
	10.0	11.3	10.3	7.2	9.1	11.1	9.5	9.5	
	3.2	2.5-	3.8-	5.5-	2.7-	1.8-	2.3	3.1-	
	2.8	2.8	2.7	2.6	2.5	2.6	2.3	2.6	
	79	127	110	106	125	124	178	240	
EA	3	3	3	3	3	3	3	3	
	15.0	15.7	17.0	17.8	17.5	15.8	14.5	13.2	
	22.6	20.8	23.3	26.1	23.5	22.8	21.1	21.2	
	8.8	9.2	11.6	11.1	11.1	9.0	9.0	7.0	
	3.0	2.7	2.8	2.8	2.6	2.7	2.5	2.5	
	79	127	110	106	125	124	178	240	
C	3	3	3	3	3	3	3	3	
	0.8	0.7	0.7	0.6	0.6	0.6	0.7	0.9	
	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	
	80	127	108	110	125	129	185	239	
P	3	3	3	3	3	3	3	3	
	21.3	21.1	21.5	22.8	24.7	26.7	26.5	26.2	
	29.5	30.0	32.0	35.0	35.0	35.5	36.7	34.7	
	10.6	11.3	12.0	10.0	10.5	17.0	6.0	19.0	
	4.1	4.3	5.0	5.8	5.8	4.3	4.3	3.5	
	82	127	110	106	122	121	178	239	
N	3	3	3	3	3	3	3	3	
	6.0	7.0	6.7	6.7	6.2	6.1	5.1	5.8	
	16.5	13.8	12.8	13.3	13.3	11.2	12.8	14.3	
	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	
	3.1	2.5	2.5	2.7	3.2	2.5	2.5	2.5	
	82	128	112	112	125	124	174	242	
W(X)	0.5	0.6-	0.4	1.7-	1.7-	2.5-	2.3-	1.0-	
	11.6	9.3	10.5	10.2	10.2	7.1	8.6	6.0	
	12.5-	8.7-	9.0-	10.1-	15.3-	10.7-	10.0-	7.7-	
	4.5	4.3	5.2	4.1	4.1	3.8	3.6	2.8	
W(Y)	1.8-	1.0	1.0	3.3	2.8	1.5	0.6-	4.5-	
	10.0	12.0	10.6	12.6	20.7	11.0	12.0	4.7	
	15.3-	12.0-	10.5-	5.0-	5.7-	11.0-	8.6-	14.3-	
	5.5	5.6	4.8	3.7	5.0	4.5	3.5	3.3	

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AUGUST 1963

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	2	3	3	3	3	3	4	4	4
	25.3	25.6	25.1	24.1	23.0	23.0	21.7	21.5	2.5
	26.0	26.0	26.0	26.0	24.5	27.0	26.5	26.5	25.5
	23.0	22.6	22.6	22.0	21.0	21.0	18.1	18.1	16.5
	1.0	1.3	1.3	1.0	1.1	1.0	1.5	1.5	85
	24	34	34	19	115	170	142		
T(W)-T(A)	2	3	3	2	2	3	4	4	4
	1.1	5.0	1.0	1.5	2.0	0.9	0.4	0.5	2.5
	5.0	5.0	3.8	3.8	5.0	4.5	3.8	5.0	4.1
	2.5	1.7	2.2	0.4	0.6	4.5	5.0	5.0	4.5
	1.6		1.7	1.1	1.6	1.5	1.6	1.3	1.7
	24		34	14	14	115	137		83
E(W)-E(A)	2	3	3	2	3	3	4	4	3
	7.1	6.6	7.0	7.0	8.3	6.7	6.0	6.0	5.5
	15.6	12.0	13.0	13.0	14.2	13.2	12.5	12.5	13.0
	1.6	5.7	3.5	3.7	3.2	3.3	0.9	0.9	3.0
	3.0	3.5	3.5	3.0	3.3	2.2	2.2	2.2	2.0
	24	34	34	19	14	115	139	139	83
EA	2	3	3	2	2	3	3	4	3
	25.6	29.5	25.5	23.5	21.1	21.1	19.0	18.0	18.0
	29.8	33.5	26.8	26.8	31.0	31.0	29.1	25.0	26.3
	21.1	21.0	20.3	20.3	18.0	17.5	16.3	14.8	13.7
	2.5	2.2	2.2	1.8	1.5	1.8	1.8	2.0	2.2
	24	34	34	19	14	115	169	139	83
C	2	3	3	3	2	3	3	4	4
	0.4	0.6	0.6	0.5	0.6	0.6	0.8	0.6	0.7
	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	0.1	0.1	0.1	0.1	0.3	0.1	0.3	0.3	0.1
	0.3		0.3	0.1	0.3	0.3	0.3	0.3	0.3
	24	34	34	20	13	114	142	142	87
P	2	3	3	2	3	3	3	4	3
	17.5	18.1	20.3	20.3	21.2	21.0	22.0	22.5	21.7
	11.2	21.1	23.0	23.0	24.0	26.0	28.5	27.5	29.5
	2.0	14.5	17.1	17.1	17.5	12.5	17.5	16.5	18.0
		1.5	1.5	1.5	1.6	1.7	2.0	1.8	1.5
	24	34	14	17	13	110	169	137	83
W	2	3	3	2	3	3	3	3	4
	5.0	5.8	5.5	6.5	8.0	6.5	6.0	5.2	6.3
	12.8	10.2	10.2	10.2	12.8	11.7	11.2	11.7	12.3
	1.0	2.3	2.3	2.5	3.0	0.0	0.0	0.0	1.0
	3.1	3.3	2.6	2.0	2.3	2.5	2.5	2.5	3.0
	23	33	26	19	14	113	136	136	87
W(X)	2	3	3	3	3	3	4	4	4
	3.0	6.2	5.1	5.1	6.8	0.1	5.1	4.3	4.0
	6.2	9.0	6.6	2.2	2.9	1.5	5.8	2.5	3.5
	7.1	9.0	10.0	10.0	12.0	11.7	11.2	11.7	11.5
	3.5	1.0	3.3	2.0	2.5	2.5	3.1	3.0	3.1
W(Y)	12.6	7.7	2.2	2.2	2.0	0.5	1.5	1.5	2.0
	1.5	6.3	6.3	9.5	9.5	6.5	7.0	4.0	8.0
	3.5	2.7	3.0	3.0	3.5	2.0	2.0	2.0	2.3

JULY 1963

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	2	3	3	3	3	3	4	4	3
	25.0	24.3	23.3	22.6	22.5	21.5	20.5	20.0	20.0
	26.5	27.0	26.5	27.0	30.0	28.7	25.5	25.5	22.6
	23.7	22.6	21.5	20.0	20.0	18.7	18.5	17.6	17.6
	0.9	1.0	1.5	1.5	1.5	1.5	1.0	1.0	1.0
	22	21	16	18	113	173	121	58	58
T(W)-T(A)	2	3	3	2	2	3	4	4	3
	0.3-	0.2	0.6	0.7	0.7	0.7	0.7	0.7	0.4
	2.0	2.0	3.3	4.0	3.5	5.5	5.5	2.3	2.3
	7.7-	4.5-	1.5-	6.7-	1.1-	0.6-	4.2-	4.2-	2.2-
	2.3	1.6	1.2	1.5	1.1	1.0	1.1	1.1	1.0
	20	18	15	111	111	171	121	58	58
E(W)-E(A)	2	3	3	2	2	3	4	4	3
	4.1	4.5	5.5	5.8	4.6	5.6	5.3	5.3	5.3
	9.2	7.6	9.1	12.3	9.0	13.7	12.0	12.0	9.6
	4.8-	3.0-	3.6	2.5-	1.2	3.5-	1.2	1.2	1.0
	4.7	2.8	1.5	2.5	2.1	2.6	2.0	2.0	2.0
	19	17	15	111	111	171	121	58	58
EA	2	3	3	2	2	3	4	4	3
	25.2	24.5	22.5	22.5	21.1	19.0	18.1	17.0	17.0
	33.1	27.1	26.1	26.1	30.1	28.3	24.2	20.8	20.8
	21.5	22.0	19.1	17.8	15.2	14.5	12.8	12.7	12.7
	2.7	1.5	2.2	2.5	2.3	2.3	1.6	2.0	2.0
	19	17	15	15	111	171	121	58	58
C	2	3	3	3	2	3	4	4	3
	0.6	0.5	0.5	0.7	0.7	0.8	0.8	0.8	0.8
	1.0	1.0	0.9	1.0	1.0	1.0	1.0	1.0	1.0
	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1
	0.3	0.3	0.1	0.2	0.2	0.2	0.2	0.3	0.3
	22	21	16	19	113	172	122	58	58
P	2	3	3	2	2	3	4	4	3
	20.0	22.0	23.7	23.6	22.0	24.6	22.3	21.0	21.0
	23.5	24.5	26.1	28.0	27.6	27.2	26.8	25.5	25.5
	16.5	19.1	20.0	21.0	10.6	18.0	12.6	16.7	16.7
	1.7	1.5	1.6	2.5	2.1	1.6	1.8	1.7	1.7
	22	21	16	16	110	167	112	52	52
W	2	3	3	3	2	3	4	4	4
	7.8	6.5	6.8	6.5	7.5	7.3	6.5	6.0	6.0
	12.8	11.7	9.0	12.3	11.7	15.3	13.3	12.8	12.8
	3.5	3.0	5.0	3.0	1.5	0.0	0.0	1.0	1.0
	2.8	2.0	1.3	2.5	2.2	2.7	2.7	2.6	2.6
	22	21	16	19	115	174	120	58	58
W(X)	6.5	5.0-	0.0-	6.0-	6.7-	5.8-	5.0-	2.5-	2.5-
	0.1-	3.7-	3.8-	1.7-	0.0-	6.7	2.8	10.2	10.2
	12.8-	8.7-	9.2-	12.0-	11.0-	13.2-	11.0-	9.7-	9.7-
	3.5	1.7	1.5	2.5	2.5	3.5	3.6	3.6	3.6
W(Y)	1.8	1.8	0.0	1.8-	2.5-	2.8-	3.5-	4.3-	4.3-
	8.8	9.0	0.6-	2.8	0.0	0.0	3.0	0.1	0.1
	5.1-	0.6-	3.2-	5.1-	6.2-	8.7-	10.2-	9.6-	9.6-
	3.5	2.5	1.5	1.6	2.0	2.3	2.2	2.3	2.3

OCTOBER 1963

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	4 / 25.3 / 28.5 / 23.0 / 1.2 / 33	4 / 24.8 / 28.0 / 22.0 / 1.0 / 54	4 / 24.8 / 28.0 / 22.0 / 1.0 / 53	4 / 24.0 / 26.0 / 21.0 / 1.1 / 39	3 / 23.5 / 26.5 / 21.0 / 1.1 / 37	3 / 23.2 / 28.1 / 19.6 / 1.5 / 144	3 / 22.0 / 25.7 / 18.1 / 1.2 / 193	4 / 21.5 / 25.5 / 17.0 / 1.1 / 135	3 / 20.7 / 26.0 / 16.2 / 1.5 / 84
T(w)-T(A)	3 / 1.3 / 4.0 / 1.5- / 1.3 / 32	3 / 1.5 / 3.6 / 1.3- / 1.1 / 53	3 / 1.5 / 3.6 / 1.3- / 1.1 / 53	3 / 1.1 / 4.2 / 1.5- / 1.2 / 38	3 / 0.9 / 3.0 / 1.0- / 1.0 / 36	3 / 1.2 / 12.0 / 5.0- / 1.8 / 140	3 / 1.6 / 4.8 / 2.5- / 1.3 / 192	4 / 1.5 / 4.8 / 2.1- / 1.2 / 135	3 / 1.5 / 5.7 / 1.6- / 1.5 / 80
E(w)-E(A)	4 / 7.5 / 15.5 / 0.6 / 3.0 / 31	4 / 7.5 / 16.5 / 2.0- / 3.6 / 53	4 / 7.5 / 16.5 / 2.0- / 3.6 / 53	4 / 7.0 / 9.8 / 2.6 / 1.8 / 38	3 / 6.5 / 10.2 / 2.3- / 2.5 / 36	3 / 8.0 / 35.7 / 0.1- / 3.6 / 145	3 / 8.0 / 15.8 / 2.0 / 2.7 / 193	4 / 7.5 / 13.0 / 1.0- / 2.2 / 134	4 / 7.0 / 12.5 / 1.0- / 2.3 / 80
EA	4 / 25.5 / 32.8 / 22.0 / 2.2 / 31	4 / 24.7 / 33.5 / 17.8 / 3.0 / 53	4 / 24.7 / 33.5 / 17.8 / 3.0 / 53	4 / 23.2 / 28.2 / 19.8 / 1.8 / 38	3 / 22.2 / 26.1 / 18.8 / 1.8 / 36	3 / 21.0 / 26.7 / 14.3 / 2.5 / 132	3 / 19.5 / 26.7 / 12.0 / 2.5 / 192	4 / 18.7 / 25.5 / 14.3 / 2.2 / 134	4 / 18.5 / 25.0 / 13.3 / 2.3 / 80
C	4 / 0.5 / 1.0 / 0.1 / 0.3 / 36	4 / 0.5 / 1.0 / 0.0 / 0.3 / 58	4 / 0.5 / 1.0 / 0.0 / 0.3 / 58	4 / 0.5 / 1.0 / 0.0 / 0.3 / 41	3 / 0.5 / 1.0 / 0.0 / 0.3 / 37	3 / 0.5 / 1.0 / 0.3 / 0.3 / 145	3 / 1.0 / 1.0 / 0.3 / 0.3 / 193	4 / 0.5 / 1.0 / 0.3 / 0.3 / 136	4 / 0.6 / 1.0 / 0.0 / 0.3 / 87
P	4 / 20.5 / 26.6 / 12.0 / 3.3 / 36	4 / 19.8 / 27.6 / 10.6 / 3.2 / 57	4 / 19.8 / 27.6 / 10.6 / 3.2 / 57	4 / 21.2 / 29.6 / 11.5 / 3.5 / 38	3 / 22.0 / 28.6 / 15.5 / 3.0 / 35	3 / 20.2 / 28.6 / 11.7 / 2.6 / 132	3 / 20.3 / 29.5 / 12.0 / 2.8 / 185	4 / 21.2 / 30.0 / 12.0 / 2.6 / 131	4 / 20.2 / 26.6 / 11.5 / 2.8 / 84
X	4 / 0.0 / 11.7 / 1.0 / 3.0 / 34	4 / 5.8 / 12.8 / 0.0 / 3.5 / 58	4 / 5.8 / 12.8 / 0.0 / 3.5 / 58	4 / 5.3 / 13.8 / 0.0 / 3.6 / 41	3 / 6.1 / 12.8 / 1.0 / 2.5 / 139	3 / 6.1 / 12.8 / 1.0 / 2.5 / 139	3 / 5.7 / 13.8 / 0.0 / 2.7 / 188	4 / 5.2 / 10.5 / 0.0 / 2.2 / 135	4 / 5.5 / 12.8 / 0.0 / 2.5 / 85
W(X)	2.8- / 4.8 / 10.0- / 3.7 / 1.3 / 11.2 / 5.5- / 4.5	2.8- / 6.2 / 12.0 / 4.5 / 0.9 / 11.1 / 6.6- / 4.0	2.8- / 6.2 / 12.0 / 4.5 / 0.9 / 11.1 / 6.6- / 4.0	3.5- / 6.7 / 11.2- / 4.5 / 0.8- / 8.1 / 6.6- / 2.8	4.3- / 6.7 / 11.2- / 4.0 / 1.8- / 2.3 / 8.0- / 2.5	4.0- / 11.0 / 10.5- / 1.5- / 7.5 / 12.8- / 3.3	3.0- / 10.1 / 13.0- / 1.5- / 8.0 / 9.8- / 3.5	3.3 / 6.0 / 9.7- / 3.0 / 1.6- / 5.5 / 9.6- / 3.0	2.2- / 5.7 / 8.0- / 3.0 / 1.6- / 7.5 / 12.8- / 3.6
W(Y)	—	—	—	—	—	—	—	—	—

SEPTEMBER 1963

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	2 / 26.1 / 30.0 / 22.0 / 1.5 / 29	3 / 25.5 / 29.2 / 21.5 / 1.3 / 37	3 / 25.5 / 29.2 / 21.5 / 1.3 / 37	3 / 24.7 / 27.5 / 22.5 / 1.0 / 28	2 / 24.8 / 27.6 / 22.0 / 1.1 / 109	3 / 24.0 / 28.1 / 22.0 / 1.0 / 170	4 / 23.1 / 27.0 / 19.6 / 1.1 / 170	4 / 22.7 / 27.6 / 21.0 / 1.1 / 140	3 / 22.0 / 26.0 / 19.8 / 1.0 / 79
T(w)-T(A)	2 / 0.0 / 3.5 / 2.3- / 1.5 / 25	3 / 0.6 / 4.5 / 6.0- / 2.0 / 36	3 / 0.6 / 4.5 / 6.0- / 2.0 / 36	3 / 1.1 / 5.2 / 1.6- / 1.1 / 50	2 / 0.7 / 3.2 / 2.1- / 1.3 / 26	3 / 1.0 / 4.0 / 3.2- / 1.3 / 109	3 / 1.0 / 4.5 / 3.2- / 1.3 / 170	4 / 0.8 / 4.5 / 4.5- / 1.3 / 139	3 / 0.7 / 4.2 / 6.5- / 1.7 / 79
E(w)-E(A)	2 / 7.2 / 12.0 / 3.0 / 3.0 / 24	3 / 6.0 / 11.2 / 0.1- / 2.7 / 36	3 / 6.0 / 11.2 / 0.1- / 2.7 / 36	3 / 7.7 / 15.2 / 2.5 / 2.5 / 50	2 / 7.1 / 16.3 / 2.8 / 108	3 / 6.5 / 14.2 / 0.5 / 2.8 / 166	3 / 6.0 / 13.7 / 3.0 / 2.8 / 136	3 / 5.5 / 11.0 / 2.8 / 79
EA	2 / 26.0 / 32.3 / 20.5 / 2.5 / 31	3 / 26.0 / 31.8 / 21.0 / 2.2 / 38	3 / 26.0 / 31.8 / 21.0 / 2.2 / 38	3 / 23.7 / 28.0 / 15.6 / 2.5 / 50	2 / 25.6 / 27.0 / 19.1 / 4.0 / 30	3 / 23.0 / 27.6 / 13.3 / 2.5 / 108	3 / 22.0 / 27.1 / 14.8 / 2.5 / 160	4 / 21.3 / 36.6 / 14.7 / 2.6 / 132	3 / 20.5 / 28.0 / 16.2 / 2.2 / 79
C	2 / 0.5 / 1.0 / 0.1 / 0.3 / 31	3 / 0.4 / 1.0 / 0.0 / 0.2 / 36	3 / 0.4 / 1.0 / 0.0 / 0.2 / 36	3 / 0.5 / 1.0 / 0.3 / 0.3 / 53	2 / 0.5 / 1.0 / 0.1 / 0.3 / 30	2 / 0.5 / 1.0 / 0.0 / 0.3 / 112	3 / 0.5 / 1.0 / 0.0 / 0.3 / 170	4 / 0.5 / 1.0 / 0.0 / 0.3 / 140	4 / 0.5 / 1.0 / 0.0 / 0.3 / 79
P	3 / 19.0 / 22.5 / 13.5 / 2.1 / 31	3 / 19.7 / 23.2 / 13.5 / 2.2 / 38	3 / 19.7 / 23.2 / 13.5 / 2.2 / 38	3 / 20.0 / 26.6 / 14.0 / 2.2 / 53	2 / 17.8 / 26.6 / 13.5 / 3.0 / 30	3 / 17.7 / 22.0 / 10.6 / 1.8 / 109	3 / 17.6 / 22.5 / 10.6 / 2.5 / 160	4 / 16.7 / 22.5 / 11.5 / 2.8 / 132	3 / 16.7 / 22.5 / 11.5 / 2.8 / 70
X	3 / 5.5 / 10.2 / 1.5 / 4.3 / 30	3 / 6.8 / 11.2 / 2.0 / 2.3 / 38	3 / 6.8 / 11.2 / 2.0 / 2.3 / 38	3 / 0.1 / 12.3 / 0.0 / 2.8 / 29	2 / 4.5 / 9.2 / 0.0 / 2.8 / 106	3 / 5.1 / 14.3 / 0.0 / 3.0 / 164	4 / 5.1 / 17.0 / 0.0 / 2.7 / 133	4 / 5.1 / 17.0 / 0.0 / 2.7 / 66	4 / 4.5 / 10.2 / 0.0 / 2.3 / —
W(X)	4.1- / 9.0- / 0.6 / 0.5 / 5.8 / 1.5- / 2.3	4.8- / 5.2 / 10.6- / 4.0 / 0.4- / 5.5 / 7.3- / 3.5	4.8- / 5.2 / 10.6- / 4.0 / 0.4- / 5.5 / 7.3- / 3.5	5.0- / 9.6- / 3.5 / 0.6- / 4.5 / 8.7- / 2.7	2.5- / 5.0- / 8.7- / 4.0 / 2.0- / 4.3 / 6.0- / 2.0	3.3- / 6.6 / 14.1- / 4.3 / 2.0- / 9.0 / 10.2- / 3.3	1.2- / 6.6 / 10.7- / 4.0 / 1.1- / 8.0 / 13.0- / 3.8	5.8- / 7.6- / 3.1 / 0.4- / 9.6 / 9.0- / 4.0	—
W(Y)	—	—	—	—	—	—	—	—	—

NOVEMBER 1963

LONGITUDE WEST

Each cell lists: mean / max / min / s.d. / N (superscript preceding each variable column = sample code).

Variable	170	165	160	155	150	145	140	135	130
T(A)	22.0/27.0/18.7/1.8/42	21.6/26.7/18.1/1.6/63	21.6/25.0/17.6/1.7/52	21.8/25.5/19.2/1.3/54	21.7/26.0/16.0/1.6/123	21.2/27.6/18.1/1.5/172	20.5/26.0/17.6/1.2/142	19.8/27.0/16.5/1.3/89	
T(W)-T(A)	2.0/5.0/4.0-/1.7/41	2.3/8.2/2.0-/1.7/62	2.0/5.5/1.0-/1.7/52	1.3/4.5/2.0-/1.5/53	1.6/7.7/2.0-/1.5/122	1.2/5.0/1.5-/1.5/168	1.2/4.5/2.0-/1.2/140	1.5/5.5/1.5-/1.5/86	
E(W)-E(A)	7.5/15.6/0.7-/4.1/35	8.5/17.5/2.1-/4.0/54	8.0/17.5/0.8-/4.3/41	5.8/14.5/0.8-/3.8/45	7.6/16.5/0.3-/3.5/115	7.0/14.3/0.7-/3.0/160	6.5/12.6/0.6-/2.7/131	6.7/12.7/1.1/2.7/81	
EA	21.0/28.6/13.2/4.2/39	19.7/27.6/12.8/4.0/54	19.3/26.7/12.2/4.3/48	21.0/26.7/11.5/3.5/52	19.6/25.0/10.1/3.3/115	19.0/25.3/12.7/2.7/160	18.1/25.7/12.0/3.0/131	17.3/23.2/11.3/2.5/81	
C	0.7/1.0/0.1/0.3/39	0.6/1.0/0.0/0.3/62	0.6/1.0/0.0/0.3/49	0.7/1.0/0.1/0.3/55	0.6/1.0/0.3/0.3/124	0.7/1.0/0.3/0.3/176	0.7/1.0/0.3/0.3/143	0.7/1.0/0.0/0.3/88	
P	16.1/29.5/0.0/9.0/39	18.2/29.5/5.6/5.9/59	18.7/28.6/9.0/4.2/48	19.0/25.2/8.2/3.5/52	19.8/28.2/0.6/3.5/118	21.0/28.0/5.5/4.0/167	21.5/30.0/7.7/4.8/139	21.1/30.0/12.0/4.0/84	
W	8.8/18.0/3.0/3.2/38	7.5/15.3/0.0/3.2/59	7.0/13.8/1.5/2.8/47	6.1/18.0/0.0/4.0/50	6.8/34.0/0.5/4.2/111	6.2/20.5/0.0/3.0/173	5.6/13.8/0.0/2.6/142	6.0/19.0/0.0/2.8/87	
W(X)	0.5-/11.6/12.8-/7.3	0.2/12.0/10.0-/5.7	0.1-/8.6/9.7-/4.7	0.1-/11.5/7.8-/4.6	2.5-/12.8/33.5-/5.2	1.5-/10.7/15.6-/4.3	1.0-/13.6/13.0-/4.1	0.4-/10.7/8.1-/4.6	
W(Y)	0.1/14.5/13.6-/6.0	1.6-/13.6/11.6-/5.5	0.3-/13.0/10.0-/5.7	2.0/14.5/8.5-/5.2	0.4-/15.3/18.0-/5.3	0.4-/16.6/15.3-/5.1	0.6/13.8/9.2-/4.5	1.3-/8.6/19.0-/4.5	

DECEMBER 1963

LONGITUDE WEST

Variable	170	165	160	155	150	145	140	135	130
T(A)	19.5/24.2/15.0/2.0/74	19.7/22.6/15.0/1.7/91	19.7/24.2/15.0/1.7/91	19.5/24.2/14.2/2.1/85	20.3/23.1/14.2/2.0/86	21.2/24.2/15.0/1.6/168	20.7/25.5/16.5/1.3/215	19.7/23.5/16.5/1.2/164	19.0/23.0/15.0/1.3/87
T(W)-T(A)	2.1/8.0/3.7-/2.1/69	2.2/5.5/1.1-/1.6/88	2.5/6.1/1.6-/1.6/85	2.0/6.0/1.0-/1.6/86	1.2/6.0/1.0-/1.5/166	1.2/6.0/3.0-/1.5/166	1.2/5.0/3.0-/1.3/212	1.2/5.5/2.1-/1.5/161	1.5/5.0/1.6-/1.5/82
E(W)-E(A)	7.3/15.2/0.5-/3.8/69	6.0/17.0/0.9-/4.0/87	7.3/15.0/0.5/3.5/85	5.7/15.1/1.3-/3.1/86	5.7/16.8/1.3-/3.1/166	5.5/16.8/1.3-/3.1/166	6.1/14.0/1.5-/3.2/211	5.6/12.7/1.5-/2.7/161	5.8/12.6/0.7/3.0/82
EA	17.1/25.7/10.5/3.3/69	17.0/25.7/11.0/3.6/87	17.0/25.7/11.0/3.6/86	17.7/25.7/10.6/3.5/85	19.6/25.5/12.5/3.3/86	20.1/25.5/12.0/2.8/166	18.8/25.7/11.3/2.8/211	17.7/23.0/11.8/2.3/161	16.6/20.5/11.1/2.3/82
C	0.7/1.0/0.0/0.3/75	1.0/1.0/0.3/0.3/89	0.6/1.0/0.3/0.3/89	0.7/1.0/0.3/0.3/86	0.7/1.0/0.3/0.3/87	0.7/1.0/0.0/0.3/165	0.6/1.0/0.3/0.3/212	0.7/1.0/0.3/0.3/163	0.7/1.0/0.3/0.3/86
P	12.7/23.5/1.0/5.7/74	13.5/22.0/0.6/5.0/88	12.0/22.0/5.0/5.0/88	12.7/21.0/0.0/4.5/87	16.3/24.5/0.0/4.5/167	16.3/24.5/0.0/4.5/167	18.8/25.5/1.5/4.3/213	20.2/26.5/1.5/4.0/163	21.1/27.5/2.0/5.0/87
W	9.1/24.6/0.0/4.5/76	8.0/16.5/0.0/3.3/92	8.0/25.7/2.0/5.0/88	9.6/20.5/2.0/4.2/90	8.2/24.1/0.0/3.6/87	8.0/24.1/0.0/3.6/87	6.8/20.5/0.0/3.5/214	5.8/17.5/0.0/3.0/161	5.8/14.3/1.0/2.7/86
W(X)	6.2/24.6/2.6/5.0	5.8/19.2/9.7-/5.5	4.8/14.5/8.1-/5.0	5.0/21.0/9.0-/5.5	5.0/21.0/9.0-/5.5	19.3/12.0-/4.3	0.3/19.3/12.0-/4.3	11.5-/11.5-/4.1/2.5	8.1-/9.7-/3.5/1.5
W(Y)	0.7/14.5/11.6-/6.3	1.0-/19.2-/6.0	2.6-/16.5/13.6-/6.0	2.7/15.1/12.5-/5.3	4.3/12.5-/5.1	3.0/12.0-/4.5	18.0/12.0-/4.5	16.5/8.1-/4.3	14.3/6.6-/5.0

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	4 19.3 25.0 15.0 1.7 65	4 19.6 25.5 16.0 1.7 81	4 19.8 25.5 15.5 1.7 67	4 19.8 25.0 16.0 1.7 87	3 20.0 23.0 14.0 1.6 140	3 19.5 24.2 14.7 1.7 182	4 18.5 23.1 15.2 1.3 153	4 17.6 22.0 15.0 1.3 116	
T(W)–T(A)	4 0.5 4.0 3.5- 1.5 59	4 0.7 4.3 7.2- 1.7 77	4 0.7 5.0 3.3- 1.6 65	4 0.7 4.0 3.3- 1.6 65	3 1.0 8.8 2.5- 1.7 136	3 1.3 7.6 5.0- 1.8 179	4 1.5 5.5 2.5- 1.3 151	4 1.5 5.0 2.0- 1.5 116	
E(W)–E(A)	2 3.6 10.1 1.1- 3.0 48	3 4.3 11.1 2.1- 3.0 71	3 3.7 10.3 0.9- 2.7 59	3 4.0 11.5 0.7- 3.0 76	3 6.0 18.5 2.8- 3.3 129	3 6.1 14.1 3.0- 2.7 171	4 6.1 12.5 1.1- 2.6 144	4 6.2 12.3 0.5- 2.3 107	
EA	4 17.7 25.5 10.3 3.0 48	4 18.2 25.7 12.0 3.1 71	4 19.0 24.8 11.7 2.8 59	4 19.0 23.7 12.2 2.8 76	3 18.1 25.3 9.0 3.1 129	3 17.3 24.2 9.1 2.6 171	4 15.5 23.3 10.5 2.2 144	4 14.5 20.0 10.1 2.0 107	
C	4 0.6 1.0 0.0 0.3 63	4 0.5 1.0 0.0 0.3 82	4 0.5 1.0 0.0 0.3 67	4 0.5 1.0 0.0 0.4 88	3 0.6 1.0 0.0 0.3 142	3 0.6 1.0 0.0 0.3 184	4 0.7 1.0 0.0 0.3 153	4 0.7 1.0 0.0 0.5- 118	
P	4 20.1 34.0 7.0 5.5 65	4 20.8 33.5 15.0 4.5 83	4 21.5 35.5 13.0 4.8 66	4 22.6 32.0 18.5 4.8 90	3 23.5 28.6 2.1 3.6 141	3 24.8 30.5 15.7 2.5 182	4 26.0 32.0 18.5 2.5 154	4 25.7 31.7 16.7 3.1 118	
W̄	4 7.7 18.0 0.4 3.5 65	4 6.7 15.3 0.0 2.8 83	4 6.2 12.8 0.0 2.5 60	4 6.2 15.3 2.5 3.0 90	3 7.5 16.5 0.0 3.3 140	3 7.0 15.3 0.0 3.0 180	4 7.0 17.0 0.0 2.8 153	4 6.7 15.3 1.0 2.8 117	
m(x)	1.7 13.6 14.1- 6.2 1.8 13.0 11.7- 5.0	0.7 15.1 11.2- 5.7 1.5 9.0 10.5- 4.1	0.7 8.8 12.6- 5.2 0.4 9.0 10.5- 4.3	0.0 12.7 12.6- 5.7 1.1 11.8 11.8- 4.8	4.2- 11.2 14.5- 5.0 1.0 15.3 8.6- 4.7	4.0- 11.2 14.5- 4.3 1.1 11.0 12.5- 4.7	3.3- 13.8 16.0- 5.1 1.0 14.0 13.0- 4.0	3.0- 13.3 12.8- 5.1 2.6- 10.6 12.0- 3.3	

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	4 20.1 26.0 15.5 2.0 75	4 20.3 24.0 16.0 1.7 90	4 19.8 25.0 16.1 1.7 82	4 19.8 23.1 16.1 1.5 92	3 19.5 24.2 15.5 1.5 166	3 18.6 24.0 15.5 1.5 173	4 17.5 22.0 15.0 1.1 145	4 16.6 22.0 12.6 1.3 95	
T(W)–T(A)	4 0.3 4.0 4.0- 1.5 71	4 0.3 5.5 1.7- 1.7 86	4 0.3 4.3 3.0- 1.7 77	4 0.8 4.3 7.2- 1.6 78	3 1.3 5.5 3.0- 1.6 165	3 1.5 6.0 4.0- 1.6 173	4 1.5 5.0 4.0- 1.6 145	4 1.8 5.5 4.3- 1.7 95	
E(W)–E(A)	3 3.1 10.8 2.0- 2.7 59	3 4.0 11.5 2.3- 2.8 77	3 5.0 11.5 2.0- 2.8 71	3 5.0 12.5 2.0- 2.8 71	3 6.6 14.2 1.5- 3.0 158	3 6.6 15.0 0.3- 2.3 167	3 6.7 12.8 0.2 2.1 139	3 6.5 13.2 0.2 2.8 93	
EA	3 19.7 27.3 14.5 2.5 59	3 19.7 24.1 13.2 2.2 77	3 18.0 23.0 12.5 2.3 71	3 18.0 24.0 12.5 2.3 71	3 16.5 23.5 10.7 2.3 158	3 15.5 25.0 11.2 2.0 167	3 14.0 20.1 9.7 1.7 139	3 13.5 21.7 9.5 2.5 93	
C	4 0.6 1.0 0.0 0.3 74	4 0.4 1.0 0.0 0.3 95	4 0.6 1.0 0.0 0.3 83	4 0.6 1.0 0.0 0.3 94	3 0.6 1.0 0.0 0.3 167	3 0.7 1.0 0.0 0.3 178	4 0.7 1.0 0.1 0.2 151	4 0.9 1.0 0.1 0.2 99	
P	4 18.7 28.5 6.5 5.2 74	4 20.1 29.7 13.5 4.3 91	4 21.2 31.6 12.0 5.1 79	4 23.0 32.5 13.0 5.0 93	3 24.3 33.5 15.0 3.7 166	3 25.0 33.0 17.7 3.1 175	4 25.0 35.5 18.5 3.5 151	4 24.0 30.5 14.5 3.2 99	
W̄	4 7.0 15.3 0.5 3.1 75	4 6.5 13.8 0.0 2.6 94	4 6.5 13.8 0.0 3.0 84	4 6.5 13.8 0.3 3.0 93	3 7.8 12.8 0.0 2.3 166	3 7.7 14.0 1.0 2.6 175	4 7.2 15.3 0.5 3.1 151	4 8.1 30.8 1.0 5.0 99	
M(X)	0.4 12.0 9.6 5.6 3.0 14.5 6.2- 4.0	2.1- 7.0 10.1- 4.1 2.8 13.8 8.6- 4.2	2.1- 7.0 10.6- 4.1 2.0 13.8 8.6- 4.1	2.2- 12.0 10.6- 5.0 2.2 13.0 6.2- 4.1	6.0- 3.5 12.8- 3.3 2.2 10.2 10.1- 4.5	6.2- 6.6 13.6- 3.3 1.5 12.6 10.1- 4.0	5.2- 6.6 13.6- 3.8 2.7 15.1 15.1- 3.5	4.8- 6.3 19.5- 4.3 5.1- 23.7 23.7- 4.6	

MARCH 1964

LATITUDE 25° - 30° N.

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	3 / 19.6	4 / 19.3	3 / 19.3	3 / 19.8	3 / 19.6	3 / 19.3	4 / 18.5	4 / 17.3	4 / 16.5
	25.0 / 13.1	24.0 / 15.3	24.3 / 15.5	19.8 / 15.5	26.0 / 15.6	24.5 / 15.0	23.1 / 14.2	20.2 / 13.7	22.0 / 14.0
	2.3 / 67	2.0 / 74	2.0 / 81	1.8 / 81	1.7 / 84	1.5 / 76	1.5 / 185	1.1 / 185	1.3 / 144
T(W)-T(A)	3 / 1.1	3 / 1.8	3 / 1.8	3 / 0.9	3 / 1.2	3 / 1.1	3 / 1.2	3 / 1.2	3 / 1.1
	12.1 / 3.7	4.7 / 3.0	4.7 / 3.0	6.0 / 5.0	5.0 / 4.2	4.5 / 7.7	4.6 / 3.0	3.8 / 3.0	4.5 / 5.5
	2.5 / 63	2.6 / 67	1.6 / 74	1.8 / 75	1.7 / 82	1.5 / 174	1.2 / 175	1.2 / 136	
E(W)-E(A)	3 / 4.5	4 / 5.5	4 / 3.3	3 / 3.3	3 / 5.7	3 / 5.8	4 / 6.1	4 / 6.1	4 / 5.3
	10.7 / 4.0	14.0 / 2.7	15.3 / 3.0	14.3 / 3.5	13.2 / 2.8	11.5 / 1.6	10.6 / 1.7	9.7 / 2.2	
	53 /	66 /	70 /	76 /	75 /	166 /	165 /	125 /	
EA	3 / 16.6	4 / 16.1	4 / 19.3	3 / 19.3	3 / 17.7	3 / 17.0	4 / 15.5	4 / 14.0	4 / 13.5
	24.5 / 12.0	25.2 / 10.8	26.5 / 10.0	22.6 / 12.1	23.3 / 10.7	22.0 / 10.6	19.3 / 9.3	19.3 /	
	53 /	60 /	70 /	75 /	66 /	201 /	165 /	125 /	
C	3 / 0.7	3 / 0.7	3 / 0.6	3 / 0.7	3 / 0.7	3 / 0.8	3 / 0.8	4 / 0.8	
	1.0 / 0.0	1.0 / 0.3	1.0 / 0.3	1.0 / 0.3	1.0 / 0.3	1.0 / 0.2	1.0 / 0.2	1.0 / 0.1	
	67 /	74 /	75 /	75 /	65 /	217 /	184 /	146 /	
P	3 / 20.1	3 / 21.7	4 / 23.3	3 / 23.3	3 / 23.0	3 / 24.2	3 / 24.7	4 / 25.0	4 / 23.8
	28.0 / 10.5	31.0 / 9.0	31.6 / 14.5	31.6 / 14.5	33.5 / 13.6	33.5 / 10.7	34.5 / 9.5	34.6 / 8.6	34.0 / 8.6
	4.1 / 67	3.7 / 74	3.7 / 80	5.8 / 87	4.2 / 87	4.3 / 177	5.2 / 216	6.0 / 185	6.5 / 144
H	3 / 8.2	4 / 7.5	4 / 8.1	3 / 8.7	3 / 8.5	3 / 8.1	4 / 8.0	4 / 7.5	
	15.3 / 0.3	15.2 / 0.0	17.0 / 2.5	18.0 / 2.5	18.0 / 1.5	16.0 / 0.0	16.5 / 1.0	16.0 / 0.0	
	3.4 / 66	2.7 / 75	3.2 / 81	3.2 / 85	3.2 / 176	2.8 / 218	2.8 / 183	2.8 / 144	
H(X)	3 / 4.7	3 / 4.3	3 / 4.3	3 / 5.2	3 / 5.8	3 / 4.8	4 / 3.3	4 / 1.6	
	12.6 / 15.1	7.7 / 14.5	7.0 / 14.8	9.6 / 17.7	10.5 / 17.0	10.5 / 16.0	10.6 / 16.5	10.1 / 16.0	
H(Y)	3 / 5.2	3 / 4.1	3 / 4.2	3 / 4.2	3 / 5.5	3 / 5.6	4 / 5.7	4 / 3.5	
	1.0 / 9.0	1.2 / 8.0	1.2 / 8.0	0.2 / 10.2	0.8 / 10.2	1.0 / 9.7	1.0 / 2.8	3.5 /	
	13.0 / 5.1	11.8 / 5.5	14.7 / 6.1	12.3 / 5.0	16.5 / 4.1	13.5 / 4.6	11.0 / 14.3 / 4.5		

APRIL 1964

LATITUDE 25° - 30° N.

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	2 / 20.0	3 / 20.3	3 / 20.3	3 / 20.2	3 / 20.0	3 / 19.7	3 / 18.2	4 / 17.2	3 / 16.1
	23.1 / 16.5	23.5 / 17.0	25.0 / 16.0	25.0 / 16.0	23.1 / 15.5	24.0 / 16.0	24.2 / 14.2	21.2 / 13.7	21.2 / 13.0
	1.6 / 36	1.7 / 34	1.5 / 34	2.1 / 34	1.5 / 129	1.5 / 198	1.5 / 145	1.3 / 108	
T(W)-T(A)	2 / 0.6	3 / 1.0	3 / 1.0	3 / 0.9	3 / 1.3	3 / 1.7	3 / 1.6	4 / 1.3	
	4.0 / 8.1	5.5 / 4.5	5.5 / 4.5	5.5 / 2.8	6.5 / 2.7	6.0 / 4.6	8.2 / 6.6		
	2.0 / 34	1.7 / 34	2.0 / 32	1.8 / 123	1.6 / 192	1.5 / 143	1.7 / 106	1.8	
E(W)-E(A)	2 / 5.3	3 / 5.8	3 / 5.5	3 / 5.3	3 / 6.6	3 / 6.5	3 / 6.1	4 / 5.5	3 /
	10.8 / 2.6	13.5 / 1.2	12.6 / 0.3	10.2 / 1.0	15.3 / 0.7	14.5 / 0.0	15.8 / 0.0	12.0 / 1.0	
	3.6 / 28	3.5 / 31	3.2 / 28	3.2 / 34	2.3 / 118	2.1 / 188	2.0 / 139	2.2 / 104	
EA	2 / 18.1	3 / 18.5	3 / 19.1	3 / 18.0	2 / 17.0	3 / 15.3	4 / 14.3	4 / 13.3	
	23.0 / 11.7	23.0 / 11.3	22.2 / 11.8	22.5 / 13.5	21.8 / 13.1	21.5 / 9.8	20.5 / 11.3	20.5 / 9.5	
	3.1 / 28	2.8 / 31	2.8 / 28	2.1 / 34	1.7 / 118	1.8 / 188	1.5 / 139	1.8 / 104	
C	2 / 0.6	3 / 0.6	3 / 0.6	3 / 0.7	2 / 0.6	3 / 0.8	3 / 0.8	4 / 0.9	3 /
	1.0 / 0.1	1.0 / 0.3	1.0 / 0.3	1.0 / 0.0	1.0 / 0.3	1.0 / 0.0	1.0 / 0.1	1.0 / 0.3	
	0.3 / 35	0.3 / 39	0.3 / 34	0.3 / 44	0.2 / 128	0.2 / 198	0.2 / 145	0.2 / 109	
P	2 / 25.0	3 / 23.6	3 / 23.6	3 / 23.6	2 / 24.8	3 / 26.0	4 / 26.5	4 / 25.7	
	32.0 / 15.1	31.0 / 15.7	31.0 / 15.5	29.0 / 16.1	30.0 / 19.1	31.6 / 21.5	31.6 / 21.0	32.5 / 18.5	
	3.8 / 36	4.1 / 39	3.7 / 33	3.3 / 44	2.2 / 129	2.2 / 195	2.3 / 144	3.1 / 107	
H	2 / 7.6	3 / 8.0	3 / 6.5	3 / 6.5	2 / 8.7	3 / 7.6	4 / 7.5	4 / 7.3	
	12.8 / 2.5	15.3 / 3.1	11.7 / 2.5	15.3 / 0.0	13.8 / 0.5	13.8 / 2.0	13.8 / 3.0	17.5 / 2.5	
	2.5 / 36	3.1 / 39	3.1 / 34	3.6 / 44	2.3 / 128	2.3 / 196	2.1 / 146	2.6 / 108	
H(X)	2 / 6.1	3 / 6.5	3 / 3.8	3 / 4.0	2 / 7.0	3 / 6.8	4 / 6.0	4 / 4.1	
	5.0 / 12.6	0.0 / 15.1	3.1 / 8.2	15.1 / 13.0	0.0 / 13.0	7.5 / 12.6	3.6 / 11.0	5.1 /	
H(Y)	2 / 3.3	3 / 0.2	3 / 3.3	3 / 4.5	2 / 0.6	3 / 2.0	4 / 2.7	4 / 3.3	
	3.3 / 8.5	9.5 / 4.5	8.5 / 5.3	0.7 / 11.5	8.5 / 6.7	4.7 / 9.0	3.2 / 12.0	5.0 / 2.2	
	2.6 /	4.5 /	5.3 /	4.3 /	3.0 /	2.3 /	2.5 /	2.7 /	

JUNE 1964

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
	3	3	3	3	3	3	4	4	3
T(A)	23.1	23.0	23.3	23.2	22.0	22.0	19.7	19.0	
	26.5	27.0	29.0	29.0	29.0	27.0	24.2	22.1	
	20.0	20.0	20.5	20.0	18.5	17.6	17.0	14.2	
	2.0	1.3	0.5	1.5	1.6	1.5	1.2	1.5	
	23	39	34	28	47	151	163	139	95
	3	3	3	3	2	3	4	4	4
T(W)–T(A)	0.2	0.2–	0.2–	0.3	0.5–	3.7	0.5	0.5	0.0
	4.0	4.0	3.0	3.0	3.1	5.0–	4.5	4.5	2.8
	5.0–	7.0–	6.0–	6.0	6.0–	10.0–	6.0–	6.0–	4.0–
	2.0	2.2	2.2	2.9	1.8	1.7	1.6	1.5	1.5
	22	36	32	26	44	147	177	137	91
	3	3	3	3	2	3	4	4	4
E(W)–E(A)	2.8	3.1	2.7	2.7	9.2	10.3	5.2	4.8	3.5
	7.5	15.1	7.7	9.7	10.3	10.7	2.1	10.3	8.0
	2.6	3.5	1.2–	1.5–	2.1	1.1	2.1	2.1	0.2–
	16	32	25	40	14	174	182	132	86
	3	3	3	3	3	3	3		3
EA	24.0	23.7	24.5	22.5	20.3	18.0	17.0	17.1	
	26.0	29.0	27.5	27.1	25.0	25.1	20.5	21.8	
	15.0	12.0	20.2	14.3	12.5	14.5	13.2	12.7	
	2.1	2.6	1.7	1.5	2.0	2.0	2.0	2.0	
	16	32	23	40	42	142	174	132	86
	3	3	3	2	2	3	3	4	4
C	0.7	0.5	0.7	0.5	0.7	0.9	0.8	0.8	0.7
	1.0	1.0	1.0	1.0	1.3	1.4	1.1	1.0	1.0
	0.3	0.3	0.3	0.0	0.3	0.3	0.1	0.3	0.3
	24	37	28	44	48	151	183	139	95
	3	3	3	2	2	3	3	4	3
P	16.0	17.7	14.8	19.8	21.8	23.0	22.8	21.6	
	21.0	26.0	26.0	26.0	28.6	28.0	29.5	26.1	
	9.0	12.0	11.7	11.0	11.0	14.0	13.7	15.7	
	2.8	3.7	3.5	3.5	3.2	3.1	3.0	2.1	
	24	37	23	49	49	149	184	133	94
	3	3	3	3	2	3	3	4	4
W	6.1	6.2	6.5	6.5	7.0	7.0	6.1	5.8	
	13.8	11.2	10.7	12.8	13.8	14.3	11.8	13.3	
	1.5	2.1	2.0	2.7	0.0	0.1	0.5	3.5	
	3.2	3.0	2.8	2.7	2.5	2.7	2.5	3.0	
W(X)	0.5–	1.0–	0.5	2.3–	5.2–	4.0–	3.2–	4.7–	
	0.7	9.0	3.5	7.7	5.5	7.1	4.8		
	9.2–	12.0–	9.2–	12.0–	13.0–	14.1–	9.7–	11.5–	
	4.4–	4.5	5.7	5.1	4.0	4.5	3.7	3.7	
W(Y)	1.7	1.1	1.7	0.3	0.7–	0.2–	2.3–	3.0–	
	10.0	10.5–	10.0	8.3	8.0	9.6	13.6	12.6	
	7.6–	7.1–	7.1–	8.0–	7.5–	9.0–	8.5–	13.6–	
	5.0	4.1	4.2	4.0	4.1	3.5	3.7	4.1	

MAY 1964

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
	3	3	3	3	3	3	4	4	3
T(A)	22.7	22.0	21.3	20.2	19.8	18.5	17.2	17.0	
	26.5	29.0	25.0	24.2	25.5	24.5	22.5	26.0	
	20.0	19.2	19.0	16.5	16.5	15.5	13.7	14.0	
	1.6	1.8	1.5	1.8	1.7	1.6	1.5	2.0	
	29	48	30	48	131	201	145	104	
	2	3	3	2	2	3	4	3	
T(W)–T(A)	0.2	0.3	0.3	1.3	1.0	1.0	1.2	1.0	
	2.0	4.8	3.0	5.5	5.5	5.5	6.6	5.5	
	3.5–	5.5–	1.5	3.0–	5.5–	4.5–	5.0–	4.8–	
	1.3	2.0	1.5	1.8	1.7	1.5	1.7	1.6	
	26	41	26	44	130	200	142	97	
	2	3	3	2	3	3	4	4	
E(W)–E(A)	4.0	4.7	5.2	6.3	6.5	6.1	5.8	5.3	
	8.5	11.3	11.8	14.2	13.0	13.5	13.5	11.5	
	0.0	1.0–	0.4–	0.7	0.7	0.2–	2.0–	0.1–	
	2.3	3.5	3.0	3.6	2.5	2.3	2.2	2.5	
	23	38	22	38	124	194	136	93	
	2	3	3	2	3	3	3	3	
EA	22.3	20.5	19.6	17.7	16.8	15.5	14.5	13.8	
	26.0	25.2	22.8	23.3	22.7	22.6	21.6	19.5	
	16.5	13.5	13.0	11.0	11.8	9.3	11.6	10.0	
	2.1	2.8	2.5	3.0	2.2	2.2	2.0	2.0	
	23	38	22	38	124	194	136	93	
	3	3	3	3	3	3	3	3	
C	0.7	0.6	0.5	0.6	0.7	0.7	0.8	0.7	
	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
	0.1	0.1	0.3	0.3	0.3	0.3	0.3	0.3	
	29	48	32	48	131	197	146	104	
	3	3	3	3	3	3	3	3	
P	18.6	21.5	19.0	20.1	23.2	31.5	24.3	22.7	
	26.0	26.0	30.0	31.0	30.0	31.5	34.0	30.0	
	12.0	12.0	10.2	14.7	14.7	15.0	15.8	14.0	
	3.7	3.0	4.3	3.2	3.0	3.6	3.2	3.2	
	29	38	32	48	132	201	147	104	
	3	3	3	3	3	3	3	3	
W	8.0	8.0	7.3	7.8	7.2	7.1	7.0	7.0	
	14.3	12.8	10.2	12.8	13.8	13.3	15.3	12.8	
	3.0	2.0	3.5	1.5	1.5	0.0	0.0	1.5	
	2.5	2.5	1.7	2.5	2.8	2.7	2.8	2.7	
W(X)	6.0–	6.5–	6.5–	6.8–	4.7–	4.0–	3.5–	2.1–	
	0.5–	1.5–	0.1	5.0	8.7	12.0	12.6	12.0	
	10.2–	14.8–	10.0–	12.0–	12.6–	13.0–	13.6–	11.5–	
	2.0	2.0	2.5	3.0	4.8	5.0	4.2	4.2	
W(Y)	2.0	0.8	0.2	1.6–	2.2–	2.2–	2.5–	3.2–	
	12.3	10.0	7.1	7.7	5.8	7.2	15.1	10.1	
	0.7–	8.3–	7.1–	7.1–	9.0–	8.6–	8.0–	10.6–	
	5.0	4.2	2.7	2.8	2.6	3.5	4.2	4.6	

AUGUST 1964

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	2 / 25.3 / 28.0 / 22.1 / 1.1 / 29	3 / 25.0 / 28.0 / 22.0 / 1.0 / 28	3 / 24.5 / 30.0 / 22.0 / 1.5 / 23	3 / 24.5 / 30.0 / 22.0 / 1.5 / 22	3 / 24.3 / 30.0 / 20.1 / 1.5 / 44	3 / 23.6 / 30.1 / 20.1 / 1.5 / 143	4 / 23.0 / 31.0 / 20.0 / 1.5 / 199	4 / 22.3 / 27.6 / 19.0 / 1.3 / 128	3 / 21.3 / 26.0 / 18.6 / 1.6 / 77
T(W)–T(A)	2 / 0.8 / 3.2 / 1.0- / 1.0 / 28	3 / 0.4 / 3.3 / 4.0- / 1.0 / 27	3 / 0.4 / 3.0 / 2.0- / 1.7 / 22	3 / 0.4 / 4.0 / 5.5- / 1.7 / 22	2 / 1.0 / 4.0 / 5.0- / 1.5 / 40	3 / 0.7 / 4.0 / 4.5- / 1.6 / 134	3 / 0.8 / 4.0 / 6.0- / 1.5 / 191	4 / 3.2 / 4.5- / 1.5 / 126	3 / 0.6 / 3.0 / 3.8- / 1.5 / 76
E(W)–E(A)	2 / 6.2 / 13.2 / 1.0- / 2.3 / 22	3 / 5.2 / 10.3 / 2.0 / 2.0 / 20	3 / 5.0 / 7.3 / 0.4 / 1.6 / 16	3 / 5.0 / 7.3 / 0.4 / 1.0 / 38	2 / 7.1 / 14.0 / 3.5 / 2.3 / 38	3 / 6.3 / 11.5 / 0.1- / 1.7 / 124	3 / 6.6 / 11.7 / 0.1- / 2.0 / 190	3 / 6.5 / 11.7 / 0.7 / 2.5 / 126	3 / 5.5 / 12.5 / 2.6- / 2.5 / 76
EA	2 / 25.5 / 28.0 / 22.1 / 1.3 / 22	3 / 25.0 / 29.5 / 21.7 / 1.5 / 20	3 / 24.7 / 27.2 / 22.5 / 1.0 / 16	3 / 24.7 / 27.2 / 20.5 / 1.0 / 38	2 / 23.0 / 28.0 / 20.5 / 1.5 / 38	3 / 22.1 / 25.7 / 18.2 / 1.2 / 124	3 / 21.0 / 28.0 / 16.0 / 1.7 / 190	4 / 20.0 / 24.8 / 14.3 / 2.0 / 126	3 / 19.1 / 27.6 / 15.6 / 2.0 / 76
C	2 / 0.5 / 1.0 / 0.1 / 0.2 / 29	3 / 0.6 / 1.0 / 0.1 / 0.3 / 28	3 / 0.5 / 1.0 / 0.1 / 0.3 / 25	3 / 0.5 / 1.0 / 0.1 / 0.3 / 25	2 / 0.5 / 1.0 / 0.2 / 0.2 / 48	3 / 0.5 / 1.0 / 0.0 / 0.3 / 145	3 / 0.6 / 1.0 / 0.0 / 0.3 / 200	4 / 0.6 / 1.0 / 0.0 / 0.3 / 130	3 / 0.7 / 1.0 / 0.1 / 0.3 / 78
P	2 / 21.1 / 24.5 / 15.5 / 2.0 / 29	3 / 22.0 / 28.6 / 15.5 / 3.0 / 28	3 / 22.1 / 27.2 / 16.0 / 2.2 / 25	3 / 22.1 / 27.2 / 16.0 / 1.0 / 25	2 / 21.5 / 24.2 / 18.1 / 1.6 / 48	3 / 21.5 / 25.5 / 14.5 / 2.0 / 145	3 / 21.3 / 26.6 / 14.5 / 2.2 / 200	4 / 20.6 / 24.5 / 15.0 / 2.5 / 130	3 / 23.0 / 24.5 / 15.0 / 2.5 / 78
M	2 / 7.1 / 10.5 / 2.0 / 2.5 / 29	3 / 6.7 / 12.8 / 1.5 / 3.0 / 29	3 / 7.0 / 12.8 / 1.5 / 2.8 / 25	3 / 7.0 / 12.8 / 2.3 / 2.0 / 48	2 / 6.7 / 10.7 / 2.0 / 2.3 / 48	3 / 5.8 / 11.7 / 1.5 / 2.0 / 142	3 / 5.0 / 11.2 / 0.0 / 2.3 / 199	4 / 4.2 / 11.2 / 0.0 / 2.1 / 130	4 / 4.7 / 11.2 / 0.7 / 2.2 / 78
W(X)	6.6- / 0.3 / 10.3- / 2.7 / 8.1	5.5- / 3.3 / 9.7- / 3.2 / 0.1	6.0- / 1.4 / 9.5- / 2.5 / 1.3	6.0- / 1.4 / 11.7- / 2.5 / 1.7	6.0- / 1.2- / 10.7- / 2.3 / 1.8	5.2- / 0.0 / 11.7- / 2.0 / 3.5	3.8- / 2.2 / 11.2- / 2.5 / 4.0	2.5- / 4.7 / 10.5- / 2.6 / 3.5	1.7- / 4.3 / 10.5- / 3.0 / 4.0
W(Y)	0.2 / 8.1 / 3.5 / 5.5- / 2.2	2.7 / 9.7 / 0.1 / 5.5- / 3.6	3.2 / 9.7 / 1.3- / 5.5- / 3.2	2.5 / 3.2- / 1.3- / 7.8- / 2.0	2.3 / 3.8 / 1.7- / 6.6- / 2.3	2.0 / 3.5 / 1.5- / 9.7- / 1.8	2.5 / 4.0 / 2.0- / 7.8- / 2.0	2.6 / 3.5 / 2.6- / 7.8- / 3.0	2.6 / 4.0 / 3.1- / 7.8- / 3.0

JULY 1964

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	2 / 25.5 / 29.2 / 21.5 / 1.5 / 35	3 / 24.5 / 29.5 / 21.7 / 1.5 / 39	3 / 24.0 / 27.0 / 21.0 / 1.3 / 28	2 / 23.2 / 27.5 / 21.5 / 1.2 / 22	2 / 22.5 / 26.5 / 20.0 / 1.1 / 131	3 / 21.5 / 26.5 / 18.1 / 1.3 / 180	3 / 20.6 / 27.0 / 18.1 / 1.1 / 136	4 / 19.1 / 22.0 / 16.5 / 1.0 / 95	3 / —
T(W)–T(A)	2 / 0.0 / 3.8 / 3.5- / 1.3 / 33	3 / 0.5 / 3.0 / 5.5- / 1.8 / 37	3 / 1.0 / 3.8 / 2.0- / 1.5 / 25	3 / 0.9 / 4.0 / 5.5- / 2.0 / 22	2 / 0.6 / 5.0 / 4.5- / 1.5 / 130	3 / 0.8 / 5.5 / 4.5- / 1.5 / 178	3 / 0.5 / 4.1 / 6.0- / 1.1 / 136	4 / 0.7 / 7.2 / 3.2- / 1.3 / 94	2 / —
E(W)–E(A)	2 / 5.6 / 12.7 / 1.0- / 2.5 / 31	3 / 5.8 / 11.6 / 1.2 / 2.0 / 37	3 / 5.7 / 11.5 / 1.2 / 2.0 / 25	3 / 6.6 / 12.7 / 1.2 / 2.6 / 22	2 / 5.5 / 11.2 / 0.6 / 2.3 / 127	3 / 5.3 / 13.2 / 0.8- / 2.3 / 169	3 / 5.0 / 11.1 / 0.0 / 1.8 / 131	4 / 4.3 / 14.3 / 0.0 / 2.2 / 93	2 / —
EA	2 / 24.8 / 30.0 / 22.3 / 1.8 / 31	3 / 24.0 / 29.0 / 16.7 / 2.0 / 37	3 / 23.7 / 27.5 / 19.7 / 2.0 / 25	3 / 21.6 / 25.1 / 18.7 / 1.6 / 127	2 / 21.1 / 24.2 / 16.3 / 1.6 / 127	3 / 19.8 / 25.3 / 14.3 / 1.8 / 169	3 / 18.5 / 22.2 / 14.7 / 1.5 / 131	4 / 17.3 / 22.8 / 12.8 / 1.6 / 93	2 / —
C	2 / 0.5 / 1.0 / 0.1 / 0.3 / 35	3 / 0.5 / 1.0 / 0.1 / 0.3 / 41	3 / 0.5 / 1.0 / 0.3 / 0.2 / 30	3 / 0.6 / 1.0 / 0.1 / 0.3 / 22	2 / 0.7 / 1.0 / 0.1 / 0.2 / 128	3 / 0.7 / 1.0 / 0.1 / 0.2 / 180	3 / 0.8 / 1.0 / 0.1 / 0.1 / 137	4 / 0.9 / 1.0 / 0.1 / 0.2 / 96	3 / —
P	2 / 22.1 / 26.0 / 16.0 / 2.0 / 33	3 / 23.0 / 27.0 / 19.5 / 2.0 / 39	3 / 22.7 / 27.0 / 18.0 / 2.1 / 26	3 / 22.5 / 27.0 / 19.5 / 2.2 / 22	2 / 22.0 / 27.0 / 14.0 / 2.2 / 130	3 / 22.3 / 27.6 / 17.5 / 2.0 / 178	3 / 22.3 / 26.6 / 18.0 / 1.8 / 137	4 / 20.8 / 26.0 / 12.1 / 2.3 / 97	3 / —
M	2 / 6.5 / 11.7 / 0.5 / 2.2 / 34	3 / 7.2 / 10.2 / 4.2 / 1.3 / 39	3 / 6.8 / 10.2 / 2.5 / 1.8 / 28	3 / 8.0 / 12.8 / 0.0 / 3.1 / 22	2 / 7.2 / 14.3 / 0.0 / 2.3 / 130	3 / 6.5 / 12.8 / 0.0 / 2.5 / 177	3 / 6.0 / 11.7 / 0.5 / 2.2 / 136	4 / 6.5 / 12.3 / 0.0 / 2.5 / 97	4 / —
W(X)	6.0- / 0.1- / 11.0- / 2.0 / 0.5-	6.3- / 3.8 / 10.0- / 2.2 / 1.5-	5.7- / 4.6 / 10.2- / 2.6 / 1.5-	6.7- / 0.3- / 12.0- / 3.3 / 3.2	6.3- / 0.0 / 12.3- / 2.2 / 2.5	5.5- / 2.6 / 12.0- / 2.5 / 2.3	4.6- / 4.0 / 11.0- / 2.5 / 3.1	3.7- / 3.0 / 9.5- / 2.6 / 4.6	2.2- / 2.6 / —
W(Y)	2.0 / 3.2 / 9.8- / 2.5	2.2 / 3.2 / 9.8- / 2.6	2.6 / 4.0 / 6.6- / 2.7	3.3 / 0.0 / 8.3- / 2.5	6.2 / 10.1- / 2.5	12.6 / 9.0- / 2.7	2.3 / 2.1 / 2.1	4.6- / 0.0 / 12.0- / 2.6	0.0 / 12.0- / 2.6

LATITUDE 25° – 30° N

SEPTEMBER 1964

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	2	3	3	3	3	3	4	4	3
	24.6	24.7	24.7	24.2	24.2	23.5	21.5	20.3	
	27.0	29.2	28.7	27.6	27.6	27.6	28.0	24.2	
	23.0	21.5	22.0	21.0	21.0	21.2	14.7	18.1	
	1.1	1.6	1.1	1.2	1.2	1.2	1.2	1.1	
	28	31	26	53	136	136	161	113	
T(w)-T(A)	2	3	3	3	3	3	4	4	
	1.3	0.7	0.6	0.6	0.7	0.7	0.8	1.0	
	4.0	5.0	4.5	2.8	3.3	3.3	4.0	3.8	
	1.0	4.2-	3.2-	4.0-	4.0-	4.0-	5.0-	3.2-	
	1.2	1.6	1.5	1.5	1.5	1.5	1.5	1.2	
	28	30	27	52	135	135	159	112	
E(w)-E(A)	2	3	3	3	3	3	4	4	
	8.1	10.8	5.0	7.3	7.1	7.2	7.0	6.8	
	10.8	10.5	9.0	12.3	12.6	12.6	16.5	12.5	
	4.8	3.0	1.6-	1.0	1.0	1.0	1.7	2.0	
	1.5	1.5	3.0	2.1	2.2	2.2	2.0	2.0	
	19	28	27	47	131	131	155	107	
EA	2	3	3	3	3	3	4	4	
	23.8	24.5	25.3	22.1	21.3	21.3	18.5	17.1	
	26.7	27.2	30.3	25.2	26.7	26.7	24.6	22.2	
	16.0	24.0	22.5	16.5	17.7	17.7	14.3	11.8	
	2.0	1.1	2.3	1.5	1.0	1.0	2.0	1.8	
	19	28	27	47	131	131	155	107	
C	3	3	3	3	3	3	4	4	
	0.5	1.0	0.6	0.5	0.6	0.6	0.7	0.7	
	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
	0.0	0.5	0.1	0.0	0.0	0.0	0.1	0.0	
	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	
	31	31	31	53	138	138	161	115	
P	2	3	3	3	3	3	4	4	
	16.6	16.0	16.7	20.5	20.7	21.0	21.0	20.5	
	23.0	23.5	25.0	26.0	25.5	27.0	26.7	25.5	
	13.5	12.5	12.5	16.1	16.0	15.0	12.5	15.0	
	4.2	3.1	2.3	1.8	1.8	2.5	2.2	2.7	
	31	32	27	53	138	167	158	111	
W	2	3	3	3	3	3	4	4	
	6.0	6.2	5.8	6.5	7.5	7.0	7.0	7.0	
	10.2	12.8	8.7	10.2	11.7	12.8	14.8	18.0	
	1.0	1.5	0.0	0.3	1.5	0.0	0.0	1.5	
	2.4	2.8	2.2	2.3	2.0	2.6	2.6	3.5	
	29	30	23	53	138	191	159	113	
W(X)	5.0-	0.9-	4.7-	5.7-	7.0-	6.2-	5.0-	4.6-	
	0.3-	0.9	8.0	0.0	0.6	3.2	4.0	0.0	
	8.1-	1.5-	6.1-	10.2-	11.7-	11.7-	12.0-	13.0-	
	2.1	2.5	2.3	2.0	2.3	2.5	2.6	2.7	
W(Y)	3.1	7.0	1.0	7.0	3.5	1.3-	5.0	4.5-	
	9.0-	9.8-	4.0-	5.2-	6.1-	3.0-	9.8-	14.5-	
	2.0	4.0	3.0	2.6	1.8	2.1	2.3	3.2	

OCTOBER 1964

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	4	3	4	3	3	3	4	4	4
	23.8	23.1	22.5	22.5	22.6	22.6	21.8	21.0	20.2
	28.1	29.0	29.0	28.0	78.0	28.0	27.0	27.6	22.6
	28.0	18.7	18.7	18.7	18.1	18.7	18.1	18.1	17.2
	20.0	1.8	1.7	1.5	4.3	1.3	1.3	1.2	1.0
	1.7								
	50	71	60	57	180	228	172	172	106
T(w)-T(A)	4	4	3	3	3	3	3	4	4
	1.1	6.1	4.3	1.7	1.3	1.3	1.0	0.7	0.6
	5.0	5.0-	5.0	5.0	5.0	10.0	5.0	4.3	3.5
	2.7-	5.0-	3.1-	4.0-	4.0	8.8	3.8-	4.5-	3.3-
	1.8	1.7	1.6	1.7	1.5	1.8	1.5	1.3	1.3
	47	69	55	49	170	224	162	162	95
E(w)-E(A)	4	4	4	3	3	3	3	4	4
	8.1	8.0	9.1	8.0	8.0	6.8	5.1	5.0	
	17.3	15.5	16.1	15.7	16.0	14.0	11.8	12.0	
	1.6	2.0	1.2	2.6	0.5	0.3	0.5-	0.2	
	3.8	3.2	3.2	3.6	2.8	2.5	2.0	2.2	
	47	69	51	48	161	223	161	95	
EA	3	3	3	3	3	3	4	4	4
	21.5	21.1	19.5	20.0	19.5	19.3	19.2	18.5	18.0
	28.5	27.5	26.0	25.7	26.7	25.0	24.0	26.0	24.0
	11.5	13.1	14.1	12.2	12.5	11.7	15.2	11.2	13.1
	3.7	3.0	3.0	3.2	2.7	2.3	1.6	1.0	2.0
	47	69	51	48	161	223	161	103	95
C	3	3	3	3	3	3	3	4	4
	0.6	1.0	0.6	0.6	0.6	0.5	0.6	0.6	
	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	
	53	72	66	61	178	226	173	106	
P	3	3	3	3	3	3	3	4	4
	21.7	21.7	21.5	20.0	19.0	19.1	19.2	19.0	18.5
	28.2	28.0	27.0	26.2	26.5	27.0	27.0	27.0	26.0
	16.5	15.5	9.6	3.5	10.6	9.6	11.2	11.2	1.0
	2.6	3.0	3.7	3.5	3.0	3.1	3.1	4.1	
	52	68	66	61	177	227	168	103	
W	3	3	3	3	3	3	3	4	4
	9.1	8.0	7.5	7.5	7.0	6.5	5.7	5.8	
	17.0	17.0	13.5	17.5	18.0	15.3	15.3	13.8	
	0.5	0.0	1.5	0.0	0.0	0.0	0.0	1.5	
	4.0	4.0	4.2	3.5	3.0	2.8	2.8	2.7	
	51	71	65	60	179	225	171	103	
W(X)	7.0-	5.5-	3.0-	1.5-	2.6-	2.0-	1.0-	0.3-	
	5.6	7.7	14.2	8.6	9.6	12.0	8.6	0.0	
	16.1-	15.8-	5.7-	15.0-	17.0-	12.0-	9.5-	7.7-	
	4.8	5.7	5.7	5.2	4.5	4.5	4.0	4.1	
W(Y)	1.2-	5.0-	9.3-	12.5	18.0	15.3	10.8	12.0	
	9.7	9.7	3.0-	3.1-	3.1-	15.3	10.8	12.0	
	13.0-	12.8-	16.0-	11.0-	12.3-	12.5-	15.1-	10.1-	
	5.0	4.3	4.2	5.2	5.2	5.0	4.8	4.5	

DECEMBER 1964

										LONGITUDE WEST		
	170	165	160	155	150	145	140	135	130
T(A)									
T(W)-T(A)									
E(W)-E(A)									
EA									
C									
P									
H									
W(X)									
W(Y)									

NOVEMBER 1964

										LONGITUDE WEST		
	170	165	160	155	150	145	140	135	130
T(A)									
T(W)-T(A)									
E(W)-E(A)									
EA									
C									
P									
H									
W(X)									
W(Y)									

FEBRUARY 1965

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	17.6	17.5	17.5	17.7	18.5	19.3	19.0	18.5	16.8
	21.0	20.5	20.5	21.5	22.6	23.1	28.0	22.0	21.0
	14.6	12.0	14.2	14.2	13.7	14.2	15.5	15.2	14.0
	1.5	1.5	1.5	1.5	1.6	1.5	1.5	1.2	1.5
	56	78	78	60	72	151	203	166	92
T(W)–T(A)	1.7	2.3	2.0	2.0	1.6	1.3	1.0	0.8	1.5
	5.5	9.0	5.5	5.5	5.5	6.2	5.5	6.6	6.1
	2.0-	1.0	0.6-	0.6-	2.8-	2.7-	8.0-	3.2-	3.0-
	1.5	1.0	1.5	1.5	1.6	1.7	1.6	1.5	1.6
	55	78	78	59	70	150	200	166	92
E(W)–E(A)	0.7	7.2	6.0	4.6	4.8	4.8	4.5	4.2	5.2
	13.1	13.5	13.5	14.0	14.8	14.8	11.7	11.8	12.0
	0.3	1.5	1.1-	1.3-	5.0-	1.7-	1.7-	2.0-	0.4
	2.7	2.3	2.6	3.3	3.5	3.5	2.7	2.6	2.3
	54	78	59	69	144	144	182	156	82
EA	14.5	14.5	15.8	17.7	18.0	17.5	16.6	14.8
	20.0	19.1	19.5	22.6	28.3	23.0	23.3	20.2
	10.3	9.5	9.6	10.3	10.6	10.8	11.1	11.1
	2.0	2.0	2.2	3.1	3.2	2.5	2.6	2.2
	54	78	59	69	144	182	156	82
C	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8
	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	0.1	0.1	0.3	0.1	0.3	0.3	0.3	0.3	0.3
	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	57	78	78	60	71	152	161	92
P	20.6	19.0	17.3	16.0	16.7	16.6	19.1	22.0
	25.0	26.6	27.2	24.5	25.2	28.6	29.5	31.0
	12.0	6.0	5.0	1.0-	3.0-	3.5-	0.6	8.6
	2.5	3.8	4.6	4.6	4.5	7.1	6.5	5.0
	56	78	60	71	145	194	162	91
H	6.3	8.2	7.3	8.6	10.3	9.6	8.2	7.5
	20.5	17.0	18.0	24.1	23.1	18.0	18.0	18.0
	1.0	1.0	0.0	0.0	1.5	0.0	0.0	0.0
	3.6	3.8	4.5	5.7	3.5	3.3	3.0	2.7
	55	77	58	71	153	195	166	93
W(X)	2.1-	2.5-	1.0-	3.6-	3.6-	3.8	4.0-	4.1-
	13.8	11.0	14.5	22.7	16.6	16.8	12.0	7.0
	8.6-	12.0-	12.0-	14.5-	17.6-	14.7-	12.0-	12.6-
	4.0	5.5	6.1	6.1	6.6	6.6	5.2	4.2
W(Y)	1.5-	4.0-	4.3-	3.0-	0.2-	2.1	2.5	1.0-
	10.3	10.1	9.6	13.6	14.3	15.5	17.6	17.6
	19.2-	15.1-	15.6-	21.7-	21.7-	16.8-	14.5-	11.2-
	5.5	5.3	5.3	6.7	7.8	6.3	5.1	5.2

JANUARY 1965

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	17.0	19.1	20.5	20.5	20.1	20.5	19.8	18.7	17.7
	22.6	24.0	26.0	23.1	28.7	28.7	22.6	22.3	22.0
	15.7	14.0	15.0	14.2	16.5	16.5	15.5	15.5	15.0
	1.7	2.2	1.7	1.7	1.7	1.5	1.2	1.3	1.5
	54	82	82	97	178	174	200	152	91
T(W)–T(A)	1.5	1.8	5.5	1.2	1.5	1.0	0.8	0.8	1.0
	7.1	8.0	5.5	5.5	6.0	4.3	5.0	4.3	5.5
	1.5-	3.0-	3.2-	3.2-	2.0-	6.6-	3.3-	3.3-	2.2-
	1.6	2.3	1.7	1.6	1.6	1.3	1.5	1.3	1.8
	54	80	81	95	174	174	199	151	99
E(W)–E(A)	6.5	6.1	5.8	5.8	5.7	4.5	4.5	4.2	4.5
	14.7	10.1	14.5	13.2	13.1	13.1	13.0	13.0	12.3
	1.7-	5.0-	0.4-	1.3-	1.3-	2.5-	2.5-	1.5-	1.5-
	3.2	3.8	3.5	3.5	3.3	3.0	3.0	2.8	2.7
	53	78	79	92	173	173	194	144	77
EA	16.5	17.2	19.0	19.0	19.6	18.3	17.0	15.8
	22.6	25.0	25.0	24.1	25.8	24.8	22.2	20.5
	11.5	4.2	12.0	10.8	11.7	10.6	9.6	10.2
	2.7	3.5	3.1	3.3	3.0	3.0	2.7	2.1
	53	78	79	92	173	194	144	77
C	0.0	0.6	0.3	0.6	1.0	0.6	0.7	0.6
	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0
	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4
	55	82	80	96	175	196	152	91
P	13.0	13.1	13.0	13.8	15.1	18.5	20.7	21.2
	20.5	23.5	26.0	27.0	30.0	31.5	32.7	37.0
	7.0	4.2-	0.6-	0.2	6.7	5.7	4.8	11.7
	7.0	6.5	6.6	6.7	5.7	5.2	4.8
	53	83	82	98	175	195	151	91
H	7.8	9.0	8.3	8.5	8.5	7.7	6.3	5.0
	16.5	18.0	20.5	23.1	20.5	23.2	15.3	10.2
	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
	4.5	4.3	4.1	4.5	4.0	4.5	2.8	2.2
	54	81	82	97	175	198	150	86
W(X)	3.5	2.2	2.5-	2.1	0.5-	2.5-	1.7-	1.8-
	16.5	16.7	20.5	17.5	17.6	12.3	12.3	7.0
	7.2	10.1-	10.2-	6.6-	14.5-	15.6-	10.7-	9.0-
	5.8	7.2	7.2	6.1	5.5	5.2	4.0	3.5
W(Y)	0.7-	12.6	0.8	2.0	4.6	4.2	3.5	8.6
	13.1	15.5-	12.0	20.5-	20.1	20.7	11.6	8.6
	18.1-	0.5	15.3-	17.7-	17.7-	11.2-	15.1-	6.0-
	5.8		5.5	6.7	5.8	5.3	4.0	3.8

MARCH 1965

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	3 18.0 22.0 13.1 1.5 48	3 18.5 24.5 15.0 1.8 67	3 17.8 23.1 14.5 1.7 54	3 18.3 23.0 15.2 1.5 76	3 19.2 23.7 15.5 1.5 181	3 19.0 25.0 15.5 1.5 221	4 18.1 26.0 14.0 1.6 152	4 16.7 22.0 13.1 1.7 91	
T(W)-T(A)	3 1.5 5.2 1.5- 1.5 48	3 1.0 5.0 3.2- 1.7 67	3 1.6 6.0 2.0- 1.7 54	3 1.5 5.5 6.0- 1.8 75	3 1.0 5.5 3.3- 1.6 177	3 0.9 5.0 7.0- 1.7 215	4 0.7 4.0 6.6- 1.6 149	4 1.0 3.8 5.0- 1.5 90	
E(W)-E(A)	3 5.6 14.1 2.1- 4.0 47	3 5.3 11.8 5.3- 3.7 67	3 6.8 16.5 1.3- 3.2 51	3 5.5 12.8 2.7- 3.0 63	3 5.1 14.6 1.0- 3.0 167	3 4.7 13.5 5.3- 3.3 211	4 4.5 11.7 1.1- 3.0 147	4 5.2 11.2 0.9 2.1 86	
EA	3 15.6 21.6 9.2 3.6 47	3 16.1 23.3 9.6 3.3 67	3 14.7 22.5 9.2 3.3 51	3 16.2 23.7 10.2 2.8 63	2 17.3 23.7 10.1 2.8 167	3 17.0 25.7 9.8 3.1 211	4 16.0 22.6 10.1 3.0 147	4 14.0 20.3 9.5 2.5 86	
C	3 0.7 1.0 0.0 0.3 44	3 0.8 1.0 0.1 0.3 68	3 0.6 1.0 0.1 0.3 54	3 0.6 1.0 0.0 0.3 76	3 0.7 1.0 0.0 0.3 177	3 0.7 1.0 0.0 0.3 222	4 0.7 1.0 0.0 0.3 153	4 0.7 1.0 0.0 0.3 90	
P	3 16.1 27.0 1.5- 0.8 49	3 16.2 26.0 0.3 5.5 68	3 18.7 25.0 9.0 3.8 54	3 18.0 28.6 7.3 5.0 76	3 18.0 29.5 10.2 5.1 182	3 19.7 30.6 8.6 4.6 223	4 21.0 30.0 11.0 4.0 155	4 21.7 28.5 9.5 4.1 91	
M	3 7.5 16.0 0.0 4.0 50	3 7.5 15.3 0.0 3.5 67	3 8.1 13.0 0.5 3.0 51	3 7.3 15.3 0.0 3.5 75	3 8.0 17.5 0.0 3.1 178	3 7.7 18.0 0.0 3.3 223	4 7.5 19.0 0.0 3.5 150	4 6.2 14.8 0.0 2.8 87	
W(X)	2.1 16.0 10.0- 1.3 13.0	0.6 10.2 9.5- 4.8 15.1	0.1 11.1 10.5- 5.5 10.1	1.5- 8.5 11.0- 4.7 12.8	2.2- 9.8 16.3- 5.1 14.5	2.2- 11.6 14.1- 5.1 12.0	2.5- 10.6 16.5- 5.1 12.0	2.2- 9.3 13.0- 4.7 8.6	
W(Y)	7.8- 4.7	10.0- 6.6	12.8- 6.3	14.5- 6.2	15.2- 6.5	10.8- 5.7	14.8- 6.0	12.6- 4.3	

APRIL 1965

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	3 18.8 24.0 14.0 2.1 69	3 19.1 22.5 15.0 1.5 46	3 19.1 22.5 16.5 1.5 46	3 19.6 27.6 16.5 2.0 42	3 19.7 24.2 16.5 1.6 59	3 19.8 23.7 16.5 1.5 14c	3 19.2 25.0 14.0 1.7 188	4 18.2 27.6 15.5 2.0 152	4 16.8 21.0 13.5 1.5 103
T(W)-T(A)	3 1.0 6.0 3.0- 2.0 69	3 1.0 2.7 2.0- 1.2 46	3 0.7 4.0 2.0- 1.2 46	3 0.4 6.3 8.3- 2.2 41	3 0.8 6.3 4.5- 2.0 59	3 0.9 6.0 4.2- 1.6 186	4 0.9 5.0 7.6- 2.0 148	4 0.7 5.0 7.6- 2.0 148	4 1.0 6.0 3.8- 1.6 102
E(W)-E(A)	3 4.2 14.5 3.0- 4.0 67	3 3.5 9.1 2.5 2.6 45	3 3.5 10.6 0.8- 3.2 38	3 4.0 10.0 2.0- 2.8 56	3 4.6 10.0 2.0- 2.8 59	3 5.1 14.1 1.7- 2.8 186	3 5.1 14.7 2.3- 3.1 148	4 5.0 10.3 1.5- 2.7 102	4 5.0 10.3 1.5- 2.7 102
EA	3 17.0 25.0 10.0 3.8 67	3 18.0 24.1 10.5 3.0 45	3 18.0 24.1 12.0 3.0 38	3 18.0 23.8 12.0 2.8 56	3 17.7 24.5 12.5 2.5 141	3 17.0 23.7 10.6 3.0 186	3 15.2 23.1 7.1 2.8 148	4 14.2 21.1 8.5 2.5 102	4 14.2 21.1 8.5 2.5 102
C	3 0.7 1.0 0.0 0.3 67	3 0.7 1.0 0.0 0.3 43	3 0.7 1.0 0.0 0.3 42	3 0.6 1.0 0.0 0.3 59	3 0.6 1.0 0.0 0.3 145	3 0.7 1.0 0.0 0.3 185	3 0.7 1.0 0.0 0.3 151	4 0.7 1.0 0.0 0.3 105	4 0.7 1.0 0.0 0.3 105
P	3 18.5 32.7 3.0 6.8 67	3 19.1 30.1 7.5 7.0 46	3 20.5 28.0 8.0 5.7 42	3 22.3 31.2 8.0 5.0 57	3 23.0 32.0 7.0 4.5 133	3 22.1 31.0 7.6 5.2 164	3 22.1 29.0 8.1 4.8 149	4 21.6 23.5 13.7 3.8 106	4 21.6 23.5 13.7 3.8 106
M	3 8.5 15.3 0.0 3.5 69	3 8.5 14.3 2.0 2.5 43	3 8.1 14.0 2.0 3.0 42	3 8.5 18.0 1.5 3.0 59	3 7.5 15.3 1.5 2.8 143	3 6.7 15.3 0.3 2.5 187	3 7.1 17.0 0.0 2.7 149	4 7.5 15.3 0.0 2.8 106	4 7.5 15.3 0.0 2.8 106
W(X)	2.2- 10.6 13.0- 6.2 10.7	4.1- 12.3 13.5- 6.5 11.0	4.1 12.3 13.1- 6.5 9.7	5.3- 16.8 6.5 5.5 10.5	4.6- 13.2 4.7- 9.3 11.8-	12.3 10.1- 4.5 0.7 12.0	13.8 10.1- 4.5 0.7 17.0	15.3 9.0- 3.2 12.5	15.3 9.0- 3.2 13.5-
W(Y)	14.5- 6.1	8.0- 4.0	9.7 3.8	8.6- 4.7	11.8- 4.5	11.8- 4.8	13.0- 5.6	13.0- 5.5	13.5- 5.5

JUNE 1965

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	3; 24.2, 29.2, 20.0, 1.8, 39	4; 23.5, 26.5, 21.0, 1.7, 27	4; 23.8, 28.5, 21.0, 1.5, 33	3; 22.8, 27.0, 19.5, 1.5, 37	2; 22.2, 27.6, 18.1, 1.2, 129	3; 21.1, 28.1, 16.5, 1.5, 180	4; 20.0, 24.2, 16.6, 1.8, 148	4; 18.1, 22.6, 15.0, 1.3, 125	3
T(W)-T(A)	3; 4.0, 4.0, 5.1-, 2.1, 36	4; 0.4, 4.0, 3.3-, 1.8, 27	4; 0.5, 4.0, 3.3-, 2.2, 30	3; 1.2, 4.6, 1.8, 1.8, 35	2; 1.0, 5.5, 1.5, 1.5, 119	3; 1.0, 5.0, 4.3-, 1.5, 177	4; 1.0, 4.6, 4.1-, 1.5, 147	4; 0.9, 3.8, 4.5-, 1.5, 124	3
E(W)-E(A)	3; 5.0, 10.0, 1.1-, 3.0, 31	4; 5.7, 12.0, 0.2, 3.0, 26	4; 6.6, 12.1, 0.9, 2.8, 30	3; 7.3, 12.7, 2.0, 2.7, 31	2; 6.7, 15.2, 1.3, 2.2, 118	3; 6.8, 13.3, 1.1, 2.3, 177	4; 6.7, 14.5, 0.7-, 2.5, 147	4; 4.7, 9.0, 0.8-, 2.1, 123	3
EA	3; 23.8, 28.8, 20.0, 2.0, 31	4; 23.0, 28.5, 20.7, 2.0, 26	3; 21.6, 26.7, 19.0, 1.8, 30	2; 20.7, 24.5, 15.6, 2.1, 31	3; 20.1, 25.3, 15.8, 1.8, 118	3; 18.2, 25.5, 14.6, 1.6, 177	4; 16.6, 22.6, 12.2, 1.5, 147	4; 16.0, 20.8, 12.5, 1.8, 123	3
C	3; 0.5, 1.0, 0.3, 0.3, 39	4; 0.5, 1.0, 0.3, 0.3, 27	4; 0.5, 1.0, 0.3, 0.3, 33	2; 0.6, 1.0, 0.0, 0.3, 38	2; 0.6, 1.0, 0.0, 0.3, 130	3; 0.6, 1.0, 0.0, 0.3, 180	4; 0.7, 1.0, 0.1, 0.3, 148	4; 0.7, 1.0, 0.1, 0.3, 125	3
P	3; 20.8, 26.0, 13.0, 3.2, 40	4; 22.5, 28.0, 14.7, 2.8, 27	4; 23.1, 28.2, 18.0, 2.5, 33	3; 23.3, 27.6, 19.5, 2.0, 38	2; 23.7, 28.0, 19.6, 1.8, 129	3; 24.0, 30.0, 5.6, 2.5, 179	4; 24.2, 29.0, 18.1, 2.1, 145	4; 22.3, 28.5, 3.0, 3.2, 124	3
X	3; 5.7, 10.2, 1.0, 2.5, 37	4; 6.0, 10.2, 0.5, 2.6, 27	3; 7.1, 15.3, 3.0, 3.3, 33	2; 7.0, 12.8, 1.5, 2.8, 38	3; 7.3, 14.3, 0.0, 2.8, 131	3; 6.5, 13.3, 0.5, 2.6, 171	4; 5.8, 11.7, 0.0, 2.5, 141	4; 6.0, 12.3, 0.0, 2.6, 126	3
W(X)	4.0-, 9.0, 3.5, 2.1	5.2-, 10.2-, 3.1, 1.1	7.5, 14.5-, 0.2-, 1.0	6.1-, 12.6-, 3.5, 1.0	6.5-, 13.0-, 0.8-, 3.5	4.8-, 11.5-, 3.7, 7.0	4.0-, 11.0-, 3.1, 3.2	1.8-, 10.7-, 10.5-, 3.1	4.6-
W(Y)	9.2-, 7.7, 5.7-, 3.5	1.1, 7.7, 6.2-, 3.5	0.2-, 6.5, 3.1	6.2, 5.0, 2.5	5.0, 7.2-, 2.5	7.0, 7.6-, 2.8	3.1-, 10.2-, 2.5	4.1-, 4.7, 10.2-, 2.6	

MAY 1965

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	3; 19.7, 23.7, 16.2, 2.0, 34	3; 20.7, 26.5, 16.3, 2.3, 27	3; 20.6, 24.0, 16.0, 2.0, 30	3; 21.7, 29.2, 18.7, 1.8, 43	3; 21.2, 25.0, 17.0, 1.3, 153	3; 20.1, 28.0, 15.0, 1.8, 194	4; 18.7, 25.0, 15.0, 1.8, 159	4; 17.2, 23.1, 13.1, 1.8, 109	3
T(W)-T(A)	3; 1.2, 4.3, 3.8-, 1.8, 34	3; 0.4, 5.0, 6.5-, 2.5, 27	3; 0.3, 4.0, 3.2-, 1.5, 30	3; 0.4, 3.0, 5.5-, 1.5, 43	2; 1.0, 4.5, 3.3, 1.3, 153	3; 0.9, 5.5, 1.7, 1.7, 192	4; 0.9, 4.5, 5.7-, 1.7, 158	4; 1.0, 4.5, 5.0-, 2.0, 109	3
E(W)-E(A)	3; 6.2, 12.8, 1.3-, 3.5, 34	3; 4.7, 11.2, 2.7-, 3.5, 27	3; 3.5, 11.5, 0.9-, 3.2, 30	3; 4.0, 13.1, 0.3-, 3.1, 42	2; 5.0, 11.0, 0.3, 2.2, 146	3; 6.0, 12.7, 3.7-, 2.3, 191	4; 5.8, 11.5, 3.5-, 2.2, 157	4; 5.2, 10.5, 0.5-, 2.2, 109	3
EA	3; 17.3, 24.6, 9.7, 4.0, 34	3; 19.0, 25.7, 11.2, 4.0, 27	3; 19.8, 26.3, 11.5, 4.2, 30	3; 21.0, 25.6, 11.6, 2.7, 42	2; 19.5, 24.3, 15.3, 1.6, 146	3; 17.3, 24.6, 12.2, 2.0, 191	4; 15.7, 24.5, 10.6, 2.2, 157	3; 14.3, 20.0, 9.6, 2.2, 109	3
C	3; 0.7, 1.0, 0.1, 0.3, 34	3; 0.7, 1.0, 0.1, 0.3, 27	3; 0.6, 1.0, 0.1, 0.3, 30	3; 0.6, 1.0, 0.3, 0.3, 43	2; 0.6, 1.0, 0.3, 0.3, 154	3; 0.7, 1.0, 0.3, 0.3, 193	4; 0.8, 1.0, 0.3, 0.3, 159	4; 0.8, 1.0, 0.1, 0.3, 109	3
P	3; 21.8, 26.5, 14.0, 3.0, 34	3; 19.7, 26.0, 14.0, 3.5, 27	3; 18.6, 26.6, 11.0, 3.6, 30	3; 20.8, 26.0, 18.1, 3.2, 42	2; 22.5, 28.2, 18.1, 1.8, 145	3; 24.1, 32.0, 17.5, 2.0, 189	4; 25.1, 31.0, 18.1, 2.3, 158	4; 24.5, 30.0, 20.1, 2.5, 111	3
X	3; 6.2, 12.6, 1.5, 2.6, 34	3; 7.5, 16.0, 1.5, 4.0, 27	3; 6.3, 18.0, 0.0, 4.0, 30	3; 7.1, 17.0, 2.5, 3.6, 43	2; 7.3, 14.3, 0.0, 2.6, 152	3; 7.2, 15.3, 1.5, 2.8, 192	4; 6.7, 11.7, 1.0, 2.5, 158	4; 6.3, 13.8, 1.5, 2.1, 110	3
W(X)	5.0-, 1.0, 12.0-, 2.0-	4.5-, 3.5, 17.6-, 1.6-	3.5-, 5.7, 18.0-, 1.1	6.5-, 4.6, 17.0-, 4.5	6.5-, 0.7, 14.3-, 3.0	6.3-, 5.2, 15.1-, 3.1	6.0-, 2.2, 11.5-, 2.8	3.8-, 2.8, 13.0-, 2.7	3.8-
W(Y)	4.0, 7.2-, 3.0	5.5, 9.5-, 4.1	5.6, 8.1, 3.2	5.6, 11.1-, 2.8	3.0, 11.0, 3.1	3.1, 9.0-, 3.0	2.8, 7.5-, 2.3	4.1-, 8.1-, 2.0	

AUGUST 1963

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	2	3	3	3	4	2	2	3	2
	26.5	26.0	25.0	25.7	24.5	23.7	23.6	23.2	21.7
	31.0	29.0	29.0	29.2	39.5	30.0	27.0	27.0	24.5
	24.2	24.0	22.6	21.7	21.7	21.0	21.0	21.5	20.0
	1.5	0.9	1.0	1.0	1.5	1.5	1.5	1.5	1.1
	54	97	101	109	201	113	27	13	13
T(w)-T(A)	2	3	2	3	3	4	2	2	3
	0.4	0.8	1.0	1.0	0.8	0.9	0.8	0.6	0.1
	3.0	4.0	4.2	4.7	4.7	4.5	4.5	3.8	2.6
	4.3-	3.7-	2.1-	2.1-	13.6-	4.2-	3.3-	3.8-	2.8-
	1.5	1.5	1.1	1.1	1.6	1.5	1.8	2.2	1.6
	53	93	101	201	201	110	27	13	13
E(w)-E(A)	2	3	2	3	3	4	3	3	3
	6.5	7.0	7.8	6.6	6.6	6.2	6.6	5.3	5.3
	11.8	13.2	14.8	18.7	12.1	10.7	12.0	7.2	7.2
	0.1	0.4-	3.3-	0.9-	1.7-	3.0	2.0	2.6	2.6
	2.7	2.6	2.8	2.5	2.5	2.2	3.0	1.2	1.2
	53	92	100	199	109	26	13	13	13
EA	2	3	2	3	3	4	3	3	3
	27.0	26.3	25.3	23.8	22.5	22.5	21.0	19.2	19.2
	32.3	34.0	35.0	31.5	29.5	25.0	24.5	22.2	22.2
	22.5	23.5	22.0	12.3	17.6	18.8	15.8	16.5	16.5
	2.0	1.7	2.0	2.1	2.0	1.5	2.3	1.6	1.6
	53	92	100	199	109	26	13	13	13
C	2	3	2	3	3	4	3	3	3
	0.6	0.5	0.5	0.6	0.6	0.6	0.7	0.9	0.9
	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	0.1	0.1	0.1	0.1	0.0	0.0	0.3	0.3	0.3
	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2
	53	100	111	203	114	27	13	13	13
P	2	3	2	3	3	4	3	3	3
	16.1	16.3	16.0	17.7	18.8	18.7	18.2	18.5	18.5
	19.1	19.1	19.5	22.0	22.5	22.2	20.0	19.5	19.5
	12.5	13.5	13.5	13.5	9.5	15.5	16.1	17.5	17.5
	1.5	1.1	1.2	1.5	2.0	1.8	0.7	0.7	0.7
	51	96	108	196	110	27	13	13	13
H	2	3	2	3	3	4	2	3	2
	5.6	6.0	7.0	7.6	7.3	7.3	8.2	5.5	5.5
	13.8	13.8	16.5	12.8	11.7	10.2	10.2	10.2	10.2
	0.0	0.0	0.0	1.0	1.0	3.5	5.0	2.7	2.7
	2.5	2.3	2.3	1.8	2.0	1.7	1.7	1.3	1.3
	55	99	111	204	112	27	13	13	13
W(x)	4.0-	6.0-	7.3-	7.3-	7.0-	6.8-	6.5-	3.5-	3.5-
	4.7	0.0	1.5-	1.0-	1.0-	2.6-	3.8-	1.2	1.2
	13.8-	13.8-	10.5-	12.3-	11.7-	9.5-	10.2-	9.2-	9.2-
	3.5	2.3	2.3	1.8	2.0	1.6	2.0	3.5-	3.5-
	0.8	0.3-	0.2-	0.2-	0.2-	0.0-	0.1-	1.5-	1.5-
W(y)	10.6	6.2	10.1	9.7	8.5	0.0	0.1-	1.5-	1.5-
	5.2-	6.6-	5.2-	6.2-	5.1-	6.0-	7.1-	5.1-	5.1-
	3.0	2.3	2.1	2.0	2.0	2.0	2.3	1.1	1.1

JULY 1963

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	3	3	2	3	4	4	4	4	4
	25.6	25.0	25.0	24.1	23.3	23.5	22.1	20.6	20.6
	30.0	31.0	28.1	30.0	27.0	27.0	24.2	23.7	23.7
	23.0	22.2	23.1	21.0	21.5	21.5	21.0	17.6	17.6
	1.2	1.5	0.9	1.2	1.1	1.5	1.0	1.3	1.3
	66	89	70	179	102	22	8	17	17
T(w)-T(A)	3	3	2	3	4	3	4	4	4
	0.5	0.9	0.6	0.7	0.7	0.1	2.1	0.8	0.8
	3.5	3.1	3.0	4.5	4.5	1.6	2.1	2.2	2.2
	5.0-	4.5-	3.2-	4.5-	3.8-	2.7-	2.6-	1.0-	1.0-
	1.5	1.3	1.3	1.3	1.5	1.1	1.5	1.0	1.0
	66	87	62	174	101	22	8	17	17
E(w)-E(A)	3	3	2	3	4	3	4	4	4
	5.5	5.1	5.8	5.8	5.3	4.1	3.5	4.5	4.5
	11.3	13.2	10.0	13.1	11.2	9.5	6.3	8.0	8.0
	2.3-	3.5-	4.1-	0.1-	0.8-	0.3	0.9	0.3	0.3
	2.7	2.7	2.5	2.1	2.2	2.2	1.7	2.0	2.0
	66	87	60	174	99	22	8	17	17
EA	3	3	2	3	4	3	4	4	4
	26.4	26.0	24.8	23.7	22.7	23.2	22.0	19.5	19.5
	33.1	32.1	29.5	30.2	28.3	27.1	25.0	23.0	23.0
	21.5	21.8	21.5	19.2	18.3	17.1	18.5	16.1	16.1
	2.5	2.2	1.6	2.0	2.0	2.0	1.6	1.8	1.8
	66	87	60	174	99	22	8	17	17
C	3	3	2	3	4	3	4	4	4
	0.5	0.5	0.4	0.6	0.7	0.7	0.7	0.9	0.9
	1.0	1.0	1.0	1.0	1.0	1.0	0.9	0.8	0.8
	0.0	0.0	0.0	0.1	0.1	0.3	0.4	0.1	0.1
	0.2	0.3	0.1	0.3	0.2	0.2	0.2	0.1	0.1
	65	42	70	175	100	22	8	17	17
P	3	3	2	3	4	3	4	4	4
	17.6	17.6	17.5	18.8	19.2	18.0	19.0	17.7	17.7
	22.1	22.0	21.1	24.2	27.0	22.0	20.5	22.5	22.5
	13.0	12.0	14.0	15.0	14.8	15.5	17.5	12.5	12.5
	2.1	2.1	1.6	1.8	2.3	1.5	0.9	3.0	3.0
	67	92	69	173	95	21	8	17	17
H	3	3	2	3	4	3	4	4	4
	7.5	7.5	7.7	8.0	8.0	7.3	5.8	8.0	8.0
	12.8	14.3	15.3	18.0	13.8	10.2	9.2	10.2	10.2
	4.0	0.0	4.2	0.0	2.5	4.0	3.0	5.0	5.0
	2.0	2.1	2.2	2.0	2.0	1.5	2.0	1.5	1.5
	67	42	71	180	101	22	8	17	17
W(x)	7.1-	7.0-	7.0-	7.5-	7.5-	6.3-	4.3-	6.0-	6.0-
	2.2-	0.0	1.1-	0.0	2.0-	2.0-	0.0	3.7-	3.7-
	12.0-	14.1-	15.8-	17.7-	13.6-	9.5-	9.2-	7.7-	7.7-
	2.1	2.1	2.5	2.0	2.0	1.6	3.0	1.1	1.1
W(y)	7.7	4.5	4.5	4.8	2.5	2.8	3.0	5.2-	5.2-
	4.6-	7.3-	5.8-	6.6-	8.3-	7.1-	0.1-	3.2-	3.2-
	2.3	2.5	2.2	2.0	2.0	2.0	4.6-	6.6-	6.6-
							1.3	1.0	1.0

OCTOBER 1963

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)									
T(W)-T(A)									
E(W)-E(A)									
EA									
C									
P									
W									
W(X)									
W(Y)									

SEPTEMBER 1963

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)									
T(W)-T(A)									
E(W)-E(A)									
EA									
C									
P									
W									
W(X)									
W(Y)									

DECEMBER 1963

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)									
T(W)–T(A)									
E(W)–E(A)									
EA									
C									
P									
W									
W(X)									
W(Y)									

NOVEMBER 1963

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)									
T(W)–T(A)									
E(W)–E(A)									
EA									
C									
P									
W									
W(X)									
W(Y)									

FEBRUARY 1964

	LONGITUDE WEST								
	170	165	160	155	150	145	140	135	130
T(A)	23.2	23.1	23.1	22.1	21.2	21.1	20.1	19.3	
	27.0	28.0	25.7	28.7	26.0	25.5	20.1	21.0	
	20.5	21.0	19.0	19.0	18.1	18.7	19.0	18.0	
	1.0	1.0	1.0	1.3	1.3	1.6	1.1	0.9	
	99	121	125	203	114	29	9	13	
T(W)−T(A)	0.9	0.8	1.3	1.3	1.5	1.0	1.5	1.1	
	5.0	3.8	5.5	4.7	5.2	3.3	3.8	4.5	
	5.2−	5.2−	4.5−	4.5−	2.0−	3.3−	1.2−	0.0	
	1.6	1.5	1.3	1.3	1.3	1.6	1.7	1.1	
	96	118	120	200	109	28	9	13	
E(W)−E(A)	6.6	6.7	7.7	8.1	7.8	7.0	6.2	4.6	
	12.6	13.5	13.7	14.2	12.0	13.5	13.1	8.0	
	2.7−	2.5−	0.2	3.7−	0.9−	0.9−	0.2	1.5	
	3.0	2.6	2.5	2.5	2.3	3.3	4.0	2.0	
	91	111	116	197	105	24	6	9	
EA	21.8	21.3	20.0	19.0	18.2	18.5	19.2	18.5	
	28.0	26.0	25.1	31.0	26.7	26.7	23.0	21.0	
	17.8	15.8	15.5	14.0	13.1	11.3	15.2	15.5	
	2.0	1.6	1.8	2.1	2.1	3.0	2.2	1.6	
	91	111	116	197	105	24	6	9	
C	0.4	0.4	0.4	0.5	0.5	0.5	0.8	0.8	
	1.0	1.0	1.0	1.0	1.0	1.0	0.9	1.0	
	0.0	0.0	0.0	0.2	0.0	0.3	0.6	0.4	
	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.2	
	101	125	125	211	121	30	9	13	
P	19.0	19.0	19.5	20.5	20.7	20.2	18.8	20.5	
	25.0	24.0	25.6	28.0	28.6	25.0	22.5	22.0	
	14.0	14.5	13.5	14.5	15.0	14.7	12.5	19.1	
	2.8	2.3	3.0	2.7	2.8	2.5	3.0	0.9	
	100	125	124	208	120	30	9	13	
W	6.7	7.2	8.3	8.5	8.0	8.3	11.3	8.8	
	12.8	12.0	18.0	20.5	18.0	13.3	20.5	23.1	
	1.5	2.0	0.5	0.0	2.5	4.5	8.1	4.0	
	3.0	2.6	3.1	3.0	2.6	2.1	3.7	4.5	
	99	124	125	211	121	30	9	13	
W(X)	5.5−	6.3−	7.5−	7.5−	7.0−	7.0−	8.3−	7.5−	
	2.5	0.8	2.3	3.8	2.8	6.0	6.5−	3.8−	
	12.8−	12.6−	17.6−	20.1−	16.8−	11.5−	9.7−	21.6−	
	3.6	2.8	3.2	3.7	3.0	3.3	1.0	4.2	
W(Y)	0.3−	0.9−	1.5−	0.6−	1.2−	2.6−	6.5−	4.5−	
	8.8	6.5	9.7	9.7	5.8	3.7	1.6−	0.0	
	9.0−	9.6−	10.0−	7.8−	10.1−	8.0−	19.3−	8.0−	
	3.1	3.1	3.0	3.2	3.3	2.3	5.3	2.5	

JANUARY 1964

	LONGITUDE WEST								
	170	165	160	155	150	145	140	135	130
T(A)	23.5	23.3	23.2	22.6	22.2	21.7	20.2	20.2	20.1
	26.0	27.5	27.5	27.0	27.6	25.0	24.0	24.0	25.0
	26.0	20.1	20.1	18.1	18.2	18.7	19.0	17.0	17.0
	21.0	1.0	1.1	1.1	1.5	1.1	1.3	2.0	2.0
	69	91	73	178	126	34	13	16	
T(W)−T(A)	1.2	1.0	1.0	1.3	0.9	0.9	1.0	1.0	1.0
	3.7	3.0	4.5	6.1	2.6	2.6	2.0	7.1	7.1
	1.0−	1.0−	3.0−	2.0−	3.3−	1.3−	0.4−	2.8−	2.8−
	1.0	0.9	1.5	1.1	1.5	1.0	0.6	2.0	2.0
	68	83	70	175	124	31	12	16	
E(W)−T(A)	7.2	6.6	6.2	6.7	6.0	6.8	6.6	6.5	6.5
	11.2	11.1	12.6	15.3	13.0	14.1	9.6	13.2	13.2
	1.6	0.3−	0.5	1.7−	1.7−	0.8	3.0	3.6	3.6
	2.1	2.3	2.5	2.5	2.6	2.8	1.6	2.1	2.1
	56	63	59	161	114	30	12	15	
EA	22.3	22.1	22.2	21.3	20.5	19.0	17.0	17.3	17.3
	29.0	31.0	29.0	27.1	29.5	25.6	25.0	21.0	21.0
	17.5	19.1	18.5	13.8	13.2	14.3	13.6	14.7	14.7
	1.8	1.6	2.1	2.5	2.7	2.8	2.7	2.0	2.0
	56	63	59	161	114	30	12	15	
C	0.5	0.4	0.5	0.6	0.6	0.6	0.6	0.8	0.8
	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.3
	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	72	91	74	181	129	35	13	17	
P	18.3	18.0	18.6	19.7	20.6	21.6	24.0	22.8	22.8
	25.0	24.0	26.0	28.2	26.7	26.0	27.2	27.2	27.2
	11.7	9.0	10.2	9.5	13.0	14.7	20.5	19.5	19.5
	2.5	2.6	2.1	2.5	2.6	2.8	2.1	1.6	1.6
	73	91	74	178	126	32	11	17	
W	8.0	8.3	8.2	8.5	8.3	9.3	8.5	7.2	7.2
	15.3	18.5	15.3	18.0	15.3	15.3	12.8	15.3	15.3
	0.3	0.0	0.0	0.0	1.5	4.0	6.1	1.0	1.0
	3.2	3.8	3.5	3.5	3.1	3.1	2.0	3.2	3.2
	72	91	74	183	130	35	13	17	
W(X)	6.0−	6.6−	6.5−	7.3−	7.3−	8.6−	8.2−	5.3−	5.3−
	2.2	5.0	8.6	3.8	1.6	3.2−	5.7−	3.0	3.0
	12.3−	17.3−	15.1−	17.5−	14.8−	15.1−	12.0−	14.5−	14.5−
	3.2	4.2	4.6	3.7	3.3	3.1	1.8	4.3	4.3
W(Y)	3.8	3.0−	1.5−	0.4−	0.1	1.8−	4.2	3.1	3.1
	7.7	5.7	7.7	15.3	10.1	4.2	1.2	1.2	1.2
	11.1−	10.2−	9.8−	12.0−	9.0−	11.0−	4.5−	8.1−	8.1−
	3.7	3.5	3.6	4.0	3.8	3.1	1.5	2.5	2.5

MARCH 1964

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	3 / 23.2 27.0 20.0 1.3 115	3 / 22.7 26.0 19.2 1.1 136	2 / 22.7 26.0 20.0 1.0 145	3 / 22.0 28.0 18.7 1.2 235	4 / 21.1 26.0 18.0 1.2 141	3 / 20.6 24.0 18.1 1.1 38	2 / 20.0 24.0 17.0 1.3 21	4 / 19.1 24.0 16.0 1.7 15	3 /
T(W)-T(A)	3 / 1.0 5.0 5.2- 1.5 106	3 / 0.9 4.5 5.6- 1.6 131	3 / 0.8 3.7 6.1- 1.3 137	3 / 1.1 5.0 2.7- 1.3 225	4 / 1.1 4.7 5.0- 1.5 132	3 / 1.3 4.5 2.5- 1.5 37	3 / 0.9 2.6 4.0- 1.3 18	3 / 0.5 2.5 5.0- 1.7 13	4 /
E(W)-E(A)	3 / 6.2 12.5 2.2- 2.6 93	3 / 5.8 16.7 2.0- 2.8 116	2 / 5.5 15.1 4.0- 3.0 127	3 / 6.3 14.8 0.6- 2.2 215	4 / 6.7 13.0 0.1- 2.2 117	3 / 7.5 12.6 2.5 2.5 26	2 / 7.0 10.5 4.5 1.8 12	4 / 7.1 10.1 3.5 1.7 9	4 /
EA	3 / 22.1 25.7 16.8 2.2 93	2 / 21.8 25.7 16.5 2.0 116	2 / 21.7 28.6 12.0 2.2 127	3 / 20.1 25.5 13.7 2.0 215	4 / 18.5 26.3 11.5 2.1 117	3 / 18.0 22.6 14.0 2.1 26	2 / 17.0 19.2 14.7 1.7 12	4 / 14.5 17.0 12.3 1.5 9	4 /
C	3 / 0.6 1.0 0.1 0.3 117	3 / 0.5 1.0 0.0 0.3 136	2 / 0.5 1.0 0.0 0.3 140	3 / 0.7 1.0 0.0 0.2 234	4 / 0.6 1.0 0.1 0.3 140	3 / 0.6 1.0 0.1 0.3 39	2 / 0.6 1.0 0.1 0.3 21	4 / 0.6 1.0 0.3 0.3 16	4 /
P	3 / 17.5 23.2 11.0 2.1 117	3 / 17.7 27.0 11.5 2.5 137	2 / 18.5 26.3 9.7 2.8 146	3 / 19.6 27.2 12.5 3.0 236	4 / 21.5 29.5 13.7 3.1 143	3 / 21.5 28.0 15.7 3.0 39	2 / 21.6 26.0 15.2 2.6 17	4 / 20.7 28.0 7.0 5.2 14	4 /
R	3 / 7.5 15.3 15.1- 3.3 114	3 / 7.0 14.3 1.0- 3.2 136	2 / 8.0 17.0 1.5 3.0 144	3 / 8.7 18.0 0.0 3.1 237	4 / 9.1 15.3 2.5 3.0 143	3 / 9.7 15.3 5.0 2.5 39	2 / 9.5 14.3 5.0 2.8 21	4 / 6.2 10.7 0.0 3.5 16	4 /
w(x)	6.3 3.1 15.1- 3.8	5.0 8.1 13.6- 4.1	6.8 7.5 15.8- 4.0	7.5 4.3 18.0- 4.0	8.0 4.0 15.3- 4.2	8.8 0.1 15.3- 3.0	7.2 4.5 12.6- 4.0	2.5 9.3 8.6- 4.8	
w(y)	0.8 7.7 12.5- 3.6	4.2 6.0 13.5- 3.7	0.0 8.1 7.6- 3.2	0.4 8.6 12.5- 3.5	0.2 7.0 11.1- 3.2	1.5 5.5 12.8- 3.0	3.2 3.5 14.3- 4.1	2.3 2.3 9.3- 2.7	

APRIL 1964

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	3 / 24.7 29.0 19.5 1.5 74	2 / 22.6 28.1 18.7 1.3 112	3 / 23.1 28.6 20.6 1.1 118	3 / 22.1 28.7 20.0 1.2 205	4 / 21.0 24.5 18.1 1.1 138	2 / 21.0 26.5 18.7 1.6 34	3 / 19.8 22.0 15.5 1.5 24	3 / 19.8 22.0 15.5 1.5 21	3 / 18.0 21.0 16.0 1.3 21
T(W)-T(A)	3 / 1.0 6.2 3.0- 1.5 71	2 / 0.7 3.3 5.0- 1.5 111	2 / 0.4 4.2 6.5- 1.7 118	3 / 0.9 6.0 6.0- 1.5 205	3 / 1.2 4.3 2.1- 1.3 138	3 / 0.8 4.2 3.8- 2.0 30	3 / 1.0 4.5 0.7- 1.1 12	3 / 1.5 4.0 0.0- 1.0 17	3 /
E(W)-E(A)	3 / 6.0 14.1 0.1- 3.0 71	2 / 5.3 14.0 2.0- 2.7 108	2 / 5.7 15.0 5.3- 2.7 116	3 / 6.1 13.5 5.5- 2.5 200	4 / 6.0 15.2 0.5- 2.3 136	3 / 6.2 14.8 0.9 2.7 30	3 / 7.0 9.3 2.5 1.8 12	3 / 6.5 9.5 2.6 1.8 15	3 /
EA	3 / 22.0 28.3 13.5 3.2 71	2 / 22.1 27.6 12.5 2.5 108	2 / 21.6 25.1 14.6 1.8 116	3 / 20.5 30.5 15.0 2.0 200	4 / 18.7 25.3 13.5 2.0 136	3 / 18.2 24.7 13.5 2.3 30	3 / 16.2 20.8 10.6 2.2 12	3 / 15.5 20.5 10.6 2.2 15	3 /
C	3 / 0.7 1.0 0.1 0.3 73	2 / 1.0 1.0 0.0 0.3 116	2 / 0.6 1.0 0.3 0.3 119	3 / 0.6 1.0 0.0 0.3 209	4 / 0.6 1.0 0.0 0.3 138	3 / 0.7 1.0 0.1 0.3 34	3 / 0.8 1.0 0.4 0.2 14	3 / 0.7 1.0 0.1 0.3 21	3 /
P	3 / 18.3 26.0 12.5 3.1 74	2 / 19.0 27.1 11.1 2.8 116	2 / 18.5 24.0 13.7 2.2 121	3 / 21.0 25.2 13.7 2.1 209	4 / 22.5 27.2 16.7 2.1 137	3 / 24.0 26.0 16.0 2.2 34	3 / 21.5 28.6 18.2 2.7 14	3 / 20.6 28.6 15.2 3.0 21	3 /
R	3 / 7.8 18.0 0.0 3.5 73	2 / 8.0 14.5 1.0 3.3 117	2 / 8.5 17.0 3.0 2.6 208	3 / 8.3 15.3 2.0 2.0 137	3 / 8.5 13.8 1.7 3.1 138	3 / 8.0 15.3 3.1 2.5 34	3 / 8.5 12.8 2.6 1.7 33	3 / 7.5 10.2 3.0 2.0 17	
w(x)	6.1 8.1 13.2- 4.0	6.0 3.5 16.5- 3.0	7.3 3.5 16.0- 3.0	7.7 3.0 15.3- 2.3	8.0 1.2 13.0- 2.3	7.0 1.5 14.5- 3.0	7.5 4.0 11.5- 2.0	5.5 2.5 7.7- 2.6	
w(y)	0.2 10.1 15.6- 4.0	3.6 8.2 8.6 3.5	1.5 8.2 7.0- 3.6	0.1 6.6 7.0- 3.0	0.1 6.6 5.0- 2.1	1.6 9.8 9.8- 2.2	3.1 1.6 8.3- 2.3	5.0 2.2 7.7- 1.6	

JUNE 1964

		LONGITUDE WEST								
		170	165	160	155	150	145	140	135	130
T(A)		3	3	3	3	3	3	4	3	2
		25.5	25.2	25.2	23.8	23.2	23.2	21.0	20.8	20.8
		30.6	28.1	27.0	30.0	31.0	27.6	22.6	26.0	26.0
		22.6	22.0	22.1	20.7	21.0	20.0	20.0	19.2	19.2
		1.2	1.1	1.0	1.1	1.5	1.6	0.6	1.5	1.5
		76	106	115	221	133	36	8	21	21
T(W)–T(A)		3	3	3	3	4	3	2	3	2
		0.5	0.8	0.9	0.9	0.7	0.2	1.8	0.9	0.9
		3.3	3.8	4.1	5.7	4.5	4.0	2.3	2.7	2.7
		3.0–	2.7–	4.3–	5.6–	6.0–	3.3–	1.0–	2.7–	2.7–
		1.2	1.3	1.3	1.5	1.6	1.6	0.4	1.3	1.3
		75	99	105	213	130	36	8	21	21
E(W)–E(A)		3	3	3	3	3	3	2	3	2
		5.6	6.3	6.0	6.3	6.0	5.5	5.7	4.0	4.0
		10.8	10.6	12.3	13.5	11.0	10.1	8.0	8.2	8.2
		2.0	1.7–	1.3–	0.6–	0.9	2.7	3.2	0.8	0.8
		3.0	2.5	2.6	2.3	2.1	1.6	1.5	2.0	2.0
		65	94	103	210	127	34	8	21	21
EA		2	3	2	3	4	4	3	3	2
		26.2	25.5	24.1	23.0	21.8	21.0	20.5	20.5	20.5
		32.1	30.0	28.7	29.1	28.7	25.2	23.3	24.0	24.0
		22.3	22.2	19.0	17.7	17.1	16.5	18.0	15.8	15.8
		2.0	1.5	1.6	1.7	1.8	2.2	1.7	2.5	2.5
		65	94	103	210	127	34	8	21	21
C		2	3	3	3	4	4	2	3	2
		0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.8	0.8
		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
		0.0	0.0	0.1	0.0	0.0	0.1	0.4	0.4	0.4
		0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2
		75	107	114	225	133	36	8	21	21
P		3	3	2	3	4	3	2	3	2
		17.1	17.1	17.5	19.0	19.8	19.3	18.5	19.0	19.0
		20.5	20.5	21.5	24.0	24.0	23.0	20.1	21.0	21.0
		13.0	12.0	11.0	14.0	14.5	16.5	16.7	17.5	17.5
		1.5	1.6	1.8	2.0	2.2	2.0	1.1	0.9	0.9
		75	103	115	224	131	31	8	21	21
W		3	3	3	3	4	4	2	3	2
		6.8	7.0	7.0	7.5	7.5	7.0	7.7	6.1	6.1
		11.7	12.8	16.5	15.3	14.8	13.8	10.2	10.2	10.2
		0.0	1.0	3.3	0.0	0.0	0.5	3.0	2.5	2.5
		3.0	2.7	3.3	3.0	2.8	3.0	2.7	2.0	2.0
		73	104	115	222	133	36	8	21	21
W(X)		5.5	5.0	6.1	6.5	6.5	6.0	7.1	4.5–	4.5–
		3.0	5.0	6.1	8.0	6.5	1.0	2.2–	0.8–	0.8–
		3.7	12.1–	15.3–	14.5–	14.6–	11.0–	10.2–	10.0–	10.0–
		0.6	0.3	1.1	4.1	3.7	2.7	2.0–	2.0–	2.0–
W(Y)		9.0	6.0	1.1	0.5	1.0–	1.8–	2.0–	3.5–	3.5–
		5.6–	6.0–	6.2	6.2	10.7–	10.5	6.6–	0.1–	0.1–
		3.3	3.0	2.7	2.5	2.5	3.1	1.8	7.2–	7.2–
									2.0	2.0

MAY 1964

		LONGITUDE WEST								
		170	165	160	155	150	145	140	135	130
T(A)										
T(W)–T(A)										
E(W)–E(A)										
EA										
C										
P										
W										
W(X)										
W(Y)										

JULY 1964 LATITUDE 20°–25° N.

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A) (n)	3 2	3	2	3	4	3	2	3	
	25.6	25.6	25.0	24.0	23.3	22.5	21.6	20.8	
	30.0	30.0	28.1	28.7	27.0	29.0	24.0	24.1	
	23.1	23.1	23.1	21.5	20.5	20.0	20.3	19.1	
	1.0	1.1	1.0	1.0	1.1	1.5	0.9	1.1	
	82	100	137	206	116	38	24	23	
T(W)–T(A) (n)	3 2	3	2	3	3	3	2	3	
	0.7	0.5	0.8	0.8	0.7	0.7	1.0	1.0	
	4.0	3.7	3.8	4.0	3.5	3.7	4.5	4.8	
	3.3-	5.0-	3.1-	3.3-	3.7-	6.0-	1.0-	3.1-	
	1.2	1.2	1.3	1.3	1.2	1.8	1.5	1.8	
	80	98	129	205	115	37	24	23	
E(W)–E(A) (n)	3 2	2	2	3	4	3	2	3	
	6.5	6.8	7.3	6.2	5.6	5.0	4.5	4.5	
	13.0	12.2	13.0	11.8	10.7	10.1	12.2	11.2	
	2.7	6.1-	2.1	1.2	0.5-	2.0-	0.9-	1.0-	
	2.0	2.5	2.1	2.2	2.2	2.0	3.5	3.7	
	76	94	127	200	110	35	24	23	
EA (n)	3 2	2	2	3	4	3	2	3	
	25.8	25.0	24.0	23.3	22.5	21.8	21.5	20.2	
	29.5	27.7	29.5	27.6	28.0	26.7	26.3	24.8	
	22.3	20.0	20.3	18.0	18.7	17.5	16.3	15.0	
	1.6	2.3	1.6	1.7	2.0	2.0	2.8	2.8	
	76	94	127	200	110	35	24	23	
C (n)	3 2	3	2	3	4	3	2	3	
	0.5	0.5	0.5	0.5	0.7	0.7	0.9	0.9	
	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
	0.0	0.0	0.0	0.3	0.1	0.3	0.5	0.6	
	0.3	0.2	0.2	0.3	0.2	0.3	0.2	0.1	
	87	102	136	211	117	38	26	24	
P (n)	3 2	3	2	3	4	3	2	3	
	18.5	16.5	17.8	19.1	19.3	17.6	16.2	16.1	
	22.1	22.0	23.2	23.5	23.5	25.5	22.0	21.0	
	14.0	14.5	10.0	14.0	14.0	11.7	11.7	8.5	
	2.0	1.6	2.0	2.1	2.1	2.7	2.8	3.7	
	84	102	137	210	114	39	26	24	
W (n)	3 2	3	2	3	4	3	2	3	
	7.6	8.5	8.5	8.2	8.3	7.8	8.6	9.6	
	10.0	16.5	14.3	14.3	13.8	10.7	11.2	18.0	
	2.5	0.0	0.0	2.5	2.5	5.0	5.0	4.0	
	2.3	2.5	2.3	2.1	2.0	1.6	1.6	3.1	
	87	101	137	210	114	39	25	24	
W(X)	7.1-	7.8-	7.5-	7.6-	7.3-	6.2-	6.0-	4.5-	
	1.5-	2.5-	2.5	1.5	0.1	1.7	0.1	0.2	
	12.8-	15.3-	13.5-	13.5-	13.0-	10.0-	9.5-	9.2-	
	2.3	2.5	2.6	2.2	2.1	2.2	2.5	3.1	
W(Y)	3.2	2.0-	2.5-	2.2-	2.8	4.1-	4.6-	7.0-	
	15.6-	9.6-	8.5-	9.0-	9.3-	0.1-	8.1	3.0	
	2.5	2.2	2.5	2.1	2.2	1.6	3.6	18.0-	
								4.8	

AUGUST 1964 LATITUDE 20°–25° N.

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A) (n)	3	2	2	3	4	2	2	3	3
	26.0	25.5	25.7	24.7	24.2	24.0	23.5	23.5	21.8
	32.0	29.6	28.7	29.2	29.0	27.6	29.0	29.0	25.0
	23.7	23.5	21.6	21.0	21.0	22.0	21.0	21.0	20.0
	1.3	1.0	0.9	1.1	1.5	1.5	2.0	2.0	1.1
	88	140	115	220	136	31	15	15	23
T(W)–T(A) (n)	3	2	2	3	3	2	2	2	3
	0.5	0.6	1.0	0.8	0.5	0.5	0.1-	0.6-	0.4-
	5.0	3.3	3.8	5.0	4.0	2.8	2.8	1.5	1.5
	4.5-	3.2-	2.0-	3.7-	4.1-	5.0-	5.0-	5.0-	2.2-
	1.3	1.2	1.3	1.5	1.5	1.6	1.6	1.8	1.0
	86	138	111	218	132	31	17	9	16
E(W)–E(A) (n)	3	2	2	3	3	4	3	3	3
	6.1	6.7	6.0	7.5	6.8	5.8	3.8	5.0	5.0
	11.5	16.0	12.8	14.8	11.6	9.0	6.6	9.1	9.1
	2.0	1.2	1.6	0.6	0.6	0.5	2.7	0.8-	0.8-
	2.0	2.1	2.3	2.1	2.0	2.0	1.2	2.7	2.7
	83	134	111	214	128	28	6	9	15
EA (n)	2	2	3	3	4	4	3	3	3
	26.1	25.5	24.7	23.3	22.5	22.3	20.7	20.7	20.5
	30.2	29.0	29.0	31.0	31.0	26.7	23.0	25.7	25.7
	21.7	20.0	20.0	17.8	17.8	19.3	19.3	16.6	16.6
	1.6	1.3	1.5	1.7	1.7	1.8	1.1	2.5	2.5
	83	134	111	214	128	28	6	15	15
C (n)	3	2	2	3	4	2	2	3	3
	0.5	0.5	0.5	0.5	0.5	0.5	0.8	0.8	0.8
	1.0	1.0	1.0	1.0	1.0	1.1	1.0	1.0	1.0
	0.0	0.0	0.1	0.0	0.1	0.1	0.3	0.3	0.3
	0.3	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.3
	92	142	118	231	139	33	17	23	23
P (n)	2	2	3	3	4	2	3	3	3
	17.3	17.5	17.5	18.6	19.0	18.0	18.6	17.6	17.6
	22.5	22.5	23.5	24.0	24.2	21.5	22.0	21.5	21.5
	12.0	12.6	12.0	10.0	14.0	14.5	16.0	14.2	14.2
	2.1	1.3	2.0	2.1	2.1	1.7	1.6	2.3	2.3
	91	142	119	230	137	34	17	23	23
W (n)	2	2	3	3	4	2	3	3	3
	7.8	7.7	7.5	7.2	6.5	7.5	5.5	5.3	5.3
	13.8	13.0	14.3	13.8	13.8	12.8	10.2	9.2	9.2
	2.3	0.0	2.0	1.5	1.5	1.6	2.5	3.5	3.5
	2.3	2.3	2.3	2.2	2.2	2.6	2.0	1.3	1.3
	92	138	118	231	139	31	17	23	23
W(X)	7.5-	7.2-	7.0-	6.7-	6.5-	6.5-	4.0-	3.8-	3.8-
	2.1-	4.6	0.0	0.6	1.5-	1.0	1.0	1.5-	1.5-
	13.6-	13.8-	12.8-	13.8-	13.8-	12.5-	8.8-	8.5-	8.5-
	2.5	2.1	2.5	2.1	2.2	2.5	2.2	1.7	1.7
W(Y)	7.0	1.5-	1.5-	0.7-	1.5-	0.1-	3.2-	3.0-	3.0-
	6.0-	5.0	5.8	4.6	4.6	8.1	1.6-	5.2	5.2
	2.3	2.0	2.0	1.8	1.8	2.0	1.0	2.0	2.0

OCTOBER 1964

LONGITUDE WEST	170	165	160	155	150	145	140	135	130
T(A)	3	2	3	3	4	3	3	3	3
	25.1	25.0	24.6	23.8	23.1	23.5	22.3	21.2	
	29.0	30.5	28.1	29.2	32.0	26.0	25.5	25.0	
	22.0	23.1	21.0	19.6	18.7	21.0	21.0	18.7	
	1.3	1.0	1.1	1.2	1.5	1.2	1.1	1.6	
	72	106	168	233	139	22	15	19	
T(W)-T(A)	2	3	2	3	4	4	3	3	3
	1.2	1.2	1.0	1.0	1.5	0.6	0.8	1.2	
	4.5	3.8	4.6	6.0	5.0	3.0	3.0	4.3	
	3.2-	3.8-	3.8-	15.0-	6.0-	2.1-	1.1-	2.0-	
	1.6	1.3	1.3	2.0	1.6	1.3	1.0	1.5	
	66	104	166	228	138	22	15	19	
E(W)-E(A)	3	2	2	3	4	3	3	3	3
	7.6	8.2	8.1	7.8	8.0	7.5	8.0	6.8	
	15.5	14.5	15.0	15.5	15.6	10.2	9.5	9.1	
	1.5	3.1	2.5	0.9	3.1	2.0	6.2	4.1	
	3.0	2.5	2.3	2.5	2.3	2.0	1.0	1.1	
	65	101	165	223	138	22	13	14	
EA	2	3	3	3	4	4	3	3	3
	24.6	24.1	23.0	22.1	21.2	20.7	18.5	19.1	
	29.5	29.5	28.2	29.3	27.1	24.6	20.0	22.2	
	16.0	18.7	16.0	15.0	15.0	16.5	15.6	16.5	
	2.3	2.3	2.1	2.2	2.3	1.8	1.1	1.5	
	65	101	165	223	138	22	13	14	
C	2	2	3	3	4	4	3	3	3
	0.6	0.6	0.5	0.6	0.6	0.4	0.6	0.6	
	1.6	1.0	1.0	1.0	1.0	1.0	0.9	1.0	
	0.0	0.0	0.3	0.3	0.3	0.2	0.1	0.3	
	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.3	
	73	105	169	232	140	24	18	20	
P	3	2	2	3	4	4	3	3	3
	17.6	17.8	17.6	18.2	18.5	18.0	18.5	19.3	
	22.0	23.5	22.5	24.0	26.5	21.1	21.1	21.5	
	14.0	13.7	11.2	12.0	13.5	15.0	16.0	17.0	
	1.7	1.5	1.8	2.0	2.2	1.5	1.3	1.2	
	68	98	166	232	139	24	13	22	
H	3	2	2	3	4	3	3	3	3
	9.0	8.6	7.8	7.7	7.5	8.6	6.3	6.0	
	20.5	15.3	18.0	18.0	13.8	13.3	13.3	8.1	
	4.0	0.0	0.0	0.8	2.0	3.0	0.0	1.5	
	3.1	2.8	3.0	0.8	2.5	3.0	3.5	1.6	
	68	105	168	235	138	23	18	22	
W(X)	8.0-	7.7-	6.6-	6.3-	4.8-	6.0-	5.2-	4.0-	
	3.2-	4.0-	3.8-	4.3-	7.5-	2.6-	5.0-	7.5-	
	15.6-	12.8-	15.5-	17.0-	12.8-	12.8-	13.3-	3.1	
	2.6	3.1	3.2	3.5	3.7	4.5	3.8		
W(Y)	1.8-	2.3-	2.5-	2.3-	2.1-	1.3-	0.8-	2.0-	
	11.0	2.2	7.1	10.0	9.5	7.7	4.0	5.8	
	13.3-	13.3-	10.7-	13.3-	12.6-	12.5-	5.7-	7.7-	
	4.0	2.7	3.0	3.2	4.3	5.1	2.8	3.1	

SEPTEMBER 1964

LONGITUDE WEST	170	165	160	155	150	145	140	135	130
T(A)	3	3	2	3	4	3	4	3	3
	26.0	25.5	25.3	24.7	24.0	23.2	22.6	22.0	
	33.0	28.7	30.0	31.0	28.0	29.2	24.0	27.0	
	23.1	23.1	23.0	21.5	21.0	21.2	22.0	20.0	
	1.2	1.0	1.0	1.2	1.1	1.5	0.7	1.7	
	68	41	105	205	120	25	9	12	
T(W)-T(A)	2	3	3	3	4	3	3	4	3
	0.4	1.3	0.9	0.8	0.6	0.7	0.2	0.6	
	3.7	5.0	4.3	3.8	3.2	2.6	1.6	2.1	
	0.0-	2.1-	1.3-	6.0-	3.0-	6.0-	1.5-	2.5-	
	1.5	1.5	1.3	1.3	1.2	1.0	1.0	1.5	
	64	90	105	201	119	25	9	12	
E(W)-E(A)	3	2	3	3	4	3	3	4	3
	7.2	7.3	7.1	7.2	6.8	6.3	6.2	7.6	
	13.3	13.0	15.0	13.0	11.5	11.8	9.0	9.0	
	1.8	1.0	2.6-	1.0-	0.5	0.2-	4.5	5.3	
	2.5	2.3	3.0	2.2	2.0	3.0	1.5	1.0	
	62	84	101	197	116	22	6	10	
EA	3	2	3	3	4	3	3	3	3
	25.8	25.7	25.0	23.5	22.5	22.0	20.5	18.1	
	31.8	31.6	32.3	31.0	27.1	27.5	22.8	20.5	
	20.2	21.2	19.8	19.5	17.8	17.7	16.5	16.2	
	2.0	1.7	2.1	1.8	1.7	2.5	2.0	1.2	
	62	84	101	197	116	22	6	10	
C	3	2	3	3	4	3	4	3	3
	0.4	0.0	0.5	0.6	0.6	0.6	0.7	0.7	
	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
	0.3	0.0	0.0	0.2	0.3	0.4	0.4	0.3	
	0.3	0.0	0.3	0.2	0.3		0.3	0.3	
	69	94	108	209	121	24	9	12	
P	3	2	3	3	4	3	3	3	3
	16.3	16.2	16.5	17.6	18.3	17.2	16.0	17.8	
	21.5	20.5	21.5	21.5	22.5	22.0	18.0	22.5	
	1.5	9.0	13.5	13.5	14.0	14.0	14.5	13.0	
	3.0	2.5	1.8	1.7	1.8	2.1	1.0	2.7	
	63	91	107	208	117	24	9	12	
H	3	2	3	3	4	3	3	3	3
	7.0	7.3	8.0	7.8	8.0	7.0	7.1	5.8	
	12.8	12.8	12.6	13.3	12.8	10.7	13.3	12.3	
	1.5	0.0	3.5	0.0	2.0	1.5	3.0	0.0	
	2.7	2.5	2.1	2.0	2.0	2.0	2.5	3.2	
	63	91	107	210	120	25	9	12	
W(X)	6.0-	6.2-	7.0-	7.5-	6.1-	6.0-	4.5-		
	0.0	2.1	1.6	2.0-	3.8	0.0	0.0		
	11.0-	12.0-	11.7-	12.8-	11.2-	11.5-	11.5-		
	3.0	3.0	2.5	0.7-	2.2	3.2	3.2		
W(Y)	1.1-	0.6-	1.3-	1.6-	2.2-	3.6-	2.1-		
	7.6	10.5	6.2	6.6	4.8	2.1	8.0-		
	10.1-	3.2	11.1-	7.0-	8.3-	4.3-	0.0		
	3.1		3.3	2.0	2.0	2.2	2.0		

NOVEMBER 1964

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	3 / 24.1 / 27.1 / 21.5 / 1.1 / 85	3 / 24.0 / 26.5 / 20.5 / 1.0 / 138	2 / 24.0 / 27.0 / 20.5 / 1.1 / 135	3 / 23.2 / 27.6 / 20.5 / 1.1 / 215	4 / 22.5 / 29.0 / 19.0 / 1.5 / 129	2 / 22.6 / 26.2 / 20.5 / 1.5 / 47	2 / 22.5 / 26.0 / 21.0 / 1.2 / 15	3 / 21.0 / 24.0 / 17.6 / 1.5 / 23	
T(W)–T(A)	3 / 0.9 / 4.0 / 3.0- / 1.3 / 83	3 / 1.1 / 3.8 / 2.7- / 1.1 / 135	2 / 0.7 / 4.5 / 2.2- / 1.2 / 131	3 / 0.9 / 5.0 / 3.3- / 1.5 / 210	4 / 1.0 / 6.0 / 4.0- / 1.6 / 125	2 / 1.0 / 4.5 / 4.0- / 1.6 / 47	2 / 1.0 / 3.0 / 2.6- / 1.3 / 15	3 / 1.0 / 4.0 / 1.1- / 1.3 / 23	
E(W)–E(A)	3 / 6.8 / 13.6 / 0.2 / 2.6 / 80	3 / 6.5 / 11.8 / 1.2- / 2.6 / 129	2 / 6.0 / 14.5 / 0.1- / 2.6 / 130	3 / 5.5 / 12.5 / 2.5- / 3.0 / 207	4 / 5.5 / 13.3 / 3.5- / 3.5 / 122	2 / 4.0 / 10.5 / 0.4- / 2.7 / 44	2 / 6.0 / 8.8 / 2.6 / 1.8 / 14	3 / 6.1 / 8.8 / 2.5 / 1.6 / 23	
EA	3 / 23.0 / 27.6 / 14.7 / 2.8 / 80	3 / 23.6 / 29.0 / 17.1 / 2.2 / 129	2 / 23.5 / 28.6 / 17.5 / 2.2 / 130	3 / 22.7 / 29.7 / 15.3 / 2.7 / 207	4 / 22.1 / 28.7 / 14.1 / 3.0 / 122	2 / 21.5 / 28.5 / 15.1 / 2.7 / 44	2 / 20.8 / 23.6 / 18.0 / 1.5 / 14	3 / 19.0 / 25.0 / 15.3 / 2.5 / 23	
C	3 / 0.5 / 1.0 / 0.0 / 0.3 / 80	3 / 0.5 / 1.0 / 0.0 / 0.3 / 129	2 / 0.6 / 1.0 / 0.0 / 0.3 / 130	3 / 0.6 / 1.0 / 0.0 / 0.3 / 214	4 / 0.7 / 1.0 / 0.0 / 0.3 / 128	2 / 0.7 / 1.0 / 0.0 / 0.3 / 47	2 / 0.7 / 1.0 / 0.3 / 0.2 / 15	3 / 0.9 / 1.0 / 0.1 / 0.2 / 23	
P	3 / 15.3 / 22.7 / 3.7 / 4.1 / 80	3 / 16.0 / 25.0 / 3.0 / 3.8 / 138	2 / 15.6 / 24.1 / 3.0 / 3.5 / 136	3 / 17.0 / 24.5 / 7.2 / 4.1 / 213	4 / 18.1 / 25.2 / 8.5 / 3.0 / 127	2 / 18.0 / 25.0 / 12.5 / 3.0 / 44	2 / 19.2 / 24.0 / 13.0 / 2.7 / 12	3 / 20.8 / 26.0 / 13.5 / 3.5 / 19	
W	3 / 7.8 / 14.3 / 0.0 / 3.3 / 83	3 / 9.1 / 18.0 / 1.0 / 3.5 / 136	2 / 8.6 / 16.5 / 0.0 / 3.5 / 132	3 / 8.7 / 18.5 / 0.0 / 3.5 / 209	4 / 8.3 / 15.3 / 0.0 / 2.8 / 125	2 / 7.2 / 11.2 / 2.5 / 2.3 / 47	2 / 6.1 / 11.7 / 3.8 / 2.5 / 15	3 / 6.7 / 10.7 / 3.0 / 1.8 / 20	
W(X)	4.3 / 11.5 / 14.3- / 6.5 / 0.1-	4.3 / 12.0 / 16.8- / 6.7 / 0.4-	4.8 / 9.7 / 15.3- / 6.0 / 0.1-	5.7 / 8.1 / 17.6- / 5.3 / 0.4	5.7 / 7.1 / 14.0- / 4.1 / 0.2-	5.8 / 3.0 / 10.2- / 3.0 / 1.2-	5.5 / 0.7 / 10.1- / 2.6 / 0.6-	5.7 / 2.0 / 8.1- / 1.8 / 1.8-	
W(Y)	8.0 / 9.0 / 3.1	12.3 / 9.0- / 4.3	11.5 / 11.6- / 5.2	16.0 / 12.0- / 5.0	12.0 / 11.1- / 5.1	9.0 / 7.5- / 3.6	4.5 / 6.0- / 2.6	6.1 / 7.0- / 3.0	

DECEMBER 1964

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	3 / 23.3 / 27.0 / 20.0 / 1.5 / 85	2 / 24.0 / 28.0 / 21.0 / 1.2 / 120	3 / 23.0 / 27.0 / 21.0 / 1.1 / 91	3 / 23.1 / 28.1 / 18.7 / 1.2 / 202	3 / 23.1 / 28.1 / 20.0 / 1.2 / 147	3 / 22.5 / 28.7 / 20.6 / 1.7 / 49	3 / 22.5 / 28.1 / 20.6 / 1.3 / 49	3 / 21.6 / 24.5 / 19.7 / 1.2 / 21	3 / 20.5 / 22.5 / 17.0 / 1.2 / 25
T(W)–T(A)	3 / 1.0 / 4.5 / 2.7- / 1.5 / 83	3 / 0.8 / 4.3 / 3.7- / 1.5 / 119	3 / 0.8 / 5.0 / 2.8- / 1.5 / 89	3 / 0.8 / 4.3 / 3.8- / 1.2 / 201	3 / 0.6 / 4.5 / 5.0- / 1.2 / 146	3 / 0.2 / 2.2 / 6.0- / 1.5 / 49	3 / 0.1 / 2.0 / 3.0- / 1.3 / 21	3 / 0.6 / 4.2 / 1.5- / 1.3 / 25	3 / 0.6 / 4.2 / 1.5- / 1.3 / 25
E(W)–E(A)	3 / 6.5 / 15.1 / 1.5- / 3.6 / 80	2 / 5.8 / 15.1 / 2.2- / 3.0 / 114	3 / 5.0 / 11.5 / 0.1- / 2.3 / 83	3 / 5.0 / 12.0 / 0.9- / 2.2 / 199	4 / 5.0 / 11.6 / 2.5- / 2.5 / 141	3 / 4.2 / 12.6 / 1.7- / 2.8 / 44	2 / 4.5 / 12.5 / 0.9- / 3.5 / 21	3 / 5.3 / 11.6 / 1.6 / 2.7 / 25	3 / 5.3 / 11.6 / 1.6 / 2.7 / 25
EA	3 / 22.2 / 28.0 / 14.6 / 3.2 / 80	2 / 23.7 / 28.0 / 17.1 / 2.0 / 114	3 / 23.6 / 27.6 / 15.0 / 2.2 / 83	3 / 23.0 / 28.2 / 17.5 / 2.0 / 199	4 / 21.6 / 29.0 / 16.0 / 2.6 / 141	3 / 21.6 / 27.5 / 14.0 / 2.8 / 44	3 / 20.0 / 25.7 / 13.3 / 3.3 / 21	3 / 18.1 / 22.6 / 13.1 / 2.5 / 25	3 / 18.1 / 22.6 / 13.1 / 2.5 / 25
C	3 / 0.5 / 1.0 / 0.0 / 0.3 / 80	2 / 0.5 / 1.0 / 0.0 / 0.3 / 114	3 / 0.5 / 1.0 / 0.0 / 0.3 / 83	3 / 0.5 / 1.0 / 0.0 / 0.3 / 199	3 / 0.5 / 1.0 / 0.0 / 0.3 / 141	3 / 0.5 / 1.0 / 0.0 / 0.3 / 44	3 / 0.5 / 1.0 / 0.3 / 0.2 / 20	3 / 0.8 / 1.0 / 0.3 / 0.2 / 25	3 / 0.8 / 1.0 / 0.3 / 0.2 / 25
P	3 / 11.2 / 19.1 / 3.0 / 4.1 / 83	2 / 12.3 / 21.2 / 1.2 / 4.5 / 117	3 / 14.6 / 22.0 / 3.5 / 4.1 / 90	3 / 15.8 / 24.5 / 7.5 / 4.1 / 204	3 / 17.2 / 25.0 / 8.5 / 3.8 / 147	3 / 19.1 / 25.0 / 12.7 / 3.0 / 49	3 / 19.2 / 25.7 / 14.0 / 2.2 / 21	3 / 23.0 / 24.5 / 15.7 / 2.3 / 25	3 / 23.0 / 24.5 / 15.7 / 2.3 / 25
W	3 / 8.6 / 18.0 / 1.7 / 3.7 / 83	2 / 8.0 / 21.5 / 0.5- / 4.0 / 118	3 / 8.0 / 17.0 / 3.3 / 4.0 / 89	3 / 7.8 / 18.0 / 0.0 / 3.0 / 202	3 / 7.2 / 17.5 / 0.0 / 2.7 / 148	3 / 6.6 / 11.8 / 2.0 / 2.0 / 48	3 / 7.7 / 14.3 / 2.5 / 2.6 / 21	3 / 7.0 / 10.7 / 3.5 / 1.8 / 25	3 / 7.0 / 10.7 / 3.5 / 1.8 / 25
W(X)	1.5 / 18.0 / 15.8- / 7.8 / 2.0	0.5 / 16.8 / 13.5- / 7.2 / 3.0	4.7 / 9.5 / 14.8- / 5.5 / 1.5	4.1 / 8.7 / 13.6- / 4.7 / 3.1	4.5 / 11.0 / 13.6- / 4.7 / 2.3	5.1 / 4.6 / 12.0- / 2.8 / 1.1	6.5 / 2.0 / 11.0- / 2.6 / 1.0	6.0 / 13.7- / 2.2 / 2.8-	6.0 / 13.7- / 2.2 / 2.8-
W(Y)	15.3 / 20.2 / 9.7- / 12.0- / 4.5	3.0 / 20.2 / 12.0- / 5.5	16.0 / 9.1- / 5.2	17.0 / 8.0- / 4.3	15.3 / 6.6- / 4.0	9.2 / 7.0- / 3.5	6.6 / 9.3- / 3.8	8.8 / 6.6- / 1.8	8.8 / 6.6- / 1.8

FEBRUARY 1965

		LONGITUDE WEST							
	170	165	160	155	150	145	140	135	130
T(A)	3	2	2	3	3	4	3	3	3
	21.2	21.1	21.1	20.8	20.6	20.5	20.5	20.1	19.2
	28.1	31.0	25.5	26.5	26.5	24.0	23.1	23.1	23.1
	18.1	18.1	18.1	17.1	17.1	16.5	17.0	17.6	17.0
	1.5	1.5	1.5	1.5	1.5	1.3	1.0	1.1	1.2
	61	107	105	229	228	164	52	26	28
T(W)-T(A)	3	2	2	3	3	4	3	3	3
	1.5	1.7	1.7	2.1	2.0	2.0	1.6	1.0	1.0
	4.0	5.5	5.5	5.5	7.1	7.1	4.5	3.2	3.2
	5.5-	9.5-	3.3	2.2-	3.8-	3.0-	0.5-	2.7-	5.5-
	1.6	1.5	1.5	1.3	1.5	1.7	1.3	1.6	2.0
	61	107	107	102	228	164	51	26	28
E(W)-E(A)	3	2	2	3	3	4	3	3	3
	8.7	8.8	9.3	7.5	7.5	6.5	6.1	5.5	5.5
	13.7	15.5	16.5	20.6	20.0	16.0	14.5	11.0	10.2
	0.4	4.3	3.3	1.2	0.6	0.6	1.3	0.4	0.2
	2.6	2.0	2.1	3.5	3.5	3.5	3.1	2.8	2.6
	56	102	96	215	215	146	49	26	28
EA	2	2	2	3	4	3	3	3	3
	17.2	17.5	17.1	18.5	19.2	19.2	18.2	16.8
	26.0	22.6	24.1	23.6	24.6	24.5	22.2	19.3
	13.2	11.0	12.0	11.1	11.7	13.0	14.1	13.0
	2.8	2.0	2.1	3.1	2.8	2.6	2.0	1.8
	56	102	96	215	146	49	26	28
C	3	2	2	3	4	4	3	3	3
	0.5	1.0	0.5	0.7	0.7	0.7	0.8	0.8	0.7
	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.2
	61	108	105	227	162	162	51	26	29
P	3	2	2	3	3	4	4	3	3
	18.1	17.5	16.0	14.0	14.0	14.0	15.0	16.5	18.1
	22.2	24.2	24.0	23.0	23.0	21.2	25.0	21.5	23.2
	14.5	12.0	7.5	1.2	3.5	3.5	0.6	10.5	10.6
	2.0	2.5	3.6	3.6	4.2	5.1	5.5	3.0	3.3
	53	102	101	228	158	52	26	29
H	3	2	2	3	3	4	3	3	3
	6.8	7.7	7.7	8.8	8.5	9.3	8.7	7.0
	17.0	16.0	13.8	24.1	18.0	23.1	14.3	10.7
	0.0	0.0	2.0	0.0	0.0	2.0	1.5	2.5
	4.0	3.5	2.8	4.5	3.3	4.1	3.5	2.1
	0.0	108	104	226	162	52	26	29
W(X)	3	2	2	3	3	4	3	3	3
	3.6	4.1	2.6	1.0	1.5-	3.3-	8.0-	5.6-
	0.6	3.1	9.8	21.7	17.6	19.2	0.8	0.1
	11.0-	13.6-	12.8-	15.2-	14.5-	14.3-	14.3-	9.5-
	3.5	3.2	4.5	6.0	0.3	7.6	4.0	2.5
	5.6	5.0-	5.1-	4.5-	0.6-	3.1	0.1	1.6-
W(Y)	3	2	2	3	3	4	3	3	3
	10.0-	14.3-	11.1	10.2	12.1	17.8	5.5	3.8
	4.1	4.2	13.5-	21.7-	15.3-	7.7-	7.3-	9.2-
			3.7	0.5	0.2	4.8	3.0	3.5

JANUARY 1965

		LONGITUDE WEST							
	170	165	160	155	150	145	140	135	130
T(A)	2	2	2	3	4	3	2	3	3
	21.8	22.1	22.5	22.2	22.0	22.0	21.0	21.5	20.0
	28.0	27.0	29.2	28.1	25.5	24.0	28.0	20.0	20.0
	17.0	18.1	17.0	18.1	18.5	16.5	19.0	16.5	16.5
	1.5	1.3	1.7	1.5	1.1	1.1	1.7	1.7	1.8
	116	137	122	215	145	36	29	30	30
T(W)-T(A)	3	2	2	3	4	3	3	3	2
	2.0	1.8	1.7	1.5	1.0	0.9	0.5	1.0	1.7
	0.7	0.0	0.2	5.0	4.6	0.5	4.7	5.5	5.5
	3.2-	1.5-	2.6-	4.3-	1.5-	2.1-	3.2-	2.2-	5.0-
	1.6	1.3	1.7	1.3	1.3	1.7	1.8	2.2	2.2
	113	138	120	214	145	32	24	25	25
E(W)-E(A)	2	3	2	2	4	3	2	3	2
	8.6	8.0	7.5	6.0	4.7	5.3	6.0	7.2
	15.3	18.1	14.5	14.8	11.5	10.1	13.5	15.0
	0.5	3.5	0.9	7.3-	4.0-	0.1	4.2-	0.6
	3.1	3.5	3.0	2.8	2.6	3.1	4.1	4.2
	109	134	113	205	139	27	24	25
EA	2	2	2	3	4	3	2	2	2
	19.2	20.2	21.2	21.5	21.8	20.8	19.3	17.0
	28.0	27.0	26.1	35.0	28.0	24.8	27.6	22.6
	12.5	12.7	13.1	13.5	14.5	13.5	13.1	12.6
	3.0	3.3	3.2	3.0	2.5	3.0	3.5	2.6
	104	134	113	205	139	27	24	25
C	3	2	3	3	4	3	2	3	3
	0.5	0.5	0.6	0.0	0.6	0.6	0.4	0.0	0.6
	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	0.3	0.3	0.3	0.3	0.3	0.4	0.0	0.0	0.3
	119	140	123	212	144	37	29	30
P	3	2	2	3	4	3	2	3	2
	13.1	13.0	13.0	13.5	15.0	16.0	17.0	18.7
	43.0	21.1	24.0	27.0	24.0	25.0	27.5	26.0
	14.5	12.7	5.0	0.0	1.6	5.5	11.7	12.7
	5.0	2.5	4.3	4.3	4.5	5.2	3.5	3.6
	118	140	120	214	142	37	27	26
H	3	2	3	3	4	3	2	3	3
	7.1	7.7	7.8	8.0	7.5	7.0	7.3	7.5
	16.5	17.5	23.1	23.1	18.0	13.8	15.3	12.8
	0.5	0.0	0.0	0.0	0.0	1.5	0.0	2.5
	3.6	3.7	4.3	3.8	3.2	3.1	4.0	3.0
	119	141	122	215	145	36	26	29
W(X)	3	2	2	3	2	3	2	3	3
	1.0	0.4-	2.1-	1.1-	2.5-	2.5-	5.0-	6.3-
	16.5	12.8	11.5	14.3	13.1	12.0	1.5	1.0-
	11.0-	12.0-	14.8-	14.1-	17.0-	10.6-	13.0-	12.0-
	0.1	0.2-	6.1	0.5	5.2	5.6	3.5	3.0
	2.0-	2.5-	0.8-	1.5	3.0	2.1	0.0	1.8-
W(Y)	3	2	2	3	4	3	2	3	3
	8.3-	15.3	10.2	19.2	16.0	12.0	12.6-	3.2
	13.4-	16.3-	21.6-	0.0	12.0-	8.6-	6.0-	6.6-
	4.5	5.5	0.1	4.7	4.0	4.3		2.6

APRIL 1965

LATITUDE 20° – 25° N.

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	21.5	22.1	22.8	22.2	21.5	21.6	20.6	19.5	
	26.5	27.6	26.0	27.6	25.5	24.2	24.5	25.0	
	17.6	18.1	19.2	18.7	18.7	19.0	17.6	16.0	
	1.6	1.5	1.3	1.5	1.2	1.3	1.8	1.8	
	109	143	128	215	135	25	18	22	
T(W)-T(A)	1.6	1.3	0.7	0.9	0.9	0.2	0.7	0.3	
	5.0	6.5	4.3	5.5	4.2	3.0	4.3	2.7	
	2.2-	3.0-	3.0-	3.0-	2.2-	1.5-	3.5-	5.0-	
	1.5	1.5	1.5	1.3	1.1	1.2	2.0	1.7	
	102	139	126	212	133	23	17	22	
E(W)-E(A)	6.5	6.3	5.2	6.0	6.0	4.6	4.7	5.8	
	16.6	14.0	14.0	13.3	11.0	10.2	14.8	10.7	
	0.0	0.8	0.4	0.3-	0.2-	0.8-	6.1-	2.2	
	3.8	3.3	2.7	2.3	2.1	3.0	4.5	2.3	
	100	135	123	208	133	23	17	22	
EA	20.1	21.0	22.0	20.6	19.8	20.3	19.0	15.7	
	26.0	28.0	27.7	27.1	26.0	25.3	29.5	21.0	
	9.2	12.1	14.3	14.2	13.8	14.7	13.5	11.8	
	3.5	3.1	2.5	2.3	2.3	3.0	4.0	2.5	
	100	135	123	208	133	23	17	22	
C	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.5	
	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	
	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	
	103	139	125	207	137	24	18	22	
P	16.5	16.1	17.0	18.7	19.1	17.7	16.0	22.0	
	23.2	32.0	32.0	28.0	27.0	24.2	23.2	22.0	
	7.5	9.0	11.2	10.6	9.0	10.0	14.0	16.5	
	3.5	4.0	3.3	3.6	4.0	4.0	2.7	1.3	
	109	139	125	207	132	23	17	22	
M	7.7	6.7	7.3	7.7	7.1	6.3	6.7	6.0	
	15.3	14.3	17.0	18.0	13.8	10.2	12.3	13.8	
	0.0	0.5	0.6	0.6	1.0	1.5	2.0	0.5	
	3.1	3.5	3.6	3.6	2.5	2.0	2.8	4.0	
	110	141	128	216	136	25	18	21	
W(X)	4.0-	3.7	4.5-	5.5	4.5	2.8	3.5	2.2-	
	8.6	8.7	10.5	15.5	7.5	9.0	3.5	0.6	
	14.5-	14.3-	13.6-	5.0	13.0-	13.0-	8.0-	7.6-	
	5.5	5.3	5.0	5.0	5.0	4.5	3.1	2.1	
W(Y)	2.0-	0.6-	0.2-	0.1	0.5	1.1	1.0-	2.8-	
	10.6	13.1	13.2	13.2	9.5	10.2	7.6	5.5	
	12.6-	8.8-	16.0-	11.6-	7.2-	5.0-	11.5-	13.0-	
	4.5	3.8	4.5	4.2	3.6	4.0	5.5	5.7	

MARCH 1965

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	21.6	21.7	21.8	21.2	21.0	20.3	20.1	20.1	19.0
	27.6	26.5	25.5	25.5	25.0	22.3	23.0	21.0	21.0
	18.2	17.6	18.1	18.0	13.5	17.0	17.2	17.2	17.0
	1.6	1.5	1.3	1.2	1.3	1.5	1.5	1.5	1.1
	121	154	124	240	120	34	16	17	17
T(W)-T(A)	1.0	1.5	1.3	1.2	1.2	1.5	1.5	1.5	1.7
	5.5	6.0	5.0	7.5	9.0	6.0	4.7	4.5	4.5
	4.5-	2.2-	1.2	3.2-	2.0-	1.5-	0.7-	1.0-	1.5
	1.5	1.5	1.2	1.5	1.5	1.5	1.6	1.6	1.5
	116	150	116	231	116	33	16	17	17
E(W)-E(A)	7.2	7.8	7.7	6.7	5.6	4.0	4.5	4.7	4.7
	15.2	15.1	14.2	15.2	12.0	9.8	10.0	10.3	10.3
	0.6-	3.1-	1.3-	0.9	2.7-	4.0-	1.7	0.5	0.5
	3.2	3.2	3.1	2.7	2.7	2.8	2.1	2.6	2.6
	113	144	110	221	114	33	9	10	10
EA	18.7	18.8	19.0	18.8	19.0	20.5	19.0	17.1	17.1
	25.5	31.6	25.8	25.7	26.1	26.5	22.2	20.5	20.5
	11.6	12.0	13.5	11.6	12.3	15.0	13.2	13.0	13.0
	3.0	3.2	2.6	2.5	2.5	2.3	2.5	2.0	2.0
	113	144	110	221	114	26	9	10	10
C	0.5	0.5	0.6	0.6	0.7	0.8	0.7	0.7	0.7
	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.0
	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3
	120	154	122	235	119	33	16	16	16
P	17.7	16.8	16.0	16.5	16.8	16.2	17.0	17.6	17.6
	23.0	23.0	23.0	24.5	26.0	22.0	22.5	22.5	22.5
	11.0	10.5	9.0	8.0	8.5	7.0	13.5	12.5	12.5
	2.8	2.3	2.5	3.1	3.7	4.0	2.6	3.1	3.1
	117	154	124	239	120	33	15	17	17
M	7.0	6.0	6.0	6.5	7.7	7.2	7.6	6.1	6.1
	12.8	12.3	12.8	15.3	14.8	15.3	12.8	9.2	9.2
	0.0	1.5	0.4	0.0	2.0	0.5	2.0	3.0	3.0
	2.7	2.5	2.6	3.0	2.7	2.7	2.5	1.5	1.5
	121	153	122	240	119	34	15	16	16
W(X)	2.1-	1.5-	2.0-	2.0-	2.7-	4.2-	5.0-	3.5-	3.5-
	10.1	9.6	10.5	12.8	11.0	8.7	0.1	1.2	1.2
	11.0-	10.5-	11.7-	13.3-	13.5-	15.1-	11.1-	7.0-	7.0-
	4.8	4.6	5.3	5.2	6.0	5.3	3.5	2.5	2.5
W(Y)	1.6-	1.7-	1.5-	0.6-	0.2	2.8	2.6	3.1	3.1
	9.6	11.6	8.3	12.2	10.8	11.7	9.2	7.5	7.5
	9.8-	10.7-	12.8-	10.6-	12.0-	2.7-	9.2-	7.6-	7.6-
	5.0	4.5	4.1	4.5	4.8	3.7	5.1	3.2	3.2

JUNE 1965

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	3 2	2 3	2	3 3	4 3	3	3	3 2	
	25.5	25.3	24.5	24.0	23.0	22.1	21.8	20.5	
	30.0	31.0	29.0	31.0	28.1	25.0	24.0	26.0	
	23.0	22.7	21.0	20.0	20.0	20.0	19.6	17.6	
	1.5	1.5	1.2	1.5	1.1	1.0	1.5	1.7	
	65	96	126	237	136	32	10	22	
T(W)-T(A)	3	2	2 3	3	4	3	3	3 2	
	0.1	0.0	0.8	0.6	0.9	0.6	0.1	1.0	
	3.0	3.1	4.0	4.0	4.0	3.0	1.5	4.0	
	4.5-	5.0-	6.0-	6.0-	4.5-	3.0-	1.6-	4.3-	
	1.5	1.5	1.5	1.6	1.5	1.5	1.0	2.1	
	63	91	117	228	130	31	10	22	
E(W)-E(A)	3 2	2 3	2	3	4 3	3	3	3 2	
	6.0	6.2	7.3	6.8	7.0	6.7	6.0	6.0	
	11.6	13.7	15.3	12.3	13.1	14.1	8.7	10.3	
	1.3	1.1	0.6	1.0	0.6-	1.0	2.6	0.7	
	2.2	2.3	2.1	2.0	2.3	2.6	2.1	2.8	
	63	86	113	226	130	31	10	22	
EA	3 2	2	2	3	4	3	3	3 2	
	25.0	24.5	23.0	22.2	20.8	19.1	18.6	18.0	
	29.1	29.7	28.0	26.6	29.0	22.5	22.7	21.3	
	21.0	19.0	14.3	16.5	16.0	13.3	16.0	14.5	
	1.5	1.7	1.7	1.6	1.7	1.8	2.0	2.2	
	63	86	113	226	130	31	10	22	
C	3	2	2	3	4	3	3	3 2	
	0.5	0.5	0.5	0.6	0.6	0.7	0.7	1.0	
	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
	0.0	0.0	0.0	0.0	0.0	0.1	0.5	0.6	
	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.1	
	65	98	129	235	136	32	10	21	
P	3	2	2	3	4	3	3	3 2	
	19.3	18.8	18.5	20.3	21.3	20.6	21.0	19.8	
	24.0	22.7	22.0	24.5	26.0	24.0	23.0	21.1	
	15.1	13.5	13.0	15.0	16.5	16.7	18.0	17.5	
	2.0	1.7	1.6	1.6	1.8	2.0	1.7	1.0	
	63	95	127	235	133	31	10	22	
H	3	2	2	3	4	3	3	3 2	
	6.5	7.0	7.5	7.8	7.8	7.5	7.8	8.7	
	10.2	11.7	15.3	15.3	16.5	10.2	10.7	12.3	
	2.5	2.0	1.5	1.5	0.0	2.5	5.0	4.0	
	1.8	2.2	2.5	2.5	3.0	2.0	2.0	1.8	
	65	98	129	238	133	32	10	22	
W(X)									
	5.7-	6.3-	7.1-	7.5-	7.1-	6.0-	5.5-	6.0-	
	0.0	0.5-	0.5-	2.2	0.0	2.8	2.6-	2.8	
	9.5-	11.6-	15.3-	15.1-	15.3-	10.0-	7.7-	10.5-	
	1.8	2.1	2.6	2.6	2.6	2.2	1.6	2.8	
W(Y)									
	0.8-	1.7-	1.0-	0.7-	0.8-	2.2-	5.0-	5.5-	
	7.0	3.7	4.5	7.0	5.1	3.3	0.1-	0.0	
	7.5-	6.6-	9.0-	8.6-	7.5-	9.0-	10.1-	9.0-	
	2.6	2.1	2.2	2.3	2.5	2.8	2.7	2.3	

MAY 1965

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	3 2	2 3	2	3 3	3	3	2 3	3 2	
	23.2	24.0	24.3	23.5	22.5	22.2	22.1	19.2	
	28.0	28.1	28.1	29.2	30.0	26.5	25.0	23.1	
	20.0	19.6	21.5	20.5	20.5	19.2	19.6	16.0	
	1.5	1.5	1.2	1.3	1.5	1.7	2.0	2.0	
	95	132	109	225	145	39	9	11	
T(W)-T(A)	3	2	3	3	3	3	2	3 2	
	0.9	0.6	0.6	0.7	0.7	0.6	0.4	1.5	
	4.3	5.0	5.0	4.5	4.5	3.7	4.2	5.0	
	3.5-	2.2-	2.2-	5.0-	5.0-	4.5-	2.1-	2.1-	
	1.5	1.2	1.1	1.5	1.5	1.8	1.8	1.8	
	91	130	107	217	144	38	9	11	
E(W)-E(A)	3 2	2	2	3	3	3	2	3 2	
	5.0	4.5	5.2	5.3	5.3	5.7	5.6	6.7	
	13.0	15.5	12.0	11.3	12.2	12.7	10.5	10.8	
	0.1	2.7-	0.1-	1.2-	0.3	0.0	0.5	5.2	
	2.7	2.7	2.3	2.0	2.0	2.8	3.0	1.5	
	91	130	98	212	142	36	9	11	
EA	3 2	2	2	3	3	3	2	3 2	
	23.3	24.7	24.3	22.8	21.5	20.0	20.0	16.3	
	29.0	29.8	29.1	28.7	28.3	25.2	24.5	18.0	
	15.5	18.3	20.3	17.1	17.0	13.8	16.0	12.3	
	2.7	2.0	1.6	1.7	1.8	2.6	2.5	1.5	
	91	130	98	212	142	36	8	11	
C	3 2	2	3	3	4	3	2	3 2	
	0.6	0.6	0.6	0.7	0.7	0.7	0.8	0.8	
	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
	0.3	0.3	0.3	0.1	0.0	0.3	0.1	0.1	
	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	
	94	131	112	226	146	39	9	11	
P	3	2	2	3	4	3	2	3 2	
	15.0	15.3	15.7	18.5	20.0	20.5	20.5	21.0	
	22.6	22.2	23.5	26.6	24.0	24.5	23.2	23.2	
	5.6	10.0	11.0	12.3	10.6	15.0	17.5	17.1	
	3.3	3.0	2.5	2.2	2.0	2.2	1.7	1.8	
	93	129	103	219	142	37	8	11	
H	3	2	2	3	3	3	2	3 2	
	6.6	6.0	6.5	7.6	8.0	7.8	7.3	8.0	
	15.3	13.3	12.8	15.3	13.3	10.2	12.8	12.8	
	3.0	0.0	0.0	0.0	0.0	4.5	4.5	3.0	
	3.0	2.5	2.5	2.3	2.1	1.5	2.2	3.2	
	96	131	113	227	147	39	9	11	
W(X)									
	4.3-	4.5-	5.5-	6.8-	7.3-	7.5-	6.8-	6.7-	
	4.8	2.0	2.0-	0.0	0.5-	4.5-	3.5-	2.2-	
	14.5-	10.5-	12.8-	14.5-	12.8-	10.2-	12.6-	12.0-	
	3.6	3.5	3.1	2.7	2.3	1.5	2.5	3.2	
W(Y)									
	2.3-	0.5-	9.7	1.5	0.3	2.8	2.1	4.1-	
	5.0	11.5	6.7-	9.5	9.3	6.3-	0.1-	2.0-	
	11.1-	12.5-	3.0	5.0-	2.8	1.8	5.2-	7.3-	
	3.0	3.2		2.8			1.3	1.5	

AUGUST 1963

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	2	3	4	3	3	3	4	4	3
	27.0	26.6	26.6	26.1	25.1	24.3	24.3	23.5	23.1
	29.0	30.0	29.0	29.0	28.0	27.5	27.5	26.3	27.6
	24.3	25.0	24.0	24.0	23.0	22.0	22.0	20.5	21.0
	0.7	1.9	0.8	0.8	1.0	1.3	1.3	1.5	1.6
	40	30	11d	29	29	17	17	31	42
T(W)-T(A)	3	4	4	3	3	3	3	3	3
	0.1-	0.5	0.5	0.8	0.7	0.0	0.0	0.5	0.8
	1.5	3.0	3.3	3.3	3.5	2.1	2.1	3.7	5.0
	2.0-	4.0-	4.0-	2.0-	2.0-	2.0-	2.0-	3.0-	4.0-
	1.0	1.2	1.2	1.0	1.1	1.1	1.1	1.5	2.0
	13	27	114	27	16	17	17	31	42
E(W)-E(A)	3	4	4	4	3	4	4	4	4
	4.5	5.0	7.5	6.6	5.5	4.5	4.8	4.8	4.8
	10.0	11.1	14.7	11.0	9.7	9.2	11.5	11.5	14.0
	1.5	2.7	0.6	3.0	0.6	0.2-	5.0-	5.0-	2.5-
	2.5	2.0	3.0	1.7	2.8	2.8	3.5	3.5	4.1
	12	27	114	28	16	17	30	30	39
EA	3	4	4	3	3	3	3	3	3
	29.3	28.0	25.8	24.7	24.7	24.2	23.0	23.0	23.3
	33.3	31.8	31.0	27.0	29.5	29.7	32.0	32.0	31.0
	22.7	24.3	20.1	21.3	20.0	20.3	17.0	17.0	18.3
	2.7	2.0	2.0	1.6	2.6	2.7	3.3	3.3	3.3
	12	27	114	28	16	17	30	30	39
C	2	3	3	3	3	3	3	3	3
	0.6	0.5	0.5	0.5	0.5	0.7	0.8	0.8	0.8
	1.0	1.0	1.0	1.0	0.9	1.0	1.0	1.0	1.0
	0.0	0.0	0.0	0.0	0.1	0.3	0.4	0.4	0.3
	0.3	0.0	0.0	0.2	0.1	0.2	0.2	0.2	0.2
	28	30	118	28	17	17	31	31	39
P	2	3	3	3	3	3	3	3	3
	13.0	13.8	13.8	14.6	15.0	15.8	16.3	16.3	15.8
	16.7	17.1	17.5	17.0	17.0	18.0	19.0	19.0	19.1
	10.5	11.1	10.5	10.0	12.6	13.0	12.0	12.0	9.6
	1.3	1.6	1.5	1.5	1.5	1.5	1.3	1.3	1.7
	40	26	115	27	16	17	31	31	42
M	2	3	4	4	3	4	4	4	4
	6.1	6.3	7.3	6.6	6.6	8.5	7.5	7.5	7.2
	10.2	10.0	13.3	9.2	9.2	10.2	10.7	10.7	10.7
	0.0	2.0	1.0	3.5	3.5	3.5	2.0	2.0	2.0
	2.0	1.8	2.3	1.7	1.7	1.5	2.2	2.2	2.5
	42	30	118	29	16	17	31	31	41
W(X)	5.8-	6.2-	6.2-	5.8-	5.8-	7.2-	6.3-	6.3-	5.5-
	0.0	9.7-	2.0-	0.1-	0.1-	2.0-	1.0-	1.0-	0.0-
	9.6-	1.8	12.3-	9.2-	9.2-	10.0-	10.0-	10.0-	9.5-
	2.0	3.3	2.3	2.0	2.0	1.7	2.3	2.3	2.2
W(Y)	3.3	3.3	2.1	2.5	2.5	2.6	2.3	2.3	4.0-
	5.1-	3.1-	5.0	7.6-	7.6-	1.5	1.2-	1.2-	1.6
	1.7	1.2	8.6-	2.2	2.2	6.6-	3.2	3.2	8.0-
			2.3			2.5	1.7	1.7	2.5

JULY 1963

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	2	3	3	3	3	4	4	4	
	26.5	26.5	25.5	25.0	24.6	23.8	23.8	22.8	
	29.0	29.5	27.6	28.0	27.0	26.5	27.0	25.5	
	25.0	24.1	22.0	22.0	23.0	21.5	21.0	20.5	
	0.7	1.0	1.0	1.0	0.7	1.2	1.5	1.1	
	48	24	59	29	37	35	32	38	
T(W)-T(A)	2	3	3	3	3	4	4	4	
	0.1-	0.9-	0.7	0.3	0.2	0.7	0.3	1.0	
	2.6	2.0	4.5	3.3	2.7	2.2	2.7	4.3	
	3.8-	3.3-	3.8-	2.5-	4.0-	1.6-	3.1-	1.1-	
	1.5	1.5	1.2	1.2	1.0	1.2	1.5	1.0	
	22	21	51	29	37	35	32	37	
E(W)-E(A)	2	3	3	3	3	4	4	4	
	5.3	4.3	6.0	5.5	4.8	5.6	5.0	5.8	
	10.2	10.7	12.3	10.2	11.0	13.7	11.3	9.2	
	0.4	0.5	0.7-	1.5-	1.3-	1.7-	7.5-	1.6-	
	2.6	2.8	2.2	2.5	2.6	3.1	3.6	2.5	
	22	21	51	29	37	31	31	37	
EA	2	3	3	3	3	4	4	4	
	27.3	26.8	25.7	25.0	24.6	23.5	23.1	22.2	
	29.5	31.0	28.6	32.1	28.6	29.5	35.5	28.0	
	24.5	24.0	21.3	20.2	20.3	17.8	15.2	16.5	
	1.1	1.5	1.5	3.0	2.2	3.0	3.8	2.8	
	22	21	51	29	37	31	31	37	
C	2	3	3	3	3	4	4	4	
	0.6	0.6	1.0	0.5	0.5	0.6	0.8	0.9	
	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
	0.1	0.3	0.0	0.1	0.1	0.0	0.1	0.3	
	0.3	0.3	0.2	0.3	0.2	0.3	0.2	0.2	
	42	24	59	29	37	35	31	35	
P	2	3	3	3	3	4	4	4	
	14.0	15.0	14.5	15.5	14.8	15.3	14.8	14.1	
	18.0	18.1	18.0	20.1	20.7	19.0	18.1	18.0	
	12.0	12.5	11.7	11.3	12.0	11.5	11.5	10.2	
	1.2	1.8	1.5	2.0	1.8	1.7	1.7	1.7	
	44	22	54	29	37	35	31	38	
M	2	3	3	3	3	4	4	4	
	7.1	7.5	7.2	7.8	8.2	7.2	7.5	7.0	
	11.7	9.3	12.3	13.3	11.5	10.7	14.3	12.8	
	4.0	1.0	1.5	3.5	5.0	2.5	0.0	3.5	
	1.5	1.0	2.1	2.1	1.3	2.0	2.5	2.0	
	48	24	59	29	37	35	32	38	
W(X)	6.7-	7.3-	6.3-	7.2-	7.8-	6.2-	6.1-	5.0-	
	3.2-	5.0-	3.6-	3.2-	3.8-	0.0	0.0	0.0	
	10.6-	9.0-	11.7-	13.1-	11.5-	10.2-	13.1-	10.1-	
	1.3	0.9	3.0	2.5	1.5	2.0	2.6	2.5	
W(Y)	9.0	0.2	1.3	4.0	1.6	2.0	3.1-	4.0-	
	3.1-	5.5	6.2	6.0-	6.3-	7.0-	7.2-	3.0	
	2.5	2.0	2.5	2.0	1.8	2.6	2.5	9.8-	
								2.7	

OCTOBER 1963

LATITUDE 15° – 20° N.

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	² 26.8 / 30.0 / 30.5 / 25.5 / 0.8 / 53	³ 27.0 / 30.5 / 24.2 / 0.9 / 58	⁴ 27.0 / 30.0 / 24.2 / 1.0 / 85	⁴ 26.0 / 30.5 / 23.1 / 1.0 / 85	² 25.5 / 26.5 / 24.0 / 0.7 / 17	³ 25.3 / 29.0 / 24.0 / 1.1 / 15	³ 25.0 / 28.1 / 22.6 / 1.2 / 29	⁴ 24.2 / 28.1 / 23.0 / 1.0 / 26	⁴ 24.0 / 26.5 / 22.6 / 1.0 / 36
T(W)–T(A)	³ 0.4 / 3.2 / 3.3- / 1.1 / 27	³ 0.2 / 3.7 / 6.0- / 1.5 / 58	³ 1.2 / 4.7 / 2.2- / 1.3 / 85	³ 1.2 / 5.5 / 2.2- / 1.3 / 85	³ 1.2 / 3.8 / 0.0 / 1.0 / 17	³ 1.1 / 3.0 / 1.0- / 0.9 / 15	³ 0.5 / 3.0 / 3.8- / 1.5 / 25	³ 0.6 / 2.7 / 4.3- / 1.3 / 25	⁴ 0.7 / 2.2 / 1.6- / 1.0 / 36
E(W)–E(A)	³ 6.7 / 10.0 / 2.0 / 3.0 / 23	⁴ 7.0 / 12.2 / 4.5- / 3.1 / 36	⁴ 7.0 / 13.0 / 1.6 / 2.1 / 68	³ 8.3 / 13.0 / 1.6 / 2.1 / 68	³ 8.1 / 14.7 / 3.1 / 3.1 / 12	³ 7.3 / 11.1 / 4.0 / 2.5 / 13	³ 6.0 / 13.2 / 0.8 / 2.6 / 25	³ 6.5 / 12.6 / 0.5 / 2.7 / 25	⁴ 6.7 / 11.1 / 2.5 / 2.5 / 36
EA	³ 26.0 / 31.0 / 25.2 / 1.2 / 23	³ 27.5 / 30.5 / 23.2 / 1.8 / 36	³ 26.0 / 34.1 / 23.2 / 1.8 / 68	³ 26.0 / 34.1 / 23.2 / 1.8 / 68	³ 25.5 / 29.5 / 17.8 / 2.6 / 12	³ 25.5 / 31.5 / 21.7 / 2.5 / 13	³ 24.3 / 28.6 / 15.2 / 2.7 / 25	³ 22.8 / 27.1 / 17.0 / 2.5 / 25	⁴ 22.5 / 26.8 / 19.0 / 2.2 / 36
C	³ 0.6 / 1.0 / 0.1 / 0.2 / 37	³ 0.6 / 1.0 / 0.1 / 0.3 / 60	³ 0.5 / 1.0 / 0.0 / 0.3 / 86	³ 0.5 / 1.0 / 0.0 / 0.3 / 86	³ 0.6 / 1.0 / 0.1 / 0.3 / 17	³ 0.6 / 1.0 / 0.1 / 0.2 / 16	³ 0.5 / 1.0 / 0.1 / 0.3 / 30	³ 0.6 / 1.0 / 0.3 / 0.3 / 26	⁴ 0.7 / 1.0 / 0.0 / 0.3 / 37
P	² 13.1 / 17.0 / 9.0 / 1.5 / 49	³ 13.7 / 19.1 / 9.6 / 1.8 / 50	³ 14.6 / 17.8 / 10.1 / 1.6 / 83	³ 15.3 / 17.8 / 10.1 / 1.6 / 83	³ 15.3 / 17.1 / 13.0 / 1.3 / 17	³ 15.5 / 17.5 / 13.0 / 1.3 / 16	³ 16.0 / 18.0 / 14.0 / 1.1 / 29	³ 16.5 / 18.5 / 13.7 / 1.1 / 23	² 15.5 / 18.5 / 13.0 / 1.3 / 32
M	² 7.0 / 10.7 / 3.5 / 1.7 / 52	³ 7.5 / 10.7 / 0.0 / 2.1 / 60	⁴ 7.5 / 13.3 / 2.5 / 1.7 / 86	⁴ 8.1 / 13.3 / 2.5 / 1.7 / 86	³ 8.1 / 10.3 / 5.0 / 1.7 / 17	³ 7.5 / 10.2 / 5.0 / 1.7 / 16	³ 6.5 / 10.2 / 3.0 / 1.8 / 29	³ 7.5 / 10.2 / 3.0 / 1.8 / 23	⁴ 7.6 / 11.2 / 2.5 / 2.2 / 37
W(X)	6.7- / 3.2- / 10.7- / 1.7 / 0.6-	6.7- / 2.2- / 10.2- / 0.6- / 7.1	6.6- / 2.2 / 12.6- / 1.8- / 10.1	6.6- / 2.2 / 12.6- / 1.8- / 10.1	7.6- / 3.8- / 10.2- / 2.0- / 0.0	6.8- / 3.8- / 10.2- / 1.5- / 2.1	5.7- / 1.5- / 10.0- / 2.0- / 2.0	6.5- / 1.5- / 10.0- / 2.0- / 3.3	6.1- / 2.0- / 9.5- / 4.2- / 0.0
W(Y)	0.6- / 4.8- / 3.8- / 1.8	0.6- / 4.3- / 2.5	1.8- / 8.6- / 3.0	1.8- / 10.1 / 8.6- / 3.0	2.0- / 0.0 / 4.6- / 1.3	1.5- / 2.1 / 4.6- / 2.1	1.1- / 2.0 / 5.2- / 2.0	1.0- / 7.0- / 1.5	1.8- / 7.3- / 1.8

SEPTEMBER 1963

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	² 26.7 / 28.6 / 25.0 / 25.6 / 0.6 / 59	³ 26.0 / 30.0 / 25.0 / 0.9 / –	³ 26.0 / 32.0 / 25.0 / 0.9 / 71	³ 26.3 / 28.0 / 25.7 / 1.0 / 71	³ 25.6 / 28.0 / 25.7 / 1.0 / 28	³ 25.1 / 29.2 / 21.0 / 1.5 / 26	³ 24.7 / 27.0 / 22.0 / 1.3 / 22	³ 24.1 / 27.0 / 21.8 / 1.1 / 29	² 24.0 / 27.0 / 22.0 / 1.3 / 32
T(W)–T(A)	² 1.0 / 3.5 / 1.1 / 33	³ 0.4 / 3.7 / 3.0- / 1.3 / 54	³ 0.4 / 3.7 / 6.0- / 1.3 / 71	³ 0.9 / 3.7 / 6.0- / 1.5 / 71	³ 2.0 / 4.5 / 0.5- / 1.3 / 23	³ 1.3 / 3.2 / 1.0- / 1.5 / 20	³ 0.9 / 3.3 / 3.3- / 1.5 / 15	³ 0.5 / 3.0 / 2.0- / 1.1 / 24	² 0.8 / 3.0 / 2.0- / 1.5 / 29
E(W)–E(A)	² 6.7 / 11.1 / 0.5- / 2.5 / 27	³ 6.0 / 12.5 / 0.1 / 3.0 / 54	³ 7.6 / 15.0 / 1.0 / 3.0 / 67	² 8.2 / 14.5 / 3.0 / 3.2 / 23	³ 8.2 / 14.5 / 3.0 / 3.2 / 23	³ 7.5 / 13.7 / 2.6 / 5.0 / 19	³ 4.6 / 9.7 / 5.1- / 3.7 / 15	³ 4.7 / 11.6 / 0.4- / 3.1 / 24	² 6.0 / 13.1 / 1.5- / 3.8 / 29
EA	² 26.3 / 34.0 / 26.0 / 1.5 / 27	³ 27.5 / 31.0 / 23.5 / 1.7 / 54	³ 26.5 / 34.0 / 23.6 / 1.8 / 67	³ 26.7 / 29.0 / 23.2 / 1.5 / 23	³ 26.7 / 30.3 / 23.2 / 1.3 / 23	³ 26.0 / 30.3 / 20.5 / 1.5 / 27	³ 26.0 / 31.8 / 20.1 / 1.8 / 24	³ 23.5 / 29.8 / 17.5 / 3.0 / 29	² 23.5 / 29.1 / 17.5 / 3.0 / 29
C	² 0.6 / 1.0 / 0.1 / 0.2 / 53	³ 0.5 / 1.0 / 0.1 / 0.2 / 62	³ 0.5 / 1.0 / 0.2 / 0.2 / 72	³ 0.6 / 1.0 / 0.1 / 0.3 / 28	³ 0.6 / 1.0 / 0.1 / 0.3 / 28	³ 0.5 / 1.0 / 0.1 / 0.3 / 27	³ 0.5 / 1.0 / 0.1 / 0.3 / 22	³ 0.4 / 1.0 / 0.3 / 0.3 / 29	² 0.6 / 1.0 / 0.0 / 0.3 / 33
P	² 13.0 / 14.5 / 11.0 / 1.0 / 60	³ 13.8 / 17.1 / 10.0 / 1.1 / 62	³ 14.0 / 17.1 / 10.0 / 1.1 / 72	³ 14.0 / 16.5 / 11.0 / 1.3 / 28	³ 14.0 / 16.5 / 11.0 / 1.3 / 28	³ 13.6 / 16.5 / 10.6 / 1.5 / 27	³ 13.2 / 16.7 / 9.6 / 1.8 / 22	³ 13.0 / 16.7 / 9.5 / 1.8 / 30	² 13.0 / 16.7 / 9.5 / 1.8 / 30
M	² 6.8 / 12.8 / 1.5 / 4.2 / 60	³ 7.0 / 10.2 / 0.0 / 2.1 / 62	³ 7.0 / 12.8 / 0.0 / 2.5 / 70	³ 7.0 / 10.7 / 1.7 / 1.7 / 28	³ 6.6 / 10.7 / 3.5 / 1.7 / 28	³ 6.1 / 10.2 / 1.0 / 1.7 / 26	³ 5.0 / 10.2 / 0.0 / 2.5 / 22	³ 6.0 / 10.7 / 2.1 / 2.8 / 33	² 5.8 / 10.7 / 0.0 / 2.8 / 33
W(X)	6.1- / 0.1- / 9.7- / 2.3 / 11.2-	6.3- / 4.0 / 10.2- / 2.5 / 1.0-	6.3- / 2.5 / 12.6- / 2.0- / 9.0-	6.1- / 1.6- / 10.5- / 2.1 / 5.7-	5.7- / 1.6- / 10.5- / 2.1 / 5.7-	5.5- / 1.0 / 9.5- / 1.8 / 5.7-	3.8- / 0.0 / 8.8- / 1.8- / 6.0-	3.5- / 1.0 / 10.0- / 3.1 / 6.0-	3.5- / 1.0 / 10.0- / 3.1 / 7.8-
W(Y)	8.3- / 5.6- / 2.8	7.6- / 2.0	9.0- / 2.5	2.1 / 2.0	2.5- / 2.0	1.0- / 5.7 / 2.5	1.8- / 8.6- / 2.7	3.1- / 7.1 / 3.7	3.1- / 8.0- / 3.5

LATITUDE 15° – 20° N.

NOVEMBER 1963

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	2 / 26.1 / 29.0 / 24.0 / 0.9 / 57	4 / 26.1 / 31.0 / 23.1 / 1.2 / 45	4 / 25.5 / 28.1 / 23.0 / 1.0 / 57	3 / 25.5 / 30.0 / 23.0 / 1.5 / 20	2 / 25.0 / 30.5 / 23.0 / 1.5 / 19	3 / 24.0 / 27.0 / 22.0 / 1.2 / 27	4 / 23.6 / 28.7 / 21.0 / 1.5 / 39	4 / 23.5 / 27.0 / 20.5 / 1.3 / 41	
T(w)-T(A)	3 / 1.0 / 3.0 / 2.0- / 1.0 / 28	4 / 0.0 / 3.8 / 4.0- / 1.3 / 41	4 / 1.1 / 4.5 / 0.8- / 1.0 / 54	3 / 1.0 / 3.3 / 3.0- / 1.5 / 19	2 / 2.1 / 4.3 / 2.2- / 1.6 / 19	3 / 1.5 / 3.5 / 2.0- / 1.2 / 27	4 / 0.8 / 4.3 / 4.5- / 1.7 / 39	4 / 1.0 / 3.8 / 2.0- / 1.5 / 41	
E(w)-t(A)	3 / 7.0 / 10.5 / 3.0 / 1.7 / 28	4 / 7.1 / 11.8 / 3.3 / 1.7 / 38	4 / 8.6 / 15.6 / 4.7 / 2.0 / 52	3 / 8.2 / 12.5 / 3.0 / 3.3 / 13	2 / 8.3 / 12.2 / 2.2 / 2.7 / 16	3 / 7.2 / 11.5 / 0.6 / 2.5 / 27	3 / 4.8 / 10.1 / 0.8- / 2.5 / 39	4 / 5.7 / 13.7 / 0.6 / 3.0 / 41	
EA	3 / 20.2 / 30.7 / 23.6 / 1.5 / 28	3 / 26.0 / 30.1 / 20.2 / 1.3 / 38	4 / 24.3 / 26.8 / 20.2 / 1.6 / 52	3 / 25.2 / 28.5 / 20.5 / 2.2 / 13	2 / 25.5 / 30.5 / 21.6 / 2.6 / 16	2 / 24.1 / 29.0 / 18.5 / 2.8 / 27	3 / 24.0 / 30.2 / 19.7 / 2.7 / 39	4 / 23.1 / 28.5 / 17.8 / 2.7 / 41	
C	2 / 0.5 / 1.0 / 0.0 / 0.3 / 48	3 / 0.5 / 1.0 / 0.1 / 0.3 / 47	4 / 1.0 / 1.0 / 0.0 / 0.3 / 58	3 / 0.4 / 0.9 / 0.1 / 0.2 / 21	2 / 0.4 / 1.0 / 0.0 / 0.3 / 20	4 / 0.5 / 1.0 / 0.0 / 0.3 / 28	4 / 0.6 / 1.0 / 0.0 / 0.3 / 38	4 / 0.7 / 1.0 / 0.1 / 0.2 / 41	
P	2 / 14.0 / 18.1 / 9.6 / 1.6 / 58	3 / 14.8 / 18.1 / 10.7 / 1.3 / 47	4 / 14.7 / 17.0 / 10.5 / 2.0 / 52	3 / 14.3 / 17.1 / 10.5 / 2.1 / 21	2 / 13.0 / 17.5 / 8.0 / 2.5 / 20	2 / 17.1 / 22.2 / 12.0 / 2.7 / 27	4 / 17.3 / 21.5 / 13.0 / 2.0 / 39	4 / 16.8 / 20.0 / 14.5 / 1.3 / 41	
W	2 / 6.6 / 14.3 / 2.5 / 2.1 / 57	4 / 6.6 / 12.8 / 0.0 / 2.5 / 46	4 / 7.5 / 16.5 / 1.1 / 3.3 / 57	3 / 8.3 / 14.3 / 2.5 / 3.0 / 21	2 / 6.7 / 11.2 / 3.0 / 2.3 / 20	4 / 7.0 / 12.8 / 2.5 / 2.5 / 28	4 / 6.6 / 10.7 / 0.0 / 2.0 / 39	4 / 7.2 / 12.8 / 1.0 / 2.2 / 41	
W(X)	0.0- / 0.0 / 12.3- / 2.3 / 57	5.6- / 0.0 / 12.0- / 3.0 / 46	6.1- / 3.2 / 15.1- / 3.7 / 57	5.8- / 5.6 / 14.1- / 4.6 / 21	5.8- / 1.7 / 11.2- / 3.3 / 20	6.5- / 0.7- / 12.6- / 2.7 / 28	5.5- / 7.6 / 10.7- / 3.5 / 39	6.2- / 0.8- / 12.0- / 2.3 / 41	
W(Y)	0.5- / 3.0 / 7.2- / 2.6	0.6 / 0.0 / 8.0- / 3.3	8.0 / 3.7 / 15.5- / 3.8	2.3 / 1.0- / 13.3- / 3.5	3.8 / 1.0- / 4.7- / 2.0	2.5- / 1.5- / 4.6- / 1.8	3.5- / 1.5 / 5.1- / 1.6	3.8 / 2.7- / 6.6- / 2.3	

DECEMBER 1963

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	2 / 24.6 / 27.1 / 23.0 / 0.9 / 58	3 / 24.5 / 26.1 / 22.6 / 0.9 / 32	4 / 25.0 / 27.0 / 23.0 / 0.9 / 79	4 / 24.7 / 27.6 / 20.0 / 1.5 / 28	4 / 24.1 / 26.0 / 23.6 / 0.5 / 18	4 / 23.5 / 26.0 / 21.5 / 1.1 / 13	5 / 22.5 / 26.0 / 18.0 / 1.5 / 28	4 / 22.2 / 24.2 / 20.5 / 1.0 / 43	3
T(w)-T(A)	3 / 1.6 / 4.5 / 2.1- / 1.6 / 32	3 / 1.3 / 4.2 / 1.8- / 1.7 / 28	4 / 1.0 / 5.0 / 3.3- / 1.7 / 73	4 / 1.1 / 4.5 / 2.6- / 1.5 / 28	3 / 0.6 / 2.0 / 0.2- / 0.5 / 18	4 / 0.5 / 3.2 / 1.6- / 1.3 / 13	5 / 1.2 / 6.0 / 2.7- / 1.8 / 28	4 / 1.3 / 4.3 / 2.1- / 1.5 / 43	3
E(w)-E(A)	3 / 9.1 / 19.8 / 2.3 / 3.6 / 32	3 / 7.5 / 16.6 / 1.0 / 4.0 / 28	4 / 7.0 / 14.3 / 1.2- / 3.3 / 73	4 / 6.5 / 9.7 / 1.6 / 1.8 / 28	3 / 5.2 / 7.5 / 0.6- / 2.0 / 18	4 / 5.0 / 10.8 / 0.5 / 3.2 / 13	5 / 6.6 / 11.0 / 1.3 / 3.0 / 28	4 / 7.0 / 23.0 / 4.1- / 4.0 / 43	3
EA	3 / 23.1 / 26.0 / 18.5 / 2.2 / 32	3 / 24.0 / 29.0 / 14.8 / 2.6 / 28	4 / 24.8 / 32.8 / 20.5 / 2.3 / 73	4 / 25.0 / 31.2 / 19.0 / 3.0 / 28	3 / 24.2 / 29.0 / 22.2 / 1.7 / 18	4 / 23.1 / 28.5 / 16.7 / 3.2 / 13	5 / 20.8 / 25.7 / 17.1 / 2.3 / 28	4 / 20.5 / 29.0 / 7.5 / 3.5 / 43	3
C	2 / 0.5 / 1.0 / 0.0 / 0.3 / 53	3 / 0.6 / 1.0 / 0.0 / 0.4 / 33	4 / 0.5 / 1.0 / 0.0 / 0.3 / 83	4 / 0.3 / 0.9 / 0.0 / 0.2 / 31	3 / 0.3 / 0.6 / 0.1 / 0.2 / 21	4 / 0.4 / 1.0 / 0.0 / 0.3 / 14	5 / 0.5 / 1.0 / 0.1 / 0.3 / 29	4 / 0.6 / 1.0 / 0.0 / 0.3 / 44	3
P	2 / 14.3 / 18.1 / 11.2 / 1.6 / 60	3 / 15.0 / 20.0 / 11.5 / 1.8 / 33	4 / 14.7 / 20.0 / 9.0 / 2.0 / 82	4 / 15.8 / 20.0 / 12.0 / 1.8 / 31	3 / 16.5 / 20.0 / 12.1 / 2.0 / 21	4 / 16.5 / 19.5 / 14.7 / 1.3 / 12	5 / 17.0 / 19.1 / 13.5 / 1.5 / 27	4 / 17.5 / 22.0 / 13.7 / 2.0 / 39	3
W	/ 6.5 / 15.3 / 2.0 / 2.6 / 60	3 / 5.5 / 10.2 / 2.7 / 2.7 / 33	4 / 5.0 / 12.8 / 0.0 / 2.5 / 81	4 / 4.0 / 8.1 / 0.5 / 2.5 / 29	3 / 5.0 / 8.1 / 2.0 / 1.8 / 21	4 / 6.2 / 10.2 / 2.0 / 2.6 / 14	5 / 7.1 / 12.8 / 2.2 / 2.3 / 29	4 / 7.0 / 12.8 / 0.0 / 2.2 / 44	3
W(X)	4.1- / 7.6 / 11.2- / 4.0	2.7- / 8.0 / 4.5 / 1.0-	3.7- / 3.3 / 12.0- / 0.7-	2.2- / 6.1 / 7.1- / 3.5	4.8- / 2.0 / 7.1- / 1.6	5.5- / 2.0 / 10.0- / 0.2-	6.1- / 1.7- / 12.6- / 2.3	6.0- / 0.0 / 12.6- / 2.3	
W(Y)	4.0- / 2.3 / 14.5- / 2.8	4.5 / 1.0- / 4.1 / 7.0- / 3.0	3.0- / 0.7- / 8.3 / 9.6- / 3.0	3.5- / 0.2- / 4.1- / 2.1	1.6 / 0.0 / 2.5 / 4.1- / 1.6	10.0- / 2.8 / 0.2- / 5.7 / 2.5	12.6- / 2.3 / 2.3 / 7.0 / 2.6	12.6- / 2.3 / 2.8 / 8.3- / 2.5	

FEBRUARY 1964

LATITUDE 15° – 20° N.

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	2	4	4	3	3	3	4	3	3
	24.3	24.2	23.5	23.0	22.1	21.5	21.0	21.0	21.0
	26.0	27.0	26.7	25.6	25.0	26.0	24.0	24.0	26.0
	22.1	21.2	21.5	21.2	20.0	19.2	19.2	19.2	14.7
	0.8	1.2	0.8	0.8	1.0	1.0	1.6	1.6	1.6
	42	28	109	44	29	34	51	51	53
T(W)-T(A)	2	4	4	3	3	3	4	3	3
	0.5	0.6	0.9	0.7	1.3	1.1	1.5	1.5	1.0
	2.0	4.5	3.6	2.1	3.1	3.1	4.0	4.0	10.6
	0.5-	2.0-	1.2-	1.6-	1.1-	2.0-	1.5-	1.5-	4.0-
	0.8	1.3	0.9	0.7	1.0	1.5	1.1	1.1	2.0
	17	28	109	44	26	28	47	47	46
E(W)-E(A)	2	4	4	3	2	3	4	3	3
	6.6	7.5	7.3	5.8	6.2	5.6	5.8	5.8	5.1
	11.0	13.3	13.0	11.5	8.8	10.1	13.1	13.1	18.5
	3.7	2.0	2.6-	1.5	4.5	0.4-	1.3-	1.3-	1.5-
	1.5	2.8	2.8	1.3	1.1	2.5	3.0	3.0	3.3
	17	27	108	41	23	25	45	45	43
EA	2	4	4	3	3	3	4	3	3
	23.5	22.1	21.5	21.6	21.0	20.2	19.6	19.6	20.0
	26.0	27.7	30.7	24.5	22.7	26.0	22.6	22.6	24.6
	20.5	18.5	15.6	18.1	18.7	15.6	14.7	14.7	12.0
	1.5	2.1	2.1	1.3	1.1	2.0	2.0	2.0	2.5
	17	27	108	41	23	25	45	45	43
C	2	4	4	3	3	3	4	3	3
	0.6	0.4	0.4	0.4	0.7	0.6	0.7	0.7	0.9
	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
	0.3	0.3	0.2	0.3	0.3	0.3	0.2	0.2	0.2
	33	28	105	44	29	35	48	48	54
P	4	4	4	3	3	4	4	3	3
	15.1	16.5	16.7	16.6	15.7	17.3	16.8	16.8	16.8
	18.5	22.0	22.5	21.5	20.0	23.0	24.5	24.5	21.0
	13.0	13.6	11.7	13.0	12.0	11.0	11.0	11.0	10.6
	1.5	2.1	2.1	2.0	2.2	2.8	2.7	2.7	2.2
	42	28	109	44	29	35	51	51	56
M	4	4	4	3	3	4	4	3	4
	8.0	8.2	8.8	9.3	10.1	8.3	8.0	8.0	8.0
	11.2	12.8	17.5	15.5	17.0	15.3	13.3	13.3	14.3
	4.0	5.0	0.0	4.0	4.0	4.0	4.5	4.5	2.0
	2.0	2.1	3.2	2.5	3.0	2.7	2.1	2.1	2.3
	42	28	109	44	28	35	51	51	56
W(X)	4	4	4	3	3	4	4	3	3
	7.6-	7.6-	0.0	8.0-	9.3-	7.3-	7.0-	7.0-	7.0-
	4.0-	2.1-	2.1-	0.7-	4.3-	3.8-	3.2-	3.2-	0.0-
	1.9	12.5-	12.6-	15.1-	15.8-	14.5-	11.5-	11.5-	14.1-
	0.9-	2.5	2.7	2.6	2.6	2.5	2.0	2.0	2.6
W(Y)	7.8	2.0	3.0-	3.8-	3.0-	3.1	3.0-	3.0-	2.2-
	4.0-	6.2-	2.5	2.0	1.6	1.6	3.3	3.3	7.7
	2.5	2.0	15.1-	11.1-	8.7-	9.8-	11.1-	11.1-	6.3-
			3.2	2.5	2.6	2.5	2.5	2.5	2.6

JANUARY 1964

LONGITUDE WEST

	170	165	160	155	150	145	140	135
T(A)	3	4	4	4	4	5	3	4
	24.5	24.3	24.2	23.3	22.7	22.5	21.8	21.3
	26.0	26.0	26.0	25.5	25.0	27.6	26.5	26.0
	22.6	21.0	23.1	21.0	21.0	20.5	20.2	19.0
	0.7	1.0	0.8	1.0	1.0	1.3	1.2	1.1
	75	46	53	30	30	45	61	73
T(W)-T(A)	4	4	4	4	4	5	4	3
	1.1	1.1	1.0	1.1	1.0	0.4	0.7	0.9
	3.0	4.5	3.3	3.7	2.7	3.6	3.7	3.1
	1.2-	1.1-	1.1-	0.5-	0.4-	4.5-	3.3-	3.2-
	1.0	1.2	1.0	1.0	0.8	1.5	1.3	1.2
	44	42	53	30	30	45	59	68
E(W)-E(A)	4	3	4	4	4	4	4	4
	6.5	6.3	7.0	7.7	7.3	6.6	6.5	6.3
	13.2	13.1	11.5	11.5	11.2	11.7	11.0	10.5
	1.6-	0.7	3.0	4.2	3.7	1.3	0.1	0.3-
	3.0	3.0	2.0	1.8	1.8	2.1	2.3	2.3
	40	40	53	26	14	27	39	43
EA	4	4	4	4	4	5	4	4
	24.3	24.2	23.5	21.3	21.1	20.0	19.5	19.0
	31.0	29.7	28.3	26.3	27.3	25.2	22.8	26.1
	17.2	21.7	19.1	17.0	17.1	15.0	15.8	14.3
	2.5	1.8	1.7	2.2	2.3	2.0	2.0	2.7
	40	40	53	26	14	27	39	43
C	3	4	4	4	4	5	4	4
	0.5	0.5	0.4	0.6	0.6	0.6	0.7	0.8
	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1
	0.2	0.3	0.0	0.3	0.3	0.3	0.2	0.2
	72	53	56	31	30	45	61	75
P	3	4	4	4	4	5	4	3
	15.3	16.8	16.1	18.0	18.8	19.5	18.7	18.3
	21.0	22.0	21.1	22.2	21.0	21.5	22.5	22.1
	9.1	9.5	6.6	12.5	12.5	15.5	15.0	12.5
	2.6	2.8	2.6	2.6	2.2	1.5	1.6	2.0
	75	50	51	31	31	45	61	71
M	3	3	3	3	3	3	3	3
	8.2	8.2	7.5	7.0	8.0	8.2	9.1	9.0
	14.3	16.0	14.3	12.8	13.8	13.8	15.3	15.3
	2.5	1.5	0.0	1.5	1.5	4.5	5.0	4.0
	2.6	3.0	3.1	2.2	2.0	2.5	2.6	3.0
	78	53	55	31	31	45	62	75
W(X)	6.8-	6.6-	5.7-	6.2-	7.2-	7.7-	8.0-	7.7-
	1.7	2.5	9.6	1.2-	1.2-	2.8-	3.8-	0.9
	14.2-	16.0-	14.1-	12.6-	13.8-	13.0-	15.1-	15.3-
	3.2	4.0	4.1	2.3	2.3	3.0	2.5	3.3
W(Y)	2.9	2.5-	4.4	2.1-	1.7-	3.1-	3.5-	4.2-
	5.2	6.2	3.7	1.7-	9.2	8.5	2.5	0.1-
	9.9-	10.2-	12.0-	6.2-	7.3-	9.0-	11.0-	10.0-
	3.2	3.1	3.0	2.7	3.5	3.0	2.3	1.5

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MARCH 1964

	LONGITUDE WEST								
	170	165	160	155	150	145	140	135	130
T(A)	24.1	24.2	23.6	23.1	22.5	22.2	21.0	20.7	
	28.0	34.0	32.0	28.0	28.0	28.1	25.0	28.0	
	20.0	17.5	22.0	21.0	20.0	20.0	18.7	18.1	
	1.2	1.6	1.2	1.1	1.2	1.3	1.3	1.6	
	55	84	97	54	48	42	39	52	
T(W)–T(A)	0.3–	0.1–	0.6	0.4	0.5	0.4	1.1	1.3	
	4.6	7.5	3.8	4.0	2.6	3.7	3.8	4.5	
	5.8–	8.0–	7.0–	3.0–	1.5–	5.0–	1.0–	1.5–	
	2.3	2.1	1.3	1.1	0.8	1.5	1.5	1.5	
	29	81	93	49	41	33	30	47	
E(W)–E(A)	4.6	5.8	5.8	3.6	4.8	4.5	6.1	6.7	
	9.8	13.1	10.3	7.7	8.7	9.0	11.6	14.2	
	1.0–	2.2–	2.1	0.3–	0.0	2.8–	0.9–	0.9–	
	3.5	2.7	2.1	2.0	2.3	3.0	3.0	3.2	
	26	78	89	42	36	31	26	45	
EA	24.0	23.0	22.5	23.5	21.5	21.5	18.7	18.0	
	27.3	28.0	29.0	27.5	26.2	29.2	25.7	25.7	
	21.3	15.5	19.1	20.1	16.7	16.7	14.7	12.3	
	1.5	2.3	1.8	1.8	2.7	2.8	2.8	3.0	
	26	78	89	42	36	31	26	45	
C	0.6	0.5	0.5	0.6	0.7	0.6	0.8	0.8	
	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
	0.0	0.0	0.0	0.0	0.1	0.0	0.3	0.4	
	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	
	45	84	98	52	47	41	39	51	
P	14.8	15.7	16.6	16.8	18.1	18.5	19.0	17.7	
	18.5	21.0	20.2	21.2	23.0	22.0	22.2	22.2	
	10.5	12.0	11.7	11.5	12.5	14.1	15.1	10.5	
	1.3	1.8	1.8	2.0	2.5	2.0	1.6	2.3	
	55	84	98	54	47	39	39	52	
H	6.0	7.0	6.6	7.6	9.6	9.2	9.8	9.0	
	10.2	13.8	11.7	12.8	15.3	16.5	17.0	15.3	
	1.5	1.0	1.0	1.4	3.0	3.0	5.0	2.0	
	1.8	2.2	2.7	2.5	2.5	2.5	2.5	2.5	
	55	84	97	53	48	43	39	50	
W(X)	5.9	6.3	5.5	7.0–	9.1–	6.7–	8.7–	6.5–	
	4.7	0.9	3.5	0.1–	2.8	2.8–	4.2–	3.8	
	9.7–	13.8–	11.5–	12.6–	15.3–	15.3–	14.5–	11.6–	
	0.5	0.3	3.5	2.8	3.0	2.2	2.2	4.0	
	7.2	7.1	9.7	0.1	1.8–	1.8–	3.5–	4.6–	
W(Y)	8.0–	8.0–	7.6–	6.0–	2.3	3.0	3.7	3.0	
	2.9	2.8	3.0	2.6	2.0	2.5	3.1	10.0–	
								2.5	

APRIL 1964

	LONGITUDE WEST								
	170	165	160	155	150	145	140	135	130
T(A)	24.5	24.2	24.0	23.0	23.0	22.6	21.5	21.1	20.7	20.3
	27.0	26.1	27.1	24.1	24.2	24.5	23.1	23.1	27.6	25.0
	21.0	22.5	21.7	22.7	22.0	21.5	20.0	20.0	18.7	18.1
	1.0	1.0	0.8	0.6	0.6	0.8	0.9	1.3	1.5	1.2
	62	42	87	36	25	22	34	50		
T(W)–T(A)	1.0	0.7	0.7	0.7	0.3	1.0	1.0	0.7		
	5.7	5.0	5.0	3.0	1.2	3.0	5.0	3.6		
	2.0	1.8	1.0	1.0	1.5–	2.1–	5.5–	4.5–		
	53	43	86	36	25	21	1.6	1.5		
							30	44		
E(W)–E(A)	5.0	5.3	6.1	6.0	5.2	5.8	5.1	5.0		
	12.5	14.2	12.8	8.5	8.3	10.3	10.2	10.0		
	0.1–	0.1–	0.6	2.2	2.3	1.3	0.4–	3.1–		
	3.5	2.8	2.2	1.5	1.3	3.2	3.1	2.6		
	31	39	86	34	22	17	28	44		
EA	24.7	24.5	23.0	21.6	21.1	20.1	19.0	18.7		
	29.7	29.7	27.3	25.7	25.0	25.7	25.7	24.1		
	19.3	22.2	16.8	19.0	18.7	14.5	14.5	14.1		
	2.3	1.5	1.8	1.8	1.5	2.7	2.8	2.3		
	31	39	86	34	22	17	28	44		
C	0.7	0.7	0.7	0.6	0.6	0.6	0.7	0.8		
	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.1		
	0.1	0.3	0.1	0.1	0.1	0.3	0.3	0.1		
	0.2	0.3	0.3	0.3	0.3	0.2	0.3	0.2		
	41	43	86	34	24	22	34	53		
P	14.8	16.5	15.6	17.3	18.0	19.0	19.1	18.5		
	18.6	20.1	19.6	20.5	22.5	22.2	22.5	23.2		
	10.6	12.7	7.5	15.0	15.0	16.5	16.0	12.0		
	2.0	1.8	1.8	1.3	1.8	1.6	2.0	2.2		
	62	43	84	36	25	22	34	53		
H	7.4	7.8	8.2	8.5	8.3	9.1	7.5	7.0		
	16.5	15.3	17.3	13.0	14.8	15.3	15.3	15.3		
	3.0	3.1	3.0	1.6	4.5	2.5	2.0	2.2		
	62	42	89	36	25	22	34	53		
W(X)	6.2–	6.5–	7.0–	7.7–	8.5–	6.5–	6.0–	5.1–		
	4.6	1.3	3.1	1.7–	4.0–	2.0–	6.1	2.6		
	14.2–	14.5–	15.7–	12.2–	14.8–	14.5–	14.5–	14.5–		
	3.4	4.5	3.6	1.7	3.0	2.5	3.2	3.2		
W(Y)	0.3–	0.5–	0.5	2.8–	2.8–	3.6–	4.0–	3.8–		
	5.1	8.6	8.5	2.5	0.8	0.0	0.0	0.0–		
	8.4–	9.8–	11.0–	5.0–	5.5–	4.0–	7.8–	11.1–		
	3.5	4.2	4.0	1.8	1.6	1.7	2.2	2.2		

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LATITUDE 15° – 20° N.

JUNE 1964

LONGITUDE WEST

Variable	Stat	170	165	160	155	150	145	140	135	130
T(A)	n	2	3	3	3	3	4	4	4	4
	mean	26.0	25.7	25.7	25.3	24.8	24.1	23.6	22.8	21.7
	max	28.1	28.0	28.5	28.7	28.7	27.2	27.5	25.0	24.2
	min	22.6	21.0	21.0	23.0	23.0	22.0	21.5	21.5	20.0
	s.d.	0.9	1.0	0.8	1.0	1.0	1.0	1.7	1.2	1.2
	N	50	53	94	66	67	41	10	26	34
T(W)-T(A)	n	2	3	3	3	3	4	4	4	4
	mean	0.6-	0.1	0.1-	0.3	0.2	0.2	0.4	0.6	1.0
	max	1.3	2.7	2.5	2.1	2.1	2.7	2.6	2.6	3.1
	min	3.1-	1.6-	1.6-	5.0-	5.0-	3.0-	3.5-	3.5-	2.1-
	s.d.	1.1	0.9	0.9	1.0	1.0	1.0	1.8	1.2	1.1
	N	19	49	94	66	40	40	25	26	34
E(W)-E(A)	n	2	3	3	3	3	4	4	4	4
	mean	3.8	4.8	5.1	4.7	5.0	6.1	6.0	6.0	6.0
	max	9.0	9.6	10.8	12.2	12.0	9.7	9.0	9.0	11.8
	min	0.1-	0.6	0.9-	0.4-	0.4-	2.7	1.5-	1.5-	1.6
	s.d.	2.2	2.0	2.6	2.2	2.2	2.0	2.3	2.2	2.7
	N	19	49	94	66	66	8	23	26	33
EA	n	2	3	3	3	3	4	4	4	4
	mean	28.1	26.5	25.5	25.1	24.0	21.8	21.5	21.5	20.0
	max	30.7	29.5	31.5	31.0	28.2	25.7	29.5	29.5	28.0
	min	24.7	22.8	20.0	18.3	19.5	19.3	18.6	18.6	13.0
	s.d.	1.5	1.2	2.0	2.1	1.8	1.8	2.3	2.3	2.6
	N	19	49	94	66	40	8	23	23	33
C	n	2	3	3	3	3	4	4	4	4
	mean	0.6	0.5	0.5	0.5	0.5	0.4	0.7	0.7	0.8
	max	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	min	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.3
	s.d.	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	N	41	56	96	67	67	10	26	26	34
P	n	2	3	3	3	3	4	4	4	2
	mean	14.2	14.8	15.0	15.5	15.3	16.5	17.0	17.1	17.1
	max	18.5	18.8	20.0	21.1	20.0	18.5	19.1	19.1	19.1
	min	11.7	10.5	11.0	10.5	10.0	14.5	14.0	13.0	12.5
	s.d.	1.2	1.5	1.7	2.0	2.1	1.5	1.2	1.2	1.2
	N	51	56	96	65	39	9	25	25	32
W	n	2	3	3	3	3	4	4	4	4
	mean	6.0	7.3	8.0	7.0	7.3	6.3	7.3	6.5	6.5
	max	10.7	10.7	14.6	12.8	10.7	10.2	15.3	12.3	12.3
	min	4.5	1.8	2.6	2.5	2.5	3.5	3.0	2.5	2.5
	s.d.	1.6	1.8	1.8	2.5	2.3	2.0	3.0	2.3	2.3
	N	51	56	96	66	42	10	26	34	34
W(X)	v1	6.0-	5.1-	7.5-	6.2-	6.3-	5.5-	6.3-	6.5-	5.0-
	v2	5.1-	1.0-	1.0-	0.7-	2.0-	1.6-	2.0-	2.2	1.1-
	v3	10.7-	10.7-	10.7-	12.6-	10.7-	7.7-	13.0-	13.0-	2.3
	v4	2.2	2.2	2.2	2.5	2.1	2.0	1.1	3.1	3.7-
W(Y)	v1	0.3	2.2	3.0	2.0-	0.3	2.0	3.0	3.1	0.4
	v2	9.0	1.0-	0.7-	1.5	8.1	1.5	0.0	0.0	7.8-
	v3	4.7-	6.0	6.0	7.2-	6.0	6.6-	10.0-	10.0-	1.7
	v4	2.6	2.3	2.3	2.3	2.6	2.2	2.1	2.1	—

MAY 1964

LONGITUDE WEST

Variable	Stat	170	165	160	155	150	145	140	135	130
T(A)	n	3	4	4	3	3	4	5	4	4
	mean	25.0	24.8	24.2	24.0	24.0	22.3	22.1	22.1	21.5
	max	28.0	31.0	27.0	30.0	28.0	28.7	28.0	28.0	25.5
	min	22.1	22.5	21.5	21.5	21.5	19.6	19.0	19.0	18.0
	s.d.	0.8	1.0	0.9	1.3	1.5	1.8	1.6	1.5	1.6
	N	52	59	106	27	27	28	49	49	52
T(W)-T(A)	n	3	4	4	3	3	4	5	4	4
	mean	0.4	0.0	0.0	0.3	0.2	0.4	0.2	0.2	0.7
	max	3.1	3.1	4.0	3.0	2.2	4.2	2.1	2.1	3.8
	min	2.7-	4.0-	4.0-	5.0-	5.0-	5.0-	5.0-	5.0-	4.0-
	s.d.	1.1	1.1	1.3	1.1	1.3	2.0	1.2	1.2	1.5
	N	37	59	106	23	27	28	48	48	51
E(W)-E(A)	n	3	4	4	3	3	4	5	4	4
	mean	4.5	5.0	5.7	4.6	4.6	4.6	3.7	3.7	4.2
	max	8.5	10.5	11.8	11.0	11.0	8.8	12.8	12.8	10.7
	min	0.2-	1.0-	0.9-	0.7-	0.7-	1.6-	0.9-	0.9-	1.3-
	s.d.	2.0	2.6	2.0	2.1	2.1	3.1	2.8	2.8	2.5
	N	37	59	105	23	27	26	44	48	50
EA	n	2	4	4	3	3	4	5	5	2
	mean	26.2	24.5	23.3	24.8	23.8	21.5	21.8	20.7	20.7
	max	29.5	32.8	28.5	29.0	29.0	26.5	28.7	28.7	27.6
	min	22.5	19.0	18.3	20.0	20.0	17.6	15.6	14.1	14.1
	s.d.	1.0	2.3	1.7	2.0	2.0	2.6	2.7	2.8	2.8
	N	37	57	105	23	27	26	44	50	50
C	n	3	3	4	3	3	4	5	5	4
	mean	0.7	0.7	0.6	0.6	0.7	0.7	0.8	0.7	0.7
	max	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	min	0.1	0.0	0.3	0.0	0.3	0.3	0.2	0.3	0.3
	s.d.	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3
	N	43	60	104	24	27	28	49	51	51
P	n	3	3	4	3	3	4	5	5	3
	mean	13.8	16.0	16.5	16.7	16.7	18.0	18.2	18.0	18.0
	max	16.5	20.0	19.5	21.5	21.5	20.0	23.0	23.5	23.5
	min	10.2	10.0	12.8	13.0	14.6	13.1	6.7	15.0	15.0
	s.d.	1.2	2.1	1.5	1.6	1.6	1.7	2.5	1.5	1.5
	N	43	57	103	24	27	28	45	48	48
W	n	2	3	4	3	3	5	5	4	4
	mean	6.8	7.2	6.6	9.2	8.5	8.5	8.0	8.5	8.5
	max	11.2	10.7	13.8	14.6	16.0	12.8	12.8	12.8	12.8
	min	2.0	0.0	0.0	7.5	6.1	2.0	2.0	2.5	2.5
	s.d.	2.0	2.1	3.3	1.6	1.1	2.3	2.3	2.2	2.2
	N	43	60	106	24	24	28	45	52	48
W(X)	v1	6.3-	7.0-	6.3-	8.5-	5.7-	7.5-	7.1-	0.4	7.2-
	v2	6.3-	2.2	0.0	2.2	5.7-	3.5-	0.4	2.2	0.1
	v3	11.2-	10.7-	13.8-	11.5-	14.3-	15.6-	12.0-	12.6-	12.0-
	v4	2.8	2.1	3.2	1.7	1.7	2.5	2.3	2.5	4.0-
W(Y)	v1	1.4	0.4	2.1	2.8	2.8	2.5	2.3	2.6	2.6
	v2	7.8	6.5	5.8	0.1-	0.1-	2.5	0.5	0.1-	0.1-
	v3	5.3-	4.0-	5.1-	4.0-	4.0-	10.1-	5.2-	9.3-	9.5-
	v4	2.6	2.3	2.0	1.3	1.3	2.7	2.0	2.7	2.0

AUGUST 1964

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	2 26.5 31.5 23.7 1.0 74	3 26.5 29.0 25.0 0.8 57	3 25.8 28.0 24.0 0.7 83	2 25.5 28.0 23.8 0.9 27	3 24.8 27.0 23.0 1.0 12	4 25.1 29.0 22.0 2.0 29	5 24.3 30.0 21.0 2.0 41	4 24.1 30.5 22.0 1.8 45	4 24.1 30.5 22.0 1.8 45
T(W)-T(A)	3 0.5 3.7 3.7- 1.1 46	3 0.4 1.5 2.0- 0.7 59	3 0.4 2.6 2.0- 0.8 77	3 0.4 1.5 1.0- 0.6 27	2 0.2 2.2 3.0- 1.1 12	5 0.0- 2.6 4.1- 2.0 25	5 0.0- 3.0 5.0- 2.0 40	4 3.2 6.6- 2.0 45	4 0.2- 3.2 6.6- 2.0 45
E(W)-E(A)	3 10.5 3.2 1.6 46	3 6.3 11.2 0.4 2.0 59	3 5.7 10.8 0.1 2.0 77	2 5.6 10.0 3.0 1.7 27	3 5.3 7.5 2.0 1.8 12	5 6.6 10.1 2.0 2.0 25	5 6.7 12.0 2.0 2.0 40	4 10.2 7.2- 3.1 42	4 0.0 10.2 7.2- 3.1 42
EA	3 27.7 32.5 24.5 1.5 46	4 26.7 31.5 22.2 1.8 59	3 26.3 31.0 21.1 1.8 77	2 25.7 29.0 19.8 1.8 27	3 24.7 27.5 22.0 1.7 12	5 22.3 26.5 19.1 2.0 25	5 22.0 25.2 17.7 1.7 40	4 22.2 29.1 18.1 2.6 42	4 22.2 29.1 18.1 2.6 42
C	3 1.0 0.1 0.3 61	3 0.6 0.1 0.2 61	3 0.5 1.0 0.3 84	2 0.4 0.9 0.0 30	3 0.5 0.1 0.3 14	4 0.6 1.0 0.1 30	5 0.6 1.0 0.1 40	4 0.6 1.0 0.2 44	4 0.6 1.0 0.1 0.2 44
P	2 14.2 17.5 11.0 1.2 75	3 14.5 16.5 11.7 1.5 59	3 15.0 18.5 12.0 1.5 82	2 15.8 20.0 13.5 1.8 30	3 15.2 19.1 12.1 1.8 14	5 16.7 20.1 13.0 1.8 29	5 16.0 20.1 13.0 1.7 42	4 16.0 20.1 11.0 1.8 45	4 16.0 20.1 11.0 1.8 45
M	2 0.8 3.8 13.9- 2.1 74	3 7.2 12.8 2.1 2.0 59	3 6.3 10.2 2.0 2.0 82	2 8.0 11.7 1.5 2.0 26	3 7.7 13.3 2.1 2.0 14	4 6.5 10.2 2.0 2.0 30	5 7.1 13.8 2.0 2.5 42	4 7.0 10.2 2.5 1.7 45	4 7.0 10.2 2.5 1.7 45
W(X)	6.7- 1.9- 2.1 0.5- 6.5- 5.6- 1.8	7.0- 0.2- 12.8- 1.0- 4.2 5.0- 1.0	5.6- 2.0- 9.5- 4.3- 3.8 7.1- 2.0	7.3- 4.7- 11.5- 1.5 5.2 4.6- 1.7	6.5- 3.8- 10.1- 1.8 3.6- 8.6- 2.5	5.5- 1.2- 9.5- 2.2 2.7- 6.0- 1.5	6.0- 0.5- 13.0- 1.7 3.5- 6.6- 1.2	4.6- 1.3 8.8- 2.6 3.5 7.1- 1.7	
W(Y)									

JULY 1964

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	2 26.3 31.0 25.0 1.0 74	4 26.3 32.0 24.0 1.1 72	3 25.5 32.0 24.0 1.2 104	3 25.0 30.0 23.0 1.2 56	3 24.6 27.6 23.0 1.0 38	3 24.7 28.5 21.0 2.0 24	4 23.7 28.1 21.0 1.8 30	4 23.0 28.1 20.0 2.0 31	
T(W)-T(A)	4 0.3 3.0 3.2- 1.3 28	4 0.6 4.0 3.0- 1.1 43	3 0.8 4.0 4.0- 1.1 91	3 0.8 3.0 3.0- 1.1 52	3 0.9 5.0 5.0- 1.5 35	3 0.4 3.5 3.5- 2.2 21	4 0.3 3.5 3.8- 1.5 29	4 0.6 3.3 4.3- 1.5 31	
E(W)-E(A)	4 7.0 11.6 2.7 2.5 28	4 6.6 13.3 1.1 2.5 42	3 6.7 11.7 0.5 2.2 90	3 5.1 9.7 2.3 1.6 52	3 6.5 10.2 0.2- 2.0 35	3 6.6 15.5 2.1 3.2 21	3 5.1 8.6 0.9- 2.7 29	4 5.0 10.5 0.6- 2.8 31	
EA	2 26.8 30.7 23.7 1.5 28	4 26.1 29.7 22.1 1.7 70	3 25.3 32.2 20.6 2.2 90	3 26.0 29.0 22.7 2.2 50	3 24.2 27.3 20.0 1.5 35	3 23.5 26.5 20.2 1.7 21	3 22.7 28.0 17.5 2.7 29	4 22.3 27.6 16.1 3.0 31	
C	2 0.5 1.0 0.0 0.2 72	4 0.5 1.0 0.1 0.2 72	3 0.5 1.0 0.0 0.2 104	3 0.5 1.0 0.0 0.2 56	3 0.5 1.0 0.1 0.2 39	3 0.5 1.0 0.3 0.3 24	4 0.6 1.0 0.3 0.2 31	3 0.8 1.0 0.4 0.2 33	
P	2 15.1 20.0 12.0 1.5 77	4 16.2 22.0 13.5 1.5 70	3 16.0 23.0 12.5 2.0 102	3 15.2 22.0 12.5 2.0 50	3 15.1 20.0 12.5 1.8 36	3 15.0 19.0 12.5 1.8 20	3 15.8 19.1 12.5 1.8 29	4 14.2 17.1 10.0 1.7 29	
M	2 7.0 12.8 2.0 2.1 78	4 7.0 12.8 1.5 2.1 72	3 7.7 13.8 2.7 2.2 104	3 7.1 10.7 2.0 2.2 50	3 7.3 11.2 2.2 2.2 35	3 5.1 11.2 3.0 3.0 23	3 7.1 12.8 2.5 2.5 29	3 7.7 12.8 2.2 2.2 29	
W(X)	6.7- 2.0- 12.7- 2.1 2.1 4.0- 1.4	6.0- 1.0- 12.0- 2.1 2.3 5.1- 1.6	7.0- 0.0 13.0- 2.5 3.5 9.5- 2.5	5.6- 1.0- 10.5- 2.3 3.0 7.0- 1.5	5.6- 0.9- 11.0- 2.6 3.8- 7.2- 2.2	4.3- 3.2- 10.5- 3.5 1.5- 4.0- 1.5	6.0- 2.2- 11.0- 2.5 3.5- 6.5- 1.5	5.5- 1.6- 9.7- 2.2 5.0- 10.1- 2.0	
W(Y)									

OCTOBER 1964

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	26.0 28.7 23.7 0.9 64	26.0 28.7 23.0 1.0 67	26.0 28.7 23.0 1.0 67	25.5 29.0 23.0 1.0 86	25.3 29.0 22.5 0.9 46	24.6 27.0 22.5 0.9 28	24.3 30.0 22.0 1.2 29	23.7 26.0 21.5 1.3 31	
T(W)–T(A)	1.0 3.8 1.5- 1.2 37	0.9 4.5 1.2- 1.2 63	0.7 3.1 2.6- 1.0 81	0.7 3.1 1.0- 1.1 40	1.1 3.3 0.0- 0.7 25	1.0 4.0 2.0- 1.5 21	0.9 4.0 3.0- 1.8 25	0.9 4.0 2.8- 1.6 29	
E(W)–E(A)	7.2 10.8 2.7 2.1 34	7.6 14.0 1.3 2.2 60	6.8 11.0 1.5 2.0 79	7.5 11.1 3.6 1.5 38	7.1 12.2 3.6 1.8 23	7.8 11.6 3.0 2.0 18	6.8 12.6 0.5- 3.1 23	6.5 12.6 1.5- 3.6 27	
EA	26.6 30.6 24.2 1.5 34	26.0 33.5 21.8 1.7 60	25.3 31.1 20.1 2.1 79	24.6 28.0 20.3 1.3 38	24.3 26.6 22.3 1.0 23	22.8 28.5 18.3 2.8 18	23.5 27.1 18.1 2.6 23	22.6 28.2 17.5 2.5 27	
C	0.6 1.0 0.3 50	0.6 1.0 0.1 0.3 69	0.6 1.0 0.0 0.3 85	0.6 1.0 0.1 0.3 44	0.6 1.0 0.1 0.2 28	0.5 1.0 0.1 0.3 26	0.6 1.0 0.1 0.3 29	0.6 1.0 0.1 0.3 35	
P	14.3 20.5 11.2 1.8 64	15.2 21.0 11.7 2.0 62	15.1 19.0 10.6 1.6 81	15.5 19.0 12.5 1.7 41	15.5 20.5 10.5 2.8 23	16.0 19.5 11.5 2.0 20	16.1 20.0 11.7 1.8 22	15.7 20.0 12.7 2.0 27	
H	7.1 13.8 4.0 2.2 65	8.0 13.8 3.0 2.2 68	7.0 14.3 2.3 2.5 85	8.2 17.5 3.0 3.0 45	9.1 14.3 5.0 2.2 28	6.5 13.3 2.5 2.7 26	7.6 12.8 4.5 2.5 29	6.6 12.8 0.0 2.3 33	
W(X)	6.6- 1.5- 13.7- 1.4	7.3- 2.6- 13.6- 2.0-	6.1- 2.3- 12.3- 2.0-	7.1- 3.8- 15.3- 3.0	8.3- 3.2- 14.3- 2.8	5.8- 2.0- 12.5- 2.5	6.0- 3.3- 9.7- 1.8	5.1- 0.0 11.7- 3.5-	
W(Y)	4.3 9.1- 2.2	7.1 7.0- 2.3	9.1- 7.0- 2.6	2.2- 8.8- 3.0	9.2- 6.7- 2.0	3.0- 7.3- 2.5	4.0- 1.1 9.6- 3.0	0.0 8.3- 2.2	

SEPTEMBER 1964

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	26.3 30.0 24.3 1.0 48	26.2 29.0 24.6 1.0 26	26.0 29.5 24.0 1.0 59	25.2 27.6 23.0 1.1 19	24.3 26.3 23.0 1.1 16	24.6 28.7 22.0 1.5 24	23.8 30.0 20.5 2.1 28	24.0 29.2 20.5 2.0 36	
T(W)–T(A)	0.7 2.1 2.0- 1.0 23	1.0 4.2 1.5- 1.2 26	0.4 2.5 4.8- 1.1 59	0.5 4.0 1.5- 1.5 19	1.1 4.0 0.8- 1.5 16	0.2 3.0 5.0- 1.7 24	0.8 3.7 6.0- 1.7 28	0.2 3.3 5.0- 2.1 36	
E(W)–E(A)	7.7 12.8 3.5 2.1 23	7.5 14.0 2.1 2.6 26	6.6 14.8 0.1- 2.7 59	6.0 9.3 2.5 1.6 18	5.5 7.7 1.5 16	4.7 8.7 0.1- 2.0 24	6.2 11.2 2.2 2.2 28	7.1 14.5 1.5- 3.2 36	
EA	27.0 32.5 24.3 2.3 23	26.7 30.5 22.0 2.2 26	25.7 31.6 20.0 2.3 59	25.0 27.6 22.3 1.1 18	25.5 27.6 23.8 0.9 16	24.7 28.7 22.0 1.8 24	23.0 26.8 17.1 2.5 28	21.2 28.0 14.5 3.8 36	
C	0.5 1.0 0.3 25	0.6 1.0 0.3 27	0.5 1.0 0.3 58	0.6 1.0 0.2 19	0.6 1.0 0.2 18	0.7 1.0 0.3 25	0.6 1.0 0.3 28	0.7 1.0 0.3 37	
P	12.7 20.5 10.5 1.1 48	13.5 15.7 10.5 1.5 25	14.0 17.0 11.7 1.8 57	15.0 16.6 11.7 1.0 18	15.2 19.0 11.5 1.6 17	14.5 18.0 11.0 1.8 27	14.0 17.1 10.0 1.6 33	
M	5.2 10.2 0.0 2.0 44	7.1 12.8 0.0 2.8 25	7.7 15.3 0.0 3.0 60	8.2 10.6 4.0 2.0 19	8.5 11.7 5.0 1.4 25	6.8 10.2 2.5 2.0 28	7.2 10.2 2.5 2.0 37	
W(X)	4.9- 5.6- 0.8- 8.9 6.3-	5.8- 11.1- 3.1 10.5 5.5-	0.7- 5.1- 1.1 8.0 7.3-	7.5- 2.6- 3.2- 0.1- 6.6-	7.7- 3.8- 11.7- 3.5- 0.1-	7.5- 0.9- 11.7- 3.5- 0.1-	5.1- 0.9- 9.5- 2.0 4.3-	5.1- 0.1 10.2- 2.6 4.3-
W(Y)	2.3 4.0	11.1- 10.5	1.1 3.5	1.3 1.5	1.6 1.7	1.2 1.6	1.6 2.0	

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NOVEMBER 1964

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)									
T(W)–T(A)									
E(W)–E(A)									
EA									
C									
P									
M									
W(X)									
W(Y)									

DECEMBER 1964

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)									
T(W)–T(A)									
E(W)–E(A)									
EA									
C									
P									
M									
W(X)									
W(Y)									

FEBRUARY 1965

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130

JANUARY 1965

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130

LATITUDE 15° – 20° N.

MARCH 1965

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	3	4	4	3	3	4	4	3	
	24.3	23.3	23.0	23.1	22.6	22.5	21.5	21.0	
	27.2	27.1	27.1	30.0	25.1	27.0	26.5	24.2	
	20.5	21.0	16.0	21.0	21.0	20.0	19.0	18.7	
	1.1	1.0	1.5	1.5	1.0	1.5	1.5	1.2	
	67	71	47	33	35	31	43	48	
T(W)-T(A)	4	4	3	3	3	4	4	3	
	0.9	0.7	1.0	0.3	0.5	0.3	0.6	1.0	
	3.7	3.2	4.5	2.1	2.1	2.0	2.7	4.0	
	4.0-	2.8-	1.8-	6.2-	2.0-	3.2-	3.8-	2.1-	
	1.5	1.3	1.3	1.5	2.0	1.2	1.5	1.0	
	41	66	45	32	33	28	39	46	
E(W)-E(A)	4	3	3	3	3	4	4	3	
	8.0	7.2	7.5	0.5	6.0	4.7	6.3	6.6	
	13.5	14.0	11.1	10.3	13.0	8.5	12.0	11.6	
	1.0	0.3-	2.1	1.3	2.1	0.9	0.1	2.3	
	2.6	2.1	2.3	2.1	2.5	2.1	2.6	2.1	
	41	45	45	32	33	28	39	46	
EA	3	3	3	3	3	4	3	3	
	20.8	21.0	20.6	20.7	20.8	21.2	18.5	18.0	
	25.7	26.3	25.7	25.1	25.1	26.5	26.5	22.5	
	13.6	16.5	13.6	11.8	14.6	16.5	13.0	13.2	
	2.5	1.7	2.1	2.0	2.2	2.1	2.0	2.0	
	67	62	45	32	33	28	39	46	
C	3	3	3	3	3	4	4	3	
	0.4	0.5	0.6	0.6	0.5	0.6	0.6	0.8	
	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	
	61	47	71	33	35	31	43	47	
P	3	4	4	3	3	4	4	3	
	15.1	15.5	15.6	14.6	15.5	15.7	17.2	17.1	
	21.0	19.0	20.7	17.5	18.5	20.0	21.5	22.5	
	9.6	9.0	10.6	11.8	9.6	10.6	12.7	10.6	
	2.2	2.2	2.0	1.5	2.0	2.2	2.0	2.2	
	67	45	69	32	33	28	39	46	
R	3	3	3	3	3	4	3	3	
	6.0	6.2	5.5	5.5	5.8	6.1	5.7	7.0	
	10.7	12.8	13.8	11.7	10.2	12.8	13.8	15.3	
	1.0	1.0	0.5	0.5	0.5	1.0	1.0	1.5	
	2.6	3.5	3.0	2.8	3.0	3.0	2.3	2.5	
	6+	43	68	32	34	31	43	48	
W(X)	4	4	4	3	3	4	4	3	
	4.0-	3.2-	3.2-	3.1-	4.2-	4.3-	4.8-	5.7-	
	7.6	5.5	5.0	5.6	6.0	5.0	3.8	0.1	
	9.6-	11.1-	8.8-	10.1-	10.2-	11.1-	10.5-	13.2-	
	3.7	2.1	2.7	2.3	4.0	4.0	2.8	3.0-	
W(Y)	3	3	3	3	3	4	4	3	
	1.5-	2.1-	2.0-	2.3-	0.0	1.5	1.0-	3.0-	
	7.7	5.0	8.0	8.0	8.0	9.5	6.3	3.7	
	8.7-	12.0-	12.0-	8.6-	7.0-	5.0-	9.0-	9.2-	
	3.3	3.7	4.1	3.6	2.8	3.2	2.7	2.5	

APRIL 1965

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	2	4	4	3	3	4	4	4	4
	24.0	23.5	24.3	24.3	23.8	23.2	22.7	21.6	21.0
	29.2	26.0	30.0	29.0	29.0	27.0	27.6	26.0	26.5
	21.0	22.0	21.0	21.0	20.5	19.2	20.0	18.0	17.6
	1.3	1.0	1.0	1.5	1.5	1.7	2.0	1.5	1.6
	56	27	53	49	30	25	31	42	50
T(W)-T(A)	5	4	4	4	3	3	3	3	4
	0.4	0.7	0.8	0.8	0.4	0.8	0.2	0.5	0.8
	2.8	4.0	4.0	5.0	4.5	5.0	4.2	4.3	4.3
	3.2-	2.7-	2.7-	3.0-	3.0-	4.3-	5.5-	2.7-	4.5-
	1.5	1.5	1.5	1.5	1.5	2.0	2.0	1.5	1.7
	30	25	49	49	30	22	27	38	45
E(W)-E(A)	3	4	4	3	3	3	3	3	4
	5.6	5.5	5.5	6.3	4.3	5.1	5.8	5.5	5.6
	10.0	10.7	17.2	8.0	8.7	15.5	10.3	10.3	
	1.3-	0.7-	1.2	0.4-	1.2	1.5-	1.1-	1.0-	
	2.8	2.6	3.5	1.7	1.5	4.0	2.8	2.2	
	30	25	49	30	22	27	38	45	
EA	3	4	4	3	3	4	4	4	4
	22.8	23.0	23.1	23.7	22.6	20.2	19.6	19.0	
	33.0	29.1	26.3	28.5	25.0	29.1	24.5	23.6	
	15.8	19.1	13.3	20.8	20.7	12.0	15.8	14.5	
	3.3	2.0	2.6	1.3	1.1	3.3	2.7	2.1	
	30	25	49	30	22	27	38	45	
C	2	4	4	3	3	3	3	3	4
	0.5	0.4	0.6	0.6	0.6	0.7	0.7	0.8	
	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
	0.3	0.3	0.3	0.3	0.3	0.3	0.1	0.3	
	49	27	53	33	24	31	42	49	
P	2	4	4	3	3	4	4	4	4
	14.5	15.0	14.5	15.5	18.2	18.5	18.5	17.8	
	18.0	20.0	20.0	20.0	22.6	23.2	22.5	21.0	
	10.5	11.1	7.5	10.5	12.7	12.7	14.5	15.0	
	1.6	2.0	2.2	2.7	2.3	2.5	2.2	1.6	
	51	25	50	30	22	29	37	46	
R	2	4	4	3	3	3	3	4	
	6.0	5.8	6.3	6.7	8.5	7.1	7.0	6.5	
	11.7	11.2	12.0	10.6	12.8	13.8	12.8	11.2	
	1.5	0.5	0.0	1.1	3.0	1.0	2.0	2.0	
	2.3	3.0	3.5	2.2	1.8	3.2	2.6	2.2	
	51	26	53	33	25	32	42	50	
W(X)	4	4	4	3	3	4	4	4	
	3.8-	4.0	4.7	4.0-	7.5-	6.5-	5.7-	4.8-	
	2.9	10.5-	11.0-	8.0	1.7-	0.8-	1.2-	2.0-	
	11.1-	3.7	0.5-	10.1-	11.0-	13.0-	11.0-	9.7-	
	3.4	5.0-	6.7-	4.5	2.0	3.3	2.5	2.5	
W(Y)	4								
	11.6	7.5	8.5	0.1	1.8-	1.0-	1.6-	1.7	
	3.9	4.1-	6.7-	5.1-	8.6-	4.3	4.3	9.6-	
		3.1	3.3	3.8	3.0	6.6-	9.1-	3.3	
						2.7	3.5		

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JUNE 1965

	LONGITUDE WEST								
	170	165	160	155	150	145	140	135	130
T(A)	26.1	26.6	26.6	25.3	24.7	23.3	22.6	22.1	21.5
	32.6	31.0	30.0	29.0	25.0	25.0	27.0	27.6	29.2
	24.0	21.5	23.2	23.0	23.0	22.0	21.0	19.2	18.6
	1.5	1.8	1.2	1.2	1.5	0.8	1.6	1.8	2.0
	57	41	43	35	35	26	25	35	46
T(W)–T(A)	0.2	0.0	0.0	0.7	0.1–	0.4	0.1	0.6	0.7
	3.0	3.0	3.0	3.0	2.0	2.0	2.7	3.2	4.3
	5.0–	7.0–	7.0–	5.0–	5.0–	2.2–	2.2–	5.5–	6.0–
	1.7	2.2	2.2	1.5	1.3	1.0	1.7	2.0	2.0
	30	41	41	40	31	26	25	35	46
E(W)–E(A)	6.3	7.0	7.0	7.2	6.1	6.1	4.7	6.5	6.5
	8.7	13.3	10.6	10.6	10.8	9.0	7.0	10.5	12.5
	1.3	0.7	0.7	0.7	1.0	2.5	2.0	2.1	0.2–
	1.3	2.2	2.2	2.2	2.3	1.6	1.5	1.8	2.2
	30	41	38	38	31	26	25	35	46
EA	26.5	26.0	24.2	22.7	22.7	21.5	21.2	19.5	18.2
	30.5	30.2	30.3	29.5	24.5	24.5	23.6	22.7	26.8
	24.5	22.0	22.6	18.7	18.7	19.1	18.5	16.1	14.1
	2.3	1.8	1.8	2.3	2.3	1.6	1.3	1.7	2.1
	30	41	38	31	31	26	25	35	46
C	0.5	0.6	0.5	0.5	0.5	0.7	0.7	0.8	0.8
	1.0	1.0	0.9	1.0	1.0	1.0	1.0	1.0	1.0
	0.0	0.1	0.2	0.1	0.2	0.3	0.3	0.3	0.2–
	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3
	54	41	44	35	35	27	25	35	46
P	14.7	16.5	16.0	16.6	17.3	18.0	18.0	18.0	17.5
	18.5	20.5	20.0	20.5	20.5	20.5	21.2	21.5	21.1
	0.4–	14.0	13.0	14.0	14.0	15.1	15.5	14.7	15.0
	3.6	1.5	1.5	1.7	1.5	1.5	1.2	1.2	1.1
	57	41	42	35	35	26	25	33	42
M	7.8	9.3	8.1	9.1	9.0	9.1	7.8	7.7	7.7
	13.3	9.2	15.3	12.2	11.7	12.2	12.8	13.8	11.7
	4.0	3.5	3.0	5.0	5.0	4.0	4.0	4.0	2.5
	1.6	1.5	3.0	1.3	1.3	2.2	2.3	2.3	2.2
	57	41	41	35	35	25	25	35	45
W(X)	7.6–	6.0–	7.7–	7.7–	8.7–	7.2–	7.2–	6.5–	6.2–
	4.1–	3.5–	2.5–	4.3–	6.6–	4.0–	4.0–	1.3–	1.6–
	13.2–	9.2–	13.2–	13.2–	12.1–	12.0–	13.0–	11.0–	11.0–
	1.6	1.5	2.8	1.5	1.8	2.0	2.0	2.5	2.3
W(Y)	0.8	1.1–	3.3	2.0	2.2–	2.3	2.3	4.0–	4.0–
	4.8	3.5	3.3	3.0	2.0	0.0	1.5	0.1–	0.1–
	3.6–	3.8–	7.7–	8.6–	8.6–	5.5–	5.2–	8.3–	7.3–
	2.2	1.7	2.2	4.0	4.0	1.8	1.5	1.6	1.8

MAY 1965

	LONGITUDE WEST								
	170	165	160	155	150	145	140	135	130
T(A)	25.5	26.2	25.2	23.7	23.5	22.0	21.2	20.8	
	30.0	30.5	30.0	26.5	26.5	28.7	25.5	25.5	
	22.0	23.7	22.7	22.0	22.0	20.0	19.2	18.7	
	1.3	1.5	1.0	1.0	1.0	1.6	1.3	1.3	
	57	24	48	23	20	30	34	56	
T(W)–T(A)	0.9	0.5–	0.6	1.0	0.9	1.3	1.5	1.0	
	4.5	2.1	3.0	3.0	3.8	4.5	3.1	4.5	
	3.3–	4.0–	4.0–	0.0–	2.7–	4.5–	2.2–	3.8–	
	2.0	1.7	1.2	1.0	1.3	1.6	1.1	1.5	
	29	24	47	23	20	30	34	56	
E(W)–E(A)	5.6	2.0	6.3	6.5	6.3	6.3	6.3	6.5	
	12.6	8.5	15.5	10.6	13.5	10.3	10.5	9.8	
	3.5–	4.7–	1.2–	2.7	0.1	2.0	3.0	2.2	
	4.2	3.3	3.2	2.0	2.8	2.1	1.8	1.8	
	29	24	46	23	20	30	34	56	
EA	27.0	29.2	25.0	23.0	22.8	21.0	19.5	18.2	
	37.0	37.0	33.1	28.7	27.5	26.0	24.5	22.6	
	20.0	23.0	17.0	19.1	19.0	17.7	16.1	15.0	
	4.1	3.6	3.0	1.8	2.2	2.0	2.1	1.8	
	29	24	46	23	20	30	34	56	
C	0.5	0.6	0.6	0.6	0.6	0.6	0.8	0.9	
	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
	0.1	0.1	0.1	0.3	0.3	0.3	0.3	0.1	
	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	
	47	26	48	22	20	30	34	55	
P	13.3	13.7	14.2	15.7	17.5	18.0	19.0	18.7	
	18.5	18.5	17.5	18.5	21.0	22.5	24.0	23.2	
	8.5	9.5	8.2	13.5	13.6	13.0	15.7	15.5	
	2.3	2.6	2.0	1.5	1.6	1.8	1.8	1.6	
	51	23	47	20	20	28	33	52	
M	5.3	5.6	7.1	8.0	7.7	8.0	8.1	8.1	
	10.2	11.7	12.3	11.7	11.7	12.3	12.8	12.8	
	1.0	1.5	0.5	4.0	4.0	4.0	5.0	2.0	
	2.1	2.5	2.6	2.0	2.2	2.3	1.7	2.3	
	55	26	48	23	20	29	34	56	
W(X)	4.4–	4.6–	6.3–	7.2–	7.0–	7.5–	7.3–	6.7–	
	5.1	1.0	0.0	1.3–	3.8–	0.7–	3.8–	0.1–	
	10.3–	9.7–	11.6–	11.3–	11.0–	12.3–	12.8–	12.8–	
	3.1	2.5	2.6	2.2	2.0	2.5	2.1	3.1	
W(Y)	1.0–	0.3	0.3	1.5–	2.0–	1.5–	2.5–	3.3–	
	4.0	9.0	7.0	2.5	0.8	1.7	1.2	3.3	
	5.3–	5.0–	3.0	6.3–	5.7–	6.6–	7.1–	10.6–	
	2.1	3.2	3.3	2.5	2.2	2.2	2.1	2.3	

AUGUST 1963

				LONGITUDE WEST					
	170	165	160	155	150	145	140	135	130
T(A)									
T(W)–T(A)									
E(W)–E(A)									
EA									
C									
P									
W									
n(X)									
n(Y)									

JULY 1963

				LONGITUDE WEST					
	170	165	160	155	150	145	140	135	130
T(A)									
T(W)–T(A)									
E(W)–E(A)									
EA									
C									
P									
W									
n(X)									
W(Y)									

OCTOBER 1963

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	4	2	4	3	4	5	4	3	3
	27.2	27.0	26.5	26.6	25.0	28.0	26.0	26.0	26.0
	29.2	28.1	29.7	28.1	27.6	33.0	29.0	29.0	36.0
	26.2	25.0	24.2	25.0	21.0	26.0	24.0	24.0	16.5
	0.8	1.1	1.1	1.0	2.1		1.1	1.1	4.2
	13	10	18	7			10	10	11
T(W)–T(A)	4	2	4	3	5	5	4	4	3
	1.0	1.0	1.5	0.3	1.1	0.1	1.3	3.0	1.0
	3.1	3.2	3.6	1.5	2.2	2.0	3.0	0.0	4.0
	1.0	0.0–	2.0–	1.0–	0.0	4.0–	0.0	1.0	7.0–
	1.0	1.0	1.3	0.9			1.0	10	2.8
	13	10	18	10			10		11
E(W)–E(A)	4	2	4	2	5	5	4	4	3
	8.2	6.5	5.5	6.5	8.7	7.0	7.5	7.5	7.5
	10.2	11.0	8.7	7.0		9.8	10.0	10.0	10.3
	5.3	4.0	4.5–	6.0		4.7	6.0	6.0	5.3
	2.5	1.8	2.7				1.1	1.1	1.7
	13	10	18				10	10	11
EA	4	2	4	2	5	5	4	3	3
	28.0	29.3	28.7	28.1	31.0	28.8	27.0	26.5	26.5
	30.5	31.8	39.5	28.3		31.5	31.5	32.2	32.2
	22.0	25.0	25.0	28.0		27.7	22.7	11.0	11.0
	2.0	1.8	3.0				2.8	5.2	5.2
	13	10	18				10	11	11
C	4	2	4	2	4	5	4	3	3
	0.7	0.8	0.6	0.7	0.6	0.6	0.6	0.5	0.5
	0.1	0.1	1.0	1.0	1.0	0.6	1.0	1.0	1.0
	0.3	0.1	0.1	0.3	0.3	0.5	0.2	0.3	0.0
	13	10	18	10	5		10	10	11
P	4	2	4	3	3	3	3	3	3
	12.2	11.7	11.6	12.2	13.8	12.3	12.5	12.0	12.0
	14.0	13.7	14.0	13.5	16.0	14.5	13.7	18.0	18.0
	7.6	9.6	8.7	9.0	12.1	11.0	11.0	7.6	7.6
	1.6	1.5	1.6	1.3	1.3		0.8	2.5	2.5
	11	9	18	7	5		10	11	11
W	4	2	4	3	3	5	4	3	3
	6.7	7.0	8.0	8.0	6.0	6.2	7.0	6.6	6.6
	12.8	9.2	11.2	10.7	8.5	12.8	10.7	10.7	10.7
	2.7	4.0	2.2	2.0	2.0	4.0	2.5	2.8	2.5
	13	10	18	7	5		10	11	11
W(X)			6.8	7.0	4.2	4.3	5.6–	3.2–	3.2–
	6.3	1.8	1.7–	4.7–	2.0–	3.0–	2.6–	4.3	4.3
	1.8	8.0–	10.1–	8.1–	7.3–	8.1–	9.5–	9.2–	9.2–
	12.6–								
W(Y)	3.3	4.2	2.2	2.2	3.5	4.5–	2.1	5.0	5.0
	0.7–	1.3–	2.5–	2.5–	3.0–	3.0–	3.2–	2.5	2.5
	0.8	3.5	4.7	1.7–	0.0	0.0	0.0	6.6–	6.6–
	2.5–	3.1	7.8–	7.0–	4.3–	9.8–	7.7–	2.8	2.8
	1.0		3.1	1.8	1.5		2.6		

SEPTEMBER 1963

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	4	3	3	3	4	3	4	2	2
	26.2	26.3	26.3	26.2	27.1	26.5	26.7	26.7	26.8
	28.8	28.1	30.0	29.0	32.0	28.0	28.5	28.5	30.5
	25.0	25.0	25.0	24.0	24.0	24.0	24.5	24.5	25.0
	2.9	0.7	0.7		1.7	1.5	1.5	1.5	1.2
	13	13	19	6	12	6	6	6	18
T(W)–T(A)	4	3	3	3	3	4	3	2	2
	1.5	1.5	1.5	1.0	0.7	1.0	1.0	0.8	0.4
	3.2	4.3	4.3	4.0	4.1	4.1	2.2	2.0	2.1
	0.2–	0.1	2.8–	1.0–	5.0–	1.0–	2.2	0.7	3.1–
	1.0	1.3	1.3		2.0	1.5	0.8		1.2
	13	13	19	6	12	12	7	5	13
E(W)–E(A)	4	3	3	3	4	3	3	2	2
	7.2	7.3	7.2	6.3	5.8	6.6	8.0	8.0	7.8
	9.1	10.3	11.2	8.2	8.8	10.5	11.2	11.2	11.3
	4.5	3.0	1.1	4.0	1.2	2.5	4.5	4.5	3.2
	1.5	1.5	2.5		2.0	3.0	2.5		2.2
	13	13	19	6	12	7	5	5	13
EA	4	4	3	3	3	2	3	2	2
	29.2	28.0	27.7	28.2	29.5	26.5	28.0	28.0	26.6
	31.0	31.8	34.7	31.5	32.1	30.0	31.0	31.0	30.5
	26.7	26.1	25.2	26.0	27.0	26.0	22.3	22.3	23.5
	1.8	1.5	2.1		1.3		1.6		1.7
	13	13	19	6	12	2	7	5	13
C	4	3	3	3	3	2	3	3	3
	0.5	0.0	0.6	0.6	0.4	0.4	0.3	0.4	0.5
	0.4	1.0	0.9	0.9	0.7	0.7	0.5	0.6	0.9
	0.2	0.3	0.1	0.1	0.1	0.1	0.2	0.3	0.0
	13	13	19	6	11	11	7	18	18
P	4	4	3	3	3	2	3	3	3
	12.0	11.6	11.7	11.2	12.5	12.5	12.0	12.0	10.6
	14.5	13.5	13.5	12.5	14.5	14.5	13.0	13.0	13.0
	11.0	9.6	9.6	10.5	10.5	10.5	10.5	10.5	8.5
	0.9	1.1	0.9		1.0	1.3	0.9		1.3
	13	13	15	3	11	5	7	7	18
W	4	3	3	3	3	3	3	3	3
	7.7	7.1	7.0	5.0	5.2	4.0	3.8	3.8	5.5
	9.5	10.2	11.2	5.0	7.6	5.0	9.2	9.2	10.7
	5.0	4.5	5.0	5.0	3.0	2.1	0.5	0.5	3.0
	13	13	19	6	12	7	7	7	18
W(X)	7.2–	6.5–	6.3–	4.8–	3.3–	2.5–	3.1–	3.1–	3.2–
	2.5	0.8–	3.8–	4.7–	1.6–	1.2–	0.0–	0.0–	2.3–
	9.5–	10.2–	10.7–	5.0–	5.8–	3.8–	8.0–	8.0–	10.7–
	1.8	2.0	2.0	0.1	1.6	0.8	3.0–	3.0–	3.7
W(Y)	1.0	1.5	1.6–	1.2–	3.5–	3.5–	3.0–	3.0–	3.0–
	4.5–	4.5–	2.0	1.7–	1.2–	1.0–	1.0–	1.0–	0.0
	1.7	1.7	5.6–	0.0–	5.7–	4.8–	3.1–	3.1–	7.5–
			2.0	0.7	1.7	1.3	2.0	2.0	2.2

LATITUDE 10° – 15° N.

NOVEMBER 1963

DECEMBER 1963

LONGITUDE WEST

JANUARY 1964

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	2 25.7 27.2 24.1 0.8 17	3 25.6 29.0 24.0 1.0 20	4 25.6 27.0 24.2 0.9 12	5 25.0	4 24.5 26.0 23.0 1.0 8	3 24.0 27.0 22.0 1.1 14	2 24.8 27.0 23.0 1.2 18	2 25.2 27.0 24.0 1.0 5	
T(W)–T(A)	2 0.4 1.2 1.2− 0.8 13	2 1.1 2.0 0.3 0.5 18	4 0.9 2.2 1.0− 1.0 12	5 1.0	4 1.1 3.0 0.0 0.8 8	3 0.8 2.1 2.0− 1.0 14	2 0.3 3.0 2.2− 1.2 18	2 0.3 1.0 0.8− 5	
E(W)–E(A)	2 5.8 7.8 2.7 1.5 13	2 0.5 9.5 1.0 2.0 18	4 5.7 9.2 1.0 2.2 12	5 8.0	4 6.2 8.0 3.0 1.6 7	3 5.1 7.0 2.0 1.6 10	2 5.0 9.1 1.0 1.2 18	2 4.5 6.3 1.5 1.7 5	
EA	2 25.8 29.1 22.7 2.0 13	2 26.3 32.5 22.7 2.5 18	4 26.8 31.6 24.3 2.1 12	5 23.5	4 25.1 28.5 23.5 1.5 7	3 25.0 27.7 22.7 1.5 10	2 25.2 26.3 19.1 2.1 15	2 26.2 29.0 24.2 1.5 5	
C	2 0.4 1.0 0.0 0.3 17	3 0.5 1.0 0.3 0.2 22	4 0.3 0.5 0.1 0.1 13	5 0.4	4 0.8 1.0 0.3 0.3 8	3 0.7 1.0 0.3 0.2 14	2 0.8 1.0 0.3 0.2 19	2 0.7 1.0 0.4 0.2 5	
P	3 11.8 14.5 9.5 1.5 17	3 11.1 15.0 2.2 3.0 18	4 12.0 16.0 10.0 1.6 13	5 14.5	4 13.1 16.1 11.1 1.3 8	3 13.5 16.5 10.0 1.7 14	2 13.1 16.5 10.0 1.6 19	2 13.2 16.2 10.0 1.7 5	
M	2 9.3 15.3 3.0 4.0 17	3 8.6 17.0 3.5 3.5 22	4 8.5 13.8 2.5 3.3 12	5 9.2	4 8.3 10.2 6.6 1.5 8	3 9.3 11.2 7.1 1.2 14	2 9.2 14.3 6.6 1.8 19	2 8.5 9.2 7.6 0.6 5	
W(X)	8.2− 0.0 15.3− 4.0 3.3−	8.0− 1.5− 17.0− 3.5 2.1−	7.7− 2.5− 13.0− 3.0 2.1−	8.6−	7.5− 4.2− 10.0− 1.5 2.3−	7.7− 4.8− 9.2− 1.0 4.1−	7.7− 4.2− 10.1− 1.5 4.3−	7.1− 6.2− 7.6− 0.5 4.0−	
W(Y)	3.3− 0.1− 6.5− 2.0	1.6 7.3− 2.6	2.1− 1.6 6.7− 2.5	3.1−	3.0 6.6− 2.6	3.0 7.3− 3.1	0.1− 11.0− 2.6	0.1− 6.0− 2.0	

FEBRUARY 1964

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	2 25.8 26.0 25.7 17	2 25.0 27.0 23.7 1.0 8	2 25.0 27.0 22.0 1.0 30	3 23.8 26.0 22.0 0.9 36	3 24.3 28.0 22.1 1.3 19	3 24.0 26.0 22.0 1.0 17	2 24.0 26.0 22.0 1.0 10	3 23.1 26.0 20.0 1.5 12	
T(W)–T(A)	2 0.4 0.6 0.2	2 0.7 1.6 1.0−	2 0.6 4.0 1.0− 0.9	3 0.4 4.0 2.5− 1.0	3 0.0 3.0 4.0− 1.6	3 1.3 3.8 0.0 1.2	2 1.5 3.0 1.0− 1.3	2 1.3 4.0 1.0− 1.2	
E(W)–E(A)	2 7.5 7.8 7.2	2 4.1 6.7 0.3 2.0	2 5.5 10.7 0.3 2.3	3 5.0 8.7 1.1 1.5	3 4.5 7.1 1.0 1.6	3 7.7 15.0 4.8 3.0	2 6.3 8.8 0.6 2.2	2 5.3 8.5 3.1 1.6	
EA	2 24.5 24.7 24.2	2 26.7 30.2 24.2 1.8	2 24.5 30.3 17.2 3.0	3 23.5 26.3 21.2 1.1	3 24.2 28.0 21.0 1.7	3 22.7 26.6 16.0 2.6	2 24.5 27.3 22.7 1.2	3 23.6 26.0 20.7 1.5	
C	2 0.3 0.5 0.1	2 0.6 1.0 0.0 0.3	2 0.4 1.0 0.0 0.2	3 0.5 1.0 0.0 0.3	3 0.6 1.0 0.3 0.2	3 0.6 1.0 0.0 0.3	2 0.7 1.0 0.3 0.3	2 0.5 1.0 0.1 0.4	
P	2 12.0 12.5 11.7	2 11.8 14.0 9.0 1.3	4 13.0 22.0 9.6 1.3	3 13.6 18.0 10.0 2.0	3 15.2 18.3 11.0 2.2	3 13.3 18.7 8.7 3.0	2 13.5 19.0 8.5 3.5	3 12.0 17.2 7.5 3.0	
M	2 9.0 10.2 7.6	2 9.7 12.8 6.6 1.7	4 8.2 14.1 3.5 3.0	3 9.5 16.5 3.5 2.6	3 10.0 14.8 5.0 2.7	3 7.8 11.2 4.5 2.0	2 7.5 11.2 0.0 3.0	3 8.3 10.2 6.1 1.2	
W(X)	8.0− 6.6− 9.5−	8.5− 6.2− 12.0− 1.5	7.0− 0.0 12.0− 2.8	8.0− 1.1− 14.6− 2.5	8.3− 1.0− 14.8− 3.7	5.7− 2.6− 8.8− 2.1	5.7− 0.5− 8.5− 2.5	6.7− 1.6− 9.5− 2.0	
W(Y)	3.6− 3.5− 3.6−	4.2− 2.2− 7.3− 1.6	3.5− 2.2− 12.5− 3.2	4.7− 1.3− 10.6− 2.0	4.1− 0.1− 12.0− 2.7	4.7− 1.5− 8.2− 2.1	2.8− 4.5 7.3− 4.0	2.3− 9.0 6.3− 3.8	

LATITUDE 10° – 15° N.

APRIL 1964

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)									
T(W)-T(A)									
E(W)-E(A)									
EA									
C									
P									
W									
W(X)									
W(Y)									

MARCH 1964

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)									
T(W)-T(A)									
E(W)-E(A)									
EA									
C									
P									
W									
W(X)									
W(Y)									

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LATITUDE 10° – 15° N.

JUNE 1964

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	27.0	28.0	26.7	26.1	25.7	25.0	25.5	25.5	24.6
	26.0	24.5	29.0	29.0	27.0	27.6	27.0	27.0	25.5
	25.5	24.0	24.5	24.0	25.0	22.6	23.1	23.1	23.0
	1.5	1.0	1.5	1.0	0.7	1.2	0.9	0.9	0.8
	5	13	23	20	17	19	17	17	11
T(w)–T(A)	0.5	2.0	0.1	0.1–	0.7	0.7	0.8	0.8	0.6
	0.5	3.0	2.1	0.6	3.0	2.2	2.5	2.5	3.0
	0.4	1.0–	3.5–	2.0–	1.0	0.9	0.0	0.0	1.0–
		1.6	1.1	0.6	1.0	0.9	1.0	1.0	1.0
	2	13	23	20	17	18	17	17	11
E(w)–E(A)	8.8	6.8	5.3	5.5	5.5	6.3	5.3	5.3	5.2
	7.8	4.1	9.0	7.8	7.8	10.5	8.0	8.0	8.7
		1.1	0.9–	3.7	2.3	3.5	1.0	1.0	0.7–
			2.1	1.1	2.0	1.6	2.0	2.0	2.8
	2	13	23	20	17	18	17	17	11
EA	25.5	27.8	26.6	25.3	27.0	24.7	27.1	27.1	25.1
	25.6	30.5	34.5	27.3	31.6	27.3	30.5	30.5	31.2
		26.0	22.2	21.8	22.0	22.1	21.1	21.1	21.5
		2.0	2.2	1.3	2.0	1.5	3.2	3.2	3.2
	2	13	23	20	17	18	17	17	11
C	0.9	0.5	0.6	0.5	0.5	0.7	0.7	0.7	0.6
	0.3	0.3	1.0	1.0	1.0	1.0	1.0	1.0	1.0
		0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	5	13	23	20	17	19	17	17	11
P	11.3	12.5	13.3	12.8	12.5	12.8	12.1	12.1	13.7
	13.0	15.5	15.5	14.0	17.0	17.5	16.0	16.0	18.1
	10.0	9.0	11.0	10.8	8.0	8.0	8.2	8.2	9.0
	1.0	2.0	1.2	0.9	1.8	2.6	2.3	2.3	2.6
	5	13	23	18	17	19	17	17	11
M	6.3	9.1	8.6	8.2	8.6	7.5	7.0	7.0	7.6
	7.1	18.0	12.3	10.7	12.3	10.7	13.3	13.3	10.2
	3.6	6.1	2.6	5.6	2.5	2.6	3.5	3.5	3.0
	5	13	24	20	17	19	17	17	11
n(<)	2.6	7.3	7.7	7.0	7.2	6.0	5.1	5.1	5.5
	5.2	5.0	1.8–	4.2	2.3	2.1	4.7	4.7	2.8
	6.2–	16.0–	11.5–	10.0–	10.5–	9.2–	13.1–	13.1–	8.6–
	2.7–	4.0–	3.1	1.7	2.1	2.1	3.2	3.2	3.1
W(Y)	2.0–	1.0	1.6	3.8–	1.3	4.5–	3.5	3.5	4.1–
	3.0–	9.0–	7.8–	6.6–	1.8	1.8	2.1	2.1	0.0
	0.6	2.5	2.5	1.8	8.0–	7.0–	6.6–	6.6–	7.6–
					2.2	1.5	2.3	2.3	2.1

MAY 1964

LONGITUDE WEST

	-170	165	160	155	150	145	140	135	130
T(A)									
T(w)–T(A)									
E(w)–E(A)									
EA									
C									
P									
M									
W(Y)									
n(<)									

AUGUST 1964

	LONGITUDE WEST								
	170	165	160	155	150	145	140	135	130
T(A)	3 / 26.0 / 26.5 / 25.0	3 / 26.1 / 28.0 / 25.0 / 2.9	4 / 26.1 / 25.5 / 25.9 / 2.7	4 / 26.5 / 30.0 / 24.0 / 1.5	4 / 26.6 / 35.0 / 24.0 / 2.0	3 / 26.2 / 28.0 / 23.7 / 1.0	3 / 26.2 / 35.0 / 23.7 / 1.0	3 / 25.8 / 28.0 / 23.7 / 1.2	2 / 25.8 / 26.0 / 23.7 / 1.2
T(W)–T(A)	2 / 1.0 / 1.0	3 / 0.8 / 3.7 / 1.5 / 4.0	2 / 0.7 / 4.1 / 0.9 / 26	3 / 0.1 / 1.1 / 2.8 / 12	2 / 0.9 / 2.0 / 1.0 / 12	3 / 0.9 / 3.8 / 1.3 / 12	3 / 0.9 / 3.8 / 1.3 / 12	3 / 1.6 / 3.8 / 0.3 / 10	2 / 1.6 / 3.8 / 0.3 / 10
E(W)–E(A)	2 / 6.0 / 7.5 / 4.3	3 / 5.5 / 10.0 / 2.1 / 4.0	4 / 5.1 / 9.1 / 2.3 / 26	4 / 4.8 / 7.0 / 2.0 / 12	4 / 7.3 / 10.0 / 2.5 / 9	3 / 6.1 / 9.5 / 2.1 / 12	3 / 6.1 / 9.5 / 2.1 / 12	3 / 5.5 / 11.1 / 3.0 / 10	2 / 5.5 / 11.1 / 3.0 / 10
EA	2 / 27.7 / 30.0 / 25.5	3 / 28.0 / 31.5 / 23.5 / 4.0	4 / 28.0 / 30.7 / 23.3 / 26	4 / 27.8 / 31.5 / 24.7 / 12	4 / 27.2 / 29.2 / 23.5 / 9	3 / 27.6 / 29.5 / 26.0 / 12	3 / 27.6 / 29.5 / 26.0 / 12	3 / 29.1 / 32.8 / 22.7 / 10	2 / 29.1 / 32.8 / 22.7 / 10
C	2 / 0.5 / 0.8 / 0.3	3 / 0.6 / 1.0 / 0.2 / 4.0	2 / 0.0 / 1.0 / 0.3 / 26	2 / 0.7 / 1.0 / 0.2 / 12	2 / 0.6 / 1.0 / 0.4 / 9	2 / 0.0 / 1.0 / 0.3 / 12	2 / 0.0 / 1.0 / 0.3 / 12	2 / 0.8 / 1.0 / 0.3 / 10	2 / 0.8 / 1.0 / 0.3 / 10
P	2 / 12.0 / 15.0 / 12.0	3 / 12.1 / 15.0 / 8.8 / 4.0	4 / 13.0 / 16.6 / 9.8 / 30	4 / 13.2 / 15.0 / 10.7 / 14	4 / 13.2 / 17.0 / 10.0 / 14	3 / 11.0 / 14.5 / 9.7 / 14	3 / 11.0 / 14.5 / 9.7 / 14	3 / 11.5 / 12.5 / 9.0 / 10	2 / 11.5 / 12.5 / 9.0 / 10
H	5 / 6.6	3 / 5.3 / 9.2 / 2.2 / 4.0	4 / 7.0 / 11.2 / 2.0 / 24	4 / 6.1 / 8.7 / 2.1 / 13	4 / 6.0 / 16.0 / 2.7 / 14	3 / 4.7 / 3.5 / 1.5 / 14	3 / 4.0 / 4.5 / 2.5 / 1	3 / 3.0 / 10.7 / 0.0 / 1	2 / 3.0 / 10.7 / 0.0 / 1
W(X)	1 / 6.2	3 / 4.5 / 4.0 / 8.1 / 3	4 / 6.0 / 1.3 / 9.7 / 4	4 / 6.2 / 1.6 / 7.0 / 13	4 / 6.2 / 0.0 / 15.0 / 14	3 / 5.5 / 0.7 / 9.1 / 1	3 / 2.6 / 1.5 / 4.2 / 3	3 / 1.1 / 6.6 / 12.0 / 3	2 / 1.1 / 6.6 / 12.0 / 3
W(Y)	2 / 2.2	3 / 1.2 / 3.5 / 2.5 / 4	4 / 3.0 / 6.0 / 1.8 / 26	4 / 3.5 / 6.7 / 2.0 / 12	4 / 3.5 / 5.0 / 3.0 / 14	3 / 2.3 / 5.2 / 2.8 / 14	3 / 1.8 / 5.2 / 2.0 / 1	3 / 5.6 / 3.8 / 2.7 / 1	2 / 5.6 / 3.8 / 2.7 / 1

JULY 1964

	LONGITUDE WEST								
	170	165	160	155	150	145	140	135	130
T(A)	4 / 26.2 / 27.0 / 26.0	2 / 26.0 / 27.0 / 25.5 / 13	4 / 26.0 / 28.5 / 25.0 / 24	3 / 26.2 / 28.7 / 25.0 / 20	3 / 25.8 / 29.0 / 24.1 / 23	3 / 25.7 / 29.0 / 24.2 / 18	3 / 26.0 / 29.0 / 23.5 / 19	4 / 25.8 / 28.0 / 22.6 / 21	2 / 25.8 / 28.0 / 22.6 / 21
T(W)–T(A)	3 / 1.2 / 1.0 / 2.0	2 / 0.4 / 2.6 / 1.1 / 13	4 / 0.7 / 3.6 / 1.0 / 29	3 / 0.3 / 3.0 / 0.8 / 20	3 / 0.6 / 2.3 / 1.3 / 23	3 / 1.3 / 5.0 / 1.5 / 18	3 / 1.3 / 4.1 / 1.3 / 16	3 / 1.6 / 4.6 / 1.5 / 17	2 / 1.6 / 4.6 / 1.5 / 17
E(W)–E(A)	3 / 2.2 / 3.0 / 1.2	2 / 3.5 / 6.3 / 1.7 / 13	4 / 5.7 / 11.5 / 1.6 / 29	3 / 5.7 / 9.0 / 1.5 / 20	3 / 6.0 / 10.6 / 2.1 / 23	3 / 7.5 / 13.1 / 2.5 / 18	2 / 8.2 / 14.7 / 3.8 / 16	3 / 8.0 / 17.6 / 4.3 / 17	2 / 8.0 / 17.6 / 4.3 / 17
EA	3 / 27.3 / 28.5 / 26.0	2 / 29.5 / 32.2 / 28.0 / 13	4 / 27.3 / 31.2 / 24.2 / 29	3 / 27.0 / 24.7 / 24.5 / 20	3 / 25.7 / 29.6 / 21.0 / 23	3 / 26.4 / 31.6 / 22.2 / 18	3 / 26.8 / 31.3 / 23.2 / 16	3 / 26.5 / 31.0 / 20.2 / 17	2 / 26.5 / 31.0 / 20.2 / 17
C	3 / 0.4 / 0.5 / 0.3	2 / 0.7 / 1.0 / 0.2 / 13	4 / 0.7 / 1.0 / 0.2 / 28	3 / 0.5 / 0.9 / 0.2 / 18	3 / 0.6 / 1.0 / 0.3 / 22	3 / 0.6 / 1.0 / 0.4 / 18	2 / 0.6 / 1.0 / 0.4 / 20	4 / 0.7 / 1.0 / 0.3 / 17	2 / 0.7 / 1.0 / 0.3 / 17
P	3 / 14.6 / 15.0 / 14.5	2 / 11.8 / 14.5 / 8.5 / 12	4 / 13.1 / 17.0 / 10.1 / 28	3 / 13.3 / 16.0 / 12.0 / 15	3 / 13.3 / 14.5 / 11.0 / 22	3 / 13.0 / 14.5 / 11.5 / 15	3 / 13.5 / 18.0 / 10.5 / 18	4 / 12.3 / 17.0 / 8.6 / 20	2 / 12.3 / 17.0 / 8.6 / 20
H	3 / 4.2 / 5.0 / 3.5	2 / 9.5 / 13.8 / 4.0 / 13	4 / 10.0 / 14.8 / 5.0 / 28	3 / 7.1 / 10.2 / 2.0 / 15	3 / 6.0 / 10.7 / 2.8 / 23	3 / 7.5 / 39.0 / 8.0 / 18	3 / 4.0 / 9.7 / 0.0 / 17	4 / 5.7 / 10.2 / 3.0 / 20	2 / 5.7 / 10.2 / 3.0 / 20
W(X)	4 / 4.1 / 3.5 / 4.7	2 / 8.2 / 4.0 / 12.0 / 1	4 / 9.0 / 4.7 / 14.0 / 2	3 / 6.0 / 1.8 / 10.0 / 1	3 / 4.8 / 0.7 / 10.5 / 1	3 / 5.5 / 3.2 / 38.5 / 1	3 / 2.1 / 3.8 / 3.1 / 1	3 / 0.3 / 6.7 / 7.3 / 1	2 / 0.3 / 6.7 / 7.3 / 1
W(Y)	3 / 0.6 / 0.0 / 1.7	2 / 2.2 / 1.6 / 9.0 / 3	4 / 2.1 / 3.7 / 8.3 / 2	3 / 2.0 / 0.0 / 5.6 / 1	3 / 3.0 / 2.7 / 6.5 / 2	3 / 3.6 / 0.8 / 7.0 / 1	2 / 1.1 / 6.3 / 2.7 / 3	4 / 3.0 / 8.1 / 10.1 / 3	2 / 3.0 / 8.1 / 10.1 / 3

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OCTOBER 1964

					LONGITUDE WEST					
	170	165	160	155	150	145	140	135	130
T(A)	3	3	3	3	3	3	4	3	3
	26.7	26.3	26.0	26.0	26.0	25.5	25.6	25.7	25.7
	27.6	27.5	28.0	28.1	28.0	28.0	28.0	28.0	28.0
	26.0	24.0	24.5	24.3	24.2	24.2	24.2	24.2	23.7
	0.5	0.7	0.8	0.8	0.9	0.9	0.9	0.9	1.0
	16	24	24	30	28	19	11	15	15
T(W)-T(A)	3	3	3	3	3	3	4	3	3
	0.0	0.8	0.9	0.9	0.7	1.0	1.5	1.1	1.1
	2.2	4.1	2.1	2.5	3.3	3.3	2.6	3.2	3.2
	1.6-	0.8-	1.5-	1.5-	0.9-	0.9-	1.0-	1.0-	2.7-
	1.0	1.0	0.9	0.8	1.0	1.3	1.0	1.3	1.3
	16	24	24	29	28	19	11	15	15
E(W)-E(A)	3	3	3	3	3	3	4	3	3
	4.5	6.1	5.0	6.5	6.1	6.3	6.5	7.3	7.3
	10.0	10.3	9.8	10.1	10.3	11.0	8.0	11.8	11.8
	0.5	2.3	1.0	4.1	2.6	3.0	4.3	4.0	4.0
	2.6	2.0	2.2	1.5	1.6	1.6	1.1	2.0	2.0
	16	24	24	29	28	19	11	14	14
EA	3	3	3	3	3	3	3	3	3
	28.7	27.7	28.5	27.1	26.6	26.6	27.0	26.3	26.3
	32.8	31.2	31.3	29.8	29.0	29.0	29.0	28.5	28.5
	26.5	24.8	26.0	24.3	24.0	23.5	24.5	21.8	21.8
	1.7	1.3	1.5	1.3	1.7	1.7	1.3	2.0	2.0
	16	24	24	29	28	19	11	14	14
C	3	3	3	3	3	3	4	3	3
	0.6	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6
	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	0.3	0.3	0.3	0.1	0.3	0.3	0.1	0.3	0.3
	16	24	25	30	27	19	11	15	15
P	3	3	3	3	3	3	4	3	3
	11.5	11.8	12.1	13.3	14.1	12.5	13.0	12.8	12.8
	15.1	15.0	15.0	17.0	17.5	16.5	17.0	16.5	16.5
	9.0	8.6	9.5	11.0	11.0	9.6	10.0	9.0	9.0
	1.5	2.0	1.1	1.6	1.6	2.0	2.3	2.0	2.0
	16	24	25	30	28	19	11	15	15
H	3	3	3	3	3	3	4	3	3
	7.0	7.6	6.3	6.1	6.5	7.0	5.6	6.0	6.0
	9.2	10.2	10.8	10.5	10.7	10.7	8.1	9.7	9.7
	4.0	0.0	0.6	2.5	3.0	3.5	2.0	2.5	2.5
	1.5	2.2	2.7	2.1	2.5	2.0	1.5	2.0	2.0
	13	22	25	30	28	19	10	13	13
W(X)	3	3	3	3	3	3	4	3	3
	6.3-	7.5-	5.5-	5.6-	6.0-	6.2-	5.0-	4.2-	4.2-
	3.5-	0.0-	0.3-	0.0-	2.0-	3.5-	1.7-	1.5-	1.5-
	8.6-	2.2-	9.6-	2.3-	10.1-	9.2-	8.0-	7.0-	7.0-
	2.2-	0.9-	1.2-	1.0-	2.1	1.7-	1.8-	1.6-	1.6-
	0.1-	0.1-	4.8	3.8	1.1-	2.5	1.0	2.1-	2.1-
W(Y)	5.2-	5.2-	6.0-	5.2-	3.8-	7.0-	4.0-	7.7-	7.7-
	1.5	1.5	3.0	2.1	2.5	2.5	1.2	3.7	3.7

SEPTEMBER 1964

					LONGITUDE WEST					
	170	165	160	155	150	145	140	135	130
T(A)	2	3	2	3	3	3	4	3	3
	26.2	26.7	26.0	26.2	26.2	26.0	26.0	25.5	25.5
	29.0	29.0	30.0	28.0	28.0	31.0	25.0	26.6	26.6
	24.0	25.0	25.0	25.0	25.0	25.0		24.0	24.0
		24	41	41	17	20	8	12	12
T(W)-T(A)	2	3	2	3	3	3	4	5	3
	1.0	0.5	0.5	0.3	0.6	0.3	0.9	3.0	1.8
	3.0	2.0	2.0	2.0	0.5-	2.1	2.0		3.0
	1.0-	2.2-	2.0-	0.9-	0.5-	3.0-	0.0-		0.6-
		1.1	1.1	0.9	1.0	1.1	0.7		1.0
		23	41	41	17	20	8		12
E(W)-E(A)	2	3	2	3	3	3	4	5	3
	4.3	6.5	6.5	5.2	5.7	4.2	6.1	8.7	7.5
	0.7	0.3	8.3	10.0	10.0	6.5	9.8		11.0
	3.1	2.0	1.6	1.6	3.1	2.3	4.6		2.7
		1.5	1.5	1.6	1.8	1.1	1.6		2.7
		23	41	41	17	20	8		12
EA	2	3	2	3	3	3	4	5	3
	29.5	28.7	28.7	27.5	27.5	29.0	27.0	26.6	27.0
	31.5	31.5	32.1	29.5	29.5	20.2	28.7		30.3
	26.6	20.5	25.2	25.5	25.5	27.2	22.6		26.8
		1.5	1.5	1.5	1.0	0.8	1.8		2.1
		23	41	41	17	20	8		12
C	2	3	2	3	3	3	3	1	3
	1.0	0.0	0.0	0.5	0.5	0.7	0.8	0.4	0.7
	1.0	0.3	0.3	1.0	1.0	1.0	1.0	0.6	1.0
	1.0	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3
		24	24	41	18	20	6		13
P	2	3	2	3	3	3	3	3	3
	11.5	11.5	12.0	13.2	12.5	11.1	11.0	11.0	10.0
	12.5	14.1	14.5	15.0	15.5	12.5	12.5	12.0	12.5
	10.5	8.3	9.2	11.0	10.0	9.5	9.5	10.0	7.5
		1.5	1.5	1.0	1.5	1.0	1.0		1.5
		23	41	41	20	20	8		11
H	2	3	3	3	3	3	3	3	3
	4.2	6.0	6.3	6.2	6.0	7.8	10.2	2.5	5.2
	9.2	10.7	12.8	10.2	10.7	12.3	8.1	2.5	9.2
	1.5	2.7	2.6	2.5	2.7	2.5	1.2	2.0	0.1
		2.1	2.7	38	18	20	8		13
W(X)		3	3	3	3	4	3	4	3
	3.0-	5.1-	3.0-	5.3-	4.8-	4.6-	4.8-	0.3-	2.0-
	1.5-	2.0-	12.0-	2.0-	0.3-	10.0-	10.0-	1.6-	2.0-
	8.6-	2.7-	0.5	3.0-	4.5-	10.0-	10.5-	1.2-	9.2-
W(Y)	1.0-	1.5-	0.5	2.5	2.7	2.7	0.5-	2.0-	1.2-
	0.0	10.1-	6.6-	5.6-	3.5	3.2-	11.7-	1.8-	5.7-
	3.1-	3.0	3.2	2.2	2.5	2.8	6.2	2.3-	4.0

DECEMBER 1964

	LONGITUDE WEST								
	170	165	160	155	150	145	140	135	130

NOVEMBER 1964

	LONGITUDE WEST								
	170	165	160	155	150	145	140	135	130

Row labels (left margin): T(A), T(W)-T(A), E(W)-E(A), EA, C, P, W, W(X), W(Y)

FEBRUARY 1965

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	0	3 24.7 26.5 22.7 1.2 23	2 24.0 25.2 22.0 0.6 33	3 24.0 26.0 22.6 0.8 40	3 24.5 26.0 22.6 0.8 40	3 24.5 26.1 22.6 0.8 25	4 23.5 25.0 22.5 0.9 8	5 23.0 23.0 22.0	3 23.2 24.0 22.6 0.5 7	3 23.2 24.0 22.6 0.5 7
T(W)-T(A)	0	3 1.0 2.7 2.2 1.2 23	3 0.8 3.0 1.3 1.0 33	3 0.1 2.0 1.6 0.9 40	3 0.2 2.3 1.2 0.8 25	3 1.6 2.5 0.5 0.8 8	4 2.0 2.0 2.0	5 2.0 2.0 2.0	3 0.8 2.0 0.8 7
E(W)-E(A)	0	3 7.5 15.0 2.6 2.7 23	3 5.3 9.6 0.7 2.0 33	3 4.3 8.5 0.1 1.5 40	3 4.2 7.2 0.6 1.5 25	3 7.5 10.6 4.7 1.8 8	5 6.0 6.2 6.0	4 4.5 8.3 0.9 2.2 7	4 4.5 8.3 0.9 2.2 7
EA	0	3 23.7 27.8 17.6 2.5 23	3 24.1 28.8 20.7 1.7 33	3 24.7 29.7 21.5 1.5 40	3 24.8 29.0 20.3 1.7 25	3 22.6 23.6 20.0 1.0 8	4 22.6 23.5 22.0	3 23.6 25.7 21.2 1.5 7	3 23.6 25.7 21.2 1.5 7
C	0	3 0.4 0.9 0.0 0.2 23	3 0.6 1.0 0.0 0.3 33	3 0.6 1.0 0.3 0.3 40	3 0.8 1.0 0.1 0.3 25	4 0.7 1.0 0.3 0.7	4 0.7 0.8 0.6	3 0.6 1.0 0.3 7
P	0	3 11.5 17.5 8.6 2.2 23	3 12.8 17.0 10.1 1.5 34	3 11.8 17.0 8.0 2.0 40	3 11.2 14.0 8.5 1.6 25	3 11.5 15.0 9.1 1.8	5 10.6 12.0 9.0	3 23.6 25.7 21.2	2 11.5 12.0 11.0
R	0	2 3 1	3 2 3	3 2 3	3 2 3	4	4	4	4
W(K)	0	8.5 13.8 5.0 2.7 23	3 9.2 20.5 1.8 3.6 34	3 7.7 14.0 0.0 3.5 40	3 9.1 15.5 2.0 3.5 25	3 9.0 12.8 7.6 1.5	3 6.2 6.6 6.1	3 8.7 10.2 6.6 1.3	3 8.7 10.2 6.6 1.3
W(Y)	0	5.5 1.6 12.0 6.0 9.2 1.2	3 0.8 0.0 19.2 9.6 3.3 11.0 3.1	3 6.0 0.0 11.0 3.0 3.7 11.1 3.6	3 5.8 1.6 12.0 3.5 6.1 13.2 3.2	4 7.5 2.8 2.5 3.3 0.1 8.1 2.6	4 5.3 5.2 5.7 3.1 3.0 3.3	2 7.7 5.0 10.2 3.5 0.1 5.2 1.6	2 7.7 5.0 10.2 3.5 0.1 5.2 1.6

JANUARY 1965

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)									
T(W)-T(A)									
E(W)-E(A)									
EA									
C									
P									
R									
W(K)									
W(Y)									

LATITUDE 10°-15° N.

APRIL 1965

MARCH 1965

LONGITUDE WEST

LATITUDE 10° – 15° N.

JUNE 1965

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	3: 27.0/32.0/26.0/1.6/11	3: 26.2/30.0/25.0/1.1/16	3: 25.6/27.6/24.5/0.8/27	3: 25.6/27.6/24.5/0.8/27	2: 24.8/26.0/23.6/0.7/14	3: 25.0/28.0/23.5/1.0/25	3: 24.7/27.6/23.0/1.1/18	3: 25.0/28.1/23.0/1.6/14	3: 22.2/26.5/15.5/3.5/13
T(W)-T(A)	2: 0.3-/1.8/6.0-/2.0/11	3: 0.4/2.6/4.0-/1.3/16	3: 0.7/2.3/1.0-/0.8/23	3: 0.7/2.3/1.0-/0.8/23	2: 0.6/1.5/0.4-/0.6/14	3: 0.4/1.3/2.0-/0.8/25	3: 0.8/3.3/2.6-/1.5/18	3: 0.3/2.0/1.2-/1.4/14	3: 0.5/2.5/2.7-/1.7/13
E(W)-E(A)	3: 6.0/9.3/3.2/2.0/11	3: 6.5/11.1/3.3/2.0/16	3: 6.0/10.6/2.7/1.8/23	3: 6.5/8.5/4.5/1.2/14	2: 6.5/8.5/4.5/1.2/14	3: 6.0/8.2/3.2/1.3/25	3: 6.1/11.7/2.0/2.5/18	3: 5.2/10.1/0.7-/3.1/14	3: 4.5/9.0/0.1-/2.6/13
EA	3: 26.7/31.0/24.6/1.5/11	3: 26.2/30.1/23.1/1.7/16	3: 26.0/31.0/23.0/2.0/23	2: 24.2/25.8/21.8/1.0/14	2: 24.2/25.8/21.8/1.0/14	3: 24.5/28.2/20.8/2.1/25	3: 24.7/28.2/21.1/2.0/18	3: 25.0/31.2/21.2/3.3/14	3: 21.6/25.5/15.0/3.6/13
C	3: 0.5/0.9/0.2/0.2/11	3: 0.4/0.9/0.0/0.3/17	3: 0.5/1.0/0.1/0.2/27	3: 0.7/1.0/0.2/0.2/15	2: 0.7/1.0/0.4/0.2/15	3: 0.8/1.0/0.2/0.2/25	3: 0.7/1.0/0.1/0.3/18	3: 0.5/1.0/0.3/0.3/14	3: 0.7/1.0/0.3/0.3/14
P	3: 12.8/14.5/10.6/0.9/11	3: 13.1/15.0/11.0/1.1/17	3: 13.6/15.0/11.0/1.3/27	3: 14.2/15.5/13.0/0.7/15	2: 14.2/15.5/13.0/0.7/15	3: 14.8/17.0/12.6/1.0/25	3: 14.3/16.5/12.0/1.2/18	3: 14.0/16.5/11.0/1.5/14	3: 14.0/17.1/12.5/1.1/14
M	3: 7.0/9.7/5.6/1.4/11	3: 8.0/18.0/2.5/3.6/17	3: 9.3/12.8/5.0/2.5/27	3: 8.5/12.6/4.5/2.5/15	2: 8.5/12.6/4.5/2.5/15	3: 9.8/12.8/5.0/2.1/25	3: 8.6/12.3/5.0/2.1/18	3: 7.2/12.8/4.0/2.5/14	3: 7.2/11.2/1.5/2.8/14
W(X)	6.5-/2.1-/9.1-/1.0/2.2-	7.1-/2.1-/13.6-/3.0/3.1-	8.2-/3.8-/12.8-/2.6/3.6-	7.0-/4.7-/11.0-/3.0/4.0-	8.5-/4.7-/11.0-/3.0/4.0-	8.6-/4.7-/11.0-/1.7/4.5-	7.5-/3.8-/12.0-/2.5/3.5-	5.5-/3.0-/11.0-/2.1/4.7-	4.5-/4.8-/10.5-/4.5/4.0-
W(Y)	0.1-/3.8-/1.5	0.0/11.6-/2.6	0.0/7.6-/2.3	0.0/6.3-/1.7	0.0/6.3-/1.7	0.9-/8.0-/1.8	0.1-/7.0-/2.0	2.6-/6.6-/1.5	1.1/7.1-/2.5

MAY 1965

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	O	2: 25.6/27.0/24.0/0.8/12	4: 26.0/31.3/24.0/1.2/21	3: 26.0/26.2/24.0/1.2/16	3: 25.3/26.2/24.0/0.6/16	3: 24.8/28.0/23.1/1.2/19	3: 25.3/29.0/23.0/2.0/8	3: 25.0/29.0/23.2/1.5/11	3: 24.5/27.0/22.2/1.2/18
T(W)-T(A)	O	2: 1.0/3.0/0.5-/1.1/11	4: 0.5/3.0/4.0-/1.3/11	3: 0.5/3.0/4.0-/1.3/20	3: 0.7/2.0/0.2-/0.8/16	3: 1.1/3.0/0.5-/0.9/19	3: 0.8/2.5/1.0-/1.2/8	3: 0.9/2.2/1.0-/1.0/11	4: 0.0/2.0/2.7-/1.3/18
E(W)-E(A)	O	2: 5.7/9.0/1.0/2.0/11	4: 4.2/9.0/8.1-/3.8/20	3: 5.3/11.0/0.1-/3.0/16	3: 6.2/12.8/1.8/2.7/19	3: 7.2/9.5/5.8/1.2/8	3: 6.5/10.0/2.0/2.1/11	4: 4.0/8.3/2.5/1.5/18	
EA	O	2: 27.5/32.5/29.5/2.0/11	4: 28.5/41.6/25.0/3.5/20	3: 26.5/33.5/22.7/3.5/16	3: 25.5/31.6/20.5/3.0/17	3: 24.7/29.5/21.0/3.2/8	3: 25.0/28.8/21.5/2.5/11	4: 25.0/29.8/20.0/2.1/18	
C	O	2: 0.5/1.0/0.1/0.3/11	4: 0.6/1.0/0.1/0.3/21	3: 0.4/1.0/0.1/0.2/16	3: 0.6/1.0/0.3/0.3/18	3: 0.8/1.0/0.4/0.2/8	3: 0.8/1.0/0.2/0.2/11	4: 0.7/1.0/0.3/0.3/18	
P	O	2: 11.5/12.7/9.0/1.2/11	4: 12.6/15.0/11.0/1.6/21	3: 13.2/15.0/11.0/1.2/16	3: 14.0/16.8/11.6/1.7/18	3: 13.6/15.7/11.0/1.5/8	3: 13.6/15.7/11.0/1.5/11	4: 14.6/17.0/11.5/1.1/18	
M	O	2: 8.0/12.8/3.0/3.0/12	4: 11.2/9.0/0.0/5.5/17	3: 8.5/11.5/3.0/2.2/12	3: 8.8/13.3/3.0/2.2/17	3: 8.0/12.3/6.1/2.1/8	3: 9.5/13.8/6.1/2.5/11	4: 8.3/12.8/4.0/2.0/18	
W(X)	O	7.3-/3.5-/11.2-/0.0/2.1	6.8-/3.0-/10.5-/1.6/1.8	8.2-/3.0-/10.5-/2.0/1.8	8.1-/0.6-/13.1-/2.5/2.8	6.7-/5.7-/9.3-/1.2/2.1	6.7-/1.3-/10.5-/2.5/1.8	6.0-/3.0-/9.7-/1.8/2.0	
W(Y)	O	1.8-/5.0-/0.0/2.5-/...	2.2/0.0/5.5-/2.1	1.6-/1.3/5.2-/1.8	1.5-/3.0-/7.3-/2.8	4.0-/2.1-/8.0-/2.0	6.2-/3.6-/9.0-/1.8	5.3-/0.1-/8.3-/2.0	

LATITUDE 5°–10° N.

JULY 1963

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	26.7 / 27.6 / 26.0	27.0 / 27.0 / 27.0		25.7 / 27.0 / 22.6	26.8 / 28.7 / 25.0	27.0	26.8 / 28.1 / 24.2 / 1.7	25.8 / 27.0 / 24.2	
T(W)−T(A)	1.7 / 2.3 / 1.0	1.7 / 2.1 / 1.0		1.8 / 6.5 / 0.5−	7.0 / 3.7 / 0.5	1.0	1.8 / 4.5 / 0.0 / 1.2	2.5 / 5.0 / 0.5	
E(W)−E(A)	4.5 / 11.4 / 0.7	3.7 / 8.0 / 5.6		6.3 / 10.7 / 2.7	8.0 / 8.5 / 7.5	5.0	6.1 / 8.5 / 2.5 / 2.5	8.0 / 8.8 / 6.1	
EA	27.3 / 28.0 / 26.5	30.1 / 30.1 / 30.1		28.5 / 29.8 / 27.5	29.7 / 30.8 / 28.6	30.1	30.0 / 32.8 / 27.3 / 2.0	28.6 / 30.3 / 27.5	
C	0.6 / 0.8 / 0.3	0.6 / 0.8 / 0.3		0.9 / 0.9 / 0.9	1.0	0.0	0.8 / 1.0 / 0.4 / 0.3	0.6 / 0.9 / 0.4	
P	13.0 / 11.7 / 8.6			11.5	11.0 / 13.0 / 9.0	11.7	11.1 / 13.7 / 1.8 / 1.7	10.7 / 11.7 / 9.6	
W	8.5 / 10.7 / 7.6	10.0 / 11.2 / 8.1		7.1 / 8.1 / 5.6	5.0 / 8.1 / 2.0		4.0 / 8.7 / 0.0 / 2.5	5.7 / 10.2 / 2.5	
W(X)	0.6− / 4.8− / 10.0−	7.6− / 6.2− / 8.5−		4.0− / 0.1− / 6.6−	2.5− / 1.2 / 6.2−		3.0− / 0.0 / 6.1− / 1.0	5.6− / 2.5− / 10.2−	
W(Y)	4.6− / 5.7− / 6.6−	0.5− / 5.2− / 7.3−		1.0 / 8.1 / 3.8−	1.7− / 1.5 / 5.2−		1.0 / 8.1 / 1.3− / 3.0	0.4 / 1.6 / 0.1−	

AUGUST 1963

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	27.3 / 28.0 / 27.0	26.8 / 28.0 / 25.0 / 13	27.7 / 30.5 / 26.0 / 1.5	27.7 / 30.5 / 26.0 / 1.5	27.0 / 28.6 / 24.2 / 1.3	27.1 / 27.6 / 26.6	26.6 / 29.0 / 23.7	27.2 / 30.0 / 24.0 / 1.5	
T(W)−T(A)	1.6 / 2.0 / 1.1	1.6 / 4.0 / 0.0 / 1.0 / 13	1.0 / 2.1 / 1.0− / 1.5	1.0 / 2.1 / 1.0− / 1.5	1.0 / 3.3 / 0.5− / 1.1 / 8	0.8 / 1.5 / 0.0	1.5 / 3.8 / 0.5−	0.9 / 4.0 / 2.0− / 1.2 / 15	
E(W)−E(A)	8.0 / 10.0 / 6.6	7.6 / 11.0 / 5.0 / 1.5 / 13	7.5 / 9.5 / 5.0 / 2.0 / 5	5.2 / 8.3 / 0.8 / 1.8 / 10	5.8 / 7.0 / 4.5 / 0.7	4.5 / 5.5 / 3.7	6.6 / 9.2 / 3.3	5.5 / 8.6 / 2.0− / 3.0 / 15	
EA	29.6 / 30.5 / 28.2	29.0 / 31.5 / 26.5 / 1.3 / 13	29.7 / 31.0 / 27.8 / 1.1 / 5	28.3 / 31.6 / 13.3 / 5.0 / 10	29.7 / 30.5 / 29.1 / 0.5 / 8	30.7 / 31.0 / 30.5	29.5 / 34.2 / 27.6	30.3 / 35.5 / 27.3 / 2.2 / 15	
C	0.8 / 1.0 / 0.5	0.8 / 1.0 / 0.3 / 13	0.6 / 0.9 / 0.4 / 0.2 / 5	0.7 / 1.0 / 0.1 / 0.3 / 10	0.8 / 1.0 / 0.2 / 0.8	0.9 / 1.0 / 0.8	0.7 / 1.0 / 0.4	0.7 / 1.0 / 0.3 / 15	
P	8.0 / 9.6 / 5.6	8.5 / 11.0 / 6.2 / 1.3 / 13	8.2 / 10.6 / 5.6 / 2.0 / 5	8.7 / 15.5 / 6.2 / 2.5 / 10	9.0 / 11.0 / 7.0 / 1.3	8.1 / 9.5 / 7.0	9.5 / 11.5 / 7.6 / 1.5	10.5 / 12.5 / 7.0 / 1.3 / 15	
W	10.1 / 15.3 / 5.0	6.1 / 12.8 / 2.5 / 3.6 / 12	6.1 / 8.7 / 4.5 / 1.5 / 5	5.5 / 11.2 / 0.0 / 3.1 / 10	6.6 / 11.2 / 1.0 / 3.3	2.7 / 4.0 / 1.5	6.5 / 8.1 / 1.7	4.8 / 12.8 / 1.0 / 2.7 / 14	
W(X)	9.7− / 5.0− / 14.5−	5.5− / 1.2− / 12.8− / 3.8	5.5− / 4.5− / 7.5− / 1.1	4.7− / 0.0 / 9.2− / 2.6	5.3− / 1.0 / 8.7− / 2.6	1.5− / 1.1− / 2.0−	1.5− / 1.3 / 4.3−	0.8− / 5.0 / 4.7− / 3.2	
W(Y)	2.6− / 0.0 / 5.3−	1.0− / 4.2 / 7.5− / 2.5	0.3− / 1.6 / 4.3− / 2.1	0.3− / 8.5 / 4.0− / 3.2	3.0 / 8.5 / 0.2− / 3.2	2.1 / 3.5 / 1.0	4.5 / 8.0 / 2.5− / 4.1	0.6 / 12.0 / 6.7− / 4.3	

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OCTOBER 1963

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)									
T(W)–T(A)									
E(W)–E(A)									
EA									
C									
P									
x									
w(X)									
w(Y)									

SEPTEMBER 1963

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)									
T(W)–T(A)									
E(W)–E(A)									
EA									
C									
P									
x									
w(X)									
w(Y)									

LATITUDE 5° – 10° N.

NOVEMBER 1963

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	⁴ 28.1 / 30.0 / 27.0 / 1.0 / ¹⁰	³ 26.8 / 28.0 / 25.1 / 0.9 / ¹⁰	³ 27.7 / 29.0 / 26.1 / ³	⁴ 27.0 / 27.7 / 26.5 / 0.5 / ⁶	² 29.6 / 33.0 / 26.5 / ³	⁵ 27.3 / 28.7 / 26.0 / ⁵	³ 26.2 / 27.0 / 25.0 / 0.8 / ⁸	⁴ 26.3 / 30.0 / 24.0 / 1.6 / ⁷	³
T(W)-T(A)	⁴ 0.6 / 1.7 / 1.1- / 1.0 / ¹⁰	² 2.1 / 3.5 / 0.8 / ¹⁰	³ 0.4 / 0.9 / 0.0 / ³	⁶ 1.2 / 2.2 / 0.8	² 0.1 / 2.6 / 3.6- / ³	⁵ 1.2 / 3.2 / 0.6-	³ 1.3 / 2.6 / 0.0	⁴ 1.5 / 4.0 / 2.0-	³ 1.7
E(W)-E(A)	⁴ 8.3 / 10.7 / 6.7 / 1.1 / ¹⁰	³ 8.5 / 11.7 / 5.7 / 1.5 / ¹⁰	³ 8.0 / 11.8 / 2.6 / ³	⁴ 7.0 / 9.6 / 5.0 / ⁶	² 9.0 / 12.2 / 5.5 / ³	⁵ 8.0 / 10.3 / 5.5 / ⁵	³ 4.5 / 6.6 / 3.1 / 1.0 / ⁸	⁴ 6.6 / 12.3 / 0.9- / 3.7 / ⁷	³
EA	⁴ 28.7 / 30.5 / 26.5 / 1.1 / ¹⁰	³ 29.2 / 31.1 / 27.0 / 1.5 / ¹⁰	² 28.0 / 30.0 / 25.7 / ³	⁴ 29.5 / 30.5 / 28.0 / 0.9 / ⁶	³ 30.2 / 34.3 / 26.0 / ³	⁵ 29.1 / 30.3 / 28.0 / ⁵	³ 30.1 / 31.8 / 29.0 / 1.0 / ⁸	⁴ 28.7 / 36.3 / 25.2 / 3.3 / ⁷	³
C	⁴ 0.6 / 0.9 / 0.4 / 0.2 / ¹⁰	³ 0.8 / 1.0 / 0.6 / 0.2 / ¹⁰	³ 0.7 / 0.9 / 0.5 / ³	⁶ 0.6 / 1.0 / 0.4 / 0.2	² 0.4 / 0.6 / 0.3 / ³	⁵ 0.4 / 0.6 / 0.3 / ⁵	³ 1.0 / 1.0 / 0.8 / 0.1 / ⁸	⁴ 0.8 / 1.0 / 0.6 / 0.3 / ⁷	³
P	⁴ 8.8 / 11.2 / 6.0 / 1.5 / ¹⁰	³ 9.0 / 11.0 / 7.6 / 1.0 / ¹⁰	² 10.2 / 11.5 / 9.0 / ³	⁴ 11.0 / 11.7 / 10.5 / ⁶	² 12.0 / 13.0 / 11.0 / ³	⁵ 12.2 / 13.0 / 11.5 / ⁵	³ 10.3 / 12.0 / 8.6 / 1.0 / ⁸	⁴ 10.5 / 12.5 / 8.0 / 1.7 / ⁷	⁴
H	⁴ 5.8 / 8.1 / 0.5 / 2.0 / ¹⁰	³ 8.2 / 12.8 / 4.0 / 2.5 / ¹⁰	³ 3.5 / 7.6 / 1.5 / ³	⁴ 5.5 / 10.2 / 1.5 / ³	³ 5.2 / 8.1 / 2.5 / ³	⁵ 2.7 / 3.0 / 2.5 / ⁵	³ 6.6 / 11.2 / 4.5 / 2.7 / ⁸	⁴ 5.8 / 11.2 / 0.0 / 3.0 / ⁹	⁴
W(X)	5.2- / 7.5- / 1.8	7.3- / 1.1- / 3.5-	2.2- / 1.1 / 7.1-	5.1- / 1.3- / 9.5-	1.5- / 0.0 / 2.6-	2.1 / 2.5 / 2.0	5.3- / 1.5 / 9.7-	4.7- / 0.0 / 8.5-	
W(Y)	2.0- / 0.4 / 6.0- / 1.7	0.5- / 6.5 / 3.0	0.2- / 1.1 / 2.6-	1.5- / 0.5 / 3.5-	5.0- / 2.5- / 7.7-	1.2- / 0.4- / 2.2-	1.3- / 4.3 / 5.6- / 3.1	2.5 / 3.8 / 7.3- / 3.5	

DECEMBER 1963

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	⁴ 27.1 / 30.5 / 25.6 / 0.9 / ⁴⁴	³ 28.0 / 28.5 / 27.6 / 0.2 / ⁹	⁴ 26.0	² 27.0 / 27.6 / 26.5 / ⁵	³ 25.8 / 28.7 / 24.2 / 1.6 / ⁵	² 26.7 / 27.0 / 26.5 / ²	³ 25.8 / 27.0 / 25.0 / 0.7 / ¹¹	³ 26.3 / 28.0 / 25.0 / 1.0 / ³	
T(W)-T(A)	⁴ 0.5 / 2.5 / 2.2- / 1.0 / ⁴⁴	³ 0.2 / 1.5 / 0.7- / ⁹	⁴ 0.5 / ¹	³ 0.9 / 1.6 / 0.5 / ³	³ 1.5 / 3.3 / 1.6- / ⁵	² 2.5 / 3.3 / 1.5 / ²	³ 1.5 / 3.0 / 1.0- / ¹¹	³ 1.2 / 3.1 / 1.3- / 1.2 / ³	
E(W)-E(A)	⁴ 6.6 / 11.3 / 3.0 / 2.0 / ⁴⁴	³ 5.7 / 10.2 / 2.3 / ⁹	⁴ 6.2 / ¹	² 7.5 / 9.5 / 6.1 / ³	³ 7.0 / 8.8 / 6.2 / 1.0 / ⁵	² 4.6 / 6.5 / 2.7 / ²	³ 4.6 / 9.1 / 0.6 / 2.6 / ¹¹	³ 6.5 / 12.1 / 1.2- / 3.0 / ¹⁶	
EA	⁴ 28.2 / 32.5 / 24.2 / 1.6 / ⁴⁴	³ 30.1 / 32.1 / 28.0 / 1.3 / ⁹	⁴ 26.3 / ¹	² 28.0 / 29.7 / 26.8 / ³	³ 27.3 / 28.5 / 25.0 / 1.1 / ³	² 33.7 / 34.5 / 33.1 / ²	³ 30.0 / 33.1 / 27.3 / 1.5 / ¹¹	³ 28.5 / 32.8 / 25.5 / 1.8 / ¹⁶	
C	⁴ 0.6 / 1.0 / 0.1 / 0.2 / ⁴⁴	³ 0.6 / 1.0 / 0.2 / ⁹	⁴ 0.3 / ¹	² 0.9 / 1.0 / 0.6 / ³	³ 0.8 / 1.0 / 0.6 / 0.2 / ⁵	² 0.9 / 1.0 / 0.9 / ²	³ 0.8 / 1.0 / 0.3 / 0.3 / ¹²	³ 0.8 / 1.0 / 0.5 / 0.2 / ¹⁶	
P	⁴ 9.5 / 12.7 / 7.0 / 1.5 / ⁴⁴	³ 7.7 / 8.8 / 6.6 / 0.9 / ⁹	⁴ 11.2 / ¹	² 9.1 / 10.5 / 6.6 / ⁵	³ 9.8 / 12.5 / 7.0 / 1.5 / ⁵	² 9.0 / 9.6 / 8.5 / ²	³ 10.1 / 13.7 / 3.1 / ¹²	³ 11.6 / 15.5 / 8.0 / 2.0 / ¹²	
H	⁴ 7.2 / 9.6 / 3.5 / 1.3 / ⁴⁴	³ 9.0 / 12.3 / 6.2 / 2.0 / ⁹	⁴ 7.6 / ¹	² 7.6 / 7.6 / 7.6 / ⁵	³ 9.0 / 10.7 / 8.1 / 0.9 / ⁵	² 12.8 / 12.8 / 12.8 / ²	³ 9.6 / 12.8 / 7.1 / 1.8 / ¹²	³ 7.0 / 11.2 / 2.5 / 2.1 / ¹⁶	
W(X)	6.2- / 2.8- / 9.2- / 1.5	8.0- / 5.0- / 10.7-	7.1- / ¹	6.1- / 5.8- / 6.6-	8.0- / 7.0- / 10.6- / 1.2	9.0- / 8.1- / 9.7-	7.7- / 5.5- / 9.7- / 1.2	5.2- / 2.0- / 8.5- / 2.0	
W(Y)	3.2- / 0.3- / 5.7- / 1.1	2.1- / 1.8 / 7.3- / 3.3	2.6- / ¹	4.5- / 3.8- / 5.0-	3.0- / 1.7 / 4.3- / 2.5	9.0- / 8.3- / 9.8-	5.3- / 2.5- / 8.3- / 2.0	4.0- / 0.0 / 7.7- / 2.5	

FEBRUARY 1964

LONGITUDE WEST

T(A) row-block	170	165	160	155	150	145	140	135	130
T(A)	0	³ 25.7 / 27.5 / 24.6 / 0.7 / 12	⁴ 26.0 / 27.5 / 25.0 / 0.7 / 5	³ 25.8 / 28.0 / 25.0 / 0.7 / 7	³ 25.8 / 27.0 / 24.5 / 0.7 / 19	⁴ 25.0 / 26.5 / 23.5 / 0.5 / 15	³ 24.5 / 26.0 / 21.5 / 1.1 / 16	³ 24.7 / 29.0 / 20.0 / 1.6 / 27	³ 24.7 / 29.0 / 20.0 / 1.8 / 27
T(w)–T(A)	0	³ 1.7 / 3.7 / 0.5 / 12	³ 0.1 / 1.5 / 2.0–	⁴ 0.7 / 3.1 / 1.0– / 7	⁴ 0.7 / 3.2 / 1.0– / 19	³ 1.3 / 3.8 / 0.0 / 15	³ 1.8 / 5.0 / 0.5 / 16	³ 1.5 / 5.5 / 2.0– / 27	³ 1.5 / 5.5 / 2.0– / 27
E(w)–E(A)	0	³ 5.6 / 8.8 / 0.8 / 2.6 / 12	⁴ 5.3 / 7.5 / 3.0 / 1.6 / 5	³ 4.6 / 9.1 / 0.8– / 3.0 / 7	³ 5.8 / 13.0 / 2.6 / 3.0 / 19	⁴ 7.8 / 17.6 / 3.0 / 4.3 / 15	³ 5.7 / 9.6 / 3.3 / 1.8 / 12	³ 6.1 / 10.6 / 2.0 / 2.2 / 27	³ 6.1 / 10.6 / 2.0 / 2.2 / 27
EA	0	³ 29.1 / 32.5 / 26.0 / 2.0 / 12	⁴ 26.5 / 29.5 / 24.6 / 1.5	⁴ 28.0 / 32.8 / 22.6 / 3.2 / 7	⁴ 26.7 / 30.0 / 23.8 / 1.5 / 19	⁴ 24.6 / 28.5 / 20.3 / 2.5 / 12	³ 26.7 / 29.0 / 22.0 / 2.1 / 12	³ 26.0 / 31.5 / 20.8 / 2.8 / 27
C	0	³ 0.6 / 1.0 / 0.0 / 16	⁴ 0.3 / 0.8 / 0.3 / 5	² 0.6 / 1.0 / 0.3 / 7	³ 0.7 / 1.0 / 0.3 / 18	⁴ 0.8 / 1.0 / 0.2 / 14	³ 0.9 / 1.0 / 0.6 / 18	³ 0.8 / 1.0 / 0.1 / 27
P	0	³ 8.5 / 12.0 / 1.5 / 16	⁴ 10.8 / 12.6 / 8.6 / 5	² 10.6 / 12.5 / 8.0 / 7	³ 10.7 / 14.8 / 7.0 / 18	⁴ 11.5 / 15.0 / 7.5 / 14	³ 11.1 / 13.6 / 7.0 / 13	³ 10.3 / 16.2 / 6.6 / 27
H	0	10.1 / 12.8 / 5.0 / 2.0 / 16	10.2 / 12.8 / 6.6 / 1.1	8.2 / 10.2 / 3.0 / 2.3	8.2 / 12.8 / 6.2 / 2.1	9.2 / 12.8 / 4.5 / 2.5	8.3 / 12.8 / 5.0 / 1.8	7.8 / 11.7 / 0.0 / 2.2
W(X)	0	8.5– / 4.3– / 12.0– / 2.0	6.1– / 3.7– / 9.5– / 4.3–	5.5– / 1.5– / 9.5– / 5.0–	7.2– / 2.3– / 12.0– / 4.3–	7.2– / 2.2– / 12.0– / 5.0–	6.2– / 0.1– / 12.0– / 4.2–	4.6– / 0.1– / 9.5– / 4.0–
W(Y)	0	1.7 / 4.6– / 9.8– / 3.0	1.2 / 6.6– / 2.6–	2.0 / 8.1– / 2.6–	1.3 / 9.8– / 2.1	2.3 / 9.8– / 2.3	4.2 / 9.8– / 3.1	9.2 / 11.7– / 4.5

JANUARY 1964

LONGITUDE WEST

row-block	170	165	160	155	150	145	140	135	130
T(A)	⁴ 26.5 / 26.5 / 25.0 / 0.7 / 44	³ 27.0 / 29.5 / 25.5 / 0.8 / 21	² 25.6 / 27.0 / 24.2 / 4	² 25.5 / 26.5 / 23.7 / 0.9 / 6	³ 25.0 / 27.0 / 23.7 / 1.0 / 6	³ 25.0 / 26.5 / 23.7 / 1.0 / 6	² 25.6 / 27.6 / 23.1 / 1.0 / 7	³ 25.8 / 27.6 / 24.0 / 1.0 / 24	² 26.1 / 29.0 / 24.0 / 1.0 / 24
T(w)–T(A)	⁴ 0.2 / 2.1 / 1.6– / 0.8 / 21	³ 1.0 / 3.7 / 2.7– / 1.3 / 21	⁴ 2.3 / 3.8 / 1.0 / 4	² 1.5 / 2.7 / 0.0 / 6	³ 1.5 / 2.7 / 0.0 / 6	³ 2.2 / 3.3 / 0.0 / 6	² 1.2 / 3.3 / 0.5– / 7	³ 0.8 / 3.0 / 1.5– / 14	² 0.6 / 3.3 / 2.0– / 24
E(w)–E(A)	⁴ 5.6 / 9.8 / 2.7 / 1.3 / 44	³ 6.6 / 11.6 / 1.6– / 3.5 / 21	² 7.5 / 13.5 / 4.0 / 4	² 6.1 / 10.2 / 4.3 / 2.0 / 6	³ 6.0 / 9.5 / 3.5 / 1.8 / 6	³ 6.0 / 9.5 / 3.5 / 1.8 / 6	² 5.3 / 7.3 / 3.0 / 1.5 / 7	³ 5.6 / 8.7 / 1.0 / 2.0 / 12	² 5.0 / 8.2 / 1.0 / 2.0 / 19
EA	⁴ 27.5 / 29.0 / 25.1 / 1.2 / 44	³ 29.0 / 35.3 / 25.2 / 3.0 / 21	² 28.1 / 31.0 / 22.3 / 4	² 27.2 / 29.1 / 22.1 / 2.2 / 6	³ 28.0 / 30.1 / 26.0 / 1.3 / 6	³ 28.0 / 30.1 / 26.0 / 1.3 / 6	² 28.1 / 29.5 / 25.7 / 1.1 / 7	³ 28.0 / 30.1 / 25.5 / 1.3 / 12	² 28.5 / 31.0 / 25.2 / 1.5 / 19
C	⁴ 0.5 / 1.0 / 0.3 / 44	³ 0.8 / 1.0 / 0.1 / 26	⁴ 0.9 / 1.0 / 0.8 / 4	² 0.8 / 1.0 / 0.1 / 6	³ 0.8 / 1.0 / 0.1 / 6	³ 0.8 / 1.0 / 0.5 / 7	² 0.7 / 1.0 / 0.1 / 7	³ 0.6 / 1.0 / 0.2 / 14	² 0.7 / 1.0 / 0.1 / 24
P	⁴ 10.0 / 12.7 / 7.7 / 1.0 / 42	³ 6.8 / 11.6 / 6.2 / 1.1 / 26	⁴ 9.3 / 11.7 / 8.5 / 4	² 11.0 / 13.7 / 8.5 / 1.6 / 6	³ 11.0 / 13.7 / 8.6 / 1.5 / 6	³ 11.1 / 13.5 / 8.6 / 1.5 / 6	² 11.3 / 13.7 / 9.2 / 1.5 / 7	³ 11.5 / 13.7 / 8.0 / 1.2 / 14	² 10.7 / 8.2 / 2.1 / 24
H	8.5 / 13.1 / 4.5 / 2.0 / 44	10.2 / 15.3 / 5.0 / 2.2	11.2 / 11.2 / 11.2	8.2 / 11.2 / 2.5 / 3.0	8.2 / 10.2 / 9.2 / 0.5	9.8 / 10.2 / 9.2 / 0.5	7.3 / 9.2 / 5.0 / 1.5	8.3 / 11.2 / 6.1 / 1.6	9.0 / 10.7 / 6.6 / 0.9 / 24
W(X)	7.3– / 3.7– / 11.6– / 2.0	8.5– / 4.7– / 12.5– / 2.0	10.5– / 10.5–	7.6– / 2.1– / 10.5– / 3.0	7.6– / 7.0– / 9.5– / 2.8	8.1– / 7.0– / 9.5– / 0.8	6.6– / 5.0– / 9.2– / 1.6	7.6– / 4.2– / 11.0– / 2.6	7.5– / 5.8– / 9.5– / 1.0
W(Y)	4.0– / 0.6– / 7.0– / 1.3	4.5– / 3.3– / 10.0– / 3.2	4.0– / 4.0–	3.0– / 1.2– / 4.0– / 0.9	2.8 / 1.2– / 4.0– / 1.7	0.3– / 1.6– / 6.6– / 1.7	0.3– / 5.8– / 3.3– / 3.0	2.6– / 0.1– / 5.1– / 1.3	4.8– / 1.3– / 6.0– / 1.2

APRIL 1964

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)									
T(W)-T(A)									
E(W)-E(A)									
LA									
C									
P									
M									
W(X)									
W(Y)									

MARCH 1964

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)									
T(W)-T(A)									
E(W)-E(A)									
EA									
C									
P									
M									
W(X)									
W(Y)									

JUNE 1964

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	1 2	3 3	3 3	3 2	3 4	3 3	3 3	3 3	3 3
	27.8	27.2	26.5	26.3	26.7	26.7	26.6	26.6	26.6
	30.0	31.0	28.7	29.2	30.5	27.5	27.6	28.1	31.0
	26.7	24.5	24.6	24.6	24.2	24.2	24.5	23.7	23.0
	1.0	1.5	1.0	1.1	1.6	1.0	1.0	1.0	1.6
	6	28	12	11	16	7	7	17	22
T(W)–T(A)	1 2	3 3	3 2	3 3	3 3	2 3	3 3	3 3	3 3
	0.4	0.7	1.1	1.0	1.0	0.6	0.6	0.6	0.6
	1.0	3.1	3.6	3.0	4.1	2.2	2.2	3.8	3.0
	1.7	1.7	0.3	0.5	2.7	0.3	0.8	1.5	3.2
	1.0	1.1	1.2	0.9	1.8	0.8	0.8	1.1	1.5
	6	28	12	11	16	7	7	17	22
E(W)–E(A)	1 2	3 3	3 2	3 4	2 3	2 3	3 3	3 3	3 3
	8.5	6.3	6.0	6.0	7.2	6.8	6.8	5.7	6.3
	10.7	14.7	10.5	8.0	11.0	7.7	7.7	8.0	11.8
	5.6	3.6	3.3	3.1	4.5	4.5	4.5	3.0	2.0
	1.5	2.2	1.8	1.3	1.8	1.0	1.0	1.3	2.5
	6	28	12	11	16	7	7	17	22
EA	1 2	3 3	3 2	3 2	3 4	3 3	3 3	3 3	3 3
	27.5	29.3	28.8	28.2	27.8	27.0	28.2	28.2	27.6
	29.3	31.0	31.0	30.0	32.8	28.0	31.8	31.8	31.0
	25.1	26.5	26.7	26.8	26.0	26.2	26.2	26.0	23.1
	1.5	1.1	1.0	1.0	1.5	0.6	1.5	1.5	2.1
	6	28	12	11	16	7	7	17	22
C	1 2	3 3	3 2	3 2	3 4	2 3	2 3	3 3	3 3
	0.7	0.7	0.9	0.9	0.8	0.8	0.8	0.6	0.8
	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	0.1	0.0	0.0	0.8	0.3	0.4	0.4	0.1	0.4
	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.2
	6	28	12	11	17	7	7	17	22
P	1 2	3 3	3 3	3 4	3 4	2 3	3 3	3 3	3 3
	10.7	10.5	10.5	10.8	11.8	12.2	12.2	11.1	11.1
	13.0	12.7	12.6	12.5	13.0	13.7	15.0	14.7	14.7
	6.5	0.6	8.7	9.5	10.0	10.5	9.5	7.1	7.1
	2.2	1.6	1.2	0.9	0.9	1.0	1.6	2.2	2.2
	6	27	10	11	16	7	7	15	22
R	1 2	3 3	3 2	3 2	3 4	2 3	3 3	3 3	3 3
	6.0	6.6	7.2	5.8	6.5	5.0	5.0	3.8	5.0
	7.6	10.2	13.3	8.1	10.2	6.1	6.1	8.1	9.2
	0.0	0.0	4.5	2.5	2.5	3.0	3.0	0.0	0.0
	2.7	2.2	2.1	2.1	1.6	1.0	1.0	2.7	2.2
	6	28	12	11	17	7	7	17	22
W(X)	4.5	6.0	6.3	5.1	5.2	3.0	2.3	2.3	3.0
	0.0	0.0	1.5	2.3	2.0	2.1	4.3	4.3	4.0
	7.2	2.1	2.2	8.1	8.8	4.5	8.0	8.0	8.2
	2.7	1.5	2.2	2.1	1.5	1.0	2.7	2.7	3.2
W(Y)	3.2	3.0	2.5	0.5	0.5	3.3	0.7	3.8	0.2
	7.1	5.2	8.6	7.1	5.8	5.7	4.2	4.2	5.0
	0.0	2.5	2.5	4.0	6.0	5.7	2.5	2.5	3.3
	2.0			2.6	3.8	2.2			

MAY 1964

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)		3 3	3 3	3 3	3 3	4	3	3 3	3 3
	26.6	26.2	26.8	26.7	26.5	26.0	25.1	25.5	26.0
	30.0	27.3	30.0	29.7	27.0	26.0	27.5	27.5	28.1
	25.5	25.0	25.1	25.5	25.5	24.6	24.6	24.1	24.5
	1.0	0.8	1.2	1.0	1.2	0.6	0.4	1.0	1.0
	26	11	10	18	9	5	5	10	16
T(W)–T(A)		3 3	3 2	3 3	4	3	3 3	3 3	
	1.2	1.4	0.0	0.6	0.4	1.5	1.0	1.0	1.0
	2.2	1.5	2.2	2.0	1.5	2.5	3.0	3.0	4.0
	4.5	0.5	2.0	2.7	0.9	1.0	1.5	1.5	0.9
	1.3	1.1	1.0	1.0	0.8	0.8	1.1	1.1	
	26	11	10	18	9	5	5	10	16
E(W)–E(A)		3 2	3 2	3 3	4	3	3 3	3 3	
	1.0	5.3	3.2	5.1	4.5	5.3	5.5	6.1	
	10.7	4.5	7.0	8.0	6.0	7.5	8.0	9.1	
	5.6	2.5	0.9	0.6	2.8	2.5	3.0	1.1	
	2.3	1.7	1.7		1.0	1.6	2.1		
			18	18				16	
EA		3 2	3 2	3 3	4	3	3 3	3 3	
	27.5	30.5	31.1	29.0	26.8	27.5	27.3	27.6	
	32.1	34.0	36.3	31.5	29.4	29.0	29.0	33.6	
	27.0	25.8	27.8	26.1	27.7	26.0	24.5	23.5	
	1.0	1.3	2.6	1.3	0.5	1.3	1.5	1.0	
	18	18						16	
C		3 2	3 2	3 3	4	3	3 3	3 3	
	0.8	0.8	0.8	0.6	0.9	0.9	0.7	0.8	
	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
	0.4	0.2	0.2	0.0	0.2	0.1	0.1	0.3	
	0.2	0.2	0.2	0.3	0.2	0.1	0.3	0.3	
	12		10	18				16	
P		3 3	3 2	3 3	4	3	3 3	3 3	
	11.7	10.1	10.6	9.3	11.1	13.0	11.0	11.0	11.7
	13.5	12.0	13.5	13.0	15.0	13.0	12.0	14.0	14.0
	8.3	8.5	7.7	0.8	8.5	8.5	9.5	9.2	9.2
	2.3	1.1	2.0	2.3	2.3	1.3	0.9	1.5	1.5
		12		18				16	
R		3 2	3 2	3 3	4	3	3 3	3 3	
	6.1	7.0	5.0	6.8	6.6	5.8	5.8	6.8	
	10.2	9.2	10.2	7.0	8.1	9.2	10.7		
	2.0	2.5	1.0	2.5	1.0	2.5	0.0	3.0	
	2.7	2.7	1.7		2.5	2.7			
W(X)	4.5	4.5	4.7	6.5	5.1	4.7	3.8	3.8	
	0.3	0.4	2.3	2.3	1.0	2.1	0.1	0.1	
	8.6	9.5	8.6	10.0	8.1	6.2	8.1	8.1	
	1.7	2.5	1.7	1.7	2.8	2.0	3.1	3.1	
W(Y)	0.6	1.7	0.8	1.5	0.6	2.0	3.2	0.6	
	7.0	3.0	2.2	1.0	3.8	1.2	3.8	9.2	
	0.0	5.5	3.1	4.2	9.1	5.2	9.0	5.5	
	2.5	2.0	1.7	1.5	3.8		3.6		

AUGUST 1964

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	2	3	3	3	3	4	4	4	3
	27.3	26.7	26.8	26.2	26.6	26.1	26.6	25.7	
	28.5	29.0	28.0	28.5	28.7	28.5	29.0	28.5	
	26.5	25.2	25.2	25.0	24.7	24.0	24.0	23.1	
	0.7	1.0	0.9	1.0	1.0	1.5	1.0	1.2	
	10	31		12	12	6	15	33	
T(W)-T(A)	2	3	3	3	4	4	4	4	3
	0.4	0.8	1.1	0.8	0.9	0.7	0.4	1.3	
	1.1	4.2	4.0	2.0	3.3	3.0	3.0	5.0	
	0.7	2.5	0.2	2.0	1.3	1.5	2.0	1.0	
	10	31		12	12	6	15	33	
E(W)-E(A)	2	3	2	3	3	3	4	4	3
	7.2	6.5	4.5	5.0	7.2	6.0	6.1	5.8	
	10.3	11.7	6.5	8.1	9.6	8.8	8.7	8.5	
	3.5	2.0	0.6	0.9	5.5	3.6	2.5	2.5	
	1.8	2.1		1.8	1.1	1.7	1.8	1.5	
	10	31		9	12	6	15	33	
EA	2	3	3	3	2	4	4	4	3
	27.7	26.2	30.7	28.5	27.3	27.0	27.5	28.0	
	32.1	31.5	35.0	32.5	29.2	29.7	31.0	32.4	
	24.5	24.5	28.0	24.2	25.5	24.7	24.3	25.2	
	2.2	1.5		2.0	1.2	1.6	1.5	1.6	
	10	31		9	12	6	15	33	
C	2	3	2	3	3	4	4	4	3
	0.6	0.7	0.8	0.7	0.7	0.6	0.8	0.9	
	1.0	1.0	1.0	1.0	1.0	0.9	1.0	1.0	
	0.3	0.3	0.3	0.4	0.3	0.4	0.3	0.3	
	10	30		15	12	6	15	34	
P	2	3	2	3	3	4	2	3	3
	10.6	10.5	11.3	10.7	11.8	12.6	11.5	11.5	
	12.7	14.0	12.6	15.0	14.0	14.2	15.0	15.0	
	8.6	8.0	9.6	8.0	9.0	11.0	9.0	8.0	
	1.3	1.5	1.0	1.8	2.0	1.1	1.7	2.0	
	10	31		15	12	6	15	34	
W	1	2	2	3	2	2	4	4	4
	5.8	4.7	5.5	6.2	7.0	3.0	6.0	5.5	
	8.0	8.1	7.0	10.7	10.2	9.2	10.2	10.2	
	2.7	0.3	3.0	2.0	3.5	3.5	3.0	2.6	
		2.3	1.7	2.7	2.2	2.1	2.8		
		31		11	12	6	15	34	
W(X)	3	3	2	3	3	5	4	4	3
	4.5	2.8	1.7	4.5	4.2	0.9	1.2	1.0	
	1.7	0.9	1.7	1.7	0.7		2.0	0.0	
	7.1	7.7	6.6	8.0	8.5	7.0	4.1	5.3	
	2.1	1.8	1.5	3.5	2.7	2.0	2.0	3.2	
W(Y)	3.5	1.8	2.0	1.5	2.0	4.2	5.3	4.2	
	5.1	7.5	4.8	6.8	9.0	2.2	5.3	9.5	
	1.7	4.0	6.2	3.6	2.3	1.5	0.0	0.9	
			3.0				2.8	2.7	

JULY 1964

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	2	3	3	3	4	2	2	3	3
	26.3	26.7	26.0	26.7	27.0	25.3	26.5	26.5	
	27.0	29.0	29.0	29.0	29.5	26.8	28.0	31.0	
	26.0	22.0	24.0	25.0	26.0	23.0	24.5	24.0	
		1.3	1.3	1.0	1.2	1.0	0.9	1.5	
		22	11	22	7	12	19	27	
T(W)-T(A)	2	3	3	3	4	2	2	3	3
	3.3	1.3	1.6	1.0	0.8	1.6	1.5	1.6	
	4.0	5.5	3.0	4.0	2.7	4.7	3.1	6.0	
	3.0	1.1	0.5	1.0	0.7	0.2	0.0	3.2	
		1.3	1.3	1.0	1.0	1.2	1.0	2.0	
		22	11	22	7	11	19	27	
E(W)-E(A)	2	3	3	3	4	2	3	3	3
	11.1	6.7	6.5	7.5	8.0	6.7	8.5	8.0	
	12.5	11.8	12.2	11.7	13.5	11.8	12.1	13.8	
	9.5	0.5	3.5	5.1	4.6	2.0	4.7	0.6	
		3.0	2.7	2.0	3.2	3.2	1.6	3.0	
		22	11	22	7	11	19	27	
EA	2	3	3	3	4	2	3	3	3
	28.1	29.0	28.5	27.6	27.1	27.5	27.0	28.0	
	30.2	35.3	30.0	30.2	28.7	30.5	29.7	35.0	
	25.8	25.2	27.5	25.2	23.6	24.0	24.5	23.6	
		2.1	0.7	1.1	1.0	2.1	1.3	2.5	
		22	11	22	7	11	19	27	
C	2	3	3	3	4	2	3	3	3
	0.5	0.7	0.9	0.8	0.6	0.8	0.6	0.6	
	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
	0.3	0.3	0.8	0.3	0.1	0.3	0.3	0.3	
		22	11	22	7	12	20	27	
P	2	3	3	3	3	2	3	3	3
	8.8	9.6	11.2	11.1	12.2	11.3	12.0	12.1	
	9.6	15.5	13.0	13.0	15.0	13.7	14.7	14.0	
	8.0	7.5	8.5	8.5	9.0	8.1	7.5	10.1	
	1.7	1.5	1.0	1.0	2.0	1.6	1.7	1.0	
		22	11	19	7	12	17	22	
W	2	3	3	3	3	2	3	3	3
	5.2	8.1	4.5	5.3	5.5	5.1	4.5	3.3	
	6.1	13.8	7.6	10.2	8.1	7.6	8.1	8.1	
	4.5	3.0	1.5	2.0	2.1	1.5	0.0	0.1	
		3.1	1.6	2.1	2.1	2.1	1.8	2.0	
		22	11	22	7	9	18	27	
W(X)	3	3	3	3	3	2	3	3	
	4.5	7.1	1.3	3.5	3.2	2.1	0.1	0.2	
	3.0	1.7	0.5	1.2	1.2	4.3	5.0	6.7	
	5.7	13.8	7.1	10.1	6.3	5.0	4.1	3.8	
		3.1	2.5	2.5	2.5	2.8	2.2	2.2	
W(Y)	0.2	0.3	2.1	2.0	3.6	2.7	3.1	1.1	
	3.5	10.5	5.2	7.5	6.0	7.1	8.0	7.6	
	2.1	6.6	3.2	3.1	2.0	3.2	3.0	3.8	
		3.8						2.8	

OCTOBER 1964

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	3 26.6 28.0 25.0 0.9 8	3 26.5 29.5 23.7 1.0 36	3 26.0 28.2 21.7 1.0 14	3 26.0 27.7 21.7 1.5 14	3 27.0 29.2 25.3 1.0 32	4 27.0 31.0 25.0 1.6 7	3 26.0 27.0 23.7 1.0 15	3 25.8 27.5 22.6 1.1 16	3
T(w)−T(A)	2 1.5 3.0 0.1 1.0 7	3 1.2 4.3 1.3 ... 36	3 0.9 3.3 1.6 1.2 14	3 0.9 3.3 1.6 1.2 14	3 0.4 2.1 1.0 0.8 32	4 0.2- 2.0 3.2- 1.7 7	2 1.2 3.8 0.0 1.0 15	3 1.2 4.3 1.0- 1.5 16	3
E(w)−E(A)	3 7.7 11.2 3.5 2.6 7	3 6.0 11.1 0.5 2.2 36	3 4.8 8.0 1.8- 2.1 14	3 6.1 10.3 1.2 2.2 32	4 6.5 11.5 4.0 1.8 16	4 6.5 11.3 0.6 3.5 7	3 8.5 12.5 4.2 2.7 15	3 8.8 14.0 5.6 3.0 16	3
EA	3 28.0 29.8 26.3 1.2 7	3 29.0 33.2 25.7 1.5 36	3 28.5 31.6 25.3 1.3 14	3 28.5 32.6 24.8 2.2 32	4 27.8 29.5 22.0 1.7 16	4 26.6 29.0 23.5 1.8 7	3 25.7 28.2 23.0 1.5 15	3 25.1 28.0 21.7 1.8 16	3
C	3 0.9 1.0 0.8 0.1 8	3 0.8 1.0 0.2 0.2 36	3 0.9 1.0 0.3 0.2 14	3 0.5 1.0 0.2 0.2 33	4 0.6 1.0 0.3 15	4 0.5 0.8 0.3 7	3 0.7 1.0 0.3 15	3 0.5 1.0 0.3 17	3
P	3 12.7 15.5 9.0 1.8 8	3 10.5 14.0 7.5 1.7 36	3 11.2 9.3 1.2 14	3 11.2 15.0 7.5 1.5 33	4 12.3 15.0 7.5 2.1 16	4 12.8 15.0 11.0 1.3 7	3 12.1 15.5 8.0 2.0 15	3 12.5 17.1 8.5 2.3 17	3
W	3 3.7 7.6 0.0 8	3 5.2 12.8 0.0 2.7 36	3 5.0 9.7 0.0 3.5 13	3 5.5 8.8 0.0 2.5 33	4 6.1 10.2 1.5 2.0 16	4 3.5 6.1 1.0 7	3 5.0 8.1 1.5 1.6 14	3 5.1 8.1 0.0 2.1 17	3
W(X)	2.0- 1.5 7.6 0.6 4.5 2.2- 2.3	4.5- 0.0 9.8 2.5 1.0 11.0 2.8- 2.5	4.0- 0.3 9.5 3.5 0.1- 4.3- 3.1	4.0- 2.1 8.5 0.7 0.1- 8.0 5.5- 3.3	5.3- 1.2- 10.0 2.1 0.1- 7.6 3.0- 3.0	2.5- 0.9 6.0 1.5 5.7 2.0	2.5- 1.5 7.6 2.5 2.1 6.0 5.2- 3.1	3.2- 0.0 6.2- 1.8 0.8 5.0 7.2- 4.0	

DECEMBER 1964

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	1	3	3	3	3	3	3	3	3
	28.0	26.6	25.6	25.6	25.6	25.5	25.5	25.3	24.6
	31.0	30.0	28.0	27.0	27.0	27.6	28.0	28.0	26.7
	25.5	23.7	22.6	24.2	24.2	23.1	23.1	22.6	22.0
	1.5	1.3	1.0	1.0	1.0	1.0	1.2	1.3	1.3
	10	18	12	12	12	17	12	22	22
T(W)-T(A)	1	3	2	3	3	3	3	3	3
	0.6-	0.0	1.2	0.8	0.8	0.6	1.0	1.2	1.2
	2.1	3.8	5.0	3.3	3.3	2.7	3.8	4.3	4.5
	5.0-	3.0-	1.0-	1.0-	1.0-	2.1-	2.0-	2.0-	0.6-
	2.0	1.6	1.6	1.3	1.3	1.2	1.5	1.5	1.5
	10	18	12	12	12	17	12	22	22
E(W)-E(A)	1	3	3	3	3	3	3	3	3
	6.0	5.6	8.0	3.8	3.8	3.3	4.6	5.5	5.2
	9.3	8.3	8.0	8.7	8.7	8.3	8.3	8.8	8.7
	1.3	0.3	0.1-	1.2	1.2	0.9	1.8	1.5	2.7
	2.2	1.7	2.1	2.0	2.0	2.0	2.1	1.7	1.5
	10	18	12	12	12	17	12	21	20
E A	1	3	3	3	3	3	3	3	3
	28.3	28.5	28.8	28.7	28.7	28.3	28.0	27.5	26.3
	30.2	31.0	33.5	30.6	30.6	29.7	29.6	31.0	28.7
	25.5	25.2	26.7	26.1	26.1	25.2	25.5	24.5	24.2
	1.3	1.5	1.5	1.3	1.3	1.3	1.3	1.5	1.1
	10	18	12	12	12	17	12	21	20
C	1	2	2	3	3	3	3	3	3
	0.4	0.6	0.7	0.8	0.8	0.8	0.8	0.7	0.7
	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.1
	0.1	1.0	0.1	0.3	0.3	0.3	0.5	0.3	0.1
	0.3	0.4	0.3	0.2	0.2	0.2	0.1	0.3	0.3
	10	18	12	12	12	16	12	22	22
P	1	2	2	3	3	3	3	3	3
	10.3	9.5	10.1	9.8	9.8	10.2	10.2	10.3	10.7
	14.5	11.5	13.5	12.5	12.5	13.5	13.0	12.7	14.0
	7.0	7.6	7.6	7.0	7.0	7.0	7.6	7.6	8.0
	2.5	1.0	1.8	1.5	1.5	1.7	1.6	1.3	1.5
	10	18	12	12	12	18	12	22	22
R	1	2	2	3	3	3	3	3	3
	7.5	8.2	6.7	7.5	7.5	7.0	6.3	9.0	6.6
	8.7	11.2	10.7	9.2	9.2	11.1	10.7	13.8	11.2
	5.0	5.0	3.0	4.5	4.5	2.5	4.0	4.0	2.5
	1.3	1.6	2.1	1.5	1.5	2.2	2.3	2.6	2.2
	9	18	12	12	12	18	11	22	22
W(X)		7.6-	6.0-	6.8-	6.8-	5.6-	3.6-	6.3-	4.0-
	6.8-	4.8-	2.6-	4.0-	4.0-	0.9-	3.0-	4.0-	0.1-
	3.2-	10.5-	10.7-	9.2-	9.2-	11.1-	10.0-	13.6-	8.5-
	8.1-	1.5	2.2	1.0-	1.0-	3.0	3.5	4.7	2.7
W(Y)	2.0	2.6	3.7	1.5	1.5	1.5	5.2	8.1	0.9
	0.3-	1.6	6.0-	5.8	5.8	8.1	9.0	8.0	8.6
	3.8	7.5-	3.0	4.3-	4.3-	4.8-	7.0-	7.0-	7.3-
	3.0-	2.3	3.0	2.5	2.5	3.5	4.3	5.0	5.0

NOVEMBER 1964

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	2	3	4	3	4	4	4	3	3
	27.5	26.3	26.3	25.5	24.3	24.3	25.5	25.3	25.3
	28.0	27.6	27.0	24.0	25.5	26.0	27.0	27.0	27.0
	27.0	25.1	26.0	23.3	23.7	22.5	24.0	23.7	23.7
		0.7		1.0	0.5	1.0	0.9	1.0	1.0
	2	13		22	9	9	23	17	17
T(W)-T(A)	2	3	4	3	4	4	4	3	3
	1.0	1.0	0.5	1.6	1.8	1.2	1.2	1.2	1.7
	2.0	3.0	1.0	4.7	3.8	3.0	3.3	3.3	4.0
	0.0	0.8	0.0	1.5-	0.8	0.1-	0.5-	0.0	0.0
				1.2		1.0	1.0	1.0	1.1
				22		9	23	17	17
E(W)-E(A)	2	3	4	3	4	4	4	3	3
	9.1	7.0	5.3	6.0	4.5	4.3	5.0	6.0	6.0
	9.0	8.7	7.2	11.8	5.5	8.0	11.1	11.8	11.8
	8.5	2.5	2.8	1.8	3.1	1.6	2.7	2.0	2.0
		1.5		2.1	0.7	2.0	2.7	2.8	2.8
		13		22	9	9	23	17	17
E A	2	3	4	3	4	4	4	3	3
	27.3	26.7	27.7	27.5	27.6	26.6	28.0	27.6	27.6
	27.7	31.0	28.6	32.5	29.5	28.0	32.8	29.8	29.8
	27.0	26.3	26.3	25.8	25.8	25.1	22.7	23.6	23.6
		1.1		1.8	1.1	1.0	2.0	1.8	1.8
		13		22	9	9	23	17	17
C	2	3	4	3	4	4	4	3	3
	0.3	0.7	0.8	0.8	0.5	1.0	0.7	0.7	0.7
	0.3	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	0.3	0.3	0.8	0.1	0.6	0.9	0.2	0.1	0.1
		0.3		0.3	0.1		0.2	0.3	0.3
		12		21	9	9	22	17	17
P	2	3	4	3	4	4	4	3	3
	9.5	8.2	9.3	10.0	11.5	10.8	11.5	11.3	11.3
	9.0	9.5	9.6	13.5	13.5	12.0	15.5	14.0	14.0
	4.0	6.7	9.0	7.0	8.5	8.5	8.5	8.5	8.5
		1.0		1.5	0.8	1.1	1.7	1.5	1.5
		13		22	9	8	23	17	17
R	2	3	4	3	4	5	4	3	3
	4.2	9.0	4.2	6.3	7.2	7.0	7.5	8.0	8.0
	5.0	13.8	5.0	12.8	12.8	12.8	10.2	15.3	15.3
	3.5	4.0	2.5	3.0	2.8	0.0	4.0	3.5	3.5
		2.2		2.6	2.8	5.2	2.1	3.5	3.5
		13		20	9	6	21	17	17
W(X)	4.0-	6.1-	2.8-	5.5-	6.8-	6.5-	5.8-	6.8-	6.8-
	3.5-	3.8-	2.0-	0.5-	3.0-	0.0	1.3-	0.9-	0.9-
	4.8-	13.0-	3.2-	12.8-	12.0-	12.0-	9.5-	14.5-	14.5-
		2.0		2.8	2.7	4.8	2.8	4.0	4.0
W(Y)	1.5	0.2-	2.0-	0.3	3.3	2.0-	0.8-	0.7	0.7
	1.6	6.8	1.5	6.1	3.3	1.3	7.1	4.8	4.8
	1.1	7.8-	4.0-	5.0-	4.5-	6.5-	10.1-	5.3-	5.3-
		4.0		3.0	2.3	2.7	4.0	3.5	3.5

LATITUDE 5°-10° N.

JANUARY 1965

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)									
T(W)-T(A)									
E(W)-E(A)									
EA									
C									
P									
R									
W(X)									
W(Y)									

FEBRUARY 1965

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)									
T(W)-T(A)									
E(W)-E(A)									
EA									
C									
P									
R									
W(X)									
W(Y)									

90

APRIL 1965

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	1 4	3 2	3 2	3 3	4 4	1 2	2 2	3 2	3 2
	27.0	26.5	26.5	26.0	26.0	26.2	26.2	25.5	25.0
		29.0	26.5	26.5	29.0	26.5	26.5	27.6	27.0
		25.0	25.0	25.1	24.5	26.0	26.0	23.7	23.7
		0.8		0.4	1.3		1.0	1.0	1.0
		14		6	7		11	11	7
T(W)-T(A)	1 1	3 3	3 3	4 4	4 4	1 2	2 2	3 2	3 2
	0.3	0.7	0.3	0.4	0.2-	4.1	2.0	2.0	3.7
		2.0	0.7	1.5	1.0	4.5	6.5	6.5	6.6
		1.8-	0.1-	2.5-	2.5-	3.8	2.1-	2.3	0.0
		0.9	0.3	1.2	1.1				2.7
		14	6	12	7		11	11	7
E(W)-E(A)	1 1	3 3	3 3	4 4	4 3	1 2	2 2	3 2	3 2
	2.2	5.0	4.8	2.5	1.5	13.2	7.0	10.3	10.3
		7.5	6.2	6.0	5.1	13.5	15.0	14.5	14.5
		0.9	4.0	0.2-	3.3-	13.0	3.1	4.3	4.3
		2.0	0.7	1.6	2.8		3.3	4.0	4.0
		14	6	12	7		11		
EA	1 1	3 2	3 3	4 4	4 3	1 2	2 2	3 2	3 2
	31.8	29.0	27.2	28.2	30.0	27.7	28.0	27.3	27.3
		33.0	28.5	30.5	36.1	28.0	31.0	28.5	28.5
		26.0	26.2	25.6	25.5	27.5	25.3	25.2	25.2
		1.8	0.7	1.5	3.6		1.5	1.0	1.0
		14	6	12	7		11		7
C	1 1	3 2	3 3	4 4	4 3	1 2	2 2	3 2	3 2
	1.0	0.5	0.9	0.7	0.3	0.4	0.7	0.9	0.9
		1.0	1.0	1.0	0.8	0.4	1.0	1.0	1.0
		0.1	0.5	0.0	0.0	0.4	0.3	0.6	0.6
		0.3	0.2	0.3	0.3		0.2	0.2	0.2
		14	6	12	7		11		7
P	1 1	3 2	3 3	4 4	4 4	1 2	2 3	3 2	3 2
	4.0	10.5	13.0	12.8	11.3	11.7	12.0	11.8	11.8
		12.5	13.5	14.5	14.5	12.5	14.7	13.0	13.0
		7.5	12.2	10.2	8.0	11.0	10.5	10.6	10.6
		1.3	0.4	1.1	2.1		1.5	0.8	0.8
		14	6	12	7		10		7
W	1 1	3 2	3 3	4 4	4 4	1 2	2 3	3 2	3 2
	7.1	9.0	6.8	6.8	9.0	3.2	7.7	7.0	7.0
		12.8	9.2	11.2	11.0	4.0	11.2	8.1	8.1
		6.1	2.5	4.1	7.1	2.5	2.5	4.0	4.0
		1.8	2.1	2.1	1.5		3.2	1.2	1.2
		14	6	12	7		10		7
W(X)	1	3 2	3 3	4 4	4 3	1 2	2 3	3 2	3 2
	5.5-	8.0-	6.5-	6.1-	7.7-	0.5-	5.0-	0.5	0.5
		5.7-	2.0-	3.0-	5.5-	0.5-	2.8	6.2	6.2
		12.0-	8.6-	9.0-	9.5-	0.7-	8.5-	7.6-	7.6-
		1.6	2.1	1.7	1.3		3.5	5.0	5.0
W(Y)	1	3 2	3 3	4 4	4 3	1 2	2 3	3 2	3 2
	4.6-	3.1-	1.2-	1.2-	4.3-	3.2	5.2-	1.7-	1.7-
		4.2	1.5	3.5	1.3-	4.0	1.0-	6.0	6.0
		7.3-	3.1-	7.3-	7.1-	2.5	7.3-	7.1-	7.1-
		2.5	1.7	3.1	1.7		2.2	4.7	4.7

MARCH 1965

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	0	3 3	3 3	3 2	4 3	3	3 1	4 4	4 4
		26.0	26.0	26.2	25.5	25.5	25.2	25.5	25.5
		28.0	27.2	28.0	26.0	26.0	27.0	29.0	29.0
		24.2	26.2	24.3	24.6	24.6	23.7	23.7	23.7
		0.9		0.8	0.4		1.0	1.3	1.3
		19		34	7		8	12	12
T(W)-T(A)	0	3 2	2 2	3 3	4 3	3	3 1	4 4	4 4
		1.7	0.8-	1.0-	1.0-	0.6	0.9	0.6-	0.6-
		3.2	0.5	1.5	1.5	1.1	3.2	2.0	2.0
		1.0-	3.0-	2.7-	0.0-	0.3	0.5-	3.0-	3.0-
		1.0		1.0	0.8		1.1	1.2	1.2
		18		34	7		8	12	12
E(W)-E(A)	0	3 2	3	3 3	4 3	3	3 1	4 4	4 4
		9.6	4.3	1.6	1.6	4.3	4.0	3.2	3.2
		16.7	5.3	7.8	6.8	6.8	6.8	8.0	8.0
		3.6	2.6	2.0-	2.0-	2.0	2.3-	0.5	0.5
		3.6		2.3	2.3		2.6	2.0	2.0
		18		34	7		8	12	12
EA	0	3 3	3	3 3	4 3	3	3 1	4 4	4 4
		25.3	28.1	28.3	27.3	27.3	27.7	26.3	26.3
		30.5	28.6	32.1	29.5	29.5	33.0	29.3	29.3
		19.7	27.5	23.6	25.0	25.0	25.0	23.5	23.5
		2.8		1.6	1.8		2.2	1.6	1.6
		18		34	7		8	12	12
C	0	3 3	3	3 3	4 3	3	3 1	4 4	4 4
		0.3	0.2	0.5	0.6	0.6	0.7	0.6	0.6
		0.9	0.4	1.0	0.4	0.4	1.0	0.9	0.9
		0.2	0.1	0.1	0.5	0.5	0.3	0.3	0.3
		0.2		0.3	0.1		0.3	0.2	0.2
		19		35	7		8	12	12
P	0	3 3	2	3 3	4 3	3	3 1	4 4	4 4
		11.1	13.0	11.0	11.6	11.6	12.6	12.3	12.3
		14.0	14.0	15.5	12.2	12.2	14.5	16.2	16.2
		7.6	11.7	8.6	9.8	9.8	11.0	3.5	3.5
		1.6		1.6	0.8		1.2	3.2	3.2
		19		35	7		8	12	12
W	0	3 3	3	3 3	4 3	3	3 1	4 4	4 4
		7.5	10.5	8.3	10.2	10.2	10.1	10.3	10.3
		12.8	12.8	11.2	11.2	11.2	12.3	12.3	12.3
		2.0	8.1	5.5	9.5	9.5	7.1	7.6	7.6
		3.5		1.0	0.6		1.7	1.3	1.3
		19		35	7		8	12	12
W(X)	0	3	2	3 3	4 3	3	3 1	4 4	4 4
		5.5-	9.5-	7.1-	10.0-	10.0-	7.8-	7.5-	7.5-
		2.0-	7.0-	3.7-	9.1-	9.1-	3.5-	4.7-	4.7-
		10.0-	12.6-	11.2-	11.0-	11.0-	11.0-	1.5	1.5
		2.5		1.5	0.6		2.5	1.5	1.5
W(Y)		3	3	3 3	4 3	3	3 1	4 4	4 4
		4.3-	3.8-	3.6-	2.0-	2.0-	5.5-	6.8-	6.8-
		0.1-	2.2-	0.1-	1.8-	1.8-	1.6-	3.7-	3.7-
		11.1-	5.1-	7.0-	3.0-	3.0-	10.1-	9.5-	9.5-
		3.5		2.0	0.4		2.6	1.5	1.5

MAY 1965

JUNE 1965

MAY 1965 — LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	3 26.7 27.0 26.5	3 26.7 29.5 25.5 0.9	3 26.0 26.0 26.0	4 26.7 29.0 24.8 1.3	5 25.8 27.0 25.2	4 26.2 28.0 25.0	3 26.2 27.7 25.0 0.9	3 26.5 29.0 25.0 1.2	3 26.5 29.0 25.0 1.2
T(w)-T(A)	2 1.3 2.1 0.6	2 1.3 2.7- 1.1	2 1.0	4 1.2 3.0 0.1-	3 0.6 1.0 0.0	4 0.8 2.0 1.0-	3 0.9 3.0 0.5- 1.0	3 1.5 3.0 1.0- 9	3 1.5 3.0 1.0-
E(w)-E(A)	2 5.3 6.6 4.1	2 6.0 9.6 1.2 20	1 7.0	4 6.8 10.7 2.5 8	3 3.1 5.0 0.6	4 0.6- 1.8 4.2-	3 4.0 7.7 1.6 13	3 5.3 9.8 2.0 9	3 5.3 9.8 2.0
EA	2 30.5 29.8 30.5	2 29.6 32.5 26.0 1.8	5 28.0	4 28.8 30.1 28.0 0.7	5 29.3 32.8 27.1	4 34.1 37.7 31.6	3 29.7 31.6 27.7 1.2	3 30.1 32.1 27.7 1.5	3 30.1 32.1 27.7
C	2 0.9 0.9 0.9	2 0.7 1.0 0.3 20	1 0.7 0.9 0.5	4 0.6 0.9 0.3 8	3 0.9 1.0 0.8	4 1.0 1.0 1.0	3 0.6 1.0 0.3 13	3 0.8 1.0 0.4 9	3 0.8 1.0 0.4
P	3 11.8 13.0 10.7	3 10.1 12.7 7.5 1.5 21	3 10.7 12.1 9.5	4 10.7 13.0 9.0 1.0	5 13.7 14.1 13.5		3 10.5 12.1 8.6 1.0 10	4 11.1 13.5 10.0 7	4 11.1 13.5 10.0
M	2 7.3 7.6 7.1	2 7.2 12.3 2.5	2 7.1 9.2 5.0	4 7.5 10.0 5.0	3 9.5 10.7 8.1	4 8.1 8.1 8.1	3 8.5 11.2 7.1 1.0 13	3 9.1 12.8 6.6 2.0	3 9.1 12.8 6.6
W(X)	2 6.8- 6.6- 7.1-	21 5.8- 2.3- 10.5-	6.8- 5.0- 8.6-	4 7.1- 4.7- 10.0-	3 8.6- 6.2- 10.2-	4 7.6- 7.6- 7.6-	7.5- 6.2- 8.3- 0.5	8.0- 6.2- 9.7- 1.0	8.0- 6.2- 9.7-
W(Y)	2.5- 2.5- 2.6-	3.3- 1.2- 7.8- 3.0	2.0- 0.9- 3.1-	4 1.6- 0.1- 2.6- 1.0	2.1- 1.8 5.2-	2.8- 2.8- 2.8-	3.3- 0.1- 8.6- 2.0	4.0- 2.2- 8.3- 2.2	4.0- 2.2- 8.3-

JUNE 1965 — LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	4 27.2 28.6 26.7	3 26.7 28.0 25.5 11	2 26.0	3 26.6 29.0 25.1 10	3 26.6 28.7 22.0 12	3 26.1 26.7 22.0 1.6	3 26.5 27.7 0.8	3 26.2 26.5 26.0	4 26.8 30.5 24.2 1.3
T(w)-T(A)	4 0.7 2.5 0.8-	3 1.6 2.6 0.5 10	1 1.0	3 0.0 3.5 1.0- 10	3 1.5 0.0 0.0- 12	3 1.5 0.0 0.0- 12	3 0.6 1.1 0.2- 6	4 1.8 2.1 1.5	4 0.4 2.7 3.2- 1.5 17
E(w)-E(A)	4 4.5 5.5 2.3	3 6.8 9.5 1.5 10	1 4.5	3 5.5 9.2 2.0 10	3 6.7 9.0 2.2 12	3 6.7 9.0 2.2 12	3 5.3 7.5 1.3 6	3 6.1 7.1 4.0	4 5.3 9.8 2.5 17
EA	4 31.0 33.0 29.0	3 29.3 33.1 26.5 1.7	1 29.1	3 28.5 30.2 27.3 0.8	3 28.3 31.0 26.3 1.0	3 28.3 31.0 26.3 1.0	3 28.6 30.1 26.0 1.5	3 29.6 31.0 28.5	4 28.6 32.8 23.0 2.7 17
C	4 0.8 1.0 0.6	3 0.7 0.9 0.3 10	1 0.8	3 0.7 1.0 0.1 10	3 0.7 1.0 0.4 11	3 0.7 1.0 0.4 11	3 0.9 1.0 0.8	4 0.6 0.8 0.4	4 0.7 1.0 0.1 17
P	4 12.0 12.7 10.8	3 10.6 13.7 8.5 1.8 11	1 13.0	3 11.5 13.5 10.1 0.9 10	3 12.0 14.5 9.6 1.6 12	3 12.0 14.5 9.6 1.6 12	4 12.1 12.6 11.5 0.4	3 11.0 11.5 10.5	4 11.1 16.1 9.5 1.5 17
M	4 7.8 12.3 5.6	3 9.6 15.3 5.0 11	1 7.6	3 7.0 12.1 4.0 10	3 8.5 12.3 2.5 2.7 12	3 8.5 12.3 2.5 2.7 12	3 7.5 12.3 4.7 3.5	3 10.5 12.3 7.6	4 6.6 11.2 1.0 2.6 17
W(X)	4 6.5- 3.8- 12.3-	8.1- 3.8- 11.6- 2.2	7.5-	6.5- 2.5- 10.0- 2.1	7.5- 2.5- 11.5- 2.5	7.5- 2.5- 11.5- 2.5	7.0- 4.6- 11.8- 3.2	6.5- 2.6- 8.1-	3.8- 0.3- 3.5- 2.5 17
W(Y)	3.0- 0.1- 6.8-	4.6- 0.0- 10.0- 2.0	1.3-	3.5- 0.0- 9.2- 2.6	1.0- 6.2- 8.0- 3.8	1.0- 6.2- 8.0- 3.8	2.2- 0.9- 4.2- 1.0	4.5- 7.1- 9.5-	4.5- 1.0- 9.5- 3.0

LATITUDE 0° - 5° N.

JULY 1963

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)									
T(M)-T(A)									
E(M)-E(A)									
EA									
C									
P									
R									
n(X)									
n(Y)									

AUGUST 1963

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)									
T(M)-T(A)									
E(M)-E(A)									
EA									
C									
P									
R									
n(X)									
n(Y)									

SEPTEMBER 1963

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	0	3 / 27.5 / 28.5 / 26.0 / 0.7 / 12	2 / 28.2 / 31.0 / 27.0 / 1.0 / 37	2 / 28.2 / 31.0 / 27.0 / 1.0 / 37	3 / 26.6 / 27.6 / 24.0 / 0.9 / 14	0	2 / 26.6 / 28.0 / 26.0	3 / 26.0 / 27.5 / 25.5 / 0.8	5 / 26.0 / 27.0 / 25.0	2 / 26.0 / 27.0 / 25.0
T(W)-T(A)	0	3 / 1.5 / 2.8 / 0.6 / 1.2	2 / 0.4- / 2.8 / 4.0- / 1.5 / 37	3 / 1.7 / 4.0 / 0.5 / 1.1	0	2 / 0.9 / 2.0 / 0.0	3 / 1.8 / 3.7 / 0.7 / 1.0	5 / 1.8 / 2.5 / 4.0 / 1.0	2 / 2.5 / 4.0 / 1.0
E(W)-E(A)	0	3 / 7.2 / 11.5 / 7.5 / 1.0 / 12	2 / 8.2 / 12.3 / 4.3 / 1.5 / 37	2 / 7.7 / 13.1 / 4.3 / 2.1 / 14	0	2 / 7.5 / 8.5 / 6.7	3 / 8.7 / 11.5 / 6.8 / 1.5	5 / 8.7 / 9.7 / 7.7	2 / 8.7 / 9.7 / 7.7
EA	0	3 / 28.5 / 29.7 / 27.1 / 0.8 / 12	2 / 28.2 / 32.8 / 24.6 / 1.7 / 37	2 / 28.8 / 33.1 / 25.2 / 2.0 / 14	0	2 / 27.2 / 28.5 / 26.0 / 0.4	3 / 26.7 / 27.3 / 26.0 / 0.5	5 / 27.7 / 27.8 / 27.7	2 / 27.7 / 27.8 / 27.7
C	0	3 / 0.5 / 0.7 / 0.4 / 0.2 / 12	2 / 0.5 / 1.0 / 0.1 / 0.4 / 37	3 / 0.5 / 1.0 / 0.0 / 0.3 / 14	0	2 / 0.6 / 1.0 / 0.3	3 / 0.5 / 0.8 / 0.4 / 0.1	5 / 0.9 / 1.0 / 0.8	2 / 0.9 / 1.0 / 0.8
P	0	2 / 7.8 / 11.5 / 6.0 / 1.0 / 6	2 / 10.2 / 12.0 / 8.0 / 1.3 / 36	3 / 10.5 / 13.1 / 8.6 / 1.5 / 5	0	2 / 10.7 / 12.5 / 9.7	3 / 9.0 / 10.6 / 7.0 / 1.2	5 / 11.1 / 13.5 / 9.0	2 / 11.1 / 13.5 / 9.0
H	0	2 / 5.9 / 7.1 / 2.5 / 1.5 / 11	2 / 3.5 / 9.2 / 1.0 / 2.0 / 37	2 / 4.5 / 7.1 / 2.5 / 1.8 / 14	0	2 / 4.8 / 8.1 / 3.0	3 / 10.6 / 12.8 / 8.7 / 1.2	5 / 6.0 / 7.1 / 5.0	2 / 6.0 / 7.1 / 5.0
m(x)		2.7- / 2.1- / 6.7- / 3.2-	2.2- / 3.5 / 7.2- / 1.7	1.5- / 2.8 / 5.5- / 2.5		1.7- / 0.7- / 4.1-	4.7- / 1.5- / 7.0- / 1.7	1.1 / 2.5 / 0.1-	1.1 / 2.5 / 0.1-
m(y)		5.0 / 1.0- / 2.0	9.0 / 0.1- / 1.8	2.7 / 7.1 / 2.6- / 2.6		4.3 / 7.0 / 2.6	9.3 / 12.0 / 8.1 / 1.3	1.3 / 7.1 / 4.3-	1.3 / 7.1 / 4.3-

OCTOBER 1963

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	3 / 28.1 / 30.5 / 26.0 / 1.5	2 / 27.5 / 31.5 / 23.0 / 1.6 / 19	2 / 26.0 / 31.0 / 26.0 / 1.1 / 33	3 / 28.5 / 33.5 / 26.5 / 1.8	4	0 / 26.0	3 / 26.1 / 26.5 / 25.5	0	
T(W)-T(A)	3 / 2.3 / 4.5 / 0.5- / 2.0 / 5	3 / 3.1 / 5.6 / 1.6 / 17	2 / 0.9- / 1.2 / 3.5- / 1.0 / 30	3 / 0.0 / 3.0 / 3.5- / 1.7 / 9	4	0 / 1.6	3 / 2.1 / 3.2 / 1.0	0	
E(W)-E(A)	3 / 8.2 / 10.0 / 6.3 / 1.3 / 5	3 / 7.8 / 14.1 / 5.1 / 2.0 / 17	2 / 0.8 / 9.7 / 3.0 / 1.5 / 30	3 / 9.5 / 14.0 / 5.2 / 2.8 / 9	4	0 / 8.3	3 / 10.0 / 11.1 / 8.7	0	
EA	3 / 33.0 / 34.5 / 31.0 / 1.1 / 5	3 / 29.7 / 32.8 / 25.7 / 1.7 / 17	2 / 28.5 / 32.1 / 26.3 / 1.6 / 30	3 / 27.3 / 28.3 / 25.7 / 0.9	4	0 / 26.5	3 / 26.3 / 26.8 / 26.0	0	
C	3 / 0.7 / 1.0 / 0.4 / 0.3 / 5	3 / 0.7 / 1.0 / 0.1 / 0.3 / 17	2 / 0.6 / 1.0 / 0.3 / 32	3 / 0.4 / 0.8 / 0.1 / 0.2 / 9	4	0 / 0.3	3 / 0.7 / 1.0 / 0.5	0	
P	3 / 9.2 / 12.5 / 8.0 / 1.0 / 5	2 / 9.0 / 12.5 / 6.5 / 1.3 / 19	2 / 10.0 / 12.0 / 8.5 / 1.0 / 32	3 / 11.0 / 13.5 / 8.5 / 1.7 / 9	4	0 / 9.6	3 / 8.5 / 9.6 / 8.0	0	
H	3 / 6.0 / 7.6 / 4.5 / 1.0 / 5	3 / 5.2 / 7.6 / 1.5 / 1.8	2 / 4.2 / 9.7 / 1.0 / 2.1 / 33	3 / 6.5 / 10.2 / 4.0 / 2.2 / 9	4	0 / 10.2	3 / 12.0 / 14.3 / 10.2	0	
m(x)	4.3- / 2.2- / 7.5- / 1.7	3.6- / 1.5- / 7.6- / 2.2	3.2- / 0.0- / 9.7- / 2.3	6.1- / 2.6- / 9.6- / 2.2		9.0-	8.5- / 4.0- / 13.5-	0	
m(y)	1.5 / 6.2 / 2.3- / 3.5	1.1 / 7.1 / 4.3- / 3.2	1.0 / 6.1 / 1.5- / 1.7	2.1 / 3.3 / 1.3- / 2.0		5.0	7.2 / 10.5 / 4.7		

NOVEMBER 1963

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	0	2 28.0 31.5 26.0 1.1 14	2 28.0 30.0 25.0 1.0 31	2 27.6 31.7 25.6 .9	5 27.0	5 27.0	3 27.7 27.6 26.0 0.6 5	4 25.0 26.0 25.0	0
T(W)-T(A)	0	2 0.6 2.5 5.8- 2.1 14	2 0.5- 2.1 1.0 31	3 1.1 3.8 4.0- 2.1 9	1 3.3	5	3 0.4 1.6 0.4- 0.7 5	3 2.7 3.7 1.6	0
E(W)-E(A)	0	2 8.2 12.2 4.2- 3.8 14	2 7.8 10.6 4.3 1.6 31	2 8.6 11.0 5.0 1.7 9	5 10.8	5	3 6.0 7.5 4.5 1.0 5	3 8.5 8.7 8.3	0
EA	0	2 28.6 31.5 25.7 1.7 14	2 28.0 31.5 24.6 1.7 31	3 28.8 30.5 27.1 9	5 30.1	5	3 28.2 29.0 26.5 0.9 5	4 27.8 28.6 26.5	0
C	0	3 0.5 1.0 0.3 14	2 0.6 1.0 0.2 31	3 0.7 1.0 0.3 9	5 1.0	5	3 0.6 0.4 0.2 5	3 0.8 1.0 0.6	0
P	0	2 10.0 12.6 7.5 1.5 11	3 10.2 12.1 6.7 1.5 31	3 10.5 12.0 9.0 9	5 11.7	5	3 10.2 11.7 8.0 1.3 5	4 9.2 10.0 8.6	0
H	0	3 3.5 7.0 0.5 1.7 13	2 3.0 6.1 0.0 1.2 30	2 4.5 8.1 0.5 1.6	5 7.6	5	3 3.8 6.6 2.5 1.6 5	3 7.1 8.7 5.0	0
W(X)	0	2.1 1.5 2.5 1.0	2.2- 1.2 6.1- 1.8	3.5- 0.5- 6.3- 2.1	1 7.6-	3.5- 0.5- 4.2- 1.0	2.3- 1.6- 8.5-	0
W(Y)		4.8 1.7- 2.0	1.3 3.5 0.1- 1.1	2.2 5.1 0.0 1.6	0.1-	4.6 7.5 1.3	4.6 7.5 1.3	

DECEMBER 1963

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	0	3 28.5 29.0 27.0 11	2 27.5 29.3 24.0 1.2 26	4 26.6 28.0 24.0 1.0	C	2 26.2 27.0 25.0 0.7	3 26.0 28.0 25.0 0.9	5 25.3 26.7 24.0	
T(W)-T(A)	0	5 0.6 1.6 0.6 11	2 0.5- 2.7 1.2 26	3 1.5 4.1 1.0 10		2 2.7 3.4 1.0 7	3 2.1 3.7 0.9	5 3.1 5.0 1.2	
E(W)-E(A)	0	3 8.7 11.2 6.1 1.5 11	2 6.0 8.1 1.7 26	3 7.3 9.0 6.0 1.0	0	2 8.3 10.8 4.0 2.1	3 7.3 11.2 2.0	5 9.0 10.2 7.8	
EA	0	3 28.3 31.5 26.3 1.5 11	2 29.0 32.3 1.8 26	3 28.7 30.1 27.0 0.9	0	2 29.5 34.7 26.8 2.2	3 28.8 31.6 26.0	5 27.5 27.8 27.3	
C	0	3 0.6 1.0 0.2 11	2 0.0 0.3 0.2 26	3 0.7 1.0 0.3	0	2 0.0 1.0 0.3	3 0.7 1.0 0.4	5 0.8 1.0 0.6	
P	0	3 7.6 9.0 0.5 11	3 8.0 14.1 4.5 1.8 26	3 7.8 10.5 6.2 1.1	0	2 9.1 18.5 5.6	3 9.3 12.5 5.0	5 13.0 14.0 12.0	
H	0	3 5.1 8.7 2.0 1.7 11	2 4.0 9.2 2.1 26	3 7.8 10.7 2.7 1.0	0	2 4.1 12.3 5.0 2.1	3 8.7 12.3 2.1	5 3.2 4.0 2.5	
W(X)		4.0- 2.0- 7.5- 1.7	3.8- 0.0 7.0- 2.2	3.8- 2.3- 10.0- 2.7	0	5.2- 1.7- 9.5- 2.0	6.0- 4.0- 10.7- 2.0	3.0- 2.3- 3.8-	
W(Y)		2.8 5.8 4.3- 2.2	1.0 5.8 4.0- 2.2	0.4 7.7 6.0- 4.0		4.3 9.5 9.0- 5.8	2.3 7.1 4.0- 5.0	1.0 1.3 0.9	

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LATITUDE 0° – 5° N.

FEBRUARY 1964

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	3 / 28.5 / 31.0 / 27.0	3 / 26.5 / 28.7 / 24.5 / 1.0 / 15	4 / 26.5 / 30.0 / 23.0 / 1.0 / 40	2 / 26.8 / 29.0 / 24.0 / 1.0 / 18	4 / 26.3 / 28.0 / 25.5 / 0.7 / 14	5 / 26.5 / 28.0 / 25.5 / 0.7	0	3 / 24.6 / 26.5 / 22.0 / 1.5 / 5	3 / 26.6 / 27.6 / 25.6 / 0.7	3 / 27.6 / 25.6 / 0.7
T(W)-T(A)	3 / 0.4- / 0.8 / 2.7-	3 / 1.3 / 3.6 / 1.0 / 15	4 / 0.8 / 3.6 / 0.6- / 1.2 / 40	2 / 0.2- / 3.6 / 2.0- / 1.2 / 40	4 / 0.8 / 4.1 / 2.0- / 1.5 / 18	5 / 1.0 / 5.0 / 1.3- / 1.8 / 14		3 / 2.5 / 5.5 / 0.5- / 1.8 / 5	3 / 0.7 / 2.0 / 1.0- / 8
E(W)-E(A)	3 / 3.0 / 8.1 / 6.3-	3 / 6.6 / 11.0 / 3.5 / 2.1 / 15	4 / 6.0 / 12.2 / 1.1 / 2.3 / 40	2 / 6.0 / 12.2 / 1.1 / 2.3 / 40	4 / 5.1 / 12.3 / 0.2 / 3.3 / 18	5 / 6.7 / 13.0 / 3.3 / 3.5 / 14		3 / 7.0 / 9.5 / 3.1 / 2.2 / 5	3 / 6.3 / 8.6 / 4.0 / 1.5 / 8
EA	3 / 32.6 / 42.3 / 27.5	3 / 32.5 / 32.3 / 21.7 / 3.0 / 15	2 / 32.8 / 22.1 / 2.1 / 40	2 / 28.0 / 32.8 / 22.1 / 2.1 / 40	4 / 28.7 / 34.7 / 24.2 / 2.5 / 18	5 / 28.0 / 29.5 / 26.5 / 0.9 / 14		3 / 27.0 / 28.6 / 25.5 / 1.2 / 5	3 / 27.8 / 29.0 / 26.1 / 0.9 / 8
C	3 / 0.9 / 1.0 / 0.8	3 / 0.6 / 1.0 / 0.4 / 19	2 / 0.5 / 1.0 / 0.1 / 40	2 / 0.5 / 1.0 / 0.1 / 40	4 / 0.5 / 1.0 / 0.1 / 19	5 / 0.4 / 1.0 / 0.3 / 14		3 / 0.7 / 1.0 / 0.1 / 5	3 / 0.8 / 1.0 / 0.3 / 9
P	3 / 7.5 / 8.2 / 6.1	3 / 7.3 / 10.1 / 5.2 / 1.2 / 19	2 / 8.8 / 12.1 / 6.0 / 1.7 / 38	2 / 8.8 / 12.1 / 6.0 / 1.7 / 38	4 / 10.2 / 11.7 / 7.0 / 1.2 / 19	5 / 9.2 / 11.1 / 7.5 / 1.0 / 14		3 / 7.2 / 9.0 / 4.5 / 1.5 / 5	4 / 8.2 / 12.5 / 5.1 / 2.3 / 6
E	3 / 7.6 / 10.2 / 3.5	3 / 7.0 / 11.2 / 2.5 / 2.7 / 19	2 / 4.2 / 10.7 / 1.0 / 2.0 / 40	2 / 4.2 / 10.7 / 1.0 / 2.0 / 40	4 / 6.0 / 10.7 / 2.0 / 2.0 / 19	5 / 5.6 / 8.1 / 2.5 / 1.5 / 14		3 / 8.2 / 10.2 / 4.1 / 2.0 / 5	3 / 4.8 / 7.6 / 2.5 / 1.8 / 9
W(X)	6.0- / 3.5- / 8.0-	6.2- / 1.6- / 10.7-	3.7- / 0.7- / 10.7-	3.7- / 0.7- / 10.7-	5.0- / 1.5- / 8.1-	5.0- / 1.2- / 8.1-		5.7- / 1.5- / 10.2-	3.1- / 0.0- / 5.0-
W(Y)	4.1- / 0.0 / 7.8-	1.8- / 1.3- / 7.3- / 2.2	0.4 / 3.2- / 6.0- / 2.0	0.4 / 3.2- / 6.0- / 2.0	0.6- / 4.3 / 7.1- / 2.8	1.8 / 4.3- / 4.7- / 2.1		0.1- / 3.3 / 7.0 / 5.1	3.3 / 3.3 / 5.8 / 0.0 / 1.8

JANUARY 1964

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	3 / 27.2 / 29.0 / 25.0 / 1.0 / 5	3 / 27.5 / 30.0 / 26.5 / 0.8 / 19	2 / 27.5 / 29.0 / 26.0 / 0.8 / 31	3 / 26.0 / 27.0 / 26.0	4 / 26.7 / 27.6 / 26.0	2 / 26.5 / 28.1 / 25.5 / 0.8	3 / 26.2 / 27.0 / 25.5	3 / 25.7 / 27.0 / 23.5 / 1.1	4 / 25.7 / 27.0 / 23.5 / 1.1 / 5
T(W)-T(A)	3 / 1.0 / 3.0 / 1.0- / 5	3 / 1.0 / 2.0 / 0.0 / 19	2 / 0.5- / 1.6 / 2.3- / 31	3 / 1.0 / 2.1 / 0.0	4 / 1.5 / 3.0 / 0.5	2 / 0.5 / 2.1 / 0.7-	3 / 2.7 / 5.5 / 1.0	4 / 5
E(W)-E(A)	3 / 8.1 / 10.4 / 4.0 / 5	3 / 6.2 / 9.7 / 1.7 / 2.5 / 19	2 / 5.8 / 7.8 / 3.2 / 1.1 / 31	3 / 5.7 / 8.0 / 4.6	4 / 7.6 / 9.1 / 5.8	2 / 6.1 / 8.5 / 3.8 / 1.5	3 / 8.2 / 11.7 / 2.5 / 3.0	4 / 5
EA	3 / 28.1 / 31.0 / 21.3 / 3.5 / 5	3 / 31.0 / 35.3 / 27.1 / 2.1 / 19	2 / 28.8 / 32.1 / 27.0 / 1.5 / 31	3 / 29.5 / 30.5 / 28.0	4 / 27.5 / 29.5 / 26.0	2 / 27.5 / 29.5 / 25.1 / 1.3	3 / 28.5 / 31.0 / 25.8 / 1.6	4 / 5
C	2 / 0.7 / 1.0 / 0.4 / 6	3 / 0.7 / 1.0 / 0.3 / 22	2 / 0.6 / 1.0 / 0.2 / 31	3 / 0.9 / 1.0 / 0.8	4 / 0.9 / 1.0 / 0.8	2 / 0.3 / 1.0 / 0.3	3 / 0.6 / 1.0 / 0.1	4 / 5
P	2 / 7.2 / 8.6 / 0.9 / 6	3 / 7.0 / 10.6 / 5.5 / 1.3 / 22	2 / 8.2 / 12.0 / 5.7 / 1.5 / 31	3 / 8.5 / 9.5 / 6.0	4 / 9.5 / 11.2 / 8.6	2 / 10.0 / 12.0 / 8.0 / 1.0	3 / 6.2 / 11.0 / 6.5 / 1.5	4 / 5
E	2 / 7.0 / 8.6 / 5.0 / 1.8 / 6	3 / 10.7 / 3.5 / 2.5 / 22	2 / 3.8 / 0.5 / 1.5 / 31	3 / 6.1 / 6.6 / 5.0	4 / 7.5 / 8.1 / 5.6	2 / 7.5 / 11.2 / 4.5 / 2.1	3 / 5.3 / 6.6 / 3.0 / 1.1	4 / 5
W(X)	6.5- / 1.6- / 9.5-	6.5- / 2.2- / 10.7-	3.5- / 0.4- / 6.2-	5.8- / 5.0- / 6.2-	6.2- / 3.6- / 7.7-	6.7- / 3.3- / 11.0-	2.0- / 3.6- / 6.2-
W(Y)	3.0- / 1.0- / 5.1- / 1.5	2.7- / 1.6 / 6.0- / 2.0	0.7 / 4.2 / 1.3	0.3 / 2.1 / 2.1-	4.0 / 5.1 / 2.6	1.3 / 5.7 / 2.6	2.7 / 5.5 / 2.2- / 3.0

APRIL 1964

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	27.3 28.0 26.0 0.7	27.5 31.0 25.0 1.3	27.7 30.0 24.0 1.0	28.0 30.5 25.0 1.6	26.0 28.3 25.0 1.0	26.0 29.0 23.7 1.3	26.8 29.0 24.2 1.7	27.3 30.0 26.0 1.5	
T(w)-T(A)	0.5 2.0 0.0	0.6 1.7 3.2-	0.9 4.0 2.6- 1.2	0.3 2.5 2.7- 1.8	1.1 2.1 0.7- 1.0	1.1 3.0 0.2- 0.9	3.1 4.0 1.6	1.6 3.0 1.7-	
E(w)-E(A)	2.8 4.5 1.8	4.5 10.0 0.4	6.1 9.5 2.2 1.6	5.2 6.5 3.0 1.2	6.7 10.5 3.0 2.5	5.2 8.3 1.5 2.0	7.8 8.5 6.7	6.1 8.1 0.6	
EA	31.3 32.5 30.2	30.8 34.5 27.2	28.0 32.1 24.6 1.7	30.0 32.8 28.6 1.5	27.1 29.0 24.3 1.6	27.2 31.0 25.0 1.5	28.1 29.0 26.5	29.6 31.0 28.5	
C	0.6 1.0 0.3	0.6 1.0 0.1	0.6 1.0 0.1 0.2	0.6 1.0 0.1 0.3	0.6 1.0 0.1 0.3	0.6 1.0 0.0 0.4	0.8 1.0 0.1	0.9 1.0 0.6	
P	12.0 16.0 8.0 3.3	10.2 17.0 6.6	9.7 17.0 6.2 2.5	13.2 18.0 9.1 3.1	11.8 18.0 2.5	10.3 16.0 4.5 3.3	11.7 17.0 5.0 4.5	12.1 16.0 8.5 2.5	
W	5.2 10.2 2.5 2.7	8.6 12.8 2.1	4.1 9.7 1.0 1.7	6.2 7.1 4.5 1.0	8.5 12.8 3.0 3.1	6.2 12.8 2.5 2.8	6.1 12.3 2.5 3.5	5.3 7.6 2.5 1.5	
W(x)	5.0- 2.3- 9.5- 2.5-	5.0- 5.0- 12.6-	3.6- 1.0- 9.1-	5.6- 3.2- 7.1-	7.3- 3.0- 11.0-	5.1- 0.0 11.0-	4.6- 0.0 11.5-	4.3- 0.0 7.2-	
W(y)	0.9 3.5 1.6	0.9 5.0- 1.8	0.9 4.0- 1.7	2.2 3.8 1.1	2.2 2.3 4.1	0.7 5.8- 3.6	2.8 9.2 3.0	1.3 4.5 2.0	

MARCH 1964

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	27.0 30.0 25.5 1.2	27.0 30.0 25.5 1.2	26.6 29.0 24.0 1.0	26.0 28.0 23.6 1.0	25.0 27.0 24.5 0.7	25.8 26.5 23.7 0.8	25.5 26.5 23.7 0.8	25.7 27.6 24.2 1.0	0
T(w)-T(A)	0.0 2.1 2.0- 1.3	0.4 2.0 1.2	0.5- 2.0 3.0-	0.9 3.2 0.8-	0.4 1.5 0.9-	1.5 3.8 0.5	1.5 2.7 0.0 0.9		0
E(w)-E(A)	4.5 6.1 3.1 1.0	3.5 7.3 2.1	4.3 7.3 0.9 1.5	3.3 5.8 0.0 1.6	3.2 5.3 1.6 1.0	5.3 7.6 4.0 1.3	6.2 8.0 5.0 1.0		0
EA	29.7 31.0 27.6 1.1	30.5 33.5 27.5 1.6	28.5 32.1 25.2 1.5	30.1 35.0 27.5 2.0	28.8 30.2 27.0 1.0	28.3 29.6 26.7 0.9	28.0 29.7 25.6 1.5		0
C	0.5 0.9 0.3	0.4 0.9 0.2	0.6 1.0 0.3	0.7 1.0 0.3	0.7 1.0 0.1 0.3	0.5 1.0 0.4	0.6 1.0 0.3		0
P	7.3 11.0 3.5 2.2	8.7 10.6 4.5 1.6	9.5 12.1 1.2	8.2 10.0 6.0 1.0	9.0 11.7 7.1 1.1	9.5 12.0 7.6 1.3	8.6 10.5 7.0 1.1		0
W	6.7 7.0 5.0	6.7 10.2 4.0	4.1 8.7 0.5 2.3	6.0 12.8 1.5 2.2	7.0 10.0 4.5 1.5	5.5 8.1 3.5 1.5	9.3 11.2 8.1 1.0		0
W(x)	6.4- 5.5- 7.5-	2.5- 1.7- 9.2-	3.5- 0.4- 6.7-	5.1- 0.8- 12.0-	6.0- 2.5- 10.0-	5.0- 2.5- 7.7-	7.1- 2.8- 9.2-		0
W(y)	1.4 4.7 1.5	1.7 6.1- 3.5	0.6 7.0- 2.0	2.2 6.1 3.0	2.0 1.1 5.5	0.5 4.3 4.1-	0.4 8.5 6.6- 5.7		0

LATITUDE 0° – 5° N.

MAY 1964

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130

JUNE 1964

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130

Row labels (both tables): T(A), T(w)–T(A), E(w)–E(A), EA, C, P, R, W(X), W(Y)

AUGUST 1964

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	2 / 26.7 / 29.0 / 25.0	1 / 26.5 / 29.0 / 25.0	5 / 26.6 / 29.0 / 25.0	2 / 27.0 / 28.0 / 26.0	5 / 24.5	3 / 26.0 / 29.7 / 25.0	2 / 25.1 / 27.0 / 23.6	5 / 23.5 / 23.7 / 23.1	
T(W)-T(A)	2 / 1.0 / 15	1 / 0.5 / 46	2 / 1.2 / 33	2 / 0.8	1 / 1.5	3 / .6	2 / .8	1 / 2	
	0.6 / 4.0 / 1.1	1.5 / 4.0 / 1.1	1.2 / 2.8 / 1.0	0.0 / 1.3		0.4 / 3.2 / 1.6	0.4 / 2.7 / 1.5	0.5 / 1.0 / 0.0	
E(W)-E(A)	2 / 7.3 / 12.6 / 4.3	1 / 9.0 / 14.8 / 5.0	2 / 6.0 / 11.6 / 2.3	2 / 7.2 / 9.0 / 5.6	1 / 5.6	3 / 7.1 / 10.6 / 3.2	2 / 4.0 / 8.0 / 2.2	1 / 3.0 / 3.7 / 2.2	
	15 / 2.4	43 / 1.7	31 / 1.7						
EA	2 / 27.0 / 29.0 / 23.8	1 / 27.0 / 31.5 / 23.5	2 / 25.5 / 31.0 / 21.5	3 / 26.2 / 27.0 / 25.5	1 / 25.8	3 / 25.0 / 22.0 / 2.2	2 / 27.0 / 29.5 / 24.5	1 / 25.0 / 25.3 / 24.6	
	15 / 1.5	43 / 1.5	31 / 1.7				1.7		
C	2 / 0.5 / 0.0 / 0.3	1 / 0.5 / 1.0 / 0.2	2 / 0.4 / 1.0 / 0.3	2 / 0.7 / 0.9 / 0.5	1 / 0.3	3 / 0.5 / 0.9 / 0.2	2 / 0.5 / 1.0 / 0.3	1 / 0.0 / 0.0 / 0.0	
	15	46	39						
P	2 / 11.2 / 14.5 / 9.2	1 / 10.0 / 12.0 / 6.3	2 / 10.6 / 13.5 / 8.5	3 / 8.6 / 9.5 / 7.7	1 / 12.0	3 / 11.5 / 14.5 / 8.5	2 / 13.5 / 17.0 / 12.0	5 / 15.0 / 16.0 / 14.0	
	15 / 1.5	46 / 1.3	39 / 1.0			2.0	1.5		
H	2 / 6.5 / 10.2 / 2.2	1 / 6.7 / 11.7 / 2.0	2 / 5.7 / 12.8 / 2.0	2 / 8.1 / 10.2 / 6.1	1	3 / 9.3 / 12.3 / 1.5	2 / 8.5 / 10.2 / 1.6	2 / 8.5 / 9.2 / 7.6	
	15	46	39						
W(X)	6.0- / 2.1- / 10.2-	6.0- / 2.1- / 9.0-	5.1- / 2.0- / 12.0-	2.8- / 4.1- / 3.5-	0	6.8- / 1.3- / 8.6-	6.8- / 4.3- / 9.0-	7.3- / 6.6- / 8.0-	
W(Y)	1.6 / 0.6 / 2.0	1.3 / 9.0 / 3.0-	2.3 / 1.5 / 1.6	7.6 / 9.5 / 5.7		6.5 / 9.3 / 4.5	4.6 / 7.7 / 1.5	4.1 / 4.5 / 3.7	

JULY 1964

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	5 / 27.5 / 27.6 / 27.2	3 / 26.5 / 27.6 / 25.5	4 / 26.5 / 27.6 / 25.5	3 / 26.5 / 29.2 / 24.5	4 / 25.8 / 27.5 / 25.0	2 / 25.3 / 27.0 / 23.7	3 / 24.6 / 26.0 / 24.2	3 / 24.8 / 26.0 / 23.0	
T(W)-T(A)	2 / 0.2 / 0.3 / 0.0	2 / 0.7 / 2.1 / 1.0-	3 / 0.4- / 2.5- / 1.5	4 / 1.1 / 3.2 / 2.0-	4 / 0.5- / 1.1 / 2.5-	2 / 0.5- / 1.1 / 0.9	3 / 1.8 / 3.8 / 0.0	3 / 1.5 / 2.7 / 0.7	
	2	21	35	17	3	5	7	10	
E(W)-E(A)	3 / 8.3 / 9.3 / 7.3	2 / 6.3 / 9.6 / 1.7	4 / 7.0 / 9.1 / 5.5	3 / 8.5 / 14.1 / 4.8	4 / 4.0 / 5.0 / 2.2	2 / 1.0- / 4.2 / 3.5-	3 / 7.2 / 8.2 / 6.0	3 / 9.3 / 11.3 / 4.0	
	2 / 2.1	21 / 2.1	21 / 2.0	17 / 2.0	5 / 2.8	2	7 / 0.7	10 / 2.0	
EA	3 / 26.3 / 27.5 / 25.3	2 / 27.6 / 31.3 / 25.2	3 / 26.3 / 29.1 / 23.0	3 / 26.6 / 28.8 / 24.5	4 / 26.8 / 27.3 / 26.5	2 / 30.5 / 32.5 / 25.5	3 / 25.5 / 27.6 / 23.7	3 / 23.1 / 27.3 / 20.5	
	2 / 1.2	21 / 1.5	2 / 1.8	12 / 1.2	5	2	7 / 1.5	10 / 1.7	
C	2 / 0.9 / 1.0 / 0.8	2 / 0.5 / 1.0 / 0.3	2 / 0.5 / 1.0 / 0.3	3 / 0.5 / 0.1 / 0.3	4 / 0.4 / 0.5 / 0.3	2 / 0.3 / 0.8 / 0.3	4 / 0.6 / 0.8 / 0.2	3 / 0.4 / 0.9 / 0.3	
	2	20	35	17	3	3	6	10	
P	5 / 8.2 / 8.5 / 8.1	2 / 10.0 / 12.0 / 6.6	2 / 10.4 / 12.0 / 6.6	3 / 10.5 / 13.0 / 8.2	4 / 11.1 / 11.5 / 11.0	2 / 10.0 / 12.0 / 9.0	3 / 12.0 / 13.5 / 10.5	3 / 12.1 / 13.0 / 10.2	
	2	21	2 / 1.1	12 / 1.7	3	4	5 / 1.1	10 / 1.0	
H	5 / 6.6 / 6.6 / 6.6	2 / 7.0 / 10.7 / 4.0	4 / 7.0 / 0.6 / 1.1	3 / 7.1 / 10.2 / 2.2	3 / 4.1 / 4.3 / 4.0	4 / 3.5	3 / 5.0 / 10.2 / 2.2	3 / 4.8 / 8.1 / 3.0	
	2	21	21	17	3	0 / 1	5	1.3	
W(X)	3.3- / 3.3- / 3.3-	6.3- / 3.1- / 10.6-	3.0- / 0.0 / 1.8	4.1- / 1.3- / 7.8-	2.5- / 2.0- / 3.0-	1 / 2.2-	2.3- / 1.6 / 6.6-	2.5- / 0.5 / 3.2-	
W(Y)	5.7 / 5.7 / 5.7	8.1 / 2.3- / 2.0	2.0 / 4.7 / 0.1- / 1.3	4.8 / 10.0 / 4.7- / 3.5	3.1 / 3.5 / 3.0	2.6	1.8 / 7.7 / 4.3- / 3.6	1.1 / 4.0 / 7.6 / 2.6 / 1.2	

SEPTEMBER 1964

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	2 / 26.0 / 29.0 / 24.0 / 1.0 / 33	2 / 26.0 / 28.1 / 23.7 / 0.8 / 42	2 / 26.7 / 28.0 / 25.0 / 0.7 / 34	3 / 26.8 / 31.5 / 24.1 / 1.8 / 17	4 / 25.8 / 28.0 / 25.0 / 0.6 / 8	4 / 25.8 / 26.7 / 25.0 / 0.6 / 8	3 / 25.1 / 25.6 / 25.0	4 / 25.0 / 25.6 / 25.0 / 0.2	5 / 25.6 / 27.0 / 24.5
T(w)-T(A)	2 / 0.7 / 3.0 / 1.5- / 1.1 / 33	2 / 0.6 / 2.1 / 1.0- / 0.7 / 42	2 / 1.3- / 1.0 / 3.1- / 1.0 / 34	3 / 0.6- / 2.1 / 6.0- / 3.7 / 17	4 / 0.3 / 1.5 / 0.5- / 3.7 / 8	4 / 0.9 / 1.8 / 0.4- / 8	3 / 0.8 / 1.8 / 0.4- / 3	4 / 1.5 / 2.0 / 0.0 / 7	5 / 0.8 / 2.5 / 0.0 / 3
E(w)-E(A)	2 / 6.0 / 10.8 / 2.3 / 33	2 / 6.2 / 10.5 / 1.8 / 42	2 / 7.2 / 9.5 / 5.8 / 1.1 / 8	3 / 6.1 / 11.0 / 2.7 / 2.3 / 17	4 / 5.7 / 7.5 / 4.1 / 1.0 / 8	4 / 4.7 / 6.5 / 1.5 / 3	4 / 6.8 / 10.5 / 2.5 / 7	4 / 6.8 / 10.5 / 2.5 / 7	5 / 5.6 / 8.7 / 2.3 / 3
EA	2 / 26.8 / 31.3 / 24.0 / 1.5 / 33	2 / 26.5 / 32.2 / 24.5 / 1.3 / 42	2 / 25.5 / 27.1 / 24.3 / 1.0 / 33	3 / 26.0 / 28.5 / 23.6 / 1.3 / 16	4 / 26.1 / 28.7 / 24.0 / 1.2 / 8	4 / 26.0 / 27.3 / 26.1 / 4	4 / 25.8 / 28.3 / 23.0 / 1.5 / 6	5 / 27.0 / 28.2 / 24.8 / 3	5 / 27.0 / 28.2 / 24.8
G	2 / 0.0 / 1.0 / 0.1 / 0.3 / 33	2 / 0.4 / 1.0 / 0.3 / 42	2 / 0.5 / 1.0 / 0.3 / 8	3 / 0.4 / 0.9 / 0.1 / 0.2 / 17	4 / 0.4 / 0.9 / 0.1 / 0.2 / 8	4 / 0.7 / 1.0 / 0.3 / 3	4 / 0.7 / 1.0 / 0.3 / 7	4 / 0.7 / 0.8 / 0.8 / 3	5 / 0.1 / 0.8 / 0.8
P	2 / 9.5 / 11.7 / 7.2 / 1.0 / 33	2 / 9.2 / 11.5 / 7.0 / 1.0 / 43	2 / 9.8 / 12.5 / 6.2 / 1.2 / 33	3 / 10.6 / 12.7 / 8.6 / 1.0 / 16	4 / 10.5 / 14.5 / 9.0 / 1.5 / 8	4 / 10.0 / 12.0 / 8.0 / 4	4 / 9.8 / 12.0 / 8.0 / 1.5 / 6	5 / 13.5 / 15.2 / 11.6 / 3	5 / 13.5 / 15.2 / 11.6
K	1 / 4.7 / 9.7 / 1.0 / 2.1 / 32	2 / 4.3 / 7.6 / 1.0 / 1.5 / 43	2 / 5.0 / 10.2 / 1.0 / 1.3 / 33	3 / 7.1 / 12.8 / 5.0 / 2.2 / 17	4 / 6.3 / 9.2 / 1.0 / 2.5 / 8	5 / 3.5 / 4.5 / 2.5 / 4	4 / 8.6 / 11.2 / 5.0 / 2.7 / 6	5 / 8.6 / 11.2 / 4.5 / 3	5 / 8.6 / 11.2 / 4.5
W(X)	4.5- / 0.8- / 9.1- / 2.0	3.7- / 0.1- / 7.2- / 1.5	4.2- / 0.0 / 7.8- / 1.7	4.0- / 0.9- / 6.6- / 1.7	4.7- / 0.8- / 7.6- / 2.3	3.3- / 2.3- / 4.0- / 2.8	5.5- / 5.5- / 10.7- / 3.5	5.5- / 4.0- / 6.6-	5.5- / 4.0- / 6.6-
W(Y)	0.8 / 7.0 / 1.7- / 1.7	1.2 / 6.1 / 2.8- / 1.6	1.7 / 6.5 / 0.1- / 2.0	5.2 / 11.0 / 0.1- / 2.7	2.8 / 9.0 / 0.1- / 3.0	0.5 / 1.5 / 0.7-	5.5 / 8.5 / 0.1- / 2.5	6.5 / 9.7 / 2.2	6.5 / 9.7 / 2.2

OCTOBER 1964   **LATITUDE 0°–5° N.**

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	3 / 26.6 / 26.1 / 25.0 / 0.8 / 20	3 / 26.1 / 23.7 / 1.0 / 17	2 / 26.5 / 28.0 / 23.7 / 0.8 / 61	3 / 25.5 / 28.7 / 23.7 / 1.1 / 26	3 / 25.2 / 26.0 / 24.7	0 / 24.5 / 25.5 / 23.7	2 / 23.6 / 25.0 / 22.2	4 / 24.5 / 26.0 / 23.0 / 0.9	4 / 24.5 / 26.0 / 23.0 / 0.9
T(w)–T(A)	2 / 0.8 / 2.1 / 2.7- / 1.0 / 20	2 / 1.0 / 2.7 / 0.0 / 17	2 / 0.7- / 2.7 / 3.5- / 1.1 / 61	3 / 0.6 / 3.8 / 3.7- / 1.3 / 26	3 / 0.3 / 1.1 / 1.0-	3 / 0.3 / 1.1 / 1.0-	3 / 0.4 / 1.6 / 1.0-	2 / 2.1 / 4.3 / 0.5	3 / 1.8 / 4.0 / 0.0 / 1.1
E(w)–E(A)	3 / 7.6 / 11.3 / 2.2 / 2.5 / 20	3 / 7.0 / 11.6 / 3.3 / 2.0 / 17	3 / 6.8 / 10.1 / 3.0 / 2.0 / 36	3 / 6.0 / 11.5 / 0.7 / 3.5 / 26	3 / 4.7 / 7.2 / 3.2	2 / 5.2 / 6.3 / 4.1	2 / 7.5 / 10.5 / 6.0	4 / 8.5 / 11.0 / 5.5 / 1.6	4 / 8.5 / 11.0 / 5.5 / 1.6
EA	3 / 26.7 / 29.3 / 24.2 / 1.5 / 20	3 / 27.1 / 30.2 / 24.6 / 1.5 / 17	3 / 25.6 / 28.5 / 22.7 / 1.5 / 36	3 / 26.0 / 29.0 / 21.8 / 2.1 / 26	2 / 26.1 / 28.2 / 24.2	0 / 24.5 / 24.6 / 24.2	3 / 23.8 / 25.3 / 21.7	4 / 23.7 / 26.6 / 21.7 / 1.5	4 / 23.7 / 26.6 / 21.7 / 1.5
G	3 / 0.5 / 1.0 / 0.3 / 20	3 / 0.4 / 1.0 / 0.3 / 18	3 / 0.5 / 1.0 / 0.1 / 0.3 / 59	3 / 0.5 / 1.0 / 0.3 / 26	3 / 0.4 / 0.8 / 0.3	3 / 0.2 / 0.4 / 0.1	3 / 0.2 / 0.6 / 0.0	4 / 0.7 / 1.0 / 0.1 / 0.3 / 9	4 / 0.7 / 1.0 / 0.1 / 0.3 / 9
P	3 / 10.1 / 13.0 / 7.7 / 1.8 / 20	3 / 9.7 / 14.5 / 7.6 / 2.0 / 18	2 / 10.0 / 13.5 / 7.0 / 1.3 / 60	3 / 10.5 / 15.5 / 7.5 / 2.0 / 26	2 / 11.3 / 13.0 / 9.0	0 / 11.2 / 16.0 / 7.5	2 / 9.8 / 11.5 / 8.6	4 / 12.2 / 15.0 / 10.0 / 1.5 / 10	4 / 12.2 / 15.0 / 10.0 / 1.5 / 10
K	3 / 5.3 / 10.2 / 1.0 / 2.3 / 20	3 / 5.7 / 10.0 / 4.0 / 2.0 / 18	2 / 6.6 / 11.5 / 2.0 / 2.2 / 60	3 / 6.7 / 10.2 / 4.0 / 1.7 / 24	3 / 0.0	1 / 5.0 / 10.2 / 0.0	2 / 6.5 / 7.6 / 4.0	4 / 4.0 / 5.0 / 1.0 / 1.3 / 10	4 / 4.0 / 5.0 / 1.0 / 1.3 / 10
W(X)	4.3- / 1.0 / 8.8- / 0.5	5.0- / 0.0 / 8.8- / 1.6	5.6- / 1.5- / 10.1- / 2.1	2.8- / 0.1- / 6.0- / 1.8	0.0	5.0- / 0.0 / 10.2-	4.0- / 3.1- / 5.0-	3.1- / 0.2- / 5.0- / 1.5	3.1- / 0.2- / 5.0- / 1.5
W(Y)	5.5 / 4.6 / 5.1- / 3.0	4.6 / 1.7- / 1.7	3.0 / 6.5 / 0.1- / 1.7	5.2 / 10.2 / 4.7- / 3.0	0.0	0.0 / 0.0 / 0.1-	5.0 / 6.6 / 2.5	1.7 / 3.8 / 0.0 / 1.5	1.7 / 3.8 / 0.0 / 1.5

LATITUDE 0° – 5° N.

DECEMBER 1964

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)									
T(W)-T(A)									
E(W)-E(A)									
EA									
C									
P									
W									
W(X)									
W(Y)									

NOVEMBER 1964

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)									
T(W)-T(A)									
E(W)-E(A)									
EA									
C									
P									
W									
W(X)									
W(Y)									

FEBRUARY 1965

LATITUDE 0°- 5° N.

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	3 26.6 25.2 0.9 1+	3 26.3 24.5 1.1 13	4 26.0 25.0 1.1	2 26.6 24.0 0.9 26	3 26.0 24.6 0.9 13	4 26.5 25.5 0.3 5	5 25.8 26.5	C 26.0	3 25.5 25.5	4 25.5	5 24.0
T(W)-T(A)	2 0.4 2.1 1.0 14	2 1.0 0.6- 1.1 13	4 1.0 3.2 0.6- 1.1	2 1.0- 1.5 2.1- 1.1 26	3 1.0 3.0 2.1- 1.5 13	5 0.7 2.1 0.2- 0.8	1 0.0	3 0.7 1.0 0.5	1 3.0	5
E(W)-E(A)	2 5.0 7.0 3.0 1.1 14	2 0.6 10.3 2.7 2.0 13	4 5.5 3.2 1.5	2 5.5 12.1 2.2 2.7 26	3 6.3 5	4 5.5 8.7 2.0 2.5	C 5.0	3 3.1 4.3 2.0	1 6.0	5
EA	2 28.7 31.8 26.5 1.3 14	28.0 29.8 26.0 1.2 13	4 26.5 27.7 23.6 1.1	2 27.5 30.3 23.7 2.0 13	3	5 27.0 28.6 24.6 1.3	0.1 26.5	3 28.6 29.5 28.2	1 27.3	5
Q	2 0.7 1.0 0.4 0.2 14	0.5 1.0 0.1 0.2 13	4 0.5 1.0 0.0 0.3	2 0.4 1.0 0.0 0.3 26	3 0.5 1.0 0.1 0.3 13	5 0.7 1.0 0.4 0.2	1 0.5	3 0.5 0.6 0.4	1 0.8	5
P	7.5 8.7 5.6 0.9 14	6.5 7.7 5.2 0.8 13	2 8.1 12.1 5.5 1.1 26	2 7.7 13.0 5.6 1.8 13	3 4 9.5 11.5 7.0 1.5	1	3	1 9.5	
W	8.0 13.8 2.5 14	6.2 10.2 2.5 2.3 13	4.5 10.7 1.0 2.2 26	7.3 13.3 4.0 2.8 13	4 8.5 12.3 4.5 2.8 5	0 5.0	3 5.2 5.6 5.0	5 3.5	
W(X)	7.3- 1.6- 13.8- 1.2-	5.6- 1.5- 9.6- 2.5-	0.8- 0.8- 10.7- 1.0-	6.1- 2.5- 13.1- 3.1	7.6- 4.0- 10.7- 2.6	4.8-	5.0- 4.8- 5.2-	1 2.2-	
W(Y)	2.0 8.3 2.5	0.8- 3.3 4.8- 2.2	1.0 4.2 2.0- 1.6	2.2 8.1 4.1- 3.0	2.2 6.0 4.1- 3.5	1.6	1.7 1.8 1.6	2.6	

JANUARY 1965

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)									
T(W)-T(A)									
E(W)-E(A)									
EA					0				
Q									
P									
W									
W(X)									
W(Y)									

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APRIL 1965

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	3 / 27.3 / 28.5 / 26.5 / 0.7 / 7	2 / 27.0 / 30.0 / 26.0 / 0.9 / 2	2 / 27.6 / 29.5 / 25.0 / 1.0 / 35	3 / 27.2 / 30.6 / 25.5 / 1.5 / 10	3 / 27.2 / 30.6 / 25.5 / 1.5 / 10	3 / 26.5 / 27.0 / 26.0	3 / 26.2 / 27.1 / 25.5 / 0.6 / 8		0
T(W)-T(A)	3 / 0.0 / 1.0 / 1.0 / 7	2 / 0.2 / 1.3 / 2.8 / 0.9 / 22	2 / 0.8 / 1.5 / 2.5 / 1.0 / 35	3 / 0.2 / 2.1 / 3.0 / 10		3 / 3.0 / 4.5 / 1.5 / 2	3 / 1.0 / 2.6 / 0.0 / 0.8 / 8		0
E(W)-E(A)	3 / 4.5 / 6.5 / 1.8 / 1.7 / 7	2 / 3.2 / 7.5 / 0.7 / 2.0 / 22	2 / 3.6 / 7.3 / 4.0 / 2.0 / 35	3 / 2.3 / 5.3 / 3.2 / 2.1 / 10		3 / 7.8 / 10.0 / 5.7 / 2	3 / 5.5 / 10.7 / 2.3 / 2.6 / 7		0
EA	3 / 29.6 / 32.0 / 28.2 / 1.5 / 7	2 / 30.7 / 34.3 / 27.7 / 1.7 / 22	2 / 30.7 / 40.0 / 27.5 / 2.1 / 35	3 / 32.0 / 38.2 / 29.5 / 2.2 / 10		3 / 30.8 / 31.0 / 30.7 / 2	3 / 28.8 / 31.6 / 27.5 / 1.1 / 7		0
C	3 / 0.3 / 0.4 / 0.2 / 7	2 / 0.6 / 1.0 / 0.3 / 22	2 / 0.5 / 1.0 / 0.1 / 35	3 / 0.5 / 1.0 / 0.3 / 10		3 / 0.7 / 0.9 / 0.5 / 2	3 / 0.4 / 0.9 / 0.2 / 7		0
P	3 / 8.0 / 11.0 / 5.0 / 2.0 / 7	2 / 8.7 / 12.0 / 2.2 / 2.8 / 22	2 / 8.8 / 15.5 / 2.5 / 2.6 / 35	3 / 9.3 / 11.6 / 7.0 / 1.5 / 10		3 / 10.6 / 10.6 / 2	3 / 10.5 / 13.1 / 9.0 / 1.5 / 5		0
H	3 / 7.0 / 10.2 / 5.0 / 1.6 / 7	2 / 6.5 / 11.2 / 2.0 / 2.3 / 22	2 / 3.5 / 7.1 / 1.5 / 1.1 / 35	3 / 6.2 / 10.2 / 4.0 / 2.0 / 10		3 / 4.0 / 4.0 / 4.0 / 2	3 / 6.0 / 11.2 / 2.0 / 3.1 / 4		0
W(X)	3 / 6.5 / 4.3 / 9.5 / 1.6 / 7	2 / 6.0 / 1.1 / 11.2 / 2.1 / 22	2 / 3.5 / 1.1 / 7.1 / 1.1 / 35	3 / 6.0 / 3.8 / 10.0 / 1.8 / 10		2 / 2.3 / 0.7 / 4.0	2 / 4.8 / 1.7 / 10.5 / 2.8 / 5		
W(Y)	3 / 0.1 / 6.3 / 4.6 / 1.6 / 7	2 / 0.2 / 1.6 / 2.1 / 22	2 / 0.5 / 3.0 / 0.6 / 35	3 / 1.5 / 0.0 / 1.1 / 10		2 / 2.2 / 4.0 / 0.7	2 / 1.5 / 4.7 / 7.3 / 3.2		

MARCH 1965

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	2 / 26.8 / 28.0 / 24.2 / 1.2 / 8	3 / 26.0 / 28.0 / 25.5 / 0.7 / 15	2 / 27.2 / 30.0 / 25.0 / 1.2 / 32	4 / 26.1 / 27.6 / 25.0 / 0.7 / 17	3 / 26.5 / 27.6 / 25.5 / 0.7 / 14	0 / 26.0 / 2	3 / 26.5 / 28.7 / 25.0 / 1.0 / 14		0
T(W)-T(A)	2 / 1.5 / 3.8 / 0.0 / 1.1 / 7	3 / 0.8 / 1.8 / 1.0 / 0.9 / 15	2 / 1.0 / 1.0 / 4.0 / 1.2 / 32	4 / 0.1 / 2.6 / 2.5 / 17	2 / 1.6 / 1.0 / 3.3 / 1.2 / 14	1 / 1.0 / 2	3 / 0.1 / 2.0 / 2.7 / 1.1 / 14		0
E(W)-E(A)	2 / 7.1 / 10.5 / 5.0 / 1.7 / 7	3 / 5.0 / 12.0 / 0.1 / 3.5 / 15	2 / 3.8 / 6.3 / 1.3 / 1.1 / 32	4 / 1.3 / 5.3 / 4.1 / 1.8 / 17	3 / 0.1 / 4.3 / 2.5 / 14	0 / 8.3 / 2	3 / 2.6 / 5.5 / 0.1 / 1.6 / 14		0
EA	2 / 29.0 / 30.5 / 27.0 / 1.0 / 7	3 / 29.6 / 33.5 / 25.6 / 2.0 / 15	2 / 29.2 / 31.5 / 26.6 / 1.1 / 32	4 / 30.5 / 33.0 / 26.0 / 1.8 / 17	3 / 29.5 / 31.8 / 28.0 / 1.0 / 14	0 / 25.2 / 2	3 / 29.6 / 31.6 / 27.1 / 1.1 / 14		0
C	2 / 0.4 / 1.0 / 0.3 / 8	3 / 0.6 / 1.0 / 0.1 / 15	2 / 0.5 / 1.0 / 0.1 / 32	4 / 1.0 / 1.0 / 0.1 / 17	3 / 0.5 / 0.9 / 0.3 / 14	1 / 0.1 / 2	3 / 0.6 / 1.0 / 0.1 / 0.3 / 14		0
P	2 / 11.0 / 13.0 / 10.5 / 0.8 / 8	2 / 10.1 / 12.5 / 8.5 / 1.2 / 15	2 / 8.7 / 12.5 / 7.5 / 0.8 / 32	4 / 10.0 / 12.5 / 6.2 / 1.5 / 17	3 / 9.1 / 12.5 / 6.2 / 1.6 / 14	0 / 10.0 / 2	3 / 10.1 / 12.0 / 8.0 / 1.2 / 14		0
H	2 / 3.5 / 11.2 / 2.0 / 1.7 / 8	2 / 7.7 / 11.2 / 5.0 / 2.0 / 15	2 / 4.1 / 10.2 / 1.5 / 2.0 / 32	4 / 7.6 / 10.2 / 6.1 / 1.2 / 17	3 / 7.8 / 10.2 / 6.1 / 0.9 / 14	1 / 5.0 / 2	3 / 7.5 / 10.2 / 4.5 / 2.0 / 14		0
W(X)	3.0 / 1.8 / 4.8 / 1.3 / 0.5	6.5 / 1.1 / 9.5 / 1.3 / 3.3	3.6 / 1.1 / 9.0 / 1.7 / 0.5	6.1 / 3.2 / 10.0 / 1.6 / 2.3	7.2 / 5.8 / 10.2 / 1.0 / 0.3	4.7	6.0 / 3.5 / 9.5 / 1.7 / 4.0		0
W(Y)	2.7 / 3.1 / 2.0	1.0 / 4.8 / 2.8	3.8 / 5.1 / 2.0	6.2 / 7.0 / 3.5	4.6 / 7.0 / 3.0	1.7	4.6 / 8.0 / 2.0		0

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MAY 1965

LONGITUDE WEST — LATITUDE 0°–5° N.

	170	165	160	155	150	145	140	135	130
T(A)	3 27.7 28.1 27.5	2 27.3 30.0 25.5 1.0 21	2 28.1 30.0 26.0 0.8 34	3 27.2 28.0 27.0	4	0	1 27.0 27.2 26.6 0.2	3 26.7 28.1 25.5	3 26.5 27.0 25.5 0.6
									6
T(W)–T(A)	4 1.1 1.7 0.6	2 1.2 3.7 0.7– 1.0	2 0.8– 3.5 2.8– 1.3 34	3 1.1 1.7 0.8	4	0	1 0.2 0.7 0.3–	3 0.8 2.1 0.5–	3 0.6 1.0 0.0 0.4
E(W)–E(A)	4 7.2 8.3 6.5	2 6.6 12.5 1.3 3.0 19	2 4.1 12.5 0.9 2.3 33	4 6.7 8.1 5.6	4	0	1 5.0 6.0 4.0 0.7	4 5.2 6.5 4.1	3 2.8 5.5 0.1– 2.1
	4	4					6		6
EA	4 30.5 31.0 30.0	4 30.5 34.2 26.5 2.0 19	2 31.5 34.2 28.8 1.3 33	4 29.6 30.1 29.0	4	0	1 26.7 29.6 28.1 0.5	4 29.3 30.7 28.2	3 31.0 35.5 28.0 3.2
	4	4	4				6	4	6
C	3 0.5 0.8 0.1	2 0.4 1.0 0.3 21	2 0.6 1.0 0.3 34	3 0.6 0.8 0.4	4	0	1 0.6 0.9 0.3 0.2	4 0.6 0.8 0.3	3 0.8 1.0 0.5 0.2
P	4 9.0 10.6 7.6	4 9.0 11.5 6.6 1.2 21	2 8.5 12.2 5.2 1.5 34	4 8.6 10.0 8.0	4	0	1 9.7 11.8 8.0 1.2	3 10.1 12.0 9.0	3 10.8 11.5 10.0
	4	4	4	4			6	4	3
H	3 4.5 5.0 2.5	2 4.0 10.7 1.5 2.2 21	2 3.0 9.2 1.5 1.5 33	4 5.5 7.6 3.5	4	0	1 4.5 7.6 1.5 2.2	3 7.5 9.7 5.6	3 6.0 7.6 4.5 1.0
	4						6	4	6
W(X)	4.0– 2.5– 4.8–	3.5– 1.0– 8.1– 1.8	3.0– 1.5– 8.6– 1.5 0.6	5.2– 3.5– 7.1–			4.1– 1.5– 7.1– 2.0	4.8– 3.2– 6.5–	3.8– 0.9– 6.2– 1.8
W(Y)	1.7 3.2 0.4	4.8 7.0– 2.5	0.0 3.1– 0.6	1.7– 0.7– 2.6–			0.6 2.7 2.6– 1.7	5.5– 3.6– 9.1–	3.0 7.1 2.2– 3.1

JUNE 1965

LATITUDE 0°–5° N.

LONGITUDE WEST

	170	165	160	155	150	145	140	135	130
T(A)	4 27.0 29.2 25.5 1.2 5	3 26.6 29.2 23.7 1.5 15	2 27.8 30.0 25.0 1.1 34	3 27.0 28.1 26.0 0.7 15	3 27.0 28.1 26.0 0.9 14	3 27.0 27.0 26.5	4 25.6 26.5 23.7	4 26.0 27.5 24.5	2 26.0 27.5 24.5
T(W)–T(A)	4 2.5 5.0 0.0 1.7 5	3 2.5 6.1 0.5– 2.0 15	2 0.2– 3.8 2.8– 1.3 34	3 2.2 5.0 0.6 1.2 15	3 1.3 6.6 0.2– 1.8 14	3 0.8 3.3 2.7–	4 2.5 3.8 1.5	4 1.3 2.2 0.5	3
E(W)–E(A)	4 10.1 12.7 6.0 1.0 5	3 8.8 14.2 4.2 3.0 15	2 5.8 13.3 1.6 2.2 34	2 10.1 14.5 5.1 2.8 15	3 7.0 14.6 3.5	3 7.1 12.6 0.1	4 9.0 9.8 7.1	4 5.1 6.0 3.5	2
EA	4 29.0 31.0 28.2 1.0 5	3 29.3 33.0 26.5 1.8 15	2 30.5 35.0 27.6 1.5 34	4 28.3 32.0 25.2 1.6 15	3 29.7 31.2 27.5 1.0 14	3 28.1 29.5 27.1	4 27.0 28.7 25.3	4 29.1 31.0 27.0	2
C	4 0.9 1.0 0.6 0.2 5	3 0.6 1.0 0.0 15	2 0.5 1.0 0.1 34	2 0.4 0.8 0.0 15	3 0.6 1.0 0.4	3 0.7 0.9 0.3	4 0.8 1.0 0.6	4 0.9 1.0 0.9	3
P	4 3.2 9.6 6.1– 8 5	3 10.6 13.0 7.0 1.7 15	4 9.3 12.5 5.6 1.5 34	4 11.3 13.0 9.6 1.0 15	3 10.0 11.7 8.2 1.0 14	3 10.8 12.5 9.0	4 10.3 11.7 9.0	4 10.0 11.5 9.0	2
H	4 4.7 6.1 2.0 1.7 5	3 5.2 10.2 2.5 2.2 13	2 3.2 8.7 0.5 1.5 33	4 4.1 8.7 2.3 2.3 15	3 5.3 9.2 3.0 1.6 14	4 5.1 7.1 3.5	4 8.5 12.3 5.0	4 4.7 6.1 2.0	3
W(X)	3.0– 1.5– 3.5– 1.2	4.5– 0.0 9.5– 2.6	3.0– 2.6– 1.7	3.7– 1.0– 8.5– 2.3	4.8– 0.0 9.0– 2.0	3.0– 0.1– 4.8–	2.5– 3.0 7.8–	2.8 5.7 1.0	
W(Y)	2.6 2.1– 1.7	2.0 5.0– 1.7	0.3– 1.5– 4.7– 1.0	0.8– 3.0– 1.3	0.6 5.0 1.6	1.1 7.1 4.0–	0.5 8.6 9.5–	2.5 6.0 0.7–	

APPENDIX TABLE B

Interpolated values of meteorological properties and heat exchange processes, lat. 0° to 35° N., long. 130° to 170° W., at the center of 5° square units of area for each month, July 1963 to June 1965, presented in geographic format with decimal point at center of the 5° square

List of notations

T(W)   Sea surface temperature, degrees Celsius.

T(A)   Air temperature, degrees Celsius.

E(A)   Vapor pressure of air, millibars.

C   Cloudiness, proportion of sky covered.

W   Wind speed, meters per second.

Q(S)   Radiation from sun and sky, calories per square centimeter per day, positive if water gains heat.

Q(B)   Effective back radiation, calories per square centimeter per day, positive if water loses heat.

Q(E)   Heat of evaporation, calories per square centimeter per day, positive if water loses heat.

Q(C)   Conduction of sensible heat, calories per square centimeter per day, positive if water loses heat.

Q(N)   Net heat exchange across the sea surface, calories per square centimeter per day, positive if water gains heat.

LONGITUDE WEST

T(W)	167	162	157	152	147	142	137	132
32	23.0	22.4	21.7	21.1	20.7	20.3	19.5	18.8
27	23.8	23.7	23.2	22.7	22.3	21.4	20.5	19.7
22	25.2	24.7	24.5	24.0	23.3	22.7	22.0	21.7
17	25.7	25.0	25.3	24.5	23.9	24.2	24.2	23.8
12	26.5	26.5	26.3	25.7	26.2	26.5	26.3	26.0
7	28.0	28.0	27.3	27.0	28.0	27.7	27.5	27.5
2	27.7	27.8	27.9	27.9	27.7	27.5	27.7	27.0

(LATITUDE NORTH)

T(A)	167	162	157	152	147	142	137	132
32	23.7	22.7	21.7	21.0	20.7	20.0	19.5	19.0
27	24.7	24.0	23.2	22.5	22.2	21.5	20.6	19.9
22	25.5	25.2	24.7	24.0	23.5	23.2	22.4	21.2
17	26.5	26.2	25.5	24.9	24.4	24.1	24.0	23.1
12	26.7	26.5	26.0	25.7	25.8	25.7	25.2	25.5
7	27.0	27.0	26.7	26.5	26.8	27.0	26.3	25.8
2	27.8	27.7	27.7	26.9	26.7	26.5	26.5	26.3

(LATITUDE NORTH)

E(A)	167	162	157	152	147	142	137	132
32	23.3	21.6	20.5	19.4	18.6	18.8	17.8	16.8
27	25.0	24.2	22.8	22.1	21.0	19.7	18.8	17.3
22	26.2	25.8	24.3	23.5	23.1	23.1	22.2	20.4
17	27.2	26.7	25.9	24.9	24.3	24.2	24.5	23.4
12	29.0	28.6	27.9	27.4	27.0	28.0	28.6	27.1
7	28.2	30.0	29.0	28.6	29.5	30.0	30.0	28.2
2	29.3	29.8	28.8	26.7	27.0	27.5	27.6	27.5

(LATITUDE NORTH)

C	167	162	157	152	147	142	137	132
32	0.6	0.6	0.6	0.6	0.7	0.8	0.8	0.8
27	0.6	0.5	0.5	0.7	0.7	0.8	0.8	0.8
22	0.5	0.5	0.4	0.6	0.6	0.6	0.8	0.9
17	0.6	0.6	0.5	0.5	0.5	0.6	0.8	0.8
12	0.5	0.5	0.6	0.7	0.6	0.6	0.8	0.5
7	0.4	0.6	0.8	0.9	1.0	0.9	0.8	0.5
2	0.2	0.3	0.5	0.6	0.6	0.5	0.4	0.3

(LATITUDE NORTH)

W	167	162	157	152	147	142	137	132
32	6.7	6.3	6.0	6.0	6.0	6.0	6.3	6.4
27	7.7	6.6	6.7	7.0	7.5	7.0	6.0	7.0
22	7.5	7.5	7.7	8.1	7.7	6.6	6.2	8.0
17	7.1	7.5	8.0	8.0	7.8	7.0	7.0	7.0
12	7.8	9.2	9.0	8.2	7.4	7.1	6.6	6.4
7	8.8	9.5	8.0	6.4	4.7	4.1	4.0	4.0
2	8.3	7.0	4.0	4.0	4.2	5.1	5.3	5.3

(LATITUDE NORTH)

LONGITUDE WEST

Q(S)	167	162	157	152	147	142	137	132
32	451.	451.	451.	451.	399.	341.	341.	341.
27	447.	494.	494.	395.	395.	338.	338.	338.
22	488.	488.	529.	441.	441.	441.	334.	273.
17	430.	430.	475.	475.	475.	430.	326.	326.
12	460.	460.	416.	368.	416.	416.	315.	460.
7	478.	399.	302.	247.	187.	247.	302.	441.
2	514.	487.	420.	380.	380.	420.	456.	487.

(LATITUDE NORTH)

Q(8)	167	162	157	152	147	142	137	132
32	95.	105.	111.	116.	106.	95.	93.	93.
27	87.	106.	114.	99.	101.	89.	90.	93.
22	100.	99.	115.	104.	102.	97.	78.	79.
17	83.	79.	103.	103.	103.	103.	81.	90.
12	93.	97.	95.	83.	99.	101.	84.	108.
7	119.	99.	77.	65.	60.	65.	82.	121.
2	108.	106.	100.	110.	109.	115.	123.	121.

(LATITUDE NORTH)

Q(E)	167	162	157	152	147	142	137	132
32	121.	126.	116.	120.	125.	107.	113.	117.
27	164.	126.	145.	157.	208.	167.	114.	165.
22	201.	181.	246.	290.	208.	110.	92.	243.
17	170.	168.	275.	253.	210.	171.	162.	174.
12	217.	378.	382.	261.	234.	195.	137.	153.
7	570.	530.	317.	166.	127.	92.	84.	109.
2	389.	216.	112.	141.	139.	158.	173.	146.

(LATITUDE NORTH)

Q(C)	167	162	157	152	147	142	137	132
32	-19.	-8.	1.	3.	1.	8.	1.	-6.
27	-28.	-8.	1.	6.	3.	-3.	-3.	-6.
22	-9.	-15.	-7.	1.	-7.	-14.	-10.	16.
17	-23.	-36.	-7.	-13.	-16.	3.	6.	20.
12	-7.	1.	11.	1.	12.	23.	29.	13.
7	35.	38.	20.	13.	23.	12.	20.	27.
2	-4.	3.	4.	16.	17.	21.	26.	15.

(LATITUDE NORTH)

Q(N)	167	162	157	152	147	142	137	132
32	255.	229.	224.	213.	168.	133.	136.	137.
27	224.	272.	235.	134.	84.	86.	138.	98.
22	196.	224.	175.	48.	138.	248.	174.	-67.
17	201.	220.	105.	133.	178.	154.	77.	42.
12	157.	-16.	-73.	23.	71.	98.	65.	186.
7	-247.	-268.	-112.	3.	-23.	78.	117.	185.
2	21.	163.	204.	113.	116.	127.	134.	205.

(LATITUDE NORTH)

				LONGITUDE WEST				
T(W)	167	162	157	152	147	142	137	132
32	24.1	23.7	23.1	22.6	21.9	21.4	20.8	19.8
27	25.3	25.3	25.0	24.2	23.1	22.1	21.1	20.5
22	26.2	26.1	25.7	24.6	23.7	23.3	22.6	21.3
17	26.2	26.6	26.2	25.3	24.4	23.9	23.8	23.7
12	27.3	27.2	26.8	26.3	25.7	26.3	26.6	25.7
7	27.8	27.7	27.7	27.4	27.1	27.2	27.4	27.2
2	28.4	28.3	27.5	27.5	27.5	27.5	27.5	27.5

LATITUDE NORTH

T(A)	167	162	157	152	147	142	137	132
32	23.6	23.2	23.0	22.4	21.8	21.5	21.0	21.0
27	25.3	25.0	24.1	22.9	22.9	22.3	21.4	21.0
22	26.3	25.9	25.1	24.3	23.7	23.4	22.8	21.8
17	26.8	26.6	26.2	25.0	24.7	24.5	24.0	23.6
12	27.9	27.5	27.1	26.2	26.0	26.8	26.9	25.8
7	27.2	26.7	26.2	26.1	27.0	27.0	27.0	27.0
2	27.7	27.5	27.5	27.0	27.0	27.0	27.0	27.0

LATITUDE NORTH

E(A)	167	162	157	152	147	142	137	132
32	23.9	24.0	23.8	21.9	20.7	20.2	19.3	18.7
27	25.3	25.1	23.4	21.7	20.8	19.8	18.9	18.0
22	26.7	26.1	24.9	23.5	23.0	22.2	20.7	20.1
17	29.1	28.1	26.3	25.4	25.0	25.1	25.0	24.0
12	29.3	28.7	28.5	29.1	29.0	29.0	30.1	29.0
7	29.5	28.9	29.0	28.9	30.0	30.5	29.8	30.0
2	28.7	28.5	29.1	29.5	29.7	28.9	28.5	28.3

LATITUDE NORTH

C	167	162	157	152	147	142	137	132
32	0.6	0.7	0.7	0.7	0.7	0.7	0.6	0.6
27	0.4	0.6	0.5	0.6	0.6	0.6	0.7	0.7
22	0.6	0.5	0.5	0.5	0.6	0.6	0.7	0.9
17	0.6	0.5	0.6	0.5	0.6	0.7	0.8	0.8
12	0.5	0.6	0.7	0.6	0.6	0.6	0.7	0.7
7	0.7	0.8	0.7	0.8	0.8	0.8	0.7	0.7
2	0.5	0.4	0.5	0.9	0.9	0.9	0.8	0.8

LATITUDE NORTH

W	167	162	157	152	147	142	137	132
32	5.8	7.2	7.3	5.8	5.3	4.8	5.0	5.3
27	5.2	6.0	7.0	7.2	6.4	6.0	6.2	6.0
22	5.7	6.6	7.2	7.3	7.3	7.5	7.9	5.9
17	6.3	6.8	7.2	7.6	8.0	8.0	7.3	6.8
12	5.8	6.5	7.1	7.9	8.0	7.0	6.1	6.2
7	5.5	5.8	6.1	6.0	5.3	3.4	5.8	5.8
2	4.5	5.1	4.5	3.7	3.8	6.0	7.5	7.5

LATITUDE NORTH

				LONGITUDE WEST				
Q(S)	167	162	157	152	147	142	137	132
32	419.	370.	370.	370.	370.	370.	419.	419.
27	510.	425.	470.	425.	425.	425.	376.	376.
22	429.	474.	474.	474.	429.	429.	379.	265.
17	427.	472.	427.	472.	427.	377.	323.	323.
12	466.	421.	372.	421.	421.	421.	372.	372.
7	364.	312.	364.	312.	312.	312.	364.	364.
2	441.	479.	441.	247.	247.	247.	302.	302.

LATITUDE NORTH

Q(B)	167	162	157	152	147	142	137	132
32	109.	98.	93.	99.	101.	100.	112.	102.
27	114.	103.	125.	126.	115.	112.	102.	102.
22	94.	108.	117.	117.	105.	106.	99.	68.
17	80.	99.	97.	111.	95.	81.	75.	81.
12	88.	86.	77.	89.	83.	81.	72.	77.
7	87.	83.	99.	86.	68.	68.	83.	79.
2	108.	116.	96.	64.	63.	65.	78.	78.

LATITUDE NORTH

Q(E)	167	162	157	152	147	142	137	132
32	123.	161.	139.	111.	99.	83.	87.	77.
27	121.	153.	242.	269.	181.	147.	139.	132.
22	144.	196.	255.	242.	203.	225.	285.	108.
17	108.	178.	240.	250.	239.	192.	138.	140.
12	139.	179.	198.	205.	162.	144.	97.	83.
7	147.	167.	178.	161.	101.	57.	133.	119.
2	147.	171.	110.	83.	83.	166.	288.	296.

LATITUDE NORTH

Q(C)	167	162	157	152	147	142	137	132
32	12.	15.	3.	5.	3.	-2.	-4.	-26.
27	1.	8.	25.	38.	6.	-5.	-8.	-12.
22	-3.	6.	18.	9.	1.	-3.	-7.	-12.
17	-15.	1.	1.	10.	-10.	-20.	-6.	3.
12	-14.	-8.	-9.	4.	-10.	-14.	-8.	-3.
7	14.	23.	37.	31.	3.	3.	10.	5.
2	13.	17.	1.	8.	8.	12.	15.	15.

LATITUDE NORTH

Q(N)	167	162	157	152	147	142	137	132
32	176.	98.	136.	156.	168.	191.	225.	266.
27	275.	162.	77.	-9.	124.	171.	143.	155.
22	194.	165.	85.	106.	120.	101.	3.	102.
17	255.	195.	90.	102.	103.	125.	117.	99.
12	253.	165.	106.	125.	186.	211.	211.	215.
7	118.	39.	50.	33.	140.	184.	139.	161.
2	174.	175.	235.	93.	93.	4.	-80.	-88.

LATITUDE NORTH

T(W)	LONGITUDE WEST							
LATITUDE NORTH	167	162	157	152	147	142	137	132
32	24.3	24.2	23.8	23.4	22.9	22.4	22.0	21.4
27	25.7	25.3	25.2	24.5	23.9	23.1	22.5	22.2
22	26.3	25.7	25.7	25.3	24.7	24.1	23.0	22.8
17	26.7	26.3	26.4	26.3	25.7	25.0	24.7	24.7
12	27.9	27.1	27.3	27.0	27.1	27.0	26.6	26.5
7	29.5	29.1	28.2	27.5	27.5	27.4	27.4	27.3
2	28.5	28.2	27.7	27.4	27.2	27.0	27.1	27.2

T(A)	167	162	157	152	147	142	137	132
32	24.5	24.0	23.5	23.1	22.5	22.0	21.6	21.2
27	25.9	25.2	24.7	24.3	23.8	22.9	22.4	22.3
22	26.3	26.0	25.3	24.9	24.5	24.0	23.2	23.4
17	26.6	26.4	26.2	25.7	25.0	24.8	24.7	24.3
12	26.5	26.3	26.3	26.5	27.0	26.7	26.7	26.8
7	26.9	27.1	26.8	26.8	27.0	27.0	26.0	26.0
2	27.4	27.8	28.0	27.0	27.0	26.6	26.0	26.0

E(A)	167	162	157	152	147	142	137	132
32	25.2	24.2	22.6	22.2	21.3	20.4	19.7	19.6
27	25.9	25.7	23.9	24.5	22.8	22.0	21.6	21.0
22	27.3	26.4	25.3	24.5	24.4	24.3	23.5	23.2
17	28.1	27.2	26.6	26.2	26.4	26.3	25.1	24.3
12	29.1	27.9	28.1	29.1	29.4	28.6	28.0	26.6
7	29.4	29.3	29.0	29.2	29.6	29.7	28.8	28.7
2	28.6	28.4	28.3	28.6	28.1	27.3	26.8	26.8

C	167	162	157	152	147	142	137	132
32	0.5	0.5	0.6	0.5	0.5	0.6	0.5	0.5
27	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5
22	0.4	0.5	0.5	0.5	0.5	0.5	0.4	0.6
17	0.5	0.5	0.6	0.6	0.5	0.4	0.4	0.6
12	0.6	0.6	0.6	0.5	0.4	0.3	0.4	0.5
7	0.8	0.8	0.7	0.5	0.5	0.7	0.8	0.9
2	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.8

W	167	162	157	152	147	142	137	132
32	5.5	5.7	5.7	5.9	6.2	6.2	6.0	5.6
27	5.8	6.5	6.0	4.9	5.2	5.5	5.6	5.2
22	6.3	6.7	7.2	6.3	5.4	5.9	7.8	7.4
17	6.8	7.2	6.7	6.3	5.8	4.9	5.3	5.7
12	6.8	6.7	6.0	4.8	4.7	3.8	4.0	5.3
7	4.7	4.7	4.3	3.6	3.7	5.3	5.8	5.6
2	4.5	4.3	4.0	4.5	4.5	4.9	10.3	10.2

Q(S)	LONGITUDE WEST							
LATITUDE NORTH	167	162	157	152	147	142	137	132
32	397.	397.	359.	397.	397.	359.	397.	397.
27	418.	453.	418.	418.	418.	418.	418.	418.
22	473.	436.	436.	436.	436.	436.	473.	394.
17	448.	448.	405.	405.	448.	486.	486.	405.
12	413.	413.	413.	456.	495.	529.	495.	456.
7	314.	314.	367.	459.	459.	367.	314.	257.
2	458.	458.	458.	458.	458.	414.	414.	314.

Q(B)	167	162	157	152	147	142	137	132
32	104.	112.	110.	120.	124.	118.	129.	126.
27	103.	114.	119.	112.	116.	119.	119.	118.
22	108.	100.	113.	115.	112.	111.	116.	96.
17	100.	100.	98.	105.	112.	112.	114.	107.
12	107.	102.	104.	102.	102.	112.	104.	100.
7	104.	96.	99.	104.	101.	83.	88.	75.
2	113.	105.	96.	103.	102.	99.	110.	91.

Q(E)	167	162	157	152	147	142	137	132
32	95.	117.	137.	137.	150.	152.	146.	114.
27	144.	159.	176.	100.	120.	118.	108.	100.
22	159.	171.	241.	181.	123.	117.	178.	148.
17	184.	216.	204.	187.	133.	84.	106.	134.
12	229.	208.	175.	101.	97.	84.	86.	144.
7	185.	171.	129.	84.	82.	119.	155.	145.
2	152.	138.	113.	115.	116.	136.	710.	718.

Q(C)	167	162	157	152	147	142	137	132
32	-5.	5.	7.	8.	10.	10.	10.	5.
27	-5.	3.	12.	4.	3.	5.	3.	-3.
22	1.	-8.	12.	10.	5.	3.	-7.	-18.
17	3.	-3.	6.	15.	17.	4.	1.	10.
12	38.	22.	24.	10.	2.	5.	-2.	-7.
7	49.	38.	24.	10.	8.	9.	33.	29.
2	20.	7.	-5.	8.	4.	8.	45.	49.

Q(N)	167	162	157	152	147	142	137	132
32	204.	163.	106.	133.	113.	80.	113.	153.
27	176.	178.	111.	202.	179.	176.	188.	202.
22	206.	174.	71.	130.	196.	206.	186.	169.
17	161.	135.	97.	99.	187.	286.	266.	155.
12	40.	82.	110.	244.	295.	329.	308.	220.
7	-24.	10.	116.	260.	269.	157.	39.	8.
2	173.	209.	255.	233.	236.	172.	-451.	-544.

		LONGITUDE WEST							
T(W)		167	162	157	152	147	142	137	132
LATITUDE NORTH	32	24.0	23.5	22.7	22.1	21.6	21.0	20.6	20.2
	27	25.7	25.3	24.5	23.9	23.3	22.7	22.2	21.7
	22	26.2	25.7	25.4	24.8	24.4	24.0	23.3	22.7
	17	26.7	26.4	26.3	25.7	25.7	25.5	25.0	24.7
	12	27.6	27.2	26.8	26.9	27.2	27.3	27.0	26.1
	7	29.0	28.6	28.0	27.4	27.5	27.5	27.4	27.3
	2	28.7	27.7	27.1	27.2	27.3	27.3	27.4	27.4
T(A)		167	162	157	152	147	142	137	132
LATITUDE NORTH	32	23.2	22.6	21.9	20.9	20.7	20.0	19.7	19.5
	27	25.3	25.0	24.3	23.5	22.9	22.0	21.5	21.0
	22	26.1	25.7	25.3	24.5	24.0	23.7	23.3	23.0
	17	26.8	26.9	26.1	25.6	25.3	25.2	24.9	24.5
	12	27.6	26.8	26.5	26.3	26.0	26.0	26.0	26.0
	7	27.9	27.3	27.3	27.2	27.0	27.0	27.0	27.0
	2	28.0	28.0	28.0	28.1	27.2	27.0	27.0	27.0
E(A)		167	162	157	152	147	142	137	132
LATITUDE NORTH	32	24.0	22.2	20.1	18.9	18.2	17.5	17.2	17.0
	27	25.3	24.6	23.6	22.1	20.6	19.4	19.0	18.9
	22	26.2	25.5	24.7	23.5	22.9	22.2	21.5	21.0
	17	28.1	28.0	26.5	25.3	25.9	25.1	24.0	23.2
	12	29.1	29.6	28.9	28.8	29.1	29.2	28.6	26.5
	7	32.0	30.5	29.1	28.6	28.3	28.3	28.4	29.0
	2	31.0	29.4	28.3	27.3	26.8	26.7	26.8	27.0
C		167	162	157	152	147	142	137	132
LATITUDE NORTH	32	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6
	27	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6
	22	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.7
	17	0.6	0.6	0.5	0.5	0.6	0.5	0.6	0.7
	12	0.8	0.8	0.7	0.7	0.6	0.6	0.6	0.5
	7	1.0	0.8	0.7	0.6	0.6	0.6	0.8	0.5
	2	0.7	0.7	0.6	0.4	0.4	0.5	0.7	0.9
W		167	162	157	152	147	142	137	132
LATITUDE NORTH	32	7.3	7.2	6.5	6.6	6.7	6.5	6.5	6.0
	27	6.1	5.6	5.8	6.3	6.2	5.4	5.2	5.4
	22	7.2	6.6	7.0	6.8	6.6	6.1	4.9	5.8
	17	7.2	7.4	7.9	7.7	7.0	6.8	7.4	7.5
	12	6.5	7.1	7.2	7.6	6.9	7.2	7.3	6.2
	7	5.7	5.8	4.7	7.2	8.4	9.3	9.6	8.0
	2	5.9	5.1	4.8	7.2	9.2	10.6	11.5	11.4

		LONGITUDE WEST							
Q(S)		167	162	157	152	147	142	137	132
LATITUDE NORTH	32	252.	285.	285.	285.	285.	285.	285.	285.
	27	346.	346.	346.	346.	346.	346.	346.	313.
	22	375.	375.	375.	375.	375.	375.	340.	300.
	17	363.	363.	401.	401.	363.	401.	363.	321.
	12	290.	290.	339.	339.	383.	383.	383.	424.
	7	187.	302.	352.	399.	399.	399.	302.	440.
	2	363.	363.	410.	492.	492.	454.	363.	311.
Q(B)		167	162	157	152	147	142	137	132
LATITUDE NORTH	32	102.	119.	124.	132.	131.	134.	133.	131.
	27	113.	114.	115.	123.	128.	135.	136.	126.
	22	106.	107.	111.	117.	120.	121.	110.	97.
	17	90.	85.	107.	109.	102.	112.	105.	98.
	12	70.	73.	83.	88.	103.	104.	102.	105.
	7	55.	83.	89.	93.	98.	98.	77.	100.
	2	84.	75.	80.	98.	112.	109.	92.	80.
Q(E)		167	162	157	152	147	142	137	132
LATITUDE NORTH	32	186.	211.	187.	199.	203.	185.	177.	146.
	27	170.	148.	145.	177.	184.	154.	138.	132.
	22	243.	191.	225.	212.	196.	170.	116.	134.
	17	213.	212.	324.	298.	205.	204.	260.	281.
	12	191.	189.	192.	239.	191.	217.	225.	164.
	7	157.	175.	134.	245.	436.	556.	564.	317.
	2	173.	131.	118.	275.	622.	784.	878.	849.
Q(C)		167	162	157	152	147	142	137	132
LATITUDE NORTH	32	24.	26.	21.	32.	24.	26.	24.	17.
	27	10.	7.	5.	10.	10.	15.	15.	15.
	22	3.	1.	3.	9.	11.	8.	1.	-7.
	17	-3.	-15.	7.	4.	12.	9.	3.	6.
	12	1.	12.	9.	19.	33.	38.	29.	3.
	7	25.	30.	14.	6.	17.	19.	16.	10.
	2	17.	-7.	-18.	-26.	4.	13.	19.	19.
Q(N)		167	162	157	152	147	142	137	132
LATITUDE NORTH	32	-60.	-71.	-48.	-79.	-74.	-61.	-50.	-9.
	27	53.	77.	81.	36.	24.	42.	57.	41.
	22	23.	77.	37.	38.	49.	77.	114.	77.
	17	64.	82.	-38.	-10.	44.	77.	-6.	-65.
	12	29.	17.	55.	-7.	56.	25.	27.	152.
	7	-52.	14.	116.	56.	-153.	-275.	-355.	14.
	2	89.	164.	230.	146.	-247.	-452.	-626.	-638.

		LONGITUDE WEST							
T(W)		167	162	157	152	147	142	137	132
LATITUDE NORTH	32	20.9	20.9	20.5	19.9	19.5	18.9	18.8	18.8
	27	23.9	23.7	23.3	22.7	22.1	21.8	21.6	21.2
	22	25.3	25.1	24.9	24.4	23.9	23.6	23.3	22.7
	17	26.3	26.3	26.2	26.0	25.9	25.2	24.8	24.5
	12	26.8	26.8	26.8	26.9	26.8	26.3	26.3	27.1
	7	28.2	28.3	27.9	28.3	28.6	27.5	27.1	27.4
	2	28.1	27.5	27.5	28.4	27.7	26.9	26.8	26.7
T(A)		167	162	157	152	147	142	137	132
LATITUDE NORTH	32	20.0	20.0	19.2	19.2	19.0	17.8	18.0	18.0
	27	22.7	22.2	22.0	21.7	21.6	21.3	21.0	20.1
	22	25.0	24.7	24.3	23.8	23.3	23.0	22.7	22.2
	17	26.0	26.2	25.6	25.3	24.7	24.4	24.2	24.1
	12	27.0	26.5	26.4	27.0	26.9	26.7	26.8	26.3
	7	27.8	27.0	27.0	27.0	27.0	27.0	26.3	26.0
	2	28.0	27.7	27.8	27.7	27.4	26.8	26.0	26.0
E(A)		167	162	157	152	147	142	137	132
LATITUDE NORTH	32	18.6	17.7	17.7	17.8	17.3	16.0	16.3	16.1
	27	21.9	20.3	20.5	21.0	19.5	19.1	18.8	18.2
	22	25.2	23.8	23.2	22.8	22.6	22.8	22.3	22.2
	17	26.3	26.1	25.3	25.4	25.3	25.1	24.9	23.9
	12	27.2	27.6	28.3	29.2	29.1	29.2	28.4	27.4
	7	28.9	29.2	28.6	29.0	30.1	30.1	30.0	29.0
	2	28.3	28.3	28.1	28.8	28.8	28.3	27.7	27.7
C		167	162	157	152	147	142	137	132
LATITUDE NORTH	32	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
	27	0.7	0.6	0.6	0.7	0.6	0.7	0.7	0.7
	22	0.6	0.6	0.4	0.5	0.5	0.6	0.6	0.6
	17	0.5	0.5	0.5	0.4	0.5	0.5	0.6	0.7
	12	0.5	0.7	0.8	0.7	0.7	0.6	0.6	0.7
	7	0.6	0.8	0.8	0.8	0.8	0.9	1.0	1.0
	2	0.4	0.5	0.6	0.7	0.7	0.6	0.6	0.6
W		167	162	157	152	147	142	137	132
LATITUDE NORTH	32	9.3	7.7	7.7	7.4	7.6	7.8	7.2	6.8
	27	8.3	7.1	6.7	6.7	6.7	6.2	5.7	6.4
	22	6.8	6.6	7.0	6.7	6.5	6.4	6.6	7.2
	17	6.6	7.3	8.3	8.1	6.3	6.5	6.7	7.3
	12	7.5	7.3	7.2	7.2	6.2	4.7	5.7	6.6
	7	6.1	7.5	4.1	5.1	4.9	4.7	6.4	5.9
	2	3.8	3.8	3.5	4.2	4.5	4.8	5.9	6.5

		LONGITUDE WEST							
Q(S)		167	162	157	152	147	142	137	132
LATITUDE NORTH	32	189.	189.	189.	189.	189.	189.	189.	189.
	27	219.	248.	248.	219.	248.	219.	219.	219.
	22	281.	281.	337.	311.	311.	281.	281.	281.
	17	345.	345.	345.	375.	345.	345.	313.	276.
	12	379.	303.	259.	303.	303.	343.	343.	303.
	7	369.	279.	279.	279.	279.	228.	173.	173.
	2	471.	434.	393.	347.	347.	393.	393.	393.
Q(B)		167	162	157	152	147	142	137	132
LATITUDE NORTH	32	116.	120.	124.	115.	114.	125.	120.	121.
	27	113.	133.	129.	112.	122.	111.	113.	121.
	22	103.	109.	130.	123.	123.	113.	114.	113.
	17	109.	107.	116.	123.	123.	118.	107.	98.
	12	100.	88.	76.	78.	78.	82.	84.	95.
	7	95.	87.	83.	87.	88.	62.	54.	63.
	2	107.	97.	88.	91.	85.	92.	103.	101.
Q(E)		167	162	157	152	147	142	137	132
LATITUDE NORTH	32	408.	275.	250.	184.	198.	238.	170.	153.
	27	392.	277.	216.	173.	188.	161.	141.	170.
	22	190.	206.	243.	205.	174.	151.	159.	165.
	17	201.	264.	440.	380.	190.	170.	166.	221.
	12	283.	246.	213.	189.	135.	73.	111.	215.
	7	207.	328.	118.	162.	146.	99.	135.	155.
	2	118.	101.	95.	135.	122.	111.	156.	179.
Q(C)		167	162	157	152	147	142	137	132
LATITUDE NORTH	32	34.	28.	40.	21.	16.	34.	23.	22.
	27	40.	43.	35.	27.	14.	13.	14.	28.
	22	9.	11.	17.	16.	16.	16.	16.	15.
	17	8.	3.	20.	23.	30.	21.	16.	12.
	12	-6.	9.	12.	-3.	-3.	-8.	-12.	21.
	7	10.	39.	15.	27.	32.	10.	21.	33.
	2	2.	-4.	-5.	12.	6.	2.	19.	19.
Q(N)		167	162	157	152	147	142	137	132
LATITUDE NORTH	32	-369.	-234.	-225.	-131.	-139.	-209.	-124.	-107.
	27	-327.	-205.	-133.	-94.	-77.	-66.	-49.	-100.
	22	-21.	-46.	-53.	-34.	-3.	2.	-9.	-12.
	17	28.	-29.	-231.	-153.	3.	37.	24.	-55.
	12	3.	-40.	-42.	40.	94.	196.	160.	-29.
	7	58.	-174.	64.	4.	14.	57.	-37.	-78.
	2	243.	240.	214.	110.	135.	187.	115.	95.

		LONGITUDE WEST							
T(W)		167	162	157	152	147	142	137	132
LATITUDE NORTH	32	17.9	18.1	18.0	18.0	18.5	18.5	18.6	18.0
	27	21.7	21.8	22.0	21.9	21.6	21.1	20.7	20.0
	22	24.2	24.3	24.3	24.0	23.3	22.8	22.1	21.6
	17	25.3	25.2	25.3	25.1	24.2	23.9	23.6	23.1
	12	25.7	25.9	26.2	26.1	25.9	25.6	25.4	25.3
	7	27.1	27.2	27.0	26.8	27.0	28.0	26.8	26.7
	2	27.3	27.2	27.1	27.3	27.8	28.1	27.6	27.6
T(A)		167	162	157	152	147	142	137	132
LATITUDE NORTH	32	15.7	16.0	17.1	18.0	18.9	18.6	18.1	17.5
	27	20.1	20.3	20.7	21.1	21.3	20.7	19.9	19.1
	22	22.7	23.0	23.3	23.2	22.7	22.3	21.7	20.7
	17	24.5	24.8	25.2	24.6	24.2	23.7	23.4	23.0
	12	26.0	26.3	25.7	25.4	25.3	25.5	25.8	25.5
	7	27.7	28.0	27.0	25.9	26.0	26.0	26.0	26.0
	2	28.0	28.0	27.3	26.7	26.4	26.1	26.0	26.0
E(A)		167	162	157	152	147	142	137	132
LATITUDE NORTH	32	13.6	13.5	16.0	17.3	17.7	17.7	16.8	15.7
	27	17.8	18.0	19.7	20.2	20.0	18.5	17.5	17.0
	22	19.8	21.0	22.7	22.5	21.1	19.3	18.8	20.5
	17	23.5	24.4	25.4	25.2	24.4	23.8	23.0	21.5
	12	26.2	28.3	28.2	26.7	26.6	27.0	28.3	28.2
	7	28.6	30.1	28.7	27.6	27.7	29.4	30.0	28.4
	2	28.5	28.6	28.8	28.7	29.1	29.3	28.3	27.5
C		167	162	157	152	147	142	137	132
LATITUDE NORTH	32	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7
	27	0.7	0.6	0.6	0.7	0.7	0.6	0.7	0.7
	22	0.5	0.4	0.4	0.5	0.5	0.5	0.5	0.6
	17	0.5	0.5	0.5	0.4	0.4	0.4	0.5	0.6
	12	0.5	0.5	0.7	0.8	0.8	0.6	0.5	0.7
	7	0.6	0.8	0.8	0.8	0.8	0.9	0.8	0.8
	2	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7
W		167	162	157	152	147	142	137	132
LATITUDE NORTH	32	10.5	10.3	10.1	9.5	9.1	7.5	6.5	6.2
	27	8.3	7.7	8.1	8.0	7.7	6.7	5.9	5.7
	22	5.8	5.3	5.2	6.1	6.6	6.4	6.7	6.4
	17	6.3	5.8	5.4	4.9	5.9	6.3	7.2	7.2
	12	6.7	7.8	7.4	7.5	8.3	7.7	7.0	7.5
	7	7.0	8.1	8.2	8.5	9.2	9.5	9.2	7.9
	2	5.3	5.1	5.4	7.9	8.7	9.1	8.7	8.5

		LONGITUDE WEST							
Q(S)		167	162	157	152	147	142	137	132
LATITUDE NORTH	32	181.	181.	160.	160.	160.	160.	160.	160.
	27	191.	216.	216.	191.	191.	216.	191.	191.
	22	277.	301.	301.	277.	277.	277.	277.	251.
	17	316.	316.	316.	343.	343.	343.	316.	286.
	12	354.	354.	283.	242.	242.	320.	354.	283.
	7	351.	266.	266.	266.	266.	217.	266.	266.
	2	381.	341.	381.	336.	336.	336.	336.	336.
Q(B)		167	162	157	152	147	142	137	132
LATITUDE NORTH	32	158.	157.	121.	106.	101.	104.	115.	118.
	27	129.	139.	130.	111.	106.	123.	119.	121.
	22	146.	146.	136.	126.	128.	134.	133.	122.
	17	124.	116.	108.	120.	116.	121.	116.	111.
	12	101.	92.	87.	84.	82.	95.	91.	78.
	7	82.	57.	70.	84.	85.	83.	77.	80.
	2	82.	80.	87.	88.	98.	105.	102.	105.
Q(E)		167	162	157	152	147	142	137	132
LATITUDE NORTH	32	568.	583.	350.	221.	221.	123.	114.	112.
	27	418.	320.	313.	268.	223.	173.	147.	128.
	22	218.	172.	135.	162.	193.	207.	208.	125.
	17	206.	156.	125.	107.	119.	134.	189.	212.
	12	177.	196.	190.	248.	336.	218.	111.	131.
	7	207.	265.	328.	408.	514.	575.	322.	274.
	2	139.	126.	128.	317.	471.	553.	495.	511.
Q(C)		167	162	157	152	147	142	137	132
LATITUDE NORTH	32	92.	86.	36.	1.	-15.	-3.	13.	13.
	27	53.	46.	42.	26.	10.	11.	19.	21.
	22	35.	28.	21.	20.	16.	13.	11.	23.
	17	20.	10.	3.	10.	1.	5.	6.	3.
	12	-8.	-13.	15.	21.	20.	4.	-12.	-6.
	7	-17.	-26.	1.	31.	37.	76.	30.	22.
	2	-15.	-17.	-5.	19.	49.	73.	56.	54.
Q(N)		167	162	157	152	147	142	137	132
LATITUDE NORTH	32	-638.	-647.	-348.	-168.	-148.	-64.	-82.	-83.
	27	-410.	-290.	-271.	-215.	-148.	-92.	-95.	-80.
	22	-122.	-46.	10.	-31.	-60.	-77.	-76.	-20.
	17	-35.	35.	81.	106.	108.	83.	5.	-41.
	12	85.	79.	-10.	-111.	-197.	4.	164.	81.
	7	79.	-30.	-134.	-258.	-371.	-517.	-163.	-110.
	2	176.	192.	171.	-88.	-282.	-394.	-317.	-335.

LONGITUDE WEST (left block)

T(W)	167	162	157	152	147	142	137	132
32	15.9	15.9	16.3	17.0	17.4	17.0	17.0	16.7
27	20.1	20.3	20.5	20.6	20.7	20.0	19.6	18.8
22	23.3	23.2	23.2	22.8	22.2	21.3	20.7	20.5
17	24.7	24.6	24.4	24.0	23.2	22.6	22.2	22.0
12	25.6	25.9	25.7	25.4	25.1	24.2	24.2	24.4
7	26.7	27.1	26.7	26.3	26.3	26.3	26.3	26.2
2	27.2	27.3	27.1	26.9	26.5	26.8	27.2	27.5

T(A)	167	162	157	152	147	142	137	132
32	16.8	16.7	17.0	16.8	16.8	16.7	16.3	16.0
27	20.1	20.2	20.6	20.4	20.0	19.3	18.8	18.0
22	23.0	23.0	22.9	22.5	22.1	21.4	20.7	20.3
17	24.5	24.5	24.3	23.7	22.2	22.8	22.3	21.9
12	25.6	25.7	25.3	25.3	24.3	24.2	24.7	25.0
7	26.6	26.3	25.8	25.5	25.2	25.6	25.9	26.0
2	27.0	27.0	27.0	26.0	26.0	26.0	26.0	25.5

E(A)	167	162	157	152	147	142	137	132
32	15.8	15.9	16.1	16.2	15.9	15.3	14.6	14.1
27	18.2	19.3	19.9	19.6	18.4	17.1	15.7	14.9
22	22.0	22.1	21.9	21.1	20.1	18.7	17.8	17.7
17	24.5	24.4	23.5	22.0	21.7	21.1	20.7	20.6
12	25.7	26.3	26.2	25.2	25.7	25.0	25.2	26.0
7	28.2	28.9	27.7	27.3	28.1	28.1	28.4	28.6
2	28.8	30.4	29.1	29.0	28.2	27.5	27.5	28.3

C	167	162	157	152	147	142	137	132
32	0.7	0.6	0.7	0.7	0.7	0.8	0.8	0.7
27	0.6	0.5	0.5	0.6	0.6	0.7	0.7	0.7
22	0.5	0.4	0.5	0.6	0.6	0.7	0.8	0.8
17	0.5	0.5	0.4	0.5	0.6	0.7	0.7	0.8
12	0.4	0.5	0.4	0.5	0.8	0.7	0.8	0.7
7	0.6	0.8	0.8	0.8	0.8	0.7	0.6	0.7
2	0.7	0.7	0.7	0.7	0.6	0.4	0.4	0.6

W	167	162	157	152	147	142	137	132
32	8.6	8.0	7.3	7.4	7.8	8.2	7.0	6.6
27	7.6	6.8	6.9	7.7	7.7	7.0	7.4	6.7
22	7.9	7.9	8.3	8.3	8.8	9.5	8.7	7.8
17	8.5	8.2	7.3	7.6	8.4	8.9	9.5	8.8
12	9.2	8.8	8.9	9.0	9.2	9.5	9.1	8.5
7	8.6	10.3	10.2	9.0	8.9	7.8	8.0	8.9
2	7.3	6.5	5.1	6.1	7.1	7.5	6.5	5.5

LONGITUDE WEST (right block)

Q(S)	167	162	157	152	147	142	137	132
32	174.	197.	174.	174.	174.	149.	149.	174.
27	231.	256.	256.	231.	231.	205.	205.	205.
22	294.	319.	294.	266.	266.	235.	201.	201.
17	330.	330.	358.	330.	299.	264.	264.	226.
12	397.	366.	397.	366.	251.	293.	251.	293.
7	360.	273.	273.	273.	273.	319.	360.	319.
2	343.	343.	343.	343.	388.	465.	465.	388.

Q(B)	167	162	157	152	147	142	137	132
32	98.	111.	100.	111.	117.	101.	108.	124.
27	118.	125.	120.	116.	126.	118.	124.	125.
22	121.	127.	121.	114.	115.	105.	95.	97.
17	112.	111.	121.	122.	121.	97.	99.	89.
12	113.	107.	116.	109.	86.	89.	71.	79.
7	92.	80.	84.	83.	85.	90.	95.	83.
2	83.	80.	81.	91.	97.	117.	123.	116.

Q(E)	167	162	157	152	147	142	137	132
32	116.	88.	74.	103.	158.	194.	139.	126.
27	196.	120.	114.	176.	233.	184.	246.	183.
22	279.	266.	327.	334.	395.	461.	384.	262.
17	353.	311.	229.	292.	350.	382.	416.	343.
12	459.	416.	408.	447.	393.	346.	305.	233.
7	373.	531.	557.	423.	360.	240.	248.	314.
2	233.	139.	113.	138.	188.	271.	212.	158.

Q(C)	167	162	157	152	147	142	137	132
32	-31.	-26.	-21.	6.	19.	10.	20.	19.
27	1.	3.	-3.	7.	22.	20.	24.	22.
22	10.	7.	10.	10.	4.	-4.	1.	7.
17	7.	4.	3.	10.	34.	-8.	-4.	4.
12	1.	7.	15.	4.	30.	1.	-19.	-21.
7	4.	33.	37.	29.	39.	22.	13.	8.
2	6.	8.	3.	22.	15.	24.	31.	44.

Q(N)	167	162	157	152	147	142	137	132
32	-10.	25.	22.	-47.	-120.	-157.	-118.	-95.
27	-83.	9.	25.	-68.	-150.	-118.	-189.	-125.
22	-116.	-81.	-165.	-193.	-249.	-327.	-279.	-165.
17	-142.	-96.	5.	-94.	-207.	-208.	-247.	-210.
12	-176.	-165.	-142.	-195.	-258.	-143.	-108.	2.
7	-109.	-372.	-405.	-263.	-212.	-34.	5.	-86.
2	21.	116.	147.	92.	89.	52.	99.	69.

T(W)	LONGITUDE WEST							
LATITUDE NORTH	167	162	157	152	147	142	137	132
32	16.4	17.0	17.0	16.8	17.0	16.7	16.3	15.8
27	20.3	20.4	20.5	20.5	20.0	19.2	18.6	17.9
22	22.8	22.9	22.5	22.3	22.0	20.8	20.1	19.6
17	24.1	24.2	23.5	22.9	22.8	22.3	21.8	21.2
12	24.9	24.8	24.3	23.8	24.1	24.3	24.2	24.0
7	26.3	26.1	25.4	25.3	25.4	25.5	25.5	25.4
2	27.2	26.7	26.5	26.5	26.5	26.5	26.5	26.5

T(A)	167	162	157	152	147	142	137	132
32	16.9	16.9	17.0	16.8	16.7	15.8	15.3	15.0
27	20.8	20.7	20.4	20.0	19.3	18.5	17.8	16.7
22	22.8	22.7	22.3	22.0	21.2	20.5	19.8	18.8
17	24.2	24.2	23.6	22.7	22.1	21.9	21.7	21.4
12	25.2	24.9	24.6	24.0	24.3	24.0	23.8	23.3
7	26.2	25.7	26.2	25.7	25.5	25.0	24.4	25.0
2	28.0	26.8	26.7	26.3	26.0	25.3	25.0	26.0

E(A)	167	162	157	152	147	142	137	132
32	16.7	16.0	16.6	15.7	14.6	13.6	12.8	12.3
27	20.0	19.3	18.3	17.7	16.4	15.8	15.0	14.0
22	21.8	20.9	19.7	19.0	19.0	19.0	18.9	17.8
17	23.4	22.8	21.8	21.3	20.8	20.7	20.4	20.0
12	26.0	26.1	25.0	23.9	24.1	22.9	24.2	23.7
7	29.1	28.8	26.9	27.2	26.1	25.3	26.2	25.9
2	29.6	28.5	27.9	28.3	27.5	27.0	27.0	27.8

C	167	162	157	152	147	142	137	132
32	0.7	0.8	0.6	0.6	0.6	0.8	0.8	0.8
27	0.5	0.4	0.6	0.6	0.6	0.7	0.7	0.9
22	0.4	0.4	0.4	0.5	0.5	0.6	0.8	0.8
17	0.6	0.4	0.4	0.4	0.7	0.7	0.7	0.9
12	0.7	0.5	0.4	0.5	0.6	0.6	0.7	0.5
7	0.7	0.6	0.4	0.6	0.7	0.8	0.9	0.8
2	0.7	0.6	0.5	0.5	0.5	0.6	0.7	0.8

W	167	162	157	152	147	142	137	132
32	7.9	6.9	6.5	6.8	6.9	7.5	7.1	7.5
27	6.7	6.6	7.1	7.5	7.5	7.7	8.0	8.3
22	6.8	7.3	8.2	8.4	8.3	9.1	10.8	8.5
17	8.0	8.5	8.5	9.7	9.8	8.1	7.6	7.7
12	8.9	9.5	8.5	9.6	9.5	7.8	7.7	8.2
7	8.9	9.6	7.6	8.2	9.0	8.7	8.2	7.1
2	7.4	6.2	5.0	6.0	6.2	7.6	8.0	4.6

Q(S)	LONGITUDE WEST							
LATITUDE NORTH	167	162	157	152	147	142	137	132
32	228.	195.	258.	258.	258.	195.	195.	195.
27	319.	346.	289.	289.	289.	255.	255.	178.
22	381.	381.	381.	351.	351.	318.	241.	241.
17	345.	413.	413.	413.	305.	305.	305.	213.
12	326.	408.	443.	408.	369.	369.	326.	408.
7	345.	390.	468.	390.	345.	295.	241.	295.
2	361.	408.	451.	451.	451.	408.	361.	309.

Q(8)	167	162	157	152	147	142	137	132
32	100.	97.	119.	122.	130.	113.	116.	115.
27	115.	128.	119.	126.	133.	121.	125.	100.
22	125.	131.	136.	132.	137.	119.	94.	102.
17	103.	123.	125.	129.	109.	105.	102.	72.
12	83.	102.	110.	108.	99.	110.	96.	120.
7	80.	93.	98.	88.	86.	84.	77.	81.
2	68.	89.	97.	100.	107.	109.	104.	79.

Q(E)	167	162	157	152	147	142	137	132
32	73.	92.	65.	91.	135.	194.	176.	204.
27	96.	117.	175.	229.	251.	253.	290.	334.
22	160.	230.	369.	420.	378.	353.	377.	268.
17	291.	400.	387.	472.	507.	287.	210.	197.
12	322.	344.	281.	382.	400.	303.	228.	292.
7	294.	332.	197.	232.	386.	419.	304.	194.
2	213.	144.	110.	132.	159.	279.	334.	101.

Q(C)	167	162	157	152	147	142	137	132
32	-16.	3.	1.	1.	9.	27.	29.	24.
27	-14.	-8.	3.	15.	21.	22.	26.	40.
22	1.	6.	7.	10.	27.	11.	13.	27.
17	-4.	1.	-4.	8.	28.	13.	4.	-7.
12	-11.	-4.	-11.	-8.	-8.	10.	13.	23.
7	4.	16.	-25.	-13.	-4.	18.	36.	12.
2	-24.	-3.	-4.	5.	13.	37.	48.	10.

Q(N)	167	162	157	152	147	142	137	132
32	71.	4.	74.	45.	-16.	-140.	-126.	-149.
27	122.	110.	-10.	-83.	-118.	-142.	-186.	-296.
22	96.	15.	-131.	-211.	-191.	-166.	-244.	-158.
17	-46.	-111.	-95.	-198.	-339.	-101.	-11.	-50.
12	-68.	-35.	63.	-75.	-123.	-54.	-11.	-27.
7	-33.	-51.	197.	85.	-124.	-226.	-176.	9.
2	104.	179.	249.	214.	173.	-18.	-126.	121.

LONGITUDE WEST

T(W)	167	162	157	152	147	142	137	132
32	16.0	16.3	16.8	16.9	16.8	16.7	16.1	15.0
27	20.7	20.6	20.4	20.3	19.8	19.0	18.2	17.2
22	23.1	22.3	22.3	22.0	21.5	21.0	19.9	19.4
17	23.6	23.5	23.4	22.8	22.5	22.3	22.0	21.7
12	24.8	24.8	24.5	24.6	24.3	23.7	23.4	23.2
7	26.4	26.0	25.4	25.4	25.3	25.3	25.3	25.0
2	26.8	26.4	25.9	26.0	25.8	26.0	26.5	26.5

T(A)	167	162	157	152	147	142	137	132
32	16.2	16.4	16.8	17.0	16.7	15.7	15.4	14.4
27	20.0	20.1	20.3	19.5	19.3	18.4	17.7	16.8
22	23.1	22.7	22.3	21.7	21.3	20.5	19.7	19.5
17	24.0	24.3	23.7	23.0	22.7	22.1	21.5	20.9
12	25.2	25.0	24.7	25.1	25.0	24.7	24.2	23.0
7	27.0	26.3	26.2	25.8	26.0	26.0	25.7	25.2
2	27.0	26.8	26.6	26.0	25.8	25.7	25.5	25.0

E(A)	167	162	157	152	147	142	137	132
32	14.1	14.8	15.9	15.7	15.0	14.0	13.3	12.8
27	18.7	19.0	19.5	17.8	17.0	15.4	14.3	13.7
22	22.1	21.3	21.3	20.0	19.1	17.9	16.5	15.0
17	23.8	23.3	23.3	23.1	22.0	21.9	19.8	19.0
12	25.8	25.8	26.4	25.4	25.3	25.5	24.0	22.5
7	28.2	28.0	29.2	28.5	27.7	28.1	26.0	26.5
2	29.8	30.0	29.5	29.6	28.7	28.3	27.7	27.5

C	167	162	157	152	147	142	137	132
32	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.8
27	0.7	0.6	0.6	0.7	0.7	0.8	0.7	0.7
22	0.6	0.5	0.5	0.7	0.7	0.7	0.6	0.7
17	0.6	0.5	0.5	0.6	0.6	0.6	0.7	0.8
12	0.4	0.5	0.6	0.6	0.7	0.7	0.7	0.6
7	0.6	0.5	0.7	0.9	0.8	0.9	0.7	0.6
2	0.5	0.5	0.6	0.7	0.7	0.6	0.6	0.6

W	167	162	157	152	147	142	137	132
32	7.1	7.3	7.5	7.7	7.5	7.1	7.3	7.5
27	8.0	7.7	8.3	8.4	8.4	8.2	7.9	6.9
22	7.3	7.2	8.2	8.5	9.3	9.3	9.0	6.5
17	6.7	6.8	6.6	8.0	9.4	8.9	8.9	8.3
12	6.2	7.2	7.5	9.0	9.1	7.8	7.6	8.2
7	5.9	8.4	7.8	9.2	9.3	9.5	8.6	7.7
2	6.3	6.0	5.0	6.0	6.7	7.1	9.0	9.5

LONGITUDE WEST

Q(S)	167	162	157	152	147	142	137	132
32	328.	290.	290.	290.	290.	290.	290.	248.
27	311.	352.	352.	311.	311.	266.	311.	311.
22	373.	412.	412.	330.	330.	330.	373.	330.
17	390.	431.	431.	390.	390.	390.	345.	295.
12	485.	447.	405.	405.	358.	358.	358.	405.
7	414.	458.	366.	256.	313.	256.	366.	414.
2	465.	465.	421.	372.	372.	421.	421.	421.

Q(B)	167	162	157	152	147	142	137	132
32	125.	112.	109.	109.	114.	127.	126.	110.
27	113.	121.	114.	117.	116.	107.	123.	123.
22	108.	114.	119.	106.	107.	114.	127.	116.
17	97.	103.	109.	101.	105.	110.	109.	102.
12	107.	102.	92.	92.	80.	75.	82.	109.
7	83.	95.	68.	53.	63.	50.	82.	92.
2	90.	87.	77.	77.	79.	93.	105.	111.

Q(E)	167	162	157	152	147	142	137	132
32	122.	120.	110.	134.	145.	152.	165.	151.
27	252.	202.	218.	315.	320.	323.	285.	169.
22	199.	174.	268.	348.	437.	469.	426.	191.
17	136.	150.	136.	198.	348.	297.	405.	353.
12	121.	166.	144.	334.	311.	142.	170.	282.
7	126.	281.	115.	234.	283.	264.	341.	192.
2	121.	88.	59.	79.	111.	153.	423.	484.

Q(C)	167	162	157	152	147	142	137	132
32	-6.	-3.	1.	-4.	3.	29.	21.	18.
27	23.	16.	4.	27.	17.	20.	16.	11.
22	1.	-12.	1.	11.	8.	19.	8.	-3.
17	-11.	-22.	-8.	-7.	-8.	8.	18.	27.
12	-10.	-6.	-6.	-18.	-26.	-31.	-25.	7.
7	-15.	-10.	-25.	-15.	-26.	-27.	-14.	-7.
2	-5.	-10.	-14.	1.	1.	9.	36.	57.

Q(N)	167	162	157	152	147	142	137	132
32	87.	63.	70.	51.	28.	-19.	-22.	-32.
27	-78.	14.	15.	-149.	-143.	-184.	-114.	8.
22	66.	137.	26.	-136.	-223.	-273.	-188.	27.
17	168.	200.	195.	98.	-55.	-25.	-188.	-186.
12	268.	185.	176.	-3.	-8.	172.	131.	7.
7	220.	93.	210.	-16.	-7.	-32.	-43.	138.
2	260.	301.	299.	216.	182.	166.	-143.	-232.

LONGITUDE WEST

T(W)

LATITUDE NORTH	167	162	157	152	147	142	137	132
32	16.1	16.8	16.7	16.7	16.5	16.0	15.8	15.0
27	19.8	20.4	20.3	20.2	19.9	19.1	18.5	17.1
22	23.0	22.6	22.5	22.1	21.5	20.8	19.8	19.1
17	24.4	24.3	23.7	22.9	22.7	22.3	21.8	20.8
12	25.7	25.3	24.7	24.6	24.6	24.1	23.9	24.2
7	26.6	26.6	26.2	25.8	25.9	26.2	26.3	26.8
2	27.4	27.3	26.7	27.0	26.6	26.9	29.1	29.2

T(A)

LATITUDE NORTH	167	162	157	152	147	142	137	132
32	16.1	17.0	17.3	17.0	16.7	16.0	15.3	14.3
27	19.9	20.3	20.3	20.0	19.1	18.2	17.6	16.4
22	22.6	22.5	22.7	21.9	21.3	20.4	19.6	18.5
17	24.3	24.3	24.1	23.0	22.7	22.2	21.5	21.0
12	25.8	25.4	25.2	25.3	25.0	24.4	24.3	24.0
7	26.7	26.3	26.3	26.5	26.6	26.4	26.0	26.2
2	27.3	27.5	27.7	27.1	26.0	26.0	27.0	27.0

E(A)

LATITUDE NORTH	167	162	157	152	147	142	137	132
32	15.6	16.1	16.8	15.7	14.9	13.7	12.8	12.3
27	18.2	19.0	19.3	17.9	16.6	15.4	14.6	14.1
22	22.1	21.7	21.0	20.1	19.1	18.0	16.2	15.9
17	25.0	24.6	23.5	21.9	22.0	21.8	21.4	19.0
12	27.4	27.4	26.8	26.7	26.5	25.3	25.2	24.6
7	29.9	30.1	29.4	27.8	28.0	30.5	29.8	29.8
2	31.1	30.1	29.3	29.0	27.5	27.9	28.5	28.6

C

LATITUDE NORTH	167	162	157	152	147	142	137	132
32	0.8	0.7	0.7	0.8	0.8	0.8	0.9	0.8
27	0.6	0.6	0.6	0.7	0.7	0.8	0.8	0.8
22	0.7	0.7	0.6	0.6	0.6	0.7	0.8	0.8
17	0.7	0.7	0.7	0.6	0.6	0.6	0.7	0.8
12	0.7	0.6	0.7	0.7	0.7	0.6	0.6	0.7
7	0.7	0.8	0.8	0.7	0.6	0.6	0.9	0.8
2	0.6	0.6	0.6	0.6	0.5	0.6	0.8	0.9

W

LATITUDE NORTH	167	162	157	152	147	142	137	132
32	8.3	7.4	7.0	7.1	6.6	6.6	6.8	7.2
27	7.6	8.0	6.8	8.2	7.5	7.5	7.7	7.5
22	7.7	8.2	8.1	8.3	8.5	8.2	8.2	7.7
17	7.3	8.0	8.5	8.9	8.9	7.7	7.6	7.6
12	6.8	8.3	9.2	10.4	8.7	7.9	7.5	7.3
7	6.6	8.1	6.0	8.5	8.8	7.9	7.5	7.1
2	5.7	7.2	4.0	6.1	8.0	6.6	5.9	5.3

LONGITUDE WEST

Q(S)

LATITUDE NORTH	167	162	157	152	147	142	137	132
32	300.	350.	350.	300.	300.	300.	245.	300.
27	409.	409.	409.	361.	361.	309.	309.	309.
22	369.	369.	418.	418.	418.	369.	316.	316.
17	373.	373.	373.	422.	422.	422.	373.	319.
12	375.	424.	375.	375.	375.	424.	424.	375.
7	372.	318.	318.	372.	421.	421.	260.	318.
2	414.	414.	414.	414.	458.	414.	314.	256.

Q(B)

LATITUDE NORTH	167	162	157	152	147	142	137	132
32	96.	106.	99.	93.	96.	102.	93.	113.
27	116.	116.	114.	110.	121.	110.	112.	110.
22	102.	99.	108.	116.	119.	112.	101.	105.
17	90.	90.	88.	107.	107.	109.	101.	89.
12	82.	91.	78.	76.	80.	94.	93.	93.
7	75.	70.	67.	74.	82.	80.	60.	75.
2	83.	83.	75.	87.	108.	103.	99.	89.

Q(E)

LATITUDE NORTH	167	162	157	152	147	142	137	132
32	128.	98.	58.	97.	97.	115.	142.	151.
27	179.	217.	120.	279.	238.	242.	264.	193.
22	229.	272.	288.	327.	355.	320.	338.	243.
17	176.	250.	307.	362.	334.	194.	169.	205.
12	147.	230.	262.	312.	239.	190.	149.	177.
7	118.	203.	92.	280.	306.	131.	144.	156.
2	101.	186.	70.	143.	320.	190.	251.	218.

Q(C)

LATITUDE NORTH	167	162	157	152	147	142	137	132
32	1.	-6.	-17.	-9.	-6.	1.	14.	20.
27	-4.	4.	1.	7.	24.	27.	28.	21.
22	13.	4.	-7.	7.	7.	13.	7.	19.
17	3.	1.	-14.	-4.	1.	4.	10.	-7.
12	-3.	-4.	-19.	-29.	-14.	-10.	-12.	6.
7	-3.	10.	-3.	-24.	-25.	-7.	9.	17.
2	3.	-6.	-16.	-3.	20.	24.	50.	47.

Q(N)

LATITUDE NORTH	167	162	157	152	147	142	137	132
32	76.	152.	210.	120.	113.	84.	-4.	17.
27	118.	72.	175.	-35.	-23.	-71.	-96.	-16.
22	26.	-6.	29.	-33.	-64.	-77.	-131.	-52.
17	104.	33.	-9.	-43.	-20.	117.	94.	33.
12	149.	107.	54.	17.	70.	150.	194.	99.
7	182.	35.	163.	43.	58.	217.	48.	71.
2	227.	152.	286.	187.	11.	98.	-87.	-97.

LONGITUDE WEST

T(W)	167	162	157	152	147	142	137	132
32	18.8	18.9	18.5	17.8	17.0	16.0	16.0	15.0
27	21.8	21.2	21.1	20.5	19.8	19.0	18.5	17.6
22	23.3	23.2	22.8	22.2	21.4	20.7	20.3	19.8
17	24.5	24.3	23.9	23.6	23.3	22.7	22.2	21.8
12	26.1	25.7	25.3	25.1	25.2	25.0	25.0	24.3
7	26.8	27.3	26.4	26.2	26.2	26.0	26.2	26.3
2	27.4	26.8	26.6	26.4	26.2	26.2	26.8	27.6

T(A)	167	162	157	152	147	142	137	132
32	19.3	19.5	18.7	17.7	16.7	15.7	15.9	15.0
27	22.4	21.8	21.3	20.0	19.3	18.5	17.9	17.2
22	24.2	23.5	23.1	22.2	21.7	21.0	20.3	20.0
17	24.9	24.7	24.3	23.9	23.7	23.1	23.0	22.6
12	26.1	25.8	25.6	25.6	25.3	24.4	25.1	24.7
7	26.7	26.4	26.5	26.4	26.1	25.1	25.6	26.2
2	27.5	27.1	27.3	26.7	26.3	26.0	26.0	27.0

E(A)	167	162	157	152	147	142	137	132
32	19.0	17.9	16.4	14.7	13.7	13.1	13.4	12.9
27	21.8	20.2	19.2	17.8	16.0	16.0	15.3	13.9
22	24.0	22.1	21.0	20.4	20.6	19.8	18.6	16.8
17	26.3	25.1	23.9	24.0	24.1	22.4	23.1	22.5
12	29.2	28.3	27.4	27.0	25.8	25.3	26.7	28.1
7	30.1	30.5	31.1	28.8	28.2	27.4	27.5	27.2
2	29.4	31.1	27.5	28.5	28.8	28.7	28.0	25.9

C	167	162	157	152	147	142	137	132
32	0.7	0.6	0.7	0.7	0.8	0.8	0.7	0.7
27	0.7	0.6	0.5	0.6	0.7	0.8	0.8	0.8
22	0.7	0.7	0.6	0.6	0.7	0.8	0.7	0.7
17	0.7	0.7	0.6	0.7	0.6	0.6	0.7	0.7
12	0.8	0.6	0.6	0.6	0.6	0.7	0.8	0.5
7	0.7	0.8	0.8	0.7	0.9	0.8	0.7	0.8
2	0.5	0.6	0.7	0.8	0.8	0.6	0.5	0.5

W	167	162	157	152	147	142	137	132
32	8.2	7.5	7.1	7.1	6.9	6.6	7.1	7.5
27	8.1	8.0	7.7	7.7	7.2	7.0	6.8	6.8
22	8.2	8.2	8.1	8.3	8.3	8.1	7.3	7.1
17	6.7	7.2	7.3	9.3	8.4	8.4	8.4	9.1
12	7.2	7.0	9.0	9.2	7.7	7.3	8.4	10.9
7	5.4	6.4	5.8	6.8	5.9	5.7	5.7	7.0
2	6.3	4.9	5.1	5.8	5.5	5.3	5.3	5.8

LONGITUDE WEST

Q(S)	167	162	157	152	147	142	137	132
32	388.	439.	388.	388.	332.	332.	388.	388.
27	389.	440.	486.	440.	389.	333.	333.	333.
22	387.	387.	438.	438.	387.	331.	387.	387.
17	381.	381.	431.	381.	431.	431.	381.	381.
12	319.	422.	422.	422.	422.	373.	319.	466.
7	361.	309.	309.	361.	253.	309.	361.	309.
2	434.	393.	348.	298.	298.	393.	434.	434.

Q(B)	167	162	157	152	147	142	137	132
32	96.	110.	108.	116.	106.	107.	119.	118.
27	89.	105.	123.	126.	119.	104.	107.	108.
22	80.	94.	108.	113.	96.	85.	105.	108.
17	80.	84.	97.	88.	96.	101.	83.	85.
12	68.	88.	88.	87.	96.	96.	73.	91.
7	77.	77.	62.	77.	61.	84.	91.	75.
2	94.	78.	75.	67.	68.	91.	109.	116.

Q(E)	167	162	157	152	147	142	137	132
32	120.	135.	147.	173.	162.	131.	145.	147.
27	192.	216.	224.	246.	226.	175.	165.	172.
22	212.	303.	313.	319.	240.	208.	169.	192.
17	110.	160.	183.	330.	224.	264.	178.	215.
12	134.	129.	285.	300.	237.	204.	247.	154.
7	89.	133.	59.	134.	117.	120.	127.	201.
2	162.	61.	124.	117.	94.	91.	128.	229.

Q(C)	167	162	157	152	147	142	137	132
32	-17.	-18.	-6.	3.	9.	8.	3.	1.
27	-20.	-20.	-7.	16.	15.	14.	17.	11.
22	-30.	-10.	-10.	1.	-10.	-10.	1.	-6.
17	-11.	-12.	-12.	-12.	-14.	-14.	-27.	-29.
12	1.	-3.	-11.	-19.	-4.	18.	-4.	-18.
7	3.	23.	-3.	-6.	3.	21.	14.	3.
2	-3.	-6.	-15.	-7.	-3.	5.	17.	14.

Q(N)	167	162	157	152	147	142	137	132
32	190.	213.	140.	96.	56.	86.	122.	123.
27	128.	139.	146.	53.	29.	40.	45.	42.
22	124.	1.	28.	6.	62.	48.	113.	93.
17	202.	150.	163.	-25.	126.	81.	148.	111.
12	116.	209.	60.	54.	93.	55.	4.	240.
7	192.	77.	191.	156.	72.	85.	130.	31.
2	182.	261.	164.	122.	139.	207.	180.	76.

Note: All tables have row axis labeled "LATITUDE NORTH".

LONGITUDE WEST								
T(W)	167	162	157	152	147	142	137	132
32	20.0	20.3	20.2	19.6	18.4	17.8	17.6	17.1
27	22.8	22.7	22.6	22.3	21.0	20.4	19.8	18.8
22	25.3	25.0	24.4	23.7	22.8	22.2	21.8	21.1
17	24.6	25.3	24.8	24.3	23.7	23.5	23.2	22.7
12	26.3	26.1	25.5	25.0	25.4	25.3	25.3	24.9
7	27.4	27.2	26.8	26.6	26.7	26.3	26.3	26.6
2	26.8	26.8	26.6	27.3	26.7	25.8	25.8	24.8

LATITUDE NORTH

T(A)	167	162	157	152	147	142	137	132
32	21.1	21.6	21.5	20.8	19.5	18.7	18.2	17.3
27	23.4	23.4	23.3	23.1	21.6	20.3	19.7	19.3
22	25.5	25.0	24.3	23.7	23.1	22.3	20.8	20.8
17	25.8	25.6	25.3	24.4	23.8	23.7	23.3	22.7
12	27.0	26.3	26.0	25.7	25.3	25.3	25.3	25.2
7	27.4	27.0	26.3	26.3	26.6	26.5	26.5	26.5
2	27.0	27.3	27.1	26.6	26.0	25.2	25.5	25.7

LATITUDE NORTH

E(A)	167	162	157	152	147	142	137	132
32	21.8	22.0	22.2	20.4	16.9	17.6	16.9	16.0
27	24.5	24.0	24.0	22.2	20.1	18.5	18.0	18.0
22	26.3	25.1	23.9	22.8	21.6	20.9	20.3	20.5
17	27.8	26.6	25.6	25.1	23.4	22.4	22.2	22.0
12	28.6	27.7	26.8	25.9	27.1	25.7	26.9	25.8
7	27.9	29.2	28.5	28.3	27.7	27.7	28.0	27.3
2	27.4	27.8	27.4	28.5	28.2	26.7	26.3	25.2

LATITUDE NORTH

C	167	162	157	152	147	142	137	132
32	0.6	0.6	0.7	0.7	0.7	0.8	0.8	0.9
27	0.6	0.5	0.6	0.5	0.7	0.8	0.8	0.7
22	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.8
17	0.6	0.5	0.5	0.5	0.4	0.5	0.7	0.7
12	0.5	0.6	0.6	0.5	0.6	0.7	0.7	0.7
7	0.6	0.8	0.9	0.9	0.8	0.8	0.6	0.8
2	0.3	0.6	0.5	0.5	0.7	0.5	0.5	0.4

LATITUDE NORTH

W	167	162	157	152	147	142	137	132
32	6.5	6.3	6.0	5.5	6.2	6.5	6.5	6.3
27	6.6	6.6	6.6	6.5	6.9	6.6	6.2	5.6
22	6.7	7.2	7.3	7.3	7.3	6.5	7.3	6.3
17	6.8	7.7	8.2	6.6	7.2	6.8	7.4	6.8
12	6.8	9.2	8.3	8.3	8.2	7.2	7.2	6.8
7	6.5	6.8	6.9	6.7	6.0	4.9	4.0	5.2
2	5.6	5.3	4.7	7.1	6.0	6.7	7.2	6.7

LATITUDE NORTH

LONGITUDE WEST								
Q(S)	167	162	157	152	147	142	137	132
32	457.	457.	404.	404.	404.	346.	346.	283.
27	451.	499.	451.	499.	399.	341.	341.	399.
22	489.	489.	489.	443.	443.	443.	391.	335.
17	430.	475.	475.	475.	516.	475.	380.	380.
12	458.	415.	415.	458.	415.	366.	366.	366.
7	396.	300.	245.	245.	300.	300.	396.	300.
2	482.	376.	416.	416.	333.	416.	416.	451.

LATITUDE NORTH

Q(B)	167	162	157	152	147	142	137	132
32	92.	89.	78.	84.	96.	81.	87.	78.
27	91.	100.	92.	106.	94.	93.	94.	99.
22	101.	108.	113.	106.	105.	110.	113.	90.
17	75.	99.	100.	106.	118.	114.	96.	97.
12	88.	89.	88.	96.	94.	88.	84.	84.
7	93.	72.	65.	63.	74.	70.	89.	75.
2	110.	86.	95.	107.	90.	110.	108.	103.

LATITUDE NORTH

Q(E)	167	162	157	152	147	142	137	132
32	30.	35.	24.	41.	95.	64.	76.	79.
27	75.	85.	80.	113.	131.	139.	115.	69.
22	152.	203.	215.	210.	199.	144.	188.	103.
17	75.	211.	267.	130.	182.	177.	210.	149.
12	146.	386.	284.	282.	247.	201.	161.	150.
7	212.	182.	185.	167.	156.	104.	77.	131.
2	151.	132.	113.	232.	144.	168.	213.	157.

LATITUDE NORTH

Q(C)	167	162	157	152	147	142	137	132
32	-29.	-33.	-31.	-27.	-28.	-24.	-16.	-5.
27	-16.	-19.	-19.	-21.	-17.	3.	3.	-12.
22	-6.	1.	3.	1.	-9.	-3.	29.	8.
17	-33.	-10.	-17.	-3.	-3.	-6.	-3.	1.
12	-19.	-8.	-17.	-24.	4.	1.	1.	-9.
7	1.	6.	14.	8.	3.	-4.	-4.	3.
2	-5.	-11.	-10.	20.	17.	16.	9.	-24.

LATITUDE NORTH

Q(N)	167	162	157	152	147	142	137	132
32	365.	367.	334.	307.	241.	224.	199.	132.
27	301.	333.	299.	301.	191.	107.	130.	242.
22	242.	179.	159.	127.	148.	193.	61.	135.
17	314.	176.	126.	243.	220.	191.	79.	134.
12	244.	-53.	60.	104.	70.	77.	122.	142.
7	92.	41.	-19.	7.	68.	131.	235.	92.
2	226.	170.	218.	58.	82.	122.	86.	216.

LATITUDE NORTH

T(W)	LONGITUDE WEST							
	167	162	157	152	147	142	137	132
32	23.9	23.6	23.2	22.3	21.1	20.3	19.4	18.3
27	24.7	24.3	24.1	22.8	22.0	21.3	20.5	19.7
22	25.3	25.2	24.7	24.1	23.4	22.6	21.7	21.1
17	25.6	26.0	25.3	25.0	24.7	24.6	24.3	23.9
12	25.9	25.9	25.8	25.8	26.1	26.3	26.4	26.6
7	28.7	27.5	26.7	27.2	26.3	26.3	27.1	27.4
2	26.3	26.5	26.3	26.3	24.6	24.2	25.2	25.6

LATITUDE NORTH

T(A)	167	162	157	152	147	142	137	132
32	24.6	24.0	23.2	22.3	21.0	20.3	19.6	18.7
27	25.2	24.6	23.9	23.0	22.1	21.3	20.4	19.5
22	25.6	25.4	24.7	23.9	23.3	22.4	21.6	20.8
17	26.3	26.1	25.4	24.8	24.7	24.5	24.3	23.9
12	26.5	26.3	26.2	26.1	25.7	25.7	26.0	25.9
7	26.8	26.7	26.5	26.3	26.1	25.3	26.5	26.5
2	26.8	26.6	26.4	26.2	25.6	25.2	25.0	25.0

LATITUDE NORTH

E(A)	167	162	157	152	147	142	137	132
32	24.4	23.7	22.7	21.8	19.8	18.9	18.0	17.3
27	24.8	24.1	23.0	21.7	20.8	19.6	18.9	17.9
22	25.6	24.7	23.8	23.4	22.7	21.6	21.1	20.5
17	26.9	26.4	25.8	25.8	24.2	23.5	23.4	23.4
12	28.1	29.1	27.9	26.8	25.9	26.2	26.2	26.5
7	28.3	28.7	28.1	27.5	27.4	27.5	27.0	28.1
2	27.5	27.1	26.4	26.5	26.4	25.8	24.8	23.0

LATITUDE NORTH

C	167	162	157	152	147	142	137	132
32	0.5	0.5	0.6	0.6	0.7	0.8	0.8	0.8
27	0.5	0.5	0.5	0.6	0.7	0.7	0.8	0.9
22	0.5	0.5	0.5	0.6	0.7	0.7	0.9	0.9
17	0.5	0.5	0.5	0.5	0.5	0.6	0.7	0.9
12	0.5	0.7	0.7	0.5	0.6	0.6	0.6	0.7
7	0.5	0.7	0.9	0.7	0.6	0.8	0.6	0.6
2	0.5	0.5	0.5	0.4	0.3	0.3	0.4	0.4

LATITUDE NORTH

W	167	162	157	152	147	142	137	132
32	5.8	6.5	6.6	6.0	5.7	5.5	5.2	5.7
27	6.7	7.2	7.1	7.6	6.9	6.7	6.9	7.0
22	7.6	8.3	8.5	7.9	7.3	7.8	8.7	9.4
17	6.6	7.5	8.0	7.1	7.0	5.7	6.3	7.3
12	5.8	9.2	8.3	6.7	5.7	5.2	4.0	5.1
7	6.8	7.2	4.8	5.4	5.3	5.4	4.3	3.7
2	7.5	6.3	4.6	6.3	4.5	4.5	4.7	4.3

LATITUDE NORTH

Q(S)	LONGITUDE WEST							
	167	162	157	152	147	142	137	132
32	499.	499.	451.	451.	399.	341.	341.	341.
27	494.	494.	494.	447.	395.	395.	338.	277.
22	488.	488.	488.	441.	390.	390.	273.	273.
17	475.	475.	475.	475.	475.	430.	380.	266.
12	460.	368.	368.	460.	416.	416.	416.	368.
7	441.	353.	247.	353.	399.	302.	399.	399.
2	420.	420.	420.	456.	487.	487.	456.	456.

LATITUDE NORTH

Q(B)	167	162	157	152	147	142	137	132
32	100.	106.	106.	108.	103.	91.	90.	89.
27	102.	107.	117.	106.	99.	103.	92.	80.
22	103.	107.	112.	1C7.	97.	100.	73.	76.
17	93.	103.	104.	108.	111.	106.	94.	68.
12	90.	73.	77.	99.	103.	105.	102.	96.
7	125.	91.	62.	96.	96.	85.	103.	103.
2	94.	101.	103.	112.	102.	104.	119.	132.

LATITUDE NORTH

Q(E)	167	162	157	152	147	142	137	132
32	104.	131.	144.	108.	103.	92.	78.	72.
27	163.	194.	211.	222.	157.	150.	145.	146.
22	242.	368.	394.	278.	195.	233.	272.	297.
17	147.	252.	280.	172.	199.	148.	162.	201.
12	104.	259.	255.	165.	157.	140.	105.	142.
7	304.	248.	108.	158.	120.	121.	124.	98.
2	233.	174.	117.	179.	63.	61.	112.	139.

LATITUDE NORTH

Q(C)	167	162	157	152	147	142	137	132
32	-17.	-11.	1.	1.	3.	1.	-5.	-10.
27	-14.	-9.	6.	-7.	-3.	1.	3.	6.
22	-10.	-7.	1.	7.	3.	7.	4.	12.
17	-19.	-3.	-4.	6.	1.	3.	1.	1.
12	-14.	-15.	-14.	-8.	10.	13.	7.	15.
7	52.	23.	4.	20.	5.	22.	11.	14.
2	-15.	-3.	-2.	3.	-18.	-18.	4.	11.

LATITUDE NORTH

Q(N)	167	162	157	152	147	142	137	132
32	311.	273.	202.	236.	191.	159.	178.	191.
27	243.	203.	161.	126.	144.	142.	98.	45.
22	153.	20.	-20.	50.	95.	51.	-77.	-113.
17	255.	124.	95.	190.	165.	174.	124.	-4.
12	280.	51.	50.	205.	147.	159.	202.	116.
7	-40.	-11.	73.	80.	179.	74.	162.	184.
2	109.	149.	202.	162.	341.	341.	222.	175.

LATITUDE NORTH

T(W)	LONGITUDE WEST							
	167	162	157	152	147	142	137	132
32	24.8	24.6	24.2	23.5	22.7	21.8	21.2	20.3
27	25.2	24.7	24.5	24.3	23.5	22.8	21.8	21.2
22	25.5	25.4	25.3	24.7	24.0	23.4	22.5	21.7
17	26.2	25.8	25.4	24.8	24.7	24.4	24.3	24.2
12	26.5	26.3	25.9	26.1	26.3	26.3	26.3	26.3
7	26.7	26.8	27.0	26.4	26.3	26.2	26.2	26.0
2	26.8	27.3	25.9	25.9	25.6	25.3	24.9	24.7

T(A)	167	162	157	152	147	142	137	132
32	24.8	24.8	23.7	22.9	22.3	21.8	21.2	20.5
27	25.4	24.8	24.4	24.0	23.4	22.9	22.0	21.2
22	26.0	25.5	25.0	24.6	24.2	23.7	23.2	21.8
17	26.3	26.1	25.5	25.3	25.1	25.2	24.8	24.5
12	26.6	26.2	26.2	26.3	26.3	26.2	26.1	25.9
7	27.0	26.8	26.7	26.5	26.3	26.1	26.0	25.4
2	26.8	26.7	26.5	26.3	26.1	25.9	25.0	24.0

E(A)	167	162	157	152	147	142	137	132
32	24.5	23.9	23.1	22.1	21.1	20.5	19.8	18.6
27	25.4	24.9	24.2	23.0	21.9	20.9	19.8	19.2
22	26.1	25.2	24.3	23.4	22.6	21.6	20.8	20.5
17	27.3	26.7	26.2	25.3	24.7	24.1	24.0	23.9
12	27.7	28.2	28.3	27.7	27.2	27.9	29.0	29.1
7	27.7	29.0	30.1	28.3	27.4	27.3	27.7	27.8
2	27.3	27.5	26.2	25.8	25.0	25.5	27.1	26.9

C	167	162	157	152	147	142	137	132
32	0.5	0.4	0.5	0.6	0.6	0.7	0.7	0.8
27	0.5	0.6	0.5	0.5	0.5	0.6	0.7	0.7
22	0.5	0.5	0.5	0.5	0.5	0.6	0.8	0.8
17	0.6	0.6	0.5	0.4	0.5	0.6	0.8	0.8
12	0.5	0.6	0.7	0.7	0.6	0.6	0.7	0.8
7	0.6	0.7	0.8	0.7	0.6	0.6	0.8	0.9
2	0.5	0.5	0.5	0.6	0.3	0.6	0.5	0.4

W	167	162	157	152	147	142	137	132
32	5.9	5.4	5.5	6.2	5.8	6.0	5.2	4.7
27	6.9	6.8	7.1	6.4	5.7	4.8	4.6	4.6
22	7.5	7.5	7.2	7.3	6.7	6.9	5.8	5.7
17	7.1	6.9	6.8	7.3	7.3	6.5	7.0	6.8
12	6.6	5.5	6.4	6.5	7.4	6.2	5.2	5.5
7	6.2	4.6	5.7	6.7	7.0	5.3	5.8	6.0
2	6.3	5.9	6.0	8.3	9.0	9.2	8.0	7.5

Q(S)	LONGITUDE WEST							
	167	162	157	152	147	142	137	132
32	463.	502.	463.	419.	419.	370.	370.	317.
27	470.	425.	470.	470.	470.	425.	376.	376.
22	474.	474.	474.	474.	474.	429.	324.	324.
17	427.	427.	472.	512.	472.	427.	323.	323.
12	466.	421.	372.	372.	421.	421.	372.	319.
7	412.	364.	312.	364.	412.	412.	312.	255.
2	441.	441.	441.	399.	512.	399.	441.	479.

Q(B)	167	162	157	152	147	142	137	132
32	110.	116.	120.	115.	115.	101.	102.	89.
27	104.	99.	112.	119.	119.	110.	101.	104.
22	99.	107.	115.	115.	114.	106.	79.	87.
17	92.	91.	103.	107.	104.	93.	75.	77.
12	99.	92.	77.	80.	94.	93.	81.	74.
7	89.	79.	70.	80.	93.	95.	75.	67.
2	102.	109.	97.	93.	115.	91.	99.	115.

Q(E)	167	162	157	152	147	142	137	132
32	141.	129.	134.	155.	132.	120.	93.	80.
27	184.	166.	195.	177.	141.	109.	95.	90.
22	227.	254.	249.	252.	190.	202.	132.	107.
17	198.	179.	166.	191.	206.	158.	183.	169.
12	173.	110.	117.	147.	234.	139.	87.	92.
7	164.	91.	105.	156.	194.	118.	126.	121.
2	184.	184.	154.	380.	487.	433.	182.	139.

Q(C)	167	162	157	152	147	142	137	132
32	1.	-5.	11.	15.	10.	1.	1.	-4.
27	-6.	-3.	3.	8.	3.	-2.	-4.	1.
22	-15.	-3.	9.	3.	-6.	-9.	-17.	-3.
17	-3.	-9.	-3.	-15.	-12.	-21.	-14.	-9.
12	-3.	3.	-8.	-6.	1.	3.	5.	9.
7	-8.	1.	7.	-3.	1.	3.	5.	15.
2	1.	15.	-15.	-14.	-18.	-22.	-4.	21.

Q(N)	167	162	157	152	147	142	137	132
32	212.	262.	198.	134.	162.	150.	175.	152.
27	188.	165.	160.	166.	208.	208.	184.	181.
22	164.	117.	101.	104.	176.	129.	130.	134.
17	140.	166.	207.	229.	175.	198.	80.	86.
12	197.	218.	187.	152.	93.	187.	200.	145.
7	167.	193.	129.	132.	124.	197.	107.	52.
2	155.	134.	205.	-61.	-72.	-103.	165.	204.

(Latitude North applies to all row groups on both left and right tables.)

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	LONGITUDE WEST							
T(W)	167	162	157	152	147	142	137	132
32	24.9	24.5	24.2	23.4	22.4	21.6	20.6	19.5
27	25.3	24.8	24.4	24.0	23.1	22.1	21.3	20.7
22	26.0	25.8	25.3	24.6	23.8	23.0	21.9	21.8
17	26.6	26.2	25.7	25.2	24.8	24.6	24.3	24.2
12	26.7	26.5	26.3	26.1	26.1	26.2	26.3	26.3
7	27.3	26.8	26.4	26.3	26.0	25.9	26.3	26.2
2	26.3	25.9	25.8	25.7	25.7	25.7	25.7	25.7
T(A)	167	162	157	152	147	142	137	132
32	24.3	24.2	24.0	23.3	22.3	21.3	20.3	19.2
27	24.8	24.7	24.4	24.1	23.1	22.3	21.4	20.5
22	26.0	25.4	25.1	24.6	24.1	23.1	22.6	22.0
17	26.3	26.2	26.0	25.3	24.8	24.5	24.2	24.3
12	26.7	26.7	26.7	26.1	26.2	25.7	25.4	25.3
7	27.0	26.8	26.6	26.4	26.2	25.9	25.7	25.3
2	26.1	26.2	26.6	26.1	25.3	25.0	25.0	25.2
E(A)	167	162	157	152	147	142	137	132
32	24.5	24.0	22.9	21.3	19.9	18.9	17.7	16.6
27	24.0	24.9	24.2	22.1	21.0	19.6	18.3	17.2
22	25.8	25.6	24.6	23.5	23.1	21.9	20.1	18.8
17	27.2	26.9	25.9	25.6	25.9	24.9	23.6	22.6
12	29.1	28.9	28.2	27.9	28.6	27.1	26.9	27.1
7	29.2	28.8	28.0	28.0	27.8	27.4	27.1	27.2
2	27.0	26.1	25.5	26.0	26.1	26.0	25.7	26.1
C	167	162	157	152	147	142	137	132
32	0.5	0.5	0.4	0.4	0.6	0.7	0.7	0.8
27	0.5	0.6	0.6	0.5	0.6	0.7	0.7	0.7
22	0.4	0.5	0.6	0.6	0.6	0.6	0.7	0.7
17	0.6	0.6	0.5	0.6	0.7	0.7	0.5	0.7
12	0.9	0.6	0.5	0.5	0.7	0.7	0.5	0.7
7	0.7	0.7	0.9	0.7	0.6	0.6	0.6	0.8
2	0.6	0.5	0.5	0.3	0.5	0.7	0.7	0.8
W	167	162	157	152	147	142	137	132
32	5.5	5.3	4.8	5.2	5.6	5.8	6.4	6.9
27	6.0	6.1	6.0	6.8	7.3	6.8	6.5	6.6
22	7.1	7.2	8.0	7.8	8.0	7.1	6.7	5.8
17	5.6	6.8	7.4	7.9	8.8	8.3	5.6	6.7
12	4.6	6.0	6.2	6.2	8.2	8.0	3.5	5.4
7	4.7	6.3	6.0	5.4	6.3	5.5	6.0	5.7
2	4.5	4.7	5.5	7.0	6.1	7.0	8.5	8.5

	LONGITUDE WEST							
Q(S)	167	162	157	152	147	142	137	132
32	397.	397.	431.	431.	359.	318.	318.	272.
27	418.	378.	378.	418.	378.	334.	334.	334.
22	473.	436.	394.	394.	394.	394.	349.	349.
17	405.	405.	448.	405.	358.	358.	448.	358.
12	255.	413.	456.	456.	365.	365.	456.	365.
7	367.	367.	257.	367.	416.	416.	416.	314.
2	414.	458.	458.	531.	458.	366.	366.	314.
Q(B)	167	162	157	152	147	142	137	132
32	117.	115.	125.	129.	116.	109.	112.	100.
27	119.	101.	102.	117.	112.	102.	106.	113.
22	113.	112.	104.	105.	101.	107.	94.	104.
17	98.	95.	102.	97.	87.	91.	114.	96.
12	58.	86.	93.	99.	79.	91.	114.	97.
7	83.	80.	57.	81.	89.	93.	101.	85.
2	97.	102.	98.	112.	110.	96.	97.	82.
Q(E)	167	162	157	152	147	142	137	132
32	131.	120.	116.	132.	141.	142.	159.	172.
27	178.	139.	135.	211.	238.	191.	176.	187.
22	235.	237.	338.	300.	280.	185.	162.	151.
17	147.	190.	239.	268.	308.	296.	131.	200.
12	86.	118.	132.	130.	239.	301.	80.	129.
7	107.	146.	134.	111.	131.	110.	151.	133.
2	105.	112.	146.	202.	151.	202.	392.	369.
Q(C)	167	162	157	152	147	142	137	132
32	14.	7.	4.	3.	3.	7.	8.	9.
27	12.	3.	1.	-3.	1.	-6.	-3.	6.
22	1.	12.	7.	1.	-10.	-3.	-19.	-5.
17	7.	1.	-9.	-4.	1.	4.	3.	-3.
12	1.	-5.	-10.	1.	-4.	16.	13.	22.
7	6.	1.	-5.	-3.	-5.	1.	15.	21.
2	4.	-6.	-18.	-12.	10.	20.	24.	17.
Q(N)	167	162	157	152	147	142	137	132
32	136.	156.	186.	168.	101.	59.	39.	-9.
27	109.	135.	141.	93.	29.	47.	55.	29.
22	125.	75.	-55.	-12.	24.	106.	112.	99.
17	154.	120.	117.	44.	-38.	-33.	201.	66.
12	112.	215.	242.	228.	52.	-43.	250.	117.
7	171.	141.	71.	178.	202.	212.	149.	76.
2	209.	251.	233.	229.	188.	49.	-147.	-155.

T(W)	LONGITUDE WEST							
	167	162	157	152	147	142	137	132
32	22.7	22.3	21.9	21.5	21.0	20.6	19.8	19.0
27	24.3	24.2	23.7	23.3	22.8	21.9	20.9	20.3
22	25.3	25.0	24.7	24.3	23.8	23.3	22.6	21.8
17	26.2	26.0	25.6	25.4	25.0	24.6	24.7	24.4
12	26.6	26.4	26.3	26.2	25.9	26.0	26.3	26.1
7	27.4	26.6	26.0	26.2	26.2	26.2	26.3	26.3
2	26.6	26.3	25.7	25.3	24.9	25.0	25.2	25.3

LATITUDE NORTH

T(A)	167	162	157	152	147	142	137	132
32	21.8	21.3	20.8	20.4	19.9	19.9	19.8	19.0
27	23.8	23.0	22.7	22.3	22.1	21.7	20.8	20.2
22	25.0	24.7	24.1	23.7	23.3	23.3	22.4	21.2
17	25.8	25.9	25.3	25.0	24.6	24.4	24.5	23.7
12	26.7	26.2	26.0	26.0	25.7	25.8	25.7	25.3
7	26.5	26.3	26.2	26.1	26.0	26.0	25.8	25.4
2	26.5	26.5	26.5	25.7	25.0	24.3	24.0	24.0

LATITUDE NORTH

E(A)	167	162	157	152	147	142	137	132
32	20.1	19.4	18.7	17.9	17.8	18.2	18.3	17.6
27	22.1	21.3	20.1	20.0	19.5	19.3	18.9	18.1
22	24.4	23.7	22.7	22.3	21.6	20.1	19.0	19.4
17	26.4	26.0	26.1	24.7	24.6	23.0	24.2	23.5
12	28.2	28.0	28.1	27.0	26.5	26.5	27.0	26.3
7	28.0	29.0	28.2	28.1	27.3	26.3	25.3	25.0
2	26.7	26.2	25.7	26.0	26.1	25.0	23.7	23.5

LATITUDE NORTH

C	167	162	157	152	147	142	137	132
32	0.6	0.6	0.7	0.7	0.6	0.6	0.6	0.7
27	0.6	0.5	0.5	0.6	0.6	0.5	0.6	0.6
22	0.6	0.6	0.5	0.6	0.5	0.5	0.6	0.6
17	0.6	0.6	0.6	0.6	0.5	0.5	0.6	0.6
12	0.6	0.6	0.7	0.6	0.6	0.6	0.6	0.6
7	0.8	0.8	0.8	0.5	0.5	0.5	0.7	0.5
2	0.5	0.4	0.5	0.5	0.4	0.3	0.3	0.7

LATITUDE NORTH

W	167	162	157	152	147	142	137	132
32	7.3	7.4	7.7	7.8	7.6	7.7	6.7	6.0
27	8.9	8.1	7.7	7.3	6.8	6.3	5.7	5.5
22	9.0	8.3	7.7	7.7	8.2	7.7	6.8	6.3
17	7.7	7.8	6.9	8.2	8.6	6.7	7.1	6.6
12	6.7	7.1	6.3	6.4	6.7	6.1	5.3	5.8
7	3.8	5.3	5.4	5.5	5.0	3.6	5.3	4.7
2	5.3	6.0	6.4	6.4	5.3	4.9	6.1	4.5

LATITUDE NORTH

Q(S)	LONGITUDE WEST							
	167	162	157	152	147	142	137	132
32	285.	285.	252.	252.	285.	285.	285.	252.
27	313.	346.	346.	313.	313.	346.	313.	313.
22	340.	340.	375.	340.	375.	375.	340.	340.
17	363.	363.	363.	363.	401.	401.	363.	363.
12	383.	383.	339.	383.	383.	383.	383.	383.
7	302.	302.	302.	440.	440.	440.	352.	440.
2	454.	492.	454.	454.	492.	526.	526.	363.

LATITUDE NORTH

Q(B)	167	162	157	152	147	142	137	132
32	125.	128.	120.	122.	134.	127.	117.	107.
27	115.	136.	138.	128.	125.	128.	117.	120.
22	106.	108.	124.	116.	126.	125.	121.	123.
17	101.	99.	100.	106.	115.	118.	105.	113.
12	89.	94.	85.	97.	98.	98.	102.	106.
7	84.	73.	68.	99.	104.	107.	97.	121.
2	105.	110.	97.	100.	109.	129.	141.	111.

LATITUDE NORTH

Q(E)	167	162	157	152	147	142	137	132
32	246.	258.	297.	319.	265.	235.	124.	93.
27	508.	418.	363.	285.	228.	164.	116.	108.
22	489.	402.	328.	315.	384.	334.	233.	158.
17	292.	306.	186.	373.	392.	210.	207.	179.
12	170.	188.	138.	166.	179.	155.	128.	152.
7	103.	101.	96.	108.	110.	88.	161.	144.
2	146.	172.	174.	147.	94.	107.	186.	130.

LATITUDE NORTH

Q(C)	167	162	157	152	147	142	137	132
32	27.	30.	34.	34.	34.	22.	1.	1.
27	18.	39.	31.	29.	19.	5.	3.	3.
22	11.	10.	19.	19.	17.	1.	6.	15.
17	13.	4.	9.	13.	14.	6.	6.	19.
12	-3.	6.	8.	6.	6.	5.	13.	19.
7	14.	7.	-5.	3.	4.	3.	11.	17.
2	3.	-5.	-21.	-11.	-3.	14.	29.	24.

LATITUDE NORTH

Q(N)	167	162	157	152	147	142	137	132
32	-114.	-132.	-200.	-224.	-148.	-100.	43.	53.
27	-329.	-248.	-187.	-130.	-60.	48.	78.	83.
22	-267.	-181.	-96.	-110.	-151.	-85.	-21.	44.
17	-44.	-46.	68.	-130.	-120.	68.	46.	52.
12	128.	96.	108.	116.	101.	125.	141.	106.
7	102.	122.	143.	231.	223.	243.	84.	159.
2	201.	216.	204.	218.	292.	276.	170.	99.

LATITUDE NORTH

	T(H)	LONGITUDE WEST							
		167	162	157	152	147	142	137	132
LATITUDE NORTH	32	20.3	19.8	19.8	19.7	19.3	18.7	18.3	17.7
	27	22.6	22.3	22.3	22.0	21.3	20.5	19.8	19.5
	22	24.3	24.3	23.8	23.4	23.1	22.5	22.0	21.5
	17	25.4	25.4	24.9	24.4	24.3	24.2	23.7	23.1
	12	26.3	26.2	25.7	25.3	25.2	25.2	25.2	25.0
	7	27.3	27.0	26.5	26.2	25.3	24.8	25.7	26.3
	2	26.2	26.0	25.5	25.3	24.7	24.6	24.9	25.3

	T(A)	167	162	157	152	147	142	137	132
LATITUDE NORTH	32	19.8	19.0	18.3	18.3	18.6	17.9	17.5	17.0
	27	22.2	21.5	21.4	21.3	20.8	20.0	19.3	19.0
	22	24.1	24.0	23.7	23.1	22.7	22.3	22.0	21.3
	17	25.3	25.3	25.3	24.4	24.3	23.9	23.0	22.8
	12	26.3	26.1	25.6	25.1	25.2	25.0	24.7	24.8
	7	27.0	26.7	26.2	25.5	24.3	24.6	25.0	25.2
	2	26.2	26.0	26.1	25.6	25.1	24.3	24.0	25.0

	E(A)	167	162	157	152	147	142	137	132
LATITUDE NORTH	32	17.8	17.0	16.9	16.9	16.9	16.4	15.6	15.1
	27	20.3	20.0	20.4	20.3	19.9	17.9	16.8	16.0
	22	23.0	23.4	23.1	22.8	22.6	20.9	20.1	19.2
	17	26.1	25.6	25.2	25.1	25.0	24.2	23.0	22.4
	12	26.8	27.6	26.9	27.2	27.4	27.5	27.9	28.0
	7	27.5	28.1	27.6	27.2	26.2	26.6	27.3	27.2
	2	27.3	26.1	25.9	24.8	23.7	24.7	25.1	24.7

	C	167	162	157	152	147	142	137	132
LATITUDE NORTH	32	0.7	0.7	0.7	0.8	0.8	0.7	0.7	0.7
	27	0.7	0.6	0.7	0.7	0.8	0.8	0.7	0.7
	22	0.5	0.5	0.6	0.6	0.7	0.7	0.7	0.9
	17	0.5	0.5	0.5	0.6	0.6	0.7	0.7	0.7
	12	0.5	0.5	0.6	0.8	0.7	0.8	0.7	0.5
	7	0.3	0.7	0.7	0.7	0.8	0.9	0.8	0.6
	2	0.2	0.4	0.4	0.3	0.4	0.5	0.6	0.6

	W	167	162	157	152	147	142	137	132
LATITUDE NORTH	32	10.0	9.2	7.8	7.5	8.8	8.2	7.6	7.3
	27	10.3	9.2	8.5	8.3	8.3	7.3	6.3	6.5
	22	7.8	8.9	8.5	8.7	7.8	6.9	5.9	6.5
	17	7.2	7.8	9.0	9.3	6.6	6.2	7.5	7.1
	12	9.9	10.5	9.7	9.1	7.3	7.3	7.2	6.6
	7	8.5	8.4	7.5	6.0	5.7	6.2	7.3	8.2
	2	7.3	6.4	4.7	7.0	6.5	8.1	6.8	7.8

	Q(S)	LONGITUDE WEST							
		167	162	157	152	147	142	137	132
LATITUDE NORTH	32	189.	189.	189.	162.	162.	189.	189.	189.
	27	219.	248.	219.	219.	188.	188.	219.	219.
	22	311.	311.	281.	281.	248.	248.	248.	174.
	17	345.	345.	345.	313.	313.	276.	276.	276.
	12	379.	379.	343.	259.	303.	259.	303.	379.
	7	473.	326.	326.	326.	279.	228.	279.	369.
	2	531.	471.	471.	503.	471.	434.	393.	393.

	Q(B)	167	162	157	152	147	142	137	132
LATITUDE NORTH	32	114.	119.	128.	112.	104.	120.	122.	122.
	27	107.	124.	112.	110.	95.	100.	116.	119.
	22	117.	117.	106.	109.	100.	103.	102.	79.
	17	106.	108.	102.	99.	99.	95.	103.	100.
	12	103.	101.	95.	75.	83.	74.	87.	99.
	7	117.	86.	87.	93.	88.	64.	81.	107.
	2	116.	112.	105.	118.	115.	112.	110.	105.

	Q(E)	167	162	157	152	147	142	137	132
LATITUDE NORTH	32	452.	400.	253.	216.	325.	249.	202.	169.
	27	559.	454.	353.	307.	270.	204.	149.	168.
	22	299.	422.	341.	339.	225.	178.	133.	160.
	17	194.	273.	384.	352.	133.	134.	221.	174.
	12	541.	501.	425.	306.	143.	139.	120.	85.
	7	474.	389.	244.	144.	117.	101.	180.	333.
	2	214.	179.	103.	216.	183.	283.	171.	304.

	Q(C)	167	162	157	152	147	142	137	132
LATITUDE NORTH	32	20.	30.	47.	42.	25.	26.	25.	21.
	27	17.	30.	31.	24.	17.	15.	13.	13.
	22	7.	11.	4.	11.	13.	6.	1.	6.
	17	3.	4.	-15.	1.	1.	8.	21.	9.
	12	1.	5.	4.	8.	1.	6.	15.	6.
	7	11.	10.	9.	17.	23.	5.	21.	36.
	2	1.	1.	-12.	-9.	-11.	10.	25.	10.

	Q(N)	167	162	157	152	147	142	137	132
LATITUDE NORTH	32	-397.	-360.	-238.	-208.	-292.	-206.	-160.	-122.
	27	-465.	-360.	-277.	-222.	-194.	-131.	-59.	-81.
	22	-113.	-240.	-171.	-178.	-90.	-38.	13.	-71.
	17	42.	-40.	-127.	-139.	81.	40.	-69.	-7.
	12	-266.	-228.	-183.	-130.	78.	40.	81.	189.
	7	-129.	-160.	-15.	73.	52.	58.	-3.	-108.
	2	201.	179.	275.	179.	184.	29.	88.	-27.

LONGITUDE WEST

T(W)	167	162	157	152	147	142	137	132
32	18.0	18.5	18.5	18.7	18.5	17.9	17.6	16.7
27	21.0	21.2	21.2	21.2	20.9	20.2	19.6	18.9
22	23.6	23.7	23.4	23.0	22.3	21.8	21.1	20.7
17	24.8	24.9	24.7	24.4	23.9	23.2	22.8	22.7
12	25.6	25.5	25.4	25.0	25.0	24.5	24.4	24.1
7	26.3	26.4	26.1	25.6	25.4	25.4	25.5	25.5
2	25.1	25.1	25.3	25.5	25.3	25.1	24.6	24.1

T(A)	167	162	157	152	147	142	137	132
32	17.0	17.0	18.0	18.2	18.5	18.4	18.0	17.2
27	20.3	21.0	21.4	21.3	21.1	20.4	19.8	18.8
22	23.3	23.6	23.5	23.0	22.7	22.1	21.4	20.6
17	24.8	25.2	25.1	24.5	24.0	23.5	22.8	22.0
12	26.3	25.8	25.5	25.3	25.1	24.6	24.2	24.0
7	27.0	26.4	25.8	25.6	25.3	25.3	25.2	24.6
2	26.7	26.5	26.3	25.7	25.0	24.6	24.3	24.0

E(A)	167	162	157	152	147	142	137	132
32	15.8	16.0	17.4	17.6	18.0	18.4	17.7	16.8
27	18.3	20.2	21.0	20.7	20.3	19.7	18.7	17.5
22	22.7	23.3	23.7	22.9	21.9	21.1	19.9	18.2
17	25.2	25.8	25.6	25.1	23.8	22.9	21.9	20.6
12	28.1	27.6	27.2	25.8	26.0	26.0	24.7	24.0
7	28.5	28.5	28.5	28.5	28.3	27.8	27.2	26.3
2	27.7	27.7	26.5	26.0	25.9	25.9	26.0	26.1

C	167	162	157	152	147	142	137	132
32	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.8
27	0.7	0.6	0.6	0.6	0.6	0.6	0.7	0.7
22	0.5	0.5	0.5	0.5	0.6	0.5	0.7	0.8
17	0.5	0.4	0.4	0.6	0.7	0.6	0.7	0.6
12	0.5	0.5	0.5	0.5	0.6	0.7	0.7	0.6
7	0.5	0.6	0.7	0.8	0.8	0.8	0.7	0.7
2	0.5	0.4	0.5	0.5	0.6	0.6	0.6	0.6

W	167	162	157	152	147	142	137	132
32	9.8	9.6	9.2	8.4	7.9	8.1	7.0	6.3
27	9.2	8.7	8.0	6.7	6.6	6.7	6.3	5.7
22	8.2	8.3	7.7	7.5	7.2	6.9	7.4	7.0
17	6.7	7.5	8.0	8.3	8.1	8.0	7.7	8.3
12	7.4	7.8	8.2	7.8	8.3	7.5	7.7	8.2
7	7.5	8.1	6.8	7.5	6.8	6.9	8.8	6.7
2	6.6	6.4	4.5	6.9	7.2	8.3	7.7	6.7

LONGITUDE WEST

Q(S)	167	162	157	152	147	142	137	132
32	160.	160.	137.	160.	160.	160.	160.	137.
27	191.	216.	216.	216.	216.	216.	191.	191.
22	277.	277.	277.	277.	251.	277.	222.	190.
17	316.	343.	343.	286.	253.	286.	253.	286.
12	354.	354.	354.	354.	320.	283.	283.	320.
7	388.	351.	311.	266.	266.	266.	311.	311.
2	420.	456.	420.	420.	381.	381.	381.	381.

Q(B)	167	162	157	152	147	142	137	132
32	123.	129.	99.	112.	105.	97.	100.	87.
27	115.	114.	107.	109.	109.	110.	101.	108.
22	119.	114.	110.	113.	102.	115.	98.	95.
17	107.	108.	107.	97.	91.	101.	97.	121.
12	89.	95.	99.	101.	95.	85.	93.	103.
7	88.	89.	84.	70.	71.	73.	87.	97.
2	79.	87.	91.	103.	101.	103.	99.	96.

Q(E)	167	162	157	152	147	142	137	132
32	351.	373.	247.	201.	133.	86.	64.	47.
27	431.	281.	178.	114.	109.	101.	93.	85.
22	308.	297.	190.	179.	153.	138.	171.	182.
17	157.	195.	236.	266.	266.	240.	224.	352.
12	151.	193.	242.	231.	276.	160.	221.	285.
7	194.	264.	137.	142.	104.	122.	308.	163.
2	98.	93.	82.	183.	195.	292.	182.	95.

Q(C)	167	162	157	152	147	142	137	132
32	39.	58.	19.	17.	1.	-17.	-12.	-13.
27	26.	7.	-7.	-3.	-6.	-6.	-5.	3.
22	10.	4.	-4.	1.	-12.	-9.	-9.	3.
17	1.	-9.	-13.	-4.	-4.	-10.	1.	24.
12	-21.	-10.	-4.	-10.	-4.	-3.	7.	4.
7	-21.	1.	9.	1.	3.	3.	11.	24.
2	-42.	-36.	-18.	-6.	9.	17.	10.	3.

Q(N)	167	162	157	152	147	142	137	132
32	-354.	-400.	-228.	-171.	-79.	-7.	8.	16.
27	-382.	-187.	-62.	-5.	4.	11.	2.	-6.
22	-159.	-138.	-19.	-16.	8.	34.	-38.	-90.
17	52.	49.	13.	-74.	-101.	-46.	-69.	-211.
12	136.	75.	17.	31.	-48.	42.	-38.	-72.
7	128.	-3.	81.	54.	88.	68.	-97.	26.
2	286.	313.	267.	141.	77.	-31.	90.	187.

All latitude rows are labeled LATITUDE NORTH.

LONGITUDE WEST								
T(W)	167	162	157	152	147	142	137	132
32	16.0	16.8	17.0	17.7	17.9	17.7	17.0	16.0
27	20.3	21.0	21.3	21.0	20.4	19.9	19.1	18.0
22	23.2	23.0	23.2	22.7	22.0	21.3	21.2	21.0
17	24.4	24.5	24.3	23.6	23.0	22.7	22.3	22.3
12	25.7	25.4	24.9	24.7	24.6	25.3	24.6	24.4
7	26.9	26.3	26.3	26.3	26.3	26.0	25.3	25.2
2	27.0	26.3	25.7	26.6	27.1	25.9	25.7	25.5
T(A)	167	162	157	152	147	142	137	132
32	15.0	15.8	16.7	17.0	17.5	17.7	17.0	15.4
27	19.2	19.3	20.4	20.2	20.2	19.6	18.8	17.9
22	21.7	21.7	22.3	22.3	22.2	21.5	21.0	19.9
17	23.8	24.3	24.3	24.2	23.5	23.2	22.3	21.5
12	25.2	25.1	25.1	24.6	24.0	24.0	24.0	22.8
7	26.3	25.9	26.2	25.9	25.4	25.0	24.5	24.8
2	26.6	26.6	26.6	26.2	25.6	24.3	24.0	24.6
E(A)	167	162	157	152	147	142	137	132
32	13.0	14.0	15.6	16.0	17.0	16.9	15.9	14.3
27	16.9	18.0	19.2	19.2	19.3	18.3	16.8	15.8
22	19.5	20.5	21.3	21.6	21.1	19.9	18.7	16.9
17	23.3	23.8	23.9	23.3	21.9	20.9	20.2	19.2
12	27.1	25.6	25.4	25.1	23.2	23.0	24.0	22.0
7	27.2	27.2	26.7	26.6	26.3	25.7	25.5	26.2
2	26.7	27.0	27.8	28.2	27.2	26.2	26.0	27.5
C	167	162	157	152	147	142	137	132
32	0.7	0.6	0.7	0.7	0.6	0.7	0.7	0.7
27	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.6
22	0.5	0.6	0.6	0.6	0.6	0.5	0.4	0.6
17	0.5	0.6	0.6	0.6	0.5	0.6	0.7	0.6
12	0.3	0.7	0.6	0.6	0.4	0.6	0.5	0.4
7	0.6	0.7	0.6	0.6	0.4	0.5	0.6	0.6
2	0.3	0.5	0.5	0.6	0.4	0.6	0.8	0.8
W	167	162	157	152	147	142	137	132
32	8.5	8.2	8.8	8.2	7.7	8.4	7.6	6.3
27	7.9	9.0	8.4	8.5	8.3	7.2	5.7	5.8
22	7.2	7.9	7.6	7.8	7.1	6.2	7.3	7.3
17	5.8	6.6	6.5	6.8	6.3	6.1	8.3	8.4
12	9.3	8.5	7.2	7.7	7.1	7.7	8.3	9.2
7	7.7	7.4	5.7	6.3	7.8	8.2	6.7	7.0
2	5.6	6.0	4.7	6.4	7.5	8.2	6.6	7.5

LONGITUDE WEST								
Q(S)	167	162	157	152	147	142	137	132
32	174.	197.	174.	174.	197.	174.	174.	174.
27	231.	231.	231.	231.	231.	205.	231.	231.
22	294.	266.	266.	266.	266.	294.	319.	266.
17	330.	299.	299.	299.	330.	299.	264.	299.
12	424.	293.	331.	331.	397.	331.	366.	397.
7	360.	319.	360.	360.	432.	398.	360.	360.
2	497.	428.	428.	388.	465.	398.	293.	293.
Q(B)	167	162	157	152	147	142	137	132
32	130.	140.	114.	118.	123.	107.	110.	121.
27	136.	140.	126.	125.	116.	109.	125.	125.
22	145.	129.	121.	114.	107.	120.	138.	137.
17	121.	106.	103.	97.	111.	106.	102.	127.
12	119.	92.	96.	100.	129.	123.	119.	146.
7	102.	89.	97.	101.	123.	119.	108.	101.
2	121.	99.	88.	96.	128.	116.	97.	83.
Q(E)	167	162	157	152	147	142	137	132
32	284.	250.	219.	203.	131.	168.	125.	90.
27	297.	433.	320.	305.	229.	153.	106.	99.
22	285.	325.	265.	240.	158.	122.	212.	265.
17	148.	176.	158.	155.	143.	148.	339.	408.
12	381.	364.	186.	227.	234.	363.	345.	564.
7	318.	234.	148.	176.	319.	381.	175.	165.
2	174.	153.	77.	155.	306.	344.	177.	173.
Q(C)	167	162	157	152	147	142	137	132
32	34.	33.	11.	23.	13.	1.	1.	15.
27	35.	61.	30.	27.	7.	9.	7.	3.
22	43.	41.	28.	13.	-6.	-5.	6.	32.
17	14.	6.	1.	-17.	-13.	-13.	1.	27.
12	19.	11.	-6.	4.	17.	40.	20.	59.
7	19.	12.	3.	10.	28.	33.	22.	12.
2	9.	-8.	-17.	11.	45.	52.	45.	27.
Q(N)	167	162	157	152	147	142	137	132
32	-274.	-227.	-170.	-170.	-70.	-102.	-61.	-52.
27	-237.	-403.	-246.	-226.	-122.	-67.	-7.	5.
22	-181.	-229.	-148.	-101.	7.	57.	-38.	-169.
17	47.	12.	38.	64.	89.	59.	-178.	-264.
12	-95.	-175.	56.	-1.	17.	-195.	-119.	-373.
7	-78.	-18.	113.	73.	-38.	-135.	56.	83.
2	193.	185.	281.	127.	-15.	-126.	-26.	10.

	T(W)	167	162	157	152	147	142	137	132
LATITUDE NORTH	32	15.4	15.7	16.0	16.7	17.5	17.2	16.5	15.4
	27	19.3	19.5	19.6	19.6	19.8	19.5	18.7	17.8
	22	21.7	21.8	22.0	22.0	21.5	21.3	20.5	19.6
	17	24.0	23.7	23.3	22.7	22.5	22.2	22.4	21.7
	12	25.3	25.2	24.0	23.7	24.2	24.4	24.1	23.6
	7	26.3	25.8	25.3	25.3	25.3	25.3	25.3	25.3
	2	26.6	26.3	25.6	26.0	25.9	25.6	25.6	26.0

	T(A)	167	162	157	152	147	142	137	132
LATITUDE NORTH	32	14.2	14.7	15.3	16.0	16.7	16.7	16.5	15.0
	27	18.4	18.0	18.3	18.7	19.0	19.0	18.4	17.0
	22	21.1	20.7	20.7	20.7	20.8	20.8	20.2	19.0
	17	22.9	23.1	23.1	22.6	22.2	22.1	22.0	21.6
	12	24.8	24.5	24.0	24.3	24.2	23.7	23.5	23.5
	7	26.2	25.9	25.5	25.5	25.5	25.3	25.3	25.9
	2	26.6	26.6	26.6	25.9	25.5	25.3	25.8	24.2

	E(A)	167	162	157	152	147	142	137	132
LATITUDE NORTH	32	13.0	12.3	13.6	14.9	15.9	15.6	14.8	13.5
	27	15.1	15.5	16.4	17.7	18.1	17.4	16.2	14.8
	22	17.3	17.0	17.5	19.0	19.5	19.2	18.2	16.7
	17	19.9	20.0	20.8	21.3	21.4	22.1	21.6	20.5
	12	24.0	23.9	24.1	24.8	24.5	23.4	24.0	24.0
	7	26.9	26.4	26.1	26.4	27.1	27.5	27.3	27.2
	2	28.3	27.0	26.5	27.1	27.6	28.1	28.1	27.7

	C	167	162	157	152	147	142	137	132
LATITUDE NORTH	32	0.7	0.7	0.7	0.8	0.9	0.8	0.8	0.8
	27	0.6	0.7	0.7	0.7	0.7	0.8	0.8	0.8
	22	0.5	0.5	0.5	0.6	0.7	0.8	0.8	0.7
	17	0.5	0.4	0.4	0.7	0.6	0.8	0.7	0.7
	12	0.5	0.4	0.6	0.6	0.7	0.8	0.7	0.6
	7	0.6	0.6	0.6	0.7	0.8	0.8	0.8	0.7
	2	0.7	0.5	0.5	0.6	0.6	0.6	0.5	0.7

	W	167	162	157	152	147	142	137	132
LATITUDE NORTH	32	9.0	7.7	8.3	9.7	11.1	9.2	8.3	7.5
	27	6.8	7.8	7.8	8.9	10.2	9.4	8.0	7.5
	22	6.8	7.6	7.8	8.5	7.7	8.7	8.3	6.9
	17	8.2	7.8	7.0	7.2	6.0	6.8	7.0	8.5
	12	9.0	8.7	9.1	8.0	9.4	8.3	6.9	8.6
	7	9.1	10.0	8.4	8.1	8.2	7.6	7.3	6.6
	2	8.0	5.8	5.2	7.7	7.5	6.0	4.9	4.2

	Q(S)	167	162	157	152	147	142	137	132
LATITUDE NORTH	32	228.	228.	228.	195.	160.	195.	195.	195.
	27	289.	255.	255.	255.	255.	218.	218.	218.
	22	351.	351.	351.	318.	281.	241.	241.	281.
	17	381.	413.	413.	305.	345.	261.	305.	305.
	12	408.	443.	369.	369.	326.	279.	326.	369.
	7	390.	390.	390.	345.	295.	295.	295.	345.
	2	361.	451.	451.	408.	408.	408.	451.	361.

	Q(B)	167	162	157	152	147	142	137	132
LATITUDE NORTH	32	131.	132.	124.	106.	90.	103.	99.	106.
	27	139.	132.	127.	117.	115.	100.	100.	109.
	22	141.	149.	149.	133.	112.	97.	97.	118.
	17	140.	141.	132.	100.	113.	85.	102.	102.
	12	119.	128.	102.	92.	91.	91.	99.	103.
	7	96.	95.	94.	83.	71.	72.	73.	76.
	2	81.	99.	91.	95.	97.	93.	95.	105.

	Q(E)	167	162	157	152	147	142	137	132
LATITUDE NORTH	32	282.	219.	231.	291.	347.	258.	197.	141.
	27	202.	296.	263.	308.	381.	356.	238.	200.
	22	241.	346.	371.	407.	237.	353.	298.	173.
	17	491.	385.	229.	196.	125.	122.	157.	291.
	12	516.	471.	357.	189.	376.	359.	166.	277.
	7	461.	502.	313.	262.	237.	166.	153.	122.
	2	281.	145.	109.	246.	199.	96.	72.	78.

	Q(C)	167	162	157	152	147	142	137	132
LATITUDE NORTH	32	43.	31.	24.	27.	36.	19.	1.	12.
	27	25.	47.	41.	32.	33.	19.	10.	24.
	22	17.	34.	41.	44.	22.	18.	10.	17.
	17	36.	19.	6.	3.	8.	3.	12.	4.
	12	18.	25.	1.	-20.	1.	24.	17.	4.
	7	4.	-4.	-7.	-7.	-7.	1.	1.	-16.
	2	1.	-7.	-21.	4.	12.	8.	-4.	30.

	Q(N)	167	162	157	152	147	142	137	132
LATITUDE NORTH	32	-229.	-154.	-152.	-230.	-313.	-185.	-102.	-64.
	27	-78.	-221.	-176.	-204.	-274.	-257.	-131.	-116.
	22	-48.	-178.	-210.	-267.	-91.	-227.	-164.	-27.
	17	-287.	-132.	46.	6.	100.	51.	34.	-92.
	12	-245.	-182.	-91.	108.	-142.	-194.	45.	-14.
	7	-171.	-203.	-10.	6.	-6.	58.	70.	163.
	2	-3.	215.	273.	64.	101.	212.	289.	149.

LONGITUDE WEST

T(W)	167	162	157	152	147	142	137	132
32	16.3	16.2	16.0	16.5	17.2	16.9	15.9	14.8
27	19.0	19.0	19.2	19.4	19.6	19.1	18.3	17.5
22	22.1	22.1	22.0	21.4	21.3	21.1	20.5	20.0
17	24.0	23.7	23.3	22.7	22.5	22.0	21.6	21.2
12	26.5	25.7	23.9	23.6	24.2	23.3	22.6	22.5
7	27.4	26.7	25.2	24.7	25.3	25.2	25.1	25.1
2	27.3	26.6	25.9	25.5	25.7	25.7	25.7	25.7

T(A)	167	162	157	152	147	142	137	132
32	16.1	16.0	15.5	16.3	17.3	16.7	15.8	14.4
27	18.6	18.5	18.0	18.7	19.3	19.0	18.0	17.0
22	21.6	21.2	21.4	21.2	21.2	20.6	20.0	19.0
17	23.3	23.3	23.3	23.0	22.7	22.5	22.0	21.0
12	25.1	24.9	24.5	24.6	24.4	23.8	24.1	23.6
7	25.8	26.1	26.7	26.0	25.4	25.3	25.6	26.0
2	26.8	27.0	27.0	26.6	26.3	26.3	26.5	26.5

E(A)	167	162	157	152	147	142	137	132
32	14.0	13.9	14.1	15.7	16.2	14.9	13.5	12.0
27	16.1	16.1	15.1	17.0	17.7	17.0	16.2	14.6
22	18.8	18.5	18.8	19.0	20.1	20.2	18.1	17.2
17	21.0	21.2	21.4	20.9	21.4	21.5	19.8	18.7
12	23.6	23.7	24.0	24.4	24.9	24.5	23.5	23.1
7	25.7	25.9	27.8	28.3	28.1	27.9	27.7	27.6
2	29.1	29.5	29.7	29.7	29.1	29.0	29.1	29.2

C	167	162	157	152	147	142	137	132
32	0.8	0.8	0.7	0.8	0.8	0.7	0.7	0.7
27	0.7	0.8	0.6	0.6	0.7	0.7	0.7	0.7
22	0.5	0.5	0.5	0.6	0.7	0.8	0.7	0.7
17	0.4	0.4	0.5	0.6	0.5	0.6	0.7	0.8
12	0.6	0.3	0.4	0.4	0.5	0.6	0.7	0.6
7	0.6	0.3	0.2	0.5	0.6	0.7	0.7	0.6
2	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6

W	167	162	157	152	147	142	137	132
32	8.6	9.2	10.0	7.9	7.5	6.6	7.4	6.6
27	7.5	7.7	7.7	7.5	7.8	7.6	7.2	6.5
22	6.8	6.2	6.2	6.6	7.0	7.1	7.1	5.9
17	5.8	5.8	5.6	5.6	6.2	6.3	6.3	7.2
12	5.6	5.8	6.7	7.0	8.2	7.6	7.8	8.5
7	6.2	8.0	9.6	8.7	9.4	9.4	9.7	10.3
2	4.9	6.0	5.2	6.8	7.4	6.9	7.1	7.7

LONGITUDE WEST

Q(S)	167	162	157	152	147	142	137	132
32	248.	248.	290.	248.	248.	290.	290.	290.
27	311.	266.	352.	352.	311.	311.	311.	311.
22	412.	412.	412.	373.	330.	282.	330.	330.
17	468.	468.	431.	390.	431.	390.	345.	295.
12	405.	518.	485.	485.	447.	405.	358.	405.
7	414.	531.	561.	458.	414.	366.	366.	414.
2	465.	465.	465.	465.	465.	465.	421.	421.

Q(B)	167	162	157	152	147	142	137	132
32	103.	103.	120.	98.	94.	115.	118.	125.
27	117.	103.	143.	129.	111.	110.	114.	121.
22	134.	140.	135.	119.	102.	94.	113.	121.
17	139.	134.	120.	108.	116.	102.	98.	95.
12	124.	137.	110.	103.	105.	93.	74.	90.
7	120.	127.	94.	80.	88.	80.	76.	80.
2	102.	89.	78.	78.	87.	67.	77.	76.

Q(E)	167	162	157	152	147	142	137	132
32	253.	295.	304.	125.	117.	111.	156.	125.
27	210.	229.	283.	196.	205.	188.	151.	135.
22	215.	187.	176.	166.	150.	142.	182.	131.
17	183.	167.	140.	130.	132.	112.	140.	204.
12	218.	193.	145.	132.	247.	143.	149.	213.
7	249.	407.	277.	138.	259.	260.	275.	309.
2	115.	109.	59.	68.	121.	103.	107.	134.

Q(C)	167	162	157	152	147	142	137	132
32	7.	8.	20.	7.	-3.	6.	3.	11.
27	12.	16.	37.	21.	10.	4.	9.	13.
22	14.	23.	15.	6.	3.	15.	15.	24.
17	17.	10.	1.	-7.	-5.	-13.	-10.	6.
12	32.	19.	-16.	-28.	-7.	-16.	-47.	-38.
7	40.	20.	-58.	-45.	-4.	-4.	-20.	-37.
2	10.	-10.	-23.	-30.	-18.	-17.	-23.	-25.

Q(N)	167	162	157	152	147	142	137	132
32	-116.	-156.	-155.	19.	41.	59.	13.	29.
27	-28.	-83.	-111.	5.	-15.	9.	38.	42.
22	49.	62.	86.	82.	75.	32.	21.	55.
17	129.	157.	171.	160.	189.	189.	118.	-10.
12	31.	170.	246.	279.	103.	185.	182.	140.
7	6.	-22.	247.	286.	72.	31.	36.	63.
2	239.	278.	352.	350.	276.	292.	260.	236.

LONGITUDE WEST								
T(W)	167	162	157	152	147	142	137	132
32	16.2	16.0	16.4	16.9	17.0	16.8	16.1	15.1
27	19.5	19.0	19.6	19.9	19.9	19.2	18.4	17.4
22	22.2	22.3	22.3	22.3	21.9	21.0	20.2	18.9
17	23.8	24.2	24.3	23.5	23.3	22.8	22.0	21.7
12	25.3	25.0	24.6	24.4	24.4	24.5	24.3	23.7
7	26.2	26.2	25.5	25.4	25.9	26.3	26.7	27.3
2	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5
T(A)	167	162	157	152	147	142	137	132
32	16.1	16.0	16.5	16.5	16.3	16.1	15.7	15.0
27	19.1	19.1	19.8	19.8	19.6	19.1	18.5	17.1
22	21.5	21.7	22.5	22.1	21.9	21.3	20.3	19.5
17	23.7	24.0	24.3	23.6	23.3	23.0	22.0	21.2
12	27.1	25.4	25.0	25.2	25.0	24.9	24.0	22.5
7	26.7	26.3	26.2	26.3	26.3	25.8	25.3	25.1
2	27.2	27.0	27.4	27.1	26.7	26.3	25.9	25.4
E(A)	167	162	157	152	147	142	137	132
32	15.0	14.9	15.0	14.7	14.7	14.3	13.6	13.2
27	17.9	18.3	18.9	17.9	17.4	17.0	15.8	14.8
22	20.1	20.9	21.6	20.6	20.3	20.0	18.2	15.8
17	23.0	24.0	24.1	23.3	22.6	20.8	19.9	19.6
12	27.5	28.0	27.1	25.0	25.0	24.7	23.3	21.9
7	30.2	29.0	27.9	29.9	29.7	28.2	27.6	27.3
2	29.6	30.5	30.8	32.1	30.6	29.1	28.5	28.5
C	167	162	157	152	147	142	137	132
32	0.7	0.7	0.8	0.8	0.7	0.7	0.7	0.7
27	0.7	0.7	0.7	0.6	0.7	0.7	0.7	0.7
22	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.5
17	0.5	0.4	0.6	0.6	0.6	0.7	0.8	0.8
12	0.3	0.4	0.7	0.5	0.4	0.6	0.6	0.5
7	0.3	0.5	0.8	0.5	0.3	0.5	0.7	0.8
2	0.3	0.6	0.6	0.5	0.4	0.4	0.5	0.6
W	167	162	157	152	147	142	137	132
32	7.7	7.2	7.3	6.7	7.6	6.9	7.3	7.5
27	8.5	8.4	8.4	8.2	7.3	6.5	6.9	7.2
22	7.4	7.0	7.3	7.5	7.2	6.6	6.6	6.5
17	6.3	6.6	6.8	6.9	8.3	7.4	7.3	7.2
12	9.0	8.8	8.0	7.2	8.3	8.1	8.2	9.2
7	8.2	8.5	6.2	7.4	8.3	7.7	7.8	6.8
2	6.7	6.0	4.0	6.2	6.4	6.0	5.7	5.5

LONGITUDE WEST								
Q(S)	167	162	157	152	147	142	137	132
32	350.	350.	300.	300.	350.	350.	350.	350.
27	361.	361.	361.	409.	361.	361.	361.	361.
22	418.	418.	418.	418.	418.	369.	418.	461.
17	466.	506.	422.	422.	422.	373.	319.	319.
12	543.	508.	375.	468.	508.	424.	424.	468.
7	539.	465.	318.	465.	539.	465.	372.	318.
2	531.	414.	414.	458.	497.	497.	458.	414.
Q(B)	167	162	157	152	147	142	137	132
32	113.	112.	97.	104.	122.	123.	121.	118.
27	111.	103.	101.	120.	112.	110.	111.	118.
22	122.	118.	106.	114.	113.	98.	117.	129.
17	115.	120.	102.	103.	106.	99.	90.	96.
12	88.	98.	78.	98.	107.	95.	109.	133.
7	95.	94.	63.	80.	97.	104.	101.	102.
2	95.	77.	71.	77.	93.	103.	104.	103.
Q(E)	167	162	157	152	147	142	137	132
32	129.	100.	117.	120.	173.	136.	154.	140.
27	254.	184.	196.	256.	191.	130.	151.	160.
22	227.	174.	170.	223.	186.	122.	139.	151.
17	150.	156.	168.	155.	298.	237.	213.	199.
12	279.	197.	155.	169.	271.	274.	340.	484.
7	165.	255.	101.	70.	167.	225.	297.	244.
2	124.	81.	44.	46.	87.	113.	118.	112.
Q(C)	167	162	157	152	147	142	137	132
32	4.	1.	-3.	11.	22.	20.	12.	3.
27	14.	-4.	-7.	4.	9.	3.	-3.	9.
22	21.	17.	-6.	6.	1.	-8.	-3.	-16.
17	3.	6.	1.	-3.	1.	-6.	1.	15.
12	-65.	-14.	-13.	-23.	-20.	-13.	10.	44.
7	-17.	-4.	-18.	-27.	-14.	16.	44.	60.
2	-19.	-12.	-15.	-15.	-6.	5.	14.	24.
Q(N)	167	162	157	152	147	142	137	132
32	106.	139.	90.	66.	34.	72.	64.	90.
27	-18.	78.	72.	29.	50.	119.	102.	75.
22	48.	109.	148.	74.	119.	159.	165.	198.
17	199.	225.	152.	168.	18.	45.	16.	10.
12	241.	228.	155.	225.	151.	68.	-36.	-193.
7	297.	120.	173.	342.	289.	121.	-70.	-88.
2	332.	270.	315.	351.	323.	275.	222.	175.

		LONGITUDE WEST							
	T(W)	167	162	157	152	147	142	137	132
LATITUDE NORTH	32	16.8	17.0	17.6	17.8	18.0	17.7	17.2	15.7
	27	20.6	20.6	21.0	21.2	21.0	20.0	19.3	17.9
	22	23.3	23.7	24.0	23.1	22.4	21.7	21.0	20.2
	17	25.2	25.2	25.1	24.1	24.0	23.5	22.5	21.7
	12	26.0	26.0	25.8	25.4	25.3	25.3	25.2	24.1
	7	27.2	27.3	27.3	27.1	26.7	26.6	26.8	27.4
	2	28.1	27.7	27.4	27.1	26.8	26.6	26.6	26.7
	T(A)	167	162	157	152	147	142	137	132
LATITUDE NORTH	32	16.5	17.0	18.3	18.3	18.5	17.8	16.8	15.5
	27	20.2	20.7	21.1	21.4	20.8	19.9	19.1	17.4
	22	23.1	23.7	23.8	23.0	22.5	22.1	21.4	19.4
	17	25.3	26.2	25.2	23.7	23.5	23.0	22.0	21.5
	12	26.0	26.0	26.1	25.3	25.0	25.3	25.1	24.8
	7	26.6	26.7	26.6	26.4	26.3	26.2	26.1	26.5
	2	27.6	27.4	27.7	27.2	26.8	26.7	26.6	26.5
	E(A)	167	162	157	152	147	142	137	132
LATITUDE NORTH	32	15.1	16.0	17.5	17.9	17.1	15.6	14.6	13.5
	27	18.5	19.3	20.2	21.0	19.0	17.3	16.2	14.9
	22	23.6	24.0	23.8	22.3	21.3	20.0	19.1	16.6
	17	27.1	28.9	25.0	23.0	22.9	22.0	20.7	19.4
	12	29.2	27.8	27.2	26.7	26.0	25.0	25.9	26.1
	7	30.2	30.0	29.4	29.4	29.5	29.7	30.1	30.1
	2	30.5	30.8	31.0	29.5	29.3	29.2	29.9	31.1
	C	167	162	157	152	147	142	137	132
LATITUDE NORTH	32	0.8	0.7	0.7	0.6	0.6	0.6	0.7	0.9
	27	0.7	0.7	0.6	0.6	0.6	0.7	0.8	0.8
	22	0.6	0.6	0.6	0.7	0.7	0.7	0.8	0.8
	17	0.5	0.6	0.6	0.6	0.6	0.7	0.8	0.9
	12	0.7	0.5	0.5	0.5	0.7	0.8	0.7	0.7
	7	0.9	0.7	0.7	0.7	0.9	0.9	0.6	0.8
	2	0.4	0.5	0.6	0.6	0.7	0.7	0.6	0.8
	W	167	162	157	152	147	142	137	132
LATITUDE NORTH	32	6.7	7.1	6.7	6.4	6.5	5.9	5.6	5.7
	27	6.7	7.3	6.6	7.2	7.2	7.1	6.5	6.8
	22	6.5	6.4	6.9	7.6	7.6	7.6	7.4	8.1
	17	5.6	6.3	7.3	8.0	7.8	8.1	8.4	8.3
	12	7.1	8.0	7.5	8.7	8.8	8.1	9.2	8.6
	7	7.1	6.9	6.7	7.5	8.0	7.8	8.2	8.2
	2	4.6	4.2	3.8	5.6	5.8	5.8	6.2	6.2

		LONGITUDE WEST							
	Q(S)	167	162	157	152	147	142	137	132
LATITUDE NORTH	32	332.	388.	388.	439.	439.	439.	388.	272.
	27	389.	389.	440.	440.	440.	389.	333.	333.
	22	438.	438.	438.	387.	387.	387.	331.	331.
	17	476.	431.	431.	431.	431.	381.	326.	267.
	12	373.	466.	466.	466.	373.	319.	373.	373.
	7	253.	361.	361.	361.	253.	253.	409.	309.
	2	471.	434.	393.	393.	348.	348.	393.	298.
	Q(B)	167	162	157	152	147	142	137	132
LATITUDE NORTH	32	101.	109.	97.	110.	113.	123.	119.	87.
	27	110.	102.	110.	107.	118.	110.	100.	106.
	22	105.	102.	105.	97.	98.	97.	86.	107.
	17	99.	75.	99.	111.	112.	104.	94.	78.
	12	78.	99.	97.	103.	91.	79.	89.	77.
	7	63.	84.	87.	87.	62.	61.	93.	78.
	2	104.	94.	79.	86.	79.	77.	85.	66.
	Q(E)	167	162	157	152	147	142	137	132
LATITUDE NORTH	32	105.	98.	64.	55.	85.	97.	98.	87.
	27	151.	159.	116.	126.	183.	185.	155.	154.
	22	120.	124.	167.	218.	212.	219.	195.	333.
	17	91.	64.	221.	310.	280.	322.	342.	331.
	12	123.	248.	207.	319.	361.	333.	392.	202.
	7	169.	170.	177.	222.	233.	195.	233.	298.
	2	111.	83.	63.	120.	117.	110.	105.	80.
	Q(C)	167	162	157	152	147	142	137	132
LATITUDE NORTH	32	8.	1.	-19.	-13.	-13.	-3.	9.	5.
	27	11.	-3.	-3.	-6.	6.	3.	6.	14.
	22	6.	1.	6.	4.	-4.	-13.	-12.	26.
	17	-3.	-25.	-3.	13.	16.	17.	17.	7.
	12	1.	1.	-9.	4.	11.	1.	4.	-24.
	7	17.	17.	19.	21.	13.	13.	23.	30.
	2	10.	5.	-5.	-3.	1.	-3.	1.	5.
	Q(N)	167	162	157	152	147	142	137	132
LATITUDE NORTH	32	118.	180.	247.	289.	255.	222.	162.	93.
	27	116.	132.	217.	214.	132.	91.	73.	59.
	22	208.	212.	160.	69.	82.	83.	62.	-135.
	17	289.	318.	115.	-3.	24.	-61.	-127.	-150.
	12	172.	119.	172.	40.	-91.	-94.	-112.	119.
	7	3.	90.	79.	31.	-56.	-17.	60.	-97.
	2	247.	253.	257.	191.	152.	164.	203.	146.

T(W)	LONGITUDE WEST							
LATITUDE NORTH	167	162	157	152	147	142	137	132
32	20.0	20.8	21.0	20.9	20.4	19.7	18.3	16.8
27	23.4	23.4	23.4	23.3	22.1	21.2	20.3	18.7
22	24.8	24.6	24.3	23.7	22.7	21.7	21.1	20.7
17	25.5	25.4	25.0	23.8	23.0	22.2	22.0	21.5
12	25.9	25.9	25.5	25.0	24.9	24.6	23.9	21.9
7	27.6	27.4	26.9	26.9	27.0	26.6	27.2	26.3
2	28.1	28.1	28.1	28.0	27.4	27.1	27.1	26.6

T(A)	167	162	157	152	147	142	137	132
32	20.2	20.7	20.9	20.2	20.2	19.2	18.1	16.9
27	24.3	23.9	23.4	22.8	21.8	20.9	20.1	18.0
22	25.5	25.0	24.5	23.8	22.8	21.9	21.3	20.5
17	26.1	26.0	25.3	24.3	23.4	22.8	22.1	21.6
12	26.8	26.2	25.6	25.0	24.7	24.6	24.6	22.7
7	26.9	26.4	26.3	26.2	26.2	26.2	26.2	26.3
2	26.9	26.8	27.0	27.0	27.0	26.4	26.0	26.0

E(A)	167	162	157	152	147	142	137	132
32	20.1	20.2	19.6	18.9	18.2	16.9	16.0	15.2
27	23.7	23.0	21.7	20.5	19.8	18.0	16.8	16.4
22	25.0	24.2	22.7	21.9	20.5	19.3	18.6	18.1
17	26.5	26.1	24.3	22.7	22.1	21.8	20.1	19.1
12	26.8	26.7	26.0	25.0	24.8	24.8	24.3	21.5
7	30.7	29.5	28.7	28.4	28.4	28.4	29.2	29.2
2	29.0	29.5	30.1	29.0	29.3	27.5	26.8	28.0

C	167	162	157	152	147	142	137	132
32	0.7	0.7	0.5	0.6	0.7	0.7	0.7	0.7
27	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.7
22	0.5	0.5	0.5	0.6	0.7	0.7	0.8	0.9
17	0.5	0.5	0.5	0.6	0.7	0.7	0.7	0.8
12	0.5	0.4	0.6	0.7	0.8	0.7	0.5	0.7
7	0.8	0.7	0.7	0.7	0.7	0.8	0.6	0.8
2	0.7	0.6	0.5	0.5	0.6	0.7	0.8	0.9

W	167	162	157	152	147	142	137	132
32	5.4	5.8	5.2	4.8	5.4	5.6	5.8	6.4
27	5.7	6.4	7.3	7.2	7.0	6.4	6.5	6.8
22	6.6	7.1	7.7	8.1	8.0	7.3	7.9	8.5
17	7.3	7.0	8.9	8.7	9.2	7.8	7.7	7.6
12	7.7	8.3	9.3	8.7	9.3	8.3	7.1	7.1
7	8.0	9.0	7.5	7.3	8.0	7.5	9.2	6.3
2	4.5	4.8	4.1	4.1	5.2	5.3	6.6	4.5

Q(S)	LONGITUDE WEST							
LATITUDE NORTH	167	162	157	152	147	142	137	132
32	404.	404.	505.	457.	404.	404.	404.	404.
27	499.	499.	499.	451.	451.	451.	399.	399.
22	489.	489.	489.	443.	391.	391.	335.	274.
17	475.	475.	475.	430.	380.	380.	380.	326.
12	458.	497.	415.	366.	314.	366.	458.	366.
7	300.	350.	350.	350.	350.	300.	396.	300.
2	333.	376.	416.	416.	376.	333.	285.	233.

Q(B)	167	162	157	152	147	142	137	132
32	97.	101.	125.	124.	109.	116.	114.	111.
27	100.	108.	119.	120.	118.	124.	114.	118.
22	99.	106.	114.	108.	101.	102.	90.	81.
17	96.	97.	107.	100.	92.	90.	101.	90.
12	92.	106.	96.	90.	81.	90.	101.	88.
7	74.	91.	88.	90.	91.	76.	100.	68.
2	96.	104.	107.	110.	93.	93.	89.	67.

Q(E)	167	162	157	152	147	142	137	132
32	57.	86.	91.	92.	107.	118.	103.	93.
27	98.	136.	231.	257.	199.	175.	176.	140.
22	158.	201.	298.	344.	316.	218.	273.	343.
17	195.	180.	447.	388.	386.	195.	245.	243.
12	251.	331.	433.	379.	439.	302.	157.	140.
7	265.	425.	233.	225.	316.	221.	437.	110.
2	132.	134.	103.	116.	124.	150.	232.	98.

Q(C)	167	162	157	152	147	142	137	132
32	-5.	3.	3.	14.	5.	12.	5.	-3.
27	-21.	-13.	1.	15.	9.	8.	6.	19.
22	-19.	-12.	-7.	-4.	-4.	-6.	-7.	7.
17	-18.	-17.	-11.	-18.	-15.	-19.	-4.	-4.
12	-28.	-10.	-4.	1.	8.	1.	-20.	-23.
7	23.	36.	18.	21.	26.	12.	37.	1.
2	22.	25.	18.	17.	9.	15.	29.	11.

Q(N)	167	162	157	152	147	142	137	132
32	255.	214.	287.	227.	185.	159.	183.	204.
27	322.	268.	149.	60.	126.	145.	103.	121.
22	251.	195.	85.	-6.	-22.	78.	-22.	-158.
17	203.	215.	-68.	-41.	-83.	115.	38.	-5.
12	144.	71.	-111.	-103.	-215.	-26.	221.	162.
7	-63.	-203.	12.	15.	-83.	-10.	-178.	121.
2	83.	113.	188.	174.	151.	75.	-66.	56.

As the Nation's principal conservation agency, the Department of the Interior has basic responsibilities for water, fish, wildlife, mineral, land, park, and recreational resources. Indian and Territorial affairs are other major concerns of America's "Department of Natural Resources."

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