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DETERMINATION OF GROSS EVAPORATION FOR SMALL TO MODERATE-SIZED WATER BODIES IN THE CANADIAN PRAIRIES USING THE MEYER FORMULA

Hydrology Report #113

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SYNOPSIS

Since 1972, the Hydrology Division of the Prairie Farm Rehabilitation Administration has updated gross evaporation estimates using the methodology based on the Meyer formula as described in the 1972 Saskatchewan-Nelson Basin Board report and has distributed the estimates to numerous interested parties. Recently, concern has been expressed regarding the validity of gross evaporation estimates in light of the apparent significant trend of increasing calculated gross evaporation in the historic sequence 1911-86.

This report outlines the background of the Meyer formula and the methodology that has been used to date to determine gross evaporation at 14 key meteorologic stations in the Canadian prairies. It identifies the inadequacies of the current methodology and discusses revisions to correct the inadequacies. Gross evaporation has been recalculated for the entire 1911-86 historic period using the revised methodology and data, and the resultant estimates are presented herein.

A vast improvement in both the temporal distribution and the magnitude of gross evaporation was attained as a result of the numerous changes to the methodology and basic data. The new gross evaporation estimates, which are appropriate for small to moderate-sized water bodies, are now more consistent over the period 1911-86. The pattern of gross evaporation more closely resembles estimates provided by more direct methods such as the water budget approach. However, there is still some uncertainty in the absolute values of the new gross evaporation estimates due to the nature of the Meyer formula, the difficulty of its accurate calibration in the Canadian Prairies and the quality of the basic data.

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1. INTRODUCTION

An important aspect of any surface water supply analysis is the consideration of gross evaporation from a free water surface. Evaporation loss from a body of water (e.g. slough, lake or reservoir) is usually quite a significant component of the water balance in the prairie region and has a major impact on the water supply potential. The ability to provide a realistic estimate of this component can have direct implications on the feasibility of projects and the operating plans of water supply systems.

Various methods have been used to estimate gross evaporation. However, the one that has been used most extensively in the Canadian Prairies is the method discussed herein based on the Meyer formula. This method was initially proposed by Meyer in 1915 and has been used in many studies, most notably the 1968-72 Saskatchewan-Nelson Basin Board (SNBB) study. Since 1972, the Hydrology Division of the Prairie Farm Rehabilitation Administration (PFRA) has been updating the gross evaporation estimates for 14 key meteorological stations using the methodology described in the SNBB report. These gross evaporation estimates, which have been distributed to various agencies, consultants, universities and individuals in the prairie region, have been used for a multitude of water resource applications.

In recent years, it has become quite apparent that the magnitude of the estimated annual gross evaporation is exhibiting an increasing trend, particularly since the late 1950's. Although climate change and improved data quality were two factors which were initially put forward to explain the observed phenomenon, a cursory examination of the data and methodology indicated that other factors also affected the gross evaporation estimates. Consequently, this study was initiated to identify the factors affecting the determination of gross evaporation, to make the appropriate adjustments to the data and methodology and to revise the gross evaporation estimates for the historic period 1911 to 1986.

This report documents the history of the Meyer formula and explains the identified inadequacies of the methodology in Section 2. Adjustments made to the various components of the Meyer formula are discussed in Section 3. Comparisons of the gross evaporation as determined by both the former and the revised methods are provided in Section 4. Pertinent conclusions arising from the study are presented in Section 5. In addition, a sensitivity

analysis of the Meyer coefficient to different types of data (i.e. relative humidity or dew point) is provided in Appendix A. The revised gross evaporation values are tabulated in Appendix B. Precipitation and net evaporation values are also tabulated in Appendix B for completeness.

No attempt has been made in this report to discuss the physical aspects of the evaporation process or to compare the numerous methods. Pertinent information can be found in most hydrology texts[1]. Furthermore, no attempt was made in this study to ascertain the relationship of the Meyer coefficient to the size and character of a water body other than in a very general manner. Such an assessment is beyond the scope of the present study due to the absence of adequate data. Further refinements (e.g. incorporation of a water body size function, calculation of evaporation on a daily basis, determination of evaporation from a snow and/or ice surface, etc.) to the methodology presented herein may be made when appropriate data has been obtained.

PFRA intends to update the gross evaporation estimates on an ongoing basis and to periodically distribute the information as an addendum to this report. The onus is on the user to understand the basis for the calculation of gross evaporation as described herein and to judge the suitability of the tabulated data for specific intended applications.

2. MEYER FORMULA

2.1 Background

The process governing the loss of water through evaporation has been under investigation for many years. Since Dalton's time, about 1800, there has been rather general agreement that the main factor controlling evaporation is the vapor pressure gradient between the water surface and the overlying atmosphere, which is affected by the wind movement over the water surface. These and other factors (such as barometric pressure) governing evaporation have been extensively evaluated by numerous investigators during the twentieth century. As a result, many empirical formulae have been proposed. However, most of these empirical formulae are based on the simple aerodynamic equation:

$$E = Kf(u)(e_0 - e_a) \qquad (1)$$

where:
- E = gross evaporation,
- K = constant,
- $f(u)$ = wind speed function,
- e_0 = vapor pressure of saturated air at the temperature of the water surface, and
- e_a = actual vapor pressure of air at some height above the water surface.

In 1915, Meyer proposed the following empirical relationship[2] for estimating evaporation from a free water surface:

$$E = K(V - v)(1 + 0.1w) \qquad (2)$$

where:
- E = evaporation, in inches per month,
- K = constant of 15 for a floating tub,
- V = maximum vapor pressure, in inches of mercury, at monthly mean air temperature,
- v = actual vapor pressure, in inches of mercury, at monthly mean air temperature and relative humidity, and
- w = wind speed, in miles per hour, as measured approximately 30 feet above the general level of the surrounding country.

In a 1942 report[3], Meyer clarified some of the components of the relationship and added an adjustment for the effect of barometric pressure

(i.e. the change in pressure due to a change in elevation). The resultant relationship, which has since been referred to as the Meyer formula, is presented as follows:

$$E = C(V_W - V_a)(1 + 0.1W)(1 + 0.00001A) \quad . \quad . \quad . \quad . \quad . \quad . \quad . \quad . \quad . \quad . \quad . \quad . \quad . \quad . \quad . \quad (3)$$

where: E = evaporation, in inches depth,
C = an empirical constant dependent upon the observation times for vapor pressure and upon the size and character of the water body,
V_W = maximum (saturated) vapor pressure, in inches of mercury, corresponding to the mean temperature of the water about one foot below the water surface,
V_a = actual vapor pressure, in inches of mercury, in the atmosphere about 25 feet above the water surface or above the surface of the surrounding land area,
W = wind speed, in miles per hour, measured about 25 feet above the surface of the water or above the surrounding cleared land or the tops of trees or buildings, and
A = elevation, in feet above mean sea level.

Meyer indicated that a "C" of 15 should be used for monthly evaporation from fully exposed pans, small puddles of water and intercepted rainfall on the surface of soil and vegetation while moisture is available. A "C" of 11 should be used for monthly evaporation from small lakes and reservoirs when the actual vapor pressure in the air is determined from the mean of the daily maximum and minimum air temperatures and the mean of the morning and evening relative humidity measured about 25 feet above the surface of the water or the ground. A "C" of 10 should be used for monthly evaporation from small lakes and reservoirs when the actual vapor pressure in the air is the mean of the morning and evening or is based on more frequent, equally-spaced determinations of actual vapor pressure measured about 25 feet above the surface of the water or the ground.

Meyer also increased all computed monthly evaporations by a factor which accounted for a barometric pressure change as a function of elevation. Although there seems to be some basis for considering the impact of changing barometric pressure, increasing the computed evaporation by one percent for every thousand feet increase in elevation to account for the effect of decreased barometric pressure seems rather subjective. However, the impact of this component on the magnitude of the computed evaporation is much less than the impact of inherent inaccuracies of other components.

Meyer also noted in his 1942 report that water temperature is the most significant single factor in determining evaporation loss. Furthermore, he noted that the average water temperature relative to the average air temperature increases in a northerly direction so that in the northern United States, the mean water temperature was approximately 3°F higher than the mean air temperature. This phenomenon, which was confirmed by later studies, was attributed primarily to the effects of radiant energy.

In estimating water temperature and selecting an appropriate "C" value, the size and character of the water body must be considered. Meyer suggested that the term "small lakes and reservoirs" relates to bodies of water not over 35 feet in depth and not more than a few miles across. However, other factors such as springs may have a significant impact on the temperature of the water body and should be considered. For example, the temperature of even small spring-fed lakes may conform more closely to that of relatively deep lakes. He also indicated that the surficial area of the water body has relatively little effect upon the evaporation until water surfaces are at least 10 or 15 miles across. For that reason, Meyer concluded that the surface area of a water body has much less of an effect upon the rate of evaporation than does its depth.

Detailed explanations and pertinent relationships presented in Meyer's 1942 report have not been repeated in this report. The reader is referred to the 1942 report[3] if more specific information is required.

2.2 Related Studies

Since 1942, numerous studies utilizing the Meyer formula or addressing various components of the formula have been made. A brief discussion of some of the more relevant studies is provided in this section.

2.2.1 PFRA Study (1952)

In 1952, a report[4] was prepared by the Hydrology Division of PFRA under the direction of the Prairie Provinces Water Board (PPWB) documenting a procedure for calculating evaporation from lakes and reservoirs on the Canadian Prairies when Class A evaporation pan data were not available. The Meyer formula was selected for this purpose for three reasons: 1) it was a widely-accepted method, 2) evaporation had been computed using this method for the area just south of the Canadian Prairies,

and 3) the formula utilized data that were available from Class I meteorological stations. Evaporation pan records for Western Canada date back to the early 1900's. However, the lack of standardization with regard to exposure and type of pan and inconsistencies in some records have forced designers to rely on other methods for estimating historic evaporation.

In order to use the Meyer formula, air/water temperature relationships were required. These relationships were based on data for Lake-of-the-Woods near Keewatin, Ontario, and were derived as follows:

April; $W_A = 0.278A_A + 25.5$ . . . . . (4)

May; $W_M = 0.234A_A + 0.630A_M + 5.9$ . . . . . (5)

June; $W_J = 0.173A_A + 0.467A_M + 0.591A_J - 5.1$ . . . . . (6)

July; $W_{JY} = 0.060A_A + 0.163A_M + 0.206A_J + 0.652A_{JY} + 2.6$ . . (7)

August; $W_{AG} = 0.025A_M + 0.028A_J + 0.089A_{JY} + 0.480A_{AG} + 29.1$. (8)

September; $W_S = 0.006A_J + 0.011A_{JY} + 0.061A_{AG} + 0.398A_S + 34.5$ . . (9)

October; $W_O = 0.018A_{AG} + 0.103A_S + 0.557A_O + 19.3$ . . . . . (10)

where: W_X = mean water temperature, in ^oF, for month X,
A_X = mean air temperature, in ^oF, for month X, and
X = subscript corresponding to month under consideration.

Unfortunately, Lake-of-the-Woods is not a typical prairie water body because it exhibits a large inherent heat storage component whereby the water temperature lags considerably behind the air temperature. Thus, for relatively small prairie water bodies, the indicated air/water temperature relationships underestimate the actual water temperature before July and overestimate the water temperature after July.

Gross evaporation was calculated for the period 1921-50 at 15 key stations across the prairies by PFRA in the early 1950's. These calculations were based on the developed air/water temperature relationships (Equations 4 to 10) and on other appropriate relationships provided by Meyer in his 1942 report. The results of this work by PFRA were subsequently presented at an International General Assembly in 1954[5].

2.2.2 McKay-Stichling Study (1961)

In 1961, McKay and Stichling[6] described an attempt to validate the various evaporation equations using data obtained from the Weyburn Reservoir on the Souris River in Saskatchewan. A water budget

approach was used to determine evaporation from Weyburn Reservoir. The calculated values were then compared to values computed by other methods, one of which was the Meyer formula in the reduced form of:

$$E = 11(1 + 0.1W)(e_o - e_a - 0.012) \quad \ldots\ldots\ldots\ldots\ldots\ldots \quad (11)$$

where: E = evaporation, in inches per month,
W = wind speed, in miles per hour, at 25 feet,
e_o = saturated vapor pressure of the water surface, in inches of mercury, and
e_a = atmospheric vapor pressure at the standard level, in inches of mercury.

In calculating gross evaporation using this reduced form of the Meyer formula, wind data were adjusted to a 25-foot level by using an anemometer height ratio to an exponent of 0.5. This exponent apparently produced a relationship which corresponded to a graphical relationship provided by Meyer in his 1942 report and, at the time, it also seemed to be supported by local wind data observations.

Comparison of the various evaporation estimation methods to the water budget in this 1961 study indicated that the Meyer formula was one of the better methods considered for estimating evaporation. Again, concern was expressed regarding the relationship of evaporation to the water body size and depth. A water temperature measurement program was recommended so that air/water temperature relationships may be better understood.

2.2.3 SNBB Study (1968-72)

In 1968, a major study of the water resources of the prairie provinces was undertaken by the SNBB and culminated in a report in 1972. As part of the study, gross evaporation for project sites was determined using a procedure[7] based on the Meyer formula. The components of this methodology are described in detail herein because it formed the basis for subsequent updates by PFRA, the results of which were widely distributed and used by various agencies.

Gross evaporation was initially computed by SNBB at 17 key meteorological stations for the period 1911-67. PFRA subsequently updated the gross evaporation estimates for the period 1968-86 for 14 of the stations as shown in Figure 1. (Three stations were eliminated because gross evaporation was determined simply as a factor of one of the other 14

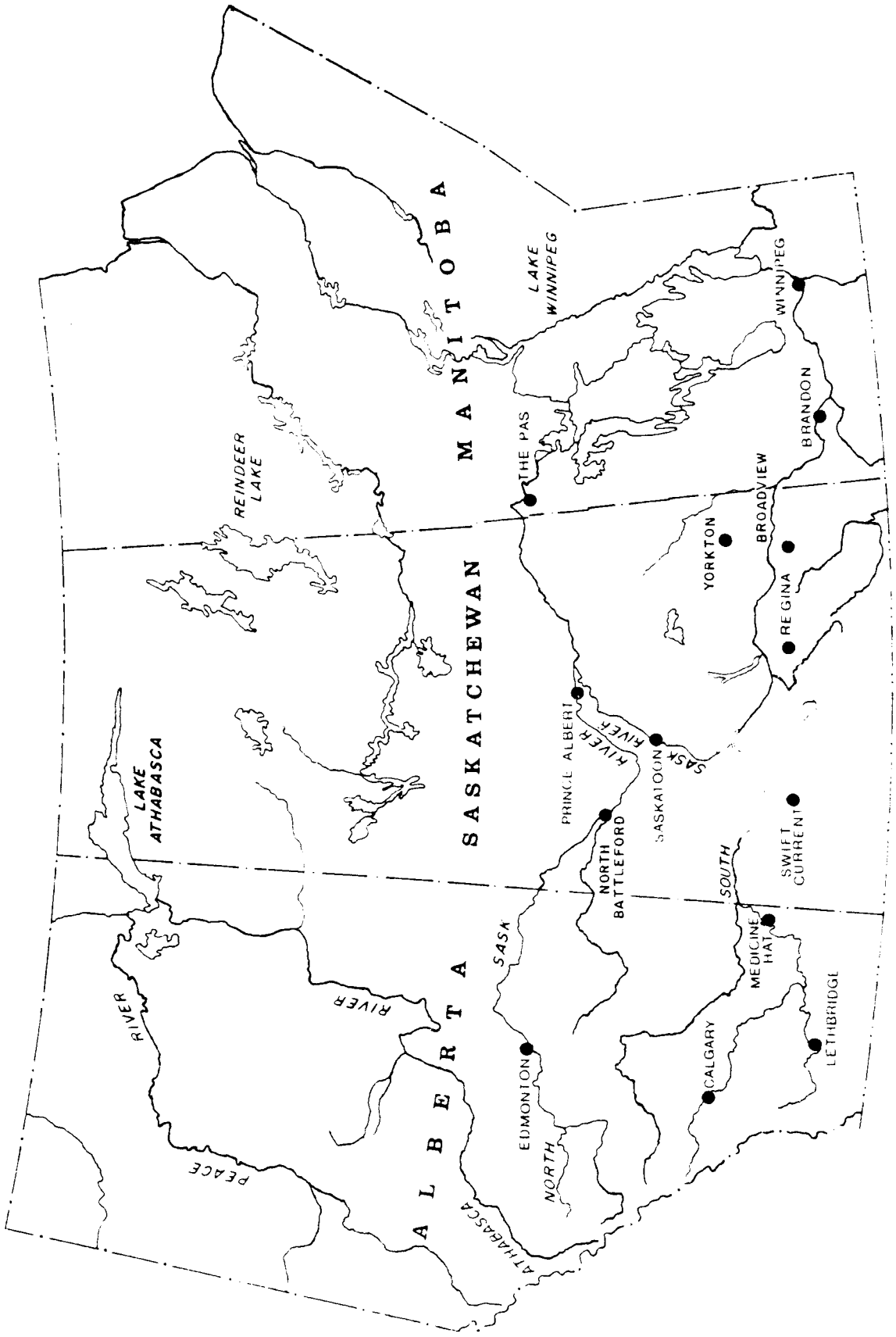


Figure 1. Location of the 14 Key Meteorological Stations

stations.) However, gross evaporation as determined by both SNBB and PFRA was based on the following simplified form of the Meyer formula:

$$EG_K = 11(V_w - V_a)(1 + 0.1W) \quad (12)$$

where: EG_K = monthly gross evaporation, in inches, at the key meteorological station,
V_w = saturated vapor pressure, in inches of mercury, corresponding to the monthly mean water temperature at the surface of a hypothetical open body of water at the site of the station,
V_a = actual monthly mean vapor pressure, in inches of mercury, in the atmosphere about 25 feet above ground level at the station, and
W = monthly mean wind speed, in miles per hour, at 25 feet above ground level.

The correction for barometric pressure due to a change in elevation that was included in the Meyer formula as presented in a 1952 report[4] was not incorporated in the methodology for determining gross evaporation because of its relatively insignificant effect (less than 4%) on the magnitude of monthly gross evaporation.

Monthly values of saturated vapor pressure were determined by linear interpolation of specified saturated vapor pressure coordinates (corresponding to temperature increments of 5°F) using estimated water temperatures based on the following equations[4]:

$$TW_1 = TA_1 \quad (13)$$
$$TW_2 = TA_2 \quad (14)$$
$$TW_3 = TA_3 \quad (15)$$
$$TW_4 = 0.278TA_4 + 25.5 \quad (16)$$
$$TW_5 = 0.234TA_4 + 0.630TA_5 + 5.9 \quad (17)$$
$$TW_6 = 0.173TA_4 + 0.467TA_5 + 0.591TA_6 - 5.1 \quad (18)$$
$$TW_7 = 0.060TA_4 + 0.163TA_5 + 0.206TA_6 + 0.652TA_7 + 2.6 \quad (19)$$
$$TW_8 = 0.025TA_5 + 0.028TA_6 + 0.089TA_7 + 0.480TA_8 + 29.1 \quad (20)$$
$$TW_9 = 0.006TA_6 + 0.011TA_7 + 0.061TA_8 + 0.398TA_9 + 34.5 \quad (21)$$
$$TW_{10} = 0.018TA_8 + 0.103TA_9 + 0.557TA_{10} + 19.3 \quad (22)$$
$$TW_{11} = TA_{11} \quad (23)$$
$$TW_{12} = TA_{12} \quad (24)$$

where: TW_X = mean water temperature, in °F, at the surface of a hypothetical reservoir at the meteorological station in month X,
TA_X = mean air temperature, in °F, at the meteorological station in month X, and
X = numerical subscript denoting the sequential calendar month where 1 is January and 12 is December.

Air/water temperature relationships for April to October (months 4 to 10 inclusive) were taken directly from PPWB Report No. 5[4]. The air/water temperature relationships for the remaining months were based on a general assumption made in the SNBB report to enable use of the Meyer formula for the winter season.

Monthly values of actual vapor pressure at the 25-foot level were derived from preliminary values determined at 4 feet above the ground level (the height at which pertinent meteorological observations were assumed to have been made) based on either dew point (whenever it was available) or relative humidity data. When dew point data were available, the preliminary value of the corresponding monthly mean vapor pressure, $V_{a(4)}$, was determined by linear interpolation of tabulated vapor pressure coordinates using the dew point temperatures. When dew point data were not available, the preliminary value of the corresponding monthly mean vapor pressure was determined by multiplying the vapor pressure value (obtained by linear interpolation of the tabulated vapor pressure coordinates corresponding to the monthly mean air temperature) by the corresponding monthly relative humidity. The following relationship was developed to adjust the preliminary vapor pressure from the 4-foot level to the 25-foot level:

$$V_a = (0.9152 + 0.094V_{am(4)})V_{a(4)} \quad \ldots\ldots\ldots\ldots\ldots\ldots \quad (25)$$

where: V_a = actual monthly mean vapor pressure, in inches of mercury, in the atmosphere about 25 feet above ground level,

$V_{a(4)}$ = preliminary value of monthly mean vapor pressure, in inches of mercury, derived from meteorological observations, assumed to be obtained at the 4-foot level, and

$V_{am(4)}$ = the mean of the April to October values of $V_{a(4)}$ for the calendar year. (Thus, there is one $V_{am(4)}$ value for each calendar year.)

However, this relationship was not used because it didn't provide appropriate adjustment factors. (The relationship was erroneously developed on the basis of an arithmetic function rather than a logarithmic function.) Instead, adjustment factors were interpolated from two specified coordinates (i.e. an adjustment factor of 0.9340 for a $V_{am(4)}$ value of 0.2 and an adjustment factor of 0.9904 for a $V_{am(4)}$ value of 0.8) using a linear logarithmic relationship.

The values for wind speed were adjusted to the 25-foot level using the following relationship presented in earlier publications[4,6]:

$$W = WV(25/WE)^{0.5} \quad \ldots \quad (26)$$

where: W = monthly mean wind speed, in miles per hour, at about 25 feet above ground level,
WV = observed monthly mean wind speed, in miles per hour, and
WE = height above ground level, in feet, of the anemometer in which the WV observations were obtained.

2.2.4 Buckler Study (1969)

In 1969, Buckler[8] determined an appropriate exponent that should be used in Equation 26 for relating monthly mean wind speed at different anemometer heights in the open prairie. Since anemometers were mounted at varying heights until 1960, when a concerted effort was made to standardize the heights at 10 metres above the ground, it was essential that wind data be adjusted to a common base. Buckler determined that an exponent of 0.25 was applicable to the prairie region where there were few trees and the terrain was gentle and rolling.

2.2.5 Buckler Study (1973)

In 1973, Buckler[9] reassessed the methods used to compute evaporation from water bodies in the Prairie Provinces based on data for Lake Diefenbaker in Saskatchewan and Glenmore Reservoir in Alberta. He found that using a coefficient of 9 (in conjunction with dew point data) in the Meyer formula produced reasonable results for Lake Diefenbaker. However, most water bodies in the prairie region are much smaller than Lake Diefenbaker and thus require a larger coefficient.

Three pertinent recommendations were contained in Buckler's 1973 report. They are:

1) Monthly mean surface water temperature should be determined using the following relationship:

$$TW = 6.5 + 0.95TA \quad \ldots \quad (27)$$

where: TW = monthly mean surface water temperature, in ^{o}F, and
TA = monthly mean air temperature, in ^{o}F.

2) Wind speed should be adjusted to the 25-foot level using an exponent of 0.25 (rather than an exponent of 0.5 as presented in previous publications[4,6]).

3) Gross evaporation should be calculated using the Meyer formula, as presented in Equation 3 (page 4), in conjunction with a coefficient (C) of 10. (The validity of this recommendation will become more apparent later in this report. Refer to Section 3 and Appendix A for more details.)

Buckler concluded that the Meyer formula provided the best approach for estimating gross evaporation if care was taken in the selection of the coefficient. He indicated that the Meyer formula should be suitable for estimating gross evaporation from all water bodies in the prairie and foothills regions if an appropriate coefficient was used.

2.2.6 PFRA Study (1978)

In 1978, PFRA[10] documented water temperature data that had been collected from 13 water bodies (reservoirs, dugouts and lakes), located as shown in Figure 2, during the period 1963-72. These water bodies ranged in size from 3 dam^3 to 469 000 dam^3 (most were in the 50 dam^3 to 5000 dam^3 range) and in mean depth from 1.2 metres to 8.5 metres (most were less than 5 metres). The following air/water temperature relationship was developed to replace relationships (Equations 13 to 24) being used at that time:

$$TW = 2.82 + 0.97TA \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad (28)$$

where: TW = monthly mean surface water temperature, in ^oC, and
TA = monthly mean air temperature, in ^oC.

The air/water temperature relationship presented as Equation 28 very closely resembles the relationship (refer to Equation 27) proposed by Buckler in 1973[9]. For example, using arbitrary air temperatures of 0^oC and 20^oC, Buckler's relationship provides water temperature estimates of 2.7^oC and 21.7^oC, respectively, while PFRA's relationship provides water temperature estimates of 2.8^oC and 22.2^oC, respectively. Since PFRA's relationship was based on a more extensive and appropriate data base, it is considered to be more valid and applicable to the estimation of water temperatures for small to moderate-sized bodies of water in the Canadian

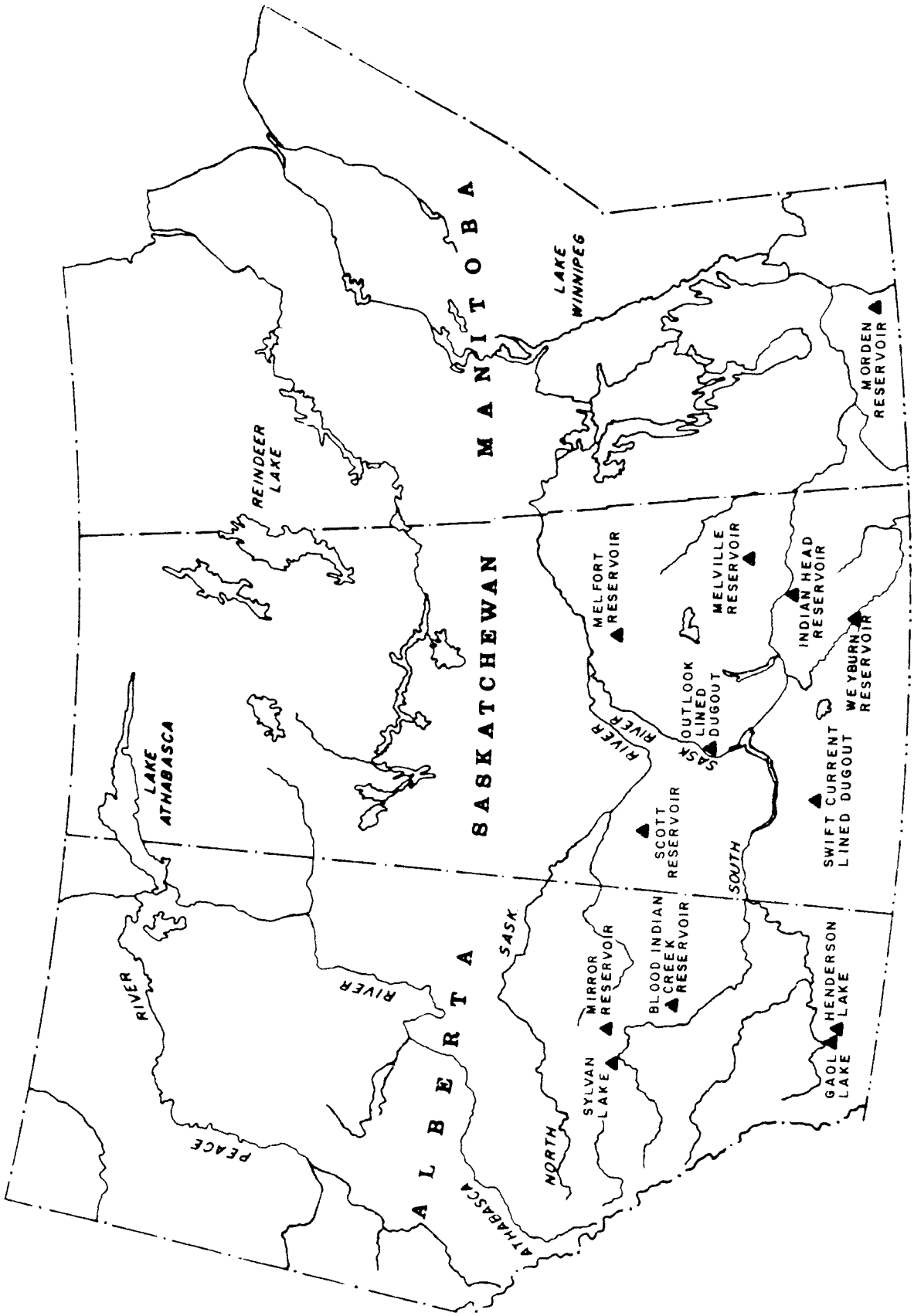


Figure 2. Location of the 13 Water Temperature Monitoring Sites

Prairies. However, the air/water temperature relationship shown as Equation 28 was never used for estimating gross evaporation.

Results of the 1978 PFRA study also indicated that the coefficient (based on dew point data) in the Meyer formula should be increased to approximately 12 for very small water bodies (such as dugouts) having storage capacities in the order of 2 to 6 dam^3. The coefficient appears to be about 12.5 (compared to 15 as initially specified by Meyer[2] when based on relative humidity data) for a water body the size of a Class A evaporation pan when based on dew point data.

2.3 Inadequacies of Current Methodology

To date, gross evaporation has been calculated by PFRA using relationships presented in Equations 12 to 26 (i.e. same as the relationships used in the SNBB study). These relationships were based on relationships that were initially provided in a PPWB report[4]. They were subsequently modified in the SNBB study[7] to suit the needs of that study. However, recent investigations and a more rigorous examination of the basic data and the methodology have identified several inadequacies. These inadequacies are listed as follows in order of their impact on the estimation of gross evaporation:

1. Basic data quality (particularly anemometer heights)
2. Consistent vapor pressure data base
3. Air/water temperature relationships
4. Anemometer height adjustment
5. Barometric pressure adjustment
6. Vapor pressure relationship

A brief discussion of each item is provided in this section. For more details, refer to Section 3.

A number of adjustments were subjectively made to the basic data (particularly the anemometer heights and corresponding wind speeds) to correct obvious data errors. For example, abrupt changes in the wind speed data were normally indicative of some change in the anemometer location or the result of an inappropriate assumption. Data errors were identified by plotting each element (i.e. air temperature, wind speed, relative humidity or dew point temperature) for each station considered and visually examining the historic data sequences. This examination was conducted after all data bases

had first been checked against published data and data in computer data banks where available. Depending upon the nature of the adjustments, the impact on the gross evaporation estimates was substantial in most cases.

During the period of record, one element of the basic data (i.e. relative humidity) did not remain constant. Relative humidity was initially provided on the basis of two observations per day. However, starting in 1939, relative humidity was generally determined on the basis of four observations per day. About the same time, Atmospheric Environment Service (AES) also began calculating dew point temperatures, but this information was not extensively utilized until the early 1960's. Although Meyer indicated in his report[3] that the coefficient will vary depending upon the number of observations used to calculate relative humidity, no adjustment to the coefficient had been made despite the variety of relative humidity and dew point data that were used. Appropriate adjustments to either the coefficient or the data base had a significant impact on the gross evaporation estimates.

Air/water temperature relationships developed by PFRA in the current study were reviewed to assess their applicability over relationships that had been used to date based on Lake-of-the-Woods data. Additional analyses were also conducted using the basic data obtained by PFRA[10] to develop individual monthly relationships rather than utilizing a single relationship for all months. Use of these new monthly air/water temperature relationships had a significant impact on the temporal distribution of the gross evaporation estimates.

The wind speed adjustment for anemometer height should be based on an exponent of 0.25 rather than an exponent of 0.5, which has been used to date. The exponent of 0.25 was first recommended by Buckler[8] in 1969 and has since been endorsed by other AES personnel. The effect of this adjustment was substantial, particularly in the years prior to 1960 when anemometer heights were extremely variable and as high as 27 metres above the ground level at some locations.

Although a barometric pressure adjustment to account for changes in elevation was proposed by Meyer[3] and subsequently acknowledged or endorsed by other investigators[4,5,6,9], it was not included in the methodology adopted by SNBB and utilized to date by PFRA. SNBB ignored this

correction because it was relatively insignificant and would have complicated the computing process. The maximum effect of this adjustment on the gross evaporation estimates was in the order of 4%.

The vapor pressure relationship utilized initially by SNBB and subsequently by PFRA to update gross evaporation was a simplified version of the table provided in the SNBB report[7]. The relationship was based on temperature increments of only $5^{o}F$ in order to minimize computer storage requirements. Of course, with today's computing capability, this constraint is no longer a concern, and a more detailed and exact relationship can be used in determining vapor pressure. The maximum effect of this modification on gross evaporation estimates was in the order of 3% on a monthly basis or 1% on an annual basis.

Although the variability of the Meyer coefficient as a function of water body size and character was recognized, no attempt was made in this study to derive a relationship other than to provide an indication of the range in general terms. The development of such a relationship would require a great deal more data than are presently available. The scope of this study was limited to the consideration of aspects that could presently be addressed.

3. ADJUSTMENTS TO THE METHODOLOGY AND DATA BASE

This section describes, in detail, the adjustments that were made not only to the methodology or components of the Meyer formula, but also to the data base. The combined effect of these adjustments is illustrated for all 14 stations in Section 4. An example, using data for the Regina station, is provided to illustrate the impact of each specified modification on the gross evaporation estimates based on the old (SNBB) methodology and data base. Similar impacts were observed at the other stations.

3.1 Data Verification

The data bases that had been assembled to date were obtained by manual extraction of the data from AES publications. Because of the vast amount of data involved, undoubtedly a certain amount of human error was inherent in the extraction process. However, some errors in the published data were also evident upon a close examination of the data. The objective of this phase of the study was to verify all data bases to the extent that was practical. Plotting the data proved to be a useful method of identifying obvious data base errors (i.e. incorrect published values) and human extraction errors.

The two major sources of error or discrepancy involved the specified anemometer heights and the estimated wind speeds. As the history of anemometer heights is unknown or questionable for most stations during the years prior to the 1940's, it was very difficult to ascertain the anemometer height corresponding to the recorded wind speed data. Some anemometers were on buildings, some on towers and some on the ground. Furthermore, there was little consistency in the reporting of anemometer heights. For example, an anemometer on a 20-metre building may have been reported at a 2-metre height because it was 2 metres above the building. As observers changed, so did the recorded anemometer height datum, even though the anemometer was not actually moved. Only since the early 1960's have the anemometers been placed at the standard height of 10 metres. In addition, the procedure previously used to estimate missing wind speed data was based on regression analyses using relatively nonhomogeneous data or, at the very least, an inappropriate exponent for adjusting the wind speed to a common datum.

The plotting of adjusted monthly historic sequences of wind speed provided an easy approach for identifying the date of significant changes or

apparent inconsistencies in anemometer heights. Unfortunately, subtle changes to the anemometer heights were masked by the natural wind variations. However, slight discrepancies between the assumed and the true anemometer heights were of little consequence in the final result. A satisfactory product was obtained by the identification and correction of the obvious anemometer height inconsistencies during the recorded period. Estimated monthly wind speeds for missing periods were obtained by multiplying wind speed data (converted to an arbitrary level of 7.62 metres using an exponent of 0.25) at the nearest base station by the ratio of the mean monthly converted wind speeds based on the common period of recorded data. Initially, regression analyses were conducted to derive wind speed relationships, but the statistical significance of the resulting relationships ranged from poor to marginal. Furthermore, estimated wind speeds based on the questionable relationships did not provide the appropriate variability that was obtained by applying a ratio based on calculated mean monthly values for the common period of record.

A detailed comparison of the old (SNBB) versus the new (PFRA) anemometer histories, as well as the stations used to estimate missing wind speed data, are presented in Table 1. As can be seen, some of the revisions to the anemometer heights are dramatic and thus have a significant effect on the gross evaporation estimates. Revisions to the estimated wind speed also had a significant effect on the gross evaporation. The combined effect of the revisions to the anemometer heights and estimated wind speeds for the Regina station are illustrated in Figure 3. All other components of the Meyer formula (including the exponent of 0.5 for adjusting wind speeds) were kept constant.

Numerous minor changes were made to other data components (e.g. relative humidity data) to correct both obvious errors in the published data and data extraction errors. However, identification of all of these corrections was deemed unwarranted.

For the most part, air temperature data was available for all of the 14 key stations. The relatively few months of missing data had been estimated by SNBB based on regression analyses. Although a longer period of record may change the relationship, reassessment of the air temperature relationships was deemed to be unwarranted, and the estimated values as determined during the SNBB study were accepted for the purposes of this study.

Table 1

Summary of Anemometer Histories and the Base Stations Used to Estimate Missing Wind Speed Data for the 14 Key Stations

STATION	SNOW[1] PERIOD	SNOW[1] HEIGHT (m)	PFRA[2] PERIOD	PFRA[2] HEIGHT (m)	BASE STATION USED TO ESTIMATE MISSING WIND SPEED DATA[3]
Alberta					
Calgary	01/1911 - 12/1930	18.29	01/1911 - 05/1911	2.44	
	01/1931 - 12/1932	7.62	06/1911 - 03/1931	3.05	
	01/1933 - 12/1955	18.29	04/1931 - 03/1940	16.76	- Medicine Hat (07/1936 and 08/1939)
	01/1956 - 09/1986	20.42	04/1940 - 02/1948	17.98	
	10/1986 - 12/1986	10.00	03/1948 - 03/1953	19.81	
			04/1953 - 01/1956	16.76	
			02/1956 - 04/1973	20.42	
			05/1973 - 11/1985	18.29	
			12/1985 - 12/1986	10.00	
Edmonton	01/1911 - 10/1975	18.29	01/1911 - 02/1911	1.22	
	11/1975 - 12/1976	10.06	03/1911 - 02/1918	4.57	
	01/1977 - 12/1986	10.00	03/1918 - 08/1939	7.62	- Battleford (01/1935 - 06/1937)
			09/1939 - 02/1948	17.98	
			03/1948 - 03/1953	19.81	
			04/1953 - 12/1954	16.76	
			01/1955 - 06/1969	18.29	
			07/1969 - 12/1969	17.37	
			01/1970 - 12/1986	10.00	
Lethbridge	01/1911 - 12/1937	7.62	01/1911 - 12/1937	7.62	- Calgary (01/1911 - 02/1911); Medicine Hat (03/1911 - 09/1920 and 11/1920)
	01/1938 - 12/1954	25.91	01/1938 - 11/1953	25.91	
	01/1955 - 12/1965	18.59	12/1953 - 07/1959	19.20	
	01/1966 - 12/1986	10.06	08/1959 - 10/1965	18.90	
			11/1965 - 12/1986	10.00	
Medicine Hat	01/1911 - 07/1970	17.37	01/1911 - 02/1912	1.22	- Calgary (01/1911 - 02/1911)
	08/1970 - 12/1986	10.06	03/1912 - 08/1930	2.44	
			09/1930 - 08/1937	7.62	
			09/1937 - 06/1938	2.44	
			07/1938 - 04/1943	12.19	
			05/1943 - 05/1945	13.41	
			06/1945 - 06/1970	17.37	- Calgary (01/1952)
			07/1970 - 12/1986	10.00	
Saskatchewan					
Broadview	01/1911 - 12/1916	22.86	01/1911 - 07/1938	7.62	- Winnipeg (03/1931 and 12/1935); Regina (all other months)
	01/1917 - 07/1938	7.62	08/1938 - 10/1940	9.14	
	08/1938 - 12/1961	21.34	11/1940 - 06/1950	21.34	- Regina (04/1949 - 05/1949 and 08/1949 - 10/1949)
	01/1962 - 12/1964	18.29	07/1950 - 08/1951	19.81	
	01/1965 - 12/1986	10.06	09/1951 - 08/1952	18.29	
			09/1952 - 10/1962	21.34	
			11/1962 - 01/1965	17.98	
			02/1965 - 12/1986	10.00	
North Battleford	01/1911 - 12/1921	12.19	01/1911 - 06/1921	7.62	- Regina (11/1911 - 12/1911); Battleford (all other months)
	01/1922 - 12/1928	7.62	07/1921 - 04/1924	1.22	- Regina (03/1922 - 05/1922); Battleford (all other months)
	01/1929 - 12/1942	10.67	05/1924 - 12/1940	7.62	- Regina (11/1937); Battleford (all other months)
	01/1943 - 12/1943	7.62	01/1941 - 08/1945	15.24	- North Battleford (01/1941 - 01/1942); Regina (02/1942 - 12/1943)
	01/1944 - 12/1957	16.46	09/1945 - 05/1949	15.85	- Regina (10/1945)
	01/1958 - 12/1986	10.06	06/1949 - 08/1958	16.46	- Regina (02/1951 and 07/1951)
			09/1958 - 03/1969	10.00	
			04/1969 - 12/1973	10.97	
			01/1974 - 12/1974	14.02	
			01/1975 - 12/1986	10.00	
Prince Albert	01/1911 - 12/1920	15.24	01/1911 - 09/1916	1.22	
	01/1921 - 12/1949	7.62	10/1916 - 04/1945	4.57	- Battleford (10/1937); North Battleford (01/1944 - 04/1945); Regina (11/1937, 12/1942 - 12/1943)
	01/1950 - 05/1968	19.51	05/1945 - 05/1949	16.76	
	06/1968 - 12/1986	10.06	06/1949 - 05/1968	19.51	
			06/1968 - 12/1986	10.00	
Regina	01/1911 - 05/1938	7.62	01/1911 - 08/1911	1.22	
	06/1938 - 12/1967	20.42	09/1911 - 12/1930	4.88	
	01/1968 - 12/1986	10.06	01/1931 - 12/1938	2.44	- Winnipeg (03/1931 and 12/1935)
			01/1939 - 07/1941	16.76	
			08/1941 - 04/1943	20.42	
			05/1943 - 03/1956	21.34	
			04/1956 - 10/1962	20.42	
			11/1962 - 12/1966	16.32	
			01/1967 - 01/1968	9.14	
			02/1968 - 12/1986	10.00	
Saskatoon	01/1911 - 12/1916	7.62	01/1911 - 02/1933	7.62	- Prince Albert (03/1931); Regina (all other months). Unrealistic recorded values were replaced by estimated values to make them more consistent with data for adjacent stations.
	01/1917 - 09/1917	24.38			
	10/1917 - 02/1918	7.62	03/1933 - 04/1943	18.29	- Regina (01/1935 - 05/1935)
	03/1918 - 08/1918	24.38	05/1943 - 07/1945	7.62	- Regina (all months)
	09/1918 - 01/1919	7.62	08/1945 - 02/1963	16.76	- Regina (07/1951)
	02/1919 - 08/1919	24.38	03/1963 - 12/1966	19.81	
	09/1919 - 12/1930	7.62	01/1967 - 12/1986	10.00	
	01/1931 - 12/1963	22.86			
	01/1964 - 12/1966	24.99			
	01/1967 - 12/1967	19.36			
	01/1968 - 12/1986	10.06			
Swift Current	01/1911 - 02/1927	10.06	01/1911 - 06/1912	7.62	
	03/1927 - 01/1972	17.37	07/1912 - 07/1913	1.22	
	02/1972 - 01/1986	10.06	08/1913 - 05/1922	7.62	- Regina (05/1921)
			06/1922 - 05/1928	1.22	- Regina (05/1923)
			06/1928 - 05/1932	7.62	
			06/1932 - 08/1933	1.22	
			09/1933 - 04/1938	7.62	- Regina (01/1935 - 11/1935 and 01/1936 - 04/1938); Medicine Hat (12/1935)
			05/1938 - 11/1952	18.29	
			12/1952 - 04/1966	17.37	
			05/1966 - 09/1973	13.11	
			10/1973 - 12/1986	10.00	
Yorkton	01/1911 - 12/1941	16.76	01/1911 - 04/1953	7.62	- Prince Albert (03/1931); Saskatoon (12/1935); Regina (all other months)
	01/1942 - 12/1950	7.62	05/1953 - 11/1962	16.76	- Regina (10/1953)
	01/1951 - 12/1957	16.76	12/1962 - 11/1966	12.19	
	01/1958 - 12/1966	12.19	12/1966 - 12/1986	10.00	
	01/1967 - 12/1986	10.06			
Manitoba					
Brandon	01/1911 - 08/1949	7.62	01/1911 - 07/1938	7.62	- Regina (08/1920 and 04/1931); Winnipeg (all other months)
	09/1949 - 06/1953	16.76	08/1938 - 02/1959	16.76	- Rivers (08/1938 - 08/1958)
	07/1953 - 07/1953	7.62	03/1959 - 07/1964	15.24	
	08/1953 - 04/1958	16.76	08/1964 - 11/1969	16.46	
	05/1958 - 07/1958	7.62	12/1969 - 12/1986	10.00	
	08/1958 - 06/1961	16.76			
	07/1961 - 08/1964	15.24			
	09/1964 - 12/1974	16.76			
	01/1975 - 12/1986	10.06			
The Pas	01/1911 - 12/1948	12.80	01/1911 - 01/1916	4.57	
	01/1949 - 12/1958	19.81	02/1916 - 08/1921	7.62	- Prince Albert (03/1920 - 08/1921)
	01/1959 - 12/1976	9.75	09/1921 - 08/1929	4.57	
	01/1977 - 12/1986	10.06	09/1929 - 07/1938	1.22	- Prince Albert (06/1938)
			08/1938 - 11/1949	7.62	- Prince Albert (11/1942 and 07/1949 - 11/1949); Regina (12/1942 - 01/1943)
			12/1949 - 12/1958	8.90	
			01/1959 - 02/1964	9.75	
			03/1964 - 12/1986	10.00	
Winnipeg	01/1911 - 12/1937	10.67	01/1911 - 09/1938	7.62	- Regina (08/1920 and 04/1931)
	01/1938 - 12/1945	23.47	10/1938 - 12/1949	21.34	
	01/1946 - 12/1949	21.34	01/1950 - 12/1962	23.47	
	01/1950 - 12/1962	23.47	01/1963 - 12/1967	10.06	
	01/1963 - 12/1967	10.37	01/1968 - 12/1986	10.00	
	01/1968 - 12/1986	10.06			

1. Determined during the SNOW study and utilized in subsequent updates by PFRA.

2. Determined by PFRA during current reassessment based on a visual examination of monthly historic wind speed plots and data provided by AES in a report for the PPWB entitled "Wind Design Study, Phase I", PPWB Report No. 90 dated December, 1986.

3. All wind data was adjusted to the 7.62-metre (25-foot) level before appropriate mean monthly ratios were calculated. Consequently, the anemometer height corresponding to the estimated value was designated as 7.62 metres.

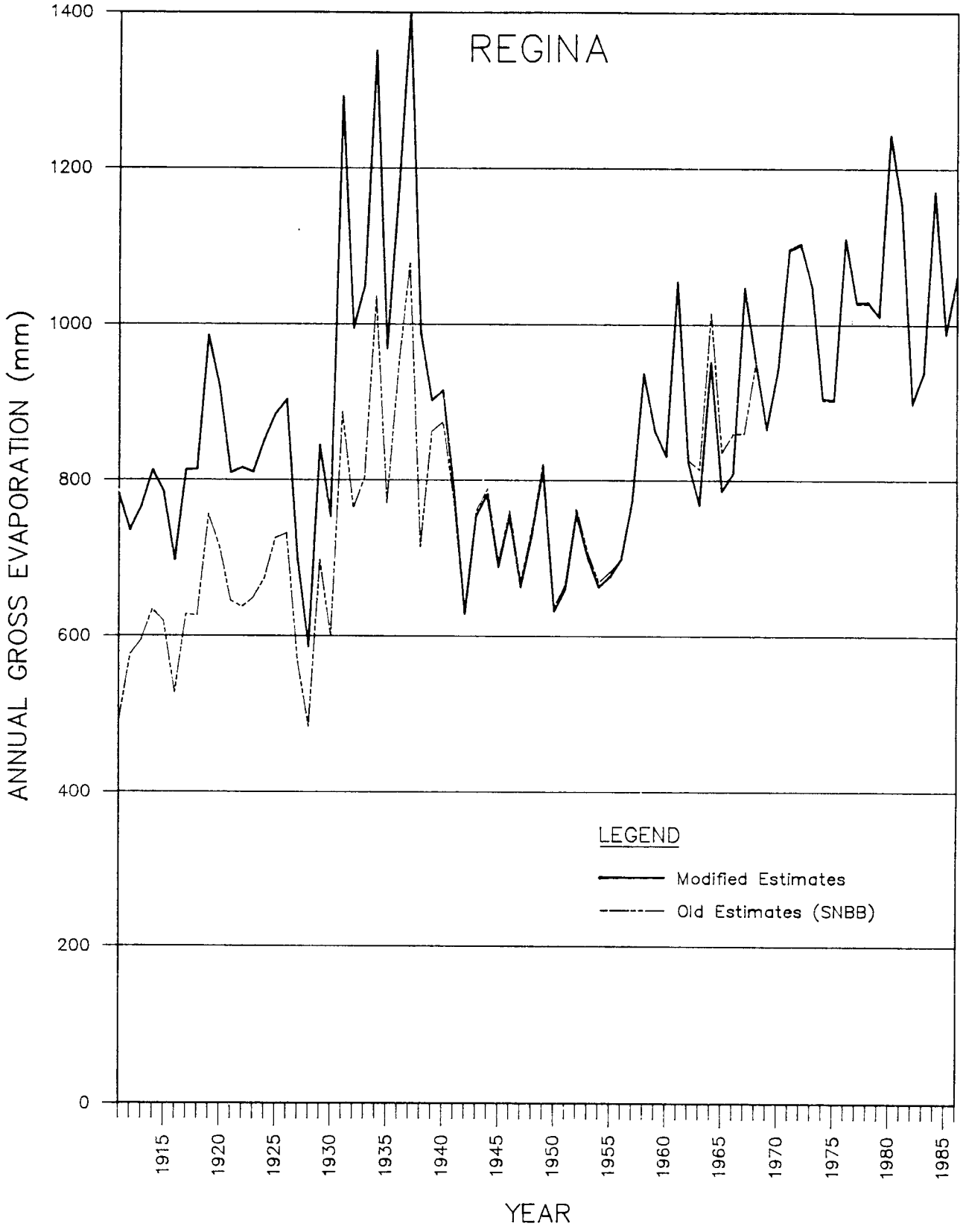


Figure 3. Effect of Corrections to Anemometer Height and Wind Speed on Annual Gross Evaporation Estimates for Regina

3.2 Consistent Vapor Pressure Data Base

The indiscriminate use of relative humidity and dew point temperature data without appropriate adjustments in the coefficient of the Meyer formula had a major impact on the gross evaporation estimates. Meyer[3] indicated that a coefficient of 11 should be used when the actual vapor pressure in the air is determined from the mean of the daily maximum and minimum temperatures and the mean of the morning and evening relative humidity measured 25 feet above the surface of the water or the ground. If the mean actual vapor pressure is determined from more frequent, equally-spaced observations, the coefficient should be decreased to 10. However, Meyer did not indicate whether four observations per day or twenty-four observations per day constituted more frequent observations.

Unfortunately, the gross evaporation estimates made by SNBB and subsequently updated by PFRA utilized a mixture of vapor pressure data bases while the coefficient was held constant at 11. To provide consistency, it was initially decided that relative humidity (RH2) based on the mean of the morning (0630 hours) and evening (1830 hours) values would be utilized for the entire period in conjunction with a coefficient of 11. Consequently, AES was requested to provide the required relative humidity data (RH2) for all 14 key meteorological stations considered in this study. Gross evaporation was then recalculated for each station.

The effect of utilizing a consistent vapor pressure data base is illustrated in Figure 4 for the Regina station. Minor differences occurred where relative humidity based on four observations per day (RH4) was used (i.e. 1939-62), while more substantial differences occurred where dew point based on four observations per day (DP4) was used (i.e. 1963-86). (Differences prior to 1939 were the result of data base corrections.) Although the vapor pressure data base varied somewhat from station to station, the effect was quite similar at all 14 key stations. The differences were particularly noticeable in recent years when dew point data were utilized. Although dew point data were available since the early 1940's, dew point was not used in determining gross evaporation at most stations until the early 1960's. However, AES has been publishing dew point data exclusively since January of 1970. The types of data that had been used by SNBB to calculate vapor pressure for the period 1911-67 and subsequently used by PFRA for updating gross evaporation estimates for the period 1968-86 are summarized in Table 2.

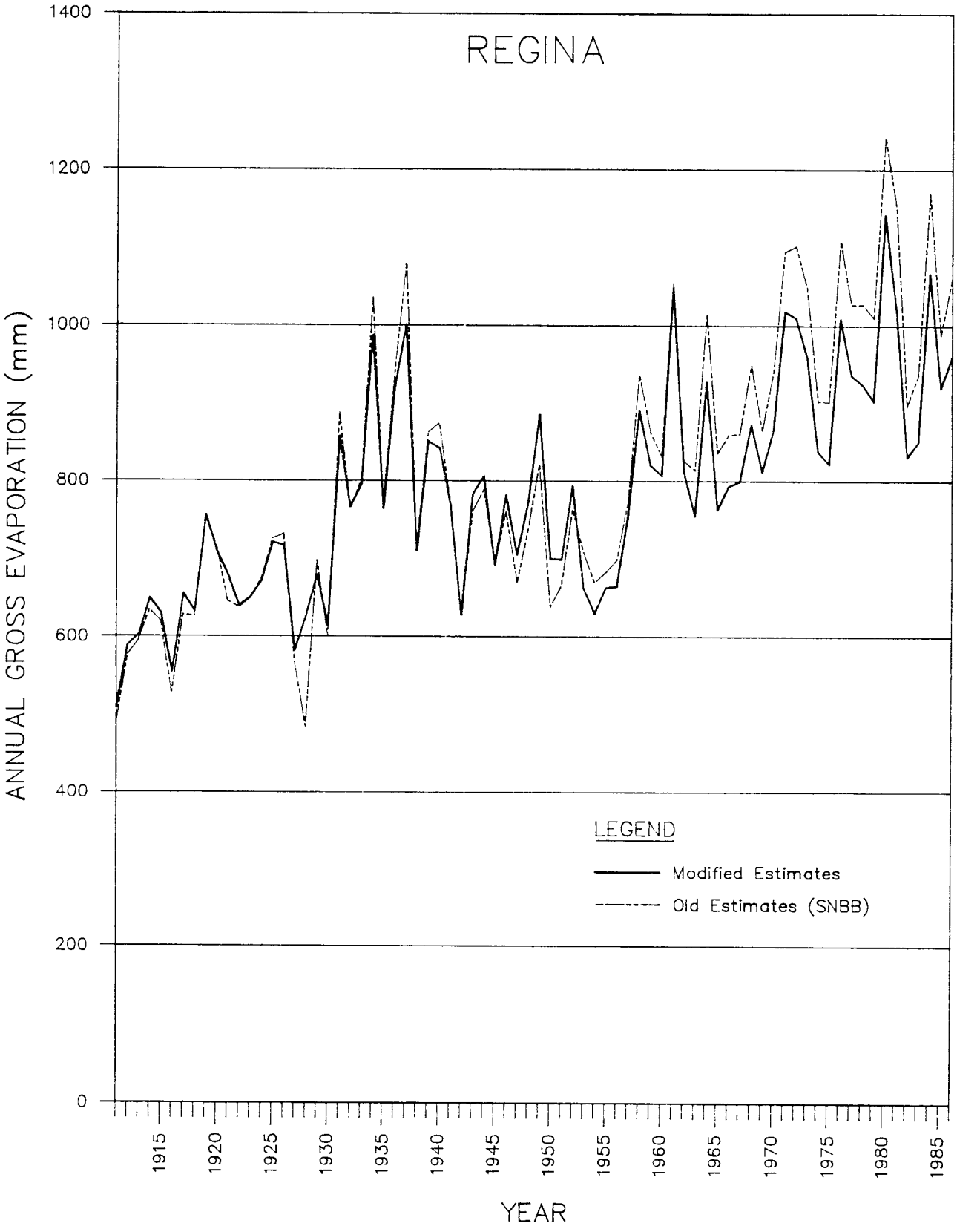


Figure 4. Effect of a Consistent Vapor Pressure Data Base on Annual Gross Evaporation Estimates for Regina

Table 2

Vapor Pressure Data Base for Gross Evaporation Calculations

STATION	SNBB[1] PERIOD	SNBB[1] TYPE[3] of VAPOR PRESSURE DATA	PFRA[2] PERIOD	PFRA[2] TYPE[3] OF VAPOR PRESSURE DATA	COMMENTS
Alberta					
Calgary	01/1911 - 12/1938	RH2	01/1911 - 04/1941	RH2	- Some data adjusted for consistency with adjacent stations.
	01/1939 - 12/1962	RH4	05/1941 - 12/1986	DP4	
	01/1963 - 12/1986	DP4			
Edmonton	01/1911 - 12/1938	RH2	01/1911 - 04/1941	RH2	
	01/1939 - 12/1962	RH4	05/1941 - 12/1986	DP4	
	01/1963 - 12/1986	DP4			
Lethbridge	01/1911 - 12/1938	RH2	01/1911 - 12/1938	RH2	- Medicine Hat data utilized.
	01/1939 - 12/1959	RH4	01/1939 - 04/1941	RH2	
	01/1960 - 12/1986	DP4	05/1941 - 12/1986	DP4	
Medicine Hat	01/1911 - 12/1938	RH2	01/1911 - 04/1941	RH2	- Some data adjusted for consistency with adjacent stations.
	01/1939 - 12/1962	RH4	05/1941 - 12/1986	DP4	
	01/1963 - 12/1986	DP4			
Saskatchewan					
Broadview	01/1911 - 12/1938	RH2	01/1911 - 06/1938	RH2	- Regina data utilized.
	01/1939 - 12/1962	RH4	07/1938 - 04/1941	RH2	
	01/1963 - 12/1986	DP4	05/1941 - 12/1986	DP4	
North Battleford	01/1911 - 12/1940	RH2	01/1911 - 04/1941	RH2	- Battleford data utilized.
	01/1941 - 12/1962	RH4	05/1941 - 02/1942	DP4	- Battleford data utilized.
	01/1963 - 12/1986	DP4	03/1942 - 12/1986	DP4	
Prince Albert	01/1911 - 12/1938	RH2	01/1911 - 04/1941	RH2	
	01/1939 - 12/1942	RH3	05/1941 - 12/1942	DP3	
	01/1943 - 12/1962	RH4	01/1943 - 12/1986	DP4	
	01/1963 - 12/1986	DP4			
Regina	01/1911 - 12/1938	RH2	01/1911 - 06/1938	RH2	- Qu'Appelle data utilized.
	01/1939 - 12/1962	RH4	07/1938 - 04/1941	RH2	
	01/1963 - 12/1986	DP4	05/1941 - 12/1986	DP4	
Saskatoon	01/1911 - 04/1941	RH2	01/1911 - 05/1915	RH2	- Qu'Appelle data utilized.
	05/1941 - 12/1962	RH4	06/1915 - 04/1941	RH2	
	01/1963 - 12/1986	DP4	05/1941 - 12/1986	DP4	
Swift Current	01/1911 - 12/1938	RH2	01/1911 - 04/1941	RH2	- Some data adjusted for consistency with adjacent stations.
	01/1939 - 12/1941	RH4	05/1941 - 05/1980	DP4	
	01/1942 - 12/1954	DP4	06/1980 - 05/1986	DP3	- Medicine Hat DP4 data utilized (03/1983 - 08/1983).
	01/1955 - 12/1962	RH4	06/1986 - 12/1986	DP4	
	01/1963 - 05/1980	DP4			
	06/1980 - 05/1986	DP3			
	06/1986 - 12/1986	DP4			
Yorkton	01/1911 - 04/1941	RH2	01/1911 - 06/1938	RH2	- Qu'Appelle data utilized.
	05/1941 - 12/1941	RH3	07/1938 - 04/1941	RH2	- Regina data utilized.
	01/1942 - 12/1962	RH4	05/1941 - 12/1941	DP3	
	01/1963 - 12/1986	DP4	01/1942 - 12/1986	DP4	
Manitoba					
Brandon	01/1911 - 12/1938	RH2	01/1911 - 06/1941	RH2	- Winnipeg data utilized.
	01/1939 - 12/1941	RH4	07/1941 - 12/1986	DP4	
	01/1942 - 12/1986	DP4			
The Pas	01/1911 - 04/1940	RH2	01/1911 - 04/1941	RH2	
	05/1940 - 08/1942	RH3	05/1941 - 07/1942	DP3	
	09/1942 - 12/1962	RH4	08/1942 - 12/1986	DP4	
	01/1963 - 12/1986	DP4			
Winnipeg	01/1911 - 12/1938	RH2	01/1911 - 04/1941	RH2	
	01/1939 - 12/1963	RH4	05/1941 - 12/1986	DP4	
	01/1964 - 12/1986	DP4			

1. Determined during the SNBB study and utilized in subsequent updates by PFRA.
2. Determined by PFRA during current reassessment based on a visual examination of monthly data and comparisons to data for adjacent stations.
3. DP3 - Dew point based on three observations per day (i.e. similar to DP4 but missing either the first or the last observation)

   DP4 - Dew point based on four observations per day (i.e. mean of observations at approximately 0000 hours, 0600 hours, 1200 hours and 1800 hours E.S.T.)

   RH2 - Relative humidity based on two observations per day (i.e. mean of observations at approximately 0630 hours and 1830 hours E.S.T.)

   RH3 - Relative humidity based on three observations per day (i.e. mean of observations at approximately 0730 hours, 1330 hours and 1930 hours E.S.T.)

   RH4 - Relative humidity based on four observations per day (i.e. mean of observations at approximately 0000 hours, 0600 hours, 1200 hours and 1800 hours E.S.T.)

Since dew point data (DP4) are currently readily-available and relative humidity data (RH2) are not, a sensitivity analysis was conducted to determine the appropriate coefficient that should be used in conjunction with DP4 data assuming that a coefficient of 11 is the correct value to be used with RH2 data. Comparisons between relative humidity based on two observations per day (RH2) and dew point based on four observations per day (DP4) were conducted for all 14 stations. The results of the sensitivity analysis are presented in Appendix A.

The sensitivity analysis presented in Appendix A indicates that if dew point (DP4) as currently published by AES is used, a coefficient of 10.1 would be appropriate. This finding agrees with the recommendation made by Buckler[9]. Although he did not specifically indicate the type of vapor pressure data he had used, presumably his analyses were based on dew point data which was readily-available at that time and considered by AES to be more appropriate than relative humidity data.

In revising the vapor pressure data base, the basic data were also modified as necessary to correct obvious errors in the published data. Recorded data that appeared unrealistic were adjusted to be more consistent with data for nearby stations. Numerous adjustments were necessary at several stations (e.g. Calgary, Medicine Hat and Swift Current) during the early years of the study period (i.e. prior to 1940). The data base used by PFRA in the revised methodology is also shown in Table 2. However, the data base still exhibits a degree of inconsistency because, prior to the early 1960's, nonstandard times were used for specified relative humidity and dew point values. This inconsistency was exacerbated by time zone changes.

3.3 Air/Water Temperature Relationships

The determination of an appropriate water temperature is a key element in estimating gross evaporation using the Meyer formula. Since water temperature is not normally available, it must be estimated from a relationship utilizing an element that is available; namely, air temperature. The monthly air/water temperature relationships are developed from recorded data. The validity of such relationships has a significant impact on the monthly and annual gross evaporation estimates.

As briefly discussed in Sections 2.2.1 and 2.2.3, the air/water temperature relationships developed by PPWB[4] and subsequently adopted by

SNBB[7] were based on data for Lake-of-the-Woods near Keewatin, Ontario and therefore are not appropriate in a prairie regime. Lake-of-the-Woods is a relatively large water body which has a large inherent heat storage component. Consequently, the monthly water temperature pattern does not exhibit the same characteristics as that exhibited by relatively small water bodies in the prairie region. Unfortunately, sufficient data were not obtained until the mid 1970's to permit development of new air/water temperature relationships. More appropriate air/water temperature relationships were proposed in several studies[6,9,10], but none of the proposed relationships had been implemented prior to the current study. The most recent study by PFRA[10] in 1978 provided the most extensive and pertinent data base, with meteorological, geographical and physical data being obtained from 13 water bodies over the ten-year period 1963-72.

The air/water temperature relationship developed by PFRA[10] in 1978 is reiterated as follows:

$$TW = 2.82 + 0.97TA \quad \text{(same as 28)}$$

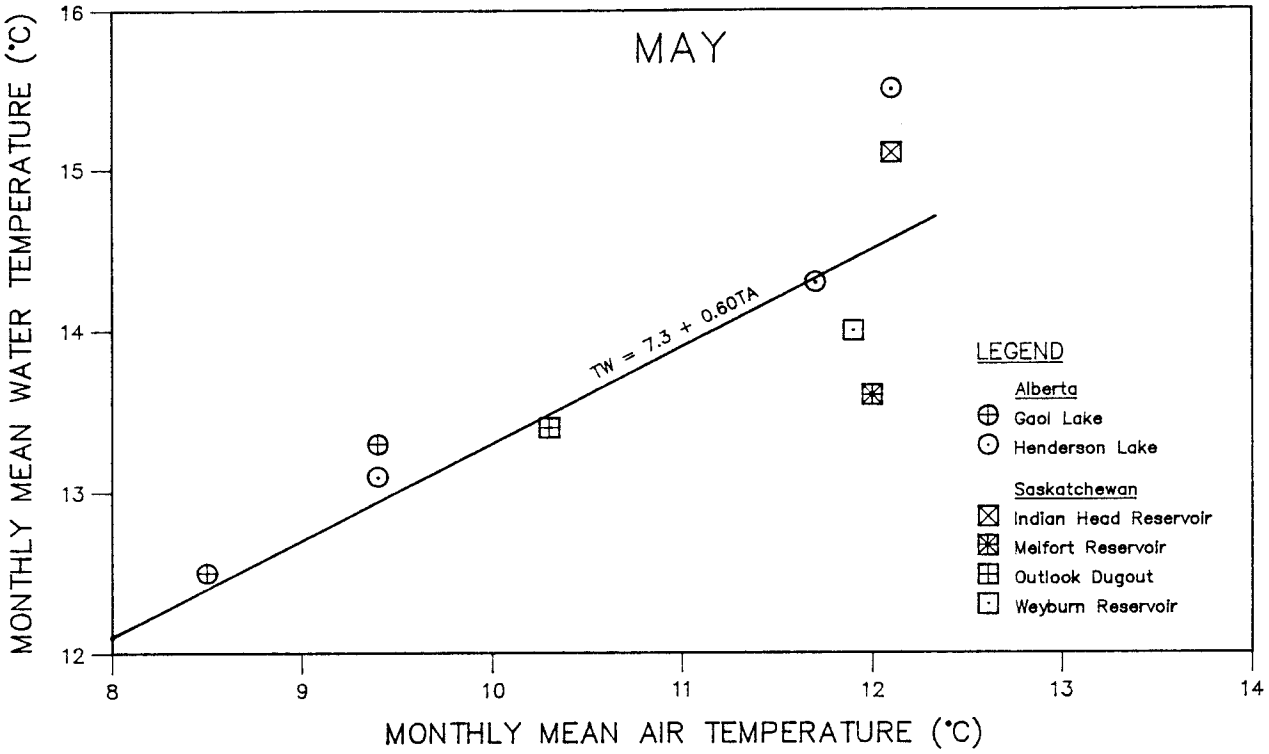
where: TW = monthly mean surface water temperature, in ^{o}C, and
TA = monthly mean air temperature, in ^{o}C.

Based on data for all months (i.e. May to October), this relationship provides water temperature estimates that conform to earlier observations made by Meyer[3] and to a more recent relationship (refer to equation 27) proposed by Buckler[9]. In general, the monthly mean water temperature is expected to exceed the monthly mean air temperature by $2^{o}C$ to $3^{o}C$. This phenomenon is attributed primarily to a radiant energy component.

When considering all of the air/water temperature data for all months at the 13 monitoring sites, the relationship proposed by PFRA[10] is statistically very good (i.e. a correlation coefficient of approximately 0.94 having a level of significance well in excess of 0.001%). However, closer examination of the data revealed that individual monthly relationships would be substantially different than the relationship that would be obtained by grouping all of the data. Thus, regression analyses were conducted for individual monthly data to determine the individual monthly relationships. In conducting these analyses, it became readily apparent that the monthly data would require closer scrutiny.

The basic data obtained by PFRA[10] were reviewed, and a few minor corrections were made. During this review process, the data for three sites (Blood Indian Reservoir, Morden Reservoir and Sylvan Lake) were viewed with some suspicion. Although the monthly data for these three sites were within the general range of the expected observations, it seemed to be somewhat anomalous. The water temperature data for Sylvan Lake were affected by a known groundwater component but apparently it had a rather insignificant effect on the air/water temperature relationship. For some unexplained reason, the water temperature data for Blood Indian Reservoir seemed unusually low, but the data were still included in the analyses, even though the data were viewed with some reservation. Fortunately, the water temperature data for these two sites were relatively limited; 1969 (August) and 1970 (June and July) for Sylvan Lake and 1970 (June and July), 1971 (June and July) and 1972 (June to August) for Blood Indian Reservoir. On the other hand, a substantial amount of water temperature data were obtained at Morden Reservoir. All data obtained for Morden Reservoir were considered in the development of appropriate monthly air/water temperature relationships, even though the data for 1970 and 1971 exhibited an unexplainable anomaly in comparison to other data obtained at the site. Although the data for 1970 and 1971 were within a reasonable band of scatter, this data contrasted sharply with the water temperature data obtained for other years (i.e. 1963-69 and 1972) at the site. No cause for this anomaly was readily apparent.

Regression analyses were conducted for individual months to determine the individual monthly air/water temperature relationships. (Only months with complete data were considered. Thus, of 176 station-months of data, a total of 33 station-months of data were ignored because of incomplete records.) The data are plotted for the months May to October in Figure 5. The statistics and relationships varied somewhat from month to month because of differing amounts of data (i.e. less data were available for spring and fall months). However, the monthly relationships exhibited similar slopes. Consequently, slight arbitrary adjustments were made to the slopes of the relationships using the relationships for July and August as a guide so that the slopes of all the monthly relationships equalled 0.60. The results of this arbitrary adjustment are graphically illustrated in Figure 5. (The relationships that are shown in Figure 5 are the final adjusted relationships that were derived as discussed in the following paragraphs.)



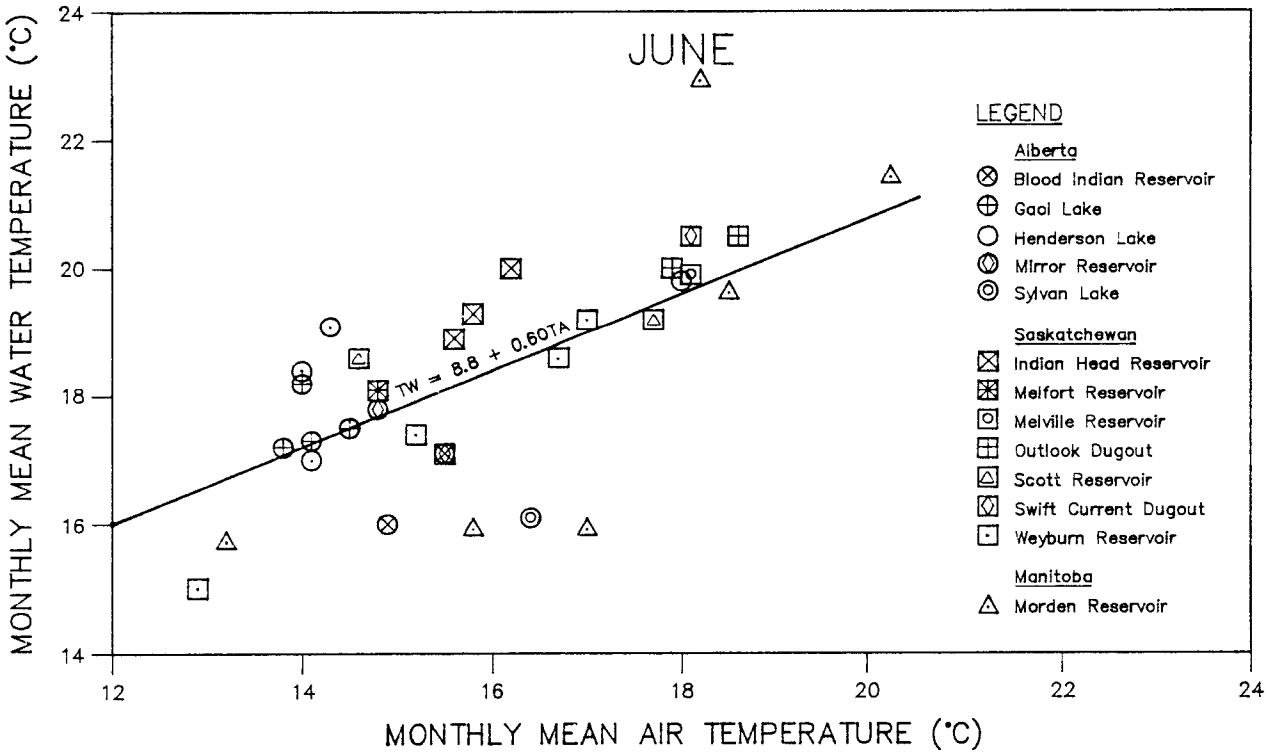
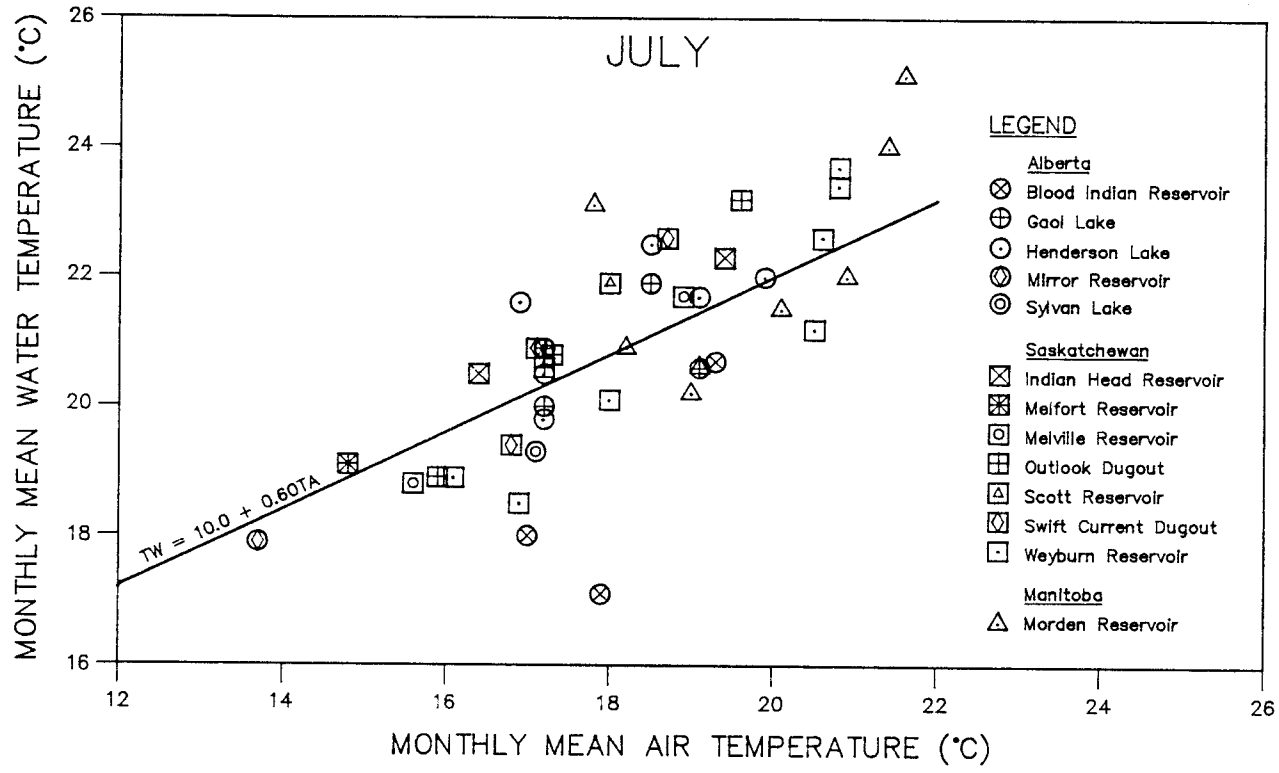


Figure 5a. Monthly Mean Air and Water Temperature Data Obtained at the 13 Monitoring Sites



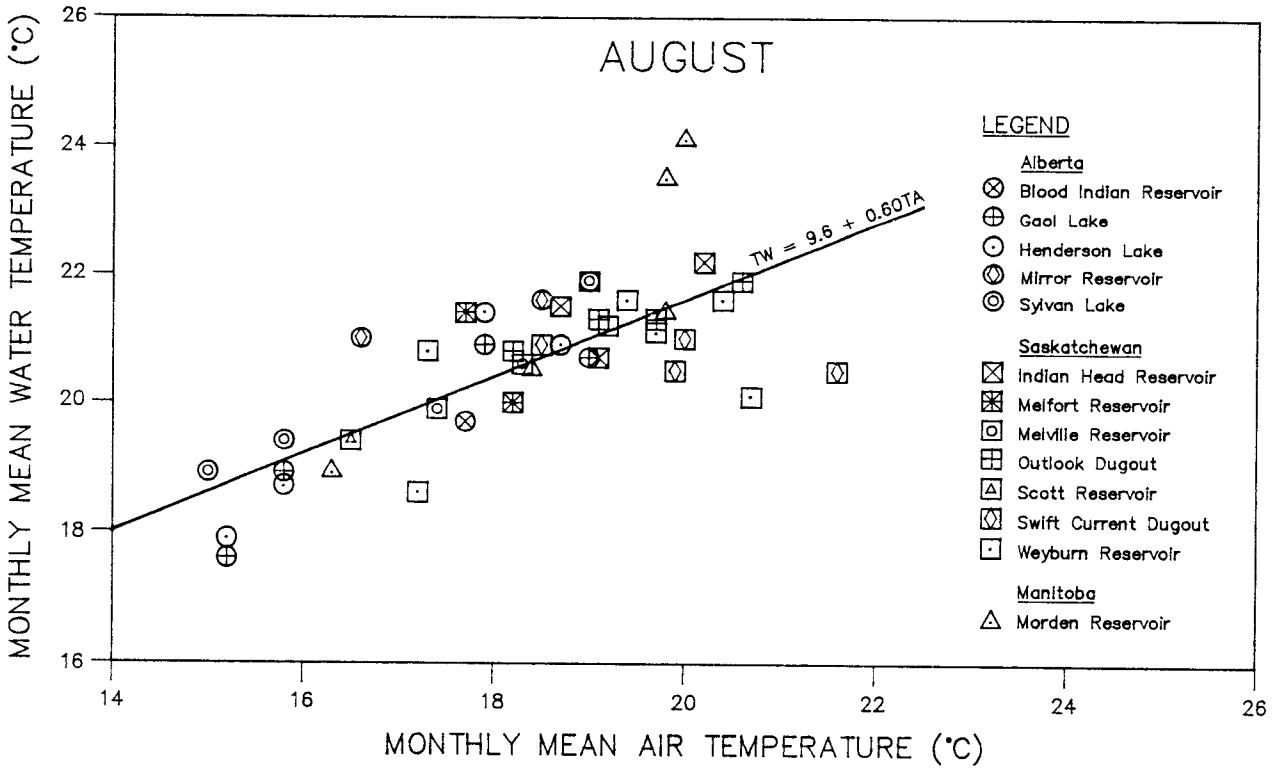
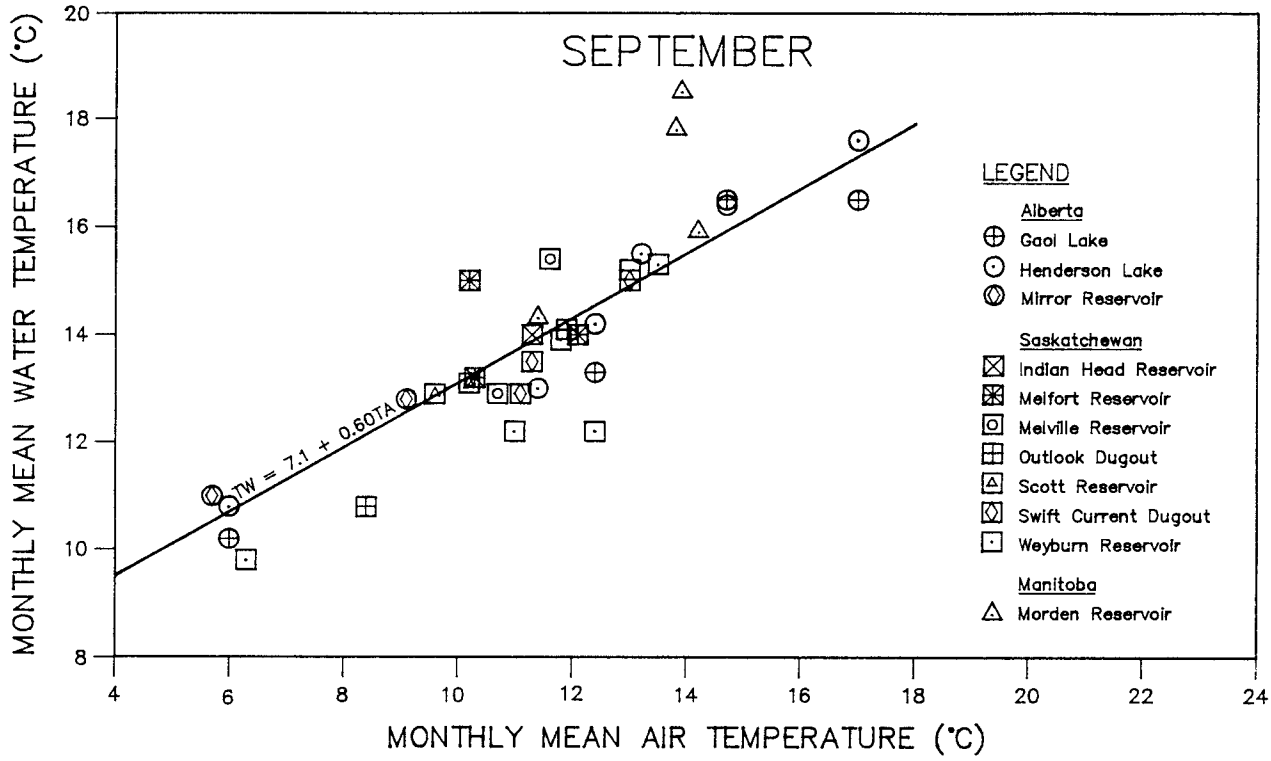


Figure 5b. Monthly Mean Air and Water Temperature Data Obtained at the 13 Monitoring Sites



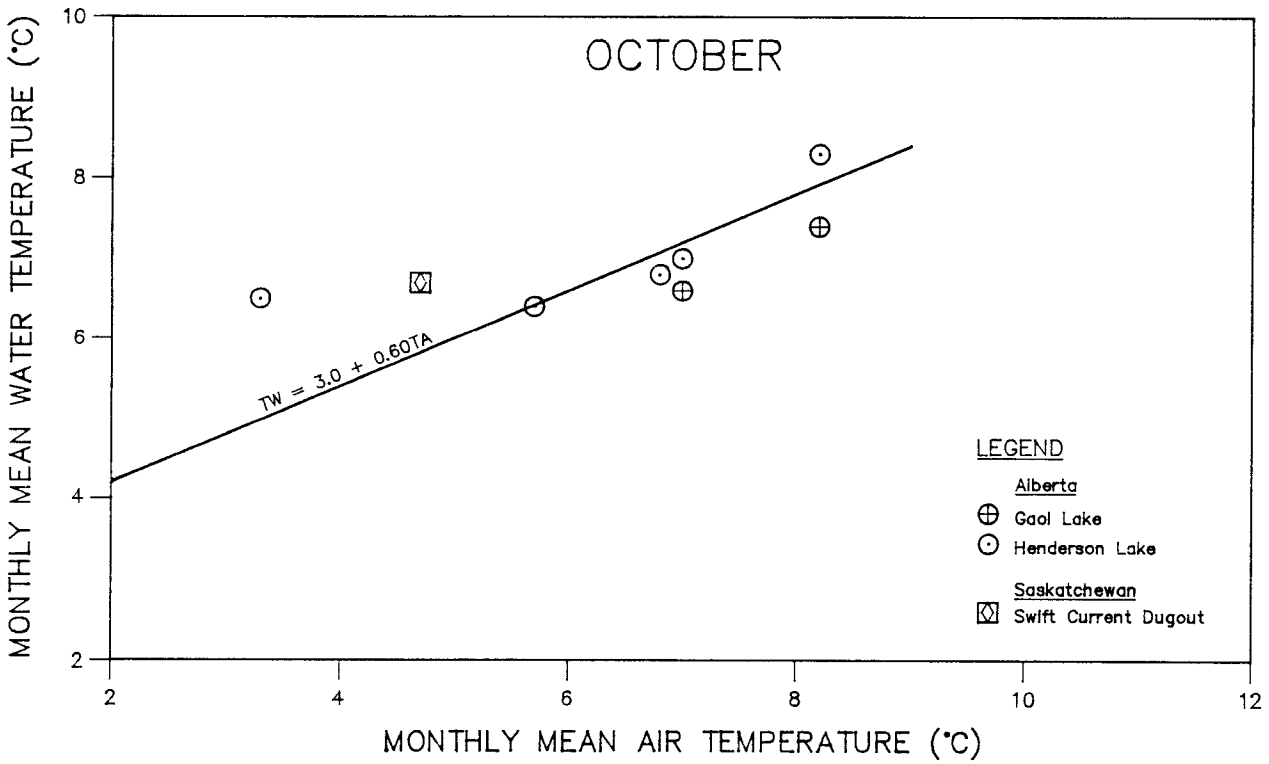


Figure 5c. Monthly Mean Air and Water Temperature Data Obtained at the 13 Monitoring Sites

The monthly air/water temperature relationships that were derived have the general form:

$$TW = B + 0.60TA \quad \ldots \quad (29)$$

where: TW = monthly mean surface water temperature, in ^{o}C,
TA = monthly mean air temperature, in ^{o}C, and
B = value (intercept) corresponding to month under consideration:

January	-3.0°C	May	7.3°C	September	7.1°C
February	-2.8°C	June	8.8°C	October	3.0°C
March	-1.4°C	July	10.0°C	November	-1.2°C
April	2.0°C	August	9.6°C	December	-2.6°C

The monthly mean temperatures for both air and water are based on an average of the daily mean temperatures calculated from daily maximum and minimum temperatures.

Since the basic data used to develop the relationships presented in Figure 5 covered only the months May to October, an approach had to be devised for developing appropriate relationships for the other months of the year, particularly the months in the remaining open water season. The required relationships were determined by plotting the intercepts of the relationships for the months May to October and extrapolating the resulting curve as shown in Figure 6. As a result, relationships for the months November to April were derived having the general form indicated by Equation 29.

In extrapolating the curve shown in Figure 6, the curve was drawn through the derived intercept values based on recorded data. Since the mean monthly air temperatures of the recorded data for all months closely approximated the 30-year (1951-80) mean monthly air temperatures, the 30-year mean monthly air temperatures were used as a guide in extrapolating the intercept curve. The shape of the intercept curve during winter months was subjectively determined by a visual comparison of the 30-year mean monthly air temperatures and monthly intercepts during the May to October period. Of course, the 30-year mean monthly air temperatures had a much larger amplitude than the monthly intercepts. Fortunately, the magnitude of the intercept values has no impact on the gross evaporation estimates during months (i.e. primarily winter months) in which the monthly mean air temperature is less than $0^{o}C$.

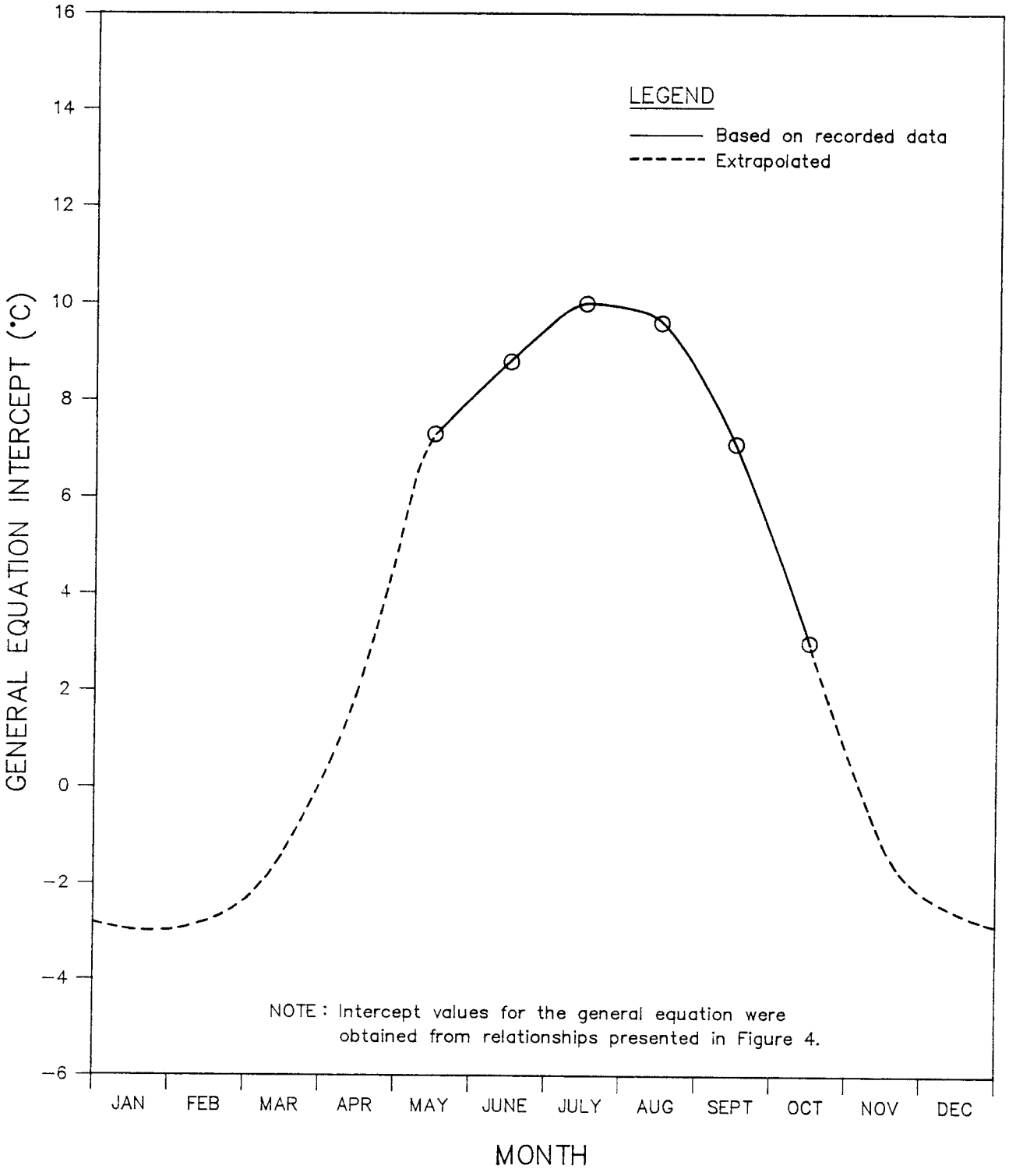


Figure 6. Variability of the Monthly Intercept Values in the Air/Water Temperature Relationship

In the Canadian Prairies, an ice cover generally forms on water bodies sometime in November, and the ice disappears sometime in April. Some annual and spatial variations in this pattern occur across the prairies. SNBB[7] had assumed that for the months November to March, the monthly mean 'water' temperature (i.e. water is normally in the form of ice or snow) would equal the monthly mean air temperature. However, it is very unusual to find a water body that has a free water surface (i.e. no ice cover) during the winter months. Any such instances are usually affected by artificial energy inputs such as turbulence mechanisms (e.g. bubblers) or thermal power plants (e.g. heat exchangers). Thus, the estimation of gross evaporation during months in which a free water surface could not be maintained under natural conditions does not adhere to the basic premise of this assessment.

After consultation with AES personnel, it was decided that when the estimate of monthly mean 'water' temperature falls below an arbitrary level of $0^{o}C$, gross evaporation would be arbitrarily set to zero. While this assumption may not provide a realistic estimate of gross evaporation during the months of ice formation and ice breakup (i.e. a free water surface would likely exist during part of the month), the impact on the annual gross evaporation would be negligible. The magnitude of the monthly gross evaporation during these periods is generally relatively small. Furthermore, the overestimation of monthly gross evaporation during the spring breakup period due to the persistence of ice, which would suppress water temperatures as the monthly mean air temperature rises above $0^{o}C$, would be compensated by the underestimation of monthly gross evaporation during the fall ice formation period when evaporation would have occurred from the free water surface during that portion of the month prior to the formation of an ice cover. Moreover, the consequences of error in extrapolating the curve in Figure 6 decreases substantially because the monthly mean air temperature is normally less than $0^{o}C$ during the winter months. Thus, regardless of the magnitude of the negative intercept, the air/water temperature relationship produces an estimated monthly mean 'water' temperature which is less than $0^{o}C$.

The apparent lack of consideration given to sublimation from snow and ice during winter months may be identified as an apparent shortcoming in the estimation of gross evaporation loss. However, while a certain amount of sublimation will occur during this period, particularly during chinook

conditions, the total volume of 'water' lost over the ice surface of a water body is relatively small[1] and is dependent upon a number of factors which can vary greatly from one water body to another. Thus, in keeping with the basic premise that gross evaporation occurs primarily from a free water surface, the sublimation aspect was ignored and gross evaporation was set to zero when the estimated monthly mean 'water' temperature fell below 0°C, even though a small fraction of the snowpack or ice cover on the body of water may have disappeared through a sublimation process.

The use of individual monthly relationships, rather than a single relationship based on all monthly data, as illustrated in Figure 7, provides more realistic estimates of water temperature. For example, if a single relationship is used, the water temperature estimate for a given air temperature would not vary from month to month (i.e. it would be the same for May, June, July, etc.). However, if individual monthly relationships as shown in Figure 7 are used, the water temperature estimate for a given air temperature will vary from month to month by the difference between the corresponding monthly constants (intercepts) in the general equation. Thus, for a given monthly mean air temperature, the monthly mean water temperature will increase with time in the months approaching July and decrease with time in the months following July during the open water period. This phenomenon corresponds to the expected effect of a radiant energy component.

The effect of using the new monthly air/water temperature relationships is illustrated for the Regina station in Figure 8. As indicated by Figure 8, the annual gross evaporation estimates were generally higher but not significantly different than the estimates obtained by using the SNBB[7] relationships. The annual gross evaporation estimates would have been somewhat higher if gross evaporation had not been zeroed during winter months when an ice cover would have existed.

The development of new air/water temperature relationships had a significant impact on the temporal distribution of monthly gross evaporation in comparison to the relationships (refer to Equations 13 to 24) that had been used previously. This impact is illustrated by the arbitrary example presented in Figure 9. The new air/water temperature relationships provide a temporal distribution of monthly gross evaporation that more closely resembles gross evaporation patterns provided by other more direct methods such as the water budget and the Class A evaporation pan.

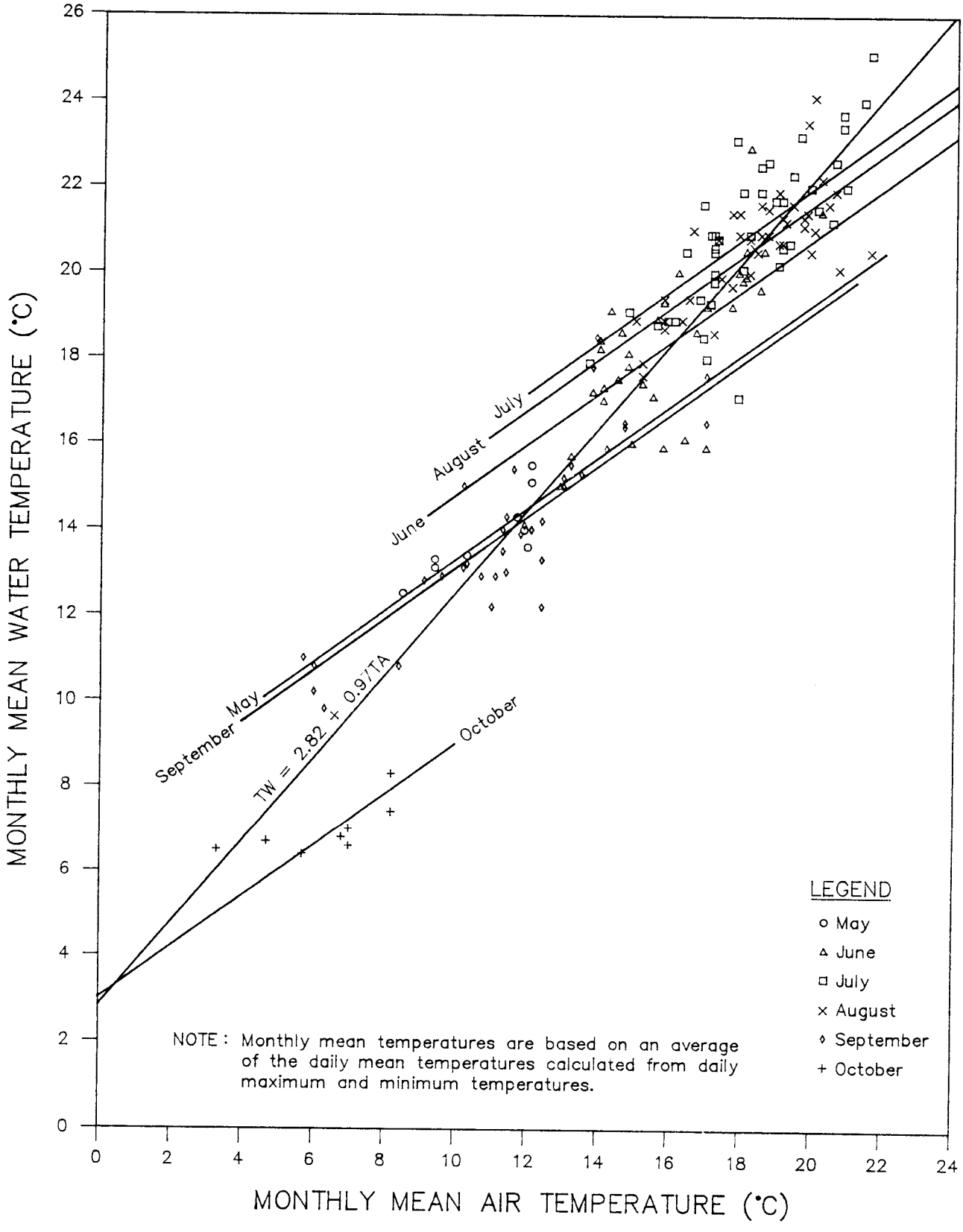


Figure 7. Monthly Air/Water Temperature Relationships for Small to Moderate-Sized Water Bodies in the Canadian Prairies

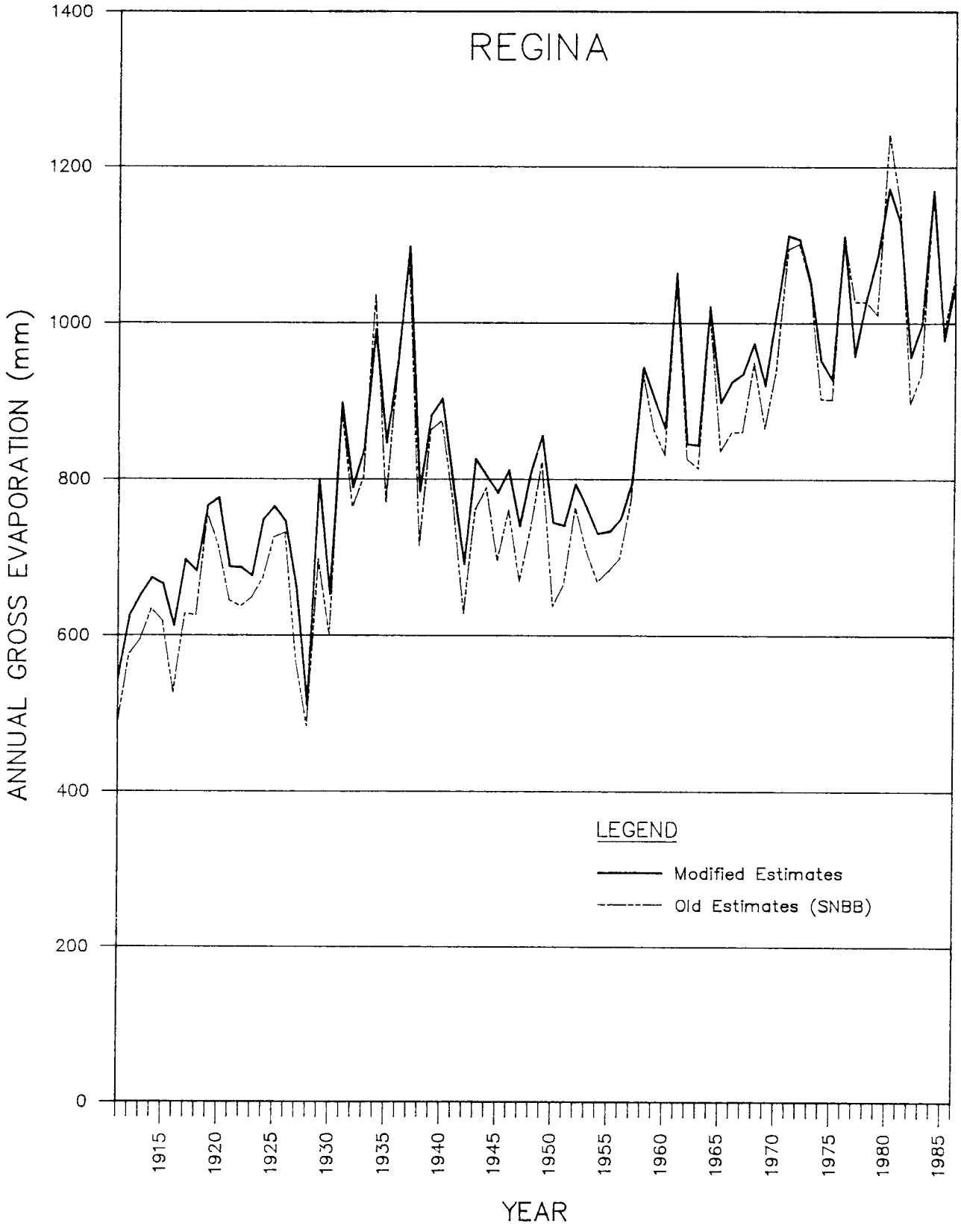


Figure 8. Effect of New Air/Water Temperature Relationships on Annual Gross Evaporation Estimates for Regina

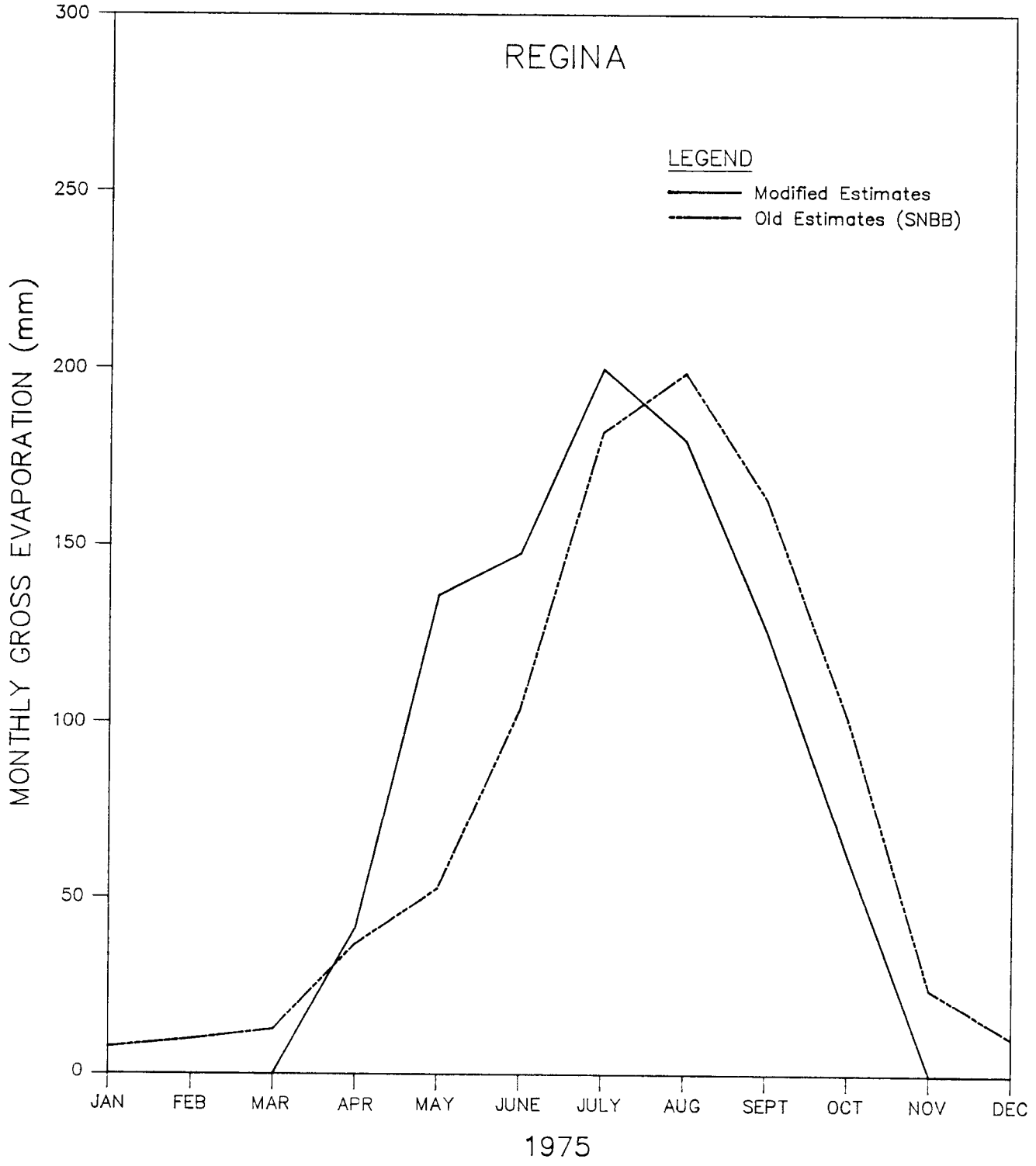


Figure 9. Effect of New Air/Water Temperature Relationships on the Temporal Distribution of Monthly Gross Evaporation Estimates for 1975 at Regina

3.4 Anemometer Height Adjustment

The determination of gross evaporation using the Meyer formula involves a wind component; namely, wind speed at 7.62 metres (25 feet) above the ground. Since anemometers have historically been installed at various heights (refer to Section 3.1), the recorded wind speeds must be adjusted to the 7.62-metre level. This adjustment can have a significant effect on gross evaporation estimates, particularly for anemometers located at heights much different than 7.62 metres.

Wind speed is adjusted by the ratio of anemometer at 7.62 metres to the actual anemometer height raised to an exponent. Meyer[3] provided relationships for several types of anemometers to adjust the wind speed data for variations in height. He also stated that "Since wind velocity has a substantial effect on evaporation loss through turbulent mixing of the air, it was necessary not only to have homogeneous records of wind velocity at all of the stations for which evaporation was to be computed, but the wind velocity used in the evaporation formula must reasonably represent the wind movement over lakes and reservoirs in the locality in which the station is located." These relationships were utilized by PPWB[4] in 1952 to estimate gross evaporation at 15 key stations for the period 1921-50. In 1961, McKay and Stichling[6] simplified the relationships by indicating that an exponent of 0.5 should be used to adjust wind speed to the 7.62-metre (25-foot) level. This exponent was later adopted by the SNBB[7] and subsequently utilized in updates prepared by PFRA. However, in 1969, Buckler[8] recommended that an exponent of 0.25 should be used to adjust wind speed in the prairie region. This recommendation was reiterated in a subsequent report[9] in 1973. An exponent of 0.25 is currently endorsed by AES as a more appropriate adjustment for wind speed in the prairie region.

The effect of using an exponent of 0.25 rather than 0.5 to adjust wind speeds to the 7.62-metre level is illustrated in Figure 10 for the Regina station based on the old (SNBB) data base. As indicated by Figure 10, the annual gross evaporation estimates varied in accordance with the height of the anemometer. The estimates of gross evaporation were higher than the estimates obtained by using the SNBB[7] exponent of 0.5 for anemometer heights greater than 7.62 metres. If some anemometer heights had been less than 7.62 metres, the estimated gross evaporation would have been smaller than the estimates obtained by using an exponent of 0.5.

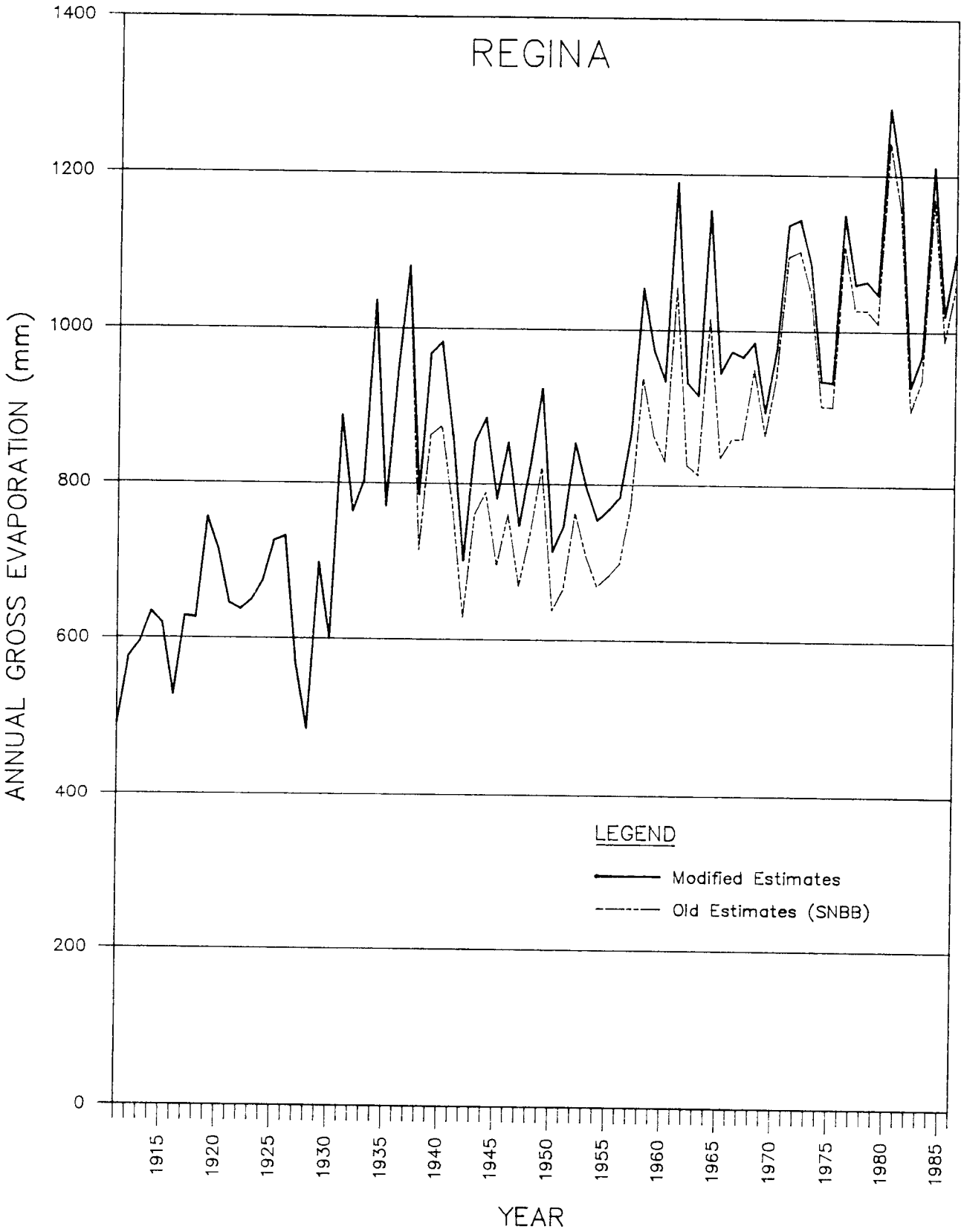


Figure 10. Effect of Revised Exponent for Wind Speed Adjustment on Annual Gross Evaporation Estimates for Regina

3.5 Barometric Pressure Adjustment

Meyer, in his 1942 report[3], indicated that all gross evaporation estimates should be increased to account for a barometric pressure adjustment of 1% for every 1000 feet of change in elevation (refer to Equation 3). Unfortunately, the basis for incorporating such an adjustment is not very well documented and appears to be based on rather sparse data. However, according to Dalton's theory of mass transfer[1], it would appear that such an adjustment is required because of the change of air density with height. The impact of this adjustment is relatively small and normally much less than the inaccuracy inherent in some other components of the formula. The adjustment would be less than 4%, ranging from about 0.8% at Winnipeg to 3.5% at Calgary. The land surface elevations corresponding to each of the 14 key stations are presented in Table 3 in both metric and Imperial units so that it is easy to ascertain the effect of such an adjustment.

Although the adjustment for barometric pressure as proposed by Meyer[2,3] was subsequently acknowledged or endorsed in most reports[4,5,6,9] on this subject, it was not incorporated into the methodology used in the SNBB study. The SNBB study ignored this adjustment because its effect on gross evaporation estimates was relatively insignificant and thus the computation could be simplified. This simplification of the Meyer formula was adhered to by PFRA in the process of updating the gross evaporation estimates until the time of this reassessment.

The barometric pressure adjustment was incorporated in the revised methodology for estimating gross evaporation at all stations. The effect of incorporating this adjustment is illustrated in Figure 11 for the Regina station based on the old (SNBB) data base. As indicated by Figure 11, the annual gross evaporation estimates were larger by approximately 1.9%.

Table 3

Land Surface Elevations for the 14 Key Stations

STATION	DATE	LAND SURFACE ELEVATION*	
		METRES	FEET
Alberta			
Calgary	01/1911 - 07/1921	1056	3465
	08/1921 - 04/1931	1058	3471
	05/1931 - 12/1986	1084	3556
Edmonton	01/1911 - 09/1937	658	2159
	10/1937 - 12/1987	671	2201
Lethbridge	01/1911 - 08/1936	903	2963
	09/1936 - 12/1986	929	3048
Medicine Hat	01/1911 - 12/1986	717	2352
Saskatchewan			
Broadview	01/1911 - 06/1938	597	1959
	07/1938 - 12/1964	620	2034
	01/1965 - 12/1986	601	1972
North Battleford	01/1911 - 02/1942	494	1621
	03/1942 - 12/1986	548	1978
Prince Albert	01/1911 - 11/1942	436	1430
	12/1942 - 12/1986	428	1404
Regina	01/1911 - 12/1986	577	1893
Saskatoon	01/1911 - 03/1941	503	1650
	04/1941 - 12/1986	500	1640
Swift Current	01/1911 - 04/1938	744	2441
	05/1938 - 12/1986	817	2680
Yorkton	01/1911 - 12/1986	498	1634
Manitoba			
Brandon	01/1911 - 06/1941	366	1201
	07/1941 - 12/1986	409	1342
The Pas	01/1911 - 12/1986	271	889
Winnipeg	01/1911 - 12/1937	232	761
	01/1938 - 12/1986	239	784

* Information (in metric units) was obtained from the AES Climatological Station Data Catalogue and converted to Imperial units (rounded to the nearest foot) to facilitate the quick determination of the effect of the barometric pressure adjustment (i.e. 1% for every 1000-foot change in elevation). A change in land surface elevation indicates a gauge relocation.

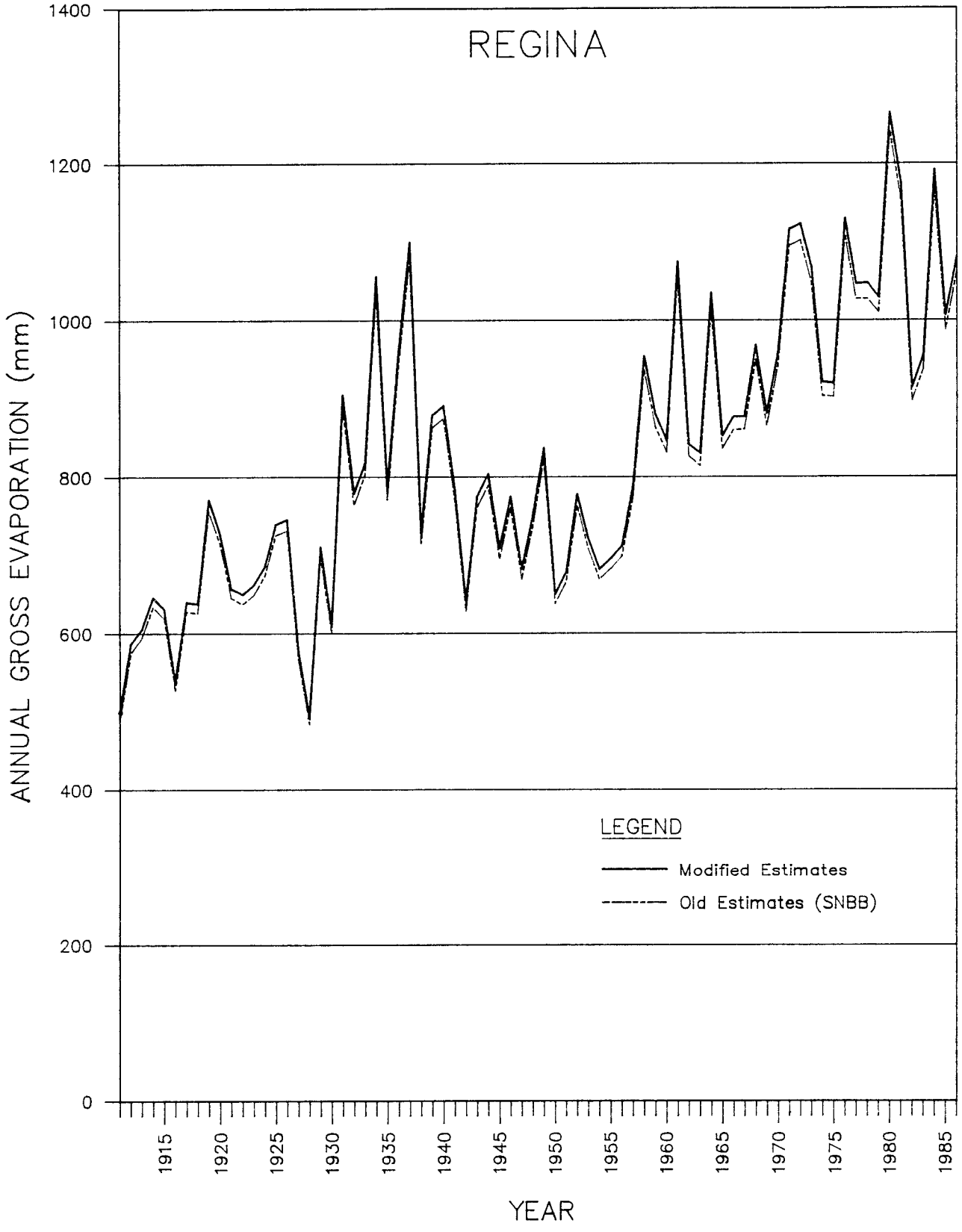


Figure 11. Effect of a Barometric Pressure Adjustment on Annual Gross Evaporation Estimates for Regina

3.6 Vapor Pressure Relationship

In the process of calculating gross evaporation, saturated vapor pressure has normally been determined in previous studies from linear interpolation of a tabulated vapor pressure table. The accuracy of the interpolation is primarily a function of the size of the temperature increments utilized in the published vapor pressure table[11].

Although a vapor pressure table in temperature increments of 0.1°F was available, SNBB simplified the vapor pressure table by using temperature increments of 5°F to reduce the computer data storage requirements. This simplification had a relatively minor effect on the estimates of gross evaporation, but it was identified as another factor which contributed to the inaccuracy of the estimates. While calculating vapor pressure directly rather than interpolating a vapor pressure table may have been of some concern due to a limited computing capacity at the time of the SNBB study, that is no longer the case. The capacity of present-day computers is such that the direct solution of a complex vapor pressure relationship can be handled quite readily.

A vapor pressure relationship[11] defined by a complex mathematical formula (refer to Equation 32) was used in the determination of gross evaporation. The effect of calculating vapor pressure directly using this relationship produced a negligible change in the gross evaporation estimates as illustrated in Figure 12 for the Regina station based on the old (SNBB) data base. As indicated in Figure 12, the estimated annual gross evaporation values based on the relationship are consistently higher than the estimated annual gross evaporation based on an interpolated vapor pressure table by an imperceptible amount (an average annual value of +0.8%).

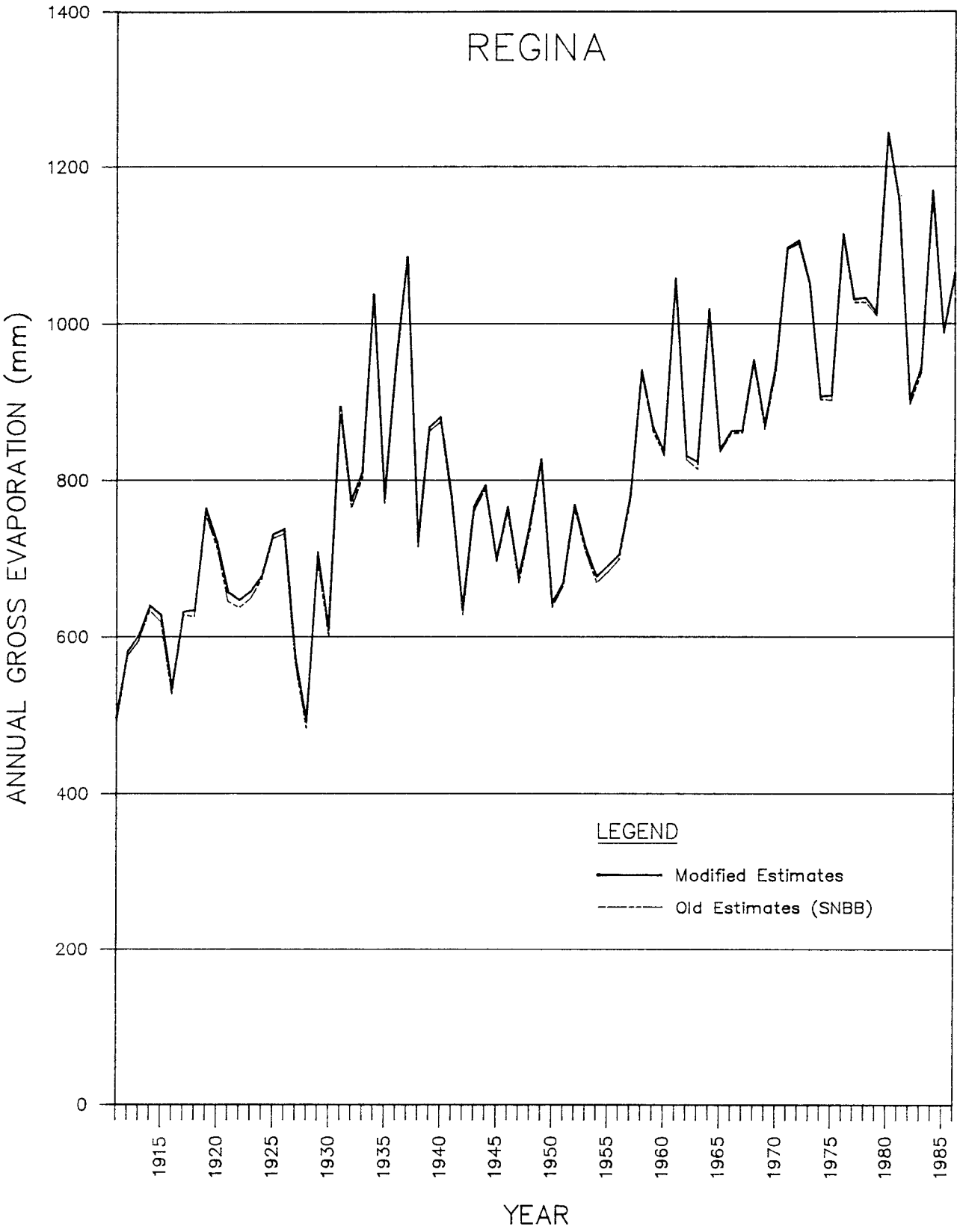


Figure 12. Effect of Direct Application of a Vapor Pressure Relationship on Annual Gross Evaporation Estimates for Regina

4. CALCULATION OF GROSS EVAPORATION

Values of monthly gross evaporation were estimated for the period 1911-86 for the 14 key meteorological stations using the following metric form of the Meyer formula (equivalent to Equation 3):

$$EG = CK(V_W - V_a)(1 + 6.2139 \times 10^{-2} W)(1 + 3.28084 \times 10^{-5} A) \quad . \; . \; . \; . \; . \; . \quad (30)$$

where: EG = monthly gross evaporation, in millimetres, at the key meteorological station,
C = coefficient of 11 if saturated vapor pressure is based on two observations of relative humidity per day or coefficient of 10.1 if saturated vapor pressure is based on four observations of dew point per day (refer to Appendix A),
K = metric conversion factor of 0.750062,
V_W = saturated vapor pressure, in millibars, corresponding to estimated monthly mean water temperature at the surface of a hypothetical open body of water at the station site,
V_a = actual monthly mean vapor pressure, in millibars, in the atmosphere at 7.62 metres above the ground level at the station,
W = monthly mean wind speed, in kilometres per hour, at 7.62 metres above the ground level at the station, and
A = elevation, in metres above mean sea level, of ground level at the station.

The value of C varies with the size of the water body and the type of input data (i.e. relative humidity or dew point) that are used. (Refer to Appendix A for a sensitivity analysis regarding various input data.) In this particular study, dew point data based on four observations per day (in a few cases, three observations per day) were used whenever available with a corresponding coefficient of 10.1. When dew point data were not available, relative humidity data based on two observations per day were used with a corresponding coefficient of 11. No consideration was given to the size of the water body other than to assume that it was neither very large (e.g. Lake Diefenbaker, Lake Winnipeg) nor very small (e.g. shallow slough). Appropriate adjustments may be made by the user, if warranted, to correct for water body size. These adjustments may be made by applying a factor (calculated as the ratio of an appropriate coefficient to 10) to the pertinent array of gross evaporation values provided in Appendix B. For example, the gross evaporation for a very small water body near Swift Current may be estimated by multiplying the gross evaporation values for the Swift

Current station (refer to Appendix B) by a factor of 1.2 (i.e. 12/10) based on the assumption that a coefficient of 12 would be appropriate for such a water body.

Water temperature was estimated based on the following air/water temperature relationship:

$$TW = B + 0.60TA \quad \ldots \quad (31)$$

where: TW = monthly mean surface water temperature, in ^{o}C,
TA = monthly mean air temperature, in ^{o}C, based on the average of the daily mean temperatures calculated from daily minimum and maximum temperatures, and
B = value (intercept) corresponding to month under consideration:

January	-3.0^{o}C	May	7.3^{o}C	September	7.1^{o}C
February	-2.8^{o}C	June	8.8^{o}C	October	3.0^{o}C
March	-1.4^{o}C	July	10.0^{o}C	November	-1.2^{o}C
April	2.0^{o}C	August	9.6^{o}C	December	-2.6^{o}C

If the estimated monthly mean surface 'water' temperature was less than $0^{o}C$, the gross evaporation for the month under consideration was arbitrarily set to zero. Otherwise, the estimated water temperature was utilized in Equation 32.

Saturated vapor pressure, V_W (as required for Equation 30), was determined by using the Goff-Gratch formulation[11]:

$$\log_{10}V_W = - 7.90298(T_S/T-1) + 5.02808\log_{10}(T_S/T) - 1.3816\times10^{-7}(10^{11.344(1-T/T_S)}-1) + 8.1328\times10^{-3}(10^{-3.49149(Ts/T-1)}-1) + \log_{10}e_{ws} \quad \ldots \quad (32)$$

where: V_W = saturated vapor pressure, in millibars, over a plane surface of pure ordinary liquid water,
T = absolute monthly mean water temperature, in ^{o}K, where T = TW + 273.16,
T_S = steam-point temperature, in ^{o}K, at one standard atmosphere (=373.16 ^{o}K), and
e_{ws} = saturated pressure, in millibars, of pure ordinary liquid water at steam-point temperature of one standard atmosphere (=1013.246 millibars).

The actual monthly mean vapor pressure, V_a (as required for Equation 30), was derived from preliminary values of vapor pressure (V_{ap}) 1.22 metres above the ground level. These values were ultimately adjusted to the

7.62-metre level using Equation 33 to obtain the required V_a values. However, V_{ap} values were first obtained by substituting the dew point temperature values (whenever available) or the monthly mean air temperatures for TW in the vapor pressure relationship presented as Equation 32 and solving for V_w. V_{ap} values were then equated to V_w values. Whenever dew point data were not available, the resultant V_{ap} values were multipled by the corresponding relative humidity values to obtain a V_{ap} value for each month. Vapor pressure at the 7.62-metre level was then determined by using the following relationship, which approximates the graphical relationship presented by Meyer[3]:

$$V_a = (0.8559 + 0.094\log_{10}V_{apm})V_{ap} \quad . . . . . \quad (33)$$

where: V_a = actual monthly mean vapor pressure, in millibars, in the atmosphere at 7.62 metres above ground level,
V_{ap} = preliminary values of monthly mean vapor pressure, in millibars, derived from meteorological observations assumed to be at the 1.22-metre level, and
V_{apm} = mean of the April to October values of V_{ap} for the calendar year. (Thus, V_{apm} varies for each calendar year.)

Equation 33 is applicable only for adjusting vapor pressure values from the 1.22-metre level to the 7.62-metre level. The resultant adjusted values are very similar but not identical to those obtained from the graphical relationship.

Wind speed, W (as required for Equation 30), was determined at the 7.62-metre level using the following relationship:

$$W = WV(7.62/WE)^{0.25} \quad . . . . . \quad (34)$$

where: W = monthly mean wind speed, in kilometres per hour, at 7.62 metres above ground level,
WV = observed monthly mean wind speed, in kilometres per hour, at the key meteorological station, and
WE = height above ground, in metres, of the anemometer with which WV observations were obtained.

The monthly gross evaporation estimates for the period 1911-86 for each of the 14 key stations are tabulated in Appendix B. Tables of precipitation (i.e. total water equivalent of all forms of precipitation) and net

evaporation data (i.e. gross evaporation minus precipitation) for the corresponding period are presented in Appendix B to facilitate subsequent use of the data for various purposes.

Comparisons of the new (PFRA) and the old (SNBB) estimates of annual gross evaporation are provided in Figures 13 to 26 inclusive. These figures illustrate the combined effect of all adjustments that have been made to the methodology and the data bases. Generally, the annual estimates in the early portion of the period have increased dramatically and thus have resulted in a substantial increase in the long-term mean annual gross evaporation. For comparative purposes, long-term (1911-86) mean annual gross evaporation estimates based on the new (PFRA) and old (SNBB) methodologies are summarized in Table 4.

Table 4

Comparison of Estimated Mean Annual Gross Evaporation Using New (PFRA) and Old (SNBB) Methodologies

STATION	MEAN ANNUAL GROSS EVAPORATION* (mm)	
	OLD (SNBB)	NEW (PFRA)
Alberta		
Calgary	774	853
Edmonton	720	804
Lethbridge	1034	1026
Medicine Hat	937	992
Saskatchewan		
Broadview	685	805
North Battleford	767	826
Prince Albert	613	686
Regina	814	930
Saskatoon	785	886
Swift Current	916	1015
Yorkton	717	825
Manitoba		
Brandon	682	747
The Pas	588	691
Winnipeg	760	815

* Based on the historic period 1911-86

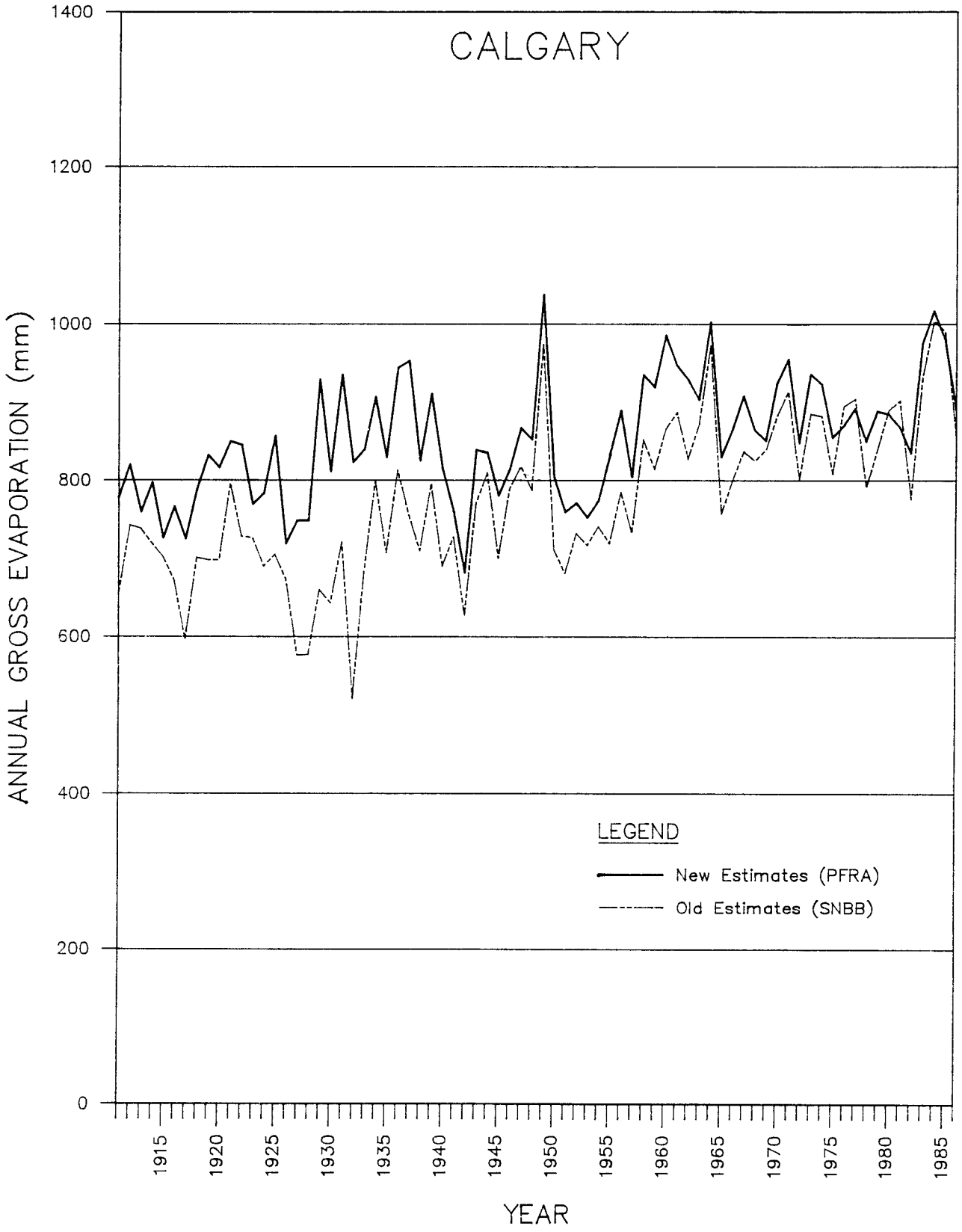


Figure 13. Comparison of New (PFRA) and Old (SNBB) Estimates of Annual Gross Evaporation for Calgary

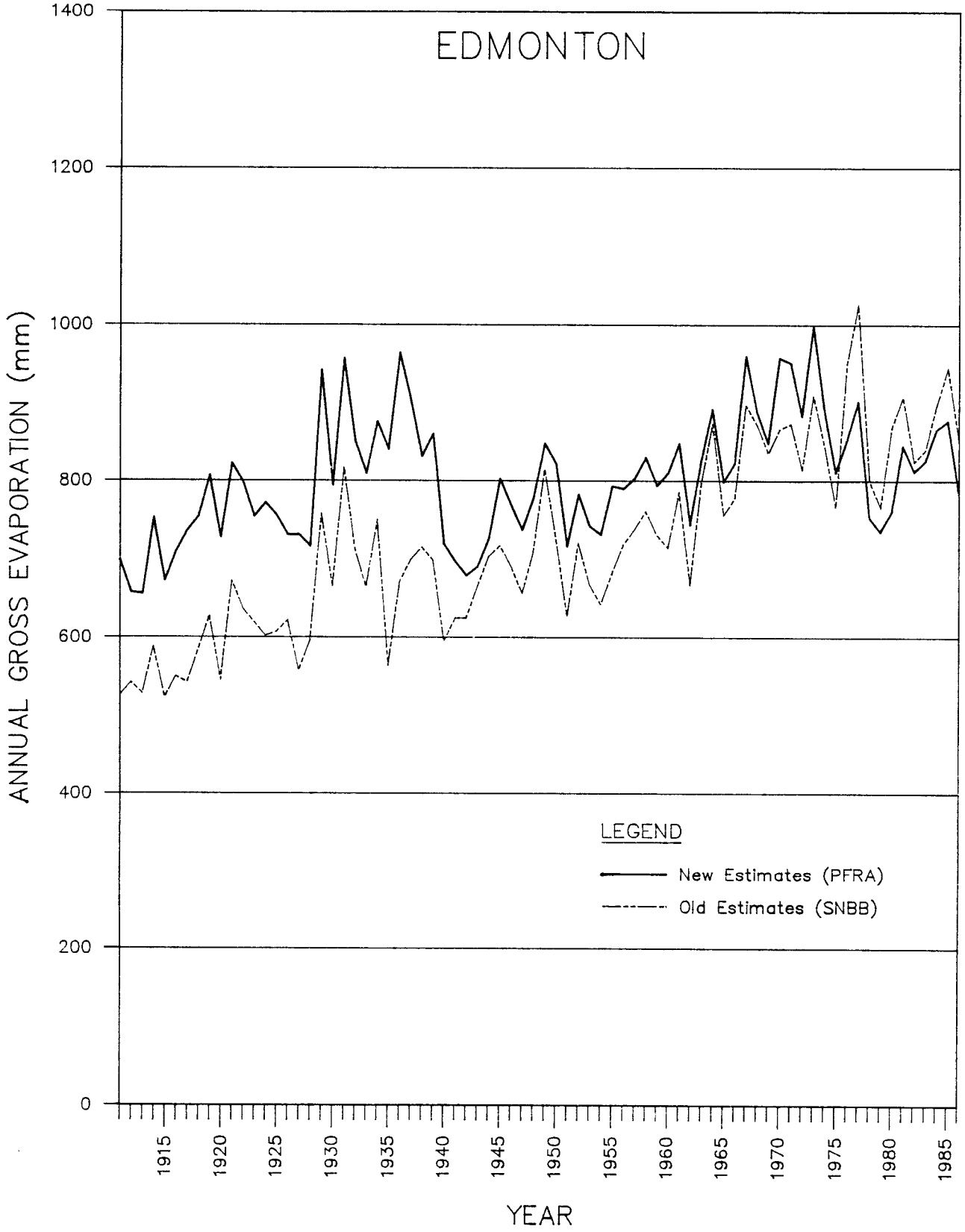


Figure 14. Comparison of New (PFRA) and Old (SNBB) Estimates of Annual Gross Evaporation for Edmonton

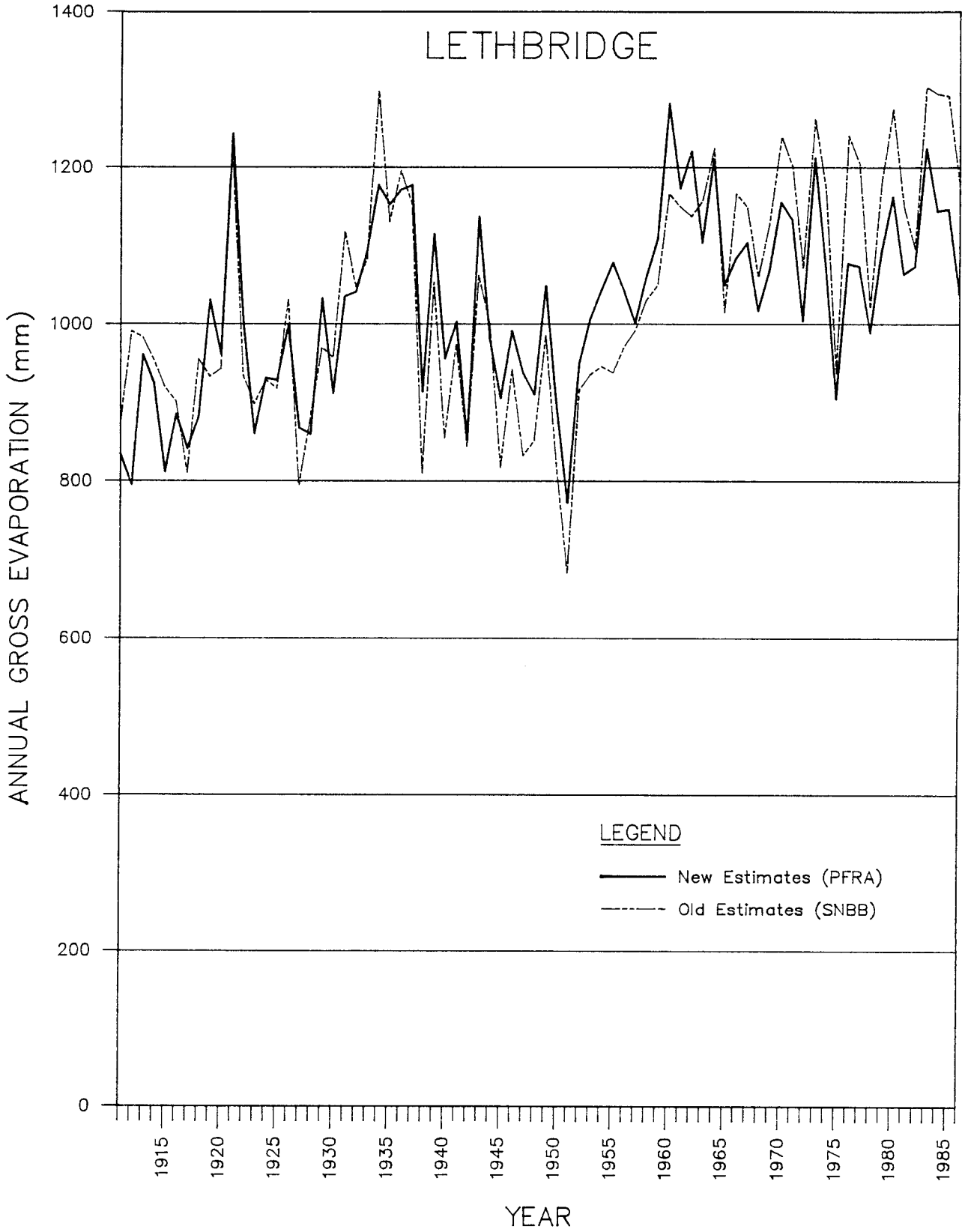


Figure 15. Comparison of New (PFRA) and Old (SNBB) Estimates of Annual Gross Evaporation for Lethbridge

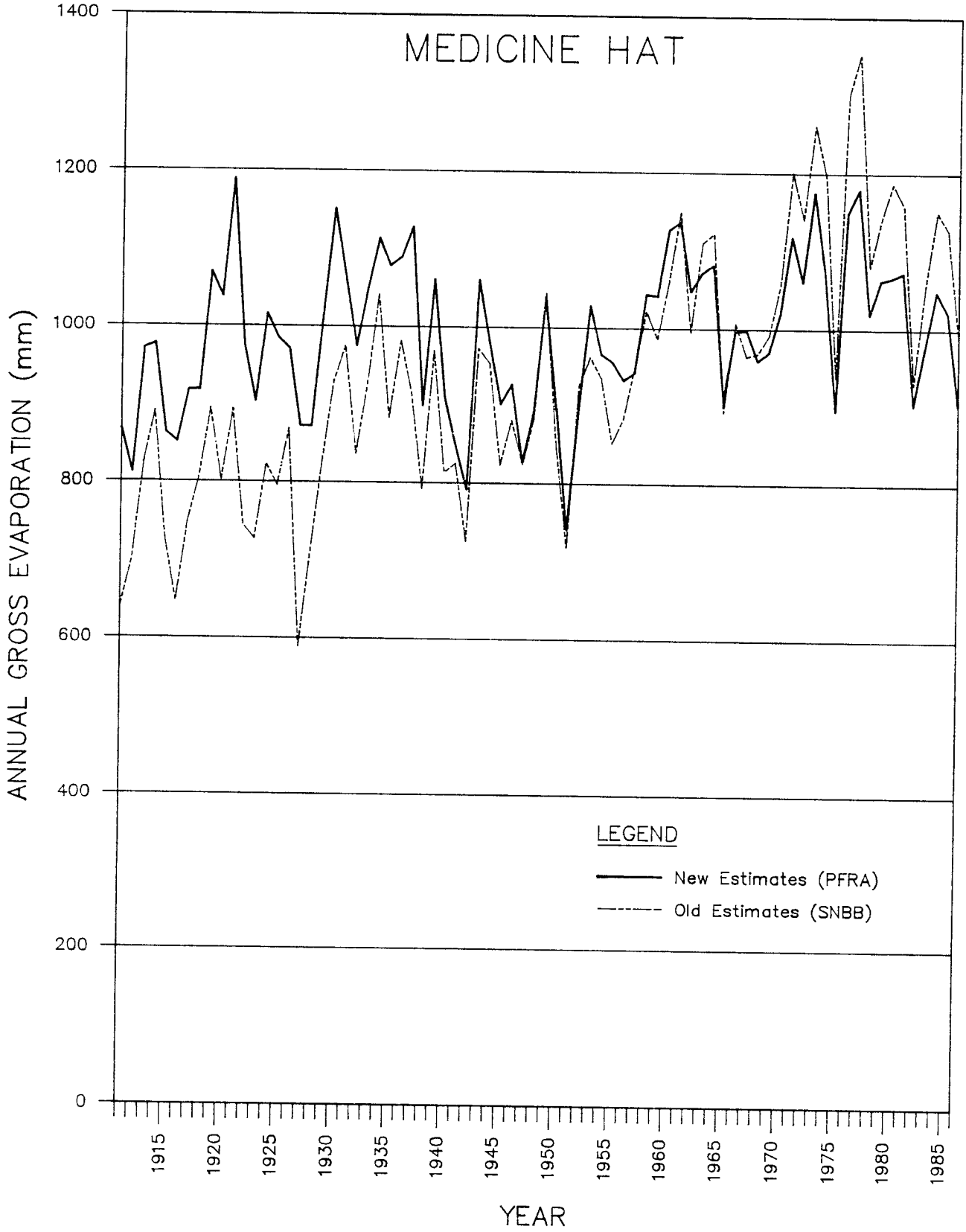


Figure 16. Comparison of New (PFRA) and Old (SNBB) Estimates of Annual Gross Evaporation for Medicine Hat

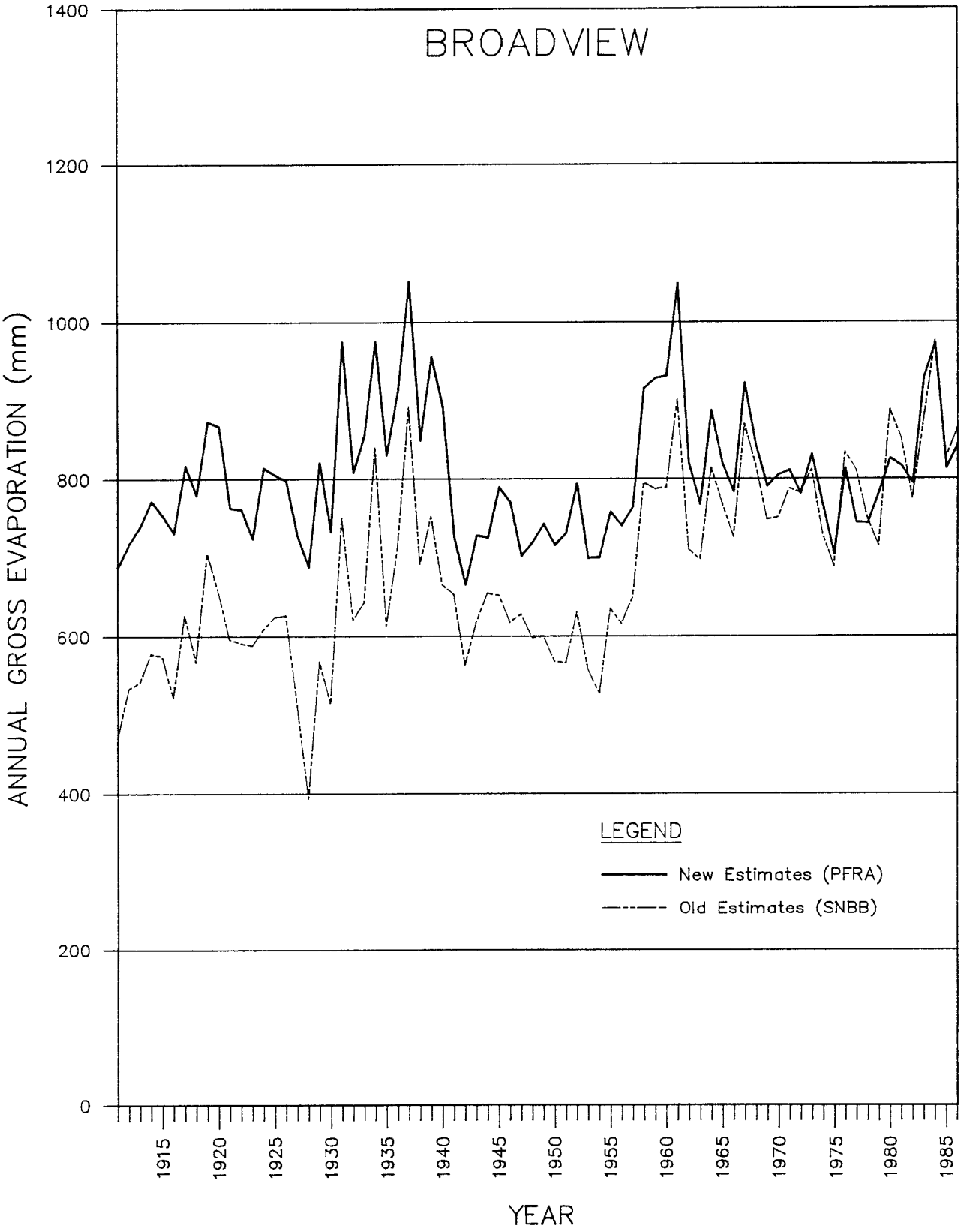


Figure 17. Comparison of New (PFRA) and Old (SNBB) Estimates of Annual Gross Evaporation for Broadview

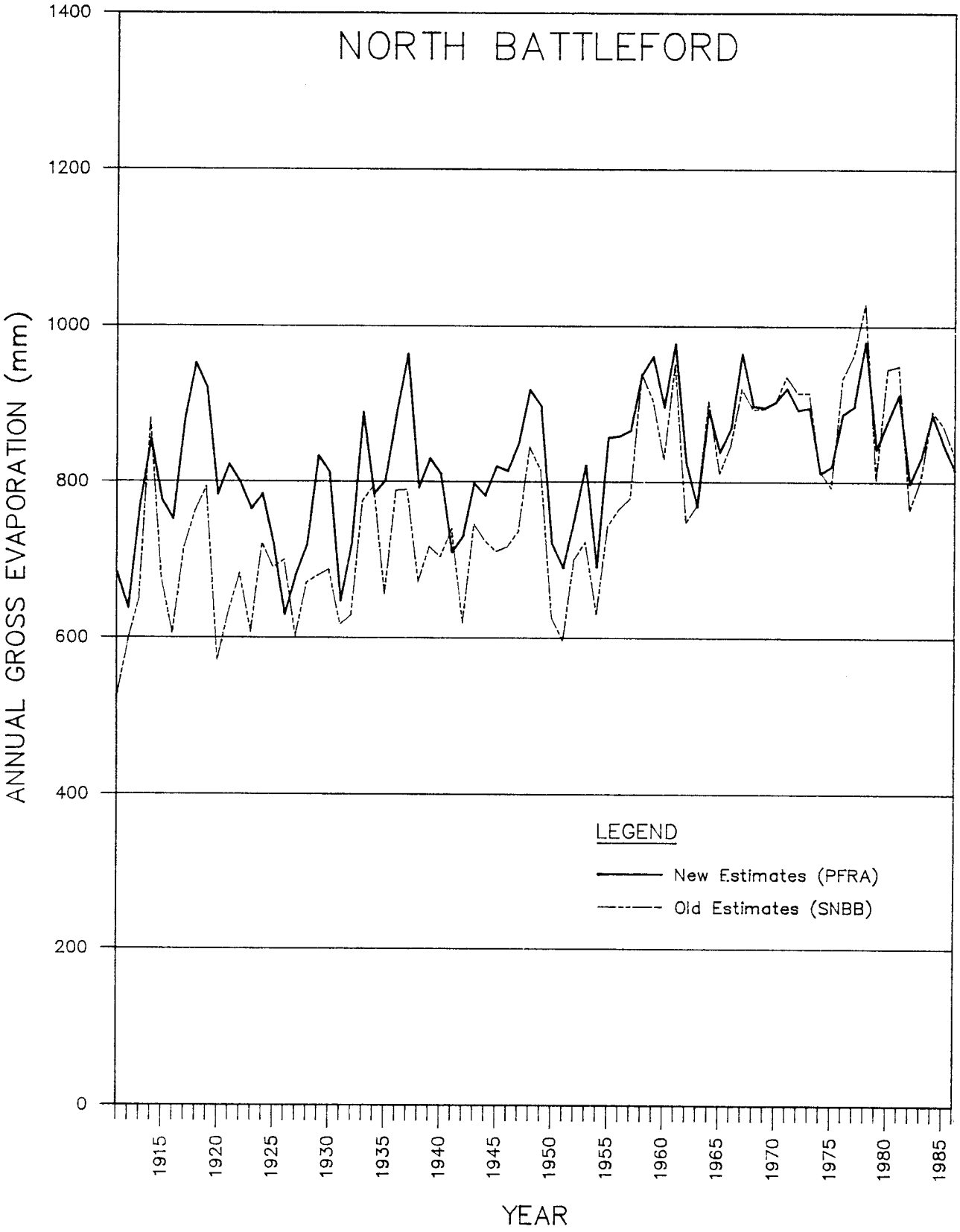


Figure 18. Comparison of New (PFRA) and Old (SNBB) Estimates of Annual Gross Evaporation for North Battleford

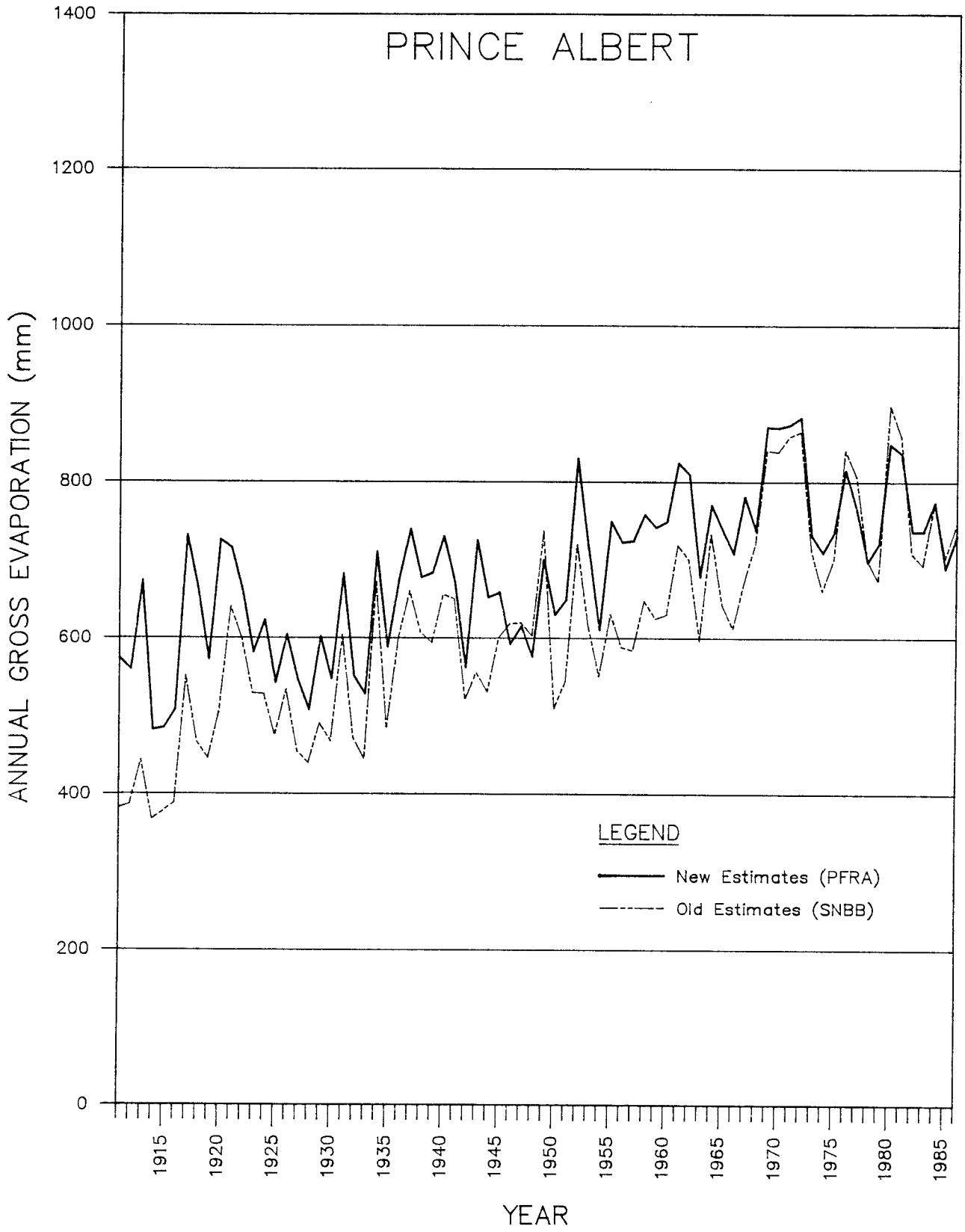


Figure 19. Comparison of New (PFRA) and Old (SNBB) Estimates of Annual Gross Evaporation for Prince Albert

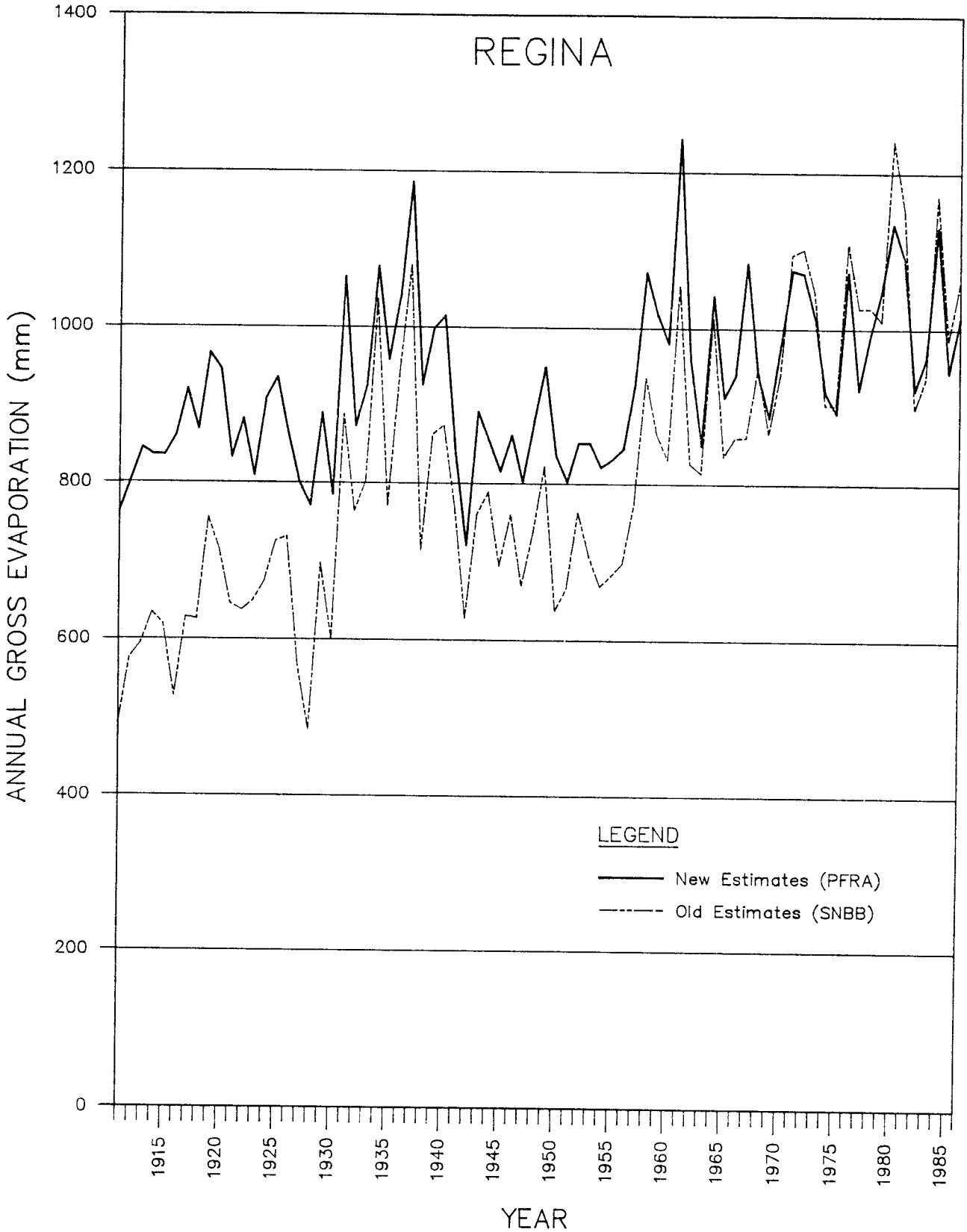


Figure 20. Comparison of New (PFRA) and Old (SNBB) Estimates of Annual Gross Evaporation for Regina

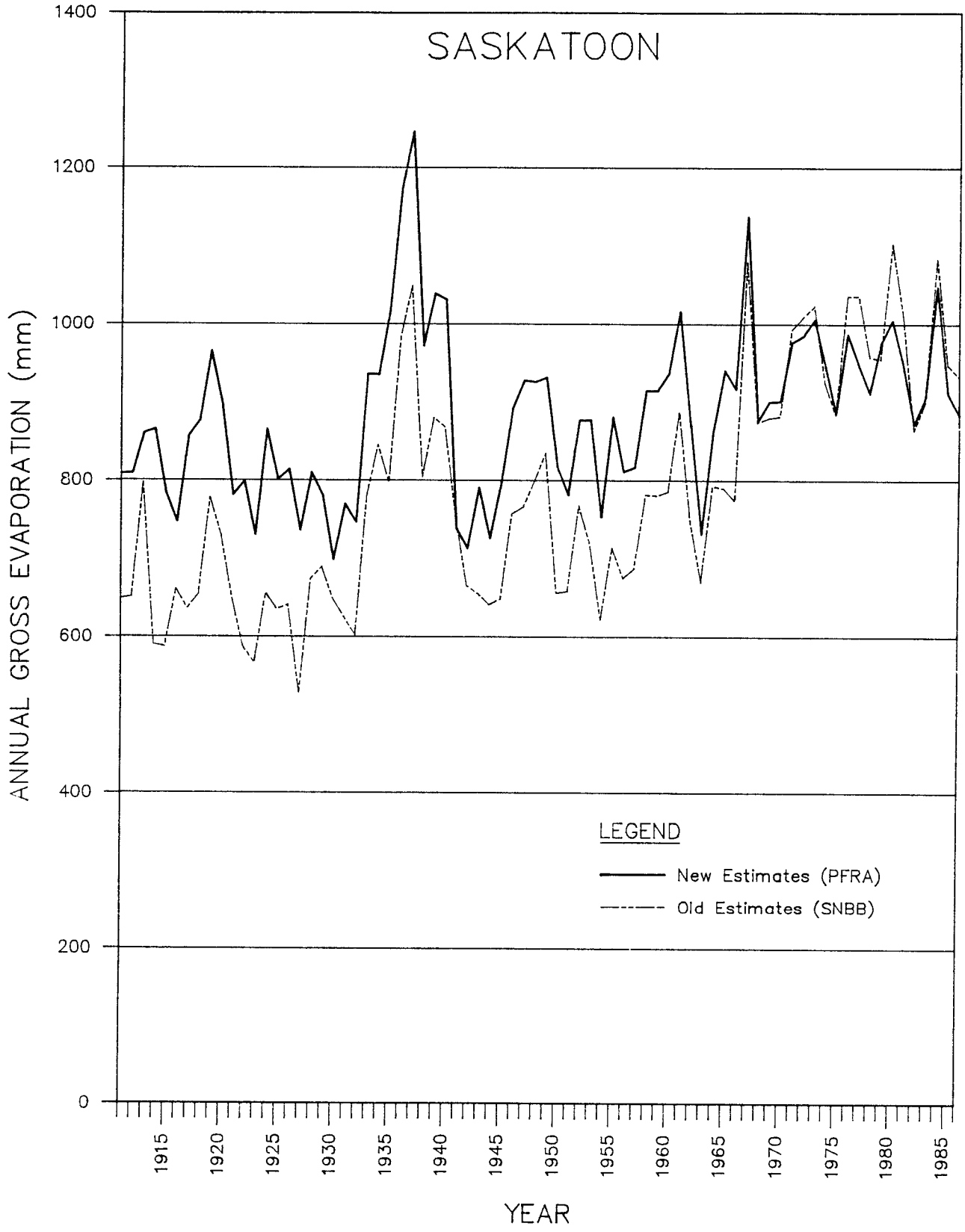


Figure 21. Comparison of New (PFRA) and Old (SNBB) Estimates of Annual Gross Evaporation for Saskatoon

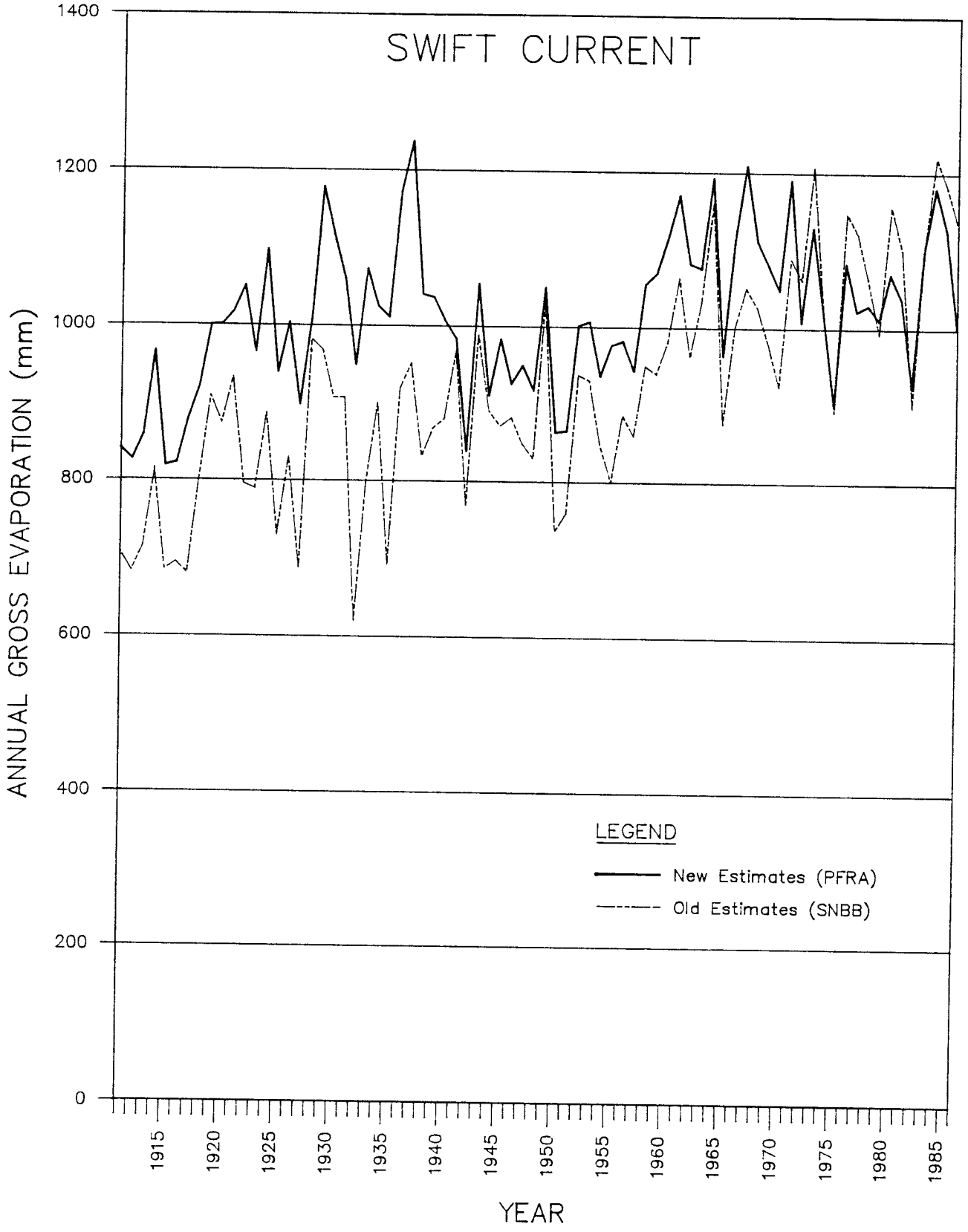


Figure 22. Comparison of New (PFRA) and Old (SNBB) Estimates of Annual Gross Evaporation for Swift Current

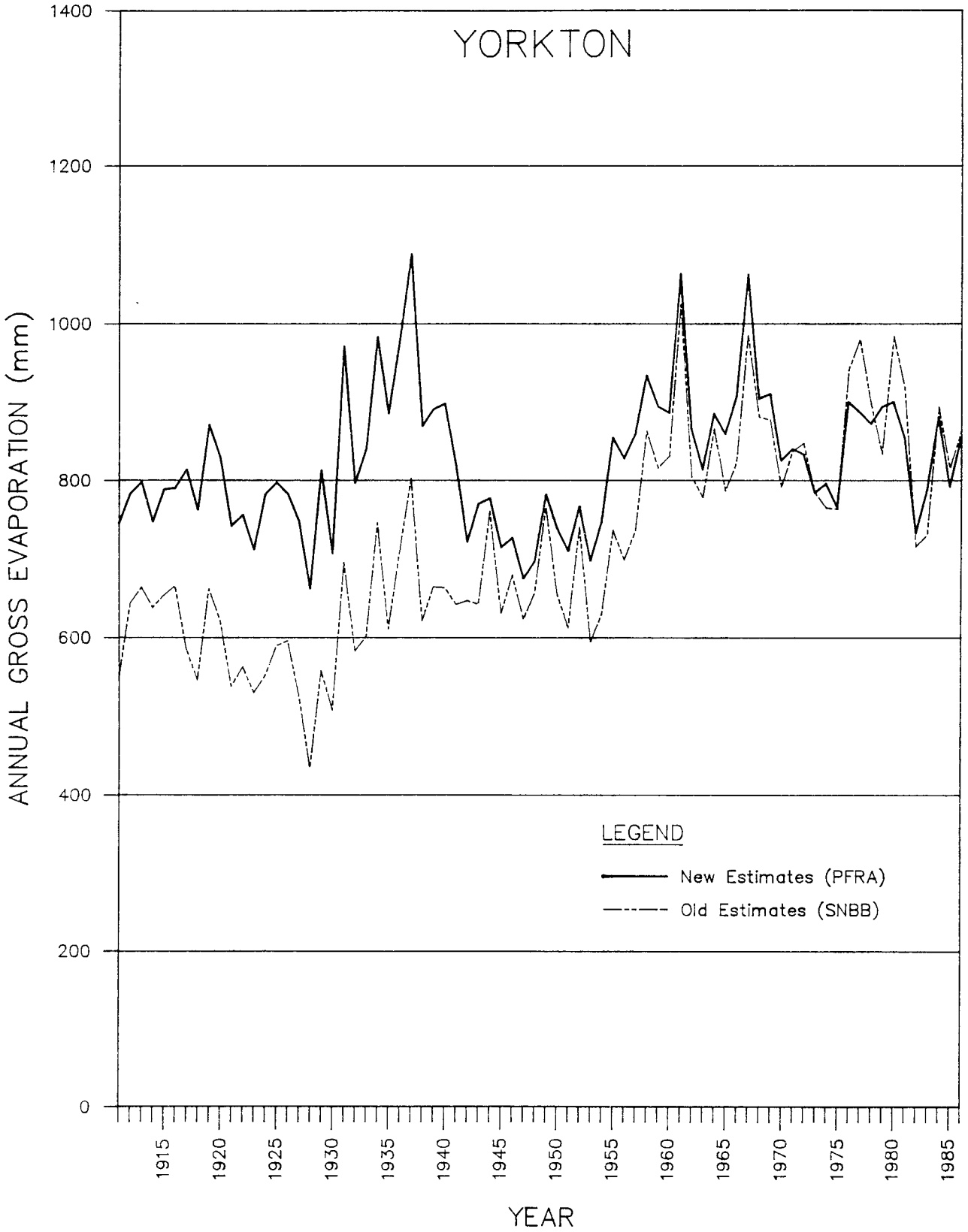


Figure 23. Comparison of New (PFRA) and Old (SNBB) Estimates of Annual Gross Evaporation for Yorkton

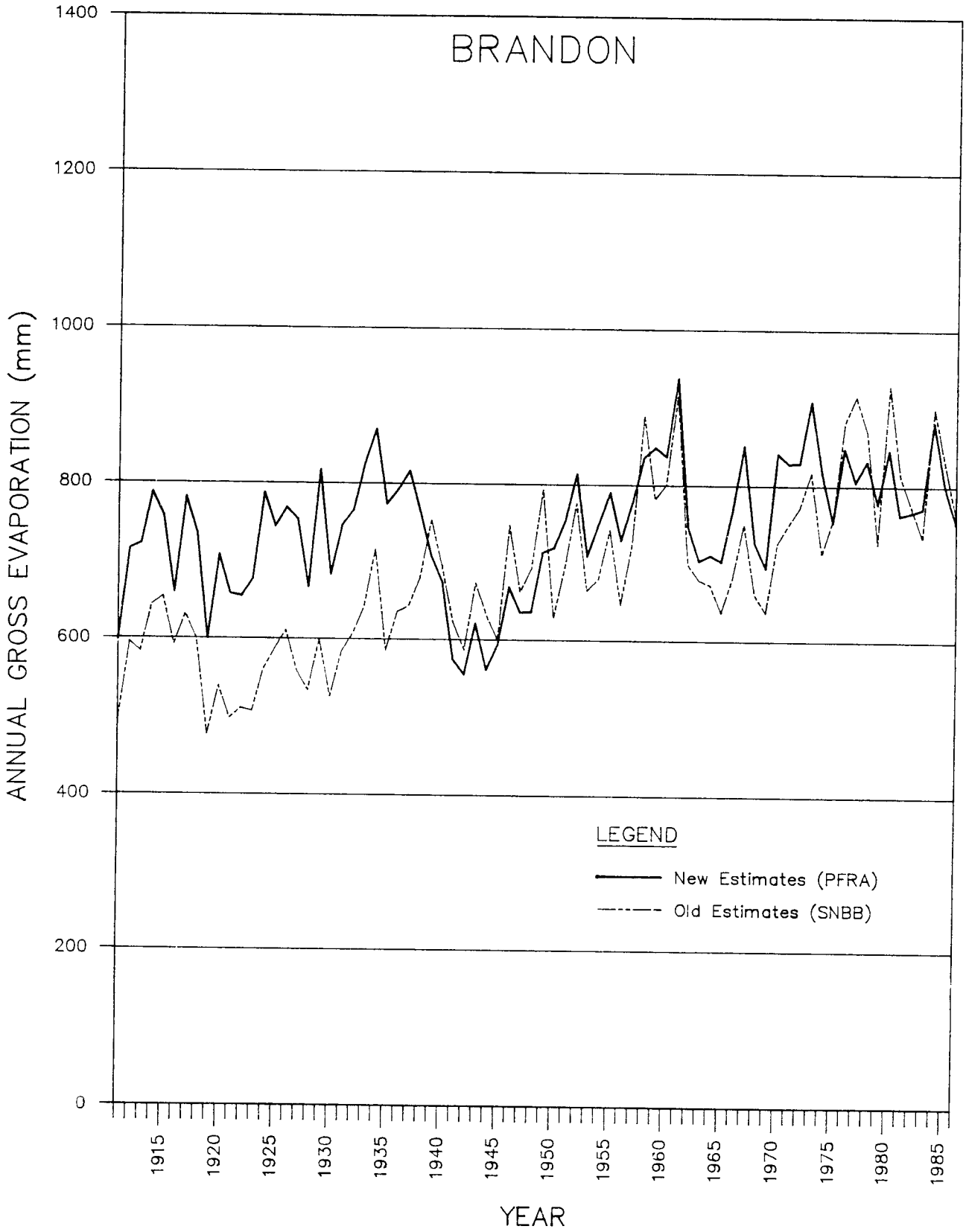


Figure 24. Comparison of New (PFRA) and Old (SNBB) Estimates of Annual Gross Evaporation for Brandon

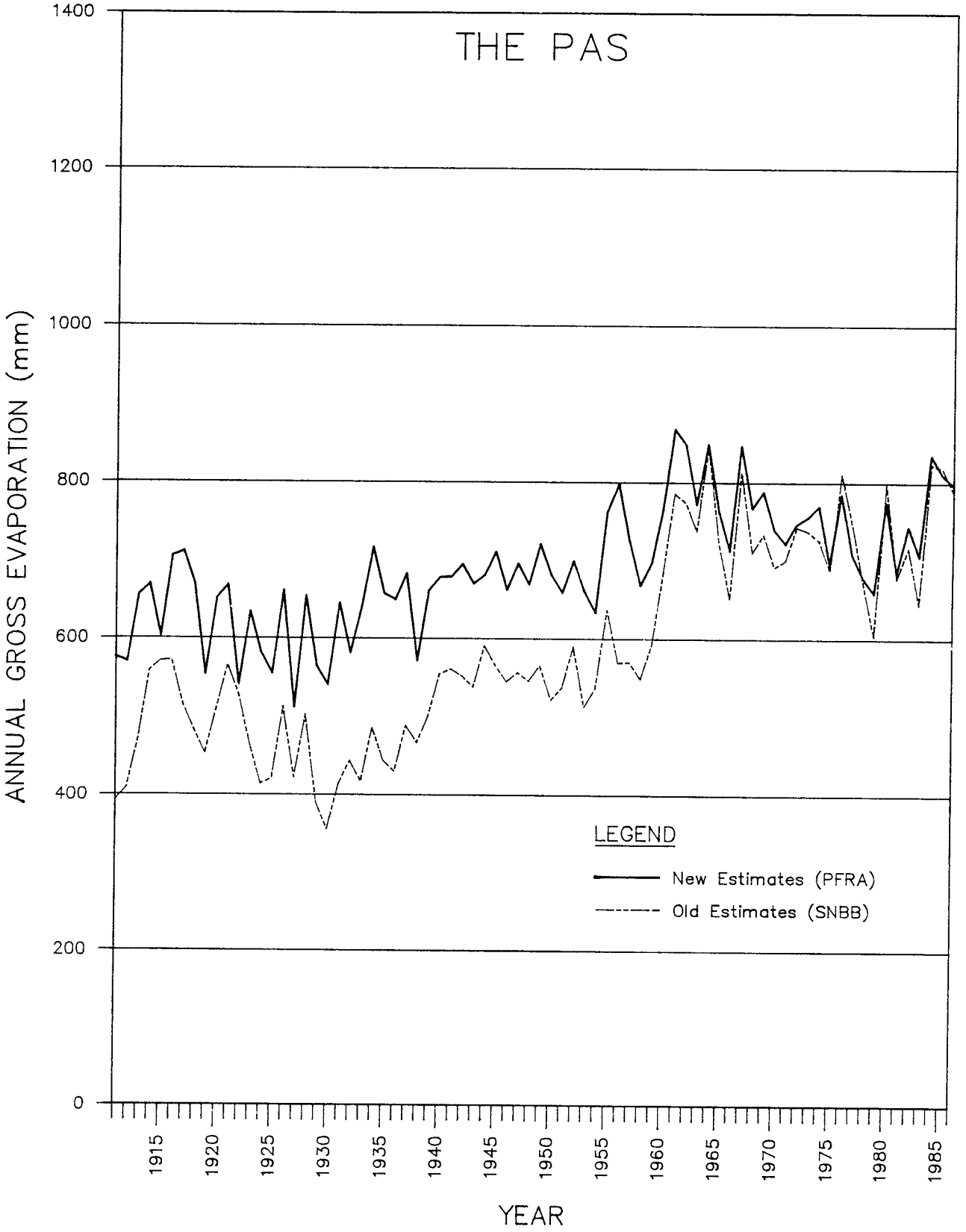


Figure 25. Comparison of New (PFRA) and Old (SNBB) Estimates of Annual Gross Evaporation for The Pas

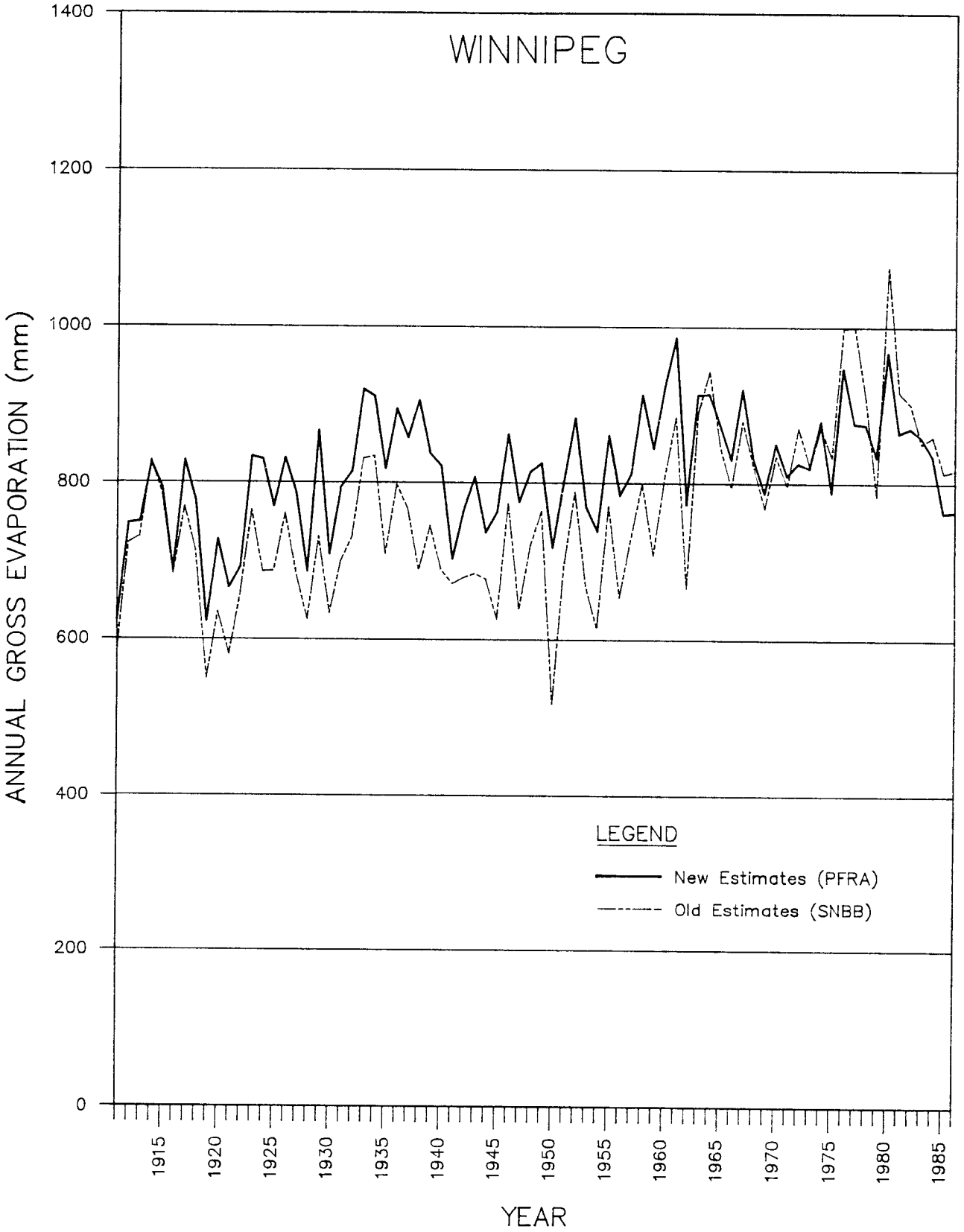


Figure 26. Comparison of New (PFRA) and Old (SNBB) Estimates of Annual Gross Evaporation for Winnipeg

5. CONCLUSIONS

A number of conclusions can be drawn from the results of the analyses. These conclusions are briefly discussed as follows.

1. Although most stations still exhibit a slightly increasing trend of estimated annual gross evaporation, the trend is much less dramatic than previously indicated. In the past, the conspicuous increasing trend has been cited by some individuals as evidence of climate change. While there may be some validity to this assumption, the effect of climate change, if that is the major factor, is apparently much less dramatic than previous estimates had indicated. In fact, a combination of factors including uncertainty in some of the basic data components (particularly during the period prior to 1940), improved data quality, and natural climatic variability may also be producing the slight increasing trends that are still evident in the estimates.

2. The availability of relatively higher-quality data during more recent periods provides a more appropriate base for estimating missing wind speed data during early periods. The development and use of transfer factors based on calculated monthly mean values for the common period of record vastly improved the data base and resulted in a more homogeneous data set of both the basic data and the estimated gross evaporation. Previous relationships were based on relatively poor and sparse data, an inappropriate wind speed adjustment exponent, and questionable anemometer histories.

3. The use of dew point data rather than relative humidity data has a significant effect on the gross evaporation estimates. Although the Meyer formula was based on the utilization of relative humidity data derived from two observations per day, this type of data is not readily available at the present time and is commonly substituted with dew point data derived from four observations per day. The use of dew point data is recommended, but a Meyer coefficient of 10.1 must be used rather than the commonly-accepted coefficient of 11.

4. The new monthly air/water temperature relationships provide a more realistic temporal distribution of monthly gross evaporation but have little impact on the magnitude of the annual gross evaporation. These relationships are based on data collected from water bodies of variable sizes located throughout the Canadian Prairies which do not exhibit the significant heat storage component of previously-used air/water temperature relationships based on data from the relatively larger Lake-of-the-Woods.

5. The gross evaporation estimates that have been determined are applicable to free water surfaces of small to moderate-sized water bodies in the Canadian Prairies. Little, if any, gross evaporation occurs during months when the water surface is covered by ice. As the Meyer formula was derived for a free water surface, gross evaporation estimates should be arbitrarily set to zero during months in which the estimated monthly mean water temperature (based on new air/water temperature relationships) is less than $0^{o}C$. This approach likely produces small inaccuracies during periods of ice formation and ice breakup, but any inaccuracies during such periods are generally compensated for on an annual basis.

6. The wind speed adjustment using an exponent of 0.25 rather than 0.5 provides more realistic gross evaporation estimates which are particularly noticeable in the early part of the 1911-86 period before anemometer heights were standardized. Unfortunately, the effect of the exponent was masked for the most part by questionable values of wind speeds and anemometer heights during the early years when such data were not well documented.

7. The barometric pressure adjustment component should be included in the methodology for determining gross evaporation, even though it has a relatively minor effect on the gross evaporation. Although the basis for adjusting gross evaporation to account for barometric pressure differences at the various stations is somewhat subjective, the theory and the results of the sensitivity analyses support the contention that some adjustment should be made. In the absence of any specific current information, the adjustment factor proposed by Meyer was accepted and utilized for the purposes of this assessment.

8. The overall combined effect of the numerous corrections and changes to the basic data and the procedure significantly increased the long-term mean annual gross evaporation at most stations considered in this analysis. This observed change resulted primarily from substantial increases in the gross evaporation estimates during the early part of the period. However, annual gross evaporation estimates during the latter part of the period generally exhibited relatively minor decreases. The resultant estimates of gross evaporation are considered to be much more valid than previous estimates, more indicative of the historic gross evaporation and the best possible estimates that can be made at the current time.

9. The results of this analysis can be generally extrapolated to estimate gross evaporation for water bodies outside the range of sizes considered in developing the air/water temperature relationships described herein. Gross evaporation estimates may be increased or decreased appropriately, depending upon the size and character of the water body. For instance, a coefficient of approximately 12 (corresponding to a 20% increase in gross evaporation) may be used for very small or

shallow bodies of water and a coefficient of 9 (corresponding to a 10% decrease in gross evaporation) may be used for large, deep prairie reservoirs similar to Lake Diefenbaker. However, appropriate air/water temperature relationships which reflect the heat storage component should be used in conjunction with a coefficient of 9 when estimating gross evaporation of large water bodies in the Canadian Prairies. Further studies are needed to better define air/water temperature relationships and the variability of the coefficient as a function of water body size and character.

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APPENDIX A

SENSITIVITY ANALYSES OF THE COEFFICIENT IN THE MEYER FORMULA TO RELATIVE HUMIDITY AND DEW POINT DATA

This appendix documents the analyses that were conducted to ascertain the effect on the coefficient in the Meyer formula of relative humidity and dew point data. Four types of data bases were considered:

1. relative humidity based on two observations per day (RH2),
2. relative humidity based on four observations per day (RH4),
3. dew point based on three observations per day (DP3), and
4. dew point based on four observations per day (DP4).

However, the major part of the analyses considered only the RH2 and DP4 data. Minor analyses were conducted to assess the effect of RH4 and DP3 data.

Historically, the data base has varied from station to station (refer to Table 2 in Section 3.2 of main report). In general, relative humidity was initially based on two observations per day (RH2) until 1939. Thereafter, relative humidity was generally based on four observations per day (RH4), although there were some instances of data based on three observations per day. Since May of 1941, dew point has been determined and published for all 14 key stations. (Although most of this data was based on four observations per day (DP4), some initial data was based on three or fewer observations per day.) However, this data was primarily used only in the gross evaporation calculations for the period since 1962. Consequently, for the most part, gross evaporation estimates provided by the SNBB study and subsequently updated by PFRA were based on RH2 values for the period 1911-38, RH4 values for the period 1939-62 and DP4 values for the period 1963-86.

Although Meyer originally proposed that a coefficient of 11 be utilized in conjunction with RH2 values and that the coefficient should vary if the data was based on more frequent observations, he was not specific as to what that change should be. Therefore, a sensitivity analysis was conducted to assess the effect of various types and frequency of data on the coefficient so as to ascertain the impact that it may have had on the past estimates of gross evaporation.

Unfortunately, RH2, RH4, DP3 and DP4 data were not available for the entire period 1911-86. Thus, a common period of 1953-80 (the period for which RH2 and DP4 data were available on AES computer data banks for all 14 key stations) was selected. The main restriction to a common period was attributed to dew point data which were not available on AES computer data banks for years prior to 1953. RH4 data were not a consideration because RH2 data would have preference over RH4 data, and RH2 data could be extracted and

utilized whenever RH4 data were available. However, for comparative purposes, an appropriate coefficient was determined as subsequently described using RH4 data for the Winnipeg station based on the common period 1953-80. Based on the analysis for this single station, a coefficient of 10.7 would be appropriate if RH4 data are used. Since the impact of RH4 data was relatively minor and RH4 data did not have to be utilized at any of the 14 key stations, no further analysis of the effect of RH4 data on the coefficient was made.

Although RH2 data can be extracted from AES records, DP4 data are more readily available at the present time and are also considered to be more appropriate than RH2 data. Consequently, it would be highly desirable to be able to use DP4 data, providing an appropriate coefficient could be determined. Since it is not known whether the coefficient would remain relatively constant for all stations or would show some spatial variation, a coefficient was determined for each of the 14 key stations. The coefficient corresponding to DP4 data was determined for each station by calculating the gross evaporation for the period 1953-80 using the methodology presented in Section 4 (based on a coefficient of 11) for both RH2 and DP4 data. The ratio of the resultant mean annual gross evaporation values (i.e. RH2/DP4) were then multiplied by the coefficient of 11. The results of the analysis are presented in Table A-1.

The results of the analysis indicate that there are some minor fluctuations of the coefficient from station to station and evidence of a slight spatial variation. There also appears to be a significant correlation between the coefficient and the magnitude of the mean annual gross evaporation. The calculated coefficients ranged between 9.90 and 10.27, with an arithmetic mean of 10.08. In general, the coefficient seems to increase in a southwest to northeast direction. However, this variation was considered to be relatively insignificant (i.e. less than 2%), and varying the coefficient as a function of either location or magnitude of mean annual gross evaporation was deemed to be unwarranted. Consequently, the calculated mean value of 10.1 was considered to be an appropriate coefficient for all regions of the Canadian Prairies when using DP4 data.

Since DP3 data, rather than DP4 data, were available during a few months at some stations (e.g. Prince Albert, Yorkton and The Pas during most months of the period 05/1941 - 12/1942 and Swift Current during most months of the period 06/1980 - 05/1986), an analysis was also conducted using DP3 data to

ascertain the effect on the coefficient. Furthermore, since DP3 data were based on either the first three six-hour daily observations (i.e. 0000 hours, 0600 hours and 1200 hours E.S.T.) or the last three six-hour daily observations (i.e. 0600 hours, 1200 hours and 1800 hours E.S.T.), the analysis considered both cases. An appropriate coefficient was determined for both cases of DP3 data using the procedure previously described based on data for the period 1953-80 at the Winnipeg station. The results of the analysis indicate that DP3 data have an insignificant effect on the coefficient regardless of which three six-hour daily observations are used. A coefficient of 9.99 was obtained for DP3 data based on the first three six-hour daily observations, and a coefficient of 10.12 was obtained for DP3 data based on the last three six-hour daily observations. These values both compare favorably with the coefficient of 10.07 that was obtained for the Winnipeg station based on DP4 data. Consequently, the coefficient of 10.1 that was derived for the general use of DP4 data is also considered to be appropriate with the use of DP3 data.

Although the adjusted coefficient based on DP4 and DP3 data provided mean annual gross evaporation values that were essentially equivalent to values based on RH2 data and a coefficient of 11, the annual and monthly gross evaporation estimates would not necessarily be similar. Thus, gross evaporation was calculated for three arbitrary stations (Calgary, Regina, Winnipeg) in the prairies for the period 1953-80 using DP4 data and a coefficient of 10.1. The results of this assessment in the form of annual gross evaporation are presented graphically in Figures A-1 to A-3. Furthermore, comparisons of monthly gross evaporation estimates for the three stations are provided in Figures A-4 and A-5 for two arbitrarily-selected years; 1966 and 1980. For the most part, only slight differences in monthly and annual gross evaporation estimates were observed. Thus, since DP4 data are currently more readily available and more appropriate than RH2 data, DP4 data should be used (with a corresponding coefficient of 10.1) whenever available (i.e. since the early 1940's) in the calculation of gross evaporation. DP3 data may be used in the absence of DP4 data.

The cause of the apparent consistent anomaly as shown in Figure A-2 for the Regina station during the period 1953-60 is difficult to pinpoint and explain. In January of 1961, the six-hour observation times were shifted by one hour. However, based on sensitivity analyses for DP3 data, gross evaporation estimates based on dew point data did not appear to be

particularly sensitive to observation times. (In this case, RH2 data for 0630 hours and 1830 hours were consistently used throughout the 1953-80 period.) Thus, the data base which was responsible for the anomaly was not readily identifiable. Therefore, average annual adjusted vapor pressure values were calculated for each year of the period 1953-80 for both RH2 data and DP4 data. The accumulated values were plotted on arithmetic paper to graphically identify which data base was nonhomogeneous. The results of this analysis indicated that the RH2 data were perceptibly affected by some unknown factor (e.g. perhaps a change in methodology for calculating RH2 values) about 1960-61, whereas the DP4 data appeared to be homogeneous. This observation was substantiated by a statistical test which indicated that the RH2 data from 1953-60 were significantly different than the RH2 data from 1961-80. Consequently, the DP4 data are considered to provide the most appropriate estimate of gross evaporation during the entire period as illustrated in Figure A-2.

Table A-1

Adjusted Coefficients for DP4 Data

STATION	MEAN ANNUAL GROSS EVAPORATION* (mm)		CORRESPONDING COEFFICIENT** FOR DP4 DATA
	UTILIZING RH2 DATA	UTILIZING DP4 DATA	
Alberta			
Calgary	887	965	10.11
Edmonton	832	911	10.05
Lethbridge	1069	1188	9.90
Medicine Hat	1020	1129	9.94
Saskatchewan			
Broadview	821	884	10.22
North Battleford	880	955	10.14
Prince Albert	774	829	10.27
Regina	966	1063	10.00
Saskatoon	913	999	10.05
Swift Current	1040	1151	9.94
Yorkton	862	944	10.04
Manitoba			
Brandon	803	863	10.24
The Pas	753	815	10.16
Winnipeg	852	931	10.07

* Based on the period 1953-80 using a coefficient of 11.
** Calculated as the mean annual gross evaporation ratio of RH2/DP4 x 11.

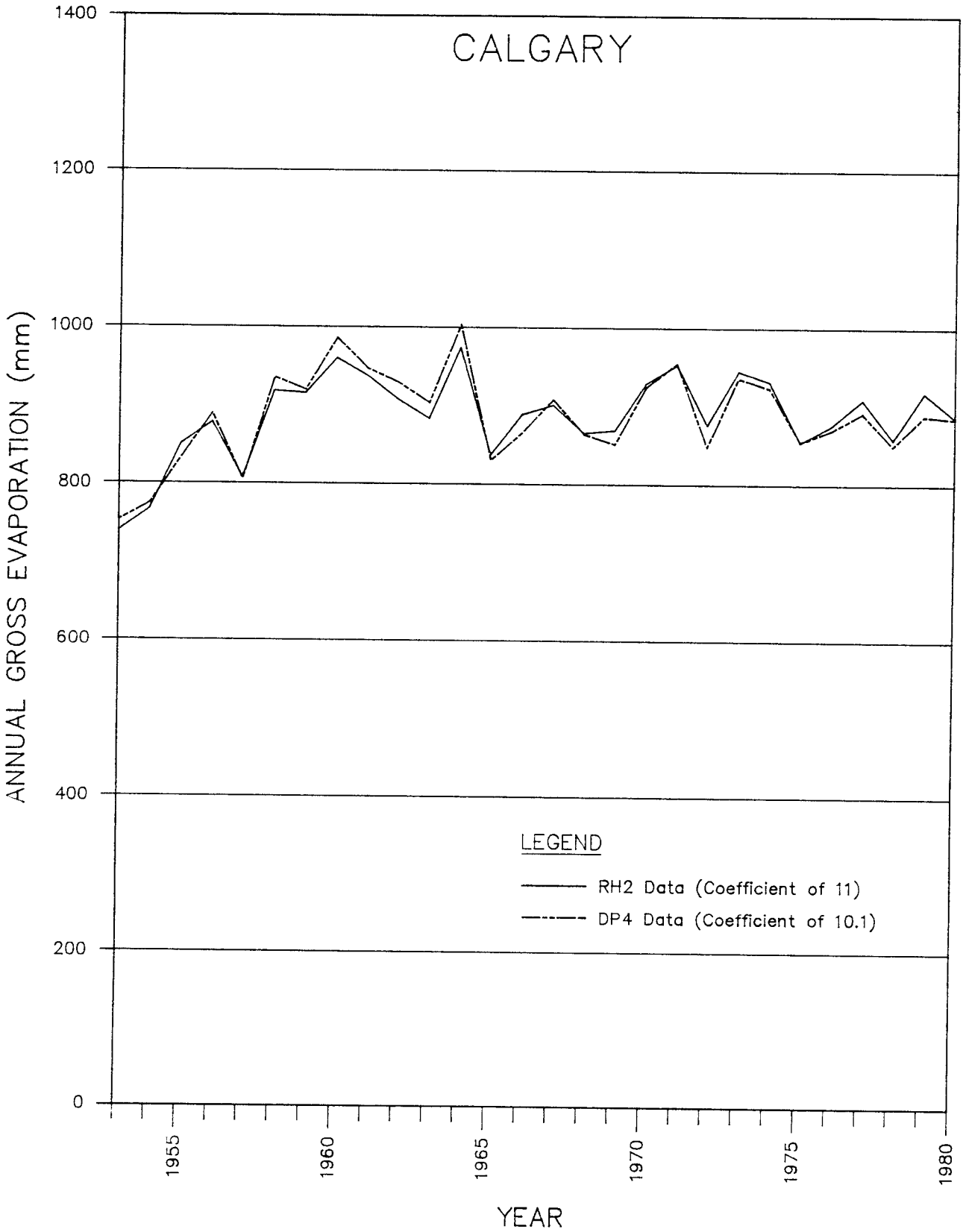

Figure A-1. Comparison of Annual Gross Evaporation Estimates Based on RH2 and DP4 Data Bases for Calgary

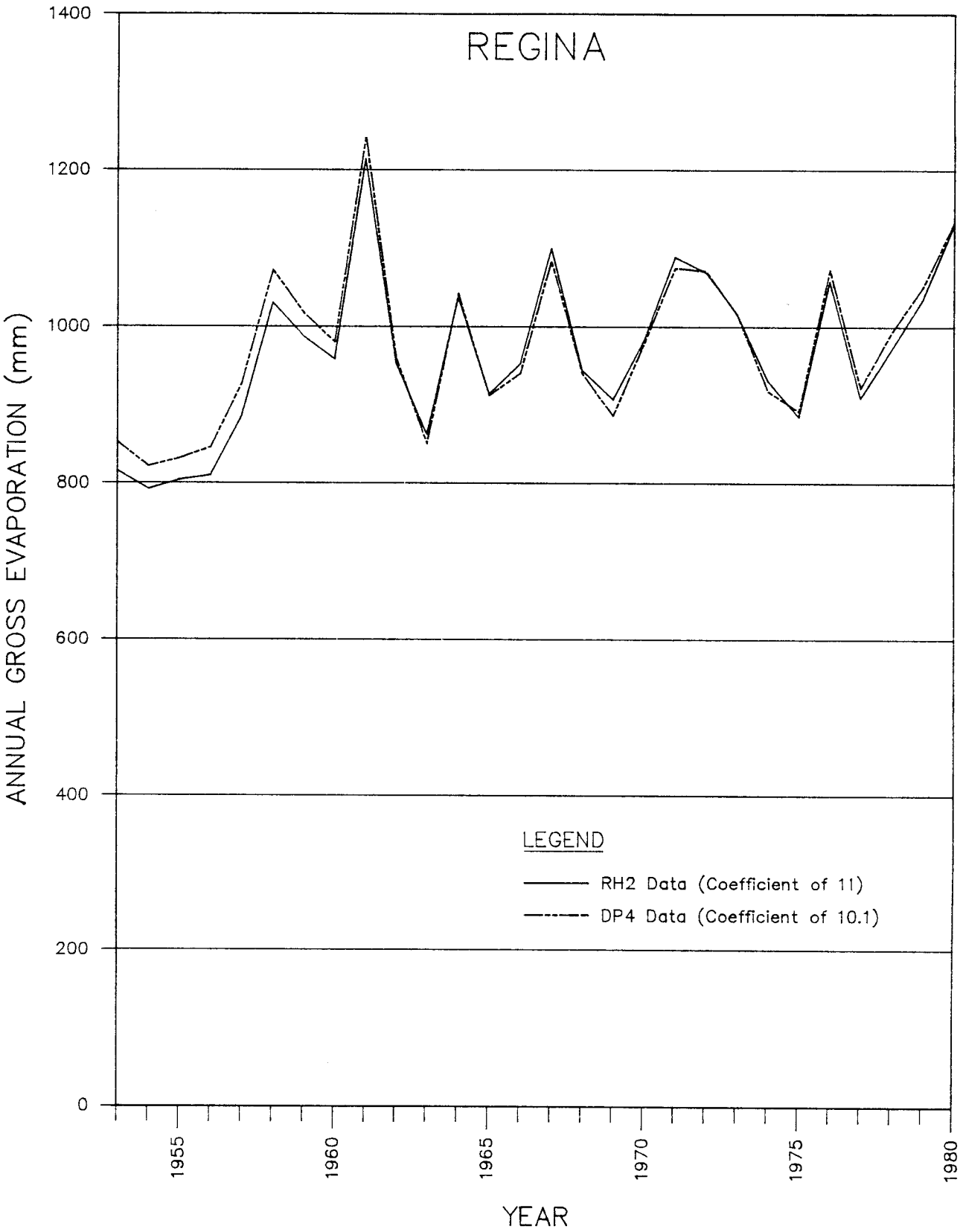

Figure A-2. Comparison of Annual Gross Evaporation Estimates Based on RH2 and DP4 Data Bases for Regina

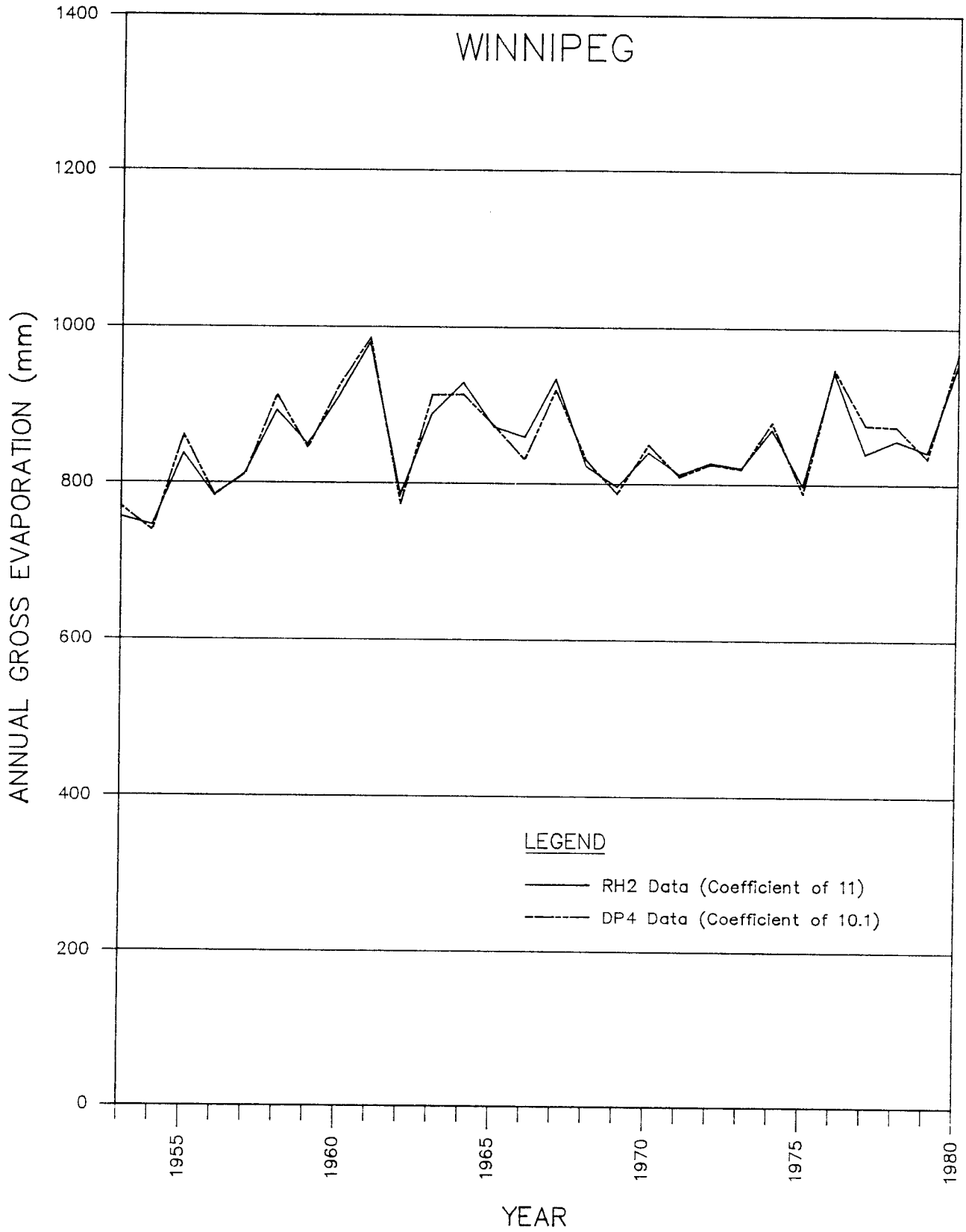

Figure A-3. Comparison of Annual Gross Evaporation Estimates Based on RH2 and DP4 Data Bases for Winnipeg

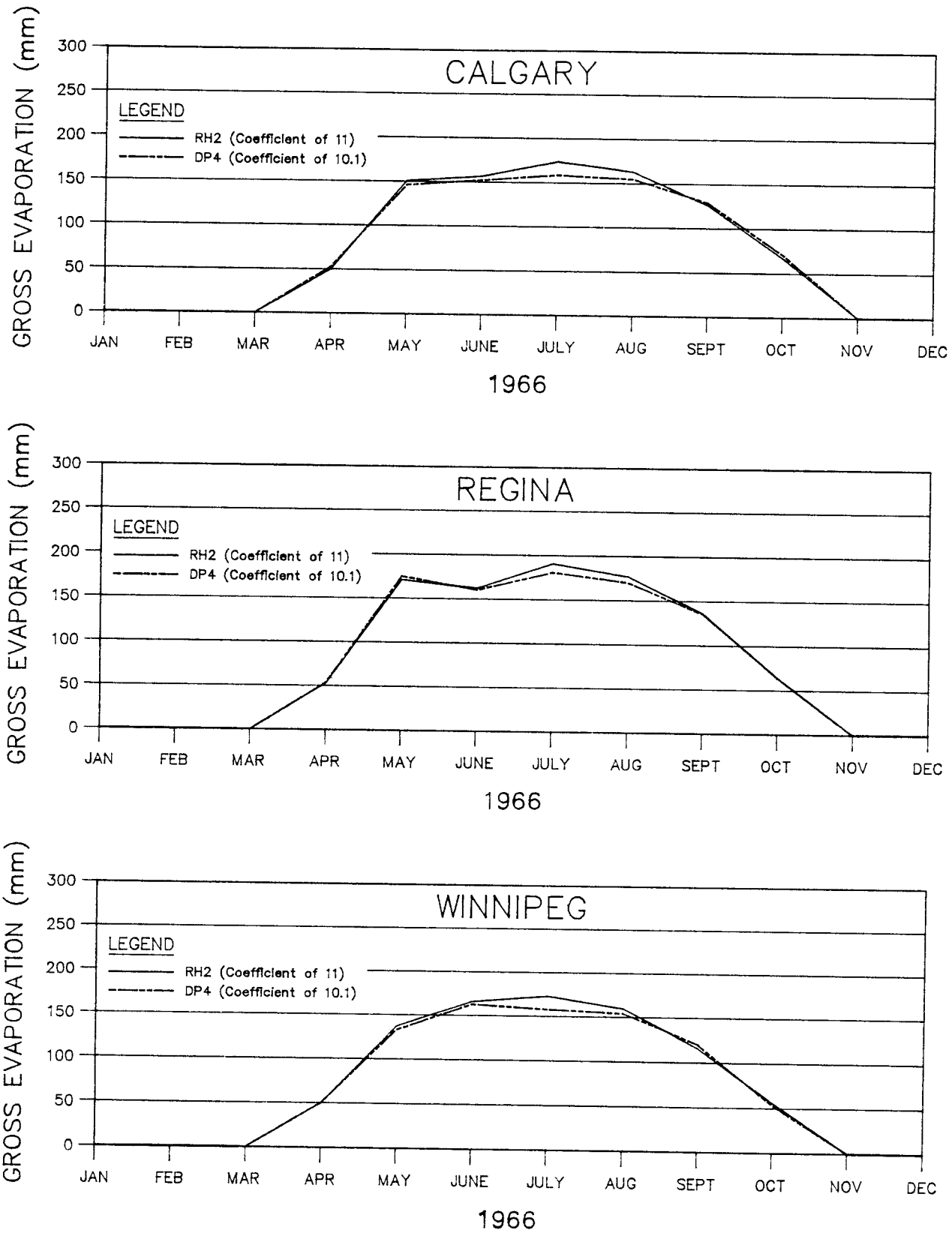

Figure A-4. Comparison of Monthly Gross Evaporation Estimates Based on RH2 and DP4 Data for 1966 at Calgary, Regina and Winnipeg

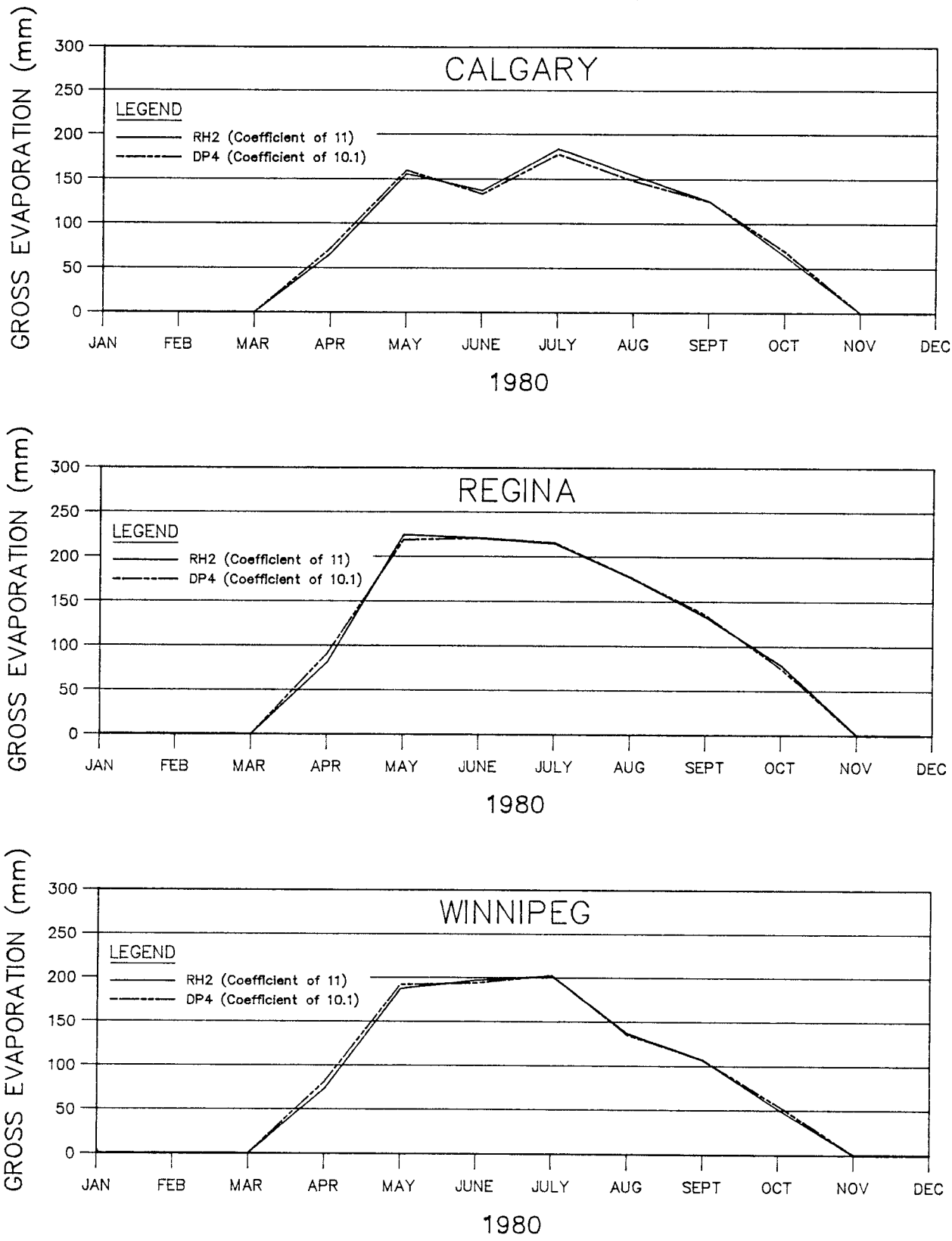

Figure A-5. Comparison of Monthly Gross Evaporation Estimates Based on RH2 and DP4 Data for 1980 at Calgary, Regina and Winnipeg

APPENDIX B

TABLES OF MONTHLY GROSS EVAPORATION, PRECIPITATION AND NET EVAPORATION

GROSS EVAPORATION

GROSS EVAPORATION (mm) -- CALGARY

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1911	0.0	0.0	0.0	41.5	97.7	159.0	178.0	146.5	103.6	52.0	0.0	0.0	778
1912	0.0	0.0	0.0	48.6	145.3	184.6	159.7	137.4	95.0	49.6	0.0	0.0	820
1913	0.0	0.0	0.0	56.8	117.9	128.8	175.8	140.0	93.4	46.1	0.0	0.0	759
1914	0.0	0.0	0.0	43.9	123.9	143.1	174.1	159.5	107.1	45.4	0.0	0.0	797
1915	0.0	0.0	0.0	61.9	99.5	115.8	136.7	151.2	103.9	56.6	0.0	0.0	726
1916	0.0	0.0	0.0	52.0	118.3	147.6	160.5	143.3	98.5	45.5	0.0	0.0	766
1917	0.0	0.0	0.0	32.7	104.7	120.8	196.1	148.9	81.2	40.6	0.0	0.0	725
1918	0.0	0.0	0.0	37.8	95.3	177.1	177.8	152.6	102.4	45.3	0.0	0.0	788
1919	0.0	0.0	0.0	43.9	145.2	153.6	202.7	162.3	77.7	46.4	0.0	0.0	832
1920	0.0	0.0	0.0	38.7	121.9	143.4	177.4	161.9	114.6	57.8	0.0	0.0	816
1921	0.0	0.0	0.0	45.1	119.0	163.3	184.1	158.6	123.9	56.2	0.0	0.0	850
1922	0.0	0.0	0.0	42.4	97.5	171.1	180.2	180.8	121.3	51.6	0.0	0.0	845
1923	0.0	0.0	0.0	59.1	118.9	134.8	164.3	130.9	110.0	50.7	0.5	0.0	769
1924	0.0	0.0	0.0	31.4	140.8	142.1	184.4	139.1	106.0	39.3	0.0	0.0	783
1925	0.0	0.0	0.0	50.3	142.9	158.9	189.9	172.2	92.4	50.4	0.0	0.0	857
1926	0.0	0.0	0.0	39.5	120.7	138.9	143.3	141.2	100.9	34.3	0.0	0.0	719
1927	0.0	0.0	0.0	46.0	112.5	147.1	161.1	138.7	106.6	36.2	0.0	0.0	748
1928	0.0	0.0	0.0	36.7	128.0	139.1	153.1	161.4	87.6	42.0	0.0	0.0	748
1929	0.0	0.0	0.0	45.3	133.0	170.9	233.2	180.8	103.6	61.8	0.0	0.0	929
1930	0.0	0.0	0.0	21.4	124.5	165.5	173.2	176.0	110.2	40.4	0.0	0.0	811
1931	0.0	0.0	0.0	62.0	141.2	166.6	209.0	192.2	99.9	64.1	0.0	0.0	935
1932	0.0	0.0	0.0	55.5	124.6	134.5	180.8	159.7	114.4	53.3	0.0	0.0	823
1933	0.0	0.0	0.0	52.5	100.0	167.4	192.8	165.1	108.4	52.9	0.0	0.0	839
1934	0.0	0.0	0.0	73.7	147.3	160.2	186.7	175.5	106.9	56.5	0.0	0.0	907
1935	0.0	0.0	0.0	49.3	124.1	147.3	169.8	155.6	121.6	61.7	0.0	0.0	829
1936	0.0	0.0	0.0	53.2	143.6	165.4	223.4	162.3	107.0	66.9	22.4	0.0	944
1937	0.0	0.0	0.0	60.4	146.5	181.9	209.7	182.1	111.3	61.3	0.0	0.0	953
1938	0.0	0.0	0.0	55.6	117.9	130.6	185.2	163.5	113.3	58.5	0.0	0.0	825
1939	0.0	0.0	0.0	54.4	138.2	112.6	189.7	205.4	127.4	60.9	22.8	0.0	911
1940	0.0	0.0	0.0	38.5	137.9	165.2	153.8	189.9	88.1	42.0	0.0	0.0	815
1941	0.0	0.0	0.0	61.0	119.7	132.7	157.2	144.6	91.8	52.9	0.0	0.0	760
1942	0.0	0.0	0.0	56.8	98.9	129.1	134.5	122.8	85.5	54.5	0.0	0.0	682
1943	0.0	0.0	0.0	55.3	108.7	130.0	180.2	159.6	125.7	52.9	27.0	0.0	839
1944	0.0	0.0	0.0	53.8	126.4	145.2	179.5	151.1	116.2	62.6	0.0	0.0	835
1945	0.0	0.0	0.0	41.6	114.2	137.4	165.5	163.0	112.1	46.5	0.0	0.0	780
1946	0.0	0.0	0.0	64.5	119.9	122.5	166.8	160.1	115.2	64.8	0.0	0.0	814
1947	0.0	0.0	0.0	61.5	134.8	128.8	204.6	155.6	120.0	61.1	0.0	0.0	867
1948	0.0	0.0	0.0	36.2	117.9	139.4	190.2	158.6	131.3	78.4	0.0	0.0	852
1949	0.0	0.0	0.0	70.6	146.0	192.3	187.2	188.6	154.3	62.8	36.1	0.0	1038
1950	0.0	0.0	0.0	51.9	141.3	159.4	150.3	131.0	121.6	48.8	0.0	0.0	804
1951	0.0	0.0	0.0	67.0	146.8	140.3	148.5	122.5	92.7	41.1	0.0	0.0	759
1952	0.0	0.0	0.0	58.2	124.3	138.0	154.3	130.0	112.0	54.5	0.0	0.0	771
1953	0.0	0.0	0.0	37.5	112.3	122.0	157.7	143.2	106.5	72.3	0.0	0.0	752
1954	0.0	0.0	0.0	0.0	116.3	156.1	180.6	120.2	99.1	71.5	30.2	0.0	774
1955	0.0	0.0	0.0	28.5	126.1	175.4	153.6	173.5	104.7	69.9	0.0	0.0	832
1956	0.0	0.0	0.0	50.3	150.8	187.3	170.6	153.9	114.4	61.7	0.0	0.0	889
1957	0.0	0.0	0.0	54.3	132.4	138.4	180.7	132.6	118.1	48.0	0.0	0.0	805
1958	0.0	0.0	0.0	50.1	167.7	147.8	164.1	181.4	141.8	81.9	0.0	0.0	935
1959	0.0	0.0	0.0	70.5	133.1	167.7	212.7	154.7	109.7	70.7	0.0	0.0	919
1960	0.0	0.0	0.0	74.7	141.6	173.7	202.4	184.3	134.7	74.7	0.0	0.0	986
1961	0.0	0.0	0.0	60.1	128.3	216.8	183.7	172.1	118.1	68.2	0.0	0.0	947
1962	0.0	0.0	0.0	72.6	115.6	176.8	177.8	189.2	127.2	69.5	0.0	0.0	929
1963	0.0	0.0	0.0	57.4	133.2	159.2	184.2	164.7	124.9	79.0	0.0	0.0	903
1964	0.0	0.0	0.0	69.8	157.0	166.6	209.2	202.2	117.9	80.5	0.0	0.0	1003
1965	0.0	0.0	0.0	52.3	137.7	148.4	164.0	149.8	96.2	81.2	0.0	0.0	830
1966	0.0	0.0	0.0	53.0	146.3	152.3	158.9	154.5	129.2	70.6	0.0	0.0	865
1967	0.0	0.0	0.0	43.6	126.4	145.0	189.7	182.0	150.6	70.3	0.0	0.0	908
1968	0.0	0.0	0.0	67.0	136.9	151.5	177.7	148.3	116.7	66.0	0.0	0.0	864
1969	0.0	0.0	0.0	63.8	133.2	153.6	162.1	181.5	105.1	51.3	0.0	0.0	851
1970	0.0	0.0	0.0	53.5	131.4	173.3	175.1	189.4	131.8	69.3	0.0	0.0	924
1971	0.0	0.0	0.0	58.6	149.0	163.0	183.2	212.6	121.5	66.7	0.0	0.0	955
1972	0.0	0.0	0.0	74.6	135.7	168.1	153.8	153.1	99.1	63.3	0.0	0.0	848
1973	0.0	0.0	0.0	52.3	152.3	174.2	202.3	179.3	110.8	65.1	0.0	0.0	936
1974	0.0	0.0	0.0	59.9	111.3	195.9	203.1	153.5	118.3	80.8	0.0	0.0	923
1975	0.0	0.0	0.0	48.4	123.1	153.0	177.5	165.2	123.8	64.1	0.0	0.0	855
1976	0.0	0.0	0.0	70.9	164.1	145.1	175.7	149.2	107.9	57.3	0.0	0.0	870
1977	0.0	0.0	0.0	89.4	129.1	186.4	193.2	131.2	89.6	73.2	0.0	0.0	892
1978	0.0	0.0	0.0	45.3	130.3	158.2	166.5	160.9	110.7	78.1	0.0	0.0	850
1979	0.0	0.0	0.0	49.1	122.5	175.3	201.5	156.0	134.2	50.1	0.0	0.0	889
1980	0.0	0.0	0.0	72.2	159.7	133.2	177.8	148.3	125.2	69.1	0.0	0.0	885
1981	0.0	0.0	0.0	85.9	117.7	157.2	159.1	159.2	128.5	60.7	0.0	0.0	868
1982	0.0	0.0	0.0	67.8	133.3	134.5	163.3	159.0	112.3	65.0	0.0	0.0	835
1983	0.0	0.0	0.0	57.7	148.9	172.9	192.6	190.7	143.4	69.6	0.0	0.0	976
1984	0.0	0.0	0.0	76.1	140.3	175.7	225.7	220.4	112.8	65.9	0.0	0.0	1017
1985	0.0	0.0	0.0	69.9	157.3	177.6	221.1	171.2	110.2	72.6	0.0	0.0	980
1986	0.0	0.0	0.0	74.2	138.2	188.2	167.4	168.2	88.6	66.8	0.0	0.0	892
MIN	0.0	0.0	0.0	0.0	95.3	112.6	134.5	120.2	77.7	34.3	0.0	0.0	682
MAX	0.0	0.0	0.0	89.4	167.7	216.8	233.2	220.4	154.3	81.9	36.1	0.0	1038
MEAN	0.0	0.0	0.0	54.2	129.8	155.3	178.9	161.6	111.8	59.6	1.8	0.0	853

GROSS EVAPORATION (mm) -- EDMONTON

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1911	0.0	0.0	0.0	48.8	136.0	128.0	144.8	115.8	85.6	38.8	0.0	0.0	698
1912	0.0	0.0	0.0	40.1	112.8	140.6	124.7	116.9	79.0	42.5	0.0	0.0	657
1913	0.0	0.0	0.0	52.9	115.1	118.9	130.6	110.9	83.3	43.6	0.0	0.0	655
1914	0.0	0.0	0.0	72.1	158.9	113.5	146.4	132.9	84.3	45.3	0.0	0.0	753
1915	0.0	0.0	0.0	63.1	115.9	113.4	114.5	114.9	92.3	57.8	0.0	0.0	672
1916	0.0	0.0	0.0	58.7	108.3	139.1	137.8	120.9	92.2	52.3	0.0	0.0	709
1917	0.0	0.0	0.0	38.7	117.0	140.9	149.8	128.8	92.2	52.6	15.7	0.0	736
1918	0.0	0.0	0.0	67.3	125.2	135.5	143.4	136.3	94.5	51.5	0.0	0.0	754
1919	0.0	0.0	0.0	54.2	139.7	146.4	169.9	156.4	96.1	44.6	0.0	0.0	807
1920	0.0	0.0	0.0	37.0	141.5	136.9	145.1	129.7	87.6	49.5	0.0	0.0	727
1921	0.0	0.0	0.0	57.3	142.9	137.2	168.4	140.6	113.3	62.7	0.0	0.0	822
1922	0.0	0.0	0.0	47.3	146.3	143.5	162.8	140.0	105.8	52.3	0.0	0.0	798
1923	0.0	0.0	0.0	64.2	135.3	137.6	154.7	117.3	93.5	51.3	0.0	0.0	754
1924	0.0	0.0	0.0	51.6	134.9	140.8	172.3	133.4	92.6	46.6	0.0	0.0	772
1925	0.0	0.0	0.0	55.8	136.8	129.8	170.3	133.5	83.3	46.5	0.0	0.0	756
1926	0.0	0.0	0.0	62.4	120.8	137.4	159.0	127.1	77.9	46.6	0.0	0.0	731
1927	0.0	0.0	0.0	52.4	117.8	144.4	140.6	131.7	99.8	44.4	0.0	0.0	731
1928	0.0	0.0	0.0	46.2	146.0	125.2	127.4	116.2	105.7	49.6	0.0	0.0	716
1929	0.0	0.0	0.0	50.7	144.1	195.6	214.3	165.2	101.2	70.4	0.0	0.0	942
1930	0.0	0.0	0.0	54.0	135.2	154.1	159.2	149.3	94.4	47.9	0.0	0.0	794
1931	0.0	0.0	0.0	84.8	170.5	185.3	170.4	171.2	115.0	60.0	0.0	0.0	957
1932	0.0	0.0	0.0	37.1	123.7	144.8	176.4	185.9	129.4	54.1	0.0	0.0	851
1933	0.0	0.0	0.0	61.2	127.3	143.4	164.3	151.9	106.7	54.3	0.0	0.0	809
1934	0.0	0.0	0.0	86.1	147.4	136.6	152.3	159.9	116.2	77.2	0.0	0.0	876
1935	0.0	0.0	0.0	39.5	120.9	158.3	183.9	150.3	122.3	65.1	0.0	0.0	840
1936	0.0	0.0	0.0	48.0	157.6	151.7	217.0	179.5	136.1	73.9	0.0	0.0	964
1937	0.0	0.0	0.0	64.7	155.9	173.0	174.6	146.8	124.9	64.3	0.0	0.0	904
1938	0.0	0.0	0.0	71.5	143.5	157.8	167.5	134.3	105.6	50.8	0.0	0.0	831
1939	0.0	0.0	0.0	71.2	135.0	127.4	188.3	195.8	92.7	49.5	0.0	0.0	860
1940	0.0	0.0	0.0	35.2	137.1	138.7	130.3	146.7	91.8	38.7	0.0	0.0	719
1941	0.0	0.0	0.0	59.7	120.1	136.2	141.0	121.1	76.4	42.9	0.0	0.0	697
1942	0.0	0.0	0.0	53.2	119.5	125.4	129.6	119.0	75.2	56.7	0.0	0.0	679
1943	0.0	0.0	0.0	52.3	107.1	111.3	143.2	118.5	112.8	44.7	0.0	0.0	690
1944	0.0	0.0	0.0	63.4	116.5	119.0	144.0	130.8	92.7	59.1	0.0	0.0	725
1945	0.0	0.0	0.0	45.6	136.6	159.5	178.2	130.8	100.5	52.2	0.0	0.0	803
1946	0.0	0.0	0.0	61.4	128.9	121.0	178.2	139.7	86.6	53.3	0.0	0.0	769
1947	0.0	0.0	0.0	43.3	140.2	129.0	156.1	122.6	93.4	52.6	0.0	0.0	737
1948	0.0	0.0	0.0	32.5	118.1	154.8	169.4	134.7	100.8	67.7	0.0	0.0	778
1949	0.0	0.0	0.0	70.0	137.4	176.4	156.6	133.2	104.6	53.1	16.9	0.0	848
1950	0.0	0.0	0.0	53.0	143.8	160.3	168.7	139.9	117.9	38.2	0.0	0.0	822
1951	0.0	0.0	0.0	48.9	130.7	145.6	133.0	125.4	92.5	40.2	0.0	0.0	716
1952	0.0	0.0	0.0	69.0	126.3	136.1	147.9	130.1	96.2	77.3	0.0	0.0	783
1953	0.0	0.0	0.0	47.5	125.1	133.2	148.3	127.5	102.8	57.9	0.0	0.0	742
1954	0.0	0.0	0.0	48.9	117.0	141.7	164.3	107.3	88.9	62.5	0.0	0.0	731
1955	0.0	0.0	0.0	40.7	130.2	175.9	142.0	149.0	100.4	54.4	0.0	0.0	793
1956	0.0	0.0	0.0	45.5	153.9	154.0	150.8	136.2	92.6	57.0	0.0	0.0	790
1957	0.0	0.0	0.0	49.1	133.1	145.1	179.1	133.7	112.3	50.8	0.0	0.0	803
1958	0.0	0.0	0.0	49.5	153.7	143.4	162.5	154.3	106.5	60.0	0.0	0.0	830
1959	0.0	0.0	0.0	68.6	129.3	138.5	176.5	132.1	102.4	46.7	0.0	0.0	794
1960	0.0	0.0	0.0	63.6	132.5	151.2	161.5	140.0	107.0	54.5	0.0	0.0	810
1961	0.0	0.0	0.0	61.9	131.7	179.9	159.1	159.4	104.2	52.0	0.0	0.0	848
1962	0.0	0.0	0.0	51.7	116.3	143.3	139.5	135.8	102.2	54.7	0.0	0.0	744
1963	0.0	0.0	0.0	53.7	126.2	154.7	169.4	146.2	110.5	65.1	0.0	0.0	826
1964	0.0	0.0	0.0	72.1	139.5	168.2	189.5	163.0	98.2	61.1	0.0	0.0	892
1965	0.0	0.0	0.0	44.2	132.0	147.1	157.8	153.9	90.6	73.4	0.0	0.0	799
1966	0.0	0.0	0.0	53.2	161.6	140.8	161.8	135.7	108.3	61.4	0.0	0.0	823
1967	0.0	0.0	0.0	42.4	147.7	161.9	194.5	187.5	160.6	64.9	0.0	0.0	960
1968	0.0	0.0	0.0	63.9	168.4	167.2	179.4	146.8	105.6	56.2	0.0	0.0	888
1969	0.0	0.0	0.0	54.4	131.7	174.9	172.0	170.3	99.7	45.2	0.0	0.0	848
1970	0.0	0.0	0.0	62.0	157.9	197.6	173.7	181.9	125.5	58.9	0.0	0.0	958
1971	0.0	0.0	0.0	61.1	179.6	149.7	170.6	192.9	128.1	69.2	0.0	0.0	951
1972	0.0	0.0	0.0	65.4	141.3	180.1	168.3	149.4	103.6	74.3	0.0	0.0	883
1973	0.0	0.0	0.0	60.2	183.8	199.4	209.7	167.6	118.7	59.2	0.0	0.0	999
1974	0.0	0.0	0.0	56.4	131.1	192.9	190.3	146.1	102.3	70.4	0.0	0.0	890
1975	0.0	0.0	0.0	48.4	136.7	154.6	170.3	144.6	102.6	54.0	0.0	0.0	811
1976	0.0	0.0	0.0	63.4	165.0	145.2	176.6	138.9	96.5	66.1	0.0	0.0	852
1977	0.0	0.0	0.0	86.3	129.5	190.5	173.5	139.5	98.6	84.1	0.0	0.0	902
1978	0.0	0.0	0.0	54.8	122.1	146.3	149.7	136.9	81.0	61.8	0.0	0.0	753
1979	0.0	0.0	0.0	47.7	120.9	136.3	139.6	131.0	102.2	57.0	0.0	0.0	735
1980	0.0	0.0	0.0	70.8	146.4	123.8	150.2	128.4	86.2	55.0	0.0	0.0	761
1981	0.0	0.0	0.0	65.4	127.6	146.7	158.9	173.7	118.5	54.6	0.0	0.0	845
1982	0.0	0.0	0.0	61.4	156.4	157.1	137.9	132.3	106.6	60.4	0.0	0.0	812
1983	0.0	0.0	0.0	57.5	140.1	154.6	155.7	157.2	104.7	55.9	0.0	0.0	826
1984	0.0	0.0	0.0	71.6	125.0	149.5	189.5	177.4	94.6	58.6	0.0	0.0	866
1985	0.0	0.0	0.0	56.2	147.7	170.9	195.9	151.6	96.1	58.2	0.0	0.0	877
1986	0.0	0.0	0.0	59.9	137.1	161.6	139.0	152.1	86.3	49.4	0.0	0.0	785
MIN	0.0	0.0	0.0	32.5	107.1	111.3	114.5	107.3	75.2	38.2	0.0	0.0	655
MAX	0.0	0.0	0.0	86.3	183.8	199.4	217.0	195.8	160.6	84.1	16.9	0.0	999
MEAN	0.0	0.0	0.0	56.4	136.2	149.1	161.4	143.0	101.2	55.9	0.4	0.0	804

GROSS EVAPORATION (mm) -- LETHBRIDGE

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1911	0.0	0.0	12.1	58.5	140.7	155.4	202.1	128.1	92.6	44.5	0.0	0.0	834
1912	0.0	0.0	0.0	43.8	130.3	174.0	153.9	142.9	93.1	57.3	0.0	0.0	795
1913	0.0	0.0	0.0	71.2	119.8	168.6	221.4	203.9	115.7	60.7	0.0	0.0	961
1914	0.0	0.0	0.0	55.1	147.3	169.1	209.7	165.3	121.8	48.3	7.9	0.0	925
1915	0.0	0.0	0.0	67.6	121.4	155.1	147.9	154.1	95.1	70.3	0.0	0.0	811
1916	0.0	0.0	0.0	60.3	119.9	164.9	202.7	182.8	100.9	53.1	0.0	0.0	885
1917	0.0	0.0	0.0	34.2	97.5	162.3	241.5	167.4	87.0	50.8	0.0	0.0	841
1918	0.0	0.0	0.0	52.3	128.1	197.7	197.5	166.2	101.1	37.8	0.0	0.0	881
1919	0.0	0.0	0.0	65.2	170.2	228.3	231.0	199.1	89.0	47.9	0.0	0.0	1031
1920	0.0	0.0	0.0	49.8	126.3	167.4	206.4	186.0	143.8	81.2	0.0	0.0	961
1921	0.0	0.0	0.0	63.9	142.7	234.8	270.9	222.0	186.9	122.0	0.0	0.0	1243
1922	0.0	0.0	0.0	47.2	155.3	182.2	186.0	210.0	158.5	63.2	0.0	0.0	1002
1923	0.0	0.0	0.0	69.6	154.6	158.6	148.2	138.0	112.0	56.4	22.2	0.0	860
1924	0.0	0.0	0.0	71.0	141.1	152.2	204.2	174.9	128.3	59.5	0.0	0.0	931
1925	0.0	0.0	0.0	57.2	167.7	163.1	189.1	208.5	95.7	46.7	0.0	0.0	928
1926	0.0	0.0	0.0	76.2	189.6	180.5	222.1	169.7	89.7	70.1	0.0	0.0	998
1927	0.0	0.0	0.0	59.1	135.9	168.6	164.8	161.1	110.3	66.7	0.0	0.0	867
1928	0.0	0.0	0.0	52.1	184.0	133.1	159.1	157.8	117.7	54.9	0.0	0.0	859
1929	0.0	0.0	0.0	54.8	134.8	183.5	241.9	243.0	103.5	71.8	0.0	0.0	1033
1930	0.0	0.0	0.0	52.6	150.4	169.8	182.5	173.9	120.5	61.9	0.0	0.0	912
1931	0.0	0.0	0.0	94.0	170.8	185.5	209.3	177.5	110.9	86.9	0.0	0.0	1035
1932	0.0	0.0	0.0	75.0	148.4	169.5	231.3	219.7	127.6	69.8	0.0	0.0	1041
1933	0.0	0.0	0.0	64.6	150.9	233.7	251.2	164.5	127.0	56.3	45.9	0.0	1094
1934	0.0	0.0	0.0	101.0	209.9	178.6	248.7	215.4	113.5	85.7	24.7	0.0	1177
1935	0.0	0.0	0.0	62.4	146.9	209.0	249.7	231.6	164.0	88.0	0.0	0.0	1152
1936	0.0	0.0	0.0	61.2	190.9	194.0	273.2	193.6	137.4	84.6	36.2	0.0	1171
1937	0.0	0.0	0.0	97.2	219.9	220.2	221.9	220.3	125.8	71.2	0.0	0.0	1177
1938	0.0	0.0	0.0	59.7	126.5	157.8	199.3	180.1	130.6	59.9	0.0	0.0	914
1939	0.0	0.0	0.0	83.4	185.2	131.2	239.5	228.1	141.0	73.4	33.1	0.0	1115
1940	0.0	0.0	0.0	44.7	148.6	175.8	194.5	226.8	103.6	61.5	0.0	0.0	956
1941	0.0	0.0	0.0	66.2	160.4	172.7	218.3	165.8	113.7	74.2	31.5	0.0	1003
1942	0.0	0.0	0.0	70.2	116.1	147.2	180.0	147.9	106.9	84.1	0.0	0.0	852
1943	0.0	0.0	0.0	77.2	143.0	170.9	258.3	220.5	172.1	65.7	29.6	0.0	1137
1944	0.0	0.0	0.0	67.8	129.4	210.5	203.2	137.7	149.0	82.7	0.0	0.0	980
1945	0.0	0.0	0.0	51.2	120.1	138.1	204.7	199.9	116.8	75.5	0.0	0.0	906
1946	0.0	0.0	33.1	86.6	125.9	147.1	213.7	195.7	127.7	61.0	0.0	0.0	991
1947	0.0	0.0	0.0	61.2	138.7	121.6	264.2	165.2	120.4	65.6	0.0	0.0	937
1948	0.0	0.0	0.0	41.8	120.9	122.0	177.3	200.6	158.6	89.9	0.0	0.0	911
1949	0.0	0.0	0.0	97.9	137.6	151.5	211.1	195.6	160.0	57.2	36.9	0.0	1048
1950	0.0	0.0	0.0	57.0	149.8	115.5	185.0	173.8	153.2	61.0	0.0	0.0	895
1951	0.0	0.0	0.0	65.1	146.0	136.3	166.8	125.8	95.1	37.9	0.0	0.0	773
1952	0.0	0.0	0.0	81.5	133.2	175.2	185.4	166.7	134.2	74.1	0.0	0.0	950
1953	0.0	0.0	0.0	41.2	143.0	153.0	184.4	201.9	144.5	100.6	38.8	0.0	1007
1954	0.0	0.0	0.0	63.0	150.4	192.9	246.6	153.9	110.2	84.3	42.9	0.0	1044
1955	0.0	0.0	0.0	72.4	145.4	201.0	183.5	235.1	145.9	95.4	0.0	0.0	1079
1956	0.0	0.0	0.0	68.6	138.2	227.9	173.6	171.9	135.7	87.5	38.4	0.0	1042
1957	0.0	0.0	0.0	58.0	136.3	167.6	270.4	178.5	138.6	51.5	0.0	0.0	1001
1958	0.0	0.0	0.0	56.1	171.7	152.6	180.2	233.6	166.2	100.3	0.0	0.0	1061
1959	0.0	0.0	0.0	77.3	139.1	207.8	246.9	233.2	128.0	76.7	0.0	0.0	1109
1960	0.0	0.0	0.0	87.7	170.8	227.8	279.5	229.8	180.2	105.0	0.0	0.0	1281
1961	0.0	0.0	0.0	71.2	137.1	252.0	223.2	253.8	146.3	89.3	0.0	0.0	1173
1962	0.0	0.0	0.0	104.2	137.5	206.9	220.7	265.6	154.4	95.4	36.1	0.0	1221
1963	0.0	0.0	0.0	73.0	160.1	209.5	220.7	186.4	148.9	105.6	0.0	0.0	1104
1964	0.0	0.0	0.0	79.0	180.9	187.5	276.5	251.8	132.7	102.8	0.0	0.0	1211
1965	0.0	0.0	0.0	57.4	183.3	171.7	205.2	199.4	106.7	126.0	0.0	0.0	1050
1966	0.0	0.0	0.0	70.1	179.5	177.9	209.0	202.2	154.0	91.4	0.0	0.0	1084
1967	0.0	0.0	0.0	46.4	139.6	149.7	259.5	206.3	200.4	102.4	0.0	0.0	1104
1968	0.0	0.0	39.0	74.3	139.8	188.2	199.5	162.0	132.0	81.8	0.0	0.0	1017
1969	0.0	0.0	0.0	69.3	150.3	141.0	186.1	256.9	150.8	60.7	54.5	0.0	1070
1970	0.0	0.0	0.0	66.9	157.6	217.4	245.6	228.2	160.3	79.4	0.0	0.0	1155
1971	0.0	0.0	0.0	68.5	152.4	204.7	235.9	256.4	141.8	73.2	0.0	0.0	1133
1972	0.0	0.0	0.0	78.5	137.3	219.7	173.7	186.2	132.5	76.5	0.0	0.0	1004
1973	0.0	0.0	37.3	58.5	190.0	235.1	250.9	228.6	129.0	82.1	0.0	0.0	1212
1974	0.0	0.0	0.0	62.4	133.3	236.4	239.5	164.3	140.0	98.3	0.0	0.0	1074
1975	0.0	0.0	0.0	38.6	138.8	181.8	190.9	169.8	118.6	66.7	0.0	0.0	905
1976	0.0	0.0	0.0	68.2	187.2	177.6	219.7	197.6	151.5	76.5	0.0	0.0	1078
1977	0.0	0.0	0.0	95.2	174.0	214.5	239.4	152.5	106.9	91.4	0.0	0.0	1074
1978	0.0	0.0	0.0	39.5	143.9	197.4	180.5	196.1	138.3	92.8	0.0	0.0	989
1979	0.0	0.0	0.0	48.6	143.7	224.1	242.3	183.3	167.2	82.3	0.0	0.0	1092
1980	0.0	0.0	0.0	88.4	168.6	177.2	246.1	185.2	163.0	84.3	49.5	0.0	1162
1981	0.0	0.0	32.7	104.1	125.2	196.0	178.3	159.8	155.6	72.1	40.3	0.0	1064
1982	0.0	0.0	0.0	79.3	164.6	149.3	227.1	217.7	151.8	84.1	0.0	0.0	1074
1983	0.0	0.0	0.0	66.8	170.1	205.9	253.8	256.0	177.3	94.3	0.0	0.0	1224
1984	0.0	0.0	0.0	78.1	193.2	196.9	247.3	243.6	116.7	68.5	0.0	0.0	1144
1985	0.0	0.0	0.0	86.5	173.7	221.3	259.4	193.7	117.0	94.7	0.0	0.0	1146
1986	0.0	0.0	38.6	87.5	188.1	180.8	201.1	185.8	88.3	69.0	0.0	0.0	1039
MIN	0.0	0.0	0.0	34.2	97.5	115.5	147.9	125.8	87.0	37.8	0.0	0.0	773
MAX	0.0	0.0	39.0	104.2	219.9	252.0	279.5	265.6	200.4	126.0	54.5	0.0	1281
MEAN	0.0	0.0	2.5	67.3	151.6	181.4	215.3	193.9	131.4	75.4	7.5	0.0	1026

GROSS EVAPORATION (mm) -- MEDICINE HAT

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1911	0.0	0.0	6.2	55.5	150.9	164.0	227.7	148.2	76.2	38.6	0.0	0.0	867
1912	0.0	0.0	0.0	39.3	126.7	175.3	162.6	149.4	94.5	54.1	9.2	0.0	811
1913	0.0	0.0	0.0	64.8	113.5	159.8	252.8	205.9	119.3	45.6	8.8	0.0	971
1914	0.0	0.0	0.0	53.2	156.5	176.5	223.8	190.4	140.1	32.7	3.7	0.0	977
1915	0.0	0.0	0.0	67.2	144.9	166.2	171.4	166.7	84.3	62.7	0.0	0.0	863
1916	0.0	0.0	0.0	55.1	122.9	137.7	200.1	181.8	107.3	45.6	0.0	0.0	851
1917	0.0	0.0	0.0	37.7	129.2	180.3	235.9	175.9	101.1	56.6	0.0	0.0	917
1918	0.0	0.0	0.0	51.5	142.0	176.1	199.2	196.6	110.8	42.2	0.0	0.0	918
1919	0.0	0.0	0.0	39.8	147.9	191.6	289.3	229.4	122.0	49.4	0.0	0.0	1069
1920	0.0	0.0	0.0	38.8	138.3	185.1	205.4	248.9	161.6	60.2	0.0	0.0	1038
1921	0.0	0.0	0.0	51.8	133.8	190.0	315.6	274.4	149.8	73.6	0.0	0.0	1189
1922	0.0	0.0	0.0	40.9	141.8	175.0	193.5	220.8	144.5	57.3	0.0	0.0	974
1923	0.0	0.0	0.0	48.9	157.1	154.1	177.0	168.3	133.7	51.2	12.4	0.0	903
1924	0.0	0.0	0.0	73.2	160.1	170.5	264.2	191.2	105.1	51.1	0.0	0.0	1016
1925	0.0	0.0	0.0	52.8	156.0	181.0	238.0	208.2	104.6	44.9	0.0	0.0	985
1926	0.0	0.0	4.4	42.6	167.7	191.9	195.5	184.6	121.5	62.7	0.0	0.0	971
1927	0.0	0.0	0.0	48.6	134.5	170.9	185.7	154.6	131.1	46.6	0.0	0.0	872
1928	0.0	0.0	0.0	42.2	157.4	134.2	167.9	187.0	127.7	54.4	1.4	0.0	872
1929	0.0	0.0	0.0	37.6	112.1	180.3	290.6	216.6	113.0	65.0	0.0	0.0	1015
1930	0.0	0.0	0.0	36.7	181.4	216.9	249.5	260.1	144.6	61.7	0.0	0.0	1151
1931	0.0	0.0	0.0	88.8	181.6	194.9	230.5	168.1	123.1	76.2	0.0	0.0	1063
1932	0.0	0.0	0.0	64.6	136.1	162.2	241.0	196.7	117.6	57.2	0.0	0.0	975
1933	0.0	0.0	0.0	59.1	127.4	206.9	264.1	197.3	138.8	55.3	0.0	0.0	1049
1934	0.0	0.0	0.0	90.2	204.8	171.0	239.7	220.4	119.6	67.0	0.0	0.0	1113
1935	0.0	0.0	0.0	50.2	137.3	195.9	243.6	220.5	162.2	68.4	0.0	0.0	1078
1936	0.0	0.0	0.0	47.5	167.7	184.5	277.6	213.3	130.6	68.1	0.0	0.0	1089
1937	0.0	0.0	0.0	69.1	172.4	224.4	240.1	217.8	146.1	58.1	0.0	0.0	1128
1938	0.0	0.0	0.0	59.5	127.6	149.3	198.4	186.3	121.9	56.0	0.0	0.0	899
1939	0.0	0.0	0.0	71.3	163.4	128.7	241.2	224.8	145.7	64.3	21.1	0.0	1061
1940	0.0	0.0	0.0	36.8	147.4	178.3	179.2	217.2	107.9	42.6	0.0	0.0	909
1941	0.0	0.0	0.0	62.8	141.4	147.8	176.5	165.8	92.3	60.3	0.0	0.0	847
1942	0.0	0.0	0.0	49.4	123.7	137.4	175.1	144.0	101.3	61.2	0.0	0.0	792
1943	0.0	0.0	0.0	77.4	130.0	166.0	256.1	212.7	147.8	71.0	0.0	0.0	1061
1944	0.0	0.0	0.0	75.0	155.4	155.1	221.9	177.7	124.3	68.1	0.0	0.0	978
1945	0.0	0.0	0.0	50.3	128.7	154.0	220.7	191.8	107.6	48.9	0.0	0.0	902
1946	0.0	0.0	23.8	85.6	118.4	154.5	227.0	166.9	103.3	47.6	0.0	0.0	927
1947	0.0	0.0	0.0	44.6	124.1	115.5	228.2	154.7	101.2	60.1	0.0	0.0	828
1948	0.0	0.0	0.0	37.7	121.1	135.9	197.4	197.4	130.2	72.4	0.0	0.0	892
1949	0.0	0.0	0.0	74.5	141.3	178.5	216.9	211.7	138.6	52.8	25.3	0.0	1040
1950	0.0	0.0	0.0	56.0	142.7	164.6	201.0	152.9	126.0	53.2	0.0	0.0	896
1951	0.0	0.0	0.0	50.7	115.8	122.6	165.3	150.6	97.5	39.4	0.0	0.0	742
1952	0.0	0.0	0.0	65.6	128.7	160.1	171.4	169.5	125.5	75.7	0.0	0.0	896
1953	0.0	0.0	0.0	42.5	139.0	147.7	207.4	214.7	146.8	93.3	38.0	0.0	1029
1954	0.0	0.0	0.0	49.6	146.0	169.8	217.4	160.6	107.9	80.9	34.0	0.0	966
1955	0.0	0.0	0.0	61.6	135.1	171.4	163.8	212.9	128.8	82.4	0.0	0.0	956
1956	0.0	0.0	0.0	58.7	128.2	194.8	172.2	170.8	130.7	77.9	0.0	0.0	933
1957	0.0	0.0	0.0	54.4	146.1	153.5	244.9	164.7	132.7	46.7	0.0	0.0	943
1958	0.0	0.0	0.0	62.1	172.1	167.2	192.4	221.4	147.9	81.5	0.0	0.0	1044
1959	0.0	0.0	0.0	84.1	135.2	194.7	234.5	201.9	133.0	58.9	0.0	0.0	1042
1960	0.0	0.0	0.0	82.5	155.3	187.0	254.4	206.0	151.7	89.9	0.0	0.0	1127
1961	0.0	0.0	27.5	56.1	134.8	257.1	222.8	226.6	139.3	72.6	0.0	0.0	1137
1962	0.0	0.0	0.0	90.2	129.7	184.6	187.8	213.4	132.6	77.7	31.9	0.0	1048
1963	0.0	0.0	38.0	74.1	159.7	172.5	202.4	182.3	148.2	95.3	0.0	0.0	1072
1964	0.0	0.0	0.0	63.1	177.3	177.0	235.6	229.7	122.1	77.2	0.0	0.0	1082
1965	0.0	0.0	0.0	49.3	159.6	164.5	175.6	182.1	96.2	79.7	0.0	0.0	907
1966	0.0	0.0	0.0	58.3	167.8	153.0	206.6	197.8	141.8	72.1	0.0	0.0	997
1967	0.0	0.0	0.0	41.6	129.6	144.5	232.1	204.0	176.6	70.2	0.0	0.0	999
1968	0.0	0.0	34.8	69.2	143.0	154.3	174.6	179.2	128.1	76.2	0.0	0.0	959
1969	0.0	0.0	0.0	60.8	139.9	155.5	191.6	239.8	133.7	49.0	0.0	0.0	970
1970	0.0	0.0	0.0	55.7	140.9	186.2	194.9	224.0	145.9	72.1	0.0	0.0	1020
1971	0.0	0.0	0.0	69.0	164.8	181.4	232.3	259.6	141.0	70.3	0.0	0.0	1118
1972	0.0	0.0	0.0	92.1	151.4	214.6	198.5	205.1	127.6	71.5	0.0	0.0	1061
1973	0.0	0.0	40.6	59.3	171.0	203.5	249.3	236.5	130.4	85.2	0.0	0.0	1176
1974	0.0	0.0	0.0	62.4	125.2	221.7	255.6	174.6	138.0	94.7	0.0	0.0	1072
1975	0.0	0.0	0.0	37.2	126.7	161.3	199.9	174.7	125.6	70.0	0.0	0.0	896
1976	0.0	0.0	0.0	76.1	195.3	182.9	219.2	234.2	163.9	78.7	0.0	0.0	1150
1977	0.0	0.0	0.0	110.7	175.5	243.5	255.9	193.5	113.5	86.9	0.0	0.0	1180
1978	0.0	0.0	0.0	51.0	149.0	182.7	209.7	202.0	143.3	80.9	0.0	0.0	1019
1979	0.0	0.0	0.0	49.1	141.1	195.4	223.8	210.5	163.4	79.6	0.0	0.0	1063
1980	0.0	0.0	0.0	101.5	183.9	161.9	211.0	181.3	137.5	62.5	27.6	0.0	1067
1981	0.0	0.0	26.1	88.6	130.9	167.0	199.1	210.0	159.4	62.8	28.9	0.0	1073
1982	0.0	0.0	0.0	71.4	149.0	144.5	171.0	187.9	122.5	56.7	0.0	0.0	903
1983	0.0	0.0	0.0	56.2	140.7	169.9	180.8	217.8	136.5	75.2	0.0	0.0	977
1984	0.0	0.0	0.0	76.0	158.0	169.1	234.2	239.5	110.8	61.4	0.0	0.0	1049
1985	0.0	0.0	0.0	65.6	148.9	200.7	248.0	180.3	104.2	73.7	0.0	0.0	1022
1986	0.0	0.0	22.0	69.1	129.4	180.2	173.3	197.5	80.4	51.8	0.0	0.0	904
MIN	0.0	0.0	0.0	36.7	112.1	115.5	162.6	144.0	76.2	32.7	0.0	0.0	742
MAX	0.0	0.0	40.6	110.7	204.8	257.1	315.6	274.4	176.6	95.3	38.0	0.0	1189
MEAN	0.0	0.0	2.9	60.4	145.9	173.4	216.2	198.1	126.9	64.4	3.2	0.0	992

GROSS EVAPORATION (mm) -- BROADVIEW

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1911	0.0	0.0	0.0	53.5	122.7	118.2	140.2	124.9	95.9	32.1	0.0	0.0	688
1912	0.0	0.0	0.0	51.2	128.1	168.8	123.4	110.4	86.4	49.9	0.0	0.0	718
1913	0.0	0.0	0.0	56.0	122.2	133.9	155.8	122.1	104.8	45.6	0.0	0.0	740
1914	0.0	0.0	0.0	47.1	132.4	139.0	166.5	132.4	116.3	37.8	0.0	0.0	772
1915	0.0	0.0	0.0	57.2	138.5	137.2	140.3	153.7	72.4	53.6	0.0	0.0	753
1916	0.0	0.0	0.0	40.4	116.2	141.8	156.5	137.3	97.4	41.4	0.0	0.0	731
1917	0.0	0.0	0.0	37.4	137.8	148.7	188.7	153.8	96.2	54.0	0.0	0.0	817
1918	0.0	0.0	0.0	47.4	120.3	166.4	151.2	133.2	105.9	54.7	0.0	0.0	779
1919	0.0	0.0	0.0	41.5	139.6	167.6	185.7	183.0	108.9	47.0	0.0	0.0	873
1920	0.0	0.0	0.0	41.5	146.1	156.0	195.7	172.9	107.1	47.5	0.0	0.0	867
1921	0.0	0.0	0.0	44.4	128.0	127.8	158.1	153.8	102.0	48.8	0.0	0.0	763
1922	0.0	0.0	0.0	35.3	122.0	143.9	156.7	142.7	115.2	45.5	0.0	0.0	761
1923	0.0	0.0	0.0	43.5	137.0	128.7	120.5	129.2	111.4	54.0	0.0	0.0	724
1924	0.0	0.0	0.0	49.4	134.7	146.0	171.0	139.0	115.0	59.1	0.0	0.0	814
1925	0.0	0.0	0.0	49.0	142.6	138.2	170.5	157.0	100.8	46.7	0.0	0.0	805
1926	0.0	0.0	0.0	60.3	139.0	155.6	168.0	142.8	85.1	46.9	0.0	0.0	798
1927	0.0	0.0	0.0	45.4	121.8	155.4	136.5	131.9	98.0	39.6	0.0	0.0	728
1928	0.0	0.0	0.0	35.3	138.2	121.8	130.6	117.0	97.1	48.1	0.0	0.0	688
1929	0.0	0.0	0.0	35.6	101.0	141.8	213.4	193.4	97.2	38.6	0.0	0.0	821
1930	0.0	0.0	0.0	38.5	125.1	134.6	157.0	146.9	94.9	35.8	0.0	0.0	733
1931	0.0	0.0	0.0	68.8	155.4	208.4	218.6	169.4	100.1	54.0	0.0	0.0	975
1932	0.0	0.0	0.0	45.3	133.3	125.0	176.8	165.5	115.1	46.9	0.0	0.0	808
1933	0.0	0.0	0.0	50.6	132.9	156.4	180.9	152.7	121.5	59.7	0.0	0.0	855
1934	0.0	0.0	0.0	72.9	173.3	157.9	194.6	201.2	109.7	65.6	0.0	0.0	975
1935	0.0	0.0	0.0	58.4	130.9	140.6	159.4	157.7	122.2	60.4	0.0	0.0	830
1936	0.0	0.0	0.0	55.6	168.3	153.2	176.3	172.0	117.4	68.0	0.0	0.0	911
1937	0.0	0.0	0.0	53.5	166.6	217.8	219.4	218.1	122.4	53.5	0.0	0.0	1051
1938	0.0	0.0	0.0	42.6	138.9	149.2	161.8	175.1	120.3	61.0	0.0	0.0	849
1939	0.0	0.0	0.0	58.8	151.2	138.3	198.1	221.8	121.6	65.2	0.0	0.0	955
1940	0.0	0.0	0.0	50.4	143.1	172.1	173.8	200.1	106.2	46.2	0.0	0.0	892
1941	0.0	0.0	0.0	35.0	120.4	124.9	150.2	139.0	106.3	50.7	0.0	0.0	726
1942	0.0	0.0	0.0	38.4	101.0	118.6	131.8	128.9	90.3	55.6	0.0	0.0	665
1943	0.0	0.0	0.0	58.7	121.2	120.8	145.1	133.4	108.6	40.5	0.0	0.0	728
1944	0.0	0.0	0.0	46.5	119.9	109.3	150.1	144.2	91.8	62.7	0.0	0.0	725
1945	0.0	0.0	0.0	41.5	120.4	129.9	163.1	159.8	112.4	61.9	0.0	0.0	789
1946	0.0	0.0	0.0	64.0	115.9	136.7	155.5	155.9	96.6	45.4	0.0	0.0	770
1947	0.0	0.0	0.0	39.3	116.3	119.5	150.9	126.1	97.1	53.1	0.0	0.0	702
1948	0.0	0.0	0.0	32.4	110.9	120.8	162.0	125.7	110.9	56.7	0.0	0.0	719
1949	0.0	0.0	0.0	50.5	119.8	138.7	135.6	142.8	107.2	47.7	0.0	0.0	742
1950	0.0	0.0	0.0	39.2	120.7	143.3	130.8	135.5	94.3	51.8	0.0	0.0	716
1951	0.0	0.0	0.0	38.5	138.7	127.0	161.5	138.1	87.5	39.2	0.0	0.0	731
1952	0.0	0.0	0.0	51.6	123.2	144.1	158.7	151.0	100.2	64.6	0.0	0.0	793
1953	0.0	0.0	0.0	36.9	99.6	111.8	143.8	129.8	117.8	59.2	0.0	0.0	699
1954	0.0	0.0	0.0	45.1	115.1	132.1	139.5	124.8	88.7	54.6	0.0	0.0	700
1955	0.0	0.0	0.0	43.1	103.9	126.6	140.8	166.4	118.1	59.4	0.0	0.0	758
1956	0.0	0.0	0.0	39.9	111.1	161.2	126.3	138.6	107.1	55.2	0.0	0.0	740
1957	0.0	0.0	0.0	40.2	133.6	121.8	183.9	131.3	106.2	47.2	0.0	0.0	764
1958	0.0	0.0	0.0	62.5	158.3	163.4	171.2	174.0	125.5	59.9	0.0	0.0	915
1959	0.0	0.0	0.0	71.9	143.4	160.0	195.8	199.3	111.1	46.3	0.0	0.0	928
1960	0.0	0.0	0.0	55.2	138.3	161.9	189.2	177.9	140.7	67.7	0.0	0.0	931
1961	0.0	0.0	0.0	59.5	142.4	211.4	217.3	236.9	120.7	59.6	0.0	0.0	1048
1962	0.0	0.0	0.0	49.5	120.9	143.2	166.3	164.5	120.8	54.0	0.0	0.0	819
1963	0.0	0.0	0.0	43.3	110.2	133.0	146.9	144.1	117.4	72.5	0.0	0.0	767
1964	0.0	0.0	0.0	57.0	153.5	144.6	180.6	168.8	119.5	63.0	0.0	0.0	887
1965	0.0	0.0	0.0	40.9	137.9	163.7	154.2	162.8	94.2	65.3	0.0	0.0	819
1966	0.0	0.0	0.0	42.0	136.8	130.8	162.2	138.2	110.1	63.0	0.0	0.0	783
1967	0.0	0.0	0.0	42.6	133.6	165.7	197.2	188.0	141.4	53.4	0.0	0.0	922
1968	0.0	0.0	0.0	64.0	143.7	157.6	189.2	136.0	107.8	44.1	0.0	0.0	842
1969	0.0	0.0	0.0	52.1	131.9	138.3	150.5	165.1	110.6	41.5	0.0	0.0	790
1970	0.0	0.0	0.0	41.2	113.7	164.4	162.8	174.0	101.7	47.6	0.0	0.0	805
1971	0.0	0.0	0.0	51.2	144.3	124.2	161.2	160.7	113.1	56.8	0.0	0.0	811
1972	0.0	0.0	0.0	50.8	104.4	164.2	139.3	151.2	112.0	58.9	0.0	0.0	781
1973	0.0	0.0	0.0	52.6	119.0	155.2	170.5	170.3	104.7	58.7	0.0	0.0	831
1974	0.0	0.0	0.0	37.2	103.0	158.7	176.7	133.3	99.0	58.3	0.0	0.0	766
1975	0.0	0.0	0.0	33.3	110.5	114.5	167.6	134.7	95.3	47.8	0.0	0.0	704
1976	0.0	0.0	0.0	43.4	143.2	121.0	161.8	158.5	125.0	60.0	0.0	0.0	813
1977	0.0	0.0	0.0	70.0	126.3	136.1	143.9	130.7	76.1	61.1	0.0	0.0	744
1978	0.0	0.0	0.0	47.8	116.3	143.7	125.9	147.3	108.9	53.5	0.0	0.0	743
1979	0.0	0.0	0.0	37.8	108.2	160.2	175.5	155.0	100.4	45.1	0.0	0.0	782
1980	0.0	0.0	0.0	67.2	157.6	157.1	158.0	126.6	102.5	57.0	0.0	0.0	826
1981	0.0	0.0	0.0	61.6	124.0	141.4	172.3	142.9	127.7	45.8	0.0	0.0	816
1982	0.0	0.0	0.0	52.1	112.7	150.5	164.6	146.7	112.3	54.7	0.0	0.0	794
1983	0.0	0.0	0.0	40.6	127.9	178.3	180.4	211.5	134.9	55.3	0.0	0.0	929
1984	0.0	0.0	0.0	66.8	147.1	157.5	221.9	216.2	107.2	55.1	0.0	0.0	972
1985	0.0	0.0	0.0	64.1	137.9	142.7	171.2	138.5	92.5	65.7	0.0	0.0	813
1986	0.0	0.0	0.0	55.2	156.5	146.6	148.8	169.4	105.3	61.2	0.0	0.0	843
MIN	0.0	0.0	0.0	32.4	99.6	109.3	120.5	110.4	72.4	32.1	0.0	0.0	665
MAX	0.0	0.0	0.0	72.9	173.3	217.8	221.9	236.9	141.4	72.5	0.0	0.0	1051
MEAN	0.0	0.0	0.0	49.0	130.0	145.6	164.5	155.3	107.2	53.2	0.0	0.0	805

GROSS EVAPORATION (mm) -- NORTH BATTLEFORD

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1911	0.0	0.0	0.0	39.0	136.0	155.0	141.9	110.7	71.9	28.1	0.0	0.0	683
1912	0.0	0.0	0.0	21.7	96.7	161.3	121.0	125.7	78.2	32.0	0.0	0.0	637
1913	0.0	0.0	0.0	23.5	119.7	164.1	173.2	157.1	101.0	28.2	0.0	0.0	767
1914	0.0	0.0	0.0	45.1	116.6	144.1	202.6	174.5	138.3	33.0	0.0	0.0	854
1915	0.0	0.0	0.0	36.4	111.9	155.2	147.8	195.5	88.9	40.5	0.0	0.0	776
1916	0.0	0.0	0.0	43.3	115.2	150.0	172.9	131.7	91.8	45.8	0.0	0.0	751
1917	0.0	0.0	0.0	26.1	152.3	176.3	225.7	146.4	99.5	48.4	3.2	0.0	878
1918	0.0	0.0	0.0	51.6	140.6	194.1	203.2	192.5	118.8	51.1	0.0	0.0	952
1919	0.0	0.0	0.0	34.7	178.7	196.2	190.7	175.6	111.8	32.6	0.0	0.0	920
1920	0.0	0.0	0.0	25.1	158.3	165.3	167.6	131.1	95.2	40.4	0.0	0.0	783
1921	0.0	0.0	0.0	16.5	140.3	153.5	177.2	166.7	108.9	58.6	0.0	0.0	822
1922	0.0	0.0	0.0	17.0	122.4	187.6	210.3	135.8	89.8	35.7	0.0	0.0	799
1923	0.0	0.0	0.0	48.7	126.7	132.9	151.5	140.1	115.3	48.9	0.0	0.0	764
1924	0.0	0.0	0.0	24.7	127.5	152.7	186.3	141.3	110.7	41.1	0.0	0.0	784
1925	0.0	0.0	0.0	42.3	127.0	122.4	166.4	146.0	80.0	35.7	0.0	0.0	720
1926	0.0	0.0	0.0	26.3	110.5	151.6	164.9	90.4	59.2	26.0	0.0	0.0	629
1927	0.0	0.0	0.0	35.0	97.6	149.7	145.3	129.5	91.0	33.2	0.0	0.0	681
1928	0.0	0.0	0.0	30.3	157.0	115.9	145.3	132.4	98.0	40.1	0.0	0.0	719
1929	0.0	0.0	0.0	25.7	98.9	161.0	214.5	197.3	94.0	41.2	0.0	0.0	833
1930	0.0	0.0	0.0	54.4	147.4	158.3	148.0	159.7	106.8	37.1	0.0	0.0	812
1931	0.0	0.0	0.0	48.6	88.9	128.3	132.1	130.8	78.9	39.1	0.0	0.0	647
1932	0.0	0.0	0.0	31.6	123.1	105.7	150.0	146.4	118.6	45.1	0.0	0.0	721
1933	0.0	0.0	0.0	41.3	131.3	161.4	219.0	187.9	105.3	42.8	0.0	0.0	889
1934	0.0	0.0	0.0	66.3	115.3	134.3	185.3	166.5	81.0	35.3	0.0	0.0	784
1935	0.0	0.0	0.0	47.9	127.8	134.6	176.0	163.5	107.8	43.5	0.0	0.0	801
1936	0.0	0.0	0.0	38.4	147.8	153.9	215.2	172.8	103.0	57.1	0.0	0.0	888
1937	0.0	0.0	0.0	60.3	147.6	243.6	206.9	165.0	99.6	40.7	0.0	0.0	964
1938	0.0	0.0	0.0	49.3	116.4	155.3	181.0	154.6	102.9	32.5	0.0	0.0	792
1939	0.0	0.0	0.0	62.1	121.7	119.1	202.8	149.8	117.4	57.5	0.0	0.0	830
1940	0.0	0.0	0.0	49.4	134.9	142.8	147.1	197.6	97.8	40.8	0.0	0.0	810
1941	0.0	0.0	0.0	48.6	104.2	133.4	164.9	138.0	83.4	37.5	0.0	0.0	710
1942	0.0	0.0	0.0	46.0	127.2	144.1	141.3	129.3	84.0	57.9	0.0	0.0	730
1943	0.0	0.0	0.0	57.2	122.7	128.0	158.6	171.0	115.8	44.5	0.0	0.0	798
1944	0.0	0.0	0.0	53.1	130.5	142.4	149.2	149.9	102.8	53.6	0.0	0.0	782
1945	0.0	0.0	0.0	49.6	131.3	142.2	186.1	161.0	102.2	47.9	0.0	0.0	820
1946	0.0	0.0	0.0	52.1	118.4	144.0	190.3	160.3	105.9	43.4	0.0	0.0	814
1947	0.0	0.0	0.0	42.9	131.1	154.2	212.6	150.3	103.3	55.5	0.0	0.0	850
1948	0.0	0.0	0.0	0.0	144.9	174.3	200.7	183.8	143.9	70.4	0.0	0.0	918
1949	0.0	0.0	0.0	63.8	148.7	159.7	169.0	175.2	123.9	56.8	0.0	0.0	897
1950	0.0	0.0	0.0	44.7	124.3	138.3	138.3	134.3	102.7	38.2	0.0	0.0	721
1951	0.0	0.0	0.0	40.6	116.8	141.4	129.9	131.1	92.1	37.9	0.0	0.0	690
1952	0.0	0.0	0.0	34.7	122.4	151.2	146.1	143.9	88.9	64.8	0.0	0.0	752
1953	0.0	0.0	0.0	38.4	116.6	138.2	171.2	167.8	117.4	70.9	0.0	0.0	821
1954	0.0	0.0	0.0	0.0	136.6	131.8	163.4	113.2	89.7	55.9	0.0	0.0	691
1955	0.0	0.0	0.0	41.5	145.8	162.2	146.3	175.7	123.5	61.8	0.0	0.0	857
1956	0.0	0.0	0.0	44.1	143.0	179.1	150.4	159.2	118.1	65.5	0.0	0.0	859
1957	0.0	0.0	0.0	55.7	148.9	143.1	197.5	152.3	116.0	52.2	0.0	0.0	866
1958	0.0	0.0	0.0	54.4	155.7	161.5	171.2	188.8	139.7	65.6	0.0	0.0	937
1959	0.0	0.0	0.0	73.9	146.8	179.2	235.3	162.1	119.8	43.5	0.0	0.0	961
1960	0.0	0.0	0.0	62.8	138.5	167.8	180.4	165.3	121.3	60.0	0.0	0.0	896
1961	0.0	0.0	0.0	51.2	153.5	201.3	187.6	207.3	120.8	55.8	0.0	0.0	978
1962	0.0	0.0	0.0	46.6	129.8	165.2	162.8	148.9	112.5	59.5	0.0	0.0	825
1963	0.0	0.0	0.0	49.6	118.8	146.9	155.3	128.1	102.0	67.2	0.0	0.0	768
1964	0.0	0.0	0.0	52.3	154.6	168.9	193.0	182.6	91.0	50.7	0.0	0.0	893
1965	0.0	0.0	0.0	42.5	149.6	154.4	168.5	164.5	87.7	71.0	0.0	0.0	838
1966	0.0	0.0	0.0	53.2	168.6	136.9	151.2	157.9	133.8	67.7	0.0	0.0	869
1967	0.0	0.0	0.0	35.7	154.4	172.5	200.5	180.9	165.8	55.3	0.0	0.0	965
1968	0.0	0.0	0.0	68.4	157.5	193.7	184.3	144.1	97.7	50.8	0.0	0.0	897
1969	0.0	0.0	0.0	50.7	134.6	169.4	168.9	214.7	112.7	43.5	0.0	0.0	895
1970	0.0	0.0	0.0	45.4	145.3	179.6	160.8	193.3	124.0	54.5	0.0	0.0	903
1971	0.0	0.0	0.0	51.2	169.5	155.6	166.2	199.7	116.6	61.0	0.0	0.0	920
1972	0.0	0.0	0.0	58.2	135.7	203.9	161.2	165.5	106.0	62.0	0.0	0.0	892
1973	0.0	0.0	0.0	46.4	141.4	167.2	191.3	174.1	116.6	58.3	0.0	0.0	895
1974	0.0	0.0	0.0	41.1	113.7	159.9	173.3	152.2	103.8	67.5	0.0	0.0	811
1975	0.0	0.0	0.0	43.7	138.5	148.1	167.0	149.3	122.5	51.3	0.0	0.0	820
1976	0.0	0.0	0.0	59.6	177.2	140.3	150.7	175.1	126.2	57.4	0.0	0.0	887
1977	0.0	0.0	0.0	74.2	148.2	181.4	181.0	152.2	88.3	71.5	0.0	0.0	897
1978	0.0	0.0	0.0	61.9	156.6	184.1	202.1	179.6	116.8	79.0	0.0	0.0	980
1979	0.0	0.0	0.0	39.2	133.1	143.4	169.0	171.6	132.0	54.1	0.0	0.0	842
1980	0.0	0.0	0.0	78.7	173.1	161.4	168.6	135.8	98.5	61.7	0.0	0.0	878
1981	0.0	0.0	0.0	62.8	162.1	158.1	170.1	178.8	124.0	56.4	0.0	0.0	912
1982	0.0	0.0	0.0	56.5	138.1	151.0	155.8	138.8	107.9	49.9	0.0	0.0	798
1983	0.0	0.0	0.0	52.9	132.9	167.0	155.5	164.5	106.1	53.5	0.0	0.0	832
1984	0.0	0.0	0.0	73.0	146.0	154.1	189.7	180.1	91.7	51.7	0.0	0.0	886
1985	0.0	0.0	0.0	57.5	139.6	163.1	170.7	153.9	99.7	63.6	0.0	0.0	848
1986	0.0	0.0	0.0	65.1	141.1	157.6	143.5	162.0	95.8	50.8	0.0	0.0	816
MIN	0.0	0.0	0.0	0.0	88.9	105.7	121.0	90.4	59.2	26.0	0.0	0.0	629
MAX	0.0	0.0	0.0	78.7	178.7	243.6	235.3	214.7	165.8	79.0	3.2	0.0	980
MEAN	0.0	0.0	0.0	45.8	135.6	156.9	172.7	159.0	106.0	50.3	0.0	0.0	826

GROSS EVAPORATION (mm) -- PRINCE ALBERT

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1911	0.0	0.0	0.0	26.9	110.5	114.8	122.9	89.3	75.1	33.3	0.0	0.0	573
1912	0.0	0.0	0.0	33.3	123.4	115.6	93.8	89.8	71.6	31.6	0.0	0.0	559
1913	0.0	0.0	0.0	32.0	102.4	118.5	159.7	128.6	99.2	32.8	0.0	0.0	673
1914	0.0	0.0	0.0	22.4	85.9	92.0	96.6	92.2	68.7	23.7	0.0	0.0	482
1915	0.0	0.0	0.0	20.1	76.6	79.2	100.8	107.1	64.6	36.4	0.0	0.0	485
1916	0.0	0.0	0.0	22.8	74.1	87.2	108.5	95.7	79.7	40.5	0.0	0.0	508
1917	0.0	0.0	0.0	24.5	124.6	146.8	175.2	134.9	86.0	37.4	1.5	0.0	731
1918	0.0	0.0	0.0	46.4	104.4	133.7	142.6	115.7	81.8	38.2	0.0	0.0	663
1919	0.0	0.0	0.0	35.8	126.2	127.7	96.7	90.2	63.6	31.8	0.0	0.0	572
1920	0.0	0.0	0.0	32.1	125.3	147.1	145.1	114.0	103.2	58.0	0.0	0.0	725
1921	0.0	0.0	0.0	24.9	132.0	129.5	141.1	133.8	97.2	56.6	0.0	0.0	715
1922	0.0	0.0	0.0	25.7	100.3	133.7	160.9	113.3	83.1	43.2	0.0	0.0	660
1923	0.0	0.0	0.0	29.2	116.7	103.4	116.9	99.0	83.1	32.8	0.0	0.0	581
1924	0.0	0.0	0.0	24.1	105.5	122.2	134.4	119.4	77.5	39.9	0.0	0.0	623
1925	0.0	0.0	0.0	31.2	106.0	90.7	110.9	97.8	73.0	32.1	0.0	0.0	542
1926	0.0	0.0	0.0	31.1	104.8	138.4	126.5	104.1	75.0	24.0	0.0	0.0	604
1927	0.0	0.0	0.0	27.4	94.1	93.6	116.3	112.3	78.2	23.9	0.0	0.0	546
1928	0.0	0.0	0.0	26.1	92.9	92.1	102.4	89.1	75.6	29.5	0.0	0.0	508
1929	0.0	0.0	0.0	23.6	94.4	119.3	147.9	120.9	68.2	27.5	0.0	0.0	602
1930	0.0	0.0	0.0	20.0	97.2	107.5	116.2	112.3	66.1	28.3	0.0	0.0	547
1931	0.0	0.0	0.0	32.1	125.0	135.5	156.2	124.6	68.9	39.4	0.0	0.0	682
1932	0.0	0.0	0.0	21.9	91.2	107.5	101.9	108.6	87.0	32.8	0.0	0.0	551
1933	0.0	0.0	0.0	27.2	79.6	89.4	123.3	109.0	70.4	29.7	0.0	0.0	528
1934	0.0	0.0	0.0	45.9	119.8	106.8	154.1	152.6	78.2	53.0	0.0	0.0	710
1935	0.0	0.0	0.0	42.8	88.8	100.6	126.9	122.9	63.7	42.5	0.0	0.0	588
1936	0.0	0.0	0.0	45.4	111.6	118.1	139.5	126.1	81.4	52.6	0.0	0.0	675
1937	0.0	0.0	0.0	25.5	111.2	149.1	177.3	153.7	86.7	35.8	0.0	0.0	739
1938	0.0	0.0	0.0	43.2	112.4	125.0	149.6	128.3	81.1	37.7	0.0	0.0	677
1939	0.0	0.0	0.0	32.0	106.5	112.1	145.0	152.9	93.3	41.8	0.0	0.0	683
1940	0.0	0.0	0.0	44.3	129.6	122.2	145.2	167.2	82.1	39.3	0.0	0.0	730
1941	0.0	0.0	0.0	38.5	110.7	123.5	158.9	127.3	75.7	37.8	0.0	0.0	672
1942	0.0	0.0	0.0	23.1	106.5	110.2	118.5	102.6	62.3	39.3	0.0	0.0	562
1943	0.0	0.0	0.0	47.0	111.0	136.0	150.8	142.4	97.4	40.4	0.0	0.0	725
1944	0.0	0.0	0.0	48.4	115.8	118.8	122.6	131.1	76.6	38.8	0.0	0.0	652
1945	0.0	0.0	0.0	39.6	107.5	108.3	162.8	124.6	79.4	35.5	0.0	0.0	658
1946	0.0	0.0	0.0	47.2	94.9	102.4	127.4	115.3	69.2	35.1	0.0	0.0	592
1947	0.0	0.0	0.0	29.8	89.5	115.3	144.3	120.1	80.5	35.8	0.0	0.0	615
1948	0.0	0.0	0.0	0.0	93.9	108.0	131.5	98.8	95.0	48.5	0.0	0.0	576
1949	0.0	0.0	0.0	51.6	121.6	131.2	138.1	129.8	82.7	43.4	0.0	0.0	699
1950	0.0	0.0	0.0	38.5	105.4	124.5	115.2	118.8	90.3	36.9	0.0	0.0	630
1951	0.0	0.0	0.0	37.7	104.4	122.3	131.6	124.1	92.0	37.2	0.0	0.0	649
1952	0.0	0.0	0.0	64.0	127.1	147.7	178.2	168.9	86.6	57.3	0.0	0.0	830
1953	0.0	0.0	0.0	39.0	106.5	124.7	158.2	140.7	92.2	53.7	0.0	0.0	715
1954	0.0	0.0	0.0	0.0	111.6	121.9	139.2	110.0	80.1	48.2	0.0	0.0	611
1955	0.0	0.0	0.0	35.8	123.5	142.0	140.6	149.9	106.6	50.9	0.0	0.0	749
1956	0.0	0.0	0.0	36.1	123.7	154.2	130.8	137.9	87.3	52.2	0.0	0.0	722
1957	0.0	0.0	0.0	43.2	119.2	127.7	172.0	128.3	89.9	43.9	0.0	0.0	724
1958	0.0	0.0	0.0	41.7	124.3	147.9	150.3	149.2	101.7	43.4	0.0	0.0	758
1959	0.0	0.0	0.0	53.3	126.4	128.0	170.0	135.8	89.9	37.2	0.0	0.0	741
1960	0.0	0.0	0.0	46.9	112.0	139.9	151.7	141.1	111.6	45.8	0.0	0.0	749
1961	0.0	0.0	0.0	46.2	129.1	162.9	169.0	173.0	95.0	49.0	0.0	0.0	824
1962	0.0	0.0	0.0	40.6	118.0	150.0	178.4	162.8	108.8	50.9	0.0	0.0	809
1963	0.0	0.0	0.0	44.9	126.1	139.1	136.2	110.2	77.4	43.9	0.0	0.0	678
1964	0.0	0.0	0.0	44.1	133.0	155.3	167.9	140.2	86.1	42.9	0.0	0.0	770
1965	0.0	0.0	0.0	41.6	135.2	141.0	143.4	139.6	84.2	53.2	0.0	0.0	738
1966	0.0	0.0	0.0	44.7	134.7	119.3	131.3	133.0	94.7	50.6	0.0	0.0	708
1967	0.0	0.0	0.0	37.7	124.0	154.9	156.1	145.7	119.6	42.5	0.0	0.0	781
1968	0.0	0.0	0.0	50.3	130.3	149.7	155.2	122.7	88.6	39.8	0.0	0.0	737
1969	0.0	0.0	0.0	58.7	142.5	169.2	173.0	176.9	105.9	43.9	0.0	0.0	870
1970	0.0	0.0	0.0	53.1	146.1	162.4	163.5	174.7	110.2	58.8	0.0	0.0	869
1971	0.0	0.0	0.0	57.1	160.0	148.7	167.1	160.7	119.1	60.1	0.0	0.0	873
1972	0.0	0.0	0.0	63.0	134.2	193.6	160.4	158.2	106.5	65.9	0.0	0.0	882
1973	0.0	0.0	0.0	53.1	125.8	127.2	144.9	136.9	98.5	44.6	0.0	0.0	731
1974	0.0	0.0	0.0	44.4	102.5	141.0	154.6	121.6	88.3	56.5	0.0	0.0	709
1975	0.0	0.0	0.0	44.1	112.9	134.1	156.7	142.3	97.6	47.5	0.0	0.0	735
1976	0.0	0.0	0.0	55.4	154.0	125.6	155.7	152.0	115.3	57.3	0.0	0.0	815
1977	0.0	0.0	0.0	70.8	131.9	150.9	157.3	129.5	71.4	53.0	0.0	0.0	765
1978	0.0	0.0	0.0	44.7	115.5	130.9	144.5	125.3	85.9	50.0	0.0	0.0	697
1979	0.0	0.0	0.0	39.7	108.7	133.4	158.3	133.9	99.8	46.9	0.0	0.0	721
1980	0.0	0.0	0.0	66.6	158.4	167.6	171.2	138.4	91.0	54.8	0.0	0.0	848
1981	0.0	0.0	0.0	55.5	141.2	161.9	171.3	145.7	114.6	45.4	0.0	0.0	836
1982	0.0	0.0	0.0	50.7	113.0	139.3	155.1	133.6	97.8	46.1	0.0	0.0	736
1983	0.0	0.0	0.0	38.7	115.7	138.1	156.2	147.2	94.9	45.6	0.0	0.0	736
1984	0.0	0.0	0.0	56.7	122.0	145.2	168.9	149.5	85.2	46.1	0.0	0.0	774
1985	0.0	0.0	0.0	50.1	110.4	127.3	137.9	120.9	92.5	49.9	0.0	0.0	689
1986	0.0	0.0	0.0	51.7	131.5	142.2	139.3	134.8	84.5	47.1	0.0	0.0	731
MIN	0.0	0.0	0.0	0.0	74.1	79.2	93.8	89.1	62.3	23.7	0.0	0.0	482
MAX	0.0	0.0	0.0	70.8	160.0	193.6	178.4	176.9	119.6	65.9	1.5	0.0	882
MEAN	0.0	0.0	0.0	39.3	115.3	129.0	143.4	129.1	87.2	42.9	0.0	0.0	686

GROSS EVAPORATION (mm) -- REGINA

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1911	0.0	0.0	0.0	58.9	133.9	141.1	151.0	138.0	104.0	36.9	0.0	0.0	764
1912	0.0	0.0	0.0	55.6	140.5	182.4	145.6	132.5	93.3	53.8	0.0	0.0	804
1913	0.0	0.0	0.0	62.1	138.3	153.5	179.9	147.3	113.8	49.0	0.0	0.0	844
1914	0.0	0.0	0.0	51.1	144.8	150.0	178.3	143.1	125.4	42.3	0.0	0.0	835
1915	0.0	0.0	0.0	68.2	150.5	148.8	150.0	171.6	88.0	58.0	0.0	0.0	835
1916	0.0	0.0	0.0	44.0	126.8	160.3	180.1	176.7	127.4	44.6	0.0	0.0	860
1917	0.0	0.0	0.0	41.2	148.7	177.2	221.0	166.8	105.8	59.0	0.0	0.0	920
1918	0.0	0.0	0.0	51.7	132.0	184.4	161.9	164.4	114.4	59.5	0.0	0.0	868
1919	0.0	0.0	0.0	45.0	170.3	181.4	201.0	200.6	117.8	49.9	0.0	0.0	966
1920	0.0	0.0	0.0	45.0	163.1	169.8	211.0	187.6	115.6	52.9	0.0	0.0	945
1921	0.0	0.0	0.0	49.2	139.6	139.9	169.8	167.3	112.5	53.6	0.0	0.0	832
1922	0.0	0.0	0.0	38.9	134.0	159.9	204.1	171.2	125.6	48.1	0.0	0.0	882
1923	0.0	0.0	0.0	49.1	149.6	138.2	140.4	153.1	120.9	57.5	0.0	0.0	809
1924	0.0	0.0	0.0	53.3	149.4	159.1	184.9	173.9	124.9	62.3	0.0	0.0	908
1925	0.0	0.0	0.0	52.4	157.0	149.6	205.5	211.3	108.9	50.0	0.0	0.0	935
1926	0.0	0.0	0.0	65.9	152.8	169.4	179.9	154.8	91.2	49.2	0.0	0.0	863
1927	0.0	0.0	0.0	48.8	133.8	167.4	145.1	141.8	122.3	42.1	0.0	0.0	801
1928	0.0	0.0	0.0	34.1	164.0	122.2	147.6	138.2	112.3	52.5	0.0	0.0	771
1929	0.0	0.0	0.0	36.9	109.6	151.9	234.3	213.3	104.6	39.9	0.0	0.0	890
1930	0.0	0.0	0.0	38.5	137.7	144.2	167.1	158.4	101.4	37.7	0.0	0.0	785
1931	0.0	0.0	0.0	75.5	175.4	226.9	236.7	185.1	107.5	58.1	0.0	0.0	1065
1932	0.0	0.0	0.0	48.4	144.4	133.2	190.4	180.6	124.9	50.7	0.0	0.0	873
1933	0.0	0.0	0.0	55.0	145.9	168.5	193.8	164.9	132.5	64.3	0.0	0.0	925
1934	0.0	0.0	0.0	80.8	193.3	169.4	210.9	219.5	133.8	70.4	0.0	0.0	1078
1935	0.0	0.0	0.0	64.2	143.1	163.2	178.5	185.5	156.0	67.0	0.0	0.0	958
1936	0.0	0.0	0.0	60.9	188.0	165.8	214.6	195.2	142.3	74.0	0.0	0.0	1041
1937	0.0	0.0	0.0	59.0	177.9	245.0	252.4	241.5	152.2	58.3	0.0	0.0	1186
1938	0.0	0.0	0.0	47.4	149.5	167.0	184.0	184.9	138.3	54.9	0.0	0.0	926
1939	0.0	0.0	0.0	61.5	166.8	142.8	209.7	218.4	136.0	63.4	0.0	0.0	998
1940	0.0	0.0	0.0	52.0	158.7	177.6	208.5	236.4	127.8	54.3	0.0	0.0	1015
1941	0.0	0.0	0.0	38.4	133.6	168.0	178.4	145.3	118.0	57.4	0.0	0.0	839
1942	0.0	0.0	0.0	44.6	121.9	145.5	125.5	134.4	93.2	55.3	0.0	0.0	721
1943	0.0	0.0	0.0	63.2	138.9	146.2	166.5	183.3	137.0	57.0	0.0	0.0	892
1944	0.0	0.0	0.0	54.9	140.1	118.4	177.3	179.6	114.6	69.2	0.0	0.0	854
1945	0.0	0.0	0.0	44.0	136.2	144.6	159.9	168.0	107.7	54.3	0.0	0.0	815
1946	0.0	0.0	0.0	76.6	121.9	149.2	174.9	179.0	110.4	49.9	0.0	0.0	862
1947	0.0	0.0	0.0	43.9	130.5	118.2	188.2	146.8	112.0	62.1	0.0	0.0	802
1948	0.0	0.0	0.0	32.4	149.2	146.8	175.0	174.2	135.4	65.6	0.0	0.0	879
1949	0.0	0.0	0.0	70.1	152.4	158.9	186.7	200.8	125.7	54.0	0.0	0.0	949
1950	0.0	0.0	0.0	43.1	135.1	166.2	158.9	160.8	115.5	55.6	0.0	0.0	835
1951	0.0	0.0	0.0	39.8	150.4	146.5	181.5	149.6	95.5	38.8	0.0	0.0	802
1952	0.0	0.0	0.0	57.5	132.6	166.4	170.5	163.5	97.4	64.4	0.0	0.0	852
1953	0.0	0.0	0.0	47.5	111.2	134.6	173.8	180.9	137.9	65.8	0.0	0.0	852
1954	0.0	0.0	0.0	51.8	134.2	141.0	180.5	144.5	104.2	64.7	0.0	0.0	821
1955	0.0	0.0	0.0	44.4	114.3	153.3	155.4	177.0	122.0	64.7	0.0	0.0	831
1956	0.0	0.0	0.0	43.1	119.8	188.8	143.9	163.6	124.4	61.2	0.0	0.0	845
1957	0.0	0.0	0.0	48.4	163.8	152.5	216.0	163.8	133.5	49.5	0.0	0.0	927
1958	0.0	0.0	0.0	65.1	187.9	175.3	200.7	225.9	145.7	71.4	0.0	0.0	1072
1959	0.0	0.0	0.0	74.8	153.1	186.5	220.9	211.0	128.9	41.8	0.0	0.0	1017
1960	0.0	0.0	0.0	55.0	154.6	183.6	185.7	187.4	135.6	77.9	0.0	0.0	980
1961	0.0	0.0	0.0	68.9	173.2	238.2	255.8	283.0	154.2	69.3	0.0	0.0	1243
1962	0.0	0.0	0.0	58.5	132.3	164.6	198.9	194.7	146.1	65.4	0.0	0.0	960
1963	0.0	0.0	0.0	52.1	121.7	139.0	176.5	171.0	126.4	63.0	0.0	0.0	850
1964	0.0	0.0	0.0	61.3	175.1	169.8	203.9	215.4	140.1	76.4	0.0	0.0	1042
1965	0.0	0.0	0.0	46.6	157.1	172.9	160.2	194.0	100.1	81.2	0.0	0.0	912
1966	0.0	0.0	0.0	54.0	175.2	160.3	181.3	170.4	135.1	64.2	0.0	0.0	940
1967	0.0	0.0	0.0	44.9	164.0	186.8	246.6	225.5	161.5	54.8	0.0	0.0	1084
1968	0.0	0.0	0.0	72.0	168.9	178.8	218.4	146.9	102.0	52.7	0.0	0.0	940
1969	0.0	0.0	0.0	50.6	142.8	160.1	160.5	193.4	131.8	46.4	0.0	0.0	886
1970	0.0	0.0	0.0	50.2	121.7	180.8	200.8	233.9	127.2	64.3	0.0	0.0	979
1971	0.0	0.0	0.0	55.8	178.3	169.0	191.0	247.9	158.8	74.6	0.0	0.0	1075
1972	0.0	0.0	0.0	75.7	145.1	220.8	197.0	208.6	151.1	72.7	0.0	0.0	1071
1973	0.0	0.0	0.0	59.0	137.4	192.2	215.4	211.7	128.4	70.7	0.0	0.0	1015
1974	0.0	0.0	0.0	41.3	116.5	195.2	222.2	162.3	112.5	68.6	0.0	0.0	918
1975	0.0	0.0	0.0	41.3	135.8	147.7	199.9	179.8	126.1	61.8	0.0	0.0	892
1976	0.0	0.0	0.0	62.0	191.2	150.3	203.0	225.7	159.9	81.2	0.0	0.0	1073
1977	0.0	0.0	0.0	93.9	146.1	168.4	185.1	159.9	93.7	74.5	0.0	0.0	922
1978	0.0	0.0	0.0	61.9	147.4	174.4	196.5	200.4	144.5	68.3	0.0	0.0	993
1979	0.0	0.0	0.0	41.8	133.4	214.1	219.2	208.7	163.2	70.6	0.0	0.0	1051
1980	0.0	0.0	0.0	91.0	218.8	220.7	216.4	177.0	135.4	74.8	0.0	0.0	1134
1981	0.0	0.0	0.0	83.6	188.1	192.1	223.1	186.9	157.5	58.3	0.0	0.0	1090
1982	0.0	0.0	0.0	59.8	135.9	179.9	176.1	182.8	135.5	52.4	0.0	0.0	922
1983	0.0	0.0	0.0	57.6	137.6	195.0	170.9	209.2	133.4	59.1	0.0	0.0	963
1984	0.0	0.0	0.0	81.8	171.6	184.6	249.7	251.0	128.6	63.2	0.0	0.0	1130
1985	0.0	0.0	0.0	64.9	152.5	166.4	213.7	170.2	107.2	68.5	0.0	0.0	944
1986	0.0	0.0	0.0	65.1	170.3	206.5	188.0	207.4	112.8	63.7	0.0	0.0	1014
MIN	0.0	0.0	0.0	32.4	109.6	118.2	125.5	132.5	88.0	36.9	0.0	0.0	721
MAX	0.0	0.0	0.0	93.9	218.8	245.0	255.8	283.0	163.2	81.2	0.0	0.0	1243
MEAN	0.0	0.0	0.0	55.6	149.2	167.5	189.8	184.0	124.3	59.4	0.0	0.0	930

GROSS EVAPORATION (mm) -- SASKATOON

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1911	0.0	0.0	0.0	44.0	134.2	154.1	171.0	166.7	90.0	47.6	0.0	0.0	808
1912	0.0	0.0	0.0	55.2	162.1	181.3	130.8	138.2	92.3	49.2	0.0	0.0	809
1913	0.0	0.0	0.0	53.8	128.4	159.6	201.2	154.6	120.6	42.0	0.0	0.0	860
1914	0.0	0.0	0.0	41.7	114.5	150.5	216.4	182.9	116.7	42.6	0.0	0.0	865
1915	0.0	0.0	0.0	47.5	121.9	151.2	151.9	171.7	82.4	57.2	0.0	0.0	784
1916	0.0	0.0	0.0	29.9	116.2	159.7	159.3	138.0	100.5	43.8	0.0	0.0	747
1917	0.0	0.0	0.0	35.0	121.9	153.3	215.8	163.9	106.4	54.4	5.1	0.0	856
1918	0.0	0.0	0.0	51.4	132.1	192.9	176.2	155.8	109.3	57.9	0.0	0.0	876
1919	0.0	0.0	0.0	44.3	142.7	220.3	216.2	181.7	112.9	47.2	0.0	0.0	965
1920	0.0	0.0	0.0	0.0	160.3	166.8	217.5	187.9	112.1	53.1	0.0	0.0	898
1921	0.0	0.0	0.0	47.0	124.3	143.9	170.7	163.2	93.4	38.4	0.0	0.0	781
1922	0.0	0.0	0.0	37.2	111.1	143.9	194.8	152.2	118.4	41.5	0.0	0.0	799
1923	0.0	0.0	0.0	48.6	146.9	119.6	134.1	125.9	99.4	55.0	0.0	0.0	730
1924	0.0	0.0	0.0	50.9	136.0	157.7	213.3	150.1	110.8	46.1	0.0	0.0	865
1925	0.0	0.0	0.0	51.1	148.7	125.0	164.6	170.2	98.8	42.1	0.0	0.0	801
1926	0.0	0.0	0.0	64.6	119.8	165.7	174.4	156.9	85.2	47.7	0.0	0.0	814
1927	0.0	0.0	0.0	45.7	124.5	141.7	148.4	131.8	101.6	42.1	0.0	0.0	736
1928	0.0	0.0	0.0	56.2	166.0	131.8	146.4	159.5	117.8	32.5	0.0	0.0	810
1929	0.0	0.0	0.0	32.5	97.3	158.4	187.7	173.7	85.3	46.2	0.0	0.0	781
1930	0.0	0.0	0.0	30.4	126.0	127.6	149.6	143.1	81.8	39.8	0.0	0.0	698
1931	0.0	0.0	0.0	61.7	132.7	162.2	163.7	137.7	72.7	39.4	0.0	0.0	770
1932	0.0	0.0	0.0	43.0	132.2	132.1	159.2	145.3	96.4	37.4	0.0	0.0	746
1933	0.0	0.0	0.0	52.4	134.5	185.0	221.0	191.6	102.5	49.4	0.0	0.0	936
1934	0.0	0.0	0.0	73.3	188.4	136.3	201.1	180.8	100.4	55.0	0.0	0.0	935
1935	0.0	0.0	0.0	59.1	154.6	176.3	226.4	201.1	135.3	64.2	0.0	0.0	1017
1936	0.0	0.0	0.0	58.9	217.9	188.8	277.4	229.3	135.3	65.7	0.0	0.0	1173
1937	0.0	0.0	0.0	71.2	193.7	267.3	290.8	229.2	138.3	55.5	0.0	0.0	1246
1938	0.0	0.0	0.0	54.0	156.5	184.7	212.0	182.9	131.5	50.3	0.0	0.0	972
1939	0.0	0.0	0.0	70.5	157.9	148.3	234.8	236.5	127.2	63.6	0.0	0.0	1039
1940	0.0	0.0	0.0	60.6	178.0	185.0	189.2	242.9	114.8	60.5	0.0	0.0	1031
1941	0.0	0.0	0.0	56.7	104.7	151.9	146.5	141.5	94.4	43.4	0.0	0.0	739
1942	0.0	0.0	0.0	48.8	121.7	140.7	131.9	132.6	83.1	54.4	0.0	0.0	713
1943	0.0	0.0	0.0	55.2	111.7	138.6	169.1	164.0	112.1	40.2	0.0	0.0	791
1944	0.0	0.0	0.0	39.1	97.8	120.5	143.3	166.1	106.5	52.7	0.0	0.0	726
1945	0.0	0.0	0.0	38.4	122.2	143.3	173.3	157.2	110.1	54.9	0.0	0.0	799
1946	0.0	0.0	0.0	72.0	129.1	166.5	204.3	172.9	103.5	44.9	0.0	0.0	893
1947	0.0	0.0	0.0	45.3	134.9	162.1	242.5	172.2	108.4	62.7	0.0	0.0	928
1948	0.0	0.0	0.0	33.2	141.8	148.1	196.7	186.8	146.1	73.7	0.0	0.0	926
1949	0.0	0.0	0.0	70.8	155.1	174.8	174.6	170.9	130.9	55.1	0.0	0.0	932
1950	0.0	0.0	0.0	44.7	131.5	172.6	156.0	145.8	119.0	47.4	0.0	0.0	817
1951	0.0	0.0	0.0	43.1	135.8	153.3	161.8	152.0	96.8	39.1	0.0	0.0	782
1952	0.0	0.0	0.0	67.2	132.8	153.3	175.9	177.1	107.4	63.5	0.0	0.0	877
1953	0.0	0.0	0.0	47.8	116.4	157.8	184.6	175.4	123.2	71.2	0.0	0.0	877
1954	0.0	0.0	0.0	43.5	130.5	141.8	165.4	116.8	95.5	61.1	0.0	0.0	754
1955	0.0	0.0	0.0	39.6	136.7	175.5	171.0	180.7	120.7	57.0	0.0	0.0	881
1956	0.0	0.0	0.0	37.4	133.0	179.3	148.4	144.8	111.5	56.6	0.0	0.0	811
1957	0.0	0.0	0.0	46.7	141.1	133.1	201.3	140.2	106.8	47.9	0.0	0.0	817
1958	0.0	0.0	0.0	50.8	147.0	170.9	177.4	187.1	122.3	59.7	0.0	0.0	915
1959	0.0	0.0	0.0	66.8	147.8	171.6	210.6	165.6	110.1	42.5	0.0	0.0	915
1960	0.0	0.0	0.0	53.4	138.0	166.2	190.9	181.3	142.9	64.4	0.0	0.0	937
1961	0.0	0.0	0.0	53.6	148.0	202.8	211.0	222.9	121.1	57.0	0.0	0.0	1016
1962	0.0	0.0	0.0	50.2	129.3	176.3	179.0	167.2	111.8	56.6	0.0	0.0	870
1963	0.0	0.0	0.0	44.6	112.5	131.7	147.3	137.1	99.7	59.5	0.0	0.0	732
1964	0.0	0.0	0.0	53.0	141.0	162.0	188.4	181.8	88.7	46.5	0.0	0.0	862
1965	0.0	0.0	0.0	43.2	173.3	174.8	177.9	194.0	101.4	76.1	0.0	0.0	941
1966	0.0	0.0	0.0	51.1	178.9	149.6	168.8	169.2	134.7	65.1	0.0	0.0	917
1967	0.0	0.0	0.0	43.1	161.9	182.0	268.6	235.5	198.4	47.3	0.0	0.0	1137
1968	0.0	0.0	0.0	65.4	157.9	187.2	180.6	142.9	95.1	46.9	0.0	0.0	876
1969	0.0	0.0	0.0	51.7	143.4	169.4	168.8	204.8	119.5	42.9	0.0	0.0	901
1970	0.0	0.0	0.0	44.3	135.0	165.8	165.9	201.9	126.5	62.5	0.0	0.0	902
1971	0.0	0.0	0.0	56.4	178.0	151.5	183.8	200.2	132.3	74.5	0.0	0.0	977
1972	0.0	0.0	0.0	77.9	137.9	210.4	164.3	189.4	130.3	74.4	0.0	0.0	985
1973	0.0	0.0	0.0	60.3	147.4	170.8	210.2	213.4	132.2	71.6	0.0	0.0	1006
1974	0.0	0.0	0.0	47.9	129.8	189.1	215.6	171.1	121.5	72.4	0.0	0.0	947
1975	0.0	0.0	0.0	45.4	129.5	152.0	194.6	172.3	132.6	59.6	0.0	0.0	886
1976	0.0	0.0	0.0	62.6	186.9	147.3	184.5	201.8	137.6	66.8	0.0	0.0	987
1977	0.0	0.0	0.0	85.4	143.8	194.5	204.5	156.3	90.5	73.0	0.0	0.0	948
1978	0.0	0.0	0.0	65.4	145.0	176.7	183.1	171.0	106.0	64.6	0.0	0.0	912
1979	0.0	0.0	0.0	43.4	134.8	167.0	203.4	204.9	160.6	62.2	0.0	0.0	976
1980	0.0	0.0	0.0	80.5	172.3	193.4	210.2	163.8	118.1	67.1	0.0	0.0	1005
1981	0.0	0.0	0.0	61.4	164.5	161.9	179.3	185.3	140.1	55.9	0.0	0.0	948
1982	0.0	0.0	0.0	59.2	134.9	151.2	180.7	159.3	127.9	58.4	0.0	0.0	872
1983	0.0	0.0	0.0	51.8	125.3	176.8	173.3	193.3	126.4	60.3	0.0	0.0	907
1984	0.0	0.0	0.0	74.9	160.9	177.0	246.7	223.5	107.4	57.1	0.0	0.0	1048
1985	0.0	0.0	0.0	57.4	134.3	167.0	197.6	174.7	111.0	68.6	0.0	0.0	911
1986	0.0	0.0	0.0	65.7	149.8	168.5	170.7	178.3	99.3	51.2	0.0	0.0	884
MIN	0.0	0.0	0.0	0.0	97.3	119.6	130.8	116.8	72.7	32.5	0.0	0.0	698
MAX	0.0	0.0	0.0	85.4	217.9	267.3	290.8	242.9	198.4	76.1	5.1	0.0	1246
MEAN	0.0	0.0	0.0	52.2	141.4	163.8	186.8	173.6	113.3	54.7	0.1	0.0	886

GROSS EVAPORATION (mm) -- SWIFT CURRENT

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1911	0.0	0.0	0.0	50.0	152.6	166.6	190.7	138.3	103.3	39.0	0.0	0.0	840
1912	0.0	0.0	0.0	45.1	132.3	178.3	160.8	153.5	100.8	55.3	0.0	0.0	826
1913	0.0	0.0	0.0	55.7	103.0	146.2	179.1	183.1	146.0	45.1	0.0	0.0	858
1914	0.0	0.0	0.0	56.9	162.0	164.6	228.2	185.8	136.8	31.9	0.0	0.0	966
1915	0.0	0.0	0.0	72.1	160.5	158.5	144.1	156.2	79.0	47.0	0.0	0.0	818
1916	0.0	0.0	0.0	64.3	135.4	159.0	161.6	147.7	110.4	43.5	0.0	0.0	822
1917	0.0	0.0	0.0	38.2	148.3	169.1	212.8	158.4	97.6	55.0	0.0	0.0	879
1918	0.0	0.0	0.0	29.1	132.5	192.9	204.6	189.4	123.4	48.9	0.0	0.0	921
1919	0.0	0.0	0.0	40.2	144.6	180.9	246.1	208.9	127.0	52.1	0.0	0.0	1000
1920	0.0	0.0	0.0	55.1	182.2	179.3	183.5	202.5	136.9	61.7	0.0	0.0	1001
1921	0.0	0.0	0.0	52.3	151.1	189.9	225.9	204.0	129.6	63.7	0.0	0.0	1017
1922	0.0	0.0	0.0	53.3	158.1	202.7	189.2	202.5	174.4	70.9	0.0	0.0	1051
1923	0.0	0.0	0.0	46.8	166.5	179.8	173.7	154.0	153.6	90.8	0.0	0.0	965
1924	0.0	0.0	0.0	69.4	178.8	181.8	288.2	184.7	128.6	65.0	0.0	0.0	1097
1925	0.0	0.0	0.0	49.7	146.5	179.2	212.8	196.5	102.0	52.3	0.0	0.0	939
1926	0.0	0.0	0.0	57.8	167.4	201.1	218.6	188.6	106.8	63.5	0.0	0.0	1004
1927	0.0	0.0	0.0	50.2	164.6	168.8	178.8	169.2	121.7	44.2	0.0	0.0	898
1928	0.0	0.0	0.0	77.2	169.8	191.9	195.2	207.9	115.6	50.7	0.0	0.0	1008
1929	0.0	0.0	0.0	65.8	170.3	239.6	279.3	257.5	108.4	56.7	0.0	0.0	1178
1930	0.0	0.0	0.0	83.0	191.6	235.6	222.2	208.4	125.3	48.9	0.0	0.0	1115
1931	0.0	0.0	0.0	72.3	180.3	158.2	249.5	195.0	124.6	79.9	0.0	0.0	1060
1932	0.0	0.0	0.0	53.3	144.0	199.0	207.6	191.5	104.2	49.0	0.0	0.0	949
1933	0.0	0.0	0.0	61.0	140.1	189.3	267.2	223.9	126.9	64.2	0.0	0.0	1073
1934	0.0	0.0	0.0	69.8	192.8	166.6	219.7	197.0	126.6	52.8	0.0	0.0	1025
1935	0.0	0.0	0.0	61.5	137.1	170.8	201.0	200.8	161.3	78.0	0.0	0.0	1011
1936	0.0	0.0	0.0	59.3	179.6	192.0	274.9	227.2	153.2	86.8	0.0	0.0	1173
1937	0.0	0.0	0.0	75.1	182.7	237.6	245.1	255.7	158.7	82.5	0.0	0.0	1237
1938	0.0	0.0	0.0	60.5	163.5	183.5	211.8	206.1	158.2	57.7	0.0	0.0	1041
1939	0.0	0.0	0.0	68.8	148.4	142.2	210.7	225.9	145.9	66.0	28.7	0.0	1037
1940	0.0	0.0	0.0	39.8	157.6	173.3	188.1	255.3	132.9	59.8	0.0	0.0	1007
1941	0.0	0.0	0.0	55.3	158.7	203.4	203.3	184.4	108.6	69.8	0.0	0.0	984
1942	0.0	0.0	0.0	65.8	126.5	154.5	163.7	152.3	109.7	66.7	0.0	0.0	839
1943	0.0	0.0	0.0	82.4	127.6	139.2	243.1	235.7	155.3	72.2	0.0	0.0	1055
1944	0.0	0.0	0.0	51.1	145.2	129.2	197.8	173.5	125.9	87.9	0.0	0.0	911
1945	0.0	0.0	0.0	47.4	129.2	159.2	241.8	215.0	121.4	69.9	0.0	0.0	984
1946	0.0	0.0	0.0	71.6	135.2	164.1	203.9	183.7	116.4	51.3	0.0	0.0	926
1947	0.0	0.0	0.0	43.6	138.4	136.6	254.5	187.8	130.0	58.7	0.0	0.0	950
1948	0.0	0.0	0.0	37.8	131.6	139.8	186.7	185.0	152.8	84.3	0.0	0.0	918
1949	0.0	0.0	0.0	78.1	139.5	163.4	196.7	224.0	158.2	62.5	28.9	0.0	1051
1950	0.0	0.0	0.0	46.0	144.6	164.2	179.9	145.9	127.3	55.6	0.0	0.0	864
1951	0.0	0.0	0.0	47.6	154.7	148.2	189.2	170.2	112.8	43.5	0.0	0.0	866
1952	0.0	0.0	0.0	68.2	143.8	178.8	190.6	203.1	130.0	87.7	0.0	0.0	1002
1953	0.0	0.0	0.0	49.4	132.4	144.9	208.8	225.7	154.5	91.5	0.0	0.0	1007
1954	0.0	0.0	0.0	52.9	139.3	166.1	214.5	156.3	109.7	73.0	25.2	0.0	937
1955	0.0	0.0	0.0	48.9	137.5	178.6	166.5	220.1	139.6	86.1	0.0	0.0	977
1956	0.0	0.0	0.0	56.7	151.3	205.3	177.8	183.5	132.6	74.3	0.0	0.0	982
1957	0.0	0.0	0.0	53.4	154.1	154.7	210.3	175.5	141.3	55.1	0.0	0.0	944
1958	0.0	0.0	0.0	52.0	167.1	176.4	203.2	234.4	147.2	75.6	0.0	0.0	1056
1959	0.0	0.0	0.0	75.9	144.8	206.2	218.0	221.9	150.6	53.0	0.0	0.0	1070
1960	0.0	0.0	0.0	69.5	156.4	195.4	229.7	202.0	178.5	83.1	0.0	0.0	1115
1961	0.0	0.0	0.0	62.2	148.0	240.0	238.7	259.5	149.3	72.5	0.0	0.0	1170
1962	0.0	0.0	0.0	79.8	144.0	190.0	213.3	213.9	165.9	75.1	0.0	0.0	1082
1963	0.0	0.0	0.0	59.3	147.6	168.3	221.3	207.3	157.6	114.4	0.0	0.0	1076
1964	0.0	0.0	0.0	72.3	184.9	176.8	270.5	243.1	136.8	108.5	0.0	0.0	1193
1965	0.0	0.0	0.0	44.8	167.9	162.9	191.3	195.1	106.2	96.0	0.0	0.0	964
1966	0.0	0.0	0.0	60.2	190.8	181.1	218.6	213.9	161.2	86.8	0.0	0.0	1113
1967	0.0	0.0	0.0	48.4	162.2	199.7	285.4	243.3	197.0	73.5	0.0	0.0	1209
1968	0.0	0.0	0.0	87.4	181.4	196.5	247.7	192.8	129.3	75.8	0.0	0.0	1111
1969	0.0	0.0	0.0	58.7	156.4	197.6	196.1	270.1	151.2	50.6	0.0	0.0	1081
1970	0.0	0.0	0.0	52.0	138.4	206.1	191.7	237.0	150.8	73.1	0.0	0.0	1049
1971	0.0	0.0	0.0	62.9	198.2	177.2	221.3	290.3	160.4	80.5	0.0	0.0	1191
1972	0.0	0.0	0.0	84.6	141.3	193.8	179.3	213.0	125.8	70.7	0.0	0.0	1008
1973	0.0	0.0	0.0	46.8	151.3	209.2	245.9	251.6	138.4	86.1	0.0	0.0	1129
1974	0.0	0.0	0.0	50.2	128.6	218.0	232.1	164.6	130.3	93.6	0.0	0.0	1017
1975	0.0	0.0	0.0	38.1	123.0	163.4	218.0	162.6	130.7	64.3	0.0	0.0	900
1976	0.0	0.0	0.0	66.0	195.2	157.7	204.8	221.4	166.0	73.3	0.0	0.0	1084
1977	0.0	0.0	0.0	96.0	146.7	197.7	209.3	178.0	107.2	87.2	0.0	0.0	1022
1978	0.0	0.0	0.0	54.9	142.2	177.9	205.1	214.7	150.7	84.7	0.0	0.0	1030
1979	0.0	0.0	0.0	43.2	134.6	193.5	205.1	191.4	160.2	82.6	0.0	0.0	1011
1980	0.0	0.0	0.0	103.1	188.9	177.8	200.2	181.4	144.9	73.5	0.0	0.0	1070
1981	0.0	0.0	0.0	89.7	160.8	162.1	195.6	202.2	169.2	58.3	0.0	0.0	1038
1982	0.0	0.0	0.0	69.7	129.7	159.1	173.4	190.0	135.1	66.8	0.0	0.0	924
1983	0.0	0.0	0.0	60.9	135.8	204.7	212.9	255.9	155.0	76.2	0.0	0.0	1101
1984	0.0	0.0	0.0	92.9	173.9	186.8	263.9	278.6	114.9	69.8	0.0	0.0	1181
1985	0.0	0.0	0.0	72.7	178.1	200.3	261.5	212.3	121.1	79.9	0.0	0.0	1126
1986	0.0	0.0	0.0	69.5	148.0	195.1	199.5	210.4	109.7	69.0	0.0	0.0	1001
MIN	0.0	0.0	0.0	29.1	103.0	129.2	144.1	138.3	79.0	31.9	0.0	0.0	818
MAX	0.0	0.0	0.0	103.1	198.2	240.0	288.2	290.3	197.0	114.4	28.9	0.0	1237
MEAN	0.0	0.0	0.0	60.7	153.9	180.0	212.5	203.3	134.8	68.5	1.1	0.0	1015

GROSS EVAPORATION (mm) -- YORKTON

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1911	0.0	0.0	0.0	50.5	130.4	137.2	149.7	137.5	100.7	38.7	0.0	0.0	745
1912	0.0	0.0	0.0	50.2	154.5	178.2	135.2	119.7	93.1	51.7	0.0	0.0	783
1913	0.0	0.0	0.0	52.8	130.2	153.5	171.2	131.9	109.6	48.4	0.0	0.0	798
1914	0.0	0.0	0.0	45.9	139.6	126.8	139.0	139.3	115.3	41.4	0.0	0.0	747
1915	0.0	0.0	0.0	51.1	143.6	151.5	149.0	156.8	80.4	55.9	0.0	0.0	788
1916	0.0	0.0	0.0	47.4	122.9	158.2	171.1	144.9	97.9	47.6	0.0	0.0	790
1917	0.0	0.0	0.0	37.8	140.5	154.7	186.4	148.9	93.3	52.3	0.0	0.0	814
1918	0.0	0.0	0.0	40.3	120.0	172.3	148.5	127.3	101.1	52.8	0.0	0.0	762
1919	0.0	0.0	0.0	37.4	141.9	174.9	188.5	176.8	105.9	45.2	0.0	0.0	871
1920	0.0	0.0	0.0	0.0	155.1	161.0	199.0	167.8	101.0	45.4	0.0	0.0	829
1921	0.0	0.0	0.0	40.3	111.5	135.6	157.3	150.3	99.8	47.7	0.0	0.0	742
1922	0.0	0.0	0.0	33.0	121.8	146.8	153.6	139.6	110.9	50.4	0.0	0.0	756
1923	0.0	0.0	0.0	42.7	141.7	136.5	131.5	124.6	84.9	50.2	0.0	0.0	712
1924	0.0	0.0	0.0	43.7	124.8	150.2	170.4	129.6	108.9	54.4	0.0	0.0	782
1925	0.0	0.0	0.0	41.9	147.5	144.6	167.6	153.4	96.9	45.0	0.0	0.0	797
1926	0.0	0.0	0.0	52.9	142.6	160.6	164.8	137.1	80.6	44.7	0.0	0.0	783
1927	0.0	0.0	0.0	52.3	122.0	161.7	129.2	147.2	94.1	41.4	0.0	0.0	748
1928	0.0	0.0	0.0	31.9	98.4	132.1	145.0	117.2	95.9	41.3	0.0	0.0	662
1929	0.0	0.0	0.0	32.4	98.2	148.9	218.7	187.7	92.9	34.5	0.0	0.0	813
1930	0.0	0.0	0.0	33.9	125.3	138.4	154.7	140.1	80.4	33.8	0.0	0.0	707
1931	0.0	0.0	0.0	57.0	162.7	219.4	225.1	164.0	94.6	48.5	0.0	0.0	971
1932	0.0	0.0	0.0	40.6	140.1	129.3	173.1	160.4	108.3	44.5	0.0	0.0	796
1933	0.0	0.0	0.0	44.4	136.8	162.7	180.1	145.0	114.5	56.5	0.0	0.0	840
1934	0.0	0.0	0.0	63.0	168.8	162.7	225.8	197.4	105.9	59.2	0.0	0.0	983
1935	0.0	0.0	0.0	52.8	139.8	154.7	184.0	169.5	124.5	59.3	0.0	0.0	885
1936	0.0	0.0	0.0	52.0	174.3	165.2	218.9	188.6	118.9	62.9	0.0	0.0	981
1937	0.0	0.0	0.0	55.9	166.2	234.9	242.6	211.3	123.5	53.4	0.0	0.0	1088
1938	0.0	0.0	0.0	58.0	145.4	172.4	166.7	159.7	119.2	47.8	0.0	0.0	869
1939	0.0	0.0	0.0	54.7	145.2	132.6	190.2	194.9	120.3	52.8	0.0	0.0	891
1940	0.0	0.0	0.0	47.4	140.9	157.1	183.0	207.8	111.7	50.4	0.0	0.0	898
1941	0.0	0.0	0.0	40.6	125.5	167.0	184.2	138.9	107.6	55.6	0.0	0.0	819
1942	0.0	0.0	0.0	38.7	125.6	142.3	150.3	120.6	89.7	55.2	0.0	0.0	722
1943	0.0	0.0	0.0	50.7	114.7	138.2	162.1	147.6	107.7	49.4	0.0	0.0	770
1944	0.0	0.0	0.0	44.9	123.2	131.9	164.7	153.8	106.3	52.5	0.0	0.0	777
1945	0.0	0.0	0.0	35.6	119.2	125.6	146.4	142.9	92.4	52.9	0.0	0.0	715
1946	0.0	0.0	0.0	53.0	108.5	137.5	154.3	144.9	85.9	42.8	0.0	0.0	727
1947	0.0	0.0	0.0	30.4	105.6	107.1	150.4	131.8	94.8	55.2	0.0	0.0	675
1948	0.0	0.0	0.0	0.0	117.1	128.9	146.8	141.8	105.1	57.4	0.0	0.0	697
1949	0.0	0.0	0.0	57.2	120.5	142.3	161.5	151.4	100.1	48.9	0.0	0.0	782
1950	0.0	0.0	0.0	37.3	125.4	155.4	140.9	134.9	96.6	48.6	0.0	0.0	739
1951	0.0	0.0	0.0	39.6	119.4	136.0	160.0	131.0	86.6	38.8	0.0	0.0	711
1952	0.0	0.0	0.0	17.7	123.6	157.7	166.4	149.2	90.9	60.3	0.0	0.0	766
1953	0.0	0.0	0.0	38.0	96.8	122.5	144.1	137.0	107.2	52.1	0.0	0.0	698
1954	0.0	0.0	0.0	42.7	116.8	146.6	150.6	136.8	97.1	57.0	0.0	0.0	747
1955	0.0	0.0	0.0	45.3	139.0	155.8	152.6	177.8	117.9	66.8	0.0	0.0	855
1956	0.0	0.0	0.0	42.9	128.6	166.6	150.6	160.3	117.8	61.6	0.0	0.0	828
1957	0.0	0.0	0.0	40.3	159.7	147.7	202.4	138.7	116.0	53.9	0.0	0.0	859
1958	0.0	0.0	0.0	59.6	164.0	167.5	188.1	190.4	112.0	52.1	0.0	0.0	934
1959	0.0	0.0	0.0	57.4	152.8	172.6	192.7	170.1	105.1	43.4	0.0	0.0	894
1960	0.0	0.0	0.0	44.2	131.9	161.4	189.1	172.4	127.6	58.9	0.0	0.0	886
1961	0.0	0.0	0.0	60.0	141.0	208.2	211.6	241.8	137.5	62.9	0.0	0.0	1063
1962	0.0	0.0	0.0	45.4	123.4	155.2	189.6	176.3	117.0	58.0	0.0	0.0	865
1963	0.0	0.0	0.0	51.0	119.6	149.2	160.0	152.0	115.6	67.0	0.0	0.0	814
1964	0.0	0.0	0.0	47.3	148.1	172.1	177.9	160.8	116.7	62.2	0.0	0.0	885
1965	0.0	0.0	0.0	42.7	144.6	173.0	169.8	159.8	95.3	74.0	0.0	0.0	859
1966	0.0	0.0	0.0	44.8	160.5	161.6	187.4	153.9	132.4	66.8	0.0	0.0	907
1967	0.0	0.0	0.0	39.4	152.7	207.0	232.0	216.3	160.7	54.4	0.0	0.0	1062
1968	0.0	0.0	0.0	60.9	154.2	182.8	190.5	148.5	115.4	51.9	0.0	0.0	904
1969	0.0	0.0	0.0	55.1	150.5	179.5	187.5	180.5	113.9	43.2	0.0	0.0	910
1970	0.0	0.0	0.0	47.8	116.8	159.5	150.4	186.6	111.2	52.3	0.0	0.0	825
1971	0.0	0.0	0.0	48.7	154.7	135.1	159.8	160.5	119.7	61.9	0.0	0.0	840
1972	0.0	0.0	0.0	53.5	119.8	189.3	150.8	150.7	107.8	60.8	0.0	0.0	833
1973	0.0	0.0	0.0	51.5	116.3	138.3	158.6	157.9	106.0	55.9	0.0	0.0	784
1974	0.0	0.0	0.0	38.1	104.1	171.8	180.2	136.8	103.8	61.5	0.0	0.0	796
1975	0.0	0.0	0.0	34.3	114.3	128.4	185.3	146.8	102.2	53.3	0.0	0.0	765
1976	0.0	0.0	0.0	49.4	159.9	132.9	183.5	165.8	136.6	71.4	0.0	0.0	900
1977	0.0	0.0	0.0	82.6	153.8	173.4	170.6	152.8	84.6	68.8	0.0	0.0	887
1978	0.0	0.0	0.0	49.1	147.1	170.5	163.2	169.0	112.9	59.8	0.0	0.0	872
1979	0.0	0.0	0.0	41.2	122.2	184.7	209.4	166.0	114.3	56.6	0.0	0.0	894
1980	0.0	0.0	0.0	73.1	185.6	174.3	171.3	133.4	105.7	57.1	0.0	0.0	900
1981	0.0	0.0	0.0	69.4	137.5	163.0	175.1	144.2	121.0	44.9	0.0	0.0	855
1982	0.0	0.0	0.0	58.6	121.2	139.3	142.4	128.2	99.9	43.6	0.0	0.0	733
1983	0.0	0.0	0.0	37.3	108.4	153.1	148.0	175.1	116.7	49.3	0.0	0.0	788
1984	0.0	0.0	0.0	61.6	133.6	154.0	185.3	191.5	101.5	53.4	0.0	0.0	881
1985	0.0	0.0	0.0	59.9	129.0	143.2	157.5	137.3	97.8	67.1	0.0	0.0	792
1986	0.0	0.0	0.0	51.2	161.0	160.8	163.6	166.9	94.1	56.2	0.0	0.0	854
MIN	0.0	0.0	0.0	0.0	96.8	107.1	129.2	117.2	80.4	33.8	0.0	0.0	662
MAX	0.0	0.0	0.0	82.6	185.6	234.9	242.6	241.8	160.7	74.0	0.0	0.0	1088
MEAN	0.0	0.0	0.0	46.2	134.6	156.4	171.6	156.7	106.4	53.1	0.0	0.0	825

GROSS EVAPORATION (mm) -- BRANDON

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1911	0.0	0.0	0.0	29.4	116.6	108.3	135.5	102.4	78.7	26.8	0.0	0.0	598
1912	0.0	0.0	0.0	39.8	127.3	167.8	138.9	116.0	81.6	43.2	0.0	0.0	714
1913	0.0	0.0	0.0	44.2	125.1	176.3	156.1	114.7	69.5	34.6	0.0	0.0	721
1914	0.0	0.0	0.0	43.0	141.2	175.4	165.1	142.6	93.4	26.4	0.0	0.0	787
1915	0.0	0.0	0.0	43.2	138.6	143.0	162.1	152.2	76.3	42.0	0.0	0.0	757
1916	0.0	0.0	0.0	40.3	114.2	116.5	128.6	118.5	99.5	41.5	0.0	0.0	659
1917	0.0	0.0	0.0	48.5	153.6	167.4	153.3	147.6	69.8	40.7	0.0	0.0	781
1918	0.0	0.0	0.0	50.6	121.1	152.4	149.0	131.3	87.4	42.9	0.0	0.0	735
1919	0.0	0.0	0.0	24.9	99.1	96.8	142.6	103.8	89.0	43.2	0.0	0.0	599
1920	0.0	0.0	0.0	39.2	116.8	125.0	161.0	132.8	82.1	49.6	0.0	0.0	707
1921	0.0	0.0	0.0	35.9	122.4	136.1	147.5	131.3	62.4	21.9	0.0	0.0	657
1922	0.0	0.0	0.0	34.5	125.6	140.5	149.9	119.5	58.1	26.2	0.0	0.0	654
1923	0.0	0.0	0.0	39.5	115.4	148.6	148.3	114.5	71.5	38.2	0.0	0.0	676
1924	0.0	0.0	0.0	40.3	128.4	152.4	173.1	144.8	99.1	48.6	0.0	0.0	787
1925	0.0	0.0	0.0	45.2	126.2	125.3	171.7	150.7	81.7	41.9	0.0	0.0	743
1926	0.0	0.0	0.0	42.2	123.3	154.7	167.4	138.7	97.4	44.1	0.0	0.0	768
1927	0.0	0.0	0.0	54.6	120.8	147.4	141.9	152.1	94.6	41.5	0.0	0.0	753
1928	0.0	0.0	0.0	38.0	125.8	122.5	118.1	121.8	93.4	46.1	0.0	0.0	666
1929	0.0	0.0	0.0	45.3	133.0	153.0	173.0	172.0	101.4	39.6	0.0	0.0	817
1930	0.0	0.0	0.0	35.4	115.6	128.2	139.1	124.1	99.4	40.4	0.0	0.0	682
1931	0.0	0.0	0.0	49.8	118.6	151.1	153.7	149.6	82.8	40.0	0.0	0.0	746
1932	0.0	0.0	0.0	36.4	149.6	128.2	152.1	142.3	111.7	44.8	0.0	0.0	765
1933	0.0	0.0	0.0	49.5	141.2	134.9	153.0	192.1	107.6	48.0	0.0	0.0	826
1934	0.0	0.0	0.0	64.8	161.7	151.8	186.8	159.7	101.0	43.7	0.0	0.0	869
1935	0.0	0.0	0.0	39.2	132.8	151.1	143.8	152.0	99.0	54.8	0.0	0.0	773
1936	0.0	0.0	0.0	47.9	95.1	155.8	175.6	157.1	103.4	56.6	0.0	0.0	792
1937	0.0	0.0	0.0	38.7	137.7	159.8	171.0	160.1	98.9	49.6	0.0	0.0	816
1938	0.0	0.0	0.0	52.4	129.0	172.1	150.2	117.4	97.1	44.7	0.0	0.0	763
1939	0.0	0.0	0.0	45.4	116.1	110.2	151.9	155.0	87.8	41.1	0.0	0.0	707
1940	0.0	0.0	0.0	45.4	107.7	129.8	140.0	140.4	76.3	34.8	0.0	0.0	674
1941	0.0	0.0	0.0	26.4	100.7	114.0	118.4	108.9	73.3	32.0	0.0	0.0	574
1942	0.0	0.0	0.0	32.4	92.8	108.9	112.2	99.6	67.6	41.8	0.0	0.0	555
1943	0.0	0.0	0.0	44.2	88.9	100.7	118.3	122.4	97.7	49.0	0.0	0.0	621
1944	0.0	0.0	0.0	39.6	95.7	93.1	110.2	112.4	72.5	37.7	0.0	0.0	561
1945	0.0	0.0	0.0	36.2	83.8	112.9	106.4	117.2	93.0	43.9	0.0	0.0	593
1946	0.0	0.0	0.0	47.5	101.7	122.1	134.8	133.3	88.8	40.0	0.0	0.0	668
1947	0.0	0.0	0.0	36.9	98.3	116.8	124.6	116.7	90.7	50.5	0.0	0.0	635
1948	0.0	0.0	0.0	31.7	98.2	108.3	135.3	109.9	105.5	47.0	0.0	0.0	636
1949	0.0	0.0	0.0	43.3	109.0	126.3	135.9	131.9	112.8	53.1	0.0	0.0	712
1950	0.0	0.0	0.0	47.0	115.8	141.1	127.9	133.1	99.5	53.2	0.0	0.0	718
1951	0.0	0.0	0.0	41.1	141.1	146.4	171.6	127.1	86.7	38.8	0.0	0.0	753
1952	0.0	0.0	0.0	52.1	124.3	146.7	167.9	152.4	107.0	63.7	0.0	0.0	814
1953	0.0	0.0	0.0	49.5	109.6	119.0	131.9	147.5	100.5	50.4	0.0	0.0	708
1954	0.0	0.0	0.0	47.1	116.1	132.4	156.0	142.5	100.2	55.1	0.0	0.0	749
1955	0.0	0.0	0.0	41.7	137.3	138.4	148.4	157.2	112.4	54.4	0.0	0.0	790
1956	0.0	0.0	0.0	35.5	114.5	143.9	135.3	144.9	102.1	52.4	0.0	0.0	728
1957	0.0	0.0	0.0	46.5	148.5	130.8	168.5	140.1	101.6	41.9	0.0	0.0	778
1958	0.0	0.0	0.0	61.3	138.7	138.9	152.9	167.7	122.0	53.9	0.0	0.0	835
1959	0.0	0.0	0.0	61.9	134.7	142.9	179.9	173.9	111.1	43.4	0.0	0.0	848
1960	0.0	0.0	0.0	50.8	124.2	158.4	171.1	157.3	113.4	61.1	0.0	0.0	836
1961	0.0	0.0	0.0	57.1	123.8	200.2	177.4	214.2	108.5	55.8	0.0	0.0	937
1962	0.0	0.0	0.0	42.0	115.0	137.0	154.3	142.7	110.3	44.6	0.0	0.0	746
1963	0.0	0.0	0.0	42.6	116.2	128.6	138.7	129.0	97.0	51.3	0.0	0.0	703
1964	0.0	0.0	0.0	40.5	123.0	138.5	130.3	132.3	88.7	56.7	0.0	0.0	710
1965	0.0	0.0	0.0	29.9	118.0	159.2	128.8	129.1	78.6	58.7	0.0	0.0	702
1966	0.0	0.0	0.0	41.4	121.5	140.3	158.4	141.9	105.3	57.7	0.0	0.0	767
1967	0.0	0.0	0.0	39.1	139.1	157.8	175.2	164.9	129.2	46.1	0.0	0.0	851
1968	0.0	0.0	0.0	47.7	117.5	152.7	156.8	123.9	85.8	40.2	0.0	0.0	725
1969	0.0	0.0	0.0	39.3	123.4	141.6	126.3	130.5	90.2	42.7	0.0	0.0	694
1970	0.0	0.0	0.0	43.6	127.4	165.6	166.8	171.2	108.6	57.7	0.0	0.0	841
1971	0.0	0.0	0.0	59.2	148.0	123.0	168.9	165.8	109.9	53.1	0.0	0.0	828
1972	0.0	0.0	0.0	47.9	123.9	165.3	154.3	157.0	117.9	62.8	0.0	0.0	829
1973	0.0	0.0	0.0	71.7	159.2	178.0	179.0	154.8	109.8	55.2	0.0	0.0	908
1974	0.0	0.0	0.0	40.2	111.1	180.2	168.4	142.2	106.4	67.7	0.0	0.0	816
1975	0.0	0.0	0.0	41.8	124.6	134.7	168.3	135.5	96.7	51.8	0.0	0.0	753
1976	0.0	0.0	0.0	51.4	158.0	127.0	157.7	157.7	128.9	67.7	0.0	0.0	848
1977	0.0	0.0	0.0	82.7	147.7	138.3	142.7	142.5	84.0	66.6	0.0	0.0	805
1978	0.0	0.0	0.0	58.1	143.9	154.6	136.7	160.6	121.6	56.4	0.0	0.0	832
1979	0.0	0.0	0.p	36.9	118.1	163.2	160.9	148.8	104.1	44.7	0.0	0.0	777
1980	0.0	0.0	0.0	73.7	171.4	169.9	166.2	123.2	93.0	48.4	0.0	0.0	846
1981	0.0	0.0	0.0	56.8	125.3	128.0	153.4	137.1	111.9	49.8	0.0	0.0	762
1982	0.0	0.0	0.0	54.1	120.3	143.0	141.3	140.7	120.3	46.5	0.0	0.0	766
1983	0.0	0.0	0.0	44.6	121.7	146.6	128.5	160.0	124.3	45.4	0.0	0.0	771
1984	0.0	0.0	0.0	64.9	145.5	151.4	177.1	192.8	103.3	47.0	0.0	0.0	882
1985	0.0	0.0	0.0	65.8	143.6	148.0	158.6	135.0	91.5	57.7	0.0	0.0	800
1986	0.0	0.0	0.0	47.8	149.9	138.9	131.3	143.9	94.8	46.2	0.0	0.0	753
MIN	0.0	0.0	0.0	24.9	83.8	93.1	106.4	99.6	58.1	21.9	0.0	0.0	555
MAX	0.0	0.0	0.0	82.7	171.4	200.2	186.8	214.2	129.2	67.7	0.0	0.0	937
MEAN	0.0	0.0	0.0	45.7	124.9	141.3	150.2	141.2	96.5	47.1	0.0	0.0	747

GROSS EVAPORATION (mm) -- THE PAS

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1911	0.0	0.0	0.0	29.2	96.3	101.0	144.5	110.3	70.2	23.2	0.0	0.0	575
1912	0.0	0.0	0.0	19.2	88.6	127.4	120.9	108.8	72.7	31.1	0.0	0.0	569
1913	0.0	0.0	0.0	30.5	97.5	121.8	157.8	131.7	83.2	32.3	0.0	0.0	655
1914	0.0	0.0	0.0	31.2	96.8	116.0	162.0	144.1	87.6	29.5	0.0	0.0	669
1915	0.0	0.0	0.0	27.1	98.7	95.2	150.5	137.4	62.0	31.4	0.0	0.0	602
1916	0.0	0.0	0.0	32.4	97.2	131.2	159.6	153.8	89.1	41.8	0.0	0.0	705
1917	0.0	0.0	0.0	26.5	116.5	149.3	177.0	125.8	69.4	46.0	0.0	0.0	711
1918	0.0	0.0	0.0	42.7	108.9	138.5	151.7	111.9	77.8	37.9	0.0	0.0	669
1919	0.0	0.0	0.0	37.8	110.9	119.7	97.7	88.0	64.4	34.4	0.0	0.0	553
1920	0.0	0.0	0.0	0.0	112.9	135.0	137.7	112.1	104.2	48.9	0.0	0.0	651
1921	0.0	0.0	0.0	38.0	118.5	114.8	128.1	130.5	101.6	37.0	0.0	0.0	668
1922	0.0	0.0	0.0	44.3	124.4	123.5	100.7	77.7	43.1	26.2	0.0	0.0	540
1923	0.0	0.0	0.0	0.0	125.5	120.2	125.0	124.3	98.8	40.1	0.0	0.0	634
1924	0.0	0.0	0.0	24.2	106.5	133.2	106.7	114.8	71.8	24.2	0.0	0.0	581
1925	0.0	0.0	0.0	21.6	115.8	84.0	121.8	102.7	72.3	36.1	0.0	0.0	554
1926	0.0	0.0	0.0	30.5	91.3	122.0	162.0	130.0	91.7	34.0	0.0	0.0	661
1927	0.0	0.0	0.0	23.4	80.1	114.4	111.2	96.1	63.2	22.8	0.0	0.0	511
1928	0.0	0.0	0.0	30.2	95.2	135.3	145.4	105.3	95.3	47.8	0.0	0.0	654
1929	0.0	0.0	0.0	21.1	89.1	116.4	131.9	121.7	70.3	13.8	0.0	0.0	564
1930	0.0	0.0	0.0	22.1	98.0	86.6	109.7	108.0	75.2	40.6	0.0	0.0	540
1931	0.0	0.0	0.0	35.9	104.4	146.3	139.7	111.9	71.5	34.8	0.0	0.0	645
1932	0.0	0.0	0.0	28.2	111.3	54.9	139.7	118.0	88.6	40.7	0.0	0.0	581
1933	0.0	0.0	0.0	30.9	105.9	123.2	132.4	98.5	114.5	34.7	0.0	0.0	640
1934	0.0	0.0	0.0	55.1	113.8	125.3	162.1	150.4	78.8	30.7	0.0	0.0	716
1935	0.0	0.0	0.0	41.7	110.8	107.3	155.5	129.2	76.3	36.3	0.0	0.0	657
1936	0.0	0.0	0.0	43.1	119.6	116.2	129.4	117.1	73.6	50.0	0.0	0.0	649
1937	0.0	0.0	0.0	25.7	125.8	138.3	160.0	123.6	74.7	34.7	0.0	0.0	683
1938	0.0	0.0	0.0	42.1	89.3	93.0	122.6	110.9	73.1	40.0	0.0	0.0	571
1939	0.0	0.0	0.0	34.4	111.2	116.6	140.8	134.8	80.7	42.7	0.0	0.0	661
1940	0.0	0.0	0.0	42.5	120.6	126.3	144.4	138.0	75.2	31.2	0.0	0.0	678
1941	0.0	0.0	0.0	34.1	118.0	125.3	147.7	135.5	83.1	35.7	0.0	0.0	679
1942	0.0	0.0	0.0	34.7	115.7	156.0	133.3	137.0	77.4	41.2	0.0	0.0	695
1943	0.0	0.0	0.0	39.8	106.1	122.6	134.1	129.5	97.1	40.8	0.0	0.0	670
1944	0.0	0.0	0.0	42.5	110.1	133.6	137.5	132.6	80.8	43.7	0.0	0.0	681
1945	0.0	0.0	0.0	0.0	118.7	148.3	164.2	144.2	91.2	44.3	0.0	0.0	711
1946	0.0	0.0	0.0	46.3	101.8	135.8	134.4	120.1	85.7	38.0	0.0	0.0	662
1947	0.0	0.0	0.0	42.0	106.6	124.3	147.1	128.0	106.8	41.5	0.0	0.0	696
1948	0.0	0.0	0.0	0.0	118.5	125.3	146.8	139.8	90.7	48.2	0.0	0.0	669
1949	0.0	0.0	0.0	47.2	119.7	151.0	143.7	129.4	83.7	45.8	0.0	0.0	721
1950	0.0	0.0	0.0	44.7	117.9	130.8	143.6	125.2	82.0	36.9	0.0	0.0	681
1951	0.0	0.0	0.0	44.2	119.1	114.1	140.5	125.3	81.3	34.5	0.0	0.0	659
1952	0.0	0.0	0.0	52.2	104.7	126.3	152.0	139.9	77.8	46.1	0.0	0.0	699
1953	0.0	0.0	0.0	40.2	109.2	121.5	142.1	113.5	93.8	39.8	0.0	0.0	660
1954	0.0	0.0	0.0	0.0	106.7	127.1	150.8	113.5	87.3	48.1	0.0	0.0	633
1955	0.0	0.0	0.0	43.3	125.3	130.3	160.7	151.8	102.2	48.1	0.0	0.0	762
1956	0.0	0.0	0.0	45.4	119.4	166.1	142.6	168.3	108.2	47.6	0.0	0.0	797
1957	0.0	0.0	0.0	44.1	118.1	132.7	159.1	131.5	95.7	44.3	0.0	0.0	725
1958	0.0	0.0	0.0	39.6	117.9	125.0	140.4	132.6	77.8	35.3	0.0	0.0	669
1959	0.0	0.0	0.0	45.0	111.6	129.8	152.6	131.2	85.1	42.8	0.0	0.0	698
1960	0.0	0.0	0.0	39.3	120.6	136.3	165.8	142.1	113.6	48.1	0.0	0.0	766
1961	0.0	0.0	0.0	52.6	135.4	171.5	174.9	170.9	113.5	49.0	0.0	0.0	868
1962	0.0	0.0	0.0	46.0	128.0	155.8	191.1	162.2	116.1	48.7	0.0	0.0	848
1963	0.0	0.0	0.0	52.4	120.8	145.9	167.4	138.6	100.4	46.1	0.0	0.0	772
1964	0.0	0.0	0.0	50.7	146.7	182.2	175.6	145.4	100.1	48.3	0.0	0.0	849
1965	0.0	0.0	0.0	46.1	121.0	157.1	152.8	130.0	98.3	57.3	0.0	0.0	763
1966	0.0	0.0	0.0	43.3	123.1	127.0	131.6	136.7	96.7	54.4	0.0	0.0	713
1967	0.0	0.0	0.0	0.0	129.6	176.5	207.7	171.2	116.0	45.7	0.0	0.0	847
1968	0.0	0.0	0.0	47.7	118.3	154.7	180.5	138.5	87.5	40.0	0.0	0.0	767
1969	0.0	0.0	0.0	52.6	116.7	161.6	163.8	154.9	93.4	45.3	0.0	0.0	788
1970	0.0	0.0	0.0	39.3	108.2	128.4	153.2	164.3	98.7	47.3	0.0	0.0	739
1971	0.0	0.0	0.0	42.3	105.5	128.2	156.1	146.7	95.0	48.4	0.0	0.0	722
1972	0.0	0.0	0.0	54.8	110.4	146.5	145.5	136.3	94.9	58.6	0.0	0.0	747
1973	0.0	0.0	0.0	46.7	120.4	132.8	157.7	150.2	107.4	40.3	0.0	0.0	756
1974	0.0	0.0	0.0	50.6	107.3	137.0	168.8	145.0	102.8	58.4	0.0	0.0	770
1975	0.0	0.0	0.0	54.1	92.5	121.6	154.4	132.1	91.9	48.5	0.0	0.0	695
1976	0.0	0.0	0.0	60.4	150.1	119.7	148.6	140.0	112.1	54.1	0.0	0.0	785
1977	0.0	0.0	0.0	60.9	120.8	135.6	140.8	125.4	73.4	51.2	0.0	0.0	708
1978	0.0	0.0	0.0	42.3	114.5	116.6	150.4	134.5	83.8	36.3	0.0	0.0	678
1979	0.0	0.0	0.0	41.3	94.7	133.2	144.5	123.5	81.6	39.9	0.0	0.0	659
1980	0.0	0.0	0.0	72.1	126.3	142.7	157.4	132.3	98.6	45.9	0.0	0.0	775
1981	0.0	0.0	0.0	43.6	117.5	129.6	149.1	108.6	90.4	45.2	0.0	0.0	684
1982	0.0	0.0	0.0	52.1	100.4	126.5	158.4	156.5	111.5	38.4	0.0	0.0	744
1983	0.0	0.0	0.0	46.8	95.2	143.8	137.9	142.3	92.3	47.9	0.0	0.0	706
1984	0.0	0.0	0.0	53.4	113.9	145.9	183.6	188.9	96.5	53.1	0.0	0.0	835
1985	0.0	0.0	0.0	59.5	122.0	135.3	175.2	151.7	109.6	56.5	0.0	0.0	810
1986	0.0	0.0	0.0	50.3	133.7	151.8	152.4	159.8	91.7	57.3	0.0	0.0	797
MIN	0.0	0.0	0.0	0.0	80.1	54.9	97.7	77.7	43.1	13.8	0.0	0.0	511
MAX	0.0	0.0	0.0	72.1	150.1	182.2	207.7	188.9	116.1	58.6	0.0	0.0	868
MEAN	0.0	0.0	0.0	38.1	112.4	130.3	148.0	131.9	88.5	41.7	0.0	0.0	691

GROSS EVAPORATION (mm) -- WINNIPEG

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1911	0.0	0.0	0.0	32.7	121.3	111.6	142.6	105.0	82.8	27.8	0.0	0.0	624
1912	0.0	0.0	0.0	42.5	132.9	175.7	145.6	122.7	83.2	44.1	0.0	0.0	747
1913	0.0	0.0	0.0	45.3	130.5	184.7	164.7	119.4	69.9	34.6	0.0	0.0	749
1914	0.0	0.0	0.0	45.3	150.9	188.3	172.9	150.8	96.8	20.2	0.0	0.0	825
1915	0.0	0.0	0.0	45.3	144.2	149.4	172.3	161.0	77.0	44.2	0.0	0.0	793
1916	0.0	0.0	0.0	41.8	118.5	120.8	132.7	123.5	104.9	44.2	0.0	0.0	687
1917	0.0	0.0	0.0	50.9	162.6	178.8	162.9	157.0	71.6	43.8	0.0	0.0	828
1918	0.0	0.0	0.0	54.3	127.5	159.4	158.0	138.2	92.7	45.9	0.0	0.0	776
1919	0.0	0.0	0.0	24.4	102.4	97.2	149.3	109.3	93.2	45.7	0.0	0.0	622
1920	0.0	0.0	0.0	41.1	121.2	128.3	168.7	138.0	80.3	49.1	0.0	0.0	727
1921	0.0	0.0	0.0	38.3	129.0	141.7	152.4	127.7	56.6	19.7	0.0	0.0	665
1922	0.0	0.0	0.0	38.3	116.9	159.0	161.0	110.5	69.1	36.2	0.0	0.0	691
1923	0.0	0.0	0.0	45.4	143.9	159.4	150.0	159.7	119.4	54.9	0.0	0.0	833
1924	0.0	0.0	0.0	41.3	136.0	162.6	180.3	157.6	101.4	49.8	0.0	0.0	829
1925	0.0	0.0	0.0	47.8	136.5	129.0	180.4	149.9	81.8	43.6	0.0	0.0	769
1926	0.0	0.0	0.0	45.1	153.2	168.4	173.7	147.0	100.1	43.7	0.0	0.0	831
1927	0.0	0.0	0.0	59.9	127.2	153.0	145.8	162.0	97.3	41.2	0.0	0.0	786
1928	0.0	0.0	0.0	38.5	130.6	127.8	119.0	125.5	96.0	48.2	0.0	0.0	686
1929	0.0	0.0	0.0	47.6	140.3	164.9	181.0	186.2	104.5	41.2	0.0	0.0	866
1930	0.0	0.0	0.0	38.7	119.3	134.6	142.4	131.0	101.6	40.5	0.0	0.0	708
1931	0.0	0.0	0.0	54.4	126.3	160.6	172.9	161.6	80.3	37.9	0.0	0.0	794
1932	0.0	0.0	0.0	39.3	159.6	133.2	158.2	157.8	118.3	47.3	0.0	0.0	814
1933	0.0	0.0	0.0	52.2	144.9	184.5	184.7	191.0	110.6	50.7	0.0	0.0	919
1934	0.0	0.0	0.0	58.4	170.2	159.5	193.8	175.2	105.1	48.1	0.0	0.0	910
1935	0.0	0.0	0.0	43.1	140.7	157.9	151.8	159.8	104.2	59.6	0.0	0.0	817
1936	0.0	0.0	0.0	51.8	151.3	165.0	185.8	168.4	109.6	62.1	0.0	0.0	894
1937	0.0	0.0	0.0	42.9	144.2	168.5	175.0	169.4	103.2	53.6	0.0	0.0	857
1938	0.0	0.0	0.0	56.9	134.1	172.4	153.2	193.1	133.3	61.6	0.0	0.0	905
1939	0.0	0.0	0.0	52.8	135.6	139.1	202.5	157.2	100.1	49.5	0.0	0.0	837
1940	0.0	0.0	0.0	49.4	132.3	153.9	168.8	165.8	103.6	47.3	0.0	0.0	821
1941	0.0	0.0	0.0	33.3	122.8	123.1	141.3	141.6	93.5	46.1	0.0	0.0	702
1942	0.0	0.0	0.0	41.5	121.9	141.8	157.3	141.4	104.9	55.4	0.0	0.0	764
1943	0.0	0.0	0.0	60.7	125.5	126.4	158.2	153.9	118.6	64.0	0.0	0.0	807
1944	0.0	0.0	0.0	53.9	118.0	117.1	165.7	155.8	78.6	46.8	0.0	0.0	736
1945	0.0	0.0	0.0	41.3	114.4	143.8	149.8	159.6	102.2	50.8	0.0	0.0	762
1946	0.0	0.0	0.0	63.1	135.0	155.5	173.3	170.4	114.3	50.6	0.0	0.0	862
1947	0.0	0.0	0.0	44.1	124.8	146.3	159.8	135.3	110.2	54.4	0.0	0.0	775
1948	0.0	0.0	0.0	38.3	136.7	145.3	150.8	144.2	132.8	65.7	0.0	0.0	814
1949	0.0	0.0	0.0	47.7	130.0	156.0	172.9	157.7	109.0	51.5	0.0	0.0	825
1950	0.0	0.0	0.0	41.1	99.1	152.2	139.5	140.2	96.4	48.2	0.0	0.0	717
1951	0.0	0.0	0.0	48.9	152.3	151.7	176.0	138.9	89.2	45.0	0.0	0.0	802
1952	0.0	0.0	0.0	74.8	139.7	159.6	160.4	163.1	122.3	62.8	0.0	0.0	883
1953	0.0	0.0	0.0	53.3	121.8	131.5	161.7	153.2	98.5	49.3	0.0	0.0	769
1954	0.0	0.0	0.0	46.8	128.1	141.0	142.3	131.7	94.6	53.3	0.0	0.0	738
1955	0.0	0.0	0.0	50.9	143.6	140.1	163.4	186.0	119.8	57.0	0.0	0.0	861
1956	0.0	0.0	0.0	44.3	123.6	170.5	139.8	146.2	102.2	57.5	0.0	0.0	784
1957	0.0	0.0	0.0	45.4	160.0	138.5	167.4	151.6	98.2	49.8	0.0	0.0	811
1958	0.0	0.0	0.0	69.9	168.5	175.1	160.0	166.3	119.8	52.9	0.0	0.0	913
1959	0.0	0.0	0.0	56.4	137.3	154.8	178.4	172.0	101.7	43.2	0.0	0.0	844
1960	0.0	0.0	0.0	46.0	148.5	162.2	212.1	170.2	119.5	65.4	0.0	0.0	924
1961	0.0	0.0	0.0	50.9	155.7	220.9	178.0	212.1	105.8	62.2	0.0	0.0	986
1962	0.0	0.0	0.0	41.7	116.2	147.7	156.3	147.4	116.3	48.0	0.0	0.0	773
1963	0.0	0.0	0.0	53.3	140.0	158.2	187.2	168.5	128.7	77.5	0.0	0.0	913
1964	0.0	0.0	0.0	54.5	155.3	152.7	161.0	190.6	129.0	70.6	0.0	0.0	914
1965	0.0	0.0	0.0	47.7	146.9	196.5	163.6	156.4	98.9	63.7	0.0	0.0	874
1966	0.0	0.0	0.0	49.6	132.8	163.1	157.7	154.0	120.2	52.9	0.0	0.0	830
1967	0.0	0.0	0.0	46.8	139.5	170.7	175.4	130.9	157.6	49.5	0.0	0.0	920
1968	0.0	0.0	0.0	59.1	135.8	171.8	169.6	139.6	103.6	51.0	0.0	0.0	830
1969	0.0	0.0	0.0	56.7	131.5	148.2	146.3	163.0	96.7	44.6	0.0	0.0	787
1970	0.0	0.0	0.0	43.7	124.5	153.2	180.5	187.5	103.5	57.5	0.0	0.0	850
1971	0.0	0.0	0.0	50.2	147.9	128.8	157.0	166.9	114.4	43.9	0.0	0.0	809
1972	0.0	0.0	0.0	43.5	136.7	169.3	151.7	150.8	117.1	55.8	0.0	0.0	825
1973	0.0	0.0	0.0	62.5	146.0	147.4	161.9	144.6	111.9	44.7	0.0	0.0	819
1974	0.0	0.0	0.0	39.4	112.9	185.7	208.0	163.7	105.4	63.6	0.0	0.0	879
1975	0.0	0.0	0.0	49.9	131.7	132.9	173.0	137.3	108.3	54.9	0.0	0.0	788
1976	0.0	0.0	0.0	56.1	146.9	155.9	197.5	179.0	144.0	67.7	0.0	0.0	947
1977	0.0	0.0	0.0	93.0	167.5	144.6	170.8	143.6	91.2	65.0	0.0	0.0	876
1978	0.0	0.0	0.0	62.1	166.8	153.8	154.6	163.5	117.7	56.1	0.0	0.0	874
1979	0.0	0.0	0.0	42.5	118.0	171.4	179.3	150.7	114.5	57.0	0.0	0.0	833
1980	0.0	0.0	0.0	81.4	192.2	194.3	202.8	135.2	107.0	54.6	0.0	0.0	967
1981	0.0	0.0	0.0	64.9	156.9	151.3	171.8	148.1	112.4	58.3	0.0	0.0	864
1982	0.0	0.0	0.0	63.3	148.3	164.4	162.7	163.9	124.2	43.3	0.0	0.0	870
1983	0.0	0.0	0.0	54.9	143.6	149.8	169.6	174.6	118.4	46.7	0.0	0.0	858
1984	0.0	0.0	0.0	70.1	148.3	134.1	155.4	175.4	104.1	46.3	0.0	0.0	834
1985	0.0	0.0	0.0	55.5	131.1	143.2	154.4	127.8	94.3	56.2	0.0	0.0	762
1986	0.0	0.0	0.0	51.9	126.5	150.4	140.5	153.2	90.8	50.2	0.0	0.0	763
MIN	0.0	0.0	0.0	24.4	99.1	97.2	119.0	105.0	56.6	19.7	0.0	0.0	622
MAX	0.0	0.0	0.0	93.0	192.2	220.9	212.1	212.1	157.6	77.5	0.0	0.0	986
MEAN	0.0	0.0	0.0	50.2	137.3	153.7	164.7	154.5	104.1	50.6	0.0	0.0	815

PRECIPITATION

PRECIPITATION (mm) -- CALGARY

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1911	11.2	14.2	26.4	26.9	127.8	66.8	55.1	110.7	22.6	13.0	15.5	4.3	495
1912	15.2	2.0	8.6	52.1	36.1	109.5	132.1	69.9	71.1	27.7	17.3	0.3	542
1913	32.5	14.2	12.7	5.3	57.7	99.3	15.5	131.8	22.1	16.8	24.6	0.3	433
1914	23.6	29.2	19.3	15.2	13.2	67.1	64.0	55.4	28.2	46.2	69.1	19.1	450
1915	10.2	5.6	1.5	11.7	79.5	102.1	101.1	19.8	59.2	55.1	11.9	7.6	465
1916	20.1	15.5	19.3	21.6	78.7	37.1	37.8	51.6	21.3	30.5	7.1	12.7	353
1917	8.6	12.7	4.1	22.9	44.7	50.3	11.9	38.6	24.1	35.1	0.3	37.6	291
1918	7.6	15.2	11.2	7.4	34.0	6.6	34.3	64.5	24.6	2.8	2.5	20.8	232
1919	8.6	28.4	14.0	12.7	24.1	7.4	41.7	96.5	34.3	15.7	19.8	1.0	304
1920	29.7	25.1	9.4	54.4	23.1	34.0	125.5	2.3	8.4	37.8	2.5	14.0	366
1921	22.6	15.2	49.0	54.9	18.5	25.1	52.6	40.9	27.2	2.0	33.0	1.3	342
1922	8.1	4.6	13.0	40.9	10.4	48.3	50.5	36.1	39.4	6.1	4.8	7.4	269
1923	7.6	15.0	57.2	24.9	136.7	196.3	85.3	30.7	14.0	0.3	11.2	27.4	607
1924	21.3	27.9	61.0	31.8	22.6	127.0	63.8	113.3	32.0	23.9	35.6	56.9	617
1925	9.1	10.4	36.8	28.7	14.7	82.6	50.8	40.9	129.0	33.8	16.3	5.6	459
1926	7.1	23.9	13.0	26.2	11.9	116.3	29.7	81.8	232.7	18.8	38.9	18.0	618
1927	3.6	17.8	21.6	1.8	69.3	111.8	245.4	71.4	110.7	25.1	46.7	32.8	758
1928	12.4	21.3	32.3	24.1	4.8	214.6	38.9	48.3	1.0	13.7	5.6	5.6	423
1929	12.2	14.0	13.7	36.1	50.5	65.8	33.0	17.0	25.9	34.5	39.4	25.4	368
1930	8.6	8.4	21.3	75.9	30.2	57.4	37.3	27.2	34.8	21.3	32.3	13.2	368
1931	1.3	3.8	49.0	28.2	14.2	55.1	40.6	11.7	43.4	5.8	8.1	39.4	301
1932	10.2	10.9	26.9	98.3	86.4	119.9	54.6	45.7	30.7	21.6	20.3	8.6	534
1933	10.7	10.2	5.1	56.4	52.8	28.4	13.2	69.6	5.1	32.8	12.7	32.5	329
1934	5.6	6.1	36.1	15.7	15.2	102.6	56.4	35.1	56.6	11.7	6.6	6.6	354
1935	30.2	13.7	23.9	41.1	76.7	93.7	48.8	48.8	9.7	46.5	8.1	11.2	452
1936	16.5	6.6	13.7	16.3	54.9	37.3	3.3	38.4	28.7	17.0	3.6	8.4	245
1937	42.9	5.6	42.2	36.8	46.5	81.8	80.8	50.3	65.0	20.6	32.5	7.6	513
1938	3.8	17.5	20.1	19.1	87.4	65.5	77.7	47.5	20.8	24.6	27.2	13.2	424
1939	7.9	16.0	41.7	27.7	36.1	202.7	17.0	13.0	38.1	75.4	5.8	3.3	485
1940	6.1	22.4	20.8	89.9	27.4	45.5	102.4	5.1	74.4	40.6	12.7	8.6	456
1941	11.7	10.4	19.6	7.4	85.6	80.8	28.7	79.5	56.1	3.6	0.5	7.4	391
1942	16.8	39.6	10.2	6.9	68.6	94.2	124.7	54.4	46.2	17.0	36.1	7.4	522
1943	23.6	19.3	30.7	7.1	59.7	70.1	30.5	50.8	16.0	26.2	0.3	1.8	336
1944	5.6	24.1	26.2	20.1	68.3	82.6	122.9	38.6	27.4	4.6	7.1	5.1	433
1945	18.3	30.7	37.8	39.1	83.3	64.0	56.1	99.8	76.5	24.9	42.7	26.7	600
1946	6.9	5.8	19.3	1.5	54.4	95.5	65.8	86.4	44.2	28.4	38.6	24.6	471
1947	16.0	39.4	31.2	20.3	36.8	124.0	30.5	78.0	47.0	21.6	49.5	10.4	505
1948	17.8	41.9	31.8	61.2	119.9	70.1	32.5	43.9	10.2	0.8	11.2	12.7	454
1949	41.4	9.9	14.7	1.5	14.5	48.8	28.7	16.5	15.5	33.8	0.3	38.9	264
1950	13.5	14.7	39.1	23.9	21.1	47.5	133.6	77.5	13.5	34.5	19.6	4.1	442
1951	22.9	33.5	21.3	59.7	52.3	133.1	129.3	165.6	49.3	61.2	7.1	38.9	774
1952	12.4	31.0	35.3	21.3	45.7	147.1	78.0	36.3	20.6	8.6	6.9	0.8	444
1953	24.1	38.6	20.1	77.0	44.2	149.4	65.8	54.9	27.4	0.5	7.4	30.0	539
1954	44.2	25.1	37.8	40.4	57.9	84.6	20.1	238.3	28.4	4.6	3.3	4.1	589
1955	5.6	29.5	28.4	63.5	68.3	15.0	70.6	8.6	61.0	4.6	9.1	38.1	402
1956	34.5	11.2	24.9	29.0	30.2	130.6	38.6	79.2	21.1	21.1	12.2	21.3	454
1957	25.1	13.7	16.8	26.2	21.1	64.0	41.7	78.7	26.9	50.3	24.1	5.3	394
1958	7.9	19.6	25.1	42.7	15.5	97.0	60.7	17.3	57.2	2.0	17.3	6.4	369
1959	11.2	17.5	8.1	25.9	46.2	116.6	58.4	65.8	18.0	9.7	37.3	14.0	429
1960	19.8	31.2	5.8	30.2	52.8	86.1	42.7	41.7	11.7	19.8	12.7	17.5	372
1961	5.6	30.0	4.8	37.8	42.7	9.9	153.7	26.7	22.1	41.4	3.8	12.4	391
1962	11.7	11.2	10.4	15.0	56.9	45.2	33.3	51.3	26.9	9.7	4.3	7.6	283
1963	25.4	7.9	14.2	19.1	19.6	146.3	90.4	16.8	50.5	0.3	13.2	21.1	425
1964	1.8	2.0	8.4	13.2	63.8	101.6	72.1	8.1	57.4	18.0	20.8	24.1	391
1965	11.7	16.0	16.0	12.4	44.2	169.9	117.6	69.9	81.5	11.4	31.0	7.6	589
1966	10.2	5.3	4.8	42.7	58.4	79.2	113.3	30.5	4.6	14.5	33.8	5.6	403
1967	20.6	9.7	19.6	26.9	61.0	54.1	7.6	14.5	1.5	18.3	6.4	15.2	255
1968	14.2	2.3	18.5	18.5	49.8	54.9	66.5	25.7	61.7	18.3	3.0	23.6	357
1969	14.2	12.4	6.6	56.4	29.5	126.5	75.2	15.5	52.3	31.8	4.3	2.8	427
1970	12.4	9.4	23.1	35.3	19.1	159.0	57.4	6.6	23.4	24.1	17.0	9.7	396
1971	24.1	10.4	27.2	18.0	18.0	95.0	73.4	29.7	40.4	25.7	1.5	27.4	391
1972	17.3	21.6	11.2	16.8	31.0	140.5	71.4	56.4	56.1	18.5	5.1	35.6	481
1973	3.3	18.5	9.7	25.7	28.2	86.1	38.1	83.6	27.7	7.1	23.4	8.6	360
1974	24.1	3.3	17.0	50.5	71.1	18.8	38.4	64.0	37.1	11.2	6.6	4.1	346
1975	7.1	12.4	22.6	15.5	68.1	70.9	63.0	27.7	22.9	15.5	7.6	35.1	368
1976	4.8	12.4	10.4	13.7	55.9	60.5	69.6	92.5	38.1	15.5	21.1	10.9	405
1977	21.5	0.2	6.4	5.6	97.0	29.3	63.3	92.1	77.5	4.3	8.6	13.7	419
1978	28.4	10.8	6.6	79.2	75.8	59.6	55.8	104.7	82.3	8.6	12.7	8.7	533
1979	7.3	8.0	10.2	37.0	41.4	47.5	46.3	28.5	19.9	19.8	4.3	15.0	285
1980	12.6	10.6	14.0	22.2	95.1	103.6	50.0	31.3	41.0	31.2	16.2	18.4	446
1981	4.7	8.7	35.6	2.6	142.1	68.9	127.0	28.4	40.1	38.2	7.0	4.0	507
1982	22.6	10.4	27.0	12.0	81.8	86.8	75.1	24.0	62.8	3.7	6.6	8.1	421
1983	8.8	5.6	22.7	55.2	9.6	47.8	59.0	42.0	16.0	4.1	10.6	13.4	295
1984	9.9	2.6	20.3	15.5	65.8	73.0	24.6	16.4	108.2	18.3	5.3	7.3	367
1985	3.4	15.9	2.8	23.9	21.9	40.9	53.2	66.2	123.8	16.7	11.3	8.7	389
1986	0.7	11.3	5.8	11.4	67.5	81.1	93.7	21.7	145.6	10.6	11.7	1.2	462
MIN	0.7	0.2	1.5	1.5	4.8	6.6	3.3	2.3	1.0	0.3	0.3	0.3	232
MAX	44.2	41.9	61.0	98.3	142.1	214.6	245.4	238.3	232.7	75.4	69.1	56.9	774
MEAN	14.8	15.7	20.9	30.2	50.6	83.1	63.8	52.6	43.8	20.7	16.0	14.7	427

PRECIPITATION (mm) -- EDMONTON

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1911	30.0	7.9	9.9	11.2	49.5	96.5	148.1	114.0	24.9	13.0	13.2	6.6	525
1912	29.2	4.1	10.2	39.9	59.7	77.0	120.9	112.0	28.7	18.8	10.2	2.5	513
1913	63.2	16.0	14.0	25.9	20.1	93.0	110.5	122.2	12.7	12.7	1.5	4.6	496
1914	26.4	27.2	8.9	9.7	46.0	216.7	82.3	64.0	74.7	27.2	21.6	37.8	642
1915	26.4	0.5	2.5	23.4	33.0	138.7	107.7	82.3	24.6	5.3	15.2	13.7	473
1916	27.7	22.1	20.3	29.7	45.0	66.5	84.1	94.0	71.9	8.6	18.0	44.2	532
1917	48.0	30.2	3.0	26.7	22.9	43.7	80.0	70.4	10.4	17.0	12.2	22.9	387
1918	36.6	8.9	23.4	24.4	42.7	83.1	67.8	76.2	36.6	4.3	7.9	41.9	454
1919	27.4	13.7	15.0	19.1	72.4	22.1	61.2	24.1	35.6	57.9	48.0	20.8	417
1920	51.3	7.6	32.0	21.3	61.7	114.0	59.2	50.0	33.3	19.8	4.6	6.4	461
1921	20.1	34.5	41.9	8.4	32.3	78.2	92.7	39.6	16.8	2.0	16.0	4.1	387
1922	19.1	22.1	14.5	38.1	32.5	26.7	43.9	88.9	19.6	21.3	5.8	16.3	349
1923	26.7	19.6	42.7	8.6	43.4	103.4	82.3	66.5	24.1	9.1	4.3	11.7	442
1924	37.1	12.4	36.1	16.0	37.1	54.4	108.5	73.2	13.0	30.7	17.5	40.9	477
1925	24.9	43.2	16.0	65.0	27.2	61.7	42.9	66.3	24.9	32.8	20.3	17.8	443
1926	16.3	7.6	22.6	8.1	91.7	53.1	56.1	122.9	70.9	14.7	25.7	37.3	527
1927	15.0	22.9	11.7	15.5	51.6	78.7	108.0	20.6	54.4	6.6	39.6	24.6	449
1928	8.9	5.1	30.5	23.4	54.4	55.1	125.5	43.2	18.0	7.9	0.3	12.7	385
1929	26.2	26.7	19.8	38.9	16.5	38.1	96.3	57.7	8.6	3.6	26.9	24.9	384
1930	14.5	3.6	5.3	15.7	45.0	65.8	47.8	36.6	31.8	18.5	22.4	8.1	315
1931	0.3	0.3	31.8	11.4	45.7	151.6	77.7	106.7	14.2	25.4	17.8	26.7	510
1932	14.0	20.3	22.6	51.6	41.4	53.1	84.6	13.2	24.9	12.7	39.1	15.7	393
1933	10.7	21.1	44.5	18.3	50.3	85.1	94.0	36.3	47.2	45.2	28.2	72.4	553
1934	16.8	14.2	22.4	37.1	72.6	106.2	75.4	43.7	60.7	5.1	11.7	20.8	487
1935	63.5	4.6	27.9	62.2	74.9	96.5	37.8	67.6	17.8	49.0	58.9	43.4	604
1936	45.2	14.7	7.4	24.6	83.3	48.5	50.3	45.7	24.1	30.7	24.9	19.3	419
1937	23.6	5.8	9.7	17.8	42.9	22.9	211.1	39.6	49.3	16.0	26.7	25.9	491
1938	14.0	11.9	9.4	12.4	31.2	71.4	85.3	97.3	3.0	22.1	36.6	34.3	429
1939	22.4	58.4	21.1	19.1	134.1	36.6	32.5	0.8	46.0	43.9	12.4	11.4	439
1940	23.9	14.2	70.1	66.5	60.5	63.0	77.0	26.4	3.3	47.5	39.6	13.0	505
1941	13.0	9.9	7.6	4.1	18.3	132.8	43.4	85.6	23.9	31.2	17.5	11.9	399
1942	4.8	13.0	7.6	37.1	42.7	172.2	89.4	56.4	37.6	14.0	78.7	36.1	590
1943	19.8	17.8	33.3	15.0	45.5	127.3	65.3	99.8	10.9	37.6	7.9	11.9	492
1944	10.2	38.6	34.0	17.8	86.6	127.0	77.0	30.0	32.0	6.6	18.8	11.7	490
1945	47.2	12.2	4.8	23.1	8.1	37.8	84.3	54.4	21.6	37.3	17.0	20.6	369
1946	36.6	22.6	5.8	18.8	19.6	107.7	71.9	98.3	38.6	5.3	21.8	30.0	477
1947	31.5	33.5	11.4	43.2	27.7	67.3	64.0	61.2	78.5	27.7	19.8	33.8	500
1948	26.7	48.5	13.0	72.4	43.4	37.6	67.8	34.8	26.4	4.3	12.4	15.0	402
1949	25.7	19.1	10.9	5.1	35.3	11.4	126.0	51.1	15.0	7.6	14.2	32.3	354
1950	30.5	8.9	5.1	25.7	19.1	35.6	70.9	73.4	24.4	4.8	20.3	8.6	327
1951	25.7	37.8	36.6	36.6	74.7	52.8	111.3	43.7	20.8	20.6	25.9	32.3	519
1952	44.2	15.7	12.2	1.3	38.9	119.6	90.7	45.2	32.0	6.1	5.6	3.8	415
1953	50.3	8.6	44.7	30.7	46.2	109.5	190.8	116.3	8.6	7.9	9.9	24.6	648
1954	13.2	9.1	27.9	25.9	81.8	76.2	99.6	140.7	10.2	9.4	6.1	5.1	505
1955	12.4	16.8	27.4	88.1	12.4	36.1	129.3	19.8	86.1	23.4	12.2	47.0	511
1956	28.2	30.5	30.5	16.3	7.1	132.3	69.9	104.9	35.1	12.7	11.7	32.3	511
1957	14.2	18.5	16.3	19.3	11.7	28.2	34.0	92.2	18.8	30.2	30.5	18.0	332
1958	23.1	22.9	9.9	9.4	25.9	58.4	60.2	71.9	104.9	6.6	17.3	25.9	436
1959	23.1	6.4	6.4	7.6	40.9	68.3	68.3	98.0	50.5	41.1	11.4	25.9	448
1960	6.6	22.6	9.7	4.1	59.7	72.6	81.8	94.5	60.7	42.2	17.5	26.9	499
1961	8.6	18.8	4.6	22.9	24.6	46.7	95.0	5.6	25.9	24.9	16.8	20.3	315
1962	25.1	38.9	25.4	35.8	57.2	78.0	80.5	57.4	25.9	11.2	9.7	20.8	466
1963	37.1	22.9	15.7	20.8	32.3	54.9	65.0	27.7	33.3	12.7	8.6	10.2	341
1964	18.3	10.7	10.7	19.1	54.4	26.4	75.2	70.9	64.8	6.4	37.1	18.0	412
1965	50.8	25.9	11.4	16.3	73.7	190.0	53.6	54.4	27.9	5.6	18.0	16.8	544
1966	35.3	12.7	5.1	18.5	28.2	22.6	62.2	163.6	8.6	7.1	16.8	11.9	393
1967	26.2	19.8	31.0	13.5	40.1	43.7	51.3	74.4	0.8	40.9	23.1	26.2	391
1968	25.1	4.8	9.9	16.8	2.5	54.4	78.2	84.8	37.3	9.9	3.0	27.7	355
1969	23.9	19.8	8.9	28.7	33.3	24.9	83.6	114.3	80.0	25.9	17.8	17.8	479
1970	14.7	11.9	22.1	6.9	28.7	91.2	158.8	22.6	34.0	35.6	25.9	18.5	471
1971	42.7	4.1	18.5	2.8	10.9	97.5	127.0	11.9	22.4	3.6	25.1	35.3	402
1972	21.1	30.0	44.7	35.1	56.4	112.3	50.5	77.2	37.6	12.7	21.6	17.3	516
1973	11.7	12.7	5.3	39.4	37.1	147.6	61.5	101.1	47.2	31.0	34.0	27.9	557
1974	40.4	24.4	34.0	23.9	49.0	123.7	126.2	29.2	45.5	4.6	2.0	24.4	527
1975	13.2	18.3	16.3	30.0	39.9	85.9	33.5	121.2	8.4	16.0	4.3	37.3	424
1976	15.2	23.4	10.2	12.7	16.5	90.7	29.5	132.8	29.0	9.4	3.6	41.7	415
1977	21.2	6.7	12.6	19.4	138.3	18.8	141.6	74.0	37.3	0.2	12.2	22.2	504
1978	26.1	11.2	5.7	20.8	69.4	77.8	124.6	92.5	112.5	14.8	36.6	12.3	604
1979	9.4	37.7	7.7	26.2	36.6	71.5	181.8	40.9	21.8	9.2	6.2	35.9	485
1980	29.9	19.9	32.3	1.3	45.1	107.2	45.5	153.7	45.6	14.8	1.6	55.4	552
1981	10.3	7.9	13.7	27.1	37.2	52.3	131.8	24.2	32.0	25.7	0.4	16.4	379
1982	70.0	16.8	35.1	23.1	28.1	13.0	175.7	52.9	29.8	21.4	15.9	3.9	486
1983	3.5	13.5	18.6	11.9	6.8	188.3	77.4	13.2	43.2	19.0	16.2	15.9	427
1984	23.1	5.4	12.9	10.9	78.7	84.9	45.1	23.0	101.9	61.7	17.4	31.9	497
1985	16.0	16.7	4.8	50.9	36.8	84.1	38.2	76.0	44.6	28.9	13.7	29.1	440
1986	11.5	7.8	37.7	35.4	35.4	73.4	123.8	18.2	94.6	20.9	27.2	2.9	489
MIN	0.3	0.3	2.5	1.3	2.5	11.4	29.5	0.8	0.8	0.2	0.3	2.5	315
MAX	70.0	58.4	70.1	88.1	138.3	216.7	211.1	163.6	112.5	61.7	78.7	72.4	648
MEAN	25.3	17.9	19.2	24.5	44.3	78.6	86.4	67.0	36.2	19.5	18.7	22.8	460

PRECIPITATION (mm) -- LETHBRIDGE

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1911	17.8	13.2	8.1	20.3	48.3	119.6	57.7	92.2	105.7	14.5	24.1	19.6	541
1912	17.5	10.2	11.2	5.1	16.8	43.9	70.6	35.8	66.3	27.2	25.1	5.8	336
1913	20.3	7.6	10.7	13.2	43.2	119.4	32.8	49.0	41.9	12.7	9.1	0.3	360
1914	39.4	24.4	51.3	13.7	7.4	63.0	23.6	91.2	27.2	55.1	16.0	34.3	447
1915	12.7	23.9	5.6	1.0	77.0	122.9	87.4	24.4	33.5	24.4	21.1	8.1	442
1916	27.7	29.0	23.1	11.7	95.8	89.9	84.6	75.4	120.9	72.4	12.2	14.7	657
1917	10.9	7.1	4.1	39.9	24.1	36.1	34.8	50.8	42.4	19.6	0.0	33.3	303
1918	17.8	21.1	18.5	3.3	17.0	19.3	21.6	30.2	27.2	6.1	10.9	11.7	205
1919	1.5	24.1	19.1	11.9	71.9	14.2	26.9	26.7	51.8	45.2	32.0	14.0	339
1920	21.3	30.7	22.6	111.0	42.2	10.2	65.8	5.1	1.3	25.1	1.5	20.1	357
1921	14.2	11.9	36.1	30.2	24.4	26.4	82.0	11.7	32.8	5.8	43.9	4.8	324
1922	10.9	10.4	20.6	65.3	22.6	47.5	58.4	10.2	20.6	19.8	11.9	15.2	313
1923	12.2	10.7	19.1	27.7	88.4	113.0	64.8	25.7	4.6	14.0	13.5	23.1	417
1924	16.8	26.4	17.5	14.2	29.7	97.0	13.7	73.9	37.1	15.0	25.9	39.1	406
1925	7.6	25.1	57.4	50.5	10.9	86.4	20.8	47.0	123.4	27.4	4.1	15.7	477
1926	6.1	19.3	2.8	8.6	16.3	118.6	29.2	58.7	117.3	7.9	13.2	14.2	412
1927	7.9	35.3	9.4	37.6	185.9	40.6	49.0	44.2	83.6	14.7	73.2	24.4	606
1928	23.9	20.1	23.6	33.5	22.9	172.5	101.1	39.1	6.1	21.6	7.1	8.4	480
1929	27.4	16.0	34.0	64.8	66.8	94.5	13.2	15.0	52.1	55.9	12.4	48.5	501
1930	9.4	5.1	19.6	38.9	39.1	36.1	47.5	14.5	59.9	14.7	23.4	5.3	313
1931	0.3	6.4	35.6	28.4	31.0	39.4	27.7	4.8	50.5	16.8	30.7	18.5	290
1932	20.6	14.0	26.7	69.3	75.9	52.3	18.8	92.2	25.4	27.2	47.5	18.8	489
1933	8.4	9.7	63.8	63.2	45.7	33.5	23.4	67.1	33.0	62.0	19.6	57.7	487
1934	10.9	7.9	58.4	3.3	18.0	101.6	10.9	15.2	75.4	43.2	28.2	15.0	388
1935	11.9	18.3	27.7	62.5	36.1	8.9	17.8	30.0	5.6	43.2	13.2	11.9	287
1936	30.2	15.7	24.9	19.8	51.1	48.0	10.4	22.9	35.3	17.5	12.2	35.6	324
1937	44.7	10.7	20.1	11.4	60.5	81.0	73.9	21.8	27.9	33.8	17.8	9.7	413
1938	25.9	16.3	35.8	22.6	62.2	37.8	26.4	55.4	17.3	22.9	64.5	10.2	397
1939	5.8	21.3	19.8	16.0	40.1	127.8	4.1	8.6	68.3	15.5	8.4	18.0	354
1940	5.1	37.3	15.2	85.3	30.0	27.9	62.0	3.6	45.2	37.3	27.2	12.7	389
1941	18.5	16.0	26.4	30.0	49.5	71.9	88.9	27.9	54.1	6.4	11.4	13.7	415
1942	6.6	25.1	18.8	25.4	110.2	110.0	114.3	31.8	26.4	7.1	40.9	7.4	524
1943	27.7	17.8	30.2	19.8	29.5	29.7	36.8	30.0	17.5	31.8	15.0	1.0	287
1944	4.1	31.5	33.3	20.1	35.3	44.2	75.7	43.9	27.4	0.3	53.3	16.0	385
1945	17.0	37.3	27.4	41.4	86.6	90.9	22.6	26.9	76.5	18.3	28.4	46.2	520
1946	16.8	12.4	5.3	13.0	50.3	98.3	26.2	33.3	50.0	127.3	73.9	33.8	541
1947	20.1	33.0	44.7	38.6	21.1	145.5	5.3	102.9	94.2	23.6	37.1	14.0	580
1948	21.8	39.1	41.1	22.9	86.1	142.7	52.6	1.8	0.3	5.8	18.3	10.7	443
1949	54.1	24.1	32.5	10.4	130.8	39.6	23.1	15.5	19.1	68.3	5.6	35.3	458
1950	30.2	9.1	35.6	19.3	30.5	33.8	41.4	19.1	11.9	26.4	34.0	23.9	315
1951	33.0	26.7	31.2	79.5	47.0	175.3	22.1	115.3	49.8	58.2	4.8	53.8	697
1952	15.5	18.0	33.5	8.4	36.3	52.3	48.8	65.0	11.2	5.6	19.1	1.0	315
1953	25.7	52.6	39.9	71.1	14.7	155.7	18.3	6.4	17.3	2.0	2.0	24.6	430
1954	62.2	13.5	34.5	38.6	15.2	43.4	25.9	95.5	85.6	3.8	7.4	5.3	431
1955	12.7	55.9	25.4	49.8	136.1	38.6	121.7	3.3	25.1	22.4	19.8	20.3	531
1956	21.6	20.3	26.4	27.7	37.6	81.8	70.1	90.4	25.4	19.1	8.9	23.9	453
1957	36.3	17.8	13.5	42.2	20.3	98.0	7.6	15.0	37.1	72.6	39.6	5.1	405
1958	7.4	52.1	23.9	26.9	37.6	85.3	75.2	39.9	18.0	3.6	56.1	24.9	451
1959	26.9	16.0	13.5	42.2	62.7	98.6	15.7	72.9	19.1	25.7	33.5	31.2	458
1960	18.8	22.9	6.4	40.6	49.8	44.2	5.3	51.6	2.3	18.3	6.1	20.6	287
1961	7.9	10.7	25.9	27.2	47.8	32.5	74.4	19.8	73.4	43.2	11.2	11.4	385
1962	15.5	20.1	22.6	6.6	38.1	45.5	48.5	10.9	38.9	4.1	10.4	10.4	272
1963	28.2	6.9	5.6	14.0	7.6	164.1	58.7	51.6	20.6	0.3	12.4	33.5	403
1964	20.1	9.7	29.2	73.7	94.2	71.9	16.0	7.1	53.6	2.3	24.4	50.5	453
1965	23.6	23.6	24.6	36.1	47.0	162.8	67.8	46.5	71.4	0.8	34.8	11.7	551
1966	20.3	10.7	14.5	41.9	42.9	152.4	98.0	64.5	13.7	37.1	36.6	10.7	543
1967	12.7	15.7	56.1	112.5	56.1	71.6	9.1	20.3	13.0	10.7	14.2	42.4	435
1968	17.5	2.3	7.4	51.3	45.0	71.1	30.2	55.6	118.4	17.3	1.8	40.4	458
1969	36.6	14.7	15.7	8.9	40.1	132.1	39.1	2.5	14.0	13.2	2.3	4.1	323
1970	25.9	12.4	30.0	32.8	23.1	94.7	7.9	15.5	38.9	10.7	27.4	12.7	332
1971	37.3	29.0	13.7	24.9	48.0	74.4	26.2	24.6	26.2	25.1	9.4	27.7	367
1972	37.8	12.7	57.9	23.1	43.2	40.9	63.0	6.4	42.7	18.0	0.3	22.1	368
1973	5.3	13.0	5.8	26.4	27.4	52.3	34.8	20.6	44.7	6.1	24.9	13.5	275
1974	23.6	6.4	21.1	93.7	48.3	19.3	25.7	59.7	17.3	3.8	4.6	22.9	346
1975	12.4	24.6	36.8	59.4	96.8	98.6	72.6	18.3	37.1	28.7	20.8	19.6	526
1976	10.7	7.9	10.7	28.2	40.1	74.9	48.5	64.8	13.2	11.2	14.2	8.6	333
1977	32.2	2.0	41.2	11.2	30.5	43.5	14.6	97.8	37.3	2.2	11.1	40.2	364
1978	45.0	18.5	21.2	107.1	113.3	17.6	120.3	140.5	110.9	11.8	25.6	23.1	755
1979	14.1	9.1	14.2	37.1	46.8	15.3	12.7	77.6	9.1	26.7	9.3	8.0	280
1980	21.7	21.2	25.3	34.0	131.4	37.1	27.6	52.6	31.9	31.3	11.4	28.8	454
1981	20.2	8.0	36.4	8.4	130.2	108.6	49.8	25.9	11.3	13.9	8.5	5.7	427
1982	39.3	10.2	47.1	11.0	26.9	58.1	87.2	23.9	58.0	5.9	16.2	12.1	396
1983	13.9	5.3	25.0	31.7	46.6	27.8	80.6	41.4	17.0	3.4	12.6	20.0	325
1984	19.5	2.8	22.9	35.9	24.0	50.7	20.2	22.5	93.7	35.0	5.5	14.1	347
1985	6.3	13.2	20.1	38.7	30.7	3.2	6.6	88.4	116.6	23.8	36.1	11.1	395
1986	5.8	20.5	20.8	15.4	69.1	39.5	12.6	12.7	98.4	37.8	37.6	3.8	374
MIN	0.3	2.0	2.8	1.0	7.4	3.2	4.1	1.8	0.3	0.3	0.0	0.3	205
MAX	62.2	55.9	63.8	112.5	185.9	175.3	121.7	140.5	123.4	127.3	73.9	57.7	755
MEAN	20.0	18.4	25.5	34.8	51.1	72.0	43.6	40.8	43.8	23.5	20.9	19.6	414

PRECIPITATION (mm) -- MEDICINE HAT

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1911	5.1	4.1	8.1	37.8	46.7	91.4	41.9	55.9	44.5	11.4	55.9	13.7	417
1912	17.8	4.6	7.9	23.9	41.4	30.2	24.9	40.1	34.0	22.4	7.4	9.1	264
1913	10.4	28.2	26.9	24.6	26.9	94.5	34.3	61.7	20.3	10.4	2.5	5.1	346
1914	31.0	20.3	15.0	0.3	14.0	50.8	8.6	16.8	35.6	88.4	5.8	22.9	309
1915	9.7	29.2	0.5	0.3	69.1	118.6	90.9	5.1	55.1	25.7	2.3	3.6	410
1916	13.5	30.7	7.4	4.6	94.7	103.9	68.6	42.9	28.2	14.5	14.0	31.8	455
1917	18.3	14.0	3.6	21.1	4.3	45.5	13.2	78.2	36.3	31.8	0.5	74.7	341
1918	46.0	21.3	9.4	4.3	4.3	35.6	45.2	46.5	6.6	4.6	8.4	22.4	255
1919	0.5	8.9	14.0	27.2	28.2	20.6	25.1	1.5	28.4	8.1	29.2	2.8	195
1920	41.9	7.6	24.6	17.0	32.5	37.6	51.6	5.8	0.0	32.5	0.3	21.3	273
1921	2.3	14.0	41.9	44.5	41.1	35.6	47.0	13.5	45.7	10.7	27.7	2.0	326
1922	13.5	14.7	8.1	39.1	35.1	62.0	29.2	27.4	36.8	1.0	8.1	18.0	293
1923	17.8	9.9	10.9	9.1	27.7	135.9	75.7	22.6	0.3	16.0	10.7	10.4	347
1924	48.8	6.4	3.3	8.6	5.1	21.3	7.9	52.1	30.0	20.3	15.2	31.5	250
1925	6.6	1.5	21.3	67.6	5.6	87.4	33.5	37.3	82.6	7.4	7.6	13.5	372
1926	15.7	6.4	6.9	8.1	41.9	29.0	14.2	62.7	38.1	0.5	24.1	54.6	302
1927	4.1	12.4	25.7	40.6	134.6	33.3	137.9	147.3	41.9	17.8	32.0	14.5	642
1928	1.8	2.5	2.0	10.9	1.0	90.9	61.0	6.9	0.5	10.2	0.3	6.4	194
1929	5.6	35.6	45.7	62.0	18.8	58.7	16.3	5.3	8.4	4.8	9.4	7.4	278
1930	0.8	2.5	0.8	42.7	33.8	54.4	29.5	29.2	85.1	22.1	13.0	9.7	323
1931	1.5	0.0	13.2	3.8	18.5	54.1	21.8	5.6	44.7	3.8	34.0	51.8	253
1932	11.7	17.8	13.2	47.5	44.7	30.2	68.1	54.4	74.2	21.8	26.7	10.9	421
1933	13.7	9.7	19.1	34.5	54.4	52.8	6.1	32.5	16.5	47.0	23.6	48.5	358
1934	15.5	2.5	32.8	6.1	11.7	119.9	19.6	22.1	56.4	6.4	17.0	21.6	331
1935	53.3	5.1	30.7	58.4	64.0	26.9	37.3	4.3	2.3	34.0	17.0	10.9	344
1936	29.0	21.1	24.1	17.0	21.1	38.6	2.5	21.3	14.0	17.5	7.4	31.0	245
1937	14.7	13.5	22.6	8.1	52.8	17.8	24.4	20.1	29.0	8.1	32.0	5.8	249
1938	22.4	32.0	64.5	10.7	59.7	51.3	35.1	40.6	59.9	23.1	19.3	26.4	445
1939	35.3	20.6	23.1	22.9	31.0	108.2	18.5	10.9	31.2	21.8	0.3	26.2	350
1940	16.8	56.1	40.9	62.2	42.7	39.4	66.8	7.4	138.2	55.6	40.4	8.4	575
1941	19.3	14.0	24.6	14.7	58.2	89.2	13.5	31.0	39.1	0.5	4.1	12.4	321
1942	13.0	28.7	16.0	15.7	75.9	104.4	48.5	42.2	21.1	32.8	36.1	10.7	445
1943	33.0	32.0	17.8	3.3	15.2	25.9	16.8	11.4	17.8	7.4	0.3	1.0	182
1944	6.6	19.6	24.1	9.4	64.8	62.7	44.2	71.4	16.3	1.5	17.3	5.8	344
1945	16.8	16.3	11.9	17.8	30.7	50.8	14.2	31.5	68.3	10.2	14.0	43.4	326
1946	17.0	5.3	12.4	14.0	32.5	63.8	27.2	84.3	59.7	48.8	58.2	19.3	442
1947	9.7	16.3	15.2	39.9	19.3	96.5	2.0	73.4	60.2	6.4	20.1	14.5	373
1948	13.7	32.5	30.5	10.2	31.0	31.8	44.5	12.4	9.7	2.5	10.9	18.3	248
1949	12.2	5.6	3.3	11.4	70.1	25.7	29.5	8.6	17.0	32.8	5.1	38.1	259
1950	16.0	8.6	11.9	7.9	20.8	40.6	61.2	70.6	7.4	53.8	9.9	15.2	324
1951	34.3	29.7	40.1	21.1	26.2	136.7	20.8	117.6	65.0	52.3	16.3	34.0	594
1952	23.6	36.6	36.3	1.3	45.2	90.9	50.0	44.7	29.2	5.1	12.4	8.9	384
1953	19.1	17.0	41.9	63.0	87.1	94.2	42.4	38.1	36.8	0.3	7.4	18.8	466
1954	46.7	10.7	59.7	82.0	32.3	58.2	29.2	75.4	68.8	1.8	6.6	9.9	481
1955	11.4	39.6	23.9	34.5	106.7	32.5	84.6	1.3	13.2	14.2	17.3	14.0	393
1956	32.8	32.3	29.5	10.9	43.7	84.8	70.9	76.2	27.9	18.3	5.3	20.1	453
1957	37.8	19.1	36.1	44.5	1.3	31.8	40.6	28.4	30.7	48.0	19.6	5.1	343
1958	9.1	37.1	11.9	5.3	20.3	36.1	56.1	44.7	49.5	8.6	56.6	9.9	345
1959	22.6	6.1	9.9	24.9	35.3	52.1	13.5	32.3	30.7	20.8	26.4	8.6	283
1960	38.1	25.1	2.8	36.3	33.8	17.0	25.7	61.2	1.5	12.4	20.8	20.3	295
1961	7.1	7.1	6.4	13.7	26.7	24.6	49.3	10.2	9.7	28.4	8.1	16.0	207
1962	16.0	15.2	18.0	6.6	26.2	26.4	65.0	4.1	52.6	14.7	3.6	7.4	256
1963	45.7	13.0	5.3	9.1	19.8	123.7	29.2	53.6	34.0	0.5	1.5	24.4	360
1964	20.8	6.1	16.5	25.1	55.6	23.4	16.5	14.7	60.7	4.3	19.1	43.2	306
1965	13.7	15.5	14.5	21.3	33.3	103.6	51.1	61.2	49.5	1.3	32.0	7.4	404
1966	36.3	8.1	1.8	39.6	19.6	91.7	79.0	48.0	9.9	12.2	22.9	10.2	379
1967	29.0	30.7	25.4	88.4	30.0	29.7	10.7	8.4	3.0	10.4	9.7	17.8	293
1968	7.1	5.1	7.1	43.9	34.5	106.9	21.8	13.0	61.5	17.5	2.5	19.3	340
1969	34.0	6.1	9.9	10.4	25.9	19.1	51.3	4.1	19.1	27.9	2.8	7.1	218
1970	37.6	4.8	11.2	24.1	22.9	127.8	51.1	9.1	21.3	15.2	17.3	11.9	354
1971	42.7	7.4	16.3	9.4	45.7	41.1	9.4	20.8	26.9	18.3	9.1	12.7	260
1972	21.8	23.4	8.4	20.1	39.6	41.4	44.2	33.3	48.0	20.1	4.3	30.0	335
1973	1.8	8.6	0.8	30.7	5.8	124.0	6.6	37.3	19.6	17.5	23.9	19.1	296
1974	14.5	17.5	27.7	44.7	53.1	45.2	23.1	48.3	3.3	5.1	1.5	7.6	292
1975	7.6	20.6	36.6	53.3	86.9	70.1	37.1	34.3	23.1	14.5	25.9	25.7	436
1976	3.0	9.4	21.1	26.7	23.1	59.2	87.1	41.1	4.8	6.9	14.2	5.3	302
1977	18.0	0.7	6.2	6.7	80.5	19.0	41.2	40.2	39.3	1.8	17.9	31.0	302
1978	18.9	16.2	8.7	72.4	55.4	53.4	44.9	33.9	92.6	31.4	22.6	8.5	459
1979	5.7	16.3	8.0	26.1	45.9	76.2	32.4	20.4	14.9	18.4	6.7	10.8	282
1980	23.4	8.0	13.7	10.8	42.0	64.7	28.4	36.4	23.4	37.6	5.1	23.2	317
1981	10.6	0.6	17.0	18.3	68.5	59.8	37.3	20.0	11.2	35.4	11.0	12.6	302
1982	22.9	10.9	25.7	17.3	88.1	54.4	88.3	20.0	62.7	18.7	11.5	10.4	431
1983	14.5	3.4	29.4	30.7	30.0	31.1	81.4	15.4	18.8	3.1	15.6	16.1	289
1984	16.7	2.2	26.5	17.8	33.0	51.6	14.2	5.8	52.1	27.2	10.3	20.5	278
1985	4.8	10.9	12.8	37.8	47.0	8.7	7.7	46.6	63.9	23.0	22.5	3.1	289
1986	3.1	9.0	26.8	5.7	84.0	82.9	57.2	12.3	197.6	25.2	23.5	9.3	537
MIN	0.5	0.0	0.5	0.3	1.0	8.7	2.0	1.3	0.0	0.3	0.3	1.0	182
MAX	53.3	56.1	64.5	88.4	134.6	136.7	137.9	147.3	197.6	88.4	58.2	74.7	642
MEAN	18.9	15.3	18.8	25.6	40.5	60.0	38.9	34.6	37.1	18.6	15.8	17.8	342

PRECIPITATION (mm) -- BROADVIEW

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1911	53.3	7.6	7.1	13.5	70.4	94.0	50.8	61.5	53.3	61.0	49.0	10.2	532
1912	12.7	7.6	17.8	25.7	122.7	14.2	84.1	47.0	117.1	3.6	14.0	22.9	489
1913	29.2	27.9	35.6	101.6	6.9	140.0	57.4	92.5	38.1	41.1	25.4	1.0	597
1914	43.2	3.0	30.5	78.0	70.1	66.8	79.8	32.5	11.4	40.1	43.4	11.4	510
1915	12.7	11.2	5.1	17.8	35.3	89.2	84.3	5.3	64.8	19.8	48.3	23.4	417
1916	63.5	7.6	43.2	31.8	48.8	84.3	43.7	39.6	91.7	61.2	2.5	14.0	532
1917	30.5	27.9	10.2	89.2	9.9	66.0	43.7	28.4	37.3	39.6	3.3	30.5	417
1918	12.7	15.2	20.1	31.0	35.6	54.6	78.7	41.1	20.1	14.2	2.5	33.0	359
1919	16.5	39.4	17.8	53.1	50.3	55.4	59.2	39.9	22.4	32.0	24.1	20.3	430
1920	52.1	27.9	33.0	21.8	44.7	37.3	102.6	43.7	41.1	45.7	20.8	15.2	486
1921	9.1	5.1	32.0	47.0	72.4	169.4	80.0	71.1	77.5	38.1	41.7	15.5	659
1922	10.9	29.0	45.2	12.7	68.6	134.9	101.6	12.7	33.0	34.3	53.3	26.9	563
1923	35.6	20.3	42.7	25.4	23.4	35.6	181.6	48.3	10.2	27.2	43.7	14.5	508
1924	19.3	19.3	50.3	29.2	14.2	55.4	37.8	71.1	10.2	52.1	23.9	35.1	418
1925	23.9	23.6	42.7	38.4	14.0	134.6	26.2	17.8	63.8	24.1	13.2	2.0	424
1926	16.3	24.4	15.5	36.3	77.2	53.3	43.2	48.8	45.0	55.9	55.6	18.8	490
1927	9.7	15.2	45.0	13.0	93.7	29.5	149.1	46.0	150.9	43.7	45.7	7.6	649
1928	6.1	4.1	32.5	43.9	15.2	118.9	47.5	4.6	10.2	17.8	0.8	5.1	307
1929	12.2	14.7	11.7	9.4	48.5	29.5	4.3	5.8	44.5	54.4	31.2	30.7	297
1930	7.6	12.2	16.0	21.1	33.0	115.6	22.6	24.1	23.4	33.8	16.3	8.6	334
1931	11.2	5.6	25.9	0.0	10.2	39.1	45.7	62.2	31.8	12.2	16.3	12.2	272
1932	15.7	15.0	32.0	25.7	50.0	106.2	40.1	71.6	6.6	28.7	57.4	15.5	465
1933	20.3	18.8	13.5	53.3	99.1	66.8	20.3	75.2	43.9	20.8	21.8	34.0	488
1934	20.3	3.0	9.4	13.5	20.3	100.6	32.0	32.0	41.1	1.3	7.9	12.2	294
1935	38.1	13.7	50.5	16.0	68.1	145.5	78.7	66.0	29.0	26.9	35.1	17.5	585
1936	26.2	7.6	64.8	13.0	53.6	77.0	58.4	24.4	22.9	0.0	14.7	33.8	396
1937	32.3	9.4	3.6	25.4	18.8	41.9	58.9	18.3	44.7	28.4	12.2	13.7	308
1938	21.1	66.8	45.5	5.1	28.4	142.2	48.8	33.5	19.6	12.4	74.9	24.9	523
1939	23.4	30.2	8.6	10.7	29.0	83.3	18.8	69.1	34.3	7.1	3.6	15.2	333
1940	15.2	32.0	18.5	19.3	47.2	89.9	70.1	45.0	18.3	49.8	20.1	21.6	447
1941	15.2	24.9	51.3	78.2	28.2	114.6	32.8	61.5	29.7	6.1	75.4	9.7	528
1942	10.2	19.6	66.5	35.6	27.2	100.8	72.4	222.5	38.9	6.4	4.3	38.6	643
1943	33.0	31.5	36.6	7.6	44.2	99.1	46.2	83.3	20.8	16.0	22.4	1.8	442
1944	3.3	13.2	22.1	34.0	66.3	152.4	52.3	114.3	15.5	6.4	8.4	13.2	501
1945	11.4	8.1	33.0	23.9	34.0	154.7	30.7	22.1	81.8	36.3	18.0	8.4	462
1946	14.2	17.0	10.9	23.1	22.6	46.7	75.4	77.7	63.5	27.9	36.1	7.1	422
1947	32.8	15.5	7.6	19.8	20.6	175.8	12.7	87.4	65.8	2.8	51.3	19.8	512
1948	23.1	7.4	10.4	27.4	38.4	27.4	55.4	63.0	5.8	17.5	35.6	40.4	352
1949	1.5	6.4	15.7	5.3	58.2	50.8	120.9	53.1	20.8	23.9	30.2	18.8	406
1950	17.0	4.6	20.3	6.4	65.3	95.3	91.9	26.2	28.2	16.0	14.7	17.0	403
1951	19.6	33.5	11.9	10.7	23.9	128.8	20.3	78.2	78.0	40.9	29.7	19.6	495
1952	20.3	2.0	8.1	7.6	26.4	138.9	66.5	142.5	36.1	9.9	10.2	5.8	474
1953	18.5	13.5	40.4	23.9	82.6	185.2	85.1	27.7	46.2	55.1	9.4	14.0	602
1954	27.4	12.2	9.7	29.0	68.1	238.5	120.9	62.2	116.8	12.2	8.4	5.6	711
1955	33.8	10.7	63.0	35.6	112.5	76.2	49.8	34.0	51.1	26.4	45.7	22.6	561
1956	29.0	20.8	44.7	13.5	36.3	105.7	102.6	19.3	10.4	36.3	31.8	40.4	491
1957	8.6	7.9	18.5	18.8	13.0	51.6	76.7	79.8	6.1	28.2	26.2	6.4	342
1958	14.0	22.9	17.5	4.8	6.1	19.8	48.3	40.6	30.0	12.7	50.3	21.8	289
1959	4.3	6.9	8.4	18.0	27.7	103.9	16.0	18.8	110.5	61.2	23.1	26.4	425
1960	13.7	4.8	15.5	28.2	61.2	51.1	17.8	48.5	7.1	4.8	19.3	10.2	282
1961	18.0	16.3	6.4	12.2	16.0	15.0	14.0	0.3	50.3	11.2	6.9	16.8	183
1962	32.0	18.5	19.8	8.1	76.2	56.1	65.0	45.7	5.8	32.5	19.3	24.1	403
1963	14.0	15.2	15.5	33.3	79.5	95.8	86.9	75.7	57.9	2.0	5.1	19.1	500
1964	10.7	17.5	34.8	12.2	83.8	75.2	63.0	80.3	35.1	2.5	17.0	28.2	460
1965	11.9	15.5	7.1	30.0	79.0	92.7	32.8	60.7	141.5	0.0	25.1	19.1	515
1966	13.2	8.6	8.9	43.7	17.3	35.6	62.7	87.4	10.2	13.5	26.2	8.9	336
1967	33.3	4.6	28.4	16.3	21.6	27.7	31.8	33.3	49.5	66.0	24.9	22.4	360
1968	21.3	2.8	8.1	5.1	54.1	20.8	45.7	108.0	30.2	36.3	11.9	18.8	363
1969	35.3	19.3	15.7	26.2	34.3	78.2	77.0	40.9	35.1	49.8	4.3	10.9	427
1970	13.5	23.1	20.6	83.6	50.3	25.7	89.9	21.3	56.6	60.2	9.9	20.1	475
1971	11.9	5.1	17.8	21.6	10.2	113.8	60.5	35.8	26.9	53.8	11.9	10.7	380
1972	17.0	21.6	20.8	10.4	39.9	33.3	38.9	50.5	18.5	10.2	11.9	14.0	287
1973	0.8	9.9	11.9	33.3	32.5	121.2	49.0	31.5	114.6	3.8	18.5	27.7	455
1974	25.4	9.9	21.3	28.2	88.4	29.5	23.1	106.9	25.1	13.7	1.5	19.6	393
1975	17.0	13.7	22.4	98.6	14.7	77.0	11.9	108.2	102.6	7.1	11.9	25.9	511
1976	32.8	22.4	29.7	26.9	20.8	128.8	27.7	26.9	3.0	6.1	2.0	31.2	358
1977	4.9	7.6	7.7	15.5	110.7	84.1	74.9	31.0	69.1	10.6	15.2	33.4	465
1978	7.5	4.8	7.4	26.8	59.8	33.6	63.3	68.5	49.8	29.1	31.0	25.3	407
1979	8.5	15.8	16.7	32.5	41.3	8.2	39.2	16.4	42.1	32.6	8.0	19.0	280
1980	22.3	14.4	11.0	0.2	7.2	35.4	95.3	110.6	35.7	4.6	4.6	11.3	353
1981	14.8	12.0	18.4	15.8	24.9	77.9	24.1	49.9	58.5	42.2	8.2	19.7	366
1982	17.7	8.0	13.2	7.8	42.4	29.4	68.7	37.7	61.6	9.8	4.6	31.0	332
1983	10.2	10.2	54.6	10.0	72.2	36.9	p62.8	16.4	44.3	14.3	22.0	8.9	363
1984	7.1	4.2	24.4	24.0	34.8	46.6	46.8	8.0	89.8	56.2	33.0	18.0	393
1985	15.6	10.6	3.8	16.4	35.2	81.0	14.4	151.7	111.9	17.6	25.1	11.8	495
1986	17.8	13.0	16.3	23.0	75.0	54.2	112.0	25.4	54.2	26.2	9.6	10.6	437
MIN	0.8	2.0	3.6	0.0	6.1	8.2	4.3	0.3	3.0	0.0	0.8	1.0	183
MAX	63.5	66.8	66.5	101.6	122.7	238.5	181.6	222.5	150.9	66.0	75.4	40.4	711
MEAN	19.6	15.2	23.7	26.8	45.6	80.3	58.2	53.6	46.1	26.1	22.9	18.4	436

PRECIPITATION (mm) -- NORTH BATTLEFORD

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1911	3.3	1.3	0.3	1.3	66.0	186.9	86.1	56.6	32.8	2.8	6.9	1.3	446
1912	0.5	0.3	5.1	0.8	29.7	30.0	135.9	69.6	52.3	14.0	10.2	12.7	361
1913	12.7	5.1	7.6	0.0	11.7	43.2	90.4	67.1	27.2	4.6	2.5	0.3	272
1914	17.8	10.2	20.3	13.7	72.6	62.7	32.5	58.4	100.8	57.4	18.8	20.8	486
1915	0.0	3.0	0.0	17.3	40.9	35.3	80.8	5.6	17.0	8.1	7.6	5.1	221
1916	19.3	0.5	25.4	18.5	70.4	93.0	53.6	119.4	26.7	18.0	0.3	5.6	451
1917	27.4	5.1	7.6	31.2	9.1	19.3	20.1	47.8	13.5	4.6	4.6	18.0	208
1918	38.4	8.4	36.6	23.4	26.2	25.7	31.0	21.8	6.1	11.4	3.0	16.0	248
1919	18.8	7.6	14.5	6.1	18.8	33.5	7.1	63.2	46.7	19.8	14.7	9.7	261
1920	36.6	9.1	17.8	24.4	63.8	81.8	101.1	70.9	36.3	46.5	5.6	5.1	499
1921	20.3	36.6	16.3	85.1	59.9	43.2	73.4	25.9	98.8	8.9	21.3	5.1	495
1922	5.1	7.6	16.5	15.2	74.4	7.9	5.6	95.0	10.9	28.7	0.3	11.2	278
1923	14.0	2.5	6.6	13.7	25.9	154.4	93.5	40.1	11.4	5.6	0.3	5.6	374
1924	10.7	16.8	3.3	3.8	18.0	12.7	29.7	69.1	44.7	18.3	23.4	13.2	264
1925	12.4	15.2	12.7	30.2	15.7	90.4	50.3	77.7	35.8	24.9	2.5	2.5	371
1926	6.1	13.5	4.6	16.3	76.7	22.6	16.5	61.7	25.7	11.2	20.3	11.9	287
1927	2.0	3.8	7.6	55.4	30.2	34.3	100.1	32.5	43.4	22.6	10.7	3.6	346
1928	2.5	3.6	16.0	16.8	13.5	103.9	60.7	27.4	11.9	8.9	0.3	5.6	271
1929	7.9	10.7	3.0	10.7	24.1	95.3	21.6	7.6	27.2	2.3	14.7	24.4	249
1930	8.1	16.3	8.1	11.4	37.3	104.4	70.6	5.6	54.9	48.0	3.3	3.8	372
1931	0.3	0.8	6.4	6.4	3.0	22.6	30.5	20.8	85.6	12.4	17.0	21.6	227
1932	41.1	0.5	4.1	20.8	57.7	76.7	57.7	38.6	20.6	12.7	8.4	13.2	352
1933	10.2	11.7	33.3	33.0	36.3	52.6	16.3	49.3	65.5	33.5	21.3	38.1	401
1934	8.9	6.6	8.1	24.1	21.1	131.8	30.5	18.0	24.4	0.8	11.2	41.1	327
1935	21.6	3.3	10.9	46.7	11.4	66.3	44.7	52.3	15.5	32.3	31.0	8.1	344
1936	11.9	9.1	1.5	5.8	11.4	55.9	24.9	17.0	39.1	43.9	1.0	38.6	260
1937	15.5	13.7	0.3	17.3	35.8	14.7	103.4	11.2	21.3	48.8	20.1	15.0	317
1938	15.5	22.4	17.8	5.8	44.7	33.5	45.2	24.9	101.3	29.0	36.6	25.4	402
1939	15.5	13.7	6.6	7.1	27.2	106.4	32.3	19.1	6.4	11.2	11.4	30.5	287
1940	4.1	14.2	5.6	3.6	12.4	63.0	65.3	4.6	4.1	49.5	28.2	11.2	266
1941	14.5	9.9	5.6	9.4	58.4	29.5	17.0	25.9	40.1	15.7	9.1	6.1	241
1942	5.8	0.3	7.1	44.2	12.2	68.1	102.4	73.9	23.6	7.1	46.5	42.4	434
1943	17.8	26.9	12.2	1.0	99.3	43.7	69.9	59.9	24.1	61.5	11.2	3.0	431
1944	9.4	16.3	12.4	14.2	90.7	55.4	106.7	133.1	23.1	1.8	11.9	6.4	481
1945	17.0	5.6	0.3	39.4	5.8	44.2	38.9	27.7	64.3	6.1	12.7	7.4	269
1946	18.8	13.5	5.3	33.3	45.2	54.6	43.9	60.2	14.7	55.9	38.9	27.2	411
1947	15.2	7.4	7.4	9.7	10.9	30.7	35.1	86.4	59.4	28.2	17.8	16.5	325
1948	24.9	23.9	19.6	45.0	4.8	21.6	38.6	17.0	1.8	2.5	36.6	15.2	251
1949	17.8	28.2	20.1	24.4	70.1	52.1	70.6	38.1	18.8	12.7	25.1	30.5	408
1950	22.6	18.5	3.0	11.4	14.0	87.1	105.4	24.1	19.8	52.8	24.4	21.6	405
1951	17.8	9.4	31.2	19.1	55.6	16.8	78.0	54.1	17.8	18.3	29.2	13.5	361
1952	10.2	11.2	17.5	2.3	66.8	100.1	47.8	7.1	20.3	10.7	11.2	12.4	317
1953	32.3	22.9	44.5	25.9	34.8	30.7	65.3	52.1	7.9	5.8	10.9	35.8	369
1954	22.1	15.7	12.4	27.7	42.2	75.7	89.2	135.9	58.2	18.3	17.3	10.2	525
1955	32.3	5.1	36.1	66.8	19.8	94.2	65.8	8.1	25.1	25.4	15.2	65.8	460
1956	37.6	28.7	51.8	17.3	14.0	38.1	62.7	49.5	40.4	4.6	11.9	16.8	373
1957	4.8	4.6	12.2	11.2	10.9	58.4	60.7	72.4	14.7	30.5	13.5	13.0	307
1958	19.1	21.6	26.2	38.1	22.9	27.9	84.1	15.7	21.8	1.3	14.2	15.0	308
1959	8.6	13.7	4.8	12.2	25.7	56.4	21.8	57.2	41.1	51.8	7.6	12.2	313
1960	12.7	8.9	21.6	10.4	35.6	69.6	54.1	49.5	2.5	22.9	11.4	13.2	312
1961	8.4	27.4	10.2	24.9	15.7	39.9	38.1	4.8	11.7	26.2	21.3	30.5	259
1962	17.3	19.3	15.2	2.8	24.1	39.1	75.2	33.3	13.0	7.1	13.5	20.8	281
1963	15.0	22.4	14.5	36.3	32.3	101.3	56.9	106.2	15.0	9.7	10.7	8.6	429
1964	24.1	17.3	8.6	23.6	71.4	4.6	51.8	86.9	50.3	17.3	4.1	26.9	387
1965	20.3	32.3	7.4	16.5	23.6	179.3	25.9	47.5	15.5	22.9	16.0	15.2	422
1966	35.3	7.6	32.8	4.3	9.7	90.9	60.5	47.8	6.4	1.3	30.7	13.5	341
1967	19.8	7.4	18.0	13.2	27.9	30.2	87.9	42.7	5.8	27.2	12.7	16.0	309
1968	17.8	5.6	25.7	6.6	39.4	29.7	97.8	60.7	67.6	26.9	2.3	20.6	401
1969	33.8	10.9	4.1	7.6	35.6	24.9	70.6	12.2	45.0	19.8	7.9	27.4	300
1970	14.5	6.1	26.7	14.2	7.4	155.4	74.7	7.6	4.6	38.1	20.6	22.6	392
1971	35.3	3.3	18.5	8.9	23.9	44.7	116.1	16.5	21.1	5.6	27.2	20.3	341
1972	23.6	17.0	23.9	13.5	51.1	17.3	77.2	23.9	59.7	14.7	15.0	13.0	350
1973	6.6	12.2	2.8	42.9	38.1	41.9	42.7	67.3	24.1	6.1	41.9	19.3	346
1974	34.8	17.3	34.8	15.7	49.8	75.4	75.9	23.9	20.8	11.7	1.5	17.8	379
1975	29.5	13.7	22.9	29.5	35.1	84.6	64.8	40.9	3.0	8.9	7.4	27.7	368
1976	12.4	19.3	36.3	11.7	32.0	74.7	111.3	28.7	14.7	5.8	1.8	20.3	369
1977	11.1	2.4	12.6	15.9	134.5	16.7	38.1	29.4	53.1	6.3	10.9	31.0	362
1978	9.1	2.7	5.2	58.7	35.3	45.9	36.3	35.2	51.8	16.8	28.0	12.2	337
1979	6.4	23.2	23.6	41.4	23.0	70.1	62.6	32.6	13.8	24.0	8.5	26.3	355
1980	20.7	11.7	18.8	13.8	18.2	70.5	58.9	119.5	25.4	9.3	5.7	32.8	405
1981	24.9	2.6	10.5	29.1	24.3	40.8	86.9	7.8	18.4	12.7	4.5	26.9	289
1982	13.6	6.7	10.8	20.3	32.4	49.0	79.5	102.9	30.6	13.8	20.0	11.8	391
1983	8.7	13.3	29.3	29.0	11.2	139.3	42.6	48.5	81.8	3.9	37.4	5.8	451
1984	11.8	3.2	4.2	27.1	59.4	108.4	11.4	97.8	72.4	41.4	23.3	10.5	471
1985	14.0	15.5	20.6	77.7	56.5	34.6	38.9	72.4	30.5	17.2	12.4	18.6	409
1986	22.8	5.7	32.3	12.4	48.3	67.1	142.6	8.0	56.4	10.1	26.8	6.0	438
MIN	0.0	0.3	0.0	0.0	3.0	4.6	5.6	4.6	1.8	0.8	0.3	0.3	208
MAX	41.1	36.6	51.8	85.1	134.5	186.9	142.6	135.9	101.3	61.5	46.5	65.8	525
MEAN	16.6	11.7	15.1	21.4	36.1	61.0	60.4	46.5	32.4	19.5	15.1	17.2	353

PRECIPITATION (mm) -- PRINCE ALBERT

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1911	50.8	10.4	2.8	20.1	35.6	78.5	50.3	75.9	45.0	1.0	57.4	27.9	456
1912	0.0	2.5	26.2	6.4	45.5	70.4	134.9	69.9	54.9	14.2	22.9	27.2	475
1913	20.3	20.3	30.5	4.3	20.1	50.3	120.9	91.2	64.3	22.4	7.9	2.8	455
1914	18.0	1.5	15.5	34.0	64.5	51.1	29.2	20.3	28.4	34.8	27.9	14.2	340
1915	2.8	6.4	0.3	9.4	23.4	73.2	80.5	7.6	29.5	9.4	23.9	29.2	295
1916	24.4	1.5	24.9	30.7	111.3	66.0	98.6	42.2	25.4	47.8	16.5	6.6	496
1917	29.5	2.5	22.9	26.4	19.6	57.2	8.9	38.4	19.8	18.8	0.5	25.1	269
1918	23.1	3.6	21.6	41.1	33.5	66.5	32.0	72.6	10.2	9.9	12.2	15.0	341
1919	23.6	3.8	20.8	4.1	4.8	53.3	51.3	79.8	83.1	18.5	26.4	20.6	390
1920	27.9	21.3	33.0	8.1	38.1	92.5	21.6	66.5	48.5	26.9	22.1	11.4	418
1921	27.4	45.2	68.8	79.5	88.9	77.0	81.3	34.0	76.2	7.6	48.3	10.2	644
1922	16.3	13.5	39.9	30.5	78.5	64.0	13.7	75.9	25.1	27.4	1.5	10.4	397
1923	11.4	1.8	7.9	29.5	31.5	93.7	74.2	73.9	26.2	7.9	5.8	7.9	372
1924	15.0	7.6	8.1	20.8	1.0	50.8	30.0	100.1	41.4	43.9	15.5	13.0	347
1925	10.9	8.4	10.2	22.1	10.2	116.3	64.0	92.5	32.3	16.8	5.3	1.0	390
1926	5.1	9.9	1.5	16.5	76.5	8.6	68.3	61.7	56.4	39.4	19.6	12.4	376
1927	5.8	10.7	36.6	32.8	27.7	62.5	96.8	33.8	111.0	20.8	17.5	13.2	469
1928	3.0	4.8	13.5	11.4	23.4	41.9	38.1	29.0	5.1	15.0	1.0	10.7	197
1929	10.4	14.2	20.8	66.8	27.9	62.5	35.8	39.1	46.5	3.0	21.3	28.7	377
1930	11.4	13.5	32.0	16.5	34.8	103.6	45.2	23.1	97.0	64.8	6.4	3.8	452
1931	17.5	4.1	22.4	7.1	16.0	71.9	31.8	34.3	67.6	3.8	24.9	34.0	335
1932	12.2	7.9	23.6	25.4	34.8	135.1	122.2	64.5	21.1	26.4	18.3	25.4	517
1933	24.4	15.2	18.5	11.9	82.6	56.1	35.3	44.2	48.3	25.1	31.5	40.9	434
1934	5.1	3.8	20.6	26.4	21.3	173.0	35.1	19.3	26.4	4.6	23.1	23.1	382
1935	18.0	10.7	12.4	43.9	26.2	91.4	54.6	68.1	20.3	45.0	17.8	14.5	423
1936	25.7	7.9	10.2	15.7	17.0	54.4	14.2	23.9	63.8	25.7	11.7	35.8	306
1937	17.5	18.0	6.9	29.7	62.0	26.7	37.1	11.7	43.4	51.6	42.2	22.9	370
1938	26.4	16.8	16.3	13.2	33.5	11.2	59.9	64.3	33.0	51.8	46.0	16.0	388
1939	19.8	12.2	11.2	25.1	25.4	109.7	34.0	15.7	23.1	16.8	22.9	44.5	360
1940	7.4	8.4	8.9	1.0	58.9	69.6	27.7	13.7	24.6	47.5	51.6	34.5	354
1941	23.9	23.6	9.4	16.5	35.1	44.7	11.2	31.0	34.8	9.4	24.9	6.4	271
1942	9.1	37.6	29.0	70.1	40.1	182.6	89.9	53.8	22.4	10.9	52.1	27.4	625
1943	14.0	15.2	14.2	14.5	40.9	35.1	63.0	22.6	31.5	38.6	15.0	12.7	317
1944	6.9	17.0	10.7	21.8	53.6	32.0	113.8	41.1	11.7	7.9	19.1	9.4	345
1945	8.1	14.7	10.7	39.9	57.2	81.8	31.5	64.5	38.6	8.6	21.1	14.7	391
1946	18.3	18.3	11.2	23.9	44.2	16.0	81.3	59.9	40.6	34.3	18.3	17.5	384
1947	29.7	4.1	12.7	15.7	21.8	14.7	5.6	90.4	53.3	32.0	31.5	24.9	337
1948	18.5	28.4	13.0	45.5	38.9	67.8	51.3	89.7	15.2	7.6	36.3	16.3	428
1949	18.3	25.4	16.5	21.8	40.1	73.2	93.2	78.0	9.7	20.3	31.8	25.4	454
1950	19.3	25.4	2.0	31.5	35.8	65.5	101.1	44.5	17.3	46.2	46.7	37.8	473
1951	11.2	11.4	42.7	13.7	62.7	31.2	66.5	33.5	45.5	36.3	26.2	4.8	386
1952	6.9	3.8	12.2	0.8	72.9	69.9	87.6	71.9	33.8	12.7	18.8	13.2	404
1953	33.5	19.6	55.4	12.4	36.1	47.2	54.4	63.0	19.3	2.8	14.2	41.1	399
1954	36.1	23.1	9.1	46.5	72.9	77.7	105.4	148.3	50.8	19.1	26.4	6.4	622
1955	23.1	10.4	33.3	70.9	37.8	24.1	86.1	27.7	40.4	24.6	42.2	41.7	462
1956	22.1	24.6	35.3	8.6	18.5	76.2	55.4	22.9	32.0	7.6	14.2	18.5	336
1957	17.3	3.8	23.9	48.5	31.0	35.6	52.3	60.5	40.9	15.2	16.5	17.8	363
1958	18.8	35.8	18.8	47.0	30.0	24.4	65.8	20.6	62.2	23.6	18.0	38.6	404
1959	17.0	11.2	10.9	11.7	15.7	65.0	8.6	49.8	98.3	53.1	14.0	16.3	372
1960	9.1	5.8	23.1	14.2	43.7	108.7	25.7	35.8	10.2	18.5	18.8	34.8	348
1961	2.8	32.5	38.6	43.4	26.2	53.1	17.0	10.7	32.8	25.9	25.1	25.1	333
1962	21.6	8.6	18.8	20.1	9.9	60.7	32.3	23.1	2.5	24.1	9.9	18.0	250
1963	15.0	10.2	19.6	31.5	19.8	113.0	100.3	38.4	40.6	23.9	13.7	15.5	441
1964	11.2	22.1	7.6	2.8	14.5	4.1	39.4	68.3	70.6	23.6	10.2	15.7	290
1965	9.7	39.9	4.8	9.7	28.7	81.8	51.1	79.2	25.4	0.0	17.0	10.4	358
1966	17.5	12.4	26.7	9.7	4.1	111.0	87.9	77.0	12.7	5.6	21.6	20.3	406
1967	12.4	7.4	17.8	9.1	2.5	25.9	70.4	31.2	12.7	25.7	16.5	32.5	264
1968	19.6	5.1	14.0	17.3	93.0	45.0	92.5	87.4	62.0	24.6	6.4	28.2	495
1969	34.3	14.5	7.1	9.7	41.9	18.5	86.4	22.1	49.8	87.4	6.4	31.5	409
1970	14.5	16.8	12.2	32.0	7.4	137.9	65.8	23.9	12.4	27.9	22.1	24.6	398
1971	19.6	4.3	8.4	2.3	12.2	81.3	165.9	36.6	38.4	9.4	11.9	18.5	409
1972	16.3	11.9	23.6	26.4	8.4	45.2	47.5	19.6	36.6	5.8	23.1	10.9	275
1973	10.2	15.0	3.6	40.4	32.5	157.2	85.9	41.1	66.0	14.7	37.6	35.6	540
1974	31.2	16.5	19.1	5.1	98.0	75.9	79.5	164.3	60.7	5.1	3.8	12.7	572
1975	24.1	8.6	10.9	45.5	47.2	88.6	52.8	46.0	16.3	17.3	4.8	18.3	380
1976	6.6	18.3	14.0	6.1	47.0	85.1	89.7	20.1	2.0	10.9	4.6	22.6	327
1977	4.7	7.9	13.6	6.6	146.9	43.0	61.3	63.2	90.1	8.7	18.2	24.5	489
1978	6.3	5.3	10.5	34.7	42.3	123.6	54.6	42.5	47.7	42.5	26.7	16.4	453
1979	6.8	25.5	21.8	31.4	39.4	77.5	42.4	41.6	29.4	36.0	5.9	23.9	382
1980	18.9	14.1	19.9	0.5	38.3	85.6	29.0	91.9	40.5	16.2	13.7	16.4	385
1981	10.9	3.0	13.9	40.9	6.7	25.2	81.0	28.3	27.7	44.5	11.3	16.4	310
1982	13.9	5.1	9.3	11.8	52.3	33.9	78.1	193.5	22.8	15.8	12.0	11.0	459
1983	13.1	8.1	25.2	34.2	27.7	57.1	82.5	38.2	104.7	9.3	43.0	8.3	451
1984	11.7	11.9	18.3	22.4	102.0	94.8	38.7	70.2	80.1	57.6	27.3	14.4	549
1985	12.1	25.2	27.0	64.4	59.9	55.7	51.3	48.2	32.3	17.6	14.2	17.2	425
1986	23.7	3.4	31.5	19.9	68.1	25.5	105.8	46.9	35.3	3.0	16.1	16.7	396
MIN	0.0	1.5	0.3	0.5	1.0	4.1	5.6	7.6	2.0	0.0	0.5	1.0	197
MAX	50.8	45.2	68.8	79.5	146.9	182.6	165.9	193.5	111.0	87.4	57.4	44.5	644
MEAN	16.6	13.4	18.7	24.5	40.5	67.4	61.4	53.3	40.2	23.2	20.8	19.9	400

PRECIPITATION (mm) -- REGINA

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1911	16.0	6.1	10.2	17.3	92.2	73.4	86.9	73.7	14.5	39.6	17.8	11.4	459
1912	3.6	2.8	2.3	13.5	55.1	48.5	34.8	47.5	39.9	8.6	2.3	14.0	273
1913	7.6	2.8	12.4	0.8	24.1	94.5	71.6	103.9	11.9	18.3	3.8	2.5	354
1914	21.3	6.4	18.8	7.9	56.6	101.3	32.8	20.6	7.4	23.4	6.1	2.3	305
1915	2.5	2.8	3.3	6.4	38.4	49.8	48.0	25.4	54.4	1.8	21.6	11.4	266
1916	29.2	19.1	52.8	14.2	48.0	109.5	127.5	17.5	105.2	48.0	1.5	14.7	587
1917	27.4	6.4	3.8	7.1	15.5	59.7	26.2	35.3	17.0	18.8	2.5	7.4	227
1918	11.4	5.1	14.5	29.7	7.9	15.2	93.2	58.7	14.0	4.3	20.1	10.7	285
1919	17.5	17.8	13.0	34.3	14.5	68.1	38.4	29.7	23.4	21.1	12.4	6.1	296
1920	17.5	16.3	14.7	18.8	50.5	70.6	48.0	38.6	32.8	46.5	10.4	3.8	369
1921	4.8	9.1	6.4	34.3	53.8	83.8	122.2	39.6	106.4	26.4	13.7	12.2	513
1922	11.4	12.2	19.6	22.4	65.3	52.6	45.7	75.7	13.2	18.8	14.5	14.5	366
1923	24.9	12.2	15.0	20.8	32.5	154.7	114.8	16.8	46.0	11.9	60.2	7.1	517
1924	10.2	16.0	28.7	17.8	16.5	38.6	35.3	58.9	11.2	42.7	32.0	22.4	330
1925	30.0	8.6	16.5	26.4	24.9	159.8	23.9	27.7	52.1	30.5	8.9	5.1	414
1926	15.0	18.3	17.8	22.4	72.6	45.2	49.0	59.2	24.6	54.4	27.4	12.4	418
1927	5.8	18.3	50.3	11.2	63.8	65.0	113.3	58.2	60.5	56.4	39.6	11.7	554
1928	2.5	5.1	22.4	26.9	27.2	141.2	49.5	5.8	8.1	13.2	1.8	5.1	309
1929	15.2	16.0	25.1	17.5	36.1	49.0	6.9	5.3	31.2	18.5	27.9	31.2	280
1930	9.1	10.2	17.3	19.6	26.4	73.9	18.5	11.4	28.4	32.5	9.9	4.8	262
1931	4.1	2.0	16.8	0.8	9.4	63.0	49.0	65.0	24.6	6.9	7.1	12.7	261
1932	36.8	8.9	33.0	26.9	21.1	75.7	76.7	56.9	8.4	37.8	31.5	14.2	428
1933	17.3	13.0	18.3	20.1	109.7	70.6	14.2	63.0	65.0	21.3	22.6	44.2	479
1934	26.2	7.1	13.0	3.8	18.0	84.8	47.5	43.2	47.0	6.4	3.0	14.0	314
1935	25.4	0.8	18.3	15.5	78.7	139.4	47.2	84.1	7.9	21.6	29.7	17.0	486
1936	25.4	16.5	37.3	17.0	49.3	73.2	14.2	15.7	12.2	8.1	7.1	15.2	291
1937	14.7	11.7	3.6	4.6	31.5	25.9	27.9	17.3	34.5	13.2	15.2	18.5	219
1938	27.9	47.5	26.4	11.4	53.8	45.7	49.5	19.3	29.7	18.0	35.8	15.0	380
1939	16.3	22.6	12.4	7.9	20.1	116.3	45.7	31.8	12.2	20.3	6.6	22.1	334
1940	4.3	13.2	13.7	18.3	19.3	53.1	47.0	21.6	52.1	40.4	17.5	15.5	316
1941	13.2	14.2	9.7	22.9	46.5	70.6	101.9	51.6	3.8	5.6	56.9	15.7	412
1942	10.2	23.9	16.3	44.2	29.2	133.4	67.6	104.6	23.4	7.1	11.7	19.6	491
1943	20.8	22.1	30.7	4.6	25.4	44.5	52.8	43.9	16.8	21.6	4.6	1.5	289
1944	4.6	25.1	22.1	28.4	91.4	86.6	29.2	58.2	8.1	3.6	7.9	4.6	370
1945	16.8	18.5	34.3	45.5	30.2	147.1	26.9	23.1	37.6	27.9	13.5	10.9	432
1946	30.2	17.5	8.9	10.7	37.3	74.9	137.2	60.2	54.4	32.0	35.3	17.0	516
1947	26.4	17.3	10.9	17.0	13.5	121.7	42.4	90.7	48.5	4.3	40.1	20.3	453
1948	20.8	22.9	11.2	52.1	1.8	44.7	63.8	36.3	14.5	5.1	30.0	36.6	340
1949	3.8	4.3	9.9	4.8	73.2	35.8	46.5	29.5	19.8	23.4	9.9	13.5	274
1950	20.6	9.4	28.2	28.7	40.1	102.9	57.4	56.1	26.2	15.2	33.5	22.9	441
1951	16.8	39.1	19.6	32.8	6.6	121.7	32.3	91.2	92.5	48.8	9.1	22.4	533
1952	29.5	10.7	24.6	1.3	12.7	99.3	61.2	69.1	31.2	5.6	14.7	1.0	361
1953	24.1	22.6	36.1	20.6	89.2	103.1	88.4	23.4	34.8	15.7	2.5	17.3	478
1954	36.8	22.1	10.7	30.2	82.6	84.1	99.1	118.6	87.6	16.8	10.2	4.1	603
1955	31.0	23.6	40.6	54.6	78.7	65.5	102.4	21.6	28.2	9.1	38.9	28.4	523
1956	36.6	15.5	50.8	19.3	38.9	130.3	87.9	28.4	21.6	30.0	7.4	36.1	503
1957	8.6	5.8	28.4	42.9	17.0	34.0	34.3	26.9	9.1	26.4	15.2	6.9	256
1958	5.3	31.2	14.0	17.3	1.3	20.1	39.9	60.5	18.5	1.0	31.2	20.6	261
1959	4.8	11.4	10.4	14.7	24.6	102.6	25.7	19.3	138.4	41.7	29.0	22.6	445
1960	18.5	11.4	7.6	21.8	58.4	131.8	31.2	42.4	2.8	0.3	13.7	7.9	348
1961	10.2	14.5	6.9	13.7	57.2	13.7	24.6	1.8	13.0	27.2	7.9	17.8	208
1962	18.0	13.0	19.1	21.8	42.7	97.0	51.1	58.7	8.9	36.3	5.8	11.9	384
1963	4.6	12.4	5.1	17.8	57.7	116.1	132.8	51.1	17.3	13.2	5.6	10.7	444
1964	10.9	16.3	11.7	5.8	35.8	89.9	92.5	51.3	46.2	1.8	11.9	22.1	396
1965	8.9	14.7	5.8	17.0	95.0	126.0	42.9	30.0	55.6	0.0	24.9	23.4	444
1966	15.7	8.4	7.4	39.4	24.9	106.9	29.0	55.9	13.0	6.9	23.1	9.9	340
1967	27.2	11.4	29.7	8.1	8.6	29.2	4.8	17.5	84.8	41.7	21.8	15.5	300
1968	12.7	5.1	6.6	0.5	30.0	13.7	29.0	112.0	32.5	8.1	3.8	20.3	274
1969	34.5	28.4	15.2	21.1	24.6	49.0	73.2	47.8	31.0	60.2	3.0	10.7	399
1970	16.5	21.8	16.3	44.5	51.3	76.7	26.2	15.5	70.9	32.8	18.3	18.0	409
1971	16.3	4.8	22.9	22.1	6.9	76.5	43.9	8.6	10.2	38.9	7.1	15.7	274
1972	13.0	31.5	12.4	16.5	71.6	46.7	63.2	41.7	15.0	9.1	10.9	12.2	344
1973	1.3	10.4	13.0	58.2	48.3	75.7	48.8	34.0	51.8	9.4	23.4	33.0	407
1974	31.0	31.5	18.0	17.5	94.5	23.4	38.9	107.7	21.1	17.0	2.5	10.9	414
1975	15.5	13.2	18.3	43.9	24.4	199.1	14.7	54.4	45.2	9.9	12.2	24.1	475
1976	15.2	15.2	42.9	18.0	30.7	170.4	76.7	9.9	2.8	2.0	2.5	15.5	402
1977	6.9	0.8	10.1	11.0	91.5	45.5	80.0	15.3	34.9	8.6	12.5	26.2	343
1978	6.6	3.0	0.8	22.5	109.0	56.8	30.6	62.1	40.0	17.2	27.3	15.2	391
1979	5.0	19.2	7.2	38.9	67.5	49.7	29.3	11.8	15.4	26.0	4.0	12.1	286
1980	17.3	14.9	21.0	18.2	10.4	34.4	64.0	55.3	26.7	3.0	5.5	9.2	280
1981	14.1	4.3	21.2	12.1	8.6	67.1	78.4	33.0	59.3	56.4	13.3	19.4	387
1982	22.5	12.2	26.1	11.3	89.2	15.3	105.1	24.7	31.1	22.3	1.8	21.0	383
1983	9.0	7.0	28.1	5.4	43.8	73.2	178.7	6.5	61.8	9.7	17.4	9.3	450
1984	14.2	1.9	19.8	4.3	33.6	36.0	25.6	22.4	40.8	42.8	9.1	22.1	273
1985	10.6	18.8	12.6	42.6	56.5	45.4	10.0	70.2	56.0	14.2	23.0	15.1	375
1986	13.2	13.9	8.6	18.6	115.3	39.4	76.8	14.0	60.1	11.9	7.4	8.4	388
MIN	1.3	0.8	0.8	0.5	1.3	13.7	4.8	1.8	2.8	0.0	1.5	1.0	208
MAX	36.8	47.5	52.8	58.2	115.3	199.1	178.7	118.6	138.4	60.2	60.2	44.2	603
MEAN	16.2	14.1	18.3	20.5	44.2	76.7	56.6	43.4	35.0	21.0	16.2	15.2	378

PRECIPITATION (mm) -- SASKATOON

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1911	66.0	10.2	7.6	39.1	61.0	128.8	48.0	80.8	14.2	0.0	17.8	20.3	494
1912	0.0	0.0	15.2	1.5	78.0	87.1	68.8	69.6	70.1	6.9	11.4	15.2	424
1913	25.4	25.4	6.4	7.1	8.9	74.2	54.4	65.5	42.9	12.4	16.5	2.5	342
1914	22.9	10.2	12.2	10.2	41.9	47.8	21.6	10.4	36.6	66.0	26.7	15.2	322
1915	12.7	7.6	0.3	3.0	33.3	43.7	43.7	31.2	33.3	12.4	4.1	5.6	231
1916	35.3	1.0	25.9	17.8	73.2	49.0	128.8	45.7	29.5	31.0	2.3	2.8	442
1917	7.1	2.8	13.5	13.7	7.4	51.6	23.4	70.4	29.7	12.7	4.3	15.2	252
1918	16.8	5.8	3.8	40.1	25.9	48.0	94.0	37.1	4.6	11.7	2.8	3.8	294
1919	0.8	1.3	1.8	28.4	7.4	51.8	40.9	61.2	70.1	38.1	4.6	6.4	313
1920	35.6	16.5	34.3	10.2	42.7	21.8	65.3	66.5	40.1	33.8	13.5	5.1	385
1921	10.2	23.4	55.9	44.7	58.9	100.6	77.2	7.9	111.5	11.4	17.0	11.4	530
1922	5.1	10.2	17.8	6.9	61.5	33.5	14.5	82.8	12.4	27.2	8.9	16.8	297
1923	11.4	6.4	5.6	14.2	53.3	144.5	134.1	71.4	22.4	6.1	2.3	1.0	473
1924	21.6	34.3	12.7	19.1	15.5	28.4	8.9	37.1	29.5	42.2	22.1	14.0	285
1925	20.3	20.6	10.2	39.6	26.4	135.4	31.2	54.9	43.4	33.3	2.5	1.3	419
1926	7.1	12.7	8.4	11.7	70.6	47.0	53.3	49.0	35.1	20.6	22.9	6.4	345
1927	5.1	3.3	39.9	26.4	62.7	32.0	138.2	24.1	51.1	32.8	11.2	5.6	432
1928	1.3	2.8	7.9	8.6	7.9	103.4	130.6	38.1	3.0	18.0	2.3	3.0	327
1929	2.3	2.3	5.3	24.6	41.4	48.5	33.3	11.7	33.8	0.5	17.0	3.8	225
1930	4.1	11.4	6.1	8.9	35.8	83.1	34.0	17.0	57.9	29.7	1.8	2.0	292
1931	1.8	0.8	12.4	7.9	23.6	78.2	38.6	11.9	81.8	12.7	14.0	11.9	296
1932	6.4	16.8	7.4	25.1	3.8	75.4	40.1	46.2	20.8	5.6	2.0	7.1	257
1933	5.8	3.8	18.5	9.9	48.3	25.4	24.9	13.0	72.6	5.8	9.1	10.9	248
1934	4.6	0.5	5.8	20.1	9.9	101.9	27.7	30.7	23.6	5.1	6.9	15.5	252
1935	18.5	3.3	20.3	44.5	20.3	116.1	63.5	53.1	18.0	59.9	23.9	12.4	454
1936	26.2	22.1	5.1	17.0	31.5	69.1	12.2	24.6	7.9	24.4	0.5	47.5	288
1937	35.1	22.4	1.8	12.4	32.8	13.2	24.4	33.3	30.5	28.7	21.6	16.8	273
1938	34.0	35.8	26.2	18.3	41.7	35.1	53.6	44.5	61.5	40.4	39.9	25.7	456
1939	16.0	40.4	14.5	6.6	20.6	168.9	45.7	8.9	18.3	15.2	13.0	32.0	400
1940	8.9	17.3	17.5	4.8	29.5	62.7	60.5	22.9	14.5	29.2	48.0	12.2	328
1941	35.3	9.7	7.6	11.2	20.6	39.9	27.9	25.4	17.5	14.0	16.3	5.1	230
1942	3.3	8.1	8.9	59.7	13.2	186.4	53.6	35.6	36.3	4.6	30.0	31.2	471
1943	6.9	27.4	6.6	1.8	63.8	17.0	65.3	25.7	19.1	56.4	21.8	1.8	313
1944	2.5	17.8	11.2	7.6	100.3	43.4	74.4	27.2	21.6	9.9	5.1	2.0	323
1945	16.5	6.6	3.0	24.9	29.5	44.7	24.9	123.2	52.8	2.8	14.2	10.4	354
1946	21.3	24.1	3.8	11.9	22.1	40.4	48.5	59.2	70.6	32.0	50.3	8.4	393
1947	31.5	22.6	7.4	31.5	18.5	42.2	28.4	66.5	68.6	17.3	36.1	23.4	394
1948	48.0	33.8	24.9	26.2	16.0	37.8	27.4	40.4	7.1	0.5	24.9	20.6	308
1949	20.8	26.4	19.1	12.4	27.2	56.1	61.0	96.8	9.7	13.2	20.1	17.3	380
1950	25.4	9.4	1.5	28.2	15.0	90.4	114.3	38.1	13.0	31.8	30.2	30.2	427
1951	16.8	16.8	47.8	17.3	29.7	25.7	73.9	43.7	33.3	21.1	12.4	13.5	352
1952	12.4	13.5	11.7	2.0	38.1	52.8	41.7	8.9	17.5	7.9	16.0	1.5	224
1953	18.8	15.5	24.4	18.8	57.2	7.1	85.3	16.8	32.5	5.6	7.6	14.5	304
1954	36.1	19.3	11.9	38.1	59.9	91.7	37.8	130.3	29.0	17.3	17.0	9.9	498
1955	28.2	9.1	39.9	82.3	46.7	24.4	38.9	22.4	52.8	11.4	23.4	38.9	418
1956	27.2	41.7	45.2	9.4	5.3	41.1	40.4	59.2	11.9	20.6	11.7	59.2	373
1957	6.4	11.2	9.1	25.4	19.6	36.3	29.7	72.1	23.6	29.2	19.8	9.9	292
1958	17.8	18.0	13.5	32.0	12.2	9.4	103.9	4.1	47.5	3.0	29.0	25.1	315
1959	6.6	14.0	7.6	5.1	14.7	69.1	14.0	37.1	100.3	43.9	13.5	26.4	352
1960	11.2	16.8	17.5	15.0	58.2	66.0	11.9	20.8	3.8	6.1	10.9	13.7	252
1961	12.7	28.7	9.9	27.7	61.0	43.9	65.5	1.0	21.1	41.4	17.3	23.6	354
1962	16.5	36.8	19.3	5.3	20.3	26.7	106.7	45.0	23.9	7.1	13.0	22.4	343
1963	13.7	26.7	15.7	31.0	41.7	93.2	73.9	43.7	32.8	5.6	31.5	9.9	419
1964	15.5	12.7	6.9	7.9	43.4	16.8	24.6	58.7	49.3	10.7	4.1	16.3	267
1965	9.1	16.3	3.0	8.9	35.1	101.9	31.0	28.7	30.5	0.5	15.5	14.2	295
1966	17.3	11.2	14.0	16.8	17.0	136.7	47.8	48.0	13.5	10.7	23.9	12.2	369
1967	20.8	9.4	42.2	4.3	19.6	51.3	19.8	57.7	34.0	32.5	16.5	22.9	331
1968	18.0	2.8	23.4	27.7	57.2	37.8	109.7	81.5	46.0	27.2	3.3	14.7	449
1969	41.7	15.7	6.9	10.4	44.7	35.6	58.9	11.7	67.1	67.6	8.6	19.8	389
1970	8.9	9.7	31.2	15.2	13.2	156.7	45.5	26.9	3.0	20.6	22.1	21.6	375
1971	25.9	5.6	21.1	20.8	5.6	87.9	142.2	16.0	5.8	11.4	14.2	33.5	390
1972	25.9	18.3	21.3	5.1	41.7	54.6	64.0	26.9	10.7	10.4	7.6	19.1	306
1973	4.8	19.8	3.6	54.9	26.2	104.6	44.7	29.2	38.1	7.9	38.4	32.5	405
1974	37.1	10.4	35.1	13.2	104.4	61.2	58.7	64.3	27.7	9.7	1.3	11.7	435
1975	22.6	21.1	8.1	31.2	74.4	77.7	27.9	38.4	21.1	16.5	5.8	13.2	358
1976	12.4	17.5	17.3	24.1	23.1	70.9	77.2	4.6	20.1	3.6	2.5	15.2	289
1977	7.3	4.7	8.5	6.6	147.4	16.5	33.8	27.8	47.1	5.0	11.7	28.1	344
1978	10.5	4.9	4.7	32.2	34.3	39.9	56.0	41.4	52.5	19.8	32.0	8.8	337
1979	7.3	28.7	17.4	42.0	23.5	90.8	36.0	14.0	19.7	28.0	4.6	25.1	337
1980	23.4	14.3	14.4	5.5	20.2	42.3	24.2	63.1	38.8	16.5	5.4	21.1	289
1981	14.5	1.6	13.3	27.1	12.8	81.0	55.2	26.6	19.5	36.7	2.0	13.3	304
1982	9.5	4.0	12.7	13.0	83.0	52.9	80.4	81.2	41.6	6.2	21.4	7.6	413
1983	6.3	6.0	23.0	30.5	45.4	115.2	64.0	27.5	65.2	9.0	36.4	5.2	434
1984	9.0	1.2	11.3	18.2	29.0	70.0	13.4	7.9	58.2	58.6	18.8	14.6	310
1985	9.8	13.6	12.6	59.8	76.2	11.4	59.0	26.7	42.0	5.8	8.2	13.6	339
1986	25.4	9.4	19.0	6.2	58.6	49.8	119.8	14.6	58.8	6.8	13.0	7.2	389
MIN	0.0	0.0	0.3	1.5	3.8	7.1	8.9	1.0	3.0	0.0	0.5	1.0	224
MAX	66.0	41.7	55.9	82.3	147.4	186.4	142.2	130.3	111.5	67.6	50.3	59.2	530
MEAN	16.9	14.3	15.2	20.4	38.2	63.9	55.0	40.6	35.2	19.7	15.5	15.3	350

PRECIPITATION (mm) -- SWIFT CURRENT

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1911	14.2	6.6	7.6	21.6	42.7	67.6	65.0	60.4	24.4	12.2	21.3	20.3	364
1912	9.1	10.7	2.5	10.7	68.6	52.8	58.9	63.0	26.9	18.8	5.6	9.6	337
1913	12.2	7.9	34.8	16.3	35.8	87.9	53.3	49.0	12.2	8.9	0.8	1.0	320
1914	15.5	9.6	20.1	10.2	4.3	58.7	19.3	12.9	55.1	63.3	23.4	24.6	317
1915	12.2	4.1	2.5	0.3	109.0	69.1	60.2	19.3	32.3	18.0	2.5	33.3	363
1916	68.6	25.9	47.8	15.8	40.4	102.9	134.4	64.5	37.1	28.2	15.8	27.9	609
1917	28.7	25.6	35.3	27.9	1.0	51.3	17.8	32.0	37.1	22.1	0.3	22.1	301
1918	24.4	23.4	24.4	26.9	10.7	42.2	31.0	32.0	17.8	34.5	17.5	25.6	310
1919	12.7	40.6	23.4	53.3	21.3	14.2	16.8	81.8	26.9	13.5	3.8	4.8	313
1920	14.0	7.6	8.1	11.7	54.1	54.6	54.9	25.9	25.1	27.4	5.6	4.6	294
1921	3.3	2.0	14.2	17.0	54.1	51.8	62.5	31.0	107.7	19.8	10.9	4.8	379
1922	20.6	8.1	4.1	17.3	83.1	120.6	26.7	47.5	6.9	6.1	11.2	10.4	362
1923	10.2	10.2	14.0	12.9	21.3	173.2	107.4	33.3	0.3	8.9	19.8	4.6	416
1924	10.7	12.9	10.9	2.0	70.4	63.5	56.4	63.0	16.5	70.1	24.9	23.6	425
1925	22.1	5.6	23.1	60.4	21.6	39.6	45.5	45.5	68.1	22.9	3.8	5.8	364
1926	27.9	11.4	7.9	3.3	67.3	59.2	63.3	89.9	27.7	15.8	19.6	10.2	403
1927	12.2	27.9	36.1	29.5	167.1	28.2	88.1	72.1	42.4	32.8	34.3	16.8	587
1928	8.4	4.3	16.0	15.8	11.2	121.9	70.6	10.2	3.6	14.7	0.3	16.8	294
1929	46.0	13.7	14.0	15.8	56.6	78.0	36.1	12.2	34.8	9.1	24.9	36.3	377
1930	9.9	3.6	4.8	45.5	14.0	102.9	14.5	38.9	67.8	27.4	8.4	6.4	344
1931	2.5	1.8	16.8	6.1	16.8	62.2	30.0	54.9	59.7	4.1	13.7	33.0	301
1932	22.4	8.6	14.7	35.3	21.1	66.6	152.4	95.3	8.4	18.3	22.9	17.8	484
1933	15.0	21.8	8.1	26.7	55.9	72.6	16.8	117.6	47.0	23.1	11.4	38.4	454
1934	17.5	4.1	12.9	2.8	9.9	123.7	36.3	11.9	48.0	6.9	4.3	12.7	291
1935	41.9	8.4	35.8	38.9	29.0	92.5	86.4	47.8	0.8	21.6	24.4	13.2	440
1936	34.8	15.8	24.9	12.7	30.7	67.1	16.3	39.6	18.8	15.2	6.1	17.8	300
1937	30.5	9.6	5.1	4.8	23.6	12.4	24.9	21.1	22.6	19.8	16.5	20.1	211
1938	23.4	45.5	30.7	12.4	51.8	58.7	27.4	38.1	43.7	21.6	10.9	11.7	376
1939	16.3	13.7	16.3	16.8	82.3	137.2	55.1	7.4	8.4	23.6	1.3	16.5	395
1940	8.4	19.6	12.9	34.8	22.1	79.8	41.9	5.8	40.9	17.8	15.5	7.1	307
1941	10.7	4.1	12.9	5.6	24.4	55.4	45.0	79.0	22.6	0.8	22.6	15.8	299
1942	14.5	20.3	9.9	62.2	19.1	166.6	46.7	74.4	47.8	38.4	22.4	13.7	536
1943	25.1	13.2	15.0	2.3	77.2	42.7	26.9	27.9	28.7	55.6	5.1	4.3	324
1944	6.6	17.3	27.7	1.0	112.5	53.6	86.9	42.4	14.7	17.8	35.3	10.7	426
1945	31.5	24.1	7.6	50.6	11.9	34.0	13.2	54.6	69.3	9.4	24.9	20.6	352
1946	13.7	6.4	3.1	8.6	18.8	62.5	60.4	76.2	36.3	29.5	53.6	35.6	405
1947	35.1	20.6	18.8	29.2	27.4	80.8	21.8	48.3	47.8	17.0	35.1	21.8	404
1948	20.1	40.4	16.3	51.8	18.3	46.5	77.7	22.1	0.3	1.0	20.6	26.4	341
1949	18.0	8.4	12.2	5.1	31.8	38.9	53.6	30.0	16.3	35.3	5.1	29.2	284
1950	30.0	22.4	21.6	22.9	21.1	85.3	134.1	58.4	20.1	24.1	14.2	14.7	469
1951	18.3	31.5	47.8	19.1	16.0	108.2	35.1	79.5	57.9	33.0	10.2	23.1	480
1952	23.6	16.0	28.4	1.0	54.9	96.0	50.0	59.9	32.0	5.1	19.6	0.0	387
1953	31.2	16.5	41.4	42.2	66.3	105.4	15.0	12.7	65.8	6.1	0.5	17.3	420
1954	33.3	8.6	31.2	32.5	78.5	104.4	87.4	77.2	85.9	17.8	12.2	6.6	576
1955	17.3	16.0	30.2	54.6	68.8	54.6	120.9	6.1	29.5	11.4	24.6	26.7	461
1956	18.0	11.7	7.1	9.1	32.8	93.0	43.4	31.5	23.1	32.3	6.9	25.1	334
1957	17.3	3.6	14.5	36.1	5.8	51.1	67.6	53.6	8.9	26.7	21.3	14.5	321
1958	5.1	27.2	16.8	22.4	16.0	27.2	55.1	64.3	24.6	7.1	36.3	15.0	317
1959	10.7	5.3	6.9	28.7	23.1	147.1	37.6	24.1	33.3	29.5	30.2	12.9	389
1960	25.9	10.7	5.1	39.6	26.7	78.5	42.9	79.5	1.3	6.9	25.1	22.9	365
1961	13.5	26.9	3.6	32.8	30.7	39.1	35.3	8.4	8.4	24.6	19.6	40.6	283
1962	24.6	22.4	12.9	7.1	36.3	62.2	99.1	35.6	22.4	32.5	2.3	8.6	366
1963	23.1	26.2	10.2	10.9	39.6	132.8	23.1	37.6	19.3	4.1	2.3	19.3	348
1964	23.9	20.3	10.9	18.0	36.1	53.6	17.5	42.7	81.3	2.5	7.9	45.0	360
1965	24.4	23.6	24.4	14.0	60.2	104.9	46.5	99.1	82.6	1.8	32.0	18.0	531
1966	21.3	11.4	5.1	40.1	20.3	130.6	34.5	64.3	4.8	12.2	27.4	8.9	381
1967	44.7	22.6	63.3	41.1	27.9	17.8	5.3	23.6	62.7	28.4	33.8	20.3	392
1968	11.9	6.6	3.6	5.8	29.2	25.9	29.0	56.6	54.1	14.0	5.6	14.2	257
1969	37.3	11.7	23.9	51.6	25.9	29.0	95.8	2.3	21.3	63.5	2.8	14.5	379
1970	33.0	23.9	14.0	40.6	24.4	215.6	41.4	9.4	31.8	30.0	16.5	23.1	504
1971	23.9	9.9	8.4	14.7	12.2	72.4	41.4	5.6	15.2	11.9	13.2	13.7	243
1972	27.9	32.8	8.6	14.2	55.6	66.6	33.8	14.0	60.7	10.9	11.4	10.9	347
1973	3.1	11.9	12.9	81.3	4.8	31.0	16.8	31.8	6.1	6.1	33.8	39.1	279
1974	33.3	32.8	34.0	30.2	100.1	20.1	45.0	130.3	18.3	5.6	11.2	11.2	472
1975	10.7	12.4	45.7	49.5	48.8	61.0	38.9	77.2	36.3	33.5	10.9	20.6	446
1976	19.1	25.4	53.3	10.9	27.7	126.0	50.3	41.9	4.3	1.3	5.3	20.6	386
1977	18.3	3.8	17.3	4.9	117.5	21.3	79.0	27.6	20.8	6.0	14.3	48.6	379
1978	10.6	11.2	2.7	53.3	51.8	59.4	14.8	18.0	58.8	11.2	23.4	13.1	328
1979	4.7	23.0	9.0	32.0	44.7	51.8	38.0	0.0	24.6	25.0	6.0	12.1	271
1980	22.9	10.3	10.5	10.4	13.5	80.4	67.7	33.4	25.9	41.0	7.9	29.1	353
1981	14.7	6.9	12.7	18.5	22.1	112.7	89.4	18.1	13.7	27.2	18.9	10.6	365
1982	27.7	10.7	28.1	11.2	88.0	41.8	107.3	46.2	37.1	21.6	3.2	19.3	442
1983	13.2	6.9	31.6	28.4	60.0	33.1	91.0	19.8	14.2	6.3	20.7	10.8	336
1984	15.3	4.8	14.4	11.5	18.4	74.7	22.5	19.8	57.2	24.4	10.2	22.5	296
1985	14.7	10.2	25.9	13.4	32.7	20.4	18.2	29.4	51.5	27.7	18.0	29.0	291
1986	7.5	14.8	13.6	16.3	128.4	51.6	51.3	17.4	97.3	27.5	9.5	12.0	447
MIN	2.5	1.8	2.5	0.3	1.0	12.4	5.3	0.0	0.3	0.8	0.3	0.0	211
MAX	68.6	45.5	63.3	81.3	167.1	215.6	152.4	130.3	107.7	70.1	53.6	48.6	609
MEAN	20.1	15.2	18.5	23.6	42.2	72.1	51.6	42.6	33.8	20.4	15.5	18.3	374

PRECIPITATION (mm) -- YORKTON

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1911	25.4	7.6	7.6	47.8	75.4	86.4	42.4	144.5	32.0	51.8	51.6	14.2	587
1912	5.1	14.2	30.2	10.7	105.4	35.8	84.6	90.4	55.9	7.1	11.9	16.5	468
1913	30.5	6.4	15.7	16.5	15.0	54.1	228.9	97.5	37.6	13.0	7.6	6.4	529
1914	20.1	7.6	21.6	17.3	60.5	10.4	31.2	38.6	14.2	43.7	0.8	15.2	281
1915	6.4	9.7	0.8	6.1	17.3	102.6	131.8	9.9	60.5	15.2	28.4	5.1	394
1916	41.9	3.0	2.0	3.0	84.6	60.5	79.0	29.0	117.9	19.3	0.0	14.0	454
1917	34.5	14.0	22.9	23.6	6.9	85.6	15.5	63.0	10.9	2.0	0.0	22.9	302
1918	15.2	7.6	26.2	9.9	51.3	73.7	52.1	75.7	13.5	18.3	3.3	10.2	357
1919	10.4	4.6	8.9	23.9	46.0	95.8	38.9	53.1	46.0	15.2	25.4	6.6	375
1920	22.1	11.9	15.2	3.8	55.4	63.8	28.4	45.5	30.5	65.5	6.4	2.8	351
1921	2.8	6.9	31.0	30.7	58.9	139.7	79.8	78.5	132.6	61.5	26.7	15.0	664
1922	8.9	8.6	31.0	51.3	64.3	36.3	31.0	85.1	46.0	24.9	24.1	27.9	439
1923	27.9	2.5	13.2	16.3	27.2	124.5	72.6	32.5	26.4	10.2	12.7	7.1	373
1924	25.1	18.5	21.6	50.8	3.3	32.8	39.9	45.7	20.1	39.6	45.2	27.2	370
1925	34.3	16.8	28.4	17.3	18.0	91.2	21.6	21.6	45.2	42.4	10.4	10.2	357
1926	9.9	11.4	12.2	14.7	0.0	27.4	77.5	35.8	47.5	75.7	30.5	5.1	348
1927	6.4	11.9	21.8	32.3	72.6	88.6	109.7	38.6	117.6	40.9	37.6	13.5	592
1928	0.8	8.4	10.4	0.0	8.1	85.6	101.9	3.8	15.5	12.7	6.4	18.5	272
1929	19.8	24.1	10.4	10.9	77.0	21.1	24.4	15.5	37.6	20.1	34.5	22.1	318
1930	12.2	45.5	32.8	6.1	61.7	78.7	75.2	27.7	17.0	21.8	8.1	17.3	404
1931	22.1	9.4	25.4	0.3	9.4	59.7	53.3	74.2	37.3	17.3	41.4	17.3	367
1932	22.6	10.4	27.9	66.5	17.3	85.1	50.3	110.0	22.9	25.9	28.7	13.5	481
1933	30.5	26.4	23.6	22.9	130.6	95.5	41.4	33.5	55.6	28.2	36.3	40.1	565
1934	28.7	4.6	24.9	13.7	30.7	64.5	26.7	12.7	43.9	6.4	50.3	26.7	334
1935	29.7	12.4	22.6	20.1	40.1	146.3	69.9	59.9	27.4	20.8	19.1	11.4	480
1936	9.7	11.2	42.4	12.2	25.4	83.6	48.0	21.6	43.4	14.7	14.0	12.2	338
1937	25.7	16.0	16.5	19.1	32.5	20.8	62.2	27.9	54.6	17.0	26.7	13.5	332
1938	22.6	16.5	25.4	22.6	33.5	106.2	114.8	55.4	45.0	8.9	30.5	11.4	493
1939	15.5	22.9	21.6	5.6	42.7	87.1	31.0	34.0	32.3	8.1	20.6	43.2	364
1940	24.9	3.0	16.5	23.1	15.0	83.3	157.5	25.9	45.7	25.9	24.6	24.1	470
1941	45.7	18.8	16.8	28.2	46.7	49.3	34.5	35.1	9.1	14.5	87.4	15.2	401
1942	15.5	24.4	32.8	41.7	22.4	97.8	79.5	186.7	31.5	5.8	18.8	21.3	578
1943	19.6	58.7	13.5	2.8	51.6	47.2	42.7	81.8	17.8	33.8	24.6	3.0	397
1944	10.7	14.2	24.6	21.6	37.1	48.0	56.6	94.2	23.1	13.0	4.3	10.4	358
1945	12.7	14.2	48.0	27.9	48.3	95.5	42.9	17.0	121.2	9.1	27.9	10.7	475
1946	9.9	5.3	9.1	12.2	29.0	47.8	138.9	48.5	59.2	13.7	23.4	13.7	411
1947	28.4	13.0	11.4	14.5	7.6	149.6	19.3	84.3	61.5	11.7	72.6	27.4	501
1948	17.0	10.9	24.9	38.9	19.3	23.1	127.8	28.7	8.1	12.7	30.0	36.1	377
1949	5.3	17.3	16.5	1.8	78.5	96.3	117.9	27.2	20.3	17.5	30.5	19.6	449
1950	22.9	7.4	14.2	18.0	22.1	47.8	141.2	23.6	19.8	45.7	26.2	21.1	410
1951	8.6	26.9	27.7	14.0	64.5	88.1	21.1	91.2	49.0	38.1	23.6	14.2	467
1952	20.1	2.0	4.6	6.4	18.0	44.5	69.9	75.2	39.1	5.8	18.8	4.3	309
1953	39.4	20.8	54.4	14.5	96.8	159.3	164.1	67.6	59.7	22.4	12.7	22.1	734
1954	27.7	9.7	7.6	62.2	46.2	140.5	41.4	53.3	74.9	18.0	18.5	5.3	505
1955	29.7	7.4	40.9	61.2	57.4	45.7	86.4	44.7	55.4	18.5	53.8	18.3	519
1956	35.6	37.6	54.1	10.7	30.7	98.8	60.5	61.5	11.9	32.8	44.2	51.8	530
1957	7.4	7.6	43.4	14.5	18.8	34.3	25.9	78.5	11.4	17.0	11.4	16.3	287
1958	6.1	34.3	13.0	22.1	10.2	29.2	36.8	65.3	35.3	14.0	34.8	26.9	328
1959	7.6	6.1	7.1	35.1	14.7	147.1	24.4	71.4	98.0	54.9	21.8	36.1	524
1960	21.1	7.6	22.1	19.1	47.5	42.4	13.0	21.3	12.7	9.9	11.9	26.7	255
1961	13.5	14.7	25.7	14.5	49.8	10.4	13.2	11.9	33.5	28.7	29.5	17.5	263
1962	53.6	43.2	45.5	23.9	66.3	31.0	32.5	88.4	34.5	36.1	22.6	18.5	496
1963	8.6	17.5	27.4	20.6	57.9	117.9	97.0	65.5	44.7	12.2	20.3	38.9	529
1964	56.1	16.8	24.6	7.1	74.7	28.7	67.6	130.3	41.7	9.1	22.6	25.4	505
1965	10.9	41.9	14.7	28.7	83.8	86.1	75.4	30.7	86.9	0.5	25.7	13.7	499
1966	23.1	22.4	21.6	24.1	24.1	73.2	62.0	58.7	1.5	14.0	41.4	24.4	390
1967	42.9	12.2	44.7	6.9	8.6	7.9	25.4	23.4	40.4	43.9	16.3	26.2	299
1968	35.6	2.8	13.7	0.8	96.3	41.1	87.4	38.1	12.7	34.3	6.9	17.3	387
1969	34.8	31.0	11.9	7.4	35.3	49.5	75.4	66.8	63.5	29.7	7.4	14.0	427
1970	10.9	23.1	28.4	27.4	52.3	73.7	92.2	19.3	62.5	73.7	23.9	35.1	522
1971	15.7	11.2	11.7	12.7	1.5	138.9	91.7	14.5	31.2	40.6	20.1	8.9	399
1972	35.1	15.5	27.4	14.2	31.8	38.1	57.4	16.3	24.9	9.7	10.7	21.1	302
1973	0.8	15.7	21.1	42.4	46.0	119.1	67.8	124.0	44.2	11.4	20.6	22.6	536
1974	41.1	15.2	35.1	28.2	77.7	46.0	31.2	136.4	58.4	7.6	7.4	19.6	504
1975	27.4	15.0	14.7	80.5	14.0	91.2	36.1	94.5	62.7	6.4	9.4	18.0	470
1976	16.3	33.0	57.7	11.9	18.5	149.6	34.3	25.4	2.0	4.1	3.3	39.9	396
1977	4.2	12.4	21.5	4.9	112.1	32.3	53.1	42.5	107.1	14.4	15.6	37.5	458
1978	10.7	3.4	4.0	25.0	32.9	52.6	86.2	56.4	94.1	30.4	24.9	18.6	439
1979	11.1	19.3	33.0	25.7	27.1	20.3	11.2	23.4	58.5	31.0	10.4	27.1	298
1980	24.6	14.0	24.5	0.0	19.7	82.7	62.3	130.9	45.6	15.5	11.4	11.5	443
1981	7.4	9.4	6.5	32.3	53.7	113.5	131.9	78.6	76.4	66.7	0.2	17.2	594
1982	22.4	10.0	19.7	7.7	43.0	51.6	138.4	33.5	75.6	31.0	2.2	22.8	458
1983	10.2	16.7	33.8	10.5	65.0	106.8	140.0	28.3	29.4	31.4	26.4	6.9	505
1984	9.6	7.5	26.2	32.4	59.7	89.4	31.3	19.8	102.6	52.5	40.3	23.5	495
1985	16.0	17.8	18.3	17.9	62.7	102.7	25.9	69.9	77.6	5.8	26.6	14.8	456
1986	22.9	14.3	23.8	24.5	62.5	60.0	125.2	34.2	50.8	11.8	8.8	9.5	448
MIN	0.8	2.0	0.8	0.0	0.0	7.9	11.2	3.8	1.5	0.5	0.0	2.8	255
MAX	56.1	58.7	57.7	80.5	130.6	159.3	228.9	186.7	132.6	75.7	87.4	51.8	734
MEAN	20.4	15.4	22.8	21.0	43.8	73.3	67.3	55.3	46.2	24.2	22.6	19.0	431

PRECIPITATION (mm) -- BRANDON

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1911	48.3	17.8	1.3	12.7	68.1	50.0	73.9	148.3	36.3	40.6	15.2	7.6	520
1912	7.6	5.3	6.9	39.6	74.7	6.1	164.1	29.7	87.9	6.1	2.5	25.4	456
1913	27.9	15.2	12.7	8.9	26.4	59.4	43.2	90.4	17.3	18.5	7.4	8.1	335
1914	41.9	7.6	15.5	64.0	57.9	56.9	47.5	25.9	62.7	39.1	17.8	2.5	439
1915	2.5	3.8	10.2	27.2	32.5	96.8	59.4	4.6	83.6	16.3	27.9	21.6	386
1916	68.6	10.2	48.3	23.4	40.4	110.0	66.8	56.4	60.7	49.8	10.4	22.9	568
1917	45.7	22.9	2.5	27.7	3.6	44.7	32.0	19.8	38.6	23.9	1.3	12.7	275
1918	7.6	22.9	17.0	17.0	60.7	24.6	62.7	53.1	33.8	25.7	26.7	12.7	364
1919	7.9	15.2	30.5	38.9	40.6	90.7	54.4	35.1	41.1	49.0	20.3	12.7	436
1920	22.9	7.6	27.9	7.9	33.8	47.2	54.6	110.2	38.4	20.3	24.1	12.7	408
1921	17.8	61.0	27.2	36.1	104.4	83.8	15.5	66.0	140.2	11.2	25.4	3.3	592
1922	8.9	29.2	21.6	16.8	51.1	66.3	48.0	88.1	71.6	15.5	69.3	17.8	504
1923	31.8	15.2	34.3	23.9	20.6	94.7	129.3	26.7	20.1	16.5	27.2	1.3	442
1924	16.5	19.1	7.6	134.4	7.1	46.7	109.2	83.3	81.5	67.1	33.5	15.2	621
1925	22.9	17.8	33.0	46.5	30.0	111.5	14.5	113.3	54.1	28.7	4.3	2.5	479
1926	3.8	14.0	12.2	12.7	23.6	70.4	55.9	116.3	114.8	25.7	50.8	27.9	528
1927	12.7	12.7	25.4	53.8	134.4	79.0	64.3	123.2	25.1	39.6	36.8	6.4	613
1928	14.7	1.3	38.1	39.9	50.5	133.4	108.0	38.4	11.4	4.3	2.3	16.5	459
1929	20.3	3.8	27.9	49.0	47.2	42.9	29.2	10.9	61.0	42.9	14.0	30.5	380
1930	2.5	50.8	12.7	29.0	57.9	134.6	126.7	10.2	9.4	61.2	12.7	11.4	519
1931	8.9	2.5	16.8	8.6	10.7	84.8	120.4	60.7	45.0	13.0	2.5	3.0	377
1932	33.0	7.6	55.9	23.1	23.1	121.7	183.1	37.6	10.4	71.6	29.2	21.6	618
1933	16.5	7.6	1.3	34.5	96.0	23.9	40.9	124.5	57.9	36.6	29.2	24.1	493
1934	14.0	2.5	0.3	18.8	18.8	45.7	39.9	55.9	54.6	6.4	11.2	14.0	282
1935	30.5	3.8	44.7	27.7	35.6	179.8	169.7	112.5	26.7	11.7	17.8	12.7	673
1936	21.6	14.0	35.6	15.5	31.2	81.3	22.4	27.7	78.2	11.9	8.9	39.4	388
1937	14.0	16.5	7.6	80.0	82.6	83.1	106.2	93.7	42.9	55.4	31.8	15.2	629
1938	15.2	41.9	29.2	17.3	29.2	41.7	58.4	33.3	2.0	21.8	23.4	36.1	349
1939	12.7	21.6	0.0	21.8	77.5	74.2	49.0	48.8	37.8	10.7	1.0	6.9	362
1940	8.9	29.2	14.0	12.7	54.6	63.8	73.7	95.0	20.3	23.6	17.5	29.2	442
1941	27.9	6.4	13.5	40.9	71.4	81.8	55.4	56.9	111.3	13.2	35.8	10.2	525
1942	8.4	16.5	53.1	42.7	44.5	22.9	71.9	80.3	37.1	8.6	20.3	46.2	452
1943	52.8	14.5	19.6	4.8	81.8	48.5	51.3	34.0	20.8	10.4	1.5	13.5	353
1944	5.3	14.0	31.5	27.4	79.8	147.6	95.3	72.1	50.3	8.1	21.1	10.7	563
1945	20.1	18.8	43.2	30.2	33.3	84.8	51.1	21.6	46.2	25.7	33.5	34.0	442
1946	18.8	16.3	41.4	16.0	21.3	87.4	93.5	62.0	42.4	32.0	40.4	17.0	488
1947	45.0	23.9	30.2	25.9	15.2	123.7	35.6	87.6	19.8	21.8	23.6	40.1	492
1948	13.5	23.6	26.7	66.0	33.8	53.3	72.9	56.6	4.1	26.9	30.2	80.5	488
1949	19.6	10.2	23.4	7.9	132.8	38.4	121.7	22.4	23.9	50.8	15.2	16.5	483
1950	28.4	5.1	7.6	30.5	69.1	106.7	116.3	55.6	26.2	19.3	9.9	26.4	501
1951	7.6	34.3	15.0	15.2	13.5	54.4	6.1	97.5	15.2	27.7	17.3	5.6	309
1952	31.8	3.0	5.6	3.0	8.6	121.4	54.1	102.9	11.2	0.0	18.0	15.5	375
1953	26.9	15.0	69.6	29.7	65.5	167.6	88.6	27.7	25.9	20.1	0.0	9.9	546
1954	36.1	12.7	7.6	39.6	36.6	185.7	37.1	38.6	130.0	2.8	7.4	3.3	537
1955	33.0	12.7	41.4	39.1	62.5	107.7	67.3	70.1	48.3	15.2	39.4	15.2	552
1956	19.1	31.0	49.5	10.2	32.3	141.7	53.6	37.8	7.1	5.1	34.3	21.6	443
1957	5.8	6.9	10.2	21.6	31.0	88.9	77.0	97.8	19.3	14.2	5.1	6.4	384
1958	16.0	17.3	20.1	20.6	0.8	31.5	53.1	37.8	22.4	25.7	65.3	19.8	330
1959	3.0	12.2	12.7	23.1	68.6	30.0	67.8	41.9	104.9	144.5	40.9	19.3	569
1960	35.3	8.4	20.6	29.2	111.0	30.5	13.0	85.3	25.9	13.2	9.1	24.6	406
1961	10.7	46.7	7.4	43.4	19.3	7.1	54.9	1.3	91.7	1.0	6.1	21.8	311
1962	33.5	62.0	13.5	14.2	97.5	41.4	66.0	131.1	6.6	30.2	18.0	18.3	532
1963	3.0	18.5	14.0	29.2	53.1	112.5	47.2	27.9	33.8	3.8	10.2	23.4	377
1964	15.7	13.5	32.8	36.1	119.6	74.7	61.0	63.5	29.2	2.5	27.4	45.0	521
1965	10.4	11.9	13.7	31.5	83.3	36.6	154.7	54.6	101.3	3.3	30.2	22.6	554
1966	16.0	5.6	5.6	29.0	28.4	67.8	14.5	69.9	15.2	5.3	14.2	17.0	288
1967	27.7	6.6	23.4	65.5	10.4	25.4	38.1	29.2	4.8	68.1	17.5	27.2	344
1968	31.2	2.3	9.1	42.2	41.4	51.1	104.1	122.9	45.0	22.4	14.2	7.1	493
1969	43.9	63.2	9.4	46.2	31.2	77.7	95.8	79.8	38.9	8.9	4.8	8.1	508
1970	12.7	19.3	47.8	51.3	30.2	75.7	92.7	38.6	82.3	24.6	9.4	13.2	498
1971	12.2	0.5	21.8	55.6	30.5	185.7	106.4	11.9	64.8	63.5	17.5	5.8	576
1972	22.6	18.8	17.3	12.4	41.7	66.0	56.1	48.8	19.1	13.0	9.7	11.7	337
1973	2.5	7.9	6.6	37.8	58.4	67.8	122.7	51.1	108.5	48.5	23.6	36.3	572
1974	26.2	19.6	15.2	47.2	68.1	22.9	38.6	74.9	33.8	5.1	1.0	14.2	367
1975	32.5	14.0	37.8	107.2	43.7	97.0	61.5	160.5	79.5	18.5	13.5	25.4	691
1976	29.2	38.6	30.5	26.2	6.4	136.9	29.2	35.1	11.4	5.1	1.3	27.7	378
1977	14.6	8.6	2.8	4.6	83.0	92.8	138.0	41.6	93.7	6.0	11.8	33.3	531
1978	11.9	6.4	12.5	21.6	84.2	26.3	88.3	22.0	41.8	11.0	36.6	17.4	380
1979	8.9	18.2	33.5	64.4	73.4	24.7	27.5	19.2	46.3	12.0	9.0	13.5	351
1980	18.9	17.6	15.6	0.0	9.4	74.8	62.3	217.3	53.1	18.6	12.0	20.0	520
1981	13.2	7.9	7.2	16.9	27.0	71.8	28.5	160.4	60.1	45.8	2.3	6.9	448
1982	24.5	4.9	24.2	39.9	55.0	43.7	144.1	48.2	62.1	61.7	3.8	23.7	536
1983	13.1	13.2	42.6	2.2	49.4	68.0	70.4	65.3	43.6	15.2	22.4	7.8	413
1984	5.5	7.0	19.7	95.0	16.6	52.1	30.9	26.0	80.3	71.5	28.7	17.7	451
1985	9.4	14.8	3.8	4.4	30.6	95.9	11.4	177.9	72.9	15.2	19.9	10.6	467
1986	22.0	10.3	26.8	63.1	68.4	72.5	79.0	19.9	55.3	23.2	11.1	7.8	459
MIN	2.5	0.5	0.0	0.0	0.8	6.1	6.1	1.3	2.0	0.0	0.0	1.3	275
MAX	68.6	63.2	69.6	134.4	134.4	185.7	183.1	217.3	140.2	144.5	69.3	80.5	691
MEAN	20.2	16.6	21.8	32.6	48.7	76.0	70.1	64.8	47.8	25.7	19.0	18.3	462

PRECIPITATION (mm) -- THE PAS

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1911	10.2	5.1	13.2	67.1	30.7	56.6	118.6	59.7	48.8	11.4	40.6	17.8	480
1912	0.5	3.6	12.4	8.1	18.5	31.0	111.5	66.3	89.9	20.8	39.4	15.2	417
1913	29.7	6.9	1.5	19.3	38.4	81.8	61.5	74.2	25.1	15.5	8.4	3.3	366
1914	35.6	7.1	15.7	25.9	71.1	14.5	70.6	36.6	16.5	50.3	30.5	6.9	381
1915	9.1	1.8	6.4	11.9	20.6	75.7	20.8	13.0	7.1	19.6	16.0	16.5	218
1916	5.8	4.1	20.1	5.1	137.2	49.8	35.3	81.3	51.3	37.8	20.8	5.1	454
1917	8.9	5.1	17.3	15.5	13.0	75.4	25.9	47.5	18.3	59.7	5.6	23.6	316
1918	29.7	24.1	9.7	9.9	42.9	84.6	59.2	109.2	15.0	46.2	9.1	13.5	453
1919	13.0	1.8	7.6	7.6	11.7	90.4	72.6	54.9	47.2	54.1	14.5	10.2	386
1920	14.5	25.7	51.3	23.9	7.4	31.0	21.6	20.3	44.2	117.9	17.8	22.9	398
1921	19.8	55.1	13.7	41.9	10.2	5.3	32.8	30.5	71.6	5.1	7.1	16.5	310
1922	15.0	14.5	19.1	12.7	56.9	35.1	64.3	45.7	51.3	7.6	5.8	5.6	334
1923	19.6	10.9	7.6	2.5	18.0	45.7	56.4	87.6	39.9	1.0	11.9	20.3	322
1924	6.6	6.9	10.2	39.6	0.5	63.5	50.3	66.0	23.4	29.5	36.1	10.2	343
1925	10.4	14.0	14.0	20.3	26.2	92.5	88.1	52.1	78.7	29.0	13.5	11.9	451
1926	8.9	19.1	16.5	14.7	29.2	74.9	21.8	24.6	20.8	55.9	16.8	35.1	338
1927	0.3	14.7	12.2	32.8	20.1	18.5	51.8	54.4	85.9	25.7	19.8	20.3	356
1928	5.8	9.7	8.9	7.6	17.0	38.4	66.0	33.3	11.2	29.2	1.3	8.9	237
1929	3.8	13.5	40.1	21.6	6.4	30.2	32.3	42.9	50.0	6.9	24.9	17.8	290
1930	10.2	28.7	17.3	10.4	90.4	83.3	95.8	23.9	53.3	46.0	6.4	13.5	479
1931	38.1	2.8	29.7	5.1	25.7	37.6	72.1	73.2	129.3	48.5	17.8	13.7	494
1932	10.2	22.4	14.0	9.4	40.1	98.8	65.5	32.8	30.7	30.0	23.6	27.4	405
1933	21.1	11.4	32.3	17.8	3.0	38.1	55.9	56.9	42.9	46.5	69.1	50.8	446
1934	49.0	20.1	5.8	42.4	53.3	86.1	68.1	45.7	87.9	18.3	52.3	7.9	537
1935	14.7	5.1	46.2	19.6	51.3	56.6	48.5	51.3	50.3	50.5	14.7	6.9	416
1936	12.7	2.5	51.3	31.2	28.2	65.3	41.1	64.5	93.5	14.7	24.4	80.0	510
1937	20.3	7.9	32.3	47.5	45.5	24.1	14.5	67.1	47.0	30.2	67.1	79.8	483
1938	7.1	25.9	30.5	9.1	33.8	24.6	44.2	95.5	10.2	21.8	13.2	14.0	330
1939	30.0	11.7	10.9	19.6	28.2	131.6	45.2	36.3	26.7	29.2	18.3	25.4	413
1940	21.6	13.2	21.3	16.0	22.9	26.2	52.3	37.8	29.7	47.5	45.7	30.5	365
1941	21.6	42.9	21.1	30.5	37.6	28.2	37.1	21.3	26.2	5.1	54.1	17.5	343
1942	25.4	25.1	21.8	38.1	59.9	104.6	140.0	58.7	40.1	18.3	37.6	31.8	601
1943	15.7	30.5	30.0	7.1	57.7	101.6	127.0	71.1	142.5	31.5	36.1	15.2	666
1944	12.7	20.3	24.1	9.1	67.8	66.5	61.0	64.8	23.9	24.1	30.7	23.4	428
1945	18.5	13.2	32.5	48.8	16.8	90.9	87.6	70.6	77.0	20.1	52.6	16.3	545
1946	27.2	19.1	14.5	17.5	57.9	55.1	84.6	77.7	87.9	47.0	21.8	43.4	554
1947	68.8	41.9	26.4	31.0	39.9	50.3	59.2	113.5	58.7	25.7	64.5	25.4	605
1948	30.5	29.7	6.4	54.4	20.1	25.9	75.4	77.5	10.4	23.6	19.8	19.1	393
1949	25.1	25.9	18.3	44.7	46.0	66.0	55.9	83.3	46.0	27.4	21.6	28.2	488
1950	22.9	38.1	3.8	25.7	38.4	87.4	46.2	90.4	18.0	55.6	39.9	20.3	487
1951	3.0	3.8	31.8	24.9	35.1	107.2	50.5	61.0	88.4	38.6	30.5	11.7	486
1952	16.5	2.5	6.6	38.1	94.0	80.0	98.3	17.8	25.9	28.2	25.7	10.7	444
1953	35.1	11.9	57.4	8.6	40.1	71.1	88.1	49.3	99.6	2.5	11.9	32.3	508
1954	37.1	17.3	1.8	44.5	39.4	50.8	91.4	75.4	38.9	46.0	25.9	18.3	487
1955	27.4	8.9	4.3	51.3	77.2	18.8	109.0	74.2	43.7	28.7	59.2	22.1	525
1956	17.8	18.3	39.9	11.7	33.5	37.1	51.1	32.5	41.9	29.5	40.4	21.3	375
1957	9.1	12.7	40.9	36.6	26.9	27.7	39.9	102.1	51.3	19.8	22.4	31.5	421
1958	23.6	21.8	9.9	49.5	12.4	24.4	29.0	42.9	59.4	63.2	20.8	36.1	393
1959	16.5	8.1	17.8	5.8	14.2	87.4	85.9	55.9	88.9	19.3	39.9	29.2	469
1960	3.3	25.7	83.6	22.9	61.2	43.9	35.3	8.9	42.4	43.2	36.6	38.1	445
1961	6.1	61.2	11.9	31.0	31.0	24.1	21.3	9.1	56.1	57.9	51.3	40.1	401
1962	38.4	5.1	37.6	47.0	16.5	58.7	10.2	143.0	33.3	21.1	44.2	35.8	491
1963	36.6	7.4	23.1	14.0	39.6	101.3	143.0	104.1	55.9	9.9	51.3	11.9	598
1964	17.3	19.8	17.3	25.1	55.6	36.1	145.0	83.8	102.4	41.1	31.8	13.2	589
1965	15.0	81.8	4.6	0.3	68.1	37.1	112.5	78.7	125.7	6.6	41.4	21.8	594
1966	23.6	9.1	31.8	13.2	20.3	81.5	77.5	65.5	30.5	21.8	34.8	38.6	448
1967	36.1	6.1	41.1	18.0	15.0	31.0	54.4	25.4	103.4	55.1	21.1	38.4	445
1968	25.7	4.3	6.6	43.9	33.0	55.4	69.1	69.9	50.0	20.8	31.2	28.7	439
1969	23.6	13.5	8.6	11.7	36.3	23.9	37.1	71.1	58.9	43.4	11.4	14.5	354
1970	10.4	15.0	15.0	61.2	35.6	146.1	60.5	32.8	18.8	80.0	25.4	30.0	531
1971	14.0	13.7	16.8	16.0	19.1	35.3	60.5	52.3	58.7	72.1	21.1	31.2	411
1972	12.2	18.3	19.6	23.1	21.8	110.7	46.5	38.9	73.9	9.9	21.6	19.3	416
1973	17.3	21.3	20.3	101.3	19.6	72.4	33.3	71.1	79.2	22.4	47.0	16.5	522
1974	33.8	21.3	63.2	12.7	32.0	47.8	46.2	99.8	50.8	22.4	34.8	10.2	475
1975	29.7	10.9	6.9	29.5	63.5	117.3	27.9	67.1	63.0	8.1	15.7	16.5	456
1976	17.0	6.9	4.6	15.5	15.2	169.4	100.6	12.4	25.7	40.1	6.1	24.6	438
1977	4.7	16.6	25.0	24.7	32.0	52.4	114.1	113.1	24.6	53.3	43.5	19.7	524
1978	12.4	8.9	36.0	30.2	13.0	40.4	89.9	47.2	35.9	57.1	34.9	18.9	425
1979	5.6	13.3	18.9	31.4	57.8	29.8	62.0	52.8	87.6	45.4	11.4	8.9	425
1980	20.6	12.7	20.4	6.1	20.1	36.5	65.7	50.4	83.0	13.6	22.8	26.3	378
1981	5.7	15.5	19.0	29.5	8.4	69.4	96.7	41.8	80.9	118.3	8.3	35.0	528
1982	8.3	16.2	20.5	12.9	25.9	29.0	32.5	58.1	35.7	33.2	8.0	38.7	319
1983	16.2	10.9	22.6	22.6	74.1	72.7	134.8	57.8	96.0	12.8	51.1	8.9	580
1984	26.7	9.5	18.7	36.0	54.8	74.7	47.2	15.2	81.3	74.9	36.1	8.6	484
1985	21.7	13.5	9.5	12.7	54.5	78.5	36.8	143.6	36.2	27.1	14.3	19.4	468
1986	15.9	2.8	36.0	49.0	26.1	41.4	116.4	95.4	58.8	28.0	17.6	21.8	509
MIN	0.3	1.8	1.5	0.3	0.5	5.3	10.2	8.9	7.1	1.0	1.3	3.3	218
MAX	68.8	81.8	83.6	101.3	137.2	169.4	145.0	143.6	142.5	118.3	69.1	80.0	666
MEAN	18.9	16.4	21.5	25.5	36.4	60.1	65.2	59.7	54.1	34.2	27.9	22.6	443

PRECIPITATION (mm) -- WINNIPEG

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1911	11.7	17.5	7.1	65.3	162.8	56.9	75.2	64.3	56.6	46.7	15.0	15.0	594
1912	7.6	4.6	7.6	67.1	81.3	23.1	155.2	42.4	139.4	29.2	2.8	19.8	580
1913	19.1	15.5	9.1	10.4	13.5	83.1	53.1	119.6	32.3	19.6	19.1	6.6	401
1914	20.1	21.1	15.0	20.6	41.9	37.1	181.4	52.1	57.9	56.4	34.5	20.6	559
1915	8.1	26.9	2.8	33.3	20.8	65.8	47.8	1.0	124.2	26.2	29.5	42.9	429
1916	85.3	6.4	54.1	7.6	62.7	104.6	72.1	59.7	51.6	58.9	8.1	43.2	614
1917	27.9	22.4	8.4	5.6	0.8	56.9	95.5	27.9	49.0	34.3	5.6	17.5	352
1918	17.5	15.0	23.1	33.0	59.2	56.4	50.5	80.8	16.5	26.7	82.0	28.4	489
1919	4.6	11.7	39.4	28.2	48.5	125.7	97.3	79.8	82.3	42.2	57.4	17.8	635
1920	39.1	21.6	37.3	7.6	42.9	81.8	19.3	43.2	84.6	5.3	38.1	19.8	441
1921	36.1	57.2	27.7	47.2	45.0	39.4	94.2	62.5	92.2	23.6	21.8	12.7	560
1922	6.9	18.8	34.0	13.2	67.3	57.9	125.7	34.3	76.5	13.0	47.8	33.8	529
1923	41.9	26.2	32.8	18.5	64.8	37.3	90.2	16.5	27.7	12.7	26.2	4.1	399
1924	10.7	10.7	2.3	89.4	10.2	28.7	75.9	34.8	92.5	68.6	29.5	18.3	471
1925	41.7	13.0	50.3	28.4	11.4	56.1	15.5	75.9	60.2	33.3	5.3	16.3	407
1926	10.7	14.7	16.0	4.1	21.1	89.7	51.1	112.3	85.3	56.9	44.2	8.1	514
1927	8.9	9.9	12.2	61.7	119.4	45.5	29.0	72.4	64.5	80.5	24.1	16.8	545
1928	9.9	4.6	39.1	30.5	89.7	85.9	112.8	80.8	16.5	10.4	42.2	8.4	531
1929	12.4	7.1	32.5	28.7	68.3	34.8	27.9	14.0	60.7	22.9	18.0	38.4	366
1930	6.4	38.9	24.4	13.5	104.4	64.8	132.6	24.6	33.0	76.5	39.4	15.0	573
1931	6.6	4.6	22.6	8.6	62.2	30.5	81.5	46.5	81.8	52.6	29.7	3.0	430
1932	34.0	20.6	50.8	27.2	18.5	73.9	62.5	38.9	48.0	52.3	61.0	7.6	495
1933	26.4	15.5	11.9	24.9	133.9	24.6	40.9	92.2	68.3	17.0	43.7	39.9	539
1934	26.4	16.8	30.0	22.4	16.0	105.4	45.0	83.3	110.2	10.7	19.8	23.9	510
1935	40.9	3.8	72.1	30.0	43.7	105.4	48.8	120.7	41.4	35.1	22.9	24.4	589
1936	27.2	35.6	48.0	11.2	23.9	61.2	47.5	12.7	52.1	25.4	27.7	19.1	391
1937	25.9	30.0	7.1	67.1	55.9	58.9	71.9	53.8	58.2	18.0	21.8	34.8	503
1938	34.5	43.7	12.7	27.9	40.6	33.5	103.6	36.8	6.4	10.2	21.8	30.0	402
1939	23.6	38.4	1.5	27.4	34.8	63.2	36.1	140.0	41.1	8.1	1.5	7.6	423
1940	13.7	17.5	16.5	41.9	29.7	120.4	29.5	32.0	25.9	69.3	20.1	18.3	435
1941	29.5	7.9	17.0	22.9	91.9	66.0	64.5	95.8	149.6	47.8	15.0	16.0	624
1942	15.7	15.7	49.3	63.2	36.8	51.3	164.1	76.2	28.4	8.9	17.8	34.3	562
1943	36.3	18.5	37.8	7.1	81.3	96.8	87.9	73.7	39.9	11.7	5.3	7.4	504
1944	14.2	17.3	50.5	8.1	48.5	171.2	40.1	138.2	38.9	26.9	46.5	17.5	618
1945	16.0	16.0	70.6	41.9	39.9	50.3	67.8	55.4	131.1	20.3	39.4	28.7	577
1946	15.7	15.0	26.7	16.3	14.7	66.5	38.4	54.1	81.8	50.5	26.4	9.1	415
1947	37.1	31.5	18.3	34.3	21.6	93.5	74.7	115.1	21.6	40.1	23.1	47.0	558
1948	15.0	17.5	19.6	54.1	43.2	42.9	103.1	23.9	1.3	9.9	32.5	41.4	404
1949	51.8	27.2	17.5	2.0	43.4	68.8	58.2	57.7	38.9	144.0	32.8	40.9	583
1950	46.5	17.5	9.4	43.4	117.3	82.8	52.1	43.7	81.8	23.1	24.1	27.7	569
1951	11.7	14.7	16.0	25.7	24.6	63.0	41.1	110.5	48.0	23.1	16.5	8.9	404
1952	20.1	7.4	15.2	7.6	9.4	170.4	43.9	36.6	13.2	15.7	13.5	9.1	362
1953	45.5	26.7	30.7	40.4	119.9	110.0	197.4	26.7	72.6	31.8	5.8	10.9	718
1954	40.6	18.0	10.7	70.1	55.4	143.3	43.9	84.3	116.3	40.9	33.0	3.8	660
1955	38.6	37.6	27.9	25.1	49.3	118.6	49.0	13.0	32.3	45.7	90.2	51.8	579
1956	43.9	27.2	39.6	6.4	50.3	56.6	84.6	136.9	19.8	51.1	49.0	38.4	604
1957	17.8	24.1	25.7	39.6	43.9	127.0	42.7	88.9	61.0	30.0	17.8	6.4	525
1958	11.2	16.0	8.9	30.5	10.7	68.6	143.5	24.4	20.3	39.4	81.3	27.7	482
1959	5.6	24.9	25.4	17.0	117.6	59.2	90.7	100.1	97.3	87.4	18.0	9.7	653
1960	17.5	11.4	30.7	49.8	34.0	55.4	17.0	78.5	23.6	46.7	12.2	19.1	396
1961	2.8	41.7	13.5	43.2	9.9	3.3	83.6	4.1	58.4	25.4	4.3	30.7	321
1962	22.1	39.9	30.2	17.0	132.3	53.6	155.2	173.5	15.7	18.5	54.6	10.7	723
1963	6.6	29.5	18.5	90.4	65.8	87.1	53.8	53.1	16.0	20.1	14.7	26.7	482
1964	16.8	5.1	50.3	54.4	34.0	119.1	22.4	71.1	34.5	5.8	15.7	30.5	460
1965	5.6	14.0	13.5	64.8	91.4	60.2	80.0	34.5	64.8	14.5	44.2	38.4	526
1966	9.4	10.4	40.9	47.0	38.1	35.8	85.9	105.2	18.3	21.6	26.2	21.1	460
1967	20.6	9.4	17.5	72.6	28.2	50.3	111.0	57.2	22.6	45.2	14.7	21.1	470
1968	21.3	4.8	13.2	32.3	99.1	82.8	143.8	143.0	58.7	40.4	3.8	8.9	652
1969	47.5	8.6	9.9	25.4	76.7	104.9	101.3	57.2	61.0	27.2	9.4	18.8	548
1970	22.9	15.0	27.4	65.3	86.6	50.5	69.6	74.9	112.0	26.7	26.7	23.4	601
1971	10.7	4.6	43.7	60.2	47.0	75.9	115.1	17.0	49.8	72.1	22.4	5.8	524
1972	16.0	10.4	20.1	13.0	29.0	50.3	60.2	103.1	61.2	24.6	10.4	25.4	424
1973	2.5	6.4	13.7	21.1	103.1	88.1	122.9	65.5	82.0	37.1	40.1	10.2	593
1974	39.1	11.2	15.2	58.7	156.0	17.8	32.0	109.7	46.0	5.3	5.6	13.0	510
1975	45.7	15.5	18.8	45.7	47.2	120.1	58.2	132.6	41.7	38.1	13.0	17.0	594
1976	29.7	22.9	22.9	31.5	10.4	182.4	36.8	58.9	9.9	2.5	0.8	18.0	427
1977	12.5	20.9	9.9	5.2	177.7	88.4	85.2	89.6	148.2	30.2	28.4	18.8	715
1978	10.3	7.5	11.4	22.8	122.6	51.5	60.6	18.5	82.6	10.2	42.6	20.9	461
1979	9.0	20.1	45.3	73.5	93.1	65.1	23.1	76.1	24.9	15.4	14.6	11.3	471
1980	34.0	17.6	13.2	0.0	7.8	44.6	23.7	109.8	85.6	33.0	25.0	11.0	405
1981	23.2	3.3	14.6	12.7	47.6	90.4	39.0	103.6	72.5	59.6	5.9	7.3	480
1982	25.7	7.8	35.8	13.3	23.3	54.2	106.9	59.0	58.2	62.0	5.7	31.7	484
1983	12.7	15.1	65.6	6.3	29.1	139.2	29.8	85.2	52.8	21.7	16.3	5.7	479
1984	12.2	8.0	11.7	46.9	29.8	227.9	38.3	21.6	62.0	99.0	26.6	22.4	606
1985	11.2	13.5	6.8	16.2	64.0	67.4	34.0	218.0	28.5	29.2	43.9	14.0	547
1986	9.6	12.9	16.9	98.3	25.2	59.2	118.0	17.0	47.5	11.6	48.4	6.4	471
MIN	2.5	3.3	1.5	0.0	0.8	3.3	15.5	1.0	1.3	2.5	0.8	3.0	321
MAX	85.3	57.2	72.1	98.3	177.7	227.9	197.4	218.0	149.6	144.0	90.2	51.8	723
MEAN	22.3	17.8	25.0	33.5	56.9	75.5	73.2	69.1	57.5	34.7	26.6	20.2	512

NET EVAPORATION

NET EVAPORATION (mm) -- CALGARY

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1911	-11.2	-14.2	-26.4	14.5	-30.0	92.2	122.9	35.8	81.0	39.0	-15.5	-4.3	284
1912	-15.2	-2.0	-8.6	-3.5	109.2	75.1	27.6	67.6	23.9	21.9	-17.3	-0.3	278
1913	-32.5	-14.2	-12.7	51.5	60.2	29.5	160.3	8.2	71.3	29.4	-24.6	-0.3	326
1914	-23.6	-29.2	-19.3	28.6	110.7	76.1	110.1	104.1	78.9	-0.8	-69.1	-19.1	347
1915	-10.2	-5.6	-1.5	50.3	20.0	13.7	35.6	131.4	44.7	1.5	-11.9	-7.6	260
1916	-20.1	-15.5	-19.3	30.4	39.6	110.5	122.7	91.7	77.2	15.0	-7.1	-12.7	412
1917	-8.6	-12.7	-4.1	9.8	60.0	70.5	184.2	110.3	57.1	5.6	-0.3	-37.6	434
1918	-7.6	-15.2	-11.2	30.4	61.2	170.5	143.5	88.1	77.8	42.5	-2.5	-20.8	557
1919	-8.6	-28.4	-14.0	31.2	121.1	146.2	161.1	65.8	43.4	30.6	-19.8	-1.0	527
1920	-29.7	-25.1	-9.4	-15.7	98.8	109.4	51.9	159.7	106.2	20.0	-2.5	-14.0	449
1921	-22.6	-15.2	-49.0	-9.8	100.4	138.2	131.6	117.7	96.7	54.2	-33.0	-1.3	508
1922	-8.1	-4.6	-13.0	1.5	87.1	122.8	129.7	144.7	81.9	45.5	-4.8	-7.4	575
1923	-7.6	-15.0	-57.2	34.2	-17.7	-61.5	78.9	100.2	96.0	50.5	-10.6	-27.4	163
1924	-21.3	-27.9	-61.0	-0.3	118.2	15.1	120.6	25.8	74.0	15.5	-35.6	-56.9	166
1925	-9.1	-10.4	-36.8	21.6	128.2	76.4	139.1	131.3	-36.6	16.6	-16.3	-5.6	398
1926	-7.1	-23.9	-13.0	13.4	108.8	22.5	113.6	59.4	-131.8	15.5	-38.9	-18.0	101
1927	-3.6	-17.8	-21.6	44.2	43.2	35.4	-84.3	67.3	-4.1	11.0	-46.7	-32.8	-10
1928	-12.4	-21.3	-32.3	12.5	123.2	-75.5	114.3	113.2	86.6	28.3	-5.6	-5.6	325
1929	-12.2	-14.0	-13.7	9.2	82.5	105.1	200.2	163.8	77.7	27.3	-39.4	-25.4	561
1930	-8.6	-8.4	-21.3	-54.5	94.3	108.1	135.9	148.9	75.4	19.0	-32.3	-13.2	443
1931	-1.3	-3.8	-49.0	33.8	127.0	111.5	168.3	180.5	56.5	58.3	-8.1	-39.4	634
1932	-10.2	-10.9	-26.9	-42.8	38.2	14.7	126.2	114.0	83.7	31.7	-20.3	-8.6	289
1933	-10.7	-10.2	-5.1	-3.9	47.2	139.0	179.6	95.5	103.3	20.1	-12.7	-32.5	510
1934	-5.6	-6.1	-36.1	57.9	132.0	57.6	130.3	140.5	50.3	44.8	-6.6	-6.6	552
1935	-30.2	-13.7	-23.9	8.1	47.4	53.5	121.1	106.8	112.0	15.3	-8.1	-11.2	377
1936	-16.5	-6.6	-13.7	37.0	88.8	128.0	220.1	124.0	78.3	49.9	18.8	-8.4	700
1937	-42.9	-5.6	-42.2	23.6	100.0	100.1	128.9	131.8	46.3	40.7	-32.5	-7.6	441
1938	-3.8	-17.5	-20.1	36.6	30.5	65.1	107.5	116.1	92.5	33.8	-27.2	-13.2	400
1939	-7.9	-16.0	-41.7	26.8	102.2	-90.1	172.6	192.5	89.3	-14.5	17.0	-3.3	427
1940	-6.1	-22.4	-20.8	-51.4	110.4	119.7	51.5	184.9	13.7	1.3	-12.7	-8.6	359
1941	-11.7	-10.4	-19.6	53.7	34.1	52.0	128.5	65.1	35.7	49.3	-0.5	-7.4	369
1942	-16.8	-39.6	-10.2	50.0	30.3	34.9	9.8	68.4	39.3	37.5	-36.1	-7.4	160
1943	-23.6	-19.3	-30.7	48.2	49.0	59.9	149.7	108.8	109.7	26.7	26.7	-1.8	503
1944	-5.6	-24.1	-26.2	33.7	58.1	62.7	56.6	112.5	88.8	58.0	-7.1	-5.1	402
1945	-18.3	-30.7	-37.8	2.5	30.9	73.4	109.4	63.1	35.6	21.6	-42.7	-26.7	180
1946	-6.9	-5.8	-19.3	63.0	65.5	27.0	101.0	73.7	71.0	36.4	-38.6	-24.6	342
1947	-16.0	-39.4	-31.2	41.2	98.0	4.9	174.2	77.7	73.0	39.5	-49.5	-10.4	362
1948	-17.8	-41.9	-31.8	-25.0	-2.0	69.3	157.7	114.6	121.2	77.7	-11.2	-12.7	398
1949	-41.4	-9.9	-14.7	69.1	131.5	143.5	158.5	172.1	138.8	29.0	35.9	-38.9	773
1950	-13.5	-14.7	-39.1	28.1	120.2	111.9	16.7	53.5	108.2	14.3	-19.6	-4.1	362
1951	-22.9	-33.5	-21.3	7.3	94.5	7.2	19.2	-43.1	43.4	-20.1	-7.1	-38.9	-15
1952	-12.4	-31.0	-35.3	36.8	78.6	-9.0	76.3	93.6	91.4	45.8	-6.9	-0.8	327
1953	-24.1	-38.6	-20.1	-39.4	68.1	-27.4	91.9	88.4	79.1	71.7	-7.4	-30.0	212
1954	-44.2	-25.1	-37.8	-40.4	58.4	71.6	160.5	-118.1	70.7	66.9	26.9	-4.1	185
1955	-5.6	-29.5	-28.4	-35.0	57.8	160.4	83.0	164.9	43.7	65.3	-9.1	-38.1	429
1956	-34.5	-11.2	-24.9	21.3	120.6	56.8	132.0	74.6	93.3	40.6	-12.2	-21.3	435
1957	-25.1	-13.7	-16.8	28.2	111.3	74.4	139.1	53.9	91.2	-2.3	-24.1	-5.3	411
1958	-7.9	-19.6	-25.1	7.4	152.2	50.8	103.4	164.1	84.6	79.9	-17.3	-6.4	566
1959	-11.2	-17.5	-8.1	44.6	86.9	51.1	154.3	88.9	91.6	61.1	-37.3	-14.0	490
1960	-19.8	-31.2	-5.8	44.4	88.8	87.6	159.7	142.6	123.1	54.9	-12.7	-17.5	614
1961	-5.6	-30.0	-4.8	22.2	85.6	206.9	30.0	145.4	96.0	26.8	-3.8	-12.4	556
1962	-11.7	-11.2	-10.4	57.6	58.7	131.6	144.5	137.9	100.3	59.8	-4.3	-7.6	645
1963	-25.4	-7.9	-14.2	38.3	113.7	12.9	93.8	147.9	74.3	78.8	-13.2	-21.1	478
1964	-1.8	-2.0	-8.4	56.6	93.2	65.0	137.0	194.1	60.5	62.5	-20.8	-24.1	612
1965	-11.7	-16.0	-16.0	39.9	93.5	-21.6	46.4	79.9	14.6	69.8	-31.0	-7.6	240
1966	-10.2	-5.3	-4.8	10.3	87.9	73.1	45.6	124.0	124.6	56.1	-33.8	-5.6	462
1967	-20.6	-9.7	-19.6	16.7	65.4	90.8	182.0	167.6	149.1	52.1	-6.4	-15.2	652
1968	-14.2	-2.3	-18.5	48.4	87.1	96.6	111.2	122.6	55.0	47.7	-3.0	-23.6	507
1969	-14.2	-12.4	-6.6	7.4	103.7	27.2	86.9	166.0	52.8	19.5	-4.3	-2.8	423
1970	-12.4	-9.4	-23.1	18.2	112.3	14.3	117.7	182.8	108.4	45.2	-17.0	-9.7	527
1971	-24.1	-10.4	-27.2	40.6	131.0	68.0	109.8	182.9	81.2	41.0	-1.5	-27.4	564
1972	-17.3	-21.6	-11.2	57.9	104.7	27.7	82.4	96.7	42.9	44.7	-5.1	-35.6	366
1973	-3.3	-18.5	-9.7	26.7	124.1	88.1	164.2	95.7	83.1	58.0	-23.4	-8.6	576
1974	-24.1	-3.3	-17.0	9.4	40.2	177.1	164.7	89.5	81.2	69.6	-6.6	-4.1	577
1975	-7.1	-12.4	-22.6	32.9	55.0	82.1	114.5	137.5	100.9	48.6	-7.6	-35.1	487
1976	-4.8	-12.4	-10.4	57.2	108.2	84.7	106.1	56.8	69.8	41.8	-21.1	-10.9	465
1977	-21.5	-0.2	-6.4	83.8	32.1	157.1	129.9	39.1	12.1	68.9	-8.6	-13.7	473
1978	-28.4	-10.8	-6.6	-33.9	54.5	98.6	110.7	56.2	28.4	69.5	-12.7	-8.7	317
1979	-7.3	-8.0	-10.2	12.1	81.1	127.8	155.2	127.5	114.3	30.3	-4.3	-15.0	604
1980	-12.6	-10.6	-14.0	50.0	64.6	29.6	127.8	117.0	84.2	37.9	-16.2	-18.4	439
1981	-4.7	-8.7	-35.6	83.3	-24.4	88.3	32.1	130.8	88.4	22.5	-7.0	-4.0	361
1982	-22.6	-10.4	-27.0	55.8	51.5	47.7	88.2	135.0	49.5	61.3	-6.6	-8.1	414
1983	-8.8	-5.6	-22.7	2.5	139.3	125.1	133.6	148.7	127.4	65.5	-10.6	-13.4	681
1984	-9.9	-2.6	-20.3	60.6	74.5	102.7	201.1	204.0	4.6	47.6	-5.3	-7.3	650
1985	-3.4	-15.9	-2.8	46.0	135.4	136.7	167.9	105.0	-13.6	55.9	-11.3	-8.7	591
1986	-0.7	-11.3	-5.8	62.8	70.7	107.1	73.7	146.5	-57.0	56.2	-11.7	-1.2	429
MIN	-44.2	-41.9	-61.0	-54.5	-30.0	-90.1	-84.3	-118.1	-131.8	-20.1	-69.1	-56.9	-15
MAX	-0.7	-0.2	-1.5	83.8	152.2	206.9	220.1	204.0	149.1	79.9	35.9	-0.3	773
MEAN	-14.8	-15.7	-20.9	24.1	79.2	72.2	115.1	108.9	68.0	39.0	-14.1	-14.7	426

NET EVAPORATION (mm) -- EDMONTON

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1911	-30.0	-7.9	-9.9	37.6	86.4	31.4	-3.2	1.7	60.7	25.9	-13.2	-6.6	173
1912	-29.2	-4.1	-10.2	0.3	53.1	63.7	3.8	4.9	50.3	23.7	-10.2	-2.5	144
1913	-63.2	-16.0	-14.0	27.0	95.0	25.9	20.2	-11.3	70.6	30.9	-1.5	-4.6	159
1914	-26.4	-27.2	-8.9	62.4	112.9	-103.2	64.2	68.9	9.6	18.1	-21.6	-37.8	111
1915	-26.4	-0.5	-2.5	39.8	82.8	-25.3	6.8	32.6	67.6	52.4	-15.2	-13.7	198
1916	-27.7	-22.1	-20.3	29.0	63.3	72.5	53.7	26.9	20.4	43.6	-18.0	-44.2	177
1917	-48.0	-30.2	-3.0	12.0	94.2	97.2	69.8	58.5	81.8	35.5	3.5	-22.9	348
1918	-36.6	-8.9	-23.4	42.9	82.5	52.5	75.6	60.1	58.0	47.2	-7.9	-41.9	300
1919	-27.4	-13.7	-15.0	35.2	67.3	124.3	108.7	132.2	60.6	-13.4	-48.0	-20.8	390
1920	-51.3	-7.6	-32.0	15.6	79.7	22.8	85.9	79.7	54.3	29.7	-4.6	-6.4	266
1921	-20.1	-34.5	-41.9	48.9	110.7	58.9	75.7	100.9	96.5	60.7	-16.0	-4.1	436
1922	-19.1	-22.1	-14.5	9.2	113.8	116.8	118.9	51.1	86.2	30.9	-5.8	-16.3	449
1923	-26.7	-19.6	-42.7	55.5	91.8	34.2	72.4	50.8	69.3	42.2	-4.3	-11.7	311
1924	-37.1	-12.4	-36.1	35.6	97.8	86.5	63.8	60.2	79.7	15.9	-17.5	-40.9	296
1925	-24.9	-43.2	-16.0	-9.2	109.6	68.1	127.4	67.2	58.4	13.7	-20.3	-17.8	313
1926	-16.3	-7.6	-22.6	54.2	29.1	84.3	102.8	4.1	7.0	31.8	-25.7	-37.3	204
1927	-15.0	-22.9	-11.7	36.9	66.3	65.7	32.7	111.1	45.4	37.8	-39.6	-24.6	282
1928	-8.9	-5.1	-30.5	22.8	91.7	70.1	1.9	73.0	87.6	41.7	-0.3	-12.7	331
1929	-26.2	-26.7	-19.8	11.9	127.6	157.5	118.1	107.5	92.6	66.9	-26.9	-24.9	558
1930	-14.5	-3.6	-5.3	38.2	90.2	88.3	111.5	112.7	62.7	29.4	-22.4	-8.1	479
1931	-0.3	-0.3	-31.8	73.3	124.8	33.7	92.7	64.5	100.8	34.6	-17.8	-26.7	448
1932	-14.0	-20.3	-22.6	-14.5	82.3	91.7	91.8	172.7	104.5	41.4	-39.1	-15.7	458
1933	-10.7	-21.1	-44.5	42.9	77.0	58.3	70.3	115.6	59.4	9.1	-28.2	-72.4	256
1934	-16.8	-14.2	-22.4	49.0	74.8	30.4	76.8	116.2	55.5	72.1	-11.7	-20.8	389
1935	-63.5	-4.6	-27.9	-22.7	45.9	61.8	146.1	82.8	104.5	16.1	-58.9	-43.4	236
1936	-45.2	-14.7	-7.4	23.4	74.3	103.2	166.7	133.8	112.0	43.2	-24.9	-19.3	545
1937	-23.6	-5.8	-9.7	46.9	112.9	150.1	-36.5	107.2	75.6	48.3	-26.7	-25.9	413
1938	-14.0	-11.9	-9.4	59.1	112.3	86.4	82.1	37.1	102.6	28.7	-36.6	-34.3	402
1939	-22.4	-58.4	-21.1	52.2	0.9	90.8	155.7	195.0	46.8	5.5	-12.4	-11.4	421
1940	-23.9	-14.2	-70.1	-31.3	76.6	75.7	53.4	120.3	88.5	-8.8	-39.6	-13.0	214
1941	-13.0	-9.9	-7.6	55.6	101.8	3.4	97.6	35.5	52.5	11.7	-17.5	-11.9	298
1942	-4.8	-13.0	-7.6	16.1	76.8	-46.8	40.2	62.7	37.6	42.7	-78.7	-36.1	89
1943	-19.8	-17.8	-33.3	37.3	61.7	-16.0	77.9	18.7	101.9	7.1	-7.9	-11.9	198
1944	-10.2	-38.6	-34.0	45.6	29.8	-8.0	67.0	100.9	60.7	52.5	-18.8	-11.7	235
1945	-47.2	-12.2	-4.8	22.5	128.5	121.7	93.9	76.4	78.9	14.9	-17.0	-20.6	435
1946	-36.6	-22.6	-5.8	42.6	109.3	13.3	106.3	41.4	48.0	47.9	-21.8	-30.0	292
1947	-31.5	-33.5	-11.4	0.1	112.5	61.6	92.1	61.4	14.9	24.9	-19.8	-33.8	237
1948	-26.7	-48.5	-13.0	-39.8	74.6	117.3	101.6	99.9	74.4	63.4	-12.4	-15.0	376
1949	-25.7	-19.1	-10.9	64.9	102.1	165.0	30.6	82.1	89.6	45.5	2.7	-32.3	495
1950	-30.5	-8.9	-5.1	27.3	124.8	124.7	97.9	66.4	93.5	33.4	-20.3	-8.6	495
1951	-25.7	-37.8	-36.6	12.3	56.0	92.8	21.8	81.8	71.7	19.7	-25.9	-32.3	198
1952	-44.2	-15.7	-12.2	67.7	87.5	16.4	57.2	84.9	64.2	71.2	-5.6	-3.8	368
1953	-50.3	-8.6	-44.7	16.8	78.9	23.7	-42.5	11.2	94.2	50.0	-9.9	-24.6	94
1954	-13.2	-9.1	-27.9	23.0	35.2	65.5	64.7	-33.4	78.8	53.1	-6.1	-5.1	225
1955	-12.4	-16.8	-27.4	-47.5	117.8	139.8	12.7	129.2	14.3	31.0	-12.2	-47.0	282
1956	-28.2	-30.5	-30.5	29.2	146.8	21.6	81.0	31.3	57.6	44.3	-11.7	-32.3	279
1957	-14.2	-18.5	-16.3	29.7	121.4	116.9	145.0	41.5	93.5	20.6	-30.5	-18.0	471
1958	-23.1	-22.9	-9.9	40.1	127.8	85.0	102.3	82.5	1.6	53.4	-17.3	-25.9	394
1959	-23.1	-6.4	-6.4	61.0	88.4	70.2	108.2	34.1	51.9	5.5	-11.4	-25.9	346
1960	-6.6	-22.6	-9.7	59.6	72.8	78.5	79.7	45.5	46.3	12.4	-17.5	-26.9	311
1961	-8.6	-18.8	-4.6	39.0	107.1	133.2	64.1	153.8	78.3	27.1	-16.8	-20.3	533
1962	-25.1	-38.9	-25.4	15.9	59.1	65.3	59.0	78.4	76.3	43.6	-9.7	-20.8	278
1963	-37.1	-22.9	-15.7	32.9	94.0	99.8	104.4	118.5	77.2	52.4	-8.6	-10.2	485
1964	-18.3	-10.7	-10.7	53.0	85.1	141.8	114.4	92.1	33.4	54.7	-37.1	-18.0	480
1965	-50.8	-25.9	-11.4	27.9	58.3	-42.9	104.2	99.5	62.6	67.8	-18.0	-16.8	255
1966	-35.3	-12.7	-5.1	34.7	133.4	118.2	99.6	-27.9	99.6	54.3	-16.8	-11.9	430
1967	-26.2	-19.8	-31.0	28.9	107.5	118.2	143.2	113.1	159.9	24.1	-23.1	-26.2	569
1968	-25.1	-4.8	-9.9	47.2	165.8	112.8	101.1	61.9	68.3	46.3	-3.0	-27.7	533
1969	-23.9	-19.8	-8.9	25.7	98.4	150.0	88.4	56.0	19.7	19.3	-17.8	-17.8	369
1970	-14.7	-11.9	-22.1	55.2	129.2	106.4	14.9	159.3	91.4	23.4	-25.9	-18.5	487
1971	-42.7	-4.1	-18.5	58.3	168.7	52.2	43.6	181.0	105.8	65.6	-25.1	-35.3	549
1972	-21.1	-30.0	-44.7	30.3	84.9	67.9	117.7	72.2	66.0	61.6	-21.6	-17.3	366
1973	-11.7	-12.7	-5.3	20.8	146.7	51.8	148.3	66.5	71.5	28.3	-34.0	-27.9	442
1974	-40.4	-24.4	-34.0	32.5	82.1	69.2	64.1	116.9	56.8	65.9	-2.0	-24.4	362
1975	-13.2	-18.3	-16.3	18.4	96.9	68.8	136.7	23.4	94.2	38.0	-4.3	-37.3	387
1976	-15.2	-23.4	-10.2	50.7	148.5	54.6	147.2	6.1	67.6	56.7	-3.6	-41.7	437
1977	-21.2	-6.7	-12.6	66.9	-8.8	171.7	31.9	65.5	61.3	83.9	-12.2	-22.2	398
1978	-26.1	-11.2	-5.7	34.0	52.7	68.5	25.1	44.4	-31.5	47.0	-36.6	-12.3	148
1979	-9.4	-37.7	-7.7	21.5	84.3	64.8	-42.2	90.1	80.4	47.8	-6.2	-35.9	250
1980	-29.9	-19.9	-32.3	69.5	101.3	16.6	104.7	-25.3	40.6	40.2	-1.6	-55.4	209
1981	-10.3	-7.9	-13.7	38.3	90.4	94.4	27.1	149.5	86.5	28.9	-0.4	-16.4	466
1982	-70.0	-16.8	-35.1	38.3	128.3	144.1	-37.8	79.4	76.8	39.0	-15.9	-3.9	326
1983	-3.5	-13.5	-18.6	45.6	133.3	-33.7	78.3	144.0	61.5	36.9	-16.2	-15.9	398
1984	-23.1	-5.4	-12.9	60.7	46.3	64.6	144.4	154.4	-7.3	-3.1	-17.4	-31.9	369
1985	-16.0	-16.7	-4.8	5.3	110.9	86.8	157.7	75.6	51.5	29.3	-13.7	-29.1	437
1986	-11.5	-7.8	-37.7	24.5	101.7	88.2	15.2	133.9	-8.3	28.5	-27.2	-2.9	297
MIN	-70.0	-58.4	-70.1	-47.5	-8.8	-103.2	-42.5	-33.4	-31.5	-13.4	-78.7	-72.4	89
MAX	-0.3	-0.3	-2.5	73.3	168.7	171.7	166.7	195.0	159.9	83.9	3.5	-2.5	569
MEAN	-25.3	-17.9	-19.2	31.9	92.0	70.5	75.0	76.0	64.9	36.4	-18.2	-22.8	343

NET EVAPORATION (mm) -- LETHBRIDGE

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1911	-17.8	-13.2	3.9	38.2	92.4	35.8	144.5	35.9	-13.0	30.0	-24.1	-19.6	293
1912	-17.5	-10.2	-11.2	38.7	113.5	130.0	83.3	107.1	26.8	30.1	-25.1	-5.8	460
1913	-20.3	-7.6	-10.7	58.0	76.6	49.2	188.6	154.8	73.8	48.0	-9.1	-0.3	601
1914	-39.4	-24.4	-51.3	41.4	140.0	106.1	186.1	74.1	94.6	-6.8	-8.1	-34.3	478
1915	-12.7	-23.9	-5.6	66.5	44.4	32.2	60.5	129.7	61.5	45.9	-21.1	-8.1	369
1916	-27.7	-29.0	-23.1	48.6	24.1	75.0	118.1	107.4	-20.0	-19.3	-12.2	-14.7	227
1917	-10.9	-7.1	-4.1	-5.7	73.4	126.3	206.7	116.6	44.6	31.2	0.0	-33.3	538
1918	-17.8	-21.1	-18.5	49.0	111.1	178.4	175.9	136.0	74.0	31.7	-10.9	-11.7	676
1919	-1.5	-24.1	-19.1	53.2	98.3	214.1	204.0	172.4	37.2	2.7	-32.0	-14.0	691
1920	-21.3	-30.7	-22.6	-61.2	84.1	157.3	140.6	180.9	142.5	56.1	-1.5	-20.1	604
1921	-14.2	-11.9	-36.1	33.7	118.3	208.4	188.9	210.3	154.1	116.1	-43.9	-4.8	919
1922	-10.9	-10.4	-20.6	-18.0	132.7	134.7	127.5	199.9	137.9	43.3	-11.9	-15.2	689
1923	-12.2	-10.7	-19.1	41.9	66.2	45.6	83.5	112.4	107.4	42.5	8.7	-23.1	443
1924	-16.8	-26.4	-17.5	56.8	111.3	55.2	190.5	101.0	91.3	44.5	-25.9	-39.1	525
1925	-7.6	-25.1	-57.4	6.7	156.7	76.8	168.3	161.5	-27.8	19.2	-4.1	-15.7	451
1926	-6.1	-19.3	-2.8	67.5	173.4	61.9	192.9	111.0	-27.7	62.2	-13.2	-14.2	586
1927	-7.9	-35.3	-9.4	21.5	-50.1	128.0	115.8	116.9	26.8	52.0	-73.2	-24.4	261
1928	-23.9	-20.1	-23.6	18.5	161.1	-39.4	58.0	118.6	111.6	33.3	-7.1	-8.4	379
1929	-27.4	-16.0	-34.0	-10.0	68.0	89.0	228.7	228.1	51.4	15.9	-12.4	-48.5	533
1930	-9.4	-5.1	-19.6	13.8	111.2	133.7	135.0	159.5	60.6	47.1	-23.4	-5.3	598
1931	-0.3	-6.4	-35.6	65.6	139.8	146.2	181.6	172.6	60.4	70.1	-30.7	-18.5	745
1932	-20.6	-14.0	-26.7	5.7	72.5	117.2	212.5	127.5	102.2	42.6	-47.5	-18.8	553
1933	-8.4	-9.7	-63.8	1.4	105.2	200.2	227.8	97.5	94.0	-5.7	26.3	-57.7	607
1934	-10.9	-7.9	-58.4	97.7	191.9	77.0	237.8	200.1	38.0	42.5	-3.5	-15.0	789
1935	-11.9	-18.3	-27.7	-0.1	110.9	200.1	232.0	201.7	158.4	44.8	-13.2	-11.9	865
1936	-30.2	-15.7	-24.9	41.4	139.8	146.0	262.8	170.7	102.1	67.1	24.0	-35.6	847
1937	-44.7	-10.7	-20.1	85.7	159.5	139.2	148.0	198.4	97.9	37.4	-17.8	-9.7	763
1938	-25.9	-16.3	-35.8	37.1	64.3	120.0	172.9	124.7	113.3	37.0	-64.5	-10.2	517
1939	-5.8	-21.3	-19.8	67.4	145.1	3.4	235.5	219.5	72.7	57.9	24.7	-18.0	761
1940	-5.1	-37.3	-15.2	-40.6	118.7	147.9	132.5	223.3	58.4	24.1	-27.2	-12.7	567
1941	-18.5	-16.0	-26.4	36.2	110.9	100.8	129.4	137.8	59.6	67.9	20.1	-13.7	588
1942	-6.6	-25.1	-18.8	44.8	5.9	37.2	65.7	116.2	80.5	77.0	-40.9	-7.4	328
1943	-27.7	-17.8	-30.2	57.4	113.5	141.1	221.4	190.5	154.6	33.9	14.6	-1.0	850
1944	-4.1	-31.5	-33.3	47.7	94.1	166.3	127.5	93.8	121.6	82.5	-53.3	-16.0	595
1945	-17.0	-37.3	-27.4	9.8	33.5	47.2	182.1	172.9	40.4	57.2	-28.4	-46.2	387
1946	-16.8	-12.4	27.8	73.7	75.7	48.8	187.5	162.4	77.6	-66.3	-73.9	-33.8	450
1947	-20.1	-33.0	-44.7	22.6	117.6	-23.9	258.9	62.3	26.2	41.9	-37.1	-14.0	357
1948	-21.8	-39.1	-41.1	18.9	34.8	-20.7	124.7	198.9	158.3	84.1	-18.3	-10.7	468
1949	-54.1	-24.1	-32.5	87.4	6.8	111.9	188.0	180.2	141.0	-11.1	31.3	-35.3	590
1950	-30.2	-9.1	-35.6	37.7	119.3	81.7	143.6	154.8	141.3	34.6	-34.0	-23.9	580
1951	-33.0	-26.7	-31.2	-14.4	99.0	-39.0	144.7	10.5	45.3	-20.2	-4.8	-53.8	76
1952	-15.5	-18.0	-33.5	73.1	96.9	122.9	136.6	101.7	123.0	68.5	-19.1	-1.0	636
1953	-25.7	-52.6	-39.9	-29.9	128.3	-2.7	166.1	195.6	127.2	98.5	36.8	-24.6	577
1954	-62.2	-13.5	-34.5	24.4	135.1	149.5	220.7	58.4	24.6	80.5	35.5	-5.3	613
1955	-12.7	-55.9	-25.4	22.6	9.2	162.4	61.8	231.8	120.8	73.1	-19.8	-20.3	548
1956	-21.6	-20.3	-26.4	40.9	100.6	146.1	103.5	81.4	110.3	68.4	29.5	-23.9	589
1957	-36.3	-17.8	-13.5	15.8	115.9	69.6	262.8	163.5	101.5	-21.2	-39.6	-5.1	596
1958	-7.4	-52.1	-23.9	29.2	134.1	67.2	105.1	193.7	148.2	96.7	-56.1	-24.9	610
1959	-26.9	-16.0	-13.5	35.2	76.4	109.2	231.2	160.3	108.9	51.0	-33.5	-31.2	651
1960	-18.8	-22.9	-6.4	47.0	121.0	183.6	274.2	178.3	178.0	86.7	-6.1	-20.6	994
1961	-7.9	-10.7	-25.9	44.0	89.3	219.5	148.8	233.9	72.9	46.1	-11.2	-11.4	787
1962	-15.5	-20.1	-22.6	97.6	99.4	161.5	172.2	254.7	115.6	91.3	25.7	-10.4	949
1963	-28.2	-6.9	-5.6	59.1	152.5	45.5	162.0	134.8	128.3	105.3	-12.4	-33.5	701
1964	-20.1	-9.7	-29.2	5.3	86.6	115.6	260.5	244.7	79.1	100.6	-24.4	-50.5	759
1965	-23.6	-23.6	-24.6	21.3	136.3	8.8	137.4	152.9	35.3	125.3	-34.8	-11.7	499
1966	-20.3	-10.7	-14.5	28.2	136.6	25.5	110.9	137.7	140.3	54.3	-36.6	-10.7	541
1967	-12.7	-15.7	-56.1	-66.1	83.4	78.0	250.3	186.0	187.4	91.7	-14.2	-42.4	670
1968	-17.5	-2.3	31.7	23.0	94.8	117.1	169.3	106.3	13.7	64.5	-1.8	-40.4	558
1969	-36.6	-14.7	-15.7	60.4	110.2	9.0	147.0	254.4	136.9	47.5	52.2	-4.1	746
1970	-25.9	-12.4	-30.0	34.2	134.5	122.6	237.7	212.8	121.5	68.8	-27.4	-12.7	824
1971	-37.3	-29.0	-13.7	43.6	104.4	130.2	209.8	231.7	115.7	48.1	-9.4	-27.7	766
1972	-37.8	-12.7	-57.9	55.4	94.1	178.8	110.7	179.9	89.8	58.5	-0.3	-22.1	636
1973	-5.3	-13.0	31.4	32.1	162.6	182.7	216.1	208.1	84.3	76.0	-24.9	-13.5	937
1974	-23.6	-6.4	-21.1	-31.4	85.1	217.1	213.8	104.6	122.7	94.5	-4.6	-22.9	728
1975	-12.4	-24.6	-36.8	-20.8	42.0	83.3	118.3	151.6	81.5	38.0	-20.8	-19.6	379
1976	-10.7	-7.9	-10.7	40.0	147.1	102.7	171.2	132.8	138.3	65.4	-14.2	-8.6	745
1977	-32.2	-2.0	-41.2	84.0	143.5	171.0	224.8	54.7	69.6	89.2	-11.1	-40.2	710
1978	-45.0	-18.5	-21.2	-67.6	30.6	179.8	60.2	55.6	27.4	81.0	-25.6	-23.1	234
1979	-14.1	-9.1	-14.2	11.5	96.9	208.8	229.6	105.7	158.1	55.6	-9.3	-8.0	812
1980	-21.7	-21.2	-25.3	54.4	37.2	140.1	218.5	132.6	131.1	53.0	38.1	-28.8	708
1981	-20.2	-8.0	-3.7	95.7	-5.0	87.4	128.5	133.9	144.3	58.2	31.8	-5.7	637
1982	-39.3	-10.2	-47.1	68.3	137.7	91.2	139.9	193.8	93.8	78.2	-16.2	-12.1	678
1983	-13.9	-5.3	-25.0	35.1	123.5	178.1	173.2	214.6	160.3	90.9	-12.6	-20.0	899
1984	-19.5	-2.8	-22.9	42.2	169.2	146.2	227.1	221.1	23.0	33.5	-5.5	-14.1	798
1985	-6.3	-13.2	-20.1	47.8	143.0	218.1	252.8	105.3	0.4	70.9	-36.1	-11.1	752
1986	-5.8	-20.5	17.8	72.1	119.0	141.3	188.5	173.1	-10.1	31.2	-37.6	-3.8	665
MIN	-62.2	-55.9	-63.8	-67.6	-50.1	-39.4	58.0	10.5	-27.8	-66.3	-73.9	-57.7	76
MAX	-0.3	-2.0	31.7	97.7	191.9	219.5	274.2	254.7	187.4	125.3	52.2	-0.3	994
MEAN	-20.0	-18.4	-23.0	32.5	100.5	109.4	171.8	153.1	87.6	51.9	-13.4	-19.6	612

NET EVAPORATION (mm) -- MEDICINE HAT

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1911	-5.1	-4.1	-1.9	17.6	104.1	72.6	185.8	92.3	31.7	27.2	-55.9	-13.7	451
1912	-17.8	-4.6	-7.9	15.4	85.3	145.1	137.7	109.3	60.5	31.7	1.8	-9.1	547
1913	-10.4	-28.2	-26.9	40.2	86.6	65.4	218.5	144.2	99.0	35.2	6.3	-5.1	625
1914	-31.0	-20.3	-15.0	52.9	142.6	125.7	215.1	173.6	104.5	-55.7	-2.1	-22.9	668
1915	-9.7	-29.2	-0.5	66.9	75.8	47.6	80.5	161.6	29.2	37.0	-2.3	-3.6	453
1916	-13.5	-30.7	-7.4	50.5	28.2	33.8	131.5	138.9	79.1	31.1	-14.0	-31.8	396
1917	-18.3	-14.0	-3.6	16.6	124.9	134.8	222.7	97.6	64.7	24.9	-0.5	-74.7	575
1918	-46.0	-21.3	-9.4	47.2	137.7	140.5	154.0	150.1	104.2	37.7	-8.4	-22.4	664
1919	-0.5	-8.9	-14.0	12.7	119.7	171.0	264.2	227.9	93.6	41.3	-29.2	-2.8	875
1920	-41.9	-7.6	-24.6	21.8	105.8	147.5	153.8	243.1	161.6	27.7	-0.3	-21.3	765
1921	-2.3	-14.0	-41.9	7.3	92.7	154.4	268.6	260.9	104.1	62.9	-27.7	-2.0	863
1922	-13.5	-14.7	-8.1	1.8	106.7	113.0	164.3	193.4	107.7	56.3	-8.1	-18.0	681
1923	-17.8	-9.9	-10.9	39.8	129.4	18.2	101.3	145.7	133.4	35.2	1.7	-10.4	556
1924	-48.8	-6.4	-3.3	64.6	155.1	149.2	256.3	139.1	75.1	30.8	-15.2	-31.5	765
1925	-6.6	-1.5	-21.3	-14.8	150.4	93.6	204.4	170.8	22.0	37.5	-7.6	-13.5	614
1926	-15.7	-6.4	-2.4	34.5	125.8	162.9	181.3	121.9	83.4	62.2	-24.1	-54.6	669
1927	-4.1	-12.4	-25.7	8.0	-0.1	137.7	47.8	7.3	89.2	28.8	-32.0	-14.5	230
1928	-1.8	-2.5	-2.0	31.3	156.3	43.3	106.9	180.2	127.2	44.2	1.2	-6.4	678
1929	-5.6	-35.6	-45.7	-24.4	93.3	121.6	274.3	211.2	104.6	60.2	-9.4	-7.4	737
1930	-0.8	-2.5	-0.8	-6.0	147.6	162.5	220.1	230.9	59.5	39.6	-13.0	-9.7	827
1931	-1.5	0.0	-13.2	85.0	163.1	140.8	208.7	162.5	78.4	72.4	-34.0	-51.8	810
1932	-11.7	-17.8	-13.2	17.1	91.3	131.9	173.0	142.4	43.4	35.4	-26.7	-10.9	554
1933	-13.7	-9.7	-19.1	24.6	73.1	154.0	258.0	164.8	122.2	8.3	-23.6	-48.5	690
1934	-15.5	-2.5	-32.8	84.1	193.2	51.1	220.1	198.3	63.2	60.6	-17.0	-21.6	781
1935	-53.3	-5.1	-30.7	-8.2	73.3	169.0	206.2	216.2	159.9	34.4	-17.0	-10.9	734
1936	-29.0	-21.1	-24.1	30.5	146.6	145.9	275.0	191.9	116.7	50.6	-7.4	-31.0	845
1937	-14.7	-13.5	-22.6	60.9	119.6	206.7	215.8	197.7	117.1	50.0	-32.0	-5.8	879
1938	-22.4	-32.0	-64.5	48.8	67.9	98.0	163.3	145.7	62.0	32.9	-19.3	-26.4	454
1939	-35.3	-20.6	-23.1	48.5	132.4	20.5	222.6	213.9	114.5	42.4	20.9	-26.2	711
1940	-16.8	-56.1	-40.9	-25.4	104.7	139.0	112.4	209.8	-30.2	-13.0	-40.4	-8.4	335
1941	-19.3	-14.0	-24.6	48.1	83.3	58.7	163.0	134.8	53.2	59.8	-4.1	-12.4	526
1942	-13.0	-28.7	-16.0	33.6	47.7	33.0	126.6	101.9	80.2	28.4	-36.1	-10.7	347
1943	-33.0	-32.0	-17.8	74.1	114.8	140.1	239.3	201.3	130.0	63.6	-0.3	-1.0	879
1944	-6.6	-19.6	-24.1	65.6	90.6	92.3	177.7	106.4	108.1	66.6	-17.3	-5.8	634
1945	-16.8	-16.3	-11.9	32.6	97.9	103.2	206.5	160.3	39.2	38.8	-14.0	-43.4	576
1946	-17.0	-5.3	11.4	71.6	85.9	90.8	199.9	82.6	43.6	-1.2	-58.2	-19.3	485
1947	-9.7	-16.3	-15.2	4.7	104.8	19.0	226.1	81.3	41.0	53.7	-20.1	-14.5	455
1948	-13.7	-32.5	-30.5	27.5	90.1	104.2	152.9	184.9	120.6	69.8	-10.9	-18.3	644
1949	-12.2	-5.6	-3.3	63.1	71.2	152.8	187.5	203.0	121.6	20.0	20.2	-38.1	780
1950	-16.0	-8.6	-11.9	48.1	121.9	124.0	139.8	82.3	118.6	-0.6	-9.9	-15.2	572
1951	-34.3	-29.7	-40.1	29.6	89.6	-14.1	144.5	33.0	32.5	-12.9	-16.3	-34.0	148
1952	-23.6	-36.6	-36.3	64.3	83.5	69.1	121.3	124.8	96.3	70.7	-12.4	-8.9	512
1953	-19.1	-17.0	-41.9	-20.4	51.9	53.4	164.9	176.6	110.0	93.0	30.6	-18.8	563
1954	-46.7	-10.7	-59.7	-32.4	113.8	111.6	188.1	85.1	39.1	79.1	27.4	-9.9	485
1955	-11.4	-39.6	-23.9	27.0	28.4	138.9	79.2	211.6	115.6	68.2	-17.3	-14.0	563
1956	-32.8	-32.3	-29.5	47.8	84.5	110.0	101.3	94.6	102.7	59.6	-5.3	-20.1	481
1957	-37.8	-19.1	-36.1	9.9	144.8	121.8	204.3	136.3	102.0	-1.3	-19.6	-5.1	600
1958	-9.1	-37.1	-11.9	56.7	151.7	131.1	136.3	176.7	98.4	72.8	-56.6	-9.9	699
1959	-22.6	-6.1	-9.9	59.2	99.9	142.6	221.0	169.6	102.3	38.1	-26.4	-8.6	759
1960	-38.1	-25.1	-2.8	46.2	121.5	169.9	228.7	144.8	150.2	77.4	-20.8	-20.3	832
1961	-7.1	-7.1	21.2	42.3	108.2	232.5	173.5	216.4	129.6	44.2	-8.1	-16.0	930
1962	-16.0	-15.2	-18.0	83.6	103.5	158.2	122.7	209.3	80.0	63.0	28.4	-7.4	792
1963	-45.7	-13.0	32.7	65.0	139.8	48.8	173.1	128.7	114.2	94.8	-1.5	-24.4	713
1964	-20.8	-6.1	-16.5	37.9	121.7	153.7	219.0	215.0	61.4	72.9	-19.1	-43.2	776
1965	-13.7	-15.5	-14.5	28.0	126.3	60.9	124.5	120.9	46.7	78.4	-32.0	-7.4	503
1966	-36.3	-8.1	-1.8	18.7	148.3	61.3	127.6	149.8	131.9	59.9	-22.9	-10.2	618
1967	-29.0	-30.7	-25.4	-46.8	99.7	114.8	221.4	195.6	173.6	59.8	-9.7	-17.8	706
1968	-7.1	-5.1	27.6	25.3	108.5	47.3	152.8	166.2	66.7	58.7	-2.5	-19.3	619
1969	-34.0	-6.1	-9.9	50.4	113.9	136.5	140.3	235.7	114.6	21.0	-2.8	-7.1	753
1970	-37.6	-4.8	-11.2	31.5	118.1	58.5	143.9	214.8	124.6	56.9	-17.3	-11.9	665
1971	-42.7	-7.4	-16.3	59.6	119.1	140.2	222.9	238.7	114.1	52.0	-9.1	-12.7	858
1972	-21.8	-23.4	-8.4	72.0	111.8	173.2	154.3	171.8	79.6	51.5	-4.3	-30.0	726
1973	-1.8	-8.6	39.8	28.6	165.2	79.5	242.7	199.1	110.9	67.7	-23.9	-19.1	880
1974	-14.5	-17.5	-27.7	17.7	72.1	176.5	232.5	126.3	134.7	89.7	-1.5	-7.6	781
1975	-7.6	-20.6	-36.6	-16.2	39.9	91.2	162.8	140.5	102.5	55.5	-25.9	-25.7	460
1976	-3.0	-9.4	-21.1	49.4	172.2	123.7	132.1	193.1	159.1	71.8	-14.2	-5.3	848
1977	-18.0	-0.7	-6.2	104.0	95.0	224.5	214.7	153.3	74.2	85.1	-17.9	-31.0	877
1978	-18.9	-16.2	-8.7	-21.4	93.6	129.3	164.8	168.1	50.7	49.5	-22.6	-8.5	560
1979	-5.7	-16.3	-8.0	23.0	95.2	119.2	191.4	190.1	148.5	61.2	-6.7	-10.8	781
1980	-23.4	-8.0	-13.7	90.7	141.9	97.2	182.6	144.9	114.1	24.9	22.5	-23.2	750
1981	-10.6	-0.6	9.1	70.3	62.4	107.2	161.8	190.0	148.2	27.4	17.9	-12.6	771
1982	-22.9	-10.9	-25.7	54.1	60.9	90.1	82.7	167.9	59.8	38.0	-11.5	-10.4	472
1983	-14.5	-3.4	-29.4	25.5	110.7	138.8	99.4	202.4	117.7	72.1	-15.6	-16.1	687
1984	-16.7	-2.2	-26.5	58.2	125.0	117.5	220.0	233.7	58.7	34.2	-10.3	-20.5	771
1985	-4.8	-10.9	-12.8	27.8	101.9	192.0	240.3	133.7	40.3	50.7	-22.5	-3.1	733
1986	-3.1	-9.0	-4.8	63.4	45.4	97.3	116.1	185.2	-117.2	26.6	-23.5	-9.3	367
MIN	-53.3	-56.1	-64.5	-46.8	-0.1	-14.1	47.8	7.3	-117.2	-55.7	-58.2	-74.7	148
MAX	-0.5	0.0	39.8	104.0	193.2	232.5	275.0	260.9	173.6	94.8	30.6	-1.0	930
MEAN	-18.9	-15.3	-15.9	34.9	105.4	113.4	177.3	163.5	89.8	45.8	-12.6	-17.8	650

NET EVAPORATION (mm) -- BROADVIEW

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1911	-53.3	-7.6	-7.1	40.0	52.3	24.2	89.4	63.5	42.6	-28.8	-49.0	-10.2	156
1912	-12.7	-7.6	-17.8	25.6	5.5	154.6	39.3	63.4	-30.7	46.4	-14.0	-22.9	229
1913	-29.2	-27.9	-35.6	-45.6	115.3	-6.1	98.4	29.6	66.7	4.4	-25.4	-1.0	144
1914	-43.2	-3.0	-30.5	-30.9	62.3	72.2	86.8	99.9	104.9	-2.3	-43.4	-11.4	261
1915	-12.7	-11.2	-5.1	39.5	103.1	48.1	56.0	148.3	7.7	33.8	-48.3	-23.4	336
1916	-63.5	-7.6	-43.2	8.7	67.4	57.5	112.8	97.7	5.7	-19.9	-2.5	-14.0	199
1917	-30.5	-27.9	-10.2	-51.8	127.9	82.7	145.0	125.3	58.9	14.4	-3.3	-30.5	400
1918	-12.7	-15.2	-20.1	16.4	84.7	111.8	72.5	92.1	85.8	40.5	-2.5	-33.0	420
1919	-16.5	-39.4	-17.8	-11.6	89.3	112.2	126.5	143.2	86.5	15.0	-24.1	-20.3	443
1920	-52.1	-27.9	-33.0	19.6	101.4	118.7	93.1	129.2	66.0	1.7	-20.8	-15.2	381
1921	-9.1	-5.1	-32.0	-2.6	55.6	-41.6	78.1	82.7	24.5	10.7	-41.7	-15.5	104
1922	-10.9	-29.0	-45.2	22.6	53.4	9.0	55.1	130.0	82.2	11.2	-53.3	-26.9	198
1923	-35.6	-20.3	-42.7	18.1	113.6	93.1	-61.1	80.9	101.2	26.8	-43.7	-14.5	216
1924	-19.3	-19.3	-50.3	20.2	120.4	90.6	133.1	67.9	104.8	7.1	-23.9	-35.1	396
1925	-23.9	-23.6	-42.7	10.7	128.7	3.6	144.4	139.3	37.1	22.6	-13.2	-2.0	381
1926	-16.3	-24.4	-15.5	24.0	61.8	102.3	124.8	94.0	40.2	-9.0	-55.6	-18.8	307
1927	-9.7	-15.2	-45.0	32.4	28.0	125.9	-12.6	85.9	-52.9	-4.1	-45.7	-7.6	80
1928	-6.1	-4.1	-32.5	-8.7	123.0	2.9	83.1	112.4	86.9	30.3	-0.8	-5.1	381
1929	-12.2	-14.7	-11.7	26.2	52.4	112.3	209.1	187.6	52.8	-15.8	-31.2	-30.7	524
1930	-7.6	-12.2	-16.0	17.4	92.1	19.0	134.4	122.8	71.5	2.0	-16.3	-8.6	399
1931	-11.2	-5.6	-25.9	68.8	145.3	169.3	172.8	107.2	68.3	41.8	-16.3	-12.2	702
1932	-15.7	-15.0	-32.0	19.6	83.2	18.8	136.7	93.8	108.5	18.2	-57.4	-15.5	343
1933	-20.3	-18.8	-13.5	-2.8	33.9	89.6	160.6	77.5	77.6	38.9	-21.8	-34.0	367
1934	-20.3	-3.0	-9.4	59.4	153.0	57.3	162.6	169.2	68.5	64.3	-7.9	-12.2	681
1935	-38.1	-13.7	-50.5	42.4	62.8	-4.9	80.7	91.7	93.3	33.5	-35.1	-17.5	244
1936	-26.2	-7.6	-64.8	42.6	114.7	76.2	117.9	147.6	94.5	68.0	-14.7	-33.8	515
1937	-32.3	-9.4	-3.6	28.1	147.8	175.9	160.5	199.8	77.7	25.1	-12.2	-13.7	744
1938	-21.1	-66.8	-45.5	37.5	110.5	7.0	113.0	141.6	100.7	48.6	-74.9	-24.9	326
1939	-23.4	-30.2	-8.6	48.1	122.2	55.0	179.3	152.7	87.3	58.1	-3.6	-15.2	622
1940	-15.2	-32.0	-18.5	31.1	95.9	82.2	103.7	155.1	87.9	-3.6	-20.1	-21.6	445
1941	-15.2	-24.9	-51.3	-43.2	92.2	10.3	117.4	77.5	76.6	44.6	-75.4	-9.7	199
1942	-10.2	-19.6	-66.5	2.8	73.8	17.8	59.4	-93.6	51.4	49.2	-4.3	-38.6	22
1943	-33.0	-31.5	-36.6	51.1	77.0	21.7	98.9	50.1	87.8	24.5	-22.4	-1.8	286
1944	-3.3	-13.2	-22.1	12.5	53.6	-43.1	97.8	29.9	76.3	56.3	-8.4	-13.2	223
1945	-11.4	-8.1	-33.0	17.6	86.4	-24.8	132.4	137.7	30.6	25.6	-18.0	-8.4	327
1946	-14.2	-17.0	-10.9	40.9	93.3	90.0	80.1	78.2	33.1	17.5	-36.1	-7.1	348
1947	-32.8	-15.5	-7.6	19.5	95.7	-56.3	138.2	38.7	31.3	50.3	-51.3	-19.8	190
1948	-23.1	-7.4	-10.4	5.0	72.5	93.4	106.6	62.7	105.1	39.2	-35.6	-40.4	368
1949	-1.5	-6.4	-15.7	45.2	61.6	87.9	14.7	89.7	86.4	23.8	-30.2	-18.8	337
1950	-17.0	-4.6	-20.3	32.8	55.4	48.0	38.9	109.3	66.1	35.8	-14.7	-17.0	313
1951	-19.6	-33.5	-11.9	27.8	114.8	-1.8	141.2	59.9	9.5	-1.7	-29.7	-19.6	235
1952	-20.3	-2.0	-8.1	44.0	96.8	5.2	92.2	8.5	64.1	54.7	-10.2	-5.8	319
1953	-18.5	-13.5	-40.4	13.0	17.0	-73.4	58.7	102.1	71.6	4.1	-9.4	-14.0	97
1954	-27.4	-12.2	-9.7	16.1	47.0	-106.4	18.6	62.6	-28.1	42.4	-8.4	-5.6	-11
1955	-33.8	-10.7	-63.0	7.5	-8.6	50.4	91.0	132.4	67.0	33.0	-45.7	-22.6	197
1956	-29.0	-20.8	-44.7	26.4	74.8	55.5	23.7	119.3	96.7	18.9	-31.8	-40.4	249
1957	-8.6	-7.9	-18.5	21.4	120.6	70.2	107.2	51.5	100.1	19.0	-26.2	-6.4	422
1958	-14.0	-22.9	-17.5	57.7	152.2	143.6	122.9	133.4	95.5	47.2	-50.3	-21.8	626
1959	-4.3	-6.9	-8.4	53.9	115.7	56.1	179.8	180.5	0.6	-14.9	-23.1	-26.4	503
1960	-13.7	-4.8	-15.5	27.0	77.1	110.8	171.4	129.4	133.6	62.9	-19.3	-10.2	649
1961	-18.0	-16.3	-6.4	47.3	126.4	196.4	203.3	236.6	70.4	48.4	-6.9	-16.8	865
1962	-32.0	-18.5	-19.8	41.4	44.7	87.1	101.3	118.8	115.0	21.5	-19.3	-24.1	416
1963	-14.0	-15.2	-15.5	10.0	30.7	37.2	60.0	68.4	59.5	70.5	-5.1	-19.1	267
1964	-10.7	-17.5	-34.8	44.8	69.7	69.4	117.6	88.5	84.4	60.5	-17.0	-28.2	427
1965	-11.9	-15.5	-7.1	10.9	58.9	71.0	121.4	102.1	-47.3	65.3	-25.1	-19.1	304
1966	-13.2	-8.6	-8.9	-1.7	119.5	95.2	99.5	50.8	99.9	49.5	-26.2	-8.9	447
1967	-33.3	-4.6	-28.4	26.3	112.0	138.0	165.4	154.7	91.9	-12.6	-24.9	-22.4	562
1968	-21.3	-2.8	-8.1	58.9	89.6	136.8	143.5	28.0	77.6	7.8	-11.9	-18.8	479
1969	-35.3	-19.3	-15.7	25.9	97.6	60.1	73.5	124.2	75.5	-8.3	-4.3	-10.9	363
1970	-13.5	-23.1	-20.6	-42.4	63.4	138.7	72.9	152.7	45.1	-12.6	-9.9	-20.1	331
1971	-11.9	-5.1	-17.8	29.6	134.1	10.4	100.7	124.9	86.2	3.0	-11.9	-10.7	431
1972	-17.0	-21.6	-20.8	40.4	64.5	130.9	100.4	100.7	93.5	48.7	-11.9	-14.0	494
1973	-0.8	-9.9	-11.9	19.3	86.5	34.0	121.5	138.8	-9.9	54.9	-18.5	-27.7	376
1974	-25.4	-9.9	-21.3	9.0	14.6	129.2	153.6	26.4	73.9	44.6	-1.5	-19.6	374
1975	-17.0	-13.7	-22.4	-65.3	95.8	37.5	155.7	26.5	-7.3	40.7	-11.9	-25.9	193
1976	-32.8	-22.4	-29.7	16.5	122.4	-7.8	134.1	131.6	122.0	53.9	-2.0	-31.2	455
1977	-4.9	-7.6	-7.7	54.5	15.6	52.0	69.0	99.7	7.0	50.5	-15.2	-33.4	280
1978	-7.5	-4.8	-7.4	21.0	56.5	110.1	62.6	78.8	59.1	24.4	-31.0	-25.3	336
1979	-8.5	-15.8	-16.7	5.3	66.9	152.0	136.3	138.6	58.3	12.5	-8.0	-19.0	502
1980	-22.3	-14.4	-11.0	67.0	150.4	121.7	62.7	16.0	66.8	52.4	-4.6	-11.3	473
1981	-14.8	-12.0	-18.4	45.8	99.1	63.5	148.2	93.0	69.2	3.6	-8.2	-19.7	449
1982	-17.7	-8.0	-13.2	44.3	70.3	121.1	95.9	109.0	50.7	44.9	-4.6	-31.0	462
1983	-10.2	-10.2	-54.6	30.6	55.7	141.4	117.6	195.1	90.6	41.0	-22.0	-8.9	566
1984	-7.1	-4.2	-24.4	42.8	112.3	110.9	175.1	208.2	17.4	-1.1	-33.0	-18.0	579
1985	-15.6	-10.6	-3.8	47.7	102.7	61.7	156.8	-13.2	-19.4	48.1	-25.1	-11.8	318
1986	-17.8	-13.0	-16.3	32.2	81.5	92.4	36.8	144.0	51.1	35.0	-9.6	-10.6	406
MIN	-63.5	-66.8	-66.5	-65.3	-8.6	-106.4	-61.1	-93.6	-52.9	-28.8	-75.4	-40.4	-11
MAX	-0.8	-2.0	-3.6	68.8	153.0	196.4	209.1	236.6	133.6	70.5	-0.8	-1.0	865
MEAN	-19.6	-15.2	-23.7	22.2	84.4	65.3	106.2	101.8	61.1	27.1	-22.9	-18.4	368

NET EVAPORATION (mm) -- NORTH BATTLEFORD

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1911	-3.3	-1.3	-0.3	37.7	69.9	-32.0	55.7	54.1	39.1	25.3	-6.9	-1.3	237
1912	-0.5	-0.3	-5.1	20.9	66.9	131.3	-14.9	56.1	25.9	18.1	-10.2	-12.7	276
1913	-12.7	-5.1	-7.6	23.5	108.0	120.9	82.8	90.0	73.8	23.6	-2.5	-0.3	494
1914	-17.8	-10.2	-20.3	31.4	43.9	81.4	170.1	116.1	37.5	-24.4	-18.8	-20.8	368
1915	0.0	-3.0	0.0	19.1	71.0	119.9	67.0	189.9	71.9	32.3	-7.6	-5.1	555
1916	-19.3	-0.5	-25.4	24.8	44.8	57.0	119.3	12.3	65.1	27.8	-0.3	-5.6	300
1917	-27.4	-5.1	-7.6	-5.2	143.2	157.0	205.6	98.6	86.0	43.8	-1.4	-18.0	670
1918	-38.4	-8.4	-36.6	28.2	114.4	168.4	172.2	170.7	112.7	39.6	-3.0	-16.0	704
1919	-18.8	-7.6	-14.5	28.6	159.9	162.7	183.6	112.3	65.1	12.8	-14.7	-9.7	660
1920	-36.6	-9.1	-17.8	0.7	94.5	83.5	66.6	60.2	58.9	-6.1	-5.6	-5.1	284
1921	-20.3	-36.6	-16.3	-68.6	80.4	110.3	103.8	140.8	10.1	49.7	-21.3	-5.1	327
1922	-5.1	-7.6	-16.5	1.7	48.0	179.7	204.7	40.8	78.9	7.0	-0.3	-11.2	520
1923	-14.0	-2.5	-6.6	35.0	100.7	-21.6	58.1	100.0	103.8	43.3	-0.3	-5.6	390
1924	-10.7	-16.8	-3.3	20.9	109.4	140.0	156.6	72.3	66.0	22.8	-23.4	-13.2	521
1925	-12.4	-15.2	-12.7	12.1	111.2	32.0	116.1	68.3	44.1	10.8	-2.5	-2.5	349
1926	-6.1	-13.5	-4.6	10.1	33.8	129.0	148.3	28.7	33.5	14.8	-20.3	-11.9	342
1927	-2.0	-3.8	-7.6	-20.4	67.4	115.4	45.2	97.0	47.6	10.6	-10.7	-3.6	335
1928	-2.5	-3.6	-16.0	13.5	143.6	12.0	84.6	104.9	86.1	31.2	-0.3	-5.6	448
1929	-7.9	-10.7	-3.0	15.0	74.8	65.8	192.9	189.7	66.8	38.9	-14.7	-24.4	583
1930	-8.1	-16.3	-8.1	43.0	110.1	54.0	77.3	154.1	52.0	-10.9	-3.3	-3.8	440
1931	-0.3	-0.8	-6.4	42.3	85.9	105.7	101.6	110.0	-6.7	26.7	-17.0	-21.6	419
1932	-41.1	-0.5	-4.1	10.8	65.5	29.0	92.3	107.8	98.1	32.4	-8.4	-13.2	369
1933	-10.2	-11.7	-33.3	8.2	95.0	108.8	202.7	138.6	39.8	9.3	-21.3	-38.1	488
1934	-8.9	-6.6	-8.1	42.2	94.2	2.5	154.8	148.5	56.6	34.5	-11.2	-41.1	457
1935	-21.6	-3.3	-10.9	1.2	116.4	68.3	131.3	111.2	92.3	11.3	-31.0	-8.1	457
1936	-11.9	-9.1	-1.5	32.5	136.4	98.1	190.3	155.8	63.9	13.2	-1.0	-38.6	628
1937	-15.5	-13.7	-0.3	43.0	111.8	228.8	103.5	153.9	78.3	-8.1	-20.1	-15.0	647
1938	-15.5	-22.4	-17.8	43.4	71.7	121.8	135.8	129.7	1.5	3.5	-36.6	-25.4	390
1939	-15.5	-13.7	-6.6	55.0	94.5	12.7	170.6	130.7	111.0	46.3	-11.4	-30.5	543
1940	-4.1	-14.2	-5.6	45.8	122.4	79.8	81.9	193.1	93.7	-8.8	-28.2	-11.2	545
1941	-14.5	-9.9	-5.6	39.2	45.8	104.0	147.8	112.0	43.2	21.8	-9.1	-6.1	469
1942	-5.8	-0.3	-7.1	1.8	115.0	76.0	38.9	55.4	60.4	50.8	-46.5	-42.4	296
1943	-17.8	-26.9	-12.2	56.1	23.4	84.4	88.8	111.0	91.7	-16.9	-11.2	-3.0	367
1944	-9.4	-16.3	-12.4	38.9	39.9	87.0	42.5	16.8	79.7	51.8	-11.9	-6.4	300
1945	-17.0	-5.6	-0.3	10.3	125.5	98.0	147.2	133.3	37.9	41.8	-12.7	-7.4	551
1946	-18.8	-13.5	-5.3	18.9	73.2	89.4	146.3	100.1	91.2	-12.5	-38.9	-27.2	403
1947	-15.2	-7.4	-7.4	33.3	120.1	123.5	177.5	64.0	43.9	27.3	-17.8	-16.5	525
1948	-24.9	-23.9	-19.6	-45.0	140.1	152.7	162.1	166.8	142.1	67.8	-36.6	-15.2	667
1949	-17.8	-28.2	-20.1	39.4	78.6	107.6	98.4	137.1	105.1	44.1	-25.1	-30.5	489
1950	-22.6	-18.5	-3.0	33.2	110.3	51.2	32.9	110.2	82.9	-14.6	-24.4	-21.6	316
1951	-17.8	-9.4	-31.2	21.5	61.2	124.6	52.0	77.0	74.3	19.6	-29.2	-13.5	329
1952	-10.2	-11.2	-17.5	32.4	55.6	51.2	98.4	136.7	68.5	54.1	-11.2	-12.4	435
1953	-32.3	-22.9	-44.5	12.5	81.8	107.5	105.9	115.7	109.5	65.1	-10.9	-35.8	452
1954	-22.1	-15.7	-12.4	-27.7	94.4	56.1	74.2	-22.7	31.6	37.7	-17.3	-10.2	166
1955	-32.3	-5.1	-36.1	-25.3	126.0	68.0	80.5	167.5	98.3	36.4	-15.2	-65.8	397
1956	-37.6	-28.7	-51.8	26.8	129.0	141.0	87.7	109.7	77.7	60.9	-11.9	-16.8	486
1957	-4.8	-4.6	-12.2	44.5	138.0	84.7	136.8	79.9	101.2	21.7	-13.5	-13.0	559
1958	-19.1	-21.6	-26.2	16.3	132.9	133.6	87.1	173.0	117.9	64.3	-14.2	-15.0	629
1959	-8.6	-13.7	-4.8	61.7	121.1	122.8	213.4	104.9	78.7	-8.4	-7.6	-12.2	647
1960	-12.7	-8.9	-21.6	52.4	102.9	98.2	126.3	115.7	118.8	37.1	-11.4	-13.2	584
1961	-8.4	-27.4	-10.2	26.3	137.8	161.4	149.5	202.5	109.1	29.6	-21.3	-30.5	718
1962	-17.3	-19.3	-15.2	43.8	105.7	126.1	87.6	115.6	99.5	52.3	-13.5	-20.8	544
1963	-15.0	-22.4	-14.5	13.3	86.6	45.5	98.4	21.9	87.0	57.5	-10.7	-8.6	339
1964	-24.1	-17.3	-8.6	28.7	83.3	164.3	141.2	95.8	40.7	33.5	-4.1	-26.9	506
1965	-20.3	-32.3	-7.4	26.0	126.0	-24.9	142.6	117.0	72.2	48.1	-16.0	-15.2	416
1966	-35.3	-7.6	-32.8	48.9	158.9	46.0	90.8	110.1	127.4	66.5	-30.7	-13.5	529
1967	-19.8	-7.4	-18.0	22.5	126.5	142.2	112.6	138.2	159.9	28.2	-12.7	-16.0	656
1968	-17.8	-5.6	-25.7	61.8	118.1	164.0	86.5	83.4	30.2	23.9	-2.3	-20.6	496
1969	-33.8	-10.9	-4.1	43.1	99.1	144.5	98.3	202.5	67.8	23.7	-7.9	-27.4	595
1970	-14.5	-6.1	-26.7	31.2	137.9	24.2	86.1	185.7	119.4	16.4	-20.6	-22.6	510
1971	-35.3	-3.3	-18.5	42.3	145.6	110.9	50.1	183.2	95.5	55.5	-27.2	-20.3	578
1972	-23.6	-17.0	-23.9	44.7	84.7	186.6	83.9	141.6	46.3	47.2	-15.0	-13.0	543
1973	-6.6	-12.2	-2.8	3.4	103.3	125.3	148.7	106.8	92.4	52.2	-41.9	-19.3	549
1974	-34.8	-17.3	-34.8	25.3	64.0	84.4	97.4	128.4	83.0	55.8	-1.5	-17.8	432
1975	-29.5	-13.7	-22.9	14.3	103.4	63.5	102.3	108.4	119.4	42.4	-7.4	-27.7	453
1976	-12.4	-19.3	-36.3	47.9	145.2	65.6	39.5	146.4	111.5	51.6	-1.8	-20.3	517
1977	-11.1	-2.4	-12.6	58.3	13.7	164.7	142.9	122.8	35.2	65.2	-10.9	-31.0	535
1978	-9.1	-2.7	-5.2	3.2	121.3	138.2	165.8	144.4	65.0	62.2	-28.0	-12.2	643
1979	-6.4	-23.2	-23.6	-2.2	110.1	73.3	106.4	139.0	118.2	30.1	-8.5	-26.3	487
1980	-20.7	-11.7	-18.8	64.9	154.9	90.9	109.7	16.3	73.1	52.4	-5.7	-32.8	473
1981	-24.9	-2.6	-10.5	33.7	137.8	117.3	83.2	171.0	105.6	43.7	-4.5	-26.9	623
1982	-13.6	-6.7	-10.8	36.2	105.7	102.0	76.3	35.9	77.3	36.1	-20.0	-11.8	406
1983	-8.7	-13.3	-29.3	23.9	121.7	27.7	112.9	116.0	24.3	49.6	-37.4	-5.8	382
1984	-11.8	-3.2	-4.2	45.9	86.6	45.7	178.3	82.3	19.3	10.3	-23.3	-10.5	415
1985	-14.0	-15.5	-20.6	-20.2	83.1	128.5	131.8	81.5	69.2	46.4	-12.4	-18.6	439
1986	-22.8	-5.7	-32.3	52.7	92.8	90.5	0.9	154.0	39.4	40.7	-26.8	-6.0	377
MIN	-41.1	-36.6	-51.8	-68.6	13.7	-32.0	-14.9	-22.7	-6.7	-24.4	-46.5	-65.8	166
MAX	0.0	-0.3	0.0	64.9	159.9	228.8	213.4	202.5	159.9	67.8	-0.3	-0.3	718
MEAN	-16.6	-11.7	-15.1	24.4	99.4	95.9	112.2	112.5	73.6	30.8	-15.0	-17.2	473

NET EVAPORATION (mm) -- PRINCE ALBERT

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1911	-50.8	-10.4	-2.8	6.8	75.0	36.3	72.6	13.3	30.1	32.3	-57.4	-27.9	117
1912	0.0	-2.5	-26.2	27.0	78.0	45.2	-41.1	20.0	16.8	17.4	-22.9	-27.2	84
1913	-20.3	-20.3	-30.5	27.7	82.4	68.2	38.8	37.4	34.9	10.4	-7.9	-2.8	218
1914	-18.0	-1.5	-15.5	-11.6	21.4	40.9	67.4	71.9	40.2	-11.1	-27.9	-14.2	142
1915	-2.8	-6.4	-0.3	10.7	53.2	6.1	20.3	99.5	35.1	27.0	-23.9	-29.2	189
1916	-24.4	-1.5	-24.9	-8.0	-37.1	21.2	9.9	53.5	54.3	-7.3	-16.5	-6.6	13
1917	-29.5	-2.5	-22.9	-1.9	105.1	89.6	166.3	96.6	66.2	18.6	1.0	-25.1	461
1918	-23.1	-3.6	-21.6	5.2	70.9	67.1	110.6	43.0	71.7	28.3	-12.2	-15.0	321
1919	-23.6	-3.8	-20.8	31.7	121.4	74.3	45.4	10.4	-19.5	13.3	-26.4	-20.6	182
1920	-27.9	-21.3	-33.0	24.0	87.2	54.6	123.5	47.5	54.7	31.1	-22.1	-11.4	307
1921	-27.4	-45.2	-68.8	-54.6	43.1	52.6	59.8	99.8	21.0	49.0	-48.3	-10.2	71
1922	-16.3	-13.5	-39.9	-4.8	21.8	69.7	147.2	37.4	58.0	15.8	-1.5	-10.4	263
1923	-11.4	-1.8	-7.9	-0.3	85.2	9.7	42.8	25.1	56.9	24.9	-5.8	-7.9	210
1924	-15.0	-7.6	-8.1	3.3	104.5	71.4	104.4	19.3	36.1	-4.0	-15.5	-13.0	276
1925	-10.9	-8.4	-10.2	9.1	95.9	-25.6	46.9	5.4	40.8	15.3	-5.3	-1.0	152
1926	-5.1	-9.9	-1.5	14.6	28.4	129.8	58.1	42.4	18.6	-15.4	-19.6	-12.4	228
1927	-5.8	-10.7	-36.6	-5.4	66.5	31.2	19.5	78.5	-32.8	3.0	-17.5	-13.2	77
1928	-3.0	-4.8	-13.5	14.6	69.5	50.2	64.3	60.1	70.5	14.5	-1.0	-10.7	311
1929	-10.4	-14.2	-20.8	-43.2	66.5	56.8	112.1	81.8	21.8	24.4	-21.3	-28.7	225
1930	-11.4	-13.5	-32.0	3.5	62.4	3.9	71.0	89.2	-31.0	-36.5	-6.4	-3.8	95
1931	-17.5	-4.1	-22.4	25.0	109.0	63.6	124.5	90.3	1.3	35.6	-24.9	-34.0	347
1932	-12.2	-7.9	-23.6	-3.5	56.4	-27.6	-20.2	44.1	66.0	6.3	-18.3	-25.4	34
1933	-24.4	-15.2	-18.5	15.2	-3.0	33.2	87.9	64.8	22.2	4.5	-31.5	-40.9	94
1934	-5.1	-3.8	-20.6	19.5	98.5	-66.2	119.0	133.3	51.8	48.4	-23.1	-23.1	329
1935	-18.0	-10.7	-12.4	-1.2	62.6	9.1	72.3	54.8	43.4	-2.5	-17.8	-14.5	165
1936	-25.7	-7.9	-10.2	29.7	94.6	63.8	125.3	102.3	17.6	26.9	-11.7	-35.8	369
1937	-17.5	-18.0	-6.9	-4.2	49.2	122.4	140.2	142.0	43.3	-15.7	-42.2	-22.9	370
1938	-26.4	-16.8	-16.3	30.0	78.9	113.8	89.7	64.0	48.1	-14.1	-46.0	-16.0	289
1939	-19.8	-12.2	-11.2	6.8	81.1	2.4	110.9	137.1	70.2	25.0	-22.9	-44.5	323
1940	-7.4	-8.4	-8.9	43.3	70.6	52.6	117.5	153.5	57.4	-8.2	-51.6	-34.5	376
1941	-23.9	-23.6	-9.4	22.0	75.6	78.8	147.8	96.3	40.9	28.4	-24.9	-6.4	402
1942	-9.1	-37.6	-29.0	-47.0	66.4	-72.4	28.5	48.8	40.0	28.4	-52.1	-27.4	-63
1943	-14.0	-15.2	-14.2	32.5	70.1	100.9	87.8	119.8	65.9	1.8	-15.0	-12.7	408
1944	-6.9	-17.0	-10.7	26.5	62.2	86.8	8.8	90.0	64.9	30.9	-19.1	-9.4	307
1945	-8.1	-14.7	-10.7	-0.3	50.4	26.5	131.3	60.1	40.7	26.9	-21.1	-14.7	266
1946	-18.3	-18.3	-11.2	23.3	50.7	86.4	46.1	55.3	28.6	0.8	-18.3	-17.5	208
1947	-29.7	-4.1	-12.7	14.1	67.7	100.6	138.7	29.7	27.1	3.8	-31.5	-24.9	279
1948	-18.5	-28.4	-13.0	-45.5	55.0	40.2	80.2	9.2	79.8	40.9	-36.3	-16.3	147
1949	-18.3	-25.4	-16.5	29.7	81.4	58.1	44.9	51.8	73.1	23.1	-31.8	-25.4	245
1950	-19.3	-25.4	-2.0	7.0	69.5	59.0	14.1	74.3	73.0	-9.3	-46.7	-37.8	156
1951	-11.2	-11.4	-42.7	24.0	41.6	91.1	65.0	90.6	46.5	0.9	-26.2	-4.8	263
1952	-6.9	-3.8	-12.2	63.2	54.2	77.8	90.5	97.0	52.8	44.6	-18.8	-13.2	425
1953	-33.5	-19.6	-55.4	26.5	70.5	77.4	103.8	77.7	72.9	50.9	-14.2	-41.1	316
1954	-36.1	-23.1	-9.1	-46.5	38.7	44.1	33.8	-38.3	29.3	29.2	-26.4	-6.4	-11
1955	-23.1	-10.4	-33.3	-35.1	85.6	117.9	54.5	122.3	66.2	26.2	-42.2	-41.7	287
1956	-22.1	-24.6	-35.3	27.4	105.1	78.0	75.4	115.0	55.3	44.6	-14.2	-18.5	386
1957	-17.3	-3.8	-23.9	-5.3	88.2	92.1	119.7	67.9	49.0	28.6	-16.5	-17.8	361
1958	-18.8	-35.8	-18.8	-5.3	94.3	123.5	84.6	128.6	39.5	19.7	-18.0	-38.6	355
1959	-17.0	-11.2	-10.9	41.6	110.7	62.9	161.3	86.0	-8.4	-15.9	-14.0	-16.3	369
1960	-9.1	-5.8	-23.1	32.7	68.4	31.2	126.0	105.3	101.4	27.2	-18.8	-34.8	400
1961	-2.8	-32.5	-38.6	2.7	102.9	109.8	151.9	162.4	62.3	23.1	-25.1	-25.1	491
1962	-21.6	-8.6	-18.8	20.6	108.1	89.3	146.1	139.7	106.2	26.7	-9.9	-18.0	560
1963	-15.0	-10.2	-19.6	13.4	106.3	26.0	35.8	71.9	36.8	20.0	-13.7	-15.5	236
1964	-11.2	-22.1	-7.6	41.3	118.6	151.2	128.6	71.8	15.5	19.3	-10.2	-15.7	480
1965	-9.7	-39.9	-4.8	32.0	106.5	59.2	92.3	60.4	58.8	53.2	-17.0	-10.4	381
1966	-17.5	-12.4	-26.7	35.0	130.6	8.3	43.4	56.0	82.0	45.0	-21.6	-20.3	302
1967	-12.4	-7.4	-17.8	28.6	121.5	128.9	85.7	114.4	106.9	16.9	-16.5	-32.5	516
1968	-19.6	-5.1	-14.0	33.1	37.3	104.8	62.7	35.3	26.6	15.2	-6.4	-28.2	242
1969	-34.3	-14.5	-7.1	49.0	100.6	150.7	86.6	154.8	56.1	-43.5	-6.4	-31.5	461
1970	-14.5	-16.8	-12.2	21.1	138.7	24.5	97.7	150.8	97.8	30.9	-22.1	-24.6	471
1971	-19.6	-4.3	-8.4	54.8	147.8	67.4	1.3	124.1	80.7	50.7	-11.9	-18.5	464
1972	-16.3	-11.9	-23.6	36.6	125.8	148.4	112.9	138.7	69.9	60.0	-23.1	-10.9	606
1973	-10.2	-15.0	-3.6	12.7	93.2	-30.1	59.1	95.8	32.5	29.9	-37.6	-35.6	191
1974	-31.2	-16.5	-19.1	39.3	4.5	65.0	75.1	-42.7	27.6	51.4	-3.8	-12.7	137
1975	-24.1	-8.6	-10.9	-1.3	65.7	45.5	103.8	96.3	81.3	30.2	-4.8	-18.3	355
1976	-6.6	-18.3	-14.0	49.3	107.0	40.5	66.1	131.9	113.3	46.4	-4.6	-22.6	488
1977	-4.7	-7.9	-13.6	64.2	-15.0	107.9	96.0	66.3	-18.7	44.3	-18.2	-24.5	276
1978	-6.3	-5.3	-10.5	10.0	73.2	7.3	89.9	82.8	38.2	7.5	-26.7	-16.4	244
1979	-6.8	-25.5	-21.8	8.3	69.3	55.9	115.9	92.3	70.4	10.9	-5.9	-23.9	339
1980	-18.9	-14.1	-19.9	66.1	120.1	82.0	142.2	46.5	50.5	38.6	-13.7	-16.4	463
1981	-10.9	-3.0	-13.9	14.6	134.5	136.7	90.3	117.4	86.9	0.9	-11.3	-16.4	526
1982	-13.9	-5.1	-9.3	38.9	60.7	105.4	77.0	-59.9	75.0	30.3	-12.0	-11.0	276
1983	-13.1	-8.1	-25.2	4.5	88.0	81.0	73.7	109.0	-9.8	36.3	-43.0	-8.3	285
1984	-11.7	-11.9	-18.3	34.3	20.0	50.4	130.2	79.3	5.1	-11.5	-27.3	-14.4	224
1985	-12.1	-25.2	-27.0	-14.3	50.5	71.6	86.6	72.7	60.2	32.3	-14.2	-17.2	264
1986	-23.7	-3.4	-31.5	31.8	63.4	116.7	33.5	87.9	49.2	44.1	-16.1	-16.7	335
MIN	-50.8	-45.2	-68.8	-54.6	-37.1	-72.4	-41.1	-59.9	-32.8	-43.5	-57.4	-44.5	-63
MAX	0.0	-1.5	-0.3	66.1	147.8	151.2	166.3	162.4	113.3	60.0	1.0	-1.0	606
MEAN	-16.6	-13.4	-18.7	14.8	74.8	61.7	82.0	75.8	46.9	19.7	-20.8	-19.9	286

NET EVAPORATION (mm) -- REGINA

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1911	-16.0	-6.1	-10.2	41.6	41.7	67.7	64.2	64.3	89.6	-2.7	-17.8	-11.4	305
1912	-3.6	-2.8	-2.3	42.2	85.4	133.9	110.8	85.0	53.4	45.2	-2.3	-14.0	531
1913	-7.6	-2.8	-12.4	61.3	114.2	59.1	108.3	43.4	101.8	30.7	-3.8	-2.5	490
1914	-21.3	-6.4	-18.8	43.2	88.2	48.7	145.6	122.5	118.0	18.9	-6.1	-2.3	530
1915	-2.5	-2.8	-3.3	61.9	112.2	99.0	101.9	146.2	33.7	56.2	-21.6	-11.4	569
1916	-29.2	-19.1	-52.8	29.8	78.7	50.9	52.6	159.1	22.2	-3.4	-1.5	-14.7	273
1917	-27.4	-6.4	-3.8	34.1	133.2	117.5	194.8	131.5	88.8	40.2	-2.5	-7.4	693
1918	-11.4	-5.1	-14.5	22.0	124.2	169.1	68.6	105.7	100.4	55.2	-20.1	-10.7	584
1919	-17.5	-17.8	-13.0	10.7	155.8	113.3	162.6	170.9	94.4	28.8	-12.4	-6.1	670
1920	-17.5	-16.3	-14.7	26.2	112.5	99.2	163.0	149.0	82.9	6.5	-10.4	-3.8	576
1921	-4.8	-9.1	-6.4	14.9	85.7	56.1	47.6	127.7	6.1	27.2	-13.7	-12.2	319
1922	-11.4	-12.2	-19.6	16.5	68.7	107.3	158.4	95.5	112.4	29.3	-14.5	-14.5	516
1923	-24.9	-12.2	-15.0	28.3	117.1	-16.5	25.6	136.4	75.0	45.6	-60.2	-7.1	292
1924	-10.2	-16.0	-28.7	35.5	132.9	120.5	149.6	115.0	113.7	19.6	-32.0	-22.4	578
1925	-30.0	-8.6	-16.5	26.0	132.1	-10.2	181.7	183.6	56.8	19.5	-8.9	-5.1	520
1926	-15.0	-18.3	-17.8	43.5	80.1	124.2	130.9	95.6	66.5	-5.1	-27.4	-12.4	445
1927	-5.8	-18.3	-50.3	37.6	70.0	102.4	31.8	83.6	61.8	-14.3	-39.6	-11.7	247
1928	-2.5	-5.1	-22.4	7.2	136.9	-19.0	98.1	132.4	104.1	s9.3	-1.8	-5.1	462
1929	-15.2	-16.0	-25.1	19.4	73.5	102.9	227.4	207.9	73.4	21.3	-27.9	-31.2	610
1930	-9.1	-10.2	-17.3	18.9	111.3	70.3	148.5	147.0	73.0	5.2	-9.9	-4.8	523
1931	-4.1	-2.0	-16.8	74.8	166.0	163.9	187.7	120.1	82.9	51.3	-7.1	-12.7	804
1932	-36.8	-8.9	-33.0	21.5	123.3	57.5	113.7	123.7	116.6	12.8	-31.5	-14.2	445
1933	-17.3	-13.0	-18.3	34.9	36.2	97.8	179.5	101.9	67.4	43.0	-22.6	-44.2	445
1934	-26.2	-7.1	-13.0	77.0	175.3	84.6	163.4	176.4	86.8	64.1	-3.0	-14.0	764
1935	-25.4	-0.8	-18.3	48.7	64.4	23.8	131.2	101.4	148.2	45.4	-29.7	-17.0	472
1936	-25.4	-16.5	-37.3	43.9	138.7	92.6	200.3	179.5	130.1	65.8	-7.1	-15.2	749
1937	-14.7	-11.7	-3.6	54.4	146.4	219.1	224.4	224.2	117.7	45.1	-15.2	-18.5	968
1938	-27.9	-47.5	-26.4	36.0	95.6	121.2	134.5	165.6	108.6	36.9	-35.8	-15.0	546
1939	-16.3	-22.6	-12.4	53.6	146.7	26.5	163.9	186.6	123.8	43.1	-6.6	-22.1	664
1940	-4.3	-13.2	-13.7	33.7	139.4	124.5	161.5	214.8	75.7	13.9	-17.5	-15.5	699
1941	-13.2	-14.2	-9.7	15.5	87.2	97.4	76.5	93.7	114.2	51.8	-56.9	-15.7	427
1942	-10.2	-23.9	-16.3	0.4	92.7	12.2	58.0	29.8	69.9	48.2	-11.7	-19.6	230
1943	-20.8	-22.1	-30.7	58.6	113.5	101.7	113.7	139.3	120.2	35.4	-4.6	-1.5	603
1944	-4.6	-25.1	-22.1	26.5	48.7	31.8	148.1	121.5	106.5	65.7	-7.9	-4.6	484
1945	-16.8	-18.5	-34.3	-1.5	105.9	-2.4	132.9	144.8	70.1	26.4	-13.5	-10.9	382
1946	-30.2	-17.5	-8.9	65.9	84.6	74.3	37.7	118.8	56.0	17.9	-35.3	-17.0	346
1947	-26.4	-17.3	-10.9	26.8	117.0	-3.4	145.8	56.2	63.4	57.7	-40.1	-20.3	348
1948	-20.8	-22.9	-11.2	-19.7	147.4	102.1	111.3	137.9	120.9	60.5	-30.0	-36.6	539
1949	-3.8	-4.3	-9.9	65.3	79.2	123.1	140.3	171.3	105.9	30.6	-9.9	-13.5	674
1950	-20.6	-9.4	-28.2	14.4	95.0	63.4	101.5	104.7	89.3	40.4	-33.5	-22.9	394
1951	-16.8	-39.1	-19.6	7.1	143.8	24.9	149.2	58.4	3.1	-9.9	-9.1	-22.4	269
1952	-29.5	-10.7	-24.6	56.2	119.9	67.1	109.3	94.5	66.2	58.8	-14.7	-1.0	491
1953	-24.1	-22.6	-36.1	26.9	22.1	31.4	85.4	157.6	103.1	50.0	-2.5	-17.3	374
1954	-36.8	-22.1	-10.7	21.6	51.6	57.0	81.5	25.9	16.6	48.0	-10.2	-4.1	218
1955	-31.0	-23.6	-40.6	-10.2	35.6	87.8	53.0	155.4	93.8	55.6	-38.9	-28.4	308
1956	-36.6	-15.5	-50.8	23.8	80.9	58.5	56.0	135.2	102.8	31.2	-7.4	-36.1	342
1957	-8.6	-5.8	-28.4	5.5	146.7	118.4	181.7	136.9	124.4	23.1	-15.2	-6.9	672
1958	-5.3	-31.2	-14.0	47.8	186.7	155.3	160.8	165.5	127.2	70.4	-31.2	-20.6	811
1959	-4.8	-11.4	-10.4	60.1	128.5	83.9	195.3	191.7	-9.6	0.2	-29.0	-22.6	572
1960	-18.5	-11.4	-7.6	33.2	96.2	51.8	154.4	145.0	132.8	77.6	-13.7	-7.9	632
1961	-10.2	-14.5	-6.9	55.2	116.0	224.5	231.2	281.3	141.2	42.1	-7.9	-17.8	1034
1962	-18.0	-13.0	-19.1	36.7	89.6	67.6	147.8	136.0	137.2	29.1	-5.8	-11.9	576
1963	-4.6	-12.4	-5.1	34.3	64.1	23.0	43.7	119.9	109.1	49.8	-5.6	-10.7	405
1964	-10.9	-16.3	-11.7	55.5	139.3	79.9	111.5	164.1	93.8	74.6	-11.9	-22.1	646
1965	-8.9	-14.7	-5.8	29.5	62.1	46.9	117.3	164.0	44.4	81.2	-24.9	-23.4	468
1966	-15.7	-8.4	-7.4	14.6	150.3	53.3	152.3	114.5	122.1	57.4	-23.1	-9.9	600
1967	-27.2	-11.4	-29.7	36.8	155.4	157.6	241.8	208.0	76.6	13.2	-21.8	-15.5	784
1968	-12.7	-5.1	-6.6	71.5	138.9	165.1	189.4	34.9	69.5	44.6	-3.8	-20.3	665
1969	-34.5	-28.4	-15.2	29.5	118.1	111.1	87.4	145.7	100.8	-13.8	-3.0	-10.7	487
1970	-16.5	-21.8	-16.3	5.7	70.4	104.0	174.7	218.4	56.4	31.5	-18.3	-18.0	570
1971	-16.3	-4.8	-22.9	33.7	171.4	92.6	147.0	239.2	148.6	35.7	-7.1	-15.7	802
1972	-13.0	-31.5	-12.4	59.1	73.4	174.1	133.7	166.9	136.1	63.6	-10.9	-12.2	727
1973	-1.3	-10.4	-13.0	0.8	89.1	116.5	166.7	177.7	76.6	61.3	-23.4	-33.0	608
1974	-31.0	-31.5	-18.0	23.8	22.0	171.8	183.3	54.6	91.4	51.5	-2.5	-10.9	504
1975	-15.5	-13.2	-18.3	-2.7	111.4	-51.4	185.1	125.4	80.9	51.9	-12.2	-24.1	417
1976	-15.2	-15.2	-42.9	43.9	160.5	-20.2	126.2	215.8	157.1	79.1	-2.5	-15.5	671
1977	-6.9	-0.8	-10.1	82.9	54.6	122.9	105.1	144.6	58.8	65.9	-12.5	-26.2	578
1978	-6.6	-3.0	-0.8	39.4	38.4	117.6	165.9	138.3	104.5	51.1	-27.3	-15.2	602
1979	-5.0	-19.2	-7.2	2.9	65.9	164.4	189.9	196.9	147.8	44.6	-4.0	-12.1	765
1980	-17.3	-14.9	-21.0	72.8	208.4	186.3	152.4	121.7	108.7	71.8	-5.5	-9.2	854
1981	-14.1	-4.3	-21.2	71.5	179.5	125.0	144.7	153.9	98.2	1.9	-13.3	-19.4	703
1982	-22.5	-12.2	-26.1	48.5	46.7	164.6	71.0	158.1	104.4	30.1	-1.8	-21.0	540
1983	-9.0	-7.0	-28.1	52.2	93.8	121.8	-7.8	202.7	71.6	49.4	-17.4	-9.3	513
1984	-14.2	-1.9	-19.8	77.5	138.0	148.6	224.1	228.6	87.8	20.4	-9.1	-22.1	858
1985	-10.6	-18.8	-12.6	22.3	96.0	121.0	203.7	100.0	51.2	54.3	-23.0	-15.1	569
1986	-13.2	-13.9	-8.6	46.5	55.0	167.1	111.2	193.4	52.7	51.8	-7.4	-8.4	626
MIN	-36.8	-47.5	-52.8	-19.7	22.0	-51.4	-7.8	25.9	-9.6	-14.3	-60.2	-44.2	218
MAX	-1.3	-0.8	-0.8	82.9	208.4	224.5	241.8	281.3	157.1	81.2	-1.5	-1.0	1034
MEAN	-16.2	-14.1	-18.3	35.1	105.0	90.8	133.2	140.6	89.3	38.4	-16.2	-15.2	552

NET EVAPORATION (mm) -- SASKATOON

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1911	-66.0	-10.2	-7.6	4.9	73.3	25.3	123.0	85.9	75.8	47.6	-17.8	-20.3	314
1912	0.0	0.0	-15.2	53.7	84.1	94.2	62.0	68.6	22.2	42.3	-11.4	-15.2	385
1913	-25.4	-25.4	-6.4	46.7	119.5	85.5	146.9	89.1	77.7	29.6	-16.5	-2.5	519
1914	-22.9	-10.2	-12.2	31.6	72.6	102.8	194.8	172.4	80.1	-23.5	-26.7	-15.2	544
1915	-12.7	-7.6	-0.3	44.4	88.6	107.5	108.3	140.4	49.1	44.7	-4.1	-5.6	553
1916	-35.3	-1.0	-25.9	12.1	43.0	110.7	30.5	92.3	71.1	12.9	-2.3	-2.8	305
1917	-7.1	-2.8	-13.5	21.3	114.5	101.7	192.4	93.6	76.7	41.7	0.8	-15.2	604
1918	-16.8	-5.8	-3.8	11.3	106.2	144.9	82.2	118.7	104.7	46.2	-2.8	-3.8	581
1919	-0.8	-1.3	-1.8	15.8	135.4	168.5	175.3	120.5	42.8	9.1	-4.6	-6.4	653
1920	-35.6	-16.5	-34.3	-10.2	117.6	145.0	152.2	121.3	72.0	19.3	-13.5	-5.1	512
1921	-10.2	-23.4	-55.9	2.3	65.3	43.3	93.5	155.4	-18.1	27.0	-17.0	-11.4	251
1922	-5.1	-10.2	-17.8	30.4	49.6	110.3	180.3	69.4	106.0	14.3	-8.9	-16.8	502
1923	-11.4	-6.4	-5.6	34.4	93.6	-24.9	0.0	54.5	77.0	48.9	-2.3	-1.0	257
1924	-21.6	-34.3	-12.7	31.8	120.5	129.2	204.4	113.0	81.3	3.9	-22.1	-14.0	580
1925	-20.3	-20.6	-10.2	11.5	122.3	-10.4	133.3	115.4	55.3	8.8	-2.5	-1.3	381
1926	-7.1	-12.7	-8.4	52.9	49.2	118.7	121.0	107.8	50.1	27.1	-22.9	-6.4	469
1927	-5.1	-3.3	-39.9	19.3	61.8	109.7	10.2	107.7	50.5	9.3	-11.2	-5.6	303
1928	-1.3	-2.8	-7.9	47.6	158.1	28.4	15.8	121.4	114.8	14.5	-2.3	-3.0	483
1929	-2.3	-2.3	-5.3	7.9	55.9	109.9	154.5	162.0	51.5	45.7	-17.0	-3.8	557
1930	-4.1	-11.4	-6.1	21.5	90.2	44.5	115.6	126.1	23.9	10.1	-1.8	-2.0	406
1931	-1.8	-0.8	-12.4	53.8	109.0	84.0	125.1	125.7	-9.1	26.7	-14.0	-11.9	475
1932	-6.4	-16.8	-7.4	17.9	128.4	56.7	119.1	99.0	75.5	31.8	-2.0	-7.1	489
1933	-5.8	-3.8	-18.5	42.5	86.2	159.6	196.1	178.6	29.9	43.6	-9.1	-10.9	688
1934	-4.6	-0.5	-5.8	53.3	178.5	34.4	173.4	150.0	76.8	49.9	-6.9	-15.5	683
1935	-18.5	-3.3	-20.3	14.6	134.3	60.2	162.9	148.0	117.3	4.3	-23.9	-12.4	563
1936	-26.2	-22.1	-5.1	41.9	186.4	119.7	265.2	204.6	127.4	41.3	-0.5	-47.5	885
1937	-35.1	-22.4	-1.8	58.7	160.9	254.1	266.4	195.9	107.8	26.8	-21.6	-16.8	973
1938	-34.0	-35.8	-26.2	35.7	114.8	149.6	158.4	138.4	70.0	9.9	-39.9	-25.7	515
1939	-16.0	-40.4	-14.5	63.9	137.3	-20.6	189.1	227.6	108.9	48.4	-13.0	-32.0	639
1940	-8.9	-17.3	-17.5	55.8	148.6	122.3	128.7	220.0	100.3	31.3	-48.0	-12.2	703
1941	-35.3	-9.7	-7.6	45.5	84.2	112.0	118.6	116.1	76.8	29.4	-16.3	-5.1	509
1942	-3.3	-8.1	-8.9	-10.9	108.5	-45.7	78.3	97.1	46.8	49.8	-30.0	-31.2	242
1943	-6.9	-27.4	-6.6	53.4	48.0	121.5	103.9	138.3	93.1	-16.2	-21.8	-1.8	477
1944	-2.5	-17.8	-11.2	31.5	-2.5	77.0	68.9	138.9	84.9	42.8	-5.1	-2.0	403
1945	-16.5	-6.6	-3.0	13.5	92.8	98.6	148.4	34.0	57.2	52.1	-14.2	-10.4	446
1946	-21.3	-24.1	-3.8	60.0	107.0	126.1	155.8	113.7	32.9	12.9	-50.3	-8.4	500
1947	-31.5	-22.6	-7.4	13.8	116.3	120.0	214.0	105.7	39.8	45.4	-36.1	-23.4	534
1948	-48.0	-33.8	-24.9	7.1	125.8	110.3	169.3	146.4	139.0	73.2	-24.9	-20.6	619
1949	-20.8	-26.4	-19.1	58.4	127.9	118.7	113.7	74.1	121.3	41.9	-20.1	-17.3	552
1950	-25.4	-9.4	-1.5	16.6	116.5	82.2	41.7	107.7	106.1	15.7	-30.2	-30.2	390
1951	-16.8	-16.8	-47.8	25.9	106.0	127.7	87.8	108.3	63.6	18.0	-12.4	-13.5	430
1952	-12.4	-13.5	-11.7	65.2	94.7	100.4	134.2	168.2	89.8	55.6	-16.0	-1.5	653
1953	-18.8	-15.5	-24.4	29.0	59.3	150.7	99.3	158.7	90.7	65.6	-7.6	-14.5	573
1954	-36.1	-19.3	-11.9	5.4	70.5	50.1	127.5	-13.5	66.5	43.8	-17.0	-9.9	256
1955	-28.2	-9.1	-39.9	-42.7	90.0	151.2	132.1	158.4	67.8	45.5	-23.4	-38.9	463
1956	-27.2	-41.7	-45.2	28.0	127.7	138.1	108.0	85.7	99.6	36.1	-11.7	-59.2	438
1957	-6.4	-11.2	-9.1	21.3	121.6	96.8	171.6	68.0	83.2	18.7	-19.8	-9.9	525
1958	-17.8	-18.0	-13.5	18.8	134.8	161.5	73.5	183.0	74.8	56.7	-29.0	-25.1	600
1959	-6.6	-14.0	-7.6	61.7	133.1	102.5	196.7	128.5	9.8	-1.4	-13.5	-26.4	563
1960	-11.2	-16.8	-17.5	38.4	79.9	100.1	178.9	160.5	139.1	58.3	-10.9	-13.7	685
1961	-12.7	-28.7	-9.9	25.9	87.0	158.9	145.4	221.9	100.0	15.6	-17.3	-23.6	663
1962	-16.5	-36.8	-19.3	44.9	109.0	149.6	72.3	122.3	87.9	49.5	-13.0	-22.4	528
1963	-13.7	-26.7	-15.7	13.6	70.9	38.5	73.4	93.4	66.9	53.9	-31.5	-9.9	313
1964	-15.5	-12.7	-6.9	45.2	97.5	145.3	163.8	123.2	39.5	35.9	-4.1	-16.3	595
1965	-9.1	-16.3	-3.0	34.3	138.3	72.9	146.9	165.3	70.9	75.6	-15.5	-14.2	646
1966	-17.3	-11.2	-14.0	34.3	161.9	12.9	121.0	121.2	121.3	54.4	-23.9	-12.2	549
1967	-20.8	-9.4	-42.2	38.8	142.4	130.7	248.8	177.9	164.3	14.7	-16.5	-22.9	806
1968	-18.0	-2.8	-23.4	37.7	100.8	149.4	70.9	61.4	49.1	19.7	-3.3	-14.7	427
1969	-41.7	-15.7	-6.9	41.3	98.7	133.9	109.9	193.1	52.4	-24.7	-8.6	-19.8	512
1970	-8.9	-9.7	-31.2	29.1	121.8	9.1	120.4	175.0	123.5	41.9	-22.1	-21.6	527
1971	-25.9	-5.6	-21.1	35.6	172.4	63.6	41.5	184.2	126.5	63.0	-14.2	-33.5	587
1972	-25.9	-18.3	-21.3	72.8	96.2	155.8	100.3	162.5	119.6	64.0	-7.6	-19.1	679
1973	-4.8	-19.8	-3.6	5.5	121.2	66.1	165.5	184.1	94.1	63.7	-38.4	-32.5	601
1974	-37.1	-10.4	-35.1	34.7	25.4	127.9	157.0	106.9	93.8	62.7	-1.3	-11.7	513
1975	-22.6	-21.1	-8.1	14.1	55.1	74.3	166.6	133.9	111.5	43.1	-5.8	-13.2	528
1976	-12.4	-17.5	-17.3	38.5	163.7	76.4	107.3	197.2	117.5	63.3	-2.5	-15.2	699
1977	-7.3	-4.7	-8.5	78.8	-3.6	178.0	170.7	128.5	43.4	68.0	-11.7	-28.1	603
1978	-10.5	-4.9	-4.7	33.2	110.7	136.8	127.1	129.6	53.5	44.8	-32.0	-8.8	575
1979	-7.3	-28.7	-17.4	1.4	111.3	76.2	167.4	190.9	140.9	34.2	-4.6	-25.1	639
1980	-23.4	-14.3	-14.4	75.0	152.1	151.1	186.0	100.7	79.3	50.6	-5.4	-21.1	716
1981	-14.5	-1.6	-13.3	34.3	151.7	80.9	124.1	158.7	120.6	19.2	-2.0	-13.3	645
1982	-9.5	-4.0	-12.7	46.2	51.9	98.3	100.3	78.1	86.3	52.2	-21.4	-7.6	458
1983	-6.3	-6.0	-23.0	21.3	79.9	61.6	109.3	165.8	61.2	51.3	-36.4	-5.2	474
1984	-9.0	-1.2	-11.3	56.7	131.9	107.0	233.3	215.6	49.2	-1.5	-18.8	-14.6	737
1985	-9.8	-13.6	-12.6	-2.4	58.1	155.6	138.6	148.0	69.0	62.8	-8.2	-13.6	572
1986	-25.4	-9.4	-19.0	59.5	91.2	118.7	50.9	163.7	40.5	44.4	-13.0	-7.2	495
MIN	-66.0	-41.7	-55.9	-42.7	-3.6	-45.7	0.0	-13.5	-18.1	-24.7	-50.3	-59.2	242
MAX	0.0	0.0	-0.3	78.8	186.4	254.1	266.4	227.6	164.3	75.6	0.8	-1.0	973
MEAN	-16.9	-14.3	-15.2	31.8	103.2	99.9	131.9	133.0	78.1	35.0	-15.5	-15.3	536

NET EVAPORATION (mm) -- SWIFT CURRENT

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1911	-14.2	-6.6	-7.6	28.4	110.0	99.0	125.7	77.9	78.9	26.8	-21.3	-20.3	477
1912	-9.1	-10.7	-2.5	34.4	63.7	125.4	101.8	90.6	73.8	36.5	-5.6	-9.6	489
1913	-12.2	-7.9	-34.8	39.4	67.2	58.4	125.8	134.1	133.9	36.3	-0.8	-1.0	538
1914	-15.5	-9.6	-20.1	46.7	157.6	105.9	208.9	172.8	81.7	-31.4	-23.4	-24.6	649
1915	-12.2	-4.1	-2.5	71.9	51.5	89.4	83.9	136.9	46.8	29.0	-2.5	-33.3	455
1916	-68.6	-25.9	-47.8	48.6	95.0	56.2	27.2	83.1	73.4	15.4	-15.8	-27.9	213
1917	-28.7	-25.6	-35.3	10.2	147.3	117.8	195.0	126.4	60.5	32.9	-0.3	-22.1	578
1918	-24.4	-23.4	-24.4	2.2	121.9	150.7	173.6	157.4	105.6	14.4	-17.5	-25.6	610
1919	-12.7	-40.6	-23.4	-13.1	123.2	166.6	229.3	127.2	100.1	38.6	-3.8	-4.8	687
1920	-14.0	-7.6	-8.1	43.5	128.1	124.7	128.7	176.6	111.8	34.3	-5.6	-4.6	708
1921	-3.3	-2.0	-14.2	35.3	97.0	138.1	163.4	173.0	21.9	43.9	-10.9	-4.8	637
1922	-20.6	-8.1	-4.1	36.1	75.0	82.0	162.5	155.0	167.5	64.8	-11.2	-10.4	689
1923	-10.2	-10.2	-14.0	33.9	145.1	6.6	66.3	120.7	153.4	81.9	-19.8	-4.6	549
1924	-10.7	-12.9	-10.9	67.4	108.5	118.3	231.8	121.7	112.1	-5.1	-24.9	-23.6	672
1925	-22.1	-5.6	-23.1	-10.8	124.9	139.6	167.3	151.1	34.0	29.5	-3.8	-5.8	575
1926	-27.9	-11.4	-7.9	54.5	100.1	141.9	155.3	98.6	79.1	47.8	-19.6	-10.2	600
1927	-12.2	-27.9	-36.1	20.7	-2.5	140.6	90.6	97.1	79.3	11.5	-34.3	-16.8	310
1928	-8.4	-4.3	-16.0	61.5	158.6	70.0	124.5	197.7	112.0	36.0	-0.3	-16.8	715
1929	-46.0	-13.7	-14.0	50.0	113.7	161.7	243.2	245.3	73.6	47.6	-24.9	-36.3	800
1930	-9.9	-3.6	-4.8	37.5	177.6	132.8	207.7	169.6	57.4	21.4	-8.4	-6.4	771
1931	-2.5	-1.8	-16.8	66.2	163.6	96.0	219.5	140.1	64.9	75.9	-13.7	-33.0	758
1932	-22.4	-8.6	-14.7	18.0	122.9	132.4	55.2	96.3	95.9	30.7	-22.9	-17.8	465
1933	-15.0	-21.8	-8.1	34.4	84.2	116.7	250.5	106.3	79.9	41.1	-11.4	-38.4	618
1934	-17.5	-4.1	-12.9	67.0	182.9	42.9	183.4	185.1	78.6	45.9	-4.3	-12.7	734
1935	-41.9	-8.4	-35.8	22.7	108.1	78.3	114.7	153.0	160.6	56.4	-24.4	-13.2	570
1936	-34.8	-15.8	-24.9	46.6	148.8	124.9	258.6	187.5	134.4	71.5	-6.1	-17.8	873
1937	-30.5	-9.6	-5.1	70.2	159.1	225.2	220.2	234.6	136.1	62.7	-16.5	-20.1	1026
1938	-23.4	-45.5	-30.7	48.1	111.6	124.8	184.4	168.0	114.5	36.1	-10.9	-11.7	665
1939	-16.3	-13.7	-16.3	52.0	66.1	5.0	155.6	218.5	137.5	42.4	27.5	-16.5	642
1940	-8.4	-19.6	-12.9	5.0	135.5	93.5	146.2	249.5	92.0	42.0	-15.5	-7.1	700
1941	-10.7	-4.1	-12.9	49.7	134.4	148.0	158.3	105.4	86.0	69.0	-22.6	-15.8	685
1942	-14.5	-20.3	-9.9	3.6	107.5	-12.1	117.0	77.9	62.0	28.4	-22.4	-13.7	303
1943	-25.1	-13.2	-15.0	80.1	50.4	96.5	216.2	207.8	126.6	16.5	-5.1	-4.3	731
1944	-6.6	-17.3	-27.7	50.0	32.7	75.6	111.0	131.1	111.2	70.1	-35.3	-10.7	484
1945	-31.5	-24.1	-7.6	-3.1	117.3	125.1	228.6	160.4	52.1	60.5	-24.9	-20.6	632
1946	-13.7	-6.4	-3.1	63.0	116.4	101.6	143.5	107.5	80.0	21.8	-53.6	-35.6	522
1947	-35.1	-20.6	-18.8	14.4	110.9	55.8	232.7	139.6	82.2	41.7	-35.1	-21.8	546
1948	-20.1	-40.4	-16.3	-14.1	113.4	93.3	109.0	162.9	152.5	83.2	-20.6	-26.4	577
1949	-18.0	-8.4	-12.2	73.0	107.7	124.5	143.1	194.0	141.9	27.2	23.9	-29.2	768
1950	-30.0	-22.4	-21.6	23.1	123.5	78.9	45.8	87.5	107.2	31.5	-14.2	-14.7	395
1951	-18.3	-31.5	-47.8	28.6	138.7	40.0	154.1	90.7	54.9	10.5	-10.2	-23.1	387
1952	-23.6	-16.0	-28.4	67.2	88.9	82.8	140.5	143.2	98.0	82.6	-19.6	0.0	616
1953	-31.2	-16.5	-41.4	7.2	66.2	39.5	193.8	213.0	88.7	85.4	-0.5	-17.3	587
1954	-33.3	-8.6	-31.2	20.4	60.8	61.7	127.2	79.1	23.9	55.2	13.0	-6.6	361
1955	-17.3	-16.0	-30.2	-5.7	68.7	124.0	45.6	214.0	110.1	74.7	-24.6	-26.7	517
1956	-18.0	-11.7	-7.1	47.6	118.6	112.3	134.4	152.0	109.5	42.0	-6.9	-25.1	648
1957	-17.3	-3.6	-14.5	17.3	148.2	103.7	142.7	121.9	132.4	28.4	-21.3	-14.5	624
1958	-5.1	-27.2	-16.8	29.7	151.1	149.3	148.1	170.1	122.6	68.5	-36.3	-15.0	739
1959	-10.7	-5.3	-6.9	47.2	121.6	59.1	180.4	197.8	117.4	23.5	-30.2	-12.9	681
1960	-25.9	-10.7	-5.1	29.9	129.7	116.9	186.7	122.5	177.2	76.3	-25.1	-22.9	750
1961	-13.5	-26.9	-3.6	29.5	117.3	200.8	203.4	251.1	140.9	47.8	-19.6	-40.6	887
1962	-24.6	-22.4	-12.9	72.7	107.6	127.8	114.2	178.4	143.6	42.6	-2.3	-8.6	716
1963	-23.1	-26.2	-10.2	48.4	108.0	35.5	198.2	169.8	138.3	110.4	-2.3	-19.3	727
1964	-23.9	-20.3	-10.9	54.3	148.8	123.2	253.0	200.4	55.5	105.9	-7.9	-45.0	833
1965	-24.4	-23.6	-24.4	30.9	107.7	58.0	144.8	96.0	23.7	94.2	-32.0	-18.0	433
1966	-21.3	-11.4	-5.1	20.1	170.5	50.5	184.0	149.7	156.4	74.6	-27.4	-8.9	732
1967	-44.7	-22.6	-63.3	7.3	134.2	181.9	280.0	219.7	134.2	45.0	-33.8	-20.3	818
1968	-11.9	-6.6	-3.6	81.6	152.2	170.6	218.8	136.2	75.2	61.8	-5.6	-14.2	854
1969	-37.3	-11.7	-23.9	7.2	130.5	168.6	100.3	267.8	129.8	-12.9	-2.8	-14.5	701
1970	-33.0	-23.9	-14.0	11.3	114.0	-9.5	150.3	227.6	119.1	43.2	-16.5	-23.1	545
1971	-23.9	-9.9	-8.4	48.2	186.0	104.9	179.9	284.8	145.1	68.5	-13.2	-13.7	948
1972	-27.9	-32.8	-8.6	70.3	85.7	127.3	145.5	199.1	65.1	59.7	-11.4	-10.9	661
1973	-3.1	-11.9	-12.9	-34.5	146.5	178.2	229.2	219.9	132.3	80.0	-33.8	-39.1	851
1974	-33.3	-32.8	-34.0	20.0	28.5	198.0	187.1	34.3	112.0	88.0	-11.2	-11.2	545
1975	-10.7	-12.4	-45.7	-11.4	74.3	102.5	179.1	85.4	94.4	30.8	-10.9	-20.6	455
1976	-19.1	-25.4	-53.3	55.1	167.5	31.7	154.5	179.4	161.7	72.0	-5.3	-20.6	698
1977	-18.3	-3.8	-17.3	91.1	29.2	176.4	130.3	150.4	86.4	81.2	-14.3	-48.6	643
1978	-10.6	-11.2	-2.7	1.6	90.4	118.5	190.3	196.7	91.9	73.5	-23.4	-13.1	702
1979	-4.7	-23.0	-9.0	11.2	89.9	141.7	167.1	191.4	135.6	57.6	-6.0	-12.1	740
1980	-22.9	-10.3	-10.5	92.7	175.4	97.4	132.5	148.0	119.0	32.5	-7.9	-29.1	717
1981	-14.7	-6.9	-12.7	71.2	138.7	49.4	106.2	184.1	155.5	31.1	-18.9	-10.6	672
1982	-27.7	-10.7	-28.1	58.5	41.7	117.3	66.1	143.8	98.0	45.2	-3.2	-19.3	482
1983	-13.2	-6.9	-31.6	32.5	75.8	171.6	121.9	236.1	140.8	69.9	-20.7	-10.8	765
1984	-15.3	-4.8	-14.4	81.4	155.5	112.1	241.4	258.8	57.7	45.4	-10.2	-22.5	885
1985	-14.7	-10.2	-25.9	59.3	145.4	179.9	243.3	182.9	69.6	52.2	-18.0	-29.0	835
1986	-7.5	-14.8	-13.6	53.2	19.6	143.5	148.2	193.0	12.4	41.5	-9.5	-12.0	554
MIN	-68.6	-45.5	-63.3	-34.5	-2.5	-12.1	27.2	34.3	12.4	-31.4	-53.6	-48.6	213
MAX	-2.5	-1.8	-2.5	92.7	186.0	225.2	280.0	284.8	177.2	110.4	27.5	0.0	1026
MEAN	-20.1	-15.2	-18.5	37.1	111.8	107.9	160.9	160.7	101.1	48.1	-14.4	-18.3	641

NET EVAPORATION (mm) -- YORKTON

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1911	-25.4	-7.6	-7.6	2.7	54.9	50.8	107.3	-7.0	68.7	-13.2	-51.6	-14.2	158
1912	-5.1	-14.2	-30.2	39.6	49.1	142.4	50.6	29.2	37.2	44.6	-11.9	-16.5	315
1913	-30.5	-6.4	-15.7	36.3	115.2	99.4	-57.6	34.3	72.0	35.5	-7.6	-6.4	268
1914	-20.1	-7.6	-21.6	28.6	79.1	116.4	107.7	100.7	101.1	-2.3	-0.8	-15.2	466
1915	-6.4	-9.7	-0.8	45.0	126.4	48.9	17.1	146.9	20.0	40.7	-28.4	-5.1	395
1916	-41.9	-3.0	-2.0	44.4	38.3	97.8	92.1	116.0	-19.9	28.3	0.0	-14.0	336
1917	-34.5	-14.0	-22.9	14.1	133.7	69.1	170.9	85.9	82.4	50.2	0.0	-22.9	512
1918	-15.2	-7.6	-26.2	30.4	68.7	98.7	96.4	51.6	87.6	34.5	-3.3	-10.2	405
1919	-10.4	-4.6	-8.9	13.5	95.9	79.2	149.6	123.7	59.9	30.0	-25.4	-6.6	496
1920	-22.1	-11.9	-15.2	-3.8	99.7	97.3	170.6	122.3	70.5	-20.2	-6.4	-2.8	478
1921	-2.8	-6.9	-31.0	9.5	52.5	-4.1	77.5	71.8	-32.8	-13.8	-26.7	-15.0	78
1922	-8.9	-8.6	-31.0	-18.3	57.5	110.5	122.6	54.5	64.9	25.5	-24.1	-27.9	317
1923	-27.9	-2.5	-13.2	26.4	114.6	12.0	58.9	92.1	58.5	40.1	-12.7	-7.1	339
1924	-25.1	-18.5	-21.6	-7.1	121.5	117.4	130.6	83.9	88.8	14.8	-45.2	-27.2	412
1925	-34.3	-16.8	-28.4	24.6	129.4	53.4	146.0	131.8	51.7	2.6	-10.4	-10.2	439
1926	-9.9	-11.4	-12.2	38.2	142.6	133.2	87.3	101.3	33.1	-30.9	-30.5	-5.1	436
1927	-6.4	-11.9	-21.8	20.1	49.4	73.1	19.5	108.6	-23.5	0.5	-37.6	-13.5	156
1928	-0.8	-8.4	-10.4	31.9	90.3	46.5	43.1	113.4	80.4	28.6	-6.4	-18.5	390
1929	-19.8	-24.1	-10.4	21.4	21.2	127.8	194.4	172.2	55.3	14.5	-34.5	-22.1	496
1930	-12.2	-45.5	-32.8	27.8	63.6	59.7	79.5	112.4	63.4	12.0	-8.1	-17.3	303
1931	-22.1	-9.4	-25.4	56.7	153.3	159.8	171.8	89.8	57.3	31.2	-41.4	-17.3	604
1932	-22.6	-10.4	-27.9	-25.9	122.8	44.2	122.8	50.4	85.5	18.6	-28.7	-13.5	315
1933	-30.5	-26.4	-23.6	21.5	6.3	67.2	138.7	111.5	58.8	28.3	-36.3	-40.1	275
1934	-28.7	-4.6	-24.9	49.2	138.0	98.2	199.1	184.7	62.0	52.8	-50.3	-26.7	649
1935	-29.7	-12.4	-22.6	32.7	99.6	8.4	114.1	109.6	97.1	38.5	-19.1	-11.4	405
1936	-9.7	-11.2	-42.4	39.8	148.9	81.6	170.8	167.0	75.5	48.2	-14.0	-12.2	642
1937	-25.7	-16.0	-16.5	36.8	133.7	214.1	180.3	183.4	68.9	36.4	-26.7	-13.5	755
1938	-22.6	-16.5	-25.4	35.4	111.8	66.2	51.9	104.3	74.2	38.9	-30.5	-11.4	376
1939	-15.5	-22.9	-21.6	49.1	102.5	45.5	159.2	160.9	88.0	44.7	-20.6	-43.2	526
1940	-24.9	-3.0	-16.5	24.2	125.9	73.8	25.5	181.9	66.0	24.5	-24.6	-24.1	429
1941	-45.7	-18.8	-16.8	12.4	78.7	117.8	149.6	103.8	98.4	41.1	-87.4	-15.2	418
1942	-15.5	-24.4	-32.8	-2.9	103.2	44.5	70.8	-66.1	58.2	49.4	-18.8	-21.3	144
1943	-19.6	-58.7	-13.5	47.9	63.2	90.9	119.4	65.8	89.9	15.6	-24.6	-3.0	373
1944	-10.7	-14.2	-24.6	23.3	86.1	83.9	108.1	59.6	83.2	39.6	-4.3	-10.4	419
1945	-12.7	-14.2	-48.0	7.7	71.0	30.1	103.5	125.9	-28.8	43.8	-27.9	-10.7	240
1946	-9.9	-5.3	-9.1	40.8	79.6	89.8	15.4	96.4	26.7	29.1	-23.4	-13.7	316
1947	-28.4	-13.0	-11.4	15.9	98.0	-42.5	131.1	47.5	33.4	43.5	-72.6	-27.4	174
1948	-17.0	-10.9	-24.9	-38.9	97.8	105.7	19.1	113.1	97.0	44.7	-30.0	-36.1	320
1949	-5.3	-17.3	-16.5	55.4	42.0	46.1	43.6	124.2	79.8	31.4	-30.5	-19.6	333
1950	-22.9	-7.4	-14.2	19.3	103.3	107.6	-0.4	111.2	76.8	2.9	-26.2	-21.1	329
1951	-8.6	-26.9	-27.7	25.6	54.9	47.8	139.0	39.8	37.6	0.7	-23.6	-14.2	244
1952	-20.1	-2.0	-4.6	11.4	105.5	113.3	96.5	74.1	51.7	54.5	-18.8	-4.3	457
1953	-39.4	-20.8	-54.4	23.5	0.0	-36.8	-20.0	69.5	47.5	29.8	-12.7	-22.1	-36
1954	-27.7	-9.7	-7.6	-19.6	70.5	6.1	109.2	83.5	22.1	39.0	-18.5	-5.3	242
1955	-29.7	-7.4	-40.9	-15.9	81.6	110.1	66.3	133.1	62.5	48.3	-53.8	-18.3	336
1956	-35.6	-37.6	-54.1	32.2	97.8	67.8	90.2	98.9	105.8	28.8	-44.2	-51.8	298
1957	-7.4	-7.6	-43.4	25.8	140.9	113.4	176.5	60.3	104.5	36.9	-11.4	-16.3	572
1958	-6.1	-34.3	-13.0	37.5	153.8	138.3	151.3	125.1	76.7	38.1	-34.8	-26.9	606
1959	-7.6	-6.1	-7.1	22.4	138.1	25.5	168.3	98.8	7.1	-11.5	-21.8	-36.1	370
1960	-21.1	-7.6	-22.1	25.2	84.5	119.0	176.1	151.0	114.9	48.9	-11.9	-26.7	630
1961	-13.5	-14.7	-25.7	45.5	91.2	197.8	198.3	229.9	104.0	34.2	-29.5	-17.5	800
1962	-53.6	-43.2	-45.5	21.5	57.1	124.2	157.1	87.9	82.5	22.0	-22.6	-18.5	369
1963	-8.6	-17.5	-27.4	30.5	61.7	31.3	63.0	86.5	70.9	54.8	-20.3	-38.9	286
1964	-56.1	-16.8	-24.6	40.1	73.4	143.4	110.4	30.5	75.0	53.0	-22.6	-25.4	380
1965	-10.9	-41.9	-14.7	14.0	60.8	86.9	94.3	129.0	8.4	73.5	-25.7	-13.7	360
1966	-23.1	-22.4	-21.6	20.6	136.3	88.4	125.4	95.2	130.8	52.8	-41.4	-24.4	517
1967	-42.9	-12.2	-44.7	32.6	144.0	199.1	206.6	192.9	120.3	10.4	-16.3	-26.2	764
1968	-35.6	-2.8	-13.7	60.1	58.0	141.7	103.1	110.4	102.7	17.6	-6.9	-17.3	517
1969	-34.8	-31.0	-11.9	47.8	115.2	130.0	112.0	113.7	50.4	13.5	-7.4	-14.0	483
1970	-10.9	-23.1	-28.4	20.4	64.5	85.9	58.2	167.3	48.7	-21.3	-23.9	-35.1	302
1971	-15.7	-11.2	-11.7	36.0	153.2	-3.9	68.1	146.0	88.4	21.3	-20.1	-8.9	442
1972	-35.1	-15.5	-27.4	39.2	88.1	151.2	93.4	134.4	83.0	51.2	-10.7	-21.1	531
1973	-0.8	-15.7	-21.1	9.1	70.4	19.1	90.7	33.9	61.8	44.5	-20.6	-22.6	249
1974	-41.1	-15.2	-35.1	9.9	26.3	125.8	149.0	0.4	45.4	53.8	-7.4	-19.6	292
1975	-27.4	-15.0	-14.7	-46.2	100.3	37.2	149.2	52.3	39.5	47.0	-9.4	-18.0	295
1976	-16.3	-33.0	-57.7	37.5	141.4	-16.7	149.2	140.4	134.6	67.4	-3.3	-39.9	504
1977	-4.2	-12.4	-21.5	77.7	41.7	141.1	117.5	110.3	-22.5	54.4	-15.6	-37.5	429
1978	-10.7	-3.4	-4.0	24.1	114.2	117.9	77.0	112.6	18.8	29.4	-24.9	-18.6	432
1979	-11.1	-19.3	-33.0	15.5	95.1	164.4	198.2	142.6	55.8	25.6	-10.4	-27.1	596
1980	-24.6	-14.0	-24.5	73.1	165.9	91.6	109.0	2.5	60.1	41.6	-11.4	-11.5	458
1981	-7.4	-9.4	-6.5	37.1	83.8	49.5	43.2	65.6	44.6	-21.8	-0.2	-17.2	261
1982	-22.4	-10.0	-19.7	50.9	78.2	87.7	4.0	94.7	24.3	12.6	-2.2	-22.8	275
1983	-10.2	-16.7	-33.8	26.8	43.4	46.3	8.0	146.8	87.3	17.9	-26.4	-6.9	282
1984	-9.6	-7.5	-26.2	29.2	73.9	64.6	154.0	171.7	-1.1	0.9	-40.3	-23.5	386
1985	-16.0	-17.8	-18.3	42.0	66.3	40.5	131.6	67.4	20.2	61.3	-26.6	-14.8	336
1986	-22.9	-14.3	-23.8	26.7	98.5	100.8	38.4	132.7	43.3	44.4	-8.8	-9.5	405
MIN	-56.1	-58.7	-57.7	-46.2	0.0	-42.5	-57.6	-66.1	-32.8	-30.9	-87.4	-51.8	-36
MAX	-0.8	-2.0	-0.8	77.7	165.9	214.1	206.6	229.9	134.6	73.5	0.0	-2.8	800
MEAN	-20.4	-15.4	-22.8	25.2	90.8	83.1	104.2	101.3	60.2	29.0	-22.6	-19.0	394

NET EVAPORATION (mm) -- BRANDON

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1911	-48.3	-17.8	-1.3	16.7	48.5	58.3	61.6	-45.9	42.4	-13.8	-15.2	-7.6	78
1912	-7.6	-5.3	-6.9	0.2	52.6	161.7	-25.2	86.3	-6.3	37.1	-2.5	-25.4	259
1913	-27.9	-15.2	-12.7	35.3	98.7	116.9	112.9	24.3	52.2	16.1	-7.4	-8.1	385
1914	-41.9	-7.6	-15.5	-21.0	83.3	118.5	117.6	116.7	30.7	-12.7	-17.8	-2.5	348
1915	-2.5	-3.8	-10.2	16.0	106.1	46.2	102.7	147.6	-7.3	25.7	-27.9	-21.6	371
1916	-68.6	-10.2	-48.3	16.9	73.8	6.5	61.8	62.1	38.8	-8.3	-10.4	-22.9	91
1917	-45.7	-22.9	-2.5	20.8	150.0	122.7	121.3	127.8	31.2	16.8	-1.3	-12.7	505
1918	-7.6	-22.9	-17.0	33.6	60.4	127.8	86.3	78.2	53.6	17.2	-26.7	-12.7	370
1919	-7.9	-15.2	-30.5	-14.0	58.5	6.1	88.2	68.7	47.9	-5.8	-20.3	-12.7	163
1920	-22.9	-7.6	-27.9	31.3	83.0	77.8	106.4	22.6	43.7	29.3	-24.1	-12.7	299
1921	-17.8	-61.0	-27.2	-0.2	18.0	52.3	132.0	65.3	-77.8	10.7	-25.4	-3.3	65
1922	-8.9	-29.2	-21.6	17.7	74.5	74.2	101.9	31.4	-13.5	10.7	-69.3	-17.8	150
1923	-31.8	-15.2	-34.3	15.6	94.8	53.9	19.0	87.8	51.4	21.7	-27.2	-1.3	235
1924	-16.5	-19.1	-7.6	-94.1	121.3	105.7	63.9	61.5	17.6	-18.4	-33.5	-15.2	166
1925	-22.9	-17.8	-33.0	-1.3	96.2	13.8	157.2	37.4	27.6	13.2	-4.3	-2.5	264
1926	-3.8	-14.0	-12.2	29.5	99.7	84.3	111.5	22.4	-17.4	18.4	-50.8	-27.9	240
1927	-12.7	-12.7	-25.4	0.8	-13.6	68.4	77.6	28.9	69.5	1.9	-36.8	-6.4	139
1928	-14.7	-1.3	-38.1	-1.9	75.3	-10.9	10.1	83.4	82.0	41.8	-2.3	-16.5	207
1929	-20.3	-3.8	-27.9	-3.7	85.8	110.1	143.8	161.1	40.4	-3.3	-14.0	-30.5	438
1930	-2.5	-50.8	-12.7	6.4	57.7	-6.4	12.4	113.9	90.0	-20.8	-12.7	-11.4	163
1931	-8.9	-2.5	-16.8	41.2	107.9	66.3	33.3	88.9	37.8	27.0	-2.5	-3.0	369
1932	-33.0	-7.6	-55.9	13.3	126.5	6.5	-31.0	104.7	101.3	-26.8	-29.2	-21.6	147
1933	-16.5	-7.6	-1.3	15.0	45.2	111.0	112.1	67.6	49.7	11.4	-29.2	-24.1	333
1934	-14.0	-2.5	-0.3	46.0	142.9	106.1	146.9	103.8	46.4	37.3	-11.2	-14.0	587
1935	-30.5	-3.8	-44.7	11.5	97.2	-28.7	-25.9	39.5	72.3	43.1	-17.8	-12.7	100
1936	-21.6	-14.0	-35.6	32.4	63.9	74.5	153.2	129.4	25.2	44.7	-8.9	-39.4	404
1937	-14.0	-16.5	-7.6	-41.3	55.1	76.7	64.8	66.4	56.0	-5.8	-31.8	-15.2	187
1938	-15.2	-41.9	-29.2	35.1	99.8	130.4	91.8	84.1	95.1	22.9	-23.4	-36.1	413
1939	-12.7	-21.6	0.0	23.6	38.6	36.0	102.9	106.2	50.0	30.4	-1.0	-6.9	345
1940	-8.9	-29.2	-14.0	32.7	53.1	66.0	66.3	45.4	56.0	11.2	-17.5	-29.2	232
1941	-27.9	-6.4	-13.5	-14.5	29.3	32.2	63.0	52.0	-38.0	18.8	-35.8	-10.2	49
1942	-8.4	-16.5	-53.1	-10.3	48.3	86.0	40.3	19.3	30.5	33.2	-20.3	-46.2	103
1943	-52.8	-14.5	-19.6	39.4	7.1	52.2	67.0	88.4	76.9	38.6	-1.5	-13.5	268
1944	-5.3	-14.0	-31.5	12.2	15.9	-54.5	14.9	40.3	22.2	29.6	-21.1	-10.7	-2
1945	-20.1	-18.8	-43.2	6.0	50.5	28.1	55.3	95.6	46.8	18.2	-33.5	-34.0	151
1946	-18.8	-16.3	-41.4	31.5	80.4	34.7	41.3	71.3	46.4	8.0	-40.4	-17.0	180
1947	-45.0	-23.9	-30.2	11.0	83.1	-6.9	89.0	29.1	70.9	28.7	-23.6	-40.1	142
1948	-13.5	-23.6	-26.7	-34.3	64.4	55.0	62.4	53.3	101.4	20.1	-30.2	-80.5	148
1949	-19.6	-10.2	-23.4	35.4	-23.8	87.9	14.2	109.5	88.9	2.3	-15.2	-16.5	229
1950	-28.4	-5.1	-7.6	16.5	46.7	34.4	11.6	77.5	73.3	33.9	-9.9	-26.4	217
1951	-7.6	-34.3	-15.0	25.9	127.6	92.0	165.5	29.6	71.5	11.1	-17.3	-5.6	443
1952	-31.8	-3.0	-5.6	49.1	115.7	25.3	113.8	49.5	95.8	63.7	-18.0	-15.5	439
1953	-26.9	-15.0	-69.6	19.8	44.1	-48.6	43.3	119.8	74.6	30.3	0.0	-9.9	162
1954	-36.1	-12.7	-7.6	7.5	79.5	-53.3	118.9	103.9	-29.8	52.3	-7.4	-3.3	212
1955	-33.0	-12.7	-41.4	2.6	74.8	30.7	81.1	87.1	64.1	39.2	-39.4	-15.2	238
1956	-19.1	-31.0	-49.5	25.3	82.2	2.2	81.7	107.1	95.0	47.3	-34.3	-21.6	285
1957	-5.8	-6.9	-10.2	24.9	117.5	41.9	91.5	42.3	82.3	27.7	-5.1	-6.4	394
1958	-16.0	-17.3	-20.1	40.7	137.9	107.4	99.8	129.9	99.6	28.2	-65.3	-19.8	505
1959	-3.0	-12.2	-12.7	38.8	66.1	112.9	112.1	132.0	6.2	-101.1	-40.9	-19.3	279
1960	-35.3	-8.4	-20.6	21.6	13.2	127.9	158.1	72.0	87.5	47.9	-9.1	-24.6	430
1961	-10.7	-46.7	-7.4	13.7	104.5	193.1	122.5	212.9	16.8	54.8	-6.1	-21.8	626
1962	-33.5	-62.0	-13.5	27.8	17.5	95.6	88.3	11.6	103.7	14.4	-18.0	-18.3	213
1963	-3.0	-18.5	-14.0	13.4	63.1	16.1	91.5	101.1	63.2	47.5	-10.2	-23.4	327
1964	-15.7	-13.5	-32.8	4.4	3.4	63.8	69.3	68.8	59.5	54.2	-27.4	-45.0	189
1965	-10.4	-11.9	-13.7	-1.6	34.7	122.6	-25.9	74.5	-22.7	55.4	-30.2	-22.6	148
1966	-16.0	-5.6	-5.6	12.4	93.1	72.5	143.9	72.0	90.1	52.4	-14.2	-17.0	478
1967	-27.7	-6.6	-23.4	-26.4	128.7	132.4	137.1	135.7	124.4	-22.0	-17.5	-27.2	507
1968	-31.2	-2.3	-9.1	5.5	76.1	101.6	52.7	1.0	40.8	17.8	-14.2	-7.1	232
1969	-43.9	-63.2	-9.4	-6.9	92.2	63.9	30.5	50.7	51.3	33.8	-4.8	-8.1	186
1970	-12.7	-19.3	-47.8	-7.7	97.2	89.9	74.1	132.6	26.3	33.1	-9.4	-13.2	343
1971	-12.2	-0.5	-21.8	3.6	117.5	-62.7	62.5	153.9	45.1	-10.4	-17.5	-5.8	252
1972	-22.6	-18.8	-17.3	35.5	82.2	99.3	98.2	108.2	98.8	49.8	-9.7	-11.7	492
1973	-2.5	-7.9	-6.6	33.9	100.8	110.2	56.3	103.7	1.3	6.7	-23.6	-36.3	336
1974	-26.2	-19.6	-15.2	-7.0	43.0	157.3	129.8	67.3	72.6	62.6	-1.0	-14.2	449
1975	-32.5	-14.0	-37.8	-65.4	80.9	37.7	106.8	-25.0	17.2	33.3	-13.5	-25.4	62
1976	-29.2	-38.6	-30.5	25.2	151.6	-9.9	128.5	122.6	117.5	62.6	-1.3	-27.7	471
1977	-14.6	-8.6	-2.8	78.1	64.7	45.5	4.7	100.9	-9.7	60.6	-11.8	-33.3	274
1978	-11.9	-6.4	-12.5	36.5	59.7	128.3	48.4	138.6	79.8	45.4	-36.6	-17.4	452
1979	-8.9	-18.2	-33.5	-27.5	44.7	138.5	133.4	129.6	57.8	32.7	-9.0	-13.5	426
1980	-18.9	-17.6	-15.6	73.7	162.0	95.1	103.9	-94.1	39.9	29.8	-12.0	-20.0	326
1981	-13.2	-7.9	-7.2	39.9	98.3	56.2	124.9	-23.3	51.8	4.0	-2.3	-6.9	314
1982	-24.5	-4.9	-24.2	14.2	65.3	99.3	-2.8	92.5	58.2	-15.2	-3.8	-23.7	230
1983	-13.1	-13.2	-42.6	42.4	72.3	78.6	58.1	94.7	80.7	30.2	-22.4	-7.8	358
1984	-5.5	-7.0	-19.7	-30.1	128.9	99.3	146.2	166.8	23.0	-24.5	-28.7	-17.7	431
1985	-9.4	-14.8	-3.8	61.4	113.0	52.1	147.2	-42.9	18.6	42.5	-19.9	-10.6	333
1986	-22.0	-10.3	-26.8	-15.3	81.5	66.4	52.3	124.0	39.5	23.0	-11.1	-7.8	294
MIN	-68.6	-63.2	-69.6	-94.1	-23.8	-62.7	-31.0	-94.1	-77.8	-101.1	-69.3	-80.5	-2
MAX	-2.5	-0.5	0.0	78.1	162.0	193.1	165.5	212.9	124.4	63.7	0.0	-1.3	626
MEAN	-20.2	-16.6	-21.8	13.1	76.2	65.3	80.1	76.4	48.7	21.4	-19.0	-18.3	285

NET EVAPORATION (mm) -- THE PAS

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1911	-10.2	-5.1	-13.2	-37.8	65.6	44.4	25.8	50.6	21.4	11.8	-40.6	-17.8	95
1912	-0.5	-3.6	-12.4	11.1	70.0	96.4	9.4	42.5	-17.2	10.3	-39.4	-15.2	151
1913	-29.7	-6.9	-1.5	11.2	59.1	40.1	96.3	57.5	58.1	16.9	-8.4	-3.3	289
1914	-35.6	-7.1	-15.7	5.2	25.6	103.5	91.4	107.5	71.1	-20.8	-30.5	-6.9	288
1915	-9.1	-1.8	-6.4	15.2	78.1	19.5	129.7	124.5	54.9	11.8	-16.0	-16.5	384
1916	-5.8	-4.1	-20.1	27.3	-40.0	81.4	124.3	72.5	37.7	4.0	-20.8	-5.1	251
1917	-8.9	-5.1	-17.3	11.0	103.5	73.9	151.1	78.3	51.1	-13.7	-5.6	-23.6	395
1918	-29.7	-24.1	-9.7	32.8	66.0	53.9	92.6	2.7	62.8	-8.3	-9.1	-13.5	216
1919	-13.0	-1.8	-7.6	30.1	99.2	29.2	25.0	33.1	17.1	-19.7	-14.5	-10.2	167
1920	-14.5	-25.7	-51.3	-23.9	105.5	104.0	116.1	91.8	60.0	-68.9	-17.8	-22.9	253
1921	-19.8	-55.1	-13.7	-4.0	108.3	109.4	95.4	100.1	29.9	31.9	-7.1	-16.5	359
1922	-15.0	-14.5	-19.1	31.6	67.5	88.4	36.5	32.0	-8.2	18.6	-5.8	-5.6	206
1923	-19.6	-10.9	-7.6	-2.5	107.5	74.4	68.6	36.7	58.9	39.1	-11.9	-20.3	312
1924	-6.6	-6.9	-10.2	-15.4	106.0	69.7	56.4	48.8	48.4	-5.3	-36.1	-10.2	239
1925	-10.4	-14.0	-14.0	1.2	89.7	-8.5	33.6	50.7	-6.4	7.2	-13.5	-11.9	104
1926	-8.9	-19.1	-16.5	15.8	62.1	47.1	140.1	105.3	70.8	-21.9	-16.8	-35.1	323
1927	-0.3	-14.7	-12.2	-9.4	60.0	95.9	59.4	41.7	-22.7	-2.8	-19.8	-20.3	155
1928	-5.8	-9.7	-8.9	22.6	78.2	96.9	79.4	72.0	84.1	18.6	-1.3	-8.9	417
1929	-3.8	-13.5	-40.1	-0.5	82.7	86.2	99.7	78.8	20.3	6.9	-24.9	-17.8	274
1930	-10.2	-28.7	-17.3	11.7	7.6	3.2	14.0	84.2	21.9	-5.4	-6.4	-13.5	61
1931	-38.1	-2.8	-29.7	30.8	78.7	108.7	67.6	38.8	-57.8	-13.7	-17.8	-13.7	151
1932	-10.2	-22.4	-14.0	18.8	71.2	-43.9	74.2	85.2	57.8	10.7	-23.6	-27.4	176
1933	-21.1	-11.4	-32.3	13.2	102.9	85.1	76.5	41.6	71.6	-11.8	-69.1	-50.8	194
1934	-49.0	-20.1	-5.8	12.7	60.5	39.2	94.0	104.7	-9.1	12.4	-52.3	-7.9	179
1935	-14.7	-5.1	-46.2	22.1	59.5	50.7	107.0	77.9	26.0	-14.2	-14.7	-6.9	241
1936	-12.7	-2.5	-51.3	11.8	91.4	50.9	88.3	52.6	-19.9	35.3	-24.4	-80.0	139
1937	-20.3	-7.9	-32.3	-21.8	80.3	114.1	145.6	56.6	27.7	4.5	-67.1	-79.8	200
1938	-7.1	-25.9	-30.5	32.9	55.5	68.3	78.4	15.4	62.9	18.1	-13.2	-14.0	241
1939	-30.0	-11.7	-10.9	14.8	83.0	-15.0	95.6	98.5	54.0	13.5	-18.3	-25.4	248
1940	-21.6	-13.2	-21.3	26.5	97.7	100.2	92.0	100.2	45.5	-16.3	-45.7	-30.5	313
1941	-21.6	-42.9	-21.1	3.6	80.4	97.1	110.6	114.2	56.9	30.6	-54.1	-17.5	336
1942	-25.4	-25.1	-21.8	-3.4	55.7	51.4	-6.7	78.3	37.2	22.9	-37.6	-31.8	94
1943	-15.7	-30.5	-30.0	32.7	48.5	21.0	7.1	58.4	-45.4	9.3	-36.1	-15.2	4
1944	-12.7	-20.3	-24.1	33.4	42.3	67.1	76.5	67.9	57.0	19.6	-30.7	-23.4	253
1945	-18.5	-13.2	-32.5	-48.8	101.9	57.4	76.6	73.6	14.2	24.2	-52.6	-16.3	166
1946	-27.2	-19.1	-14.5	28.8	43.9	80.7	49.8	42.4	-2.2	-9.0	-21.8	-43.4	108
1947	-68.8	-41.9	-26.4	11.0	66.7	74.0	87.9	14.5	48.1	15.8	-64.5	-25.4	91
1948	-30.5	-29.7	-6.4	-54.4	98.4	99.4	71.3	62.3	80.3	24.6	-19.8	-19.1	277
1949	-25.1	-25.9	-18.3	2.5	73.7	85.0	87.8	46.1	37.7	18.3	-21.6	-28.2	232
1950	-22.9	-38.1	-3.8	19.0	79.6	43.4	97.4	34.8	64.0	-18.8	-39.9	-20.3	194
1951	-3.0	-3.8	-31.8	19.3	84.0	7.0	90.0	64.3	-7.1	-4.1	-30.5	-11.7	173
1952	-16.5	-2.5	-6.6	14.1	10.8	46.3	53.7	122.1	51.9	17.9	-25.7	-10.7	255
1953	-35.1	-11.9	-57.4	31.6	69.1	50.3	54.0	64.3	-5.8	37.2	-11.9	-32.3	152
1954	-37.1	-17.3	-1.8	-44.5	67.3	76.3	59.4	38.1	48.4	2.1	-25.9	-18.3	147
1955	-27.4	-8.9	-4.3	-8.0	48.1	111.5	51.8	77.7	58.5	19.4	-59.2	-22.1	237
1956	-17.8	-18.3	-39.9	33.7	85.9	129.0	91.6	135.8	66.3	18.1	-40.4	-21.3	423
1957	-9.1	-12.7	-40.9	7.6	91.2	105.1	119.2	29.4	44.3	24.5	-22.4	-31.5	305
1958	-23.6	-21.8	-9.9	-9.9	105.5	100.6	111.4	89.7	18.4	-27.9	-20.8	-36.1	276
1959	-16.5	-8.1	-17.8	39.2	97.4	42.5	66.7	75.3	-3.8	23.5	-39.9	-29.2	229
1960	-3.3	-25.7	-83.6	16.5	59.3	92.3	130.5	133.2	71.2	4.9	-36.6	-38.1	321
1961	-6.1	-61.2	-11.9	21.6	104.4	147.4	153.6	161.7	57.4	-8.9	-51.3	-40.1	466
1962	-38.4	-5.1	-37.6	-1.0	111.5	97.1	180.9	19.2	82.8	27.6	-44.2	-35.8	357
1963	-36.6	-7.4	-23.1	38.4	81.2	44.5	24.4	34.5	44.6	36.2	-51.3	-11.9	173
1964	-17.3	-19.8	-17.3	25.6	91.0	146.1	30.6	61.5	-2.3	7.1	-31.8	-13.2	260
1965	-15.0	-81.8	-4.6	45.9	53.0	120.0	40.3	51.2	-27.5	50.7	-41.4	-21.8	169
1966	-23.6	-9.1	-31.8	30.1	102.8	45.4	54.1	71.2	66.2	32.5	-34.8	-38.6	264
1967	-36.1	-6.1	-41.1	-18.0	114.6	145.5	153.4	145.8	12.6	-9.5	-21.1	-38.4	402
1968	-25.7	-4.3	-6.6	3.7	85.3	99.4	111.4	68.7	37.5	19.2	-31.2	-28.7	329
1969	-23.6	-13.5	-8.6	40.9	80.4	137.7	126.7	83.7	34.5	1.8	-11.4	-14.5	434
1970	-10.4	-15.0	-15.0	-21.9	72.6	-17.6	92.8	131.6	79.9	-32.7	-25.4	-30.0	209
1971	-14.0	-13.7	-16.8	26.3	86.5	92.9	95.7	94.3	36.3	-23.7	-21.1	-31.2	312
1972	-12.2	-18.3	-19.6	31.7	88.6	35.7	99.0	97.4	21.0	48.7	-21.6	-19.3	331
1973	-17.3	-21.3	-20.3	-54.6	100.9	60.4	124.5	79.0	28.2	17.9	-47.0	-16.5	234
1974	-33.8	-21.3	-63.2	37.9	75.3	89.2	122.6	45.1	52.0	36.0	-34.8	-10.2	295
1975	-29.7	-10.9	-6.9	24.6	29.0	4.2	126.5	65.1	28.9	40.3	-15.7	-16.5	239
1976	-17.0	-6.9	-4.6	44.9	134.9	-49.7	48.0	127.5	86.5	13.9	-6.1	-24.6	347
1977	-4.7	-16.6	-25.0	36.2	88.8	83.2	26.7	12.3	48.8	-2.1	-43.5	-19.7	184
1978	-12.4	-8.9	-36.0	12.1	101.5	76.2	60.5	87.3	47.9	-20.8	-34.9	-18.9	253
1979	-5.6	-13.3	-18.9	9.9	36.9	103.4	82.5	70.7	-6.0	-5.5	-11.4	-8.9	234
1980	-20.6	-12.7	-20.4	66.0	106.2	106.2	91.7	81.9	15.6	32.3	-22.8	-26.3	397
1981	-5.7	-15.5	-19.0	14.1	109.1	60.2	52.4	66.8	9.5	-73.1	-8.3	-35.0	156
1982	-8.3	-16.2	-20.5	39.2	74.5	97.5	125.9	98.4	75.8	5.2	-8.0	-38.7	425
1983	-16.2	-10.9	-22.6	24.2	21.1	71.1	3.1	84.5	-3.7	35.1	-51.1	-8.9	126
1984	-26.7	-9.5	-18.7	17.4	59.1	71.2	136.4	173.7	15.2	-21.8	-36.1	-8.6	352
1985	-21.7	-13.5	-9.5	46.8	67.5	56.8	138.4	8.1	73.4	29.4	-14.3	-19.4	342
1986	-15.9	-2.8	-36.0	1.3	107.6	110.4	36.0	64.4	32.9	29.3	-17.6	-21.8	288
MIN	-68.8	-81.8	-83.6	-54.6	-40.0	-49.7	-6.7	2.7	-57.8	-73.1	-69.1	-80.0	4
MAX	-0.3	-1.8	-1.5	66.0	134.9	147.4	180.9	173.7	86.5	50.7	-1.3	-3.3	466
MEAN	-18.9	-16.4	-21.5	12.7	76.0	70.3	82.7	72.2	34.4	7.5	-27.9	-22.6	248

NET EVAPORATION (mm) -- WINNIPEG

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1911	-11.7	-17.5	-7.1	-32.6	-41.5	54.7	67.4	40.8	26.2	-19.0	-15.0	-15.0	30
1912	-7.6	-4.6	-7.6	-24.5	51.6	152.6	-9.6	80.3	-56.3	14.9	-2.8	-19.8	166
1913	-19.1	-15.5	-9.1	34.9	117.1	101.6	111.6	-0.3	37.6	15.1	-19.1	-6.6	348
1914	-20.1	-21.1	-15.0	24.7	109.0	151.3	-8.4	98.7	38.9	-36.2	-34.5	-20.6	267
1915	-8.1	-26.9	-2.8	12.1	123.4	83.6	124.6	160.0	-47.2	18.0	-29.5	-42.9	364
1916	-85.3	-6.4	-54.1	34.2	55.8	16.2	60.6	63.8	53.4	-14.7	-8.1	-43.2	72
1917	-27.9	-22.4	-8.4	45.3	161.8	121.9	67.4	129.0	22.6	9.5	-5.6	-17.5	476
1918	-17.5	-15.0	-23.1	21.3	68.3	103.0	107.5	57.4	76.2	19.3	-82.0	-28.4	287
1919	-4.6	-11.7	-39.4	-3.8	53.9	-28.5	52.0	29.6	10.9	3.5	-57.4	-17.8	-13
1920	-39.1	-21.6	-37.3	33.4	78.2	46.5	149.4	94.8	-4.3	43.7	-38.1	-19.8	286
1921	-36.1	-57.2	-27.7	-9.0	84.1	102.3	58.2	65.2	-35.6	-3.9	-21.8	-12.7	106
1922	-6.9	-18.8	-34.0	25.1	49.6	101.1	35.3	76.3	-7.4	23.2	-47.8	-33.8	162
1923	-41.9	-26.2	-32.8	26.9	79.2	122.1	59.8	143.2	91.7	42.2	-26.2	-4.1	434
1924	-10.7	-10.7	-2.3	-48.1	125.8	133.9	104.4	122.8	8.9	-18.7	-29.5	-18.3	358
1925	-41.7	-13.0	-50.3	19.4	125.1	72.9	164.9	73.9	21.6	10.3	-5.3	-16.3	362
1926	-10.7	-14.7	-16.0	41.0	132.2	78.8	122.6	34.7	14.8	-13.2	-44.2	-8.1	317
1927	-8.9	-9.9	-12.2	-1.8	7.9	107.5	116.9	89.6	32.8	-39.3	-24.1	-16.8	242
1928	-9.9	-4.6	-39.1	8.0	40.9	41.9	6.2	44.8	79.5	37.8	-42.2	-8.4	155
1929	-12.4	-7.1	-32.5	18.9	71.9	130.1	153.1	172.2	43.8	18.4	-18.0	-38.4	500
1930	-6.4	-38.9	-24.4	25.3	14.9	69.8	9.9	106.3	68.6	-36.0	-39.4	-15.0	135
1931	-6.6	-4.6	-22.6	45.8	64.1	130.1	91.4	115.1	-1.5	-14.7	-29.7	-3.0	364
1932	-34.0	-20.6	-50.8	12.1	141.1	59.3	95.7	118.9	70.3	-5.0	-61.0	-7.6	318
1933	-26.4	-15.5	-11.9	27.4	11.0	159.8	143.8	98.8	42.3	33.7	-43.7	-39.9	379
1934	-26.4	-16.8	-30.0	36.0	154.2	54.1	148.8	91.9	-5.2	37.5	-19.8	-23.9	401
1935	-40.9	-3.8	-72.1	13.1	97.0	52.4	103.0	39.2	62.8	24.6	-22.9	-24.4	228
1936	-27.2	-35.6	-48.0	40.6	127.4	103.8	138.3	155.7	57.5	36.7	-27.7	-19.1	502
1937	-25.9	-30.0	-7.1	-24.2	88.3	109.6	103.1	115.5	45.0	35.6	-21.8	-34.8	353
1938	-34.5	-43.7	-12.7	28.9	93.5	138.9	49.6	156.3	126.9	51.5	-21.8	-30.0	503
1939	-23.6	-38.4	-1.5	25.3	100.8	75.9	166.4	17.2	59.0	41.3	-1.5	-7.6	413
1940	-13.7	-17.5	-16.5	7.5	102.6	33.5	139.4	133.8	77.7	-22.1	-20.1	-18.3	386
1941	-29.5	-7.9	-17.0	10.4	30.8	57.1	76.8	45.9	-56.1	-1.7	-15.0	-16.0	78
1942	-15.7	-15.7	-49.3	-21.7	85.1	90.5	-6.8	65.2	76.4	46.5	-17.8	-34.3	202
1943	-36.3	-18.5	-37.8	53.6	44.2	29.6	70.3	80.2	78.7	52.4	-5.3	-7.4	304
1944	-14.2	-17.3	-50.5	45.7	69.5	-54.1	125.6	17.6	39.8	19.9	-46.5	-17.5	118
1945	-16.0	-16.0	-70.6	-0.6	74.5	93.5	82.0	104.3	-28.8	30.5	-39.4	-28.7	185
1946	-15.7	-15.0	-26.7	46.8	120.3	89.0	135.0	116.3	32.5	0.0	-26.4	-9.1	447
1947	-37.1	-31.5	-18.3	9.8	103.2	52.9	85.1	20.3	88.6	14.3	-23.1	-47.0	217
1948	-15.0	-17.5	-19.6	-15.8	93.5	102.4	47.7	120.4	131.5	55.8	-32.5	-41.4	410
1949	-51.8	-27.2	-17.5	45.7	86.6	87.2	114.8	100.1	70.1	-92.5	-32.8	-40.9	242
1950	-46.5	-17.5	-9.4	-2.3	-18.3	69.4	87.4	96.5	14.6	25.1	-24.1	-27.7	147
1951	-11.7	-14.7	-16.0	23.2	127.6	88.7	134.9	28.4	41.2	21.8	-16.5	-8.9	398
1952	-20.1	-7.4	-15.2	67.1	130.3	-10.9	116.5	126.5	109.1	47.0	-13.5	-9.1	520
1953	-45.5	-26.7	-30.7	12.9	1.9	21.5	-35.6	126.5	25.8	17.6	-5.8	-10.9	51
1954	-40.6	-18.0	-10.7	-23.3	72.7	-2.3	98.3	47.4	-21.8	12.4	-33.0	-3.8	77
1955	-38.6	-37.6	-27.9	25.7	94.3	21.5	114.4	173.0	87.5	11.2	-90.2	-51.8	282
1956	-43.9	-27.2	-39.6	38.0	73.3	113.8	55.2	9.3	82.4	6.5	-49.0	-38.4	180
1957	-17.8	-24.1	-25.7	5.8	116.1	11.5	124.7	62.7	37.3	19.8	-17.8	-6.4	286
1958	-11.2	-16.0	-8.9	39.4	157.9	106.5	16.5	141.9	99.5	13.6	-81.3	-27.7	430
1959	-5.6	-24.9	-25.4	39.4	19.7	95.6	87.7	71.9	4.4	-44.2	-18.0	-9.7	191
1960	-17.5	-11.4	-30.7	-3.8	114.4	106.9	195.1	91.7	95.9	18.6	-12.2	-19.1	528
1961	-2.8	-41.7	-13.5	7.7	145.8	217.6	94.4	208.0	47.3	36.8	-4.3	-30.7	665
1962	-22.1	-39.9	-30.2	24.7	-16.2	94.1	1.1	-26.1	100.6	29.4	-54.6	-10.7	50
1963	-6.6	-29.5	-18.5	-37.1	74.2	71.1	133.4	115.4	112.7	57.4	-14.7	-26.7	431
1964	-16.8	-5.1	-50.3	0.2	121.3	33.5	138.6	119.4	94.4	64.7	-15.7	-30.5	454
1965	-5.6	-14.0	-13.5	-17.1	55.5	136.3	83.6	121.8	34.2	49.2	-44.2	-38.4	348
1966	-9.4	-10.4	-40.9	2.6	94.7	127.3	71.8	48.9	102.0	31.4	-26.2	-21.1	371
1967	-20.6	-9.4	-17.5	-25.8	111.3	120.4	64.4	123.7	135.0	4.3	-14.7	-21.1	450
1968	-21.3	-4.8	-13.2	26.9	36.8	89.0	25.8	-3.4	44.9	10.7	-3.8	-8.9	178
1969	-47.5	-8.6	-9.9	31.3	54.7	43.3	44.9	105.9	35.8	17.4	-9.4	-18.8	239
1970	-22.9	-15.0	-27.4	-21.5	37.9	102.6	110.9	112.6	-8.6	30.8	-26.7	-23.4	249
1971	-10.7	-4.6	-43.7	-10.0	100.9	52.9	41.9	149.8	64.6	-28.3	-22.4	-5.8	285
1972	-16.0	-10.4	-20.1	30.6	107.7	119.0	91.5	47.7	55.9	31.1	-10.4	-25.4	401
1973	-2.5	-6.4	-13.7	41.4	42.8	59.3	38.9	79.0	29.9	7.6	-40.1	-10.2	226
1974	-39.1	-11.2	-15.2	-19.2	-43.1	167.9	176.0	54.0	59.4	58.2	-5.6	-13.0	369
1975	-45.7	-15.5	-18.8	4.1	84.4	12.7	114.9	4.7	66.7	16.8	-13.0	-17.0	194
1976	-29.7	-22.9	-22.9	24.7	136.4	-26.5	160.6	120.1	134.1	65.2	-0.8	-18.0	520
1977	-12.5	-20.9	-9.9	87.8	-10.2	56.2	85.6	54.0	-57.0	34.8	-28.4	-18.8	161
1978	-10.3	-7.5	-11.4	39.3	44.2	102.3	94.0	145.0	35.1	45.9	-42.6	-20.9	413
1979	-9.0	-20.1	-45.3	-31.0	24.9	106.3	156.2	74.6	89.6	41.6	-14.6	-11.3	362
1980	-34.0	-17.6	-13.2	81.4	184.4	149.7	179.1	25.4	21.4	21.6	-25.0	-11.0	562
1981	-23.2	-3.3	-14.6	52.2	109.3	60.9	132.8	44.5	39.9	-1.3	-5.9	-7.3	384
1982	-25.7	-7.8	-35.8	50.0	125.0	110.2	55.8	104.9	66.0	-18.7	-5.7	-31.7	386
1983	-12.7	-15.1	-65.6	48.6	114.5	10.6	139.8	89.4	65.6	25.0	-16.3	-5.7	378
1984	-12.2	-8.0	-11.7	23.2	118.5	-93.8	117.1	153.8	42.1	-52.7	-26.6	-22.4	227
1985	-11.2	-13.5	-6.8	39.3	67.1	75.8	120.4	-90.2	65.8	27.0	-43.9	-14.0	216
1986	-9.6	-12.9	-16.9	-46.4	101.3	91.2	22.5	136.2	43.3	38.6	-48.4	-6.4	292
MIN	-85.3	-57.2	-72.1	-48.1	-43.1	-93.8	-35.6	-90.2	-57.0	-92.5	-90.2	-51.8	-13
MAX	-2.5	-3.3	-1.5	87.8	184.4	217.6	195.1	208.0	135.0	65.2	-0.8	-3.0	665
MEAN	-22.3	-17.8	-25.0	16.7	80.4	78.2	91.5	85.4	46.6	16.0	-26.6	-20.2	303

Martin, F.R.J.

Determination of gross evaporation for small to moderate-sized water bodies in the Canadian prairies using the Meyer formula.

Agriculture
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