RAINFALL ATLAS OF HAWAI'I

Report R76

State of Hawaii
DEPARTMENT OF LAND AND NATURAL RESOURCES
Division of Water and Land Development

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ABSTRACT

This atlas consists of ishohyetal maps of median and mean monthly and annual rainfall for the six major islands of Hawai'i. Data from more than 1,200 gages, updated through 1983, were adjusted to a common base period to eliminate the effects of secular trends. The adjustment procedure takes advantage of the high spatial autocorrelation in the rainfall data to adjust short-record normals on the basis of representatively located long-record base stations. Ridge regression was used to obtain biased estimates of regression coefficients relating each rain-gage station with three predictor base stations, while minimizing the effects of multicollinearity in the predictor variables. Bias coefficients were determined by a cross-verification technique in which ten-year data segments from long-record stations were used to estimate long-term normals. Estimated long-term normals, obtained by adjusting ten-year normals of data, were found to agree very well with actual long-term normals. Adjusted normals were plotted and isohyets analyzed to obtain maps of median and mean rainfall.

KEYWORDS: rainfall, isohyets, maps; rainfall analysis, rainfall data, rain gage stations, Hawaii, Maui, Molokai, Lanai, Oahu, Kauai

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INTRODUCTION

This atlas consists of isohyetal maps depicting the patterns of normal monthly and annual rainfall for the six major islands of Hawai'i. Also included is a tabulation of adjusted and unadjusted normals from which these maps were developed. The text contains brief descriptions of the rainfall characteristics of Hawai'i, data compilation and mapping, instrumentation, sources of data uncertainty, selection of normal statistic, uncertainty of the estimated normals, adjustment of the normals to a common base period, and the rainfall maps.

The maps and data are the culmination of decades of diligent work by numerous individuals and organizations, including those responsible for siting, installing, and reading the gages, compiling and distributing the data, computerizing the data base, developing statistical techniques to test and adjust the data to a common base period, and analyzing the spatial patterns of rainfall. Prior to this atlas, the most recent effort to summarize existing data in the form of monthly and annual maps for the state was that of Taliaferro (1959), more than 27 years ago. Work leading to this atlas was begun in 1976 by the Department of Meteorology, University of Hawaii at Manoa. To complete their work and thereby update the landmark publication of Taliaferro, this project was undertaken to develop median and mean monthly and annual maps of Hawai'i by using the most recent data base (through 1983).

RAINFALL IN HAWAI'I

Of the climatic elements, rainfall is probably the most easily measured and, for this reason, there are more and longer records of rainfall than of temperature, wind, humidity, solar radiation, or any other climatic feature. It may also be argued that rainfall is the most important climatic element, having the greatest effect on man and his physical and biological environment. This is certainly true in the tropics where spatial and temporal variability of temperature is small and distinctions among various climates result primarily from differences in the amount, frequency, intensity, seasonality, and variability of rainfall.

In Hawai'i a great diversity of climate is found in a small area--a

diversity due in part to elevation-related temperature differences and the spatial variability of sunlight resulting from cloudiness and shadowing effects. However, Hawai'i's climatic diversity is most strikingly seen in the spectacular spatial variability of rainfall. The gradients in average rainfall in some places in Hawai'i are among the steepest in the world. On the island of Kaua'i annual rainfall increases from about 500 mm (19.7 in.) near Kekaha to over 11 000 mm (433.1 in.) at Mt. Wai'ale'ale, an average gradient of 0.42 mm/m (26.6 in./mile). Thus, one small island experiences a range of moisture regimes exceeding that found across the breadth of a continent.

Meisner and Schroeder identified a total of 1,985 rain gage sites operated at one time or another in Hawai'i, for various lengths of time prior to 1976, an average gage density of 0.125 gage/km^2 (Schroeder 1981). Several factors have contributed to the large network. Plantation agriculture (sugarcane and pineapple) dominated the economy of Hawai'i for much of this century. The growers developed and practiced advanced methods of maximizing crop yields that required detailed environmental data, especially water availability. The joint Pineapple Research Institute-Hawaiian Sugar Planters' Association Meteorology Department established a dense network of gages, and collected, collated, and published data. In addition, water purveyors, such as the Honolulu Board of Water Supply, and other agencies, including the National Weather Service and the U.S. Geological Survey, and many private citizens maintained rain gages throughout the state. Thus, as a result of the need for data and because of the extraordinary spatial variability of its rainfall, Hawai'i has one of the densest networks of rain gages in the world.

Rainfall in Hawai'i has been extensively studied for a variety of meteorological, hydrological, and agricultural purposes. One of the first extended monographs published by the American Meteorological Society (1951) was devoted to Hawai'i rainfall. Project Shower[1] (1957) and Warm Rain Project[2] (1967), comprehensive studies of orographic cloud dynamics and rainfall on the island of Hawai'i, are important landmarks in the understanding of the mechanics of warm rainfall. The many other published reports, too numerous for a complete listing here, range from analysis of rainfall-runoff relationships (Mink 1962) to empirical orthogonal function analysis (Lyons 1982). Hawai'i's rainfall has fascinated scientists and laymen for years.

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[1]Collective set of 15 papers published in 1957 in Tellus: 9(4):471-590.
[2]Collective set of 11 papers published in 1967 in Tellus: 19(3):347-461.

TABLE 1. PREVIOUS RAINFALL MAPS OF HAWAI'I

Year	Author	Description
1929	J.F. Voorhees	Mean annual rainfall of O'ahu
1933	W.T. Nakamura	Mean annual rainfall of O'ahu
1939	W.R. Feldwisch	Mean annual rainfall of major islands*
1942	H.T. Stearns, G.A. Macdonald	Mean annual rainfall of Maui
1948	M.H. Halstead, L.B. Leopold	Median monthly rainfall of O'ahu
1949	L.B. Leopold (1949a)	Mean annual rainfall of East Maui
1951	C.K. Stidd, L.B. Leopold	Mean annual rainfall of major islands
1955	W.A. Mordy, S. Price	Monthly and annual mean rainfall of major islands
1959	W.J. Taliaferro	Monthly and annual median rainfall of major islands
1967	D.I. Blumenstock, S. Price	Mean annual rainfall of major islands
1973	Division of Water and Land Development	Median annual rainfall of major islands
1979	Division of Water and Land Development (1982) (B.N. Meisner, T.A. Schroeder, C.S. Ramage)	Median annual rainfall of major islands

*Hawai'i, Maui, Moloka'i, Lāna'i, O'ahu, Kaua'i.

RAINFALL MAPPING IN HAWAI'I

Rainfall observations in Hawai'i date from the 1840s. Over the years numerous maps of rainfall in Hawai'i have been prepared, the most noteworthy of which are listed in Table 1. The most comprehensive effort was that of Taliaferro (1959), who prepared monthly and annual median rainfall maps for all major islands, based on a common 25 yr base period, 1933 to 1957. These maps have been the standard for nearly three decades. More recently Meisner (1978, 1979) undertook the task of updating and revising Taliaferro's maps. He sought out and compiled all existing rainfall data and developed a methodology for adjusting normals to a common base period (60 years for most islands). That work led to a revised set of median annual maps for the state by Meisner, Schroeder, and Ramage (Division of Water and Land Development 1982).

RAINFALL MEASUREMENT

Measurement of rainfall requires only a receptacle with a horizontally oriented orifice of known area. Rainfall is measured today in much the same

manner as was done six centuries ago in Korea (Gibbs 1962). Despite the apparent ease of data collection, rainfall measurement--particularly the use of a point value to represent a large area--is fraught with uncertainty. Even in Hawai'i, with its high average gage density (0.125 gage/km^2), the entire rain-gage network comprises a very small sample of the area which it represents (less than 1 in 254 million). However, rainfall is generally perceived to have some degree of spatial continuity and, therefore, a well situated gage is expected to give a good indication of the rainfall received in the surrounding area. However, the fact that adjacent gages often give significantly different results, raises questions concerning the accuracy and precision of any rainfall measurement.

Modern rain gages may be categorized as either recording or nonrecording gages. Recording gages, which constitute a minority in Hawai'i, make a continuous record of precipitation as a function of time that allows determination of short-duration intensities. Studies of rainfall frequency (Giambelluca et al. 1984) and real-time flood detection rely on recording gage data. Recording gages operate on one of three principles: tipping buckets (event recorders), weighing devices, and float chambers.

The tipping bucket gage funnels water into a triangular receptacle that pivots on a sharp edge. The right and left portions of the "bucket" each hold a volume of water equivalent to a rainfall depth of 0.03 mm (0.01 in.). When one portion is filled, the bucket pivots due to the weight of the water, emptying the contents of that portion and bringing the other portion into position beneath the funnel. The time of each event (each pivot) is recorded or transmitted (usually via telephone line) to a remote receiving station.

Weighing gages record the downward motion of a pail as it fills with rainwater. Two types are common in Hawai'i: (1) the universal gage, a 0.305 m (12 in.) capacity device which records the accumulating weight of the rainfall on a dual traverse clock-driven chart; and (2) the Fisher-Porter gage, which uses a paper tape with 2.5 mm (0.10 in.) rainfall depth increments.

Rarely used in Hawai'i are float type gages, which record the rise of a float in a chamber with a pen and clock-driven chart. Some gages use a siphon to empty the chamber when full.

For nonrecording gages, the basic element is a receptacle which is manually read and emptied at regular or irregular intervals as circumstances

permit. The U.S. Standard gage has a 0.203-m (8-in.) orifice located 0.787 m (31 in.) above the ground. Readings are made daily with a calibrated dipstick. The National Weather Service maintains a network of standard gages within Hawai'i. In remote high-rainfall areas, such as Wai'ale'ale, Kaua'i, regular readings are impractical. In such areas, large capacity storage gages are used. In addition, numerous nonstandard devices are commercially available, such as plastic cylinders or wedges designed for easy mounting and reading. Private citizens who have installed such rain gages and maintain records provide valuable information in areas devoid of standard gage sites.

In addition to errors arising from the small sample size inherent in rainfall measurement, several sources of error are associated with the gage itself. Specifically, gages tend to catch less rain than would fall on a horizontal ground surface. Rain-catch efficiency is most notably affected by wind. Because the gage itself interferes with the air stream moving past it, flow over the orifice tends to accelerate and become turbulent above the gage. Both acceleration and turbulence reduce the rain catch; thus, wind is a major source of error in nearly all rainfall measurements. The problem is even greater for snowfall. A gage exposed to a 4.4-m/s (10-mph) wind catches 90% as much rain as a gage in calm conditions and 45 to 60% as much snow (Larson and Peck 1974). Higher wind is associated with further reductions in rain-catch efficiency.

Because of this problem, rain gages are best sited in an environment which is sheltered from the wind. A forest clearing is often a good site. By comparing gages at standard height with buried gages, Helvey and Patric (1983) found that gages situated in forest clearings had deficiencies of only 2.3 to 3.4%. Favorable siting is not always possible, however. An alternative is to position the gage close to the ground. A gage 0.762 m (30 in.) above the ground (approximately the U.S. Standard) catches 97.7% as much rain as a gage at 0.305-m (12-in.) height (Kurtyka 1953). Another alternative is to use a wind shielding device to alter the flow of air past the gage orifice. However, for liquid precipitation, Larson and Peck (1974) have found shielding to be ineffective. In any case, the authors are unaware of any shielded gages in Hawai'i.

It is likely that rainfall in high wind regions as well as snowfall in high elevations in Hawai'i is significantly underestimated. Because wind effects are highly site-specific, no attempt has been made in this study to

correct or adjust the data for this type of error. Users of the data should be aware of this limitation, and may wish to add a correction. Particular attention should be given to gages located atop ridges or in other areas exposed to high wind. In addition, steep slopes facing the wind will receive more rainfall and slopes facing downwind less rainfall than a horizontal surface. This effect should be recognized in making hydrological assessments.

The characteristics of certain gages produce other errors. An important source of error for tipping bucket recording gages results from water lost during intense rainfall as the bucket pivots. On the other hand, the force of the flow may cause the bucket to pivot before completely filling during high intensity rainfall. The universal weighing gage, some float type gages, and most nonrecording gages have limited capacities. In heavy rainfalls, gages overflow and critical information is lost. For instance, during the flood of 19 April 1974, two key gages near the storm's center overflowed, preventing complete analysis of the event (Schroeder 1977). Likewise, the record rainfall at Kīlauea, Kaua'i of 24-25 January 1956 is only approximate since the gage overflowed prior to the first reading (Blumenstock and Price 1967).

Several other sources of error, generally considered to be of lesser importance, can be significant for specific gages. These include splash into or out of the gage, evaporation losses, wetting of the gage surface, and improper leveling of the gage.

During measurement, compilation, processing, and analysis of rainfall data, the introduction of human error is practically inevitable. In compiling and computerizing the Hawai'i rainfall data base, Meisner (1978) found numerous transcription errors in rain gage data. Despite every effort for accuracy, errors are difficult to avoid when large amounts of data are transcribed. Other data problems arise when changes occur in gage reading schedules. Most plantations gages, read daily prior to the late 1950s, are now read only on weekdays, thus reducing the utility of these records.

RAINFALL NORMALS

Probably the most frequently used statistics of any data set are those that describe the central tendency of the distribution or the normal, the most familiar of which are the median and the mean. The selection of the appropri-

ate statistic for rainfall often depends on the application. For most purposes, the median--the value for which higher or lower occurrences are equally frequent--is preferred as an indicator of normal rainfall (Meisner 1978). On the other hand, the mean is required as a parameter of some probability density functions used by hydrologists, and is appropriate for applications that require the total amount of rainfall during the period of record. Thus, median and mean maps are included in this atlas.

Estimation of rainfall medians and means is prone to some uncertainty. The basic assumption is that the data from any gage site are stationary; that is, the central tendency remains the same over time. This assumption is violated if the gages are moved or in any way affected by changes in the environment. Problems of this nature are common. Given that rainfall at a particular location is stationary, a long period of observation is necessary to accurately determine the normal. The minimum period of record necessary to establish the long-term normal is difficult to define. An advantage of the use of the median for rainfall is its tendency to stabilize more quickly than the mean. In any case, a longer record length is always desirable for the estimation of normals.

ADJUSTMENT OF RAINFALL NORMALS TO A COMMON BASE PERIOD

Like most meteorological networks, Hawai'i's rain-gage network consists of stations established on different dates and operated for varying lengths of time. In developing maps of normals, secular variability in rainfall can result in spurious spatial patterns. To overcome this problem, a common base period is usually selected and only data from that period from stations with complete base period records are used to estimate normals. This technique, however, severely limits the amount of data, reducing the confidence in the final map analysis. To make better use of available data, short-record stations may be extrapolated to a longer base period by taking advantage of high spatial correlation among station records. This may be done using unbiased least-squares multiple regression of the form,

$$Y = Xb$$

where Y is the vector of observations at the station whose record is to be extrapolated, X is the matrix of concurrent records of surrounding predictor

stations, and b is the vector of regression coefficients which are estimated as

$$b = (X'X)^{-1} X'Y.$$

However, because predictor stations are themselves often highly correlated, the X'X matrix may approach singularity, resulting in unstable coefficients and unreliable estimates. Use of ridge regression techniques (Hoerl and Kennard 1970) lessens the effects of multicollinearity and thus optimizes explained variance through the use of biased coefficient estimation of the form,

$$b = (X'X + kI)^{-1} X'Y$$

where k is a non-negative scalar called the bias coefficient and I is the identity matrix.

Meisner (1979) developed a technique which made use of ridge regression to adjust rainfall normals of short-record stations to a common base period. He applied this technique to produce base-period adjusted median annual rainfall maps of Hawai'i (Division of Water and Land Development 1982). In this study, Meisner's technique was modified slightly and applied to adjust monthly and annual medians and means to a common base period.

Each major island (Hawai'i, Maui, Moloka'i, Lāna'i, O'ahu, Kaua'i) was treated separately. The computerized monthly rainfall data base, updated through 1983, served as the basic data. All long-record stations on a particular island were first identified. A base period was then determined as the maximum period during which continuous or nearly continuous records existed for a sufficient number of stations in representative areas of the island.

The stations with complete or nearly complete records during the selected base period were then designated as candidates for the base station network for the island. Each candidate's data were then tested with double mass analysis for evidence of non-stationarity. Stations with inconsistent records were eliminated from candidacy. A base station network was then selected from among the remaining stations on the basis of representativeness and non-redundancy. Spatial autocorrelation among base station candidates was performed as a check against redundancy. Long-record stations which were not selected as base stations were used in subsequent model calibration and verification. Table 2 lists base periods and base and non-base long-record stations by State Key Number for each island (refer to Division of Water and Land Development [1973] Report R42 and other DOWALD documents and maps for station locations and descriptions).

TABLE 2. BASE PERIODS, BASE AND NON-BASE LONG-RECORD RAINFALL STATIONS, STATE OF HAWAI'I

Island	Base Period	Base Stations (State Key No.)		Non-Base Long-Record Stations (State Key No.)	
Hawai'i	1916-1983	2.00	92.10	21.00	168.00
		4.10	94.10	73.00	197.00
		14.00	100.00	118.00	199.00
		17.00	103.00	120.00	214.00
		27.00	117.00	133.00	217.00
		36.00	135.00	142.00	221.00
		54.00	137.00	144.10	
		65.00	147.00		
		68.00	175.00		
		70.00	181.00		
		73.20	182.00		
		75.00	194.00		
		80.00	206.00		
		90.00	216.00		
		91.00	222.00		
		92.00			
Maui	1916-1983	250.00	374.00	336.00	449.00
		256.00	390.00	346.00	466.00
		258.00	396.00	361.00	482.00
		267.00	406.00	376.00	483.00
		296.00	432.00	386.00	485.00
		333.00	442.00	446.00	
		350.00	480.00		
		354.00	484.00		
		364.00	494.00		
Moloka'i	1931-1983	511.00	556.00	526.00	533.00
		529.00	562.00	528.00	534.00
		540.00			
Lāna'i	1916-1983	650.00	676.00	662.00	690.00
		652.00	693.00	684.00	
O'ahu	1916-1983	707.00	837.00	700.00	783.00
		741.00	847.00	713.00	833.00
		770.00	863.00	727.00	871.00
		775.00	870.00	732.00	885.00
		782.00	883.00	733.00	890.00
		798.00	912.00	736.00	892.00
		836.00		750.00	
Kaua'i	1916-1983	936.00	1026.00	927.00	1064.00
		943.00	1055.00	935.00	1102.00
		965.00	1086.00	944.00	1112.00
		985.00	1010.00	947.00	1134.00
		994.00	1115.00	1051.00	
		1020.00	1117.00		

On the basis of proximity, spatial autocorrelation patterns, and generally accepted regionality in rainfall characteristics, each short-record station was assigned three base stations to serve as predictors in the adjustment process. This step differs from Meisner's procedure which used stepwise regression to select the predictor stations.

Selection of bias coefficients (k) was by a cross-verification technique. Two ten-year segments (1930-1939 and 1940-1949) of each non-base long-record station were entered into the program to calculate the ridge regression coefficients (b). This procedure was repeated for a range of k values. The regression coefficients corresponding to each k value were then used to estimate the long-term median and long-term mean for the station. The estimates were compared with the actual long-term means and medians. Each month and the annual total were treated separately. On this basis the k values which produced the least overall error were selected. A single k value was selected for monthly adjustments and another for the annual adjustment on each island. Table 3 lists the selected k values.

Using the selected k values, long-term monthly and annual medians and means were computed using only the ten-year segments and compared with actual long-term normals to verify the procedure. As Figure 1 illustrates for four O'ahu stations, 1930 to 1939 medians and means adjusted by this procedure are very close to actual 1916 to 1983 values.

The above detailed procedure to adjust normals for short-record stations to a common base period was applied to all stations in the computerized monthly rainfall data base having at least 10 years of record. Using the selected bias coefficient, all available data during the base period were

TABLE 3. BIAS COEFFICIENTS FOR RIDGE REGRESSION FOR SIX MAJOR ISLANDS OF HAWAI'I

ISLAND	BIAS COEFFICIENT (k) Monthly	Annual
Hawai'i	0.10	0.05
Maui	0.10	0.70
Moloka'i	0.10	0.05
Lāna'i	0.30	0.70
O'ahu	0.10	0.60
Kaua'i	0.10	0.20

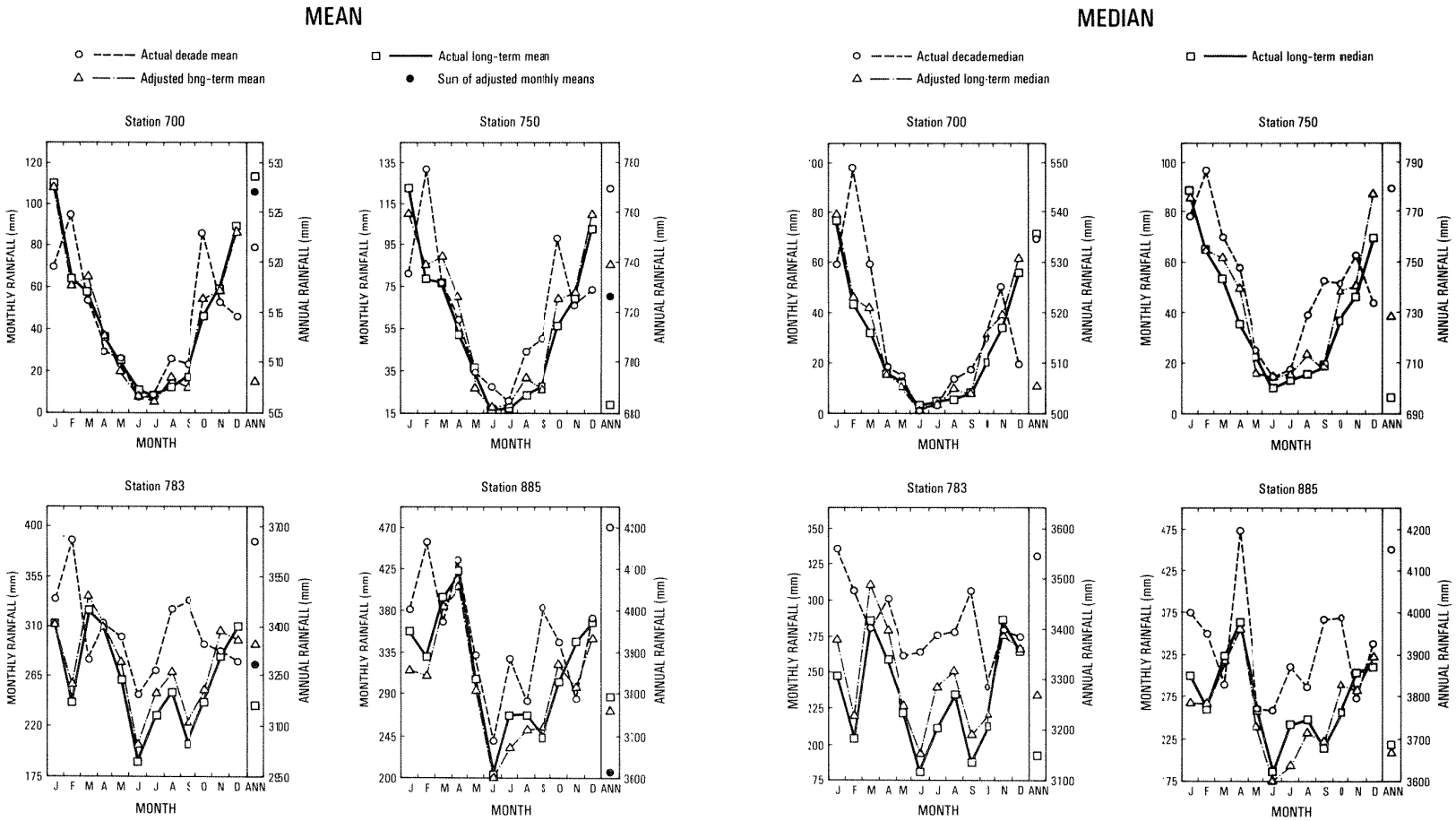

Figure 1. Adjusted monthly and annual rainfall in comparison with 1930-1939 and long-term values for means and medians at O'ahu stations 700 (Waimānalo ['Ewa]), 750 (Waipahu), 783 (Nu'uanu Reservoir 4), and 885 (Waikāne)

entered into the ridge regression program with data from the predictor base stations to determine the regression coefficients. Long-term median and mean values at the predictor stations were then substituted into the regression equation to obtain the estimated long-term median and mean for the short-term station. This procedure was repeated for each month and for annual totals at each short-term station. Monthly and annual adjusted and unadjusted median and mean rainfall in millimeters for all stations used in the map preparation are listed in Appendix Tables A.1 to A.6.

RAINFALL MAPS

Adjusted rainfall normals were plotted along with computerized island coastlines and 1,000 ft (305 m) elevation contours. The length of record for each station was also plotted. Isohyetal analysis was then performed, giving most weight to stations with the longest record. Despite the adjustment, some inconsistencies were still evident among nearby stations. In such cases, and in areas without gages, judgment was based on the information at hand and on knowledge of the mechanisms giving rise to the observed rainfall pattern. Thus, an indispensable element of subjectivity is incorporated into these maps. Monthly and annual median and mean rainfall maps of the islands of Hawai'i, Maui, Moloka'i, Lāna'i, O'ahu, and Kaua'i are given in Appendix Figures A.1 through A.130.

Spatial Distribution

Open ocean rainfall over an area as small as that occupied by the major Hawaiian Islands would show almost no spatial gradient. Estimates of annual average open ocean rainfall near Hawai'i currently range from 550 mm (21.7 in.) (Elliott and Reed 1984) to 700 mm (27.6 in.) (Dorman and Bourke 1979). Yet measurements on the islands indicate average annual rainfall varies from less than 250 mm (9.8 in.) near Kawaihae on Hawai'i, to more than 11 000 mm (433.1 in.) at Mt. Wai'ale'ale on Kaua'i. Obviously, the islands themselves are responsible for these deviations. The formation of clouds and rainfall occur when air is cooled, usually the result of its ascent. The primary rainfall-producing mechanism in Hawai'i is the orographic lifting of moisture-laden northeast tradewinds up the windward slopes of each island. In

addition, thermally-driven diurnal circulations, that is, sea-breeze-land-breeze systems and mountain-valley winds, contribute to rainfall by reinforcing tradewind-orographic lifting, inducing areas of low level convergence with the prevailing trades, or producing orographic uplift in areas not exposed to trades (Leopold 1949b). Convective uplift occurs on the larger islands, often in conjunction with the sea-breeze circulation. Open ocean rainfall near Hawai'i is almost exclusively produced by large-scale storm systems which produce rainfall with a relatively uniform spatial distribution. Drier areas of the state receive most of their rainfall from such storms.

In general, rainfall maximum areas correspond to regions of persistent uplifting. Areas of low rainfall are found in leeward areas and atop the highest mountains. The leeward rainfall minima are usually attributed to the so-called "rain-shadow effect" in which air, desiccated by its uplift over an upwind orographic barrier, subsides into a low leeward area as a warm, dry wind. However, in spite of the rain-shadow effect, minimum rainfall on O'ahu and Kaua'i is not substantially different from Elliott and Reed's open ocean estimate (550 mm [21.7 in.]). High mountain dry areas occur because the upslope flow of moist air is prevented from penetrating to this elevation, and relatively dry, stable air prevails.

The salient features of the spatial rainfall distribution of Hawai'i are discussed below with reference to the median annual rainfall maps of each major island (App. Figs. A.1, A.14, A.27, A.40, and A.53).

The island of Hawai'i (App. Fig. A.1) exhibits a complex rainfall pattern, arising from its diverse topography. Four distinct maxima occur: (1) Kohala (windward Kohala Mountains); Hilo (eastern slopes of Mauna Kea); Ka'ū (along Mauna Loa's southeastern flank); and Kona (upslope of the Kona Coast). Four minima are found: (1) Kawaihae (on the south Kohala Coast); (2) "Interior Uplands" (high elevation, central portion of the island, including the peaks of Mauna Kea, Mauna Loa, and Hualālai); (3) Ka'u Desert (leeward of Kīlauea volcano); and (4) South Point (the southern tip of the island). Rainfall maxima and minima are listed in Table 4.

The Kohala and Hilo maxima are associated with sea-breeze-aided tradewind orographic rainfall. The Kohala maximum occurs on the windward side near the mountain's 1 603-m (5,260-ft) peak. Rainfall declines steeply in the Kohala Mountains lee toward the Kawaihae minimum. The Hilo maximum, found on the

TABLE 4. MAXIMUM AND MINIMUM RAINFALL AREAS IN HAWAI'I

Island		Maximum/Minimum Rainfall Areas	Rainfall (mm)
Hawai'i	Max	Kohala	> 4 000
		Hilo	> 6 000
		Ka'ū	> 3 000
		Kona	> 2 000
	Min	Kawaihae	< 250
		Interior Uplands*	< 500
		Ka'ū Desert	< 750
		South Point	< 500
Maui	Max	Hāna	> 7 000
		West Maui	> 9 000
	Min	Kīhei	< 400
		Haleakalā	< 1 000
Moloka'i	Max	East Moloka'i	> 4 000
	Min	West Moloka'i	< 400
Lāna'i	Max	Lāna'ihale	> 1 000
	Min	Lāna'i Coast	< 400
O'ahu	Max	Kahana	> 7 000
		Tantalus	> 4 000
		Ka'ala	> 2 000
	Min	'Ewa	< 600
Kaua'i	Max	Wai'ale'ale	> 11 000
	Min	Kekaha	< 500

*High elevation interior of island, including peaks of Mauna Kea, Mauna Loa, and Hualālai.

broad eastern slopes of Mauna Kea at about 760 m (2,493 ft) clearly shows the influence of the tradewind inversion. The presence of the inversion at about 2 500 m (8,202 ft) (Lavoie 1967) tends to split the circulation and divert upslope flow around rather than over the higher elevations (Leopold 1949b). Tradewind rainfall maxima in Hawai'i generally occur at or near the peaks of mountains whose summits are less than 2 000 m (6,562 ft). As a result of the cap on upslope flow imposed by the inversion, rainfall maxima on higher

mountains such as Mauna Kea, are found at lower elevations. The Ka'ū maximum is unique in Hawai'i because it occurs along a southeast-oriented slope. As shown by Ekern and Becker (1982), the normal tradewind direction (approximately 70°) results in an upslope trajectory. Orographic lifting is enhanced by a thermally induced circulation up the heated slopes during the day. The Kona rainfall maximum, a ridge of high rainfall extending along a strip at about 600 to 900 m (1,969-2,953 ft) elevation, is also unique. While sea-breeze flow has a slight effect on rainfall in other leeward areas of the state, the effect is pronounced in Kona. Wind sheltering by Mauna Loa and Hualālai and afternoon heating of the west-oriented slopes provide conditions for a well-developed sea breeze during the day. When tradewind flow diverted around the large topographic barriers meets the sea breeze, an elongated area of convergence is produced.

The rainfall minimum that results from the rain-shadow effects of Kohala Mountains and Mauna Kea, makes Kawaihae the driest area in the state. Dry, subsiding air funneled through the saddle between Kohala Mountain and Mauna Kea prevails here. The Interior Uplands' minimum includes most of the area above the tradewind inversion. The Ka'ū Desert rainfall minimum lies in the lee of Kīlauea volcano, where the rain-shadow effect and subsidence account for its aridity. The South Point minimum is associated with the rain-shadow of Mauna Loa and the speed divergence which occurs as the trade winds cross the coast and escape the retarding influence of friction with the land surface.

On Maui (App. Fig. A.14), the rainfall pattern is dominated by the effect of two volcanic peaks on the island, 3 055-m (10,023-ft) Haleakalā, and 1 764-m (5,788-ft) West Maui Mountains. The two rainfall maxima areas are (1) Hāna, on the northeastern slope of Haleakalā, and (2) West Maui, at the summit of the West Maui Mountains. The two rainfall minimum areas are (1) Kīhei, at the southern coast of the saddle, and (2) Haleakalā, at the summit of Haleakalā.

The Hāna maximum occurs at the approximately 650-m (2,133-ft) elevation. As with the Hilo maximum, upslope flow is capped by the inversion. The West Maui Mountain is cone-shaped and orographic rainfall at the summit can occur with wind from any direction. The deeply incised valleys enhance uplift by funneling air toward the summit. As a result, West Maui's annual rainfall maximum exceeds 9 000 mm (354 in.), the second highest recorded rainfall in

Hawai'i.

The Kīhei minimum is part of a broad area of low rainfall covering the saddle of the island and extending along the leeward coast from Makena to Ka'anapali. The aridity of this region results from the rain-shadow effects of the island's two large volcanoes. The Haleakalā minimum, like the Interior Uplands minimum of Hawai'i Island, occurs in an area above the tradewind inversion.

The rainfall pattern of Moloka'i (App. Fig. A.27) closely resembles the island's topography. The East Moloka'i rainfall maximum occurs near the summit of the East Moloka'i mountains, while the West Moloka'i minimum includes most of the coastal portion of western Moloka'i. The orographic uplifting of trade winds is responsible for the East Moloka'i maximum. Despite its 1 515-m (4,970-ft) height, East Moloka'i's rainfall maximum is not as great as for other peaks in Hawai'i, primarily because the mountain's ridge line is oriented nearly parallel to the trades. All of western Moloka'i is dry although a small local rainfall maximum is found near the town of Mauna Loa.

Lāna'i's small area and subdued topography produce a simple rainfall pattern with a single maximum, Lāna'ihale, near the island's highest point (1 027 m [3,370 ft]). The Lāna'i coast minimum encircles the island. The rain-shadow effects of East Moloka'i and West Maui ensure that all of this island is relatively dry.

O'ahu, with two roughly parallel mountain ranges oriented approximately perpendicular to the northeast trade winds, has three rainfall maxima (App. Fig. A.40): (1) Kahana, to the lee and northwest of the center of the Ko'olau ridge line; (2) Tantalus, leeward of the Ko'olaus' highest point; and (3) Ka'ala, at the highest point of the Wai'anae Range; and two minima (1) Waialua, at the coast, north of the island's saddle area; and (2) 'Ewa, along the south and west shores.

The Kahana and Tantalus maxima are the result of strong uplifting of trade winds along the steep windward Ko'olau slope. The leeward position of the Kahana maximum has been attributed to the continuation of the upward air trajectory as it crests the ridge and its subsequent rapid downturning, which concentrates the release of raindrops in a zone slightly leeward of the summit.* Tradewind flow, partially desiccated in its traverse of the

*Colin S. Ramage 1979: personal communication.

Ko'olaus, produces less intense rainfall when lifted over the Wai'anae Range. Thus, the Ka'ala rainfall maximum is relatively low. Rain shadowing by the Ko'olaus induces the Waialua minimum, while both the Ko'olau and Wai'anae rain shadows affect the 'Ewa minimum.

The rainfall pattern on Kaua'i (App. Fig. A.53) is characterized by a single maximum, Wai'ale'ale, near the island's highest point (Kawaikini, 1 598 m [5,243 ft]), and a minimum, Kekaha, along the western coast of the island. The rain gage at Mt. Wai'ale'ale receives more rainfall than any other gage in the world. With an annual median of 11 415 mm (449 in.), it is one of the wettest locations on earth. A mere 25 000 m (15.5 miles) southwest of Wai'ale'ale, the Kekaha annual minimum is less than 500 mm (19.7 in.).

Annual Cycle

The annual rainfall cycle differs from place to place in Hawai'i, but certain features are common to areas with similar exposures. The ancient Hawaiians recognized two seasons: Kau (May-October), the high-sun period corresponding to warm temperatures and steady trade winds; and Ho'oilo (November-April), the cooler period when trade winds are less frequent and widespread storm rainfall is more common. Climatologists today are in general agreement with the Hawaiian system, although a 5-mo summer (May-September) and 7-mo winter (October-April) are generally used (Blumenstock and Price 1967).

To most residents of Hawai'i, the winter-wet, summer-dry rainfall regime is familiar. Figures 2 through 7 show the annual patterns of median monthly rainfall at selected stations. For much of the state, the maximum monthly rainfall occurs in January and the minimum in June. This is particularly true for dry, leeward areas, such as Kawaihae (Hawai'i), Lahaina (Maui), Kamāka'ipō (Moloka'i), Waimānalo ('Ewa, O'ahu), and Kekaha (Kaua'i).

In high rainfall areas as opposed to dry areas, rainfall seasonality is less pronounced. For instance, at 'Eke (Maui) the June rainfall minimum is 52% as much as the November maximum. By contrast, the Lahaina minimum is less than 2% as much as the maximum. Wet areas are usually characterized by a triple maxima, triple minima regime. Peaks are observed in March or April, August, and November or December, and lows are found in February, June, and September or October. Honohina (Hawai'i), 'Eke (Maui), and Kahana 27 and Lower Luakaha (O'ahu) are examples.

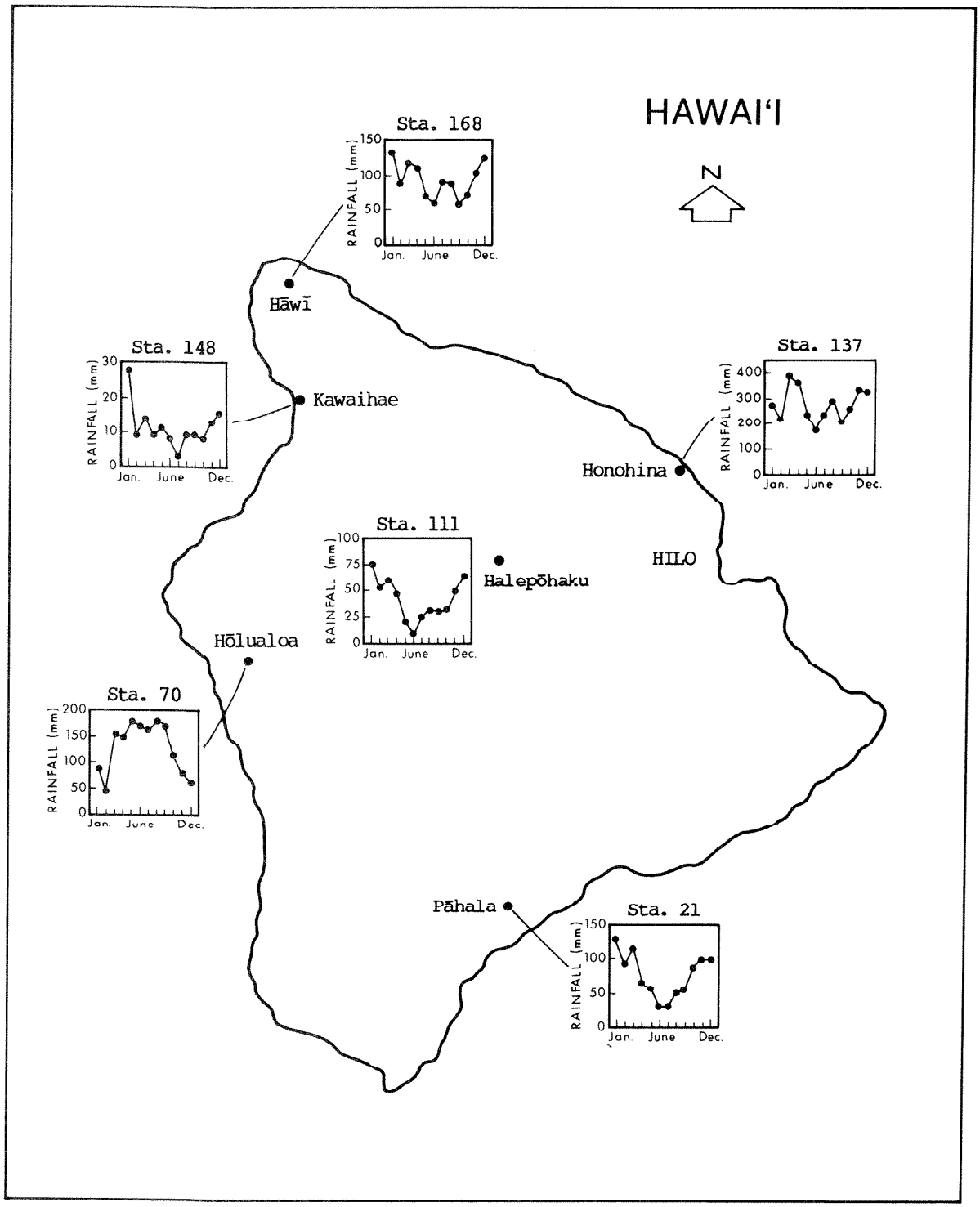

Figure 2. Annual rainfall cycles (adjusted median monthly rainfall) of selected stations, Hawai'i Island, Hawai'i

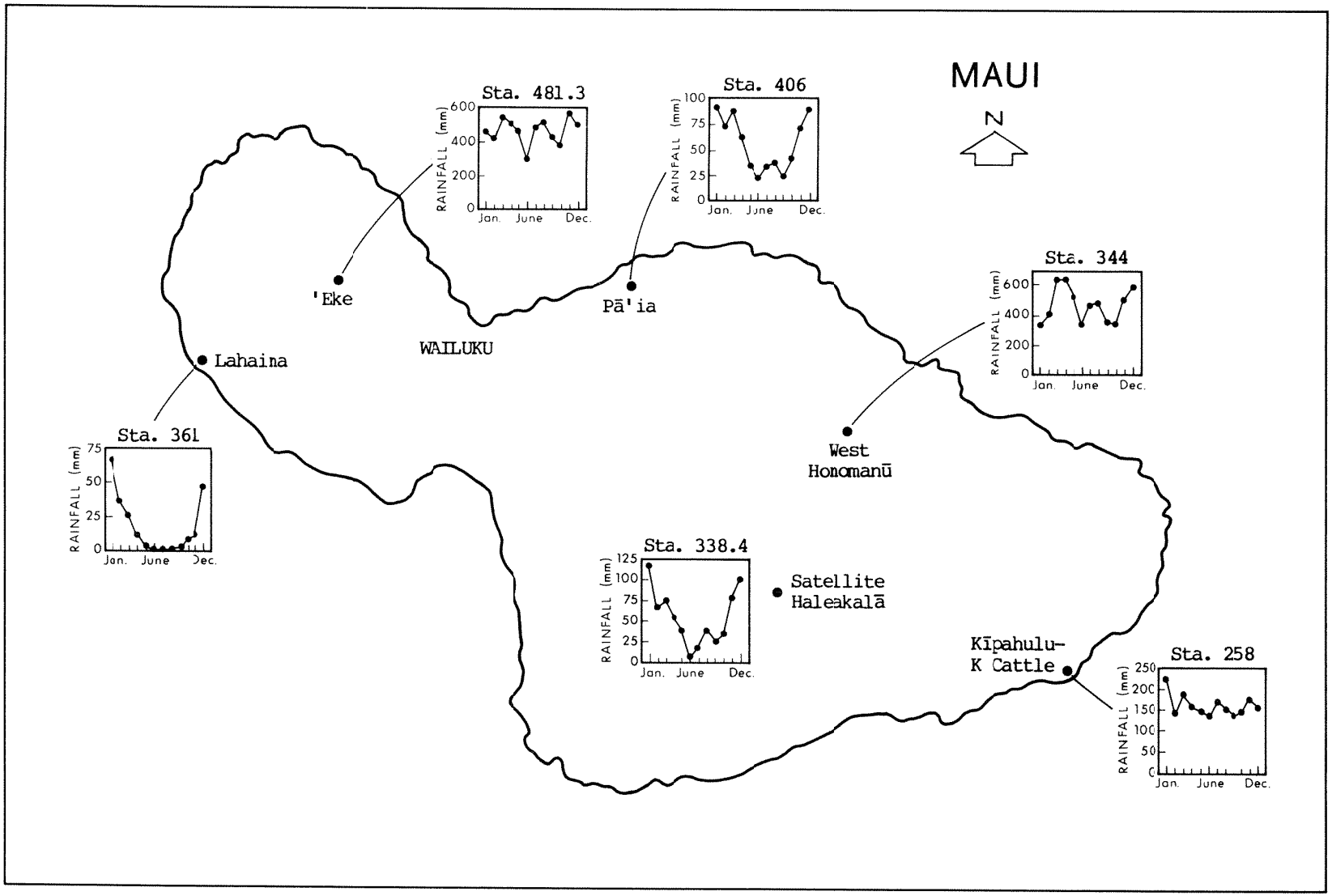

Figure 3. Annual rainfall cycles (adjusted median monthly rainfall) of selected stations, Maui Island, Hawai'i

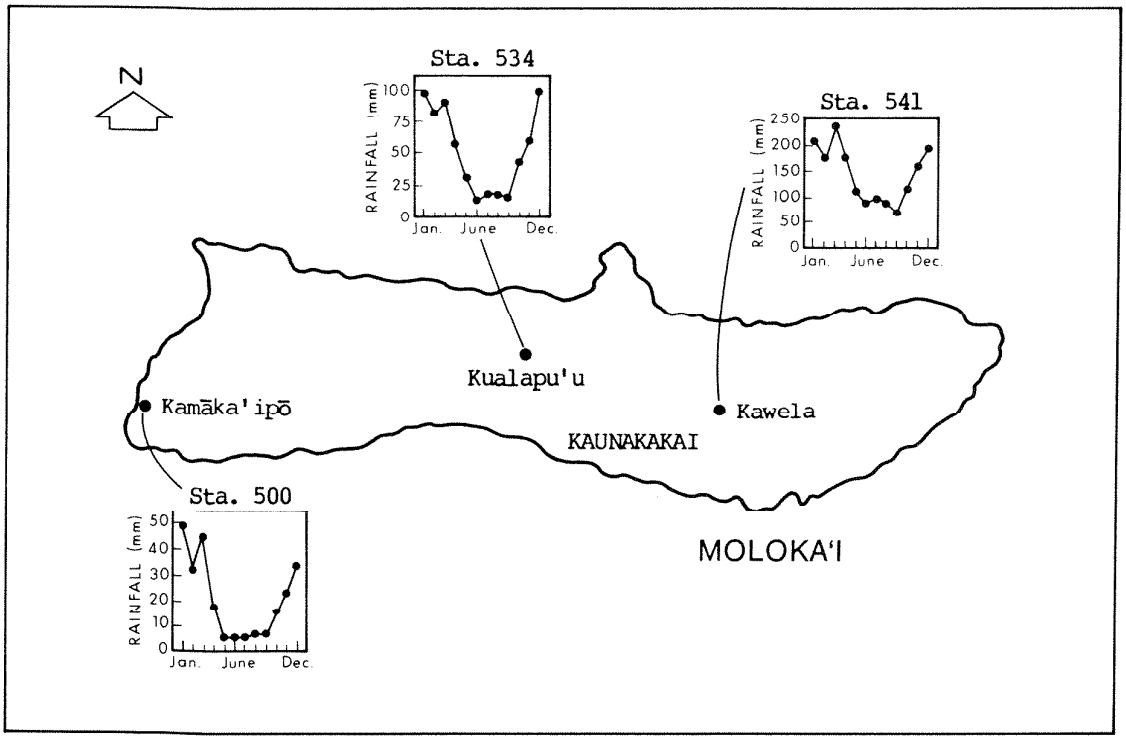

Figure 4. Annual rainfall cycles (adjusted median monthly rainfall) of selected stations, Moloka'i Island, Hawai'i

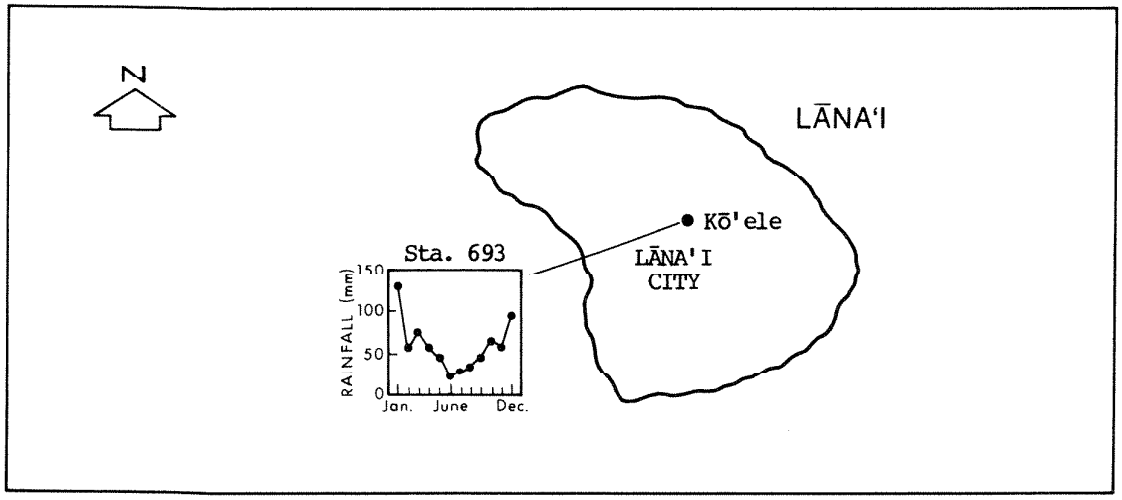

Figure 5. Annual rainfall cycles (adjusted median monthly rainfall) of a selected station, Lāna'i Island, Hawai'i

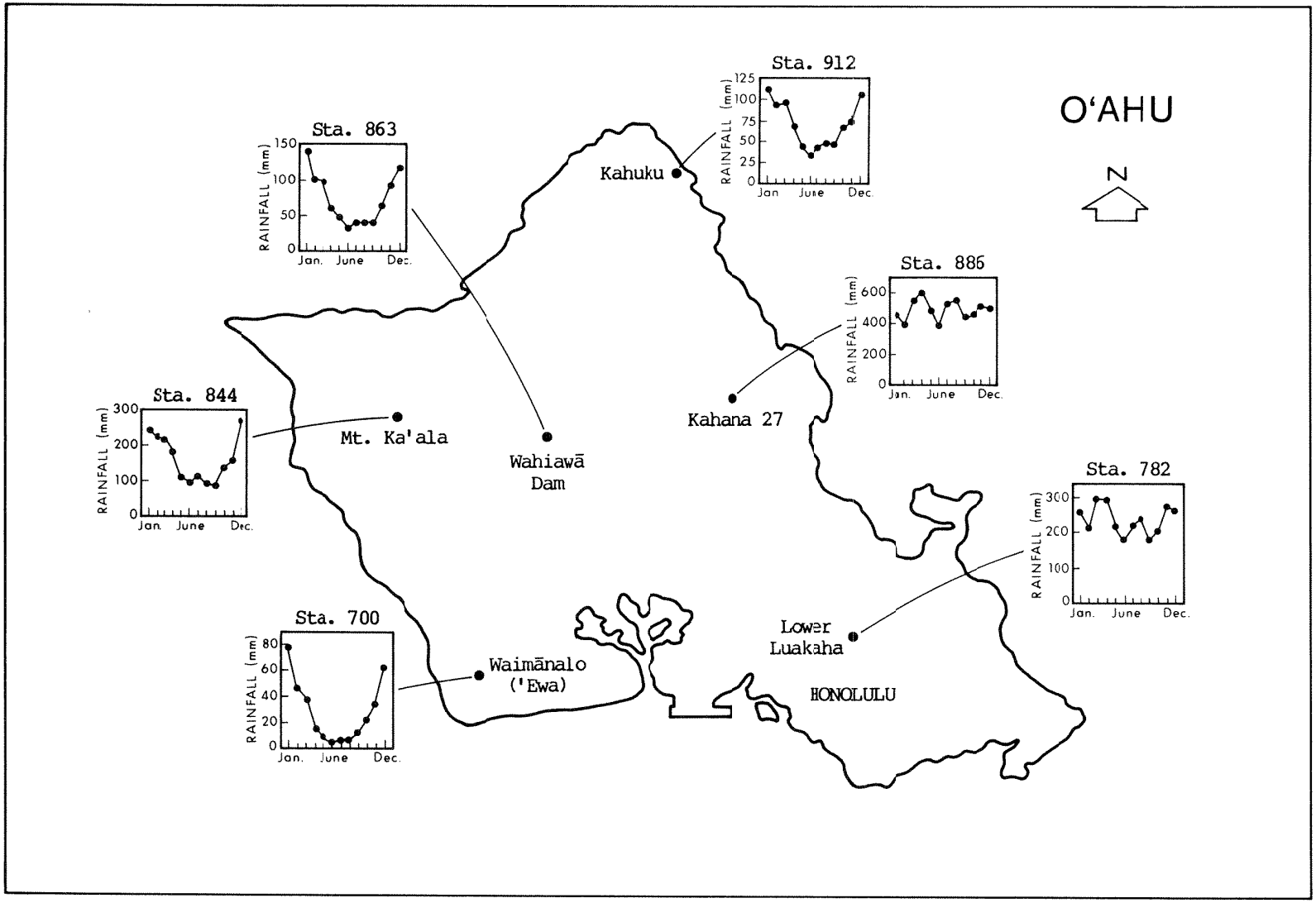

Figure 6. Annual rainfall cycles (adjusted median monthly rainfall) of selected stations, O'ahu Island, Hawai'i

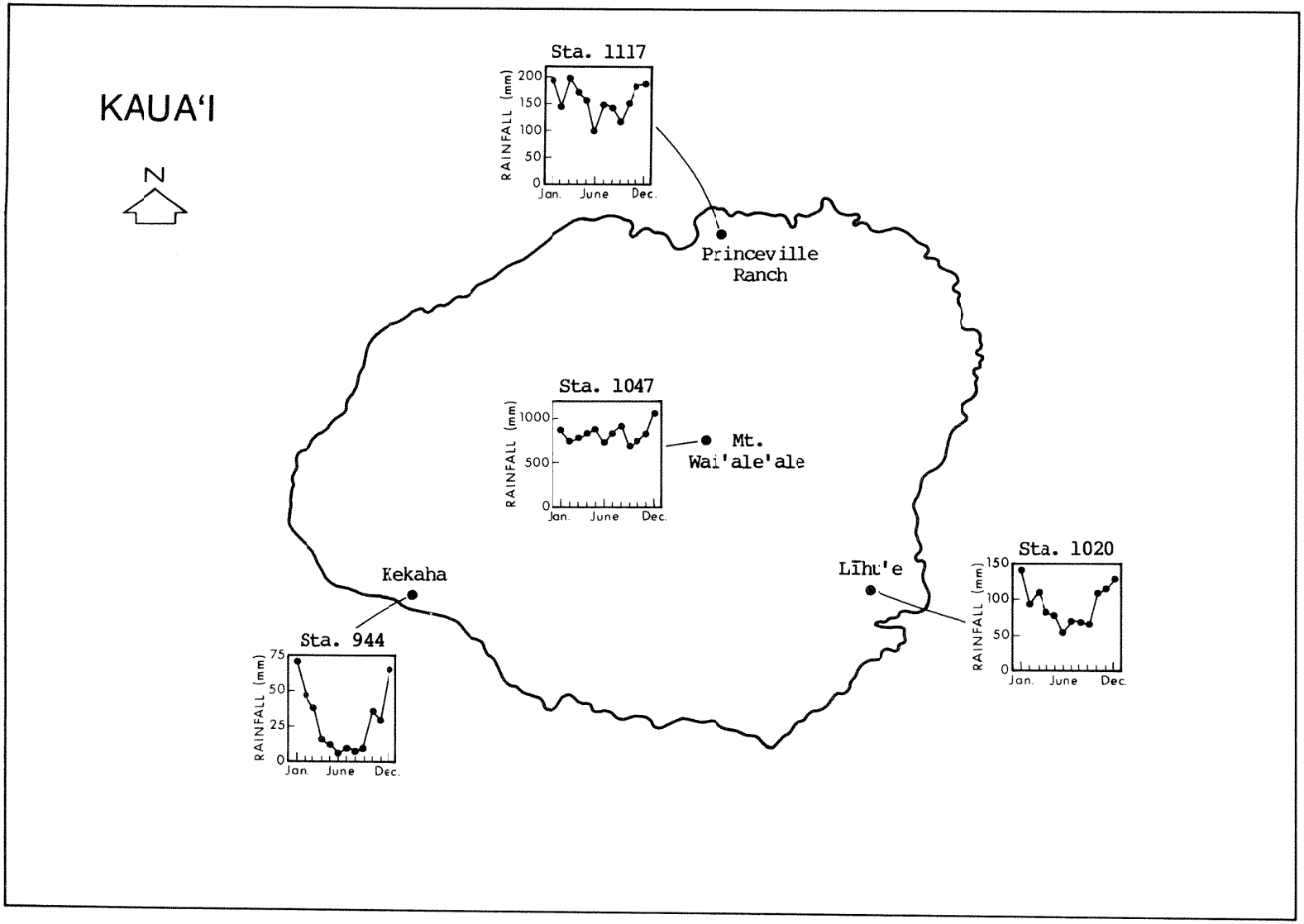

Figure 7. Annual rainfall cycles (adjusted median monthly rainfall) of selected stations, Kaua'i Island, Hawai'i

The winter maximum in dry areas is explained by the greater frequency of synoptic storm systems in winter that produce widespread rainfall over the state. In the high rainfall areas, orographic rainfall increases in summer because of more persistent trade winds. This compensates for the greater storm rainfall in winter and the annual cycle tends to be flat.

Hōlualoa (Hawai'i) is representative of the Kona maximum rainfall region. Because the chief rainfall-producing mechanism here involves the convergence of the sea breeze and trade winds, the annual cycle features a maximum during summer when trades are more frequent.

Stations, such as Hāwī (Hawai'i) and Kīpahulu-K Cattle (Maui), must be regarded as transitional locations between wet windward and dry leeward areas. As such, their annual cycles resemble dry regions, but with less pronounced summer-winter differences.

An often recognized feature of the annual rainfall cycle in Hawai'i is the relatively low February rainfall. At most stations, rainfall is significantly lower in February than in December, January, or March. February rainfall is about 9% lower simply on the basis of the month's shorter duration. In addition, according to Namias and Mordy (1952), the atmospheric trough located west of the islands during most of the winter usually shifts to a position east of the islands during February, producing a slight decline in rainfall.

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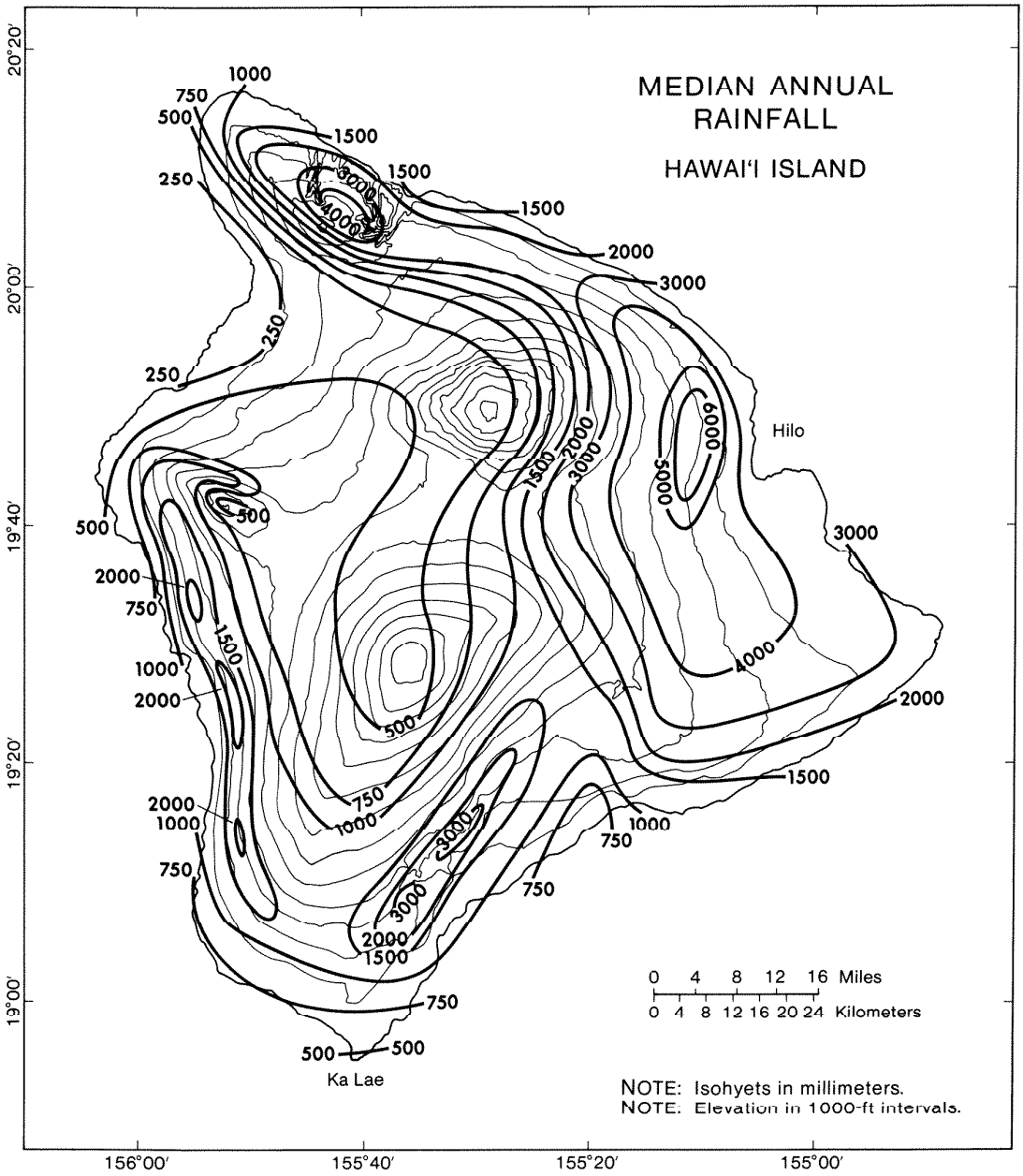
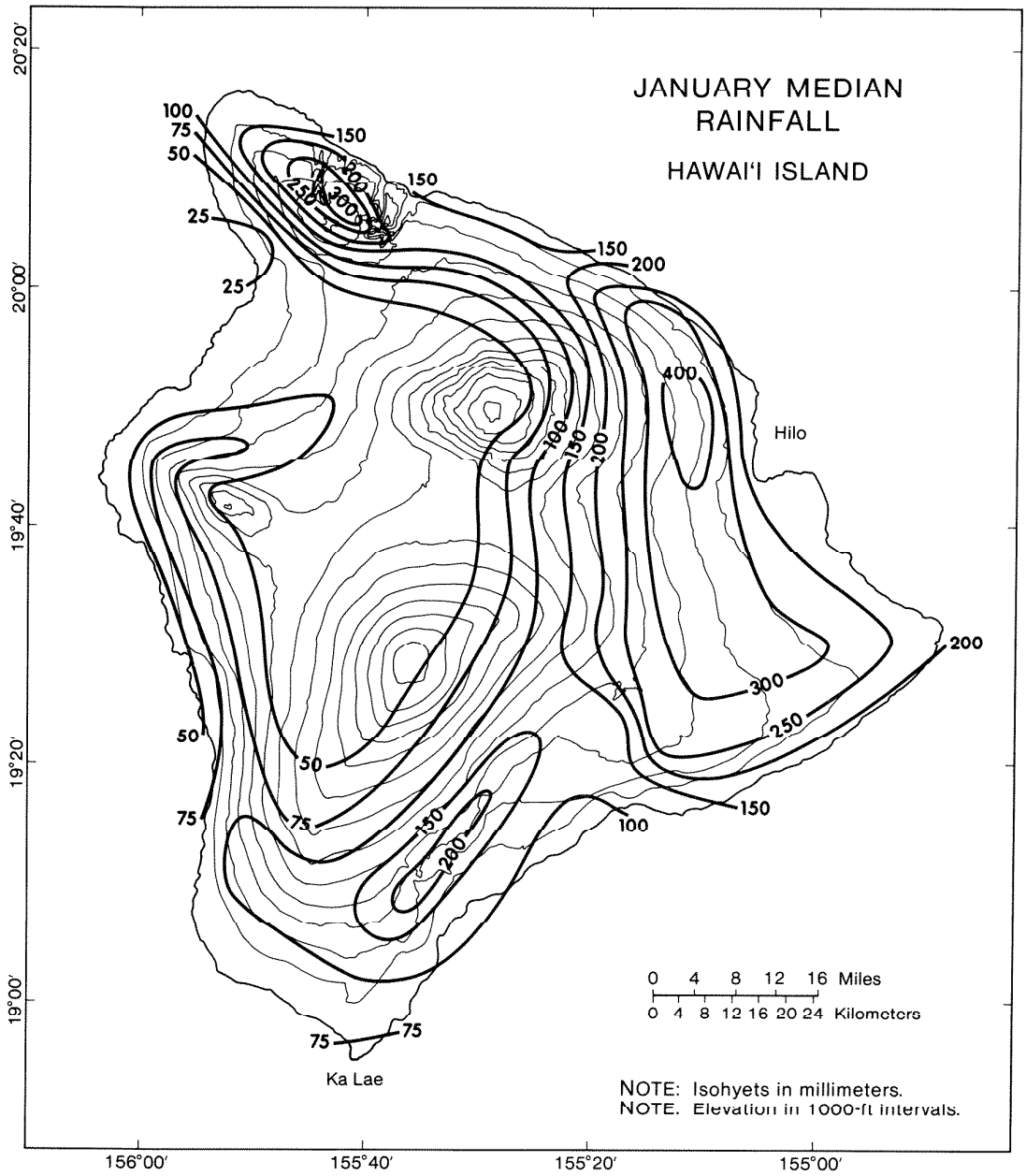
UNIT CONVERSIONS

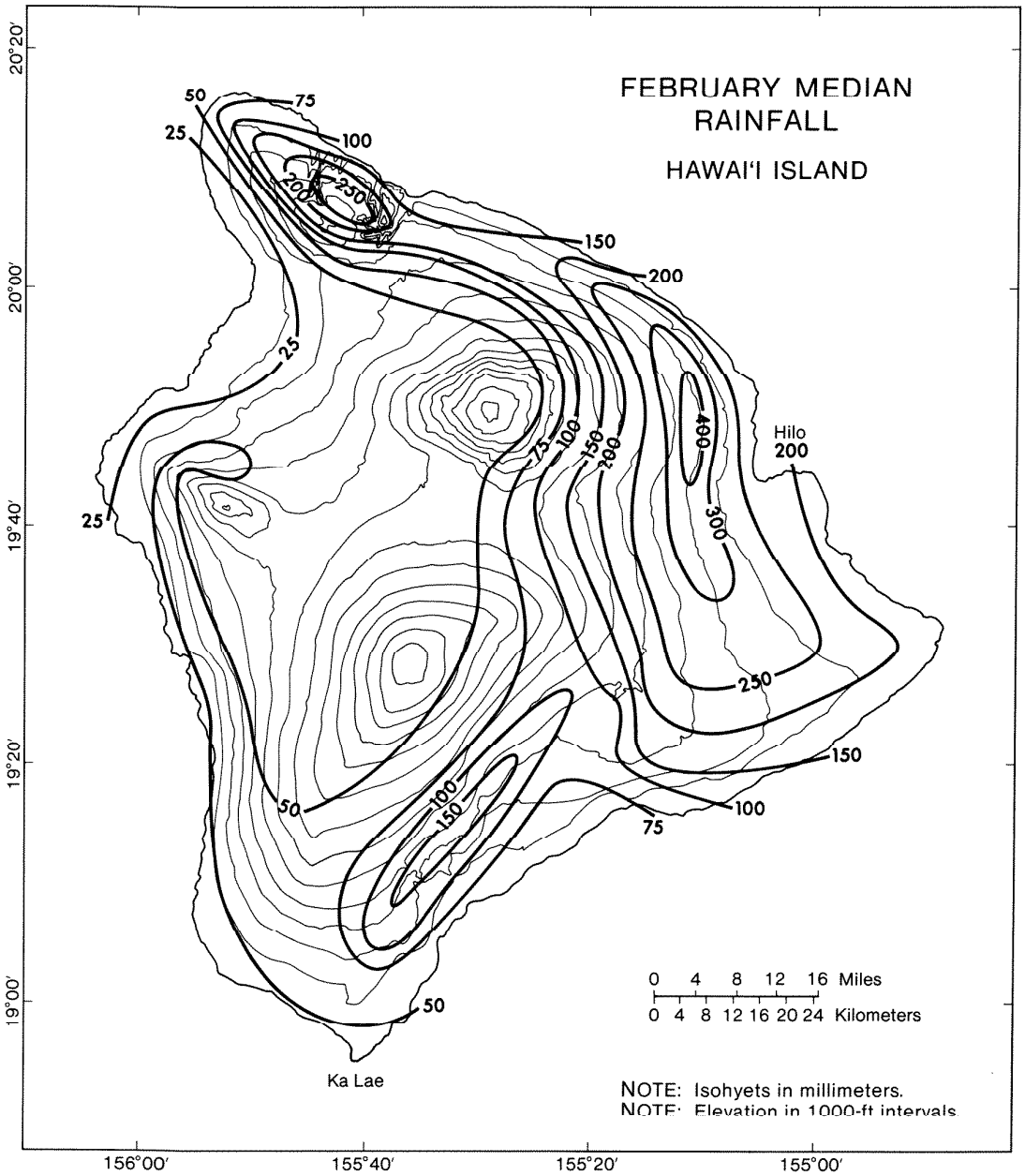
mm	in.	mm	in.	in.	mm
5	0.20	1 300	51.18	0.25	6
10	0.39	1 400	55.12	0.50	13
20	0.79	1 500	59.06	0.75	19
25	0.98	1 600	62.99	1.00	25
40	1.57	1 700	66.93	1.50	38
50	1.97	1 800	70.87	2.00	51
70	2.76	1 900	74.80	3.00	76
75	2.95	2 000	78.74	4.00	102
100	3.94	2 500	98.43	5.00	127
125	4.92	3 000	118.11	6.00	152
150	5.91	3 500	137.80	7.00	178
175	6.89	4 000	157.48	8.00	203
200	7.87	4 500	177.17	9.00	229
250	9.84	5 000	196.85	10.00	254
300	11.81	5 500	216.54	15.00	381
400	15.75	6 000	236.22	20.00	508
500	19.69	6 500	255.91	25.00	635
600	23.62	7 000	275.59	50.00	1 270
700	27.56	7 500	295.28	100.00	2 540
750	29.53	8 000	314.96	150.00	3 810
800	31.50	8 500	334.65	200.00	5 080
900	35.43	9 000	354.33	250.00	6 350
1 000	39.37	9 500	374.02	300.00	7 620
1 100	43.31	10 000	393.70	400.00	10 160
1 200	47.24	11 000	433.07	500.00	12 700



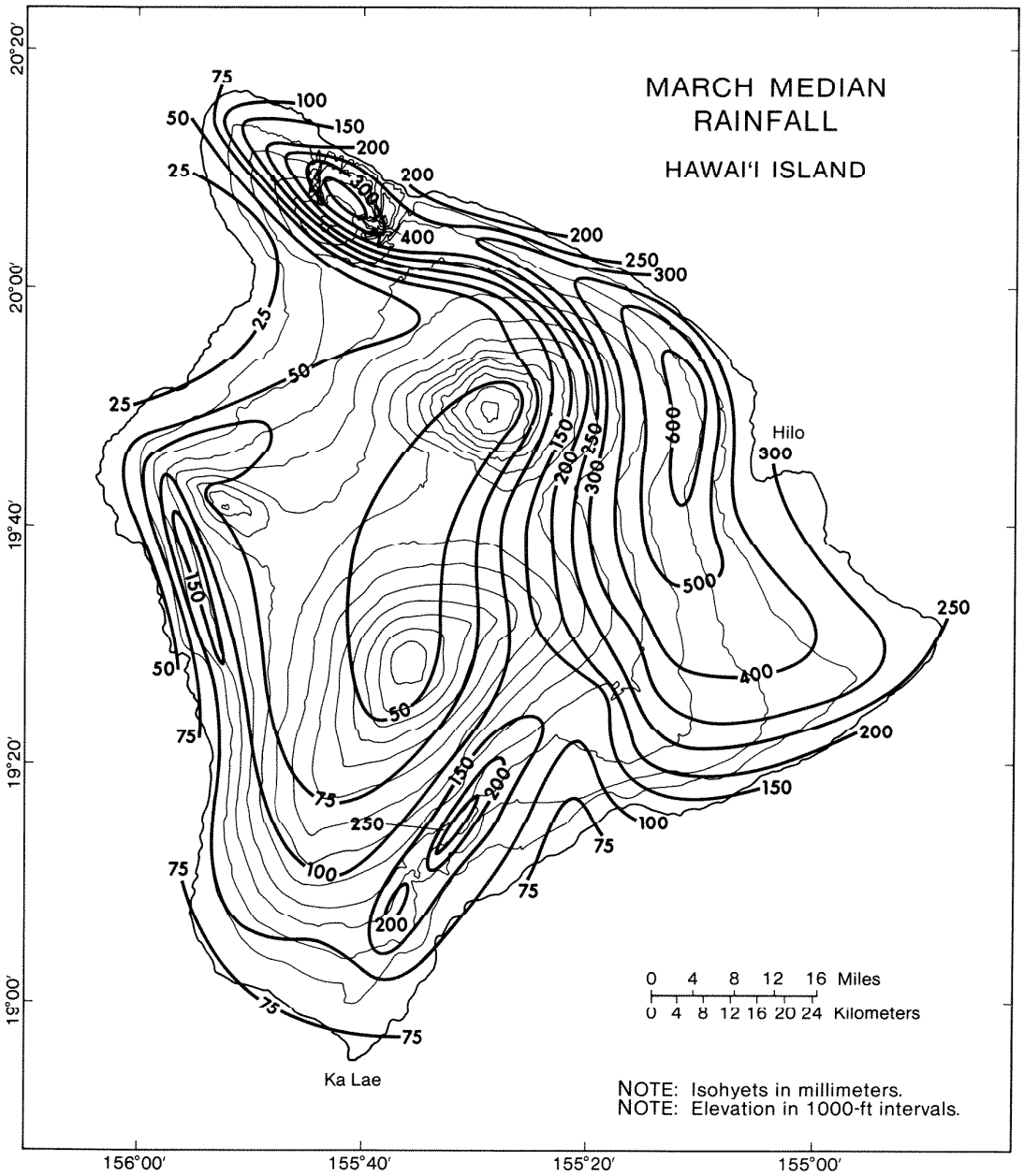
Appendix Figure A.1. Median annual rainfall, Hawai'i Island, Hawai'i



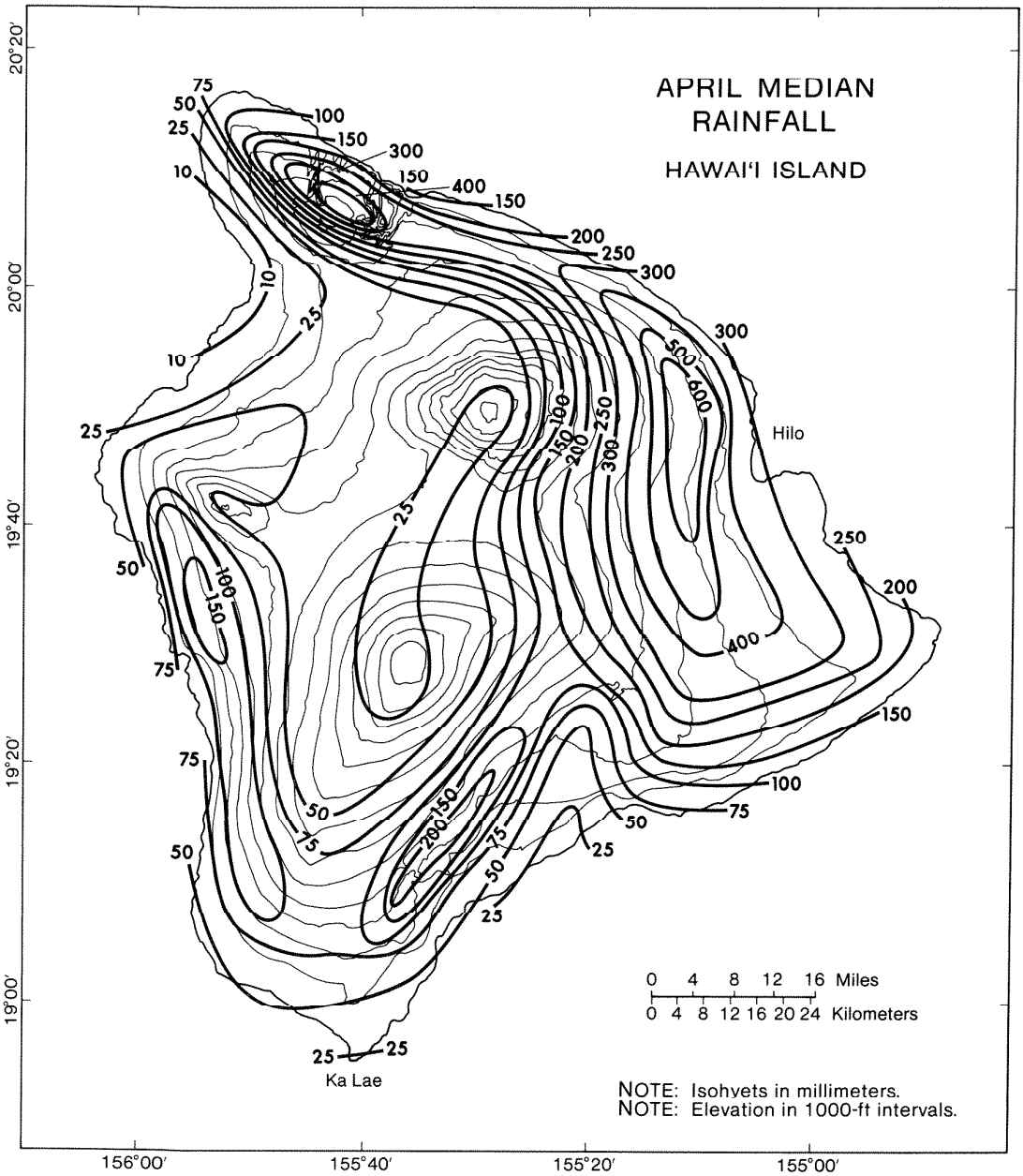
Appendix Figure A.2. January median rainfall, Hawai'i Island, Hawai'i



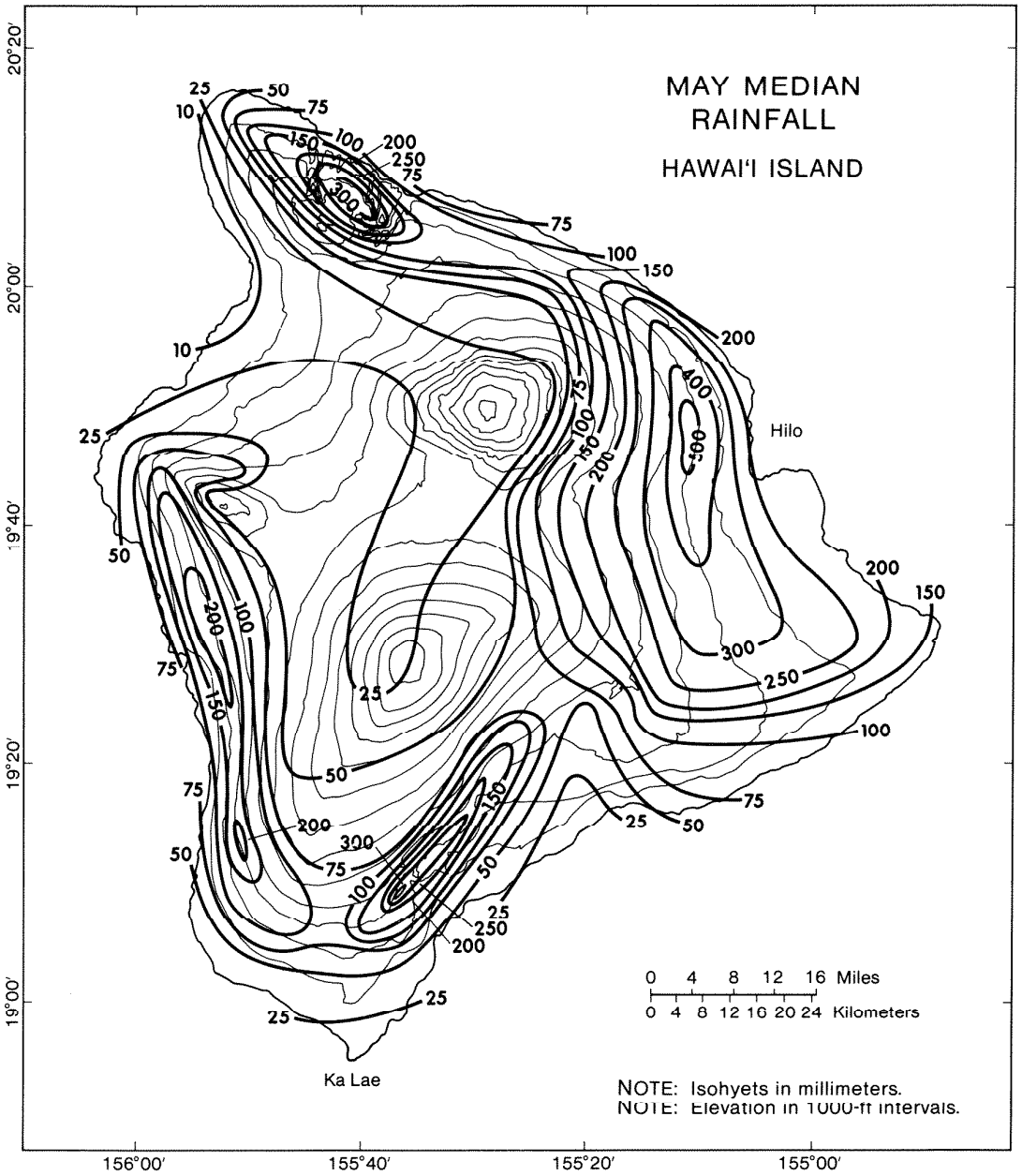
Appendix Figure A.3. February median rainfall, Hawai'i Island, Hawai'i



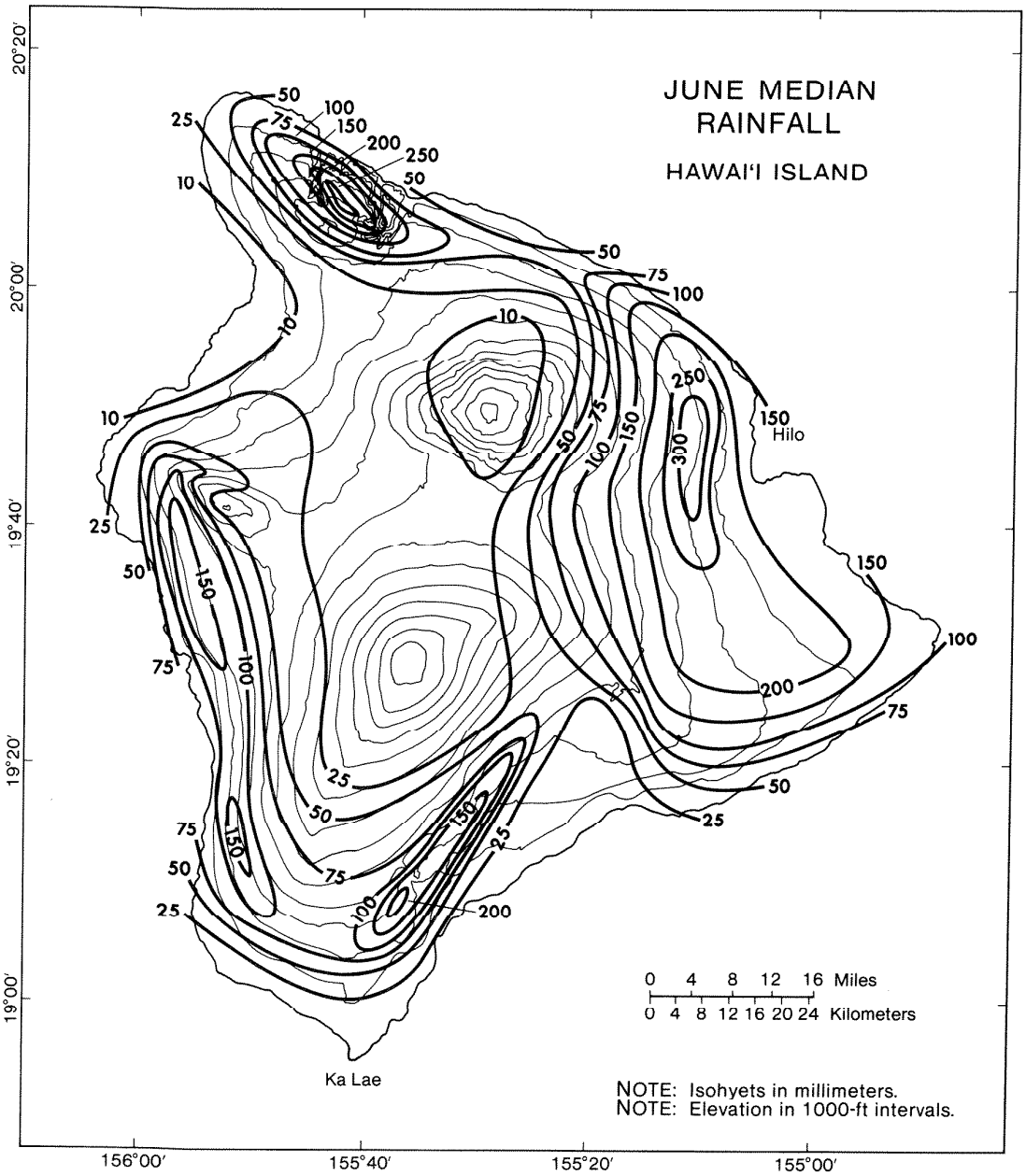
Appendix Figure A.4. March median rainfall, Hawai'i Island, Hawai'i



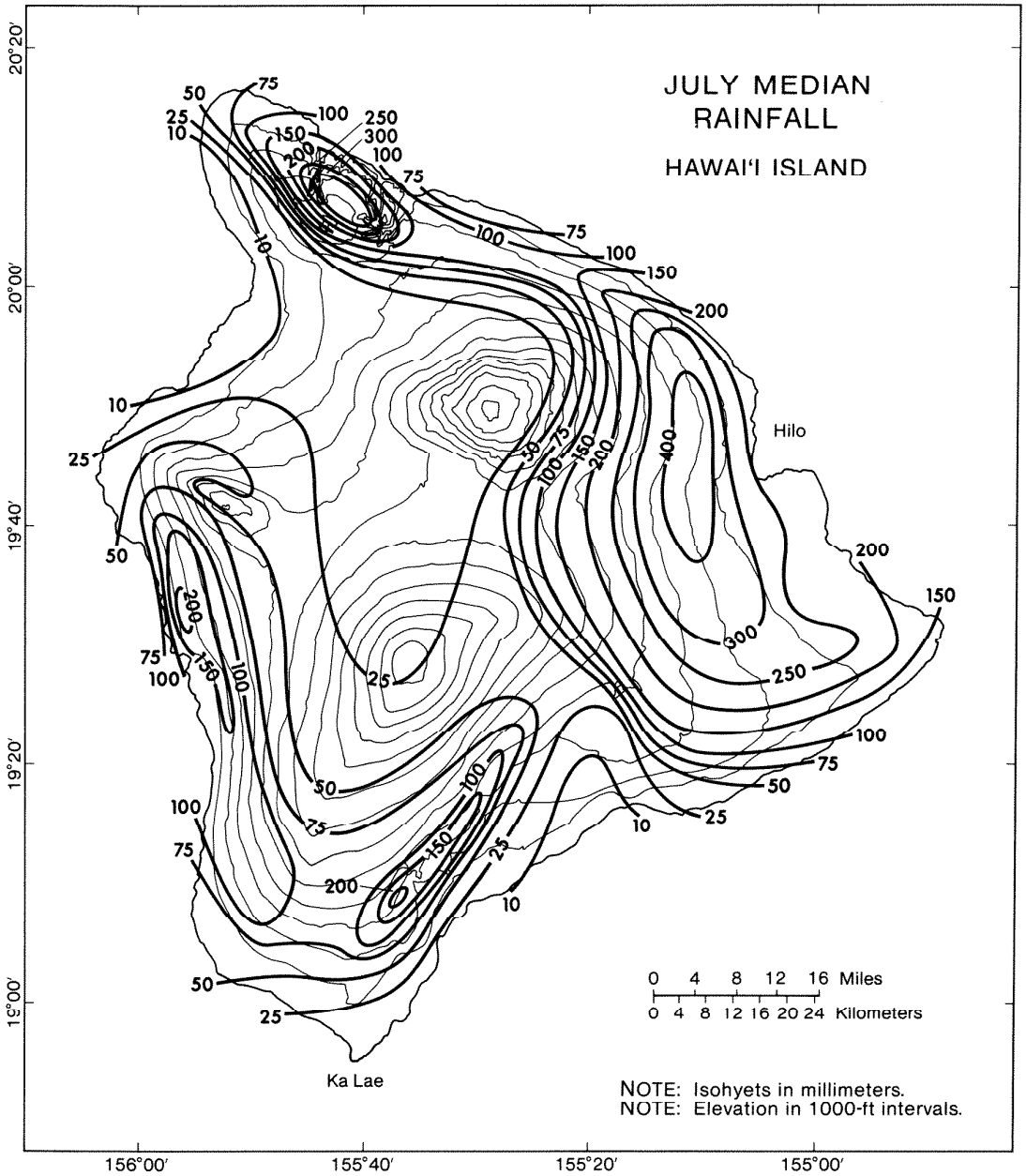
Appendix Figure A.5. April median rainfall, Hawai'i Island, Hawai'i



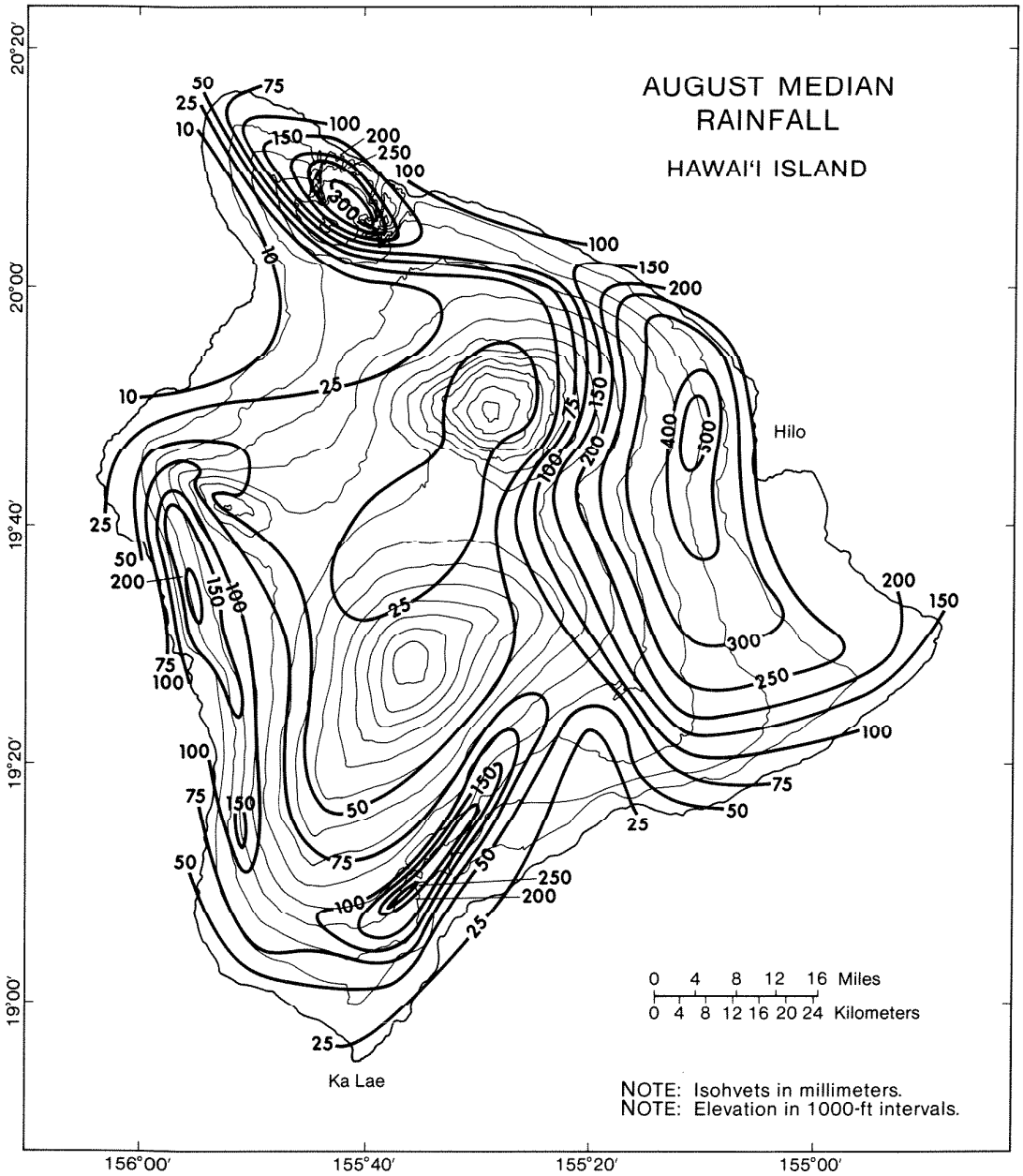
Appendix Figure A.6. May median rainfall, Hawai'i Island, Hawai'i



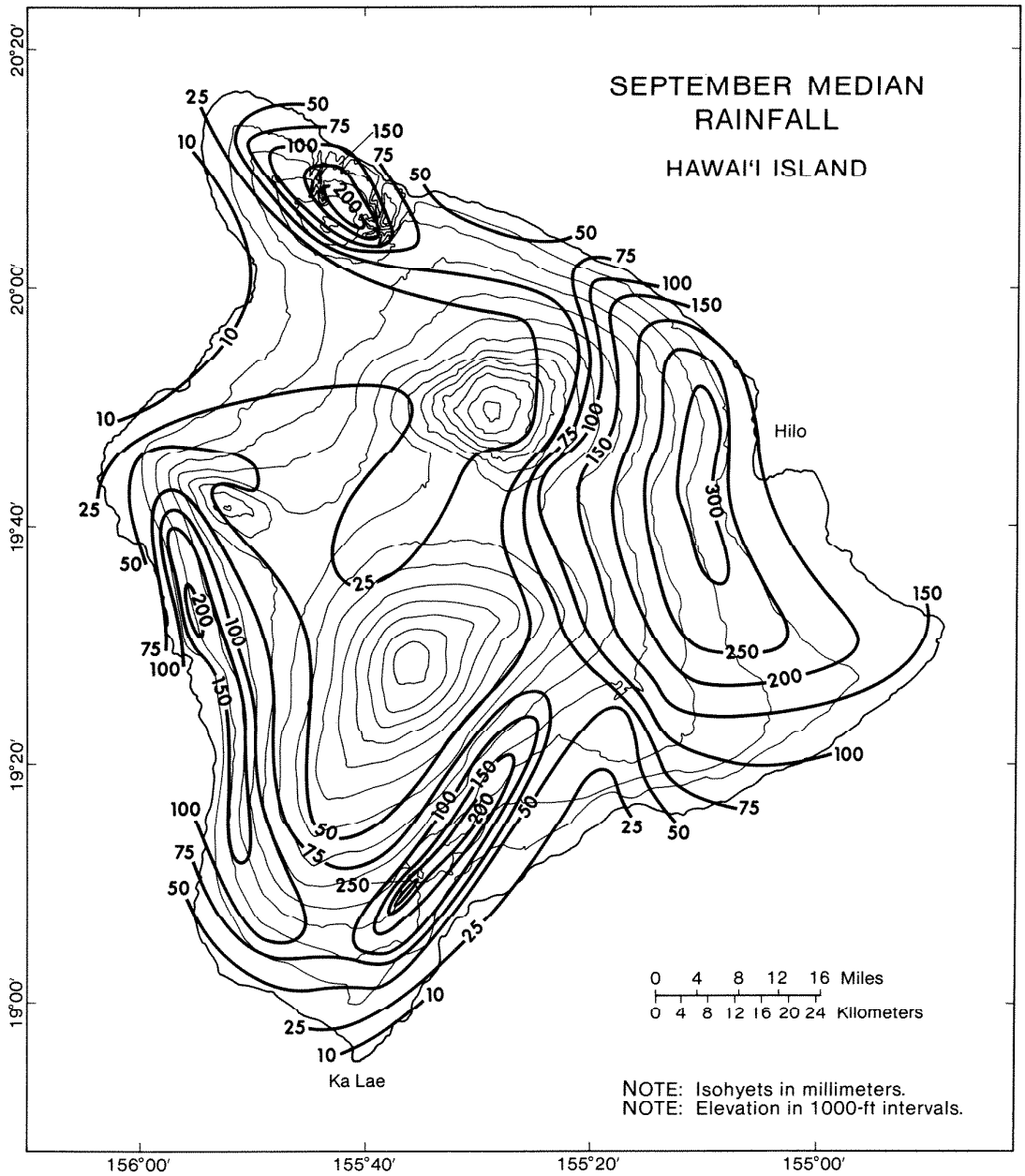
Appendix Figure A.7. June median rainfall, Hawai'i Island, Hawai'i



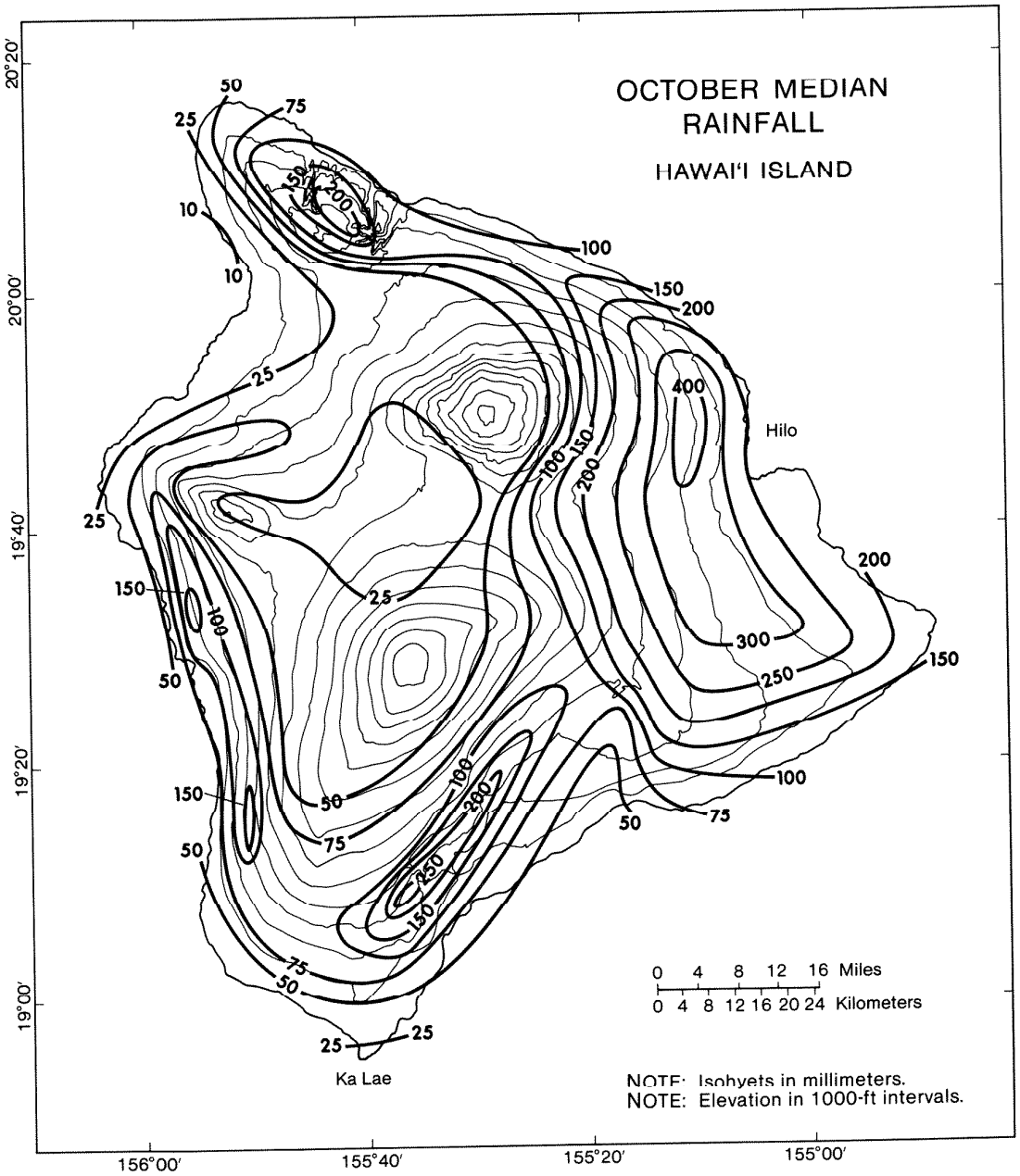
Appendix Figure A.8. July median rainfall, Hawai'i Island, Hawai'i



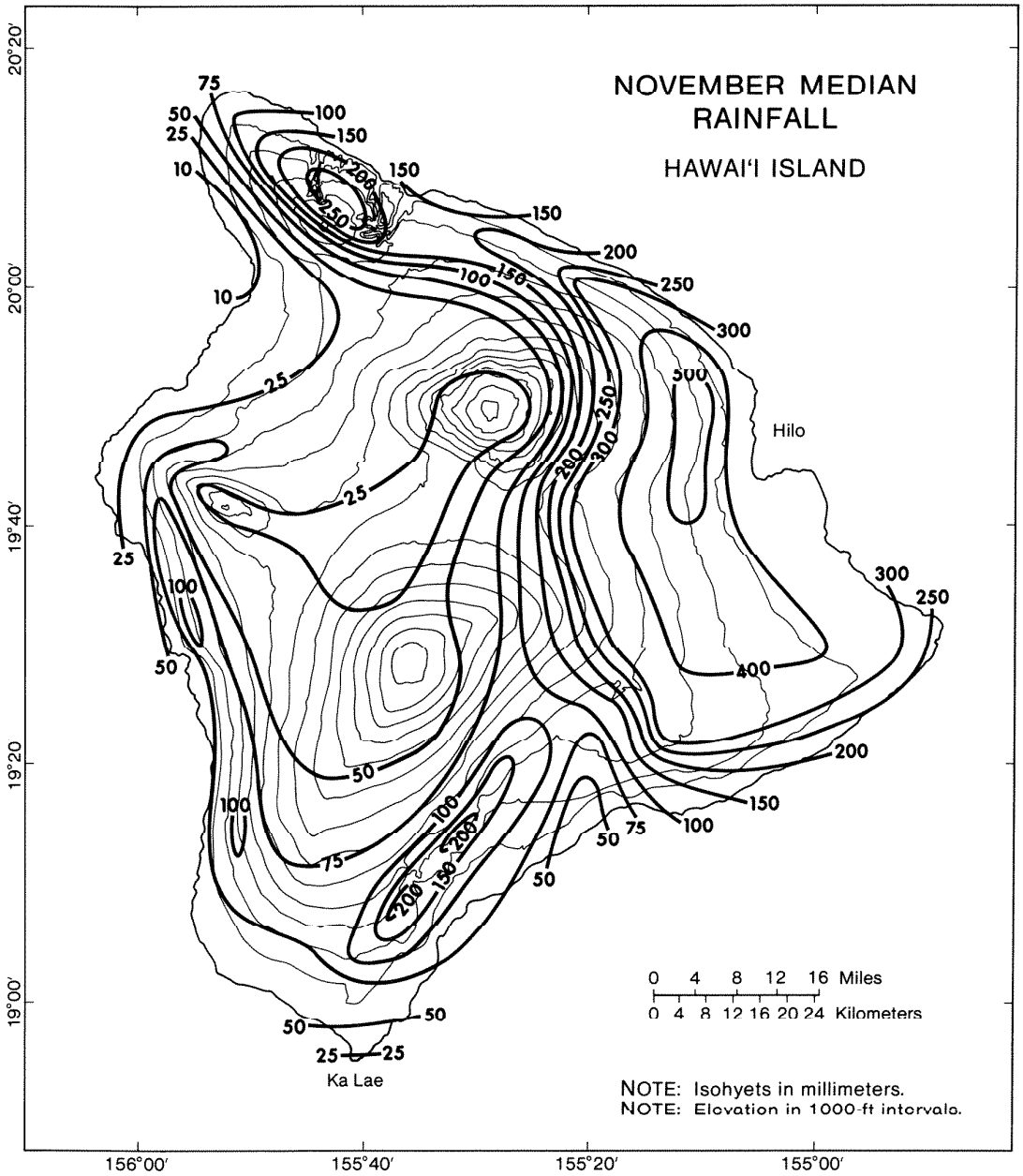
Appendix Figure A.9. August median rainfall, Hawai'i Island, Hawai'i



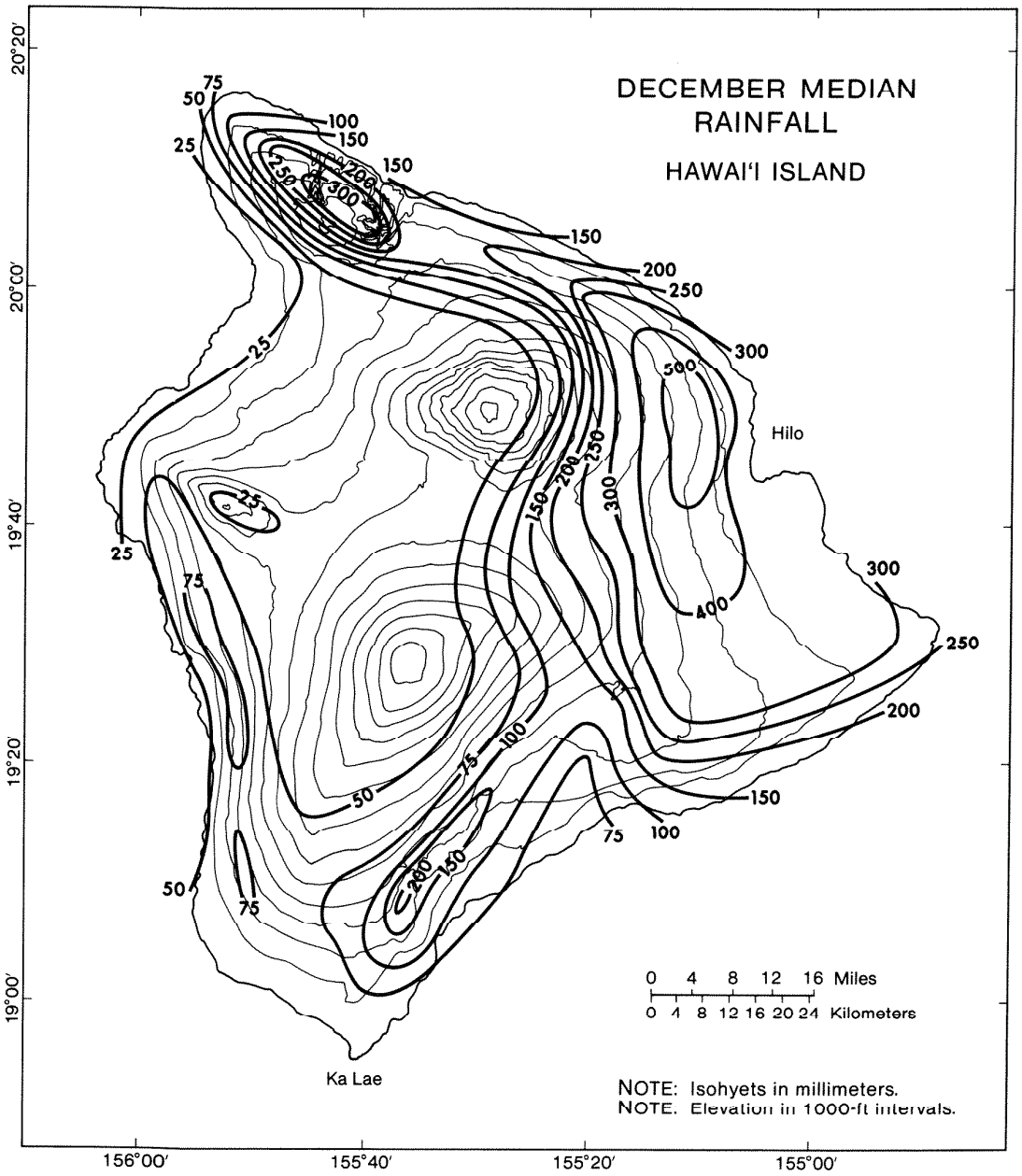
Appendix Figure A.10. September median rainfall, Hawai'i Island, Hawai'i



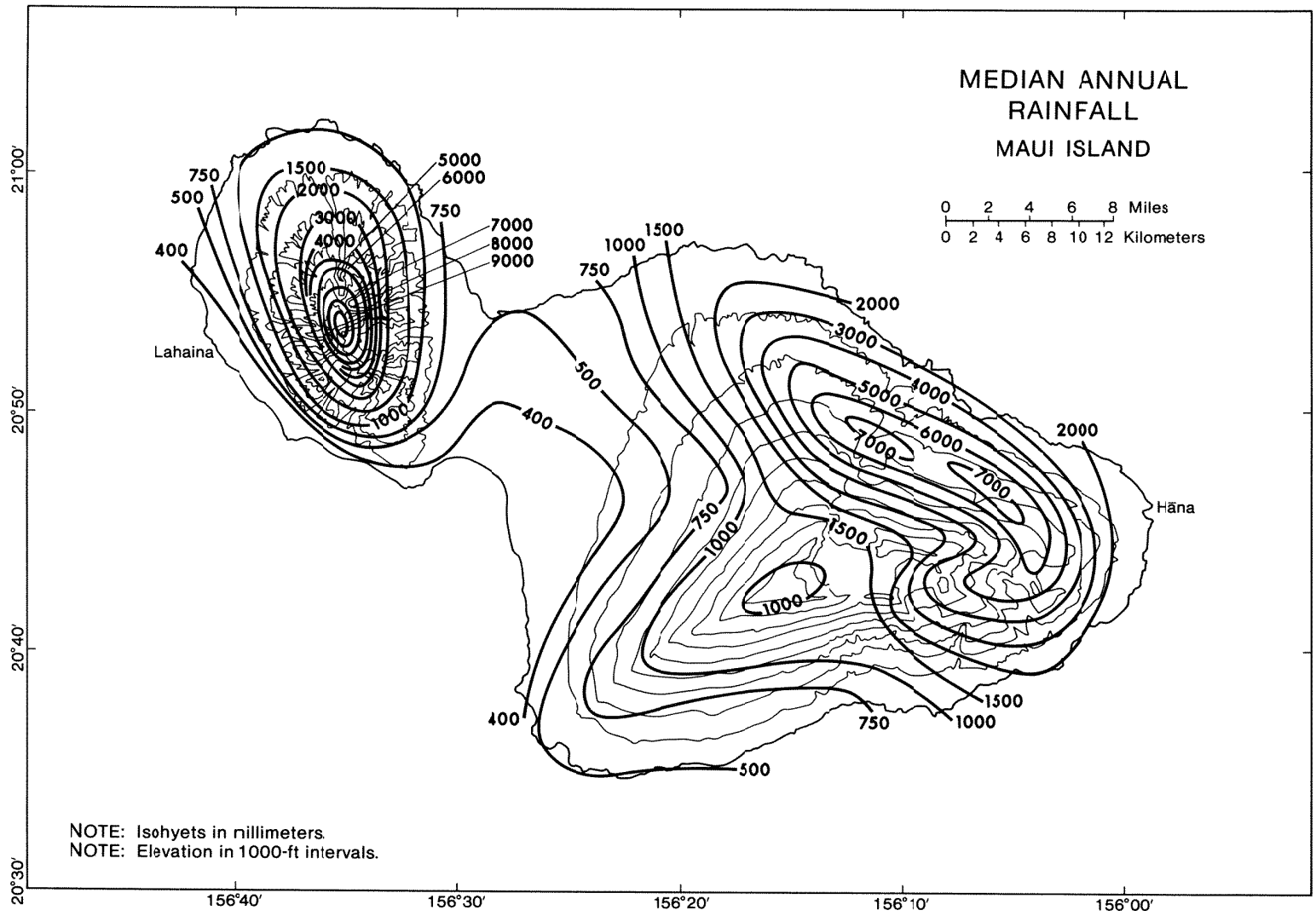
Appendix Figure A.11. October median rainfall, Hawai'i Island, Hawai'i



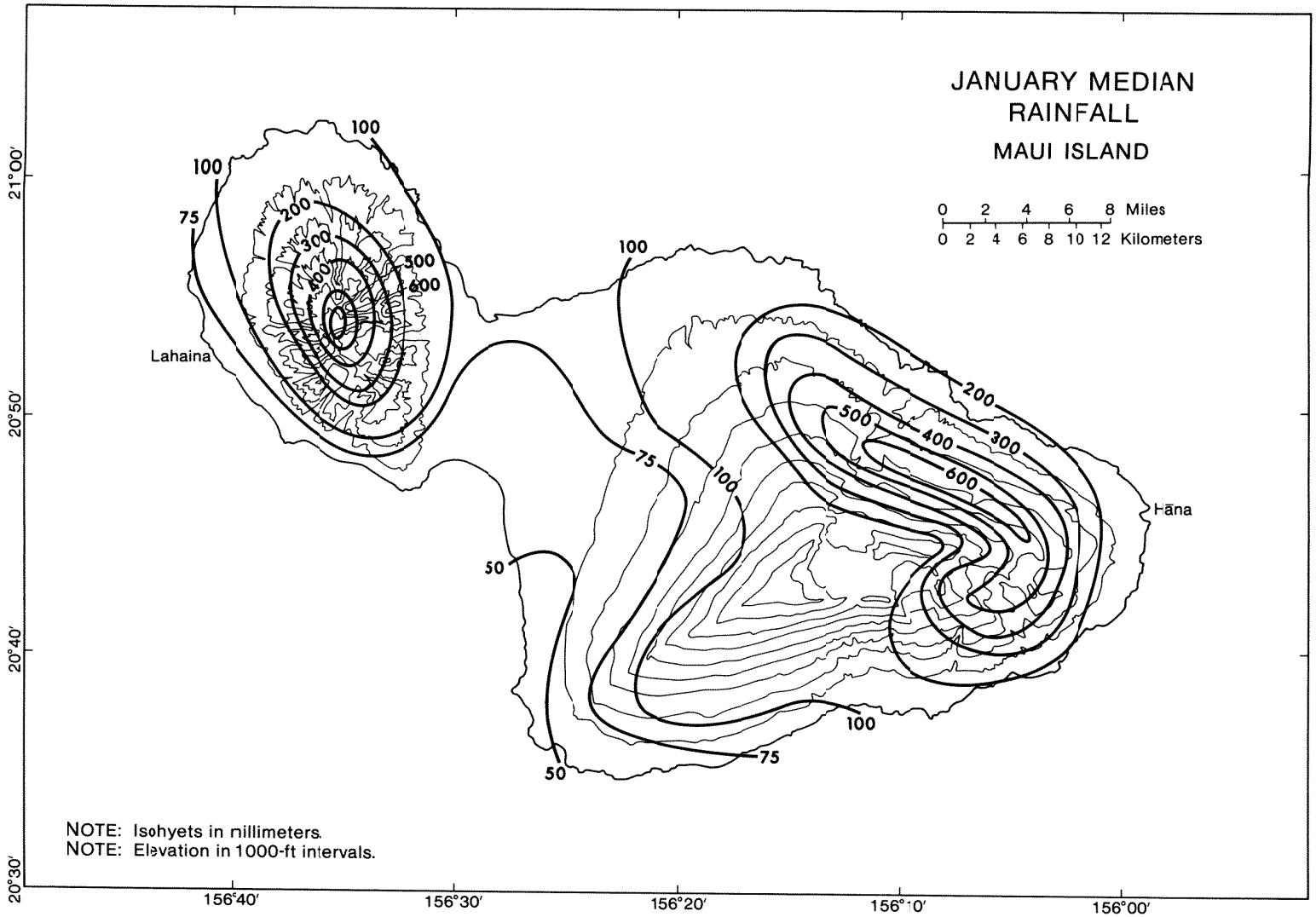
Appendix Figure A.12. November median rainfall, Hawai'i Island, Hawai'i



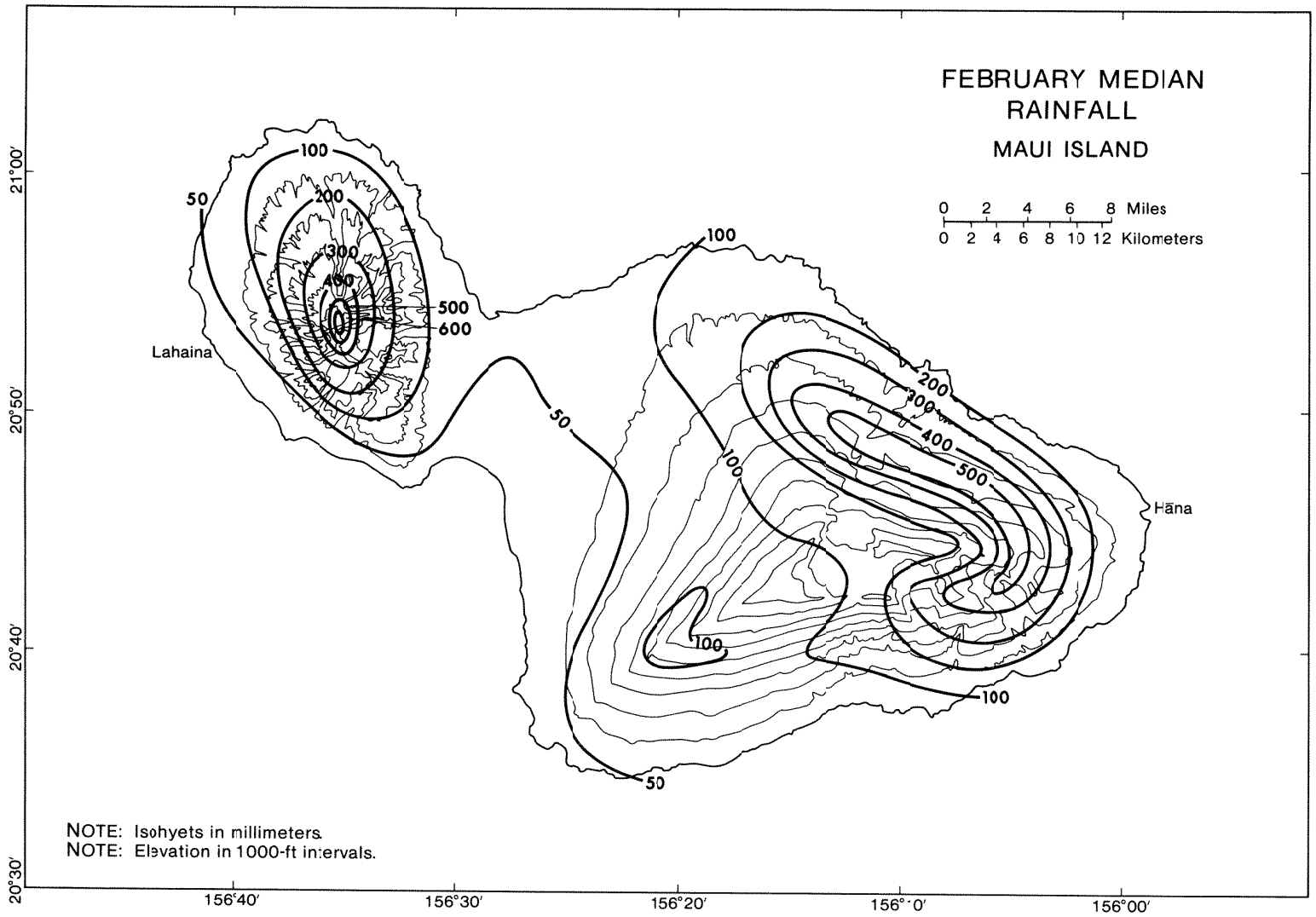
Appendix Figure A.13. December median rainfall, Hawai'i Island, Hawai'i



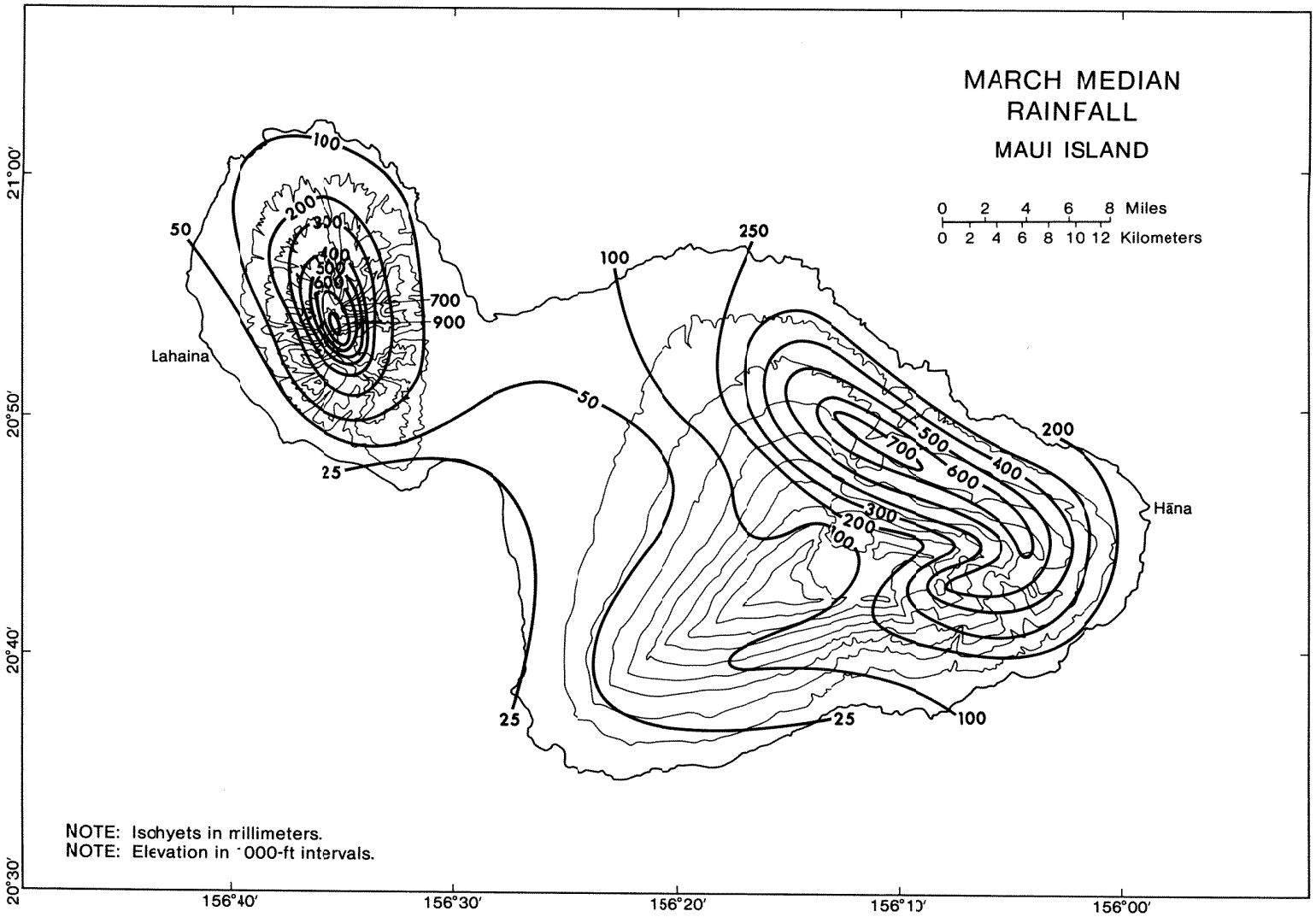
Appendix Figure A.14. Median annual rainfall, Maui Island, Hawai'i



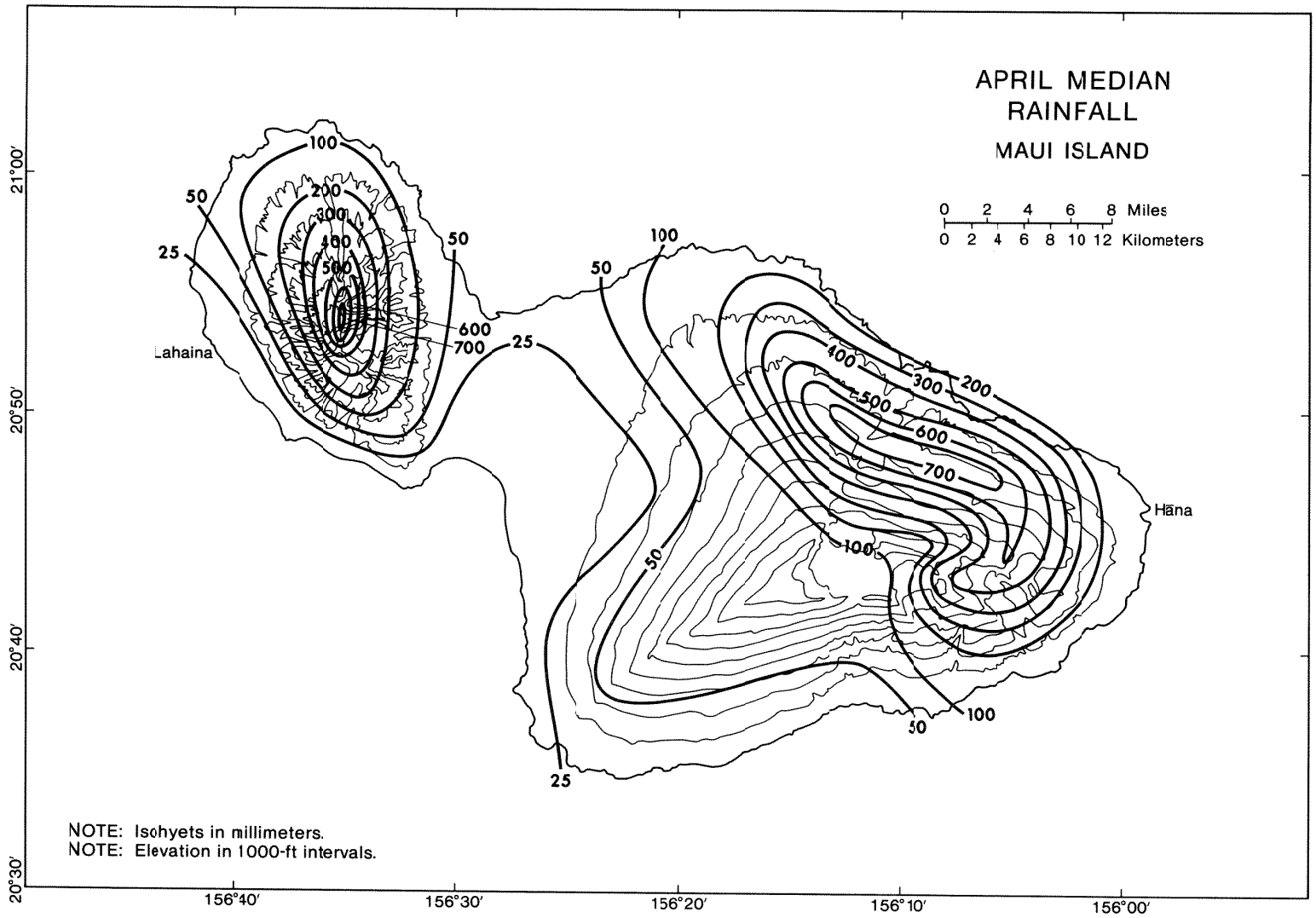
Appendix Figure A.15. January median rainfall, Maui Island, Hawai'i



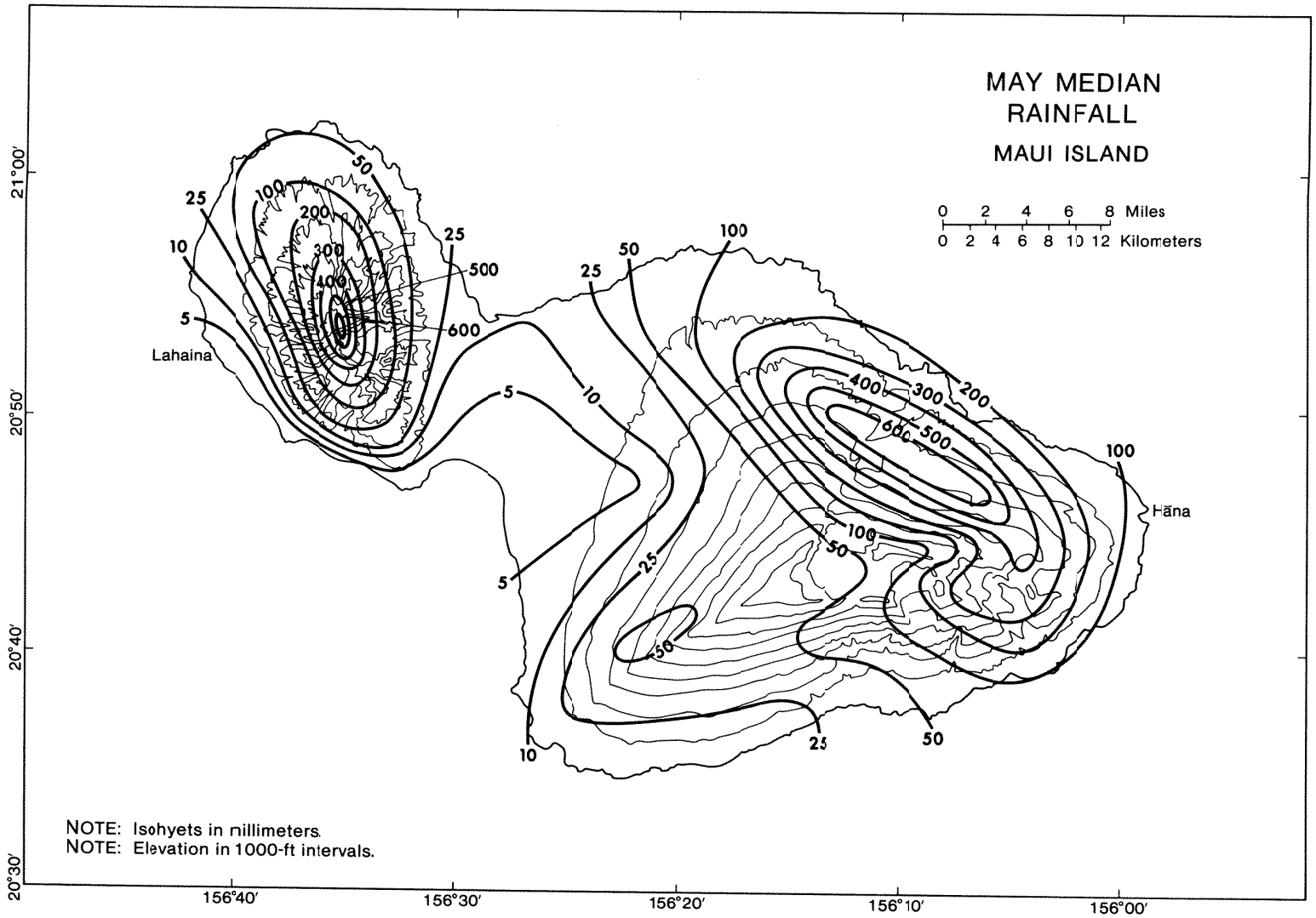
Appendix Figure A.16. February median rainfall, Maui Island, Hawai'i



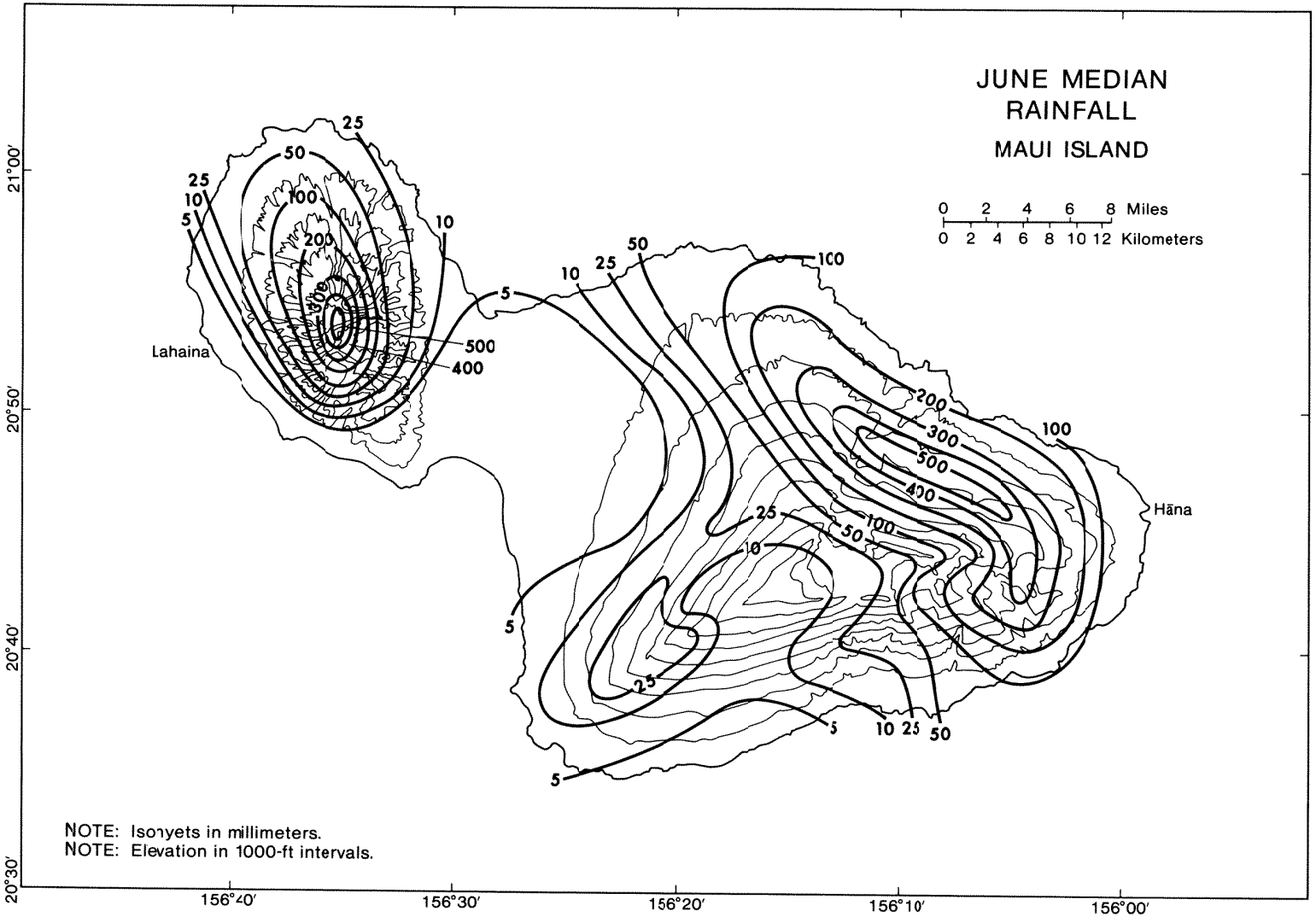
Appendix Figure A.17. March median rainfall, Maui Island, Hawai'i



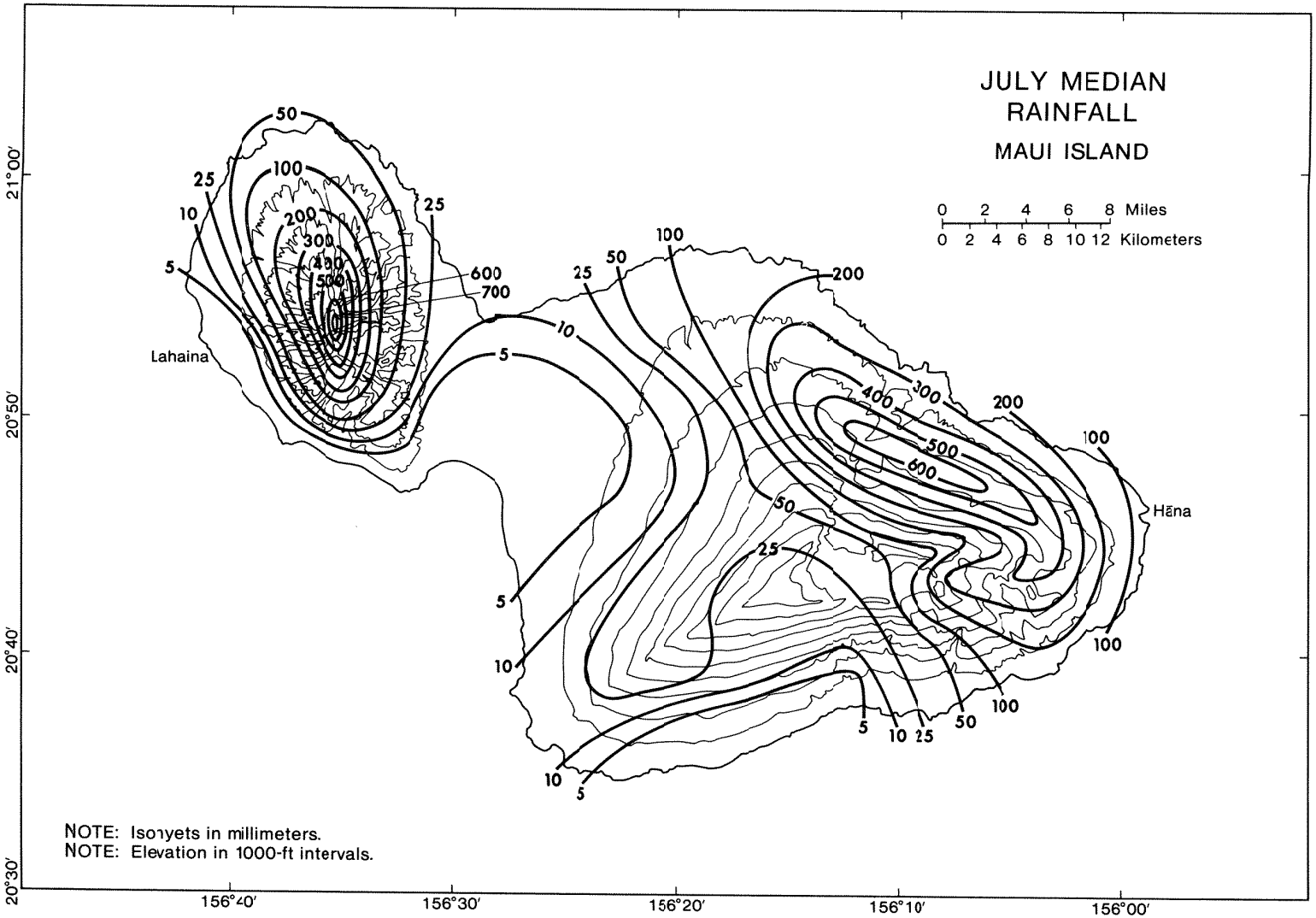
Appendix Figure A.18. April median rainfall, Maui Island, Hawai'i



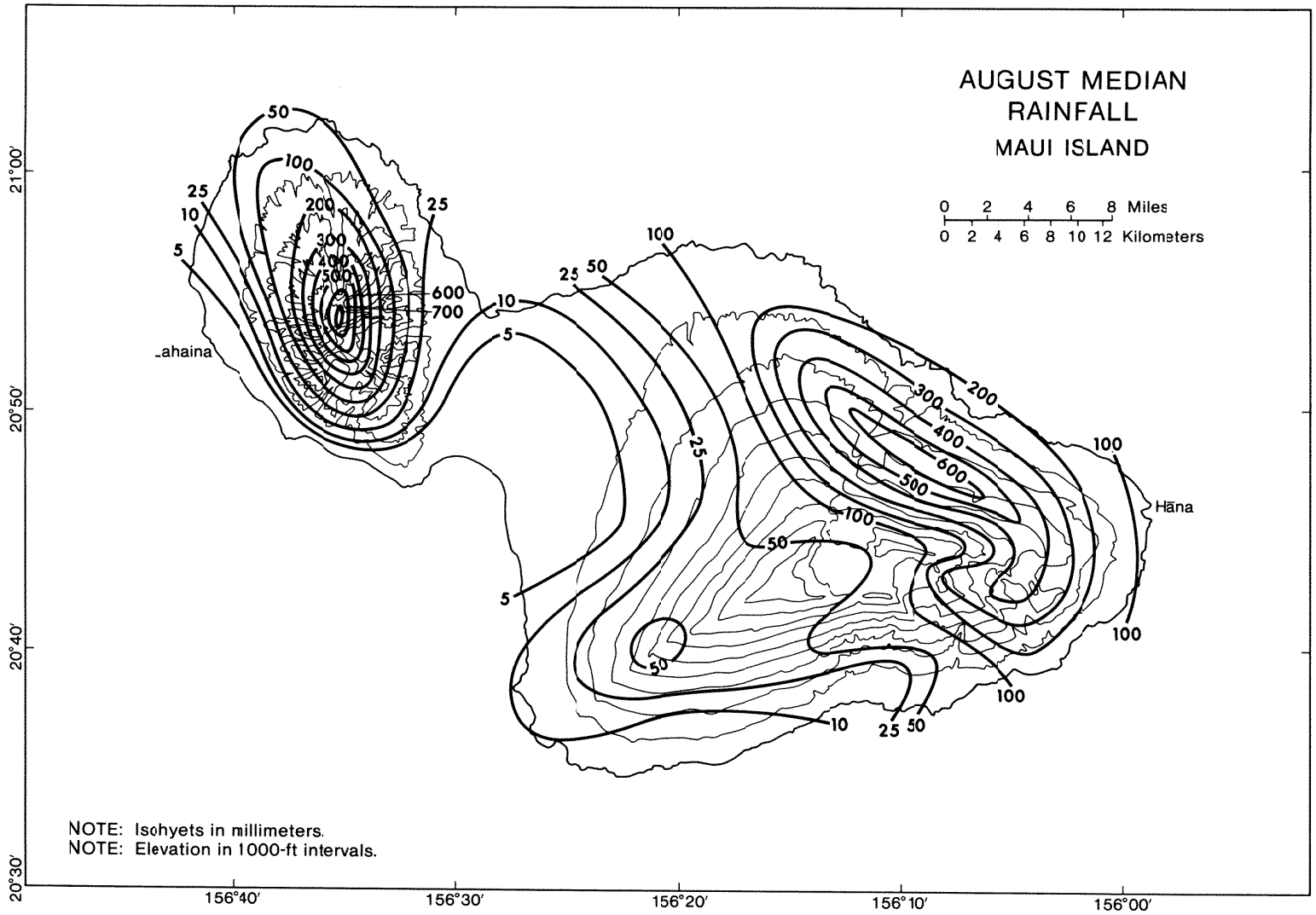
Appendix Figure A.19. May median rainfall, Maui Island, Hawai'i



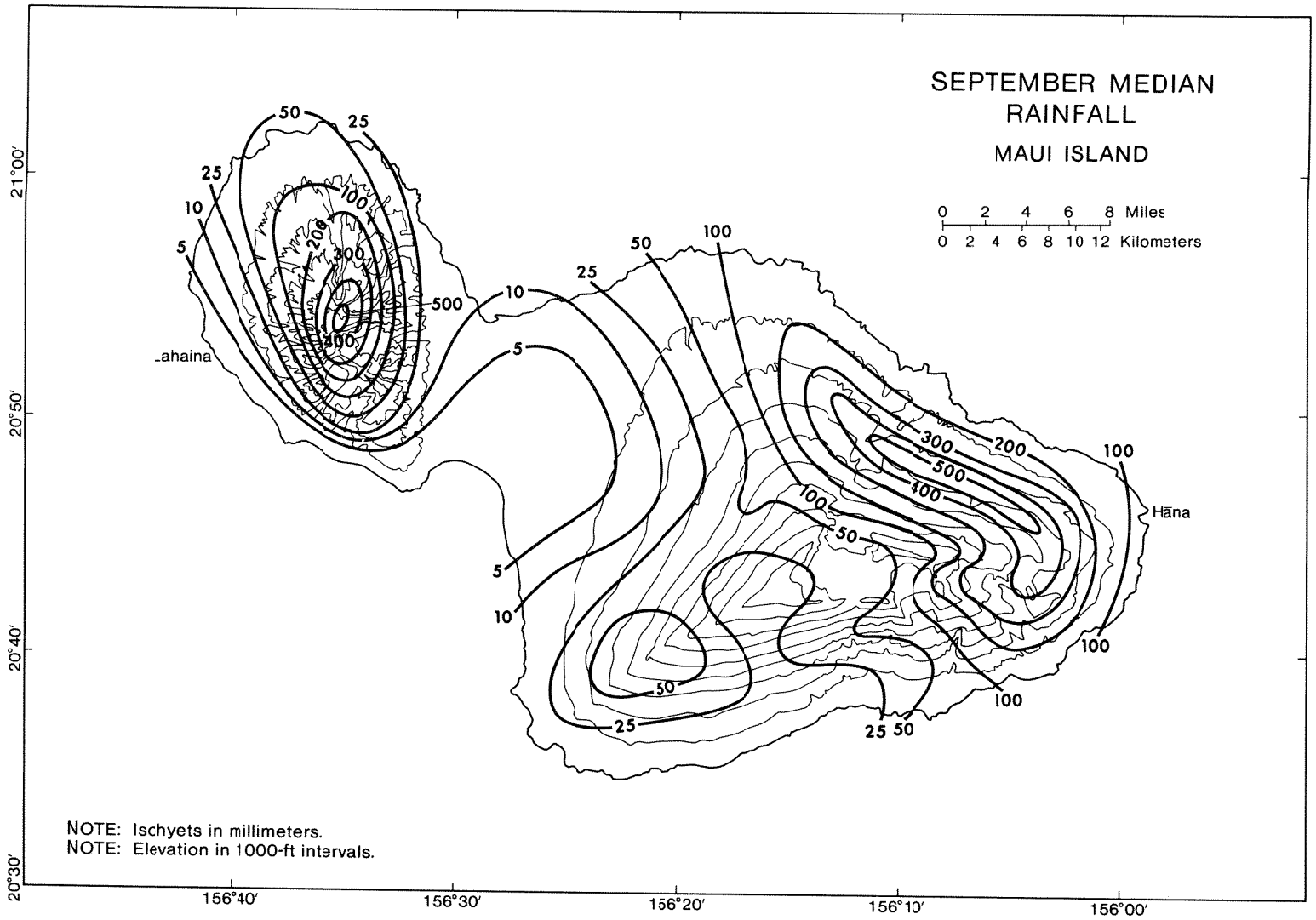
Appendix Figure A.20. June median rainfall, Maui Island, Hawai'i



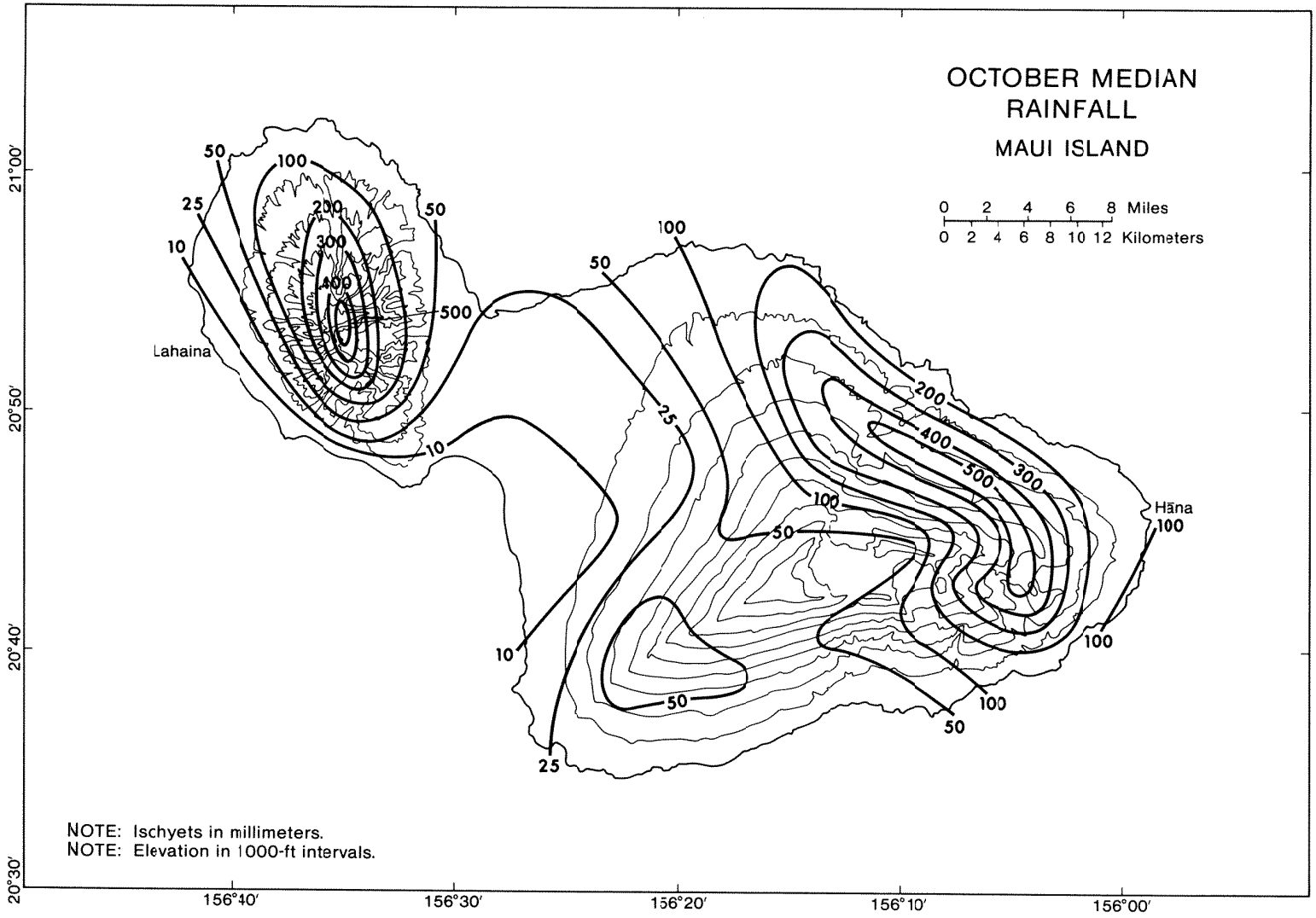
Appendix Figure A.21. July median rainfall, Maui Island, Hawai'i



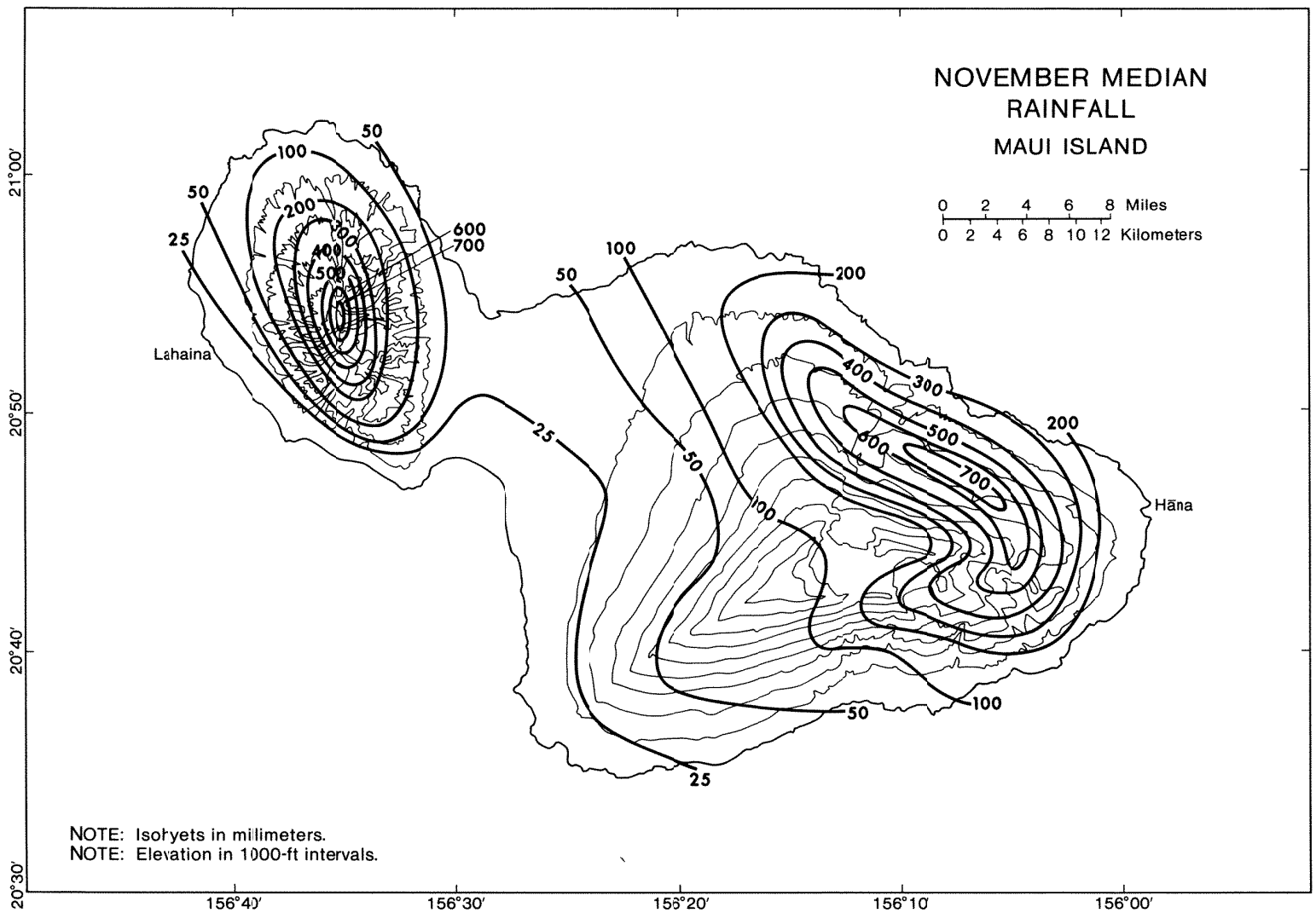
Appendix Figure A.22. August median rainfall, Maui Island, Hawai'i



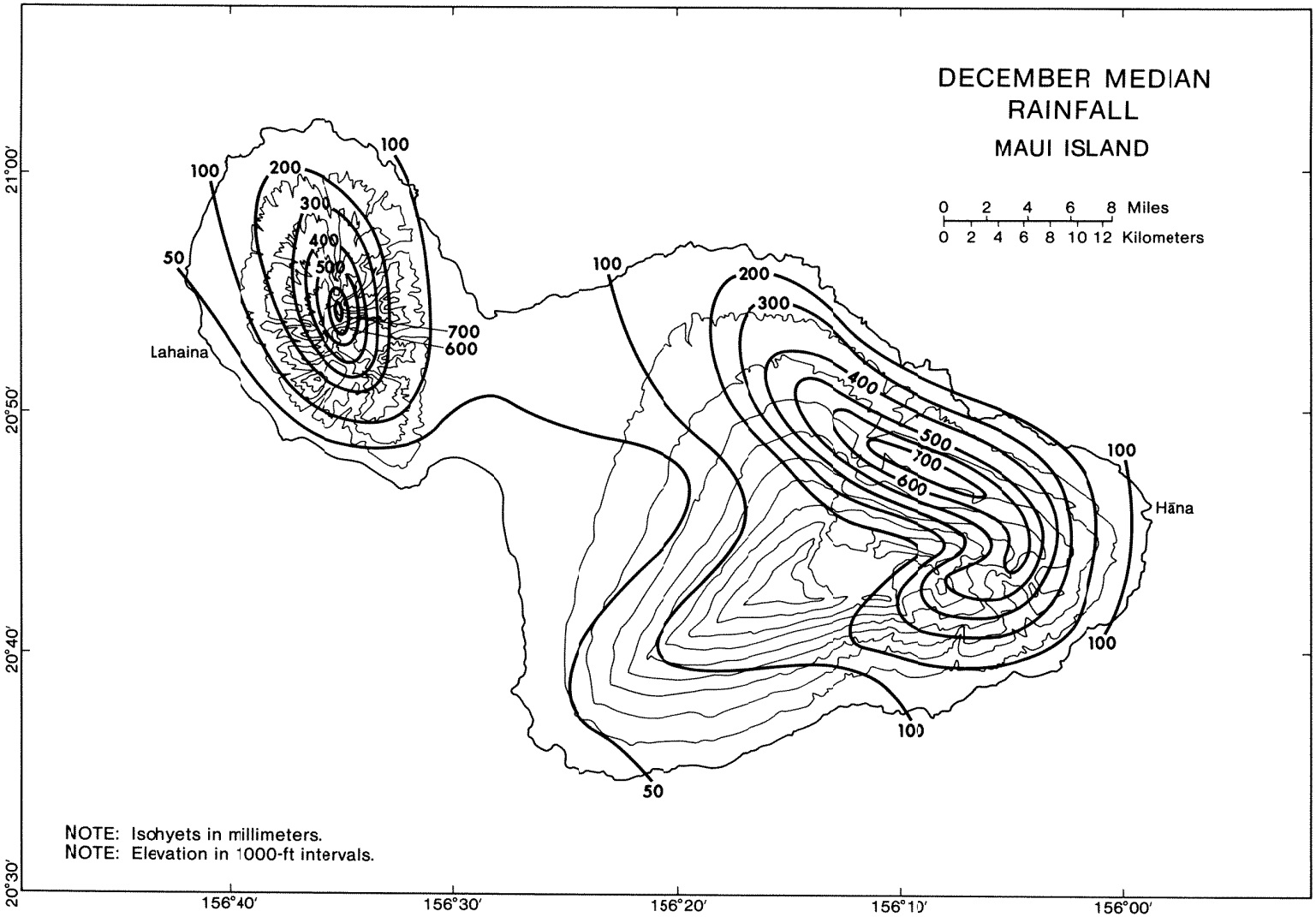
Appendix Figure A.23. September median rainfall, Maui Island, Hawai'i



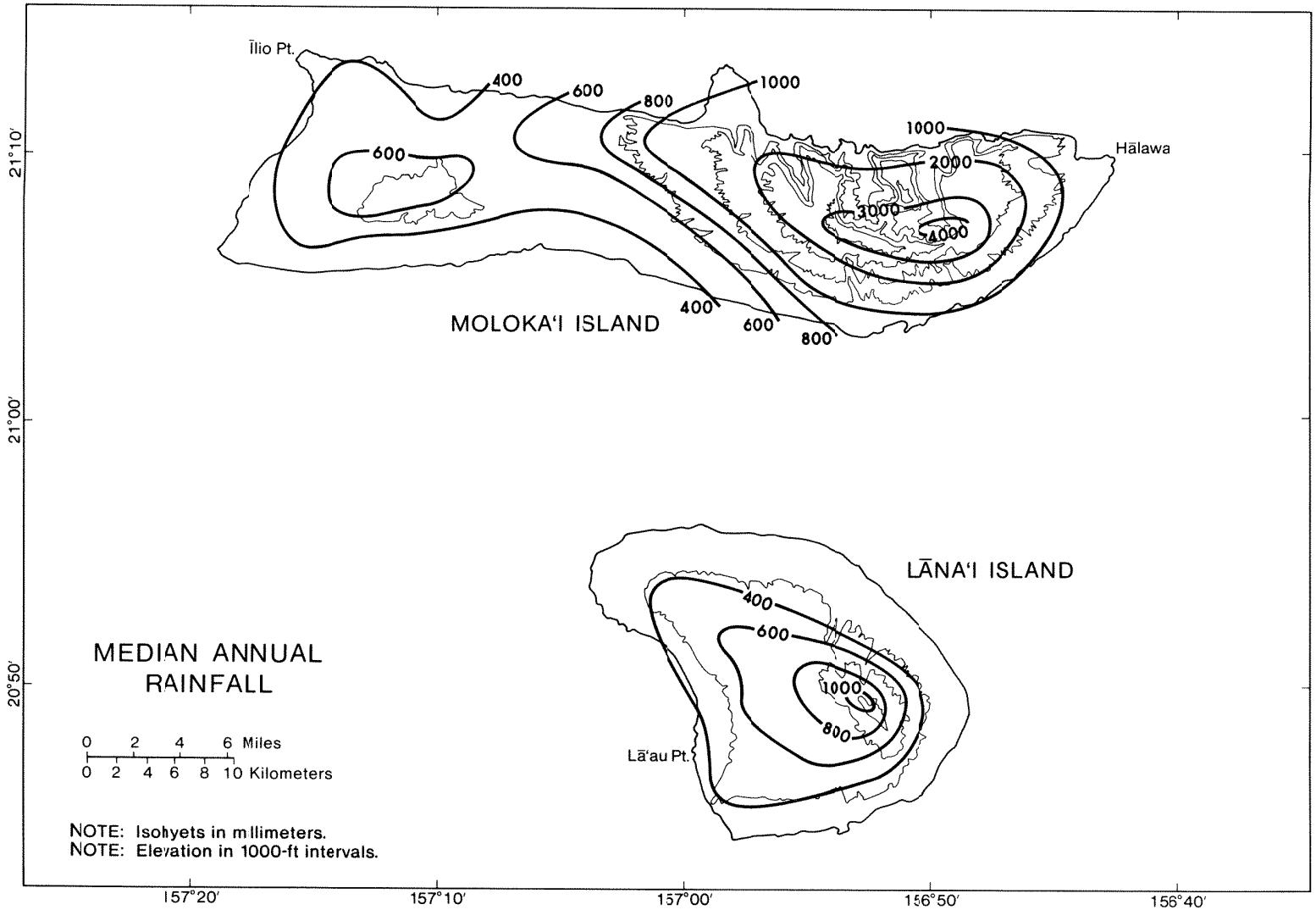
Appendix Figure A.24. October median rainfall, Maui Island, Hawai'i



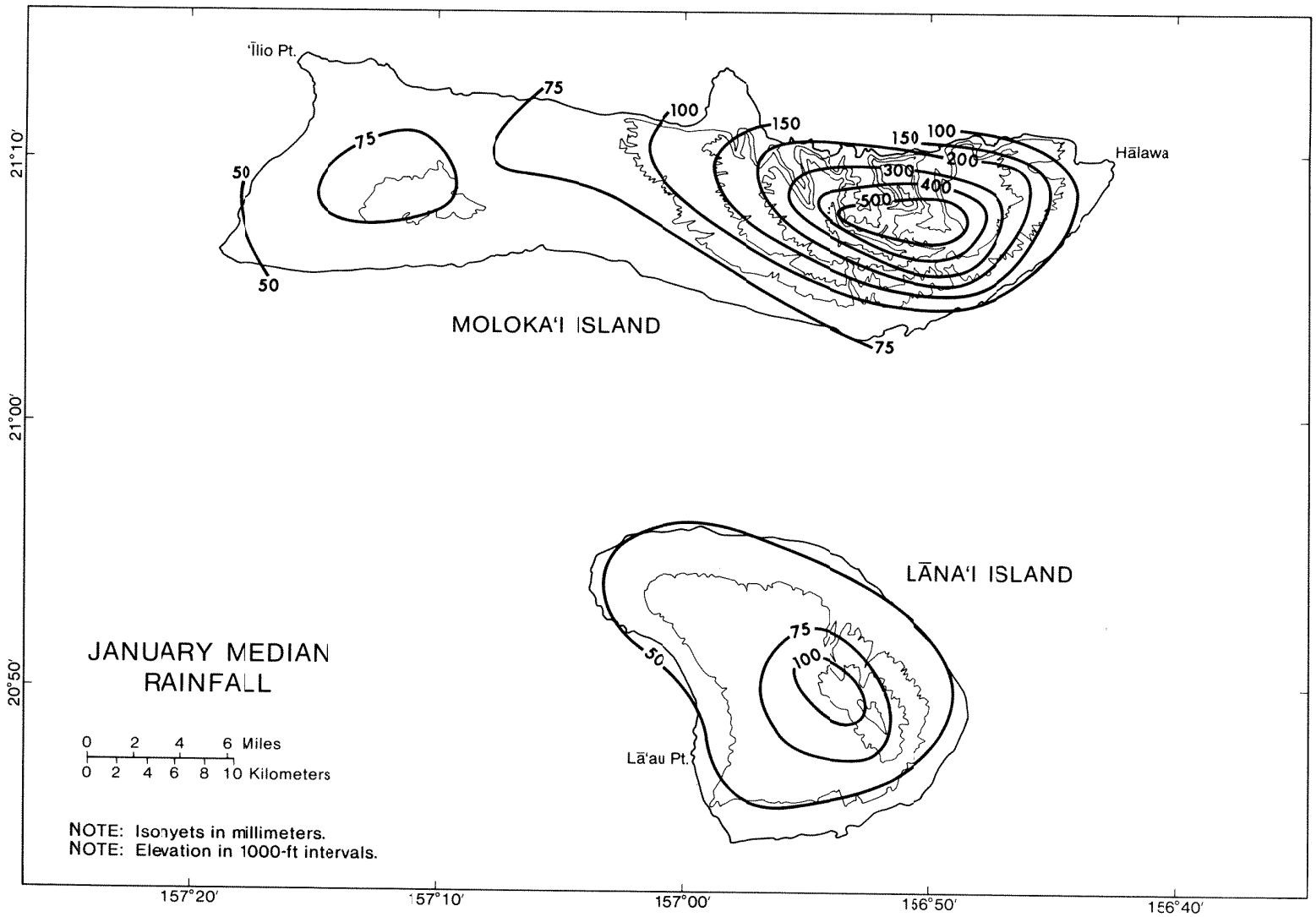
Appendix Figure A.25. November median rainfall, Maui Island, Hawai'i



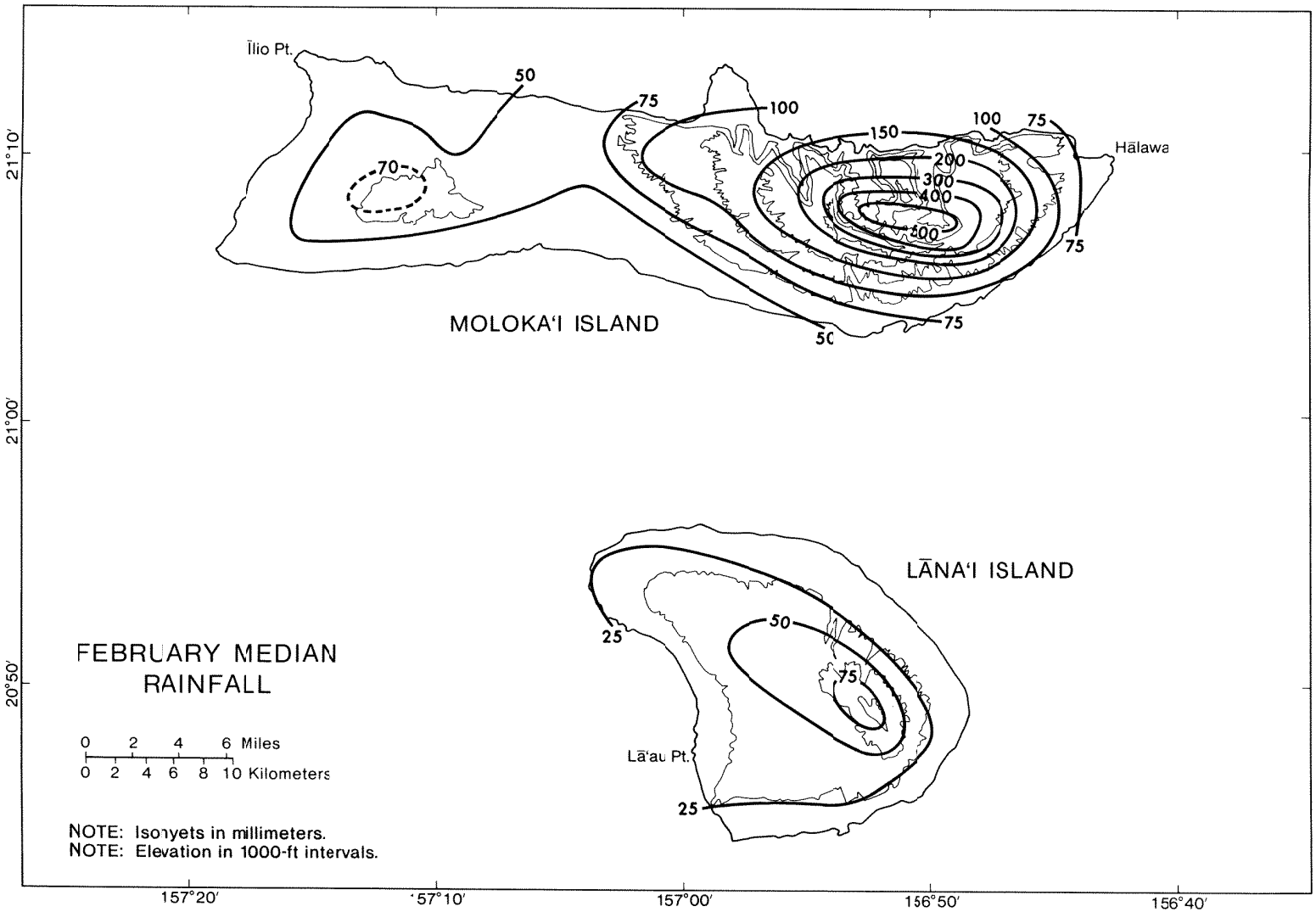
Appendix Figure A.26. December median rainfall, Maui Island, Hawai'i



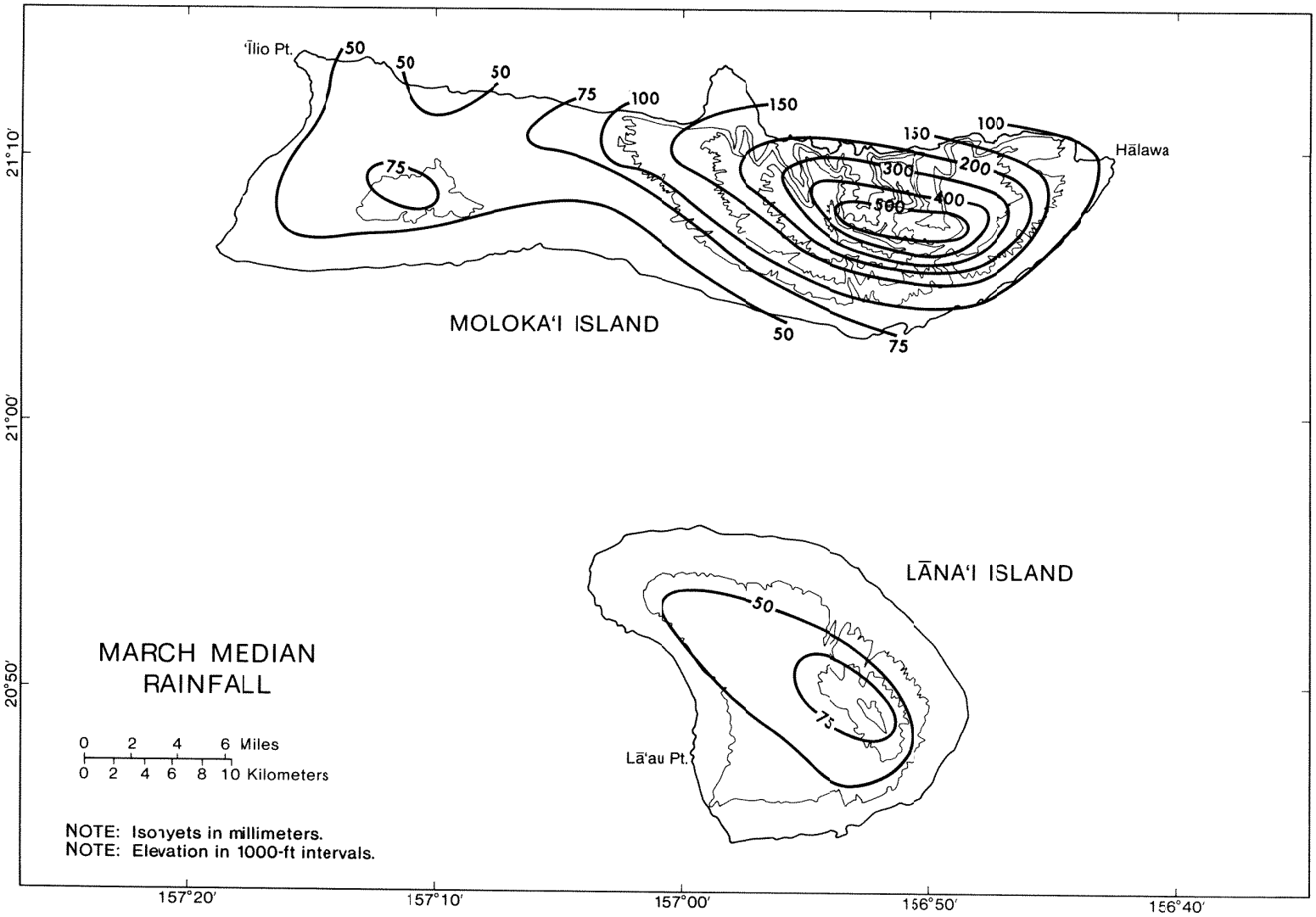
Appendix Figure A.27. Median annual rainfall, Moloka'i and Lāna'i islands, Hawai'i



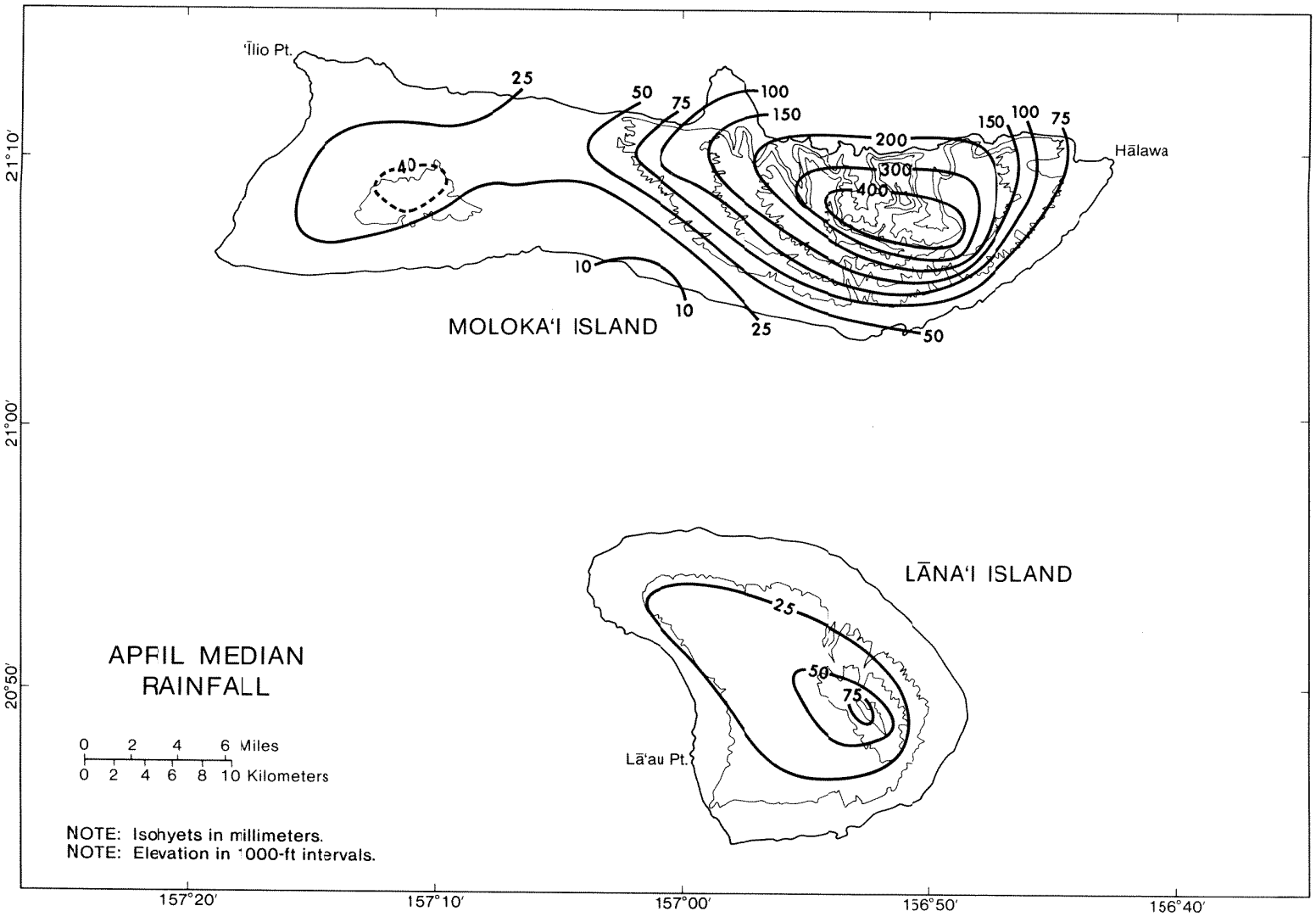
Appendix Figure A.28. January median rainfall, Moloka'i and Lāna'i islands, Hawai'i



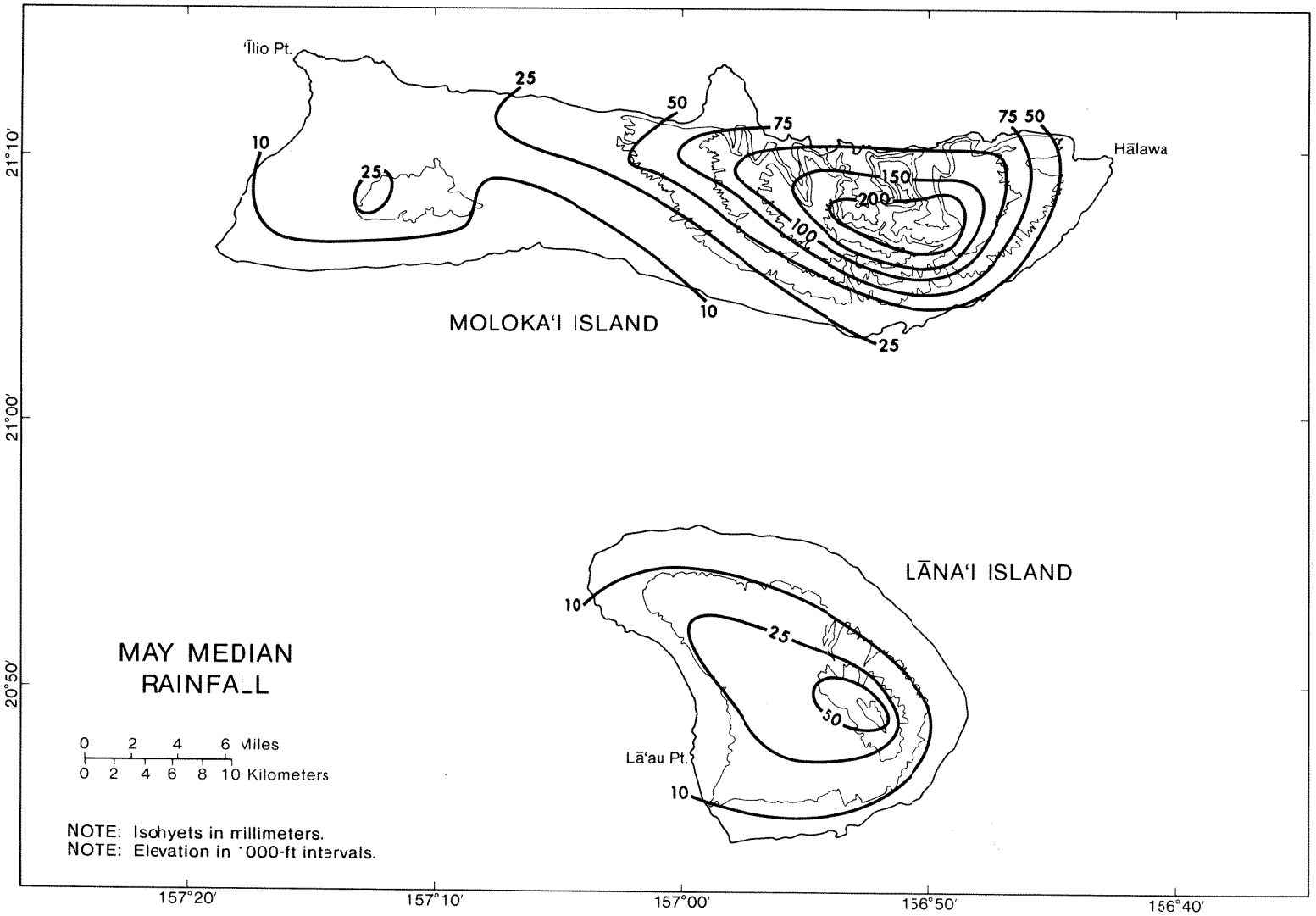
Appendix Figure A.29. February median rainfall, Moloka'i and Lāna'i islands, Hawai'i



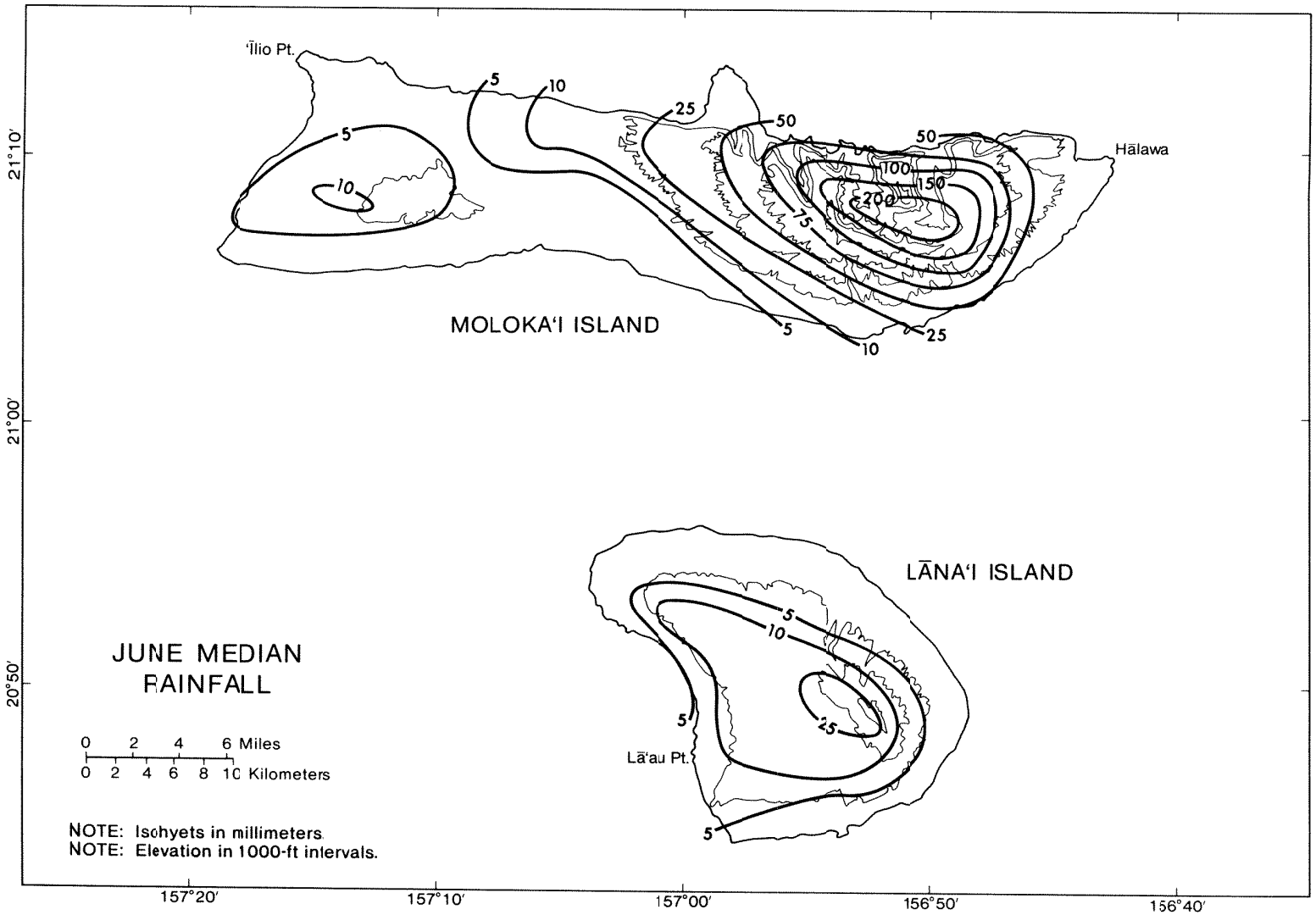
Appendix Figure A.30. March median rainfall, Moloka'i and Lāna'i islands, Hawai'i



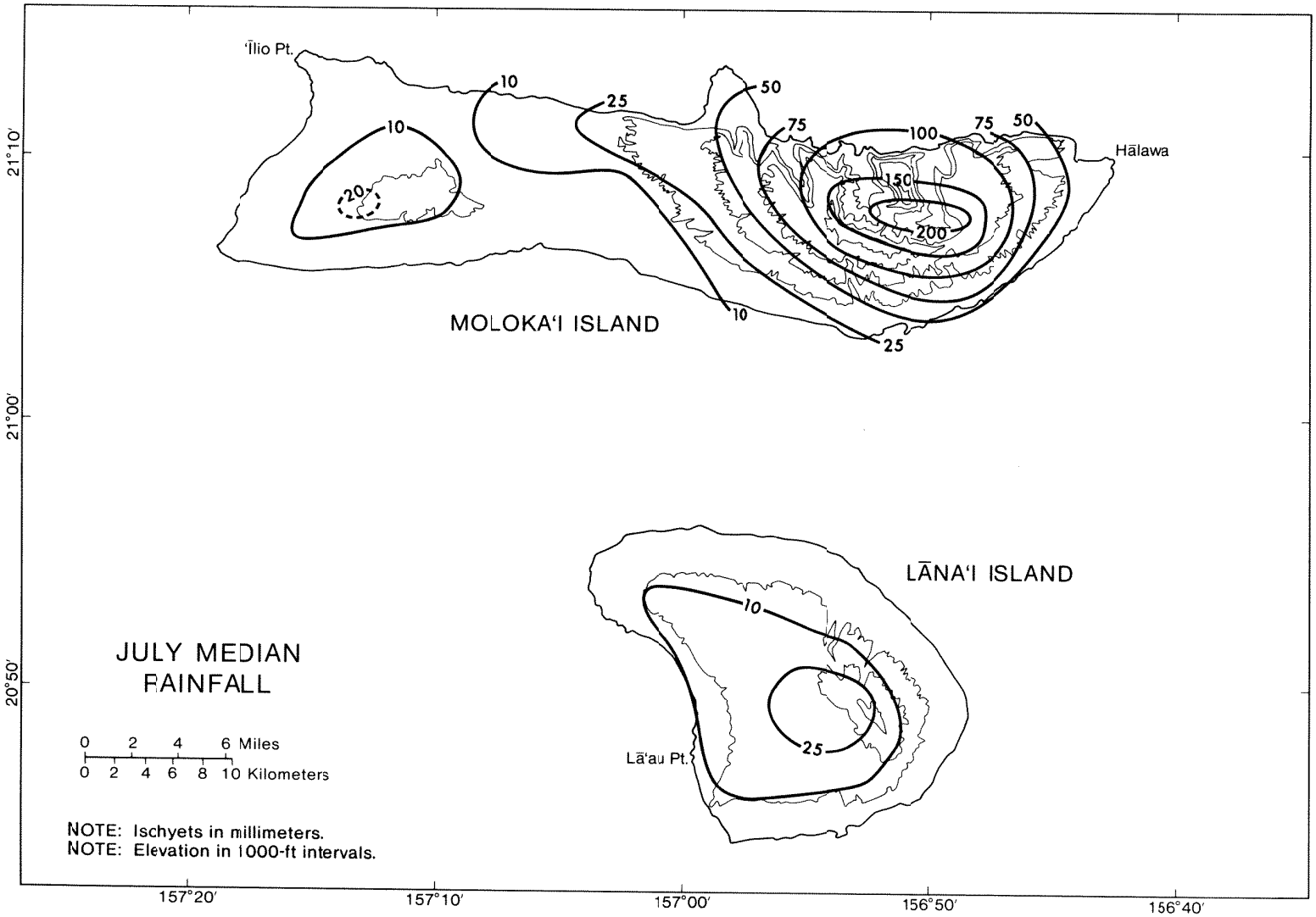
Appendix Figure A.31. April median rainfall, Moloka'i and Lāna'i islands, Hawai'i



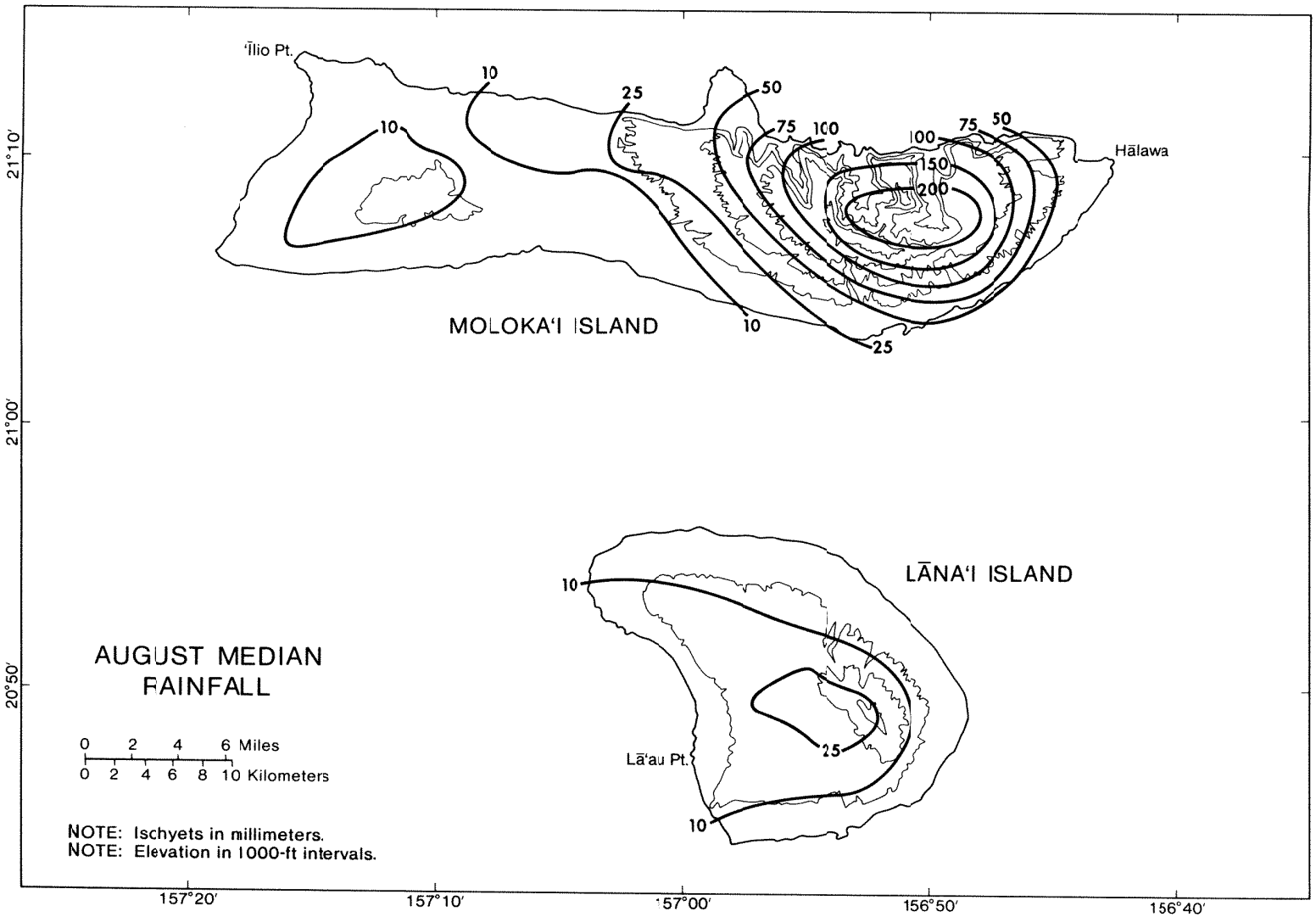
Appendix Figure A.32. May median rainfall, Moloka'i and Lāna'i islands, Hawai'i



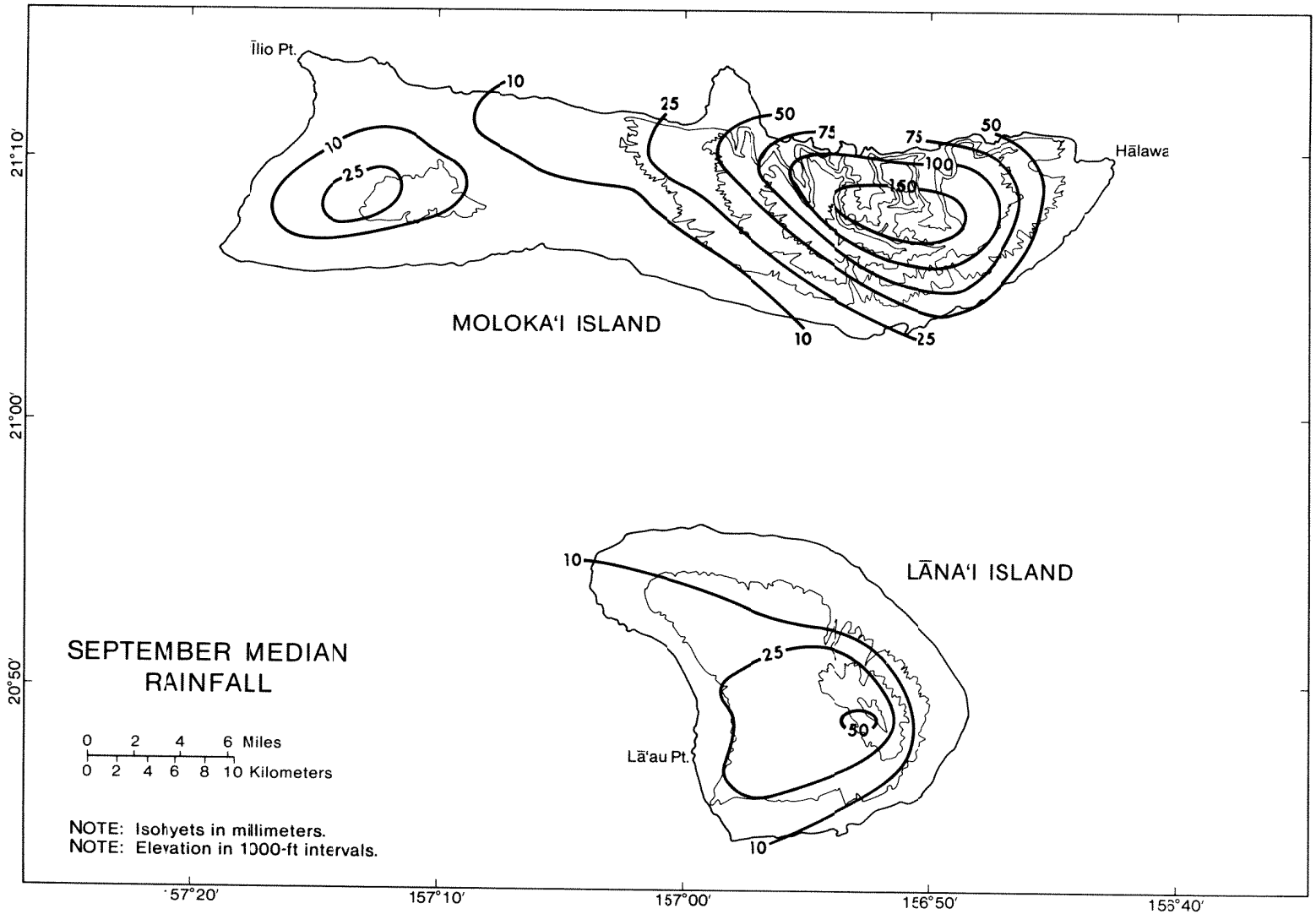
Appendix Figure A.33. June median rainfall, Moloka'i and Lāna'i islands, Hawai'i



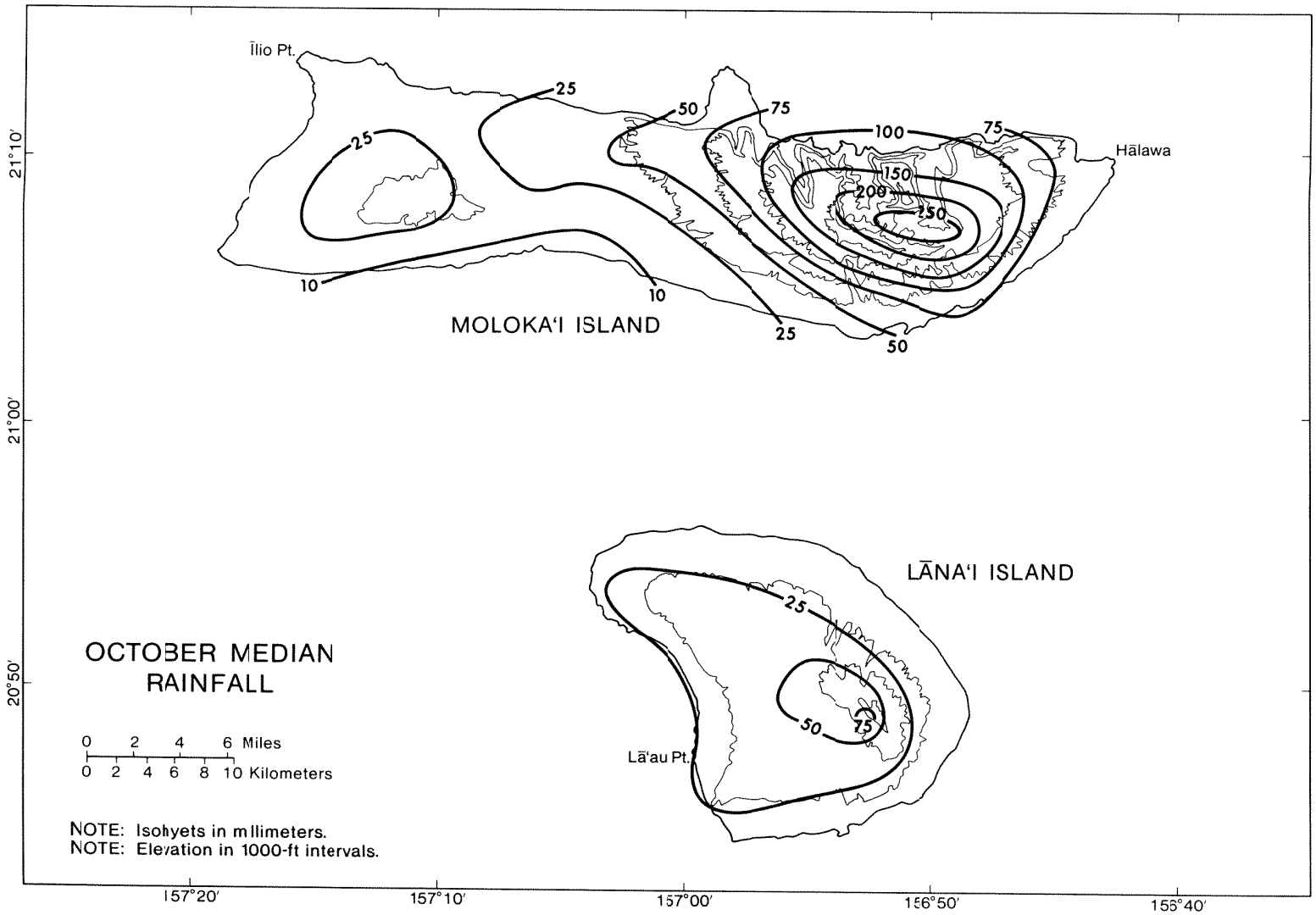
Appendix Figure A.34. July median rainfall, Moloka'i and Lāna'i islands, Hawai'i



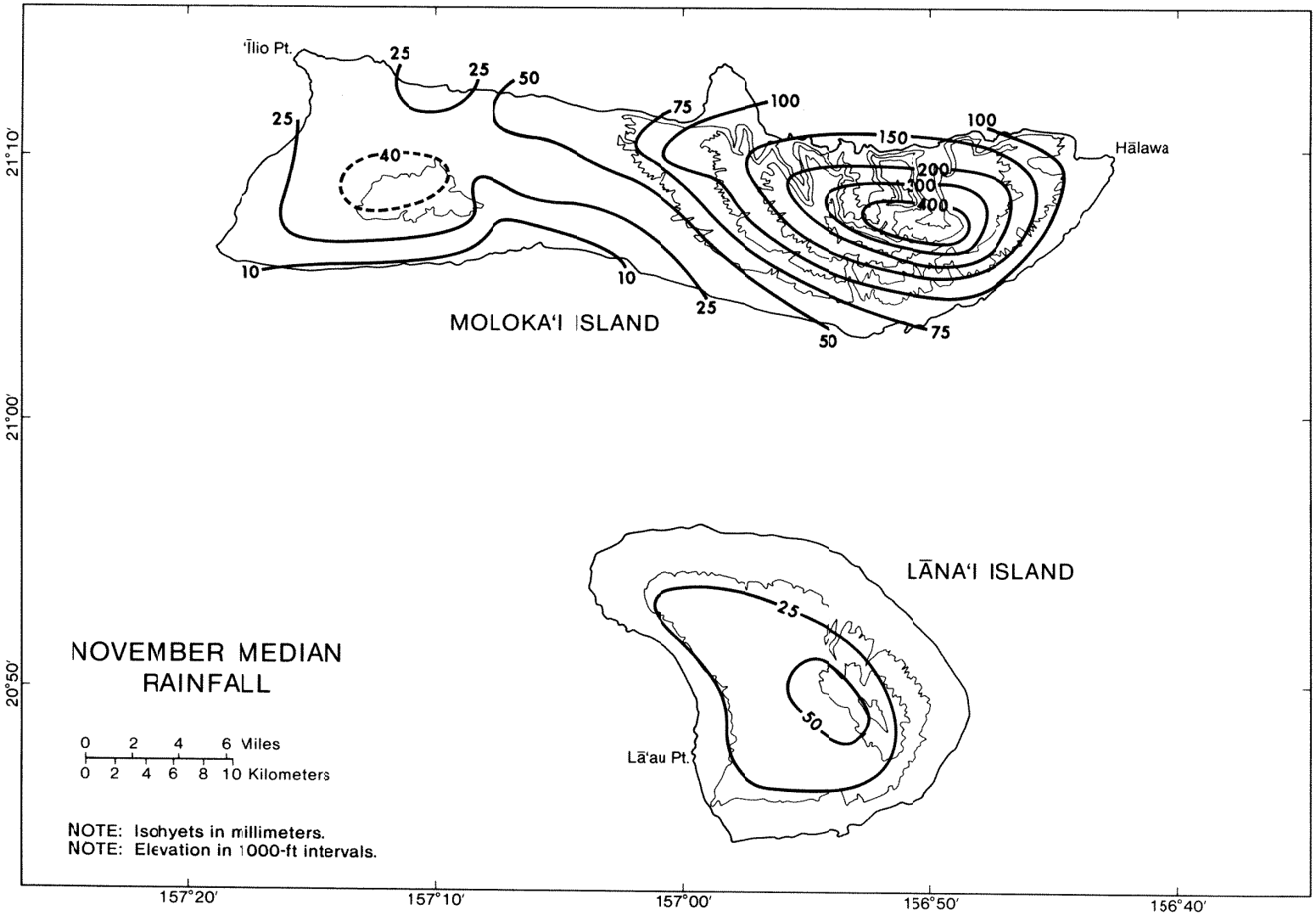
Appendix Figure A.35. August median rainfall, Moloka'i and Lāna'i islands, Hawai'i



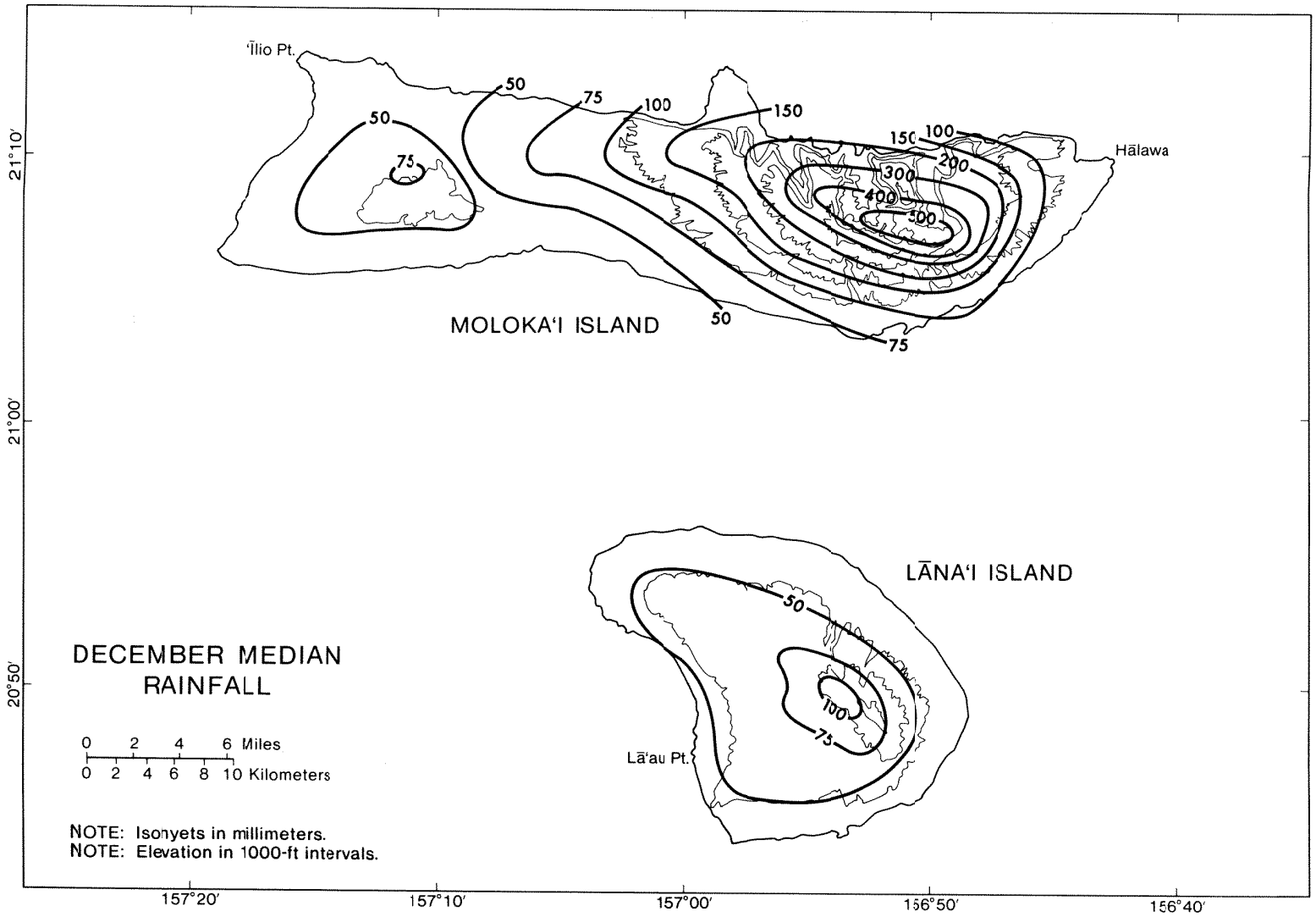
Appendix Figure A.36. September median rainfall, Moloka'i and Lāna'i islands, Hawai'i



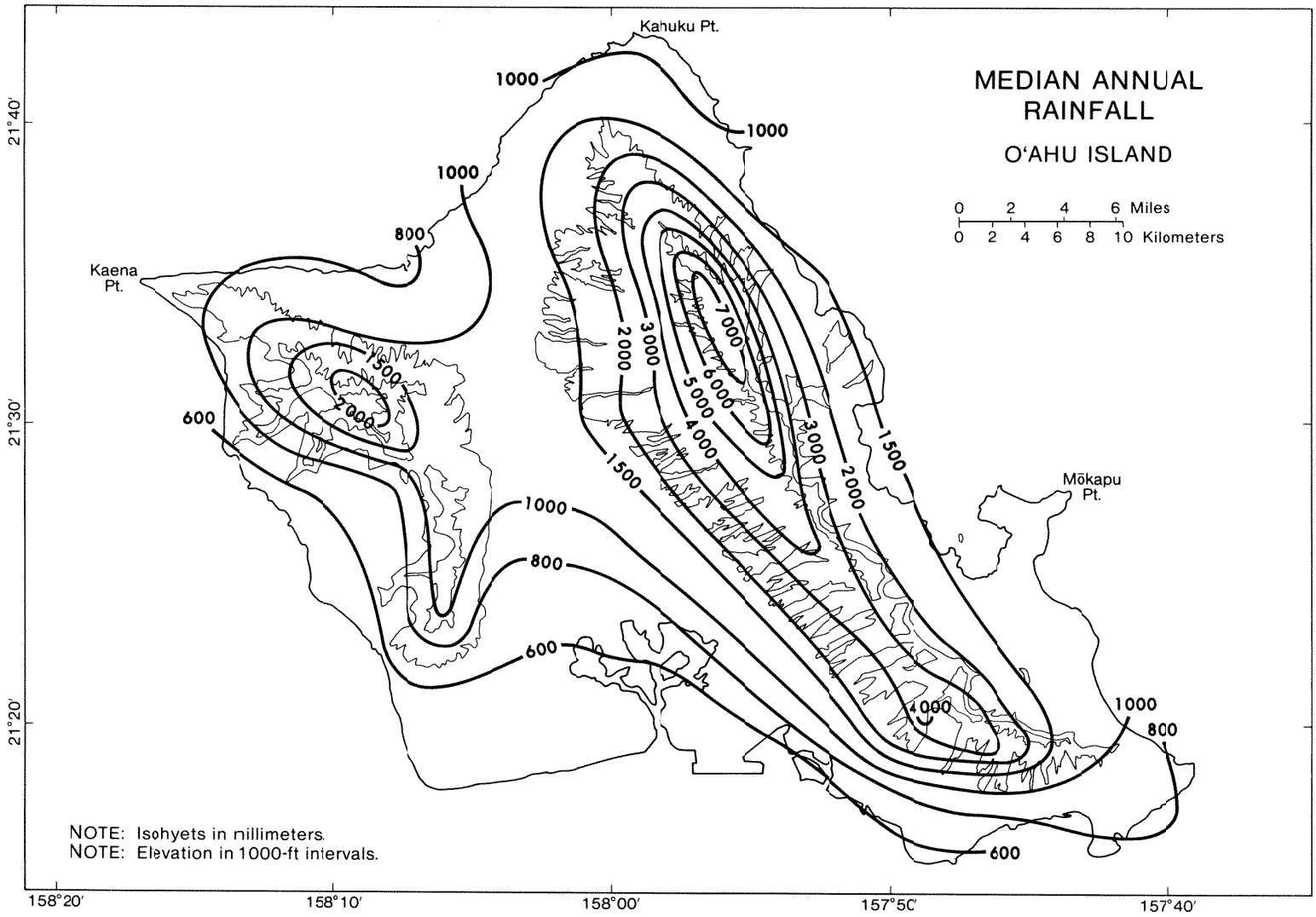
Appendix Figure A.37. October median rainfall, Moloka'i and Lāna'i islands, Hawai'i



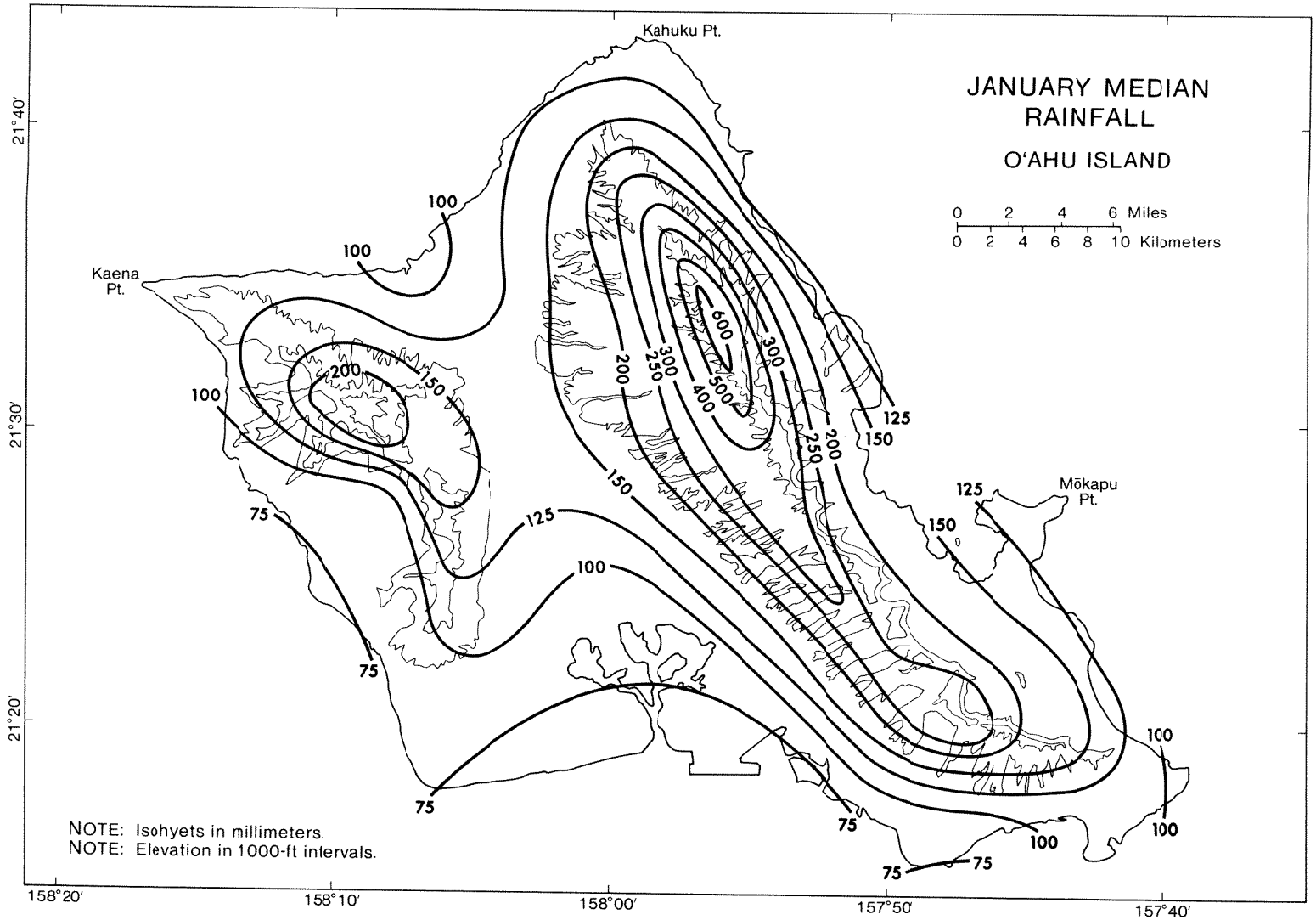
Appendix Figure A.38. November median rainfall, Moloka'i and Lāna'i islands, Hawai'i



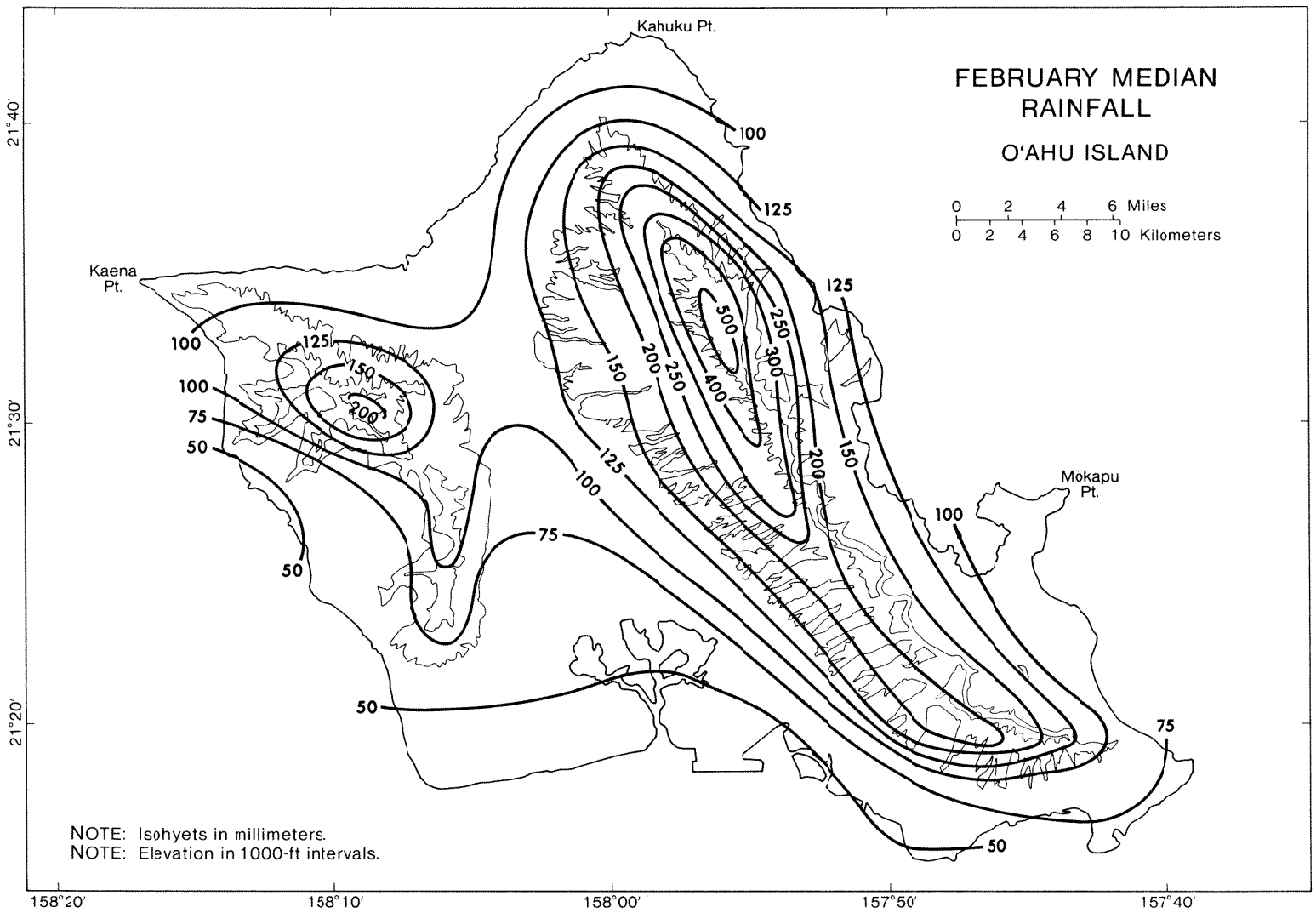
Appendix Figure A.39. December median rainfall, Moloka'i and Lāna'i islands, Hawai'i



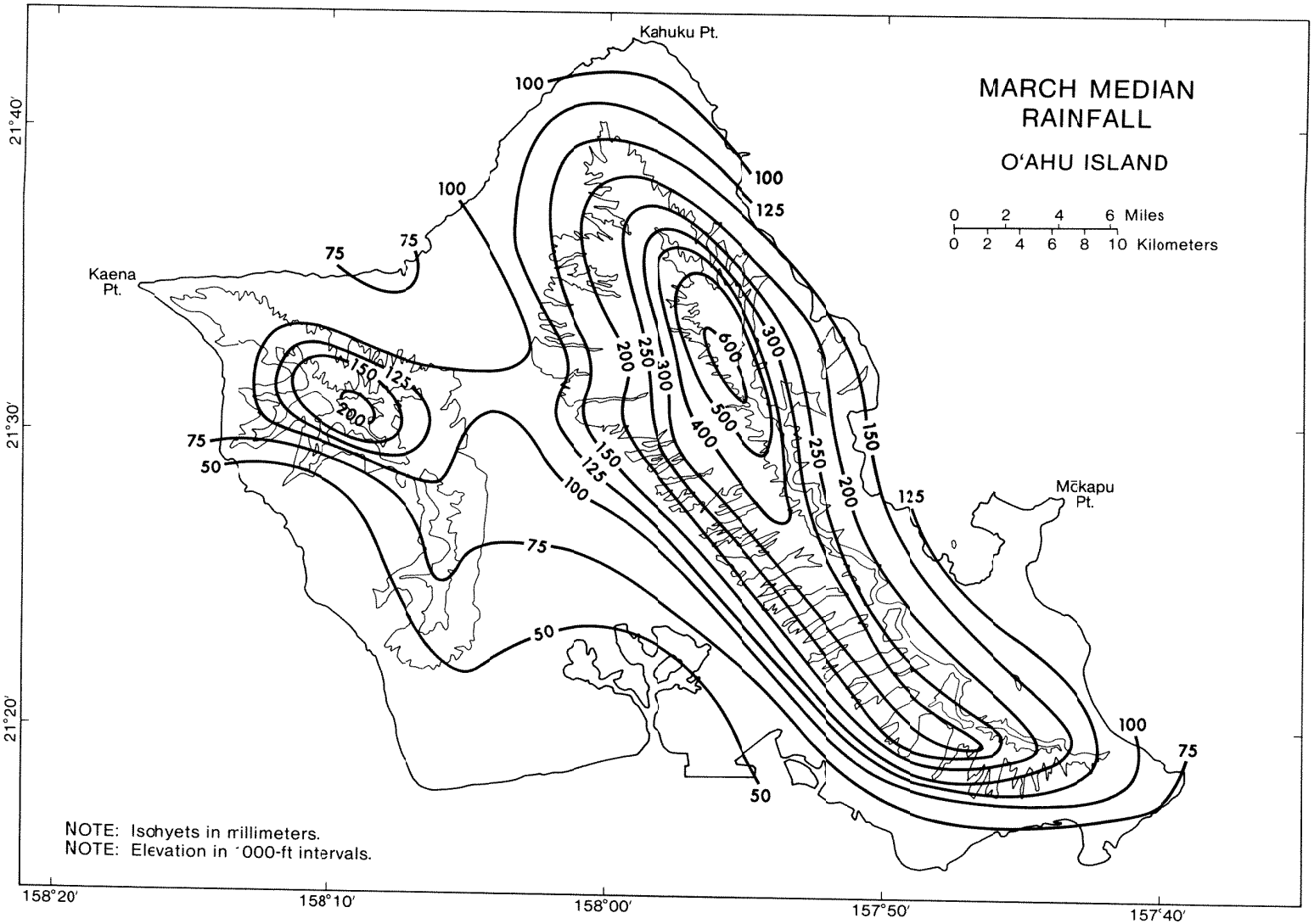
Appendix Figure A.40. Median annual rainfall, O'ahu Island, Hawai'i



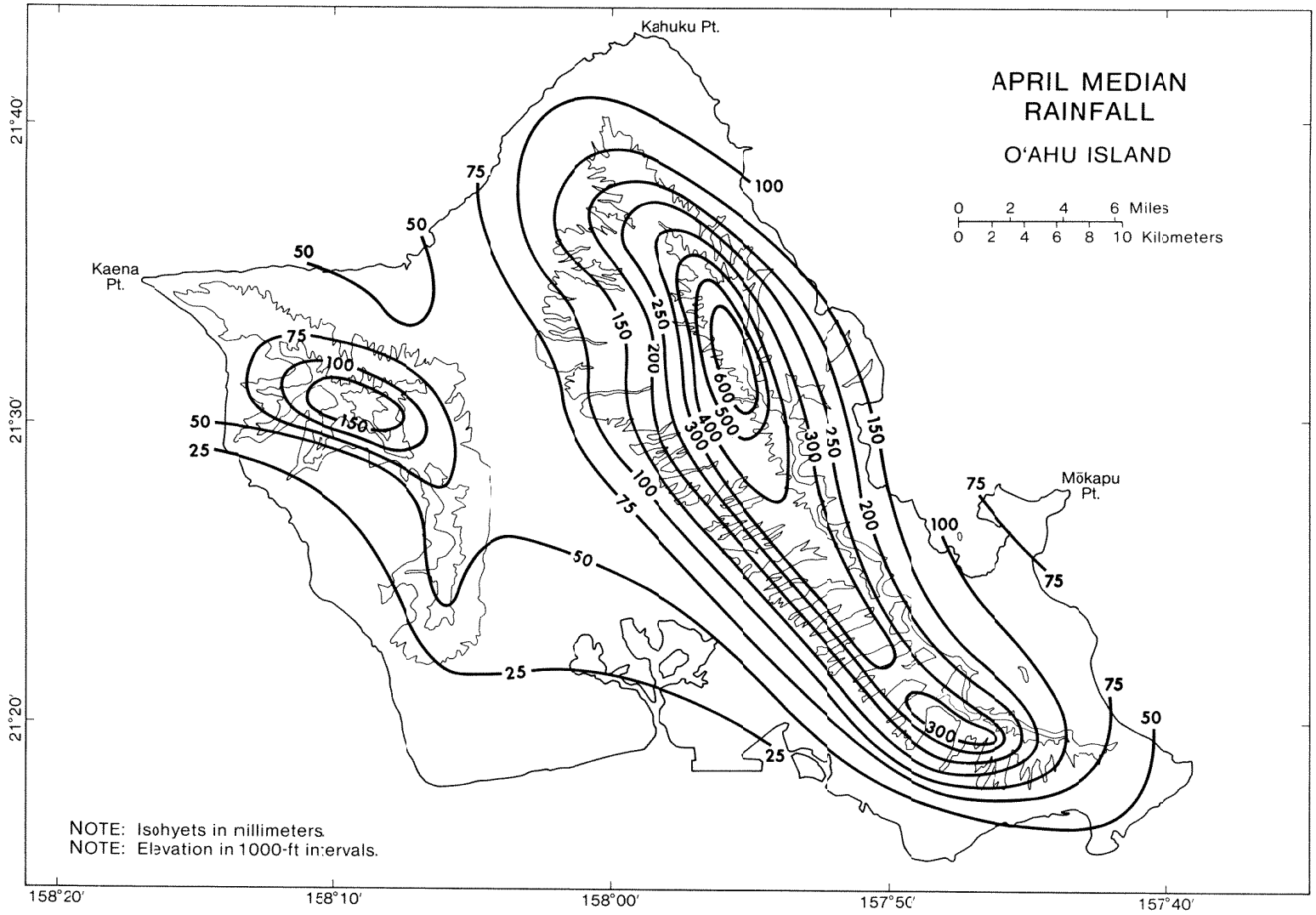
Appendix Figure A.41. January median rainfall, O'ahu Island, Hawai'i



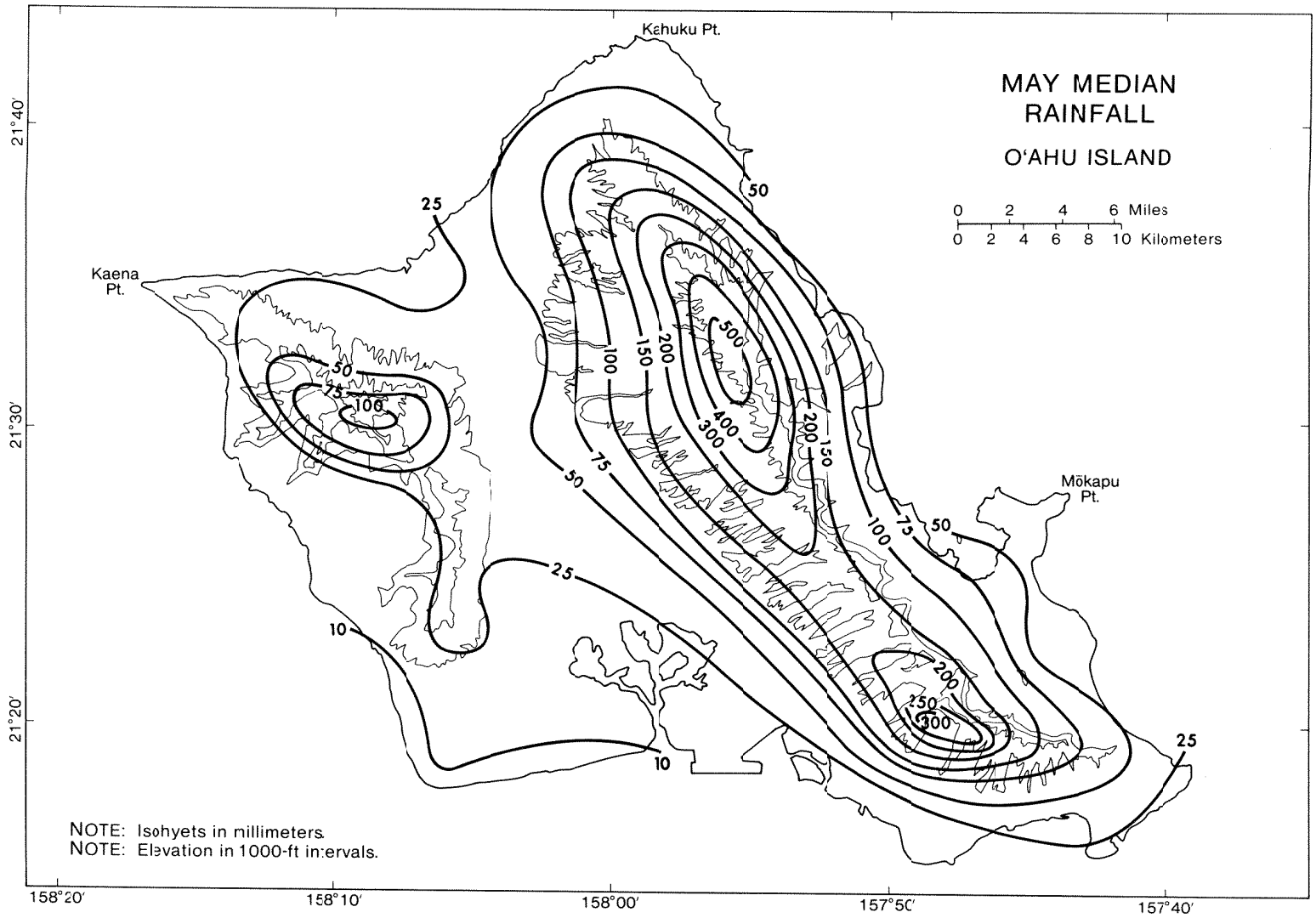
Appendix Figure A.42. February median rainfall, O'ahu Island, Hawai'i



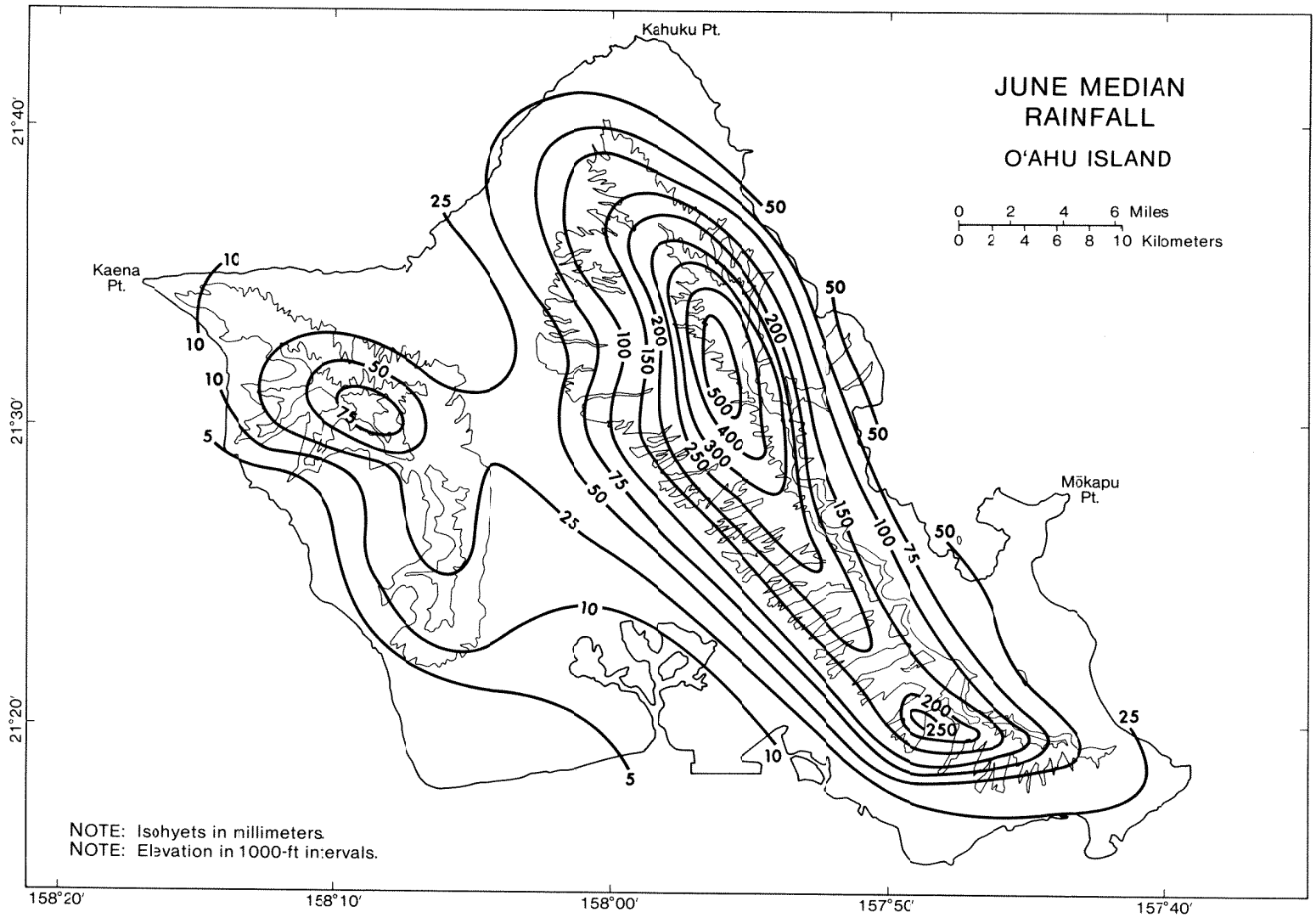
Appendix Figure A.43. March median rainfall, O'ahu Island, Hawai'i



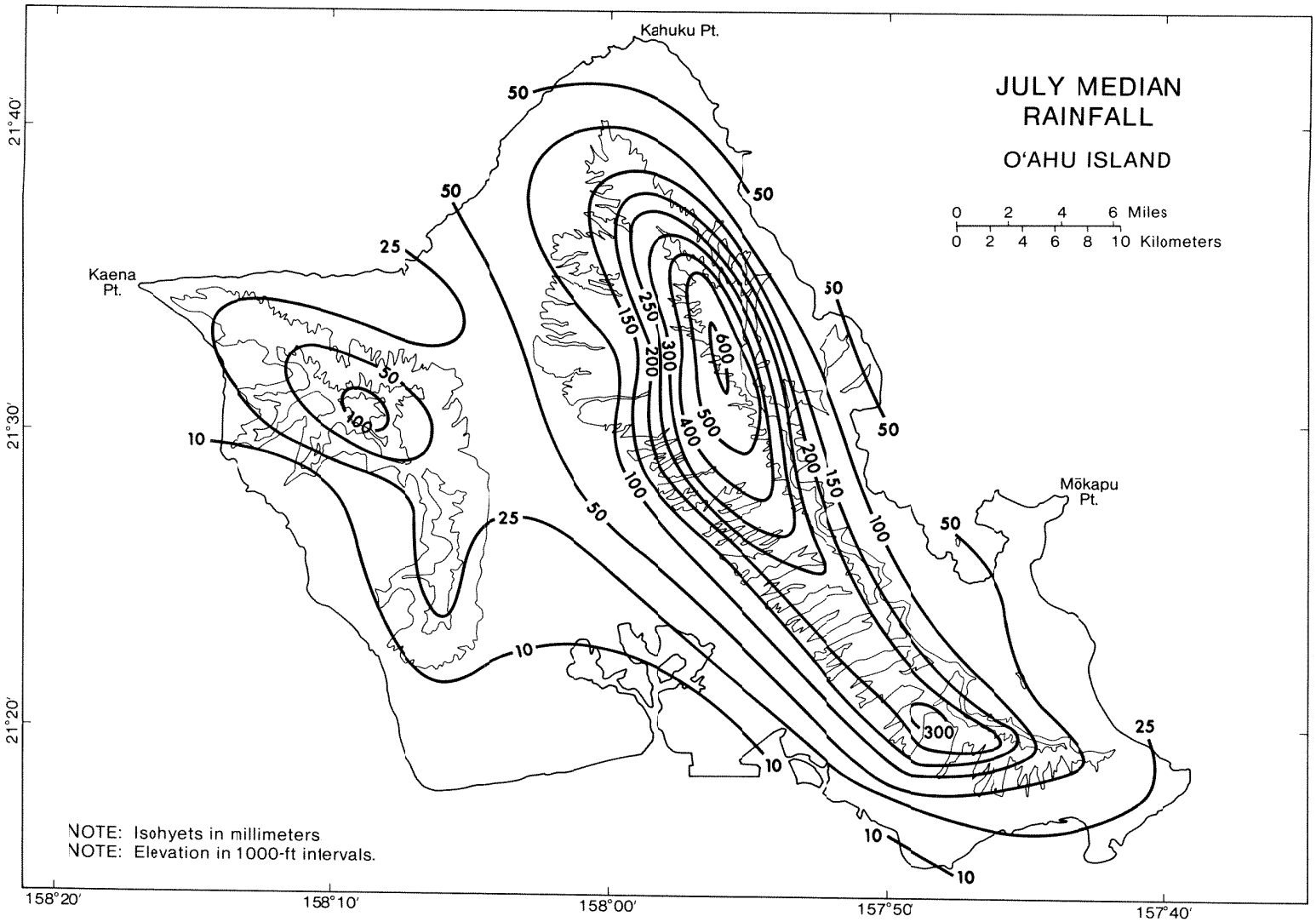
Appendix Figure A.44. April median rainfall, O'ahu Island, Hawai'i



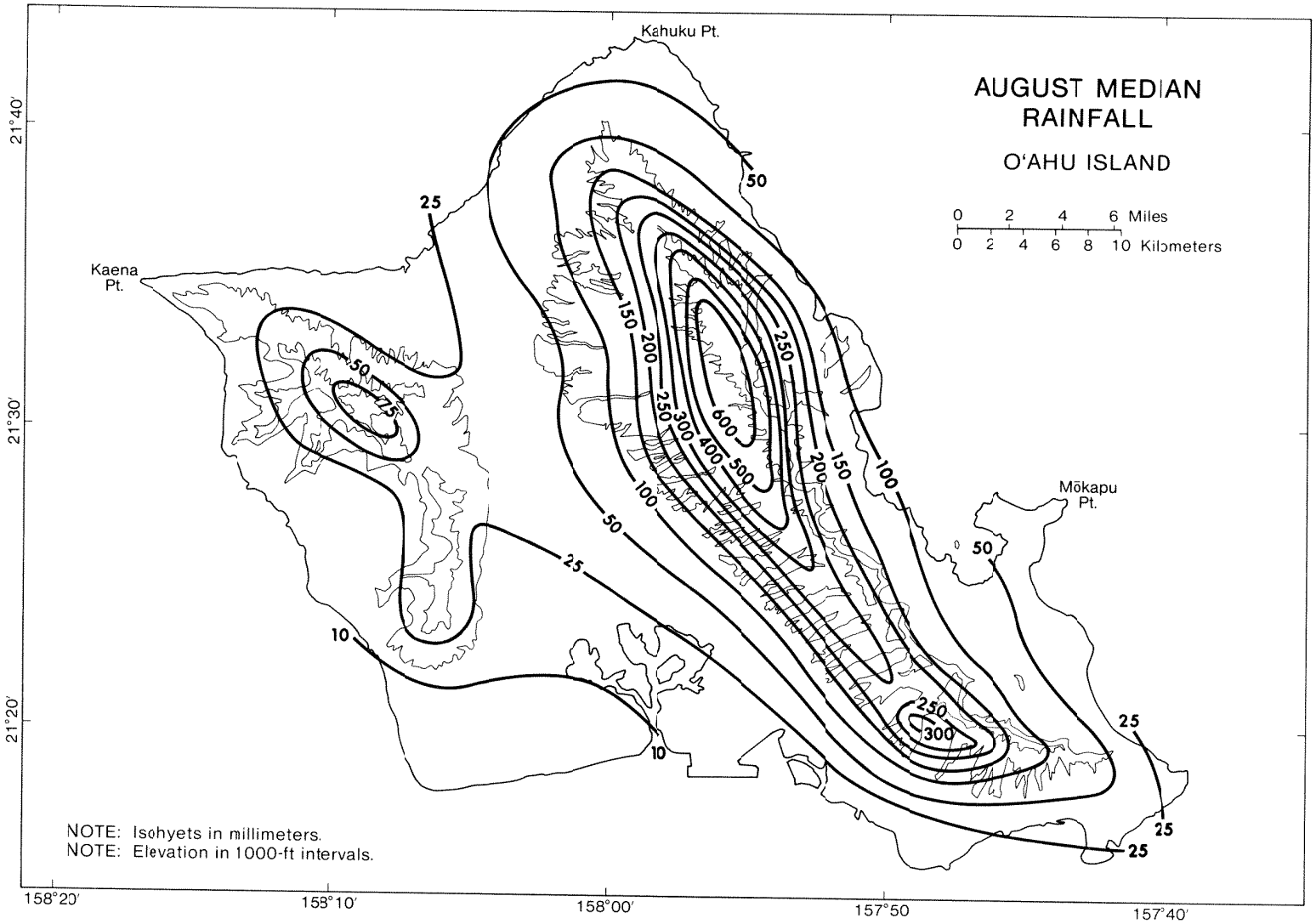
Appendix Figure A.45. May median rainfall, O'ahu Island, Hawai'i



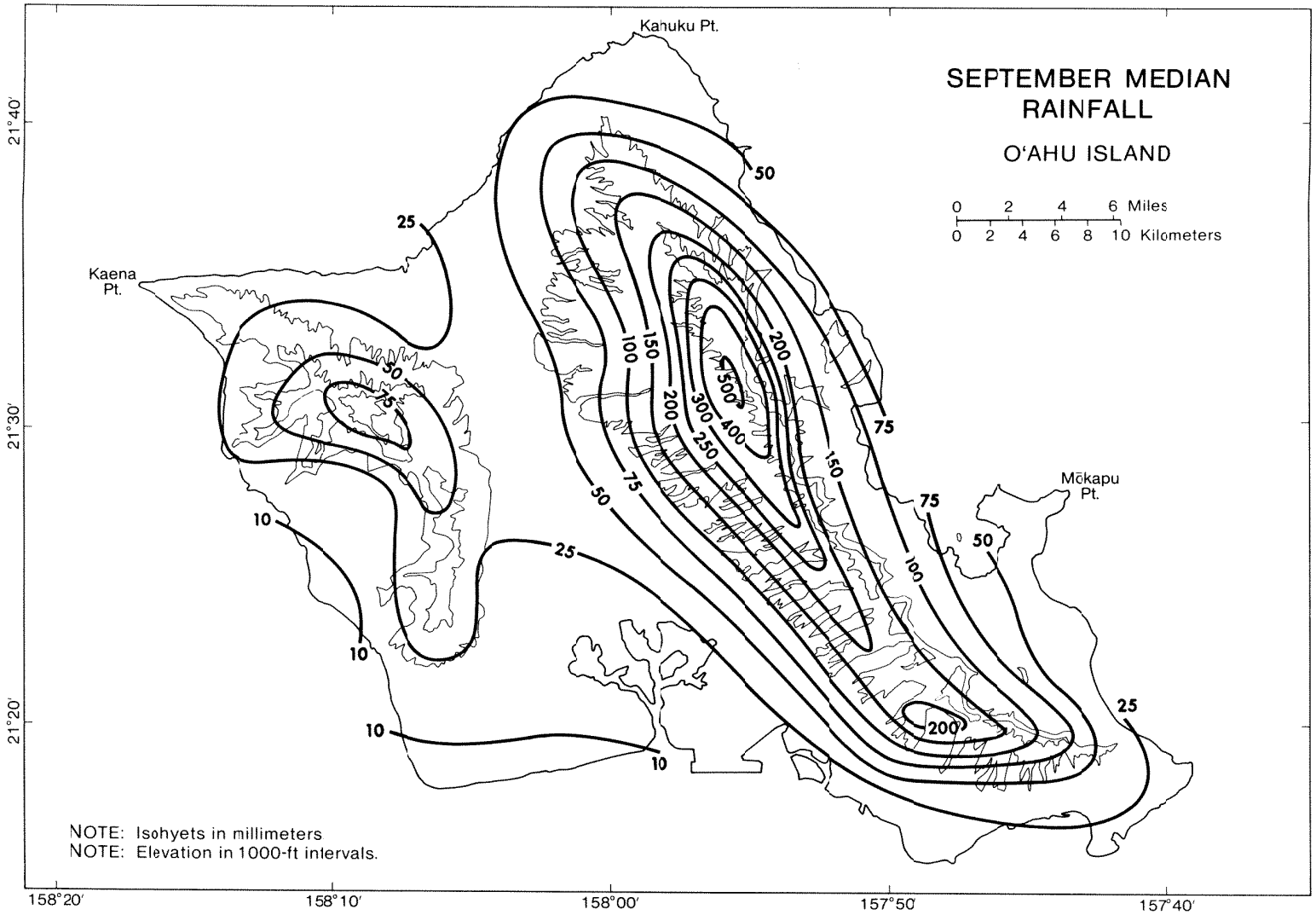
Appendix Figure A.46. June median rainfall, O'ahu Island, Hawai'i



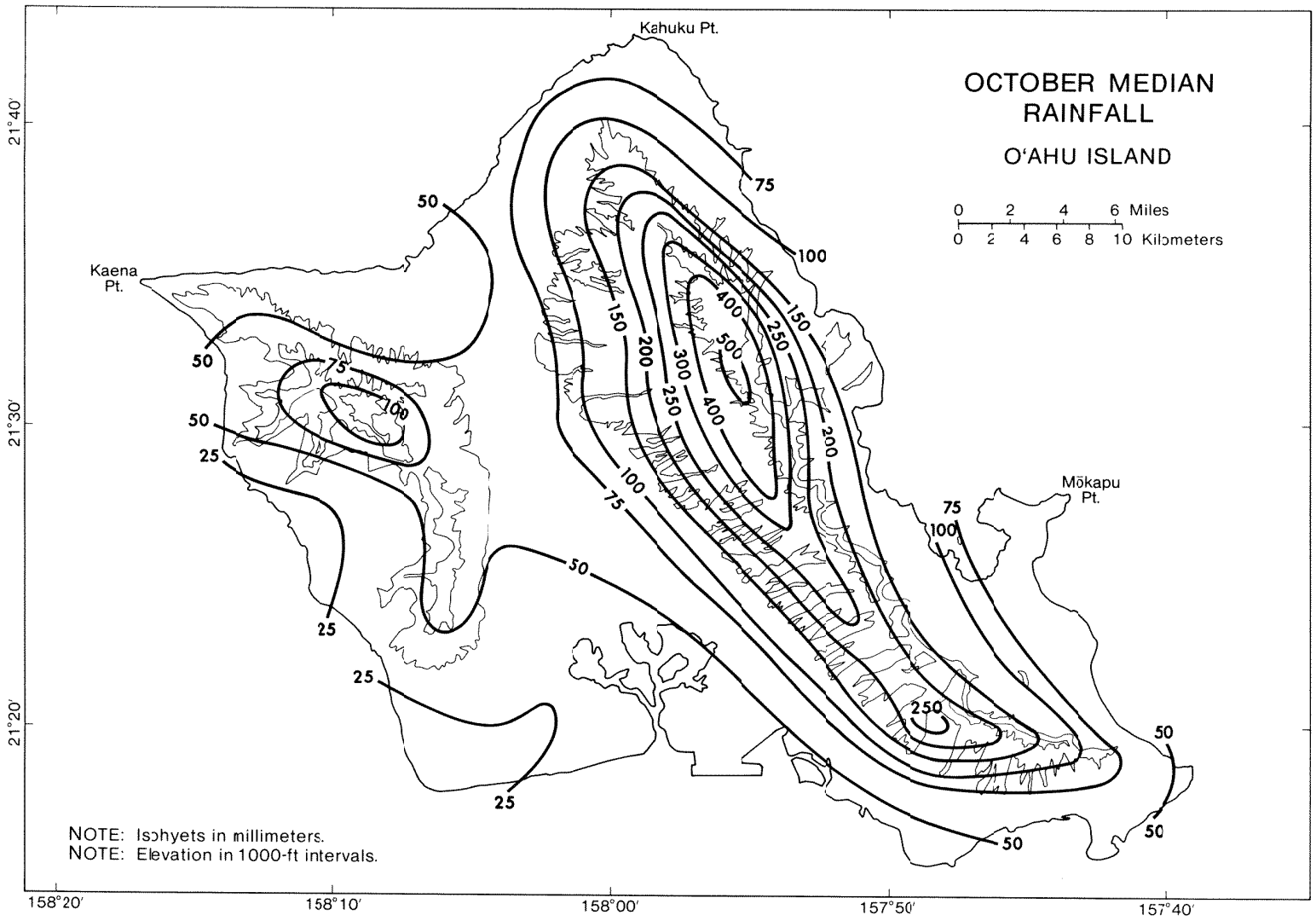
Appendix Figure A.47. July median rainfall, O'ahu Island, Hawai'i



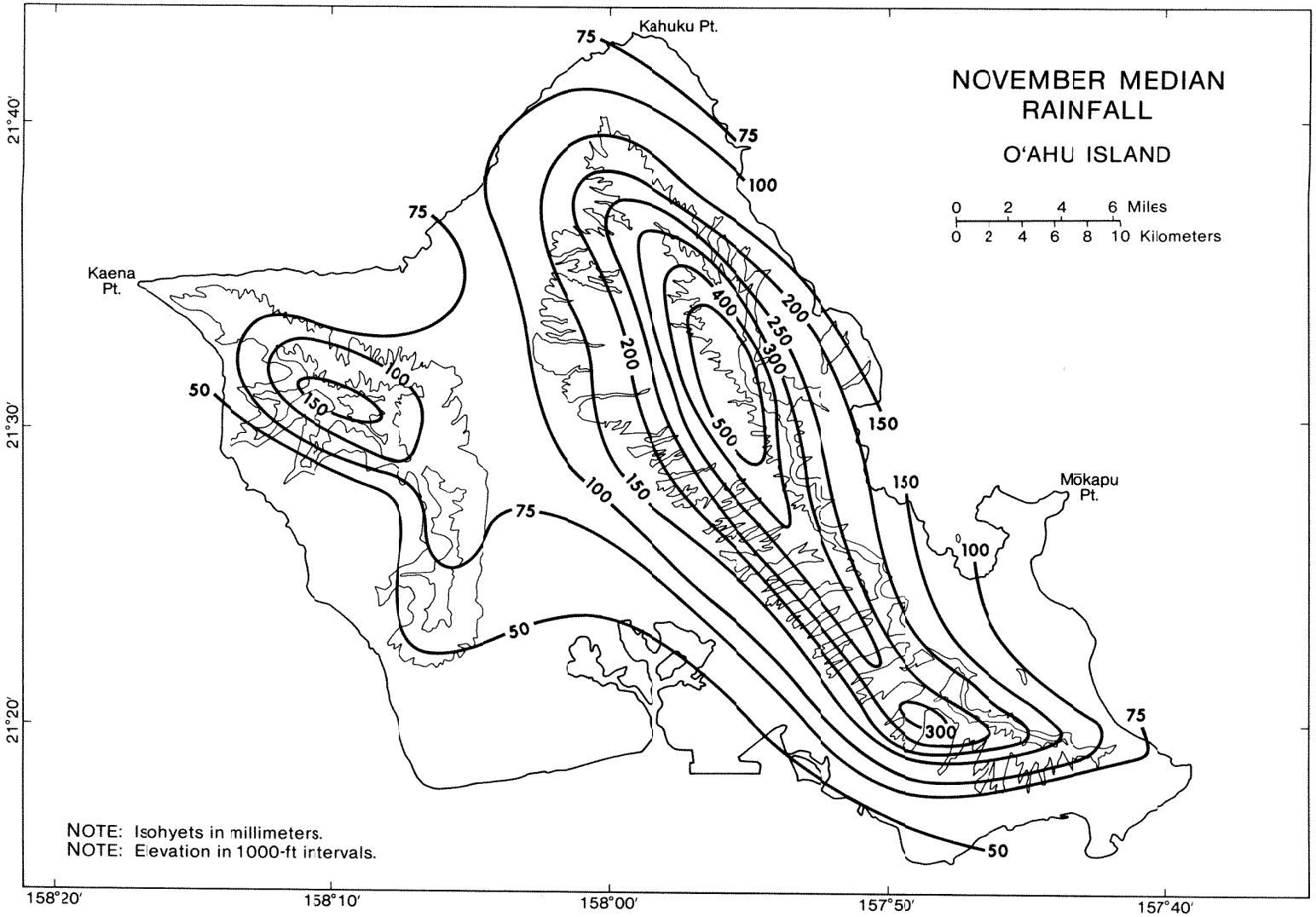
Appendix Figure A.48. August median rainfall, O'ahu Island, Hawai'i



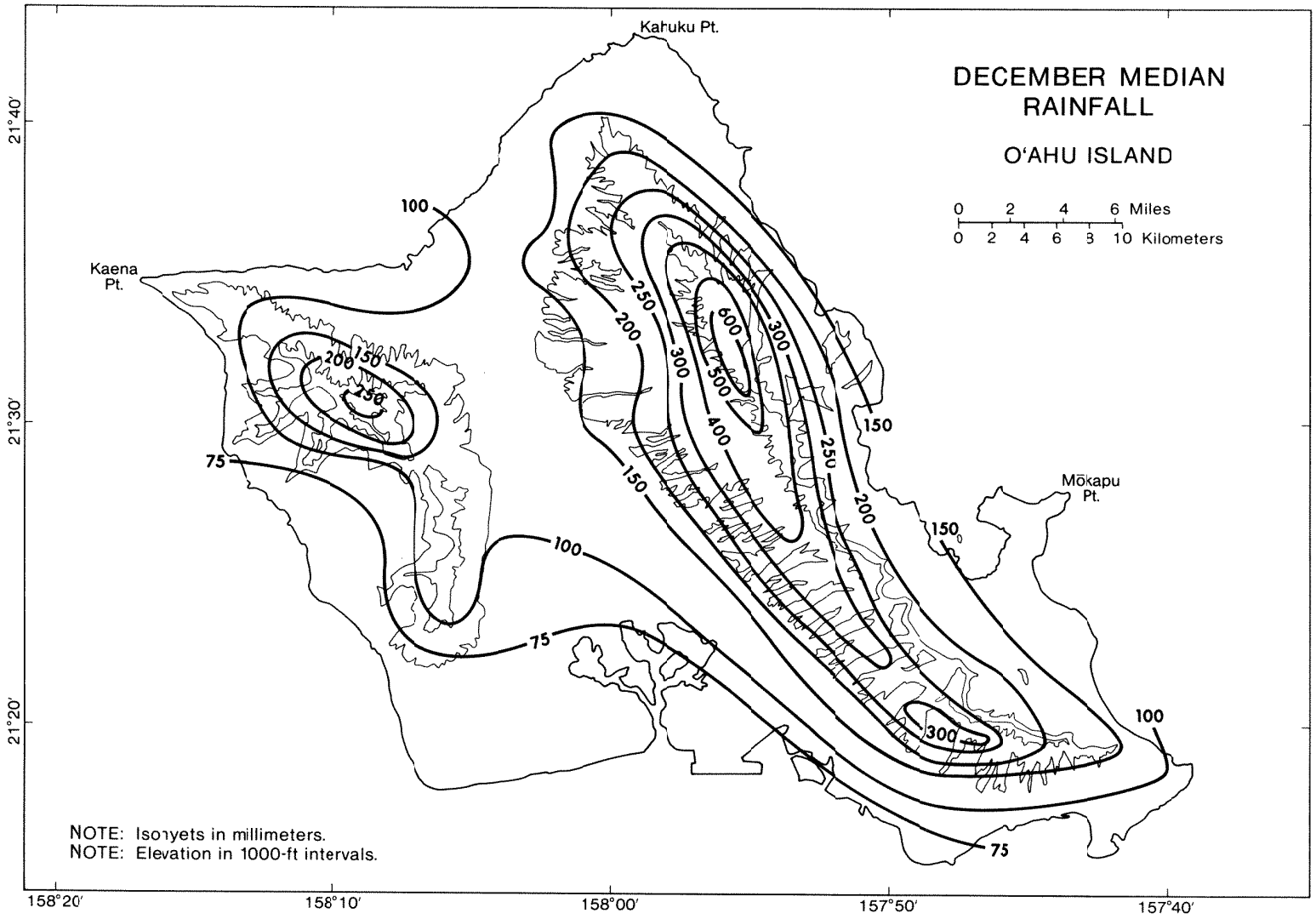
Appendix Figure A.49. September median rainfall, O'ahu Island, Hawai'i



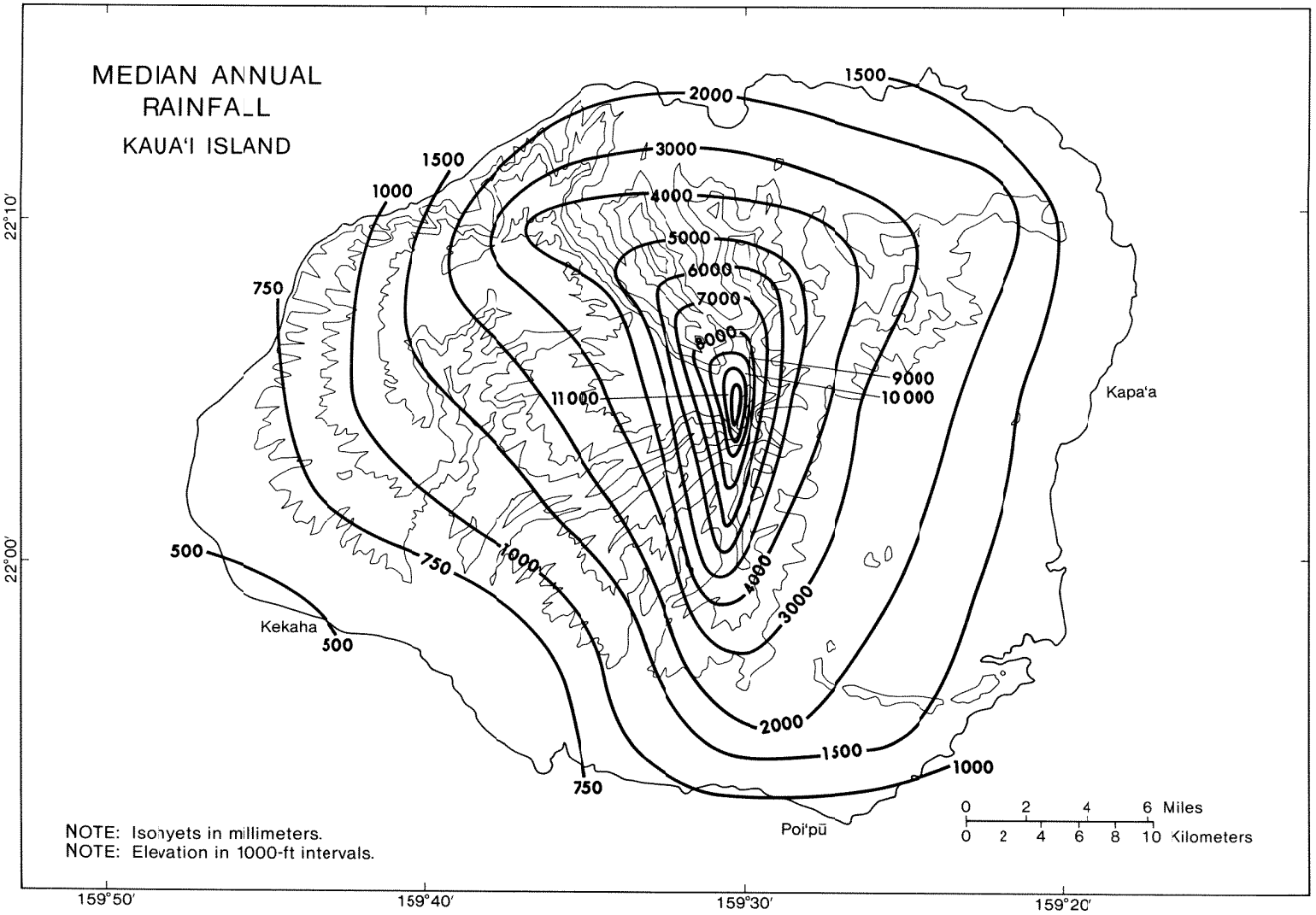
Appendix Figure A.50. October median rainfall, O'ahu Island, Hawai'i



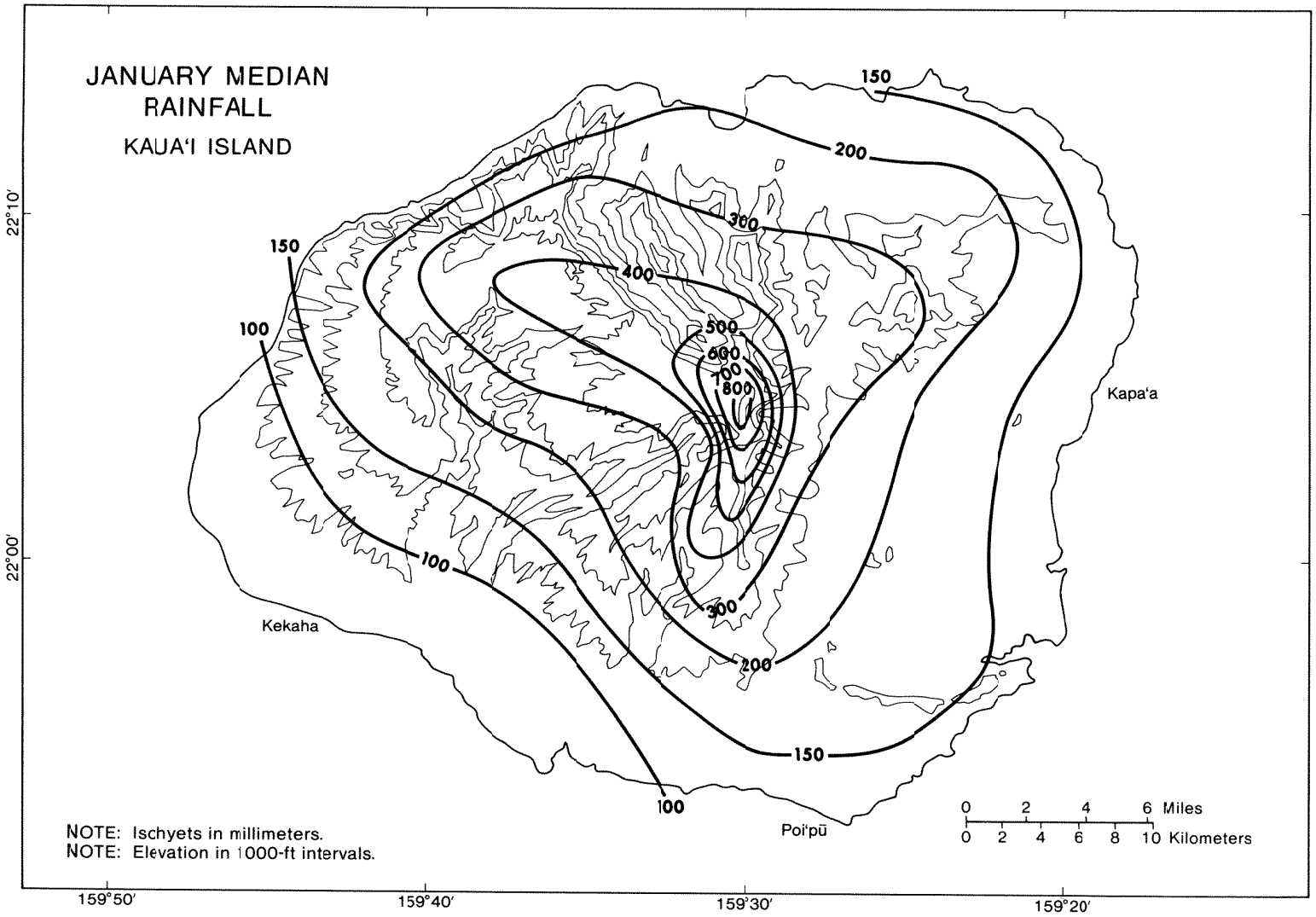
Appendix Figure A.51. November median rainfall, O'ahu Island, Hawai'i



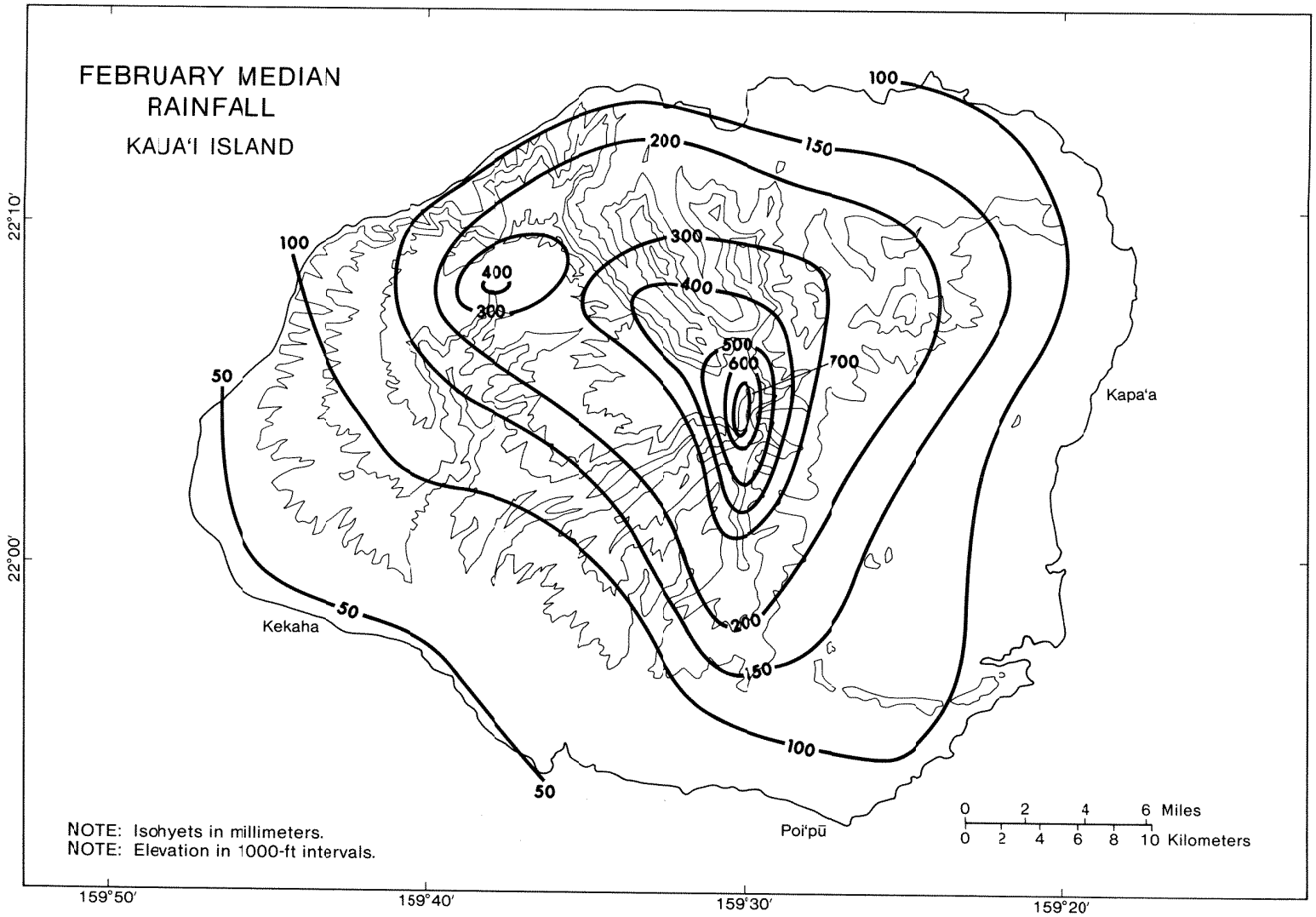
Appendix Figure A.52. December median rainfall, O'ahu Island, Hawai'i



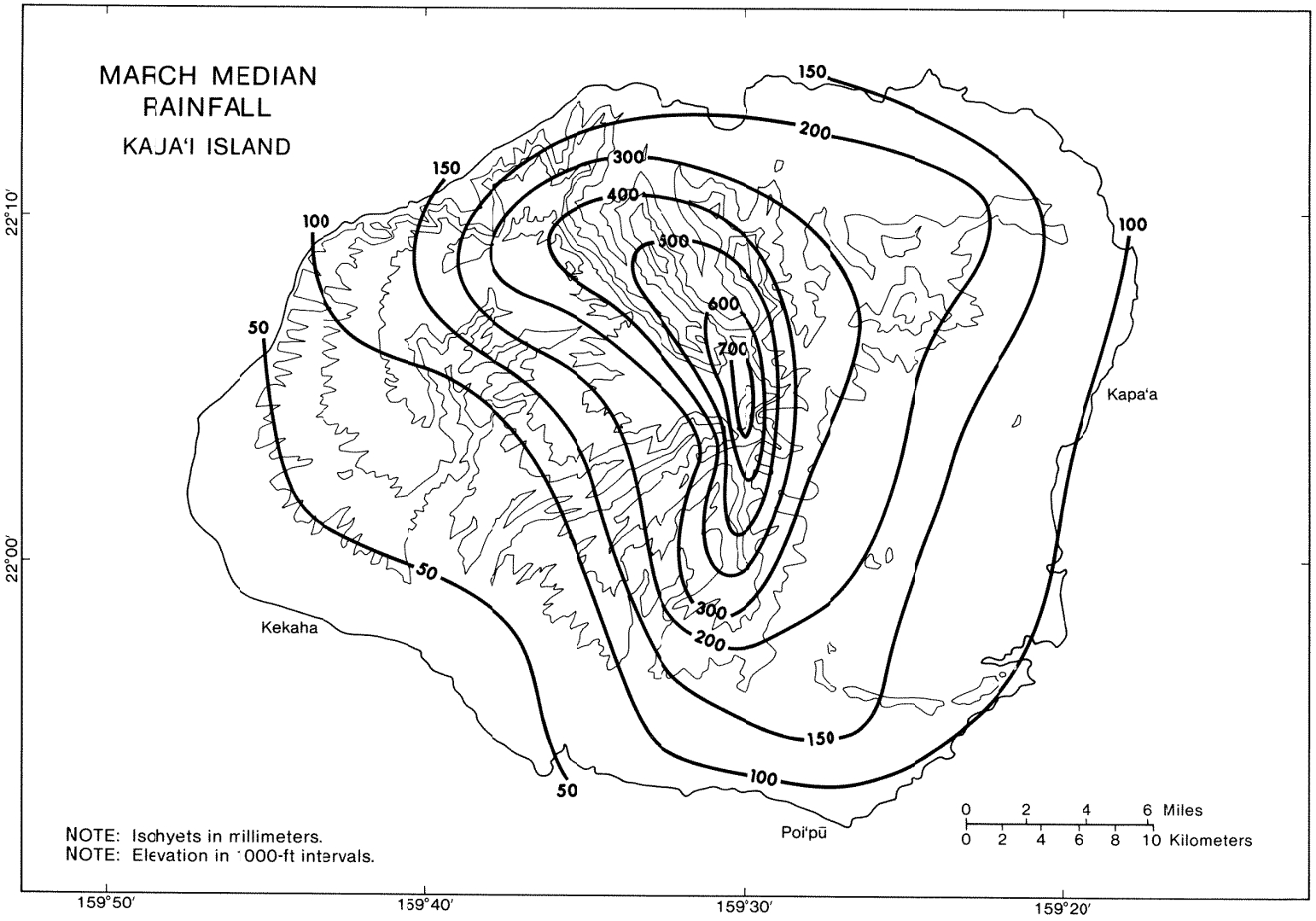
Appendix Figure A.53. Median annual rainfall, Kaua'i Island, Hawai'i



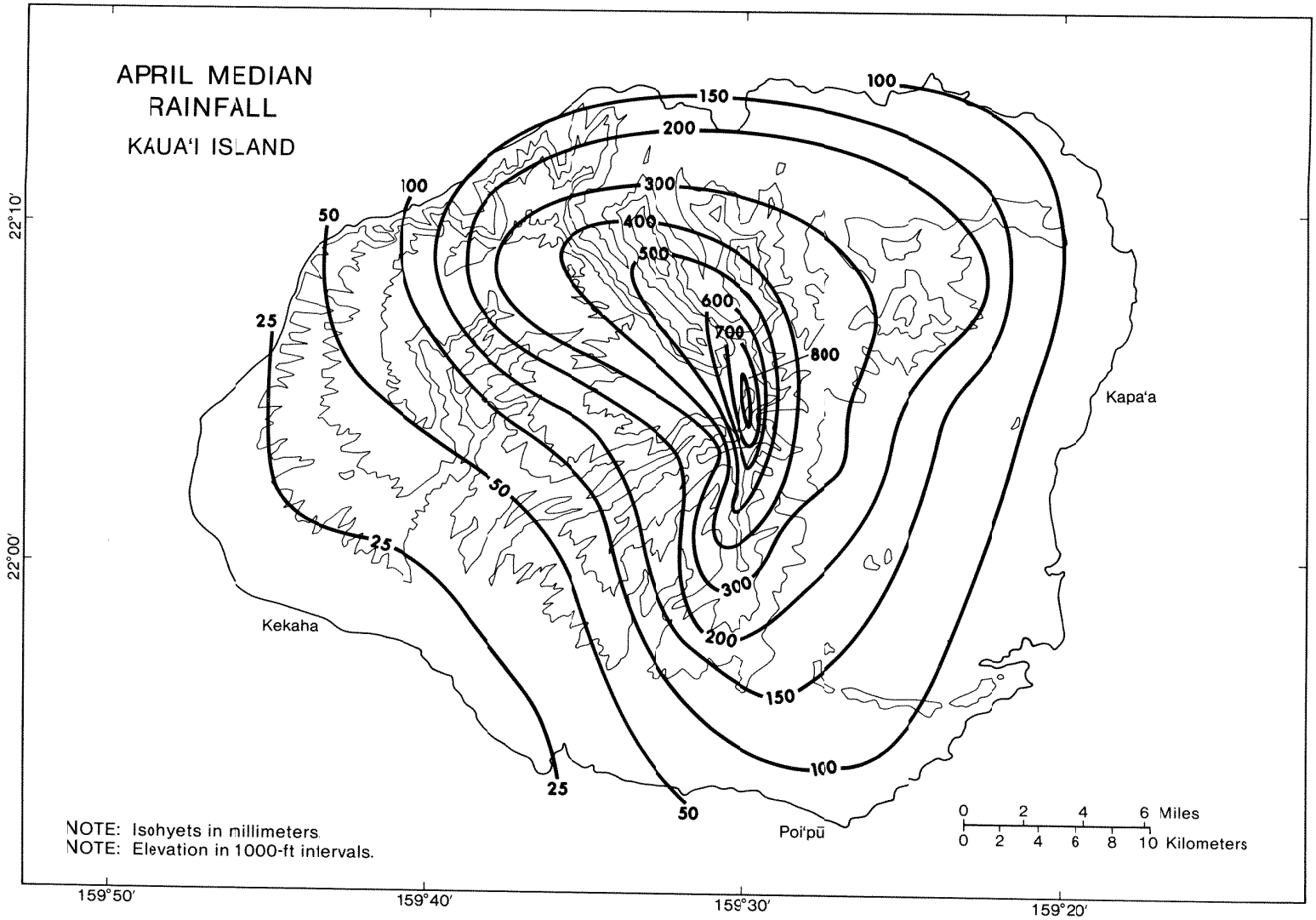
Appendix Figure A.54. January median rainfall, Kaua'i Island, Hawai'i



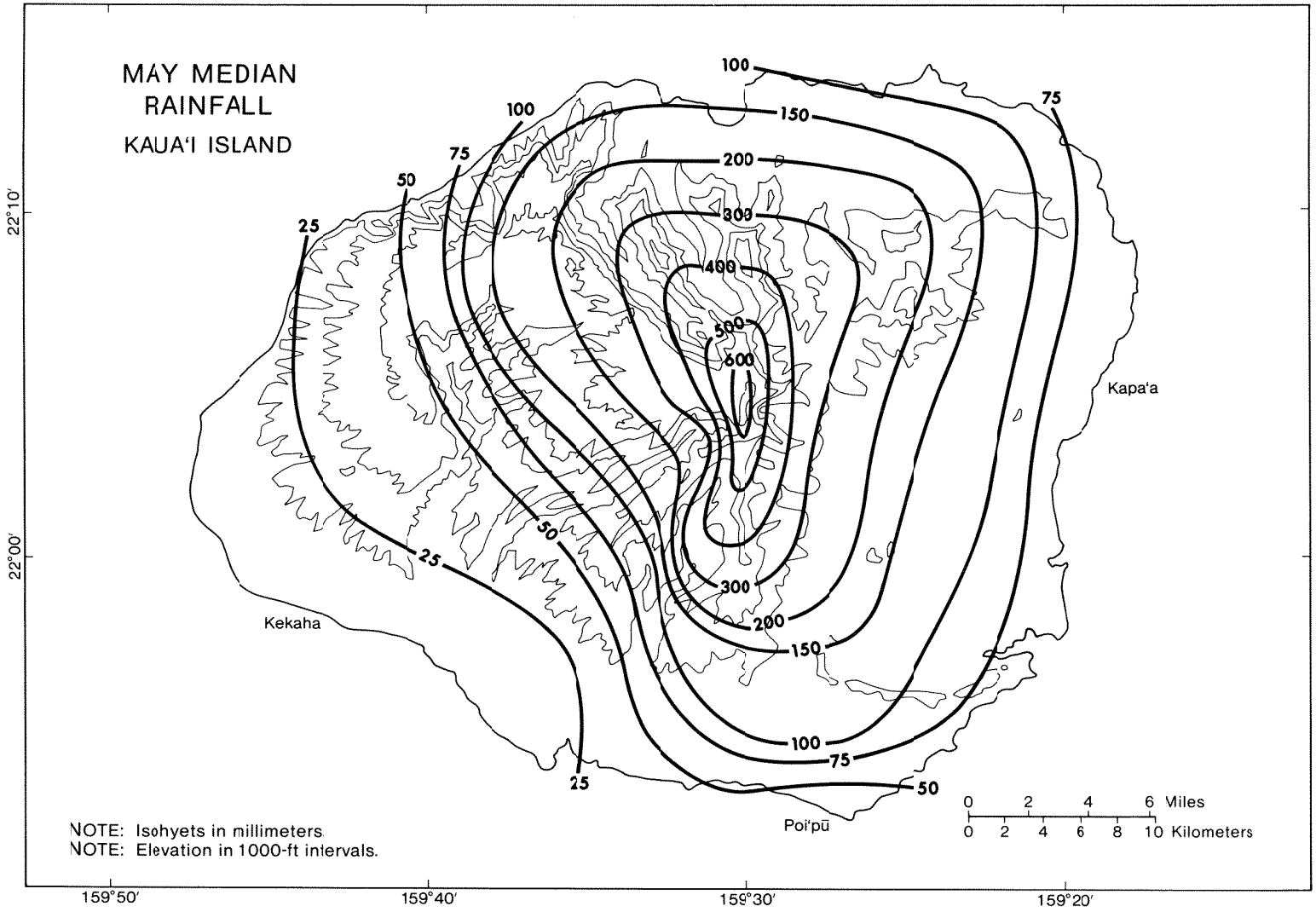
Appendix Figure A.55. February median rainfall, Kaua'i Island, Hawai'i



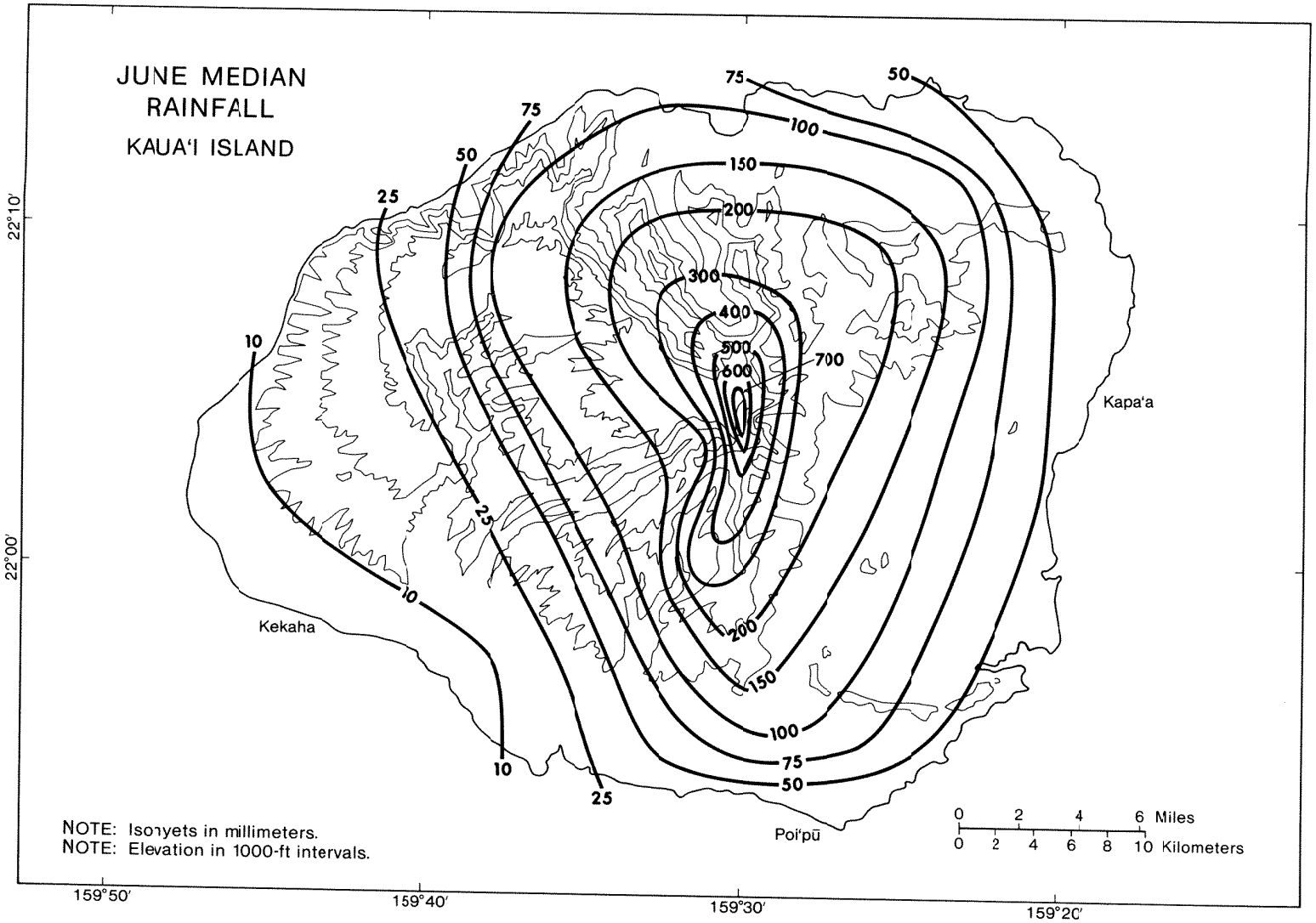
Appendix Figure A.56. March median rainfall, Kaua'i Island, Hawai'i



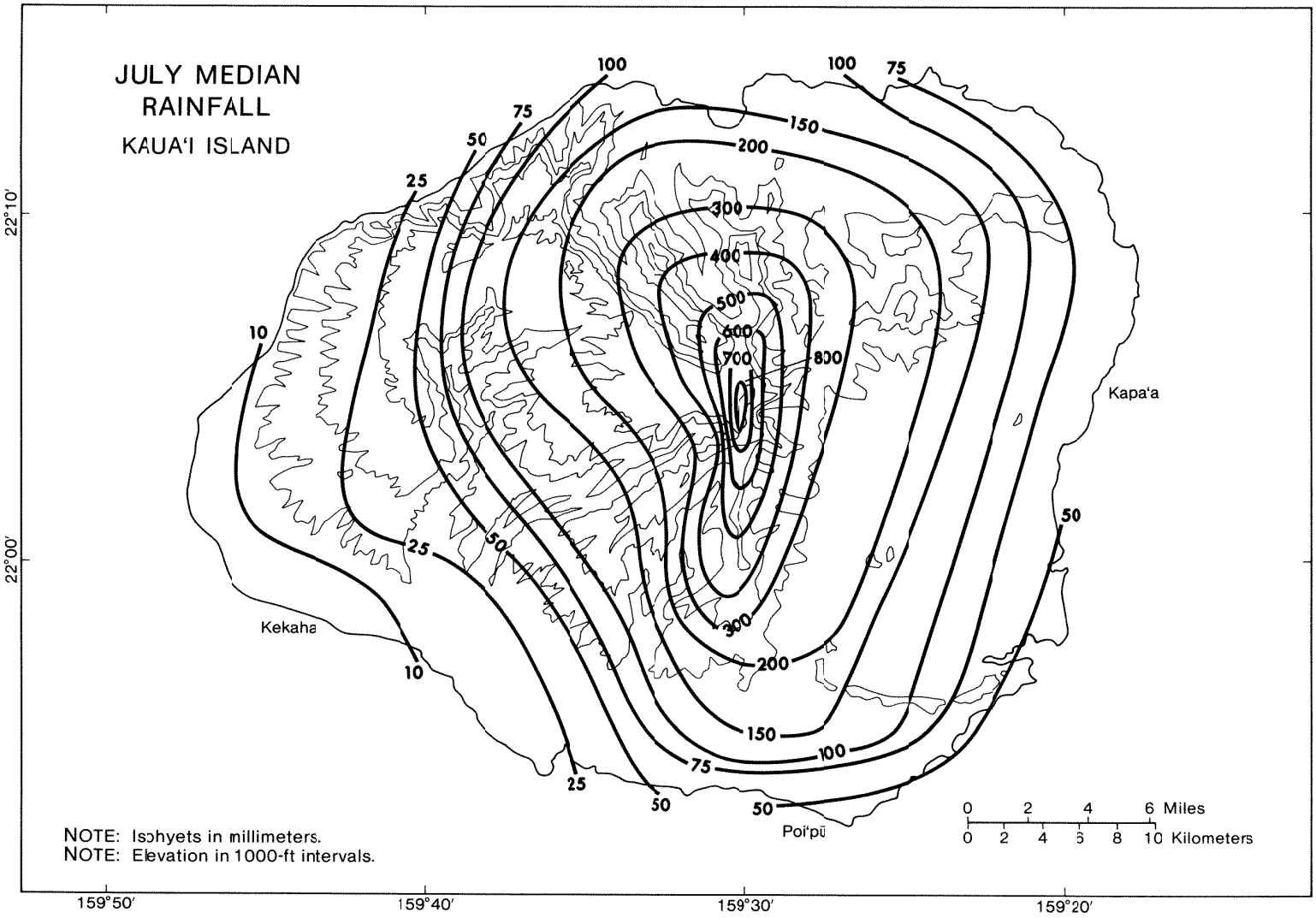
Appendix Figure A.57. April median rainfall, Kaua'i Island, Hawai'i



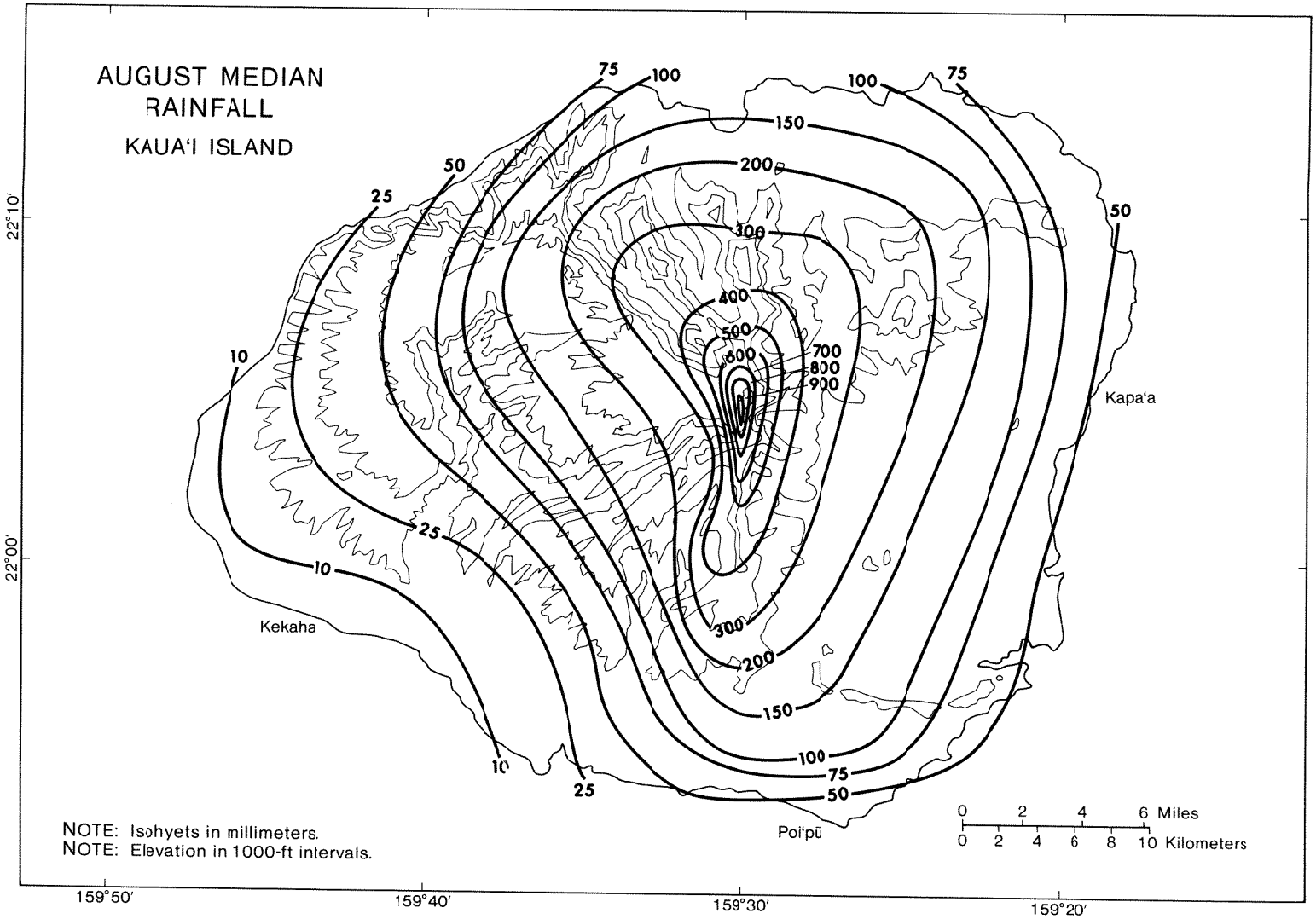
Appendix Figure A.58. May median rainfall, Kaua'i Island, Hawai'i



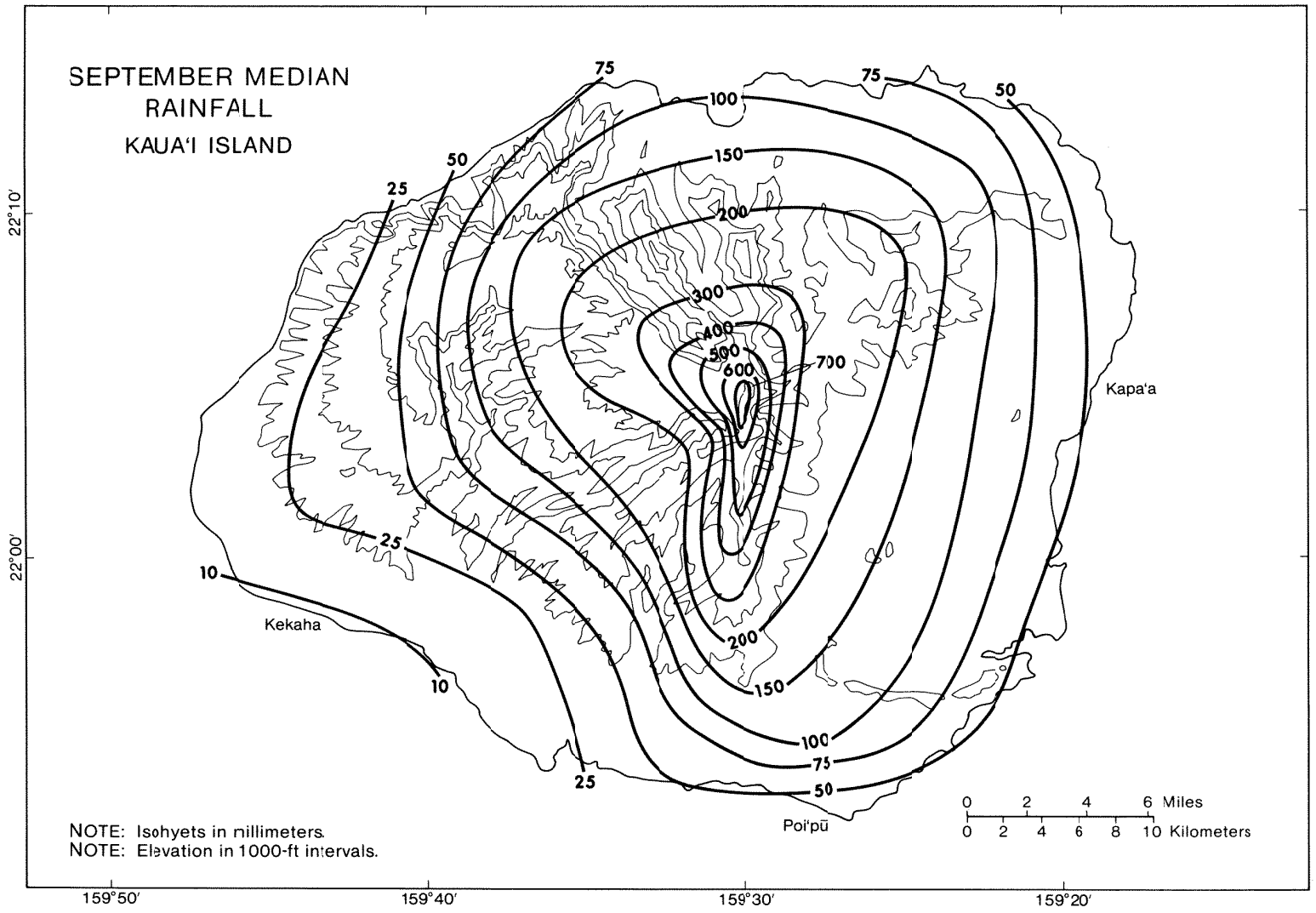
Appendix Figure A.59. June median rainfall, Kaua'i Island, Hawai'i



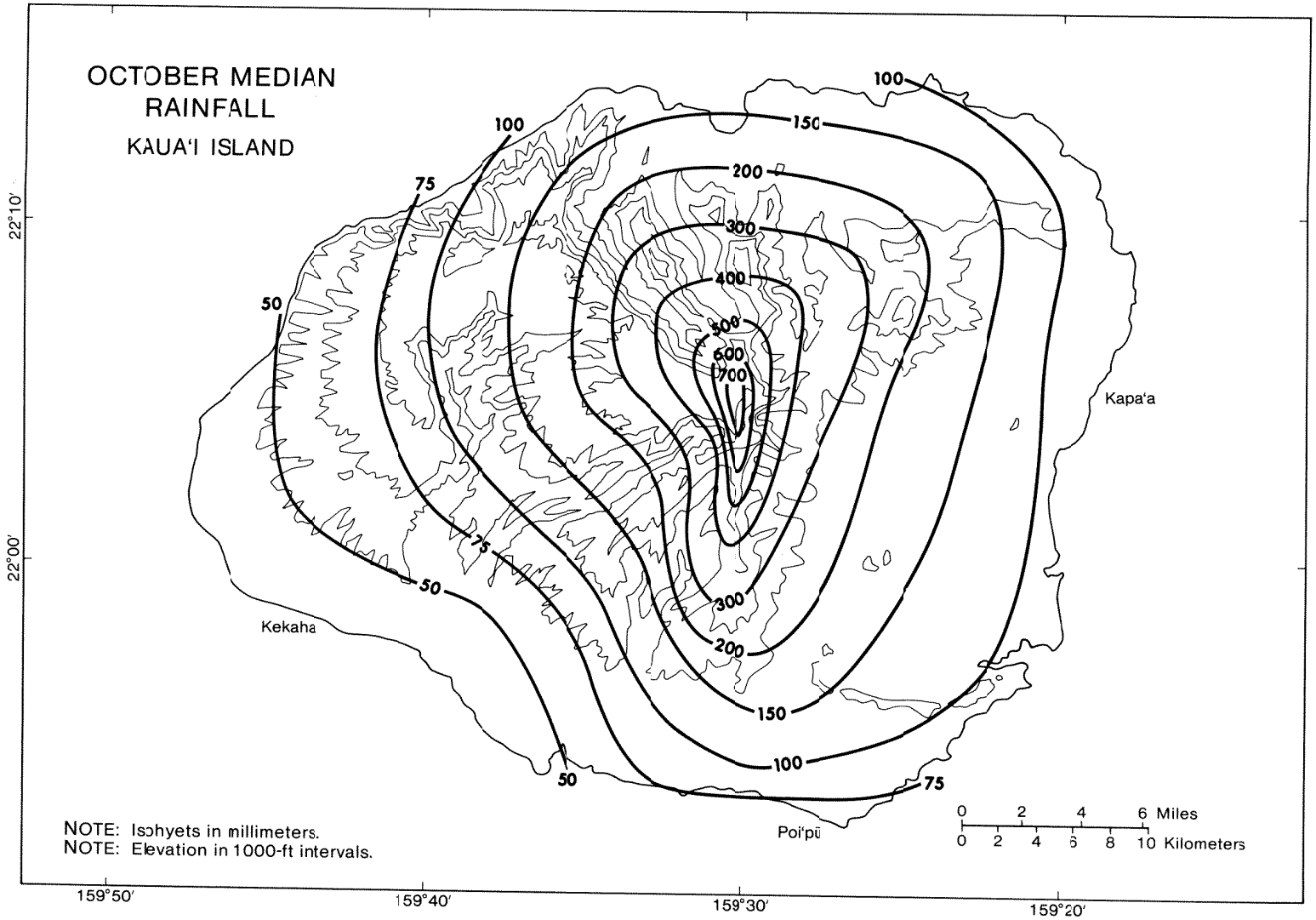
Appendix Figure A.60. July median rainfall, Kaua'i Island, Hawai'i



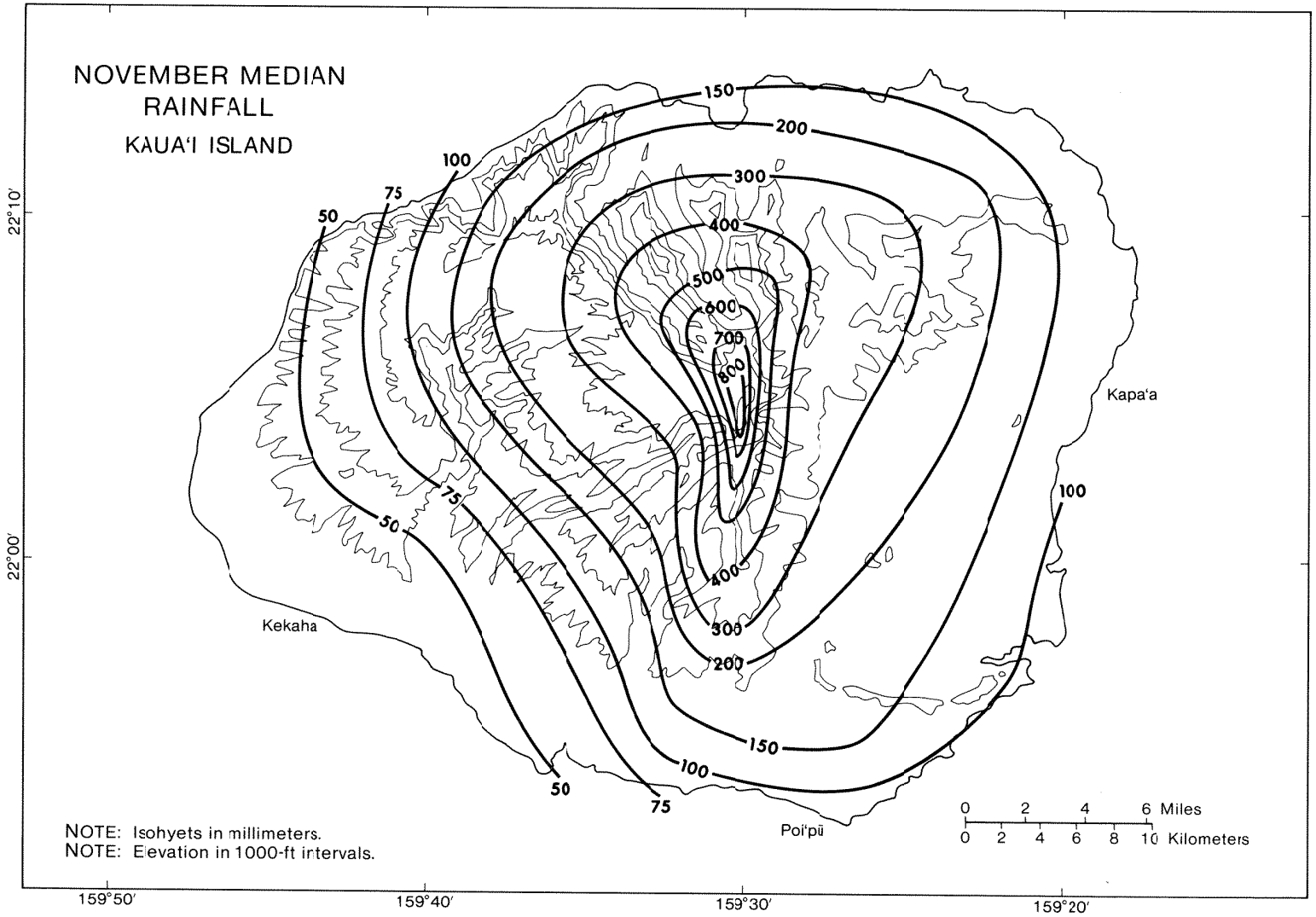
Appendix Figure A.61. August median rainfall, Kaua'i Island, Hawai'i



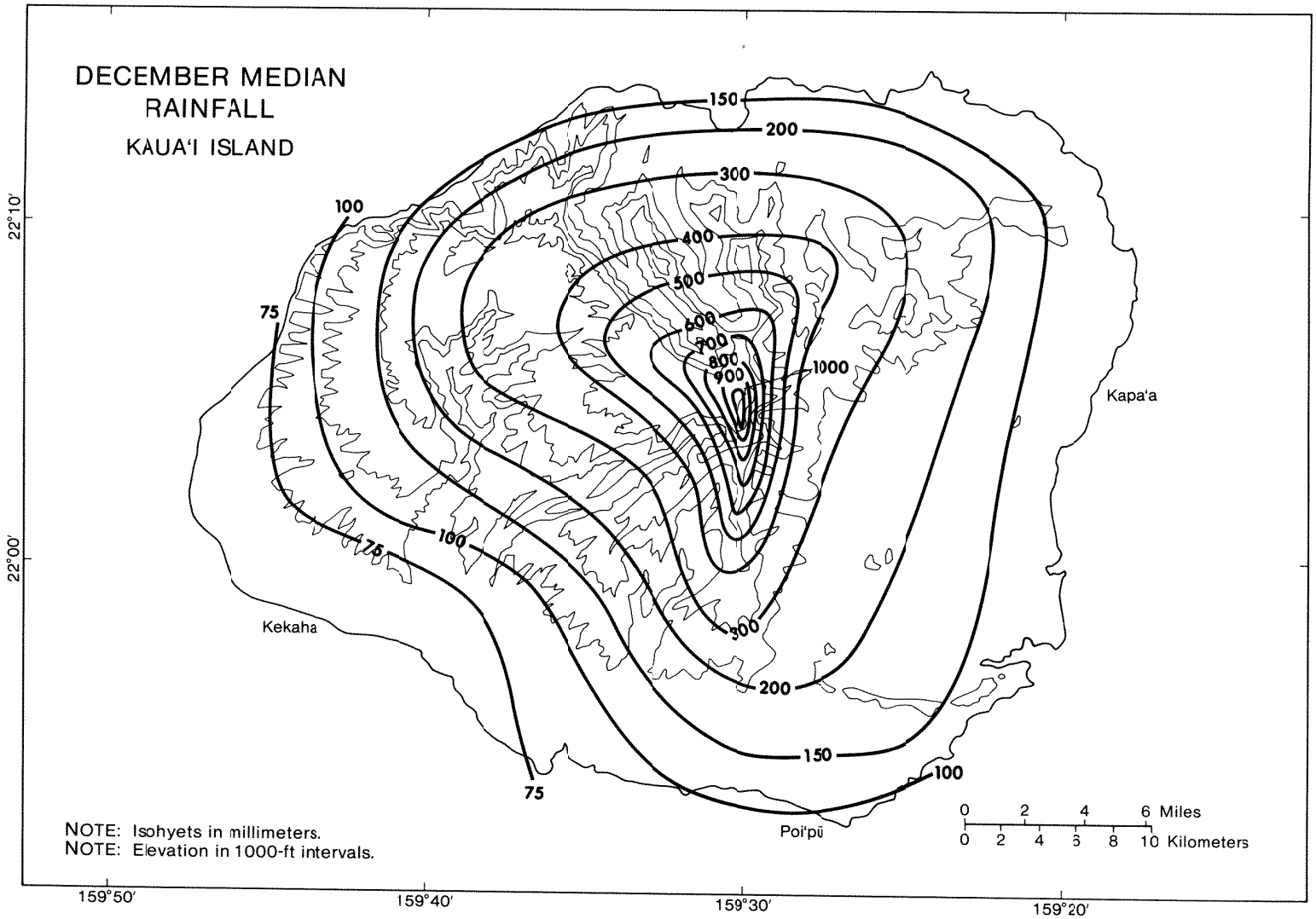
Appendix Figure A.62. September median rainfall, Kaua'i Island, Hawai'i



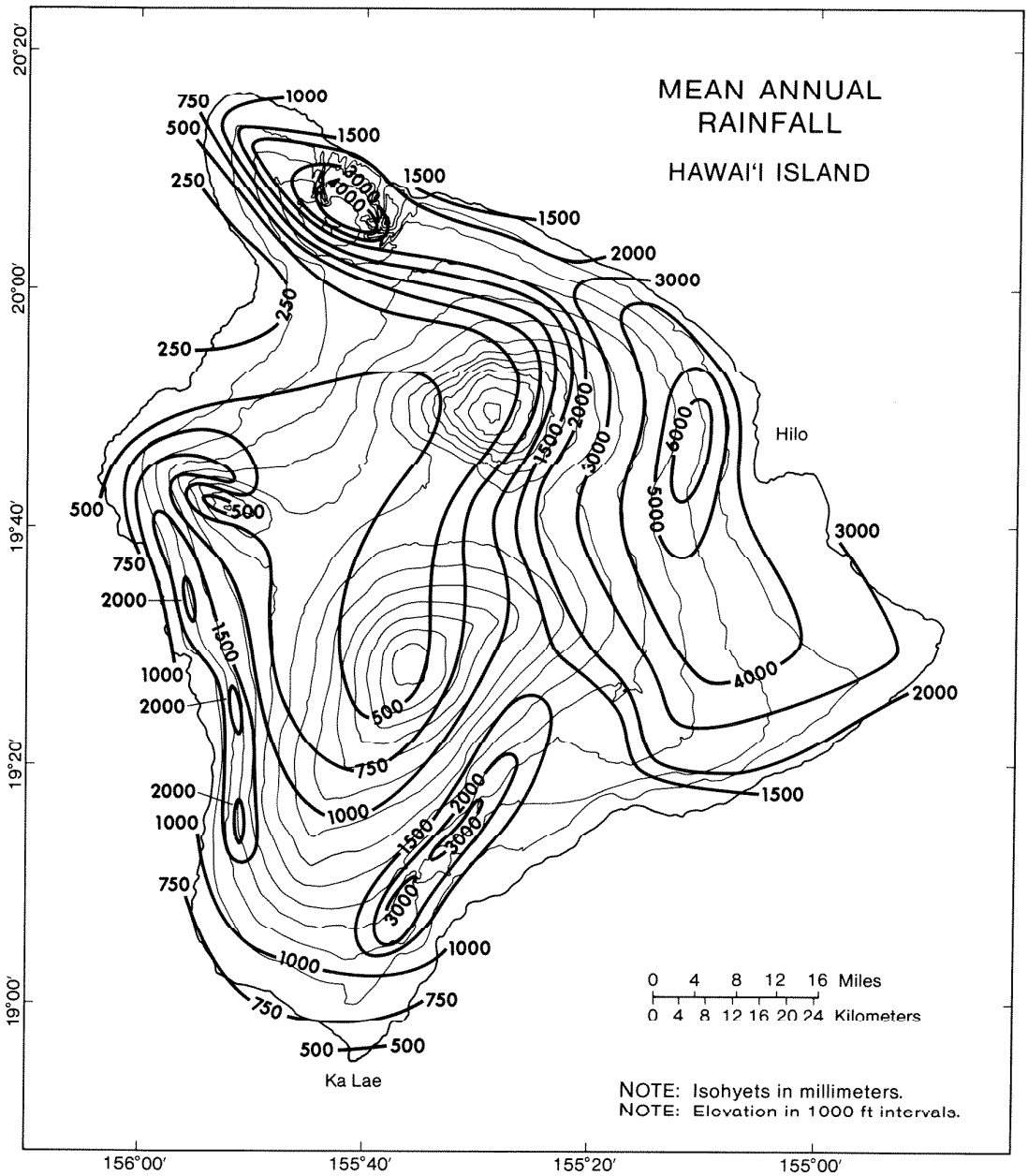
Appendix Figure A.63. October median rainfall, Kaua'i Island, Hawai'i



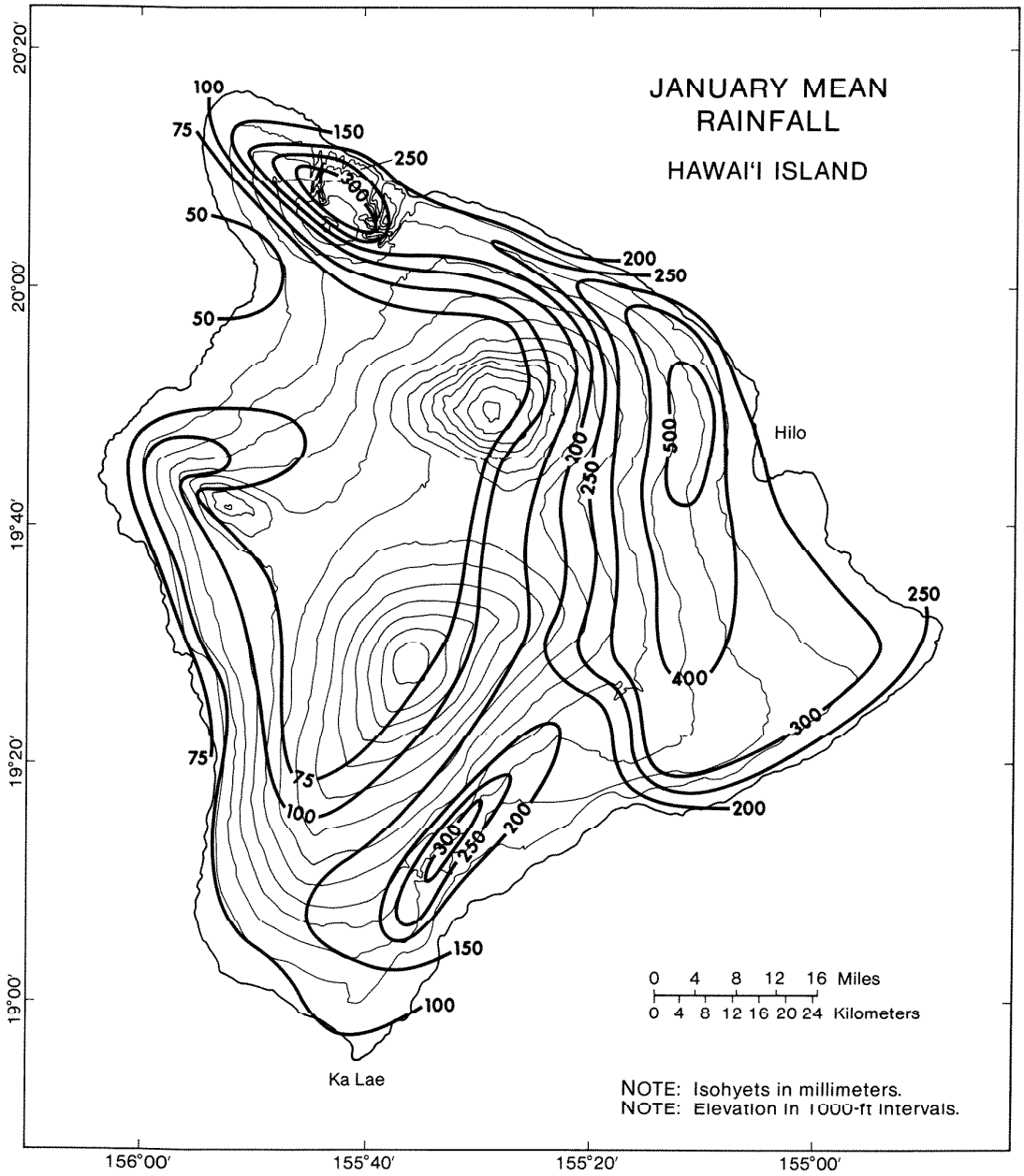
Appendix Figure A.64. November median rainfall, Kaua'i Island, Hawai'i



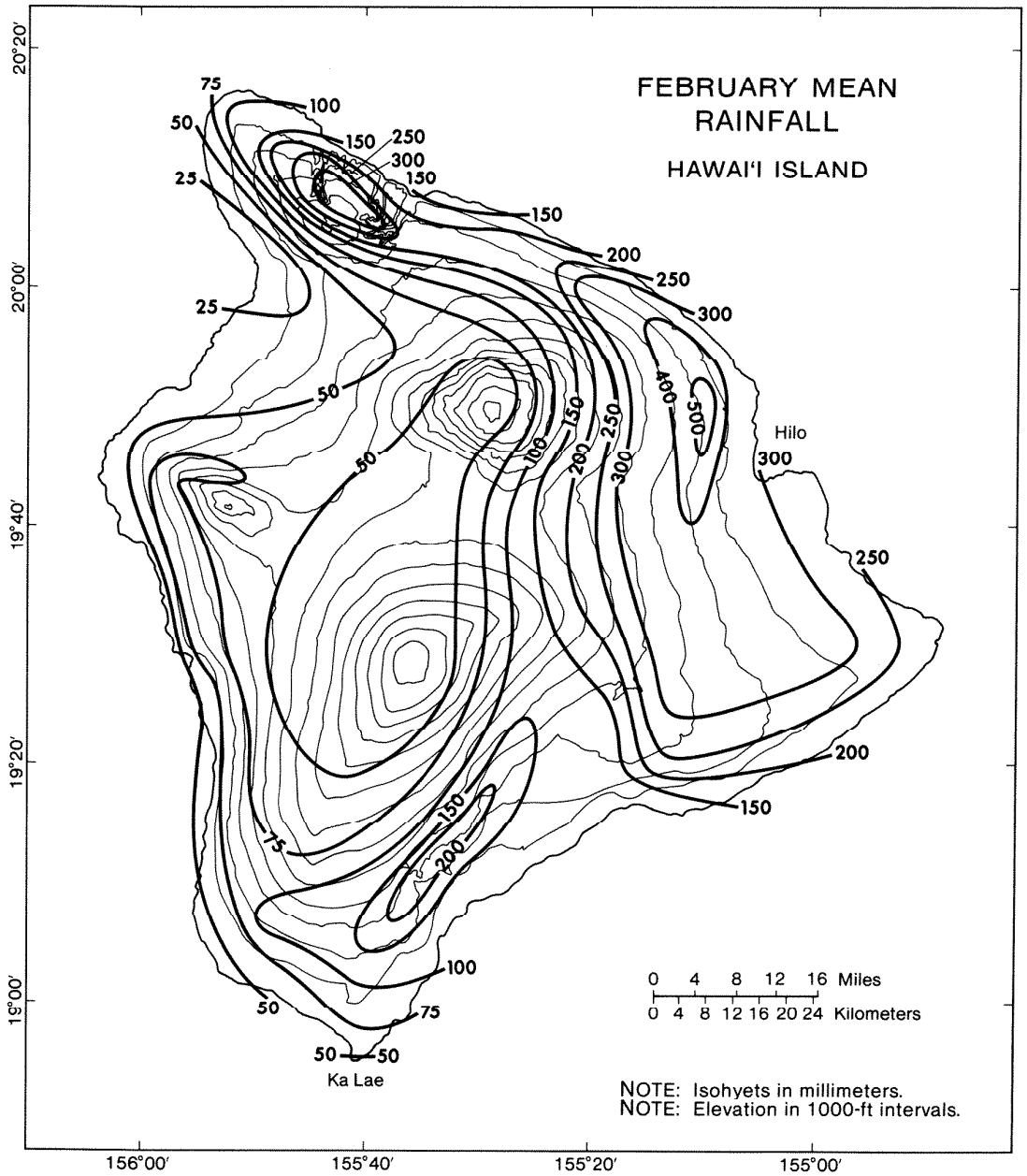
Appendix Figure A.65. December median rainfall, Kaua'i Island, Hawai'i



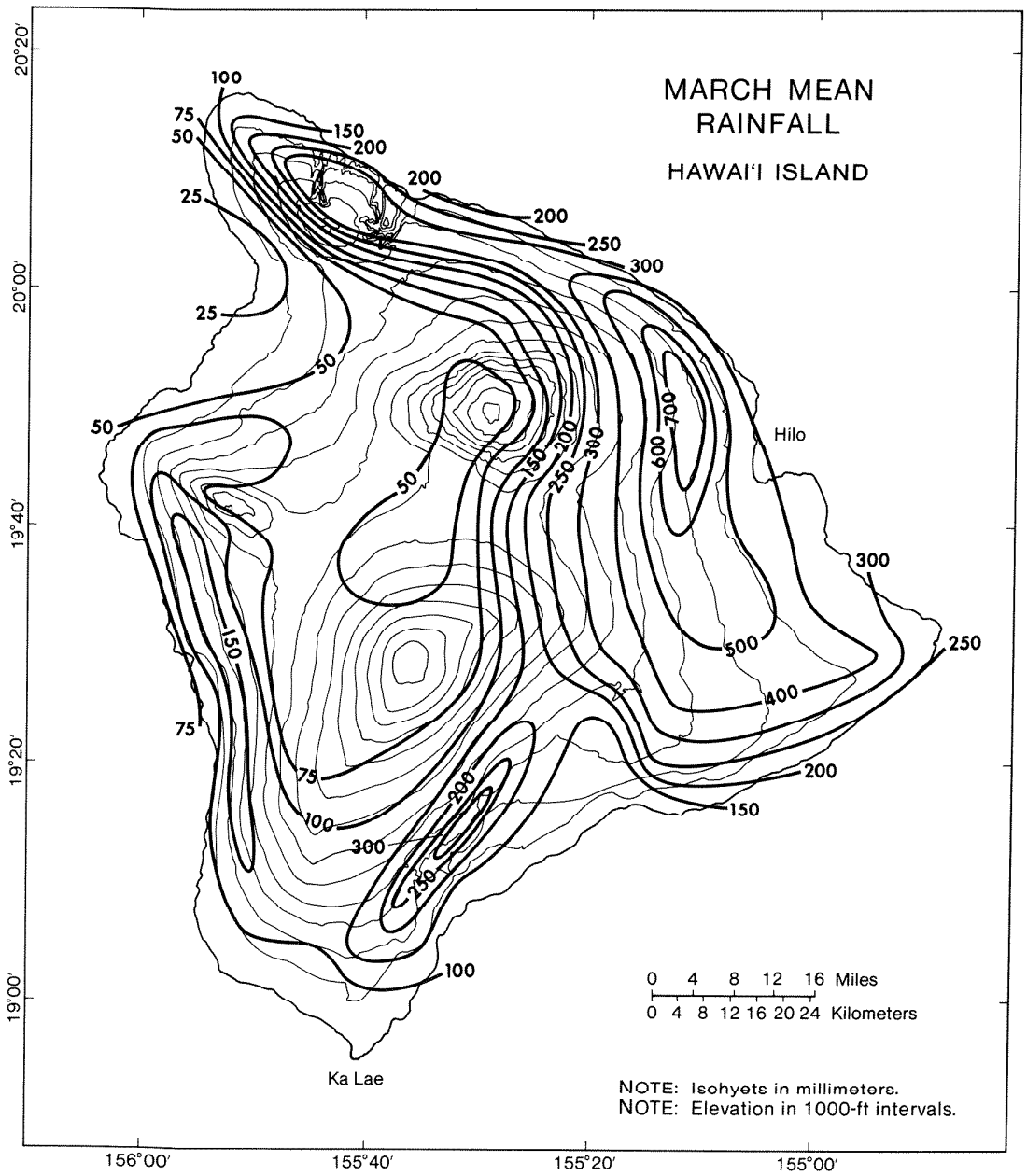
Appendix Figure A.66. Mean annual rainfall, Hawai'i Island, Hawai'i



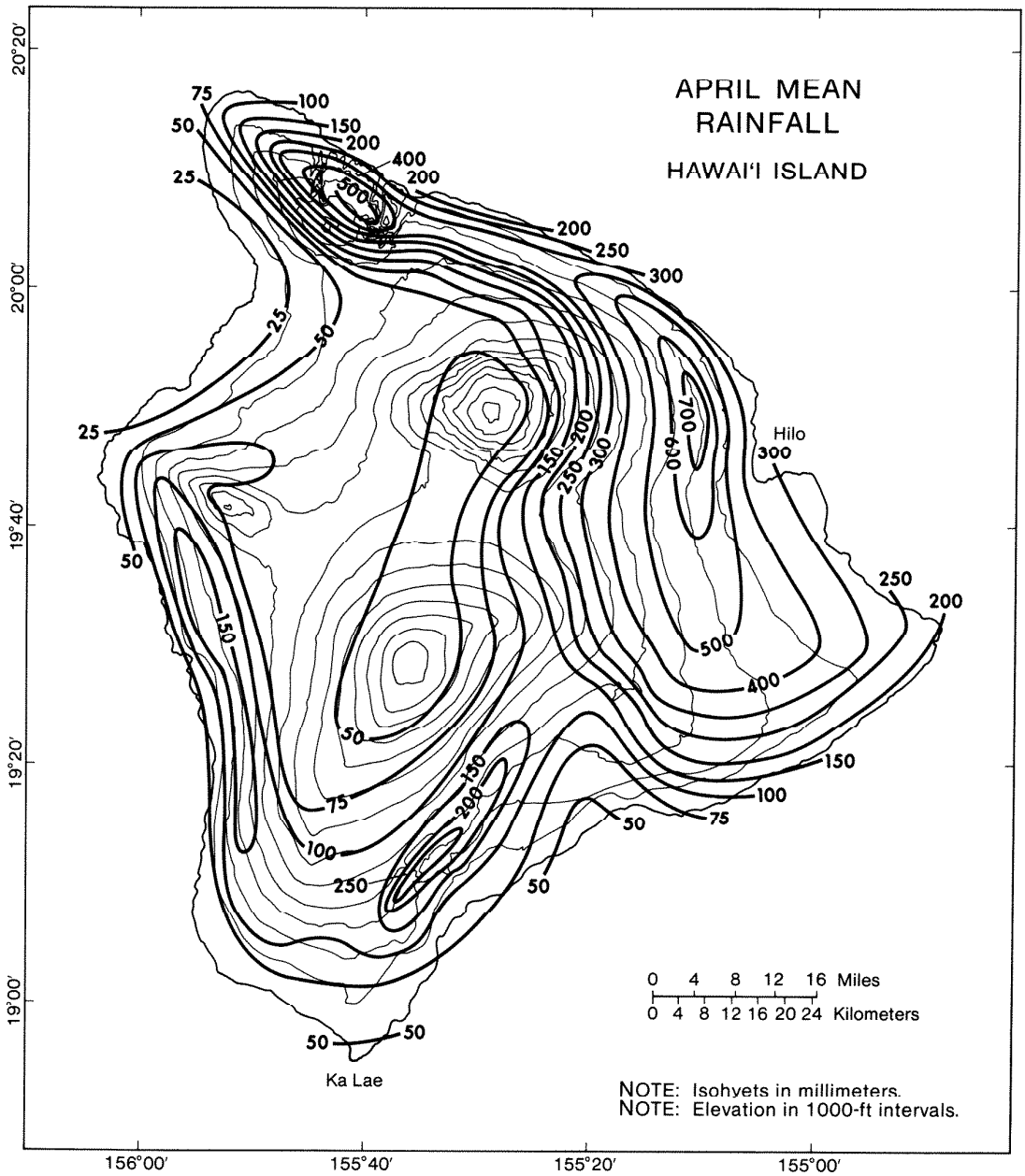
Appendix Figure A.67. January mean rainfall, Hawai'i Island, Hawai'i



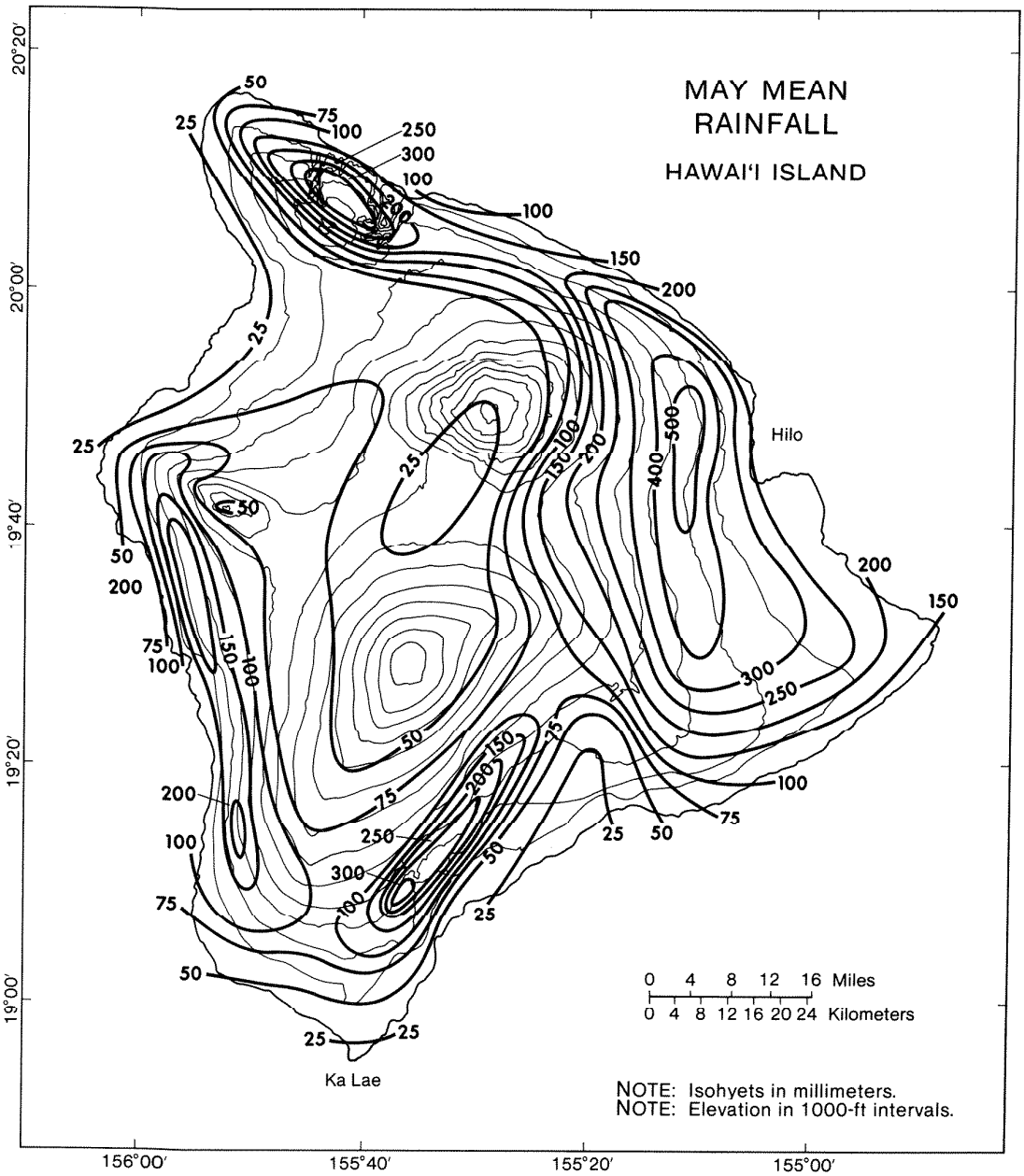
Appendix Figure A.68. February mean rainfall, Hawai'i Island, Hawai'i



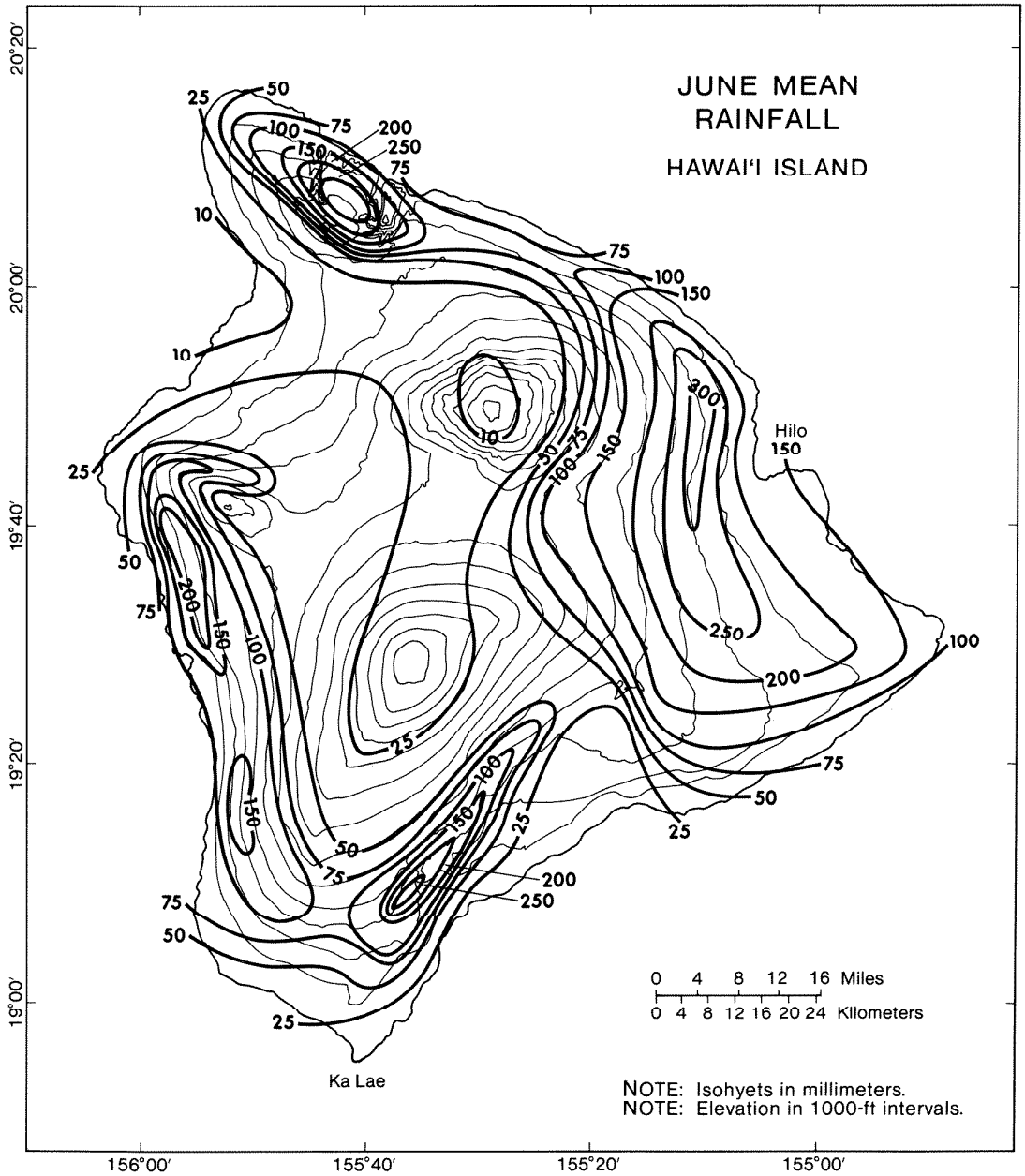
Appendix Figure A.69. March mean rainfall, Hawai'i Island, Hawai'i



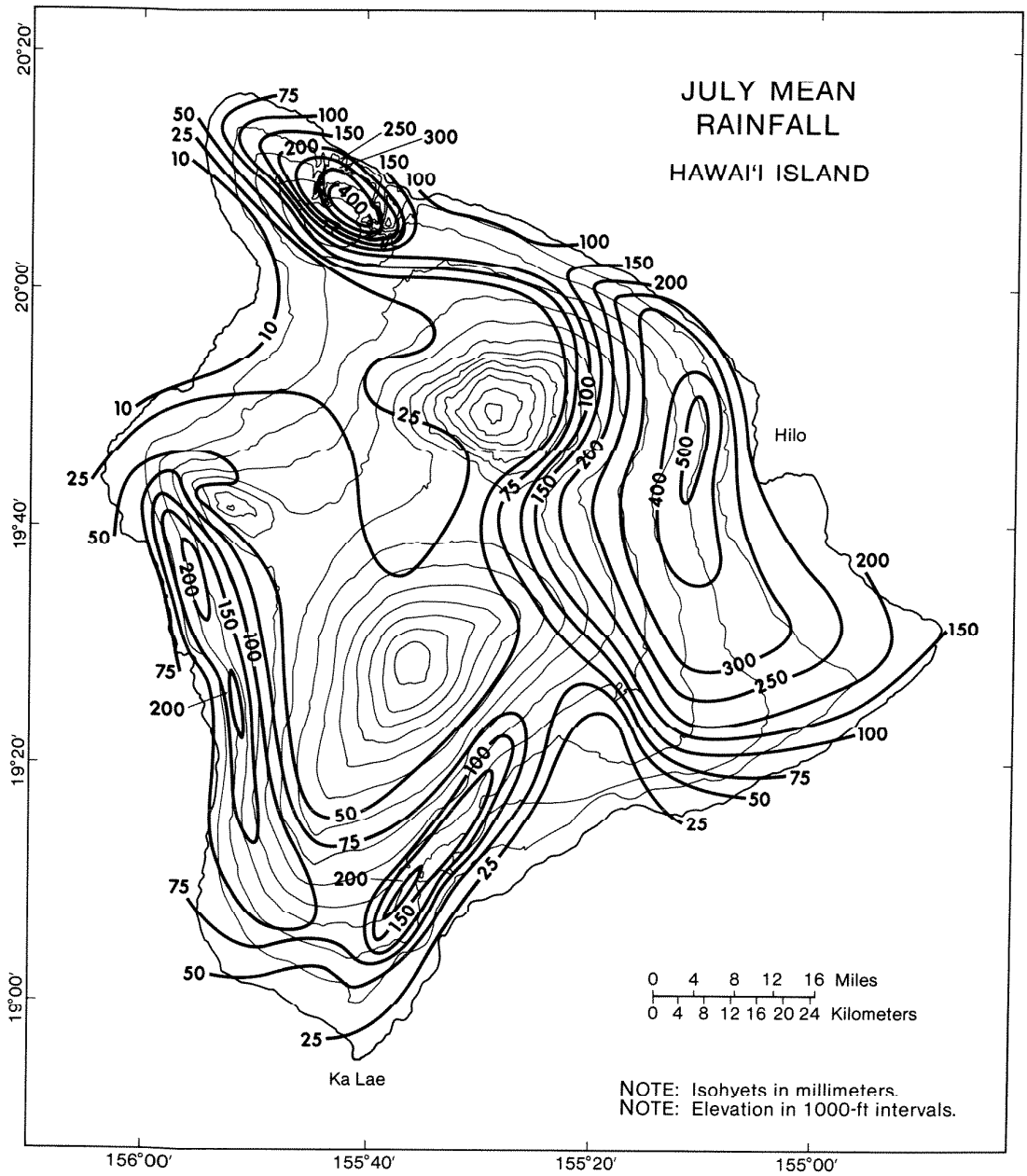
Appendix Figure A.70. April mean rainfall, Hawai'i Island, Hawai'i



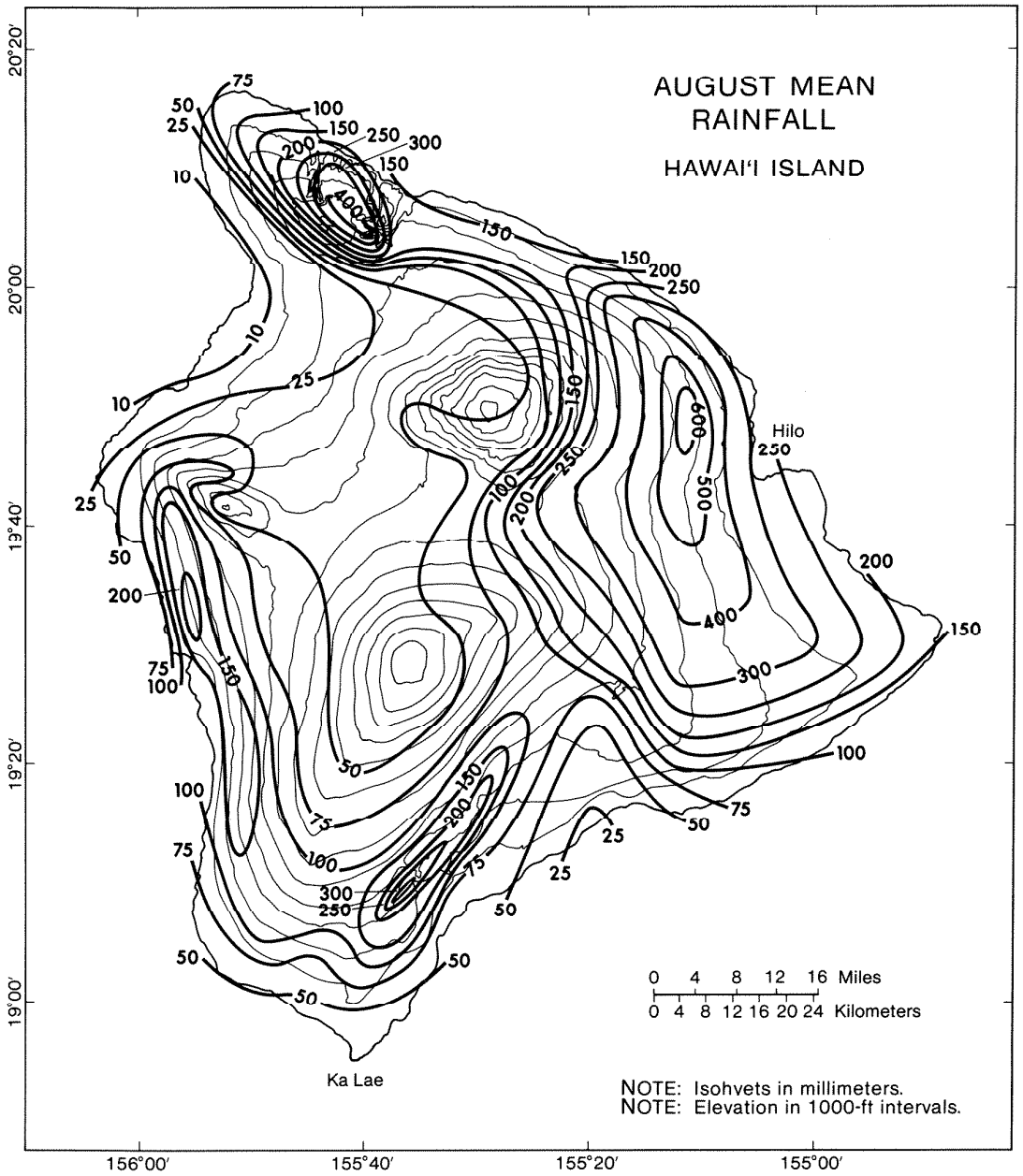
Appendix Figure A.71. May mean rainfall, Hawai'i Island, Hawai'i



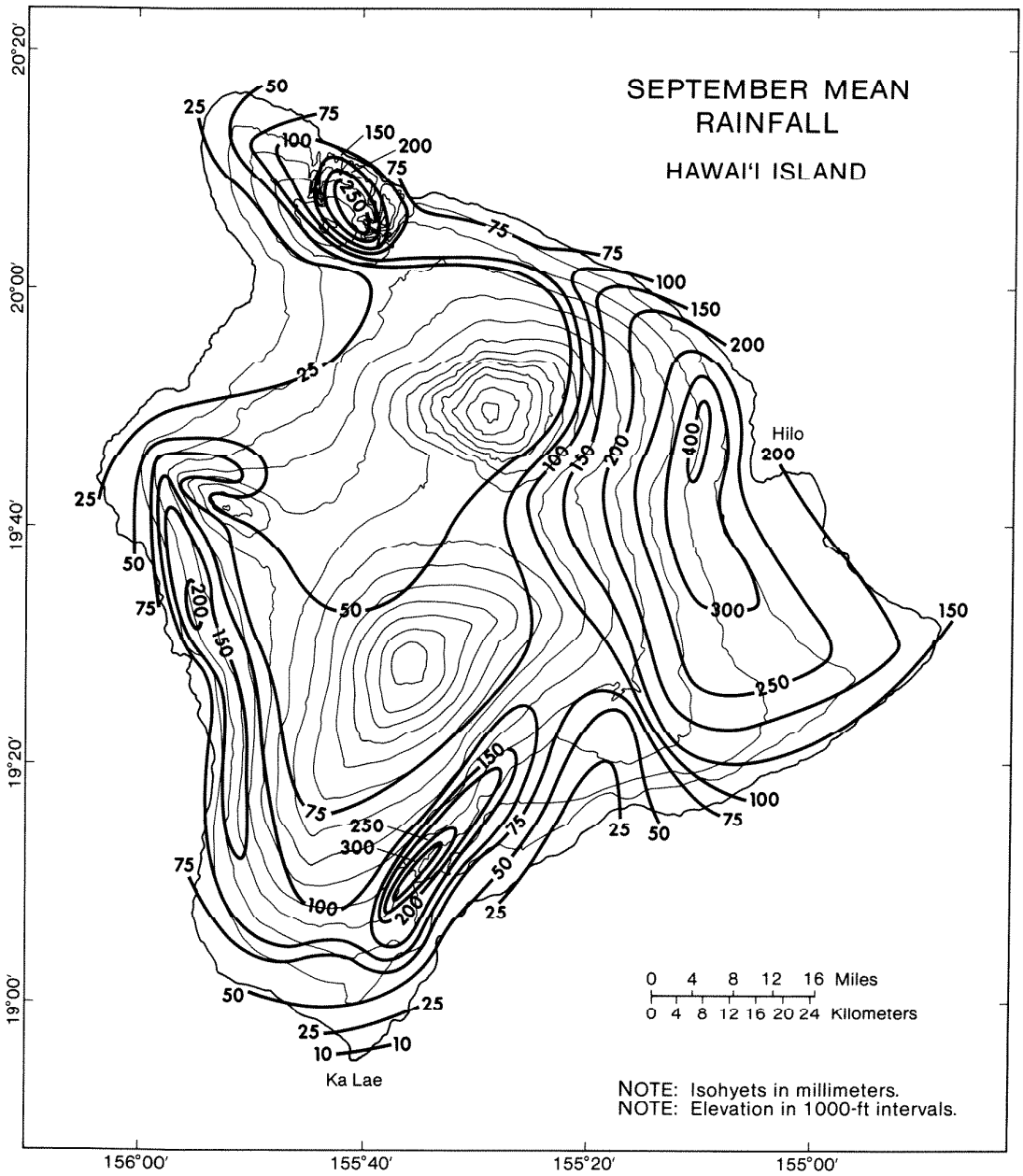
Appendix Figure A.72. June mean rainfall, Hawai'i Island, Hawai'i



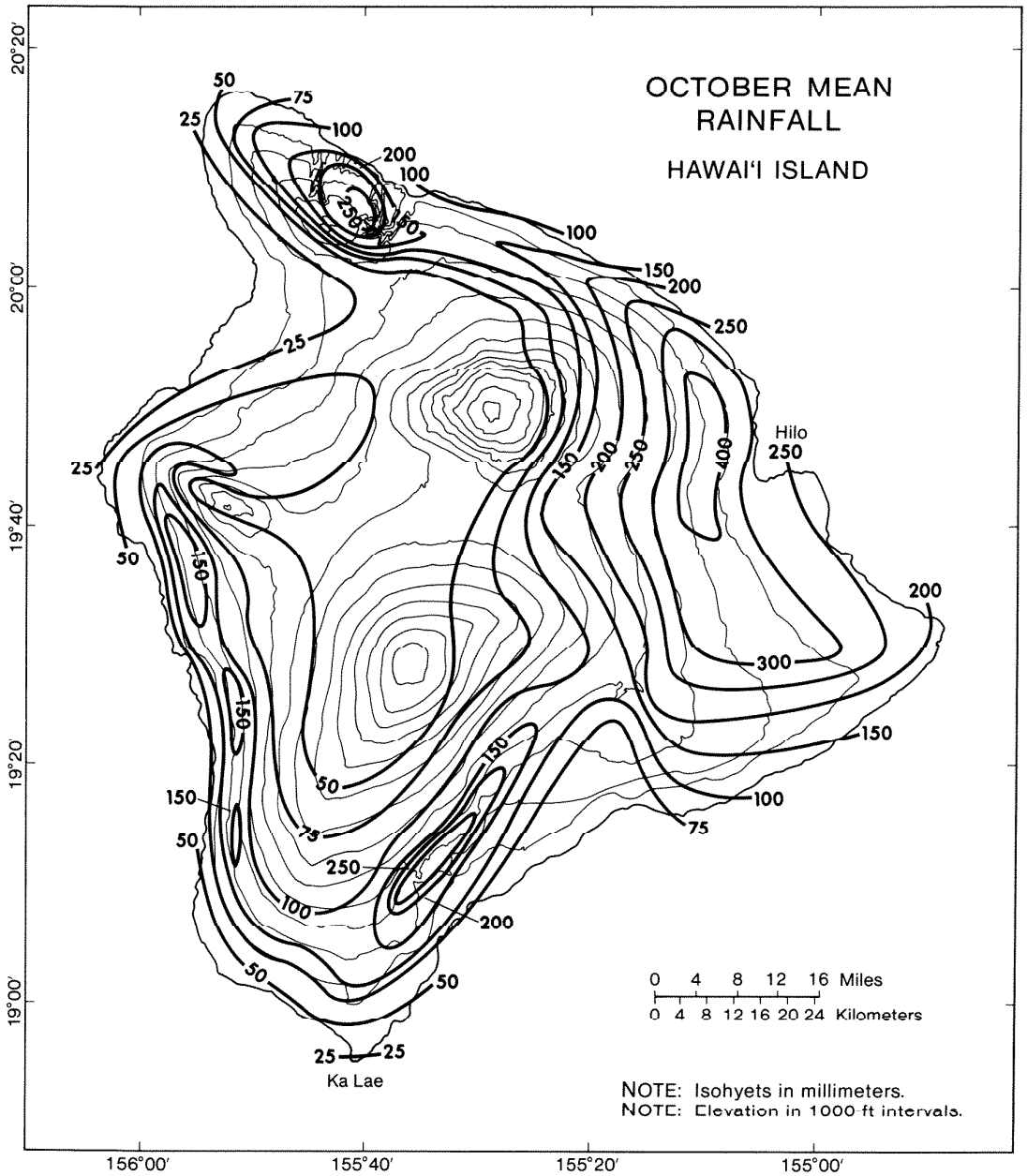
Appendix Figure A.73. July mean rainfall, Hawai'i Island, Hawai'i



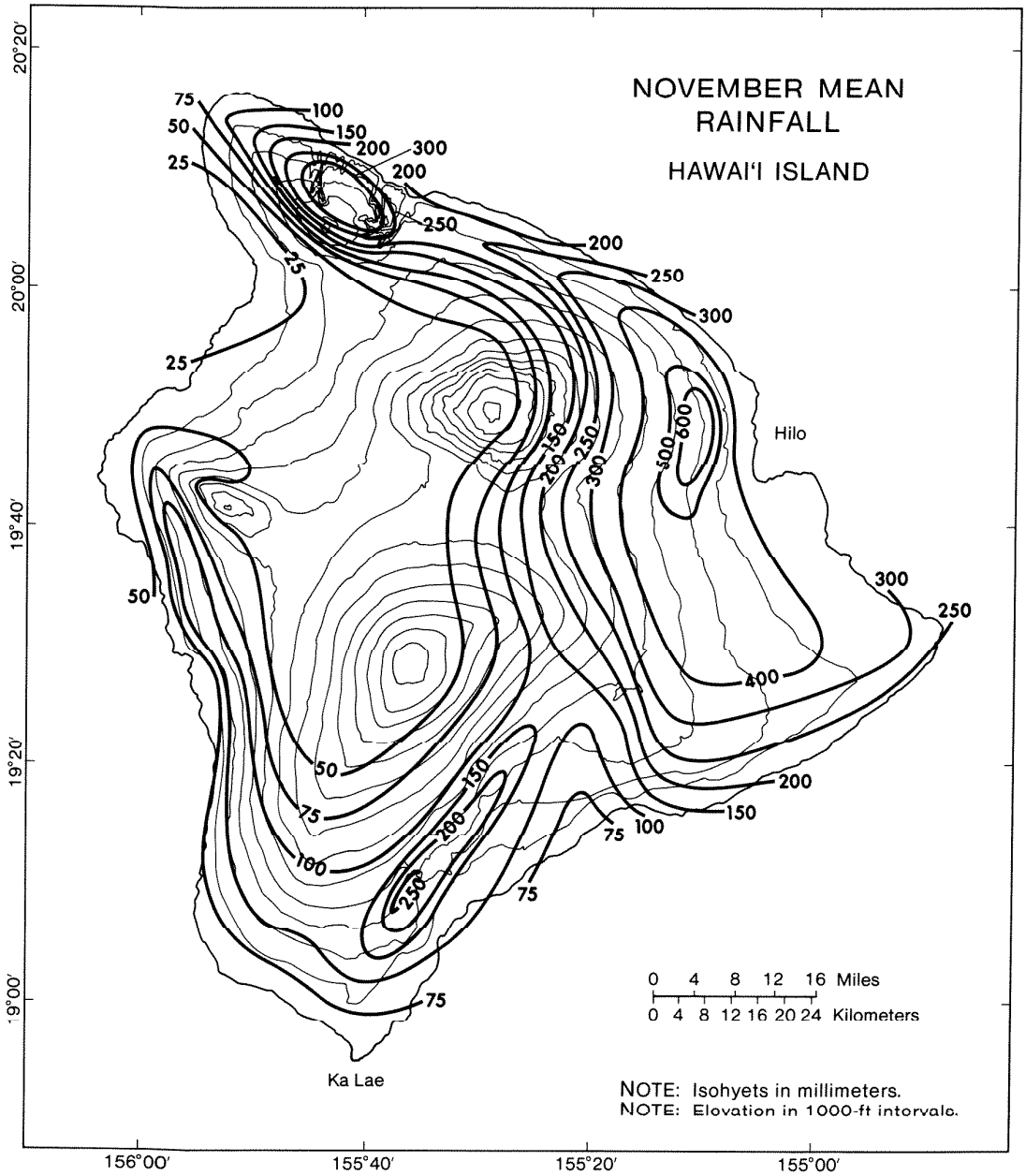
Appendix Figure A.74. August mean rainfall, Hawai'i Island, Hawai'i



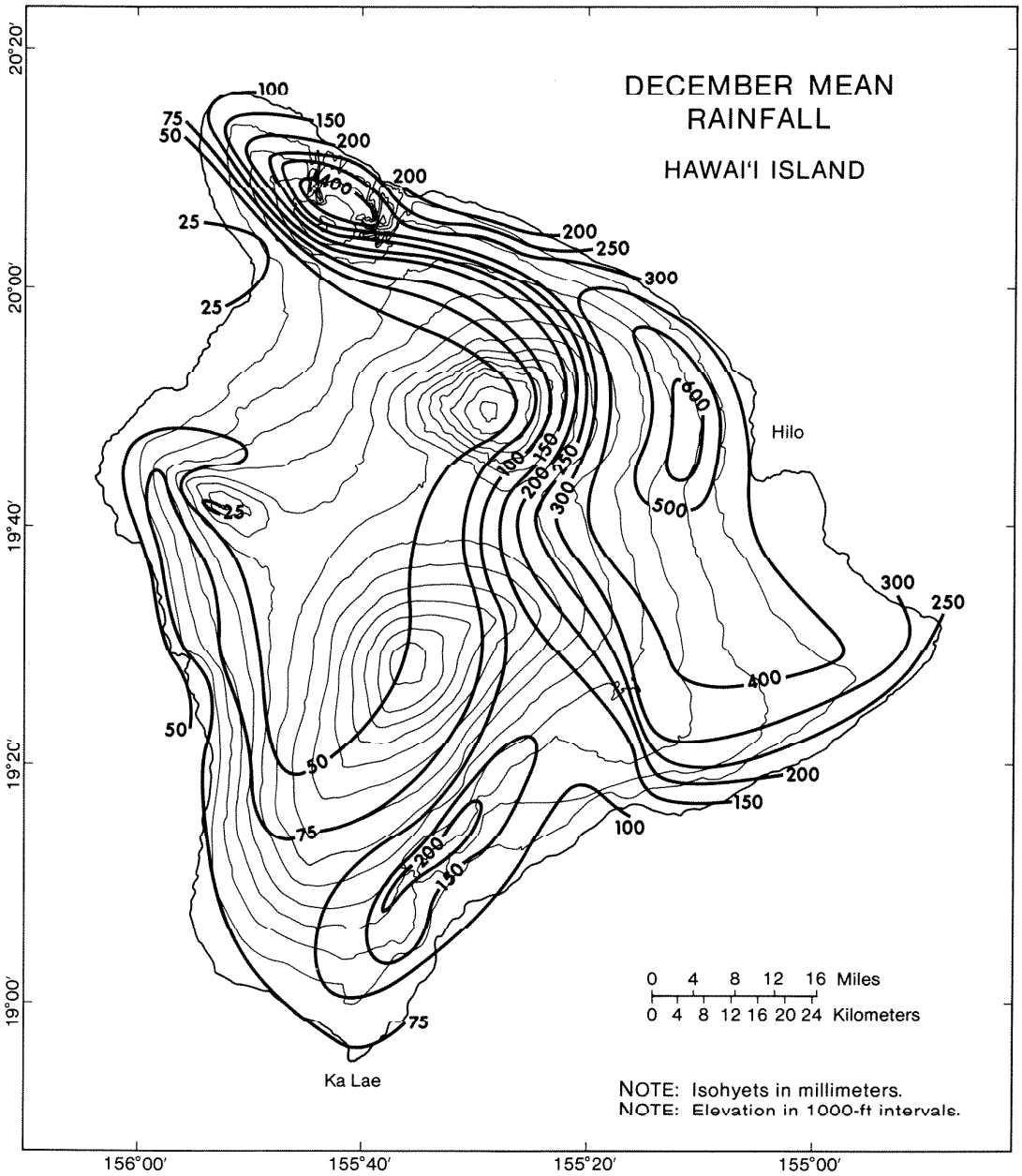
Appendix Figure A.75. September mean rainfall, Hawai'i Island, Hawai'i



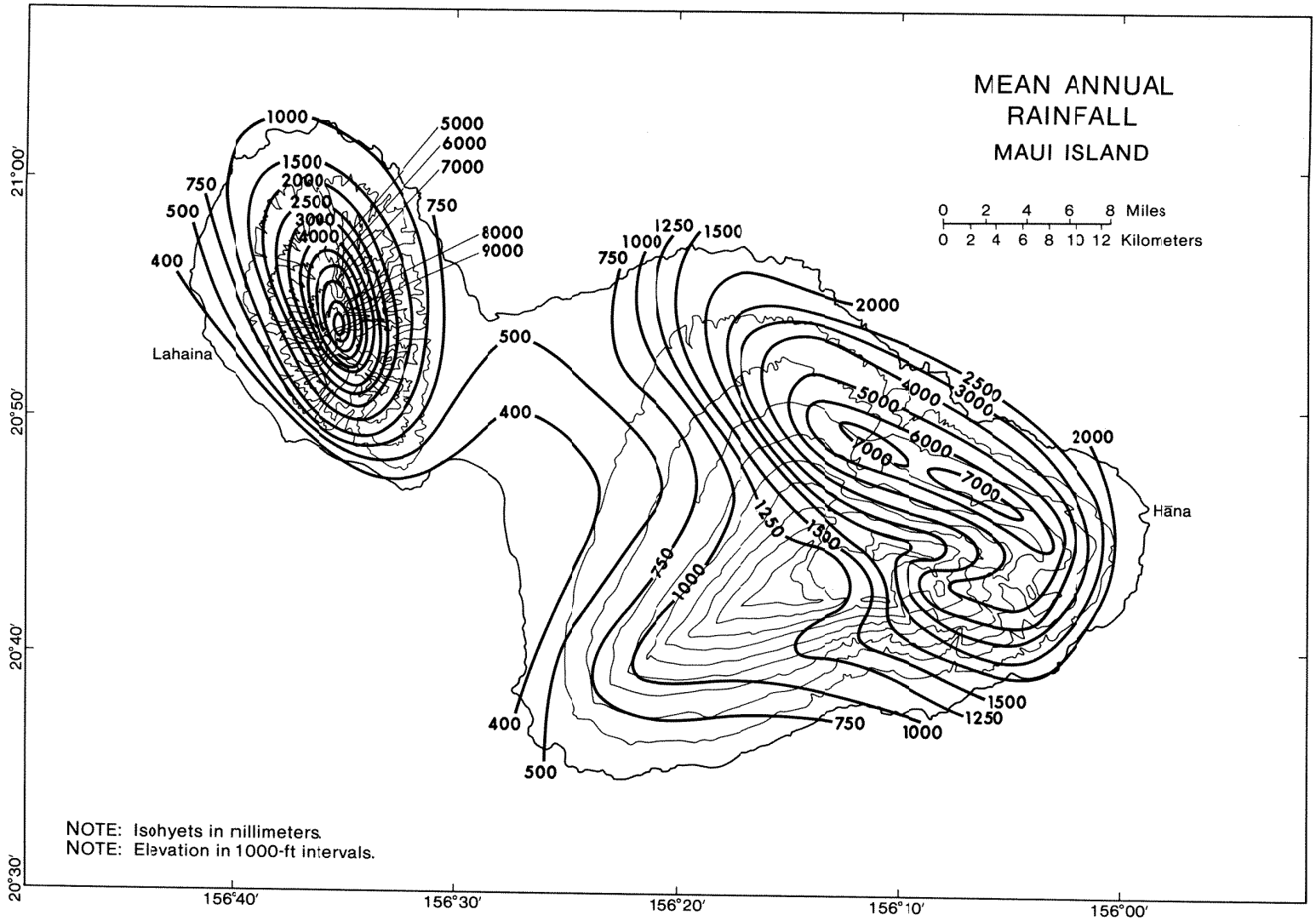
Appendix Figure A.76. October mean rainfall, Hawai'i Island, Hawai'i



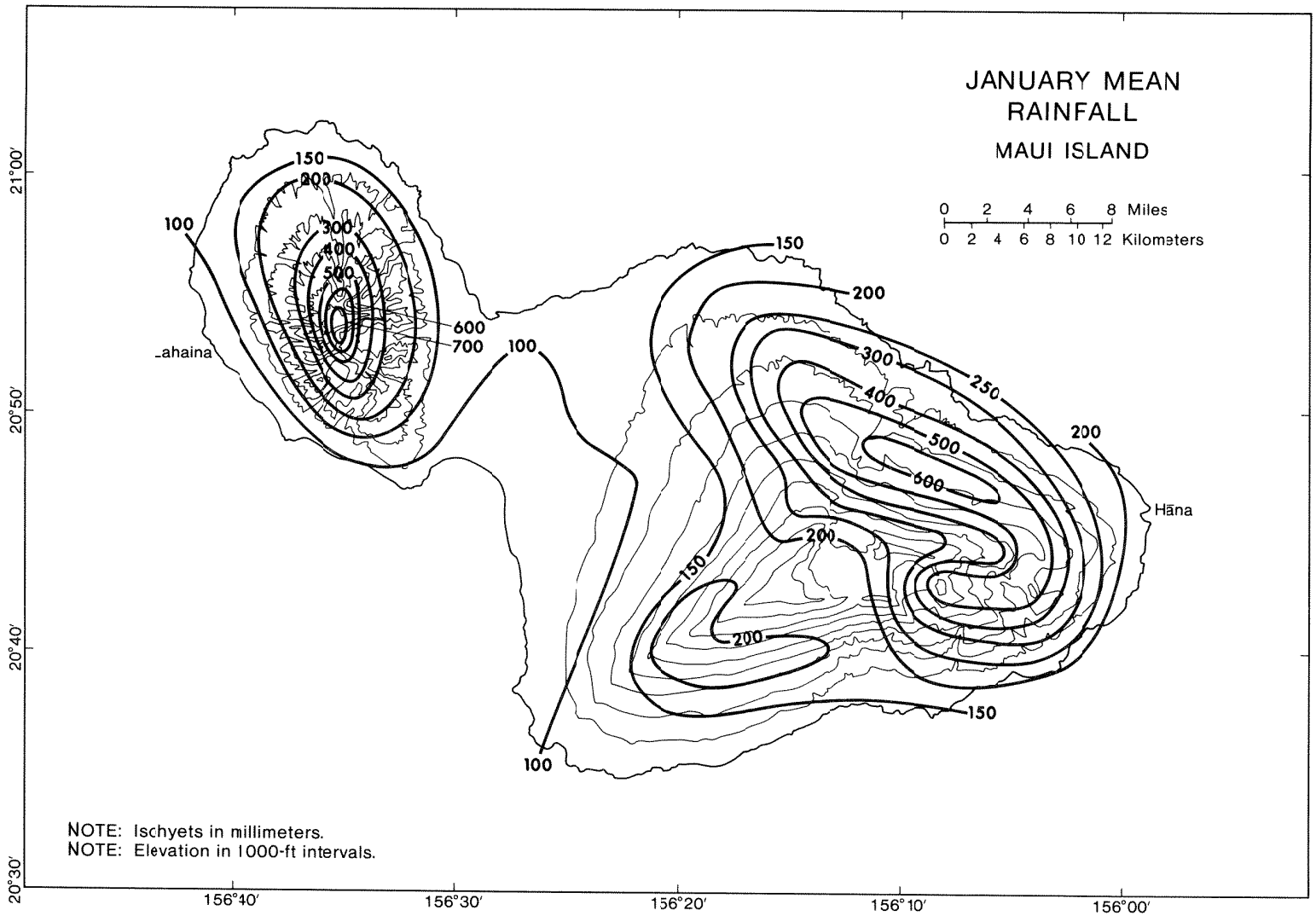
Appendix Figure A.77. November mean rainfall, Hawai'i Island, Hawai'i



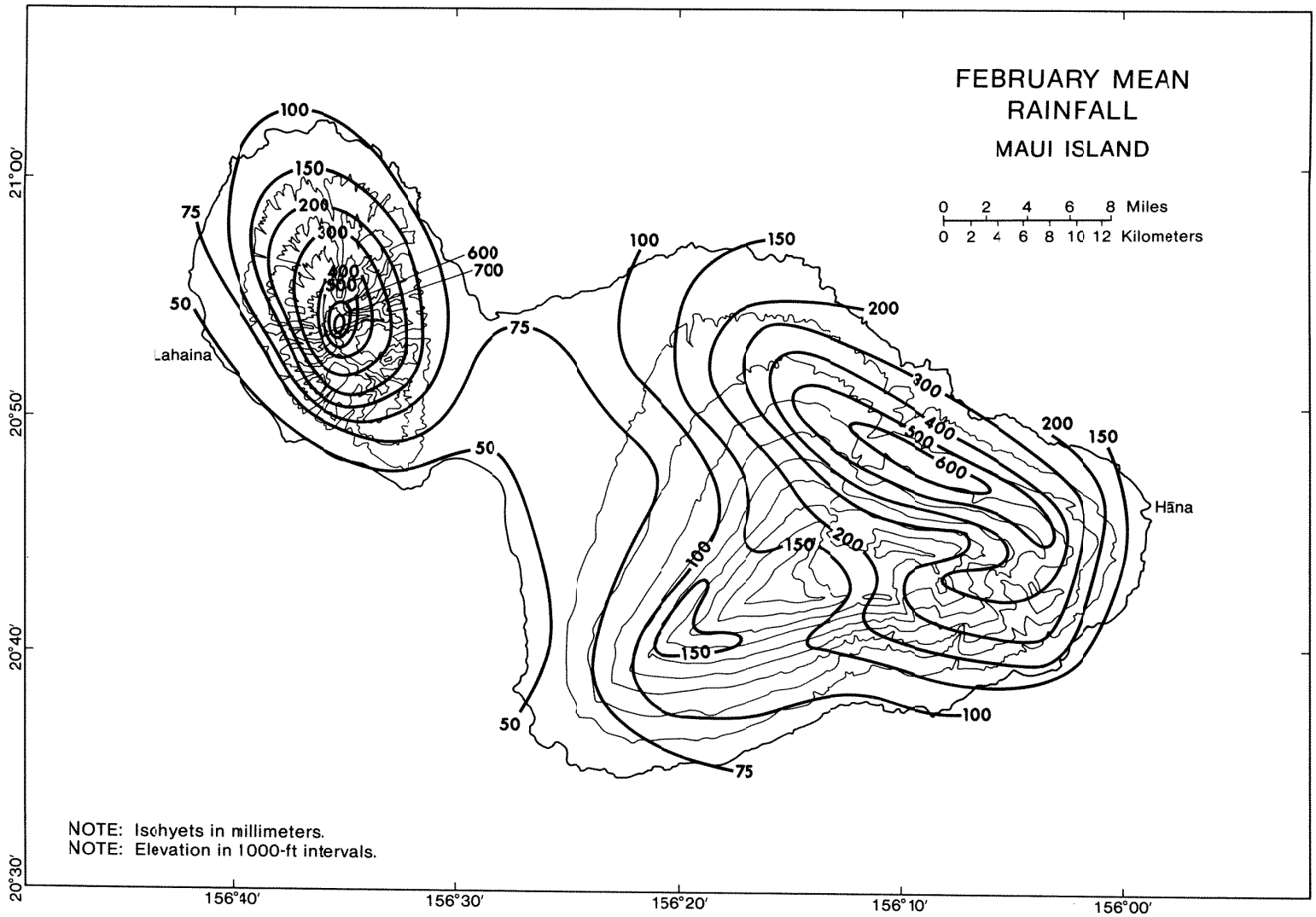
Appendix Figure A.78. December mean rainfall, Hawai'i Island, Hawai'i



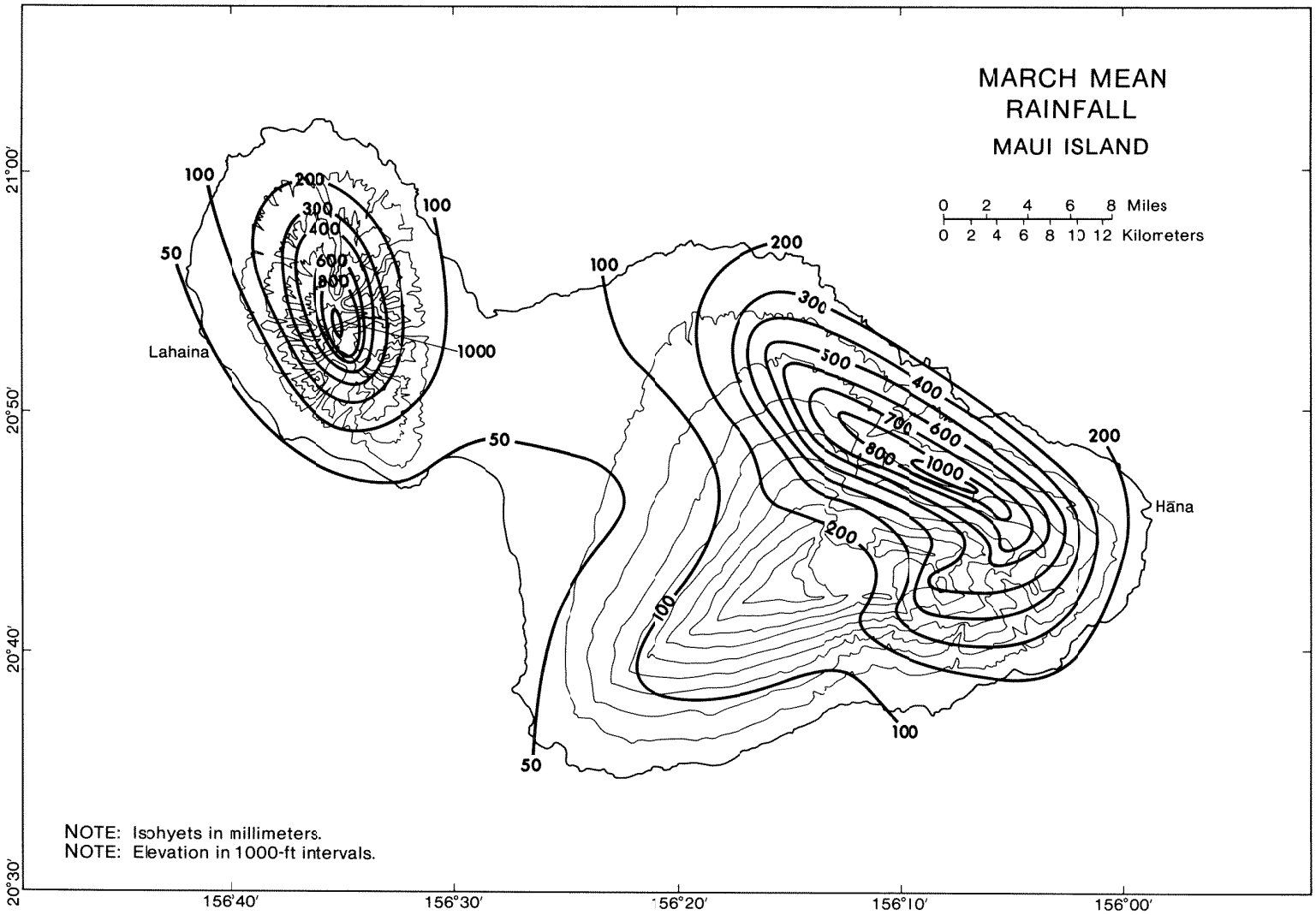
Appendix Figure A.79. Mean annual rainfall, Maui Island, Hawai'i



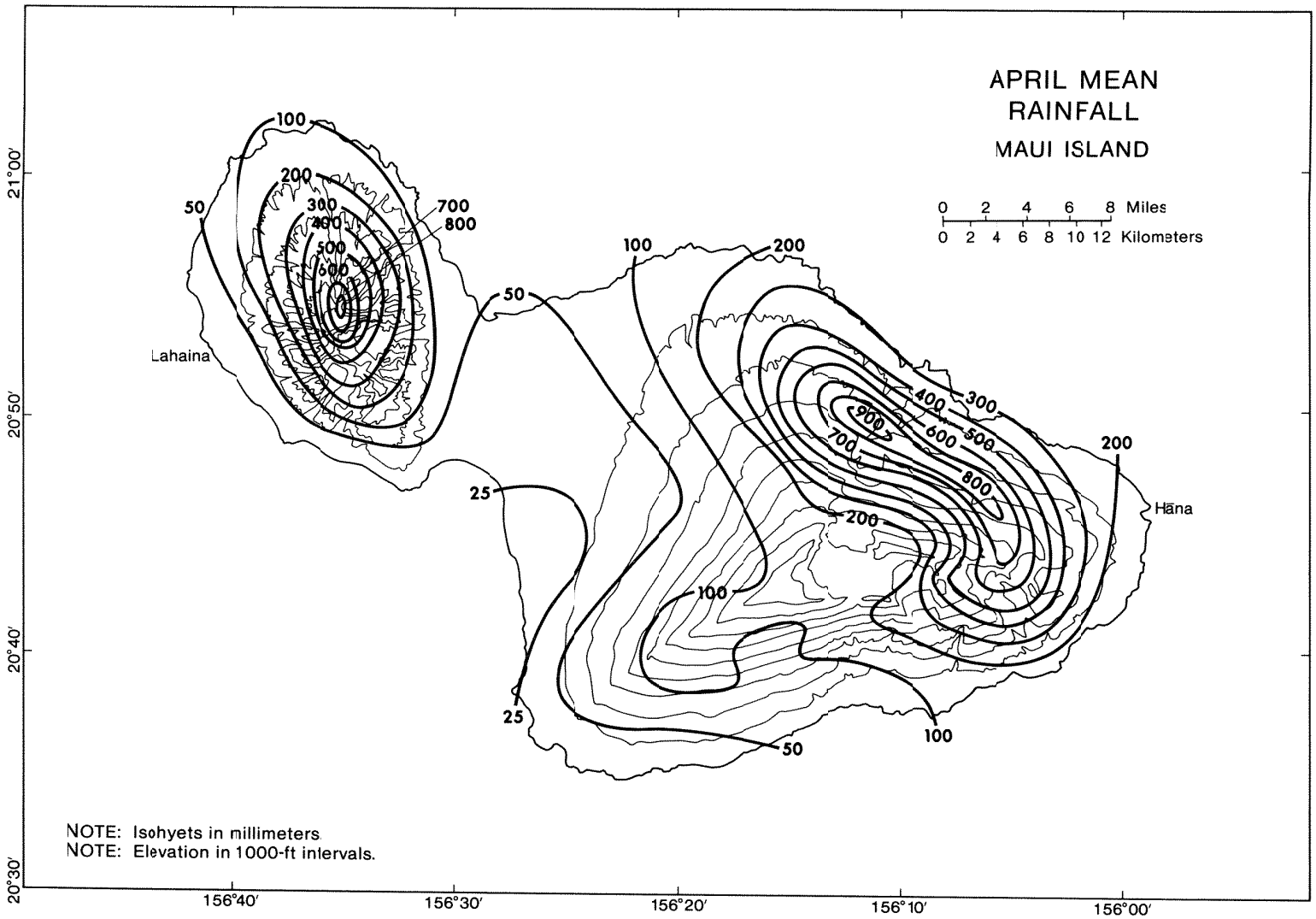
Appendix Figure A.80. January mean rainfall, Maui Island, Hawai'i



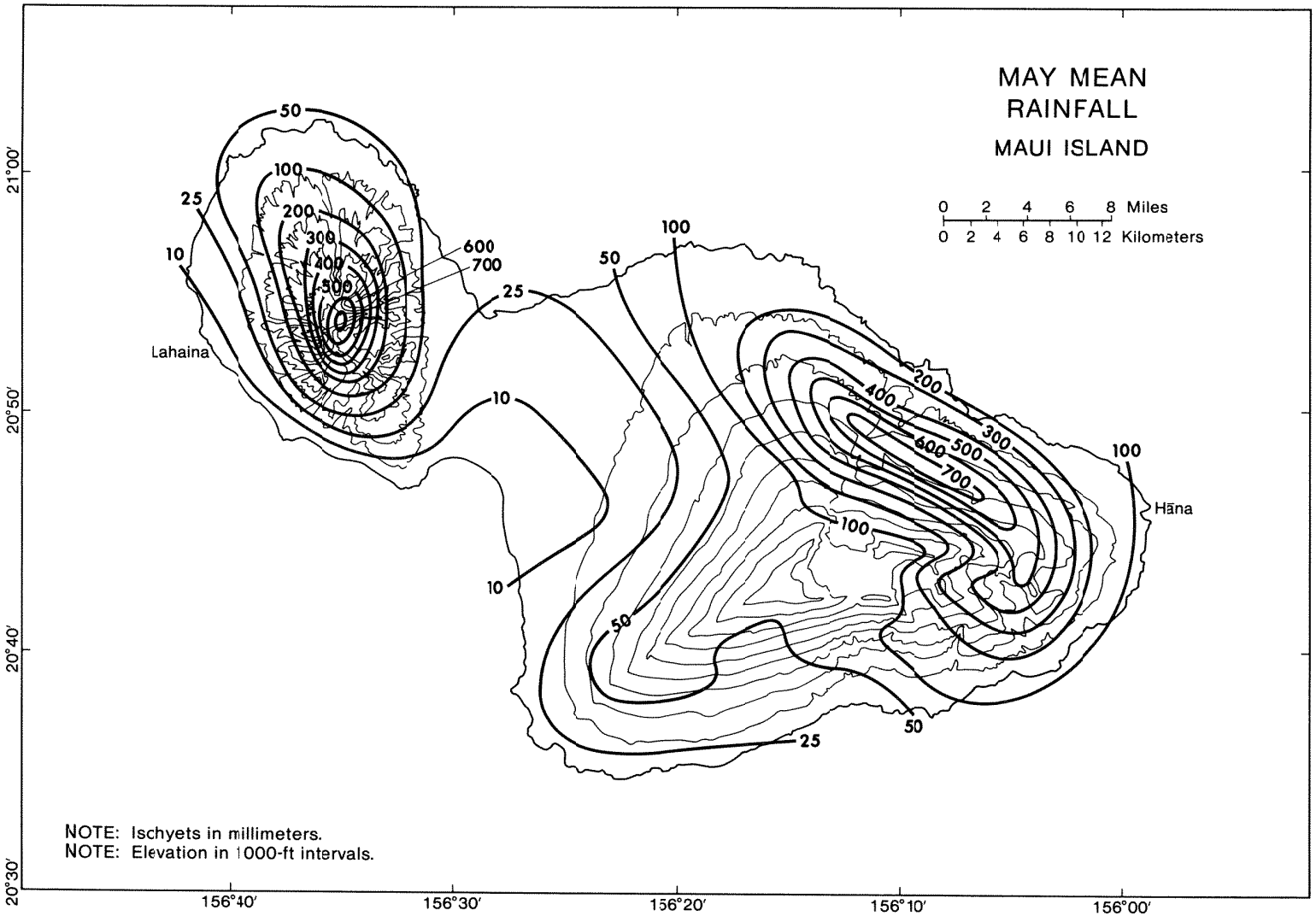
Appendix Figure A.81. February mean rainfall, Maui Island, Hawai'i



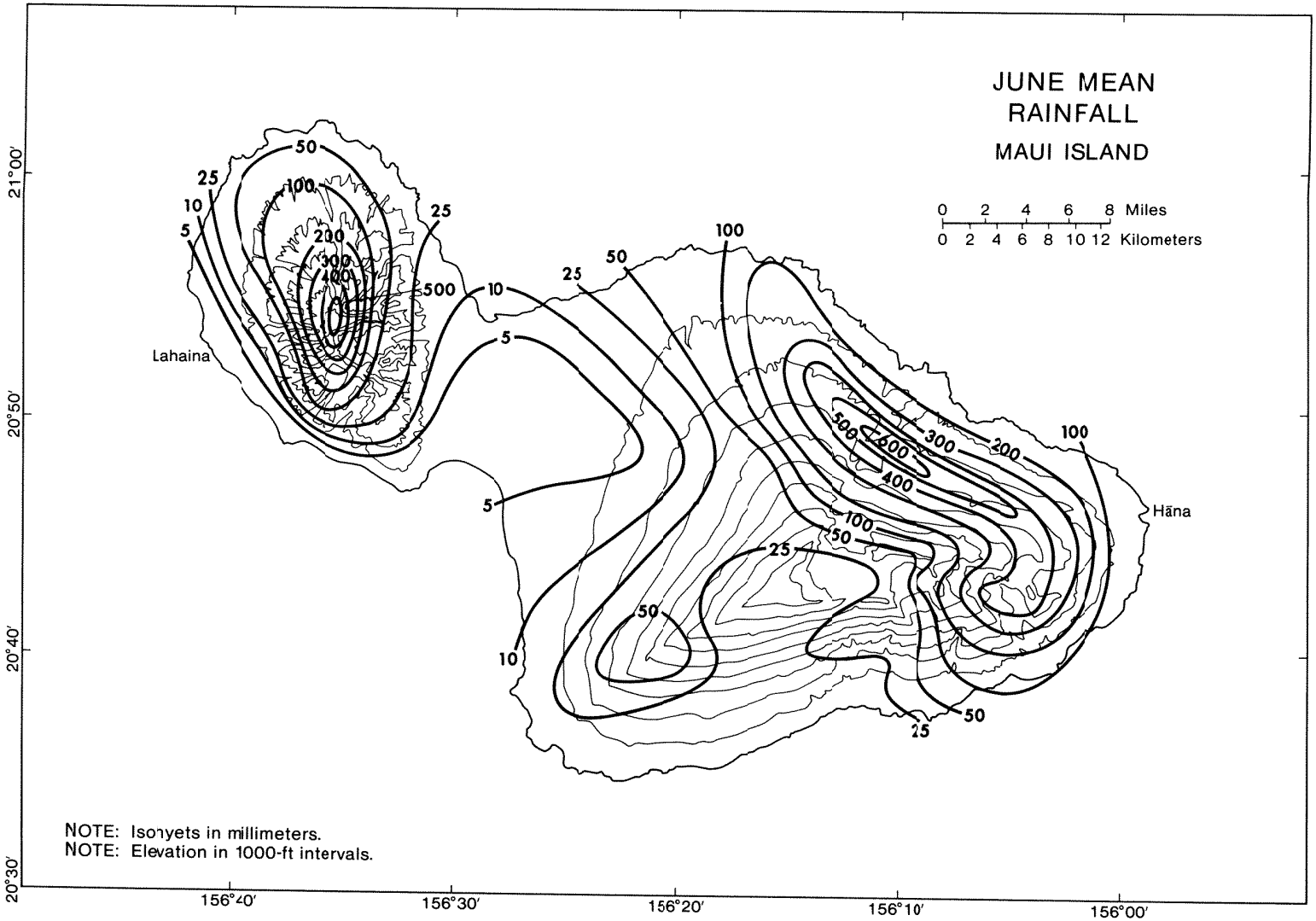
Appendix Figure A.82. March mean rainfall, Maui Island, Hawai'i



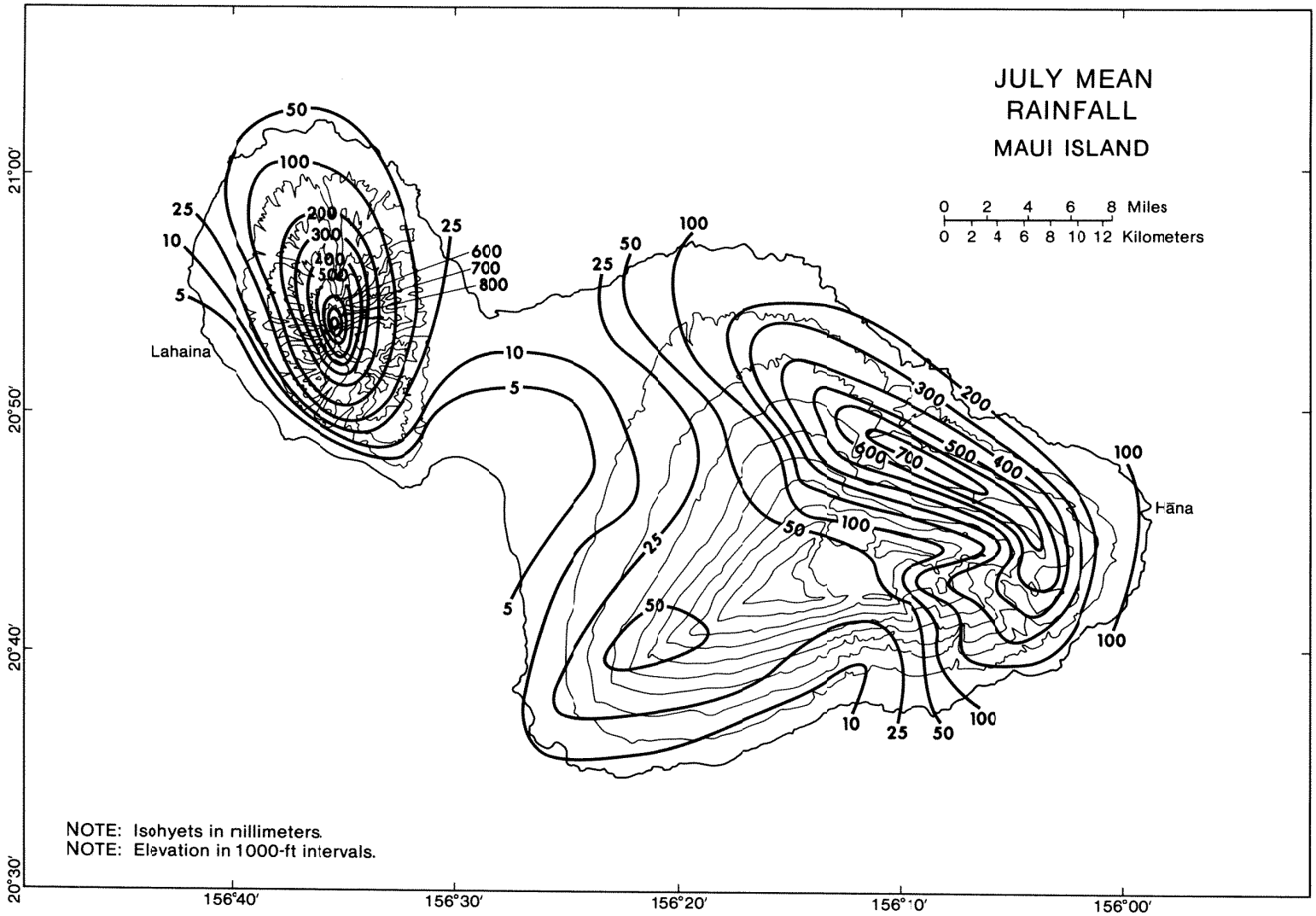
Appendix Figure A.83. April mean rainfall, Maui Island, Hawai'i



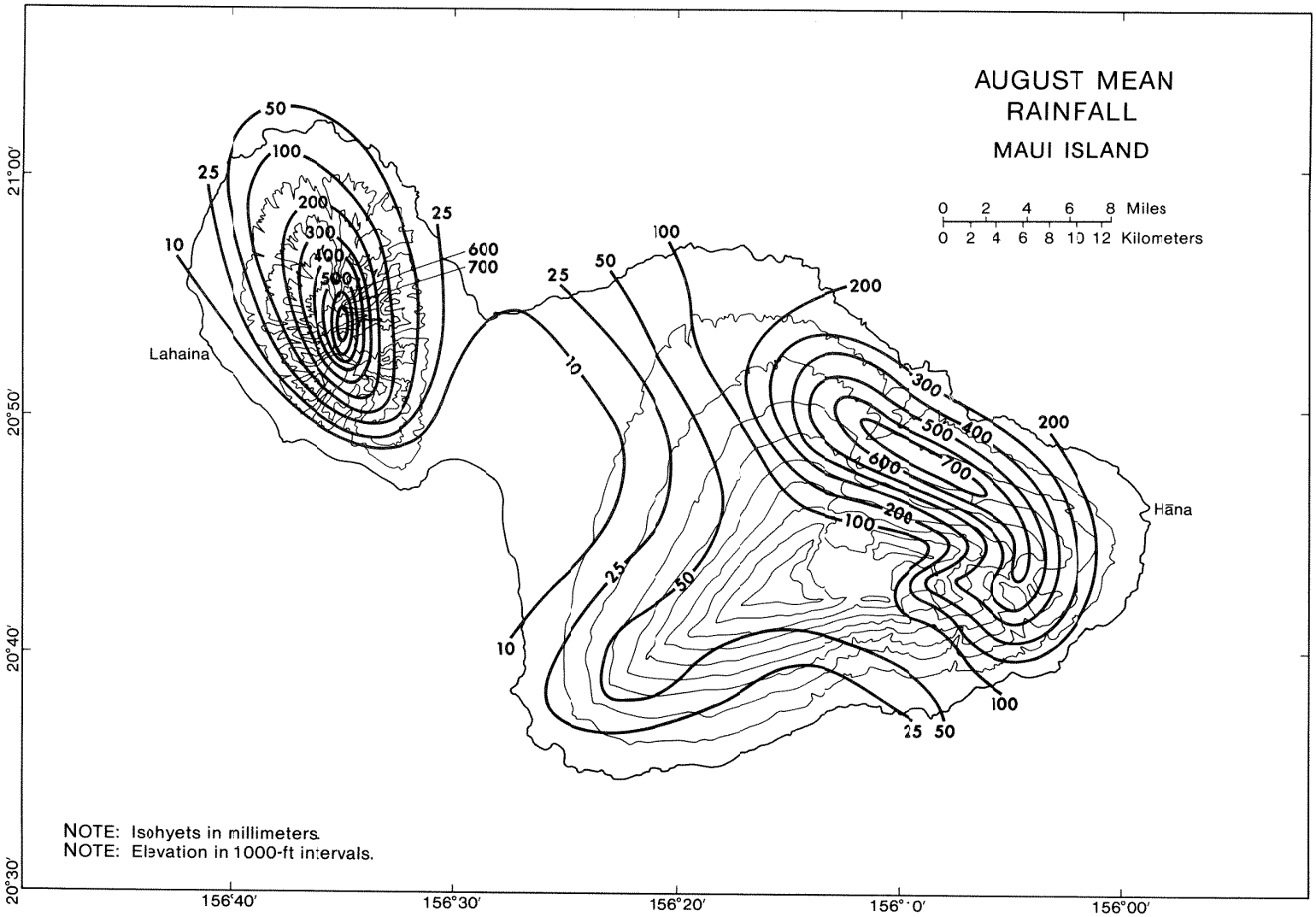
Appendix Figure A.84. May mean rainfall, Maui Island, Hawai'i



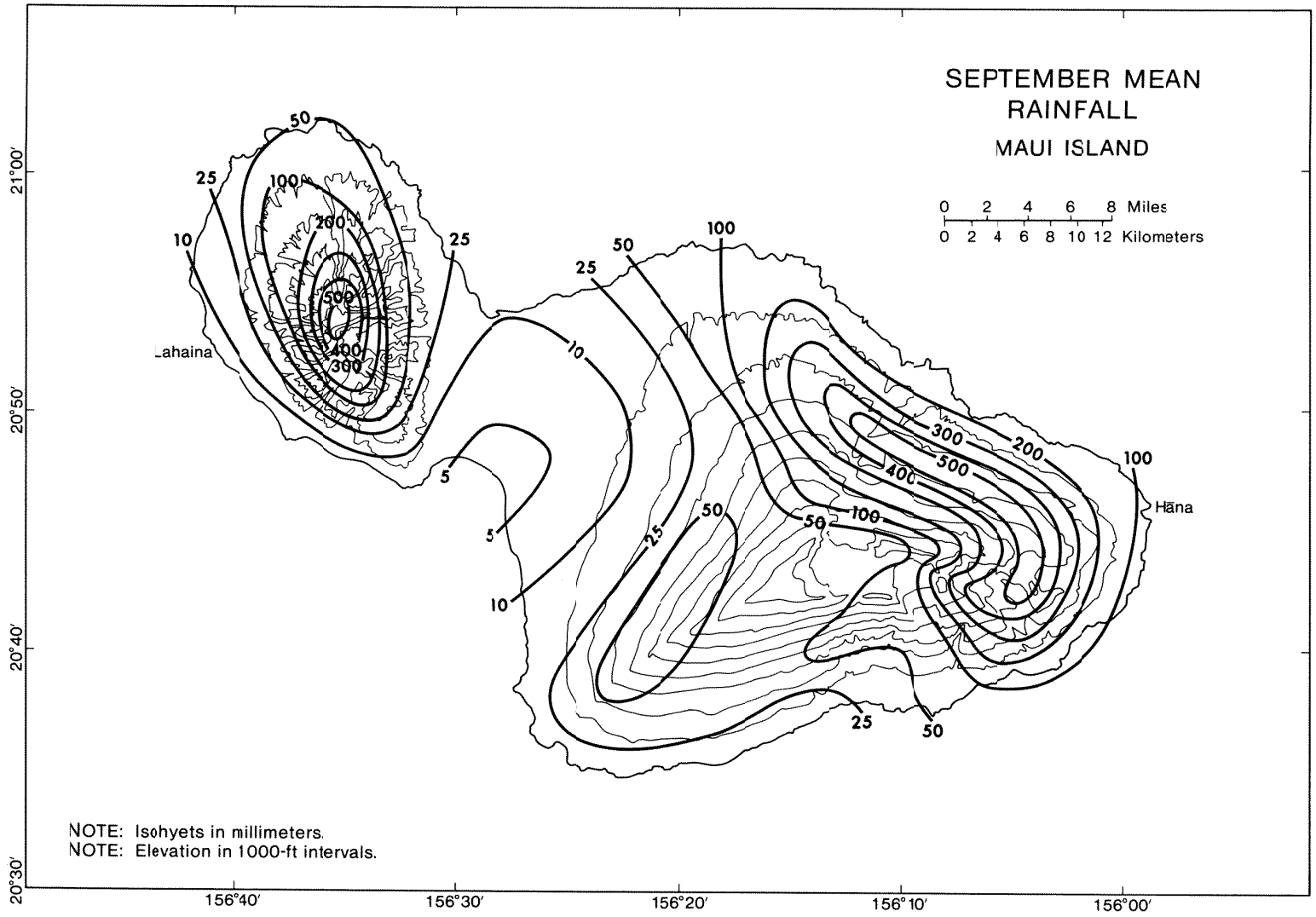
Appendix Figure A.85. June mean rainfall, Maui Island, Hawai'i



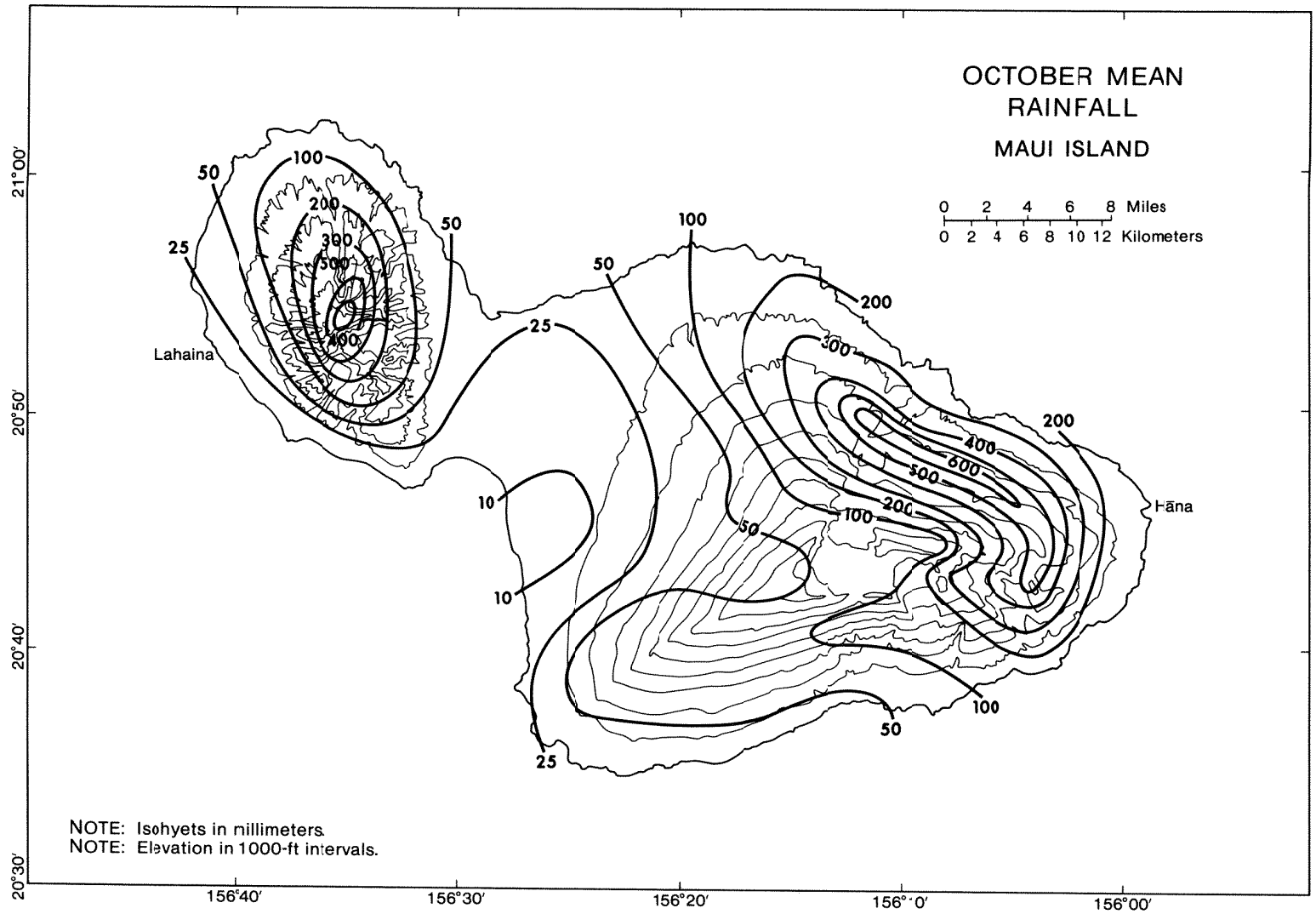
Appendix Figure A.86. July mean rainfall, Maui Island, Hawai'i



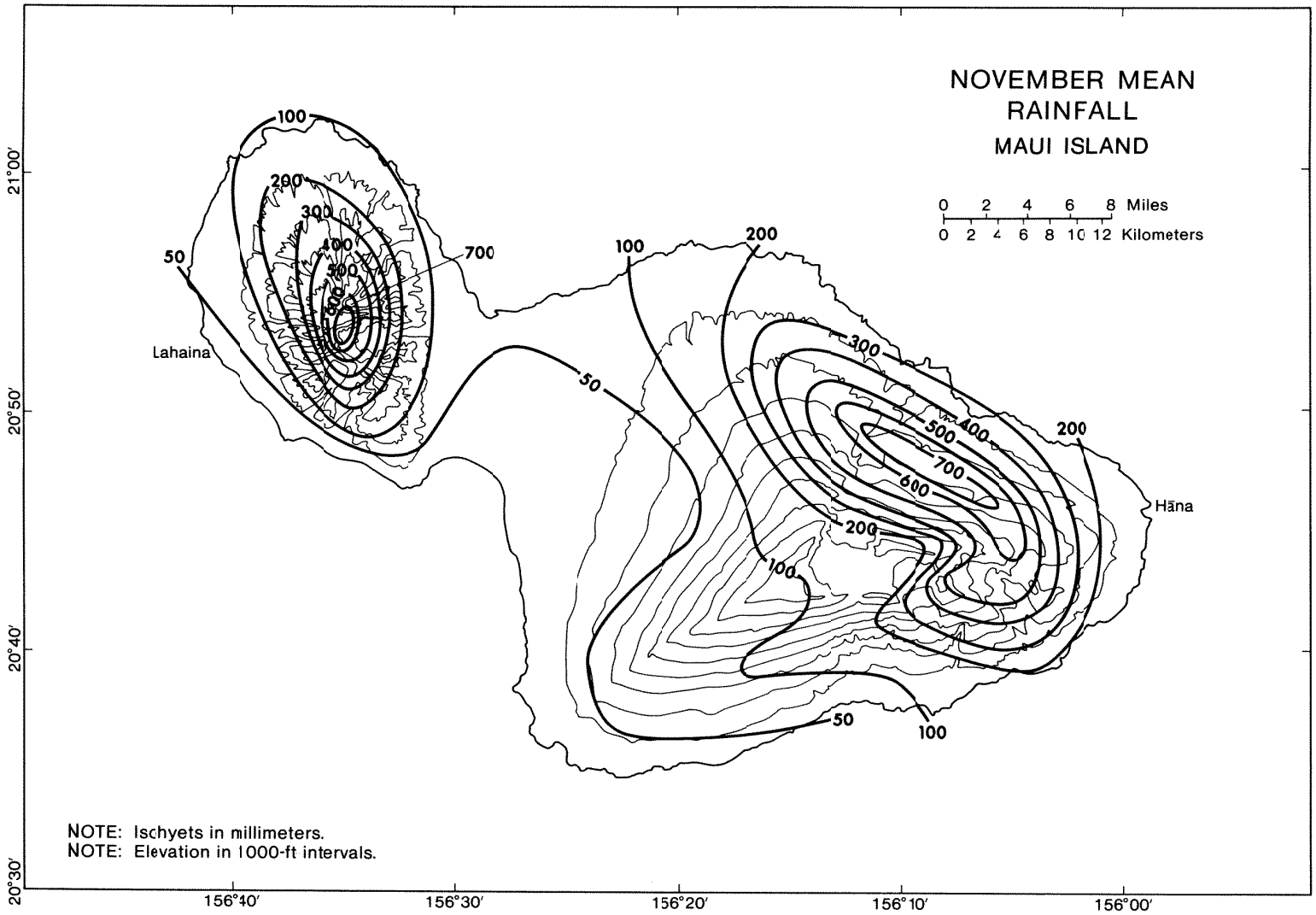
Appendix Figure A.87. August mean rainfall, Maui Island, Hawai'i



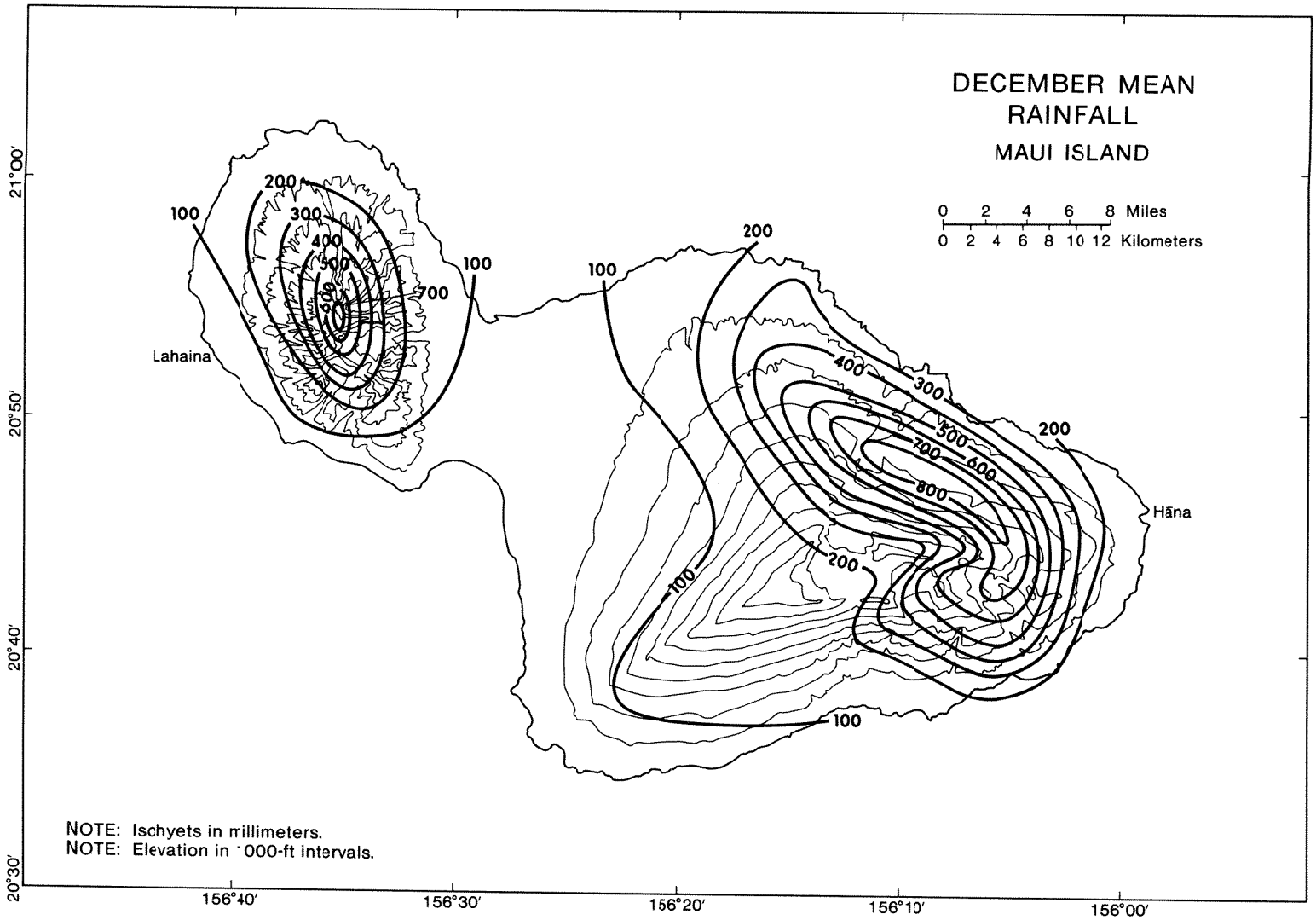
Appendix Figure A.88. September mean rainfall, Maui Island, Hawai'i



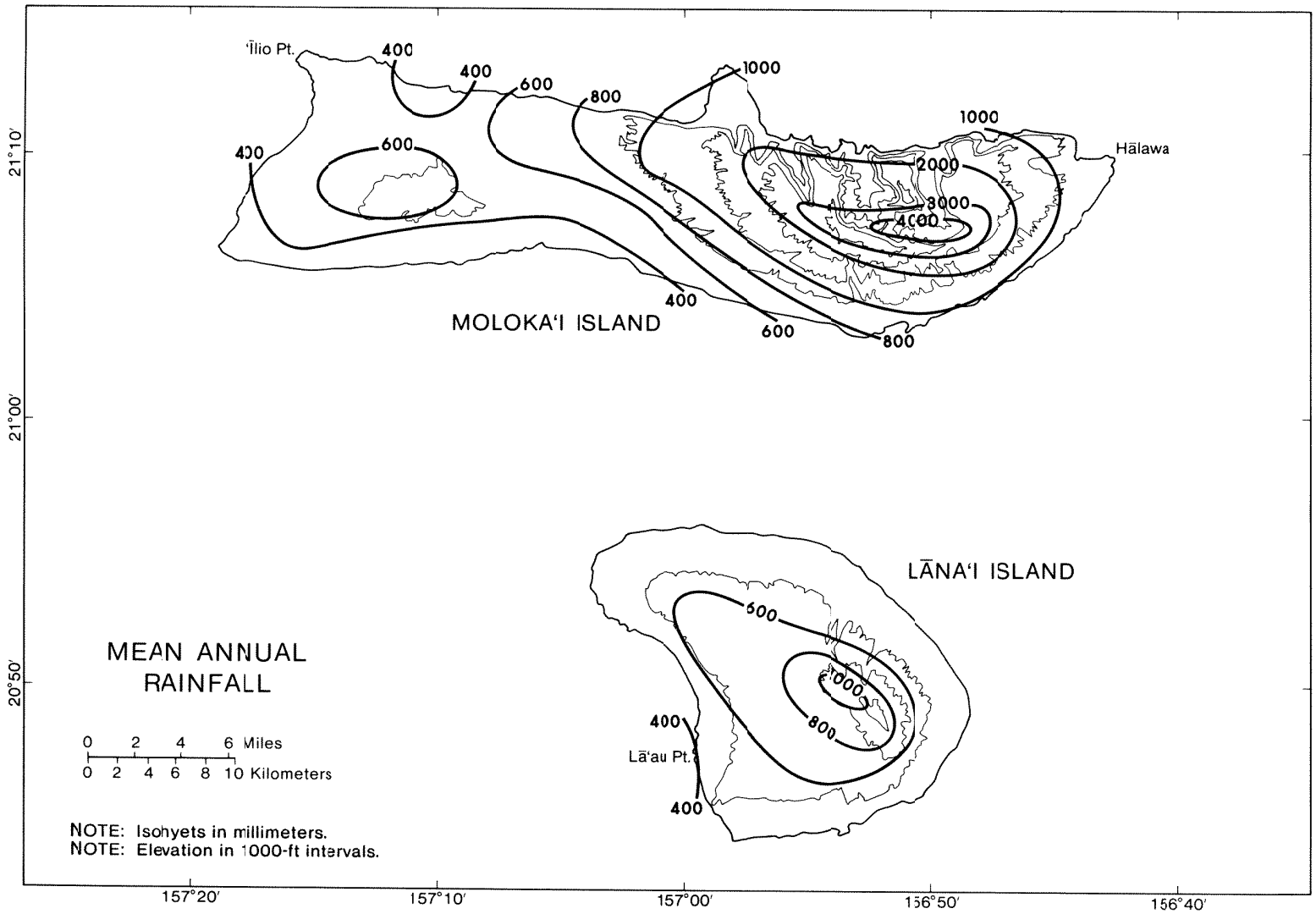
Appendix Figure A.89. October mean rainfall, Maui Island, Hawai'i



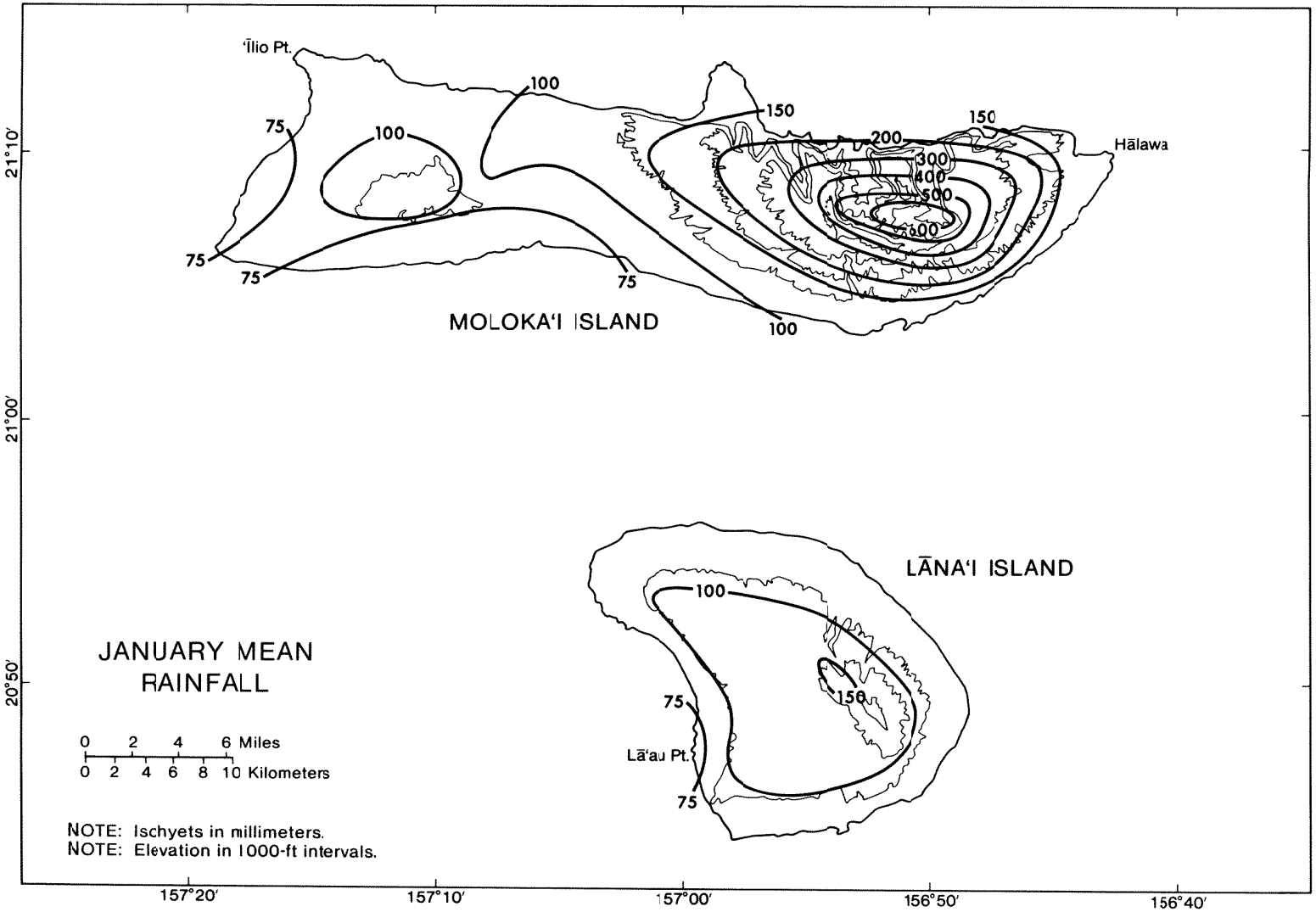
Appendix Figure A.90. November mean rainfall, Maui Island, Hawai'i



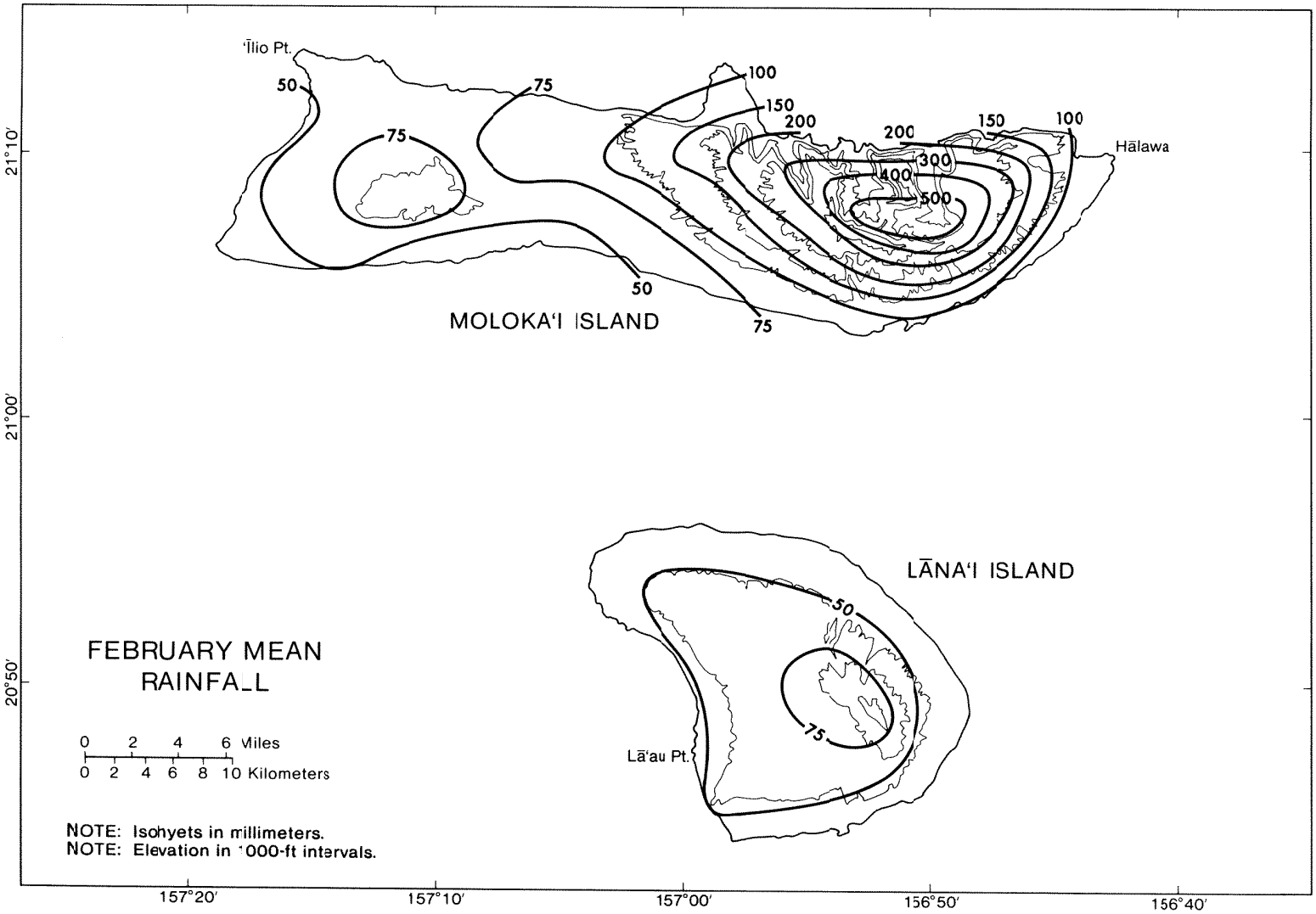
Appendix Figure A.91. December mean rainfall, Maui Island, Hawai'i



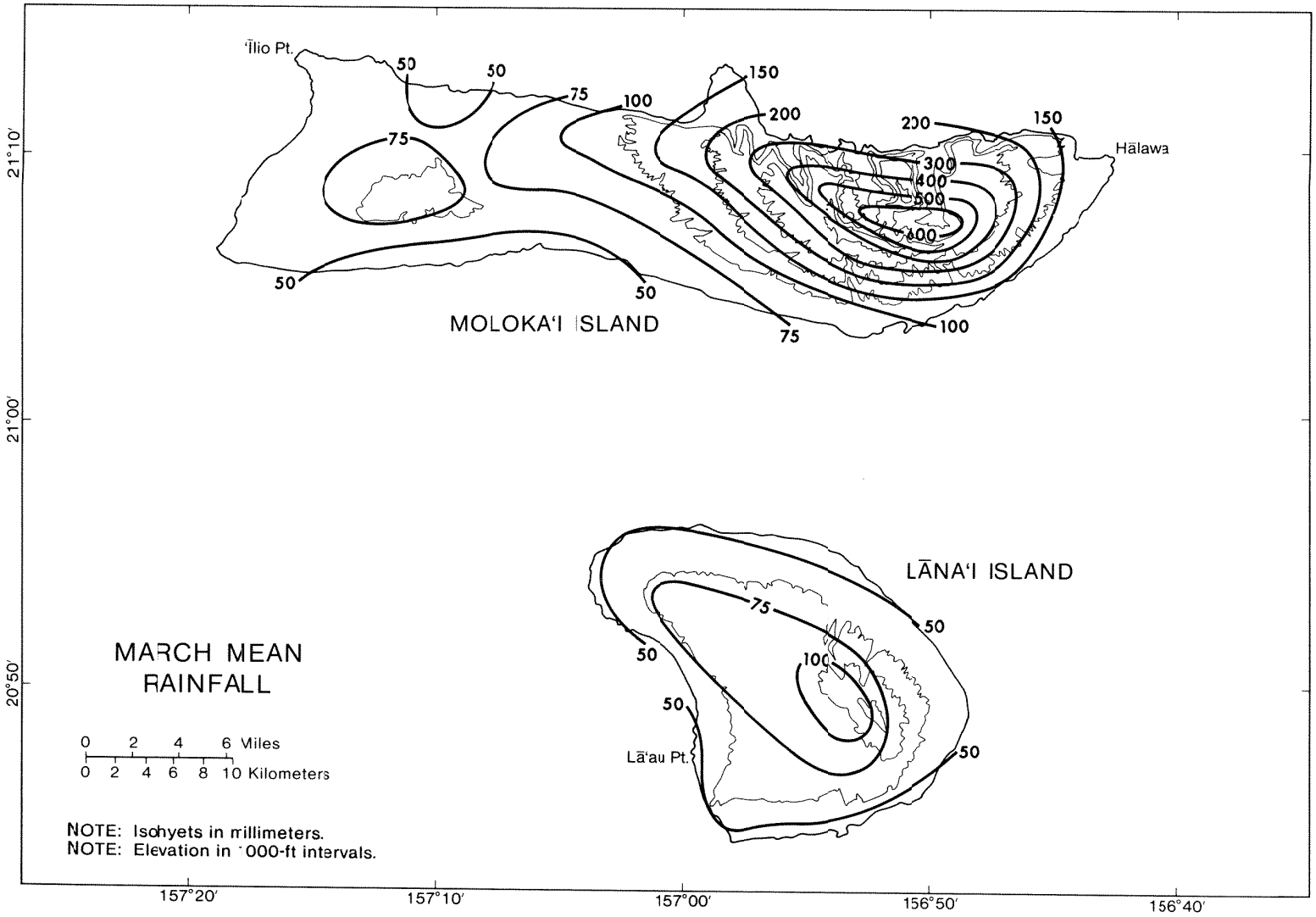
Appendix Figure A.92. Mean annual rainfall, Moloka'i and Lāna'i islands, Hawai'i



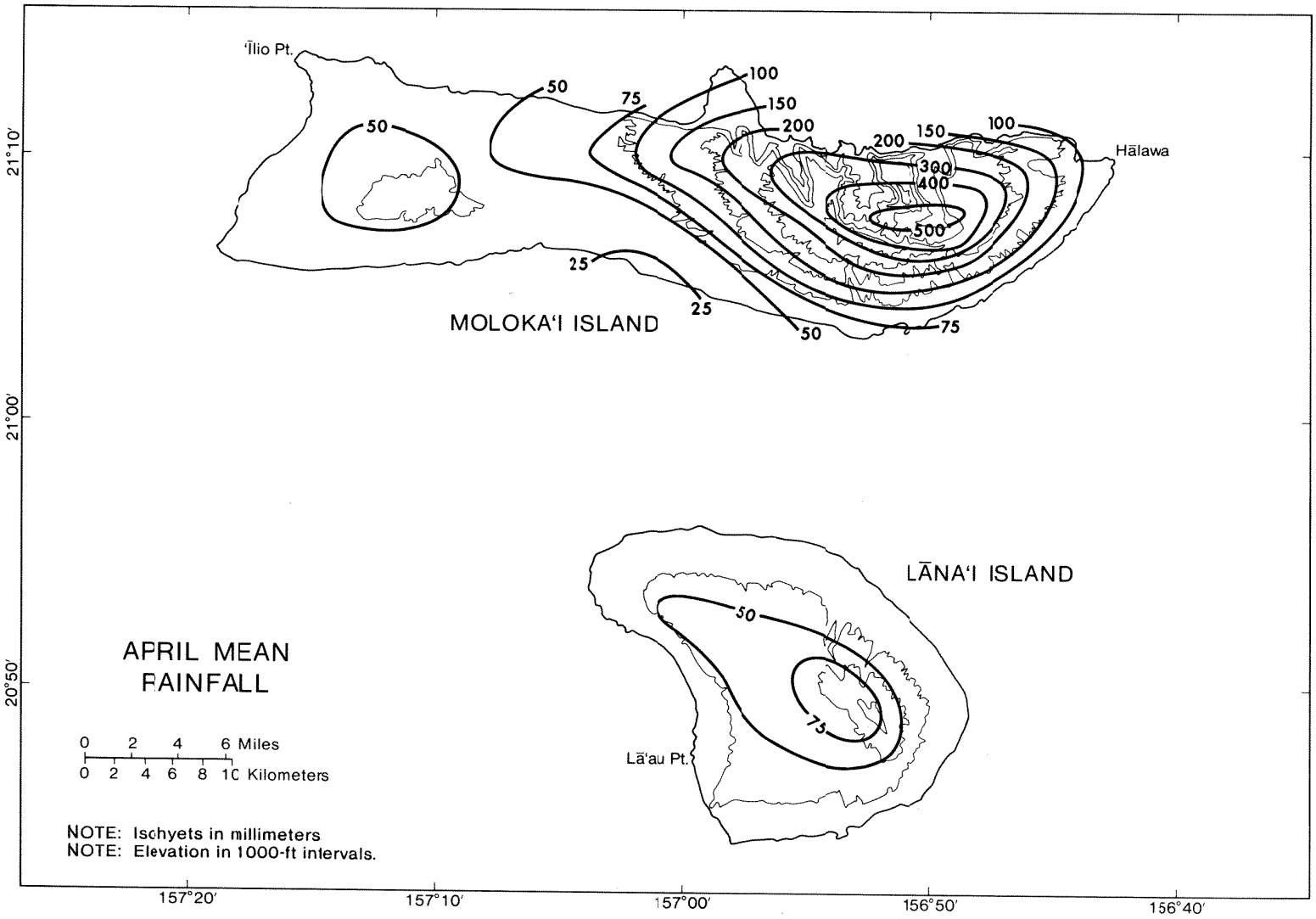
Appendix Figure A.93. January mean rainfall, Moloka'i and Lāna'i islands, Hawai'i



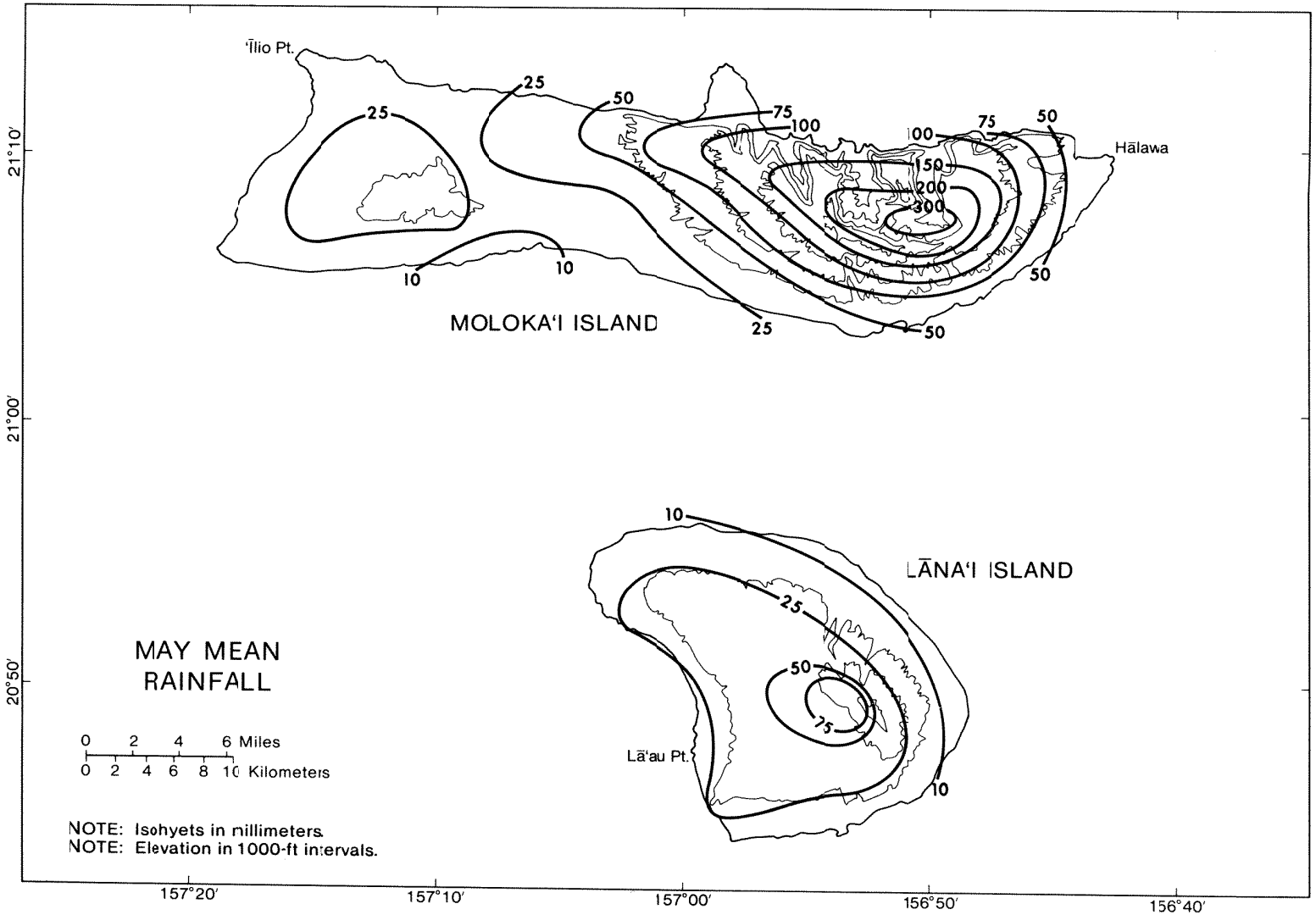
Appendix Figure A.94. February mean rainfall, Moloka'i and Lāna'i islands, Hawai'i



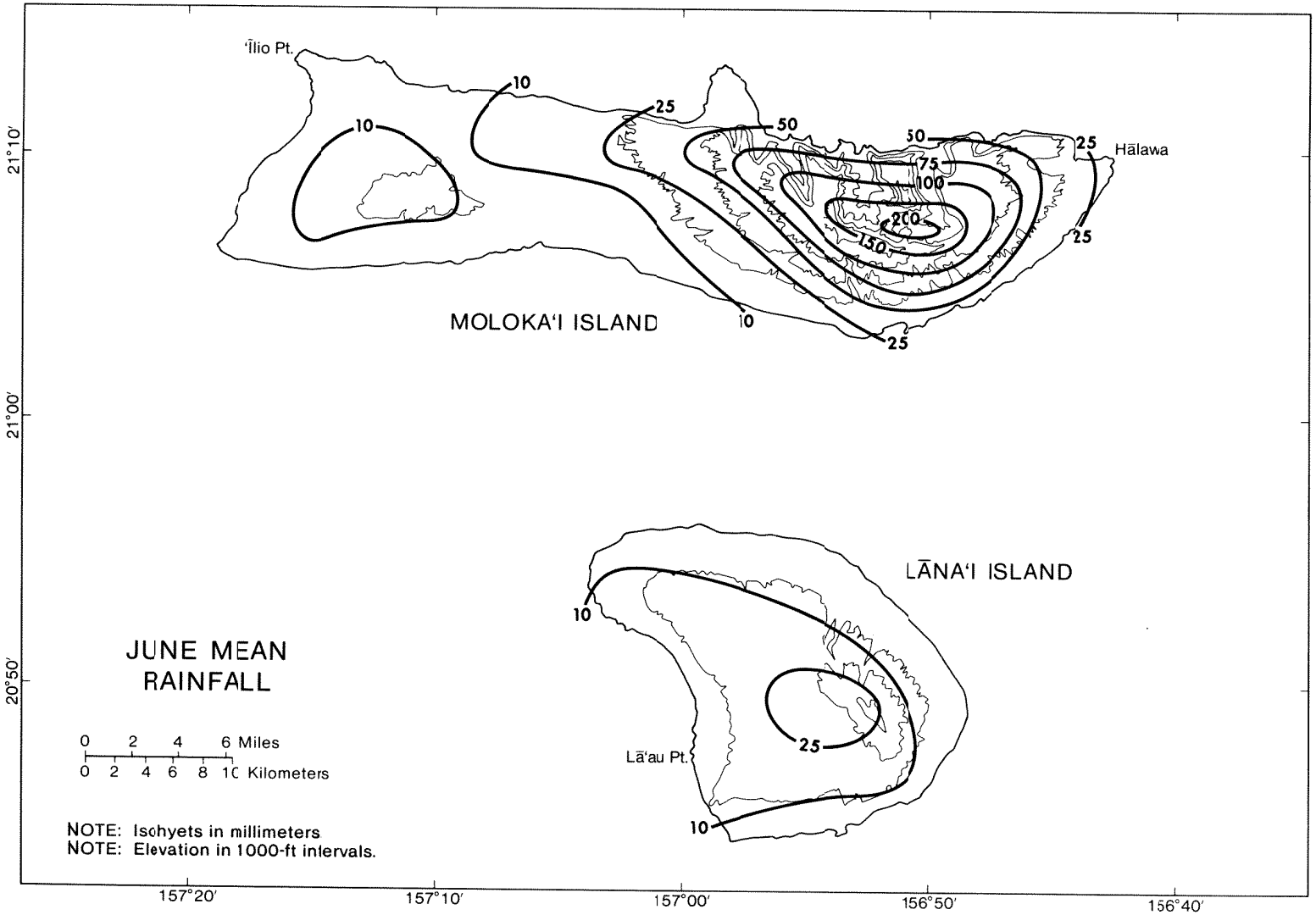
Appendix Figure A.95. March mean rainfall, Moloka'i and Lāna'i islands, Hawai'i



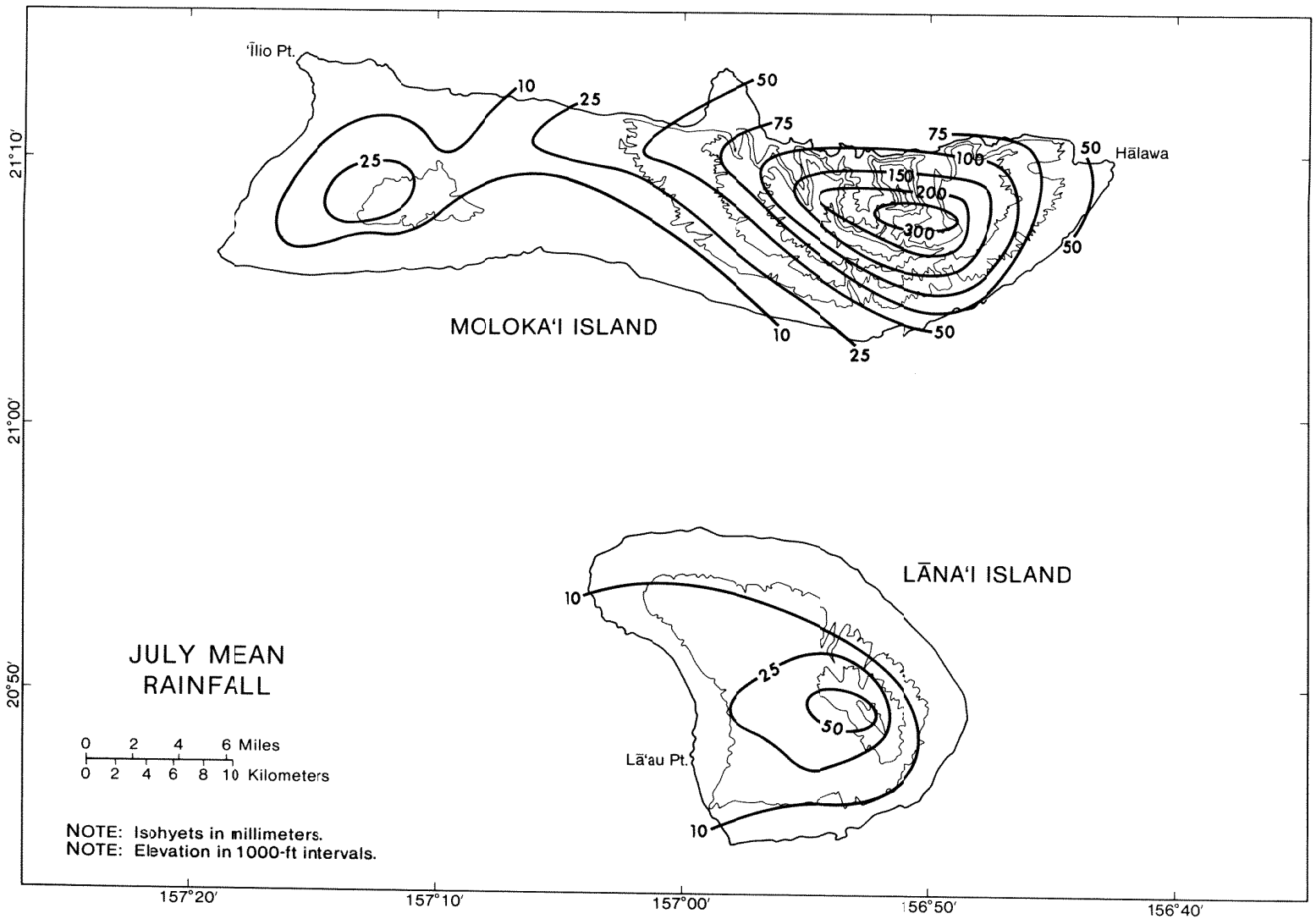
Appendix Figure A.96. April mean rainfall, Moloka'i and Lāna'i islands, Hawai'i



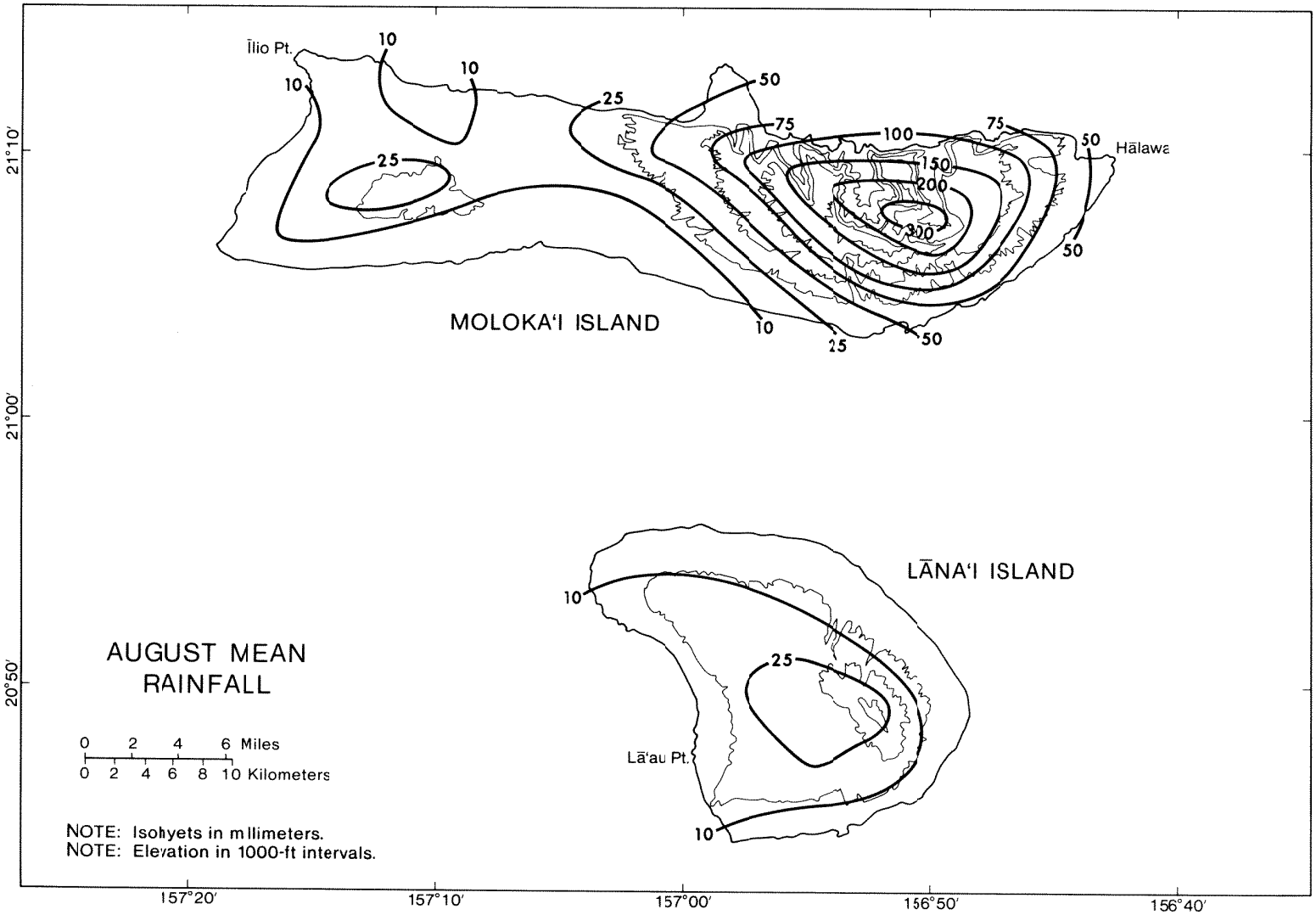
Appendix Figure A.97. May mean rainfall, Moloka'i and Lāna'i islands, Hawai'i



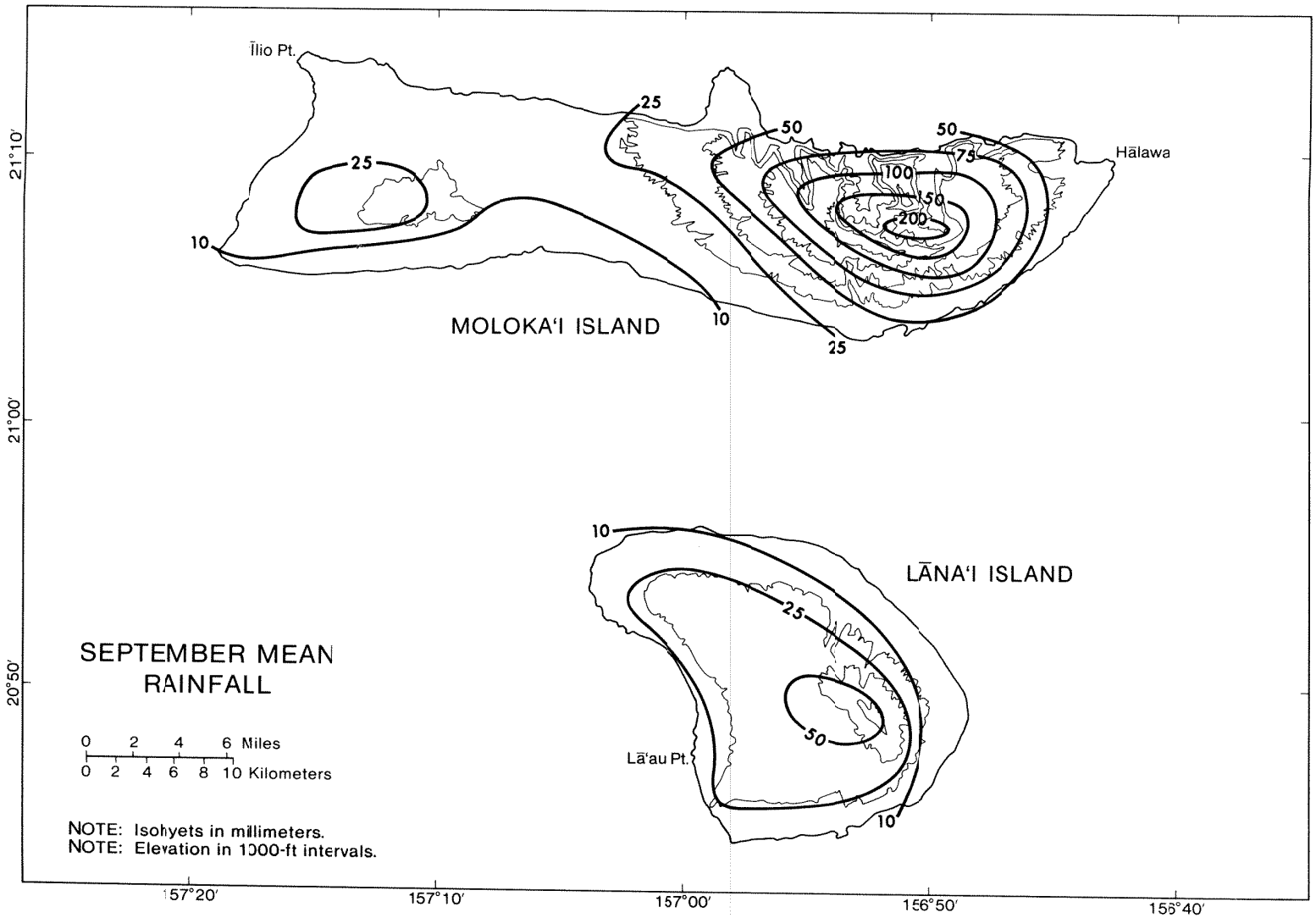
Appendix Figure A.98. June mean rainfall, Moloka'i and Lāna'i islands, Hawai'i



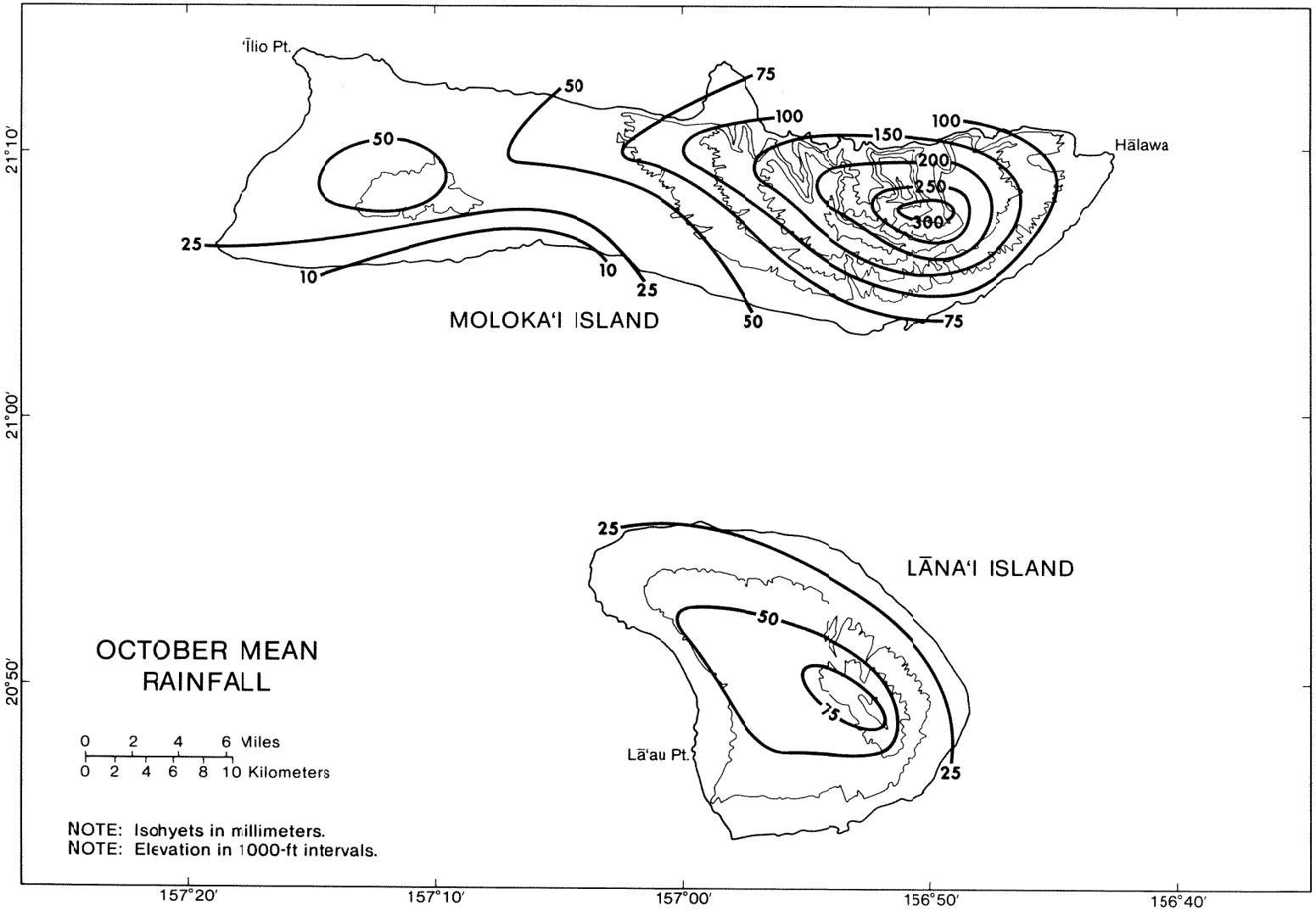
Appendix Figure A.99. July mean rainfall, Moloka'i and Lāna'i islands, Hawai'i



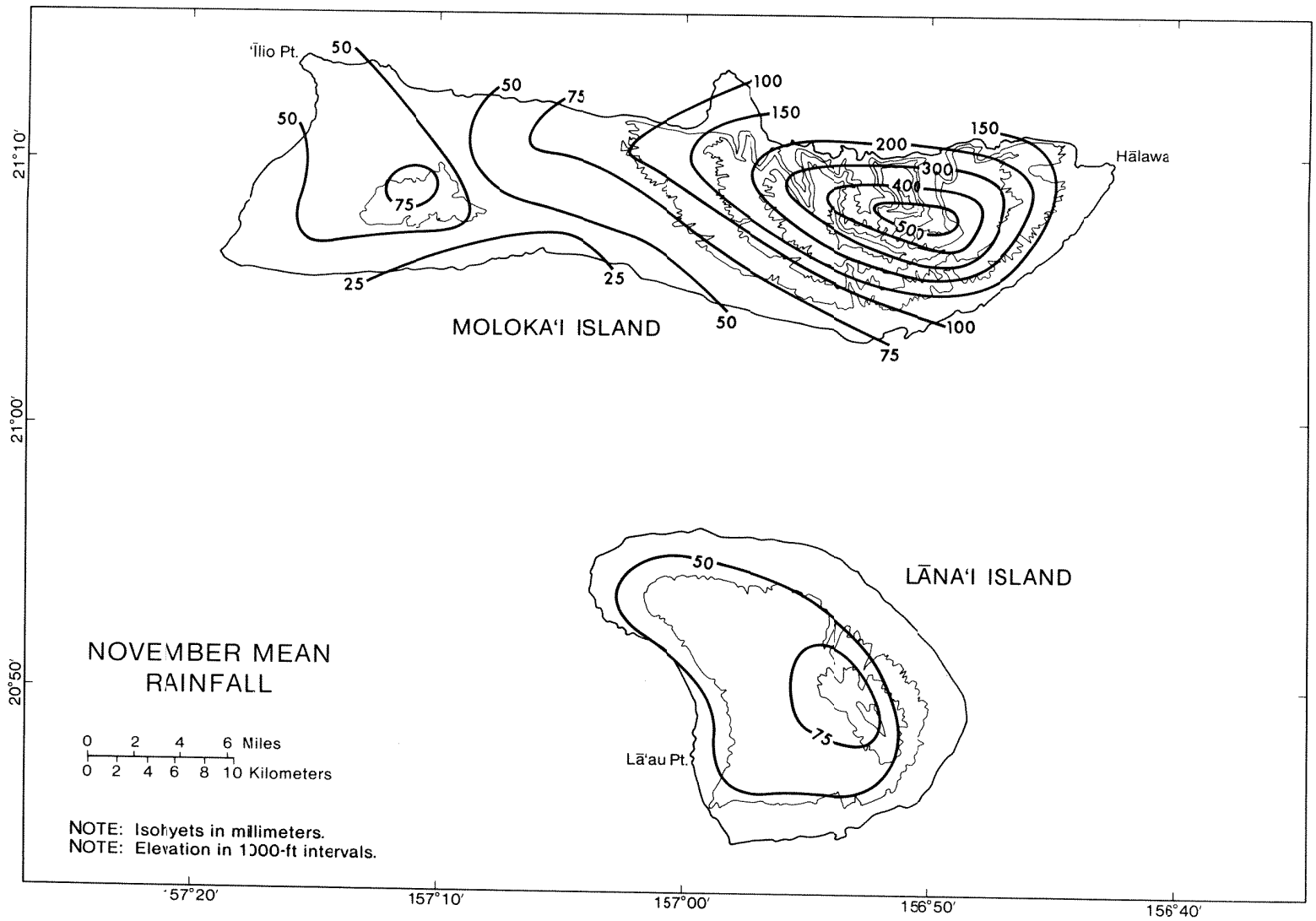
Appendix Figure A.100. August mean rainfall, Moloka'i and Lāna'i islands, Hawai'i



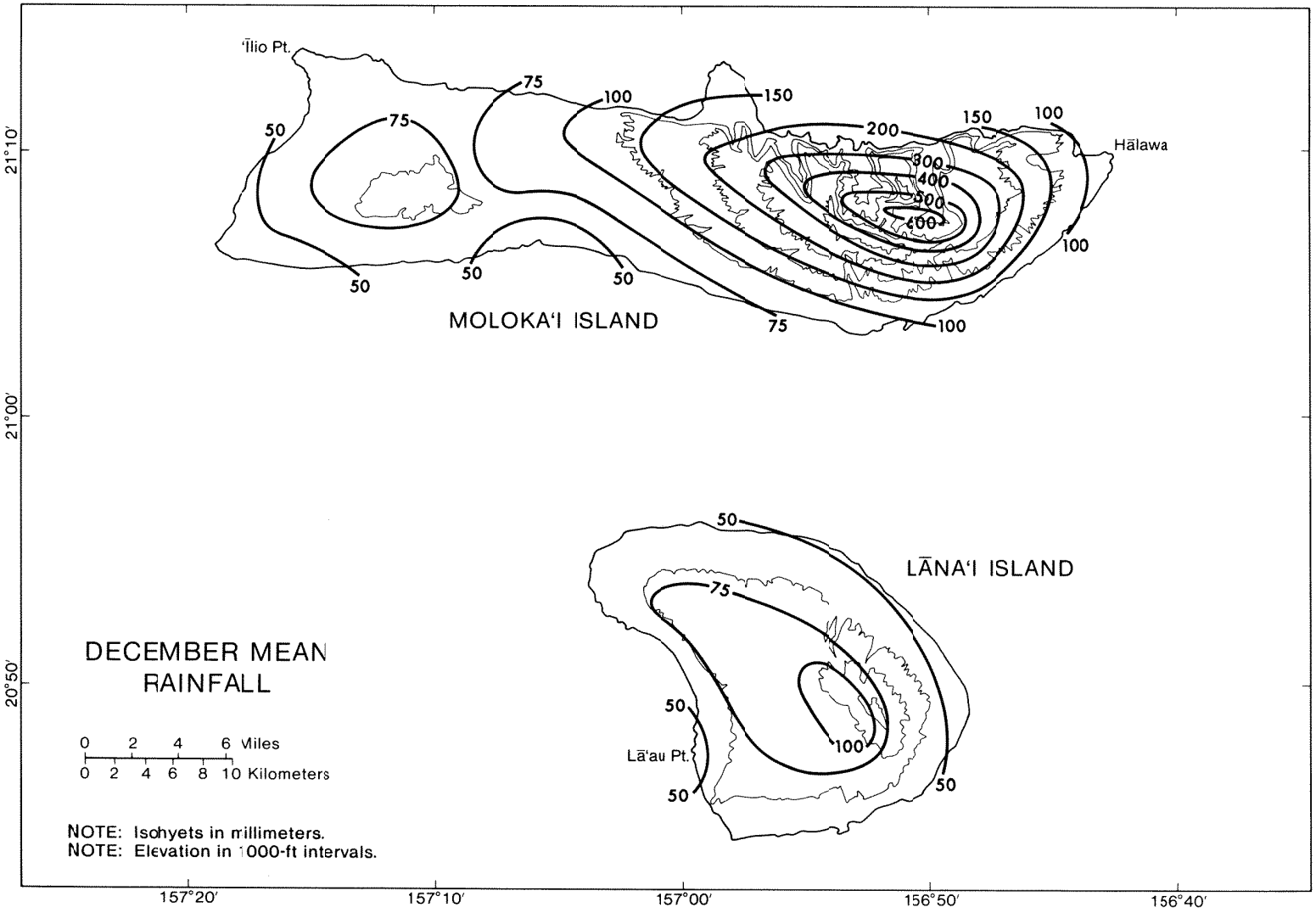
Appendix Figure A.101. September mean rainfall, Moloka'i and Lāna'i islands, Hawai'i



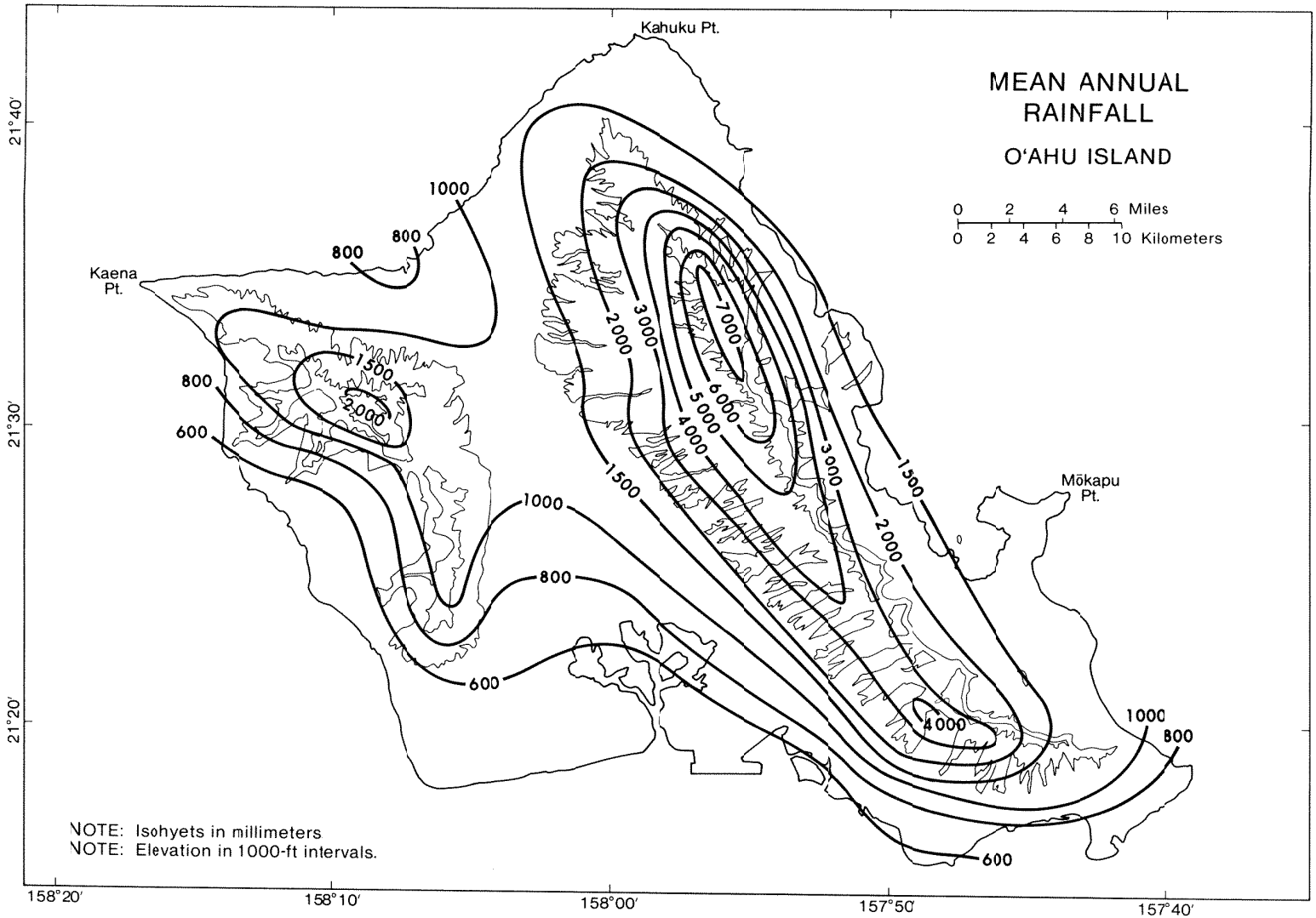
Appendix Figure A.102. October mean rainfall, Moloka'i and Lāna'i islands, Hawai'i



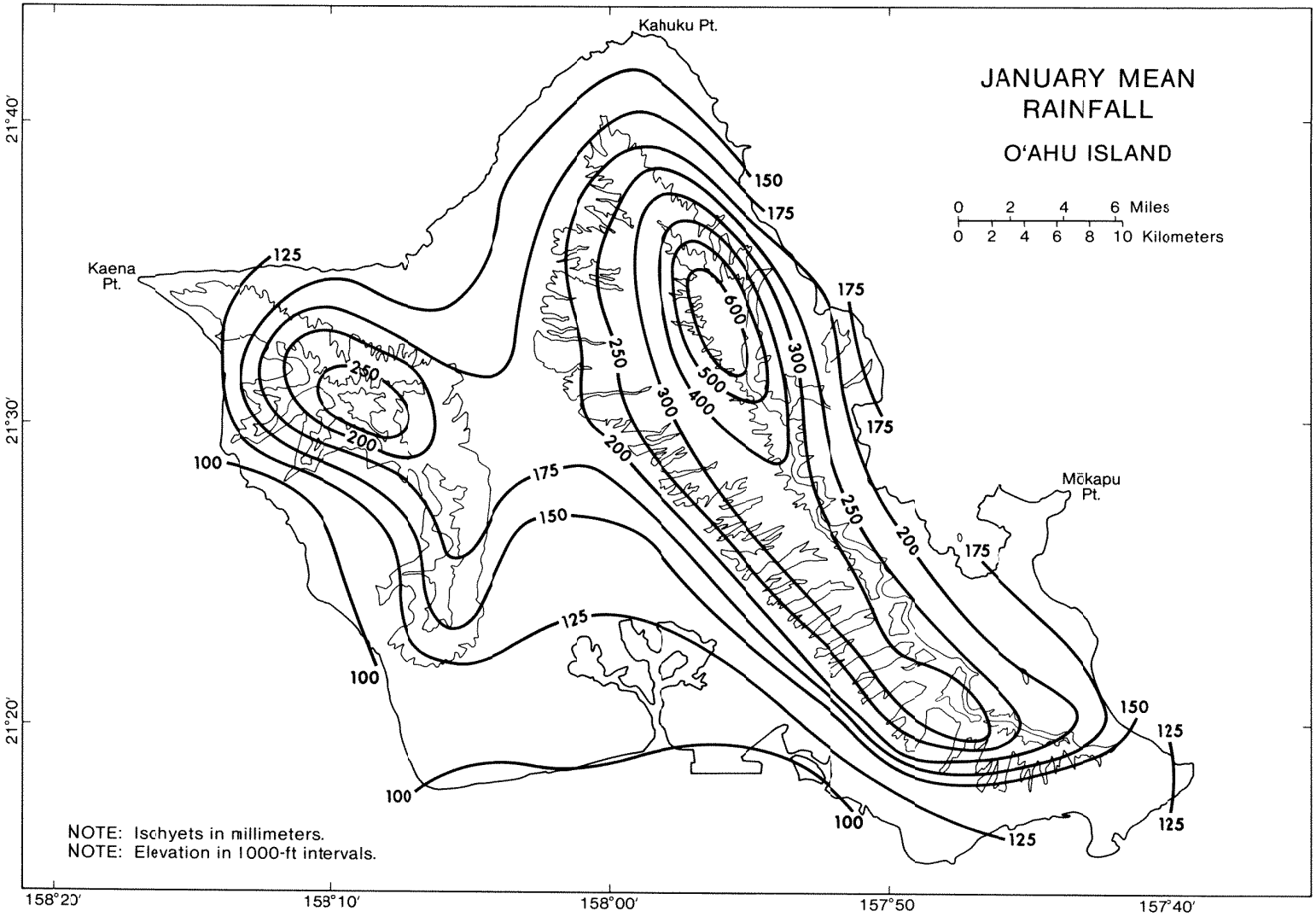
Appendix Figure A.103. November mean rainfall, Moloka'i and Lāna'i islands, Hawai'i



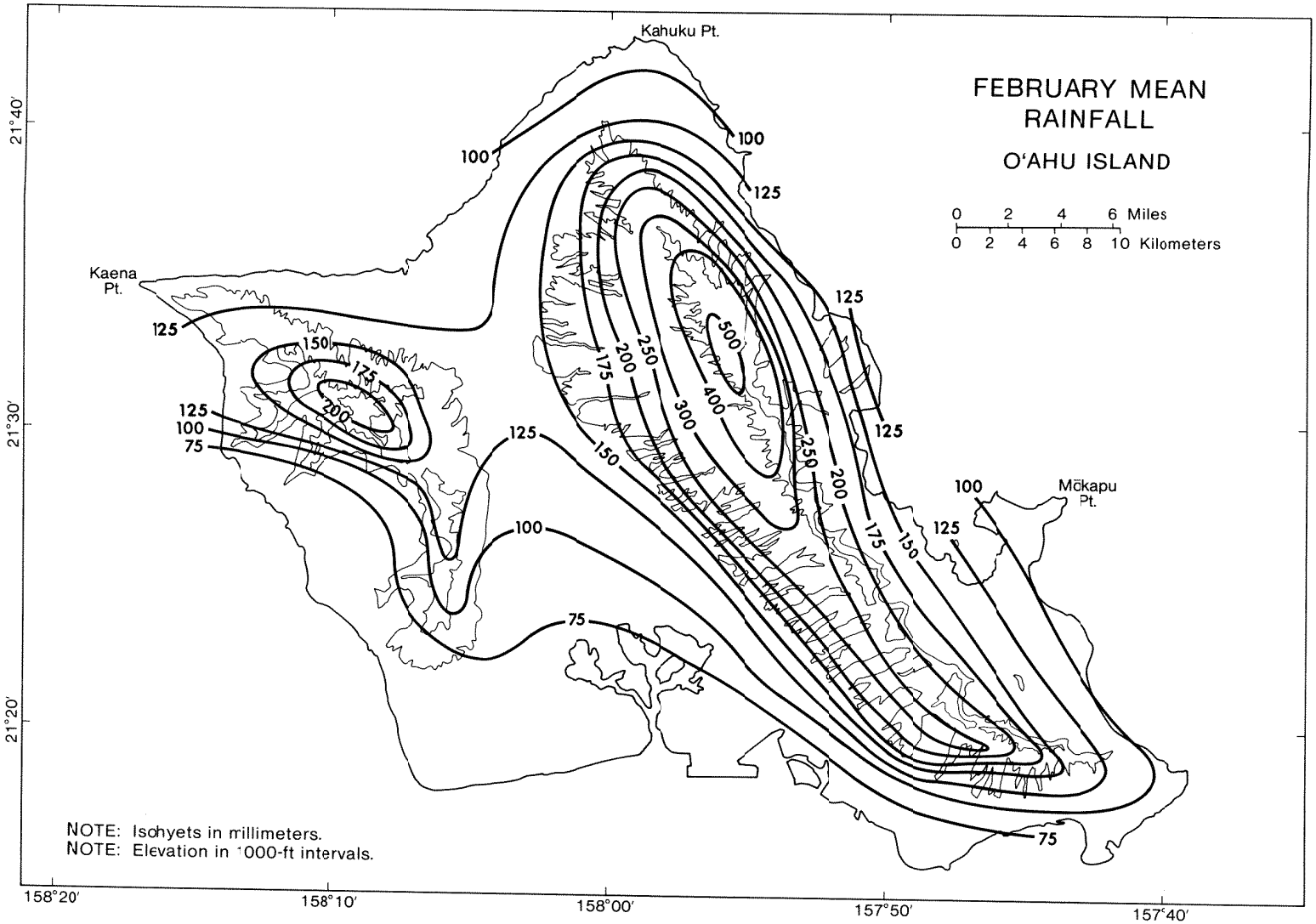
Appendix Figure A.104. December mean rainfall, Moloka'i and Lāna'i islands, Hawai'i



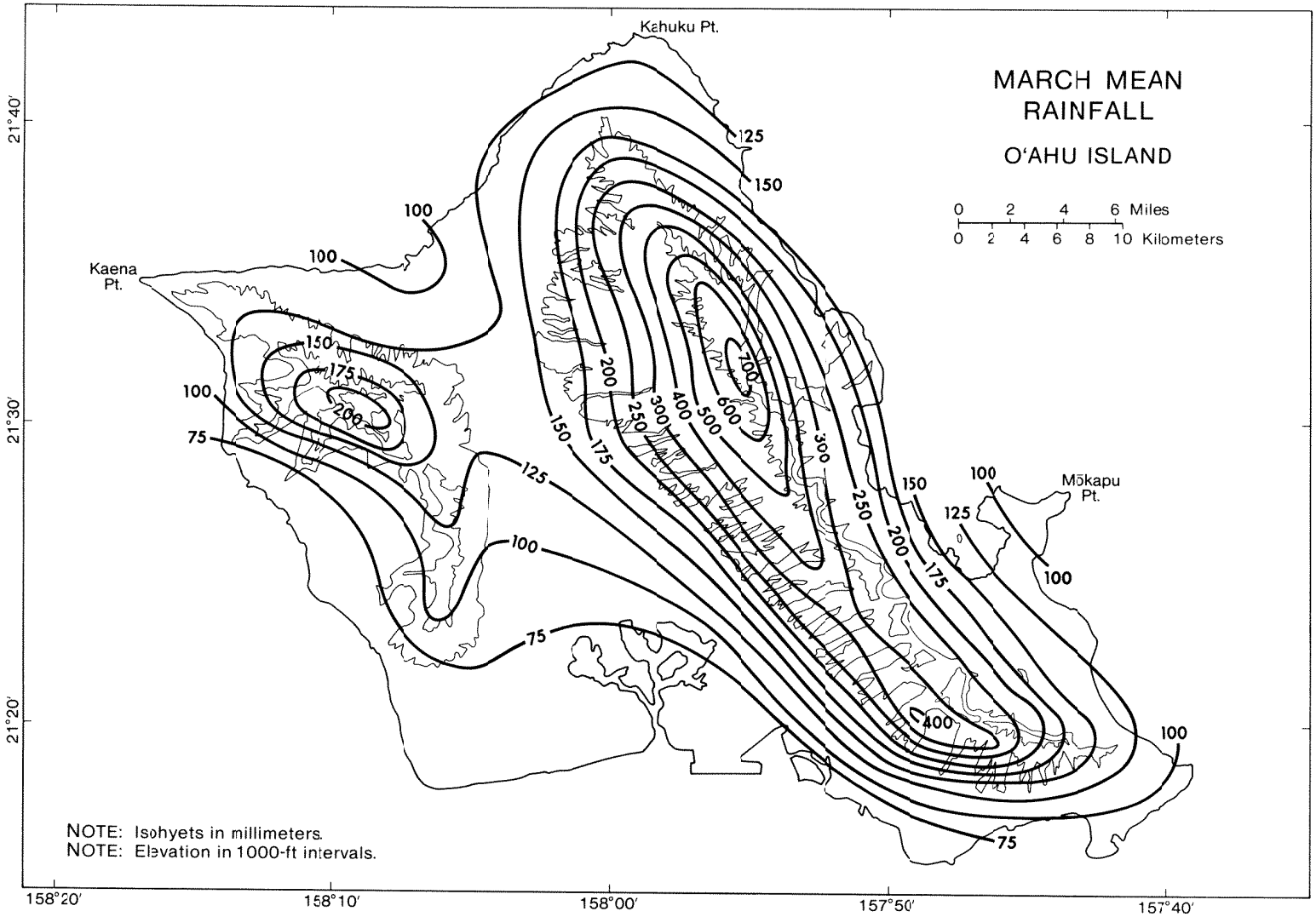
Appendix Figure A.105. Mean annual rainfall, O'ahu Island, Hawai'i



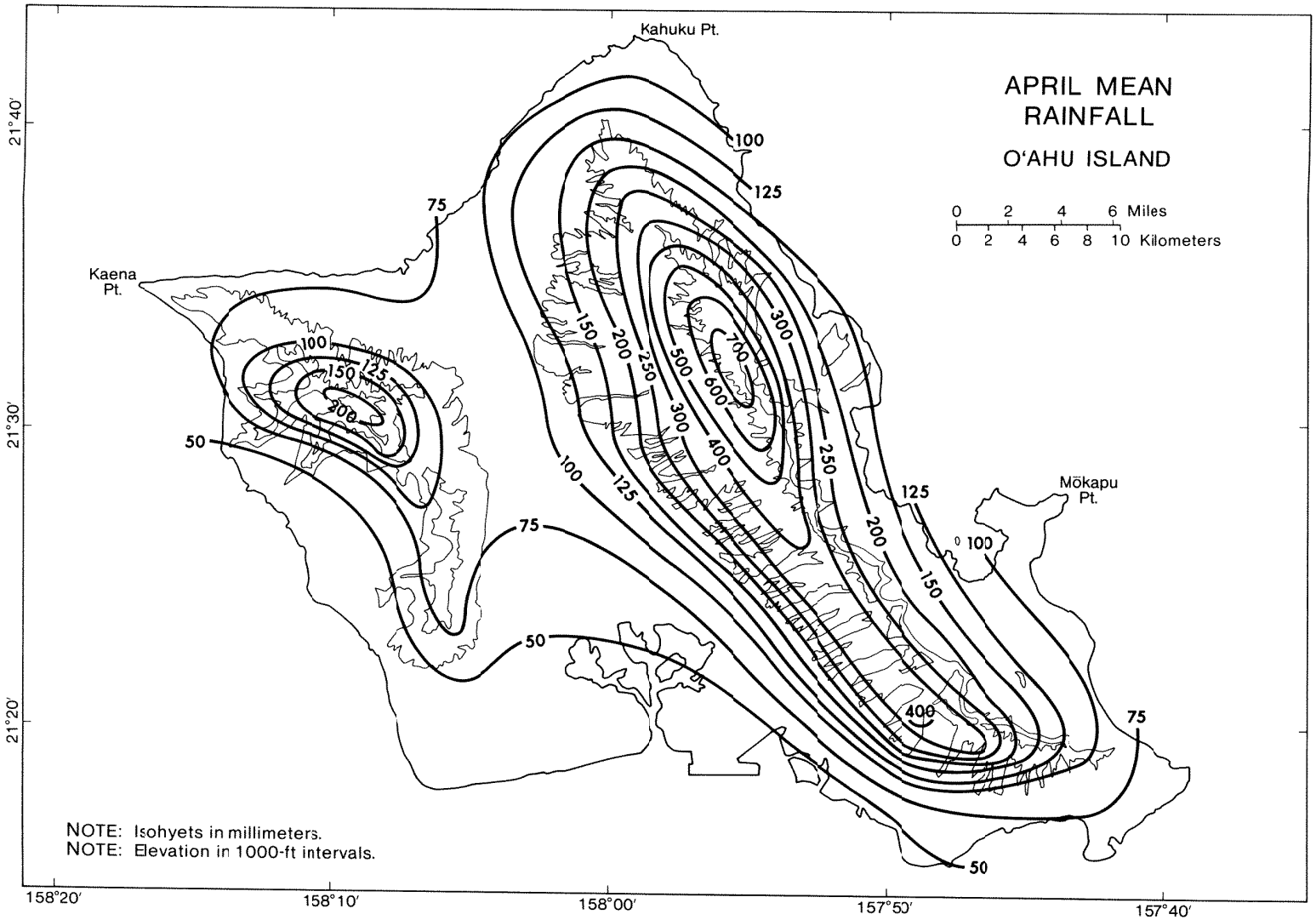
Appendix Figure A.106. January mean rainfall, O'ahu Island, Hawai'i



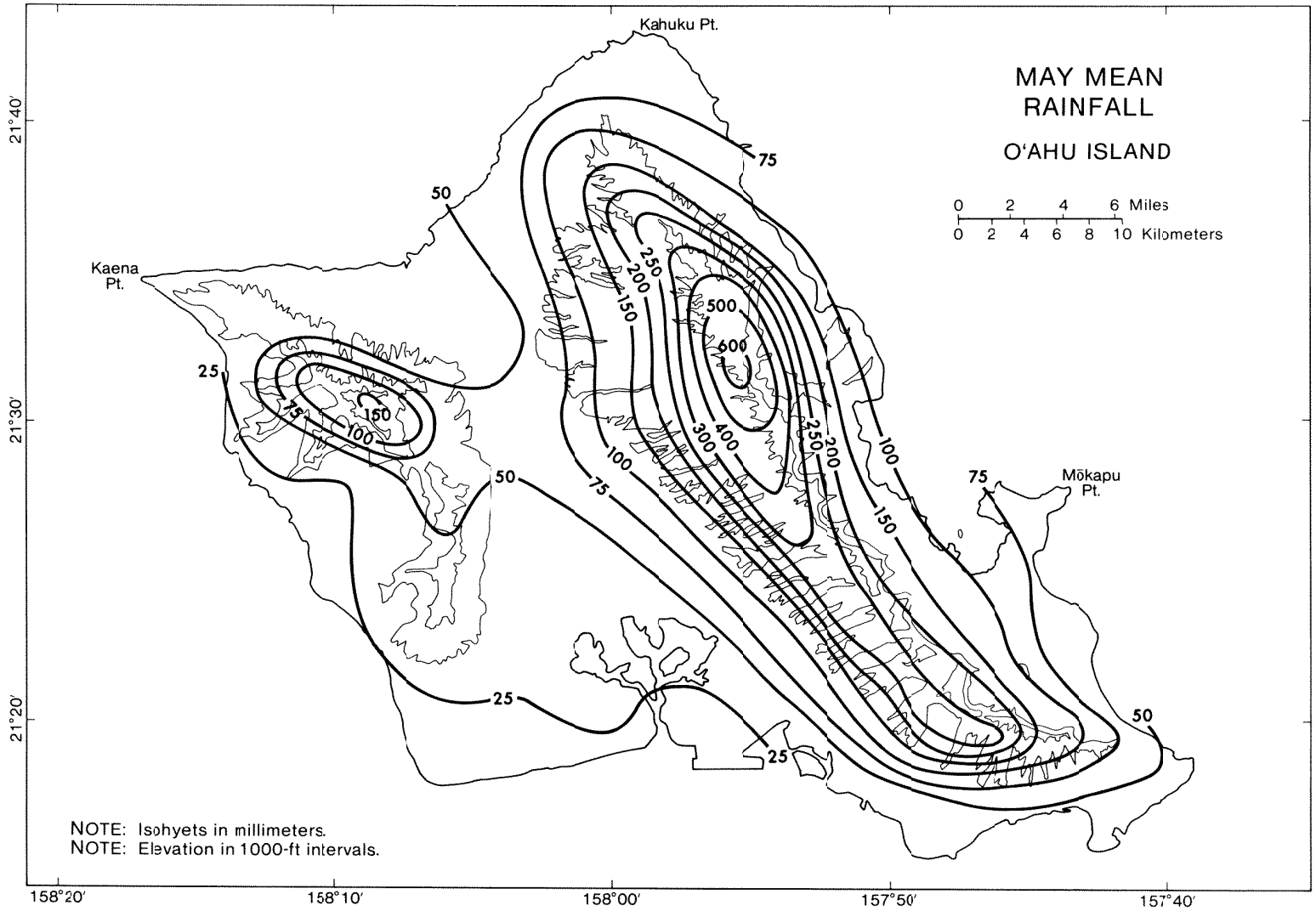
Appendix Figure A.107. February mean rainfall, O'ahu Island, Hawai'i



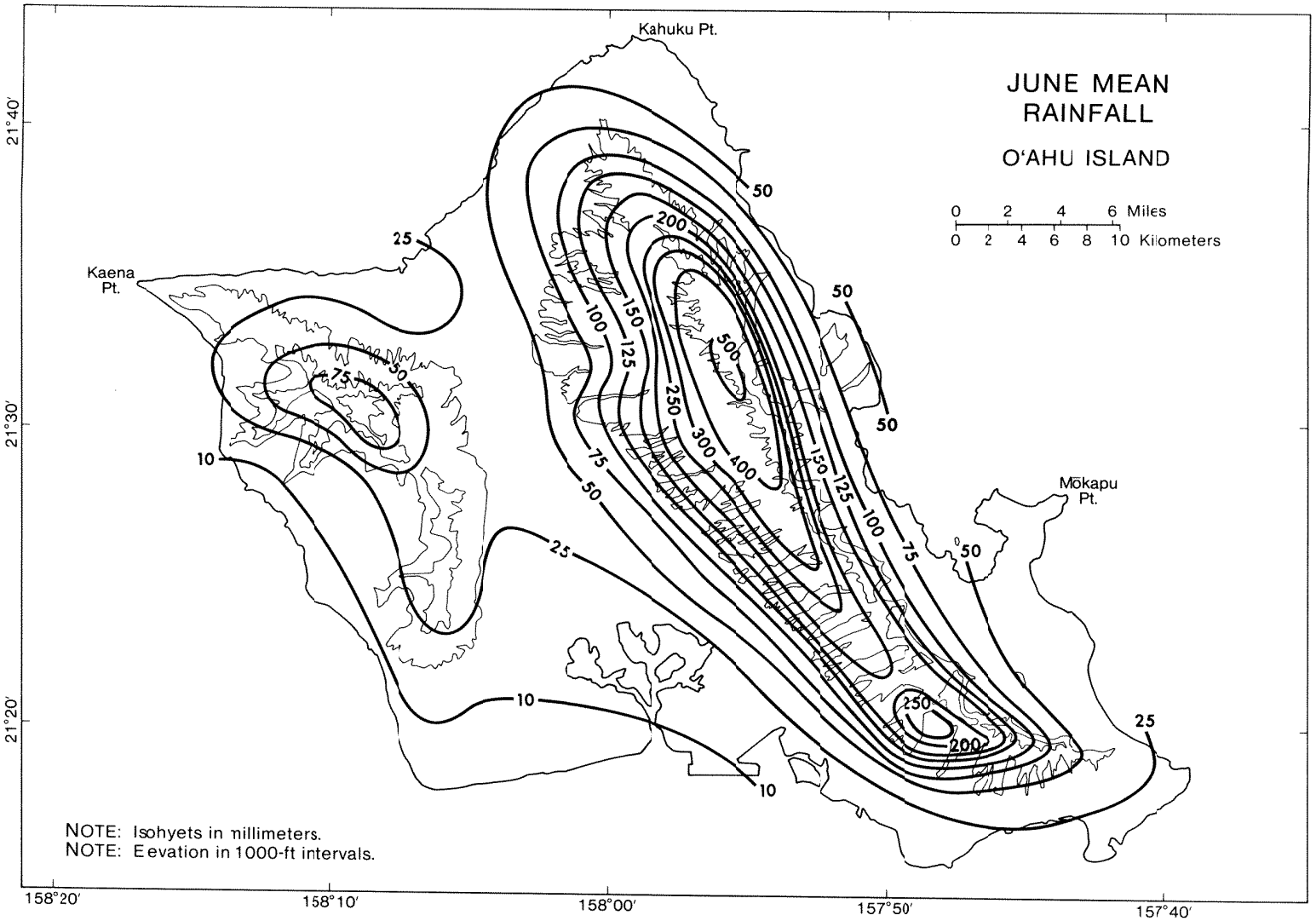
Appendix Figure A.108. March mean rainfall, O'ahu Island, Hawai'i



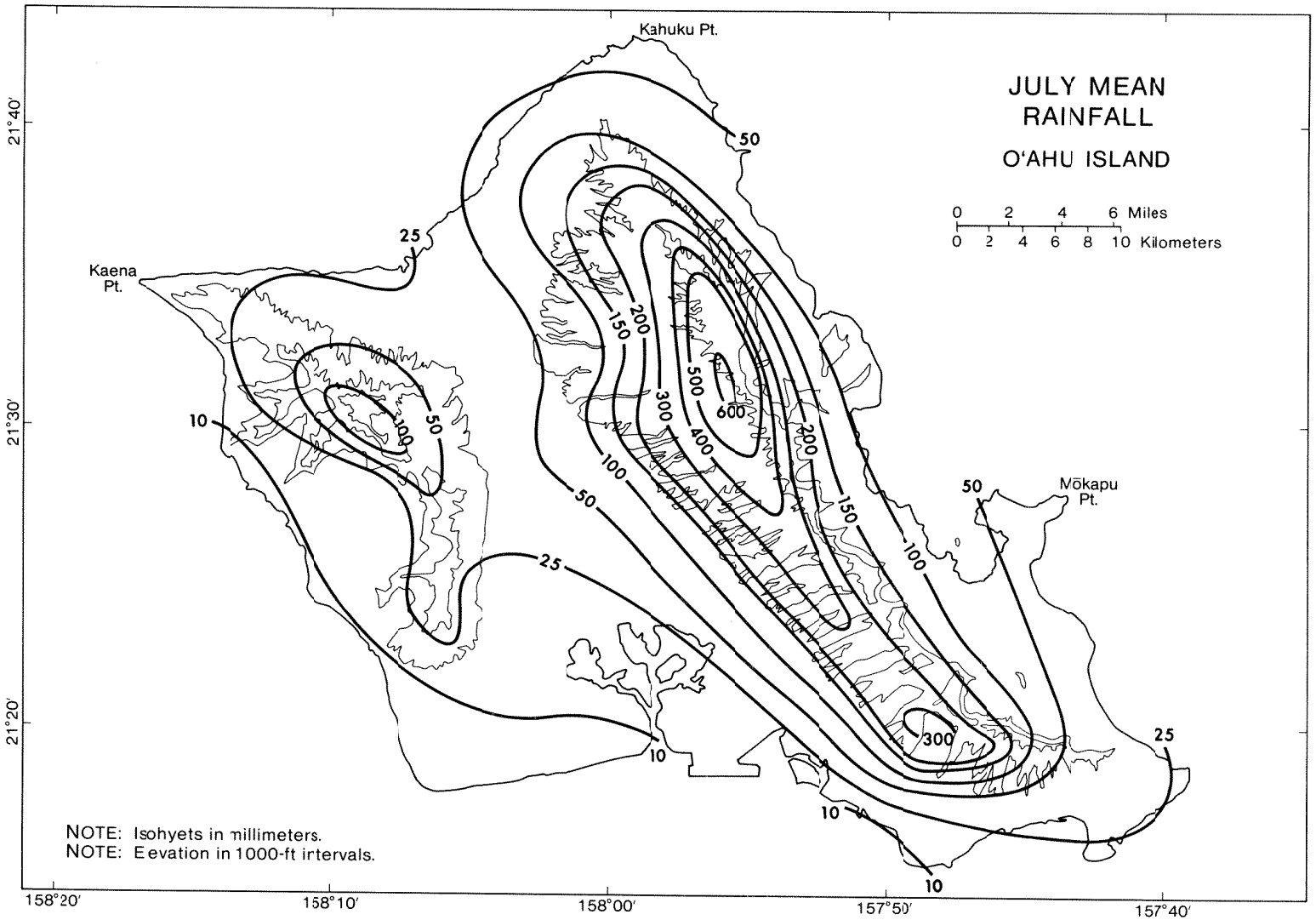
Appendix Figure A.109. April mean rainfall, O'ahu Island, Hawai'i



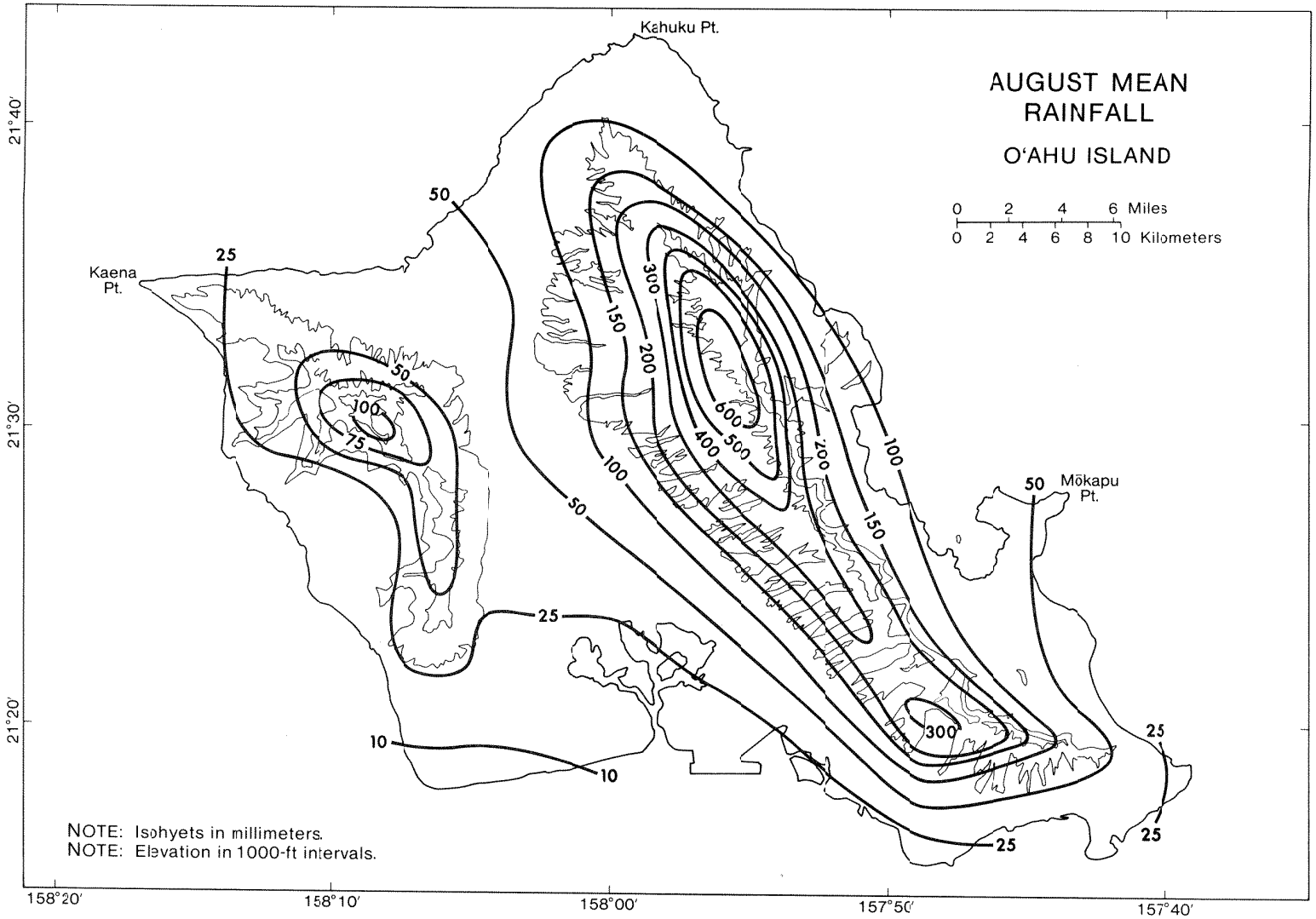
Appendix Figure A.110. May mean rainfall, O'ahu Island, Hawai'i



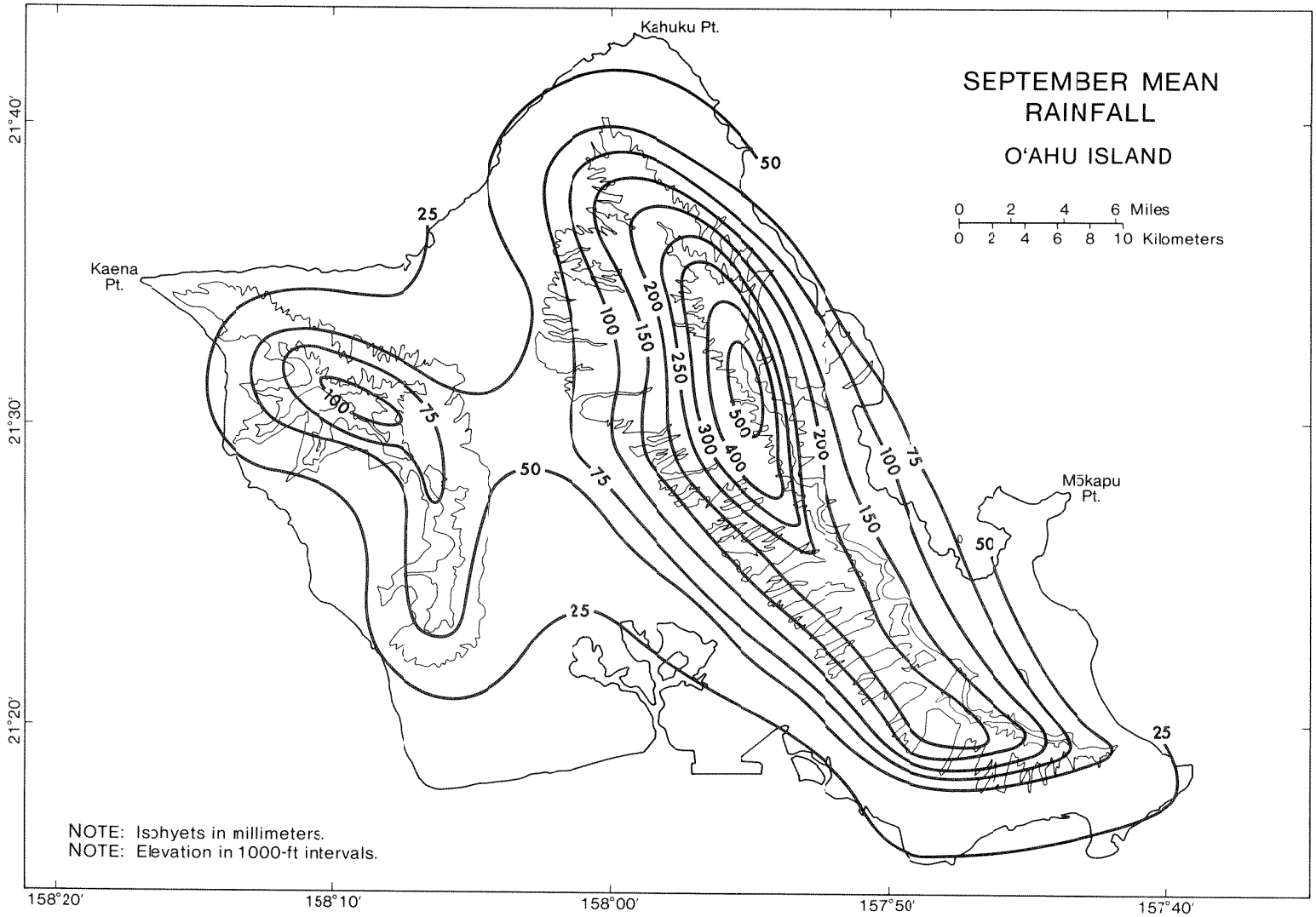
Appendix Figure A.111. June mean rainfall, O'ahu Island, Hawai'i



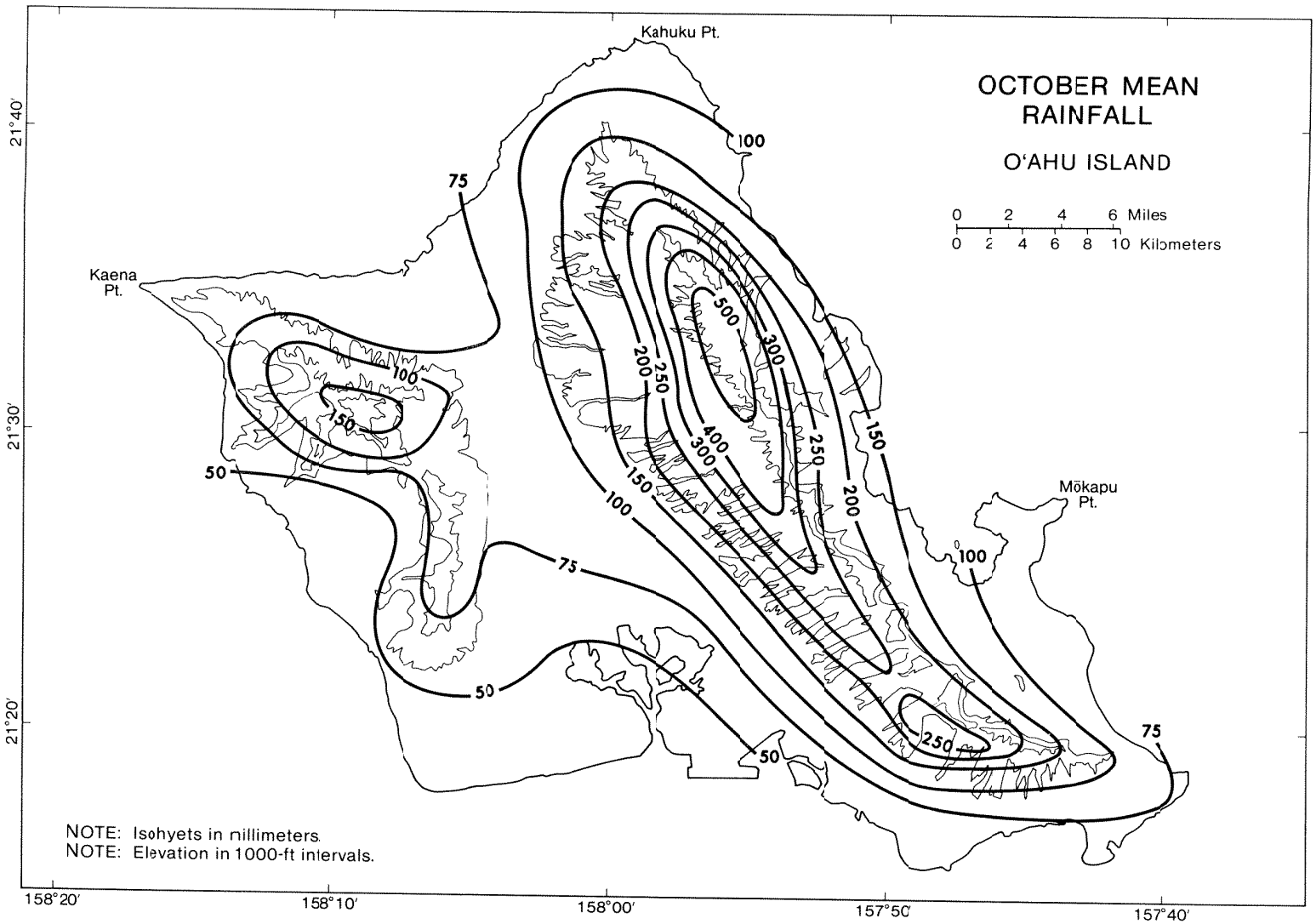
Appendix Figure A.112. July mean rainfall, O'ahu Island, Hawai'i



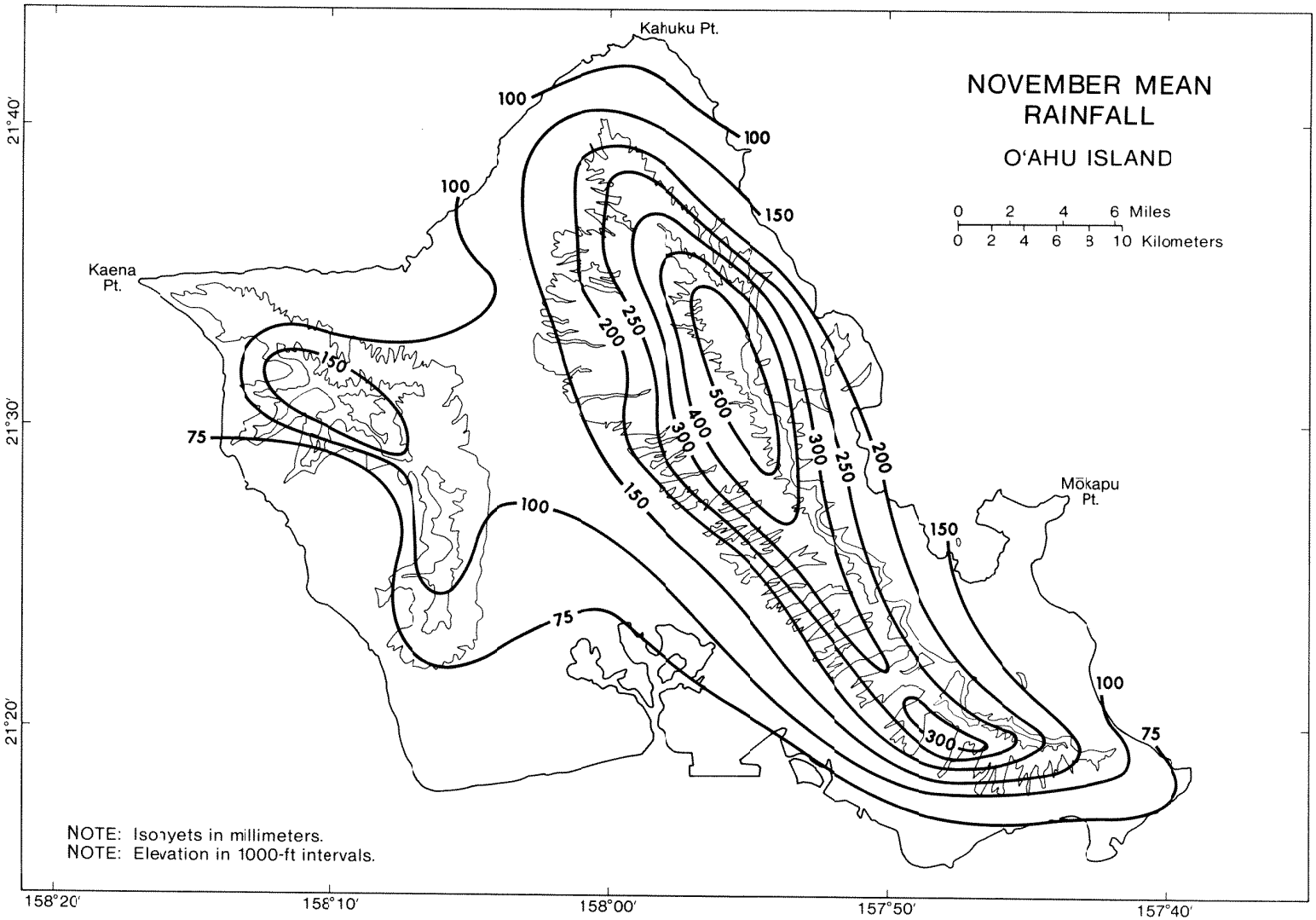
Appendix Figure A.113. August mean rainfall, O'ahu Island, Hawai'i



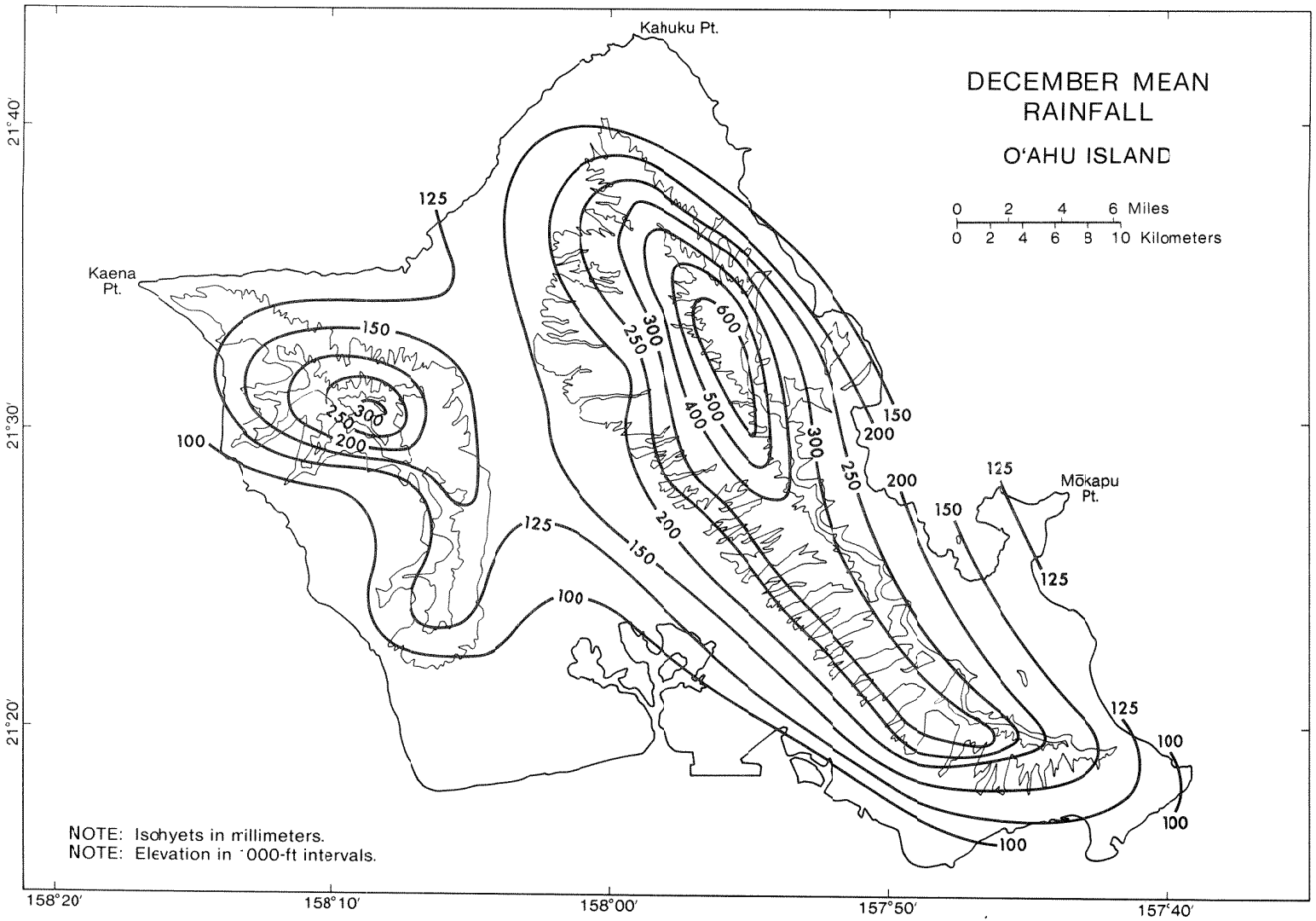
Appendix Figure A.114. September mean rainfall, O'ahu Island, Hawai'i



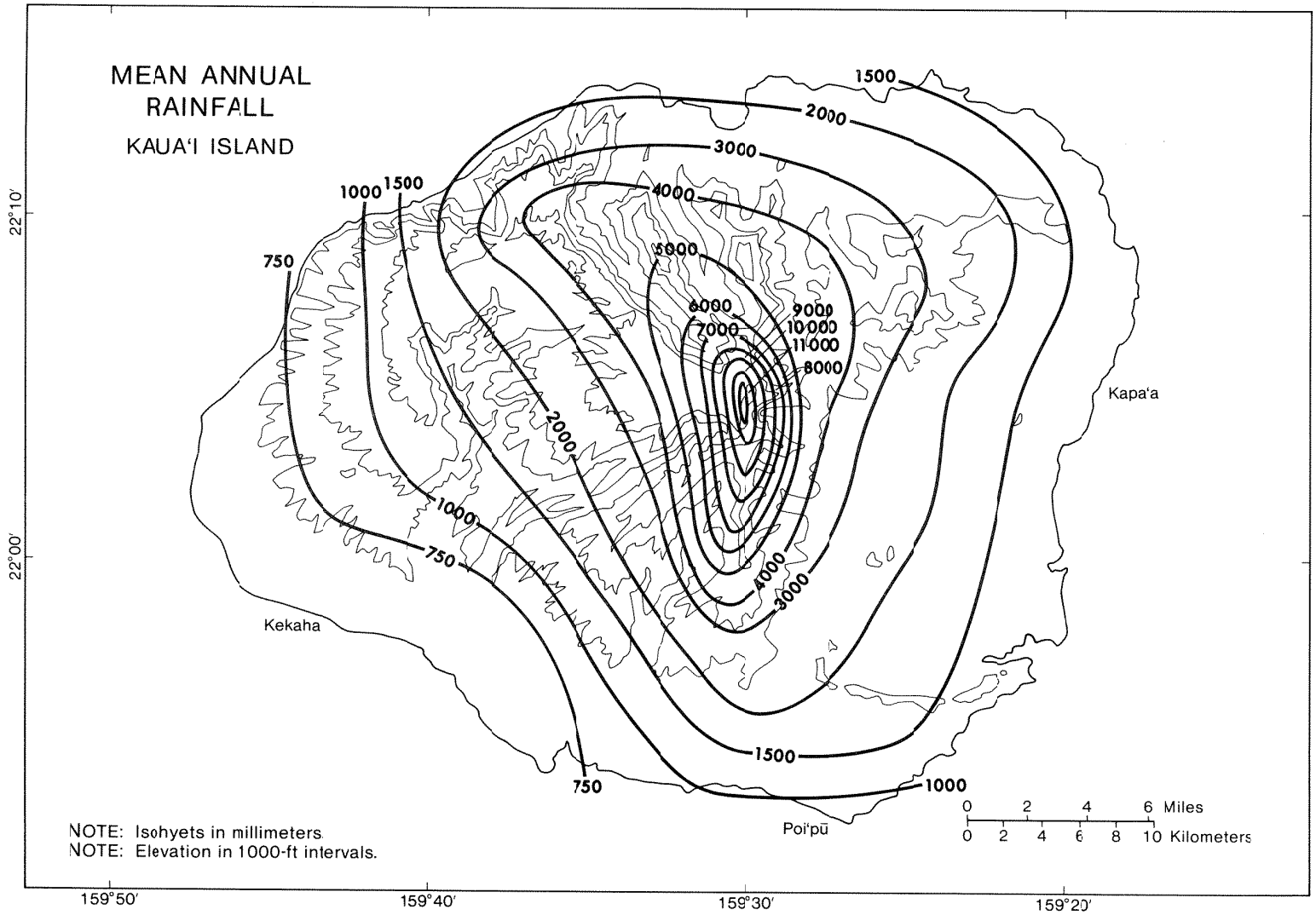
Appendix Figure A.115. October mean rainfall, O'ahu Island, Hawai'i



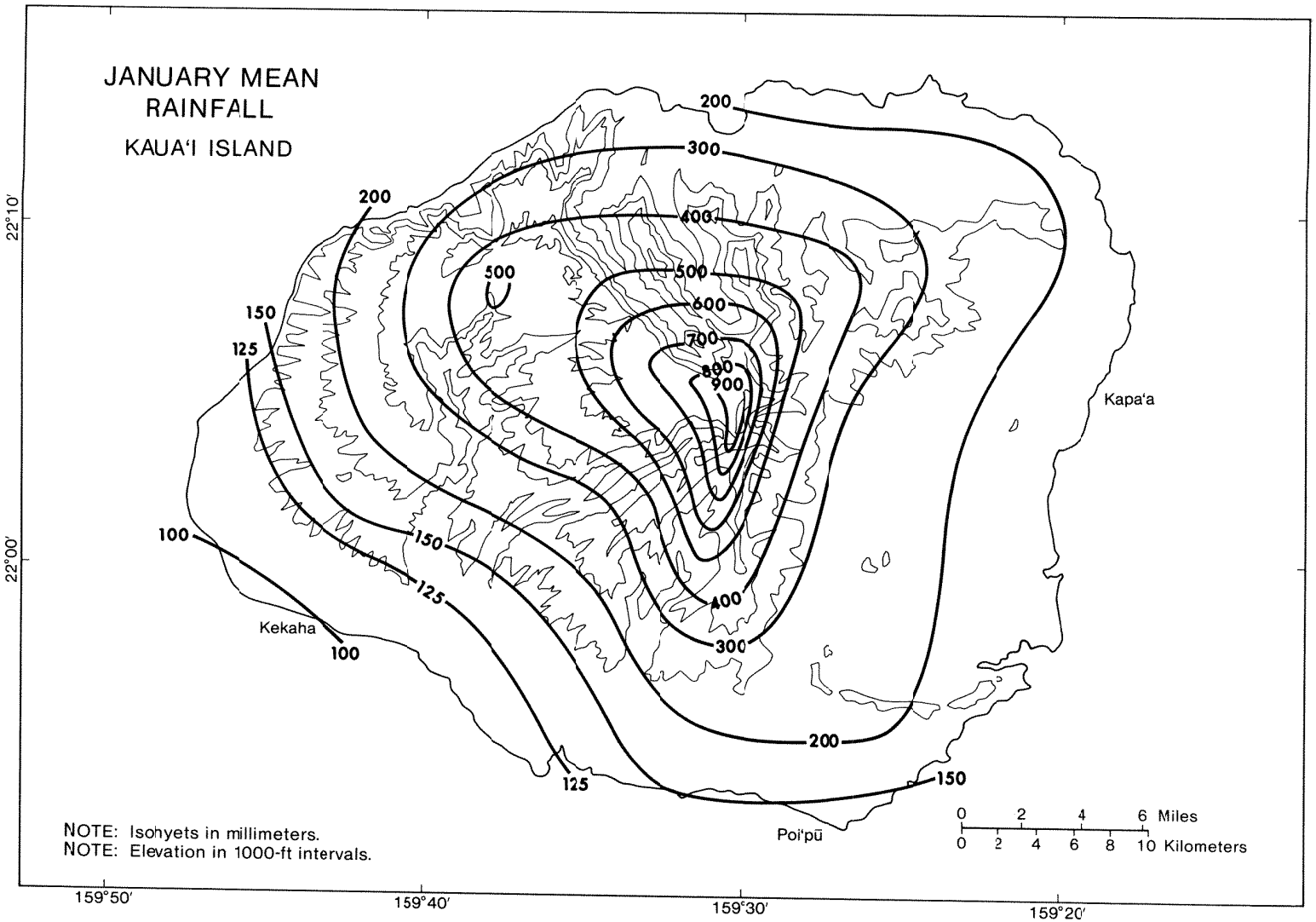
Appendix Figure A.116. November mean rainfall, O'ahu Island, Hawai'i



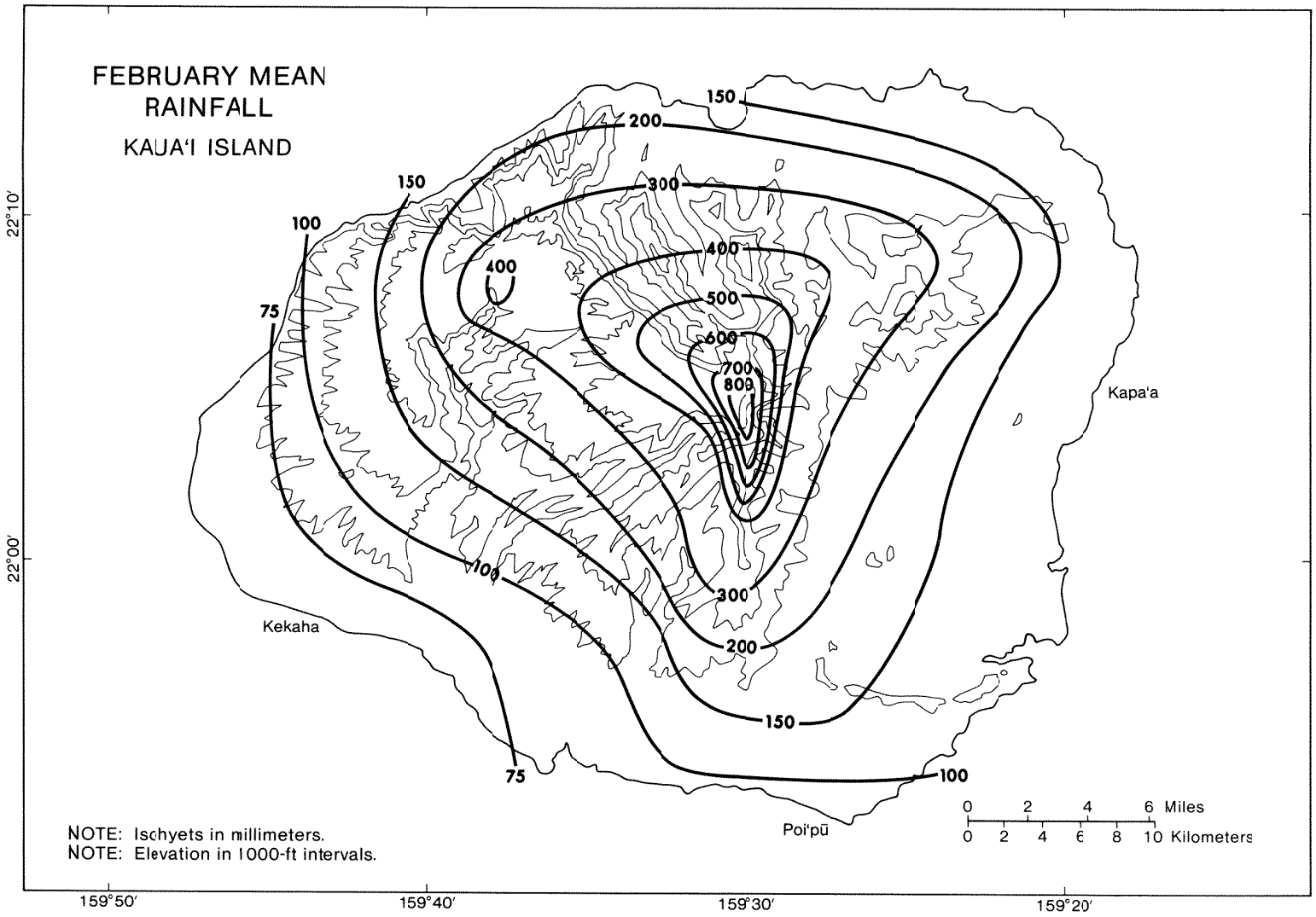
Appendix Figure A.117. December mean rainfall, O'ahu Island, Hawai'i



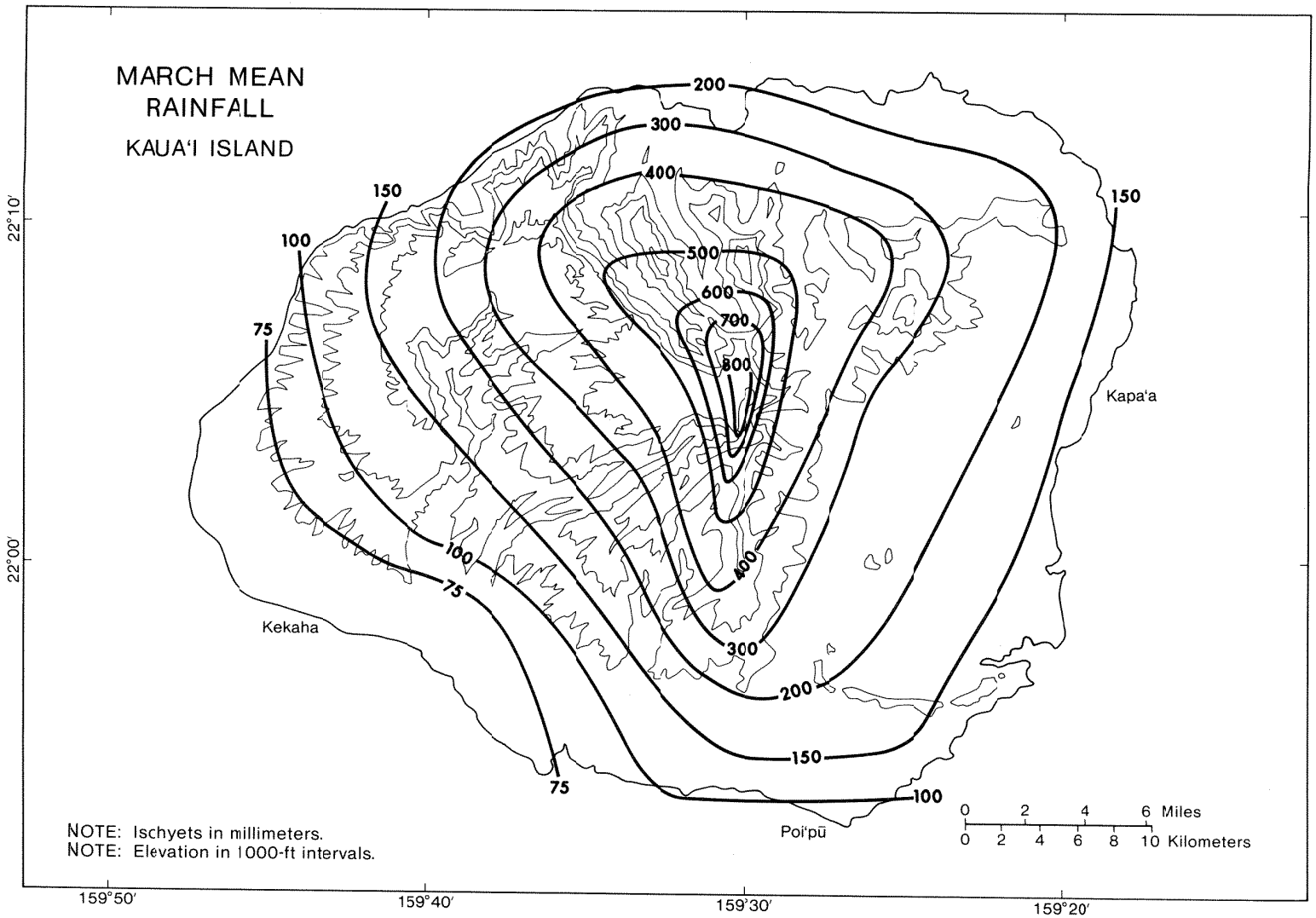
Appendix Figure A.118. Mean annual rainfall, Kaua'i Island, Hawai'i



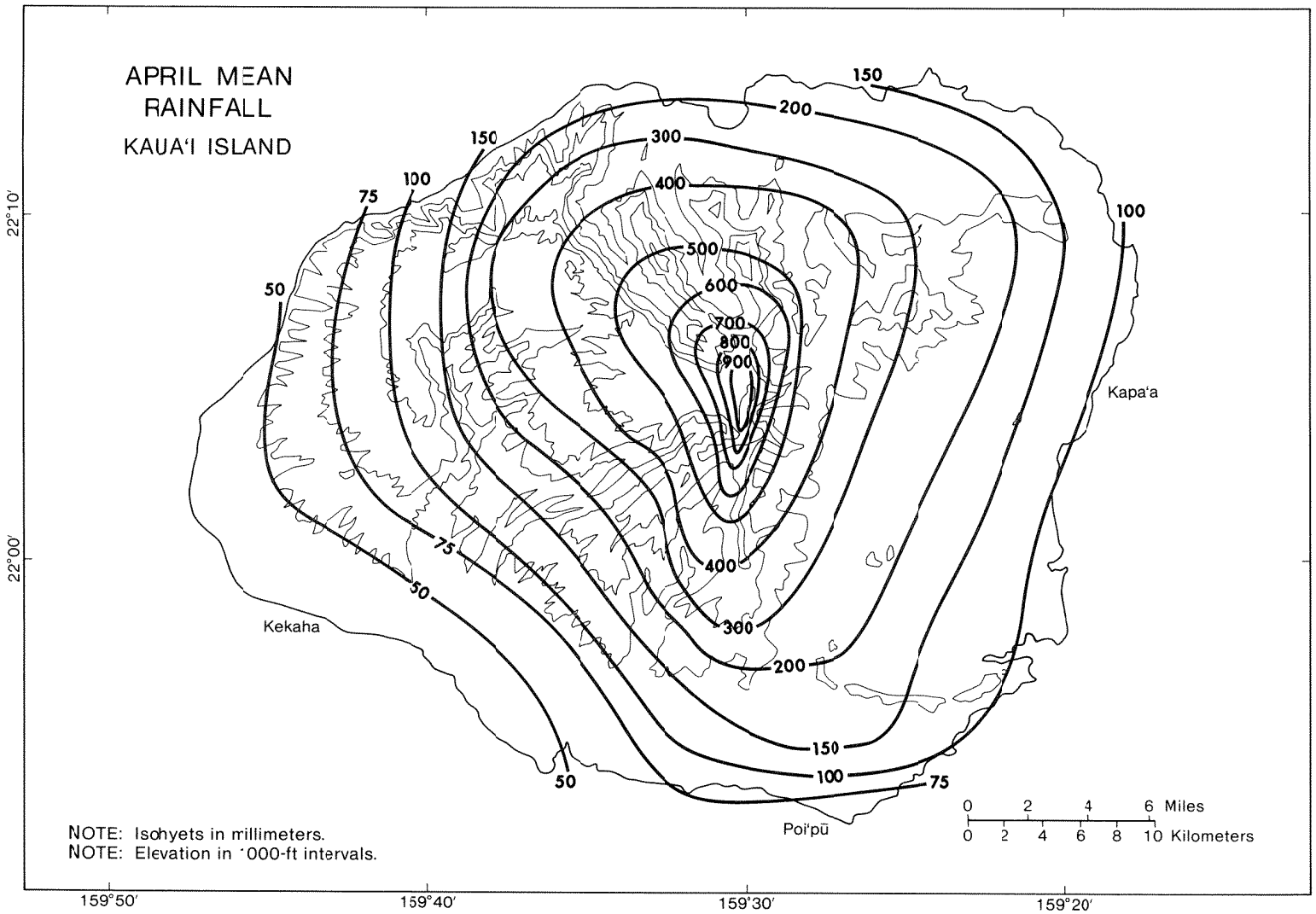
Appendix Figure A.119. January mean rainfall, Kaua'i Island, Hawai'i



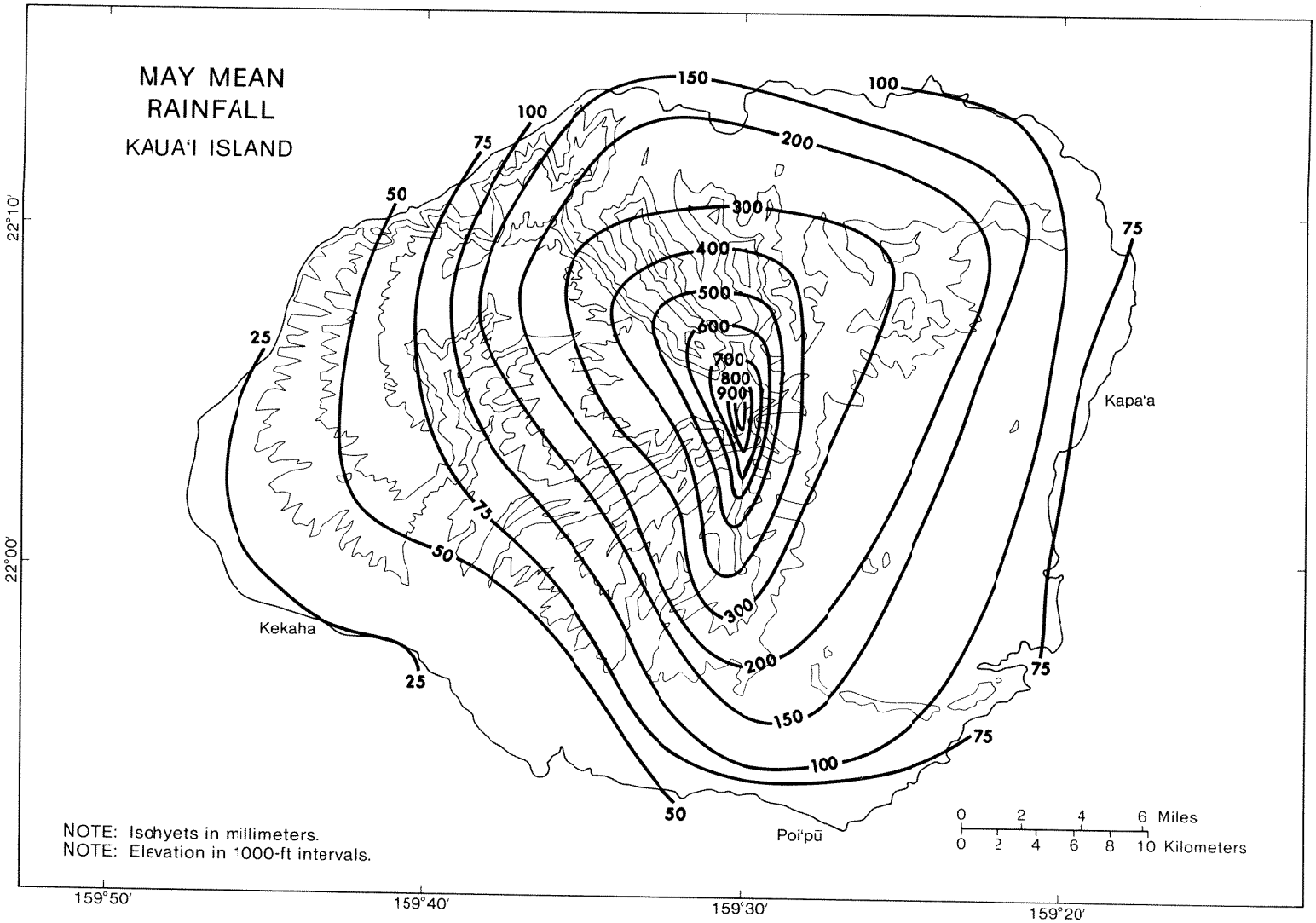
Appendix Figure A.120. February mean rainfall, Kaua'i Island, Hawai'i



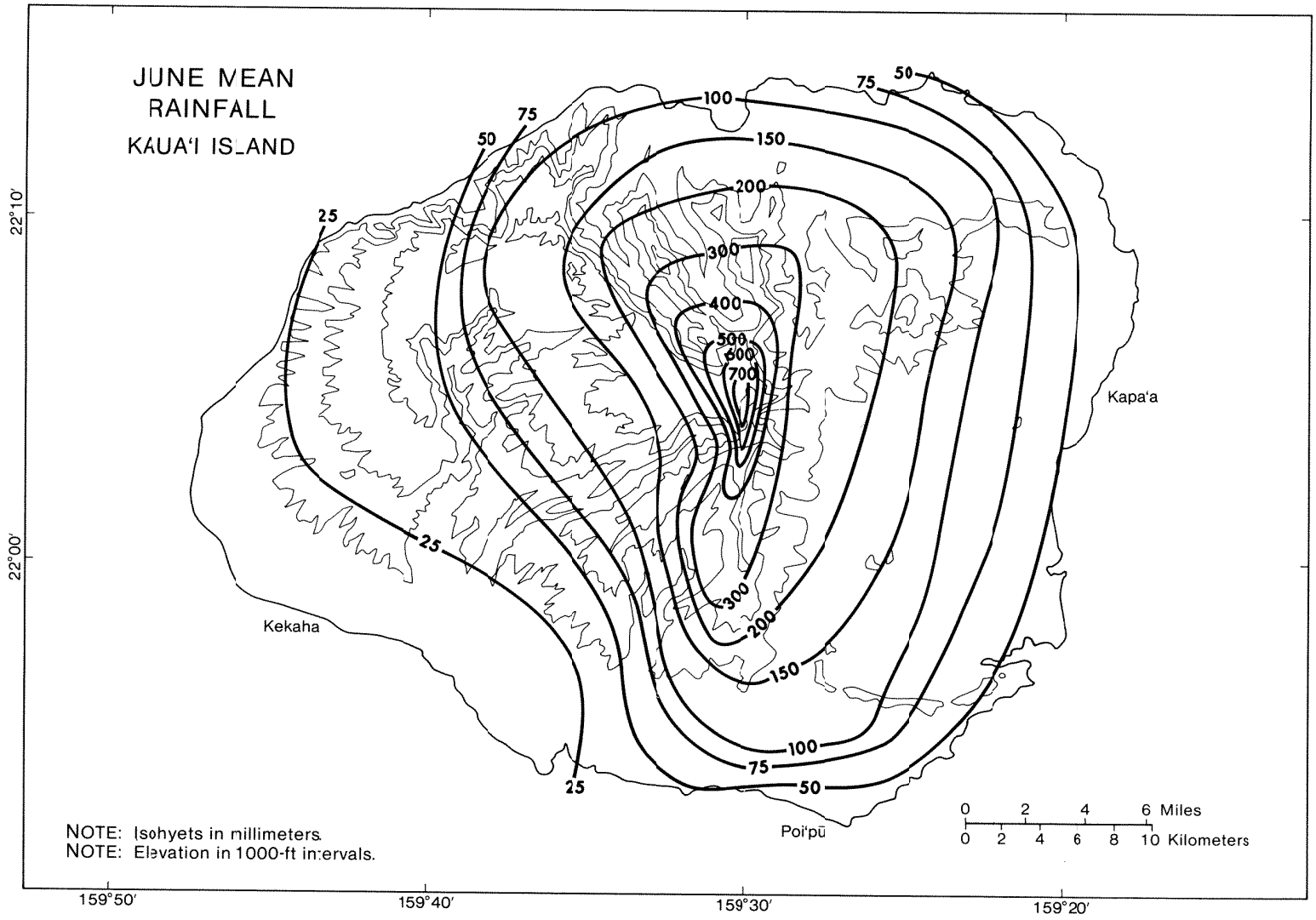
Appendix Figure A.121. March mean rainfall, Kaua'i Island, Hawai'i



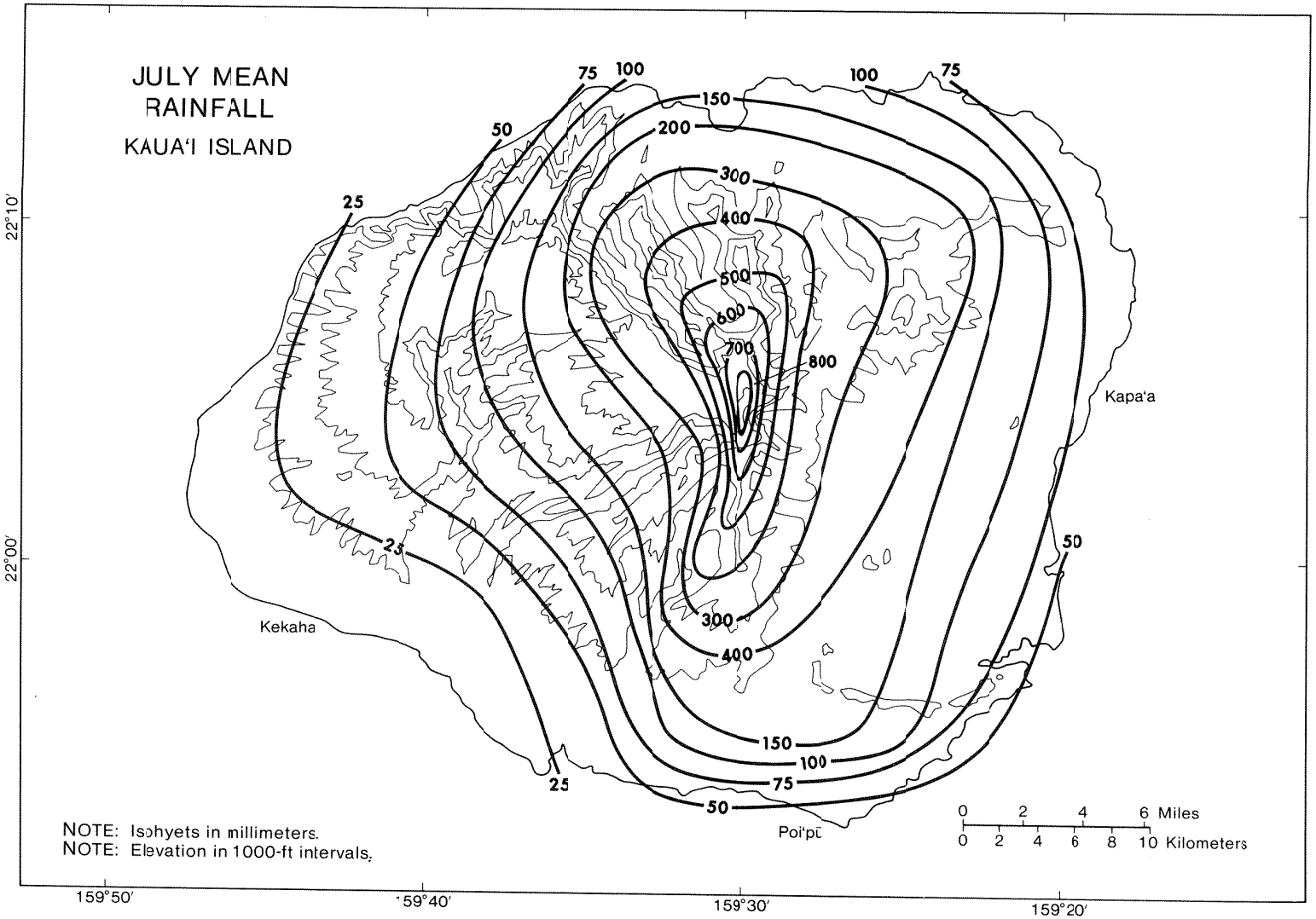
Appendix Figure A.122. April mean rainfall, Kaua'i Island, Hawai'i



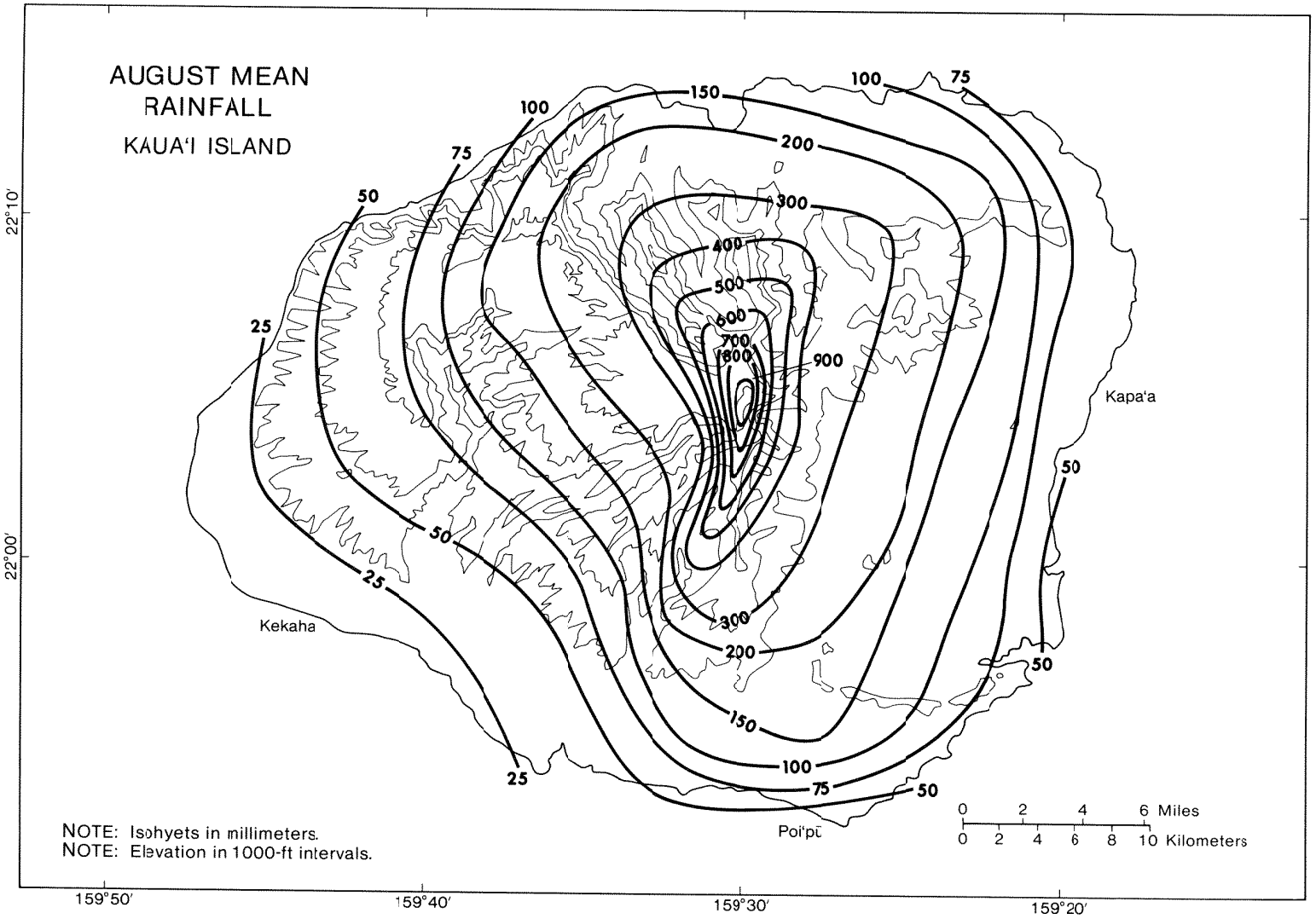
Appendix Figure A.123. May mean rainfall, Kaua'i Island, Hawai'i



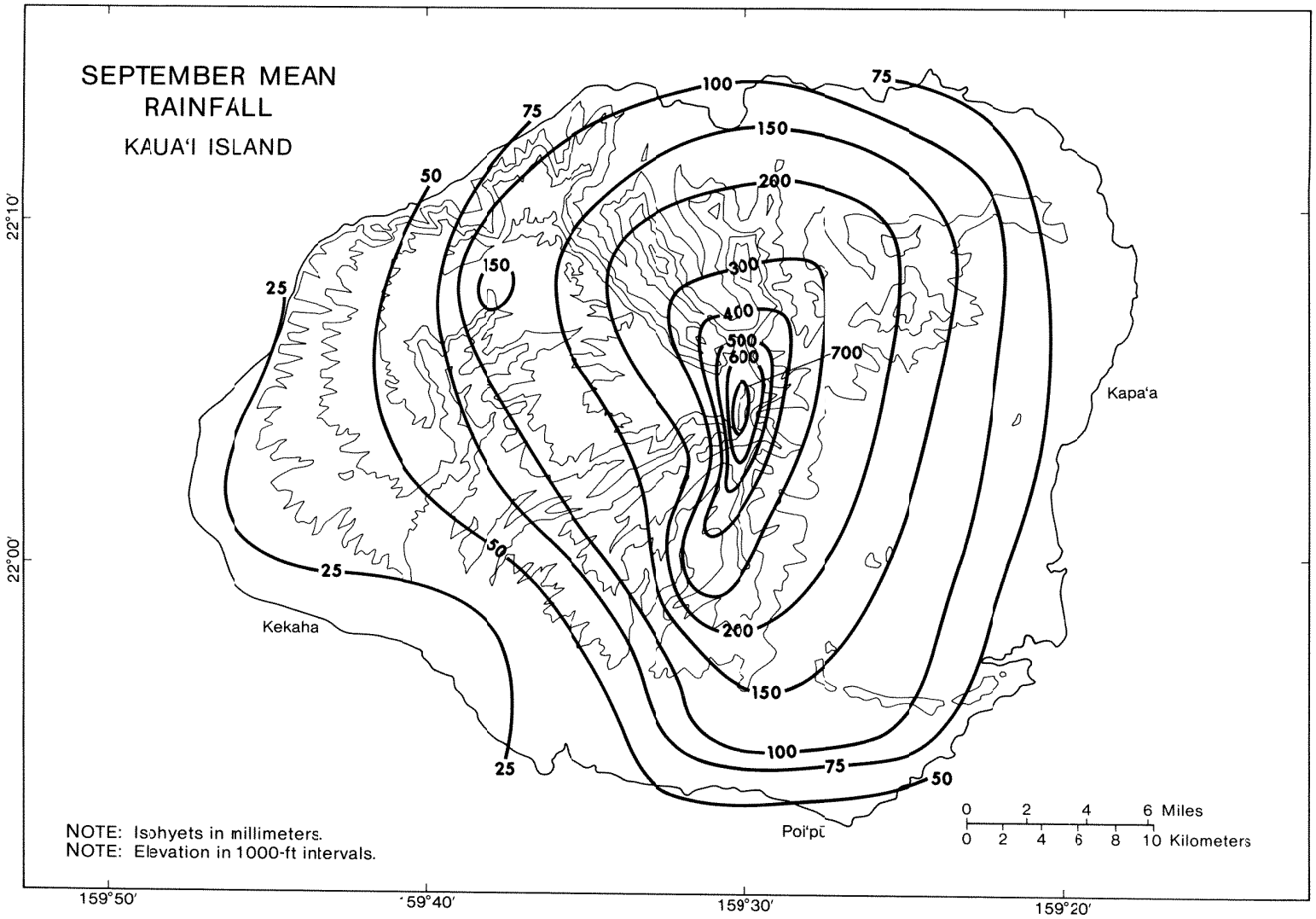
Appendix Figure A.124. June mean rainfall, Kaua'i Island, Hawai'i



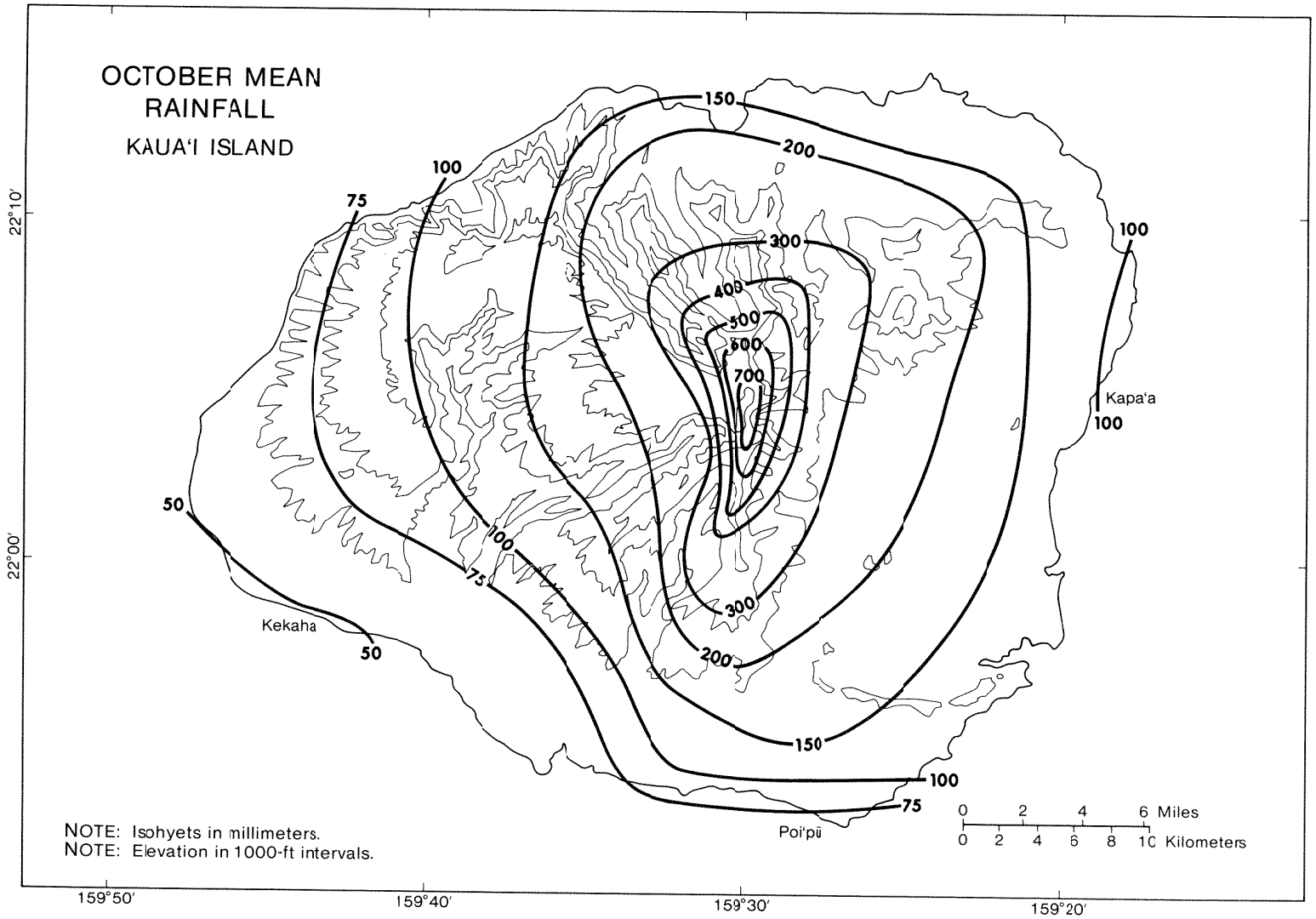
Appendix Figure A.125. July mean rainfall, Kaua'i Island, Hawai'i



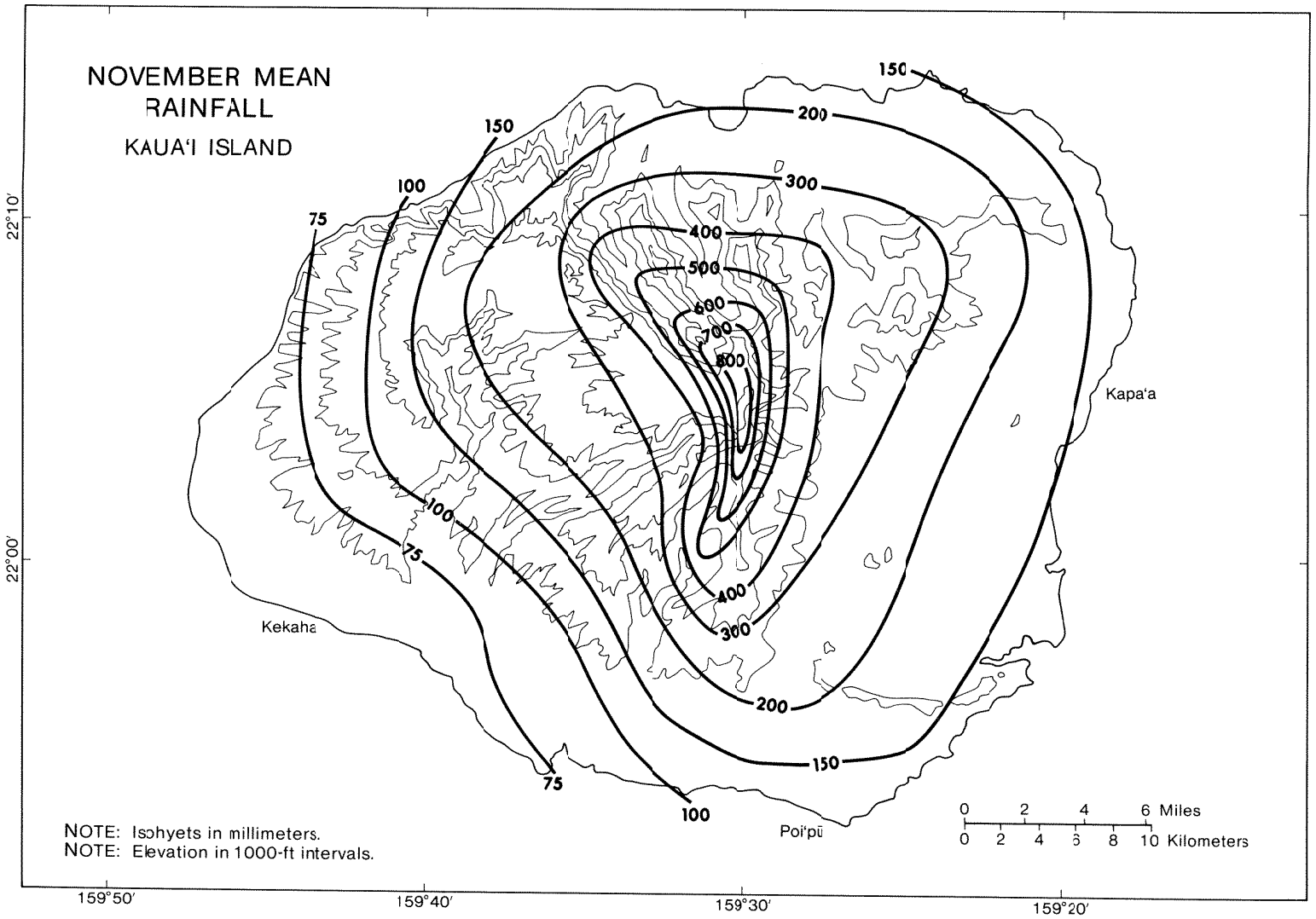
Appendix Figure A.126. August mean rainfall, Kaua'i Island, Hawai'i



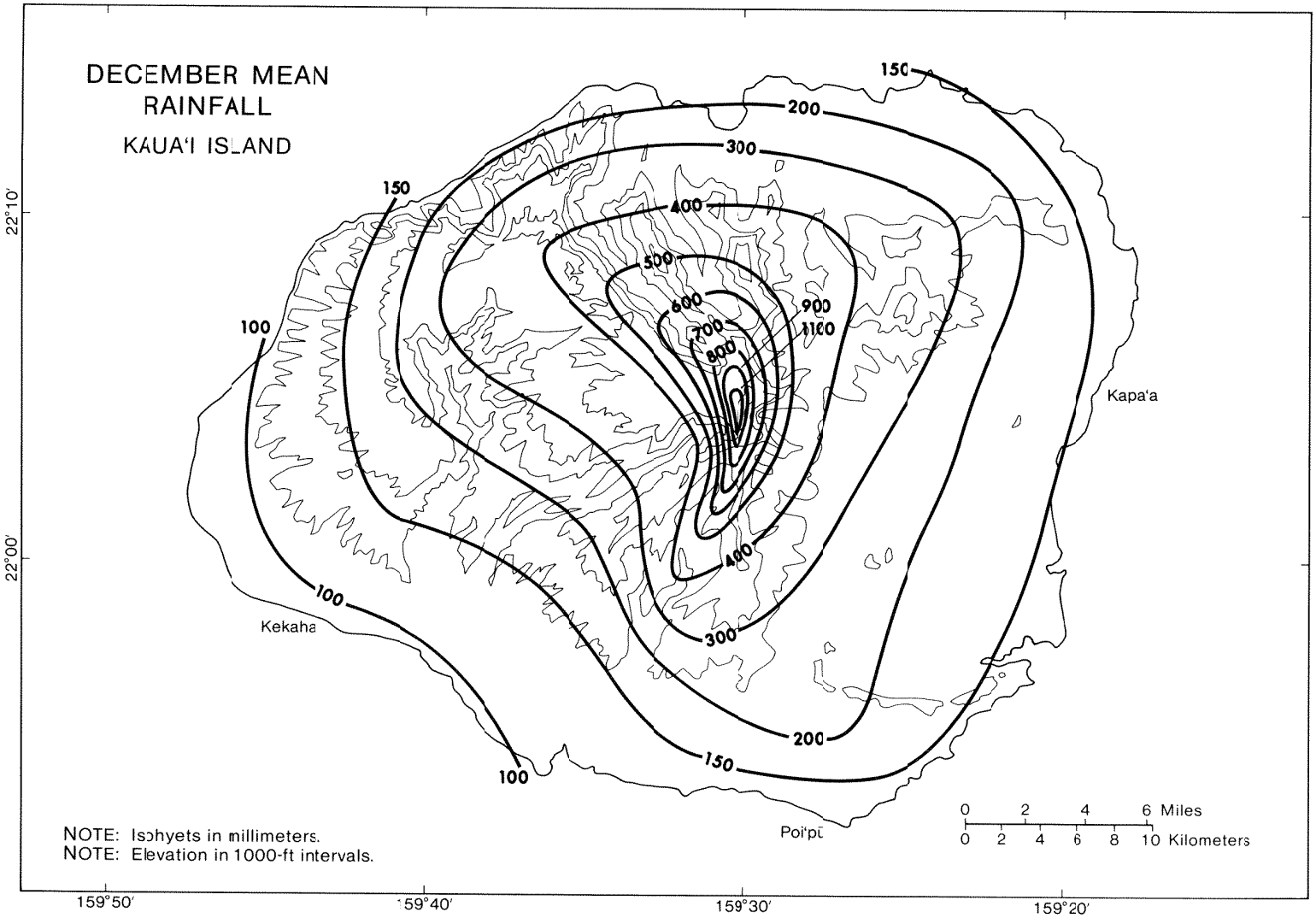
Appendix Figure A.127. September mean rainfall, Kaua'i Island, Hawai'i



Appendix Figure A.128. October mean rainfall, Kaua'i Island, Hawai'i



Appendix Figure A.129. November mean rainfall, Kaua'i Island, Hawai'i



Appendix Figure A.130. December mean rainfall, Kaua'i Island, Hawai'i

APPENDIX TABLE A.1. ADJUSTED AND UNADJUSTED MEDIAN AND MEAN, MONTHLY AND ANNUAL RAINFALL, HAWAI'I ISLAND, STATE OF HAWAI'I

State Key No.			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
			(mm)												
1.00	A	MD	68	28	60	22	10	13	11	20	3	19	49	56	433
1.00	U	MD	47	12	43	15	7	4	4	18	7	15	32	33	443
1.00	A	MN	86	49	75	35	12	16	12	28	7	24	65	73	421
1.00	U	MN	81	50	63	30	11	13	11	26	22	23	52	57	429
2.00	A	MD	85	76	132	119	130	102	104	104	135	94	76	76	1403
2.00	U	MD	85	76	132	119	129	102	104	104	134	93	76	76	1402
2.00	A	MN	109	100	137	133	142	112	112	126	129	105	92	89	1380
2.00	U	MN	109	100	136	133	141	111	111	126	129	104	92	89	1379
2.13	A	MD	107	63	141	109	138	98	102	101	132	90	66	51	1328
2.13	U	MD	85	60	98	128	129	71	94	77	105	80	72	50	1141
2.13	A	MN	129	80	143	127	146	105	105	109	131	91	87	64	1317
2.13	U	MN	125	64	105	128	136	90	94	92	107	79	93	59	1200
2.17	A	MD	109	56	157	113	127	92	101	95	118	88	82	65	1305
2.17	U	MD	79	50	92	105	119	82	92	85	109	71	86	52	1081
2.17	A	MN	128	76	161	130	132	96	104	95	126	99	103	75	1302
2.17	U	MN	125	64	108	121	127	90	103	89	110	94	107	55	1221
2.18	A	MD	87	37	89	57	66	48	61	58	71	49	55	43	794
2.18	U	MD	73	29	60	54	62	43	50	41	68	45	43	31	618
2.18	A	MN	99	54	95	71	69	50	63	65	74	54	67	54	790
2.18	U	MN	92	43	66	65	63	44	57	50	63	52	67	45	722
2.20	A	MD	123	75	100	87	84	70	78	92	79	87	82	76	1271
2.20	U	MD	119	67	85	72	82	63	66	85	76	79	77	80	1152
2.20	A	MN	153	107	116	111	91	75	78	107	91	98	107	105	1277
2.20	U	MN	139	96	110	108	86	72	78	99	89	101	100	100	1193
2.21	A	MD	143	91	231	161	237	182	170	177	180	165	114	79	2383
2.21	U	MD	140	101	137	180	167	86	144	157	167	127	101	95	2060
2.21	A	MN	168	97	243	186	251	196	178	179	187	176	138	97	2341
2.21	U	MN	187	95	164	191	200	140	159	168	184	156	141	96	1942
2.22	A	MD	113	65	147	99	152	115	112	96	120	90	83	54	1514
2.22	U	MD	104	59	99	119	128	62	86	67	107	65	74	48	1143
2.22	A	MN	134	86	151	119	162	125	117	102	125	89	103	67	1487
2.22	U	MN	132	66	105	125	134	85	94	86	108	70	97	59	1177
2.50	A	MD	95	98	99	89	118	98	99	97	119	82	82	67	1356
2.50	U	MD	77	71	75	86	116	50	106	101	99	63	38	71	1376
2.50	A	MN	121	104	107	106	128	104	102	106	120	90	107	83	1371
2.50	U	MN	128	98	84	114	133	99	99	107	104	76	109	81	1331
3.00	A	MD	76	45	75	35	23	13	20	26	18	34	46	71	630
3.00	U	MD	80	43	68	38	21	17	19	19	16	27	56	61	582
3.00	A	MN	101	71	85	53	27	18	24	38	24	37	62	87	632
3.00	U	MN	99	67	88	51	27	19	23	35	21	36	82	83	640

NOTE: A = normals adjusted to common base period; U = unadjusted normals; MD = median; MN = mean; —— = insufficient data.

NOTE: Median and mean annual rainfall not necessarily equal to sum of monthly normals.

APPENDIX TABLE A.1.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
3.10 A MD	128	64	92	78	90	85	76	92	82	84	75	82	1233
3.10 U MD	137	82	95	77	86	64	70	88	76	74	83	96	1150
3.10 A MN	156	86	109	93	93	92	76	109	87	92	106	110	1241
3.10 U MN	161	84	105	97	91	83	76	97	82	85	118	110	1190
3.20 A MD	132	81	108	87	93	85	91	101	93	107	90	88	1395
3.20 U MD	125	76	104	86	89	88	80	100	90	96	94	83	1320
3.20 A MN	161	115	125	110	101	92	91	115	106	120	116	119	1399
3.20 U MN	150	109	120	110	94	93	91	108	104	121	116	117	1350
3.30 A MD	180	124	129	124	173	145	143	177	151	155	144	126	2095
3.30 U MD	180	135	135	148	175	154	140	177	154	140	132	150	1966
3.30 A MN	217	171	155	149	182	148	151	201	158	166	163	157	2107
3.30 U MN	213	135	151	163	181	147	148	198	164	161	172	165	2016
4.10 A MD	122	62	85	61	47	53	56	67	52	75	64	76	1049
4.10 U MD	115	56	85	59	47	53	59	61	58	76	63	81	1048
4.10 A MN	142	104	106	90	61	59	55	77	67	91	91	104	1056
4.10 U MN	137	100	104	88	60	59	55	74	68	93	98	107	1056
4.40 A MD	92	71	75	46	45	25	26	47	40	57	56	68	858
4.40 U MD	80	44	48	57	43	17	25	32	45	35	73	62	831
4.40 A MN	122	91	90	68	52	33	30	57	52	70	78	92	873
4.40 U MN	123	82	76	71	55	30	27	53	52	60	103	93	847
4.90 A MD	77	49	94	41	20	2	12	23	7	31	55	50	591
4.90 U MD	101	28	27	60	14	2	5	3	2	12	29	53	629
4.90 A MN	89	90	99	58	28	7	15	41	18	38	74	78	597
4.90 U MN	98	49	70	81	44	12	12	38	25	24	75	90	621
5.00 A MD	107	61	86	59	50	42	50	65	51	74	75	89	946
5.00 U MD	94	67	90	62	51	49	53	69	51	76	81	86	940
5.00 A MN	135	102	101	83	57	47	54	83	66	83	100	111	953
5.00 U MN	127	100	113	85	57	51	54	77	64	87	118	108	928
6.00 A MD	136	116	154	120	111	120	129	134	137	135	142	135	1828
6.00 U MD	104	114	153	121	129	115	119	130	132	138	147	110	1832
6.00 A MN	183	156	171	147	126	121	133	154	143	146	175	164	1824
6.00 U MN	177	161	172	140	128	117	131	151	140	142	184	142	1758
7.00 A MD	134	81	125	78	76	66	60	89	86	99	108	119	1380
7.00 U MD	149	68	121	67	73	66	69	78	91	97	87	103	1352
7.00 A MN	180	123	148	107	85	72	66	106	97	111	140	148	1375
7.00 U MN	185	123	140	99	77	74	69	99	98	117	132	145	1349
10.00 A MD	242	184	246	257	306	299	282	331	323	288	223	210	3499
10.00 U MD	270	198	236	264	319	304	279	312	355	312	264	187	3384
10.00 A MN	285	231	274	286	316	298	286	353	339	304	262	239	3479
10.00 U MN	291	233	261	289	320	301	285	347	348	302	265	222	3454
11.00 A MD	197	113	162	132	126	110	102	150	143	155	169	155	2045
11.00 U MD	169	118	164	137	139	127	110	159	137	158	163	148	2037
11.00 A MN	238	163	193	163	136	120	110	180	164	168	219	195	2051
11.00 U MN	243	171	209	161	148	126	115	178	158	170	225	190	2078
12.00 A MD	154	99	141	98	96	66	68	97	106	131	127	134	1682
12.00 U MD	126	106	145	93	103	77	67	103	104	129	125	127	1644
12.00 A MN	228	155	176	131	108	77	77	119	123	147	168	173	1685
12.00 U MN	226	158	180	127	113	81	77	122	118	145	186	169	1696

APPENDIX TABLE A.1.—Continued

State Key No.			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
			(mm)												
12.10	A	MD	117	71	104	55	56	29	31	48	54	89	83	102	1091
12.10	U	MD	61	66	108	52	39	21	27	38	51	60	76	66	913
12.10	A	MN	172	113	133	90	62	32	35	65	68	102	113	136	1103
12.10	U	MN	114	100	120	80	48	26	39	69	64	86	112	120	963
12.12	A	MD	164	92	123	82	81	66	55	86	99	129	129	106	1557
12.12	U	MD	170	84	101	109	99	75	55	96	108	149	157	116	1468
12.12	A	MN	232	135	148	128	94	76	65	105	115	138	167	145	1572
12.12	U	MN	212	101	138	153	118	71	67	121	119	144	213	157	1624
12.70	A	MD	211	134	189	130	186	156	115	170	180	181	167	116	2366
12.70	U	MD	244	121	157	194	189	178	107	188	203	224	313	153	2377
12.70	A	MN	266	215	225	173	203	160	126	188	203	199	216	166	2375
12.70	U	MN	263	153	176	194	244	161	108	184	219	198	301	198	2405
12.90	A	MD	231	145	215	197	236	198	176	217	212	231	192	159	2764
12.90	U	MD	267	175	231	247	272	207	159	212	218	200	195	173	2882
12.90	A	MN	311	200	244	232	249	200	179	228	226	252	243	206	2775
12.90	U	MN	343	176	244	268	273	192	158	216	239	242	282	214	2853
13.00	A	MD	136	87	125	75	64	39	40	63	74	100	105	116	1399
13.00	U	MD	118	79	138	76	60	41	41	63	64	104	109	100	1328
13.00	A	MN	196	130	155	108	75	52	48	88	91	113	141	152	1430
13.00	U	MN	193	126	159	103	78	54	47	89	84	110	157	147	1352
13.20	A	MD	190	118	151	116	108	98	74	116	121	162	154	142	1924
13.20	U	MD	225	113	124	157	145	99	90	118	127	181	168	145	2006
13.20	A	MN	255	190	184	155	125	107	90	144	144	173	198	182	1929
13.20	U	MN	249	144	159	192	163	97	93	173	141	178	252	188	2030
13.80	A	MD	195	118	172	117	157	102	95	144	139	156	155	131	2077
13.80	U	MD	172	118	166	150	162	106	95	135	133	150	174	138	2215
13.80	A	MN	276	182	198	149	171	115	105	164	156	174	197	170	2081
13.80	U	MN	264	171	204	151	186	122	104	166	146	172	230	183	2089
14.00	A	MD	122	66	120	57	53	29	34	59	59	84	87	115	1211
14.00	U	MD	107	67	115	54	51	31	37	57	57	80	87	108	1175
14.00	A	MN	183	122	146	95	61	42	42	85	77	97	124	144	1217
14.00	U	MN	165	120	141	88	58	41	45	88	76	95	129	132	1183
15.00	A	MD	110	68	103	48	33	18	18	40	39	64	81	95	1020
15.00	U	MD	101	73	97	47	30	14	17	42	36	50	89	72	872
15.00	A	MN	164	118	135	80	44	25	24	61	50	76	117	123	1034
15.00	U	MN	166	113	125	78	50	23	22	66	49	70	134	111	1017
16.00	A	MD	193	223	267	273	318	287	207	258	314	267	183	155	3294
16.00	U	MD	165	152	254	273	292	254	215	266	304	256	184	152	3172
16.00	A	MN	258	267	312	312	331	284	212	297	304	285	221	205	3342
16.00	U	MN	250	257	295	299	305	291	209	271	291	275	220	205	3194
17.00	A	MD	177	150	199	168	177	146	126	165	177	196	167	153	2376
17.00	U	MD	162	149	178	165	176	142	127	160	177	195	167	149	2347
17.00	A	MN	261	205	242	197	193	147	132	181	186	217	206	201	2341
17.00	U	MN	248	199	231	191	189	146	132	177	183	213	217	197	2302
18.00	A	MD	121	79	109	70	45	29	27	48	48	88	96	92	1193
18.00	U	MD	116	79	101	61	45	30	21	38	48	78	96	79	1071
18.00	A	MN	184	117	149	103	50	33	34	69	63	101	130	133	1202
18.00	U	MN	179	118	146	102	50	33	36	72	64	103	137	131	1190

APPENDIX TABLE A.1.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
20.00 A MD	247	211	274	255	257	212	216	220	298	272	250	191	3412
20.00 U MD	203	304	266	215	254	228	190	209	288	254	266	190	3260
20.00 A MN	344	273	326	319	285	219	226	247	312	296	307	260	3401
20.00 U MN	429	328	310	273	300	220	218	206	310	276	292	254	3458
20.10 A MD	226	180	255	231	247	192	177	206	242	252	209	180	2925
20.10 U MD	218	203	266	254	254	182	177	217	254	241	254	203	2971
20.10 A MN	317	235	308	270	265	192	186	228	252	272	249	235	2859
20.10 U MN	357	240	288	276	287	192	184	227	259	264	286	249	3114
20.20 A MD	218	164	243	224	239	186	165	200	207	234	178	175	2826
20.20 U MD	218	163	241	272	224	181	148	231	209	230	220	213	2951
20.20 A MN	298	212	295	257	253	180	173	221	224	246	218	227	2784
20.20 U MN	298	175	271	275	274	177	170	239	228	249	271	245	2941
21.00 A MD	130	94	118	67	57	31	31	52	55	88	100	100	1254
21.00 U MD	96	91	97	53	46	24	23	43	52	73	106	84	1128
21.00 A MN	196	146	155	104	68	36	37	73	68	103	139	144	1263
21.00 U MN	169	140	147	91	62	33	35	76	65	94	146	132	1196
22.00 A MD	166	118	149	115	95	56	54	76	95	133	113	124	1695
22.00 U MD	164	123	130	98	88	59	53	69	84	127	96	102	1512
22.00 A MN	255	173	196	159	107	61	61	99	112	152	154	163	1708
22.00 U MN	273	174	172	151	97	62	59	90	126	152	129	152	1642
22.10 A MD	165	130	155	115	109	64	55	81	95	116	131	121	1742
22.10 U MD	126	113	163	119	105	62	51	71	92	106	148	114	1691
22.10 A MN	247	195	200	159	121	70	66	106	107	133	175	174	1753
22.10 U MN	219	188	205	163	127	70	66	121	99	132	208	182	1739
24.10 A MD	92	61	120	84	106	104	113	105	131	92	75	68	1226
24.10 U MD	90	59	96	91	90	85	99	96	96	82	76	57	1099
24.10 A MN	109	79	124	94	108	105	115	104	128	99	90	79	1228
24.10 U MN	103	69	102	91	109	96	108	112	110	86	88	77	1158
25.00 A MD	87	75	118	87	108	135	125	103	124	75	65	91	1211
25.00 U MD	87	71	99	103	131	130	119	116	137	111	67	47	1267
25.00 A MN	129	91	119	90	115	137	122	110	136	81	69	99	1221
25.00 U MN	84	85	105	96	125	129	119	122	148	121	64	73	1277
25.70 A MD	72	55	97	94	110	97	111	114	103	86	60	69	1155
25.70 U MD	82	48	88	102	90	90	110	104	89	75	49	70	1120
25.70 A MN	88	65	102	99	116	102	109	118	110	94	70	75	1182
25.70 U MN	95	58	89	102	115	90	109	115	100	89	69	79	1125
26.00 A MD	86	87	137	176	203	192	226	197	205	139	101	88	1956
26.00 U MD	88	94	144	174	220	215	202	168	214	135	112	82	1992
26.00 A MN	112	100	154	187	212	213	223	199	219	158	110	96	2002
26.00 U MN	109	95	150	190	216	206	217	193	209	160	113	97	1957
26.10 A MD	89	75	152	178	170	193	181	188	155	108	89	76	1835
26.10 U MD	97	81	127	144	127	142	162	182	125	102	65	80	1679
26.10 A MN	120	82	170	198	178	241	188	189	157	136	112	81	1882
26.10 U MN	144	70	151	181	172	158	182	186	152	130	97	89	1719
26.20 A MD	68	64	99	116	141	139	168	173	161	128	74	58	1507
26.20 U MD	80	56	101	102	152	145	160	168	167	138	87	66	1538
26.20 A MN	97	64	107	126	148	156	164	173	174	136	86	63	1543
26.20 U MN	100	74	104	123	158	157	168	176	180	144	93	84	1577

APPENDIX TABLE A.1.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
26.30 A MD	77	55	101	192	170	174	162	186	154	109	109	63	1740
26.30 U MD	88	56	101	174	154	169	202	180	185	112	69	67	1673
26.30 A MN	103	71	111	210	176	194	178	186	164	129	124	72	1787
26.30 U MN	144	78	115	192	173	184	191	185	182	123	88	64	1726
27.00 A MD	56	52	80	91	125	143	134	138	118	99	71	52	1244
27.00 U MD	56	51	80	91	125	142	134	137	118	99	71	52	1243
27.00 A MN	80	69	102	111	130	144	140	138	136	118	70	58	1289
27.00 U MN	79	69	102	111	130	144	140	137	135	118	70	57	1289
27.40 A MD	45	---	---	---	---	49	55	---	58	44	49	45	---
27.40 U MD	49	39	41	34	55	53	47	49	65	44	49	29	585
27.40 A MN	67	---	---	---	---	57	55	---	65	52	56	58	---
27.40 U MN	79	59	51	46	59	63	49	61	65	55	49	35	659
28.00 A MD	58	52	71	75	88	89	104	99	110	89	55	55	990
28.00 U MD	60	44	68	80	93	93	94	99	101	85	57	53	1026
28.00 A MN	78	58	86	82	94	97	103	103	118	96	62	60	1024
28.00 U MN	76	53	81	86	91	97	100	104	110	94	63	60	1019
28.20 A MD	72	61	91	94	114	118	130	143	126	110	68	60	1295
28.20 U MD	80	43	76	117	107	98	136	149	133	96	68	66	1352
28.20 A MN	96	74	98	109	118	132	130	146	134	117	77	70	1345
28.20 U MN	100	56	94	128	113	112	136	153	131	108	79	75	1320
29.00 A MD	67	67	93	113	130	136	159	150	149	112	69	65	1376
29.00 U MD	71	64	105	104	125	146	139	160	157	117	69	63	1410
29.00 A MN	98	74	107	121	137	150	154	153	158	120	78	71	1413
29.00 U MN	102	67	102	125	129	147	146	158	152	114	79	75	1402
29.50 A MD	55	43	108	87	103	100	106	108	102	76	58	44	1127
29.50 U MD	55	50	76	81	93	92	101	85	86	55	50	43	994
29.50 A MN	78	60	116	104	106	114	111	111	110	86	80	55	1160
29.50 U MN	91	57	104	104	108	100	100	99	91	77	69	54	1061
29.80 A MD	58	270	97	121	131	135	162	160	152	110	70	59	1520
29.80 U MD	93	52	76	107	120	124	154	118	152	107	50	54	1380
29.80 A MN	85	189	103	128	140	146	164	160	164	124	84	66	1559
29.80 U MN	102	161	98	126	137	135	149	149	163	111	72	69	1374
29.90 A MD	66	49	114	150	161	181	183	189	181	96	86	62	1697
29.90 U MD	67	50	114	152	138	177	201	157	203	98	78	54	1747
29.90 A MN	96	67	122	170	163	212	191	190	193	109	100	69	1746
29.90 U MN	119	71	116	180	157	180	189	175	183	101	82	72	1634
30.30 A MD	96	158	225	280	393	279	318	237	233	273	142	127	2724
30.30 U MD	105	119	177	295	351	269	280	203	253	274	135	96	2147
30.30 A MN	108	179	224	284	391	326	330	238	225	296	150	131	2793
30.30 U MN	123	173	221	303	351	275	291	219	259	293	156	138	2374
35.00 A MD	289	230	353	321	417	245	222	269	384	372	282	231	4082
35.00 U MD	241	223	406	304	304	266	266	266	368	393	266	247	4108
35.00 A MN	375	296	399	349	462	278	239	316	384	396	320	282	4100
35.00 U MN	367	299	393	329	363	283	238	317	386	389	311	288	4012
35.10 A MD	219	170	243	234	247	176	145	199	200	244	196	165	2839
35.10 U MD	213	157	229	269	245	158	140	223	188	248	248	203	2918
35.10 A MN	315	226	302	271	263	173	155	217	219	261	240	224	2800
35.10 U MN	303	191	274	284	288	167	149	232	211	267	299	228	2903

APPENDIX TABLE A.1.—Continued

State Key No.			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
			(mm)												
35.60	A	MD	179	151	184	164	149	99	76	108	131	150	201	139	2097
35.60	U	MD	163	128	175	166	157	86	74	108	144	156	182	142	2129
35.60	A	MN	266	206	238	207	162	101	87	135	144	167	239	194	2116
35.60	U	MN	269	161	215	208	173	107	92	156	146	167	278	203	2181
36.00	A	MD	154	129	146	101	94	45	46	72	86	121	110	103	1631
36.00	U	MD	126	116	150	87	90	44	46	72	85	118	112	92	1553
36.00	A	MN	225	186	205	154	106	53	60	102	99	139	157	171	1669
36.00	U	MN	197	177	196	134	100	50	61	100	97	130	166	160	1574
37.00	A	MD	140	110	160	156	123	63	86	115	113	135	104	88	1689
37.00	U	MD	157	128	156	139	117	64	88	124	111	150	94	86	1514
37.00	A	MN	187	145	199	182	134	67	100	139	121	146	129	134	1717
37.00	U	MN	188	148	181	177	135	67	94	138	123	148	142	116	1651
38.00	A	MD	176	147	190	150	138	74	71	92	121	152	140	127	1948
38.00	U	MD	167	142	183	136	152	50	63	91	109	145	129	114	1769
38.00	A	MN	225	183	239	190	150	83	79	121	135	168	170	168	1988
38.00	U	MN	219	177	213	177	148	82	77	121	136	169	177	163	1889
38.10	A	MD	149	92	166	119	91	35	52	66	72	79	113	120	1499
38.10	U	MD	116	100	183	134	84	14	41	69	68	73	139	84	1470
38.10	A	MN	227	144	236	150	101	43	70	117	84	86	150	160	1505
38.10	U	MN	209	167	228	152	99	38	72	114	74	86	178	168	1538
38.50	A	MD	154	116	140	77	90	43	42	57	82	91	157	148	1407
38.50	U	MD	117	96	114	135	59	33	44	42	51	90	124	91	1383
38.50	A	MN	212	151	161	107	100	49	49	85	99	98	164	166	1441
38.50	U	MN	202	157	180	149	91	48	55	69	76	94	165	167	1461
39.10	A	MD	46	28	46	28	28	13	27	31	40	35	29	34	483
39.10	U	MD	40	28	54	26	35	9	23	26	33	30	41	47	471
39.10	A	MN	73	37	52	36	36	16	35	46	56	43	39	56	499
39.10	U	MN	70	35	48	43	40	13	32	44	43	35	47	58	500
43.10	A	MD	135	115	125	94	70	34	42	61	74	103	108	99	1244
43.10	U	MD	152	114	131	88	60	18	27	50	69	91	117	105	1299
43.10	A	MN	169	134	155	117	78	44	51	80	88	117	127	131	1296
43.10	U	MN	165	134	143	113	79	42	50	82	92	119	132	129	1285
43.20	A	MD	119	93	119	100	61	27	49	81	88	120	75	112	1596
43.20	U	MD	87	78	97	76	52	25	33	77	82	95	52	42	957
43.20	A	MN	180	140	164	124	67	31	55	95	99	122	91	134	1561
43.20	U	MN	146	112	154	119	67	35	54	111	150	113	75	112	1231
44.00	A	MD	135	96	108	69	46	21	21	41	55	83	91	98	1174
44.00	U	MD	98	86	118	55	34	6	15	32	51	72	86	86	1093
44.00	A	MN	191	137	155	103	55	26	28	67	64	97	118	135	1202
44.00	U	MN	182	129	135	95	54	25	27	68	66	97	124	131	1141
45.10	A	MD	141	81	144	106	81	32	41	54	61	76	116	103	1350
45.10	U	MD	94	89	143	117	70	10	32	61	60	66	132	95	1294
45.10	A	MN	226	136	206	150	85	38	55	96	71	87	148	140	1374
45.10	U	MN	196	159	204	154	85	35	60	98	65	76	169	150	1399
51.00	A	MD	218	147	233	198	119	58	84	98	91	117	194	200	2061
51.00	U	MD	208	177	226	156	136	56	74	81	81	108	240	205	2144
51.00	A	MN	280	193	283	234	127	64	91	135	99	129	216	239	2042
51.00	U	MN	261	206	268	191	160	62	79	131	85	125	256	251	2049

APPENDIX TABLE A.1.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
51.50 A MD	245	190	297	262	204	115	163	162	142	164	304	253	2938
51.50 U MD	319	170	292	369	209	110	180	160	149	133	304	370	3131
51.50 A MN	326	257	358	302	211	127	174	201	158	180	313	303	2899
51.50 U MN	353	245	279	402	255	117	193	221	152	134	344	334	3107
52.00 A MD	147	97	127	83	51	23	27	47	40	71	121	119	1292
52.00 U MD	129	87	121	78	44	18	26	37	31	57	112	112	1327
52.00 A MN	201	154	172	118	57	27	35	74	47	84	157	164	1296
52.00 U MN	199	161	171	111	59	29	34	77	42	84	170	157	1322
52.10 A MD	175	121	161	107	76	30	39	59	58	89	149	137	1581
52.10 U MD	175	127	152	113	66	26	30	54	46	77	186	127	1662
52.10 A MN	242	178	219	147	85	36	46	90	67	103	181	183	1583
52.10 U MN	246	199	219	151	90	35	40	95	56	100	216	185	1600
54.00 A MD	229	167	264	212	161	99	120	127	119	150	221	230	2573
54.00 U MD	215	160	261	212	161	102	120	127	124	149	229	238	2596
54.00 A MN	297	247	332	251	170	110	132	179	131	167	250	282	2537
54.00 U MN	290	241	325	249	169	112	140	181	136	168	266	281	2552
54.10 A MD	282	210	327	272	210	149	173	187	161	194	261	280	3204
54.10 U MD	389	293	368	235	217	147	177	184	131	231	276	311	3197
54.10 A MN	355	291	397	306	221	163	186	238	177	212	292	338	3186
54.10 U MN	346	315	410	273	207	172	187	265	160	243	301	350	3232
54.20 A MD	329	305	389	430	382	192	298	296	290	294	465	317	---
54.20 U MD	361	189	409	425	257	149	256	368	330	353	350	308	4676
54.20 A MN	428	390	489	500	406	201	312	368	301	316	482	401	---
54.20 U MN	531	347	506	474	347	180	317	317	323	330	427	454	4893
54.40 A MD	313	244	381	366	269	188	229	248	196	245	374	310	3672
54.40 U MD	315	256	390	419	275	186	226	240	170	220	487	280	3923
54.40 A MN	389	310	435	393	283	205	243	302	215	263	382	364	3652
54.40 U MN	365	330	380	424	338	197	232	308	175	261	431	385	3805
55.00 A MD	272	213	372	301	219	140	190	191	150	176	319	290	---
55.00 U MD	149	190	431	394	228	146	189	163	148	205	325	339	3171
55.00 A MN	341	304	455	336	229	152	200	246	163	205	327	348	---
55.00 U MN	325	267	505	385	230	152	204	233	160	195	339	380	3291
58.00 A MD	265	184	233	142	87	53	52	71	73	113	206	216	2160
58.00 U MD	197	169	248	116	82	51	48	56	49	82	206	234	2048
58.00 A MN	351	249	306	184	101	59	57	100	82	135	247	259	2190
58.00 U MN	338	260	272	185	113	58	65	98	64	130	265	262	2112
58.10 A MD	280	177	211	124	69	99	32	68	58	115	190	172	2003
58.10 U MD	238	160	246	96	73	27	29	61	40	72	196	233	1972
58.10 A MN	366	262	288	164	86	96	37	87	68	137	229	250	2054
58.10 U MN	355	239	251	172	106	93	36	88	53	132	277	256	2022
58.20 A MD	294	183	221	163	61	57	56	78	86	136	189	219	2224
58.20 U MD	312	152	269	253	137	51	64	59	80	146	210	292	2123
58.20 A MN	389	241	281	203	81	64	65	108	90	158	232	294	2272
58.20 U MN	354	180	250	289	179	61	70	93	90	151	278	336	2354
65.00 A MD	295	239	388	309	254	202	255	254	206	275	373	369	3725
65.00 U MD	278	231	343	306	252	209	264	250	233	272	362	369	3726
65.00 A MN	356	321	416	347	271	209	266	278	242	295	373	402	3773
65.00 U MN	347	318	393	339	270	220	277	274	251	288	371	398	3778

APPENDIX TABLE A.1.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
66.00 A MD	243	206	326	208	188	162	207	219	200	212	342	323	3023
66.00 U MD	253	184	315	177	189	163	197	237	203	217	307	377	3104
66.00 A MN	285	270	347	226	197	166	212	239	217	226	342	349	3060
66.00 U MN	265	255	368	203	186	173	214	240	216	253	310	389	3065
66.10 A MD	286	234	403	265	212	182	234	215	189	241	364	276	3416
66.10 U MD	335	264	321	277	266	171	259	222	166	239	359	283	3594
66.10 A MN	325	276	403	292	229	190	242	238	212	255	364	313	3443
66.10 U MN	294	279	337	320	276	176	247	242	191	249	393	318	3486
67.00 A MD	245	190	300	206	151	130	153	168	156	195	290	276	2635
67.00 U MD	296	188	291	177	143	128	147	164	179	180	271	298	2674
67.00 A MN	291	255	320	227	158	136	160	185	175	204	290	306	2673
67.00 U MN	281	253	315	203	143	148	163	185	180	209	274	323	2669
67.50 A MD	192	171	231	170	109	101	127	129	118	152	223	219	2007
67.50 U MD	198	184	204	121	107	96	128	121	107	144	229	207	2077
67.50 A MN	224	203	242	191	117	105	133	142	136	161	223	246	2122
67.50 U MN	213	218	229	193	126	100	129	134	116	162	244	264	2138
67.80 A MD	188	170	212	142	131	73	85	93	120	136	228	195	1833
67.80 U MD	228	143	191	165	96	67	62	77	121	131	212	122	1895
67.80 A MN	227	209	230	174	141	78	89	114	143	143	225	226	1861
67.80 U MN	250	211	259	210	123	80	95	113	122	136	227	224	2062
68.00 A MD	37	31	42	53	61	58	61	54	56	46	38	35	698
68.00 U MD	36	31	41	52	61	58	60	54	56	46	38	35	697
68.00 A MN	65	42	57	62	68	73	68	69	70	58	46	48	734
68.00 U MN	65	41	56	61	68	73	68	68	70	57	46	48	734
68.10 A MD	56	46	69	85	114	106	122	111	101	76	59	50	1127
68.10 U MD	63	42	66	74	110	112	108	115	92	72	59	53	1014
68.10 A MN	84	58	82	94	125	127	126	119	115	92	69	58	1168
68.10 U MN	83	56	81	91	125	128	129	119	113	95	71	54	1188
68.20 A MD	82	76	131	151	202	201	173	174	151	126	90	75	1878
68.20 U MD	88	78	136	157	207	214	176	180	172	133	80	76	1871
68.20 A MN	116	100	139	172	225	228	188	193	167	154	104	92	1893
68.20 U MN	115	96	140	177	226	231	180	193	171	148	99	88	1867
68.30 A MD	42	29	40	41	60	43	54	49	38	34	28	28	601
68.30 U MD	36	34	37	43	64	45	61	44	36	29	28	27	605
68.30 A MN	66	43	48	51	64	51	59	54	49	43	37	39	616
68.30 U MN	69	40	45	54	62	48	60	52	50	42	42	39	618
68.70 A MD	117	101	180	189	231	255	215	206	252	115	108	109	---
68.70 U MD	108	68	175	234	294	188	204	183	191	134	109	97	1804
68.70 A MN	132	121	195	224	299	290	234	224	290	173	129	122	---
68.70 U MN	139	115	181	230	295	248	237	201	247	199	132	123	1714
69.00 A MD	39	30	44	68	49	61	74	69	73	51	46	35	781
69.00 U MD	48	26	46	62	57	62	85	60	85	52	36	27	784
69.00 A MN	65	41	55	75	56	72	75	76	83	58	53	46	812
69.00 U MN	80	41	56	70	64	69	86	76	81	60	64	44	802
69.10 A MD	62	45	74	74	81	72	56	57	65	48	42	49	787
69.10 U MD	54	53	76	72	69	77	63	63	63	50	41	50	861
69.10 A MN	77	55	78	82	85	80	57	61	71	52	54	58	799
69.10 U MN	79	59	80	77	83	89	61	64	72	55	62	57	847

APPENDIX TABLE A.1.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
69.16 A MD	61	---	---	111	---	107	130	134	129	93	---	58	---
69.16 U MD	63	41	68	91	105	106	135	100	131	69	53	66	1180
69.16 A MN	91	---	---	116	---	128	137	152	151	111	---	69	---
69.16 U MN	106	54	71	116	131	122	126	119	137	93	55	72	1189
69.20 A MD	67	55	87	106	134	139	150	147	132	101	70	56	1338
69.20 U MD	69	54	101	111	142	144	155	152	136	108	65	60	1410
69.20 A MN	101	72	102	114	143	160	156	155	146	114	82	67	1392
69.20 U MN	90	63	121	121	151	168	159	165	139	115	89	61	1450
69.30 A MD	66	48	93	88	103	78	81	80	53	62	54	50	977
69.30 U MD	92	60	84	81	100	83	104	104	63	77	75	59	1267
69.30 A MN	113	74	103	97	107	92	91	85	54	72	67	65	1001
69.30 U MN	120	60	101	89	124	106	104	104	104	86	87	71	1162
69.90 A MD	60	40	75	92	108	104	107	112	92	62	49	45	1127
69.90 U MD	50	39	69	99	115	81	123	98	100	54	60	45	1139
69.90 A MN	87	52	84	107	127	123	116	134	105	75	56	56	1144
69.90 U MN	99	43	75	114	126	102	126	126	100	72	61	51	1122
70.00 A MD	88	44	155	149	178	170	163	178	166	113	79	62	1811
70.00 U MD	87	44	154	148	177	170	163	177	166	112	78	62	1811
70.00 A MN	128	93	161	168	209	216	190	186	188	159	100	83	1871
70.00 U MN	128	93	161	168	208	215	189	185	188	159	99	83	1870
70.10 A MD	78	64	106	79	90	83	88	84	74	71	50	51	1131
70.10 U MD	77	61	89	80	104	91	85	74	67	69	41	48	1186
70.10 A MN	119	84	115	105	114	102	92	93	85	81	70	67	1146
70.10 U MN	132	77	121	102	125	110	90	90	83	77	77	64	1174
70.13 A MD	69	---	64	145	---	171	132	125	---	74	59	40	---
70.13 U MD	66	31	57	124	159	162	146	112	151	91	37	50	1378
70.13 A MN	88	---	71	149	---	191	144	143	---	90	71	43	---
70.13 U MN	109	65	69	133	154	168	148	148	161	87	51	51	1310
70.14 A MD	56	45	90	58	58	59	57	72	58	40	51	39	808
70.14 U MD	46	21	69	58	50	50	50	50	41	34	36	26	654
70.14 A MN	91	67	96	66	64	71	61	79	67	48	67	52	829
70.14 U MN	125	68	71	58	51	58	50	62	47	33	37	47	701
70.20 A MD	65	47	89	77	90	73	74	85	69	55	44	42	944
70.20 U MD	57	51	88	67	82	72	70	76	61	51	42	48	917
70.20 A MN	103	70	94	90	103	88	78	88	76	64	56	53	969
70.20 U MN	106	60	97	90	95	84	72	82	71	58	55	55	929
70.30 A MD	67	117	99	126	183	145	178	163	153	91	99	61	---
70.30 U MD	64	54	96	116	209	153	186	121	156	80	69	51	1551
70.30 A MN	107	128	113	129	194	154	183	168	168	106	105	72	---
70.30 U MN	111	110	109	131	211	164	180	159	168	101	116	61	1576
70.40 A MD	58	34	92	85	94	60	82	96	78	62	66	42	1026
70.40 U MD	53	28	74	90	92	56	72	69	47	62	56	42	903
70.40 A MN	81	53	99	103	116	72	91	104	88	78	86	48	1051
70.40 U MN	118	47	89	97	112	65	71	83	63	62	65	44	919
71.00 A MD	65	44	93	69	90	75	76	76	70	49	34	32	940
71.00 U MD	55	33	95	76	91	76	76	73	76	50	39	20	987
71.00 A MN	105	81	102	91	106	92	87	81	80	58	49	50	952
71.00 U MN	105	92	101	88	110	93	87	81	82	59	53	47	968

APPENDIX TABLE A.1.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
71.10 A MD	65	54	78	50	60	39	39	50	53	51	42	42	730
71.10 U MD	59	43	47	41	60	41	38	45	48	36	40	34	745
71.10 A MN	98	69	78	74	69	49	42	54	64	60	52	58	760
71.10 U MN	107	60	75	69	75	55	43	51	64	53	55	58	774
72.00 A MD	38	42	50	46	33	28	28	41	47	25	19	16	452
72.00 U MD	28	23	38	35	29	21	25	30	30	15	9	11	435
72.00 A MN	55	55	55	59	45	36	32	42	48	28	25	24	462
72.00 U MN	52	50	52	55	47	35	33	42	48	28	26	25	461
73.00 A MD	47	40	65	57	64	47	56	62	51	46	33	34	722
73.00 U MD	45	47	54	50	53	51	55	55	50	42	27	33	712
73.00 A MN	79	54	71	68	75	56	62	68	57	54	43	46	736
73.00 U MN	77	54	69	66	71	56	60	67	56	53	42	48	733
73.10 A MD	105	110	190	195	273	262	274	253	244	181	131	87	2426
73.10 U MD	106	105	194	177	276	290	282	268	249	181	136	65	2322
73.10 A MN	141	123	203	203	283	290	267	255	277	226	144	105	2489
73.10 U MN	136	129	203	201	295	306	269	269	279	237	157	105	2572
73.12 A MD	60	31	46	76	67	83	97	77	75	58	50	43	855
73.12 U MD	46	27	38	69	63	66	88	68	78	45	44	46	781
73.12 A MN	95	44	55	86	74	98	99	78	91	65	57	56	910
73.12 U MN	103	38	47	78	69	74	91	67	86	56	56	52	770
73.13 A MD	77	65	130	140	156	180	230	212	213	152	92	81	1858
73.13 U MD	117	42	100	135	159	149	229	253	213	136	113	85	1832
73.13 A MN	112	80	137	148	169	200	222	213	228	166	104	87	1908
73.13 U MN	154	63	132	155	164	154	225	231	209	148	115	92	1842
73.17 A MD	42	38	45	58	60	66	73	66	74	50	40	43	732
73.17 U MD	35	30	35	62	53	59	76	55	76	38	38	27	762
73.17 A MN	60	45	55	63	63	74	77	63	78	55	44	52	767
73.17 U MN	74	41	45	65	62	66	76	63	72	47	46	44	746
73.18 A MD	40	53	52	75	86	81	92	90	85	71	49	54	942
73.18 U MD	50	48	43	82	69	76	95	71	83	59	55	41	892
73.18 A MN	59	59	67	80	88	91	93	86	90	75	53	58	966
73.18 U MN	74	52	56	83	80	79	88	84	85	65	53	50	904
73.20 A MD	73	74	115	134	172	167	211	193	181	130	87	73	1688
73.20 U MD	73	73	114	134	171	167	211	192	181	130	87	73	1687
73.20 A MN	109	80	130	143	179	189	202	192	191	142	100	78	1734
73.20 U MN	108	80	129	142	178	188	202	191	191	141	99	78	1733
73.24 A MD	71	---	91	118	---	140	174	157	---	106	84	67	---
73.24 U MD	68	26	53	109	78	115	102	109	120	68	69	60	1166
73.24 A MN	109	---	110	129	---	157	166	165	---	106	100	77	---
73.24 U MN	124	53	64	103	97	122	126	108	125	82	57	69	1131
73.25 A MD	71	51	106	121	91	118	110	107	128	75	67	42	---
73.25 U MD	76	50	82	96	87	120	101	75	75	55	46	24	1077
73.25 A MN	104	71	114	123	75	146	118	113	148	98	80	57	---
73.25 U MN	137	78	92	111	99	121	102	95	104	67	54	61	1182
73.26 A MD	39	21	26	55	53	53	60	48	68	32	54	26	---
73.26 U MD	49	29	20	43	43	34	62	32	60	31	40	20	656
73.26 A MN	68	35	34	64	57	64	63	48	79	35	69	31	---
73.26 U MN	80	40	29	59	51	53	67	40	69	45	45	29	642

APPENDIX TABLE A.1.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
73.60 A MD	86	75	146	173	198	239	267	248	245	165	116	88	2182
73.60 U MD	114	71	115	170	194	202	273	245	257	153	129	87	2173
73.60 A MN	121	93	156	183	213	266	263	252	262	180	128	95	2230
73.60 U MN	149	79	143	184	210	207	275	272	244	158	138	100	2164
73.70 A MD	73	62	108	131	156	157	207	180	170	123	83	72	1602
73.70 U MD	67	54	84	133	153	147	177	175	157	115	72	75	1542
73.70 A MN	107	75	121	140	168	175	199	186	180	133	96	78	1649
73.70 U MN	120	62	105	142	157	155	183	184	168	120	91	79	1519
73.80 A MD	49	24	36	59	72	64	79	70	73	51	35	34	729
73.80 U MD	48	24	24	50	71	49	73	71	66	45	33	37	885
73.80 A MN	78	39	42	71	86	74	85	76	84	55	38	44	769
73.80 U MN	96	40	38	73	77	65	89	80	80	56	46	43	825
73.90 A MD	61	48	76	100	125	124	178	170	145	103	74	63	1344
73.90 U MD	70	43	76	88	121	109	177	150	148	104	63	57	1395
73.90 A MN	93	55	86	106	126	136	174	171	158	114	85	70	1374
73.90 U MN	114	53	76	104	118	118	175	180	157	105	80	71	1382
74.00 A MD	43	40	64	56	56	38	51	62	49	45	30	30	684
74.00 U MD	45	40	58	53	50	42	50	58	44	45	31	30	694
74.00 A MN	71	54	70	68	69	48	57	67	57	53	40	38	700
74.00 U MN	68	54	69	68	68	51	57	69	56	52	40	42	705
74.10 A MD	58	46	82	87	85	79	89	84	77	57	47	36	907
74.10 U MD	60	45	67	74	72	77	68	73	64	49	37	33	882
74.10 A MN	86	66	88	98	94	87	93	91	83	64	61	48	935
74.10 U MN	102	60	81	96	90	78	78	81	68	61	50	52	890
74.40 A MD	50	32	79	55	59	59	66	71	74	43	50	32	765
74.40 U MD	54	44	57	46	53	59	50	37	68	34	35	16	668
74.40 A MN	77	52	84	59	61	68	72	74	86	55	66	42	782
74.40 U MN	104	58	67	56	56	58	54	58	57	37	40	43	676
75.00 A MD	41	42	61	48	44	27	36	50	38	42	27	28	625
75.00 U MD	40	41	60	48	43	27	35	50	38	42	26	27	624
75.00 A MN	66	55	68	64	60	40	44	62	46	52	38	40	636
75.00 U MN	65	55	68	63	59	39	43	62	46	52	37	39	636
76.00 A MD	71	65	97	65	42	29	46	55	47	68	79	77	899
76.00 U MD	60	57	102	75	38	15	29	50	32	65	85	60	908
76.00 A MN	108	93	114	80	53	37	60	90	59	79	96	103	881
76.00 U MN	96	90	122	80	53	28	54	85	46	67	106	96	964
77.00 A MD	46	33	58	46	60	53	52	52	43	37	31	30	622
77.00 U MD	43	28	53	45	69	54	51	46	40	30	27	27	593
77.00 A MN	72	38	64	53	64	56	55	53	46	42	35	40	635
77.00 U MN	70	36	62	54	66	54	55	51	44	41	35	38	618
77.10 A MD	43	63	77	61	73	79	62	57	60	53	39	35	794
77.10 U MD	30	56	89	52	70	42	69	62	53	41	30	41	727
77.10 A MN	66	73	86	75	81	104	64	61	65	55	58	46	826
77.10 U MN	82	51	80	78	83	67	62	59	53	60	48	53	782
77.20 A MD	69	54	95	74	99	85	76	81	67	56	53	45	983
77.20 U MD	53	50	81	77	94	81	72	82	61	48	50	63	945
77.20 A MN	100	61	111	85	105	97	78	85	75	65	73	58	1014
77.20 U MN	112	56	101	86	99	77	79	83	63	63	60	68	964

APPENDIX TABLE A.1.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
77.30 A MD	72	68	117	120	144	130	117	112	105	70	66	58	1333
77.30 U MD	68	68	105	124	137	96	127	115	83	46	53	71	1371
77.30 A MN	105	79	140	135	155	149	118	116	115	79	90	69	1366
77.30 U MN	128	68	118	135	147	120	119	116	98	79	74	83	1298
77.40 A MD	82	63	118	99	131	106	100	105	94	72	66	59	1224
77.40 U MD	90	66	111	96	109	100	100	101	79	60	49	73	1199
77.40 A MN	116	71	138	119	138	121	103	107	101	81	85	70	1267
77.40 U MN	128	64	125	119	128	96	104	106	93	82	72	81	1204
77.50 A MD	---	---	---	---	---	---	---	---	---	---	---	---	502
77.50 U MD	---	---	---	---	---	---	---	---	---	---	---	---	533
77.50 A MN	---	---	---	---	---	---	---	---	---	---	---	---	536
77.50 U MN	---	---	---	---	---	---	---	---	---	---	---	---	569
77.60 A MD	45	58	77	63	75	74	62	70	67	59	44	44	771
77.60 U MD	45	44	80	69	83	34	63	67	52	55	43	38	699
77.60 A MN	62	68	85	75	83	97	65	77	65	61	63	56	803
77.60 U MN	78	46	77	87	102	61	62	70	56	78	53	62	793
78.00 A MD	171	149	207	229	152	83	151	148	124	130	243	203	2356
78.00 U MD	154	142	161	248	155	69	132	135	106	134	221	177	2410
78.00 A MN	218	203	283	257	162	90	172	213	140	134	257	260	2373
78.00 U MN	201	218	272	282	171	89	149	203	117	142	274	260	2383
79.00 A MD	205	181	270	245	156	75	145	156	126	151	235	209	2570
79.00 U MD	194	187	253	233	155	65	118	145	108	134	232	162	2600
79.00 A MN	275	245	358	283	161	85	166	227	138	172	256	275	2558
79.00 U MN	251	261	364	303	178	86	158	217	120	155	286	279	2664
79.10 A MD	320	285	517	526	389	278	352	361	292	292	487	401	4708
79.10 U MD	374	269	538	607	382	283	296	340	234	272	569	331	5312
79.10 A MN	410	374	631	566	409	296	370	436	313	319	486	482	4790
79.10 U MN	459	440	599	675	449	268	365	391	254	282	519	466	5308
80.00 A MD	62	64	81	68	35	19	46	50	41	49	68	67	910
80.00 U MD	61	63	79	64	34	19	45	49	41	49	70	67	903
80.00 A MN	111	93	122	86	49	28	72	121	62	67	91	109	1015
80.00 U MN	109	93	119	85	47	29	70	118	62	67	93	108	1013
80.20 A MD	43	39	54	36	21	10	18	25	33	20	37	32	---
80.20 U MD	40	39	43	28	18	2	18	27	15	15	34	30	516
80.20 A MN	74	55	77	56	23	16	28	49	53	30	54	64	---
80.20 U MN	55	55	77	57	25	7	29	58	27	21	48	66	518
82.00 A MD	133	125	197	186	148	86	127	162	122	133	194	180	2197
82.00 U MD	147	100	176	163	142	84	120	174	128	126	173	147	2333
82.00 A MN	179	183	247	220	173	99	164	257	148	150	219	234	2358
82.00 U MN	180	173	206	207	171	98	164	244	150	147	236	220	2267
84.00 A MD	352	294	510	561	418	254	435	394	275	360	475	421	5286
84.00 U MD	313	351	477	568	380	217	395	365	260	367	546	369	5496
84.00 A MN	447	384	663	595	449	273	454	522	290	393	504	520	5505
84.00 U MN	389	433	583	643	480	242	429	495	249	376	534	524	5398
85.00 A MD	246	232	329	339	247	163	240	257	206	257	347	339	3543
85.00 U MD	210	255	310	321	226	161	246	240	201	247	331	363	3665
85.00 A MN	315	316	408	377	258	174	262	302	227	278	352	399	3651
85.00 U MN	293	315	398	377	258	173	266	312	228	273	351	412	3607

APPENDIX TABLE A.1.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
86.10 A MD	235	221	330	317	242	157	225	248	208	250	345	326	3438
86.10 U MD	200	218	298	301	222	165	223	259	214	244	339	300	3407
86.10 A MN	308	299	413	353	254	168	241	296	228	273	350	374	3546
86.10 U MN	288	285	394	330	253	182	248	304	250	284	351	341	3517
86.20 A MD	333	316	469	590	460	285	415	434	307	381	501	410	5506
86.20 U MD	387	283	528	560	455	316	477	458	378	391	453	337	5562
86.20 A MN	432	418	562	634	482	313	438	511	344	413	525	504	5640
86.20 U MN	500	362	586	599	446	345	453	544	442	422	466	494	5664
87.00 A MD	223	208	304	297	220	149	212	222	186	242	329	302	3188
87.00 U MD	201	227	287	280	206	142	207	206	172	244	325	263	3233
87.00 A MN	287	282	378	332	230	158	233	262	205	259	333	352	3291
87.00 U MN	239	292	389	323	230	157	235	264	188	263	338	342	3266
87.10 A MD	242	213	327	311	240	163	225	239	198	236	319	327	3345
87.10 U MD	177	215	302	300	200	155	241	260	212	236	288	311	3291
87.10 A MN	314	288	407	350	251	175	247	284	215	259	324	377	3474
87.10 U MN	301	238	406	332	233	184	250	302	257	276	327	345	3449
88.00 A MD	301	307	425	462	443	279	393	413	302	373	409	344	4847
88.00 U MD	340	420	607	478	429	316	421	384	314	351	417	314	5235
88.00 A MN	390	387	502	488	454	299	417	469	333	394	426	425	4966
88.00 U MN	430	389	560	484	437	335	438	449	358	411	423	443	5185
88.10 A MD	294	272	420	468	349	226	345	356	266	307	426	405	4585
88.10 U MD	270	308	392	435	377	235	374	386	306	309	427	317	4569
88.10 A MN	372	372	511	510	369	241	368	430	292	334	431	472	4733
88.10 U MN	351	397	481	508	384	240	389	473	312	325	457	420	4725
88.20 A MD	313	284	454	489	360	235	347	367	273	329	431	406	4716
88.20 U MD	262	298	391	544	364	224	326	355	278	306	412	302	4601
88.20 A MN	405	381	564	527	377	248	369	440	297	354	436	480	4858
88.20 U MN	328	414	526	554	406	238	367	453	275	340	464	448	4818
88.40 A MD	326	275	478	524	374	226	382	389	286	334	438	445	4996
88.40 U MD	336	306	443	546	423	249	371	376	287	330	550	430	4994
88.40 A MN	436	389	574	573	404	247	404	463	308	363	462	510	5068
88.40 U MN	342	394	515	584	443	234	417	497	280	372	511	564	5149
88.60 A MD	349	306	422	484	349	248	320	364	271	291	446	419	4870
88.60 U MD	544	273	407	504	325	244	349	370	318	262	402	336	4688
88.60 A MN	436	410	502	522	360	266	347	428	295	313	449	489	4902
88.60 U MN	554	360	503	519	333	260	359	412	348	301	443	477	4826
89.00 A MD	432	369	591	609	476	306	483	490	362	404	548	501	6063
89.00 U MD	363	370	548	579	482	294	472	462	335	401	543	472	6177
89.00 A MN	552	463	687	661	522	336	489	579	399	431	580	577	6256
89.00 U MN	477	455	647	653	519	335	483	574	381	426	583	565	6160
89.10 A MD	313	282	409	433	327	232	321	353	258	309	428	424	4586
89.10 U MD	411	246	463	477	330	216	381	334	286	263	416	349	4734
89.10 A MN	386	381	492	476	343	250	344	423	283	331	432	494	4679
89.10 U MN	476	331	512	479	320	242	353	406	334	305	424	483	4652
89.20 A MD	354	312	516	553	403	251	414	410	316	354	465	471	5356
89.20 U MD	292	302	430	617	403	242	336	397	326	336	501	333	5289
89.20 A MN	467	426	618	606	438	272	438	479	340	388	489	541	5461
89.20 U MN	372	445	520	630	480	264	432	518	329	374	530	508	5345

APPENDIX TABLE A.1.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
89.40 A MD	303	299	445	446	360	225	339	358	272	320	397	414	4635
89.40 U MD	295	379	416	393	423	236	340	342	258	330	516	335	4906
89.40 A MN	401	386	529	489	389	237	365	412	298	354	429	473	4810
89.40 U MN	330	431	422	443	442	233	354	407	260	380	509	461	4645
90.00 A MD	242	222	333	319	243	168	234	251	205	252	358	361	3501
90.00 U MD	217	218	325	315	223	171	247	279	207	261	366	322	3451
90.00 A MN	331	317	409	368	265	178	272	302	232	283	365	400	3702
90.00 U MN	308	296	406	358	258	182	269	314	243	281	371	363	3638
90.10 A MD	249	221	336	337	250	162	242	257	202	253	347	317	3496
90.10 U MD	237	251	331	331	252	158	233	242	184	257	334	312	3696
90.10 A MN	320	306	420	377	263	172	267	304	221	275	352	370	3617
90.10 U MN	301	322	435	381	275	173	268	303	215	274	352	368	3680
91.00 A MD	308	295	438	464	346	238	350	343	279	309	437	354	4657
91.00 U MD	298	289	434	475	347	242	355	358	284	313	454	386	4716
91.00 A MN	389	379	543	497	363	259	354	407	298	334	440	447	4712
91.00 U MN	383	371	522	497	368	273	370	431	324	341	467	442	4797
91.10 A MD	226	195	291	264	209	158	202	204	192	236	340	308	3072
91.10 U MD	218	211	262	264	231	149	196	181	171	201	314	308	3006
91.10 A MN	268	263	347	296	218	164	211	235	211	250	342	344	3133
91.10 U MN	255	291	303	311	248	149	201	220	183	235	371	362	3142
91.30 A MD	300	309	518	492	265	183	277	---	---	---	---	---	---
91.30 U MD	253	186	447	385	246	220	290	375	240	242	409	431	4081
91.30 A MN	369	384	605	523	276	197	284	---	---	---	---	---	---
91.30 U MN	376	301	491	457	267	234	323	402	289	304	431	468	4438
91.40 A MD	289	257	401	405	307	207	296	305	243	310	412	352	4174
91.40 U MD	229	233	357	472	307	209	262	300	204	306	499	285	4210
91.40 A MN	359	341	488	435	317	217	307	356	265	327	414	424	4233
91.40 U MN	308	367	461	464	347	218	301	364	242	329	447	400	4185
91.50 A MD	285	205	315	318	250	171	235	232	209	266	330	314	3371
91.50 U MD	232	175	308	354	249	156	214	196	189	253	310	244	3392
91.50 A MN	344	271	363	346	262	177	244	265	231	286	331	359	3424
91.50 U MN	297	269	355	407	287	175	251	241	231	272	359	319	3446
92.00 A MD	252	224	324	330	249	177	240	241	216	268	353	326	3535
92.00 U MD	205	224	318	334	248	178	250	244	230	259	362	358	3621
92.00 A MN	306	302	412	359	250	185	254	287	232	277	356	389	3609
92.00 U MN	297	293	401	359	249	194	262	299	248	279	373	387	3645
92.10 A MD	75	46	82	72	94	78	55	60	63	66	50	49	1005
92.10 U MD	76	45	79	69	94	76	54	60	63	59	45	47	962
92.10 A MN	117	74	93	96	111	92	57	70	78	85	70	70	1003
92.10 U MN	110	73	90	90	106	90	55	69	78	78	65	72	972
92.20 A MD	236	207	295	270	217	171	213	225	190	249	333	329	3225
92.20 U MD	242	242	278	254	233	153	205	198	157	235	328	302	3252
92.20 A MN	290	281	347	303	227	179	228	259	211	267	336	369	3315
92.20 U MN	241	316	302	323	248	162	219	248	174	264	377	372	3255
92.40 A MD	274	227	357	336	237	194	257	240	230	333	428	379	4056
92.40 U MD	344	226	352	486	253	151	220	201	248	289	500	345	4283
92.40 A MN	369	317	448	377	247	202	274	268	255	359	431	427	4108
92.40 U MN	329	325	412	528	280	180	267	237	236	297	485	432	4161

APPENDIX TABLE A.1.—Continued

State Key No.			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
			(mm)												
93.00	A	MD	223	180	291	196	165	132	166	173	159	198	284	286	2657
93.00	U	MD	236	163	223	157	139	129	154	156	176	177	215	232	2452
93.00	A	MN	259	234	317	224	172	137	173	189	181	208	284	307	2698
93.00	U	MN	249	218	296	186	151	136	160	191	185	204	252	286	2524
93.10	A	MD	58	43	77	57	51	42	50	35	49	54	31	35	671
93.10	U	MD	52	44	82	64	71	51	50	33	46	43	31	36	697
93.10	A	MN	75	62	79	75	67	55	54	39	59	65	42	45	701
93.10	U	MN	84	59	77	74	80	63	57	35	55	57	45	47	742
93.30	A	MD	54	28	59	44	31	35	39	25	28	47	25	35	531
93.30	U	MD	60	25	63	30	29	28	41	21	25	41	29	31	546
93.30	A	MN	73	44	61	61	39	46	40	28	32	58	34	46	551
93.30	U	MN	92	34	53	63	41	43	40	25	31	48	34	48	561
93.40	A	MD	63	33	78	52	37	37	45	30	36	60	29	32	628
93.40	U	MD	65	33	77	50	48	39	39	31	27	39	20	29	623
93.40	A	MN	81	50	81	70	47	52	45	33	43	78	38	45	651
93.40	U	MN	97	43	67	72	52	51	45	32	42	63	38	48	656
93.50	A	MD	237	169	230	219	173	132	180	161	147	189	247	240	2470
93.50	U	MD	226	130	202	232	177	139	167	150	165	176	228	224	2462
93.50	A	MN	276	210	246	248	183	134	188	178	164	199	247	253	2513
93.50	U	MN	259	209	249	308	207	135	192	165	173	189	259	234	2572
93.80	A	MD	35	17	27	11	20	9	10	12	9	11	17	22	---
93.80	U	MD	32	17	22	8	14	9	6	6	10	15	5	26	281
93.80	A	MN	62	31	35	17	18	10	10	11	11	12	28	36	---
93.80	U	MN	72	43	30	18	19	10	19	13	11	14	14	46	309
94.10	A	MD	75	51	82	58	56	37	40	44	48	56	34	40	720
94.10	U	MD	61	45	69	48	57	37	41	45	53	47	34	37	711
94.10	A	MN	88	68	79	75	70	49	46	51	59	68	48	56	757
94.10	U	MN	79	67	75	67	69	47	46	52	66	59	49	55	743
94.20	A	MD	269	237	369	387	310	206	294	320	236	270	387	381	4098
94.20	U	MD	268	217	328	399	307	212	318	333	270	260	365	384	4077
94.20	A	MN	352	318	449	429	325	222	306	382	260	296	391	448	4209
94.20	U	MN	393	280	416	412	305	243	322	401	324	282	400	424	4263
94.30	A	MD	66	48	73	57	49	34	35	33	34	45	29	36	620
94.30	U	MD	72	37	64	71	55	38	36	26	29	45	30	35	598
94.30	A	MN	81	63	75	74	67	42	41	40	43	51	35	47	652
94.30	U	MN	104	44	63	75	83	48	42	33	42	47	39	51	695
95.00	A	MD	46	38	51	36	25	17	17	13	18	33	27	31	439
95.00	U	MD	28	23	52	36	23	14	14	5	13	16	23	35	377
95.00	A	MN	66	61	54	49	27	23	17	15	26	43	37	40	457
95.00	U	MN	53	44	54	39	27	25	16	13	20	34	39	36	404
95.10	A	MD	30	17	21	8	9	6	8	6	12	13	12	22	229
95.10	U	MD	33	14	17	2	5	2	4	3	8	7	11	22	226
95.10	A	MN	52	30	28	15	12	7	8	8	13	21	23	31	237
95.10	U	MN	54	27	28	14	12	6	7	7	12	16	24	31	251
96.00	A	MD	43	29	44	36	28	13	15	15	15	35	24	34	412
96.00	U	MD	39	20	42	24	21	9	6	6	12	25	25	34	401
96.00	A	MN	61	39	49	52	40	17	15	15	22	42	39	47	431
96.00	U	MN	54	35	53	42	39	18	12	17	18	40	41	39	418

APPENDIX TABLE A.1.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
97.00 A MD	50	41	65	46	43	22	20	28	27	44	38	37	580
97.00 U MD	50	39	63	50	39	21	13	24	29	38	38	35	580
97.00 A MN	69	57	71	65	60	31	25	35	40	59	48	48	594
97.00 U MN	60	54	69	63	58	32	25	35	41	58	49	46	603
100.00 A MD	44	44	66	40	40	19	26	28	25	34	30	30	580
100.00 U MD	40	44	60	39	39	20	28	26	27	32	30	29	576
100.00 A MN	67	58	74	59	53	26	33	36	43	50	42	43	589
100.00 U MN	62	58	71	54	53	27	33	37	46	45	39	44	575
102.00 A MD	29	40	61	42	24	16	23	27	18	24	25	24	499
102.00 U MD	25	33	66	35	21	23	6	19	13	30	25	27	550
102.00 A MN	43	53	69	57	36	24	34	35	41	32	37	37	504
102.00 U MN	36	56	78	49	39	27	28	36	33	33	40	33	481
102.10 A MD	46	40	54	40	34	16	28	41	27	25	31	32	503
102.10 U MD	43	34	52	38	35	17	26	33	20	20	25	26	468
102.10 A MN	61	51	58	58	42	19	34	51	35	33	41	42	524
102.10 U MN	55	48	60	52	41	19	33	50	32	30	39	39	507
103.00 A MD	68	56	72	52	33	18	24	28	23	29	48	56	629
103.00 U MD	67	56	72	51	33	18	24	28	23	30	47	58	625
103.00 A MN	85	81	86	71	41	20	34	45	29	40	63	83	679
103.00 U MN	84	80	84	67	42	21	34	45	29	39	63	82	674
104.00 A MD	38	43	53	41	26	10	18	37	18	31	33	24	470
104.00 U MD	36	38	58	38	21	7	18	51	5	24	34	29	548
104.00 A MN	55	54	61	62	36	15	26	45	31	41	46	32	492
104.00 U MN	48	54	67	55	37	16	24	50	23	39	42	31	501
105.00 A MD	42	42	60	32	24	10	17	22	19	27	38	37	467
105.00 U MD	43	50	51	35	20	7	12	19	15	23	28	36	457
105.00 A MN	57	55	68	49	32	13	26	37	26	34	46	49	496
105.00 U MN	56	53	65	49	33	13	24	39	23	31	38	47	477
106.00 A MD	69	59	79	55	35	18	23	31	25	35	49	57	653
106.00 U MD	69	53	70	50	33	17	26	30	23	28	39	54	680
106.00 A MN	86	81	91	71	37	21	33	49	30	45	63	80	693
106.00 U MN	78	86	85	67	39	20	34	50	29	44	60	84	688
107.00 A MD	33	29	33	20	14	13	15	23	23	22	22	29	375
107.00 U MD	36	22	37	16	12	6	13	20	17	19	19	24	389
107.00 A MN	53	40	42	24	23	15	22	32	33	25	29	48	382
107.00 U MN	47	35	44	26	25	14	21	29	28	25	29	46	383
110.00 A MD	76	63	89	67	31	27	27	36	28	36	52	68	787
110.00 U MD	80	55	76	62	27	22	25	33	23	37	46	60	721
110.00 A MN	93	91	101	89	39	30	38	60	35	43	71	94	800
110.00 U MN	91	87	100	89	41	29	40	66	33	45	60	91	808
111.00 A MD	75	52	60	46	21	9	25	31	30	31	50	65	662
111.00 U MD	50	53	90	42	20	5	19	29	22	36	43	47	703
111.00 A MN	127	78	77	64	30	13	38	63	42	38	68	88	687
111.00 U MN	95	80	106	61	30	13	33	64	34	38	75	81	711
111.10 A MD	45	35	35	20	18	7	21	23	23	33	24	35	---
111.10 U MD	21	26	36	15	21	6	20	16	20	20	21	21	332
111.10 A MN	71	50	43	28	23	11	29	67	33	46	45	68	---
111.10 U MN	42	40	42	28	30	11	29	75	22	25	41	64	488

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State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
112.00 A MD	49	46	63	43	28	10	14	19	17	29	35	38	511
112.00 U MD	45	40	53	45	22	8	9	19	13	27	27	39	506
112.00 A MN	62	65	71	57	36	12	24	35	26	35	47	49	530
112.00 U MN	63	63	71	59	36	13	22	37	22	36	39	48	523
113.00 A MD	58	50	85	53	29	11	16	23	18	37	43	43	649
113.00 U MD	49	44	75	50	26	5	17	18	16	30	33	45	605
113.00 A MN	75	72	98	73	45	14	32	47	28	47	63	79	664
113.00 U MN	62	73	95	69	43	15	27	49	24	50	50	76	629
114.00 A MD	108	114	174	115	46	13	32	39	27	62	99	112	1283
114.00 U MD	92	126	156	120	54	12	26	25	27	52	99	99	1248
114.00 A MN	138	149	193	148	71	24	44	81	36	74	142	187	1284
114.00 U MN	131	151	185	142	72	26	47	84	38	73	146	198	1305
115.00 A MD	75	74	116	66	34	8	19	27	22	46	69	70	878
115.00 U MD	66	73	117	66	35	6	17	26	20	47	64	55	827
115.00 A MN	102	105	132	92	49	15	30	61	33	56	106	123	898
115.00 U MN	95	102	127	92	49	16	34	65	36	56	107	126	922
116.00 A MD	101	104	169	109	39	13	24	42	26	61	91	104	1240
116.00 U MD	80	111	165	102	47	8	23	28	25	48	82	113	1172
116.00 A MN	133	144	191	149	59	20	38	87	38	76	127	177	1250
116.00 U MN	95	143	159	133	53	14	35	82	29	73	106	198	1126
117.00 A MD	88	87	150	87	39	11	25	39	31	64	78	90	1125
117.00 U MD	87	87	149	87	38	10	25	37	31	63	80	90	1111
117.00 A MN	116	126	170	118	64	21	41	91	46	75	121	147	1123
117.00 U MN	115	125	167	118	62	20	41	89	47	75	122	146	1120
118.00 A MD	163	168	274	199	69	23	52	65	38	85	167	180	1992
118.00 U MD	135	158	246	197	65	21	49	52	36	86	172	150	1843
118.00 A MN	213	229	310	241	112	39	70	115	54	106	229	286	2002
118.00 U MN	197	226	300	235	107	39	69	115	62	104	227	281	1965
118.10 A MD	227	243	339	339	137	56	135	121	60	125	263	244	2824
118.10 U MD	237	286	264	462	158	64	98	83	54	59	372	291	2846
118.10 A MN	306	334	392	380	192	67	163	185	81	159	325	384	2847
118.10 U MN	239	379	306	379	213	60	157	152	86	162	348	365	2747
118.30 A MD	198	187	---	326	137	---	112	---	---	---	---	232	---
118.30 U MD	220	173	381	411	181	37	117	195	76	136	241	317	2976
118.30 A MN	257	259	---	390	196	---	117	---	---	---	---	342	---
118.30 U MN	323	255	523	430	206	88	190	213	97	144	369	320	3089
120.00 A MD	82	72	138	84	40	11	32	54	28	58	83	92	1053
120.00 U MD	87	62	114	73	38	8	27	34	29	51	82	86	1065
120.00 A MN	109	106	153	109	59	22	51	105	44	69	115	140	1070
120.00 U MN	106	105	150	107	57	21	51	103	46	70	116	139	1063
120.10 A MD	51	50	89	72	18	10	20	33	27	48	43	47	635
120.10 U MD	55	20	80	64	5	0	5	20	22	30	76	55	819
120.10 A MN	80	80	113	94	32	19	32	66	51	63	72	76	653
120.10 U MN	94	75	100	85	32	15	38	60	67	43	117	81	746
121.00 A MD	93	99	164	116	52	21	42	48	35	86	90	101	1298
121.00 U MD	81	103	179	112	52	14	46	47	31	80	82	104	1397
121.00 A MN	123	142	192	153	75	36	59	108	49	98	126	155	1318
121.00 U MN	100	148	196	152	74	50	57	121	46	105	113	159	1331

APPENDIX TABLE A.1.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
123.00 A MD	125	122	191	132	63	18	48	66	46	87	125	129	1530
123.00 U MD	116	116	184	136	59	18	45	62	43	83	119	134	1651
123.00 A MN	157	171	223	167	88	33	67	126	62	103	172	200	1549
123.00 U MN	147	169	218	166	88	34	74	134	66	106	176	203	1571
124.00 A MD	148	137	224	173	83	45	68	95	67	114	163	193	1903
124.00 U MD	142	152	250	162	86	40	60	83	54	102	162	154	1846
124.00 A MN	187	204	258	204	117	59	86	157	79	133	198	264	1921
124.00 U MN	176	216	262	206	107	58	95	161	77	139	197	250	1888
124.10 A MD	151	160	272	199	86	36	89	115	70	117	179	190	2111
124.10 U MD	142	147	193	188	82	34	83	89	59	88	168	117	1965
124.10 A MN	197	223	304	229	104	50	111	197	85	141	225	276	2136
124.10 U MN	179	214	273	216	96	47	106	179	84	137	217	257	2026
124.20 A MD	182	118	---	207	88	30	74	80	49	101	---	226	1912
124.20 U MD	121	106	210	218	75	26	96	49	34	100	136	180	1907
124.20 A MN	224	160	---	234	116	44	106	118	62	115	---	288	1924
124.20 U MN	222	163	219	239	84	43	90	112	47	107	186	246	1838
125.10 A MD	162	141	238	209	139	81	126	175	115	143	205	213	2362
125.10 U MD	167	138	210	202	130	57	127	167	110	128	208	157	2288
125.10 A MN	263	209	305	251	168	98	161	269	149	168	238	279	2513
125.10 U MN	246	205	262	242	146	80	143	251	138	148	241	258	2374
126.00 A MD	202	170	342	243	137	65	136	175	128	155	228	290	2731
126.00 U MD	187	151	315	234	144	71	136	183	147	135	213	259	2751
126.00 A MN	270	240	383	273	166	97	167	270	157	174	276	363	2737
126.00 U MN	264	244	378	272	162	100	173	287	163	177	274	362	2805
126.10 A MD	128	125	188	170	94	33	63	97	67	75	156	178	1667
126.10 U MD	100	93	164	182	113	32	67	166	54	65	155	82	1924
126.10 A MN	216	178	209	211	122	48	85	173	78	71	208	248	1682
126.10 U MN	127	165	175	206	140	44	86	207	74	93	209	260	1739
127.00 A MD	255	263	459	414	174	78	146	165	98	157	286	328	3441
127.00 U MD	243	256	456	407	179	72	145	179	97	163	290	290	3348
127.00 A MN	346	358	483	439	234	104	174	234	124	195	326	439	3479
127.00 U MN	312	380	482	442	232	104	175	243	122	202	322	449	3527
128.00 A MD	239	186	358	283	175	118	178	223	157	175	299	302	3247
128.00 U MD	240	177	346	262	185	106	178	274	165	196	259	245	3040
128.00 A MN	321	273	388	329	202	134	205	359	190	193	333	360	3245
128.00 U MN	289	257	402	305	190	138	211	331	212	195	285	333	3149
130.00 A MD	269	266	466	481	246	121	221	238	135	193	336	348	3909
130.00 U MD	263	255	482	537	257	125	252	228	125	206	328	329	3870
130.00 A MN	367	358	543	507	312	147	256	307	166	233	383	432	3966
130.00 U MN	343	376	555	514	320	153	267	315	169	246	386	425	4035
130.10 A MD	214	237	358	394	217	122	190	223	142	162	263	294	3268
130.10 U MD	180	438	279	337	303	153	211	264	122	183	297	243	3645
130.10 A MN	285	315	411	422	268	143	215	284	172	189	300	359	3314
130.10 U MN	184	438	306	357	296	148	229	408	141	252	303	377	3434
130.20 A MD	211	197	338	362	152	91	155	177	89	144	258	243	2933
130.20 U MD	211	233	313	384	219	107	128	170	71	121	231	232	2972
130.20 A MN	284	278	396	389	207	110	185	236	113	175	294	333	3004
130.20 U MN	232	348	318	359	231	99	177	276	93	176	257	342	2914

APPENDIX TABLE A.1.—Continued

State Key No.			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
			(mm)												
132.00	A	MD	317	300	517	550	293	162	288	315	186	255	377	384	4526
132.00	U	MD	294	286	523	572	287	161	264	323	172	275	404	402	4395
132.00	A	MN	420	411	602	588	367	192	315	390	217	291	426	466	4566
132.00	U	MN	366	412	594	573	358	180	322	401	199	310	451	477	4589
133.00	A	MD	224	210	341	335	183	117	196	218	137	204	273	267	3118
133.00	U	MD	220	208	322	349	209	127	217	225	145	213	276	273	3097
133.00	A	MN	284	294	390	364	222	130	218	265	156	229	301	324	3166
133.00	U	MN	273	285	387	366	228	144	231	289	186	229	311	323	3235
133.10	A	MD	346	336	516	621	318	181	308	356	235	264	474	430	4991
133.10	U	MD	304	277	432	638	267	168	262	345	267	230	407	340	5072
133.10	A	MN	437	451	604	650	388	211	364	425	274	310	510	520	5090
133.10	U	MN	434	404	575	631	369	219	345	405	290	284	451	468	4871
133.20	A	MD	232	225	357	368	172	133	218	226	134	217	273	269	3237
133.20	U	MD	239	220	389	305	181	145	244	284	168	217	285	265	3554
133.20	A	MN	294	319	421	393	210	150	255	264	152	244	298	337	3298
133.20	U	MN	298	244	467	406	231	176	273	308	222	247	334	342	3629
134.00	A	MD	527	447	776	722	535	405	575	574	411	460	686	630	7380
134.00	U	MD	447	492	1054	711	701	444	632	505	395	538	690	558	7645
134.00	A	MN	675	619	857	769	596	428	585	654	454	495	746	692	7482
134.00	U	MN	613	569	984	773	622	462	614	652	452	578	660	731	7641
135.00	A	MD	314	293	515	502	350	227	378	387	269	347	414	467	5069
135.00	U	MD	321	311	506	528	363	248	403	395	268	368	433	476	5291
135.00	A	MN	419	427	573	557	406	256	388	451	290	371	467	505	5085
135.00	U	MN	425	435	569	573	425	285	417	480	321	383	521	537	5345
136.00	A	MD	458	396	635	668	497	341	472	536	375	441	576	574	6477
136.00	U	MD	430	426	615	688	514	347	554	527	375	465	583	652	6797
136.00	A	MN	587	503	722	726	556	368	511	602	410	477	611	631	6632
136.00	U	MN	522	518	684	723	569	372	517	610	415	476	602	662	6633
137.00	A	MD	270	217	389	363	235	170	239	292	206	259	334	331	3756
137.00	U	MD	236	218	366	352	234	175	237	293	210	259	337	323	3703
137.00	A	MN	323	340	466	400	280	180	277	329	228	287	362	400	3871
137.00	U	MN	314	316	467	387	282	185	273	337	249	285	382	375	3858
137.30	A	MD	348	279	520	471	321	230	333	361	233	317	409	433	4813
137.30	U	MD	335	247	524	551	280	197	299	347	218	252	551	420	4417
137.30	A	MN	440	412	600	520	379	250	365	418	253	343	450	487	4924
137.30	U	MN	407	383	652	568	358	225	359	415	241	309	509	433	4795
138.00	A	MD	347	301	505	484	351	250	371	394	275	367	441	488	5022
138.00	U	MD	267	314	534	500	367	238	379	385	256	373	434	475	5001
138.00	A	MN	452	442	572	536	401	267	393	449	299	395	482	540	5106
138.00	U	MN	367	433	617	540	409	265	400	474	287	409	497	516	5158
138.10	A	MD	392	401	528	498	391	259	379	414	315	353	535	572	5416
138.10	U	MD	429	377	538	543	374	293	373	445	348	376	570	553	5604
138.10	A	MN	504	548	604	543	429	276	413	475	343	383	562	634	5693
138.10	U	MN	587	481	569	584	421	313	440	500	455	385	615	629	5951
140.00	A	MD	473	375	605	658	482	334	478	497	391	422	564	519	6266
140.00	U	MD	457	406	603	612	528	325	518	477	365	443	599	515	6390
140.00	A	MN	584	520	697	716	550	361	495	570	421	460	598	569	6398
140.00	U	MN	524	518	651	666	562	375	500	566	452	476	573	581	6342

APPENDIX TABLE A.1.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
140.10 A MD	351	319	519	536	390	267	397	440	316	384	477	515	5461
140.10 U MD	315	337	518	561	413	267	415	407	310	354	501	453	5474
140.10 A MN	459	445	586	594	436	289	427	506	344	415	510	567	5545
140.10 U MN	405	436	594	587	438	293	433	512	348	402	505	555	5514
141.00 A MD	307	274	426	406	303	211	294	351	239	351	406	448	4409
141.00 U MD	282	420	422	311	350	181	317	369	204	394	466	505	4508
141.00 A MN	397	387	497	450	335	230	322	405	260	381	436	496	4543
141.00 U MN	292	487	430	389	330	214	305	424	228	422	456	508	4522
142.00 A MD	238	207	335	303	212	156	224	251	193	251	303	316	3341
142.00 U MD	227	215	318	290	234	160	226	274	194	248	307	294	3456
142.00 A MN	298	303	391	337	243	166	247	285	211	275	321	360	3431
142.00 U MN	287	288	406	337	244	173	249	306	239	273	342	337	3498
143.00 A MD	233	211	337	324	234	164	224	266	193	268	306	338	3463
143.00 U MD	245	201	313	294	269	176	246	263	204	268	300	342	3566
143.00 A MN	298	320	390	361	263	174	251	301	214	291	328	390	3581
143.00 U MN	301	320	383	349	264	181	256	311	233	301	313	408	3618
144.00 A MD	226	194	313	286	206	150	215	229	194	242	294	309	3161
144.00 U MD	209	182	291	273	213	155	233	237	195	240	298	306	3221
144.00 A MN	285	285	367	319	228	159	238	260	211	264	308	352	3273
144.00 U MN	279	265	370	306	231	167	244	278	236	264	315	348	3309
144.10 A MD	251	229	355	336	243	169	250	273	219	272	345	368	3635
144.10 U MD	231	224	315	337	254	169	278	272	224	278	356	360	3813
144.10 A MN	336	331	426	382	272	182	278	314	242	297	367	415	3824
144.10 U MN	322	316	451	391	285	204	297	341	276	308	397	402	3995
144.50 A MD	235	200	321	300	223	159	211	249	193	270	321	336	3380
144.50 U MD	227	190	312	278	236	144	195	221	178	247	292	279	3307
144.50 A MN	294	306	376	335	250	168	244	284	213	299	337	382	3518
144.50 U MN	250	324	354	325	251	158	230	287	190	281	338	332	3297
144.60 A MD	276	236	370	361	263	197	264	303	226	297	368	381	3970
144.60 U MD	282	237	336	328	281	168	261	304	201	281	368	298	3912
144.60 A MN	346	352	429	403	297	210	292	343	248	328	390	428	4095
144.60 U MN	296	369	424	398	299	193	288	351	226	317	405	381	3916
145.00 A MD	252	233	353	365	271	175	270	279	216	266	359	369	3791
145.00 U MD	244	259	365	384	252	166	255	265	185	273	394	299	3794
145.00 A MN	335	336	426	411	297	186	297	332	236	290	375	413	3928
145.00 U MN	293	372	423	416	306	177	300	332	216	284	405	389	3865
147.00 A MD	23	8	12	5	5	6	0	1	4	9	5	16	190
147.00 U MD	22	8	12	4	5	6	0	1	4	9	5	16	189
147.00 A MN	46	23	18	15	14	9	5	9	10	15	16	29	206
147.00 U MN	45	22	18	15	14	8	4	9	10	15	16	28	205
147.10 A MD	30	14	22	9	21	12	6	9	16	14	11	22	275
147.10 U MD	30	13	18	9	20	4	6	5	15	8	9	17	298
147.10 A MN	53	26	28	21	28	16	10	13	24	22	20	31	289
147.10 U MN	52	24	29	19	26	15	10	14	23	21	19	34	292
148.00 A MD	28	9	14	9	11	8	3	9	9	8	13	16	210
148.00 U MD	26	8	11	5	9	5	3	5	7	2	7	14	208
148.00 A MN	50	23	20	16	15	10	6	14	13	11	21	21	223
148.00 U MN	49	22	22	15	17	10	5	14	11	11	20	25	229

APPENDIX TABLE A.1.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
148.10 A MD	23	13	17	10	21	14	11	10	14	12	13	15	247
148.10 U MD	30	9	14	5	23	11	9	9	15	9	13	12	234
148.10 A MN	37	22	22	17	28	19	15	13	17	16	20	19	252
148.10 U MN	38	18	23	16	28	18	15	12	16	14	18	18	242
159.00 A MD	57	24	36	20	5	13	8	8	10	18	22	33	373
159.00 U MD	60	29	24	13	6	8	3	7	7	11	20	42	328
159.00 A MN	85	40	46	45	14	16	12	13	14	25	37	48	386
159.00 U MN	68	37	36	35	16	13	9	11	13	17	31	57	351
159.10 A MD	105	64	95	85	46	38	77	69	31	46	92	100	907
159.10 U MD	99	63	92	66	49	29	72	51	20	48	74	97	889
159.10 A MN	123	87	107	110	56	51	83	85	32	51	101	114	895
159.10 U MN	97	83	113	87	54	43	82	78	27	55	91	127	889
159.20 A MD	90	64	76	62	42	42	62	52	31	43	74	73	822
159.20 U MD	89	81	82	50	36	34	53	40	27	35	77	69	713
159.20 A MN	101	74	87	77	49	53	66	62	31	48	79	87	840
159.20 U MN	114	78	98	70	41	42	56	61	27	45	79	81	794
160.00 A MD	105	59	73	67	42	40	62	50	32	47	74	74	796
160.00 U MD	86	57	74	55	44	32	62	41	27	41	60	75	800
160.00 A MN	113	70	82	82	48	48	65	57	33	52	80	84	802
160.00 U MN	109	69	87	69	46	43	63	56	28	55	78	89	796
161.00 A MD	122	79	100	95	56	45	69	64	41	53	89	117	1043
161.00 U MD	113	67	90	101	56	48	65	49	39	50	94	102	1040
161.00 A MN	136	102	113	115	65	53	74	77	42	58	100	130	1053
161.00 U MN	120	95	109	117	64	55	76	75	44	55	98	123	1073
162.10 A MD	71	40	74	57	34	28	53	45	26	35	62	64	654
162.10 U MD	62	29	71	50	44	21	54	41	13	38	41	79	671
162.10 A MN	81	56	83	68	40	36	57	53	27	38	69	71	654
162.10 U MN	65	49	84	58	40	33	56	53	22	43	59	81	656
163.00 A MD	130	90	111	111	70	55	86	74	46	59	99	123	1176
163.00 U MD	125	80	107	101	77	51	89	72	42	54	88	114	1129
163.00 A MN	144	110	124	128	78	67	91	86	48	66	109	140	1190
163.00 U MN	131	110	117	124	82	67	90	88	45	63	102	140	1160
164.00 A MD	161	118	161	155	103	82	120	106	71	88	132	166	1626
164.00 U MD	160	105	160	154	109	81	126	101	66	78	121	164	1608
164.00 A MN	180	147	180	176	115	94	127	122	72	98	145	189	1628
164.00 U MN	164	148	171	169	118	94	126	125	69	95	137	188	1610
165.00 A MD	123	82	109	93	59	63	89	88	53	63	104	94	1160
165.00 U MD	104	94	98	80	89	54	99	64	46	61	100	121	1225
165.00 A MN	137	105	121	107	73	77	94	103	54	69	110	104	1166
165.00 U MN	122	100	107	92	81	70	91	108	47	76	115	126	1138
166.00 A MD	110	70	93	82	57	47	75	70	48	59	88	96	993
166.00 U MD	106	66	86	83	60	43	78	66	48	57	79	97	983
166.00 A MN	118	86	103	96	66	56	80	79	49	64	96	107	982
166.00 U MN	111	87	100	93	67	56	77	77	47	67	96	112	996
167.00 A MD	153	124	162	166	99	73	112	94	67	81	127	158	1541
167.00 U MD	143	125	146	166	108	72	113	90	59	71	105	144	1550
167.00 A MN	174	155	185	184	110	85	120	111	69	92	143	184	1565
167.00 U MN	157	157	178	179	114	85	118	114	64	89	132	181	1576

APPENDIX TABLE A.1.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
168.00 A MD	133	87	117	110	68	58	88	85	56	70	104	124	1250
168.00 U MD	118	84	117	114	73	59	87	89	59	75	112	117	1267
168.00 A MN	146	107	132	131	82	70	95	98	57	79	116	137	1249
168.00 U MN	132	111	140	135	87	76	103	105	64	83	121	136	1300
170.00 A MD	174	148	188	177	98	75	109	80	57	84	139	169	1695
170.00 U MD	149	122	161	134	83	62	83	48	34	62	104	141	1448
170.00 A MN	200	176	215	203	114	87	115	96	60	92	155	205	1843
170.00 U MN	173	149	200	174	102	71	90	79	44	77	126	167	1519
172.00 A MD	149	110	143	154	85	88	92	99	65	82	122	152	1422
172.00 U MD	180	96	127	176	83	85	105	112	59	107	142	136	1482
172.00 A MN	166	132	163	174	98	94	102	114	67	90	143	173	1468
172.00 U MN	160	109	175	194	91	99	100	132	72	98	164	171	1564
173.00 A MD	122	83	109	103	65	55	86	80	55	70	100	118	1166
173.00 U MD	102	76	111	103	73	54	89	87	55	70	98	119	1219
173.00 A MN	131	105	122	122	76	64	91	90	56	78	109	133	1134
173.00 U MN	111	108	133	124	84	66	98	100	56	81	108	142	1213
174.00 A MD	123	85	102	96	57	55	90	83	57	65	93	90	1122
174.00 U MD	107	90	83	72	75	43	100	63	47	60	87	114	1191
174.00 A MN	133	104	114	110	68	66	94	95	59	75	98	100	1131
174.00 U MN	123	100	105	90	76	61	86	103	49	81	103	125	1097
175.10 A MD	148	98	147	143	89	71	116	117	72	90	133	151	1584
175.10 U MD	134	101	145	142	90	69	115	113	74	87	129	137	1531
175.10 A MN	163	129	169	171	107	87	125	133	74	101	148	168	1573
175.10 U MN	150	129	168	164	106	87	124	132	77	98	145	158	1545
176.00 A MD	181	133	195	201	135	101	151	148	93	113	164	191	2036
176.00 U MD	176	128	184	197	126	96	156	137	86	103	159	183	1943
176.00 A MN	199	173	218	231	154	118	161	169	95	129	184	216	2062
176.00 U MN	190	168	204	225	149	117	160	168	98	124	180	215	2007
176.10 A MD	213	168	227	240	133	110	164	142	82	110	173	223	2203
176.10 U MD	166	171	203	205	131	95	156	118	57	97	134	195	1932
176.10 A MN	256	201	250	265	156	124	173	172	85	124	194	276	2326
176.10 U MN	201	183	223	215	143	109	154	140	67	121	167	259	1979
176.20 A MD	153	102	126	131	83	61	98	100	59	59	110	160	1402
176.20 U MD	216	90	92	140	76	57	85	131	61	58	126	189	1335
176.20 A MN	171	128	144	151	92	72	104	121	61	69	125	180	1430
176.20 U MN	206	109	125	150	78	64	99	116	72	63	138	190	1422
178.00 A MD	184	133	147	122	76	49	71	71	49	70	116	151	1365
178.00 U MD	155	120	132	110	62	44	63	45	38	58	89	123	1221
178.00 A MN	207	139	161	143	79	54	76	88	51	76	131	191	1375
178.00 U MN	193	132	164	132	74	50	69	73	42	71	115	168	1279
178.20 A MD	230	184	234	254	178	129	195	167	106	127	207	239	2496
178.20 U MD	216	184	246	197	177	115	187	170	84	119	188	248	2408
178.20 A MN	259	234	261	285	202	151	206	195	109	142	235	284	2544
178.20 U MN	230	221	276	244	196	140	199	200	95	151	207	296	2444
178.30 A MD	100	55	72	45	42	25	20	23	31	31	40	75	708
178.30 U MD	116	44	64	43	34	14	16	20	19	33	37	74	639
178.30 A MN	127	86	81	61	45	27	25	35	34	37	63	114	746
178.30 U MN	125	74	82	60	46	32	23	34	28	35	54	103	699

APPENDIX TABLE A.1.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
178.60 A MD	209	245	190	222	176	120	179	157	87	123	247	250	3517
178.60 U MD	196	139	168	126	101	51	111	61	48	70	160	172	1664
178.60 A MN	206	240	197	246	187	115	184	176	90	135	270	307	4140
178.60 U MN	208	179	183	179	122	84	114	118	65	92	197	201	1807
178.70 A MD	161	---	---	146	---	---	---	84	---	---	---	---	---
178.70 U MD	193	179	159	131	69	55	88	48	34	77	128	149	1413
178.70 A MN	191	---	---	170	---	---	---	95	---	---	---	---	---
178.70 U MN	202	157	192	153	78	52	85	76	45	79	159	168	1473
178.80 A MD	82	48	61	49	27	20	24	27	---	34	65	88	---
178.80 U MD	92	64	67	42	29	20	22	18	15	34	60	71	634
178.80 A MN	101	73	81	68	36	21	26	28	---	38	75	104	---
178.80 U MN	129	78	81	65	34	19	21	24	17	34	64	90	669
179.00 A MD	132	96	149	135	88	66	109	114	77	87	127	130	1482
179.00 U MD	123	90	140	128	96	65	112	110	83	81	127	124	1414
179.00 A MN	150	120	168	157	106	79	119	128	80	99	143	153	1492
179.00 U MN	134	117	156	155	110	81	120	126	86	96	138	150	1475
179.10 A MD	133	92	138	130	82	69	107	109	72	86	121	135	1433
179.10 U MD	122	82	132	128	89	69	110	112	75	77	120	139	1409
179.10 A MN	147	115	154	152	98	81	114	123	74	96	135	152	1443
179.10 U MN	133	117	150	153	104	87	119	127	81	95	134	153	1455
180.10 A MD	163	114	178	175	118	92	144	138	88	113	154	168	1817
180.10 U MD	156	105	179	161	127	91	159	128	90	103	140	164	1823
180.10 A MN	177	152	199	203	134	109	153	155	90	127	175	193	1816
180.10 U MN	168	151	204	187	141	107	155	161	85	135	158	193	1843
181.00 A MD	244	220	287	308	197	135	198	197	122	140	228	266	2831
181.00 U MD	197	204	288	332	213	136	207	187	130	123	210	250	2878
181.00 A MN	277	256	328	337	220	157	214	228	125	170	255	303	2874
181.00 U MN	244	246	330	349	223	163	218	217	127	158	240	293	2810
181.10 A MD	271	252	348	354	233	178	281	251	148	154	281	328	3448
181.10 U MD	278	249	330	342	233	168	291	277	152	160	305	333	3610
181.10 A MN	321	316	360	397	263	204	303	296	154	194	320	406	3572
181.10 U MN	320	325	354	396	265	224	316	317	180	200	330	406	3708
181.20 A MD	265	254	324	321	202	176	253	226	140	148	250	306	3019
181.20 U MD	265	254	323	329	202	186	254	226	143	149	260	310	3119
181.20 A MN	338	277	349	353	243	196	266	265	145	165	285	378	3258
181.20 U MN	336	280	348	356	245	206	276	276	156	171	306	380	3343
182.00 A MD	172	140	178	181	120	86	132	130	86	106	162	176	1890
182.00 U MD	161	135	188	158	125	78	129	109	70	87	141	187	1830
182.00 A MN	195	176	204	204	132	103	140	148	89	124	188	207	1912
182.00 U MN	178	172	201	175	133	91	144	150	74	131	170	227	1850
182.10 A MD	287	225	347	401	297	178	269	263	171	161	279	309	3491
182.10 U MD	265	235	346	400	299	180	290	264	171	173	292	307	3543
182.10 A MN	321	305	394	429	307	205	293	306	176	203	324	368	3603
182.10 U MN	313	310	386	432	311	224	315	332	197	210	330	372	3719
183.10 A MD	97	82	94	90	43	44	63	52	34	40	83	101	945
183.10 U MD	90	80	103	84	39	45	58	43	24	39	75	92	918
183.10 A MN	113	90	99	102	46	48	66	62	36	44	94	135	1020
183.10 U MN	121	91	123	99	45	45	60	54	31	46	93	121	903

APPENDIX TABLE A.1.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
183.20 A MD	314	288	398	413	312	294	381	367	225	207	322	386	4138
183.20 U MD	300	300	339	386	328	244	383	409	205	192	293	355	4152
183.20 A MN	375	328	403	460	340	325	404	413	233	234	351	470	4307
183.20 U MN	343	324	387	444	337	301	394	405	217	224	326	430	4198
183.50 A MD	---	---	---	---	---	---	---	---	---	---	---	---	2685
183.50 U MD	---	---	---	---	---	---	---	---	---	---	---	---	2819
183.50 A MN	---	---	---	---	---	---	---	---	---	---	---	---	2795
183.50 U MN	---	---	---	---	---	---	---	---	---	---	---	---	3010
184.00 A MD	56	52	47	30	26	24	18	17	29	28	19	34	497
184.00 U MD	49	31	28	24	20	8	11	15	16	11	16	29	394
184.00 A MN	75	71	54	42	40	26	20	24	34	38	32	50	546
184.00 U MN	75	61	58	43	39	25	18	24	26	35	28	47	463
184.10 A MD	278	232	375	399	300	186	285	280	189	181	285	318	3653
184.10 U MD	279	266	338	424	310	186	296	275	183	187	275	333	3589
184.10 A MN	324	309	429	438	323	212	311	319	199	221	329	374	3781
184.10 U MN	295	319	417	440	330	214	319	329	193	229	308	360	3756
185.00 A MD	300	259	406	461	399	295	448	413	256	228	313	338	4497
185.00 U MD	376	289	462	570	381	322	529	468	314	268	333	363	4761
185.00 A MN	349	319	444	531	435	326	477	463	268	269	342	411	4632
185.00 U MN	408	361	487	577	475	440	565	543	360	322	430	446	5373
190.00 A MD	253	240	366	414	370	269	409	374	232	207	288	298	4084
190.00 U MD	299	230	385	505	380	301	472	399	276	216	306	291	4340
190.00 A MN	303	296	403	475	402	296	440	418	245	246	317	373	4201
190.00 U MN	338	292	420	506	405	335	463	445	281	251	365	395	4489
190.11 A MD	275	255	394	402	---	246	387	339	---	181	257	285	---
190.11 U MD	303	220	357	381	239	225	388	276	191	239	278	286	3684
190.11 A MN	307	295	415	463	---	264	408	386	---	221	286	347	---
190.11 U MN	333	260	425	425	303	241	382	334	224	237	308	297	3774
191.00 A MD	66	55	50	29	24	9	22	20	11	23	37	46	509
191.00 U MD	52	45	44	30	24	9	22	25	8	16	30	62	485
191.00 A MN	91	69	59	53	28	10	26	28	13	32	46	65	525
191.00 U MN	80	57	50	51	28	9	29	30	11	24	35	74	498
191.10 A MD	61	48	44	19	26	15	11	22	6	27	33	30	---
191.10 U MD	55	47	34	29	13	8	10	13	6	22	32	27	366
191.10 A MN	84	61	50	41	30	18	15	30	12	21	40	40	---
191.10 U MN	88	77	72	44	28	18	13	19	15	26	40	51	495
191.40 A MD	111	---	80	67	31	---	---	---	---	---	---	---	---
191.40 U MD	94	78	81	62	34	25	40	34	20	38	65	84	656
191.40 A MN	131	---	92	93	35	---	---	---	---	---	---	---	---
191.40 U MN	125	83	90	83	44	28	42	39	23	41	71	93	798
191.50 A MD	57	45	48	24	27	11	12	17	9	25	25	36	468
191.50 U MD	56	45	42	25	15	9	11	8	5	15	24	39	391
191.50 A MN	80	59	53	46	30	14	15	24	14	26	31	45	497
191.50 U MN	82	58	51	45	28	14	14	15	14	21	29	52	433
191.60 A MD	74	56	59	37	30	19	20	33	14	34	37	54	608
191.60 U MD	92	56	65	50	20	16	17	14	10	23	38	63	498
191.60 A MN	98	70	66	66	33	21	21	46	17	35	45	67	645
191.60 U MN	100	69	68	64	30	21	22	27	17	28	43	70	568

APPENDIX TABLE A.1.—Continued

State Key No.			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
			(mm)												
192.00	A	MD	107	77	106	94	64	47	63	61	41	52	72	90	971
192.00	U	MD	97	87	101	90	62	48	73	62	43	53	73	88	998
192.00	A	MN	128	99	117	112	76	52	70	74	46	61	83	118	1023
192.00	U	MN	123	105	124	108	76	55	73	78	52	63	90	125	1078
192.10	A	MD	115	76	121	109	81	49	74	74	47	55	88	107	1167
192.10	U	MD	101	81	116	91	95	50	68	74	36	58	70	91	1165
192.10	A	MN	144	107	138	136	94	55	85	92	52	68	108	149	1238
192.10	U	MN	120	111	136	115	91	57	83	93	44	71	83	136	1158
192.20	A	MD	100	79	82	62	42	30	35	38	26	38	61	81	788
192.20	U	MD	94	72	88	65	43	28	36	34	19	35	57	81	759
192.20	A	MN	120	101	90	83	48	32	44	51	27	46	73	108	847
192.20	U	MN	117	93	92	78	48	32	43	55	22	45	66	103	792
192.60	A	MD	137	101	158	156	95	70	103	102	56	84	120	120	1514
192.60	U	MD	142	117	143	138	89	61	96	76	51	86	99	115	1369
192.60	A	MN	173	140	183	193	108	81	120	121	63	102	147	167	1590
192.60	U	MN	181	125	183	186	98	71	109	100	59	96	144	140	1509
193.00	A	MD	286	264	417	428	329	207	331	326	193	198	302	333	4120
193.00	U	MD	246	213	361	411	281	216	343	315	199	193	304	328	4096
193.00	A	MN	343	359	433	523	381	236	358	374	204	254	346	436	4246
193.00	U	MN	331	347	423	502	369	242	364	373	212	253	356	422	4251
194.00	A	MD	191	171	272	262	194	126	206	198	114	126	199	214	2675
194.00	U	MD	190	180	270	274	197	127	205	204	118	129	201	218	2709
194.00	A	MN	237	238	322	334	230	145	227	228	126	168	239	293	2771
194.00	U	MN	241	246	318	333	233	158	234	237	134	172	251	294	2847
195.00	A	MD	211	178	272	326	268	186	311	268	159	156	213	227	3127
195.00	U	MD	249	149	285	348	273	202	341	281	181	150	217	229	3269
195.00	A	MN	248	219	322	374	307	209	327	305	170	191	238	290	3204
195.00	U	MN	263	215	348	394	314	236	331	315	194	182	270	299	3362
195.10	A	MD	241	---	323	320	---	---	---	275	---	---	---	---	---
195.10	U	MD	248	156	334	326	169	166	276	282	135	198	227	231	3164
195.10	A	MN	245	---	343	362	---	---	---	333	---	---	---	---	---
195.10	U	MN	289	183	335	343	211	196	298	314	137	204	252	258	3063
196.00	A	MD	189	160	263	267	193	124	205	198	107	121	193	201	2599
196.00	U	MD	162	145	240	267	181	129	209	214	109	121	192	208	2570
196.00	A	MN	231	227	308	326	229	143	227	234	120	160	227	276	2703
196.00	U	MN	222	228	286	323	230	153	233	239	125	159	232	274	2703
197.00	A	MD	208	181	294	290	201	130	220	218	111	142	218	227	2899
197.00	U	MD	187	161	242	274	201	131	223	224	118	138	215	238	2778
197.00	A	MN	248	252	338	352	249	150	242	255	126	175	256	312	2965
197.00	U	MN	246	239	327	343	248	151	245	257	128	174	260	307	2926
199.00	A	MD	161	148	236	211	115	62	110	125	69	99	186	169	1999
199.00	U	MD	159	153	219	200	115	66	111	134	81	97	188	165	1936
199.00	A	MN	207	187	265	252	150	81	129	151	80	126	215	232	2105
199.00	U	MN	212	187	258	242	154	85	139	157	88	129	216	229	2100
200.00	A	MD	165	139	208	205	145	91	141	133	82	97	153	175	1986
200.00	U	MD	182	162	242	235	169	92	143	142	93	91	135	163	2027
200.00	A	MN	198	187	236	245	167	104	160	157	92	124	181	238	2062
200.00	U	MN	214	181	252	263	173	108	156	151	102	117	188	245	2155

APPENDIX TABLE A.1.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
201.00 A MD	135	116	175	147	97	61	95	92	57	73	121	129	1514
201.00 U MD	156	137	193	192	107	57	100	108	73	74	100	119	1599
201.00 A MN	168	161	196	186	126	71	109	116	63	87	139	190	1578
201.00 U MN	178	160	211	201	124	73	109	116	71	88	150	185	1671
201.20 A MD	106	93	155	136	87	59	85	95	48	66	109	129	1378
201.20 U MD	140	120	136	130	82	60	91	82	45	70	102	177	1386
201.20 A MN	143	129	180	170	98	69	93	114	55	82	130	176	1444
201.20 U MN	177	124	187	167	93	69	98	102	51	87	138	170	1514
202.00 A MD	179	153	262	254	152	88	150	151	80	117	197	193	2390
202.00 U MD	168	149	232	234	154	78	163	148	92	102	196	212	2303
202.00 A MN	220	204	307	316	193	108	171	182	93	141	225	270	2447
202.00 U MN	217	202	308	309	188	105	168	179	95	145	224	267	2456
202.10 A MD	152	144	239	242	134	69	130	138	69	107	178	200	2197
202.10 U MD	150	163	198	226	152	70	117	150	53	108	160	211	2058
202.10 A MN	202	201	270	299	171	85	148	165	83	137	215	266	2246
202.10 U MN	211	211	255	279	159	82	146	172	71	157	205	242	2154
203.00 A MD	111	92	139	114	69	39	70	65	40	57	96	99	1231
203.00 U MD	119	96	127	117	71	37	66	67	42	52	90	101	1160
203.00 A MN	138	125	164	144	84	47	77	87	46	69	120	153	1251
203.00 U MN	137	126	160	144	84	51	78	86	47	67	124	150	1251
204.00 A MD	72	54	69	62	29	13	22	26	14	27	44	55	585
204.00 U MD	77	52	62	61	25	11	22	25	17	32	47	44	648
204.00 A MN	89	76	82	79	36	15	30	37	19	35	57	83	628
204.00 U MN	88	74	83	80	31	14	29	36	23	39	64	77	646
205.00 A MD	131	121	197	167	88	49	88	101	56	88	158	141	1664
205.00 U MD	126	137	196	171	86	52	103	107	58	94	164	139	1664
205.00 A MN	169	159	221	211	119	65	103	122	67	113	182	201	1734
205.00 U MN	152	162	226	211	119	66	113	127	77	111	170	203	1743
206.00 A MD	117	102	173	139	70	40	72	88	48	76	139	121	1427
206.00 U MD	120	109	184	154	77	47	87	92	58	81	150	140	1535
206.00 A MN	156	136	198	176	96	56	88	107	57	99	161	169	1500
206.00 U MN	157	144	208	185	103	63	101	121	69	101	165	174	1596
207.00 A MD	189	172	270	245	141	74	136	141	72	105	201	207	2290
207.00 U MD	229	194	257	281	133	74	152	137	93	102	205	179	2364
207.00 A MN	235	223	301	295	185	93	156	176	86	133	245	309	2406
207.00 U MN	250	213	306	307	199	108	171	189	110	126	285	317	2586
210.00 A MD	144	139	218	197	88	49	90	103	58	92	171	151	1807
210.00 U MD	144	144	207	183	94	46	95	105	63	79	177	158	1786
210.00 A MN	188	174	249	231	122	65	107	131	71	117	195	215	1860
210.00 U MN	173	179	241	228	121	61	106	129	70	116	192	219	1835
211.00 A MD	165	145	239	256	109	62	119	126	65	115	180	180	2223
211.00 U MD	156	161	230	162	117	55	98	115	50	91	200	148	2155
211.00 A MN	215	192	266	308	145	80	138	157	82	146	200	252	2276
211.00 U MN	187	198	240	272	138	63	135	159	76	154	201	264	2249
212.00 A MD	163	166	262	225	119	62	111	126	72	99	170	183	2152
212.00 U MD	185	180	247	241	121	63	116	124	71	99	178	174	2077
212.00 A MN	216	214	298	276	154	78	127	158	85	122	200	268	2197
212.00 U MN	216	228	276	275	158	88	133	161	87	120	209	277	2239

APPENDIX TABLE A.1.—Continued

State Key No.			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
			(mm)												
213.00	A	MD	123	114	180	160	74	42	77	89	49	81	147	121	1530
213.00	U	MD	123	117	175	143	72	42	80	88	48	78	149	128	1523
213.00	A	MN	160	152	202	188	103	54	92	112	60	104	167	177	1569
213.00	U	MN	161	153	203	185	100	53	93	113	60	105	166	175	1559
214.00	A	MD	125	124	198	181	79	40	74	90	50	87	160	141	1634
214.00	U	MD	124	132	207	173	77	44	83	100	52	96	166	164	1624
214.00	A	MN	167	164	225	212	112	54	89	117	62	110	184	197	1687
214.00	U	MN	169	165	230	208	119	61	103	126	72	107	185	201	1749
215.00	A	MD	167	165	255	240	107	53	102	113	80	104	205	177	2149
215.00	U	MD	159	173	252	248	121	51	108	114	63	89	207	175	2060
215.00	A	MN	224	218	297	283	150	73	122	146	94	132	236	255	2214
215.00	U	MN	200	229	285	281	153	70	124	147	94	132	228	262	2194
215.10	A	MD	185	168	262	242	116	51	97	113	58	103	207	189	2197
215.10	U	MD	175	145	254	276	104	58	114	128	92	106	233	210	2168
215.10	A	MN	239	226	295	282	161	70	118	146	72	131	239	267	2256
215.10	U	MN	251	231	280	322	181	92	145	174	114	111	267	269	2441
216.00	A	MD	189	207	318	277	128	63	133	135	67	124	224	210	2635
216.00	U	MD	189	207	308	277	128	65	133	136	69	124	239	215	2635
216.00	A	MN	258	270	353	334	183	80	147	176	90	151	270	324	2649
216.00	U	MN	254	268	340	331	192	91	152	183	98	150	284	323	2696
216.30	A	MD	185	198	322	300	128	62	116	134	68	118	222	210	2530
216.30	U	MD	191	195	279	319	112	64	118	124	72	139	195	220	2547
216.30	A	MN	247	263	383	347	176	84	137	177	88	147	264	325	2600
216.30	U	MN	290	263	373	363	158	75	140	186	84	163	289	298	2618
216.40	A	MD	158	168	259	256	108	53	99	117	62	102	203	185	2197
216.40	U	MD	167	190	266	246	108	52	93	123	60	114	190	192	2116
216.40	A	MN	223	217	297	297	152	70	116	157	83	131	236	278	2234
216.40	U	MN	245	192	351	281	138	70	121	156	74	147	233	240	2200
217.00	A	MD	130	126	196	181	81	38	73	85	48	86	158	138	1620
217.00	U	MD	131	132	194	169	75	40	82	87	47	88	167	149	1601
217.00	A	MN	171	164	224	211	112	51	88	114	61	107	180	190	1666
217.00	U	MN	169	163	226	202	112	56	98	123	68	104	178	187	1692
218.00	A	MD	135	153	226	224	103	49	93	107	60	99	191	165	1929
218.00	U	MD	135	140	231	208	117	48	98	109	56	103	211	188	1924
218.00	A	MN	184	197	263	243	140	61	113	143	76	124	218	228	1983
218.00	U	MN	186	194	284	236	136	59	115	155	67	136	210	233	1992
218.20	A	MD	114	136	228	204	80	42	80	94	48	85	178	165	1748
218.20	U	MD	115	166	217	188	61	32	77	96	45	99	195	167	1626
218.20	A	MN	157	182	263	221	116	55	98	129	63	107	206	224	1808
218.20	U	MN	164	201	261	218	100	48	102	138	60	111	224	211	1774
220.30	A	MD	159	156	262	254	103	52	103	120	57	102	209	179	2144
220.30	U	MD	174	167	224	304	82	55	99	128	51	113	214	188	2208
220.30	A	MN	202	214	304	289	152	67	123	159	76	129	243	251	2205
220.30	U	MN	228	220	308	294	132	63	128	170	73	135	256	227	2217
221.00	A	MD	176	181	291	282	120	58	109	124	65	112	218	203	2399
221.00	U	MD	187	166	266	271	117	58	120	120	62	111	239	209	2361
221.00	A	MN	237	245	337	318	167	78	134	171	86	141	245	286	2442
221.00	U	MN	233	233	323	318	169	83	149	179	99	138	247	291	2466

APPENDIX TABLE A.1.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
221.10 A MD	174	220	304	326	122	50	116	132	67	104	237	195	2489
221.10 U MD	174	291	235	404	133	56	96	99	46	72	191	193	2600
221.10 A MN	240	283	352	346	182	66	139	179	91	135	284	273	2537
221.10 U MN	179	373	256	341	196	61	121	195	79	139	261	273	2407
221.20 A MD	153	169	288	266	116	45	97	112	56	93	201	212	2195
221.20 U MD	166	179	234	272	103	44	87	125	48	98	195	191	2172
221.20 A MN	213	232	344	292	161	61	118	153	73	119	238	307	2261
221.20 U MN	227	276	324	295	151	56	117	174	70	129	248	264	2229
221.30 A MD	178	187	297	294	114	56	107	129	70	115	224	215	2407
221.30 U MD	162	191	290	253	127	43	110	109	50	118	244	217	2254
221.30 A MN	235	226	345	321	163	80	131	172	92	149	254	296	2441
221.30 U MN	232	238	370	311	164	80	126	165	77	158	252	294	2464
222.00 A MD	183	198	311	336	135	69	124	141	75	123	241	218	2624
222.00 U MD	174	200	293	310	135	71	134	141	74	127	246	218	2496
222.00 A MN	246	262	367	348	189	89	153	206	98	164	271	307	2680
222.00 U MN	243	252	362	341	188	94	160	208	109	162	271	292	2673
222.30 A MD	234	238	409	385	184	86	164	166	92	157	312	260	3294
222.30 U MD	283	228	448	388	180	73	174	140	137	153	327	230	3336
222.30 A MN	321	325	465	429	249	108	193	220	115	199	343	354	3327
222.30 U MN	365	340	431	462	235	110	192	212	155	181	359	329	3375
222.50 A MD	231	244	423	376	184	84	171	168	100	163	315	270	3351
222.50 U MD	301	221	435	391	188	85	183	149	149	167	335	245	3490
222.50 A MN	322	334	481	419	251	105	198	223	123	203	352	366	3383
222.50 U MN	385	365	427	443	229	109	208	220	168	185	376	342	3488
222.60 A MD	172	156	241	268	99	64	96	106	66	104	208	179	2197
222.60 U MD	169	166	240	213	101	71	108	122	76	124	221	194	2136
222.60 A MN	220	212	281	275	142	75	119	142	77	131	235	258	2228
222.60 U MN	219	202	287	283	154	90	140	169	107	132	246	232	2268
222.70 A MD	162	165	284	260	129	67	127	141	78	115	219	211	2283
222.70 U MD	146	205	272	273	130	57	111	155	82	109	209	186	2166
222.70 A MN	206	231	337	275	171	79	151	185	98	142	249	277	2341
222.70 U MN	196	267	311	279	164	73	148	204	94	139	262	240	2293

APPENDIX TABLE A.2. ADJUSTED AND UNADJUSTED MEDIAN AND MEAN, MONTHLY AND ANNUAL RAINFALL, MAUI ISLAND, STATE OF HAWAI'I

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
248.00 A MD	67	53	44	37	27	18	22	22	39	33	26	56	619
248.00 U MD	76	52	43	28	23	14	18	19	38	31	26	36	630
248.00 A MN	105	67	65	53	35	27	28	32	48	53	43	73	647
248.00 U MN	112	69	69	50	35	29	29	32	48	54	47	71	639
248.10 A MD	68	48	38	37	25	11	9	16	28	28	21	48	516
248.10 U MD	85	58	39	43	17	8	22	6	30	20	29	43	514
248.10 A MN	95	63	52	48	35	17	21	22	34	47	35	67	540
248.10 U MN	116	73	62	47	39	16	27	21	32	42	42	73	564
249.00 A MD	32	23	25	19	7	6	2	18	13	15	20	40	322
249.00 U MD	44	38	33	20	3	4	2	12	8	15	25	38	393
249.00 A MN	56	39	40	25	16	12	9	25	19	24	31	61	346
249.00 U MN	89	63	52	29	23	15	13	22	17	25	44	61	455
250.00 A MD	80	71	57	58	43	33	39	34	55	40	35	64	804
250.00 U MD	79	65	59	55	40	34	38	35	54	38	33	64	807
250.00 A MN	126	96	88	74	56	50	46	47	71	68	56	85	863
250.00 U MN	125	93	85	71	57	49	47	48	70	68	56	86	861
251.10 A MD	102	59	59	67	39	37	26	42	63	53	34	71	830
251.10 U MD	104	53	73	69	34	33	37	33	57	52	46	79	822
251.10 A MN	136	82	77	82	57	43	42	53	82	66	55	100	862
251.10 U MN	166	115	94	93	57	43	47	48	77	56	58	102	871
252.00 A MD	115	77	68	35	28	8	4	7	24	37	49	85	732
252.00 U MD	109	73	66	28	21	8	7	11	22	30	44	67	710
252.00 A MN	151	104	93	55	37	13	16	28	33	64	67	105	761
252.00 U MN	151	105	94	51	37	13	16	28	33	62	68	104	767
254.00 A MD	116	77	64	38	22	3	5	10	22	33	54	85	692
254.00 U MD	114	68	55	20	14	5	5	9	20	40	59	67	711
254.00 A MN	149	100	90	68	31	11	10	22	31	54	70	104	723
254.00 U MN	136	90	80	52	29	9	9	25	31	56	75	99	687
254.10 A MD	172	60	98	66	37	8	19	27	32	61	81	92	945
254.10 U MD	231	58	85	46	26	6	31	34	28	69	90	89	910
254.10 A MN	216	76	127	108	48	18	27	38	32	89	98	110	967
254.10 U MN	235	71	116	70	60	12	32	45	30	74	108	116	948
255.00 A MD	85	71	42	36	13	3	2	8	15	27	44	83	615
255.00 U MD	110	45	27	46	10	2	2	7	12	25	45	91	609
255.00 A MN	111	88	68	74	28	12	6	18	19	48	53	103	650
255.00 U MN	125	97	67	99	47	15	6	12	16	44	57	104	663
256.00 A MD	105	62	64	28	14	0	0	8	12	30	43	89	624
256.00 U MD	104	62	64	27	14	0	0	8	12	29	43	89	624
256.00 A MN	122	87	85	63	30	8	10	18	28	40	59	103	656
256.00 U MN	121	86	85	63	30	7	9	18	27	40	59	102	655
256.10 A MD	182	130	141	87	64	24	9	32	46	81	108	132	1302
256.10 U MD	156	122	177	96	82	16	11	29	28	72	132	129	1274
256.10 A MN	203	169	176	128	82	36	21	51	67	103	129	163	1342
256.10 U MN	221	183	188	136	98	35	25	45	55	95	141	169	1427

NOTE: A = normals adjusted to common base period; U = unadjusted normals; MD = median; MN = median; MN = mean; —— = insufficient data.

NOTE: Median and mean annual rainfall not necessarily equal to sum of monthly normals.

APPENDIX TABLE A.2.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
257.00 A MD	128	63	83	44	25	11	6	14	24	35	63	95	792
257.00 U MD	156	71	95	48	24	9	8	18	19	30	75	84	852
257.00 A MN	145	95	105	70	43	13	17	24	37	52	81	131	832
257.00 U MN	159	106	118	69	53	12	18	22	26	52	88	109	849
257.10 A MD	140	99	73	41	29	11	0	7	21	31	61	85	766
257.10 U MD	167	117	94	44	20	4	0	7	11	20	62	90	899
257.10 A MN	164	133	102	69	40	14	7	13	32	43	80	91	801
257.10 U MN	183	136	121	77	50	10	7	13	30	43	78	100	888
257.20 A MD	159	103	106	74	45	23	11	16	32	47	92	138	1053
257.20 U MD	199	106	130	96	40	16	17	26	24	36	94	140	1114
257.20 A MN	180	127	133	101	61	28	23	31	47	60	108	178	1091
257.20 U MN	206	129	148	105	75	23	22	29	38	54	105	133	1104
257.30 A MD	139	77	97	80	55	33	34	32	48	49	90	123	1077
257.30 U MD	150	83	97	80	59	28	25	34	38	44	77	112	1088
257.30 A MN	158	111	116	106	71	38	44	41	64	66	103	175	1140
257.30 U MN	178	117	127	108	82	32	36	37	51	58	101	119	1116
257.40 A MD	152	102	154	115	92	65	63	69	80	74	128	141	1405
257.40 U MD	162	103	174	133	92	51	59	68	67	74	105	133	1471
257.40 A MN	167	142	177	139	108	72	72	82	96	92	139	181	1457
257.40 U MN	176	143	185	145	116	56	64	73	81	83	133	133	1451
258.00 A MD	225	141	186	159	146	135	168	152	136	146	177	154	2162
258.00 U MD	218	140	185	159	155	142	153	152	137	145	170	166	2165
258.00 A MN	236	195	212	179	166	151	195	176	152	178	202	220	2269
258.00 U MN	229	191	205	179	167	153	189	175	159	175	199	221	2253
259.00 A MD	211	125	162	124	92	50	44	55	61	79	154	181	1613
259.00 U MD	220	139	185	147	110	49	51	73	56	73	157	183	1654
259.00 A MN	223	171	191	164	116	61	59	72	81	107	172	220	1656
259.00 U MN	236	178	219	161	125	56	58	70	66	104	178	199	1672
259.10 A MD	214	142	187	131	85	39	31	48	46	82	129	210	1530
259.10 U MD	287	142	234	190	81	34	46	62	50	71	146	185	1565
259.10 A MN	234	184	223	175	105	46	42	61	61	105	151	244	1563
259.10 U MN	274	189	244	201	107	41	50	58	60	98	149	192	1578
259.20 A MD	244	232	243	183	143	89	55	53	79	112	199	283	2102
259.20 U MD	290	228	298	246	148	51	52	63	56	101	196	254	2255
259.20 A MN	265	299	300	224	173	98	65	91	95	121	234	341	2165
259.20 U MN	336	280	298	262	180	62	60	76	93	115	229	279	2245
259.30 A MD	466	319	462	421	279	127	237	287	206	194	454	549	4890
259.30 U MD	577	322	398	436	187	72	181	259	202	247	346	459	4670
259.30 A MN	620	421	518	461	289	147	260	317	220	205	504	778	5108
259.30 U MN	696	432	583	518	229	150	212	281	187	216	465	563	4702
259.50 A MD	92	121	82	100	51	24	33	51	31	54	110	146	1226
259.50 U MD	131	110	66	151	33	20	31	43	26	53	156	159	979
259.50 A MN	192	168	119	134	58	29	49	67	36	61	142	229	1264
259.50 U MN	257	153	149	157	51	26	42	57	32	60	171	192	1360
260.00 A MD	47	32	26	14	7	6	6	5	14	7	18	39	358
260.00 U MD	73	37	33	10	0	0	0	0	1	0	19	41	343
260.00 A MN	80	45	41	22	13	11	8	9	15	12	30	59	374
260.00 U MN	101	50	50	19	13	9	7	9	14	10	40	58	377

APPENDIX TABLE A.2.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
260.20 A MD	46	32	24	15	9	5	6	6	9	7	16	38	336
260.20 U MD	53	32	26	7	3	0	0	2	2	2	12	34	297
260.20 A MN	79	44	42	23	16	10	8	10	11	12	30	55	352
260.20 U MN	94	46	43	16	13	7	7	9	9	10	34	50	334
261.00 A MD	55	43	37	28	19	8	13	12	21	18	22	44	461
261.00 U MD	53	44	35	23	15	3	8	8	20	14	25	36	475
261.00 A MN	86	59	54	48	30	17	17	20	24	31	33	64	484
261.00 U MN	92	63	58	41	33	17	18	20	25	32	37	63	471
261.30 A MD	55	51	29	20	11	1	8	4	7	9	28	40	396
261.30 U MD	71	52	44	10	0	0	0	0	0	0	25	32	327
261.30 A MN	96	69	43	29	19	4	9	10	14	12	41	62	418
261.30 U MN	122	77	54	26	19	6	8	10	12	10	48	60	377
262.00 A MD	64	43	38	30	12	6	12	18	14	13	25	46	464
262.00 U MD	71	45	40	20	6	0	4	7	6	9	37	45	485
262.00 A MN	96	61	55	36	20	13	16	22	16	20	38	71	485
262.00 U MN	112	65	58	36	19	13	15	21	15	19	50	69	489
263.00 A MD	68	59	49	40	20	12	21	21	24	25	34	49	608
263.00 U MD	71	64	59	34	22	6	19	16	21	23	41	33	618
263.00 A MN	109	78	70	62	31	24	26	29	30	36	48	76	638
263.00 U MN	123	82	78	58	33	23	26	30	28	36	54	68	639
264.00 A MD	85	74	60	67	55	47	43	48	58	55	45	65	923
264.00 U MD	99	69	68	60	58	38	53	46	55	59	47	65	922
264.00 A MN	138	96	85	87	68	58	57	60	73	77	64	90	962
264.00 U MN	151	98	96	82	69	54	57	59	70	74	64	81	945
264.10 A MD	65	59	49	36	37	17	25	37	53	37	45	53	696
264.10 U MD	95	100	74	55	30	14	20	27	50	40	79	58	708
264.10 A MN	102	83	69	55	48	31	30	44	58	51	58	75	726
264.10 U MN	140	108	83	63	48	39	30	42	61	45	75	77	771
265.00 A MD	73	65	52	50	26	20	28	32	33	35	38	53	710
265.00 U MD	82	59	64	43	23	17	30	25	33	29	46	58	689
265.00 A MN	113	84	72	73	40	36	34	40	43	45	52	83	742
265.00 U MN	128	86	81	70	41	34	34	39	40	43	59	74	735
267.00 A MD	74	74	55	60	36	23	37	42	42	42	44	59	812
267.00 U MD	73	73	54	59	36	23	36	41	42	42	44	59	812
267.00 A MN	136	97	80	86	51	43	46	52	52	53	57	96	851
267.00 U MN	135	96	80	86	51	42	46	51	52	52	57	95	851
267.20 A MD	156	148	92	88	82	48	43	53	63	54	50	111	1269
267.20 U MD	193	119	85	83	65	44	40	54	55	56	52	86	1311
267.20 A MN	241	186	121	117	89	56	56	75	70	68	85	160	1308
267.20 U MN	281	205	132	121	87	55	61	70	65	63	112	161	1372
267.30 A MD	75	74	52	52	38	20	30	36	37	28	50	63	756
267.30 U MD	111	55	57	66	27	16	26	32	30	28	65	68	738
267.30 A MN	132	97	72	73	55	29	35	48	53	35	64	87	789
267.30 U MN	156	107	81	78	59	28	33	44	45	33	78	81	865
267.40 A MD	81	71	52	57	42	25	37	29	38	30	43	59	781
267.40 U MD	114	81	55	58	35	16	20	17	27	31	56	40	733
267.40 A MN	137	96	75	78	57	33	43	38	56	35	60	87	821
267.40 U MN	174	111	84	80	64	28	36	31	44	33	70	74	824

APPENDIX TABLE A.2.—Continued

State Key No.			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
			(mm)												
280.00	A	MD	406	325	452	390	324	367	283	422	390	360	418	370	3090
280.00	U	MD	370	337	416	337	269	391	353	436	383	370	396	378	3048
280.00	A	MN	450	347	463	413	338	377	326	436	401	386	410	376	3116
280.00	U	MN	407	373	451	396	338	397	339	441	390	362	416	406	3088
281.00	A	MD	174	131	195	151	130	100	145	143	123	140	169	143	1945
281.00	U	MD	187	152	223	122	131	101	150	157	107	136	179	136	1901
281.00	A	MN	213	168	212	193	142	106	157	153	136	153	193	170	1979
281.00	U	MN	215	176	193	172	141	106	150	155	123	159	211	165	1968
282.00	A	MD	153	107	175	143	99	74	100	120	99	101	122	105	1602
282.00	U	MD	112	119	179	137	103	77	105	123	91	100	130	132	1590
282.00	A	MN	198	139	195	185	105	79	114	128	102	117	142	133	1652
282.00	U	MN	140	134	225	176	116	81	113	129	95	141	144	147	1627
296.00	A	MD	51	25	24	5	1	0	0	0	0	4	4	37	285
296.00	U	MD	50	24	24	4	1	0	0	0	0	4	4	36	284
296.00	A	MN	95	47	54	26	7	3	1	5	6	15	35	61	359
296.00	U	MN	95	47	53	26	7	2	1	4	6	15	35	60	359
296.10	A	MD	61	32	30	8	2	0	0	2	1	6	11	45	346
296.10	U	MD	65	35	29	11	3	0	0	1	0	4	18	46	345
296.10	A	MN	98	54	57	26	9	3	2	6	7	15	37	67	391
296.10	U	MN	96	55	71	21	10	2	4	5	5	15	44	74	402
297.00	A	MD	46	25	20	11	2	0	1	1	1	3	11	73	308
297.00	U	MD	43	43	12	11	0	0	0	2	0	2	17	43	279
297.00	A	MN	75	50	52	32	7	2	4	6	7	14	37	95	352
297.00	U	MN	91	58	40	18	7	1	4	3	5	10	27	83	332
301.00	A	MD	64	34	29	12	2	0	0	1	1	8	14	46	338
301.00	U	MD	50	40	25	9	1	0	0	0	0	6	10	31	316
301.00	A	MN	100	52	55	33	10	3	2	7	8	17	38	67	383
301.00	U	MN	92	51	49	24	10	2	1	6	7	17	37	62	363
307.00	A	MD	72	54	51	28	9	0	1	3	5	17	29	55	472
307.00	U	MD	60	36	47	27	7	0	2	3	2	27	25	56	456
307.00	A	MN	104	70	63	55	18	3	4	10	9	28	50	78	491
307.00	U	MN	93	67	61	67	18	3	4	10	10	31	46	77	494
307.20	A	MD	69	44	41	16	5	0	1	3	4	14	24	46	410
307.20	U	MD	85	50	43	15	5	0	0	1	1	8	40	49	360
307.20	A	MN	107	64	61	44	12	5	3	7	8	22	44	72	447
307.20	U	MN	115	66	59	28	12	3	2	6	4	19	49	76	449
310.00	A	MD	68	49	44	22	5	0	1	2	5	13	23	47	414
310.00	U	MD	66	48	43	18	4	0	0	0	1	12	25	44	365
310.00	A	MN	99	65	58	42	11	3	3	8	8	23	44	69	434
310.00	U	MN	95	63	58	42	14	2	3	7	8	21	43	69	413
311.00	A	MD	57	37	31	11	2	0	1	2	2	9	18	41	327
311.00	U	MD	52	37	34	7	1	0	0	0	0	8	11	35	325
311.00	A	MN	99	54	51	30	6	3	2	6	5	16	36	59	362
311.00	U	MN	87	59	48	19	6	2	2	5	3	17	31	52	338
311.10	A	MD	55	31	31	13	3	0	1	1	2	8	19	38	323
311.10	U	MD	71	45	40	10	2	0	0	0	0	7	27	37	279
311.10	A	MN	89	49	49	41	10	4	2	6	6	14	38	58	352
311.10	U	MN	95	54	53	21	8	3	2	5	3	12	39	54	335

APPENDIX TABLE A.2.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
311.30 A MD	59	29	23	12	1	0	1	2	1	2	17	63	520
311.30 U MD	71	48	22	12	0	0	0	0	0	0	12	39	297
311.30 A MN	102	52	47	25	8	8	2	4	4	2	34	83	603
311.30 U MN	114	63	43	15	9	4	1	3	3	6	30	65	528
312.00 A MD	63	46	41	18	2	0	2	2	2	10	20	40	362
312.00 U MD	49	45	24	4	0	0	2	2	0	3	23	43	387
312.00 A MN	92	68	51	49	2	1	3	6	0	20	41	55	390
312.00 U MN	78	57	45	30	2	0	2	9	1	19	47	66	382
312.10 A MD	61	39	36	13	2	0	2	2	2	8	21	44	362
312.10 U MD	83	50	40	12	1	0	0	0	0	5	27	44	326
312.10 A MN	98	61	53	43	8	4	3	5	5	14	40	65	394
312.10 U MN	105	63	52	25	6	3	3	5	3	12	45	63	384
313.00 A MD	60	46	41	16	4	0	3	2	2	10	22	46	359
313.00 U MD	46	48	37	9	1	0	0	0	0	4	14	35	338
313.00 A MN	89	60	52	35	7	3	4	7	4	16	36	67	375
313.00 U MN	89	62	52	32	6	2	3	6	4	16	36	60	364
313.20 A MD	61	59	51	20	6	1	7	4	4	14	29	53	457
313.20 U MD	79	52	57	19	3	1	4	4	3	13	47	49	411
313.20 A MN	91	73	67	38	12	3	11	8	9	20	49	72	474
313.20 U MN	115	80	72	19	10	6	10	7	5	14	68	65	477
314.00 A MD	75	51	43	21	5	0	4	4	4	10	31	51	407
314.00 U MD	60	51	39	11	1	0	1	1	1	5	28	40	359
314.00 A MN	104	64	53	37	9	3	5	7	7	16	44	71	418
314.00 U MN	109	63	57	28	9	3	5	6	5	16	44	63	399
314.10 A MD	60	46	35	15	4	2	1	5	2	9	22	43	380
314.10 U MD	91	57	43	19	1	0	0	0	0	6	13	27	329
314.10 A MN	93	61	48	27	10	5	2	10	5	11	38	63	400
314.10 U MN	124	72	57	23	9	5	1	6	3	11	37	51	372
315.00 A MD	72	52	48	19	5	1	4	4	4	13	31	58	420
315.00 U MD	51	53	45	15	1	0	1	0	1	6	27	42	385
315.00 A MN	100	66	59	35	10	4	5	7	7	19	44	79	431
315.00 U MN	98	69	58	30	9	3	4	7	6	17	44	72	412
316.00 A MD	84	50	47	20	3	2	4	6	4	11	26	53	414
316.00 U MD	46	42	33	9	2	0	2	4	0	4	26	51	359
316.00 A MN	115	64	57	40	7	8	5	9	8	17	36	72	425
316.00 U MN	102	57	54	31	6	3	5	9	4	24	36	72	408
316.10 A MD	73	56	46	24	9	0	4	4	4	12	38	61	452
316.10 U MD	91	66	44	21	5	0	1	3	1	7	42	65	401
316.10 A MN	104	69	58	39	14	3	5	9	6	15	53	80	462
316.10 U MN	116	75	60	30	11	2	5	8	5	12	55	74	443
317.00 A MD	85	51	45	21	6	2	5	6	4	12	26	53	418
317.00 U MD	48	41	28	9	3	0	2	4	1	4	24	46	357
317.00 A MN	118	63	55	41	9	7	6	10	7	18	36	71	428
317.00 U MN	102	56	54	31	8	2	5	11	3	24	35	70	412
317.10 A MD	78	55	47	42	17	4	8	7	11	21	36	69	529
317.10 U MD	108	54	46	29	7	0	3	5	10	9	37	56	523
317.10 A MN	110	66	58	80	24	8	13	13	12	24	52	93	541
317.10 U MN	138	66	63	35	17	7	10	10	14	18	67	76	526

APPENDIX TABLE A.2.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
317.20 A MD	73	60	41	25	11	1	5	3	8	15	35	58	481
317.20 U MD	78	60	57	22	5	0	1	2	4	6	28	43	421
317.20 A MN	104	75	52	37	16	5	8	8	10	17	51	81	492
317.20 U MN	127	80	62	29	13	5	6	7	8	13	54	62	457
318.00 A MD	57	46	35	22	3	3	5	4	5	17	24	40	380
318.00 U MD	57	44	47	16	0	0	0	0	0	12	27	37	384
318.00 A MN	89	61	49	37	7	6	7	9	9	25	39	61	394
318.00 U MN	98	61	56	33	7	5	7	10	8	26	37	54	393
320.00 A MD	126	74	84	54	22	4	16	21	11	25	51	94	678
320.00 U MD	109	93	56	47	11	1	10	17	2	13	38	108	624
320.00 A MN	163	94	91	73	33	7	20	30	17	35	69	117	699
320.00 U MN	144	98	62	63	20	5	17	31	8	29	61	113	616
320.20 A MD	137	78	122	70	29	10	17	26	18	32	63	102	842
320.20 U MD	115	87	82	42	31	12	10	26	5	24	51	88	747
320.20 A MN	187	103	138	99	42	14	24	40	26	43	87	125	865
320.20 U MN	126	114	89	74	28	11	19	44	13	35	78	131	775
321.00 A MD	62	51	39	25	9	3	9	7	8	17	28	48	446
321.00 U MD	71	56	43	17	4	0	5	4	4	10	43	52	429
321.00 A MN	94	69	55	44	15	8	13	14	12	23	41	69	464
321.00 U MN	110	68	57	34	14	6	14	14	10	21	48	68	448
321.10 A MD	74	51	46	27	2	0	18	9	2	21	27	62	416
321.10 U MD	55	62	41	21	2	0	1	5	1	22	21	23	452
321.10 A MN	101	66	50	47	6	3	17	12	6	28	44	94	428
321.10 U MN	65	75	62	42	14	5	19	14	9	38	24	51	435
321.40 A MD	81	62	45	29	17	1	5	4	11	12	33	63	539
321.40 U MD	88	73	55	38	7	0	3	6	7	8	35	52	444
321.40 A MN	111	83	54	41	26	4	7	10	14	19	50	89	550
321.40 U MN	134	81	63	39	21	5	9	9	11	16	55	72	503
322.00 A MD	77	57	48	26	5	5	5	7	9	22	28	44	477
322.00 U MD	49	54	37	15	5	3	0	0	5	19	15	22	423
322.00 A MN	119	74	64	47	12	6	9	19	13	30	35	58	493
322.00 U MN	96	76	64	39	16	7	10	21	12	33	32	51	459
323.00 A MD	57	51	46	33	15	7	12	17	16	20	34	47	501
323.00 U MD	53	57	46	21	9	0	9	10	11	16	44	49	472
323.00 A MN	84	65	61	52	24	15	16	27	20	26	43	72	518
323.00 U MN	96	64	63	43	22	12	16	23	17	24	50	70	501
323.10 A MD	44	72	37	29	2	6	9	8	3	19	32	48	441
323.10 U MD	43	78	41	12	0	0	0	13	4	20	24	17	446
323.10 A MN	68	85	51	35	8	9	14	12	7	29	40	76	445
323.10 U MN	58	82	59	37	16	12	14	17	13	42	22	47	446
323.20 A MD	94	62	57	46	22	7	18	19	20	27	44	66	643
323.20 U MD	79	66	63	29	17	4	14	15	8	23	47	67	622
323.20 A MN	140	80	74	70	33	11	24	29	28	35	63	93	665
323.20 U MN	126	76	78	51	32	10	23	24	20	29	65	89	640
324.00 A MD	112	79	66	64	30	20	24	37	42	45	37	52	837
324.00 U MD	101	85	80	40	26	11	27	37	20	32	41	69	717
324.00 A MN	187	96	82	90	45	31	38	49	55	50	47	83	872
324.00 U MN	175	100	84	64	44	27	41	46	36	48	50	88	792

APPENDIX TABLE A.2.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
324.40 A MD	81	68	65	74	43	14	26	29	38	30	49	74	812
324.40 U MD	77	66	59	53	43	5	20	30	23	12	41	66	710
324.40 A MN	145	95	89	99	64	32	31	39	56	41	63	101	840
324.40 U MN	157	90	83	88	72	25	36	41	48	31	76	92	858
324.50 A MD	56	63	55	43	29	14	15	30	24	29	37	61	682
324.50 U MD	72	69	57	43	14	13	7	26	17	23	24	51	654
324.50 A MN	94	96	73	66	45	22	21	38	36	37	49	88	708
324.50 U MN	114	91	87	75	30	22	18	35	31	36	45	76	755
325.00 A MD	90	71	61	49	18	7	11	15	14	23	43	78	629
325.00 U MD	82	76	66	41	11	5	8	14	10	17	41	75	599
325.00 A MN	134	92	74	68	24	12	16	22	18	31	60	108	652
325.00 U MN	121	88	77	61	22	11	15	23	15	32	53	95	625
325.10 A MD	76	72	59	42	19	5	10	17	12	21	39	72	648
325.10 U MD	88	79	67	37	16	1	6	10	7	16	48	78	586
325.10 A MN	106	97	72	58	27	8	14	26	16	30	57	96	666
325.10 U MN	117	91	74	48	24	8	14	25	13	26	65	90	619
327.00 A MD	105	82	77	56	25	8	17	22	19	32	52	84	731
327.00 U MD	97	87	77	52	19	7	16	20	12	27	45	82	653
327.00 A MN	148	105	93	77	34	13	21	31	28	40	72	114	756
327.00 U MN	135	100	96	69	31	12	21	32	22	40	63	101	739
327.10 A MD	67	79	68	34	11	8	26	25	24	28	49	64	587
327.10 U MD	51	88	65	46	16	2	31	19	19	32	44	55	574
327.10 A MN	104	95	78	57	15	9	30	28	30	36	67	86	605
327.10 U MN	83	124	71	68	16	6	30	29	30	31	70	96	653
328.00 A MD	76	76	66	58	40	25	36	43	46	51	46	53	818
328.00 U MD	75	67	69	54	45	28	40	56	57	47	30	55	823
328.00 A MN	131	95	83	81	54	35	46	54	58	58	58	87	839
328.00 U MN	119	108	95	70	58	41	45	66	70	57	53	88	876
329.00 A MD	174	129	148	108	52	31	50	64	37	55	101	150	1326
329.00 U MD	161	109	142	79	51	32	44	72	28	59	87	136	1293
329.00 A MN	239	158	175	147	70	37	64	86	47	68	142	197	1362
329.00 U MN	195	141	164	125	63	38	63	94	42	77	106	195	1309
329.10 A MD	163	113	144	105	43	20	39	43	29	53	101	144	1245
329.10 U MD	171	130	147	80	43	15	40	41	22	54	107	107	1219
329.10 A MN	217	154	166	138	56	31	54	60	37	64	128	186	1275
329.10 U MN	178	166	151	112	55	34	54	63	33	61	114	173	1208
329.30 A MD	179	166	224	166	74	44	71	78	50	85	152	176	1696
329.30 U MD	182	157	169	144	52	28	43	48	50	74	139	126	1277
329.30 A MN	194	199	229	187	99	64	87	100	54	109	181	201	1727
329.30 U MN	210	199	192	170	77	39	63	86	44	92	164	177	1498
330.00 A MD	98	78	68	68	31	19	25	36	29	34	53	77	833
330.00 U MD	95	78	75	50	24	16	22	42	23	32	47	76	786
330.00 A MN	144	107	91	98	44	27	34	49	38	44	75	115	862
330.00 U MN	138	105	95	79	43	28	34	53	40	43	65	99	830
333.00 A MD	173	144	179	136	70	44	66	83	66	90	134	157	1708
333.00 U MD	161	152	173	140	73	46	71	90	70	93	141	163	1778
333.00 A MN	235	203	231	186	93	53	99	114	81	115	179	211	1761
333.00 U MN	225	204	220	190	97	55	101	125	97	113	184	223	1808

APPENDIX TABLE A.2.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
338.00 A MD	167	131	127	87	42	23	40	53	40	59	100	151	1328
338.00 U MD	182	112	128	74	42	19	45	56	35	53	103	115	1278
338.00 A MN	250	186	158	120	57	31	55	80	49	76	136	205	1370
338.00 U MN	243	171	165	109	51	30	53	81	46	80	136	181	1350
338.20 A MD	212	288	234	172	147	77	123	148	120	108	183	229	2632
338.20 U MD	185	175	174	153	145	93	156	139	90	90	131	106	2526
338.20 A MN	271	381	299	209	167	92	147	178	132	128	255	298	2681
338.20 U MN	187	416	215	174	161	102	148	191	119	142	179	255	2308
338.40 A MD	118	67	74	54	39	6	18	39	26	34	78	101	976
338.40 U MD	171	61	84	54	38	5	20	27	28	24	135	132	1196
338.40 A MN	177	99	117	102	53	11	24	69	37	43	98	155	1009
338.40 U MN	217	106	113	116	60	11	26	55	41	34	120	161	1106
340.00 A MD	213	192	302	195	179	94	123	141	184	128	207	287	2482
340.00 U MD	191	176	272	152	162	105	113	161	114	115	234	212	2374
340.00 A MN	293	277	337	240	210	107	155	185	181	154	274	365	2529
340.00 U MN	312	214	303	187	200	129	151	214	182	172	217	348	2532
341.00 A MD	227	198	268	226	145	93	157	159	123	139	222	263	2755
341.00 U MD	203	238	279	212	152	96	152	167	116	135	198	187	2601
341.00 A MN	307	275	325	291	179	110	196	193	144	169	290	333	2791
341.00 U MN	300	277	338	277	174	111	183	200	136	173	274	307	2715
342.00 A MD	420	363	580	540	361	243	413	412	251	330	474	471	5584
342.00 U MD	364	317	581	551	324	221	378	352	246	321	568	438	5559
342.00 A MN	517	463	706	630	422	294	451	460	280	389	526	580	5634
342.00 U MN	513	480	624	668	410	279	435	457	292	377	584	609	5767
343.00 A MD	432	447	702	726	649	389	558	508	387	404	575	603	6787
343.00 U MD	400	487	660	705	618	406	549	528	304	381	518	591	6647
343.00 A MN	529	560	746	809	674	432	591	555	401	458	614	733	6792
343.00 U MN	506	566	744	805	683	430	594	576	392	461	610	719	6773
344.00 A MD	342	415	647	645	528	341	473	483	350	342	507	589	6129
344.00 U MD	334	429	678	573	609	378	509	541	311	319	487	562	6527
344.00 A MN	413	523	742	745	560	380	507	516	372	389	556	656	6137
344.00 U MN	377	555	721	721	612	428	558	563	389	391	531	704	6279
345.00 A MD	366	456	565	669	544	293	454	438	287	344	471	384	6042
345.00 U MD	315	616	462	598	565	275	477	479	245	284	447	508	6364
345.00 A MN	411	598	646	784	675	341	516	457	234	390	552	575	6048
345.00 U MN	310	750	548	671	629	285	582	554	303	394	510	731	6003
346.00 A MD	375	368	548	572	427	287	434	454	296	336	472	448	5543
346.00 U MD	398	403	525	577	428	301	445	476	313	342	495	487	5601
346.00 A MN	429	454	625	639	452	318	454	487	307	383	511	520	5543
346.00 U MN	420	454	609	644	460	343	460	520	342	391	523	539	5679
348.00 A MD	---	---	---	---	---	---	---	---	---	---	---	---	6804
348.00 U MD	---	---	---	---	---	---	---	---	---	---	---	---	6731
348.00 A MN	---	---	---	---	---	---	---	---	---	---	---	---	6830
348.00 U MN	---	---	---	---	---	---	---	---	---	---	---	---	6805
348.10 A MD	---	---	---	---	---	---	---	---	---	---	---	---	5734
348.10 U MD	---	---	---	---	---	---	---	---	---	---	---	---	5676
348.10 A MN	---	---	---	---	---	---	---	---	---	---	---	---	5743
348.10 U MN	---	---	---	---	---	---	---	---	---	---	---	---	5582

APPENDIX TABLE A.2.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
348.20 A MD	---	---	---	---	---	---	---	---	---	---	---	---	5202
348.20 U MD	---	---	---	---	---	---	---	---	---	---	---	---	5054
348.20 A MN	---	---	---	---	---	---	---	---	---	---	---	---	5217
348.20 U MN	---	---	---	---	---	---	---	---	---	---	---	---	4968
348.30 A MD	---	---	---	---	---	---	---	---	---	---	---	---	5550
348.30 U MD	---	---	---	---	---	---	---	---	---	---	---	---	5029
348.30 A MN	---	---	---	---	---	---	---	---	---	---	---	---	5554
348.30 U MN	---	---	---	---	---	---	---	---	---	---	---	---	5210
350.00 A MD	381	345	499	496	425	270	391	430	303	345	429	395	5233
350.00 U MD	367	351	485	502	422	281	407	441	315	344	433	404	5348
350.00 A MN	430	426	573	570	421	296	416	445	305	390	477	479	5227
350.00 U MN	418	422	557	577	425	316	421	471	334	392	493	497	5332
351.00 A MD	595	571	1057	874	690	1746	665	680	552	478	795	791	8970
351.00 U MD	510	494	1014	914	728	596	637	640	508	447	641	668	9277
351.00 A MN	680	722	1136	1020	707	1641	708	706	569	532	829	1200	8974
351.00 U MN	587	640	1232	933	856	1147	697	726	606	564	728	1332	9135
352.00 A MD	---	---	---	---	---	---	---	---	---	---	---	---	6679
352.00 U MD	---	---	---	---	---	---	---	---	---	---	---	---	6278
352.00 A MN	---	---	---	---	---	---	---	---	---	---	---	---	6646
352.00 U MN	---	---	---	---	---	---	---	---	---	---	---	---	6428
354.00 A MD	144	119	173	145	97	75	102	107	97	117	138	152	1657
354.00 U MD	143	119	168	143	98	79	100	112	96	115	138	154	1662
354.00 A MN	197	147	195	183	108	80	110	115	102	128	160	179	1710
354.00 U MN	188	148	197	191	113	85	108	123	113	125	162	190	1758
355.00 A MD	169	147	199	176	140	96	128	138	135	141	171	167	1986
355.00 U MD	151	145	203	179	130	94	126	123	116	155	173	162	2010
355.00 A MN	211	184	223	217	149	101	137	147	143	157	193	189	2018
355.00 U MN	199	194	242	185	149	97	138	145	132	175	203	175	2046
355.10 A MD	205	187	261	230	167	123	176	186	157	190	218	206	2589
355.10 U MD	191	182	240	297	184	135	184	198	182	150	228	239	2607
355.10 A MN	246	229	283	271	177	134	184	192	166	215	244	236	2614
355.10 U MN	205	253	291	283	207	144	192	198	196	207	231	253	2662
360.00 A MD	71	47	39	18	7	2	3	6	4	13	19	61	412
360.00 U MD	83	43	36	15	7	0	3	2	0	9	21	43	404
360.00 A MN	92	64	61	36	12	4	6	10	12	23	50	79	439
360.00 U MN	88	60	62	33	14	4	6	11	9	24	56	70	451
361.00 A MD	66	37	26	12	4	1	1	1	2	9	12	47	334
361.00 U MD	58	28	27	9	4	0	0	1	0	5	9	45	338
361.00 A MN	86	52	49	27	11	2	3	7	9	21	38	65	364
361.00 U MN	85	50	48	27	11	2	3	7	9	20	36	66	369
361.20 A MD	51	29	21	11	2	1	1	0	0	7	5	46	272
361.20 U MD	50	17	17	7	0	0	0	0	0	5	11	40	307
361.20 A MN	72	47	41	31	9	3	2	8	5	17	33	62	316
361.20 U MN	89	62	43	25	12	2	3	6	7	19	37	83	389
362.00 A MD	63	33	29	10	6	1	2	1	2	6	13	47	334
362.00 U MD	81	29	18	3	0	0	0	0	0	7	14	32	347
362.00 A MN	96	54	53	29	13	2	3	7	10	19	39	67	379
362.00 U MN	87	42	52	24	15	2	5	7	9	25	50	63	371

APPENDIX TABLE A.2.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
363.00 A MD	98	64	60	32	15	11	14	14	11	23	42	91	650
363.00 U MD	105	64	66	24	14	8	13	14	5	27	42	74	613
363.00 A MN	125	86	87	59	26	14	19	24	20	34	70	112	685
363.00 U MN	119	82	89	57	28	14	19	25	17	35	74	101	674
364.00 A MD	82	48	38	18	7	3	5	5	4	14	24	69	447
364.00 U MD	73	44	35	16	8	3	4	4	4	14	24	69	445
364.00 A MN	103	69	63	40	18	6	8	14	15	24	53	88	501
364.00 U MN	98	67	60	38	19	5	9	13	14	23	52	87	491
365.00 A MD	64	33	28	10	2	1	1	0	1	8	10	48	340
365.00 U MD	78	30	16	4	1	0	0	0	0	4	14	42	329
365.00 A MN	97	55	54	29	10	2	3	6	8	21	39	67	388
365.00 U MN	89	46	49	21	11	2	3	6	5	18	44	62	373
365.10 A MD	69	33	29	8	5	1	2	0	1	9	14	50	349
365.10 U MD	66	25	22	2	0	0	0	0	0	8	8	52	347
365.10 A MN	101	55	54	26	15	2	2	8	10	22	41	69	400
365.10 U MN	81	38	60	21	14	2	2	11	5	29	49	68	377
365.20 A MD	75	39	33	14	4	2	2	0	4	12	16	57	408
365.20 U MD	73	39	23	10	5	0	2	2	1	5	19	46	395
365.20 A MN	109	65	60	35	13	5	6	10	12	26	45	79	462
365.20 U MN	98	56	59	27	16	4	6	10	8	24	53	78	443
366.00 A MD	76	47	36	15	6	1	3	4	5	11	21	57	427
366.00 U MD	60	53	33	11	6	0	3	5	3	13	26	44	427
366.00 A MN	107	69	62	37	16	4	5	13	14	24	49	78	478
366.00 U MN	93	69	59	33	19	3	6	15	15	28	55	76	458
367.00 A MD	62	36	30	9	4	1	2	1	2	9	12	47	351
367.00 U MD	44	33	26	4	1	0	0	1	1	10	8	27	349
367.00 A MN	93	53	55	30	12	2	3	9	9	22	42	66	397
367.00 U MN	77	50	52	25	12	2	2	11	8	29	40	53	377
370.00 A MD	110	78	77	43	23	20	27	23	17	29	56	110	802
370.00 U MD	132	71	98	39	21	17	26	28	11	25	61	87	781
370.00 A MN	139	103	104	73	36	25	34	36	31	42	86	131	840
370.00 U MN	132	92	110	64	37	24	34	34	21	41	94	124	820
371.00 A MD	68	41	33	11	5	1	2	1	3	10	14	53	385
371.00 U MD	60	41	22	9	3	0	1	3	1	12	16	32	388
371.00 A MN	101	63	60	33	14	3	4	9	10	24	43	76	434
371.00 U MN	86	63	59	29	17	3	4	11	10	30	47	66	418
372.00 A MD	60	38	26	12	2	1	2	0	2	9	11	45	337
372.00 U MD	62	29	21	7	1	0	0	1	1	5	13	33	347
372.00 A MN	89	53	53	26	9	3	3	7	10	21	37	67	372
372.00 U MN	83	56	45	24	9	3	3	7	9	21	38	63	370
372.10 A MD	58	30	26	7	2	1	1	0	1	9	12	45	319
372.10 U MD	48	27	25	3	0	0	0	0	0	9	10	34	347
372.10 A MN	92	51	53	26	9	3	2	7	9	21	38	67	364
372.10 U MN	73	49	54	21	10	2	3	9	10	25	46	65	346
373.00 A MD	83	49	37	18	8	3	4	5	7	13	21	64	471
373.00 U MD	73	44	37	13	7	2	5	6	5	11	26	52	463
373.00 A MN	116	72	63	44	19	5	7	15	17	27	54	88	528
373.00 U MN	105	70	59	34	20	5	8	16	16	27	56	82	503

APPENDIX TABLE A.2.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
374.00 A MD	214	179	224	174	133	113	162	132	92	118	198	276	2383
374.00 U MD	202	175	205	164	125	110	150	124	90	108	193	255	2362
374.00 A MN	265	225	269	220	172	138	188	159	115	147	221	295	2430
374.00 U MN	252	220	255	209	163	131	176	151	112	141	215	284	2331
375.00 A MD	143	100	98	66	43	31	45	33	38	45	80	144	1096
375.00 U MD	159	94	110	68	48	37	47	40	34	53	88	120	1135
375.00 A MN	184	133	132	97	62	39	55	54	51	68	108	169	1157
375.00 U MN	173	129	131	94	60	40	56	55	52	65	106	166	1136
376.00 A MD	120	92	101	71	46	33	49	45	32	42	85	131	1036
376.00 U MD	137	73	103	67	47	33	51	54	38	55	93	113	1077
376.00 A MN	153	114	131	94	60	40	55	70	46	70	106	153	1074
376.00 U MN	160	111	132	95	62	42	58	70	45	69	105	148	1099
377.00 A MD	151	124	153	118	74	62	93	71	55	55	130	179	1510
377.00 U MD	177	116	163	127	76	55	81	76	62	76	152	161	1567
377.00 A MN	200	164	189	146	83	69	101	87	72	88	162	194	1565
377.00 U MN	203	160	191	150	102	81	108	88	82	94	169	203	1621
378.00 A MD	85	48	39	22	10	5	9	8	10	18	26	68	518
378.00 U MD	68	46	40	19	10	4	12	10	10	18	20	59	503
378.00 A MN	120	69	65	47	23	8	13	21	19	35	55	91	570
378.00 U MN	103	64	61	42	23	8	14	20	19	36	56	89	541
380.00 A MD	672	615	948	947	807	593	793	753	537	614	807	882	9792
380.00 U MD	660	571	863	965	838	660	812	861	488	558	711	812	9677
380.00 A MN	763	731	1001	1050	894	669	854	826	590	683	839	921	9976
380.00 U MN	735	755	994	1037	899	690	894	867	552	693	820	911	9948
386.00 A MD	98	74	74	47	19	6	11	11	12	30	45	80	681
386.00 U MD	87	76	75	39	18	6	11	11	11	29	49	75	651
386.00 A MN	132	96	91	76	30	9	15	18	16	42	74	107	706
386.00 U MN	119	105	92	69	31	9	15	20	17	39	74	104	703
386.50 A MD	143	100	93	64	24	12	20	19	15	43	61	99	910
386.50 U MD	155	90	92	59	17	13	19	32	12	40	69	118	928
386.50 A MN	180	134	112	102	40	14	26	28	21	56	101	132	943
386.50 U MN	231	139	95	84	29	15	18	29	20	48	99	118	917
387.00 A MD	109	81	84	55	22	7	12	13	12	36	51	84	738
387.00 U MD	107	84	89	44	24	5	11	15	11	38	51	72	678
387.00 A MN	147	106	101	92	35	11	16	22	17	46	80	108	767
387.00 U MN	141	103	102	74	36	9	15	22	15	48	78	101	743
387.10 A MD	212	170	176	159	74	31	47	55	51	101	141	165	1733
387.10 U MD	217	173	168	148	62	29	48	58	41	93	164	171	1640
387.10 A MN	263	213	213	235	98	37	56	79	59	120	190	212	1795
387.10 U MN	281	217	208	185	89	35	56	84	52	115	212	212	1756
387.20 A MD	199	174	210	171	110	35	69	85	66	117	174	144	1828
387.20 U MD	222	140	209	164	93	26	61	77	45	83	196	114	1778
387.20 A MN	254	220	247	207	140	41	82	109	81	141	215	176	1877
387.20 U MN	272	216	235	184	102	33	73	102	53	116	230	176	1767
390.00 A MD	97	77	71	39	16	3	6	10	8	27	45	77	645
390.00 U MD	84	71	69	38	15	3	6	8	8	25	49	75	640
390.00 A MN	136	94	87	77	28	9	12	17	14	38	69	105	683
390.00 U MN	120	95	86	72	29	9	10	16	14	36	70	101	663

APPENDIX TABLE A.2.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
390.10 A MD	134	102	104	76	29	8	16	17	17	47	68	105	928
390.10 U MD	143	99	91	66	23	6	15	20	14	43	75	112	910
390.10 A MN	177	122	123	126	41	12	21	29	23	58	100	140	964
390.10 U MN	190	124	123	92	37	10	20	30	19	55	117	142	971
391.00 A MD	90	62	64	32	11	0	3	6	7	23	35	64	556
391.00 U MD	82	68	68	27	10	0	2	5	3	21	36	51	523
391.00 A MN	126	81	81	68	21	6	7	13	11	33	60	91	592
391.00 U MN	126	79	81	54	21	5	6	13	8	34	58	85	572
392.00 A MD	100	75	76	48	19	9	14	12	12	33	47	83	694
392.00 U MD	86	76	77	52	19	8	16	11	13	30	49	87	689
392.00 A MN	134	96	93	74	30	13	18	20	17	43	69	113	719
392.00 U MN	119	98	99	75	33	11	17	21	19	41	70	120	726
393.00 A MD	72	53	55	20	7	1	3	4	3	14	29	55	431
393.00 U MD	77	53	63	18	4	0	1	3	1	11	34	49	386
393.00 A MN	100	69	67	43	13	4	5	9	7	22	48	76	451
393.00 U MN	107	74	68	31	11	4	4	8	5	19	53	70	436
393.10 A MD	70	49	54	19	6	1	4	4	4	13	31	53	423
393.10 U MD	77	56	57	17	4	0	3	2	2	9	40	52	418
393.10 A MN	95	64	66	39	13	4	6	8	8	21	48	74	442
393.10 U MN	106	69	71	26	11	3	5	8	6	18	57	72	427
394.00 A MD	65	45	46	16	4	0	2	3	2	10	22	47	393
394.00 U MD	64	47	52	17	3	0	1	1	0	8	19	37	365
394.00 A MN	101	62	62	43	10	4	3	8	6	18	44	67	421
394.00 U MN	95	65	62	33	10	3	3	7	5	18	45	58	396
395.00 A MD	78	55	62	27	10	2	8	5	4	20	36	61	488
395.00 U MD	47	65	51	19	13	1	7	5	2	14	27	49	469
395.00 A MN	106	72	74	45	19	5	11	9	8	28	56	84	503
395.00 U MN	84	69	68	41	20	3	11	10	6	31	44	79	467
396.00 A MD	69	52	55	20	7	1	5	4	3	14	31	52	452
396.00 U MD	68	49	53	21	7	1	4	4	3	12	32	58	479
396.00 A MN	96	67	69	42	15	4	8	8	8	22	50	77	465
396.00 U MN	92	69	70	41	15	4	7	9	8	22	49	81	472
396.10 A MD	56	46	45	15	4	1	3	3	3	11	19	44	369
396.10 U MD	70	47	55	18	1	0	1	2	2	7	21	40	321
396.10 A MN	81	59	58	28	10	3	6	6	5	18	34	64	388
396.10 U MN	102	68	62	21	9	5	4	5	3	12	42	52	380
397.00 A MD	76	52	54	22	9	2	5	5	4	15	34	55	452
397.00 U MD	77	45	53	22	11	0	5	3	3	12	29	52	474
397.00 A MN	104	67	66	44	15	4	7	9	8	22	52	75	470
397.00 U MN	100	72	66	35	15	3	8	8	7	23	56	72	463
397.20 A MD	65	55	55	22	7	1	6	4	4	15	30	52	435
397.20 U MD	70	57	59	19	4	0	4	5	3	13	40	49	407
397.20 A MN	93	70	68	43	12	3	10	8	8	20	48	74	456
397.20 U MN	110	79	68	28	11	5	8	8	5	15	58	62	451
398.00 A MD	71	49	57	25	9	2	9	8	7	18	35	59	474
398.00 U MD	82	56	53	24	8	2	8	7	3	17	40	53	442
398.00 A MN	95	65	69	40	16	6	11	11	11	24	52	78	487
398.00 U MN	103	72	65	30	14	5	10	11	7	23	54	75	475

APPENDIX TABLE A.2.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
398.10 A MD	89	60	56	32	12	2	10	7	7	20	41	53	523
398.10 U MD	77	76	66	28	14	0	7	4	3	12	40	46	546
398.10 A MN	117	78	66	49	20	5	17	9	10	27	60	74	535
398.10 U MN	103	80	56	35	19	2	17	9	9	25	54	82	519
400.00 A MD	87	62	72	38	17	6	16	12	9	24	47	66	585
400.00 U MD	60	60	53	43	17	7	17	12	13	24	46	59	554
400.00 A MN	113	80	84	57	25	11	20	17	13	31	62	84	598
400.00 U MN	89	78	75	60	26	11	21	18	16	31	56	88	576
400.20 A MD	73	60	83	37	16	6	14	15	12	25	46	70	571
400.20 U MD	75	78	69	37	11	4	12	13	9	17	53	67	569
400.20 A MN	98	77	92	50	25	9	18	21	15	31	62	88	581
400.20 U MN	113	83	94	41	19	7	15	17	10	27	66	75	576
401.00 A MD	72	54	48	20	6	0	3	5	3	12	33	53	429
401.00 U MD	85	64	44	14	3	0	2	1	1	6	35	47	402
401.00 A MN	100	67	60	39	11	3	5	9	5	17	46	72	441
401.00 U MN	105	78	60	28	9	2	4	8	4	15	48	65	424
401.10 A MD	72	50	46	19	6	0	3	3	2	12	28	48	407
401.10 U MD	76	42	48	15	3	0	1	0	1	5	29	45	381
401.10 A MN	105	63	58	38	11	3	5	6	5	17	41	66	418
401.10 U MN	115	66	60	28	9	3	4	6	3	14	46	62	402
402.00 A MD	73	58	58	28	11	2	6	5	5	17	38	64	494
402.00 U MD	61	59	57	23	11	0	5	4	3	14	39	61	431
402.00 A MN	101	75	69	47	18	6	9	11	8	22	53	83	503
402.00 U MN	101	78	68	45	16	5	9	10	7	21	53	77	490
403.00 A MD	78	60	69	42	19	9	17	17	12	29	47	67	573
403.00 U MD	77	65	63	41	18	5	17	17	9	23	47	62	538
403.00 A MN	100	76	79	56	28	12	22	22	16	34	60	82	584
403.00 U MN	103	74	81	50	27	10	20	23	12	34	58	74	566
404.00 A MD	82	60	64	34	14	3	10	10	6	19	46	70	551
404.00 U MD	69	70	58	34	13	2	10	9	6	16	52	69	533
404.00 A MN	112	77	74	52	21	7	14	16	10	27	61	90	562
404.00 U MN	111	82	75	47	20	6	13	15	9	25	61	83	541
404.10 A MD	81	61	63	33	13	3	10	10	7	20	41	65	519
404.10 U MD	84	78	64	25	7	3	8	10	5	13	47	64	504
404.10 A MN	109	78	74	46	20	6	12	15	9	25	56	82	530
404.10 U MN	116	84	75	34	16	4	11	14	6	22	58	75	506
404.20 A MD	82	57	67	34	15	4	10	9	6	20	42	59	531
404.20 U MD	62	58	34	16	11	3	9	10	3	11	43	59	554
404.20 A MN	109	76	79	54	23	6	13	13	11	27	58	77	543
404.20 U MN	93	77	61	39	15	4	13	17	4	25	62	101	546
405.00 A MD	89	69	85	55	28	17	28	27	17	36	62	86	705
405.00 U MD	91	67	85	44	25	12	27	25	14	35	62	82	684
405.00 A MN	116	85	96	71	37	22	34	33	20	44	77	101	717
405.00 U MN	119	84	101	60	33	17	31	32	15	44	76	96	688
406.00 A MD	92	73	89	63	35	22	35	37	24	43	72	91	815
406.00 U MD	86	69	88	65	35	25	34	37	24	46	73	90	821
406.00 A MN	118	90	99	77	45	27	44	43	29	52	85	106	817
406.00 U MN	113	96	103	76	46	29	43	43	32	53	90	108	840

APPENDIX TABLE A.2.—Continued

State Key No.			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
			(mm)												
407.00	A	MD	92	70	80	49	22	10	20	21	12	31	61	88	697
407.00	U	MD	95	87	70	45	17	6	18	21	9	25	64	93	670
407.00	A	MN	121	90	91	70	30	15	26	28	16	40	79	106	711
407.00	U	MN	127	90	87	56	24	10	24	23	10	35	82	103	652
410.00	A	MD	81	62	63	34	14	2	9	7	7	20	45	72	545
410.00	U	MD	65	68	56	34	13	2	8	5	6	18	47	75	516
410.00	A	MN	112	79	74	52	21	6	12	13	11	27	60	91	556
410.00	U	MN	106	77	71	48	23	7	11	13	10	26	57	90	550
411.00	A	MD	80	62	60	34	12	2	8	7	7	16	41	72	534
411.00	U	MD	69	70	58	24	8	2	7	5	3	11	48	67	497
411.00	A	MN	107	80	69	53	19	6	11	12	9	24	58	91	545
411.00	U	MN	108	78	73	42	16	5	10	12	8	24	57	83	506
413.00	A	MD	101	83	105	74	40	20	39	39	23	45	78	103	884
413.00	U	MD	106	96	92	72	31	14	39	32	17	35	83	105	784
413.00	A	MN	132	104	116	95	50	28	48	47	28	56	96	122	899
413.00	U	MN	138	103	108	80	40	20	43	40	19	49	98	119	828
413.10	A	MD	106	87	93	70	37	21	37	37	22	42	73	100	869
413.10	U	MD	87	134	61	71	36	16	40	39	18	46	82	105	878
413.10	A	MN	135	107	104	90	50	39	45	46	28	51	91	116	883
413.10	U	MN	111	135	74	72	44	23	46	48	20	50	95	110	855
414.00	A	MD	108	91	97	64	30	10	20	21	15	35	65	105	805
414.00	U	MD	113	94	92	54	23	6	17	17	10	32	74	107	739
414.00	A	MN	143	115	108	86	41	17	28	29	19	45	86	127	823
414.00	U	MN	148	113	100	73	32	12	26	25	14	41	90	123	760
415.00	A	MD	97	80	90	56	24	8	17	19	12	29	59	98	738
415.00	U	MD	97	84	91	52	17	5	16	17	9	26	66	98	714
415.00	A	MN	126	103	100	76	32	14	24	26	15	39	80	119	754
415.00	U	MN	125	98	103	63	28	11	22	25	12	39	78	110	712
416.00	A	MD	122	98	130	102	59	47	69	67	40	67	104	127	1170
416.00	U	MD	127	103	131	87	58	39	68	65	32	72	91	119	1069
416.00	A	MN	152	120	145	120	70	55	78	76	45	78	119	148	1177
416.00	U	MN	144	115	147	106	62	46	70	74	36	79	117	140	1116
417.00	A	MD	110	93	115	79	40	21	34	36	20	46	83	118	947
417.00	U	MD	121	89	112	72	41	17	36	36	17	47	82	119	954
417.00	A	MN	145	117	126	100	49	28	45	45	24	56	103	139	966
417.00	U	MN	135	108	127	86	46	25	47	47	20	59	103	145	941
419.00	A	MD	106	83	86	55	22	7	15	14	12	28	58	99	737
419.00	U	MD	84	86	85	49	18	4	14	11	9	24	60	91	676
419.00	A	MN	141	106	96	81	32	13	21	24	16	36	79	123	754
419.00	U	MN	138	101	99	67	26	11	20	21	12	37	78	113	704
420.00	A	MD	122	76	79	47	16	5	10	16	13	23	50	83	646
420.00	U	MD	115	79	53	31	13	4	4	15	3	19	41	92	636
420.00	A	MN	166	90	87	66	23	7	14	24	20	33	67	97	664
420.00	U	MN	140	82	58	51	20	5	11	22	10	31	55	113	633
421.00	A	MD	115	109	133	120	60	36	65	64	37	63	111	137	1191
421.00	U	MD	111	136	107	105	55	29	67	55	24	61	104	121	1034
421.00	A	MN	141	132	153	142	76	46	74	75	45	76	132	162	1205
421.00	U	MN	123	130	129	125	62	36	66	66	29	69	129	145	1092

APPENDIX TABLE A.2.—Continued

State Key No.			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
			(mm)												
422.00	A	MD	125	108	126	94	48	24	46	48	26	52	96	126	1090
422.00	U	MD	125	111	113	85	41	16	38	44	20	51	102	118	927
422.00	A	MN	158	133	140	113	60	34	57	58	32	66	116	148	1102
422.00	U	MN	151	130	128	101	50	25	48	49	22	59	117	137	996
423.00	A	MD	122	105	122	93	45	20	35	34	23	49	91	135	1029
423.00	U	MD	107	105	121	86	54	16	36	32	20	47	80	121	981
423.00	A	MN	162	130	134	114	56	27	46	43	31	58	110	161	1047
423.00	U	MN	141	129	133	109	53	26	44	42	28	58	104	148	1025
424.00	A	MD	104	92	96	70	25	7	15	19	12	30	71	110	765
424.00	U	MD	87	95	95	64	18	1	14	15	9	30	52	92	731
424.00	A	MN	143	111	108	95	36	13	21	24	16	39	94	135	785
424.00	U	MN	126	107	109	85	31	12	20	24	13	40	80	124	778
425.00	A	MD	136	120	145	118	55	24	47	49	27	60	101	151	1204
425.00	U	MD	118	118	125	103	44	15	43	40	19	66	76	139	1143
425.00	A	MN	176	151	163	145	68	35	59	64	33	72	122	180	1222
425.00	U	MN	149	136	161	126	58	29	55	64	27	74	109	166	1162
425.30	A	MD	176	150	178	179	106	61	95	89	64	84	171	183	1824
425.30	U	MD	150	147	197	201	104	76	95	102	96	99	185	197	1900
425.30	A	MN	214	181	198	209	128	77	110	112	76	101	193	216	1840
425.30	U	MN	205	199	224	209	135	87	114	122	111	116	207	237	1969
427.00	A	MD	106	90	102	66	25	10	18	18	16	32	62	103	806
427.00	U	MD	85	94	90	66	22	6	19	17	16	30	55	94	749
427.00	A	MN	145	114	112	88	35	14	25	28	23	43	85	128	828
427.00	U	MN	129	114	107	83	31	13	26	28	21	42	79	121	797
430.00	A	MD	135	122	147	127	72	40	68	65	38	70	120	158	1342
430.00	U	MD	134	132	135	110	75	33	68	66	32	70	104	144	1315
430.00	A	MN	173	152	162	150	86	51	81	77	46	82	141	187	1360
430.00	U	MN	153	145	160	141	83	48	77	79	38	83	129	173	1328
430.10	A	MD	142	132	165	158	91	57	90	84	55	75	159	165	1609
430.10	U	MD	135	147	148	214	93	79	87	87	93	78	183	154	1826
430.10	A	MN	174	160	182	179	105	67	103	102	66	92	181	189	1618
430.10	U	MN	183	197	158	211	104	82	114	88	100	85	206	189	1723
431.00	A	MD	131	97	114	84	38	10	23	27	20	44	79	125	963
431.00	U	MD	128	75	117	89	42	3	22	17	13	39	72	129	948
431.00	A	MN	174	125	126	108	52	20	31	38	27	55	100	154	988
431.00	U	MN	146	110	101	93	43	13	30	37	18	53	88	165	920
432.00	A	MD	137	116	139	95	39	12	27	28	23	43	85	142	1110
432.00	U	MD	128	115	135	91	39	13	25	29	25	39	99	138	1084
432.00	A	MN	182	153	153	126	54	22	38	45	34	61	118	178	1167
432.00	U	MN	173	154	157	115	53	22	35	50	40	60	123	179	1168
432.10	A	MD	151	112	148	110	56	22	47	39	37	55	111	163	1300
432.10	U	MD	137	104	140	162	81	24	56	51	64	74	141	233	1414
432.10	A	MN	187	142	170	130	72	29	54	55	44	72	137	186	1317
432.10	U	MN	218	154	171	161	92	34	68	83	81	95	158	253	1575
433.00	A	MD	165	165	208	179	95	50	83	75	50	97	159	208	1812
433.00	U	MD	162	198	193	175	103	56	86	71	45	105	157	171	1752
433.00	A	MN	210	207	228	215	118	65	97	101	60	117	181	256	1846
433.00	U	MN	188	210	226	207	111	63	97	103	57	117	179	237	1804

APPENDIX TABLE A.2.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
433.10 A MD	154	146	176	140	64	27	47	47	34	66	130	168	1410
433.10 U MD	129	163	168	143	50	22	49	39	29	73	156	144	1255
433.10 A MN	198	186	199	175	82	40	61	67	44	87	162	213	1442
433.10 U MN	177	185	185	163	70	32	56	59	32	71	166	185	1380
433.20 A MD	179	155	139	141	63	25	41	43	41	73	128	189	1474
433.20 U MD	170	115	180	71	71	26	47	34	17	75	104	177	1393
433.20 A MN	237	200	179	185	77	38	54	64	55	97	164	237	1505
433.20 U MN	172	189	130	134	64	29	57	84	22	82	129	257	1315
434.00 A MD	179	167	219	172	90	48	81	75	51	91	162	205	1863
434.00 U MD	184	187	201	171	85	52	74	78	46	99	153	181	1823
434.00 A MN	227	216	250	214	111	64	98	98	63	111	196	257	1895
434.00 U MN	220	223	249	210	102	62	98	98	63	112	199	245	1894
434.10 A MD	149	139	175	136	51	22	46	48	26	66	124	165	1413
434.10 U MD	127	137	204	128	58	20	44	50	20	88	95	142	1400
434.10 A MN	196	186	202	175	67	36	58	70	31	83	161	212	1447
434.10 U MN	151	175	197	155	69	37	59	74	29	94	145	205	1377
435.00 A MD	---	---	---	---	---	---	---	---	---	---	---	---	3295
435.00 U MD	---	---	---	---	---	---	---	---	---	---	---	---	3315
435.00 A MN	---	---	---	---	---	---	---	---	---	---	---	---	3302
435.00 U MN	---	---	---	---	---	---	---	---	---	---	---	---	3230
435.10 A MD	186	164	191	214	139	98	154	156	76	138	200	217	2186
435.10 U MD	182	196	176	212	112	77	154	128	63	123	221	205	1904
435.10 A MN	226	197	218	241	166	117	170	172	88	158	223	244	2195
435.10 U MN	181	211	189	220	139	91	146	155	61	144	238	234	1977
436.00 A MD	262	257	346	334	211	130	204	183	117	172	286	334	3242
436.00 U MD	256	259	294	345	210	145	192	216	112	176	273	271	3248
436.00 A MN	324	321	391	390	238	159	232	217	138	203	324	407	3286
436.00 U MN	299	322	389	385	231	159	233	222	135	199	318	386	3278
440.00 A MD	341	340	466	468	341	204	307	295	209	243	362	453	4591
440.00 U MD	347	368	433	508	401	213	330	325	188	235	345	406	4856
440.00 A MN	402	418	551	551	370	238	340	334	232	276	422	543	4640
440.00 U MN	382	455	533	538	406	265	364	375	238	285	387	580	4692
441.00 A MD	192	164	372	322	148	303	287	156	354	413	267	417	2097
441.00 U MD	165	149	366	201	129	190	201	149	319	219	159	376	2272
441.00 A MN	232	199	391	361	157	317	307	166	372	388	274	478	2092
441.00 U MN	210	185	384	343	145	299	294	164	337	366	265	455	2087
442.00 A MD	307	278	376	412	285	208	330	325	207	251	379	354	4129
442.00 U MD	291	267	363	379	286	212	323	325	214	251	377	354	4076
442.00 A MN	349	336	433	459	316	231	337	352	228	290	396	395	4082
442.00 U MN	335	324	424	447	320	235	332	361	245	293	393	395	4088
443.00 A MD	450	430	616	619	504	328	457	459	337	326	475	505	6138
443.00 U MD	423	436	585	579	558	374	480	515	293	304	431	523	6437
443.00 A MN	523	532	718	723	529	367	492	500	355	372	536	637	6156
443.00 U MN	502	567	676	692	581	410	524	553	371	378	501	699	6273
443.20 A MD	376	418	516	631	443	272	428	368	274	334	470	417	5624
443.20 U MD	319	475	413	688	425	232	422	337	240	290	505	401	5557
443.20 A MN	410	517	598	699	481	295	468	395	275	388	517	558	5632
443.20 U MN	373	575	522	686	445	268	441	378	235	354	554	530	5495

APPENDIX TABLE A.2.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
444.00 A MD	---	---	---	---	---	---	---	---	---	---	---	---	2495
444.00 U MD	---	---	---	---	---	---	---	---	---	---	---	---	2500
444.00 A MN	---	---	---	---	---	---	---	---	---	---	---	---	2516
444.00 U MN	---	---	---	---	---	---	---	---	---	---	---	---	2449
445.00 A MD	---	---	---	---	---	---	---	---	---	---	---	---	3660
445.00 U MD	243	294	962	1132	537	1158	683	537	906	751	922	1058	3540
445.00 A MN	---	---	---	---	---	---	---	---	---	---	---	---	3649
445.00 U MN	200	445	864	1159	537	1032	589	537	789	993	933	940	3762
446.00 A MD	228	215	304	281	219	166	244	252	180	212	269	242	3115
446.00 U MD	231	211	283	290	225	179	238	255	191	209	270	251	3119
446.00 A MN	265	257	348	324	230	181	256	269	184	238	292	284	3122
446.00 U MN	259	255	333	327	234	192	252	283	204	240	299	296	3183
447.00 A MD	219	213	288	277	225	156	231	246	185	216	260	242	3058
447.00 U MD	213	221	272	266	217	169	217	267	198	204	265	263	3158
447.00 A MN	256	257	326	319	232	169	244	260	189	244	282	280	3062
447.00 U MN	254	261	313	324	248	192	248	288	220	235	287	318	3198
449.00 A MD	335	319	455	470	347	254	372	387	274	307	409	395	4755
449.00 U MD	325	324	434	466	334	244	388	392	272	309	404	378	4895
449.00 A MN	386	389	517	548	371	278	391	406	279	345	445	454	4757
449.00 U MN	377	396	500	555	382	298	395	430	308	352	459	477	4896
450.00 A MD	317	310	445	447	362	237	366	371	254	302	395	367	4673
450.00 U MD	266	295	477	463	414	256	383	447	242	309	366	399	4829
450.00 A MN	362	376	499	510	379	257	378	394	267	345	434	434	4660
450.00 U MN	308	362	541	451	422	269	397	468	262	358	392	501	4765
451.00 A MD	549	637	835	1047	812	519	775	626	502	564	643	690	6063
451.00 U MD	532	612	797	1026	573	428	735	632	428	479	592	668	6034
451.00 A MN	605	667	902	1124	849	576	776	633	550	613	679	790	6070
451.00 U MN	556	675	939	1101	780	519	740	618	511	601	698	747	6029
451.10 A MD	370	336	508	492	400	280	397	429	291	322	445	411	5201
451.10 U MD	329	309	484	563	378	276	453	483	347	340	481	418	5655
451.10 A MN	419	421	583	571	418	307	415	452	302	363	482	483	5199
451.10 U MN	433	427	563	611	463	373	453	526	400	371	495	555	5641
453.00 A MD	70	45	43	23	8	2	4	4	12	14	27	64	424
453.00 U MD	63	40	37	20	9	1	4	6	5	10	21	48	430
453.00 A MN	92	61	63	40	13	3	6	10	14	25	58	82	450
453.00 U MN	87	62	56	35	15	4	7	17	13	24	48	78	451
453.10 A MD	97	46	40	20	8	6	7	7	6	18	27	67	449
453.10 U MD	140	39	45	32	6	3	6	6	7	15	26	84	442
453.10 A MN	112	61	52	45	16	6	10	23	10	28	46	83	476
453.10 U MN	124	69	58	47	14	8	8	18	7	26	40	87	509
454.00 A MD	75	47	39	21	7	2	4	5	4	14	22	64	424
454.00 U MD	75	52	41	17	4	0	3	3	0	9	24	45	432
454.00 A MN	98	63	61	40	12	3	7	9	10	25	54	83	452
454.00 U MN	93	61	62	36	13	3	6	9	8	25	59	72	458
455.00 A MD	75	51	52	28	11	5	8	9	6	20	28	75	480
455.00 U MD	65	48	39	22	9	4	7	8	3	20	36	52	483
455.00 A MN	100	69	73	44	15	6	11	14	11	32	60	95	506
455.00 U MN	87	68	72	40	16	5	12	15	11	36	69	84	510

APPENDIX TABLE A.2.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
456.00 A MD	76	52	48	25	10	3	6	8	6	17	28	69	462
456.00 U MD	65	53	32	17	8	1	5	6	5	14	23	41	466
456.00 A MN	99	68	71	43	15	4	8	12	12	27	60	86	487
456.00 U MN	86	65	64	39	15	4	8	13	13	30	61	78	484
457.00 A MD	80	52	47	29	14	5	9	8	8	17	30	74	506
457.00 U MD	81	54	47	24	14	3	6	6	6	13	33	61	483
457.00 A MN	103	71	68	50	20	7	12	13	14	28	61	93	535
457.00 U MN	97	66	67	48	21	6	11	12	13	25	61	87	524
458.00 A MD	95	75	84	55	36	27	34	31	22	40	62	104	803
458.00 U MD	88	65	80	57	38	29	34	28	21	39	57	68	764
458.00 A MN	124	92	108	72	43	30	38	36	28	51	93	128	836
458.00 U MN	105	88	101	66	43	29	40	38	25	54	84	110	798
458.10 A MD	99	66	82	58	39	26	35	29	23	40	61	102	789
458.10 U MD	105	83	112	57	32	21	38	28	18	39	84	102	860
458.10 A MN	123	82	104	82	44	31	46	34	24	47	85	123	812
458.10 U MN	126	91	131	80	40	27	42	29	19	41	100	122	861
460.00 A MD	93	62	68	45	21	14	21	18	11	27	44	93	647
460.00 U MD	90	64	65	47	19	9	19	18	8	28	57	81	649
460.00 A MN	120	80	89	67	28	16	25	23	18	38	75	115	675
460.00 U MN	114	72	95	62	29	15	27	25	14	38	83	102	686
461.00 A MD	95	66	63	45	18	11	17	14	12	26	44	97	646
461.00 U MD	92	62	64	43	17	7	12	13	9	23	53	86	692
461.00 A MN	122	86	85	69	24	13	22	21	18	38	78	120	677
461.00 U MN	114	77	90	61	24	12	23	19	12	36	88	111	679
462.00 A MD	103	83	87	68	45	30	42	40	27	45	61	124	897
462.00 U MD	96	80	89	61	44	26	43	37	21	48	70	100	901
462.00 A MN	132	103	114	91	53	34	46	48	32	56	95	152	930
462.00 U MN	117	100	115	85	52	32	48	47	28	55	95	133	914
462.10 A MD	138	123	134	125	82	59	81	76	48	76	104	161	1415
462.10 U MD	141	145	153	114	74	53	88	78	37	67	118	159	1422
462.10 A MN	167	143	165	149	89	68	89	98	54	86	141	192	1439
462.10 U MN	159	144	175	138	88	62	93	89	40	80	159	175	1434
462.20 A MD	139	112	116	107	79	61	75	76	44	69	93	148	1328
462.20 U MD	124	149	112	97	86	56	88	67	30	86	117	164	1306
462.20 A MN	168	139	143	136	85	69	84	84	50	84	131	179	1366
462.20 U MN	143	147	151	114	85	62	92	87	38	89	176	191	1326
462.30 A MD	108	73	96	74	51	29	40	32	33	48	67	112	---
462.30 U MD	153	79	134	74	40	24	41	39	17	42	74	104	958
462.30 A MN	132	89	119	99	56	35	49	39	35	56	91	135	---
462.30 U MN	141	96	154	103	45	30	49	35	21	46	92	115	955
463.00 A MD	106	69	63	35	16	11	15	14	11	26	40	95	660
463.00 U MD	105	68	68	37	14	9	13	13	4	26	47	85	644
463.00 A MN	133	92	89	63	25	14	20	23	19	37	71	117	694
463.00 U MN	122	82	92	54	25	13	20	21	13	36	80	108	679
464.00 A MD	120	89	102	69	38	23	33	29	21	41	69	131	944
464.00 U MD	125	93	110	68	38	21	30	27	15	43	81	107	953
464.00 A MN	149	113	125	98	47	27	39	41	28	55	102	155	980
464.00 U MN	139	110	129	92	48	26	42	42	24	56	106	142	972

APPENDIX TABLE A.2.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
465.00 A MD	127	97	118	96	68	48	67	62	42	62	95	146	1190
465.00 U MD	139	105	134	88	74	49	79	63	38	64	101	130	1269
465.00 A MN	155	120	141	126	78	54	74	72	49	77	121	171	1227
465.00 U MN	150	121	147	121	82	56	81	79	43	81	125	162	1239
466.00 A MD	137	103	122	92	63	38	58	52	36	54	99	150	1199
466.00 U MD	138	106	135	95	54	38	56	52	31	61	107	145	1173
466.00 A MN	173	127	145	121	73	44	66	63	45	69	129	175	1238
466.00 U MN	170	125	143	120	71	45	67	64	45	70	129	174	1229
467.00 A MD	130	96	96	63	34	28	35	32	25	41	67	132	1011
467.00 U MD	126	96	119	68	38	30	39	33	13	49	79	117	1022
467.00 A MN	162	128	122	96	45	32	42	45	39	54	101	156	1046
467.00 U MN	146	117	128	87	51	34	49	47	27	59	118	160	1006
470.00 A MD	114	95	103	92	63	49	74	75	49	69	96	131	1144
470.00 U MD	136	93	104	92	65	54	78	76	44	74	110	147	1183
470.00 A MN	141	115	129	125	70	55	80	82	55	83	125	154	1175
470.00 U MN	135	110	135	113	72	56	83	83	50	86	129	146	1175
471.00 A MD	138	133	152	151	101	78	116	110	66	104	144	184	1641
471.00 U MD	152	138	143	140	103	73	142	103	62	91	136	191	1656
471.00 A MN	154	152	183	189	110	89	130	124	74	119	171	217	1686
471.00 U MN	153	155	185	172	112	88	139	126	64	119	180	212	1700
472.00 A MD	233	200	209	192	145	109	158	148	87	113	194	254	2367
472.00 U MD	233	170	236	226	162	116	170	139	86	119	203	238	2471
472.00 A MN	274	241	245	231	171	127	172	166	100	139	209	285	2408
472.00 U MN	272	230	251	245	173	134	174	169	110	144	227	297	2423
473.00 A MD	196	166	193	199	165	107	168	173	120	138	201	218	2295
473.00 U MD	211	173	205	238	169	130	178	203	124	162	214	238	2537
473.00 A MN	227	189	222	237	194	124	184	191	131	160	230	247	2337
473.00 U MN	234	214	236	255	201	140	197	215	159	175	232	272	2533
474.00 A MD	195	142	206	164	114	84	144	144	105	127	172	213	2013
474.00 U MD	188	177	175	167	119	83	173	117	96	125	184	233	2060
474.00 A MN	231	172	256	207	126	98	161	163	111	150	202	245	2062
474.00 U MN	214	197	261	216	135	99	165	141	102	154	214	233	2113
475.00 A MD	191	162	188	190	131	101	144	156	104	130	181	211	2086
475.00 U MD	200	162	183	195	137	101	146	159	96	131	188	208	2250
475.00 A MN	221	184	222	225	149	114	155	169	112	151	212	239	2120
475.00 U MN	217	202	223	223	154	115	160	176	121	156	210	239	2195
476.00 A MD	242	224	261	250	187	130	207	187	117	145	243	297	2824
476.00 U MD	251	212	303	271	199	118	202	173	104	152	217	270	2863
476.00 A MN	284	259	305	301	215	151	222	207	133	163	270	330	2866
476.00 U MN	276	253	312	303	212	148	218	210	133	165	273	324	2867
477.00 A MD	231	253	317	293	220	143	229	222	143	170	268	314	3125
477.00 U MD	241	228	336	285	228	152	223	205	101	177	199	273	2929
477.00 A MN	276	293	365	348	245	162	251	253	163	194	284	346	3186
477.00 U MN	261	299	373	339	248	161	246	265	141	194	261	340	3112
477.10 A MD	259	247	296	320	241	169	194	205	175	222	329	313	3368
477.10 U MD	299	233	280	320	279	190	203	210	218	226	319	337	3683
477.10 A MN	298	274	329	385	262	182	220	237	183	248	381	351	3418
477.10 U MN	330	318	312	457	291	187	237	259	234	246	375	385	3649

APPENDIX TABLE A.2.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
480.00 A MD	295	267	309	321	278	161	221	262	209	233	314	339	3556
480.00 U MD	288	275	302	357	265	163	229	262	209	238	311	340	3524
480.00 A MN	331	297	368	402	324	187	252	288	216	266	351	389	3640
480.00 U MN	321	303	362	404	322	196	259	299	230	263	350	383	3665
481.00 A MD	403	317	575	484	372	302	409	414	301	323	417	489	5093
481.00 U MD	381	304	511	474	406	304	412	419	228	330	406	431	5131
481.00 A MN	446	367	641	557	430	341	443	463	315	349	468	531	5229
481.00 U MN	426	382	648	562	434	337	448	470	295	344	457	493	5315
481.10 A MD	479	372	497	511	478	353	522	545	388	326	495	507	6208
481.10 U MD	533	396	533	533	546	431	571	584	508	342	444	533	6680
481.10 A MN	512	448	555	574	538	413	550	584	439	392	518	555	6304
481.10 U MN	570	570	518	675	577	514	576	606	541	369	504	600	6559
481.30 A MD	462	427	547	507	470	298	486	519	428	387	570	501	6160
481.30 U MD	392	361	463	694	438	330	539	463	500	377	605	487	6620
481.30 A MN	515	437	624	590	458	333	535	567	439	443	582	581	6273
481.30 U MN	587	510	565	701	518	378	572	553	522	397	635	680	6582
482.00 A MD	134	101	113	95	49	22	38	36	32	70	87	118	1099
482.00 U MD	130	99	103	92	51	22	36	41	36	62	82	117	1080
482.00 A MN	172	124	136	125	60	25	43	48	40	85	124	148	1131
482.00 U MN	171	124	138	127	63	25	44	49	43	83	125	151	1147
483.00 A MD	113	84	90	68	31	14	26	23	21	50	66	98	870
483.00 U MD	98	80	77	57	24	14	24	22	20	46	60	90	815
483.00 A MN	149	109	111	95	42	17	30	32	27	64	99	127	898
483.00 U MN	135	113	107	87	40	16	28	31	29	59	95	124	867
484.00 A MD	117	82	92	67	29	12	21	19	17	44	58	99	831
484.00 U MD	116	80	87	66	29	12	22	20	18	44	58	100	830
484.00 A MN	152	114	112	97	40	15	25	29	23	56	95	130	888
484.00 U MN	147	111	108	96	44	15	24	30	26	55	94	134	889
485.00 A MD	118	99	128	106	67	56	79	76	48	74	110	127	1258
485.00 U MD	115	98	128	113	71	54	77	78	49	79	109	121	1265
485.00 A MN	147	119	143	126	77	63	88	87	53	85	125	147	1260
485.00 U MN	138	119	146	124	79	63	87	89	59	88	128	144	1274
485.10 A MD	108	83	112	90	56	47	67	64	42	64	96	107	1046
485.10 U MD	102	87	107	82	51	36	61	59	33	59	88	113	1014
485.10 A MN	136	102	126	103	66	54	76	71	48	75	109	124	1045
485.10 U MN	133	109	118	88	55	43	64	65	33	69	110	113	976
486.00 A MD	104	92	117	105	66	56	87	71	49	87	114	126	1212
486.00 U MD	111	88	105	102	59	41	67	69	38	78	87	110	1107
486.00 A MN	128	110	135	123	77	65	93	84	57	98	128	145	1214
486.00 U MN	119	106	137	112	71	55	87	89	50	99	121	138	1186
487.00 A MD	121	95	104	99	63	50	79	78	47	77	101	121	1177
487.00 U MD	120	88	97	86	72	44	84	78	44	83	90	121	1093
487.00 A MN	145	116	115	115	76	70	88	89	58	87	114	143	1176
487.00 U MN	120	116	113	99	68	52	85	85	43	86	113	145	1130
487.20 A MD	125	113	159	160	98	73	124	100	72	107	152	150	1575
487.20 U MD	135	123	169	150	67	52	107	103	55	94	113	144	1321
487.20 A MN	156	137	179	169	113	83	144	116	82	128	174	172	1576
487.20 U MN	172	121	192	155	73	58	111	109	60	110	155	155	1486

APPENDIX TABLE A.2.--Continued

State Key No.			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
			(mm)												
488.00	A	MD	154	129	153	156	98	80	112	103	74	86	135	157	1679
488.00	U	MD	140	120	181	157	138	85	116	113	71	123	118	170	1864
488.00	A	MN	189	159	175	182	114	89	123	122	88	104	147	180	1674
488.00	U	MN	174	128	218	182	132	94	127	148	87	133	137	197	1761
488.10	A	MD	132	125	143	145	81	62	89	81	49	75	138	157	1525
488.10	U	MD	192	171	133	188	109	83	102	88	85	85	145	169	1706
488.10	A	MN	160	150	159	164	95	71	100	95	61	91	158	182	1530
488.10	U	MN	179	188	144	195	119	93	115	99	93	87	173	194	1657
488.30	A	MD	182	167	203	232	147	135	177	169	107	145	213	201	2409
488.30	U	MD	211	168	185	262	183	129	225	165	141	139	243	167	2499
488.30	A	MN	203	199	220	239	152	138	192	179	119	161	237	226	2407
488.30	U	MN	237	240	204	265	180	162	214	185	154	155	260	254	2527
488.40	A	MD	178	170	215	232	145	110	164	162	98	136	227	225	2378
488.40	U	MD	222	187	223	298	167	118	184	166	155	142	259	237	2720
488.40	A	MN	212	204	238	260	169	123	172	180	111	161	243	251	2387
488.40	U	MN	281	246	226	287	192	144	181	181	150	156	275	272	2567
490.00	A	MD	152	126	156	148	106	84	120	118	78	102	146	162	1686
490.00	U	MD	166	116	147	148	116	90	116	117	84	106	141	169	1726
490.00	A	MN	181	152	173	168	118	92	129	130	84	114	160	181	1694
490.00	U	MN	177	159	176	169	125	97	132	134	86	115	161	190	1728
491.00	A	MD	180	153	164	184	136	104	162	146	110	136	187	195	2046
491.00	U	MD	187	142	152	182	156	109	122	144	85	121	165	217	2058
491.00	A	MN	212	181	174	209	150	117	169	159	128	158	200	217	2049
491.00	U	MN	173	180	152	187	154	109	164	155	94	150	192	236	1979
492.00	A	MD	---	---	---	---	---	---	---	---	---	---	---	---	1999
492.00	U	MD	---	---	---	---	---	---	---	---	---	---	---	---	2214
492.00	A	MN	---	---	---	---	---	---	---	---	---	---	---	---	1996
492.00	U	MN	---	---	---	---	---	---	---	---	---	---	---	---	2068
493.00	A	MD	112	86	92	77	52	40	61	57	46	60	83	116	1044
493.00	U	MD	118	102	89	68	53	40	64	56	35	58	84	125	1046
493.00	A	MN	140	105	118	101	58	47	66	65	49	74	111	140	1081
493.00	U	MN	140	112	126	92	59	48	71	66	43	73	125	139	1099
494.00	A	MD	99	87	95	76	57	40	64	63	46	64	86	114	1038
494.00	U	MD	92	87	79	75	54	39	60	61	45	63	85	110	1023
494.00	A	MN	136	106	114	103	64	46	67	69	51	79	112	137	1072
494.00	U	MN	126	111	110	96	61	45	64	69	55	76	108	132	1050
495.00	A	MD	141	124	135	126	82	59	93	94	73	98	127	158	1459
495.00	U	MD	146	127	122	111	81	59	103	102	73	94	115	149	1476
495.00	A	MN	177	148	162	162	91	67	100	105	80	115	158	183	1499
495.00	U	MN	163	147	172	139	92	67	106	109	72	116	161	174	1495
496.00	A	MD	114	94	108	100	64	47	76	74	62	81	100	125	1174
496.00	U	MD	121	97	105	88	66	51	79	83	59	77	93	118	1142
496.00	A	MN	145	111	132	126	72	53	81	84	68	94	129	146	1206
496.00	U	MN	133	109	139	114	73	54	85	88	63	96	131	138	1204
497.00	A	MD	105	87	96	77	50	39	60	61	53	70	81	111	1004
497.00	U	MD	92	94	86	75	51	38	62	61	44	63	78	103	1009
497.00	A	MN	136	106	115	101	57	44	64	68	58	81	110	133	1037
497.00	U	MN	128	102	120	93	60	45	67	72	54	84	112	125	1060

APPENDIX TABLE A.3. ADJUSTED AND UNADJUSTED MEDIAN AND MEAN, MONTHLY AND ANNUAL RAINFALL, MOLOKA'I ISLAND, STATE OF HAWAI'I

State Key No.		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
		(mm)												
500.00	A MD	49	32	45	18	6	6	6	7	7	16	23	34	344
500.00	U MD	43	28	34	3	0	0	0	0	0	4	24	32	314
500.00	A MN	64	47	55	28	11	6	8	8	11	28	47	46	363
500.00	U MN	65	48	54	25	15	6	8	9	9	28	57	48	369
500.10	A MD	63	43	42	17	12	3	5	5	4	14	23	35	392
500.10	U MD	68	59	32	9	6	0	0	1	0	4	21	50	378
500.10	A MN	86	57	58	33	21	7	9	7	8	23	46	46	413
500.10	U MN	89	61	62	27	23	5	7	7	6	17	61	52	415
500.20	A MD	58	36	43	18	9	1	4	10	7	15	17	31	355
500.20	U MD	72	21	21	8	1	0	0	0	0	5	16	28	328
500.20	A MN	81	44	54	32	15	4	7	10	12	26	42	50	390
500.20	U MN	87	46	51	28	18	3	7	9	11	26	51	53	397
500.40	A MD	52	30	32	24	10	0	0	2	1	3	0	36	225
500.40	U MD	18	7	13	4	7	0	0	0	0	0	0	42	233
500.40	A MN	63	34	41	26	9	0	1	5	1	3	8	53	233
500.40	U MN	58	32	57	23	9	0	1	6	0	3	12	60	248
500.50	A MD	52	40	35	22	9	2	1	4	3	12	5	24	272
500.50	U MD	20	13	24	19	3	0	0	0	0	0	0	21	239
500.50	A MN	57	45	51	37	10	1	2	6	3	13	16	40	291
500.50	U MN	54	40	69	31	10	1	2	6	2	10	23	48	287
502.10	A MD	60	41	51	18	15	4	6	5	11	21	25	42	418
502.10	U MD	67	54	57	11	15	0	1	0	5	8	30	50	398
502.10	A MN	74	55	66	38	25	8	10	8	15	33	46	52	441
502.10	U MN	80	57	67	31	29	8	8	8	13	22	59	61	442
503.00	A MD	72	55	53	25	17	6	12	12	19	26	30	51	497
503.00	U MD	78	44	49	18	16	5	9	10	12	26	33	52	510
503.00	A MN	91	69	62	42	27	11	16	14	25	41	50	67	517
503.00	U MN	95	67	63	42	25	10	15	15	25	41	57	71	529
505.00	A MD	77	56	64	28	19	10	16	18	24	34	37	63	581
505.00	U MD	79	47	59	25	19	6	13	14	20	33	36	74	576
505.00	A MN	100	69	75	48	29	17	22	22	30	51	62	80	603
505.00	U MN	98	66	74	46	25	15	22	22	29	49	66	84	590
505.10	A MD	75	59	58	22	18	---	---	24	20	34	---	---	---
505.10	U MD	55	75	63	38	25	8	13	12	26	38	46	61	585
505.10	A MN	94	72	67	42	28	---	---	27	26	51	---	---	---
505.10	U MN	70	83	61	54	27	15	15	30	34	62	56	103	590
511.00	A MD	93	71	72	39	25	12	23	20	28	36	44	71	696
511.00	U MD	93	70	72	39	24	11	22	20	27	36	44	70	696
511.00	A MN	114	81	85	62	39	19	29	26	35	55	72	94	712
511.00	U MN	113	81	84	62	39	19	28	26	34	54	71	94	711
511.10	A MD	75	62	61	33	22	8	20	12	26	25	36	57	560
511.10	U MD	101	64	62	28	16	11	19	9	23	29	45	73	591
511.10	A MN	97	76	75	55	39	14	25	17	30	42	63	76	595
511.10	U MN	107	80	80	43	35	15	21	17	34	35	80	85	638

NOTE: A = normals adjusted to common base period; U = unadjusted normals; MD = median; MN = median; MN = mean; --- = insufficient data.

NOTE: Median and mean annual rainfall not necessarily equal to sum of monthly normals.

APPENDIX TABLE A.3.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
511.20 A MD	84	70	69	34	21	---	18	12	22	36	---	---	---
511.20 U MD	53	68	70	43	24	8	18	11	31	26	48	77	615
511.20 A MN	99	83	75	54	34	---	22	19	30	53	---	---	---
511.20 U MN	70	86	69	63	37	16	26	23	37	54	54	113	604
513.00 A MD	78	64	62	36	19	7	15	16	15	29	37	62	579
513.00 U MD	74	61	59	33	22	7	11	14	11	22	41	75	538
513.00 A MN	99	76	74	56	33	14	20	21	20	48	63	79	609
513.00 U MN	96	78	69	50	37	13	19	21	18	39	71	82	587
513.10 A MD	83	66	68	39	22	8	19	14	21	34	40	61	627
513.10 U MD	102	75	57	32	25	7	12	15	12	21	40	79	561
513.10 A MN	107	79	87	61	37	14	27	20	26	57	69	80	661
513.10 U MN	110	80	86	50	39	12	21	19	22	37	81	89	655
513.30 A MD	79	74	83	40	27	---	18	26	29	43	---	---	---
513.30 U MD	57	54	72	41	22	7	13	17	34	51	42	90	655
513.30 A MN	90	87	87	55	40	---	18	36	34	57	---	---	---
513.30 U MN	69	83	71	60	32	18	27	33	36	64	59	118	639
514.00 A MD	91	69	71	38	22	9	19	17	27	35	42	66	674
514.00 U MD	118	77	55	27	21	6	18	15	23	32	45	74	661
514.00 A MN	118	85	91	62	36	16	26	23	34	52	73	86	709
514.00 U MN	138	82	98	57	33	15	24	22	33	40	83	88	723
517.00 A MD	87	70	71	41	20	11	20	19	18	36	45	76	670
517.00 U MD	100	75	72	34	19	8	20	18	19	33	50	78	719
517.00 A MN	113	86	85	64	36	19	25	25	24	56	77	94	701
517.00 U MN	122	82	91	63	33	17	24	25	22	58	85	90	720
517.10 A MD	96	68	69	44	22	8	17	20	17	31	43	71	677
517.10 U MD	116	87	53	33	19	6	12	17	17	24	48	87	698
517.10 A MN	129	87	91	67	42	18	22	26	22	54	75	98	726
517.10 U MN	136	92	91	56	44	15	18	24	19	37	89	102	726
517.20 A MD	89	73	77	44	22	8	19	23	20	34	44	73	666
517.20 U MD	129	89	84	33	18	10	19	21	22	34	58	91	713
517.20 A MN	119	86	93	69	40	16	25	28	28	53	73	98	709
517.20 U MN	136	91	102	57	39	16	23	29	34	45	93	104	778
518.00 A MD	105	71	84	44	22	8	18	18	24	36	42	76	713
518.00 U MD	143	85	70	26	18	9	22	21	26	24	52	99	737
518.00 A MN	137	93	100	71	36	17	24	25	31	59	76	106	760
518.00 U MN	164	96	107	59	31	15	23	25	31	44	97	108	810
519.00 A MD	56	53	59	23	14	4	3	3	8	22	30	55	461
519.00 U MD	80	61	45	13	8	0	0	0	0	15	38	70	382
519.00 A MN	76	73	70	48	28	10	6	9	12	35	53	74	493
519.00 U MN	89	74	65	37	32	9	6	9	11	23	64	83	503
519.10 A MD	54	48	46	22	9	3	5	3	7	15	26	34	367
519.10 U MD	70	61	43	14	8	0	0	0	0	5	23	49	375
519.10 A MN	72	60	54	33	18	8	7	6	10	25	42	56	394
519.10 U MN	80	66	54	27	26	7	7	7	9	23	55	74	430
519.20 A MD	77	57	58	24	10	6	94	5	11	22	32	62	559
519.20 U MD	93	68	45	17	4	0	2	0	0	21	36	86	513
519.20 A MN	100	74	76	45	24	12	97	9	15	34	61	79	634
519.20 U MN	111	77	78	38	33	11	84	11	13	26	77	91	641

APPENDIX TABLE A.3.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
520.00 A MD	65	55	52	22	6	2	4	6	7	18	23	47	432
520.00 U MD	56	41	40	16	0	0	0	2	0	11	20	51	475
520.00 A MN	86	72	66	39	19	7	10	11	11	34	48	71	460
520.00 U MN	87	71	66	38	23	6	9	10	9	34	55	73	476
521.00 A MD	73	53	57	25	10	2	4	5	6	26	30	62	499
521.00 U MD	96	54	50	18	7	1	6	6	3	16	44	93	513
521.00 A MN	101	75	80	45	21	9	7	9	9	47	57	81	536
521.00 U MN	114	72	87	39	19	5	8	9	8	47	81	86	569
522.00 A MD	78	55	59	29	15	4	8	9	10	23	36	64	523
522.00 U MD	111	60	50	19	14	5	10	10	10	16	43	78	562
522.00 A MN	105	74	79	49	25	9	13	14	14	40	60	84	562
522.00 U MN	124	76	86	40	21	8	13	15	14	30	75	88	602
523.00 A MD	82	61	67	33	19	6	12	9	9	33	42	69	591
523.00 U MD	111	60	70	26	15	4	12	8	7	24	39	66	590
523.00 A MN	112	82	85	54	31	11	16	16	12	53	66	88	622
523.00 U MN	121	78	88	54	28	9	16	16	11	50	72	84	633
524.00 A MD	81	65	73	36	19	7	15	12	13	35	47	80	630
524.00 U MD	81	69	66	33	23	8	15	11	13	30	39	89	622
524.00 A MN	109	81	95	57	33	13	18	18	17	49	71	102	667
524.00 U MN	117	78	96	63	35	14	16	17	15	52	73	104	692
525.00 A MD	67	51	54	20	7	2	3	3	6	23	29	56	451
525.00 U MD	86	46	23	18	4	0	4	3	1	10	43	86	502
525.00 A MN	94	68	73	37	16	6	4	7	10	43	55	77	493
525.00 U MN	104	67	79	35	13	3	5	7	9	33	81	78	524
525.10 A MD	74	49	58	26	15	4	3	4	5	20	33	61	488
525.10 U MD	85	54	87	19	8	8	8	4	9	18	41	36	448
525.10 A MN	99	68	84	47	27	8	6	11	9	38	60	83	535
525.10 U MN	110	68	88	38	25	12	9	9	11	23	56	81	533
526.00 A MD	66	46	51	19	8	1	4	3	6	18	27	51	423
526.00 U MD	82	36	46	18	7	1	2	3	4	16	22	46	425
526.00 A MN	91	64	71	34	20	5	6	7	9	34	51	74	465
526.00 U MN	95	62	71	34	20	5	5	7	8	36	49	70	474
527.00 A MD	84	64	74	38	25	8	14	12	11	35	49	79	632
527.00 U MD	109	53	74	34	22	5	14	11	11	29	48	81	623
527.00 A MN	114	86	96	59	37	13	19	19	16	55	73	95	677
527.00 U MN	116	82	99	58	33	11	18	19	15	52	83	95	681
527.10 A MD	97	87	110	68	59	33	40	31	22	60	73	119	935
527.10 U MD	96	89	104	59	58	35	33	28	26	54	68	95	875
527.10 A MN	128	106	131	86	72	39	48	35	27	80	100	137	977
527.10 U MN	109	103	119	94	69	35	41	31	28	80	99	122	922
528.00 A MD	69	49	57	23	12	3	6	6	7	22	31	59	472
528.00 U MD	68	46	53	21	13	2	5	6	5	22	29	55	463
528.00 A MN	92	68	77	39	25	7	8	11	11	38	56	79	510
528.00 U MN	92	66	74	38	24	6	8	10	10	38	56	77	508
528.10 A MD	77	69	72	39	14	4	11	9	10	36	43	74	573
528.10 U MD	110	78	81	39	26	5	19	12	12	23	59	97	672
528.10 A MN	99	86	89	57	26	9	14	15	14	54	69	87	612
528.10 U MN	111	84	103	62	37	9	18	22	15	51	92	101	702

APPENDIX TABLE A.3.—Continued

State Key No.			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
			(mm)												
529.00	A	MD	67	44	40	13	8	1	2	2	6	14	23	46	414
529.00	U	MD	67	44	39	13	7	0	2	2	5	14	22	46	414
529.00	A	MN	93	63	69	31	20	5	5	8	10	34	52	74	460
529.00	U	MN	92	63	69	31	20	4	4	7	10	33	51	74	459
530.00	A	MD	85	63	72	42	22	6	14	14	13	38	50	77	620
530.00	U	MD	133	82	40	49	18	6	15	14	11	22	60	109	656
530.00	A	MN	114	83	93	62	36	11	18	20	17	57	76	97	669
530.00	U	MN	126	85	103	58	30	9	21	23	16	46	98	108	716
530.10	A	MD	94	74	89	55	34	14	20	22	15	41	63	100	758
530.10	U	MD	132	83	104	46	23	13	22	17	16	31	74	105	767
530.10	A	MN	123	95	112	76	44	22	27	30	19	59	89	120	811
530.10	U	MN	137	97	121	63	34	20	29	30	17	48	106	128	845
531.00	A	MD	85	64	71	37	22	7	12	10	11	34	46	82	618
531.00	U	MD	121	81	62	38	24	10	14	14	10	25	53	111	640
531.00	A	MN	113	86	94	58	33	11	15	17	16	54	72	103	667
531.00	U	MN	130	91	95	51	31	11	16	17	15	47	80	114	711
531.10	A	MD	65	56	52	27	13	12	9	8	9	15	35	56	---
531.10	U	MD	40	64	57	26	9	12	9	6	5	12	36	68	475
531.10	A	MN	93	76	70	42	22	15	10	12	11	32	63	80	---
531.10	U	MN	105	89	59	36	24	16	10	12	11	29	48	83	510
532.00	A	MD	71	47	51	22	11	2	4	4	8	22	32	57	466
532.00	U	MD	100	55	44	25	6	3	6	5	6	15	40	72	448
532.00	A	MN	97	66	73	39	22	7	7	9	13	43	58	78	508
532.00	U	MN	114	71	74	36	22	8	8	10	11	36	64	90	555
533.00	A	MD	74	51	55	23	10	2	4	3	7	19	30	59	470
533.00	U	MD	65	48	47	19	10	1	3	4	3	17	26	52	435
533.00	A	MN	100	69	76	40	22	6	6	9	11	37	55	81	511
533.00	U	MN	101	68	73	38	21	5	6	8	11	37	53	80	509
533.10	A	MD	86	66	65	36	17	5	10	6	10	26	41	77	574
533.10	U	MD	93	88	59	37	16	6	11	6	9	17	51	106	629
533.10	A	MN	115	86	87	56	26	10	13	12	15	46	71	103	631
533.10	U	MN	130	94	86	51	28	11	14	13	14	41	76	119	704
534.00	A	MD	98	82	90	57	32	14	19	18	16	43	59	99	778
534.00	U	MD	99	79	88	59	35	16	17	16	20	38	66	106	762
534.00	A	MN	129	103	113	78	43	19	23	26	22	64	89	120	829
534.00	U	MN	135	107	106	77	41	20	23	24	24	56	90	122	834
534.10	A	MD	100	82	92	63	32	15	18	14	16	41	67	110	780
534.10	U	MD	124	97	108	64	34	22	20	15	18	40	66	167	827
534.10	A	MN	131	103	112	78	42	20	20	23	21	59	97	135	838
534.10	U	MN	162	114	115	77	46	23	21	23	21	54	94	156	922
535.00	A	MD	79	62	67	37	17	5	8	8	9	28	41	75	557
535.00	U	MD	80	65	68	34	18	3	10	8	9	24	52	78	580
535.00	A	MN	106	81	88	55	28	9	11	15	14	47	64	96	607
535.00	U	MN	113	77	90	57	29	9	11	16	13	46	65	98	639
536.00	A	MD	57	37	34	9	6	0	2	2	3	10	15	37	317
536.00	U	MD	55	25	30	2	0	0	0	0	0	5	11	38	307
536.00	A	MN	78	51	51	20	13	3	3	4	5	27	39	59	350
536.00	U	MN	80	55	52	20	13	2	3	4	3	25	39	59	365

APPENDIX TABLE A.3.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
536.30 A MD	48	24	29	12	15	3	1	2	3	3	8	34	239
536.30 U MD	20	9	12	4	8	0	0	1	0	0	1	25	239
536.30 A MN	56	27	47	29	12	2	2	4	5	4	20	40	250
536.30 U MN	53	25	70	24	13	2	1	5	2	3	28	46	249
536.50 A MD	60	38	35	5	11	0	3	5	5	12	20	46	---
536.50 U MD	92	69	34	13	5	2	3	1	4	10	15	67	427
536.50 A MN	88	52	58	21	16	5	5	5	7	23	41	63	---
536.50 U MN	111	69	46	22	21	10	9	5	9	28	40	84	455
537.00 A MD	128	103	140	101	60	32	43	38	26	56	87	124	1131
537.00 U MD	132	91	128	97	50	28	40	40	21	60	88	131	1090
537.00 A MN	169	137	155	127	70	36	50	54	30	71	118	140	1145
537.00 U MN	164	133	155	126	66	32	50	54	28	73	121	144	1136
537.10 A MD	95	76	88	60	31	14	20	15	14	39	60	82	715
537.10 U MD	120	124	100	74	33	16	19	13	15	53	78	103	816
537.10 A MN	129	101	99	85	40	20	23	23	17	47	81	104	737
537.10 U MN	155	114	105	92	49	24	28	22	21	50	101	135	877
540.00 A MD	215	183	250	197	117	73	87	81	64	111	170	229	2162
540.00 U MD	215	183	250	196	116	72	86	81	64	111	169	228	2162
540.00 A MN	268	248	269	228	134	83	103	107	74	135	218	268	2131
540.00 U MN	268	247	269	227	133	83	102	107	73	134	218	268	2131
540.10 A MD	551	---	563	523	537	195	209	232	186	154	---	681	2602
540.10 U MD	579	416	523	523	447	172	160	213	165	167	205	640	2727
540.10 A MN	595	---	573	583	551	220	213	266	161	167	---	677	2612
540.10 U MN	658	500	592	528	596	259	203	263	206	194	254	647	2776
541.00 A MD	209	175	240	177	112	90	98	88	70	117	163	197	2031
541.00 U MD	239	203	241	156	116	87	99	96	82	126	179	179	2242
541.00 A MN	249	221	260	195	123	97	118	123	81	142	204	221	1987
541.00 U MN	260	236	262	198	131	109	135	125	85	142	240	226	2192
541.10 A MD	571	---	601	620	489	351	365	404	---	279	---	693	3197
541.10 U MD	685	406	615	647	533	355	330	469	330	342	311	660	3194
541.10 A MN	607	---	613	655	533	377	373	410	---	304	---	698	3295
541.10 U MN	620	389	643	641	473	386	388	435	328	322	374	663	3298
542.00 A MD	96	86	99	67	63	53	70	64	57	77	86	100	1031
542.00 U MD	105	88	86	59	56	55	64	64	50	79	74	110	1067
542.00 A MN	120	105	114	89	69	58	76	74	63	91	110	114	1078
542.00 U MN	130	102	107	83	65	56	74	74	64	83	102	121	1078
542.10 A MD	100	75	108	73	42	27	47	40	36	65	83	88	918
542.10 U MD	105	80	62	70	40	30	47	54	33	51	88	111	982
542.10 A MN	133	100	130	108	49	27	53	52	40	83	115	102	942
542.10 U MN	138	111	122	102	45	28	55	55	41	83	111	124	1070
543.00 A MD	569	---	629	485	494	228	308	290	252	201	---	484	2604
543.00 U MD	584	482	622	459	452	203	230	294	284	203	431	466	2434
543.00 A MN	616	---	664	557	491	246	320	302	255	212	---	488	2676
543.00 U MN	673	618	669	474	492	219	315	304	263	223	425	490	2489
544.00 A MD	---	---	---	---	---	---	---	---	---	---	---	---	3908
544.00 U MD	---	---	---	---	---	---	---	---	---	---	---	---	3910
544.00 A MN	---	---	---	---	---	---	---	---	---	---	---	---	3968
544.00 U MN	---	---	---	---	---	---	---	---	---	---	---	---	3835

APPENDIX TABLE A.3.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
550.00 A MD	62	38	48	21	13	4	4	5	7	19	26	44	406
550.00 U MD	70	39	51	12	2	0	0	2	0	11	30	46	395
550.00 A MN	82	47	59	40	21	8	8	9	12	32	53	63	437
550.00 U MN	92	49	56	34	24	8	7	9	10	32	59	62	453
550.10 A MD	69	54	59	23	17	4	6	9	8	19	43	54	506
550.10 U MD	73	65	52	17	7	0	0	11	2	12	45	80	474
550.10 A MN	90	70	73	46	28	9	9	14	12	33	66	74	539
550.10 U MN	92	71	74	38	30	7	8	14	10	26	74	86	539
551.00 A MD	67	46	54	24	13	3	5	5	8	21	28	44	441
551.00 U MD	82	43	55	18	3	0	0	3	0	14	30	50	442
551.00 A MN	87	57	70	40	23	8	9	10	12	33	60	62	481
551.00 U MN	100	60	68	35	26	8	9	10	10	31	67	69	501
551.10 A MD	71	54	59	29	14	5	6	7	12	24	37	53	517
551.10 U MD	86	62	59	22	16	0	5	4	8	17	38	85	477
551.10 A MN	92	66	69	53	28	11	11	12	18	39	65	73	544
551.10 U MN	98	71	71	44	38	10	10	16	14	29	78	86	559
551.20 A MD	75	60	60	22	15	3	7	8	8	18	37	62	505
551.20 U MD	93	65	64	16	14	0	0	7	3	16	35	94	539
551.20 A MN	96	76	78	40	28	7	11	14	13	30	61	82	536
551.20 U MN	98	77	78	32	34	7	10	14	11	25	71	93	545
551.30 A MD	49	43	51	25	10	2	3	5	6	13	28	46	367
551.30 U MD	40	44	29	12	0	0	0	1	0	6	13	51	391
551.30 A MN	60	60	55	33	16	5	6	8	11	24	43	53	383
551.30 U MN	75	62	55	29	23	4	6	9	9	18	52	61	411
551.40 A MD	57	40	46	16	16	4	4	5	5	11	23	35	353
551.40 U MD	63	38	20	14	4	0	0	3	0	6	18	47	353
551.40 A MN	65	42	41	43	21	5	8	9	10	20	36	37	347
551.40 U MN	72	51	37	39	32	5	6	9	11	18	48	49	373
551.50 A MD	85	57	51	44	25	14	18	10	10	36	49	40	593
551.50 U MD	91	63	48	45	25	10	10	12	12	27	44	81	608
551.50 A MN	114	74	55	75	37	17	26	14	13	68	94	50	627
551.50 U MN	120	81	54	72	40	16	18	18	14	54	101	88	717
552.00 A MD	81	62	69	32	23	8	18	15	15	31	39	64	593
552.00 U MD	96	69	67	28	22	9	12	17	15	24	47	71	610
552.00 A MN	105	75	83	50	35	14	24	21	20	47	68	81	622
552.00 U MN	122	77	89	42	31	13	21	21	21	37	85	82	641
554.00 A MD	70	57	61	29	19	7	12	11	10	28	43	63	546
554.00 U MD	109	60	44	27	14	6	15	11	10	17	63	89	555
554.00 A MN	96	75	82	48	31	11	18	17	12	45	71	81	585
554.00 U MN	109	76	96	47	28	9	19	19	12	34	99	90	634
555.00 A MD	80	66	67	35	22	7	16	11	13	31	47	72	618
555.00 U MD	117	74	53	30	18	8	16	12	13	26	47	76	599
555.00 A MN	109	82	93	56	34	12	20	19	16	49	71	92	659
555.00 U MN	127	87	102	47	27	12	19	20	16	37	84	94	690
556.00 A MD	73	56	70	35	18	7	13	11	11	32	46	74	581
556.00 U MD	73	55	69	34	18	6	12	11	10	31	45	73	581
556.00 A MN	108	76	87	54	31	12	17	18	14	52	73	88	626
556.00 U MN	108	76	87	53	30	12	16	17	13	51	73	87	626

APPENDIX TABLE A.3.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul (mm)	Aug	Sep	Oct	Nov	Dec	Ann
556.20 A MD	75	64	70	37	28	6	19	14	14	32	52	66	618
556.20 U MD	106	72	85	33	27	11	23	18	15	31	51	80	644
556.20 A MN	101	78	89	57	39	12	24	20	16	49	80	81	651
556.20 U MN	134	85	96	53	40	16	25	18	18	46	96	86	722
557.00 A MD	86	68	78	44	28	10	17	13	10	34	49	79	658
557.00 U MD	82	71	73	41	23	8	16	13	10	34	55	82	689
557.00 A MN	119	89	99	65	40	15	22	20	14	52	77	95	702
557.00 U MN	117	85	97	62	34	14	21	20	15	50	85	92	688
557.10 A MD	85	68	78	39	35	12	22	16	17	47	55	86	696
557.10 U MD	126	80	81	52	37	10	31	21	17	44	59	106	774
557.10 A MN	113	87	96	59	46	18	26	23	21	64	85	98	740
557.10 U MN	124	87	113	63	50	17	32	30	20	63	112	113	824
558.00 A MD	91	69	87	48	40	16	27	23	18	45	65	95	757
558.00 U MD	142	75	86	52	33	13	28	22	17	37	71	102	785
558.00 A MN	121	89	108	69	51	23	35	30	23	63	90	109	805
558.00 U MN	140	92	115	59	39	20	37	30	20	52	105	114	835
558.10 A MD	79	64	75	40	32	12	20	15	19	39	55	75	660
558.10 U MD	86	62	75	40	25	12	24	15	20	35	61	85	686
558.10 A MN	108	82	94	60	42	17	26	20	22	56	83	90	700
558.10 U MN	109	80	104	55	34	16	29	21	22	45	99	91	719
558.30 A MD	93	82	96	50	41	14	24	22	19	46	60	87	789
558.30 U MD	102	90	128	48	30	16	29	22	21	41	58	94	785
558.30 A MN	124	102	119	74	49	21	30	30	23	61	88	105	827
558.30 U MN	130	108	123	74	37	20	32	25	25	51	105	106	854
559.00 A MD	94	104	117	75	59	24	35	36	21	51	68	108	1008
559.00 U MD	101	82	99	68	51	22	32	27	15	51	70	118	1006
559.00 A MN	111	131	131	102	68	27	36	43	25	72	98	129	1044
559.00 U MN	109	110	117	106	71	26	36	44	22	76	86	125	994
559.30 A MD	136	130	163	131	83	42	54	50	39	89	113	169	1410
559.30 U MD	183	146	171	122	77	41	56	62	38	84	125	248	1438
559.30 A MN	173	157	183	160	92	50	66	66	44	111	147	187	1459
559.30 U MN	173	169	201	141	82	51	75	80	37	111	181	209	1504
559.60 A MD	66	79	90	54	31	15	10	17	11	22	65	111	709
559.60 U MD	96	130	87	63	48	24	0	5	0	2	57	136	785
559.60 A MN	94	104	102	69	44	22	16	24	16	37	83	123	768
559.60 U MN	115	124	96	70	65	29	25	21	17	33	90	128	761
560.00 A MD	101	89	108	74	48	22	31	27	20	57	74	116	906
560.00 U MD	97	80	89	64	48	22	28	24	22	50	78	111	905
560.00 A MN	131	108	128	96	59	27	40	38	26	75	102	133	957
560.00 U MN	122	104	123	93	55	25	38	37	26	72	107	127	923
561.00 A MD	95	87	108	62	46	21	32	29	22	50	68	112	871
561.00 U MD	105	82	114	62	43	18	26	29	19	49	70	122	870
561.00 A MN	120	108	129	85	58	27	41	39	27	68	94	130	923
561.00 U MN	113	100	134	89	58	25	41	39	25	69	94	128	911
562.00 A MD	119	111	135	96	68	29	42	38	27	69	91	146	1148
562.00 U MD	119	111	135	95	67	29	41	38	27	68	91	146	1147
562.00 A MN	152	134	159	122	78	39	54	51	33	88	126	164	1205
562.00 U MN	151	134	159	122	78	38	53	50	32	88	126	164	1205

APPENDIX TABLE A.3.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
563.00 A MD	112	99	142	103	63	33	46	46	33	64	86	138	1063
563.00 U MD	122	103	143	81	63	25	43	40	27	66	89	146	1111
563.00 A MN	138	114	161	127	71	37	54	52	37	85	122	151	1152
563.00 U MN	139	113	161	129	73	36	55	53	35	85	120	153	1152

APPENDIX TABLE A.4. ADJUSTED AND UNADJUSTED MEDIAN AND MEAN, MONTHLY AND ANNUAL RAINFALL, LĀNA'I ISLAND, STATE OF HAWAI'I

State Key No.			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
			(mm)												
650.00	A	MD	45	30	35	17	14	8	10	12	21	28	15	48	442
650.00	U	MD	45	27	34	16	15	7	10	11	22	24	16	49	444
650.00	A	MN	89	53	59	30	30	14	16	14	28	38	44	61	475
650.00	U	MN	88	51	58	31	30	14	16	14	28	37	44	64	478
651.00	A	MD	59	40	43	20	19	11	15	16	26	36	25	56	516
651.00	U	MD	116	32	35	19	17	7	14	14	25	32	22	54	542
651.00	A	MN	104	61	67	36	33	18	19	21	34	46	53	71	560
651.00	U	MN	116	57	74	35	36	17	19	19	35	46	63	73	596
652.00	A	MD	55	39	40	23	19	15	14	18	21	37	25	51	487
652.00	U	MD	55	38	39	23	19	14	14	17	22	33	25	53	491
652.00	A	MN	98	59	67	42	38	20	22	20	30	45	52	68	564
652.00	U	MN	96	58	64	42	38	20	21	19	30	43	52	72	564
653.00	A	MD	64	51	51	28	27	12	15	20	27	41	30	64	589
653.00	U	MD	105	49	54	26	24	8	13	14	13	30	35	69	625
653.00	A	MN	110	72	79	49	45	16	22	22	37	53	57	78	642
653.00	U	MN	119	76	86	50	47	16	22	21	35	54	61	79	677
654.00	A	MD	66	49	49	30	25	14	18	19	28	40	34	65	609
654.00	U	MD	150	39	42	25	28	11	16	16	21	36	37	73	629
654.00	A	MN	114	70	75	56	43	20	27	20	39	49	62	80	658
654.00	U	MN	134	66	87	51	46	18	29	19	44	47	74	82	706
655.00	A	MD	61	43	48	23	21	11	15	17	27	38	25	58	539
655.00	U	MD	138	35	39	23	17	6	11	15	18	40	31	57	568
655.00	A	MN	106	66	71	40	35	18	19	22	36	49	55	74	587
655.00	U	MN	120	66	83	39	37	17	20	20	37	52	65	74	633
656.00	A	MD	58	57	41	26	16	10	15	15	25	37	37	57	486
656.00	U	MD	49	60	33	27	11	7	6	12	9	12	17	69	561
656.00	A	MN	106	91	70	37	30	18	18	20	39	39	70	75	537
656.00	U	MN	108	93	75	38	27	17	16	15	18	30	68	99	642
657.00	A	MD	61	39	48	23	17	12	13	14	30	33	24	58	524
657.00	U	MD	129	40	54	25	19	5	12	12	23	32	36	67	567
657.00	A	MN	104	61	72	39	29	18	18	18	38	43	51	73	571
657.00	U	MN	129	61	84	34	34	16	20	17	43	42	75	83	651
658.00	A	MD	40	30	34	14	12	8	8	11	12	25	17	38	348
658.00	U	MD	73	40	27	10	21	4	4	9	9	22	15	49	373
658.00	A	MN	71	45	48	26	20	12	11	14	15	32	39	48	381
658.00	U	MN	82	49	54	24	22	13	11	13	15	28	47	57	419
660.00	A	MD	58	38	42	20	18	8	14	14	27	34	24	54	511
660.00	U	MD	113	37	35	20	14	4	15	14	24	31	28	50	531
660.00	A	MN	103	57	64	34	32	15	19	18	38	45	53	69	550
660.00	U	MN	111	57	76	32	33	14	21	17	39	49	61	68	582
661.00	A	MD	71	50	56	33	31	15	20	23	27	43	37	68	643
661.00	U	MD	137	48	52	28	32	10	20	21	21	40	46	77	680
661.00	A	MN	119	73	82	57	49	20	29	25	36	54	64	84	693
661.00	U	MN	132	72	96	55	52	18	31	24	38	58	74	83	739

NOTE: A = normals adjusted to common base period; U = unadjusted normals; MD = median; MN = median; MN = mean; —— = insufficient data.

NOTE: Median and mean annual rainfall not necessarily equal to sum of monthly normals.

APPENDIX TABLE A.4.—Continued

State Key No.			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
			(mm)												
662.00	A	MD	72	53	54	34	29	16	24	25	30	49	34	67	666
662.00	U	MD	97	60	51	33	27	15	21	24	26	49	39	76	672
662.00	A	MN	121	74	79	57	46	21	32	26	40	60	65	84	715
662.00	U	MN	122	76	82	56	47	21	31	26	42	60	67	83	734
663.00	A	MD	67	48	53	30	23	13	19	21	28	40	31	63	596
663.00	U	MD	144	50	58	30	27	12	15	20	26	34	36	71	643
663.00	A	MN	115	68	74	50	39	21	25	24	38	51	61	77	646
663.00	U	MN	139	72	89	44	42	22	27	22	43	46	82	86	720
664.00	A	MD	69	48	49	31	23	12	18	20	29	41	32	65	602
664.00	U	MD	139	46	42	27	28	15	16	17	27	33	39	71	667
664.00	A	MN	117	71	74	51	39	19	23	23	38	52	61	82	651
664.00	U	MN	140	69	86	48	43	19	24	21	41	48	74	87	704
665.00	A	MD	63	44	49	29	26	11	17	18	28	41	26	60	567
665.00	U	MD	119	39	43	28	21	10	13	15	22	34	25	53	571
665.00	A	MN	106	65	71	45	40	19	21	22	38	51	55	76	613
665.00	U	MN	114	68	74	44	42	18	20	21	38	51	59	75	641
666.00	A	MD	64	41	44	23	19	10	16	15	29	33	26	58	546
666.00	U	MD	123	38	41	16	13	8	16	12	21	31	29	48	576
666.00	A	MN	112	63	67	40	34	19	20	20	39	45	59	74	591
666.00	U	MN	121	62	78	38	36	18	20	19	41	48	69	73	627
667.00	A	MD	80	49	55	36	33	18	24	24	35	47	43	69	661
667.00	U	MD	136	46	80	34	35	11	27	21	32	40	68	76	675
667.00	A	MN	117	70	80	59	53	28	31	29	46	58	67	82	720
667.00	U	MN	143	70	90	47	58	21	35	25	49	51	91	89	782
668.00	A	MD	70	49	47	29	23	11	15	19	23	40	36	70	588
668.00	U	MD	152	69	56	27	18	9	10	11	21	34	59	85	646
668.00	A	MN	115	67	75	54	43	17	23	21	34	51	65	84	643
668.00	U	MN	140	66	96	46	47	15	26	19	39	47	87	94	731
669.00	A	MD	61	34	46	23	18	10	14	15	27	32	26	56	531
669.00	U	MD	137	29	48	19	18	5	13	15	18	30	37	64	586
669.00	A	MN	107	58	71	39	33	15	18	19	36	45	59	72	579
669.00	U	MN	131	56	93	36	37	14	20	17	39	42	86	84	668
670.00	A	MD	88	53	69	42	39	23	32	29	34	51	46	75	758
670.00	U	MD	148	49	75	32	39	18	30	28	30	51	45	76	767
670.00	A	MN	128	78	94	71	59	33	39	32	46	63	74	90	815
670.00	U	MN	144	79	107	66	63	29	40	30	47	65	84	87	847
671.00	A	MD	95	50	70	45	43	22	34	35	38	52	52	79	789
671.00	U	MD	137	78	65	43	33	20	36	39	35	45	61	88	832
671.00	A	MN	131	78	95	74	67	31	40	40	52	65	80	93	848
671.00	U	MN	138	81	115	61	74	28	40	40	43	59	109	96	901
672.00	A	MD	103	63	76	52	48	27	40	37	46	62	54	87	875
672.00	U	MD	122	60	82	46	49	21	35	40	36	54	50	84	847
672.00	A	MN	142	90	103	84	71	37	47	42	61	72	84	101	936
672.00	U	MN	144	96	106	78	70	34	46	44	58	73	83	101	936
673.00	A	MD	58	37	46	19	14	6	12	11	24	28	23	53	503
673.00	U	MD	120	30	41	14	12	4	12	7	19	28	24	48	523
673.00	A	MN	109	57	69	35	28	14	15	16	34	41	55	70	545
673.00	U	MN	125	55	81	35	31	13	15	15	34	45	66	70	588

APPENDIX TABLE A.4.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
674.00 A MD	89	50	65	43	40	23	35	24	40	50	41	74	737
674.00 U MD	152	39	70	39	38	17	29	24	33	52	42	74	770
674.00 A MN	126	73	90	70	61	32	41	29	56	62	71	91	799
674.00 U MN	141	73	102	66	67	29	42	27	55	63	82	88	838
675.00 A MD	69	46	52	32	25	14	22	21	29	37	30	64	611
675.00 U MD	135	37	46	32	24	11	18	16	29	38	31	52	644
675.00 A MN	119	67	76	52	44	23	27	26	40	48	61	83	660
675.00 U MN	131	65	88	51	46	22	27	24	42	50	71	81	700
675.10 A MD	82	43	56	36	47	18	27	24	33	47	41	70	688
675.10 U MD	152	49	68	35	43	13	22	20	38	36	32	67	708
675.10 A MN	121	67	80	59	64	25	31	30	44	58	72	87	750
675.10 U MN	169	71	96	59	81	24	33	27	53	56	105	94	882
676.00 A MD	39	26	34	14	13	3	8	6	14	17	11	43	398
676.00 U MD	38	25	34	14	12	2	7	6	17	17	13	43	397
676.00 A MN	93	51	60	30	23	10	10	11	26	36	47	61	453
676.00 U MN	91	50	60	30	23	10	10	11	27	34	48	61	455
677.00 A MD	61	34	49	19	16	7	12	13	27	28	33	55	519
677.00 U MD	140	28	48	15	18	5	12	12	18	27	50	60	542
677.00 A MN	105	56	72	35	28	14	16	17	40	40	65	71	563
677.00 U MN	126	54	94	31	31	12	18	16	42	38	93	84	641
678.00 A MD	79	45	55	31	29	17	26	22	34	47	41	70	654
678.00 U MD	152	44	54	31	32	9	25	20	33	38	60	79	660
678.00 A MN	116	68	79	53	48	27	30	27	46	58	72	85	712
678.00 U MN	138	69	101	40	55	22	33	24	49	51	101	95	780
680.00 A MD	101	61	79	57	51	35	45	37	46	64	60	92	911
680.00 U MD	162	52	89	42	46	27	37	39	45	65	58	90	932
680.00 A MN	142	87	108	85	78	46	53	43	62	76	91	109	982
680.00 U MN	156	82	116	81	85	42	54	41	61	74	103	108	1012
681.00 A MD	59	38	44	20	16	6	10	11	22	26	26	54	499
681.00 U MD	112	33	46	17	16	2	12	7	16	19	20	49	518
681.00 A MN	108	59	67	37	30	13	13	15	32	39	58	72	542
681.00 U MN	123	57	79	36	33	12	13	14	32	42	69	72	584
681.10 A MD	64	38	51	25	19	8	12	14	24	28	26	54	557
681.10 U MD	135	32	57	24	23	7	11	8	35	29	17	48	682
681.10 A MN	110	60	75	39	35	14	16	18	35	40	57	71	602
681.10 U MN	155	62	91	43	49	16	17	18	47	43	89	84	728
682.00 A MD	67	45	57	36	25	12	19	18	30	38	30	63	619
682.00 U MD	107	45	56	34	26	8	15	16	21	31	27	57	614
682.00 A MN	116	67	81	54	44	20	24	24	41	47	61	82	668
682.00 U MN	126	67	83	56	48	20	24	22	38	46	66	87	698
683.00 A MD	99	57	76	60	51	27	41	27	48	57	60	93	881
683.00 U MD	154	58	69	58	50	26	31	26	39	40	50	91	913
683.00 A MN	142	83	101	81	76	37	46	34	63	74	94	111	952
683.00 U MN	154	85	108	82	75	37	43	36	58	62	104	116	988
684.00 A MD	87	69	83	76	60	33	46	42	59	78	61	87	929
684.00 U MD	79	60	89	56	50	32	42	41	53	70	53	76	943
684.00 A MN	113	87	104	95	78	46	53	47	72	88	89	99	979
684.00 U MN	109	84	107	89	80	43	50	49	71	85	93	100	984

APPENDIX TABLE A.4.—Continued

State Key No.			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
			(mm)												
685.00	A	MD	104	53	68	38	29	14	20	15	30	46	42	78	708
685.00	U	MD	154	49	61	38	28	10	13	11	27	33	34	75	710
685.00	A	MN	145	77	95	57	46	23	25	21	41	61	75	101	772
685.00	U	MN	150	70	94	59	52	20	22	17	38	57	82	99	765
685.10	A	MD	104	60	73	57	48	20	29	29	41	55	56	86	843
685.10	U	MD	179	58	100	54	48	13	21	23	42	52	65	79	880
685.10	A	MN	143	85	101	78	72	29	33	37	54	73	91	110	916
685.10	U	MN	190	88	119	77	91	25	35	32	67	72	127	119	1058
686.00	A	MD	65	51	52	31	23	12	14	20	23	39	35	73	596
686.00	U	MD	125	58	49	32	27	8	11	16	13	33	37	89	643
686.00	A	MN	114	68	81	52	43	19	19	20	29	48	61	87	644
686.00	U	MN	134	72	83	49	50	18	20	20	29	46	73	98	715
688.00	A	MD	67	46	46	23	18	10	11	11	18	32	26	54	515
688.00	U	MD	142	50	60	21	24	6	11	5	15	28	42	58	576
688.00	A	MN	113	61	69	34	31	14	14	14	26	49	55	74	564
688.00	U	MN	143	62	86	32	40	13	15	13	32	51	78	84	666
689.00	A	MD	118	88	86	75	79	31	43	44	44	68	50	103	1024
689.00	U	MD	206	90	114	87	92	21	50	37	46	67	62	82	1061
689.00	A	MN	160	110	107	98	95	50	55	50	55	73	84	125	1096
689.00	U	MN	217	113	124	97	117	49	62	47	67	68	114	138	1217
690.00	A	MD	65	46	55	35	25	16	15	20	24	43	36	68	598
690.00	U	MD	84	51	45	31	21	10	14	17	18	33	38	64	603
690.00	A	MN	111	67	84	54	37	25	20	22	29	52	68	83	639
690.00	U	MN	109	66	82	54	38	25	19	22	30	51	67	87	633
691.00	A	MD	82	49	56	35	27	11	13	19	25	46	37	73	622
691.00	U	MD	123	50	46	27	31	5	8	15	16	48	39	71	626
691.00	A	MN	115	74	83	60	47	19	21	23	33	59	63	87	682
691.00	U	MN	126	74	96	57	50	17	22	22	33	61	72	83	716
692.00	A	MD	89	53	62	39	34	17	21	29	32	50	43	71	699
692.00	U	MD	125	53	63	30	32	17	16	25	24	46	48	72	713
692.00	A	MN	125	79	89	65	54	25	28	33	42	62	70	85	759
692.00	U	MN	134	78	102	60	56	23	28	33	44	64	78	80	785
693.00	A	MD	129	58	77	56	46	24	30	35	46	65	59	95	876
693.00	U	MD	120	59	71	52	46	26	30	35	45	59	61	92	872
693.00	A	MN	145	87	107	90	71	35	37	43	60	76	87	108	947
693.00	U	MN	133	89	103	83	69	36	36	46	60	72	83	110	929
694.00	A	MD	78	54	50	26	13	4	5	10	10	31	33	60	503
694.00	U	MD	89	45	52	23	10	2	2	8	6	23	25	53	527
694.00	A	MN	117	73	76	44	27	7	10	13	14	45	61	75	561
694.00	U	MN	127	79	87	42	27	8	11	12	13	47	66	75	597
695.00	A	MD	62	22	34	13	6	3	0	2	7	20	18	40	303
695.00	U	MD	50	16	30	7	1	1	0	0	0	12	7	24	291
695.00	A	MN	91	34	56	27	14	4	1	5	11	32	37	54	341
695.00	U	MN	81	27	35	37	14	4	0	4	9	38	23	30	294
696.00	A	MD	52	20	28	12	4	0	1	0	3	13	14	37	283
696.00	U	MD	4	8	19	3	0	0	0	0	0	2	0	24	304
696.00	A	MN	77	41	55	26	9	1	0	3	8	23	38	48	314
696.00	U	MN	64	38	44	28	7	1	0	3	9	26	20	46	290

APPENDIX TABLE A.4.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
697.00 A MD	83	50	69	35	21	9	15	15	23	43	43	66	646
697.00 U MD	169	73	73	30	27	5	6	7	23	50	78	63	698
697.00 A MN	127	73	95	61	31	15	23	18	30	53	75	81	708
697.00 U MN	186	78	117	61	42	14	27	17	38	47	102	89	824
698.00 A MD	112	64	79	49	30	16	24	22	35	54	55	88	820
698.00 U MD	183	81	116	45	38	9	15	15	40	50	86	88	831
698.00 A MN	153	90	110	76	45	23	33	24	43	63	91	103	880
698.00 U MN	196	99	140	73	56	20	38	22	50	54	122	108	994

APPENDIX TABLE A.5. ADJUSTED AND UNADJUSTED MEDIAN AND MEAN, MONTHLY AND ANNUAL RAINFALL, O'AHU ISLAND, STATE OF HAWAI'I

State Key No.			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
			(mm)												
700.00	A	MD	78	47	38	16	10	3	6	6	12	23	35	63	531
700.00	U	MD	65	43	31	15	11	2	4	5	7	18	29	54	490
700.00	A	MN	108	62	62	34	20	10	8	12	19	44	61	93	532
700.00	U	MN	102	61	56	32	21	10	7	11	18	40	58	85	505
701.00	A	MD	71	43	36	15	10	4	7	5	8	27	36	58	491
701.00	U	MD	86	48	28	9	9	1	5	4	4	19	22	59	464
701.00	A	MN	98	56	59	34	16	8	8	8	15	46	64	76	493
701.00	U	MN	110	56	74	36	12	4	7	8	10	31	49	61	466
702.00	A	MD	75	48	36	20	8	4	7	6	8	24	30	64	516
702.00	U	MD	51	41	34	11	8	3	4	8	10	15	27	61	481
702.00	A	MN	108	62	60	38	20	9	9	11	14	43	55	89	520
702.00	U	MN	91	70	63	29	18	9	7	14	17	34	50	88	502
702.20	A	MD	76	48	44	19	12	7	9	9	14	30	35	66	528
702.20	U	MD	89	51	37	24	14	5	8	5	10	23	37	52	580
702.20	A	MN	107	66	59	37	24	10	10	12	16	50	57	83	543
702.20	U	MN	116	58	53	43	29	11	9	8	14	53	71	77	555
702.50	A	MD	81	63	32	18	17	9	3	5	10	25	40	67	560
702.50	U	MD	57	39	38	30	11	13	1	2	5	9	22	48	541
702.50	A	MN	115	98	40	33	33	12	4	9	13	52	67	83	574
702.50	U	MN	120	69	34	43	40	16	3	8	11	52	53	60	541
703.00	A	MD	71	47	52	23	12	7	10	14	15	33	41	71	561
703.00	U	MD	76	56	39	21	10	5	7	9	13	27	39	58	588
703.00	A	MN	101	64	74	40	24	11	12	19	21	51	64	91	578
703.00	U	MN	112	65	76	37	26	11	12	16	17	46	73	84	579
704.00	A	MD	82	51	60	35	20	14	20	22	27	44	52	75	634
704.00	U	MD	68	53	52	34	17	13	16	19	21	33	51	68	648
704.00	A	MN	110	68	77	50	31	18	23	27	31	57	69	93	652
704.00	U	MN	104	67	80	47	30	18	22	26	33	51	72	95	655
704.12	A	MD	189	121	196	148	114	104	121	125	93	129	166	184	1881
704.12	U	MD	196	113	235	193	117	98	114	70	89	127	148	195	1698
704.12	A	MN	231	146	222	172	144	117	128	142	107	147	182	209	1928
704.12	U	MN	204	131	216	200	155	119	122	99	90	145	165	169	1807
705.00	A	MD	96	56	75	43	28	19	25	28	30	50	63	97	771
705.00	U	MD	99	59	62	46	24	18	26	18	26	41	60	97	741
705.00	A	MN	122	72	91	61	41	23	29	34	36	62	79	118	794
705.00	U	MN	127	73	94	61	42	22	29	28	29	55	88	109	772
705.40	A	MD	76	47	55	37	19	12	14	17	20	44	47	80	588
705.40	U	MD	55	53	54	33	19	14	17	19	28	35	50	79	609
705.40	A	MN	102	64	65	47	29	14	18	21	24	57	62	96	604
705.40	U	MN	92	77	79	42	25	18	19	24	35	48	67	106	634
706.00	A	MD	157	121	178	134	111	104	139	117	100	124	148	165	1774
706.00	U	MD	156	117	171	130	122	100	135	112	100	116	145	156	1740
706.00	A	MN	193	151	192	155	134	115	142	126	110	140	168	194	1807
706.00	U	MN	176	156	179	146	130	114	140	123	108	136	164	184	1764

NOTE: A = normals adjusted to common base period; U = unadjusted normals; MD = median; MN = median; MN = mean; —— = insufficient data.

NOTE: Median and mean annual rainfall not necessarily equal to sum of monthly normals.

APPENDIX TABLE A.5.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
707.00 A MD	105	69	87	61	38	32	41	45	40	64	80	108	938
707.00 U MD	105	68	86	60	38	32	41	44	40	64	79	107	938
707.00 A MN	138	92	105	80	56	38	47	51	45	79	99	130	966
707.00 U MN	137	91	105	80	56	37	46	50	45	79	98	130	966
707.30 A MD	134	92	124	98	73	59	78	82	65	89	114	147	1332
707.30 U MD	139	115	131	111	73	48	77	61	68	84	132	168	1331
707.30 A MN	166	121	142	118	90	67	85	90	72	103	133	177	1363
707.30 U MN	161	127	156	114	88	58	84	80	60	95	159	172	1370
709.00 A MD	106	70	97	70	43	34	46	49	43	70	88	116	965
709.00 U MD	118	75	94	78	43	33	56	39	37	64	97	115	977
709.00 A MN	135	94	115	89	57	41	51	56	51	84	106	138	987
709.00 U MN	130	97	121	87	62	40	49	47	40	79	117	128	989
710.00 A MD	167	123	186	164	131	109	143	150	104	140	168	196	1980
710.00 U MD	161	128	177	161	130	109	148	155	109	132	179	217	1962
710.00 A MN	204	156	199	185	154	123	152	162	112	159	186	227	2023
710.00 U MN	186	166	190	176	145	122	154	162	114	153	192	226	1975
710.10 A MD	211	178	262	247	210	171	233	229	159	198	243	257	2771
710.10 U MD	237	183	258	243	189	146	228	205	152	182	259	243	2808
710.10 A MN	245	219	276	267	232	191	244	243	172	218	264	299	2817
710.10 U MN	241	218	282	255	226	172	240	221	149	207	290	288	2792
711.00 A MD	114	71	106	69	45	31	45	50	39	69	82	116	985
711.00 U MD	95	75	85	64	52	29	44	49	33	54	73	106	910
711.00 A MN	140	93	124	88	58	37	48	57	44	81	101	141	1013
711.00 U MN	129	95	127	80	58	33	49	59	39	77	96	122	965
711.10 A MD	86	55	63	37	20	13	16	22	25	47	58	85	655
711.10 U MD	84	56	61	39	13	11	15	12	14	26	54	82	613
711.10 A MN	110	71	81	52	27	16	18	28	29	60	73	105	676
711.10 U MN	112	73	86	49	28	15	17	21	22	52	81	101	674
712.00 A MD	146	103	142	119	90	73	93	97	75	104	130	156	1514
712.00 U MD	140	101	133	101	87	72	87	97	76	106	134	140	1470
712.00 A MN	181	129	157	138	109	82	103	105	81	119	151	182	1544
712.00 U MN	178	130	155	135	104	79	104	105	83	118	156	181	1532
712.10 A MD	165	121	160	143	108	97	124	124	101	120	141	172	1705
712.10 U MD	152	147	163	121	118	91	114	118	92	139	124	140	1732
712.10 A MN	202	149	176	166	123	108	133	134	114	136	160	204	1740
712.10 U MN	210	164	188	156	127	102	125	128	88	132	129	178	1706
712.20 A MD	188	152	225	205	181	144	207	172	133	169	221	230	2461
712.20 U MD	201	197	205	171	183	136	178	178	122	158	214	259	2552
712.20 A MN	222	187	242	230	224	159	216	186	146	190	245	279	2511
712.20 U MN	234	224	253	184	215	144	205	202	123	167	206	285	2472
713.00 A MD	110	75	92	71	47	32	46	47	41	69	85	114	975
713.00 U MD	111	72	92	73	43	33	47	44	42	67	86	104	973
713.00 A MN	142	95	109	85	61	38	51	54	45	84	103	136	995
713.00 U MN	138	94	106	83	61	38	50	52	44	83	103	134	992
714.00 A MD	199	162	232	208	185	173	214	221	152	179	218	249	2671
714.00 U MD	184	173	247	208	183	185	221	215	165	179	225	239	2607
714.00 A MN	237	196	250	224	222	190	228	229	161	199	237	278	2696
714.00 U MN	233	211	251	225	204	196	227	229	187	194	241	286	2682

APPENDIX TABLE A.5.—Continued

State Key No.			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
			(mm)												
714.10	A	MD	192	167	242	240	187	168	216	215	158	178	224	233	2592
714.10	U	MD	213	193	251	234	179	133	208	185	147	185	227	228	2645
714.10	A	MN	225	203	256	262	218	183	229	228	172	200	240	270	2640
714.10	U	MN	212	209	254	255	215	162	221	201	147	196	252	248	2572
715.00	A	MD	93	57	54	38	23	14	17	20	21	47	53	86	651
715.00	U	MD	85	61	45	38	19	12	14	16	17	34	49	61	663
715.00	A	MN	123	70	75	52	33	18	20	26	26	60	69	101	666
715.00	U	MN	122	71	68	52	33	17	20	25	27	58	69	99	671
716.00	A	MD	269	225	340	350	275	233	298	297	215	246	305	331	3602
716.00	U	MD	251	234	294	329	278	253	311	295	210	259	296	285	3630
716.00	A	MN	309	259	364	374	319	249	318	315	232	281	327	372	3669
716.00	U	MN	280	270	352	359	312	245	322	311	231	281	331	362	3634
716.70	A	MD	130	111	118	135	117	96	121	113	73	108	137	159	1671
716.70	U	MD	152	146	137	135	111	106	137	116	96	130	177	160	1728
716.70	A	MN	161	138	136	163	141	106	129	118	82	128	150	178	1694
716.70	U	MN	162	184	122	175	146	127	140	136	134	149	169	207	1797
716.80	A	MD	265	163	216	276	226	200	274	242	188	205	228	219	3053
716.80	U	MD	281	226	165	360	200	240	287	251	247	200	200	180	3421
716.80	A	MN	323	195	251	310	264	213	286	257	204	237	262	253	3112
716.80	U	MN	294	276	191	337	258	251	307	297	283	262	311	267	3258
717.00	A	MD	72	48	46	33	14	10	13	15	15	44	41	69	536
717.00	U	MD	66	45	30	22	11	7	9	11	10	32	33	44	501
717.00	A	MN	101	59	63	50	20	14	16	18	22	54	54	86	550
717.00	U	MN	95	62	67	47	17	11	15	18	26	54	44	80	537
717.20	A	MD	91	52	52	30	20	14	10	20	23	44	51	81	622
717.20	U	MD	74	55	45	36	21	8	10	7	13	37	44	84	645
717.20	A	MN	120	70	69	39	34	17	10	26	26	58	66	100	643
717.20	U	MN	113	63	56	39	43	16	10	16	19	55	91	103	641
718.00	A	MD	259	230	312	329	253	204	248	245	185	227	298	312	3343
718.00	U	MD	248	235	274	322	263	203	254	244	180	225	268	285	3371
718.00	A	MN	298	259	339	347	293	215	268	257	201	258	319	353	3399
718.00	U	MN	277	269	330	335	287	213	271	257	201	257	318	343	3331
718.10	A	MD	157	137	152	153	138	111	119	119	98	135	134	159	1716
718.10	U	MD	181	166	129	144	113	114	109	124	110	139	127	123	1729
718.10	A	MN	182	153	163	164	165	115	118	125	105	158	151	181	1762
718.10	U	MN	173	171	149	177	148	120	119	147	133	168	150	170	1878
720.00	A	MD	128	92	132	97	59	41	58	65	50	88	97	135	1189
720.00	U	MD	108	111	107	82	55	36	55	69	42	67	74	142	1228
720.00	A	MN	164	114	146	113	79	48	65	68	58	104	99	160	1218
720.00	U	MN	161	124	144	94	63	43	58	72	46	85	87	155	1157
720.40	A	MD	113	81	75	66	42	39	38	47	41	61	76	105	887
720.40	U	MD	159	80	84	79	32	31	34	33	35	61	120	110	877
720.40	A	MN	144	103	90	79	57	44	41	54	44	75	91	128	909
720.40	U	MN	149	91	79	81	60	44	36	41	32	72	127	131	946
721.00	A	MD	110	83	113	88	57	38	50	53	44	73	84	121	1029
721.00	U	MD	92	91	103	96	51	35	50	49	47	71	87	101	1069
721.00	A	MN	142	100	126	106	70	45	56	59	50	90	102	141	1051
721.00	U	MN	135	104	118	98	68	44	56	58	50	89	105	136	1056

APPENDIX TABLE A.5.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
722.20 A MD	95	53	71	38	26	11	22	26	25	64	52	82	732
722.20 U MD	94	56	51	36	28	8	24	22	17	34	48	67	654
722.20 A MN	124	70	87	51	33	14	25	33	33	83	70	103	756
722.20 U MN	123	74	108	46	34	11	27	35	26	60	85	110	764
722.50 A MD	100	54	45	33	17	12	9	16	20	38	40	75	622
722.50 U MD	110	50	34	35	22	3	5	6	10	32	29	58	583
722.50 A MN	125	72	59	41	26	14	11	23	22	51	56	106	648
722.50 U MN	119	66	47	41	34	14	9	16	16	51	90	106	639
723.00 A MD	87	52	64	54	29	21	30	32	21	58	53	87	701
723.00 U MD	73	49	48	42	26	16	27	26	24	52	46	59	689
723.00 A MN	115	63	83	66	40	27	34	35	28	72	62	106	715
723.00 U MN	98	64	81	58	37	25	32	36	37	74	56	90	693
723.10 A MD	91	50	57	71	29	18	37	29	18	70	62	90	769
723.10 U MD	103	62	53	56	35	17	41	23	36	72	64	70	815
723.10 A MN	112	62	79	90	39	22	43	32	26	89	74	115	788
723.10 U MN	93	79	79	75	44	26	48	38	61	90	74	121	833
723.20 A MD	114	99	130	106	59	39	55	52	40	102	83	140	1170
723.20 U MD	115	114	151	79	55	34	53	52	46	72	89	161	1129
723.20 A MN	138	119	152	123	65	45	61	61	50	128	98	176	1202
723.20 U MN	136	135	155	108	68	39	62	68	49	106	122	188	1218
723.40 A MD	116	82	75	60	39	23	32	35	34	65	61	110	843
723.40 U MD	115	74	72	70	38	22	28	25	25	48	67	99	775
723.40 A MN	146	104	92	76	47	26	36	42	37	77	77	130	867
723.40 U MN	141	87	83	79	53	26	33	33	32	67	91	119	855
723.70 A MD	125	104	68	60	34	27	32	53	36	67	41	88	852
723.70 U MD	107	76	64	64	43	17	26	23	27	53	93	99	804
723.70 A MN	151	110	83	73	41	33	36	62	39	82	61	117	880
723.70 U MN	139	101	74	69	48	29	33	33	35	61	131	130	914
724.00 A MD	86	63	75	40	22	13	18	18	17	47	60	83	654
724.00 U MD	67	52	71	34	14	9	12	15	12	31	37	67	663
724.00 A MN	112	77	95	53	26	15	20	22	21	66	72	98	684
724.00 U MN	104	72	91	56	24	15	19	21	21	58	68	99	678
724.40 A MD	129	69	78	56	25	16	20	30	20	78	27	96	786
724.40 U MD	133	59	81	60	25	13	26	14	19	54	48	104	827
724.40 A MN	165	96	92	69	30	21	24	37	19	92	44	116	817
724.40 U MN	171	76	100	76	35	20	29	23	28	63	93	127	914
725.00 A MD	78	53	38	21	14	6	8	15	8	31	25	63	551
725.00 U MD	49	41	37	27	14	6	5	13	11	36	22	46	503
725.00 A MN	104	66	70	40	25	11	14	20	20	50	48	91	548
725.00 U MN	65	64	49	41	22	11	12	20	27	56	37	85	505
725.20 A MD	134	87	67	50	34	22	29	38	48	53	65	127	1008
725.20 U MD	155	86	77	51	39	24	30	23	38	57	82	125	1119
725.20 A MN	168	103	101	82	48	32	34	51	69	84	92	156	1004
725.20 U MN	202	101	105	73	55	33	32	41	46	86	114	139	1065
726.00 A MD	80	52	40	15	10	3	5	7	15	24	29	61	536
726.00 U MD	77	48	31	14	13	2	4	3	9	20	33	55	531
726.00 A MN	110	65	66	35	20	8	8	13	21	43	59	91	535
726.00 U MN	108	72	57	32	23	9	7	11	18	42	64	83	528

APPENDIX TABLE A.5.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
727.00 A MD	78	49	39	17	9	3	5	8	13	22	33	60	527
727.00 U MD	72	41	33	16	10	3	4	5	9	20	27	61	514
727.00 A MN	107	63	64	35	19	12	8	14	20	40	59	90	528
727.00 U MN	104	63	56	35	21	12	7	12	18	40	59	83	517
729.00 A MD	119	81	70	36	21	13	14	25	25	52	58	102	866
729.00 U MD	109	106	63	29	13	10	15	31	16	29	38	129	943
729.00 A MN	158	98	98	65	32	19	22	39	42	82	81	133	876
729.00 U MN	166	114	115	55	20	13	29	40	29	62	73	138	874
729.10 A MD	99	61	63	29	16	9	11	21	19	43	46	79	711
729.10 U MD	113	81	44	18	11	7	13	25	11	21	27	102	791
729.10 A MN	132	78	86	56	23	12	18	32	32	70	68	103	720
729.10 U MN	150	94	96	47	15	9	24	33	22	52	61	111	748
730.00 A MD	83	48	44	19	14	4	6	8	14	28	38	64	557
730.00 U MD	77	56	36	17	13	4	5	9	9	19	46	52	566
730.00 A MN	113	63	68	41	23	9	9	14	21	47	64	90	559
730.00 U MN	111	75	67	38	26	9	9	13	19	46	70	83	547
731.00 A MD	90	52	53	34	19	7	11	16	18	42	44	73	661
731.00 U MD	79	43	40	26	14	5	11	15	17	32	64	59	647
731.00 A MN	122	68	79	58	29	15	16	23	27	64	69	98	664
731.00 U MN	110	67	78	58	31	13	17	24	29	67	74	92	666
732.00 A MD	80	49	41	20	12	4	8	9	12	28	38	66	561
732.00 U MD	71	43	38	15	10	4	5	9	12	18	39	59	538
732.00 A MN	110	65	66	40	24	10	11	14	20	47	64	93	564
732.00 U MN	105	64	61	38	25	11	9	14	20	43	61	86	542
733.00 A MD	100	63	51	30	19	9	11	15	17	37	49	78	680
733.00 U MD	87	52	52	29	16	7	9	12	12	32	42	68	686
733.00 A MN	136	81	78	53	31	15	15	22	26	60	74	101	690
733.00 U MN	131	82	76	52	30	15	15	21	25	59	74	102	684
733.10 A MD	120	78	47	36	26	14	13	14	21	35	51	81	736
733.10 U MD	104	88	49	35	19	12	13	7	12	40	73	70	793
733.10 A MN	157	106	63	52	35	21	16	21	30	60	81	103	746
733.10 U MN	183	104	58	48	38	26	16	17	27	58	101	92	750
734.40 A MD	123	83	54	39	28	18	17	16	23	37	55	89	791
734.40 U MD	126	86	56	42	26	11	15	12	14	45	81	73	795
734.40 A MN	158	111	75	58	40	25	20	23	38	63	81	111	800
734.40 U MN	184	108	68	54	44	29	21	18	34	62	101	97	801
735.00 A MD	81	49	44	19	14	4	7	9	11	25	37	66	557
735.00 U MD	75	57	38	14	15	4	6	7	8	20	46	50	564
735.00 A MN	112	65	68	39	24	8	10	14	18	46	65	92	560
735.00 U MN	112	71	60	37	27	8	9	13	17	47	70	84	556
736.00 A MD	88	54	46	25	15	7	9	10	14	31	44	69	590
736.00 U MD	67	52	40	21	13	5	7	9	11	24	37	62	581
736.00 A MN	119	70	68	46	28	13	12	15	23	51	68	90	600
736.00 U MN	112	67	67	42	27	12	11	15	23	44	65	89	575
737.00 A MD	87	54	47	28	16	8	10	12	15	33	45	70	603
737.00 U MD	69	51	42	23	15	7	9	9	12	33	46	58	617
737.00 A MN	119	71	69	48	28	14	13	18	25	53	68	93	613
737.00 U MN	110	73	67	43	29	14	13	17	24	54	72	87	607

APPENDIX TABLE A.5.—Continued

State Key No.			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
			(mm)												
738.00	A	MD	111	68	74	38	25	14	21	23	28	56	60	92	820
738.00	U	MD	123	80	95	41	33	11	21	24	18	55	73	112	891
738.00	A	MN	147	87	103	60	36	26	27	33	45	76	83	115	827
738.00	U	MN	176	94	123	57	36	17	27	35	28	72	104	128	892
738.10	A	MD	98	59	72	30	20	12	17	31	24	45	56	83	760
738.10	U	MD	90	97	73	24	11	8	12	36	12	25	52	102	859
738.10	A	MN	134	75	100	51	35	18	23	40	44	70	85	105	771
738.10	U	MN	166	104	126	37	18	10	19	46	23	58	82	106	811
738.20	A	MD	103	67	62	38	21	11	19	21	24	44	61	89	752
738.20	U	MD	97	71	56	28	22	6	15	15	15	43	88	93	834
738.20	A	MN	138	86	90	62	34	20	25	29	38	65	83	113	762
738.20	U	MN	159	91	109	59	35	12	24	30	24	61	103	121	835
738.40	A	MD	126	81	58	40	29	15	18	18	20	39	55	92	779
738.40	U	MD	110	72	57	38	30	13	18	14	13	43	62	61	798
738.40	A	MN	163	109	79	60	42	21	21	25	30	65	76	119	788
738.40	U	MN	181	100	69	55	44	26	22	19	27	72	90	96	807
739.00	A	MD	106	66	54	35	24	11	14	16	22	38	55	82	759
739.00	U	MD	107	69	49	30	23	8	14	12	14	35	68	75	819
739.00	A	MN	142	85	81	58	36	18	18	24	36	62	79	103	768
739.00	U	MN	164	91	85	56	38	18	19	22	27	62	91	97	796
740.00	A	MD	84	53	41	22	13	8	9	10	13	29	44	67	575
740.00	U	MD	67	64	44	20	13	5	8	8	10	23	49	53	611
740.00	A	MN	114	69	63	43	25	13	12	15	23	49	68	87	585
740.00	U	MN	111	75	62	39	27	12	12	14	22	49	74	84	584
740.10	A	MD	102	66	68	41	20	13	19	23	24	50	62	92	770
740.10	U	MD	106	71	56	39	20	10	17	20	21	57	80	100	860
740.10	A	MN	133	87	93	63	32	23	24	33	38	70	87	117	780
740.10	U	MN	159	93	108	61	33	14	24	35	24	66	108	127	851
740.20	A	MD	95	57	54	31	20	8	14	20	20	42	53	81	683
740.20	U	MD	108	59	52	18	20	8	10	14	15	38	33	85	766
740.20	A	MN	129	75	81	53	31	12	19	28	31	62	82	96	692
740.20	U	MN	165	85	108	52	27	7	15	29	20	50	67	89	720
741.00	A	MD	75	50	41	19	11	4	8	8	10	24	36	70	547
741.00	U	MD	56	50	40	16	10	5	7	7	11	22	36	62	538
741.00	A	MN	109	71	68	40	25	9	11	13	19	47	62	88	563
741.00	U	MN	93	80	66	35	24	10	11	13	20	41	63	85	551
742.00	A	MD	91	55	46	27	17	10	11	12	17	31	46	72	634
742.00	U	MD	94	56	48	27	13	5	9	7	11	26	45	70	678
742.00	A	MN	124	73	70	47	30	15	14	18	31	53	71	91	644
742.00	U	MN	143	79	74	45	31	15	14	16	22	52	82	86	664
742.10	A	MD	97	66	56	37	23	11	15	18	18	40	55	79	704
742.10	U	MD	96	63	55	36	23	9	15	12	15	54	70	69	746
742.10	A	MN	129	86	80	57	34	17	19	27	30	61	81	97	714
742.10	U	MN	149	92	84	56	35	17	19	23	23	61	93	92	749
742.30	A	MD	75	52	39	17	16	5	8	6	13	27	42	71	508
742.30	U	MD	67	39	33	21	17	0	1	0	6	27	39	58	535
742.30	A	MN	104	67	62	38	25	9	12	10	24	48	54	84	516
742.30	U	MN	111	74	59	36	27	8	11	8	17	47	63	82	544

APPENDIX TABLE A.5.—Continued

State Key No.			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
			(mm)												
743.00	A	MD	84	51	46	28	16	8	10	12	13	30	43	67	591
743.00	U	MD	77	58	41	26	16	6	9	9	13	29	40	58	604
743.00	A	MN	115	69	67	48	28	13	13	18	25	49	69	86	601
743.00	U	MN	112	75	66	44	30	12	13	17	25	49	76	84	602
744.00	A	MD	76	44	40	18	11	5	7	8	10	30	36	66	520
744.00	U	MD	70	48	35	19	13	3	6	5	8	25	41	53	529
744.00	A	MN	110	63	59	38	25	9	8	13	16	48	59	86	534
744.00	U	MN	106	68	57	33	26	8	8	12	16	47	63	80	530
745.00	A	MD	93	56	57	34	17	5	14	18	17	41	49	79	666
745.00	U	MD	99	51	55	31	9	5	13	16	11	41	44	93	729
745.00	A	MN	125	75	82	55	22	6	18	29	27	60	66	102	676
745.00	U	MN	150	81	102	53	23	5	17	28	17	54	75	99	700
745.10	A	MD	94	55	54	32	15	7	14	19	17	43	52	82	668
745.10	U	MD	108	61	52	22	9	6	12	18	11	45	39	83	713
745.10	A	MN	127	74	80	53	24	13	18	27	29	61	80	102	678
745.10	U	MN	160	86	105	52	21	7	15	28	18	51	66	90	703
747.00	A	MD	80	49	43	21	11	6	8	9	11	30	38	69	552
747.00	U	MD	75	52	42	18	15	4	7	8	8	22	39	55	571
747.00	A	MN	114	68	62	40	25	11	11	14	19	49	63	88	567
747.00	U	MN	109	72	60	36	28	10	11	14	19	50	68	84	567
748.00	A	MD	99	62	61	49	24	13	21	21	19	49	55	85	775
748.00	U	MD	107	64	53	50	22	10	21	15	16	52	70	88	810
748.00	A	MN	133	83	84	70	34	20	25	33	33	69	81	104	783
748.00	U	MN	158	92	90	69	36	21	26	28	25	65	96	102	831
750.00	A	MD	92	60	54	36	22	11	13	16	18	37	46	81	673
750.00	U	MD	68	59	52	27	19	10	12	14	16	33	46	66	651
750.00	A	MN	124	79	78	55	33	16	17	24	27	58	71	103	683
750.00	U	MN	106	83	77	47	33	16	15	23	27	52	69	97	651
751.00	A	MD	75	46	43	21	11	6	7	8	11	29	36	68	529
751.00	U	MD	59	42	45	15	11	4	7	7	8	24	40	54	534
751.00	A	MN	108	66	64	37	25	10	10	14	19	47	60	89	545
751.00	U	MN	95	65	60	37	26	9	10	12	20	46	66	83	534
751.20	A	MD	83	51	42	23	14	9	8	9	11	30	42	69	571
751.20	U	MD	72	36	37	25	16	10	7	5	8	24	44	54	577
751.20	A	MN	120	72	58	43	29	14	10	13	19	51	66	87	587
751.20	U	MN	133	62	55	50	36	16	11	9	17	54	83	83	604
752.00	A	MD	83	55	53	38	22	9	14	15	17	37	46	76	637
752.00	U	MD	73	59	57	32	19	6	12	20	15	34	42	68	623
752.00	A	MN	113	74	77	57	34	15	17	24	25	55	71	96	648
752.00	U	MN	103	73	81	57	30	13	16	26	26	52	61	93	625
752.10	A	MD	83	47	47	25	16	7	10	13	14	34	42	73	598
752.10	U	MD	85	41	33	25	15	5	11	9	10	25	43	65	611
752.10	A	MN	114	67	68	44	28	12	13	19	21	55	67	94	616
752.10	U	MN	123	67	69	43	27	11	14	17	18	51	74	87	615
752.20	A	MD	97	61	66	43	24	11	21	23	20	51	54	91	735
752.20	U	MD	110	62	70	42	21	9	21	22	14	45	58	103	827
752.20	A	MN	129	81	90	62	34	21	27	34	33	67	81	110	745
752.20	U	MN	147	89	106	58	37	12	27	36	20	62	100	111	804

APPENDIX TABLE A.5.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
752.30 A MD	106	77	71	54	31	20	31	31	27	56	64	96	848
752.30 U MD	125	83	64	58	28	18	32	20	24	54	88	93	884
752.30 A MN	138	98	96	79	41	28	37	45	42	77	92	115	858
752.30 U MN	160	106	102	78	44	28	37	38	31	73	110	113	902
753.00 A MD	102	69	72	45	31	20	30	30	24	58	62	105	832
753.00 U MD	109	80	76	46	24	14	32	25	23	46	70	127	985
753.00 A MN	135	90	98	69	38	32	36	43	37	77	91	129	844
753.00 U MN	153	100	115	66	42	21	35	43	24	73	115	137	929
754.00 A MD	98	72	76	56	30	25	38	33	29	58	71	103	883
754.00 U MD	96	73	77	53	30	23	38	33	25	46	65	100	874
754.00 A MN	130	95	102	77	46	30	46	45	42	76	93	127	894
754.00 U MN	119	111	105	71	43	29	44	49	36	76	80	109	880
755.00 A MD	51	42	34	23	13	6	6	14	13	27	30	54	421
755.00 U MD	38	48	25	12	16	5	5	17	13	13	36	40	382
755.00 A MN	72	57	50	34	22	10	8	19	18	38	46	70	432
755.00 U MN	54	62	37	28	23	8	8	20	25	41	46	66	412
756.00 A MD	96	75	82	52	35	26	37	34	30	57	71	107	902
756.00 U MD	85	68	70	53	34	23	32	32	37	48	83	114	863
756.00 A MN	128	99	103	72	51	33	43	43	36	74	98	130	921
756.00 U MN	124	102	104	64	48	30	40	44	43	67	99	132	916
757.00 A MD	76	53	47	28	19	9	7	15	17	33	45	70	552
757.00 U MD	51	68	43	15	15	7	6	15	20	16	38	42	521
757.00 A MN	106	70	60	45	29	12	11	20	24	46	66	88	567
757.00 U MN	89	86	49	37	26	12	11	22	30	52	53	65	527
757.10 A MD	78	49	48	28	11	6	10	15	11	30	28	75	540
757.10 U MD	78	44	52	26	12	6	7	7	15	22	24	72	554
757.10 A MN	108	67	74	47	22	12	12	22	20	45	48	96	555
757.10 U MN	91	63	70	49	23	14	10	25	27	44	47	99	567
757.20 A MD	74	49	42	30	12	5	9	13	8	27	34	70	502
757.20 U MD	61	48	36	21	10	3	6	14	14	17	37	78	489
757.20 A MN	106	66	67	40	22	12	12	18	16	37	55	89	518
757.20 U MN	86	73	66	34	18	12	9	21	26	31	56	91	529
758.00 A MD	75	54	48	34	12	10	14	19	21	39	48	76	643
758.00 U MD	90	62	49	30	9	6	10	16	16	31	50	48	739
758.00 A MN	109	78	73	46	21	16	18	25	29	58	70	102	663
758.00 U MN	136	90	104	43	18	8	17	26	20	46	61	84	660
760.00 A MD	95	69	75	51	26	18	32	36	25	59	71	105	847
760.00 U MD	105	83	60	60	27	13	33	28	25	49	70	121	892
760.00 A MN	127	93	96	70	43	27	38	46	32	83	98	129	869
760.00 U MN	144	108	116	68	46	17	37	43	25	72	100	122	892
761.00 A MD	122	85	100	67	54	46	64	53	43	78	99	126	1149
761.00 U MD	107	80	98	69	50	48	68	58	50	66	113	139	1108
761.00 A MN	156	108	121	82	69	54	71	66	53	96	123	154	1162
761.00 U MN	142	108	121	81	66	54	70	70	61	89	120	157	1161
762.00 A MD	127	85	130	95	66	66	97	77	64	98	121	147	1358
762.00 U MD	131	96	125	88	57	60	85	83	57	85	100	127	1253
762.00 A MN	156	114	149	112	84	75	108	91	83	117	145	175	1383
762.00 U MN	148	114	154	105	76	69	97	92	63	115	114	145	1300

APPENDIX TABLE A.5.—Continued

State Key No.			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
			(mm)												
763.00	A	MD	129	89	115	85	60	56	68	63	57	86	108	133	1235
763.00	U	MD	120	94	110	79	56	60	72	70	54	85	103	121	1234
763.00	A	MN	159	114	135	101	78	65	77	77	72	100	130	161	1255
763.00	U	MN	143	134	132	93	78	61	77	84	67	99	105	140	1213
764.00	A	MD	99	67	76	50	35	27	30	32	30	50	65	104	835
764.00	U	MD	82	64	67	51	34	28	30	33	39	44	74	110	834
764.00	A	MN	132	92	99	69	51	35	35	41	36	63	92	127	855
764.00	U	MN	113	92	98	63	43	35	33	46	47	57	91	126	849
764.10	A	MD	100	70	89	59	33	26	39	48	34	67	86	113	960
764.10	U	MD	111	74	81	54	31	23	35	38	30	58	70	106	1047
764.10	A	MN	137	94	111	77	57	37	47	58	43	91	113	140	985
764.10	U	MN	169	112	136	73	47	25	41	53	32	75	94	126	963
764.20	A	MD	130	78	122	82	53	41	69	67	49	84	108	144	1230
764.20	U	MD	112	86	109	89	48	28	49	65	31	75	82	133	1354
764.20	A	MN	164	110	145	108	74	53	79	80	61	106	131	172	1254
764.20	U	MN	164	151	172	87	66	36	67	93	34	94	108	163	1265
765.00	A	MD	101	62	69	47	30	18	24	26	25	50	70	98	824
765.00	U	MD	103	69	59	41	22	16	19	22	21	41	47	74	852
765.00	A	MN	136	87	90	66	49	20	30	36	35	71	99	127	848
765.00	U	MN	147	94	112	64	37	17	27	33	25	53	73	104	834
766.00	A	MD	124	81	101	68	49	39	48	43	37	67	94	121	1075
766.00	U	MD	98	85	85	61	42	39	43	49	45	57	93	121	1001
766.00	A	MN	158	107	125	84	67	49	55	57	48	82	118	150	1092
766.00	U	MN	139	111	125	78	59	46	49	64	55	74	105	150	1063
767.00	A	MD	124	78	99	74	43	37	52	45	46	68	96	115	1050
767.00	U	MD	122	92	87	61	38	30	49	33	38	70	59	93	1106
767.00	A	MN	156	104	122	92	60	47	59	55	59	85	119	144	1072
767.00	U	MN	175	122	142	84	55	37	55	54	39	74	92	125	1067
770.00	A	MD	102	72	83	57	34	27	33	32	30	61	71	110	908
770.00	U	MD	94	71	81	56	32	24	30	32	31	54	71	106	872
770.00	A	MN	134	94	109	77	52	36	40	40	42	76	95	142	936
770.00	U	MN	124	96	106	71	47	34	38	39	43	70	95	139	905
771.20	A	MD	135	107	114	94	72	57	75	73	55	84	110	143	1268
771.20	U	MD	114	82	109	92	65	63	76	55	55	96	111	151	1327
771.20	A	MN	168	132	124	115	80	65	81	84	72	106	134	171	1293
771.20	U	MN	155	124	122	110	85	63	81	76	57	108	142	163	1320
771.30	A	MD	161	160	208	168	124	126	182	177	226	147	188	201	2257
771.30	U	MD	148	157	162	139	139	160	160	187	184	114	190	240	2301
771.30	A	MN	182	187	217	193	140	134	178	183	223	158	200	229	2274
771.30	U	MN	163	253	188	190	135	156	178	219	223	157	199	234	2309
772.00	A	MD	205	149	242	199	152	140	169	178	122	164	217	222	2302
772.00	U	MD	193	137	205	182	132	147	170	163	123	168	200	236	2297
772.00	A	MN	237	182	259	218	181	151	176	186	136	184	233	255	2345
772.00	U	MN	216	192	249	205	176	148	175	186	137	181	241	250	2341
773.00	A	MD	145	105	144	105	75	67	83	79	66	95	120	151	1402
773.00	U	MD	134	113	143	103	73	71	77	76	68	92	114	134	1393
773.00	A	MN	179	138	160	126	96	77	89	89	76	111	137	172	1431
773.00	U	MN	168	142	155	122	96	76	88	87	75	110	136	165	1432

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State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
773.10 A MD	116	95	125	87	61	45	60	60	51	79	105	128	1181
773.10 U MD	101	95	114	87	58	46	63	46	43	75	101	130	1129
773.10 A MN	147	121	138	107	79	55	69	68	64	95	124	153	1215
773.10 U MN	133	120	141	106	80	52	69	59	47	90	130	142	1199
774.00 A MD	209	174	228	207	176	145	184	195	136	176	222	211	2481
774.00 U MD	182	182	217	190	149	157	182	208	137	147	216	218	2534
774.00 A MN	242	210	248	224	211	157	194	206	149	196	235	247	2533
774.00 U MN	211	229	234	202	194	155	200	213	154	183	243	263	2480
774.10 A MD	175	128	210	159	124	110	138	139	102	135	170	185	1942
774.10 U MD	199	134	210	151	116	103	140	116	94	127	165	194	1935
774.10 A MN	215	162	225	175	151	124	146	149	117	153	191	220	1984
774.10 U MN	210	162	228	170	151	115	142	128	92	148	196	204	1952
774.30 A MD	228	188	240	179	168	156	148	163	138	177	202	215	2454
774.30 U MD	234	165	224	180	160	155	193	196	159	209	228	228	2613
774.30 A MN	273	229	255	205	183	164	153	177	153	194	227	244	2512
774.30 U MN	281	225	251	222	189	167	178	210	189	215	266	290	2700
774.40 A MD	224	184	263	241	178	170	208	206	142	188	237	244	2714
774.40 U MD	206	207	214	226	157	170	212	160	134	209	240	231	2722
774.40 A MN	256	224	286	263	211	184	218	215	157	209	255	286	2766
774.40 U MN	231	240	276	242	200	163	227	187	126	208	289	274	2663
775.00 A MD	195	139	230	184	148	124	165	164	120	153	191	210	2206
775.00 U MD	174	149	206	174	135	123	148	155	117	150	193	202	2135
775.00 A MN	237	184	241	204	174	140	168	174	134	172	206	250	2275
775.00 U MN	211	191	227	193	160	137	156	165	141	168	207	236	2185
775.30 A MD	187	153	263	214	149	145	182	177	126	169	209	205	2347
775.30 U MD	207	126	311	245	164	148	164	125	117	163	214	220	2239
775.30 A MN	228	190	288	235	180	161	189	193	140	185	228	240	2397
775.30 U MN	219	168	281	255	177	157	170	148	121	174	234	221	2319
776.00 A MD	284	228	326	318	248	198	272	283	199	247	309	317	3488
776.00 U MD	280	243	281	294	240	204	276	271	183	237	305	343	3614
776.00 A MN	323	270	355	342	285	210	288	297	219	268	331	361	3542
776.00 U MN	296	288	349	328	277	210	299	304	225	267	344	371	3553
777.00 A MD	231	183	233	232	176	125	164	185	148	178	227	231	2505
777.00 U MD	206	179	201	203	178	117	158	167	136	157	195	210	2550
777.00 A MN	277	211	276	261	209	136	178	199	165	207	245	262	2565
777.00 U MN	244	215	260	243	204	135	180	199	165	204	249	256	2534
780.00 A MD	239	182	292	254	228	229	268	259	207	215	270	272	3119
780.00 U MD	235	185	288	229	243	232	288	262	205	213	269	259	3125
780.00 A MN	279	218	304	276	257	248	281	271	223	234	288	305	3173
780.00 U MN	247	234	291	264	244	244	285	270	226	231	294	302	3098
780.50 A MD	207	162	258	250	189	192	237	224	166	191	230	255	2714
780.50 U MD	249	161	273	263	195	160	241	191	137	221	244	246	2645
780.50 A MN	244	199	274	268	218	210	249	237	183	210	242	295	2760
780.50 U MN	235	205	281	265	209	192	245	198	143	206	259	277	2712
780.70 A MD	197	148	280	167	119	162	179	201	166	162	221	222	2418
780.70 U MD	223	154	190	139	142	152	233	177	203	167	256	218	2435
780.70 A MN	262	184	298	203	147	181	196	206	177	174	240	248	2465
780.70 U MN	237	262	212	198	148	206	223	220	234	168	257	286	2571

APPENDIX TABLE A.5.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
780.80 A MD	231	198	271	242	176	171	207	189	159	196	269	252	2755
780.80 U MD	203	190	347	248	182	144	215	161	156	226	255	283	2603
780.80 A MN	272	233	291	268	209	187	216	198	174	222	284	284	2817
780.80 U MN	230	213	304	258	216	172	216	175	151	234	300	274	2752
781.00 A MD	189	139	162	146	102	70	95	99	91	122	159	177	1738
781.00 U MD	173	128	130	131	97	67	96	97	88	127	151	161	1780
781.00 A MN	224	162	192	179	126	82	110	107	100	152	180	197	1803
781.00 U MN	214	176	185	164	127	84	111	109	101	153	185	185	1797
781.60 A MD	195	118	117	121	110	78	69	89	67	89	132	185	1508
781.60 U MD	256	108	111	123	87	47	77	65	73	95	128	132	1460
781.60 A MN	229	145	131	142	127	79	81	96	72	114	151	210	1551
781.60 U MN	219	138	117	125	114	75	80	78	78	111	189	187	1499
782.00 A MD	260	214	299	293	220	186	223	242	181	207	277	265	3114
782.00 U MD	246	233	297	294	241	203	231	243	189	226	282	302	3236
782.00 A MN	298	244	329	316	262	198	243	261	201	241	291	305	3188
782.00 U MN	280	261	333	321	268	212	247	274	229	249	303	319	3304
783.00 A MD	261	203	289	281	221	176	212	236	182	212	267	270	3049
783.00 U MD	242	207	288	281	235	189	214	249	187	215	289	279	3195
783.00 A MN	305	241	323	310	258	189	229	253	203	243	284	309	3134
783.00 U MN	301	243	321	317	275	203	236	264	227	244	296	323	3266
783.10 A MD	197	177	192	201	202	134	130	181	191	153	190	185	1948
783.10 U MD	162	147	152	182	175	119	129	167	177	144	167	119	1858
783.10 A MN	192	179	196	209	218	135	134	179	188	160	192	185	1944
783.10 U MN	189	178	186	222	220	141	134	180	181	159	198	177	1944
783.30 A MD	240	201	290	259	208	163	210	219	157	193	250	238	2883
783.30 U MD	269	197	302	263	236	155	184	169	150	202	281	244	2844
783.30 A MN	280	241	314	281	244	179	223	235	169	219	269	279	2950
783.30 U MN	254	210	317	282	258	167	215	186	149	231	296	269	2858
784.00 A MD	308	261	388	385	311	293	349	362	259	286	346	356	4134
784.00 U MD	349	285	363	382	314	297	356	354	238	278	335	340	4124
784.00 A MN	350	300	411	412	357	312	366	382	280	323	365	396	4196
784.00 U MN	316	312	397	400	353	311	369	385	278	323	366	384	4209
785.00 A MD	287	234	340	350	319	264	345	350	247	268	336	337	3952
785.00 U MD	301	245	336	347	322	270	374	349	243	270	320	319	4043
785.00 A MN	327	273	362	371	366	283	367	368	265	300	358	378	4014
785.00 U MN	327	281	343	363	358	286	376	386	277	298	342	383	4025
786.00 A MD	243	182	238	213	178	106	141	155	131	167	220	234	2434
786.00 U MD	198	180	204	191	172	98	146	143	126	182	213	208	2351
786.00 A MN	287	207	275	242	213	117	158	166	145	197	237	252	2497
786.00 U MN	256	217	262	225	208	117	161	168	145	196	239	252	2447
787.00 A MD	202	165	194	173	123	83	99	107	95	138	167	196	1908
787.00 U MD	150	144	179	168	124	92	103	129	109	126	176	205	2004
787.00 A MN	241	181	216	204	162	88	116	116	106	171	186	218	1967
787.00 U MN	220	195	213	195	155	99	113	134	127	156	180	236	2030
787.10 A MD	230	159	209	178	158	99	124	119	104	140	196	242	2131
787.10 U MD	215	145	180	185	135	64	121	102	104	167	187	186	2058
787.10 A MN	264	173	233	209	182	103	141	127	106	170	219	274	2199
787.10 U MN	249	186	229	189	177	90	140	116	104	172	233	248	2104

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State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
788.00 A MD	216	160	212	146	115	73	103	111	113	128	172	199	2016
788.00 U MD	199	151	199	138	101	65	95	97	87	121	169	189	1942
788.00 A MN	257	187	240	174	143	81	117	122	127	161	193	232	2080
788.00 U MN	253	191	234	172	134	73	115	108	104	142	212	225	1973
788.10 A MD	238	164	198	176	145	109	101	111	90	140	175	226	2175
788.10 U MD	195	145	156	173	115	70	104	84	88	164	138	217	2039
788.10 A MN	288	197	213	209	178	113	111	123	95	169	200	254	2240
788.10 U MN	251	179	208	207	170	97	110	98	98	168	220	221	2065
790.00 A MD	142	95	163	82	66	41	49	58	48	84	117	146	1320
790.00 U MD	109	101	166	66	60	35	48	50	47	87	110	130	1199
790.00 A MN	177	116	185	103	80	44	55	65	49	107	135	175	1376
790.00 U MN	148	120	188	93	80	40	58	66	50	105	150	176	1321
790.10 A MD	170	128	168	118	83	55	69	78	74	104	135	166	1532
790.10 U MD	154	123	140	100	87	45	69	72	66	110	131	144	1582
790.10 A MN	203	145	190	143	109	59	78	85	82	133	155	185	1583
790.10 U MN	196	157	181	135	109	58	80	85	84	132	170	188	1579
790.60 A MD	190	154	186	136	115	74	87	104	79	117	163	214	1811
790.60 U MD	202	130	148	123	102	59	86	71	85	124	132	183	1716
790.60 A MN	227	170	209	163	137	78	96	115	85	147	182	243	1875
790.60 U MN	225	167	183	159	141	74	94	102	88	147	199	220	1779
791.00 A MD	129	94	114	91	38	27	34	37	45	82	85	113	1002
791.00 U MD	93	90	106	68	37	28	37	37	45	93	73	85	1061
791.00 A MN	160	108	131	116	61	30	36	41	51	100	99	127	1042
791.00 U MN	106	116	124	96	72	33	38	49	60	112	95	134	1061
791.30 A MD	150	79	105	81	49	41	39	46	48	63	96	124	1031
791.30 U MD	152	73	105	72	62	25	35	30	35	49	88	83	946
791.30 A MN	181	88	116	103	59	41	45	52	47	85	110	147	1073
791.30 U MN	167	88	115	101	73	39	44	40	44	79	122	130	1028
791.60 A MD	175	95	100	84	66	58	55	66	68	63	96	143	1190
791.60 U MD	220	93	82	87	91	32	55	43	43	67	86	167	1120
791.60 A MN	206	118	109	97	85	57	71	69	74	81	112	169	1230
791.60 U MN	215	114	100	92	95	50	78	57	57	88	142	179	1296
791.70 A MD	163	84	90	79	75	31	42	54	40	54	93	115	1057
791.70 U MD	189	68	75	91	66	29	42	33	36	56	99	93	978
791.70 A MN	190	97	106	96	92	38	47	58	40	69	107	135	1093
791.70 U MN	166	93	85	93	83	34	48	38	41	57	132	129	1042
791.80 A MD	156	89	98	68	62	30	46	48	43	48	97	143	1085
791.80 U MD	180	82	81	84	89	26	46	32	33	49	81	130	971
791.80 A MN	183	110	110	90	78	34	58	53	45	72	115	163	1130
791.80 U MN	169	102	104	117	115	32	58	39	39	72	141	143	1072
792.00 A MD	186	128	185	133	92	47	62	75	75	128	143	178	1583
792.00 U MD	191	130	137	101	79	48	61	81	62	127	138	156	1617
792.00 A MN	215	145	207	164	119	51	67	82	85	161	171	199	1644
792.00 U MN	186	167	186	135	114	56	67	95	78	168	162	193	1617
794.00 A MD	156	103	116	91	59	31	34	43	39	77	97	155	1133
794.00 U MD	101	86	96	66	44	24	35	35	38	62	91	137	1079
794.00 A MN	191	116	133	116	73	34	40	48	44	101	115	170	1175
794.00 U MN	168	130	137	102	75	35	39	47	46	89	118	171	1162

APPENDIX TABLE A.5.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
795.10 A MD	171	108	139	81	66	31	34	46	38	74	118	163	1215
795.10 U MD	140	101	100	75	44	20	32	32	31	66	106	138	1095
795.10 A MN	206	124	154	101	79	34	40	51	39	98	136	189	1264
795.10 U MN	186	129	154	93	78	30	40	43	35	95	146	171	1177
796.00 A MD	76	50	43	20	13	4	5	10	14	25	25	61	546
796.00 U MD	59	50	37	19	9	2	4	10	14	27	26	61	516
796.00 A MN	102	63	69	42	24	10	8	17	22	47	53	88	541
796.00 U MN	93	64	67	39	22	9	8	17	22	48	52	89	531
797.00 A MD	76	46	41	22	12	3	5	10	13	25	23	64	551
797.00 U MD	56	52	31	21	13	4	3	8	12	22	27	53	542
797.00 A MN	98	60	69	44	20	8	8	18	21	51	54	90	547
797.00 U MN	83	74	62	33	17	7	8	19	25	54	51	88	533
798.00 A MD	78	50	35	20	11	4	5	10	13	21	21	53	548
798.00 U MD	57	51	32	17	12	3	5	10	13	17	24	52	541
798.00 A MN	102	61	65	40	20	10	10	18	22	40	55	86	521
798.00 U MN	90	76	61	32	20	10	9	18	22	34	57	83	518
800.00 A MD	113	77	70	39	25	11	14	18	28	133	45	99	805
800.00 U MD	100	85	59	29	21	8	10	15	20	46	41	113	837
800.00 A MN	143	96	102	62	41	23	19	28	34	157	74	131	802
800.00 U MN	139	107	89	46	33	15	18	32	30	163	59	115	759
800.10 A MD	82	58	56	24	22	2	7	12	22	32	36	68	647
800.10 U MD	94	49	96	23	52	1	21	5	16	28	54	81	693
800.10 A MN	110	73	80	44	33	6	11	20	38	53	65	101	641
800.10 U MN	118	59	106	47	50	7	16	24	26	52	87	119	707
801.00 A MD	74	47	39	20	11	2	5	9	13	21	20	59	509
801.00 U MD	59	55	24	21	10	2	2	10	9	15	19	30	463
801.00 A MN	100	60	65	41	19	9	8	17	17	45	51	86	501
801.00 U MN	86	72	60	32	17	9	7	20	19	51	33	60	445
802.00 A MD	99	63	52	33	15	8	11	14	20	30	38	84	700
802.00 U MD	103	72	50	28	13	6	7	11	13	27	49	92	714
802.00 A MN	131	79	85	55	28	19	16	23	31	53	68	112	696
802.00 U MN	128	90	88	48	27	16	16	24	26	58	70	106	696
802.10 A MD	103	87	64	40	22	17	21	29	25	39	48	88	812
802.10 U MD	82	135	65	39	23	24	21	31	29	54	43	48	732
802.10 A MN	135	106	95	63	40	28	27	37	42	64	73	113	813
802.10 U MN	78	138	84	41	41	32	23	39	39	96	60	78	752
803.00 A MD	215	158	148	127	89	73	93	83	74	101	134	208	1806
803.00 U MD	183	156	152	121	100	81	92	85	79	97	136	216	1728
803.00 A MN	255	175	195	156	112	85	103	100	88	134	158	240	1805
803.00 U MN	231	163	184	152	113	87	101	99	96	123	157	237	1756
804.00 A MD	83	56	49	27	17	13	13	14	28	28	38	78	656
804.00 U MD	85	46	58	27	19	9	12	7	20	28	46	82	596
804.00 A MN	114	69	79	47	31	20	18	22	43	48	65	100	654
804.00 U MN	117	72	78	40	28	21	20	16	33	41	74	101	636
804.10 A MD	159	104	109	85	46	38	49	40	46	73	78	95	1160
804.10 U MD	116	124	76	60	41	46	30	34	36	91	60	78	1082
804.10 A MN	190	115	137	86	61	49	62	55	58	96	83	120	1160
804.10 U MN	169	115	130	84	53	49	44	55	53	121	74	106	1074

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State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
805.00 A MD	150	105	92	65	41	25	33	33	40	56	89	122	1102
805.00 U MD	110	112	97	56	34	23	31	33	38	57	84	109	1094
805.00 A MN	191	130	124	89	53	35	38	46	55	85	111	157	1103
805.00 U MN	178	134	123	86	52	35	38	46	50	87	114	152	1100
806.00 A MD	135	91	89	56	35	21	28	38	32	56	81	116	1023
806.00 U MD	120	93	80	57	33	22	25	25	33	56	80	104	985
806.00 A MN	175	113	122	88	47	29	34	50	48	82	105	145	1034
806.00 U MN	164	116	120	85	47	30	34	49	45	83	108	142	1022
807.00 A MD	114	72	69	44	26	15	19	21	24	49	61	96	820
807.00 U MD	89	73	71	39	25	14	17	17	26	50	56	76	813
807.00 A MN	152	91	97	67	37	23	23	33	38	73	84	123	828
807.00 U MN	139	94	96	66	37	23	23	32	36	74	87	117	829
808.00 A MD	149	105	84	66	38	27	24	29	33	64	82	111	997
808.00 U MD	149	102	82	46	33	19	26	21	21	52	69	110	1000
808.00 A MN	179	114	109	88	48	34	30	36	46	77	103	124	1005
808.00 U MN	188	115	119	85	44	28	33	38	35	71	106	126	995
809.00 A MD	123	82	82	52	28	16	23	26	29	59	72	106	930
809.00 U MD	110	99	69	47	30	15	22	24	22	50	84	99	977
809.00 A MN	161	102	113	81	41	24	29	39	41	81	95	131	939
809.00 U MN	155	107	120	75	41	20	32	44	32	87	101	130	955
809.10 A MD	95	66	70	30	20	12	19	28	24	51	54	83	775
809.10 U MD	148	109	73	28	13	8	11	35	13	31	64	122	890
809.10 A MN	129	81	95	56	34	16	23	40	41	78	82	106	784
809.10 U MN	191	112	109	44	19	9	20	32	23	65	92	125	847
809.30 A MD	128	82	61	52	31	23	20	27	25	41	67	87	805
809.30 U MD	136	81	60	55	27	29	18	15	18	58	73	64	800
809.30 A MN	163	108	85	74	40	30	24	40	41	65	94	108	811
809.30 U MN	178	103	71	68	42	38	24	24	41	71	90	77	843
810.00 A MD	117	92	95	67	45	29	38	34	40	63	86	108	1028
810.00 U MD	90	93	89	62	54	30	37	36	54	55	68	121	970
810.00 A MN	149	115	129	96	56	38	45	48	52	85	112	138	1035
810.00 U MN	127	105	113	88	57	42	41	48	67	76	94	146	1000
811.00 A MD	107	72	76	46	27	17	23	26	27	56	63	100	844
811.00 U MD	93	69	74	48	27	17	22	24	28	54	65	105	891
811.00 A MN	144	94	106	68	39	26	27	37	37	78	87	127	854
811.00 U MN	136	96	108	66	38	23	26	40	36	81	90	136	886
812.00 A MD	114	76	81	54	26	17	21	26	29	57	71	103	901
812.00 U MD	105	89	65	49	27	15	24	28	30	40	70	96	910
812.00 A MN	149	98	111	80	42	24	27	40	41	81	95	128	910
812.00 U MN	139	112	117	73	41	22	28	45	34	83	101	122	919
812.10 A MD	118	75	83	50	27	18	23	28	31	64	69	106	919
812.10 U MD	130	70	97	44	29	16	20	27	22	57	91	130	1021
812.10 A MN	156	95	112	73	41	31	29	41	47	88	95	133	929
812.10 U MN	188	103	133	71	42	20	29	43	32	84	117	145	1001
812.20 A MD	107	100	103	60	33	23	23	31	31	54	88	117	1020
812.20 U MD	61	109	70	61	24	30	21	34	49	60	83	55	894
812.20 A MN	143	130	161	88	48	31	27	44	43	95	115	156	1034
812.20 U MN	83	135	123	67	41	38	25	42	63	70	116	149	961

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State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
813.00 A MD	117	83	86	51	33	21	26	28	31	57	74	107	932
813.00 U MD	99	72	82	51	30	21	25	29	33	52	65	113	884
813.00 A MN	150	103	116	77	48	29	32	41	42	80	97	135	943
813.00 U MN	133	97	116	73	46	28	30	43	47	74	91	138	919
813.10 A MD	112	75	79	46	27	18	22	33	28	54	72	94	887
813.10 U MD	121	73	84	41	25	14	20	21	23	38	39	87	994
813.10 A MN	147	94	106	74	38	24	27	45	41	81	103	115	897
813.10 U MN	177	104	139	75	32	18	25	46	29	70	79	114	920
813.30 A MD	145	87	73	58	34	29	26	30	32	53	80	98	945
813.30 U MD	157	80	68	68	38	31	29	20	24	73	81	90	916
813.30 A MN	194	118	101	83	46	40	32	42	49	76	106	119	951
813.30 U MN	216	109	86	78	48	45	32	29	47	81	103	87	976
814.10 A MD	144	111	132	88	61	54	63	62	53	79	114	132	1461
814.10 U MD	176	120	142	80	64	54	57	60	46	84	122	146	1368
814.10 A MN	179	132	163	120	76	61	70	77	80	101	139	159	1469
814.10 U MN	192	139	167	116	78	60	70	69	60	95	154	156	1485
815.00 A MD	118	84	86	57	37	27	31	33	32	59	76	107	956
815.00 U MD	104	80	79	56	34	23	31	28	30	58	81	108	976
815.00 A MN	152	106	115	81	51	36	36	45	42	81	99	131	966
815.00 U MN	142	109	113	81	50	37	36	45	41	83	102	127	988
816.00 A MD	98	70	72	50	26	17	23	24	27	51	63	95	813
816.00 U MD	86	81	67	36	26	17	22	26	25	38	52	80	854
816.00 A MN	129	90	99	72	39	22	29	36	37	70	89	118	822
816.00 U MN	119	101	103	63	36	21	26	41	38	69	81	99	807
817.00 A MD	120	90	97	60	43	27	33	34	34	63	79	108	1010
817.00 U MD	106	81	96	57	40	29	36	32	38	47	81	91	1007
817.00 A MN	151	112	125	88	60	37	40	48	42	85	105	135	1020
817.00 U MN	134	119	127	77	55	36	38	52	41	82	96	126	1002
817.10 A MD	120	86	81	66	41	30	43	40	43	57	80	113	1020
817.10 U MD	128	75	88	68	36	28	51	27	34	53	127	105	1088
817.10 A MN	154	106	111	91	53	37	50	54	53	97	103	140	1035
817.10 U MN	169	105	112	89	57	34	55	53	46	87	138	145	1093
817.20 A MD	112	81	83	48	34	23	30	30	26	61	71	107	911
817.20 U MD	66	87	79	52	29	21	32	29	33	65	72	73	876
817.20 A MN	148	106	120	68	49	33	36	40	34	83	93	138	922
817.20 U MN	90	112	104	74	45	36	33	45	42	96	86	126	902
817.30 A MD	121	83	82	51	35	25	27	29	27	54	69	100	896
817.30 U MD	76	76	74	47	35	20	29	24	30	57	74	71	895
817.30 A MN	163	107	123	71	48	33	32	39	39	75	95	124	906
817.30 U MN	128	105	94	71	46	34	32	36	43	80	96	117	894
818.00 A MD	110	75	72	53	29	19	26	27	27	51	67	100	850
818.00 U MD	125	75	69	48	29	20	25	20	25	51	89	109	925
818.00 A MN	142	94	97	75	41	25	31	41	40	75	90	126	861
818.00 U MN	157	96	96	76	43	23	32	35	33	78	98	121	905
818.10 A MD	120	88	64	52	30	22	20	20	24	44	62	80	855
818.10 U MD	108	89	58	54	30	26	21	12	24	55	103	79	935
818.10 A MN	154	118	89	76	42	29	24	29	40	67	91	95	864
818.10 U MN	171	108	80	74	45	35	26	20	38	76	111	82	881

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State Key No.			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
			(mm)												
820.10	A	MD	125	100	93	71	48	35	44	47	35	63	90	126	1082
820.10	U	MD	130	88	102	73	49	33	54	35	35	59	124	130	1141
820.10	A	MN	159	121	122	98	63	43	53	61	42	93	111	154	1094
820.10	U	MN	168	117	121	94	68	39	58	60	39	85	142	159	1166
820.20	A	MD	128	94	100	66	45	28	39	41	37	61	82	122	1071
820.20	U	MD	151	92	115	66	43	27	46	33	38	63	115	117	1116
820.20	A	MN	164	114	132	93	59	34	46	55	54	91	104	150	1084
820.20	U	MN	179	121	131	96	61	30	51	50	49	80	140	148	1155
820.40	A	MD	82	81	107	60	59	47	44	43	32	90	89	102	1059
820.40	U	MD	69	68	101	99	45	40	49	41	22	65	78	120	988
820.40	A	MN	97	104	127	77	76	60	52	58	63	108	113	135	1070
820.40	U	MN	68	91	140	127	69	56	61	56	32	77	95	199	1094
821.00	A	MD	141	112	122	86	64	55	72	63	61	85	116	141	1349
821.00	U	MD	134	123	102	91	68	54	75	73	65	81	118	150	1328
821.00	A	MN	174	132	153	114	80	63	81	78	76	108	136	177	1355
821.00	U	MN	167	134	155	106	77	61	83	84	68	114	138	171	1378
823.00	A	MD	150	114	124	92	70	59	72	65	62	96	119	136	1406
823.00	U	MD	156	116	115	97	77	55	67	63	57	94	131	139	1434
823.00	A	MN	185	138	155	120	87	67	82	85	76	118	141	166	1410
823.00	U	MN	176	145	153	113	85	67	83	84	72	119	143	163	1421
824.00	A	MD	91	92	57	48	21	12	21	25	21	48	54	90	749
824.00	U	MD	91	79	49	47	20	11	23	27	22	53	62	78	823
824.00	A	MN	123	110	81	68	32	20	26	34	33	67	79	115	760
824.00	U	MN	123	124	89	64	33	16	26	37	27	78	85	98	789
824.10	A	MD	129	95	90	83	55	33	47	44	36	69	84	116	1070
824.10	U	MD	155	89	101	128	60	33	56	28	34	78	110	117	1062
824.10	A	MN	169	121	121	111	67	39	55	60	52	93	112	137	1076
824.10	U	MN	192	116	110	112	70	45	58	46	46	99	138	124	1130
825.00	A	MD	138	103	118	65	51	38	46	45	40	73	91	129	1168
825.00	U	MD	118	86	105	63	52	37	48	48	43	63	85	127	1074
825.00	A	MN	171	129	148	90	72	47	56	57	51	93	123	162	1185
825.00	U	MN	159	126	136	94	64	47	53	59	56	89	104	162	1154
825.10	A	MD	108	80	79	61	38	26	37	35	34	66	76	107	940
825.10	U	MD	126	87	67	61	39	23	35	38	39	58	108	120	1017
825.10	A	MN	142	103	104	85	47	35	46	48	45	85	102	133	952
825.10	U	MN	152	117	106	80	47	32	45	52	45	91	125	123	1018
825.30	A	MD	137	97	95	107	67	55	68	80	59	74	126	111	1233
825.30	U	MD	125	105	93	147	71	64	74	47	64	74	131	93	1137
825.30	A	MN	165	120	120	127	84	62	81	99	76	84	134	124	1244
825.30	U	MN	170	107	106	135	79	65	88	58	65	85	129	103	1238
826.00	A	MD	148	105	114	85	61	54	64	61	50	93	111	131	1274
826.00	U	MD	137	102	109	82	61	54	62	59	49	77	140	144	1313
826.00	A	MN	180	129	142	109	78	63	72	71	61	106	135	162	1283
826.00	U	MN	168	139	139	100	75	61	73	73	59	102	146	153	1298
827.00	A	MD	172	139	160	139	110	107	138	116	96	140	163	174	1915
827.00	U	MD	166	150	152	142	109	100	130	110	104	137	174	181	1896
827.00	A	MN	205	167	190	168	131	116	148	133	111	158	187	208	1917
827.00	U	MN	194	174	187	160	128	117	148	133	108	158	192	210	1941

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State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
830.00 A MD	143	93	110	69	48	40	52	53	41	73	93	131	1159
830.00 U MD	142	93	105	72	53	37	57	53	39	77	93	151	1180
830.00 A MN	177	116	135	93	57	50	58	57	55	89	112	153	1164
830.00 U MN	177	117	145	95	58	46	62	64	42	97	127	156	1199
830.10 A MD	162	105	115	89	55	53	68	73	50	97	109	138	1276
830.10 U MD	138	109	122	85	48	48	69	65	44	85	110	174	1439
830.10 A MN	193	129	140	114	70	64	75	82	65	113	136	169	1288
830.10 U MN	197	140	157	105	73	53	78	82	46	110	157	171	1360
831.00 A MD	115	80	83	60	37	30	43	45	31	65	81	120	1004
831.00 U MD	129	90	69	65	32	25	43	40	29	56	93	129	1014
831.00 A MN	147	104	109	84	47	38	51	61	44	88	104	148	1018
831.00 U MN	165	118	130	80	50	29	50	58	32	80	108	142	1047
831.10 A MD	219	166	232	194	154	182	217	168	145	184	211	219	2568
831.10 U MD	202	170	246	213	156	163	184	167	137	185	220	222	2594
831.10 A MN	251	196	263	225	176	194	228	190	160	195	237	260	2574
831.10 U MN	229	193	263	219	175	188	225	182	146	192	245	243	2543
832.00 A MD	179	142	170	118	101	101	137	111	95	134	163	175	1906
832.00 U MD	173	150	225	126	111	99	130	120	102	140	170	180	1884
832.00 A MN	216	168	203	144	120	110	152	128	102	156	192	206	1906
832.00 U MN	213	175	209	142	126	114	154	138	109	159	187	220	1943
832.20 A MD	209	161	221	169	125	125	154	156	128	187	186	213	2207
832.20 U MD	199	132	250	197	140	124	154	104	120	186	224	196	2134
832.20 A MN	235	189	255	206	148	132	168	164	145	214	201	251	2214
832.20 U MN	229	167	247	217	150	119	169	139	123	209	224	213	2243
832.30 A MD	181	133	164	130	101	112	155	122	77	137	154	166	2021
832.30 U MD	198	122	121	121	86	149	183	123	147	116	194	160	1819
832.30 A MN	206	160	202	136	123	123	158	132	97	164	175	196	2021
832.30 U MN	198	201	183	144	123	156	166	145	147	152	185	226	2018
832.70 A MD	176	123	164	119	95	82	91	104	80	137	146	175	1715
832.70 U MD	187	105	187	130	91	87	110	63	79	132	207	179	1811
832.70 A MN	213	144	190	153	115	91	98	110	104	176	177	214	1721
832.70 U MN	220	128	182	171	122	85	111	79	86	169	251	198	1821
832.80 A MD	194	130	195	145	117	113	121	125	98	161	188	196	2076
832.80 U MD	160	115	206	164	143	124	108	85	98	156	234	220	2095
832.80 A MN	229	155	216	180	140	122	131	135	121	173	222	237	2082
832.80 U MN	213	130	202	204	150	112	133	99	102	171	286	209	2110
833.00 A MD	216	175	245	209	183	199	246	199	173	195	225	225	2689
833.00 U MD	185	169	258	214	170	186	234	205	179	188	228	231	2872
833.00 A MN	249	203	278	237	207	210	264	217	180	209	251	259	2686
833.00 U MN	250	200	275	236	205	209	262	215	183	211	255	258	2746
834.00 A MD	146	90	95	71	59	56	68	70	52	88	106	113	1196
834.00 U MD	147	125	100	55	37	49	61	63	51	84	97	143	1231
834.00 A MN	175	116	121	97	78	67	79	77	66	100	132	140	1204
834.00 U MN	193	153	137	73	54	52	70	91	47	101	123	154	1254
834.10 A MD	123	91	108	68	52	47	56	52	43	79	92	119	1138
834.10 U MD	117	97	94	67	54	41	50	52	44	82	96	105	1167
834.10 A MN	149	118	132	89	70	54	64	62	52	97	111	158	1151
834.10 U MN	147	129	137	86	66	51	62	69	54	98	96	147	1162

APPENDIX TABLE A.5.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
834.30 A MD	181	141	187	174	118	116	132	162	99	124	160	260	1912
834.30 U MD	183	142	137	154	115	86	124	148	91	119	170	269	1979
834.30 A MN	212	151	195	189	133	125	133	166	108	136	176	288	1942
834.30 U MN	194	152	189	186	128	112	136	159	105	138	197	287	1877
834.70 A MD	191	147	178	163	117	129	164	142	101	156	187	193	2076
834.70 U MD	196	156	199	156	109	110	167	118	97	144	178	201	2166
834.70 A MN	221	175	210	188	134	138	175	153	116	166	214	234	2083
834.70 U MN	220	178	213	183	128	122	172	141	96	162	216	204	2052
834.80 A MD	184	116	149	138	104	91	121	117	75	132	154	170	1627
834.80 U MD	162	116	152	173	92	86	126	78	68	142	185	173	1559
834.80 A MN	216	138	175	158	129	98	128	131	90	157	178	207	1629
834.80 U MN	215	131	156	164	106	93	123	95	77	156	187	169	1701
835.00 A MD	129	85	104	73	46	48	60	60	40	87	105	122	1140
835.00 U MD	121	89	98	71	45	38	66	50	35	81	113	130	1192
835.00 A MN	156	110	126	94	60	54	66	68	51	110	130	151	1152
835.00 U MN	159	127	139	85	64	45	71	71	36	104	141	147	1162
836.00 A MD	296	228	332	310	258	237	322	331	213	291	313	305	3730
836.00 U MD	295	228	331	310	258	237	321	331	213	290	313	304	3730
836.00 A MN	324	274	358	344	308	258	328	324	243	294	349	367	3770
836.00 U MN	324	273	358	344	308	257	328	323	243	293	348	366	3769
836.10 A MD	168	125	157	147	139	121	144	178	122	181	192	169	1986
836.10 U MD	157	114	167	139	122	148	147	194	134	157	190	182	2058
836.10 A MN	186	162	193	157	149	133	152	177	132	189	207	196	2014
836.10 U MN	164	209	191	150	142	155	163	190	149	183	192	202	2073
837.00 A MD	299	232	306	321	226	166	213	235	197	236	297	329	3377
837.00 U MD	298	232	306	320	225	165	212	235	196	236	296	328	3376
837.00 A MN	352	285	382	382	293	192	253	258	224	283	325	358	3584
837.00 U MN	351	285	381	381	292	192	253	258	223	283	325	357	3584
838.00 A MD	178	148	163	112	90	43	59	59	75	96	142	159	1564
838.00 U MD	159	143	152	90	79	33	61	49	67	78	125	165	1647
838.00 A MN	220	181	213	147	115	51	72	67	83	123	163	184	1657
838.00 U MN	207	183	199	146	110	43	75	65	73	114	182	193	1607
838.20 A MD	264	169	179	181	123	89	117	128	109	123	206	254	2122
838.20 U MD	318	135	138	177	125	80	94	106	83	123	210	172	2071
838.20 A MN	302	207	210	215	164	98	140	138	126	156	249	275	2214
838.20 U MN	290	196	181	203	151	109	112	117	110	149	237	220	2126
839.70 A MD	196	219	203	224	137	77	166	162	116	221	358	267	2223
839.70 U MD	248	169	177	231	134	75	155	89	116	181	274	178	2190
839.70 A MN	222	205	219	228	206	86	167	168	112	236	347	271	2277
839.70 U MN	264	204	242	260	206	85	158	135	122	206	274	231	2403
840.10 A MD	140	106	108	77	50	42	50	55	57	73	107	139	1191
840.10 U MD	126	68	74	82	58	33	41	49	53	70	114	109	1184
840.10 A MN	169	127	140	106	80	51	60	63	61	94	126	156	1266
840.10 U MN	157	122	127	102	82	47	55	55	57	91	141	137	1218
841.00 A MD	116	89	81	50	28	13	21	24	20	40	65	93	825
841.00 U MD	107	87	76	45	24	11	15	21	15	37	68	90	836
841.00 A MN	147	109	103	73	45	23	26	33	25	64	84	114	828
841.00 U MN	144	118	102	64	44	22	24	33	22	68	78	103	838

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State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
842.00 A MD	217	163	177	159	93	60	71	63	74	92	151	205	1844
842.00 U MD	201	151	161	147	94	64	76	65	88	88	133	225	1883
842.00 A MN	255	180	199	191	111	72	83	80	89	128	176	234	1840
842.00 U MN	236	175	190	186	115	75	78	83	91	124	170	239	1804
842.10 A MD	150	135	142	117	76	30	34	33	41	112	61	160	1324
842.10 U MD	154	142	113	134	69	34	44	30	33	81	87	181	1358
842.10 A MN	175	155	180	148	82	34	41	47	58	136	85	200	1310
842.10 U MN	190	186	154	137	78	50	45	38	52	131	117	188	1372
843.00 A MD	122	90	84	57	29	16	23	22	21	41	70	97	901
843.00 U MD	112	93	88	50	26	15	21	24	17	41	72	90	876
843.00 A MN	154	109	108	83	45	26	28	32	26	70	92	122	905
843.00 U MN	146	115	107	75	44	28	27	33	23	72	90	117	900
844.00 A MD	242	225	215	182	107	93	110	89	85	134	155	270	2331
844.00 U MD	261	230	199	182	107	101	97	91	65	120	168	250	2121
844.00 A MN	273	261	247	219	153	97	115	106	118	172	174	318	2322
844.00 U MN	259	274	220	177	133	98	103	96	87	183	172	277	2047
845.00 A MD	114	88	80	50	26	15	24	22	20	36	69	103	907
845.00 U MD	145	99	79	42	23	12	21	18	17	35	80	115	892
845.00 A MN	148	110	104	75	43	24	29	33	24	66	92	127	911
845.00 U MN	175	115	108	71	40	21	29	32	20	66	99	123	944
846.00 A MD	129	100	92	55	29	15	22	23	26	44	72	109	935
846.00 U MD	107	104	93	50	28	10	20	23	17	39	82	94	931
846.00 A MN	168	125	119	82	45	26	28	34	29	71	93	135	938
846.00 U MN	160	134	117	73	46	28	26	35	27	73	97	131	946
847.00 A MD	97	78	74	43	21	13	19	20	19	34	57	92	784
847.00 U MD	87	76	74	42	21	13	19	19	19	31	57	93	746
847.00 A MN	132	100	97	67	36	21	24	30	25	62	80	116	794
847.00 U MN	122	107	95	61	35	21	24	29	27	56	79	118	783
848.00 A MD	126	104	98	61	31	22	30	24	27	47	81	124	1007
848.00 U MD	160	103	108	51	32	22	25	20	24	52	94	118	1042
848.00 A MN	162	132	122	89	45	28	35	35	32	77	104	152	1010
848.00 U MN	182	143	124	86	48	27	35	34	29	76	116	142	1047
849.00 A MD	118	90	86	49	24	15	23	18	21	41	67	109	896
849.00 U MD	127	73	104	42	23	12	17	12	16	45	76	104	928
849.00 A MN	156	116	108	73	39	21	27	27	26	70	89	136	898
849.00 U MN	176	125	110	71	42	19	27	26	22	70	99	129	940
850.00 A MD	121	93	84	49	25	12	19	20	21	40	72	105	891
850.00 U MD	126	98	95	34	20	9	17	19	15	33	84	97	853
850.00 A MN	159	119	110	74	40	21	25	33	30	69	95	132	894
850.00 U MN	161	127	108	68	38	18	22	32	23	76	91	126	908
851.00 A MD	119	94	81	50	27	13	20	21	22	36	72	103	883
851.00 U MD	130	96	92	37	26	11	18	20	15	34	79	98	846
851.00 A MN	154	119	106	76	42	21	26	34	30	64	96	131	886
851.00 U MN	152	119	103	70	40	20	24	33	24	71	94	123	899
852.00 A MD	112	92	81	51	26	15	23	24	24	40	69	100	886
852.00 U MD	112	93	89	46	22	11	22	25	18	41	71	91	877
852.00 A MN	144	117	107	78	41	23	28	36	32	68	91	129	889
852.00 U MN	143	124	106	71	39	19	26	36	25	75	88	121	893

APPENDIX TABLE A.5.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
853.00 A MD	132	102	88	58	32	18	23	24	27	45	80	113	971
853.00 U MD	118	109	97	47	31	15	23	24	22	41	76	99	959
853.00 A MN	168	127	115	86	48	27	29	37	35	73	104	144	973
853.00 U MN	164	140	114	77	46	26	28	38	29	77	101	132	989
854.00 A MD	106	91	79	55	25	17	26	31	27	41	71	100	871
854.00 U MD	108	89	73	49	25	17	21	24	20	38	73	88	846
854.00 A MN	139	111	102	80	39	24	32	42	33	67	93	126	873
854.00 U MN	138	116	93	74	37	22	31	42	27	74	91	117	859
855.00 A MD	144	113	102	63	35	21	27	28	32	50	87	122	1070
855.00 U MD	126	109	111	60	34	21	24	25	29	53	90	103	1029
855.00 A MN	182	139	131	90	48	31	33	41	43	79	112	157	1072
855.00 U MN	170	145	129	81	47	32	32	42	39	81	116	149	1076
856.00 A MD	119	96	81	56	29	17	27	27	27	41	76	107	923
856.00 U MD	115	100	84	46	26	14	25	25	21	43	73	97	883
856.00 A MN	155	118	107	83	44	25	33	40	34	68	100	135	926
856.00 U MN	153	124	104	76	42	23	31	39	28	75	98	126	938
857.00 A MD	134	107	100	62	35	23	24	28	30	52	85	109	1007
857.00 U MD	111	122	97	52	34	21	21	28	24	45	70	109	942
857.00 A MN	168	127	133	87	48	28	29	41	40	77	105	134	1008
857.00 U MN	148	141	133	80	51	26	29	45	30	84	101	128	991
859.00 A MD	135	97	95	59	43	31	34	35	39	57	92	115	1078
859.00 U MD	123	99	92	51	40	32	33	37	32	44	89	140	1061
859.00 A MN	173	119	132	85	55	41	40	49	54	84	115	140	1078
859.00 U MN	157	123	147	80	56	37	44	57	39	87	117	143	1088
860.00 A MD	127	103	99	64	35	24	31	29	36	53	89	120	1027
860.00 U MD	112	105	93	56	33	23	34	30	37	48	96	128	987
860.00 A MN	160	126	128	90	48	32	37	42	46	76	111	148	1029
860.00 U MN	145	128	126	80	45	31	38	45	44	78	114	150	1038
860.10 A MD	106	103	91	50	24	20	23	29	28	54	86	92	898
860.10 U MD	76	100	83	53	33	30	26	26	49	46	118	62	975
860.10 A MN	141	125	115	76	34	29	32	41	34	77	101	111	900
860.10 U MN	88	158	110	51	36	37	30	46	53	74	119	122	928
860.30 A MD	136	106	90	52	32	27	20	35	33	64	91	120	1052
860.30 U MD	88	113	89	55	37	30	28	42	67	44	129	88	1066
860.30 A MN	177	131	117	75	44	37	27	49	41	97	110	147	1054
860.30 U MN	115	171	110	54	46	46	33	56	68	95	130	163	1092
861.00 A MD	125	111	101	73	41	35	44	36	40	59	95	127	1117
861.00 U MD	131	112	101	72	43	31	39	36	36	53	95	120	1081
861.00 A MN	156	134	130	99	58	41	52	49	41	86	121	159	1118
861.00 U MN	151	146	125	91	54	40	50	49	38	91	122	148	1118
862.00 A MD	142	113	108	67	42	31	34	36	40	63	99	131	1164
862.00 U MD	130	109	106	64	41	28	34	39	37	63	104	129	1154
862.00 A MN	177	140	144	95	57	41	40	52	58	85	120	159	1165
862.00 U MN	163	143	143	85	54	40	40	56	53	86	124	162	1157
863.00 A MD	141	102	98	61	48	33	41	41	40	64	93	118	1129
863.00 U MD	128	99	94	58	47	33	40	41	48	63	90	114	1067
863.00 A MN	177	124	138	90	60	41	47	57	58	93	113	145	1124
863.00 U MN	168	117	133	84	60	42	46	56	58	88	110	145	1094

APPENDIX TABLE A.5.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
863.10 A MD	158	111	106	77	48	33	41	40	48	64	94	129	1154
863.10 U MD	193	114	105	69	46	26	41	39	35	67	106	144	1151
863.10 A MN	191	133	136	104	63	43	47	53	65	86	116	154	1158
863.10 U MN	210	141	142	99	64	36	47	50	49	80	124	156	1210
864.00 A MD	142	118	120	89	61	56	66	55	53	74	116	144	1366
864.00 U MD	137	122	115	89	60	57	63	60	49	77	113	155	1355
864.00 A MN	176	141	149	113	81	62	74	70	57	100	143	175	1366
864.00 U MN	166	151	149	103	79	60	73	73	52	104	141	172	1348
865.00 A MD	141	104	101	67	46	36	38	40	38	65	94	120	1126
865.00 U MD	122	101	95	61	42	37	36	36	34	70	94	122	1123
865.00 A MN	177	127	138	95	60	43	45	57	51	92	118	148	1127
865.00 U MN	165	133	137	92	59	44	44	57	47	96	118	145	1137
866.00 A MD	142	111	105	74	50	36	41	41	42	66	102	133	1171
866.00 U MD	130	122	101	68	49	35	39	42	40	68	107	129	1164
866.00 A MN	179	135	140	105	64	43	47	56	54	93	127	162	1173
866.00 U MN	172	144	139	96	64	43	46	56	50	96	130	158	1204
867.00 A MD	168	135	137	106	69	59	75	66	62	89	131	168	1530
867.00 U MD	143	141	127	101	65	55	76	68	65	92	131	175	1581
867.00 A MN	203	163	168	133	87	65	85	82	69	118	159	200	1531
867.00 U MN	189	170	166	124	84	66	90	88	68	121	163	204	1541
867.40 A MD	221	193	198	215	133	97	158	118	96	163	229	230	2307
867.40 U MD	247	173	227	237	136	90	156	100	106	159	252	236	2341
867.40 A MN	267	217	238	248	158	109	174	143	108	175	260	274	2309
867.40 U MN	268	211	241	288	160	101	173	116	97	170	277	224	2357
870.00 A MD	150	129	129	109	68	59	72	61	62	85	121	142	1489
870.00 U MD	141	130	128	105	67	59	72	68	67	86	122	144	1419
870.00 A MN	191	163	164	137	89	64	83	78	64	113	152	183	1490
870.00 U MN	179	167	159	132	87	66	83	80	70	109	153	186	1474
871.00 A MD	161	126	120	88	59	49	49	49	50	75	110	135	1325
871.00 U MD	146	131	113	85	57	48	44	48	50	73	104	123	1352
871.00 A MN	199	151	158	122	74	59	58	65	62	104	134	166	1326
871.00 U MN	192	150	155	121	72	58	56	65	60	103	133	166	1334
872.00 A MD	149	108	123	74	58	52	58	56	51	71	111	128	1297
872.00 U MD	121	102	116	67	60	53	58	63	62	66	102	135	1275
872.00 A MN	187	130	158	107	71	59	66	72	66	98	131	156	1297
872.00 U MN	163	136	161	97	72	59	63	79	72	92	121	166	1267
873.00 A MD	167	130	129	90	69	66	66	67	55	94	130	140	1468
873.00 U MD	162	143	114	75	68	65	61	75	58	102	132	126	1421
873.00 A MN	204	155	165	125	81	71	74	83	67	120	155	170	1470
873.00 U MN	177	162	167	108	77	73	72	90	65	119	145	173	1443
873.10 A MD	162	127	130	101	74	66	75	67	57	86	131	156	1436
873.10 U MD	176	135	124	104	66	70	73	63	59	101	134	179	1521
873.10 A MN	197	152	165	133	91	74	83	81	73	111	156	189	1437
873.10 U MN	222	159	170	130	89	73	83	78	61	115	163	178	1513
874.00 A MD	150	121	144	92	62	59	69	65	56	72	124	130	1399
874.00 U MD	171	146	148	66	62	63	68	68	47	63	106	126	1380
874.00 A MN	185	145	172	130	77	70	76	80	69	92	150	157	1400
874.00 U MN	195	158	192	123	67	66	80	85	52	81	123	154	1382

APPENDIX TABLE A.5.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
874.10 A MD	164	137	152	98	105	79	91	75	68	95	137	151	1613
874.10 U MD	144	167	129	89	84	78	96	86	68	88	134	166	1559
874.10 A MN	198	160	188	133	114	90	101	94	81	124	161	176	1613
874.10 U MN	171	173	184	111	111	90	100	102	82	128	156	189	1603
874.30 A MD	193	141	166	124	110	97	108	89	75	114	159	185	1869
874.30 U MD	183	157	192	133	104	92	113	85	73	120	221	167	1905
874.30 A MN	232	171	198	160	130	103	115	105	91	146	188	224	1868
874.30 U MN	223	192	197	174	133	101	126	105	81	132	231	212	1921
875.00 A MD	164	132	138	107	69	63	67	65	60	103	135	156	1511
875.00 U MD	166	134	119	93	74	62	62	73	64	103	158	181	1538
875.00 A MN	197	163	175	142	86	70	75	81	72	126	159	186	1511
875.00 U MN	184	175	175	128	86	70	78	87	70	129	168	199	1548
875.10 A MD	176	138	148	116	83	75	84	75	68	114	153	161	1653
875.10 U MD	166	156	141	107	89	76	82	86	64	98	161	197	1676
875.10 A MN	209	173	187	155	100	80	95	91	75	129	178	202	1655
875.10 U MN	190	172	206	146	104	78	100	103	64	137	182	207	1688
876.00 A MD	172	143	159	118	81	72	85	78	71	116	149	172	1684
876.00 U MD	154	177	162	112	91	76	91	83	76	106	160	172	1737
876.00 A MN	207	175	192	148	100	79	95	93	79	136	175	206	1686
876.00 U MN	185	196	199	135	103	81	100	107	78	140	181	221	1723
877.00 A MD	191	173	234	148	111	125	132	125	101	136	182	193	2126
877.00 U MD	180	166	230	133	111	134	136	149	106	137	182	197	2125
877.00 A MN	234	199	265	170	136	130	150	145	104	161	211	228	2152
877.00 U MN	217	230	272	162	136	131	161	162	101	169	211	228	2177
877.10 A MD	156	165	204	137	115	111	104	101	87	105	158	176	1865
877.10 U MD	158	177	185	85	92	104	116	130	73	84	151	201	1911
877.10 A MN	196	184	241	181	151	119	117	116	80	138	177	199	1866
877.10 U MN	207	200	252	156	103	111	136	129	80	114	164	210	1864
878.00 A MD	200	137	160	127	103	110	136	123	101	132	171	166	1920
878.00 U MD	196	144	179	148	104	120	127	129	125	133	199	214	2027
878.00 A MN	237	160	198	149	122	120	150	134	107	152	197	201	1921
878.00 U MN	235	168	213	147	122	140	143	146	132	154	186	234	2031
879.00 A MD	216	192	191	177	174	181	181	200	120	161	184	170	2320
879.00 U MD	208	188	210	193	116	180	177	208	133	165	147	180	2230
879.00 A MN	243	224	206	194	175	194	186	209	127	171	199	184	2323
879.00 U MN	210	259	203	175	166	216	194	219	151	175	186	194	2351
880.00 A MD	208	173	229	193	130	124	152	152	126	144	214	224	2378
880.00 U MD	209	154	216	201	135	143	158	172	155	158	212	247	2405
880.00 A MN	248	214	277	220	172	134	168	174	132	175	238	245	2414
880.00 U MN	247	218	262	219	167	148	165	190	155	176	242	272	2468
880.10 A MD	271	285	399	360	299	338	421	446	291	290	361	332	4416
880.10 U MD	280	267	400	331	304	325	383	427	294	244	355	319	4675
880.10 A MN	312	310	431	380	350	350	431	441	314	305	386	399	4444
880.10 U MN	294	326	428	343	332	374	446	471	323	296	352	430	4574
880.20 A MD	205	200	183	195	136	154	156	150	116	163	196	201	2508
880.20 U MD	214	189	202	192	146	146	203	203	120	179	243	185	2592
880.20 A MN	227	227	221	227	168	169	175	174	124	208	233	247	2532
880.20 U MN	249	257	219	237	178	145	211	205	117	219	277	253	2665

APPENDIX TABLE A.5.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
881.00 A MD	199	162	189	146	100	90	106	104	85	140	176	185	1962
881.00 U MD	193	154	191	141	97	86	103	106	88	133	175	177	1901
881.00 A MN	231	193	225	186	123	97	118	116	97	160	203	224	1966
881.00 U MN	225	201	220	189	120	96	120	117	96	158	205	229	1982
882.00 A MD	368	294	471	430	364	404	506	508	348	400	438	374	5246
882.00 U MD	406	323	431	447	407	455	482	579	393	383	455	480	5631
882.00 A MN	426	345	520	468	420	427	521	519	378	416	462	428	5288
882.00 U MN	487	370	526	459	437	470	516	557	441	432	471	503	5585
883.00 A MD	397	349	509	570	448	366	521	510	384	408	499	474	5960
883.00 U MD	396	348	508	569	447	366	521	509	384	408	499	473	5960
883.00 A MN	469	423	590	636	542	404	548	554	436	457	516	508	6073
883.00 U MN	469	423	589	636	541	404	547	554	435	457	516	508	6072
883.10 A MD	615	548	787	804	561	501	533	722	465	559	635	767	8004
883.10 U MD	525	508	777	718	621	510	589	735	537	609	671	795	7692
883.10 A MN	740	573	782	836	642	535	579	735	509	609	697	837	8152
883.10 U MN	655	606	786	804	630	609	661	820	594	670	683	887	8566
883.20 A MD	608	458	593	691	484	447	534	594	337	621	587	677	7763
883.20 U MD	690	523	621	717	507	454	510	645	502	594	533	741	7620
883.20 A MN	686	476	661	724	549	468	556	634	378	642	608	731	7744
883.20 U MN	650	510	671	711	605	512	600	682	503	703	545	739	7631
883.90 A MD	404	372	474	460	371	305	354	544	296	405	420	562	5198
883.90 U MD	492	441	360	452	360	307	312	466	419	441	368	568	5887
883.90 A MN	491	405	506	494	437	352	391	565	342	432	435	584	5266
883.90 U MN	604	490	478	495	462	397	431	587	484	444	420	607	5309
884.00 A MD	179	154	195	164	100	69	85	92	88	126	171	176	1829
884.00 U MD	166	164	205	119	108	62	86	95	81	137	193	205	1874
884.00 A MN	222	178	238	208	129	83	98	103	96	163	196	197	1894
884.00 U MN	215	179	232	187	127	74	100	110	90	166	209	200	1878
885.00 A MD	305	277	329	365	243	183	247	251	218	267	328	340	3690
885.00 U MD	301	260	321	363	261	184	240	247	213	252	305	312	3687
885.00 A MN	354	326	390	419	305	208	267	269	244	302	347	365	3786
885.00 U MN	356	329	395	421	308	205	267	268	244	302	347	368	3790
885.10 A MD	180	156	232	183	109	86	109	127	103	158	195	214	2019
885.10 U MD	139	188	204	135	84	77	91	146	95	119	169	217	2081
885.10 A MN	219	194	278	240	156	97	121	136	117	187	221	239	2096
885.10 U MN	233	214	260	150	104	77	111	149	95	180	209	224	2017
885.20 A MD	355	390	473	490	421	390	443	556	448	470	545	501	5731
885.20 U MD	323	354	417	450	472	444	499	549	490	421	487	472	6123
885.20 A MN	410	422	518	525	493	418	473	577	470	498	568	537	5841
885.20 U MN	373	438	493	508	465	478	515	624	508	505	537	537	6080
885.30 A MD	357	390	487	498	380	344	352	402	340	411	412	453	5203
885.30 U MD	314	307	454	447	348	436	411	421	416	424	355	411	5245
885.30 A MN	416	413	496	529	441	388	380	413	378	433	423	488	5250
885.30 U MN	404	431	489	523	461	470	406	457	455	441	389	507	5356
886.00 A MD	450	386	551	607	484	382	535	554	440	455	515	499	6356
886.00 U MD	470	427	509	601	498	384	551	505	417	405	511	489	6154
886.00 A MN	522	460	630	687	569	417	553	580	504	496	538	542	6483
886.00 U MN	473	482	627	660	569	419	564	581	492	494	542	542	6440

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State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
886.10 A MD	164	120	167	112	78	59	73	71	91	111	174	201	1610
886.10 U MD	121	143	147	99	48	32	57	109	86	106	169	195	1689
886.10 A MN	201	154	214	148	113	72	92	83	99	135	192	230	1699
886.10 U MN	199	187	195	114	78	47	78	103	88	127	174	191	1605
886.30 A MD	125	107	133	115	65	38	51	67	66	108	120	136	1255
886.30 U MD	117	107	144	79	72	41	52	78	69	109	141	125	1382
886.30 A MN	155	117	163	141	93	44	62	73	75	134	143	155	1318
886.30 U MN	148	129	160	121	98	43	63	82	85	141	144	161	1374
887.00 A MD	104	86	78	52	24	19	27	25	25	38	69	98	841
887.00 U MD	92	78	83	46	23	14	19	26	18	37	64	100	826
887.00 A MN	138	107	100	73	39	24	33	36	29	64	93	124	855
887.00 U MN	134	112	97	71	37	23	30	36	24	69	89	113	842
888.00 A MD	99	83	78	49	23	18	24	23	25	40	63	91	832
888.00 U MD	111	83	91	43	20	14	21	20	18	39	66	84	852
888.00 A MN	135	104	101	70	37	26	29	34	29	63	84	115	844
888.00 U MN	158	110	104	70	34	22	28	32	23	62	91	107	865
888.10 A MD	105	88	85	57	30	23	32	28	31	49	77	106	923
888.10 U MD	112	77	96	64	48	19	54	24	33	70	119	105	1039
888.10 A MN	139	109	108	79	42	27	41	38	35	69	99	128	939
888.10 U MN	145	99	125	106	56	21	60	33	37	78	139	154	1096
890.00 A MD	107	88	90	62	36	29	40	35	32	47	80	103	924
890.00 U MD	109	81	88	62	33	26	36	36	31	44	87	107	947
890.00 A MN	138	107	114	82	50	34	47	45	35	72	101	126	940
890.00 U MN	137	108	114	81	50	34	46	46	35	73	99	128	952
891.00 A MD	116	97	100	78	45	39	57	46	39	60	94	117	1083
891.00 U MD	120	107	104	79	51	38	52	47	37	61	99	108	1092
891.00 A MN	147	118	126	98	62	45	66	56	43	86	116	146	1098
891.00 U MN	143	125	124	99	61	43	64	57	38	93	114	132	1104
892.00 A MD	123	103	111	85	54	56	71	63	51	71	101	121	1211
892.00 U MD	128	91	119	91	58	55	73	66	48	66	111	121	1205
892.00 A MN	153	121	138	109	73	60	81	74	53	96	126	143	1231
892.00 U MN	150	123	138	111	73	59	82	73	53	95	127	143	1238
893.00 A MD	125	106	112	85	53	51	65	53	47	65	106	128	1224
893.00 U MD	127	107	103	84	56	47	58	56	37	69	110	117	1204
893.00 A MN	159	131	137	107	71	55	75	65	50	91	132	161	1240
893.00 U MN	153	138	134	104	68	51	72	65	44	98	128	146	1222
894.00 A MD	129	115	120	92	57	53	70	56	52	75	111	134	1288
894.00 U MD	143	114	120	94	48	44	62	55	46	72	119	132	1340
894.00 A MN	165	140	147	114	77	58	80	68	55	99	136	170	1303
894.00 U MN	174	138	143	117	69	51	78	64	46	95	141	155	1295
894.10 A MD	142	122	125	97	64	57	75	61	58	81	119	151	1364
894.10 U MD	143	135	126	95	64	60	71	65	53	81	131	143	1372
894.10 A MN	179	145	153	121	84	62	87	74	58	108	144	183	1385
894.10 U MN	173	159	151	116	82	61	84	74	55	113	144	170	1402
894.20 A MD	151	147	155	145	77	84	115	88	84	111	152	170	1669
894.20 U MD	165	140	147	166	84	74	121	88	82	113	165	187	1694
894.20 A MN	188	173	188	168	96	94	126	102	86	138	176	201	1687
894.20 U MN	202	163	196	186	113	95	130	90	84	148	184	191	1812

APPENDIX TABLE A.5.—Continued

State Key No.			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
			(mm)												
894.30	A	MD	170	167	175	166	96	113	141	111	100	137	188	192	1982
894.30	U	MD	189	173	197	186	107	103	149	110	99	145	200	215	1983
894.30	A	MN	206	193	212	195	118	121	153	125	102	160	214	225	1997
894.30	U	MN	206	194	227	225	141	118	153	105	99	163	220	212	2073
895.00	A	MD	143	127	148	107	70	63	85	62	57	86	113	142	1409
895.00	U	MD	134	130	116	102	67	60	84	88	50	84	107	129	1401
895.00	A	MN	169	153	168	123	90	68	99	78	62	107	131	153	1439
895.00	U	MN	155	155	148	111	74	65	102	103	55	113	123	159	1378
896.00	A	MD	144	107	137	109	74	81	97	90	77	84	101	131	1478
896.00	U	MD	147	126	121	112	106	90	123	103	91	93	96	137	1312
896.00	A	MN	172	128	168	132	102	86	112	104	78	112	124	156	1512
896.00	U	MN	134	144	158	122	106	93	121	120	81	139	98	139	1441
896.30	A	MD	98	78	84	79	45	47	51	53	45	68	82	103	994
896.30	U	MD	88	103	80	95	39	50	48	48	50	81	107	94	1081
896.30	A	MN	114	97	104	95	67	53	58	60	49	85	104	126	1011
896.30	U	MN	126	115	84	101	79	51	61	48	49	84	146	114	1047
896.80	A	MD	125	126	148	150	81	106	117	103	85	105	150	159	1608
896.80	U	MD	175	121	159	142	88	94	113	97	76	103	151	119	1469
896.80	A	MN	153	147	184	177	106	112	127	114	87	129	175	189	1628
896.80	U	MN	181	140	163	180	130	101	119	95	78	123	157	129	1547
897.70	A	MD	140	121	123	100	48	68	94	64	62	83	139	113	1363
897.70	U	MD	120	127	157	137	66	63	96	54	57	84	137	114	1407
897.70	A	MN	180	142	149	127	69	76	103	77	62	91	166	140	1375
897.70	U	MN	185	146	164	163	96	72	104	68	61	93	176	146	1468
897.80	A	MD	182	155	183	163	98	121	142	133	115	161	145	218	2177
897.80	U	MD	213	146	250	176	106	124	201	137	121	170	207	261	2323
897.80	A	MN	210	178	219	194	123	119	157	150	116	183	178	247	2192
897.80	U	MN	239	175	245	234	142	130	197	140	114	192	241	262	2348
898.00	A	MD	260	198	203	173	144	136	149	145	153	168	208	220	2230
898.00	U	MD	182	167	215	158	156	132	127	174	137	170	182	182	2148
898.00	A	MN	289	207	220	183	179	142	159	163	153	190	216	248	2240
898.00	U	MN	283	224	217	172	160	144	153	182	151	202	216	243	2284
899.00	A	MD	349	321	261	327	206	228	227	225	198	264	282	270	3808
899.00	U	MD	323	304	238	279	256	236	254	261	190	299	335	228	3682
899.00	A	MN	359	355	259	426	331	230	246	286	203	294	351	319	3888
899.00	U	MN	368	454	268	310	317	268	253	288	238	324	284	289	3862
899.10	A	MD	160	141	117	109	62	53	56	78	65	94	111	104	1411
899.10	U	MD	175	154	87	114	74	40	57	89	65	84	125	113	1512
899.10	A	MN	199	157	143	165	85	64	66	85	75	126	140	121	1455
899.10	U	MN	216	167	146	153	86	54	68	85	68	114	162	122	1502
899.40	A	MD	159	146	132	135	67	67	86	102	75	113	116	107	1594
899.40	U	MD	174	135	150	131	93	51	96	83	77	127	119	113	1713
899.40	A	MN	220	173	161	190	93	92	90	119	84	166	150	121	1648
899.40	U	MN	243	158	177	225	132	70	102	105	80	177	220	124	1861
900.00	A	MD	129	109	109	78	47	36	46	60	48	75	89	111	1113
900.00	U	MD	128	104	109	71	46	37	55	69	47	82	92	94	1082
900.00	A	MN	166	120	135	107	69	43	56	68	54	103	113	129	1161
900.00	U	MN	141	130	129	90	62	42	57	74	53	109	109	129	1126

APPENDIX TABLE A.5.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
901.00 A MD	132	107	109	85	53	40	51	59	52	76	96	112	1188
901.00 U MD	129	103	113	83	57	41	55	58	48	66	111	134	1197
901.00 A MN	165	119	138	119	75	47	59	68	58	109	119	130	1234
901.00 U MN	170	122	136	112	70	43	60	71	54	106	132	133	1210
902.00 A MD	136	114	127	97	63	46	51	61	57	90	112	123	1301
902.00 U MD	121	124	139	88	69	39	45	66	50	73	132	118	1384
902.00 A MN	172	129	159	133	86	55	60	69	64	123	135	142	1352
902.00 U MN	176	142	154	119	80	42	60	73	56	110	165	139	1322
903.00 A MD	124	110	122	86	59	40	51	58	57	82	99	118	1211
903.00 U MD	118	99	119	76	64	37	53	57	56	72	97	109	1198
903.00 A MN	157	125	147	116	80	46	61	67	64	115	123	135	1257
903.00 U MN	148	120	143	114	78	47	63	69	68	111	124	142	1231
904.00 A MD	154	131	159	124	76	54	68	71	75	103	135	145	1529
904.00 U MD	111	129	182	99	78	56	72	82	73	106	120	132	1406
904.00 A MN	192	147	194	163	105	62	81	83	83	133	164	160	1576
904.00 U MN	162	153	204	150	100	62	82	90	83	134	153	159	1534
905.00 A MD	175	153	186	148	92	67	85	85	90	120	178	179	1788
905.00 U MD	167	158	176	133	89	53	91	88	87	115	196	161	1742
905.00 A MN	219	174	229	193	126	83	98	95	102	149	200	197	1856
905.00 U MN	243	178	220	169	117	64	99	96	91	140	227	198	1829
907.00 A MD	121	88	104	73	43	37	45	51	47	68	84	103	1060
907.00 U MD	111	79	110	74	48	31	43	53	47	62	86	105	1001
907.00 A MN	150	101	126	97	60	42	54	61	52	95	109	126	1085
907.00 U MN	141	97	121	93	56	41	54	62	54	90	110	130	1053
908.00 A MD	100	78	92	67	41	34	41	45	41	61	73	96	965
908.00 U MD	101	89	78	65	46	40	36	46	38	72	94	106	1019
908.00 A MN	128	88	115	95	61	39	50	52	46	80	96	113	986
908.00 U MN	145	98	121	94	58	35	55	56	42	78	116	117	1020
910.00 A MD	128	104	124	92	50	44	51	53	52	71	85	115	1187
910.00 U MD	141	114	114	82	50	40	53	52	60	67	115	143	1232
910.00 A MN	161	116	149	126	56	49	61	62	57	96	114	134	1214
910.00 U MN	177	125	151	115	54	46	66	67	53	90	142	141	1232
911.00 A MD	124	95	112	74	48	43	47	52	49	68	83	110	1130
911.00 U MD	125	102	102	62	56	43	48	46	53	72	111	130	1095
911.00 A MN	158	107	139	97	67	54	55	60	54	93	106	129	1155
911.00 U MN	176	111	140	89	68	46	60	63	53	90	126	132	1162
912.00 A MD	111	94	96	69	44	35	43	48	46	67	74	105	990
912.00 U MD	94	85	86	60	43	33	42	46	42	60	72	96	953
912.00 A MN	142	105	116	95	65	40	52	55	51	98	98	122	1055
912.00 U MN	125	114	116	84	60	39	50	56	53	88	96	116	1015

APPENDIX TABLE A.6. ADJUSTED AND UNADJUSTED MEDIAN AND MEAN, MONTHLY AND ANNUAL RAINFALL, KAUA'I ISLAND, STATE OF HAWAI'I

State Key No.			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
			(mm)												
925.00	A	MD	88	56	46	23	18	12	16	16	21	49	49	76	650
925.00	U	MD	104	55	32	21	21	12	13	13	14	45	50	84	645
925.00	A	MN	124	80	69	48	33	16	18	28	29	63	74	104	683
925.00	U	MN	128	81	69	53	38	16	16	27	26	67	80	110	716
927.00	A	MD	96	57	62	35	28	25	32	28	28	57	65	82	766
927.00	U	MD	89	54	53	36	26	23	30	25	26	50	57	98	742
927.00	A	MN	133	79	84	59	41	28	34	38	36	67	85	114	796
927.00	U	MN	125	78	89	55	39	27	31	36	39	63	81	106	775
928.00	A	MD	135	94	117	92	75	75	96	86	75	101	127	141	1423
928.00	U	MD	156	98	146	92	75	80	85	113	74	97	119	168	1463
928.00	A	MN	171	120	135	112	87	80	102	101	79	113	150	167	1439
928.00	U	MN	183	141	146	115	77	80	97	128	77	109	133	183	1478
928.20	A	MD	134	84	110	79	71	66	85	83	73	94	130	183	1340
928.20	U	MD	177	90	101	82	64	74	90	97	89	106	137	125	1399
928.20	A	MN	171	110	136	106	87	74	89	102	79	108	151	282	1361
928.20	U	MN	188	111	139	111	80	72	93	111	78	119	184	277	1371
930.00	A	MD	101	64	68	45	34	33	46	38	39	65	73	87	857
930.00	U	MD	100	62	63	47	34	35	44	40	41	58	64	105	856
930.00	A	MN	135	84	89	69	46	36	47	48	44	76	90	118	883
930.00	U	MN	129	79	92	65	47	37	47	48	46	72	89	116	872
930.10	A	MD	132	80	104	76	62	57	76	64	58	86	108	118	1224
930.10	U	MD	150	95	98	88	69	61	83	67	54	89	123	129	1261
930.10	A	MN	168	108	126	101	74	63	80	78	64	99	125	151	1244
930.10	U	MN	172	109	125	118	77	67	81	72	59	106	153	159	1300
931.00	A	MD	123	77	95	70	53	48	66	55	59	82	97	109	1117
931.00	U	MD	112	71	82	68	51	45	61	59	58	81	87	113	1092
931.00	A	MN	157	99	113	91	64	53	71	69	65	95	118	139	1135
931.00	U	MN	146	97	118	86	63	53	67	69	69	91	115	134	1113
933.00	A	MD	132	86	119	90	76	64	88	81	78	93	110	130	1355
933.00	U	MD	132	97	136	97	83	74	77	95	80	90	112	146	1399
933.00	A	MN	161	109	136	111	88	71	94	94	83	106	138	164	1368
933.00	U	MN	154	120	136	110	87	71	92	111	87	107	139	169	1383
934.00	A	MD	157	98	137	115	100	91	124	114	97	123	140	150	1651
934.00	U	MD	164	94	139	114	103	89	119	121	94	128	137	146	1630
934.00	A	MN	191	123	154	137	112	98	133	130	103	137	163	182	1664
934.00	U	MN	182	122	158	135	111	102	130	135	112	136	162	178	1668
935.00	A	MD	121	73	93	60	47	38	53	50	50	73	89	110	1029
935.00	U	MD	116	77	88	59	46	37	48	46	43	72	83	104	1057
935.00	A	MN	152	92	107	81	57	42	58	63	56	84	111	142	1046
935.00	U	MN	141	91	108	76	57	44	55	61	59	80	110	136	1024
935.10	A	MD	134	84	101	77	58	46	69	60	62	84	103	116	1183
935.10	U	MD	135	86	102	86	58	42	74	60	61	103	121	131	1224
935.10	A	MN	165	100	114	96	68	53	73	82	67	96	128	147	1198
935.10	U	MN	164	97	110	110	72	57	75	76	68	102	158	153	1254

NOTE: A = normals adjusted to common base period; U = unadjusted normals; MD = median; MN = median; MN = mean; —— = insufficient data.

NOTE: Median and mean annual rainfall not necessarily equal to sum of monthly normals.

APPENDIX TABLE A.6.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
936.00 A MD	164	110	148	131	110	89	123	112	100	120	140	162	1718
936.00 U MD	148	111	141	118	109	94	119	113	96	122	134	151	1696
936.00 A MN	198	130	160	151	122	99	136	133	106	136	171	192	1729
936.00 U MN	179	133	165	139	121	102	128	130	111	134	168	179	1692
936.10 A MD	151	98	129	118	92	77	112	99	92	108	127	143	1573
936.10 U MD	184	115	117	139	93	74	103	107	105	131	153	160	1573
936.10 A MN	185	117	143	134	107	82	120	116	98	123	154	169	1582
936.10 U MN	204	117	142	145	104	77	121	126	107	133	187	186	1666
936.20 A MD	163	107	151	132	117	102	134	136	106	122	159	166	1873
936.20 U MD	151	118	186	135	110	101	110	153	126	150	149	182	1808
936.20 A MN	195	124	166	152	128	111	140	150	111	136	192	194	1874
936.20 U MN	201	128	170	158	109	107	136	172	116	146	185	215	1815
937.00 A MD	133	90	106	84	64	46	66	67	62	87	109	124	1219
937.00 U MD	124	90	98	81	65	44	72	63	58	96	102	126	1198
937.00 A MN	162	108	122	103	74	52	73	80	69	99	133	154	1229
937.00 U MN	147	111	117	103	74	53	74	81	67	98	137	152	1221
940.00 A MD	112	72	82	55	42	30	40	39	39	65	83	98	914
940.00 U MD	100	63	73	45	36	26	40	37	39	59	74	97	909
940.00 A MN	140	88	96	72	51	33	44	48	44	76	106	124	924
940.00 U MN	134	83	99	65	51	33	43	46	49	72	102	122	912
940.10 A MD	118	70	83	51	41	33	41	32	35	69	81	83	869
940.10 U MD	155	66	59	52	37	30	36	32	32	66	84	80	854
940.10 A MN	141	86	96	68	50	36	45	34	39	80	101	98	879
940.10 U MN	138	79	83	73	56	37	40	34	39	80	118	99	881
941.00 A MD	152	104	134	116	85	67	93	85	77	103	135	152	1518
941.00 U MD	143	109	135	105	91	68	87	89	77	105	123	149	1524
941.00 A MN	188	124	152	138	97	74	103	98	83	115	165	184	1529
941.00 U MN	180	118	152	132	99	76	101	100	92	112	162	182	1523
941.10 A MD	134	102	108	91	67	50	66	66	58	89	117	121	1247
941.10 U MD	149	94	100	96	65	45	68	62	55	108	152	138	1265
941.10 A MN	162	121	141	111	76	56	74	76	64	102	139	150	1260
941.10 U MN	167	112	132	124	76	56	77	77	65	114	171	166	1328
942.00 A MD	68	50	42	16	11	5	9	11	16	37	30	67	537
942.00 U MD	96	53	41	22	10	2	6	7	11	22	34	67	497
942.00 A MN	104	67	64	37	26	14	15	22	29	51	55	101	585
942.00 U MN	121	66	64	36	30	11	12	20	27	50	63	107	618
943.00 A MD	62	45	35	14	9	4	8	8	10	41	29	64	486
943.00 U MD	57	41	32	13	9	5	6	7	10	32	27	58	483
943.00 A MN	100	59	57	38	23	13	14	20	21	51	51	90	537
943.00 U MN	92	62	65	33	23	12	13	17	24	44	55	86	535
944.00 A MD	71	47	38	16	12	5	9	7	9	36	30	66	510
944.00 U MD	63	44	32	14	7	4	7	10	9	31	25	58	463
944.00 A MN	106	63	62	36	25	12	13	19	20	48	54	94	553
944.00 U MN	98	68	70	32	25	11	12	20	23	43	53	88	543
945.00 A MD	84	55	43	19	12	4	10	7	12	37	34	73	577
945.00 U MD	89	51	32	20	10	2	8	6	10	39	37	65	551
945.00 A MN	119	75	69	47	29	9	15	25	21	52	59	105	627
945.00 U MN	127	77	67	51	32	7	13	22	18	53	64	112	650

APPENDIX TABLE A.6.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
947.00 A MD	73	48	38	15	10	4	10	6	10	37	29	64	507
947.00 U MD	63	44	34	12	7	3	8	6	9	34	29	62	491
947.00 A MN	103	68	60	38	25	9	13	18	18	50	52	95	550
947.00 U MN	100	66	58	36	26	10	13	17	20	50	51	95	547
950.00 A MD	83	57	42	20	13	4	11	10	10	42	42	68	576
950.00 U MD	143	59	47	19	5	0	7	5	12	42	41	76	620
950.00 A MN	120	76	66	48	28	10	13	28	19	59	67	104	625
950.00 U MN	157	77	73	53	28	6	11	24	20	57	75	112	677
950.10 A MD	72	50	39	20	10	5	30	8	12	37	34	74	561
950.10 U MD	45	39	36	15	5	2	11	8	13	29	29	53	516
950.10 A MN	110	70	61	41	26	11	27	22	22	51	59	105	605
950.10 U MN	92	65	73	26	18	15	23	20	28	40	48	88	542
951.00 A MD	83	49	41	20	14	5	10	11	11	39	42	68	568
951.00 U MD	118	48	50	20	8	1	7	8	11	28	47	72	564
951.00 A MN	119	68	62	46	27	12	13	30	19	56	66	102	614
951.00 U MN	155	68	68	51	27	8	10	26	21	55	74	110	664
952.00 A MD	93	63	49	29	17	8	19	10	13	47	47	73	652
952.00 U MD	143	73	49	35	11	3	14	6	13	34	49	107	695
952.00 A MN	132	82	72	58	30	14	23	25	22	61	72	108	691
952.00 U MN	171	86	78	65	31	10	19	24	24	60	85	123	763
952.10 A MD	91	64	61	51	28	25	29	20	13	67	57	76	778
952.10 U MD	76	66	64	19	21	21	27	32	25	56	56	38	720
952.10 A MN	128	85	91	114	39	32	31	31	28	80	88	108	815
952.10 U MN	84	95	84	37	31	40	35	42	46	67	76	77	729
952.20 A MD	82	61	53	25	18	13	16	15	18	45	41	80	649
952.20 U MD	75	56	45	18	12	8	15	11	12	35	35	56	633
952.20 A MN	120	83	78	49	33	20	17	27	29	59	63	112	676
952.20 U MN	100	79	66	37	20	21	19	29	36	49	53	92	606
953.00 A MD	94	59	48	28	16	7	17	13	14	48	51	73	643
953.00 U MD	150	58	57	45	10	2	13	10	17	43	50	78	683
953.00 A MN	129	76	69	54	30	11	21	30	22	67	76	107	687
953.00 U MN	165	77	75	60	29	9	17	27	24	65	85	115	736
953.10 A MD	69	53	40	21	9	7	15	10	13	42	34	73	565
953.10 U MD	48	46	36	16	8	3	12	13	18	42	33	34	520
953.10 A MN	104	73	65	46	22	14	16	22	24	54	57	107	606
953.10 U MN	85	69	56	35	12	16	19	25	31	46	52	91	541
955.00 A MD	98	64	56	30	23	12	26	16	19	55	58	77	728
955.00 U MD	143	76	61	33	23	13	21	15	23	57	62	89	837
955.00 A MN	134	83	78	58	35	17	30	41	27	71	79	113	762
955.00 U MN	169	88	83	67	36	14	27	39	28	72	94	129	830
962.00 A MD	83	49	44	19	12	6	12	10	14	46	39	72	584
962.00 U MD	98	49	45	25	9	5	9	6	12	40	41	70	559
962.00 A MN	120	71	66	45	28	12	13	23	24	62	65	104	630
962.00 U MN	139	70	66	46	31	10	11	19	22	63	76	107	668
965.00 A MD	75	45	41	18	12	7	13	10	14	41	39	63	571
965.00 U MD	68	43	42	16	12	8	12	10	14	33	39	62	576
965.00 A MN	113	70	62	42	26	12	15	22	24	56	66	98	606
965.00 U MN	102	74	71	36	27	15	15	21	26	50	66	93	601

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State Key No.			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
			(mm)												
966.00	A	MD	96	62	54	27	20	15	23	17	24	55	56	82	730
966.00	U	MD	101	57	46	34	20	13	19	18	17	58	54	88	758
966.00	A	MN	134	87	77	55	36	19	25	29	34	67	83	116	764
966.00	U	MN	139	89	77	62	42	19	23	28	30	71	89	124	799
966.10	A	MD	89	56	55	23	11	13	21	20	17	50	48	79	668
966.10	U	MD	69	43	52	18	10	9	17	12	21	41	41	80	694
966.10	A	MN	125	81	80	49	21	18	23	32	29	63	72	111	703
966.10	U	MN	114	62	90	33	20	20	26	28	42	50	62	95	646
966.20	A	MD	91	55	56	28	16	17	23	20	19	49	52	79	707
966.20	U	MD	75	49	44	19	12	7	23	17	30	43	39	64	685
966.20	A	MN	133	80	81	48	32	24	26	33	33	62	80	112	738
966.20	U	MN	113	74	70	31	21	24	30	34	44	55	60	95	656
981.00	A	MD	100	66	64	36	28	24	34	29	32	62	68	92	836
981.00	U	MD	104	82	59	41	27	25	32	34	28	70	60	93	856
981.00	A	MN	139	93	90	64	44	28	36	41	39	75	94	123	868
981.00	U	MN	138	101	89	65	46	29	35	45	40	78	98	122	890
982.00	A	MD	120	70	90	52	43	36	54	53	43	83	88	117	1054
982.00	U	MD	112	107	79	64	45	40	56	44	39	80	109	149	983
982.00	A	MN	166	97	114	80	64	44	57	63	55	98	114	147	1089
982.00	U	MN	151	101	106	97	76	46	57	46	46	102	142	156	1127
983.00	A	MD	191	132	171	150	128	121	168	142	112	151	184	193	2083
983.00	U	MD	185	143	164	151	129	131	153	144	110	153	176	184	2110
983.00	A	MN	234	171	204	189	142	131	172	157	121	161	211	234	2102
983.00	U	MN	227	186	205	191	140	137	170	164	121	161	225	233	2174
985.00	A	MD	147	90	118	89	83	74	102	91	78	108	136	136	1475
985.00	U	MD	138	84	101	89	83	78	100	89	79	107	136	136	1445
985.00	A	MN	186	123	147	120	96	79	104	104	85	120	150	177	1490
985.00	U	MN	181	118	140	118	95	82	103	101	91	119	151	174	1478
986.00	A	MD	145	95	110	78	71	63	85	79	74	98	115	130	1362
986.00	U	MD	139	91	124	69	66	60	83	100	79	98	104	130	1385
986.00	A	MN	185	124	137	107	84	67	90	93	82	112	131	168	1385
986.00	U	MN	171	134	141	94	77	67	88	108	84	107	117	162	1353
986.10	A	MD	136	89	108	84	70	63	86	75	66	97	114	130	1343
986.10	U	MD	136	100	98	118	82	67	96	73	67	100	128	144	1306
986.10	A	MN	175	119	133	113	85	70	90	90	73	111	134	164	1363
986.10	U	MN	183	112	124	144	97	75	93	83	67	113	155	165	1415
990.00	A	MD	300	211	306	283	273	278	351	312	252	276	337	318	3898
990.00	U	MD	306	216	333	298	306	265	346	360	266	308	328	359	3904
990.00	A	MN	346	268	355	341	300	290	355	333	270	298	375	359	3911
990.00	U	MN	354	292	371	332	299	290	349	361	288	318	367	379	4009
990.10	A	MD	250	163	238	190	193	161	231	218	184	200	232	248	2912
990.10	U	MD	230	143	207	191	203	181	241	246	212	231	244	276	2903
990.10	A	MN	307	206	277	236	217	176	241	238	199	212	263	303	2919
990.10	U	MN	317	182	299	230	219	195	250	273	243	231	260	293	3025
990.20	A	MD	442	269	407	389	392	381	463	441	343	365	459	411	5378
990.20	U	MD	457	243	360	421	431	355	508	462	441	406	457	375	5398
990.20	A	MN	521	335	463	464	431	408	488	479	374	375	504	486	5379
990.20	U	MN	520	317	438	431	441	417	520	519	480	417	497	480	5542

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State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
990.30 A MD	283	198	229	169	153	114	153	172	134	177	256	253	2637
990.30 U MD	305	134	185	156	154	138	156	174	153	197	223	266	2679
990.30 A MN	337	245	264	225	166	130	161	189	148	186	282	297	2638
990.30 U MN	339	209	267	183	166	143	171	201	183	196	265	300	2663
990.40 A MD	311	260	259	193	229	181	283	245	176	267	311	306	3472
990.40 U MD	361	210	266	241	248	191	264	259	248	250	303	329	3372
990.40 A MN	351	296	286	238	240	194	283	257	189	270	361	351	3479
990.40 U MN	372	271	303	264	259	228	287	278	285	278	341	368	3598
992.00 A MD	179	123	169	150	137	115	168	155	126	161	178	187	2098
992.00 U MD	201	132	181	169	147	113	160	153	126	160	181	199	2083
992.00 A MN	213	154	195	181	152	125	174	169	134	174	207	219	2104
992.00 U MN	209	161	191	194	147	128	168	168	127	166	223	231	2128
993.00 A MD	188	125	171	146	135	120	169	156	133	155	177	189	2127
993.00 U MD	221	137	182	162	136	116	169	175	133	150	191	189	2127
993.00 A MN	221	153	195	175	149	130	180	176	144	170	206	223	2138
993.00 U MN	214	161	192	171	145	126	179	188	148	169	209	230	2139
994.00 A MD	229	157	196	165	163	128	197	185	140	189	184	226	2481
994.00 U MD	207	148	192	163	160	128	186	184	138	178	176	225	2406
994.00 A MN	256	192	232	211	180	146	197	196	158	199	236	258	2466
994.00 U MN	245	182	229	201	178	147	190	198	170	194	234	254	2430
995.00 A MD	193	141	184	156	153	122	178	177	130	180	196	206	2274
995.00 U MD	224	163	177	179	159	110	175	194	138	196	197	230	2377
995.00 A MN	225	171	211	187	167	134	185	194	137	194	233	241	2278
995.00 U MN	248	173	209	192	160	121	176	202	136	195	265	267	2349
996.00 A MD	230	169	222	197	200	164	221	202	162	202	203	249	2904
996.00 U MD	223	150	212	220	199	192	231	226	200	226	226	221	2780
996.00 A MN	265	201	246	238	219	178	235	224	176	218	249	280	2915
996.00 U MN	279	206	277	227	231	203	235	258	228	222	245	274	2870
997.00 A MD	203	144	196	170	163	129	178	178	142	177	185	216	2390
997.00 U MD	198	142	183	166	167	120	179	179	149	185	201	198	2275
997.00 A MN	234	172	226	208	181	139	187	196	154	195	224	255	2395
997.00 U MN	240	172	230	209	180	142	190	196	158	195	223	254	2386
1000.00 A MD	204	150	182	163	160	125	178	174	140	184	194	213	2265
1000.00 U MD	213	157	166	183	161	110	163	163	138	149	206	207	2213
1000.00 A MN	235	183	207	203	177	141	183	191	153	194	234	250	2271
1000.00 U MN	234	172	194	208	169	131	177	179	135	179	258	246	2280
1001.00 A MD	171	111	151	133	121	97	151	127	132	126	163	159	1827
1001.00 U MD	184	135	164	134	120	97	135	133	146	124	164	149	1852
1001.00 A MN	202	130	167	153	134	105	162	143	137	137	187	183	1842
1001.00 U MN	194	141	164	149	130	101	161	151	140	133	193	188	1863
1002.00 A MD	144	95	125	107	96	72	101	99	85	109	122	137	1461
1002.00 U MD	133	100	105	108	99	70	99	98	86	116	126	136	1436
1002.00 A MN	170	111	137	123	106	79	107	110	94	121	147	162	1463
1002.00 U MN	160	117	133	121	107	82	108	114	94	118	154	160	1482
1003.00 A MD	183	119	165	147	136	115	161	145	131	150	171	172	2050
1003.00 U MD	187	145	185	163	139	118	167	152	137	164	186	173	2072
1003.00 A MN	215	144	182	172	149	123	172	167	139	165	200	205	2065
1003.00 U MN	210	156	181	165	146	120	171	182	145	162	208	212	2090

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State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
1004.00 A MD	171	125	154	132	117	93	131	130	111	143	154	173	1888
1004.00 U MD	171	116	145	132	108	101	127	132	126	142	167	174	1921
1004.00 A MN	201	147	179	159	129	103	142	147	121	158	192	205	1899
1004.00 U MN	203	145	179	152	129	102	138	149	131	160	191	213	1904
1005.00 A MD	179	121	162	150	138	106	145	131	113	139	160	186	1956
1005.00 U MD	185	124	157	152	138	101	141	154	119	130	172	188	1909
1005.00 A MN	209	143	177	172	150	115	158	150	121	152	196	217	1963
1005.00 U MN	200	151	175	168	146	110	157	159	124	150	198	223	1966
1006.00 A MD	178	125	154	141	125	98	141	137	117	152	163	179	1930
1006.00 U MD	172	146	161	148	121	100	134	146	122	153	160	167	1899
1006.00 A MN	212	146	176	167	141	107	154	152	127	170	202	209	1941
1006.00 U MN	199	158	172	169	140	111	148	152	123	169	206	202	1955
1006.10 A MD	242	147	231	171	190	151	191	195	179	200	205	233	2616
1006.10 U MD	205	151	238	157	185	153	195	200	172	191	197	196	2627
1006.10 A MN	293	182	271	213	204	164	201	210	195	214	246	265	2616
1006.10 U MN	257	189	268	204	201	165	202	220	215	233	231	240	2623
1007.00 A MD	165	117	145	123	114	85	122	115	102	140	145	160	1771
1007.00 U MD	151	113	135	123	111	83	117	113	108	135	149	160	1792
1007.00 A MN	196	137	170	149	126	94	131	130	110	156	179	191	1782
1007.00 U MN	197	133	167	144	124	93	127	127	122	153	181	195	1776
1007.10 A MD	188	124	155	124	108	81	114	113	107	143	152	165	1831
1007.10 U MD	180	140	162	134	107	76	104	124	91	133	133	170	1764
1007.10 A MN	220	147	177	155	125	91	124	128	121	157	184	207	1837
1007.10 U MN	228	159	183	159	113	87	117	148	102	139	186	210	1823
1007.20 A MD	158	111	134	97	84	55	77	77	85	130	121	155	1522
1007.20 U MD	162	117	134	91	78	53	70	78	65	104	102	166	1465
1007.20 A MN	193	133	155	127	98	62	86	91	98	147	149	190	1532
1007.20 U MN	201	143	161	130	87	59	80	111	80	127	157	194	1526
1007.30 A MD	143	94	108	84	67	44	59	58	58	95	107	127	1258
1007.30 U MD	140	104	100	82	62	37	58	56	55	82	111	137	1235
1007.30 A MN	176	109	128	106	77	47	66	67	65	110	133	150	1263
1007.30 U MN	168	110	123	115	72	50	64	67	60	102	152	154	1233
1007.50 A MD	136	93	112	95	85	75	78	77	73	115	118	120	1370
1007.50 U MD	153	100	132	91	89	68	76	67	77	119	166	129	1409
1007.50 A MN	163	110	131	117	97	81	88	84	77	126	145	139	1375
1007.50 U MN	162	100	131	141	103	88	89	68	79	127	162	138	1378
1011.00 A MD	165	114	139	122	108	81	120	113	96	148	142	159	1734
1011.00 U MD	156	121	139	119	108	77	112	114	98	145	140	153	1764
1011.00 A MN	196	135	161	150	123	90	129	124	105	164	175	191	1740
1011.00 U MN	180	138	157	154	123	91	121	126	101	162	179	192	1731
1012.00 A MD	166	110	129	111	94	69	89	92	85	132	132	160	1619
1012.00 U MD	169	120	115	115	86	61	83	87	84	141	141	178	1608
1012.00 A MN	201	133	151	140	109	77	100	104	95	148	164	195	1625
1012.00 U MN	199	132	140	147	100	76	97	101	87	144	185	205	1616
1013.00 A MD	165	110	139	115	102	72	106	99	90	141	134	160	1675
1013.00 U MD	166	101	142	102	97	70	99	99	90	154	137	165	1654
1013.00 A MN	200	133	161	143	118	80	115	111	100	157	166	194	1682
1013.00 U MN	187	138	157	148	119	81	107	114	95	157	171	192	1670

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State Key No.			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
			(mm)												
1013.20	A	MD	165	107	131	114	119	72	99	104	89	149	139	163	1706
1013.20	U	MD	202	93	121	131	152	73	103	81	95	169	155	155	1686
1013.20	A	MN	199	131	157	146	137	80	107	118	101	167	171	194	1714
1013.20	U	MN	194	118	143	176	152	90	100	91	100	165	194	190	1724
1015.00	A	MD	152	107	133	102	96	66	89	85	84	122	130	147	1558
1015.00	U	MD	101	87	127	91	80	66	80	86	76	105	115	124	1510
1015.00	A	MN	188	126	159	129	115	74	101	96	95	141	156	180	1569
1015.00	U	MN	164	131	164	109	107	74	90	101	101	125	143	165	1484
1015.10	A	MD	144	99	140	97	80	66	86	81	94	113	128	139	1494
1015.10	U	MD	128	89	127	97	69	74	83	80	101	104	98	127	1473
1015.10	A	MN	179	117	165	126	97	71	95	94	105	128	155	170	1503
1015.10	U	MN	182	116	172	111	95	79	95	102	131	121	136	158	1492
1015.30	A	MD	162	109	131	119	110	77	96	102	87	151	139	150	1691
1015.30	U	MD	179	94	120	141	126	83	108	85	91	170	153	146	1692
1015.30	A	MN	199	133	155	150	129	85	108	113	98	168	168	178	1699
1015.30	U	MN	184	113	147	174	138	93	104	93	99	167	185	177	1694
1016.00	A	MD	157	103	122	96	88	62	84	82	78	124	125	148	1507
1016.00	U	MD	158	104	113	98	84	60	76	75	75	128	132	167	1463
1016.00	A	MN	192	123	144	126	104	69	94	91	87	140	155	181	1513
1016.00	U	MN	184	126	137	135	95	70	85	89	79	130	163	194	1500
1017.00	A	MD	160	107	122	99	83	57	76	77	72	118	121	147	1473
1017.00	U	MD	156	105	106	94	79	56	66	78	67	108	117	165	1411
1017.00	A	MN	196	130	143	127	101	64	86	86	81	133	150	179	1480
1017.00	U	MN	186	130	135	133	102	65	80	86	75	127	160	189	1461
1020.00	A	MD	141	94	110	82	78	54	70	68	66	110	115	130	1356
1020.00	U	MD	138	92	109	80	76	54	65	71	67	101	110	120	1337
1020.00	A	MN	181	116	138	112	95	60	80	77	76	130	141	164	1369
1020.00	U	MN	175	111	141	107	94	61	77	79	85	124	139	162	1362
1020.10	A	MD	129	81	101	61	63	36	47	44	48	86	96	108	1110
1020.10	U	MD	126	60	86	54	44	30	42	46	43	100	99	119	1046
1020.10	A	MN	164	100	123	81	80	40	54	52	57	108	119	136	1118
1020.10	U	MN	156	91	115	83	73	40	52	49	54	121	133	137	1114
1020.20	A	MD	123	91	99	64	53	30	46	38	43	85	95	101	1105
1020.20	U	MD	154	94	85	48	41	26	41	51	39	84	130	96	1138
1020.20	A	MN	151	103	123	88	67	34	54	45	49	103	116	121	1108
1020.20	U	MN	170	106	128	78	54	29	50	54	42	105	140	116	1120
1020.30	A	MD	127	93	93	65	54	27	42	39	51	84	88	108	1107
1020.30	U	MD	163	74	81	72	36	28	33	35	38	84	96	124	1117
1020.30	A	MN	155	109	116	85	67	31	47	42	60	101	113	134	1112
1020.30	U	MN	162	109	111	87	62	32	42	37	53	96	139	137	1125
1020.40	A	MD	137	95	105	75	68	38	57	55	57	99	105	113	1203
1020.40	U	MD	159	110	92	86	61	36	46	48	52	105	120	123	1186
1020.40	A	MN	167	114	125	96	83	43	64	61	67	118	129	143	1211
1020.40	U	MN	171	115	122	99	78	44	56	54	62	115	150	148	1239
1020.50	A	MD	136	91	110	78	74	45	64	62	58	104	115	119	1285
1020.50	U	MD	145	81	90	83	69	43	54	59	59	118	135	127	1267
1020.50	A	MN	167	108	135	103	91	50	71	68	68	123	137	146	1291
1020.50	U	MN	171	107	133	107	86	52	63	61	64	119	156	151	1290

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	(mm)												
1021.00 A MD	151	98	117	87	78	53	72	70	66	109	119	137	1381
1021.00 U MD	120	92	115	77	73	49	62	61	61	98	116	119	1295
1021.00 A MN	187	117	140	115	94	59	82	79	75	125	149	171	1392
1021.00 U MN	162	119	141	103	90	57	74	75	78	114	145	159	1327
1022.00 A MD	149	98	122	86	77	49	68	61	62	110	127	132	1395
1022.00 U MD	117	87	114	70	65	50	53	58	59	110	116	124	1240
1022.00 A MN	197	116	155	117	93	54	81	71	72	125	156	164	1405
1022.00 U MN	177	116	155	107	89	57	75	72	77	118	152	162	1376
1024.00 A MD	74	49	44	19	13	6	8	7	11	39	32	61	513
1024.00 U MD	105	51	43	21	10	4	4	5	8	31	11	72	464
1024.00 A MN	103	61	67	37	24	14	15	16	21	55	57	89	553
1024.00 U MN	138	65	80	36	23	10	10	17	14	43	52	89	551
1025.00 A MD	78	54	52	20	10	8	5	6	12	39	35	62	536
1025.00 U MD	110	52	54	11	8	3	3	5	8	33	34	73	466
1025.00 A MN	107	66	73	37	19	14	9	18	24	55	63	91	577
1025.00 U MN	124	58	86	36	18	11	6	20	17	42	57	91	554
1026.00 A MD	80	47	44	21	12	9	10	12	14	36	30	65	542
1026.00 U MD	67	43	42	19	13	8	10	12	16	33	26	59	533
1026.00 A MN	109	63	68	38	26	17	18	22	27	53	57	94	592
1026.00 U MN	106	58	75	34	27	16	16	20	30	49	54	92	583
1027.00 A MD	70	47	42	18	12	7	10	10	13	35	32	60	509
1027.00 U MD	95	46	40	20	10	5	7	7	10	23	38	62	457
1027.00 A MN	99	59	64	35	25	17	18	19	24	48	55	89	552
1027.00 U MN	112	60	64	33	29	13	14	17	23	48	60	95	581
1028.00 A MD	73	48	44	18	11	7	8	10	14	39	31	64	515
1028.00 U MD	103	31	25	23	14	11	6	4	7	30	51	69	495
1028.00 A MN	105	65	68	36	22	15	13	19	24	55	53	90	558
1028.00 U MN	95	58	53	34	30	13	13	13	27	66	69	99	585
1030.00 A MD	70	46	44	19	12	8	8	10	14	36	31	60	513
1030.00 U MD	102	42	36	16	14	8	6	7	10	31	35	71	498
1030.00 A MN	100	61	66	35	24	16	14	19	26	52	52	88	553
1030.00 U MN	113	61	66	34	27	13	11	17	24	52	57	93	581
1031.00 A MD	80	55	50	21	13	10	10	10	15	40	35	65	566
1031.00 U MD	112	53	39	21	15	9	8	10	11	34	46	74	560
1031.00 A MN	111	69	72	40	27	17	15	23	25	55	59	94	606
1031.00 U MN	125	70	69	38	29	14	13	20	23	55	64	101	635
1032.00 A MD	78	54	48	24	13	8	11	14	16	38	34	65	565
1032.00 U MD	112	60	41	30	10	5	8	14	12	29	20	74	525
1032.00 A MN	109	68	69	41	25	20	18	23	26	53	60	96	608
1032.00 U MN	147	73	82	40	23	13	12	24	19	42	55	95	622
1033.00 A MD	83	53	48	22	13	9	9	12	14	39	33	69	556
1033.00 U MD	98	57	42	22	17	9	9	13	11	43	34	63	548
1033.00 A MN	114	67	70	41	25	16	14	24	23	53	58	96	599
1033.00 U MN	119	72	70	42	29	14	13	22	21	55	60	97	618
1034.00 A MD	71	51	40	21	12	7	13	12	17	37	35	65	554
1034.00 U MD	102	46	35	22	12	7	12	11	15	26	39	72	512
1034.00 A MN	104	67	61	38	27	20	21	22	29	52	59	95	596
1034.00 U MN	120	67	61	37	31	15	17	20	28	52	65	100	625

APPENDIX TABLE A.6.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
1035.00 A MD	87	59	51	31	17	13	16	15	25	53	37	79	682
1035.00 U MD	103	54	39	40	18	14	18	15	19	45	32	81	670
1035.00 A MN	124	77	79	53	34	23	25	29	42	68	65	113	734
1035.00 U MN	135	79	75	55	39	20	23	26	38	70	69	119	757
1037.10 A MD	128	93	79	46	37	19	29	37	40	74	57	112	994
1037.10 U MD	156	110	69	57	38	19	25	32	32	82	63	142	985
1037.10 A MN	179	114	115	79	61	29	38	51	57	91	92	156	1060
1037.10 U MN	194	107	106	81	69	27	36	41	56	99	115	164	1106
1040.00 A MD	112	75	61	36	27	14	26	23	32	57	47	91	811
1040.00 U MD	119	86	54	35	33	14	24	26	28	59	43	85	792
1040.00 A MN	151	93	87	62	47	23	35	45	48	72	76	127	865
1040.00 U MN	161	95	83	65	53	21	32	40	44	74	81	134	891
1040.30 A MD	76	62	45	22	18	6	14	15	17	37	36	66	583
1040.30 U MD	68	63	29	23	19	9	10	9	12	20	56	50	526
1040.30 A MN	116	88	71	48	36	12	18	29	34	51	57	97	631
1040.30 U MN	105	78	54	40	43	10	16	21	26	56	75	109	651
1042.00 A MD	---	---	---	---	---	---	---	---	---	---	---	---	2345
1042.00 U MD	---	---	---	---	---	---	---	---	---	---	---	---	2308
1042.00 A MN	---	---	---	---	---	---	---	---	---	---	---	---	2360
1042.00 U MN	---	---	---	---	---	---	---	---	---	---	---	---	2383
1044.00 A MD	---	---	---	---	---	---	---	---	---	---	---	---	3346
1044.00 U MD	---	---	---	---	---	---	---	---	---	---	---	---	3261
1044.00 A MN	---	---	---	---	---	---	---	---	---	---	---	---	3381
1044.00 U MN	---	---	---	---	---	---	---	---	---	---	---	---	3361
1047.00 A MD	871	744	786	837	873	726	844	922	706	749	827	1061	11415
1047.00 U MD	733	670	784	985	817	581	736	631	576	663	755	1083	10977
1047.00 A MN	968	878	881	997	909	764	844	993	713	771	890	1156	11418
1047.00 U MN	813	720	934	1042	898	720	850	762	703	804	829	1018	11267
1050.00 A MD	347	285	365	343	346	264	374	369	277	326	346	365	4342
1050.00 U MD	330	273	396	351	336	254	348	358	268	311	355	335	4129
1050.00 A MN	396	340	408	403	380	280	381	395	295	363	404	425	4344
1050.00 U MN	372	324	390	382	359	266	372	378	275	338	401	391	4227
1051.00 A MD	365	314	383	373	362	274	368	369	286	329	357	384	4602
1051.00 U MD	383	311	377	399	356	274	370	360	292	337	376	360	4508
1051.00 A MN	419	381	427	444	397	287	377	395	309	368	411	445	4605
1051.00 U MN	397	375	405	422	373	282	377	389	308	350	418	408	4485
1051.10 A MD	348	313	358	332	306	263	310	321	275	316	360	377	4189
1051.10 U MD	347	334	340	302	289	233	348	360	267	299	345	360	4197
1051.10 A MN	400	379	409	372	334	273	333	341	289	369	386	437	4236
1051.10 U MN	372	397	399	348	319	282	364	368	313	360	381	374	4219
1052.00 A MD	284	217	289	271	264	219	299	298	231	265	291	303	3549
1052.00 U MD	273	199	288	265	253	201	294	276	233	254	300	271	3444
1052.00 A MN	325	266	322	322	291	233	305	318	240	297	341	354	3558
1052.00 U MN	308	252	310	314	278	228	308	316	237	275	342	322	3496
1053.00 A MD	329	311	369	354	361	250	314	329	253	300	350	383	4332
1053.00 U MD	359	337	342	309	337	233	285	308	259	293	358	381	4118
1053.00 A MN	388	374	406	423	391	252	320	353	273	347	391	444	4341
1053.00 U MN	369	369	388	396	370	245	314	343	271	325	397	413	4255

APPENDIX TABLE A.6.—Continued

State Key No.			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
			(mm)												
1054.00	A	MD	239	195	252	230	221	184	263	255	191	233	249	262	3079
1054.00	U	MD	223	171	256	215	225	177	240	244	194	225	275	252	2914
1054.00	A	MN	274	235	291	276	248	197	267	273	203	259	295	299	3082
1054.00	U	MN	260	212	277	256	238	195	254	259	205	247	307	281	2989
1055.00	A	MD	206	209	239	239	218	182	229	259	184	203	284	279	2865
1055.00	U	MD	205	209	238	238	218	181	228	259	184	203	284	279	2862
1055.00	A	MN	246	256	274	306	256	177	224	283	185	253	310	345	2896
1055.00	U	MN	245	256	274	306	255	176	223	283	185	253	310	344	2895
1055.10	A	MD	287	223	288	316	269	217	285	293	206	260	378	271	3373
1055.10	U	MD	313	187	245	287	251	165	282	206	205	244	300	273	3301
1055.10	A	MN	312	249	316	354	289	212	285	303	207	288	412	275	3368
1055.10	U	MN	304	238	269	336	275	182	271	247	205	268	373	300	3300
1055.30	A	MD	266	231	229	253	231	203	234	242	218	219	239	275	2998
1055.30	U	MD	254	198	220	223	223	203	238	210	208	208	260	253	2941
1055.30	A	MN	293	274	255	310	251	208	246	257	229	250	264	327	3009
1055.30	U	MN	280	268	249	298	239	207	247	257	222	240	264	330	2967
1057.00	A	MD	212	166	242	193	191	157	214	251	167	---	250	244	2724
1057.00	U	MD	179	208	271	172	211	152	203	228	208	213	180	167	2545
1057.00	A	MN	254	205	278	248	225	160	224	264	187	---	296	292	2786
1057.00	U	MN	183	222	284	224	218	162	212	256	187	243	192	222	2610
1061.00	A	MD	193	148	190	175	155	118	173	174	138	183	192	192	2329
1061.00	U	MD	179	147	214	194	155	124	166	159	134	171	195	194	2239
1061.00	A	MN	222	190	233	221	181	127	180	187	156	208	220	230	2350
1061.00	U	MN	212	186	226	219	174	129	176	181	147	204	214	223	2285
1061.30	A	MD	201	189	224	213	192	150	216	210	172	208	207	224	2659
1061.30	U	MD	223	167	243	275	210	134	213	168	168	192	248	196	2604
1061.30	A	MN	229	231	263	256	213	160	225	222	191	229	243	265	2662
1061.30	U	MN	211	188	257	292	226	158	221	189	173	216	266	248	2624
1062.00	A	MD	181	137	181	140	138	104	142	137	117	167	174	186	2083
1062.00	U	MD	173	126	169	155	130	103	134	138	118	157	182	184	1961
1062.00	A	MN	223	166	216	178	157	109	148	150	129	188	204	218	2100
1062.00	U	MN	208	165	201	175	153	106	150	149	129	181	205	206	2038
1062.10	A	MD	167	117	148	129	127	87	135	127	100	165	166	163	1885
1062.10	U	MD	175	128	133	155	124	86	132	115	99	172	198	159	1840
1062.10	A	MN	199	146	176	166	146	96	144	137	113	183	198	193	1906
1062.10	U	MN	194	140	167	172	139	93	139	130	110	182	217	195	1884
1062.30	A	MD	159	110	169	124	119	92	127	137	99	152	165	155	1841
1062.30	U	MD	140	103	137	167	128	102	154	106	96	156	243	153	1753
1062.30	A	MN	192	140	211	159	142	100	139	150	110	170	193	185	1884
1062.30	U	MN	161	131	176	169	149	102	142	117	111	169	207	202	1842
1063.00	A	MD	171	113	145	108	104	67	103	103	85	136	177	163	1680
1063.00	U	MD	210	132	134	118	93	67	87	111	89	163	155	159	1998
1063.00	A	MN	200	145	182	133	124	78	112	115	94	160	197	185	1720
1063.00	U	MN	220	155	188	140	115	71	103	117	90	177	217	193	1879
1063.10	A	MD	171	97	139	135	103	81	94	108	95	140	157	166	1688
1063.10	U	MD	177	88	127	142	101	88	101	107	101	147	180	184	1816
1063.10	A	MN	208	118	168	175	117	88	103	119	107	155	183	198	1703
1063.10	U	MN	242	106	171	157	107	83	118	112	125	148	189	222	1754

APPENDIX TABLE A.6.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
1064.00 A MD	168	111	140	115	109	83	110	105	90	138	151	154	1733
1064.00 U MD	137	110	137	108	111	84	111	99	83	134	152	154	1725
1064.00 A MN	207	136	173	153	131	89	119	116	104	158	178	183	1753
1064.00 U MN	192	139	164	151	132	90	119	116	103	157	180	180	1738
1064.10 A MD	167	109	140	133	112	89	116	111	90	154	157	152	1780
1064.10 U MD	153	114	130	152	123	83	131	100	106	168	225	140	1673
1064.10 A MN	202	136	164	168	131	96	127	122	106	169	190	177	1791
1064.10 U MN	173	129	145	174	143	99	130	103	109	172	222	189	1751
1064.20 A MD	160	103	142	127	129	89	128	118	101	155	158	149	1838
1064.20 U MD	169	102	121	159	136	89	134	109	112	156	213	143	1847
1064.20 A MN	192	134	174	164	147	98	138	128	116	169	189	176	1845
1064.20 U MN	169	125	157	192	157	101	139	113	117	163	214	183	1843
1065.00 A MD	139	88	115	87	78	52	74	70	64	100	138	124	1347
1065.00 U MD	130	77	113	88	73	51	70	65	58	95	128	124	1293
1065.00 A MN	171	115	148	116	99	58	82	78	76	118	158	158	1376
1065.00 U MN	158	118	138	114	99	58	83	78	75	117	159	154	1360
1066.00 A MD	131	78	103	82	64	43	60	57	51	91	130	108	1195
1066.00 U MD	130	83	121	87	64	41	61	62	46	87	118	115	1234
1066.00 A MN	166	105	140	105	84	48	75	63	60	109	148	143	1242
1066.00 U MN	164	117	144	109	84	48	69	71	58	120	149	152	1292
1067.00 A MD	182	126	146	122	116	82	121	121	93	150	172	160	1834
1067.00 U MD	181	134	149	129	110	88	108	120	94	129	184	171	1881
1067.00 A MN	215	160	186	162	134	93	127	130	104	173	196	195	1867
1067.00 U MN	216	163	176	169	125	88	118	125	99	164	202	203	1858
1068.00 A MD	166	101	214	167	149	111	154	156	96	143	174	165	1940
1068.00 U MD	139	89	178	213	180	86	150	106	112	150	156	151	1814
1068.00 A MN	194	126	264	203	166	127	148	165	114	174	189	189	1943
1068.00 U MN	153	94	228	227	181	109	145	135	118	181	202	178	1817
1070.00 A MD	89	55	46	22	13	10	8	11	11	34	36	70	549
1070.00 U MD	105	55	41	28	12	6	9	4	10	26	40	78	554
1070.00 A MN	117	67	68	40	25	17	11	25	19	48	58	96	587
1070.00 U MN	132	69	68	38	29	15	9	22	18	49	63	101	607
1070.10 A MD	151	98	93	40	30	22	22	34	22	56	42	91	802
1070.10 U MD	165	98	122	39	30	34	20	21	18	20	50	99	759
1070.10 A MN	182	105	129	59	40	33	26	44	36	59	71	117	844
1070.10 U MN	186	126	127	61	46	32	25	34	30	62	78	132	849
1071.00 A MD	164	126	103	51	26	20	23	24	19	61	71	105	921
1071.00 U MD	218	119	94	61	29	19	21	23	13	48	87	110	885
1071.00 A MN	198	136	129	66	36	27	25	51	30	74	94	132	961
1071.00 U MN	222	146	128	66	37	27	23	44	27	73	95	131	982
1072.00 A MD	195	135	110	64	34	24	32	6	39	80	95	152	1206
1072.00 U MD	181	123	111	42	42	22	29	30	32	79	71	132	1221
1072.00 A MN	231	156	143	105	57	33	37	47	58	92	144	187	1277
1072.00 U MN	242	162	147	84	53	33	37	73	56	91	112	164	1274
1072.30 A MD	186	125	87	55	35	22	34	44	32	71	84	164	1196
1072.30 U MD	181	113	76	57	53	27	41	33	32	71	101	136	1111
1072.30 A MN	266	148	124	88	58	38	40	59	43	83	112	215	1258
1072.30 U MN	259	144	113	91	77	32	39	40	47	92	145	206	1321

APPENDIX TABLE A.6.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
1072.40 A MD	161	121	113	54	37	27	23	51	26	69	59	141	1023
1072.40 U MD	225	125	78	82	32	33	29	22	23	49	59	145	1047
1072.40 A MN	235	139	143	77	54	35	26	62	36	88	80	175	1084
1072.40 U MN	252	149	144	84	56	33	24	39	35	83	88	174	1063
1075.00 A MD	312	198	159	127	71	43	51	71	71	103	143	247	1742
1075.00 U MD	247	176	167	96	54	39	51	44	49	95	141	215	1688
1075.00 A MN	345	221	188	135	78	48	57	82	70	112	167	278	1779
1075.00 U MN	327	229	188	130	78	47	57	89	68	113	171	269	1765
1080.00 A MD	480	406	308	354	234	157	150	155	163	133	207	372	2290
1080.00 U MD	452	368	256	332	215	129	140	104	121	116	190	345	2296
1080.00 A MN	514	421	324	355	239	160	153	182	167	135	244	397	2354
1080.00 U MN	494	413	319	348	240	159	150	182	166	135	247	386	2322
1083.00 A MD	397	295	285	313	169	123	118	132	122	140	208	333	2185
1083.00 U MD	355	196	277	258	151	101	109	79	91	142	184	303	2211
1083.00 A MN	439	309	315	314	177	130	122	155	122	153	231	378	2217
1083.00 U MN	432	307	311	311	174	130	117	157	119	158	244	363	2327
1084.00 A MD	---	---	---	---	---	---	---	---	---	---	---	---	4830
1084.00 U MD	---	---	---	---	---	---	---	---	---	---	---	---	4381
1084.00 A MN	---	---	---	---	---	---	---	---	---	---	---	---	4881
1084.00 U MN	---	---	---	---	---	---	---	---	---	---	---	---	4692
1085.00 A MD	---	---	---	---	---	---	---	---	---	---	---	---	2113
1085.00 U MD	---	---	---	---	---	---	---	---	---	---	---	---	2213
1085.00 A MN	---	---	---	---	---	---	---	---	---	---	---	---	2140
1085.00 U MN	---	---	---	---	---	---	---	---	---	---	---	---	2177
1086.00 A MD	334	287	460	448	279	167	281	238	180	225	362	382	4218
1086.00 U MD	326	283	458	442	278	175	275	244	181	231	362	401	4259
1086.00 A MN	410	340	480	474	311	201	318	275	192	277	434	459	4194
1086.00 U MN	393	338	479	477	315	214	312	284	209	276	435	460	4207
1092.00 A MD	246	182	218	211	176	112	170	180	125	199	250	222	2610
1092.00 U MD	274	212	224	265	187	117	170	168	127	195	311	225	2607
1092.00 A MN	284	222	275	256	207	135	180	198	137	223	278	265	2668
1092.00 U MN	289	223	270	262	214	128	179	195	134	232	301	259	2691
1092.30 A MD	237	180	238	217	182	117	173	159	155	177	239	249	2594
1092.30 U MD	192	182	235	230	180	123	155	144	151	186	195	256	2586
1092.30 A MN	279	214	294	264	221	127	187	172	181	208	264	305	2645
1092.30 U MN	256	196	287	273	194	141	168	163	171	201	234	307	2597
1094.00 A MD	179	160	220	178	152	101	151	143	146	155	202	186	2242
1094.00 U MD	106	142	262	187	144	110	154	153	149	155	173	183	2113
1094.00 A MN	214	201	258	219	198	108	160	155	165	191	222	230	2305
1094.00 U MN	167	189	254	211	179	119	153	159	157	180	170	209	2177
1094.10 A MD	171	127	150	140	121	83	122	115	94	148	172	151	1859
1094.10 U MD	180	145	153	162	117	84	125	119	101	153	178	168	1841
1094.10 A MN	204	161	196	177	141	96	132	129	105	171	199	193	1906
1094.10 U MN	201	161	191	186	140	91	132	125	103	180	213	201	1920
1095.00 A MD	160	111	135	123	101	61	99	90	74	119	156	133	1609
1095.00 U MD	159	130	135	142	101	63	94	98	77	118	147	138	1614
1095.00 A MN	196	142	183	157	125	71	111	99	86	141	179	171	1663
1095.00 U MN	184	150	180	165	128	76	103	103	84	145	178	174	1658

APPENDIX TABLE A.6.—Continued

State Key No.			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
			(mm)												
1097.00	A	MD	156	109	136	109	95	66	98	99	79	129	154	136	1611
1097.00	U	MD	149	130	144	115	95	74	95	101	81	121	142	133	1629
1097.00	A	MN	190	139	178	142	116	74	107	110	92	152	179	177	1659
1097.00	U	MN	181	148	174	148	119	78	103	111	89	153	177	178	1656
1097.10	A	MD	181	133	168	127	120	85	132	115	102	144	171	171	1923
1097.10	U	MD	183	151	170	112	107	65	124	121	101	203	187	189	2088
1097.10	A	MN	207	167	206	172	146	90	137	126	109	174	190	193	1942
1097.10	U	MN	210	160	206	166	130	78	134	127	106	193	218	206	2032
1100.00	A	MD	151	95	112	92	74	51	76	65	61	107	140	126	1372
1100.00	U	MD	193	98	131	87	65	52	71	68	60	90	134	141	1599
1100.00	A	MN	178	124	150	119	95	60	84	75	68	130	159	150	1412
1100.00	U	MN	200	132	158	130	92	56	78	79	65	148	183	160	1567
1101.00	A	MD	149	90	110	97	60	42	68	61	51	75	101	104	1237
1101.00	U	MD	87	90	113	67	72	51	42	72	31	68	76	87	1253
1101.00	A	MN	175	122	163	125	81	50	79	70	64	89	106	141	1293
1101.00	U	MN	168	147	183	141	104	66	62	76	41	86	85	119	1227
1101.10	A	MD	152	107	125	101	88	49	67	66	55	94	140	119	1429
1101.10	U	MD	140	115	103	143	94	59	90	63	63	91	134	130	1414
1101.10	A	MN	183	137	166	135	111	56	76	74	65	114	169	161	1488
1101.10	U	MN	154	132	129	153	123	65	81	68	69	100	161	147	1399
1102.00	A	MD	189	137	169	145	118	72	102	103	85	131	182	160	1860
1102.00	U	MD	178	150	175	154	128	69	91	100	86	129	158	153	1841
1102.00	A	MN	228	170	220	184	143	82	112	115	99	155	207	203	1914
1102.00	U	MN	223	171	205	184	141	81	110	113	99	154	204	202	1879
1102.10	A	MD	168	117	128	99	91	47	77	76	61	127	146	136	1541
1102.10	U	MD	173	148	132	87	99	43	54	94	59	188	112	166	1618
1102.10	A	MN	206	145	177	139	118	55	85	87	70	153	164	177	1593
1102.10	U	MN	256	172	188	104	95	51	75	100	65	180	169	182	1620
1104.00	A	MD	136	91	108	86	74	47	65	65	59	98	131	115	1304
1104.00	U	MD	145	88	104	97	76	51	62	66	59	75	143	131	1278
1104.00	A	MN	169	120	151	117	97	53	73	74	68	122	154	153	1359
1104.00	U	MN	167	127	140	127	95	56	70	75	65	124	162	164	1374
1104.10	A	MD	134	83	115	97	67	54	69	62	59	99	126	118	1253
1104.10	U	MD	137	67	96	91	74	47	67	54	57	98	94	107	1321
1104.10	A	MN	167	108	141	122	88	61	75	67	71	115	149	157	1276
1104.10	U	MN	168	98	150	104	90	53	80	67	78	114	123	131	1241
1104.20	A	MD	132	90	105	85	76	48	64	64	54	91	123	114	1247
1104.20	U	MD	154	71	91	117	91	48	71	63	57	87	139	118	1224
1104.20	A	MN	158	117	140	112	96	54	72	72	64	111	146	151	1286
1104.20	U	MN	143	104	130	131	111	55	71	70	66	112	160	158	1316
1107.00	A	MD	123	76	98	73	57	38	55	52	50	88	121	103	1130
1107.00	U	MD	100	73	105	67	53	47	43	57	45	73	89	104	1126
1107.00	A	MN	153	102	136	105	70	43	61	60	58	106	140	142	1170
1107.00	U	MN	155	114	143	94	64	46	54	69	55	107	122	131	1162
1107.20	A	MD	127	98	115	92	67	49	70	62	60	107	136	112	1322
1107.20	U	MD	92	123	130	74	74	58	70	55	55	94	80	100	1288
1107.20	A	MN	153	129	160	126	91	54	78	71	73	127	156	150	1371
1107.20	U	MN	117	134	167	126	95	60	70	75	65	123	109	135	1306

APPENDIX TABLE A.6.—Continued

State Key No.			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
			(mm)												
1110.00	A	MD	143	82	108	82	66	38	59	56	48	89	134	107	1225
1110.00	U	MD	130	81	111	78	64	41	58	55	51	88	132	122	1227
1110.00	A	MN	171	114	155	116	89	47	67	64	59	112	150	154	1296
1110.00	U	MN	167	112	161	109	85	50	64	64	72	108	150	162	1299
1111.00	A	MD	141	84	112	85	66	36	57	53	44	107	123	109	1223
1111.00	U	MD	144	102	114	78	60	37	49	58	44	106	113	109	1267
1111.00	A	MN	173	113	153	116	82	40	64	62	52	128	137	150	1263
1111.00	U	MN	168	124	150	113	81	39	59	65	51	130	138	153	1273
1111.20	A	MD	129	85	120	89	71	34	58	50	46	88	114	97	1180
1111.20	U	MD	145	101	123	101	70	33	53	56	41	118	157	120	1311
1111.20	A	MN	153	107	160	127	91	38	66	60	51	107	131	131	1233
1111.20	U	MN	164	116	174	131	96	35	62	67	48	130	155	137	1329
1112.00	A	MD	125	78	95	71	57	37	53	47	45	80	111	101	1090
1112.00	U	MD	114	70	87	66	58	39	51	45	44	70	98	108	1095
1112.00	A	MN	152	103	124	99	70	43	61	55	54	99	130	136	1120
1112.00	U	MN	139	102	127	91	68	43	58	53	59	95	123	134	1090
1113.00	A	MD	124	71	93	67	54	31	46	43	39	75	103	92	1049
1113.00	U	MD	126	72	84	89	57	36	44	44	37	65	106	107	1067
1113.00	A	MN	152	97	131	98	73	37	52	50	49	95	121	131	1093
1113.00	U	MN	149	103	121	110	75	41	49	53	46	94	128	146	1126
1114.00	A	MD	142	85	110	76	65	37	56	55	45	87	122	108	1195
1114.00	U	MD	138	89	111	81	71	37	56	56	44	93	111	114	1213
1114.00	A	MN	172	112	151	107	81	44	63	61	55	107	139	149	1242
1114.00	U	MN	162	120	145	114	84	48	60	65	55	111	141	150	1259
1115.00	A	MD	275	229	311	271	198	120	208	188	120	181	246	276	3005
1115.00	U	MD	271	225	309	267	198	122	195	183	123	174	244	281	2940
1115.00	A	MN	320	267	380	332	230	148	242	220	138	207	284	324	3092
1115.00	U	MN	307	261	370	324	230	156	238	219	151	202	279	321	3064
1117.00	A	MD	193	145	198	171	157	101	149	141	117	152	184	188	2162
1117.00	U	MD	176	145	193	164	157	110	147	136	116	152	185	188	2157
1117.00	A	MN	227	171	253	212	176	119	166	164	127	170	225	222	2233
1117.00	U	MN	222	168	243	207	175	120	165	161	137	168	226	222	2221
1118.00	A	MD	150	122	170	141	138	86	132	118	99	130	163	143	1853
1118.00	U	MD	125	107	178	185	162	81	149	102	91	103	190	117	1953
1118.00	A	MN	171	137	216	178	157	99	150	135	106	145	194	164	1902
1118.00	U	MN	155	126	215	218	179	96	174	110	100	140	210	154	1947
1131.00	A	MD	215	175	238	206	194	121	183	183	140	173	230	234	2570
1131.00	U	MD	210	185	255	216	216	118	179	193	132	167	236	228	2641
1131.00	A	MN	258	203	292	254	219	142	204	205	156	191	257	272	2638
1131.00	U	MN	250	212	293	237	225	142	204	213	146	192	254	278	2662
1131.40	A	MD	268	187	273	227	178	136	184	184	148	206	232	247	2649
1131.40	U	MD	244	198	346	363	173	141	241	141	128	193	294	191	2898
1131.40	A	MN	314	237	340	277	201	162	209	214	179	230	268	289	2757
1131.40	U	MN	285	250	331	344	218	164	232	163	151	224	295	278	2973
1132.00	A	MD	142	112	130	121	130	72	101	105	94	100	129	150	1615
1132.00	U	MD	144	146	170	142	105	71	97	110	75	105	125	137	1542
1132.00	A	MN	166	130	163	157	154	84	113	118	97	120	140	170	1659
1132.00	U	MN	158	142	182	170	145	91	108	141	93	121	121	170	1609

APPENDIX TABLE A.6.—Continued

State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
1132.10 A MD	172	134	183	152	144	89	138	134	97	128	188	183	1968
1132.10 U MD	198	141	193	122	170	83	147	139	101	134	219	208	2069
1132.10 A MN	223	163	232	196	161	104	153	149	106	145	214	208	2033
1132.10 U MN	268	181	237	168	177	93	156	148	98	163	243	221	2156
1133.00 A MD	136	96	111	84	73	49	71	81	62	105	134	129	1222
1133.00 U MD	139	82	85	99	89	50	70	76	60	116	144	113	1217
1133.00 A MN	171	111	155	109	84	56	80	86	68	114	158	150	1283
1133.00 U MN	158	117	165	109	87	51	79	87	67	118	176	151	1329
1134.00 A MD	163	114	151	125	113	70	105	103	86	123	154	151	1674
1134.00 U MD	136	113	159	132	112	82	105	99	91	126	152	148	1660
1134.00 A MN	196	137	197	164	130	80	116	114	95	139	181	176	1727
1134.00 U MN	180	143	207	155	132	87	118	116	105	138	180	175	1737
1135.00 A MD	206	153	208	188	168	106	154	152	111	153	204	202	2283
1135.00 U MD	209	167	220	188	180	104	156	149	119	153	203	218	2273
1135.00 A MN	254	184	255	231	194	122	170	169	127	172	234	231	2344
1135.00 U MN	246	192	255	229	194	122	167	176	128	174	233	237	2355
1136.00 A MD	164	115	159	118	99	66	97	99	80	118	174	138	1634
1136.00 U MD	167	133	193	121	112	67	99	104	76	123	195	137	1740
1136.00 A MN	205	140	199	158	113	78	108	110	88	135	195	161	1687
1136.00 U MN	209	151	213	159	117	79	106	115	80	140	196	168	1738
1137.00 A MD	217	145	200	169	148	96	139	141	107	163	208	199	2208
1137.00 U MD	231	170	209	179	156	99	142	139	111	176	229	211	2267
1137.00 A MN	262	175	252	212	175	111	152	156	117	185	236	230	2271
1137.00 U MN	253	190	253	221	179	115	154	163	117	194	240	234	2324
1140.00 A MD	193	133	133	127	116	66	94	95	82	106	151	137	1671
1140.00 U MD	171	143	177	150	113	65	85	85	63	99	115	138	1696
1140.00 A MN	226	161	185	164	145	78	108	106	93	127	185	164	1739
1140.00 U MN	215	173	217	179	133	85	95	129	77	124	134	158	1690
1141.00 A MD	165	106	135	117	94	52	81	79	72	109	151	135	1502
1141.00 U MD	171	126	157	123	97	54	82	80	58	101	134	127	1596
1141.00 A MN	204	133	178	158	116	59	89	89	82	127	173	161	1564
1141.00 U MN	208	145	191	163	122	59	88	95	73	133	176	169	1629
1142.00 A MD	176	110	149	113	91	46	76	70	58	120	149	123	1513
1142.00 U MD	119	128	182	97	78	51	74	89	50	101	128	122	1501
1142.00 A MN	219	142	202	150	123	52	84	79	68	142	175	163	1582
1142.00 U MN	217	164	217	140	109	55	77	93	61	145	158	161	1579
1143.00 A MD	160	93	119	99	81	45	65	67	54	98	127	119	1330
1143.00 U MD	158	104	127	106	89	49	63	62	48	88	117	125	1442
1143.00 A MN	194	122	157	142	101	50	73	76	62	115	147	144	1386
1143.00 U MN	199	133	164	146	107	50	70	82	56	120	153	152	1436
1144.00 A MD	146	94	117	91	80	35	55	52	43	89	119	103	1230
1144.00 U MD	120	118	142	82	70	36	54	57	34	83	138	117	1296
1144.00 A MN	175	119	158	127	100	41	61	61	50	103	135	139	1281
1144.00 U MN	193	127	161	132	95	42	57	69	44	110	142	149	1335
1145.00 A MD	146	94	117	91	77	39	61	59	50	106	119	111	1261
1145.00 U MD	111	108	118	90	67	38	61	63	44	106	110	101	1294
1145.00 A MN	176	119	158	126	99	44	69	67	56	126	138	143	1311
1145.00 U MN	165	125	154	119	101	45	70	70	54	128	136	141	1307

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State Key No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
	(mm)												
1147.00 A MD	171	95	125	92	80	51	62	62	---	109	146	132	---
1147.00 U MD	172	101	126	135	89	46	92	53	61	109	199	202	1672
1147.00 A MN	198	129	173	132	99	60	72	74	---	132	170	167	---
1147.00 U MN	186	124	161	194	100	53	85	56	57	144	205	220	1648