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A CROP WATER EVALUATION MANUAL FOR INDIA

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A CROP WATER EVALUATION MANUAL FOR INDIA

By

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INTRODUCTION

India has a wide range of climate. The variation in rainfall is from 1,147 cm at Cherapunjee in Meghalaya to 11.2 cm at Shahgarh in Rajashthan. Rainfall is erratic, uncertain and unevenly distributed. Similarly, there is a large difference in temperature, sunshine and wind velocity due to various geographical situations. Therefore, the determination of evapotranspiration and crop-zoning needs specific recommendations for specific areas so that better utilization of water resources and higher crop yields can be achieved.

The average grain yield in India is 1,700 kg/ha under irrigation and 700 kg/ha without irrigation. Rice, wheat, jowar (sorghum) and maize are the major cereal crops which are cultivated in 40.0, 21.2, 16.2 and 5.7 million hectares with a total production of 52.6, 31.3, 11.8 and 5.9 millions tons, respectively. Among pulses, gram has the maximum area and production of 8.2 million hectares and 5.7 million tons. The above figures indicate that the average yield of cereals and pulses in India is less than 1,500 kg/ha. Although total food production in India has increased from 55.0 million tons in 1950-51 to 125.0 millions tons in 1977-78, there is still a large potential for increasing food grain yields in the country by manipulating the factors of production.

Among the different factors of production, water management plays the most important role. Out of 142 million hectares of net cultivated area, only 24.4 percent of the area is irrigated. More than 80 percent of total cultivatable area can be irrigated if the full water resources are utilized. It seems probable that as the population increases, about 80 percent of the cultivatable area will eventually be under irrigation.

The tabular presentation, climatic data and the maps showing potential evapotranspiration are presented as a guide for estimating present and future irrigation requirements and water demands.

With the above objectives in mind, the ETP (potential evapotranspiration) and MAI (Moisture Availability Index) of different locations of India were determined on the basis of temperature, rainfall and radiation. On the basis of these values, the country was divided into different zones and suitable crops and water management were suggested.

MATERIALS AND METHODS

This report discusses the role of soil water availability to plants with special reference to evapotranspiration and a moisture availability index. Particular attention is directed toward analyzing climatic data in order to develop relationships which classify areas for agricultural production and predict crop yields based upon inputs of water, fertility and energy.

Computer programs were developed applying the relationships described herein. The results of these analyses are presented in tabular form. Climatic data can be used to develop a moisture availability index (MAI) for crop production. The MAI is the ratio of dependable precipitation to potential evapotranspiration. Precipitation probabilities and mean monthly values of temperature, relative humidity and duration of sunshine were used by Hargreaves (5) to determine MAI for 40 locations in India. Similar procedures were used with other data in order to estimate ETP and MAI at the locations shown in the tables.

DEPENDABLE PRECIPITATION

Dependable precipitation (PD) is defined here as the 75 percent probability of assured precipitation occurrence, or that amount of precipitioon that can be anticipated, on the average, to be equaled or exceeded during three-fourths of the time.

Precipitation probabilities or frequency determinations are determined from the available data. The accuracy of the analysis depends more on the length of record than on the method used. The WMO (12) ranked the monthly values of precipitation for the 30-year period 1931-60. Various monthly precipitation probability amounts can be determined by using the ranking method and the equations:

$$F = \frac{m}{n+1} \tag{1}$$

$$P = 100 - 100\ F \tag{2}$$

in which m = the order number assigned to the data, ranked in ascending order,

m = 1,2,3,-----n (m=1 being the lowest recorded monthly rainfall);

n = total number of data points;

F = frequency number; and

P = percentage probability of occurrence.

The precipitation data published by WMO (12) include the mean and the 97, 79, 60, 21 and 3 percent probability of occurrence or exceedence.

The 75 percent probability of precipitation may be estimated using the ranking method. When computer facilities are available the incomplete gamma probability distribution is usually preferred.

Worldwide rainfall and climatic data were obtained on tape from NOAA (National Oceanic and Atmosphere Administration of the U.S. Department of Commerce). Probability analyses were made using the incomplete gamma distribution for 51 locations presented in this study.

For areas of fairly uniform skew in the precipitation probability distribution, the 75 percent probability of rainfall occurrence (PD) can also be estimated from mean monthly precipitation (PM). The relationship is usually linear and has the form:

$$PD = a + b \times PM \tag{3}$$

For the 51 locations having fairly complete data the values of PD and PM were compared. Only those months having enough rainfall to be of significant value for agriculture were used. The lower limit was taken as the amount such that PD was equal to 33 percent of potential evapotranspiration (ETP). Months of less rainfall were not used in developing the equations. The resulting equations are:

$$PD = 14 + 0.40 \times PM \tag{4}$$

for values of PM of less than 175 mm, and

$$PD = -70 + 0.88 \times PM \tag{5}$$

for values of PM equal to or greater than 175 m.

Equations 4 and 5 were then used to estimate PD for the rainfall

stations for which mean values are given by Wernstedt (11). Equation 4 is not recommended for low mean monthly rainfall amounts, as dependable rainfall does not exceed mean rainfall. The lowest mean monthly value used in developing the equation exceeded 55 mm. Lower rainfall amounts have little significance for agricultural production.

Equations 4 and 5 were developed from graphical plotting. The 5, 50, 75 and 95 percent probabilities of assured rainfall (P05, P50, P75 or PD, and P95) were regressed as functions of mean rainfall (PM). Those months with PD values of less than one-third of potential evapotranspiration were not used. Months with PM exceeding 550 mm were also omitted from the regression. The regression equations and the corresponding coefficients of determination (R^2) are as follows:

Equation	R^2 in %
P05 = 148 + 1.36 PM	86
P50 = -20 + 1.00 PM	99
P75 = -40 + 0.80 PM	96
P95 = -63 + 0.62 PM	91

The above equations can be generalized as:

$$Px = a + b \times PM \qquad (6)$$

in which Px is any desired probability in the range of 5 to 95 percent. Values of a and b can then be plotted for the values of Px = 05, 50, 75 and 95, and connected by smooth curves or straight lines. Values of a

and b can be taken from these graphs in order to develop an equation for any probability of assured rainfall in the range of probabilities between 5 and 95 percent.

POTENTIAL EVAPOTRANSPIRATION

Crop water requirements are influenced by the evapotranspiration demand which is controlled by climatic factors and crop characteristics including rate and stage of growth. Potential evapotranspiration (ETP) can be estimated from published climatic data. Methods used in this study are described by Hargreaves and Samani (6). The most important weather elements influencing potential water use are ambient air temperature and solar radiation. A useful relationship between these elements and ETP exists when mean temperature is expressed in degrees Fahrenheit (TMF) and incident solar radiation (RS) is expressed in equivalent mm of water evaporation. Values of ETP in mm per month are given by the equations:

$$ETP = 0.0075\ RS \times TMF \tag{7}$$

$$RS \text{ in mm} = \frac{RS \text{ in Langleys } (cal/cm^2)}{59.6 - (0.055 \times T°C)} \tag{7a}$$

For this report, values of RS were taken principally from Löf, Duffie and Smith (8). When not measured directly, RS can be calcuated from tabular values of extraterrestrial radiation, RA, in equivalent mm of water evaporated per month and from the percentage of possible sunshine, S, occurring at a given location. Löf, Duffie and Smith (8) used several conversion equations from RA to RS allowing for the

difference in sunshine percentage. A more general equation can be written:

$$RS = 0.075\ RA \times S^{0.50} \tag{8}$$

The monthly percentage of possible sunshine (S) is determined from the actual duration of sunshine in hours (SH), from day length (DL) and from the number of days in the month (DM). The equation is:

$$S = \frac{100\ SH}{DL \times DM} \tag{9}$$

Values of DL are given in Table 1.

When sunshine hours are not available, S can be roughly estimated from mean monthly relative humidity (RH) using the equation:

$$S = KS\ (100 - RH)^{0.50} \tag{10}$$

Values of the adjustment coefficient (KS) vary somewhat with climate and the manner and times of recording the relative humidity data. A computer program can be developed to calculate values of KS for all stations having published values of SH and RH. For locations where either SH or RH data are not available, a KS value can be assigned based on those values calculated in comparable areas having similar climatic conditions. Equation 8 may somewhat overestimate RS in areas of humid climate, and in these situations some local calibration of the coefficient may be desirable.

For locations for which mean maximum and minimum temperature are available, RS can also be estimated from the equation:

$$RS = KT \times RA \times TD^{0.50} \tag{11}$$

TABLE 1. MEAN DAILY DURATION OF MAXIMUM POSSIBLE SUNSHINE HOURS (DL) FOR DIFFERENT MONTHS AND LATITUDES.

Northern Latitudes / Southern Latitudes	Jan / July	Feb / Aug	Mar / Sept	Apr / Oct	May / Nov	June / Dec	July / Jan	Aug / Feb	Sept / Mar	Oct / Apr	Nov / May	Dec / June
40	9.6	10.7	11.9	13.3	14.4	15.0	14.7	13.7	12.5	11.2	10.0	9.3
35	10.1	11.0	11.9	13.1	14.0	14.5	14.3	13.5	12.4	11.3	10.3	9.8
30	10.4	11.1	12.0	12.9	13.6	14.0	13.9*	13.2	12.4	11.5	10.6	10.2
25	10.7	11.3	12.0	12.7	13.3	13.7	13.5	13.0	12.3	11.6	10.9	10.6
20	11.0	11.5	12.0	12.6	13.1	13.3	13.2	12.8	12.3	11.7	11.2	10.9
15	11.3	11.6	12.0	12.5	12.8	13.0	12.9	12.6	12.2	11.8	11.4	11.2
10	11.6	11.8	12.0	12.3	12.6	12.7	12.6	12.4	12.1	11.8	11.6	11.5
5	11.8	11.9	12.0	12.2	12.3	12.4	12.3	12.3	12.1	12.0	11.9	11.8
0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0

Source: Doorenbos and Kassam (1).

in which TD is mean maximum minus mean minimum temperature and KT is a coefficient that requires some local calibration. For most continental climates KT for °C is usually within the range of 0.15 to 0.18. Values of KT are generally lower near mountains when there is significant resultant nighttime cooling and higher near the ocean due to the moderating effect of the large body of water.

In the present study, Eqs. 7 and 7a were used to calculate the ETP values of different locations of India. Solar radiation was principally from Löf, Duffie and Smith (8). For those locations for which radiation measurements or estimates were not otherwise available, values were taken from radiation isolines on a set of maps or from a nearby location of similar latitude and elevation. The mean monthly rainfall data given by Wernstedt (11) also present mean temperature where available. However, there are many locations with rainfall records but no temperature data. For these missing temperature records it was assumed that temperature would be equal to that at a nearby station of similar latitude and elevation.

Hargreaves (5) used Eqs. 7 through 10 in a worldwide study. For 12 locations in India RS was estimated using Eq. 8 and direct measurements of sunshine hours. A comparison was made of annual values of ETP for the corresponding locations presented in this report with those previously estimated by Hargreaves. The new values averaged 5 percent more than those given by Hargreaves. The standard deviation in ratios to the previous values was 3.8 percent of the mean. These differences are considered to be well within the accuracy of the measurements of temperature and radiation. The higher values seem preferable, as they are more conservative.

Equations 7 and 11 can be combined, resulting in:

$$ETP = K \times RA \times TMF \times TD^{0.50} \tag{12}$$

Values of K are given by the equation:

$$1000\ K = \frac{RS \times 0.128}{RA \times TD^{0.50}} \tag{13}$$

in which RS is in Langleys per day (cal/cm^2/day) and RA is in equivalent mm of water evaporation per day.

Temperature data were taken from values given by Her Majesty's Stationery Office (7), RS from Löf, Duffie and Smith (8) and RA from Doorenbos and Kassam (1). Values of 1,000 K were calculated using Eq. 13 for those locations not directly on the coast for which data are available from these sources. The results are presented in Table 2. The average value of K in Eq. 12 for these locations is 0.00099. A value of 0.001 is suggested for estimating ETP.

Equation 11 can be modified for temperature in °C. The corresponding equation is:

$$ETP = 0.0024 \times RA \times TD^{0.50} \times (T°C + 17.8) \tag{14}$$

in which ETP and RA are in the same units. Values of RA given by Doorenbos and Kassam (1) are presented as Table 3.

MOISTURE AVAILABILITY INDEX

The moisture availability index (MAI) is a moisture adequacy index at the 75 percent probability level of precipitation occurrence. It is

TABLE 2. VALUES OF 1000 K FROM EQUATION 13 FOR CONTINENTAL LOCATIONS IN INDIA.

Station and State	Ahamadabad Gujarat	Allahabad Uttar Pradesh	Calcutta West Bangel	Jaipur Rajasthan	Jodhpur Rajasthan	New Delhi	Poona Maharashtra	Sholapur Maharashtra
Jan	1.03	1.00	0.92	1.03	1.04	0.96	0.92	1.07
Feb	1.00	0.98	0.88	1.02	1.02	1.08	0.94	1.02
Mar	0.97	0.88	0.89	0.98	0.97	1.01	0.91	1.03
Apr	1.00	0.92	0.93	0.98	0.98	0.94	0.94	0.99
May	0.99	0.98	0.97	1.01	1.04	0.99	1.02	0.96
June	1.06	0.94	1.04	0.93	1.11	1.06	1.05	0.85
July	0.95	1.09	1.06	0.87	0.99	0.82	0.97	0.77
Aug	0.90	1.16	1.03	0.96	0.98	1.05	0.98	0.82
Sept	1.15	1.14	1.11	1.07	1.11	1.02	1.02	0.91
Oct	1.08	1.08	1.08	0.99	0.97	0.97	0.98	1.04
Nov	1.04	1.01	1.01	0.98	0.96	0.95	0.95	1.14
Dec	0.95	0.99	0.91	0.98	0.98	0.95	0.89	1.08
Mean	1.01	1.01	0.99	0.98	1.01	0.98	0.96	0.97
STD. DEV.	0.067	0.087	0.079	0.051	0.053	0.070	0.049	0.114

TABLE 3. EXTRA-TERRESTRIAL RADIATION (RA) EXPRESSED IN EQUIVALENT EVAPORATION IN mm/DAY.

Northern Hemisphere													Southern Hemisphere											
Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Lat	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
6.4	8.6	11.4	14.3	16.4	17.3	16.7	15.2	12.5	9.6	7.0	5.7	40°	17.9	15.7	12.5	9.2	6.6	5.3	5.9	7.9	11.0	14.2	16.9	18.3
6.9	9.0	11.8	14.5	16.4	17.2	16.7	15.3	12.8	10.0	7.5	6.1	38	17.9	15.8	12.8	9.6	7.1	5.8	6.3	8.3	11.4	14.4	17.0	18.3
7.4	9.4	12.1	14.7	16.4	17.2	16.7	15.4	13.1	10.6	8.0	6.6	36	17.9	16.0	13.2	10.1	7.5	6.3	6.8	8.8	11.7	14.6	17.0	18.2
7.9	9.8	12.4	14.8	16.5	17.1	16.8	15.5	13.4	10.8	8.5	7.2	34	17.8	16.1	13.5	10.5	8.0	6.8	7.2	9.2	12.0	14.9	17.1	18.2
8.3	10.2	12.8	15.0	16.5	17.0	16.8	15.6	13.6	11.2	9.0	7.8	32	17.8	16.2	13.8	10.9	8.5	7.3	7.7	9.6	12.4	15.1	17.2	18.1
8.8	10.7	13.1	15.2	16.5	17.0	16.8*	15.7	13.9	11.6	9.5	8.3	30	17.8	16.4	14.0	11.3	8.9	7.8	8.1	10.1	12.7	15.3	17.3	18.1
9.3	11.1	13.4	15.3	16.5	16.8	16.7	15.7	14.1	12.0	9.9	8.8	28	17.7	16.4	14.3	11.6	9.3	8.2	8.6	10.4	13.0	15.4	17.2	17.9
9.8	11.5	13.7	15.3	16.4	16.7	16.6	15.7	14.3	12.3	10.3	9.3	26	17.6	16.4	14.4	12.0	9.7	8.7	9.1	10.9	13.2	15.5	17.2	17.8
10.2	11.9	13.9	15.4	16.4	16.6	16.5	15.8	14.5	12.6	10.7	9.7	24	17.5	16.5	14.6	12.3	10.2	9.1	9.5	11.2	13.4	15.6	17.1	17.7
10.7	12.3	14.2	15.5	16.3	16.4	16.4	15.8	14.6	13.0	11.1	10.2	22	17.4	16.5	14.8	12.6	10.6	9.6	10.0	11.6	13.7	15.7	17.0	17.5
11.2	12.7	14.4	15.6	16.3	16.4	16.3	15.9	14.8	13.3	11.6	10.7	20	17.3	16.5	15.0	13.0	11.0	10.0	10.4	12.0	13.9	15.8	17.0	17.4
11.6	13.0	14.6	15.6	16.1	16.1	16.1	15.8	14.9	13.6	12.0	11.1	18	17.1	16.5	15.1	13.2	11.4	10.4	10.8	12.3	14.1	15.8	16.8	17.1
12.0	13.3	14.7	15.6	16.0	15.9	15.9	15.7	15.0	13.9	12.4	11.6	16	16.9	16.4	15.2	13.5	11.7	10.8	11.2	12.6	14.3	15.8	16.7	16.8
12.4	13.6	14.9	15.7	15.8	15.7	15.7	15.7	15.1	14.1	12.8	12.0	14	16.7	16.4	15.3	13.7	12.1	11.2	11.6	12.9	14.5	15.8	16.5	16.6
12.8	13.9	15.1	15.7	15.7	15.5	15.5	15.6	15.2	14.4	13.3	12.5	12	16.6	16.3	15.4	14.0	12.5	11.6	12.0	13.2	14.7	15.8	16.4	16.5
13.2	14.2	15.3	15.7	15.5	15.3	15.3	15.5	15.3	14.7	13.6	12.9	10	16.4	16.3	15.5	14.2	12.8	12.0	12.4	13.5	14.8	15.9	16.2	16.2
13.6	14.5	15.3	15.6	15.3	15.0	15.1	15.4	15.3	14.8	13.9	13.3	8	16.1	16.1	15.5	14.4	13.1	12.4	12.7	13.7	14.9	15.8	16.0	16.0
13.9	14.8	15.4	15.4	15.1	14.7	14.9	15.2	15.3	15.0	14.2	13.7	6	15.8	16.0	15.6	14.7	13.4	12.8	13.1	14.0	15.0	15.7	15.8	15.7
14.3	15.0	15.5	15.5	14.9	14.4	14.6	15.1	15.3	15.1	14.5	14.1	4	15.5	15.8	15.6	14.9	13.8	13.2	13.4	14.3	15.1	15.6	15.5	15.4
14.7	15.3	15.6	15.3	14.6	14.2	14.3	14.9	15.3	15.3	14.8	14.4	2	15.3	15.7	15.7	15.1	14.1	13.5	13.7	14.5	15.2	15.5	15.3	15.1
15.0	15.5	15.7	15.3	14.4	13.9	14.1	14.8	15.3	15.4	15.1	14.8	0	15.0	15.5	15.7	15.3	14.4	13.9	14.1	14.8	15.3	15.4	15.1	14.8

Source: Doorenbos and Kassam (1).

defined as dependable precipitation divided by potential evapotranspiration. The equation is:

$$MAI = \frac{PD}{ETP} \tag{15}$$

A MAI value of 1.00 means that dependable precipitation equals potential evapotranspiration.

Monthly MAI computations do not define the rainfall distribution within the month nor the limitations resulting from shallow root depths or soils that have limited capacity to store available soil water. In most cases, use of MAI values calculated for 10-day periods is significantly superior to using monthly indices. Some studies defining the agricultural potential for rainfed agriculture have used 5, 10 and 15 day MAI values as well as monthly.

The MAI computations assume that all precipitation enters the soil profile and becomes available for plant use. Often rainfall intensities will exceed soil infiltration capacities. Estimates of rainfall infiltration rates of water into the soil need to be compared with rainfall depth duration amounts. If intensities of precipitation significantly exceed infiltration rates, then surface runoff will be considerable unless measures are taken to increase the opportunity time for water to enter the soil or to increase the infiltration rate.

A value of MAI of 0.33 or less for one month during the crop growing season is considered to be a danger signal. Production will probably drop below an economic level. This will depend to an important degree both upon the crop grown and upon the corresponding crop growth stage. If the average MAI value for the crop growing season is less than 0.50,

then the use of fertilizers may not be economical. This will also depend upon the crop grown and upon the level of other inputs.

Whenever a monthly MAI value exceeds 1.20 or 1.33, then there is indicated to be a need, except for rice, of good natural or artificial drainage.

For most irrigated crops the application of water should be made at a frequency such that the residual soil moisture does not fall below 50 percent of the readily available soil moisture. The amount applied should be adequate to replace the water used to supply the crop evapotranspiration. Monthly values of PD and ETP provide a rough guide for the amounts of irrigation water required by the crops. For rainfed agriculture monthly MAI values provide an indication of potential yields and an indication of similar conditions for use in agricultural technology transfer.

CLIMATIC CLASSIFICATION OF AREAS FOR AGRICULTURAL PRODUCTION

Current climatic classifications are not fully adequate for agricultural technology transfer. Most classifications are based primarily on temperature and precipitation. Crop production technology transfer, to be successful, should also consider the evaporative demand or potential evapotranspiration and rainfall probabilities of occurrence.

Mean monthly temperatures do not clearly define the type of climate. In some humid climates with a mean monthly temperatue of 25°C, the mean maximum may be 30°C and the mean minimum 20°C. For arid climates with the same monthly mean, the range may be from 15°C to 35°C. These two conditions are not comparable for purposes of crop technology

transfer. Improvements in climatic classifications should therefore consider including information on the mean range between maximum and minimum temperatures.

Crops have varying requirements for photoperiod, temperature, radiation, water and length of growing season. When the climatic phenological requirements are met, then temperature and radiation determine limits to crop production. Within a range of optimum or near optimum temperature, potential evapotranspiration provides a useful index of potential biomass production or potential yields.

Potential yield can only be attained when water is adequate for crop evapotranspiration requirements. Under rainfed conditions an estimate of the water balance is essential for determining potential crop production. The moisture availability index provides an estimate of the climatic water balance. The estimating of the soil water balance is much more complicated and depends upon rainfall intensities, percolation, management, soil conditions, etc., as well as upon crop requirements and probabilities of rainfall amounts.

The moisture availability index is presented as a criteria for use in agricultural technology transfer and for determining potential yields under rainfed agriculture. It provides a useful means of comparing areas of similar climates. Although rainfall varies in India from very low to highly excessive, the distribution is remarkably uniform in that depth-duration amounts have a fairly uniform relationship to mean monthly rainfall amounts. If soils, topography, management and vegetation are similar, it should be anticipated that similar MAI values will result in similar runoff amounts.

WATER AVAILABILITY AND CROP PRODUCTION

Crops have critical periods during which soil water stress produces a much greater reduction in yields than is the case for other growth periods. The critical periods are usually during the flowering and fruit setting stages or the flowering and seed development periods. Critical water stress periods are given by Doorenbos and Kassam (1).

Soils vary in their capacity to store and carry over readily available moisture in the crop root zone. The amounts of water available to the crop from soil moisture depend upon the crop rooting characteristics under prevailing conditions and the capacity of the soil to store and make water available within that depth. For some soil and crop combinations, moisture should be replaced in the root zone at short time intervals (five days or less). For other conditions replacement of soil moisture at two to three week or longer intervals is adequate.

CROP YIELD AND MOISTURE STRESS

Doorenbos and Kassam (1) used the Stewart model to relate the effects of water stress to yield. The equation can be written:

$$\left(1 - \frac{Ya}{Ym}\right) = Ky \left(1 - \frac{ETa}{ETm}\right) \qquad (16)$$

in which

Ya = actual harvested yield;

Ym = maximum or potential yield;

Ky = a yield response factor;

ETa = actual crop evapotranspiration; and

ETm = maximum or potential crop evapotranspiration.

Use of Eq. 16 is facilitated by tables giving good yields of high producing varieties. Crop evapotranspiration coefficients (KC) for each stage of the crop cycle for 15 crops and values of the yield response factor (Ky) for various growth stages and for the crop season for 23 crops are given by Doorenbos and Kassam (1).

Of crops listed, banana and corn (maize) have the largest yield response or reduction factors. Seasonal Ky values are 1.2 to 1.35 for banana and 1.25 for corn. Groundnut, cotton, grape, safflower and soybeans have seasonal Ky values of 0.85 or less. Groundnut is listed as being the most drought resistant, with Ky equal to 0.70. For most of the other crops listed, the range in Ky for the growing season is between 0.9 to 1.10. When other information is lacking, an average seasonal Ky of 1.00 is suggested. However, recent research by Stewart[1] indicates that the seasonal Ky values given by Doorenbos and Kassam (1) are too optimistic. He suggests the following: beans, 1.6; cotton, 1.25; maize, 1.4; and sorghum, 1.0.

ETm is estimated by multiplying ETP (Eqs. 7, 12 or 14) times the crop coefficient, KC. Values of KC are shown in Table 4, and those for Ky in Table 5.

SURFACE DRAINAGE

The yield reductions from excessive irrigation probably far exceed loss of yield due to soil moisture stress resulting from deficit irrigation. Plant growth depends upon photosynthesis and respiration.

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[1] Stewart, J. Ian, Personal Communication, 28 January, 1983.

TABLE 4. CROP COEFFICIENTS (KC).

Crop	Crop Development Stage					Total Growing Period
	Initial	Crop Development	Mid-Season	Late Season	At Harvest	
Banana						
tropical	0.4-0.5	0.7-0.85	1.0-1.1	0.9-1.0	0.75-0.85	0.7-0.8
subtropical	0.5-0.65	0.8-0.9	1.0-1.2	1.0-1.15	1.0-1.15	0.85-0.95
Bean						
green	0.3-0.4	0.65-0.75	0.95-1.05	0.9-0.95	0.85-0.95	0.85-0.9
dry	0.3-0.4	0.7-0.8	1.05-1.2	0.65-0.75	0.25-0.3	0.7-0.8
Cabbage	0.4-0.5	0.7-0.8	0.95-1.1	0.9-1.0	0.8-0.95	0.7-0.8
Cotton	0.4-0.5	0.7-0.8	1.05-1.25	0.8-0.9	0.65-0.7	0.8-0.9
Grape	0.35-0.55	0.6-0.8	0.7-0.9	0.6-0.8	0.55-0.7	0.55-0.75
Groundnut	0.4-0.5	0.7-0.8	0.95-1.1	0.75-0.85	0.55-0.6	0.75-0.8
Maize						
sweet	0.3-0.5	0.7-0.9	1.05-1.2	1.0-1.15	0.95-1.1	0.8-0.95
grain	0.3-0.5	0.7-0.85	1.05-1.2	0.8-0.95	0.55-0.6	0.75-0.9
Onion						
dry	0.4-0.6	0.7-0.8	0.95-1.1	0.85-0.9	0.75-0.85	0.8-0.9
green	0.4-0.6	0.6-0.75	0.95-1.05	0.95-1.05	0.95-1.05	0.65-0.8
Pea, fresh	0.4-0.5	0.7-0.85	1.05-1.2	1.0-1.15	0.95-1.1	0.8-0.95
Pepper, fresh	0.3-0.4	0.6-0.75	0.95-1.1	0.85-1.0	0.8-0.9	0.7-0.8
Potato	0.4-0.5	0.7-0.8	1.05-1.2	0.85-0.95	0.7-0.75	0.75-0.9
Rice	1.1-1.15	1.1-1.5	1.1-1.3	0.95-1.05	0.95-1.05	1.05-1.2
Safflower	0.3-0.4	0.7-0.8	1.05-1.2	0.65-0.7	0.2-0.25	0.65-0.7
Sorghum	0.3-0.4	0.7-0.75	1.0-1.15	0.75-0.8	0.5-0.55	0.75-0.85
Soybean	0.3-0.4	0.7-0.8	1.0-1.15	0.7-0.8	0.4-0.5	0.75-0.9
Sugarbeet	0.4-0.5	0.75-0.85	1.05-1.2	0.9-1.0	0.6-0.7	0.8-0.9
Sugarcane	0.4-0.5	0.7-1.0	1.0-1.3	0.75-0.8	0.5-0.6	0.85-1.05
Sunflower	0.3-0.4	0.7-0.8	1.05-1.2	0.7-0.8	0.35-0.45	0.75-0.85
Tobacco	0.3-0.4	0.7-0.8	1.0-1.2	0.9-1.0	0.75-0.85	0.85-0.95
Tomato	0.4-0.5	0.7-0.8	1.05-1.25	0.8-0.95	0.6-0.65	0.75-0.9
Watermelon	0.4-0.5	0.7-0.8	0.95-1.05	0.8-0.9	0.65-0.75	0.75-0.85
Wheat	0.3-0.4	0.7-0.8	1.05-1.2	0.65-0.75	0.2-0.25	0.8-0.9
Alfalfa	0.3-0.4				1.05-1.2	0.85-1.05
Citrus						
clean weeding						0.65-0.75
no weed control						0.85-0.9
Olive						0.4-0.6

First Figure: Under high humidity (RHmin > 70%) and low wind (U < 5m/sec).

Second Figure: Under low humidity (RHmin < 20%) and strong wind (> 5 m/sec).

Source: Doorenbos and Kassam (1).

TABLE 5. YIELD RESPONSE FACTOR (Ky).

Crop	Vegetative period (1)			Flowering period (2)	Yield formation (3)	Ripening (4)	Total growing period
	early (1a)	late (1b)	total				
Alfalfa			0.7-1.1				0.7-1.1
Banana							1.2-1.35
Bean			0.2	1.1	0.75	0.2	1.15
Cabbage	0.2				0.45	0.6	0.95
Citrus							0.8-1.1
Cotton			0.2	0.5		0.25	0.85
Grape							0.85
Groundnut			0.2	0.8	0.6	0.2	0.7
Maize			0.4	1.5*	0.5	0.2	1.25*
Onion			0.45		0.8	0.3	1.1
Pea	0.2			0.9	0.7	0.2	1.15
Pepper							1.1
Potato	0.45	0.8			0.7	0.2	1.1
Safflower		0.3		0.55	0.6		0.8
Sorghum			0.2	0.55	0.45	0.2	0.9
Soybean			0.2	0.8	1.0		0.85
Sugarbeet							
beet							0.6-1.0
sugar							0.7-1.1
Sugarcane			0.75		0.5	0.1	1.2
Sunflower	0.25	0.5		1.0	0.8		0.95
Tobacco	0.2	1.0			0.5		0.9
Tomato			0.4	1.1	0.8	0.4	1.05
Water melon	0.45	0.7		0.8	0.8	0.3	1.1
Wheat							
winter			0.2	0.6	0.5		1.0
spring			0.2	0.65	0.55		1.15

Source: Doorenbos and Kassam (1).

If soil-oxygen is excluded from the soil by flooding, particularly during hot weather, most plants wilt, decreasing water use, photosynthesis and respiration. During hot weather many crops cannot survive flooding for more than a few days.

In areas of dependably excessive rainfall, rice should be the crop of choice. Dikes or levees to hold the rain on the land combined with adequate surface drainage to remove excess water prior to harvest can maximize the effectiveness of rainfall on lands of favorable soils and topography. Usually significant benefits to rice production can be obtained from small amounts of supplemental irrigation during the rainy season.

The predominant soils in large portions of Maharashtra and Andhra Pradesh are fairly heavy and are described as black cotton soils. Rains are normally fairly intense with frequent amounts of 25 to 50 mm in 30 minutes. Without some form of land preparation much water runs off, and during rains there is much waterlogging of these heavy textured soils. In order to obtain satisfactory yields it is necessary to improve surface drainage and availablity of oxygen in the surface soil, and also to increase the opportunity time for water to enter the soil.

A system that has produced good results at ICRISAT (International Crops Research Institute for the Semi-Arid Tropics), near Hyderabad, consists of broad (150 cm) beds and furrows with an average slope of about 0.5 percent. The slope range is from 0.2 to 0.8 percent, depending upon soil type and infiltration rates. Various other systems have also produced significant or large increases in crop yields. Broad (20 to 40 m) camber beds raised 20 to 40 cm in the center have produced very

good results in some tropical areas. Planting on ridges between furrows on flat slopes has produced large yield increases in areas where rainfall is excessive.

Throughout most of India crop yields are reduced to a significant degree due to either excessive rainfall amounts or high intensities of fall during rainfall events. It is therefore considered appropriate that a major effort be made to adapt research and methodology for surface drainage that has produced proven results in other areas of similar soils and climate.

AVAILABLE SOIL MOISTURE

Many soils reports fail to provide information on the amount of water that can be stored in the soil and become available for crop use. Gupta and Larson (3) have developed equations that estimate the -0.33 bar matrix potential and the -15.0 bar potential. These approximate the field capacity, FC, and the permanent wilting point, PWP. This use of -0.33 bar as an index of field capacity does not apply to all soils. For some tropical clays and for sandy soils the value is significantly different (in the order of -0.10 to 0.20 bar).

The equations require the percentage of sand (Sa), of silt (Si), of Clay (Cl), organic matters (OM) and the bulk density (BD) or dry weight density of the soil. Organic matter (OM) is estimated by multiplying the percentage of organic carbon by 1.17. The equations can be written:

$$FC = 0.0031\ Sa + 0.0059\ Si + 0.0081\ Cl + 0.0022\ OM - 0.143\ BD; \text{ and} \quad (17)$$

$$PWP = 0.00006\ Sa + 0.0011\ Si + 0.0058\ Cl + 0.0022\ OM + 0.267\ BD \quad (18)$$

The capacity of the soil to store available water (ASW) is taken as the difference between the FC and PWP. Doorenbos and Kassam (1) present a procedure for estimating the desirable depletion percentage (P) to be multiplied times the ASW in order to determine how much of the ASW can be depleted prior to irrigation or replenishment of soil moisture by rain. The depletion fraction (P) depends upon the crop and ETm in mm per day. The usual range for values of P is from 25 to 70 percent. From many studies an average value of 50 percent is used.

CROP YIELD AND MOISTURE AVAILABILITY INDEX

Yield relationships to water availability can be examined if Y is used to express a ratio of actual yield to maximum yield at full moisture adequacy under the prevailing fertility, climatic and cultural conditions, and X is the ratio of actual moisture available during the crop season to the potential amount for which the yield is a maximum. Y can then be expressed as a function of X. This procedure permits yields in differing units to be analyzed on the same graph.

If moisture stress is not concentrated in a critical crop development period and moisture adequacy is maintained above about one-third ($X > 0.33$) in any period, then many crops demonstrate similar production functions. Based on data from several crops grown in various locations, the following equation was developed by Hargreaves (4):

$$Y = 0.8X + 1.3X^2 - 1.1X^3 \qquad (19)$$

In the range where X is greater than 0.33 but less than 0.80 in Eq. 19, the production or yield function can be closely approximated by a straight line equation. Within these limits, the relationship can be approximated by the equation:

$$Y = 1.15X \tag{20}$$

This simple relationship makes rapid evaluation of rainfed or irrigated development potential easier.

Very little data are available showing the relationship between yield and moisture adequacy at seasonal water availability levels below one-third the potential crop water requirements. For most crops, one-third adequacy is close to a level below which production is no longer economical. For the range from zero to one-third adequacy, the moisture-availability yield function has not been well defined.

Although the limitations described above and in preceding sections are of significant importance, the moisture availability index, MAI, correlates reasonably well with potential production under conditions of rainfed agriculture. In most cases, correlations between MAI and average production over a period of years are good.

Equations 19 and 20 are useful for comparing potential yield at one location with yield possible at another location with a different climate. They also provide a means for rapidly estimating possible increases in yield that might result from increased availability of an adequate water supply from irrigation development.

FERTILITY AND YIELD

Doorenbos and Kassam (1) give fertilizer requirements for crops in kg per ha of N, P and K for the growing season. The amounts of fertilizer recommended are as follows:

TABLE 6

FAO FERTILIZER RECOMMENDATIONS

Crop	N	P	K	Crop	N	P	K
Alfalfa	0-40	55-65	75-100	Pineapple	230-300	45-60	110-120
Banana	200-300	45-60	240-480	Potato	80-120	50-80	125-160
Bean	20-40	40-60	50-120	Rice	100-150	20-40	80-120
Cabbage	100-150	50-65	100-130	Safflower	60-110	15-30	25-40
Citrus	100-200	35-45	50-160	Sorghum	100-180	20-45	35-80
Cotton	100-180	20-60	50-80	Soybean	10-20	15-30	25-60
Grape	100-160	40-60	160-230	Sugar Beet	150	50-70	110-160
Groundnut	10-20	15-40	25-40	Sugarcane	100-200	20-90	125-160
Maize	100-200	50-80	60-100	Sunflower	50-100	20-45	60-125
Olive	200-250	55-70	160-210	Tobacco	40-80	30-90	50-110
Onion	60-100	25-45	45-80	Tomato	100-150	65-110	160-240
Pea	20-40	40-60	80-160	Watermelon	80-100	25-60	35-80
Pepper	100-170	25-50	50-100	Wheat	100-150	35-45	25-50

1 kg of P = 2.4 kg of P_2O_5, 1 kg of K = 1.2 kg of K20
Source: Doorenbos and Kassam (1)

The above recommendations can be used as a guide for fertilizer applications when conditions other than fertility are not seriously limiting. Three important considerations largely determine potential yields. These are: water, fertility and energy. The evaporative potential as measured by Class A pan evaporation from a pan located in a large irrigated area and/or potential evapotranspiration provide indices of energy available for photosynthesis.

If one factor is very limiting on yields, optimizing the other two does not sigificantly increase production. If water is inadequate for

good crop yields, the application of fertilizer may result in a decrease in production. When fertility is very low, a full water supply may produce only a little more yield than would result from a rather limited amount of water. A knowledge of the interactions of water-production functions helps optimize yields.

If seasonal crop evapotranspiration (ETa) is plotted on the X-axis in mm and nitrogen (N) in kg per ha, applied or available is plotted on the Y-axis and yields are shown as isoquants (lines of equal yield amounts) that vary with ETa and N, then a line through the origin connecting the points of approximate maximum change in direction of the isoquants can be used to derive an equation for cptimum yield or production in terms of ETa and N. Equations derived from considerable experimental data from high yielding well adapted varieties over a range of conditions indicate the following average optimum amounts of nitrogen:

Crop	Equation	
Corn	$N = 0.32 \times ETa$	(21)
Cotton	$N = 0.10 \times ETa$	(22)
Wheat	$N = 0.12 \times ETa$	(23)
Sugar Beets	$N = 0.15 \times ETa$	(24)

The above equations are recommended for further testing and evaluation with different varieties under prevailing conditions.

The optimum level of nitrogen fertilization depends not only on the seasonal amount of water applied and/or used, but also on the soil moisture and leaf matrix potentials maintained. High levels of fertilization require lower moisture stress resulting from more frequent rain or irrigation.

Equations 21 through 24 indicate that with increased water and with

more radiation and higher temperatures (within the range of climate suitable for good growth), more nitrogen is required and higher yields are possible. Equation 21 has been used in order to approximately match applications of urea with MAI and ETP values for the crop growing season. In areas of favorable rainfall and on high base status soils, this procedure usually nearly doubled yields over those obtained under prevailing agricultural practices.

There is considerable belief that farmers operating near the subsistence level on small parcels cannot afford fertilizer. Since potential benefits from fertilization may at times be equal to several times their cost, it is desirable that a clearer definition be developed indicating those conditions when farmers cannot afford to fertilize and those when they really cannot afford to forego the large possible benefits from applying fertilizer.

Corn (maize) is one of the most important food grain crops in the developing world. Unfortunately, this crop is more sensitive to drought, more adversely influenced by excessive rain and poor drainage and requires larger amounts of fertilizer for optimum yields than do the other food grain crops. However, since corn is a popular food grain crop for millions of subsistence farmers, this food crop deserves special mention.

Figure 1 presents the interactions of water and nitrogen on yields. The graph is based on experimental data from various locations. The varieties were high yielding hybrids well adapted to the climate. Attempts were made to optimize other inputs and management practices.

Figure 2 is based on some of the same yield data as used to develop

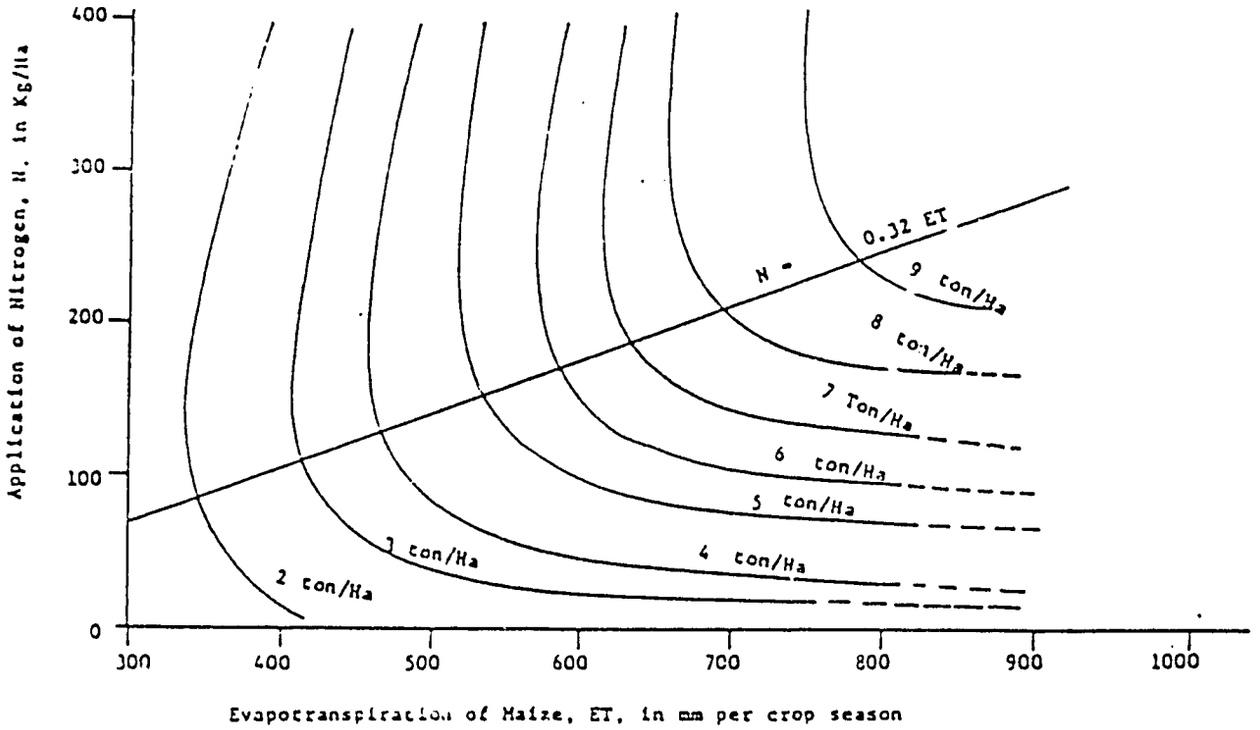

Figure 1. Isoquants of Maize Production.

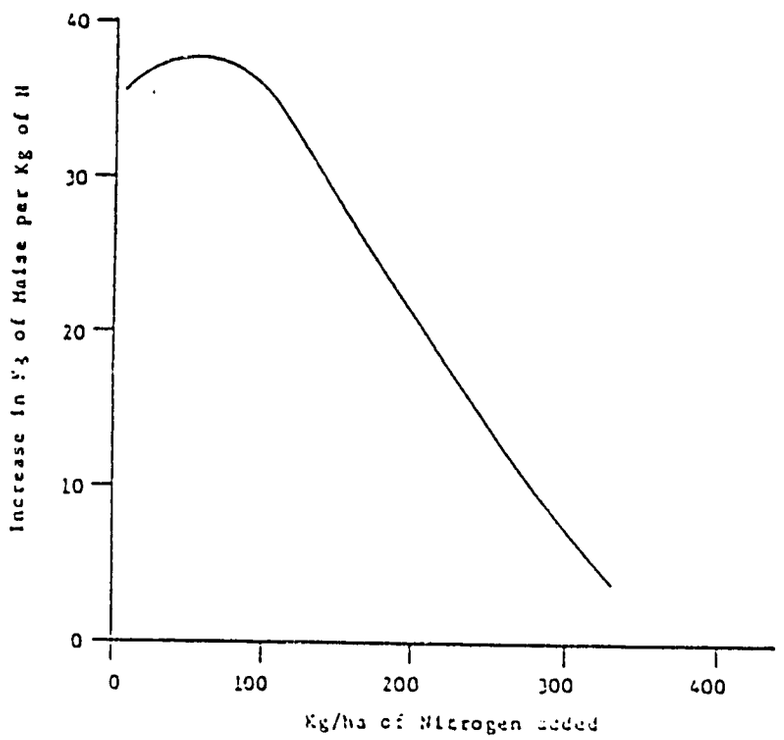

Figure 2. Increase in Yield of Maize per kg of Nitrogen Added at Various Rates of Application of N. (Water was adequate at All Levels of N Application.)

Figure 1. When the graph was developed the cost of 1 kg of nitrogen was equivalent to the 4 kg of corn grain. Obviously, a production of 10 to 12 kg of corn per kg of nitrogen would have been profitable.

Figures 1 and 2 are based on data typical for a wide range of conditions of soils and climate. The shape of these relationships is general for many crops. It is therefore recommended that priority be assigned to further defining water fertility interactions and to determining the economic limits for fertilizer application for the predominant crops in the developing countries.

CLIMATE AND CROP ADAPTABILITY

To assess crop species for their climatic suitability, it is desirable to prepare an inventory of their requirements for both photosynthesis and phenology which bear a relationship to yield in quantity and where necessary, to yield in quality. The rate of crop photosynthesis, growth and yield are directly related to the assimilation pathway and its response to temperature and radiation. However, the phenological climatic requirements, which must be met, are not specific to a photosynthetic pathway. Consequently, crop species were classified into five groups by FAO (2).

These divisions have been made on the basis of photosynthesis efficiency of cultivated plants under certain sets of climatic requirements. The major two photosynthesis pathways are C_3 and C_4. In the case of the former, the first product of photosynthesis is a 3-carbon organic acid (3-phosphoglycenic acid), while in the later the first products are 4-carbon organic acids (malate and aspartate). In

general, the C_3 assimilation pathway is adapted to operate at optimum rates under conditions of low temperature (15 to 20°C), and the C_3 crops have relatively lower rates of CO_2 exchange at a given radiation level than C_4-species, which are adapted to operate at optimum rates under conditions of higher temperature (30 to 35°C) and have comparatively higher rates of CO_2 exchange. Further, C_4-species have maximum rates of photosynthesis in the range of 70 to 100 mg CO_2 dm^{-2} hr^{-1} with light saturation at 1.0 to 1.4 cal/cm^{-2} min^{-1} total radiation, while C_3-species have maximum rates of photosynthesis in the range of 15 to 30 mg CO_2 dm^{-2} hr^{-1} with a light saturation at 0.2 to 0.6 cal cm^{-2} min^{-1}. These C_3 and C_4-species constitute groups I and II, respectively.

Breeding and selection, through both natural and human agencies, have changed the temperature response of photosynthesis in some C_3 and C_4-species. Consequently, there are C_3-species (e.g., cotton and groundnut) whose optimum temperature is in a medium to high range (25 to 30°C), and there are C_4-species (e.g., maize, sorghum) where, for temperate and tropical highland cultivars, the optimum temperature is in a low to medium range (20 to 30°C). These C_3-species, and especially adapted cultivars of C_4-species, constitute Groups II and IV, respectively.

The Crassulacean Acid Metabolism (CAM) group has been placed in Group V. They are mostly zerophytic plants found in deserts and dry places. Their pathway is similar to C_4-species, but they entrap light energy in the daytime and fix CO_2 at night. The cultivated species under this group are pineapple and sisal. Due to this special feature, they have higher water use efficiency.

Figure 3 indicates the desirable temperature ranges for production of Crop Groups I, II, III and IV. Crops should be selected for production under conditions where mean temperatures during the major portion of the crop growth cycle are fairly close to the values shown corresponding to the highest portion of the curve for the appropriate crop group.

Tables 7 through 11 from FAO (2) give crop adaptability inventories for crop groups I through V. The symbols used in these tables are given as follows:

A	- Annual
ABC	- Alternatively branched cultivar
B	- Biennial
BC	- Bush cultivar
BRC	- Branched cultivar
C	- Cereal
CHF	- Chilling required for flowering
CHIF	- Chilling required to initiate flower buds
CHOD	- Chilling required to overcome dormancy
CHS	- Chilling required at seedling stage
CHSG	- Chilling required to stop growth
CHT	- Chilling required for tuberization
CHTI	- Chilling required for tillering
CI	- Cauliflorous inflorescence
CL	- Cob on modified lateral branch
CTC	- Common tomato cultivar
D	- Determine
DC	- Desi cultivar
DN	- Day neutral
EC	- Early cultivar
ID	- Interdeterminate
KC	- Kabuli cultivar
L	- Legume
LC	- Late cultivar
LD	- Long-day
LE	- Leaf
LI	- Lateral inflorescence
LP	- Last phase in crop's life
LT	- Last third period in crop's life
MA	- Much or all the period in crop's life
MDC	- Mediterranean cultivar
ME	- Middle to end period in crop's life
MEC	- Medium cultivar

NLC	- Normal leaf cotton
OLC	- Okra leaf coton
P	- Perennial
PC	- Pole cultivar
PLC	- Potato rice
PR	- Paddy rice
Q	- Quality of yield influenced by temperature
R	- Root
RH	- Rhizome
S	- Stem
SBC	- Sequentially branched cultivar
SC	- Spring cultivar
SD	- Short-day
SG	- Smaller or greater fraction of crop's life
SP	- Short-term perennial
STSC	- Sub-tropical, summer rainfall, cool growing period with mean temperature < 20°C
STSW	- Sub-tropical, summer rainfall, warm growing period with mean temperature > 20°C
STW(M)	- Sub-tropical, winter rainfall (Mediterranean climate)
T	- Temperature
TEC	- Temperate cultivar
TI	- Terminal inflorescence
TRC	- Tropical cultivar
TRH	- Tropical highland, altitude of more than 1,500 m
TRHC	- Tropical highland cultivar
TRL	- Tropical lowland, humid and seasonally arid, altitude of less than 1,500 m
TRL(H)	- Tropical lowland, humid (P > ET for seven to twelve momths)
TRL(SA)	- Tropical lowland seasonally arid (P > ET for less than seven months)
UBC	- Unbranched cultivar
US	- Underground stem
UTC	- Upright tomato cultivar
V	- Variable
WC	- Winter cultivar
*	- Residual moisture

RAINFALL INTENSITIES

Information is often needed on depth-duration and depth-frequency rainfall amounts in order to plan and design storm drainage systems or agricultural drainage. Reasonable estimates are also useful in estimating the probability of flood damage to irrigation systems and facilities.

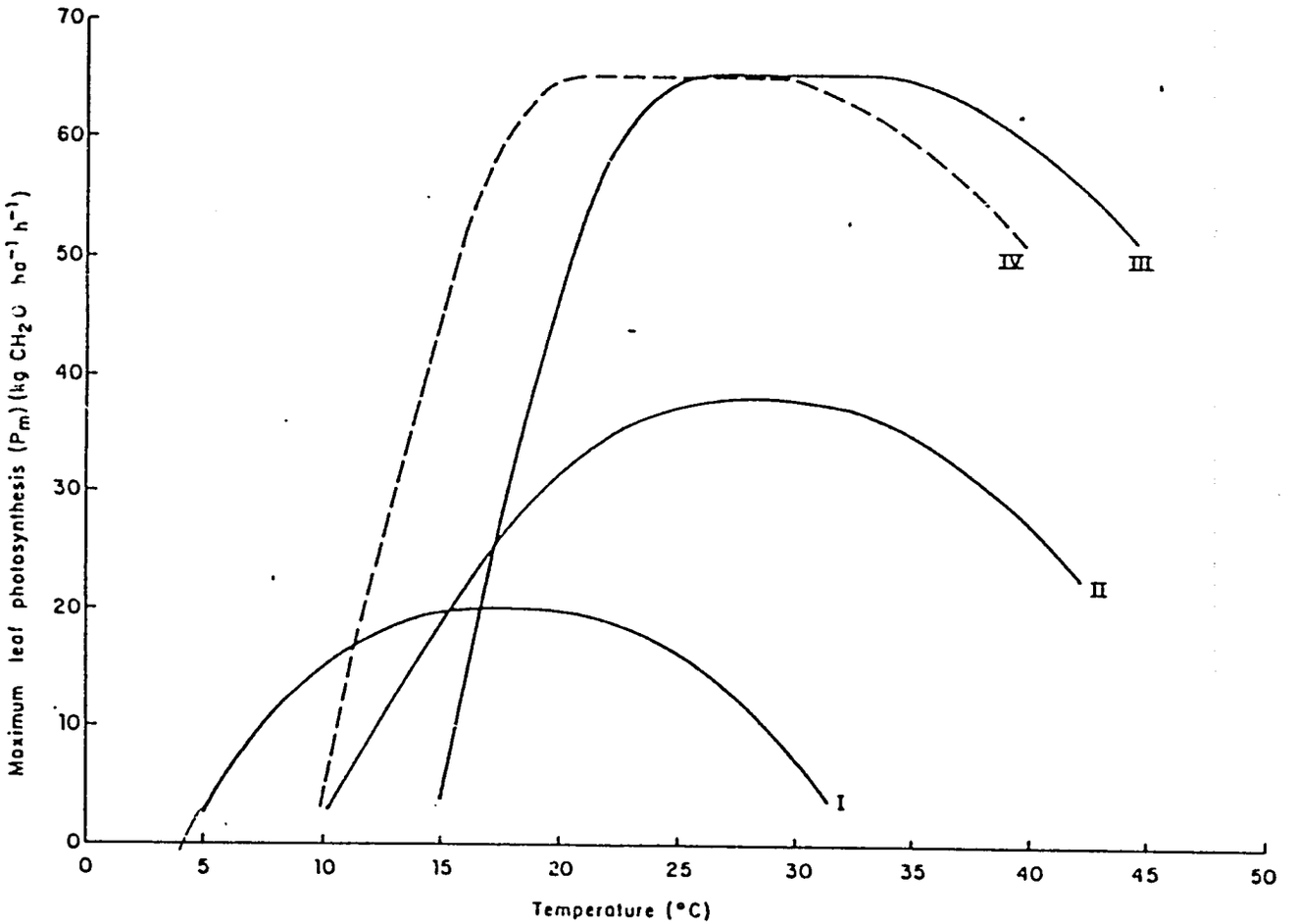

Figure 3. Average Relationship Between Maximum Leaf Photosynthesis Rate and Temperature for Crop Groups I, II, III and IV.
Source: FAO (2).

TABLE 7. CROP ADAPTABILITY INVENTORY - GROUP I.

Photosynthesis Characteristics	Crop Species: Scientific Name	Crop Species: Common Name English	Days to maturity/ growing period
Photosynthesis pathway: C_3	Brassica campestris	Field mustard	80-90 (SC)
Temperature response of photosynthesis	Solanum tuberosum	Potato	90-110 (EC) 120-140 (MEC) 150-180 (LC)
Optimum temp.: 15-20°C Operative range: 5-30°C	Cicer arietinum	Chickpea	90-120 (DC) 130-150 (KC)
Radiation intensity at maximum photosynthesis: 0 2-0 6 cal $cm^{-2}min^{-1}$	Lens esculenta	Lentil	90-120 (SC) 180-240 (WC)
Maximum net rate of CO_2 exchange at light saturation: 20-30 mg $dm^{-2}h^{-1}$	Phaseolus vulgaris (TEC)	French bean	90-140 (BC) 160-200 (PC)
	Brassica napus	Rape	100-110 (SC)
Maximum crop growth rate: 20-30 g $m^{-2}day^{-1}$	Brassica oleracea var. capitata	Cabbage	100-120
	Helianthus annus (TEC)	Sunflower	100-120(UBC,EC) 130-160(BC,LC)
Water use efficiency: 400-800 g/g	Hordeum vulgare	Barley	100-130 (SC) 180-240 (WC)
	Triticum aestivum (TEC)	Bread wheat	100-130 (SC) 180-240 (WC)
	Linum usitatissimum	Linseed	100-140 (UBC) 140-180(BRC,WC)
	Lycopersicon esculentum (TEC)	Tomato	110-130 (UTC) 120-140(PTC, CTC, PLC)
	Avena sativa	Oat	110-130 (SC) 210-270 (WC)
	Secale cereale	Rye	110-130 (SC) 210-270 (WC)
	Titis vinifera (TEC)	Grape	160-180 (EC) 180-270 (LC)
	Crysanthemum cinerariafolium	Pyrethrum	180-240 (TEC) 270-365 (TRHC)
	Beta vulgaris	Sugarbeet	160-240
	Olea Europaea	Olive	210-240
	Coffea arabica	Arabica coffee	240-300

TABLE 8. CROP ADAPTABILITY INVENTORY - GROUP II.

Photosynthesis Characteristics	Crop Species: Scientific Name	Crop Species: Common Name English	Days to maturity/ growing period
Photosynthesis pathway: C_3	Arachis hypogaea	Groundnut	90-110 (SBC) 120-140 (ABC)
	Vigna unguiculata	Cowpea	90-120 (EC) 140-180 (LC)
Temperature response of photosynthesis:	Glycine max (TRC)	Soybean	90-130 (EC) 140-180 (LC)
Optimum pressure: 25-30°C	Phaseolus vulgaris (TRC)	French bean	90-140 (BC) 160-200 (PC)
Operative range: 10-35°C	Nicotiana tabacum	Tobacco	100-130
	Helianthus annus (TRC)	Sunflower	100-120 (UBC,EC) 130-160 (BRC,LC)
Radiation intensity at maximum photosynthesis: 0.3-0.8 cal $cm^{-2}min^{-1}$	Sesamum indicum	Sesame	100-130 (UBC,EC) 140-180 (BRC,LC)
	Lycopersicon esculentum (TRC)	Tomato	110-130 (UTC) 120-140 (PTC,OTC, PLC)
Maximum net rate of CO_2 exchange at light saturation: 40-50 mg $dm^{-2}h^{-1}$	Carthamus tinctorius	Safflower	110-130 (EC) 140-180 (LC)
	Oryza sativa (PR)	Rice	110-130 (EC) 140-180 (LC)
Maximum crop growth rate: 30-40 g $m^{-2}day^{-1}$	Lablab purpureus var. lablab	Hyacinth bean	110-130 (EC) 140-210 (LC)
	Hibiscus sabdariffa	Roselle	120-150
Water use efficiency: 300-700 g/g	Hibiscus cannabinus	Kenaf	120-150
	Fiscus carica	Fig	120-150
	Gossypium hirsutum	Cotton	130-140 (OLC) 160-180 (NLC)
	Ricinus communis	Castor bean	130-160 (EC) 170-210 (LC)
	Ipomoea batatas	Sweet potato	150-210
	Vitis vinifera (MDC)	Grape	160-180 (EC)
	Manihot esculenta	Cassava	180-270 (EC) 270-365 (LC)
	Dioscorea rotendata	White yam	210-240
	Olea europaea	Olive	210-240
	Citrus sinensis	Sweet orange	240-360
	Citrus limon	Lemon	240-365
	Mangifera indica	Mango	240-365
	Theobroma cacao	Cocoa	270-300
	Coffea canephophora	Robusta coffee	270-300
	Dioscorea alata	Greater yam	270-300
	Musa spp.	Banana	300-365
	Persea americana	Avacado pear	300-365
	Cocos nucifera	Coconut	330-365
	Hevea brasiliensis	Para rubber	330-365
	Elaeis guineensis	Oil palm	330-365

TABLE 9. CROP ADAPTABILITY INVENTORY - GROUP III.

Photosynthesis Characteristics	Crop Species: Scientific Name	Crop Species: Common Name English	Days to maturity/ growing period
Photosynthesis pathway: C_4	Echinochloa frumentacea (TRC)	Japanese barnyard millet	50-90
Temperature response of photosynthesis:	Setaria italica (TRC)	Foxtail millet	70-90
Optimum temperature: 30-35°C Operative range: 15-45°C	Eleusine coracana	Finger millet	70-90
Radiation intensity at maximum photosynthesis: 1.0-1.4 cal $cm^{-2}min^{-1}$	Panicum milliaceum (TRC)	Common millet	70-100
	Pennisetum americana, Typhoides	Pearl millet	70-100 (EC) 120-240 (LC)
Maximum net rate of CO_2 exchange at light saturation: 70-100	Digitaria exilis	Hungry rice	90-130
Maximum crop growth rate: 30-60 g $m^{-2}day^{-1}$	Sorghum bicolor (TRC)	Sorghum	90-110 (EC) 120-130 (MEC) 140-240 (LC)
Water use efficiency: 150-300 g/g	Zea mays (TRC)	Maize	80-100 (EC) 110-130 (MEC)
	Saccharum officinarum	Sugarcane	270-365

TABLE 10. CROP ADAPTABILITY INVENTORY - GROUP IV.

Photosynthesis Characteristics	Crop Species: Scientific Name	Crop Species: Common Name English	Days to maturity growing period
Photosynthesis pathway: C_4	Echinochloa frumentacea (TEC, TRHC)	Japanese barnyard millet	70-90
Temperature response of photosynthesis:	Setaria italica (TEC, TRHC)	Foxtail millet	80-90
Optimum temperature: 20-30°C Operative range: 10-35°C	Panicum milliaceum (TEC, TRHC)	Common millet	80-100
Radiation intensity at maximum photosynthesis: 1.0-1.4 cal $cm^{-2}min^{-1}$	Sorghum bicolor (TEC, TRHC)	Sorghum	110-130 (EC) 140-160 (MEC) 170-280 (LC)
Maximum net rate of CO_2 exchange at light saturation: 70-100 mg $dm^{-2}h^{-1}$	Zea mays (TEC, TRHC)	Maize	110-130 (EC) 140-160 (MEC) 170-200 (LC)
Maximum crop growth rate: 40-60 g $m^{-2}day^{-1}$			
Water use efficiency: 150-350 g/g			

TABLE 11. CROP ADAPTABILITY INVENTORY - GROUP V.

Photosynthesis Characteristics	Crop Species: Scientific Name	Crop Species: Common Name English	Days to maturity/ growing period
Photosynthesis pathway: CAM	Agave sisalana	Sisal	270-365
Temperature response of photosynthesis:	Ananas comosus	Pineapple	365
Optimum temperature: 25-35°C Operative range: 10-45°C			
Radiation intensity at maximum photosynthesis: 0.6-1.4 cal $cm^{-2}min^{-1}$			
Maximum rate of CO_2 exchange at light saturation: 20-50 mg $dm^{-2}h^{-1}$			
Maximum crop growth rate: 20-30 $m^{-2}day^{-1}$			
Water use efficiency: 50-200 g/g			

For time periods (durations) (t) of from 0.5 to 96 or more hours and return periods (T) of from 5 to 100 years, the depth-duration-frequency amounts can be approximated by the equation:

$$D = K\ (t x T)^{0.25} \tag{25}$$

Equation 25 has produced good results when compared with the log-normal probability distribution of rainfall at various locations.

Extreme values of one day rainfall for 46 locations were multiplied by 1.13 to approximate 24 hour extreme rainfall. Values of K in Eq. 25 were calculated for each location and graphed as a function of mean annual rainfall, PMA. The best average relationship is:

$$K = 1.80 + 0.006\ PMA \tag{26}$$

for PMA in inches and

$$K = 46 + 0.006\ PMA \tag{27}$$

for PMA in mm of anual rainfall. The envelope relationship is obtained by substituting K x 1.75 for K in Eqs. 26 and 27.

Values of K were also calculated as a function of mean rainfall during the month of maximum precipitation, PM_{mx}. The equation for K can be written:

$$K = a + b\ PM_{mx} \tag{28}$$

If a is assumed to be equal to zero, the equation is:

$$K = b\ x\ PM_{mx} \tag{29}$$

India is divided into rainfall adequacy zones as described later. For rainfall in mm the approximate average values of b are 0.35 for Zone 1 and Zone 2 in northern India, 0.25 for Zone 2 in southern India, 0.20 for Zone 5 and 5E on the East Coast, 0.15 for Zones 4 and 4E and 0.10 for Zone 5E on the West Coast and for Zone 7E.

The equations presented above provide reasonable estimates of rainfall intensities for use in planning, design and project operation. For those locations where long records of short duration rainfall amounts are available, analyses should be made to see which probability distribution (including the $t^{1/4} \times T^{1/4}$ distribution) provides the best fit of the measured data. Where such records are not available, Eqs. 25 through 29 are recommended for use. However, further verification and possible future modification should be undertaken.

NUMBER OF RAINY DAYS

Agrotechnology transfer is facilitated when climatic data are adequate for selecting similar conditions. Climates are similar when maximum and minimum temperatures and rainfall are approximately the same. The usefulness of precipitation depends both on amount and distribution. The number of days within a month of rain exceeding 0.1 inch (2.5 mm) is an indicator of distribution or frequency of rainfall. For India the number of rainy days per month was graphed as a function of mean monthly rainfall. The relationship is linear up to a rainfall amount of 10 inches (254 mm) and then falls off gradually.

A regression analysis of the available data was made for the range of monthly precipitation of from 2 to 10 inches (51 to 254 mm). The

equation for the number of days with rain is:

$$\text{Days} = 1.2 + 1.15 \times \text{Inches, or} \tag{30}$$

$$\text{Days} = 1.2 + 0.045 \times \text{mm of rain per month} \tag{31}$$

The R^2 value for the entire country is 70 percent. For ten locations in the principal irrigated areas the R^2 is 75 percent. The equation is essentially the same countrywide. The best fit graphical equation through the origin is:

$$\text{Days} = 0.05 \times \text{mm/month} \tag{32}$$

In comparing rainfall with crop water requirements, both amount and distribution need to be considered. However, this study facilitates analyses in that it clearly indicates that for similar amounts of rain, regardless of month and location within the country, there is a high probability that the distribution within the month will be similar. This similarity of distribution facilitates agrotechnology transfer.

IRRIGATION SCHEDULING

Twelve maps showing monthly mean estimates of potential evapotranspiration (ETP) are presented. Monthly crop evapotranspiration can be estimated by multiplying the KC values from Table 4 times ETP. This procedure is recommended as an aid to water application.

For locations not given on the maps, values of ETP may be estimated

by interpolation, or for continental locations, Eq. 12 with K = 0.001, or Eq. 14 may be used to estimate monthly or shorter time period values of ETP. Scheduling of water deliverances or water application can then be made by taking into consideration the crop requirements, the achievable irrigation efficiencies and the soil conditions.

Details relative to irrigation scheduling are set forth in a publication entitled "Irrigation Scheduling Manual," 1984, by the International Irrigation Center.

Available Soil Water, ASW

ASW is considered to be the field capacity (FC) minus the permanent wilting point (PWP). However, ASW in the root zone is not all available to the plant. In general, plants usually have 40 percent of their roots in the upper one-fourth of the foot zone, 30 percent in the next fourth, 20 in the next, and only 10 percent in the lowest one-fourth of the principal root zone.

If soil moisture extraction is proportional to root development and it is assumed that the total amount of FC - PWP can be extracted in the upper one-fourth of the root zone, then 62.5 percent of FC - PWP can be withdrawn from the full root zone. In practice, this value is about a maximum, and for some crops the allowable percentage may be as low as 25 to 30 percent of ASW.

Root depth varies with crop and variety and also with soil chemistry, structure and drainage. Too frequent irrigation may limit root development. Toxicity in the subsoil such as aluminum oxides in oxisols may limit root development to shallow depths in the order of 30 cm in some cases.

Four ranges of rooting depth can be used to indicate typical conditions for most commercial crops. They are as follows:

Rooting depth 0.3 to 0.5 meters:

Cabbage, celery, lettuce, onion, pineapple, potatoes, sisai, spinach, vegetables.

Rooting depth 0.5 to 1.0 meters:

Banana, beans, beets, carrots, clover, groundnuts, peas, peppers, soybeans, sugar beets.

Rooting depth 1.0 to 1.5 meters:

Barley, citrus, cucumber, flax, small grains, maize, melons, sunflower, sweet potato, wheat.

Rooting depth 1.5 to 2.0 meters:

Alfalfa, cotton, deciduous orchard, grapes, sunflower, sorghum, sugarcane.

The available soil water in the crop root zone is estimated by multiplying ASW as a percentage on a dry weight basis times the bulk density and the effective root depth. The bulk density of most soils ranges from 1.0 gm/cc for clays to 1.8 gm/cc for sands.

Allowable Water Depletion

The soil moisture should be maintained at a level such that actual crop evapotranspiration (ETa) will not fall too far below the maximum potential crop evapotranspiration (ETm). As indicated above, crops vary significantly in their ability to withstand water stress. Some varieties

of the same crop are more drought tolerant than others, and usually the flowering or fruit or grain setting stage of the growth cycle is more critical with respect to soil water depletion.

Doorenbos and Kassam (1) have developed criteria for estimating the soil water depletion fraction, p, for various crops for a significant range of values of ETm. These fractions are presented as a guide. Table 12 presents a list of crops divided into four groups and Table 13 gives the suggested depletion fraction, p.

Contribution of Saturation Water

When a soil becomes saturated through irrigation or from rain, the crop will use some of the excess water as soil drainage due to gravity reducing the water content to the field capacity. This period during which water in excess of FC is used by the crop may last two or three days, depending upon soil type, crop, climate and other factors. Allowance needs to be made for the use of saturation water when irrigation schedules are prepared.

For most crops growth is influenced when the depth to groundwater is shallow or when the soil is waterlogged. Substantial amounts of water can be supplied by a shallow water table to meet crop requirements. Some varieties of sugarcane produce well with groundwater at 50 cm. Others require a minimum of 80 cm or well drained soil in order to produce maximum or near maximum yields. Bananas, sugarcane, potatoes, broad beans and strawberries produce well with 50 to 100 cm of soil above groundwater. Sometimes as much as one-third or more of the total water supply is supplied from groundwater at shallow depths. The capillary

TABLE 12

CROP GROUPS ACCORDING TO SOIL WATER DEPLETION

Crop Group	Crops
1	Onion, pepper, potato
2	Banana, cabbage, grape, pea, tomato
3	Alfalfa, bean, citrus, groundnut, pineapple, sunflower, watermelon, wheat
4	Cotton, maize, olive, sunflower, sorghum, soybean, sugar beet, sugarcane, tobacco

TABLE 13

SOIL WATER DEPLETION FRACTION (p) FOR CROP GROUPS AND MAXIMUM EVAPOTRANSPIRATION (ETm)

Crop Group	ETm mm/day								
	2	3	4	5	6	7	8	9	10
1	0.50	0.425	0.35	0.30	0.25	0.225	0.20	0.20	0.175
2	0.675	0.575	0.475	0.40	0.35	0.325	0.275	0.25	0.225
3	0.80	0.70	0.60	0.50	0.45	0.425	0.375	0.35	0.30
4	0.875	0.80	0.70	0.60	0.55	0.50	0.45	0.425	0.40

rise of water is not as rapid as required to meet crop evapotranspiration requirements. In order to use much water the plants must send their roots to where the water is. Sudden fluctuations in water level may be damaging to the plant root system.

Crops including sugarbeet, wheat, barley, oats, cotton, citrus, apples, pears, blackberries and onions are capable of producing high yields while drawing significant quantities of water from groundwater.

DROUGHT

Once in 20 years it can be anticipated that rainfall will be equal to or less than the 95 percent probability of occurrence shown in the probability analyses. An attempt was made to determine the relationship between mean rainfall and the 95 percent probability. There is a good deal of scatter in the relationship. However, if the mean monthly precipitation is 175 mm, there is about a 50 percent probability that the monthly rainfall will be lower than 50 mm once in 20 years. For months at the end of the rainy season this probability is significantly increased.

For areas where drought is considered to be a serious problem it is suggested that rainfall data and maximum and minimum temperature be tabulated for long periods of record and a series of probabilities calculated showing probabilities of having rainfall equal to specified percentages of potential evapotranspiration for 10 and 15 day periods as well as monthly.

The relationships between mean monthly rainfall and several probabilities of assured rainfall are quite uniform for countrywide rainfall data. As indicated previously, the number of rainy days correlates well with rainfall amounts. It is concluded from these analyses that countrywide the rainfall distributions are relatively independent of amounts. It seems very probable that for the climate of India drought can be related to the date of onset of the rainy season and to the amount of rain occurring in the first rainy month. These relationships need to be further evaluated and refined for practical use.

Crop production during periods of low rainfall amounts depends on

amount and distribution of rain, various management practices, crop and variety, and the evaporative demand. The definition of drought usually is related to agricultural production. In this study a month with MAI of less than 0.33 is considered a drought month. This criteria is not applicable for all crops and conditions. Some studies have defined a drought month as one with rainfall less than 30 percent of ETP. Obviously, more analysis needs to be made in order to more clearly define drought in terms of potential agricultural production. A drought for rice, maize or sorghum production will have differing criteria.

ZONATION FOR RAINFALL ADEQUACY

India is a large country with extremes of climate. In the Western portion between latitudes 24 to 30 degrees North a large area is so dry that no month has significant useful rainfall for crop growth. In the northeastern portion (East of longitude 88 or 89° East), the dependable rainy season is usually of six to eight months with three to five months of very excessive precipitation for the production of general crops.

Crop selection and cropping practices depend not only upon rainfall but upon soils, topography, drainage, temperatures and other conditions. On large areas of heavy textured soils the prevailing practice is to plant crops other than rice at the end of the rainy season. However, lighter textured, better drained soils in the same area are cropped during the rainy season, and limited experience on the heavier soils has demonstrated a three-fold increase in crop values from improving both water infiltration and surface drainage so that crops could be produced during the rainy period. This was accomplished by using raised beds and furrows on flat slopes.

This zoning study uses a moisture availability index (MAI). A month of dependable rainfall is defined as one having a value for MAI of 0.33 or greater. This means that the 75 percent probability of assured rainfall occurrence (that amount equaled or exceeded three-fourths of the time) is 0.33 times the estimated potential evapotranspiration. By using the equations given above for estimating ETP, PD and MAI, India was zoned based upon the number of months of dependable rainfall.

Zone 1

This zone is not suitable for rainfed agriculture. The number of months of dependable precipitation varies from zero to one. The area has some value for seasonal grazing of livestock and for cropping whenever irrigation water can be made available. This area consists of a major portion of Ragasthan and parts of Gujarat, Haryana and Punjab.

Zone 2

Zone 2 is a transition area between Zones 1 and 3. Usually, the rainfall is dependable for crop production for a minimum of two months. Some millets and mungbeans mature in 60 days or less and may be grown in this zone.

Zone 3

Large areas in southern India and in the northeast have three months of dependable rainfall. In some locations rainfall may be excessive for one, or occasionally two months. Some varieties of beans, groundnut, millet, sorghum, soybeans, maize and vegetables can be produced.

The International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) is located in Zone 3. At ICRISAT the average MAI for the three months of dependable rainfall is 0.74. In addition, June has an average MAI of 0.34, which is considered to be marginal. Crop technology developed at ICRISAT can and should be transferred to large portions of Zone 3.

Zones 4 and 4E

These zones have four months of dependable rainfall. In Zone 4 occasionally there is one month of excessive precipitation. In 4E usually the MAI exceeds 1.22 during two months. Along the western coast from Goa until north of Bombay rains are usually quite excessive during three months. With three months of heavy rains paddy can be grown without irrigation. In the northern portion of Zone 4E predominant rainfed crops are wheat, mustard and peanuts. Corn and sorghum are well suited to the climate of Zone 4. In Zone 4E good natural or artificial drainage is required in order to prevent waterlogging and reduced yields of most crops produced under rainfed agriculture. Large increases in agricultural production are possible through improved drainage and better matching of fertilizer application with water availability. Much of the crop technology developed at ICRISAT can be transferred for use in Zones 4 and 4E. With irrigation, paddy is well suited to Zone 4E, as rain can supply most water needs during two months.

Zones 5 and 5E

To the east of Zones 4 and 4E, and also on the western coast south

of Goa, the dependable rainy season increases to five months. The crop suitability is similar to that in Zones 4 and 4E. Crop varieties with somewhat longer growing seasons are recommended. Usually these varieties with longer growing seasons produce higher yields, as more time is available to accumulate biomass or the products of photosynthesis. Care needs to be exercised in order to have adequate water for rainfed crops throughout the entire period of crop production.

Zone 6

In the northern mountainous areas the rainfall measurements are made mainly in the valleys. The amount of rain depends upon topography and exposure to prevailing storm directions. Various rain shadow areas are encountered. The dependable rainfall period varies from zero to six months. The scale of this study and the number of climatic stations in this zone does not justify an attempt to separate areas of different agricultural potential.

Zone 7

Zone 7 is comprised of the northeastern portion and the southwestern coastal area. The rainy season is usually six to eight months. In the northeast the number of months of excessive rain is variable, but averages four months. In Kerala State rainfall is excessive during three months. The principal crops are tea on the slopes where drainage is satisfactory, and rice in the valleys.

Intense rains and flooding cause serious problems. Improvements in water management in this region can provide significant benefits. More

control of runoff would also benefit the agriculture of Bangladesh. It is suggested that additional data be evaluated in order to determine the extent of economic benefits possible from improved water management.

General

The zonation shows general conditions. Some anomalies exist within zones. Discretion was used in showing the number of rainy months in that a month with MAI of 0.33 or 0.34 could be counted or left out in determining the length of the rainy season, depending upon the values of preceding months. Significant use of topography and prevailing storm direction were used in locating boundaries between zones. To the east of Kerala State a small mountainous area was not zoned. Rainfall is variable and does not fit into the criteria used for the other zones.

Major portions of India have two or more months of excessive rainfall. Water in excess of evapotranspiration requirements can be stored in reservoirs, used to recharge groundwater, diverted to areas having less rainfall or allowed to flow to the oceans. The zonation provides a clear indication of those areas which might derive greatest benefit from the availability of additional water.

A folded map showing the various zones described above is included in the pocket at the end of this report.

POTENTIAL EVAPOTRANSPIRATION MAPS

Estimated potential evapotranspiration, ETP, in mm per month, is shown on a set of 12 maps. ETP was estimated using Eq. 7. Equation 7 has been compared with estimates made using the Penman method at several

locations where lysimeter evapotranspiration measurements were also available. Based upon these comparisons, Eq. 7 is considered to produce values that are as good, or perhaps better than those estimated from the Penman method.

Equation 7 was derived using Alta fescue grass as a reference crop and has been verified using worldwide lysimeter data from other cool season grasses including ryegrass, the tall fescues and Kentucky bluegrass. Use of other reference crops such as alfalfa or the warm season grasses results in somewhat different equations for ETP. Because of these differences, an evaluation was made to determine how well the crop coefficients, KC, shown in Table 4, applied with ETP estimates. Measured crop evapotranspiration from the principal crops grown in the Southern San Joaquin Valley of California was used with Eq. 7 to calculate a new set of rop coefficients. Although here were some differences, the average mid-season and seasonal values of these calculated coefficients were almost exactly that of the averages presented for the same crops in Table 4. This indicates that the ETP values shown on the maps may be used with the KC values in Table 4 for scheduling irrigation and for planning, designing and for main system operations.

ANALYTICAL TABLES

The methodology used in preparing tables showing mean rainfall, rainfall probabilities, climatic data, potential evapotranspiration and a water balance or moisture availability index is presented above.

For 51 locations the following are presented:

PROB = the probability of rainfall occurrence amounts in mm, the 95, 75, 50 and 5 percent probabilities are given (75 percent probability is that amount equaled or exceeded three-fourths of the time);

PM = mean monthly precipitation in mm;

TEMC = mean monthly temperature in degrees Celsius;

ETP = mean monthly potential evapotranspiration in mm; and

MAI = a moisture availability index equal to the 75 percent probability of rainfall amount divided by ETP.

At 372 locations analyses are presented using mean rainfall and climatic data. Temperature and radiation data were obtained or estimated as described above. The following values are presented:

PREC = mean monthly precipitation in mm;

TEM = mean monthly temperature in degrees Celsius;

RS = mean monthly incident solar radiation in Langleys per day ($cal/cm^2/day$) (values are either measured or estimated);

PD = the 75 percent probability of rainfall occurrence in mm (the 75 percent probability of assured rainfall amounts);

ETP = mean monthly potential evapotranspiration in mm (equivalent to reference crop ET of a cool season grass; and

MAI = moisture availabiity index as defined above (MAI = PD/ETP).

For the 51 locations for which the various years of record are available, the number of years are shown. At 18 of these the record exceeds 100 years. For five stations with individual year records the mean data are not presented in a separate table and for 46 locations the values from Wernstedt's (11) mean data are presented first, and those values from the data obtained from NOAA in the following table.

Equations 4 and 5 were derived from those months for which MAI equaled or exceeded 0.33. For this reason the values of PD for months with MAI less than 0.33 are not presented for the 372 locations based on Wernstedt's data. The equations used overestimate both PD and MAI for these low rainfall months. The annual values of MAI, and for those months of 0.33 or above, are quite realistic and compare well with those calculated from the individual years of record.

WATER MANAGEMENT PLANNING

The use of rainfall for agricultural production can be significantly improved through a graphical analyses of probable adequacies, excesses and deficits. Figure 4 compares probable rainfall amounts for two months in each of two locations in Andhra Pradesh with ETP and one-third ETP.

There are many definitions of drought. A drought month has sometimes been defined as a month with rain less than 50 percent of ETP. In Figure 4 a drought month is considered to be one with one-third of ETP or less. If this definition is used, then there is about a 5 percent probability of drought at Begampet during August or September. There is about a 50 percent probability that rain will exceed ETP and at least a 30 percent probability that rain will be of such amount that the excess water will need to be removed by natural or artificial drainage to prevent waterlogging. At Vishakhapatnam during August and October there is an 11 or 12 percent probability of drought. During August there is about a 34 percent probability that rainfall will equal or exceed ETP. These graphs show the probable risk for rainfed agriculture and the probable needs for either irrigation or drainage during these months.

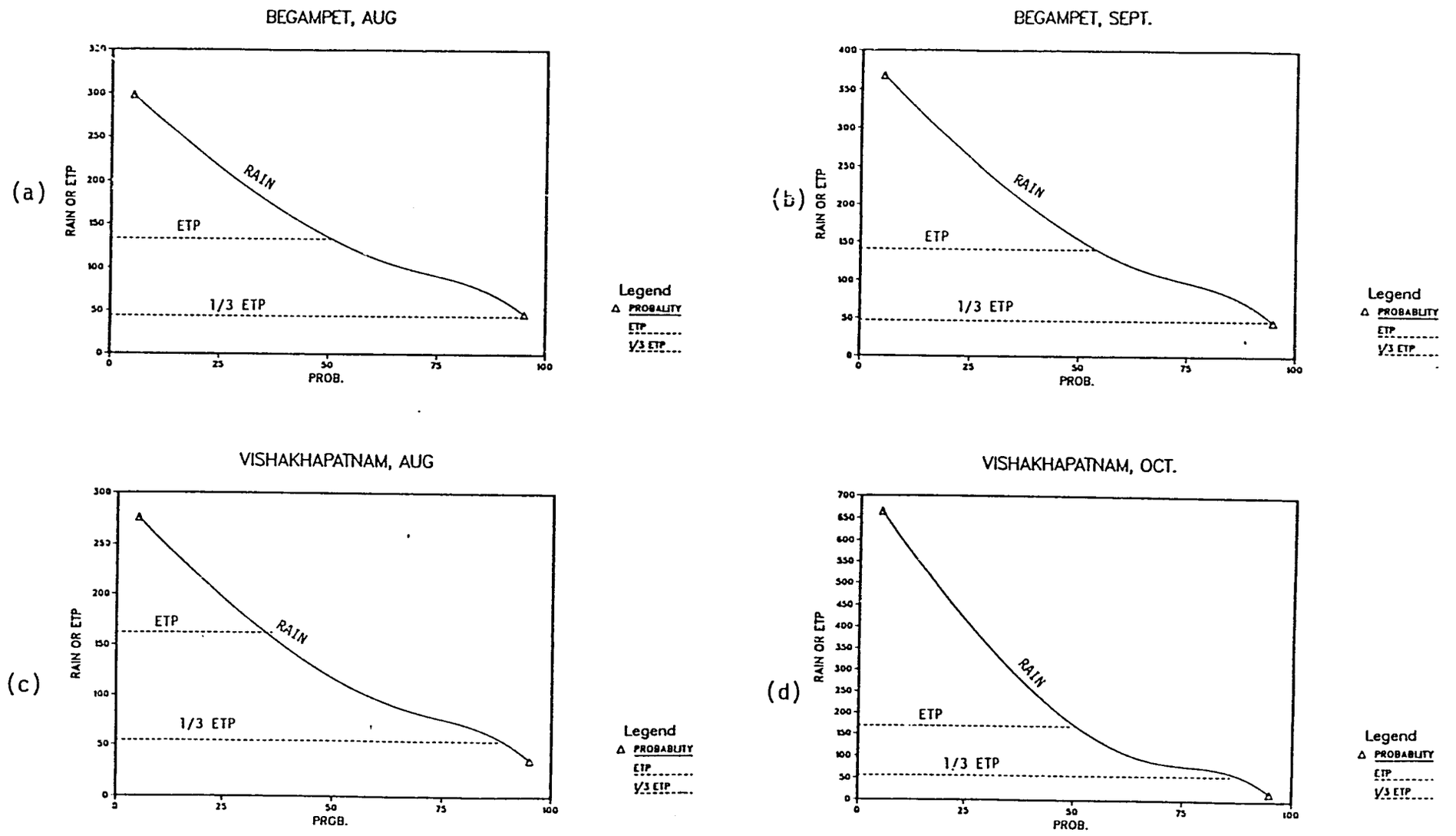

Figure 4. Probabilities of Assured Rainfall Compared with Estimated Values of ETP and 1/3 ETP for Selected Months.

Figure 4 was drawn by computer by using the values presented in the tables described above. Similar graphs can be prepared using the probabilities already calculated by computer or probabilities calculated from the mean rainfall using Eq. 6 with the approximate values of a and b.

The probability of reasonably adequate rainfall can be used as a guide for estimating possible or probable benefits from fertilizer application, improved seeds and various management practices. Stewart and Hash (10) show a good correlation between early onset of rains and whether the rainfall season will be good, fair or poor. The production is much improved when onset is combined with amount during the early stages of the rainfall season. It is suggested that rainfall probabilities and MAI values be calculated for ten-day periods (three periods per month) and that comparison of the onset of rain with the probable amount and a comparison of the first three ten-day periods with a given probability based on long-term records could provide a means of predicting the probability of the year being good, fair or poor. This hypothesis is recommended for further testing in India.

Probabilities of assured weekly rainfall amounts facilitate water management planning. Probabilities of weekly amounts exceeding 20 mm have sometimes been used to define the potential growing season for rainfed agriculture. Table 14 presents a comparison of weekly probabilities of assured rainfall with monthly probabilities. The locations selected were those with long records in representative agricultural areas.

Many of the crop growth models use daily climatic measurements. For

TABLE 14. COMPARISON OF MONTHLY AND WEEKLY PROBABILITIES OF ASSURED RAINFALL FOR SELECTED TYPICAL LOCATIONS (AMOUNTS IN mm).

State and Station	Probability %	WEEKS 23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
		MONTHS June					July					August			September					October	
GUJARAT	50		63				281					170					73			1	
	75		21				163					87					19			0	
AHMADABAD	50		3	8	25	42	39	32	48	39	23	20	20	18	15	8					
	70				9	15	16	12	17	16	7	7	7	4							
KARNATAKA	50		73				88					122				150				137	
	75		44				50					77				94				82	
BANGALORE	50	14	9	9	10	18	15	19	16	15	20	23	27	19	16	18	28	27	27	28	15
	70	6	3	4	4	9	6	9	7	6	9	10	13	8	6	7	12	10	10	10	4
MADHYA PRADESH	50		110				259					218				153				8	
	75		56				183					146				182				1	
INDORE	50	3	17	23	33	46	52	41	50	49	30	29	35	42	31	26	22	9			
	70		5	6	12	23	28	21	23	24	14	13	16	18	12	8	8				
PUNJAB	50		29				184					148					55			2	
	75		8				119					89					14			0	
LUDHANIA	50		1	4	10	19	31	27	34	32	28	27	21	13	9	10					
	70					5	13	10	16	15	11	8	5								
RAJASTHAN	50		40				178					153					49			2	
	75		17				114					70					16			0	
JAIPUR	50		2	5	6	16	32	33	35	29	26	23	31	18	11	8					
	70					5	14	14	14	13	6	8	12	5	2						

Source: Sarker, R.P., B.C. Biswas and N.N. Khambete, "Probability Analysis of Short Period Rainfall in Dry Farming Tract in India," Mausam 323, 3, 1982, pp. 269-284.

the developing countries daily data are frequently difficult to obtain for records long enough to provide for probability analyses. The soil water holding capacity can usually buffer moisture availability for one week or more, so that weekly rainfall amounts can be used in crop growth models.

Figure 5 compares values of MAI x 100 with weekly probabilities of rainfall exceeding 50 percent of estimated ETP for four of the locations given in Table 14. In general, both criteria (MAI values and weekly rainfall probabilities) define approximately the same growing season for rainfed agriculture and similar requirements for irrigation.

AGROTECHNOLOGY TRANSFER

The IBSNAT (International Benchmark Sites Network for Agrotechnology Transfer) project is attempting to standardize data collection and publication in a worldwide agricultural research network. Agrotechnology transfer between similar conditions can be, and has frequently been very successful. There have been, however, several serious failures when an important climatic or other difference was overlooked.

Climatic conditions are similar when the following condition exists:

1. The rainfall is similar in amount, distribution and intensity;
2. The values of ETP are approximately equal;
3. The mean values of temperature are nearly the same;
4. The differences between mean maximum and mean minimum temperatures are nearly equal; and
5. Latitude and day length are not too different for crops that are sensitive to this factor.

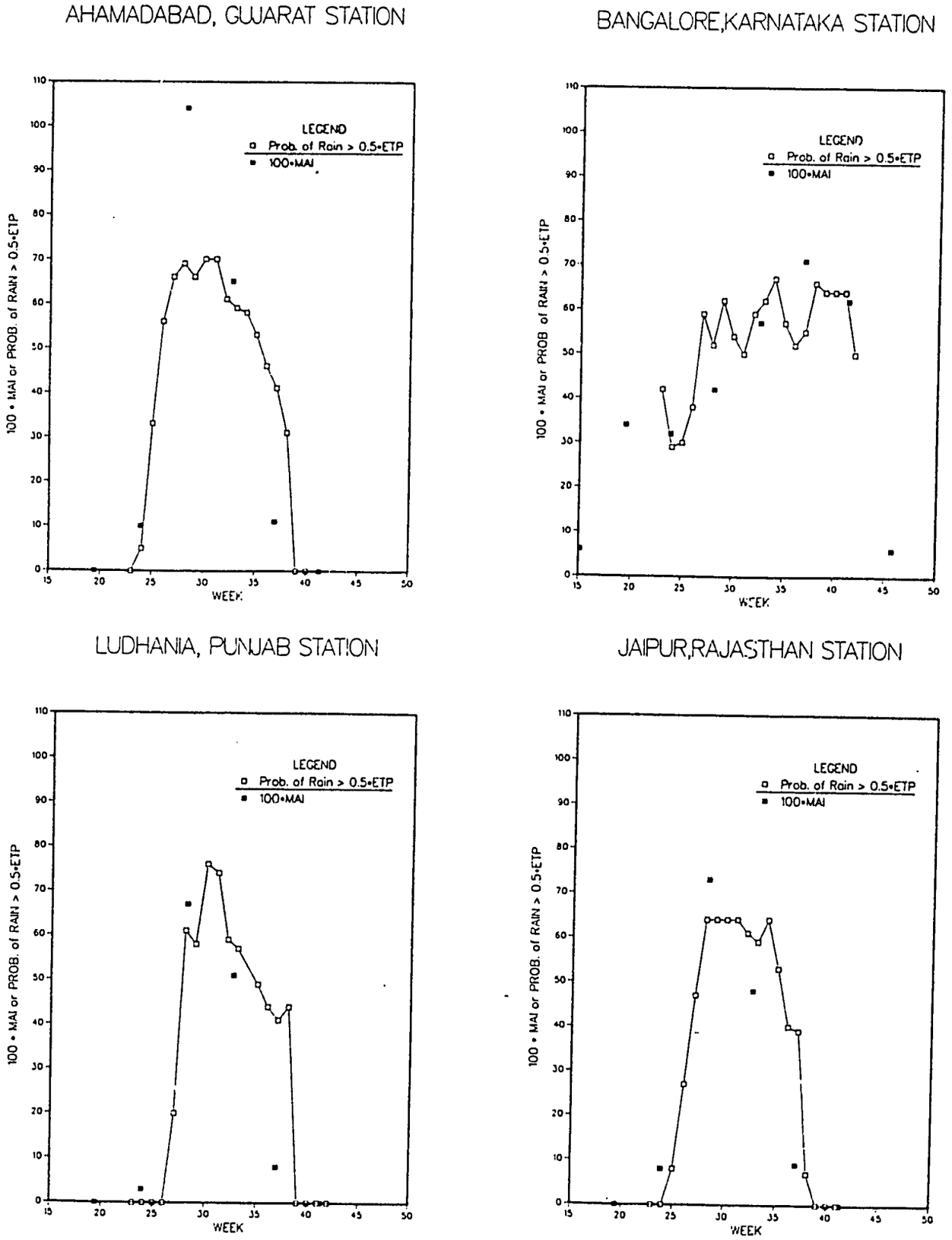

Figure 5. Comparison of MAI x 100 with Weekly Probability of Rain Exceeding 50 Percent of ETP.

The Analytical Tables provide most of the information about climate required for agrotechnology transfer. The principal exception is item (4) above (the temperature range, or TD). Values of maximum and minimum temperature for 42 locations in India are given by Her Majesty's Stationery Office (7). Values of TD summarized from these data are given in Table 15.

The mean annual values of TD average 22°F (12°C) for the interior locations with continental climates. For the coastal stations TD averages 13°F (7°C). The climate changes rapidly inland from the coast, so that stations located only a few miles inland may have a temperature range significantly different from those located adjacent to the edge of the ocean.

Those desiring further information about the IBSNAT project or wishing to receive a copy or copies of the IBSNAT manual should write to one of the following:

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TABLE 15. THE MEAN TEMPERATURE RANGE, TD, FOR SELECTED STATIONS IN INDIA IN °F.

	*ANDHRA PRADESH			ASSAM			BIHAR		
Month	**Hyderabad I	Kakinada C	Vishakhapatnam C	Dhubri I	Silchar I	Tezpur I	Gaya I	Jamshedpur I	Patna I
Jan	24	15	14	21	25	22	24	27	22
Feb	25	16	12	22	25	20	24	27	22
Mar	27	19	12	23	23	21	27	30	25
Apr	25	17	12	17	19	16	26	28	25
May	24	17	11	13	16	15	25	25	22
June	19	16	11	10	13	12	19	18	17
July	14	12	10	8	13	11	15	11	11
Aug	14	12	10	7	13	11	11	11	9
Sept	15	12	10	8	14	12	13	13	11
Oct	19	12	11	12	17	15	18	18	16
Nov	21	11	12	16	22	20	24	26	22
Dec	24	15	13	19	25	22	25	27	22
Annual	20	14	12	15	19	16	20	21	19

* = State; ** = Station Name; I = Interior or continental climate;
C = Coastal climate; M = Mountainous area with variable climate;
TD in °C = °F/1.8.

TABLE 15 (Continued).

	*DELHI	GOA	GUJARAT			HIMACHAL PRADESH	JAMMU & KASHMIR	KARNATAKA	
Month	**New Delhi I	Marmagao C	Ahmadabad I	Surat I	Veraval C	Simla M	Srinagar M	Bangalore I	Bellary I
Jan	26	15	27	29	22	11	13	24	24
Feb	26	14	29	29	21	11	15	26	26
Mar	29	12	30	29	20	13	19	26	26
Apr	29	10	30	25	14	13	21	24	24
May	26	9	28	18	7	14	24	23	24
June	19	10	20	13	6	12	27	18	18
July	15	8	14	9	4	9	23	16	15
Aug	14	7	13	10	5	8	23	16	16
Sept	18	8	17	13	7	10	28	17	17
Oct	28	10	25	22	16	12	31	17	18
Nov	32	13	28	27	21	12	29	18	20
Dec	27	15	27	29	22	11	20	20	22
Annual	24	11	24	21	14	11	22	21	21

* = State; ** = Station Name; I = Interior or continental climate;
C = Coastal climate; M = Mountainous area with variable climate;
TD in °C = °F/1.8.

TABLE 15 (Continued).

	*MAHARASHTRA			ORISSA	RAJASTHAN			TAMIL NADU	
Month	**Poona I	Ratnagiri C	Sholapur I	Puri C	Bikaner I	Jaipur I	Jodhpur I	Madras C	Nagapattinam C
Jan	34	20	27	16	27	27	28	18	12
Feb	36	18	28	14	26	27	28	20	12
Mar	35	15	28	10	29	29	29	19	13
Apr	33	12	27	9	27	29	29	17	14
May	27	10	28	9	26	27	26	19	17
June	26	10	21	8	23	22	22	19	19
July	21	8	17	7	20	16	17	18	17
Aug	21	8	18	8	18	14	16	17	17
Sept	16	9	18	9	21	20	19	17	16
Oct	23	14	22	12	27	29	30	15	13
Nov	28	20	24	16	30	31	33	13	11
Dec	32	21	26	18	29	28	29	15	10
Annual	26	14	24	11	25	26	26	17	14

* = State; ** = Station Name: I = Interior or continental climate; C = Coastal climate; M = Mountainous area with variable climate; TD in °C = °F/1.8.

TABLE 15 (Continued).

	*KARNATAKA	KERALA		MADHYA PRADESH				MAHARASHTRA	
Month	**Mangalore C	Cochin C	Trivandrum C	Indore I	Jabalpur I	Jagdalpur I	Raipur I	Bombay C	Nagpur I
Jan	18	17	12	30	29	29	26	16	27
Feb	15	16	12	30	30	29	25	16	29
Mar	14	14	11	28	31	30	27	14	30
Apr	12	13	10	29	31	27	27	13	29
May	12	12	9	27	27	25	25	11	27
June	10	10	7	20	19	17	19	10	19
July	10	10	7	12	12	11	12	8	13
Aug	10	9	8	12	11	11	11	9	12
Sept	10	10	8	15	14	14	13	9	15
Oct	11	12	8	27	23	18	19	13	22
Nov	14	13	9	29	29	23	23	16	25
Dec	18	16	10	30	31	28	26	18	27
Annual	13	13	9	24	23	22	21	13	23

* = State; ** = Station Name; I = Interior or continental climate;
C = Coastal climate; M = Mountainous area with variable climate;
TD in °C = °F/1.8.

TABLE 15 (Continued).

	*TAMIL NADU	UTTAR PRADESH			WEST BENGAL	
Month	**Pamban C	Agra I	Allahabad I	Kanpur I	Calcutta I	Darjeeling M
Jan	8	30	28	27	25	12
Feb	10	32	28	27	25	12
Mar	12	34	31	29	26	15
Apr	11	34	32	30	22	13
May	11	30	27	27	19	11
June	10	22	20	19	13	9
July	10	14	12	14	10	8
Aug	10	12	10	12	11	8
Sept	10	18	14	15	12	9
Oct	10	31	23	25	15	11
Nov	9	37	29	29	20	12
Dec	8	33	29	28	24	12
Annual	10	27	24	24	19	12

* = State; ** = Station Name; I = Interior or continental climate; C = Coastal climate; M = Mountainous area with variable climate; TD in °C = °F/1.8.

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The IBSNAT project is in the process of preparing a manual for data collection in connection with agricultural research and agrotechnology transfer. The IBSNAT manual recommends a minimum climatic data set consisting of long term monthly means and daily values of maximum temperature, minimum temperature, precipitation and solar radiation. As indicated above, Eqs. 8, 11, 12, 13 and 14 reduce the requirements for measured values of solar radiation. However, it is desirable that a complete climatic data set be collected and maintained at each agricultural research station.

The table of contents of the draft of the IBSNAT data collection manual is given as follows:

Experimental Design and Data Collection Procedures
for IBSNAT Collaborators

I Design of IBSNAT Experiments

- A. Site Selection
- B. Treatment Alternatives
  1. Planting dates
  2. Variety trials
  3. Plant density
  4. Irrigation
  5. Fertilizer amounts and sources
  6. Drainage
  7. Residue management
  8. Pest control
  9. Erosion control
  10. Soil and/or climatic variability
- C. Number of Treatment Factors
- D. Experimental Design
- E. Plot Size

F. Examples of Possible Experiments
   1. Effects of altitude on soybean growth
   2. Effects of soil acidity on crop growth
   3. Effects of irrigation and fertilizer nitrogen on maize yields
   4. Effects of improved management packages on crop yields

II The Minimum IBSNAT Data Set

A. FORM A - Institutional Information
B. FORM B - Weather
C. FORM C - Experiment
D. FORM D - Plot
E. FORM E - Soil Fertility
F. FORM F - Soil Water
G. FORM G - Tillage
F. FORM H - Planting
I. FORM I - Fertilizers and Amendments
J. FORM J - Biocides and Hormones
K. FORM K - Irrigation
L. FORM L - Phenology
M. FORM M - Harvests
N. FORM N - Plant Analyses

III Chronogram of Activities for a Typical Experiment

IV Appendices

A. Appendix 1. Fertilizer and Amendment Codes
B. Appendix 2. Biocide Codes
C. Appendix 3. Maize Phenology
D. Appendix 4. Sorghum, Wheat and Rice Phenology
E. Appendix 5. Soybean and Field Bean Phenology
F. Appendix 6. Peanut Phenology
G. Appendix 7. Potato Phenology
H. Appendix 8. Cassava Phenology
I. Appendix 9. Aroid Phenology
J. Appendix 10. Plant Component Codes

V Literature Cited

RECOMMENDATIONS

This report is recommended for crop selection and for technology transfer. In areas of similar soils, similar temperature and uniform length and intensity of rainy season experience gained at one location should be applicable to other locations.

An analysis of the crop water requirements for the different States should be made in greater detail. For this, additional agrometeorological stations are required, particularly in the areas commanded by major irrigation canals. Daily data should be made available for computer analyses of probabilities and irrigation requirements for the time periods required for improved irrigation scheduling and for a probability analysis for droughts.

Attention is called to limitations of detail and accuracy. The analyses are presented as useful for improving technology and as an illustration of benefits possible from more detailed studies. It is strongly recommended that for India as a whole rainfall probabilities be determined based upon 10-day or fortnightly records using the gamma distribution. The water delivery system, for many locations, is based upon a 14-day rotation. Values of ETP, PD and MAI for fortnightly periods will therefore be much more useful for irrigation scheduling than the monthly values given in this report. For critical and transitional areas it may be desirable to use daily rainfall data to calculate the moisture availability index, MAI, for 5-day or weekly periods.

It is recommended that this study be widely circulated and reviewed and that the methodology described herein be used in more detailed studies and analyses. The fertility recommendations should be verified by field testing and high yielding varieties selected that are compatible with the precipitation and other climatic conditions.

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ANALYTICAL TABLES

STATION ADILABAD LAT 19.40N LONG 78.32E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	6.	18.	13.	28.	14.	182.	323.	222.	189.	51.	23.	3.	1072.
TEM	22.	24.	28.	32.	36.	32.	28.	27.	27.	26.	22.	20.	27.
RS	480.	550.	610.	650.	660.	510.	480.	390.	500.	520.	500.	450.	525.
PD						90.	214.	125.	96.				874.
ETP	135.	155.	203.	228.	256.	179.	157.	127.	158.	164.	139.	123.	2023.
MAI						0.50	1.37	0.99	0.61				0.43

STATION ADONI LAT 15.38N LONG 77.17E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	3.	10.	5.	18.	39.	75.	101.	106.	175.	92.	36.	4.	664.
TEM	26.	26.	27.	28.	28.	27.	26.	26.	26.	26.	26.	26.	27.
RS	510.	560.	680.	645.	635.	530.	450.	510.	500.	500.	495.	480.	541.
PD						44.	54.	56.	84.	51.			515.
ETP	160.	164.	218.	206.	208.	164.	143.	162.	153.	159.	152.	151.	2042.
MAI						0.27	0.38	0.35	0.55	0.32			0.25

STATION ANANTAPUR LAT 14.41N LONG 77.37E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	5.	6.	3.	15.	53.	50.	52.	85.	150.	99.	58.	7.	584.
TEM	24.	26.	29.	32.	32.	30.	28.	28.	28.	27.	25.	23.	28.
RS	510.	560.	620.	640.	620.	520.	460.	500.	500.	495.	490.	485.	533.
PD								48.	74.	54.	37.		444.
ETP	152.	165.	210.	223.	223.	173.	152.	165.	159.	159.	145.	143.	2069.
MAI								0.29	0.47	0.34	0.26		0.21

STATION AROGYAVARAM LAT 13.32N LONG 78.30E ELEV 701. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	5.	2.	4.	36.	59.	54.	86.	75.	113.	166.	61.	36.	697.
TEM	21.	23.	26.	28.	29.	27.	26.	26.	26.	24.	22.	21.	25.
RS	510.	570.	625.	610.	615.	480.	400.	460.	500.	480.	480.	485.	518.
PD							48.	44.	59.	80.			544.
ETP	142.	158.	198.	196.	208.	151.	126.	144.	151.	145.	133.	133.	1884.
MAI							0.39	0.30	0.39	0.56			0.29

STATION BEGAMPET LAT 17 30 N LONG 78 30 E ELEV 545.0 M 90 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	0.	0.	0.	0.	1.	27.	63.	47.	46.	6.	0.	0.	485.
75.	0.	0.	0.	2.	6.	58.	111.	91.	98.	27.	1.	0.	644.
50.	1.	2.	2.	9.	18.	90.	156.	135.	154.	60.	9.	0.	773.
5.	29.	49.	72.	94.	103.	212.	313.	298.	368.	240.	121.	27.	1157.
PM	6.	10.	14.	23.	30.	101.	168.	149.	173.	83.	28.	5.	790.
TEMC	22.	25.	28.	31.	33.	30.	27.	26.	26.	26.	23.	21.	26.
ETP	140.	154.	199.	216.	235.	169.	131.	133.	141.	159.	144.	128.	1950.
MAI	0.00	0.00	0.00	0.01	0.02	0.34	0.84	0.68	0.70	0.17	0.01	0.00	0.33

STATION BHONGIR LAT 17.31N LONG 78.53E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	1.	11.	11.	34.	31.	109.	118.	130.	135.	72.	27.	5.	684.
TEM	22.	24.	27.	30.	32.	29.	26.	26.	26.	25.	22.	21.	26.
RS	500.	550.	620.	660.	655.	510.	450.	500.	490.	520.	500.	470.	535.
PD						58.	61.	66.	68.	43.			532.
ETP	141.	154.	202.	222.	238.	167.	142.	157.	148.	160.	139.	129.	1999.
MAI						0.34	0.43	0.42	0.46	0.27			0.27

STATION CUDDAPAH LAT 14.29N LONG 78.50E ELEV 130. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	3.	1.	4.	16.	51.	84.	114.	111.	146.	109.	83.	21.	743.
TEM	25.	28.	31.	34.	34.	32.	32.	30.	30.	29.	28.	26.	26.
RS	500.	550.	620.	640.	620.	500.	460.	500.	500.	495.	490.	480.	530.
PD						48.	60.	58.	72.	58.	47.		584.
ETP	154.	169.	218.	231.	235.	174.	166.	173.	166.	168.	157.	151.	1988.
MAI						0.28	0.36	0.34	0.44	0.34	0.30		0.29

STATION CUMBUM LAT 15.35N LONG 79.07E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	7.	5.	8.	16.	35.	49.	99.	69.	104.	125.	98.	14.	629.
TEM	25.	27.	29.	31.	34.	33.	31.	31.	30.	29.	26.	25.	29.
RS	500.	550.	620.	640.	615.	470.	400.	390.	480.	490.	490.	480.	510.
PD							54.	42.	56.	64.	53.		484.
ETP	153.	164.	208.	220.	230.	168.	142.	137.	161.	164.	149.	146.	2043.
MAI							0.38	0.30	0.34	0.39	0.36		0.24

STATION GANNAVARAM LAT 16.33N LONG 80.48E ELEV 24. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	6.	10.	14.	17.	45.	109.	198.	174.	161.	120.	77.	6.	937.
TEM	25.	26.	29.	32.	34.	32.	29.	29.	29.	28.	26.	24.	29.
RS	500.	560.	620.	680.	640.	500.	450.	470.	495.	520.	500.	475.	534.
PD						58.	104.	83.	78.	62.	45.		755.
ETP	152.	167.	209.	236.	239.	176.	152.	157.	161.	171.	152.	144.	2115.
MAI						0.33	0.69	0.53	0.49	0.36	0.29		0.36

STATION HANAMKONDA LAT 19.01N LONG 79.34E ELEV 269. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	2.	16.	11.	25.	33.	140.	239.	180.	185.	91.	22.	2.	946.
TEM	24.	26.	29.	32.	34.	32.	28.	28.	28.	27.	24.	23.	28.
RS	480.	550.	610.	650.	660.	510.	480.	390.	500.	520.	500.	450.	525.
PD						70.	140.	88.	93.	50.			762.
ETP	142.	161.	206.	226.	250.	176.	158.	127.	158.	167.	146.	130.	2048.
MAI						0.40	0.89	0.69	0.59	0.30			0.37

STATION HINDUPUR LAT 13.49N LONG 77.29E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	3.	7.	4.	25.	66.	44.	57.	83.	142.	102.	50.	10.	593.
TEM	23.	26.	28.	30.	29.	26.	24.	24.	25.	25.	23.	22.	25.
RS	505.	550.	620.	640.	615.	510.	450.	510.	515.	490.	490.	485.	532.
PD							37.	47.	71.	55.			452.
ETP	148.	161.	206.	211.	206.	155.	137.	154.	152.	150.	140.	139.	1960.
MAI							0.27	0.31	0.47	0.36			0.23

STATION HYDERABAD LAT 17.27N LONG 78.28E ELEV 545. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	2.	11.	13.	24.	30.	107.	165.	147.	163.	71.	25.	6.	764.
TEM	22.	24.	27.	30.	32.	29.	26.	26.	26.	25.	22.	21.	26.
RS	500.	550.	620.	660.	655.	510.	450.	500.	490.	520.	500.	470.	535.
PD						57.	80.	73.	79.	42.			602.
ETP	141.	154.	202.	222.	238.	167.	142.	157.	148.	160.	139.	129.	1999.
MAI						0.34	0.56	0.46	0.53	0.27			0.30

STATION JAGTIAL LAT 18.48N LONG 78.56E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	4.	24.	12.	23.	16.	146.	265.	186.	174.	69.	24.	2.	945.
TEM	23.	25.	29.	32.	35.	31.	27.	27.	27.	26.	23.	21.	27.
RS	490.	550.	600.	660.	670.	510.	450.	500.	490.	515.	500.	450.	532.
PD						72.	163.	94.	83.	42.			761.
ETP	142.	158.	201.	230.	255.	173.	145.	160.	152.	162.	141.	126.	2046.
MAI						0.42	1.13	0.59	0.55	0.26			0.37

STATION KADIRI LAT 14.07N LONG 78.10E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	6.	6.	7.	21.	59.	44.	64.	90.	145.	97.	67.	12.	618.
TEM	24.	26.	29.	32.	32.	30.	28.	28.	28.	27.	25.	23.	28.
RS	510.	560.	620.	640.	620.	520.	460.	500.	500.	495.	490.	485.	533.
PD								50.	72.	53.	41		474.
ETP	152.	165.	210.	223.	223.	173.	152.	165.	159.	159.	145.	143.	2069.
MAI								0.30	0.45	0.33			0.23

STATION KAKINADA LAT 16.57N LONG 82.14E ELEV 8. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	4.	12.	12.	22.	46.	126.	218.	152.	158.	307.	107.	9.	1173.
TEM	23.	25.	28.	31.	32.	32.	29.	29.	29.	28.	25.	23.	28.
RS	500.	560.	620.	675.	645.	500.	425.	420.	480.	520.	500.	480.	527.
PD						64.	122.	75.	77.	200.	57.		962.
ETP	147.	162.	205.	228.	234.	172.	142.	141.	156.	170.	149.	141.	2048.
MAI						0.37	0.86	0.53	0.49	1.18	0.38		0.47

STATION KALAHASTI LAT 13.46N LONG 79.43E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	55.	8.	11.	16.	39.	50.	87.	92.	104.	231.	331.	122.	1146.
TEM	24.	25.	28.	31.	33.	31.	30.	30.	29.	27.	25.	23.	28.
RS	510.	565.	630.	620.	610.	450.	380.	450.	450.	440.	500.	490.	508.
PD							49.	51.	56.	133.	221.	63.	938.
ETP	151.	164.	208.	211.	222.	154.	131.	154.	147.	143.	149.	145.	1979.
MAI							0.37	0.33	0.38	0.93	1.49	0.43	0.47

STATION KALINGAPATNAM LAT 18.20N LONG 84.02E ELEV 6. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	4.	13.	12.	18.	42.	114.	163.	158.	176.	219.	57.	10.	986.
TEM	23.	25.	27.	29.	31.	30.	29.	29.	29.	28.	24.	22.	27.
RS	490.	550.	605.	660.	670.	400.	380.	520.	520.	515.	500.	450.	522.
PD						60.	79.	77.	85.	123.	37.		797.
ETP	142.	157.	197.	217.	235.	135.	128.	175.	169.	168.	147.	129.	1998.
MAI						0.44	0.62	0.44	0.50	0.73	0.25		0.40

STATION KAVALI LAT 14.55N LONG 80.00E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	26.	7.	12.	12.	31.	38.	66.	66.	111.	284.	265.	69.	987.
TEM	25.	27.	29.	31.	34.	33.	31.	31.	30.	29.	26.	25.	29.
RS	500.	550.	620.	640.	615.	470.	400.	390.	480.	490.	490.	480.	510.
PD									58.	180.	163.	42.	799.
ETP	153.	164.	208.	220.	230.	168.	142.	137.	161.	164.	149.	146.	2043.
MAI									0.36	1.10	1.09	0.29	0.39

STATION KHAMNAM LAT 17.15N LONG 80.09E ELEV 112. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	2.	7.	11.	26.	27.	127.	260.	186.	165.	107.	34.	4.	956.
TEM	24.	27.	30.	32.	35.	32.	29.	28.	29.	28.	25.	23.	29.
RS	500.	560.	620.	680.	640.	500.	450.	470.	495.	520.	500.	475.	534.
PD						65.	159.	94.	80.	57.			771.
ETP	151.	168.	214.	239.	244.	176.	151.	157.	160.	171.	148.	140.	2118.
MAI						0.37	1.05	0.60	0.50	0.33			0.36

STATION KONTA LAT 17.48N LONG 81.23E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	5.	12.	11.	44.	48.	206.	374.	320.	230.	101.	28.	7.	1386.
TEM	24.	27.	30.	32.	35.	32.	29.	28.	29.	28.	25.	23.	29.
RS	500.	560.	620.	680.	640.	500.	450.	470.	495.	520.	500.	475.	534.
PD						111.	259.	212.	133.	54.			1150.
ETP	151.	168.	214.	239.	244.	176.	151.	157.	160.	171.	148.	140.	2118.
MAI						0.63	1.71	1.35	0.83	0.32			0.54

STATION KURNOOL LAT 15.50N LONG 78.04E ELEV 281. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	0.	5.	10.	22.	44.	91.	130.	122.	147.	79.	22.	3.	675.
TEM	24.	27.	30.	33.	34.	30.	28.	28.	28.	27.	25.	23.	28.
RS	500.	560.	620.	650.	650.	510.	480.	500.	505.	500.	495.	480.	538.
PD						50.	66.	63.	73.	46.			524.
ETP	151.	168.	214.	230.	242.	171.	159.	164.	160.	163.	148.	142.	2111.
MAI						0.29	0.42	0.38	0.46	0.28			0.25

STATION MAHBUBNAGAR LAT 16.44N LONG 77.59E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	6.	10.	7.	17.	29.	112.	176.	146.	185.	74.	26.	4.	792.
TEM	22.	24.	27.	30.	32.	29.	26.	26.	26.	25.	22.	21.	26.
RS	500.	550.	620.	660.	655.	510.	450.	500.	490.	520.	500.	470.	535.
PD						59.	85.	72.	93.	44.			627.
ETP	141.	154.	202.	222.	238.	167.	142.	157.	148.	160.	139.	129.	1999.
MAI						0.35	0.60	0.46	0.63	0.27			0.31

STATION MASULIPATAM LAT 16 12 N LONG 81 12 E ELEV 3.0 M 114 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	0.	0.	0.	0.	0.	21.	57.	49.	58.	21.	0.	0.	654.
75.	0.	0.	0.	0.	3.	54.	108.	97.	107.	83.	6.	0.	860.
50.	0.	1.	0.	2.	14.	92.	158.	145.	154.	171.	42.	1.	1027.
5.	22.	39.	55.	77.	137.	248.	339.	326.	322.	609.	549.	92.	1521.
PM	4.	7.	10.	15.	34.	108.	173.	161.	167.	224.	128.	18.	1049.
TEMC	24.	25.	27.	30.	32.	32.	29.	29.	29.	28.	26.	24.	28.
ETP	148.	162.	202.	226.	231.	173.	153.	158.	161.	171.	151.	142.	2078.
MAI	0.00	0.00	0.00	0.00	0.01	0.31	0.71	0.61	0.66	0.49	0.04	0.00	0.41

STATION MEDAK LAT 18.03N LONG 78.16E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	1.	17.	18.	30.	24.	166.	254.	202.	181.	38.	16.	6.	953.
TEM	23.	25.	29.	32.	35.	31.	27.	27.	27.	26.	23.	21.	27.
RS	490.	550.	600.	660.	670.	510.	450.	500.	490.	515.	500.	450.	532.
PD						80.	154.	108.	89.				769.
ETP	142.	158.	201.	230.	255.	173.	145.	160.	152.	162.	141.	126.	2046.
MAI						0.46	1.06	0.67	0.59				0.38

STATION NAGARAM LAT 17.21N LONG 79.03E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	3.	10.	14.	29.	32.	98.	117.	107.	159.	88.	30.	8.	695.
TEM	24.	27.	30.	32.	35.	32.	29.	28.	29.	28.	25.	23.	29.
RS	500.	560.	620.	680.	640.	500.	450.	470.	495.	520.	500.	475.	534.
PD						53.	61.	57.	78.	49.			541.
ETP	151.	168.	214.	239.	244.	176.	151.	157.	160.	171.	148.	140.	2118.
MAI						0.30	0.40	0.36	0.49	0.29			0.26

STATION NALGONDA LAT 17.03N LONG 79.16E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	6.	9.	6.	21.	32.	102.	138.	129.	171.	105.	37.	8.	764.
TEM	24.	27.	30.	32.	35.	32.	29.	28.	29.	26.	25.	23.	29.
RS	500.	560.	620.	680.	640.	500.	450.	470.	495.	520.	500.	475.	534.
PD						55.	69.	66.	80.	56.			602.
ETP	151.	168.	214.	239.	244.	176.	151.	157.	160.	171.	148.	140.	2118.
MAI						0.31	0.46	0.42	0.50	0.33			0.28

STATION NANDYAL LAT 15.30N LONG 78.30E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	2.	5.	5.	19.	39.	96.	149.	144.	181.	89.	31.	5.	766.
TEM	25.	28.	31.	34.	35.	32.	30.	30.	29.	28.	26.	24.	29.
RS	500.	550.	620.	640.	620.	500.	460.	500.	500.	495.	490.	480.	530.
PD						52.	74.	72.	89.	50.			604.
ETP	154.	169.	218.	231.	235.	174.	159.	172.	164.	164.	149.	145.	2133.
MAI						0.30	0.46	0.42	0.55	0.30			0.28

STATION NELLORE LAT 14.27N LONG 79.59E ELEV 20. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	8.	5.	7.	15.	54.	41.	73.	83.	98.	267.	293.	90.	1034.
TEM	25.	27.	29.	31.	34.	33.	31.	31.	30.	29.	26.	25.	29.
RS	500.	550.	620.	640.	615.	470.	400.	390.	480.	490.	490.	480.	510.
PD							43.	47.	53.	165.	188.	50.	840.
ETP	153.	164.	208.	220.	230.	168.	142.	137.	161.	164.	149.	146.	2043.
MAI							0.30	0.34	0.33	1.01	1.26	0.34	0.41

STATION NIRMAL LAT 19.06N LONG 78.21E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	6.	16.	12.	13.	17.	156.	325.	210.	192.	51.	23.	4.	1025.
TEM	23.	25.	29.	32.	35.	31.	27.	27.	27.	26.	23.	21.	27.
RS	490.	550.	600.	660.	670.	510.	450.	500.	490.	515.	500.	450.	532.
PD						76.	216.	115.	99.				832.
ETP	142.	158.	201.	230.	255.	173.	145.	160.	152.	162.	141.	126.	2046.
MAI						0.44	1.49	0.72	0.65				0.41

STATION NIZAMABAD LAT 18.40N LONG 78.06E ELEV 381. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	5.	17.	14.	21.	20.	149.	317.	261.	203.	65.	14.	3.	1089.
TEM	23.	25.	29.	32.	35.	31.	27.	27.	27.	26.	23.	21.	27.
RS	490.	550.	600.	660.	670.	510.	450.	500.	490.	515.	500.	450.	532.
PD						74.	209.	160.	109.	40.			889.
ETP	142.	158.	201.	230.	255.	173.	145.	160.	152.	162.	141.	126.	2046.
MAI						0.43	1.45	1.00	0.72	0.25			0.43

STATION ONGOLE LAT 15.34N LONG 80.03E ELEV 12. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	10.	8.	13.	13.	35.	49.	87.	87.	135.	212.	174.	26.	844.
TEM	24.	26.	28.	30.	33.	33.	30.	30.	30.	28.	26.	24.	29.
RS	500.	560.	620.	650.	650.	510.	450.	470.	500.	500.	480.	480.	531.
PD							47.	49.	68.	117.	83.		673.
ETP	151.	164.	204.	218.	240.	181.	156.	163.	166.	166.	146.	145.	2099.
MAI							0.30	0.30	0.41	0.70	0.57		0.32

STATION POLAVARAM LAT 17.24N LONG 82.49E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	7.	24.	7.	21.	47.	94.	109.	110.	152.	188.	110.	12.	881.
TEM	24.	27.	30.	32.	35.	32.	29.	28.	29.	28.	25.	23.	29.
RS	500.	560.	620.	680.	640.	500.	450.	470.	495.	520.	500.	475.	534.
PD						52.	58.	58.	75.	95.	58.		705.
ETP	151.	168.	214.	239.	244.	176.	151.	157.	160.	171.	148.	140.	2118.
MAI						0.29	0.38	0.37	0.47	0.56	0.39		0.33

STATION RAMAGUNDAM LAT 18.46N LONG 79.26E ELEV 156. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	2.	2.	14.	10.	29.	194.	305.	256.	172.	78.	6.	1.	1069.
TEM	24.	26.	30.	34.	36.	33.	28.	28.	28.	28.	24.	23.	29.
RS	490.	550.	605.	660.	670.	510.	450.	500.	490.	515.	500.	450.	533.
PD						101.	198.	155.	81.	45.			871.
ETP	146.	164.	210.	238.	263.	183.	150.	164.	157.	169.	146.	130.	2119.
MAI						0.55	1.32	0.94	0.52	0.27			0.41

STATION RENTACHINTALA LAT 16.33N LONG 79.33E ELEV 106. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	0.	10.	6.	20.	41.	86.	116.	115.	146.	124.	41.	13.	718.
TEM	24.	27.	30.	33.	35.	33.	30.	30.	29.	28.	25.	23.	29.
RS	500.	560.	620.	680.	640.	500.	450.	470.	495.	520.	500.	475.	534.
PD						48.	60.	60.	72.	64.			562.
ETP	151.	169.	215.	241.	245.	177.	154.	161.	162.	172.	150.	140.	2139.
MAI						0.27	0.39	0.37	0.45	0.37			0.26

STATION SALUR LAT 18.31N LONG 83.12E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	10.	15.	16.	45.	84.	144.	166.	182.	192.	181.	74.	11.	1120.
TEM	22.	24.	28.	32.	36.	32.	28.	27.	27.	26.	22.	20.	27.
RS	480.	550.	610.	650.	660.	510.	480.	390.	500.	520.	500.	450.	525.
PD						72.	80.	90.	99.	89.	44.		916.
ETP	135.	155.	203.	228.	256.	179.	157.	127.	158.	164.	139.	123.	2023.
MAI						0.40	0.51	0.71	0.63	0.54	0.31		0.45

STATION SRIKAKULAM LAT 18.18N LONG 83.54E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	4.	16.	9.	22.	54.	105.	124.	163.	188.	174.	69.	11.	939.
TEM	23.	24.	27.	29.	31.	31.	29.	29.	29.	28.	25.	23.	27.
RS	500.	560.	620.	680.	640.	500.	440.	480.	510.	515.	450.	410.	525.
PD						56.	64.	79.	95.	83.	42.		756.
ETP	145.	158.	199.	224.	225.	169.	148.	162.	165.	169.	135.	120.	2019.
MAI						0.33	0.43	0.49	0.58	0.49	0.31		0.37

STATION TANDUR LAT 17.14N LONG 77.35E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	2.	6.	7.	23.	28.	112.	172.	147.	196.	48.	15.	1.	757.
TEM	23.	26.	29.	32.	33.	29.	27.	27.	26.	26.	24.	22.	27.
RS	500.	550.	620.	660.	650.	510.	450.	500.	490.	520.	500.	470.	535.
PD						59.	81.	73.	103.				597.
ETP	147.	162.	211.	230.	240.	168.	145.	160.	151.	166.	145.	135.	2060.
MAI						0.35	0.56	0.45	0.68				0.29

STATION UDAYAGIRI LAT 14.53N LONG 79.18E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	38.	13.	20.	29.	58.	37.	69.	62.	102.	199.	230.	61.	918.
TEM	25.	27.	31.	34.	35.	32.	30.	30.	29.	28.	26.	24.	29.
RS	500.	550.	620.	640.	620.	500.	460.	500.	500.	495.	490.	480.	530.
PD							42.	39.	55.	105.	133.		738.
ETP	154.	167.	218.	231.	235.	174.	159.	172.	164.	164.	149.	145.	2131.
MAI							0.26	0.23	0.33	0.64	0.89		0.35

STATION VISHAKHAPATNAM LAT 17.43N LONG 83.14E ELEV 3. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	7.	15.	9.	13.	54.	88.	122.	132.	167.	259.	91.	18.	975.
TEM	23.	24.	27.	29.	31.	31.	29.	29.	29.	28.	25.	23.	27.
RS	500.	560.	620.	680.	640.	500.	440.	480.	510.	515.	450.	410.	525.
PD						49.	63.	67.	81.	158.	50.		788.
ETP	145.	158.	199.	224.	225.	169.	148.	162.	165.	169.	135.	120.	2019.
MAI						0.29	0.42	0.41	0.49	0.94	0.37		0.39

STATION VISHAKHAPATNAM LAT 17 42 N LONG 83 18 E ELEV 3.0 M 115 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	0.	0.	0.	0.	1.	22.	38.	36.	53.	18.	0.	0.	607.
75.	0.	0.	0.	0.	10.	54.	74.	76.	107.	79.	4.	0.	810.
50.	1.	1.	1.	4.	32.	90.	109.	117.	160.	173.	32.	2.	976.
5.	49.	70.	49.	97.	192.	235.	238.	276.	360.	665.	435.	108.	1470.
PM	9.	13.	9.	21.	56.	104.	120.	132.	177.	235.	101.	21.	999.
TEMC	23.	25.	28.	30.	31.	31.	29.	29.	29.	28.	26.	24.	28.
ETP	147.	162.	203.	225.	226.	169.	149.	162.	166.	169.	136.	122.	2036.
MAI	0.00	0.00	0.00	0.00	0.05	0.32	0.50	0.47	0.64	0.47	0.03	0.00	0.40

STATION DHUBRI LAT 26.01N LONG 89.59E ELEV 35. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	11.	19.	45.	154.	419.	644.	448.	305.	331.	135.	12.	1.	2524.
TEM	17.	20.	24.	27.	26.	27.	28.	28.	28.	26.	22.	19.	24.
RS	390.	460.	560.	620.	650.	500.	370.	360.	480.	495.	440.	380.	475.
PD				76.	299.	497.	324.	198.	221.	68.			2151.
ETP	98.	116.	168.	192.	207.	157.	121.	120.	152.	156.	122.	100.	1708.
MAI				0.39	1.44	3.17	2.67	1.66	1.45	0.44			1.26

STATION DHUBRI LAT 26 0 N LONG 90 0 E ELEV 35.0 M 99 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	0.	0.	0.	16.	186.	267.	154.	121.	91.	6.	0.	0.	1782.
75.	0.	1.	3.	56.	293.	435.	284.	219.	192.	37.	0.	0.	2176.
50.	2.	5.	17.	111.	388.	588.	409.	312.	297.	93.	1.	0.	2483.
5.	43.	70.	187.	374.	701.	1100.	859.	644.	701.	424.	59.	10.	3347.
PM	9.	16.	46.	142.	408.	623.	445.	338.	334.	138.	12.	2.	2513.
TEMC	18.	20.	24.	26.	26.	27.	28.	28.	28.	26.	22.	19.	24.
ETP	63.	89.	144.	156.	188.	204.	175.	165.	174.	134.	100.	78.	1670.
MAI	0.00	0.01	0.02	0.36	1.56	2.13	1.62	1.32	1.10	0.28	0.00	0.00	1.30

STATION DIBRUGARH LAT 27.28N LONG 94.55E ELEV 106. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	35.	61.	100.	204.	356.	514.	517.	417.	342.	166.	27.	22.	2761.
TEM	16.	18.	21.	24.	25.	27.	28.	28.	27.	25.	21.	18.	23.
RS	370.	455.	550.	610.	645.	515.	425.	400.	460.	490.	430.	370.	477.
PD			54.	109.	243.	382.	385.	297.	231.	80.			2360.
ETP	90.	110.	154.	176.	200.	161.	139.	131.	144.	152.	117.	93.	1666.
MAI			0.35	0.62	1.21	2.38	2.77	2.26	1.61	0.53			1.42

STATION DIBRUGARH LAT 27 30 N LONG 94 54 E ELEV 106.0 M 61 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	2.	15.	22.	92.	149.	285.	305.	248.	156.	30.	0.	0.	2289.
75.	12.	32.	55.	154.	238.	389.	424.	345.	250.	80.	5.	1.	2583.
50.	26.	51.	91.	210.	317.	474.	522.	426.	335.	139.	16.	7.	2788.
5.	103.	123.	240.	402.	581.	732.	824.	674.	618.	390.	102.	72.	3288.
PM	36.	57.	106.	224.	335.	487.	538.	439.	354.	165.	29.	18.	2788.
TEMC	16.	18.	21.	23.	25.	27.	28.	28.	27.	25.	21.	17.	23.
ETP	90.	109.	153.	174.	200.	161.	139.	131.	144.	151.	116.	92.	1660.
MAI	0.13	0.29	0.36	0.88	1.19	2.41	3.05	2.63	1.74	0.53	0.04	0.01	1.56

STATION DIBRUGARH/MOHANBARI LAT 27 30 N LONG 95 0 E ELEV 111.0 M 18 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	5.	11.	26.	94.	118.	243.	330.	234.	128.	35.	0.	0.	1887.
75.	14.	27.	55.	150.	190.	334.	417.	355.	198.	74.	3.	0.	2253.
50.	26.	45.	85.	200.	255.	410.	485.	460.	260.	115.	14.	4.	2507.
5.	79.	120.	200.	367.	472.	639.	682.	801.	464.	272.	125.	66.	3127.
PM	32.	53.	96.	211.	270.	421.	493.	481.	274.	129.	32.	15.	2507.
TEMC	16.	18.	21.	23.	26.	27.	28.	28.	27.	25.	21.	17.	23.
ETP	88.	108.	153.	174.	201.	162.	140.	132.	144.	149.	114.	91.	1656.
MAI	0.16	0.25	0.36	0.86	0.95	2.07	2.98	2.69	1.37	0.50	0.03	0.01	1.36

STATION GAUHATI LAT 26.11N LONG 91.45E ELEV 55. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	11.	18.	53.	126.	274.	293.	302.	263.	190.	90.	12.	5.	1637.
TEM	18.	20.	23.	26.	27.	28.	29.	29.	29.	26.	22.	19.	25.
RS	390.	460.	560.	620.	650.	510.	370.	360.	480.	495.	440.	380.	476.
PD				64.	171.	188.	196.	161.	97.	50.			1371.
ETP	98.	115.	165.	189.	209.	163.	125.	122.	156.	157.	122.	99.	1720.
MAI				0.34	0.82	1.15	1.57	1.33	0.62	0.32			0.80

STATION GAUHATI LAT 26 12 N LONG 91 48 E ELEV 55.0 M 115 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	0.	0.	1.	48.	68.	150.	141.	122.	49.	3.	0.	0.	1201.
75.	0.	3.	9.	93.	143.	229.	220.	193.	105.	20.	0.	0.	1473.
50.	3.	11.	31.	137.	222.	298.	291.	256.	163.	52.	3.	1.	1663.
5.	60.	84.	210.	298.	524.	521.	523.	466.	387.	244.	66.	26.	2125.
PM	13.	22.	59.	150.	250.	312.	306.	270.	183.	78.	14.	5.	1663.
TEMC	17.	19.	23.	26.	27.	28.	29.	29.	28.	26.	22.	18.	24.
ETP	98.	113.	164.	187.	208.	164.	125.	122.	154.	156.	121.	97.	1710.
MAI	0.00	0.02	0.05	0.50	0.69	1.40	1.76	1.59	0.68	0.13	0.00	0.00	0.86

STATION GOLAGHAT LAT 26.31N LONG 93.59E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	24.	38.	74.	174.	241.	305.	336.	331.	232.	105.	24.	8.	1892.
TEM	18.	20.	23.	25.	26.	28.	29.	29.	28.	26.	22.	19.	24.
RS	390.	560.	620.	680.	640.	500.	460.	460.	495.	525.	505.	480.	526.
PD			44.	83.	142.	198.	226.	221.	134.	56.			1595.
ETP	98.	140.	182.	204.	203.	160.	154.	155.	159.	165.	140.	125.	1885.
MAI			0.24	0.41	0.70	1.24	1.46	1.43	0.84	0.34			0.85

STATION GOALPARA LAT 26.11N LONG 90.28E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	8.	20.	51.	199.	397.	578.	408.	337.	290.	138.	13.	3.	2442.
TEM	17.	20.	24.	27.	26.	27.	28.	28.	28.	26.	22.	19.	24.
RS	390.	460.	560.	620.	650.	500.	370.	360.	480.	495.	440.	380.	475.
PD				105.	279.	439.	289.	227.	185.	69.			2079.
ETP	98.	116.	168.	192.	207.	157.	121.	120.	152.	156.	122.	100.	1708.
MAI				0.55	1.35	2.80	2.38	1.89	1.22	0.44			1.22

STATION LUMDING LAT 25.45N LONG 93.11E ELEV 149. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	13.	26.	43.	128.	170.	157.	211.	188.	182.	125.	30.	43.	1316.
TEM	16.	18.	23.	26.	27.	28.	29.	29.	28.	26.	21.	18.	24.
RS	430.	480.	570.	620.	640.	490.	450.	420.	470.	510.	460.	410.	496.
PD				65.	82.	77.	116.	95.	90.	64.			1088.
ETP	104.	116.	166.	189.	208.	158.	152.	141.	151.	160.	125.	103.	1772.
MAI				0.34	0.39	0.49	0.76	0.68	0.60	0.40			0.61

ASSAM

STATION NORTH LAKHIMPOR LAT 27.14N LONG 94.07E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	38.	62.	93.	244.	459.	668.	643.	536.	496.	193.	41.	18.	3491.
TEM	16.	18.	21.	24.	25.	27.	28.	28.	27.	25.	21.	18.	23.
RS	370.	455.	550.	610.	645.	515.	425.	400.	460.	490.	430.	370.	477.
PD		39	51.	145.	334.	518.	496.	402.	367.	100.			3002.
ETP	90.	110.	154.	176.	200.	161.	139.	131.	144.	152.	117.	93.	1666.
MAI		[illegible]	0.33	0.82	1.67	3.23	3.57	3.06	2.55	0.66			1.80

STATION SADIYA LAT 27.50N LONG 95.40E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	44.	82.	128.	251.	274.	492.	509.	418.	305.	143.	27.	21.	2694.
TEM	16.	18.	21.	24.	25.	27.	28.	28.	27.	25.	21.	18.	23.
RS	370.	455.	550.	610.	645.	515.	425.	400.	460.	490.	430.	370.	477.
PD		47.	65.	151.	171.	363.	378.	298.	198.	71.			2301.
ETP	90.	110.	154.	176.	200.	161.	139.	131.	144.	152.	117.	93.	1666.
MAI		0.43	0.42	0.86	0.85	2.26	2.72	2.27	1.38	0.47			1.38

STATION SIBSAGAR LAT 26.59N LONG 94.38E ELEV 97. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	30.	47.	95.	218.	361.	391.	476.	400.	302.	136.	30.	20.	2506.
TEM	16.	18.	22.	24.	26.	28.	29.	29.	28.	26.	21.	18.	24.
RS	430.	480.	570.	620.	640.	490.	450.	410.	450.	510.	460.	410.	493.
PD			52.	122.	248.	274.	349.	282.	196.	68.			2135.
ETP	104.	116.	161.	180.	202.	157.	152.	138.	144.	160.	125.	104.	1742.
MAI			0.32	0.68	1.23	1.74	2.30	2.05	1.36	0.43			1.23

STATION SILCHAR LAT 24.49N LONG 92.48E ELEV 29. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	15.	45.	97.	313.	493.	605.	547.	475.	378.	207.	44.	7.	3226.
TEM	19.	20.	24.	26.	27.	28.	28.	28.	28.	27.	23.	20.	25.
RS	430.	490.	570.	620.	640.	490.	450.	410.	450.	510.	460.	410.	494.
PD			53.	205.	364.	462.	411.	348.	263.	112.			2769.
ETP	112.	125.	171.	190.	206.	156.	150.	135.	145.	164.	132.	110.	1796.
MAI			0.31	1.08	1.76	2.96	2.74	2.58	1.82	0.68			1.54

STATION TEZPUR LAT 26.37N LONG 92.47E ELEV 79. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	13.	23.	55.	149.	306.	297.	336.	313.	236.	133.	23.	9.	1893.
TEM	18.	20.	23.	25.	26.	28.	29.	29.	28.	26.	22.	19.	24.
RS	390.	560.	620.	680.	640.	500.	460.	460.	495.	525.	505.	480.	526.
PD				74.	199.	191.	226.	205.	138.	67.			1596.
ETP	98.	140.	182.	204.	203.	160.	154.	155.	159.	165.	140.	125.	1885.
MAI				0.36	0.98	1.19	1.46	1.33	0.87	0.41			0.85

STATION BHAGALPUR LAT 25.15N LONG 87.00E ELEV 49. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	12.	20.	13.	17.	57.	173.	246.	268.	195.	72.	9.	2.	1084.
TEM	18.	21.	26.	31.	32.	31.	29.	29.	29.	28.	23.	19.	26.
RS	415.	485.	575.	610.	655.	550.	450.	450.	470.	510.	450.	395.	501.
PD						82.	147.	166.	102.	43.			884.
ETP	106.	125.	181.	207.	236.	187.	153.	153.	154.	167.	127.	104.	1900.
MAI						0.44	0.96	1.08	0.66	0.26			0.47

STATION BIHAR LAT 25.11N LONG 85.33E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	14.	21.	9.	10.	28.	138.	283.	306.	186.	43.	10.	4.	1052.
TEM	17.	20.	26.	30.	32.	32.	30.	29.	29.	27.	23.	18.	26.
RS	390.	460.	560.	620.	650.	580.	440.	420.	490.	495.	440.	380.	494.
PD						69.	179.	199.	94.				855.
ETP	98.	116.	175.	209.	236.	202.	151.	143.	161.	161.	123.	98.	1873.
MAI						0.34	1.18	1.40	0.58				0.46

STATION CHAIBASA LAT 22.33N LONG 85.49E ELEV 226. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	16.	28.	24.	28.	63.	176.	324.	315.	218.	99.	21.	2.	1314.
TEM	19.	22.	27.	32.	34.	32.	29.	28.	28.	26.	22.	19.	26.
RS	450.	520.	580.	650.	690.	500.	430.	400.	490.	470.	470.	420.	506.
PD						85.	215.	207.	122.	54.			1086.
ETP	119.	138.	187.	224.	257.	173.	144.	133.	157.	149.	130.	111.	1922.
MAI						0.49	1.50	1.56	0.77	0.36			0.57

STATION CHATRA LAT 24.12N LONG 84.52E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	27.	33.	19.	11.	23.	173.	361.	385.	229.	61.	18.	4.	1344.
TEM	17.	19.	25.	30.	34.	33.	29.	28.	28.	26.	20.	17.	25.
RS	430.	510.	580.	630.	660.	560.	460.	410.	510.	520.	440.	400.	509.
PD						82.	248.	269.	132.	38.			1113.
ETP	106.	127.	176.	209.	245.	199.	155.	136.	162.	163.	116.	99.	1895.
MAI						0.41	1.59	1.97	0.81	[illegible]			0.59

STATION DALTONGANJ LAT 24.03N LONG 84.04E ELEV 221. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	31.	27.	21.	9.	13.	140.	346.	358.	224.	57.	7.	4.	1237.
TEM	17.	19.	25.	30.	34.	33.	29.	28.	28.	26.	20.	17.	25.
RS	430.	510.	580.	630.	560.	560.	460.	410.	510.	520.	440.	400.	509.
PD						70.	234.	245.	127.				1018.
ETP	106.	127.	176.	209.	245.	199.	155.	136.	162.	164.	116.	99.	1896.
MAI						0.35	1.51	1.80	0.79				0.54

BIHAR

STATION DALTONGANJ LAT 24 6 N LONG 84 6 E ELEV 149.0 M 85 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	0.	0.	0.	0.	0.	24.	128.	156.	65.	0.	0.	0.	769.
75.	1.	3.	0.	0.	0.	69.	223.	245.	123.	4.	0.	0.	988.
50.	8.	14.	5.	2.	4.	125.	312.	323.	179.	21.	1.	1.	1162.
5.	114.	99.	79.	43.	62.	371.	621.	581.	381.	212.	57.	25.	1671.
PM	26.	27.	18.	9.	14.	151.	335.	340.	195.	53.	11.	5.	1184.
TEMC	17.	19.	24.	30.	34.	33.	29.	28.	28.	26.	20.	17.	25.
ETP	105.	126.	175.	209.	246.	198.	159.	136.	164.	162.	116.	98.	1895.
MAI	0.01	0.03	0.00	0.00	0.00	0.35	1.40	1.79	0.75	0.02	0.00	0.00	0.52

STATION DARBHANGA LAT 26.10N LONG 85.54E ELEV 49. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	20.	15.	10.	20.	57.	190.	329.	291.	247.	70.	7.	2.	1258.
TEM	17.	19.	24.	29.	31.	30.	29.	29.	29.	27.	22.	18.	25.
RS	390.	460.	560.	620.	650.	570.	430.	480.	480.	495.	440.	380.	496.
PD						97.	219.	186.	147.	42.			1037.
ETP	96.	112.	168.	201.	227.	192.	146.	163.	157.	159.	121.	97.	1839.
MAI						0.51	1.50	1.14	0.94	0.26			0.56

STATION DARBHANGA LAT 26 12 N LONG 85 54 E ELEV 49.0 M 105 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	0.	0.	0.	0.	5.	43.	125.	114.	59.	0.	0.	0.	822.
75.	0.	0.	0.	1.	21.	99.	210.	204.	127.	6.	0.	0.	1036.
50.	4.	4.	2.	5.	46.	159.	289.	290.	200.	29.	0.	0.	1205.
5.	66.	57.	53.	84.	178.	397.	560.	593.	480.	252.	36.	15.	1692.
PM	15.	13.	11.	19.	63.	181.	309.	314.	225.	65.	7.	3.	1224.
TEMC	17.	19.	24.	28.	30.	30.	29.	29.	29.	27.	22.	18.	25.
ETP	95.	112.	167.	200.	225.	190.	146.	162.	156.	158.	121.	96.	1828.
MAI	0.00	0.00	0.00	0.00	0.09	0.52	1.44	1.26	0.82	0.04	0.00	0.00	0.57

STATION DEOGHAR LAT 24.29N LONG 86.42E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	16.	25.	15.	18.	66.	192.	311.	269.	201.	89.	14.	3.	1219.
TEM	17.	19.	25.	30.	34.	33.	29.	28.	28.	26.	20.	17.	25.
RS	430.	510.	580.	630.	660.	560.	460.	410.	510.	520.	440.	400.	509.
PD						99.	204.	167.	107.	50.			1002.
ETP	106.	127.	176.	209.	245.	199.	155.	136.	162.	163.	116.	99.	1895.
MAI						0.50	1.31	1.22	0.66	0.30			0.53

STATION DHANBAD LAT 23.47N LONG 86.26E ELEV 257. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	16.	22.	16.	16.	41.	160.	249.	347.	229.	90.	9.	3.	1198.
TEM	18.	21.	26.	31.	32.	31.	28.	28.	28.	26.	22.	19.	26.
RS	450.	500.	580.	635.	660.	490.	420.	400.	450.	520.	465.	410.	498.
PD						78.	149.	235.	132.	50.			984.
ETP	116.	130.	184.	215.	239.	167.	139.	131.	143.	164.	127.	107.	1862.
MAI						0.47	1.08	1.79	0.92	0.30			0.53

STATION DUMKA LAT 24.16N LONG 87.15E ELEV 149. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	20.	26.	14.	29.	62.	205.	372.	350.	280.	129.	15.	2.	1504.
TEM	18.	21.	26.	30.	32.	31.	29.	28.	28.	27.	22.	19.	26.
RS	420.	510.	580.	630.	650.	550.	440.	400.	500.	515.	440.	400.	503.
PD						110.	257.	238.	176.	66.			1253.
ETP	107.	131.	184.	212.	233.	186.	147.	133.	161.	164.	121.	104.	1883.
MAI						0.59	1.75	1.79	1.10	0.40			0.67

STATION DUMKA LAT 24 18 N LONG 87 18 E ELEV 149.0 M 92 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	0.	0.	0.	0.	7.	78.	179.	163.	93.	6.	0.	0.	1087.
75.	0.	2.	0.	2.	29.	149.	266.	247.	163.	33.	0.	0.	1297.
50.	3.	8.	5.	11.	62.	220.	342.	319.	227.	79.	2.	0.	1458.
5.	79.	82.	85.	103.	229.	474.	582.	553.	453.	345.	75.	17.	1905.
PM	17.	20.	19.	26.	83.	240.	356.	334.	244.	115.	15.	3.	1472.
TEMC	18.	20.	26.	30.	31.	30.	29.	28.	28.	26.	22.	18.	26.
ETP	106.	130.	182.	212.	231.	185.	147.	133.	161.	164.	121.	103.	1875.
MAI	0.00	0.01	0.00	0.01	0.13	0.81	1.81	1.85	1.01	0.20	0.00	0.00	0.69

STATION GAYA LAT 24.45N LONG 84.57E ELEV 116. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	24.	21.	10.	6.	18.	109.	289.	364.	194.	51.	6.	3.	1095.
TEM	17.	20.	26.	31.	34.	33.	30.	29.	29.	26.	21.	18.	26.
RS	425.	510.	580.	630.	660.	580.	470.	440.	510.	520.	440.	400.	514.
PD						58.	184.	250.	101.				894.
ETP	106.	128.	181.	215.	249.	208.	162.	149.	167.	166.	119.	101.	1950.
MAI						0.28	1.14	1.68	0.60				0.46

STATION HAZARIBAGH LAT 23.59N LONG 85.22E ELEV 611. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	31.	26.	20.	15.	48.	165.	335.	350.	233.	80.	11.	5.	1319.
TEM	16.	19.	24.	29.	31.	30.	26.	26.	26.	24.	19.	16.	24.
RS	430.	500.	585.	640.	650.	480.	420.	390.	450.	520.	480.	400.	495.
PD						80.	225.	238.	135.	46.			1091.
ETP	104.	121.	175.	207.	230.	159.	133.	123.	137.	155.	123.	97.	1765.
MAI						0.50	1.69	1.93	0.99	0.30			0.62

STATION JAMSHEDPUR LAT 22.49N LONG 86.11E ELEV 129. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	14.	28.	24.	25.	69.	218.	347.	356.	215.	76.	17.	2.	1391.
TEM	19.	22.	27.	31.	33.	32.	29.	29.	29.	27.	22.	19.	27.
RS	420.	510.	580.	630.	650.	480.	420.	390.	450.	515.	440.	400.	490.
PD						122.	235.	243.	119.	44.			1154.
ETP	111.	135.	186.	216.	241.	167.	142.	131.	146.	166.	122.	106.	1868.
MAI						0.73	1.66	1.86	0.81	0.27			0.62

STATION JAMUI LAT 24.56N LONG 86.18E ELEV 82. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	33.	5.	9.	8.	38.	108.	248.	226.	196.	81.	3.	1.	956.
TEM	18.	21.	26.	31.	33.	32.	29.	29.	29.	27.	22.	19.	26.
RS	425.	510.	580.	630.	660.	550.	440.	400.	500.	515.	460.	410.	507.
PD						57.	148.	129.	103.	46.			771.
ETP	108.	132.	184.	217.	245.	193.	150.	136.	162.	165.	127.	107.	1925.
MAI						0.30	0.99	0.95	0.63	0.28			0.40

STATION LOHARIDAGA LAT 23.26N LONG 84.41E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	31.	43.	29.	19.	36.	188.	355.	360.	192.	94.	23.	6.	1376.
TEM	17.	19.	24.	29.	31.	29.	26.	26.	26.	24.	19.	17.	24.
RS	430.	500.	585.	640.	650.	480.	420.	390.	450.	520.	480.	400.	495.
PD						95.	242.	247.	99.	52.			1141.
ETP	106.	123.	175.	207.	229.	157.	132.	122.	136.	154.	123.	99.	1762.
MAI						0.61	1.84	2.02	0.73	0.33			0.65

STATION MOTIHARI LAT 26.40N LONG 84.55E ELEV 66. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	17.	15.	12.	22.	48.	207.	373.	287.	191.	37.	5.	2.	1216.
TEM	16.	18.	23.	28.	30.	30.	29.	29.	29.	26.	21.	17.	25.
RS	390.	450.	560.	600.	650.	530.	410.	390.	450.	500.	440.	380.	479.
PD						112.	258.	183.	98.				1000.
ETP	94.	107.	165.	191.	226.	178.	138.	132.	146.	158.	118.	94.	1747.
MAI						0.63	1.87	1.38	0.67				0.57

STATION MUZAFFARPUR LAT 26.07N LONG 85.24E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	15.	17.	8.	14.	51.	178.	315.	323.	223.	58.	7.	3.	1212.
TEM	17.	19.	25.	31.	34.	33.	30.	29.	29.	27.	21.	18.	26.
RS	400.	460.	560.	610.	650.	550.	450.	430.	450.	505.	440.	380.	490.
PD						87.	207.	214.	126.				997.
ETP	98.	114.	173.	206.	243.	195.	154.	146.	146.	162.	119.	96.	1852.
MAI						0.44	1.35	1.47	0.87				0.54

STATION PALKOT 22.53N LONG 84.39E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	30.	41.	24.	22.	47.	214.	412.	434.	253.	101.	19.	6.	1603.
TEM	17.	19.	24.	29.	31.	29.	26.	26.	26.	24.	19.	17.	24.
RS	430.	500.	585.	640.	650.	480.	420.	390.	450.	520.	480.	400.	495.
PD						118.	293.	312.	153.	54.			1341.
ETP	106.	123.	175.	207.	229.	157.	132.	122.	136.	154.	123.	99.	1762.
MAI						0.75	2.22	2.56	1.12	0.35			0.76

BIHAR

STATION PATNA LAT 25.37N LONG 85.10E ELEV 53. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	21.	20.	7.	8.	28.	139.	266.	307.	243.	63.	6.	2.	1110.
TEM	17.	20.	26.	30.	32.	32.	30.	29.	29.	27.	23.	18.	26.
RS	390.	460.	560.	620.	650.	580.	440.	420.	490.	495.	440.	380.	494.
PD						70.	164.	200.	144.	39.			907.
ETP	98.	116.	175.	209.	236.	202.	151.	143.	161.	161.	123.	98.	1873.
MAI						0.34	1.09	1.40	0.89	0.24			0.48

STATION PATNA LAT 25 42 N LONG 85 18 E ELEV 53.0 M 93 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	0.	0.	0.	0.	0.	29.	127.	123.	60.	0.	0.	0.	714.
75.	0.	1.	0.	0.	3.	81.	203.	210.	126.	3.	0.	0.	940.
50.	4.	6.	2.	2.	15.	143.	271.	291.	195.	21.	0.	0.	1123.
5.	80.	74.	43.	39.	137.	414.	495.	568.	456.	267.	37.	23.	1666.
PM	17.	18.	9.	8.	35.	172.	286.	311.	218.	63.	7.	4.	1148.
TEMC	18.	20.	26.	31.	33.	32.	30.	29.	29.	27.	22.	19.	26.
ETP	98.	116.	176.	209.	238.	202.	151.	143.	162.	161.	123.	99.	1879.
MAI	0.00	0.01	0.00	0.00	0.01	0.40	1.34	1.47	0.78	0.02	0.00	0.00	0.50

STATION PURNEA LAT 25.46N LONG 87.28E ELEV 38. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	16.	16.	13.	30.	100.	238.	363.	329.	267.	102.	8.	1.	1483.
TEM	17.	19.	24.	28.	30.	29.	29.	29.	29.	26.	22.	18.	25.
RS	415.	490.	570.	610.	655.	550.	430.	420.	460.	515.	450.	400.	497.
PD					54.	139.	249.	219.	165.	55.			1235.
ETP	102.	120.	170.	196.	224.	181.	145.	141.	150.	164.	123.	101.	1816.
MAI					0.24	0.77	1.72	1.55	1.10	0.33			0.68

STATION RANCHI LAT 23.23N LONG 85.20E ELEV 655. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	24.	39.	28.	23.	50.	202.	360.	354.	256.	105.	17.	4.	1462.
TEM	17.	19.	24.	29.	31.	29.	26.	26.	26.	24.	19.	17.	24.
RS	430.	500.	585.	640.	650.	480.	420.	390.	450.	520.	480.	400.	495.
PD						108.	247.	242.	155.	56.			1217.
ETP	106.	123.	175.	207.	229.	157.	132.	122.	136.	154.	123.	99.	1762.
MAI						0.69	1.87	1.98	1.14	0.36			0.69

STATION SABAUR LAT 25.14N 87.04E ELEV 37. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	19.	17.	9.	22.	59.	175.	258.	256.	234.	80.	6.	1.	1136.
TEM	16.	19.	24.	29.	31.	31.	29.	29.	29.	27.	21.	17.	25.
RS	415.	490.	570.	610.	655.	560.	450.	430.	460.	515.	450.	400.	500.
PD						84.	157.	155.	136.	46.			930.
ETP	100.	119.	172.	200.	232.	190.	153.	146.	150.	164.	121.	99.	1845.
MAI						0.44	1.03	1.07	0.91	0.28			0.50

BIHAR

STATION SIWAN LAT 26.13N LONG 84.22E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	15.	19.	10.	10.	31.	136.	328.	314.	226.	58.	6.	5.	1158.
TEM	17.	19.	25.	31.	34.	33.	30.	29.	29.	27.	21.	18.	26.
RS	400.	460.	560.	610.	650.	550.	450.	430.	450.	505.	440.	380.	490.
PD						68.	219.	206.	129.				949.
ETP	98.	114.	173.	206.	243.	195.	154.	146.	146.	162.	119.	96.	1852.
MAI						0.35	1.42	1.41	0.88				0.51

DELHI

STATION NEW DELHI LAT 28.35N LONG 77.12E ELEV 216. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	25.	22.	17.	7.	8.	65.	211.	173.	150.	31.	1.	5.	715.
TEM	14.	17.	23.	29.	34.	34.	31.	30.	29.	26.	20.	16.	25.
RS	352.	472.	564.	602.	649.	606.	399.	481.	472.	477.	410.	336.	485.
PD							116.	82.	74.				559.
ETP	80.	109.	164.	195.	241.	221.	142.	166.	155.	150.	108.	80.	1811.
MAI							0.82	0.50	0.48				0.31

STATION NEW DELHI LAT 28 42 N LONG 77 18 E ELEV 216.0 M 106 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	0.	0.	0.	0.	0.	3.	49.	13.	1.	0.	0.	0.	3[illegible].
75.	1.	1.	1.	0.	1.	19.	111.	62.	18.	0.	0.	0.	535.
50.	7.	5.	4.	2.	5.	47.	178.	142.	65.	2.	0.	1.	679.
5.	97.	88.	62.	38.	56.	207.	445.	576.	453.	98.	16.	51.	1136.
PM	23.	19.	14.	8.	14.	68.	203.	199.	125.	19.	3.	10.	706.
TEMC	14.	17.	23.	29.	33.	34.	31.	30.	29.	26.	20.	15.	25.
ETP	80.	110.	163.	196.	239.	220.	141.	165.	155.	150.	108.	80.	1805.
MAI	0.01	0.00	0.00	0.00	0.00	0.09	0.79	0.38	0.11	0.00	0.00	0.00	0.30

GOA

STATION GOA/PANJIM LAT 15 30 N LONG 73 48 E ELEV 57.0 M 17 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	0.	0.	0.	0.	0.	590.	610.	171.	79.	2.	0.	0.	2152.
75.	0.	0.	0.	0.	4.	741.	792.	317.	153.	22.	3.	0.	2542.
50.	0.	0.	0.	4.	27.	846.	938.	459.	225.	67.	17.	1.	2813.
5.	0.	0.	6.	49.	324.	1103.	1366.	971.	491.	370.	196.	81.	3473.
PM	0.	0.	1.	11.	77.	846.	956.	500.	247.	111.	47.	15.	2813.
TEMC	26.	26.	28.	29.	30.	27.	26.	26.	27.	28.	28.	26.	27.
ETP	162.	168.	203.	197.	202.	133.	115.	127.	142.	151.	164.	159.	1923.
MAI	0.00	0.00	0.00	0.00	0.02	5.59	6.90	2.49	1.07	0.15	0.02	0.00	1.32

STATION MARMUGAO LAT 15.25N LONG 73.47E ELEV 62. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	2.	0.	0.	20.	81.	778.	905.	413.	226.	139.	43.	5.	2612.
TEM	26.	25.	27.	29.	29.	27.	26.	26.	26.	27.	27.	26.	27.
RS	500.	565.	625.	650.	635.	430.	380.	380.	480.	500.	490.	480.	510.
PD						615.	726.	293.	129.	70.			2229.
ETP	156.	164.	201.	210.	215.	134.	120.	119.	146.	161.	153.	151.	1930.
MAI						4.57	6.07	2.46	0.88	0.43			1.15

STATION AHMADABAD LAT 23.04N LONG 72.38E ELEV 55. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	4.	0.	1.	2.	5.	100.	316.	213.	163.	13.	5.	1.	823.
TEM	20.	23.	27.	31.	34.	33.	29.	28.	29.	28.	25.	21.	27.
RS	450.	520.	580.	650.	690.	600.	450.	400.	540.	470.	480.	420.	521.
PD						54.	208.	118.	79.				655.
ETP	123.	142.	188.	223.	256.	212.	153.	133.	175.	156.	141.	117.	2020.
MAI						0.25	1.36	0.89	0.45				0.32

STATION AHMADABAD LAT 23 0 N LONG 72 36 E ELEV 55.0 M 112 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	0.	0.	0.	0.	0.	2.	63.	25.	1.	0.	0.	0.	293.
75.	0.	0.	0.	0.	0.	21.	163.	87.	19.	0.	0.	0.	532.
50.	0.	0.	0.	0.	1.	63.	281.	170.	73.	1.	0.	0.	762.
5.	9.	9.	6.	7.	48.	342.	774.	563.	520.	59.	31.	6.	1578.
PM	2.	2.	1.	1.	9.	103.	331.	216.	143.	11.	6.	1.	826.
TEMC	20.	23.	28.	31.	34.	33.	29.	28.	29.	29.	25.	22.	28.
ETP	120.	139.	190.	227.	251.	216.	157.	133.	175.	181.	140.	108.	2038.
MAI	0.00	0.00	0.00	0.00	0.00	0.10	1.04	0.65	0.11	0.00	0.00	0.00	0.26

STATION AMRELI LAT 21.36N LONG 71.13E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	1.	1.	1.	12.	6.	101.	179.	99.	88.	24.	3.	2.	517.
TEM	20.	23.	27.	31.	33.	32.	29.	28.	28.	27.	24.	21.	27.
RS	450.	520.	580.	650.	690.	600.	450.	400.	540.	470.	480.	420.	521.
PD						54.	88.	54.	49.				385.
ETP	123.	141.	185.	221.	256.	210.	152.	133.	174.	153.	139.	117.	2003.
MAI						0.26	0.58	0.40	0.28				0.19

STATION BARODA LAT 22.18N LONG 73.15E ELEV 34. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	2.	2.	1.	3.	4.	115.	366.	264.	186.	35.	9.	0.	987.
TEM	20.	23.	27.	31.	33.	32.	29.	28.	28.	27.	24.	21.	27.
RS	450.	520.	580.	650.	690.	600.	450.	400.	540.	470.	480.	420.	521.
PD						60.	252.	162.	94.				799.
ETP	123.	141.	185.	221.	256.	210.	152.	133.	174.	153.	139.	117.	2003.
MAI						0.29	1.66	1.22	0.54				0.40

STATION BHAUNAGAR LAT 21.45N LONG 72.11E ELEV 11. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	3.	1.	3.	13.	6.	14.	243.	152.	122.	38.	7.	0.	602.
TEM	19.	23.	27.	31.	33.	32.	30.	29.	29.	28.	25.	21.	27.
RS	455.	510.	600.	645.	665.	600.	410.	370.	550.	520.	480.	435.	520.
PD							144.	75.	63.				460.
ETP	121.	138.	194.	219.	243.	211.	140.	124.	179.	173.	142.	122.	2006.
MAI							1.03	0.60	0.35				0.23

GUJARAT

STATION BHUJ LAT 23.15N LONG 69.48E ELEV 80. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	3.	5.	1.	1.	8.	22.	164.	96.	38.	7.	2.	2.	350.
TEM	18.	21.	26.	30.	32.	32.	30.	29.	29.	29.	24.	20.	27.
RS	442.	500.	580.	640.	640.	650.	480.	470.	550.	525.	470.	450.	533.
PD							80.	52.					238.
ETP	113.	130.	183.	215.	231.	227.	164.	157.	178.	175.	136.	120.	2031.
MAI							0.48	0.33					0.12

STATION BROACH LAT 21.42N LONG 72.58E ELEV 17. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	5.	2.	1.	4.	6.	149.	329.	183.	157.	32.	9.	1.	878.
TEM	22.	25.	29.	32.	33.	31.	29.	28.	29.	29.	26.	24.	28.
RS	450.	510.	600.	640.	660.	490.	430.	440.	480.	510.	480.	430.	510.
PD						74.	219.	91.	77.				703.
ETP	129.	145.	201.	222.	244.	168.	145.	146.	155.	172.	147.	127.	2002.
MAI						0.44	1.52	0.62	0.49				0.35

STATION CAMBAY LAT 22.19N LONG 72.37E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	2.	2.	2.	3.	5.	90.	277.	166.	125.	15.	6.	1.	694.
TEM	19.	23.	27.	31.	33.	32.	30.	29.	29.	28.	25.	21.	27.
RS	455.	510.	600.	645.	665.	600.	410.	370.	550.	520.	480.	435.	520.
PD						50.	174.	80.	64.				541.
ETP	121.	138.	194.	219.	243.	211.	140.	124.	179.	173.	142.	122.	2006.
MAI						0.24	1.24	0.65	0.36				0.27

STATION DEESA LAT 24.12N LONG 72.12E ELEV 136. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	2.	0.	0.	0.	0.	55.	243.	164.	94.	15.	2.	0.	575.
TEM	19.	22.	26.	30.	34.	33.	29.	28.	28.	28.	24.	20.	27.
RS	425.	510.	580.	630.	655.	610.	510.	460.	530.	485.	430.	370.	516.
PD							144.	80.	52.				436.
ETP	112.	137.	184.	212.	244.	217.	174.	153.	170.	158.	123.	101.	1986.
MAI							0.83	0.52	0.30				0.22

STATION DHRANGADHRA LAT 22.59N LONG 71.28E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	2.	2.	2.	1.	6.	68.	233.	105.	77.	7.	5.	1.	509.
TEM	20.	23.	27.	31.	34.	33.	29.	28.	29.	28.	25.	21.	27.
RS	450.	520.	580.	650.	690.	600.	450.	400.	540.	470.	480.	420.	521.
PD							135.	56.	45.				378.
ETP	123.	142.	188.	223.	256.	212.	153.	133.	175.	156.	141.	117.	2020.
MAI							0.88	0.42	0.26				0.19

GUJARAT

STATION DOHAD LAT 22.50N LONG 74.16E ELEV 333. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	3.	2.	2.	2.	8.	92.	255.	206.	176.	31.	11.	1.	789.
TEM	20.	22.	27.	31.	33.	31.	27.	26.	26.	27.	23.	21.	26.
RS	450.	520.	580.	640.	666.	580.	440.	400.	550.	520.	480.	420.	521.
PD						51.	154.	111.	85.				624.
ETP	120.	140.	188.	219.	244.	197.	143.	126.	169.	166.	137.	116.	1966.
MAI						0.26	1.08	0.88	0.50				0.32

STATION DWARKA LAT 22.22N LONG 69.05E ELEV 11. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	2.	2.	1.	0.	0.	49.	220.	76.	42.	5.	19.	2.	418.
TEM	21.	22.	25.	27.	29.	30.	29.	28.	27.	27.	26.	22.	26.
RS	440.	510.	580.	640.	640.	650.	480.	470.	550.	525.	470.	450.	534.
PD							124.	44.					298.
ETP	121.	136.	178.	201.	217.	217.	160.	154.	173.	170.	142.	129.	2000.
MAI							0.77	0.29					0.15

STATION DWARKA LAT 22 24 N LONG 69 6 E ELEV 11.0 M 77 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	0.	0.	0.	0.	0.	0.	8.	2.	0.	0.	0.	0.	88.
75.	0.	0.	0.	0.	0.	1.	51.	15.	1.	0.	0.	0.	207.
50.	0.	0.	0.	0.	0.	12.	130.	47.	12.	0.	0.	0.	338.
5.	12.	19.	10.	2.	2.	215.	605.	263.	188.	39.	49.	11.	866.
PM	2.	4.	2.	0.	0.	47.	195.	78.	42.	7.	9.	2.	390.
TEMC	21.	22.	25.	27.	29.	30.	29.	28.	28.	27.	26.	22.	26.
ETP	121.	136.	178.	200.	216.	217.	161.	154.	174.	171.	142.	129.	1999.
MAI	0.00	0.00	0.00	0.00	0.00	0.01	0.32	0.10	0.01	0.00	0.00	0.00	0.10

STATION GODHRA LAT 22.47N LONG 73.37E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	3.	2.	2.	2.	7.	126.	404.	273.	183.	21.	3.	1.	1027.
TEM	20.	23.	27.	31.	33.	32.	29.	28.	28.	27.	24.	21.	27.
RS	450.	520.	580.	650.	690.	600.	450.	400.	540.	470.	480.	420.	521.
PD						64.	286.	170.	91.				834.
ETP	123.	141.	185.	221.	256.	210.	152.	133.	174.	153.	139.	117.	2003.
MAI						0.31	1.88	1.29	0.52				0.42

STATION JAFRABAD LAT 20.51N LONG 71.22E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	3.	2.	1.	5.	7.	107.	236.	99.	86.	27.	8.	1.	582.
TEM	21.	22.	25.	27.	29.	29.	28.	27.	27.	28.	26.	23.	26.
RS	470.	525.	600.	650.	660.	600.	450.	380.	550.	520.	490.	440.	528.
PD						57.	138.	54.	48.				442.
ETP	132.	141.	184.	202.	220.	198.	148.	123.	172.	170.	149.	129.	1968.
MAI						0.29	0.93	0.44	0.28				0.22

STATION JAMNAGAR LAT 22.27N LONG 70.02E ELEV 23. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	1.	1.	0.	0.	8.	63.	216.	126.	62.	10.	3.	1.	491.
TEM	19.	21.	25.	28.	31.	32.	29.	28.	28.	28.	24.	20.	26.
RS	420.	510.	580.	630.	650.	550.	440.	400.	500.	550.	440.	400.	506.
PD							120.	64.	30				362.
ETP	109.	132.	180.	203.	228.	190.	149.	133.	159.	181.	128.	108.	1901.
MAI							0.80	0.48					0.19

STATION JETPUR LAT 22.20N LONG 73.51E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	1.	3.	1.	5.	7.	123.	261.	110.	96.	20.	3.	2.	632.
TEM	20.	23.	27.	31.	33.	32.	29.	28.	28.	27.	24.	21.	27.
RS	450.	520.	580.	650.	690.	600.	450.	400.	540.	470.	480.	420.	521.
PD						63.	160.	58.	52.				487.
ETP	123.	141.	185.	221.	256.	210.	152.	133.	174.	153.	139.	117.	2003.
MAI						0.30	1.05	0.44	0.30				0.24

STATION LAKHPAT LAT 23.50N LONG 68.47E ELEV 0. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	2.	6.	0.	0.	0.	28.	111.	86.	12.	1.	1.	3.	250.
TEM	19.	21.	25.	28.	31.	32.	29.	28.	28.	28.	24.	20.	26.
RS	420.	510.	580.	630.	650.	550.	440.	400.	500.	550.	440.	400.	506.
PD							58.	48.					150.
ETP	109.	132.	180.	203.	228.	190.	149.	133.	159.	181.	128.	108.	1901.
MAI							0.39	0.36					0.08

STATION MANDVI LAT 21.15N LONG 73.18E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	5.	2.	1.	0.	8.	185.	551.	314.	227.	37.	13.	2.	1345.
TEM	22.	25.	29.	32.	33.	31.	29.	28.	29.	29.	26.	24.	28.
RS	450.	510.	600.	640.	660.	490.	430.	440.	480.	510.	480.	430.	510.
PD						93.	415.	206.	130.				1114.
ETP	129.	145.	201.	222.	244.	168.	145.	146.	155.	172.	147.	127.	2002.
MAI						0.55	2.87	1.42	0.84				0.56

STATION MEHSANA LAT 23.37N LONG 72.23E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	3.	1.	3.	1.	6.	68.	273.	167.	82.	4.	3.	2.	613.
TEM	20.	23.	27.	31.	33.	32.	29.	28.	28.	27.	24.	21.	27.
RS	450.	520.	580.	650.	690.	600.	450.	400.	540.	470.	480.	420.	521.
PD							170.	81.	47.				470.
ETP	123.	141.	185.	221.	256.	210.	152.	133.	174.	153.	139.	117.	2003.
MAI							1.12	0.61	0.27				0.23

GUJARAT

STATION MODASA LAT 23.27N LONG 73.17E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	2.	3.	2.	2.	11.	90.	331.	251.	118.	11.	3.	1.	828.
TEM	20.	23.	27.	31.	33.	32.	29.	28.	28.	27.	24.	21.	27.
RS	450.	520.	580.	650.	690.	600.	450.	400.	540.	470.	480.	420.	521.
PD						50.	221.	151.	61.				659.
ETP	123.	141.	185.	221.	256.	210.	152.	133.	174.	153.	139.	117.	2003.
MAI						0.24	1.46	1.14	0.35				0.33

STATION PORBANDAR LAT 21.37N LONG 69.38E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	2.	3.	2.	0.	4.	94.	240.	89.	54.	8.	2.	3.	501.
TEM	21.	22.	25.	27.	29.	29.	28.	27.	27.	28.	26.	23.	26.
RS	470.	525.	600.	650.	660.	600.	450.	380.	550.	520.	490.	440.	528.
PD						52.	141.	50.					371.
ETP	132.	141.	184.	202.	220.	198.	148.	123.	172.	170.	149.	129.	1968.
MAI						0.26	0.95	0.40					0.19

STATION RADHANPUR LAT 23.50N LONG 71.36E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	1.	2.	1.	1.	7.	35.	237.	147.	69.	7.	2.	2.	512.
TEM	20.	23.	27.	31.	33.	32.	29.	28.	28.	27.	24.	21.	27.
RS	450.	520.	580.	650.	690.	600.	450.	400.	540.	470.	480.	420.	521.
PD							139.	73.	42.				380.
ETP	123.	141.	185.	221.	256.	210.	152.	133.	174.	153.	139.	117.	2003.
MAI							0.91	0.55	0.24				0.19

STATION RAJKOT LAT 22.18N LONG 70.47E ELEV 138. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	1.	0.	1.	2.	7.	99.	293.	143.	93.	25.	5.	4.	673.
TEM	19.	22.	26.	30.	33.	32.	29.	28.	28.	28.	25.	21.	27.
RS	420.	510.	580.	630.	650.	555.	440.	400.	500.	515.	440.	440.	507.
PD						54.	188.	71.	51.				523.
ETP	112.	136.	184.	211.	237.	193.	148.	131.	159.	171.	130.	122.	1934.
MAI						0.28	1.27	0.54	0.32				0.27

STATION SURAT LAT 21.12N LONG 72.50E ELEV 12. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	1.	1.	1.	5.	6.	210.	448.	254.	218.	43.	16.	2.	1205.
TEM	23.	25.	28.	31.	31.	30.	28.	28.	28.	29.	27.	24.	28.
RS	460.	530.	590.	600.	680.	590.	450.	420.	550.	550.	480.	430.	528.
PD						115.	324.	154.	122.				991.
ETP	135.	152.	195.	203.	242.	199.	149.	138.	175.	187.	150.	130.	2054.
MAI						0.58	2.18	1.11	0.70				0.48

GUJARAT

STATION VERAVAL LAT 20.54N LONG 70.22E ELEV 458. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	1.	1.	0.	303.	508.	5.	135.	305.	146.	67.	29.	7.	1507.
TEM	21.	22.	25.	27.	29.	29.	28.	27.	27.	28.	26.	23.	26.
RS	470.	525.	600.	650.	660.	600.	450.	380.	550.	520.	490.	440.	528.
PD				197.	377.	16.	68.	198.	72.				1257.
ETP	132.	141.	184.	202.	220.	198.	148.	123.	172.	170.	149.	129.	1968.
MAI				0.98	1.71	0.08	0.46	1.61	0.42				0.64

STATION VERAVAL LAT 20 54 N LONG 70 24 E ELEV 8.0 M 91 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	0.	0.	0.	0.	0.	2.	38.	8.	1.	0.	0.	0.	187.
75.	0.	0.	0.	0.	0.	23.	109.	40.	9.	0.	0.	0.	369.
50.	0.	0.	0.	0.	0.	74.	197.	93.	37.	1.	0.	0.	553.
5.	5.	9.	4.	9.	27.	453.	584.	382.	273.	102.	34.	8.	1234.
PM	1.	2.	1.	2.	5.	131.	239.	130.	74.	19.	6.	2.	611.
TEMC	21.	22.	25.	27.	28.	29.	28.	27.	27.	27.	26.	23.	26.
ETP	132.	141.	183.	201.	219.	197.	148.	123.	172.	169.	149.	129.	1963.
MAI	0.00	0.00	0.00	0.00	0.00	0.11	0.74	0.33	0.05	0.00	0.00	0.00	0.19

STATION WAGHAI LAT 20.46N LONG 73.30E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	2.	2.	0.	1.	9.	246.	981.	532.	359.	56.	25.	5.	2218.
TEM	22.	24.	28.	33.	35.	32.	28.	27.	27.	27.	23.	21.	27.
RS	470.	520.	590.	650.	680.	560.	430.	450.	500.	540.	480.	440.	526.
PD						147.	793.	398.	246.				1882.
ETP	133.	145.	195.	230.	260.	195.	142.	146.	157.	173.	137.	123.	2036.
MAI						0.75	5.58	2.73	1.56				0.92

HARYANA

STATION AMBALA LAT 30.25N LONG 76.46E ELEV 272. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	42.	52.	28.	12.	15.	72.	272.	250.	168.	27.	6.	15.	959.
TEM	14.	16.	22.	28.	33.	34.	31.	30.	30.	25.	19.	15.	25.
RS	300.	400.	520.	560.	620.	630.	530.	520.	530.	465.	390.	330.	483.
PD							169.	150.	81.				774.
ETP	67.	91.	148.	179.	227.	228.	185.	178.	176.	142.	100.	77.	1799.
MAI							0.91	0.84	0.46				0.43

STATION BHIWANI LAT 28.48N LONG 76.08E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	15.	12.	9.	5.	10.	43.	116.	105.	83.	8.	3.	5.	414.
TEM	15.	18.	23.	29.	33.	33.	30.	29.	29.	26.	21.	17.	25.
RS	360.	460.	540.	600.	640.	570.	450.	410.	470.	480.	415.	350.	479.
PD							60.	56.	47.				294.
ETP	85.	109.	159.	196.	236.	204.	155.	139.	153.	151.	110.	86.	1784.
MAI							0.39	0.40	0.31				0.16

HARYANA

STATION HISSAR LAT 29.10N LONG 75.44E ELEV 221. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	19.	15.	17.	6.	11.	34.	122.	114.	81.	15.	8.	5.	447.
TEM	14.	17.	22.	28.	33.	35.	32.	31.	30.	26.	20.	15.	25.
RS	290.	340.	480.	500.	590.	550.	520.	530.	460.	420.	330.	290.	442.
PD							63.	60.	46.				323.
ETP	65.	78.	137.	160.	218.	202.	188.	186.	153.	132.	86.	68.	1672.
MAI							0.33	0.32	0.30				0.19

STATION KARNAL LAT 29.42N LONG 77.02E ELEV 249. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	40.	22.	23.	9.	8.	60.	152.	230.	131.	71.	7.	8.	761.
TEM	14.	17.	22.	28.	32.	33.	30.	29.	28.	24.	20.	16.	24.
RS	290.	340.	480.	500.	590.	520.	500.	510.	520.	460.	420.	310.	453.
PD							75.	133.	66.	42.			600.
ETP	65.	78.	136.	158.	212.	186.	174.	172.	168.	139.	109.	74.	1669.
MAI							0.43	0.77	0.40	0.30			0.36

STATION PANIPAT LAT 29.23N LONG 76.58E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	22.	22.	14.	10.	12.	52.	173.	163.	114.	11.	3.	9.	605.
TEM	14.	17.	22.	28.	32.	33.	30.	29.	28.	24.	20.	16.	24.
RS	290.	340.	480.	500.	590.	520.	500.	510.	520.	460.	420.	310.	453.
PD							82.	79.	60.				462.
ETP	65.	78.	136.	158.	212.	186.	174.	172.	168.	139.	109.	74.	1669.
MAI							0.47	0.46	0.36				0.28

STATION REWARI LAT 28.12N LONG 76.36E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	17.	13.	12.	5.	13.	48.	149.	135.	107.	14.	3.	6.	522.
TEM	14.	17.	23.	29.	34.	34.	31.	30.	29.	26.	20.	16.	25.
RS	352.	472.	564.	602.	649.	606.	399.	481.	472.	477.	410.	336.	485.
PD							74.	68.	57.				389.
ETP	80.	109.	164.	195.	241.	221.	142.	166.	155.	150.	108.	80.	1811.
MAI							0.52	0.41	0.37				0.21

STATION SIRSA LAT 29.32N LONG 75.02E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	13.	10.	9.	6.	7.	34.	89.	77.	62.	5.	1.	8.	321.
TEM	14.	17.	22.	28.	33.	35.	32.	31.	30.	26.	20.	15.	25.
RS	290.	340.	480.	500.	590.	550.	520.	530.	460.	420.	330.	290.	442.
PD							50.	45.	[illegible]				212.
ETP	65.	78.	137.	160.	218.	202.	188.	186.	153.	132.	86.	68.	1672.
MAI							0.26	0.24					0.13

HIMACHAL PRADESH

STATION DALHOUSIE LAT 32.32N LONG 75.58E ELEV 1960. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	205.	156.	149.	77.	68.	117.	620.	615.	299.	83.	21.	84.	2494.
TEM	7.	9.	13.	17.	21.	23.	20.	20.	19.	17.	13.	10.	16.
RS	240.	355.	480.	500.	590.	650.	530.	500.	550.	420.	360.	300.	456.
PD	110.	76.	74.	15.	41.	61.	476.	471.	193.	47.		48.	2125.
ETP	41.	62.	104.	121.	163.	184.	144.	134.	141.	103.	77.	59.	1334.
MAI	2.68	1.22	0.71	0.37	0.25	0.33	3.29	3.52	1.37	0.46		0.80	1.59

STATION DHARAMSHALA LAT 32.16N LONG 76.23E ELEV 1211. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	143.	92.	118.	47.	55.	142.	1055.	994.	512.	129.	17.	59.	3363.
TEM	10.	13.	17.	21.	26.	28.	24.	23.	23.	20.	16.	13.	20.
RS	250.	355.	480.	510.	590.	650.	530.	500.	550.	425.	360.	300.	458.
PD	71.	51.	61.			71.	859.	805.	381.	66.		38.	2890.
ETP	50.	73.	119.	138.	186.	205.	160.	148.	155.	116.	84.	65.	1499.
MAI	1.42	0.70	0.52			0.34	5.36	5.45	2.45	0.57		0.58	1.93

STATION SIMLA LAT 31.06N LONG 77.10E ELEV 2203. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	65.	48.	58.	38.	54.	148.	415.	385.	195.	45.	7.	24.	1482.
TEM	5.	7.	11.	15.	19.	20.	18.	18.	17.	14.	11.	8.	14.
RS	300.	380.	500.	540.	630.	610.	480.	480.	500.	440.	380.	320.	463.
PD						73.	295.	269.	102.				1234.
ETP	49.	62.	101.	123.	167.	161.	124.	121.	120.	101.	76.	58.	1260.
MAI						0.46	2.39	2.21	0.85				0.98

STATION SIMLA LAT 31 6 N LONG 77 12 E ELEV 2202.0 M 98 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	5.	2.	4.	2.	8.	38.	216.	199.	37.	0.	0.	0.	1136.
75.	24.	17.	19.	13.	28.	89.	324.	311.	90.	2.	0.	1.	1390.
50.	53.	45.	45.	33.	56.	145.	417.	410.	149.	11.	1.	10.	1587.
5.	207.	218.	190.	148.	191.	368.	717.	734.	388.	153.	53.	124.	2143.
PM	73.	69.	64.	49.	72.	166.	436.	431.	172.	35.	10.	29.	1606.
TEMC	5.	6.	10.	15.	19.	20.	18.	17.	17.	14.	11.	8.	13.
ETP	49.	60.	100.	122.	165.	159.	124.	120.	118.	100.	74.	58.	1249.
MAI	0.49	0.29	0.19	0.11	0.17	0.56	2.62	2.58	0.76	0.02	0.00	0.02	1.11

JAMMU AND KASHMIR

STATION ANANTNAG LAT 33.43N LONG 75.09E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	74.	82.	82.	85.	55.	33.	60.	60.	49.	26.	13.	44.	663.
TEM	1.	4.	8.	13.	18.	22.	25.	24.	21.	14.	8.	3.	13.
RS	240.	310.	410.	500.	560.	620.	500.	480.	460.	400.	290.	250.	418.
PD	44.	47.	47.	48.									513.
ETP	32.	44.	76.	107.	143.	170.	152.	144.	122.	91.	51.	37.	1168.
MAI	1.37	1.07	0.62	0.45									0.44

JAMMU AND KASHMIR

STATION BHADARWAH LAT 32.59N LONG 75.43E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	159.	156.	146.	95.	62.	56.	129.	118.	49.	36.	24.	95.	1125.
TEM	4.	7.	11.	16.	19.	21.	18.	18.	17.	14.	11.	8.	14.
RS	240.	350.	480.	510.	610.	670.	530.	500.	560.	425.	360.	300.	461.
PD	78.	76.	72.	52.			66.	61.				52.	920.
ETP	38.	57.	96.	117.	160.	181.	137.	127.	135.	97.	71.	55.	1272.
MAI	2.06	1.35	0.75	0.44			0.48	0.48				0.94	0.72

STATION DRAS LAT 34.26N LONG 75.46E ELEV 3067. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	126.	130.	173.	101.	64.	21.	14.	15.	16.	18.	23.	57.	758.
TEM	-16.	-14.	-9.	0.	8.	13.	17.	17.	13.	6.	-2.	-10.	2.
RS	280.	340.	475.	495.	585.	660.	540.	520.	530.	420.	335.	290.	456.
PD	64.	66.	82.	54.	40.								597.
ETP				60.	108.	140.	135.	129.	111.	70.	35.		847.
MAI				0.90	0.37								0.71

STATION GILGIT LAT 35.55N LONG 74.23E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	7.	7.	20.	24.	22.	10.	10.	14.	10.	6.	1.	3.	134.
TEM	10.	13.	17.	21.	26.	28.	24.	23.	23.	20.	16.	13.	20.
RS	250.	355.	480.	510.	590.	650.	530.	500.	550.	425.	360.	300.	458.
PD													68.
ETP	50.	73.	119.	138.	186.	205.	160.	148.	155.	116.	84.	65.	1499.
MAI													0.05

STATION JAMMU LAT 32.40N LONG 74.50E ELEV 366. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	71.	59.	57.	25.	17.	61.	321.	319.	151.	30.	8.	30.	1149.
TEM	13.	16.	21.	27.	32.	34.	31.	29.	29.	25.	20.	15.	24.
RS	240.	350.	480.	510.	610.	670.	530.	500.	560.	425.	360.	300.	461.
PD	42.						213.	211.	74.				941.
ETP	53.	78.	132.	158.	222.	244.	186.	169.	181.	132.	94.	71.	1720.
MAI	0.80						1.14	1.24	0.41				0.55

STATION KARGIL LAT 34.34N LONG 76.08E ELEV 2633. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	45.	52.	86.	31.	24.	10.	6.	10.	8.	5.	4.	26.	307.
TEM	-9.	-7.	0.	9.	16.	20.	24.	23.	19.	12.	5.	-3.	9.
RS	280.	340.	475.	495.	585.	660.	540.	520.	530.	400.	330.	280.	453.
PD			48.										200.
ETP			58.	90.	139.	171.	161.	152.	134.	84.	50.	26.	1109.
MAI			0.83										0.18

STATION KISSHTWAR LAT33.18N LONG 75.45E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	109.	116.	142.	104.	61.	39.	77.	72.	61.	33.	20.	62.	896.
TEM	1.	4.	8.	13.	18.	22.	25.	24.	21.	14.	8.	3.	13.
RS	240.	310.	410.	500.	560.	620.	500.	480.	460.	400.	290.	250.	418.
PD	58.	60.	71.	56.			45.	43.				39.	718.
ETP	32.	44.	76.	107.	143.	170.	152.	144.	122.	91.	51.	37.	1168.
MAI	1.81	1.39	0.93	0.52			0.29	0.30				1.03	0.62

STATION LEH KASHMIR LAT 34 12 N LONG 77 42 E ELEV 3514.0 M 94 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	37.
75.	2.	2.	1.	0.	1.	0.	1.	3.	0.	0.	0.	0.	63.
50.	6.	5.	4.	2.	3.	2.	6.	9.	2.	1.	0.	2.	87.
5.	33.	27.	32.	23.	25.	18.	52.	55.	41.	23.	8.	22.	169.
PM	10.	8.	9.	6.	7.	4.	13.	16.	9.	5.	2.	5.	93.
TEMC	-8.	-6.	0.	6.	10.	14.	17.	17.	13.	7.	1.	-5.	6.
ETP	19.	30.	54.	84.	124.	142.	138.	124.	102.	64.	40.	25.	946.
MAI	0.11	0.06	0.02	0.01	0.01	0.00	0.01	0.02	0.00	0.00	0.00	0.01	0.07

STATION MIRPUR LAT 33.12N LONG 73.48E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	58.	55.	50.	34.	24.	47.	204.	198.	86.	12.	6.	28.	802.
TEM	13.	16.	21.	27.	32.	34.	31.	29.	29.	25.	20.	15.	24.
RS	240.	350.	480.	510.	610.	670.	530.	500.	560.	425.	360.	300.	461.
PD	37.	[illegible]					109.	104.	48.			[illegible]	636.
ETP	53.	78.	132.	158.	222.	244.	186.	169.	181.	132.	94.	71.	1720.
MAI	0.70	[illegible]					0.59	0.62	0.27				0.37

STATION MUZAFFARABAD LAT 34.23N LONG 73.28E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	102.	110.	132.	100.	57.	77.	289.	247.	104.	42.	17.	59.	1336.
TEM	1.	4.	8.	13.	18.	22.	25.	24.	21.	14.	8.	3.	13.
RS	240.	310.	410.	500.	560.	620.	500.	480.	460.	400.	290.	250.	418.
PD	55.	58.	67.	54.	37.	45.	184.	147.	56.			38.	1105.
ETP	32.	44.	76.	107.	143.	170.	152.	144.	122.	91.	51.	37.	1168.
MAI	1.73	1.33	0.88	0.50	0.26	0.26	1.21	1.03	0.46			1.00	0.95

STATION PUNCH LAT 33.47N LONG 74.07E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	127.	128.	139.	94.	68.	100.	301.	291.	117.	32.	17.	62.	1476.
TEM	1.	4.	8.	13.	18.	22.	25.	24.	21.	14.	8.	3.	13.
RS	240.	310.	410.	500.	560.	620.	500.	480.	460.	400.	290.	250.	418.
PD	65.	65.	70.	52.	41.	54.	195.	186.	61.			39.	1229.
ETP	32.	44.	76.	107.	143.	170.	152.	144.	122.	91.	51.	37.	1168.
MAI	2.04	1.50	0.91	0.48	0.29	0.32	1.28	1.30	0.50			1.03	1.05

JAMMU AND KASHMIR

STATION SKARDU LAT 35.18N LONG 75.37E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	22.	17.	27.	24.	20.	6.	9.	9.	11.	3.	2.	9.	159.
TEM	1.	4.	8.	13.	18.	22.	25.	24.	21.	14.	8.	3.	13.
RS	240.	310.	410.	500.	560.	620.	500.	480.	460.	400.	290.	250.	418.
PD													78.
ETP	32.	44.	76.	107.	143.	170.	152.	144.	122.	91.	51.	37.	1168.
MAI													0.07

STATION SRINAGAR LAT 34.05N 74.50E ELEV 1587. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	73.	72.	104.	78.	63.	36.	61.	63.	32.	29.	18.	36.	665.
TEM	1.	4.	8.	13.	18.	22.	25.	24.	21.	14.	8.	3.	13.
RS	240.	310.	410.	500.	560.	620.	500.	480.	460.	400.	290.	250.	418.
PD	43.	43.	56.	45.									515.
ETP	32.	44.	76.	107.	143.	170.	152.	144.	122.	91.	51.	37.	1168.
MAI	1.36	0.98	0.73	0.42									0.44

STATION SRINAGAR LAT 34 6 N LONG 74 48 E ELEV 1587.0 M 77 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	8.	15.	31.	28.	13.	5.	10.	12.	1.	0.	0.	1.	446.
75.	28.	37.	59.	56.	33.	15.	28.	31.	9.	2.	0.	7.	567.
50.	55.	62.	87.	84.	55.	28.	49.	53.	24.	12.	3.	22.	662.
5.	187.	162.	190.	187.	144.	89.	142.	141.	119.	125.	72.	138.	939.
PM	71.	72.	96.	93.	64.	35.	59.	62.	38.	31.	15.	40.	674.
TEMC	1.	3.	8.	13.	18.	22.	24.	24.	20.	14.	8.	3.	13.
ETP	32.	42.	76.	107.	141.	169.	151.	143.	120.	90.	51.	37.	1159.
MAI	0.88	0.88	0.78	0.53	0.23	0.09	0.18	0.22	0.08	0.03	0.00	0.18	0.49

STATION SRINAGAR LAT 34 6 N LONG 74 48 E ELEV 1587.0 M 10 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	25.	26.	24.	30.	24.	10.	13.	13.	8.	2.	0.	0.	513.
75.	42.	48.	56.	45.	46.	22.	30.	41.	20.	10.	1.	1.	614.
50.	58.	69.	90.	59.	68.	35.	48.	77.	32.	24.	10.	9.	692.
5.	113.	143.	224.	101.	150.	85.	120.	240.	81.	107.	142.	126.	907.
PM	62.	75.	103.	61.	75.	39.	55.	95.	37.	35.	33.	29.	699.
TEMC	2.	4.	8.	14.	18.	23.	24.	23.	20.	14.	8.	3.	13.
ETP	36.	49.	74.	108.	139.	182.	175.	153.	125.	79.	48.	33.	1200.
MAI	1.19	0.98	0.76	0.42	0.33	0.12	0.17	0.27	0.16	0.13	0.03	0.04	0.51

KARNATAKA

STATION BAGALKOT LAT 16.12N LONG 75.42E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	1.	5.	6.	20.	42.	68.	71.	63.	144.	84.	34.	8.	546.
TEM	27.	27.	28.	29.	29.	27.	26.	26.	26.	27.	27.	27.	27.
RS	510.	560.	630.	620.	600.	430.	380.	370.	480.	450.	500.	490.	502.
PD						41.	42.	39.	72.	48.			411.
ETP	163.	169.	208.	204.	203.	133.	120.	117.	147.	144.	157.	157.	1921.
MAI						0.31	0.35	0.34	0.49	0.33			0.21

STATION BALEHONNUR LAT 16.22N LONG 75.27E ELEV 889. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	2.	4.	22.	108.	129.	427.	943.	595.	220.	220.	66.	11.	2747.
TEM	21.	23.	24.	25.	24.	22.	21.	21.	21.	22.	21.	21.	22.
RS	500.	560.	620.	675.	640.	510.	460.	510.	515.	525.	500.	480.	541.
PD				57.	66.	306.	760.	454.	124.	124.			2348.
ETP	139.	152.	188.	201.	194.	141.	126.	141.	139.	150.	135.	132.	1838.
MAI				0.29	0.34	2.18	6.01	3.21	0.89	0.83			1.28

STATION BANGALORE LAT 12.58N LONG 77.35E ELEV 921. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	7.	9.	11.	45.	107.	71.	111.	137.	164.	153.	61.	13.	889.
TEM	21.	23.	26.	27.	27.	24.	28.	23.	23.	23.	22.	21.	24.
RS	510.	560.	630.	620.	600.	460.	400.	460.	460.	450.	500.	490.	512.
PD					57.	42.	58.	69.	80.	75.			712.
ETP	141.	154.	197.	195.	193.	134.	133.	136.	131.	132.	137.	134.	1818.
MAI					0.29	0.32	0.44	0.51	0.61	0.57			0.39

STATION BANGALORE LAT 13 0 N LONG 77 36 E ELEV 921.0 M 144 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	0.	0.	0.	2.	31.	18.	18.	35.	42.	33.	0.	0.	606.
75.	0.	0.	0.	11.	66.	44.	50.	77.	94.	82.	8.	0.	768.
50.	0.	0.	1.	27.	102.	73.	88.	122.	150.	137.	30.	4.	896.
5.	27.	32.	54.	120.	242.	191.	253.	300.	368.	365.	216.	74.	1267.
PM	5.	6.	11.	40.	115.	85.	106.	139.	170.	160.	59.	16.	911.
TEMC	21.	23.	26.	28.	27.	25.	23.	23.	23.	23.	22.	21.	24.
ETP	142.	154.	197.	196.	194.	136.	118.	136.	132.	133.	138.	135.	1810.
MAI	0.00	0.00	0.00	0.06	0.34	0.32	0.42	0.57	0.71	0.62	0.06	0.00	0.42

STATION BELGAUM LAT 15.51N LONG 74.32E ELEV 753. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	1.	2.	12.	58.	93.	223.	519.	303.	121.	175.	37.	7.	1551.
TEM	22.	24.	26.	28.	27.	24.	23.	23.	23.	24.	23.	22.	24.
RS	500.	565.	625.	650.	635.	430.	380.	380.	480.	505.	495.	480.	510.
PD					51.	126.	387.	197.	62.	84.			1295.
ETP	143.	157.	199.	206.	206.	125.	110.	110.	136.	153.	141.	135.	1821.
MAI					0.25	1.01	3.52	1.79	0.46	0.55			0.71

STATION BELGAUM LAT 15 54 N LONG 74 42 E ELEV 753.0 M 120 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	0.	0.	0.	2.	4.	61.	182.	78.	24.	26.	0.	0.	920.
75.	0.	0.	0.	14.	21.	126.	302.	153.	59.	65.	1.	0.	1140.
50.	0.	0.	2.	33.	52.	193.	413.	229.	97.	109.	11.	1.	1312.
5.	12.	9.	53.	141.	231.	447.	787.	508.	255.	292.	154.	45.	1801.
PM	2.	2.	11.	47.	76.	216.	439.	252.	113.	127.	36.	9.	1330.
TEMC	22.	24.	26.	28.	27.	24.	23.	23.	23.	24.	23.	22.	24.
ETP	142.	157.	198.	207.	207.	126.	110.	110.	136.	152.	140.	136.	1821.
MAI	0.00	0.00	0.00	0.07	0.10	1.00	2.74	1.39	0.43	0.43	0.01	0.00	0.63

STATION BELGAUM LAT 15 54 N LONG 74 36 E ELEV 747.0 M 5 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	0.	0.	0.	6.	5.	130.	113.	72.	45.	4.	45.	0.	779.
75.	0.	0.	0.	18.	24.	162.	169.	123.	72.	19.	64.	0.	893.
50.	0.	0.	1.	34.	53.	187.	218.	170.	96.	40.	80.	0.	973.
5.	23.	2.	76.	106.	208.	258.	373.	334.	176.	154.	150.	7.	1167.
PM	5.	1.	14.	42.	73.	189.	227.	182.	101.	55.	83.	1.	973.
TEMC	22.	24.	27.	28.	28.	24.	23.	23.	23.	24.	24.	22.	24.
ETP	142.	157.	199.	208.	208.	126.	111.	111.	138.	153.	143.	136.	1831.
MAI	0.00	0.00	0.00	0.09	0.11	1.28	1.52	1.11	0.52	0.12	0.45	0.00	0.49

STATION BELLARY LAT 15.09N LONG 76.51E ELEV 449. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	2.	2.	4.	24.	61.	43.	48.	80.	110.	109.	31.	5.	519.
TEM	24.	27.	30.	32.	32.	29.	28.	27.	27.	27.	25.	23.	28.
RS	510.	550.	620.	640.	635.	475.	400.	480.	510.	500.	500.	450.	523.
PD								46.	58.	58.			387.
ETP	153.	164.	212.	222.	228.	156.	131.	156.	160.	160.	148.	133.	2025.
MAI								0.29	0.36	0.36			0.19

STATION BIDAR LAT 17.55N LONG 77.32E ELEV 664. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	2.	7.	17.	27.	29.	147.	243.	186.	212.	74.	30.	3.	977.
TEM	22.	25.	28.	31.	32.	28.	25.	25.	25.	25.	23.	22.	26.
RS	495.	555.	620.	660.	660.	510.	450.	430.	490.	520.	500.	470.	530.
PD						73.	144.	94.	117.	44.			790.
ETP	143.	159.	206.	224.	239.	163.	139.	132.	145.	160.	141.	133.	1985.
MAI						0.45	1.04	0.71	0.80	0.27			0.40

STATION BIJAPUR LAT 16.49N LONG 75.43E ELEV 594. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	3.	1.	9.	26.	39.	68.	79.	85.	135.	97.	26.	5.	573.
TEM	23.	26.	29.	31.	31.	28.	26.	26.	26.	26.	24.	22.	26.
RS	500.	560.	620.	675.	645.	500.	425.	500.	510.	520.	500.	475.	536.
PD							46.	48.	68.	53.			434.
ETP	147.	163.	208.	230.	229.	159.	134.	156.	155.	163.	144.	136.	2023.
MAI							0.34	0.31	0.44	0.32			0.21

STATION CHANNAPATNA LAT 12.39N LONG 77.12E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	3.	7.	10.	47.	127.	69.	75.	117.	150.	160.	63.	13.	841.
TEM	22.	25.	27.	28.	27.	25.	24.	24.	24.	24.	23.	22.	24.
RS	510.	560.	630.	620.	610.	450.	400.	380.	480.	450.	500.	490.	507.
PD					65.	42.	44.	61.	74.	78.			670.
ETP	147.	160.	202.	197.	196.	132.	119.	113.	139.	135.	141.	139.	1821.
MAI					0.33	0.31	0.37	0.54	0.53	0.58			0.37

STATION CHITRADURGA LAT 14.14N LONG 76.26E ELEV 733. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	1.	5.	3.	32.	85.	62.	73.	97.	96.	135.	49.	16.	654.
TEM	23.	26.	28.	30.	29.	26.	24.	24.	25.	25.	23.	22.	25.
RS	505.	550.	620.	640.	615.	510.	450.	510.	515.	490.	490.	485.	532.
PD					48.	39.	43.	53.	52.	68.			506.
ETP	148.	161.	206.	211.	206.	155.	137.	154.	152.	150.	140.	139.	1960.
MAI					0.23	0.25	0.32	0.34	0.34	0.45			0.26

STATION COONDAPOOR LAT 13.38N LONG 74.41E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	2.	3.	4.	26.	127.	1038.	1211.	698.	350.	156.	66.	14.	3695.
TEM	27.	27.	28.	29.	29.	27.	26.	26.	26.	27.	27.	27.	27.
RS	510.	560.	630.	620.	600.	430.	380.	370.	480.	450.	500.	490.	502.
PD					65.	844.	996.	544.	238.	76.			3182.
ETP	163.	169.	208.	204.	203.	133.	120.	117.	147.	144.	157.	157.	1921.
MAI					0.32	6.33	8.32	4.66	1.62	0.53			1.66

STATION GADAG LAT 15.25N LONG 75.38E ELEV 650. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	2.	2.	7.	35.	82.	73.	70.	83.	133.	130.	37.	9.	663.
TEM	24.	26.	29.	30.	30.	26.	25.	25.	25.	26.	24.	23.	26.
RS	500.	560.	630.	650.	630.	430.	380.	380.	480.	505.	495.	480.	510.
PD						43.	42.	47.	67.	66.			514.
ETP	148.	164.	210.	217.	215.	133.	116.	117.	143.	157.	144.	140.	1904.
MAI						0.33	0.36	0.41	0.47	0.42			0.27

STATION GULBARGA LAT 17.21N LONG 76.51E ELEV 458. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	1.	5.	11.	17.	40.	110.	151.	143.	178.	71.	24.	2.	753.
TEM	23.	26.	29.	32.	33.	29.	27.	27.	26.	26.	24.	22.	27.
RS	500.	550.	620.	660.	650.	510.	450.	500.	490.	520.	500.	470.	535.
PD						58.	74.	71.	87.				593.
ETP	147.	162.	211.	230.	240.	168.	145.	160.	151.	166.	145.	135.	2060.
MAI						0.35	0.51	0.44	0.57				0.29

STATION HASSAN LAT 13.00N LONG 76.09E ELEV 960. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	2.	7.	15.	60.	112.	87.	145.	107.	100.	181.	63.	13.	892.
TEM	21.	23.	26.	27.	26.	23.	22.	22.	23.	23.	22.	21.	23.
RS	500.	560.	620.	630.	600.	510.	450.	510.	515.	500.	490.	480.	530.
PD					59.	49.	72.	57.	54.	89.			715.
ETP	140.	154.	193.	195.	189.	145.	128.	146.	144.	147.	135.	133.	1849.
MAI					0.31	0.34	0.56	0.39	0.37	0.61			0.39

STATION HAVERI LAT 14.48N LONG 75.24E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	4.	3.	8.	43.	80.	95.	159.	102.	89.	121.	49.	15.	768.
TEM	24.	27.	30.	32.	32.	29.	28.	27.	27.	27.	25.	23.	28.
RS	510.	550.	620.	640.	635.	475.	400.	480.	510.	500.	500.	450.	523.
PD						52.	78.	55.	50.	62.			606.
ETP	153.	164.	212.	222.	228.	156.	131.	156.	160.	160.	148.	133.	2025.
MAI						0.33	0.59	0.35	0.31	0.39			0.30

STATION HONAVAR LAT 14.17N LONG 74.27E ELEV 26. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	1.	0.	1.	24.	138.	1039.	1176.	639.	349.	175.	47.	7.	3596.
TEM	26.	26.	27.	29.	29.	27.	26.	26.	26.	27.	27.	27.	27.
RS	500.	560.	630.	630.	610.	470.	400.	510.	515.	500.	480.	480.	524.
PD					69.	844.	965.	492.	237.	84.			3095.
ETP	157.	165.	204.	205.	206.	146.	126.	160.	157.	161.	151.	154.	1991.
MAI					0.34	5.79	7.69	3.07	1.51	0.52			1.55

STATION HUBLI LAT 15.20N LONG 75.08E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	2.	2.	9.	37.	70.	82.	113.	88.	101.	112.	43.	12.	671.
TEM	24.	27.	30.	32.	32.	29.	28.	27.	27.	27.	25.	23.	28.
RS	510.	550.	620.	640.	635.	475.	400.	480.	510.	500.	500.	450.	523.
PD						47.	59.	49.	54.	59.			521.
ETP	153.	164.	212.	222.	228.	156.	131.	156.	160.	160.	148.	133.	2025.
MAI						0.30	0.45	0.31	0.34	0.37			0.26

STATION ILKAL LAT 15.58N LONG 76.07E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	3.	3.	4.	27.	46.	61.	69.	81.	151.	87.	41.	8.	581.
TEM	24.	27.	30.	32.	32.	29.	27.	27.	27.	27.	25.	23.	27.
RS	510.	550.	620.	640.	635.	475.	400.	480.	510.	500.	500.	450.	523.
PD							42.	46.	74.	49.			441.
ETP	153.	164.	212.	222.	228.	156.	128.	156.	160.	160.	148.	133.	2021.
MAI							0.33	0.30	0.46	0.30			0.22

STATION KARWAR LAT 14.47N LONG 74.08E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	1.	1.	0.	15.	82.	987.	1011.	507.	282.	129.	53.	7.	3075.
TEM	27.	27.	28.	29.	29.	27.	26.	26.	26.	27.	27.	27.	27.
RS	510.	560.	630.	620.	600.	430.	380.	370.	480.	450.	500.	490.	502.
PD					47.	799.	820.	376.	178.	66.			2636.
ETP	163.	169.	208.	204.	203.	133.	120.	117.	147.	144.	157.	157.	1921.
MAI					0.23	6.00	6.85	3.22	1.21	0.45			1.37

KARNATAKA

STATION KOLAR LAT 13.08N LONG 78.08E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	10.	6.	11.	37.	91.	46.	64.	99.	129.	119.	82.	18.	712.
TEM	21.	23.	26.	27.	27.	24.	28.	23.	23.	23.	22.	21.	24.
RS	510.	560.	630.	620.	600.	460.	400.	460.	460.	450.	500.	490.	512.
PD					50.	32.	40.	54.	66.	62.	47.		557.
ETP	141.	154.	197.	195.	193.	134.	133.	136.	131.	132.	137.	134.	1818.
MAI					0.26	0.24	0.30	0.40	0.50	0.47	0.34		0.31

STATION KOTTURU LAT 14.50N LONG 76.13E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	4.	1.	2.	26.	47.	50.	43.	91.	103.	104.	26.	5.	502.
TEM	24.	26.	29.	32.	32.	30.	28.	28.	28.	27.	25.	23.	28.
RS	510.	560.	620.	640.	620.	520.	460.	500.	500.	495.	490.	485.	533.
PD								50.	55.	56.			372.
ETP	152.	165.	210.	223.	223.	173.	152.	165.	159.	159.	145.	143.	2069.
MAI								0.31	0.35	0.35			0.18

STATION MANGALORE LAT 12.52N LONG 74.51E ELEV 22. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	5.	2.	9.	40.	233.	982.	1059.	577.	267.	206.	71.	18.	3469.
TEM	27.	27.	28.	29.	29.	27.	26.	26.	26.	27.	27.	27.	27.
RS	510.	560.	630.	620.	600.	430.	380.	370.	480.	450.	500.	490.	502.
PD					135.	794.	862.	438.	165.	111.	42.		2983.
ETP	163.	169.	208.	204.	203.	133.	120.	117.	147.	144.	157.	157.	1921.
MAI					0.67	5.96	7.20	3.75	1.12	0.77	0.27		1.55

STATION MANGALORE LAT 12 54 N LONG 74 54 E ELEV 22.0 M 127 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	0.	0.	0.	0.	6.	566.	541.	269.	91.	52.	0.	0.	2508.
75.	0.	0.	0.	2.	45.	772.	780.	433.	176.	113.	7.	0.	3002.
50.	0.	0.	0.	14.	123.	941.	983.	582.	261.	178.	31.	2.	3382.
5.	17.	12.	28.	177.	616.	1454.	1619.	1076.	573.	426.	249.	85.	4439.
PM	3.	2.	5.	42.	192.	967.	1019.	615.	287.	200.	66.	17.	3416.
TEMC	27.	27.	28.	29.	29.	27.	26.	26.	26.	27.	27.	27.	27.
ETP	163.	169.	209.	204.	202.	133.	119.	116.	147.	145.	157.	158.	1924.
MAI	0.00	0.00	0.00	0.01	0.22	5.78	6.53	3.72	1.20	0.78	0.05	0.00	1.56

STATION MERCARA LAT 12.25N LONG 75.44E ELEV 1152. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	5.	6.	21.	81.	160.	614.	1106.	724.	332.	204.	78.	15.	3346.
TEM	19.	21.	23.	23.	22.	20.	19.	19.	19.	20.	20.	19.	20.
RS	510.	560.	630.	620.	610.	450.	400.	380.	480.	450.	500.	490.	507.
PD				46.	78.	470.	903.	567.	222.	109.	45.		2874.
ETP	136.	145.	182.	175.	175.	117.	104.	100.	124.	123.	130.	129.	1639.
MAI				0.27	0.45	4.03	8.67	5.69	1.80	0.89	0.35		1.75

KARNATAKA

STATION MYSORE LAT 12.18N LONG 76.42E ELEV 767. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	3.	6.	12.	68.	157.	61.	72.	156.	116.	180.	67.	15.	913.
TEM	22.	25.	27.	28.	27.	25.	24.	24.	24.	24.	23.	22.	24.
RS	510.	560.	630.	620.	610.	450.	400.	380.	480.	450.	500.	490.	507.
PD					77.	38.	43.	76.	60.	80.			734.
ETP	147.	160.	202.	197.	196.	132.	119.	113.	139.	135.	141.	139.	1821.
MAI					0.39	0.29	0.36	0.67	0.43	0.66			0.40

STATION RAICHUR LAT 16.12N LONG 77.21E ELEV 400. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	1.	6.	4.	13.	28.	103.	139.	135.	168.	94.	25.	3.	719.
TEM	24.	27.	30.	32.	33.	30.	27.	27.	27.	27.	25.	24.	28.
RS	510.	570.	620.	640.	610.	480.	460.	500.	480.	510.	520.	480.	532.
PD						55.	70.	68.	81.	52.			563.
ETP	154.	171.	215.	225.	225.	159.	150.	163.	150.	165.	155.	142.	2074.
MAI						0.35	0.46	0.42	0.54	0.31			0.27

STATION SHIMOGA LAT 13.56N LONG 75.38E ELEV 571. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	4.	2.	9.	32.	75.	104.	223.	115.	84.	118.	45.	11.	822.
TEM	23.	25.	27.	29.	28.	25.	24.	24.	25.	25.	23.	22.	25.
RS	500.	560.	620.	630.	600.	510.	450.	510.	515.	500.	490.	480.	530.
PD						56.	126.	60.	48.	61.			653.
ETP	145.	159.	201.	206.	199.	153.	135.	153.	152.	153.	140.	136.	1930.
MAI						0.36	0.94	0.39	0.31	0.40			0.34

STATION SIRA LAT 13.45N LONG 76.55E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	6.	3.	5.	21.	77.	46.	47.	75.	114.	117.	48.	7.	566.
TEM	21.	23.	26.	27.	27.	24.	28.	23.	23.	23.	22.	21.	24.
RS	510.	560.	630.	620.	600.	460.	400.	460.	460.	450.	500.	490.	512.
PD							33.	44.	60.	61.			428.
ETP	141.	154.	197.	195.	193.	134.	133.	136.	131.	132.	137.	134.	1818.
MAI							0.25	0.32	0.45	0.46			0.24

STATION YADGIR LAT 16.46N LONG 77.08E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	4.	8.	8.	22.	23.	97.	133.	111.	165.	71.	31.	4.	677.
TEM	24.	27.	30.	32.	33.	30.	27.	27.	27.	27.	25.	24.	28.
RS	510.	570.	620.	640.	610.	480.	460.	500.	480.	510.	520.	480.	532.
PD						53.	67.	58.	80.	[illegible]			526.
ETP	154.	171.	215.	225.	225.	159.	150.	163.	150.	165.	155.	142.	2074.
MAI						0.33	0.45	0.36	0.53				0.25

KERALA

STATION ALLEPPEY LAT 9.33N LONG 76.25E ELEV 4. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	42.	52.	66.	139.	314.	686.	513.	381.	268.	309.	265.	63.	3098.
TEM	27.	28.	29.	29.	28.	27.	26.	26.	27.	27.	27.	27.	27.
RS	520.	575.	625.	540.	555.	420.	410.	500.	490.	430.	445.	500.	501.
PD				70.	206.	534.	382.	265.	166.	202.	163.	39.	2656.
ETP	169.	177.	210.	177.	185.	130.	129.	158.	151.	138.	139.	162.	1925.
MAI				0.39	1.11	4.10	2.95	1.68	1.10	1.46	1.17	0.24	1.38

STATION CALICUT LAT 11.15N LONG 75.47E ELEV 5. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	6.	11.	21.	111.	323.	871.	860.	405.	215.	290.	140.	30.	3283.
TEM	27.	28.	29.	29.	29.	27.	26.	26.	27.	27.	27.	27.	27.
RS	520.	575.	625.	610.	570.	475.	410.	470.	500.	460.	465.	490.	514.
PD				58.	214.	696.	687.	286.	119.	185.	70.		2819.
ETP	167.	175.	209.	201.	193.	147.	128.	149.	155.	149.	146.	158.	1977.
MAI				0.29	1.11	4.73	5.35	1.93	0.77	1.25	0.48		1.43

STATION CANNANORE LAT 11.52N LONG 75.22E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	4.	5.	9.	49.	213.	924.	989.	509.	229.	216.	110.	18.	3275.
TEM	27.	28.	29.	29.	29.	27.	26.	26.	27.	27.	27.	27.	27.
RS	520.	575.	625.	610.	570.	475.	410.	470.	500.	460.	465.	490.	514.
PD					118.	743.	800.	378.	132.	120.	58.		2812.
ETP	167.	175.	209.	200.	193.	147.	128.	149.	155.	149.	146.	158.	1976.
MAI					0.61	5.05	6.23	2.54	0.85	0.81	0.40		1.42

STATION COCHIN LAT 9.58N LONG 76.14E ELEV 3. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	10.	34.	50.	140.	354.	756.	572.	386.	235.	333.	184.	37.	3101.
TEM	27.	28.	29.	29.	28.	27.	26.	26.	26.	27.	27.	27.	27.
RS	520.	575.	625.	540.	550.	420.	410.	500.	490.	430.	445.	500.	500.
PD				70.	250.	595.	433.	270.	137.	223.	92.		2659.
ETP	167.	175.	209.	175.	183.	130.	129.	158.	150.	138.	139.	161.	1914.
MAI				0.40	1.37	4.59	3.36	1.71	0.91	1.62	0.66		1.39

STATION FORT COCHIN LAT 10 0 N LONG 76 18 E ELEV 3.0 M 109 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	0.	0.	1.	29.	75.	406.	272.	134.	66.	119.	29.	0.	2210.
75.	0.	1.	8.	69.	173.	574.	437.	233.	144.	210.	79.	4.	2701.
50.	3.	6.	27.	114.	280.	716.	585.	325.	226.	297.	138.	20.	3042.
5.	107.	120.	173.	291.	707.	1155.	1078.	646.	542.	601.	391.	184.	3874.
PM	21.	26.	49.	131.	321.	740.	618.	349.	255.	320.	165.	47.	3042.
TEMC	27.	28.	29.	29.	28.	27.	26.	26.	26.	27.	27.	27.	27.
ETP	161.	168.	198.	187.	190.	142.	116.	136.	142.	132.	128.	155.	1855.
MAI	0.00	0.00	0.04	0.37	0.91	4.04	3.75	1.72	1.02	1.60	0.61	0.03	1.46

KERALA

STATION PALGHAT LAT 10.47N LONG 76.39E ELEV 97. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	11.	11.	23.	60.	132.	429.	605.	334.	155.	210.	116.	30.	2116.
TEM	28.	29.	31.	31.	29.	26.	25.	26.	27.	27.	27.	27.	28.
RS	500.	550.	590.	570.	570.	420.	410.	500.	480.	430.	440.	500.	497.
PD					67.	308.	462.	224.	76.	115.	60.		1792.
ETP	165.	175.	208.	193.	193.	129.	127.	157.	149.	139.	139.	162.	1935.
MAI					0.35	2.39	3.64	1.42	0.51	0.83	0.44		0.93

STATION PONNANI LAT 10.47N LONG 75.55E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	7.	8.	24.	97.	267.	753.	716.	383.	203.	287.	185.	28.	2958.
TEM	27.	28.	29.	29.	28.	27.	26.	26.	26.	27.	27.	27.	27.
RS	520.	575.	625.	540.	550.	420.	410.	500.	490.	430.	445.	500.	500.
PD				53.	165.	593.	560.	267.	109.	183.	93.		2533.
ETP	167.	175.	209.	175.	183.	130.	129.	158.	150.	138.	139.	161.	1914.
MAI				0.30	0.90	4.57	4.35	1.69	0.72	1.33	0.67		1.32

STATION QUILON LAT 8.53N LONG 76.36E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	18.	23.	50.	140.	267.	531.	378.	246.	195.	294.	209.	47.	2398.
TEM	27.	27.	28.	29.	28.	26.	26.	26.	27.	27.	27.	27.	27.
RS	530.	590.	590.	500.	530.	400.	400.	480.	490.	440.	430.	520.	492.
PD				70.	165.	397.	263.	147.	102.	189.	114.		2040.
ETP	170.	179.	196.	163.	176.	123.	127.	152.	152.	141.	133.	167.	1878.
MAI				0.43	0.94	3.22	2.08	0.96	0.67	1.34	0.86		1.09

STATION TRIVANDRUM LAT 8.29N LONG 76.57E ELEV 64. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	20.	20.	44.	122.	249.	331.	215.	164.	123.	272.	207.	73.	1839.
TEM	27.	27.	28.	29.	28.	26.	26.	26.	27.	27.	27.	27.	27.
RS	530.	590.	590.	500.	530.	400.	400.	480.	490.	440.	430.	520.	492.
PD				63.	149.	221.	119.	80.	63.	169.	112.		1549.
ETP	170.	179.	196.	163.	176.	123.	127.	152.	152.	141.	133.	167.	1878.
MAI				0.39	0.85	1.79	0.94	0.52	0.42	1.20	0.84		0.82

STATION TRIVANDRUM LAT 8 30 N LONG 77 0 E ELEV 64.0 M 117 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	0.	0.	1.	27.	27.	117.	77.	31.	16.	98.	36.	2.	1186.
75.	1.	1.	9.	62.	88.	213.	137.	71.	54.	176.	91.	16.	1479.
50.	8.	7.	25.	100.	168.	305.	195.	115.	104.	251.	155.	42.	1709.
5.	94.	100.	133.	250.	539.	635.	396.	289.	342.	514.	419.	207.	2366.
PM	23.	23.	41.	114.	210.	331.	210.	132.	132.	271.	182.	65.	1733.
TEMC	26.	27.	28.	29.	28.	26.	26.	26.	26.	26.	26.	26.	27.
ETP	168.	178.	195.	162.	175.	123.	126.	151.	151.	140.	132.	165.	1864.
MAI	0.01	0.00	0.05	0.39	0.50	1.73	1.09	0.47	0.36	1.26	0.69	0.09	0.79

STATION AGAR LAT 23.43N LONG 76.01E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	13.	5.	4.	3.	12.	109.	325.	271.	151.	21.	15.	7.	936.
TEM	18.	21.	25.	30.	34.	31.	27.	26.	26.	25.	21.	18.	25.
RS	445.	500.	580.	640.	645.	550.	450.	450.	480.	525.	475.	450.	516.
PD						58.	216.	168.	74.				754.
ETP	114.	128.	180.	211.	240.	188.	[illegible]	140.	146.	160.	127.	116.	1895.
MAI						0.31	1.50	1.20	0.51				0.40

STATION AMBIKAPUR LAT 23.10N LONG 83.15E ELEV 611. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	22.	22.	21.	9.	15.	143.	435.	465.	[illegible]	47.	1.	2.	1406.
TEM	16.	19.	23.	28.	32.	30.	26.	26.	[illegible]	24.	18.	16.	24.
RS	440.	510.	580.	660.	660.	510.	450.	410.	[illegible]	520.	470.	415.	507.
PD						71.	313.	339.	127.				1168.
ETP	107.	125.	171.	213.	239.	172.	143.	129.	139.	154.	117.	100.	1810.
MAI						0.41	2.19	2.62	0.91				0.65

STATION BANKURA LAT 23.14N LONG 87.04E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	18.	29.	27.	35.	94.	258.	336.	319.	197.	88.	18.	4.	1423.
TEM	19.	22.	27.	31.	32.	30.	29.	29	29.	28.	23.	20.	27.
RS	440.	490.	580.	640.	645.	500.	420.	400.	470.	525.	480.	450.	503.
PD						157.	226.	211.	103.	49.			1182.
ETP	117.	130.	188.	218.	230.	169.	141.	135.	153.	172.	137.	121.	1910.
MAI						0.93	1.60	1.57	0.67	0.29			0.62

STATION BARWANI LAT 22.02N LONG 74.53E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	6.	2.	4.	2.	6.	128.	182.	132.	123.	31.	18.	4.	639.
TEM	18.	21.	25.	30.	33.	30.	26.	25.	25.	24.	20.	19.	25.
RS	450.	520.	580.	650.	690.	530.	470.	480.	490.	470.	480.	420.	519.
PD						65.	90.	67.	63.				492.
ETP	116.	135.	180.	215.	254.	177.	146.	148.	147.	141.	127.	109.	1895.
MAI						0.37	0.62	0.45	0.43				0.26

STATION BEOHARI LAT 24.02N LONG 81.22E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	30.	23.	15.	9.	9.	129.	350.	327.	160.	37.	12.	8.	1109.
TEM	18.	21.	26.	30.	34.	31.	26.	25.	26.	25.	22.	19.	25.
RS	460.	520.	580.	645.	660.	510.	450.	400.	510.	515.	490.	435.	515.
PD						66.	238.	218.	78.				906.
ETP	118.	134.	181.	217.	247.	175.	143.	124.	154.	158.	134.	115.	1898.
MAI						0.37	1.67	1.76	0.51				0.48

STATION BETUL LAT 21.52N LONG 77.56E ELEV 653. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	8.	2.	18.	10.	9.	138.	320.	29[illegible].	240.	68.	19.	1.	1129.
TEM	19.	21.	25.	29.	32.	30.	25.	24.	25.	23.	20.	19.	24.
RS	460.	525.	580.	645.	665.	560.	430.	450.	480.	515.	490.	435.	520.
PD						69.	212.	190.	141.				923.
ETP	120.	137.	179.	211.	240.	186.	133.	136.	142.	152.	128.	113.	1876.
MAI						0.37	1.59	1.40	1.00				0.49

STATION BHIND LAT 26.34N LONG 78.48E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	11.	8.	6.	5.	4.	47.	235.	240.	126.	14.	4.	5.	705.
TEM	15.	18.	24.	30.	35.	36.	30.	29.	28.	26.	20.	16.	26.
RS	390.	460.	550.	610.	650.	510.	450.	430.	480.	500.	440.	380.	488.
PD							137.	141.	64.				550.
ETP	92.	111.	167.	205.	250.	191.	156.	144.	155.	156.	115.	91.	1834.
MAI							0.87	0.98	0.42				0.30

STATION BHOPAL LAT 23.17N LONG 77.21E ELEV 523. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	17.	5.	10.	3.	11.	137.	429.	308.	232.	37.	15.	7.	1211.
TEM	18.	21.	25.	30.	34.	31.	27.	26.	26.	25.	21.	18.	25.
RS	445.	500.	580.	640.	645.	550.	450.	450.	480.	525.	475.	450.	516.
PD						69.	308.	201.	134.				996.
ETP	114.	128.	180.	211.	240.	188.	144.	140.	146.	160.	127.	116.	1895.
MAI						0.37	2.14	1.43	0.92				0.[illegible]3

STATION BURHANPUR LAT 21.19N LONG 76.14E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	10.	6.	4.	2.	9.	149.	232.	162.	185.	32.	23.	11.	825.
TEM	22.	24.	28.	33.	35.	32.	28.	27.	27.	27.	23.	21.	27.
RS	460.	525.	600.	645.	660.	550.	430.	450.	460.	520.	485.	440.	519.
PD						74.	134.	79.	93.				656.
ETP	131.	147.	199.	227.	254.	191.	141.	146.	144.	166.	137.	123.	2007.
MAI						0.39	0.95	0.54	0.64				0.33

STATION CHAMPA LAT 22.02N LONG 82.42E ELEV 245. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	24.	10.	27.	8.	15.	144.	399.	505.	231.	61.	1.	4.	1428.
TEM	21.	24.	28.	32.	36.	33.	28.	28.	28.	27.	23.	21.	27.
RS	455.	520.	580.	655.	690.	555.	460.	400.	470.	475.	480.	420.	513.
PD						72.	281.	374.	133.				1187.
ETP	125.	145.	190.	230.	269.	199.	152.	132.	150.	152.	135.	116.	1996.
MAI						0.36	1.84	2.85	0.88				0.59

MADHYA PRADESH

STATION DAMOH LAT 23.50N LONG 79.27E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	19.	14.	10.	5.	9.	118.	375.	380.	187.	30.	18.	8.	1173.
TEM	18.	21.	26.	30.	34.	31.	26.	25.	26.	25.	22.	19.	25.
RS	460.	520.	580.	645.	660.	510.	450.	400.	510.	515.	490.	435.	515.
PD						61.	260.	264.	95.				962.
ETP	118.	134.	181.	217.	247.	175.	143.	124.	154.	158.	134.	115.	1898.
MAI						0.35	1.82	2.13	0.62				0.51

STATION DEHRI LAT 23.50N LONG 79.27E ELEV 107. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	23.	22.	14.	6.	7.	120.	287.	370.	242.	40.	8.	3.	1142.
TEM	18.	21.	26.	32.	35.	34.	30.	29.	29.	27.	22.	19.	27.
RS	440.	515.	580.	630.	660.	550.	470.	425.	475.	510.	460.	410.	510.
PD						62.	183.	256.	143.				935.
ETP	112.	134.	184.	219.	253.	198.	161.	144.	154.	164.	127.	107.	1956.
MAI						0.31	1.13	1.77	0.93				0.48

STATION DEOGHOG LAT 19.54N LONG 82.40E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	7.	10.	11.	28.	36.	213.	327.	353.	225.	71.	16.	4.	1301.
TEM	20.	23.	27.	30.	31.	29.	25.	25.	26.	25.	21.	19.	25.
RS	490.	550.	605.	650.	665.	510.	450.	480.	510.	515.	500.	450.	531.
PD						118.	218.	241.	128.				1075.
ETP	132.	149.	193.	215.	237.	166.	139.	149.	155.	157.	136.	119.	1946.
MAI						0.71	1.57	1.62	0.83				0.55

STATION DHAR LAT 22.36N LONG 75.18E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	7.	2.	2.	2.	15.	149.	283.	232.	183.	33.	19.	4.	931.
TEM	18.	20.	25.	29.	32.	30.	26.	25.	25.	24.	20.	18.	24.
RS	450.	520.	580.	640.	660.	580.	440.	400.	550.	520.	480.	420.	520.
PD						74.	179.	134.	91.				749.
ETP	114.	131.	176.	209.	239.	194.	139.	123.	164.	157.	127.	108.	1883.
MAI						0.38	1.29	1.09	0.55				0.40

STATION GADARWARA LAT 22.55N LONG 78.48E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	17.	15.	11.	5.	10.	144.	414.	364.	225.	42.	17.	6.	1270.
TEM	15.	18.	24.	30.	35.	36.	30.	29.	28.	26.	20.	16.	26.
RS	390.	460.	550.	610.	650.	510.	450.	430.	480.	500.	440.	380.	488.
PD						72.	294.	250.	128.				1048.
ETP	92.	111.	167.	205.	250.	191.	156.	144.	155.	156.	115.	91.	1834.
MAI						0.38	1.88	1.74	0.83				0.57

MADHYA PRADESH

STATION GUNA LAT 24.39N LONG 77.19E ELEV 478. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	20.	9.	11.	5.	14.	130.	389.	382.	214.	24.	15.	9.	1222.
TEM	17.	19.	24.	29.	34.	33.	28.	26.	26.	25.	20.	17.	25.
RS	440.	500.	580.	630.	660.	650.	480.	470.	550.	520.	440.	400.	527.
PD						66.	272.	266.	118.				1005.
ETP	108.	123.	174.	207.	246.	229.	157.	149.	169.	158.	114.	99.	1933.
MAI						0.29	1.74	1.79	0.70				0.52

STATION GWALIOR LAT 26.14N LONG 78.13E ELEV 207. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	18.	8.	8.	3.	9.	83.	274.	259.	192.	35.	2.	8.	899.
TEM	15.	18.	24.	30.	35.	36.	30.	29.	28.	26.	20.	16.	26.
RS	390.	460.	550.	610.	650.	510.	450.	430.	480.	500.	440.	380.	488.
PD							171.	158.	99.				721.
ETP	92.	111.	167.	205.	250.	191.	156.	144.	155.	156.	115.	91.	1834.
MAI							1.09	1.10	0.64				0.39

STATION HARDA LAT 22.21N LONG 77.05E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	11.	7.	6.	2.	11.	142.	386.	286.	204.	40.	22.	7.	1124.
TEM	19.	21.	25.	29.	32.	30.	25.	24.	25.	23.	20.	19.	24.
RS	460.	525.	580.	645.	665.	560.	430.	450.	480.	515.	490.	435.	520.
PD						71.	270.	182.	109.				919.
ETP	120.	137.	179.	211.	240.	186.	133.	136.	142.	152.	128.	113.	1876.
MAI						0.38	2.03	1.34	0.77				0.49

STATION HOSHANGABAD LAT 22.46N LONG 77.46E ELEV 302. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	16.	10.	8.	4.	8.	153.	468.	398.	261.	37.	16.	6.	1385.
TEM	20.	22.	27.	31.	35.	32.	27.	26.	27.	26.	22.	21.	26.
RS	450.	520.	580.	640.	660.	570.	480.	460.	560.	520.	480.	420.	528.
PD						75.	342.	280.	160.				1149.
ETP	121.	139.	186.	220.	252.	199.	155.	146.	175.	163.	132.	116.	2003.
MAI						0.38	2.20	1.92	0.92				0.57

STATION INDORE LAT 22.43N LONG 75.48E ELEV 567. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	8.	1.	4.	4.	13.	147.	316.	267.	221.	48.	22.	3.	1054.
TEM	18.	20.	25.	29.	32.	30.	26.	25.	25.	24.	20.	18.	24.
RS	450.	520.	580.	640.	660.	580.	440.	400.	550.	520.	480.	420.	520.
PD						73.	208.	165.	124.				858.
ETP	114.	131.	176.	209.	239.	194.	139.	123.	164.	157.	127.	108.	1883.
MAI						0.38	1.50	1.34	0.76				0.46

STATION INDORE LAT 22 42 N LONG 75 48 E ELEV 567.0 M 104 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	0.	0.	0.	0.	0.	16.	103.	74.	26.	0.	0.	C.	542.
75.	0.	0.	0.	0.	0.	56.	183.	146.	82.	1.	0.	0.	743.
50.	1.	0.	0.	0.	2.	110.	259.	218.	153.	8.	1.	1.	910.
5.	36.	17.	13.	15.	59.	365.	525.	486.	473.	158.	94.	36.	1416.
PM	7.	3.	2.	3.	12.	140.	279.	241.	189.	34.	18.	7.	935.
TEMC	18.	20.	25.	29.	32.	30.	26.	25.	25.	25.	21.	18.	25.
ETP	115.	132.	177.	211.	238.	193.	139.	123.	165.	158.	128.	108.	1889.
MAI	0.00	0.00	0.00	0.00	0.00	0.29	1.32	1.18	0.50	0.00	0.00	0.00	0.39

STATION JABALPUR LAT 23.10N LONG 79.57E ELEV 393. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	26.	22.	15.	9.	15.	170.	505.	401.	212.	50.	17.	5.	1447.
TEM	18.	20.	25.	30.	34.	32.	27.	27.	27.	25.	20.	18.	25.
RS	440.	510.	580.	630.	660.	500.	450.	410.	470.	510.	460.	410.	503
PD						82.	374.	283.	117.	4			1203.
ETP	112.	130.	177.	208.	247.	174.	146.	131.	147.	156.	121.	105.	1854.
MAI						0.47	2.57	2.16	0.80				0.65

STATION JAGDALPUR LAT 19.05N LONG 82.02E ELEV 553. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	5.	15.	17.	51.	66.	212.	398.	381.	246.	116.	24.	4.	1535.
TEM	20.	23.	27.	30.	31.	29.	25.	25.	26.	25.	21.	19.	25.
RS	490.	550.	605.	650.	665.	510.	450.	480.	510.	515.	500.	450.	531.
PD						117.	230.	265.	147.	60.			1281.
ETP	132.	149.	193.	215.	237.	166.	139.	149.	155.	157.	136.	119.	1947.
MAI						0.70	2.02	1.79	0.95	0.38			0.66

STATION JAGDALPUR LAT 19 6 N LONG 82 0 E ELEV 553.0 M 72 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	0.	0.	0.	10.	7.	81.	192.	185.	105.	8.	0.	0.	1109.
75.	0.	0.	0.	26.	25.	151.	284.	282.	174.	37.	0.	0.	1350.
50.	1.	2.	4.	45.	50.	220.	363.	367.	238.	80.	4.	0.	1537.
5.	43.	85.	70.	127.	169.	468.	615.	642.	453.	303.	115.	46.	2063.
PM	8.	17.	15.	53.	64.	240.	378.	384.	253.	108.	24.	8.	1555.
TEMC	20.	23.	27.	30.	31.	29.	25.	25.	26.	25.	22.	19.	25.
ETP	132.	149.	194.	215.	236.	165.	140.	148.	155.	157.	136.	118.	1946.
MAI	0.00	0.00	0.00	0.12	0.11	0.92	2.04	1.90	1.13	0.23	0.00	0.00	0.69

STATION KANKER LAT 20.16N LONG 81.29E ELEV 402. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	9.	18.	26.	27.	25.	205.	359.	359.	257.	97.	13.	1.	1395.
TEM	20.	22.	27.	31.	34.	31.	26.	26.	26.	25.	21.	19.	26.
RS	470.	525.	600.	650.	660.	550.	500.	480.	460.	520.	490.	440.	529.
PD						110.	246.	246.	156.	53.			1158.
ETP	127.	141.	192.	221.	247.	187.	159.	152.	142.	161.	133.	116.	1977.
MAI						0.59	1.55	1.62	1.10	0.33			0.59

STATION KHANDWA LAT 21.50N LONG 76.22E ELEV 318. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	8.	4.	6.	2.	10.	143.	310.	216.	186.	43.	27.	4.	959.
TEM	21.	23.	27.	32.	35.	32.	27.	27.	27.	26.	22.	20.	27.
RS	435.	500.	580.	630.	660.	500.	450.	460.	480.	520.	445.	405.	505.
PD						71.	203.	120.	94.				774.
ETP	120.	136.	188.	220.	252.	174.	146.	147.	149.	164.	124.	111.	1931.
MAI						0.41	1.39	0.82	0.63				0.40

STATION KONDAGAON LAT 19.36N LONG 81.49E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	10.	17.	13.	36.	38.	209.	384.	363.	271.	81.	26.	4.	1452.
TEM	20.	23.	27.	30.	31.	29.	25.	25.	26.	25.	21.	19.	25.
RS	490.	550.	605.	650.	665.	510.	450.	480.	510.	515.	500.	450.	531.
PD						114.	268.	249.	168.	46.			1208.
ETP	132.	149.	193.	215.	237.	166.	139.	149.	155.	157.	136.	119.	1946.
MAI						0.69	1.93	1.68	1.09	0.30			0.62

STATION MANDLA LAT 22.35N 80.22E ELEV 443. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	29.	15.	28.	14.	8.	132.	480.	420.	214.	71.	9.	3.	1423.
TEM	17.	20.	24.	29.	33.	31.	27.	26.	26.	24.	19.	17.	24.
RS	450.	520.	580.	650.	690.	510.	450.	450.	480.	470.	480.	420.	513.
PD						67.	352.	300.	118.				1182.
ETP	113.	130.	174.	210.	253.	176.	144.	142.	147.	141.	122.	105.	1857.
MAI						0.38	2.44	2.11	0.80				0.64

STATION MUNGELI LAT 22.04N LONG 81.41E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	19.	28.	20.	17.	16.	181.	335.	324.	178.	53.	14.	6.	1192.
TEM	17.	20.	24.	29.	33.	31.	27.	26.	26.	24.	19.	17.	24.
RS	450.	520.	580.	650.	690.	510.	450.	450.	480.	470.	480.	420.	513.
PD						89.	225.	215.	87.	35			979.
ETP	113.	130.	174.	210.	253.	176.	144.	142.	147.	141.	122.	105.	1857.
MAI						0.51	1.56	1.51	0.59				0.53

STATION NIMACH LAT 24.28N LONG 74.54E ELEV 496. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	11.	3.	4.	3.	5.	106.	297.	281.	145.	32.	8.	1.	896.
TEM	17.	20.	25.	30.	33.	31.	27.	26.	26.	26.	21.	18.	25.
RS	425.	500.	575.	610.	655.	600.	450.	430.	480.	510.	455.	400.	508.
PD						56.	191.	177.	72.				718.
ETP	106.	126.	176.	202.	241.	206.	146.	136.	148.	159.	123.	103.	1872.
MAI						0.27	1.31	1.30	0.49				0.38

STATION NOWGONG LAT 25.04N LONG 79.27E ELEV 229. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	23.	17.	8.	2.	7.	90.	342.	341.	169.	29.	10.	6.	1044.
TEM	17.	19.	24.	29.	34.	33.	28.	26.	26.	25.	20.	17.	25.
RS	440.	500.	580.	630.	660.	650.	480.	470.	550.	520.	440.	400.	527.
PD						50.	231.	230.	82.				849.
ETP	108.	123.	174.	207.	246.	229.	157.	149.	169.	158.	114.	99.	1933.
MAI						0.22	1.47	1.54	0.48				0.44

STATION PACHMARHI LAT 22.28N LONG 78.26E ELEV 1075. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	28.	25.	13.	10.	16.	202.	753.	647.	436.	84.	26.	4.	2244.
TEM	16.	18.	22.	27.	30.	27.	22.	22.	22.	21.	17.	15.	21.
RS	450.	520.	580.	640.	660.	550.	480.	460.	550.	520.	480.	420.	526.
PD						108.	593.	499.	314.	48.			1905.
ETP	107.	123.	165.	199.	229.	171.	137.	130.	152.	142.	115.	99.	1769.
MAI						0.63	4.32	3.83	2.06	0.33			1.08

STATION PENDRA LAT 22.46N LONG 81.54E ELEV 625. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	29.	31.	25.	21.	22.	205.	401.	393.	229.	83.	11.	11.	1461.
TEM	17.	20.	25.	29.	33.	29.	26.	25.	25.	23.	20.	17.	24.
RS	415.	490.	570.	610.	655.	540.	440.	440.	480.	515.	450.	400.	500.
PD						110.	283.	276.	132.	47.			1216.
ETP	104.	122.	173.	200.	240.	177.	138.	137.	144.	152.	117.	100.	1805.
MAI						0.62	2.05	2.02	0.91	0.31			0.67

STATION RAIGARH LAT24.01N LONG 76.44E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	14.	7.	9.	3.	7.	112.	405.	329.	198.	17.	23.	9.	1133.
TEM	21.	24.	28.	33.	36.	33.	28.	28.	28.	27.	23.	21.	28.
RS	425.	500.	575.	610.	650.	640.	460.	430.	430.	510.	445.	400.	506.
PD						59.	286.	219.	104.				927.
ETP	118.	140.	190.	216.	253.	229.	153.	142.	138.	165.	126.	111.	1980.
MAI						0.26	1.87	1.55	0.76				0.47

STATION RAIPUR LAT 21.14N LONG 81.39E ELEV 298. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	12.	20.	23.	15.	17.	194.	392.	394.	249.	62.	8.	2.	1388.
TEM	21.	23.	28.	32.	36.	32.	27.	27.	28.	26.	23.	20.	27.
RS	460.	520.	585.	650.	665.	550.	500.	480.	460.	520.	480.	435.	525.
PD						101.	275.	277.	149.				1151.
ETP	126.	143.	191.	227.	258.	192.	162.	155.	145.	165.	134.	118.	2019.
MAI						0.52	1.70	1.78	1.02				0.57

STATION RATLAM LAT 23.19N LONG 75.03E ELEV 486. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	10.	2.	3.	2.	12.	98.	311.	242.	237.	58.	3.	0.	978.
TEM	19.	22.	26.	30.	33.	31.	27.	25.	26.	26.	22.	20.	26.
RS	420.	510.	575.	635.	640.	500.	470.	390.	520.	520.	465.	440.	515.
PD						53.	204.	143.	139.				791.
ETP	109.	134.	182.	213.	234.	204.	151.	121.	159.	163.	130.	120.	1919.
MAI						0.26	1.35	1.18	0.87				0.41

STATION SABAUR LAT 25.14N 87.04E ELEV 37. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	19.	17.	9.	22.	59.	175.	258.	256.	234.	80.	6.	1.	1136.
TEM	16.	19.	24.	29.	31.	31.	29.	29.	29.	27.	21.	17.	25.
RS	415.	490.	570.	610.	655.	560.	450.	430.	460.	515.	450.	400.	500.
PD						84.	157.	155.	136.				930.
ETP	100.	119.	172.	200.	232.	190.	153.	146.	150.	164.	121.	99.	1845.
MAI						0.44	1.03	1.07	0.91				0.50

STATION SAGAR LAT 23.51N LONG 78.45E ELEV 531. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	46.	13.	10.	4.	8.	145.	463.	419.	228.	44.	24.	7.	1411.
TEM	18.	21.	25.	30.	34.	31.	26.	25.	26.	25.	22.	19.	25.
RS	460.	520.	580.	645.	660.	510.	450.	400.	510.	515.	490.	435.	515.
PD						72.	337.	299.	131.				1172.
ETP	118.	134.	181.	217.	247.	175.	143.	124.	154.	158.	134.	115.	1898.
MAI						0.41	2.37	2.41	0.85				0.62

STATION SAGAR LAT 23 54 N LONG 78 48 E ELEV 551.0 M 110 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	0.	0.	0.	0.	0.	23.	168.	139.	30.	0.	0.	0.	771.
75.	0.	0.	0.	0.	0.	67.	280.	251.	88.	0.	0.	0.	1022.
50.	4.	2.	1.	1.	2.	121.	383.	358.	159.	6.	1.	1.	1225.
5.	89.	56.	46.	23.	47.	357.	733.	737.	475.	163.	93.	61.	1829.
PM	19.	12.	9.	5.	10.	146.	408.	388.	193.	33.	17.	12.	1253.
TEMC	18.	20.	25.	30.	33.	31.	27.	26.	26.	25.	22.	18.	25.
ETP	118.	132.	180.	217.	244.	175.	144.	125.	155.	159.	134.	113.	1895.
MAI	0.00	0.00	0.00	0.00	0.00	0.38	1.95	2.02	0.56	0.00	0.00	0.00	0.54

STATION SARAIPALI LAT 21.05N LONG 82.27E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	14.	22.	15.	18.	22.	207.	393.	401.	221.	51.	15.	3.	1382.
TEM	22.	25.	29.	32.	35.	31.	27.	26.	27.	26.	24.	22.	27.
RS	470.	530.	590.	630.	665.	550.	430.	440.	500.	520.	490.	440.	521.
PD						112.	276.	283.	124.				1146.
ETP	135.	151.	198.	222.	255.	189.	138.	140.	155.	166.	141.	125.	2014.
MAI						0.59	2.00	2.02	0.80				0.57

STATION SATNA LAT 24.34N LONG 80.50E ELEV 317. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	36.	23.	14.	10.	11.	126.	356.	320.	176.	47.	13.	6.	1138.
TEM	17.	19.	25.	30.	35.	34.	29.	28.	28.	25.	20.	17.	25.
RS	435.	500.	580.	630.	660.	510.	450.	440.	485.	520.	445.	405.	505.
PD						64.	243.	212.	85.				932.
ETP	107.	124.	176.	211.	250.	184.	150.	144.	154.	161.	117.	101.	1879.
MAI						0.35	1.62	1.47	0.55				0.50

STATION SEONI LAT 22.05N LONG 79.33E ELEV 619. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	25.	24.	23.	21.	23.	207.	479.	345.	194.	76.	25.	5.	1447.
TEM	18.	21.	25.	30.	33.	30.	26.	25.	25.	24.	20.	19.	25.
RS	450.	520.	580.	650.	690.	530.	470.	480.	490.	470.	480.	420.	519.
PD						112.	352.	234.	101.	44			1203.
ETP	116.	135.	180.	215.	254.	177.	146.	148.	147.	141.	127.	109.	1895.
MAI						0.63	2.40	1.57	0.68				0.63

STATION SHEOPUR LAT 25.40N LONG 76.41E ELEV 235. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	15.	6.	9.	2.	10.	71.	306.	350.	112.	39.	4.	3.	927.
TEM	16.	19.	25.	30.	35.	35.	30.	28.	28.	26.	20.	17.	26.
RS	410.	480.	575.	600.	655.	570.	480.	500.	550.	510.	450.	440.	518.
PD							199.	238.	59.				746.
ETP	99.	119.	177.	201.	249.	209.	165.	165.	176.	159.	118.	110.	1947.
MAI							1.21	1.44	0.33				0.38

STATION SHIVPURI LAT 25.25N LONG 77.39E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	10.	8.	5.	3.	6.	89.	305.	274.	131.	15.	8.	8.	862.
TEM	17.	19.	24.	29.	34.	33.	28.	26.	26.	25.	20.	17.	25.
RS	440.	500.	580.	630.	660.	650.	480.	470.	550.	520.	440.	400.	527.
PD							198.	171.	66.				688.
ETP	108.	123.	174.	207.	246.	229.	157.	149.	169.	158.	114.	99.	1933.
MAI							1.27	1.15	0.39				0.36

STATION TIKAMGARH LAT 24.45N LONG 78.50E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	17.	15.	7.	4.	7.	90.	345.	304.	158.	29.	18.	8.	1002.
TEM	17.	19.	24.	29.	34.	33.	28.	26.	26.	25.	20.	17.	25.
RS	440.	500.	580.	630.	660.	650.	480.	470.	550.	520.	440.	400.	527.
PD							234.	198.	77.				812.
ETP	108.	123.	174.	207.	246.	229.	157.	149.	169.	158.	114.	99.	1933.
MAI							1.49	1.33	0.46				0.42

MADHYA PRADESH

STATIOF UMARIA LAT 23.32N LONG 80.53E ELEV 459. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	37.	26.	20.	9.	9.	141.	409.	410.	228.	43.	14.	6.	1352.
TEM	17.	19.	24.	30.	34.	32.	27.	26.	27.	24.	19.	17.	25.
RS	440.	510.	580.	660.	660.	510.	450.	410.	460.	520.	470.	415.	507.
PD						70.	290.	291.	131.				1120.
ETP	109.	126.	175.	218.	247.	179.	146.	131.	142.	156.	120.	102.	1852.
MAI						0.39	1.98	2.23	0.92				0.60

MAHARASHTRA

STATION AHMADNAGAR, LAT19.05N LONG 74.55E ELEV 657. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	3.	0.	5.	11.	26.	131.	102.	98.	175.	84.	33.	8.	676.
TEM	21.	23.	27.	30.	31.	28.	26.	25.	25.	25.	22.	21.	25.
RS	480.	550.	610.	655.	660.	510.	415.	410.	510.	520.	500.	450.	523.
PD						66.	55.	53.	84.	48.			525.
ETP	133.	151.	196.	218.	233.	163.	130.	127.	152.	161.	139.	124.	1927.
MAI						0.41	0.42	0.42	0.55	0.30			0.27

STATION AKOLA LAT 20.42N LONG 77.02E ELEV 282. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	9.	8.	8.	7.	11.	146.	261.	170.	178.	46.	28.	6.	878.
TEM	22.	24.	28.	33.	35.	32.	28.	27.	27.	27.	23.	21.	27.
RS	460.	525.	600.	645.	660.	550.	430.	450.	460.	520.	485.	440.	519.
PD						72.	160.	82.	87.				702.
ETP	131.	147.	199.	227.	254.	191.	141.	146.	144.	166.	137.	123.	2007.
MAI						0.38	1.13	0.56	0.60				0.35

STATION AKOLA LAT 20 42 N LONG 77 0 E ELEV 282.0 M 111 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	0.	0.	0.	0.	0.	35.	81.	38.	30.	0.	0.	0.	468.
75.	0.	0.	0.	0.	0.	77.	148.	88.	76.	1.	0.	0.	641.
50.	1.	1.	1.	1.	1.	122.	213.	144.	130.	10.	1.	1.	785.
5.	52.	36.	45.	24.	47.	300.	445.	370.	353.	215.	99.	67.	1220.
PM	10.	7.	9.	5.	9.	139.	231.	166.	152.	46.	19.	13.	806.
TEMC	22.	24.	28.	32.	35.	32.	28.	27.	27.	27.	23.	21.	27.
ETP	132.	148.	196.	225.	260.	197.	141.	142.	161.	169.	139.	122.	2032.
MAI	0.00	0.00	0.00	0.00	0.00	0.39	1.05	0.62	0.48	0.00	0.00	0.00	0.32

STATION ALIBAG LAT 18.38N LONG 72.52E ELEV 7. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	2.	0.	0.	2.	17.	528.	699.	445.	310.	90.	28.	3.	2124.
TEM	23.	24.	26.	28.	29.	28.	27.	27.	27.	27.	26.	24.	26.
RS	460.	520.	580.	610.	630.	460.	390.	370.	460.	510.	500.	450.	495.
PD						395.	545.	322.	203.	50.			1799.
ETP	134.	144.	181.	193.	213.	148.	127.	119.	143.	166.	153.	136.	1857.
MAI						2.66	4.31	2.71	1.42	0.30			0.97

STATION AMRAOTI LAT 20.56N LONG 77.47E ELEV 370. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	15.	13.	12.	13.	12.	149.	286.	210.	186.	50.	24.	6.	976.
TEM	22.	25.	29.	32.	35.	31.	27.	26.	27.	26.	24.	22.	27.
RS	470.	530.	590.	630.	665.	550.	430.	440.	500.	520.	490.	440.	521.
PD						74.	182.	115.	94.				789.
ETP	135.	151.	198.	222.	255.	189.	138.	140.	155.	166.	141.	125.	2014.
MAI						0.39	1.32	0.82	0.60				0.39

STATION AURANGABAD LAT 19.53N LONG 75.20E ELEV 561. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	3.	3.	4.	7.	17.	141.	189.	146.	179.	62.	32.	9.	792.
TEM	22.	24.	28.	31.	32.	29.	26.	25.	25.	26.	23.	21.	26.
RS	480.	550.	610.	655.	660.	510.	415.	410.	510.	520.	500.	450.	523.
PD						70.	96	72.	88.	39.			627.
ETP	136.	154.	201.	224.	240.	166.	130.	127.	153.	162.	142.	126.	1961.
MAI						0.42	0.74	0.57	0.57	0.24			0.32

STATION BOMBAY LAT 18.54N LONG 72.49E ELEV 11. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	2.	1.	0.	3.	16.	520.	710.	439.	297.	88.	21.	2.	2099.
TEM	24.	25.	27.	29.	30.	29.	27.	27.	27.	28.	28.	26.	27.
RS	460.	520.	580.	610.	630.	460.	390.	370.	460.	510.	500.	450.	495.
PD						388.	555.	316.	191.	49.			1777.
ETP	139.	149.	186.	198.	218.	151.	127.	120.	145.	169.	158.	141.	1901.
MAI						2.57	4.37	2.64	1.32	0.29			0.93

STATION BOMBAY LAT 18 54 N LONG 72 54 E ELEV 11.0 M 174 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	0.	0.	0.	0.	0.	198.	260.	103.	56.	0.	0.	0.	1183.
75.	0.	0.	0.	0.	0.	345.	445.	224.	142.	2.	0.	0.	1580.
50.	0.	0.	0.	0.	2.	484.	617.	350.	238.	15.	2.	0.	1903.
5.	14.	6.	3.	7.	76.	965.	1210.	839.	639.	260.	66.	10.	2869.
PM	3.	1.	1.	1.	15.	520.	661.	395.	279.	58.	13.	2.	1949.
TEMC	24.	25.	27.	29.	30.	29.	27.	27.	27.	28.	27.	26.	27.
ETP	139.	148.	186.	198.	218.	150.	127.	120.	145.	169.	157.	140.	1897.
MAI	0.00	0.00	0.00	0.00	0.00	2.30	3.50	1.87	0.98	0.01	0.00	0.00	0.83

STATION BULDANA LAT 20.32N LONG 76.11E ELEV 650. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	11.	8.	7.	8.	14.	68.	237.	68.	64.	48.	29.	13.	575.
TEM	20.	24.	28.	31.	32.	29.	25.	24.	25.	25.	23.	21.	26.
RS	460.	525.	600.	645.	660.	550.	430.	450.	460.	520.	485.	440.	519.
PD							139.						436.
ETP	126.	148.	198.	220.	239.	179.	133.	135.	136.	161.	136.	123.	1933.
MAI							1.04						0.23

STATION CHANDA LAT 19.58N LONG 79.18E ELEV 193. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	5.	21.	22.	17.	11.	181.	404.	363.	235.	73.	14.	3.	1349.
TEM	22.	24.	28.	32.	36.	32.	28.	27.	27.	26.	22.	20.	27.
RS	480.	550.	610.	650.	660.	510.	480.	390.	500.	520.	500.	450.	525.
PD						89.	286.	249.	137.				1117.
ETP	135.	155.	203.	228.	256.	179.	157.	127.	158.	164.	139.	123.	2023.
MAI						0.50	1.82	1.97	0.87				0.55

STATION CHIKALDA LAT 21.25N LONG 77.19E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	17.	15.	11.	9.	20.	214.	537.	445.	306.	77.	46.	13.	1710.
TEM	22.	25.	29.	32.	35.	31.	27.	26.	27.	26.	24.	22.	27.
RS	470.	530.	590.	630.	665.	550.	430.	440.	500.	520.	490.	440.	521.
PD						118.	403.	322.	199.				1435.
ETP	135.	151.	198.	222.	255.	189.	138.	140.	155.	166.	141.	125.	2014.
MAI						0.63	2.91	2.30	1.29				0.71

STATION DAHANU LAT 19.59N LONG 72.43E ELEV 5. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	2.	1.	1.	3.	12.	358.	730.	347.	226.	57.	20.	2.	1759.
TEM	22.	23.	26.	28.	30.	29.	27.	27.	27.	27.	26.	24.	26.
RS	495.	550.	600.	650.	665.	460.	390.	390.	510.	515.	500.	450.	515.
PD						245.	572.	235.	129.				1478.
ETP	142.	150.	188.	207.	229.	151.	127.	126.	159.	167.	152.	134.	1932.
MAI						1.62	4.51	1.87	0.81				0.76

STATION DEVGARH LAT 16.22N LONG 73.22E ELEV 36. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	2.	0.	1.	6.	40.	680.	702.	385.	302.	92.	32.	5.	2247.
TEM	26.	26.	27.	29.	30.	28.	27.	26.	27.	27.	27.	26.	27.
RS	500.	560.	610.	655.	645.	440.	390.	400.	500.	525.	500.	480.	517.
PD						528.	548.	269.	196.	51.			1907.
ETP	156.	164.	199.	214.	222.	140.	124.	127.	154.	170.	157.	153.	1981.
MAI						3.78	4.40	2.12	1.27	0.30			0.96

STATION GONDIA LAT 21.27N LONG 80.12E ELEV 313. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	18.	31.	16.	16.	14.	219.	504.	444.	222.	67.	23.	6.	1580.
TEM	20.	23.	27.	32.	36.	33.	27.	27.	27.	26.	22.	20.	27.
RS	460.	520.	585.	650.	665.	550.	500.	480.	460.	520.	480.	435.	525.
PD						123.	373.	321.	125.				1321.
ETP	126.	143.	190.	226.	257.	195.	163.	155.	145.	164.	133.	119.	2016.
MAI						0.63	2.30	2.07	0.87				0.66

STATION HARNAI LAT 17.49N LONG 73.06E ELEV 20. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	0.	0.	0.	11.	48.	789.	952.	639.	243.	113.	15.	2.	2812.
TEM	25.	25.	26.	28.	29.	28.	26.	26.	26.	27.	27.	26.	27.
RS	490.	550.	620.	660.	660.	440.	390.	400.	500.	520.	500.	470.	517.
PD						624.	768.	492.	144.	59.			2405.
ETP	152.	160.	198.	210.	223.	140.	124.	126.	154.	169.	157.	149.	1961.
MAI						4.46	6.18	3.90	0.94	0.35			1.23

STATION JALGAON LAT 21.03N LONG 75.34E ELEV 201. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	5.	2.	5.	2.	13.	143.	242.	194.	159.	48.	22.	6.	842.
TEM	22.	24.	28.	33.	35.	32.	28.	27.	27.	27.	23.	21.	27.
RS	470.	520.	590.	650.	680.	560.	430.	450.	500.	540.	480.	440.	526.
PD						71.	143.	101.	78.				671.
ETP	133.	145.	195.	230.	260.	195.	142.	146.	157.	173.	137.	123.	2036.
MAI						0.36	1.01	0.69	0.49				0.33

STATION JEUR LAT 18.12N LONG 75.12E ELEV 521. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	0.	2.	2.	16.	44.	89.	107.	88.	141.	83.	23.	5.	600.
TEM	22.	24.	28.	31.	32.	29.	27.	26.	26.	26.	23.	21.	26.
RS	490.	550.	600.	660.	670.	600.	450.	480.	510.	515.	500.	450.	540.
PD							57.	49.	70.	47.			458.
ETP	140.	155.	197.	224.	241.	196.	144.	151.	156.	161.	142.	127.	2032.
MAI							0.40	0.33	0.45	0.29			0.23

STATION JUNNAR LAT 19.13N LONG 73.53E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	3.	2.	2.	11.	19.	114.	231.	133.	119.	66.	40.	4.	744.
TEM	22.	24.	28.	31.	32.	29.	26.	25.	25.	26.	23.	21.	26.
RS	480.	550.	610.	655.	660.	510.	415.	410.	510.	520.	500.	450.	523.
PD						60.	133.	67.	62.				585.
ETP	136.	154.	201.	224.	240.	166.	130.	127.	153.	162.	142.	126.	1961.
MAI						0.36	1.03	0.53	0.40				0.30

STATION KOLHAPUR LAT 16.42N LONG 74.14E ELEV 570. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	0.	1.	9.	33.	77.	163.	375.	213.	103.	122.	40.	1.	1137.
TEM	23.	25.	27.	29.	29.	26.	24.	23.	24.	25.	24.	22.	25.
RS	510.	550.	620.	670.	640.	500.	425.	500.	510.	520.	500.	475.	535.
PD						79.	260.	118.	55.	63.			930.
ETP	149.	157.	202.	220.	217.	152.	127.	148.	150.	161.	143.	137.	1962.
MAI						0.52	2.05	0.79	0.37	0.39			0.47

STATION MAHABLESHWAR LAT 17.56N LONG 73.40E ELEV 1382. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	3.	2.	7.	30.	55.	898.	2521.	1715.	709.	179.	57.	6.	6182.
TEM	19.	21.	23.	24.	24.	19.	18.	18.	18.	20.	19.	19.	20.
RS	490.	550.	620.	650.	580.	360.	340.	320.	480.	520.	500.	470.	490.
PD						720.	2148.	1439.	554.	88.			5370.
ETP	128.	141.	182.	189.	172.	93.	86.	81.	119.	141.	129.	123.	1583.
MAI						7.78	24.85	17.80	4.67	0.62			3.39

STATION MAHIM LAT 19.39N LONG 72.43E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	3.	1.	2.	3.	15.	367.	683.	326.	262.	56.	14.	1.	1733.
TEM	24.	25.	27.	29.	30.	29.	27.	27.	27.	28.	28.	26.	27.
RS	460.	520.	580.	610.	630.	460.	390.	370.	460.	510.	500.	450.	495.
PD						253.	531.	217.	160.				1455.
ETP	139.	149.	186	198.	218.	151.	127.	120.	145.	169.	158.	141.	1901.
MAI						1.68	4.18	1.81	1.11				0.77

STATION MALEGAON LAT 20.33N LONG 74.32E ELEV 437. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	4.	3.	1.	4.	15.	110.	109.	95.	144.	56.	36.	4.	581.
TEM	21.	23.	27.	31.	33.	30.	27.	26.	26.	26.	23.	21.	26.
RS	470.	530.	590.	640.	680.	530.	400.	450.	500.	530.	490.	440.	521.
PD						58.	58.	52.	72.				441.
ETP	130.	144.	189.	217.	248.	178.	129.	143.	153.	166.	138.	121.	1956.
MAI						0.33	0.45	0.36	0.47				0.23

STATION MIRAJ 16.49N LONG 74.41E ELEV 554. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	3.	0.	4.	30.	56.	71.	116.	101.	105.	107.	42.	4.	639.
TEM	22.	24.	27.	30.	30.	27.	25.	25.	25.	26.	24.	22.	26.
RS	500.	550.	620.	670.	640.	500.	425.	500.	510.	520.	500.	510.	538.
PD							60.	54.	56.	57.			492.
ETP	147.	155.	202.	223.	221.	156.	130.	152.	152.	162.	144.	146.	1990.
MAI							0.46	0.36	0.37	0.35			0.25

STATION NAGPUR LAT 21.09N LONG 79.07E ELEV 310. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	11.	23.	17.	16.	21.	222.	376.	286.	185.	55.	20.	10.	1242.
TEM	21.	24.	28.	32.	36.	33.	28.	27.	27.	26.	22.	20.	27.
RS	495.	555.	620.	660.	655.	510.	450.	500.	490.	520.	500.	470.	535.
PD						125.	261.	182.	93.				1023.
ETP	136.	155.	204.	229.	254.	180.	147.	161.	154.	164.	138.	128.	2051.
MAI						0.70	1.77	1.13	0.60				0.50

STATION NAGPUR LAT 21 12 N LONG 79 12 E ELEV 310.0 M 126 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	0.	0.	0.	0.	0.	48.	152.	102.	54.	0.	0.	0.	748.
75.	0.	0.	0.	0.	1.	111.	245.	181.	113.	1.	0.	0.	972.
50.	2.	2.	3.	3.	6.	179.	329.	255.	174.	13.	1.	1.	1152.
5.	63.	77.	71.	67.	78.	449.	608.	514.	405.	234.	79.	56.	1679.
PM	12.	16.	15.	14.	19.	205.	348.	275.	194.	52.	15.	11.	1175.
TEMC	21.	23.	28.	32.	35.	32.	28.	27.	27.	26.	23.	20.	27.
ETP	137.	153.	204.	231.	252.	177.	147.	161.	154.	165.	140.	128.	2049.
MAI	0.00	0.00	0.00	0.00	0.00	0.62	1.67	1.12	0.73	0.01	0.00	0.00	0.47

STATION NANDURBAR LAT 21.22N LONG 74.15E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	7.	1.	2.	1.	7.	117.	206.	127.	117.	37.	18.	4.	645.
TEM	22.	24.	28.	31.	32.	29.	26.	25.	25.	26.	23.	21.	26.
RS	480.	550.	610.	655.	660.	510.	415.	410.	510.	520.	500.	450.	523.
PD						61.	111.	65.	61.				497.
ETP	136.	154.	201.	224.	240.	166.	130.	127.	153.	162.	142.	126.	1961.
MAI						0.37	0.86	0.51	0.40				0.25

STATION NASIK LAT 20.00N LONG 73.47E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	3.	1.	2.	7.	22.	119.	202.	127.	127.	62.	21.	5.	699.
TEM	22.	24.	28.	31.	32.	29.	26.	25.	25.	26.	23.	21.	26.
RS	480.	550.	610.	655.	660.	510.	415.	410.	510.	520.	500.	450.	523.
PD						62.	108.	65.	65.				545.
ETP	136.	154.	201.	224.	240.	166.	130.	127.	153.	162.	142.	126.	1961.
MAI						0.37	0.83	0.51	0.42				0.28

STATION OSMANABAD 18.10N LONG 76.03E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	5.	4.	7.	17.	21.	148.	161.	149.	211.	54.	24.	8.	809.
TEM	22.	25.	28.	31.	32.	28.	25.	25.	25.	25.	23.	22.	26.
RS	495.	555.	620.	660.	660.	510.	450.	430.	490.	520.	500.	470.	530.
PD						73.	78.	74.	116.				642.
ETP	143.	159.	206.	224.	239.	163.	139.	132.	145.	160.	141.	133.	1985.
MAI						0.45	0.56	0.56	0.80				0.32

STATION PARBHANI LAT 19.08N LONG 76.50E ELEV 423. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	9.	8.	11.	10.	19.	154.	192.	144.	215.	49.	34.	9.	853.
TEM	22.	25.	29.	32.	34.	31.	27.	26.	26.	26.	22.	21.	27.
RS	490.	550.	610.	655.	665.	580.	450.	450.	480.	510.	500.	455.	533.
PD						76.	99.	72.	119.				681.
ETP	140.	157.	204.	228.	251.	197.	146.	143.	148.	160.	140.	127.	2039.
MAI						0.38	0.68	0.50	0.80				0.33

STATION POONA LAT 18.32N LONG 73.51E ELEV 559. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	2.	0.	3.	18.	35.	103.	187.	106.	127.	92.	37.	5.	715.
TEM	21.	23.	26.	29.	30.	27.	25.	25.	25.	26.	23.	21.	25.
RS	480.	570.	616.	661.	665.	531.	403.	400.	474.	495.	465.	432.	516.
PD						55.	95.	56.	65.	51.			559.
ETP	134.	156.	196.	217.	229.	167.	124.	122.	141.	154.	131.	120.	1893.
MAI						0.33	0.76	0.46	0.46	0.33			0.30

STATION POONA LAT 18 30 N LONG 73 54 E ELEV 559.0 M 125 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	0.	0.	0.	0.	0.	13.	33.	24.	22.	5.	0.	0.	423.
75.	0.	0.	0.	0.	1.	46.	87.	56.	59.	27.	0.	0.	568.
50.	0.	0.	0.	3.	9.	93.	149.	91.	104.	63.	5.	0.	687.
5.	15.	6.	18.	71.	157.	316.	412.	233.	297.	270.	128.	25.	1043.
PM	3.	1.	3.	15.	35.	119.	176.	105.	125.	91.	27.	5.	704.
TEMC	21.	23.	26.	29.	30.	27.	25.	24.	25.	25.	23.	21.	25.
ETP	134.	155.	196.	217.	229.	167.	124.	121.	141.	154.	131.	119.	1888.
MAI	0.00	0.00	0.00	0.00	0.00	0.28	0.70	0.46	0.42	0.17	0.00	0.00	0.30

STATION PUSAD LAT 19.55N LONG 77.35E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	9.	14.	11.	14.	14.	162.	271.	192.	165.	40.	29.	9.	930.
TEM	22.	24.	28.	31.	32.	29.	26.	25.	25.	26.	23.	21.	26.
RS	480.	550.	610.	655.	660.	510.	415.	410.	510.	520.	500.	450.	523.
PD						79.	168.	99.	80.				748.
ETP	136.	154.	201.	224.	240.	166.	130.	127.	153.	162.	142.	126.	1961.
MAI						0.47	1.30	0.78	0.52				0.38

STATION RATNAGIRI LAT 16.59N LONG 73.20E ELEV 35. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	2.	1.	0.	4.	31.	770.	850.	483.	333.	104.	35.	4.	2617.
TEM	25.	25.	27.	29.	30.	28.	27.	26.	26.	27.	27.	26.	27.
RS	500.	560.	610.	665.	645.	440.	390.	400.	500.	525.	500.	480.	518.
PD						607.	678.	355.	223.	56.			2233.
ETP	154.	162.	197.	216.	222.	140.	125.	127.	154.	170.	156.	151.	1974.
MAI						4.34	5.43	2.80	1.45	0.33			1.13

STATION SAKOLI LAT 21.05N LONG 80.00E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	14.	31.	17.	16.	15.	230.	525.	425.	226.	52.	15.	8.	1574.
TEM	21.	23.	28.	32.	36.	32.	27.	27.	28.	26.	23.	20.	27.
RS	460.	520.	585.	650.	665.	550.	500.	480.	460.	520.	480.	435.	525.
PD						133.	392.	304.	129.				1315.
ETP	126.	143.	191.	227.	258.	192.	162.	155.	145.	165.	134.	118.	2019.
MAI						0.69	2.42	1.96	0.89				0.65

MAHARASHTRA

STATION SHOLAPUR LAT 17.40N LONG 75.54E ELEV 479. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	4.	2.	7.	16.	26.	109.	128.	140.	184.	92.	28.	7.	743.
TEM	23.	26.	29.	32.	33.	29.	27.	27.	26.	26.	24.	23.	27.
RS	500.	550.	620.	630.	640.	490.	400.	430.	450.	520.	530.	480.	520.
PD						58.	65.	70.	92.	51.			584.
ETP	147.	161.	210.	219.	235.	161.	129.	137.	139.	166.	154.	139.	1996.
MAI						0.36	0.51	0.51	0.66	0.31			0.29

STATION SIRONCHA LAT 18.50N LONG 79.58E ELEV 123. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	10.	17.	14.	24.	26.	171.	378.	305.	201.	63.	17.	6.	1232.
TEM	23.	26.	30.	33.	36.	33.	28.	28.	28.	28.	24.	22.	28.
RS	490.	550.	605.	660.	670.	510.	450.	500.	490.	515.	500.	450.	533.
PD						80.	263.	198.	107.				1014.
ETP	143.	162.	208.	236.	260.	181.	149.	164.	157.	168.	144.	129.	2100.
MAI						0.45	1.76	1.21	0.68				0.48

STATION VENGURLA LAT 15.52N LONG 73.58E ELEV 9. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	1.	1.	1.	9.	57.	836.	911.	458.	263.	96.	34.	4.	2671.
TEM	25.	25.	27.	29.	29.	27.	26.	26.	26.	27.	27.	26.	27.
RS	500.	565.	625.	650.	635.	430.	380.	380.	480.	500.	490.	480.	510.
PD						666.	732.	333.	161.	52.			2280.
ETP	155.	164.	201.	211.	216.	135.	121.	120.	148.	162.	152.	150.	1935.
MAI						4.92	6.07	2.76	1.09	0.32			1.18

STATION YEOTMAL LAT 20.23N LONG 78.08E ELEV 15. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	12.	19.	10.	12.	16.	172.	335.	232.	186.	52.	20.	9.	1075.
TEM	22.	25.	29.	32.	35.	31.	26.	26.	26.	25.	23.	22.	27.
RS	470.	530.	590.	630.	665.	550.	430.	440.	500.	520.	490.	440.	521.
PD						81.	225.	134.	94.				876.
ETP	135.	153.	199.	221.	255.	188.	137.	138.	152.	162.	138.	125.	2002.
MAI						0.43	1.64	0.97	0.61				0.44

MANIPUR

STATION IMPHAL LAT 24.51N LONG 93.58E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	13.	39.	69.	119.	154.	254.	248.	221.	144.	102.	40.	10.	1413.
TEM	10.	12.	16.	19.	20.	21.	21.	21.	20.	17.	13.	10.	17.
RS	415.	480.	570.	600.	655.	490.	420.	470.	480.	510.	480.	430.	500.
PD			42.	62.	76.	154.	148.	124.	72.	55.			1173.
ETP	80.	94.	137.	152.	175.	130.	117.	130.	126.	128.	103.	86.	1459.
MAI			0.30	0.40	0.43	1.18	1.27	0.95	0.57	0.43			0.80

MEGHALAYA

STATION CHERRAPUNJI LAT 25.15N LONG 91.44E ELEV 1313. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	20.	37.	179.	605.	1705.	2540.	2457.	1828.	1168.	447.	47.	5.	11038.
TEM	12.	14.	17.	19.	19.	20.	20.	20.	21.	19.	16.	13.	17.
RS	415.	480.	570.	600.	655.	420.	400.	390.	400.	510.	450.	435.	477.
PD			88.	462.	1430.	2165.	2092.	1539.	958.	323.			9644.
ETP	87.	101.	140.	151.	173.	110.	109.	107.	106.	135.	104.	95.	1417.
MAI			0.62	3.07	8.26	19.65	19.20	14.42	9.03	2.40			6.80

STATION CHERRAPUNJI LAT 25 18 N LONG 91 48 E ELEV 1313.0 M 107 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	0.	0.	14.	216.	430.	1131.	1171.	890.	322.	47.	0.	0.	7877.
75.	0.	5.	75.	432.	828.	1856.	1824.	1342.	663.	172.	1.	0.	9580.
50.	5.	21.	175.	651.	1222.	2517.	2403.	1736.	1013.	346.	10.	1.	10900.
5.	92.	165.	734.	1465.	2664.	4742.	4298.	2999.	2337.	1187.	269.	50.	14612.
PM	20.	44.	249.	721.	1342.	2672.	2525.	1813.	1130.	446.	56.	9.	11027.
TEMC	12.	13.	17.	18.	19.	20.	20.	20.	21.	19.	16.	13.	17.
ETP	87.	98.	139.	149.	174.	110.	109.	107.	106.	134.	105.	95.	1414.
MAI	0.01	0.05	0.54	2.89	4.76	16.86	16.69	12.57	6.25	1.28	0.01	0.00	6.77

STATION SHILLONG LAT 25.34N LONG 91.53E ELEV 1500. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	15.	29.	59.	136.	325.	545.	395.	335.	315.	220.	35.	6.	2415.
TEM	10.	12.	16.	19.	20.	21.	21.	21.	20.	17.	13.	10.	17.
RS	415.	480.	570.	600.	655.	490.	420.	470.	480.	510.	480.	430.	500.
PD				68.	216.	410.	278.	225.	207.	124.			2055.
ETP	80.	94.	137.	152.	175.	130.	117.	130.	126.	128.	103.	86.	1459.
MAI				0.45	1.23	3.15	2.37	1.72	1.64	0.97			1.41

STATION SHILLONG LAT 25 36 N LONG 91 54 E ELEV 1500.0 M 94 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	0.	0.	1.	18.	130.	208.	131.	152.	143.	39.	0.	0.	1557.
75.	1.	2.	11.	55.	201.	330.	234.	238.	232.	93.	4.	0.	1900.
50.	4.	11.	32.	102.	264.	440.	332.	315.	313.	152.	16.	1.	2167.
5.	60.	91.	178.	315.	468.	803.	677.	568.	585.	391.	123.	30.	2921.
PM	14.	24.	53.	126.	277.	464.	358.	332.	332.	175.	33.	6.	2194.
TEMC	10.	11.	16.	19.	19.	20.	21.	21.	20.	17.	13.	10.	17.
ETP	81.	93.	137.	151.	174.	130.	117.	130.	126.	128.	103.	86.	1455.
MAI	0.01	0.02	0.08	0.36	1.15	2.54	2.00	1.83	1.85	0.73	0.04	0.00	1.31

STATION TURA LAT 25.31N LONG 90.14E ELEV 370. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	10.	22.	44.	200.	458.	702.	585.	552.	450.	244.	24.	2.	3293.
TEM	18.	21.	24.	27.	27.	26.	26.	26.	26.	25.	21.	19.	24.
RS	390.	460.	560.	620.	650.	500.	370.	360.	480.	495.	440.	380.	475.
PD				106.	333.	548.	445.	416.	326.	145.			2828.
ETP	99.	118.	169.	195.	209.	152.	117.	114.	147.	151.	119.	100.	1692.
MAI				0.54	1.59	3.59	3.81	3.64	2.22	0.96			1.67

MIZORAM

STATION AIJAL LAT 23.44N LONG 92.43E ELEV 1097. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	12.	33.	79.	180.	283.	375.	325.	327.	307.	146.	47.	18.	2132.
TEM	16.	17.	20.	22.	22.	22.	22.	22.	22.	21.	19.	17.	20.
RS	415.	480.	570.	600.	655.	490.	420.	470.	480.	510.	480.	430.	500.
PD				88.	179.	260.	216.	218.	200.	72.			1806.
ETP	99.	111.	156.	165.	186.	135.	120.	134.	132.	143.	122.	105.	1608.
MAI				0.54	0.96	1.92	1.80	1.62	1.52	0.51			1.12

STATION LUNGLEH LAT 22.53N LONG 92.45E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	14.	32.	64.	176.	326.	707.	702.	704.	601.	265.	85.	24.	3700.
TEM	10.	12.	16.	19.	20.	21.	21.	21.	20.	17.	13.	10.	17.
RS	415.	480.	570.	600.	655.	490.	420.	470.	480.	510.	480.	430.	500.
PD				85.	217.	552.	548.	550.	459.	163.	48.		3186.
ETP	80.	94.	137.	152.	175.	130.	117.	130.	126.	128.	103.	86.	1459.
MAI				0.56	1.24	4.24	4.68	4.22	3.64	1.28	0.47		2.18

STATION SILCHAR LAT 24 48 N LONG 92 48 E ELEV 29.0 M 105 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	0.	0.	16.	108.	170.	320.	291.	267.	179.	46.	0.	0.	2317.
75.	0.	7.	62.	212.	291.	452.	409.	383.	274.	105.	1.	0.	2859.
50.	5.	25.	128.	315.	403.	563.	507.	482.	357.	168.	12.	1.	3235.
5.	86.	174.	455.	697.	790.	907.	811.	789.	627.	416.	186.	49.	4152.
PM	19.	48.	168.	348.	432.	582.	524.	499.	374.	191.	42.	9.	3235.
TEMC	18.	20.	24.	26.	27.	28.	28.	28.	28.	27.	23.	19.	25.
ETP	111.	124.	170.	188.	206.	156.	150.	136.	144.	163.	131.	109.	1789.
MAI	0.00	0.06	0.37	1.13	1.41	2.89	2.72	2.81	1.90	0.64	0.01	0.00	1.60

NAGALAND

STATION KOHIMA LAT 25.38N LONG 94.10E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	14.	32.	56.	96.	184.	319.	399.	415.	243.	122.	35.	6.	1921.
TEM	10.	12.	16.	19.	20.	21.	21.	21.	20.	17.	13.	10.	17.
RS	415.	480.	570.	600.	655.	490.	420.	470.	480.	510.	480.	430.	500.
PD				52.	92.	211.	281.	295.	144.	63.			1620.
ETP	80.	94.	137.	152.	175.	130.	117.	130.	126.	128.	103.	86.	1459.
MAI				0.34	0.52	1.62	2.40	2.27	1.14	0.49			1.11

ORISSA

STATION ANANDPUR LAT 21.13N LONG 86.07E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	17.	34.	26.	52.	93.	212.	325.	298.	241.	119.	37.	4.	1458.
TEM	21.	23.	28.	31.	32.	30.	29.	29.	29.	27.	23.	21.	27.
RS	460.	530.	595.	650.	665.	500.	435.	410.	500.	530.	480.	435.	516.
PD						117.	216.	192.	142.	62.			1213.
ETP	126.	146.	195.	219.	237.	169.	146.	137.	162.	171.	137.	119.	1965.
MAI						0.69	1.48	1.40	0.88	0.36			0.62

ORISSA

STATION ANGUL LAT 20.50N LONG 85.06E ELEV 139. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	10.	30.	21.	26.	50.	178.	324.	320.	221.	123.	24.	3.	1330.
TEM	21.	23.	28.	32.	34.	31.	28.	28.	28.	[illegible]	23.	20.	27.
RS	470.	530.	600.	645.	665.	500.	450.	450.	490.	520.	490.	440.	521.
PD						87.	215.	212.	124.	63.			1100.
ETP	130.	147.	197.	224.	247.	172.	149.	149.	157.	167.	139.	119.	1998.
MAI						0.50	1.44	1.42	0.79	0.38			0.55

STATION BALASORE LAT 21.30N LONG 86.56E ELEV 20. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	17.	31.	38.	48.	98.	234.	318.	335.	287.	230.	45.	9.	1390.
TEM	21.	23.	28.	31.	32.	30.	29.	29.	29.	27.	23.	21.	27.
RS	460.	530.	595.	650.	665.	500.	435.	410.	500.	530.	480.	435.	516.
PD						136.	210.	225.	183.	133.			1417.
ETP	126.	146.	195.	219.	237.	169.	146.	137.	162.	171.	137.	119.	1965.
MAI						0.81	1.44	1.64	1.13	0.77			0.72

STATION BARIPADA LAT 21.57N LONG 86.44E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	19.	34.	34.	57.	112.	250.	367.	351.	255.	136.	29.	5.	1649.
TEM	21.	23.	28.	31.	32.	30.	29.	29.	29.	27.	23.	21.	27.
RS	460.	530.	595.	650.	665.	500.	435.	410.	500.	530.	480.	435.	516.
PD					59.	150.	253.	239.	154.	68.			1381.
ETP	126.	146.	195.	219.	237.	169.	146.	137.	162.	171.	137.	119.	1965.
MAI					0.25	0.89	1.73	1.74	0.95	0.40			0.70

STATION BISSEMEUTTACK LAT 19.31N LONG 83.30E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	9.	16.	20.	53.	90.	200.	269.	303.	213.	91.	28.	8.	1300.
TEM	22.	24.	28.	32.	36.	32.	28.	27.	27.	26.	22.	20.	27.
RS	480.	550.	610.	650.	660.	510.	480.	390.	500.	520.	500.	450.	525.
PD						106.	167.	197.	118.	50.			1074.
ETP	135.	155.	203.	228.	256.	179.	157.	127.	158.	164.	139.	123.	2023.
MAI						0.59	1.06	1.55	0.75	0.31			0.53

STATION BONAIGARH LAT 21.50N LONG 84.58E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	19.	35.	22.	23.	50.	263.	484.	448.	216.	75.	20.	5.	1660.
TEM	20.	23.	27.	32.	35.	32.	28.	28.	28.	27.	23.	20.	27.
RS	455.	510.	600.	640.	660.	490.	470.	490.	510.	520.	480.	430.	521.
PD						161.	356.	324.	120.	[illegible]			1391.
ETP	124.	139.	194.	222.	252.	171.	154.	161.	164.	167.	134.	116.	1997.
MAI						0.94	2.31	2.02	0.73	[illegible]			0.70

STATION CONTAI LAT 21.47N LONG 87.45E ELEV 11. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	19.	29.	31.	39.	123.	273.	333.	341.	269.	203.	35.	2.	1697.
TEM	21.	24.	27.	30.	30.	30.	29.	29.	29.	28.	24.	21.	27.
RS	460.	520.	580.	645.	660.	510.	450.	400.	510.	550.	490.	435.	518.
PD						170.	223.	230.	167.	109.			1424.
ETP	126.	144.	189.	215.	230.	168.	150.	134.	165.	181.	142.	121.	1966.
MAI						1.01	1.48	1.72	1.01	0.60			0.72

STATION CHANDABALI LAT 20.47N LONG 86.44E ELEV 6. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	10.	19.	26.	43.	90.	201.	348.	334.	264.	229.	57.	7.	1628.
TEM	21.	14.	28.	31.	32.	30.	29.	29.	29.	27.	24.	21.	26.
RS	475.	530.	600.	645.	665.	500.	450.	460.	510.	520.	490.	440.	524.
PD						107.	236.	224.	162.	132.			1362.
ETP	132.	111.	197.	219.	237.	168.	150.	154.	165.	169.	141.	121.	1964.
MAI						0.64	1.57	1.45	0.98	0.78			0.69

STATION CUTTACK LAT 20.48N LONG 85.56E ELEV 27. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	10.	29.	20.	27.	72.	215.	355.	365.	252.	168.	42.	4.	1559.
TEM	22.	25.	29.	32.	33.	31.	29.	29.	29.	28.	24.	22.	28.
RS	480.	525.	600.	640.	660.	520.	440.	410.	490.	520.	490.	445.	518.
PD						119.	242.	251.	152.	81.			1302.
ETP	138.	150.	203.	222.	242.	178.	147.	137.	159.	171.	144.	127.	2018.
MAI						0.67	1.65	1.83	0.95	0.47			0.64

STATION CUTTACK LAT 20 48 N LONG 85 54 E ELEV 27.0 M 106 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	0.	0.	0.	0.	11.	68.	154.	141.	121.	9.	0.	0.	1050.
75.	0.	0.	1.	1.	36.	143.	241.	232.	184.	46.	0.	0.	1310.
50.	1.	5.	6.	10.	68.	221.	319.	314.	239.	107.	5.	0.	1514.
5.	53.	112.	118.	137.	216.	516.	573.	590.	418.	439.	195.	28.	2098.
PM	10.	24.	26.	31.	85.	247.	335.	333.	250.	150.	38.	5.	1536.
TEMC	22.	25.	29.	32.	33.	31.	29.	29.	29.	28.	24.	21.	28.
ETP	137.	151.	203.	222.	241.	177.	148.	137.	160.	171.	143.	125.	2016.
MAI	0.00	0.00	0.00	0.01	0.15	0.81	1.63	1.69	1.15	0.27	0.00	0.00	0.65

STATION GOPALPUR LAT 19.16N LONG 84.53E ELEV 17. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	8.	22.	22.	15.	51.	141.	193.	200.	185.	279.	80.	15.	1211.
TEM	22.	24.	27.	28.	29.	30.	28.	29.	29.	28.	24.	22.	27.
RS	490.	550.	605.	650.	665.	615.	400.	380.	520.	515.	500.	450.	528.
PD						70.	100.	106.	93.	175.	46.		996.
ETP	140.	155.	193.	208.	227.	203.	133.	127.	169.	168.	147.	129.	1999.
MAI						0.35	0.75	0.83	0.55	1.04	0.31		0.50

ORISSA

STATION KALINGAPATNAM LAT 18.20N LONG 84.02E ELEV 6. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	4.	13.	12.	18.	42.	114.	163.	158.	176.	219.	57.	10.	986.
TEM	23.	25.	27.	29.	31.	30.	29.	29.	29.	28.	24.	22.	27.
RS	490.	550.	605.	660.	670.	400.	380.	520.	520.	515.	500.	450.	522.
PD						60.	79.	77.	85.	123.			797.
ETP	142.	157.	197.	217.	235.	135.	128.	175.	169.	168.	147.	129.	1998.
MAI						0.44	0.62	0.44	0.50	0.73			0.40

STATION KEONJHARGARH LAT 21.38N LONG 85.35E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	23.	36.	19.	48.	95.	195.	367.	300.	213.	91.	30.	5.	1422.
TEM	20.	23.	27.	32.	35.	32.	28.	28.	28.	27.	23.	20.	27.
RS	455.	510.	600.	640.	660.	490.	470.	490.	510.	520.	480.	430.	521.
PD						102.	253.	194.	118.	50.			1182.
ETP	124.	139.	194.	222.	252.	171.	154.	161.	164.	167.	134.	116.	1997.
MAI						0.59	1.64	1.21	0.72	0.30			0.59

STATION KORAPUT LAT 18.49N LONG 82.43E ELEV 913. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	8.	8.	17.	46.	62.	210.	427.	430.	265.	103.	34.	9.	1619.
TEM	19.	21.	25.	27.	28.	26.	23.	23.	23.	23.	20.	18.	23.
RS	480.	550.	610.	660.	665.	510.	460.	480.	510.	510.	500.	460.	533.
PD						115.	306.	308.	163.	55.			1354.
ETP	125.	144.	186.	207.	221.	157.	134.	139.	145.	148.	129.	117.	1852.
MAI						0.73	2.27	2.21	1.12	0.37			0.73

STATION MALKANGIRI LAT 18.21N LONG 81.54E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	4.	4.	9.	36.	46.	217.	433.	484.	302.	105.	29.	4.	1673.
TEM	20.	23.	27.	30.	31.	29.	25.	25.	26.	25.	21.	19.	25.
RS	490.	550.	605.	650.	665.	510.	450.	480.	510.	515.	450.	490.	530.
PD						121.	311.	356.	196.	56.			1402.
ETP	132.	149.	193.	215.	237.	166.	139.	149.	155.	157.	122.	130.	1943.
MAI						0.73	2.24	2.40	1.26	0.36			0.72

STATION NAYAGARH LAT 20.08N LONG 85.06E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	14.	30.	28.	47.	67.	208.	281.	266.	225.	123.	36.	8.	1333.
TEM	22.	24.	28.	32.	36.	32.	28.	27.	27.	26.	22.	20.	27.
RS	480.	550.	610.	650.	660.	510.	480.	390.	500.	520.	500.	450.	525.
PD						113.	177.	164.	128.	63.			1103.
ETP	135.	155.	203.	228.	256.	179.	157.	127.	158.	164.	139.	123.	2023.
MAI						0.63	1.13	1.30	0.81	0.38			0.55

ORISSA

STATION PURI LAT 19.48N LONG 85.49E ELEV 6. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	9.	20.	14.	12.	63.	187.	296.	256.	258.	242.	75.	8.	1440.
TEM	22.	25.	27.	29.	30.	30.	29.	29.	29.	28.	25.	22.	27.
RS	490.	550.	605.	650.	665.	615.	400.	380.	520.	515.	520.	450.	530.
PD						95.	190.	155.	157.	143.	44.		1197.
ETP	141.	157.	196.	211.	228.	203.	134.	128.	170.	170.	155.	130.	2023.
MAI						0.46	1.42	1.21	0.92	0.84	0.28		0.59

STATION SAMBALPUR LAT 21.28N LONG 83.58E ELEV 148. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	19.	25.	23.	12.	25.	238.	503.	477.	262.	68.	10.	2.	1664.
TEM	20.	23.	27.	32.	35.	32.	28.	28.	28.	27.	23.	20.	27.
RS	455.	510.	600.	640.	660.	490.	470.	490.	510.	520.	480.	430.	521.
PD						139.	373.	350.	160.				1394.
ETP	124.	139.	194.	222.	252.	171.	154.	161.	164.	167.	134.	116.	1997.
MAI						0.82	2.41	2.17	0.98				0.70

STATION SONEPUR LAT 20.50N LONG 83.54E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	12.	22.	11.	21.	22.	249.	393.	391.	209.	61.	12.	5.	1408.
TEM	21.	23.	28.	32.	36.	32.	27.	27.	28.	26.	23.	20.	27.
RS	460.	520.	585.	650.	665.	550.	500.	480.	460.	520.	480.	435.	525.
PD						149.	276.	274.	114.				1169.
ETP	126.	143.	191.	227.	258.	192.	162.	155.	145.	165.	134.	118.	2019.
MAI						0.77	1.70	1.77	0.78				0.58

STATION TITLAGARH LAT 20.18N LONG 83.09E ELEV 211. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	12.	11.	13.	15.	25.	228.	342.	395.	245.	69.	18.	3.	1376.
TEM	21.	24.	28.	32.	35.	32.	28.	27.	28.	27.	23.	21.	27.
RS	460.	520.	585.	650.	665.	550.	500.	480.	460.	520.	480.	435.	525.
PD						131.	231.	278.	146.				1141.
ETP	129.	147.	194.	228.	253.	191.	164.	156.	146.	167.	135.	120.	2030.
MAI						0.68	1.41	1.78	1.00				0.56

PUNJAB

STATION AMBALA LAT 30.25N LONG 76.46E ELEV 272. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	42.	52.	28.	12.	15.	72.	272.	250.	168.	27.	6.	15.	959.
TEM	14.	16.	22.	28.	33.	34.	31.	30.	30.	25.	19.	15.	25.
RS	300.	400.	520.	560.	620.	630.	530.	520.	530.	465.	390.	330.	483.
PD							169.	150.	81.				774.
ETP	67.	91.	148.	179.	227.	228.	185.	178.	176.	142.	100.	77.	1799.
MAI							0.91	0.84	0.46				0.43

PUNJAB

STATION AMRITSAR LAT 31.38N LONG 74.52E ELEV 234. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	38.	11.	26.	10.	11.	32.	169.	168.	106.	54.	10.	15.	649.
TEM	12.	15.	20.	25.	30.	33.	31.	30.	29.	24.	18.	13.	23.
RS	320.	410.	520.	580.	650.	650.	500.	500.	510.	465.	390.	410.	492.
PD							82.	81.	56.				502.
ETP	67.	88.	139.	174.	225.	230.	175.	172.	166.	140.	96.	90.	1762.
MAI							0.46	0.47	0.34				0.28

STATION AMRITSAR LAT 31 36 N LONG 74 54 E ELEV 234.0 M 31 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	0.	0.	1.	0.	0.	1.	82.	40.	0.	0.	0.	0.	397.
75.	3.	4.	7.	3.	1.	11.	131.	97.	5.	0.	0.	0.	538.
50.	13.	13.	19.	8.	6.	33.	175.	159.	32.	3.	1.	2.	654.
5.	105.	75.	91.	39.	56.	195.	320.	412.	400.	125.	31.	70.	1002.
PM	28.	22.	29.	12.	14.	57.	184.	184.	95.	25.	6.	14.	671.
TEMC	12.	14.	20.	25.	30.	33.	31.	30.	29.	24.	18.	13.	23.
ETP	67.	88.	128.	182.	227.	233.	185.	179.	172.	142.	94.	70.	1768.
MAI	0.05	0.04	0.06	0.01	0.01	0.05	0.71	0.54	0.03	0.00	0.00	0.00	0.30

STATION FEROZPUR LAT 30.55N LONG 74.40E ELEV 200. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	35.	12.	22.	4.	6.	34.	153.	125.	97.	26.	9.	14.	537.
TEM	12.	16.	20.	26.	31.	34.	32.	31.	29.	25.	19.	14.	24.
RS	320.	410.	520.	580.	650.	660.	550.	520.	530.	465.	390.	415.	501.
PD							75.	64.	53.				403.
ETP	68.	91.	142.	177.	229.	238.	197.	182.	173.	143.	98.	94.	1832.
MAI							0.38	0.35	0.31				0.22

STATION HOSHIARPUR LAT 31.32N LONG 75.55E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN.	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	44.	45.	36.	19.	16.	61.	251.	239.	122.	14.	6.	24.	877.
TEM	13.	16.	21.	27.	33.	34.	31.	30.	30.	26.	19.	15.	25.
RS	320.	410.	520.	580.	650.	650.	500.	500.	510.	465.	390.	410.	492.
PD							151.	140.	63.				702.
ETP	70.	92.	144.	182.	238.	237.	178.	174.	169.	146.	100.	94.	1823.
MAI							0.85	0.81	0.37				0.38

STATION LUDHIANA LAT 30.56N LONG 75.52E ELEV 247. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	35.	34.	29.	11.	10.	54.	188.	175.	119.	34.	3.	14.	706.
TEM	13.	16.	21.	27.	33.	34.	31.	30.	30.	26.	19.	15.	25.
RS	320.	410.	520.	580.	650.	650.	500.	500.	510.	465.	390.	410.	492.
PD							95.	84.	62.				551.
ETP	70.	92.	144.	182.	238.	237.	178.	174.	169.	146.	100.	94.	1823.
MAI							0.54	0.48	0.37				0.30

PUNJAB

STATION LUDHIANA LAT 30 54 N LONG 75 54 E ELEV 247.0 M 111 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	0.	0.	0.	0.	0.	0.	57.	36.	1.	0.	0.	0.	385.
75.	3.	3.	2.	1.	1.	8.	119.	89.	14.	0.	0.	0.	550.
50.	15.	14.	10.	4.	5.	29.	184.	148.	55.	2.	0.	3.	689.
5.	127.	134.	117.	64.	69.	206.	428.	395.	425.	91.	19.	81.	1121.
PM	33.	34.	28.	15.	16.	57.	205.	173.	114.	18.	4.	17.	713.
TEMC	13.	15.	21.	27.	32.	34.	31.	30.	29.	25.	19.	14.	24.
ETP	70.	91.	144.	182.	234.	236.	178.	174.	168.	145.	100.	93.	1814.
MAI	0.05	0.03	0.01	0.00	0.00	0.03	0.67	0.51	0.08	0.00	0.00	0.00	0.30

STATION NATHANA LAT 30.19N LONG 75.05E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	14.	15.	11.	5.	5.	26.	84.	92.	49.	6.	2.	7.	316.
TEM	16.	19.	25.	30.	34.	34.	30.	29.	29.	26.	21.	17.	26.
RS	320.	410.	520.	580.	650.	650.	500.	500.	510.	465.	390.	410.	492.
PD							48.	51.					208.
ETP	77.	101.	158.	194.	243.	235.	173.	170.	167.	147.	105.	102.	1872.
MAI							0.28	0.30					0.11

STATION PATHANKOT LAT 32.14N LONG 75.38E ELEV 312. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	92.	42.	55.	19.	17.	58.	444.	436.	171.	115.	10.	27.	1486.
TEM	12.	15.	20.	26.	31.	33.	30.	28.	28.	24.	18.	14.	23.
RS	240.	355.	480.	500.	590.	650.	530.	500.	550.	425.	360.	300.	457.
PD	51.						321.	314.	80.	60.			1238.
ETP	51.	78.	131.	151.	209.	232.	181.	166.	174.	127.	89.	68.	1657.
MAI	1.00						1.77	1.89	0.46	0.47			0.75

STATION PATIALA LAT 30.20N LONG 76.28E ELEV 251. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	43.	19.	18.	7.	12.	56.	228.	286.	134.	44.	10.	11.	868.
TEM	14.	17.	22.	28.	32.	34.	31.	30.	29.	25.	19.	15.	25.
RS	320.	410.	520.	580.	650.	650.	480.	480.	500.	460.	390.	410.	488.
PD							131.	182.	68.				694.
ETP	72.	95.	147.	184.	235.	234.	168.	164.	164.	142.	100.	96.	1800.
MAI							0.78	1.11	0.41				0.39

RAJASTHAN

STATION ABU LAT 24.36N LONG 72.43E ELEV 1195. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	6.	7.	3.	2.	11.	90.	634.	666.	249.	13.	8.	3.	1692.
TEM	14.	16.	21.	25.	27.	25.	22.	20.	21.	22.	19.	16.	21.
RS	452.	500.	575.	612.	655.	640.	460.	450.	540.	510.	455.	400.	521.
PD						50.	488.	516.	149.				1419.
ETP	103.	114.	158.	181.	211.	189.	130.	123.	146.	145.	115.	97.	1713.
MAI						0.26	3.74	4.20	1.02				0.83

STATION AJMER LAT 26.27N LONG 74.37E ELEV 486. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	12.	6.	6.	3.	9.	67.	187.	175.	71.	17.	4.	203.	760.
TEM	15.	18.	23.	29.	33.	33.	29.	28.	28.	25.	20.	16.	25.
RS	400.	470.	560.	630.	670.	570.	450.	440.	530.	510.	430.	370.	503.
PD							95.	84.	[illegible]	[illegible]	[illegible]	109.	599.
ETP	93.	111.	165.	205.	248.	202.	153.	144.	169.	158.	112.	89.	1850.
MAI							0.62	0.58	[illegible]	[illegible]	[illegible]	1.22	0.32

STATION ALWAR LAT 27.34N LONG 76.36E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	14.	13.	9.	5.	16.	63.	177.	189.	134.	12.	2.	7.	641.
TEM	15.	18.	23.	29.	33.	33.	30.	28.	28.	26.	21.	17.	25.
RS	400.	470.	560.	630.	670.	570.	450.	440.	530.	510.	430.	370.	503.
PD							86.	96.	68.				494.
ETP	94.	113.	165.	205.	248.	204.	155.	146.	170.	160.	114.	91.	1863.
MAI							0.55	0.66	0.40				0.27

STATION ANUPGARH LAT 29.12N LONG 73.14E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	5.	8.	6.	4.	4.	16.	59.	58.	23.	4.	0.	3.	190.
TEM	14.	17.	23.	29.	35.	36.	33.	31.	31.	27.	20.	15.	26.
RS	360.	460.	540.	605.	645.	670.	510.	480.	520.	480.	410.	350.	503.
PD													97.
ETP	81.	107.	158.	199.	245.	251.	189.	170.	177.	155.	108.	82.	1922.
MAI													0.05

STATION BALOTRA LAT 25.50N LONG 72.15E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	4.	5.	0.	17.	3.	20.	74.	136.	30.	1.	2.	2.	294.
TEM	17.	21.	26.	32.	34.	34.	31.	29.	30.	29.	24.	20.	27.
RS	400.	480.	560.	605.	650.	650.	520.	510.	550.	510.	445.	390.	523.
PD								68.					189.
ETP	101.	125.	178.	209.	246.	235.	184.	174.	183.	172.	128.	104.	2037.
MAI								0.39					0.09

STATION BANSWARA LAT 23.33N LONG 74.27E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	4.	4.	2.	1.	7.	95.	327.	307.	153.	24.	5.	1.	930.
TEM	19.	22.	26.	30.	33.	31.	27.	25.	26.	26.	22.	20.	26.
RS	420.	510.	575.	635.	640.	600.	470.	390.	520.	520.	465.	440.	515.
PD						52.	218.	200.	75.				749.
ETP	109.	134.	182.	213.	234.	204.	151.	121.	159.	163.	130.	120.	1919.
MAI						0.26	1.44	1.65	0.47				0.39

STATION BARMER LAT 25.45N LONG 71.23E ELEV 194. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	5.	4.	3.	3.	9.	22.	87.	139.	33.	2.	2.	2.	311.
TEM	17.	21.	26.	32.	34.	34.	31.	29.	30.	29.	24.	20.	27.
RS	400.	480.	560.	605.	650.	650.	520.	510.	550.	510.	445.	390.	523.
PD							49.	70.					204.
ETP	101.	125.	178.	209.	246.	235.	184.	174.	183.	172.	128.	104.	2037.
MAI							0.27	0.40					0.10

STATION BIKANER LAT 28.00N LONG 73.18E ELEV 224. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	6.	7.	6.	5.	8.	27.	87.	105.	45.	6.	3.	2.	307.
TEM	14.	17.	23.	29.	35.	36.	33.	31.	31.	27.	20.	15.	26.
RS	360.	460.	540.	605.	645.	670.	510.	480.	520.	480.	410.	350.	503.
PD													200.
ETP	81.	107.	158.	199.	245.	251.	189.	170.	177.	155.	108.	82.	1922.
MAI													0.10

STATION BIKANER LAT 28 0 N LONG 73 18 E ELEV 224.0 M 102 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	0.	0.	0.	0.	0.	0.	4.	2.	0.	0.	0.	0.	107.
75.	0.	0.	0.	0.	0.	3.	23.	19.	1.	0.	0.	0.	190.
50.	2.	1.	1.	1.	4.	13.	56.	54.	8.	0.	0.	0.	269.
5.	30.	37.	26.	23.	72.	120.	244.	285.	183.	30.	10.	21.	545.
PM	7.	7.	5.	5.	16.	31.	81.	88.	39.	6.	2.	4.	290.
TEMC	15.	18.	24.	30.	35.	36.	33.	32.	31.	28.	21.	16.	27.
ETP	84.	109.	162.	202.	245.	251.	189.	171.	177.	159.	112.	85.	1947.
MAI	0.00	0.00	0.00	0.00	0.00	0.01	0.12	0.11	0.00	0.00	0.00	0.00	0.10

STATION DEOLI LAT 25.46N LONG 75.23E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	7.	4.	6.	3.	9.	63.	247.	262.	95.	18.	4.	3.	721.
TEM	18.	21.	26.	32.	36.	35.	30.	29.	29.	28.	23.	19.	27.
RS	410.	480.	575.	600.	655.	570.	480.	500.	550.	510.	450.	440.	518.
PD							147.	160.	52.				565.
ETP	103.	124.	182.	208.	257.	211.	165.	167.	179.	167.	127.	116.	2006.
MAI							0.89	0.96	0.29				0.28

STATION DIDWANA LAT 27.24N LONG 74.35E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	6.	6.	5.	4.	12.	36.	118.	121.	41.	4.	1.	4.	358.
TEM	14.	17.	23.	28.	32.	33.	30.	29.	28.	25.	20.	16.	25.
RS	370.	460.	555.	605.	645.	570.	490.	450.	500.	490.	430.	370.	495.
PD							61.	62.					245.
ETP	83.	107.	162.	192.	232.	204.	170.	152.	161.	151.	112.	88.	1816.
MAI							0.36	0.41					0.14

STATION DUNGARPUR LAT 23.51N LONG 73.43E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	3.	3.	2.	2.	11.	94.	273.	203.	118.	16.	7.	1.	733.
TEM	19.	22.	26.	30.	33.	31.	27.	25.	26.	26.	22.	20.	26.
RS	420.	510.	575.	635.	640.	600.	470.	390.	520.	520.	465.	440.	515.
PD						52.	170.	109.	61.				575.
ETP	109.	134.	182.	212.	234.	204.	151.	121.	159.	163.	130.	120.	1919.
MAI						[illegible]	1.13	0.90	0.39				0.30

STATION GANGANAGAR LAT 29.55N LONG 73.53E ELEV 177. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	15.	9.	14.	6.	12.	36.	69.	77.	50.	3.	2.	7.	300.
TEM	13.	16.	20.	27.	33.	35.	33.	32.	30.	26.	19.	14.	25.
RS	292.	340.	480.	500.	590.	660.	540.	520.	530.	420.	330.	290.	458.
PD													194.
ETP	63.	76.	131.	157.	216.	245.	200.	188.	178.	132.	84.	66.	1738.
MAI													0.11

STATION HINDAUN LAT 26.43N LONG 77.01E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	10.	6.	7.	4.	7.	49.	219.	227.	107.	14.	4.	5.	659.
TEM	15.	18.	23.	29.	33.	33.	30.	28.	28.	26.	21.	17.	25.
RS	400.	470.	560.	630.	670.	570.	450.	440.	530.	510.	430.	370.	503.
PD							123.	130.	57.				510.
ETP	94.	113.	165.	205.	248.	204.	155.	146.	170.	160.	114.	91.	1863.
MAI							0.79	0.89	0.33				0.27

STATION JAIPUR LAT 26.49N LONG 75.48E ELEV 390. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	14.	8.	9.	4.	10.	54.	193.	239.	90.	19.	3.	4.	647.
TEM	15.	18.	23.	29.	33.	33.	30.	28.	28.	26.	21.	17.	25.
RS	400.	470.	560.	630.	670.	570.	450.	440.	530.	510.	430.	370.	503.
PD							100.	140.	50.				499.
ETP	94.	113.	165.	205.	248.	204.	155.	146.	170.	160.	114.	91.	1863.
MAI							0.65	0.96	0.29				0.27

STATION JAIPUR LAT 26 54 N LONG 75 54 E ELEV 390.0 M 88 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	0.	0.	0.	0.	0.	3.	52.	16.	1.	0.	0.	0.	284.
75.	0.	0.	0.	0.	1.	17.	114.	70.	16.	0.	0.	0.	447.
50.	3.	1.	1.	1.	5.	40.	178.	153.	49.	2.	0.	1.	592.
5.	52.	40.	37.	22.	63.	171.	429.	586.	290.	76.	19.	34.	1070.
PM	11.	8.	7.	4.	15.	58.	201.	208.	85.	15.	4.	7.	624.
TEMC	16.	18.	24.	29.	33.	34.	30.	28.	29.	26.	21.	17.	26.
ETP	96.	114.	168.	208.	248.	206.	156.	147.	171.	162.	116.	92.	1884.
MAI	0.00	0.00	0.00	0.00	0.00	0.08	0.73	0.48	0.09	0.00	0.00	0.00	0.24

STATION JAISALMER LAT 26.54N LONG 70.55E ELEV 242. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	2.	1.	3.	2.	5.	7.	90.	86.	14.	1.	5.	2.	218.
TEM	16.	19.	25.	30.	34.	34.	32.	31.	30.	28.	22.	17.	27.
RS	390.	460.	560.	620.	650.	650.	520.	510.	550.	495.	440.	380.	519.
PD							50.	48.	20.				122.
ETP	93.	114.	171.	205.	243.	238.	188.	179.	185.	164.	122.	96.	1997.
MAI							0.27	0.27					0.06

STATION JALORE LAT 25.21N LONG 72.37E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	3.	5.	2.	2.	9.	33.	114.	134.	55.	7.	0.	1.	366.
TEM	15.	18.	23.	29.	33.	33.	30.	28.	28.	26.	21.	17.	25.
RS	400.	470.	560.	630.	670.	570.	450.	440.	530.	510.	430.	370.	503.
PD							60.	68.					252.
ETP	94.	113.	165.	205.	248.	204.	155.	146.	170.	160.	114.	91.	1863.
MAI							0.39	0.46					0.14

STATION JHALAWAR LAT 24.32N LONG 76.10E ELEV 321. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	14.	3.	4.	4.	6.	111.	357.	327.	164.	18.	10.	6.	1024.
TEM	17.	20.	25.	30.	35.	33.	29.	27.	28.	26.	21.	18.	26.
RS	425.	500.	575.	610.	615.	640.	460.	430.	430.	510.	455.	400.	504.
PD						58.	244.	218.	80.				831.
ETP	106.	126.	178.	205.	234.	229.	154.	140.	136.	160.	122.	102.	1893.
MAI						0.25	1.59	1.56	0.5				0.44

STATION JODHPUR LAT 26.18N LONG 73.01E ELEV 224. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	7.	5.	2.	2.	6.	31.	122.	146.	47.	7.	3.	2.	380.
TEM	17.	20.	25.	30.	34.	39.	31.	29.	29.	28.	23.	19.	27.
RS	410.	480.	560.	630.	680.	680.	530.	480.	540.	510.	540.	380.	535.
PD							63.	72.					265.
ETP	102.	121.	173.	212.	258.	274.	188.	163.	178.	167.	152.	99.	2086.
MAI							0.33	0.44					0.13

STATION JODHPUR LAT 26 18 N LONG 73 0 E ELEV 224.0 M 84 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	0.	0.	0.	0.	0.	0.	4.	3.	0.	0.	0.	0.	114.
75.	0.	0.	0.	0.	0.	4.	27.	27.	3.	0.	0.	0.	228.
50.	0.	1.	0.	0.	2.	16.	73.	79.	20.	1.	0.	0.	342.
5.	21.	25.	20.	14.	47.	128.	364.	438.	261.	43.	15.	10.	767.
PM	4.	5.	4.	3.	10.	34.	114.	132.	61.	8.	3.	2.	378.
TEMC	17.	20.	25.	31.	34.	34.	31.	30.	30.	28.	23.	19.	27.
ETP	103.	121.	174.	213.	256.	247.	189.	164.	178.	168.	153.	99.	2065.
MAI	0.00	0.00	0.00	0.00	0.00	0.02	0.14	0.16	0.02	0.00	0.00	0.00	0.11

STATION KISHANGARH LAT 27.49N LONG 76.43E ELEV ---

	JAN	FEB	MAR.	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	14.	13.	11.	6.	14.	53.	180.	174.	120.	14.	2.	6.	607.
TEM	15.	18.	23.	29.	33.	33.	30.	28.	28.	26.	21.	17.	25.
RS	400.	470.	560.	630.	670.	570.	450.	440.	530.	510.	430.	370.	503.
PD							88.	83.	62.				464.
ETP	94.	113.	165.	205.	248.	204.	155.	146.	170.	160.	114.	91.	1863.
MAI							0.57	0.57	0.37				0.25

STATION KOTA LAT 25.11N LONG 75.51E ELEV 257. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	9.	4.	5.	5.	7.	79.	309.	268.	132.	15.	6.	3.	843.
TEM	18.	21.	26.	32.	36.	35.	30.	29.	29.	28.	23.	19.	27.
RS	410.	480.	575.	600.	655.	570.	480.	500.	550.	510.	450.	440.	518.
PD							202.	166.	67.				671.
ETP	103.	124.	182.	208.	257.	211.	165.	167.	179.	167.	127.	116.	2006.
MAI							1.22	0.99	0.37				0.33

STATION KOTA LAT 25 12 N LONG 75 54 E ELEV 257.0 M 79 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	0.	0.	0.	0.	0.	2.	82.	69.	12.	0.	0.	0.	380.
75.	0.	0.	0.	0.	0.	16.	166.	147.	47.	0.	0.	0.	577.
50.	1.	1.	0.	0.	2.	44.	252.	228.	96.	2.	0.	0.	749.
5.	35.	22.	21.	21.	45.	214.	574.	540.	338.	80.	27.	24.	1305.
PM	7.	4.	4.	4.	10.	68.	280.	256.	125.	15.	5.	5.	784.
TEMC	18.	21.	26.	32.	36.	35.	30.	29.	29.	28.	23.	19.	27.
ETP	104.	123.	182.	208.	255.	211.	167.	167.	179.	168.	127.	115.	2006.
MAI	0.00	0.00	0.00	0.00	0.00	0.08	1.00	0.88	0.26	0.00	0.00	0.00	0.29

STATION MARWAR LAT 25.44N LONG 73.37E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	3.	2.	1.	1.	8.	33.	119.	167.	51.	5.	1.	1.	392.
TEM	17.	20.	25.	30.	34.	39.	31.	29.	29.	28.	23.	19.	27.
RS	410.	480.	560.	630.	680.	680.	530.	480.	540.	510.	540.	380.	535.
PD							62.	81.					275.
ETP	102.	121.	173.	212.	258.	274.	188.	163.	178.	167.	152.	99.	2086.
MAI							0.33	0.50					0.13

STATION MERTA ROAD LAT 26.38N LONG 74.02E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	4.	5.	4.	2.	8.	38.	137.	127.	52.	7.	1.	2.	387.
TEM	15.	18.	23.	29.	33.	33.	30.	28.	28.	26.	21.	17.	25.
RS	400.	470.	560.	630.	670.	570.	450.	440.	530.	510.	430.	370.	503.
PD							69.	65.					271.
ETP	94.	113.	165.	205.	248.	204.	155.	146.	170.	160.	114.	91.	1863.
MAI							0.44	0.45					0.15

STATION PHALODI LAT 27.08N LONG 72.22E ELEV 234. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	4.	6.	4.	2.	9.	23.	72.	93.	24.	1.	1.	2.	241.
TEM	15.	18.	24.	30.	34.	34.	32.	30.	30.	27.	22.	16.	26.
RS	390.	445.	550.	620.	650.	610.	580.	520.	560.	500.	440.	380.	520.
PD								51.					142.
ETP	90.	107.	165.	206.	245.	223.	209.	180.	187.	163.	121.	92.	1988.
MAI								0.28					0.07

STATION RAJGARH LAT 28.38N LONG 75.23E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	13.	9.	6.	3.	11.	38.	104.	90.	57.	6.	2.	5.	344.
TEM	14.	17.	23.	29.	34.	34.	31.	30.	29.	26.	20.	16.	25.
RS	352.	472.	564.	602.	649.	606.	399.	481.	472.	477.	410.	336.	485.
PD							56.	50.					233.
ETP	80.	109.	164.	195.	241.	221.	142.	166.	155.	150.	108.	80.	1811.
MAI							0.39	0.30					0.13

STATION SARDARSHAHR LAT 28.26N LONG 74.29E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	6.	6.	5.	4.	6.	30.	84.	84.	50.	4.	1.	3.	284.
TEM	14.	17.	23.	29.	35.	36.	33.	31.	31.	27.	20.	15.	26.
RS	360.	460.	540.	605.	645.	670.	510.	480.	520.	480.	410.	350.	503.
PD								48.					180.
ETP	81.	107.	158.	199.	245.	251.	189.	170.	177.	155.	108.	82.	1922.
MAI								0.28					0.09

STATION SAWAI MADHOPUR LAT 25.59N LONG 76.22E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	8.	5.	6.	2.	6.	78.	336.	306.	124.	11.	2.	6.	890.
TEM	15.	18.	24.	30.	35.	36.	30.	29.	28.	26.	20.	16.	26.
RS	390.	460.	550.	610.	650.	510.	450.	430.	480.	500.	440.	380.	488.
PD						45.	226.	199.	64.				713.
ETP	92.	111.	167.	205.	250.	191.	156.	144.	155.	156.	115.	91.	1834.
MAI						0.24	1.44	1.38	0.41				0.39

STATION SHAHGARH LAT 27.07N LONG 69.54E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	1.	4.	0.	3.	1.	3.	39.	48.	13.	1.	0.	0.	113.
TEM	16.	19.	25.	30.	34.	34.	32.	31.	30.	28.	22.	17.	27.
RS	390.	460.	560.	620.	650.	650.	520.	510.	550.	495.	440.	380.	519.
PD													59.
ETP	93.	114.	171.	205.	243.	238.	188.	179.	185.	164.	122.	96.	1997.
MAI													0.03

RAJASTHAN

STATION SIKAR LAT 27.37N LONG 75.08E ELEV 432. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	9.	3.	5.	3.	17.	44.	155.	126.	43.	27.	6.	3.	441.
TEM	14.	17.	23.	28.	32.	33.	30.	29.	28.	25.	20.	16.	25.
RS	370.	460.	555.	605.	645.	570.	490.	450.	500.	490.	430.	370.	495.
PD							76.	64.					318.
ETP	83.	107.	162.	192.	232.	204.	170.	152.	161.	151.	112.	88.	1816.
MAI							0.45	0.42					0.18

STATION UDAIPUR LAT 24.35N LONG 73.42E ELEV 582. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	9.	4.	4.	3.	5.	87.	197.	207.	120.	16.	6.	3.	661.
TEM	16.	19.	24.	28.	32.	31.	27.	26.	26.	25.	20.	17.	24.
RS	425.	500.	575.	610.	655.	600.	450.	430.	480.	510.	500.	445.	515.
PD						49.	103.	112.	62.				512.
ETP	102.	122.	171.	195.	235.	203.	146.	136.	148.	159.	131.	111.	1860.
MAI						0.24	0.71	0.83	0.42				0.28

TAMIL NADU

STATION ARUPPUKKOTTAI LAT 9.30N LONG 78.06E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	37.	21.	24.	65.	50.	25.	33.	65.	73.	175.	155.	73.	796.
TEM	26.	28.	30.	31.	32.	31.	30.	31.	31.	30.	27.	26.	29.
RS	510.	570.	620.	550.	560.	450.	400.	500.	510.	410.	440.	500.	502.
PD									43.	84.	76.	43.	630.
ETP	163.	175.	213.	186.	201.	154.	139.	175.	173.	140.	138.	159.	2014.
MAI									0.25	0.60	0.55	0.27	0.31

STATION CHINGLEPUT LAT 12.42N LONG 79.59E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	38.	11.	14.	21.	37.	52.	98.	142.	160.	233.	274.	135.	1215.
TEM	25.	26.	28.	30.	33.	32.	31.	30.	30.	28.	26.	25.	29.
RS	510.	570.	620.	630.	600.	510.	460.	470.	510.	480.	480.	480.	527.
PD							53.	71.	78.	135.	171.	68.	999.
ETP	155.	167.	204.	212.	219.	179.	161.	163.	169.	159.	146.	146.	2082.
MAI							0.33	0.43	0.46	0.85	1.17	0.46	0.48

STATION COIMBATORE LAT 11.00N LONG 76.58E ELEV 409. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	11.	7.	9.	61.	69.	34.	42.	34.	37.	149.	125.	34.	612.
TEM	24.	26.	28.	29.	29.	26.	26.	26.	26.	26.	25.	24.	26.
RS	510.	560.	620.	600.	590.	480.	430.	520.	560.	490.	460.	490.	526.
PD										74.	64.		469.
ETP	155.	166.	206.	196.	197.	148.	134.	164.	172.	155.	138.	148.	1979.
MAI										0.47	0.46		0.24

TAMIL NADU

STATION COONOOR LAT 11.21N LONG 76.48E ELEV 1748. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	82.	71.	82.	143.	112.	65.	71.	96.	96.	268.	315.	149.	1550.
TEM	10.	15.	17.	19.	20.	19.	18.	18.	18.	17.	16.	14.	17.
RS	510.	580.	620.	615.	590.	460.	410.	440.	510.	460.	465.	480.	512.
PD	47.	42.	47.	71.	59.	40.	42.	52.	52.	166.	207.	74.	1294.
ETP	101.	128.	154.	155.	158.	116.	105.	113.	125.	114.	107.	109.	1484.
MAI	0.46	0.33	0.30	0.46	0.37	0.34	0.40	0.47	0.42	1.45	1.94	0.68	0.87

STATION CUDDALORE LAT 11.46N LONG 79.46E ELEV 12. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	42.	15.	27.	38.	71.	35.	69.	110.	113.	242.	362.	183.	1307.
TEM	24.	25.	27.	29.	31.	32.	31.	30.	29.	28.	26.	25.	28.
RS	515.	590.	615.	620.	590.	520.	500.	520.	540.	460.	460.	485.	535.
PD								58.	59.	143.	249.	91.	1080.
ETP	156.	170.	198.	204.	210.	181.	175.	179.	178.	151.	140.	148.	2091.
MAI								0.32	0.33	0.94	1.78	0.61	0.52

STATION DHARMAPURI LAT 12.08N LONG 78.10E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	16.	8.	8.	40.	109.	63.	63.	109.	137.	155.	109.	35.	851.
TEM	24.	26.	29.	32.	32.	30.	28.	28.	28.	27.	25.	23.	28.
RS	510.	560.	620.	640.	620.	520.	460.	500.	500.	495.	490.	485.	533.
PD								58.	69.	76.	58.		679.
ETP	152.	165.	210.	223.	223.	173.	152.	165.	159.	159.	145.	143.	2069.
MAI								0.35	0.43	0.48	0.40		0.33

STATION ERODE LAT 11.21N LONG 77.43E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	16.	14.	19.	51.	92.	42.	48.	91.	101.	176.	110.	35.	795.
TEM	24.	25.	28.	31.	33.	31.	30.	30.	29.	27.	25.	23.	28.
RS	510.	565.	630.	620.	610.	450.	380.	450.	450.	440.	500.	490.	508.
PD								50.	54.	85.	58.		630.
ETP	151.	164.	208.	211.	222.	154.	131.	154.	147.	143.	149.	145.	1979.
MAI								0.33	0.37	0.59	0.39		0.32

STATION KALLAKKURICHI LAT 11.44N LONG 78.56E ELEV 127. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	47.	14.	14.	39.	81.	46.	79.	136.	142.	194.	175.	75.	1042.
TEM	25.	27.	29.	31.	33.	32.	30.	30.	30.	28.	26.	25.	29.
RS	500.	570.	610.	600.	580.	460.	410.	440.	510.	460.	465.	480.	507.
PD							46.	68.	71.	101.	84.	44.	347.
ETP	155.	170.	207.	206.	211.	160.	142.	151.	169.	152.	142.	147.	2011.
MAI							0.32	0.45	0.42	0.66	0.59	0.30	0.42

STATION KODAIKANAL LAT 10.14N LONG 77.28E ELEV 2344. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	63.	32.	64.	166.	157.	104.	117.	163.	161.	250.	274.	121.	1672.
TEM	13.	13.	15.	16.	17.	15.	14.	15.	15.	14.	13.	13.	14.
RS	500.	550.	590.	570.	570.	460.	370.	430.	460.	410.	410.	480.	483.
PD				80.	77.	56.	61.	79.	78.	150.	171.	62.	1401.
ETP	108.	114.	136.	132.	140.	105.	84.	99.	102.	93.	87.	103.	1301.
MAI				0.61	0.55	0.53	0.72	0.80	0.77	1.62	1.98	0.60	1.08

STATION KODAIKANAL LAT 10 12 N LONG 77 30 E ELEV 2343.0 M 61 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	0.	0.	0.	36.	61.	35.	41.	59.	46.	108.	47.	5.	1235.
75.	8.	3.	5.	79.	105.	66.	76.	107.	99.	178.	123.	32.	1491.
50.	34.	14.	24.	125.	148.	97.	110.	154.	155.	243.	211.	84.	1670.
5.	289.	147.	212.	306.	294.	206.	232.	318.	373.	460.	581.	406.	2105.
PM	75.	36.	54.	142.	159.	106.	120.	166.	175.	258.	249.	129.	1670.
TEMC	13.	14.	15.	16.	17.	15.	14.	15.	15.	14.	13.	13.	14.
ETP	109.	115.	139.	134.	140.	105.	85.	99.	103.	93.	87.	104.	1311.
MAI	0.07	0.02	0.04	0.59	0.75	0.63	0.90	1.08	0.97	1.92	1.42	0.31	1.14

STATION MADRAS LAT 13.00N LONG 80.11E ELEV 16. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	24.	7.	15.	25.	52.	53.	84.	124.	118.	267.	309.	139.	1217.
TEM	25.	26.	28.	30.	33.	32.	31.	30.	30.	28.	26.	25.	29.
RS	510.	570.	620.	630.	600.	510.	460.	470.	510.	480.	480.	480.	527.
PD							48.	64.	61.	165.	202.	70.	1001.
ETP	155.	167.	204.	212.	219.	179.	161.	163.	169.	159.	146.	146.	2082.
MAI							0.30	0.39	0.36	1.04	1.39	0.48	0.48

STATION MADRAS LAT 13 6 N LONG 80 18 E ELEV 16.0 M 168 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	0.	0.	0.	0.	0.	5.	25.	34.	28.	59.	55.	2.	728.
75.	0.	0.	0.	0.	0.	19.	55.	72.	65.	146.	158.	22.	1004.
50.	6.	1.	1.	2.	8.	40.	87.	110.	106.	245.	284.	75.	1233.
5.	134.	43.	51.	88.	220.	141.	208.	257.	267.	653.	835.	480.	1930.
PM	29.	8.	9.	17.	45.	52.	98.	123.	121.	286.	343.	136.	1268.
TEMC	25.	26.	28.	30.	32.	32.	31.	30.	30.	28.	26.	25.	28.
ETP	155.	166.	203.	210.	218.	179.	161.	162.	169.	158.	146.	147.	2074.
MAI	0.00	0.00	0.00	0.00	0.00	0.11	0.34	0.44	0.39	0.92	1.08	0.15	0.48

STATION MADURAI LAT 9.53N LONG 78.07E ELEV 133. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	26.	16.	21.	81.	59.	31.	48.	117.	123.	179.	161.	43.	905.
TEM	26.	27.	29.	31.	32.	32.	31.	30.	30.	29.	27.	26.	29.
RS	520.	580.	620.	550.	560.	450.	400.	500.	510.	410.	440.	500.	503.
PD								61.	63.	88.	78.		726.
ETP	162.	175.	210.	187.	201.	155.	140.	174.	170.	137.	137.	156.	2004.
MAI								0.35	0.37	0.64	0.57		0.36

TAMIL NADU

STATION NAGAPATTINAM LAT 10.46N LONG 79.51E ELEV 9. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	57.	25.	22.	55.	56.	29.	48.	62.	62.	224.	458.	239.	1337.
TEM	25.	26.	28.	30.	31.	32.	31.	30.	30.	28.	26.	25.	29.
RS	520.	600.	615.	620.	590.	520.	500.	520.	540.	460.	460.	490.	536.
PD										127.	333.	140.	1106.
ETP	161.	177.	202.	206.	210.	180.	175.	180.	179.	153.	142.	152.	2117.
MAI										0.83	2.35	0.93	0.52

STATION NAGERCOIL LAT 8.10N LONG 77.27E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	23.	12.	35.	77.	89.	169.	90.	47.	60.	201.	182.	61.	1046.
TEM	27.	27.	28.	29.	28.	26.	26.	26.	27.	27.	27.	27.	27.
RS	530.	590.	590.	500.	530.	400.	400.	480.	490.	440.	430.	520.	492.
PD					50.	82	50.		38.	107.	90.		850.
ETP	170.	179.	196.	163.	176.	123.	127.	152.	152.	141.	133.	167.	1878.
MAI					0.28	0.66	0.39		0.25	0.76	0.68		0.45

STATION OOTACAMUND LAT 11.24N LONG 76.44E ELEV 2250. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	35.	13.	33.	86.	159.	156.	201.	147.	139.	202.	158.	49.	1378.
TEM	13.	13.	15.	16.	17.	15.	14.	14.	14.	14.	14.	13.	14.
RS	510.	580.	620.	615.	590.	460.	410.	440.	510.	460.	465.	480.	512.
PD				48.	78.	76.	107.	73.	70.	108.	77.		1143.
ETP	110.	120.	145.	144.	144.	102.	92.	100.	113.	105.	100.	105.	1381.
MAI				0.34	0.54	0.75	1.16	0.73	0.62	1.02	0.77		0.83

STATION PALAYAMKOTTAI LAT8.44N LONG 77.45E ELEV 51. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	45.	29.	30.	67.	39.	10.	8.	17.	29.	174.	183.	113.	744.
TEM	26.	28.	30.	31.	32.	31.	30.	31.	31.	30.	27.	26.	29.
RS	510.	570.	620.	550.	560.	450.	400.	500.	510.	410.	440.	500.	502.
PD										83.	91.	59.	584.
ETP	163.	175.	213.	186.	201.	154.	139.	175.	173.	140.	136.	159.	2014.
MAI										0.59	0.66	0.37	0.29

STATION PAMBAN LAT 9.16N LONG 79.18E ELEV 11. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	66.	19.	24.	68.	24.	6.	9.	12.	16.	175.	308.	196.	923.
TEM	26.	27.	28.	29.	30.	30.	29.	29.	29.	28.	27.	26.	28.
RS	520.	580.	620.	550.	560.	450.	400.	500.	510.	410.	440.	500.	503.
PD										84.	201.	103.	742.
ETP	164.	173.	204.	181.	193.	149.	135.	169.	166.	136.	137.	158.	1965.
MAI										0.62	1.46	0.65	0.38

TAMIL NADU

STATION PAMBAN LAT 9 18 N LONG 79 18 E ELEV 11.0 M 90 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	0.	0.	0.	0.	0.	0.	0.	0.	0.	43.	85.	31.	548.
75.	7.	0.	0.	7.	1.	0.	0.	0.	1.	105.	174.	90.	743.
50.	28.	4.	3.	27.	9.	1.	1.	2.	6.	175.	265.	161.	902.
5.	202.	97.	99.	202.	138.	19.	57.	61.	111.	461.	607.	473.	1384.
PM	55.	20.	20.	54.	31.	4.	11.	12.	24.	204.	295.	194.	926.
TEMC	26.	27.	28.	30.	30.	30.	29.	29.	29.	28.	27.	26.	28.
ETP	163.	174.	205.	182.	194.	149.	135.	168.	166.	136.	137.	157.	1968.
MAI	0.05	0.00	0.00	0.04	0.01	0.00	0.00	0.00	0.00	0.78	1.27	0.57	0.38

STATION PERIYAKULAM LAT 10.07N LONG 77.32E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	43.	37.	57.	99.	69.	18.	29.	50.	74.	191.	157.	58.	882.
TEM	24.	26.	28.	29.	34.	26.	26.	26.	26.	26.	25.	24.	27.
RS	510.	560.	620.	600.	590.	480.	430.	520.	560.	490.	460.	490.	526.
PD				54.					44.	98.	77.		706.
ETP	155.	166.	206.	196.	222.	148.	134.	164.	172.	155.	138.	148.	2004.
MAI				0.27					0.25	0.63	0.56		0.35

STATION PUDUKKOTTAI LAT 10.23N LONG 78.49E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	39.	13.	16.	48.	69.	52.	73.	136.	133.	158.	158.	90.	985.
TEM	25.	27.	29.	31.	32.	31.	31.	30.	30.	28.	26.	25.	29.
RS	520.	600.	615.	620.	590.	520.	500.	520.	540.	460.	460.	490.	536.
PD								68.	67.	77.	77.	50.	797.
ETP	161.	181.	208.	213.	212.	179.	175.	181.	179.	152.	141.	152.	2133.
MAI								0.38	0.38	0.51	0.55	0.33	0.37

STATION SALEM LAT 11.39N LONG 78.10E ELEV 278. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	9.	12.	15.	55.	93.	82.	105.	143.	142.	186.	90.	34.	966.
TEM	25.	27.	29.	31.	31.	30.	29.	28.	28.	27.	26.	25.	28.
RS	500.	570.	610.	600.	580.	460.	410.	440.	510.	460.	465.	480.	507.
PD						47.	56.	71.	71.	94.	50.		780.
ETP	154.	172.	207.	205.	205.	153.	137.	146.	164.	150.	141.	147.	1980.
MAI						0.31	0.41	0.49	0.43	0.63	0.35		0.39

STATION TENKASI LAT 8.57N LONG 77.19E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	65.	39.	74.	84.	60.	108.	93.	38.	39.	191.	246.	135.	1172.
TEM	26.	28.	30.	31.	32.	31.	30.	31.	31.	30.	27.	26.	29.
RS	510.	570.	620.	550.	560.	450.	400.	500.	510.	410.	440.	500.	502.
PD						57.	51.			98.	147.	68.	962.
ETP	163.	175.	213.	186.	201.	154.	139.	175.	173.	140.	138.	159.	2014.
MAI						0.37	0.37			0.70	1.06	0.43	0.48

TAMIL NADU

STATION TIRUCHCHIRAPPALLI LAT 10.46N LONG 78.43E ELEV 88. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	18.	8.	8.	70.	80.	34.	41.	105.	108.	170.	156.	71.	869.
TEM	25.	27.	29.	31.	32.	31.	31.	30.	30.	28.	26.	25.	29.
RS	520.	600.	615.	620.	590.	520.	500.	520.	540.	460.	460.	490.	536.
PD								56.	57.	82.	76.	42.	694.
ETP	161.	181.	208.	213.	212.	179.	175.	181.	179.	152.	141.	152.	2133.
MAI								0.31	0.32	0.54	0.54	0.28	0.33

STATION TIRUPPATTUR LAT 12.29N LONG 78.35E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	14.	5.	10.	37.	100.	66.	93.	136.	155.	139.	85.	31.	871.
TEM	24.	25.	28.	31.	33.	31.	30.	30.	29.	27.	25.	23.	28.
RS	510.	565.	630.	620.	610.	450.	380.	450.	450.	440.	500.	490.	508.
PD							51.	68.	76.	70.	48.		696.
ETP	151.	164.	208.	211.	222.	154.	131.	154.	147.	143.	149.	145.	1979.
MAI							0.39	0.44	0.52	0.49	0.32		0.35

STATION TIRUVANNAMALAI LAT 12.14N LONG 79.05E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	40.	15.	13.	27.	79.	54.	82.	151.	170.	175.	173.	62.	1041.
TEM	24.	25.	28.	31.	33.	31.	30.	30.	29.	27.	25.	23.	28.
RS	510.	565.	630.	620.	610.	450.	380.	450.	450.	440.	500.	490.	508.
PD							47.	74.	82.	84.	82.	[illegible]	846.
ETP	151.	164.	208.	211.	222.	154.	131.	154.	147.	143.	149.	145.	1979.
MAI							0.36	0.48	0.56	0.59	0.55	[illegible]	0.43

STATION VELLORE LAT 12.55N LONG 79.09E ELEV 214. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	19.	6.	8.	25.	80.	77.	90.	106.	152.	169.	160.	77.	969.
TEM	24.	25.	28.	31.	33.	31.	30.	30.	29.	27.	25.	23.	28.
RS	510.	565.	630.	620.	610.	450.	380.	450.	450.	440.	500.	490.	508.
PD						45.	50.	56.	75.	82.	78.	45.	782.
ETP	151.	164.	208.	211.	222.	154.	131.	154.	147.	143.	149.	145.	1979.
MAI						0.29	0.38	0.37	0.51	0.57	0.52	0.31	0.40

TRIPURA

STATION AGARTALA LAT 23.53N LONG 91.15E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	8.	33.	72.	190.	295.	401.	304.	302.	231.	152.	34.	5.	2027.
TEM	19.	21.	26.	30.	31.	30.	29.	29.	29.	28.	23.	20.	26.
RS	435.	500.	580.	630.	660.	500.	450.	460.	480.	520.	445.	405.	505.
PD				97.	190.	283.	198.	196.	133.	75.			1713.
ETP	114.	130.	184.	212.	232.	168.	153.	156.	158.	171.	127.	109.	1913.
MAI				0.46	0.82	1.68	1.29	1.25	0.84	0.44			0.90

STATION AGRA LAT 27.10N LONG 78.02E ELEV 169. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	16.	9.	11.	5.	10.	60.	210.	263.	152.	24.	2.	4.	766.
TEM	15.	18.	24.	30.	35.	35.	31.	29.	29.	26.	21.	16.	26.
RS	376.	471.	562.	616.	660.	588.	425.	461.	501.	494.	420.	353.	494.
PD							115.	161.	75.				604.
ETP	87.	113.	168.	204.	250.	218.	150.	157.	163.	156.	112.	85.	1863.
MAI							0.77	1.03	0.46				0.32

STATION AGRA LAT 27 12 N LONG 78 0 E ELEV 169.0 M 119 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	0.	0.	0.	0.	0.	1.	69.	46.	5.	0.	0.	0.	387.
75.	0.	0.	0.	0.	0.	10.	135.	115.	34.	0.	0.	0.	550.
50.	3.	2.	1.	1.	3.	33.	201.	193.	85.	2.	0.	1.	687.
5.	61.	53.	42.	24.	51.	192.	447.	519.	390.	104.	18.	35.	1114.
PM	13.	11.	9.	5.	12.	56.	222.	226.	127.	20.	3.	7.	711.
TEMC	15.	18.	24.	30.	34.	35.	31.	30.	29.	27.	21.	16.	26.
ETP	75.	89.	132.	167.	196.	181.	163.	147.	141.	128.	91.	70.	1581.
MAI	0.00	0.00	0.00	0.00	0.00	0.06	0.83	0.78	0.24	0.00	0.00	0.00	0.35

STATION ALIGARH LAT 27.53N LONG 78.04E ELEV 187. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	18.	15.	14.	11.	12.	68.	227.	215.	153.	36.	2.	2.	774.
TEM	15.	17.	23.	29.	34.	34.	31.	29.	29.	26.	21.	16.	25.
RS	380.	450.	540.	595.	640.	570.	460.	470.	450.	490.	430.	365.	487.
PD							130.	120.	75.				611.
ETP	88.	106.	157.	194.	239.	208.	161.	160.	147.	155.	114.	88.	1817.
MAI							0.80	0.75	0.51				0.34

STATION ALLAHABAD LAT 25.27N LONG 81.44E ELEV 98. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	20.	22.	14.	5.	8.	102.	275.	333.	195.	40.	7.	6.	1027.
TEM	16.	19.	25.	31.	35.	34.	30.	29.	29.	26.	21.	17.	26.
RS	410.	470.	530.	620.	650.	450.	490.	450.	480.	500.	440.	390.	490.
PD						55.	172.	223.	102.				834.
ETP	100.	116.	164.	210.	248.	163.	170.	152.	157.	159.	118.	97.	1854.
MAI						0.34	1.02	1.47	0.65				0.45

STATION ALLAHABAD LAT 25 30 N LONG 81 54 E ELEV 98.0 M 120 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	0.	0.	0.	0.	0.	2.	108.	100.	18.	0.	0.	0.	575.
75.	0.	1.	0.	0.	0.	20.	196.	187.	67.	0.	0.	0.	787.
50.	4.	5.	1.	1.	1.	59.	281.	273.	134.	7.	0.	1.	962.
5.	81.	71.	43.	22.	39.	325.	582.	582.	460.	230.	40.	32.	1492.
PM	18.	16.	9.	4.	8.	98.	304.	298.	173.	47.	7.	6.	988.
TEMC	16.	19.	25.	31.	34.	34.	30.	29.	29.	27.	21.	17.	26.
ETP	100.	116.	163.	211.	245.	197.	170.	152.	157.	159.	119.	96.	1885.
MAI	0.00	0.00	0.00	0.00	0.00	0.10	1.15	1.23	0.43	0.00	0.00	0.00	0.42

UTTAR PRADESH

STATION AZAMGARH LAT 26.03N LONG 83.13E ELEV 78. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	22.	9.	16.	3.	8.	103.	274.	290.	261.	50.	9.	3.	1048.
TEM	17.	19.	25.	31.	34.	33.	30.	29.	29.	27.	21.	18.	26.
RS	400.	460.	560.	610.	650.	550.	450.	430.	450.	505.	440.	380.	490.
PD						55.	171.	185.	160.				852.
ETP	98.	114.	173.	206.	243.	195.	154.	146.	146.	162.	119.	96.	1852.
MAI						0.28	1.11	1.27	1.10				0.46

STATION BAHRAICH LAT 27.34N LONG 81.36E ELEV 124. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	28.	17.	12.	7.	23.	142.	361.	285.	210.	83.	2.	7.	1177.
TEM	16.	18.	24.	29.	33.	32.	30.	29.	29.	26.	21.	17.	25.
RS	380.	460.	555.	615.	645.	550.	440.	450.	460.	490.	425.	350.	485.
PD						71.	248.	181.	115.	47.			966.
ETP	91.	111.	165.	202.	236.	193.	151.	152.	150.	156.	114.	86.	1807.
MAI						0.37	1.64	1.19	0.77	0.30			0.53

STATION BANDA LAT 25.28N LONG 80.22E ELEV 121. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	17.	16.	9.	5.	8.	74.	311.	312.	165.	36.	10.	6.	969.
TEM	16.	19.	25.	31.	35.	34.	30.	29.	29.	26.	21.	17.	26.
RS	410.	470.	530.	620.	650.	450.	490.	450.	480.	500.	440.	390.	490.
PD						44.	204.	204.	80.				783.
ETP	100.	116.	164.	210.	248.	163.	170.	152.	157.	159.	118.	97.	1854.
MAI						0.27	1.20	1.34	0.51				0.42

STATION BAREILLY LAT 28.22N LONG 79.24E ELEV 173. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	25.	22.	14.	8.	15.	102.	346.	297.	172.	62.	3.	5.	1071.
TEM	15.	18.	23.	29.	33.	33.	30.	29.	29.	26.	21.	17.	25.
RS	360.	460.	540.	600.	640.	570.	450.	410.	470.	480.	415.	350.	479.
PD	24.					55.	234.	191.	81.	39.			872.
ETP	85.	109.	159.	196.	236.	204.	155.	139.	153.	151.	110.	86.	1784.
MAI	0.28					0.27	1.51	1.38	0.53	0.26			0.49

STATION BASTI LAT 26.47N LONG 82.43E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	14.	20.	14.	10.	28.	130.	362.	304.	247.	59.	6.	7.	1201.
TEM	16.	18.	24.	29.	33.	32.	30.	29.	29.	26.	21.	17.	25.
RS	380.	460.	550.	610.	650.	550.	440.	450.	460.	480.	430.	360.	485.
PD						66.	249.	198.	147.				987.
ETP	90.	110.	164.	201.	238.	192.	150.	152.	149.	151.	114.	88.	1801.
MAI						0.34	1.65	1.30	0.99				0.55

UTTAR PRADESH

STATION DEHRA DUN LAT 30.19N LONG 78.02E ELEV 208. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	61.	58.	39.	17.	41.	157.	707.	750.	321.	70.	5.	19.	2244.
TEM	13.	15.	19.	25.	29.	29.	27.	26.	25.	22.	18.	14.	22.
RS	310.	400.	520.	560.	620.	610.	480.	500.	510.	465.	390.	330.	475.
PD	38.	37.				77.	552.	590.	212.	42.		22.	1905.
ETP	67.	87.	138.	165.	209.	201.	154.	158.	153.	133.	95.	74.	1635.
MAI	0.57	0.43				0.38	3.59	3.74	1.38	0.31		0.29	1.17

STATION DUDHI LAT 24.13N LONG 83.15E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	26.	31.	17.	7.	14.	132.	324.	340.	182.	44.	11.	6.	1134.
TEM	17.	19.	25.	30.	34.	33.	29.	28.	28.	26.	20.	17.	25.
RS	430.	510.	580.	630.	660.	560.	460.	410.	510.	520.	440.	400.	509.
PD						67.	215.	229.	90.				928.
ETP	106.	127.	176.	209.	245.	199.	155.	136.	162.	163.	116.	99.	1895.
MAI						0.34	1.39	1.68	0.56				0.49

STATION FATEHPUR LAT 25.56N LONG 80.50E ELEV 114. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	20.	17.	10.	6.	5.	67.	289.	280.	144.	39.	2.	6.	885.
TEM	16.	19.	25.	30.	35.	34.	30.	29.	29.	26.	21.	17.	26.
RS	400.	475.	565.	600.	650.	510.	470.	430.	480.	510.	440.	390.	493.
PD							184.	176.	72.				709.
ETP	97.	116.	173.	202.	248.	187.	163.	145.	156.	162.	118.	96.	1863.
MAI							1.13	1.21	0.46				0.38

STATION GONDA LAT 27.08N LONG 81.58E ELEV 110. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	27.	16.	11.	8.	27.	158.	356.	1651.	353.	250.	65.	2.	2923.
TEM	16.	18.	24.	29.	33.	32.	30.	29.	29.	26.	21.	17.	25.
RS	380.	460.	550.	610.	650.	550.	440.	450.	460.	480.	430.	360.	485.
PD	25.					77.	243.	1383.	241.	150.	40.		2502.
ETP	90.	110.	164.	201.	238.	192.	150.	152.	149.	151.	114.	88.	1801.
MAI	0.27					0.40	1.62	9.09	1.61	0.99	0.35		1.39

STATION GORAKHPUR LAT 26.45N LONG 83.22E ELEV 77. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	19.	14.	11.	11.	41.	186.	342.	315.	253.	74.	5.	3.	1274.
TEM	16.	19.	25.	30.	32.	32.	30.	29.	29.	27.	22.	18.	26.
RS	390.	450.	560.	600.	650.	550.	440.	400.	460.	505.	440.	380.	485.
PD						94.	231.	207.	153.				1051.
ETP	95.	111.	172.	200.	236.	190.	151.	136.	151.	162.	120.	96.	1819.
MAI						0.49	1.53	1.52	1.01				0.58

UTTAR PRADESH

STATION HARDOI LAT 27.23N LONG 80.10E ELEV 142. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	39.	10.	18.	1.	9.	124.	335.	324.	186.	112.	2.	2.	1162.
TEM	15.	18.	24.	29.	33.	34.	30.	29.	29.	26.	21.	17.	25.
RS	380.	460.	550.	610.	650.	550.	450.	460.	460.	490.	420.	390.	489.
PD						64.	225.	215.	94.	59.			953.
ETP	89.	111.	165.	201.	240.	198.	156.	156.	151.	155.	112.	96.	1829.
MAI						0.32	1.44	1.38	0.62	0.38			0.52

STATION JHANSI LAT 25.27N LONG 78.35E ELEV 251. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	17.	14.	11.	3.	8.	105.	298.	309.	190.	32.	5.	7.	999.
TEM	17.	20.	25.	31.	36.	35.	31.	28.	28.	26.	21.	17.	26.
RS	415.	485.	575.	610.	655.	600.	450.	430.	500.	510.	450.	400.	507.
PD						56.	192.	202.	97.				809.
ETP	102.	121.	179.	209.	254.	222.	158.	143.	161.	162.	122.	100.	1933.
MAI						0.25	1.22	1.41	0.60				0.42

STATION KANPUR LAT 26.26N LONG 80.22E ELEV 126. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	23.	16.	9.	5.	6.	68.	208.	286.	202.	43.	8.	8.	882.
TEM	16.	19.	25.	30.	34.	34.	30.	29.	29.	26.	21.	16.	26.
RS	400.	470.	550.	610.	650.	500.	450.	400.	480.	500.	440.	380.	486.
PD							113.	182.	108.				706.
ETP	95.	114.	167.	204.	246.	183.	156.	135.	156.	158.	117.	93.	1824.
MAI							0.73	1.35	0.69				0.39

STATION KASGANG LAT 27.48N LONG 78.39E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	16.	20.	10.	5.	10.	63.	212.	214.	142.	19.	2.	6.	719.
TEM	15.	18.	24.	30.	35.	35.	31.	29.	29.	26.	21.	16.	26.
RS	320.	370.	440.	500.	520.	490.	460.	430.	430.	400.	340.	290.	416.
PD							117.	118.	71.				563.
ETP	74.	88.	131.	166.	197.	182.	162.	146.	140.	127.	90.	70.	1574.
MAI							0.72	0.81	0.51				0.36

STATION KHERI LAT 27.54N LONG 80.48E ELEV 147. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	44.	12.	19.	2.	24.	135.	329.	305.	158.	101.	1.	2.	1132.
TEM	16.	19.	24.	29.	33.	32.	29.	29.	29.	26.	21.	17.	25.
RS	380.	460.	550.	610.	650.	350.	450.	460.	460.	490.	420.	390.	473.
PD						68.	219.	198.	77.	54.			926.
ETP	90.	112.	164.	201.	238.	123.	153.	155.	150.	154.	112.	97.	1748.
MAI						0.55	1.44	1.28	0.52	0.35			0.53

UTTAR PRADESH

STATION LUCKNOW LAT 26.52N LONG 80.56E ELEV 111. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	24.	17.	9.	6.	12.	94.	299.	312.	182.	40.	1.	6.	992.
TEM	16.	19.	25.	30.	34.	34.	30.	29.	29.	26.	21.	17.	26.
RS	400.	460.	550.	600.	650.	500.	430.	400.	470.	500.	440.	380.	482.
PD						52.	193.	196.	90.				803.
ETP	97.	113.	168.	201.	243.	180.	149.	136.	154.	159.	118.	94.	1811.
MAI						0.29	1.30	1.44	0.59				0.44

STATION MAINPURI LAT 27.14N LONG 79.03E ELEV 157. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	17.	9.	12.	6.	11.	64.	196.	247.	152.	40.	2.	6.	762.
TEM	15.	18.	24.	30.	34.	35.	31.	30.	29.	26.	21.	17.	26.
RS	380.	450.	540.	590.	640.	570.	460.	470.	450.	490.	430.	370.	487.
PD							103.	147.	75.				600.
ETP	89.	108.	161.	196.	241.	210.	162.	160.	148.	156.	115.	90.	1837.
MAI							0.63	0.92	0.51				0.33

STATION MEERUT 29.01N LONG 77.43E ELEV 222. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	30.	30.	15.	8.	9.	71.	247.	229.	152.	37.	2.	8.	838.
TEM	14.	17.	23.	28.	32.	33.	30.	29.	29.	25.	20.	16.	25.
RS	290.	340.	480.	500.	590.	520.	500.	510.	520.	460.	420.	310.	453.
PD							147.	132.	75.				667.
ETP	66.	79.	139.	160.	214.	187.	174.	173.	169.	142.	109.	74.	1687.
MAI							0.85	0.76	0.44				0.40

STATION MORADABAD LAT 28.52N LONG 78.47E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	24.	31.	14.	7.	19.	105.	290.	279.	171.	27.	4.	11.	982.
TEM	14.	17.	23.	29.	34.	34.	31.	30.	29.	26.	20.	16.	25.
RS	352.	472.	564.	602.	649.	606.	399.	481.	472.	477.	410.	336.	485.
PD							185.	175.	80.				794.
ETP	80.	109.	164.	195.	241.	221.	142.	166.	155.	150.	108.	80.	1811.
MAI							1.31	1.06	0.52				0.44

STATION MUKTESHWAR LAT 29.28N LONG 79.39E ELEV 2312. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	58.	56.	45.	34.	51.	143.	332.	338.	197.	79.	4.	23.	1360.
TEM	6.	7.	11.	15.	19.	19.	18.	17.	17.	14.	11.	8.	14.
RS	330.	340.	480.	510.	600.	500.	480.	460.	500.	460.	420.	310.	449.
PD						71.	222.	228.	103.				1127.
ETP	55.	56.	98.	117.	157.	127.	121.	115.	118.	105.	84.	57.	1210.
MAI						0.56	1.83	1.98	0.87				0.93

UTTAR PRADESH

STATION MUKTESWAR LAT 29 30 N LONG 79 42 E ELEV 2311.0 M 84 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	1.	2.	2.	1.	7.	35.	143.	146.	34.	0.	0.	0.	890.
75.	10.	13.	13.	8.	23.	84.	228.	223.	95.	2.	0.	0.	1123.
50.	33.	36.	33.	22.	45.	139.	304.	291.	168.	16.	1.	5.	1308.
5.	191.	183.	157.	110.	151.	362.	556.	510.	486.	240.	39.	105.	1838.
PM	56.	57.	50.	34.	57.	161.	321.	305.	202.	54.	8.	2[illegible].	1329.
TEMC	6.	7.	11.	15.	18.	19.	18.	17.	16.	14.	11.	8.	13.
ETP	60.	73.	102.	132.	160.	152.	124.	122.	114.	106.	79.	64.	1288.
MAI	0.17	0.18	0.12	0.06	0.14	0.55	1.84	1.83	0.83	0.02	0.00	0.01	0.87

STATION MUSSOORIE LAT 30.27N LONG 78.05E ELEV 2043. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	66.	67.	64.	30.	45.	189.	727.	755.	323.	65.	8.	31.	2370.
TEM	6.	7.	12.	16.	20.	20.	18.	18.	17.	15.	12.	9.	14.
RS	310.	400.	520.	560.	620.	610.	480.	480.	500.	460.	390.	330.	472.
PD						96.	570.	594.	214.				2015.
ETP	53.	66.	109.	132.	167.	161.	124.	122.	120.	107.	79.	61.	1302.
MAI						0.60	4.60	4.86	1.78				1.55

STATION NAGINA LAT 29.27N LONG 78.26E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	33.	33.	17.	10.	19.	107.	325.	311.	203.	31.	4.	11.	1104.
TEM	14.	17.	23.	28.	32.	33.	30.	29.	29.	25.	20.	16.	25.
RS	290.	340.	480.	500.	590.	520.	500.	510.	520.	460.	420.	310.	453.
PD						57.	216.	204.	109.				901.
ETP	66.	79.	139.	160.	214.	187.	174.	173.	169.	142.	109.	74.	1687.
MAI						0.30	1.24	1.18	0.64				0.53

STATION ORAI LAT 25.59N LONG 79.30E ELEV 141. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	21.	5.	8.	2.	7.	106.	273.	372.	159.	89.	1.	2.	1045.
TEM	16.	19.	25.	30.	35.	34.	30.	28.	29.	26.	21.	17.	26.
RS	400.	475.	550.	610.	670.	510.	450.	500.	490.	515.	500	450.	510.
PD						56.	170.	257.	78.	50.			850.
ETP	95.	117.	170.	205.	256.	187.	155.	166.	158.	164.	134.	111.	1917.
MAI						0.30	1.10	1.55	0.49	0.30			0.44

STATION RAE BARELI LAT 26.14N LONG 81.14E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	1.	2.	1.	1.	7.	35.	237.	147.	69.	7.	2.	2.	512.
TEM	16.	19.	25.	30.	34.	34.	30.	29.	29.	26.	21.	17.	26.
RS	400.	460.	550.	600.	650.	500.	430.	400.	470.	500.	440.	380.	482.
PD							139.	73.					380.
ETP	97.	113.	168.	201.	243.	180.	149.	136.	154.	159.	118.	94.	1811.
MAI							0.93	0.54					0.21

UTTAR PRADESH

STATION ROBERTSGANJ LAT 24.42N LONG 83.04E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	24.	30.	14.	7.	15.	112.	352.	369.	202.	40.	8.	5.	1178.
TEM	18.	21.	26.	30.	32.	31.	29.	28.	28.	27.	22.	19.	26.
RS	420.	510.	580.	630.	650.	550.	440.	400.	500.	515.	440.	400.	503.
PD						59.	240.	255.	108.				966.
ETP	107.	131.	184.	212.	233.	186.	147.	133.	161.	164.	121.	104.	1883.
MAI						0.32	1.63	1.92	0.67				0.51

STATION ROORKEE LAT 29.51N LONG 77.53E ELEV 274. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	43.	47.	28.	11.	17.	91.	337.	329.	206.	39.	3.	13.	1164.
TEM	13.	16.	21.	27.	32.	32.	29.	29.	28.	24.	18.	14.	24.
RS	290.	340.	480.	500.	590.	520.	500.	510.	520.	460.	420.	310.	453.
PD						50.	227.	219.	111.				954.
ETP	64.	76.	133.	155.	210.	182.	170.	171.	166.	138.	105.	71.	1641.
MAI						0.28	1.33	1.28	0.67				0.58

STATION SAHASWAN LAT 28.04N LONG 78.45E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	19.	23.	11.	6.	16.	85.	236.	248.	143.	23.	1.	7.	818.
TEM	15.	17.	23.	29.	34.	34.	31.	29.	29.	26.	21.	16.	25.
RS	380.	450.	540.	595.	640.	570.	460.	470.	450.	490.	430.	365.	487.
PD							138.	148.	71.				650.
ETP	88.	106.	157.	194.	239.	208.	161.	160.	147.	155.	114.	88.	1817.
MAI							0.85	0.93	0.48				0.36

STATION SULTANPUR LAT 26.16N LONG 82.05E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	14.	19.	7.	8.	11.	86.	309.	283.	206.	47.	4.	6.	1000.
TEM	16.	19.	25.	30.	34.	34.	30.	29.	29.	26.	21.	17.	26.
RS	400.	460.	550.	600.	650.	500.	430.	400.	470.	500.	440.	380.	482.
PD							202.	179.	111.				810.
ETP	97.	113.	168.	201.	243.	180.	149.	136.	154.	159.	118.	94.	1811.
MAI							1.36	1.32	0.72				0.45

STATION TANAKPUR LAT 29.05N LONG 80.07E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	40.	54.	17.	15.	48.	273.	647.	520.	279.	38.	0.	15.	1946.
TEM	15.	18.	23.	29.	33.	33.	30.	29.	29.	26.	21.	17.	25.
RS	360.	460.	540.	600.	640.	570.	450.	410.	470.	480.	415.	350.	479.
PD						170.	499.	388.	175.				1642.
ETP	85.	109.	159.	196.	236.	204.	155.	139.	153.	151.	110.	86.	1784.
MAI						0.83	3.22	2.79	1.15				0.92

UTTAR PRADESH

STATION VARANASI LAT 25.18N LONG 83.01E ELEV 76. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	25.	22.	11.	4.	12.	92.	306.	342.	226.	60.	10.	3.	1113.
TEM	16.	19.	25.	31.	34.	34.	30.	29.	29.	27.	21.	17.	26.
RS	400.	475.	565.	605.	650.	480.	460.	420.	460.	510.	445.	390.	488.
PD						51.	199.	231.	129.				909.
ETP	98.	118.	175.	204.	245.	173.	159.	142.	150.	163.	120.	97.	1844.
MAI						0.29	1.26	1.62	0.86				0.49

WEST BENGAL

STATION ASANSOL LAT 23.41N LONG 86.59E ELEV 126. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	17.	24.	17.	24.	73.	192.	344.	335.	235.	113.	15.	3.	1392.
TEM	19.	21.	27.	31.	33.	31.	29.	29.	29.	27.	23.	19.	26.
RS	435.	505.	580.	635.	660.	490.	420.	400.	450.	520.	465.	410.	498.
PD						99.	233.	225.	137.	59.			1155.
ETP	114.	133.	187.	217.	241.	168.	141.	134.	146.	167.	130.	109.	1887.
MAI						0.59	1.65	1.68	0.94	0.35			0.61

STATION BAGDOGRA LAT 26.38N LONG 88.19E ELEV 131. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	8.	16.	20.	80.	260.	464.	418.	370.	340.	118.	9.	2.	2105.
TEM	16.	19.	23.	26.	27.	28.	28.	28.	28.	26.	21.	18.	24.
RS	395.	470.	555.	605.	650.	550.	450.	450.	460.	500.	435.	380.	492.
PD					159.	338.	298.	256.	229.	61.			1783.
ETP	96.	115.	161.	186.	212.	174.	148.	149.	146.	156.	118.	97.	1758.
MAI					0.75	1.94	2.01	1.71	1.57	0.39			1.01

STATION BALURGHAT LAT 25.13N LONG 88.46E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	10.	19.	19.	49.	180.	335.	363.	365.	309.	156.	13.	1.	1819.
TEM	19.	21.	26.	30.	31.	30.	29.	29.	29.	28.	23.	20.	26.
RS	435.	500.	580.	630.	660.	500.	450.	460.	480.	520.	445.	405.	505.
PD					88.	225.	249.	251.	202.	76.			1531.
ETP	114.	130.	184.	212.	232.	168.	153.	156.	158.	171.	127.	109.	1913.
MAI					0.38	1.34	1.63	1.61	1.28	0.45			0.80

STATION BERHAMPORE LAT 24.08N LONG 88.16E ELEV 19. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	13.	19.	18.	37.	115.	219.	295.	302.	226.	127.	16.	4.	1391.
TEM	19.	21.	26.	30.	31.	30.	29.	29.	29.	28.	23.	20.	26.
RS	435.	500.	580.	630.	660.	500.	450.	460.	480.	520.	445.	405.	505.
PD						123.	190.	196.	129.	65.			1154.
ETP	114.	130.	184.	212.	232.	168.	153.	156.	158.	171.	127.	109.	1913.
MAI						0.73	1.24	1.25	0.82	0.38			0.60

WEST BENGAL

STATION BURDWAN LAT 23.14N LONG 87.51E ELEV 32. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	11.	25.	25.	46.	115.	196.	314.	301.	237.	107.	23.	4.	1404.
TEM	19.	22.	27.	31.	32.	30.	29.	29.	29.	28.	23.	20.	27.
RS	440.	490.	580.	640.	645.	500.	420.	400.	470.	525.	480.	450.	503.
PD						103.	206.	195.	139.	57.			1165.
ETP	117.	130.	188.	218.	230.	169.	141.	135.	153.	172.	137.	121.	1910.
MAI						0.61	1.46	1.45	0.90	0.33			0.61

STATION CALCUTTA LAT 22.32N LONG 88.20E ELEV 6. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	14.	24.	27.	43.	121.	259.	301.	306.	290.	160.	35.	3.	1583.
TEM	20.	23.	28.	31.	31.	30.	29.	29.	29.	28.	24.	21.	27.
RS	380.	420.	490.	530.	540.	480.	430.	420.	440.	420.	390.	350.	441.
PD					62.	158.	195.	199.	185.	78.			1323.
ETP	103.	115.	161.	180.	191.	162.	146.	142.	144.	138.	113.	96.	1692.
MAI					0.33	0.98	1.34	1.40	1.28	0.56			0.78

STATION CALCUTTA LAT 22 30 N LONG 88 24 E ELEV 6.0 M 145 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	0.	0.	0.	2.	26.	101.	169.	173.	105.	9.	0.	0.	1171.
75.	0.	1.	2.	13.	65.	185.	248.	255.	181.	43.	0.	0.	1419.
50.	2.	6.	12.	33.	109.	265.	317.	325.	252.	95.	2.	0.	1611.
5.	63.	113.	138.	157.	290.	551.	535.	548.	497.	369.	103.	30.	2151.
PM	13.	25.	33.	50.	127.	288.	330.	338.	270.	130.	20.	6.	1630.
TEMC	20.	22.	27.	30.	31.	30.	29.	29.	29.	28.	24.	20.	26.
ETP	102.	113.	159.	178.	189.	160.	145.	141.	143.	137.	112.	94.	1674.
MAI	0.00	0.01	0.01	0.07	0.34	1.16	1.71	1.81	1.27	0.31	0.00	0.00	0.85

STATION CALCUTTA/DUM DUM LAT 22 42 N LONG 88 30 E ELEV 6.0 M 14 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	0.	0.	0.	3.	20.	95.	150.	174.	127.	31.	0.	0.	1087.
75.	0.	1.	2.	14.	55.	168.	231.	228.	203.	70.	0.	0.	1319.
50.	1.	5.	10.	32.	98.	237.	302.	273.	271.	113.	4.	0.	1499.
5.	48.	72.	121.	128.	282.	480.	531.	404.	498.	282.	153.	21.	2005.
PM	10.	16.	29.	44.	117.	256.	316.	279.	287.	129.	31.	4.	1517.
TEMC	20.	22.	27.	31.	31.	30.	29.	29.	29.	28.	23.	20.	27.
ETP	102.	113.	159.	179.	191.	161.	145.	142.	144.	137.	112.	95.	1680.
MAI	0.00	0.00	0.01	0.08	0.29	1.05	1.59	1.61	1.41	0.51	0.00	0.00	0.79

STATION CONTAI LAT 21.47N LONG 87.45E ELEV 11. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	19.	29.	31.	39.	123.	273.	333.	341.	269.	203.	35.	2.	1697.
TEM	21.	24.	27.	30.	30.	30.	29.	29.	29.	28.	24.	21.	27.
RS	460.	520.	580.	645.	660.	510.	450.	400.	510.	550.	490.	435.	518.
PD					63.	170.	223.	230.	167.	109.			1424.
ETP	126.	144.	189.	215.	230.	168.	150.	134.	165.	181.	142.	121.	1966.
MAI					0.27	1.01	1.48	1.72	1.01	0.60			0.72

STATION COOCH BEHAR LAT 26.20N LONG 89.27E ELEV 43. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	8.	20.	39.	156.	427.	834.	748.	580.	592.	191.	10.	3.	3608.
TEM	17.	20.	24.	26.	27.	28.	28.	29.	29.	27.	22.	19.	25.
RS	380.	460.	560.	620.	650.	500.	360.	340.	480.	495.	440.	380.	472.
PD				76.	306.	664.	588.	440.	451.	98.			3105.
ETP	94.	115.	166.	191.	210.	158.	120.	114.	155.	158.	121.	101.	1705.
MAI				0.40	1.45	4.19	4.91	3.85	2.91	0.62			1.82

STATION DARJEELING LAT 27.03N LONG 88.16E ELEV 2128. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	22.	27.	52.	109.	187.	522.	713.	572.	419.	116.	14.	5.	2758.
TEM	6.	8.	11.	14.	16.	17.	18.	18.	17.	15.	11.	8.	13.
RS	370.	460.	550.	610.	645.	510.	430.	400.	485.	490.	430.	370.	479.
PD				58.	95.	389.	557.	433.	299.	60.			2357.
ETP	63.	78.	113.	135.	154.	122.	109.	101.	117.	115.	86.	68.	1261.
MAI				0.43	0.61	3.18	5.13	4.29	2.54	0.53			1.87

STATION DARJEELING LAT 27 6 N LONG 88 18 E ELEV 2128.0 M 107 YEARS

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
95.	0.	0.	1.	26.	69.	260.	444.	379.	163.	1.	0.	0.	2126.
75.	1.	2.	8.	58.	120.	403.	604.	497.	279.	20.	0.	0.	2556.
50.	5.	11.	26.	93.	169.	530.	736.	592.	388.	68.	4.	1.	2855.
5.	78.	94.	162.	229.	340.	944.	1136.	873.	764.	435.	76.	26.	3584.
PM	18.	24.	46.	106.	182.	557.	756.	605.	416.	124.	16.	5.	2855.
TEMC	5.	6.	10.	13.	15.	16.	17.	17.	16.	14.	10.	7.	12.
ETP	60.	73.	109.	130.	150.	120.	107.	99.	113.	110.	82.	64.	1218.
MAI	0.01	0.03	0.07	0.45	0.80	3.35	5.67	5.03	2.47	0.18	0.00	0.00	2.10

STATION JALPAIGURI LAT 26.32N LONG 88.43E ELEV 83. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	9.	14.	30.	115.	340.	710.	776.	663.	537.	143.	14.	3.	3354.
TEM	17.	19.	23.	26.	27.	27.	28.	28.	28.	26.	22.	19.	24.
RS	395.	470.	550.	600.	650.	470.	420.	450.	460.	500.	435.	380.	482.
PD				60.	229.	555.	613.	513.	403.	71.			2881.
ETP	98.	115.	161.	183.	209.	148.	138.	148.	145.	156.	120.	99.	1721.
MAI				0.33	1.10	3.74	4.44	3.47	2.77	0.46			1.67

STATION JANGIPUR LAT 24.28N LONG 88.04E ELEV ---

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	12.	20.	25.	37.	120.	253.	299.	289.	234.	113.	17.	3.	1422.
TEM	19.	21.	26.	30.	31.	30.	29.	29.	29.	28.	23.	20.	26.
RS	435.	500.	580.	630.	660.	500.	450.	460.	480.	520.	445.	405.	505.
PD					62.	153.	193.	184.	136.	59.			1181.
ETP	114.	130.	184.	212.	232.	168.	153.	156.	158.	171.	127.	109.	1913.
MAI					0.27	0.91	1.26	1.18	0.86	0.35			0.62

WEST BENGAL

STATION KALIMPONG LAT 27.04N LONG 88.28E ELEV 1209. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	14.	19.	34.	71.	146.	405.	635.	489.	344.	88.	13.	5.	2263.
TEM	12.	13.	16.	19.	21.	22.	22.	22.	21.	20.	16.	13.	18.
RS	370.	450.	550.	610.	645.	510.	430.	400.	485.	490.	430.	370.	478.
PD					72.	286.	489.	360.	233.	49.			1921.
ETP	77.	92.	134.	155.	178.	140.	122.	113.	132.	131.	100.	81.	1455.
MAI					0.41	2.05	4.02	3.18	1.76	0.37			1.32

STATION KRISHNANAGAR LAT 23.24N LONG 88.31E ELEV 15. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	11.	23.	31.	60.	141.	252.	281.	271.	205.	130.	26.	3.	1434.
TEM	19.	22.	22.	31.	31.	30.	29.	29.	29.	28.	23.	20.	26.
RS	440.	505.	580.	640.	650.	510.	450.	430.	460.	525.	470.	450.	509.
PD					70.	152.	177.	168.	110.	66.			1192.
ETP	115.	134.	165.	217.	230.	171.	152.	145.	151.	172.	135.	121.	1907.
MAI					0.31	0.89	1.17	1.16	0.73	0.38			0.62

STATION MALDA LAT 25.02N LONG 88.08E ELEV 31. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	13.	18.	15.	28.	104.	232.	303.	288.	276.	118.	13.	2.	1410.
TEM	18.	20.	25.	29.	30.	30.	29.	29.	29.	27.	22.	19.	25.
RS	415.	490.	570.	610.	655.	550.	450.	440.	480.	515.	450.	400.	502.
PD					56.	134.	197.	183.	173.	61.			1171.
ETP	105.	123.	175.	200.	227.	183.	152.	148.	156.	165.	123.	104.	1861.
MAI					0.24	0.73	1.29	1.24	1.11	0.37			0.63

STATION MIDNAPORE LAT 22.25N LONG 87.19E ELEV 45. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	14.	30.	34.	44.	109.	232.	322.	336.	262.	132.	36.	3.	1554.
TEM	20.	23.	28.	32.	32.	31.	29.	29.	29.	27.	23.	20.	27.
RS	420.	510.	580.	630.	650.	480.	420.	390.	450.	515.	440.	400.	490.
PD					58.	134.	213.	226.	160.	67.			1297.
ETP	114.	139.	191.	217.	236.	163.	141.	131.	146.	167.	125.	108.	1878.
MAI					0.24	0.82	1.51	1.72	1.10	0.40			0.69

STATION PURULIA LAT 23.20N LONG 86.23E ELEV 255. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	19.	33.	25.	23.	64.	217.	325.	325.	214.	90.	15.	4.	1354.
TEM	19.	22.	27.	32.	34.	31.	28.	28.	28.	27.	22.	20.	26.
RS	430.	500.	580.	630.	660.	490.	420.	400.	450.	520.	465.	410.	496.
PD						121.	216.	216.	118.	50.			1122.
ETP	113.	134.	187.	219.	245.	168.	139.	133.	143.	166.	129.	110.	1886.
MAI						0.72	1.55	1.63	0.83	0.30			0.59

WEST BENGAL

STATION RAIGANJ LAT 25.37N LONG 88.08E ELEV ---

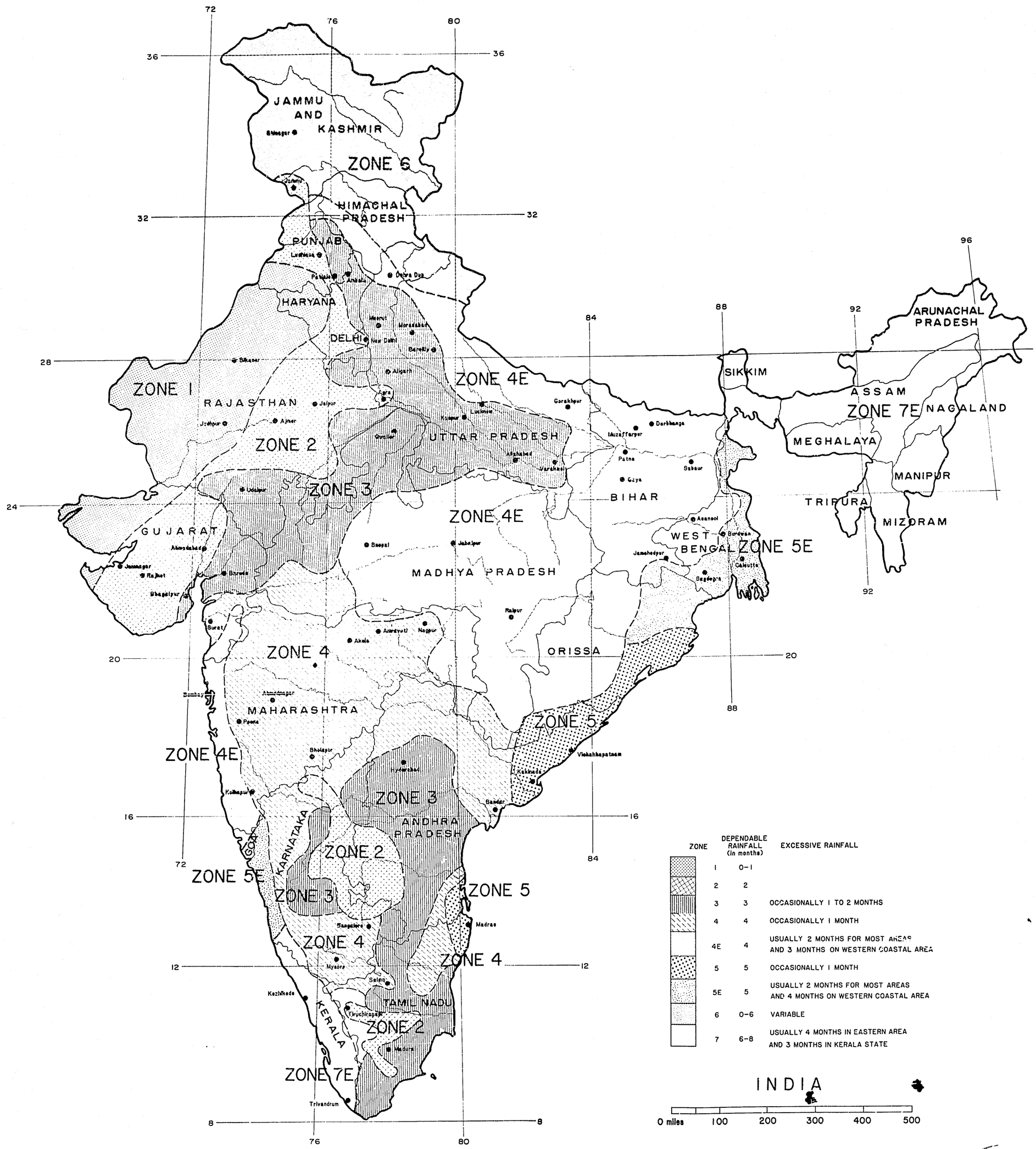
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	8.	15.	17.	40.	130.	296.	340.	351.	262.	104.	10.	3.	1576.
TEM	18.	21.	26.	30.	32.	31.	29.	28.	28.	27.	22.	19.	26.
RS	420.	510.	580.	630.	650.	550.	440.	400.	500.	515.	440.	400.	503.
PD					66.	190.	229.	239.	160.	56.			1316.
ETP	107.	131.	184.	212.	233.	186.	147.	133.	161.	164.	121.	104.	1883.
MAI					0.28	1.02	1.56	1.80	1.00	0.34			0.70

STATION SAGAR ISLAND LAT 21.39N LONG 88.03E ELEV 3. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	14.	22.	21.	42.	128.	250.	409.	410.	329.	240.	35.	8.	1908.
TEM	20.	23.	27.	29.	30.	30.	29.	28.	29.	28.	24.	21.	26.
RS	460.	520.	580.	645.	660.	510.	450.	400.	510.	515.	490.	435.	515.
PD					65.	150.	290.	291.	219.	141.			1609.
ETP	126.	142.	187.	210.	226.	169.	150.	133.	165.	168.	143.	120.	1939.
MAI					0.29	0.89	1.93	2.18	1.33	0.84			0.83

STATION SANDHEADS LAT 21.51N LONG 88.15E ELEV 10. M

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
PREC	11.	14.	15.	13.	53.	194.	296.	243.	184.	162.	47.	10.	1242.
TEM	21.	23.	28.	31.	32.	30.	29.	29.	29.	27.	23.	21.	27.
RS	460.	530.	595.	650.	665.	500.	435.	410.	500.	530.	430.	435.	516.
PD						101.	190.	144.	92.	79.			1023.
ETP	126.	146.	195.	219.	237.	169.	146.	137.	162.	171.	137.	119.	1965.
MAI						0.60	1.30	1.05	0.57	0.46			0.52



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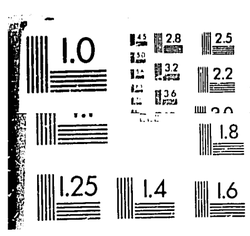

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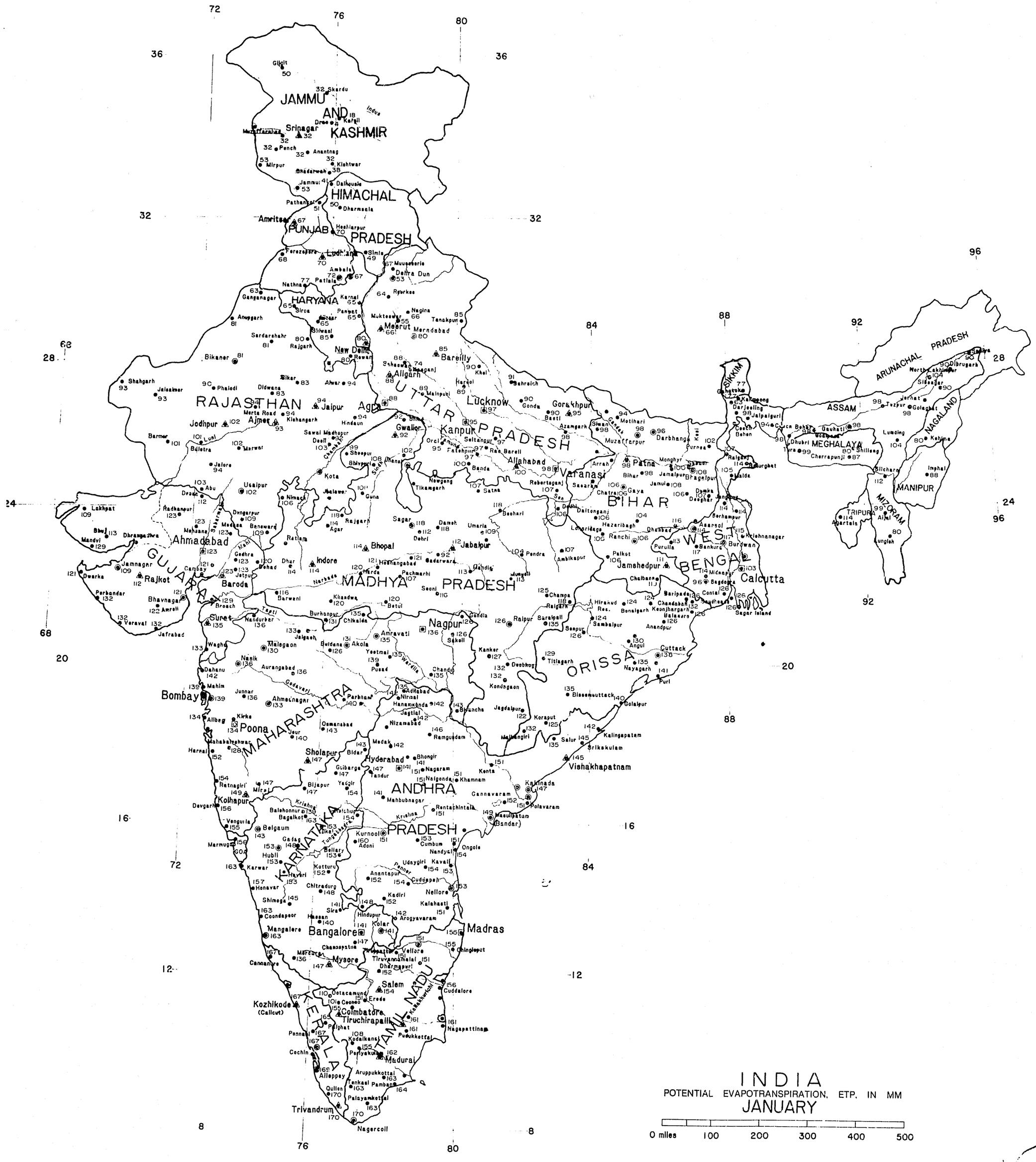

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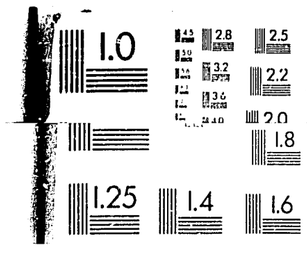

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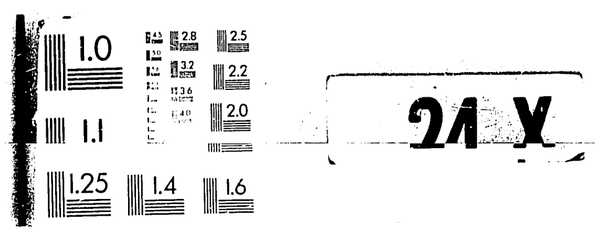
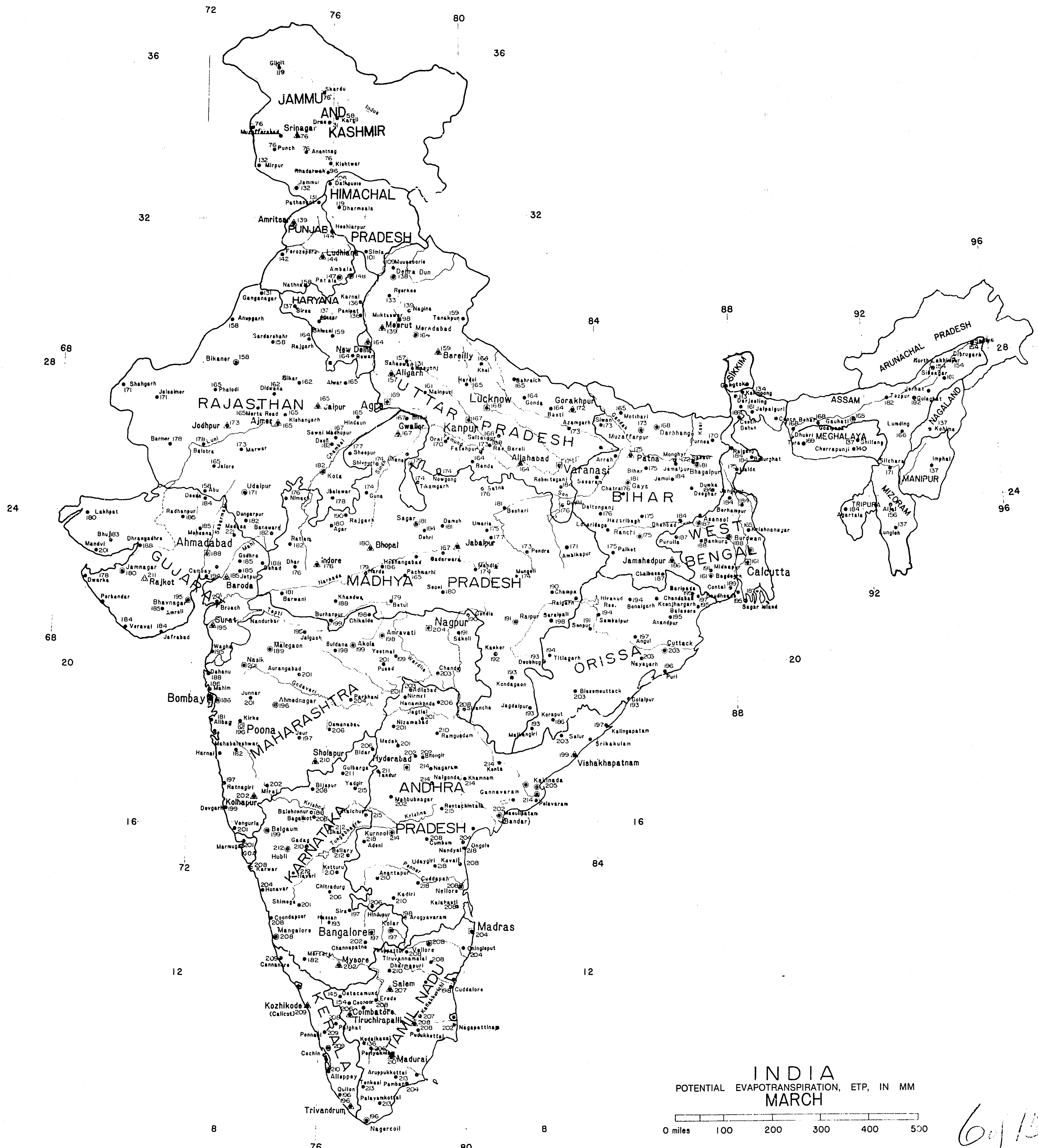
158





INDIA
POTENTIAL EVAPOTRANSPIRATION, ETP, IN MM
MARCH

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PN-ABH-156

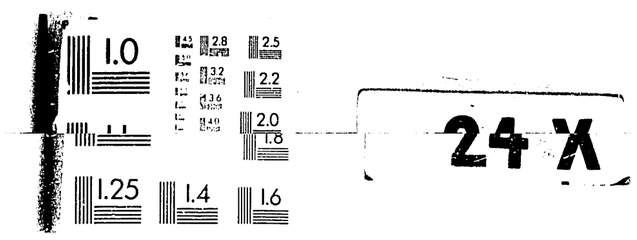
159

24X

INDIA
POTENTIAL EVAPOTRANSPIRATION, ETP, IN MM
APRIL
0 miles 100 200 300 400 500
JAMMU AND KASHMIR
HIMACHAL PRADESH
PUNJAB
HARYANA
RAJASTHAN
UTTAR PRADESH
BIHAR
WEST BENGAL
ARUNACHAL PRADESH
ASSAM
MEGHALAYA
NAGALAND
MANIPUR
TRIPURA
MIZORAM
SIKKIM
GUJARAT
MADHYA PRADESH
MAHARASHTRA
ORISSA
ANDHRA PRADESH
KARNATAKA
KERALA
TAMIL NADU
Gilgit
Srinagar
Simla
Dehra Dun
Ambala
Ludhiana
Amritsar
Jodhpur
Ajmer
Jaipur
Agra
Lucknow
Gorakhpur
Kanpur
Allahabad
Varanasi
Patna
Bareilly
Meerut
New Delhi
Aligarh
Bhopal
Indore
Jabalpur
Nagpur
Ahmadabad
Baroda
Rajkot
Bombay
Poona
Calcutta
Jamshedpur
Hyderabad
Vishakhapatnam
Madras
Bangalore
Mysore
Coimbatore
Salem
Madurai
Kozhikode (Calicut)
Trivandrum
Nagercoil

70/15

PN 1.6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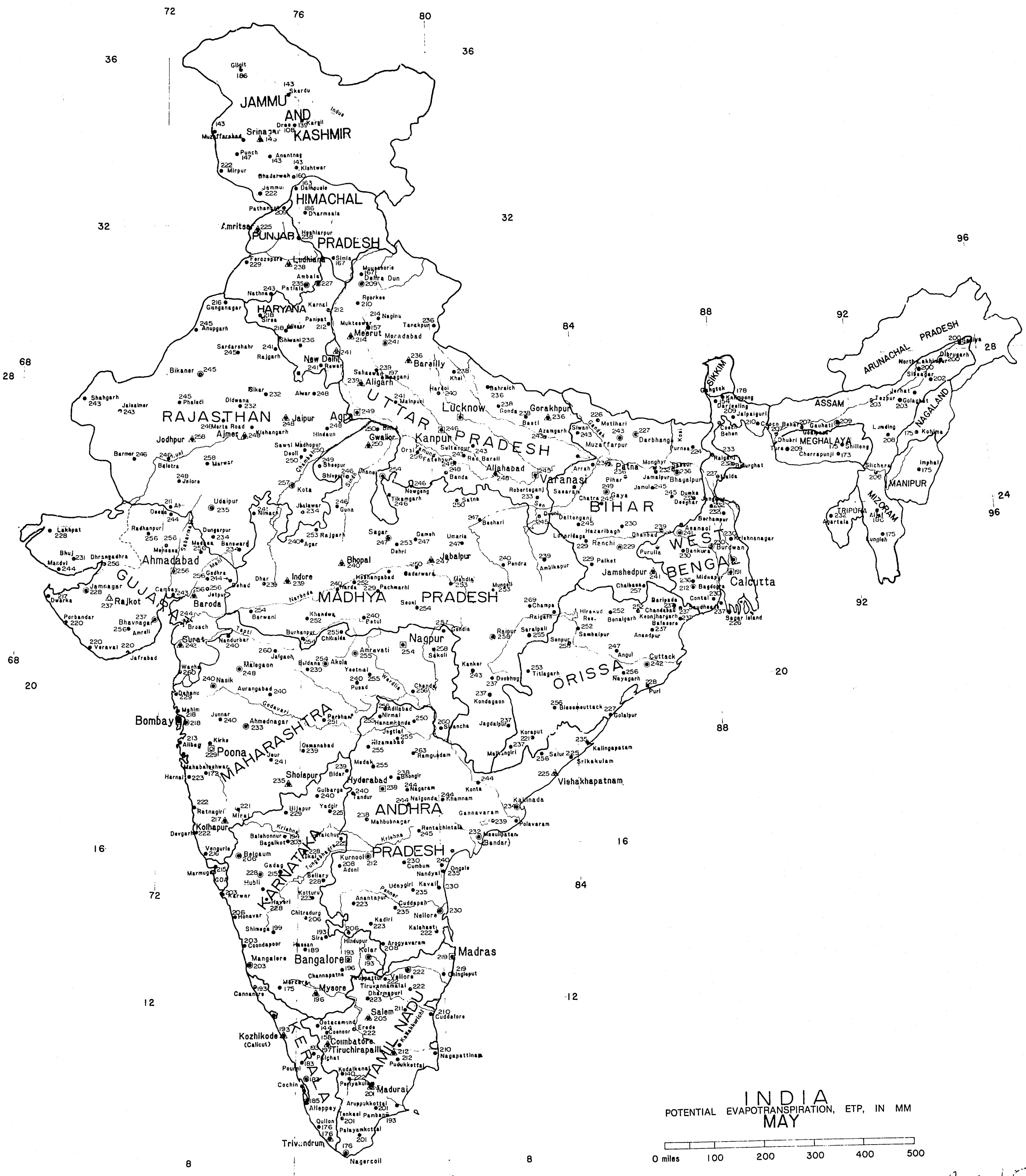

INDIA
POTENTIAL EVAPOTRANSPIRATION, ETP, IN MM
MAY

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-161-

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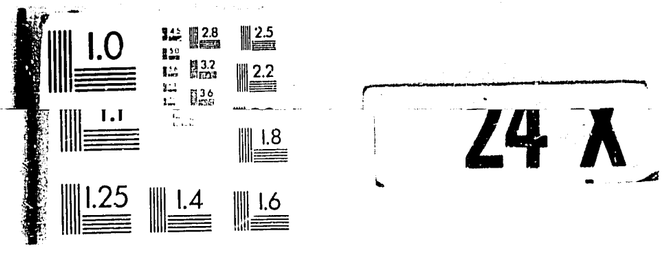
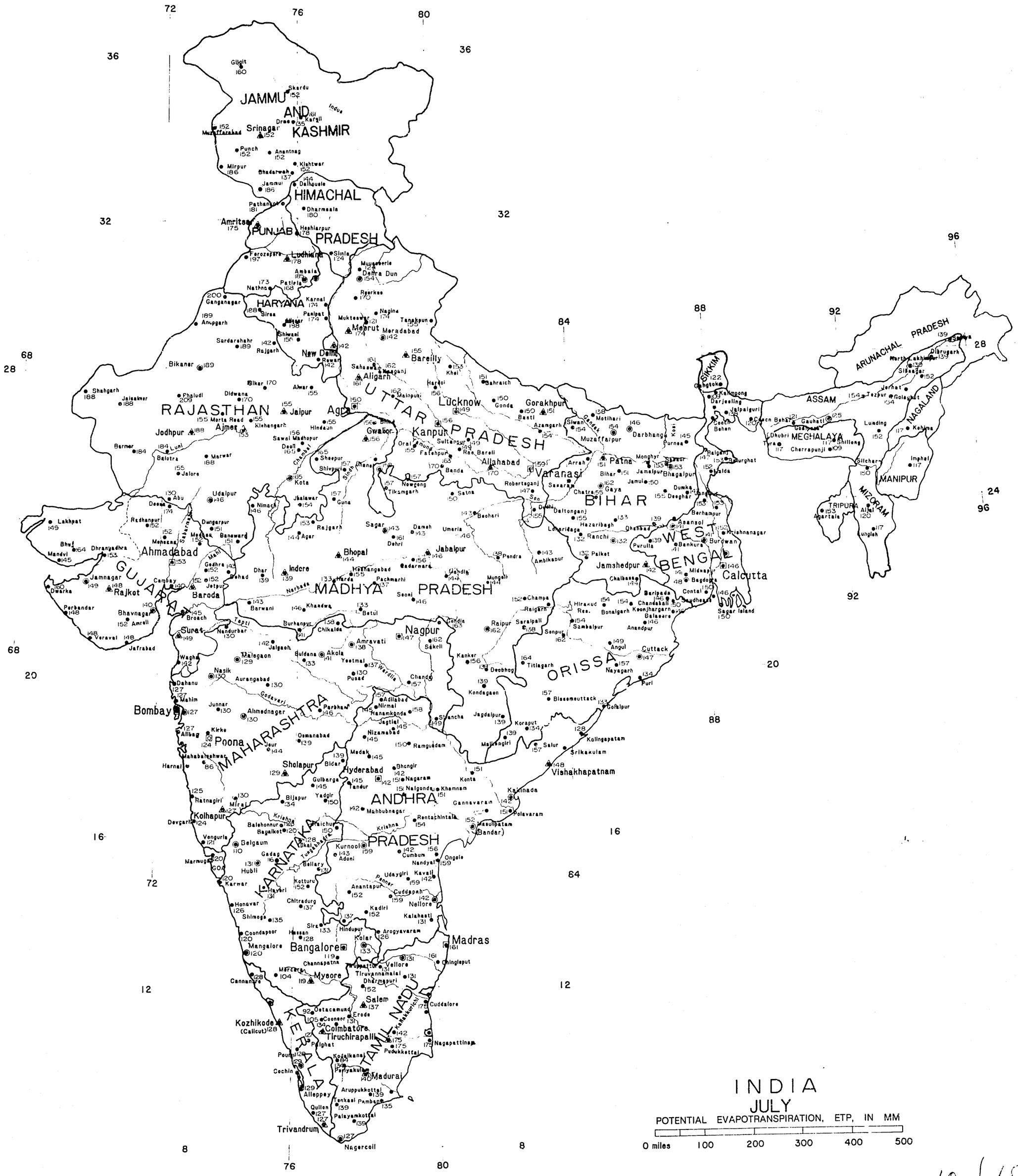
-162-





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PN-AEA-756

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24X

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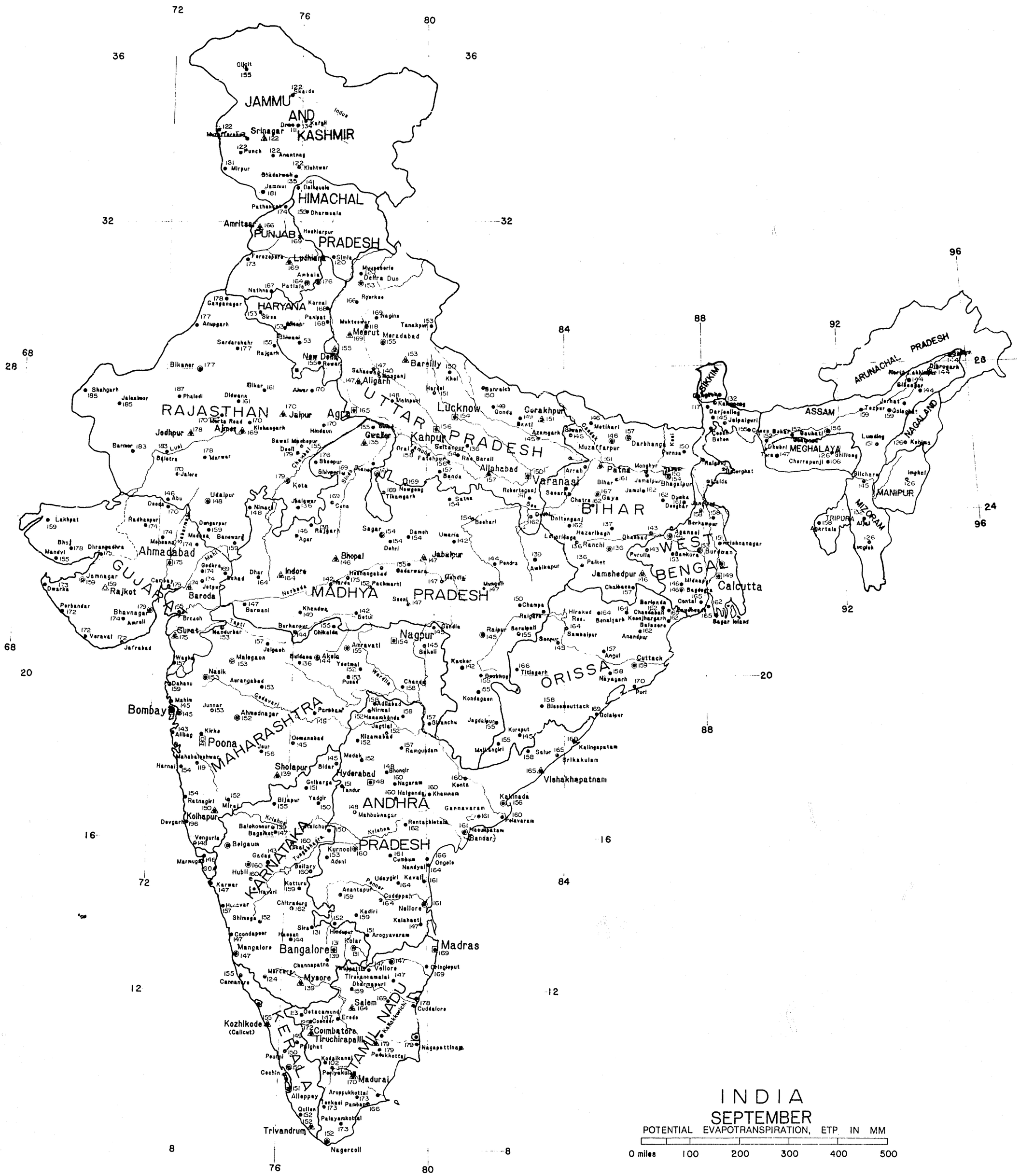
PN-AAA-756

24 X



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INDIA
POTENTIAL EVAPOTRANSPIRATION, ETP, IN MM
OCTOBER

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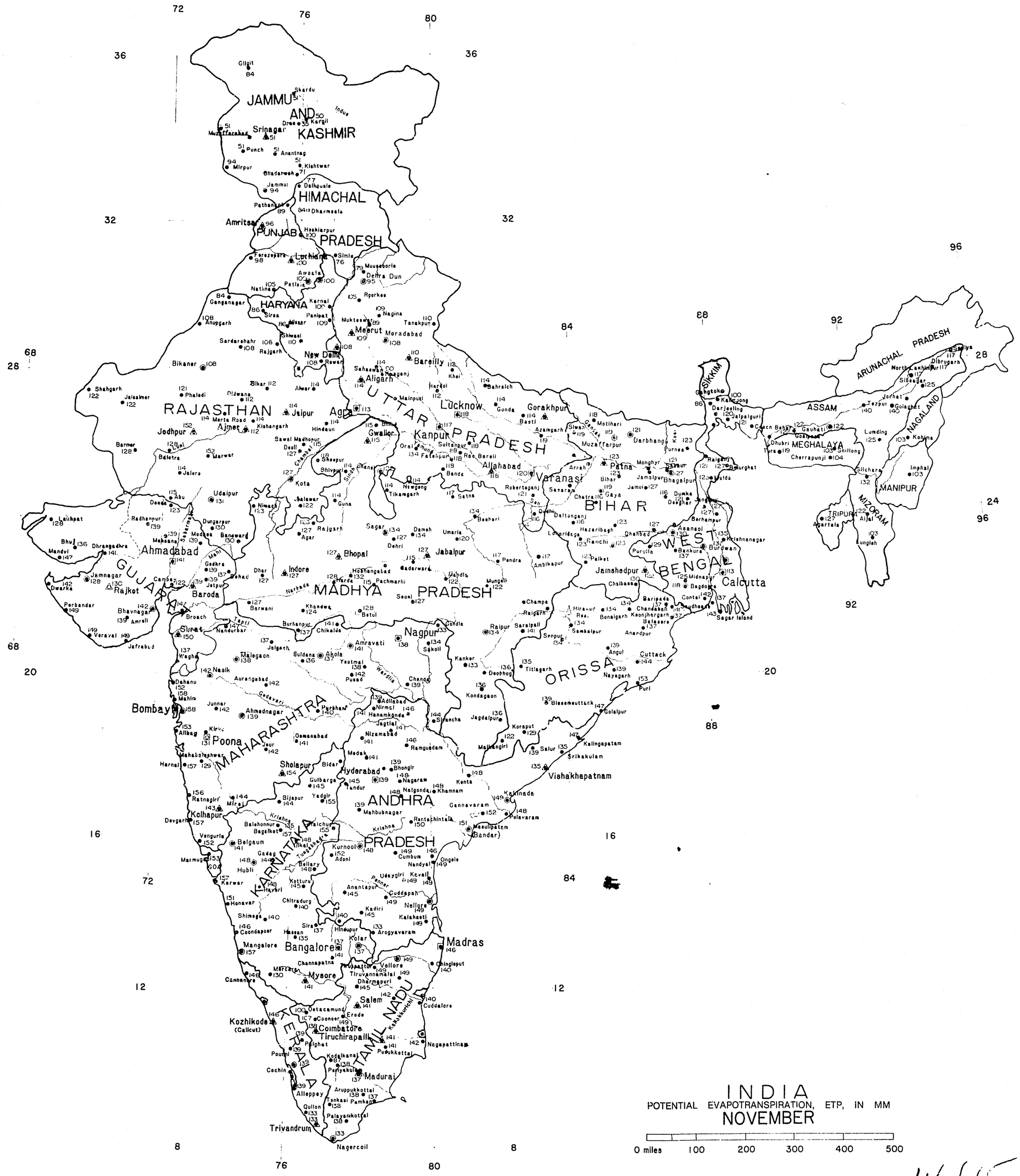

INDIA
POTENTIAL EVAPOTRANSPIRATION, ETP, IN MM
NOVEMBER

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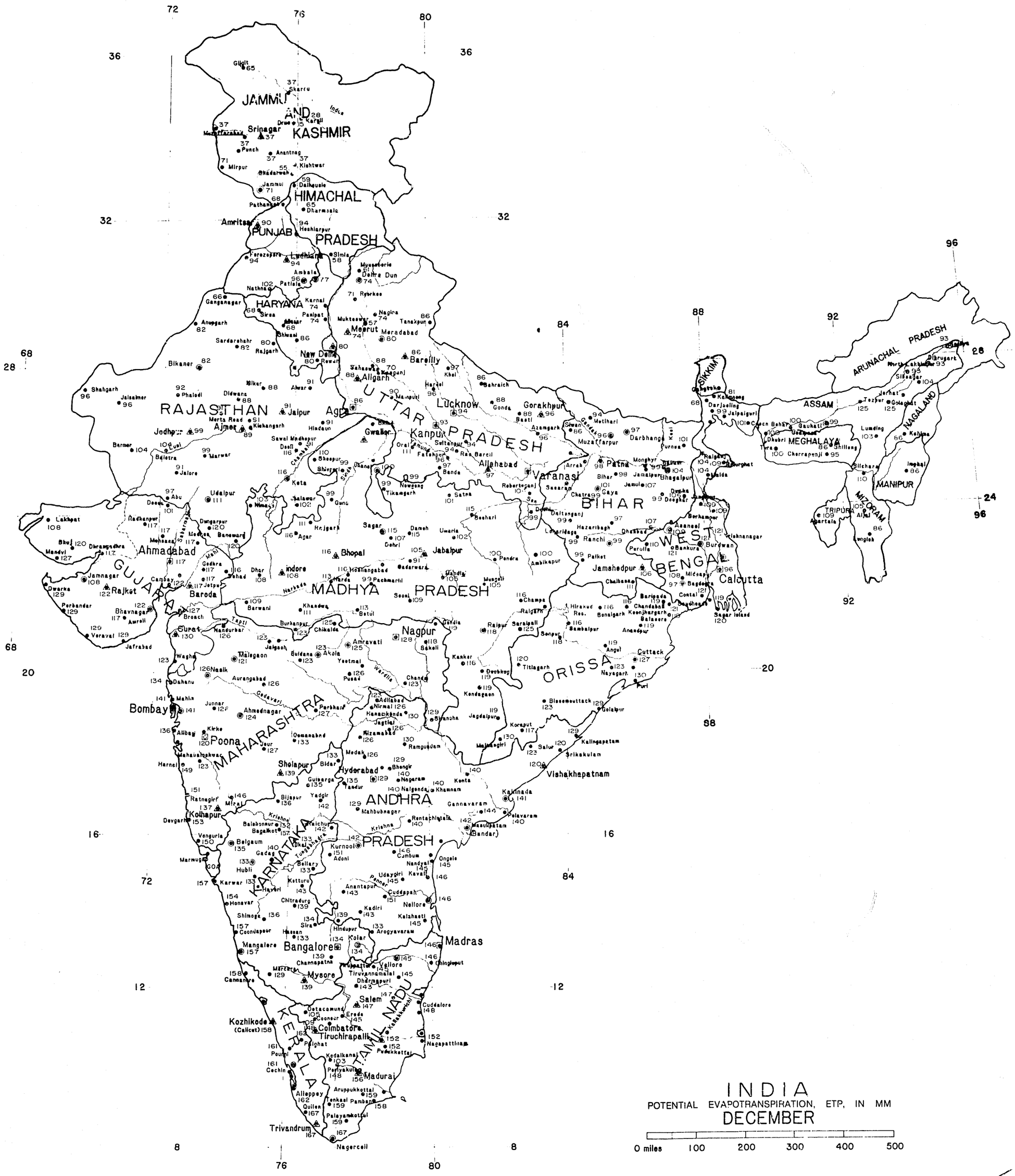

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