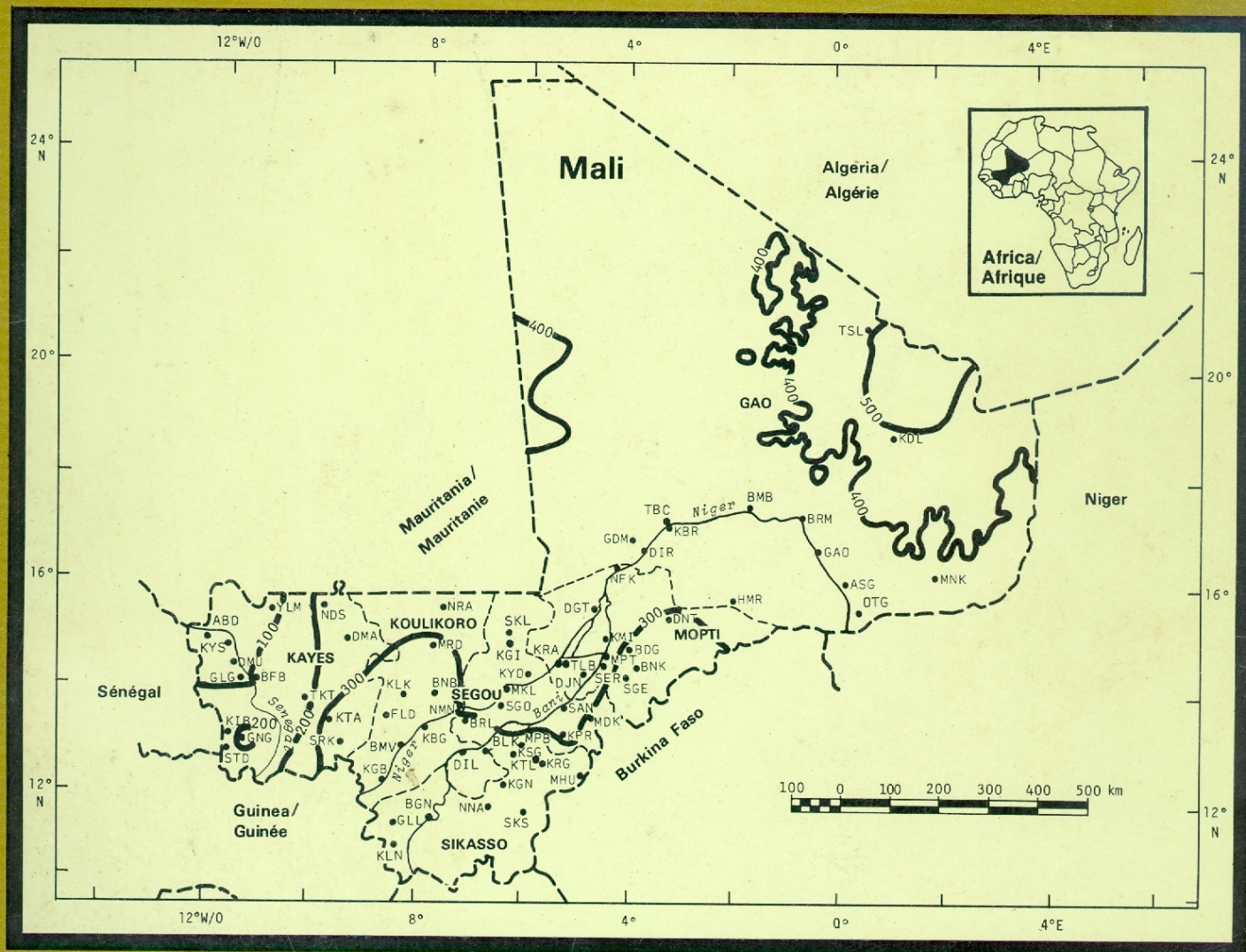


Agroclimatology of West Africa : Mali



ICRISAT

Information Bulletin no. 19

International Crops Research Institute for the Semi-Arid Tropics

Abstract

M.V.K. Sivakumar, M. Konate, and S.M. Virmani. 1984. **Agroclimatology of West Africa: Mali**. Information Bulletin no. 19. Patancheru, A.P. 502324, India: International Crops Research Institute for the Semi-Arid Tropics.

In semi-arid tropical countries such as Mali, a land-locked country without access to the sea, variable and erratic rainfall during the growing season influences crop potential. In this study a description of the rainfall variability is attempted through the analysis of annual, monthly, seasonal, and weekly totals. Through probability analysis of rainfall carried out weekly its seasonality and dependability are described, as is the application of this analysis to crop planning.

Résumé

M.V.K. Sivakumar, M. Konate et S.M. Virmani. 1984. **Agroclimatologie de l'Afrique de l'Ouest: le Mali**. Bulletin d'information n° 19. Patancheru, A.P. 502 324, Inde: International Crops Research Institute for the Semi-Arid Tropics.

Dans les pays tropicaux semi-arides tels que le Mali, pays enclavé, la pluviosité variable et aléatoire pendant la période végétative a une incidence sur le potentiel agricole. Cette étude présente une description de la variabilité pluviométrique au Mali en se fondant sur une analyse des sommes de pluies hebdomadaires, mensuelles (pendant la saison des pluies) et annuelles. L'analyse des probabilités hebdomadaires des pluies a permis de décrire son caractère saisonnier et sa stabilité ainsi que l'application de cette analyse à la planification agricole.

A French edition of this Bulletin is also available.

The International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) is a nonprofit scientific educational institute receiving support from donors through the Consultative Group on International Agricultural Research. Donors to ICRISAT include governments and agencies of Australia, Belgium, Canada, Federal Republic of Germany, Finland, France, India, Italy, Japan, Netherlands, Nigeria, Norway, People's Republic of China, Sweden, Switzerland, United Kingdom, United States of America, and the following international and private organizations: Asian Development Bank, International Development Research Centre, International Fertilizer Development Center, International Fund for Agricultural Development, The European Economic Community, The Ford Foundation, The Leverhulme Trust, The Opec Fund for International Development, The Population Council, The Rockefeller Foundation, The World Bank, and the United Nations Development Programme. Responsibility for the information in this publication rests with ICRISAT.

Agroclimatology of West Africa : Mali

M.V.K. Sivakumar, M. Konate, and S.M. Virmani



ICRISAT

Information Bulletin no. 19

**International Crops Research Institute for the Semi-Arid Tropics
ICRISAT Patancheru P.O., Andhra Pradesh 502 324, India**

December 1984

Contents

Foreword	v	Probability Estimates of Rainfall	18
Introduction	1	Temperature	30
Physiogeography	1	Potential Evapotranspiration	34
Soils	2	Water Balance	36
Agriculture and Animal Husbandry	4	Length of the Growing Season	41
Climatic Characteristics	5	Climatic Classification	43
Data Availability	9	Application of the Analysis	47
Annual Rainfall	9	Acknowledgements	48
Seasonal Rainfall	13	References	49
Monthly Rainfall	13		

Appendixes

I. Results of the Monthly Rainfall Analysis	51
II. Standard Climatological Weeks	95
III. Program for the Computation of Initial and Conditional Probabilities	99
IV. Results of the Initial and Conditional Probability Analysis	105
V. Computer Program Used for Constant Probability Analysis	189
VI. Results of the Constant Probability Analysis	195
VII. Analysis of Maximum Air Temperature	239
VIII. Analysis of Minimum Air Temperature	257
IX. Water Balance Analysis--Soil Water Estimation	275

Foreword

This report on the agroclimatology of Mali is the second in a series planned by ICRISAT. The first report on Niger was brought out in 1979. One on Burkina Fâso (formerly Upper Volta) is being prepared, and others will follow. We hope they will prove useful to scientists, development agencies, and planners working to improve agricultural production in Africa.

The semi-arid tropics--the geographical region of concern to ICRISAT--are characterized by low and variable crop production primarily owing to erratic rainfall conditions. Most of the annual rainfall is received in a relatively short rainy season. The aim of our Farming Systems Research Program is to develop suitable technology for soil and water management and crop production for these dry tropics having erratic rainfall. The problem is being tackled in a three-way approach: (1) assessment of the soil, water, and climatic resources of the various ecological regions of the semi-arid tropics (SAT); (2) identification of the major physical, biological, and socioeconomic processes that make up farming systems of the SAT; (3) investigations of the means by which these processes can be purposefully managed.

Owing to the peculiar distribution of the natural resources of soil and climate, the tropics--especially the dry tropics--call for some specificity with regard to appropriate cropping systems and related farming systems technology. Assessment and interpretation of the natural resources, particularly those related to water in agronomically relevant terms, therefore, assume special significance. We believe that such a quantification will assist in developing a relevant technology and help in its transfer.

We at ICRISAT, in cooperation with the national programs and international agencies, have created a meteorological data bank. Rainfall data for India, West Africa, and the Brazilian northeast have been collected. The data base is being enlarged with data from areas currently unrepresented and collection of other meteorological data, particularly related to evapotranspiration.

The publication of this report reflects our recognition of the continuing need to share the information to help plan food production in an area of the world where food deficits are a matter of acute concern.

L.D. Swindale
Director General

Agroclimatology of West Africa : Mali

M.V.K. Sivakumar, M. Konate, and S.M. Virmani*

Introduction

Mali, a landlocked country without direct access to the sea, covers about 1.24 million sq km or 4.2% of Africa's total area; it lies between 10° to 26°N, 12°W, and 4° 15' E. More than half of that land is barren. Mali is bordered on the north by Mauritania and the Algerian Sahara, on the east and southeast by Niger, on the south by Burkina Fâso (Upper Volta) and Ivory Coast, on the southwest by Guinea, and on the west by Senegal.

In semi-arid tropical countries such as Mali, variable and erratic rainfall during the growing season influences crop potential because of the continuous and high evaporative demand from the atmosphere. The intimate relationship between the weather and crop production systems, especially the complexities associated with the vagaries of weather in terms of yield fluctuations, should be fully understood. A proper description and analysis of weather parameters is an essential element in the application of agrometeorological knowledge for improved crop production systems.

In the present study a description of the rainfall variability in Mali is attempted through the analysis of annual, monthly, seasonal, and weekly totals. Through the probability analysis of rainfall carried out on a weekly basis, the seasonality of rainfall and its dependability are described. Climatic water-balance studies have been carried out, using weekly rainfall as input and the soil moisture storage and estimated evapotranspiration as withdrawals. The application of this analysis in crop planning has been described.

Physiogeography

The physical geography of the country is characterized by a flat and very monotonous relief with low plateaux and basins (Church 1982). The plateaux correspond to the ancient crystalline continental shelf of West Africa, covered by almost horizontal primary sediment, usually siliceous sandstone but sometimes ferruginous. The plateaux slope both northward to the Niger basin and southward, with altitudes not

*Principal Agroclimatologist, ICRISAT Sahelian Center, Niamey, Niger; Chief, Agrometeorological Division, Meteorological Service of Mali; and Program Leader, Farming Systems Research Program, ICRISAT; respectively.

exceeding 300 to 400 m (Fig. 1). In the northeast of Mali, the Iforas Adrar is a crystalline massif of 500 to 800 m altitude, which has a confusing appearance owing to granite decomposition in heaps of blocks in scattered secondary chains. This is separated from the Niger valley by a series of shallow basins, carpeted with sand and valleys of dried out fossils. On the southwest, the Guinean massif of Fouta-D'jalou extends into Mali as a plateau sloping from the northeast and ends near Koulikoro.

The most characteristic reliefs are made of sandstones which generally seem to be overhanging when compared with the surrounding area. There are four dominant masses: the Manding Plateau on the west (maximum altitude--794 m), the Sikasso massif on the south (820 m), the Dogon Plateau on the southeast (777 m), and immediately next to it, the Hombori massif (1150 m).

Above 15°N, the arid region of the country has been influenced by the wind's relief. The sandy cover stretches as far as the eye can see, with a series of sand dunes more or less high and scattered but generally lying in the direction of the dominant wind (E-NE).

Soils

No systematic study of the soils of Mali has been carried out so far. However, a few morphological surveys have been done locally for specific needs (Rossetti 1963; Pieri 1970). In the absence of detailed pedological studies, an attempt is made here to bring out the physical characteristics of soils from the limited surveys already done. The soils of different sites are characterized by their mechanical analysis and topographical position (relief). The Kayes region consists of three big units: the zone of plateaux, the alluvial valley of the Senegal River, and the northern zone of sand banks. In the first, tropical ferruginous and hydromorphic soils are found according to the relief they occupy; in the second, the most cultivated alluvial plain (Same) is rich with tropical ferruginous soils, leached to silty sandy texture, and mineral hydromorphic soils leached to clayey-sandy texture.

In Koulikoro region and Bamako district, according to the studies conducted at Sotuba, Samanko, and Katibougou, tropical ferruginous soils are generally found.

In the south, the Sikasso region manifests considerable pedological diversity. Traditionally the farmers cultivate on the lowest slopes, which have two soil types: red and brown soils, with characteristics of tropical ferruginous soils leached to hydromorphic types, and gray soils which are not very extensive. Besides these, slopes of weathered ferrallitic soils altered by gravelly cover, hydromorphic soils, and low-ground mineral hydromorphic soils are also found.

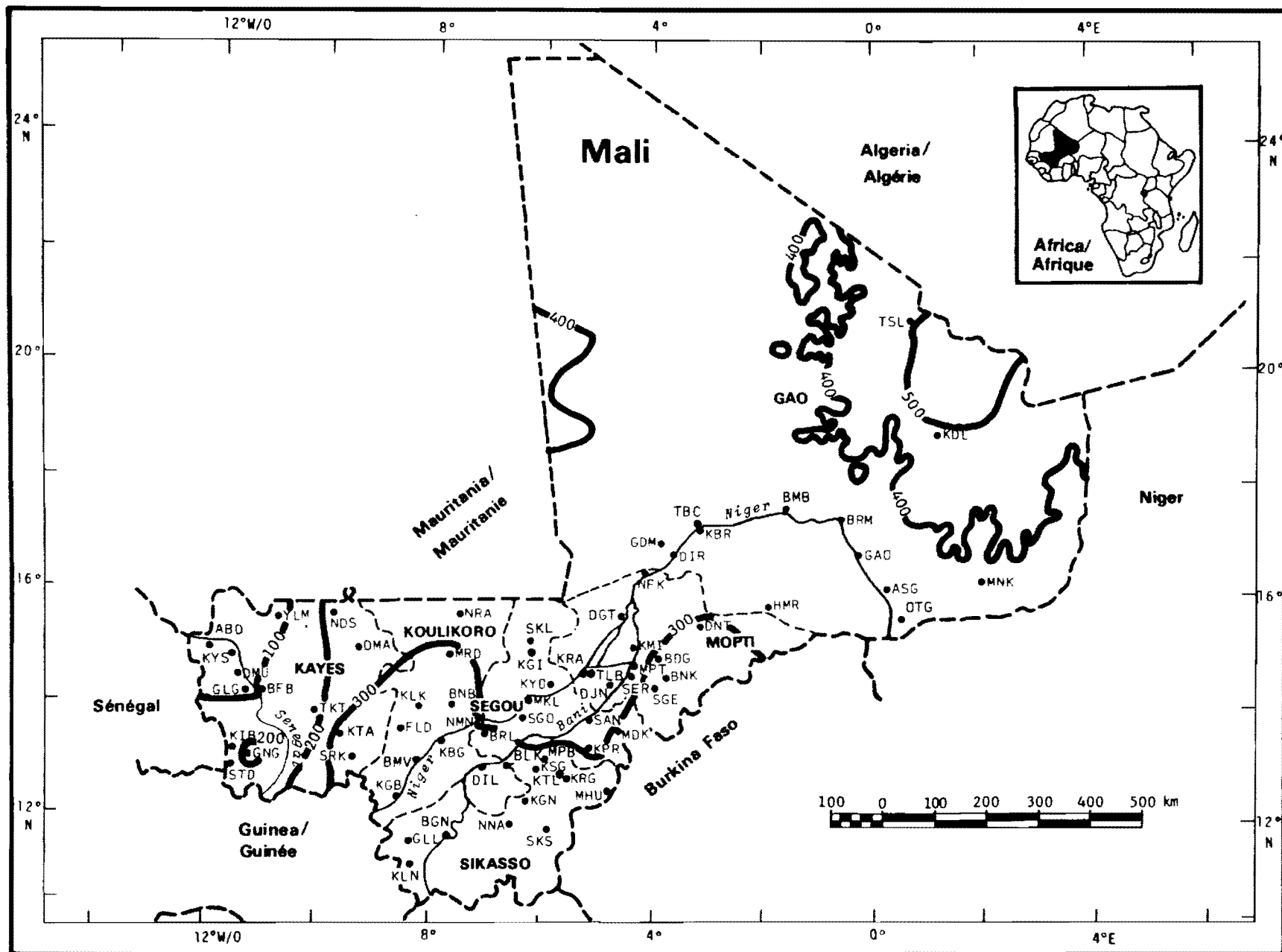


Figure 1. Location of the rainfall stations in Mali. (For explanation of station codes, see Table 1 of this Bulletin. Numbers on the solid lines show the average elevation.)

Figure 1. Site des stations météorologiques au Mali. (Pour explication des abréviations des stations, voir Tableau 1 de ce manuel. L'altitude (m) est indiquée entre les traits épais.)

According to various pedological surveys, certain places in the Ségou region (San, Baramandougou, Niono, and Kogoni) have tropical ferruginous soils indurated in depth and little humus-bearing hydromorphic soils in the old alluvial deposits of Bani.

Three big geomorphological groups can be distinguished in the Mopti region: the central Nigerian delta, the Dogon plateau, and the Seno plain. The central Nigerian delta is an alluvial plain consisting essentially of hydromorphic soils; the Dogon plateau is a gritty massif with little-evolved soils; and finally, the Seno plain, a tract of land made of windy sandy formations, at some places undulating, at others flat, has impoverished tropical ferruginous soils and leached tropical ferruginous soils with low clay percentage.

In the northern part of the country, pedological studies made at Ansongo show the presence of sandy soils on sand banks and levees, clayey soils on clayey deposits in the flood regions, both hydromorphic with oxidized gley and recent clayey terrace outliers (Vertisols originating from oxidized gley's hydromorphy).

The soil map of Africa published by FAO (1978) identifies seven broad soil regions in Mali. Yermosols, Lithosols, and Takyrlic Solonchaks occupy large areas in the northwestern and northeastern regions of Mali, while Calcaric and Entric Regosols predominate in western Mali bordering Mauritania, extending upto Gourma-Rharous. In a broad region on the east bordering Niger and northwestern Burkina Fâso covering Gao, Douentza, and Koro, Arenosols, Cambisols, and Regosols coexist. These soils are also found in the area around Nioro du Sahel. Adjacent to this area is again a small pocket of Regosols and Yermosols. In the rest of Mali covering the more productive southern region Ferric, Gleyic, and Plinthic Luvisols, Vertisols, and Planosols predominate.

Agriculture and Animal Husbandry

In Mali, 90% of the population is involved in agricultural activities. Among the food crops, millets, sorghum, Digitaria exilis, and groundnut are cultivated for domestic consumption (Fig. 2) by 80% of the active population in the country mainly through traditional techniques of subsistence farming. Rice is next in importance, and half of it is cultivated in the inland delta of the river Niger. It is also produced in the Senegal Valley, the Valley of the Niger from Bamako to Ségou and from Gao to Ansongo, and in the Sikasso region in the south.

Maize, of which half the production comes from Sikasso, groundnut, and vegetables are grown on the best alluvial soils in the Niger Valley. Fruits (mainly mangoes) are also grown here to augment the dietary needs of the people.

Cotton and groundnut are the most important commercial crops, supplying the requirements of national industries and of export. Cotton is grown mainly in Sikasso, which contributes half the annual production, while Bamako district and Koulikoro, Ségou, and Mopti regions share the other half. Groundnut is produced mainly in the west; the Kayes and Koulikoro regions and Bamako district produce two thirds of the crop. Tobacco, tea, rice, and sugarcane have been introduced into the regions of Koulikoro, Sikasso, and Ségou, and Bamako district. Gum is produced in the Sahelian region, along with Indian butternuts and kapok. The inner delta of Niger, particularly Ké-Macina, is fertile for industrial crops, where irrigated production of rice, cotton, tea, and sugarcane is common.

Itinerant animal husbandry is the only occupation possible in more than one half of the country subjected to severe aridity. It is practiced through various forms, as for example, nomadism (Tuareg) and transhumance by the Peulh in the Sahel and Saharan regions and essentially sedentary livestock breeding in southern Mali.

Fishing has been practiced since ancient times. It is particularly intense in the valley of Niger, in the inland delta of the river, and in lakes which exist within the bend of the river. The main fishing centers are Ségou, Mopti, and Gao.

This division of agricultural and pastoral activities make the country's economy dependent on rainfall. As rainfall is scanty in more than half the country, agriculture is concentrated in the central, western, southern, and southwestern parts.

Climatic Characteristics

General Atmospheric Circulation

In a vertical cross section along a meridian, the basic pattern over the tropics may be represented by two cells, a low pressure belt along the equator, surrounded by belts of high pressure in the subtropics. The equatorial low-pressure belt corresponds to a mass of air with continual low pressure, affected by rising movements which cool the air. This cooling causes saturation, condensation, and cloud formation--resulting in daily violent heavy showers which maintain constant and high levels of humidity in the equatorial regions (Trewartha 1968).

Positioned over the subtropical high-pressure belt are relatively narrow bands of strong winds bounded by slower-moving air called "jet streams". The high-altitude circulation (at about 12000 meters) of this gigantic air mass, which flows very fast (100-300 km/hour), drives the air down from the top at the southern edge of the current. These descending or subsiding air currents are warmed by compression and consequently become hot and dry, creating at low altitudes the

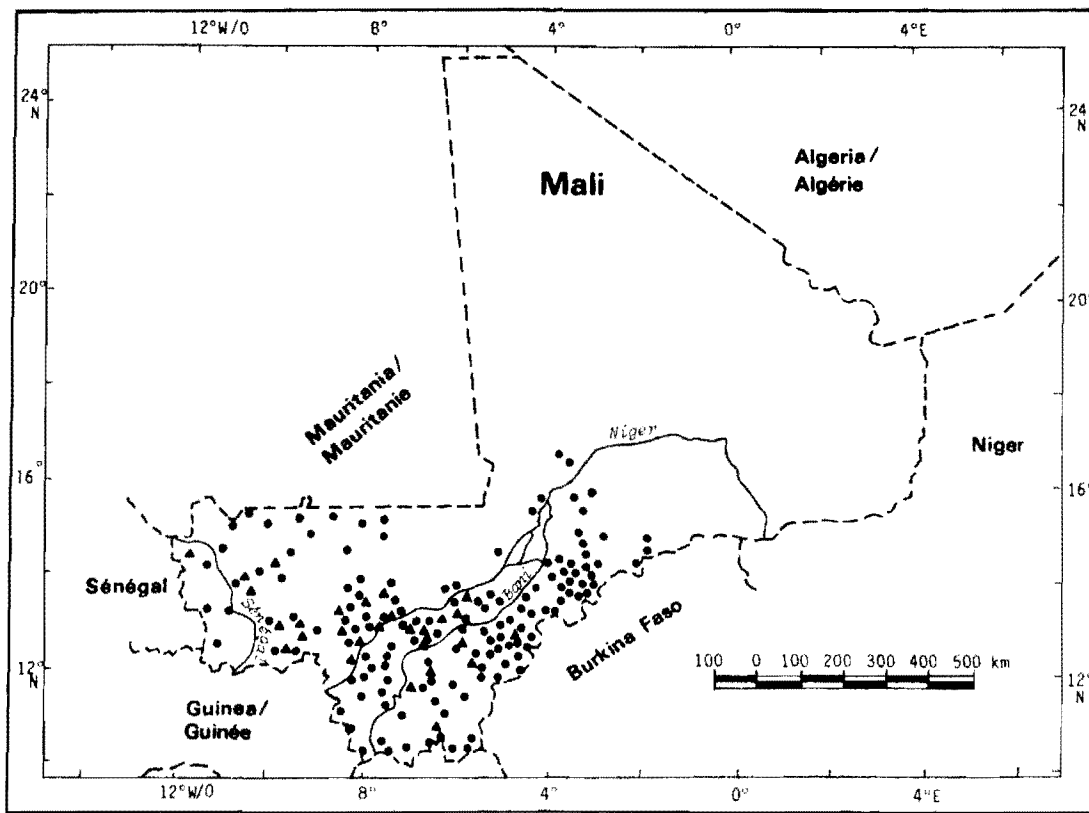


Figure 2. Production trends of sorghum, millet, and groundnut in Mali (●=5000 t sorghum/millet; ▲=5000 t groundnut).

Figure 2. Tendances de la production de sorgho, de mil et d'arachide au Mali (●=5 000 t de sorgho/mil; ▲=5 000 t d'arachide).

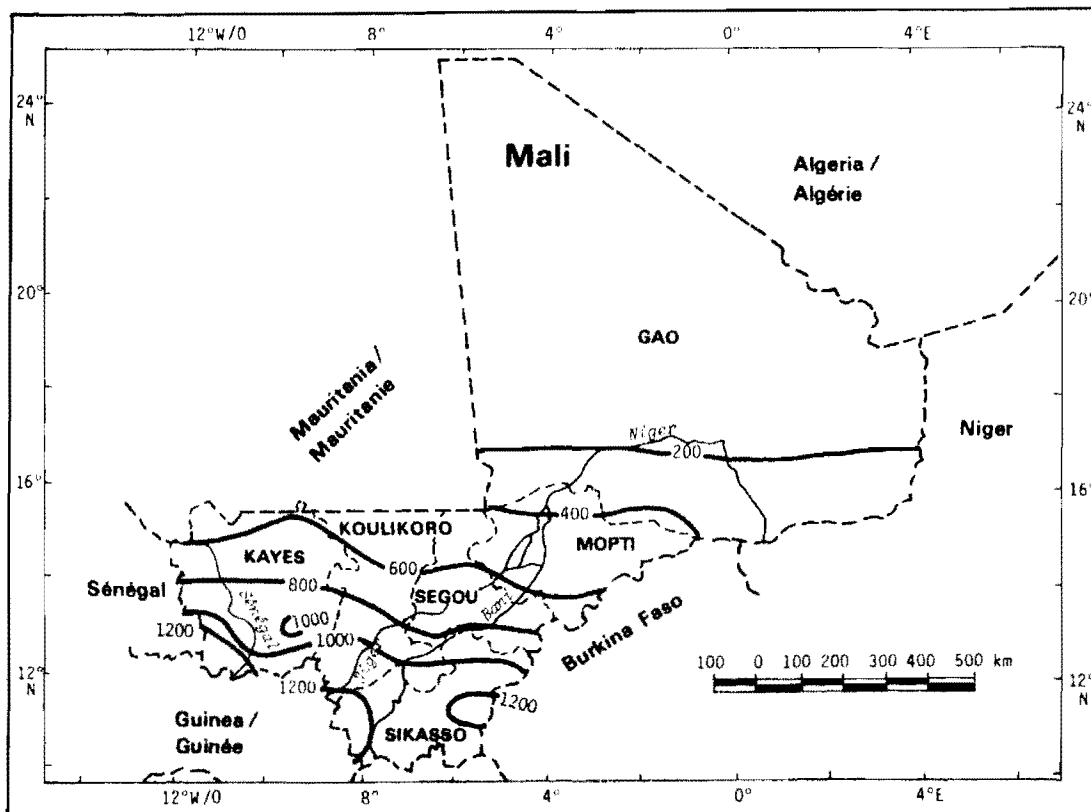


Figure 3. Mean annual rainfall (mm) in Mali.

Figure 3. Pluviométrie annuelle moyenne (mm) au Mali.

zones of high pressure that form a continuous belt across the globe. These high pressures create the belt of tropical deserts, which girdle the globe in either hemisphere between 23° and 30° latitude. The Sahara region in the northern half of Africa is part of this system.

At the surface, the high- and low-pressure zones are normally broken into centers of extreme pressure, around which wind circulations develop when they are away from the equator. But above the equator, the rotation of the earth does not cause moving air to circulate around pressure maxima or minima. Instead, air tends to flow directly from high to low pressure, and its movements are greatly influenced by adjacent circulations of high altitude. These are called easterlies or trade winds. It is the convergence of these prevailing winds of the two hemispheres near the zone of equatorial low pressure that forces the air in the latter to rise. This area of contact between the dry tropical air and humid equatorial air is called the intertropical convergence zone, or ITCZ.

In intertropical and subtropical Africa, climate is regulated by the movement of the two pressure belts and the ITCZ between them, the ITCZ following the earth position of the sun at its zenith with a time lag of about 5 weeks (Cochemé and Franquin 1967). The sun is at its zenith over the equator on 21 March and 21 September (called equinoxes); at its zenith over the tropics on 21 June (Tropic of Cancer, $23^{\circ}27'N$) and 21 December (Tropic of Capricorn, $23^{\circ}27'S$). In association with the sun's apparent movement, ITCZ advances northward between 21 March and 21 June, then recedes to the south between 21 June and 21 September, and slowly disappears between 21 September and 21 December while the southern ITCZ takes shape as the sun's apparent movement brings it south of the equator (Trewartha 1968).

The ITCZ is a zone of rising turbulence, the passage of which above various regions of intertropical Africa brings them rain. Rainfall often follows, rather than accompanies, the passage of ITCZ; the lag between ITCZ and release of heavy showers may be 200 to 300 km (Cochemé and Franquin 1967).

The atmospheric circulation described above is a very simple generalized pattern. Several modifications could be introduced by regional differences in relief, relative areas under land and water, etc. Windward slopes of mountains favor lifting of air and incidence of heavy rain. The formation of high- or low-pressure centers is determined by annual temperature variations in land and sea. However, a simple picture of the latitudinal zones of climate imposed by the movement of ITCZ and the associated rainfall could emerge from the phenomena discussed above.

West Africa presents some peculiarities due to its geographical position. Not only is it subjected to a dominant continental action towards the north, but also to a considerable oceanic influence.

Season and Weather Types in Mali

The start of different seasons is linked to the existence of the anticyclones of Azores, Libya, and Saint-Helena, both on the surface and at a high altitude of semipermanent and quasi-stationary centers of action.

The movement of the ITCZ is affected by the fluctuations of these anticyclones, their position and elevation. The anticyclone of Azores reaches its most active position in July-August; when it is in its prominent meridional position, the wind blows from north to northeast in the whole of West Africa. Libya's anticyclone, linked to that of Azores, sends to Mali from November to May a dry east wind called "harmattan" (Asnani 1982). And finally, the anticyclone of Saint-Helena, remaining permanently between the equator and 20°S, in its most septentrional position (between the equator and 10° to 15°N) sends a very humid southwest current of oceanic origin, i.e., the monsoon. During this period, a generally dry east wind prevails at a high altitude in the north, but it becomes gradually more and more humid towards the south where it meets with the monsoon current of low layers. This current gives birth to the heavy showers and perturbation characteristics of the rainy season.

The circulation described above helps to distinguish clearly two distinct seasons and transitional periods (Konare and Konate 1976).

The dry season. The intertropical convergence zone is situated between 5° and 10°N in the south of Mali, which is subjected to harmattan. Its duration varies between 6 and 9 months from south to north. This season is marked by the appearance of dry mist owing to the quasi-permanent presence of solid particles, which overhang in the air near the ground. During the hot afternoons, small whirlwinds occur near the ground, perhaps owing to the strong horizontal temperature gradients. Whirling sand and dust, a spectacular phenomenon, can gain in magnitude and transform into a sandstorm.

The interseasonal periods. These are neither rainy nor dry months when the intertropical front oscillates between 10° and 15°N and is very active. This period is characterized by unstable clouds that cause sudden showers and sporadic storms, generally during mid or late evening. The highest temperatures are registered during this period, and the absence of wind circulation near the ground is observed.

The humid season. It is affected successively by heavy showers and monsoon and is marked by two distinct types of weather.

Squall lines in the east wind are very characteristic of the Sahelian region, which the layman wrongly names as "tornado." They are centered along the meridian, with a length of 500 or even 750 km; they always move from east to west. Their passage is marked by violent winds accompanied by abundant rainfall, which can have disastrous effects.

The monsoon regime is the dominant factor in the rainy season. The intertropical front, almost nonexistent, is pushed towards 20°N and half of southern Mali is subjected to the very humid western winds of the Gulf of Guinea. This regime, which reaches its maximum intensity during August, is marked by an overcast sky or sometimes dense clouds, causing moderate rainfall or stormy showers.

Data Availability

Long-term daily rainfall data for 81 locations in Mali (Table 1) were supplied to us by Office de la Recherche Scientifique et Technique d'Outre-Mer (ORSTOM), Paris in 1977. These data were updated to 1980 for all locations, in cooperation with the Meteorological Services of the Government of Mali. Geographical location of the stations is displayed in Figure 1. The data were verified and entered into the ICRISAT Computer System (VAX-11/780).

Monthly mean maximum and minimum temperature data for durations varying from 20 to 48 years for 32 locations, available from the Meteorological Services of the Government of Mali, were also verified and entered on the computer.

Weekly average meteorological data for the computation of Penman potential evapotranspiration (PE) were made available for 9 locations by the Meteorological Services of the Government of Mali. These data were used to compute PE and were used subsequently in the water-balance computations for these 9 locations.

Annual Rainfall

In areas with pronounced seasonal patterns of rainfall influenced by changes in solar energy and pressure patterns, mean annual rainfall could help provide useful comparisons of agricultural potential.

The mean annual rainfall in Mali is plotted in Figure 3. Broadly speaking the isohyets run more or less parallel. The influence of the movement of ITCZ and of its northern limits of operations, as discussed earlier, is immediately reflected in the latitudinal variation in rainfall. Above 16°N, the region is completely dry, while to the south the isohyets show a strong gradient. In the Kayes area, the gradient is relatively steep. Annual rainfall increases from 570 mm at Yélimané in the north to 1337 mm at Satadougou in the south. The prevailing cropping patterns in this area, in a cross section running north-south, reveal a diversity of cropping possibilities.

Table 1. List of the rainfall stations in Mali.

Station	Code	Lat. (N)	Long.	Altitude (m)	Data base (years)
Ambidédi	ABD	14 35	11 47E	30	31
Ansongo	ASG	15 40	0 30E	246	59
Bafoulabé	BFB	13 48	10 50W	104	51
Bamako-Ville	BMV	12 38	8 1W	331	24
Bamako-Zoo-Ifan	BMI	12 40	7 59W	362	31
Bamba	BMB	17 2	1 24W	259	33
Banamba	BNB	13 33	7 27W	379	49
Bandiagara	BDG	14 21	3 37W	392	66
Bankass	BNK	14 4	3 31W	294	30
Baroueli	BRL	13 4	6 50W	309	50
Béléko	BLK	12 29	6 25W	306	36
Bougouni	BGN	11 25	7 30W	350	61
Bourem	BRM	16 57	0 21W	273	54
Diamou	DMU	14 6	11 16W	60	31
Diéma	DMA	14 33	9 11W	252	41
Dioïla	DIL	12 29	6 48W	315	43
Diré	DIR	16 16	3 24W	265	47
Djenné	DJN	13 54	4 34W	278	61
Dogo-Ténenkou	DGT	15 10	4 26W	264	33
Douentza	DNT	14 59	2 57W	305	56
Dounfing	DNF	12 41	8 3W	389	29
Faladye	FLD	13 8	8 21W	337	51
Galougo	GLG	13 50	11 4W	91	31
Gao	GAO	16 16	0 3W	258	63
Goualala	GLL	11 13	8 14W	350	37
Goundam	GNM	16 25	3 40W	269	63
Gourma-Rharous	GRR	16 53	1 56W	266	56
Guené-Goré	GNG	12 44	11 1W	240	26
Hombori	HMR	15 17	1 42W	287	52
Kabara	KBR	16 42	2 59W	267	59
Kalana	KLN	10 47	8 12W	379	31
Kami	KMI	14 34	4 13W	272	32
Kangaba	KGB	11 56	8 25W	370	43
Kara	KRA	14 9	5 1W	271	31
Karangasso	KRG	12 17	5 16W	392	31
Katibougou	KBG	12 56	7 32W	326	45
Kayes	KYS	14 26	11 26W	46	81
Kayo	KYO	13 54	5 37W	278	31
Ké-Macina	KMN	13 57	5 22W	277	56
Kéniéba	KIB	12 48	11 21W	136	40

.. contd.

Table 1 continued.

Station	Code	Lat. (N) ° ' "	Long. ° ' "	Alti- tude (m)	Data base (years)
Kidal	KDL	18 26	1 21E	458	59
Kignan	KGN	11 51	6 1W	348	29
Kimparana	KPR	12 50	4 56W	297	2
Kita	KTA	13 4	9 27W	328	51
Kogoni	KGI	14 44	6 2W	273	31
Kolokani	KLK	13 35	8 2W	399	57
Konséguéla	KSG	12 24	5 53W	346	30
Koulouba	KLB	12 40	8 1W	485	34
Koutiala	KTL	12 24	5 28W	344	61
Mahoua	MHU	12 8	4 38W	330	31
Mandjakuy	MDK	13 2	4 28W	305	28
Markala	MKL	13 41	6 5W	287	42
Ménaka	MNK	15 52	2 13E	288	59
Mopti	MPT	14 41	4 6W	271	61
Mourdiah	MRD	14 28	7 28W	314	52
Mpessoba	MPB	12 37	5 42W	302	32
Nara	NRA	15 10	7 17W	263	60
Niafounké	NFK	15 56	3 59W	271	63
Niéna	NNA	11 25	6 21W	348	29
Niénébalé	NNB	12 55	7 30W	290	55
Niono	NNO	14 15	5 59W	277	32
Nioro du Sahel	NDS	15 14	9 36W	235	63
Nyamina	NMN	13 19	6 59W	292	46
Ouatagouna	OTG	15 11	0 44E	250	28
Ouéléssébougou	OLB	11 59	7 55W	356	28
San	SAN	13 17	4 54W	283	61
Saraféré	SRF	15 49	3 42W	261	43
Satadougou	STD	12 36	11 24W	150	40
Ségou	SGO	13 24	6 9W	288	66
Ségué	SGE	13 51	3 45W	464	32
Sikasso	SKS	11 21	5 41W	374	69
Sirakoro	SRK	12 41	9 14W	369	31
Sofara	SFR	14 1	4 14W	271	46
Sokolo	SKL	14 44	6 8W	273	45
Soninkoura	SNK	13 27	6 15W	284	30
Sotuba	STB	12 39	7 56W	320	32
Tessalit	TSL	20 12	0 59E	493	34
Tilembéya	TLB	14 9	4 59W	273	37
Tombouctou	TBC	16 43	3 0W	263	51
Toukoto	TKT	13 27	9 53W	177	50
Yélimané	YLM	15 7	10 34W	97	46

Another significant feature in Mali, as in Niger (Sivakumar et al. 1980), is that the isohyets at the eastern end of Mali do not show the steep gradient witnessed at the western end. This may be owing to greater amplitude of movement and therefore swifter passage of the ITCZ in the east than in the west and to habitual large-scale convergence. For example, Satadougou in Kayes in southwest Mali records a mean annual rainfall of 1337 mm, and Sikasso in southern Mali registers 1307 mm. Such similarities in the amount of rainfall and in approximately the same length of humid season should not be taken to imply a similar degree of plant growth and development at the two locations, because Satadougou (12°36'N) and Sikasso (11°21'N) are not located on the same latitude.

Frequency distribution of mean annual rainfall recorded at the 81 locations in Mali is shown in Table 2. The mean annual rainfall for the country as a whole is 708 mm. There is a wide variation in the annual rainfall in Mali because of the transition from the savannah climatic type to the Sahelian and desert climates as one moves from the southern to the northernmost areas in Mali. Hence, the standard deviation and coefficient of variation (CV) of annual rainfall are large. The lowest mean annual rainfall of 79 mm is recorded at Tessalit in northern Mali, the highest of 1362 mm at Goualala in southern Mali.

 Table 2. Frequency distribution and important statistics of annual rainfall data for 81 stations in Mali.

Frequency class	No. of stations	Percent of total
0-100	1	1.2
100-200	5	6.2
200-300	7	8.6
300-400	2	2.5
400-500	5	6.2
500-600	15	18.5
600-700	6	7.4
700-800	8	9.9
800-900	7	8.6
900-1000	7	8.6
1000-1100	9	11.1
1100-1200	3	3.7
1200-1300	3	3.7
1300-1400	3	3.7
Total	81	100.0

Mean annual rainfall	:708 mm	Maximum rainfall	:1362 mm
Standard deviation	:325 mm	Minimum rainfall	: 79 mm
CV (%)	:46	Range	:1283 mm

Seasonal Rainfall

Because the seasonal movement of ITCZ strongly regulates the rainfall pattern, rainfall distribution in Mali tends to be monomodal. Seasonal distribution of rainfall at different locations in Mali is listed in Table 3. Based on the probability of occurrence of 10 mm of rainfall in two consecutive weeks, the data were divided into dry season (probabilities < 0.16), prerainy or postrainy season (probabilities from 0.16 to 0.45), and rainy season (probabilities from 0.46 to 1.00). As in most semi-arid areas, rainfall during the rainy season accounts for over 90% of the annual rainfall. Length of the rainy season in Mali (Fig. 4) closely follows the annual rainfall trends shown in Figure 3. In the Gao area of Mali, the length of the rainy season is less than 100 days. This duration increases gradually as one moves southward towards Mopti and Sikasso. For example, at Sofara, the length of the rainy season is 112 days, increasing to 161 days at Konseguela and to 189 days at Goualala at the southern end of Mali. As with mean annual rainfall, the length of the rainy season depends to a large extent on latitude.

Rainfall during the rainy season (Fig. 5) follows a pattern similar to that observed in mean annual rainfall (Fig. 3). The predominant influence of ITCZ on the amount and distribution of rainfall in Mali and the gradient in rainfall noticed in the western regions (Fig. 3), is repeated in Figure 5, emphasizing the monomodal nature of the rainfall distribution.

Monthly Rainfall

Mean monthly rainfall and annual rainfall along with the standard deviation, coefficient of variation, maximum and minimum rainfall, and the range in rainfall recorded for each month have been computed from the daily rainfall data for all the 81 locations in Mali. The results of this analysis are presented in Appendix I. Data on coefficient of variation and standard deviation of monthly rainfall for different locations in Mali give an idea of the degree of variability within a given year. As discussed earlier, the movement of ITCZ and its placement over a region strongly influence the rainfall patterns in Mali. To present the latitudinal variations in the distribution of monthly rainfall amounts, six locations--Kalana, Kéniéba, Mopti, Gao, Kidal, and Tessalit--spread from $10^{\circ}47'$ to $20^{\circ}12'N$ were chosen and histograms of monthly rainfall data plotted (Fig. 6). At Kalana ($10^{\circ}47'N$) rainfall is well distributed through June to October. But Kidal ($18^{\circ}26'N$) and Tessalit ($20^{\circ}12'N$), situated in the Sahelian desert, have very little water available for sustained plant growth during most of the year, with scanty amounts available only during July and August.

Table 3. Seasonal rainfall distribution (in mm) in Mali¹.

Station	Prerainy	Rainy	Postrainy	Dry	Total
Ambidédi	34.7	639.7	23.4	6.0	703.8
Ansongo	61.0	186.3	28.5	17.7	293.5
Bafoulabé	13.3	832.6	30.9	14.2	891.0
Bamako-Ville	32.0	932.5	31.9	25.0	1021.4
Bamako-Zoo-Ifan	11.0	971.3	47.1	8.5	1037.9
Bamba	32.3	117.5	34.5	11.8	196.1
Banamba	35.3	694.0	20.2	18.8	768.3
Bandiagara	19.5	526.6	24.2	20.2	590.5
Bankass	31.5	509.3	34.0	18.3	593.1
Baroueli	51.2	646.6	18.5	21.6	737.9
Béléko	55.4	823.5	26.6	14.3	919.8
Bougouni	-	1051.4	16.5	20.0	1087.9
Bourem	16.5	47.2	58.9	19.9	142.5
Diamou	11.5	699.8	42.8	16.3	770.4
Diéma	18.8	583.9	30.9	17.0	650.6
Dioïla	31.9	857.3	28.2	13.1	930.5
Diré	21.0	214.4	7.3	21.5	264.2
Djenné	35.1	514.7	17.2	23.2	590.2
Dogo-Téenkou	37.7	380.3	-	17.1	435.1
Douentza	29.9	423.5	22.6	18.4	494.4
Dounfing	53.3	864.9	38.9	17.1	974.2
Faladye	31.6	902.2	0.0	56.8	990.6
Galougo	30.2	803.7	6.4	17.4	857.7
Gao	42.7	158.5	26.6	24.8	252.6
Goualala	28.1	1291.7	14.2	27.5	1361.5
Goundam	36.1	173.8	9.7	21.6	241.2
Gourma-Rharous	28.9	82.2	25.8	29.3	166.2
Guené-Goré	18.1	1182.9	22.6	10.4	1234.0
Hombori	24.8	346.0	16.1	21.1	408.0
Kabara	24.2	117.9	43.0	19.5	204.6
Kalana	33.9	1152.4	43.7	15.8	1245.8
Kami	29.2	488.1	25.0	9.8	552.1
Kangaba	35.1	1045.4	21.0	14.5	1116.0
Kara	30.1	502.1	17.7	11.2	561.1
Karangasso	26.6	964.1	19.3	27.0	1037.0
Katibougou	35.6	776.3	22.4	29.3	863.6

1. Seasonal rainfall distribution for Tessalit, listed in Table 1, is not presented here since the mean annual rainfall at this location is only 79 mm.

..contd.

Table 3 continued.

Station	Prerainy	Rainy	Postrainy	Dry	Total
Kayes	16.3	667.0	25.5	12.9	721.7
Kayo	29.8	571.1	62.1	10.7	673.7
Ké-Macina	26.5	489.1	18.8	30.7	565.1
Kéniéba	24.3	1213.5	44.6	12.8	1295.2
Kidal	12.5	45.7	49.1	28.7	136.0
Kignan	43.4	1091.3	27.5	25.9	1188.1
Kimparana	42.3	776.7	27.4	10.4	856.8
Kita	38.6	1007.8	27.0	13.0	1086.4
Kogoni	8.0	488.2	21.8	30.6	548.6
Kolokani	23.5	744.7	18.2	25.8	812.2
Konséguéla	34.6	925.7	12.5	18.7	991.5
Koulouba	56.2	899.9	32.8	11.8	1000.7
Koutiala	54.9	901.0	18.2	26.0	1000.1
Mahoua	43.2	916.4	32.1	10.2	1001.9
Mandjakuy	39.5	697.3	14.1	19.3	770.7
Markala	25.6	556.1	24.5	22.6	628.8
Ménaka	35.5	181.4	36.6	16.6	270.1
Mopti	5.6	465.4	40.4	21.2	532.6
Mourdiah	31.8	460.9	26.7	27.4	546.8
Mpessoba	21.2	939.8	11.2	18.3	990.5
Nara	35.9	429.9	12.9	19.7	498.4
Niafunké	25.4	235.1	27.5	21.1	309.1
Niena	22.1	1105.5	6.2	29.6	1163.4
Niénébalé	48.5	788.5	30.4	12.4	879.8
Niono	26.5	506.5	22.7	16.7	572.4
Nioro du Sahel	16.4	555.5	34.9	28.5	635.3
Nyamina	30.2	614.8	32.2	18.9	696.1
Ouatagouna	37.0	208.7	50.0	22.0	317.7
Ouéléssébougou	48.6	983.7	34.1	7.6	1076.0
San	43.3	678.5	10.7	17.7	750.2
Saraféré	27.4	220.3	26.9	16.0	290.6
Satadougou	28.1	1282.9	-	25.5	1336.5
Ségou	24.5	637.0	22.8	21.5	705.8
Ségué	46.5	392.3	45.1	23.5	507.4
Sikasso	52.9	1225.3	-	27.4	1305.6
Sirakoro	22.4	945.6	11.6	20.0	999.6
Sofara	27.0	495.4	22.1	23.7	568.2
Sokolo	49.9	412.5	14.4	20.6	497.4
Soninkoura	38.4	602.6	38.6	11.6	691.2
Sotuba	48.4	913.7	40.6	11.6	1014.3
Tilembéya	22.8	518.9	19.1	9.4	570.2
Tombouctou	13.7	146.3	6.4	25.7	192.1
Toukoto	32.9	813.8	18.0	16.3	881.0
Yélimané	14.6	515.7	23.7	15.9	569.9

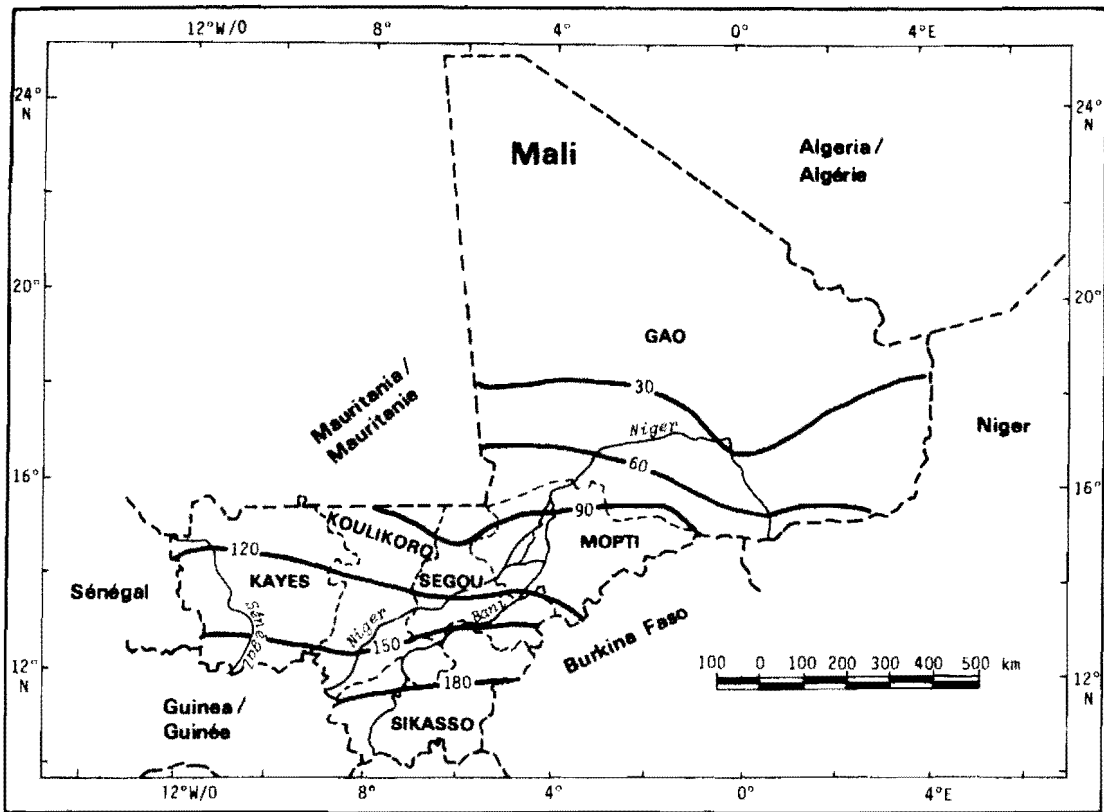


Figure 4. Length of the rainy season (days) in Mali.

Figure 4. Durée de la saison des pluies (jours) au Mali.

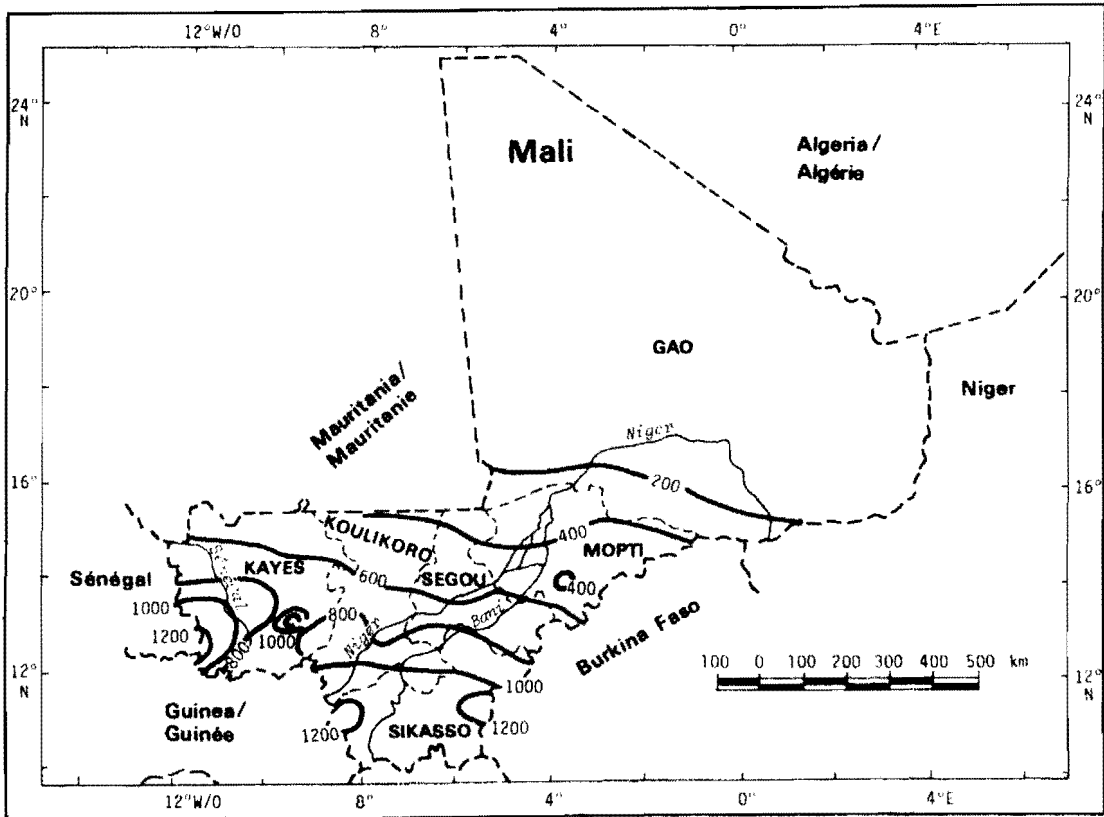


Figure 5. Mean rainfall (mm) during the rainy season in Mali.

Figure 5. Pluviométrie moyenne (mm) durant la saison des pluies au Mali.

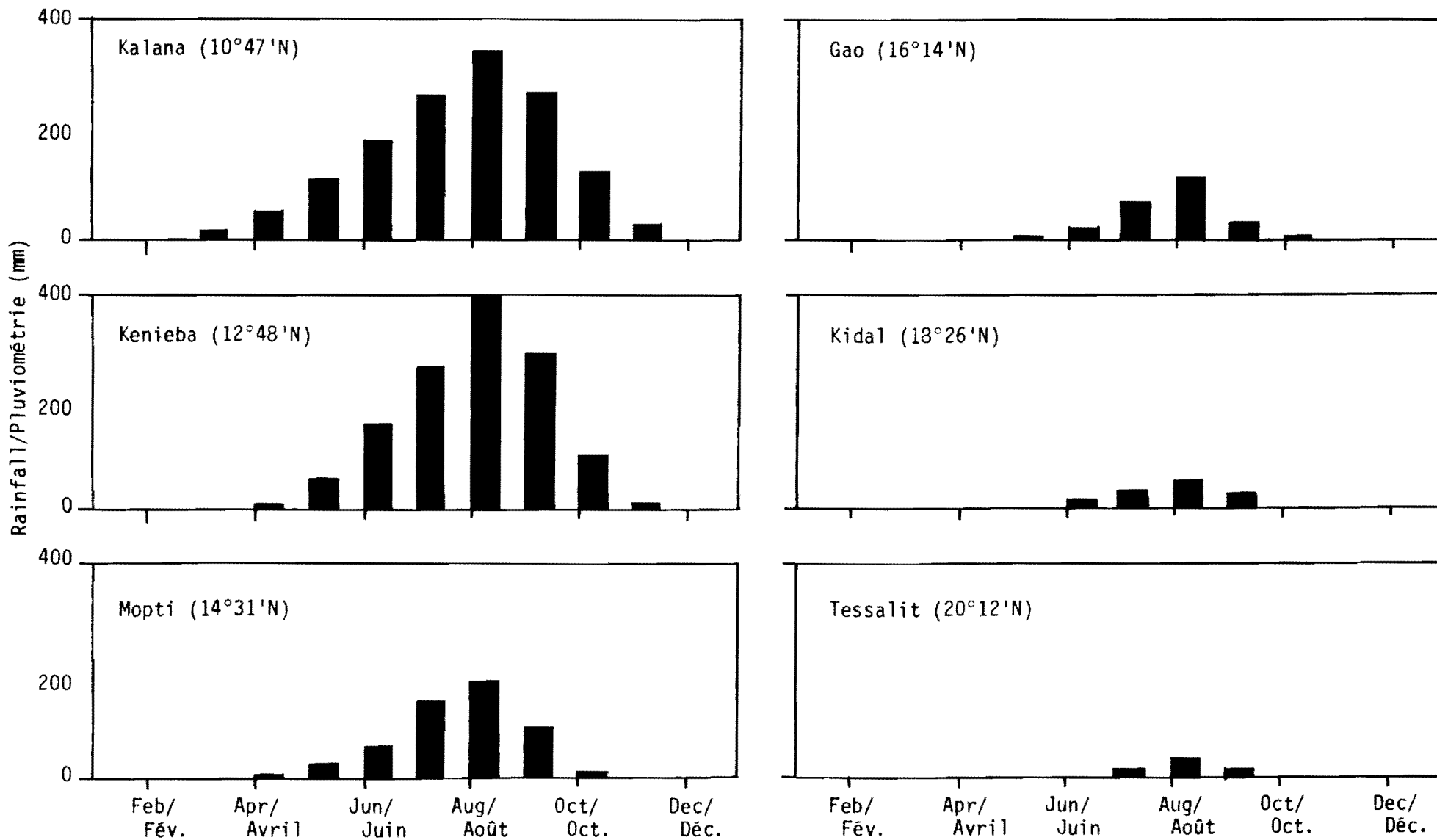


Figure 6. Latitudinal variation in the monthly rainfall (mm) in Mali.

Figure 6. Variation, selon la latitude, de la pluviométrie mensuelle (mm) au Mali.

Probability Estimates of Rainfall

Knowledge of rainfall estimates in a given geographical region enables the development of suitable strategies for agricultural planning and implementation. In determining rainfall probabilities, it is a common approach to fit a mathematical function to rainfall data and to compute the probabilities from this function. In the probability analysis of daily rainfall data, two approaches--(1) constant precipitation analysis and (2) constant probability analysis--have been adopted.

Constant Precipitation Analysis

Weekly¹ precipitation totals, computed from the daily rainfall data were analyzed for the probability of receiving 10, 20, 30, 40, and 50 mm. These threshold amounts were chosen to enable the user to decide upon the appropriate rainfall amounts considered sufficient for designated farm operations. The analysis was carried out using Markov chain probabilities (Gabriel and Neuman 1962). The program used for the computation of the initial and conditional probabilities is listed in Appendix III.

Results are reported for the initial probabilities of a wet week, $P(W)$; conditional probabilities of a wet week following a wet week $P(W+W)$; and of a wet week following a dry week, $P(W+D)$. A discussion of the formulae employed in the calculation of these probabilities has been presented by Virmani et al. (1978). Results of the constant precipitation analysis are presented in Appendix IV. To show the regional patterns of precipitation probabilities, 4-week periods were chosen. The selected periods were:

Week No.	Period
20	14-20 May
25	18-24 June
30	23-29 July
35	27 August-02 September
40	01-07 October

Probability of 10 mm or more. Figure 7 depicts the probability (percent) of receiving 10 mm or more of precipitation during the 5 selected periods. During the month of May in the Mopti region, and in the northern parts of Ségou, Bamako, and Kayes, the probabilities do not exceed 30%. In southern Mali, the probability is above 50%. By mid-June, however, owing to the northward shift in the position of ITCZ, the probabilities exceed 50% in Kayes, Koulikoro, Ségou, and Mopti regions, and Bamako district, while in the more desert regions

1. Standard weeks are listed in Appendix II.

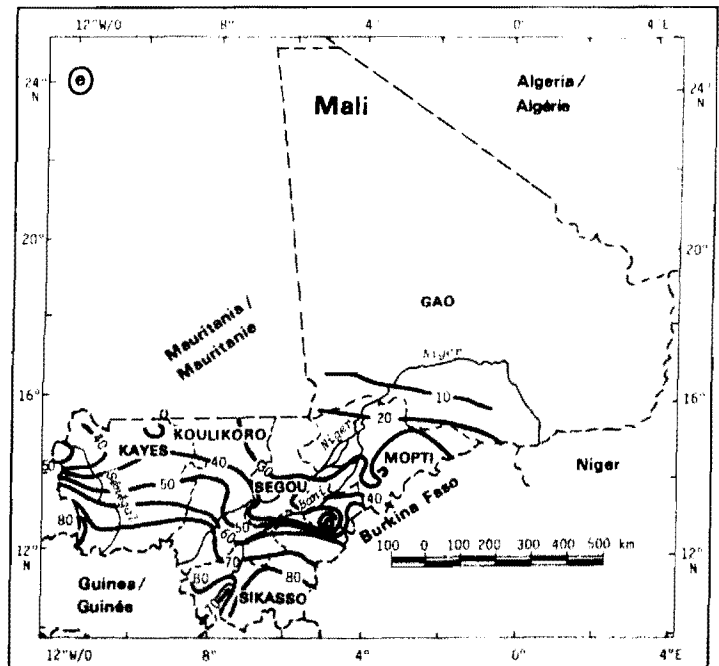
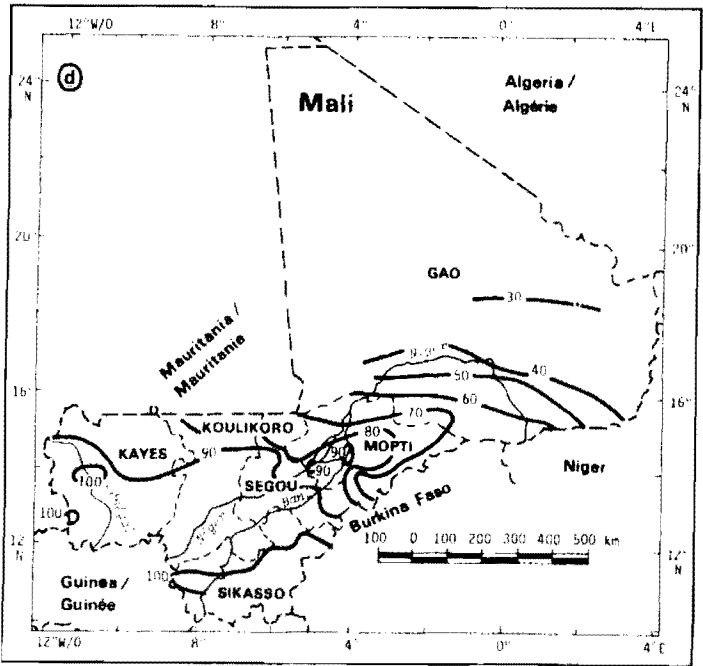
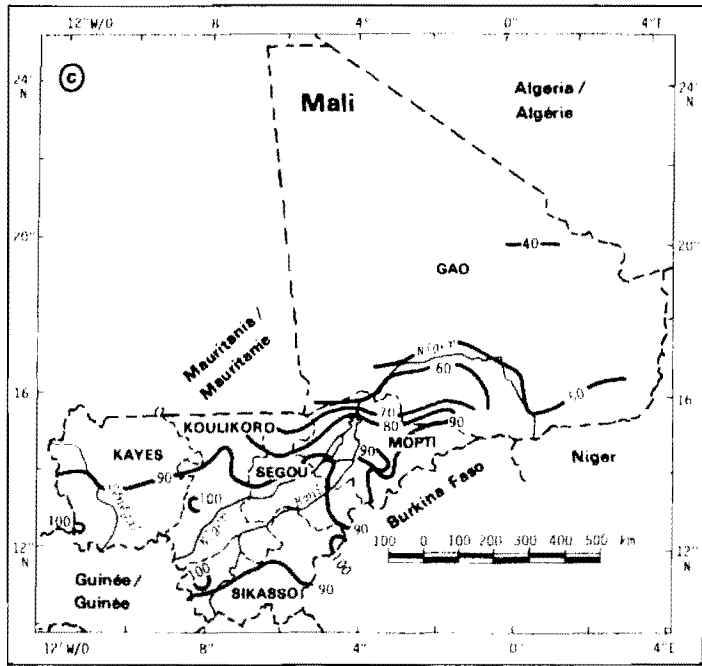
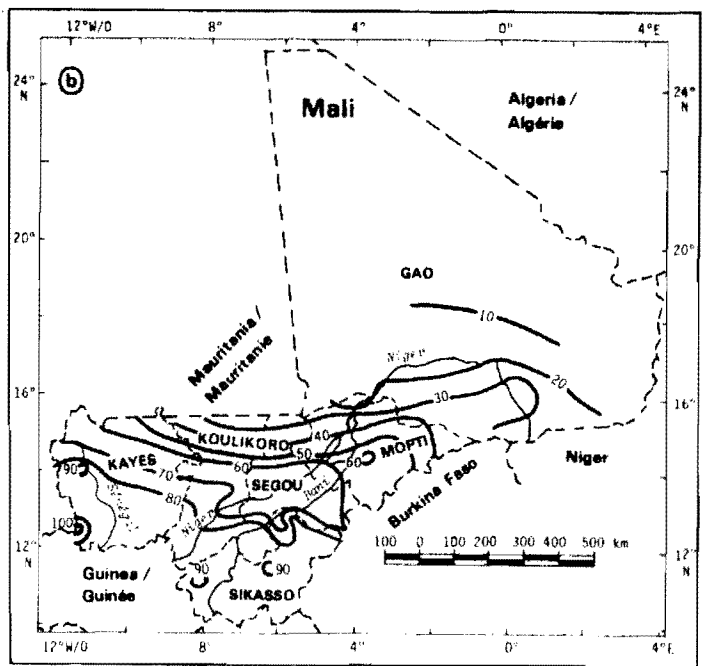
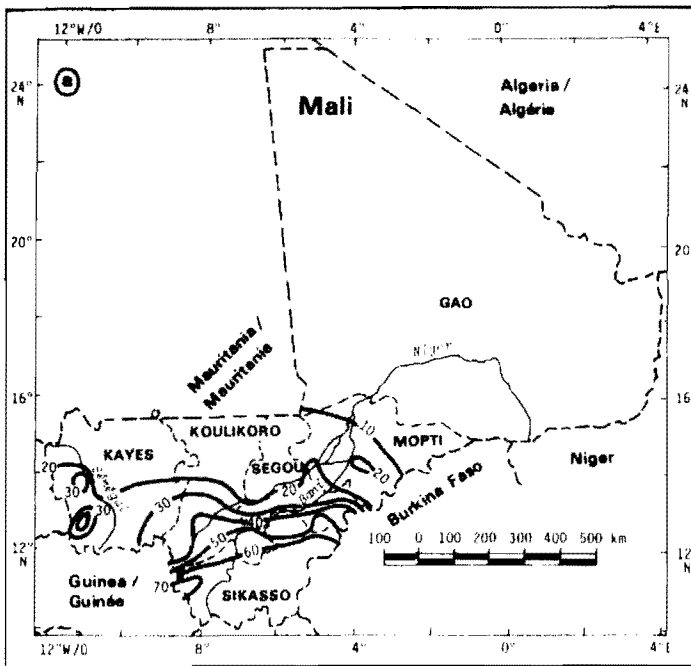


Figure 7. Probability (%) of receiving 10 mm or more of rain during a) 14-20 May; b) 18-24 June; c) 23-29 July; d) 27 Aug-2 Sept; and e) 1-7 Oct.

Figure 7. Probabilité (%) de précipitations ≥ 10 mm du a) 14-20 mai; b) 18-24 juin; c) 23-29 juil.; d) 27 août-2 sept.; et e) 1-7 oct.

of Gao they are still quite low. By late July, with peak rainfall activity associated with a favorable positioning of ITCZ, the probabilities exceed the dependable level of 70% in most of Mali and show essentially the same trend till the end of August and early September. By early October, when ITCZ recedes and moves south of the equator, rainfall probabilities show a decline, although in southern Kayes, Sikasso, and Koulikoro regions, and in Bamako district, some activity associated with ITCZ still persists and the probabilities stay above 50%.

Probability of 20 mm or more. As the rainfall threshold for computation of probabilities is increased to 20 mm, the probabilities show significant decreases in some areas during the five selected periods (Fig. 8). Even in southern Mali, excepting the area surrounding Goualala, the probabilities do not exceed 50% in May. After mid-June, the 50% probability isohyet shifts up to Ambidédi in Kayes, Kolokani in Koulikoro, and to San in the Ségou region. As with probabilities for 10 mm rainfall, the probabilities for 20 mm rainfall reach up to 70% in all regions by late July, with the exception of the Gao area. This trend also persists till the beginning of September, with the rainy season at its peak. By early October with receding rainfall, the 50% probability isohyet shifts southwards. When compared with the pattern reflected by the 10 mm rainfall threshold, the changes appear to be more or less similar.

Probability of 30, 40, and 50 mm or more. The data presented in Figures 9, 10, and 11 show the probabilities of receiving 30, 40, and 50 mm or more in the five selected periods. They indicate the more dependable areas in Mali and their potentials. When compared with the analysis presented above with 10 and 20 mm threshold values, the data show that the probabilities are very low at higher threshold values during 14-20 May, indicating that during this period field operations should be planned cautiously. Data for individual stations on W+W probabilities given in Appendix IV show that rainfall continuity is also uncertain during this period. Data for the next three periods show that in terms of dependability and also continuity in rainfall, areas south of Bafoulabé in Kayes, Banamba in Koulikoro, Markala in Ségou, and the entire region of Sikasso are the most promising areas. Comments made earlier regarding the last period during early October are also valid for the 30, 40, and 50 mm threshold values.

Constant Probability Analysis

The expected quantity of rainfall and the degree of uncertainty with which this rainfall occurs are two of the most crucial factors in farm management decision-making, especially in the semi-arid tropics where it is important to determine the right time of sowing and to carry out the preparatory cultivation with it to ensure good crop establishment and subsequent performance. Hargreaves (1974) defined dependable precipitation as the rainfall amount received at 70% probability. But

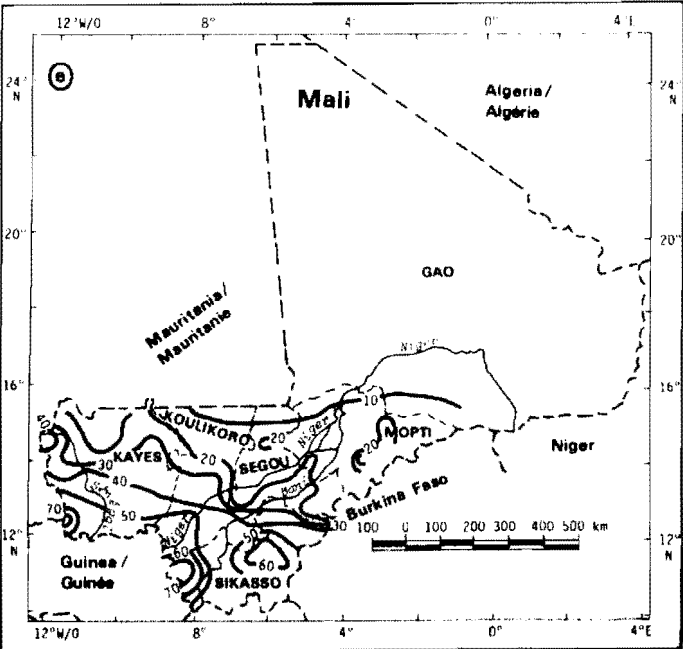
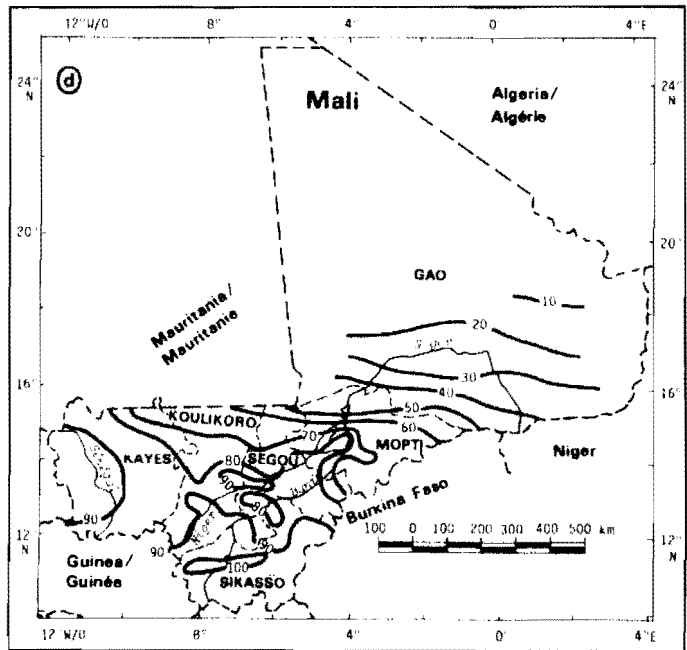
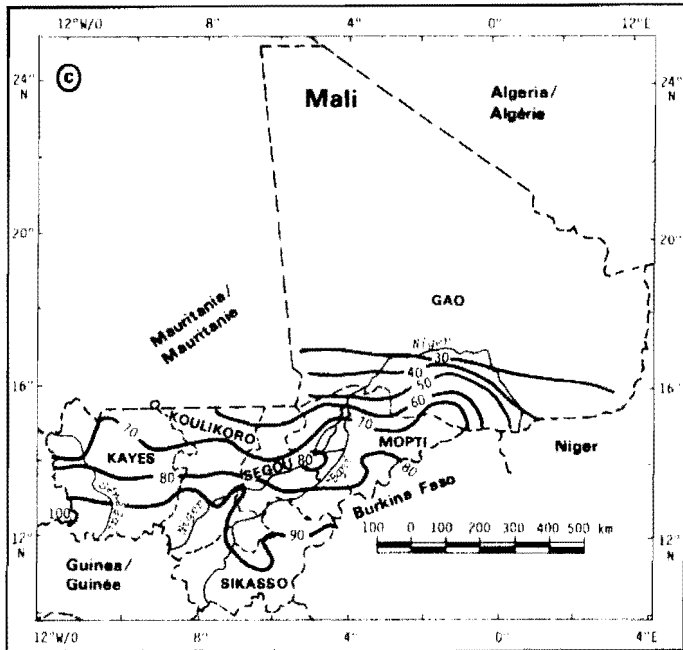
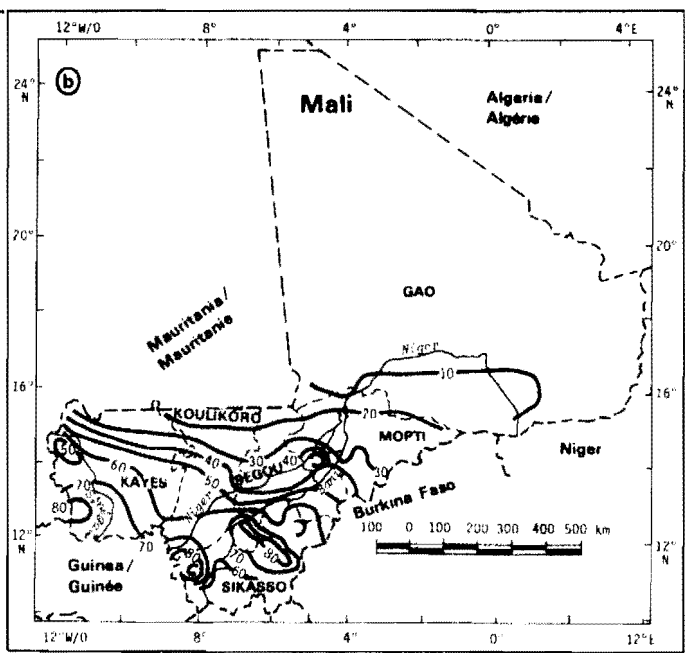
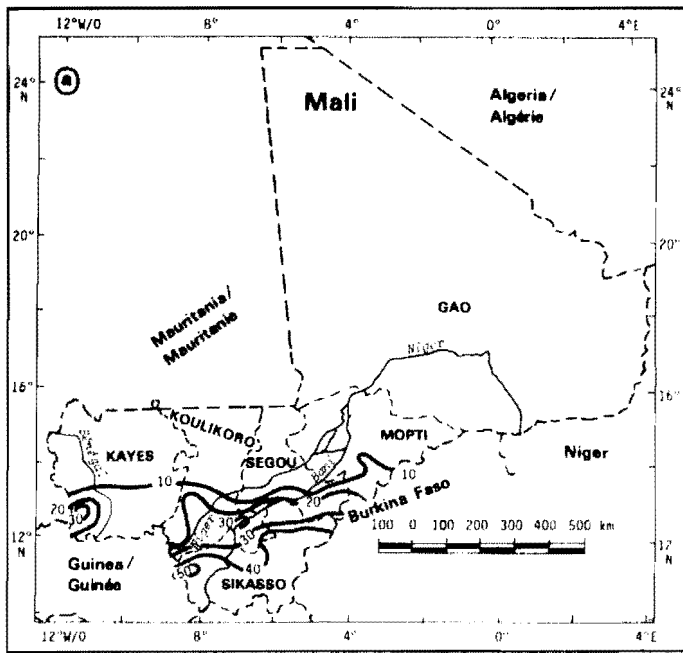


Figure 8. Probability (%) of receiving 20 mm or more of rain during a) 14-20 May; b) 18-24 June; c) 23-29 July; d) 27 Aug-2 Sept; and e) 1-7 Oct.

Figure 8. Probabilité (%) de précipitations ≥ 20 mm du a) 14-20 mai; b) 18-24 juin; c) 23-29 juil.; d) 27 août- 2 sept.; et e) 1-7 oct.

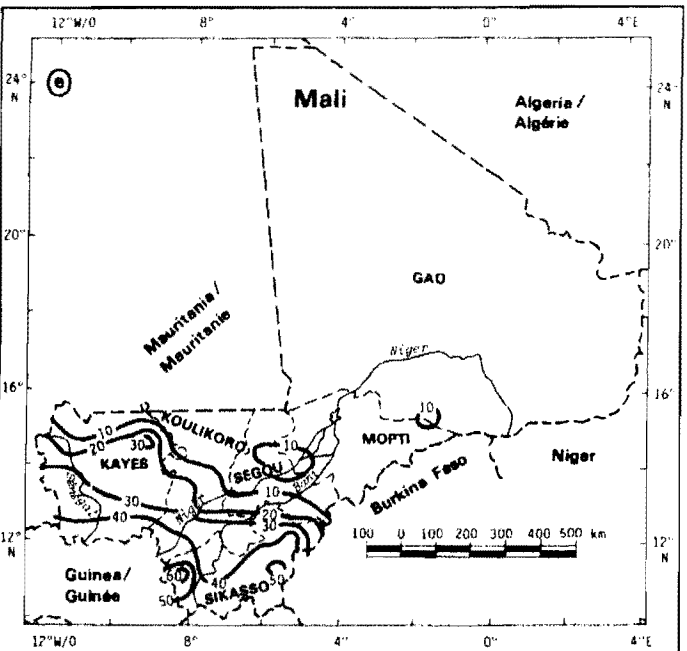
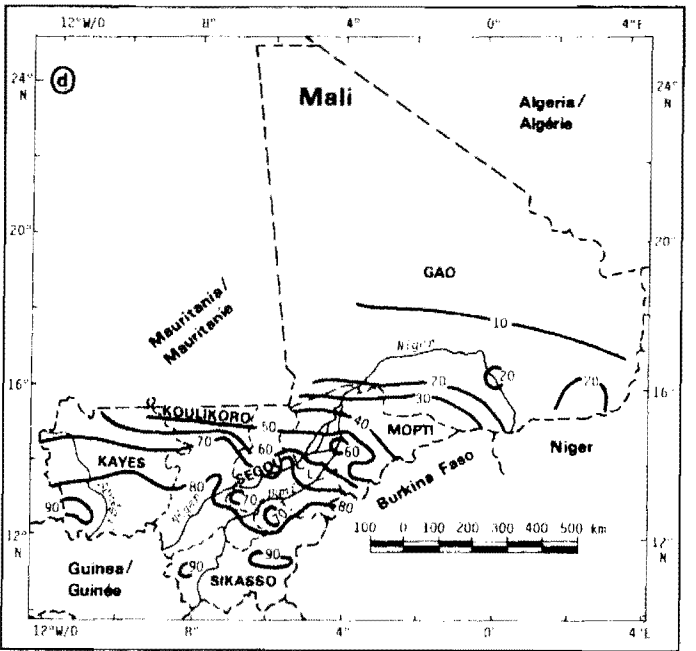
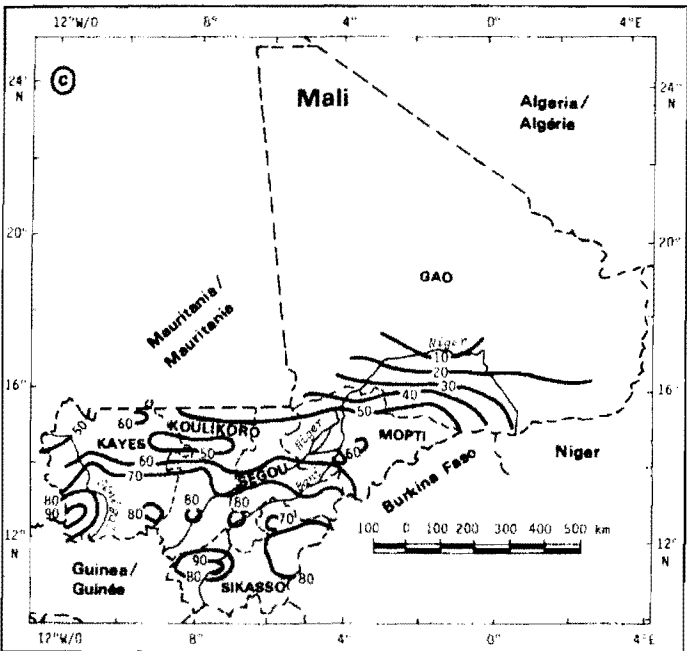
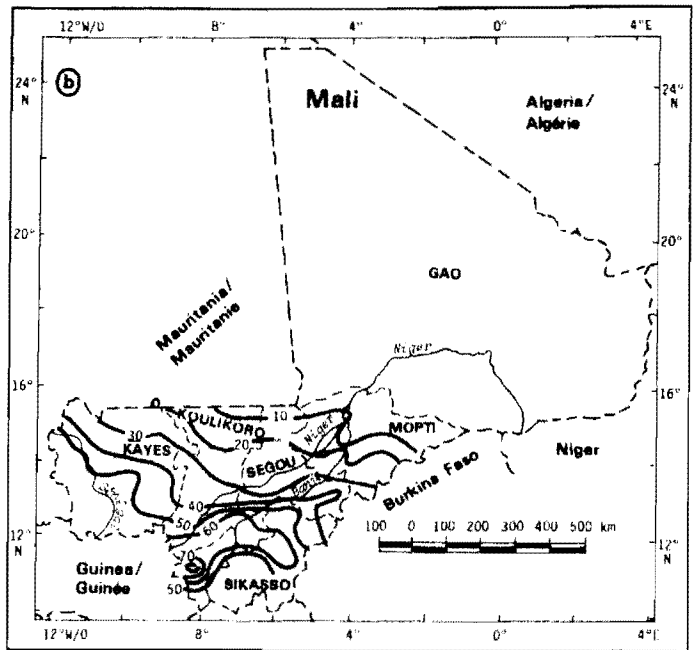
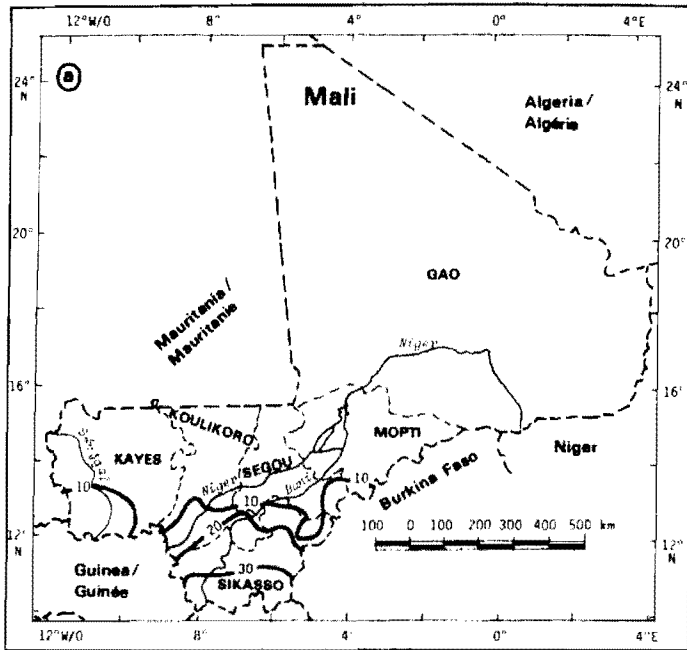


Figure 9. Probability (%) of receiving 30 mm or more of rain during a) 14-20 May; b) 18-24 June; c) 23-29 July; d) 27 Aug-2 Sept; and e) 1-7 Oct.

Figure 9. Probabilité (%) de précipitations ≥ 30 mm du a) 14-20 mai; b) 18-24 juin; c) 23-29 juil.; d) 27 août-2 sept.; et e) 1-7 oct.

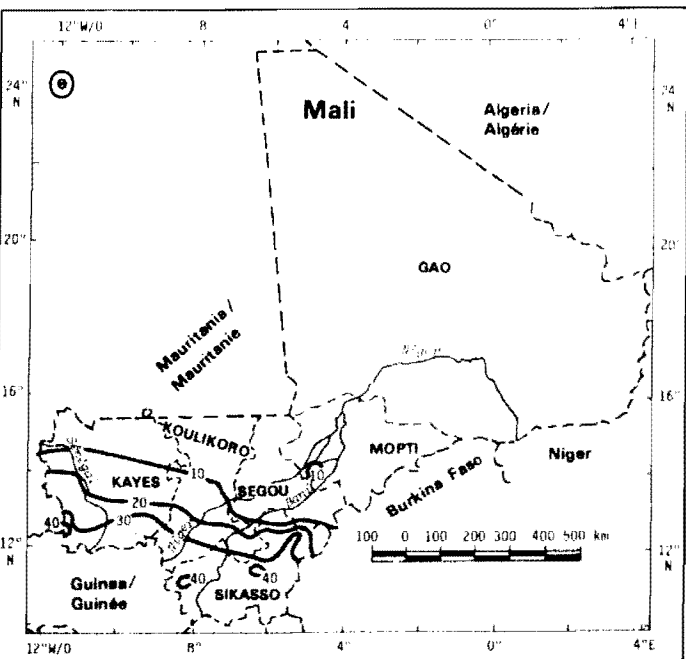
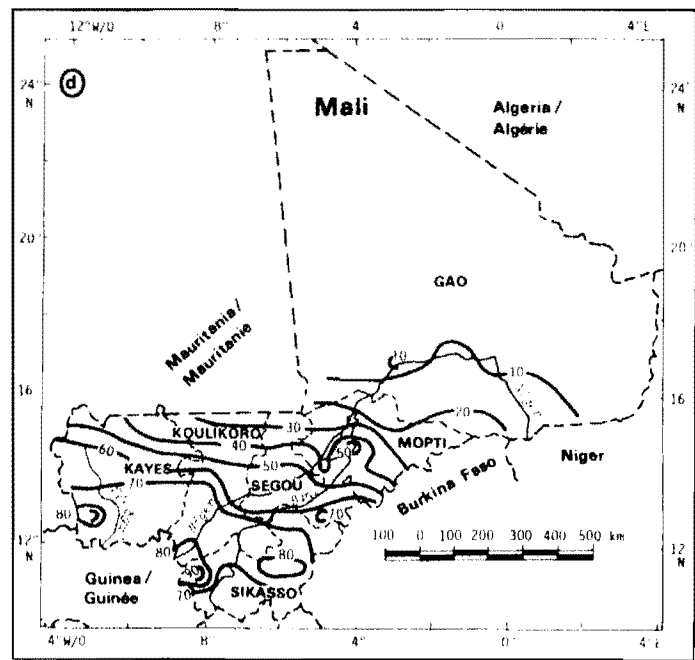
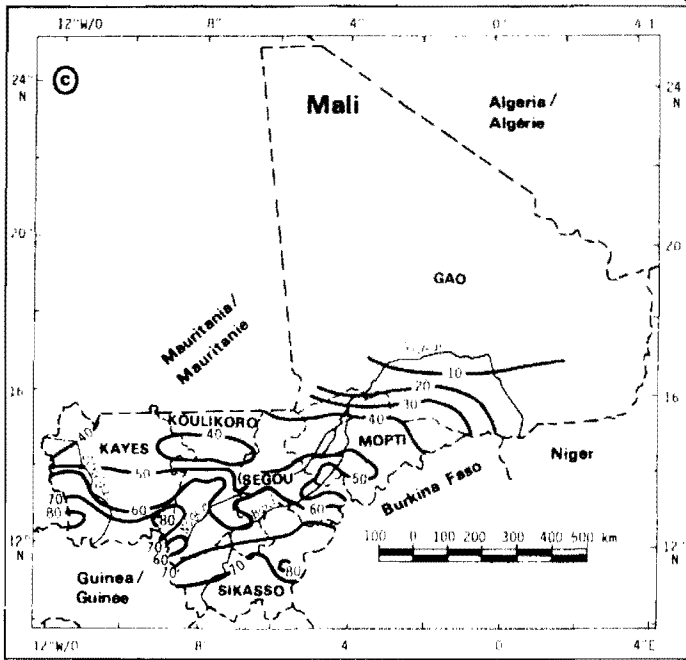
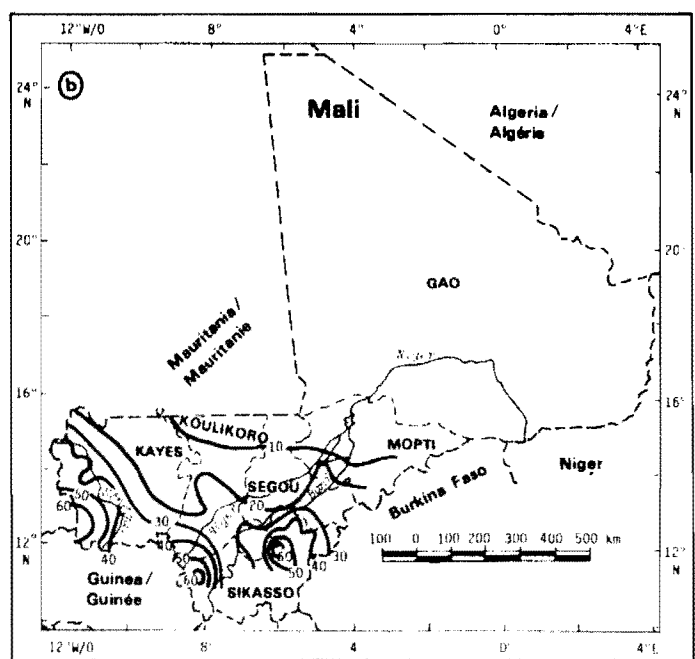
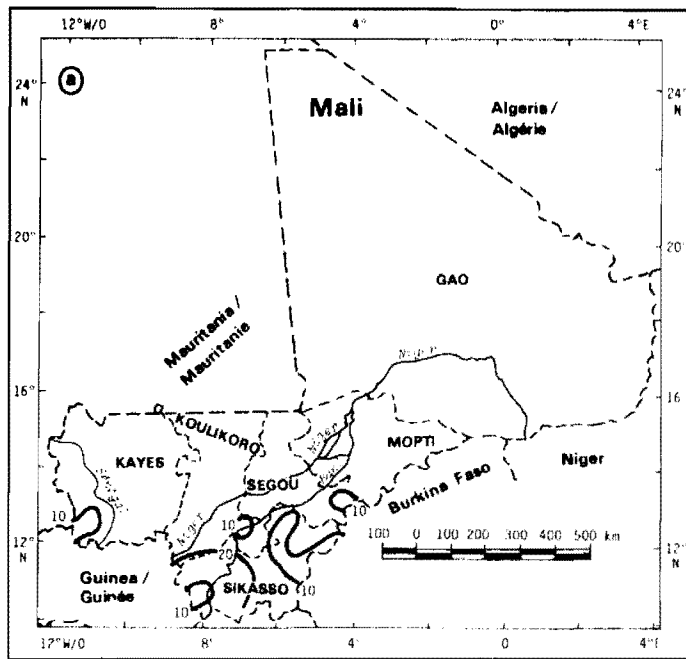


Figure 10. Probability (%) of receiving 40 mm or more of rain during a) 14-20 May; b) 18-24 June; c) 23-29 July; d) 27 Aug-2 Sept; and e) 1-7 Oct.

Figure 10. Probabilité (%) de précipitations ≥ 40 mm du a) 14-20 mai; b) 18-24 juin; c) 23-29 juil.; d) 27 août-2 sept.; et e) 1-7 oct.

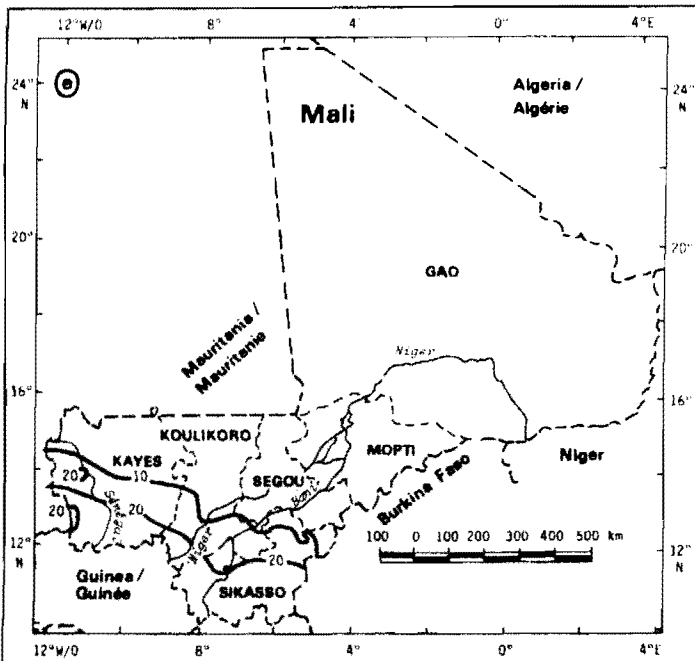
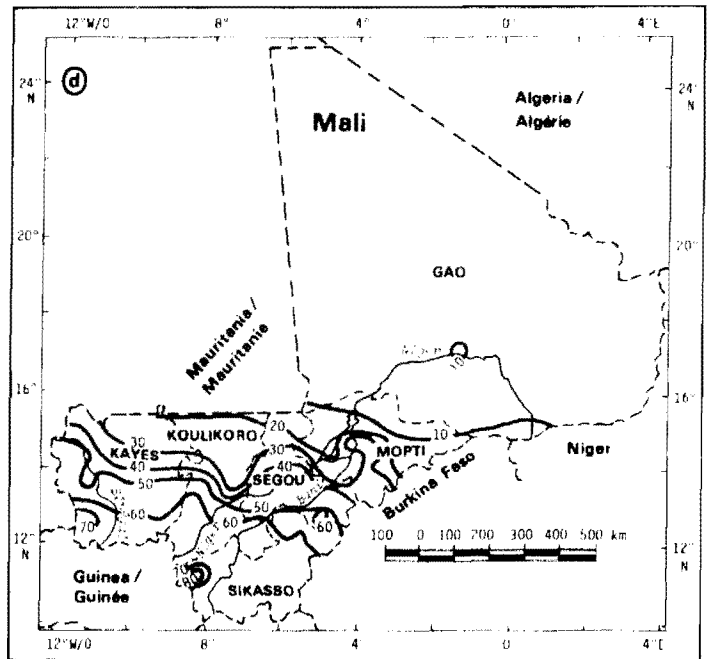
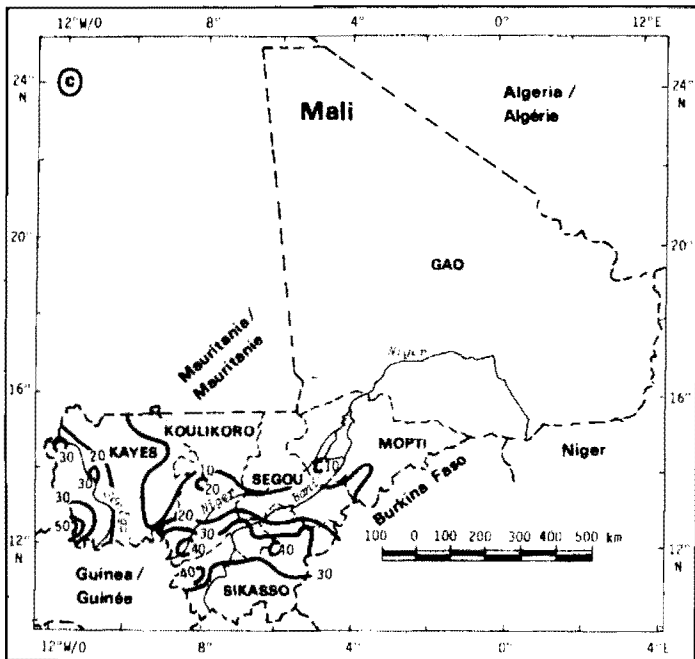
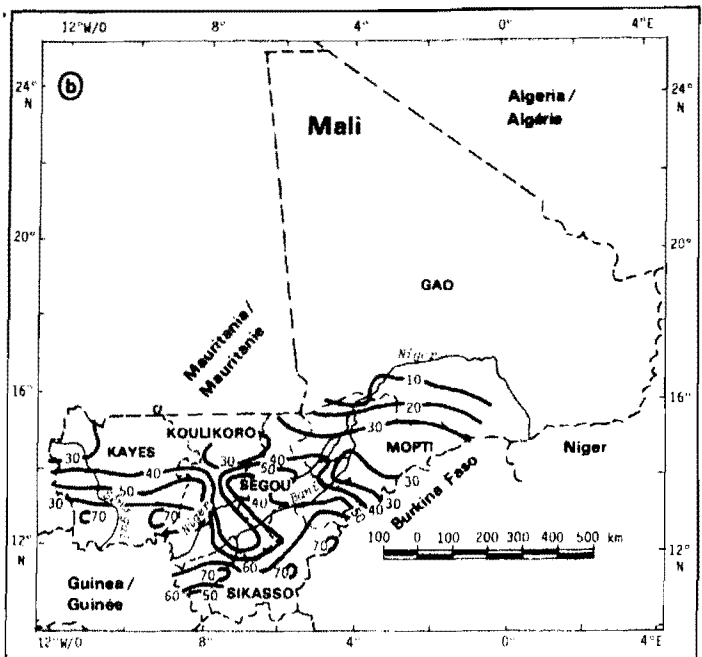
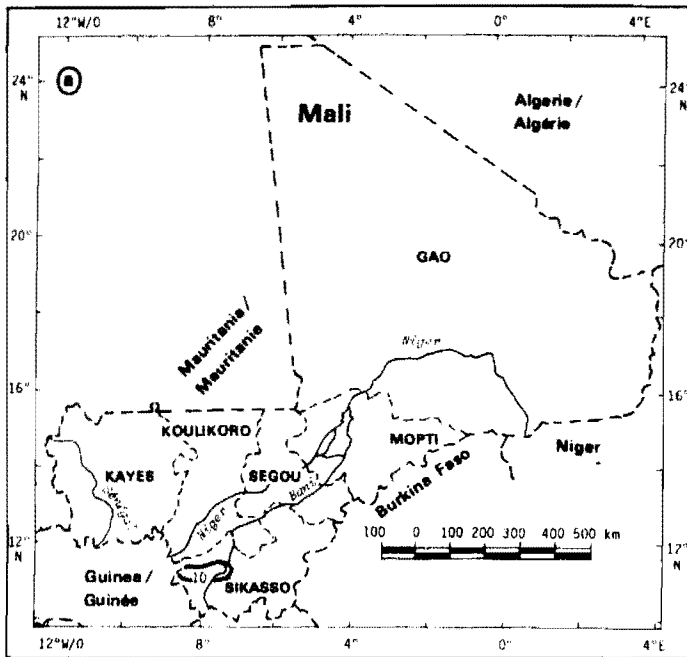


Figure 11. Probability (%) of receiving 50 mm or more of rain during a) 14-20 May; b) 18-24 June; c) 23-29 July; d) 27 Aug-2 Sept; and e) 1-7 Oct.

Figure 11. Probabilité (%) de précipitations ≥ 50 mm du a) 14-20 mai; b) 18-24 juin; c) 23-29 juil.; d) 27 août-2 sept; et e) 1-7 oct.

the level of dependability of precipitation chosen at a particular phenological stage of a given crop depends on the degree of demand for moisture at that stage. For highly sensitive crops or high-value crops, a higher level of probability may be more appropriate.

Expected amounts of precipitation at different probability levels, by 4-week periods, were calculated using an incomplete gamma distribution. The computer program used for this analysis is listed in Appendix V. Results of constant probability analysis for the 81 stations in Mali are presented in Appendix VI.

As with our constant precipitation analysis, 4 of the 13 4-week periods were selected for depicting the regional patterns relating to expected amount of rainfall at four specified probability levels--i.e., 25, 50, 75, and 90%. The four periods selected for this purpose were: 21 May-17 June, 18 June-15 July, 16 July-12 August, and 13 August-9 September.

21 May-17 June. Expected quantities of rainfall at 25, 50, 75, and 90% probabilities during 21 May-17 June are plotted in Figure 12. The data confirm conclusions derived earlier regarding the dependability and continuity in rainfall exhibited in southern Kayes, Koulikoro, Ségou, and the entire region of Sikasso. These are the areas that show an expected rainfall of 100 mm or more even at the low probability level of 25%. At the probability level of 50%, which is the average level, there is a shift of the 100 mm isohyet towards the south, but the general pattern remains the same. Expected rainfall at the 75% probability level shows that except for Goualala, which receives 101 mm, the locations in Mali receive rainfall ranging from 0 to 98 mm. At a more assured level of 90% probability, as one would assume, the expected rainfall is significantly lower at most of the locations. Above 14°N, rainfall received during this period is negligible at the 90% probability level. During the period under consideration, the northern limit of influence of the ITCZ probably ends at that latitude, little affecting rainfall beyond that line.

18 June-15 July. By the beginning of July, the advance of ITCZ into northern Mali brings adequate rain. At the 25% probability level (Fig. 13), the maximum amount of rainfall of 260 mm is recorded at Satadougou in Kayes and expected rainfall exceeding 200 mm is recorded in southern Koulikoro and the entire region of Sikasso. The 100 mm isohyet runs along the border of the Mopti region indicating the extent of aridity in the Gao region. At the median probability level of 50%, the same isohyet moves down to central Koulikoro, central Ségou, and the southwestern end of Mopti. Areas south of the 100 mm isohyet show considerable promise, with expected rainfall exceeding 150 mm within a short distance. Even at the higher probability level of 75%, expected rainfall in southern Mali is fairly high. At the most dependable level of 90%, western Kayes, southern Koulikoro, and southern Sikasso show expected rainfall in the region of 100 mm, which should favor good early vegetative growth for most crops.

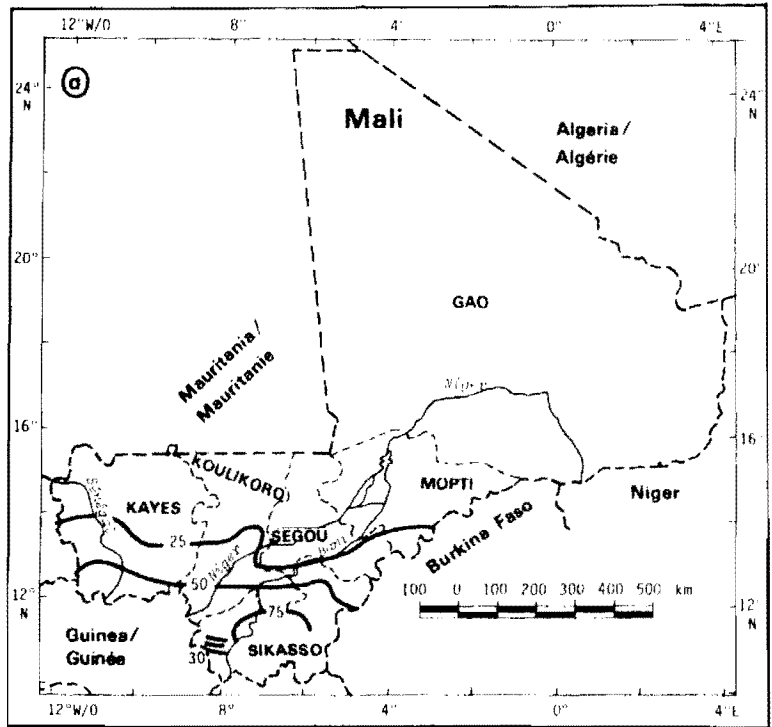
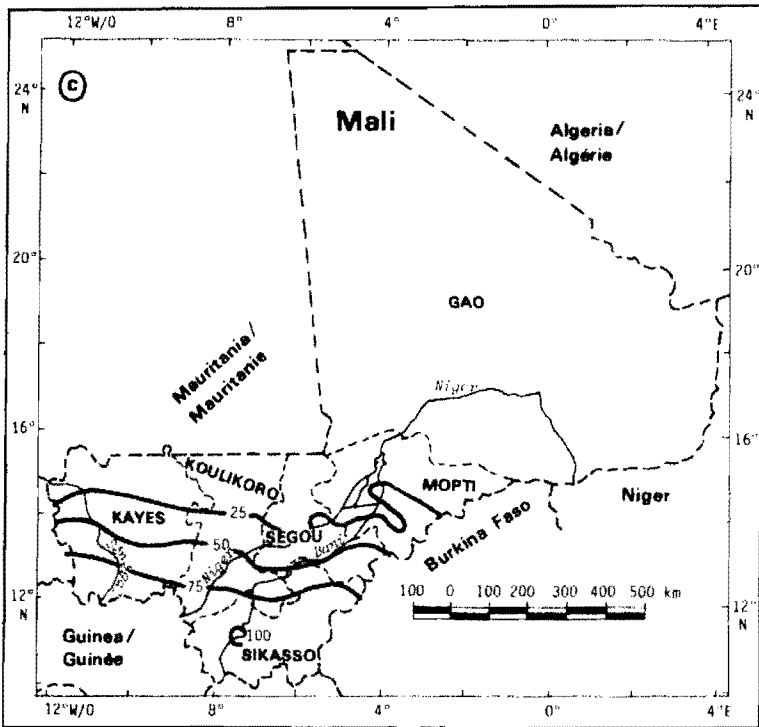
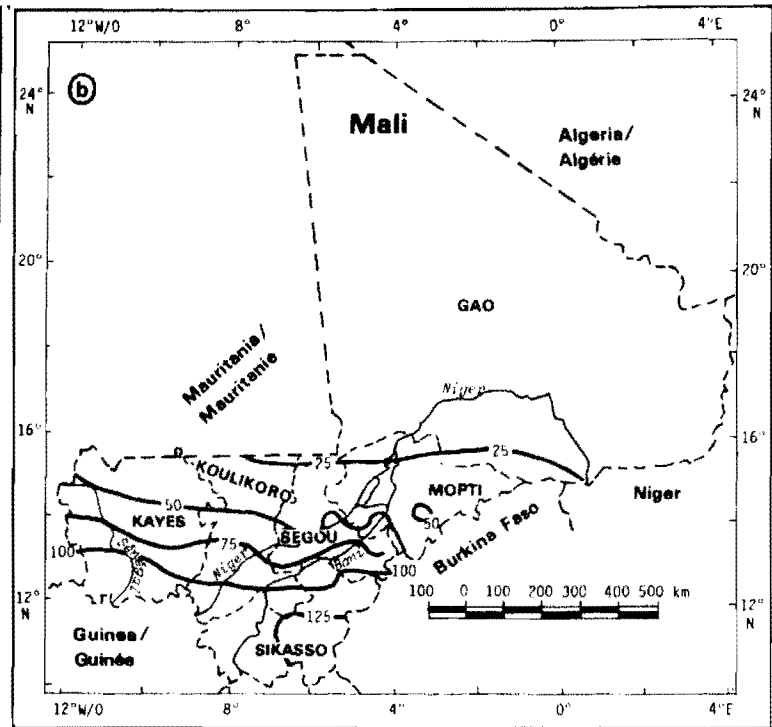
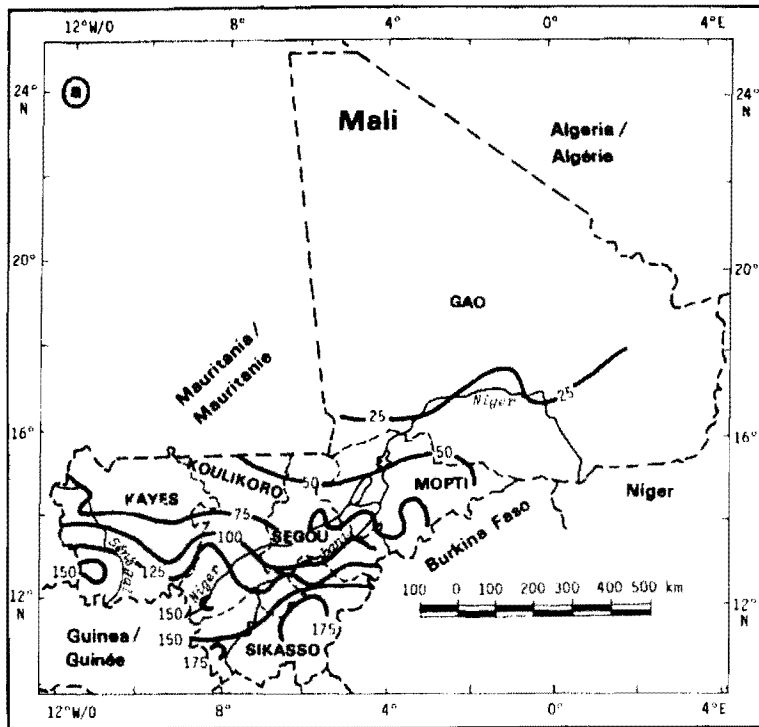


Figure 12. Precipitation (mm) that could be received during 21 May-17 June at a probability of a) 25%; b) 50%; c) 75%; and d) 90%.

Figure 12. Précipitations (mm) susceptibles d'être reçues du 21 mai au 17 juin à une probabilité de a) 25%; b) 50%; c) 75%, et d) 90%.

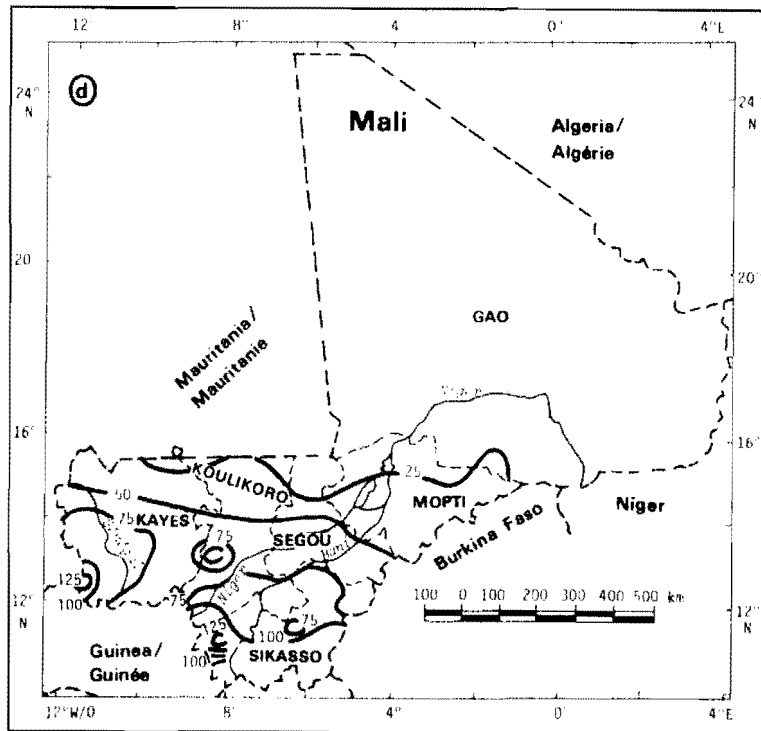
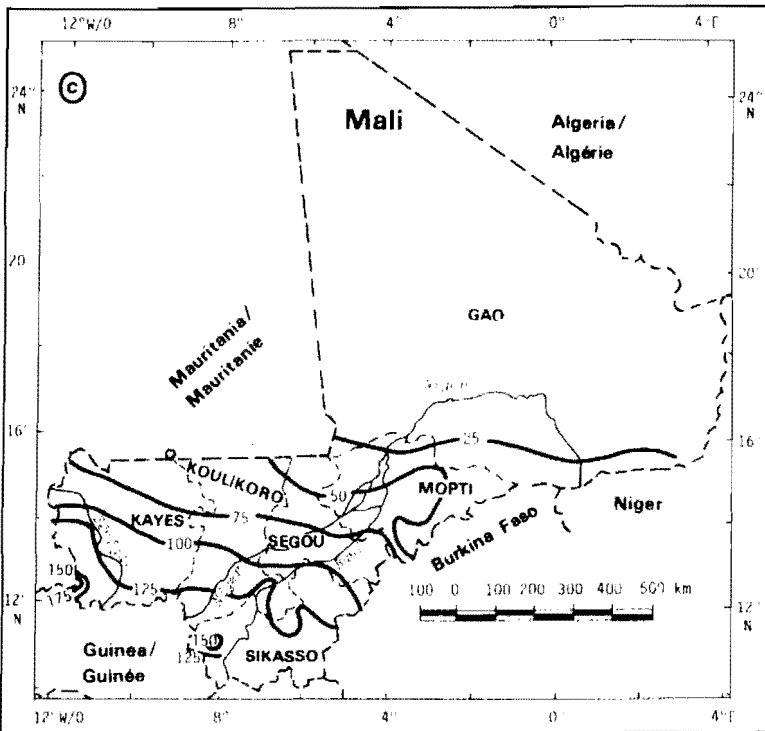
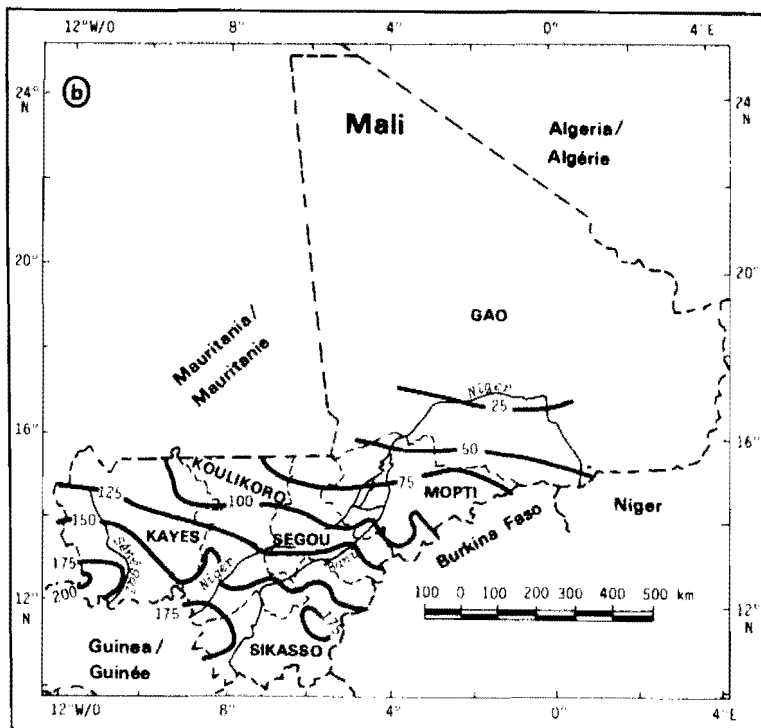
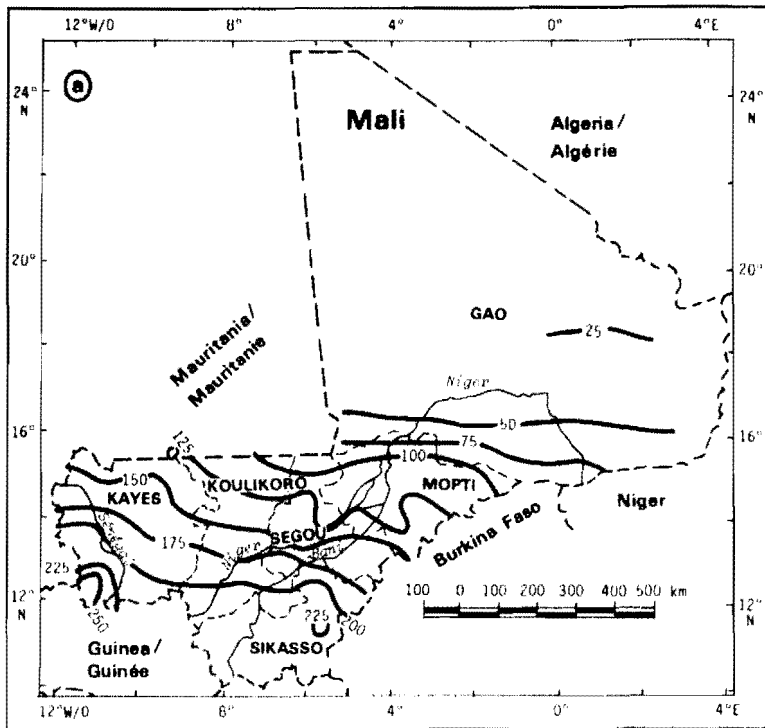


Figure 13. Precipitation (mm) that could be received during 18 June-15 July at a probability of a) 25%; b) 50%; c) 75%; and d) 90%.

Figure 13. Précipitations (mm) susceptibles d'être reçues du 18 juin au 15 juillet à une probabilité de a) 25%; b) 50%; c) 75%; et d) 90%.

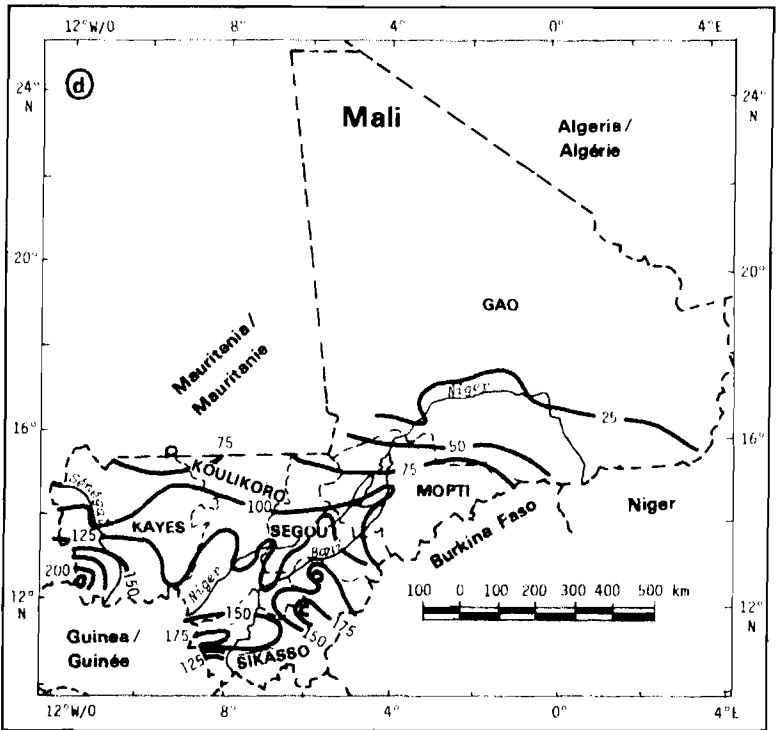
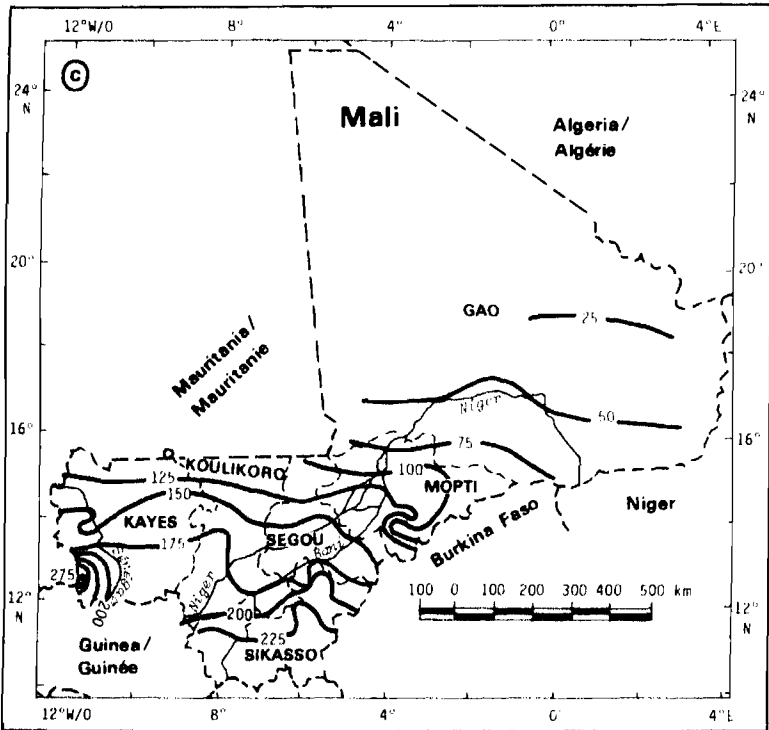
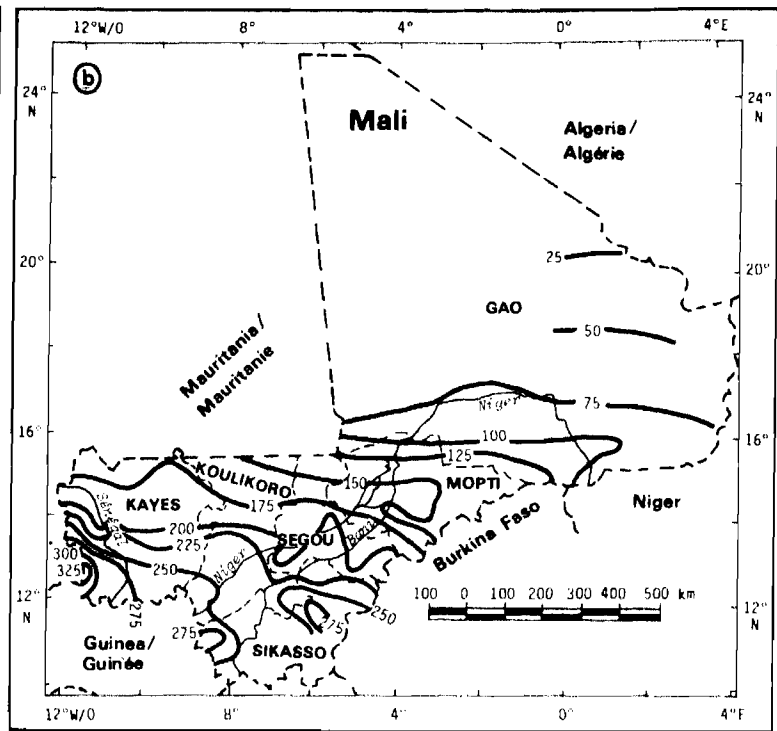
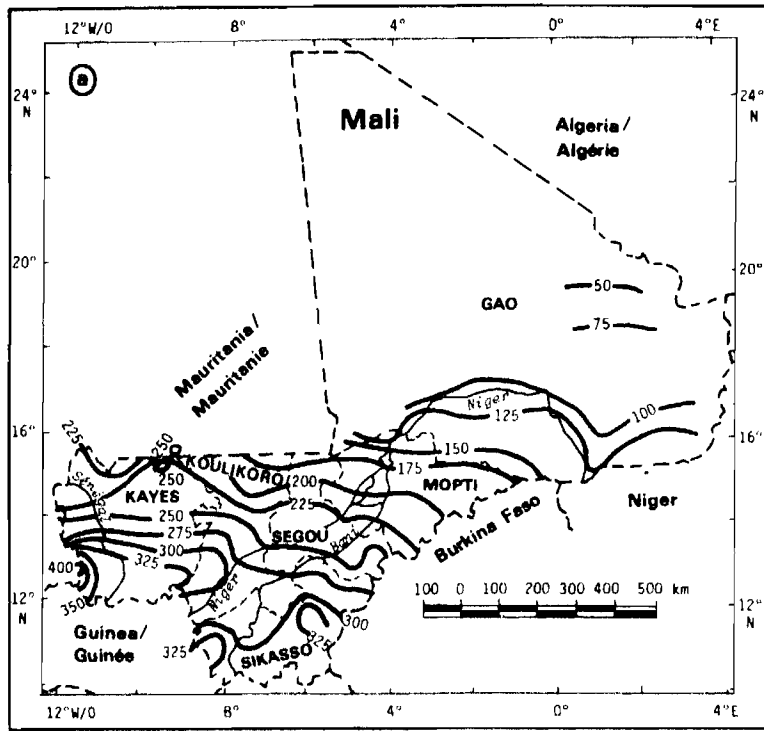


Figure 14. Precipitation (mm) that could be received during 16 July-12 August at a probability of a) 25%; b) 50%; c) 75%; and d) 90%.

Figure 14. Précipitations (mm) susceptibles d'être reçues du 16 juillet au 12 août à une probabilité de a) 25%; b) 50%; c) 75%; et d) 90%.

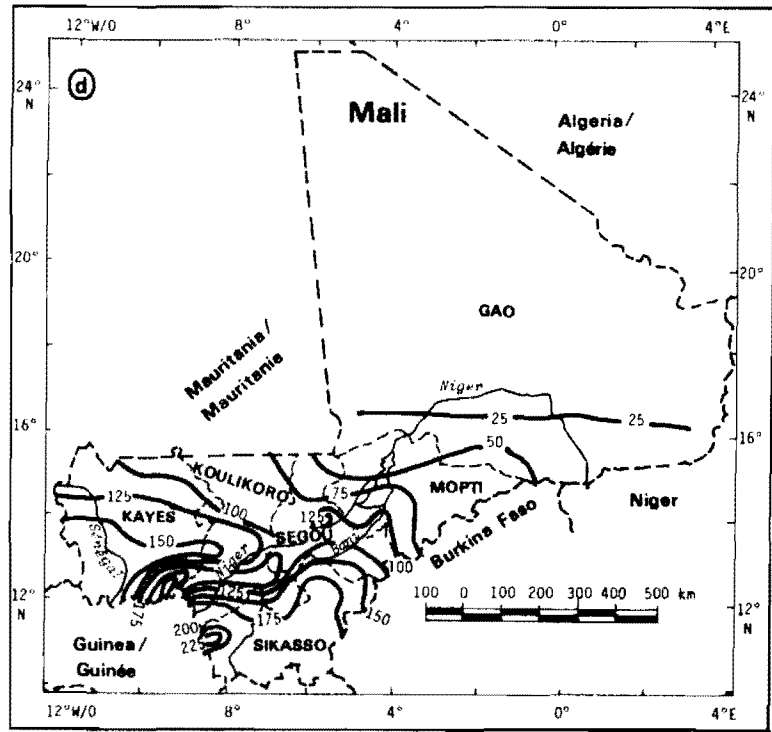
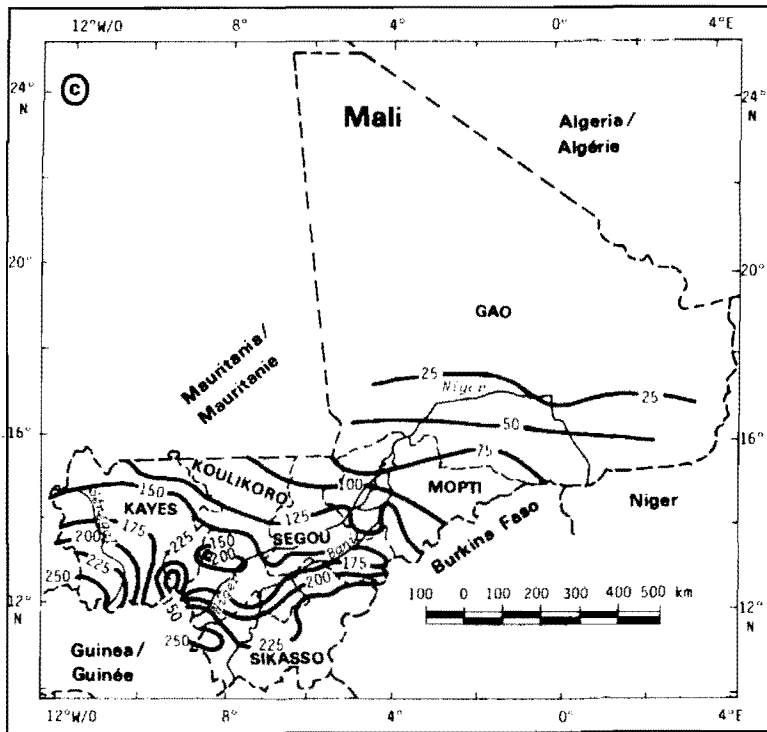
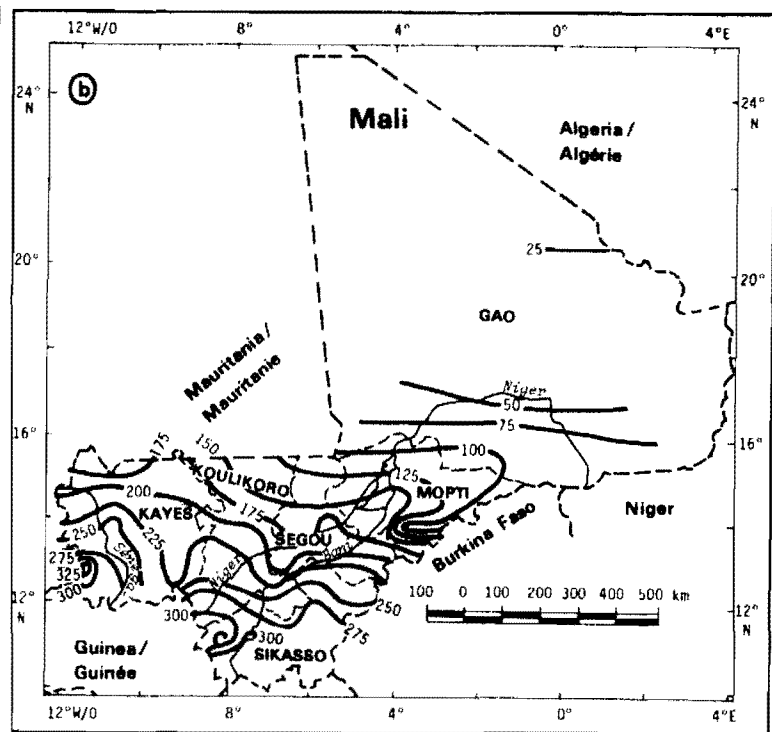
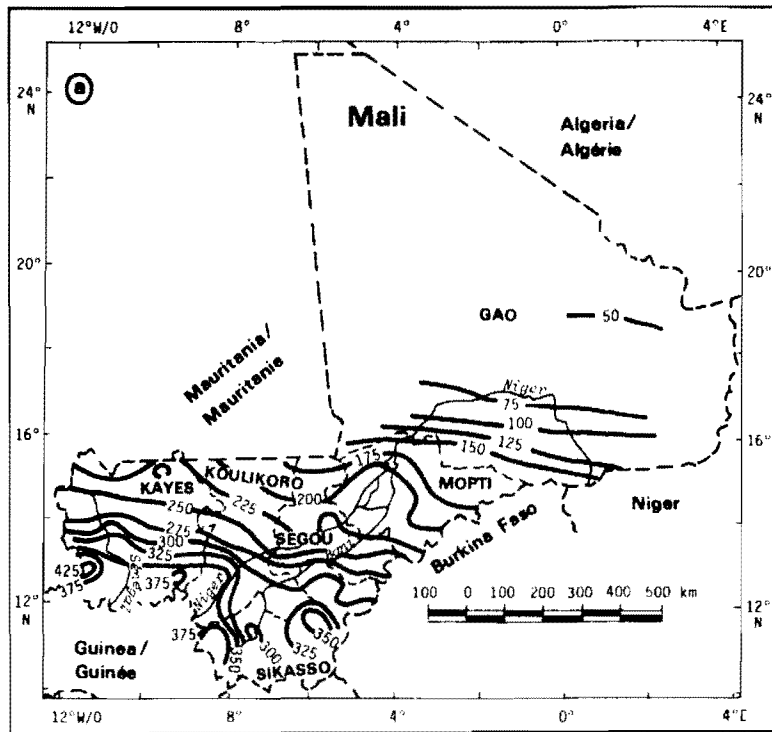


Figure 15. Precipitation (mm) that could be received during 13 August-9 September at a probability of a) 25%; b) 50%; c) 75%; and d) 90%.

Figure 15. Précipitations (mm) susceptibles d'être reçues du 13 août au 9 septembre à une probabilité de a) 25%; b) 50%; c) 75%; et d) 90%.

16 July-12 August. With the ITCZ reaching its most productive phase in August, expected rainfall in all regions of Mali is at its maximum. At the lowest probability level of 25%, the promising areas in southern Mali can expect rainfall in excess of 300 mm, and most locations in Mali show expected rainfall above 200 mm (Fig. 14), which is higher than the potential evapotranspiration (PE) demand at these locations (Virmani et al. 1980). At the average probability level of 50% also this conclusion seems valid as the expected rainfall is still at or above the PE. In the Gao and Tombouctou regions, however, the expected rainfall is still below the atmospheric evaporative demand. Expected rainfall at the higher probability levels of 75 and 90% follows the trend of the shift in the isohyets toward the southern areas, indicating the more assured nature of the rainfall in those areas.

13 August-9 September. During this four-week period, the ITCZ is still stationed over Mali and at its peak of activity. The same general features discussed above for the preceding four-week period (16 July-12 August) emerge from an examination of the expected rainfall for this period at the four probability levels (Fig. 15).

It is apparent from the precipitation probabilities analysis that southern Mali, i.e., the southern regions of Kayes, Koulikoro, Ségou, and the region of Sikasso are the most promising regions for crop production. The implications of this analysis are discussed later.

Temperature

The temperature of the environment is mainly a manifestation of the radiation and energy balance. Because of the uniformly high radiation levels throughout the year, Mali in general has a warm environment that is modified seasonally by changes in water regimes and surface conditions. Long-term monthly mean maximum and minimum air temperature data for 32 locations for durations varying from 20-48 years, available from the Meteorological Services of the Government of Mali, were analyzed. Monthly mean maximum and minimum air temperatures for the 32 locations in Mali are given in Table 4. In general the mean maximum air temperatures over Mali are high, ranging from a low of 27.2°C in January at Tessalit in northeastern Mali to a high of 42.7°C in June at the same location. During the growing season from June to October, the maximum air temperatures are lowest at Bougouni and Sikasso in southern Mali, ranging from 29.7°C in August to 32.2°C in October. Expectedly, as one moves from south to north in Mali, maximum air temperatures increase with decreasing rainfall. The lowest mean minimum air temperature of 10°C in January is recorded at Mpessoba in January, while the highest minimum temperature of 28.7°C is recorded at Hombori in May.

Table 4. Monthly mean maximum and minimum air temperatures (°C) for selected stations in Mali (data base 20 to 48 years, as indicated by location).

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Ansongo (1945-80)	31.2 18.6	35.8 17.5	37.1 18.3	39.8 19.8	40.9 22.0	39.2 22.9	36.9 24.8	34.4 22.8	36.3 22.4	38.3 21.5	36.0 20.9	31.9 20.1
Bafoulabé (1946-80)	34.3 21.1	36.4 20.5	39.7 19.4	41.1 19.6	41.1 20.3	36.5 21.5	32.5 22.7	31.1 23.3	32.1 23.6	34.3 23.1	34.7 23.0	33.5 22.4
Bamako- Ville (1941-80)	33.5 16.9	36.2 19.4	37.5 22.8	38.6 23.7	38.0 25.2	35.1 23.4	34.2 22.1	30.5 21.7	31.7 21.6	33.1 21.3	34.8 18.5	33.0 16.8
Bamako-Zoo (1954-76)	23.7 17.5	36.7 20.1	38.6 22.6	38.9 24.1	38.3 24.4	35.1 22.5	31.4 21.6	30.1 20.9	31.5 21.0	34.2 20.6	34.9 18.1	33.2 17.1
Bougouni (1941-80)	33.9 16.4	36.0 19.0	37.5 22.3	37.4 24.3	35.5 23.9	32.9 22.3	30.5 21.5	29.5 21.3	30.8 21.2	33.0 21.3	34.1 18.9	33.2 16.1
Dogo- Tenenkou (1949-79)	28.2 15.2	32.2 15.4	35.6 16.1	39.2 19.3	41.0 22.4	39.6 22.7	35.0 21.8	32.8 22.0	33.6 22.9	34.8 23.0	32.0 21.7	27.8 17.8
Faladye (1932-80)	33.6 11.2	36.1 14.2	38.4 18.4	39.6 22.2	38.7 24.2	35.1 23.0	31.3 21.7	29.9 21.5	31.1 21.0	33.7 20.0	33.7 15.2	32.8 11.4
Gao (1941-80)	31.1 14.4	34.0 16.7	37.5 20.2	40.6 23.9	42.4 27.3	41.6 28.0	38.4 26.1	36.0 24.6	38.1 25.2	39.3 24.4	36.1 19.6	33.1 15.5
Hombori (1941-80)	31.4 17.1	34.9 19.4	38.2 22.8	40.7 26.1	41.8 28.7	41.6 27.5	36.4 25.3	34.1 24.1	37.5 24.6	39.0 24.6	36.6 21.2	32.5 17.7
Kara (1951-77)	30.5 12.7	34.2 14.3	37.3 17.3	39.4 21.3	39.8 24.4	37.5 24.0	33.6 22.6	31.5 22.3	31.7 23.2	32.4 24.0	31.2 20.1	29.3 15.1
Katibougou (1937-78)	33.4 13.4	36.2 16.5	38.5 19.9	39.8 23.2	38.9 24.7	35.7 23.3	32.1 21.8	30.6 21.7	31.8 21.5	34.4 20.8	35.0 16.9	33.1 13.9
Kayes (1941-80)	33.8 16.9	36.5 19.2	39.6 22.2	41.7 25.6	42.0 28.0	38.1 26.3	33.5 24.0	31.8 23.2	32.9 23.1	35.9 23.1	36.7 20.3	33.7 17.5
Kayo (1950-70)	31.3 10.4	34.8 12.7	37.5 15.7	39.5 19.2	39.5 22.4	36.6 21.3	32.7 20.4	30.9 20.5	31.7 20.6	33.3 21.0	32.6 16.9	30.8 12.0
Kéniéba (1948-80)	35.0 18.1	37.1 20.4	39.3 22.8	40.3 25.1	38.8 26.4	34.4 24.3	31.3 23.1	30.4 22.8	31.3 22.5	33.0 22.1	34.8 18.5	34.2 16.2
Kidal (1953-80)	28.6 12.6	31.7 14.9	35.0 18.5	38.2 22.7	41.2 26.6	41.7 28.1	39.7 26.8	38.2 25.8	39.0 25.7	38.0 23.0	33.8 18.0	28.8 13.9

...contd.

Table 4 continued.

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Kita (1955-80)	33.5 18.5	36.2 20.9	38.3 23.6	39.3 25.5	38.4 25.7	34.3 23.4	30.9 22.1	29.7 21.5	31.0 21.4	33.4 21.1	34.5 18.6	32.8 17.8
Kogoni (1950-80)	32.0 13.2	34.8 15.8	37.4 18.7	39.0 21.8	39.8 24.3	38.2 24.0	34.1 22.4	31.8 21.6	33.1 21.5	36.1 20.3	35.3 16.9	31.7 14.0
Koulouba (1948-80)	32.8 18.6	35.6 21.2	37.7 23.6	33.8 24.6	37.2 23.9	33.8 21.9	30.4 20.7	29.3 20.6	30.7 20.7	33.5 21.8	34.4 21.7	32.5 19.2
Koutiala (1948-80)	33.2 13.0	35.8 15.7	38.0 20.0	38.0 23.9	36.8 24.7	34.0 23.2	31.1 21.9	29.9 21.6	31.2 21.5	33.9 21.2	34.6 17.1	32.7 13.5
Ménaka (1949-80)	31.6 15.0	34.6 17.1	38.2 20.7	40.8 24.5	42.1 27.5	40.9 27.6	37.7 25.6	35.3 24.3	37.5 24.5	39.2 23.5	36.1 19.4	32.3 15.8
Mopti (1941-80)	31.7 14.3	34.9 16.6	37.8 20.3	39.9 23.5	40.4 25.6	38.1 25.0	34.3 23.4	31.9 22.9	32.6 23.2	34.6 22.8	34.5 18.9	31.3 15.5
Mpessoba (1950-78)	33.7 10.0	36.7 12.9	39.0 18.3	39.8 21.7	37.9 24.0	35.2 22.4	32.0 21.7	31.2 21.2	32.0 21.3	34.6 20.6	34.9 15.5	33.5 11.1
Nara (1941-68)	32.2 12.2	35.0 14.2	38.0 17.7	40.6 21.2	41.3 24.3	39.8 23.7	34.9 21.8	32.4 20.9	34.1 21.0	37.0 20.2	36.0 16.2	32.3 13.0
Niono (1950-80)	32.6 12.6	35.3 15.4	37.6 18.4	39.3 22.1	39.9 24.7	37.5 24.1	33.7 22.4	31.9 21.9	32.8 22.0	35.2 20.9	35.1 17.4	32.0 13.6
Nioro du Sahel (1941-80)	32.4 12.9	35.2 15.4	38.4 18.7	40.7 22.9	42.2 26.5	39.7 26.5	33.8 24.2	32.5 23.0	34.2 23.1	37.4 22.3	36.2 18.0	32.3 14.1
San (1941-80)	32.9 14.3	36.0 16.8	38.9 20.7	40.1 24.4	39.5 26.0	36.5 24.3	33.2 22.8	31.2 22.1	32.2 22.2	35.2 22.5	35.5 19.5	32.7 15.7
Ségou (1941-80)	32.3 15.9	35.2 18.3	37.9 21.5	39.9 24.4	39.2 25.9	36.3 24.3	32.7 22.7	30.7 22.1	31.9 22.0	34.8 21.8	35.0 19.1	32.1 16.5
Sikasso (1941-80)	33.9 14.5	36.4 17.4	37.7 21.5	37.3 24.0	35.7 23.8	33.3 22.3	31.1 21.5	30.0 21.3	31.2 21.2	33.5 21.4	34.5 18.4	33.5 14.7
Sotuba (1951-80)	33.6 14.2	36.1 17.0	38.1 20.2	38.9 23.1	37.7 24.3	33.8 22.9	31.2 21.8	30.1 21.5	31.3 21.2	33.6 20.3	33.4 16.8	32.8 14.1
Tessalit (1948-80)	27.2 12.8	30.1 15.1	33.3 17.7	36.9 21.3	40.3 25.5	42.7 28.2	41.8 27.4	40.4 26.2	40.2 26.1	37.6 23.7	32.3 18.4	27.4 13.6
Tilembéya (1946-67)	30.4 10.8	34.4 12.1	37.8 15.4	40.2 20.2	40.6 24.4	37.9 24.3	33.9 23.1	31.7 22.9	32.1 24.2	32.6 25.1	31.7 19.3	29.3 12.7
Tombouctou (1941-80)	30.0 12.7	33.2 15.0	36.6 18.2	39.7 22.0	41.9 25.4	41.5 26.5	38.3 25.3	35.7 24.2	37.7 24.1	38.9 22.5	35.4 18.0	30.4 13.7

To show the latitudinal variation in the maximum and minimum air temperatures, data for the locations presented in Table 4 have been grouped in 4 latitudinal zones, i.e., 10-12°, 12-14°, 14-16°, and 16-22°N. Mean maximum and minimum air temperature in each of the latitudinal zones is shown in Table 5. From May to October, when the ITCZ is active over Mali, locations in the 10-12°N zone show the lowest maximum temperatures, while areas north of 16°N show high temperatures. From November to February, however, when the sun is at or near its zenith, the 10-12°N zone shows the highest maximum air temperature. As with maximum air temperatures, mean minimum air temperatures during the growing season are also lowest in the latitudinal zone of 10-12°N from May to October. Conversely, the same zone shows the highest minimum air temperature during November to April for reasons explained earlier for its maximum air temperatures.

 Table 5. Mean maximum and minimum air temperatures in indicated latitudinal zones in Mali (data base explained in Table 4).

Zone	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
10-12°	33.9 15.0	36.2 18.2	37.6 21.6	37.3 24.2	35.6 23.8	33.1 22.3	30.8 21.8	29.7 20.8	31.0 21.2	33.2 21.2	34.3 18.6	33.3 15.4
12-14°	33.3 14.9	35.7 17.5	38.4 20.8	39.4 23.6	38.6 24.8	35.2 23.2	31.9 21.9	30.4 21.6	31.5 21.4	33.9 21.2	34.5 17.9	32.8 15.2
14-16°	31.5 13.9	34.8 15.9	37.7 19.0	40.1 22.5	41.0 25.7	39.0 25.1	34.8 23.4	32.7 22.7	34.0 22.9	36.0 22.7	34.8 19.0	31.4 15.1
16-22°	29.2 13.1	31.5 15.4	35.6 18.6	38.5 22.5	41.4 26.2	41.9 27.6	39.6 26.4	37.6 25.2	38.7 25.3	38.2 22.4	34.1 18.5	29.3 14.2

Statistical Analysis of Air Temperatures

An assessment of thermal regimes for Mali can be made by computing the probabilities of exceeding temperatures of a given magnitude. Such analyses are useful to evaluate the rates of activity of temperature-dependent processes such as leaf initiation, leaf expansion, photosynthesis, and respiration. The C4 crop species are far more sensitive to low temperatures than to high temperatures provided there is sufficient moisture supply. In contrast, the optimum temperature for carbon dioxide assimilation for C3 species is in the broad range of 10 to 25°C, with a decrease often noted as the temperature rises above 25°C (Black 1971).

Using the long-term temperature data available, mean temperature, standard deviation, coefficient of variation, and the probabilities of exceeding five designated temperature levels each for maximum and minimum air temperatures for each of the 12 months during the year for the 32 locations in Mali have been computed. The results are presented in Appendix VII for maximum air temperatures, and in Appendix VIII for minimum air temperatures.

Maximum air temperature. The results in Appendix VII show that in general the maximum air temperature at a given place varies relatively little during the year, the coefficient of variation being less than 10% in almost all cases. The probabilities computed for exceeding 25, 30, 35, 40, and 45°C during the year show that in general the probabilities of exceeding 25°C for any month during the year are almost 100% in all the locations. Except during November-March, for all locations above 14°N the probability of exceeding 30°C is above 90%. For locations below 14°N such as Bougouni, Faladye, and Kita, the probabilities of exceeding 30°C during the rainy season are low. The probabilities also show that in these locations the maximum temperatures rarely exceed 35°C during the growing season.

For locations above 14°N, however, maximum air temperatures during the growing season exceed 35°C, as in Nioro du Sahel or Ménaka, or even 40°C, as in Kidal, Gao, or Dogo-Tenenkou. The probabilities of exceeding maximum air temperatures of 30° and 40°C during the month of August in Mali are shown in Figure 16. These trends, when matched with the rainfall patterns for the growing season (Fig. 5), indicate that arable cropping is promising in regions below 14°N. The temperature probabilities also explain the reasons for the preferred cultivation of millet above 14°N (Fig. 2).

Minimum air temperature. The monthly coefficient of variation for minimum air temperature is in general slightly higher than that for maximum air temperature for most locations (see Appendix VIII). For example at Nara, the coefficient of variation for minimum air temperature varies from 10 to 23% during the year. The probabilities for exceeding minimum air temperatures of 10, 15, 20, 25, and 30°C have been computed for the twelve months during the year. In general the probabilities of minimum air temperatures exceeding 10°C are very high for all the locations of Mali. Probabilities of minimum air temperatures exceeding 15°C during November to February are usually much lower than the level of 100% recorded during the growing season. At most locations, during the growing season from June to October, the probabilities of exceeding 20°C range from 65 to 100%. The probabilities of exceeding minimum air temperatures of 15 and 25°C during the month of August in Mali are shown in Figure 17. As explained earlier with maximum air temperatures, above 14°N, the probabilities of minimum air temperatures exceeding specified values during the growing season are high.

Potential Evapotranspiration

Although the rainfall amount and distribution at two locations might be similar, if the degree of atmospheric demand for water between those locations is different, it can make a significant difference in the water requirement of the crop. Potential evapotranspiration (PE) gives an idea of the potential demand for water at a given location. Potential evapotranspiration--defined by Penman (1948) as the amount of water transpired from an actively growing, short green plant cover (usually grass), with a full crop cover and a continuously adequate moisture supply--was computed for 9 stations in Mali using weekly data

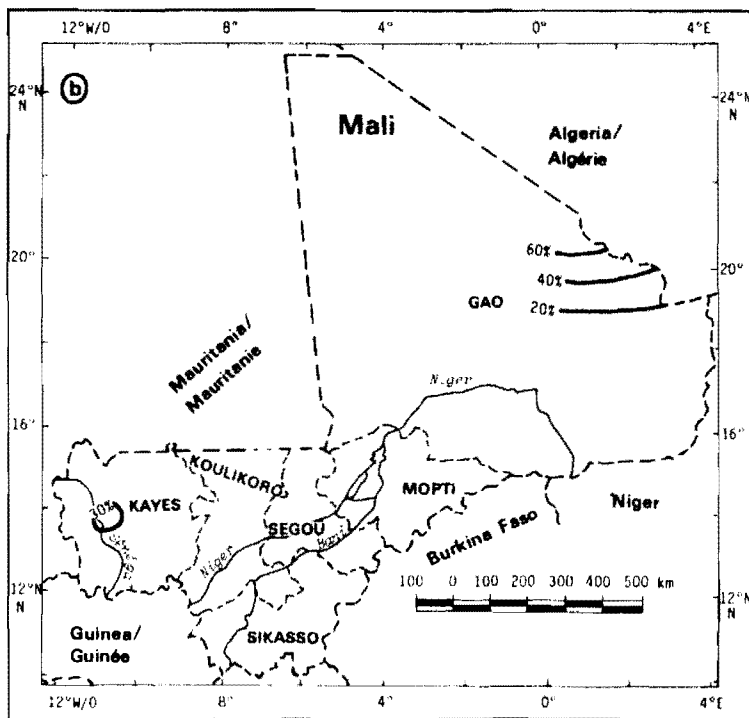
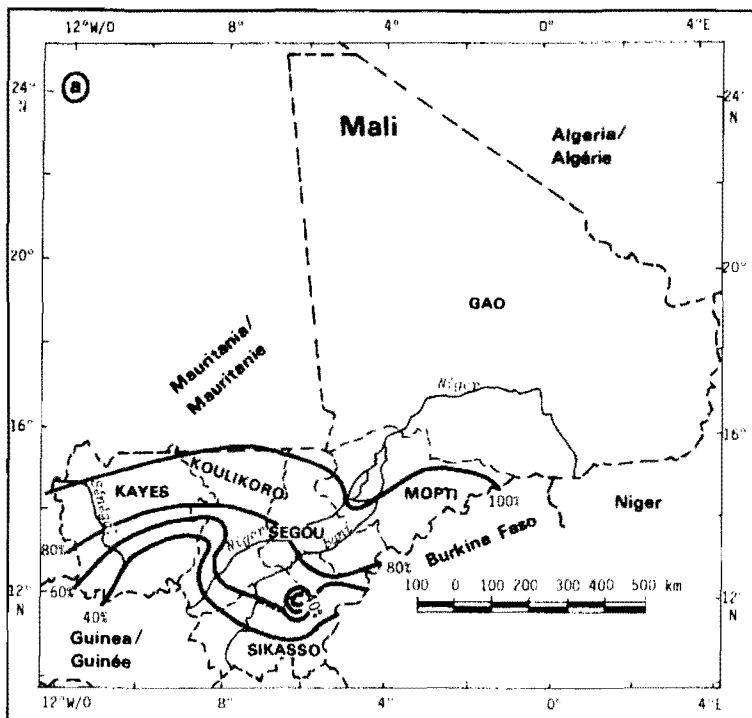


Figure 16. Probability (%) of exceeding during August a maximum air temperature of a) 30°C, and b) 40°C.

Figure 16. Probabilité (%) de température maximale de l'air a) >30°C, et b) >40°C en août.

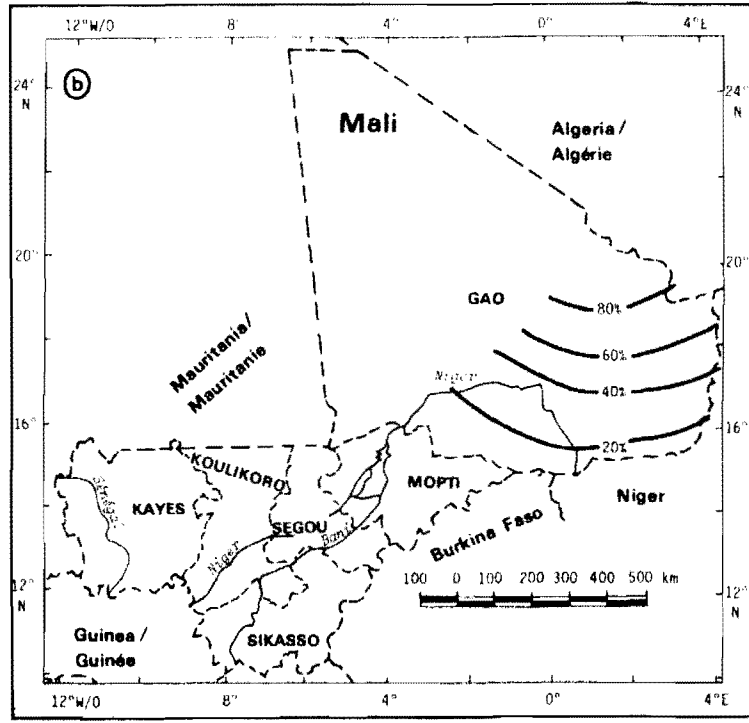
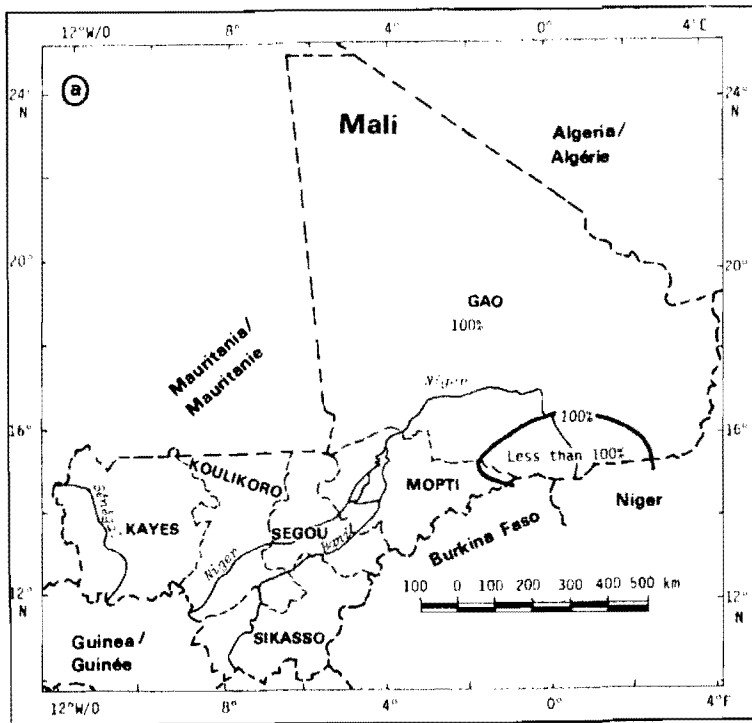


Figure 17. Probability (%) of exceeding during August a minimum air temperature of a) 15°C, and b) 25°C.

Figure 17. Probabilité (%) de température minimale de l'air a) >15°C, et b) >25°C en août.

on maximum and minimum air temperatures, vapor pressure deficit, sunshine hours, and wind speed (Konate 1978). The method of computation of PE was similar to that described by Cochemé and Franquin (1967). Computed values of weekly PE for the 9 stations are shown in Table 6. As noted earlier with temperature, the PE increases from south to north in Mali. For example, Sikasso in southern Mali located at 11°21'N has an annual PE of 1408 mm, while the PE increases to 2087 mm at Tombouctou situated farther north at 16°43'N.

Seasonal variation in the weekly PE and weekly rainfall at three locations, i.e., Sikasso, Kayes, and Tombouctou, is shown in Figure 18. Mean PE at the beginning of the season is usually high owing to clear weather and dry air. With the onset of the rains, the humidity and cloudiness increase and the PE decreases. Except at Tombouctou, rainfall during the rainy season is adequate to meet the PE demand, the degree of adequacy being high at Sikasso and low at Kayes.

Water Balance

So far the discussion was confined to variability in the amount of rainfall and PE at different locations in Mali, which undoubtedly affect the duration and the characteristics of the growing season. Differences in soils, specifically with regard to moisture-storage capacity and availability of soil moisture, strongly influence agricultural potential. The balance between water available within the root zone of the soil caused by rainfall and the water loss resulting from evapotranspiration is of fundamental significance in relation to plant growth.

 Table 6. Weekly potential evapotranspiration (mm) for selected locations in Mali.

Week	Tombo- uctou	Bamako- Ville	Bou- gouni	San	Kayes	Ségou	Sikasso	Nioro du Sahel	Mopti
1	29.1	33.7	29.5	30.4	24.8	35.1	23.0	31.6	34.4
2	29.4	34.0	30.5	29.9	28.7	35.2	23.8	33.8	33.7
3	30.0	34.6	31.6	29.9	31.6	35.8	24.1	36.0	33.7
4	32.4	36.6	33.0	32.3	31.1	38.4	22.5	38.6	36.5
5	32.6	37.3	32.7	32.0	32.7	39.2	28.2	39.2	37.6
6	23.9	38.3	33.0	33.0	34.4	36.0	32.3	40.7	39.4
7	35.8	41.3	36.0	39.9	37.2	40.1	31.1	46.7	44.9
8	38.2	42.4	35.2	40.6	37.4	45.0	32.0	48.8	44.7
9	40.4	40.7	30.5	42.5	39.8	46.5	32.3	50.3	47.3
10	42.0	39.7	36.5	44.4	42.2	47.8	32.2	51.2	50.0

 ..contd.

Table 6. continued.

Week	Tombo- uctou	Bamako- Ville	Bou- gouni	San	Kayes	Ségou	Sikasso	Nioro du Sahel	Mopti
11	46.2	43.3	38.1	48.6	45.7	49.6	32.2	54.0	54.5
12	42.2	44.5	39.6	48.7	48.0	47.0	33.9	57.0	52.6
13	41.5	45.0	40.0	48.4	48.7	45.8	34.5	57.8	52.3
14	47.2	44.9	39.5	46.6	47.0	44.9	33.4	55.0	55.2
15	48.3	46.0	38.0	44.0	50.0	52.6	33.2	58.4	56.3
16	47.8	46.1	37.2	47.7	51.3	53.1	33.3	59.5	56.9
17	45.5	45.0	36.5	47.8	51.7	46.9	33.5	59.1	57.2
18	51.6	43.1	35.8	45.0	50.5	43.8	32.6	59.4	51.7
19	52.9	42.7	35.3	45.6	50.7	43.6	32.7	59.2	50.4
20	53.2	42.6	34.9	47.0	51.2	44.2	33.0	58.9	49.8
21	50.3	39.1	33.5	46.7	45.4	42.5	30.2	60.8	48.9
22	50.3	38.2	32.8	44.2	45.7	40.1	30.5	59.0	49.4
23	51.2	37.0	31.9	39.1	46.3	37.0	30.8	56.7	50.1
24	49.8	33.4	30.5	39.8	44.7	34.1	28.6	57.7	53.1
25	50.4	31.0	29.4	37.8	42.1	35.5	28.1	57.1	49.8
26	50.4	29.4	28.3	36.3	39.6	36.5	27.7	55.1	46.6
27	48.1	31.0	27.4	36.3	36.5	36.0	27.0	45.8	42.0
28	47.5	30.0	27.5	32.9	34.4	32.6	26.5	40.8	37.6
29	46.4	28.7	27.1	30.9	33.0	30.7	25.9	37.9	35.5
30	44.0	26.7	25.8	29.3	31.4	29.3	25.0	35.6	34.6
31	38.1	26.6	25.4	29.5	31.0	28.4	24.5	35.2	38.2
32	35.8	26.2	25.0	29.3	30.3	28.4	24.1	34.5	37.4
33	36.2	25.3	24.4	28.5	29.0	28.7	23.6	33.3	31.8
34	36.0	26.6	24.5	28.1	29.3	26.4	24.0	32.5	29.6
35	37.3	26.4	24.5	28.3	29.2	26.4	23.9	32.2	29.6
36	40.5	25.4	24.5	29.0	28.7	27.6	23.5	31.7	30.8
37	38.8	25.8	25.9	27.9	28.6	27.5	24.2	31.6	30.9
38	38.4	26.9	27.0	28.4	29.6	28.5	24.7	32.7	31.5
39	38.2	28.1	28.0	29.4	30.7	29.7	25.2	34.2	32.2
40	42.1	28.3	28.3	30.9	30.9	30.2	26.5	43.0	31.1
41	43.9	28.6	27.6	31.0	31.1	30.1	26.5	40.9	31.5
42	43.4	28.7	27.0	31.1	31.0	29.9	26.4	40.1	31.6
43	31.6	28.1	27.1	30.9	29.3	29.0	25.5	45.3	30.2
44	33.5	27.6	27.3	31.1	30.4	31.9	25.7	40.3	32.9
45	35.1	27.9	26.7	31.0	30.8	33.7	25.5	36.0	34.7
46	36.5	31.4	22.0	28.6	28.5	31.4	23.9	33.0	32.8
47	36.0	31.7	25.3	30.2	28.6	32.7	23.6	33.7	33.4
48	33.7	31.1	26.3	29.2	27.9	32.7	23.0	32.7	32.5
49	28.2	30.0	25.4	25.3	26.0	31.6	21.8	29.5	29.7
50	26.7	30.9	26.1	28.5	27.1	31.7	22.3	31.7	31.2
51	27.0	31.8	26.5	28.8	27.2	31.3	22.1	32.3	31.3
52	31.7	32.8	30.8	32.7	31.0	35.2	24.7	37.1	35.4

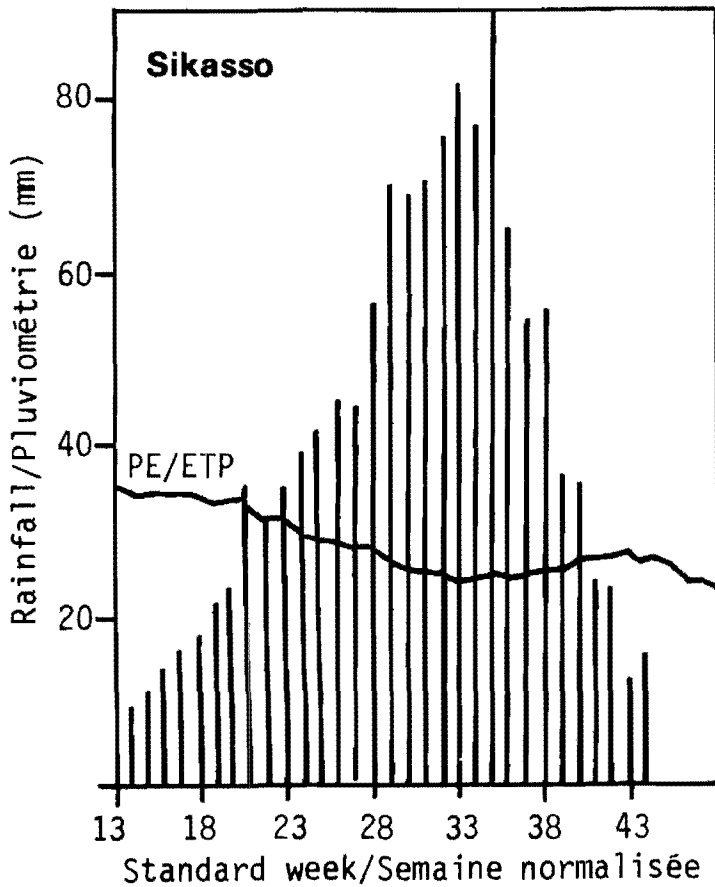
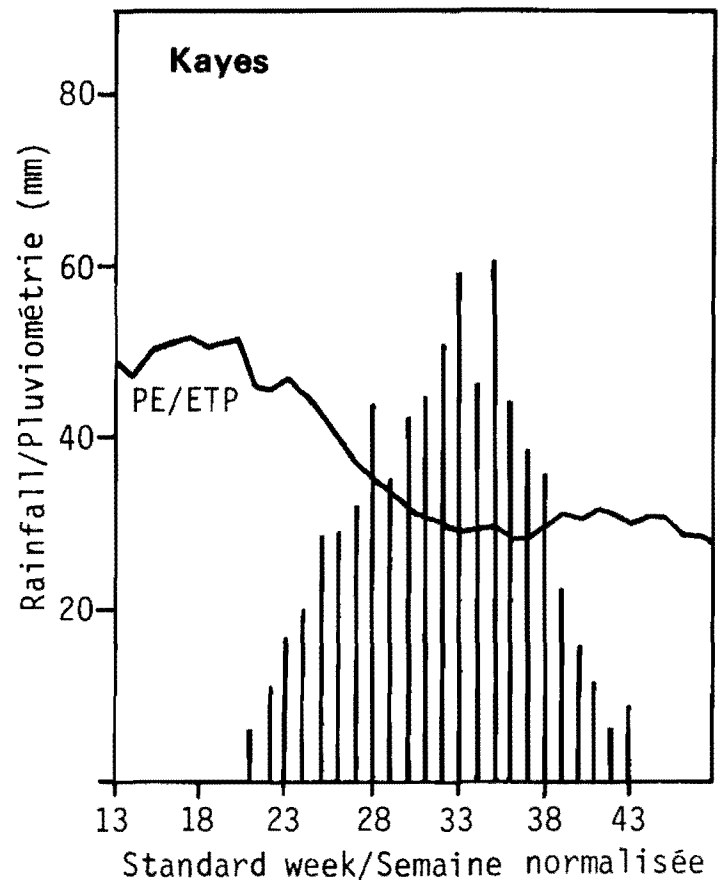
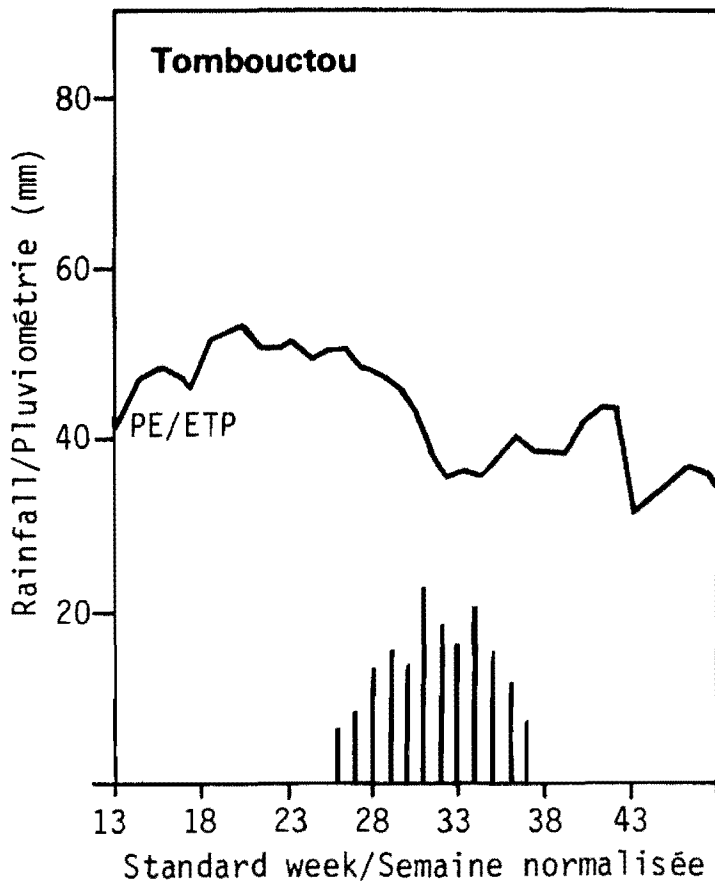


Figure 18. Seasonal variation in weekly potential evaporation (PE) and weekly rainfall at indicated locations in Mali.

Figure 18. Sur une base hebdomadaire, variation saisonnière de l'évapotranspiration potentielle (ETP) et de la pluviométrie aux stations indiquées au Mali.

A water-balance model (Keig and McAlpine 1969) was used to estimate the weekly available soil moisture storage for the 9 stations in Mali listed in Table 6. Use of the water-balance model is based on two assumptions. First, a maximum soil moisture-storage capacity has to be known or at least assumed. Second, runoff or deep drainage losses of rainfall occur only after the maximum soil water-storage capacity has been reached. Soil water-storage at the end of a particular week was calculated from the sum of the soil water storage at the end of a previous week and the amount of rainfall received during the week, by subtracting the soil water loss due to evapotranspiration during the week. Soil water loss through the week was estimated by the ratio of actual evapotranspiration (AE) to PE multiplied by PE. The ratio AE/PE is taken as 1.0 as the soil water storage varies from 100% to X%; and it decreases linearly from 1.0 to 0.0 as the storage decreases from X% to 0%. The value of X varies with the maximum soil water-storage capacity. PE values listed in Table 6 were used in the water-balance computations.

Using the above procedure, weekly available soil moisture was estimated for the 9 locations. Maximum soil water-storage capacities were assumed by taking into consideration the variability of soils at each location. Results of the water-balance analysis are given in Appendix IX. Seasonal changes in the estimated soil-moisture content were plotted for the two levels of soil-moisture storages for the 9 locations (see Fig. 19). At Sikasso located in southern Mali the mean annual rainfall is 1306 mm and the mean potential evapotranspiration is 1408 mm. At a low soil water-holding capacity of 60 mm, the estimated soil moisture in the profile is low, as can be expected, and for a period of 21 weeks from standard week 22 (28 May-3 June) to standard week 42 (15-21 Oct) the soil moisture in the profile exceeds 40 mm. Average weekly potential evapotranspiration during this period varies from 23 to 31 mm (Table 6). At an assumed soil water-storage capacity of 250 mm, because of the high rainfall which is well distributed, soil water storage increases from 40 mm at week 15 (9-15 April) and reaches 248 mm by week 34 (20-26 August) when the peak rainfall occurs. Up to the end of the year, the soil water storage is maintained at least up to 50% of the capacity. Obviously the moisture availability situation at Sikasso is good and is amenable to growing a variety of crops. At Bougouni (mean annual rainfall 1088 mm) moisture availability is similar to that at Sikasso, with the water contents falling slightly below the levels observed at Sikasso because of lower rainfall. The weekly potential evapotranspiration also is slightly higher at Bougouni. At Bamako-Ville, located further north, the potential evapotranspiration is higher although the mean annual rainfall is about the same (1021 mm). Hence the available water storage at Bamako-Ville is lower than at Sikasso and Bougouni. The assumed soil water-holding capacities here are different, i.e., 150 and 200 mm.

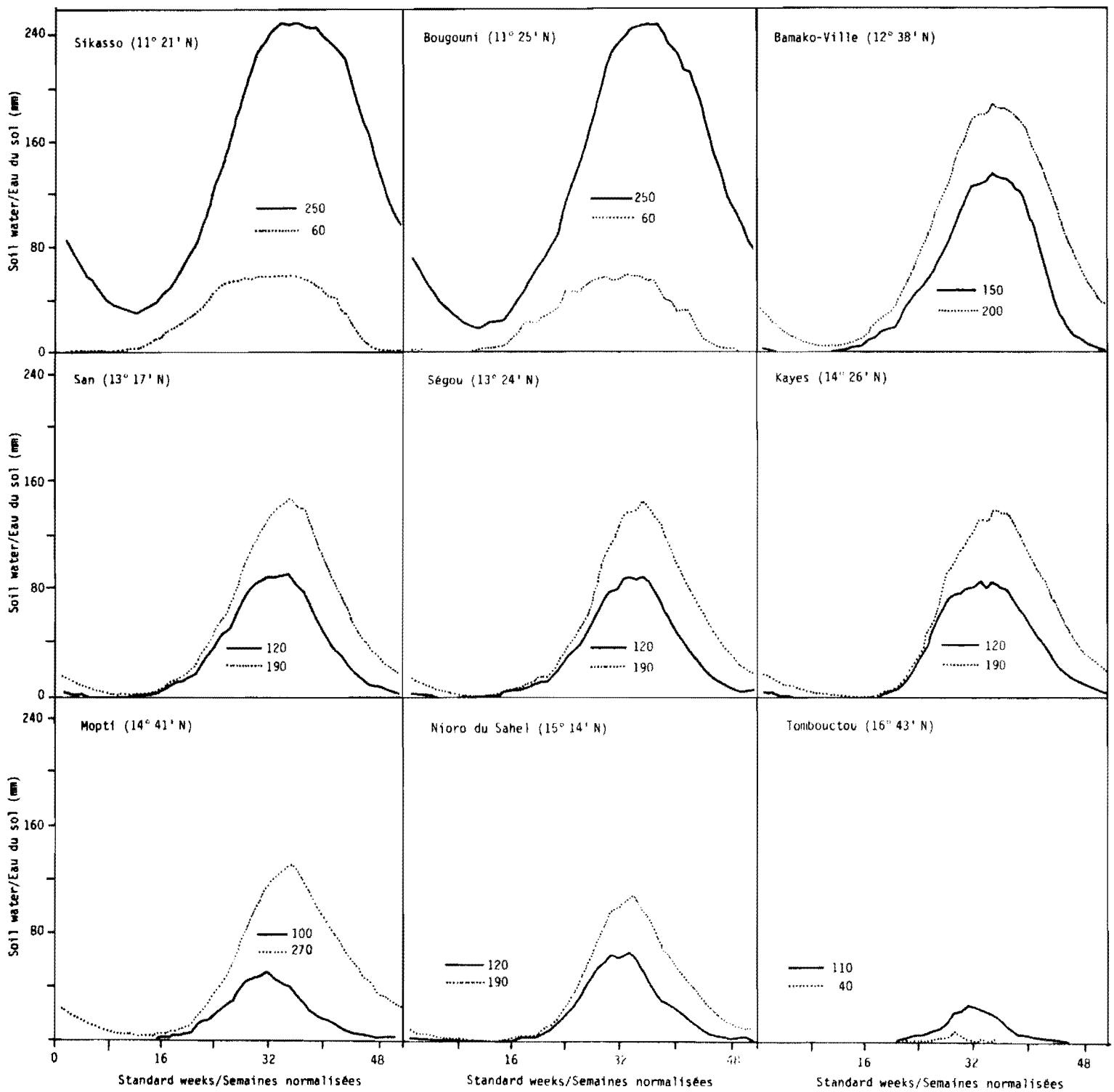


Figure 19. Weekly soil water storage at two assumed soil water-holding capacities at indicated locations in Mali.

Figure 19. Sur une base hebdomadaire, stock d'eau du sol à deux niveaux donnés de capacité de rétention d'eau du sol aux stations indiquées au Mali.

San and Ségou located in the Ségou region and Kayes situated in Kayes region all receive a mean annual rainfall ranging from 700 to 750 mm. Of these Kayes, located further north, shows weekly potential evapotranspiration rates that are 2-3 mm higher than those for San and Ségou. The weekly soil moisture storage computed using 120 and 190 mm soil water-holding capacities shows that at San the soil moisture storage exceeds 50% of its capacity from week 27 (2-8 July) to week 39 (24-30 Sept) at 120 mm, and that this period gets extended by a further three weeks at 190 mm capacity. At those two water-holding capacities at Ségou, the period when the available water storage exceeds 50% of its capacity gets reduced by a week because of lower rainfall and slightly higher PE rates. Although the rainfall at Kayes is higher than at Ségou by a small margin, because of higher PE rates the available water storage is low. One significant feature that differentiates San, Ségou, and Kayes from Sikasso and Bougouni is that the soil water storage in the former locations never attains the full capacity that is attained for a short period in the latter two locations. This has implications for crop survival if midseason droughts occur.

As one goes further north in Mali to locations such as Mopti (14°31'N) and Nioro du Sahel (15°14'N), the soil water storage even at 190 and 270 mm water-holding capacities is low, and even during the growing season the soil water storages could be well below 50% of capacity. At Tombouctou, which is located at 16°43'N and has a mean annual rainfall of 192 mm, the soil water storages are the lowest and show no promise for arable cropping.

Length of the Growing Season

Results of the water-balance analysis given in Appendix IX also give estimates of the week-to-week changes in the ratio of actual evapotranspiration to potential evapotranspiration (AE/PE). Length of the growing period at the nine locations in Mali could be computed based on the assumption that it is the period when the available soil moisture is adequate to maintain an AE/PE ratio of 0.5 or more. The length of the growing period (Table 7) varies from 0 weeks at Tombouctou (with 110 mm available water-holding capacity) to 33 weeks at Sikasso (with 250 mm soil water-holding capacity). The growing periods computed for Sikasso, Bougouni, and Bamako point to the existence of a definite potential for cropping at these locations. The soil moisture availability is adequate to support long-duration crops such as cotton. At San, Ségou, and Kayes the length of the growing period ranges from 16 to 20 weeks, which provides adequate potential for crops such as sorghum. At Nioro du Sahel and Mopti the soil moisture availability is limited to supporting a short crop of millet. Even at high soil water-holding capacities such as 270 mm assumed for Mopti, the growing season is limited to only 12 weeks, showing thereby that the amount and distribution of rainfall severely restrict cropping. Tombouctou with 192 mm annual rainfall is very risky for cropping.

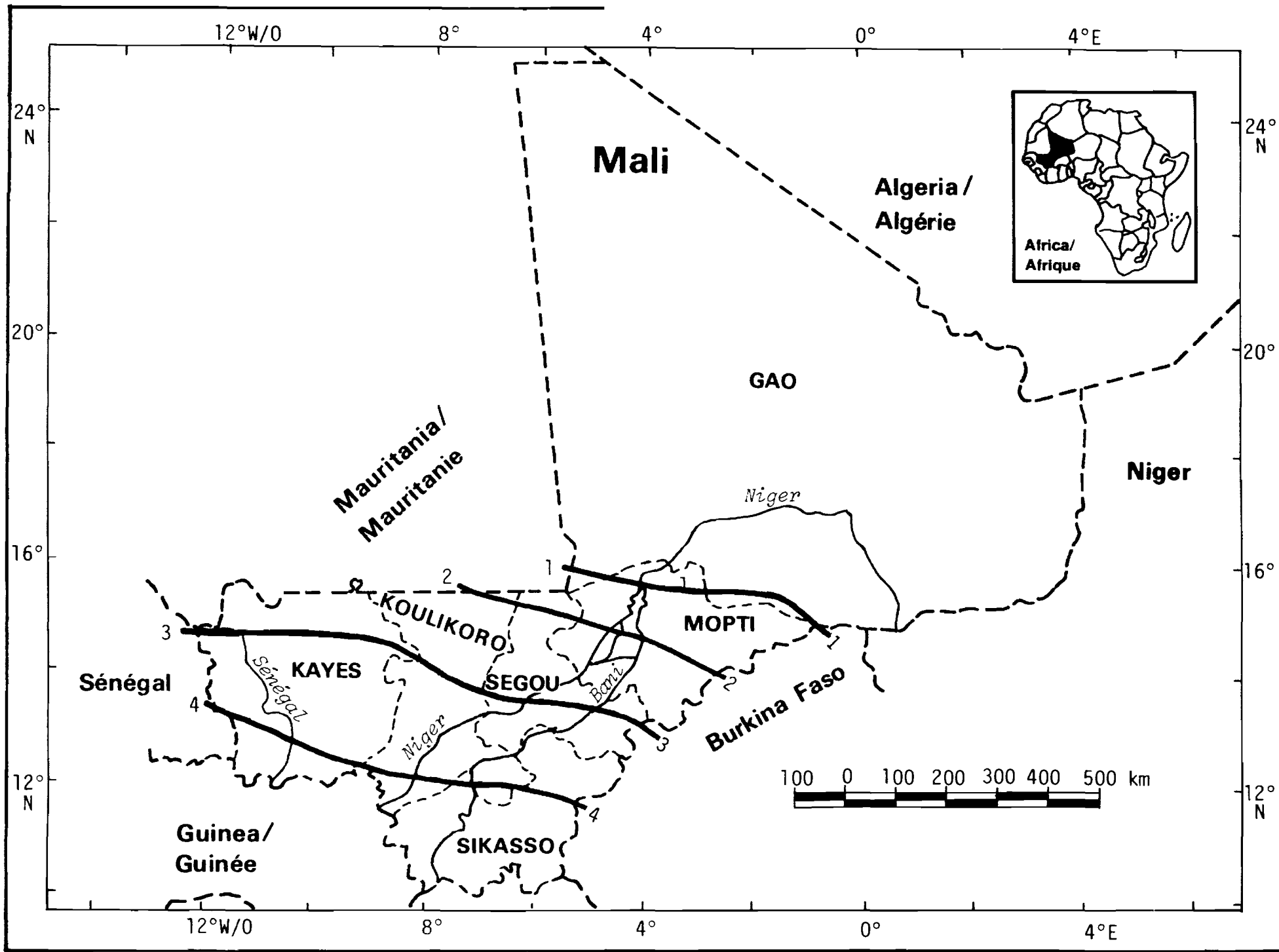


Figure 20. Number of humid months (as per Troll's approach) in Mali.
Figure 20. Nombre de mois humides (d'après la méthode de Troll) au Mali.

Table 7. Length of the growing season in soils with variable water-holding capacities for indicated locations in Mali.

Station	Soil water-holding capacity (mm)	Length of the growing season (weeks)
Sikasso	60	27
	250	32
Bougouni	60	27
	250	28
Bamako-Ville	150	24
	200	24
San	120	19
	190	20
Ségou	120	17
	190	19
Kayes	120	19
	190	21
Mopti	100	14
	270	16
Nioro du Sahel	120	15
	190	15
Tombouctou	40	2
	110	0

Climatic Classification

Classification of climate provides a useful index of the ecological conditions, agricultural potential, and general environment of a country. Appropriate climatic zonation is important for the transfer of adaptable soil-water and crop-management technology. Climatic classification systems using precipitation and potential evapotranspiration as inputs have definite advantages because an evaluation of moisture adequacy could easily be made using those parameters, especially in Mali where water is the basic climatic constraint. Climatic classification of Mali has been carried out in this study using the approaches of Troll (1965) and Cochemé and Franquin (1967).

Troll's classification is based on the number of humid months rather than on the assignment of climatic boundaries based on annual precipitation. A humid month is defined as a month having a mean rainfall that is higher than the mean potential evapotranspiration. Monthly rainfall and potential evaporation data for 80 locations in Mali are available (Virmani et al. 1980). According to Troll, areas with 2 to 4.5 humid months in a year are classified as thorn savannah belt or dry tropics, and those with 4.5 to 7 humid months come under the dry savannah belt or the wet-dry semi-arid tropics. Areas with 1-2 humid months in a year are classified as the semi-desert belt or arid. Using Troll's approach, the number of humid months for all the locations in Mali were computed. As shown in Figure 20, except for Gao and the northern half of Mopti region, the rest of Mali could be classified as dry tropics. The northern half of Mopti, where the humid months range from 1-2, is the semi-desert belt. All of Gao, except for a narrow area around Hombori, is a desert area.

The approach of Cochemé and Franquin (1967) is based on the computation of dates at which average rainfall equals $1/10$, $1/2$, and all of the potential evapotranspiration at the beginning, middle, and end of the rainy season. The point where the rainfall equals $1/10$ of PE defines the beginning of the preparatory period, which ends with the beginning of the first intermediate period ($P = 1/2 PE$). The humid period is one during which rainfall exceeds potential evapotranspiration. The intermediate periods, during which rainfall is more than half the PE but does not exceed it, occur before and after the humid period. The moist period is the sum of the humid and the two intermediate periods taken together.

The approximate dates of the beginning of the preparatory, moist, and humid periods and their durations for different locations in Mali are shown in Table 8. The preparatory period can be utilized for preparation of the soil and early sowing of crops resistant to drought in the seedling stage (Cochemé and Franquin 1967). At Kalana this period starts early on 19 March, whereas at Bamako-Ville with a mean annual rainfall of 1077 mm the preparatory period begins on 18 April. The preparatory period is also the longest in southern Mali, i.e., 48 days at Sikasso, while the period gets reduced progressively to the north and is only 22 days at Diamou.

The beginning of the moist period (and that of the first intermediate period) is the best time for sowing. It can be expected that because of the pronounced north-south gradients in the annual rainfall caused by the movement of ITCZ and its positioning over southern Mali for a longer period, the beginning of the moist period would be the earliest in southern Mali. For example at Goualala (mean annual rainfall 1382 mm) the moist period begins on 14 May and its duration is 172 days. Guéné-Goré, Kalana, Niéna, and Sikasso are some of the other locations where the moist period starts early and lasts longer. Such locations offer considerable promise for growing long-duration crops with a fair degree of dependability.

Table 8. Dates of beginning and durations of preparatory, humid, and moist periods for indicated locations in Mali.

Station	Annual rainfall (mm)	Date of beginning			Number of days		
		Prepa-ratory period	Humid period	Moist period	Prepa-ratory period	Humid period	Moist period
Ambidédi	766	17 May	8 Jul	9 Jun	23	81	124
Ansongo	298	2 Jun	-	26 Jul	54	-	38
Bafoulabé	919	5 May	27 Jun	5 Jun	31	96	131
Bamako-Ville	1077	18 Apr	19 Jun	26 May	38	106	143
Bamako-Zoo-Ifan	1039	20 Apr	20 Jun	28 May	38	105	140
Bamba	194	18 Jun	-	15 Aug	58	-	3
Banamba	795	3 May	4 Jul	12 Jun	40	81	118
Bandiagara	591	18 May	19 Jul	23 Jun	36	51	100
Bankass	594	8 May	14 Jul	23 Jun	46	57	100
Barouéli	737	19 Apr	2 Jul	12 Jun	54	76	114
Béléko	938	6 Apr	22 Jun	29 May	53	97	136
Bourem	148	24 Jun	-	-	-	-	-
Diamou	792	18 May	3 Jul	9 Jun	22	86	124
Diéma	650	21 May	12 Jul	22 Jun	32	67	106
Dioïla	950	6 Apr	25 Jun	30 May	54	95	136
Diré	271	18 Jun	-	22 Jul	34	-	43
Djenné	612	3 May	13 Jul	19 Jun	47	57	101
Dogo-Tenenkou	473	24 May	26 Jul	1 Jul	37	35	80
Douentza	495	19 May	2 Aug	28 Jun	40	23	86
Dounfing	1019	17 Apr	22 Jun	30 May	43	100	136
Faladye	1010	23 Apr	24 Jun	2 Jun	40	99	134
Galougo	891	5 May	24 Jun	3 Jun	29	98	132
Gao	256	13 Jun	-	16 Aug	64	-	10
Goualala	1382	21 Mar	9 Jun	14 May	54	127	172
Goundam	247	17 Jun	-	26 Jul	39	-	35
Gourma-Rharous	176	22 Jun	-	-	-	-	-
Guéné-Goré	1286	12 Apr	10 Jun	23 May	31	125	161
Hombori	411	28 May	10 Aug	7 Jul	40	11	69
Kabara	209	18 Jun	-	7 Aug	50	-	16
Kalana	1327	19 May	11 Jun	6 May	48	124	181
Kami	621	11 May	17 Jul	25 Jun	45	48	120
Kangaba	1120	7 Apr	14 Jun	23 May	46	115	153
Kara	575	11 May	15 Jul	24 Jun	44	53	92
Karangasso	1038	4 Apr	21 Jun	17 May	43	101	151
Katibougou	876	23 Apr	27 Jun	2 Jun	40	92	131
Kayes	731	19 May	9 Jul	14 Jun	26	77	118
Kayo	672	8 May	10 Jul	21 Jun	44	69	105
Ké-Macina	564	17 May	15 Jul	24 Jun	38	56	96
Kéniéba	1322	24 Apr	13 Jun	26 May	32	122	158
Kidal	133	29 Jun	-	-	-	-	-

..contd.

Table 8 continued.

Station	Annual rainfall (mm)	Date of beginning			Number of days		
		Preparatory period	Humid period	Moist period	Preparatory period	Humid period	Moist period
Kignan	1189	26 Mar	16 Jun	17 May	52	109	152
Kimparana	855	8 Apr	1 Jul	2 Jun	55	86	129
Kita	1135	23 Apr	18 Jun	29 May	36	110	142
Kogoni	557	22 May	17 Jul	25 Jun	34	52	96
Kolokani	812	27 Apr	3 Jul	11 Jun	45	82	120
Konséguéla	1002	10 Apr	23 Jun	29 May	49	103	139
Koulouba	997	20 Apr	21 Jun	29 May	39	103	139
Koutiala	999	1 Apr	19 Jun	26 May	55	103	141
Mahoua	1053	7 Apr	20 Jun	18 May	41	100	147
Mandjakuy	827	20 Apr	1 Jul	6 Jun	47	83	122
Markala	643	17 May	11 Jul	21 Jun	35	65	104
Ménaka	275	10 Jun	-	22 Jul	42	0	41
Mopti	539	13 May	23 Jul	27 Jun	45	43	92
Mourdiah	560	20 May	15 Jul	24 Jun	35	54	95
Mpessoba	1029	19 Apr	20 Jun	25 May	36	122	155
Nara	506	23 May	14 Jul	25 Jun	33	52	93
Niafunké	312	16 Jun	-	16 Jul	30	-	64
Niéna	1235	25 Mar	14 Jun	9 May	45	117	173
Niénébalé	895	21 Apr	2 Jul	3 Jun	43	85	129
Niono	582	18 May	15 Jul	25 Jun	38	58	97
Nioro du Sahel	661	19 May	12 Jul	23 Jun	35	66	103
Nyamina	723	5 May	5 Jul	12 Jun	38	78	116
Ouatagouna	333	1 Jun	-	16 Jul	46	-	55
Ouéléssébougou	1087	30 Mar	15 Jun	15 May	46	113	161
San	748	22 Apr	5 Jul	8 Jun	47	74	118
Saraféré	294	13 Jun	-	18 Jul	35	-	52
Satadougou	1336	23 Apr	9 Jun	24 May	31	126	159
Ségou	709	1 May	6 Jul	16 Jun	46	73	110
Ségué	641	2 May	15 Jul	11 Jun	40	63	115
Sikasso	1315	18 Mar	8 Jun	5 May	48	123	175
Sirakoro	1128	23 Apr	20 Jun	29 May	36	109	145
Sofara	579	13 May	21 Jul	24 Jun	42	49	97
Sokolo	502	27 May	17 Jul	28 Jun	32	48	89
Soninkoura	715	2 May	7 Jul	14 Jun	43	74	113
Sotuba	1027	18 Apr	20 Jun	28 May	40	104	140
Tessalit	84	27 Jul	-	-	-	-	-
Tilembéya	569	17 May	14 Jul	22 Jun	36	54	95
Tombouctou	199	18 Jun	-	10 Aug	53	0	11
Toukoto	898	4 May	27 Jun	5 Jun	32	97	132
Yélimané	586	22 May	13 Jul	23 Jun	32	63	102

As one moves northward in Mali rainfall decreases and the moist period also gets progressively delayed. At locations such as Faladye and Galougo, for example, the moist period starts early in June and the duration averages 135 days. The cropping possibilities here are not as bright as those for locations such as Sikasso, but still suggest that successful cropping of sorghum is possible.

In the region of Kayes toward the northern limits, such as at Yélimané (mean annual rainfall 586 mm), the optimum time of sowing gets delayed till the end of June, as suggested by the beginning of the humid period. The short moist period also suggests possibilities for growing crops such as millet and short-duration sorghum.

The simple procedure of Cochemé and Franquin (1967) discussed already is useful for suggesting region-specific crop planning. Such procedures can also be used to assess the optimum times for various agricultural operations. It should be mentioned, however, that the suggested moist periods can only provide an approximate idea as the type of soil and its storage capacity are not taken into consideration here.

Application of the Analysis

The coefficient of variation and the range in rainfall, computed on a monthly basis for all locations in Mali, provide a general idea of the long-term moisture availability. The probability analysis of rainfall carried out on a weekly basis enabled the delineation of the year into prerainy, rainy, and postrainy periods. The probabilities of given amounts of rainfall and the expected amounts of rainfall calculated at specified probability levels should help in deciding on the appropriate sowing dates, the length of the rainy season, and the relative degree of dependability of rainfall and moisture availability at different locations. Regional differences in precipitation probabilities should aid the process of determining areas most suitable for successful crop production. The application of the probabilities computed at 10, 20, 30, 40, and 50 mm-threshold levels could be based on the crop water requirements in each zone, as determined by atmospheric evaporative demand and the crop phenological stages such as establishment, vegetative growth, flowering, and grain filling.

An example of the use of these probabilities could be provided by comparing Sikasso and Mopti (Appendix IV). At Sikasso the probability of receiving 30 mm of rainfall to meet the PE demand (as given in Table 6) are better than 50% from week 23 to week 40. In other words, in 5 out of 10 years the water demands can be met adequately. On the other hand, at Mopti the PE demand is in excess of 30 mm/week during the growing season, but the precipitation probabilities of 30 mm are below 60%. From the incomplete gamma analysis (Appendix VI), it appears that the potential evapotranspiration demands in July, August,

and September can be met at a high degree of probability at Sikasso while this is not so at Mopti. Water shortages are frequent at Mopti and crop growth is likely to be limited by these shortages.

Climatic water-balance studies help in the evaluation of the soil moisture storage and the amount of crop-available water on a weekly basis. The length of the growing season computed from the analysis should help in the choice of crops and varieties to fit well within the moisture-availability period. Dates of beginning of the preparatory, humid, and moist periods computed for different locations also help in deciding the possible timing of different field operations.

The choice of a crop appropriate to a given location is determined not merely by the climatic characteristics but also by the soil type, the socioeconomic situation, and the market demands. However, application of agroclimatological analysis--where the available growing period is compared with the phenology of a crop--can suggest the potential of harvesting a good crop if the crop water requirements at different stages can be met adequately by the seasonal rainfall.

Acknowledgements

The authors are grateful to Mr J.G. Sekaran, Research Associate (Computer) and Mr P.V.V. Satyanarayana, Field Assistant for help in the analysis of data; to Mr M.N.S. Bose, formerly Assistant Cartographer at ICRISAT Center, and Mr G. Thomas, Field Assistant for maps and figures.

References

- Asnani, G.C. 1982. The climate of Africa, including feasibility study of climate alert system. Pages 107-130 in Proceedings, Technical Conference on Climate - Africa. WMO/OMM No.596. Geneva, Switzerland: World Meteorological Organisation.
- Black, C.C. 1971. Ecological implications of dividing plants into groups with distinct photosynthetic production capacities. Advanced Ecological Research 7:87-114.
- Church, R.J.H. 1982. Mali: Physical and Social Geography. Page 655 in Africa South of the Sahara. 1982-83 London, UK: Entopa Publication Ltd.
- Cochemé, J., and Franquin, P. 1967. An agroclimatological survey of a semi-arid area in Africa south of the Sahara. Technical note no. 86. Geneva, Switzerland: World Meteorological Organisation.
- FAO. 1977. Soil map of the world. Vol. VI. Africa. Paris, France: UNESCO. 299 pp.
- Gabriel, K.R., and Neumann, J. 1962. A Markov Chain model for daily rainfall occurrence at Tel Aviv. Quarterly Journal of the Royal Meteorological Society 88:90-95.
- Grand Atlas de l'Afrique - Editions Jeune Afrique.
- Hargreaves, G.H. 1974. Precipitation dependability and potential for agricultural production in Northeast Brazil. EMBRAPA and Utah State University. (74-D155) Logan, Utah. 123 pp.
- Keig, G., and McAlpine, J.R. 1974. WATBAL: A computer system for the estimation and analysis of soil moisture from simple climatic data. Second Ed. Technical Memorandum 74/4, CSIRO, Australia.
- Konare, K., et Konate, M. 1976. Contribution à une étude agrométéorologique du Mali. Thèse d'ingénieur civil de la Météorologie. Ecole Nationale de la Météorologie, Paris.
- Konate, M. 1978. Instructions pour le calcul de l'évapotranspiration potentielle Penman. Note Interne. Direction Nationale de la Météorologie du Mali.
- Notes et Etudes Documentaires: Le Mali. Avril 1974 La Documentation Française.
- Penman, H.L. 1948. Natural evaporation from open water, bare soil, and grasses. Proceedings of Royal Society, London (A)193:120-145.

Pieri, D. 1970. Rapport pédologique Fana-Bamako, Paris, France: Institut de recherches agronomiques tropicales et des cultures vivrières.

Rossetti, C. 1963. Prospection écologique: Etudes en Afrique occidentale, observations sur la végétation au Mali Oriental. Rome, FAO.

Sivakumar, M.V.K., Virmani, S.M., and Reddy, S.J. 1979. Rainfall climatology of West Africa: Niger. Information Bulletin No.5. Patancheru, AP, India: ICRISAT.

Troll, C. 1965. Seasonal climates of the earth. Page 28 in World Maps of Climatology. (Ed. E. Rodenwalt and H. Juszatz). Berlin: Springer-Verlag.

Trewartha, G.T. 1968. An introduction to climate. (4th Ed.) New York: McGraw-Hill.

Virmani, S.M., Sivakumar, M.V.K., and Reddy, S.J. 1978. Rainfall probability estimates for selected locations of semi-arid India. Research Bulletin No. 1. Patancheru, AP, India: ICRISAT. 127 pp.

Virmani, S.M., Reddy, S.J., and Bose, M.N.S. 1980. A handbook on the rainfall climatology of West Africa: Data for selected locations. Information Bulletin No.7. Patancheru, AP, India: ICRISAT.

APPENDIX I - Results of the Monthly Rainfall Analysis

APPENDICE I - Résultats de l'analyse de la pluviométrie mensuelle

Key for Appendix I/Clé pour Appendice I

Month/Mois

- 1 = January / Janvier
- 2 = February / Février
- 3 = March / Mars
- 4 = April / Avril
- 5 = May / Mai
- 6 = June / Juin
- 7 = July / Juillet
- 8 = August / Août
- 9 = September / Septembre
- 10 = October / Octobre
- 11 = November / Novembre
- 12 = December / Décembre

Ambidédi

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.0	0.0	520	0.2	0.0	0.2
2	0.5	2.7	506	14.7	0.0	14.7
3	0.0	0.0	0	0.0	0.0	0.0
4	0.3	1.1	366	4.9	0.0	4.9
5	14.7	31.2	212	165.0	0.0	165.0
6	89.1	52.0	58	249.1	0.0	249.1
7	156.1	56.4	36	286.0	47.1	238.9
8	217.6	100.7	46	518.1	66.1	452.0
9	152.3	60.8	40	280.7	57.0	223.7
10	46.6	39.2	84	151.8	0.0	151.8
11	1.0	2.1	211	7.4	0.0	7.4
12	0.2	0.6	346	2.3	0.0	2.3
TOTAL	690.1	181.9	26	1018.0	357.4	660.6

Ansongo

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.0	0.2	714	1.6	0.0	1.6
2	0.6	2.8	459	14.5	0.0	14.5
3	0.4	1.8	431	11.8	0.0	11.8
4	0.4	1.5	341	8.5	0.0	8.5
5	14.8	29.1	197	188.2	0.0	188.2
6	26.0	25.2	97	126.2	0.0	126.2
7	71.6	40.5	57	164.0	0.0	164.0
8	130.4	61.0	47	347.0	0.0	347.0
9	35.4	24.9	70	90.7	0.0	90.7
10	6.6	11.1	169	63.7	0.0	63.7
11	0.0	0.0	0	0.0	0.0	0.0
12	0.0	0.0	0	0.0	0.0	0.0
TOTAL	293.5	102.1	35	475.7	26.9	448.8

Bafoulabé

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.0	0.2	678	1.5	0.0	1.5
2	0.6	3.9	686	27.0	0.0	27.0
3	0.2	1.1	484	7.7	0.0	7.7
4	2.8	6.5	230	32.9	0.0	32.9
5	25.1	26.5	105	131.4	0.0	131.4
6	116.9	52.3	45	239.1	24.5	214.6
7	203.2	76.8	38	390.4	47.7	342.7
8	294.3	99.1	34	621.0	126.6	494.4
9	192.0	91.1	47	549.6	44.4	505.2
10	53.6	37.7	70	141.6	0.0	141.6
11	3.1	7.9	251	43.0	0.0	43.0
12	0.3	1.8	522	12.0	0.0	12.0
TOTAL	898.5	207.8	23	1503.8	469.7	1034.1

Bamako-Aéro

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.0	0.0	0	0.0	0.0	0.0
2	1.6	4.8	300	16.0	0.0	16.0
3	0.2	0.4	190	1.5	0.0	1.5
4	8.4	9.0	108	31.0	0.0	31.0
5	63.0	38.5	61	147.5	19.0	128.5
6	173.9	67.3	39	295.9	78.0	217.9
7	257.4	41.2	16	340.0	191.4	148.6
8	336.6	85.4	25	465.5	218.5	247.0
9	229.6	72.7	32	356.8	110.0	246.8
10	97.4	68.4	70	253.0	10.3	242.7
11	10.1	17.2	171	53.5	0.0	53.5
12	1.7	5.2	300	17.4	0.0	17.4
TOTAL	1177.8	108.7	9	1296.5	941.5	355.0

Bamako-Zoo-Ifan

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.0	0.0	0	0.0	0.0	0.0
2	0.3	0.9	340	3.5	0.0	3.5
3	3.9	8.3	210	31.2	0.0	31.2
4	14.3	21.9	153	81.6	0.0	81.6
5	50.2	37.6	75	167.1	3.1	164.0
6	137.3	45.4	33	229.1	67.4	161.7
7	235.6	56.1	24	390.4	126.4	264.0
8	310.7	97.1	31	486.1	166.3	319.8
9	205.6	77.4	38	390.2	99.7	290.5
10	68.5	64.9	95	290.4	0.0	290.4
11	5.9	10.2	174	36.6	0.0	36.6
12	0.1	0.4	364	1.7	0.0	1.7
TOTAL	1038.3	177.1	17	1311.5	643.5	668.0

Bamba

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.2	0.7	354	3.0	0.0	3.0
2	0.0	0.0	0	0.0	0.0	0.0
3	0.5	1.4	314	6.3	0.0	6.3
4	2.8	9.6	348	45.4	0.0	45.4
5	3.6	7.0	194	21.3	0.0	21.3
6	17.5	20.5	117	73.7	0.0	73.7
7	52.3	32.4	62	127.4	1.7	125.7
8	91.0	41.7	46	170.0	13.1	156.9
9	28.2	25.9	92	112.8	0.0	112.8
10	3.2	6.5	202	28.2	0.0	28.2
11	0.0	0.0	0	0.0	0.0	0.0
12	0.4	1.6	447	7.5	0.0	7.5
TOTAL	196.1	81.7	42	327.4	79.4	248.0

Banamba

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.3	1.7	542	11.6	0.0	11.6
2	0.0	0.3	678	2.1	0.0	2.1
3	5.1	12.0	233	56.8	0.0	56.8
4	7.2	11.1	154	46.1	0.0	46.1
5	26.0	23.7	91	103.3	0.0	103.3
6	98.4	37.7	38	207.0	30.5	176.5
7	186.2	60.4	32	336.7	71.2	265.5
8	255.1	88.7	35	421.7	64.0	357.7
9	144.9	65.3	45	288.6	43.0	245.6
10	36.6	44.7	122	229.4	0.0	229.4
11	3.1	8.7	281	48.2	0.0	48.2
12	0.2	0.9	422	5.0	0.0	5.0
TOTAL	767.6	173.4	23	1173.2	488.8	684.4

Bandiagara

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.1	0.8	568	5.8	0.0	5.8
2	0.0	0.3	635	1.9	0.0	1.9
3	1.3	3.6	277	16.0	0.0	16.0
4	8.0	13.8	173	57.0	0.0	57.0
5	21.2	18.8	89	87.8	0.0	87.8
6	67.3	29.6	44	158.2	18.8	139.4
7	158.2	127.7	81	1035.3	23.2	1012.1
8	194.2	76.3	39	457.4	60.0	397.4
9	111.9	46.9	42	229.3	13.6	215.7
10	25.8	20.9	81	72.0	0.0	72.0
11	2.3	5.6	246	27.2	0.0	27.2
12	0.1	0.5	561	3.5	0.0	3.5
TOTAL	604.2	186.3	31	1533.4	351.2	1182.2

Bankass

Month/ Mois	Mean rainfall/ Pluviométrie moyenne (mm)	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
				Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.1	0.5	520	2.7	0.0	2.7
2	0.4	1.2	305	6.0	0.0	6.0
3	2.8	6.9	250	31.8	0.0	31.8
4	6.8	14.4	212	69.0	0.0	69.0
5	26.9	20.8	77	76.3	0.0	76.3
6	73.6	28.5	39	123.6	28.5	95.1
7	165.2	75.0	45	353.8	55.8	298.0
8	178.9	64.9	36	368.3	32.8	335.5
9	110.3	43.8	40	206.4	43.7	162.7
10	24.1	24.8	103	116.9	0.0	116.9
11	3.7	10.2	276	40.0	0.0	40.0
12	0.2	0.9	425	5.0	0.0	5.0
TOTAL	583.9	106.6	18	860.4	331.4	529.0

Baroueli

Month/ Mois	Mean rainfall/ Pluviométrie moyenne (mm)	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
				Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.4	2.3	548	15.6	0.0	15.6
2	0.2	1.0	648	6.5	0.0	6.5
3	3.5	7.0	201	27.5	0.0	27.5
4	16.8	16.7	99	56.6	0.0	56.6
5	32.9	28.1	85	127.0	1.2	125.8
6	96.8	46.2	48	214.6	12.3	202.3
7	199.2	74.5	37	303.0	14.1	288.9
8	239.7	108.4	45	489.4	17.2	472.2
9	122.0	63.8	52	317.6	15.8	301.8
10	27.7	24.6	89	85.9	0.0	85.9
11	2.4	7.8	323	47.6	0.0	47.6
12	0.1	0.3	393	1.7	0.0	1.7
TOTAL	744.8	225.1	30	1185.5	91.8	1093.7

Béléko

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.4	1.8	449	10.6	0.0	10.6
2	0.2	0.8	346	4.0	0.0	4.0
3	2.5	6.0	239	23.0	0.0	23.0
4	25.9	29.2	113	99.4	0.0	99.4
5	61.4	28.6	47	128.5	12.2	116.3
6	116.0	38.7	33	216.7	45.0	171.7
7	201.9	59.3	29	338.1	87.1	251.0
8	288.1	87.3	30	511.9	116.8	395.1
9	168.7	50.3	30	300.6	95.5	205.1
10	46.7	35.9	77	144.3	0.0	144.3
11	3.7	8.4	231	41.1	0.0	41.1
12	2.1	7.4	363	38.7	0.0	38.7
TOTAL	915.7	143.3	16	1258.2	538.4	719.8

Bougouni

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.8	2.7	331	11.0	0.0	11.0
2	0.6	1.8	308	7.1	0.0	7.1
3	8.7	7.9	91	26.2	0.0	26.2
4	42.3	42.5	101	155.2	0.0	155.2
5	102.4	43.9	43	196.9	41.6	155.3
6	141.3	48.0	34	226.2	73.1	153.1
7	242.9	51.2	21	329.5	166.3	163.2
8	268.9	62.0	23	358.2	172.4	185.8
9	194.3	76.6	39	361.6	98.3	263.3
10	79.6	55.7	70	205.5	18.5	187.0
11	7.2	8.4	117	25.9	0.0	25.9
12	0.0	0.0	0	0.0	0.0	0.0
TOTAL	1089.0	129.4	12	1309.3	843.8	465.5

Bourem

Month/ Mois	Mean rainfall/ Pluviométrie moyenne (mm)	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
				Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.0	0.3	707	1.9	0.0	1.9
2	0.1	0.3	500	2.0	0.0	2.0
3	0.3	1.1	424	7.0	0.0	7.0
4	0.3	1.3	434	8.5	0.0	8.5
5	3.6	6.2	174	25.0	0.0	25.0
6	13.9	14.5	104	68.2	0.0	68.2
7	44.4	26.4	59	156.1	0.0	156.1
8	59.3	35.2	59	150.5	3.6	146.9
9	20.2	16.5	82	74.1	0.0	74.1
10	3.2	7.2	222	34.2	0.0	34.2
11	0.1	0.5	693	3.4	0.0	3.4
12	0.0	0.2	439	1.0	0.0	1.0
TOTAL	142.5	55.5	39	322.5	72.5	250.0

Diamou

Month/ Mois	Mean rainfall/ Pluviométrie moyenne (mm)	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
				Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.0	0.0	0	0.0	0.0	0.0
2	0.3	1.4	490	7.1	0.0	7.1
3	0.0	0.0	0	0.0	0.0	0.0
4	1.1	4.0	372	20.3	0.0	20.3
5	22.0	22.6	103	83.0	0.0	83.0
6	102.8	46.3	45	193.0	19.5	173.5
7	191.8	59.8	31	321.0	93.0	228.0
8	244.1	75.9	31	494.1	115.0	379.1
9	153.0	65.7	43	285.7	32.0	253.7
10	49.3	40.5	82	139.0	0.0	139.0
11	3.9	12.7	321	59.0	0.0	59.0
12	0.0	0.0	0	0.0	0.0	0.0
TOTAL	773.3	126.6	16	1121.0	507.5	613.5

Diéma

Month/ Mois	Mean rainfall/ Pluviométrie moyenne (mm)	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
				Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.0	0.0	0	0.0	0.0	0.0
2	0.0	0.0	0	0.0	0.0	0.0
3	0.4	1.2	326	5.5	0.0	5.5
4	4.1	9.1	224	36.6	0.0	36.6
5	14.8	17.8	120	61.2	0.0	61.2
6	67.8	43.1	64	208.2	11.6	196.6
7	164.0	59.8	36	369.1	67.2	301.9
8	228.2	69.8	31	376.4	120.3	256.1
9	128.1	51.9	41	255.9	43.1	212.8
10	31.8	25.3	79	88.3	0.0	88.3
11	1.6	5.0	314	26.5	0.0	26.5
12	1.4	4.8	340	20.5	0.0	20.5
TOTAL	651.9	132.2	20	962.2	423.9	538.3

Dioila

Month/ Mois	Mean rainfall/ Pluviométrie moyenne (mm)	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
				Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.3	1.7	535	10.5	0.0	10.5
2	0.2	1.2	616	7.9	0.0	7.9
3	4.6	11.6	254	55.4	0.0	55.4
4	24.4	24.9	102	112.8	0.0	112.8
5	59.1	27.7	47	124.1	6.4	117.7
6	122.4	40.6	33	220.0	58.7	161.3
7	203.3	70.3	35	400.1	72.8	327.3
8	301.7	85.0	28	478.9	131.3	347.6
9	159.2	75.2	47	353.1	10.4	342.7
10	53.5	45.1	84	223.7	0.0	223.7
11	2.5	5.3	209	20.2	0.0	20.2
12	1.6	6.0	378	31.3	0.0	31.3
TOTAL	942.5	175.6	19	1285.2	577.8	707.4

Diré

Month/ Mois	Mean rainfall/ Pluviométrie moyenne (mm)	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
				Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.3	1.3	382	8.0	0.0	8.0
2	0.3	1.8	640	11.5	0.0	11.5
3	0.3	1.5	473	9.5	0.0	9.5
4	1.0	3.8	391	23.2	0.0	23.2
5	6.4	12.5	197	52.3	0.0	52.3
6	18.7	18.5	99	83.2	0.0	83.2
7	72.6	39.1	54	176.1	5.3	170.8
8	111.9	58.3	52	282.5	18.0	264.5
9	45.1	26.4	59	121.0	8.0	113.0
10	7.5	13.3	177	76.8	0.0	76.8
11	0.1	0.5	640	3.1	0.0	3.1
12	0.2	1.2	640	8.0	0.0	8.0
TOTAL	263.7	86.5	33	530.2	139.3	390.9

Djenné

Month/ Mois	Mean rainfall/ Pluviométrie moyenne (mm)	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
				Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.7	3.2	457	22.0	0.0	22.0
2	0.1	0.6	480	4.0	0.0	4.0
3	1.7	4.6	275	22.0	0.0	22.0
4	5.5	9.0	164	49.5	0.0	49.5
5	30.4	32.8	108	139.2	0.0	139.2
6	74.2	51.3	69	332.5	6.0	326.5
7	159.0	58.8	37	295.6	27.0	268.6
8	202.1	80.5	40	394.0	30.1	363.9
9	96.7	43.7	45	226.6	0.0	226.6
10	17.4	18.4	106	74.0	0.0	74.0
11	1.1	2.9	268	14.5	0.0	14.5
12	0.4	2.9	738	22.0	0.0	22.0
TOTAL	591.1	172.7	29	1170.7	293.8	876.9

Dogo-Téhenkou

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.1	0.2	304	1.0	0.0	1.0
2	0.1	0.3	354	1.0	0.0	1.0
3	0.8	2.3	278	10.0	0.0	10.0
4	2.1	3.3	158	10.5	0.0	10.5
5	10.2	16.0	157	78.6	0.0	78.6
6	42.9	33.7	79	160.3	1.0	159.3
7	119.3	71.5	60	358.5	21.7	336.8
8	166.3	93.6	56	428.2	19.5	408.7
9	65.5	39.5	60	163.4	11.9	151.5
10	5.1	13.4	266	68.3	0.0	68.3
11	0.8	3.8	507	20.5	0.0	20.5
12	0.5	2.2	475	11.6	0.0	11.6
TOTAL	434.7	177.5	41	902.6	205.8	696.8

Douentza

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.1	0.6	531	4.1	0.0	4.1
2	0.5	1.9	370	10.0	0.0	10.0
3	1.8	9.2	508	62.5	0.0	62.5
4	4.6	9.0	197	40.5	0.0	40.5
5	17.9	20.3	114	88.1	0.0	88.1
6	65.0	39.9	61	194.2	6.2	188.0
7	129.4	46.5	36	282.7	56.8	225.9
8	161.8	57.8	36	341.0	54.0	287.0
9	88.5	46.0	52	212.1	5.8	206.3
10	20.7	22.7	110	93.0	0.0	93.0
11	0.4	1.7	448	10.0	0.0	10.0
12	0.5	2.9	631	20.6	0.0	20.6
TOTAL	493.1	111.4	23	829.0	245.0	584.0

Dounfing

Month/ Mois	Mean rainfall/ Pluviométrie moyenne (mm)	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
				Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.0	0.0	0	0.0	0.0	0.0
2	0.3	0.8	281	3.0	0.0	3.0
3	5.0	16.0	320	83.0	0.0	83.0
4	35.3	105.7	300	553.6	0.0	553.6
5	54.5	39.0	72	157.9	1.5	156.4
6	132.1	57.0	43	229.5	0.0	229.5
7	242.8	65.9	27	361.0	77.1	283.9
8	307.7	118.9	39	549.0	85.6	463.4
9	190.3	70.7	37	346.0	0.0	346.0
10	64.3	77.8	121	334.2	0.0	334.2
11	5.9	12.4	211	55.2	0.0	55.2
12	0.9	4.3	466	23.0	0.0	23.0
TOTAL	1017.3	220.0	22	1402.0	615.0	787.0

Faladye

Month/ Mois	Mean rainfall/ Pluviométrie moyenne (mm)	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
				Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.6	2.4	440	16.4	0.0	16.4
2	0.4	1.8	494	12.4	0.0	12.4
3	4.4	8.5	193	38.1	0.0	38.1
4	9.8	13.0	132	65.1	0.0	65.1
5	50.9	34.0	67	131.1	2.7	128.4
6	124.8	43.6	35	208.9	22.9	186.0
7	240.4	62.6	26	359.4	122.7	236.7
8	305.9	112.1	37	682.7	117.1	565.6
9	194.3	61.9	32	342.8	84.5	258.3
10	57.5	46.6	81	246.5	0.2	246.3
11	4.6	8.7	191	43.8	0.0	43.8
12	0.4	1.1	288	4.8	0.0	4.8
TOTAL	991.0	176.3	18	1396.7	662.7	734.0

Galougo

Month/ Mois	Mean rainfall/ Pluviométrie moyenne (mm)	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
				Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.0	0.0	0	0.0	0.0	0.0
2	0.4	1.9	520	10.2	0.0	10.2
3	0.2	0.9	520	4.7	0.0	4.7
4	1.7	4.6	274	20.0	0.0	20.0
5	30.2	20.9	69	81.0	0.0	81.0
6	122.6	46.9	38	234.7	25.2	209.5
7	205.9	67.7	33	353.0	105.8	247.2
8	267.9	89.4	33	580.4	145.0	435.4
9	174.0	68.9	40	335.9	67.5	268.4
10	54.9	42.3	77	218.1	0.0	218.1
11	3.5	7.8	222	28.2	0.0	28.2
12	0.6	1.7	306	7.0	0.0	7.0
TOTAL	857.5	151.4	18	1240.6	543.1	697.5

Gao

Month/ Mois	Mean rainfall/ Pluviométrie moyenne (mm)	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
				Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.5	2.2	449	16.0	0.0	16.0
2	0.1	0.5	542	3.9	0.0	3.9
3	0.4	1.6	383	8.0	0.0	8.0
4	1.9	8.6	449	63.5	0.0	63.5
5	7.1	14.6	207	78.1	0.0	78.1
6	22.5	19.5	87	77.4	0.0	77.4
7	66.3	32.9	50	159.2	8.6	150.6
8	104.6	52.1	50	259.5	24.1	235.4
9	33.5	25.3	76	155.4	0.0	155.4
10	4.7	7.0	151	27.2	0.0	27.2
11	0.1	0.9	688	7.2	0.0	7.2
12	0.1	0.6	540	3.5	0.0	3.5
TOTAL	237.7	97.9	41	469.4	94.8	374.6

Goualala

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.2	0.8	419	4.1	0.0	4.1
2	4.1	13.0	321	72.2	0.0	72.2
3	13.2	20.3	154	90.9	0.0	90.9
4	47.9	27.6	58	97.2	0.0	97.2
5	99.8	42.3	42	205.4	31.7	173.7
6	170.7	34.1	20	241.6	101.2	140.4
7	261.0	61.6	24	409.4	146.6	262.8
8	360.0	111.1	31	680.1	179.6	500.5
9	259.6	89.6	35	536.3	113.4	422.9
10	118.4	76.1	64	342.9	15.0	327.9
11	16.2	21.2	131	91.9	0.0	91.9
12	1.1	2.9	268	13.8	0.0	13.8
TOTAL	1361.1	189.8	14	1811.7	1039.3	772.4

Goundam

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.4	1.1	283	5.2	0.0	5.2
2	0.3	1.3	516	7.5	0.0	7.5
3	0.1	0.5	469	3.4	0.0	3.4
4	0.5	1.8	356	12.0	0.0	12.0
5	3.6	6.8	190	35.0	0.0	35.0
6	17.1	16.2	95	81.2	0.0	81.2
7	65.1	44.3	68	182.3	0.5	181.8
8	98.4	45.7	46	247.8	21.0	226.8
9	44.2	28.8	65	127.0	0.0	127.0
10	5.9	10.8	183	55.2	0.0	55.2
11	0.3	1.0	398	6.3	0.0	6.3
12	0.2	1.2	728	9.0	0.0	9.0
TOTAL	241.2	73.5	30	416.5	111.4	305.1

Gourma-Rharous

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.1	0.6	395	3.0	0.0	3.0
2	0.0	0.2	505	1.0	0.0	1.0
3	0.8	4.8	604	35.0	0.0	35.0
4	1.1	4.6	414	31.0	0.0	31.0
5	3.6	7.3	205	42.6	0.0	42.6
6	11.7	13.6	116	55.1	0.0	55.1
7	49.7	34.9	70	182.9	0.0	182.9
8	67.2	35.8	53	194.5	5.0	189.5
9	26.0	20.4	79	122.5	0.6	121.9
10	2.9	5.9	204	24.8	0.0	24.8
11	0.1	0.5	721	4.0	0.0	4.0
12	0.1	0.4	323	2.0	0.0	2.0
TOTAL	165.9	57.2	34	306.9	77.6	229.3

Guené-Goré

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.2	1.1	489	5.4	0.0	5.4
2	0.5	1.7	370	8.7	0.0	8.7
3	0.3	1.0	381	4.7	0.0	4.7
4	5.3	10.3	195	43.2	0.0	43.2
5	58.4	31.5	54	117.3	0.0	117.3
6	179.4	62.8	35	324.1	58.4	265.7
7	262.5	58.9	22	397.9	181.0	216.9
8	345.1	119.6	35	641.7	169.3	472.4
9	266.9	67.5	25	407.8	98.0	309.8
10	105.0	67.2	64	243.6	18.0	225.6
11	10.9	19.1	175	95.4	0.0	95.4
12	0.1	0.6	490	3.3	0.0	3.3
TOTAL	1232.0	184.6	15	1507.0	840.8	666.2

Hombori

Month/ Mois	Mean rainfall/ Pluviométrie moyenne (mm)	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
				Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.0	0.0	550	0.3	0.0	0.3
2	0.1	0.4	347	2.1	0.0	2.1
3	0.3	0.7	255	2.7	0.0	2.7
4	1.8	5.0	272	24.0	0.0	24.0
5	10.3	15.5	150	70.5	0.0	70.5
6	42.7	25.2	59	130.0	5.6	124.4
7	116.9	50.5	43	229.9	26.6	203.3
8	155.7	64.8	42	383.1	48.2	334.9
9	67.5	31.6	47	155.7	10.0	145.7
10	12.6	19.7	157	95.9	0.0	95.9
11	0.2	0.7	449	4.7	0.0	4.7
12	0.3	1.4	504	9.6	0.0	9.6
TOTAL	408.9	98.8	24	767.5	201.2	566.3

Kabara

Month/ Mois	Mean rainfall/ Pluviométrie moyenne (mm)	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
				Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.2	0.9	385	5.0	0.0	5.0
2	0.2	1.4	675	10.5	0.0	10.5
3	0.1	0.3	476	2.0	0.0	2.0
4	1.3	3.9	296	18.7	0.0	18.7
5	1.8	4.1	231	26.8	0.0	26.8
6	16.5	20.2	122	97.6	0.0	97.6
7	56.8	32.1	57	150.8	4.3	146.5
8	88.6	43.0	49	183.1	12.0	171.1
9	33.2	24.8	75	99.0	0.0	99.0
10	3.6	5.8	164	22.4	0.0	22.4
11	0.2	1.2	541	8.5	0.0	8.5
12	0.2	0.9	435	6.1	0.0	6.1
TOTAL	204.0	65.9	32	363.4	53.1	310.3

Kalana

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	1.9	6.0	315	24.1	0.0	24.1
2	2.3	6.2	270	28.3	0.0	28.3
3	17.8	24.4	137	91.2	0.0	91.2
4	49.7	40.2	81	140.6	0.0	140.6
5	110.2	58.8	53	281.8	11.6	270.2
6	179.2	86.3	48	393.5	53.6	339.9
7	263.6	109.9	42	520.0	51.5	468.5
8	344.2	131.1	38	611.3	139.6	471.7
9	266.5	83.1	31	496.8	134.5	362.3
10	124.7	83.0	67	310.2	14.2	296.0
11	24.9	37.1	149	195.5	0.0	195.5
12	2.7	8.7	322	44.0	0.0	44.0
TOTAL	1382.6	341.4	25	2143.8	848.1	1295.7

Kami

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.2	1.0	500	5.1	0.0	5.1
2	0.0	0.1	500	0.6	0.0	0.6
3	0.6	1.5	233	6.6	0.0	6.6
4	3.7	5.8	156	19.1	0.0	19.1
5	25.3	18.2	72	66.6	1.8	64.8
6	64.7	30.6	47	131.4	21.6	109.8
7	164.2	52.4	32	253.5	62.8	190.7
8	185.5	67.6	36	351.6	87.0	264.6
9	91.0	41.9	46	210.0	29.2	180.8
10	18.6	22.4	120	94.1	0.0	94.1
11	0.4	1.5	369	7.1	0.0	7.1
12	0.9	4.6	510	24.2	0.0	24.2
TOTAL	550.8	98.4	18	711.5	377.6	333.9

Kangaba

Month/ Mois	Mean rainfall/ Pluviométrie moyenne (mm)	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
				Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.9	2.5	289	11.2	0.0	11.2
2	0.5	1.6	289	6.5	0.0	6.5
3	4.1	8.3	201	33.1	0.0	33.1
4	28.2	27.7	98	122.7	0.0	122.7
5	67.5	36.5	54	168.7	14.0	154.7
6	160.2	50.0	31	278.0	62.4	215.6
7	232.7	77.6	33	467.2	99.0	368.2
8	317.0	103.3	33	593.0	152.5	440.5
9	217.5	94.1	43	544.0	62.9	481.1
10	79.0	52.6	67	196.0	0.0	196.0
11	12.5	22.9	184	105.7	0.0	105.7
12	0.1	0.6	554	4.0	0.0	4.0
TOTAL	1113.2	184.9	17	1674.6	724.8	949.8

Kara

Month/ Mois	Mean rainfall/ Pluviométrie moyenne (mm)	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
				Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.3	1.6	490	8.1	0.0	8.1
2	0.1	0.4	362	1.7	0.0	1.7
3	0.9	2.2	248	10.7	0.0	10.7
4	2.5	3.7	148	13.5	0.0	13.5
5	24.9	24.8	100	97.9	0.0	97.9
6	64.2	29.6	46	120.8	13.2	107.6
7	152.9	48.6	32	291.8	59.5	232.3
8	210.3	71.0	34	363.6	100.0	263.6
9	81.2	37.4	46	161.6	22.6	139.0
10	19.0	28.4	149	106.8	0.0	106.8
11	0.7	2.2	322	9.2	0.0	9.2
12	1.3	6.6	498	34.2	0.0	34.2
TOTAL	561.3	105.6	19	743.6	329.9	413.7

Karangasso

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.7	2.6	355	11.0	0.0	11.0
2	0.9	2.7	304	10.8	0.0	10.8
3	8.3	15.6	188	66.6	0.0	66.6
4	25.0	21.8	87	91.7	0.0	91.7
5	88.4	49.9	56	203.4	7.4	196.0
6	119.8	38.3	32	232.9	63.1	169.8
7	221.6	71.5	32	337.0	66.5	270.5
8	282.9	80.3	28	492.4	152.7	339.7
9	181.6	63.5	35	371.1	81.8	289.3
10	51.4	34.2	66	116.4	0.0	116.4
11	7.3	11.0	152	52.1	0.0	52.1
12	1.4	5.8	413	30.7	0.0	30.7
TOTAL	1003.0	151.9	15	1365.7	811.9	553.8

Katibougou

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.1	0.5	549	3.1	0.0	3.1
2	0.1	0.3	554	2.0	0.0	2.0
3	4.7	13.2	280	72.2	0.0	72.2
4	13.1	14.9	113	65.8	0.0	65.8
5	47.3	37.5	79	176.7	0.0	176.7
6	121.1	44.4	37	247.0	24.7	222.3
7	194.6	71.4	37	324.6	0.0	324.6
8	285.0	108.3	38	570.7	0.0	570.7
9	164.1	65.2	40	361.9	61.2	300.7
10	42.9	37.1	87	131.9	0.0	131.9
11	4.0	9.0	223	39.7	0.0	39.7
12	0.5	2.1	422	12.2	0.0	12.2
TOTAL	864.7	174.3	20	1360.0	529.0	831.0

Kayes

Month/ Mois	Mean rainfall/ Pluviométrie moyenne (mm)	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
				Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.4	2.3	561	17.0	0.0	17.0
2	0.3	2.0	684	16.6	0.0	16.6
3	0.2	1.0	622	8.3	0.0	8.3
4	1.4	5.0	363	30.0	0.0	30.0
5	17.3	23.4	135	121.7	0.0	121.7
6	93.2	46.6	50	242.5	0.0	242.5
7	170.0	62.7	37	344.2	44.6	299.6
8	224.8	86.3	38	526.1	54.5	471.6
9	156.9	64.6	41	370.1	59.2	310.9
10	42.6	38.5	90	203.2	0.0	203.2
11	2.5	10.8	428	82.9	0.0	82.9
12	0.4	2.4	581	19.8	0.0	19.8
TOTAL	722.6	160.0	22	1136.1	361.2	774.9

Kayo

Month/ Mois	Mean rainfall/ Pluviométrie moyenne (mm)	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
				Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.2	0.7	436	3.0	0.0	3.0
2	0.0	0.0	0	0.0	0.0	0.0
3	0.8	2.8	336	12.8	0.0	12.8
4	4.6	7.8	171	31.5	0.0	31.5
5	25.3	18.5	73	81.3	0.0	81.3
6	67.4	37.7	56	145.5	4.0	141.5
7	170.8	42.7	25	295.0	118.2	176.8
8	234.1	84.5	36	394.0	129.0	265.0
9	128.3	54.4	42	239.3	50.5	188.8
10	28.1	26.6	95	80.0	0.0	80.0
11	0.9	2.5	290	9.3	0.0	9.3
12	2.0	7.8	388	35.0	0.0	35.0
TOTAL	673.7	77.4	11	841.6	502.6	339.0

Ké-Macina

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.7	2.6	380	13.5	0.0	13.5
2	0.0	0.0	0	0.0	0.0	0.0
3	0.9	3.2	345	16.7	0.0	16.7
4	8.9	15.1	170	62.5	0.0	62.5
5	23.2	22.3	96	106.0	0.0	106.0
6	65.0	45.5	70	251.1	0.0	251.1
7	147.0	60.2	41	327.1	54.9	272.2
8	197.0	80.8	41	476.1	79.2	396.9
9	104.9	48.9	47	212.5	21.5	191.0
10	16.5	26.5	160	134.2	0.0	134.2
11	1.0	3.2	334	18.2	0.0	18.2
12	0.7	5.2	721	38.3	0.0	38.3
TOTAL	563.9	136.3	24	899.7	316.8	582.9

Kéniéba

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.0	0.1	436	0.4	0.0	0.4
2	0.3	1.2	427	6.3	0.0	6.3
3	0.2	0.9	536	5.6	0.0	5.6
4	6.4	8.1	126	32.6	0.0	32.6
5	54.6	35.3	65	165.0	0.0	165.0
6	161.1	65.6	41	300.0	13.5	286.5
7	260.7	88.7	34	446.0	128.1	317.9
8	410.6	161.0	39	931.1	171.6	759.5
9	285.1	91.9	32	500.9	139.5	361.4
10	106.0	87.8	83	508.5	17.0	491.5
11	8.6	13.1	152	49.9	0.0	49.9
12	1.1	4.0	367	22.2	0.0	22.2
TOTAL	1298.0	253.6	20	1913.7	843.5	1070.2

Kidal

Month/ Mois	Mean rainfall/ Pluviométrie moyenne (mm)	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
				Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.1	0.4	435	2.5	0.0	2.5
2	0.3	1.4	523	10.0	0.0	10.0
3	0.2	0.8	414	5.2	0.0	5.2
4	1.4	5.0	344	33.0	0.0	33.0
5	6.9	14.5	211	90.0	0.0	90.0
6	10.8	11.8	109	50.2	0.0	50.2
7	34.6	20.7	60	96.1	1.6	94.5
8	54.1	32.9	61	196.5	10.7	185.8
9	23.9	21.2	88	75.5	0.0	75.5
10	2.4	6.6	278	39.0	0.0	39.0
11	0.1	0.3	496	1.8	0.0	1.8
12	0.2	0.6	339	4.0	0.0	4.0
TOTAL	136.0	51.1	38	333.8	59.0	274.8

Kignan

Month/ Mois	Mean rainfall/ Pluviométrie moyenne (mm)	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
				Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.4	1.9	485	9.8	0.0	9.8
2	3.8	13.2	345	63.0	0.0	63.0
3	9.1	14.2	156	56.5	0.0	56.5
4	32.7	32.4	99	146.1	0.0	146.1
5	93.9	46.6	50	219.4	28.5	190.9
6	147.3	50.1	34	258.1	75.8	182.3
7	226.7	67.6	30	341.4	106.4	235.0
8	330.7	123.9	37	602.0	158.1	443.9
9	199.0	69.4	35	369.6	75.5	294.1
10	62.8	41.5	66	165.6	0.0	165.6
11	14.9	33.0	221	153.2	0.0	153.2
12	5.3	15.0	284	58.0	0.0	58.0
TOTAL	1110.7	211.8	19	1545.1	801.5	743.6

Kimparana

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.5	1.7	371	8.0	0.0	8.0
2	0.2	1.0	450	5.1	0.0	5.1
3	5.7	9.6	167	43.2	0.0	43.2
4	20.4	17.0	83	61.9	0.0	61.9
5	67.1	31.0	46	130.6	18.6	112.0
6	109.5	40.4	37	192.8	50.3	142.5
7	199.2	69.8	35	339.5	50.5	289.0
8	253.5	82.4	33	474.2	110.7	363.5
9	159.5	57.6	36	289.4	60.0	229.4
10	37.5	27.6	74	117.7	0.6	117.1
11	4.7	8.7	185	35.1	0.0	35.1
12	0.5	1.9	372	9.9	0.0	9.9
TOTAL	852.4	120.2	14	1135.9	663.0	472.9

Kita

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.5	3.1	620	22.0	0.0	22.0
2	0.3	1.5	482	9.7	0.0	9.7
3	0.9	2.2	237	11.1	0.0	11.1
4	11.0	16.9	154	82.6	0.0	82.6
5	44.1	29.3	67	124.3	0.0	124.3
6	152.8	55.6	36	275.8	54.7	221.1
7	246.1	73.5	30	458.9	98.9	360.0
8	334.7	105.8	32	569.4	154.3	415.1
9	217.6	77.4	36	439.0	62.5	376.5
10	70.5	54.0	77	248.3	2.4	245.9
11	7.8	15.1	193	77.1	0.0	77.1
12	0.8	3.0	376	16.3	0.0	16.3
TOTAL	1087.1	209.0	19	1619.8	731.3	888.5

Kogoni

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.2	0.4	275	1.9	0.0	1.9
2	0.2	1.1	529	5.8	0.0	5.8
3	2.0	4.7	234	16.0	0.0	16.0
4	4.4	12.1	275	60.7	0.0	60.7
5	11.8	11.2	95	41.7	0.0	41.7
6	61.5	36.5	59	143.8	0.0	143.8
7	143.8	57.5	40	335.6	58.0	277.6
8	196.8	83.6	43	467.0	47.3	419.7
9	103.4	55.6	54	249.9	22.2	227.7
10	21.9	27.3	124	116.2	0.0	116.2
11	1.0	4.5	453	24.6	0.0	24.6
12	0.6	2.7	456	14.7	0.0	14.7
TOTAL	547.6	130.8	24	866.6	253.4	613.2

Kolokani

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.4	1.8	427	12.8	0.0	12.8
2	0.3	1.2	415	8.0	0.0	8.0
3	3.0	10.3	350	70.2	0.0	70.2
4	9.3	12.2	131	52.0	0.0	52.0
5	36.9	26.5	72	100.0	0.0	100.0
6	105.0	49.7	47	218.1	13.6	204.5
7	193.2	57.4	30	297.2	60.4	236.8
8	263.1	91.5	35	449.2	67.3	381.9
9	157.4	65.8	42	290.9	24.2	266.7
10	40.4	37.8	94	189.6	0.0	189.6
11	4.7	11.3	244	62.0	0.0	62.0
12	0.6	2.5	415	15.0	0.0	15.0
TOTAL	789.8	192.1	24	1225.9	351.8	874.1

Konséguéla

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.0	0.0	0	0.0	0.0	0.0
2	1.9	7.2	385	36.6	0.0	36.6
3	4.5	10.5	232	49.1	0.0	49.1
4	19.4	17.9	92	60.5	0.0	60.5
5	59.5	35.3	59	158.5	0.0	158.5
6	135.2	43.6	32	236.6	63.8	172.8
7	197.8	64.8	33	357.2	89.9	267.3
8	287.4	99.1	34	559.5	147.2	412.3
9	197.5	81.1	41	391.6	65.6	326.0
10	60.3	50.6	84	205.0	0.0	205.0
11	6.2	15.0	240	66.8	0.0	66.8
12	0.7	3.1	413	15.4	0.0	15.4
TOTAL	989.8	163.8	17	1341.6	704.5	637.1

Koulouba

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.1	0.3	306	1.2	0.0	1.2
2	0.4	1.0	273	3.5	0.0	3.5
3	6.3	11.2	177	37.3	0.0	37.3
4	13.9	21.4	154	86.5	0.0	86.5
5	51.0	34.4	68	131.3	1.0	130.3
6	131.7	44.2	34	253.2	69.6	183.6
7	241.1	66.9	28	407.8	97.8	310.0
8	309.5	97.9	32	476.6	155.1	321.5
9	198.4	86.0	43	465.9	60.6	405.3
10	56.9	45.4	80	154.2	3.5	150.7
11	3.8	7.7	203	30.0	0.0	30.0
12	1.2	5.4	466	29.0	0.0	29.0
TOTAL	1000.7	190.0	19	1360.8	639.7	721.1

Koutiala

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.4	1.7	402	10.2	0.0	10.2
2	1.1	3.7	331	19.2	0.0	19.2
3	4.7	7.6	162	36.1	0.0	36.1
4	29.1	33.1	114	156.4	0.0	156.4
5	67.8	35.7	53	175.5	0.0	175.5
6	136.6	51.0	37	262.3	25.5	236.8
7	220.0	60.0	27	391.2	50.6	340.6
8	271.5	88.9	33	525.8	87.1	438.7
9	181.1	62.5	35	369.3	57.6	311.7
10	58.3	45.1	77	238.6	5.1	233.5
11	6.6	10.9	166	57.8	0.0	57.8
12	1.6	7.1	455	42.2	0.0	42.2
TOTAL	986.8	171.0	17	1433.6	667.8	765.8

Mahoua

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	1.2	4.5	362	18.9	0.0	18.9
2	2.0	7.6	378	39.9	0.0	39.9
3	11.0	16.8	153	57.1	0.0	57.1
4	20.0	21.5	107	84.5	0.0	84.5
5	86.6	39.9	46	148.3	3.4	144.9
6	113.3	55.0	48	261.5	15.9	245.6
7	245.9	88.6	36	469.5	96.8	372.7
8	264.2	88.2	33	414.5	112.3	302.2
9	182.2	81.3	45	418.5	66.4	352.1
10	45.2	37.4	83	169.3	0.0	169.3
11	8.2	13.0	158	43.9	0.0	43.9
12	3.2	12.2	382	64.0	0.0	64.0
TOTAL	1002.8	241.3	24	1461.6	542.6	919.0

Mandjakuy

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.3	1.1	389	5.5	0.0	5.5
2	1.2	3.9	339	20.0	0.0	20.0
3	4.4	6.7	153	26.0	0.0	26.0
4	15.0	13.1	88	48.7	0.0	48.7
5	53.0	34.5	65	133.1	6.2	126.9
6	98.5	47.2	48	209.5	27.1	182.4
7	199.4	71.2	36	341.7	0.0	341.7
8	237.4	74.5	31	394.8	113.0	281.8
9	143.1	57.0	40	284.1	57.4	226.7
10	31.7	26.3	83	106.9	2.5	104.4
11	1.8	3.9	214	13.9	0.0	13.9
12	0.6	1.5	263	6.1	0.0	6.1
TOTAL	770.2	169.3	22	1110.1	455.0	655.1

Markala

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.4	1.5	384	9.0	0.0	9.0
2	0.1	0.7	482	4.1	0.0	4.1
3	1.9	6.1	313	34.6	0.0	34.6
4	10.7	26.8	250	160.0	0.0	160.0
5	21.2	22.4	106	95.6	0.0	95.6
6	76.3	40.4	53	195.5	8.6	186.9
7	165.2	54.3	33	293.4	92.7	200.7
8	210.6	82.4	39	449.2	73.6	375.6
9	116.6	46.5	40	210.8	35.8	175.0
10	23.6	25.3	107	79.5	0.0	79.5
11	0.5	1.7	372	8.5	0.0	8.5
12	0.0	0.1	616	0.6	0.0	0.6
TOTAL	628.2	151.4	24	1032.3	371.4	660.9

Ménaka

Month/ Mois	Mean rainfall/ Pluviométrie moyenne (mm)	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
				Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.1	0.4	639	3.1	0.0	3.1
2	0.1	0.3	377	1.7	0.0	1.7
3	0.5	2.9	557	21.1	0.0	21.1
4	0.7	2.2	295	12.5	0.0	12.5
5	7.9	13.1	165	68.0	0.0	68.0
6	24.9	23.3	94	122.0	0.0	122.0
7	77.3	50.6	65	328.0	2.1	325.9
8	109.7	55.6	51	256.0	14.0	242.0
9	42.4	32.1	76	139.0	3.1	135.9
10	5.8	12.1	209	58.0	0.0	58.0
11	0.1	0.6	526	3.8	0.0	3.8
12	0.0	0.3	524	1.6	0.0	1.6
TOTAL	270.0	99.6	37	696.5	44.0	652.5

Mopti

Month/ Mois	Mean rainfall/ Pluviométrie moyenne (mm)	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
				Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.1	0.5	681	3.9	0.0	3.9
2	0.1	0.3	594	2.4	0.0	2.4
3	0.5	1.7	322	10.8	0.0	10.8
4	4.8	7.9	164	41.4	0.0	41.4
5	26.0	26.5	102	110.2	0.0	110.2
6	59.5	31.2	52	156.9	11.2	145.7
7	145.8	58.0	40	291.9	45.9	246.0
8	182.5	71.9	39	441.2	71.4	369.8
9	92.5	41.8	45	206.7	23.0	183.7
10	18.8	18.1	96	79.3	0.0	79.3
11	0.3	0.9	271	5.0	0.0	5.0
12	0.5	2.7	586	20.3	0.0	20.3
TOTAL	533.6	122.1	23	963.6	326.2	637.4

Mourdiah

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.2	0.7	439	4.0	0.0	4.0
2	0.1	0.9	700	6.5	0.0	6.5
3	1.5	4.8	328	24.0	0.0	24.0
4	4.7	7.9	169	40.4	0.0	40.4
5	14.7	14.8	101	58.0	0.0	58.0
6	61.6	39.3	64	153.5	0.0	153.5
7	151.3	50.7	34	276.0	65.3	210.7
8	194.1	72.8	37	365.5	51.6	313.9
9	91.6	45.2	49	262.5	27.4	235.1
10	21.1	24.8	117	114.1	0.0	114.1
11	1.4	4.8	355	28.0	0.0	28.0
12	0.9	4.0	452	26.0	0.0	26.0
TOTAL	544.8	113.5	21	814.1	337.3	476.8

Mpessoba

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.0	0.0	351	0.2	0.0	0.2
2	0.0	0.2	447	1.0	0.0	1.0
3	1.9	4.2	225	15.6	0.0	15.6
4	11.6	15.0	129	60.8	0.0	60.8
5	62.8	33.1	53	132.4	0.0	132.4
6	125.9	40.7	32	228.8	36.0	192.8
7	202.7	62.1	31	308.5	89.3	219.2
8	300.6	92.2	31	502.0	180.2	321.8
9	180.0	72.7	40	379.4	66.1	313.3
10	51.9	39.1	75	170.4	6.7	163.7
11	4.0	7.4	188	27.0	0.0	27.0
12	2.0	7.8	398	38.9	0.0	38.9
TOTAL	988.4	156.2	16	1226.8	702.6	524.2

Nara

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.8	2.6	320	14.0	0.0	14.0
2	0.1	0.4	392	2.0	0.0	2.0
3	0.3	1.5	442	9.3	0.0	9.3
4	3.6	6.5	182	31.0	0.0	31.0
5	11.8	16.8	142	69.8	0.0	69.8
6	47.3	35.9	76	209.1	2.5	206.6
7	133.0	50.9	38	250.1	44.7	205.4
8	183.9	66.2	36	357.0	34.0	323.0
9	86.4	42.6	49	187.5	12.4	175.1
10	17.9	17.2	96	58.2	0.0	58.2
11	2.4	8.9	379	57.5	0.0	57.5
12	1.3	5.9	445	29.5	0.0	29.5
TOTAL	498.0	110.9	22	755.3	289.4	465.9

Niafouké

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.4	1.2	315	7.0	0.0	7.0
2	0.3	1.4	494	9.2	0.0	9.2
3	0.2	0.7	339	3.7	0.0	3.7
4	2.2	6.6	303	37.0	0.0	37.0
5	6.8	14.4	212	76.9	0.0	76.9
6	20.2	18.9	94	92.4	0.0	92.4
7	77.6	39.6	51	187.3	12.9	174.4
8	120.7	60.0	50	320.0	11.7	308.3
9	69.2	44.7	65	233.0	0.0	233.0
10	6.4	11.1	175	48.0	0.0	48.0
11	0.3	1.6	621	11.5	0.0	11.5
12	0.3	2.1	672	15.6	0.0	15.6
TOTAL	309.8	79.9	26	493.4	64.3	429.1

Niéna

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	1.7	6.3	368	31.2	0.0	31.2
2	3.2	11.9	370	62.1	0.0	62.1
3	11.2	22.4	200	95.4	0.0	95.4
4	41.2	34.0	83	147.6	0.0	147.6
5	90.4	44.5	49	190.2	15.8	174.4
6	155.4	48.7	31	268.3	82.7	185.6
7	227.1	93.3	41	452.3	49.6	402.7
8	319.6	113.7	36	561.8	90.5	471.3
9	214.6	89.4	42	457.9	34.8	423.1
10	90.9	60.5	67	239.5	0.0	239.5
11	24.4	32.6	133	155.5	0.0	155.5
12	5.0	13.9	276	45.9	0.0	45.9
TOTAL	1161.5	252.3	22	1787.7	630.5	1157.2

Niénébalé

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.0	0.2	574	1.2	0.0	1.2
2	1.0	4.8	496	32.8	0.0	32.8
3	2.7	7.2	271	33.2	0.0	33.2
4	15.2	18.9	124	89.8	0.0	89.8
5	52.4	40.8	78	187.5	0.4	187.1
6	117.2	39.2	33	206.5	32.6	173.9
7	200.5	61.4	31	353.2	68.9	284.3
8	277.6	97.6	35	564.9	101.6	463.3
9	162.2	69.8	43	404.4	58.4	346.0
10	41.2	31.8	77	130.4	0.0	130.4
11	2.9	6.7	230	36.9	0.0	36.9
12	0.8	3.5	448	21.2	0.0	21.2
TOTAL	880.5	165.9	19	1240.1	514.0	726.1

Niono

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.1	0.2	363	1.0	0.0	1.0
2	0.0	0.0	0	0.0	0.0	0.0
3	1.4	3.2	226	14.6	0.0	14.6
4	3.8	7.8	203	29.1	0.0	29.1
5	21.6	21.8	101	94.6	0.0	94.6
6	65.6	29.7	45	118.6	11.3	107.3
7	154.2	54.4	35	265.2	33.2	232.0
8	208.5	76.0	36	406.6	46.3	360.3
9	108.9	55.9	51	276.2	22.0	254.2
10	18.6	23.7	127	93.2	0.0	93.2
11	0.4	1.8	420	9.5	0.0	9.5
12	0.6	2.3	406	11.7	0.0	11.7
TOTAL	572.7	140.7	25	820.1	242.0	578.1

Nioro du Sahel

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.4	2.1	502	15.4	0.0	15.4
2	0.4	2.1	556	15.3	0.0	15.3
3	0.1	0.4	487	2.9	0.0	2.9
4	4.7	9.8	208	46.0	0.0	46.0
5	16.1	30.5	189	205.0	0.0	205.0
6	62.3	44.3	71	220.9	10.5	210.4
7	162.3	81.8	50	420.2	40.0	380.2
8	232.0	146.5	63	891.0	20.1	870.9
9	122.4	70.1	57	392.2	29.4	362.8
10	24.8	23.0	93	94.8	0.0	94.8
11	2.0	5.0	251	29.0	0.0	29.0
12	1.1	3.6	320	21.7	0.0	21.7
TOTAL	635.8	263.8	41	1579.0	298.9	1280.1

Nyamina

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.2	0.7	381	3.0	0.0	3.0
2	0.1	0.4	459	2.3	0.0	2.3
3	3.3	10.3	309	57.5	0.0	57.5
4	8.0	11.2	139	56.0	0.0	56.0
5	25.5	23.6	93	90.7	0.0	90.7
6	90.8	47.2	52	231.0	18.0	213.0
7	181.3	55.8	31	308.3	74.0	234.3
8	233.6	83.2	36	435.9	74.0	361.9
9	130.6	65.1	50	272.8	21.5	251.3
10	23.7	23.1	97	84.0	0.0	84.0
11	3.5	9.4	267	37.2	0.0	37.2
12	0.6	3.1	533	21.0	0.0	21.0
TOTAL	695.1	130.5	19	995.7	414.2	581.5

Ouatagouna

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.0	0.0	0	0.0	0.0	0.0
2	0.1	0.3	500	1.4	0.0	1.4
3	0.2	0.7	302	3.1	0.0	3.1
4	2.8	7.0	249	30.0	0.0	30.0
5	12.4	15.9	129	66.6	0.0	66.6
6	34.0	26.7	78	86.4	0.0	86.4
7	84.2	41.9	50	204.3	0.0	204.3
8	120.3	60.1	50	277.0	22.0	255.0
9	58.3	37.8	65	177.2	3.2	174.0
10	6.8	10.2	150	32.0	0.0	32.0
11	0.1	0.7	500	3.5	0.0	3.5
12	0.4	1.6	362	7.3	0.0	7.3
TOTAL	316.2	119.3	38	623.6	148.4	475.2

Ouélessébougou

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.4	1.2	333	4.7	0.0	4.7
2	0.9	3.0	353	14.8	0.0	14.8
3	8.8	14.3	162	52.4	0.0	52.4
4	29.9	40.0	134	184.9	0.0	184.9
5	96.6	54.8	57	233.2	33.3	199.9
6	150.8	38.2	25	236.0	88.3	147.7
7	217.9	78.8	36	525.7	130.7	395.0
8	282.1	71.3	25	406.1	129.4	276.7
9	204.4	56.1	27	307.2	58.3	248.9
10	78.5	52.9	67	197.3	0.0	197.3
11	10.4	17.6	170	78.6	0.0	78.6
12	0.3	1.3	458	6.4	0.0	6.4
TOTAL	1075.8	145.8	14	1361.3	749.0	612.3

San

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.5	1.8	390	10.4	0.0	10.4
2	0.2	0.8	445	5.1	0.0	5.1
3	3.0	5.9	193	32.0	0.0	32.0
4	15.6	22.3	143	140.2	0.0	140.2
5	42.9	29.9	70	172.1	0.0	172.1
6	101.9	39.3	39	234.5	37.3	197.2
7	180.3	57.1	32	347.6	91.5	256.1
8	242.0	72.7	30	484.3	115.9	368.4
9	129.2	53.9	42	253.1	38.7	214.4
10	28.2	25.4	90	114.7	0.0	114.7
11	3.8	9.4	250	60.0	0.0	60.0
12	0.4	2.2	496	15.5	0.0	15.5
TOTAL	749.1	116.1	16	1103.0	534.0	569.0

Saraféré

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.4	1.7	405	9.5	0.0	9.5
2	0.1	0.3	608	2.0	0.0	2.0
3	0.2	1.2	608	7.5	0.0	7.5
4	1.3	3.9	308	18.0	0.0	18.0
5	4.6	11.1	242	65.0	0.0	65.0
6	21.1	19.6	93	84.0	0.0	84.0
7	78.4	35.5	45	191.0	10.0	181.0
8	119.2	62.1	52	343.1	34.9	308.2
9	51.8	30.3	59	121.5	0.0	121.5
10	10.0	15.7	156	47.5	0.0	47.5
11	1.0	3.7	365	18.0	0.0	18.0
12	0.2	0.9	616	6.0	0.0	6.0
TOTAL	289.3	74.9	26	544.8	178.3	366.5

Satadougou

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.9	3.8	424	17.2	0.0	17.2
2	0.3	1.1	424	5.0	0.0	5.0
3	0.7	2.1	313	9.5	0.0	9.5
4	6.7	10.5	158	41.6	0.0	41.6
5	51.4	51.6	100	194.0	0.0	194.0
6	186.2	61.9	33	334.0	58.0	276.0
7	266.4	71.7	27	429.5	167.3	262.2
8	408.4	112.9	28	662.0	161.6	500.4
9	312.8	69.2	22	436.0	106.7	329.3
10	99.3	60.6	61	228.0	18.2	209.8
11	11.8	18.1	153	57.5	0.0	57.5
12	0.1	0.5	436	2.5	0.0	2.5
TOTAL	1336.5	156.3	12	1658.4	1044.4	614.0

Ségou

Month/ Mois	Mean rainfall/ Pluviométrie moyenne (mm)	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
				Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.2	0.8	478	4.6	0.0	4.6
2	0.2	1.6	651	12.1	0.0	12.1
3	2.7	6.7	247	28.7	0.0	28.7
4	11.5	16.8	146	64.2	0.0	64.2
5	29.8	21.1	71	93.8	0.5	93.3
6	85.3	41.6	49	199.8	19.0	180.8
7	184.4	58.2	32	336.2	63.7	272.5
8	237.0	67.2	28	398.2	65.9	332.3
9	124.0	48.0	39	242.7	16.4	226.3
10	25.9	30.5	118	137.9	0.0	137.9
11	2.3	6.0	255	31.1	0.0	31.1
12	0.5	3.7	685	29.0	0.0	29.0
TOTAL	705.2	127.0	18	962.3	456.1	506.2

Ségué

Month/ Mois	Mean rainfall/ Pluviométrie moyenne (mm)	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
				Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.0	0.2	455	1.0	0.0	1.0
2	0.9	4.0	430	22.0	0.0	22.0
3	3.0	6.6	219	27.8	0.0	27.8
4	8.5	12.9	152	48.2	0.0	48.2
5	34.3	22.2	65	91.4	0.0	91.4
6	74.0	31.7	43	149.7	20.0	129.7
7	151.7	55.2	36	279.8	36.8	243.0
8	201.0	78.4	39	437.8	89.6	348.2
9	116.3	54.6	47	240.6	39.1	201.5
10	28.1	25.1	89	93.6	0.0	93.6
11	1.6	5.5	336	25.2	0.0	25.2
12	0.1	0.7	498	4.0	0.0	4.0
TOTAL	622.4	122.8	20	910.8	356.1	554.7

Sikasso

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.7	2.9	403	19.3	0.0	19.3
2	6.9	21.7	314	120.9	0.0	120.9
3	15.6	17.8	114	81.1	0.0	81.1
4	49.7	36.2	73	146.1	0.0	146.1
5	113.4	59.5	52	312.0	12.4	299.6
6	165.1	53.0	32	335.5	29.0	306.5
7	267.8	76.9	29	480.8	101.5	379.3
8	334.1	80.3	24	496.2	150.2	346.0
9	242.2	90.7	37	631.5	69.3	562.2
10	97.7	58.7	60	315.4	4.6	310.8
11	15.8	16.3	103	85.5	0.0	85.5
12	1.9	6.9	370	40.7	0.0	40.7
TOTAL	1309.7	226.8	17	1983.8	795.8	1188.0

Sirakoro

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.2	0.9	520	5.1	0.0	5.1
2	0.4	2.0	505	11.0	0.0	11.0
3	3.8	12.0	319	58.5	0.0	58.5
4	8.7	12.4	143	55.8	0.0	55.8
5	57.8	29.3	51	132.9	14.4	118.5
6	131.8	39.4	30	212.7	47.0	165.7
7	255.4	81.4	32	479.5	106.5	373.0
8	331.0	97.1	29	571.4	151.1	420.3
9	215.7	61.5	29	340.5	117.9	222.6
10	77.0	53.6	70	250.9	0.0	250.9
11	2.8	5.3	187	23.1	0.0	23.1
12	0.3	1.0	371	4.4	0.0	4.4
TOTAL	1085.9	155.5	14	1448.1	846.3	601.8

Sofara

Month/ Mois	Mean rainfall/ Pluviométrie moyenne (mm)	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
				Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.1	0.8	648	5.0	0.0	5.0
2	0.0	0.2	648	1.6	0.0	1.6
3	0.6	1.7	295	7.5	0.0	7.5
4	5.5	8.5	155	32.6	0.0	32.6
5	23.2	17.0	73	74.2	0.0	74.2
6	67.6	29.7	44	148.3	12.0	136.3
7	134.2	46.9	35	259.9	48.3	211.6
8	210.5	77.7	37	528.1	50.1	478.0
9	99.3	44.6	45	258.4	21.6	236.8
10	25.7	22.1	86	91.0	0.0	91.0
11	1.5	5.1	343	28.6	0.0	28.6
12	0.6	2.4	428	12.6	0.0	12.6
TOTAL	568.0	132.2	23	1057.0	410.3	646.7

Sokolo

Month/ Mois	Mean rainfall/ Pluviométrie moyenne (mm)	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
				Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.2	1.0	445	6.0	0.0	6.0
2	0.4	1.7	444	10.1	0.0	10.1
3	1.4	4.6	336	23.9	0.0	23.9
4	3.4	9.8	285	56.0	0.0	56.0
5	8.6	12.2	142	54.5	0.0	54.5
6	44.7	30.4	68	118.7	0.0	118.7
7	143.8	51.3	36	270.5	48.2	222.3
8	193.7	76.6	40	438.8	49.2	389.6
9	87.2	47.2	54	211.4	16.6	194.8
10	15.7	20.6	131	80.8	0.0	80.8
11	1.2	3.5	301	15.0	0.0	15.0
12	0.5	2.9	579	18.8	0.0	18.8
TOTAL	497.3	129.5	26	864.7	227.0	637.7

Soninkoura

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		Range/ Etendue
	moyenne (mm)			Maximum (mm)	Minimum (mm)	
1	0.5	1.2	245	3.4	0.0	3.4
2	0.0	0.0	0	0.0	0.0	0.0
3	2.7	6.5	245	18.6	0.0	18.6
4	5.5	10.5	191	31.1	0.0	31.1
5	42.6	30.0	70	81.6	0.0	81.6
6	65.4	23.8	36	106.2	40.1	66.1
7	167.3	61.6	37	284.2	106.2	178.0
8	216.1	54.6	25	305.8	120.5	185.3
9	112.0	29.8	27	153.2	56.6	96.6
10	24.3	32.3	133	101.3	0.0	101.3
11	1.4	3.5	245	10.0	0.0	10.0
12	0.0	0.0	0	0.0	0.0	0.0
TOTAL	637.7	85.5	13	782.6	470.7	311.9

Sotuba

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		Range/ Etendue
	moyenne (mm)			Maximum (mm)	Minimum (mm)	
1	0.5	2.4	498	13.5	0.0	13.5
2	0.1	0.5	326	2.2	0.0	2.2
3	4.6	10.5	229	45.6	0.0	45.6
4	20.1	24.7	123	111.1	0.0	111.1
5	53.4	34.5	65	168.5	0.0	168.5
6	133.4	44.3	33	259.1	66.4	192.7
7	241.5	58.2	24	360.1	142.1	218.0
8	300.6	96.6	32	578.1	174.5	403.6
9	197.3	72.1	37	393.7	94.4	299.3
10	63.4	47.4	75	221.1	2.0	219.1
11	4.4	8.7	198	41.8	0.0	41.8
12	0.9	4.3	470	24.0	0.0	24.0
TOTAL	1015.2	184.4	18	1425.9	659.8	766.1

Tessalit

Month/ Mois	Mean rainfall/ Pluviométrie moyenne (mm)	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
				Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.4	0.9	224	3.2	0.0	3.2
2	0.1	0.4	437	2.2	0.0	2.2
3	0.2	0.7	279	2.8	0.0	2.8
4	0.1	0.2	241	1.1	0.0	1.1
5	4.6	12.0	258	59.8	0.0	59.8
6	4.5	6.5	143	27.0	0.0	27.0
7	15.2	14.0	92	53.2	0.0	53.2
8	35.8	30.6	86	166.5	2.1	164.4
9	16.0	17.6	109	64.0	0.0	64.0
10	1.2	4.1	333	23.8	0.0	23.8
11	0.3	1.0	327	4.9	0.0	4.9
12	0.4	1.8	422	10.5	0.0	10.5
TOTAL	79.0	39.2	50	185.7	18.9	166.8

Tilembéya

Month/ Mois	Mean rainfall/ Pluviométrie moyenne (mm)	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
				Maximum (mm)	Minimum (mm)	Range/ Etendue
1	1.0	3.2	320	12.7	0.0	12.7
2	0.0	0.1	458	0.6	0.0	0.6
3	0.7	1.8	272	8.4	0.0	8.4
4	3.5	5.2	151	19.9	0.0	19.9
5	17.0	12.6	74	49.1	0.0	49.1
6	69.5	29.2	42	122.2	16.0	106.2
7	160.0	52.1	33	294.5	57.1	237.4
8	212.0	69.2	33	338.7	110.4	228.3
9	90.6	43.3	48	185.7	28.4	157.3
10	16.2	22.9	141	76.8	0.0	76.8
11	1.2	2.5	217	8.3	0.0	8.3
12	1.3	5.9	458	28.5	0.0	28.5
TOTAL	570.2	112.7	20	726.7	311.2	415.5

Tombouctou

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.0	0.2	505	1.4	0.0	1.4
2	0.2	0.8	383	4.6	0.0	4.6
3	0.4	1.8	421	11.5	0.0	11.5
4	0.8	2.9	387	16.1	0.0	16.1
5	3.8	6.4	170	24.0	0.0	24.0
6	15.6	17.6	113	88.7	0.0	88.7
7	56.2	33.6	60	131.4	12.2	119.2
8	80.9	36.7	45	163.7	9.3	154.4
9	28.5	17.8	63	71.5	0.0	71.5
10	2.8	5.1	181	19.9	0.0	19.9
11	0.0	0.2	637	1.3	0.0	1.3
12	0.2	1.1	607	7.6	0.0	7.6
TOTAL	192.3	56.6	29	380.3	100.3	280.0

Toukoto

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.2	0.8	435	5.0	0.0	5.0
2	0.0	0.0	0	0.0	0.0	0.0
3	0.6	2.2	351	10.8	0.0	10.8
4	6.3	10.0	158	52.0	0.0	52.0
5	28.0	19.2	69	83.7	0.0	83.7
6	120.1	47.6	40	233.1	38.4	194.7
7	209.7	62.9	30	349.3	62.9	286.4
8	264.9	93.6	35	554.1	89.7	464.4
9	187.5	72.9	39	315.6	44.0	271.6
10	55.1	42.3	77	189.1	0.0	189.1
11	4.7	13.5	286	57.8	0.0	57.8
12	1.1	5.8	501	39.0	0.0	39.0
TOTAL	879.0	171.3	19	1183.5	418.9	764.6

Yélimané

Month/ Mois	Mean rainfall/ Pluviométrie	Standard deviation/ Ecart type	CV (%)	Rainfall/Pluviométrie		
	moyenne (mm)			Maximum (mm)	Minimum (mm)	Range/ Etendue
1	0.2	1.2	550	8.0	0.0	8.0
2	0.3	2.3	671	16.0	0.0	16.0
3	0.1	0.3	671	2.4	0.0	2.4
4	2.3	7.2	314	44.0	0.0	44.0
5	11.5	16.7	145	78.4	0.0	78.4
6	62.7	41.1	66	234.5	7.8	226.7
7	157.0	66.0	42	397.5	49.5	348.0
8	189.0	70.0	37	320.1	56.7	263.4
9	123.1	46.8	38	301.4	24.4	277.0
10	25.3	23.0	91	105.4	0.0	105.4
11	2.5	5.1	202	20.3	0.0	20.3
12	0.3	1.2	360	7.0	0.0	7.0
TOTAL	570.7	139.4	24	975.5	315.7	659.8

APPENDIX II - Standard Climatological Weeks

APPENDICE II - Semaines climatologiques normalisées

Standard climatological weeks/Semaines climatologiques normalisées

Week/ Semaine	Dates	Week/ Semaine	Dates
1	Jan/Jan. 01-07	27	July/Juil. 02-08
2	08-14	28	08-15
3	15-21	29	16-22
4	22-28	30	23-29
5	29-04	31	30-05
6	Feb/Fév. 05-11	32	Aug/Août 06-12
7	12-18	33	13-19
8	19-25	34	20-26
9	26-04 ^a	35	27-02
10	Mar/Mars 05-11	36	Sept/Sept. 03-09
11	12-18	37	10-16
12	19-25	38	17-23
13	26-01	39	24-30
14	Apr/Avril 02-08	40	Oct/Oct. 01-07
15	09-15	41	08-14
16	16-22	42	15-21
17	23-29	43	22-28
18	30-06	44	29-04
19	May/Mai 07-13	45	Nov/Nov. 05-11
20	14-20	46	12-18
21	21-27	47	19-25
22	28-03	48	26-02
23	June/Juin 04-10	49	Dec/Déc. 03-09
24	11-17	50	10-16
25	18-24	51	17-23
26	25-01	52	24-31 ^b

a. In leap years week 9 will be 26 Feb to 4 Mar (8 days rather than 7).

a. Dans les ans bissextiles, semaine de 8 jours, du 26 février au 4 mars.

b. Week 52, 24-31 Dec, has 8 days.

b. Semaine de 8 jours, du 24 au 31 décembre.

**APPENDIX III - Program for the
Computation
of Initial and
Conditional Probabilities**

**APPENDICE III - Programme pour
l'estimation des
probabilités initiales
et conditionnelles**

**Program for the computation of initial and conditional probabilities /
 Programme pour l'estimation des probabilités initiales et conditionnelles**

```

8 DIM V6(100%),V7(100%)
9 L$=' ## ## ## ## ## ## ## ## ## ## ## '
10 L$=L$+' ### ### ### ### ### ### ###. #'
11 DIM VI(100%)
12 DIM W1%(52%),W2%(52%),W3%(52%),M(52%), A(52%),AC(52%),C(52%)
13 DIM E4(52%),V(5%),U(5%),X(5%), E1(53%,5%),E2(52%,5%),E3(52%,5%)
20 DIM#1%, P(200%,52%) ! MAXIMUM OF 200 YEARS AND 52 WEEKS INPUT DATA
61 PRINT '** INITIAL AND CONDITIONAL PROBABILITY OF RAINFALL **'
63 PRINT ' IF YOU HAVE DAILY DATA CONVERT IT INTO WEEKLY'
65 INPUT' DO YOU HAVE WEEKLY RAINFALL DATA FILE(type YES or NO)';O7$
66 IF O7$="NO" THEN GOTO 32767
80 ONERROR GOTO 30000
84 INPUT'ENTER THE FILE NAME';M$
85 OPEN M$ FOR INPUT AS FILE 1%,VIRTUAL
91 INPUT' ENTER THE OUTPUT FILE NAME';O9$
92 OPEN O9$ FOR OUTPUT AS FILE 6%,RECORDSIZE 132%
93 INPUT'ENTER THE STATION NAME';S9$
95 INPUT'ENTER NO OF YEARS OF DATA';NN
140 W%=1
145 PRINT #6%
150 X=K9%*10
160 MAT W1%=ZER \ MAT W2%=ZER \ MAT W3%=ZER \ MAT M=ZER
165 N%=NN
170 FOR I% = 1 TO N%
180 FOR J%=1% TO 52%
185 M(J%)=M(J%)+P(I%,J%)
190 IF P(I%,J%) > X THEN W1%(J%)=W1%(J%)+1% \ W1%=1%
195 FOR K%=1% TO W%
200 K1%=J%+K% \ I1%=I%
205 IF K1%>52% THEN K1%=K1% -52% \ I1%=I1%+1%
210 IF I1%>N% THEN 232
215 IF P(I1%,K1%)<=X THEN 232
220 NEXT K%
225 W3%(J%)=W3%(J%)+1%
230 IF W1% THEN W2%(J%)=W2%(J%)+1%
232 W1%=0%
235 NEXT J%
237 NEXT I%
245 N=N%
250 FOR J%=1% TO 52%
255 P1=W1%(J%)/N \ P2=1.- P1
260 IF P1>0 THEN C1=W2%(J%)*1./W1%(J%) ELSE C1=0. ! P[W/W]
265 IF P1>0. THEN C2=1.- C1 ELSE C2=0. ! P[D/W]
270 ! P[W/D]
271 IF W1%(J%)<>N% THEN C3=(W3%(J%)- W2%(J%))/(N - W1%(J%)) ELSE C3=0.
275 IF W1%(J%)<>N% THEN C4=1.- C3 ELSE C4=0. ! P[D/D]
280 M=M(J%)/N ! MEAN FOR WEEK J%
285 E1(J%,K9%)=P1*100 \ E2(J%,K9%)=C1*100 \ E3(J%,K9%)=C3*100

```

```

286 IF K9%=1 THEN E4(J%)=M
287 IF K9%>1 THEN 293
288 G2%=M*10+.5 \ G3%=P1*100+.5 \ G2=G2% \ G4=G2/10 \ G5=G3%
290 V6(J%)=G4 \ V7(J%)=G5
293 NEXT J%
294 K9%=K9%+1
295 IF K9%<=5 THEN GOTO 140 ELSE 300
300 F1=0
301 F2=0
302 T=0
306 I2%,I3%=1
307 E1(53%,1%)=0
310 FOR I%=1 TO 52
311 T=T+E4(I%)
312 VI(I%)=E1(I%,1%)
315 A(I%)=0 \ AC(I%)=0 \ C(I%)=0 \ NEXT I%
318 F1,F2,F3,F4=0
320 FOR I%=1 TO 51
321 IF F1=1 THEN GOTO 325
322 IF VI(I%)>45 AND VI(I%+1%)>45 THEN F1=1 \ FF1=I%
324 GOTO 326
325 IF VI(I%)<45 THEN FF2=I%-1% \ GOTO 327
326 NEXT I%
327 FC1=0 \ FOR I%=FF2 TO 51
328 IF FC1=1 THEN GOTO 335
329 IF VI(I%)>45 AND VI(I%+1%)>45 THEN FC1=1 \ FC2=I%
330 GOTO 336
335 IF VI(I%)<45 THEN FC3=I%-1% \ GOTO 340
336 NEXT I%
340 FC4=FC3-FC2 \ FC5=FF2-FF1
341 IF FC4>FC5 THEN FF1=FC2 \ FF2=FC3
377 FOR I%=1 TO FF1
378 II1%=(FF1-I%)+1%
380 IF VI(II1%)<15 THEN FF3=II1%+1% \ GOTO 385
381 NEXT I%
385 FOR I%=FF2 TO 52
386 IF VI(I%)<15 THEN FF4=I%-1% \ GOTO 390
387 NEXT I%
390 FOR I%=FF3 TO FF1-1 \ A(I%)=I% \ NEXT I%
392 FOR I%=FF1 TO FF2 \ AC(I%)=I% \ NEXT I%
394 FOR I%=FF2+1 TO FF4 \ C(I%)=I% \ NEXT I%
401 T%=T*10+.5 \ T=T% \ T=T/10
402 B1=0 \ B2=0 \ B3=0
403 GOSUB 2000
405 FOR I%=1 TO 52
410 A1%=A(I%) \ A2%=AC(I%) \ A3%=C(I%)
415 IF A1%>0 THEN B1=B1+E4(A1%)
420 IF A2%>0 THEN B2=B2+E4(A2%)
430 IF A3%>0 THEN B3=B3+E4(A3%)
440 NEXT I%
441 B1%=B1*10+.5 \ B1=B1% \ B1=B1/10

```

```

442 B2%=B2*10+.5 \ B2=B2% \ B2=B2/10
443 B3%=B3*10+.5 \ B3=B3% \ B3=B3/10
500 PRINT #6%, ' Prerainy (';B1;' mm) '
520 FOR I%=1 TO 52
530 A1%=A(I%)
540 IF A1%<=0 THEN 600
550 FOR J%=1 TO 5
560 V(J%)=E1(A1%,J%) \ U(J%)=E2(A1%,J%) \ X(J%)=E3(A1%,J%)
561 NEXT J%
562 GOSUB 1400
600 NEXT I%
605 PRINT#6% \ PRINT#6%, ' Rainy (';B2;' mm) '
610 FOR I%=1 TO 52
620 A1%=AC(I%)
630 IF A1%<=0 THEN 690
640 FOR J%=1 TO 5
650 V(J%)=E1(A1%,J%) \ U(J%)=E2(A1%,J%) \ X(J%)=E3(A1%,J%)
655 NEXT J%
660 GOSUB 1400
690 NEXT I%
700 PRINT #6%
701 PRINT #6%, ' Postrainy (';B3;' mm) '
710 FOR I%=1 TO 52
720 A1%=C(I%)
730 IF A1%<=0 THEN 750
735 FOR J%=1 TO 5
736 V(J%)=E1(A1%,J%) \ U(J%)=E2(A1%,J%) \ X(J%)=E3(A1%,J%)
740 NEXT J%
745 GOSUB 1400
750 NEXT I%
770 PRINT#6%, '-----';
771 PRINT #6%, '-----';
955 PRINT #6%, CHR$(12)
975 CLOSE 1%,2%,3%,6%
1000GOTO 32767
1400 V1%=V(1%)+.5\V2%=V(2%)+.5\V3%=V(3%)+.5\V4%=V(4%)+.5\V5%=V(5%)+.5
1410 U1%=U(1%)+.5\U2%=U(2%)+.5\U3%=U(3%)+.5\U4%=U(4%)+.5\U5%=U(5%)+.5
1420 X1%=X(1%)+.5\X2%=X(2%)+.5\X3%=X(3%)+.5\X4%=X(4%)+.5\X5%=X(5%)+.5
1500 PRINT #6% USING L$, A1%,V1%,U1%,X1%,V2%,U2%,X2%,V3%,;
1501 PRINT #6%,U3%,X3%,V4%,U4%,X4%,V5%,U5%,X5%,E4(A1%)
1550 RETURN
2000 PRINT#6%, ' ';
2001 PRINT #6%, ' STATION : ';S9$;' (';T;' mm) '
2100 PRINT#6%
2200 PRINT#6%, 'INITIAL AND CONDITIONAL PROBABILITIES OF RAINFALL';
2201 PRINT #6%, '(%) FOR SELECTED AMOUNTS DURING THREE SEASONS'
2410 PRINT#6%, '-----';
2411 PRINT #6%, '-----';
2415 PRINT#6%, 'STANDARD >10 mm >20 mm >30 mm';
2416 PRINT #6%, ' >40 mm >50 mm MEAN'
2420 PRINT#6%, '-----';

```

```

2421 PRINT #6%, '-----'
2430 PRINT#6%, ' WEEK      W      W/W      W/D      W      W/W      W/D      W      W/W      W/D';
2431 PRINT #6%, '      W      W/W      W/D      W      W/W      W/D      (mm)';
2440 PRINT#6%, '-----';
2441 PRINT #6%, '-----';
3000 RETURN
30000 !ERROR PROCESSING
30010 PRINT ERR,ERL
30015 PRINT ERT$(ERR)
32767 END

```


**APPENDIX IV - Results of the Initial
and Conditional
Probability Analysis**

**APPENDICE IV - Résultats de l'analyse
des probabilités initiales
et conditionnelles**

Ambidédi (703.8 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (34.7 mm)																
21	17	0	21	0	0	17	0	0	17	0	0	13	0	0	9	3.0
22	17	75	37	17	75	32	17	75	11	13	67	10	9	50	10	13.7
23	43	70	54	39	44	36	22	20	22	17	0	16	13	0	10	18.0
Rainy/Pluvieuse (639.7 mm)																
24	61	79	67	39	89	57	22	60	56	13	0	50	9	0	38	18.5
25	74	71	17	70	56	14	57	38	20	43	30	0	35	13	7	34.9
26	57	77	70	43	60	46	30	29	38	13	33	30	9	0	29	22.5
27	74	94	100	52	83	82	35	75	67	30	71	44	26	83	12	28.3
28	96	91	100	83	63	100	70	38	57	52	25	45	30	14	38	42.5
29	91	86	50	70	75	29	43	50	38	35	38	27	30	43	19	36.5
30	83	84	75	61	79	78	43	60	62	30	43	56	26	33	53	38.9
31	83	89	75	78	83	80	61	79	56	52	67	55	48	55	42	48.6
32	87	85	100	83	79	75	70	63	86	61	43	56	48	27	33	50.0
33	87	75	100	78	72	80	70	63	71	48	55	50	30	29	44	47.1
34	78	100	80	74	94	83	65	67	75	52	75	45	39	56	50	45.6
35	96	95	100	91	86	100	70	81	86	61	64	67	52	58	45	63.2
36	96	77	100	87	70	100	83	58	100	65	20	75	52	17	45	54.2
37	78	89	60	74	82	17	65	33	25	39	0	50	30	0	38	36.9
38	83	63	25	65	40	13	30	14	13	30	0	13	26	0	12	36.8
39	57	62	40	30	57	38	13	67	15	9	50	5	9	50	5	16.6
40	52	42	36	43	30	23	22	20	11	9	0	0	9	0	0	18.5
Postrainy/Post-pluvieuse (23.4 mm)																
41	39	22	7	26	17	6	13	0	5	0	0	4	0	0	4	11.5
42	14	33	20	9	50	5	4	100	0	4	100	0	4	0	0	6.4
43	22	0	0	9	0	0	4	0	0	4	0	0	0	0	0	5.5

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
 H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Ansongo (293.5 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (47.2 mm)																
23	16	29	16	5	50	2	2	100	0	2	0	0	0	0	0	4.3
24	18	38	33	5	0	14	2	0	9	0	0	5	0	0	2	4.3
25	34	20	38	14	17	13	9	0	8	5	0	0	2	0	0	8.8
26	32	36	37	14	17	11	7	33	5	0	0	5	0	0	0	8.2
27	36	50	36	11	40	13	7	0	12	5	0	7	0	0	7	9.3
28	41	56	58	16	43	46	11	20	26	7	0	20	7	0	12	12.2
Rainy/Pluvieuse (186.3 mm)																
29	57	48	47	45	15	50	25	18	24	18	13	11	11	0	8	22.9
30	48	81	74	34	73	59	23	60	47	11	40	33	7	67	27	16.7
31	77	71	80	64	64	44	50	64	36	34	47	38	30	23	19	35.2
32	73	88	67	57	68	47	50	55	41	41	28	38	20	33	23	34.5
33	82	67	75	59	42	44	48	29	22	34	20	14	25	0	12	35.9
34	68	53	57	43	42	28	25	18	15	16	14	11	9	0	10	23.4
35	55	38	40	34	33	24	16	29	16	11	0	8	9	0	3	17.7
Postrainy/Post-pluvieuse (28.5 mm)																
36	39	29	26	27	17	9	18	0	6	7	0	2	2	0	0	12.8
37	27	50	25	11	40	10	5	50	2	2	0	0	0	0	0	7.6
38	32	7	17	14	0	3	5	0	2	0	0	2	0	0	0	8.1

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Bafoulabé (891 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (13.3 mm)																
20	16	29	28	5	0	20	2	0	14	0	0	9	0	0	0	4.0
21	28	42	61	19	13	37	14	0	24	9	0	18	0	0	12	9.3
Rainy/Pluvieuse (832.6 mm)																
22	56	50	42	33	36	31	21	0	24	16	0	17	12	0	11	17.6
23	47	70	74	33	43	59	19	13	34	14	17	22	9	0	13	16.6
24	72	81	83	53	65	60	30	54	43	21	56	35	12	60	29	27.8
25	81	63	75	63	56	44	47	40	39	40	18	27	33	14	21	37.1
26	65	89	80	51	73	81	40	59	65	23	40	48	19	38	37	28.0
27	86	97	100	77	85	90	63	67	69	47	55	52	37	38	41	43.0
28	98	93	100	86	81	83	67	55	86	53	48	55	40	41	38	45.1
29	93	90	67	81	80	88	65	68	87	51	59	48	40	59	42	44.3
30	88	89	80	81	86	50	74	72	55	53	65	50	49	48	41	55.7
31	88	92	80	79	85	67	67	69	64	58	56	67	44	53	54	53.8
32	91	92	75	81	86	75	67	83	79	60	73	82	53	61	65	55.9
33	91	90	100	84	83	100	81	74	88	77	67	60	63	52	69	83.7
34	91	100	100	86	92	100	77	85	60	65	64	60	58	48	56	66.4
35	100	95	0	93	85	67	79	76	67	63	67	56	51	59	57	66.6
36	95	90	100	84	72	100	74	53	45	63	41	31	58	40	22	55.2
37	91	74	100	77	55	80	51	32	48	37	25	33	33	14	21	43.1
38	77	67	40	60	54	47	40	41	42	30	54	23	19	38	26	38.0
39	60	58	53	51	45	33	42	33	24	33	21	10	28	8	13	32.6
40	56	50	32	40	35	27	28	8	19	14	0	16	12	0	13	22.2
Postrainy/Post-pluvieuse (30.9 mm)																
41	42	17	32	30	0	23	16	0	6	14	0	0	12	0	0	16.5
42	26	27	16	16	14	14	5	0	10	0	0	5	0	0	5	7.8
43	19	25	3	14	17	3	9	0	3	5	0	0	5	0	0	6.6

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.

H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Bamako-Aéro (1021.4 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (32 mm)																
17	21	62	27	15	11	25	11	14	7	5	33	5	3	0	3	8.2
18	34	43	34	23	29	21	8	20	12	6	0	9	3	0	5	11.1
19	37	39	49	23	36	23	13	0	19	8	0	4	5	0	2	12.6
Rainy/Pluvieuse (932.5 mm)																
20	45	50	47	26	44	22	16	20	15	3	0	13	2	0	10	13.2
21	48	57	47	27	24	40	16	10	31	13	0	19	10	0	11	15.2
22	52	81	57	35	55	40	27	59	33	16	40	25	10	33	20	21.7
23	69	86	79	45	54	62	40	44	43	27	24	40	21	0	29	28.4
24	84	81	70	58	61	58	44	33	49	35	18	33	23	0	17	31.7
25	79	90	77	60	73	60	42	62	50	27	47	33	13	38	30	29.1
26	87	91	63	68	81	65	55	76	39	37	57	38	31	47	28	36.2
27	87	89	63	76	77	67	60	49	64	45	32	47	34	33	37	40.9
28	85	91	67	74	76	75	55	68	71	40	56	54	35	45	52	42.6
29	87	100	50	76	96	73	69	86	74	55	76	61	50	65	65	50.0
30	94	97	50	90	89	67	82	75	73	69	63	53	65	55	45	65.3
31	94	100	50	87	98	63	74	93	69	60	78	60	52	69	63	59.6
32	97	93	0	94	90	50	87	81	75	71	73	61	66	73	48	73.3
33	90	98	67	87	91	75	81	84	83	69	84	68	65	80	55	70.4
34	95	100	0	89	95	57	84	88	60	79	80	69	71	66	56	76.2
35	95	97	33	90	84	67	84	77	60	77	71	43	63	54	43	76.4
36	94	95	50	82	88	64	74	76	50	65	52	45	50	39	39	58.6
37	92	93	60	84	75	80	69	60	42	50	48	39	39	42	24	47.2
38	90	75	33	76	57	47	55	38	29	44	22	23	31	11	21	43.0
39	71	75	67	55	56	54	34	48	27	23	29	23	18	9	10	27.2
40	73	36	24	55	29	0	34	24	7	24	20	6	10	33	5	26.4
Postrainy/Post-pluvieuse (31.9 mm)																
41	32	40	29	16	20	23	13	0	17	10	0	5	8	0	4	12.9
42	32	30	21	23	21	8	15	22	4	5	0	3	3	0	2	11.0
43	24	13	15	11	14	9	6	25	7	3	50	3	2	0	2	8.0

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Bamako-Zoo-Ifan (1037.9 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (49.1 mm)																
17	17	75	40	4	0	13	4	0	13	0	0	13	0	0	0	4.0
18	46	27	15	13	0	5	13	0	5	13	0	5	0	0	4	12.0
19	21	20	26	4	0	22	4	0	17	4	0	4	4	0	4	7.3
20	25	50	28	21	40	21	17	50	5	4	100	9	4	100	9	12.4
21	33	38	56	25	17	39	13	0	24	13	0	19	13	0	19	13.4
Rainy/Pluvieuse (945.9 mm)																
22	50	83	50	33	88	50	21	100	42	17	100	35	17	0	20	20.7
23	67	81	75	63	53	44	54	54	36	46	36	46	17	0	40	31.1
24	79	84	100	50	58	83	46	45	69	42	20	21	33	0	25	33.4
25	88	95	100	71	71	100	58	50	70	21	60	47	17	50	30	29.6
26	96	91	0	79	79	80	58	79	40	50	58	33	33	38	31	39.3
27	88	100	100	79	95	100	63	60	89	46	55	46	33	63	31	42.1
28	100	92	0	96	74	100	71	65	86	50	58	75	42	40	64	54.3
29	92	100	100	75	94	83	71	88	86	67	75	75	54	62	64	57.2
30	100	96	0	92	77	100	88	62	100	75	61	50	63	47	44	65.5
31	96	100	100	79	89	60	67	75	75	58	71	70	46	45	54	61.3
32	100	96	0	83	95	100	75	83	100	71	59	86	50	58	58	57.8
33	96	100	100	96	100	100	88	100	100	67	81	75	58	50	60	62.7
34	100	100	0	100	96	0	100	96	0	79	84	100	54	69	100	78.7
35	100	96	0	96	87	100	96	83	100	88	62	100	83	55	50	87.2
36	96	100	100	88	90	67	83	70	75	67	63	50	54	46	55	59.8
37	100	79	0	88	67	100	71	47	57	58	36	50	50	33	33	55.5
38	79	68	60	71	41	57	50	25	33	42	20	14	33	13	6	44.0
39	67	63	75	46	36	62	29	29	29	17	25	25	8	50	14	24.1
40	67	56	25	50	33	17	29	29	18	25	17	11	17	0	10	27.4
41	46	45	23	25	33	22	21	20	16	13	0	5	8	0	5	14.3
Postrainy/Post-pluvieuse (10.8 mm)																
42	33	25	0	25	33	0	17	0	5	4	0	4	4	0	4	10.8

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Bamba (196.1 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	

Prerainy/Pré-pluvieuse (8.4 mm)																
28	32	83	38	16	67	19	5	0	6	0	0	0	0	0	0	8.4
Rainy/Pluvieuse (117.5 mm)																
29	53	50	56	26	20	36	5	0	17	0	0	16	0	0	0	13.1
30	53	80	44	32	50	54	16	33	38	16	33	19	0	0	16	16.9
31	63	58	71	53	50	67	37	29	33	21	0	27	16	0	25	28.1
32	63	33	43	58	18	38	32	17	23	21	0	13	21	0	13	25.2
33	37	57	67	26	40	57	21	50	27	11	50	6	11	0	6	12.8
34	63	67	0	53	30	22	32	17	15	11	0	18	5	0	11	21.4

Postrainy/Post-pluvieuse (34.5 mm)																
35	42	13	9	26	20	0	16	0	0	16	0	0	11	0	0	14.2
36	11	50	41	5	0	22	0	0	16	0	0	11	0	0	0	3.3
37	42	25	18	21	25	7	16	0	0	11	0	0	0	0	0	11.4
38	21	0	13	11	0	6	0	0	5	0	0	5	0	0	5	5.7

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Banamba(768.3 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (35.3 mm)																
18	23	40	9	11	20	5	5	0	2	2	0	2	2	0	0	6.1
19	16	29	19	7	0	7	2	0	0	2	0	0	0	0	0	4.4
20	20	22	26	7	33	12	0	0	5	0	0	2	0	0	0	4.3
21	25	55	39	14	0	29	5	0	19	2	0	12	0	0	2	6.7
22	43	63	48	25	45	36	18	25	25	11	40	15	2	0	12	13.9
Rainy/Pluvieuse (694 mm)																
23	55	58	60	39	35	56	25	27	39	18	0	28	11	0	13	19.9
24	59	81	61	48	43	52	36	44	14	23	40	15	11	40	10	23.0
25	73	66	75	48	62	52	25	18	36	20	11	14	14	0	8	26.1
26	68	77	86	57	60	68	32	29	57	14	17	34	7	0	24	23.4
27	80	83	100	64	82	63	48	71	61	32	57	37	23	30	26	34.5
28	86	92	83	75	82	73	66	69	53	43	42	52	27	50	44	39.6
29	91	90	100	80	74	100	64	57	88	48	52	70	45	40	58	46.9
30	91	98	50	80	89	56	68	73	43	61	70	41	50	64	41	52.0
31	93	98	33	82	86	75	64	82	69	59	81	39	52	74	29	51.5
32	93	95	100	84	89	86	77	85	80	64	82	56	52	65	48	60.0
33	95	93	100	89	85	80	84	78	57	73	75	50	57	68	37	65.4
34	93	100	100	84	92	86	75	82	73	68	60	50	55	46	25	55.7
35	100	89	0	91	70	100	80	63	56	57	56	47	36	50	39	51.9
36	89	87	60	73	66	67	61	33	53	52	26	33	43	32	4	45.0
37	84	76	100	66	66	60	41	56	54	30	46	42	16	43	27	32.2
38	80	54	56	64	39	25	55	21	10	43	16	4	30	8	6	34.9
39	55	54	40	34	40	34	16	29	16	9	25	10	7	33	2	16.2
40	48	19	13	36	19	4	18	0	6	11	0	5	5	0	2	15.9
Postrainy/Post-pluvieuse (20.2 mm)																
41	16	29	14	9	50	8	5	50	7	5	50	2	2	100	2	6.5
42	16	14	16	11	0	13	9	0	10	5	0	5	5	0	5	7.2
43	16	43	3	11	60	3	9	50	0	5	50	2	5	50	2	6.5

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Bandiagara (590.5 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (19.5 mm)																
20	16	0	16	4	0	5	0	0	2	0	0	2	0	0	0	4.2
21	13	50	36	4	50	19	2	100	11	2	0	11	0	0	4	4.1
22	38	47	54	20	22	31	13	17	21	11	0	3	4	0	0	11.3
Rainy/Pluvieuse (526.6 mm)																
23	51	35	64	29	38	34	20	22	17	2	0	18	0	0	13	13.8
24	49	59	61	36	19	38	18	0	16	18	0	5	13	0	5	17.7
25	60	70	67	31	21	48	13	0	33	4	0	21	4	0	16	16.4
26	69	68	93	40	39	56	29	31	38	20	44	22	16	14	21	23.3
27	76	85	64	49	77	43	36	56	38	27	42	21	20	44	6	27.4
28	80	86	100	60	56	72	44	50	52	27	25	42	13	0	23	29.0
29	89	90	100	62	71	82	51	65	55	38	53	50	20	33	36	33.6
30	91	93	75	76	82	73	60	67	67	51	52	27	36	50	28	41.4
31	91	90	100	80	81	56	67	67	60	40	50	44	36	44	31	44.6
32	91	95	75	76	85	55	64	76	44	47	67	42	36	50	38	48.5
33	93	88	100	78	66	80	64	62	63	53	54	33	42	47	35	47.9
34	89	80	100	69	68	50	62	54	47	44	45	44	40	33	37	45.6
35	82	76	100	62	46	53	51	35	45	44	35	36	36	25	34	39.3
36	80	69	89	49	50	61	40	28	37	36	19	28	31	7	3	36.3
37	73	55	83	56	32	55	33	33	23	24	18	18	4	0	12	23.8
38	62	46	47	42	42	31	27	25	9	18	25	8	11	20	3	21.8
39	47	38	25	36	13	10	13	17	3	11	0	0	4	0	0	16.2
Postrainy/Post-pluvieuse (24.2 mm)																
40	31	50	29	11	40	20	4	0	7	0	0	4	0	0	0	8.7
41	36	44	14	22	10	9	7	0	2	4	0	0	0	0	0	9.8
42	24	0	6	9	0	2	2	0	0	0	0	0	0	0	0	5.6

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Bankass (593.1 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)	
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S		

Prerainy/Pré-pluvieuse (9.0 mm)	22	35	50	47	17	25	37	9	0	24	0	0	13	0	0	9	9.0

Rainy/Pluvieuse (509.3 mm)	23	48	45	83	35	38	73	22	20	39	13	0	20	9	0	14	17.8
24	65	47	75	61	21	44	35	13	27	17	25	11	13	0	5	24.8	
25	57	69	70	30	29	31	22	20	17	13	0	5	4	0	5	17.5	
26	70	69	57	30	71	25	17	50	21	4	0	23	4	0	14	16.4	
27	65	80	63	39	89	64	26	100	65	22	60	44	13	33	50	23.8	
28	74	94	100	74	88	83	74	65	67	48	73	42	48	55	25	46.5	
29	96	95	100	87	90	33	65	53	50	57	46	30	39	44	21	46.1	
30	96	91	0	83	79	75	52	58	64	39	56	50	30	29	38	45.7	
31	87	90	67	78	67	60	61	64	44	52	42	36	35	38	27	42.4	
32	87	95	67	65	87	63	57	54	60	39	33	43	30	14	13	36.7	
33	91	86	50	78	78	40	57	69	40	39	56	36	13	67	35	33.6	
34	83	84	100	70	69	71	57	54	50	43	40	31	39	22	29	43.1	
35	87	75	67	70	56	57	52	50	27	35	38	33	26	33	18	35.2	
36	74	76	67	57	77	50	39	22	43	35	13	47	22	0	17	35.9	
37	74	65	67	65	27	50	35	0	13	35	0	13	13	0	0	28.0	
38	65	27	63	35	25	20	9	0	5	9	0	5	0	0	4	15.7	

Postrainy/Post-pluvieuse (34 mm)	39	39	56	36	22	60	28	4	100	5	4	100	5	4	0	0	11.0
40	43	50	23	35	13	7	9	0	5	9	0	5	0	0	0	12.2	
41	35	25	13	9	0	5	4	0	0	4	0	0	0	0	0	7.5	
42	17	0	5	4	0	5	0	0	4	0	0	4	0	0	4	3.3	

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Baroueli (737.9 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (51.2 mm)																
16	18	14	26	5	0	11	3	0	8	3	0	5	0	0	3	4.5
17	24	22	21	11	0	12	8	0	9	5	0	8	3	0	5	6.6
18	21	13	23	11	0	9	8	0	3	8	0	3	5	0	0	8.7
19	21	13	23	8	0	9	3	0	3	3	0	3	0	0	3	5.5
20	21	50	20	8	0	11	3	0	5	3	0	5	3	0	3	7.7
21	26	40	32	11	50	15	5	50	6	5	0	3	3	0	0	7.5
22	34	46	56	18	43	29	8	0	17	3	0	5	0	0	5	10.6
Rainy/Pluvieuse (646.6 mm)																
23	53	80	67	32	67	42	16	17	22	5	0	11	5	0	11	16.8
24	74	64	40	50	58	37	21	50	27	11	25	21	11	25	12	22.1
25	58	82	75	47	44	75	32	33	46	21	25	30	13	40	15	23.8
26	79	90	38	61	78	60	42	75	55	29	55	48	18	43	42	29.6
27	79	100	50	71	93	64	63	58	50	50	42	37	42	19	36	41.0
28	89	85	25	84	78	33	55	67	59	39	60	48	29	36	44	42.4
29	79	100	63	71	93	64	63	83	64	53	75	44	42	63	50	44.2
30	92	94	33	84	88	33	76	76	33	61	70	53	55	57	35	51.4
31	89	94	75	79	90	25	66	88	38	63	63	36	47	56	40	51.6
32	92	89	67	76	86	56	71	81	64	53	90	61	47	72	50	51.3
33	87	88	40	79	87	50	76	83	56	76	79	44	61	57	53	66.1
34	82	97	71	79	87	38	76	76	44	71	59	45	55	38	29	56.6
35	92	86	67	76	76	56	68	65	50	55	48	29	34	46	16	44.8
36	84	75	33	71	56	18	61	57	13	39	53	9	26	20	14	36.7
37	68	69	42	45	65	29	39	47	13	26	30	18	16	17	13	25.7
38	61	61	53	45	35	48	26	30	21	21	25	17	13	0	9	22.4
39	58	36	25	42	13	18	24	11	3	18	14	3	8	33	0	20.2
Postrainy/Post-pluvieuse (18.5 mm)																
40	32	42	19	16	17	16	5	0	14	5	0	8	3	0	3	9.2
41	26	10	14	16	17	9	13	0	6	8	0	3	3	0	3	9.2

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Béléko (919.8 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (55.4 mm)																
15	17	40	20	10	33	19	7	0	11	0	0	10	0	0	7	4.3
16	23	29	17	20	33	8	10	0	15	10	0	11	7	0	11	9.5
17	20	50	25	13	25	19	13	25	15	10	0	11	10	0	7	8.3
18	30	22	29	20	17	13	17	20	4	10	0	0	7	0	0	13.3
19	27	38	45	13	0	23	7	0	7	0	0	7	0	0	3	8.2
20	43	62	59	20	0	50	7	0	21	7	0	7	3	0	3	11.9
Rainy/Pluvieuse (823.5 mm)																
21	60	39	75	40	17	44	20	0	33	7	0	18	3	0	7	17.5
22	53	81	50	33	60	50	27	50	36	17	60	24	7	100	14	19.0
23	67	90	70	53	81	50	40	50	39	30	11	19	20	0	8	29.2
24	83	84	80	67	65	70	43	23	53	17	40	28	7	0	18	29.5
25	83	80	100	67	60	80	40	42	39	30	11	33	17	0	12	29.4
26	83	92	100	67	80	80	40	50	61	27	38	64	10	0	41	28.7
27	93	82	100	80	75	83	57	41	77	57	35	62	37	36	26	44.5
28	83	92	100	77	78	86	57	76	69	47	57	69	30	33	48	38.3
29	93	100	50	80	92	67	73	77	75	63	63	73	43	23	71	47.3
30	97	86	100	87	81	100	77	74	100	67	70	80	50	53	60	61.6
31	87	92	100	83	88	100	80	75	67	73	73	63	57	59	54	57.3
32	93	96	100	90	93	100	73	82	100	70	81	89	57	65	85	60.5
33	97	97	100	93	89	100	87	81	75	83	76	80	73	55	88	73.8
34	97	93	100	90	93	33	80	83	50	77	74	57	63	68	64	67.4
35	93	93	100	87	77	100	77	61	100	70	57	78	67	45	60	56.2
36	93	93	100	80	83	83	70	67	67	63	26	64	50	27	40	48.3
37	93	82	100	83	64	20	67	50	20	40	25	11	33	20	10	45.6
38	83	60	80	57	41	54	40	25	28	17	0	12	13	0	4	29.0
39	63	68	45	47	36	38	27	25	36	10	0	15	3	0	7	21.1
40	60	33	25	37	18	11	33	10	10	13	25	4	7	0	4	19.5
Postrainy/Post-pluvieuse (26.6 mm)																
41	30	33	29	13	0	23	10	0	11	7	0	11	3	0	3	10.1
42	30	33	14	20	0	13	10	0	7	10	0	4	3	0	3	9.9
43	20	17	13	10	33	11	7	0	7	3	0	7	3	0	0	6.6

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Bougouni (1087.9 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (0 mm)																
Rainy/Pluvieuse (1046.7 mm)																
16	47	43	50	27	0	18	7	0	7	7	0	7	7	0	7	13.7
17	47	57	75	13	50	46	7	100	29	7	100	21	7	100	14	13.8
18	67	60	60	47	29	50	33	40	20	27	50	9	20	33	0	24.7
19	60	56	67	40	33	56	27	50	18	20	33	8	7	0	14	19.0
20	60	67	83	47	43	88	27	75	27	13	0	15	13	0	8	19.5
21	73	64	100	67	50	40	40	83	22	13	50	31	7	0	14	25.1
22	73	91	100	47	57	38	47	43	13	33	20	20	13	0	8	26.7
23	93	86	100	47	71	88	27	75	82	20	67	42	7	0	36	25.1
24	87	77	50	80	58	33	80	50	0	47	29	25	33	20	20	42.7
25	73	82	75	53	75	86	40	67	67	27	50	45	20	33	42	31.5
26	80	100	100	80	83	100	67	70	80	47	29	63	40	17	33	41.5
27	100	93	0	87	92	100	73	91	75	47	57	63	27	75	36	42.2
28	93	100	100	93	93	100	87	100	50	60	78	67	47	71	50	54.1
29	100	93	0	93	93	100	93	93	100	73	73	75	60	78	67	59.2
30	93	100	100	93	86	100	93	79	100	73	73	75	73	64	50	65.2
31	100	100	0	87	100	100	80	75	100	73	73	75	60	67	67	53.3
32	100	100	0	100	100	0	80	100	67	73	100	50	67	90	60	56.2
33	100	93	0	100	93	0	93	93	100	87	85	100	80	75	67	69.5
34	93	100	100	93	100	100	93	86	100	87	69	50	73	64	50	64.5
35	100	100	0	100	93	0	87	77	50	67	60	60	60	33	67	61.1
36	100	100	0	93	86	100	73	82	50	60	33	33	47	43	25	59.4
37	100	87	0	87	69	100	73	55	25	33	20	40	33	20	40	50.3
38	87	69	50	73	55	25	47	29	50	33	20	20	33	20	10	37.0
39	67	70	60	47	57	38	40	33	33	20	67	25	13	50	15	26.2
40	67	50	20	47	43	13	33	20	0	33	20	0	20	0	0	30.3
41	44	50	78	27	25	64	7	0	43	7	0	21	0	0	7	11.2
42	67	40	0	53	38	0	40	50	0	20	67	0	7	0	7	23.7
Postrainy/Post-pluvieuse (16.5 mm)																
43	27	25	18	20	33	8	20	0	8	13	0	0	7	0	0	11.1
44	20	0	0	13	0	0	7	0	0	0	0	0	0	0	0	5.5

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.

H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Bourem (142.5 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (108.3 mm)																
26	16	0	18	9	0	5	4	0	5	0	0	0	0	0	0	4.8
27	16	29	29	4	0	9	4	0	0	0	0	0	0	0	0	5.5
28	29	46	47	9	25	27	0	0	13	0	0	7	0	0	0	6.2
29	47	33	50	27	33	18	13	0	15	7	0	7	0	0	2	12.7
30	42	58	58	22	50	37	13	17	21	7	33	12	2	100	11	12.9
31	58	27	47	40	11	33	20	11	22	13	17	8	13	0	5	21.5
32	36	31	34	24	18	18	20	0	8	9	0	2	4	0	2	12.3
33	33	40	43	18	13	30	7	0	10	2	0	5	2	0	2	9.4
34	42	47	23	27	42	18	9	50	12	4	0	2	2	0	2	12.1
35	33	7	17	24	0	6	16	0	3	2	0	0	2	0	0	11.0

Rainy/Pluvieuse (0.0 mm)

Postrainy/Post-pluvieuse (0.0 mm)

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
 H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Diamou (770.4 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (11.5 mm)																
21	17	50	21	9	0	10	0	0	4	0	0	4	0	0	0	4.3
22	26	67	47	9	100	38	4	100	23	4	100	14	0	0	9	7.2
Rainy/Pluvieuse (699.8 mm)																
23	52	42	55	43	40	46	26	33	29	17	0	21	9	0	14	18.9
24	48	91	92	43	80	62	30	71	44	17	25	47	13	33	20	18.7
25	91	57	100	70	38	29	52	42	9	43	20	15	22	20	17	34.0
26	61	93	100	35	50	73	26	33	59	17	25	42	17	25	21	25.4
27	96	95	100	65	87	88	52	58	73	39	56	50	22	40	39	40.9
28	96	86	100	87	70	67	65	67	75	52	58	64	39	33	50	46.7
29	87	80	100	70	63	86	70	56	43	61	50	33	43	40	23	44.0
30	83	84	100	70	81	86	52	50	82	43	40	54	30	29	56	45.1
31	87	90	100	83	79	75	65	73	50	48	73	42	48	73	42	55.5
32	91	100	100	78	94	80	65	73	88	57	62	90	57	54	90	56.3
33	100	74	0	91	67	100	78	50	80	74	41	83	70	31	71	65.3
34	74	94	100	70	94	86	57	69	70	52	67	64	43	50	62	47.8
35	96	91	100	91	86	50	70	69	86	65	53	38	57	38	40	60.2
36	91	90	100	83	68	100	74	59	33	48	18	33	39	11	29	45.7
37	91	90	100	74	53	83	52	50	45	26	50	35	22	20	33	33.9
38	91	67	50	61	43	44	48	45	25	39	33	14	30	43	0	37.7
39	65	33	38	43	30	23	35	25	20	22	20	17	13	0	20	23.7
Postrainy/Post-pluvieuse (42.8 mm)																
40	35	50	40	26	33	18	22	20	11	17	25	5	17	0	5	17.8
41	43	0	31	22	0	11	13	0	5	9	0	0	4	0	0	12.6
42	17	0	21	9	0	19	4	0	9	0	0	4	0	0	4	4.8
43	17	0	5	17	0	5	9	0	5	4	0	0	4	0	0	7.6

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Diéma (650.6 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (18.8 mm)																
22	24	33	42	16	25	24	4	0	4	4	0	0	4	0	0	8.8
23	40	50	53	24	50	21	4	0	25	0	0	12	0	0	8	10.0
Rainy/Pluvieuse (583.9 mm)																
24	52	69	50	28	71	33	24	67	21	12	67	9	8	50	9	17.7
25	60	73	40	44	55	50	32	13	29	16	0	5	12	0	0	21.6
26	60	53	90	52	38	83	24	33	53	4	100	29	0	0	24	17.8
27	68	76	88	60	67	70	48	42	54	32	25	29	24	33	11	29.4
28	80	90	100	68	76	88	48	67	69	28	57	44	16	25	48	30.1
29	92	78	100	80	65	80	68	47	38	48	33	46	44	36	36	46.7
30	80	75	100	68	76	75	44	55	71	40	30	73	36	22	50	47.1
31	80	95	100	76	89	100	64	81	78	56	64	64	40	50	40	47.7
32	96	96	100	92	91	50	80	75	80	64	63	78	44	36	64	51.8
33	96	88	100	88	82	67	76	74	33	68	65	38	52	54	50	56.1
34	88	86	100	80	80	80	64	69	67	56	43	45	52	23	33	60.6
35	88	91	67	80	80	80	68	59	88	44	45	43	28	29	22	40.5
36	88	68	100	80	55	100	68	53	50	44	18	36	24	17	21	43.1
37	72	78	86	64	50	56	52	31	33	28	14	28	20	0	20	30.0
38	80	50	40	52	38	8	32	25	6	24	17	11	16	25	5	28.9
39	48	42	38	24	50	26	12	67	27	12	0	9	8	0	4	14.8
Postrainy/Post-pluvieuse (30.9 mm)																
40	40	30	40	32	25	18	32	0	6	8	0	0	4	0	0	15.5
41	36	22	19	20	0	20	4	0	8	0	0	0	0	0	0	9.1
42	20	0	0	16	0	0	8	0	0	0	0	0	0	0	0	6.3

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Dioila (930.5 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (31.9 mm)																
14	21	13	13	18	14	6	5	50	6	3	100	3	3	0	3	6.7
15	13	20	15	8	33	9	8	33	6	5	0	3	3	0	0	4.7
16	16	17	25	11	0	12	8	0	9	3	0	5	0	0	0	6.0
17	24	44	24	11	25	15	8	0	11	5	0	6	0	0	0	6.5
18	29	64	44	16	50	28	11	25	9	5	50	0	0	0	0	8.0
Rainy/Pluvieuse (857.3 mm)																
19	50	47	53	32	17	38	11	0	24	3	0	11	0	0	5	12.6
20	50	53	47	32	17	19	21	13	7	11	0	3	5	0	3	16.2
21	50	53	63	18	43	32	8	0	31	3	0	19	3	0	14	11.5
22	58	73	81	34	54	60	29	55	44	18	57	42	13	20	24	22.3
23	76	69	67	58	36	56	47	11	35	45	6	10	24	0	7	33.2
24	68	96	83	45	88	81	24	78	55	8	67	37	5	50	33	19.9
25	92	86	100	84	66	100	61	35	53	39	27	26	34	23	12	38.1
26	87	97	100	71	78	91	42	50	77	26	50	57	16	33	28	30.0
27	97	84	100	82	84	71	66	80	62	55	57	71	29	27	41	43.9
28	84	84	100	82	74	57	74	68	70	63	50	36	37	36	42	47.4
29	87	100	80	71	78	82	68	62	83	45	59	38	39	40	22	44.9
30	97	95	0	79	90	75	68	81	83	47	67	70	29	55	67	46.6
31	92	94	67	87	91	80	82	87	71	68	77	58	63	63	57	68.2
32	92	94	67	89	88	75	84	78	83	71	78	64	61	57	73	63.5
33	92	97	67	87	91	80	79	87	88	74	82	90	63	75	57	67.7
34	95	100	50	89	94	75	87	85	60	84	81	33	68	69	50	69.9
35	97	92	0	92	77	67	82	58	86	74	50	50	63	38	43	61.1
36	89	97	50	76	79	67	63	58	64	50	53	32	39	27	30	45.3
37	92	71	33	76	62	33	61	39	47	42	38	23	29	27	26	40.9
38	68	54	50	55	48	47	42	31	18	29	18	7	26	10	4	33.5
39	53	75	44	47	56	35	24	44	28	11	50	24	5	50	17	17.6
40	61	48	7	45	18	14	32	17	8	26	10	7	18	14	0	22.9
Postrainy/Post-pluvieuse (28.2 mm)																
41	32	17	42	16	33	19	11	25	12	8	0	6	3	0	3	9.7
42	34	23	24	21	0	17	13	0	9	5	0	3	3	0	3	10.0
43	24	22	10	13	20	3	8	33	3	3	100	3	3	0	3	8.5

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Diré (264.2 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (21 mm)																
25	20	25	19	10	0	8	3	0	3	3	0	0	0	0	0	5.8
26	20	38	38	8	33	19	3	0	10	0	0	10	0	0	0	4.9
27	38	40	48	20	38	34	10	0	14	10	0	6	0	0	5	10.3
Rainy/Pluvieuse (191.2 mm)																
28	45	67	41	35	29	27	13	0	26	5	0	21	5	0	16	13.8
29	52	38	84	28	18	55	23	22	29	20	13	19	15	0	15	19.3
30	60	58	56	45	50	32	28	45	24	18	43	9	13	40	9	20.5
31	58	57	71	40	44	46	30	42	29	15	33	21	13	40	14	21.9
32	63	68	73	45	50	41	33	46	26	23	44	16	18	43	15	29.0
33	70	75	83	45	67	50	33	54	37	23	33	26	20	25	22	26.9
34	78	55	44	58	48	24	43	24	4	28	9	10	23	11	6	29.7
35	52	43	53	38	20	28	13	0	14	10	0	6	8	0	0	17.0
36	48	21	38	25	20	23	13	20	17	5	0	11	0	0	3	13.1
Postrainy/Post-pluvieuse (30.5 mm)																
37	30	50	43	23	33	19	18	29	6	10	0	3	3	0	3	11.9
38	45	11	5	23	0	6	10	0	6	3	0	3	3	0	0	11.3
40	10	25	14	5	0	3	0	0	3	0	0	3	0	0	3	3.0
41	15	0	0	3	0	0	3	0	0	3	0	0	3	0	0	4.3

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Djenné (590.2 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (35.1 mm)																
19	21	9	17	9	20	2	6	33	2	4	0	4	4	0	0	7.2
20	15	63	27	4	100	16	4	100	6	4	50	6	0	0	6	4.5
21	32	41	36	19	30	21	9	0	13	8	0	6	6	0	4	12.0
22	38	50	45	23	25	32	11	17	15	6	0	10	4	0	8	11.4
Rainy/Pluvieuse (514.7 mm)																
23	47	60	61	30	38	30	15	38	24	9	0	15	8	0	8	15.1
24	60	66	57	32	47	39	26	29	26	13	29	13	8	25	4	18.6
25	62	61	50	42	36	35	26	0	28	15	0	11	6	0	6	22.6
26	57	63	65	36	47	50	21	36	31	9	20	19	6	33	14	18.4
27	64	68	89	49	58	59	32	47	44	19	30	33	15	25	27	26.3
28	75	95	85	58	77	73	45	71	59	32	71	44	26	43	36	34.6
29	92	88	100	75	80	77	64	68	63	53	46	48	38	20	27	42.3
30	89	89	100	79	76	91	66	71	61	47	52	39	25	46	28	40.5
31	91	92	80	79	71	73	68	58	47	45	42	41	32	41	22	49.4
32	91	94	100	72	76	73	55	62	67	42	45	61	28	33	47	43.2
33	94	80	67	75	73	46	64	65	42	55	38	46	43	30	37	49.8
34	79	83	82	66	77	67	57	47	57	42	23	35	34	17	26	42.9
35	83	86	89	74	64	64	51	41	42	30	38	30	23	33	22	34.3
36	87	65	71	64	35	58	42	32	35	32	18	25	25	8	13	34.7
37	66	60	44	43	43	27	34	22	23	23	33	10	11	33	6	23.3
38	55	28	25	34	17	20	23	17	12	15	13	4	9	0	2	18.7
Postrainy/Post-pluvieuse (17.2 mm)																
39	26	43	31	19	10	7	13	14	4	6	0	0	2	0	0	9.6
40	34	22	9	8	0	6	6	0	4	0	0	0	0	0	0	7.7

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Dogo-Ténenkou (435.1 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (37.7 mm)																
21	17	0	11	13	0	10	9	0	5	4	0	5	0	0	4	5.4
22	10	0	29	10	0	5	4	0	0	4	0	0	4	0	0	4.8
23	26	33	24	4	0	23	0	0	9	0	0	9	0	0	9	5.8
24	26	83	18	22	60	17	9	50	10	9	50	5	9	0	0	10.3
25	35	50	47	26	17	41	13	0	20	9	0	10	0	0	4	11.5
Rainy/Pluvieuse (380.3 mm)																
26	48	55	42	35	50	33	17	25	21	9	50	10	4	100	5	16.3
27	48	91	33	39	100	29	22	60	33	13	33	20	9	50	5	17.1
28	61	86	44	57	77	50	39	56	36	22	40	28	9	100	24	24.1
29	70	81	86	65	67	75	43	60	54	30	71	38	30	43	13	34.4
30	83	63	50	70	56	43	57	46	30	48	27	25	22	0	22	37.5
31	61	79	100	52	75	64	39	56	36	26	50	35	17	0	37	28.3
32	87	65	67	70	56	43	43	70	31	39	56	21	30	43	25	35.8
33	65	87	75	52	83	82	48	73	75	35	63	60	30	43	38	44.2
34	83	84	0	83	63	0	74	53	17	61	29	33	39	22	7	52.3
35	70	69	29	52	58	27	43	50	23	30	29	25	13	0	15	31.0
36	57	62	60	43	40	46	35	25	27	26	0	6	13	0	5	23.1
37	61	86	33	43	60	15	26	50	12	4	100	9	4	0	9	16.8
38	65	0	13	35	0	7	22	0	0	13	0	0	9	0	0	19.4

Postrainy/Post-pluvieuse (0 mm)

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Douentza (494.4 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (29.9 mm)																
20	18	13	22	9	0	13	2	0	9	0	0	2	0	0	2	4.4
21	20	33	31	11	20	10	9	25	8	2	0	2	2	0	2	6.8
22	32	50	27	11	20	15	9	0	3	2	0	2	2	0	2	9.2
23	34	67	48	16	57	30	2	100	16	2	0	9	2	0	2	9.6
Rainy/Pluvieuse (423.5 mm)																
24	55	54	55	34	27	38	18	0	11	9	0	10	2	0	5	17.0
25	55	42	70	34	33	48	9	0	20	9	0	18	5	0	12	15.4
26	55	54	70	43	32	40	18	38	19	16	14	11	11	0	8	22.3
27	61	78	76	36	50	61	23	10	44	11	0	26	7	0	20	18.6
28	77	79	70	57	60	53	36	44	39	23	30	24	18	25	17	30.6
29	77	88	80	57	64	68	41	61	54	25	18	48	18	0	42	28.7
30	86	84	83	66	59	87	57	52	68	41	33	42	34	27	28	40.9
31	84	81	100	68	67	57	59	62	50	39	41	44	27	17	22	40.9
32	84	89	100	64	75	88	57	72	58	43	63	36	20	33	34	35.5
33	91	85	75	80	63	56	66	41	47	48	33	35	34	33	24	44.2
34	84	78	86	61	52	76	43	37	32	34	13	24	27	0	9	35.7
35	80	77	44	61	56	35	34	40	31	20	11	23	7	0	17	25.8
36	70	77	69	48	38	57	34	40	41	20	33	20	16	43	8	25.1
37	75	45	55	48	33	22	41	28	15	23	10	18	14	17	11	24.6
38	48	48	35	27	33	28	20	33	9	16	0	3	11	0	0	18.2
Postrainy/Post-pluvieuse (22.6 mm)																
39	41	39	31	30	38	13	14	17	8	2	0	7	0	0	2	11.9
40	34	13	10	20	11	9	9	0	8	7	0	5	2	0	2	10.7

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Doufing (974.2 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (53.3 mm)																
17	17	50	42	13	0	25	9	0	14	4	0	9	0	0	9	5.4
18	43	40	31	22	0	17	13	0	10	9	0	5	9	0	0	12.6
19	35	50	27	13	0	25	9	0	10	4	0	9	0	0	4	8.8
20	35	25	40	22	40	28	9	50	19	9	0	14	4	0	9	11.2
21	35	50	47	30	14	38	22	0	28	13	0	20	9	0	5	15.3
Rainy/Pluvieuse (864.9 mm)																
22	48	82	50	30	71	44	22	60	39	17	50	26	4	0	27	16.3
23	65	80	63	52	67	64	43	60	31	30	29	31	26	17	24	28.2
24	74	76	67	65	53	63	43	20	54	30	14	31	22	0	28	32.0
25	74	76	67	57	62	70	39	44	43	26	33	24	22	40	17	28.9
26	74	94	100	65	93	38	43	80	46	26	67	41	22	60	33	29.3
27	96	91	100	74	76	50	61	64	44	48	36	42	39	44	21	42.5
28	91	90	100	70	94	71	57	69	80	39	67	64	30	57	50	41.9
29	91	100	100	87	100	100	74	88	83	65	67	88	52	58	64	59.0
30	100	100	0	100	87	0	87	75	33	74	76	17	61	79	33	75.0
31	100	96	0	87	90	67	70	94	71	61	57	78	61	43	78	63.6
32	96	91	100	87	90	100	87	80	100	65	73	63	57	62	60	63.9
33	91	95	100	91	95	100	83	95	75	70	69	86	61	57	56	64.4
34	96	100	0	96	100	0	91	90	0	74	82	50	57	62	60	70.9
35	96	86	0	96	86	0	83	79	50	74	65	67	61	50	67	64.4
36	83	95	75	83	84	75	74	88	67	65	67	75	57	54	40	50.3
37	91	81	50	83	53	50	83	37	50	70	31	29	48	18	25	57.5
38	78	83	0	52	50	36	39	33	29	30	14	25	22	20	11	27.3
39	65	67	63	43	60	38	30	57	31	22	40	17	13	33	20	21.4
40	65	47	13	48	27	17	39	33	7	22	60	0	22	20	0	28.0
Postrainy/Post-pluvieuse (38.9 mm)																
41	35	38	27	22	40	11	17	50	11	13	33	5	4	100	5	12.2
42	30	29	6	17	25	5	17	25	0	9	0	5	9	0	5	13.0
43	13	33	15	9	50	5	4	100	0	4	0	0	4	0	0	9.9
44	17	0	16	9	0	5	4	0	5	0	0	0	0	0	0	3.8

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Faladye (990.6 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (31.6 mm)																
19	20	78	27	13	33	18	11	20	5	4	0	2	4	0	0	7.4
20	37	47	38	20	11	32	7	0	21	2	0	13	0	0	4	9.8
21	41	63	59	28	38	33	20	0	24	13	0	15	4	0	9	14.5
Rainy/Pluvieuse (902.2 mm)																
22	61	68	78	35	63	47	20	44	41	13	50	20	9	50	17	19.2
23	72	88	85	52	71	50	41	58	41	24	36	37	20	33	22	29.4
24	87	83	67	61	57	56	48	32	21	37	12	17	24	0	17	32.0
25	80	89	78	57	69	75	26	50	68	15	29	33	13	17	28	26.0
26	87	95	83	72	70	77	63	62	59	33	60	48	26	33	32	36.4
27	93	100	100	72	94	92	61	75	89	52	58	77	33	20	48	39.2
28	100	98	0	93	91	67	80	78	89	67	65	93	39	50	61	48.7
29	98	100	100	89	93	80	80	78	78	74	68	67	57	62	55	54.8
30	100	98	0	91	90	100	78	81	100	67	71	67	59	74	42	69.6
31	98	96	100	91	95	75	85	85	86	70	72	86	61	61	61	62.7
32	96	95	100	93	91	100	85	82	100	76	80	91	61	71	89	69.5
33	96	98	100	91	95	100	85	87	86	83	79	75	78	72	50	83.1
34	98	100	0	96	93	50	87	88	83	78	83	60	67	71	53	66.7
35	98	89	100	91	81	100	87	80	83	78	72	80	65	63	63	69.5
36	89	93	100	83	84	100	80	68	67	74	50	42	63	28	35	57.9
37	93	84	100	87	60	100	67	48	53	48	50	29	30	43	22	44.8
38	85	74	71	65	60	38	50	30	22	39	11	21	28	0	18	40.5
39	74	59	58	52	25	36	26	17	26	17	13	21	13	17	18	26.1
40	59	48	32	30	36	6	24	36	6	20	11	5	17	0	3	26.1
Postrainy/Post-pluvieuse (29.2 mm)																
41	41	16	41	15	0	23	13	0	10	7	0	5	2	0	4	11.3
42	30	50	16	20	33	11	9	25	10	4	0	5	4	0	2	9.7
43	26	17	9	15	0	5	11	0	5	4	0	2	2	0	0	8.3

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.

H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Galougo (857.7 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (30.2 mm)																
20	39	27	41	7	0	31	4	0	19	4	0	7	4	0	7	7.7
21	36	20	44	29	0	25	18	0	9	7	0	0	7	0	0	12.9
22	36	80	72	18	60	61	7	0	46	0	0	32	0	0	21	9.5
Rainy/Pluvieuse (803.7 mm)																
23	75	67	71	61	41	64	43	42	38	32	11	32	21	0	18	28.7
24	68	89	89	50	79	57	39	55	59	25	57	29	14	25	13	24.9
25	89	72	67	68	63	56	57	63	50	36	50	44	14	50	29	36.9
26	71	75	88	61	53	91	57	44	67	46	23	67	32	22	37	33.2
27	79	86	100	68	79	89	54	60	77	46	54	53	32	33	53	36.7
28	89	96	67	82	83	60	68	63	67	54	47	54	46	38	40	55.6
29	93	92	100	79	82	83	64	72	60	50	71	50	39	45	41	43.0
30	93	88	100	82	74	100	68	68	89	61	53	73	43	33	63	51.5
31	89	88	100	79	77	83	75	57	71	61	47	36	50	36	29	55.8
32	89	96	100	79	86	100	61	82	82	43	67	75	32	56	68	46.5
33	96	93	100	89	84	100	82	78	60	71	55	75	64	39	80	67.6
34	93	100	100	86	96	75	75	81	71	61	59	64	54	40	46	74.0
35	100	86	0	93	81	100	79	68	83	61	65	73	43	50	44	52.0
36	86	88	75	82	65	60	71	60	25	68	53	22	46	31	40	55.1
37	86	83	75	64	56	70	50	50	57	43	33	50	36	20	39	40.8
38	82	65	100	61	59	55	54	33	31	43	25	19	32	22	5	39.3
39	71	45	50	57	25	50	32	33	32	21	0	32	11	0	24	25.2
40	46	46	47	36	20	39	32	11	16	25	14	0	21	0	0	23.5
41	46	23	27	32	0	5	14	0	4	4	0	4	0	0	0	13.3
Postrainy/Post-pluvieuse (6.4 mm)																
42	25	0	19	4	0	4	4	0	0	4	0	0	0	0	0	6.4

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Gao (252.6 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (42.7 mm)																
24	29	44	28	11	17	12	9	0	4	4	0	2	4	0	0	8.1
25	32	22	11	13	14	6	4	0	4	2	0	4	0	0	2	7.8
26	14	50	31	7	25	19	4	0	11	4	0	7	2	0	2	6.3
27	34	32	49	20	0	20	11	0	12	7	0	2	2	0	0	10.2
28	43	71	59	16	44	38	11	50	30	2	100	16	0	0	5	10.2
Rainy/Pluvieuse (158.5 mm)																
29	64	50	70	39	23	41	32	11	26	18	0	13	5	0	4	21.4
30	57	69	63	34	53	49	21	42	36	11	33	24	4	0	20	17.4
31	66	70	79	50	39	54	38	29	37	25	21	21	20	9	16	29.6
32	73	63	60	46	46	43	34	26	27	21	33	18	14	13	8	25.9
33	63	63	67	45	32	32	27	13	22	21	8	14	9	0	6	21.8
34	64	61	40	32	22	39	20	9	24	13	14	12	5	33	8	21.8
35	54	37	27	34	16	14	21	0	2	13	0	2	9	0	0	20.6
Postrainy/Post-pluvieuse (26.6 mm)																
36	32	28	42	14	25	27	2	0	7	2	0	4	0	0	0	8.6
37	38	38	11	27	7	7	7	25	4	4	0	4	0	0	0	11.0
38	21	17	14	7	0	4	5	0	4	4	0	2	0	0	0	7.0

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Goulalala (1361.5 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (28.1 mm)																
14	19	17	32	13	25	22	6	0	10	6	0	7	3	0	7	6.8
15	29	33	41	23	14	21	10	0	11	6	0	0	6	0	0	11.0
16	39	33	53	19	33	32	10	0	18	0	0	13	0	0	10	10.3
Rainy/Pluvieuse (1291.7 mm)																
17	45	50	59	32	40	24	16	0	15	13	0	4	10	0	0	14.5
18	55	59	57	29	44	45	13	0	33	3	0	27	0	0	16	13.7
19	58	78	69	45	36	65	29	11	36	26	0	22	16	0	12	22.8
20	74	70	50	52	31	47	29	22	36	16	20	19	10	33	18	24.7
21	65	80	64	39	75	37	32	40	33	19	33	12	19	17	12	25.8
22	74	87	63	52	81	53	35	55	40	16	40	27	13	0	22	23.9
23	81	84	100	68	62	90	45	36	65	29	33	41	19	50	32	30.6
24	87	93	100	71	91	89	52	81	80	39	58	63	35	36	50	38.5
25	94	97	100	90	86	100	81	60	100	61	42	83	45	36	71	46.4
26	97	100	100	87	78	100	68	67	60	58	44	46	55	29	29	48.6
27	100	100	0	81	92	83	65	80	91	45	71	76	29	44	64	44.1
28	100	100	0	90	96	100	84	85	80	74	57	88	58	44	69	52.3
29	100	100	0	97	90	100	84	81	100	65	80	73	55	59	71	66.1
30	100	94	0	90	93	100	84	81	80	77	71	57	65	60	64	77.2
31	94	97	100	94	97	100	81	96	100	68	86	100	61	84	100	68.3
32	97	93	100	97	90	100	97	83	100	90	75	100	90	68	100	74.6
33	94	100	100	90	100	100	84	92	100	77	88	86	71	86	78	80.9
34	100	100	0	100	100	0	94	97	100	87	93	100	84	85	100	96.3
35	100	97	0	100	87	0	97	80	100	94	79	50	87	59	75	86.6
36	97	97	100	87	81	100	81	76	83	77	71	86	61	63	67	74.1
37	97	97	100	84	88	100	77	67	86	74	61	63	65	50	18	73.4
38	97	93	100	90	75	100	71	59	67	61	32	50	39	8	42	53.7
39	94	83	50	77	83	57	61	58	67	39	42	42	29	22	32	38.5
40	81	84	33	77	71	14	61	37	42	42	31	28	29	22	23	44.9
41	74	65	50	58	56	46	39	25	32	29	33	14	23	14	4	31.8
42	61	47	42	52	38	33	29	33	14	19	33	12	6	0	14	20.9
43	45	36	18	35	18	10	19	17	4	16	20	4	13	25	0	18.5
Postrainy/Post-pluvieuse (14.2 mm)																
44	26	13	17	13	0	7	6	0	7	6	0	7	3	0	3	9.1
45	16	0	15	6	0	10	6	0	7	6	0	7	3	0	3	5.1

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Goundam(241.2 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (36.1 mm)																
24	16	29	13	7	0	5	2	0	0	0	0	0	0	0	0	4.4
25	16	0	16	4	0	14	0	0	4	0	0	0	0	0	0	4.3
26	13	17	41	13	17	13	4	0	5	0	0	2	0	0	0	5.5
27	38	41	36	13	33	21	4	50	19	2	100	9	0	0	9	8.6
28	38	59	54	22	60	29	20	44	11	11	20	10	9	0	7	13.2
Rainy/Pluvieuse (173.8 mm)																
29	56	40	75	36	19	41	18	13	30	11	0	20	7	0	17	18.4
30	56	56	55	33	47	40	27	25	30	18	25	19	16	14	13	20.6
31	56	60	85	42	47	58	29	38	38	20	33	22	13	0	10	21.0
32	71	66	62	53	54	52	38	47	21	24	36	24	9	50	12	24.7
33	64	52	88	53	46	57	31	29	32	27	25	18	16	14	8	25.6
34	64	52	50	51	35	27	31	14	16	20	11	11	9	0	5	22.3
35	51	43	32	31	21	23	16	0	18	11	0	8	4	0	2	16.0
36	38	65	46	22	20	29	16	0	18	7	0	0	2	0	0	12.7
37	53	29	24	27	8	21	16	14	13	0	0	7	0	0	4	12.5
Postrainy/Post-pluvieuse (9.7 mm)																
38	27	17	12	18	13	5	13	17	3	7	0	2	4	0	2	9.7

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Gourma-Rharous (166.2 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (28.9 mm)																
27	17	25	28	9	0	19	6	0	14	2	0	0	2	0	0	6.6
28	28	69	32	17	25	21	13	17	15	0	0	9	0	0	6	9.2
29	43	60	56	21	60	22	15	0	15	9	0	9	6	0	2	13.1
Rainy/Pluvieuse (82.2 mm)																
30	57	56	55	30	43	42	13	17	24	9	0	19	2	0	13	15.2
31	55	54	43	43	35	22	23	27	22	17	0	15	13	0	5	21.0
32	49	52	50	28	31	32	23	27	17	13	17	12	4	0	7	15.8
33	51	46	52	32	33	28	19	11	18	13	17	5	6	0	0	16.5
34	49	43	29	30	21	18	17	13	5	6	33	2	0	0	0	13.9
Postrainy/Post-pluvieuse (25.8 mm)																
35	36	24	33	19	11	18	6	0	9	4	0	4	0	0	2	9.0
36	30	14	33	17	13	13	9	25	2	4	50	0	2	0	0	9.1
37	28	15	15	13	0	7	4	0	4	2	0	2	0	0	0	7.6

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Guené-Goré (1234 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (18.1 mm)																
17	17	50	21	0	0	9	0	0	4	0	0	0	0	0	0	2.9
18	26	33	24	9	0	14	4	0	14	0	0	13	0	0	0	6.4
19	26	100	35	13	33	30	13	0	20	13	0	15	0	0	0	8.9
Rainy/Pluvieuse (1182.9 mm)																
20	52	75	45	30	57	38	17	50	26	13	33	10	0	0	4	14.0
21	61	79	78	43	70	54	30	29	38	13	33	25	4	0	9	19.5
22	78	72	80	61	71	67	35	50	67	26	50	41	9	50	33	25.8
23	74	94	100	70	88	86	61	79	44	43	70	46	35	50	33	35.0
24	96	91	0	87	85	67	65	53	75	57	54	70	39	33	36	50.5
25	87	95	67	83	74	75	61	71	67	61	64	33	35	63	40	45.3
26	91	95	100	74	65	100	70	56	86	52	58	45	48	36	42	44.5
27	96	95	100	74	82	100	65	67	63	52	75	55	39	44	57	47.0
28	96	100	100	87	95	100	65	80	88	65	53	75	52	50	64	59.0
29	100	96	0	96	95	100	83	89	100	61	79	89	57	85	80	64.6
30	96	95	100	96	86	100	91	76	50	83	74	75	83	63	75	69.7
31	96	100	100	87	95	100	74	94	100	74	88	83	65	73	88	74.5
32	100	96	0	96	91	100	96	82	100	87	80	67	78	67	80	76.5
33	96	100	100	91	95	100	83	79	75	78	78	40	70	75	29	80.9
34	100	96	0	96	95	100	78	94	100	70	88	100	61	71	78	76.2
35	96	95	0	96	95	0	96	82	0	91	81	0	74	76	67	79.3
36	91	100	100	91	100	100	78	89	100	74	82	83	74	76	50	68.9
37	100	91	0	100	91	0	91	90	100	83	79	75	70	69	43	65.0
38	91	90	50	91	86	0	91	57	0	78	44	40	61	36	22	56.8
39	87	75	33	78	50	60	52	42	36	43	30	23	30	14	31	41.4
40	70	75	100	52	67	45	39	44	36	26	50	24	26	33	18	37.5
41	83	58	50	57	46	50	39	22	7	30	14	6	22	0	11	33.3
42	57	38	20	48	27	17	13	67	10	9	50	14	9	0	10	17.5
Postrainy/Post-pluvieuse (22.6 mm)																
43	30	43	25	22	60	6	17	25	5	17	25	0	9	50	0	13.9
44	30	14	6	17	25	5	9	50	0	4	0	5	4	0	5	8.7

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Hombori (408 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (24.8 mm)																
23	24	27	26	9	0	22	0	0	7	0	0	2	0	0	0	6.3
24	27	25	36	20	11	17	7	0	10	2	0	2	0	0	0	8.3
25	33	53	57	16	14	32	9	0	24	2	0	16	0	0	4	10.2
Rainy/Pluvieuse (346 mm)																
26	56	60	65	29	46	41	22	20	26	16	0	18	4	0	5	16.8
27	62	71	76	42	32	46	24	27	26	16	0	18	4	0	16	19.7
28	73	79	67	40	56	56	27	50	42	16	29	32	16	0	16	22.5
29	76	82	73	56	80	65	44	65	44	31	36	39	13	17	31	28.4
30	80	86	33	73	64	42	53	58	43	38	35	43	29	15	38	37.9
31	76	94	73	58	58	63	51	35	50	40	17	41	31	14	29	36.7
32	89	93	100	60	78	83	42	63	69	31	36	58	24	45	26	31.9
33	93	79	100	80	61	56	67	47	40	51	35	23	31	29	19	42.8
34	80	72	89	60	33	78	44	40	36	29	31	19	22	0	9	35.6
35	76	65	45	51	39	36	38	24	25	22	10	6	7	0	7	24.7
36	60	56	50	38	24	32	24	9	15	7	33	10	7	0	7	18.9
37	53	54	43	29	23	25	13	0	13	11	0	5	7	0	0	17.4
38	49	23	26	24	27	12	11	20	10	4	50	2	0	0	4	12.8
Postrainy/Post-pluvieuse (16.1 mm)																
39	24	18	21	16	14	11	11	20	10	4	0	5	4	0	2	9.4
40	20	11	14	11	0	3	11	0	0	4	0	0	2	0	0	6.7

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Kabara (204.6 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (24.2 mm)																
26	23	23	26	7	25	13	2	0	5	0	0	2	0	0	0	6.3
27	25	36	33	14	25	19	5	33	13	2	0	7	0	0	2	6.8
28	34	37	57	20	27	36	14	13	23	7	25	12	2	0	5	11.2
Rainy/Pluvieuse (117.9 mm)																
29	50	54	54	34	21	43	21	8	20	13	0	4	5	0	2	17.3
30	54	70	54	36	60	44	18	40	26	4	50	17	2	0	15	16.1
31	63	69	52	50	43	32	29	25	30	18	20	24	14	0	19	23.6
32	63	51	43	38	48	26	29	38	18	23	23	9	16	22	6	22.6
33	48	63	59	34	47	43	23	38	23	13	0	20	9	0	10	17.6
34	61	47	41	45	16	16	27	20	7	18	10	4	9	20	4	20.6
Postrainy/Post-pluvieuse (43 mm)																
35	43	20	55	16	22	15	11	17	4	5	0	2	5	0	0	12.4
36	39	27	41	16	33	21	5	33	15	2	0	7	0	0	4	9.6
37	36	5	17	23	8	2	16	11	2	7	0	0	4	0	0	11.9
38	13	14	20	4	0	6	4	0	2	0	0	2	0	0	2	4.3
39	20	18	7	5	0	2	2	0	0	2	0	0	2	0	0	4.8

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Kalana (1381.5 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (20.6 mm)																
15	28	43	28	24	50	11	16	25	10	8	0	13	0	0	4	10.4
16	32	50	47	20	20	30	12	33	27	12	33	18	4	0	17	10.2
Rainy/Pluvieuse (1281.3 mm)																
17	48	33	54	28	43	44	28	29	17	20	20	15	16	0	10	20.1
18	44	45	57	44	36	36	20	40	30	16	25	29	8	0	26	16.9
19	52	77	75	36	44	56	32	25	41	28	14	33	24	17	5	25.7
20	76	63	67	52	46	58	36	33	50	28	43	28	8	0	22	25.5
21	64	75	56	52	77	58	44	73	43	32	75	29	20	20	15	29.1
22	68	82	75	68	59	63	56	50	45	44	45	43	16	50	29	33.5
23	80	85	80	60	67	60	48	58	31	44	45	21	32	50	18	42.1
24	84	81	100	64	63	78	44	55	64	32	63	53	28	43	44	36.0
25	84	95	100	68	71	100	60	60	80	56	57	18	44	55	14	45.5
26	96	92	100	80	90	80	68	53	75	40	60	47	32	63	29	42.0
27	92	96	100	88	77	33	60	80	40	52	77	42	40	70	47	46.8
28	96	100	100	72	94	71	64	88	56	60	80	60	56	71	45	51.6
29	100	92	0	88	91	33	76	89	50	72	78	57	60	53	50	79.8
30	92	96	100	84	86	100	80	85	100	72	72	86	52	69	50	63.9
31	96	100	100	88	100	100	88	86	100	76	84	67	60	73	70	65.2
32	100	96	0	100	92	0	88	86	67	80	70	60	72	61	57	72.5
33	96	100	100	92	100	50	84	90	75	68	88	63	60	87	70	69.8
34	100	92	0	96	88	100	88	77	67	80	75	60	80	65	60	101.1
35	92	100	100	88	100	100	76	89	100	72	72	86	64	56	67	82.3
36	100	100	0	100	96	0	92	87	100	76	74	83	60	67	60	70.5
37	100	96	0	96	79	100	88	73	67	76	63	67	64	50	67	75.9
38	96	96	100	80	75	40	72	72	43	64	38	44	56	21	36	62.5
39	96	71	100	68	59	75	64	50	56	40	30	27	28	29	22	38.4
40	72	78	57	64	63	33	52	46	33	28	14	22	24	17	5	36.1
41	72	67	57	52	54	58	40	20	33	20	20	25	8	0	22	24.8
42	64	50	33	56	50	27	28	57	28	24	33	21	20	40	15	23.7
Postrainy/Post-pluvieuse (47.7 mm)																
43	43	45	14	40	20	20	36	11	13	24	17	5	20	20	5	22.8
44	28	14	17	20	0	15	12	0	5	8	0	0	8	0	0	12.3
45	16	25	19	12	0	14	4	0	8	0	0	8	0	0	8	5.1
46	20	0	5	12	0	0	8	0	0	8	0	0	8	0	0	7.5

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Kami (552.1 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (40.9 mm)																
22	32	43	53	18	0	33	14	0	21	5	0	10	5	0	5	12.9
23	50	45	27	27	17	19	18	25	6	9	50	0	5	0	5	15.7
24	36	50	50	18	50	17	9	50	0	5	0	5	5	0	0	12.3
Rainy/Pluvieuse (460.1 mm)																
25	50	64	64	23	60	53	5	0	33	5	0	24	0	0	18	11.6
26	64	79	63	55	58	40	32	57	33	23	40	12	18	50	11	24.3
27	73	81	50	50	55	64	41	33	62	18	25	28	18	25	17	26.0
28	73	94	67	59	92	56	50	82	45	27	67	38	18	25	28	31.3
29	86	84	100	77	71	100	64	50	75	45	30	58	27	0	50	41.0
30	86	84	67	77	71	80	59	38	44	45	30	42	36	25	36	45.9
31	82	83	75	73	63	83	41	33	77	36	25	43	32	29	20	36.3
32	82	72	50	68	67	71	59	62	44	36	38	36	23	40	24	35.3
33	68	100	86	68	87	71	55	58	70	36	38	57	27	33	38	42.1
34	95	90	100	82	78	100	64	57	75	50	55	45	36	38	29	47.8
35	91	70	50	82	56	50	64	36	38	50	45	9	32	29	13	43.1
36	68	73	57	55	25	50	36	25	29	27	0	19	18	0	11	31.6
37	68	47	86	36	50	50	27	17	25	14	0	16	9	0	15	21.3
38	59	46	22	50	27	9	23	20	6	14	0	0	14	0	0	22.6
Postrainy/Post-pluvieuse (17.8 mm)																
39	36	25	29	18	0	11	9	0	10	0	0	5	0	0	5	9.5
40	27	17	0	9	50	0	9	50	0	5	0	0	5	0	0	8.3
42	18	25	11	14	0	5	0	0	0	0	0	0	0	0	0	4.6

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Kangaba (1116 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (59 mm)																
15	21	0	19	13	0	6	10	0	3	5	0	0	3	0	0	8.1
16	15	50	39	5	50	22	3	0	13	0	0	10	0	0	3	4.0
17	41	38	43	23	11	23	13	0	12	10	0	6	3	0	3	11.7
18	41	56	39	21	38	29	10	0	11	5	0	3	3	0	0	11.3
19	46	44	33	31	17	19	10	25	11	3	0	8	0	0	0	12.6
20	38	53	67	18	14	56	13	20	24	8	33	11	0	0	10	11.4
Rainy/Pluvieuse (1021.4 mm)																
21	62	67	73	49	42	55	23	11	37	13	20	29	10	0	14	20.5
22	69	67	83	49	63	55	31	50	48	28	45	29	13	20	18	27.3
23	72	79	91	59	70	94	49	58	70	33	23	50	18	29	25	32.6
24	82	88	86	79	71	88	64	48	86	41	38	52	26	50	38	39.6
25	87	85	100	74	72	80	62	50	87	46	28	38	41	19	30	44.9
26	87	97	80	74	76	90	64	68	71	33	46	54	26	30	41	39.6
27	95	89	100	79	74	88	69	74	75	51	60	58	38	33	50	44.4
28	90	100	50	77	90	67	74	83	50	59	65	44	44	59	41	51.0
29	95	95	100	85	82	100	74	66	100	56	59	59	49	53	50	55.0
30	95	97	100	85	82	100	74	72	90	59	61	69	51	45	63	56.5
31	97	95	100	85	82	100	77	73	56	64	68	50	54	62	33	58.3
32	95	100	100	85	100	100	69	93	83	62	83	80	49	68	75	61.8
33	100	100	0	100	97	0	90	97	75	82	84	71	72	71	45	78.2
34	100	97	0	97	89	100	95	84	100	82	78	100	64	60	79	73.1
35	97	92	100	90	89	75	85	85	83	82	75	57	67	54	62	76.4
36	92	86	100	87	76	80	85	73	83	72	50	73	56	55	35	66.1
37	87	88	80	77	80	44	74	62	50	56	45	53	46	39	33	48.3
38	87	76	80	72	57	55	59	39	44	49	26	30	36	29	20	50.9
39	77	80	56	56	59	59	41	44	48	28	27	39	23	22	23	32.0
40	74	41	30	59	26	19	46	28	10	36	21	8	23	22	3	34.9
41	44	53	46	23	33	27	18	0	19	13	0	6	8	0	3	15.6
42	49	32	25	28	27	21	15	0	12	5	0	5	3	0	5	14.6
Postrainy/Post-pluvieuse (21 mm)																
43	28	45	11	23	44	13	10	25	14	5	0	11	5	0	5	10.6
44	21	0	16	21	0	3	15	0	0	10	0	0	5	0	0	10.4

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Kara (561.1 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (25.1 mm)																
20	24	33	5	12	33	0	8	50	0	4	0	0	4	0	0	8.4
21	12	33	27	4	0	21	4	0	13	0	0	4	0	0	4	5.0
22	28	43	44	20	20	30	12	33	18	4	0	0	4	0	0	11.7
Rainy/Pluvieuse (502.1 mm)																
23	44	55	43	28	57	28	20	20	25	0	0	12	0	0	8	11.6
24	48	58	46	36	56	38	24	33	16	12	33	9	8	50	0	15.6
25	52	62	83	44	55	29	20	60	15	12	33	9	4	0	8	17.9
26	72	50	43	40	40	40	24	17	32	12	0	18	8	0	13	20.3
27	48	100	77	40	70	67	28	43	50	16	25	19	12	0	14	20.7
28	88	100	100	68	82	75	48	67	54	20	40	45	12	33	36	30.0
29	100	92	0	80	75	100	60	40	80	44	36	71	36	22	56	40.6
30	92	74	100	80	60	80	56	64	36	56	43	18	44	18	14	48.5
31	76	79	100	64	69	89	52	54	83	32	38	41	16	25	38	33.6
32	84	100	100	76	95	83	68	82	63	40	60	67	36	56	44	43.6
33	100	88	0	92	78	100	76	74	50	64	50	44	48	42	46	53.6
34	88	95	67	80	85	60	68	53	75	48	42	46	44	18	29	57.9
35	92	52	100	80	30	60	60	20	30	44	18	21	24	33	11	42.9
36	56	79	91	36	33	69	24	33	42	20	0	20	16	0	14	22.7
37	84	57	50	56	36	27	40	30	20	16	25	5	12	33	5	25.8
38	56	14	27	32	0	12	24	0	5	8	0	4	8	0	4	16.7
Postrainy/Post-pluvieuse (17.7 mm)																
39	20	40	10	8	50	13	4	0	13	4	0	0	4	0	0	6.0
40	16	75	5	16	25	0	12	0	5	0	0	4	0	0	4	7.3
41	16	0	0	4	0	0	4	0	0	4	0	0	4	0	0	4.4

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Karangasso (1037 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (26.6 mm)																
16	20	0	33	7	0	14	7	0	7	7	0	7	0	0	7	7.4
17	27	25	27	13	50	15	7	0	14	7	0	7	7	0	0	9.6
18	27	50	64	20	33	42	13	0	23	7	0	14	0	0	0	9.6
Rainy/Pluvieuse (964.1 mm)																
19	60	78	33	40	67	22	20	33	17	13	0	8	0	0	7	16.2
20	60	56	33	40	50	44	20	0	42	7	0	29	7	0	14	18.9
21	47	86	75	47	86	38	33	60	50	27	25	36	13	50	31	25.0
22	80	67	67	60	67	33	53	50	14	33	0	20	33	0	20	34.2
23	67	100	100	53	50	100	33	20	80	13	0	31	13	0	23	22.5
24	100	87	0	73	64	75	60	33	67	27	50	36	20	67	25	38.2
25	87	85	50	67	60	80	47	14	50	40	0	22	33	0	10	35.0
26	80	92	67	67	80	60	33	60	70	13	50	54	7	0	43	26.1
27	87	100	50	73	91	50	67	80	20	53	50	43	40	50	44	41.6
28	93	86	100	80	75	100	60	67	83	47	43	50	47	29	50	45.3
29	87	100	50	80	92	67	73	82	75	47	57	88	40	33	78	45.8
30	93	93	100	87	85	100	80	83	100	73	82	100	60	78	67	63.2
31	93	93	100	87	92	100	87	85	50	87	77	50	73	36	50	76.4
32	93	100	100	93	93	100	80	92	100	73	73	75	40	83	67	53.9
33	100	100	0	93	100	100	93	93	100	73	82	100	73	64	75	74.7
34	100	100	0	100	93	0	93	93	0	87	69	0	67	60	40	72.8
35	100	100	0	93	93	100	87	69	100	60	67	50	53	63	57	61.6
36	100	93	0	93	93	0	73	73	50	60	33	33	60	22	33	60.8
37	93	86	100	87	69	0	67	50	40	33	40	50	27	50	27	40.8
38	87	85	50	60	78	50	47	71	50	47	57	13	33	0	30	36.6
39	80	67	67	67	40	60	60	33	50	33	20	40	20	0	25	29.4
40	67	50	40	47	14	50	40	17	11	33	20	10	20	0	8	27.6
41	47	14	38	33	20	10	13	0	8	13	0	8	7	0	7	17.7
Postrainy/Post-pluvieuse (19.3 mm)																
42	27	50	27	13	0	15	7	0	7	7	0	0	7	0	0	7.8
43	33	0	30	13	0	0	7	0	0	0	0	0	0	0	0	7.8
44	20	0	8	0	0	0	0	0	0	0	0	0	0	0	0	3.7

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Katibougou (863.6 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (35.6 mm)																
18	28	10	31	14	0	6	6	0	3	3	0	3	3	0	0	7.5
19	25	44	37	6	50	18	3	0	6	3	0	0	0	0	0	6.3
20	39	50	36	19	29	24	6	0	21	0	0	8	0	0	0	9.7
21	42	47	48	25	44	37	19	43	17	8	33	18	0	0	8	12.0
Rainy/Pluvieuse (776.3 mm)																
22	47	82	63	39	64	45	22	38	43	19	43	28	8	0	21	20.1
23	72	81	80	53	58	65	42	33	52	31	18	32	19	29	14	27.7
24	81	69	71	61	50	71	44	25	50	28	20	27	17	33	13	28.9
25	69	80	64	58	57	67	39	43	32	25	33	26	17	0	20	27.3
26	75	89	89	61	82	86	36	54	65	28	20	46	17	0	20	29.3
27	89	91	75	83	87	50	61	64	57	39	50	45	17	33	30	39.1
28	89	88	75	81	76	71	61	64	64	47	53	53	31	45	32	43.4
29	86	97	80	75	93	78	64	87	54	53	63	53	36	38	35	44.6
30	94	79	100	89	69	75	75	63	78	58	57	73	36	31	65	51.3
31	81	100	86	69	100	91	67	83	75	64	61	62	53	53	53	57.7
32	97	94	0	97	91	0	81	86	86	61	73	71	53	63	59	60.8
33	92	94	67	89	84	75	86	74	80	72	65	50	61	68	21	71.4
34	92	97	100	83	87	100	75	78	89	61	64	79	50	50	56	55.5
35	97	94	100	89	88	75	81	79	71	69	68	55	53	63	53	59.0
36	94	97	50	86	71	60	78	61	50	64	39	54	58	19	33	58.0
37	94	59	100	69	52	55	58	33	47	44	19	40	25	11	22	38.5
38	61	59	43	53	42	24	39	21	18	31	18	12	19	29	7	30.7
39	53	47	47	33	42	38	19	14	17	14	0	3	11	0	3	18.8
40	47	47	32	39	29	18	17	17	13	3	0	11	3	0	9	14.4
Postrainy/Post-pluvieuse (22.4 mm)																
41	39	36	32	22	13	18	14	20	6	11	25	6	8	0	6	12.8
42	33	25	8	17	17	7	8	0	3	8	0	3	6	0	3	9.6

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Kayes (721.7 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (16.3 mm)																
21	15	25	38	9	20	21	4	0	14	0	0	6	0	0	4	5.4
22	36	68	41	21	55	26	13	71	13	6	67	10	4	50	6	10.9
Rainy/Pluvieuse (667 mm)																
23	51	63	54	32	29	39	21	18	29	13	29	11	8	25	10	16.9
24	58	77	64	36	74	50	26	64	36	13	43	33	11	17	21	20.0
25	72	74	60	58	55	50	43	52	43	34	33	37	21	18	24	28.2
26	70	81	69	53	68	52	47	60	36	36	47	26	23	58	12	28.6
27	77	88	92	60	72	71	47	44	57	34	39	51	23	33	39	32.0
28	89	89	100	72	71	73	51	48	50	47	36	32	38	25	15	44.2
29	91	81	100	72	55	80	49	54	56	34	56	37	19	50	23	35.2
30	83	82	78	62	76	60	55	62	63	43	52	43	28	40	39	42.6
31	81	88	80	70	76	75	62	55	60	47	44	54	40	33	34	44.7
32	87	91	100	75	88	92	57	70	74	49	62	67	34	56	54	50.7
33	92	76	100	89	72	83	72	50	80	64	41	47	55	24	38	59.5
34	77	95	83	74	92	86	58	77	77	43	74	53	30	63	49	46.2
35	92	88	100	91	79	100	77	63	67	62	55	50	53	32	44	60.8
36	89	83	83	81	77	80	64	65	58	53	50	48	38	35	27	44.8
37	83	91	67	77	71	50	62	64	30	49	38	22	30	25	19	38.7
38	87	63	57	66	43	33	51	37	23	30	19	22	21	18	17	35.6
39	62	52	35	40	38	25	30	25	16	21	0	14	17	0	11	22.7
40	45	38	28	30	38	16	19	30	12	11	17	4	9	20	2	15.6
Postrainy/Post-pluvieuse (25.5 mm)																
41	32	18	22	23	8	10	15	13	2	6	0	2	4	0	2	11.5
42	21	27	21	9	20	17	4	0	10	2	0	6	2	0	6	5.9
43	23	8	5	17	11	5	9	20	2	6	0	2	6	0	2	8.1

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Kayo (673.7 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (29.8 mm)																
18	22	25	21	6	0	0	6	0	0	6	0	0	0	0	0	6.1
19	22	0	14	0	0	6	0	0	6	0	0	0	0	0	0	3.8
20	11	0	19	6	0	0	6	0	0	0	0	0	0	0	0	3.5
21	17	0	47	0	0	28	0	0	11	0	0	6	0	0	6	4.2
22	39	43	45	28	40	23	11	50	13	6	100	6	6	0	6	12.0
Rainy/Pluvieuse (571.1 mm)																
23	44	63	50	28	60	54	17	33	40	11	0	25	6	0	18	14.1
24	56	80	63	56	50	25	39	29	9	22	0	7	17	0	7	23.4
25	72	62	40	39	71	18	17	33	27	6	0	18	6	0	18	18.2
26	56	70	50	39	43	45	28	0	15	17	0	13	17	0	13	20.8
27	61	82	86	44	63	80	11	100	63	11	100	38	11	50	25	20.4
28	83	87	100	72	85	80	67	58	67	44	50	60	28	20	38	36.0
29	89	94	100	83	73	100	61	55	86	56	30	75	33	0	75	44.2
30	94	94	100	78	86	75	67	75	67	50	78	44	50	44	33	53.7
31	94	94	100	83	80	100	72	69	100	61	55	43	39	43	45	48.2
32	94	94	100	83	93	100	78	71	75	50	78	56	44	50	60	59.8
33	94	100	100	94	82	100	72	62	60	67	50	50	56	30	38	56.5
34	100	89	0	83	80	100	61	82	57	50	56	56	33	33	50	49.6
35	89	88	100	83	80	100	72	69	100	56	50	38	44	38	30	52.3
36	89	88	50	83	60	33	78	36	50	44	13	30	33	17	25	44.5
37	83	47	33	56	20	38	39	29	27	22	50	21	22	25	14	29.5
Postrainy/Post-pluvieuse (62.1 mm)																
38	43	50	30	28	40	31	28	40	15	28	20	15	17	0	13	20.5
39	39	29	36	33	17	17	22	0	14	17	0	7	11	0	6	19.6
40	33	17	17	17	0	7	11	0	6	6	0	6	6	0	6	10.3
41	17	33	13	6	0	12	6	0	6	6	0	6	6	0	6	6.5
42	17	33	7	11	0	6	6	0	0	6	0	0	6	0	0	5.3

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Ké-Macina (565.1 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (26.5 mm)																
21	19	44	23	15	14	15	13	17	10	2	0	9	2	0	0	7.5
22	27	23	31	15	29	17	10	20	7	8	0	5	0	0	2	8.8
23	29	50	56	19	56	33	8	50	11	4	0	7	2	0	4	10.2
Rainy/Pluvieuse (489.1 mm)																
24	54	69	23	38	50	17	15	57	17	6	0	11	4	0	4	15.7
25	48	65	60	29	36	35	23	27	24	10	20	14	4	50	9	15.8
26	63	83	72	35	59	61	25	25	39	15	0	27	10	0	12	22.2
27	79	74	90	60	62	58	35	29	35	23	27	24	10	20	21	26.8
28	77	86	73	60	72	58	33	63	44	25	50	31	21	50	26	30.9
29	83	80	63	67	59	69	50	54	67	35	47	48	31	33	45	34.7
30	77	86	91	63	60	83	60	45	63	48	39	48	42	20	39	41.1
31	88	86	83	69	76	60	52	64	57	44	43	52	31	40	45	42.8
32	85	90	86	71	82	71	60	69	63	48	61	40	44	43	41	48.6
33	90	86	100	79	66	80	67	50	56	50	42	38	42	25	32	47.9
34	88	93	67	69	73	73	52	52	48	40	32	34	29	21	18	46.2
35	90	86	60	73	63	62	50	50	54	33	50	38	19	33	28	36.3
36	83	65	63	63	37	61	52	32	39	42	20	32	29	14	15	35.9
37	65	74	29	46	50	31	35	41	13	27	8	9	15	14	2	25.4
38	58	43	20	40	26	21	23	9	19	8	0	11	4	0	4	18.7
Postrainy/Post-pluvieuse (18.8 mm)																
39	33	19	34	23	0	14	17	0	5	10	0	2	4	0	0	12.3
40	29	14	3	10	0	0	4	0	0	2	0	0	0	0	0	6.6

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Kéniéba (1295.2 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (24.3 mm)																
18	19	14	21	11	25	13	6	50	3	6	0	0	3	0	0	6.4
19	19	43	24	14	40	16	6	50	12	0	0	8	0	0	6	6.3
20	28	50	50	19	29	31	14	0	29	8	0	15	6	0	3	11.6
Rainy/Pluvieuse (1213.5 mm)																
21	50	78	50	31	45	40	25	44	26	14	40	26	3	100	26	15.5
22	64	78	85	42	67	67	31	45	44	28	10	31	28	0	27	25.8
23	81	90	71	67	83	67	44	63	60	25	56	48	19	43	31	31.1
24	86	90	80	78	82	75	61	73	71	50	67	61	33	42	33	45.2
25	89	88	100	81	66	100	72	38	50	64	35	23	36	31	13	48.3
26	89	91	100	72	69	100	42	60	57	31	36	48	19	29	34	32.9
27	92	88	67	78	75	63	58	62	67	44	63	50	33	58	38	45.4
28	86	97	100	72	88	100	64	78	92	56	70	75	44	56	55	50.7
29	97	94	100	92	91	100	83	87	100	72	73	100	56	75	75	61.1
30	94	94	100	92	94	100	89	88	100	81	72	86	75	67	78	82.7
31	94	100	100	94	97	100	89	97	100	75	96	89	69	92	91	88.8
32	100	100	0	97	89	0	97	86	0	94	76	50	92	73	33	99.1
33	100	100	0	86	87	100	83	83	100	75	74	89	69	68	82	88.9
34	100	94	0	89	97	75	86	94	80	78	79	88	72	69	80	89.3
35	94	97	50	94	97	50	92	94	67	81	76	86	72	77	80	89.3
36	94	100	100	94	91	100	92	76	67	78	71	63	78	57	63	78.9
37	100	97	0	92	94	100	75	85	89	69	72	64	58	71	47	60.8
38	97	80	100	94	71	0	86	52	40	69	52	27	61	36	29	65.2
39	81	86	71	67	58	50	50	39	39	44	25	40	33	25	33	47.1
40	83	70	67	56	55	50	39	57	32	33	58	21	31	45	8	39.4
41	69	40	55	53	42	24	42	27	19	33	17	13	19	29	10	28.0
Postrainy/Post-pluvieuse (44.6 mm)																
42	43	43	25	33	42	21	22	38	11	14	40	13	14	20	10	20.7
43	33	58	13	28	10	8	17	17	0	17	17	0	11	25	0	16.7
44	28	0	8	8	0	3	3	0	3	3	0	0	3	0	0	7.2

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Kidal (136 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (107.2 mm)																
28	17	11	34	8	0	12	4	0	2	0	0	0	0	0	0	5.6
29	30	56	46	11	50	21	2	0	15	0	0	4	0	0	2	6.8
30	49	35	37	25	31	28	15	38	16	4	50	6	2	0	8	13.0
31	36	58	59	28	33	32	19	10	19	8	0	14	8	0	6	13.8
32	58	29	59	32	12	22	17	11	7	13	0	4	6	0	0	18.9
33	42	45	35	19	20	19	8	0	8	4	0	4	0	0	2	11.2
34	40	38	25	19	10	9	8	0	6	4	0	2	2	0	0	11.6
35	30	38	27	9	0	10	6	0	6	2	0	4	0	0	2	7.8
36	30	38	16	9	0	13	6	0	4	4	0	4	2	0	0	8.0
37	23	8	17	11	0	6	4	0	2	4	0	2	0	0	0	6.5
38	15	13	7	6	0	4	2	0	0	2	0	0	0	0	0	4.0

Rainy/Pluvieuse (0 mm)

Postrainy/Post-pluvieuse (0 mm)

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
 H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Kignan (1188.1 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (43.4 mm)																
12	20	33	25	0	0	13	0	0	13	0	0	13	0	0	13	2.4
13	27	50	9	13	50	0	13	50	0	13	50	0	13	50	0	10.9
14	20	0	17	7	0	7	7	0	0	7	0	0	7	0	0	5.4
15	13	0	23	7	0	21	0	0	20	0	0	13	0	0	7	4.2
16	20	33	42	20	33	17	20	33	0	13	0	0	7	0	0	11.1
17	40	50	44	20	0	33	7	0	7	0	0	0	0	0	0	9.4
Rainy/Pluvieuse (1091.3 mm)																
18	47	86	50	27	100	9	7	0	21	0	0	13	0	0	7	11.3
19	67	80	40	33	80	30	20	33	25	13	50	8	7	0	7	18.2
20	67	90	80	47	43	63	27	25	27	13	0	23	7	0	7	22.0
21	87	62	100	53	38	29	27	50	18	20	33	17	7	0	7	25.7
22	67	80	80	33	60	60	27	25	45	20	33	25	7	0	21	19.8
23	80	92	100	60	78	83	40	50	67	27	25	64	20	0	42	27.8
24	93	86	100	80	83	100	60	89	50	53	75	43	33	60	30	38.8
25	87	85	100	87	54	50	73	55	25	60	44	17	40	33	11	45.6
26	87	92	100	53	100	86	47	57	75	33	60	50	20	67	42	32.0
27	93	86	100	93	79	100	67	70	60	53	63	29	47	57	13	59.3
28	87	100	100	80	100	100	67	60	100	47	57	75	33	40	50	39.9
29	100	93	0	100	93	0	73	82	75	67	80	60	47	43	50	66.7
30	93	100	100	93	93	100	80	92	100	73	82	75	47	86	75	61.2
31	100	100	0	93	100	100	93	100	100	80	83	100	80	75	100	85.3
32	100	100	0	100	100	0	100	93	0	87	85	100	80	75	33	69.6
33	100	100	0	100	100	0	93	100	100	87	85	100	67	90	80	73.4
34	100	100	0	100	87	0	100	80	0	87	69	100	87	54	100	95.6
35	100	100	0	87	92	50	80	67	33	73	64	25	60	67	33	68.0
36	100	100	0	87	92	50	60	78	83	53	38	71	53	38	57	59.5
37	100	80	0	87	62	100	80	58	100	53	38	57	47	43	38	48.2
38	80	58	67	67	60	40	67	40	40	47	57	25	40	33	22	41.5
39	60	78	67	53	75	43	40	50	33	40	0	22	27	0	18	31.5
40	73	64	75	60	44	50	40	17	22	13	50	8	13	50	8	26.3
41	67	50	20	47	14	13	20	0	0	13	0	0	13	0	0	24.3
Postrainy/Post-pluvieuse (27.5 mm)																
42	40	17	22	13	0	8	0	0	7	0	0	7	0	0	0	7.8
43	20	0	17	7	0	7	7	0	7	7	0	0	0	0	0	6.7
44	13	50	23	7	0	21	7	0	14	0	0	7	0	0	7	3.8
45	27	25	0	20	33	0	13	50	0	7	0	0	7	0	0	9.2

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.

H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Kimparana (856.8 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (31.8 mm)																
15	13	50	23	7	0	7	7	0	7	7	0	7	7	0	0	4.5
16	27	0	27	7	0	7	7	0	0	7	0	0	0	0	0	7.2
17	20	0	33	7	0	14	0	0	13	0	0	7	0	0	7	3.8
18	27	25	27	13	0	8	13	0	8	7	0	7	7	0	7	8.8
19	27	50	55	7	100	21	7	0	0	7	0	0	7	0	0	7.6
Rainy/Pluvieuse (753.3 mm)																
20	53	50	57	27	25	45	0	0	20	0	0	7	0	0	7	11.2
21	53	63	71	40	33	33	20	67	25	7	100	21	7	0	14	18.4
22	67	70	60	33	60	60	33	40	20	27	25	9	13	0	8	25.4
23	67	80	60	60	44	50	27	0	27	13	0	15	7	0	14	22.0
24	73	55	100	47	43	75	20	33	42	13	0	31	13	0	15	29.9
25	67	70	100	60	67	67	40	33	33	27	25	9	13	0	8	28.2
26	80	75	100	67	60	60	33	20	40	13	0	23	7	0	21	27.1
27	80	100	67	60	89	67	33	40	70	20	0	50	20	0	42	31.2
28	93	86	100	80	75	67	60	56	67	40	50	44	33	60	20	42.1
29	87	92	100	73	91	75	60	89	50	47	57	63	33	60	60	54.9
30	93	93	100	87	77	100	73	64	100	60	44	50	60	33	33	54.5
31	93	93	100	80	92	100	73	91	25	47	57	63	33	40	50	42.7
32	93	100	100	93	93	100	73	73	25	60	78	33	47	71	38	47.3
33	100	100	0	93	93	100	60	89	100	60	89	100	53	38	71	54.2
34	100	93	0	93	86	100	93	79	100	93	71	100	53	63	71	74.5
35	93	93	100	87	69	100	80	58	100	73	55	100	67	50	60	59.2
36	93	100	100	73	82	100	67	50	60	67	40	40	53	38	29	47.3
37	100	87	0	87	77	0	53	50	29	40	67	22	33	40	30	48.4
38	87	46	0	67	40	20	40	67	11	40	0	11	33	0	10	34.8
Postrainy/Post-pluvieuse (50.8 mm)																
39	13	0	54	13	0	31	13	0	23	7	0	7	7	0	7	9.9
40	47	43	13	27	0	27	20	0	8	7	0	0	7	0	0	13.5
41	40	33	0	33	20	10	33	20	10	7	0	7	7	0	7	14.7
42	27	0	27	20	0	8	7	0	7	0	0	0	0	0	0	8.2
43	20	0	8	7	0	0	7	0	0	0	0	0	0	0	0	4.4

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Kita (1086.4 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (38.6 mm)																
17	16	25	14	6	33	6	4	50	2	2	0	2	2	0	2	4.9
18	16	13	17	8	0	2	4	0	2	2	0	0	2	0	0	6.4
19	16	50	33	2	100	18	2	0	8	0	0	6	0	0	2	5.2
20	36	33	25	20	10	20	8	0	15	6	0	9	2	0	4	10.5
21	28	71	53	18	33	37	14	14	21	8	0	17	4	0	15	11.6
Rainy/Pluvieuse (1007.8 mm)																
22	58	90	81	36	67	84	20	50	52	16	38	43	14	14	28	21.0
23	86	84	71	78	67	64	52	38	46	42	29	34	26	23	27	38.2
24	82	90	100	66	73	71	42	71	55	32	44	35	26	38	27	33.2
25	92	91	75	72	69	64	62	61	47	38	47	35	30	20	34	40.1
26	90	91	60	68	85	75	56	75	68	40	65	57	30	40	34	38.3
27	88	93	100	82	83	100	72	64	50	60	53	30	36	33	38	46.6
28	94	96	100	86	86	86	60	70	85	44	55	64	36	50	50	49.6
29	96	98	100	86	95	86	76	87	67	60	73	80	50	52	72	59.1
30	98	98	100	94	94	100	82	83	89	76	71	83	62	48	68	64.2
31	98	98	100	94	94	100	84	88	100	74	84	69	56	71	73	72.0
32	98	100	100	94	94	100	90	91	100	80	80	80	72	75	64	76.0
33	100	98	0	94	91	100	92	91	75	80	83	80	72	78	71	79.2
34	98	98	100	92	96	100	90	87	80	82	71	78	76	66	50	75.6
35	98	96	100	96	90	100	86	86	86	72	75	86	62	65	58	71.5
36	96	94	100	90	84	60	86	70	71	78	62	45	62	48	42	67.3
37	94	94	33	82	83	22	70	74	33	58	55	38	46	30	41	48.8
38	90	80	100	72	67	57	62	45	42	48	33	31	36	22	28	42.0
39	82	56	67	64	41	33	44	32	25	32	38	18	26	23	16	38.4
40	58	79	43	38	47	32	28	50	28	24	33	21	18	22	10	25.0
41	64	41	33	38	32	19	34	24	6	24	17	5	12	17	2	21.9
Postrainy/Post-pluvieuse (27 mm)																
42	38	42	23	24	25	5	12	17	5	8	25	4	4	0	4	12.0
43	30	20	14	10	20	9	6	33	4	6	33	4	4	50	2	8.4
44	16	13	7	10	0	4	6	0	4	6	0	2	4	0	0	6.7

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.

H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Kogoni (548.6 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (8 mm)																
21	17	20	17	3	0	4	0	0	3	0	0	0	0	0	0	3.5
22	17	60	50	3	100	14	3	100	4	0	0	0	0	0	0	4.4
Rainy/Pluvieuse (488.2 mm)																
23	52	53	36	17	20	25	7	0	19	0	0	14	0	0	7	11.6
24	45	69	31	24	57	18	17	40	21	14	25	16	7	50	4	15.4
25	48	50	60	28	38	43	24	43	23	17	40	25	7	0	19	16.4
26	55	56	69	41	58	24	28	25	24	28	25	19	17	20	17	24.6
27	62	78	73	38	55	67	24	29	50	21	33	22	17	20	13	22.3
28	76	91	71	62	61	64	45	54	44	24	57	27	14	50	24	28.9
29	86	76	75	62	56	73	48	57	53	34	30	53	28	38	38	37.5
30	76	91	86	62	61	73	55	56	62	45	46	56	38	27	44	36.3
31	90	88	100	66	79	60	59	59	42	52	47	50	38	45	33	47.1
32	90	85	100	72	81	63	52	67	50	48	43	53	38	36	33	46.4
33	86	88	100	76	50	57	59	59	42	48	43	33	34	20	37	40.6
34	90	92	100	52	67	71	52	53	57	38	27	50	31	33	30	44.8
35	93	63	50	69	50	44	55	44	23	41	33	12	31	22	20	40.0
36	62	67	73	48	57	47	34	40	32	21	33	30	21	17	26	30.5
37	69	60	44	52	33	21	34	30	16	31	0	5	24	0	5	30.5
38	55	31	15	28	25	19	21	17	17	3	0	11	3	0	7	15.3
Postrainy/Post-pluvieuse (21.8 mm)																
39	24	43	14	21	50	13	17	20	8	10	0	4	7	0	0	13.1
40	21	17	4	21	17	0	10	0	0	3	0	0	0	0	0	8.8

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Kolokani (812.2 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (23.5 mm)																
19	20	13	33	12	0	8	12	0	6	10	0	5	2	0	3	7.5
20	29	25	17	7	0	16	5	0	8	5	0	0	2	0	0	9.5
21	20	25	55	15	17	34	7	0	26	0	0	17	0	0	12	6.5
Rainy/Pluvieuse (744.7 mm)																
22	49	55	48	32	46	25	24	20	26	17	14	12	12	0	3	22.0
23	51	67	65	32	62	43	24	30	19	12	40	8	2	0	8	16.3
24	66	74	71	49	55	57	22	67	28	12	60	19	7	67	16	22.5
25	73	87	73	56	78	39	37	47	19	24	20	19	20	0	15	28.5
26	83	85	71	61	64	75	29	67	45	20	50	30	12	40	28	25.7
27	83	94	86	68	79	85	51	71	50	34	29	44	29	17	28	35.3
28	93	95	100	80	88	88	61	68	88	39	63	64	24	50	42	40.4
29	95	100	50	88	89	60	76	74	80	63	65	67	44	50	57	49.3
30	98	98	100	85	91	83	76	71	90	66	63	71	54	41	58	57.1
31	98	98	100	90	97	100	76	90	50	66	81	57	49	70	57	60.7
32	98	98	100	98	93	100	80	85	75	73	77	55	63	62	53	62.8
33	98	95	100	93	89	33	83	79	29	71	62	42	59	42	41	64.6
34	95	97	50	85	94	33	71	86	58	56	87	50	41	76	42	47.2
35	95	87	100	85	80	67	78	69	67	71	62	58	56	52	50	58.3
36	88	92	60	78	78	56	68	64	54	61	48	50	51	33	20	47.4
37	88	75	60	73	60	45	61	40	25	49	10	24	27	0	20	40.6
38	73	50	55	56	57	39	34	36	30	17	57	9	15	33	6	26.4
39	51	57	55	49	35	29	32	31	18	17	29	12	10	25	3	20.9
40	56	35	17	32	38	11	22	33	0	15	33	3	5	0	5	18.5
Postrainy/Post-pluvieuse (18.2 mm)																
41	27	27	13	20	25	6	7	33	3	7	33	3	5	50	3	11.0
42	17	14	9	10	0	3	5	0	3	5	0	0	5	0	0	7.2

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Konséguéla (991.5 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (34.6 mm)																
17	32	57	20	23	40	6	14	0	11	9	0	10	9	0	10	9.7
18	32	29	33	14	0	21	9	0	20	9	0	20	9	0	10	11.5
19	32	29	53	18	50	22	18	0	17	18	0	17	9	0	5	13.4
Rainy/Pluvieuse (925.7 mm)																
20	45	50	42	27	17	31	14	0	16	14	0	0	5	0	0	13.7
21	45	60	50	27	50	38	14	33	21	0	0	14	0	0	5	12.6
22	55	92	60	41	89	54	23	80	24	14	67	21	5	0	24	17.6
23	77	53	100	68	33	71	36	25	36	27	17	31	23	20	24	29.1
24	64	64	75	45	60	58	32	43	67	27	33	44	23	20	24	27.9
25	68	80	100	59	62	67	59	23	67	41	22	38	23	20	29	36.5
26	86	95	100	64	64	63	41	33	38	32	14	40	27	0	38	34.1
27	95	95	100	64	93	63	36	100	64	32	86	67	27	67	56	35.1
28	95	86	0	82	72	75	77	71	60	73	69	50	59	62	44	55.0
29	82	83	100	73	75	83	68	67	71	64	71	50	55	67	50	46.0
30	86	89	67	77	82	80	68	73	71	64	57	63	59	46	44	51.9
31	86	95	100	82	94	100	73	81	83	59	62	78	45	40	75	57.1
32	95	95	100	95	90	100	82	83	100	68	87	86	59	85	56	66.1
33	95	95	100	91	95	100	86	95	100	86	95	100	73	69	67	69.7
34	95	95	0	95	81	0	95	71	0	95	57	0	68	47	57	71.7
35	91	100	100	77	100	100	68	93	86	55	75	70	50	55	64	47.5
36	100	95	0	100	82	0	91	75	0	73	69	33	59	54	22	76.8
37	95	81	100	82	67	75	68	60	57	59	38	44	41	33	46	46.9
38	82	61	75	68	40	43	59	38	11	41	11	31	41	0	15	54.0
39	64	64	75	41	33	38	27	17	38	23	20	24	9	0	20	21.4
40	68	40	14	36	50	21	32	29	13	23	20	12	18	25	6	28.0
41	44	46	53	32	14	27	18	25	11	14	33	11	9	0	5	13.8
42	50	18	9	23	40	0	14	33	0	14	33	0	5	0	5	13.2
Postrainy/Post-pluvieuse (12.5 mm)																
43	14	67	11	9	50	15	5	0	10	5	0	10	5	0	10	5.1
44	18	0	11	18	0	0	9	0	0	9	0	0	9	0	0	7.4

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
 H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Koulouba (1000.7 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (49.5 mm)																
17	16	75	29	8	50	17	4	0	13	4	0	13	0	0	0	4.8
18	36	44	25	20	40	10	12	0	9	12	0	9	0	0	4	10.1
19	32	38	41	16	50	14	8	0	13	8	0	9	4	0	4	9.6
20	40	30	33	20	40	20	12	33	14	8	50	9	4	0	8	12.2
21	32	38	53	24	0	32	16	0	24	12	0	18	8	0	13	12.9
Rainy/Pluvieuse (899.9 mm)																
22	48	92	54	24	100	53	20	40	45	16	0	29	12	0	18	19.9
23	72	83	86	64	63	67	44	45	43	24	33	42	16	25	38	29.7
24	84	81	100	64	63	67	44	36	36	40	20	13	36	0	6	34.1
25	84	86	100	64	63	78	36	44	44	16	50	38	4	0	33	25.4
26	88	91	67	68	82	63	44	73	57	40	40	47	32	38	29	34.2
27	88	100	100	76	79	83	64	69	67	44	55	50	32	38	47	40.4
28	100	96	0	80	75	80	68	71	75	52	46	83	44	27	64	49.4
29	96	100	100	76	100	83	72	94	71	64	88	67	48	67	54	56.5
30	100	96	0	96	79	100	88	68	33	80	55	40	60	40	60	65.8
31	96	100	100	80	90	80	64	75	78	52	62	75	48	50	62	64.1
32	100	96	0	88	95	100	76	84	100	68	65	75	56	64	55	63.9
33	96	100	100	96	100	100	88	91	100	68	76	63	60	67	50	67.8
34	100	100	0	100	96	0	92	83	100	72	72	100	60	53	90	78.4
35	100	96	0	96	83	100	84	86	50	80	70	60	68	65	50	73.3
36	96	100	100	84	90	50	80	75	60	68	59	50	60	47	40	53.7
37	100	80	0	84	67	75	72	44	71	56	50	27	44	55	14	48.6
38	80	65	40	68	41	38	52	23	25	40	10	13	32	13	12	45.7
39	60	67	80	40	50	67	24	50	32	12	33	18	12	33	14	21.1
40	72	50	29	60	40	10	36	22	13	20	40	10	16	25	10	27.8
Postrainy/Post-pluvieuse (32.8 mm)																
41	43	36	14	28	29	6	16	25	10	16	0	10	12	0	5	16.1
42	24	33	11	12	33	5	12	0	0	8	0	0	4	0	0	7.3
43	16	25	14	8	50	9	0	0	4	0	0	4	0	0	4	3.9
44	16	0	10	12	0	5	4	0	0	4	0	0	4	0	0	5.6

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Koutiala (1000.1 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (54.9 mm)																
16	24	25	22	20	30	15	18	22	13	10	20	7	6	0	7	11.5
17	22	9	34	18	0	25	14	0	14	8	0	9	6	0	4	9.7
18	29	36	23	20	30	8	12	50	2	8	25	2	4	0	2	11.6
19	27	38	44	12	17	28	8	0	22	4	0	9	2	0	2	8.3
20	43	67	57	27	31	33	20	20	18	8	25	13	2	0	4	13.8
Rainy/Pluvieuse (901 mm)																
21	61	83	63	33	75	45	18	67	33	14	71	19	4	100	13	17.4
22	76	81	83	55	52	50	39	42	40	27	31	31	16	0	15	26.6
23	82	90	78	51	64	71	41	45	59	31	33	24	12	17	12	27.0
24	88	88	67	67	79	69	53	50	48	27	54	28	12	50	21	31.9
25	86	79	86	76	62	67	49	46	52	35	41	25	24	33	19	41.5
26	80	87	100	63	74	83	49	63	64	31	40	47	22	18	34	33.3
27	90	98	80	78	92	91	63	77	72	45	55	59	31	40	35	42.0
28	96	96	100	92	89	75	76	78	75	57	61	71	37	61	58	45.9
29	96	100	100	88	86	100	78	71	91	65	59	76	59	48	60	58.1
30	100	94	0	88	79	100	76	70	83	65	53	71	53	38	57	52.8
31	94	98	100	82	93	100	73	83	100	59	69	90	47	57	77	60.9
32	98	100	100	94	93	100	88	86	83	78	76	82	67	64	63	68.9
33	100	100	0	94	91	100	86	81	71	78	68	64	63	65	61	64.5
34	100	94	0	92	93	75	80	85	80	67	73	69	63	65	56	67.1
35	94	93	100	92	84	100	84	68	88	71	54	71	61	50	47	60.1
36	94	96	67	86	76	86	71	57	64	59	41	60	49	29	40	56.1
37	94	93	100	78	74	36	59	59	45	49	46	32	35	24	38	43.2
38	94	65	100	65	53	41	53	42	35	39	26	23	33	13	9	40.4
39	67	61	69	49	29	56	39	21	20	24	8	8	10	20	0	25.0
40	63	52	67	43	24	36	20	20	21	8	0	11	2	0	10	18.3
41	57	46	33	31	47	18	20	20	10	10	20	7	10	20	2	20.1
Postrainy/Post-pluvieuse (18.2 mm)																
42	41	5	24	27	8	8	12	0	5	8	0	2	4	0	2	12.3
43	16	0	12	8	0	9	4	0	4	2	0	0	2	0	0	5.9

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Mahoua (1001.9 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (43.2 mm)																
12	25	50	0	13	0	0	13	0	0	8	0	0	4	0	0	8.2
13	13	0	14	0	0	8	0	0	0	0	0	0	0	0	0	1.9
14	13	0	10	8	0	9	0	0	4	0	0	4	0	0	4	3.2
15	10	0	14	10	0	0	4	0	0	4	0	0	4	0	0	5.2
16	13	0	24	0	0	8	0	0	4	0	0	4	0	0	0	3.0
17	21	60	37	8	50	18	4	0	22	4	0	22	0	0	8	7.0
18	42	50	43	21	0	32	21	0	26	21	0	11	8	0	5	14.7
Rainy/Pluvieuse (916.4 mm)																
19	46	91	46	25	67	33	21	20	16	8	0	14	4	0	9	14.5
20	67	94	50	42	70	57	17	25	45	13	33	38	8	50	23	18.8
21	79	63	20	63	47	33	42	20	14	38	11	7	25	0	11	32.5
22	54	85	82	42	50	57	17	50	35	8	0	18	8	0	14	19.1
23	83	90	100	54	69	64	38	56	40	17	25	30	13	33	19	28.1
24	92	82	100	67	63	50	46	36	38	29	43	24	21	40	16	37.3
25	83	65	75	58	50	60	38	56	27	29	43	18	21	0	11	32.1
26	67	63	75	54	46	73	38	44	60	25	33	50	8	50	23	24.6
27	67	88	100	58	93	80	54	77	64	46	64	62	25	67	22	36.3
28	92	100	100	88	90	67	71	76	57	63	67	56	33	88	44	52.5
29	100	100	0	88	95	100	71	88	86	63	73	89	58	64	90	63.7
30	100	92	0	96	87	100	88	62	100	79	68	40	75	61	33	77.7
31	92	91	100	88	81	100	67	69	63	63	53	56	54	31	45	50.6
32	92	100	100	83	95	100	67	88	88	54	85	73	38	67	53	51.4
33	100	100	0	96	87	100	88	81	67	79	79	80	58	79	50	64.4
34	100	100	0	88	100	67	79	84	80	79	58	40	67	56	50	73.0
35	100	83	0	96	78	100	83	45	75	54	38	45	54	23	36	65.1
36	83	100	100	79	89	100	50	83	58	42	70	43	29	43	41	50.3
37	100	75	0	92	64	0	71	76	14	54	62	27	42	40	21	53.0
38	75	61	50	58	50	40	58	7	30	46	9	15	29	0	6	33.9
39	58	57	80	46	27	62	17	0	30	13	0	19	4	0	9	17.4
40	67	31	0	46	9	0	25	17	0	17	0	5	8	0	5	20.1
Postrainy/Post-pluvieuse (32.1 mm)																
41	21	40	21	4	0	17	4	0	9	4	0	4	4	0	4	6.8
42	25	17	22	17	25	15	8	0	0	4	0	0	4	0	0	9.8
43	21	0	11	17	0	10	0	0	8	0	0	4	0	0	4	5.4
44	10	0	18	10	0	14	10	0	9	4	0	4	4	0	0	5.1
45	17	0	0	13	0	0	8	0	0	4	0	0	0	0	0	5.0

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Mandjakuy (770.7 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (39.5 mm)																
17	18	50	33	14	67	21	0	0	18	0	0	9	0	0	9	4.9
18	36	25	21	27	33	13	18	0	0	9	0	0	9	0	0	13.0
19	23	40	41	18	25	28	0	0	18	0	0	18	0	0	9	6.4
20	41	33	54	27	0	19	18	0	6	18	0	0	9	0	0	15.2
Rainy/Pluvieuse (697.3 mm)																
21	45	50	58	14	33	26	5	100	14	0	0	9	0	0	9	10.7
22	55	50	50	27	17	31	18	0	17	9	0	5	9	0	0	16.1
23	50	82	91	27	83	44	14	67	32	5	0	19	0	0	18	15.2
24	86	53	100	55	42	60	36	50	36	18	25	22	18	0	17	28.4
25	59	85	56	50	73	27	41	56	15	23	60	18	14	33	16	24.0
26	73	81	67	50	64	64	32	43	33	27	33	13	18	50	11	27.4
27	77	100	40	64	86	63	36	88	71	18	100	56	18	50	44	26.6
28	86	95	67	77	71	80	77	53	80	64	50	63	45	40	33	46.4
29	91	90	50	73	88	67	59	77	67	55	58	50	36	75	43	47.4
30	86	84	67	82	78	75	73	63	83	55	33	70	55	33	50	52.0
31	82	94	100	77	94	100	68	67	100	50	64	55	41	44	31	50.3
32	95	95	100	95	81	100	77	71	80	59	77	56	36	63	50	55.0
33	95	100	100	82	94	75	73	94	67	68	80	43	55	67	30	58.0
34	100	86	0	91	75	100	86	68	100	68	53	86	50	45	45	55.3
35	86	84	67	77	82	40	73	75	33	64	50	38	45	40	17	51.4
36	82	89	100	73	81	100	64	57	88	45	50	58	27	50	38	43.1
37	91	70	100	86	42	33	68	27	29	55	17	20	41	0	0	43.3
38	73	38	67	41	22	31	27	33	13	18	25	6	0	0	5	19.5
39	45	60	42	27	33	13	18	0	6	9	0	0	5	0	0	15.4
40	50	27	9	18	25	11	5	0	5	0	0	5	0	0	0	11.8
Postrainy/Post-pluvieuse (14.1 mm)																
41	18	50	17	14	33	11	5	100	5	5	0	5	0	0	5	6.1
42	23	20	12	14	33	0	9	0	5	5	0	5	5	0	5	7.9

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Markala (628.8 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (25.6 mm)																
18	18	17	4	6	0	6	0	0	3	0	0	3	0	0	3	3.8
19	11	0	9	6	0	9	3	0	6	3	0	0	3	0	0	2.9
20	10	0	10	9	0	6	6	0	3	0	0	3	0	0	0	4.2
21	10	33	35	6	0	19	3	0	9	3	0	6	0	0	6	3.8
22	35	58	45	18	33	36	9	0	16	6	0	9	6	0	6	10.9
Rainy/Pluvieuse (556.1 mm)																
23	50	47	41	35	33	18	15	20	14	9	0	13	6	0	3	15.4
24	44	73	53	24	63	31	15	40	24	12	0	13	3	0	6	12.8
25	62	62	77	38	31	48	26	22	20	12	0	23	6	0	16	19.5
26	68	87	91	41	64	75	21	43	37	21	29	22	15	0	14	22.9
27	88	83	75	71	75	80	38	69	62	24	38	46	12	50	27	27.8
28	82	89	83	76	77	75	65	55	50	44	53	42	29	40	29	38.5
29	88	93	100	76	73	75	53	61	69	47	50	67	32	64	48	40.4
30	94	84	100	74	80	89	65	64	58	59	40	43	53	22	44	45.6
31	85	100	100	82	96	100	62	76	85	41	71	65	32	64	43	46.0
32	100	88	0	97	76	0	79	67	29	68	52	27	50	29	41	57.7
33	88	93	100	74	68	89	59	55	71	44	47	47	35	33	18	45.6
34	94	91	100	74	88	56	62	81	46	47	63	44	24	88	27	44.0
35	91	87	100	79	70	86	68	61	36	53	50	31	41	29	30	46.8
36	88	80	75	74	56	67	53	39	31	41	36	30	29	30	13	40.3
37	79	67	57	59	50	36	35	33	27	32	18	17	18	17	11	30.4
38	65	32	17	44	27	21	29	10	8	18	17	0	12	0	0	22.5
Postrainy/Post-pluvieuse (24.5 mm)																
39	26	56	24	24	13	15	9	0	10	3	0	6	0	0	6	8.6
40	32	36	13	15	0	10	9	0	6	6	0	0	6	0	0	10.0
41	21	0	15	9	0	10	6	0	6	0	0	6	0	0	3	5.9

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Ménaka (270.1 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (35.5 mm)																
23	18	22	17	8	25	6	2	0	2	0	0	0	0	0	0	5.0
24	18	56	12	8	0	9	2	0	4	0	0	2	0	0	2	5.2
25	20	40	22	8	0	13	4	0	6	2	0	2	2	0	2	7.6
26	25	31	37	12	0	13	6	0	8	2	0	4	2	0	4	7.7
27	35	61	45	12	17	27	8	0	15	4	0	2	4	0	2	9.9
Rainy/Pluvieuse (181.4 mm)																
28	51	50	56	25	23	45	14	0	23	2	0	16	2	0	8	13.9
29	53	59	58	39	40	35	20	30	24	16	0	16	8	0	11	20.6
30	59	60	71	37	58	56	25	54	45	14	29	30	10	0	24	20.2
31	65	76	72	57	59	55	47	42	37	29	20	28	22	9	10	32.1
32	75	74	54	57	55	45	39	45	23	25	38	18	10	0	17	25.8
33	69	74	63	51	38	48	31	38	37	24	25	28	16	38	23	26.7
34	71	44	47	43	32	34	37	32	19	27	21	3	25	0	3	27.0
35	45	26	46	33	18	29	24	8	13	8	0	11	2	0	4	15.1
Postrainy/Post-pluvieuse (36.6 mm)																
36	37	37	28	25	31	11	12	17	9	10	0	2	4	0	2	13.1
37	31	25	14	16	25	12	10	20	11	2	0	4	2	0	2	9.5
38	18	33	21	14	14	11	12	0	4	4	0	4	2	0	0	7.4
39	24	17	8	12	17	4	4	0	4	4	0	4	0	0	0	6.7

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Mopti (532.6 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (45.9 mm)																
21	17	56	44	6	33	22	4	50	14	2	0	8	0	0	4	5.6
22	46	42	46	23	17	28	15	0	14	8	0	6	4	0	2	13.8
23	44	30	48	25	15	31	12	0	11	6	0	6	2	0	6	12.8
24	40	43	48	27	29	21	10	20	9	6	33	6	6	33	6	13.7
Rainy/Pluvieuse (437.9 mm)																
25	46	58	50	23	50	30	10	0	21	8	0	13	8	0	8	14.8
26	54	64	63	35	44	44	19	20	26	12	17	9	8	25	6	17.8
27	63	79	84	44	70	79	25	62	51	10	40	34	8	25	23	21.2
28	81	79	80	75	69	38	54	57	38	35	44	21	23	33	15	35.1
29	79	93	82	62	75	75	48	52	52	29	27	32	19	20	26	32.1
30	90	87	100	75	82	85	52	74	60	31	44	56	25	38	36	36.3
31	88	85	83	83	65	78	67	49	53	52	44	44	37	32	39	43.1
32	85	86	88	67	74	65	50	65	54	44	61	45	37	37	42	44.8
33	87	80	100	71	65	73	60	48	48	52	22	44	40	14	32	41.3
34	83	93	100	67	86	71	48	60	59	33	47	40	25	31	18	41.7
35	94	67	100	81	50	50	60	42	38	42	36	27	21	36	20	38.4
36	69	69	69	50	62	50	40	24	29	31	0	22	23	0	10	30.2
37	69	69	75	56	38	43	27	43	18	15	0	9	8	0	4	21.7
38	71	41	53	40	24	29	25	15	8	8	25	2	4	50	0	19.3
Postrainy/Post-pluvieuse (27.6 mm)																
39	43	30	31	27	7	13	10	0	4	4	0	2	2	0	0	12.9
40	31	31	22	12	0	17	4	0	6	2	0	2	0	0	0	7.7
41	25	8	15	15	13	7	6	0	2	2	0	0	0	0	0	7.0

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Mourdiah (546.8 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (31.8 mm)																
22	21	40	37	8	0	18	4	0	11	4	0	9	4	0	4	7.8
23	38	39	40	17	50	23	10	20	12	8	0	7	4	0	2	11.3
24	40	53	48	27	15	34	13	33	17	6	33	11	2	0	6	12.8
Rainy/Pluvieuse (460.9 mm)																
25	50	71	58	29	29	38	19	11	23	13	17	14	6	0	7	17.2
26	65	74	71	35	47	42	21	40	29	15	57	17	6	0	11	20.3
27	73	83	77	44	52	63	31	20	42	23	18	30	10	0	28	28.2
28	81	95	100	58	71	75	35	41	65	27	38	49	25	42	33	31.5
29	96	89	100	73	77	62	56	52	43	46	36	27	35	18	23	41.6
30	90	91	100	73	74	100	48	52	76	31	20	45	21	20	18	36.4
31	92	91	75	81	82	67	65	74	82	38	67	53	19	33	46	38.3
32	90	88	80	79	82	80	77	76	64	58	71	35	44	52	30	47.8
33	88	83	100	81	69	56	73	57	38	56	59	24	40	47	17	53.6
34	85	88	100	67	72	81	52	68	74	44	57	30	29	29	15	43.8
35	90	77	60	75	53	50	71	47	36	42	25	29	19	22	21	37.2
36	75	64	67	52	24	43	44	24	33	27	15	9	21	10	3	29.4
37	65	58	53	33	25	34	29	21	15	10	20	12	4	50	4	18.8
38	56	48	38	31	33	27	17	25	10	13	17	10	6	33	7	16.9
Postrainy/Post-pluvieuse (26.7 mm)																
39	43	48	26	29	14	12	13	17	7	10	20	5	8	25	5	15.4
40	35	6	6	13	17	0	8	0	0	6	0	0	6	0	0	11.3

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Mpessoba (990.5 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (21.2 mm)																
17	16	67	38	5	100	22	5	100	17	5	100	11	5	100	0	5.2
18	42	63	36	26	40	21	21	0	13	16	0	0	5	0	0	16.0
Rainy/Pluvieuse (939.8 mm)																
19	47	44	50	26	20	29	11	0	12	0	0	11	0	0	5	10.9
20	47	44	40	26	20	43	11	0	12	11	0	12	5	0	0	15.0
21	44	63	36	37	29	17	11	50	12	11	50	12	0	0	16	13.5
22	47	89	90	21	100	47	16	0	19	16	0	6	16	0	6	15.9
23	89	88	100	58	64	88	16	33	56	5	0	28	5	0	22	22.2
24	89	94	100	74	64	60	53	60	56	26	40	50	21	25	7	38.9
25	95	94	100	63	58	71	58	45	50	47	33	30	11	0	18	33.8
26	95	89	100	63	67	100	47	67	60	32	17	62	16	0	38	32.0
27	89	94	50	79	73	50	63	50	57	47	44	30	32	17	23	45.8
28	89	88	100	68	85	67	53	70	56	37	57	42	21	50	40	35.3
29	89	94	100	79	87	100	63	67	100	47	78	60	42	63	64	49.8
30	95	100	100	89	100	100	79	80	100	68	62	83	63	42	43	62.8
31	100	100	0	100	95	0	84	94	100	68	77	83	42	50	73	59.1
32	100	100	0	95	94	100	95	89	0	79	80	75	63	67	86	68.3
33	100	100	0	95	100	100	84	94	100	79	93	75	74	71	80	71.4
34	100	95	0	100	84	0	95	72	100	89	65	50	74	50	80	82.7
35	95	89	100	84	81	100	74	86	80	63	75	71	58	82	38	62.2
36	89	100	100	84	94	100	84	75	67	74	57	80	63	50	29	60.6
37	100	89	0	95	78	100	74	50	80	63	42	86	42	38	45	50.8
38	89	59	50	79	40	25	58	45	13	58	9	0	42	13	0	52.9
39	58	55	63	37	29	33	32	17	23	5	0	6	5	0	6	17.5
40	58	45	75	32	67	54	21	25	27	5	0	17	5	0	0	19.0
41	58	9	13	58	0	0	26	0	0	16	0	0	0	0	0	19.4
Postrainy/Post-pluvieuse (11.2 mm)																
42	11	50	18	0	0	11	0	0	11	0	0	11	0	0	0	3.9
43	21	50	0	11	50	0	11	50	0	11	50	0	0	0	5	7.3

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Nara (498.4 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (35.9 mm)																
22	18	29	21	10	25	11	3	100	3	3	100	0	0	0	0	5.7
23	23	33	29	13	40	20	5	50	16	3	0	8	0	0	5	7.0
24	30	25	32	23	22	13	18	14	9	8	0	5	5	0	3	12.8
25	30	50	61	15	67	35	10	25	25	5	0	16	3	0	8	10.4
Rainy/Pluvieuse (429.9 mm)																
26	58	65	47	40	44	29	25	30	13	15	33	3	8	0	5	19.4
27	58	74	82	35	50	65	18	57	39	8	67	27	5	50	21	18.8
28	78	81	100	60	75	81	43	59	61	30	33	36	23	33	32	30.8
29	85	76	100	78	55	78	60	46	56	35	36	50	33	15	41	36.6
30	80	91	63	60	67	56	50	50	35	45	28	27	33	31	15	37.0
31	85	85	100	63	72	67	43	59	52	28	45	41	20	25	38	36.1
32	88	94	60	70	75	58	55	64	39	43	65	26	35	64	27	43.5
33	90	81	100	70	75	75	52	57	68	43	41	65	40	38	46	46.8
34	83	79	71	75	73	40	63	56	33	55	36	22	43	35	17	46.6
35	78	71	67	65	62	43	48	37	43	30	42	32	25	30	13	31.1
36	70	68	75	55	50	44	40	25	33	35	21	27	18	0	15	28.4
37	70	61	50	48	37	29	30	17	14	25	10	10	13	0	9	23.7
38	58	61	35	33	31	33	15	17	12	10	0	8	8	0	8	17.2
39	50	40	20	33	23	4	13	20	3	8	0	3	8	0	0	13.8
Postrainy/Post-pluvieuse (7.4 mm)																
40	30	17	11	10	0	6	5	0	3	3	0	0	0	0	0	7.4

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Niafouké (309.1 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (25.4 mm)																
24	17	0	15	9	0	7	9	0	2	0	0	2	0	0	0	5.2
25	13	33	22	6	0	7	2	0	0	2	0	0	0	0	0	4.4
26	23	9	42	6	0	16	0	0	9	0	0	6	0	0	2	5.2
27	34	44	58	15	43	40	9	0	33	6	0	23	2	0	13	10.6
Rainy/Pluvieuse (235.1 mm)																
28	53	68	59	40	42	43	30	21	18	21	10	14	13	0	5	20.7
29	64	53	65	43	45	48	19	33	34	13	0	17	4	0	7	19.9
30	57	67	60	47	68	40	34	56	29	15	43	20	6	0	16	20.7
31	64	60	71	53	48	55	38	22	38	23	9	25	15	0	15	25.2
32	64	73	88	51	58	48	32	53	31	21	50	32	13	67	24	23.7
33	79	76	80	53	48	50	38	39	24	36	24	20	30	14	9	34.3
34	77	61	64	49	35	50	30	14	33	21	10	19	11	0	10	25.5
35	62	62	50	43	45	52	28	38	29	17	38	18	9	0	12	21.2
36	57	56	65	49	30	46	32	13	25	21	20	8	11	20	5	22.3
37	60	46	32	38	28	28	21	10	16	11	0	12	6	0	5	21.6
Postrainy/Post-pluvieuse (27.5 mm)																
38	40	42	32	28	15	12	15	29	5	11	20	2	4	0	0	13.7
39	36	12	20	13	17	7	9	0	0	4	0	0	0	0	0	9.4
40	17	13	3	9	0	5	0	0	0	0	0	0	0	0	0	4.3

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Niéna (1164 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (51.3 mm)																
15	29	43	6	13	0	5	8	0	5	4	0	0	4	0	0	7.9
16	17	25	35	4	0	22	4	0	9	0	0	4	0	0	4	3.7
17	33	50	56	21	20	47	8	50	32	4	0	17	4	0	4	11.1
18	54	23	36	42	20	21	33	0	6	17	0	0	4	0	0	19.7
19	29	57	71	21	60	32	4	0	30	0	0	8	0	0	4	9.0
Rainy/Pluvieuse (1076.9 mm)																
20	67	69	88	38	67	60	29	29	53	8	0	32	4	0	22	18.6
21	75	89	50	63	80	22	46	45	31	29	29	35	21	20	21	32.6
22	79	84	80	58	79	60	38	78	33	33	63	25	21	40	21	32.0
23	83	85	75	71	71	86	50	58	42	38	22	40	25	0	39	34.8
24	83	90	100	75	67	100	50	42	58	33	38	38	29	29	29	40.1
25	92	91	100	75	83	33	50	67	33	38	56	20	29	43	24	37.6
26	92	95	100	71	94	29	50	67	42	33	63	44	29	43	41	35.7
27	96	83	100	75	56	83	54	69	55	50	75	25	42	40	14	44.7
28	83	100	75	63	93	89	63	93	67	50	67	50	25	67	44	44.3
29	96	91	0	92	86	50	83	70	75	58	71	50	50	67	50	53.4
30	88	95	100	83	90	100	71	82	86	63	73	78	58	71	70	56.1
31	96	96	100	92	77	100	83	70	100	75	61	67	71	41	57	74.8
32	96	87	100	79	79	100	75	67	100	63	40	78	46	36	46	63.1
33	88	86	100	83	85	75	75	83	83	54	85	82	42	90	79	59.7
34	88	100	100	83	100	100	83	90	100	83	80	100	83	70	50	91.9
35	100	92	0	100	79	0	92	68	50	83	60	25	67	56	50	70.4
36	92	86	50	79	79	60	67	75	63	54	54	45	54	38	45	61.3
37	83	85	75	75	78	50	71	47	57	50	50	42	42	20	43	50.6
38	83	90	50	71	59	57	50	50	50	46	45	38	33	38	19	36.1
39	83	85	75	58	86	40	50	50	42	42	40	43	25	33	28	36.5
40	83	60	0	67	31	25	46	27	8	42	20	7	29	29	0	38.8
41	50	75	17	29	43	35	17	50	35	13	33	29	8	50	9	20.0
42	46	55	38	38	33	13	38	11	0	29	0	0	13	0	0	21.2
43	46	82	15	21	40	26	4	100	17	0	0	4	0	0	0	9.9
44	46	18	8	29	0	0	21	0	0	4	0	0	0	0	0	12.6
Postrainy/Post-pluvieuse (0.0 mm)																

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.

H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Niéénébalé (879.8 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (48.5 mm)																
17	22	0	29	13	0	10	7	0	7	2	0	0	2	0	0	7.0
18	22	40	23	9	0	20	7	0	12	0	0	9	0	0	7	5.8
19	27	25	30	18	25	16	11	20	13	9	25	5	7	0	0	11.9
20	29	38	34	18	25	24	13	33	18	7	33	10	0	0	11	9.7
21	36	38	48	24	45	29	20	33	17	11	20	15	11	20	8	14.2
Rainy/Pluvieuse (788.5 mm)																
22	44	65	60	33	53	53	20	44	39	16	29	26	9	0	15	18.8
23	62	82	59	53	67	57	40	33	48	27	25	24	13	0	23	26.6
24	73	79	67	62	36	71	42	11	54	24	18	29	20	22	14	30.7
25	76	88	55	49	73	52	36	63	34	27	50	24	16	14	18	26.4
26	80	94	89	62	82	76	44	65	64	31	43	45	18	25	38	32.1
27	93	93	67	80	75	89	64	66	50	44	45	40	36	44	21	43.7
28	91	90	100	78	69	90	60	59	83	42	53	54	29	62	41	39.3
29	91	98	100	73	88	100	69	77	79	53	58	62	47	43	46	47.2
30	98	98	100	91	83	100	78	80	60	60	59	61	44	45	52	50.4
31	98	100	100	84	100	100	76	79	100	60	81	83	49	55	65	59.8
32	100	93	0	100	87	0	84	74	86	82	65	88	60	52	72	66.1
33	93	90	100	87	85	83	76	76	73	69	74	36	60	67	28	69.7
34	91	95	75	84	92	86	76	71	91	62	68	65	51	57	55	57.8
35	93	98	100	91	90	100	76	82	82	67	70	67	56	56	50	59.6
36	98	91	100	91	73	75	82	51	63	69	35	50	53	29	14	58.3
37	91	80	50	73	64	42	53	33	48	40	17	22	22	10	14	36.7
38	78	66	40	58	50	26	40	22	26	20	22	19	13	17	15	29.2
39	60	48	44	40	39	22	24	27	9	20	0	6	16	0	3	22.9
40	47	43	33	29	23	16	13	0	13	4	0	9	2	0	5	13.2
Postrainy/Post-pluvieuse (30.4 mm)																
41	38	18	36	18	13	16	11	20	10	9	25	5	4	0	2	12.5
42	29	38	9	16	29	5	11	0	3	7	0	2	2	0	0	8.9
43	18	25	14	9	25	5	2	100	0	2	0	0	0	0	0	6.0
44	16	0	3	7	0	0	2	0	0	0	0	0	0	0	0	3.1

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.

H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Niono (572.4 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (26.5 mm)																
18	16	0	14	8	0	9	8	0	4	8	0	4	4	0	4	6.2
19	12	0	14	8	0	0	4	0	0	4	0	0	4	0	0	5.0
20	12	0	32	0	0	8	0	0	4	0	0	0	0	0	0	2.7
21	28	0	22	8	0	13	4	0	4	0	0	0	0	0	0	5.7
22	16	50	52	12	33	18	4	0	8	0	0	8	0	0	8	6.9
Rainy/Pluvieuse (506.5 mm)																
23	52	38	67	20	20	40	8	0	17	8	0	13	8	0	9	14.6
24	52	62	17	36	56	25	16	0	19	12	0	18	8	0	9	16.6
25	40	30	60	36	22	31	16	0	24	16	0	19	8	0	9	16.8
26	48	75	62	28	29	50	20	0	40	16	0	29	8	0	13	16.9
27	68	59	88	44	36	43	32	50	29	24	33	21	12	67	18	24.0
28	68	82	100	40	50	67	36	22	56	24	33	21	24	17	16	29.4
29	88	77	100	60	73	70	44	55	64	24	50	58	16	25	48	30.2
30	80	80	100	72	78	43	60	73	30	56	43	36	44	27	29	46.8
31	84	95	50	68	82	75	56	79	45	40	70	33	28	86	28	43.5
32	88	100	100	80	95	60	64	88	56	48	33	69	44	27	50	52.6
33	100	92	0	88	82	33	76	68	33	52	31	58	40	40	33	51.2
34	92	91	100	76	79	67	60	67	40	44	64	29	36	33	25	44.2
35	92	65	100	76	53	67	56	36	36	44	36	21	28	14	17	37.9
36	68	76	88	56	43	64	36	22	31	28	14	22	16	25	5	31.4
37	80	75	60	52	62	50	28	43	44	20	20	25	8	0	9	25.2
38	72	39	0	56	29	18	44	0	14	24	0	11	8	0	9	25.1
Postrainy/Post-pluvieuse (22.7 mm)																
39	28	14	22	24	17	5	8	0	4	8	0	0	8	0	0	11.9
40	20	20	20	8	50	4	4	0	0	0	0	0	0	0	0	6.1
41	20	20	5	8	0	4	0	0	4	0	0	4	0	0	0	4.7

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Nioro du Sahel (635.3 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (16.4 mm)																
22	22	31	24	10	17	17	9	20	6	5	33	2	2	100	2	7.4
23	26	33	49	17	20	27	7	0	11	3	0	7	3	0	2	9.0
Rainy/Pluvieuse (555.5 mm)																
24	45	54	47	26	40	30	10	33	21	7	0	15	2	0	9	13.7
25	50	72	45	33	42	33	22	31	24	14	13	20	9	0	11	18.9
26	59	68	67	36	57	43	26	47	37	19	27	30	10	0	15	22.0
27	67	85	95	48	68	73	40	48	49	29	29	27	14	50	12	28.6
28	88	80	86	71	51	76	48	54	47	28	50	31	17	50	21	34.4
29	81	85	91	59	65	67	50	59	62	36	52	46	26	60	30	37.5
30	86	84	88	66	71	80	60	54	78	48	36	57	38	27	47	45.5
31	84	88	78	74	67	80	64	51	67	47	48	39	40	39	26	51.2
32	86	88	88	71	80	59	57	70	60	43	60	52	31	50	40	50.0
33	88	78	100	74	70	80	66	63	70	55	69	50	43	52	42	55.8
34	81	87	91	72	69	56	66	50	50	60	37	30	47	30	13	58.4
35	88	82	100	66	74	60	50	55	48	34	50	37	21	42	22	44.0
36	84	69	89	69	52	67	52	40	32	41	29	21	26	20	21	39.7
37	72	69	44	57	52	40	36	43	30	24	21	18	21	25	7	32.5
38	62	42	41	47	37	23	34	40	13	19	36	9	10	67	4	23.6
Postrainy/Post-pluvieuse (34.9 mm)																
39	41	42	38	29	29	22	22	15	4	14	25	0	10	17	0	17.0
40	40	30	20	24	21	5	7	25	7	3	0	7	2	0	4	10.2
41	24	0	18	9	0	8	9	0	4	7	0	2	3	0	2	7.7

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Nyamina (696.1 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (30.2 mm)																
18	17	43	9	10	25	5	7	33	3	2	0	3	2	0	0	5.4
19	15	17	9	7	0	3	5	0	0	2	0	0	0	0	0	4.4
20	10	25	24	2	0	10	0	0	2	0	0	2	0	0	2	3.4
21	24	50	32	10	25	19	2	0	15	2	0	5	2	0	0	6.2
22	37	80	46	20	63	39	15	50	23	5	0	18	0	0	12	10.9
Rainy/Pluvieuse (614.8 mm)																
23	59	75	47	44	61	26	27	27	27	17	14	21	12	0	8	22.1
24	63	69	47	41	35	50	27	27	30	20	13	18	7	0	11	21.0
25	61	76	69	44	61	48	29	42	34	17	0	24	10	0	14	21.6
26	73	83	82	54	64	58	37	40	46	20	25	33	12	20	22	24.7
27	83	91	71	61	76	63	44	67	52	32	31	36	22	44	31	31.7
28	88	94	80	71	90	67	59	79	53	34	50	59	34	43	33	37.7
29	93	95	100	83	88	100	68	64	69	56	39	61	37	20	38	46.5
30	95	87	100	90	70	75	66	56	64	49	55	52	32	31	46	51.6
31	88	94	100	71	79	92	59	63	76	54	50	68	41	47	42	43.6
32	95	95	100	83	82	100	68	71	85	59	63	59	44	56	48	61.1
33	95	97	100	85	86	50	76	81	50	61	60	44	51	48	30	55.6
34	98	95	100	80	88	100	73	70	73	54	64	37	39	50	36	47.6
35	95	87	100	90	78	75	71	62	33	51	38	45	41	35	38	48.1
36	88	81	100	78	66	89	54	45	47	41	24	29	37	20	12	46.2
37	83	62	71	71	41	50	46	37	18	27	45	7	15	33	9	33.2
38	63	42	40	44	33	17	27	27	13	17	14	9	12	0	6	22.6
Postrainy/Post-pluvieuse (32.2 mm)																
39	41	41	42	24	30	13	17	14	9	10	25	3	5	0	3	14.3
40	41	18	21	17	14	12	10	0	8	5	0	8	2	0	5	11.6
41	20	13	9	12	0	6	7	0	3	7	0	3	5	0	0	6.3

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Quatagouna (317.7 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pre-pluvieuse (37 mm)																
23	23	40	35	18	25	17	5	0	10	0	0	5	0	0	5	6.7
24	36	38	14	18	0	11	9	0	10	5	0	5	5	0	5	9.9
25	23	40	41	9	0	35	9	0	25	5	0	0	5	0	0	8.0
26	41	67	31	32	29	20	23	0	18	0	0	14	0	0	9	12.4
Rainy/Pluvieuse (208.7 mm)																
27	45	50	42	23	40	18	14	33	11	14	33	11	9	0	10	15.7
28	45	70	67	23	40	41	14	0	21	14	0	21	9	0	15	14.2
29	68	60	57	41	33	46	18	25	28	18	25	17	14	0	11	21.2
30	59	77	67	41	89	46	27	67	38	18	25	28	9	0	20	21.0
31	73	56	83	64	36	25	45	40	8	27	17	6	18	0	6	28.2
32	64	64	75	32	43	53	23	60	29	9	50	35	5	0	29	18.7
33	68	73	71	50	55	55	36	38	29	36	38	21	27	33	25	33.5
34	73	75	50	55	50	30	32	29	13	27	33	13	27	33	13	33.6
35	68	47	14	41	33	23	18	25	17	18	25	11	18	25	6	22.5
Postrainy/Post-pluvieuse (50 mm)																
36	36	13	57	27	17	44	18	25	22	14	33	21	9	0	5	18.5
37	41	44	0	36	25	0	23	20	6	23	0	6	5	0	5	16.3
38	18	25	28	9	0	15	9	0	10	5	0	0	5	0	0	7.4
39	27	33	0	14	0	5	9	0	5	0	0	0	0	0	0	7.8

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Ouélessébougou (1076 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (48.6 mm)																
13	17	50	5	17	50	5	0	0	13	0	0	9	0	0	9	4.9
14	13	0	15	13	0	10	13	0	5	9	0	5	9	0	5	6.9
15	13	0	15	9	0	5	4	0	0	4	0	0	4	0	0	4.8
16	13	0	20	4	0	14	0	0	9	0	0	9	0	0	4	4.1
17	17	75	37	13	100	20	9	50	19	9	50	19	4	0	14	7.6
18	43	50	46	30	43	13	22	40	6	22	20	6	13	33	5	20.3
Rainy/Pluvieuse (983.7 mm)																
19	48	73	67	22	40	28	13	33	15	9	0	10	9	0	0	17.6
20	70	75	57	30	71	44	17	25	26	9	50	19	0	0	13	17.1
21	70	88	86	52	50	45	26	33	41	22	20	22	13	0	15	24.4
22	87	70	100	48	64	67	39	44	57	22	20	39	13	0	25	30.0
23	74	76	67	65	73	75	52	75	55	35	38	47	22	0	33	30.0
24	74	88	100	74	71	83	65	53	88	43	10	54	26	0	18	36.6
25	91	95	50	74	76	67	65	60	75	35	38	53	13	33	35	34.9
26	91	90	50	74	71	83	65	53	63	48	45	42	35	38	27	43.3
27	87	90	100	74	82	83	57	38	80	43	20	54	30	14	38	38.8
28	91	100	100	83	95	50	57	69	70	39	67	64	30	57	56	41.8
29	100	100	0	87	100	100	70	88	100	65	40	100	57	46	60	59.9
30	100	100	0	100	96	0	91	90	50	61	57	78	52	58	64	57.4
31	100	96	0	96	86	100	87	75	100	65	73	75	61	57	56	56.5
32	96	100	100	87	100	67	78	89	40	74	71	50	57	46	50	65.0
33	100	100	0	96	95	100	78	89	80	65	73	75	48	82	50	63.4
34	100	96	0	96	95	100	87	95	67	74	82	50	65	67	50	67.8
35	96	95	100	96	95	100	91	86	100	74	76	83	61	71	44	64.7
36	96	91	100	96	86	100	87	65	67	78	50	40	61	21	22	62.9
37	91	90	100	87	70	67	65	53	50	48	45	42	22	20	50	43.9
38	91	76	50	70	63	43	52	42	64	43	20	38	43	0	15	46.4
39	74	71	50	57	69	50	52	58	36	30	29	50	9	0	38	28.3
40	65	67	50	61	43	33	48	0	33	43	0	15	35	0	7	35.9
41	61	64	11	39	44	7	17	25	5	9	50	0	4	100	0	17.1
Postrainy/Post-pluvieuse (34.1 mm)																
42	43	20	23	22	20	11	9	50	10	4	100	5	4	100	0	12.6
43	22	20	17	13	0	15	13	0	15	9	0	10	4	0	9	7.9
44	17	0	21	13	0	15	13	0	5	9	0	5	9	0	0	7.8
45	17	25	5	13	33	5	4	100	0	4	0	0	0	0	0	5.8

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

San (750.2 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (43.3 mm)																
16	16	0	10	7	0	6	3	0	4	0	0	2	0	0	2	4.0
17	10	40	30	5	0	22	3	0	11	2	0	4	2	0	4	5.2
18	31	22	18	21	8	7	10	0	2	3	0	0	3	0	0	9.1
19	19	27	28	7	0	13	2	0	4	0	0	2	0	0	2	5.0
20	28	44	33	12	29	22	3	50	13	2	0	7	2	0	5	8.1
21	36	62	59	22	38	33	14	50	18	7	50	13	5	33	9	12.0
Rainy/Pluvieuse (678.5 mm)																
22	60	63	48	34	50	34	22	23	27	16	11	12	10	17	12	20.6
23	57	70	72	40	57	46	26	27	30	12	0	24	12	0	16	20.6
24	71	68	71	50	48	52	29	41	37	21	33	22	14	13	12	25.2
25	69	70	72	50	45	59	38	32	33	24	14	16	12	14	8	24.7
26	71	85	88	52	70	79	33	32	49	16	44	24	9	20	19	24.8
27	86	90	88	74	74	67	43	56	52	28	25	40	19	9	34	34.2
28	90	88	100	72	67	94	53	45	78	36	29	57	29	18	34	42.7
29	90	92	83	74	81	80	60	71	57	47	56	42	29	41	39	41.7
30	91	94	100	81	89	82	66	68	75	48	46	63	40	39	51	45.1
31	95	98	100	88	92	100	71	83	82	55	66	62	47	44	45	50.2
32	98	95	100	93	85	100	83	73	80	64	65	52	45	58	44	58.2
33	95	98	67	86	82	75	74	70	80	60	57	65	50	48	62	53.9
34	97	95	100	81	87	91	72	67	75	60	51	65	55	41	54	55.8
35	95	87	67	88	75	71	69	60	56	57	36	52	47	37	35	52.4
36	86	92	88	74	65	73	59	56	38	43	32	27	36	24	27	38.4
37	91	68	60	67	41	53	48	36	30	29	29	20	26	13	12	37.8
38	67	46	42	45	31	25	33	21	10	22	0	7	12	0	4	24.5
39	45	54	56	28	31	21	14	13	8	5	33	4	3	50	0	14.5
40	55	25	12	24	14	7	9	20	8	5	0	5	2	0	5	13.2
Postrainy/Post-pluvieuse (10.7 mm)																
41	19	18	15	9	20	4	9	0	0	5	0	0	5	0	0	7.0
42	16	22	10	5	0	7	0	0	3	0	0	0	0	0	0	3.7

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Saraféré (290.6 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (27.4 mm)																
24	20	43	11	9	0	13	3	0	9	0	0	3	0	0	0	5.4
25	17	17	17	11	0	13	9	0	9	3	0	3	0	0	3	6.5
26	17	33	31	11	25	13	9	0	6	3	0	0	3	0	0	6.6
27	31	73	58	14	40	50	6	0	21	0	0	11	0	0	0	8.8
Rainy/Pluvieuse (220.3 mm)																
28	63	68	62	49	35	44	20	29	29	11	25	23	0	0	17	18.8
29	66	65	67	40	43	38	29	20	20	23	13	11	17	17	7	21.7
30	66	78	75	40	64	62	20	43	43	11	0	16	9	0	6	22.7
31	77	63	100	63	50	62	43	7	50	14	0	30	6	0	21	24.2
32	71	72	60	54	58	44	31	45	33	26	33	23	20	29	21	28.8
33	69	67	100	51	28	65	37	31	27	26	22	23	23	13	19	28.1
34	77	48	75	46	44	37	29	10	28	23	0	26	17	0	10	28.8
35	54	53	38	40	21	19	23	13	19	20	14	4	9	0	0	19.7
36	46	63	37	20	57	32	17	17	21	6	0	9	0	0	0	12.6
37	49	24	56	37	0	41	20	0	21	9	0	13	0	0	0	15.0
Postrainy/Post-pluvieuse (26.9 mm)																
38	40	21	14	26	22	12	17	33	7	11	0	6	0	0	3	12.9
39	17	0	24	14	0	13	11	0	3	6	0	3	3	0	0	8.1
40	20	14	7	11	0	6	3	0	6	3	0	3	0	0	0	5.9

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Satadougou (1336.5 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (28.1 mm)																
20	31	60	27	25	50	17	13	0	14	13	0	7	6	0	7	14.9
21	38	67	90	25	25	50	13	50	21	6	100	20	6	100	20	13.2
Rainy/Pluvieuse (1282.9 mm)																
22	81	85	67	44	71	56	25	75	42	25	25	25	25	0	17	26.1
23	81	100	100	63	100	100	50	63	88	25	0	50	13	0	21	30.3
24	100	100	0	100	81	0	75	83	50	38	50	80	19	33	62	44.4
25	100	94	0	81	92	100	75	75	50	69	73	40	56	44	57	49.1
26	94	87	100	94	80	100	69	73	80	63	70	67	50	63	38	56.3
27	88	100	100	81	92	100	75	92	75	69	82	80	50	63	88	53.5
28	100	100	0	94	87	100	88	79	100	81	69	100	75	42	50	60.2
29	100	100	0	88	100	100	81	92	100	75	83	75	44	71	78	65.6
30	100	94	0	100	94	0	94	80	100	81	85	67	75	75	50	70.6
31	94	100	100	94	100	100	81	92	100	81	92	100	69	91	60	87.3
32	100	100	0	100	100	0	94	100	100	94	93	100	81	69	67	105.9
33	100	100	0	100	100	0	100	88	0	94	87	100	69	73	80	98.7
34	100	100	0	100	94	0	88	93	50	88	79	50	75	75	50	72.0
35	100	100	0	94	93	100	88	93	100	75	83	75	69	82	80	67.2
36	100	100	0	94	93	0	94	93	0	81	92	67	81	92	33	81.7
37	100	94	0	88	100	50	88	86	50	88	71	0	81	69	0	85.4
38	94	100	100	94	93	100	81	85	100	63	60	83	56	33	86	60.0
39	100	88	0	94	73	100	88	57	50	69	36	60	56	33	29	59.7
40	88	57	50	75	50	0	56	22	29	44	14	22	31	20	18	45.3
41	56	33	71	38	33	30	25	25	8	19	0	0	19	0	0	21.2
42	50	63	13	31	60	18	13	50	21	0	0	19	0	0	6	14.8
43	44	50	50	31	40	27	25	0	17	19	0	0	6	0	0	15.0
44	50	13	0	31	0	9	13	0	0	0	0	0	0	0	0	12.3
Postrainy/Post-pluvieuse (0 mm)																

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Ségou (705.8 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (24.5 mm)																
18	18	0	19	10	0	9	8	0	4	4	0	2	2	0	2	6.4
19	16	25	21	8	0	9	4	0	4	2	0	4	2	0	2	5.6
20	22	9	18	8	0	9	4	0	6	4	0	2	2	0	0	6.9
21	16	25	49	8	25	23	6	33	19	2	0	8	0	0	4	5.6
Rainy/Pluvieuse (637 mm)																
22	45	65	46	24	58	36	20	50	20	8	25	11	4	0	8	13.2
23	55	64	57	41	43	37	25	23	24	12	33	16	8	25	13	18.0
24	61	48	75	39	25	39	24	17	23	18	11	14	14	0	11	21.7
25	59	57	76	33	35	50	22	18	43	14	0	30	10	0	15	18.2
26	65	73	83	45	70	57	37	47	53	25	38	29	14	43	16	25.1
27	76	87	92	63	75	74	51	73	48	31	63	40	20	40	34	30.9
28	88	93	100	75	76	85	61	52	75	47	50	48	35	33	36	41.9
29	94	98	100	78	88	64	61	84	65	49	64	62	35	50	45	43.6
30	98	94	100	82	88	89	76	79	67	63	50	68	47	38	56	51.9
31	94	98	100	88	93	100	76	87	75	57	69	64	47	54	52	49.2
32	98	92	100	94	81	100	84	74	75	67	62	59	53	44	50	57.6
33	92	96	100	82	93	89	75	76	85	61	71	65	47	58	52	52.6
34	96	96	100	92	91	75	78	73	64	69	51	56	55	50	35	54.5
35	96	88	50	90	76	60	71	69	40	53	56	38	43	50	17	50.5
36	86	77	86	75	47	77	61	35	50	47	25	33	31	31	20	41.1
37	78	63	55	55	39	39	41	29	23	29	13	17	24	0	15	31.5
38	61	48	40	39	15	35	25	15	16	16	13	12	12	0	7	20.7
39	45	43	32	27	29	16	16	13	9	12	0	2	6	0	2	14.8
Postrainy/Post-pluvieuse (22.8 mm)																
40	37	32	13	20	30	7	10	0	4	2	0	4	2	0	4	10.5
41	20	30	17	12	17	7	4	50	2	4	50	2	4	50	0	6.9
42	20	10	10	8	25	6	4	0	4	4	0	2	2	0	0	5.3

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Ségué (622.4 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (42.7 mm)																
17	17	0	25	0	0	10	0	0	7	0	0	3	0	0	3	3.6
18	21	0	13	10	0	12	7	0	7	3	0	0	3	0	0	6.5
19	14	67	23	10	33	12	7	50	7	0	0	10	0	0	3	3.8
20	28	0	33	14	0	12	10	0	4	10	0	0	3	0	0	9.8
21	24	29	41	10	0	27	3	0	11	0	0	7	0	0	3	6.2
22	38	45	56	24	29	32	10	0	15	7	0	7	3	0	4	12.7
Rainy/Pluvieuse (527.7 mm)																
23	52	47	64	31	11	35	14	0	20	7	0	4	3	0	4	15.0
24	55	69	77	28	38	48	17	0	33	3	0	18	3	0	11	15.9
25	72	71	75	45	15	38	28	13	19	17	20	0	10	0	0	23.6
26	72	76	75	28	63	43	17	60	29	3	0	29	0	0	17	16.0
27	76	95	86	48	64	80	34	40	58	28	25	48	17	0	29	27.6
28	93	93	100	72	86	88	52	67	43	41	58	35	24	71	18	35.6
29	93	89	100	86	76	50	55	81	46	45	54	25	31	44	15	40.7
30	90	92	100	72	76	63	66	79	60	38	55	50	24	71	45	39.1
31	93	100	100	72	71	88	72	52	75	52	47	50	52	33	43	48.4
32	100	79	0	76	73	57	59	65	75	48	50	47	38	45	28	40.0
33	79	96	50	69	85	22	69	75	22	48	71	27	34	60	32	42.4
34	86	84	100	66	68	90	59	47	75	48	43	60	41	33	47	47.4
35	86	72	100	76	59	86	59	35	42	52	27	36	41	25	24	45.9
36	76	73	86	66	47	70	38	27	56	31	22	40	24	14	23	36.1
37	76	68	43	55	69	31	45	31	31	34	20	26	21	17	9	31.4
38	62	39	55	52	27	21	31	22	5	24	0	5	10	0	4	22.6
Postrainy/Post-pluvieuse (36.4 mm)																
39	43	38	25	24	29	9	10	33	4	3	0	0	3	0	0	12.1
40	31	44	10	14	25	4	7	50	0	0	0	0	0	0	0	8.4
41	21	33	43	7	0	19	3	0	7	0	0	7	0	0	0	5.9
42	41	25	6	17	20	8	7	0	7	7	0	4	0	0	0	9.9

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.

H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Sikasso (1305.6 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (52.9 mm)																
13	16	33	26	9	20	14	4	0	9	4	0	6	4	0	2	6.2
14	27	33	29	14	25	17	9	0	12	5	0	6	2	0	4	8.2
15	30	18	49	18	10	24	11	17	14	5	0	9	4	0	6	10.2
16	39	27	50	21	33	27	14	25	19	9	20	10	5	0	8	13.1
17	41	52	58	29	31	28	20	27	16	11	0	12	7	0	6	15.1
Rainy/Pluvieuse (1225.3 mm)																
18	55	65	48	29	56	33	18	30	26	11	17	14	5	33	9	16.9
19	57	72	63	39	45	47	27	20	32	14	0	21	11	0	8	21.0
20	68	74	67	46	62	63	29	56	45	18	30	28	7	25	23	22.7
21	71	80	69	63	51	57	48	37	38	29	19	33	23	23	14	34.6
22	77	81	92	54	70	62	38	57	57	29	38	38	16	22	28	28.9
23	84	91	89	66	78	63	57	63	71	38	62	40	27	40	27	35.0
24	91	86	80	73	80	80	66	65	68	48	44	55	30	35	33	38.4
25	86	94	88	80	71	73	66	62	58	50	43	54	34	21	41	41.8
26	93	90	100	71	75	81	61	62	64	48	44	52	34	37	49	44.1
27	91	98	80	77	88	77	63	74	62	48	59	52	45	52	42	43.8
28	96	96	100	86	88	88	70	82	82	55	81	72	46	77	63	55.8
29	96	98	100	88	92	100	82	87	100	77	81	85	70	67	76	69.4
30	98	98	100	93	94	75	89	80	83	82	67	70	70	62	59	68.8
31	98	96	100	93	96	75	80	91	91	68	71	83	61	53	68	70.0
32	96	100	100	95	96	100	91	94	100	75	90	93	59	70	83	75.4
33	100	100	0	96	96	100	95	89	100	91	80	80	75	74	50	80.4
34	100	100	0	96	98	100	89	94	100	80	87	82	68	74	56	76.8
35	100	98	0	98	95	100	95	91	67	86	69	88	68	63	61	85.3
36	98	95	100	95	83	67	89	78	67	71	63	50	63	51	48	64.6
37	95	98	100	82	85	80	77	65	69	59	64	43	50	43	39	53.5
38	98	82	100	84	68	78	66	59	53	55	29	40	41	17	24	55.5
39	82	80	80	70	74	47	57	50	50	34	37	35	21	17	25	35.2
40	80	71	45	66	54	32	50	43	25	36	25	14	23	15	12	34.8
41	66	65	68	46	38	47	34	32	32	18	10	22	13	14	10	23.6
42	66	32	37	43	13	9	32	11	5	20	0	4	11	0	4	22.5
43	44	63	41	11	33	24	7	25	13	4	50	9	4	50	7	11.9
44	48	7	17	25	0	7	14	0	2	11	0	0	9	0	0	14.7
Postrainy/Post-pluvieuse (0 mm)																
W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.																
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.																

Sirakoro (1061.1 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (23.7 mm)																
18	28	29	17	16	0	5	8	0	0	4	0	0	0	0	0	7.0
19	20	20	45	4	0	13	0	0	8	0	0	8	0	0	4	6.0
20	40	60	53	12	33	32	8	0	13	8	0	9	4	0	0	10.8
Rainy/Pluvieuse (1003.6 mm)																
21	56	71	73	32	38	65	12	33	32	8	0	13	0	0	0	16.2
22	72	83	86	56	71	73	32	88	41	12	100	32	0	0	16	22.3
23	84	81	75	72	72	43	56	50	18	40	20	20	16	25	14	33.6
24	80	85	100	64	69	67	36	44	56	20	40	25	16	25	10	27.9
25	88	100	100	68	82	75	52	54	67	28	57	33	12	0	32	32.2
26	100	80	0	80	65	80	60	40	40	40	20	20	28	14	11	39.9
27	80	90	80	68	71	75	40	70	67	20	60	50	12	100	41	34.9
28	88	95	33	72	100	57	68	88	63	52	54	58	48	42	62	47.5
29	88	100	67	88	100	67	80	100	60	56	100	82	52	85	75	60.7
30	96	100	0	96	96	0	92	87	50	92	65	50	80	65	40	76.8
31	96	100	0	92	100	0	84	90	50	64	88	67	60	80	70	66.8
32	96	100	100	92	96	100	84	95	100	80	85	80	76	79	67	73.0
33	100	100	0	96	96	100	96	96	100	84	81	100	76	84	67	80.8
34	100	100	0	96	92	100	96	92	100	84	81	75	80	70	60	82.6
35	100	96	0	92	96	50	92	96	0	80	95	60	68	82	38	75.4
36	96	96	100	92	91	50	88	64	33	88	45	33	68	24	50	65.0
37	96	92	100	88	68	67	60	53	50	44	45	50	32	50	35	45.6
38	92	96	50	68	82	50	52	54	25	48	50	15	40	10	13	41.8
39	92	74	100	72	56	29	40	50	33	32	38	29	12	33	18	29.7
40	76	58	33	48	67	23	40	40	13	32	25	6	20	0	15	29.2
41	52	46	42	44	18	14	24	33	0	12	0	9	12	0	9	21.7
Postrainy/Post-pluvieuse (11.6 mm)																
42	43	27	0	16	25	5	8	0	4	8	0	0	8	0	0	11.6

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Sofara (568.2 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (27 mm)																
21	17	29	46	10	0	21	0	0	5	0	0	2	0	0	2	5.6
22	43	33	42	19	13	24	5	0	10	2	0	2	2	0	2	10.8
23	38	56	69	21	11	45	10	0	29	2	0	15	2	0	7	10.6
Rainy/Pluvieuse (495.4 mm)																
24	64	56	47	38	38	23	26	18	16	14	33	14	7	0	8	18.9
25	52	64	75	29	42	60	17	14	34	17	0	9	7	0	5	17.4
26	69	62	77	55	57	63	31	54	28	7	67	23	5	50	15	21.3
27	67	86	71	60	52	59	36	40	30	26	27	26	17	14	23	28.7
28	81	91	88	55	70	58	33	71	32	26	27	29	21	11	18	29.9
29	90	84	100	64	67	67	45	42	52	29	33	30	17	14	23	32.7
30	86	89	100	67	79	43	48	65	41	31	54	24	21	33	24	33.6
31	90	89	100	67	79	71	52	55	55	33	36	46	26	27	35	36.7
32	90	95	100	76	91	90	55	87	74	43	61	63	33	43	39	40.4
33	95	90	100	90	82	75	81	59	75	62	50	63	40	41	48	52.6
34	90	82	75	81	68	75	62	58	56	55	43	37	45	37	17	59.3
35	81	71	63	69	62	54	57	33	44	40	29	32	26	27	23	35.4
36	69	72	92	60	36	71	38	19	27	31	8	24	24	10	6	31.3
37	79	55	44	50	33	33	24	20	16	19	13	15	7	0	10	22.7
38	52	55	50	33	21	29	17	14	20	14	0	8	10	0	8	17.9
39	52	45	15	26	27	10	19	13	6	7	33	3	7	0	3	16.6
Postrainy/Post-pluvieuse (22.1 mm)																
40	31	23	21	14	0	11	7	0	5	5	0	3	2	0	0	9.3
41	21	33	24	10	0	11	5	0	3	2	0	0	0	0	0	6.9
42	26	18	6	10	0	5	2	0	5	0	0	0	0	0	0	5.9

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Sokolo (497.4 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (49.9 mm)																
22	17	83	17	11	50	19	8	33	9	3	0	6	0	0	0	6.0
23	28	50	27	22	25	14	11	25	6	6	50	3	0	0	3	10.0
24	33	42	33	17	33	30	8	33	15	6	0	9	3	0	0	9.5
25	36	31	43	31	27	32	17	17	17	8	0	3	0	0	0	12.2
26	39	64	73	31	55	48	17	50	33	3	0	11	0	0	8	12.1
Rainy/Pluvieuse (412.5 mm)																
27	69	76	82	50	56	61	36	46	35	11	25	34	8	0	18	23.0
28	78	79	75	58	62	73	39	50	50	33	33	42	17	17	27	30.1
29	78	75	88	67	63	75	50	56	56	39	43	50	25	33	41	40.3
30	78	82	88	67	71	58	56	50	50	47	41	47	39	21	32	38.6
31	83	87	83	67	83	83	50	61	78	44	38	50	28	30	42	39.4
32	86	90	100	83	80	50	69	80	45	44	56	50	39	43	41	50.9
33	92	79	67	75	63	56	69	48	36	53	37	24	42	7	29	45.4
34	78	79	75	61	77	57	44	44	60	31	27	36	19	29	28	32.8
35	78	75	75	69	64	45	53	53	29	33	50	21	28	40	19	39.2
36	75	56	56	58	48	33	42	27	33	31	18	16	25	11	11	35.0
37	56	50	50	42	47	29	31	27	16	17	33	3	11	25	3	21.0
38	50	28	17	36	23	4	19	29	3	8	0	3	6	0	3	16.7
Postrainy/Post-pluvieuse (14.4 mm)																
39	22	50	18	11	25	16	8	0	6	3	0	0	3	0	0	7.6
40	25	11	11	17	17	0	6	0	0	0	0	0	0	0	0	6.9

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Soninkoura (691.2 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (38.4 mm)																
18	32	0	24	16	0	10	8	0	4	4	0	4	0	0	0	8.1
19	16	25	29	8	50	13	4	0	4	4	0	0	0	0	0	4.8
20	28	14	28	16	0	19	4	0	13	0	0	0	0	0	0	7.2
21	24	33	32	16	0	19	12	0	14	0	0	8	0	0	4	7.9
22	32	50	53	16	25	38	12	33	23	8	0	9	4	0	8	10.5
Rainy/Pluvieuse (602.6 mm)																
23	52	46	50	36	33	38	24	17	32	8	50	17	8	50	13	16.0
24	48	67	92	36	44	50	28	14	39	20	0	30	16	0	19	19.9
25	80	60	80	48	17	46	32	13	29	24	17	26	16	0	24	26.6
26	64	63	44	32	50	47	24	33	37	24	33	16	20	20	10	21.5
27	56	79	82	48	67	62	36	44	44	20	60	25	12	33	18	23.0
28	80	100	100	64	88	89	44	64	64	32	50	53	20	40	35	34.2
29	100	84	0	88	82	33	64	63	44	52	46	50	36	44	31	50.1
30	84	90	100	76	84	100	56	71	82	48	50	69	36	44	50	45.8
31	92	87	100	88	77	100	76	74	83	60	53	80	48	25	62	55.1
32	88	100	100	80	95	100	76	89	100	64	81	67	44	55	64	46.7
33	100	96	0	96	88	100	92	78	0	76	53	67	60	60	10	59.8
34	96	96	100	88	95	100	72	94	71	56	64	55	40	60	40	48.8
35	96	96	100	96	67	100	88	68	67	60	73	30	48	67	8	52.6
36	96	67	100	68	41	75	68	35	50	56	36	27	36	44	19	44.3
37	68	65	63	52	46	50	40	30	47	32	25	41	28	14	28	30.0
38	64	25	78	48	17	38	40	20	20	36	22	6	24	17	5	28.1
Postrainy/Post-pluvieuse (38.6 mm)																
39	43	36	29	28	0	17	20	0	0	12	0	0	8	0	0	14.4
40	32	13	29	12	0	9	0	0	4	0	0	4	0	0	4	7.1
41	24	17	16	8	0	9	4	0	0	4	0	0	4	0	0	7.9
42	16	25	19	8	0	13	0	0	8	0	0	0	0	0	0	3.5
43	20	20	5	12	33	0	8	50	0	0	0	0	0	0	0	5.7

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Sotuba (1014.3 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (40.6 mm)																
17	24	71	36	14	25	16	10	33	4	7	0	4	3	0	4	9.3
18	45	31	25	17	20	17	7	0	7	3	0	0	3	0	0	10.5
19	28	13	52	17	20	29	7	0	19	0	0	7	0	0	3	8.0
20	41	33	53	28	25	33	17	20	17	7	50	7	3	100	7	12.8
Rainy/Pluvieuse (913.7 mm)																
21	45	54	56	31	44	35	17	20	25	10	0	19	10	0	19	15.9
22	55	88	69	38	55	61	24	29	36	17	20	33	17	20	17	20.6
23	79	83	67	59	59	50	34	40	42	31	22	35	17	20	33	29.2
24	79	83	100	55	69	62	41	42	41	31	33	35	31	22	20	34.3
25	86	88	75	66	58	70	41	42	47	34	30	47	21	0	30	29.6
26	86	100	100	62	78	73	45	69	50	41	58	41	24	57	36	33.1
27	100	83	0	76	82	71	59	59	75	48	50	47	41	33	41	46.9
28	83	100	100	79	91	100	66	84	80	48	79	80	38	82	61	45.9
29	100	100	0	93	93	100	83	96	80	79	83	67	69	70	44	68.5
30	100	97	0	93	74	100	93	67	50	79	61	50	62	50	45	64.3
31	97	100	100	76	86	86	66	79	90	59	71	75	48	57	53	59.6
32	100	100	0	86	92	100	83	83	100	72	76	88	55	63	77	65.0
33	100	90	0	93	89	100	86	76	75	79	65	83	69	50	56	68.0
34	90	100	100	90	96	67	76	95	86	69	65	67	52	53	50	67.9
35	100	97	0	93	89	100	93	74	100	66	68	60	52	67	50	65.3
36	97	93	100	90	88	100	76	73	71	66	63	60	59	41	58	62.0
37	93	81	100	90	62	100	72	48	50	62	44	27	48	43	20	52.7
38	83	75	20	66	42	40	48	36	33	38	18	17	31	0	10	41.0
39	66	68	50	41	50	47	34	30	42	17	20	21	7	0	11	20.6
40	62	44	36	48	29	20	38	36	11	21	33	13	10	33	12	23.1
Postrainy/Post-pluvieuse (40.6 mm)																
41	41	25	35	24	14	23	21	0	22	17	0	21	14	0	12	16.3
42	31	11	15	21	0	4	17	0	4	17	0	4	10	0	4	12.1
43	14	50	16	3	100	7	3	0	4	3	0	0	3	0	0	7.3
44	21	17	4	10	0	4	3	0	0	0	0	0	0	0	0	4.9

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.

H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Tessalit (78.8 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (48.8 mm)																
30	21	14	15	9	33	7	6	0	3	0	0	0	0	0	0	6.1
31	15	40	25	9	0	10	3	0	6	0	0	0	0	0	0	5.9
32	27	11	33	9	0	17	6	0	10	0	0	3	0	0	3	6.9
33	27	33	42	15	20	11	9	0	3	3	0	0	3	0	0	9.2
34	39	31	5	12	50	7	3	100	3	0	0	3	0	0	3	9.6
35	15	20	18	12	0	3	6	0	0	3	0	0	3	0	0	6.9
36	18	17	7	3	0	6	0	0	3	0	0	0	0	0	0	4.1

Rainy/Pluvieuse (0 mm)

Postrainy/Post-pluvieuse (0 mm)

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Tilembéya (570.2 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (36.3 mm)																
21	20	25	31	0	0	20	0	0	10	0	0	5	0	0	5	3.6
22	30	67	43	20	50	13	10	0	0	5	0	0	5	0	0	10.1
23	50	30	50	20	25	31	0	0	20	0	0	5	0	0	0	9.4
24	40	75	75	30	50	64	20	50	19	5	0	21	0	0	10	13.2
Rainy/Pluvieuse (496.3 mm)																
25	75	60	60	60	67	50	25	40	33	20	25	19	10	0	6	25.2
26	60	92	88	60	58	50	35	43	46	20	50	31	5	0	11	23.3
27	90	94	100	55	82	78	45	67	36	35	29	31	10	50	0	31.9
28	95	84	100	80	69	75	50	70	60	30	33	43	5	100	21	30.0
29	85	100	67	70	79	83	65	54	71	40	38	67	25	40	53	36.9
30	95	95	100	80	81	75	60	58	50	55	55	11	50	30	10	45.2
31	95	84	100	80	75	100	55	64	78	35	29	77	20	0	63	39.5
32	85	100	100	80	81	75	70	64	83	60	50	88	50	40	60	51.1
33	100	80	0	80	75	50	70	64	67	65	62	71	50	30	50	52.5
34	80	88	50	70	86	67	65	54	43	65	38	29	40	25	17	53.8
35	80	56	75	80	38	50	50	30	40	35	14	38	20	0	38	38.1
36	60	58	88	40	38	75	35	29	38	30	17	21	30	17	14	27.7
37	70	57	50	60	25	25	35	29	23	20	50	0	15	0	6	24.8
38	55	0	33	25	0	20	25	0	0	10	0	0	5	0	0	16.2
Postrainy/Post-pluvieuse (19.1 mm)																
39	15	67	18	15	67	12	0	0	15	0	0	10	0	0	0	6.0
40	25	40	7	20	25	6	15	0	0	10	0	0	0	0	0	9.1
41	15	0	6	10	0	0	0	0	0	0	0	0	0	0	0	4.0

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Tombouctou (192.1 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (13.7 mm)																
26	22	25	17	11	25	9	0	0	8	0	0	3	0	0	3	6.1
27	19	43	47	11	25	27	8	33	12	3	0	6	3	0	0	7.5
Rainy/Pluvieuse (146.3 mm)																
28	46	59	40	27	40	26	14	20	13	5	0	11	0	0	8	12.8
29	49	33	63	30	9	27	14	0	16	11	0	3	8	0	3	15.6
30	49	72	53	22	50	52	14	20	41	3	0	17	3	0	11	13.7
31	62	52	86	51	32	61	38	7	26	16	0	10	11	0	3	22.9
32	65	46	46	46	24	45	19	14	17	8	0	15	3	0	8	18.8
33	46	65	50	35	46	42	16	0	29	14	0	22	8	0	12	15.8
34	57	48	38	43	13	29	24	22	18	19	14	10	11	0	6	20.0
35	44	50	48	22	13	21	19	14	10	11	0	0	5	0	0	15.3
36	49	17	37	19	14	10	11	0	0	0	0	0	0	0	0	11.5
Postrainy/Post-pluvieuse (6.4 mm)																
37	27	20	11	11	25	3	0	0	0	0	0	0	0	0	0	6.4

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Toukoto (881 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse	(32.9 mm)															
19	20	0	29	11	0	13	2	0	5	2	0	0	2	0	0	5.9
20	23	20	24	11	0	18	5	0	7	0	0	5	0	0	0	5.8
21	23	30	44	16	29	24	7	0	20	5	0	7	0	0	7	7.5
22	41	72	69	25	36	55	18	25	28	7	0	20	7	0	12	13.7
Rainy/Pluvieuse	(813.8 mm)															
23	70	68	62	50	45	41	27	33	34	18	38	17	11	20	15	24.8
24	66	86	80	43	74	56	34	73	45	20	67	20	16	43	11	23.8
25	84	78	86	64	64	63	55	42	40	30	38	19	16	43	14	32.0
26	80	94	89	64	68	81	41	44	65	25	45	45	18	13	28	31.5
27	93	98	67	73	81	83	57	68	74	45	50	58	25	36	33	37.4
28	95	90	50	82	83	75	70	77	77	55	58	70	34	60	55	41.9
29	89	90	100	82	78	100	77	68	90	64	54	63	57	48	47	54.0
30	91	98	100	82	89	75	73	81	42	57	68	47	48	57	48	50.2
31	98	98	100	86	89	83	70	81	77	59	65	61	52	57	52	61.5
32	98	95	100	89	87	100	80	77	67	64	64	56	55	58	50	57.5
33	95	95	100	89	87	80	75	85	64	61	81	47	55	67	45	60.5
34	95	95	100	86	89	83	80	86	89	68	70	71	57	56	47	62.2
35	95	95	100	89	85	100	86	79	50	70	65	54	52	43	67	62.5
36	95	93	100	86	71	100	75	45	82	61	37	65	55	21	40	61.5
37	93	88	67	75	73	91	55	42	65	48	29	52	30	23	48	40.6
38	86	68	50	77	50	60	52	17	67	41	17	38	41	11	31	43.7
39	66	55	53	52	48	33	41	28	23	30	15	16	23	10	12	28.3
40	55	50	50	41	28	27	25	36	24	16	43	19	11	40	8	21.2
41	50	32	41	27	17	22	27	8	19	23	0	6	11	0	5	18.5
Postrainy/Post-pluvieuse	(18 mm)															
42	36	44	4	20	22	11	16	29	3	5	0	7	5	0	5	11.0
43	18	25	11	14	0	8	7	0	7	7	0	7	5	0	5	7.0

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.

H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

Yélimané (569.9 mm)

Week/ Semaine	>10 mm			>20 mm			>30 mm			>40 mm			>50 mm			Mean/ Moyenne (mm)
	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	W H	W+W H+H	W+D H+S	
Prerainy/Pré-pluvieuse (14.6 mm)																
22	21	56	21	7	0	20	7	0	10	0	0	2	0	0	2	5.8
23	28	75	32	19	38	26	9	25	21	2	0	5	2	0	5	8.8
Rainy/Pluvieuse (515.7 mm)																
24	44	53	63	28	33	19	21	33	18	5	0	15	5	0	12	15.1
25	58	60	61	23	40	30	21	22	12	14	33	5	12	20	0	18.1
26	60	69	59	33	57	52	14	50	43	9	25	38	2	0	24	17.5
27	65	86	87	53	65	85	44	53	54	37	50	30	23	40	24	29.2
28	86	84	83	74	66	64	53	61	45	37	44	37	28	33	19	39.7
29	84	86	71	65	79	60	53	52	55	40	53	38	23	50	27	35.1
30	84	83	86	72	74	83	53	65	60	44	47	58	33	29	41	43.1
31	84	86	71	77	70	70	63	67	56	53	39	45	37	31	26	41.4
32	84	94	71	70	77	77	63	70	50	42	56	44	28	42	42	36.4
33	91	85	100	77	67	80	63	52	63	49	43	50	42	33	44	46.2
34	86	89	67	70	87	77	56	75	47	47	55	39	40	35	23	41.2
35	86	81	100	84	75	86	63	52	56	47	35	43	28	25	35	42.3
36	84	78	86	77	55	70	53	39	50	40	24	38	33	29	14	40.0
37	79	76	56	58	40	61	44	26	33	33	7	24	19	13	11	29.8
38	72	39	75	49	19	45	30	8	17	19	0	11	12	0	8	24.7
39	49	33	36	33	7	21	14	0	5	9	0	0	7	0	0	16.1
Postrainy/Post-pluvieuse (23.7 mm)																
40	35	27	7	16	29	3	5	100	2	0	0	5	0	0	2	8.7
41	14	17	27	7	0	15	7	0	3	5	0	0	2	0	0	5.4
42	26	18	16	14	0	5	2	0	2	0	0	0	0	0	0	5.7
43	16	0	6	5	0	2	2	0	2	0	0	0	0	0	0	3.9

W = Wet; W+W = Wet followed by wet; and W+D = Wet followed by dry.
H = Humide; H+H = Humide suivi par humide; H+S = Humide suivi par sec.

**APPENDIX V - Computer Program
Used for Constant
Probability Analysis**

**APPENDICE V - Programme informatique
utilisé pour l'analyse
de la probabilité
constante**

Computer program used for constant probability analysis /

Programme informatique utilisé pour l'analyse de la probabilité constante

```
10 !INCOMPLETE GAMMA
11 !THIS PROGRAM WILL WORK ON WEEKLY DATA FILE
12 !IF YOU HAVE DAILY DATA THEN CONVERT IT IN TO WEEKLY FILE'
15 PRINT' ***** GAMMA DISTRIBUTION *****'\ PRINT
16 PRINT' IF YOU HAVE DAILY RAINFALL THEN CONVERT IT IN TO'
17 PRINT' WEEKLY RAINFALL'
18 PRINT' USING STDWK PROGRAM AND THEN OPERATE THIS PROGRAM'
19 INPUT' DO YOU HAVE WEEKLY RAINFALL FILE(type YES or NO)';S8$
20 IF S8$="NO" THEN GOTO 32767
21 DIM #1%,P(200%,52%) ! MAXIMUM 200 YEARS AND 52 WEEKS INPUT DATA
22 DIM R8(103%,14%), DD$(53),AB(8), R1(103%,14%)
26 DIM R(14,53),P2(53),I1%(70),A(53),A1(53),G(53),R2(53),R3(53)
27 DIM L1(53),S6(14%),S7(14%),ZZ(6),PP(14)
30 DIM P90(50%),P75(50%),P50(50%),P25(50%),P10(50%),MN(50%), G1$(32%)
35 G1$(1%)=" 1      JAN   1-JAN 28      1-4      "
36 G1$(2%)=" 2      JAN 29-FEB 25      5-8      "
37 G1$(3%)=" 3      FEB 26-MAR 25      9-12     "
38 G1$(4%)=" 4      MAR 26-APR 22      13-16    "
39 G1$(5%)=" 5      APR 23-MAY 20      17-20    "
40 G1$(6%)=" 6      MAY 21-JUN 17      21-24    "
41 G1$(7%)=" 7      JUN 18-JUL 15      25-28    "
42 G1$(8%)=" 8      JUL 16-AUG 12      29-32    "
43 G1$(9%)=" 9      AUG 13-SEP  9      33-36    "
44 G1$(10%)="10     SEP 10-OCT  7      37-40    "
45 G1$(11%)="11     OCT  8-NOV  4      41-44    "
46 G1$(12%)="12     NOV  5-DEC  2      45-48    "
47 G1$(13%)="13     DEC  3-DEC 31      49-52    "
48 G1$(14%)="      ANNUAL                      "
50 G2$="  "
51 G3$="-----"
52 G3$=G3$+"-----"
53 DATA 13
54 DATA 5. , 10., 20.,25.,30.,40.,50.,60.,70.,75.,80.,90.,95.
55 DATA 1.64485,1.28155,.84162,.67448,.53440,.25300
56 DATA -.577191652,.988205891,-.897056937,.918206857,-.756704073
57 DATA .482189394,-.193527818,.035868343
60 READ N1%
61 FOR I% =1% TO N1%\ READ PP(I%)\ NEXT I%
62 N5%=N1%/2%\READ ZZ(I) FOR I = 1% TO N5%
63 MAT READ AB
80 ONERROR GOTO 30000
84 INPUT'ENTER THE FILE NAME';M$
85 OPEN M$ FOR INPUT AS FILE 1%,VIRTUAL
90 INPUT' ENTER THE OUTPUT FILE NAME ';O9$
95 OPEN O9$ FOR OUTPUT AS FILE 6%,RECORDSIZE 132%
100 INPUT' ENTER THE STATION NAME';S9$
110 A$=" ####"
120 PRINT
```

```

135 G9=1
139 INPUT ' ENTER NO. OF YEARS OF DATA';NN
140 FOR UI%=1 TO NN
142 FOR UJ%=1 TO 13
143 R1(UI%,UJ%)=0
145 FOR UK%=1 TO 4
150 UL%=(UJ%-1%)*4+UK%
160 R1(UI%,UJ%)=R1(UI%,UJ%)+P(UI%,UL%)
161 NEXT UK% \ NEXT UJ% \ NEXT UI%
165 FOR G8=1 TO G9
190 N4%=NN\R8(103%,14%)=0. ! PREALLOCATE TEMPORARY FILE
191 PRINT N4%
200 FOR I%=1% TO N4% \ FOR J%=1% TO 13% \ R8(I%,J%)=R1(I%,J%)
201 NEXT J% \ NEXT I%
211 IF G8>1 THEN 290
262 PRINT N1%
290 N6%=1 \ L7%,N3%,N2%=13 \ L8%,W1%=1 \ N2%=N2%/W1% \ L%=N2%+1%
400 MAT P2=ZER \ MAT R=ZER \ Y=N4% \ L9%=2
440 IF L9%=1% THEN L7=0.1 ELSE L7=1.0
450 I% = INSTR(1%,F$,'.DAT')\ IF I% <>0 THEN 480
460 IF L9%=1% THEN L7=0.1 ELSE L7=1.0
470 PRINT #6%, ' PRECIPITATION FOR GIVEN PROBABILITIES ' ;
471 PRINT #6%, ' USING A GAMMA DISTRIBUTION (mm)' \ PRINT #6%,
478 PRINT #6%, ' STATION: ' ;S9$
480 FOR M% = 1% TO N4%
490 IF W1%=1% THEN Y%=1% \ GOTO 520
500 Y%=0\FOR I1% = 1% TO N2%\W=0\FOR I2% = 1% TO W1%
510 Y%=Y%+1%\W=W+R8(M%,Y%)\NEXT I2%\R8(M%,I1%)=W\nEXT I1%
520 S1=0.\ FOR J% = 1% TO N2% \ E9=R8(M%,J%) \ P2(J%)=P2(J%)+E9
530 S1=S1+E9\nEXT J%
540 R8(M%,L%) =S1\ P2(L%)= P2(L%) +S1
550 NEXT M%
560 P2(J%) = P2(J%)/Y FOR J% = 1% TO L%
590 X%=N1%+1%
720 FOR J%=1% TO L%
730 DD$(J%)=' ' \ A(J%)=P2(J%)+L7
740 R9=R8(1%,J%)
750 S2 =(R9 - A(J%))*(R9 - A(J%))\A2=LOG(R9+L7)
760 FOR I% = 2% TO N4%
770 R9=R8(I%,J%)
780 S2=S2+(R9 - A(J%))*(R9 - A(J%))\A2=A2+LOG(R9+L7)
790 NEXT I%\ A3=LOG(P2(J%)+L7)
800 A3=A3 - A2/Y
810 IF A3=0 THEN A3=0.1*L7
820 P5=1./(4*A3)*(1+SQR(1+4*A3/3))\L1(J%) =P5
830 IF(A(J%) =0) THEN A(J%)=L7
840 A1(J%)=P5/A(J%)\P6=P5 -1
850 T9= SQR(S2/(Y -1))
852 S6(J%)=T9
853 S7(J%)=S6(J%)/A(J%)*100
854 IF J%<6 THEN 860

```



```

855 IF J%>8 THEN 860
856 GOTO 1120
860 IF P5 >= 85 THEN 1120
870 GOSUB 1400
880 G(J%)=H
890 G(J%)=LOG(G(J%))\ GOTO 920
900 GOTO 1160
910 G(J%)=2.302585*G(J%)
920 G6=G(J%)
930 FOR I7% = 1% TO N1%\ T2=0\T3=.0001\T5=.0004\X0=P6
940 IF P5<1 THEN 960
950 IF X0<= 0 THEN 970 ELSE 980
960 X0=.0001\GOTO 980
970 X0=.01
980 Z1=2\T2=T2+1\T1=X0/(P6+Z1)\S=T1+1
990 FOR L=1 TO 100
1000 Z1=Z1+1\T1=(T1*X0)/(P6+Z1)\S=S+T1
1010 IF T1 <= T3 THEN 1030
1020 NEXT L
1030 D6=PP(I7%)/100\IF D6 <0 THEN 1100
1040 R7=X0\IF X0 > 86 THEN 1120
1050 R7=EXP(G6 -(P6*LOG(R7)))
1060 X1=X0 -(X0/P5)*S+(D6*R7*EXP(X0))
1070 D7=X1 - X0\X0=X1
1080 IF X0 < 0 THEN 1100 ELSE IF X0=0 THEN 1110
1090 IF ABS(D7)<=T5 THEN 1110
1091 IF T2<=100 THEN 980
1100 X1=0
1110 R3(I7%)=X1/A1(J%)\NEXT I7%\GOTO 1160
1120 FOR I = 1 TO N5%\F1=T9*ZZ(I)\R3(I)=A(J%)- F1
1121 R3(X% - I)=A(J%)+F1\IF R3(I) < 0 THEN R3(I) =0
1130 IF R3(X%+1%) <0 THEN R3(X%+1%)=0
1140 NEXT I
1150 R3(N5%+1)=P2(J%)\DD$(J%)=' '
1160 FOR I = 1 TO N1%\R(I,J%)=R3(I)\NEXT I\NEXT J%
1200 FOR J%=1 TO L%
1201 MN(J%)=P2(J%)
1202 P90(J%)=R(2,J%) \ P75(J%)=R(4,J%) \ P50(J%)=R(7,J%)
1203 P25(J%)=R(10,J%)\ P10(J%)=R(12,J%)
1210 NEXT J%
1300 GOSUB 1800
1390 GOTO 1565
1400 C=.43429482\IF ABS(P5) <33 GOTO 1420
1410 H=(P5 -.5)*C*LOG(ABS(P5))- C*P5+.39908995+C*LOG(1+1/(12*P5))
1411 H=H+1/(288*P5*P5)-138/(51840*P5*P5*P5)\GOTO 910
1420 F1=1\F2=P5 -1\ IF F2<0 GOTO 1450
1430 IF F2 <1 GOTO 1480 ELSE F1=F1*F2
1440 F2=F2 -1\ GOTO 1430
1450 F2=F2+1\F1=F1*F2
1460 IF F2<0 GOTO 1450 ELSE IF F2=0 GOTO 900
1470 F1=1/F1

```

```

1480 H=0\ J9=9 \ FOR I = 1 TO 8\ J9=J9 -2\M=I+J9\ H=(H+AB(M))*F2\NEXT I
1490 H=(1+H)*F1\RETURN
1565 NEXT G8
1566 PRINT #6%,CHR$(12%) \ CLOSE 1%,2%,3%,6% \ GOTO 32767
1800 ! SUBROUTINE FOR TABLE PRINTTING
1805 PRINT #6%, G3$
1810 PRINT #6%, 'S          FOUR WEEK          STD          ' ;
1811 PRINT #6%, 'PROBABILTY LEVELS (PERCENT)          MEAN '
1820 PRINT #6%, 'NO.          PERIOD          WEEK ' ;
1821 PRINT #6%, '-----' ; (mm) '
1830 PRINT #6%, '          NO.          90          ' ;
1831 PRINT #6%, '75          50          25          10 '          "
1900 G4$="
2005 L1$='#### '
2009 PRINT #6%, G3$
2010 FOR H8%=1 TO 14
2020 IF MN(H8%)>=5 THEN 2100 ELSE 2300
2100 PRINT #6%, G1$(H8%);
2105 PRINT #6% USING L1$,P90(H8%);
2110 PRINT #6%, G2$;
2115 PRINT #6% USING L1$,P75(H8%);
2120 PRINT #6%, G2$;
2125 PRINT #6% USING L1$,P50(H8%);
2130 PRINT #6%, G2$;
2135 PRINT #6% USING L1$,P25(H8%);
2140 PRINT #6%, G2$;
2145 PRINT #6% USING L1$,P10(H8%);
2148 PRINT #6%, G2$;
2150 PRINT #6% USING L1$,MN(H8%)
2200 GOTO 2450
2300 PRINT #6%, G1$(H8%);
2400 PRINT #6%, G4$
2450 IF H8%>12 THEN GOTO 2455 ELSE 2458
2455 PRINT #6%, G3$ \ GOTO 2460
2458 PRINT #6%
2460 NEXT H8%
2480 RETURN
30000 !ERROR PROCESSING
30010 PRINT ERR,ERL
30015 PRINT ERT$(ERR)
32767 END

```

APPENDIX VI - Results of the Constant Probability Analysis

APPENDICE VI - Résultats de l'analyse de la probabilité constante

Ambidédi

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
-----Rainfall/Pluviométrie (mm)-----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20						
21.05 - 17.06	21-24	0	18	53	89	121	53
18.06 - 15.07	25-28	52	89	128	169	205	128
16.07 - 12.08	29-32	92	131	174	218	257	174
13.08 - 09.09	33-36	115	151	200	259	320	210
10.09 - 07.10	37-40	34	57	95	145	204	108
08.10 - 04.11	41-44	2	7	17	34	56	23
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		486	576	689	816	942	703

Ansongo

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
-----Rainfall/Pluviométrie (mm)-----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20						
21.05 - 17.06	21-24	0	0	22	47	69	22
18.06 - 15.07	25-28	5	21	38	57	73	38
16.07 - 12.08	29-32	38	72	109	148	182	109
13.08 - 09.09	33-36	35	54	81	117	157	89
10.09 - 07.10	37-40	3	8	17	31	49	22
08.10 - 04.11	41-44						
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		154	206	278	364	456	293

Bafoulabé

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20	1	3	8	18	32	12
21.05 - 17.06	21-24	26	48	71	97	119	71
18.06 - 15.07	25-28	85	118	153	191	223	153
16.07 - 12.08	29-32	98	152	210	270	323	210
13.08 - 09.09	33-36	163	206	262	328	396	272
10.09 - 07.10	37-40	53	81	123	178	238	136
08.10 - 04.11	41-44	3	9	23	47	80	33
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		648	751	877	1017	1155	891

Bamako-Aéro

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16	1	3	7	15	26	10
23.04 - 20.05	17-20	9	19	37	63	96	45
21.05 - 17.06	21-24	37	66	97	130	159	97
18.06 - 15.07	25-28	73	109	149	190	227	149
16.07 - 12.08	29-32	144	194	248	305	355	248
13.08 - 09.09	33-36	93	153	247	374	518	281
10.09 - 07.10	37-40	46	77	126	192	268	144
08.10 - 04.11	41-44	4	11	26	53	88	37
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		480	675	950	1291	1658	1021

Bamako-Zoo-Ifan

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20	8	15	29	50	74	35
21.05 - 17.06	21-24	42	69	98	129	156	98
18.06 - 15.07	25-28	102	132	165	199	230	165
16.07 - 12.08	29-32	158	198	241	287	327	241
13.08 - 09.09	33-36	180	224	279	344	410	288
10.09 - 07.10	37-40	76	104	142	189	240	151
08.10 - 04.11	41-44	3	10	28	59	100	41
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		813	911	1028	1155	1277	1037

Bamba

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20						
21.05 - 17.06	21-24	0	1	17	35	50	17
18.06 - 15.07	25-28	3	10	17	26	33	17
16.07 - 12.08	29-32	35	58	83	110	134	83
13.08 - 09.09	33-36	17	28	46	70	97	52
10.09 - 07.10	37-40	2	5	15	31	54	22
08.10 - 04.11	41-44						
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		98	135	185	246	311	196

Banamba

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20	1	3	11	25	46	17
21.05 - 17.06	21-24	28	45	63	83	100	63
18.06 - 15.07	25-28	55	88	123	160	193	123
16.07 - 12.08	29-32	121	163	210	258	301	210
13.08 - 09.09	33-36	130	164	210	263	318	218
10.09 - 07.10	37-40	42	62	91	128	168	99
08.10 - 04.11	41-44	0	3	12	33	65	24
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		556	646	756	878	998	768

Bandiagara

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20	1	4	9	19	33	13
21.05 - 17.06	21-24	7	27	47	69	88	47
18.06 - 15.07	25-28	44	69	96	125	150	96
16.07 - 12.08	29-32	83	124	168	215	255	168
13.08 - 09.09	33-36	78	111	158	215	278	169
10.09 - 07.10	37-40	32	46	66	91	118	70
08.10 - 04.11	41-44	2	5	14	29	49	20
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		425	494	581	677	772	590

Bankass

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20	2	5	13	28	48	19
21.05 - 17.06	21-24	23	40	59	79	97	59
18.06 - 15.07	25-28	45	73	104	137	166	104
16.07 - 12.08	29-32	91	129	171	215	253	171
13.08 - 09.09	33-36	75	102	140	186	234	148
10.09 - 07.10	37-40	35	47	64	84	106	67
08.10 - 04.11	41-44	1	3	10	24	44	16
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		455	515	587	666	742	593

Baroueli

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16	1	2	7	17	31	11
23.04 - 20.05	17-20	4	10	21	41	66	29
21.05 - 17.06	21-24	9	32	57	84	107	57
18.06 - 15.07	25-28	58	96	137	180	217	137
16.07 - 12.08	29-32	90	142	198	257	308	198
13.08 - 09.09	33-36	80	122	185	266	357	204
10.09 - 07.10	37-40	21	38	66	106	152	78
08.10 - 04.11	41-44	2	5	13	28	48	19
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		371	507	694	922	1165	738

Béléko

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16	0	2	10	26	51	18
23.04 - 20.05	17-20	8	17	33	58	89	41
21.05 - 17.06	21-24	36	64	95	127	156	95
18.06 - 15.07	25-28	81	110	141	173	202	141
16.07 - 12.08	29-32	137	180	226	275	317	226
13.08 - 09.09	33-36	161	196	240	290	340	245
10.09 - 07.10	37-40	54	76	107	146	188	115
08.10 - 04.11	41-44	4	10	23	44	73	31
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		--	--	--	--	--	919

Bougouni

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16	4	9	21	40	65	28
23.04 - 20.05	17-20	28	45	69	102	139	77
21.05 - 17.06	21-24	83	101	120	140	158	120
18.06 - 15.07	25-28	96	131	169	209	244	169
16.07 - 12.08	29-32	170	201	234	269	300	234
13.08 - 09.09	33-36	184	214	251	292	332	254
10.09 - 07.10	37-40	69	96	135	182	233	144
08.10 - 04.11	41-44	11	22	42	72	107	51
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		--	--	--	--	--	1088

Bourem

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20						
21.05 - 17.06	21-24	0	3	10	18	25	10
18.06 - 15.07	25-28	2	10	19	29	37	19
16.07 - 12.08	29-32	13	35	59	85	107	59
13.08 - 09.09	33-36	9	17	31	51	74	37
10.09 - 07.10	37-40	1	3	9	19	32	12
08.10 - 04.11	41-44						
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		82	106	137	174	212	142

Diamou

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20	0	2	7	17	30	11
21.05 - 17.06	21-24	8	28	49	71	91	49
18.06 - 15.07	25-28	91	118	146	177	204	146
16.07 - 12.08	29-32	112	154	200	248	291	200
13.08 - 09.09	33-36	137	170	212	262	312	219
10.09 - 07.10	37-40	59	80	107	141	177	113
08.10 - 04.11	41-44	2	8	19	38	63	26
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		--	--	--	--	--	770

Diéma

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20						
21.05 - 17.06	21-24	3	21	39	59	77	39
18.06 - 15.07	25-28	49	73	99	127	151	99
16.07 - 12.08	29-32	112	151	193	238	277	193
13.08 - 09.09	33-36	122	153	194	241	290	200
10.09 - 07.10	37-40	36	55	82	117	155	89
08.10 - 04.11	41-44	2	5	13	25	41	17
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		491	560	643	734	823	651

Dioula

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16	1	4	12	29	52	20
23.04 - 20.05	17-20	13	22	38	58	83	43
21.05 - 17.06	21-24	36	61	86	114	139	86
18.06 - 15.07	25-28	94	125	159	195	226	159
16.07 - 12.08	29-32	113	166	223	282	334	223
13.08 - 09.09	33-36	91	142	219	319	432	244
10.09 - 07.10	37-40	35	60	100	154	216	114
08.10 - 04.11	41-44	3	9	22	46	78	32
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		664	776	914	1068	1220	930

Diré

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20						
21.05 - 17.06	21-24	0	3	13	25	34	13
18.06 - 15.07	25-28	5	19	35	52	67	35
16.07 - 12.08	29-32	18	53	91	130	165	91
13.08 - 09.09	33-36	32	51	78	114	155	87
10.09 - 07.10	37-40	5	11	23	43	68	30
08.10 - 04.11	41-44						
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		167	206	257	315	374	264

Djenné

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20	1	4	11	25	44	17
21.05 - 17.06	21-24	1	28	57	88	115	57
18.06 - 15.07	25-28	29	64	101	141	176	101
16.07 - 12.08	29-32	82	127	175	225	270	175
13.08 - 09.09	33-36	79	109	151	204	260	161
10.09 - 07.10	37-40	15	28	50	81	117	59
08.10 - 04.11	41-44	0	1	6	16	30	10
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		385	468	574	695	817	590

Dogo-Ténenkou

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20						
21.05 - 17.06	21-24	0	8	26	45	61	26
18.06 - 15.07	25-28	7	37	69	102	132	69
16.07 - 12.08	29-32	51	92	136	181	222	136
13.08 - 09.09	33-36	38	70	125	204	298	150
10.09 - 07.10	37-40	4	12	28	56	92	39
08.10 - 04.11	41-44						
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		239	314	414	534	660	435

Douentza

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20						
21.05 - 17.06	21-24	0	20	42	66	87	42
18.06 - 15.07	25-28	23	54	86	121	152	86
16.07 - 12.08	29-32	88	116	145	177	205	145
13.08 - 09.09	33-36	66	90	123	164	208	130
10.09 - 07.10	37-40	20	34	57	88	124	65
08.10 - 04.11	41-44						
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		358	416	487	565	642	494

Dounfing

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20	5	12	28	54	88	38
21.05 - 17.06	21-24	34	62	92	124	152	92
18.06 - 15.07	25-28	62	101	142	186	225	143
16.07 - 12.08	29-32	135	196	261	329	389	261
13.08 - 09.09	33-36	118	166	233	317	406	250
10.09 - 07.10	37-40	36	65	113	182	263	134
08.10 - 04.11	41-44	1	5	21	54	104	39
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		673	798	954	1129	1304	974

Faladye

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20	4	9	20	37	59	26
21.05 - 17.06	21-24	37	65	95	126	154	95
18.06 - 15.07	25-28	101	124	150	177	201	150
16.07 - 12.08	29-32	139	195	256	319	376	256
13.08 - 09.09	33-36	168	212	268	333	400	277
10.09 - 07.10	37-40	69	94	130	172	218	137
08.10 - 04.11	41-44	5	12	26	46	72	33
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		768	864	980	1106	1228	990

Galougo

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20	1	4	11	22	37	15
21.05 - 17.06	21-24	34	54	76	100	120	76
18.06 - 15.07	25-28	93	127	162	200	234	162
16.07 - 12.08	29-32	100	146	197	249	295	197
13.08 - 09.09	33-36	157	194	242	297	353	249
10.09 - 07.10	37-40	67	90	122	161	202	129
08.10 - 04.11	41-44	6	11	22	37	55	26
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		666	749	849	958	1064	858

Gao

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20						
21.05 - 17.06	21-24	0	5	17	31	42	17
18.06 - 15.07	25-28	8	21	35	50	63	35
16.07 - 12.08	29-32	33	63	94	128	157	94
13.08 - 09.09	33-36	31	46	68	95	124	73
10.09 - 07.10	37-40	4	10	20	35	55	25
08.10 - 04.11	41-44						
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		158	196	245	302	360	253

Goualala

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12	0	1	5	15	30	10
26.03 - 22.04	13-16	7	14	27	45	67	32
23.04 - 20.05	17-20	37	52	71	96	122	75
21.05 - 17.06	21-24	65	91	118	148	174	118
18.06 - 15.07	25-28	138	164	191	221	246	191
16.07 - 12.08	29-32	194	238	286	336	380	286
13.08 - 09.09	33-36	230	274	330	394	457	337
10.09 - 07.10	37-40	131	163	204	251	300	210
08.10 - 04.11	41-44	21	39	68	109	157	80
05.11 - 02.12	45-48	0	2	7	19	35	13
03.12 - 31.12	49-52						
TOTAL		--	--	--	--	--	1361

Goundam

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20						
21.05 - 17.06	21-24	0	2	10	20	28	10
18.06 - 15.07	25-28	3	17	31	48	62	31
16.07 - 12.08	29-32	42	62	84	108	128	84
13.08 - 09.09	33-36	35	50	71	98	127	76
10.09 - 07.10	37-40	4	11	24	46	73	32
08.10 - 04.11	41-44						
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		154	190	235	286	338	241

Gourma-Rharous

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20						
21.05 - 17.06	21-24						
18.06 - 15.07	25-28	1	12	24	37	48	24
16.07 - 12.08	29-32	20	42	65	90	112	65
13.08 - 09.09	33-36	15	25	43	66	93	48
10.09 - 07.10	37-40	3	6	13	23	37	16
08.10 - 04.11	41-44						
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		102	128	161	200	239	166

Guené-Goré

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20	4	10	23	46	76	32
21.05 - 17.06	21-24	65	96	131	167	199	131
18.06 - 15.07	25-28	94	143	196	251	299	196
16.07 - 12.08	29-32	187	234	285	338	385	285
13.08 - 09.09	33-36	179	229	294	370	449	305
10.09 - 07.10	37-40	119	152	194	243	295	201
08.10 - 04.11	41-44	23	39	64	99	139	73
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		--	--	--	--	--	1234

Hombori

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20						
21.05 - 17.06	21-24	0	8	24	42	57	24
18.06 - 15.07	25-28	28	48	69	93	113	69
16.07 - 12.08	29-32	63	97	135	174	209	135
13.08 - 09.09	33-36	62	85	116	153	193	122
10.09 - 07.10	37-40	10	21	38	65	96	46
08.10 - 04.11	41-44						
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		291	341	401	469	536	408

Kabara

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20						
21.05 - 17.06	21-24						
18.06 - 15.07	25-28	2	15	28	43	56	28
16.07 - 12.08	29-32	28	53	79	108	133	79
13.08 - 09.09	33-36	19	32	53	81	112	60
10.09 - 07.10	37-40	2	6	16	33	56	23
08.10 - 04.11	41-44						
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		128	159	198	244	291	204

Kalana

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12	1	2	7	16	29	11
26.03 - 22.04	13-16	5	11	24	46	73	32
23.04 - 20.05	17-20	23	42	74	120	175	88
21.05 - 17.06	21-24	34	85	141	198	249	141
18.06 - 15.07	25-28	83	132	186	242	291	186
16.07 - 12.08	29-32	142	209	281	356	422	281
13.08 - 09.09	33-36	178	234	309	398	493	324
10.09 - 07.10	37-40	120	156	204	261	320	213
08.10 - 04.11	41-44	16	34	66	116	177	84
05.11 - 02.12	45-48	1	3	9	23	45	16
03.12 - 31.12	49-52						
TOTAL		972	1143	1355	1593	1828	1381

Kami

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20	1	4	10	21	34	14
21.05 - 17.06	21-24	12	28	44	63	79	44
18.06 - 15.07	25-28	36	63	93	124	151	93
16.07 - 12.08	29-32	101	128	158	189	217	158
13.08 - 09.09	33-36	91	119	157	202	249	164
10.09 - 07.10	37-40	27	39	57	80	105	61
08.10 - 04.11	41-44	0	2	6	16	29	10
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		433	485	547	615	680	552

Kangaba

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16	0	2	9	23	44	16
23.04 - 20.05	17-20	11	21	39	65	95	47
21.05 - 17.06	21-24	62	90	120	151	179	120
18.06 - 15.07	25-28	116	147	179	214	245	179
16.07 - 12.08	29-32	133	180	231	284	331	231
13.08 - 09.09	33-36	180	226	284	352	421	293
10.09 - 07.10	37-40	76	109	154	211	273	166
08.10 - 04.11	41-44	7	18	38	72	114	51
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		--	--	--	--	--	1116

Kara

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20	2	4	11	21	33	14
21.05 - 17.06	21-24	4	23	43	66	85	43
18.06 - 15.07	25-28	41	64	88	115	138	88
16.07 - 12.08	29-32	108	136	166	198	226	166
13.08 - 09.09	33-36	98	129	169	218	268	177
10.09 - 07.10	37-40	24	35	52	72	95	55
08.10 - 04.11	41-44	0	1	5	15	30	10
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		423	482	554	633	710	561

Karangasso

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16	3	7	14	26	42	18
23.04 - 20.05	17-20	13	25	45	75	111	54
21.05 - 17.06	21-24	49	83	120	159	192	120
18.06 - 15.07	25-28	79	112	148	186	219	148
16.07 - 12.08	29-32	155	195	239	285	326	239
13.08 - 09.09	33-36	193	226	266	311	355	270
10.09 - 07.10	37-40	81	102	130	163	196	134
08.10 - 04.11	41-44	5	12	27	53	85	37
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		--	--	--	--	--	1037

Katibougou

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20	5	11	22	40	63	28
21.05 - 17.06	21-24	30	58	88	120	148	88
18.06 - 15.07	25-28	74	105	139	174	206	139
16.07 - 12.08	29-32	121	165	214	265	309	214
13.08 - 09.09	33-36	134	176	232	300	370	243
10.09 - 07.10	37-40	46	66	95	131	171	102
08.10 - 04.11	41-44	2	7	20	44	78	31
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		648	740	852	975	1096	863

Kayes

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20						
21.05 - 17.06	21-24	5	28	53	80	103	53
18.06 - 15.07	25-28	66	98	133	169	201	133
16.07 - 12.08	29-32	88	129	173	219	259	173
13.08 - 09.09	33-36	123	158	203	257	312	211
10.09 - 07.10	37-40	44	68	102	147	196	112
08.10 - 04.11	41-44	2	7	19	40	69	28
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		525	608	710	823	935	721

Kayo

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20	1	3	10	21	38	14
21.05 - 17.06	21-24	13	33	53	76	96	53
18.06 - 15.07	25-28	54	74	95	118	138	95
16.07 - 12.08	29-32	130	166	205	247	283	205
13.08 - 09.09	33-36	141	167	199	236	272	202
10.09 - 07.10	37-40	35	51	74	103	135	79
08.10 - 04.11	41-44	0	1	7	21	43	15
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		--	--	--	--	--	673

Ké-Macina

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20	0	3	9	20	37	14
21.05 - 17.06	21-24	1	21	42	65	84	42
18.06 - 15.07	25-28	38	66	95	127	155	95
16.07 - 12.08	29-32	86	125	167	211	250	167
13.08 - 09.09	33-36	88	117	158	206	258	166
10.09 - 07.10	37-40	11	25	49	87	134	63
08.10 - 04.11	41-44						
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		401	470	555	650	744	565

Kéniéba

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20	3	8	20	38	62	26
21.05 - 17.06	21-24	48	81	117	155	189	117
18.06 - 15.07	25-28	103	138	177	218	253	177
16.07 - 12.08	29-32	200	262	331	402	465	331
13.08 - 09.09	33-36	189	249	330	426	527	346
10.09 - 07.10	37-40	100	141	198	269	345	212
08.10 - 04.11	41-44	16	31	59	100	149	72
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		988	1120	1280	1454	1625	1295

Kidal

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20						
21.05 - 17.06	21-24	0	0	11	24	34	11
18.06 - 15.07	25-28	0	7	15	25	33	15
16.07 - 12.08	29-32	8	29	52	77	98	52
13.08 - 09.09	33-36	11	20	33	53	75	38
10.09 - 07.10	37-40	1	3	9	19	33	13
08.10 - 04.11	41-44						
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		79	101	131	166	202	136

Kignan

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16	3	9	22	45	76	32
23.04 - 20.05	17-20	10	23	47	85	133	61
21.05 - 17.06	21-24	64	87	112	139	162	112
18.06 - 15.07	25-28	91	132	177	224	265	177
16.07 - 12.08	29-32	203	241	283	326	364	283
13.08 - 09.09	33-36	187	231	288	353	420	297
10.09 - 07.10	37-40	96	117	144	175	207	147
08.10 - 04.11	41-44	11	20	36	59	86	43
05.11 - 02.12	45-48	0	1	6	23	53	18
03.12 - 31.12	49-52						
TOTAL		--	--	--	--	--	1188

Kimparana

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16	2	6	15	32	54	22
23.04 - 20.05	17-20	4	10	23	44	71	31
21.05 - 17.06	21-24	43	68	95	125	150	95
18.06 - 15.07	25-28	60	93	128	165	198	128
16.07 - 12.08	29-32	137	167	199	233	263	199
13.08 - 09.09	33-36	163	193	231	273	315	235
10.09 - 07.10	37-40	50	71	101	137	177	107
08.10 - 04.11	41-44	3	8	20	40	66	27
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		--	--	--	--	--	856

Kita

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20	4	9	21	39	62	27
21.05 - 17.06	21-24	48	75	104	135	162	104
18.06 - 15.07	25-28	98	135	175	216	253	175
16.07 - 12.08	29-32	181	224	271	320	364	271
13.08 - 09.09	33-36	198	237	287	344	401	294
10.09 - 07.10	37-40	74	103	145	195	250	154
08.10 - 04.11	41-44	10	20	40	68	103	49
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		831	941	1074	1219	1360	1086

Kogoni

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20						
21.05 - 17.06	21-24	0	16	35	56	75	35
18.06 - 15.07	25-28	23	56	92	130	163	92
16.07 - 12.08	29-32	73	118	167	219	264	167
13.08 - 09.09	33-36	73	103	146	198	255	156
10.09 - 07.10	37-40	13	27	54	94	144	68
08.10 - 04.11	41-44	1	3	8	20	36	13
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		387	455	539	633	726	549

Kolokani

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20	3	9	19	36	58	25
21.05 - 17.06	21-24	10	38	67	99	127	67
18.06 - 15.07	25-28	62	95	130	167	199	130
16.07 - 12.08	29-32	140	183	230	279	322	230
13.08 - 09.09	33-36	131	165	210	263	317	218
10.09 - 07.10	37-40	51	72	100	135	173	106
08.10 - 04.11	41-44	2	6	16	34	58	24
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		574	674	798	935	1072	812

Konséguéla

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16	1	3	8	17	30	11
23.04 - 20.05	17-20	7	16	36	68	110	48
21.05 - 17.06	21-24	41	63	87	113	136	87
18.06 - 15.07	25-28	85	121	161	202	239	161
16.07 - 12.08	29-32	111	163	221	281	334	221
13.08 - 09.09	33-36	183	218	261	309	358	266
10.09 - 07.10	37-40	77	104	142	188	237	150
08.10 - 04.11	41-44	4	12	28	56	93	40
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		--	--	--	--	--	991

Koulouba

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20	7	15	30	52	79	37
21.05 - 17.06	21-24	40	67	97	128	156	97
18.06 - 15.07	25-28	87	117	149	184	214	149
16.07 - 12.08	29-32	150	198	250	305	353	250
13.08 - 09.09	33-36	179	218	267	322	379	273
10.09 - 07.10	37-40	61	90	132	185	243	143
08.10 - 04.11	41-44	3	9	22	47	80	33
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		765	867	989	1124	1254	1001

Koutiala

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16	1	5	14	32	57	22
23.04 - 20.05	17-20	10	19	36	60	90	43
21.05 - 17.06	21-24	51	76	103	132	157	103
18.06 - 15.07	25-28	83	121	163	206	244	163
16.07 - 12.08	29-32	164	201	241	283	319	241
13.08 - 09.09	33-36	156	193	241	296	353	248
10.09 - 07.10	37-40	68	91	121	158	196	127
08.10 - 04.11	41-44	9	19	35	60	89	43
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		--	--	--	--	--	1000

Mahoua

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12	0	2	7	18	35	12
26.03 - 22.04	13-16	1	3	9	20	35	13
23.04 - 20.05	17-20	19	31	49	74	101	55
21.05 - 17.06	21-24	44	79	117	157	192	117
18.06 - 15.07	25-28	54	98	145	195	239	145
16.07 - 12.08	29-32	144	191	243	297	345	243
13.08 - 09.09	33-36	144	186	242	309	379	253
10.09 - 07.10	37-40	59	83	116	159	204	124
08.10 - 04.11	41-44	2	7	18	39	67	27
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		708	831	983	1154	1323	1002

Mandjakuy

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20	8	16	32	55	84	40
21.05 - 17.06	21-24	26	48	70	95	117	70
18.06 - 15.07	25-28	56	89	124	162	195	124
16.07 - 12.08	29-32	96	148	205	263	315	205
13.08 - 09.09	33-36	116	152	199	255	314	208
10.09 - 07.10	37-40	51	67	87	111	136	90
08.10 - 04.11	41-44	1	4	12	27	47	18
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		560	649	759	880	999	771

Markala

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20	1	4	10	21	36	14
21.05 - 17.06	21-24	2	22	43	66	86	43
18.06 - 15.07	25-28	60	84	109	136	159	109
16.07 - 12.08	29-32	115	151	190	230	266	190
13.08 - 09.09	33-36	97	128	169	218	269	177
10.09 - 07.10	37-40	20	36	61	97	139	71
08.10 - 04.11	41-44	0	2	9	22	43	15
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		448	524	618	723	826	629

Ménaka

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20						
21.05 - 17.06	21-24	0	6	16	28	39	16
18.06 - 15.07	25-28	8	23	39	57	72	39
16.07 - 12.08	29-32	34	65	99	134	165	99
13.08 - 09.09	33-36	33	50	75	107	144	82
10.09 - 07.10	37-40	4	10	21	39	61	27
08.10 - 04.11	41-44						
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		154	199	259	330	404	270

Mopti

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20	1	3	7	16	28	10
21.05 - 17.06	21-24	13	29	46	65	81	46
18.06 - 15.07	25-28	42	65	89	115	138	89
16.07 - 12.08	29-32	86	120	156	195	229	156
13.08 - 09.09	33-36	81	108	145	188	235	152
10.09 - 07.10	37-40	28	40	58	80	103	62
08.10 - 04.11	41-44	1	3	9	19	33	13
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		387	448	525	609	692	533

Mourdiah

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20						
21.05 - 17.06	21-24	2	19	37	57	74	37
18.06 - 15.07	25-28	30	62	97	134	167	97
16.07 - 12.08	29-32	97	129	164	201	233	164
13.08 - 09.09	33-36	86	115	156	205	257	164
10.09 - 07.10	37-40	17	31	53	85	123	62
08.10 - 04.11	41-44						
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		407	467	540	620	699	547

Mpessoba

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20	9	19	37	66	102	47
21.05 - 17.06	21-24	39	64	90	119	144	90
18.06 - 15.07	25-28	93	119	147	177	203	147
16.07 - 12.08	29-32	175	206	240	276	307	240
13.08 - 09.09	33-36	173	215	269	331	394	277
10.09 - 07.10	37-40	75	100	134	175	218	140
08.10 - 04.11	41-44	5	12	26	49	77	34
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		--	--	--	--	--	991

Nara

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20						
21.05 - 17.06	21-24	0	9	28	50	68	28
18.06 - 15.07	25-28	31	55	79	106	129	79
16.07 - 12.08	29-32	93	122	153	187	216	153
13.08 - 09.09	33-36	85	111	147	188	232	153
10.09 - 07.10	37-40	21	34	55	84	116	62
08.10 - 04.11	41-44	1	2	7	16	29	11
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		363	420	491	570	647	498

Niafouké

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20						
21.05 - 17.06	21-24	0	0	15	32	46	15
18.06 - 15.07	25-28	3	22	41	62	81	41
16.07 - 12.08	29-32	41	64	89	117	140	89
13.08 - 09.09	33-36	46	67	96	133	173	103
10.09 - 07.10	37-40	10	20	39	69	104	49
08.10 - 04.11	41-44						
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		201	245	301	366	431	309

Niéna

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12	0	1	6	19	39	13
26.03 - 22.04	13-16	1	4	11	25	45	17
23.04 - 20.05	17-20	25	37	54	76	99	58
21.05 - 17.06	21-24	59	98	139	183	222	139
18.06 - 15.07	25-28	61	109	162	217	266	162
16.07 - 12.08	29-32	147	195	247	302	350	247
13.08 - 09.09	33-36	176	219	275	339	405	283
10.09 - 07.10	37-40	76	107	151	206	265	162
08.10 - 04.11	41-44	6	17	43	90	152	64
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		840	976	1144	1331	1515	1163

Niénébalé

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20	8	15	29	48	72	34
21.05 - 17.06	21-24	28	58	90	124	154	90
18.06 - 15.07	25-28	79	109	142	176	206	142
16.07 - 12.08	29-32	144	182	224	267	305	224
13.08 - 09.09	33-36	140	181	235	300	368	245
10.09 - 07.10	37-40	41	62	93	133	178	102
08.10 - 04.11	41-44	4	9	22	43	71	30
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		672	761	870	989	1104	880

Niono

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20	1	3	10	23	41	15
21.05 - 17.06	21-24	14	29	44	61	76	44
18.06 - 15.07	25-28	23	54	87	122	153	87
16.07 - 12.08	29-32	59	114	173	235	289	173
13.08 - 09.09	33-36	86	116	156	205	257	165
10.09 - 07.10	37-40	20	35	59	93	132	68
08.10 - 04.11	41-44	1	3	10	22	39	15
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		389	465	560	667	775	572

Nioro du Sahel

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20						
21.05 - 17.06	21-24	0	12	37	65	89	37
18.06 - 15.07	25-28	24	62	104	148	186	104
16.07 - 12.08	29-32	54	116	184	254	317	184
13.08 - 09.09	33-36	84	123	181	255	337	198
10.09 - 07.10	37-40	29	47	74	111	152	83
08.10 - 04.11	41-44	1	4	11	23	41	16
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		362	468	608	774	947	

635

Nyamina

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20	2	5	12	25	41	17
21.05 - 17.06	21-24	10	34	60	88	113	60
18.06 - 15.07	25-28	69	92	116	142	164	116
16.07 - 12.08	29-32	126	163	203	245	282	203
13.08 - 09.09	33-36	113	146	190	241	295	197
10.09 - 07.10	37-40	31	49	74	108	145	82
08.10 - 04.11	41-44	1	2	8	19	35	13
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		532	602	688	782	874	696

Ouatagouna

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20						
21.05 - 17.06	21-24	0	9	23	38	52	23
18.06 - 15.07	25-28	5	27	50	76	97	50
16.07 - 12.08	29-32	32	60	89	121	148	89
13.08 - 09.09	33-36	34	58	94	145	203	108
10.09 - 07.10	37-40	5	12	27	50	79	35
08.10 - 04.11	41-44						
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		184	236	305	387	471	318

Ouélessébougou

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16	1	4	12	30	55	21
23.04 - 20.05	17-20	11	24	49	88	137	63
21.05 - 17.06	21-24	62	91	121	153	182	121
18.06 - 15.07	25-28	106	132	159	188	213	159
16.07 - 12.08	29-32	162	199	239	281	318	239
13.08 - 09.09	33-36	175	210	253	303	352	259
10.09 - 07.10	37-40	85	112	148	191	236	155
08.10 - 04.11	41-44	5	14	32	64	106	45
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		--	--	--	--	--	1076

San

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16	1	3	7	16	29	11
23.04 - 20.05	17-20	4	10	21	39	62	27
21.05 - 17.06	21-24	24	50	78	108	135	78
18.06 - 15.07	25-28	62	93	126	162	193	126
16.07 - 12.08	29-32	120	156	195	236	272	195
13.08 - 09.09	33-36	125	155	195	240	287	200
10.09 - 07.10	37-40	40	58	84	116	152	90
08.10 - 04.11	41-44	1	4	11	24	42	16
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		--	--	--	--	--	750

Saraféré

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20						
21.05 - 17.06	21-24	0	2	13	26	36	13
18.06 - 15.07	25-28	10	25	41	59	74	41
16.07 - 12.08	29-32	49	72	97	124	148	97
13.08 - 09.09	33-36	39	56	83	116	152	89
10.09 - 07.10	37-40	11	20	36	58	84	42
08.10 - 04.11	41-44						
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		204	240	286	336	387	291

Satadougou

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20	1	4	16	41	80	29
21.05 - 17.06	21-24	61	87	114	143	169	114
18.06 - 15.07	25-28	144	180	219	260	296	219
16.07 - 12.08	29-32	226	275	329	386	435	329
13.08 - 09.09	33-36	223	264	314	371	427	320
10.09 - 07.10	37-40	169	203	245	294	342	250
08.10 - 04.11	41-44	17	31	54	86	125	63
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		--	--	--	--	--	1336

Ségou

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20	3	7	17	32	53	22
21.05 - 17.06	21-24	5	31	59	88	114	59
18.06 - 15.07	25-28	56	85	116	149	178	116
16.07 - 12.08	29-32	129	164	202	242	278	202
13.08 - 09.09	33-36	115	148	191	242	295	199
10.09 - 07.10	37-40	33	49	72	101	133	77
08.10 - 04.11	41-44	1	3	11	26	48	18
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		549	617	699	788	875	706

Ségué

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20	3	8	18	34	55	24
21.05 - 17.06	21-24	17	33	50	69	85	50
18.06 - 15.07	25-28	56	79	103	129	152	103
16.07 - 12.08	29-32	91	128	168	210	247	168
13.08 - 09.09	33-36	85	117	162	216	275	172
10.09 - 07.10	37-40	29	45	68	98	132	75
08.10 - 04.11	41-44	1	5	14	31	55	21
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		467	533	615	704	791	622

Sikasso

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12	1	3	8	17	30	11
26.03 - 22.04	13-16	5	13	28	54	86	38
23.04 - 20.05	17-20	28	44	68	100	136	76
21.05 - 17.06	21-24	63	98	137	178	213	137
18.06 - 15.07	25-28	107	145	185	228	266	185
16.07 - 12.08	29-32	182	230	284	339	387	284
13.08 - 09.09	33-36	194	239	298	366	435	307
10.09 - 07.10	37-40	95	127	170	222	278	179
08.10 - 04.11	41-44	20	36	62	99	142	73
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		--	--	--	--	--	1306

Sirakoro

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20	5	11	21	36	54	25
21.05 - 17.06	21-24	51	75	100	127	151	100
18.06 - 15.07	25-28	69	110	155	201	242	155
16.07 - 12.08	29-32	144	207	277	349	413	277
13.08 - 09.09	33-36	187	233	294	365	437	304
10.09 - 07.10	37-40	76	103	139	183	229	146
08.10 - 04.11	41-44	7	16	33	59	92	42
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		139	335	735	1383	2213	1061

Sofara

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20	1	3	9	19	32	13
21.05 - 17.06	21-24	16	30	45	63	77	45
18.06 - 15.07	25-28	47	71	97	124	148	97
16.07 - 12.08	29-32	67	103	143	185	221	143
13.08 - 09.09	33-36	100	130	171	219	269	178
10.09 - 07.10	37-40	32	45	62	84	108	66
08.10 - 04.11	41-44	1	4	11	25	44	17
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		418	482	560	646	731	568

Sokolo

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20						
21.05 - 17.06	21-24	0	9	28	49	67	28
18.06 - 15.07	25-28	24	50	77	107	133	77
16.07 - 12.08	29-32	81	123	169	217	260	169
13.08 - 09.09	33-36	73	102	143	193	247	152
10.09 - 07.10	37-40	9	20	41	73	114	52
08.10 - 04.11	41-44						
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		339	404	487	580	673	497

Soninkoura

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20	4	9	18	33	51	23
21.05 - 17.06	21-24	5	29	54	82	106	54
18.06 - 15.07	25-28	42	73	105	140	170	105
16.07 - 12.08	29-32	109	152	198	246	288	198
13.08 - 09.09	33-36	119	153	198	250	305	205
10.09 - 07.10	37-40	31	47	72	105	141	80
08.10 - 04.11	41-44	0	3	10	27	54	19
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		529	599	684	776	866	691

Sotuba

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16	1	3	9	19	34	13
23.04 - 20.05	17-20	11	20	35	56	81	41
21.05 - 17.06	21-24	35	66	100	136	167	100
18.06 - 15.07	25-28	89	121	156	192	224	156
16.07 - 12.08	29-32	165	209	257	308	352	257
13.08 - 09.09	33-36	156	198	254	319	387	263
10.09 - 07.10	37-40	63	90	128	176	228	137
08.10 - 04.11	41-44	6	14	30	58	93	41
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		785	884	1004	1134	1260	1014

Tessalit

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20						
21.05 - 17.06	21-24						
18.06 - 15.07	25-28						
16.07 - 12.08	29-32	2	12	22	34	44	22
13.08 - 09.09	33-36	6	13	25	42	64	30
10.09 - 07.10	37-40	1	3	8	16	27	10
08.10 - 04.11	41-44						
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		34	50	73	102	135	79

Tilembéya

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20						
21.05 - 17.06	21-24	4	20	36	55	71	36
18.06 - 15.07	25-28	57	83	110	140	166	110
16.07 - 12.08	29-32	110	140	173	207	237	173
13.08 - 09.09	33-36	85	118	162	217	275	172
10.09 - 07.10	37-40	22	34	51	74	100	56
08.10 - 04.11	41-44						
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		425	487	563	646	728	570

Tombouctou

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20						
21.05 - 17.06	21-24	0	0	10	22	32	10
18.06 - 15.07	25-28	6	17	29	43	54	29
16.07 - 12.08	29-32	30	50	71	94	113	71
13.08 - 09.09	33-36	23	36	56	83	114	63
10.09 - 07.10	37-40	4	8	14	22	31	15
08.10 - 04.11	41-44						
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		125	153	188	228	268	192

Toukoto

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%) / Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20	1	4	12	25	43	17
21.05 - 17.06	21-24	17	43	70	99	124	70
18.06 - 15.07	25-28	81	111	143	177	207	143
16.07 - 12.08	29-32	125	172	223	277	324	223
13.08 - 09.09	33-36	144	184	237	300	365	247
10.09 - 07.10	37-40	67	92	126	169	214	134
08.10 - 04.11	41-44	7	15	32	59	94	42
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		663	756	870	995	1116	881

Yólimané

Four-week period/ Périodes de 4 semaines	Weeks/ Semaines	Probability levels (%)/ Niveaux de probabilité (%)					Mean/ Moyenne (mm)
		90	75	50	25	10	
----Rainfall/Pluviométrie (mm)----							
01.01 - 28.01	1-4						
29.01 - 25.02	5-8						
26.02 - 25.03	9-12						
26.03 - 22.04	13-16						
23.04 - 20.05	17-20						
21.05 - 17.06	21-24	0	12	33	55	74	33
18.06 - 15.07	25-28	39	70	104	140	171	104
16.07 - 12.08	29-32	77	114	156	199	236	156
13.08 - 09.09	33-36	102	129	164	205	247	169
10.09 - 07.10	37-40	35	50	73	102	134	79
08.10 - 04.11	41-44	1	4	11	24	42	16
05.11 - 02.12	45-48						
03.12 - 31.12	49-52						
TOTAL		399	470	559	658	757	569

APPENDIX VII - Analysis of Maximum Air Temperature

APPENDICE VII - Analyse de la température maximale de l'air

Key for Appendix VII / Clé pour Appendice VII

Month/Mois

- 1 = January / Janvier
- 2 = February / Février
- 3 = March / Mars
- 4 = April / Avril
- 5 = May / Mai
- 6 = June / Juin
- 7 = July / Juillet
- 8 = August / Août
- 9 = September / Septembre
- 10 = October / Octobre
- 11 = November / Novembre
- 12 = December / Décembre

Ansongo (27 years/ans)

Month/ Mois	Mean max.temp/ Temp.max. moy.°C	SD/ Ecart type	CV (%)	Probability (%) of max. temp./ Probabilité (%) de temp. max.				
				>25°C	>30°C	>35°C	>40°C	>45°C
1	35.4	3.2	9	100	96	64	4	0
2	34.5	3.3	10	100	100	26	11	0
3	34.9	3.4	10	100	100	52	13	0
4	36.3	3.4	9	100	96	65	12	0
5	37.9	4.1	11	100	92	81	35	0
6	38.0	3.8	10	100	100	74	44	0
7	38.1	2.8	7	100	100	88	29	0
8	36.7	3.0	8	100	100	59	14	0
9	36.6	2.4	7	100	100	84	8	0
10	35.8	3.7	10	100	92	58	12	0
11	36.2	2.0	6	100	100	72	8	0
12	36.0	3.2	9	100	100	68	4	0
TOTAL	36.4	1.2	3	--	--	--	--	--

Bafoulabé (29 years/ans)

Month/ Mois	Mean max.temp/ Temp.max. moy.°C	SD/ Ecart type	CV (%)	Probability (%) of max. temp./ Probabilité (%) de temp. max.				
				>25°C	>30°C	>35°C	>40°C	>45°C
1	34.8	3.0	9	100	96	38	8	0
2	34.4	3.0	9	100	100	31	8	0
3	34.2	2.7	8	100	100	39	0	0
4	35.2	3.0	9	100	100	42	15	0
5	35.8	3.3	9	100	100	54	11	0
6	37.3	3.4	9	100	96	71	29	0
7	38.2	3.7	10	100	96	79	46	0
8	37.4	4.2	11	100	96	63	33	0
9	36.1	3.9	11	100	100	62	15	0
10	35.6	3.6	10	100	96	50	14	0
11	34.6	3.8	11	100	100	39	17	0
12	34.5	3.6	10	100	96	44	12	0
TOTAL	35.7	1.3	4	--	--	--	--	--

Bamako-Aéro (40 years/ans)

Month/ Mois	Mean max.temp/ Temp.max. moy.°C	SD/ Ecart type	CV (%)	Probability (%) of max. temp./ Probabilité (%) de temp. max.				
				>25°C	>30°C	>35°C	>40°C	>45°C
1	33.5	1.3	4	100	100	23	0	0
2	36.2	0.9	3	100	100	85	0	0
3	38.4	0.9	2	100	100	100	5	0
4	39.1	1.0	3	100	100	100	23	0
5	38.0	1.3	3	100	100	98	3	0
6	35.2	1.7	5	100	100	45	3	0
7	31.7	0.7	2	100	100	0	0	0
8	30.5	0.9	3	100	68	0	0	0
9	31.7	0.8	2	100	100	0	0	0
10	34.1	1.0	3	100	100	23	0	0
11	34.8	0.8	2	100	100	43	0	0
12	33.0	0.8	3	100	100	0	0	0
TOTAL	34.7	0.5	1	--	--	--	--	--

Bamako-Zoo-Ifan (20 years/ans)

Month/ Mois	Mean max.temp/ Temp.max. moy.°C	SD/ Ecart type	CV (%)	Probability (%) of max. temp./ Probabilité (%) de temp. max.				
				>25°C	>30°C	>35°C	>40°C	>45°C
1	34.1	1.2	3	100	100	20	0	0
2	37.0	0.9	2	100	100	100	0	0
3	38.8	0.8	2	100	100	100	10	0
4	38.7	1.5	4	100	100	95	10	0
5	37.6	1.4	4	100	100	95	5	0
6	34.4	1.7	5	100	100	35	0	0
7	31.2	0.9	3	100	90	0	0	0
8	30.3	1.0	3	100	60	0	0	0
9	31.8	1.2	4	100	100	5	0	0
10	34.1	1.0	3	100	100	25	0	0
11	34.6	1.0	3	100	100	40	0	0
12	33.0	0.9	3	100	100	0	0	0
TOTAL	34.6	0.4	1	--	--	--	--	--

Bougouni (40 years/ans)

Month/ Mois	Mean max.temp/ Temp.max. moy.°C	SD/ Ecart type	CV (%)	Probability (%) of max. temp./ Probabilité (%) de temp. max.				
				>25°C	>30°C	>35°C	>40°C	>45°C
1	33.9	1.1	3	100	100	20	0	0
2	36.0	1.1	3	100	100	90	0	0
3	37.5	0.8	2	100	100	100	0	0
4	37.4	1.2	3	100	100	98	0	0
5	35.5	1.2	3	100	100	64	0	0
6	32.9	1.1	3	100	100	5	0	0
7	30.5	0.8	3	100	65	0	0	0
8	29.5	0.7	2	100	15	0	0	0
9	30.8	0.6	2	100	95	0	0	0
10	33.0	1.0	3	100	100	0	0	0
11	34.1	0.8	2	100	100	13	0	0
12	33.2	1.3	4	100	100	5	0	0
TOTAL	33.7	0.5	2	--	--	--	--	--

Dogo-Téneko (26 years/ans)

Month/ Mois	Mean max.temp/ Temp.max. moy.°C	SD/ Ecart type	CV (%)	Probability (%) of max. temp./ Probabilité (%) de temp. max.				
				>25°C	>30°C	>35°C	>40°C	>45°C
1	33.7	3.4	10	100	79	42	4	0
2	35.9	3.1	9	100	96	58	4	0
3	36.9	4.4	12	96	92	69	38	0
4	36.8	4.0	11	100	85	73	15	0
5	35.2	4.2	12	100	92	40	16	0
6	34.6	4.1	12	100	92	36	20	0
7	35.2	3.1	9	100	100	31	23	0
8	36.0	3.1	9	100	100	54	19	0
9	34.6	4.0	12	100	92	35	15	0
10	31.4	5.0	16	100	48	24	16	0
11	30.4	3.5	12	100	48	8	0	0
12	32.1	3.1	10	96	81	15	4	0
TOTAL	34.4	1.0	3	--	--	--	--	--

Faladye (49 years/ans)

Month/ Mois	Mean max.temp/ Temp.max. moy.°C	SD/ Ecart type	CV (%)	Probability (%) of max. temp./ Probabilité (%) de temp. max.				
				>25°C	>30°C	>35°C	>40°C	>45°C
1	33.6	1.8	5	100	100	17	0	0
2	36.1	1.3	4	100	100	77	0	0
3	38.4	1.5	4	100	100	95	10	0
4	39.6	1.3	3	100	100	100	38	0
5	38.7	1.1	3	100	100	100	5	0
6	35.1	1.3	4	100	100	42	0	0
7	31.3	1.1	3	100	93	0	0	0
8	29.9	1.4	5	100	41	0	0	0
9	31.1	1.1	4	100	87	0	0	0
10	33.7	1.1	3	100	100	11	0	0
11	34.2	1.4	4	100	98	25	0	0
12	32.8	0.9	3	100	100	0	0	0
TOTAL	34.5	1.0	3	--	--	--	--	--

Gao (40 years/ans)

Month/ Mois	Mean max.temp/ Temp.max. moy.°C	SD/ Ecart type	CV (%)	Probability (%) of max. temp./ Probabilité (%) de temp. max.				
				>25°C	>30°C	>35°C	>40°C	>45°C
1	31.1	1.5	5	100	70	0	0	0
2	34.0	1.5	4	100	100	23	0	0
3	37.5	1.4	4	100	100	98	5	0
4	40.6	1.1	3	100	100	100	63	0
5	42.4	1.0	2	100	100	100	100	0
6	41.6	1.2	3	100	100	100	93	0
7	38.4	1.2	3	100	100	100	10	0
8	36.0	1.6	4	100	100	74	0	0
9	38.1	1.1	3	100	100	100	8	0
10	39.3	1.1	3	100	100	97	23	0
11	36.2	1.2	3	100	100	83	0	0
12	31.6	1.3	4	100	83	0	0	0
TOTAL	37.2	0.6	2	--	--	--	--	--

Hombori (40 years/ans)

Month/ Mois	Mean max.temp/ Temp.max. moy.°C	SD/ Ecart type	CV (%)	Probability (%) of max. temp./ Probabilité (%) de temp. max.				
				>25°C	>30°C	>35°C	>40°C	>45°C
1	31.9	1.7	5	100	84	5	0	0
2	34.8	1.7	5	100	100	36	0	0
3	38.2	1.5	4	100	100	100	8	0
4	40.7	1.0	2	100	100	100	77	0
5	41.8	1.0	2	100	100	100	97	0
6	40.0	1.1	3	100	100	100	59	0
7	36.3	1.6	5	100	97	87	0	0
8	34.1	1.3	4	100	100	28	0	0
9	36.2	1.3	4	100	100	85	0	0
10	38.6	1.6	4	100	100	95	8	0
11	36.4	1.1	3	100	100	89	0	0
12	32.5	1.1	3	100	100	5	0	0
TOTAL	36.8	0.6	2	--	--	--	--	--

Kara (49 years/ans)

Month/ Mois	Mean max.temp/ Temp.max. moy.°C	SD/ Ecart type	CV (%)	Probability (%) of max. temp./ Probabilité (%) de temp. max.				
				>25°C	>30°C	>35°C	>40°C	>45°C
1	30.5	1.4	5	100	62	0	0	0
2	34.2	1.4	4	100	100	27	0	0
3	37.3	1.3	3	100	100	96	8	0
4	39.4	1.0	3	100	100	100	19	0
5	39.8	1.0	2	100	100	100	48	0
6	37.5	1.4	4	100	100	100	4	0
7	33.6	1.3	4	100	100	13	0	0
8	31.5	1.3	4	100	96	4	0	0
9	31.7	1.2	4	100	96	4	0	0
10	32.4	1.5	5	100	100	8	0	0
11	31.2	1.6	5	100	84	4	0	0
12	29.3	1.4	5	100	32	0	0	0
TOTAL	34.0	1.1	3	--	--	--	--	--

Katibougou (47 years/ans)

Month/ Mois	Mean max.temp/ Temp.max. moy.°C	SD/ Ecart type	CV (%)	Probability (%) of max. temp./ Probabilité (%) de temp. max.				
				>25°C	>30°C	>35°C	>40°C	>45°C
1	33.4	1.5	5	100	100	15	0	0
2	36.2	1.7	5	100	100	79	0	0
3	38.5	1.2	3	100	100	100	13	0
4	39.8	1.7	4	100	100	100	38	0
5	38.9	1.9	5	100	100	97	24	0
6	35.7	1.4	4	100	100	70	0	0
7	32.1	1.2	4	100	100	3	0	0
8	30.6	1.0	3	100	69	0	0	0
9	31.8	1.0	3	100	97	0	0	0
10	34.4	1.5	4	100	100	19	0	0
11	35.0	1.4	4	100	100	53	0	0
12	33.1	1.6	5	100	100	15	0	0
TOTAL	35.0	1.3	4	--	--	--	--	--

Kayes (40 years/ans)

Month/ Mois	Mean max.temp/ Temp.max. moy.°C	SD/ Ecart type	CV (%)	Probability (%) of max. temp./ Probabilité (%) de temp. max.				
				>25°C	>30°C	>35°C	>40°C	>45°C
1	33.8	1.6	5	100	100	26	0	0
2	36.6	1.5	4	100	100	85	3	0
3	39.6	1.2	3	100	100	100	33	0
4	41.7	0.9	2	100	100	100	100	0
5	42.0	1.0	2	100	100	100	100	3
6	38.1	1.3	3	100	100	98	3	0
7	33.5	1.0	3	100	100	10	0	0
8	31.8	1.1	3	100	100	3	0	0
9	32.9	0.8	3	100	100	0	0	0
10	35.9	1.3	4	100	100	73	0	0
11	36.7	1.0	3	100	100	90	0	0
12	33.7	1.1	3	100	100	13	0	0
TOTAL	36.3	0.5	1	--	--	--	--	--

Kayo (21 years/ans)

Month/ Mois	Mean max.temp/ Temp.max. moy.°C	SD/ Ecart type	CV (%)	Probability (%) of max. temp./ Probabilité (%) de temp. max.				
				>25°C	>30°C	>35°C	>40°C	>45°C
1	31.3	1.6	5	100	84	0	0	0
2	34.8	1.2	3	100	100	50	0	0
3	37.5	1.5	4	100	100	95	0	0
4	39.5	1.4	4	100	100	100	32	0
5	39.5	1.1	3	100	100	100	29	0
6	36.6	1.7	5	100	100	86	0	0
7	32.7	0.8	2	100	100	0	0	0
8	30.9	0.9	3	100	85	0	0	0
9	31.7	0.7	2	100	100	0	0	0
10	33.3	1.2	3	100	100	5	0	0
11	32.6	1.2	4	100	100	0	0	0
12	30.8	1.3	4	100	68	0	0	0
TOTAL	34.4	0.8	2	--	--	--	--	--

Kéniéba (36 years/ans)

Month/ Mois	Mean max.temp/ Temp.max. moy.°C	SD/ Ecart type	CV (%)	Probability (%) of max. temp./ Probabilité (%) de temp. max.				
				>25°C	>30°C	>35°C	>40°C	>45°C
1	35.0	1.2	4	100	100	58	0	0
2	37.1	1.4	4	100	100	97	0	0
3	39.3	0.8	2	100	100	100	15	0
4	40.3	0.8	2	100	100	100	67	0
5	38.8	0.9	2	100	100	100	6	0
6	34.4	1.0	3	100	100	21	0	0
7	31.3	0.7	2	100	100	0	0	0
8	30.4	0.6	2	100	73	0	0	0
9	31.3	0.6	2	100	100	0	0	0
10	33.0	0.7	2	100	100	0	0	0
11	34.8	0.7	2	100	100	45	0	0
12	34.2	0.9	3	100	100	24	0	0
TOTAL	35.0	0.4	1	--	--	--	--	--

Kidal (36 years/ans)

Month/ Mois	Mean max.temp/ Temp.max. moy.°C	SD/ Ecart type	CV (%)	Probability (%) of max. temp./ Probabilité (%) de temp. max.				
				>25°C	>30°C	>35°C	>40°C	>45°C
1	28.6	1.8	6	100	19	0	0	0
2	31.7	1.6	5	100	82	7	0	0
3	35.0	1.7	5	100	100	43	0	0
4	38.2	1.6	4	100	100	96	11	0
5	41.2	1.2	3	100	100	100	86	0
6	41.7	0.9	2	100	100	100	93	0
7	39.7	0.7	2	100	100	100	32	0
8	38.2	1.3	3	100	100	100	4	0
9	39.0	0.9	2	100	100	100	7	0
10	38.0	0.9	2	100	100	100	0	0
11	33.8	1.4	4	100	100	7	0	0
12	28.8	1.5	5	100	25	0	0	0
TOTAL	36.2	0.5	1	--	--	--	--	--

Kita (36 years/ans)

Month/ Mois	Mean max.temp/ Temp.max. moy.°C	SD/ Ecart type	CV (%)	Probability (%) of max. temp./ Probabilité (%) de temp. max.				
				>25°C	>30°C	>35°C	>40°C	>45°C
1	33.5	1.5	5	100	100	19	0	0
2	36.2	1.2	3	100	100	88	0	0
3	38.3	1.1	3	100	100	100	12	0
4	39.3	0.9	2	100	100	100	24	0
5	38.4	0.9	2	100	100	100	8	0
6	34.3	1.1	3	100	100	23	0	0
7	30.9	0.9	3	100	81	0	0	0
8	29.7	0.6	2	100	31	0	0	0
9	31.0	0.6	2	100	92	0	0	0
10	33.4	1.0	3	100	100	4	0	0
11	34.5	0.8	2	100	100	24	0	0
12	32.8	1.1	3	100	100	0	0	0
TOTAL	34.3	0.6	2	--	--	--	--	--

Kogoni (49 years/ans)

Month/ Mois	Mean max.temp/ Temp.max. moy.°C	SD/ Ecart type	CV (%)	Probability (%) of max. temp./ Probabilité (%) de temp. max.				
				>25°C	>30°C	>35°C	>40°C	>45°C
1	32.0	2.0	6	100	79	7	0	0
2	34.8	1.7	5	100	100	43	0	0
3	37.4	1.3	3	100	100	97	7	0
4	39.0	1.3	3	100	100	100	21	0
5	39.8	2.2	5	100	97	97	52	0
6	38.2	1.4	4	100	100	100	10	0
7	34.1	1.2	4	100	100	34	0	0
8	31.8	1.0	3	100	100	0	0	0
9	33.1	0.9	3	100	100	3	0	0
10	36.1	1.1	3	100	100	77	0	0
11	35.3	1.2	4	100	100	61	0	0
12	31.7	1.2	4	100	94	0	0	0
TOTAL	35.3	0.7	2	--	--	--	--	--

Koulouba (49 years/ans)

Month/ Mois	Mean max.temp/ Temp.max. moy.°C	SD/ Ecart type	CV (%)	Probability (%) of max. temp./ Probabilité (%) de temp. max.				
				>25°C	>30°C	>35°C	>40°C	>45°C
1	32.8	1.5	4	100	97	10	0	0
2	35.6	1.3	4	100	100	62	0	0
3	37.7	1.2	3	100	100	97	0	0
4	38.3	1.1	3	100	100	100	0	0
5	37.2	1.1	3	100	100	93	0	0
6	33.8	1.2	4	100	100	13	0	0
7	30.4	0.9	3	100	67	0	0	0
8	29.3	0.8	3	100	21	0	0	0
9	30.7	0.9	3	100	83	0	0	0
10	33.5	1.2	3	100	100	9	0	0
11	34.4	0.8	2	100	100	19	0	0
12	32.5	1.0	3	100	100	0	0	0
TOTAL	33.8	0.8	2	--	--	--	--	--

Koutiala (36 years/ans)

Month/ Mois	Mean max.temp/ Temp.max. moy. °C	SD/ Ecart type	CV (%)	Probability (%) of max. temp./ Probabilité (%) de temp. max.				
				>25 °C	>30 °C	>35 °C	>40 °C	>45 °C
1	33.2	1.5	4	100	100	9	0	0
2	35.8	1.0	3	100	100	72	0	0
3	38.0	1.0	3	100	100	100	0	0
4	38.0	1.1	3	100	100	100	3	0
5	36.8	0.8	2	100	100	100	0	0
6	34.0	1.0	3	100	100	12	0	0
7	31.1	0.8	3	100	94	0	0	0
8	29.9	0.7	2	100	45	0	0	0
9	31.2	0.6	2	100	100	0	0	0
10	33.9	1.0	3	100	100	6	0	0
11	34.6	0.9	3	100	100	22	0	0
12	32.7	1.0	3	100	100	0	0	0
TOTAL	34.1	0.5	1	--	--	--	--	--

Ménaka (36 years/ans)

Month/ Mois	Mean max.temp/ Temp.max. moy. °C	SD/ Ecart type	CV (%)	Probability (%) of max. temp./ Probabilité (%) de temp. max.				
				>25 °C	>30 °C	>35 °C	>40 °C	>45 °C
1	31.6	1.4	4	100	83	0	0	0
2	34.6	1.5	4	100	100	42	0	0
3	38.2	1.4	4	100	100	100	9	0
4	40.8	2.0	5	100	100	97	91	0
5	42.1	1.0	2	100	100	100	97	0
6	40.9	1.3	3	100	100	100	74	0
7	37.7	1.2	3	100	100	97	7	0
8	35.3	1.7	5	100	100	61	0	0
9	37.5	1.2	3	100	100	97	6	0
10	39.2	0.9	2	100	100	100	13	0
11	36.1	1.1	3	100	100	81	0	0
12	32.3	1.5	5	100	90	3	0	0
TOTAL	37.2	0.7	2	--	--	--	--	--

Mopti (40 years/ans)

Month/ Mois	Mean max.temp/ Temp.max. moy.°C	SD/ Ecart type	CV (%)	Probability (%) of max. temp./ Probabilité (%) de temp. max.				
				>25°C	>30°C	>35°C	>40°C	>45°C
1	31.7	1.7	5	100	83	3	0	0
2	34.9	1.4	4	100	100	43	0	0
3	37.8	1.1	3	100	100	98	5	0
4	39.9	1.0	3	100	100	100	48	0
5	40.4	1.0	3	100	100	100	68	0
6	38.1	1.1	3	100	100	98	3	0
7	34.3	1.2	4	100	100	25	0	0
8	31.9	1.1	4	100	98	0	0	0
9	32.6	0.9	3	100	100	0	0	0
10	34.6	1.1	3	100	100	38	0	0
11	34.5	1.1	3	100	100	35	0	0
12	31.3	1.3	4	100	80	0	0	0
TOTAL	35.2	0.6	2	--	--	--	--	--

Mpessoba (49 years/ans)

Month/ Mois	Mean max.temp/ Temp.max. moy.°C	SD/ Ecart type	CV (%)	Probability (%) of max. temp./ Probabilité (%) de temp. max.				
				>25°C	>30°C	>35°C	>40°C	>45°C
1	33.7	1.5	4	100	100	17	0	0
2	36.7	1.3	3	100	100	95	0	0
3	39.0	0.9	2	100	100	100	16	0
4	39.8	1.0	3	100	100	100	53	0
5	37.9	0.8	2	100	100	100	0	0
6	35.2	1.1	3	100	100	50	0	0
7	32.0	0.7	2	100	100	0	0	0
8	31.2	2.0	6	100	83	4	0	0
9	32.0	0.5	2	100	100	0	0	0
10	34.6	1.1	3	100	100	23	0	0
11	34.9	2.3	7	100	96	54	0	0
12	33.5	0.7	2	100	100	0	0	0
TOTAL	34.8	1.0	3	--	--	--	--	--

Nara (27 years/ans)

Month/ Mois	Mean max.temp/ Temp.max. moy.°C	SD/ Ecart type	CV (%)	Probability (%) of max. temp./ Probabilité (%) de temp. max.				
				>25°C	>30°C	>35°C	>40°C	>45°C
1	32.1	2.0	6	100	88	4	0	0
2	35.2	1.7	5	100	100	50	0	0
3	38.1	1.6	4	100	100	96	12	0
4	40.6	1.3	3	100	100	100	60	0
5	41.8	1.3	3	100	100	100	88	0
6	39.8	2.1	5	100	100	100	44	4
7	34.8	2.1	6	100	100	36	4	0
8	32.3	1.6	5	100	96	4	0	0
9	34.1	1.6	5	100	100	23	0	0
10	37.0	1.5	4	100	100	92	4	0
11	36.0	1.6	4	100	100	75	0	0
12	32.4	1.7	5	100	91	9	0	0
TOTAL	36.3	1.4	4	--	--	--	--	--

Niono (49 years/ans)

Month/ Mois	Mean max.temp/ Temp.max. moy.°C	SD/ Ecart type	CV (%)	Probability (%) of max. temp./ Probabilité (%) de temp. max.				
				>25°C	>30°C	>35°C	>40°C	>45°C
1	32.6	2.2	7	100	82	18	0	0
2	35.3	1.7	5	100	100	56	0	0
3	37.6	1.5	4	100	100	96	4	0
4	39.3	1.4	4	100	100	100	27	0
5	39.9	1.2	3	100	100	100	55	0
6	37.5	1.1	3	100	100	97	0	0
7	33.7	1.0	3	100	100	10	0	0
8	31.9	0.8	3	100	100	0	0	0
9	32.8	0.9	3	100	100	3	0	0
10	35.2	1.4	4	100	100	47	0	0
11	35.1	1.9	5	100	100	55	0	0
12	32.0	1.8	6	100	86	3	0	0
TOTAL	35.1	1.1	3	--	--	--	--	--

Nioro du Sahel (40 years/ans)

Month/ Mois	Mean max.temp/ Temp.max. moy.°C	SD/ Ecart type	CV (%)	Probability (%) of max. temp./ Probabilité (%) de temp. max.				
				>25°C	>30°C	>35°C	>40°C	>45°C
1	32.4	1.8	6	100	88	13	0	0
2	35.2	1.8	5	100	100	51	0	0
3	38.4	1.6	4	100	100	98	18	0
4	40.7	1.4	4	100	100	100	62	0
5	41.9	1.3	3	100	100	100	87	0
6	39.7	1.1	3	100	100	100	36	0
7	34.8	1.3	4	100	100	50	0	0
8	32.5	1.2	4	100	100	3	0	0
9	34.2	1.3	4	100	100	18	0	0
10	37.4	1.3	4	100	100	95	3	0
11	36.2	1.2	3	100	100	87	0	0
12	32.3	1.5	5	100	93	3	0	0
TOTAL	36.3	0.8	2	--	--	--	--	--

San (40 years/ans)

Month/ Mois	Mean max.temp/ Temp.max. moy.°C	SD/ Ecart type	CV (%)	Probability (%) of max. temp./ Probabilité (%) de temp. max.				
				>25°C	>30°C	>35°C	>40°C	>45°C
1	32.9	1.6	5	100	100	15	0	0
2	36.0	1.5	4	100	100	79	0	0
3	38.9	1.0	2	100	100	100	8	0
4	40.1	1.0	2	100	100	100	56	0
5	39.5	1.0	3	100	100	100	28	0
6	36.5	1.2	3	100	100	85	0	0
7	33.2	1.0	3	100	100	5	0	0
8	31.2	0.8	2	100	92	0	0	0
9	32.2	0.8	2	100	100	0	0	0
10	35.2	1.2	4	100	100	55	0	0
11	35.5	0.9	3	100	100	70	0	0
12	32.7	1.1	3	100	97	3	0	0
TOTAL	35.3	0.5	1	--	--	--	--	--

Ségou (40 years/ans)

Month/ Mois	Mean max.temp/ Temp.max. moy.°C	SD/ Ecart type	CV (%)	Probability (%) of max. temp./ Probabilité (%) de temp. max.				
				>25°C	>30°C	>35°C	>40°C	>45°C
1	32.3	1.6	5	100	93	5	0	0
2	35.2	1.2	4	100	100	54	0	0
3	37.9	1.0	3	100	100	100	5	0
4	39.4	1.1	3	100	100	100	35	0
5	39.2	1.1	3	100	100	100	15	0
6	36.3	1.4	4	100	100	83	0	0
7	32.6	1.2	4	100	100	3	0	0
8	30.7	0.8	2	100	85	0	0	0
9	31.9	0.9	3	100	100	0	0	0
10	34.8	1.3	4	100	100	45	0	0
11	35.0	1.1	3	100	100	50	0	0
12	32.1	1.1	3	100	95	0	0	0
TOTAL	34.8	0.6	2	--	--	--	--	--

Sikasso (40 years/ans)

Month/ Mois	Mean max.temp/ Temp.max. moy.°C	SD/ Ecart type	CV (%)	Probability (%) of max. temp./ Probabilité (%) de temp. max.				
				>25°C	>30°C	>35°C	>40°C	>45°C
1	33.9	1.3	4	100	100	23	0	0
2	36.3	0.9	2	100	100	97	0	0
3	37.7	0.8	2	100	100	100	3	0
4	37.3	1.0	3	100	100	95	0	0
5	35.6	1.1	3	100	100	71	0	0
6	33.3	1.1	3	100	100	5	0	0
7	31.1	0.9	3	100	90	0	0	0
8	30.0	0.8	3	100	55	0	0	0
9	31.2	0.8	3	100	93	0	0	0
10	33.5	1.0	3	100	100	3	0	0
11	34.5	0.8	2	100	100	18	0	0
12	33.5	0.7	2	100	100	3	0	0
TOTAL	34.0	0.5	1	--	--	--	--	--

Sotuba (49 years/ans)

Month/ Mois	Mean max.temp/ Temp.max. moy.°C	SD/ Ecart type	CV (%)	Probability (%) of max. temp./ Probabilité (%) de temp. max.				
				>25°C	>30°C	>35°C	>40°C	>45°C
1	33.6	1.3	4	100	100	21	0	0
2	36.1	1.0	3	100	100	90	0	0
3	38.1	1.2	3	100	100	97	7	0
4	38.9	1.2	3	100	100	100	27	0
5	37.7	1.3	3	100	100	97	0	0
6	33.8	2.8	8	93	93	31	0	0
7	31.2	0.8	3	100	97	0	0	0
8	30.1	0.8	3	100	50	0	0	0
9	31.3	0.8	3	100	97	0	0	0
10	33.6	1.0	3	100	100	7	0	0
11	34.4	0.9	3	100	100	27	0	0
12	32.8	0.8	2	100	100	0	0	0
TOTAL	34.3	0.5	1	--	--	--	--	--

Tessalit (36 years/ans)

Month/ Mois	Mean max.temp/ Temp.max. moy.°C	SD/ Ecart type	CV (%)	Probability (%) of max. temp./ Probabilité (%) de temp. max.				
				>25°C	>30°C	>35°C	>40°C	>45°C
1	27.2	2.1	8	81	13	0	0	0
2	30.1	1.8	6	100	55	0	0	0
3	33.3	1.8	6	100	97	15	0	0
4	36.9	1.6	4	100	100	91	0	0
5	40.3	1.6	4	100	100	97	69	0
6	42.7	0.7	2	100	100	100	100	0
7	41.8	0.7	2	100	100	100	100	0
8	40.4	0.9	2	100	100	100	61	0
9	40.2	0.7	2	100	100	100	61	0
10	37.6	1.1	3	100	100	100	3	0
11	32.3	1.3	4	100	94	0	0	0
12	27.4	1.7	6	90	3	0	0	0
TOTAL	36.0	0.7	2	--	--	--	--	--

Tilembéya (21 years/ans)

Month/ Mois	Mean max.temp/ Temp.max. moy.°C	SD/ Ecart type	CV (%)	Probability (%) of max. temp./ Probabilité (%) de temp. max.				
				>25°C	>30°C	>35°C	>40°C	>45°C
1	30.4	1.6	5	100	60	0	0	0
2	34.4	1.2	3	100	100	33	0	0
3	37.9	1.1	3	100	100	100	5	0
4	40.2	0.9	2	100	100	100	57	0
5	40.6	1.0	2	100	100	100	79	0
6	37.9	1.1	3	100	100	100	5	0
7	33.9	0.9	3	100	100	14	0	0
8	31.7	0.8	3	100	100	0	0	0
9	32.1	0.7	2	100	100	0	0	0
10	32.6	1.0	3	100	100	0	0	0
11	31.7	1.0	3	100	95	0	0	0
12	29.3	1.0	4	100	19	0	0	0
TOTAL	34.4	0.5	1	--	--	--	--	--

Tombouctou (40 years/ans)

Month/ Mois	Mean max.temp/ Temp.max. moy.°C	SD/ Ecart type	CV (%)	Probability (%) of max. temp./ Probabilité (%) de temp. max.				
				>25°C	>30°C	>35°C	>40°C	>45°C
1	30.0	2.6	9	92	49	3	0	0
2	33.2	2.4	7	100	90	23	0	0
3	36.6	2.2	6	100	100	75	3	0
4	39.7	1.8	5	100	100	98	45	0
5	41.9	1.6	4	100	100	100	88	0
6	41.5	1.2	3	100	100	100	85	0
7	38.3	1.0	3	100	100	100	5	0
8	35.7	1.4	4	100	100	73	0	0
9	37.7	1.4	4	100	100	95	5	0
10	38.9	1.6	4	100	100	98	30	0
11	35.4	2.0	6	100	100	54	0	0
12	30.3	2.0	6	100	64	0	0	0
TOTAL	36.6	1.3	4	--	--	--	--	--

APPENDIX VIII - Analysis of Minimum Air Temperature

APPENDICE VIII - Analyse de la température minimale de l'air

Key for Appendix VIII / Clé pour Appendice VIII

Month/Mois

- 1 = January / Janvier
- 2 = February / Février
- 3 = March / Mars
- 4 = April / Avril
- 5 = May / Mai
- 6 = June / Juin
- 7 = July / Juillet
- 8 = August / Août
- 9 = September / Septembre
- 10 = October / Octobre
- 11 = November / Novembre
- 12 = December / Décembre

Ansongo (27 years/ans)

Month/ Mois	Mean min.temp/ Temp.min. moy. °C	SD/ Ecart type	CV (%)	Probability (%) of min. temp./ Probabilité (%) de temp. min.				
				>10°C	>15°C	>20°C	>25°C	>30°C
1	18.6	3.5	19	100	75	33	0	0
2	17.5	4.1	23	100	74	22	9	0
3	18.3	4.7	26	100	71	33	17	0
4	20.1	3.9	20	100	96	46	17	0
5	22.0	4.4	20	100	92	71	38	0
6	22.9	4.7	20	100	88	84	44	0
7	24.8	4.3	17	100	96	88	54	4
8	22.8	4.3	19	100	92	73	31	0
9	22.4	4.0	18	100	92	81	31	0
10	21.5	3.9	18	100	92	72	4	0
11	20.9	4.0	19	96	96	60	4	0
12	20.1	4.2	21	100	80	60	4	0
TOTAL	20.2	4.4	22	--	--	--	--	--

Bafoulabé (29 years/ans)

Month/ Mois	Mean min.temp/ Temp.min. moy. °C	SD/ Ecart type	CV (%)	Probability (%) of min. temp./ Probabilité (%) de temp. min.				
				>10°C	>15°C	>20°C	>25°C	>30°C
1	21.1	3.5	16	100	97	72	7	0
2	20.5	3.1	15	100	93	59	4	0
3	19.4	2.8	14	100	92	38	0	0
4	19.6	3.8	19	100	88	52	8	0
5	20.3	3.8	19	100	96	46	19	0
6	21.5	3.2	15	100	100	65	19	0
7	22.7	2.8	12	100	100	81	31	0
8	23.3	3.0	13	100	100	78	37	0
9	23.6	2.8	12	100	100	83	29	0
10	23.1	2.3	10	100	100	93	11	0
11	23.0	1.9	8	100	100	96	11	0
12	22.4	2.5	11	100	100	82	11	0
TOTAL	21.7	0.9	4	--	--	--	--	--

Bamako-Aéro (40 years/ans)

Month/ Mois	Mean min.temp/ Temp.min. moy. °C	SD/ Ecart type	CV (%)	Probability (%) of min. temp./ Probabilité (%) de temp. min.				
				>10°C	>15°C	>20°C	>25°C	>30°C
1	16.9	1.3	8	100	93	0	0	0
2	19.4	1.4	7	100	100	33	0	0
3	22.8	1.5	7	100	100	98	8	0
4	24.7	0.9	4	100	100	100	33	0
5	25.2	0.7	3	100	100	100	58	0
6	23.4	0.7	3	100	100	100	3	0
7	22.1	0.5	2	100	100	100	0	0
8	21.7	0.5	2	100	100	100	0	0
9	21.6	0.5	3	100	100	100	0	0
10	21.3	0.7	3	100	100	98	0	0
11	18.5	1.4	8	100	100	15	0	0
12	16.8	1.6	9	100	90	0	0	0
TOTAL	21.2	0.6	3	--	--	--	--	--

Bamako-Zoo-lfan (20 years/ans)

Month/ Mois	Mean min.temp/ Temp.min. moy. °C	SD/ Ecart type	CV (%)	Probability (%) of min. temp./ Probabilité (%) de temp. min.				
				>10°C	>15°C	>20°C	>25°C	>30°C
1	17.6	1.0	5	100	100	0	0	0
2	20.4	1.0	5	100	100	65	0	0
3	23.0	0.7	3	100	100	100	0	0
4	24.4	0.8	3	100	100	100	20	0
5	24.4	1.0	4	100	100	100	25	0
6	22.7	1.2	5	100	100	95	0	0
7	21.7	1.2	5	100	100	85	5	0
8	21.2	0.8	4	100	100	90	0	0
9	20.9	1.0	5	100	100	85	0	0
10	20.4	1.8	9	100	100	79	0	0
11	17.9	1.4	8	100	95	10	0	0
12	17.3	1.4	8	100	100	0	0	0
TOTAL	21.0	0.6	3	--	--	--	--	--

Bougouni (40 years/ans)

Month/ Mois	Mean min.temp/ Temp.min. moy. °C	SD/ Ecart type	CV (%)	Probability (%) of min. temp./ Probabilité (%) de temp. min.				
				>10°C	>15°C	>20°C	>25°C	>30°C
1	16.4	1.4	8	100	82	3	0	0
2	19.0	1.6	8	100	97	26	0	0
3	22.3	1.0	5	100	100	100	0	0
4	24.3	0.8	3	100	100	100	15	0
5	23.9	0.7	3	100	100	100	5	0
6	22.3	0.6	3	100	100	100	0	0
7	21.5	0.5	2	100	100	100	0	0
8	21.3	0.4	2	100	100	100	0	0
9	21.2	0.4	2	100	100	100	0	0
10	21.3	0.5	2	100	100	100	0	0
11	18.9	1.5	8	100	100	28	0	0
12	16.1	1.4	9	100	77	0	0	0
TOTAL	20.7	0.6	3	--	--	--	--	--

Dogo-Téhenkou (26 years/ans)

Month/ Mois	Mean min.temp/ Temp.min. moy. °C	SD/ Ecart type	CV (%)	Probability (%) of min. temp./ Probabilité (%) de temp. min.				
				>10°C	>15°C	>20°C	>25°C	>30°C
1	17.8	3.5	20	100	69	31	0	0
2	18.6	3.1	17	100	85	31	0	0
3	19.7	3.4	17	100	85	65	0	0
4	20.3	3.1	15	100	92	65	0	0
5	20.5	3.1	15	100	88	77	4	0
6	20.4	3.2	16	100	88	73	0	0
7	21.5	2.4	11	100	96	81	0	0
8	21.8	2.1	10	100	100	81	0	0
9	21.9	2.2	10	100	100	85	0	0
10	20.0	3.0	15	100	96	46	0	0
11	18.4	3.7	20	100	76	40	0	0
12	18.3	3.1	17	100	81	27	0	0
TOTAL	19.9	0.9	5	--	--	--	--	--

Faladye (49 years/ans)

Month/ Mois	Mean min.temp/ Temp.min. moy. °C	SD/ Ecart type	CV (%)	Probability (%) of min. temp./ Probabilité (%) de temp. min.				
				>10°C	>15°C	>20°C	>25°C	>30°C
1	11.2	1.3	11	75	0	0	0	0
2	14.2	1.6	12	100	25	0	0	0
3	18.4	1.8	10	100	100	17	0	0
4	22.2	1.9	9	100	100	90	8	0
5	24.2	1.5	6	100	100	98	26	0
6	23.0	1.1	5	100	100	95	0	0
7	21.7	1.0	5	100	100	95	0	0
8	21.5	0.8	4	100	100	98	0	0
9	21.0	0.8	4	100	100	79	0	0
10	20.0	0.9	5	100	100	58	0	0
11	15.2	1.8	12	100	41	2	0	0
12	11.4	1.6	14	72	3	0	0	0
TOTAL	18.8	1.1	6	--	--	--	--	--

Gao (40 years/ans)

Month/ Mois	Mean min.temp/ Temp.min. moy. °C	SD/ Ecart type	CV (%)	Probability (%) of min. temp./ Probabilité (%) de temp. min.				
				>10°C	>15°C	>20°C	>25°C	>30°C
1	14.4	1.4	10	100	23	0	0	0
2	16.7	1.5	9	100	88	3	0	0
3	20.2	1.5	7	100	100	63	0	0
4	23.9	1.4	6	100	100	100	33	0
5	27.3	1.3	5	100	100	100	98	0
6	28.0	1.1	4	100	100	100	100	3
7	26.1	0.8	3	100	100	100	87	0
8	24.6	1.0	4	100	100	100	31	0
9	25.2	1.1	5	100	100	100	56	0
10	24.4	1.2	5	100	100	100	28	0
11	19.6	1.4	7	100	100	40	0	0
12	15.5	1.5	10	100	63	0	0	0
TOTAL	22.1	0.8	4	--	--	--	--	--

Hombori (40 years/ans)

Month/ Mois	Mean min.temp/ Temp.min. moy. °C	SD/ Ecart type	CV (%)	Probability (%) of min. temp./ Probabilité (%) de temp. min.				
				>10°C	>15°C	>20°C	>25°C	>30°C
1	17.1	1.3	8	100	100	8	0	0
2	19.4	1.2	6	100	100	28	0	0
3	22.8	1.2	5	100	100	100	8	0
4	26.1	1.1	4	100	100	100	74	0
5	28.7	0.9	3	100	100	100	100	13
6	27.5	1.3	5	100	100	100	95	0
7	25.3	0.9	3	100	100	100	66	0
8	24.1	0.8	3	100	100	100	11	0
9	24.6	0.8	3	100	100	100	28	0
10	24.6	1.0	4	100	100	100	32	0
11	21.2	0.9	4	100	100	92	0	0
12	17.7	1.1	6	100	97	0	0	0
TOTAL	23.3	0.8	3	--	--	--	--	--

Kara (49 years/ans)

Month/ Mois	Mean min.temp/ Temp.min. moy. °C	SD/ Ecart type	CV (%)	Probability (%) of min. temp./ Probabilité (%) de temp. min.				
				>10°C	>15°C	>20°C	>25°C	>30°C
1	12.7	1.2	9	100	4	0	0	0
2	14.3	1.2	9	100	23	0	0	0
3	17.3	1.3	7	100	100	4	0	0
4	21.3	1.3	6	100	100	88	0	0
5	24.4	0.9	4	100	100	100	32	0
6	24.0	0.7	3	100	100	100	0	0
7	22.6	0.8	3	100	100	100	0	0
8	22.3	0.5	2	100	100	100	0	0
9	23.2	0.5	2	100	100	100	0	0
10	24.0	0.9	4	100	100	100	15	0
11	20.1	1.8	9	100	100	48	4	0
12	15.1	1.5	10	100	44	0	0	0
TOTAL	20.1	0.8	4	--	--	--	--	--

Katibougou (47 years/ans)

Month/ Mois	Mean min.temp/ Temp.min. moy. °C	SD/ Ecart type	CV (%)	Probability (%) of min. temp./ Probabilité (%) de temp. min.				
				>10°C	>15°C	>20°C	>25°C	>30°C
1	13.4	1.9	14	100	18	0	0	0
2	16.5	2.3	14	100	67	3	0	0
3	19.9	2.5	13	100	97	45	0	0
4	23.2	1.6	7	100	100	100	15	0
5	24.7	1.2	5	100	100	100	52	0
6	23.3	0.7	3	100	100	100	0	0
7	21.8	0.7	3	100	100	94	0	0
8	21.7	0.7	3	100	100	97	0	0
9	21.5	0.7	3	100	100	97	0	0
10	20.8	1.2	6	100	100	76	0	0
11	16.9	2.3	14	100	76	12	0	0
12	13.9	2.5	18	97	36	0	0	0
TOTAL	19.9	1.3	7	--	--	--	--	--

Kayes (40 years/ans)

Month/ Mois	Mean min.temp/ Temp.min. moy. °C	SD/ Ecart type	CV (%)	Probability (%) of min. temp./ Probabilité (%) de temp. min.				
				>10°C	>15°C	>20°C	>25°C	>30°C
1	16.9	1.1	7	100	97	0	0	0
2	19.2	1.3	7	100	98	20	0	0
3	22.2	1.2	5	100	100	98	3	0
4	25.6	1.1	4	100	100	100	63	0
5	28.0	1.4	5	100	100	100	95	3
6	26.3	1.1	4	100	100	100	85	0
7	24.0	0.9	4	100	100	100	13	0
8	23.2	0.7	3	100	100	100	3	0
9	23.1	0.7	3	100	100	100	0	0
10	23.1	1.0	4	100	100	100	3	0
11	20.3	1.3	6	100	100	55	0	0
12	17.5	1.2	7	100	98	0	0	0
TOTAL	22.4	0.6	3	--	--	--	--	--

Kayo (21 years/ans)

Month/ Mois	Mean min.temp/ Temp.min. moy. °C	SD/ Ecart type	CV (%)	Probability (%) of min. temp./ Probabilité (%) de temp. min.				
				>10°C	>15°C	>20°C	>25°C	>30°C
1	10.4	1.4	14	65	0	0	0	0
2	12.7	1.4	11	95	0	0	0	0
3	15.7	1.6	10	100	55	0	0	0
4	19.2	2.2	11	100	94	56	0	0
5	22.4	1.5	7	100	100	90	0	0
6	21.3	1.8	9	100	100	76	0	0
7	20.4	1.9	9	100	100	65	0	0
8	20.5	1.6	8	100	100	65	0	0
9	20.6	1.8	9	100	100	60	0	0
10	21.0	1.3	6	100	100	79	0	0
11	16.9	1.6	10	100	89	0	0	0
12	12.0	1.9	16	89	6	0	0	0
TOTAL	17.9	1.0	6	--	--	--	--	--

Kéniéba (33 years/ans)

Month/ Mois	Mean min.temp/ Temp.min. moy. °C	SD/ Ecart type	CV (%)	Probability (%) of min. temp./ Probabilité (%) de temp. min.				
				>10°C	>15°C	>20°C	>25°C	>30°C
1	18.1	1.5	8	100	97	12	0	0
2	20.4	1.1	5	100	100	64	0	0
3	22.8	1.4	6	100	100	97	6	0
4	25.1	1.1	5	100	100	100	55	0
5	26.4	0.7	3	100	100	100	100	0
6	24.3	0.7	3	100	100	100	15	0
7	23.1	0.6	2	100	100	100	0	0
8	22.8	0.4	2	100	100	100	0	0
9	22.5	0.5	2	100	100	100	0	0
10	22.1	0.6	3	100	100	100	0	0
11	18.5	1.4	8	100	100	15	0	0
12	16.2	1.3	8	100	73	0	0	0
TOTAL	21.8	0.5	2	--	--	--	--	--

Kidal (28 years/ans)

Month/ Mois	Mean min.temp/ Temp.min. moy. °C	SD/ Ecart type	CV (%)	Probability (%) of min. temp./ Probabilité (%) de temp. min.				
				>10°C	>15°C	>20°C	>25°C	>30°C
1	12.6	1.3	11	100	7	0	0	0
2	14.9	1.4	9	100	43	0	0	0
3	18.5	1.4	8	100	100	14	0	0
4	22.7	1.5	6	100	100	96	7	0
5	26.6	0.9	4	100	100	100	93	0
6	28.1	0.9	3	100	100	100	100	4
7	26.8	0.7	3	100	100	100	100	0
8	25.8	0.9	3	100	100	100	79	0
9	25.7	0.8	3	100	100	100	79	0
10	23.0	1.2	5	100	100	100	4	0
11	18.0	1.2	7	100	100	4	0	0
12	13.9	1.3	9	100	22	0	0	0
TOTAL	21.4	0.6	3	--	--	--	--	--

Kita (26 years/ans)

Month/ Mois	Mean min.temp/ Temp.min. moy. °C	SD/ Ecart type	CV (%)	Probability (%) of min. temp./ Probabilité (%) de temp. min.				
				>10°C	>15°C	>20°C	>25°C	>30°C
1	18.5	1.2	6	100	100	8	0	0
2	20.9	1.1	5	100	100	73	0	0
3	23.6	0.8	3	100	100	100	4	0
4	25.5	0.8	3	100	100	100	81	0
5	25.7	0.7	3	100	100	100	77	0
6	23.4	0.8	3	100	100	100	4	0
7	22.1	0.7	3	100	100	100	0	0
8	21.5	0.4	2	100	100	100	0	0
9	21.4	0.4	2	100	100	100	0	0
10	21.1	0.7	3	100	100	96	0	0
11	18.6	1.1	6	100	100	8	0	0
12	17.8	1.0	6	100	100	0	0	0
TOTAL	21.7	0.4	2	--	--	--	--	--

Kogoni (49 years/ans)

Month/ Mois	Mean min.temp/ Temp.min. moy. °C	SD/ Ecart type	CV (%)	Probability (%) of min. temp./ Probabilité (%) de temp. min.				
				>10°C	>15°C	>20°C	>25°C	>30°C
1	13.2	1.8	13	97	17	0	0	0
2	15.8	1.4	9	100	68	0	0	0
3	18.7	1.3	7	100	100	14	0	0
4	21.8	1.5	7	100	100	90	0	0
5	24.3	1.3	6	100	100	100	29	0
6	24.0	2.9	12	100	100	97	16	3
7	22.4	1.5	7	100	100	94	3	0
8	21.5	1.4	6	100	100	87	0	0
9	21.5	1.6	7	100	100	83	3	0
10	20.3	1.5	7	100	100	65	0	0
11	16.9	1.3	8	100	90	0	0	0
12	14.0	1.8	13	97	32	0	0	0
TOTAL	19.6	1.2	6	--	--	--	--	--

Koulouba (49 years/ans)

Month/ Mois	Mean min.temp/ Temp.min. moy. °C	SD/ Ecart type	CV (%)	Probability (%) of min. temp./ Probabilité (%) de temp. min.				
				>10°C	>15°C	>20°C	>25°C	>30°C
1	18.6	1.7	9	100	97	19	0	0
2	21.2	1.8	8	100	100	82	0	0
3	23.6	1.5	6	100	100	97	10	0
4	24.6	1.9	8	100	100	96	50	0
5	23.9	1.6	7	100	100	97	17	0
6	21.9	1.3	6	100	100	94	0	0
7	20.7	1.4	7	100	97	87	0	0
8	20.6	0.8	4	100	100	86	0	0
9	20.7	0.7	3	100	100	87	0	0
10	21.8	1.1	5	100	100	94	0	0
11	21.7	1.3	6	100	100	94	0	0
12	19.2	1.1	6	100	100	13	0	0
TOTAL	21.4	1.0	5	--	--	--	--	--

Koutiala (37 years/ans)

Month/ Mois	Mean min.temp/ Temp.min. moy. °C	SD/ Ecart type	CV (%)	Probability (%) of min. temp./ Probabilité (%) de temp. min.				
				>10°C	>15°C	>20°C	>25°C	>30°C
1	13.0	2.0	15	94	14	0	0	0
2	15.7	2.1	13	100	63	0	0	0
3	20.0	2.2	11	100	100	50	0	0
4	23.9	1.1	5	100	100	100	17	0
5	24.7	0.9	3	100	100	100	36	0
6	23.2	0.7	3	100	100	100	0	0
7	21.9	0.4	2	100	100	100	0	0
8	21.6	0.4	2	100	100	100	0	0
9	21.5	0.3	2	100	100	100	0	0
10	21.2	0.6	3	100	100	97	0	0
11	17.1	1.6	9	100	92	3	0	0
12	13.5	1.8	13	94	21	0	0	0
TOTAL	19.8	0.8	4	--	--	--	--	-

Ménaka (32 years/ans)

Month/ Mois	Mean min.temp/ Temp.min. moy. °C	SD/ Ecart type	CV (%)	Probability (%) of min. temp./ Probabilité (%) de temp. min.				
				>10°C	>15°C	>20°C	>25°C	>30°C
1	15.0	1.3	9	100	48	0	0	0
2	17.1	1.2	7	100	94	3	0	0
3	20.7	1.2	6	100	100	63	0	0
4	24.5	1.7	7	100	100	100	44	0
5	27.5	0.6	2	100	100	100	100	0
6	27.6	0.9	3	100	100	100	97	0
7	25.6	0.8	3	100	100	100	78	0
8	24.3	0.8	3	100	100	100	22	0
9	24.5	0.9	4	100	100	100	25	0
10	23.5	1.3	5	100	100	100	13	0
11	19.4	1.2	6	100	100	23	0	0
12	15.8	1.4	9	100	68	0	0	0
TOTAL	22.1	0.6	3	--	--	--	--	--

Mopti (40 years/ans)

Month/ Mois	Mean min.temp/ Temp.min. moy. °C	SD/ Ecart type	CV (%)	Probability (%) of min. temp./ Probabilité (%) de temp. min.				
				>10°C	>15°C	>20°C	>25°C	>30°C
1	14.3	1.6	12	100	25	0	0	0
2	16.6	1.5	9	100	85	0	0	0
3	20.3	1.6	8	100	100	43	0	0
4	23.5	1.3	5	100	100	100	13	0
5	25.6	0.9	3	100	100	100	78	0
6	25.0	0.8	3	100	100	100	45	0
7	23.4	0.7	3	100	100	100	0	0
8	22.9	0.5	2	100	100	100	0	0
9	23.2	0.5	2	100	100	100	0	0
10	22.8	0.8	3	100	100	100	0	0
11	18.9	1.2	6	100	100	25	0	0
12	15.5	1.3	8	100	68	0	0	0
TOTAL	21.0	0.6	3	--	--	--	--	--

Mpessoba (49 years/ans)

Month/ Mois	Mean min.temp/ Temp.min. moy. °C	SD/ Ecart type	CV (%)	Probability (%) of min. temp./ Probabilité (%) de temp. min.				
				>10°C	>15°C	>20°C	>25°C	>30°C
1	10.0	1.5	15	58	0	0	0	0
2	12.9	2.5	19	79	26	0	0	0
3	18.3	3.3	18	100	89	11	5	5
4	21.7	1.5	7	100	100	89	0	0
5	24.0	2.5	10	100	100	100	5	5
6	22.4	1.1	5	100	100	96	0	0
7	21.7	1.4	6	100	100	92	4	0
8	21.2	0.4	2	100	100	100	0	0
9	21.3	0.5	3	100	100	96	0	0
10	20.6	0.7	4	100	100	70	0	0
11	15.5	1.8	11	100	54	0	0	0
12	11.1	1.1	10	81	0	0	0	0
TOTAL	18.6	1.1	6	--	--	--	--	--

Nara (40 years/ans)

Month/ Mois	Mean min.temp/ Temp.min. moy. °C	SD/ Ecart type	CV (%)	Probability (%) of min. temp./ Probabilité (%) de temp. min.				
				>10°C	>15°C	>20°C	>25°C	>30°C
1	12.2	2.8	23	76	16	0	0	0
2	14.2	2.4	17	100	36	0	0	0
3	17.7	3.0	17	100	79	21	0	0
4	21.2	2.9	14	100	96	76	8	0
5	24.3	2.4	10	100	100	100	52	0
6	23.7	3.0	13	100	100	81	46	0
7	21.8	3.0	14	100	100	64	8	0
8	20.9	2.8	13	100	100	63	0	0
9	21.0	2.7	13	100	100	65	0	0
10	20.2	2.7	13	100	100	64	0	0
11	16.2	2.5	16	100	74	4	0	0
12	13.0	2.1	16	91	17	0	0	0
TOTAL	18.6	2.8	15	--	--	--	--	--

Niono (49 years/ans)

Month/ Mois	Mean min.temp/ Temp.min. moy. °C	SD/ Ecart type	CV (%)	Probability (%) of min. temp./ Probabilité (%) de temp. min.				
				>10°C	>15°C	>20°C	>25°C	>30°C
1	12.6	1.8	14	96	11	0	0	0
2	15.4	1.2	7	100	65	0	0	0
3	18.4	1.1	6	100	100	4	0	0
4	22.1	1.6	7	100	100	81	4	0
5	24.7	1.3	5	100	100	100	41	0
6	24.1	1.1	5	100	100	100	21	0
7	22.4	1.6	7	100	100	86	3	0
8	21.9	1.3	6	100	100	86	0	0
9	22.0	1.5	7	100	100	86	0	0
10	20.9	3.8	18	97	97	83	0	0
11	17.4	1.3	7	100	93	0	0	0
12	13.6	1.3	10	100	7	0	0	0
TOTAL	19.4	2.0	10	--	--	--	--	--

Nioro du Sahel (40 years/ans)

Month/ Mois	Mean min.temp/ Temp.min. moy. °C	SD/ Ecart type	CV (%)	Probability (%) of min. temp./ Probabilité (%) de temp. min.				
				>10°C	>15°C	>20°C	>25°C	>30°C
1	12.9	1.9	15	98	10	0	0	0
2	15.4	1.6	11	100	63	3	0	0
3	18.7	1.6	8	100	100	23	0	0
4	22.9	1.4	6	100	100	97	5	0
5	26.5	1.0	4	100	100	100	97	0
6	26.5	0.8	3	100	100	100	98	0
7	24.2	1.2	5	100	100	100	18	0
8	23.0	1.1	5	100	100	98	3	0
9	23.1	0.9	4	100	100	98	0	0
10	22.3	1.4	6	100	100	98	0	0
11	18.0	1.6	9	100	97	5	0	0
12	14.1	2.1	15	98	40	3	0	0
TOTAL	20.6	1.0	5	--	--	--	--	--

San (40 years/ans)

Month/ Mois	Mean min.temp/ Temp.min. moy. °C	SD/ Ecart type	CV (%)	Probability (%) of min. temp./ Probabilité (%) de temp. min.				
				>10°C	>15°C	>20°C	>25°C	>30°C
1	14.3	1.6	11	100	28	0	0	0
2	16.8	1.5	9	100	90	0	0	0
3	20.7	1.6	8	100	100	63	0	0
4	24.4	1.0	4	100	100	100	26	0
5	26.0	0.8	3	100	100	100	93	0
6	24.3	0.9	4	100	100	100	18	0
7	22.8	0.6	3	100	100	100	0	0
8	22.1	0.5	2	100	100	97	0	0
9	22.2	0.6	3	100	100	98	0	0
10	22.5	0.6	3	100	100	100	0	0
11	19.5	1.2	6	100	100	33	0	0
12	15.7	1.3	8	100	74	0	0	0
TOTAL	21.0	0.6	3	--	--	--	--	--

Ségou (40 years/ans)

Month/ Mois	Mean min.temp/ Temp.min. moy. °C	SD/ Ecart type	CV (%)	Probability (%) of min. temp./ Probabilité (%) de temp. min.				
				>10°C	>15°C	>20°C	>25°C	>30°C
1	15.9	1.4	9	100	68	3	0	0
2	18.3	1.1	6	100	100	5	0	0
3	21.5	1.1	5	100	100	93	0	0
4	24.4	1.0	4	100	100	100	25	0
5	25.9	0.7	3	100	100	100	90	0
6	24.3	0.8	3	100	100	100	23	0
7	22.7	0.5	2	100	100	100	0	0
8	22.1	0.4	2	100	100	100	0	0
9	22.0	0.5	2	100	100	98	0	0
10	21.8	0.8	4	100	100	100	0	0
11	19.1	1.2	6	100	100	28	0	0
12	16.5	1.2	7	100	88	0	0	0
TOTAL	21.2	0.6	3	--	--	--	--	--

Sikasso (40 years/ans)

Month/ Mois	Mean min.temp/ Temp.min. moy. °C	SD/ Ecart type	CV (%)	Probability (%) of min. temp./ Probabilité (%) de temp. min.				
				>10°C	>15°C	>20°C	>25°C	>30°C
1	14.5	1.2	8	100	21	0	0	0
2	17.4	1.5	9	100	90	3	0	0
3	21.5	1.2	6	100	100	92	0	0
4	24.0	1.1	5	100	100	100	10	0
5	23.8	0.7	3	100	100	100	3	0
6	22.3	0.7	3	100	100	100	0	0
7	21.5	0.8	4	100	100	98	0	0
8	21.3	0.3	1	100	100	100	0	0
9	21.2	0.5	2	100	100	100	0	0
10	21.4	0.6	3	100	100	100	0	0
11	18.4	1.5	8	100	100	13	0	0
12	14.7	1.6	11	100	36	3	0	0
TOTAL	20.2	0.6	3	--	--	--	--	--

Sotuba (49 years/ans)

Month/ Mois	Mean min.temp/ Temp.min. moy. °C	SD/ Ecart type	CV (%)	Probability (%) of min. temp./ Probabilité (%) de temp. min.				
				>10°C	>15°C	>20°C	>25°C	>30°C
1	14.2	1.5	11	100	26	0	0	0
2	17.0	1.5	9	100	93	4	0	0
3	20.2	1.1	6	100	100	59	0	0
4	23.1	1.2	5	100	100	97	7	0
5	24.3	0.7	3	100	100	100	13	0
6	22.9	0.7	3	100	100	100	0	0
7	21.8	0.6	3	100	100	100	0	0
8	21.5	0.5	2	100	100	100	0	0
9	21.2	0.6	3	100	100	100	0	0
10	20.3	1.5	8	100	96	68	0	0
11	16.8	1.6	9	100	83	3	0	0
12	14.1	1.6	11	100	29	0	0	0
TOTAL	19.9	0.7	3	--	--	--	--	--

Tessalit (33 years/ans)

Month/ Mois	Mean min.temp/ Temp.min. moy. °C	SD/ Ecart type	CV (%)	Probability (%) of min. temp./ Probabilité (%) de temp. min.				
				>10°C	>15°C	>20°C	>25°C	>30°C
1	12.8	1.8	14	97	9	0	0	0
2	15.1	1.6	10	100	53	0	0	0
3	17.7	1.5	8	100	97	3	0	0
4	21.3	1.7	8	100	100	78	0	0
5	25.5	1.1	4	100	100	100	69	0
6	28.2	1.2	4	100	100	100	100	6
7	27.4	0.8	3	100	100	100	100	0
8	26.2	1.0	4	100	100	100	85	0
9	26.1	0.6	2	100	100	100	97	0
10	23.7	1.2	5	100	100	100	13	0
11	18.4	1.3	7	100	97	3	0	0
12	13.6	1.5	11	100	10	0	0	0
TOTAL	21.4	0.6	3	--	--	--	--	--

Tilembéya (27 years/ans)

Month/ Mois	Mean min.temp/ Temp.min. moy. °C	SD/ Ecart type	CV (%)	Probability (%) of min. temp./ Probabilité (%) de temp. min.				
				>10°C	>15°C	>20°C	>25°C	>30°C
1	10.8	2.7	25	55	5	5	0	0
2	12.1	1.4	12	91	0	0	0	0
3	15.4	1.5	10	100	55	0	0	0
4	20.2	1.1	5	100	100	50	0	0
5	24.4	0.8	3	100	100	100	26	0
6	24.3	0.4	2	100	100	100	0	0
7	23.1	0.5	2	100	100	100	0	0
8	22.9	0.4	2	100	100	100	0	0
9	24.2	0.6	3	100	100	100	10	0
10	25.1	0.7	3	100	100	100	52	0
11	19.3	1.9	10	100	100	33	0	0
12	12.7	1.7	13	90	10	0	0	0
TOTAL	19.2	1.2	6	--	--	--	--	--

Tombouctou (40 years/ans)

Month/ Mois	Mean min.temp/ Temp.min. moy. °C	SD/ Ecart type	CV (%)	Probability (%) of min. temp./ Probabilité (%) de temp. min.				
				>10°C	>15°C	>20°C	>25°C	>30°C
1	12.7	2.1	16	92	10	0	0	0
2	15.0	1.7	11	100	52	0	0	0
3	18.2	1.3	7	100	98	5	0	0
4	22.0	1.2	5	100	100	95	3	0
5	25.4	1.1	4	100	100	100	68	0
6	26.5	1.5	6	100	100	100	90	3
7	25.3	1.2	5	100	100	100	70	0
8	24.2	1.1	5	100	100	100	18	0
9	24.1	1.3	5	100	100	98	10	0
10	22.5	1.3	6	100	100	98	0	0
11	18.0	1.6	9	100	100	3	0	0
12	13.7	1.4	10	100	10	0	0	0
TOTAL	20.7	0.8	4	--	--	--	--	--

APPENDIX IX - Water Balance Analysis— Soil Water Estimation

APPENDICE IX - Analyse du bilan hydrique — estimation de l'humidité du sol

Bamako-Aéro

WATER HOLDING CAPACITY / CAPACITE DE RETENTION EN EAU.....: 150 mm

Week/ Semaine	Rain/ Pluvio- métrie(mm)	AE/PE ETR/ETP	AE/ ETR(mm)	Deficit/ Déficit(mm)	Runoff/ Ruisselle- ment(mm)	SMOS/ SES(mm)
1	0.0	0.0	1.4	1.3	0.0	1.7
2	0.1	0.0	1.1	0.9	0.0	1.0
3	0.2	0.0	0.9	0.5	0.0	0.6
4	0.1	0.0	0.9	0.4	0.0	0.3
5	0.0	0.0	0.8	0.2	0.0	0.2
6	0.0	0.0	0.8	0.1	0.0	0.1
7	0.1	0.0	0.8	0.1	0.0	0.1
8	0.1	0.0	0.9	0.0	0.0	0.1
9	0.4	0.0	0.9	0.1	0.0	0.2
10	0.1	0.0	0.9	0.2	0.0	0.2
11	0.8	0.0	1.3	0.1	0.0	0.4
12	0.8	0.0	1.4	0.2	0.0	0.5
13	1.3	0.0	1.6	0.3	0.0	0.9
14	2.4	0.1	2.3	0.4	0.0	1.4
15	3.8	0.1	3.4	0.6	0.0	2.2
16	2.5	0.1	3.0	1.1	0.0	2.0
17	8.2	0.1	6.2	0.6	0.0	4.3
18	11.1	0.2	8.8	1.0	0.0	6.7
19	12.6	0.3	11.1	1.7	0.0	8.2
20	13.2	0.3	11.9	2.2	0.0	9.5
21	15.2	0.3	13.1	2.0	0.0	11.7
22	21.7	0.4	16.6	2.3	0.0	16.8
23	28.4	0.5	20.3	1.4	0.0	25.0
24	31.7	0.7	23.7	2.7	0.0	32.9
25	29.1	0.7	23.2	2.8	0.0	38.9
26	36.2	0.8	24.3	2.2	0.5	50.3
27	40.9	0.9	26.4	1.8	1.4	63.4
28	42.6	0.9	27.5	3.8	1.6	77.0
29	50.0	0.9	26.7	2.9	4.7	95.6
30	65.3	0.9	25.3	0.7	18.8	116.8
31	59.6	1.0	25.7	1.5	23.6	127.1
32	73.3	1.0	25.4	0.4	37.3	137.7
33	70.4	1.0	24.4	1.7	43.4	140.3
34	76.2	1.0	25.8	1.2	48.5	142.2
35	76.4	1.0	25.6	1.2	49.8	143.3
36	58.6	1.0	24.6	1.9	34.8	142.4
37	47.2	1.0	25.0	1.9	23.0	141.6
38	43.0	1.0	26.0	3.7	19.1	139.5
39	27.2	1.0	27.2	9.1	7.9	131.6
40	26.4	1.0	27.4	8.9	5.2	125.3
41	12.9	1.0	27.7	19.1	3.8	106.8
42	11.0	1.0	27.4	18.4	0.4	90.0
43	8.0	0.9	25.9	20.1	1.6	70.6
44	5.2	0.8	22.0	18.0	0.3	53.4
45	1.8	0.6	17.6	16.0	0.0	37.6
46	0.9	0.5	14.6	14.0	0.0	23.9
47	2.8	0.3	10.6	9.2	0.0	16.1
48	0.9	0.2	6.8	6.2	0.0	10.3
49	0.0	0.1	3.8	3.8	0.0	6.5
50	0.4	0.1	2.5	2.3	0.0	4.4
51	0.0	0.0	1.6	1.5	0.0	2.8
52	0.1	0.0	1.1	1.0	0.0	1.8

AE : Actual evapotranspiration
 PE : Potential evapotranspiration
 SMOS: Soil moisture storage

ETR: Evapotranspiration réelle
 ETP: Evapotranspiration potentielle
 SES: Stock d'eau du sol

Bamako-Aéro

WATER HOLDING CAPACITY / CAPACITE DE RETENTION EN EAU.....: 200 mm

Week/ Semaine	Rain/ Pluvio- métrie(mm)	AE/PE ETR/ETP	AE/ ETR(mm)	Deficit/ Déficit(mm)	Runoff/ Ruisselle- ment(mm)	SMOS/ SES(mm)
1	0.0	0.2	5.7	5.6	0.0	29.0
2	0.1	0.1	4.8	4.7	0.0	24.4
3	0.2	0.1	4.1	4.0	0.0	20.5
4	0.1	0.1	3.6	3.5	0.0	17.0
5	0.0	0.1	3.0	3.0	0.0	14.1
6	0.0	0.1	2.5	2.5	0.0	11.6
7	0.1	0.1	2.2	2.1	0.0	9.4
8	0.1	0.0	1.8	1.7	0.0	7.7
9	0.4	0.0	1.5	1.3	0.0	6.7
10	0.1	0.0	1.2	1.1	0.0	5.6
11	0.8	0.0	1.2	0.9	0.0	5.2
12	0.8	0.0	1.1	0.8	0.0	4.9
13	1.3	0.0	1.2	0.7	0.0	5.0
14	2.4	0.0	1.5	0.8	0.0	6.0
15	3.8	0.1	2.5	0.7	0.0	7.3
16	2.5	0.0	2.1	1.2	0.0	7.7
17	8.2	0.1	4.3	0.8	0.0	11.7
18	11.1	0.1	6.0	0.9	0.0	16.8
19	12.6	0.2	8.3	1.3	0.0	21.2
20	13.2	0.2	7.9	1.6	0.0	26.5
21	15.2	0.3	10.9	2.0	0.0	30.9
22	21.7	0.4	13.7	1.6	0.0	38.9
23	28.4	0.5	17.3	1.0	0.0	50.0
24	31.7	0.6	19.9	0.9	0.0	61.7
25	29.1	0.6	19.1	0.9	0.0	71.7
26	36.2	0.7	21.3	0.8	0.0	86.5
27	40.9	0.8	23.5	0.8	1.3	102.6
28	42.6	0.8	24.5	1.7	1.1	119.7
29	50.0	0.9	25.1	1.8	4.3	140.3
30	65.3	0.9	24.8	0.5	18.3	162.5
31	59.6	0.9	25.3	1.2	21.7	175.2
32	73.3	1.0	25.4	0.5	37.3	185.7
33	70.4	1.0	24.3	1.6	42.9	188.9
34	76.2	1.0	25.8	1.3	48.3	191.0
35	76.4	1.0	25.5	1.2	50.0	191.8
36	58.6	1.0	24.6	1.9	34.8	191.0
37	47.2	1.0	25.0	1.9	23.0	190.1
38	43.0	1.0	26.0	3.7	19.1	188.0
39	27.2	1.0	26.9	8.8	7.8	180.5
40	26.4	0.9	26.8	8.4	5.2	174.9
41	12.9	0.9	25.4	16.8	3.8	158.6
42	11.0	0.8	23.8	14.9	0.4	145.3
43	8.0	0.8	21.1	15.4	1.6	130.6
44	5.2	0.7	18.6	14.7	0.3	116.9
45	1.8	0.6	16.5	14.9	0.0	102.2
46	0.9	0.5	16.2	15.5	0.0	86.9
47	2.8	0.4	14.3	12.9	0.0	75.5
48	0.9	0.4	11.8	11.2	0.0	64.7
49	0.0	0.3	9.6	9.6	0.0	55.1
50	0.4	0.3	8.4	8.3	0.0	47.1
51	0.0	0.2	7.3	7.3	0.0	39.8
52	0.1	0.2	6.4	6.4	0.0	33.5

AE : Actual evapotranspiration
 PE : Potential evapotranspiration
 SMOS: Soil moisture storage

ETR: Evapotranspiration réelle
 ETP: Evapotranspiration potentielle
 SES: Stock d'eau du sol

Bougouni

WATER HOLDING CAPACITY / CAPACITE DE RETENTION EN EAU.....: 60 mm

Week/ Semaine	Rain/ Pluvio- m�trie(mm)	AE/PE ETR/ETP	AE/ ETR(mm)	Deficit/ D�ficit(mm)	Runoff/ Ruiselle- ment(mm)	SMOS/ SES(mm)
1	0.7	0.1	1.6	1.1	0.0	1.5
2	0.0	0.0	1.0	0.9	0.0	0.8
3	0.0	0.0	0.6	0.4	0.0	0.4
4	0.1	0.0	0.5	0.2	0.0	0.2
5	0.0	0.0	0.4	0.1	0.0	0.1
6	0.0	0.0	0.3	0.1	0.0	0.1
7	0.5	0.0	0.6	0.1	0.0	0.2
8	0.0	0.0	0.4	0.1	0.0	0.1
9	0.1	0.0	0.3	0.0	0.0	0.1
10	1.0	0.0	0.9	0.0	0.0	0.5
11	1.2	0.0	1.3	0.3	0.0	0.6
12	2.8	0.1	2.4	0.3	0.0	1.3
13	4.4	0.1	3.7	0.7	0.0	2.0
14	5.1	0.1	4.6	0.7	0.0	2.6
15	4.8	0.1	4.6	1.1	0.0	2.8
16	13.7	0.2	8.5	0.6	0.1	8.0
17	13.8	0.3	11.6	3.1	0.2	10.1
18	24.7	0.5	17.9	1.3	1.2	15.8
19	19.0	0.5	17.0	3.1	1.5	16.3
20	19.5	0.6	19.8	5.4	0.0	16.0
21	25.1	0.6	21.0	2.9	0.0	20.1
22	26.7	0.7	23.7	2.8	0.5	22.6
23	25.1	0.7	22.5	2.7	0.2	25.0
24	42.7	0.9	28.8	3.3	3.6	35.4
25	31.5	0.8	24.4	5.6	6.1	36.3
26	41.5	0.9	26.1	3.6	10.8	40.9
27	42.2	1.0	26.7	1.2	8.0	48.3
28	54.1	1.0	27.5	1.9	21.2	53.7
29	59.2	1.0	27.1	0.6	28.2	57.5
30	65.2	1.0	25.8	1.2	38.7	58.2
31	53.3	1.0	25.4	1.8	27.9	58.2
32	56.2	1.0	25.0	0.1	29.8	59.5
33	69.5	1.0	24.4	0.0	44.6	60.0
34	64.5	1.0	24.5	1.0	41.0	59.0
35	61.1	1.0	24.5	0.4	36.0	59.6
36	59.4	1.0	24.5	1.1	35.7	58.7
37	50.3	1.0	25.9	2.0	25.4	57.7
38	37.0	1.0	27.0	4.3	13.8	53.8
39	26.2	1.0	27.4	10.6	8.6	44.0
40	30.3	0.9	25.5	9.2	9.2	39.7
41	11.2	0.7	20.4	10.5	1.0	29.5
42	23.7	0.8	22.0	5.1	0.6	30.5
43	11.1	0.6	15.2	7.7	2.7	23.7
44	5.5	0.5	12.9	7.8	0.0	16.2
45	0.5	0.3	7.3	6.8	0.0	9.4
46	2.0	0.2	5.2	3.7	0.0	6.2
47	1.6	0.1	3.2	2.4	0.0	4.6
48	0.0	0.1	1.9	1.9	0.0	2.7
49	0.0	0.0	1.0	1.0	0.0	1.7
50	0.0	0.0	0.6	0.6	0.0	1.1
51	0.0	0.0	0.4	0.4	0.0	0.7
52	0.0	0.0	0.4	0.3	0.0	0.4

AE : Actual evapotranspiration
 PE : Potential evapotranspiration
 SMOS: Soil moisture storage

ETR: Evapotranspiration r elle
 ETP: Evapotranspiration potentielle
 SES: Stock d'eau du sol

Bougouni

WATER HOLDING CAPACITY / CAPACITE DE RETENTION EN EAU.....: 250 mm

Week/ Semaine	Rain/ Pluio- métrie(mm)	AE/PE ETR/ETP	AE/ ETR(mm)	Deficit/ Déficit(mm)	Runoff/ Ruisselle- ment(mm)	SMOS/ SES(mm)
1	0.7	0.3	9.0	8.3	0.0	68.8
2	0.0	0.3	8.3	8.3	0.0	60.5
3	0.0	0.2	7.5	7.5	0.0	53.0
4	0.1	0.2	6.8	6.7	0.0	46.3
5	0.0	0.2	5.9	5.9	0.0	40.4
6	0.0	0.2	5.2	5.1	0.0	35.3
7	0.5	0.1	5.0	4.7	0.0	30.8
8	0.0	0.1	4.2	4.2	0.0	26.6
9	0.1	0.1	3.1	3.0	0.0	23.6
10	1.0	0.1	3.4	3.1	0.0	21.2
11	1.2	0.1	3.2	2.9	0.0	19.2
12	2.8	0.1	3.3	1.9	0.0	18.7
13	4.4	0.1	3.5	1.8	0.0	19.6
14	5.1	0.1	3.7	1.5	0.0	21.0
15	4.8	0.1	3.7	1.9	0.0	22.1
16	13.7	0.2	6.3	1.1	0.0	29.5
17	13.8	0.2	7.3	1.9	0.0	36.0
18	24.7	0.4	14.1	0.8	0.0	46.7
19	19.0	0.4	12.4	1.2	0.0	53.4
20	19.5	0.4	14.0	2.3	0.0	58.9
21	25.1	0.4	14.7	2.0	0.0	69.3
22	26.7	0.6	20.7	1.1	0.0	75.3
23	25.1	0.5	16.8	0.7	0.0	83.5
24	42.7	0.9	26.9	1.4	0.0	99.4
25	31.5	0.7	19.5	2.3	0.0	111.4
26	41.5	0.9	24.3	2.5	0.0	128.6
27	42.2	0.9	25.3	0.0	0.0	145.5
28	54.1	0.9	26.0	0.8	0.0	173.6
29	59.2	1.0	26.4	0.0	5.2	201.1
30	65.2	1.0	25.8	1.2	12.6	227.9
31	53.3	1.0	25.4	1.8	18.7	237.1
32	56.2	1.0	25.0	0.1	22.7	245.5
33	69.5	1.0	24.4	0.0	43.2	247.4
34	64.5	1.0	24.5	1.0	39.3	248.1
35	61.1	1.0	24.5	0.4	35.1	249.6
36	59.4	1.0	24.5	1.1	35.7	248.7
37	50.3	1.0	25.9	2.0	25.4	247.7
38	37.0	1.0	27.0	4.3	13.8	243.8
39	26.2	1.0	27.8	11.0	8.6	233.6
40	30.3	1.0	27.6	11.3	9.2	227.2
41	11.2	0.9	25.5	15.3	1.0	211.9
42	23.7	0.9	25.3	8.2	0.6	209.6
43	11.1	0.9	23.1	15.5	2.7	194.9
44	5.5	0.8	22.0	16.7	0.0	178.4
45	0.5	0.7	19.0	18.4	0.0	160.0
46	2.0	0.6	18.0	16.0	0.0	143.9
47	1.6	0.6	14.6	13.5	0.0	130.9
48	0.0	0.5	13.6	13.6	0.0	117.3
49	0.0	0.5	11.8	11.8	0.0	105.5
50	0.0	0.4	10.9	10.9	0.0	94.6
51	0.0	0.4	9.9	9.9	0.0	84.7
52	0.0	0.3	10.3	10.3	0.0	74.4

AE : Actual evapotranspiration
 PE : Potential evapotranspiration
 SMOS: Soil moisture storage

ETR: Evapotranspiration réelle
 ETP: Evapotranspiration potentielle
 SES: Stock d'eau du sol

Keyes

WATER HOLDING CAPACITY / CAPACITE DE RETENTION EN EAU.....: 120 mm

Week/ Semaine	Rain/ Pluvio- m�trie(mm)	AE/PE ETR/ETP	AE/ ETR(mm)	Deficit/ D�ficit(mm)	Runoff/ Ruisselle- ment(mm)	SMOS/ SES(mm)
1	0.0	0.0	1.2	1.2	0.0	5.3
2	0.4	0.0	1.2	1.1	0.0	4.4
3	0.0	0.0	1.0	1.0	0.0	3.4
4	0.0	0.0	0.8	0.8	0.0	2.7
5	0.0	0.0	0.6	0.6	0.0	2.1
6	0.4	0.0	0.6	0.5	0.0	1.8
7	0.0	0.0	0.5	0.5	0.0	1.3
8	0.0	0.0	0.5	0.5	0.0	0.9
9	0.0	0.0	0.5	0.4	0.0	0.5
10	0.1	0.0	0.5	0.3	0.0	0.3
11	0.0	0.0	0.5	0.2	0.0	0.2
12	0.2	0.0	0.5	0.1	0.0	0.2
13	0.0	0.0	0.5	0.1	0.0	0.1
14	0.1	0.0	0.5	0.1	0.0	0.2
15	0.2	0.0	0.6	0.1	0.0	0.2
16	0.1	0.0	0.6	0.1	0.0	0.2
17	0.6	0.0	0.7	0.1	0.0	0.5
18	1.3	0.0	1.1	0.1	0.0	1.0
19	3.2	0.0	2.3	0.3	0.0	2.2
20	2.0	0.0	1.9	0.7	0.0	2.6
21	5.4	0.1	2.9	0.4	0.0	5.1
22	10.9	0.1	6.7	1.0	0.0	9.3
23	16.9	0.3	11.9	1.0	0.0	14.4
24	20.0	0.3	14.8	1.7	0.0	19.6
25	28.2	0.5	21.7	1.3	0.0	26.1
26	28.6	0.6	22.5	2.0	0.0	32.2
27	32.0	0.6	22.2	1.2	0.2	41.8
28	44.2	0.7	25.5	1.5	1.6	58.8
29	35.2	0.8	26.4	2.8	2.0	65.7
30	42.6	0.8	26.6	3.3	7.3	74.4
31	44.7	0.9	27.1	4.0	6.7	85.4
32	50.7	0.9	27.6	3.8	15.6	92.8
33	59.5	1.0	28.2	2.6	18.8	105.4
34	46.2	1.0	28.0	5.3	18.3	105.2
35	60.8	1.0	28.8	2.2	26.3	110.9
36	44.8	1.0	28.1	3.4	16.6	111.0
37	38.7	1.0	28.0	4.7	12.3	109.3
38	35.6	1.0	28.7	6.0	10.4	105.8
39	22.7	0.9	28.4	13.1	5.6	94.5
40	15.6	0.8	26.2	14.1	1.9	81.9
41	11.5	0.7	23.3	13.9	1.0	69.3
42	5.9	0.6	19.0	13.8	0.1	56.0
43	8.1	0.5	15.7	9.8	0.0	48.5
44	2.8	0.4	13.0	11.2	0.0	38.4
45	0.5	0.3	9.8	9.4	0.0	29.0
46	0.0	0.2	6.7	6.7	0.0	22.3
47	0.1	0.2	5.2	5.1	0.0	17.2
48	0.4	0.1	3.9	3.6	0.0	13.6
49	0.0	0.1	2.8	2.8	0.0	10.8
50	0.1	0.1	2.3	2.3	0.0	8.6
51	0.3	0.1	1.9	1.7	0.0	7.0
52	0.1	0.1	1.7	1.6	0.0	5.4

AE : Actual evapotranspiration
 PE : Potential evapotranspiration
 SMOS: Soil moisture storage

ETR: Evapotranspiration r elle
 ETP: Evapotranspiration potentielle
 SES: Stock d'eau du sol

Kayes

WATER HOLDING CAPACITY / CAPACITE DE RETENTION EN EAU.....: 190 mm

Week/ Semaine	Rain/ Pluvio- m�trie(mm)	AE/PE ETR/ETP	AE/ ETR(mm)	Deficit/ D�ficit(mm)	Runoff/ Ruisselle- ment(mm)	SMOS/ SES(mm)
1	0.0	0.1	3.5	3.5	0.0	24.0
2	0.4	0.1	3.5	3.4	0.0	20.8
3	0.0	0.1	3.3	3.3	0.0	17.5
4	0.0	0.1	2.7	2.7	0.0	14.8
5	0.0	0.1	2.4	2.4	0.0	12.4
6	0.4	0.1	2.2	2.0	0.0	10.6
7	0.0	0.1	1.9	1.9	0.0	8.7
8	0.0	0.0	1.6	1.5	0.0	7.2
9	0.0	0.0	1.3	1.3	0.0	5.9
10	0.1	0.0	1.1	1.1	0.0	4.8
11	0.0	0.0	0.9	0.9	0.0	3.9
12	0.2	0.0	0.8	0.7	0.0	3.3
13	0.0	0.0	0.6	0.6	0.0	2.6
14	0.1	0.0	0.5	0.5	0.0	2.2
15	0.2	0.0	0.6	0.5	0.0	1.8
16	0.1	0.0	0.6	0.5	0.0	1.4
17	0.6	0.0	0.7	0.4	0.0	1.3
18	1.3	0.0	0.9	0.4	0.0	1.9
19	3.2	0.0	2.0	0.4	0.0	3.2
20	2.0	0.0	1.5	0.7	0.0	3.9
21	5.4	0.0	2.2	0.4	0.0	7.2
22	10.9	0.1	5.4	0.8	0.0	12.8
23	16.9	0.2	10.1	0.7	0.0	19.7
24	20.0	0.3	12.5	1.2	0.0	27.2
25	28.2	0.5	19.8	1.0	0.0	35.6
26	28.6	0.5	20.7	1.3	0.0	43.6
27	32.0	0.6	20.3	0.9	0.0	55.3
28	44.2	0.7	23.4	0.9	0.0	76.0
29	35.2	0.7	24.1	2.1	0.0	87.2
30	42.6	0.8	24.7	1.9	3.4	101.6
31	44.7	0.8	25.8	3.2	2.2	118.3
32	50.7	0.9	26.2	3.2	7.5	135.2
33	59.5	0.9	27.5	2.0	13.2	154.0
34	46.2	0.9	27.0	4.4	12.3	160.9
35	60.8	1.0	28.7	2.2	22.0	170.9
36	44.8	1.0	27.8	3.1	14.1	173.9
37	38.7	1.0	27.8	4.5	11.2	173.5
38	35.6	1.0	28.5	5.9	10.0	170.6
39	22.7	0.9	28.5	13.2	5.6	159.2
40	15.6	0.9	27.1	15.0	1.6	146.1
41	11.5	0.8	25.3	15.9	0.9	131.4
42	5.9	0.7	22.1	16.8	0.1	115.1
43	8.1	0.7	19.1	13.2	0.0	104.1
44	2.8	0.6	17.1	15.3	0.0	89.8
45	0.5	0.5	14.5	14.1	0.0	75.8
46	0.0	0.4	11.2	11.2	0.0	64.6
47	0.1	0.3	9.6	9.6	0.0	55.1
48	0.4	0.3	8.0	7.6	0.0	47.4
49	0.0	0.2	6.4	6.4	0.0	41.1
50	0.1	0.2	5.7	5.6	0.0	35.4
51	0.3	0.2	5.0	4.8	0.0	30.8
52	0.1	0.2	4.9	4.8	0.0	26.0

AE : Actual evapotranspiration
 PE : Potential evapotranspiration
 SMOS: Soil moisture storage

ETR: Evapotranspiration r elle
 ETP: Evapotranspiration potentielle
 SES: Stock d'eau du sol

Mopti

WATER HOLDING CAPACITY / CAPACITE DE RETENTION EN EAU.....: 100 mm

Week/ Semaine	Rain/ Pluvio- m�trie(mm)	AE/PE ETR/ETP	AE/ ETR(mm)	Deficit/ D�ficit(mm)	Runoff/ Ruisselle- ment(mm)	SMOS/ SES(mm)
1	0.1	0.0	0.8	0.7	0.0	1.4
2	0.0	0.0	0.6	0.6	0.0	0.9
3	0.1	0.0	0.5	0.4	0.0	0.5
4	0.0	0.0	0.5	0.3	0.0	0.3
5	0.0	0.0	0.4	0.2	0.0	0.2
6	0.0	0.0	0.4	0.1	0.0	0.1
7	0.0	0.0	0.5	0.1	0.0	0.1
8	0.0	0.0	0.5	0.0	0.0	0.0
9	0.0	0.0	0.5	0.0	0.0	0.0
10	0.0	0.0	0.5	0.0	0.0	0.0
11	0.0	0.0	0.5	0.0	0.0	0.0
12	0.4	0.0	0.7	0.0	0.0	0.2
13	0.1	0.0	0.6	0.1	0.0	0.2
14	0.5	0.0	0.8	0.1	0.0	0.3
15	0.4	0.0	0.8	0.1	0.0	0.4
16	2.7	0.0	2.0	0.2	0.0	1.4
17	1.3	0.0	1.7	0.7	0.0	1.3
18	3.6	0.1	3.0	0.4	0.0	2.0
19	2.2	0.0	2.2	0.8	0.0	2.2
20	3.4	0.1	2.8	0.8	0.0	2.9
21	5.6	0.1	4.1	0.5	0.0	4.5
22	13.8	0.2	9.2	0.7	0.0	9.1
23	12.8	0.2	10.9	2.0	0.0	11.0
24	13.7	0.3	13.7	2.9	0.0	11.0
25	14.8	0.3	13.7	1.9	0.0	12.0
26	17.8	0.3	14.5	1.4	0.0	15.4
27	21.2	0.4	16.1	1.7	0.0	20.5
28	35.1	0.7	25.0	1.0	0.0	30.5
29	32.1	0.6	22.7	1.9	0.5	39.4
30	36.3	0.7	25.1	2.0	1.8	48.9
31	43.1	0.8	32.4	3.2	0.9	58.7
32	44.8	0.8	31.5	5.7	6.4	65.6
33	41.3	0.9	27.5	3.8	8.6	70.7
34	41.7	0.9	26.5	4.6	12.9	73.2
35	38.4	0.9	28.0	3.4	6.8	76.7
36	30.2	0.9	27.7	9.0	7.7	71.5
37	21.7	0.9	26.7	8.5	0.5	66.0
38	19.3	0.8	24.9	8.4	0.6	59.8
39	12.9	0.7	22.4	11.3	0.8	49.5
40	7.7	0.6	17.9	11.0	0.0	39.2
41	7.0	0.5	14.7	8.3	0.0	31.6
42	3.4	0.4	11.2	8.2	0.0	23.8
43	1.8	0.3	7.9	6.3	0.0	17.7
44	0.6	0.2	5.9	5.3	0.0	12.4
45	0.0	0.1	4.2	4.1	0.0	8.3
46	0.0	0.1	2.6	2.6	0.0	5.7
47	0.1	0.1	1.8	1.7	0.0	4.1
48	0.0	0.0	1.2	1.1	0.0	3.0
49	0.1	0.0	0.7	0.7	0.0	2.3
50	0.2	0.0	0.6	0.6	0.0	1.9
51	0.2	0.0	0.5	0.4	0.0	1.6
52	0.0	0.0	0.5	0.5	0.0	1.1

AE : Actual evapotranspiration ETR: Evapotranspiration r elle
PE : Potential evapotranspiration ETP: Evapotranspiration potentielle
SMOS: Soil moisture storage SES: Stock d'eau du sol

Mopti

WATER HOLDING CAPACITY / CAPACITE DE RETENTION EN EAU.....: 270 mm

Week/ Semaine	Rain/ Pluvio- métrerie(mm)	AE/PE ETR/ETP	AE/ ETR(mm)	Deficit/ Déficit(mm)	Runoff/ Ruisselle- ment(mm)	SMOS/ SES(mm)
1	0.1	0.1	4.7	4.6	0.0	33.4
2	0.0	0.1	4.0	4.0	0.0	29.4
3	0.1	0.1	3.5	3.4	0.0	25.9
4	0.0	0.1	3.3	3.3	0.0	22.6
5	0.0	0.1	2.9	2.9	0.0	19.7
6	0.0	0.1	2.7	2.7	0.0	17.0
7	0.0	0.1	2.6	2.6	0.0	14.4
8	0.0	0.0	2.2	2.2	0.0	12.2
9	0.0	0.0	1.9	1.9	0.0	10.3
10	0.0	0.0	1.7	1.7	0.0	8.7
11	0.0	0.0	1.5	1.5	0.0	7.2
12	0.4	0.0	1.3	1.1	0.0	6.4
13	0.1	0.0	1.0	0.9	0.0	5.5
14	0.5	0.0	0.9	0.8	0.0	5.0
15	0.4	0.0	0.9	0.7	0.0	4.6
16	2.7	0.0	1.3	0.6	0.0	5.9
17	1.3	0.0	1.3	0.9	0.0	5.9
18	3.6	0.0	2.4	0.7	0.0	7.1
19	2.2	0.0	1.6	1.0	0.0	7.7
20	3.4	0.0	1.9	0.9	0.0	9.2
21	5.6	0.1	2.5	0.5	0.0	12.3
22	13.8	0.1	5.8	0.5	0.0	20.3
23	12.8	0.1	6.6	0.9	0.0	26.6
24	13.7	0.2	9.8	1.7	0.0	30.5
25	14.8	0.2	10.8	1.3	0.0	34.5
26	17.8	0.2	11.1	1.0	0.0	41.2
27	21.2	0.3	12.1	1.0	0.0	50.4
28	35.1	0.6	22.3	0.6	0.0	63.2
29	32.1	0.5	19.1	1.0	0.0	76.1
30	36.3	0.6	20.6	0.5	0.0	91.9
31	43.1	0.7	28.2	1.5	0.0	106.8
32	44.8	0.7	26.1	1.9	0.0	125.6
33	41.3	0.8	24.6	1.9	0.3	142.0
34	41.7	0.8	23.1	2.2	3.4	157.2
35	38.4	0.9	25.5	1.7	1.2	168.9
36	30.2	0.8	24.4	5.8	1.7	173.0
37	21.7	0.8	23.9	6.9	0.1	170.7
38	19.3	0.7	22.9	7.1	0.3	166.8
39	12.9	0.7	21.2	10.7	0.8	157.7
40	7.7	0.6	19.2	12.5	0.0	146.1
41	7.0	0.6	18.2	12.1	0.0	134.9
42	3.4	0.5	16.4	13.4	0.0	121.9
43	1.8	0.5	14.0	12.3	0.0	109.7
44	0.6	0.4	13.3	12.7	0.0	97.0
45	0.0	0.4	12.3	12.3	0.0	84.7
46	0.0	0.3	10.1	10.1	0.0	74.6
47	0.1	0.3	9.1	9.0	0.0	65.6
48	0.0	0.2	7.7	7.7	0.0	57.9
49	0.1	0.2	6.2	6.1	0.0	51.8
50	0.2	0.2	5.8	5.7	0.0	46.1
51	0.2	0.2	5.2	5.1	0.0	41.1
52	0.0	0.1	5.2	5.2	0.0	35.9

AE : Actual evapotranspiration
 PE : Potential evapotranspiration
 SMOS: Soil moisture storage

ETR: Evapotranspiration réelle
 ETP: Evapotranspiration potentielle
 SES: Stock d'eau du sol

Nioro du Sahel

WATER HOLDING CAPACITY / CAPACITE DE RETENTION EN EAU.....: 120 mm

Week/ Semaine	Rain/ Pluio- métrie(mm)	AE/PE ETR/ETP	AE/ ETR(mm)	Deficit/ Déficit(mm)	Runoff/ Ruisselle- ment(mm)	SMOS/ SES(mm)
1	0.0	0.0	0.8	0.8	0.0	2.6
2	0.0	0.0	0.7	0.7	0.0	2.0
3	0.3	0.0	0.7	0.6	0.0	1.6
4	0.1	0.0	0.6	0.6	0.0	1.1
5	0.0	0.0	0.5	0.5	0.0	0.7
6	0.4	0.0	0.6	0.3	0.0	0.7
7	0.0	0.0	0.3	0.2	0.0	0.5
8	0.0	0.0	0.3	0.2	0.0	0.4
9	0.0	0.0	0.6	0.2	0.0	0.2
10	0.1	0.0	0.5	0.1	0.0	0.2
11	0.0	0.0	0.5	0.1	0.0	0.1
12	0.0	0.0	0.6	0.0	0.0	0.1
13	0.0	0.0	0.6	0.0	0.0	0.0
14	0.0	0.0	0.6	0.1	0.0	0.0
15	1.2	0.0	1.1	0.0	0.0	0.6
16	1.5	0.0	1.5	0.3	0.0	1.1
17	1.9	0.0	1.8	0.5	0.0	1.6
18	2.2	0.0	2.1	0.7	0.0	2.0
19	1.3	0.0	1.8	0.8	0.0	1.8
20	1.3	0.0	1.6	0.6	0.0	1.7
21	7.2	0.1	3.8	0.5	0.3	4.9
22	7.4	0.1	6.4	1.7	0.0	6.0
23	9.0	0.1	7.5	1.5	0.0	7.5
24	13.7	0.2	9.9	1.3	0.0	11.3
25	18.9	0.3	14.7	2.1	0.3	15.2
26	22.0	0.3	17.2	2.3	0.4	19.6
27	28.6	0.5	21.2	2.4	0.0	27.0
28	34.4	0.5	21.5	1.1	1.7	38.2
29	37.5	0.6	24.6	2.0	1.7	49.3
30	45.5	0.8	26.8	2.4	6.1	61.9
31	51.2	0.8	29.7	3.5	9.1	74.3
32	50.0	0.8	29.3	3.9	15.7	79.4
33	55.8	0.9	29.8	3.3	17.2	88.2
34	58.4	0.9	29.6	5.0	21.2	95.7
35	44.0	0.9	29.4	6.0	16.0	94.3
36	39.7	0.9	29.4	5.6	11.0	93.6
37	32.5	0.9	28.4	8.5	7.3	90.4
38	23.6	0.9	28.4	10.3	2.6	82.9
39	17.0	0.8	26.9	14.4	2.9	70.2
40	10.2	0.6	27.8	18.3	0.4	52.1
41	7.7	0.5	20.3	13.6	0.0	39.5
42	4.5	0.4	14.7	11.2	0.0	29.3
43	2.5	0.3	11.8	9.6	0.0	20.1
44	1.2	0.2	6.9	6.0	0.0	14.3
45	0.3	0.1	4.2	4.0	0.0	10.4
46	0.0	0.1	2.7	2.7	0.0	7.7
47	0.7	0.1	2.2	1.8	0.0	6.2
48	0.5	0.1	1.7	1.4	0.0	5.1
49	0.2	0.0	1.2	1.1	0.0	4.1
50	0.3	0.0	1.0	0.9	0.0	3.4
51	0.6	0.0	0.9	0.7	0.0	3.1
52	0.1	0.0	0.8	0.7	0.0	2.4

AE : Actual evapotranspiration
 PE : Potential evapotranspiration
 SMOS: Soil moisture storage

ETR: Evapotranspiration réelle
 ETP: Evapotranspiration potentielle
 SES: Stock d'eau du sol

Nioro du Sahel

WATER HOLDING CAPACITY / CAPACITE DE RETENTION EN EAU.....: 190 mm

Week/ Semaine	Rain/ Pluvio- mètrie(mm)	AE/PE ETR/ETP	AE/ ETR(mm)	Deficit/ Déficit(mm)	Runoff/ Ruisselle- ment(mm)	SMOS/ SES(mm)
1	0.0	0.1	2.1	2.1	0.0	11.5
2	0.0	0.1	1.9	1.9	0.0	9.6
3	0.3	0.0	1.7	1.6	0.0	8.2
4	0.1	0.0	1.5	1.5	0.0	6.7
5	0.0	0.0	1.2	1.2	0.0	5.5
6	0.4	0.0	1.1	0.9	0.0	4.9
7	0.0	0.0	0.6	0.6	0.0	4.3
8	0.0	0.0	0.5	0.5	0.0	3.8
9	0.0	0.0	0.8	0.8	0.0	3.1
10	0.1	0.0	0.7	0.6	0.0	2.5
11	0.0	0.0	0.6	0.6	0.0	1.8
12	0.0	0.0	0.6	0.6	0.0	1.2
13	0.0	0.0	0.6	0.6	0.0	0.7
14	0.0	0.0	0.6	0.4	0.0	0.4
15	1.2	0.0	0.9	0.3	0.0	1.1
16	1.5	0.0	1.2	0.4	0.0	1.8
17	1.9	0.0	1.5	0.5	0.0	2.6
18	2.2	0.0	1.7	0.8	0.0	3.4
19	1.3	0.0	1.6	0.8	0.0	3.4
20	1.3	0.0	1.5	0.8	0.0	3.3
21	7.2	0.1	3.3	0.7	0.0	7.3
22	7.4	0.1	5.1	1.5	0.0	9.7
23	9.0	0.1	6.5	1.4	0.0	12.3
24	13.7	0.1	8.0	1.1	0.0	18.0
25	18.9	0.2	12.4	1.8	0.0	24.5
26	22.0	0.3	15.2	2.2	0.0	31.4
27	28.6	0.4	19.7	2.1	0.0	40.2
28	34.4	0.5	19.1	0.9	0.3	55.1
29	37.5	0.6	23.0	1.5	0.5	69.1
30	45.5	0.7	25.3	1.6	3.4	85.9
31	51.2	0.8	28.0	2.7	3.9	105.2
32	50.0	0.8	27.5	2.8	12.8	115.0
33	55.8	0.9	28.9	2.6	12.6	129.3
34	58.4	0.9	28.7	4.2	17.0	142.0
35	44.0	0.9	28.4	5.4	13.3	144.2
36	39.7	0.9	28.4	5.0	9.2	146.3
37	32.5	0.9	27.7	7.8	6.2	144.9
38	23.6	0.9	28.0	10.1	2.5	138.0
39	17.0	0.8	27.2	14.8	2.7	125.1
40	10.2	0.7	30.0	20.5	0.4	104.9
41	7.7	0.6	24.2	17.6	0.0	88.3
42	4.5	0.5	19.6	15.9	0.0	73.2
43	2.5	0.4	17.8	15.6	0.0	57.9
44	1.2	0.3	12.3	11.3	0.0	46.7
45	0.3	0.2	8.7	8.5	0.0	38.3
46	0.0	0.2	6.5	6.5	0.0	31.8
47	0.7	0.2	5.6	5.0	0.0	26.9
48	0.5	0.1	4.6	4.2	0.0	22.9
49	0.2	0.1	3.5	3.3	0.0	19.6
50	0.3	0.1	3.2	3.0	0.0	16.8
51	0.6	0.1	2.8	2.6	0.0	14.6
52	0.1	0.1	2.7	2.6	0.0	12.0

AE : Actual evapotranspiration
 PE : Potential evapotranspiration
 SMOS: Soil moisture storage

ETR: Evapotranspiration réelle
 ETP: Evapotranspiration potentielle
 SES: Stock d'eau du sol

San

WATER HOLDING CAPACITY / CAPACITE DE RETENTION EN EAU.....: 120 mm

Week/ Semaine	Rain/ Pluvio- m�trie(mm)	AE/PE ETR/ETP	AE/ ETR(mm)	Deficit/ D�ficit(mm)	Runoff/ Ruisselle- ment(mm)	SMOS/ SES(mm)
1	0.1	0.0	1.2	1.1	0.0	4.1
2	0.2	0.0	0.9	0.8	0.0	3.4
3	0.2	0.0	0.7	0.7	0.0	2.8
4	0.0	0.0	0.6	0.6	0.0	2.2
5	0.0	0.0	0.5	0.5	0.0	1.8
6	0.1	0.0	0.5	0.4	0.0	1.4
7	0.0	0.0	0.5	0.5	0.0	0.9
8	0.0	0.0	0.5	0.4	0.0	0.6
9	0.2	0.0	0.5	0.3	0.0	0.4
10	0.4	0.0	0.6	0.2	0.0	0.5
11	0.2	0.0	0.6	0.2	0.0	0.4
12	0.9	0.0	0.8	0.1	0.0	0.8
13	1.7	0.0	1.2	0.2	0.0	1.5
14	2.4	0.0	1.7	0.5	0.0	2.5
15	2.7	0.0	2.0	0.6	0.0	3.4
16	4.0	0.1	3.0	1.1	0.0	4.5
17	5.2	0.1	3.8	1.2	0.0	6.1
18	9.1	0.1	6.4	1.5	0.0	8.8
19	5.0	0.1	5.1	1.8	0.0	8.8
20	8.1	0.1	6.7	1.7	0.0	10.2
21	12.0	0.2	10.1	1.4	0.0	12.1
22	20.6	0.3	13.2	1.2	0.0	19.5
23	20.6	0.4	14.7	1.6	0.0	25.4
24	25.2	0.5	19.2	2.7	0.0	31.4
25	24.7	0.5	20.6	3.4	0.0	35.5
26	24.8	0.6	20.6	3.3	0.4	39.3
27	34.2	0.7	24.3	1.7	1.0	48.2
28	42.7	0.8	25.6	2.0	1.9	63.4
29	41.7	0.9	26.9	2.4	4.2	74.0
30	45.1	0.9	26.7	2.0	4.5	87.9
31	50.2	1.0	28.8	2.2	11.5	97.8
32	58.2	1.0	28.9	1.1	19.5	107.7
33	53.9	1.0	28.1	2.5	23.1	110.4
34	55.8	1.0	27.6	2.4	24.2	114.4
35	52.4	1.0	28.2	2.5	23.7	114.9
36	38.4	1.0	28.6	5.4	13.9	110.8
37	37.8	1.0	27.4	5.6	12.8	108.3
38	24.5	1.0	27.0	9.9	5.6	100.2
39	14.5	0.9	26.1	14.4	1.9	86.7
40	13.2	0.8	25.1	13.2	0.3	74.6
41	7.0	0.7	20.4	14.9	0.3	60.9
42	3.7	0.5	16.5	13.0	0.0	48.1
43	3.7	0.4	13.4	10.2	0.0	38.4
44	1.9	0.3	10.3	8.6	0.0	30.0
45	0.7	0.3	7.8	7.2	0.0	23.0
46	0.5	0.2	5.5	5.3	0.0	18.0
47	1.2	0.2	4.9	4.2	0.0	14.3
48	0.2	0.1	3.4	3.1	0.0	11.1
49	0.2	0.1	2.3	2.1	0.0	9.1
50	0.2	0.1	2.1	2.0	0.0	7.2
51	0.1	0.1	1.6	1.5	0.0	5.7
52	0.0	0.0	1.4	1.4	0.0	4.3

AE : Actual evapotranspiration
 PE : Potential evapotranspiration
 SMOS: Soil moisture storage

ETR: Evapotranspiration r elle
 ETP: Evapotranspiration potentiel
 SES: Stock d'eau du sol

San

WATER HOLDING CAPACITY / CAPACITE DE RETENTION EN EAU.....: 190 mm

Week/ Semaine	Rain/ Pluvio- m�trie(mm)	AE/PE ETR/ETP	AE/ ETR(mm)	Deficit/ D�ficit(mm)	Runoff/ Ruisselle- ment(mm)	SMOS/ SES(mm)
1	0.1	0.1	3.6	3.5	0.0	20.0
2	0.2	0.1	3.0	2.9	0.0	17.1
3	0.2	0.1	2.6	2.5	0.0	14.8
4	0.0	0.1	2.3	2.3	0.0	12.4
5	0.0	0.1	2.0	1.9	0.0	10.5
6	0.1	0.1	1.7	1.6	0.0	8.9
7	0.0	0.0	1.7	1.6	0.0	7.3
8	0.0	0.0	1.3	1.3	0.0	6.0
9	0.2	0.0	1.2	1.1	0.0	5.0
10	0.4	0.0	1.1	0.9	0.0	4.3
11	0.2	0.0	0.9	0.8	0.0	3.6
12	0.9	0.0	0.9	0.6	0.0	3.6
13	1.7	0.0	1.1	0.5	0.0	4.1
14	2.4	0.0	1.5	0.8	0.0	5.0
15	2.7	0.0	1.7	0.8	0.0	6.1
16	4.0	0.0	2.4	1.2	0.0	7.7
17	5.2	0.1	3.3	1.3	0.0	9.6
18	9.1	0.1	5.3	1.5	0.0	13.4
19	5.0	0.1	4.2	1.5	0.0	14.2
20	8.1	0.1	5.8	1.6	0.0	16.5
21	12.0	0.2	8.9	1.3	0.0	19.5
22	20.6	0.3	11.8	1.1	0.0	28.3
23	20.6	0.3	12.8	1.1	0.0	36.2
24	25.2	0.4	16.9	1.9	0.0	44.5
25	24.7	0.5	18.5	2.5	0.0	50.7
26	24.8	0.5	18.5	2.4	0.0	57.0
27	34.2	0.6	22.2	1.2	0.2	69.0
28	42.7	0.7	24.1	1.5	0.7	86.9
29	41.7	0.8	25.2	1.3	1.5	101.8
30	45.1	0.9	25.6	1.5	1.9	119.4
31	50.2	0.9	27.8	1.5	5.3	136.5
32	58.2	1.0	28.5	0.8	9.9	156.3
33	53.9	1.0	27.5	2.1	18.2	164.5
34	55.8	1.0	27.3	2.1	18.5	174.5
35	52.4	1.0	28.0	2.4	18.6	180.3
36	38.4	1.0	28.4	5.3	12.7	177.5
37	37.8	1.0	27.4	5.6	11.7	176.2
38	24.5	1.0	27.3	10.1	5.6	167.8
39	14.5	0.9	27.0	15.3	1.9	153.4
40	13.2	0.9	26.7	14.8	0.3	139.6
41	7.0	0.8	23.5	17.9	0.3	122.9
42	3.7	0.7	20.5	17.0	0.0	106.0
43	3.7	0.6	17.9	14.6	0.0	91.9
44	1.9	0.5	15.2	13.3	0.0	78.6
45	0.7	0.4	12.8	12.1	0.0	66.5
46	0.5	0.3	9.9	9.7	0.0	57.0
47	1.2	0.3	9.3	8.7	0.0	48.9
48	0.2	0.3	7.4	7.2	0.0	41.7
49	0.2	0.2	5.5	5.3	0.0	36.5
50	0.2	0.2	5.4	5.2	0.0	31.3
51	0.1	0.2	4.6	4.5	0.0	26.8
52	0.0	0.1	4.4	4.4	0.0	22.3

AE : Actual evapotranspiration
 PE : Potential evapotranspiration
 SMOS: Soil moisture storage

ETR: Evapotranspiration r elle
 ETP: Evapotranspiration potentielle
 SES: Stock d'eau du sol

Ségou

WATER HOLDING CAPACITY / CAPACITE DE RETENTION EN EAU.....: 120 mm

Week/ Semaine	Rain/ Pluio- métrie(mm)	AE/PE ETR/ETP	AE/ ETR(mm)	Deficit/ Déficit(mm)	Runoff/ Ruisselle- ment(mm)	SMOS/ SES(mm)
1	0.1	0.0	1.2	1.1	0.0	3.4
2	0.1	0.0	0.9	0.8	0.0	2.7
3	0.0	0.0	0.7	0.7	0.0	2.0
4	0.0	0.0	0.6	0.6	0.0	1.4
5	0.2	0.0	0.6	0.5	0.0	1.1
6	0.0	0.0	0.5	0.4	0.0	0.7
7	0.0	0.0	0.5	0.4	0.0	0.4
8	0.0	0.0	0.5	0.2	0.0	0.2
9	0.2	0.0	0.5	0.1	0.0	0.3
10	0.1	0.0	0.5	0.1	0.0	0.2
11	0.8	0.0	0.8	0.1	0.0	0.6
12	1.1	0.0	1.0	0.2	0.0	1.1
13	0.9	0.0	1.0	0.3	0.0	1.3
14	1.9	0.0	1.3	0.4	0.0	2.1
15	2.6	0.0	2.2	0.7	0.0	2.8
16	2.6	0.0	2.4	1.0	0.0	3.2
17	3.4	0.1	3.0	0.9	0.0	3.6
18	6.4	0.1	4.5	0.7	0.0	5.6
19	5.6	0.1	4.4	1.2	0.0	6.8
20	6.9	0.1	5.8	1.3	0.0	7.9
21	5.6	0.1	4.6	1.6	0.0	8.9
22	13.2	0.2	8.9	1.2	0.0	13.2
23	18.0	0.3	11.7	0.9	0.0	19.5
24	21.7	0.4	13.4	1.3	0.0	27.8
25	18.2	0.4	15.4	3.2	0.0	30.6
26	25.1	0.6	20.4	2.4	0.0	35.3
27	30.9	0.6	23.2	1.8	0.6	42.3
28	41.9	0.8	24.7	1.0	0.8	58.7
29	43.6	0.9	26.8	2.0	0.7	74.8
30	51.9	0.9	27.3	1.3	9.7	89.8
31	49.2	1.0	27.3	1.7	11.8	99.9
32	57.6	1.0	28.0	1.1	20.5	108.9
33	52.6	1.0	28.2	2.9	21.7	111.6
34	54.5	1.0	26.2	1.4	25.0	114.9
35	50.5	1.0	26.0	1.3	24.5	114.9
36	41.1	1.0	27.2	4.5	17.5	111.4
37	31.5	1.0	27.0	7.3	8.8	107.0
38	20.7	0.9	27.0	11.0	2.6	98.1
39	14.8	0.9	26.1	14.5	0.8	86.0
40	10.5	0.8	23.7	14.1	0.0	72.8
41	6.9	0.6	19.4	14.2	0.4	60.0
42	5.3	0.5	16.4	11.9	0.4	48.5
43	3.2	0.4	12.8	10.1	0.0	38.9
44	2.5	0.3	11.0	8.8	0.0	30.4
45	0.1	0.2	8.4	8.3	0.0	22.1
46	0.0	0.2	5.6	5.6	0.0	16.5
47	1.0	0.1	4.6	4.1	0.0	12.9
48	0.0	0.1	3.3	3.3	0.0	9.5
49	0.0	0.1	2.4	2.4	0.0	7.2
50	0.5	0.1	1.8	1.7	0.0	5.8
51	0.1	0.0	1.4	1.3	0.0	4.5
52	0.1	0.0	1.2	1.1	0.0	3.4

AE : Actual evapotranspiration
 PE : Potential evapotranspiration
 SMOS: Soil moisture storage

ETR: Evapotranspiration réelle
 ETP: Evapotranspiration potentielle
 SES: Stock d'eau du sol

Ségou

WATER HOLDING CAPACITY / CAPACITE DE RETENTION EN EAU.....: 190 mm

Week/ Semaine	Rain/ Pluvio- métrerie(mm)	AE/PE ETR/ETP	AE/ ETR(mm)	Deficit/ Déficit(mm)	Runoff/ Ruisselle- ment(mm)	SMOS/ SES(mm)
1	0.1	0.1	3.6	3.5	0.0	17.0
2	0.1	0.1	3.0	2.9	0.0	14.1
3	0.0	0.1	2.5	2.5	0.0	11.6
4	0.0	0.1	2.1	2.1	0.0	9.5
5	0.2	0.0	1.8	1.7	0.0	7.9
6	0.0	0.0	1.3	1.3	0.0	6.6
7	0.0	0.0	1.2	1.2	0.0	5.4
8	0.0	0.0	1.1	1.1	0.0	4.3
9	0.2	0.0	0.9	0.8	0.0	3.7
10	0.1	0.0	0.7	0.6	0.0	3.0
11	0.8	0.0	0.8	0.6	0.0	3.0
12	1.1	0.0	0.9	0.5	0.0	3.2
13	0.9	0.0	1.0	0.6	0.0	3.2
14	1.9	0.0	1.2	0.7	0.0	3.9
15	2.6	0.0	1.8	0.9	0.0	4.8
16	2.6	0.0	2.0	1.0	0.0	5.5
17	3.4	0.1	2.7	0.9	0.0	6.2
18	6.4	0.1	4.0	0.7	0.0	8.7
19	5.6	0.1	3.7	1.1	0.0	10.5
20	6.9	0.1	5.1	1.3	0.0	12.3
21	5.6	0.1	3.9	1.5	0.0	14.1
22	13.2	0.2	7.8	1.1	0.0	19.6
23	18.0	0.3	10.2	0.8	0.0	27.3
24	21.7	0.4	12.0	1.0	0.0	37.0
25	18.2	0.4	13.1	2.2	0.0	42.1
26	25.1	0.5	18.6	1.7	0.0	48.6
27	30.9	0.6	21.8	1.4	0.0	57.7
28	41.9	0.7	23.5	0.7	0.0	76.1
29	43.6	0.8	25.1	1.2	0.0	94.6
30	51.9	0.9	26.3	0.7	1.9	118.4
31	49.2	0.9	26.5	1.2	4.0	137.0
32	57.6	1.0	27.3	0.8	11.6	155.7
33	52.6	1.0	27.8	2.5	17.1	163.5
34	54.5	1.0	26.0	1.2	17.3	174.7
35	50.5	1.0	25.7	1.0	21.0	178.5
36	41.1	1.0	26.9	4.3	16.4	176.3
37	31.5	1.0	26.8	7.1	8.8	172.2
38	20.7	0.9	26.8	10.9	2.6	163.5
39	14.8	0.9	26.7	15.1	0.8	150.8
40	10.5	0.8	25.3	15.7	0.0	136.0
41	6.9	0.7	22.2	17.0	0.3	120.4
42	5.3	0.7	20.0	15.5	0.4	105.3
43	3.2	0.6	16.8	14.1	0.0	91.6
44	2.5	0.5	15.8	13.4	0.0	78.4
45	0.1	0.4	13.8	13.7	0.0	64.7
46	0.0	0.3	10.5	10.5	0.0	54.2
47	1.0	0.3	9.3	8.7	0.0	45.8
48	0.0	0.2	7.7	7.7	0.0	38.1
49	0.0	0.2	6.2	6.2	0.0	31.9
50	0.5	0.2	5.2	5.1	0.0	27.1
51	0.1	0.1	4.4	4.2	0.0	22.9
52	0.1	0.1	4.1	4.0	0.0	18.9

AE : Actual evapotranspiration
 PE : Potential evapotranspiration
 SMOS: Soil moisture storage

ETR: Evapotranspiration réelle
 ETP: Evapotranspiration potentielle
 SES: Stock d'eau du sol

Sikasso

WATER HOLDING CAPACITY / CAPACITE DE RETENTION EN EAU.....: 60 mm

Week/ Semaine	Rain/ Pluio- métrie(mm)	AE/PE ETR/ETP	AE/ ETR(mm)	Deficit/ Déficit(mm)	Runoff/ Ruisselle- ment(mm)	SMOS/ SES(mm)
1	0.4	0.0	0.8	0.6	0.0	1.5
2	0.2	0.0	0.6	0.5	0.0	1.1
3	0.1	0.0	0.5	0.4	0.0	0.8
4	0.0	0.0	0.4	0.3	0.0	0.5
5	2.2	0.0	1.1	0.2	0.2	1.5
6	0.2	0.0	1.2	0.9	0.0	0.8
7	0.6	0.0	1.0	0.4	0.0	0.7
8	2.1	0.0	1.2	0.4	0.3	1.5
9	1.9	0.1	2.0	0.7	0.0	1.6
10	2.3	0.1	2.2	0.7	0.0	1.9
11	3.6	0.1	3.1	0.8	0.0	2.5
12	3.7	0.1	3.5	1.1	0.0	2.8
13	6.2	0.1	5.0	1.0	0.0	4.0
14	8.2	0.2	7.0	1.5	0.0	5.3
15	10.2	0.3	8.5	1.5	0.0	7.1
16	13.1	0.3	11.3	2.3	0.0	8.8
17	15.1	0.4	13.0	2.3	0.0	11.0
18	16.9	0.4	14.0	2.4	0.6	13.2
19	21.0	0.5	17.0	2.6	1.2	16.0
20	22.7	0.6	20.8	3.2	0.6	17.3
21	34.6	0.7	22.4	2.2	4.9	24.6
22	28.9	0.7	22.9	4.4	2.5	28.1
23	35.0	0.9	26.3	3.7	3.7	33.1
24	38.5	0.9	26.2	2.7	5.9	39.5
25	41.9	1.0	26.8	2.9	8.5	46.1
26	44.2	1.0	26.4	3.1	14.2	49.6
27	43.8	1.0	26.1	3.1	16.2	51.1
28	55.8	1.0	25.9	1.3	26.3	54.6
29	69.4	1.0	25.8	1.7	41.5	56.6
30	68.8	1.0	25.0	1.0	41.7	58.8
31	70.0	1.0	24.5	0.7	45.2	59.1
32	75.4	1.0	24.1	0.8	51.3	59.0
33	80.4	1.0	23.6	0.3	56.2	59.7
34	76.8	1.0	24.0	0.6	53.0	59.4
35	85.3	1.0	23.9	0.2	61.1	59.8
36	64.6	1.0	23.5	0.6	41.5	59.4
37	53.5	1.0	24.2	1.9	31.0	57.7
38	55.5	1.0	24.6	1.9	31.2	57.4
39	35.2	1.0	25.1	5.1	14.2	53.3
40	34.8	1.0	25.6	5.5	12.3	50.1
41	23.6	0.9	24.0	8.2	6.9	42.8
42	22.5	0.9	22.8	7.4	3.4	39.1
43	11.9	0.7	18.9	10.3	2.6	29.5
44	14.7	0.7	16.8	6.4	2.0	25.5
45	3.2	0.5	12.2	9.6	0.0	16.4
46	2.2	0.3	7.6	5.5	0.0	11.0
47	2.1	0.2	5.6	3.8	0.0	7.5
48	0.4	0.1	2.9	2.6	0.0	5.0
49	1.0	0.1	2.2	1.6	0.0	3.8
50	0.9	0.1	1.7	1.2	0.0	2.9
51	0.1	0.0	1.0	1.0	0.0	2.0
52	0.1	0.0	0.8	0.7	0.0	1.4

AE : Actual evapotranspiration
 PE : Potential evapotranspiration
 SMOS: Soil moisture storage

ETR: Evapotranspiration réelle
 ETP: Evapotranspiration potentielle
 SES: Stock d'eau du sol

Sikasso

WATER HOLDING CAPACITY / CAPACITE DE RETENTION EN EAU.....: 250 mm

Week/ Semaine	Rain/ Pluvio- m�trie(mm)	AE/PE ETR/ETP	AE/ ETR(mm)	Deficit/ D�ficit(mm)	Runoff/ Ruisselle- ment(mm)	SMOS/ SES(mm)
1	0.4	0.4	8.8	8.6	0.0	88.7
2	0.2	0.4	8.3	8.1	0.0	80.6
3	0.1	0.3	7.7	7.5	0.0	73.1
4	0.0	0.3	6.5	6.5	0.0	66.6
5	2.2	0.3	7.8	7.0	0.0	61.0
6	0.2	0.2	7.8	7.5	0.0	53.5
7	0.6	0.2	6.6	6.2	0.0	47.6
8	2.1	0.2	6.4	5.7	0.0	43.2
9	1.9	0.2	5.7	4.5	0.0	39.5
10	2.3	0.2	5.3	4.1	0.0	36.5
11	3.6	0.2	5.4	3.6	0.0	34.7
12	3.7	0.1	5.0	3.5	0.0	33.4
13	6.2	0.2	6.1	2.7	0.0	33.5
14	8.2	0.2	7.0	2.5	0.0	34.7
15	10.2	0.2	7.3	1.8	0.0	37.6
16	13.1	0.3	9.8	2.1	0.0	41.0
17	15.1	0.3	10.6	1.7	0.0	45.5
18	16.9	0.3	11.1	2.0	0.0	51.3
19	21.0	0.4	14.0	1.8	0.0	58.3
20	22.7	0.5	15.9	1.4	0.0	65.1
21	34.6	0.6	19.4	1.0	0.7	79.6
22	28.9	0.6	17.9	2.0	0.0	90.6
23	35.0	0.7	22.7	1.5	0.4	102.4
24	38.5	0.8	23.7	1.1	0.1	117.0
25	41.9	0.9	24.1	1.6	0.8	134.0
26	44.2	0.8	23.5	1.0	2.9	151.8
27	43.8	0.9	23.3	1.0	5.2	167.2
28	55.8	0.9	24.5	0.5	8.7	189.8
29	69.4	1.0	24.8	0.7	20.4	214.0
30	68.8	1.0	24.8	1.0	27.1	230.9
31	70.0	1.0	24.3	0.6	36.6	240.0
32	75.4	1.0	24.1	0.8	43.0	248.2
33	80.4	1.0	23.6	0.3	55.3	249.7
34	76.8	1.0	24.0	0.6	53.0	249.4
35	85.3	1.0	23.9	0.2	61.1	249.8
36	64.6	1.0	23.5	0.6	41.5	249.4
37	53.5	1.0	24.2	1.9	31.0	247.7
38	55.5	1.0	24.7	1.9	31.2	247.3
39	35.2	1.0	25.2	5.1	14.2	243.1
40	34.8	1.0	26.3	6.2	12.3	239.2
41	23.6	1.0	25.8	10.0	6.9	230.2
42	22.5	1.0	25.3	9.9	3.4	224.0
43	11.9	0.9	23.3	14.5	2.6	210.0
44	14.7	0.9	22.6	12.2	1.9	200.1
45	3.2	0.8	20.8	17.8	0.0	182.6
46	2.2	0.7	17.7	15.6	0.0	167.1
47	2.1	0.7	16.2	14.4	0.0	152.9
48	0.4	0.6	14.0	13.6	0.0	139.3
49	1.0	0.6	12.3	11.6	0.0	128.1
50	0.9	0.5	11.5	11.0	0.0	117.4
51	0.1	0.5	10.3	10.1	0.0	107.3
52	0.1	0.4	10.5	10.4	0.0	96.9

AE : Actual evapotranspiration
 PE : Potential evapotranspiration
 SMOS: Soil moisture storage

ETR: Evapotranspiration r elle
 ETP: Evapotranspiration potentielle
 SES: Stock d'eau du sol

Tombouctou

WATER HOLDING CAPACITY / CAPACITE DE RETENTION EN EAU.....: 40 mm

Week/ Semaine	Rain/ Pluvio- m�trie(mm)	AE/PE ETR/ETP	AE/ ETR(mm)	Deficit/ D�ficit(mm)	Runoff/ Ruisselle- ment(mm)	SMOS/ SES(mm)
1	0.0	0.0	0.7	0.4	0.0	0.2
2	0.0	0.0	0.4	0.1	0.0	0.0
3	0.0	0.0	0.3	0.0	0.0	0.0
4	0.0	0.0	0.3	0.0	0.0	0.0
5	0.0	0.0	0.3	0.0	0.0	0.0
6	0.2	0.0	0.3	0.0	0.0	0.1
7	0.0	0.0	0.4	0.1	0.0	0.0
8	0.0	0.0	0.4	0.0	0.0	0.0
9	0.0	0.0	0.4	0.0	0.0	0.0
10	0.1	0.0	0.5	0.0	0.0	0.0
11	0.2	0.0	0.7	0.0	0.0	0.0
12	0.2	0.0	0.7	0.0	0.0	0.0
13	0.0	0.0	0.4	0.0	0.0	0.0
14	0.0	0.0	0.5	0.0	0.0	0.0
15	0.0	0.0	0.5	0.0	0.0	0.0
16	0.0	0.0	0.5	0.0	0.0	0.0
17	0.8	0.0	1.3	0.1	0.0	0.0
18	0.3	0.0	0.8	0.1	0.0	0.0
19	0.2	0.0	0.8	0.1	0.0	0.0
20	0.3	0.0	0.9	0.1	0.0	0.0
21	0.7	0.0	1.3	0.2	0.0	0.0
22	3.8	0.1	3.8	0.4	0.0	0.7
23	3.6	0.1	5.6	1.8	0.0	0.0
24	2.3	0.1	3.0	0.5	0.0	0.0
25	2.6	0.1	3.4	0.6	0.0	0.0
26	6.1	0.2	7.8	1.5	0.0	0.0
27	7.5	0.2	8.4	1.1	0.0	0.3
28	12.8	0.3	15.4	2.5	0.0	0.0
29	15.6	0.3	15.5	1.5	0.0	1.6
30	13.7	0.3	15.2	2.4	0.0	1.1
31	22.9	0.5	20.0	0.4	0.0	4.1
32	18.8	0.5	18.9	2.2	0.0	4.0
33	15.8	0.4	14.8	1.9	0.2	4.8
34	20.0	0.5	19.4	2.9	0.0	5.3
35	15.3	0.4	16.5	3.5	0.0	4.2
36	11.5	0.4	15.6	4.1	0.0	0.1
37	6.4	0.2	6.3	0.1	0.0	0.3
38	4.6	0.1	4.6	0.2	0.0	0.4
39	2.6	0.1	2.8	0.3	0.0	0.3
40	1.6	0.0	2.0	0.3	0.0	0.0
41	1.0	0.0	1.4	0.1	0.0	0.0
42	0.0	0.0	0.4	0.0	0.0	0.0
43	0.3	0.0	0.5	0.0	0.0	0.1
44	0.0	0.0	0.4	0.1	0.0	0.0
45	0.0	0.0	0.4	0.0	0.0	0.0
46	0.0	0.0	0.4	0.0	0.0	0.0
47	0.0	0.0	0.4	0.0	0.0	0.0
48	0.0	0.0	0.4	0.0	0.0	0.0
49	0.0	0.0	0.3	0.0	0.0	0.0
50	0.2	0.0	0.4	0.0	0.0	0.1
51	0.0	0.0	0.3	0.1	0.0	0.0
52	0.0	0.0	0.3	0.0	0.0	0.0

AE : Actual evapotranspiration
 PE : Potential evapotranspiration
 SMOS: Soil moisture storage

ETR: Evapotranspiration r elle
 ETP: Evapotranspiration potentielle
 SES: Stock d'eau du sol

Tombouctou

WATER HOLDING CAPACITY / CAPACITE DE RETENTION EN EAU.....: 110 mm

Week/ Semaine	Rain/ Pluvio- m�trie(mm)	AE/PE ETR/ETP	AE/ ETR(mm)	Deficit/ D�ficit(mm)	Runoff/ Ruisselle- ment(mm)	SMOS/ SES(mm)
1	0.0	0.0	0.7	0.5	0.0	1.2
2	0.0	0.0	0.6	0.3	0.0	0.9
3	0.0	0.0	0.5	0.3	0.0	0.6
4	0.0	0.0	0.5	0.2	0.0	0.5
5	0.0	0.0	0.4	0.1	0.0	0.3
6	0.2	0.0	0.3	0.1	0.0	0.4
7	0.0	0.0	0.4	0.1	0.0	0.3
8	0.0	0.0	0.4	0.1	0.0	0.2
9	0.0	0.0	0.4	0.1	0.0	0.2
10	0.1	0.0	0.4	0.1	0.0	0.1
11	0.2	0.0	0.5	0.1	0.0	0.2
12	0.2	0.0	0.5	0.1	0.0	0.3
13	0.0	0.0	0.5	0.1	0.0	0.2
14	0.0	0.0	0.5	0.1	0.0	0.2
15	0.0	0.0	0.5	0.1	0.0	0.1
16	0.0	0.0	0.5	0.1	0.0	0.1
17	0.8	0.0	0.7	0.0	0.0	0.5
18	0.3	0.0	0.8	0.1	0.0	0.4
19	0.2	0.0	0.7	0.2	0.0	0.3
20	0.3	0.0	0.7	0.1	0.0	0.4
21	0.7	0.0	0.8	0.1	0.0	0.6
22	3.8	0.1	2.6	0.3	0.0	2.0
23	3.6	0.1	2.6	0.6	0.0	3.1
24	2.3	0.0	2.4	0.9	0.0	3.1
25	2.6	0.1	2.5	1.0	0.0	3.2
26	6.1	0.1	4.2	0.8	0.0	5.3
27	7.5	0.1	5.9	1.0	0.0	6.9
28	12.8	0.2	8.3	1.1	0.0	11.5
29	15.6	0.3	12.1	1.5	0.0	15.0
30	13.7	0.3	11.5	2.6	0.0	17.2
31	22.9	0.4	16.1	0.9	0.0	24.0
32	18.8	0.4	15.9	2.4	0.0	26.8
33	15.8	0.4	14.7	3.6	0.0	27.9
34	20.0	0.5	17.6	3.4	0.0	30.3
35	15.3	0.4	16.2	4.9	0.0	29.4
36	11.5	0.4	14.9	5.1	0.0	26.0
37	6.4	0.3	11.2	5.9	0.0	21.2
38	4.6	0.2	8.8	4.9	0.0	17.0
39	2.6	0.2	6.6	4.4	0.0	13.0
40	1.6	0.1	5.4	4.1	0.0	9.2
41	1.0	0.1	3.8	3.1	0.0	6.3
42	0.0	0.1	2.3	2.3	0.0	4.1
43	0.3	0.0	1.1	0.9	0.0	3.3
44	0.0	0.0	0.9	0.8	0.0	2.5
45	0.0	0.0	0.6	0.6	0.0	1.9
46	0.0	0.0	0.5	0.5	0.0	1.4
47	0.0	0.0	0.4	0.4	0.0	1.0
48	0.0	0.0	0.4	0.3	0.0	0.7
49	0.0	0.0	0.3	0.3	0.0	0.5
50	0.2	0.0	0.3	0.2	0.0	0.5
51	0.0	0.0	0.3	0.2	0.0	0.3
52	0.0	0.0	0.3	0.2	0.0	0.2

AE : Actual evapotranspiration
 PE : Potential evapotranspiration
 SMOS: Soil moisture storage

ETR: Evapotranspiration r elle
 ETP: Evapotranspiration potentielle
 SES: Stock d'eau du sol