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Paix-Travail-Patrie

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**DIRECTION GENERALE** 



**REPUBLIC OF CAMEROON** 

Peace-Work-Fatherland

NATIONAL OBSERVATORY ON CLIMATE CHANGE

DIRECTORATE GENERAL

NOCC







**BULLETIN Nº127** 

**Forecasts and Dekadal Climate Alerts for the** Period 1st to 10th September 2022



1<sup>st</sup> September, 2022

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#### **I** Introduction

This dekadal climate early warning bulletin n° 127 is done through the exploitation of spatial data collected from major international centres involved in day-to-day climate science, notably: the International Research Institute for Climate and Society (IRI) of the University of Columbia (USA); the National Oceanic and Atmospheric Administration (NOAA, USA); AccuWeather (American Weather Forecasting Agency, USA); the African Centre of Meteorological Applications for Development (ACMAD); Spatial data from 1979 to 2018, relating to Ocean Surface Temperature (OST) in the Atlantic and Pacific, El-Niño/La Nina episode intensities in the Pacific, rainfall and temperature from local stations. To this end, NOCC would like to express its gratitude to all these international Institutions as well as the DMN for the goodwill demonstrated in sharing the data.

This bulletin highlights the historical climatic conditions from 1979 to 2018, as well as the climatic forecasts for all the five Agro-ecological zones of Cameroon, for the period from 1<sup>st</sup> to 10<sup>th</sup> September 2022. This early warning brief further underscores the risks, threats and potential impacts expected in the different socio-economic development sectors of Cameroon. It also makes an assessment of the forecasts made for the previous dekad from 21st to 30th August 2022.

#### I. Forecast Summary

#### II.1. For Temperature

#### **II.1.1. Maximum Temperatures**

The following localities have a high probability of experiencing an increase in average maximum temperatures compared to historical averages for the same period from 1979 to 2018. They include:

- -Yimbere, Betare Gongo, Nass Arao and Tibati, in the Adamawa region;
- Yoko, Mbalmayo, Ayos and Nkoteng, in the Centre region;
- Mbitom, Mintoum, Kika, Mambele, Abong-Mbang, Batouri, Koso, Belabo, Mbalam, Lomie, Mindourou, Mambele, Moloundou, Dimako, Bertoua, Doume, Yokadouma, Ngoyla, Kongolo and Libongo, in the East region;
- Djoum, Sangmelima, Minkoumou, Zoetele and Ambam, in the South region;
- Furu-Awa and Munkep, in the North West region;
- Dibombari, Mouanko, Loum, Nkongsamba, Manjo, Melong, Ndokama, Penja, Ndokiti and Mbanga in the Littoral region.

Nb1: This ten-day period from 1st to 10th September 2022 will be marked by heat waves in many localities in the East (Abong-Mbang, Betare-Oya, Lomie, Batouri, Yokadouma, Mindourou, Bertoua etc.), Centre (Akonolinga, Bafia, Monatele, Mbandjock, Ntui, Nkoteng, Mbeka, Nanga-Eboko, Mbalmayo, Ngoro, Obala etc.) and South (Zoetele, Djoum, Ambam, Sangmelima, Kribi, Campo etc.) regions due to maximum temperatures that will be between 30°C and 33°C.

#### II.1.2. Minimum Temperatures



The following localities have a high probability of experiencing a decrease in minimum temperatures compared to the historical mean for the same period from 1979 to 2018. They include:

- Mokolo, Mora, Maroua and Gamboura in the Far North region;
- Dembo, Poli, Touboro, Pitoa, Rey-Bouba, Garoua, Tchollire and Lagdo, in the North region;
- Ngaoundere, Ngaou Mbol, Kognoli, Meiganga, Tignere, Ngaoundal and Mbakaou, in the Adamawa region;
- Ayos, in the Centre region;
  - Garoua-Boulai, in the **East region**.

NB2: This dekad from 1st to 10th September 2022 will be marked by an increase in the number of days with cold conditions, both during the day and at night, in many localities in the Far North (Mokolo, Maroua, Waza and Mora), North (Poli, Rey-Bouba, Guider, Tchollire, Touboro and Lagdo), Adamawa (Mbe, Dota, Ngaoundere and Meiganga), West (Dschang, Makam, Foumbot, Bazou, Bafoussam and Foumban), North West (Furu Awa, Esu, Ndop, Santa, Kumbo, Nwa and Bamenda), the Centre (Yaounde, Mbalmayo, Ayos, Akonolinga, Nanga Eboko, Bafia, Obala, Monatele, Eseka, Mbeka, etc.), the East (Bertoua, Batouri, Abong-Mbang, Mindourou, Moloundou, Yokadouma, etc.) and the South (Lolodorf, Ebolowa, Sangmelima, Djoum, etc.) regions, due to the decrease in minimum temperatures, ranging from 11°C to 22°C.

This dekad from 1<sup>st</sup> to 10<sup>th</sup> September 2022 will be marked by an increase in rainfall amounts over the entire national territory, except the North and South West regions where they will however remain abundant.

NB3: This dekad, from 1st to 10th September 2022 will be marked by:

- rainfall amounts above those observed during the dekad from 21-30 August 2022 in the northern part of the bimodal rain forest zone (Centre, South and East regions).;

-rainfall amounts above those observed during the dekad from 21-30 August 2022 in the monomodal rain forest zone (Littoral and South-West regions);

 $-rainfall\,amounts\,above\,those\,observed\,during\,the\,dekad\,from\,21-30\,August\,2022\,in\,the\,highlands\,zone\,(West\,and\,North-West\,regions)$ 

 $-rainfall\,amounts\,way\,above\,those\,observed\,during\,the\,\frac{d}{e}kad\,from\,21-30\,August\,2022\,in\,the\,Guinean\,High\,Savannah\,zone\,(Adamawa\,region);$ 

abundant rainfall amounts above those observed during the dekad from 21-30 August 2022 in the Sudano-Sahelian zone (Far North and North regions);

NB4: This dekad from 1st to 10th September 2022 marks the effective onset of the long rainy season in the bimodal rain forest zone (Centre, South and East regions)

III. Climate forecasts for the five agro-ecological zones for the period from 1st to 10th September 2022

#### l) For precipitation

#### a) In the Sudano-Sahelian zone

This dekad from 1<sup>st</sup> to 10<sup>th</sup> September 2022 will be characterized by rainfall amounts between:

- \* **50 and 100mm** in Kousseri, Yagoua, Kaele, Maroua, Maga, Waza Mora, Mindif and Bogo in the **Far North region**;
- \* 100 and 200mm in Lagdo, Dembo, Tchollire, Garoua, Guider, Pitoa, Rey Bouba, Poli and Touboro, in the North region.

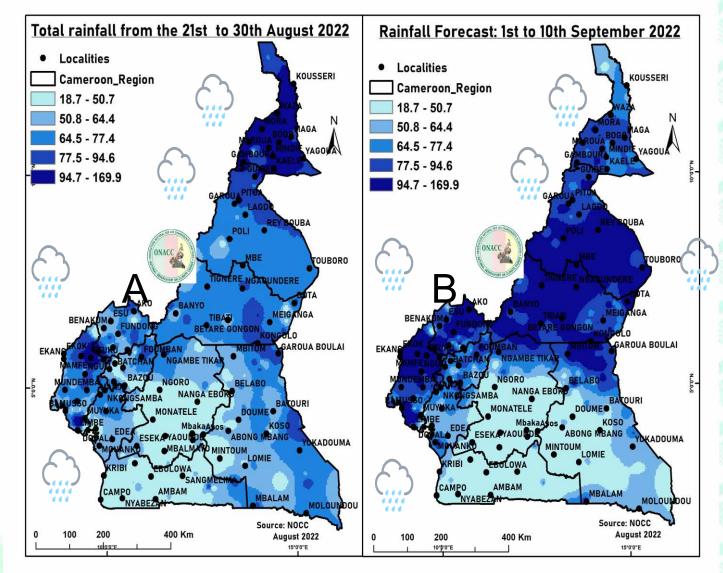


Figure 1: Variations in rainfall amounts during the current dekad (b) compared to that recorded during the period August 21-30, 2022 (a) Source: NOCC, September 2022

This dekad from 1<sup>st</sup> to 10<sup>th</sup> September 2022 will be marked by rainfall amounts between 100 and 180 mm in Dota,

Ngaoundere, Mbakaou, Yimbere, Meiganga, Banyo, Tignere, Betare Gongon and Tibati in the Adamawa region.

#### c) In the Monomodal rain forest zone

This dekad from 1st to 10th September 2022 will be marked by rainfall amounts between:

- \*100 and 200 mm in Ekok, Buea, Limbe, Eyumojock, Idenau, Bamusso, Tiko, Kumba, Fontem, Nguti and Mamfe in the South Westregion.
- \* 50 and 100mm in Douala, Loum, Penja, Mbanga, Baptek, Yabassi, Melong, Nkongsamba, Edea, Mouanko, Dizangue and

Manjo in the Littoral region.

#### d) In the Highlands zone

This dekad from 1<sup>st</sup> to 10<sup>th</sup> September 2022 will be marked by rainfall amounts between:

- \* 70 and 100mm in Dschang, Bafoussam, Foumbot, Bafang, Tonga, Makam, Foumban and Bazou in the West region;
- \* 70 and 200mm in Ndop, Kumbo, Bamenda, Munkep, Esu, Furu Awa, Ako, Wum, Bali and Nwa in the North West region.

#### e) In the Bimodal rain forest zone

For the dekad from 1<sup>st</sup> to 10<sup>th</sup> September 2022, we expect rainfall amounts between:

\* 70 and 100mm in Ngoro, Ngambe Tikar, Yoko, Ntui; between 20 and 50mm in Yaounde, Nanga Eboko, Mbalmayo,

Monatele, Obala, Bafia, Eseka, Nkoteng and Akonolinga in the **Centre region**;

Also, the localities of Ayos and Mbaka will record rainfall amounts between 20 and 50mm.

\* 50 and 170mm in Garoua-Boulai, Betare-Oya, Belabo, Batouri, Mbalam, Moloundou; Doume; between 20 and 50 mm in

Lomie, Abong-Mbang, Yokadouma, Mambele, Ngoyla, Bertoua, Mindourou, Mintom, in the East region;

\* 20 and 50mm in Ebolowa, Nyabizan, Zoetele, Ambam, Sangmelima, Akom II, Lolodorf, Kribi, Campo and Djoum, in the South region.

### NB 5: This dekad, from 1st to 10th September 2022 will be marked by:

- rainfall amounts above those observed during the dekad from 21-30 August 2022 in the northern part of the bimodal rain forest zone (Centre, South and East regions) and lower in the southern part of the said agroecological zone;
- -rainfall amounts above those observed during the dekad from 21-30 August 2022 in the monomodal rain forest zone (Littoral and South-West regions);
- -rainfall amounts above those observed during the dekad from 21-30 August 2022 in the highlands zone (West and North-West regions)
- -rainfall amounts way above those observed during the dekad from 21-30 August 2022 in the Guinean High Savannah zone (Adamawa region);
- abundant rainfall amounts above those observed during the dekad from 21-30 August 2022 in the Sudano-Sahelian zone (Far North and North regions);

#### 2) For Temperatures

This dekad from 1st to 10th September 2022 will be marked by persistent cold weather over the national territory, particularly in the highlands (North West and West regions) and the high Guinean savannah (Adamawa region) zones, due to

- minimum temperatures between 12°C and 19°C.
- At the same time, the said dekad will be marked by heatwave conditions in many localities in the bimodal rain forest zone (Centre, South and East regions).

#### a) For Maximum Temperatures

Based on the historical average of maximum temperatures recorded during this dekad over the period from 1979 to 2018, notably 32.06°C in the Far North Region; 31°C in the North Region; 28.6°C in the Adamawa Region; 27°C in the Centre Region; 27°C in the South Region; 27.67°C in the East Region; 24.6°C in the West Region; 25.54°C in the North West Region; 25.91°C in the South West Region and 25.29°C in the Littoral Region, for the dekad from 1st to 10th September 2022, we expect maximum temperatures:

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- Around the historical average recorded from 1979 to 2018 in Pitoa, Rey-Bouba, Tchollire, Touboro and Lagdo; below the historical average in Garoua, Guider, Dembo and Poli, in the **North region**;

- Above the historical average recorded from 1979 to 2018 in Yimbere, Betare Gongo, Nass Arao and Tibati; below the historical average in Banyo, Dota, Ngaoundere, Ngaoundal, Tignere, Meiganga, Mbakaou, Ngaou Mbol, Kognoli and Mbe in the Adamawa region;

- Above the historical average recorded from 1979 to 2018 in Yoko, Mbalmayo, Ayos and Nkoteng; around the historical average in Ngoro, Bafia, Akonolinga, Monatele, Mbandjock, Ntui, Obala, Mbaka, Nanga-Eboko, Ngambe Tikar, Eseka and Yaounde, in the Centre region;

# During this period in the said region, the localities of Ayos and Mbaka will record maximum temperatures above the average.

- Above the historical average recorded from 1979 to 2018 in Mbitom, Mintoum, Kika and Mambele; around the historical average in Betare-Oya, Abong-Mbang, Batouri, Koso, Belabo, Mbalam, Lomie, Mindourou, Dimako, Bertoua, Doume, Yokadouma, Ngoyla, Kongolo and Libongo; and below the historical average in Moloundou and Garoua-Boulai, in the East region;

- Above the historical average recorded from 1979 to 2018 in Kribi Minkoumou, Zoetele and Am<mark>ba</mark>m; a<mark>round th</mark>e hi<mark>sto</mark>rical average in Campo, Akom II, Ebolowa, Nyabizan, Djoum and Sangmelima; below the historical average in Lolodorf, in the **South region**;

- Above the historical average recorded from 1979 to 2018 in Furu-Awa and Munkep; around the historical average in Ako, Audu and Nwa; below the historical average in Windekum, Bamenda, Bali, Kumbo, Ndop, Wum, Santa, Nkambe, Bambalang, Fundong and Esu in the **North West region**;

- Around the historical average recorded from 1979 to 2018 in Makam, Foumbot Batcham, Bazou, Koutaba, Foumban, Bafoussam, Mbouda and Dschang; below the historical average in Tonga, Bangangte and Bafang in the **West region**;

- Around the historical average recorded from 1979 to 2018 in Buea, Eyumojock, Mundemba, Dikome Bafaw, Bakogo, Ekondo Titi, Dikome Balue, Nguti, Fontem, Tiko, Limbe, Muyuka, Idenau, Etuku, Bamusso, Mamfe, Ekok, Kumba, Benakuma and Babong in the **South West region**;

- Above the historical average recorded from 1979 to 2018 in Dibombari, Mouanko, Loum, Nkongsamba, Manjo, Melong, Ndokama, Penja, Ndokiti and Mbanga; around the historical average in Douala, Yabassi, Dizangue, Nkondjock, Baptek and

Edea; in the **Littoral region**.

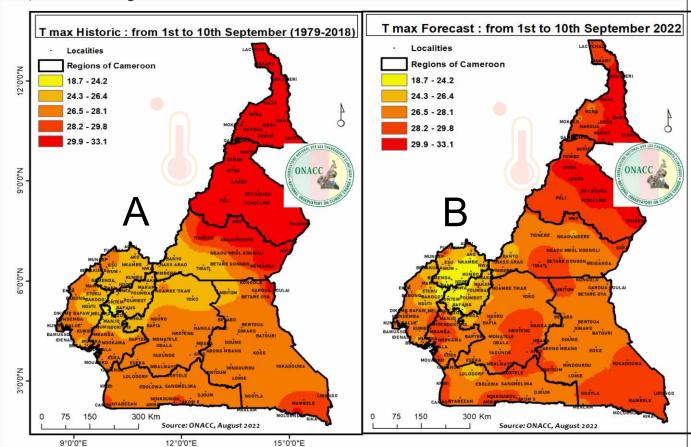


Figure 2: Variations in average maximum temperatures for the current dekad (b) compared to those registered for the same period from 1979 to 2018; (a)

(Source: NOCC, September 2022)

- --- Around the historical average recorded during the dekad from 21<sup>st</sup> to 30<sup>th</sup> August 2022 in Waza, Bogo, Kousseri, Maga, Yagoua, Kaele and Mindif; below the average in Makary, Mora, Maroua, Gamboura and Mokolo in the Far North region;
- Around the historical average recorded during the dekad from 21<sup>st</sup> to 30<sup>th</sup> August 2022 in Pitoa, Rey-Bouba, Tchollire, Touboro and Lagdo; below the average in Garoua, Guider, Dembo and Poli, in the **North region**;
- Around the historical average recorded during the dekad from 21<sup>st</sup> to 30<sup>th</sup> August 2022 in Meiganga, Nass Arao, Banyo, Betare Gongon and Yimbere; below the average in Ngaou Mbol, Ngaoundere, Tignere, Mbe, Dota, Mbakaou, Ngaoundal, Kognoli and Tibati in the **Adamawa region**;
- Around the historical average recorded during the dekad from 21<sup>st</sup> to 30<sup>th</sup> August 2022 in Yokadouma, Ngoyla, Libongo, Mbitom and Bertoua; below the average in Mambele, Mbalam, Garoua-Boulai, Abong-Mbang, Kika, Dimako, Batouri, Doume, Koso, Betare-Oya, Lomie, Belabo, Mindourou Kongolo, Moloundou and Mintoum, in the East region; Around historical average recorded during the dekad from 21<sup>st</sup> to 30<sup>th</sup> August 2022 in
- Around historical average recorded during the dekad from 21<sup>st</sup> to 30<sup>th</sup> August 2022 in Nanga-Eboko, Deuk, Mbeka, Akonolinga, Mbandjock, Messondo, Yaounde, Nkoteng, Eseka, Yoko, Ombessa; below the average in Ngoro, Bafia, Mbalmayo, Monatele, Obala and Ngambe-Tikar, in the **Centre region**;
- Around the historical average recorded during the dekad from 21<sup>st</sup> to 30<sup>th</sup> August 2022 in Kribi, Akom II, Lolodorf, Campo, Minkoumou, Nyabizan, Ambam, Ebolowa and Zoetele; below the average in Sangmelima and Djoum in the **South region**;
- Around the historical average recorded during the dekad from 21<sup>st</sup> to 30<sup>th</sup> August 2022 in Bakogo, Ekok, Buea, Ekang, Tiko, Limbe, Bamusso, Idenau, Benakuma, Eyumojock, Babong, Mamfe, Fontem, Nguti, Benakuma, Muyuka, Dikome Bafaw, Mundemba, Dikome Balue and Kumba in the **South West region**;
- Around the historical average recorded during the dekad from 21<sup>st</sup> to 30<sup>th</sup> August 2022 in Melong, Douala, Mbanga, Nkongsamba, Loum, Yabassi, Pouma, Ngambe, Yingui, Nyanon, Dizangue, Mouanko, Penja, Ndokiti, Ndokama, Manjo, Baptek and Edea in the Littoral region;

- Around the historical average recorded during the dekad from 21<sup>st</sup> to 30<sup>th</sup> August 2022 in Wum, Esu, Furu Awa, Audu, Nwa, Bamenda, Bali, Kumbo, Santa, Ndop and Ako in the **North West region**:
- Around the historical average recorded during the dekad from 21<sup>st</sup> to 30<sup>th</sup> August 2022 in Magba, Bazou, Batcham, Bafang, Tonga, Bare-Bakem, Bamendjing, Bangangte, Dschang, Mbouda, Makam, Bafoussam, Koutaba, Foumban and Foumbot in the **West region.**

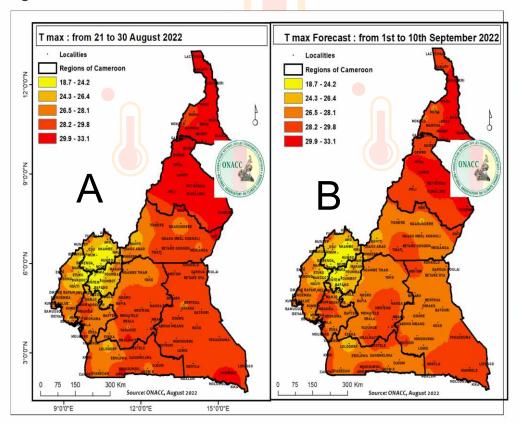


Figure 3: Variation in average maximum temperatures for the dekad from 1st to 10th September 2022 (b) compared to the open recorded for the dekad from 21st to 30th August 2022 (a).

Source: NCC, September 2022



#### Alerts for maximum temperatures

During this dekad from 1<sup>st</sup> to 10<sup>th</sup> September 2022, particular attention should be paid to localities that have a very high probability of experiencing an increase in maximum temperatures compared to their historical averages for the same period from 1979 to 2018. They include:

- Yimbere, Betare Gongo, Nass Arao and Tibati, in the Adamawa region:
- Yoko, Mbalmayo, Ayos and Nkoteng, in the Centre region;
- Mbitom, Mintoum, Kika and Mambele, Oya, Mbitom, Mintoum, Abong-Mbang, Batouri, Koso, Belabo, Mbalam, Lomie, Mindourou, Kika, Mambele, Moloundou, Dimako, Bertoua, Doume, Yokadouma, Ngoyla, Kongolo and Libongo, in the East region;
- Djoum, Sangmelima, Minkoumou, Zoetele and Ambam, in the South region;
- Furu-Awa and Munkep, in the **North West region**;
- -Dibombari, Mouanko, Loum, Nkongsamba, Manjo, Melong, Ndokama, Penja, Ndokiti and Mbanga in the Littoral region.

#### b) For Minimum Temperatures

Based on the historical average of minimum temperatures recorded from 1979 to 2018, notably 20.2°C in the Far North Region; 20.6°C in the North; 18.1°C in the Adamawa region; 20.7°C in the Centre region; 21.3°C in the South region; 21.2°C in the East region; 17.9°C in the West region; 17.4°C in the North West region; 21.6°C in the South West region and 22.9°C in the Littoral region, for the dekad from 1st to 10th September 2022, we expect minimum temperatures:

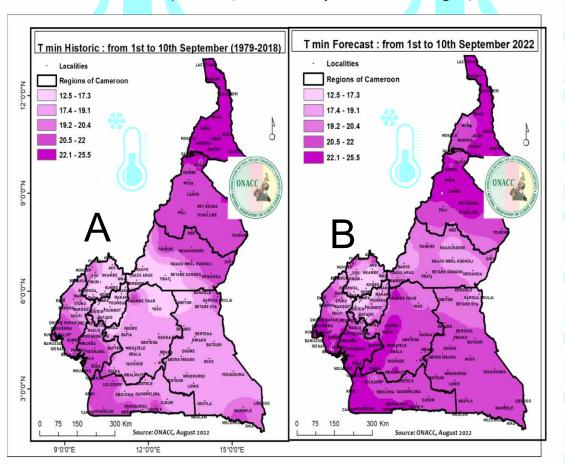
- Below the historical mean recorded during the same period from 1979 to 2018 in Mokolo, Mora, Maroua and Gamboura; around the historical mean in Makary, Maga, Kaele, Yagoua, Mindif, Bogo, Waza and Kousseri, in the Far North region;
- Below the historical mean recorded during the same period from 1979 to 2018 in Dembo, Poli, Touboro, Pitoa, Rey-Bouba, Garoua, Tchollire and Lagdo; around the historical mean in Guider, in the North region;
- Below the historical mean recorded during the same period from 1979 to 2018 in Ngaoundere, Ngaou Mbol, Kognoli, Meiganga, Tignere, Ngaoundal and Mbakaou:

around the historical mean in Dota and Mbe; above the mean in Betare Gongon Tibati, Banyo, Yimbere, and Nass Arao, in the Adamawa region;

- Above the historical mean recorded during the same period from 1979 to 2018 in Ngambe Tikar, Mbandjock, Nkoteng, Obala, Yaounde, Nanga Eboko, Mbaka, Yoko, Akonolinga Monatele, Bafia, Mbaka, Ayos, Mbalmayo, Eseka and Ngoro, in the Centre region;

During this period in the said region, the localities of Mbaka and Ayos will record minimum temperatures above the average.

- Below the historical mean recorded during the same period from 1979 to 2018 in Garoua-Boulai: around the historical mean in Mambele, Libongo, Moloundou and Kika: above the historical mean in Mbitom, Mbalam, Betare-Oya, Minkoumou, Kongolo, Mintoum, Belabo, Abong-Mbang, Mindourou, Yokadouma, Lomie, Ngoyla, Dimako, Doume, Koso, Batouri and Bertoua, in the East region;
- Below the historical mean recorded during the same period from 1979 to 2018 in Lolodorf; around the mean in Sangmelima, Akom II, Kribi, Ambam, Nyabizan and Minkoumou; above the historical mean in Campo Zoetele, Ebolowa and Djourn in the **South region**;



September 2022) (b) compared to historical averages from 1979 to 2018 (a). Source: NOCC, September 2022



- Around the historical mean recorded during the same period from 1979 to 2018 in Esu, Munkep, Ndop, Kumbo, Nkum, Santa, Furu Awa, Bamenda and Bamessing; above the historical mean in Ngambe, Wum, Nwa, Bali, Audu and Ako in the **North West region**;
- Around the historical mean recorded during the same period from 1979 to 2018 in Nguti, Bakogo, Mundemba, Kumba, Fontem, Limbe, Benakuma, Etuku, Kumba, Buea, Bamusso, Eyumojock, Dikome Balue, Dikome Bafaw, Idenau, Ekang, Tiko, Ekok and Mamfe, in the **South West region**;
- Around the historical mean recorded during the same period from 1979 to 2018 in Yabassi, Loum, Dizangue, Ndokama, Penja, Nkongsamba, Edea, Douala, Nyanon, Ngambe and Mbanga; above the historical mean in Baptek, Manjo and Mouanko, in the **Littoral region**.
- Around the historical mean recorded during the same period from 1979 to 2018 in Bazou, Bafang, Bafoussam, Foumban, Bangangte, Babadjou, Batcham, Koutaba, Bamendjing and Makam; above the historical mean in Batie, Mbouda, Dschang, Bagam, Magba and Foumbot in the **West region**;

Based on the difference between the average minimum temperatures recorded during the dekad from 21st to 30th August 2022, for the dekad from 1st to 10th September 2022, we expect minimum temperatures:

- --Around the mean recorded during the dekad from 21<sup>st</sup> to 30<sup>th</sup> August 2022 in Maroua, Bogo, Kaele, Waza, Makary, Maga, Kousseri, Mora, Mindif, Yagoua and Gamboura; above the mean in Mokolo, in the **Far North region**;
- Around the mean recorded during the dekad from 21<sup>st</sup> to 30<sup>th</sup> August 2022 in Touboro, Poli, Garoua, Lagdo, Pitoa, Rey-Bouba, Tchollire, Guider and Dembo, in the **North region**;
- Around the mean recorded during the dekad from 21<sup>st</sup> to 30<sup>th</sup> August 2022 in Mbe, Dota and Meiganga; above the mean in Ngaou Mbol, Kognoli, Yimbere, Nass Arao, Betare

Gongon, Tibati, Tignere, Mbakaou, Banyo and Ngaoundere in the Adamawa region;

- Below the mean recorded during the dekad from 21<sup>st</sup> to 30<sup>th</sup> August 2022 in Ayos; around the mean in Mbalmayo, Eseka, Yaounde, Obala, Bafia Nkoteng, Mbaka, Yoko, Nanga Eboko, Akonolinga, Monatele, Mbandjock, Ngoro, and Ngambe Tikar, in the **Centre region**;
- Around the mean recorded during the dekad from 21<sup>st</sup> to 30<sup>th</sup> August 2022 in Garoua-Boulai, Mbitom, Mintoum, Yokadouma, Ngoyla, Mambele, Moloundou, Kika; above the mean in Kongolo, Betare Oya, Lomie, Belabo, Mbalam, Bertoua, Mindourou, Libongo, Dimako, Doume, Abong-Mbang, Batouri, and Koso, in the East region;
- Around the mean recorded during the dekad from 21<sup>st</sup> to 30<sup>th</sup> August 2022 in Ebolowa, Zoetele, Lolodorf, Campo and Kribi; above the mean in Nyabizan, Ambam, Minkoumou, Akom II, Sangmelima Djoum, in the **South region**;
- Around the mean recorded during the dekad from 21<sup>st</sup> to 30<sup>th</sup> August 2022 in Dschang, Bafang, Bangourain, Batcham, Mbouda, Babadjou, Bamendjing, Bafoussam, Bagam, Koutaba, Bangangte, Makam, Tonga, Bazou, Foumban, Foumbot, Batie, Babadjou and in the **West region**;
- Around the mean recorded during the dekad from 21<sup>st</sup> to 30<sup>th</sup> August 2022 in Esu, Munkep, Ndop, Kumbo, Nkum, Santa, Furu Awa, Bamessing, Audu, Ako and Fundong; above the mean in Wum, Nwa, Bamenda and Bali, in the **North West region**;
- Around the mean recorded during the dekad from 21<sup>st</sup> to 30<sup>th</sup> August 2022 in Mouanko, Yabassi, Loum, Dizangue, Ndokama, Penja, Nkongsamba, Manjo, Edea, Douala, Nyanon, Ngambe and Mbanga; above the mean in Baptek, in the **Littoral region**;
- Around the mean recorded during the dekad from 21<sup>st</sup> to 30<sup>th</sup> August 2022 in Nguti, Bakogo, Fontem, Mundemba, Kumba, Limbe, Benakuma, Etuku, Buea, Bamusso, Eyumojock, Dikome Balue, Dikome Bafaw, Idenau, Ekang, Tiko, Ekok and Mamfe in the South West region.

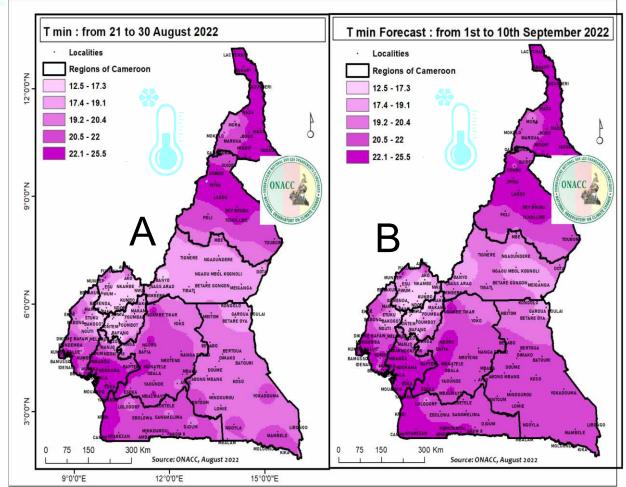


Figure 5: Variations in minimum temperatures for the current dekad (b) compared to those recorded in the dekad from 21st to 30th August 2022 (a). Source: NOCC, September 2022



# Alerts for minimum temperatures

During this dekad from 1<sup>st</sup> to 10<sup>th</sup> September 2022, particular attention should be paid to the localities that have a very high probability of experiencing a decrease in minimum temperatures compared to their historical values for the same period from 1979 to 2018, which could lead to cold nights. They include:

- Mokolo, Mora, Maroua and Gamboura in the Far North region;
- Dembo, Poli, Touboro, Pitoa, Rey-Bouba, Garoua, Tchollire and Lagdo, in the **North region**;
- Ngaoundere, Ngaou Mbol, Kognoli, Meiganga,
   Tignere, Ngaoundal and Mbakaou, in the Adamawa
   region;
  - Ayos, in the **Centre region**;
  - Garoua-Boulai, in the **East region.**



## IV. Risks and potential impacts on socio-economic sectors



#### a) In the agricultural sector:

A high risk of recording cases of:

- cases of degradation and destruction of fields and plantations in many localities in the Sudano-Sahelian zone (Far North and North regions) and the forest zone with monomodal rainfall (Littoral and South-West regions), following heavy rains accompanied by violent winds and flooding that could be observed during this dekad.
- a deterioration in the quality of groundnut and tuber production (cassava, cocoyams, etc.) in many localities in the forest zone with monomodal rainfall (Littoral and South West regions), the highlands zone (West and North West regions), as a result of waterlogging.
- cases of degradation and des<mark>truction of mai</mark>ze, millet and cotton fi<mark>elds in many lo</mark>calities in the Sudano-Sahelian zone (Far North and North Regions), following attacks by army worms.



A high risk of recording cases of:--<u>Death by drowning following flooding in certain</u> localities in the Sudano-Sahelian zone (Maga, Bogo, Zina, Kai-Kai, Sara-Sara, Yagoua, Maroua, Bibemi, Lagdo, Pitoa, Garoua, etc.);

- a resurgence of cholera cases in the five agro-ecological zones, especially in the Sudano-Sahelian zone (Far North and North regions), and in some coastal towns, following the contamination of drinking water points by polluted run-off water;
- cases of respiratory diseases (influenza, cough, bronchitis, colds, asthma attacks, etc.), due to the persistence of cold weather and humidity in the five agro-ecological zone.
- an upsurge in cases of other water-borne diarrhoeal diseases, following the contamination of water points by polluted run-off water in many localities in the forest zone with monomodal rainfall (South-West and Littoral regions), the Sudano-Sahelian zone (North and Far North Regions), the Guinean high savannah zone (Adamawa region), the forest zone with monomodal rainfall (Littoral and South-West regions) and the high plateau zone (North-West and West);
- An upsurge in joint pains, following the cold, among people suffering from arthrosis and rheumatism in the five agro-ecological zones;
- An upsurge in cases of water-borne diseases (yeast, amoebiasis, dysentery, typhoid, etc.) due to the contamination of water points in the five agro-ecological zones, particularly in precarious areas and large towns;
- a resurgence of breeding sites for mosquitoes in many localities in the monomodal rainfall forest zone (South-West and Littoral regions), the Sudano-Sahelian zone (North and Far North regions) the high Guinean savannah zone (Adamawa region), the forest zone with monomodal rainfall (Littoral and South-West Regions) and the high plateau zone (North-West and West Regions) as a result of the increase in puddles;

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#### b) In the livestock sector

A high risk of recording: - cases of loss of poultry on farms and even during transport, due to cold weather in the Guinean High Savannah zone, the Sudano-Sahelian zone (Kai-Kai,

Sara-Sara, Yagoua Maga, Bogo, Zina, Maroua, Bibemi, Garoua), the highland zone and the bimodal rainforest zone;

- -Cases of loss of poultry on farms following flooding in certain coastal areas such as **Douala, Edea, Limbe, Tiko,** etc;
- -Cases of loss of livestock in pig farms, due to the cold weather forecast for this period;
- -Cases of loss of livestock in many localities in the **Guinean high savannah zone** and the **Sudano-Sahelian zone**, due to lightning during the heavy rains accompanied by violent winds;

#### c) In the environment and biodiversity sector:

- - A risk of recording cases of **landslides or mudflows**, due to the saturation of soils with water in artisanal mineral exploitation sites in the **Far North** and **North regions**;
- A risk of recording cases of **landslides** and mudflows in some localities in the **highlands zone** (Foumban, Makam, Santa, Bamenda, Bafoussam etc.), due to the saturation of the soil with water, combined with the very steep reliefs;
  - A risk of recording morning fog in many localities of the five agro-ecological zones with a consequent increase in cases of road accidents;
- cases of flooding due to the overflowing of the mayo in many localities and flood plains in the Far North region, especially the localities of <a href="Maga">Maga</a>, <a href="Bogo">Bogo</a>, <a href="Zina, Kai-Kai">Zina, Kai-Kai</a>, <a href="Sara-Sara">Sara-Sara</a>, <a href="Yagoua">Yagoua</a>, <a href="Kousseri">Kousseri</a>, etc., as well as in the flood plains of the North region, especially localities such as <a href="Garoua">Garoua</a>, <a href="Pitton">Pitton</a>, <a href="Adoumri">Adoumri</a>, <a href="Riadous">Riadoumri</a>, <a href="Riadous">Riadous</a>, <a href="Riadous"
- -A risk of flooding in some towns in the forest zone with monomodal rainfall and especially in the coastal strip (Douala, Edea, Mouanko, Limbe, Tiko, Buea, etc.), following heavy rainfall, coupled with anarchic urbanisation.

#### e) In the water and energy sector:

A high risk of recording:

- destruction of electricity transmission infrastructure (poles, transformers, etc.) due to heavy rains, accompanied by violent winds and lightning in some localities in the Adamawa, Far North and North regions, resulting in an increase in the number of cases of load shedding in these regions;
- contamination of water catchment points by polluted runoffs in the Centre, South, East, Littoral,
   South-West, Adamawa, West and North-West regions, resulting in increased treatment costs of drinking water;

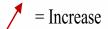
## f) In the public works sector:

A high risk of recording a risk of:

- cases of degradation or destruction of roads in many localities located on the coastal strip and in the Highlands zone, the bimodal rain forest zone, the Guinea high savannah zone and the Sudano-Sahelian zone, as well as the bimodal rainforest zone due to heavy rains;
- degradation or destruction of crossing structures (bridges, culverts, etc.) due to heavy rains in many localities in the monomodal rain forest, the highlands, bimodal rain forest, the Guinean high savannah and the Sudano-Sahelian zones.

# VI. Assessment of climate predictions for the dekad from 21st to 30th August, 2022

Agro Ecological Zones	Sudano-Sahelian		High Guinean Savannah	Bimodal Rain Forest			High plateau		Mono-modal Rain Forest	
Regions	Far-North	North	Adamawa	East	Centre	South	West	North-West	South-West	Littoral
Minimum temperatures										
Historic mean from 1979 to 2018(°C)	20.6	20.4	18	20.7	20.3	20.9	17.4	17	20.8	22.8
Trend forecasts	≈	≈	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	1		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		≈	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	<b>\</b>
Success rates of Forecasts (%)	87.9	84.9	86	85.1	87.9	84.9	86	85.1	87.9	84.2
Maximum temperatures										
Historic mean from 1979 to 2018(°C)	31.27	30.91	28.25	27.43	27	27.29	24.17	24.68	25.91	25.29
Trend forecasts										
Forecasts success rates (%)	85	85	85.8	83.6	85	85	85.8	83.6	85	84.8
Precipitation										
Historic mean from 1979 to 2018(mm)	15-60	60-120	80-140	60-115	60-115	60-120	60-170	80-200	115-200	80-115
Trend forecasts	≈	≈	1	1	1	1	1	1	1	1
Forecasts success rates (%)	100	100	100	65	64	76	94	90	80	85



#### VII. Some recommendations

#### It is recommended within this period:



#### In the Agriculture sector, to:

It is recommended that the populations of the five agro-ecological zones comply with the recommendations of NOCC's agricultural calendar for the implementation of phytosanitary treatments.

#### • In the health sector, continue to



- Raise awareness of the need to scrupulously observe basic hygiene and sanitation rules (washing food, making water drinkable before consumption, cooking food well before consumption in households, using latrines, etc.);
- Avoid the accumulation of household waste in neighbourhoods;
- Regularly put on warm clothes to protect oneself against the cold;
- Strengthen community surveillance at the level of health centres for the rapid detection of suspected cases of cholera with a view to their treatment.
- Continue vaccination campaigns against the various epidemics and pandemics.

#### In the water and energy sector, to continue:



- Regular sampling, analysis and treatment of drinking water at catchment points and water supply points before distribution to households;
- Regular use of basic techniques (filtering, boiling, etc.) to make drinking water potable at the household level;

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