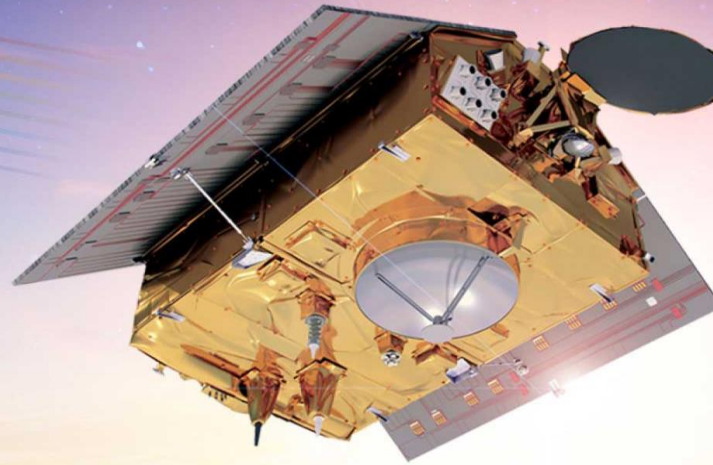


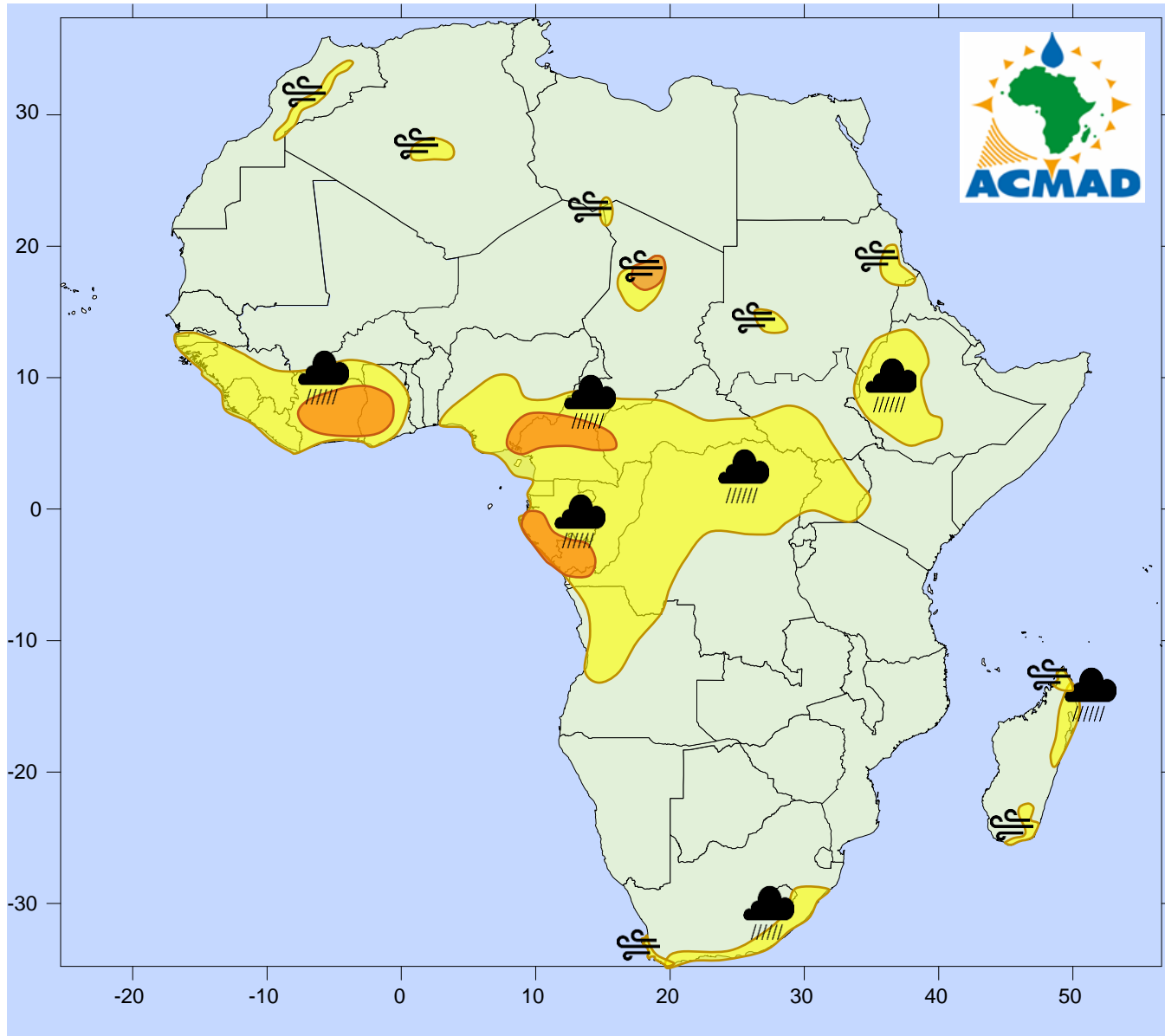
## African Centre of Meteorological Applications for Development (ACMAD)

## Continental Multi-Hazard & Advisory Bulletin



**Issued on: October 13<sup>th</sup>, 2022**





**Validity period: October 14<sup>th</sup> to 18<sup>th</sup>, 2022**



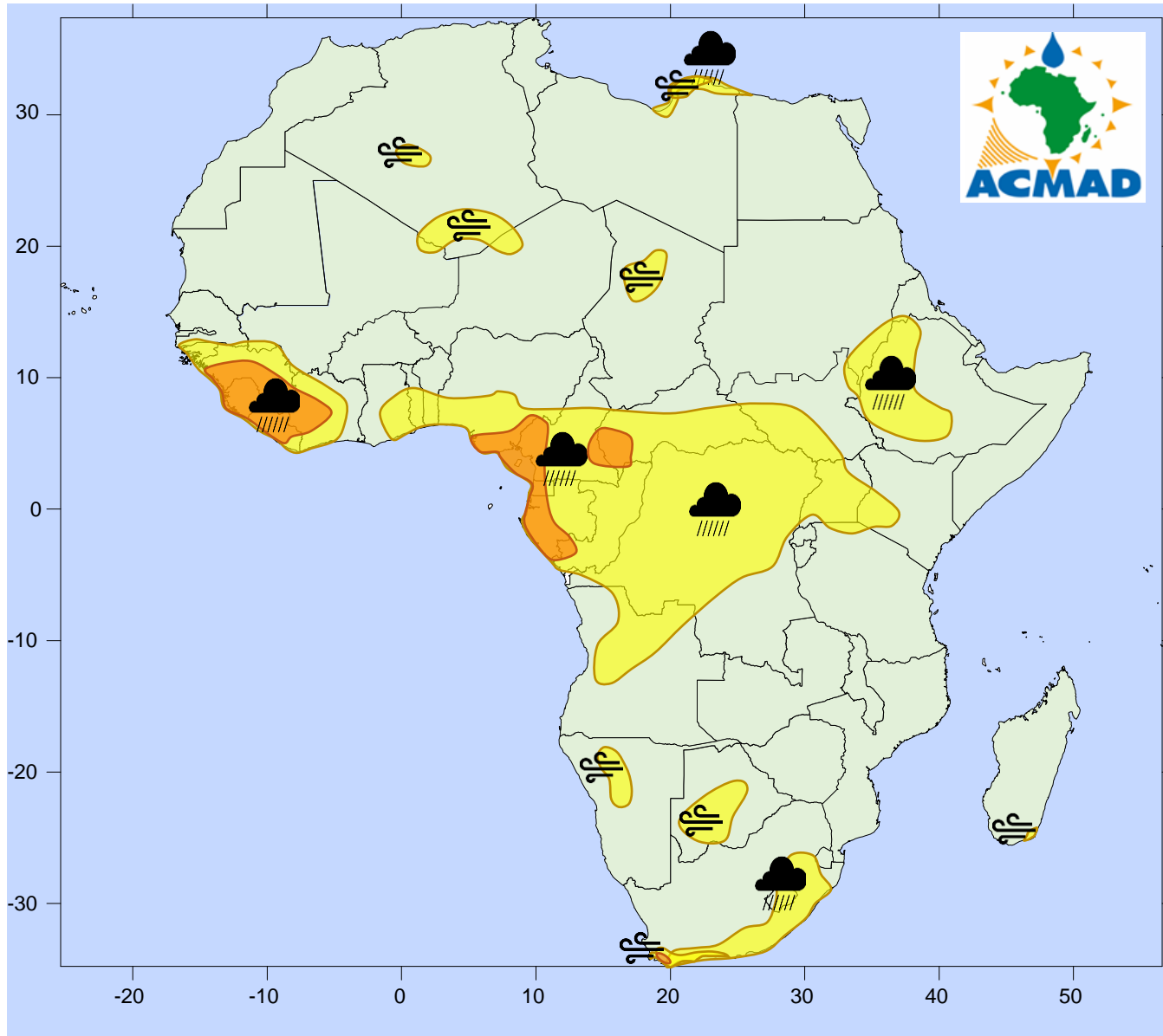
## MULTI-HAZARD OUTLOOK

**Validity: 2022-10-14**

*issued on 2022-10-13*

| <br>Rain | <br>Wind | <br>Dust | <br>Meningitis |
|---|---|---|---|
| Very heavy<br>>100mm  | Very strong<br>>80kmh <sup>-1</sup>   | Very heavy<br>>1000µg m <sup>-3</sup>   | Very likely   |
| Heavy<br>50-100mm   | Strong<br>>65kmh <sup>-1</sup>  | Heavy<br>>600µg m <sup>-3</sup>   | Likely  |
| Moderate<br>10 - 49mm   | Moderate<br>>50kmh <sup>-1</sup>  | Moderate<br>>400µg m <sup>-3</sup>  | Less likely   |
| Light<br>1 - 10mm   | Light<br><50kmh <sup>-1</sup>   | Light<br><200µg m <sup>-3</sup>   |   |









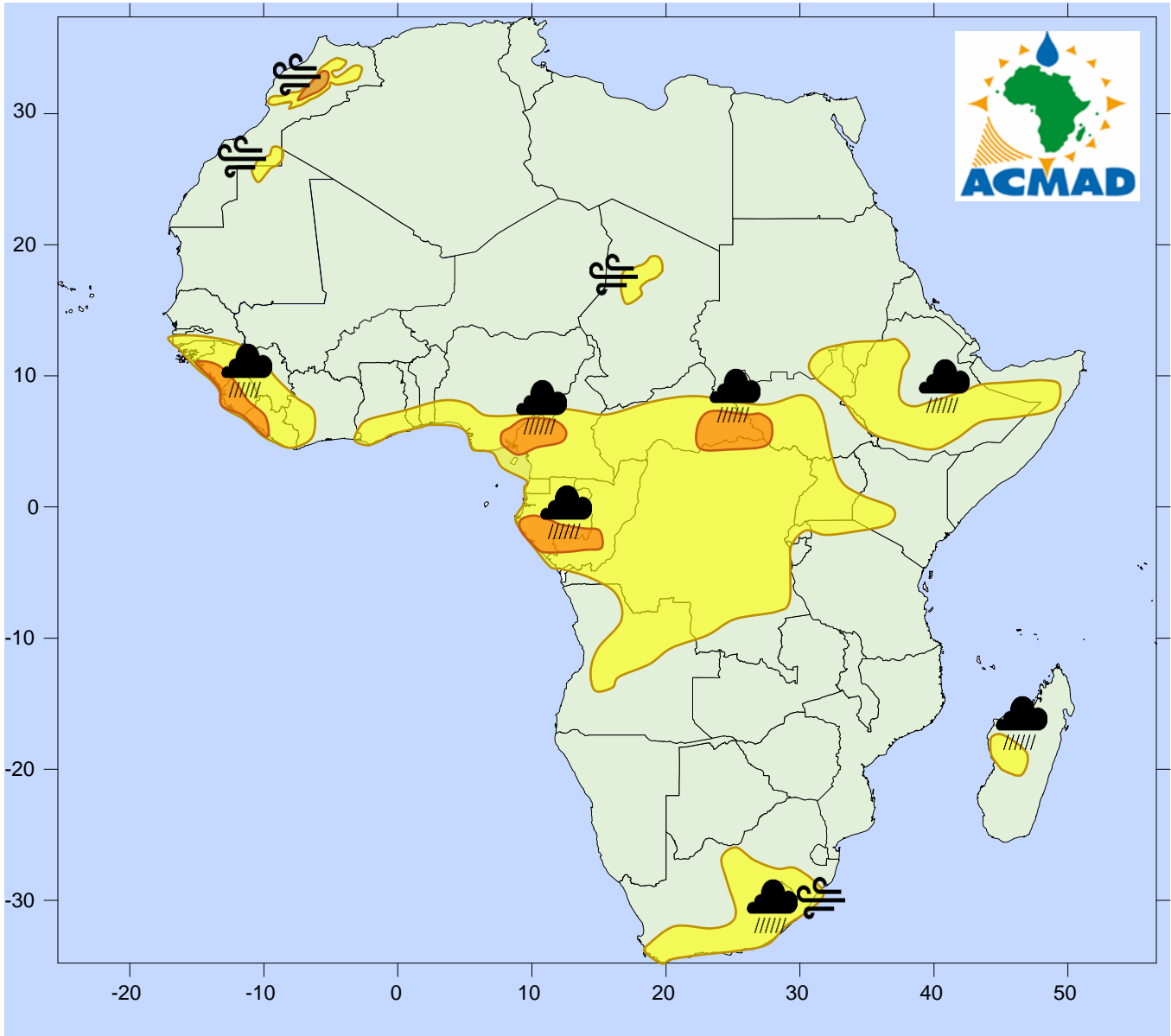
## MULTI-HAZARD OUTLOOK

**Validity: 2022-10-15**

*issued on 2022-10-13*

| <br>Rain | <br>Wind | <br>Dust | <br>Meningitis |
|---|---|---|---|
| Very heavy<br>>100mm  | Very strong<br>>80kmh <sup>-1</sup>   | Very heavy<br>>1000µg m <sup>-3</sup>   | Very likely   |
| Heavy<br>50-100mm   | Strong<br>>65kmh <sup>-1</sup>  | Heavy<br>>600µg m <sup>-3</sup>   | Likely  |
| Moderate<br>10 - 49mm   | Moderate<br>>50kmh <sup>-1</sup>  | Moderate<br>>400µg m <sup>-3</sup>  | Less likely   |
| Light<br>1 - 10mm   | Light<br><50kmh <sup>-1</sup>   | Light<br><200µg m <sup>-3</sup>   |   |









MULTI-HAZARD OUTLOOK

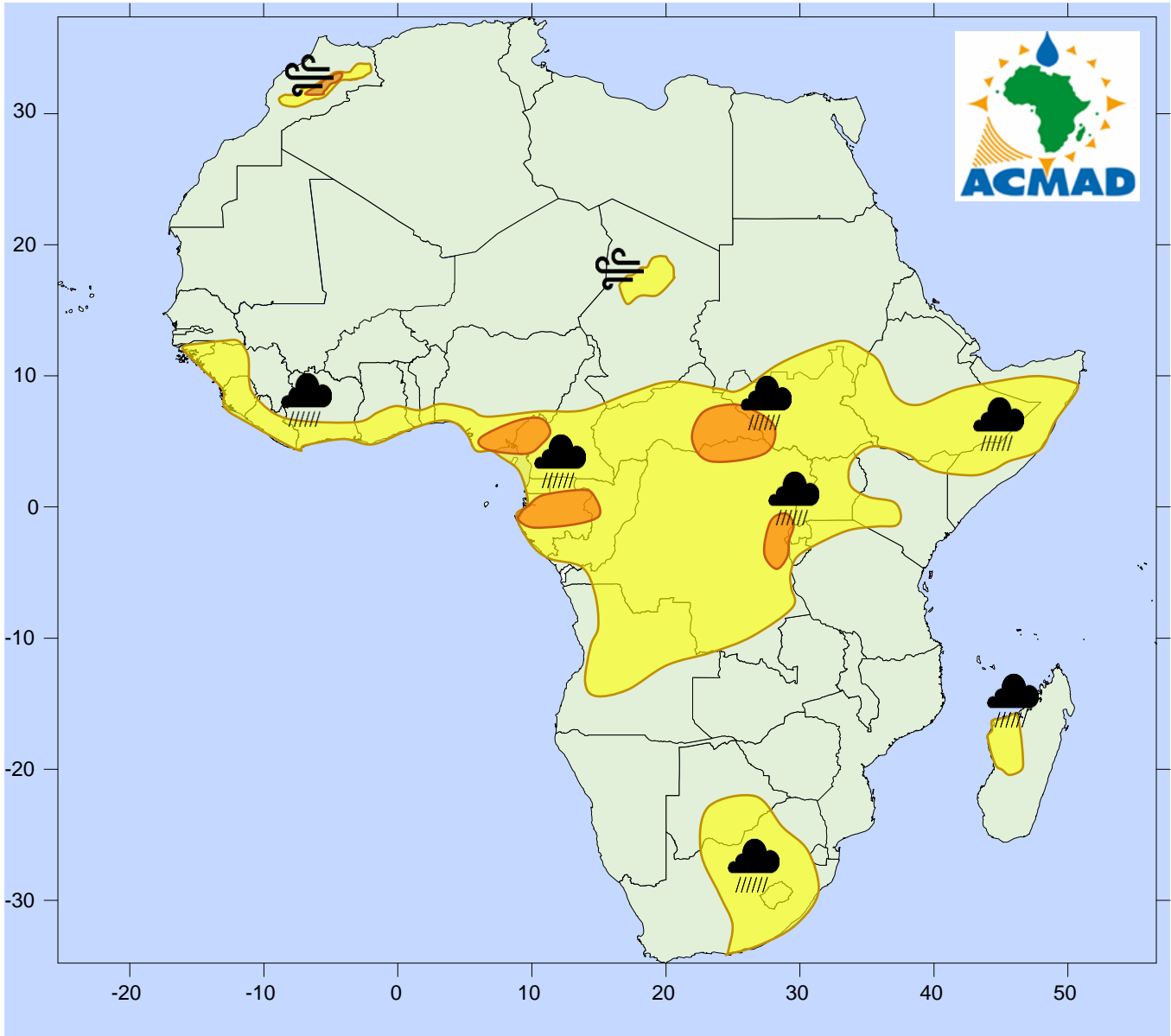
Validity: 2022-10-16

issued on 2022-10-13

| <br>Rain | <br>Wind | <br>Dust | <br>Meningitis |
|---|---|---|---|
| Very heavy<br>>100mm  | Very strong<br>>80kmh <sup>-1</sup>   | Very heavy<br>>1000µg m <sup>-3</sup>   | Very likely   |
| Heavy<br>50-100mm   | Strong<br>>65kmh <sup>-1</sup>  | Heavy<br>>600µg m <sup>-3</sup>   | Likely  |
| Moderate<br>10 - 49mm   | Moderate<br>>50kmh <sup>-1</sup>  | Moderate<br>>400µg m <sup>-3</sup>  | Less likely   |
| Light<br>1 - 10mm   | Light<br><50kmh <sup>-1</sup>   | Light<br><200µg m <sup>-3</sup>   |   |











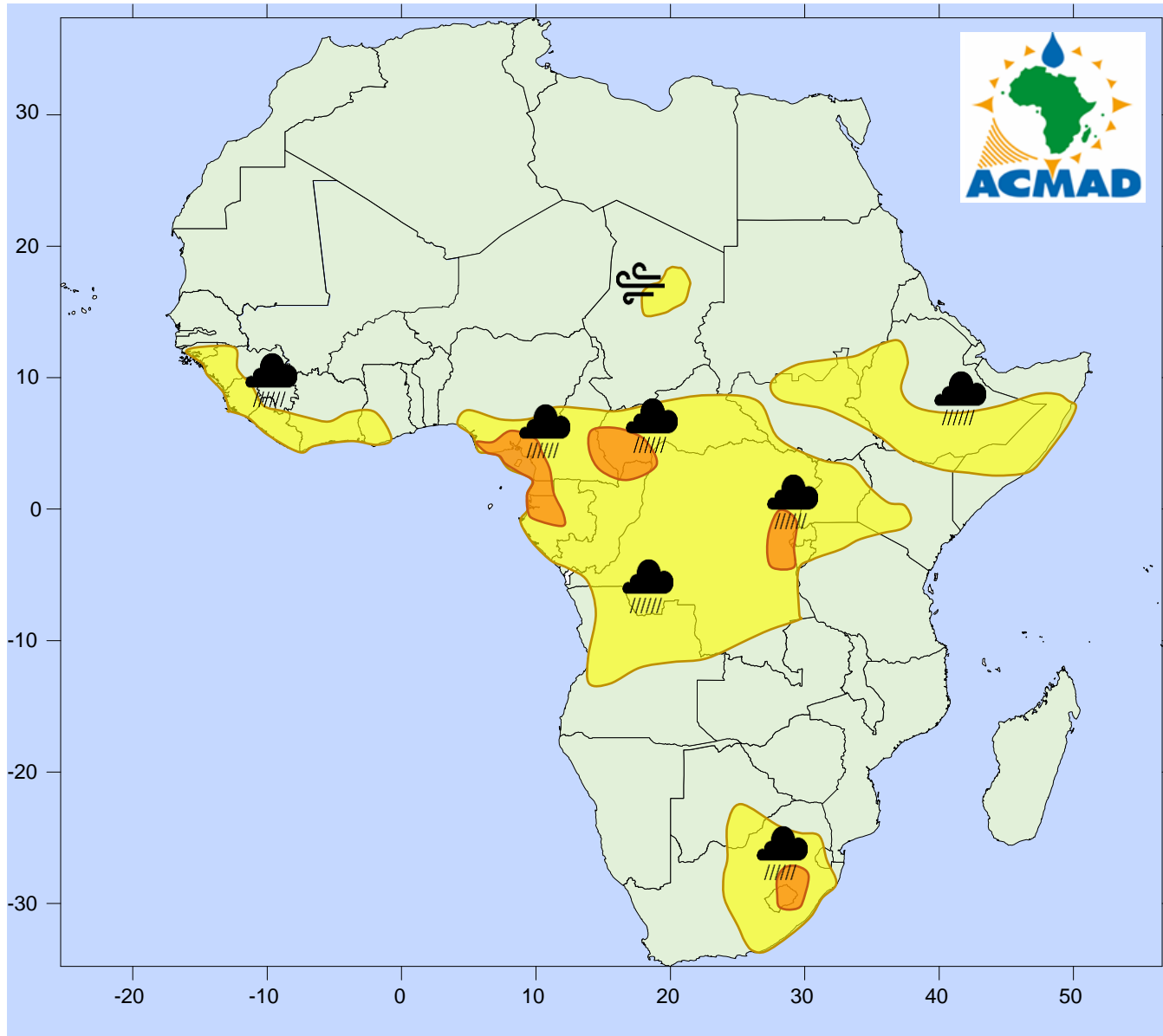
# MULTI-HAZARD OUTLOOK

**Validity: 2022-10-17**

*issued on 2022-10-13*

| <br>Rain | <br>Wind | <br>Dust | <br>Meningitis |
|---|---|---|---|
| Very heavy<br>>100mm  | Very strong<br>>80kmh <sup>-1</sup>   | Very heavy<br>>1000µg m <sup>-3</sup>   | Very likely   |
| Heavy<br>50-100mm   | Strong<br>>65kmh <sup>-1</sup>  | Heavy<br>>600µg m <sup>-3</sup>   | Likely  |
| Moderate<br>10 - 49mm   | Moderate<br>>50kmh <sup>-1</sup>  | Moderate<br>>400µg m <sup>-3</sup>  | Less likely   |
| Light<br>1 - 10mm   | Light<br><50kmh <sup>-1</sup>   | Light<br><200µg m <sup>-3</sup>   |   |









## MULTI-HAZARD OUTLOOK

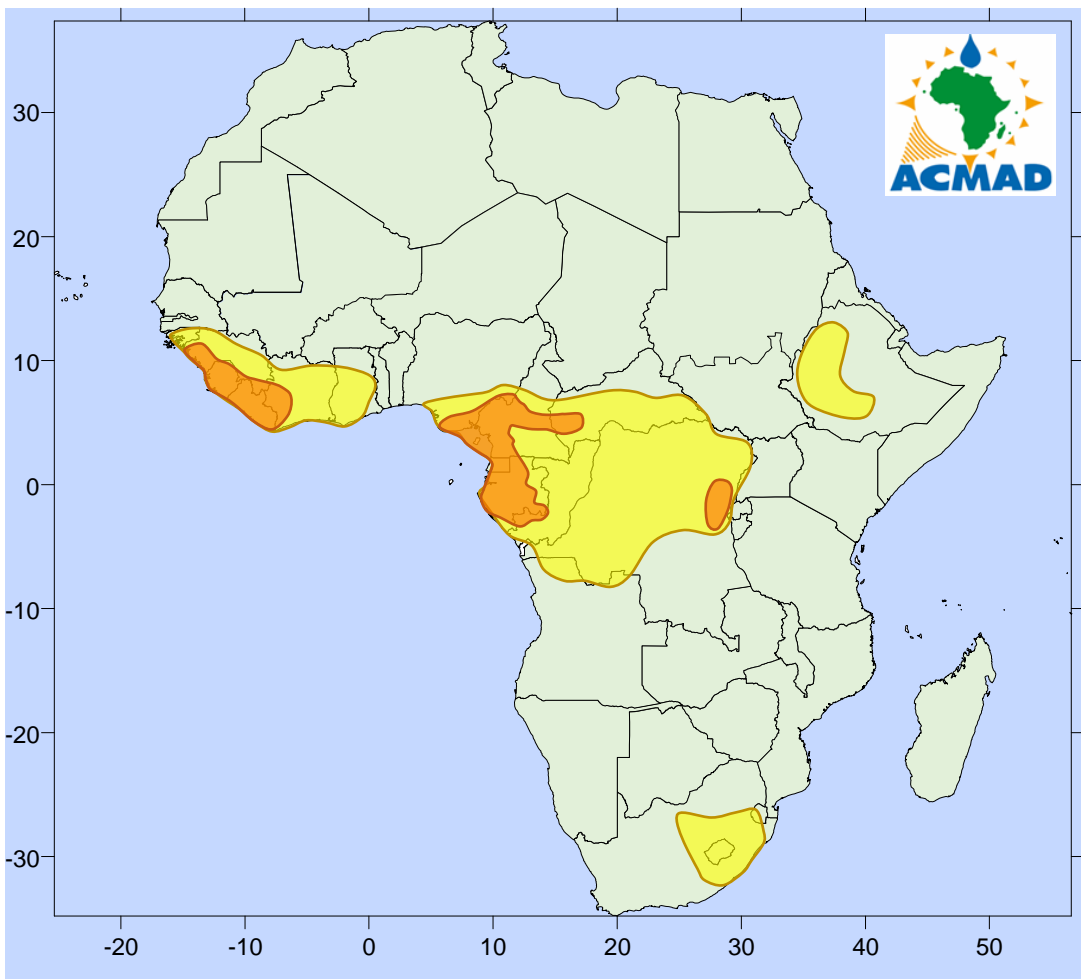
**Validity: 2022-10-18**

*issued on 2022-10-13*

| <br>Rain | <br>Wind | <br>Dust | <br>Meningitis |
|---|---|---|---|
| Very heavy<br>>100mm  | Very strong<br>>80kmh <sup>-1</sup>   | Very heavy<br>>1000µg m <sup>-3</sup>   | Very likely   |
| Heavy<br>50-100mm   | Strong<br>>65kmh <sup>-1</sup>  | Heavy<br>>600µg m <sup>-3</sup>   | Likely  |
| Moderate<br>10 - 49mm   | Moderate<br>>50kmh <sup>-1</sup>  | Moderate<br>>400µg m <sup>-3</sup>  | Less likely   |
| Light<br>1 - 10mm   | Light<br><50kmh <sup>-1</sup>   | Light<br><200µg m <sup>-3</sup>   |   |



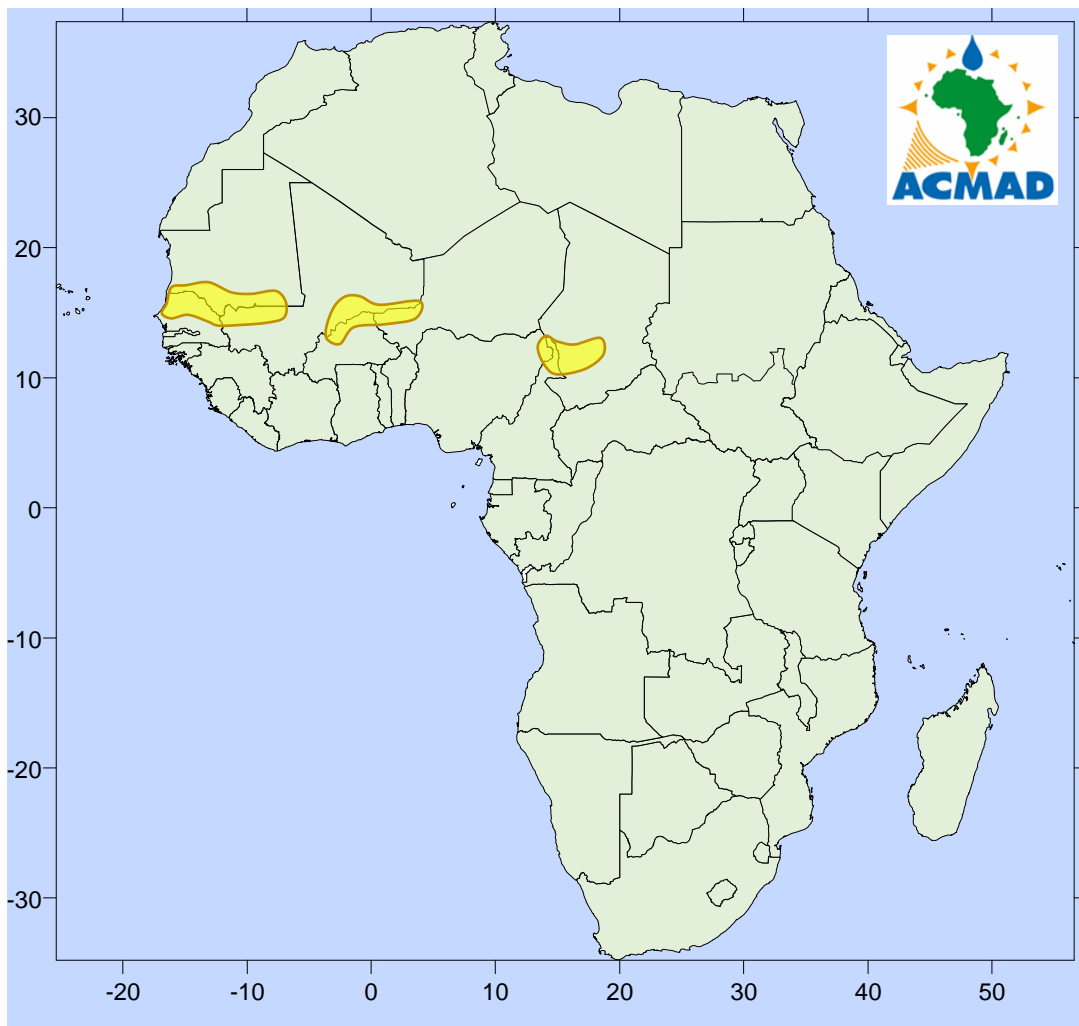
**HIGHLIGHT:** Heavy rainfall is expected over Guinea, Sierra Leone, Liberia, Cote d'Ivoire, Nigeria, Cameroon, Equatorial Guinea, Gabon, CAR, and DRC



|  | Phenomenon  | Hazard  | Potentials Impacts  | DRM Measures / Advices  |
|--|---|---|---|---|
|  | In next 5 days accumulated rainfall (50-100mm) is likely,         | Moderate rainfall, flash flood, riverine flooding, landslides, soil erosion and lightning likely  | Displacements of people due to floods, outbreak of water borne diseases, damage of infrastructures (roads, bridges, ...).                         | Civil Protection services in west and central Africa and DRM authorities in Ethiopia and South Africa to monitor closely the situation with NHMSs.  |
|  | In next 5 days accumulated rainfall (100 – 150mm) is very likely, | Heavy rainfall, flash flood, riverine flooding, landslides, soil erosion and lightning, strong winds,                                   | Displacements of people due to floods, outbreak of water borne diseases, damage of infrastructures (roads, bridges, ...)                          | Civil Protection and Humanitarian services in Ivory Coast, Cameroon, Equatorial Guinea, Gabon, CAR and DRC to update Flood contingency plans, monitor the water level in river basin, reservoirs and dams, assess vulnerabilities and evacuation areas and take preparedness measures. Liberia and Sierra Leone to reinforce their DRM Policy framework with a multi-hazard contingency plan. |
|  | In next 5 days accumulated rainfall (>150mm) is very likely,      | Extreme heavy precipitation, flash flood, riverine flooding, landslides, soil erosion and lightning, strong winds, severe thunderstorms | Loss of lives, Injuries, Displacements of people due to floods, outbreak of water borne diseases, damage of infrastructures (roads, bridges, ...) | Civil Protection services and DRM authorities to activate flood contingency plans for emergency response (assistance to victims, search & rescue operations ), and be in close touch with NHMS, in this type of situation.  |

**Disclaimer:** The presentation of country boundaries on the map does not imply any opinion whatsoever on the part of ACMAD concerning the legal status of any country, territory or area, or concerning the delimitation of frontiers or boundaries.

**HIGHLIGHT: Light heat wave is likely expected over Mauritania, Senegal, Mali, Burkina Faso, Niger, Nigeria, Cameroon, and Chad**



|  | Phenomenon  | Hazard  | Potentials Impacts  | Measures / Advices  |
|--|---|---|---|---|
|  | In next 5 days apparent temperature >40°C to 44°C are expected for two days | Heat wave<br>Conditions persists on 2days   | Moderate temperature heat is tolerable for general public but moderate health concern for vulnerable people(people chronic diseases, infants and elderly)   | Mauritanian (Southern), Senegal (Northern), Mali (South west and East), Niger (South west), Burkina Faso (Northern), Nigeria (North East), Chad (South West) and Cameroon (Extreme North) Civil Protection services to monitor closely the situation with NHMSs   |
|  | apparent temperature 40°C to 44°C are expected for more than 2 days         | Moderate heat wave conditions are likely to persist for 3days ore more with varied severity | High temperature<br>Increased likelihood of heat illness symptoms in people who are either exposed to sun for a prolonged period or doing heavy work<br>High health concern for vulnerable people | Civil Protection services and DRM authorities to update heat wave contingency plan, assess vulnerabilities, cooling systems and take awareness measures in close relation with the health services. in this type of situation   |
|  | Apparent temperatures >45°C are expected for more than 2 days               | Severe heat wave is very likely to persist for more than 2 days,                            | Very high likelihood of developing heat illness and heat stroke in all ages   | Civil Protection services to activate heat wave contingency plan for emergency response (Warning/alert, assist victims of physical and psychological stress, sensitize vulnerable groups to avoid heat exposure, dehydration, to keep cool, to drink sufficient water, to wear lightweight, light colored...) in this type of situation |

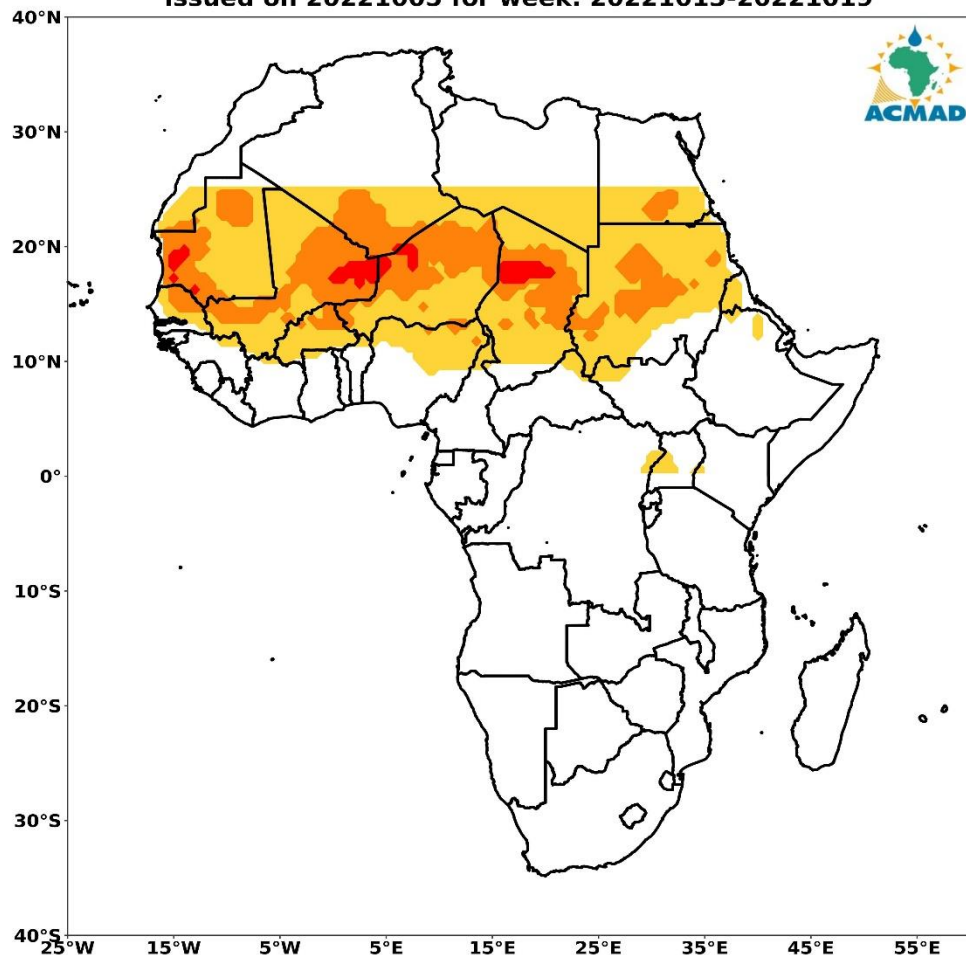
### Disclaimer:

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**HIGHLIGHT:** Emergence of Meningitis cases are very likely in Mauritania, Mali, Niger and Chad.

**VIGILANCE MAP FOR MENINGITIS OUTBREAKS IN AFRICA**  
issued on 20221005 for week: 20221013-20221019



**Disclaimer:**

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|  | Phenomenon   | Hazard   | Potentials Impacts                                    | Advisory / Measures  |
|--|--|--|---|--|
|  | <ul style="list-style-type: none"> <li>- Dust concentration below <math>150\mu\text{g}/\text{m}^3</math></li> <li>- Relative humidity above 40%</li> <li>- Temperature below <math>27^\circ\text{C}</math></li> </ul>                                  | Emergence of Meningitis cases not likely                               | Potential pressure on the health system               | Routine surveillance systems at regional and national levels                                 |
|  | <ul style="list-style-type: none"> <li>- Dust concentration between <math>150</math> to <math>400\mu\text{g}/\text{m}^3</math></li> <li>- Relative humidity between 20 &amp; 40%</li> <li>- Temperature above <math>27^\circ\text{C}</math></li> </ul> | Emergence of Meningitis cases very likely                              | Loss of life, pressure on the health system           | Activation of surveillance systems at regional and national levels                           |
|  | <ul style="list-style-type: none"> <li>- Dust Concentration at least <math>400\mu\text{g}/\text{m}^3</math> and above</li> <li>- Relative humidity less than 20%</li> <li>- Temperature above <math>30^\circ\text{C}</math></li> </ul>                 | Emergence of Meningitis cases very likely and epidemic status possible | Loss of life, increased pressure on the health system | Strengthen and increase meningitis surveillance systems at both regional and national levels |

## Contributors

| Name                     | Function                          | Date       |
|--------------------------|-----------------------------------|------------|
| Dr. Lawal Kamoru Abiodun | Thematic expert in Climate Change | 13-10-2022 |
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| Sunshine Gamedze         | Short Term Climate Expert         | 13-10-2022 |
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| Dominique Kuitsouc       | EWS expert                        | 13-10-2022 |

## Versions

| Version | Date       | By               | Descriptions  |
|---------|------------|------------------|---|
| V0      | 13-10-2022 | WWFD forecasters | First draft for « Briefing », with all forecaster's contributions |
| Last    | 13-10-2022 | Dr. Pierre Kamsu | Final Review  |



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part of implementation of the WMO's Global  
Framework for Climate Services**



**ClimSA**

INTRA-ACP CLIMATE SERVICES AND RELATED APPLICATIONS PROGRAMME



An initiative of the Organisation of African, Caribbean  
and Pacific States funded by the European Union



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