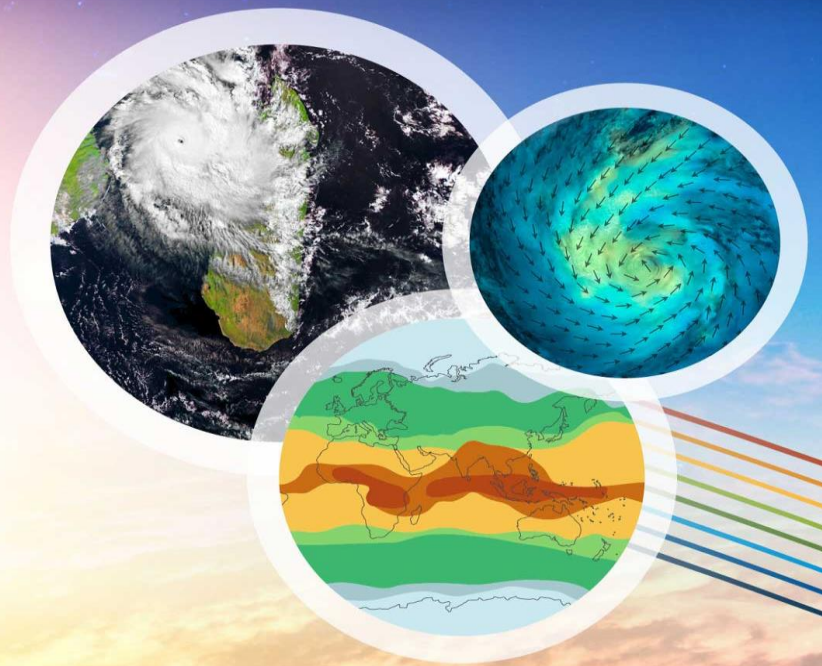
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INTRA-ACP CLIMATE SERVICES AND RELATED APPLICATIONS PROGRAMME

# African Centre of Meteorological Applications for Development (ACMAD)

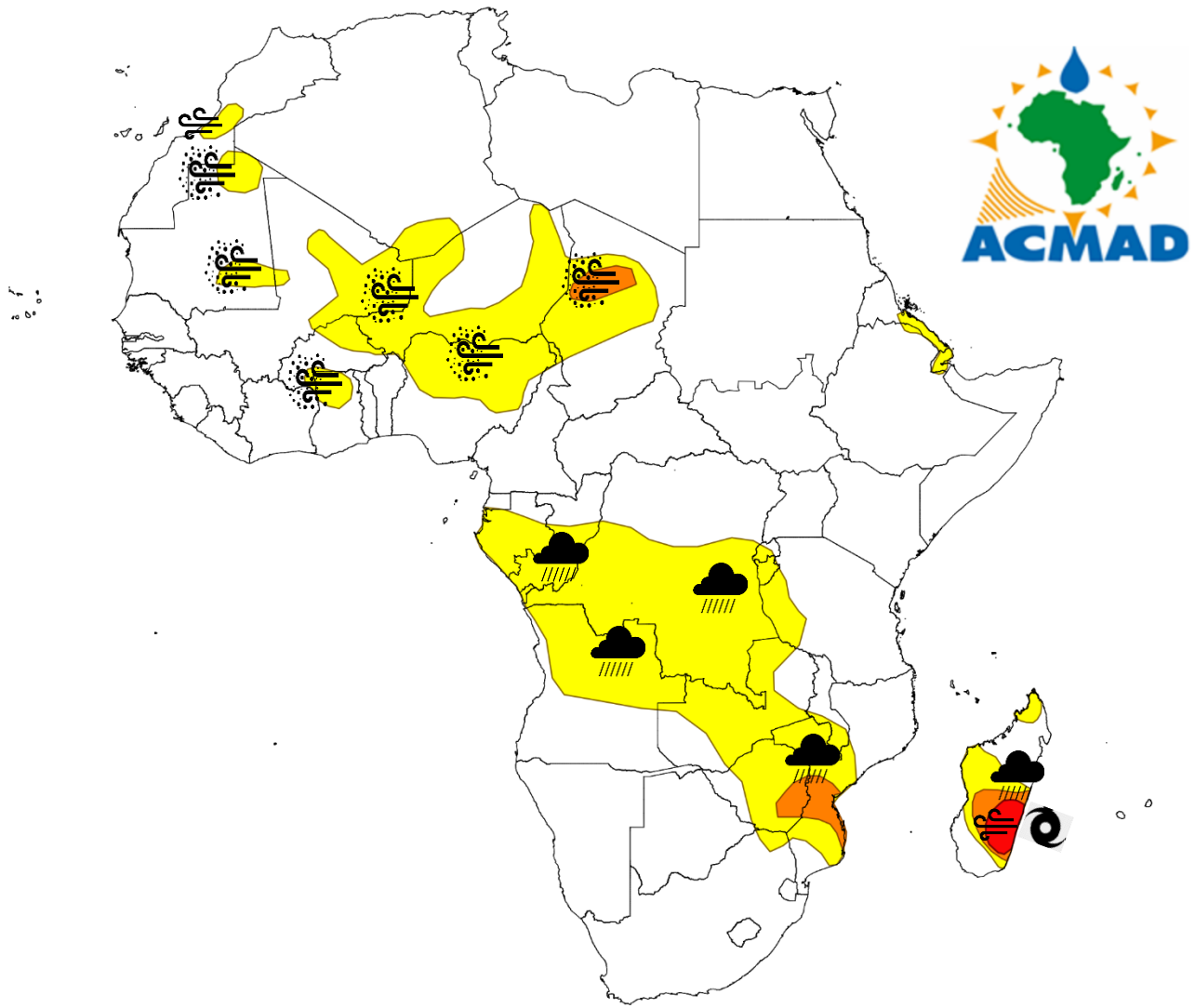
## Continental Multi-Hazard & Advisory Bulletin





**Issued on: February 20th, 2023**

**Validity period: February 21st to 25th , 2023**

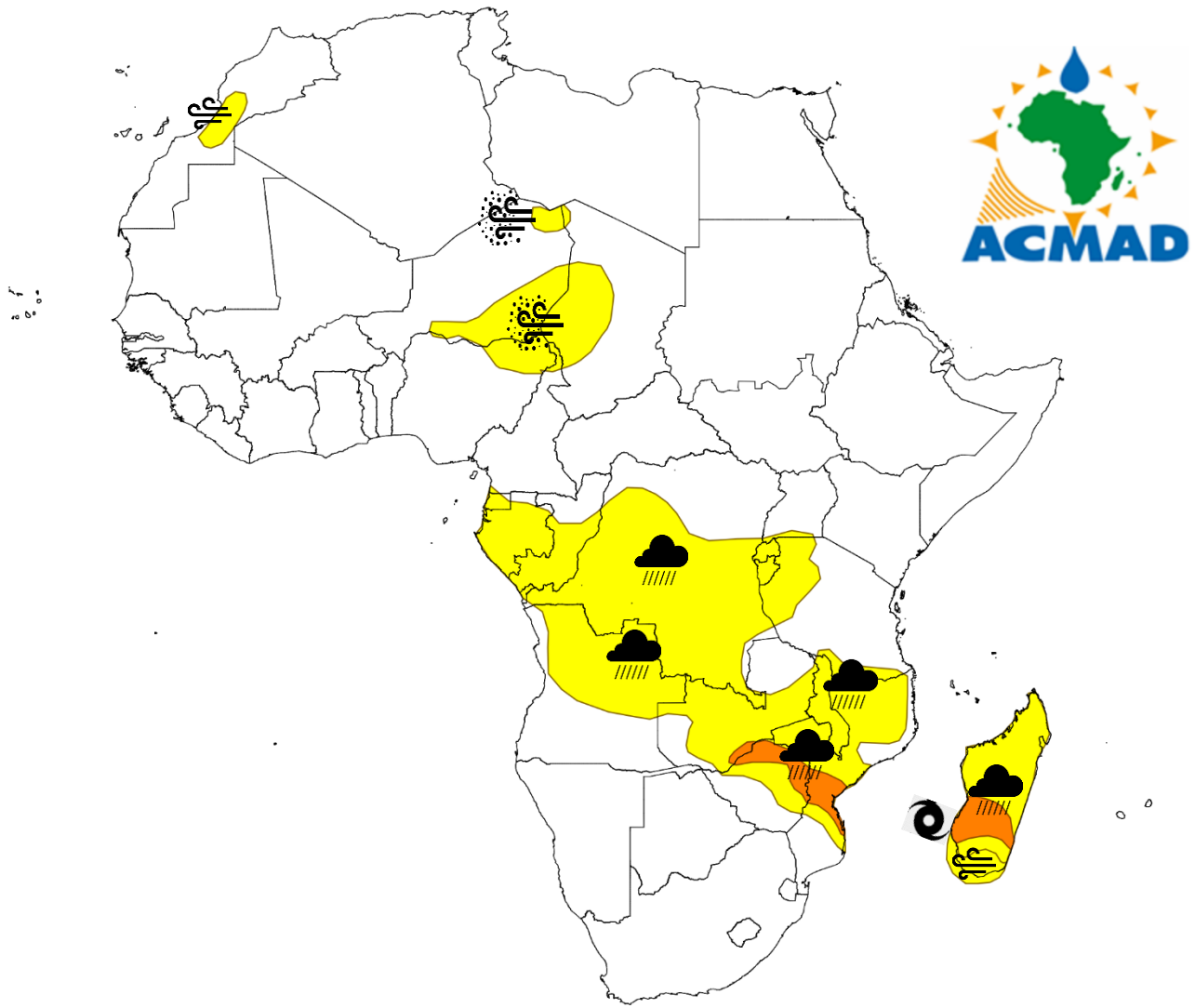


# MULTI-HAZARD OUTLOOK

## Validity: 2023-02-21

issued on 2023-02-20

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

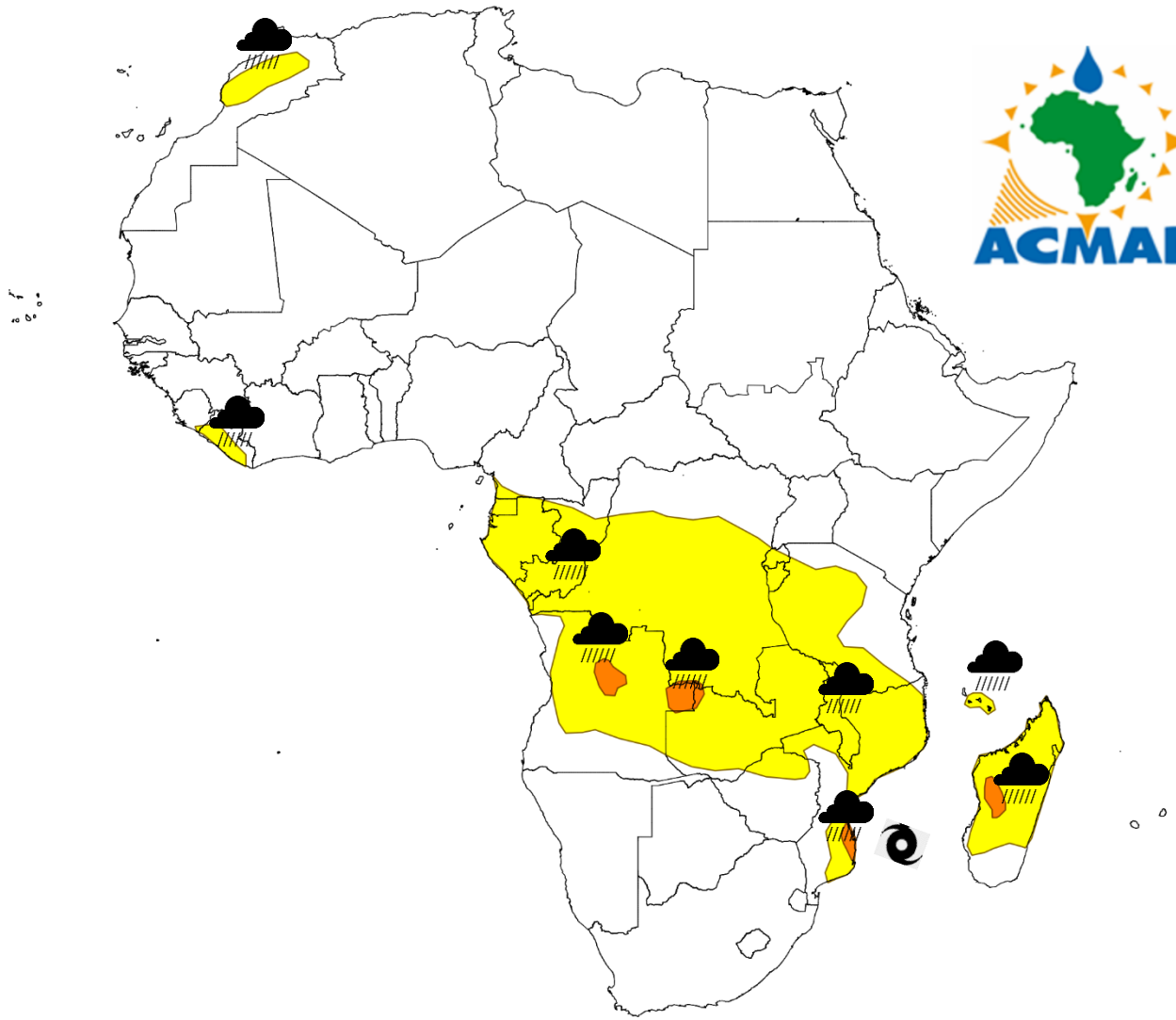


# MULTI-HAZARD OUTLOOK

## Validity: 2023-02-22

issued on 2023-02-20

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

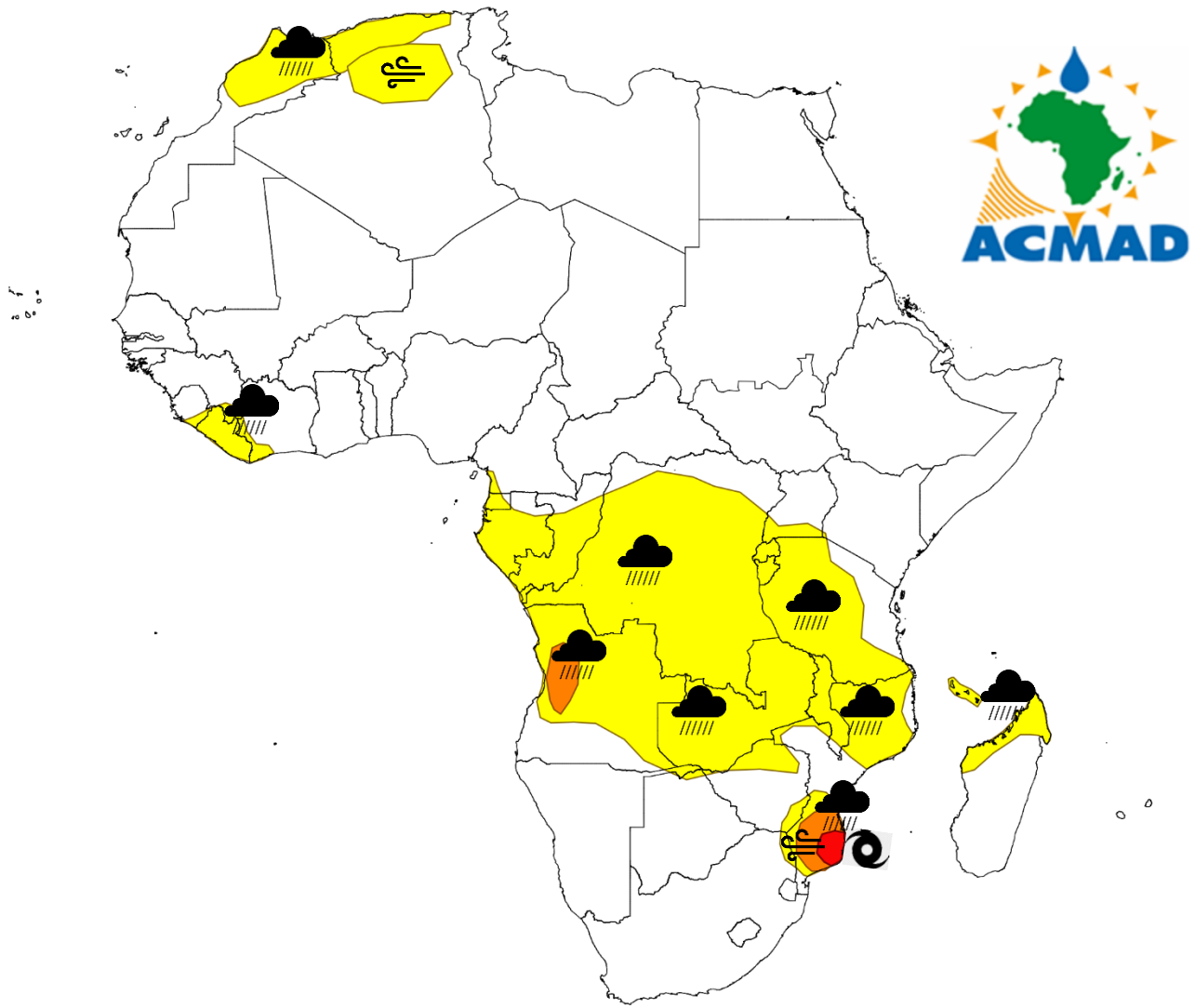


# MULTI-HAZARD OUTLOOK

## Validity: 2023-02-23

issued on 2023-02-20

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

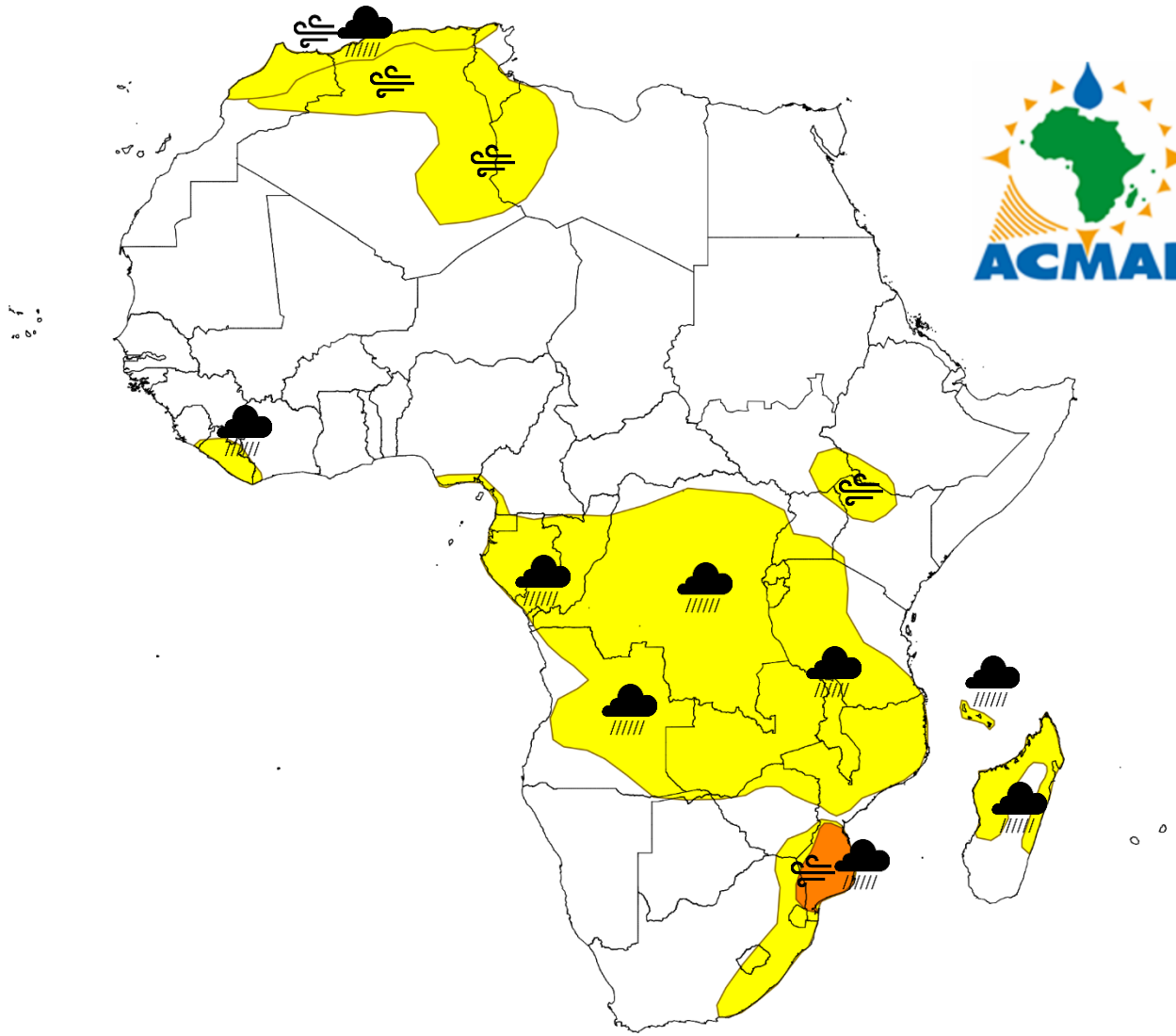


# MULTI-HAZARD OUTLOOK

## Validity: 2023-02-24

issued on 2023-02-20

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



# MULTI-HAZARD OUTLOOK

## Validity: 2023-02-25

issued on 2023-02-20

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

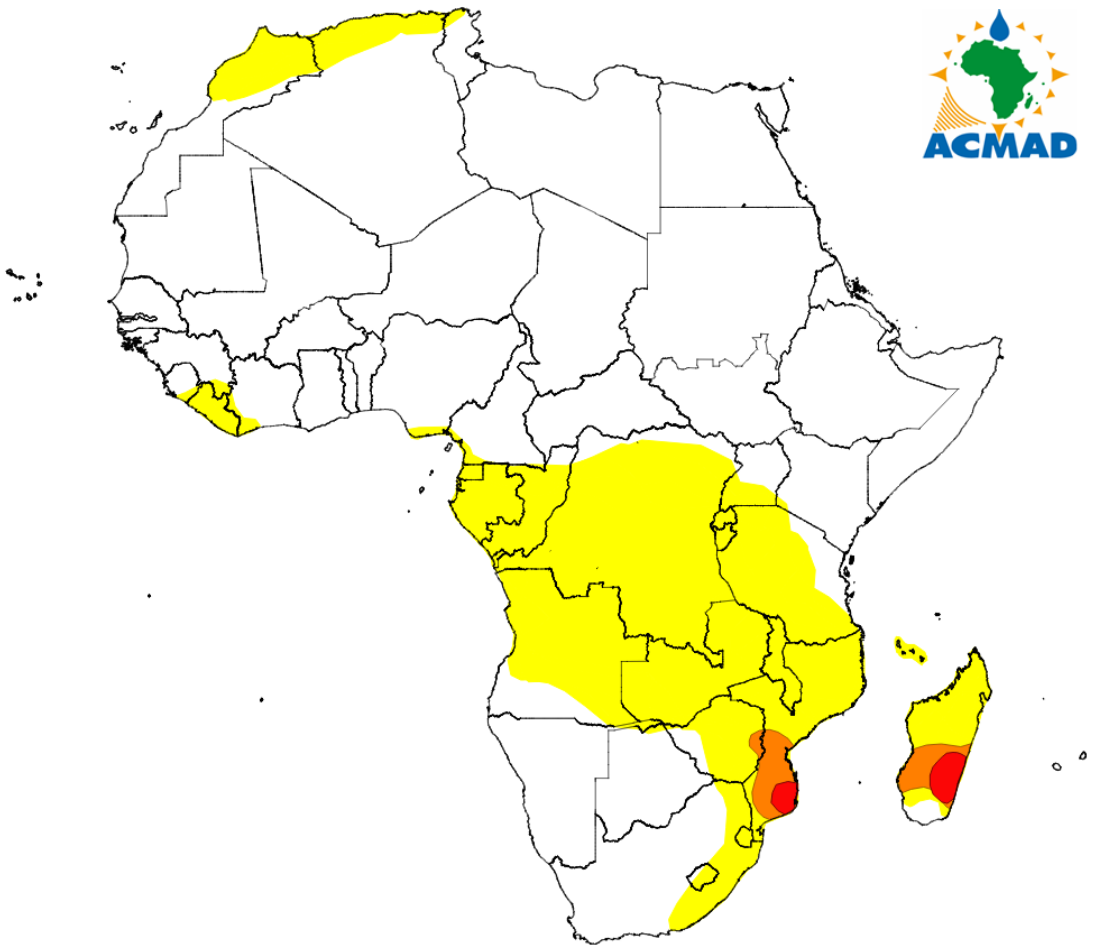
# VIGILANCE MAP AND POLICY BRIEF FOR HEAVY RAINFALL AND STRONG WINDS

## Valid From February 21 to 25, 2023

**Issued on February 20, 2023**

**HIGHLIGHT: Tropical Cyclone FREDDY is expected to landfall along the south-eastern coast of Madagascar on Tuesday night , 21st February and will generate extreme heavy rainfall and strong wind, it is expected to reach the coast of Mozambique on Thursday 24th February 2023.**

**Heavy rainfall is expected in Mozambique, Zimbabwe and Madagascar**



| | 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, …) | DRM authorities to keep informed about the development of the meteorological situation and raise awareness, taking action is more likely, the situation needs to be monitored closely 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, …) | Update Flood contingency plans, Improve water management in reservoirs and dams, DRM authorities be ready to take adequate actions, DRM to be continuously in touch with NHMSs to be informed of the detailed expected meteorological conditions. |
| | 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, …) | Madagascar and Mozambique's Civil Protection service and DRM authorities to activate Tropical Cyclone contingency plan for disaster preparedness and emergency response (awareness, assistance to victims, search & rescue operations ), and be in close touch with NHMS for further accuracy at the national. |

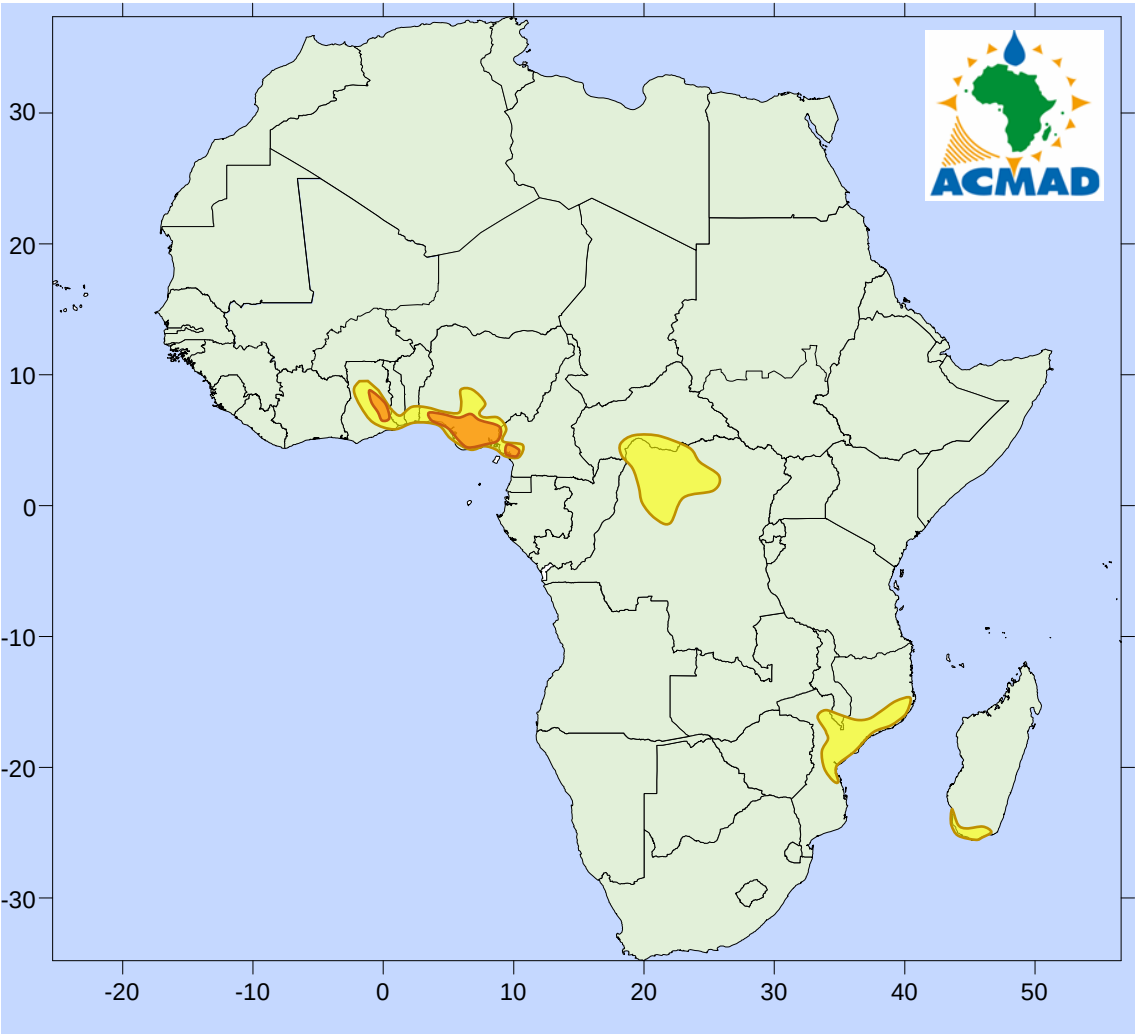
***Disclaimer:*** *The presentation of country boundaries on the map does not imply any opinion whatsoever on the part of ACMAD concerning the legal status of any country, territory or area, or concerning the delimitation of frontiers or boundaries.*

# VIGILANCE MAP AND POLICY BRIEF FOR HEAT WAVE

## Valid From February 21 to 25, 2023

**Issued on February 20, 2023**

**HIGHLIGHT: Moderate heat wave is expected in Ghana and Nigeria**




| | Phenomenon | Hazard | Potentials Impacts | DRM Measures / Advices |
|---|---|---|---|---|
| | In next 5 days apparent temperature >40ºC to 44ºC are expected for two days | Heat wave 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) | Civil Protection services in Ghana, Togo, Benin, Nigeria, Cameroon, Centrafrique, DRC, Malawi, and Mozambique to monitor closely the heat wave situation with NHMSs |
| | apparent temperature 40ºC to 44ºC are expected for more than 2 days | Moderate heat wave conditions are likely to persist for 3days ore more with varied severity | High temperature Increased likelihood of heat illness symptoms in people who are either exposed to sun for a prolonged period or doing heavy work High health concern for vulnerable people | DRM authorities in Ghana and Nigeria to update heat wave contingency plan, assess vulnerabilities, take awareness and public behavior advisories in close relation with the health services. |
| | Apparent temperatures >45ºC 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 | N/A |

***Disclaimer:***

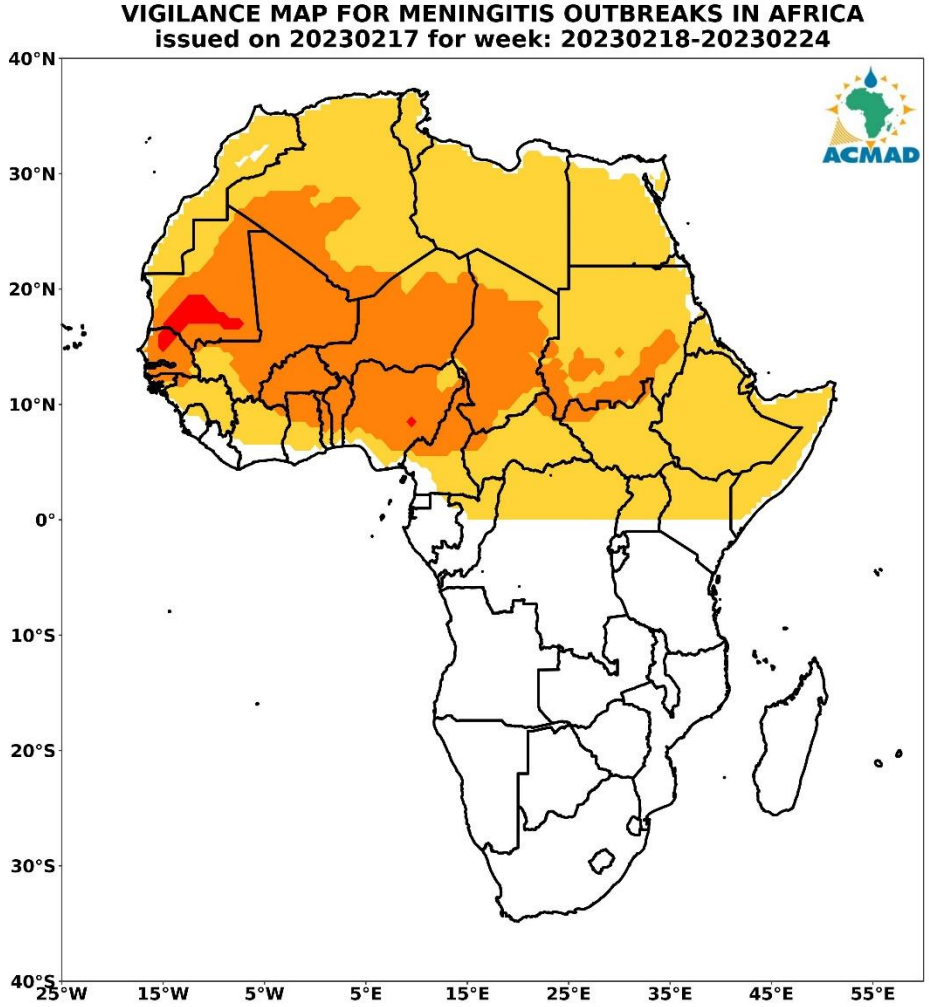
*The presentation of country boundaries on the map does not imply any opinion whatsoever on the part of ACMAD concerning the legal status of any country, territory or area, or concerning the delimitation of frontiers or boundaries.*

# VIGILANCE MAP AND POLICY BRIEF FOR MENINGITIS OUBREAK

## Valid From February 18 to 24, 2023

**Issued on 17 February, 2023**

**HIGHLIGHT: Emergence of Meningitis cases is very likely and epidemics status possible in Mauritania and Senegal**




***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.*

| | Phenomenon | Hazard | Potentials Impacts | Advisory / Measures |
|---|---|---|---|---|
| | - Dust concentration below 150µg/m3<br>- Relative humidity above 40%<br>- Temperature below 27oC | Emergence of Meningitis cases not likely | Potential pressure on the health system | Routine surveillance systems at regional and national levels |
| | - Dust concentration between 150 to 400µg/$m^3$<br>- Relative humidity between 20 & 40%<br>- Temperature above 27°C | Emergence of Meningitis cases very likely | Loss of life, high potential pressure on the health system | Activation of surveillance systems at regional and national levels |
| | - Dust Concentration at least 400µg/$m^3$ and above<br>- Relative humidity less than 20%<br>- Temperature above 30°C | 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 | 20-02-2023 |
| Godefroid Nshimirimana | Thematic expert in meteorology | 20-02-2023 |
| Leon Guy Razafindrakoto | Thematic expert in meteorology | 20-02-2023 |
| Ambesi Hans Ndonwi | Resource Person - Secondment | 20-02-2023 |
| Bitsoumani-Ngouaya Gaëlla-Bentricia | Resource Person – On Job Training | 20-02-2023 |
| Sunshine Gamedze | Short Term Climate Expert | 20-02-2023 |
| Dr. Pierre Kamsu | Senior Expert Forecaster | 20-02-2023 |

## Versions

| Version | Date | By | Descriptions |
|---|---|---|---|
| V0 | 20-02-2023 | WWFD forecasters | First draft for « Briefing », with all forecaster's contributions |
| Last | 20-02-2023 | Dr. Pierre Kamsu | Final Review |




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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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