



Ministero degli Affari Esteri
e della Cooperazione Internazionale



ITALIAN AGENCY
FOR DEVELOPMENT
COOPERATION



UN Office for Disaster Risk Reduction



Africa Multi-hazard Early Warning and Action System

AMHEWAS INDUCTION TRAINING COURS D'INITIATION à AMHEWAS

CONTINENTAL WATCH
AMHEWAS

VEUILLE CONTINENTALE
AMHEWAS

ABUJA 16/11/2023

AMHEWAS

Africa Multi-Hazard Early Warning and
Action System for Disaster Risk Reduction

THE SITUATION ROOMS

The Continental
Multi-Hazard
Advisory Centre



The Continental Situation Room



The Disaster Operation Centre



CONTINENTAL WATCH – **VEILLE CONTINENTALE**

Structure of the CW



Structure ...



CONTINENTAL WATCH – **VEILLE CONTINENTALE**

a)What is a Continental Watch?

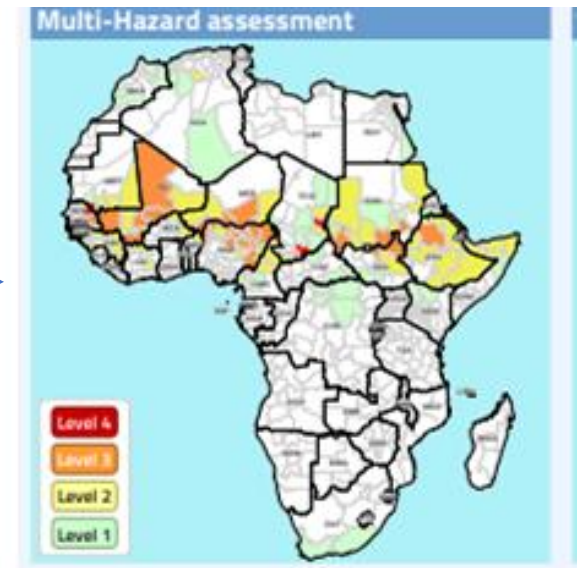
Qu'est-ce qu'une veille continentale?

b)What can you benefit from a continental watch?

Que pouvez-vous gagner d'une veille continentale?



?



?

CONTINENTAL WATCH – **VEILLE CONTINENTALE**

The Continental Watch is needed to warn (alert) on extreme event which may occur in **country or locality, day** and the level of **severity** of such an event for a decision maker **for the next 5days from issued date**.

The Continental Watch is an early warning for early action bulletin compiled and issued by the AUC Situation Room with technical support from ACMAD and ICPAC



What is a Continental Watch?

Qu'est-ce qu'une veille continentale ?



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Continental Watch - Veille Continentale (CW)

What:

- A Continental Watch is an early warning for early action bulletin compiled and issued by the Situation Room of the DRM Division under the DARBE of the African Union Commission.

Quoi:

- Une veille continentale est un bulletin d'alerte précoce pour une action rapide compilé et publié par la salle de situation de la division DRM sous le DARBE de la Commission de l'Union Africaine.



What is a Continental Watch?

Qu'est-ce qu'une veille continentale ?

Continental Watch

From Tuesday, August 9, 2022 to Saturday, August 13, 2022

1.HIGHLIGHTS

Observed events over the last five days:

(From Thursday, August 4, 2022 to Monday, August 8, 2022)

At least one person died and another was severely injured after heavy rains caused flooding in Dakar, the capital city of Senegal.

Multi - Hazard Outlook for the next 5 days :

Level 4 warning for possibility of extreme rainfall over Mauritania, Senegal and Chad.

Level 3 warning for possibility of high rainfall in Ethiopia, Guinea, Guinea-Bissau, Mauritania, Mali, Nigeria, Niger, Sudan, Senegal, South Sudan and Chad.

Level 3 warning for possible riverine floods in Sudan, Niger and Nigeria.



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Continental Watch - Veille Continentale (CW)

Why:

- Provide an over-regional overview on **what** extreme event is expected to occur, **where**, **when** and with what **level of severity** for policy and decision making.



Pourquoi ?

- Fournir un aperçu régional sur les événements extrêmes qui devraient se produire, **où**, **quand** et avec quel **niveau de gravité** pour la politique et la prise de décision.

c) When is the Continental Watch written?

Quand le veille continentale est-elle écrite ?

d) What resources do you need to compile it?

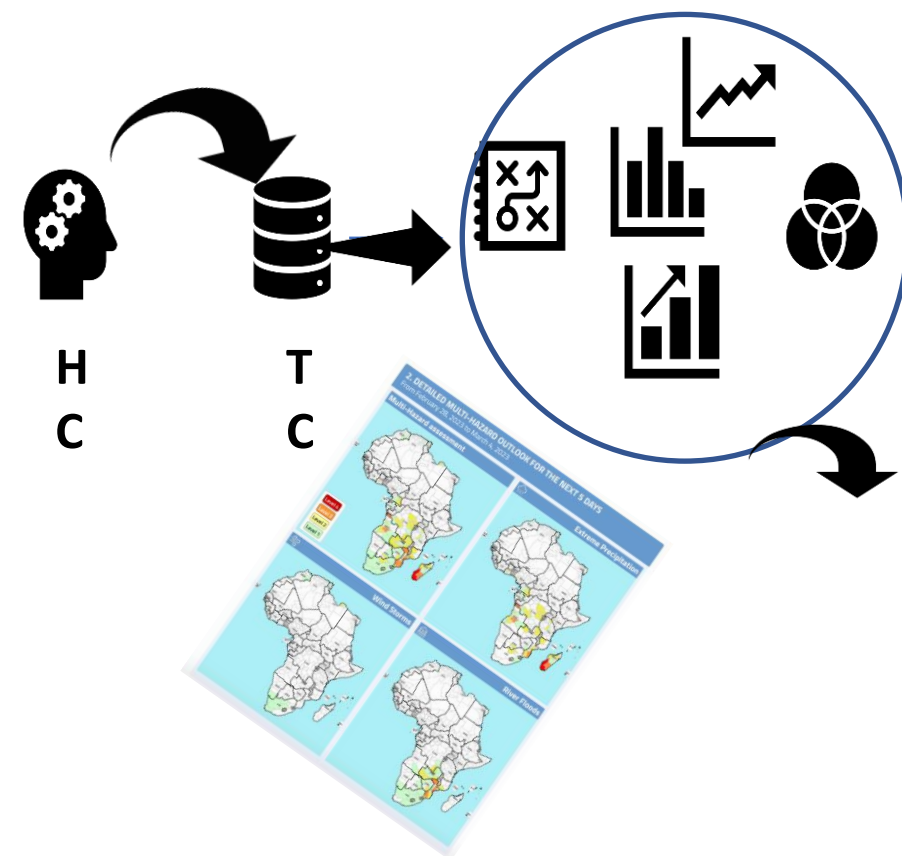
De quelles ressources on a besoin pour le compiler ?

?

➤ Continental Watch is currently compiled twice a week at the continental level. On: **Tuesday and Friday**;

➤ To compile the CW, the requirements are

- ✓ myDewetra Platform;
- ✓ Skilled and trained staff (**Forecaster, Hydrologist, EAW experts and communicator**);
- ✓ Adequate Infrastructure;
- ✓ Sources of early warning information
- ✓ Partnership or collaboration



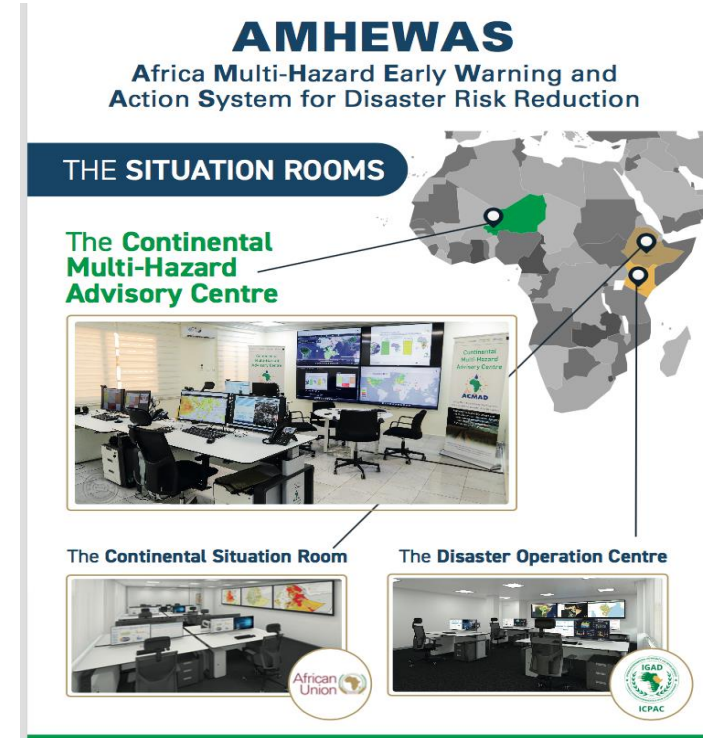
When and how?

Quand et comment?



When?

- A Continental Watch is currently compiled twice a week at the continental level.
On: Tuesday and Friday.



Quand ?

- Une veille continentale est actuellement compilée deux fois par semaine au niveau continental.
Le : le mardi et le vendredi.

When and how?

Quand et comment?

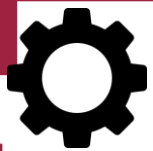


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Continental Watch - Veille Continentale (CW)

How?

- A system such as myDEWETRA Dashboard is key.
- Skilled and trained personnel
- Relevant infrastructure
- Other sources of early warning information
- Collaboration



Comment ?

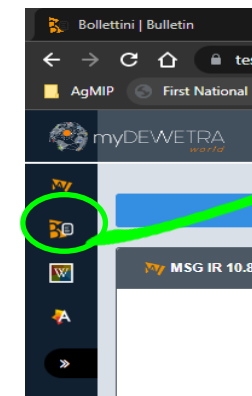
- Un système tel que myDEWETRA dashboard est essentiel.
- Personnel qualifié et formé
- Infrastructure pertinente
- Autres sources d'information sur l'alerte précoce
- Collaboration

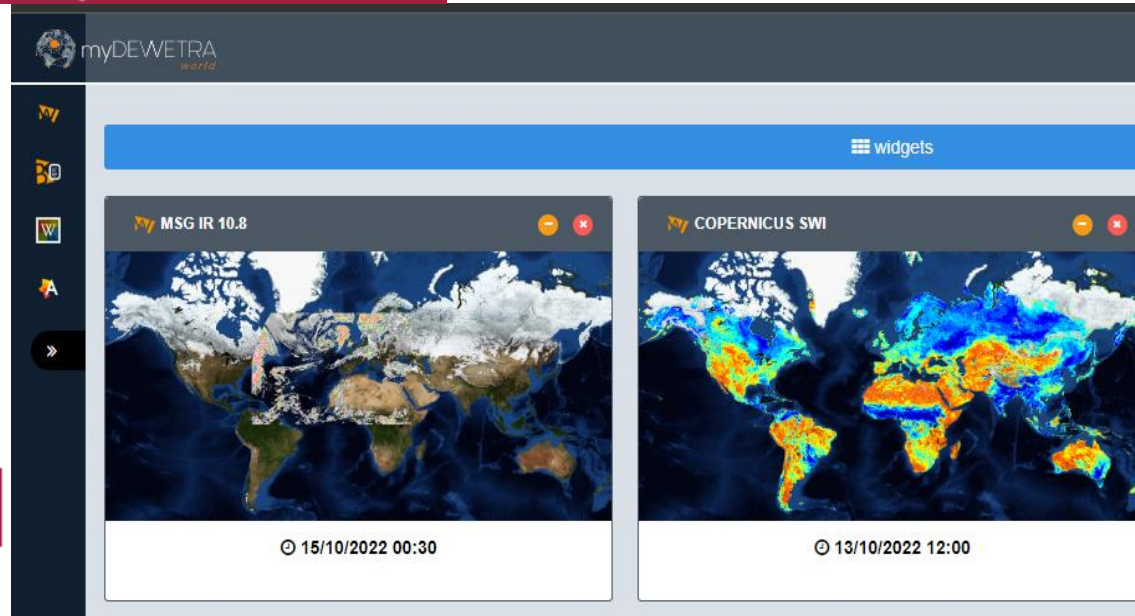
What is myDEWETRA

- **myDEWETRA** platform is a real-time event scenario builder, which allows decision makers to take prevention actions and reduce impacts of the forecasted event;
- **myDEWETRA** provide usefull link between forecasters, decision makers, communities and population;
- **myDEWETRA** works as an integrated real-time system providing a single access point to key early warning information;
- Through the platform, data (local or global) can be compared and analysed by experts in a timely manner.

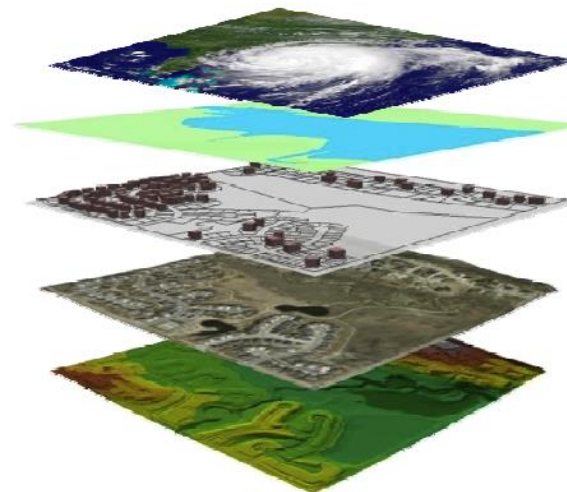


myDewetra





$$R(t) = E \times V \times H(t) / C$$



- **myDEWETRA** platform makes it possible to build risk scenarios in real time, which enables preventive measures to be taken and the impacts of predicted extreme hydrometeorological events to be reduced.
- To Assess risk scenarios in real time Several sources of information must be taken into consideration and All information is made available through one single platform:
 - ✓ Hazard(in real time) *Medium and short-term weather forecasts, remote sensing and in situ observations, hydrological monitoring and forecasting;*
 - ✓ Adaptive capacity *emergency means: shelters, storage, operational centres;*
 - ✓ Exposure and vulnerability *population, critical infrastructure, cultivated areas, etc...*

Main source outside myDewetra: ACMAD 5-day multi-hazard outlook

Source principale en dehors de myDewetra : prévision multirisques à 5 jours d'ACMAD

<https://www.acmad.org/>

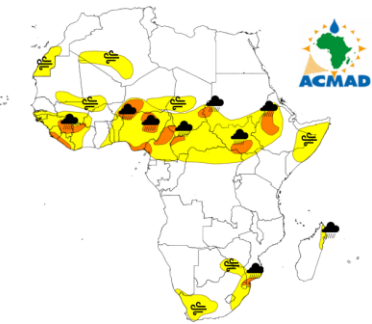
- Current satellite image
- 1-day accumulated precipitation observation:
 - Rain-gauge, archive
 - Satellite based, archive
- Daily Max T° observation, yesterday
- ITD & ITCZ Positions
- Rapid Developing Thunderstorm (RDT)
- Five day hazard outlook, Archive**
- Tech. note for synoptic forecast, Archive
- Daily Max T° forecast: D: D+1: D+2: D+3
-
- Continental multimodel visualisation
- UKMO model output, Africa

Climate

RCC Afrique



Daily outlooks



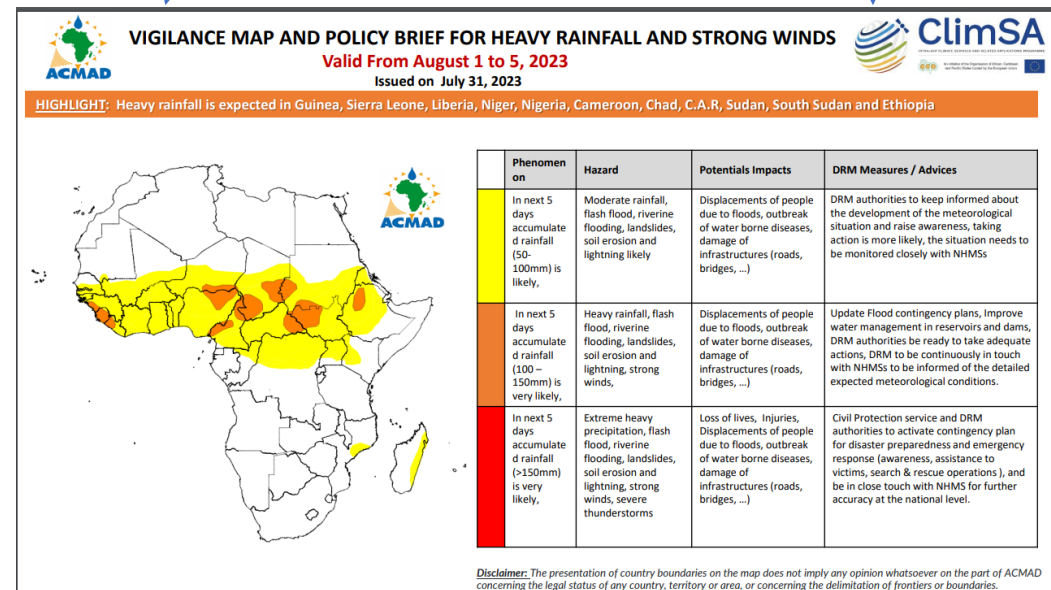
MULTI-HAZARD OUTLOOK

Validity: 2023-07-20

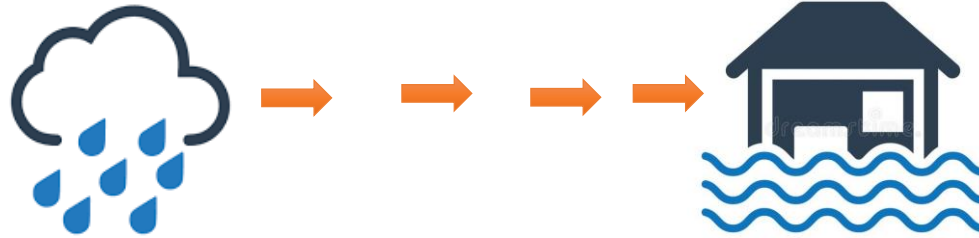
Issued on 2023-07-17

Rain	Wind	Dust	Meningitis
Very heavy >150mm	Very strong >60kmh ⁻¹	Very heavy >1000µg m ⁻³	Very likely
Heavy 50-100mm	Strong >35kmh ⁻¹	Heavy >600µg m ⁻³	Likely
Moderate 10-49mm	Moderate >50kmh ⁻¹	Moderate >400µg m ⁻³	Less likely
Light 1-9mm	Light <50kmh ⁻¹	Light <200µg m ⁻³	

Consolidated 5-day outlook



From the forecast to impact-based warning level classification

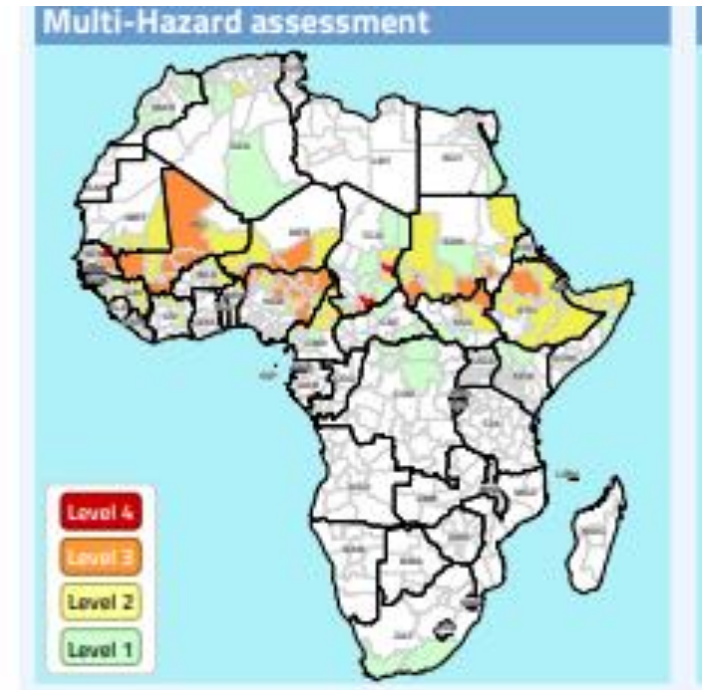


HAZARD BASED



IMPACT BASED

- Identification of the thresholds;
- Hazard classification;
- Exposure and vulnerability;
- Risk level classification;



Why classify warning levels?

Pourquoi classer les niveaux d'alerte ?

Level	Criteria for Activation	Continental Level Action
Level 1	<ul style="list-style-type: none"> Very localized Sub-National Warning triggered by National EWS Service or community based EWS targeting specific geographical areas within a MS. Warnings issued for relatively low impact, routine, events which can be managed by local authorities or communities with no major risk of escalation or transboundary spread. 	<ul style="list-style-type: none"> No action required. General monitoring by Situation Room.
Level 2	<ul style="list-style-type: none"> National warning triggered by National MHEWS facility for significant events which may escalate, impacting/ potential to impact multiple administrative areas within MS or more localized events with potential of very significant consequences which requires national hazard monitoring and forecasting and may potentially require intervention of National resources in support of the local level depending on the organization of the MS. 	<ul style="list-style-type: none"> No formal action required. General monitoring by Situation Room and provision of advice or guidance on request.
Level 3	<ul style="list-style-type: none"> Regional Warning triggered when the REC MHEWS Situation Room identifies the potential for significant impact that can exceed the coping capacity of the MS and may require international support and related supranational coordination. These events are likely to determine transboundary impacts/ anticipated impacts even from a single hazard event affected more than 1 MS. This may be triggered by information received from regional hazard monitoring services, or from information received from a MS. Regional Warning may be issued to all impacted/ potentially impacted MS within same REC. Where neighbouring MS from another REC may be impacted, transboundary warnings may be issued through the Continental MHEWS Situation Room. 	<ul style="list-style-type: none"> Partial activation of the Situation Room. Monitor the situation with the involved REC(s). Evaluate the situation and escalate to Level 4 Warning if required. Issue Situation Reports to impacted REC Situation Rooms to monitor the situation. Inform so that they may initiate pre-emptive Early Actions as required.
Level 4	<ul style="list-style-type: none"> Continental Warning issued by the AMHEWS Situation Room for the most significant events that may potentially exceed the coping capacity of the affected MS by a large amount and require international support and related supranational coordination. These events are extremely likely to result in regional transboundary impacts. Warnings for significant hazards with potential for continental impacts, likely affecting multiple MSs and RECs with significant consequences. 	<ul style="list-style-type: none"> Full activation of the Situation Room to coordinate information from multiple sources, liaison with RECs on transboundary impacts or anticipated impacts. If a disaster occurs, ensure data and information on hazards being monitored continues to be provided to the Continental Disaster Coordination Centre. Issue regular Situation Reports on hazards and early warnings issued, and on Early Actions taken, for AUC Bodies, AUC Senior Decision Makers and International Partners.

Collaborators: Collaborateurs :

This Continental Watch is produced by the African Union with the technical and scientific assistance of UNDRR, ICPAC, ACMAD and CIMA Foundation, with support of the Italian Government



Ministero degli Affari Esteri
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AGENZIA ITALIANA
PER LA COOPERAZIONE
ALLO SVILUPPO



UNDRR
UN Office for Disaster Risk Reduction



Africa Multi-hazard Early Warning and Action System

Early Warning Information Contributors: Contributeurs de l'information sur l'alerte précoce :

TECHNICAL SUPPORT SUPPORT TECHNIQUE



ROLE

METEO

HYDRO

MULTI-HAZARD RISK + ADVISORIES
RISQUE MULTIRISQUE + ADVISORIES

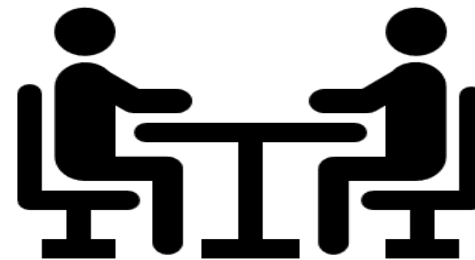
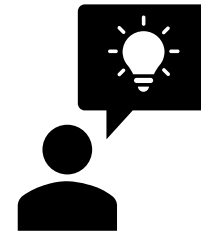
System Development and
management
Développement et gestion
du système

e) Who is the target audience and why?

Qui est le public cible et pourquoi?

f) Proposed list of recipients of the CW in your REC?

Liste proposée des destinataires du CW dans votre REC?



For who and why?

Quand et comment?



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Continental Watch - Veille Continentale (CW)

For who and why?

- AUC Senior management and AUC Ambassadors
- ? High Level decision making



Qui et pourquoi ?

- Direction générale de la CUA et ambassadeurs de la CUA
- ? Prise de décision à haut niveau

Sections of the CW

Sections du CW

Issue no. 78

Continental Watch

From Tuesday, September 20, 2022 to Saturday, September 24, 2022

1. HIGHLIGHTS

Multi - Hazard Outlook for the next 5 days :

Level 4 warning for possible extreme rainfall over Ghana and Senegal.

Level 3 warning for possible extreme rainfall over Angola, Burkina Faso, Democratic Republic of the Congo (DRC), Guinea, Gambia, Mali, Nigeria and Togo.

2. DETAILED MULTI-HAZARD OUTLOOK FOR THE NEXT 5 DAYS

From September 20, 2022 to September 24, 2022

Multi-Hazard assessment



Extreme Precipitation



Extreme Precipitation:

Level 4: Ghana (Upper East), Senegal (Kaffrine, T

Level 3: Angola (Uíge), Burkina Faso (Centre-Est, Democratic Republic of the Congo (Tshopo), Ghana (Volta), Guinea (Fouta Djallon), Gambia (Lower River, Maccarthy Island, North Bank), Mali (Koulikoro), Senegal (Kolda, Sédhiou), Nigeria (Savanes)

Level 2: Benin (Alibori, Atakora), Angola (Lunda N

Continental Watch -Veille Continentale

Highlights / Faits Saillants



Africa Multi-Hazard Early Warning and Action System for DRR
Continental Situation Room

Issue no. 66

Continental Watch

From Tuesday, August 9, 2022 to Saturday, August 13, 2022

1. HIGHLIGHTS

Observed events over the last five days:

(From Thursday, August 4, 2022 to Monday, August 8, 2022)

At least one person died and another was severely injured after heavy rains caused flooding in Dakar, the capital city of Senegal.

Multi - Hazard Outlook for the next 5 days :

Level 4 warning for possibility of extreme rainfall over Mauritania, Senegal and Chad.

Level 3 warning for possibility of high rainfall in Ethiopia, Guinea, Guinea-Bissau, Mauritania, Mali, Nigeria, Niger, Sudan, Senegal, South Sudan and Chad.

Level 3 warning for possible riverine floods in Sudan, Niger and Nigeria.

Maps / Cartes



Africa Multi-Hazard Early Warning and Action System for DRR
Continental Situation Room

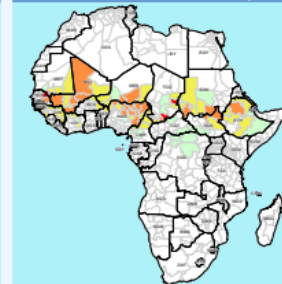
2. DETAILED MULTI-HAZARD OUTLOOK FOR THE NEXT 5 DAYS

From August 9, 2022 to August 13, 2022

Multi-Hazard assessment



Extreme Precipitation



Wind Storms



River Floods



These maps summarize the forecast occurrence of extreme precipitation, wind storms and river floods possibly affecting the population in

Advisories / Avis



Africa Multi-Hazard Early Warning and Action System for DRR
Continental Situation Room

3. ADVISORIES

Level 4 Advisory: 1. Due to high chances of heavy rainfall that is forecast to affect Mauritania, Senegal and Chad, the countries at risk are advised to:
(i) engage with their national hydrometeorological services and National Disaster Risk Management institutions to monitor the forecast hazards, and
(ii) undertake preparedness measures to prevent and minimize potential losses and damages to potentially vulnerable communities.

2. The National Disaster Management Authorities are also advised to alert communities of high chances of heavy flash floods and provide tailored products for various clusters for anticipatory actions and preparedness to the affected areas.

3. The Regional Economic Communities are advised to monitor the potential flood situation in the countries likely to experience heavy rainfall and provide technical assistance if needed.
4. The potentially affected member states are requested to share information on the state of the hazards with the AMHEWAS Situation Room at mhewsituationroom@africa-union.org to enable AMHEWAS to inform African Union organs on the evolving situation.

5. The countries in alert level 4 warning (Mauritania, Senegal and Chad) are requested to attend an emergency meeting with the African Union Commission at 10:00 hours on Wednesday, 10 August, 2022 to deliberate on the forecast. The AUC will share the meeting link to the affected countries (Mauritania, Senegal and Chad) through a separate email in due course.

Level 3 Advisory: National Disaster Authorities in Ethiopia, Guinea, Guinea-Bissau, Mauritania, Mali, Nigeria, Niger, Sudan, Senegal, South Sudan and Chad, are advised to monitor the rainfall situation and water flows in the rivers over the next five days due to medium possibilities of heavy rainfall and riverine flooding.

Level 2 Advisory: National Disaster Authorities of Benin, Burkina Faso, Côte d'Ivoire, Cameroon, Djibouti, Ethiopia, Guinea, Guinea-Bissau, Mauritania, Mali, Niger, Nigeria, Sudan, Senegal, South Sudan, Chad, Algeria, Lesotho and Somalia, are advised to continue monitoring the rainfall evolutions that are expected to cause sporadic flash floods as well as wind storms and heavy rainfall.



Africa Multi-Hazard Early Warning and Action System for DRR
Continental Situation Room

4. SOURCES

<https://www.globalfloods.eu/technical-information/gofas-30day/>
<http://www.ecmad.net/new/NEWS/TECMAD/>
<http://www.ecmad.net/en/forecasts/cccharts>
<http://www.meteo.fr>
<https://www.jrc.nrg.noaa.gov>
<https://www.meteoffice.gov.uk/premium/vp/africa/#map>
<https://floodlist.com/africa/senegal-deadly-flash-floods-in-dakar>

Contact us: mhewsituationroom@africa-union.org

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This Continental Watch is produced by the African Union with the technical and scientific assistance of UNDRR, OHCHR, OHADA and OHCHR Foundation with support of the United Nations.



Sources / Resources

Thanks for your attention!
Merci de votre attention!



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n.godefroid@acmad.org