

African Centre of Meteorological
Application for Development

Centre Africain pour les
Applications de la Météorologie
au Développement



*Direction Générale ACMAD
85 Avenue des Ministères
BP 13184, Niamey - Niger
Tél. (227) 20 72 36 27
Fax : (227) 20 72 36 27
E-mail : dgacmad@acmad.ne
Web : <http://www.acmad.org>*

Meningitis bulletin n^o 002

Issued on January 29, 2019

Summary :

Due to atmospheric conditions and the ITD position :

- High vigilance is required for meningitis cases over Mali, Northern Burkina faso, Niger, Chad, Northern Nigeria, Northern Cameroon and central Sudan.

- Moderate vigilance is needed over Eastern Senegal, Southwestern Mali

- Low vigilance and no vigilance are required over the remaining parts of the meningitis belt.

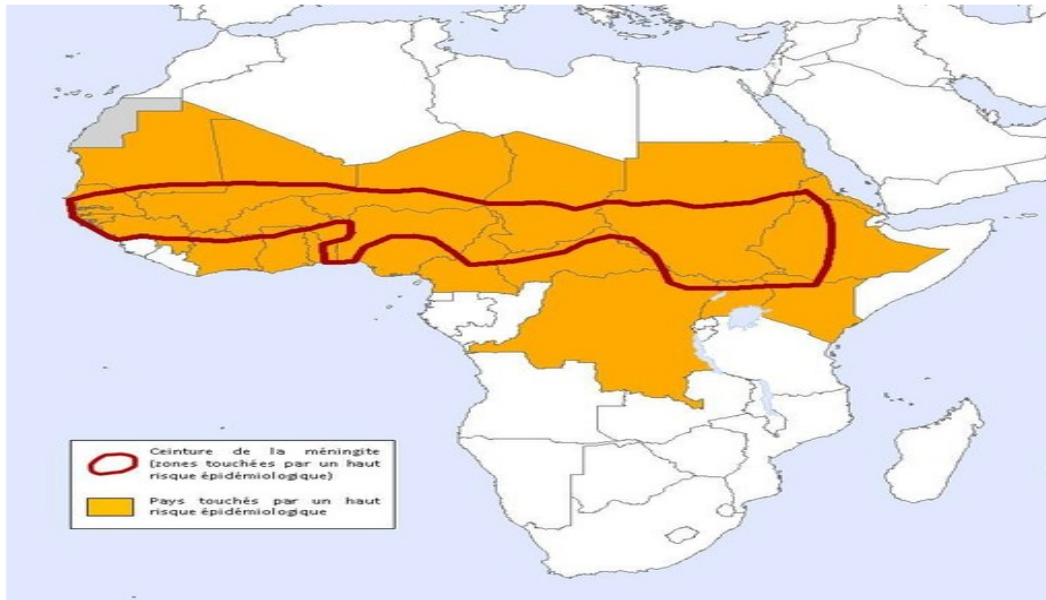


FIGURE 1 – African Meningitis Belt. [Source : World Health Organisation.](#)

Figure 2 indicates that during the week from 18 to 25 January 2019, very dry atmospheric conditions (relative humidity below 20 %) were observed over the south and central Chad, Niger, Mali, Northern Burkina Faso, northern Nigeria, northern Cameroon and Eastern Senegal. Relative humidity between 20 and 40 % prevailed over parts Mauritania, southern Mali, Burkina Faso, Niger, Sudan, central Senegal, northern the coastal countries of Gulf of Guinea. Wet (relative humidity above 40 %) atmospheric conditions are observed over the coasts.

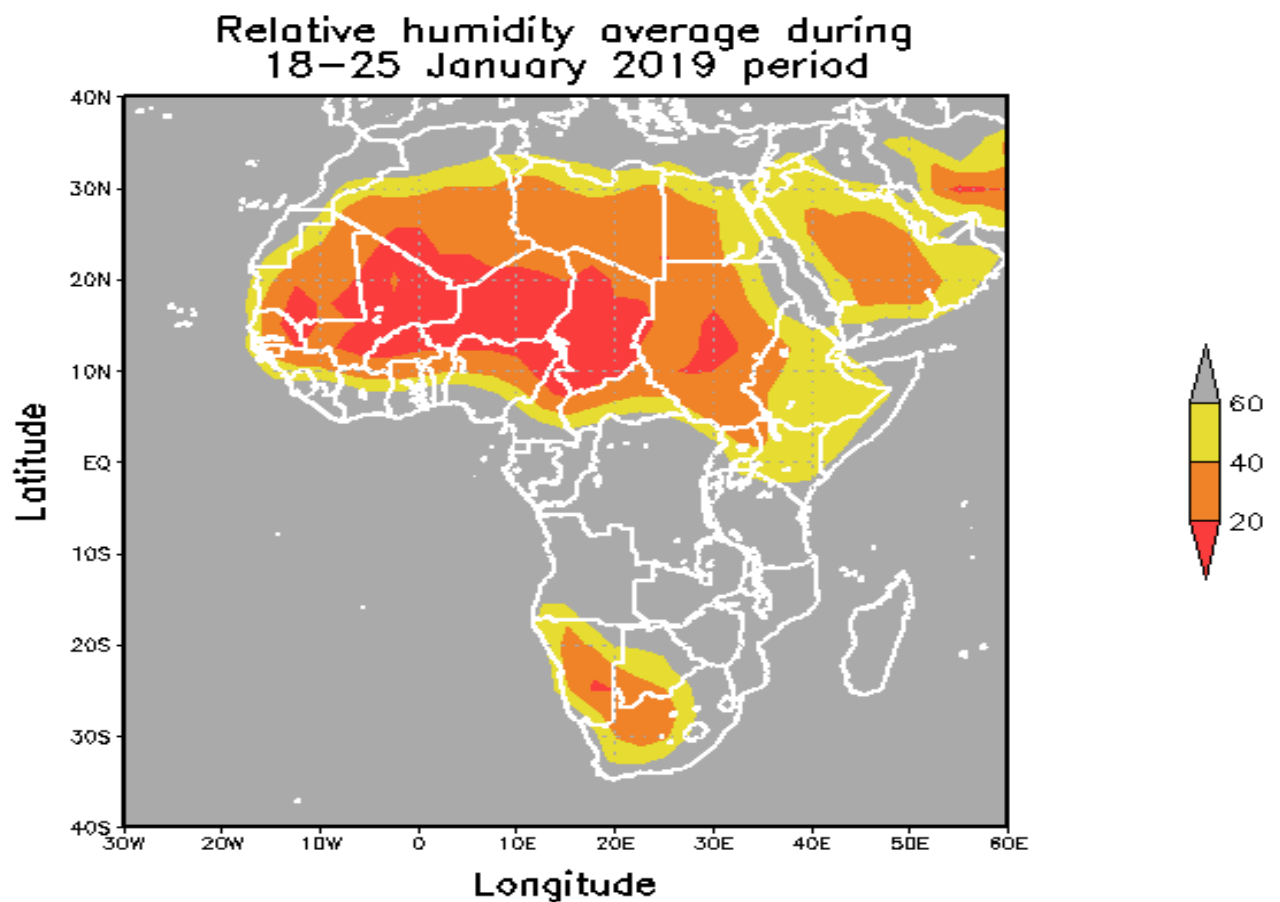


FIGURE 2 – Relative humidity from 18 - 25 January 2019 period. [Source : NOAA/.NCEP-NCAR/.CDAS-1/.DAILY](#)

Figure 3 shows that moderate low dust concentrations ($50 \mu\text{g m}^3$) were observed over Gulf of Guinea countries except extreme north of Nigeria and Cameroon. Southern part of Senegal, Mali, Niger, Chad, and Burkina Faso were also marked by low dust concentrations during that week. Moderate dust concentrations between 50 and $150 \mu\text{g m}^3$ were located over the Sahel particularly Northern Senegal, Mauritania, Central Mali, northern Niger, and Chad. The dust concentrations between 150 and $300 \mu\text{g m}^3$ were observed locally over Niger, Mauritania, Chad and Northern Africa, and Eastern the continent. High dust concentrations more than $300 \mu\text{g m}^3$ was located only over Morocco, Algeria, Tunisia, and Libya.

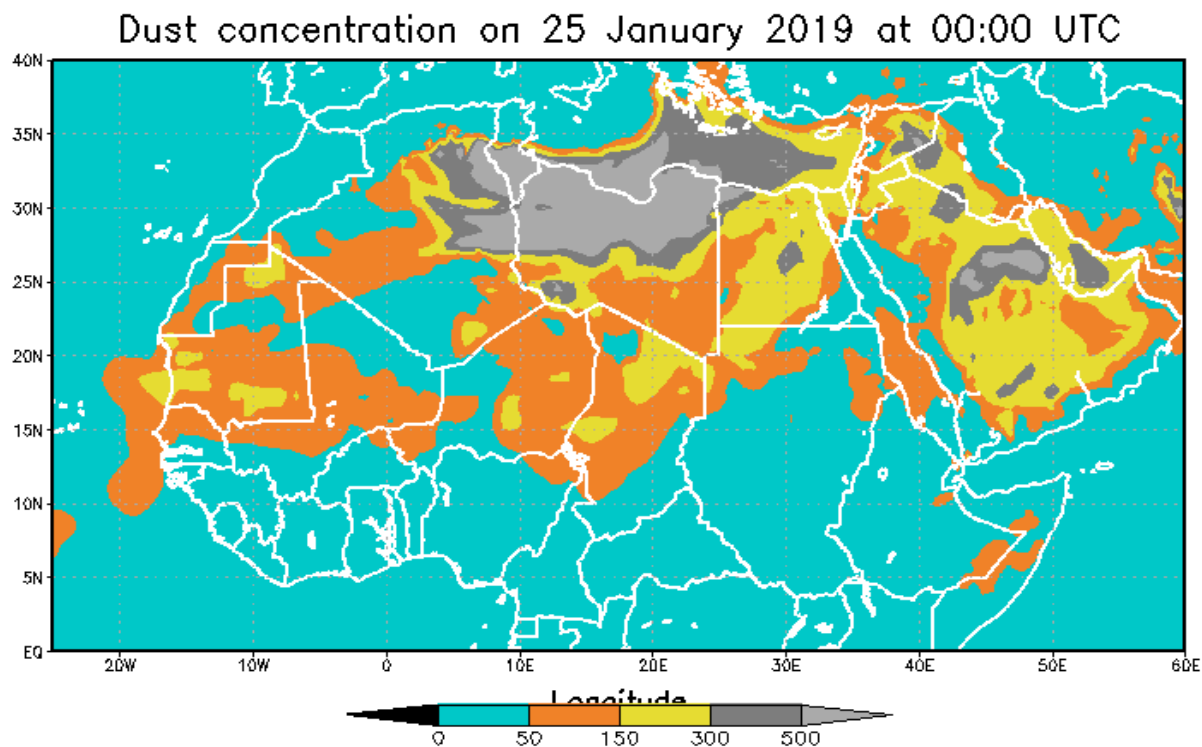


FIGURE 3 – Surface dust Concentration ($\mu\text{g m}^3$) estimated on 25 January 2019 at 00 :00 UTC from ECMWF reanalyses. [Source : WMO SDS-WAS : BSC-DREAM8b](#)

Figure 4 indicates that North wind was observed over much of the meningitis belt. The highest values are observed over Senegal, northern Guinea, Burkina Faso, Mauritania, Mali, South-western Niger, northern Nigeria and Northern Cameroon, Chad and northern Sudan.

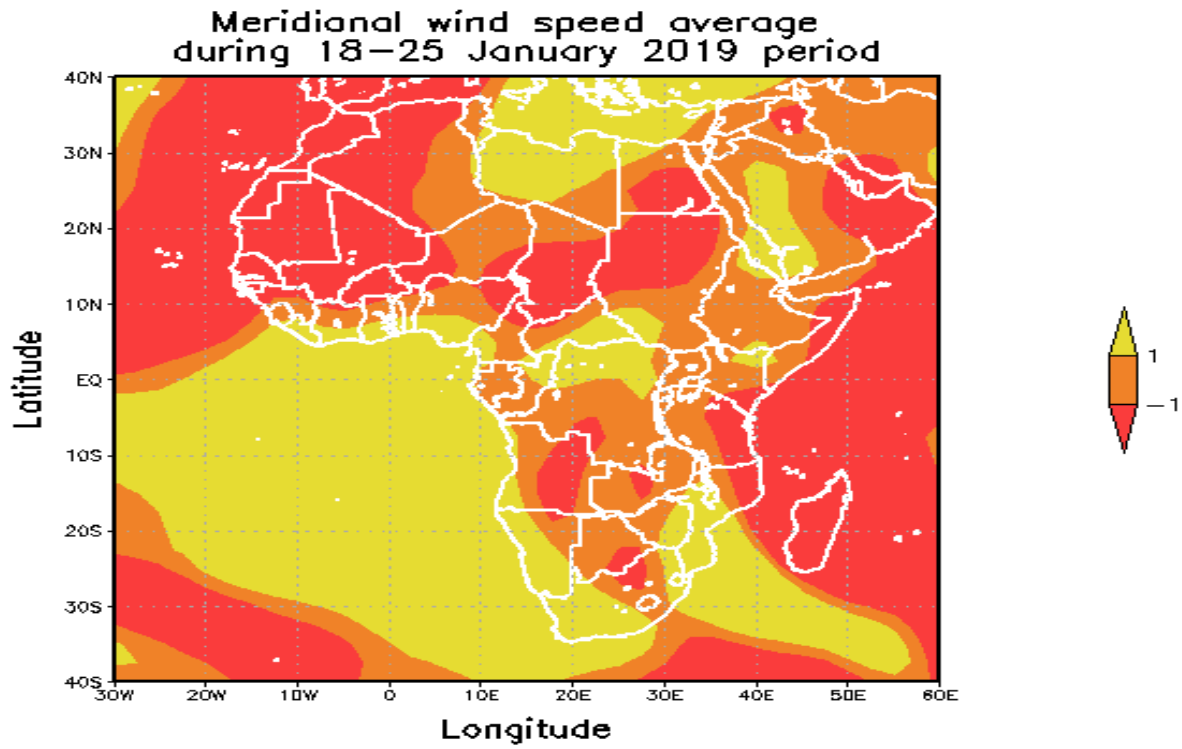


FIGURE 4 – Meridional Wind from 18- 25 January 2019. Source : NOAA/.NCEP-NCAR/.CDAS-1/.DAILY

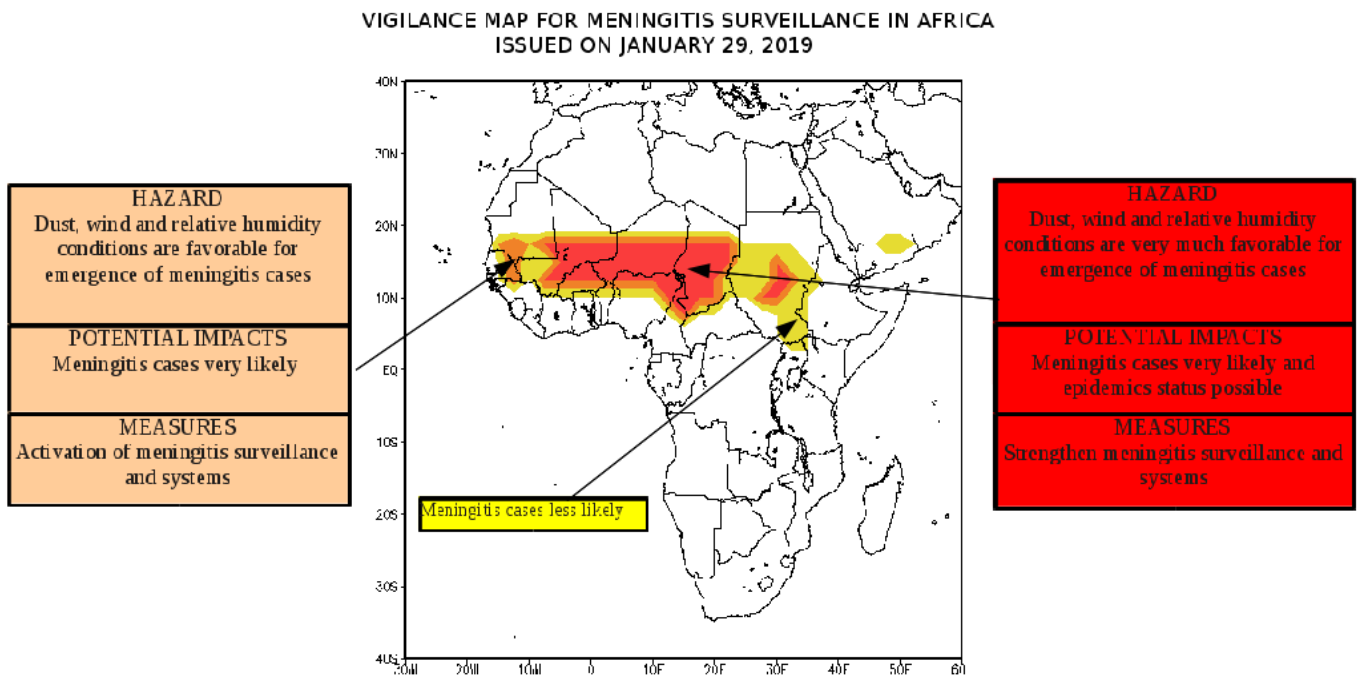


FIGURE 5 – Vigilance map of emergency of meningitis in Africa.