

**OBSERVED CLIMATE SITUATION: 11 - 20 January 2019**

Number 001 from 11 - 20 January 2019

***Climate conditions are favorable for a high vigilance is required for meningitis cases over extreme Western Chad only.***

***Moderate vigilance is needed over southern Niger, Eastern Burkina Faso, northern Nigeria and Benin.***

***Low vigilance and No vigilance are required over the remaining parts of the meningitis belt.***

***Due to atmospheric conditions and the ITD position the occurrence of the meningitis would be located to the Eastern Sahel.***

- *Figure 2 indicates very dry atmospheric conditions (relative humidity below 20%) was observed over the south and central Chad and Niger, Northern Mali, Mauritania, Nigeria and Cameroon. Relative humidity between 20 and 40% prevailed over parts of southern Mauritania, Mali, Burkina Faso, Niger, Chad, Sudan, eastern Senegal, northern the coastal country of Gulf of Guinea. Wet conditions are observed over (relative humidity above 40%) the coasts.*
- *Figure 3 shows that moderate dust concentrations (50 to 200  $\mu\text{g}/\text{m}^3$ ) prevailed over northern Mauritania, southeastern Senegal, southern Mali, Guinea, Liberia, Sierra Leone, Western Ivory Coast . The dust concentrations between 200 and 500  $\mu\text{g}/\text{m}^3$  were observed over Niger, Benin, Nigeria, Burkina Faso, Togo, Cameroon. High dust concentrations more than 500  $\mu\text{g}/\text{m}^3$  was located only over Western Chad, close to the borders Niger.*
- *Figure 4 indicates that negative meridian wind were dominant over much of the meningitis belt. The highest values are observed over Senegal, Guinea, Burkina faso, Mauritania, Mali, Niger, northern Nigeria and Northern Cameroon. (Figure 4).*
- *The ITD is located near the Gulf of Guinea coasts and started his migration in the north.*

***Given these climate conditions, a high vigilance is required for meningitis cases over extreme Southwestern Chad only.***

***Moderate vigilance is needed over central Chad, Eastern Niger, Central Sudan.***

***Low vigilance and No vigilance are required over the remaining parts of the meningitis belt.***



Figure 1: African Meningitis Belt

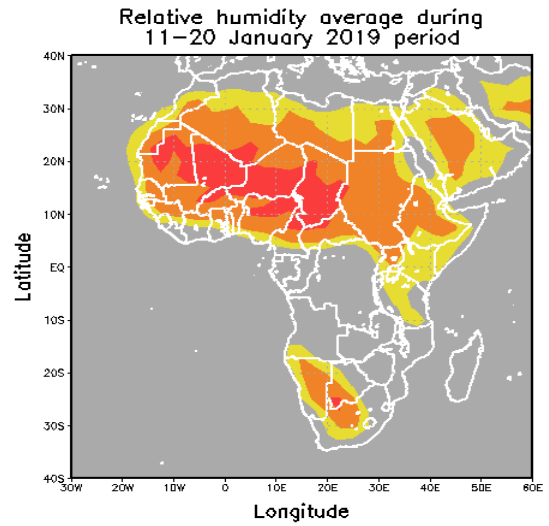


Figure 2: Relative humidity from 11 - 20 January 2019  
Source: .NOAA/.NCEP-NCAR/.CDAS-1/.DAILY

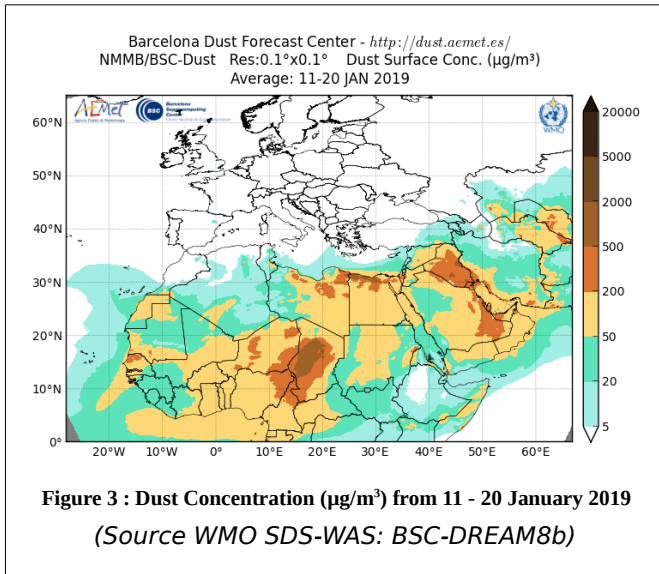


Figure 3 : Dust Concentration ( $\mu\text{g}/\text{m}^3$ ) from 11 - 20 January 2019  
(Source WMO SDS-WAS: BSC-DREAM8b)

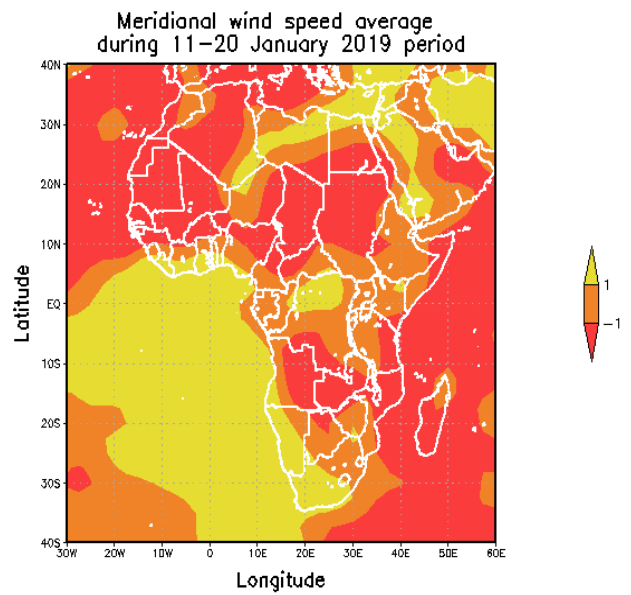
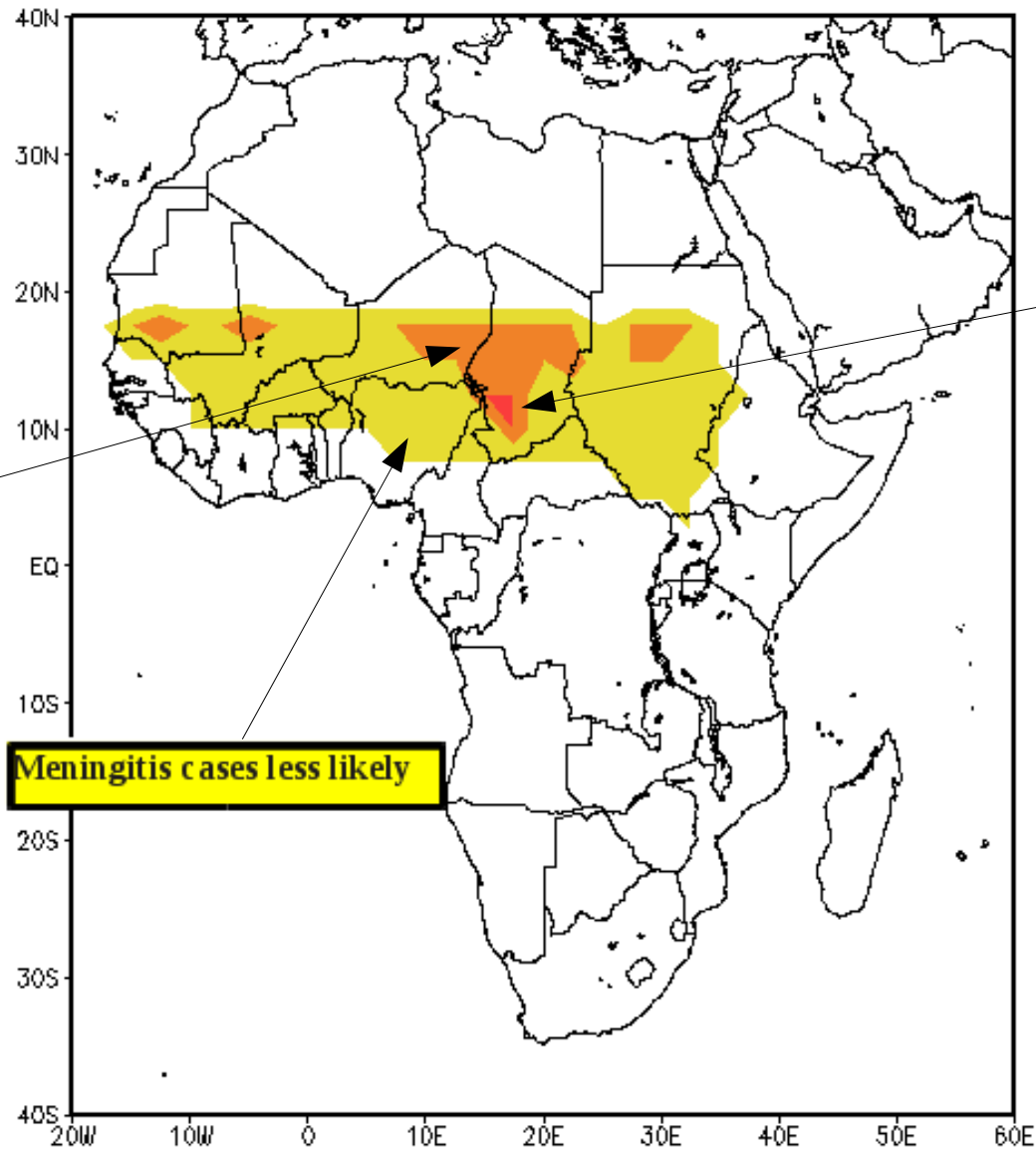


Figure 4: Meridional Wind from 11 - 20 January 2019  
Source: .NOAA/.NCEP-NCAR/.CDAS-1/.DAILY

# VIGILANCE MAP FOR EMERGENCE OF MENINGITIS IN ISSUED ON JANUARY 22, 2019

<b>HAZARD</b> Dust, wind and relative humidity conditions are favorable for emergence of meningitis cases
<b>POTENTIAL IMPACTS</b> Meningitis cases very likely
<b>MEASURES</b> Activation meningitis surveillance and systems



**Meningitis cases less likely**