

# CLIMATE & HEALTH BULLETIN: MENINGITIS VIGILANCE ZONES

African Centre of Meteorological Application for  
Development  
Centre Africain pour les Applications de la Météorologie



Direction Générale ACMAD, BP 13184, 85 Avenue des  
Ministères, Niamey – Niger  
Tél. (227) 20 73 49 92, Fax : (227) 20 72 36 27, E-mail :  
dgacmad@acmad.ne, Web : <http://www.acmad.org>

N°: 09 from 6<sup>th</sup> to 12<sup>th</sup> March 2017

**Climate conditions are favorable for a high vigilance for meningitis cases over eastern Senegal and Burkina Faso, extreme southern Mauritania, southern Mali and Niger, northern Nigeria and Cameroon, and western Chad.**

**Moderate vigilance is detected over western Senegal, much of Gambia, Guinea and Bissau Guinea, western Burkina Faso, northern Côte d'Ivoire, Ghana, Togo and Benin, western and central Nigeria, central Cameroon and Chad, and southern Sudan.**

**Low vigilance is required over CAR, South Sudan, Ethiopia and northern Uganda.**

**Climate conditions favorable for meningitis vigilance maintained compared to last week. Meningitis surveillance systems should be activated urgently.**

## OBSERVED CLIMATE SITUATION: 6<sup>th</sup> to 12<sup>th</sup> March 2017

- The northern parts of meningitis belt experienced low humidity (below 20%) in particular over eastern Senegal, much of Mauritania, Mali, Niger, Burkina Faso, Chad and Sudan, northern Benin, Nigeria and Cameroon. Relative humidity between 20 and 40% prevailed over the remaining parts of the belt. (Figure 2).
- Moderate concentrations ( $50$  to  $200\mu\text{g}/\text{m}^3$ ) prevailed over much of Mauritania, Gulf of Guinea countries, northern Mali, Niger and Chad, and much of Sudan. The concentrations of  $200$  to  $500\mu\text{g}/\text{m}^3$  were observed southern Mauritania, northern Senegal, central Mali, much of Burkina and Faso and Niger, northern Nigeria and central Chad. The highest concentrations of above  $500$  to  $2000\mu\text{g}/\text{m}^3$  prevailed over eastern Niger, north-eastern Nigeria and western (Figure 3).
- Negative meridian winds were dominant over much of the meningitis belt in particular over Senegal, Gambia, Mauritania, Mali, Niger, Chad and Sudan. (Figure 4).
- The ITD is located over Sierra Leon, Côte d'Ivoire, Ghana, Togo, Benin, Nigeria and Cameroon. (See figure 2 No. 06 Decadal bulletin 2017).

**Given these climate conditions, a high vigilance is required for meningitis cases over eastern Senegal and Burkina Faso, extreme southern Mauritania, southern Mali and Niger, northern Nigeria and Cameroon, and western Chad.**

**Moderate vigilance is detected over western Senegal, much of Gambia, Guinea and Bissau Guinea, western Burkina Faso, northern Côte d'Ivoire, Ghana, Togo and Benin, western and central Nigeria, central Cameroon and Chad, and southern Sudan.**

**Low vigilance is required over CAR, South Sudan, Ethiopia and northern Uganda.**

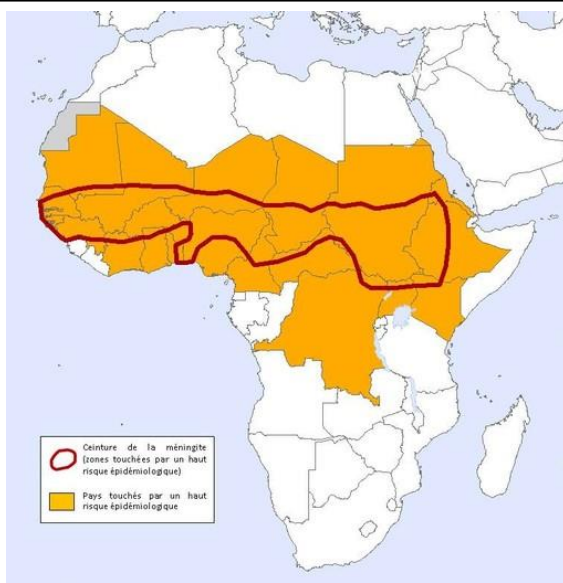


Figure 1: African Meningitis Belt

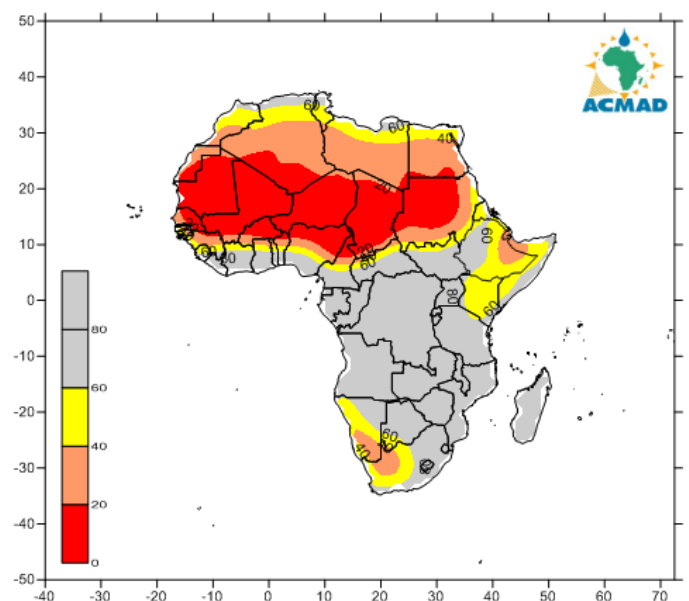
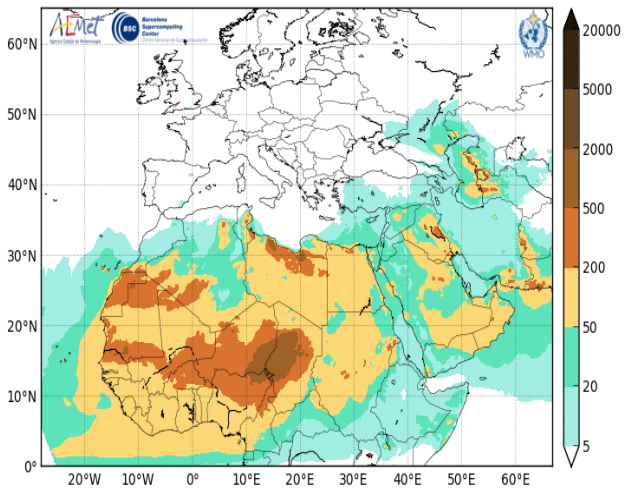
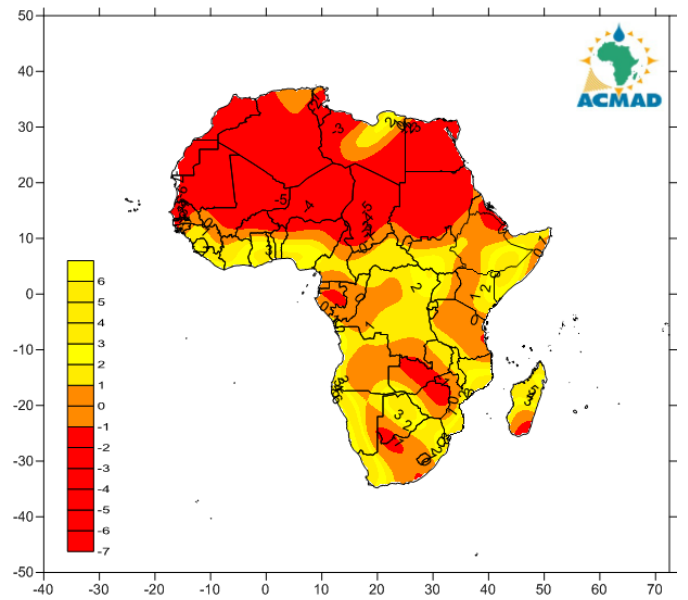


Figure 2: Relative Humidity 6<sup>th</sup> to 5<sup>th</sup> March 2017  
Source: .NOAA/NCEP-NCAR/CDAS-1/.DAILY



**Figure 3 : Dust Concentration ( $\mu\text{g}/\text{m}^3$ ) 6<sup>th</sup> to 12<sup>th</sup> March 2017**  
*(Source WMO SDS-WAS: BSC-DREAM8b)*



**Figure 4: Meridional Wind 6<sup>th</sup> to 12<sup>th</sup> March 2017**  
*Source: .NOAA/.NCEP-NCAR/.CDAS-1/.DAILY*

