

# Climate monitoring by RAI RCC

On behalf of  
Andre Kamga (ACMAD)



## African Center of Meteorological Application for Development

### HOME

**Vigilance high precipitation valid for October November Decembre for Central Africa 2013**

VIGILANCE HAUTE PRÉCIPITATION  
 DES PAYSÉS PRÉCIPITATIONS  
 ET SOUS-RENTS IMPORTANTS  
 SURVILLANCE 4 DÉCEMBRE

ZONE HAUTE VIGILANCE  
 ZONE VIGILANCE

- #### PRODUCTS / BULLETINS
- [Seasonal Climate Outlook SWIOCOF-02](#)
  - [Seasonal Climate Outlook PRESAC 07](#)
  - [Long range forecasting product for Africa](#)
  - [Seasonal Climate Outlook PREASO 16](#)
  - [ITD & ITCZ positions](#)
  - [Heavy rain/flood risk](#)
  - [High Impact Weather](#)
  - [Weekly monitoring rainfall](#)
  - [Analysis & forecast WASA/F](#)

#### SEASONAL PRECIPITATION FORECAST 2013

##### Seasonal Temperature Forecast

50 30 20  
 20 30 50  
 20 30 20  
 20 30 50  
 15 40 45

A Above normal  
 N NEAR Normal  
 B Below normal  
 C Climatology

#### VIGILANCE MAP for September October-November 2013



AFRICAN CENTRE OF METEOROLOGICAL APPLICATIONS FOR DEVELOPMENT

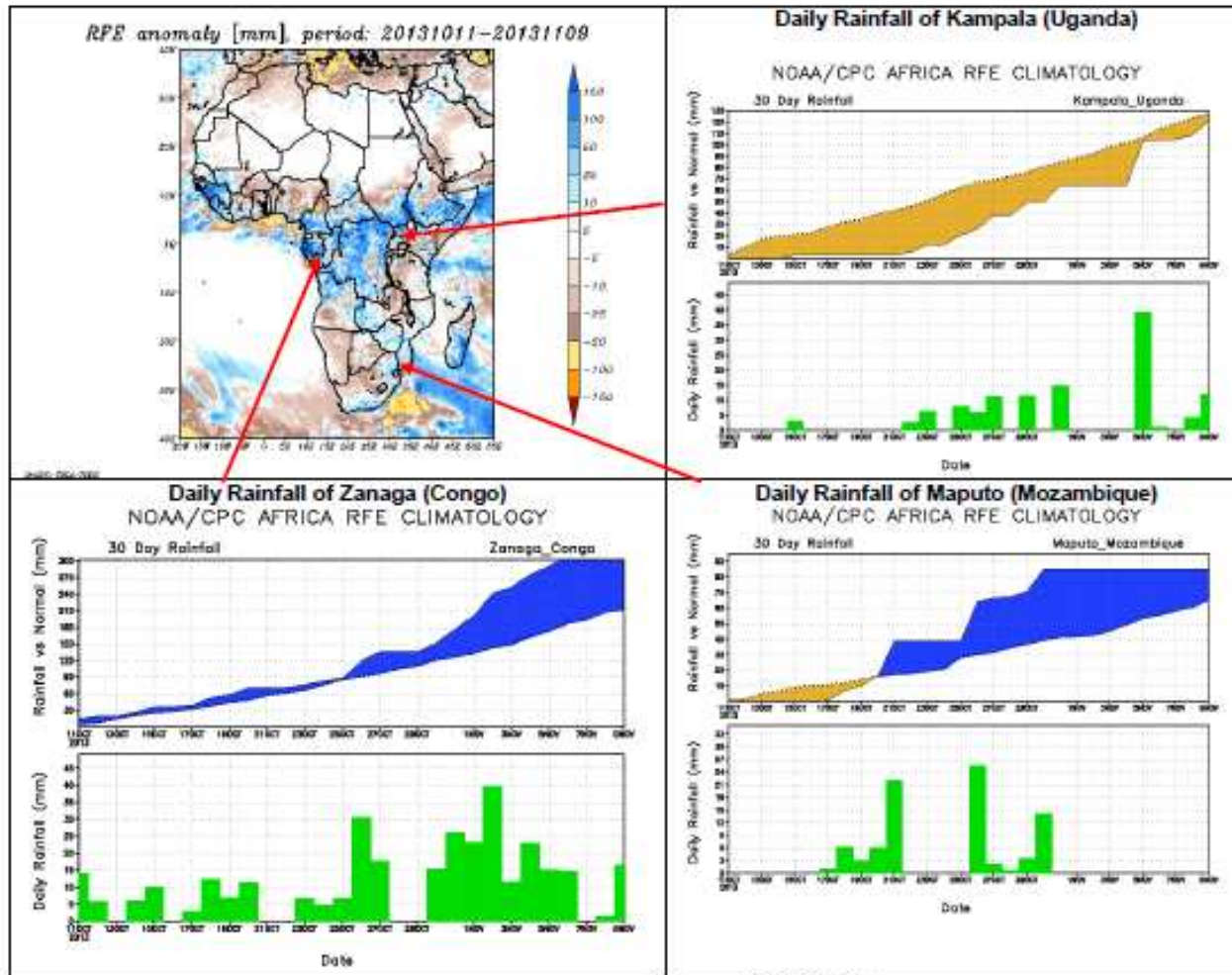
# WEEKLY MONITORING AND FORECAST BULLETIN OF HEAVY RAINS

PSN04-112

Forecast of November, 11<sup>th</sup> 2013: Valid from November, 11<sup>th</sup> to November, 17<sup>th</sup> 2013

**Highlights:** The convective rainfall activities during the past week have interested mainly the Horn of Africa and Central Africa.

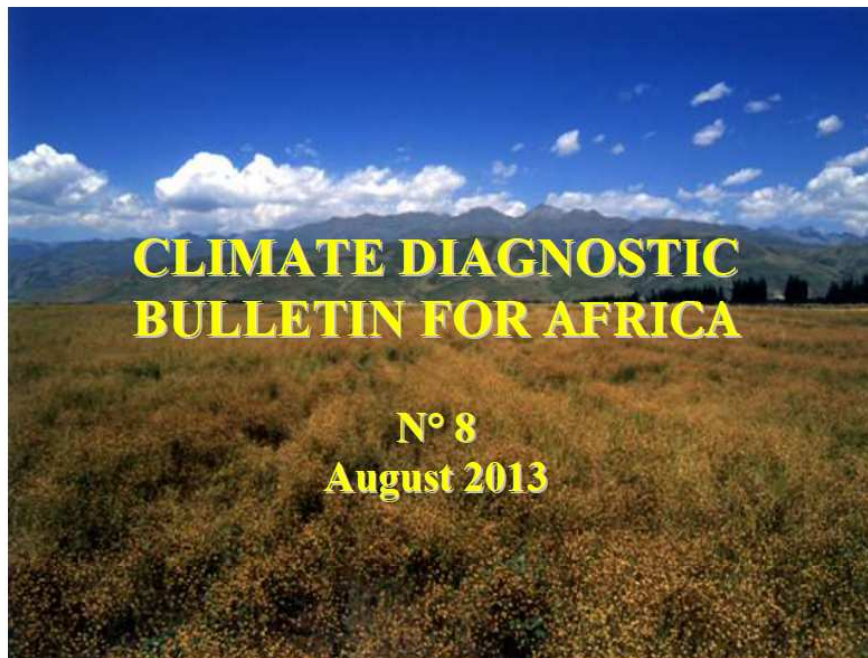
## RECENT RAINFALL EVOLUTION AT SELECTED STATIONS



(Source: CPC/NCEP)

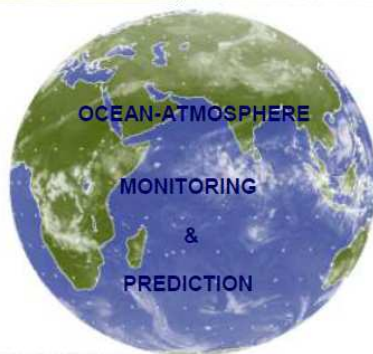


**AFRICAN CENTRE OF METEOROLOGICAL APPLICATIONS FOR DEVELOPMENT**  
**CENTRE AFRICAIN POUR LES APPLICATIONS DE LA METEOROLOGIE AU DEVELOPPEMENT**



# CLIMATE DIAGNOSTIC BULLETIN FOR AFRICA

**N° 8**  
**August 2013**



METS 15 NOV 2003 1000 0101

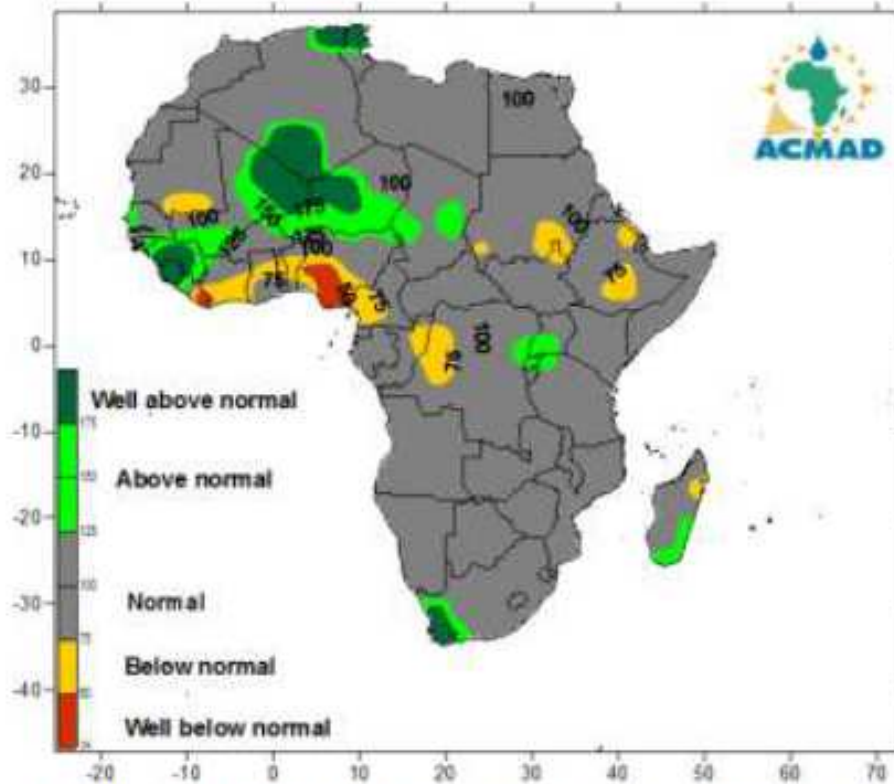


Figure 7a : Monthly Precipitation in percentage for August 2013  
 (Source : NOAA/NCEP)

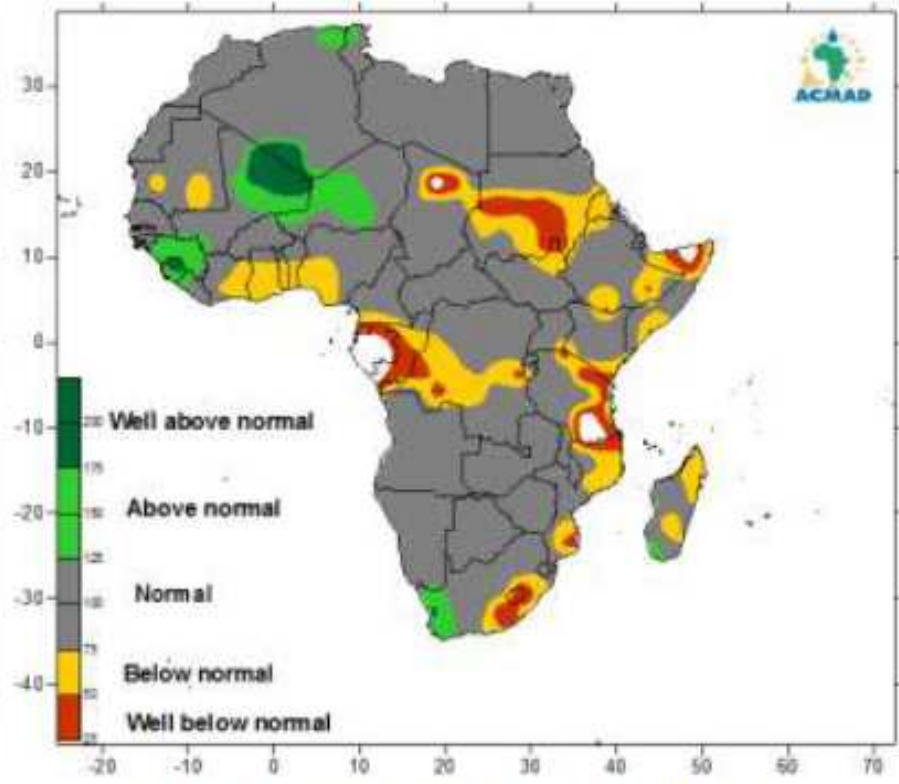


Figure 7b : Seasonal Precipitation anomaly for JJA 2013  
 (Source : NOAA/NCEP)



#### HIGHLIGHTS

Well above normal precipitations were observed over western Gabon and over bordering South Sudan-Ethiopia. However, well below normal precipitation was observed over GoG countries, South Sudan, Uganda, western Kenya, southern DRC, and north-eastern Angola.

*During the period 22<sup>nd</sup> to 29<sup>th</sup> October, 2013, high probability of moderate to heavy precipitation exceeding 75mm is very likely over coastal part of Cameroon, some parts of Gabon and Congo, north-east of DRC and central Angola. From 22<sup>nd</sup> October to 4<sup>th</sup> November, there will be persistence of moderate to heavy precipitation exceeding 75 mm over Cameroon, parts of Gabon and Congo extending to Equatorial Guinea.*

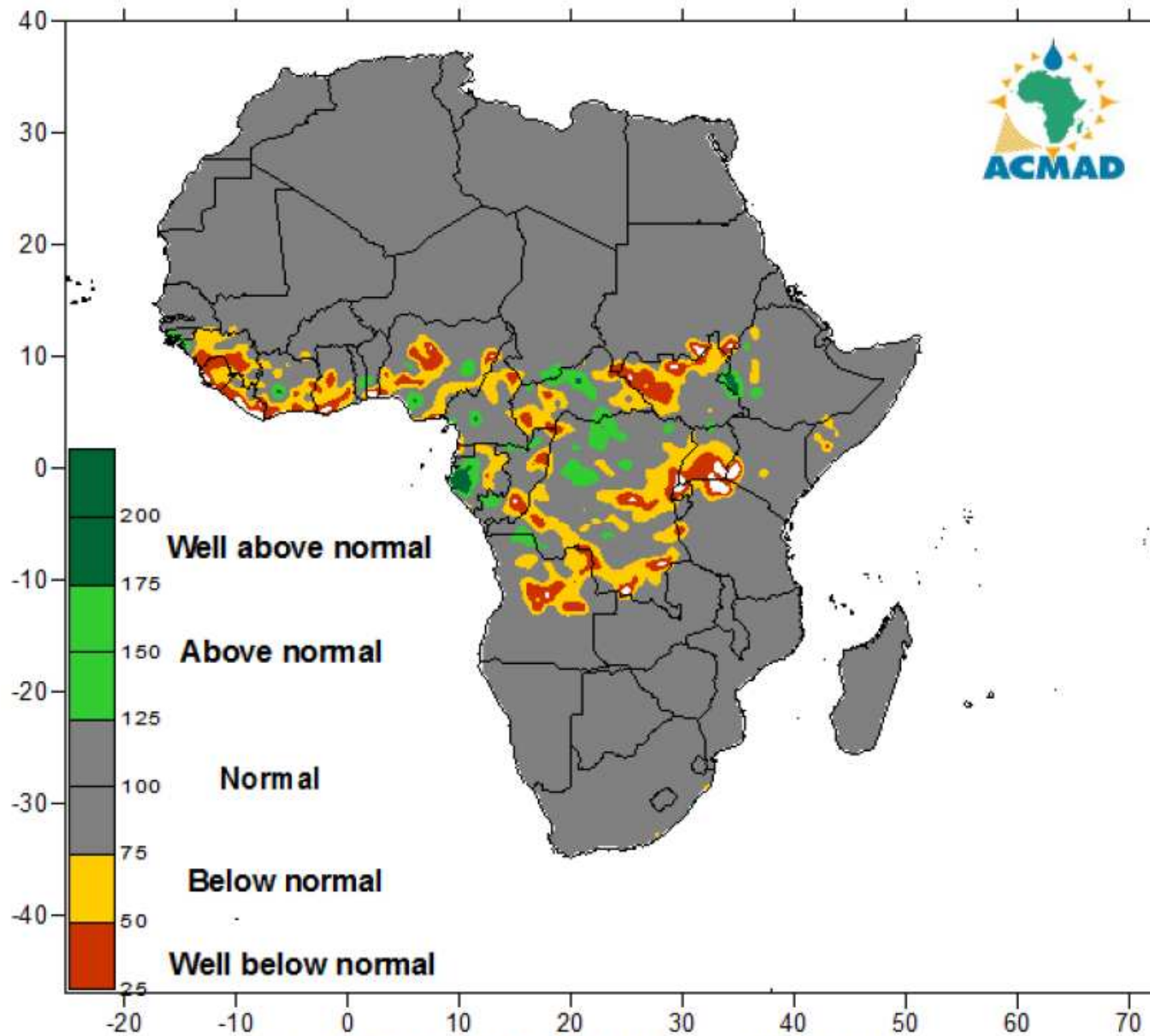


Figure 8: Cumulative Precipitation in relation to the Reference in % 11 to 20 Oct 2013  
 (Source: NOAA/NCEP)





**HIGHLIGHT:** Cholera, malaria, measles and Meningitis continued to affect some African countries as reported by some sources. High amounts of rainfall were observed over parts of the Gulf of Guinea, northern part of Central Africa and north-western part of GHA countries. Above normal temperature was mostly observed in the north-western part of the continent.

## 1. CLIMATIC AND ENVIRONMENTAL CONDITIONS OVER AFRICA

### 1.1 Inter-Tropical Discontinuity (ITD)

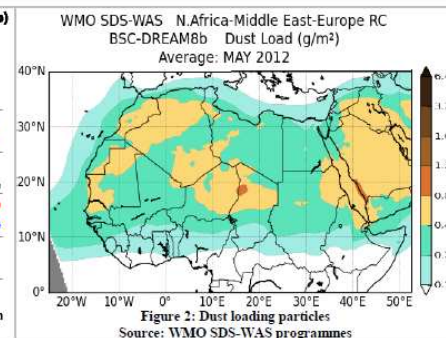
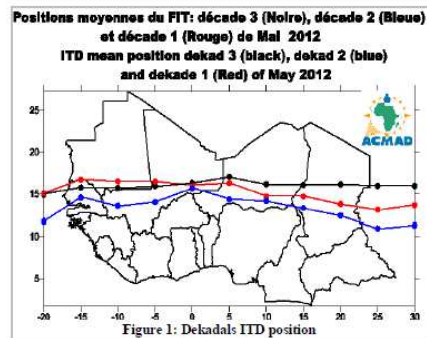
The ITD is the demarcation line between north/north-eastern winds from the Sahara (hot, dry and dusty) and south/south-western winds from Atlantic Ocean (cool and moist) as seen in Figure 1.

Between the first dekad (red line) and the second dekad (blue line) of May 2012, the ITD moved southwards between 2 and 4 degrees of latitude over most of the domain.

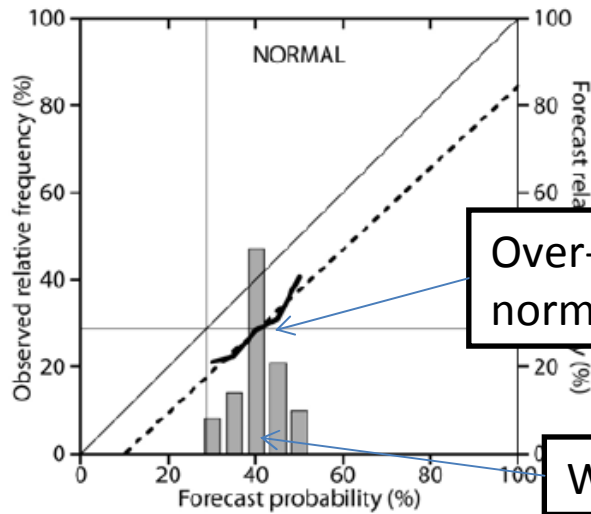
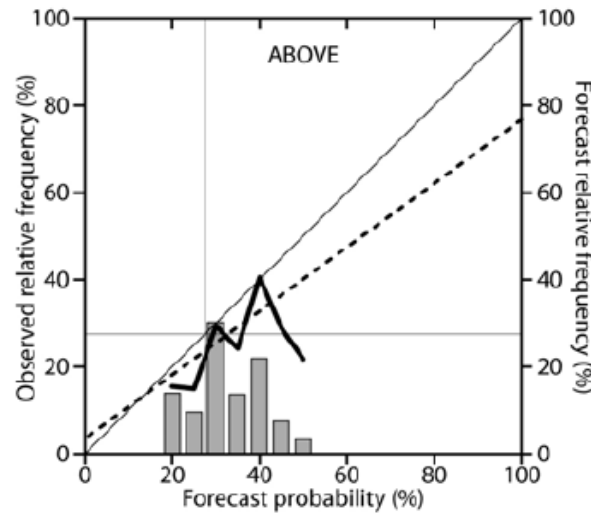
Between the second dekad (blue line) and the third dekad (black line), the ITD had a northwards migration between 2 and 5 degrees of latitude over most parts of the domain except over the eastern Mali.

### 1.2 Dust Haze

The figure 2 below shows mean dust events in the month of May 2012 from WMO SDS-WAS Programme: BSC-DREAM8b model shows the dust loading particles ( $0.1$  to  $0.4 \text{ g/m}^2$ ) over most localities above  $05^\circ\text{N}$  intensifying to moderate dust loading particles ranging from  $0.4$  to  $0.8 \text{ g/m}^2$  over northern Chad, eastern Niger, western Mauritania, most of Morocco, most of Algeria, south Tunisia, western Libya, south-eastern Egypt and north-eastern Sudan with the maximum dust loading particles ( $0.8$  to  $1.2 \text{ g/m}^2$ ) over northwest Chad.

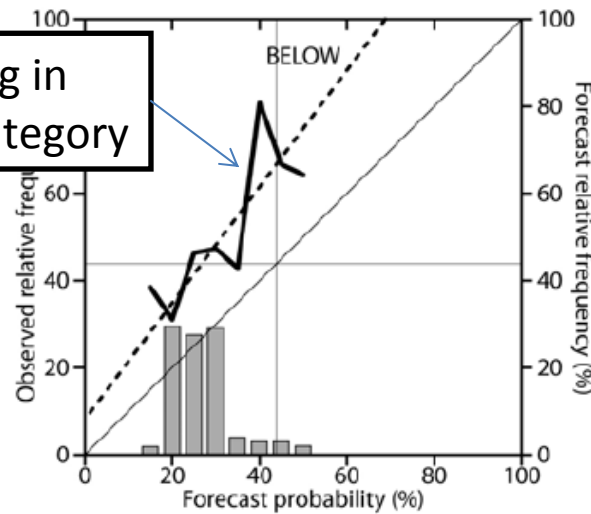


# Reliability diagrams for the first 10 years of PRESAO (seasonal rainfall forecasts Jul-Sept)

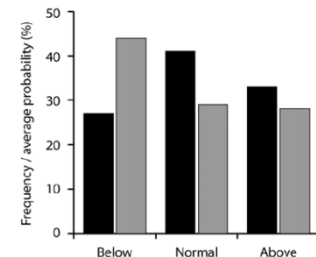
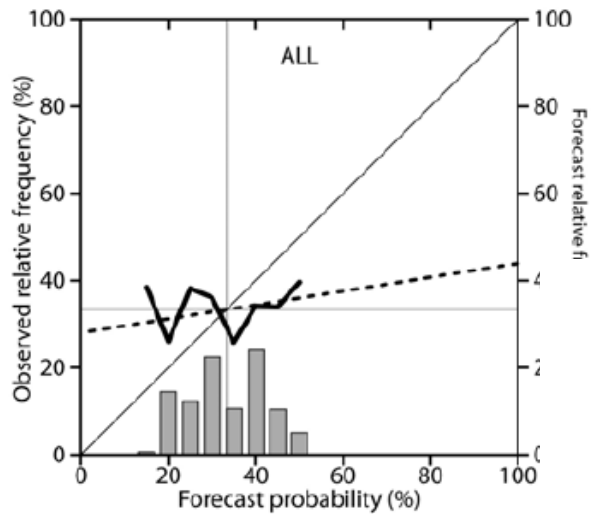


Over-forecasting in normal category

Weak sharpness



Under-forecasting in below normal category



# Conclusions

- Many bulletins including monitoring and forecast information for different periods (7 days, 10 days, 1 month, ...) different users (health, water, ...) mainly based on external sources
- Long experience in RCOFs → around 10 years
- Some attempts of objective verification based on consensus forecasts.