GCRF African SWIFT - Science for Weather Information and Forecasting Techniques

## Synoptic weather Forecast sheet - ACMAD

2021 09 29 0600 UTC

**Region** Africa

**Date** 

2021 09 28

**Forecast Time** 

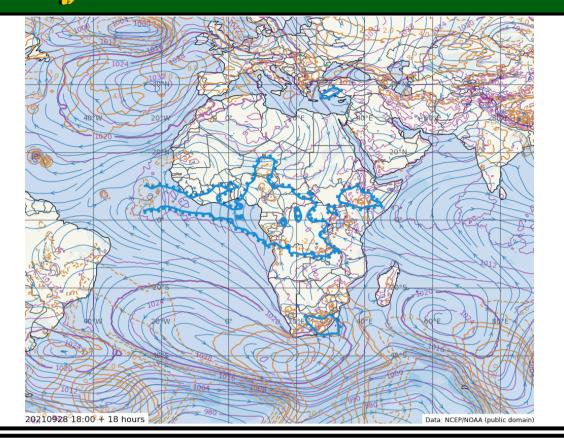
0018 + 18 hrs

Data

GFS synthetic

analysis chart





Dry			
Intrusion			

Increasing Pressure Tendency

decreasing Pressure Tendency

1	W	ınc	t
Str	ea	ml	ine

Isobar

**TEJ** 

**AEJ** 

ITD

Monsoon

trough

Monsoon

ridge

### 24 hr Regional Synoptic Summary

Azores high is expected to remain quasistationary (1028hPa), extending ridge over Morocco and Algeria.

St Helena high is expected to move eastwards to the tip of South Africa and maintain its intensity (1028hPa).

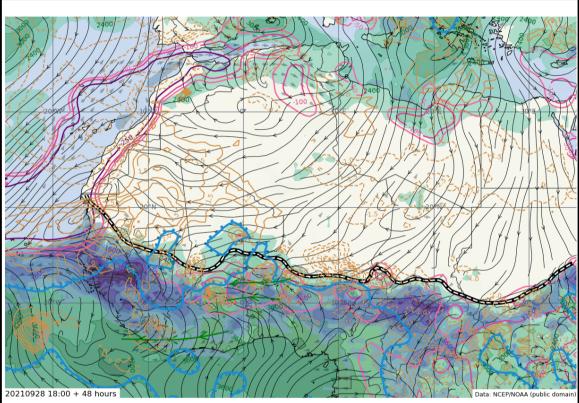
Mascarene High is expected to remain quasi-stationary (1024hPa).

The relative Libyan ridge is maintained over northern Sahel.

The ITD position will generally shift northwards.

Deep moisture depth from 2400m over Sahel region to 4200m over the coastal areas

Deep convections are expected over the coast of the Gulf of Guinea countries, including Central and East Africa.





Date

Forecast Time

2021 09 28

0018 +48 hours **Data** 

GFS synthetic analysis chart

#### 24-72 hr Regional Synoptic Summary

Azores high is expected to remain Quasi-stationary (1028hPa).

St Helena high is expected to slightly shift eastwards while intensifying from 1028hPa to 1032hPa, this will allow the dominance of monsoon flow over the Gulf of Guinea countries and Central Africa.

Mascarene high is expected to remain quasistationary with 1024hPa at its center.

Libyan ridge will remain intense over eastern and central Sahel region and the ITD will generally move southwards especially over the eastern part of Sahel. Dry intrusion is observed over Southern Mali and CAR.

Monsoon influx is expected to be observed up to 15°N between 2400m over Sahel and 4200m near the coastal area.

AEJ is expected to occur over Cape Verde, Senegal, Mauritania, Guinea, Mali, Burkina Faso, southwestern Niger and northern Benin.

AEW will be present over Mauritania and Nigeria/Benin/Togo/Ghana. This will be associated with a vorticity over Burkina Faso



GCRF African SWIFT - Science for Weather Information and Forecasting Techniques High impact weather Forecast sheet - Africa 2021 09 29 1200 UTC 2021-09-30 2021 -09-29 2021-10-01 Region Africa ACMAD ACMAD **Date** 2021 09 29 Time 29-30/09 & 01/10 **Data** NCEP-NOAA/SWIFT, ECMWF, ARP-PUMA **Forecast Risk** Be aware **Weather Forecasting Risk Table Be Prepared** Very high **E**1 E2 **E**3 **E**4 E5 **Take Action** Take Action **Be Prepared** Likelihood **D1** D2 D3 D4 **D5** High Be aware C2 **C3 Medium** C<sub>1</sub> C4 C5 Low risk **B1 B**2 **B3 B4 B5** Low **Weather Icons A1** A2 **A3 A5 A4** Very low Very low **Medium** High Very High Low Rain Wind **Dust** Hail **Impact** UKMO Which ensemble products have been used to determine the likelihood and forecast? ECWMF BOTH X **Regions 12-15hrs** 15-18 hrs 18-21 hrs 21-24 hrs Diffa **Zinder** Maradi **Tahoua** Dosso **Niamey** 

Summary of 12-24 hour forecast



**Tillaberi** 

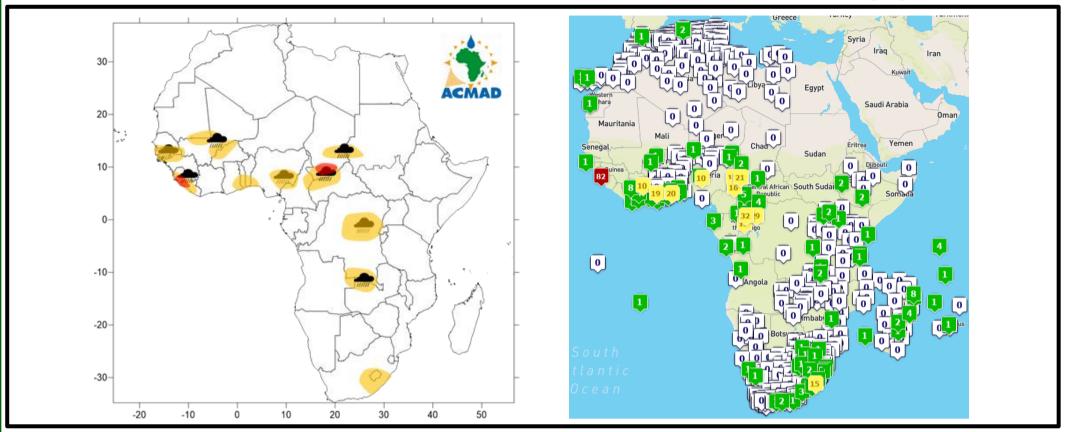
# S-WIFT

## **SWIFT** High impact weather Forecast verification

VT: 2021 09 28

Forecast issued on 2021 09 27 for 2021 09 28

2021 09 28 24H rain gauge observation



Data: Reports from GTS on 2021 09 29 at 06UTC

http://154.66.220.45:8080/thredds/fileServer/ACMAD/WWFD/verificationservice/OBS/ARCHIVE/RR24 20210928.html

### 2021 09 28 24H rain gauge observation

