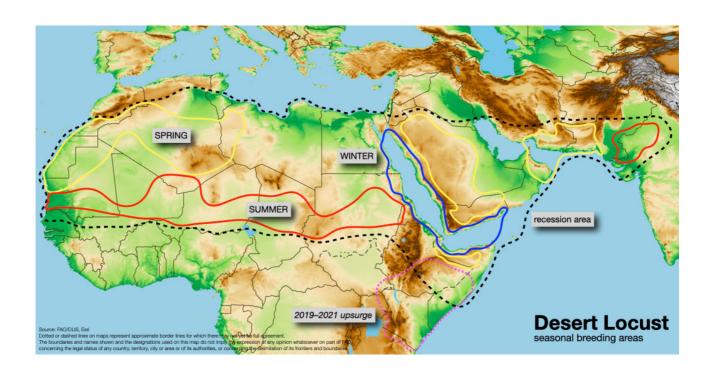




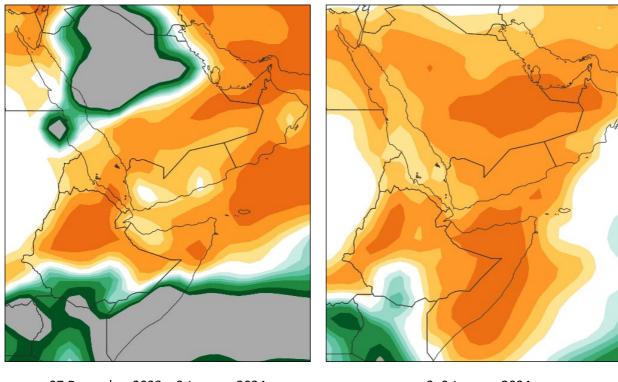
Seasonal precipitation predictions in the Desert Locust winter/spring breeding areas (January – June 2024)

The latest models predict a drier than last month's forecast for January to March in the Red Sea coast and Arabia interior with below-normal rainfall. Nevertheless, there might be enough rain for Desert Locusts in parts of the winter and spring breeding areas. In the Gulf of Aden and the Horn of Africa, the wet signal remains essentially unchanged with a rather high probability of above-normal rain from southern Yemen and northern Somalia to southern Ethiopia and Kenya due to El Niño. As a result, a second generation of breeding is likely to begin at the end of January, especially in the southern Red Sea and Gulf of Aden coasts with high temperatures.

PRECIPITATION ANOMALY		Jan	Feb	Mar	Apr	May	Jun
Algeria (central/south)							
Chad							
Djibouti							
Egypt (SE Red Sea)							
Eritrea (western–summer, coastal–winter)							
Ethiopia (Afar–summer, Sc							
India (Rajasthan, Gujarat)							
Iran (south-spring)							
Mali (northeast)							
Mauritania (south–summe							
Morocco (W Sahara-autur							
Niger (Tamesna, Air)							
Oman (spring)							
Pakistan (southwest–spring, east–summer)							
Saudi Arabia (Red Sea, interior–spring)							
Somalia (N coast–winter, N interior–spring)							
Sudan (interior–summer, coastal–winter)							
Yemen (interior–summer, coastal–winter)							
Dry	Slightly drier	Norma	al	Slightly wett	er	Wet	

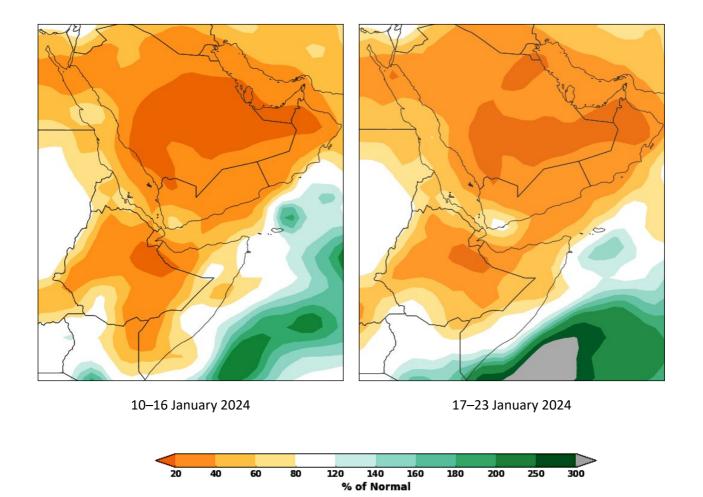


Subseasonal forecast multi-model precipitation – WCS maps (four weeks)

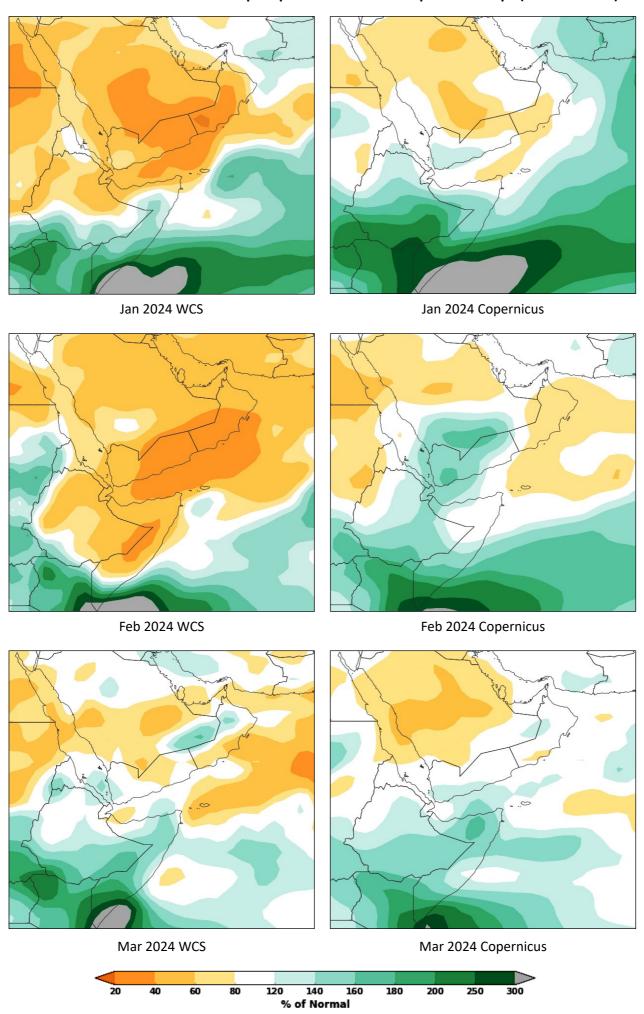


27 December 2023 – 2 January 2024

3-9 January 2024



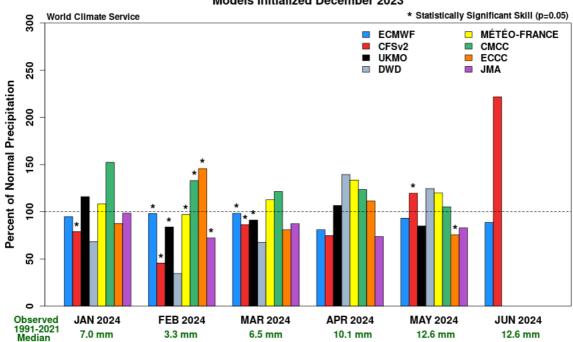
Seasonal forecast multi-model precipitation – WCS vs. Copernicus maps (three months)



Model forecast charts. The latest seasonal precipitation predictions provided by the World Climate Service (WCS) cover the spring, summer and winter breeding areas of the Desert Locust. This is one of the most sophisticated products available, derived from **eight** models: CFSv2, ECMWF, and Copernicus (CMCC, DWD, ECCC, JMA, Méteo-France, UKMO). The results of each model are presented below.

How to interpret the precipitation forecast charts. A value of 100 on the left axis indicates normal rainfall; values less than 100 indicate drier than normal conditions; more than 100 indicates wetter than normal. Little variation between models suggests greater confidence and reliability. An asterisk indicates the most reliable model in each month. When available, the historically best model during the entire forecast period in the region is indicated in the caption.

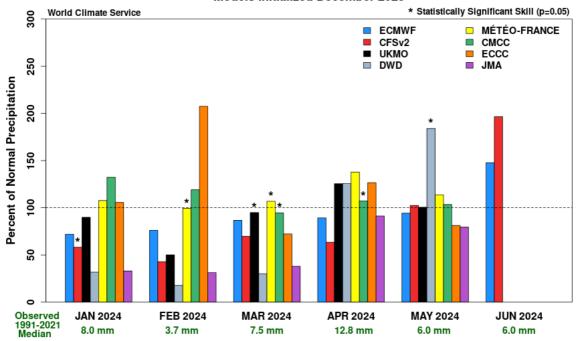
Precipitation Forecast Winter Breeding Region Models Initialized December 2023



Winter breeding, January-March/April (Red Sea / Gulf of Aden)

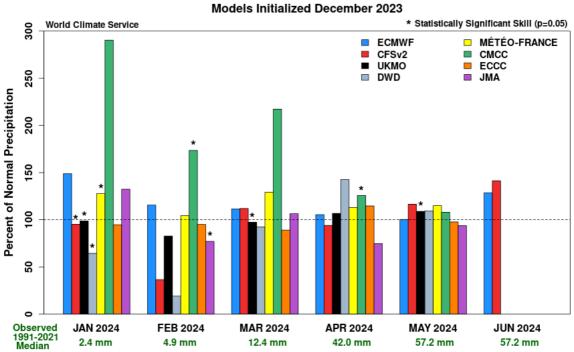
Precipitation Forecast Spring Breeding Region (Central)

Models Initialized December 2023



Spring breeding, March-May/June (Arabian Peninsula)

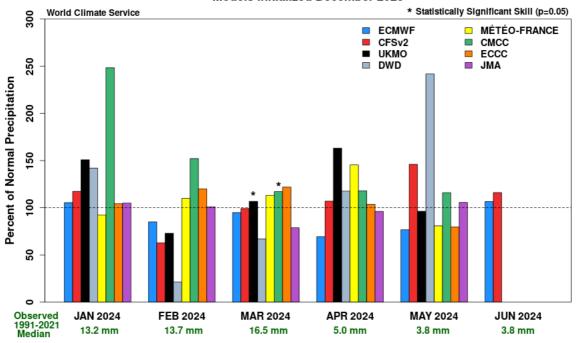
Precipitation Forecast Spring Breeding Region (Northeast Africa)



Spring breeding, March-May/June (Horn of Africa)

Precipitation Forecast Spring Breeding Region (Eastern)

Models Initialized December 2023



Spring breeding, February–May (SE Iran / SW Pakistan)

Precipitation Forecast Spring Breeding Region (Western)

Models Initialized December 2023 World Climate Service * Statistically Significant Skill (p=0.05) ■ MÉTÉO-FRANCE ECMWF CFSv2 CMCC UKMO ECCC 250 DWD JMA Percent of Normal Precipitation 200 150 100 20 0 Observed 1991-2021 Median **JAN 2024 FEB 2024 MAR 2024 APR 2024** MAY 2024 JUN 2024 4.0 mm 3.0 mm 1.4 mm

Spring breeding, March-May (NW Africa)