Seasonal precipitation predictions in the Desert Locust winter/spring/summer breeding areas (March – August 2024)
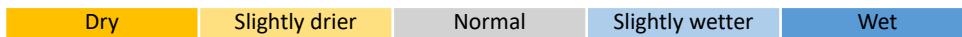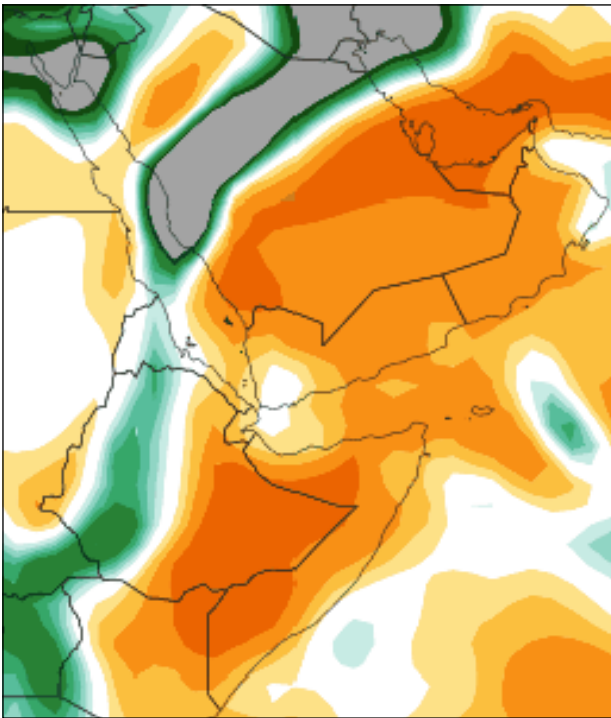
According to the latest models, dry conditions are expected to persist along the Red Sea coast and in the interior throughout winter and spring. The forecast for March models has changed, predicting above-normal rains from the Gulf of Aden and eastern Ethiopia plateau to southeast Iran and southwest Pakistan. The presence of warmer waters and a positive phase of the Indian Ocean Dipole (IOD) in May and June could lead to more cyclone activity in the western Indian Ocean, potentially resembling the cyclones Sagar and Mekunu in 2018 and the seasonal precipitation prediction in March 2020.
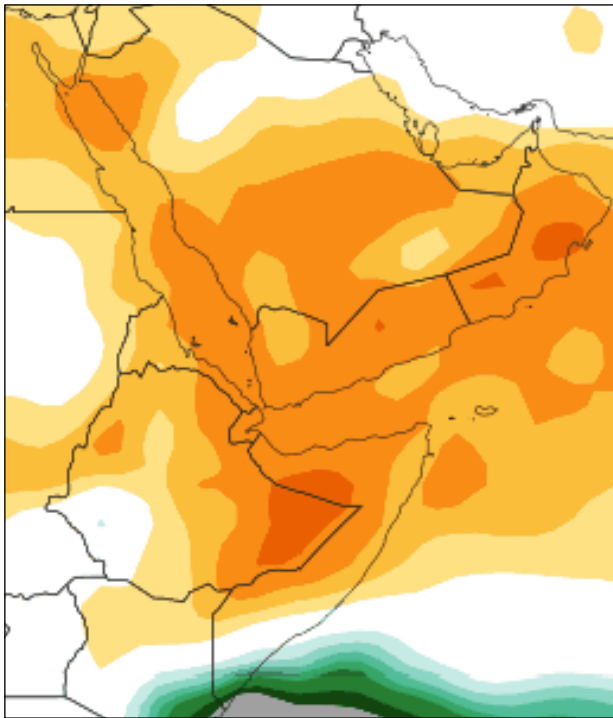
PRECIPITATION ANOMALY	Mar	Apr	May	Jun	Jul	Aug
Algeria (central/south)	Dry	Dry	Dry	Dry	Slightly drier	Slightly wetter
Chad				Slightly drier	Slightly wetter	Slightly wetter
Djibouti	Normal					
Egypt (SE Red Sea–winter, Nile–summer)	Dry	Slightly drier	Slightly drier	Slightly drier	Slightly drier	Slightly wetter
Eritrea (western–summer, coastal–winter)	Slightly drier	Slightly drier	Slightly drier	Slightly wetter	Slightly wetter	Slightly wetter
Ethiopia (Somali–spring, Afar–summer)	Slightly wetter	Slightly drier	Slightly drier	Slightly drier	Slightly drier	Slightly drier
India (Rajasthan, Gujarat)				Slightly wetter	Slightly wetter	Slightly wetter
Iran (south–spring)	Slightly wetter	Slightly drier	Normal	Wet		
Mali (northeast)				Slightly drier	Slightly drier	Slightly wetter
Mauritania (south–summer, NW–autumn)				Slightly drier	Slightly drier	Slightly wetter
Morocco (W Sahara–autumn, Atlas–spring)	Normal	Slightly wetter	Slightly wetter	Normal	Slightly wetter	Slightly wetter
Niger (Tamesna, Air)				Normal	Normal	Slightly wetter
Oman (spring)	Slightly wetter	Slightly drier	Slightly drier	Wet		
Pakistan (southwest–spring, east–summer)	Slightly wetter	Slightly wetter	Slightly wetter	Slightly wetter	Slightly wetter	Slightly wetter
Saudi Arabia (Red Sea, interior–spring)	Slightly drier	Slightly drier	Slightly drier	Wet	Slightly wetter	Wet
Somalia (N coast–winter, N interior–spring)	Slightly wetter	Slightly drier	Slightly drier			
Sudan (interior–summer, coastal–winter)	Dry	Slightly drier	Slightly drier	Slightly wetter	Slightly wetter	Slightly wetter
Yemen (interior–summer, coastal–winter)	Slightly drier	Slightly drier	Slightly drier	Wet	Wet	Slightly wetter

Dry	Slightly drier	Normal	Slightly wetter	Wet

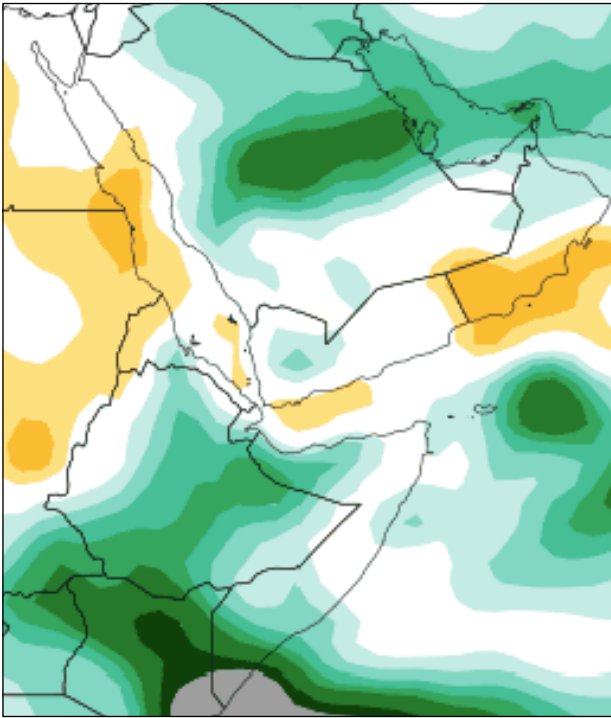Desert Locust seasonal breeding areas

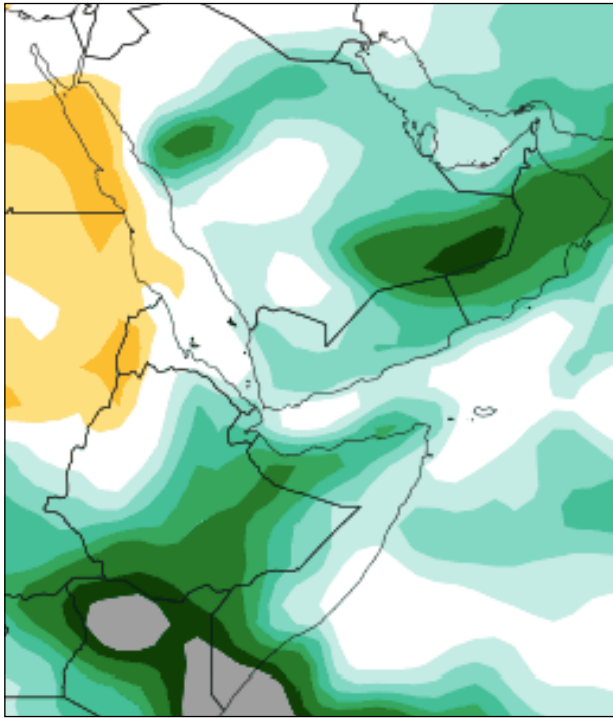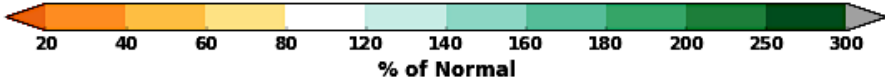# Subseasonal forecast multi-model precipitation – WCS maps (four weeks)

15–21 February 2024
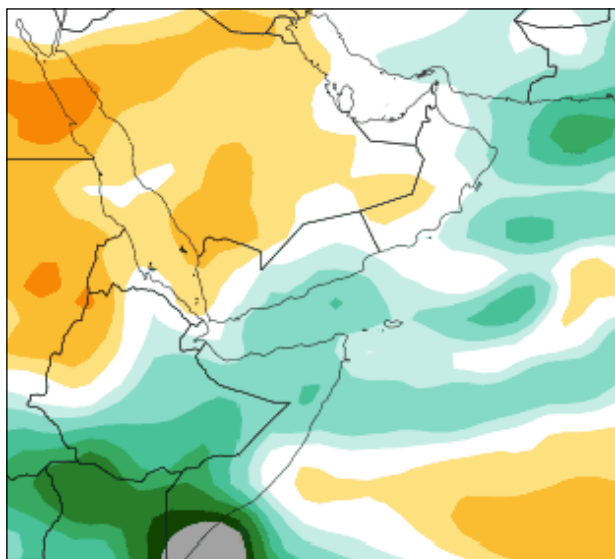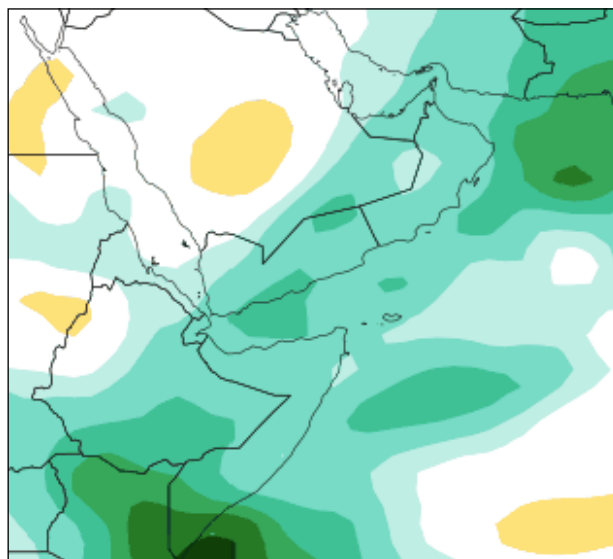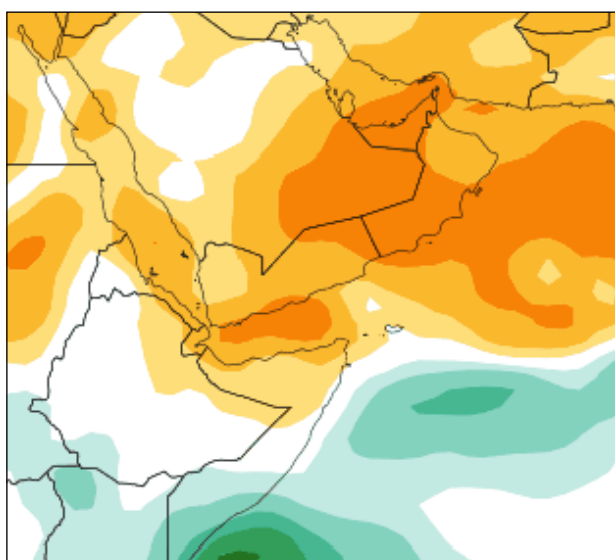
22–28 February 2024

29 February – 6 March 2024

7–13 March 2024

% of Normal

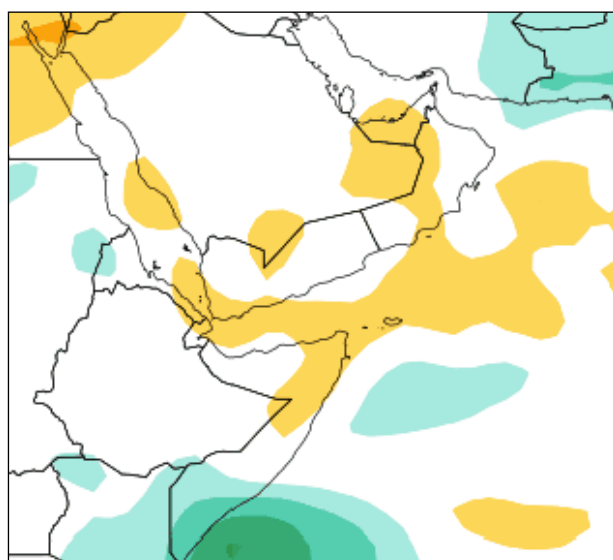# Seasonal forecast multi-model precipitation – WCS vs. Copernicus maps (three months)
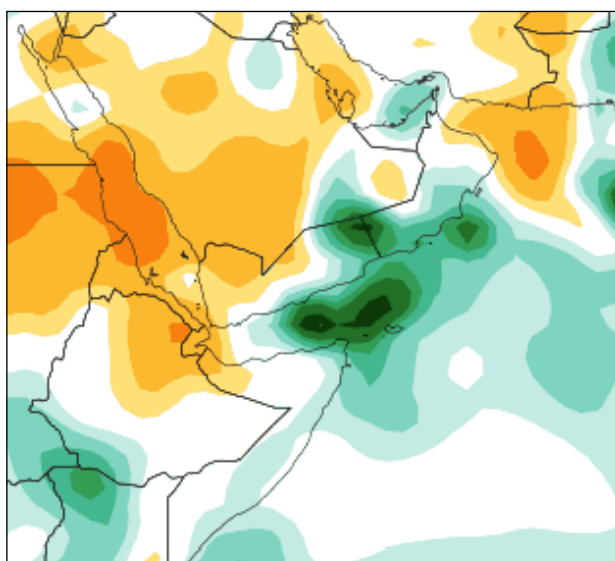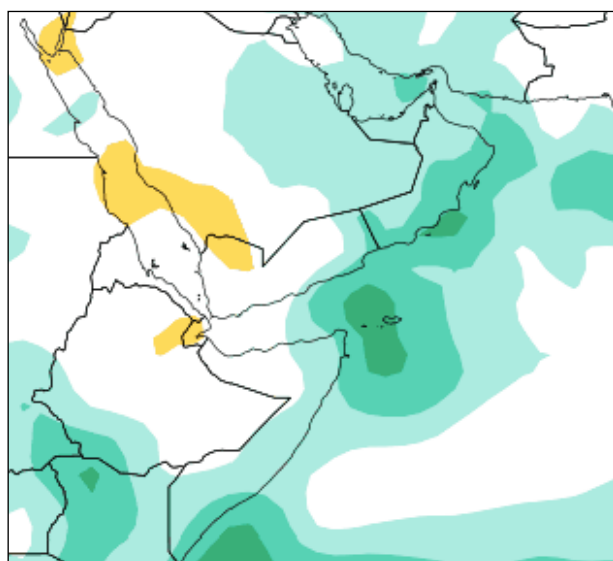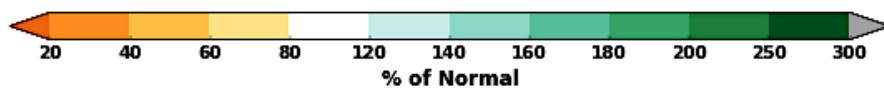

March 2024 WCS

March 2024 Copernicus

April 2024 WCS

April 2024 Copernicus

May 2024 WCS

May 2024 Copernicus

20 40 60 80 120 140 160 180 200 250 300
% of Normal

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.
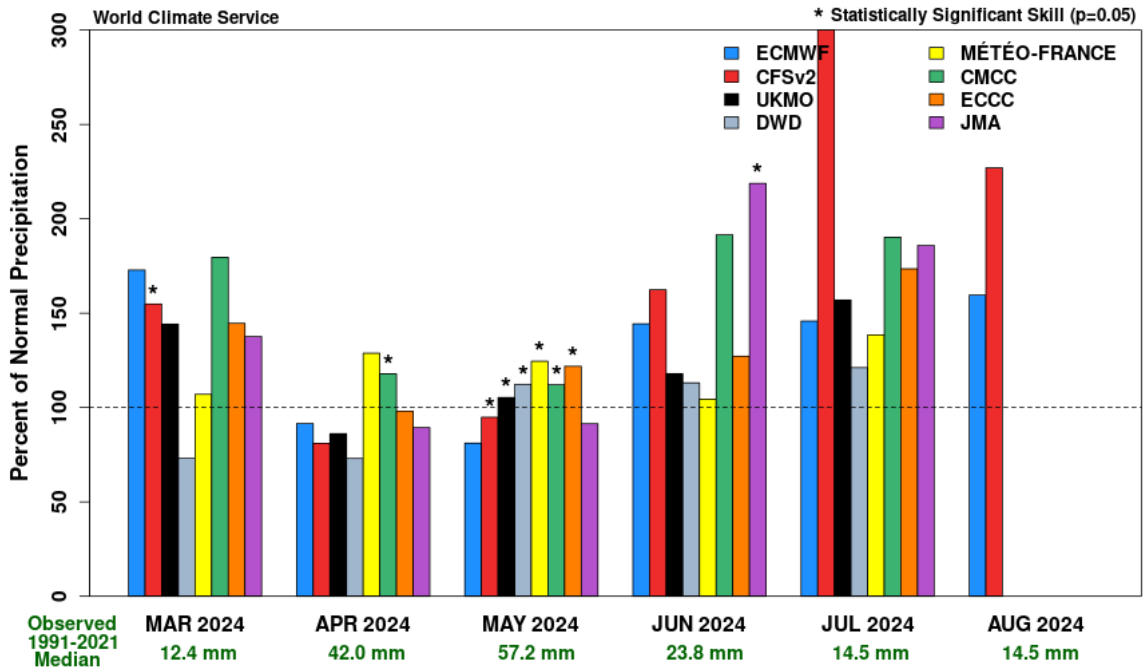

Winter breeding, March/April (Red Sea / Gulf of Aden)
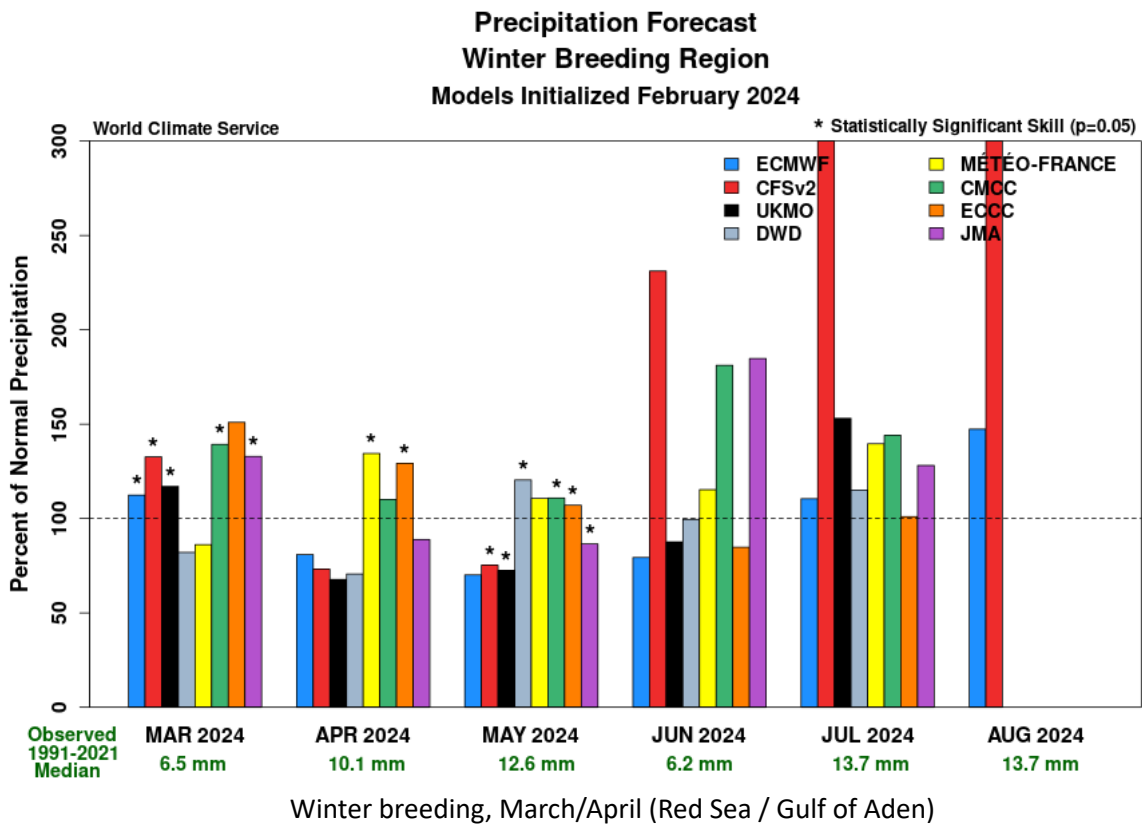
Precipitation Forecast
Spring Breeding Region (Central)
Models Initialized February 2024
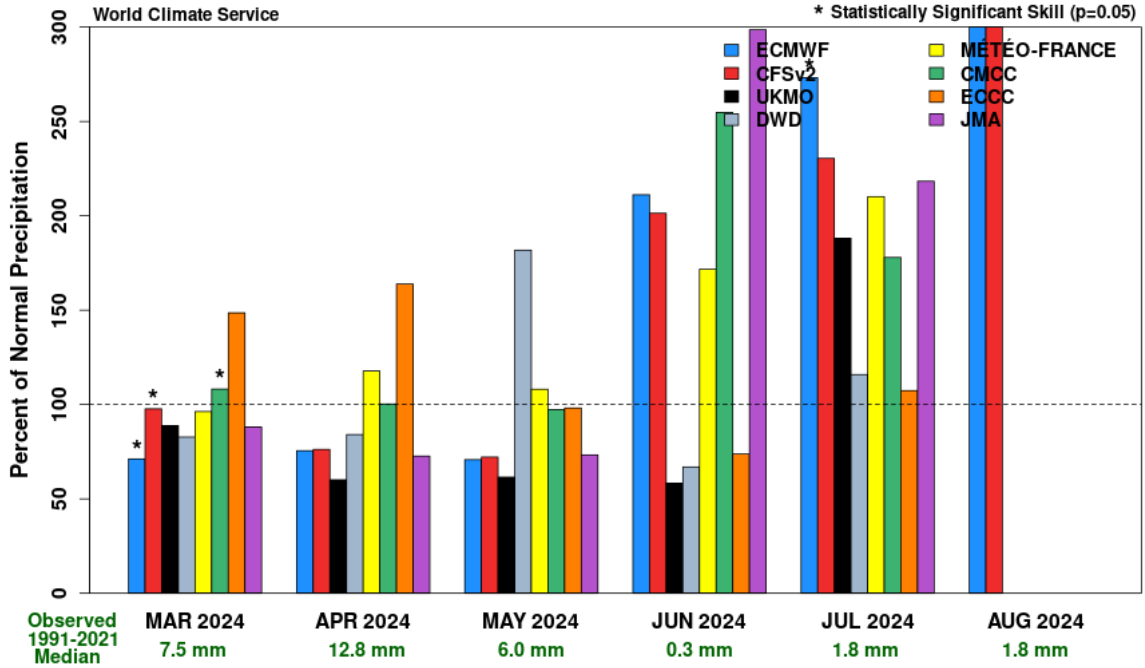
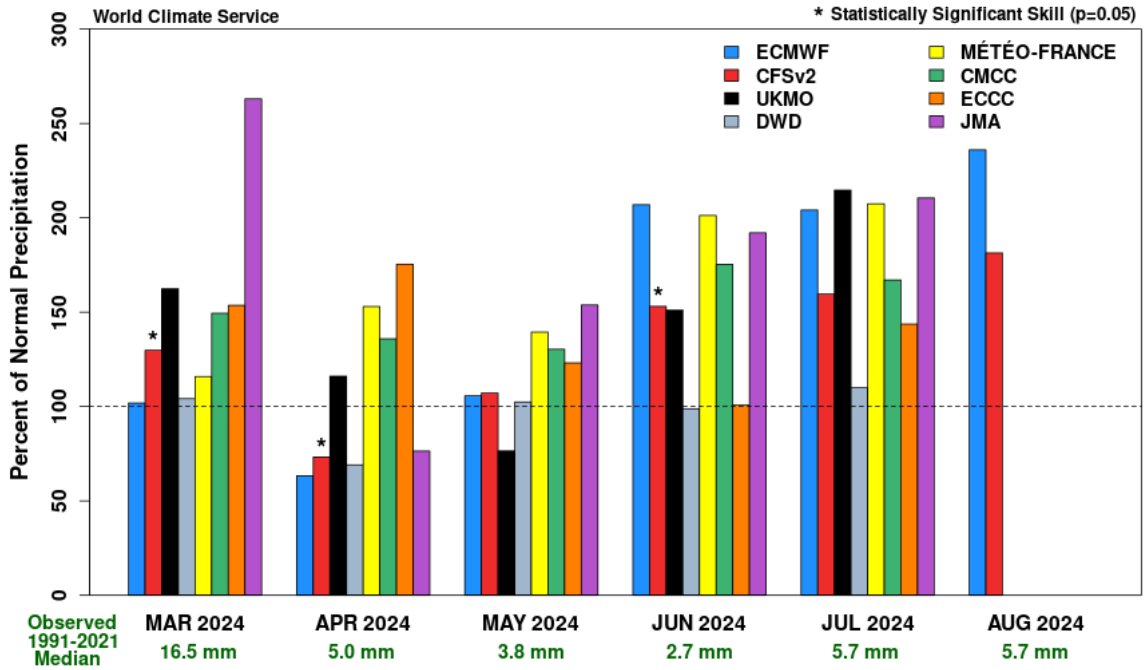Spring breeding, March–May/June (Arabian Peninsula)

Precipitation Forecast
Spring Breeding Region (Northeast Africa)
Models Initialized February 2024

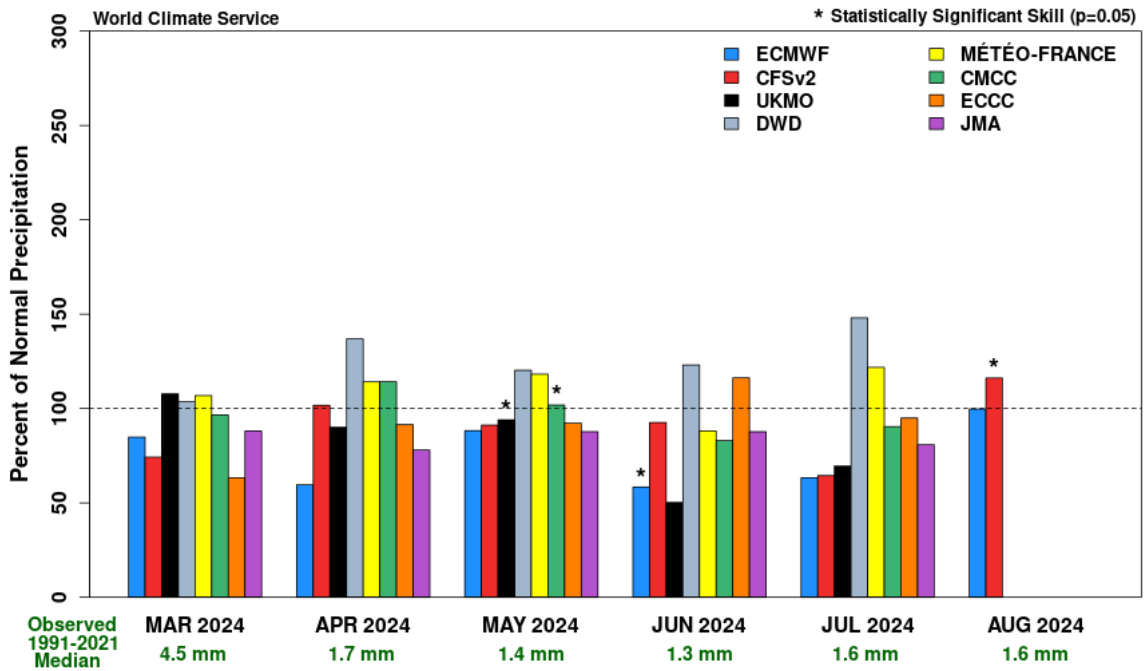Spring breeding, March–May/June (Horn of Africa)

Precipitation Forecast
Spring Breeding Region (Eastern)
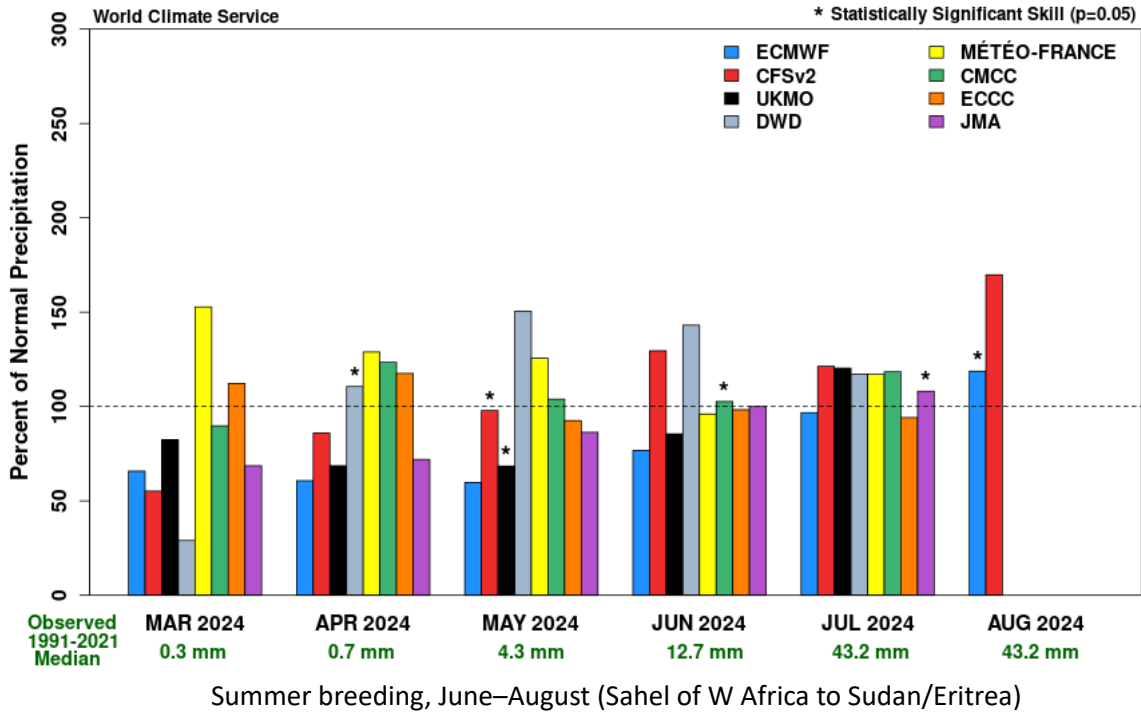Models Initialized February 2024

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

Precipitation Forecast
Spring Breeding Region (Western)
Models Initialized February 2024

Spring breeding, March–May (NW Africa)

Precipitation Forecast
Summer Breeding Region (Western)
Models Initialized February 2024

Summer breeding, June–August (Sahel of W Africa to Sudan/Eritrea)

Precipitation Forecast
Summer Breeding Region (Eastern)
Models Initialized February 2024

Summer breeding, June–August (India/Pakistan)