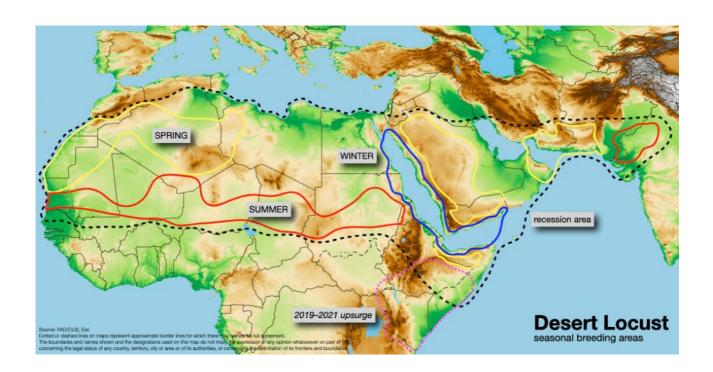


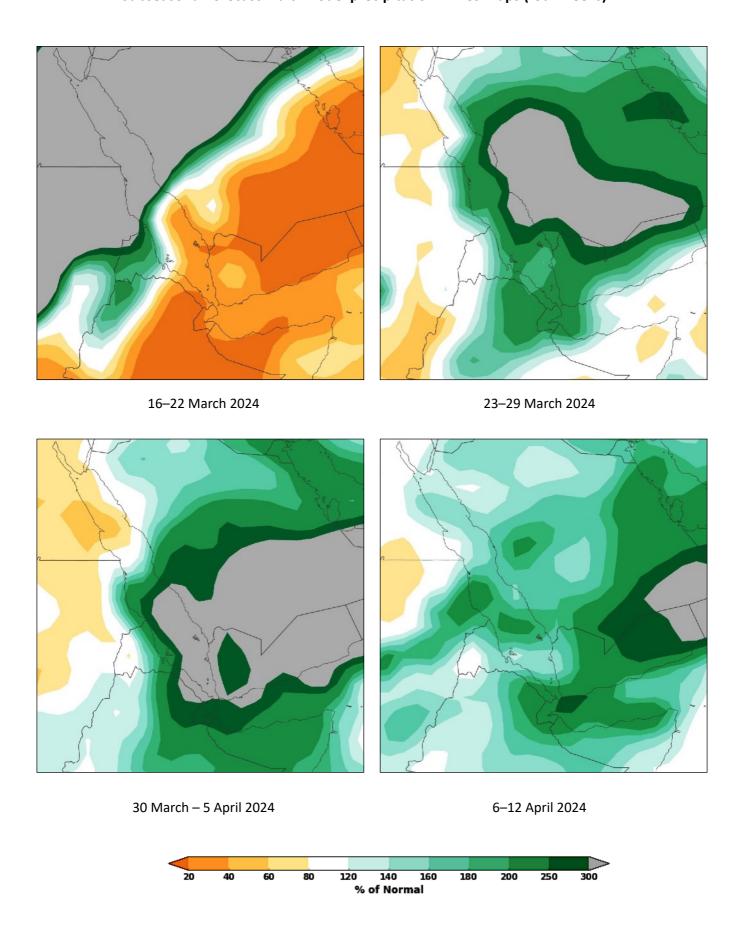
### Seasonal precipitation predictions in the Desert Locust spring/summer breeding areas (April – September 2024)

The latest models suggest that widespread above-normal rainfall could occur during the spring in the interior of Saudi Arabia, the Yemen Gulf of Aden and interior, the coast and interior of Oman, southeast Iran and southwest Pakistan, and perhaps the Nile Valley of northern Sudan and abnormal rains on the northern Red Sea coast of Saudi Arabia. The Gulf of Aden and the Arabian Sea may experience heightened cyclone activity in May and June. Summer from Sudan to Pakistan/India is expected to bring above-average rainfall and favourable breeding conditions. Western Africa experiences rain starting in July in Chad, followed by Niger, Mali and Mauritania in August and September

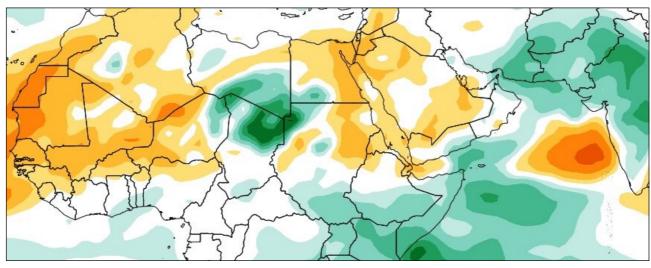
PRECIPITATION ANOMALY		Apr	May	Jun	Jul	Aug	Sep
Algeria (central/south)							
Chad							
Djibouti							
Egypt (SE Red Sea-winter, Nile-summer)							
Eritrea (western–summer, coastal–winter)							
Ethiopia (Somali–spring, Afar–summer)							
India (Rajasthan, Gujarat)							
Iran (south-spring)							
Mali (northeast)							
Mauritania (south–summer, NW–autumn)							
Morocco (W Sahara-autumn, Atlas-spring)							
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)							
Davis	Climbally, duing	N. a. was	.1 (	71:		\A/a+	
Dry	Slightly drier	Norma	ai S	Slightly wett	.er	Wet	



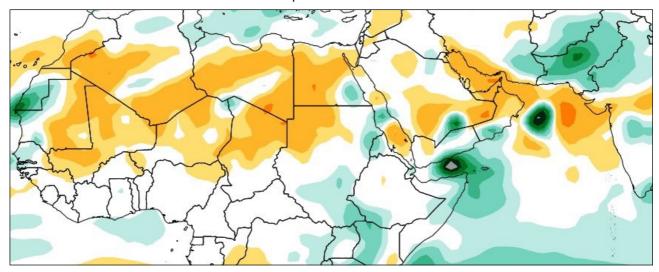
### Subseasonal forecast multi-model precipitation – WCS maps (four weeks)



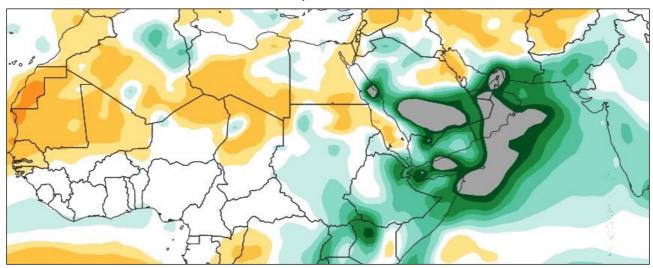
### Seasonal forecast multi-model precipitation



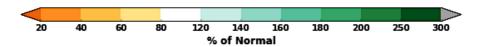
April 2024



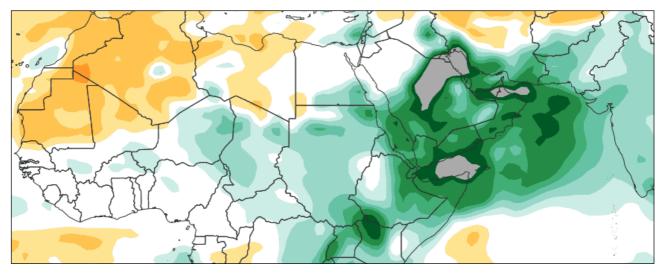
May 2024



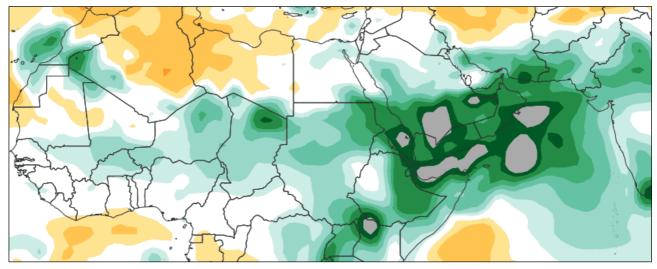
June 2024



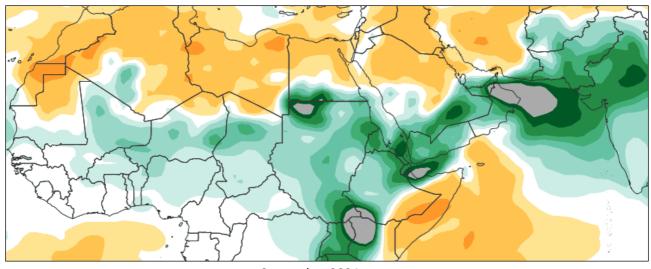
### Seasonal forecast multi-model precipitation



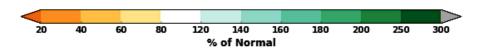
July 2024



August 2024



September 2024



**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 March 2024** \* Statistically Significant Skill (p=0.05) World Climate Service 300 ECMW MÉTÉO-FRANCE CFSv2 CMCC UKMO ECCC 250 DWD JM Percent of Normal Precipitation 200 150 100 20 Observed 1991-2021 **APR 2024 MAY 2024** JUN 2024 JUL 2024 **AUG 2024 SEP 2024** 10.1 mm 12.6 mm 13.7 mm 6.2 mm 18.1 mm 18.1 mm Median

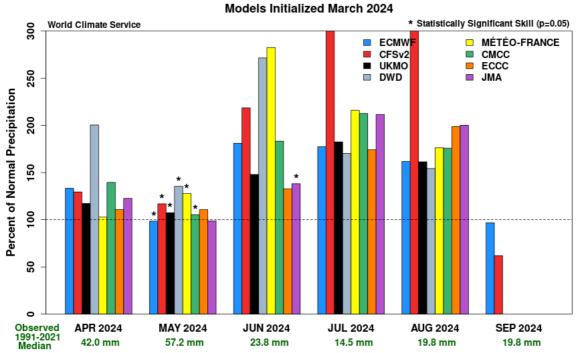
Winter breeding, April (Red Sea / Gulf of Aden)

# Precipitation Forecast Spring Breeding Region (Central) Models Initialized March 2024

\* Statistically Significant Skill (p=0.05) World Climate Service ECMW ■ MÉTÉO-FRANCE CFS CMCC UKMO DWD **ECCC** 250 JMA Percent of Normal Precipitation 200 150 100 20 0 Observed 1991-2021 Median **APR 2024** MAY 2024 **JUN 2024** JUL 2024 **AUG 2024 SEP 2024** 12.8 mm 6.0 mm 0.3 mm 1.8 mm 2.2 mm 2.2 mm

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

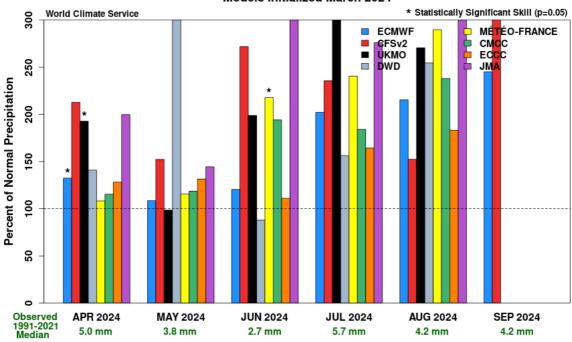
### Precipitation Forecast Spring Breeding Region (Northeast Africa)



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

### Precipitation Forecast Spring Breeding Region (Eastern)

Models Initialized March 2024



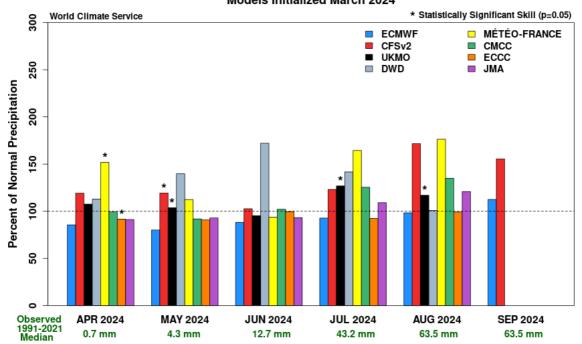
Spring breeding, April-May (SE Iran / SW Pakistan)

## Precipitation Forecast Spring Breeding Region (Western)

**Models Initialized March 2024** \* Statistically Significant Skill (p=0.05) World Climate Service **ECMWF** MÉTÉO-FRANCE CFSv2 CMCC **ECCC** UKMO 250 DWD JMA Percent of Normal Precipitation 200 150 100 20 Observed 1991-2021 Median JUL 2024 JUN 2024 **SEP 2024 APR 2024** MAY 2024 **AUG 2024** 5.8 mm 1.7 mm 1.4 mm 1.3 mm 1.6 mm 5.8 mm

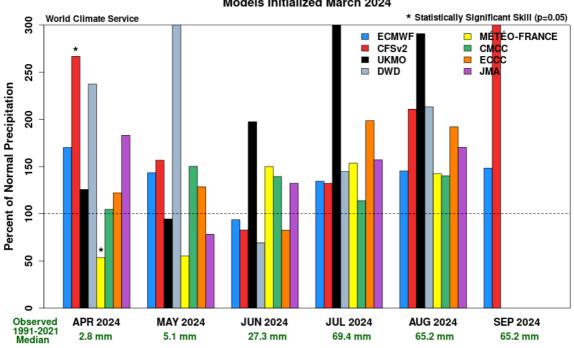
Spring breeding, April-May (NW Africa)

## Precipitation Forecast Summer Breeding Region (Western) Models Initialized March 2024



Summer breeding, June-September (Sahel of W Africa to Sudan/Eritrea)

### Precipitation Forecast Summer Breeding Region (Eastern) Models Initialized March 2024



Summer breeding, June-September (India/Pakistan)