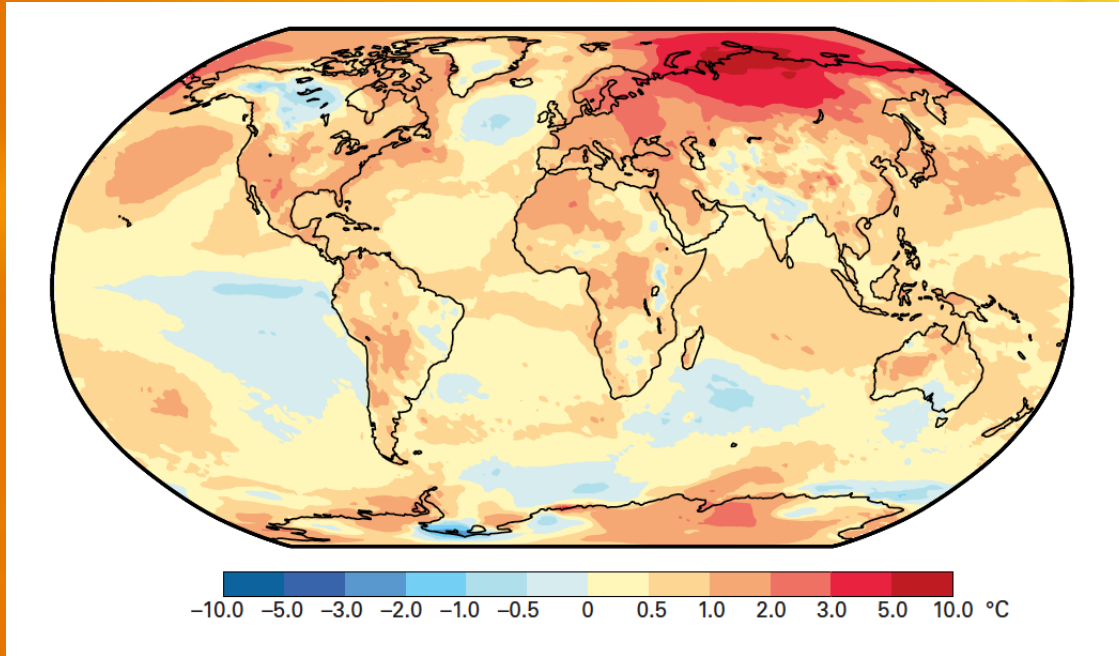




المركز الوطني للأرصاد
National Center for Meteorology
المملكة العربية السعودية

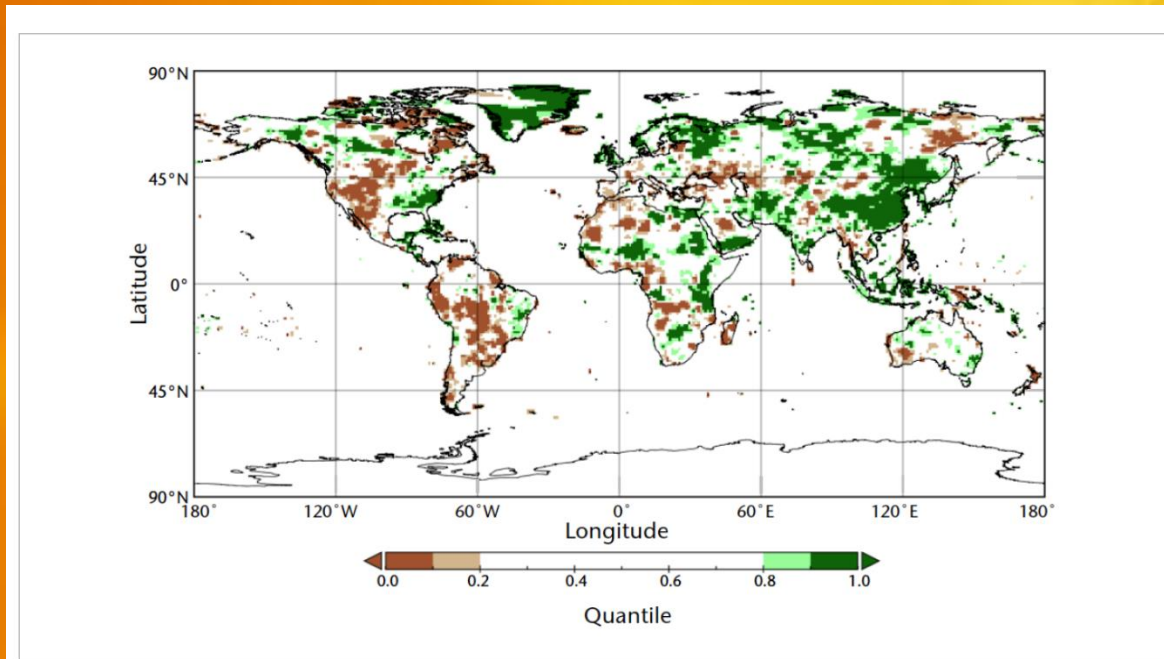
Temperature:

- The global mean temperature for 2020 was 1.2 °C above the 1850–1900 baseline (Figure 1), which places 2020 as one of the three warmest years on record globally.
- Globally, the warmest year on record to date is 2016.



Temperature anomalies relative to the 1981–2010 long-term average from the ERA5 reanalysis for 2020. Source: Copernicus Climate Change Service, European Centre for Medium-Range Weather Forecasts (ECMWF).

Precipitation:



Total precipitation in 2020, expressed as a percentile of the 1951–2010 reference period. The shaded areas are those with precipitation totals in the driest 20% (brown) and wettest 20% (green) of years during the reference period

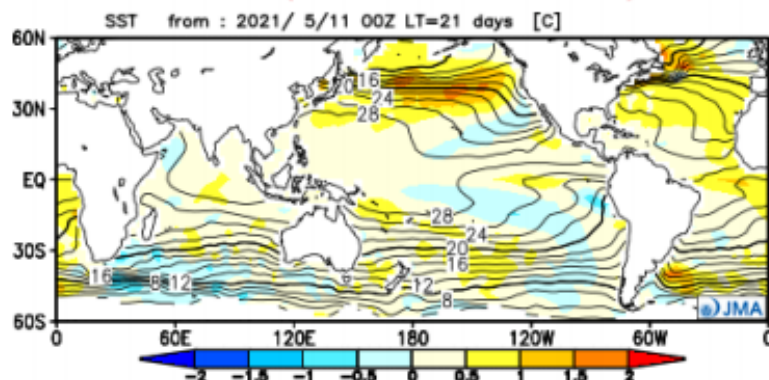
- The WMO precipitation anomaly expressed as percentile of the reference period show drier conditions over central KSA regions.

- ENSO-neutral conditions are likely to continue during boreal summer and autumn (70%).
- The NINO.WEST SST is likely to become near normal gradually in boreal spring, and remains near normal during boreal summer and autumn.
- The IOBW SST is likely to be below or near normal from boreal spring to autumn.

Three month mean Sea surface temperature (SST)

Contour: SST (°C); Shading: SST anomalies.

Ensemble forecast (3 months mean : JUN–AUG)

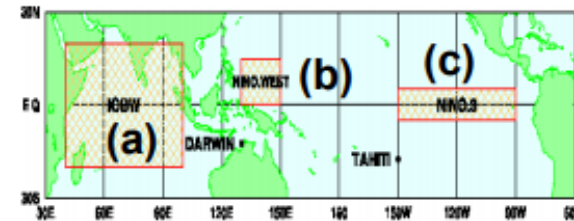
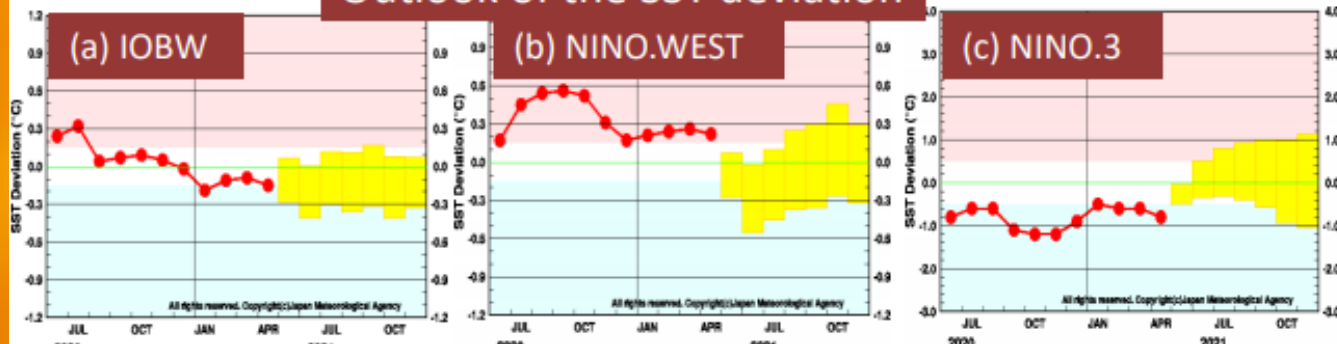


ENSO forecast probabilities

YEAR	MONTH	mean period	El Niño	ENSO neutral	La Niña
2021	MAR	JAN2021–MAY2021	0	100	0
	APR	FEB2021–JUN2021	0	50	50
	MAY	MAR2021–JUL2021	0	80	20
	JUN	APR2021–AUG2021	10	80	10
	JUL	MAY2021–SEP2021	20	70	10
	AUG	JUN2021–OCT2021	20	70	10
	SEP	JUL2021–NOV2021	20	70	10

El Niño ENSO neutral La Niña

Outlook of the SST deviation



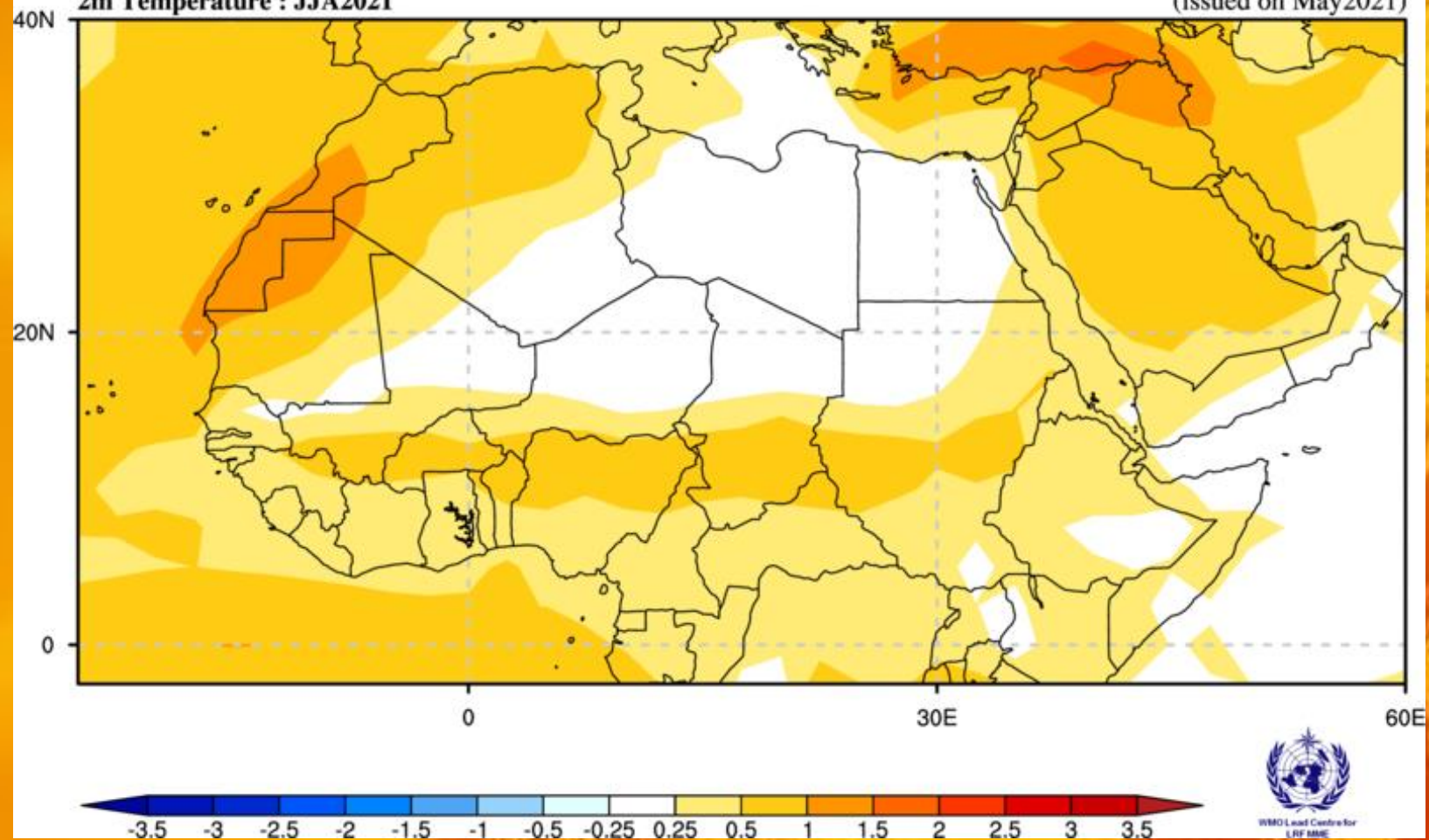
Simple Composite Map

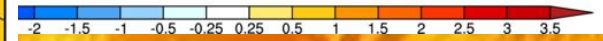
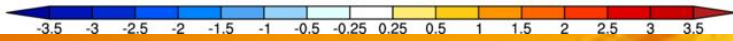
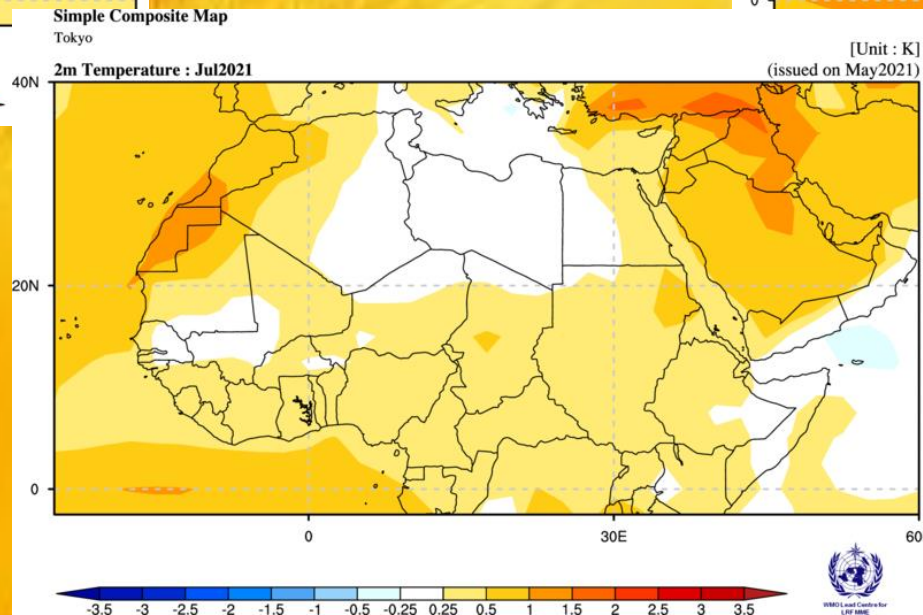
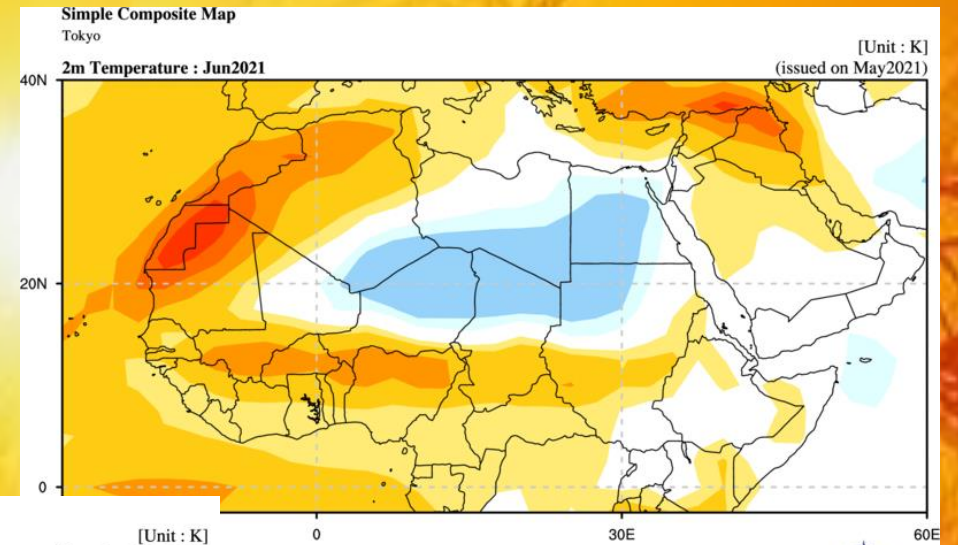
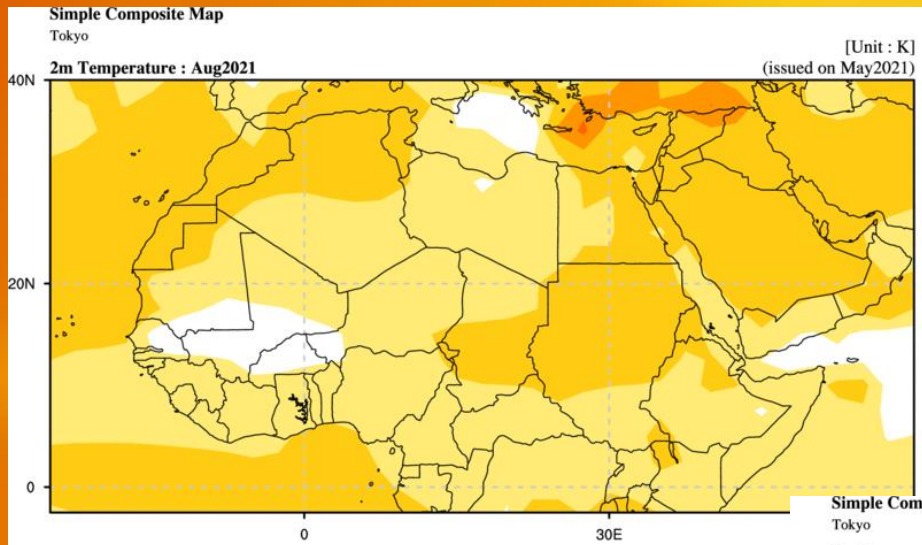
Tokyo

[Unit : K]

2m Temperature : JJA2021

(issued on May2021)



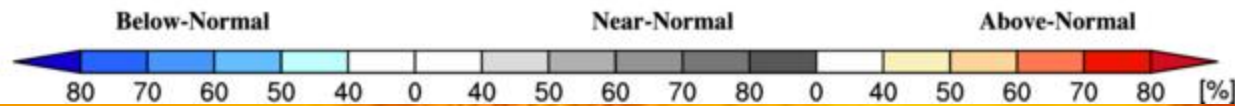
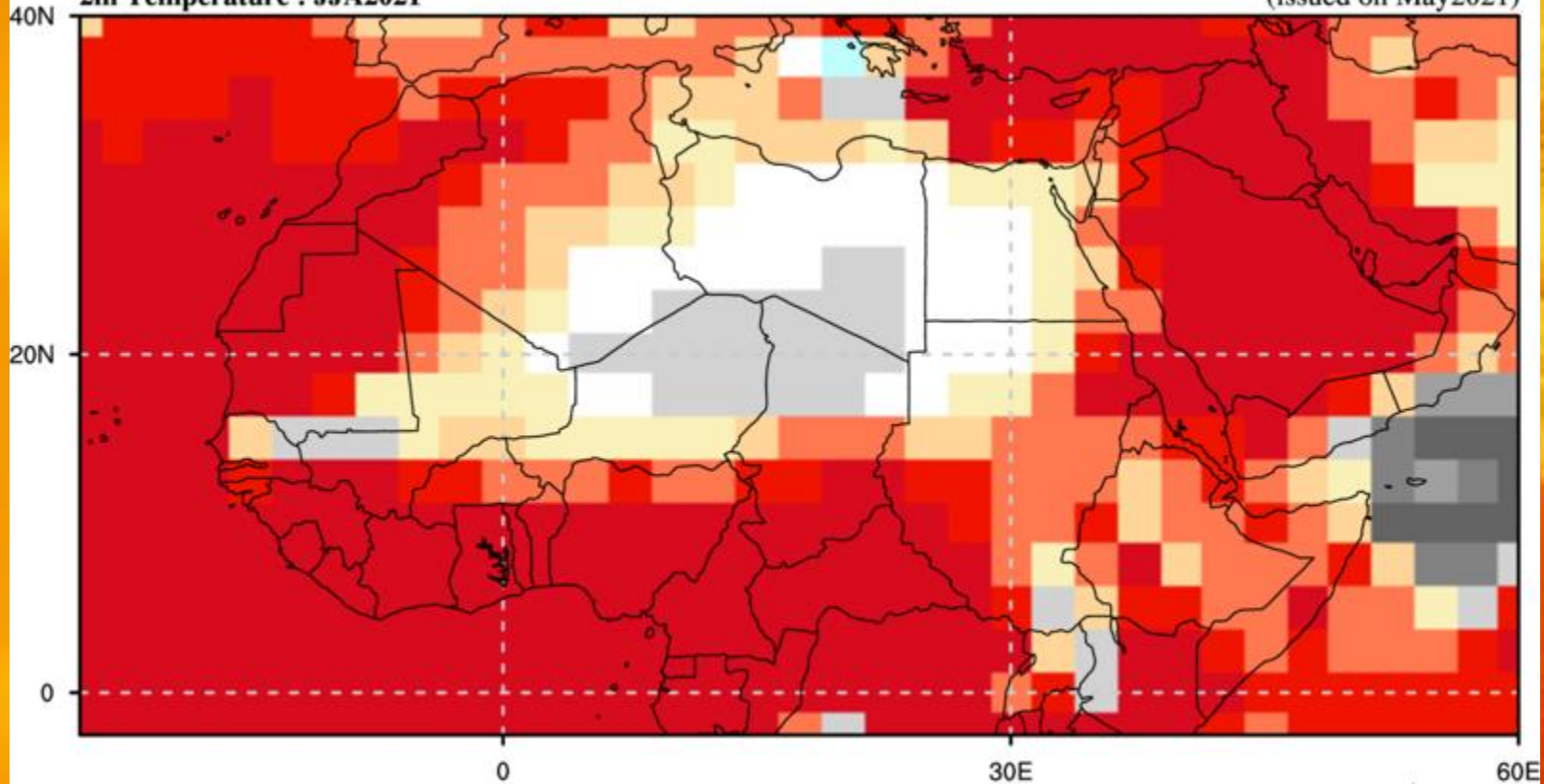


Probabilistic Multi-Model Ensemble Forecast

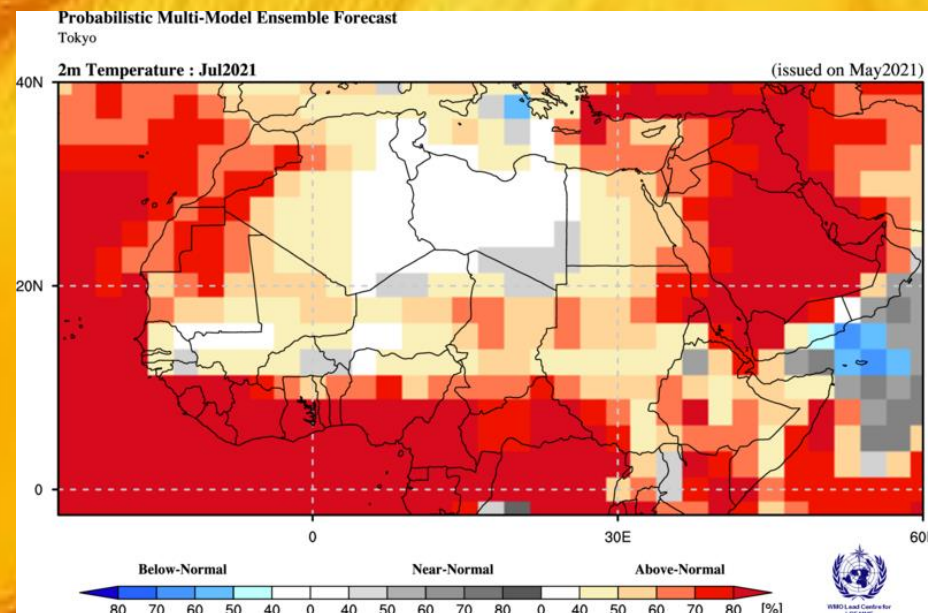
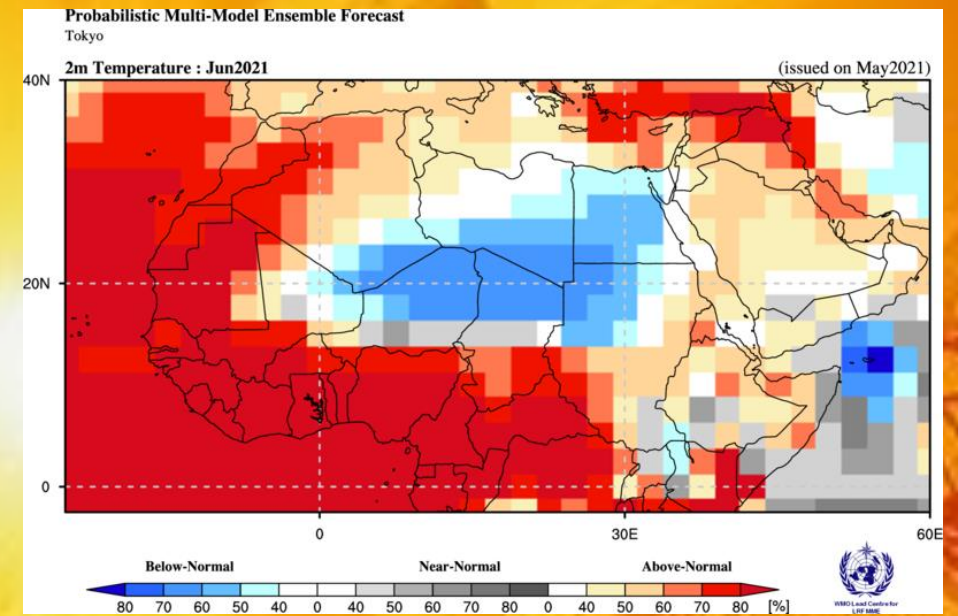
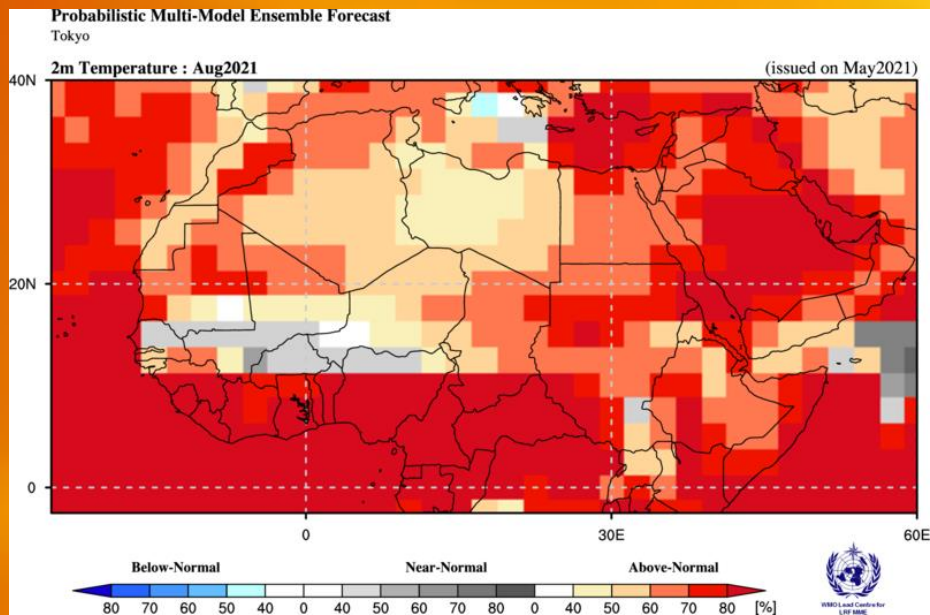
Tokyo

2m Temperature : JJA2021

(issued on May2021)



WMO Lead Centre for
LRF MSE



Probabilistic Multi-Model Ensemble Forecast

Tokyo

Precipitation : JJA2021

(issued on May2021)

