Climate Change

Forecast

December 2018 – February 2019

MedCOF November 2018

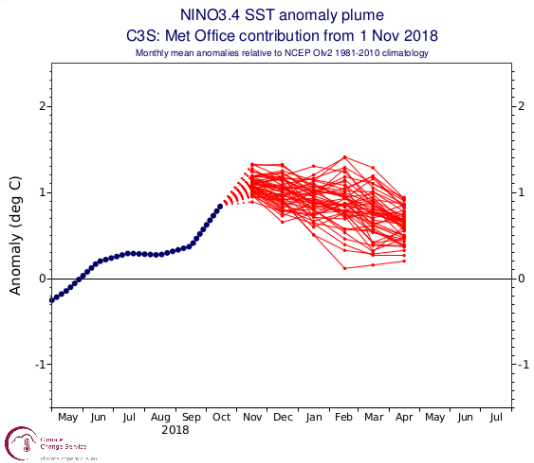
Copernicus Europe's eyes on Earth

European Commission

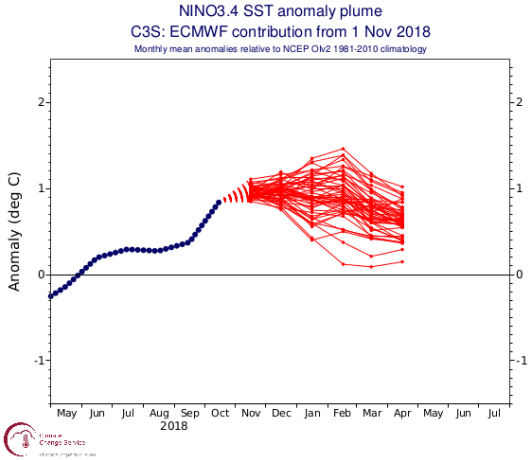
ECMWF

NINO 3.4 - from November 2018

Climate Change



UKMO



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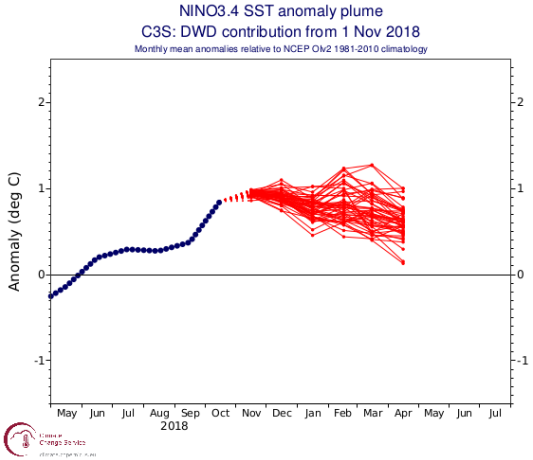


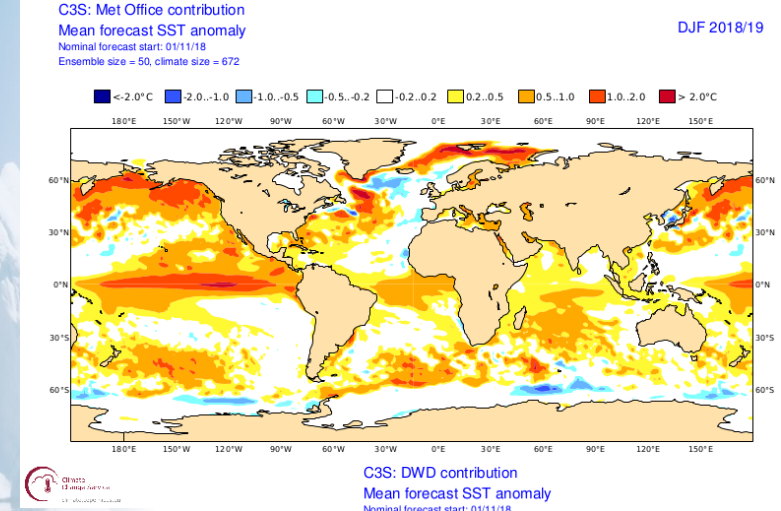
DWD

UKMO: GPC Exeter
DWD: GPC Offenbach

ECMWF Copernicus Europe's eyes on Earth European Commission

Climate Change

SST-DJF from November 2018



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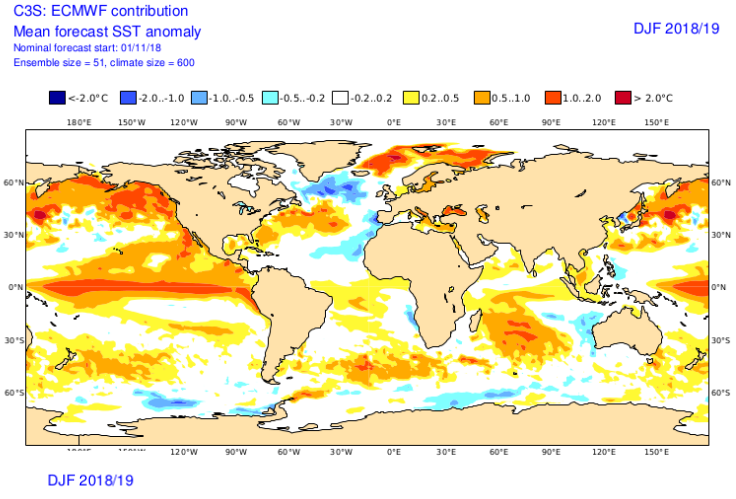

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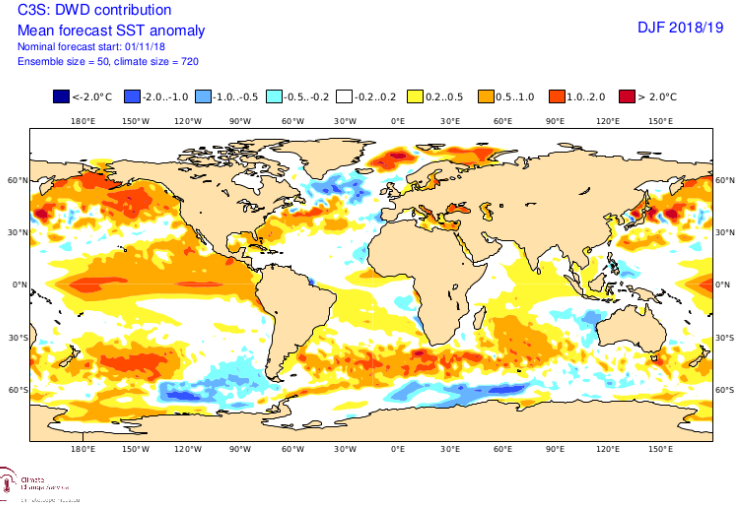

DWD

UKMO: GPC Exeter
DWD: GPC Offenbach

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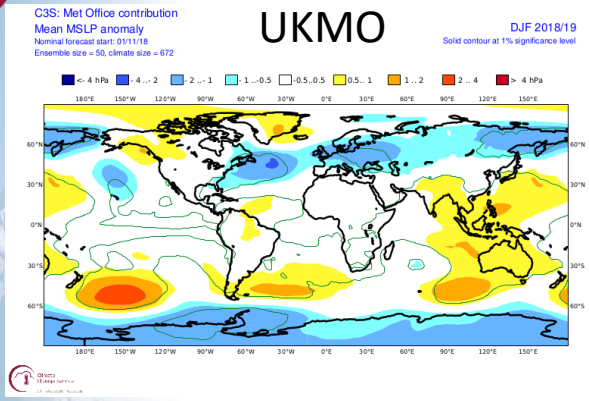
Climate Change

MSLP-DJF from November 2018

UKMO



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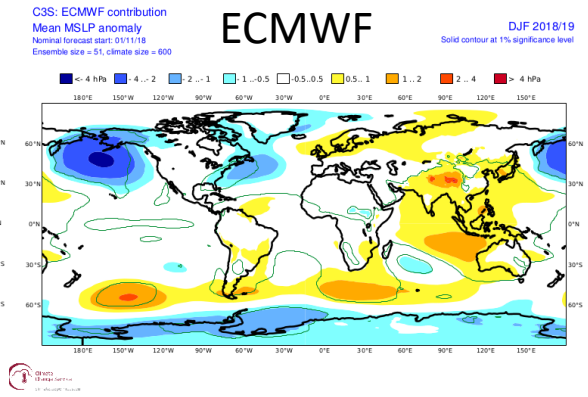

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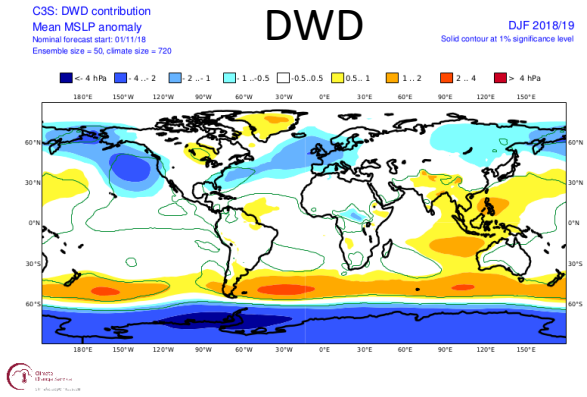

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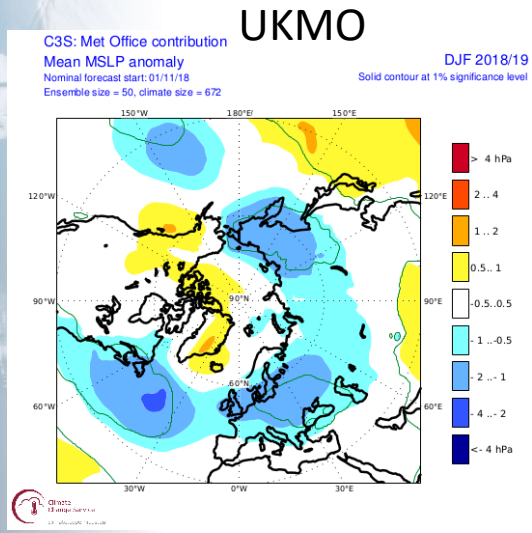

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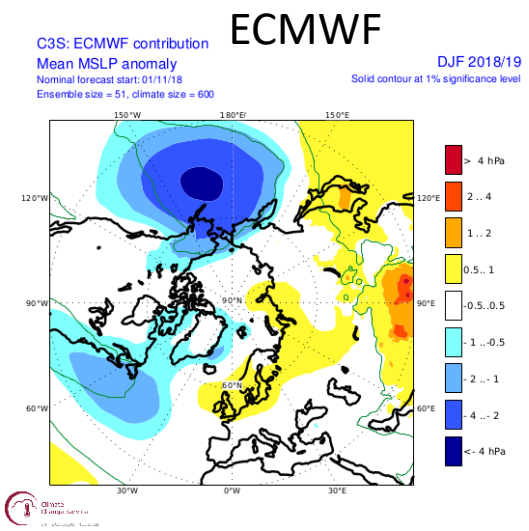

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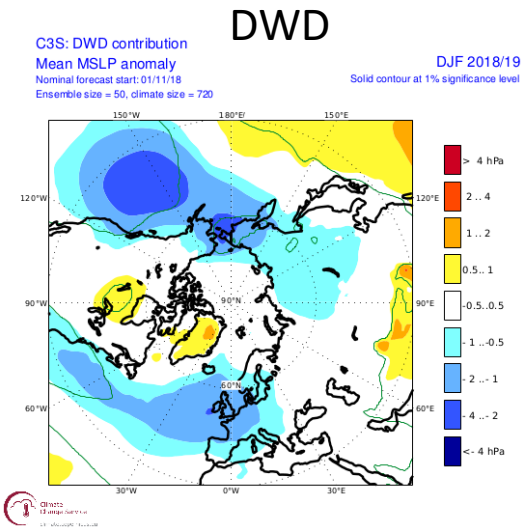
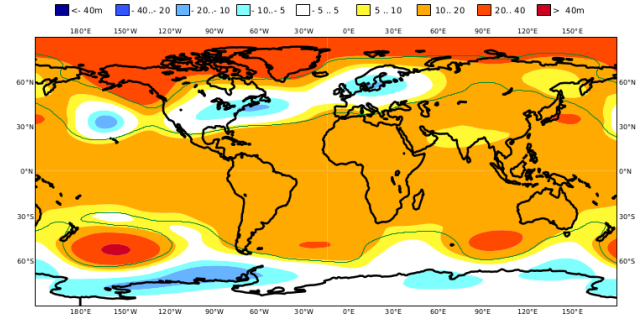


Z500-DJF from November 2018

UKMO

C3S: Met Office contribution
Mean Z500 anomaly
Nominal forecast start: 01/11/18
Ensemble size = 50, climate size = 672

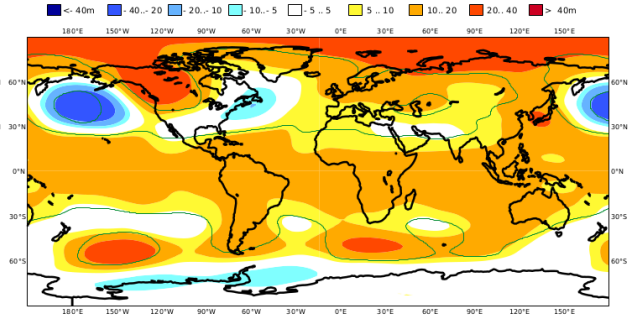
DJF 2018/19
Solid contour at 1% significance level



ECMWF

C3S: ECMWF contribution
Mean Z500 anomaly
Nominal forecast start: 01/11/18
Ensemble size = 51, climate size = 600

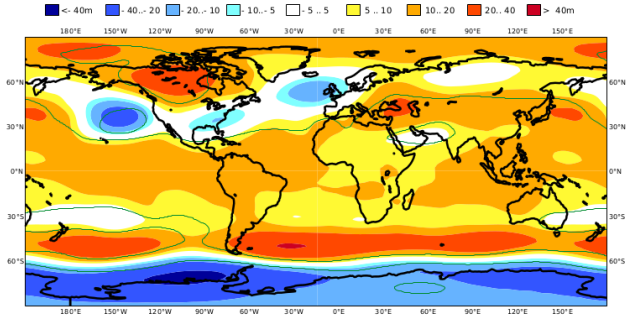
DJF 2018/19
Solid contour at 1% significance level



DWD

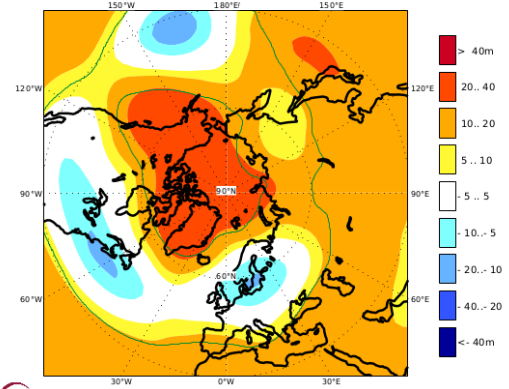
C3S: DWD contribution
Mean Z500 anomaly
Nominal forecast start: 01/11/18
Ensemble size = 50, climate size = 720

DJF 2018/19
Solid contour at 1% significance level



C3S: Met Office contribution
Mean Z500 anomaly
Nominal forecast start: 01/11/18
Ensemble size = 50, climate size = 672

DJF 2018/19
Solid contour at 1% significance level



C3S: ECMWF contribution
Mean Z500 anomaly
Nominal forecast start: 01/11/18
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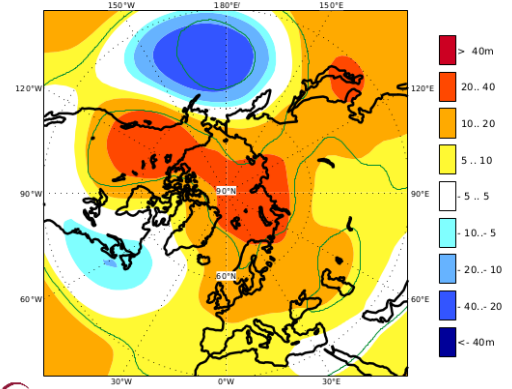
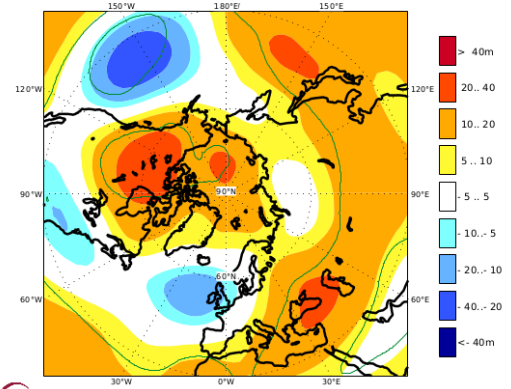
DJF 2018/19
Solid contour at 1% significance level



C3S: DWD contribution
Mean Z500 anomaly
Nominal forecast start: 01/11/18
Ensemble size = 50, climate size = 720

DJF 2018/19
Solid contour at 1% significance level

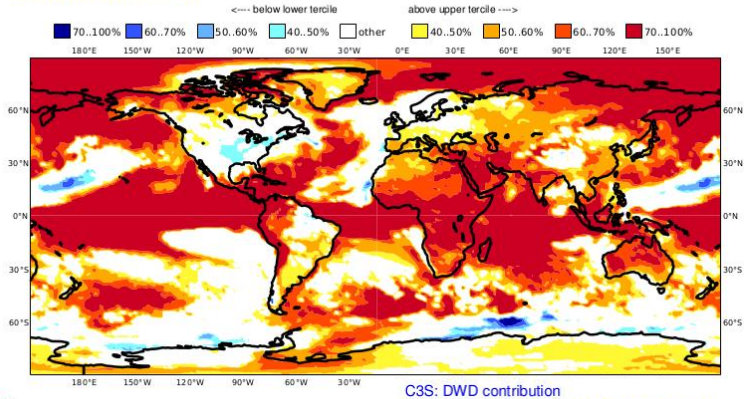


T2m-DJF from November 2018

C3S: Met Office contribution
Prob(most likely category of 2m temperature)
Nominal forecast start: 01/11/18
Ensemble size = 50, climate size = 672

UKMO

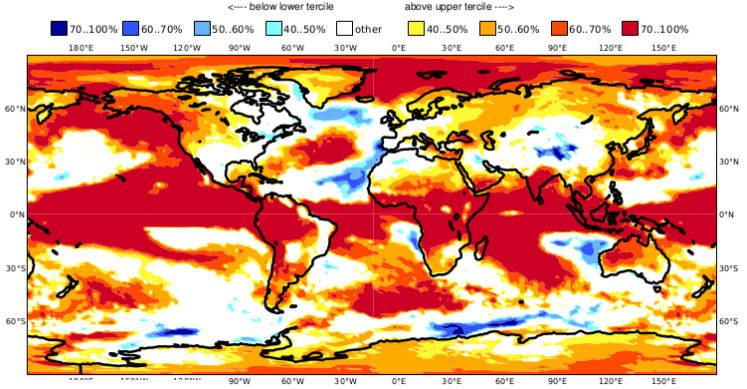
DJF 2018/19



C3S: ECMWF contribution
Prob(most likely category of 2m temperature)
Nominal forecast start: 01/11/18
Ensemble size = 51, climate size = 600

ECMWF

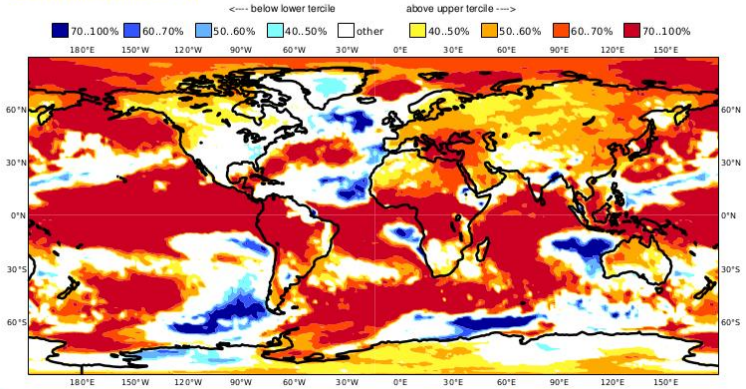
DJF 2018/19



C3S: DWD contribution
Prob(most likely category of 2m temperature)
Nominal forecast start: 01/11/18
Ensemble size = 50, climate size = 720

DWD

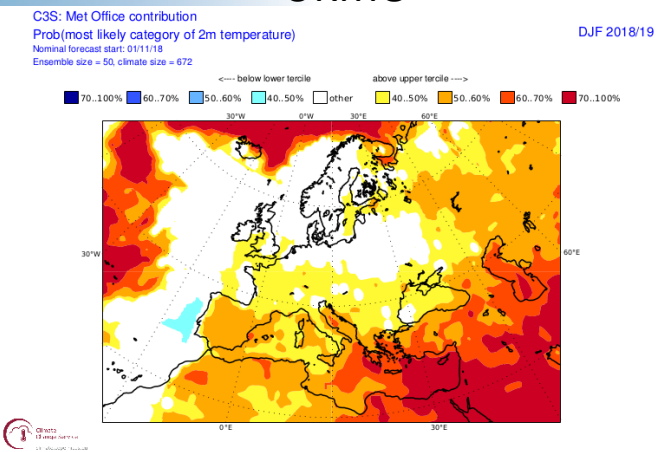
DJF 2018/19



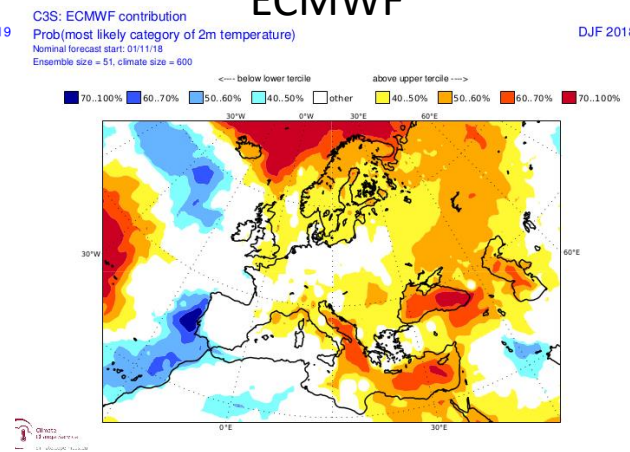
T2m-DJF from November 2018

Climate

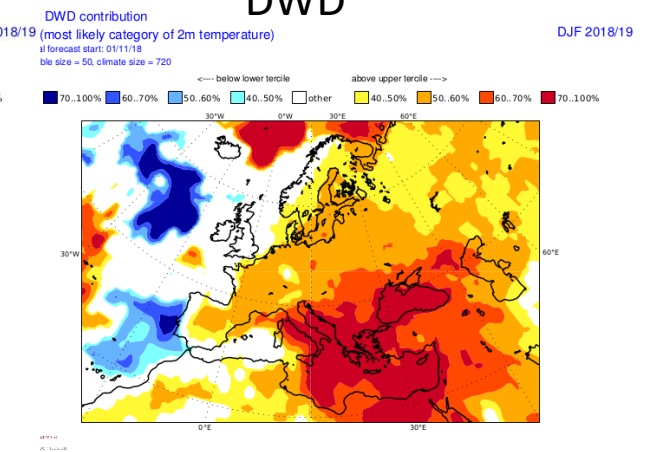
UKMO

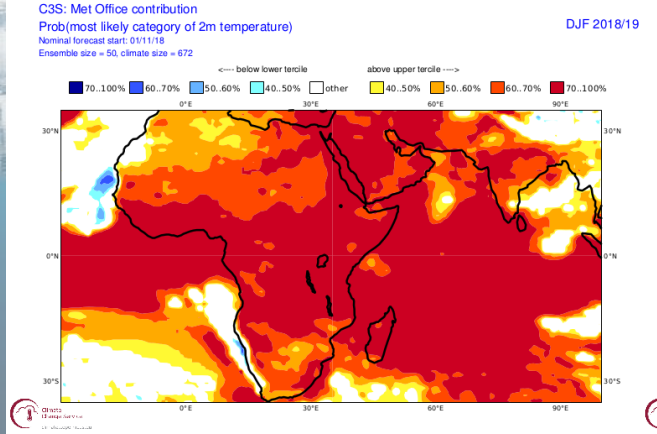


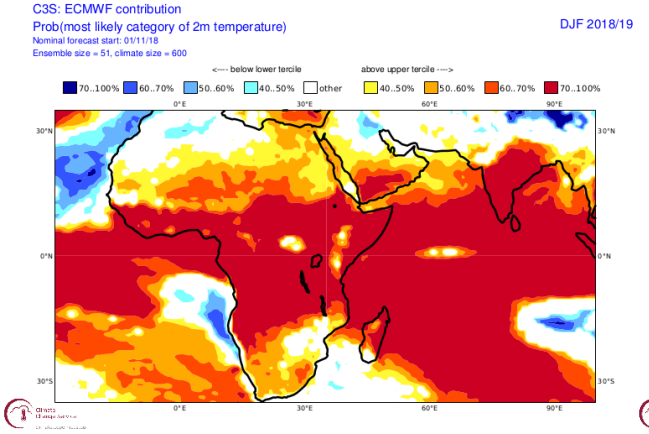
ECMWF

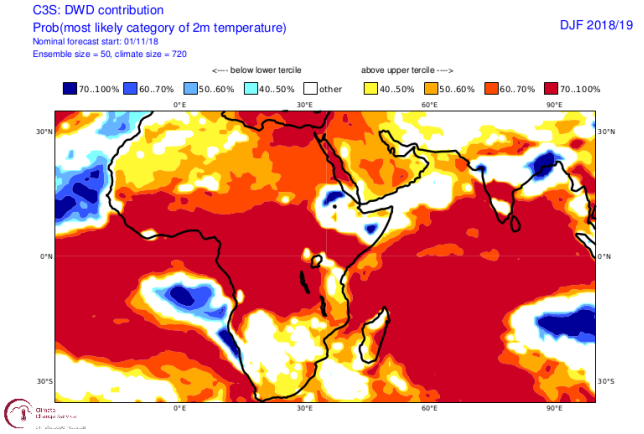


DWD





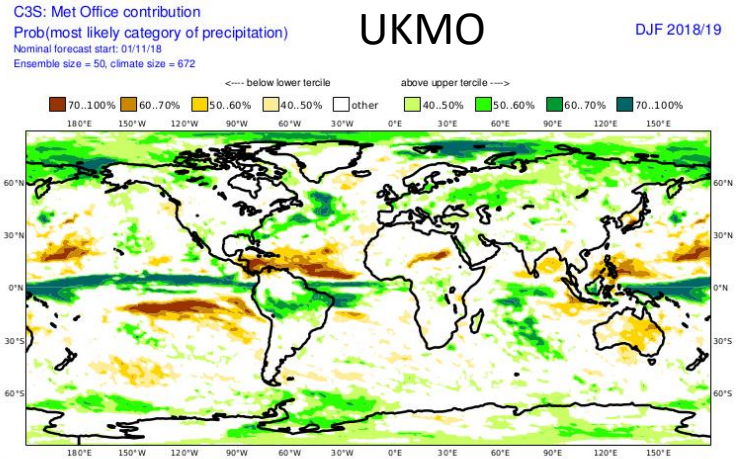




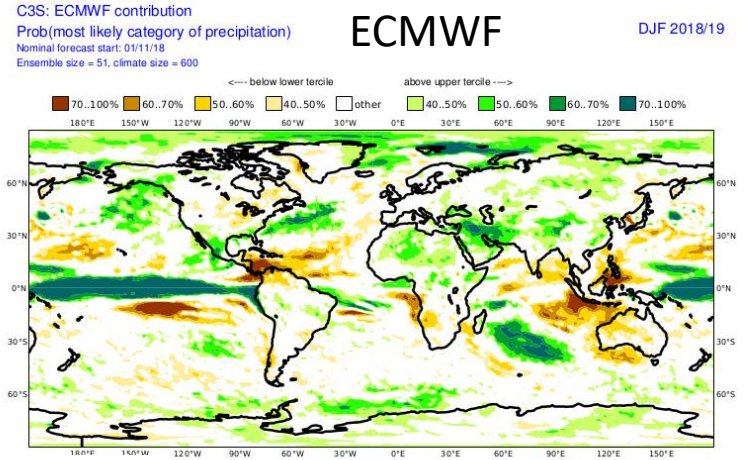
Precipitation-DJF from November 2018

Climate Change

UKMO



ECMWF



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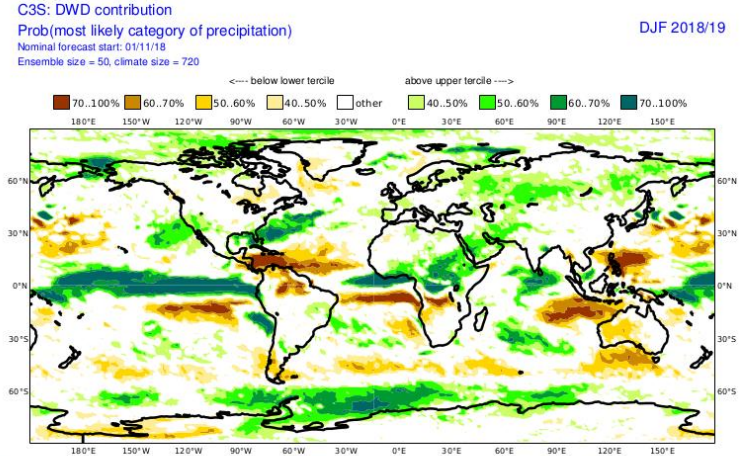

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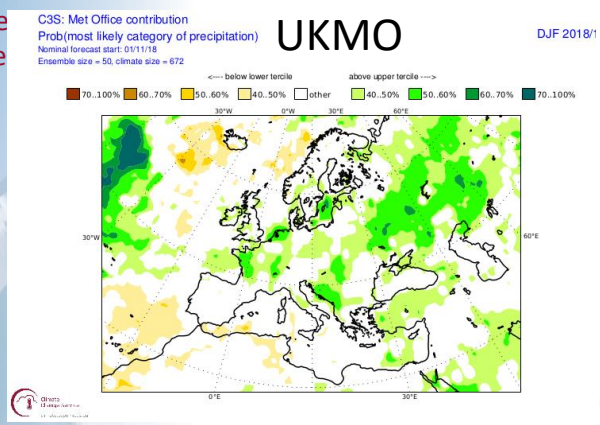
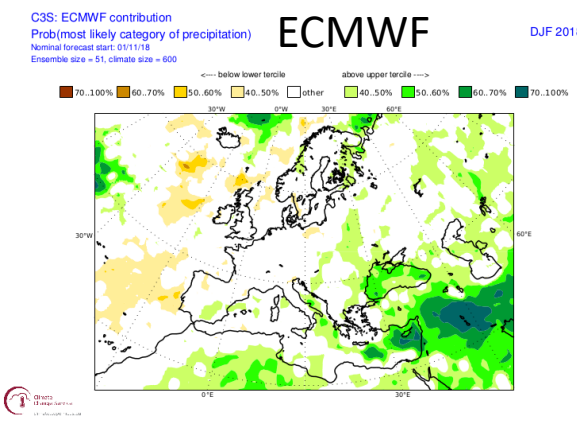
Precipitation - DJF from November 2018

Climate Change

UKMO



ECMWF



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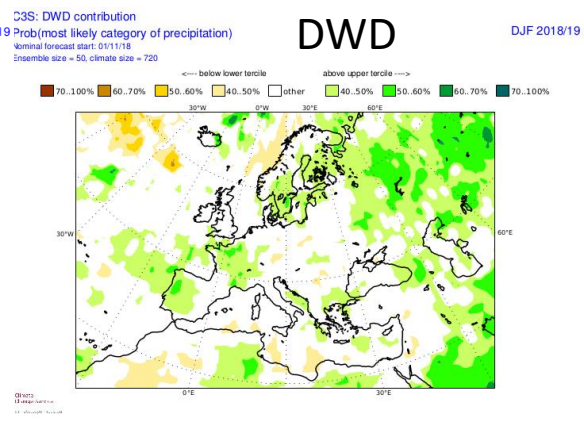

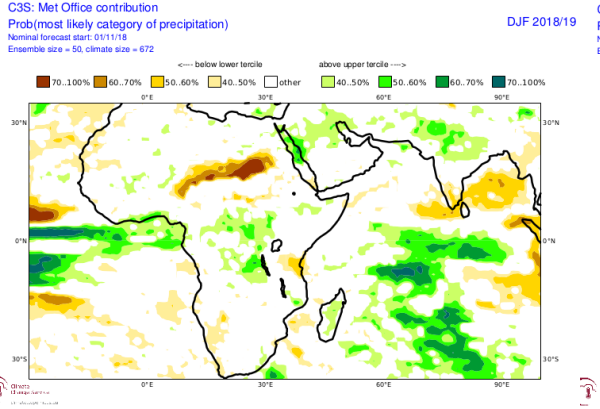

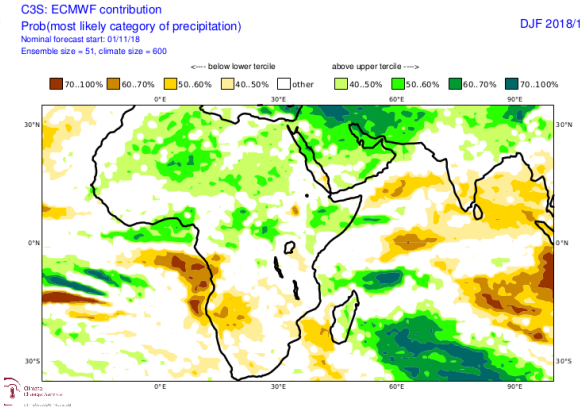

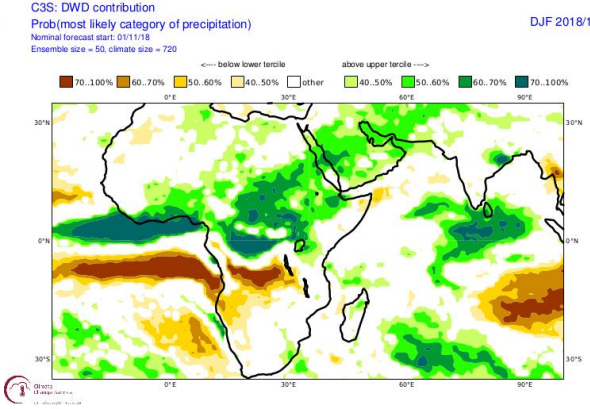

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Climate Change

Skill

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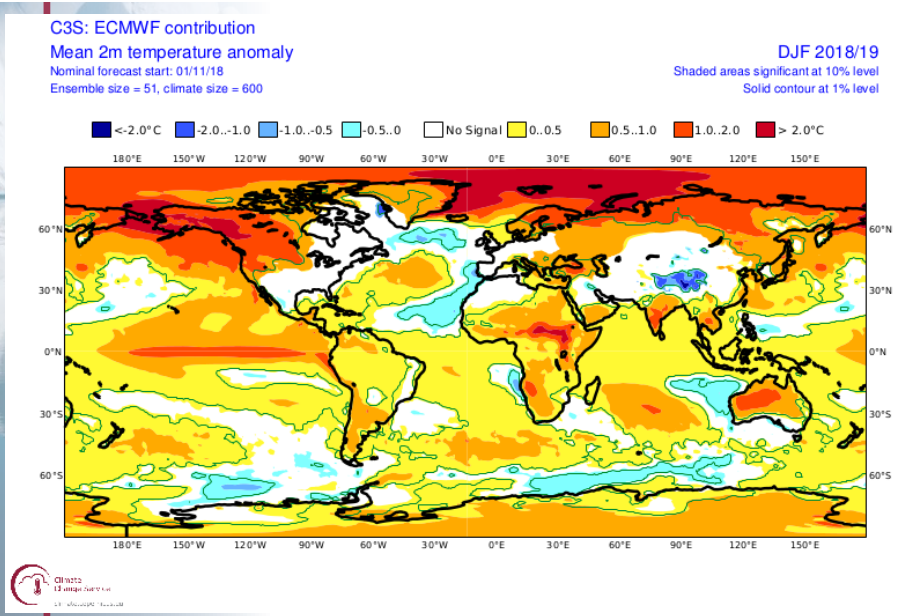
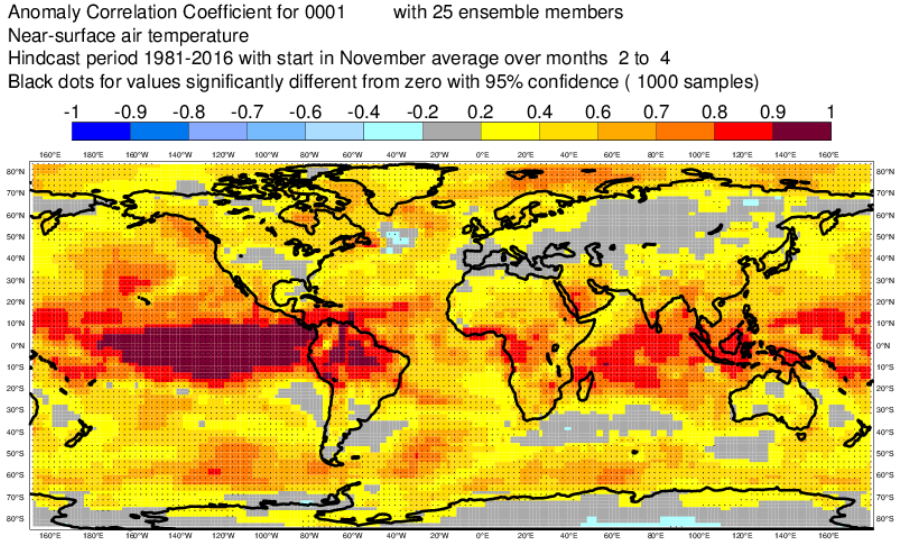
Climate Change

T 2 m - E C M W F

Ensemble mean - DJF from November 2018



Anomaly correlation - DJF from November



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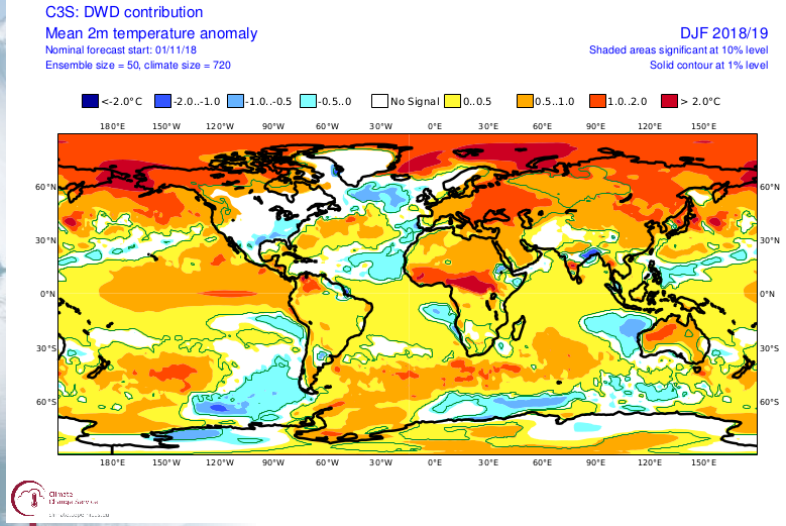
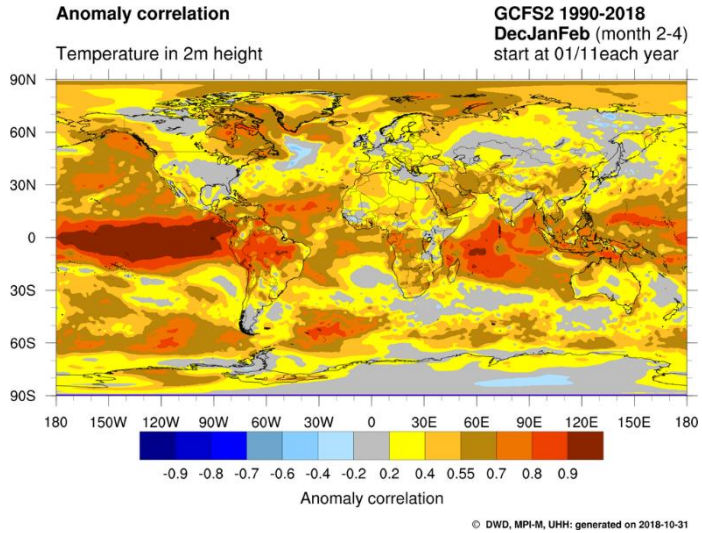
Climate Change

T 2 m - D W D

Ensemble mean - DJF from November 2018



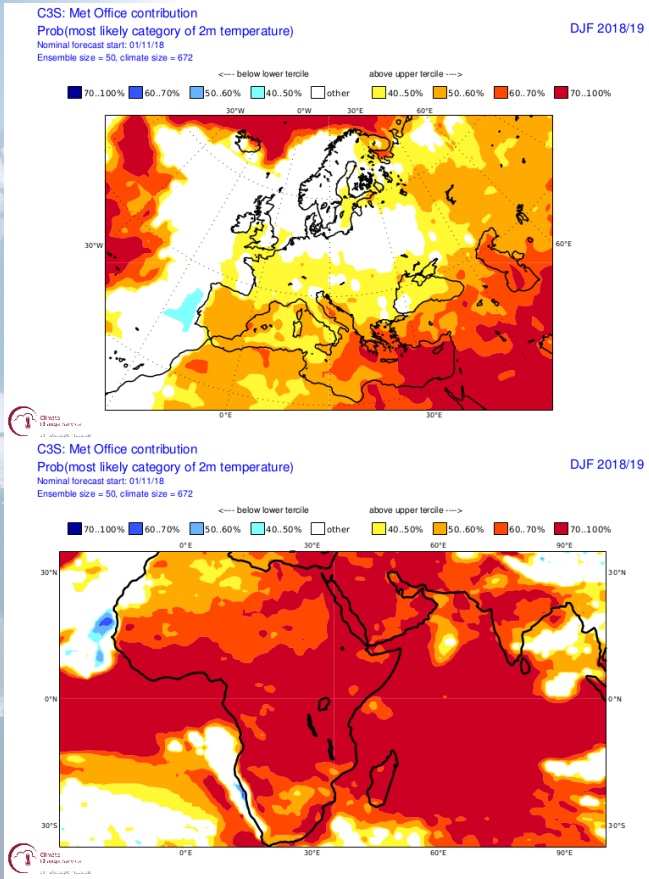
Anomaly correlation - DJF from November

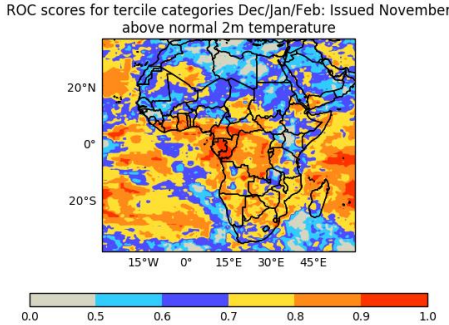


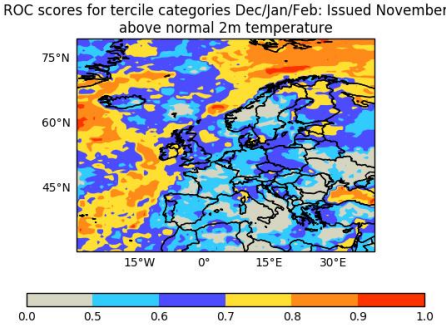
Climate Change

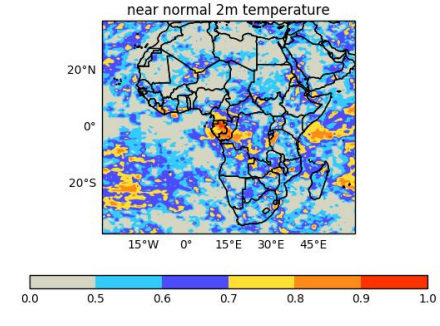
T 2 m - U K M O

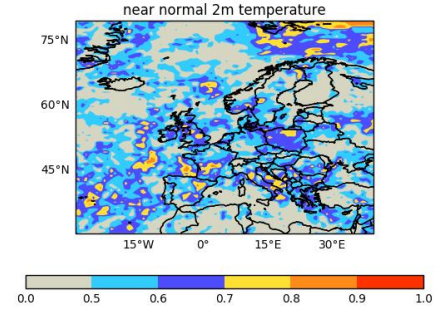
ROC area DJF from November

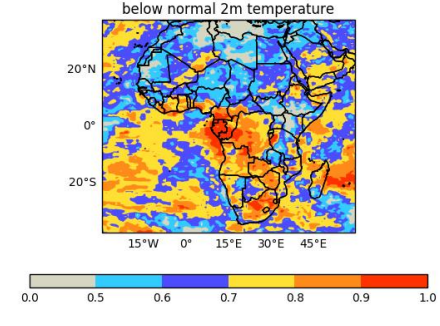


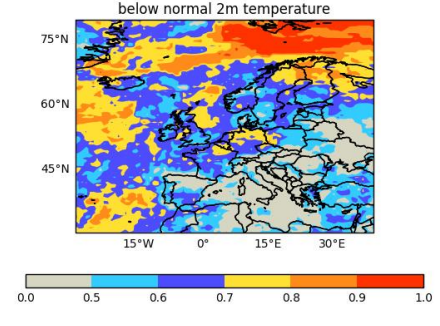








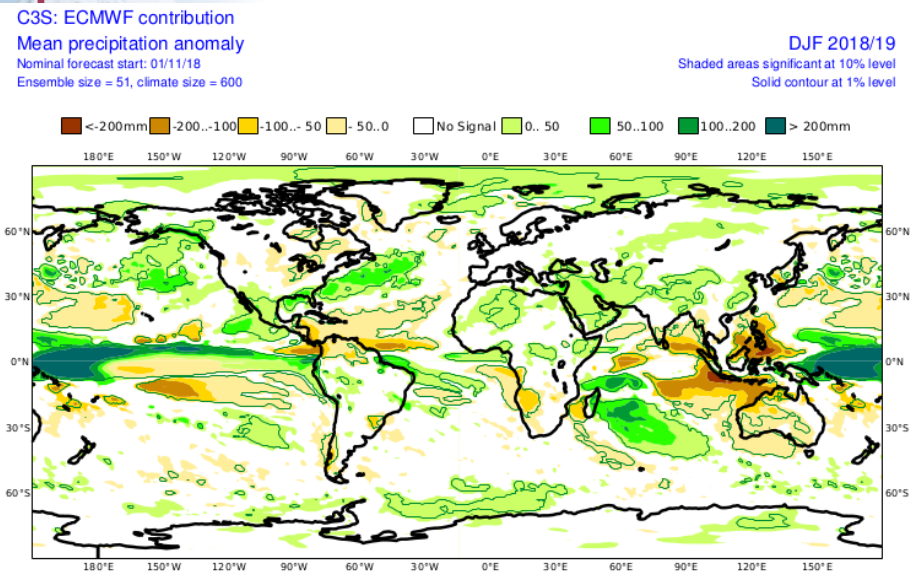




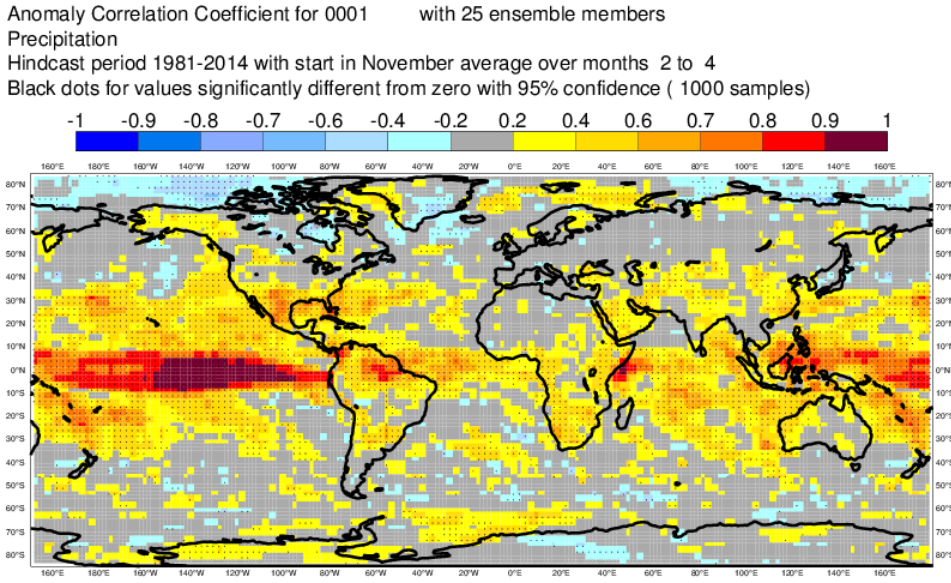
Climate Change

Precipitation - ECMWF

Ensemble mean - DJF from November 2017



Anomaly correlation - DJF from November



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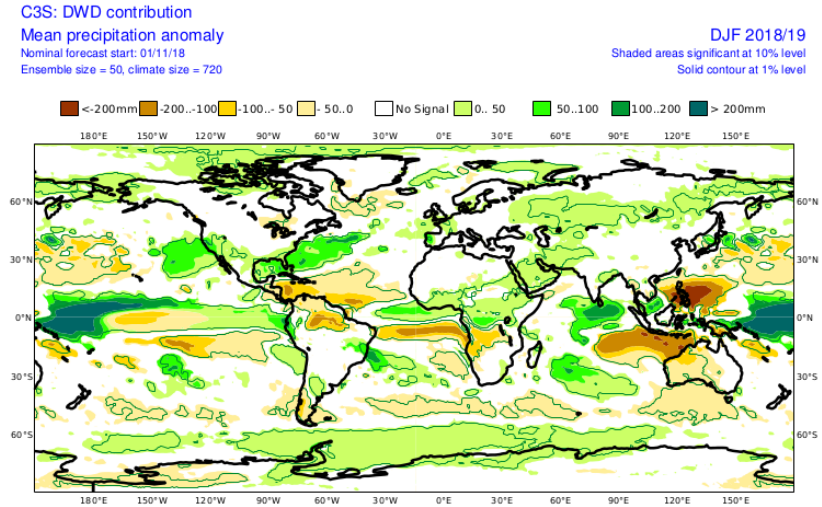
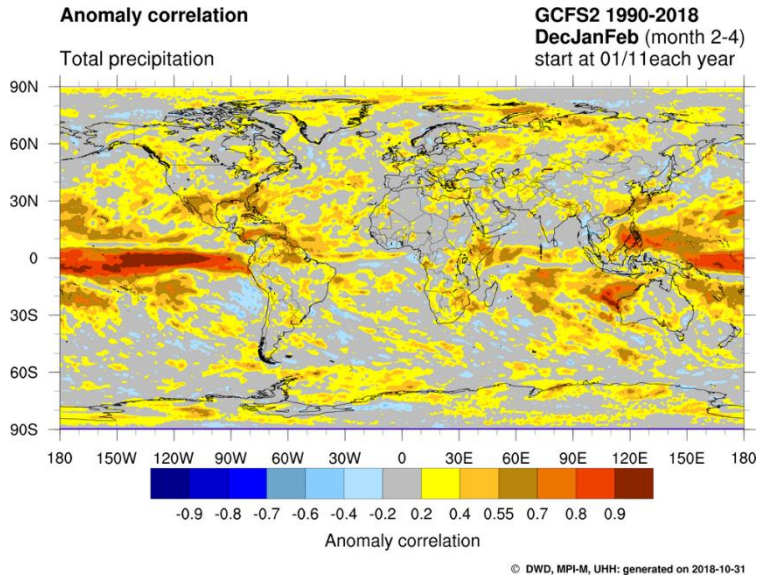
Climate Change

Precipitation - DWD

Ensemble mean - DJF from November 2018



Anomaly correlation - DJF from November



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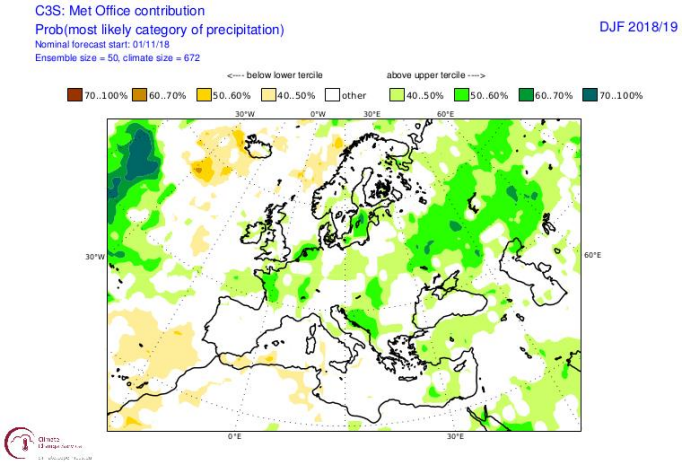
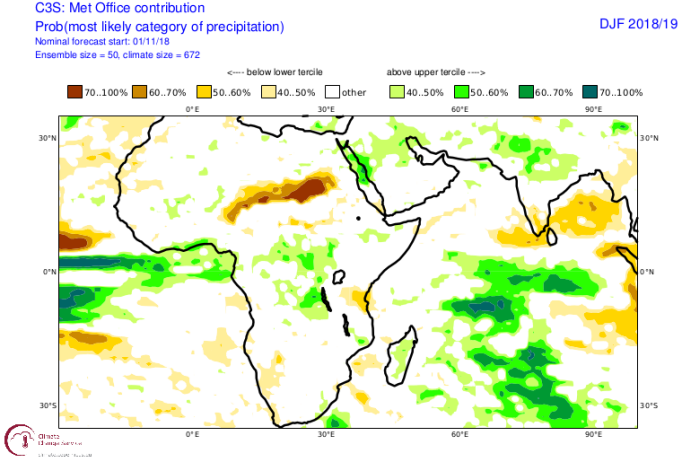
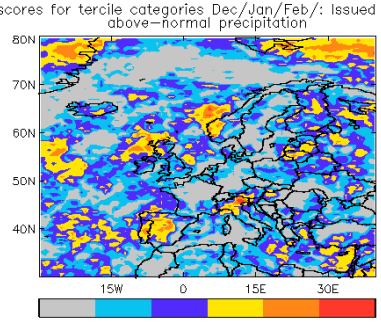
Precipitation - UKMO

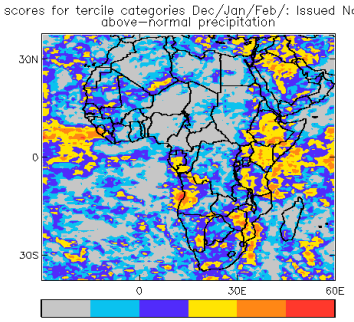
ROC area DJF from November

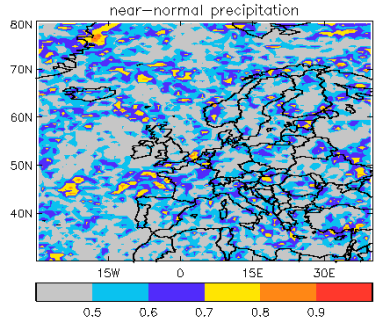


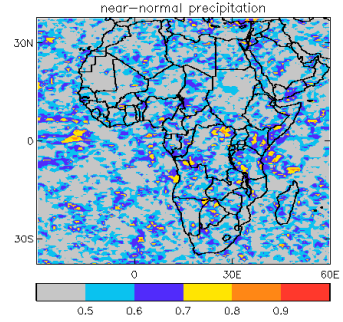


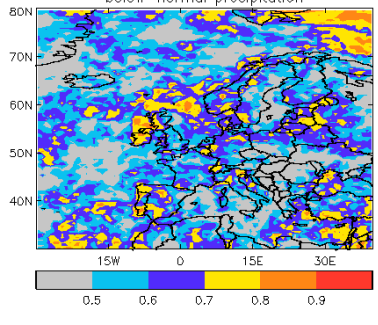
ROC scores for tercile categories Dec/Jan/Feb/: Issued November

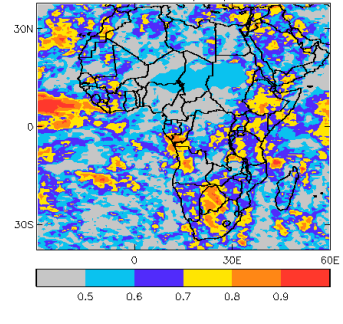








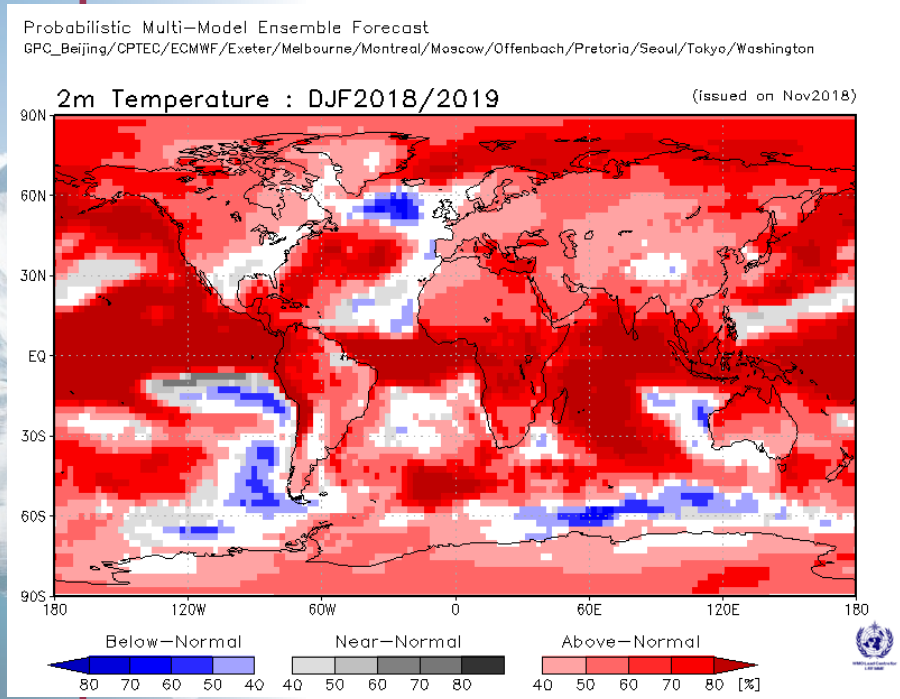


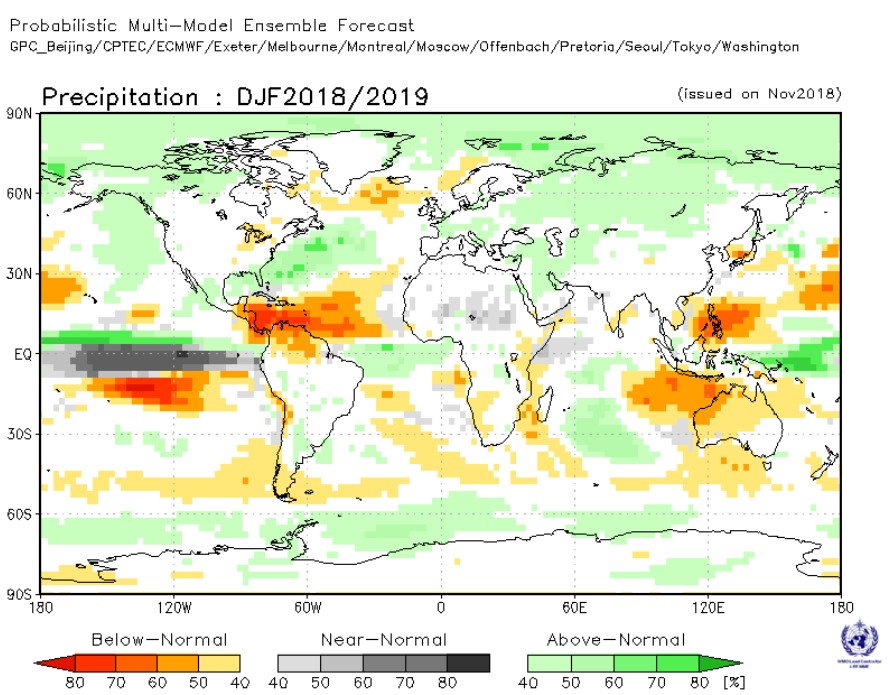


Thank you

Climate Change

Combination of 12 GPC forecasts





ECMWF Copernicus Europe's eyes on Earth European Commission

M S L P - E C M W F

Anomaly correlation - DJF from November

Anomaly Correlation Coefficient for 0001 with 25 ensemble members
Mean sea level pressure
Hindcast period 1981-2016 with start in November average over months 2 to 4
Black dots for values significantly different from zero with 95% confidence (1000 samples)