



Third Session of SOUTHEASTERN EUROPE CLIMATE OUTLOOK FORUM

SEEVCCC BULLETIN OF CLIMATE OUTLOOK FOR 2010 SUMMER SEASON FOR THE SEE REGION

The Republic Hydrometeorological Service of Serbia (RHMS of Serbia) regularly prepares seasonal forecast at the end of the second decade of the month. It is based on analysis of the map products of the following centers:

- European Center for Medium range Weather Forecast, Reading, UK;
- South East European Virtual Climate Change Center (SEEVCCC), Belgrade, Serbia;
- EUROSIP multi-model (ECMWF, Reading, UK; MetOffice, Exeter, UK; Meteo-France, Toulouse, France);
- International Research Institute, Columbia University, USA;

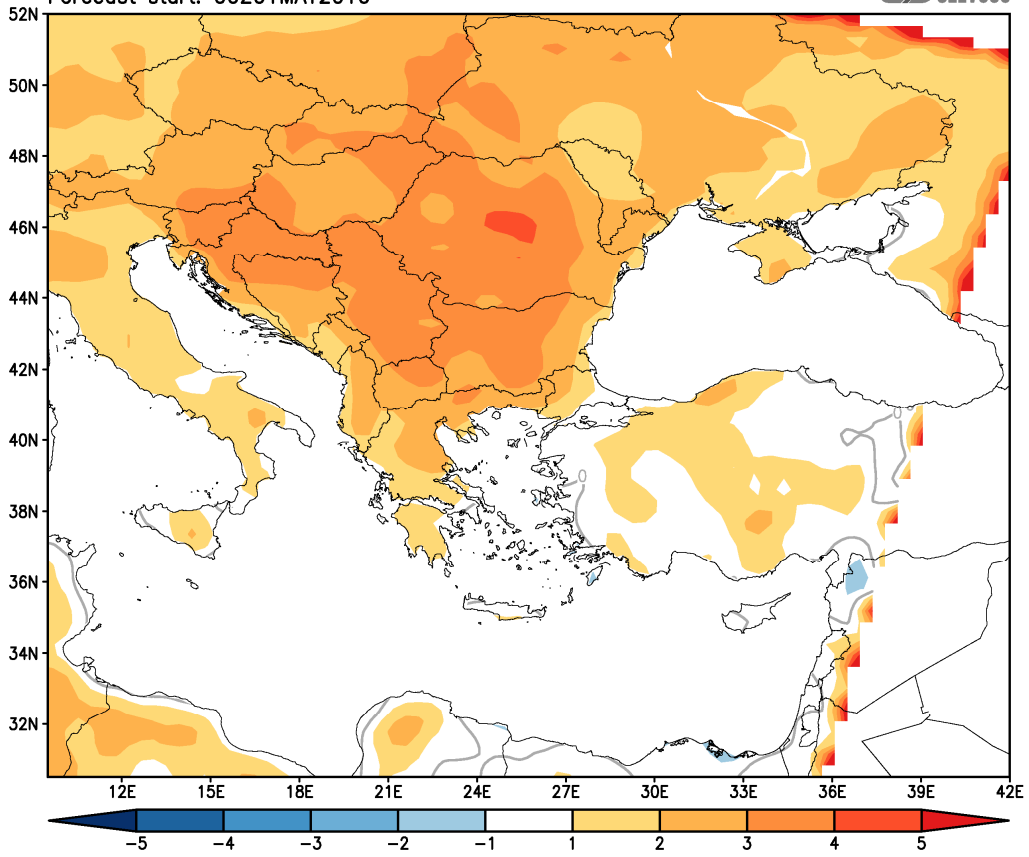
Since June 2009, results of the South East European Virtual Climate Change Center (SEEVCCC) regional numerical climate model for seasonal forecasts are available on the website of the Center.

CLIMATE OUTLOOK FOR 2010 SUMMER SEASON BASED ON RCM-SEEVCCC MODEL OUTPUTS FOR THE SEE REGION

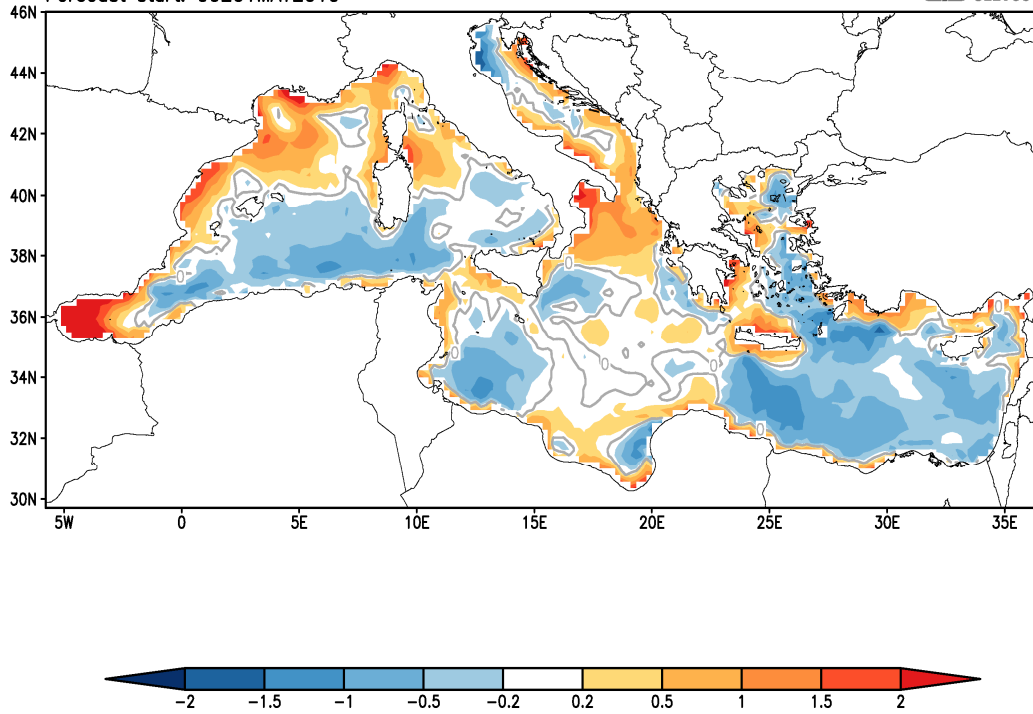
Summer season temperature anomaly will be positive in almost all parts of SEE region, except Cyprus and some parts of Greece (Athens region, Aegean sea islands, including Crete) and Turkey (Istanbul area, western, southern and north-eastern parts) where summer season temperature will be around mean values with respect to 1961-1990. The greatest positive anomaly, more than 3°C, is expected in Slovenia, Croatia, northern part of Bosnia and Herzegovina, Serbia, northern part of FYR Macedonia, eastern part of Hungary and most parts of Bulgaria and Romania.

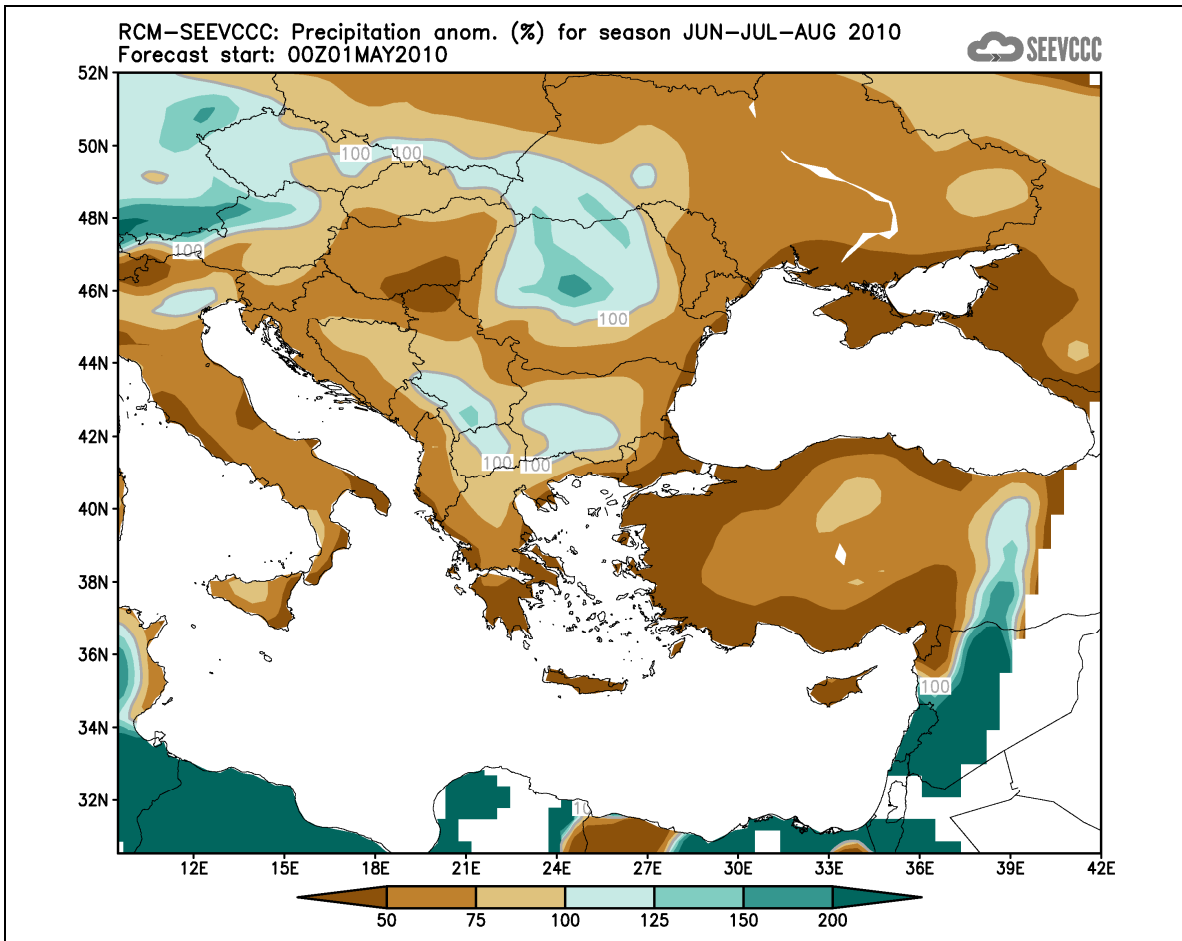
In the greater part of the SEE region summer season precipitations will be around mean values. Summer season precipitation surplus will appear only in the Carpathian region, in the mountain region of Serbia and in the south of Bulgaria. Deficit of precipitation will be in the Pannonian Basin, along the coasts of south Adriatic and Ionian Sea, in the central and eastern Mediterranean, in Turkey, in the Black Sea and belonging coasts.

RCM-SEEVCCC: Mean 2m temp. anom. (°C) for season JUN-JUL-AUG 2010
Forecast start: 00Z01MAY2010



RCM-SEEVCCC: Sea surface temp. anom. (°C) for season JUN-JUL-AUG 2010
Forecast start: 00Z01MAY2010





CLIMATE OUTLOOK FOR 2010 SUMMER SEASON BASED ON ECMWF SEASONAL FORECAST MODEL OUTPUTS FOR THE SEE REGION

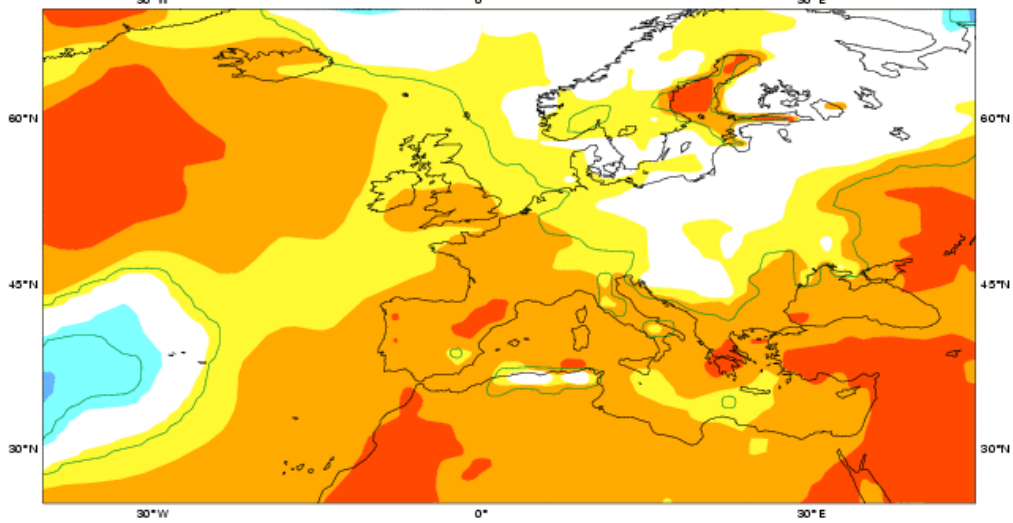
In greater part of the SEE region summer season temperature will be above normal. On the other side, in the west and central Balkan and Pannonian Basin, summer season temperature will be within normal range. Summer season precipitation in greater part of the SEE region will be within normal range; in the Adriatic Sea and in the west of the Balkan peninsula, it will be above normal, while in central and eastern Mediterranean, Aegean Sea and along the belonging coasts, in the central and eastern Greece, Turkey, eastern half of Bulgaria, eastern part of the Black Sea and belonging coasts and in the Caucasian region, it will be below normal.

ECMWF Seasonal Forecast
Mean 2m temperature anomaly

Forecast start reference is 01/05/10
Ensemble size = 41, climate size = 275

System 3
JJA 2010

Shaded areas significant at 10% level
Solid contour at 1% level



Forecast issue date: 15/05/2010

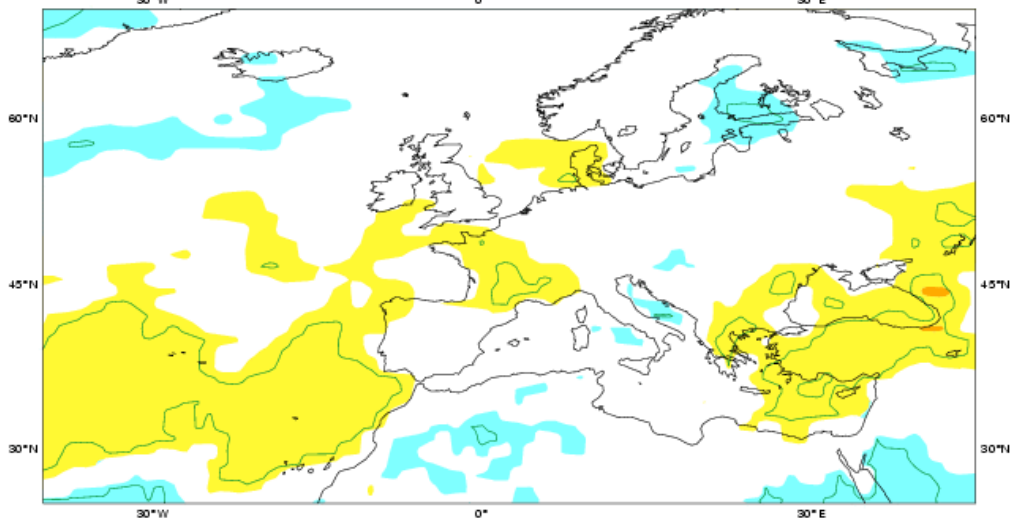
ECMWF

ECMWF Seasonal Forecast
Mean precipitation anomaly

Forecast start reference is 01/05/10
Ensemble size = 41, climate size = 275

System 3
JJA 2010

Shaded areas significant at 10% level
Solid contour at 1% level

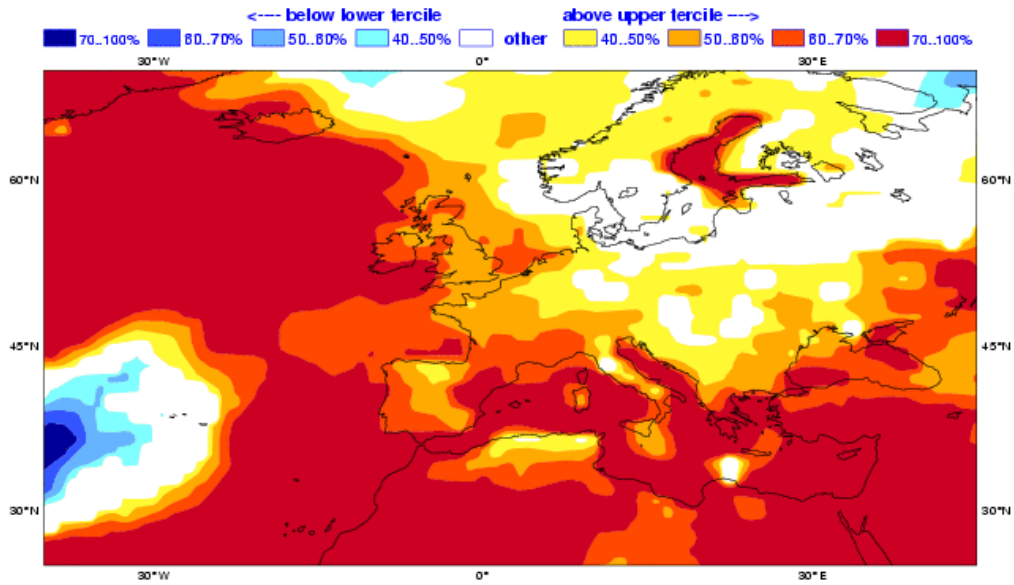


Forecast issue date: 15/05/2010

ECMWF

ECMWF Seasonal Forecast
Prob(most likely category of 2m temperature)
Forecast start reference is 01/05/10
Ensemble size = 41, climate size = 275

System 3
JJA 2010
No significance test applied

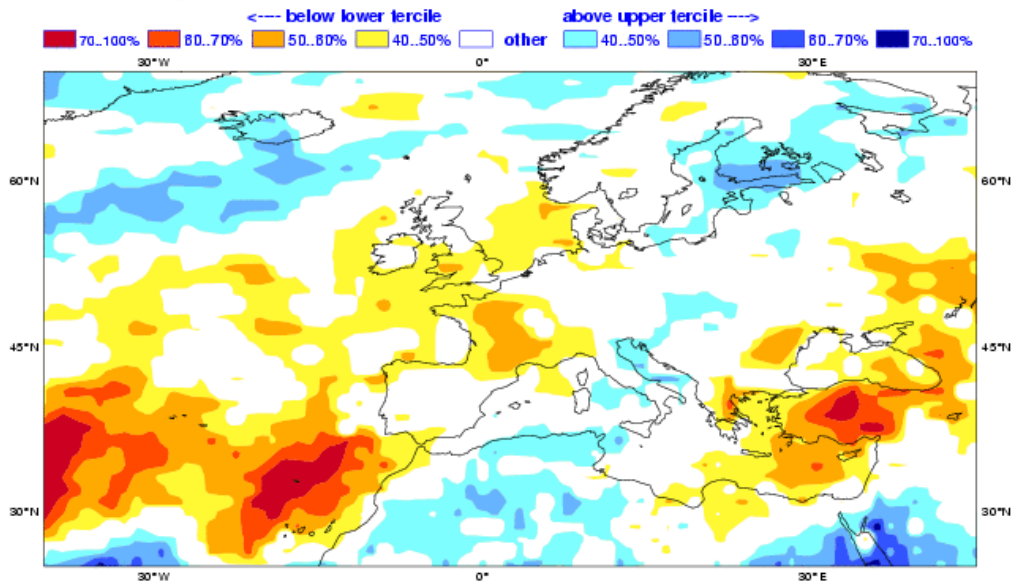


Forecast issue date: 15/05/2010



ECMWF Seasonal Forecast
Prob(most likely category of precipitation)
Forecast start reference is 01/05/10
Ensemble size = 41, climate size = 275

System 3
JJA 2010
No significance test applied

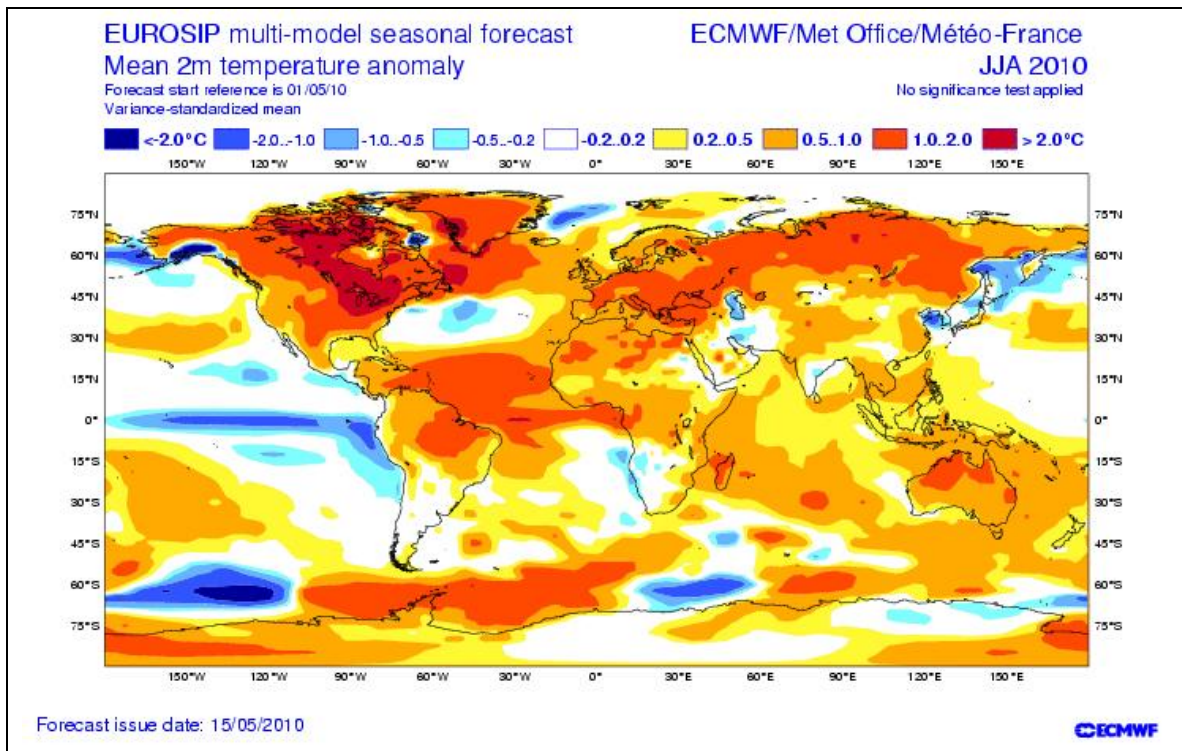


Forecast issue date: 15/05/2010



CLIMATE OUTLOOK FOR 2010 SUMMER SEASON BASED ON EUROSIP MULTI-MODEL SEASONAL FORECAST OUTPUTS FOR THE SEE REGION

In the whole SEE region summer season temperature will be above normal. Summer season precipitation in greater part of the SEE region will be within normal range; in the central and north part of the Adriatic Sea, in the west of the Balkan peninsula, in the south-east of Bulgaria, on northern slopes of Carpathian mountains, on the south-east coast of the Black Sea, on Cyprus and in the north-east of the Aegean Sea, it will be above normal, while in the south of the Balkan peninsula, on Crete, in central parts of Turkey and on the mountains along eastern coast of Eastern Mediterranean, it will be below normal.



EUROSIP multi-model seasonal forecast

ECMWF/Met Office/Météo-France

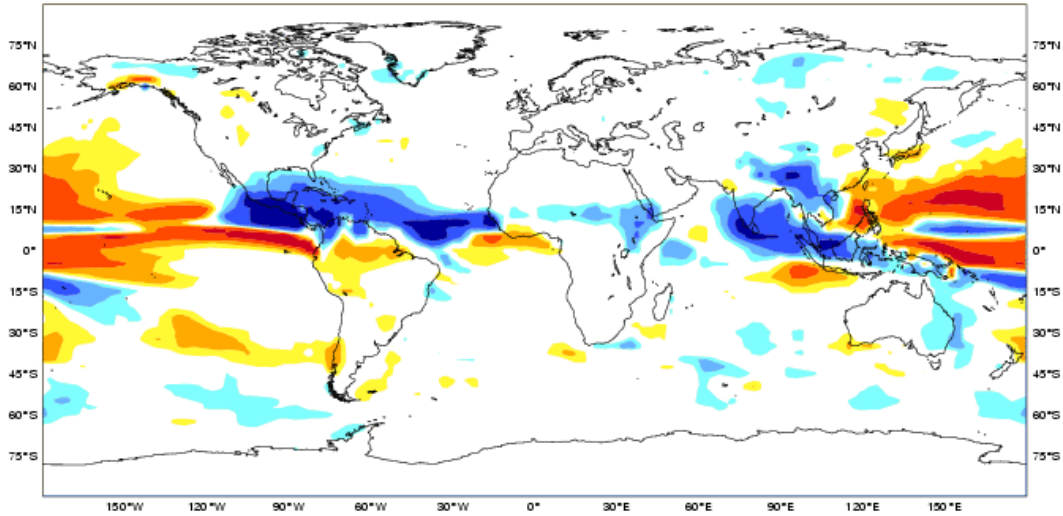
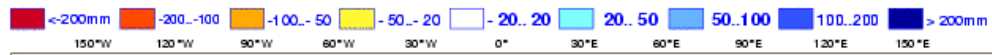
Mean precipitation anomaly

JJA 2010

Forecast start reference is 01/05/10

No significance test applied

Variance-standardized mean



Forecast issue date: 15/05/2010



EUROSIP multi-model seasonal forecast

ECMWF/Met Office/Météo-France

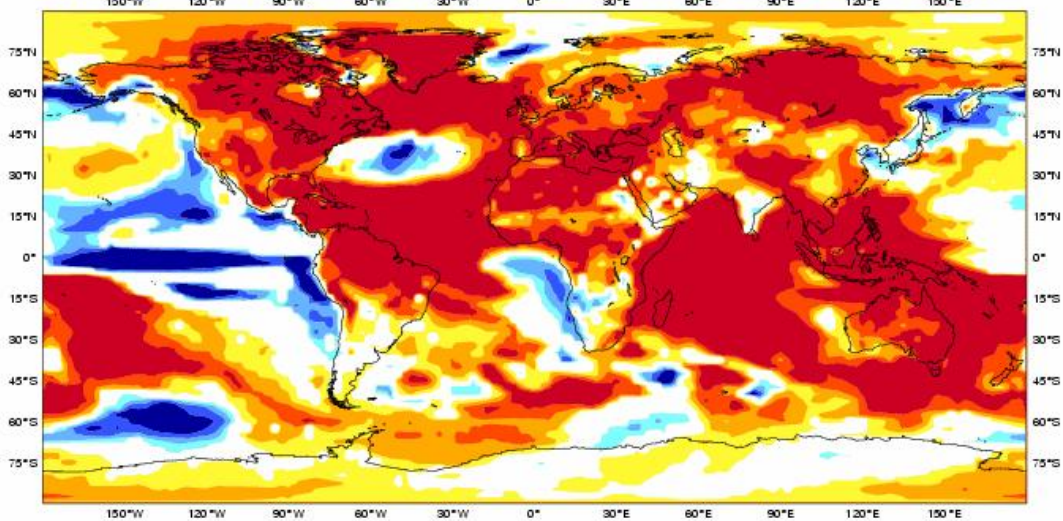
Prob(most likely category of 2m temperature)

JJA 2010

Forecast start reference is 01/05/10

No significance test applied

Unweighted mean

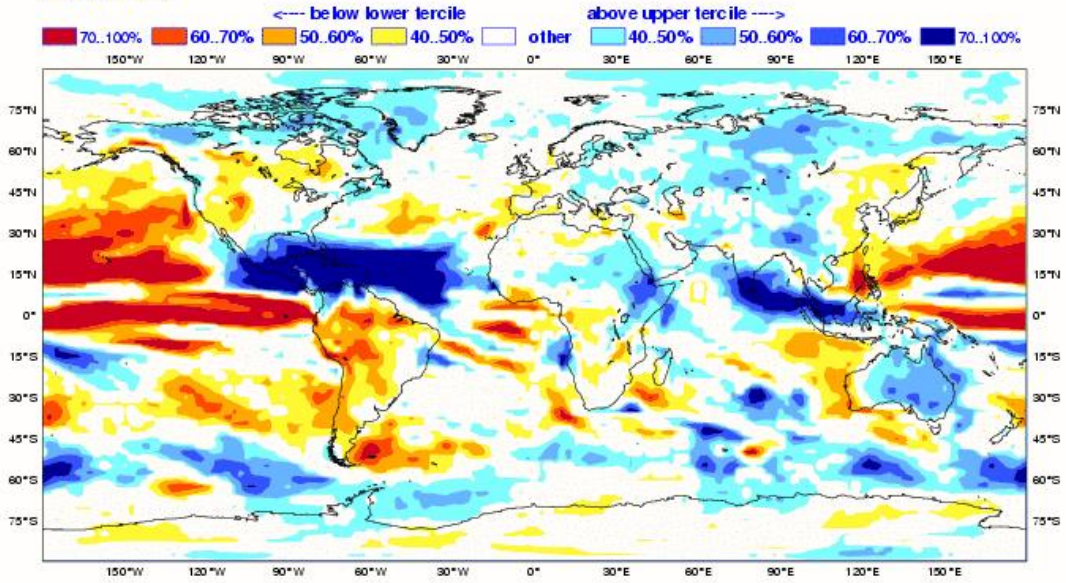


Forecast issue date: 15/05/2010



EUROSIP multi-model seasonal forecast
Prob(most likely category of precipitation)
Forecast start reference is 01/05/10
Unweighted mean

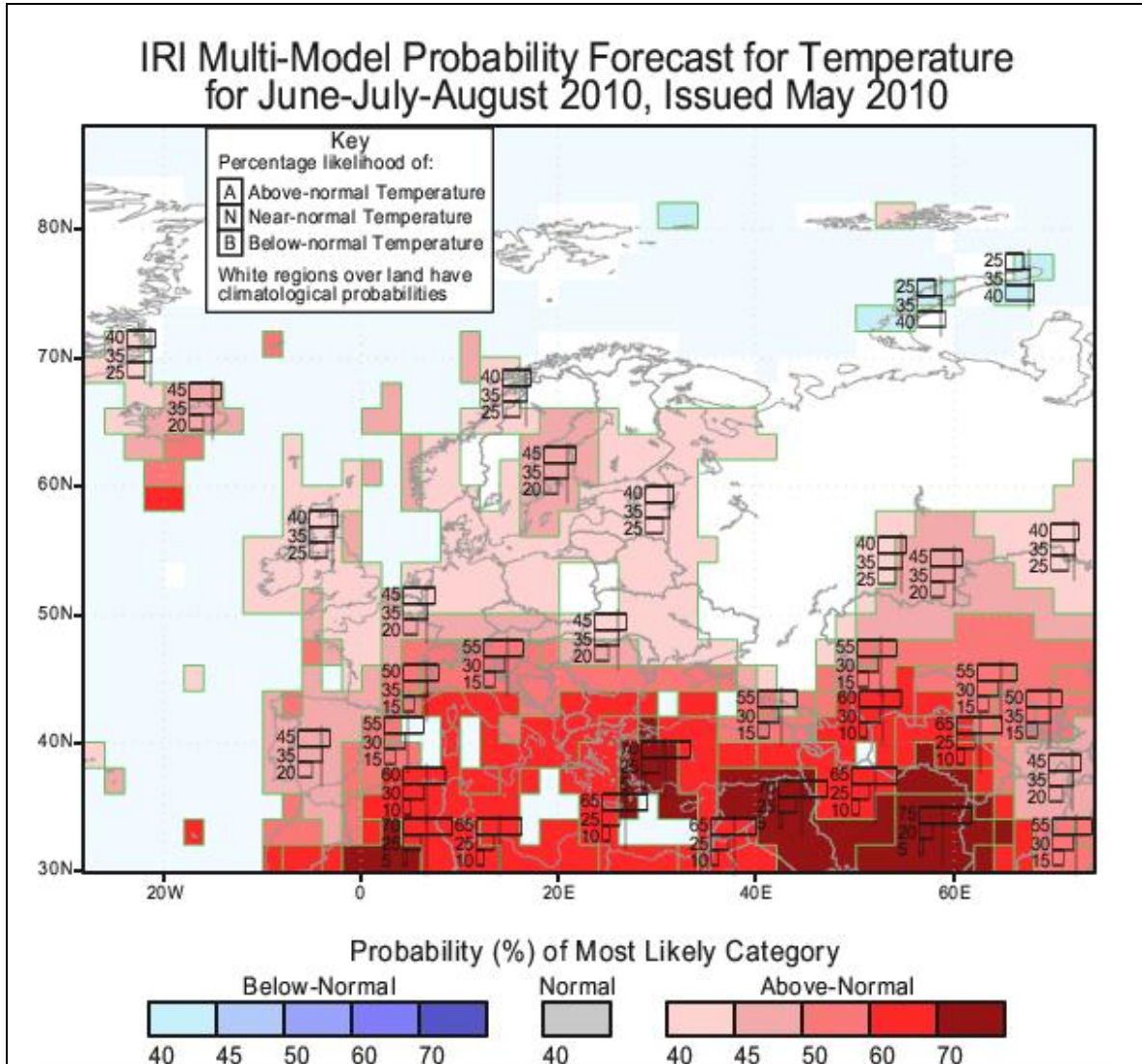
ECMWF/Met Office/Météo-France
JJA 2010
No significance test applied



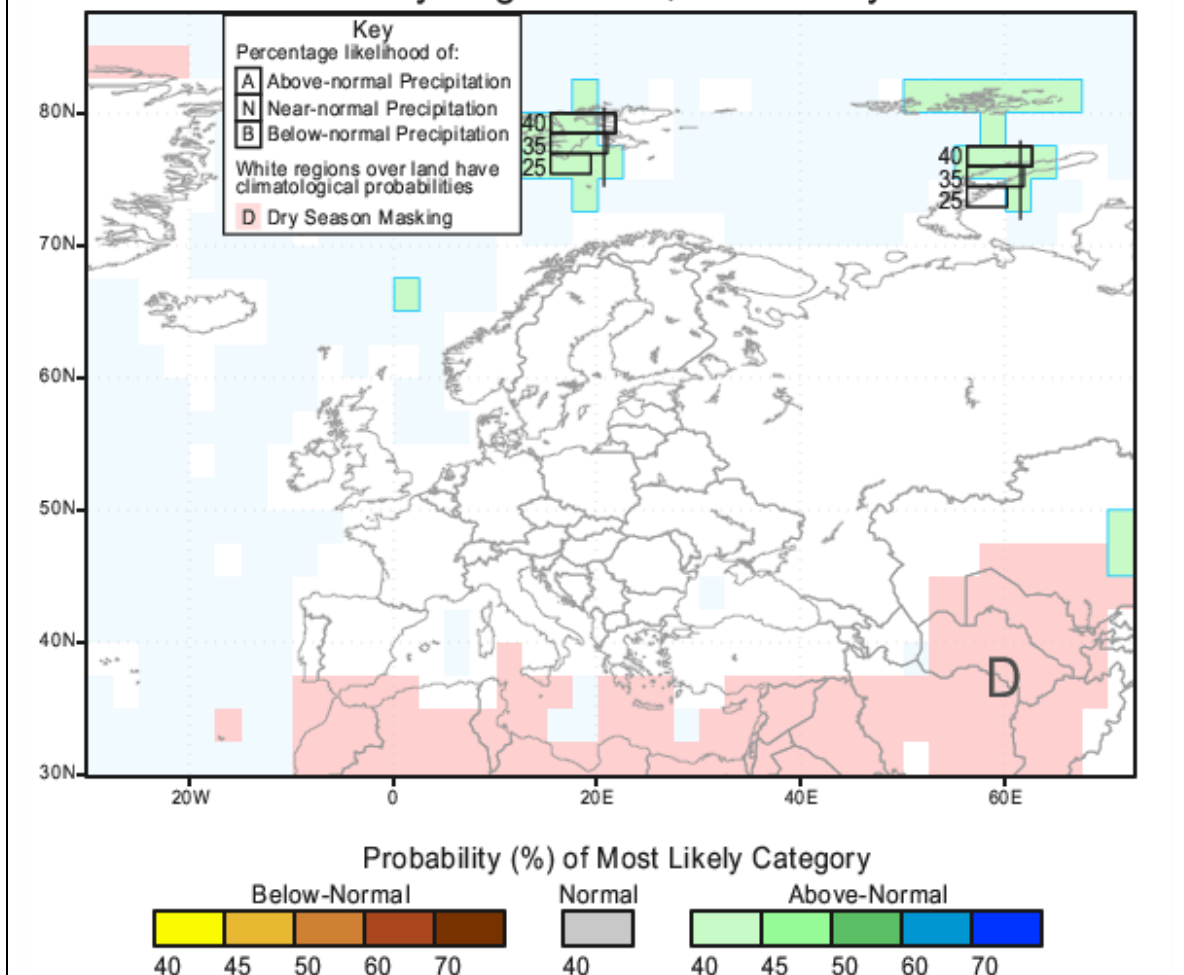
ECMWF

CLIMATE OUTLOOK FOR 2010 SUMMER SEASON BASED ON IRI MULTI-MODEL FORECASTS FOR SEE REGION

Most of the forecasting models indicate that summer season temperature will be above normal in the whole SEE region. In central and eastern Mediterranean, summer season precipitation will be below normal, while for the other parts of the SEE region, summer season precipitation will be within normal range.



IRI Multi-Model Probability Forecast for Precipitation for June-July-August 2010, Issued May 2010



SEEVCCC SUGGESTED CLIMATE OUTLOOK FOR SUMMER SEASON FOR SEE REGION

Summer season temperature anomaly will be positive in almost all parts of SEE region, except Cyprus and some parts of Greece (Athens region, Aegean sea islands, including Crete) and Turkey (Istanbul area, western, southern and north-eastern parts) where summer season temperature will be around mean values with respect to 1961-1990. The greatest positive anomaly, more than 3°C, is expected in Slovenia, Croatia, northern part of Bosnia and Herzegovina, Serbia, northern part of FYR Macedonia, eastern part of Hungary and most parts of Bulgaria and Romania.

In the greater part of the SEE region summer season precipitations will be around mean values. Summer season precipitation surplus will appear only in the Carpathian region, in the mountain region of Serbia and in the south of Bulgaria. Deficit of precipitation will be in the Pannonian Basin, along the coasts of south Adriatic and Ionian Sea, in the central and eastern Mediterranean, in Turkey, in the Black Sea and belonging coasts.