

RHMS/SEEVCCC seasonal outlook for DJF 2010/2011

Dragan Mihić and Jasminka Smailagić

Goran Pejanović, Miroslava Mihajlović, Tatjana Savić, Marija Miladinović

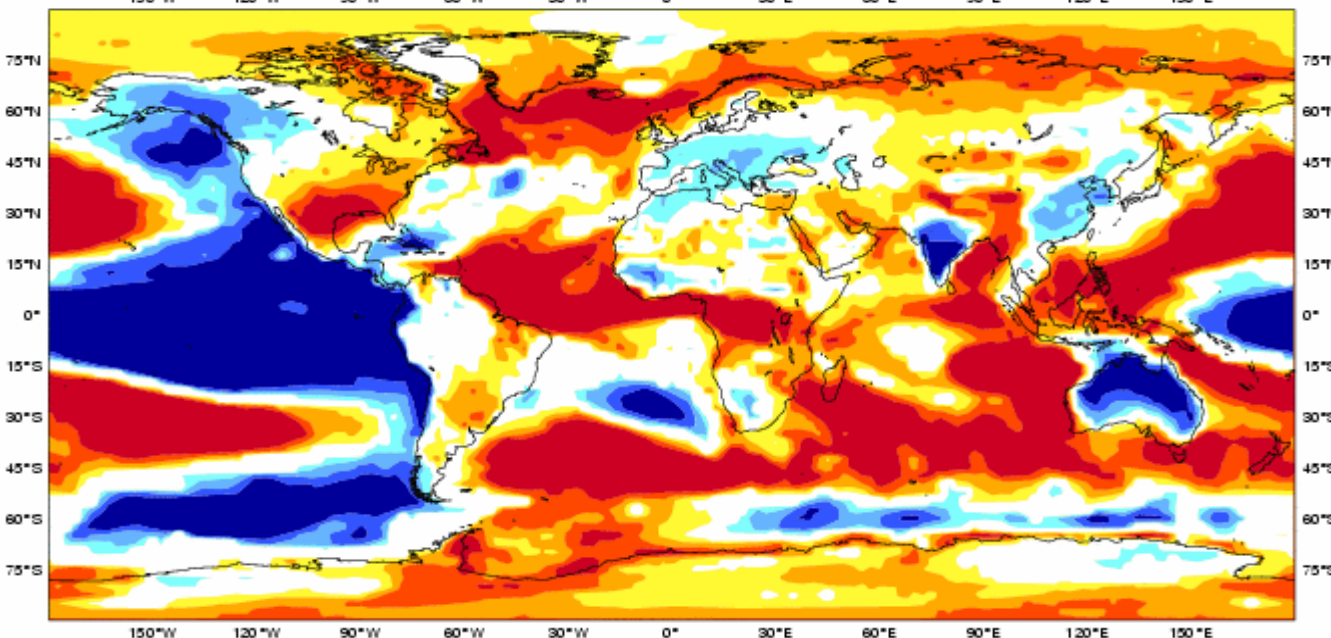
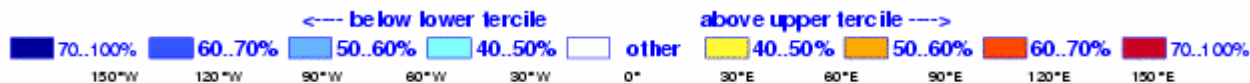
Products used for Winter Season 2010/2011 Climate Outlook

- ECMWF - seasonal products
- EUROSIP – multi-model seasonal products
- IRI – maps of multi-model probability forecast
- RCM-SEEVCCC - seasonal products

Forecasted temperature anomalies DJF 2010/2011 - EUROSIP

EUROSIP multi-model seasonal forecast
Prob(most likely category of 2m temperature)
Forecast start reference is 01/11/10
Unweighted mean

ECMWF/Met Office/Météo-France
DJF 2010/11
No significance test applied



- Below normal temperature deviations in Serbia

- Also in most of SEECOF region, normal in Caucasus region and eastern Turkey

Forecast issue date: 15/11/2010



Forecasted temperature anomalies DJF 2010/2011 - ECMWF

ECMWF Seasonal Forecast

Mean 2m temperature anomaly

Forecast start reference is 01/11/10

Ensemble size = 41, climate size = 275

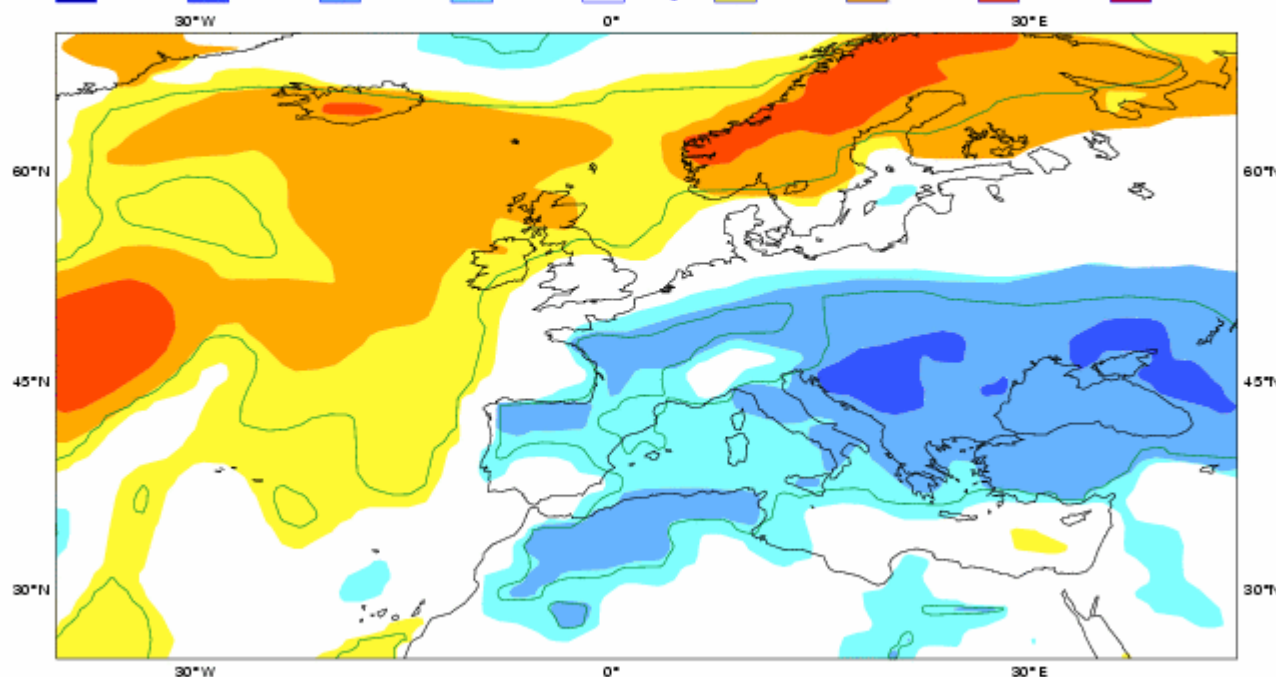
■ <-2.0°C
 ■ -2.0..-1.0
 ■ -1.0..-0.5
 ■ -0.5..0
 ■ No Signal
 ■ 0..0.5
 ■ 0.5..1.0
 ■ 1.0..2.0
 ■ > 2.0°C

System 3

DJF 2010/11

Shaded areas significant at 10% level

Solid contour at 1% level



- Below normal, stronger signal in north and central Serbia

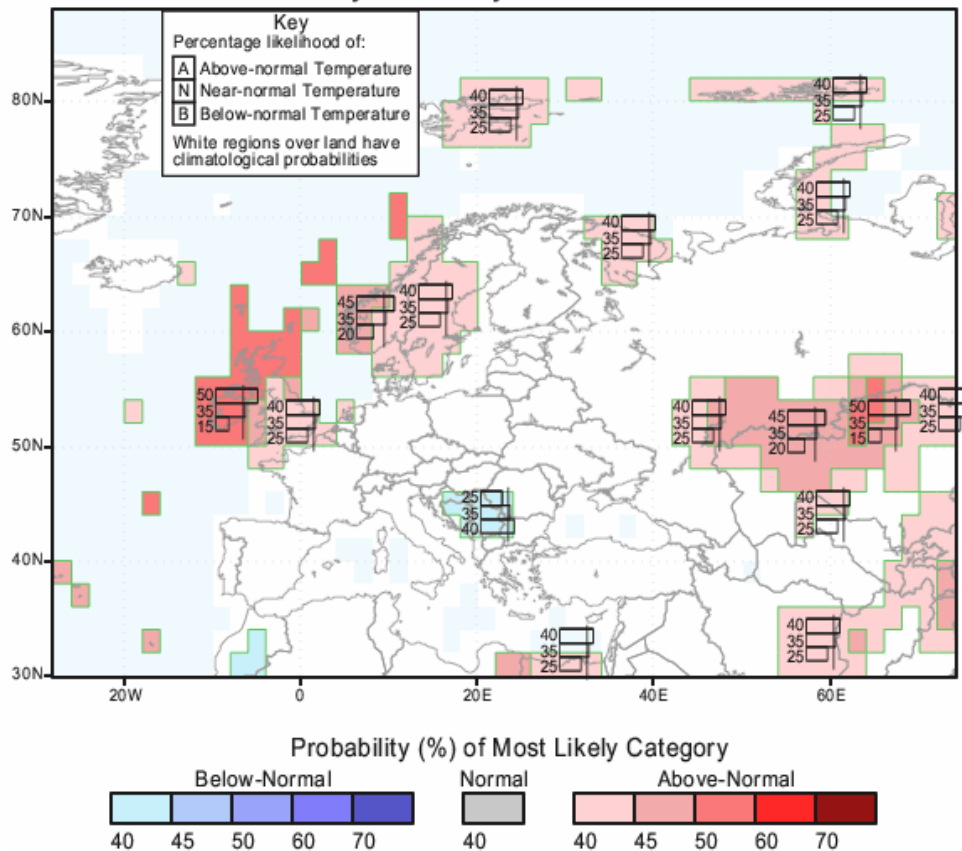
- Negative temperature deviations almost all over SEECOF region

Forecast issue date: 15/11/2010

ECMWF

Forecasted temperature probabilities DJF 2010/2011 - IRI

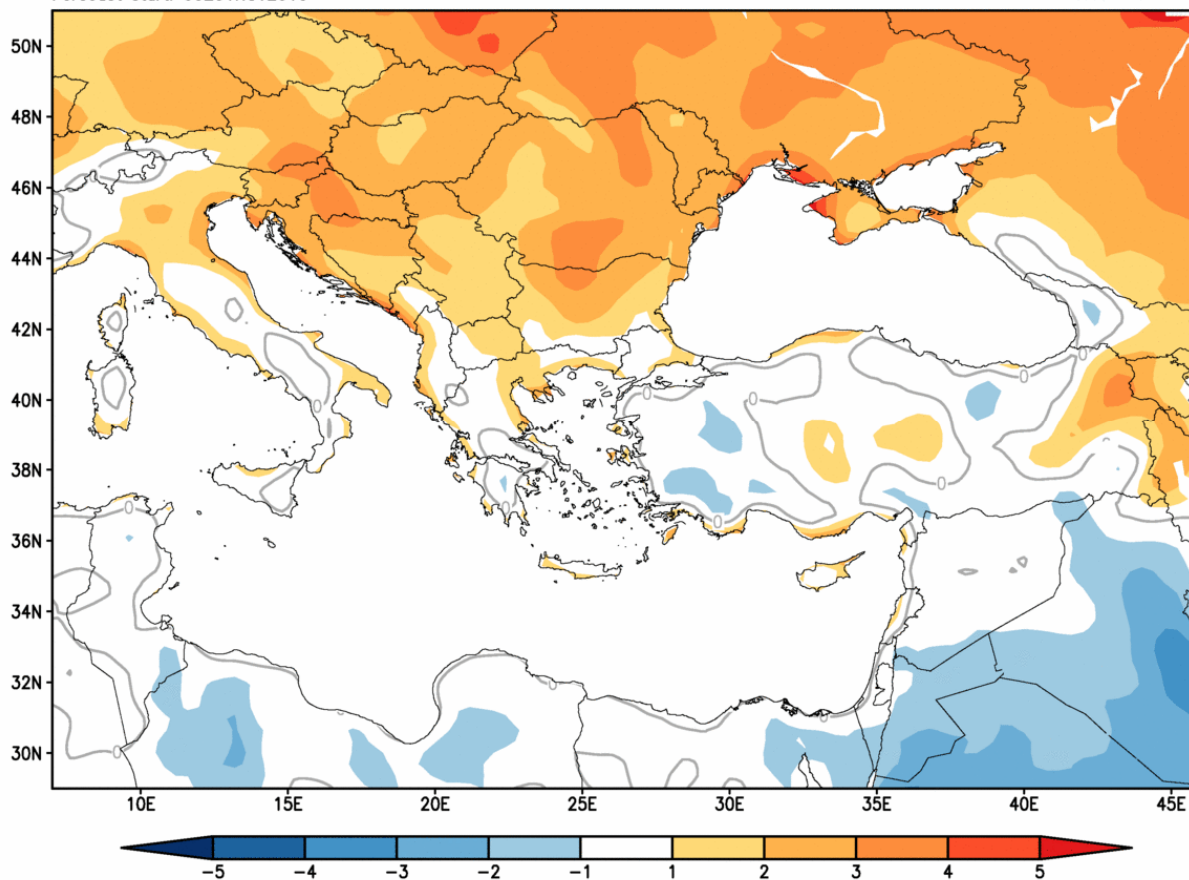
IRI Multi-Model Probability Forecast for Temperature
for December-January-February 2011, Issued November 2010



- Below normal temperatures in Serbia
- Within normal domain in almost all other parts of SEECOF region

Forecasted temperature anomalies DJF 2010/2011 - RCM-SEEVCCC

RCM-SEEVCCC: Mean 2m temp. anom. (°C) for season DEC-JAN-FEB 2010
Forecast start: 00Z01NOV2010



- Above normal temperatures in Serbia
- Positive anomalies, except south Balkan, Turkey, Israel and western Georgia

SEECOF - 4

22-26 November 2010, Belgrade

Forecasted precipitation anomalies DJF 2010/2011 - EUROSIP

EUROSIP multi-model seasonal forecast

ECMWF/Met Office/Météo-France

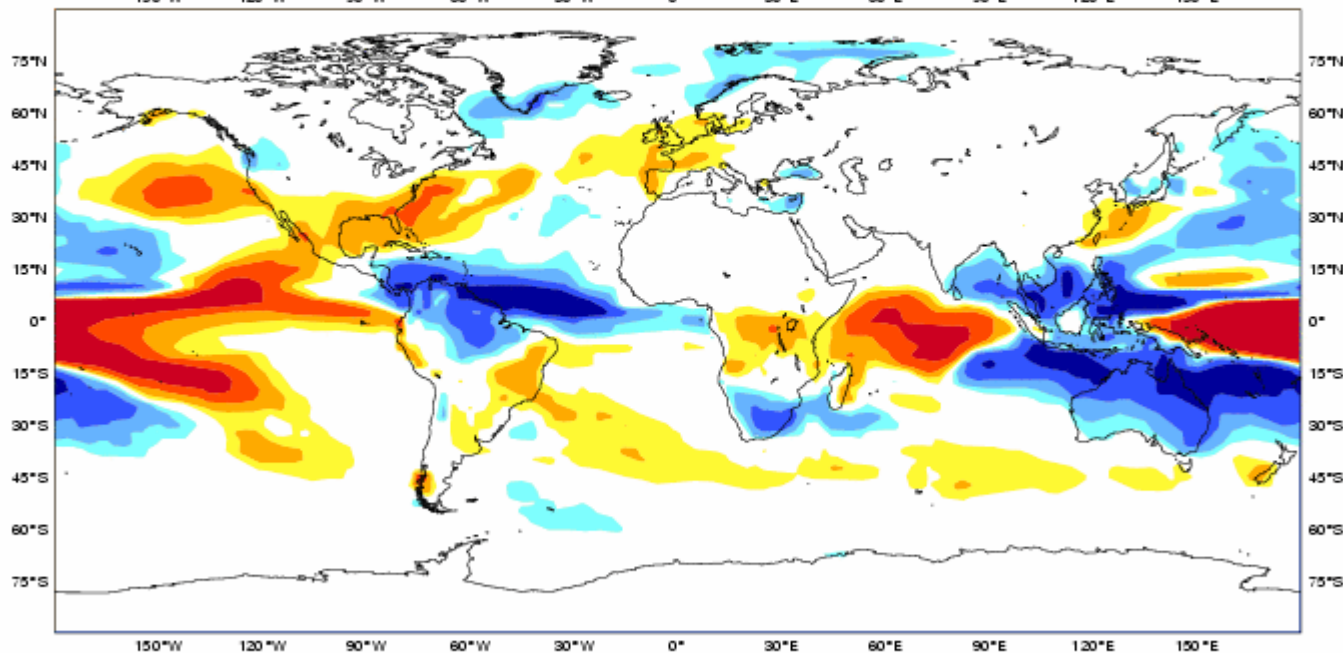
Mean precipitation anomaly

DJF 2010/11

Forecast start reference is 01/11/10

No significance test applied

Variance-standardized mean



- In whole SEECOF region except Cyprus precipitations around normal values.

Forecast issue date: 15/11/2010

ECMWF

Forecasted precipitation anomalies

DJF 2010/2011 - ECMWF

ECMWF Seasonal Forecast

Prob(most likely category of precipitation)

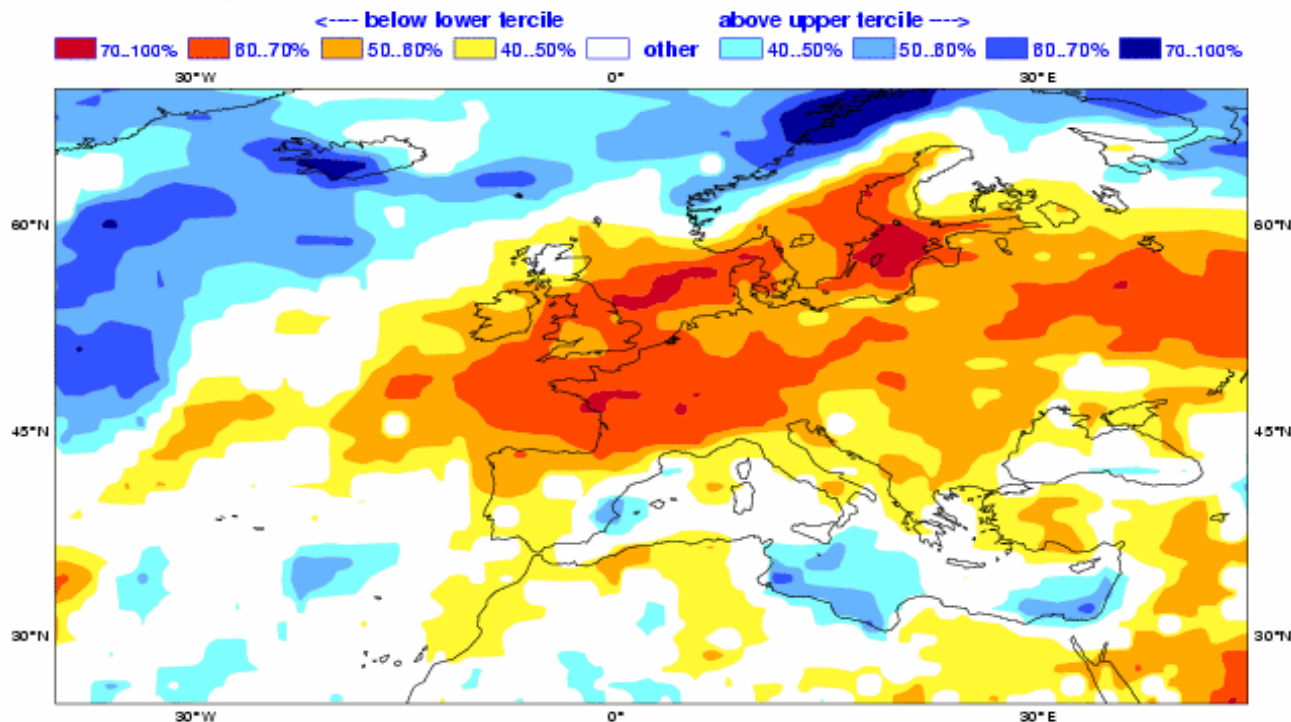
Forecast start reference is 01/11/10

Ensemble size = 41, climate size = 275

System 3

DJF 2010/11

No significance test applied



- Deficit of rainfall in large parts of the SEECOF region except western Balkans, central Turkey and the Caucasus region (normal)

Forecast issue date: 15/11/2010



Forecasted precipitation anomalies DJF 2010/2011 - ECMWF

ECMWF Seasonal Forecast

Mean precipitation anomaly

Forecast start reference is 01/11/10

Ensemble size = 41, climate size = 275

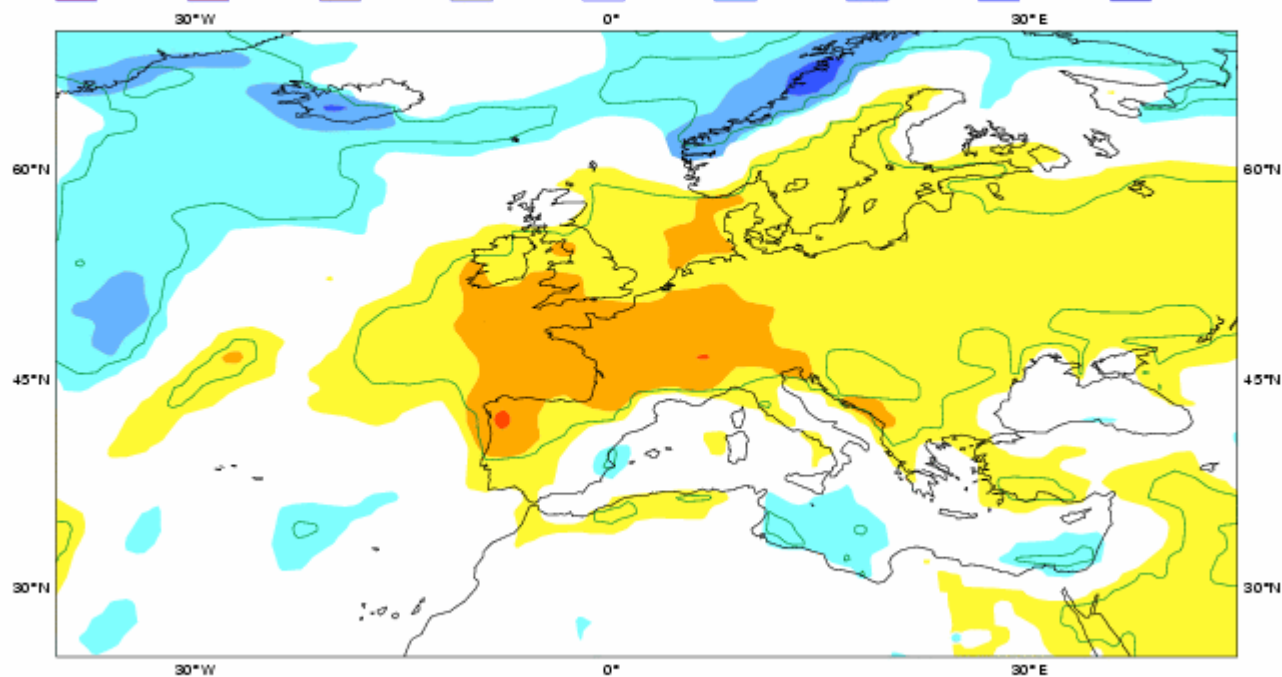
■ <-200mm
 ■ -200..-100
 ■ -100..- 50
 ■ - 50..0
 ■ No Signal
 ■ 0.. 50
 ■ 50..100
 ■ 100..200
 ■ > 200mm

System 3

DJF 2010/11

Shaded areas significant at 10% level

Solid contour at 1% level

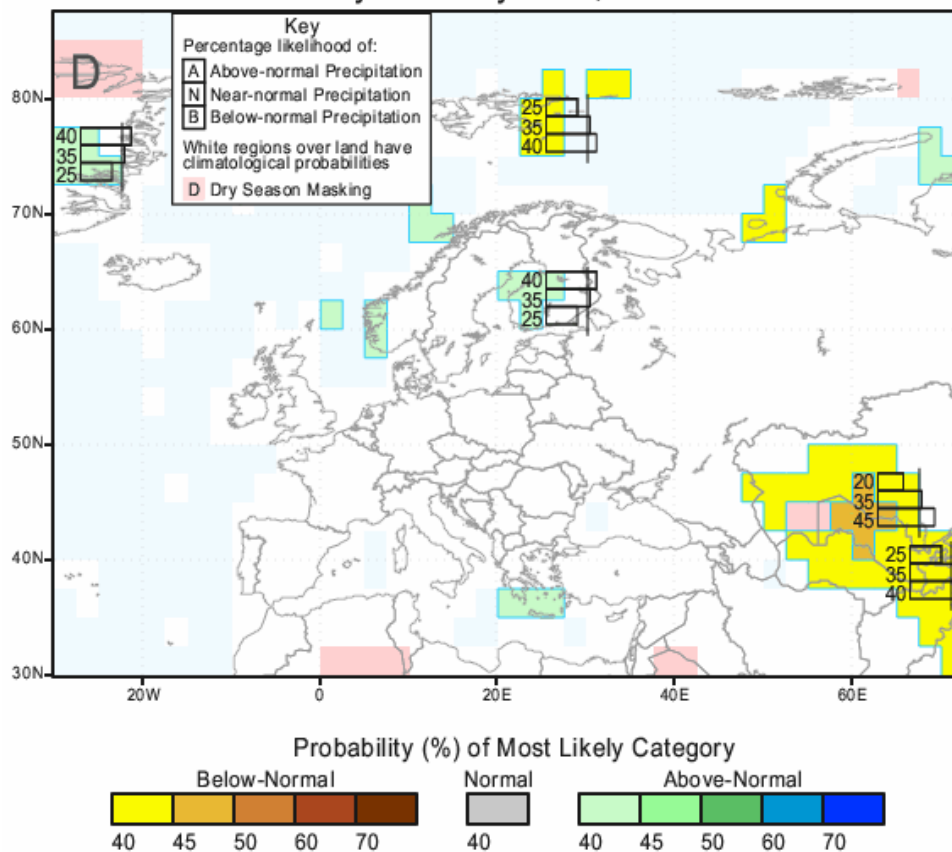


Forecast issue date: 15/11/2010

ECMWF

Forecasted precipitation probabilities DJF 2010/2011 - IRI

IRI Multi-Model Probability Forecast for Precipitation
for December-January-February 2011, Issued November 2010

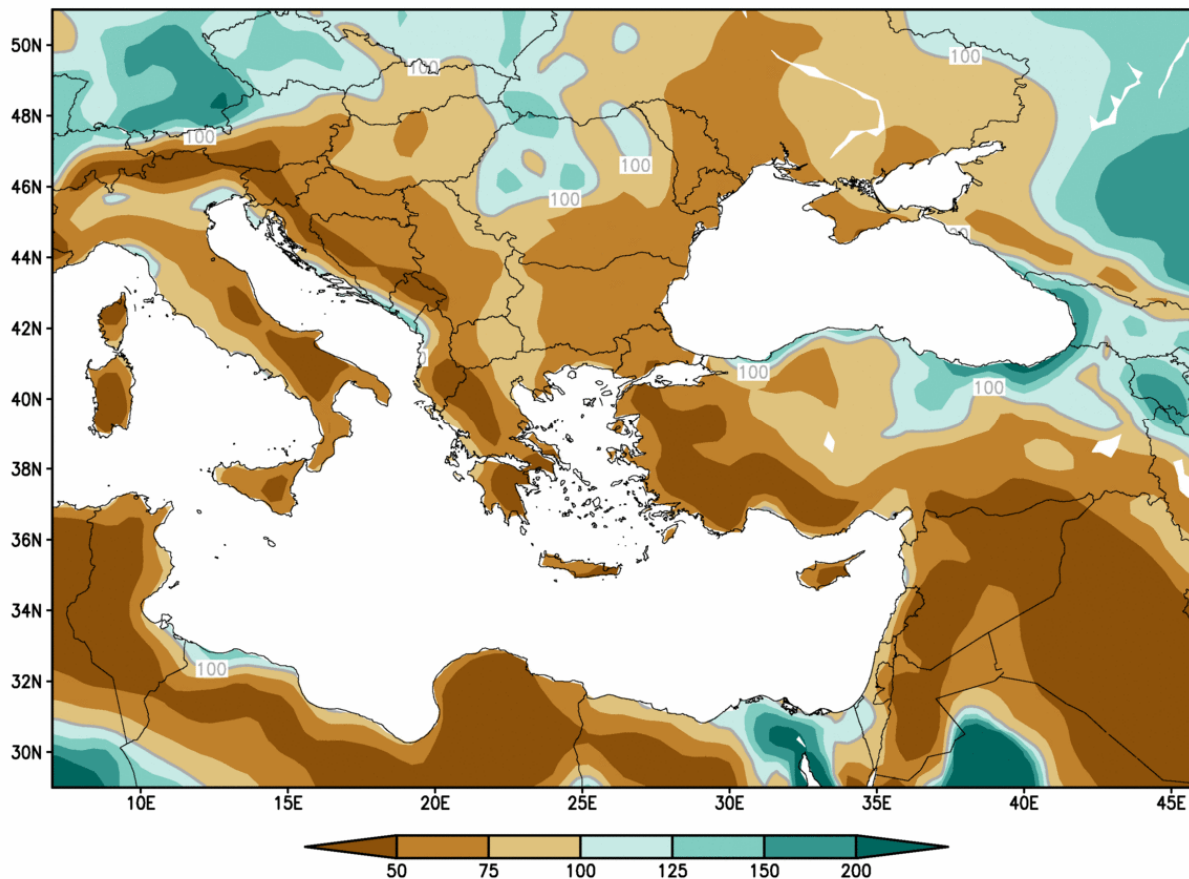


- Surplus of rainfall is expected only in the southern part of Greece

- Precipitation within normal range in other parts of SEECOF region

Forecasted precipitation anomalies DJF 2010/2011 - RCM-SEEVCCC

RCM-SEEVCCC: Precipitation anom. (%) for season DEC-JAN-FEB 2010
Forecast start: 00Z01NOV2010



- Less than normal rainfall in south-western Turkey, south-western and southern Balkans
- More than normal in some parts of Romania, south-eastern coast of Black sea and Armenia

SEECOF - 4

22-26 November 2010, Belgrade

Conclusion

TEMPERATURE

- Serbia: Normal to above normal (north) winter season temperatures are expected in reference to the climatological period 1961-1990
- SEECOF region: Positive deviation in northern and central Balkans and eastern Turkey, around normal in other parts of the region

PRECIPITATION

- Serbia: Deficit in most part of Serbia, compared to the climatological reference period 1961 - 1990
- SEECOF region: Deficit in much of the region, except some parts of Romania, south-eastern coast of Black sea and Armenia

Thank you for your attention