

# Seasonal Outlook for DJF 2010-2011

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ΕΘΝΙΚΗ ΜΕΤΕΩΡΟΛΟΓΙΚΗ ΥΠΗΡΕΣΙΑ

# Remarks

HNMS is not issuing seasonal forecasts to the public but are only used for research purposes.

A Climatological Bulletin is available every month with the analysis of the deviations from climatological averages for each region of the country

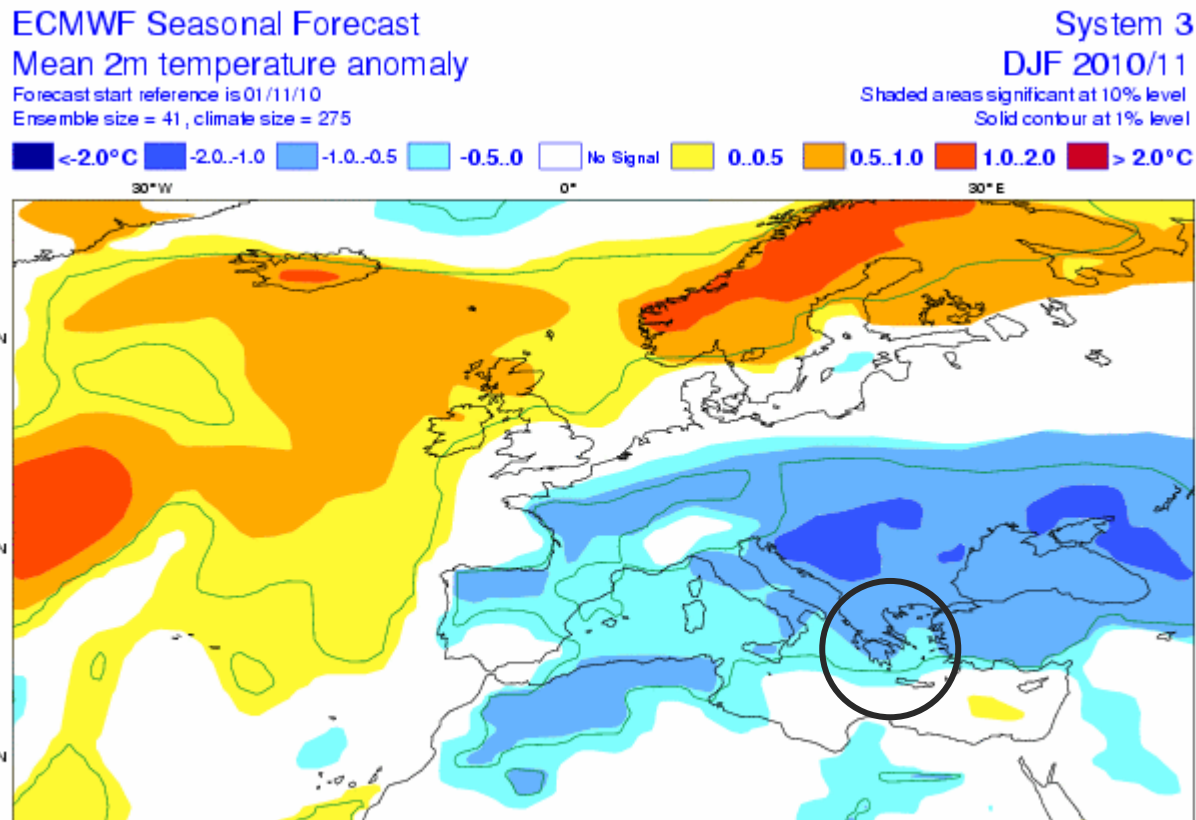
Plots available through ECMWF Seasonal Forecasting System on a monthly basis.

- 62 vertical levels (~5hPa)
- 1.125 degrees horizontal spacing
- 41 member ensemble (5-member ensemble ocean analysis, SST perturbations and stochastic physics)
- Model climatology based on 1981-2005 reforecasts

# ECMWF seasonal forecast

(based on November run)

**Ensemble Mean: Shift in the predicted probability distribution, given in absolute terms**

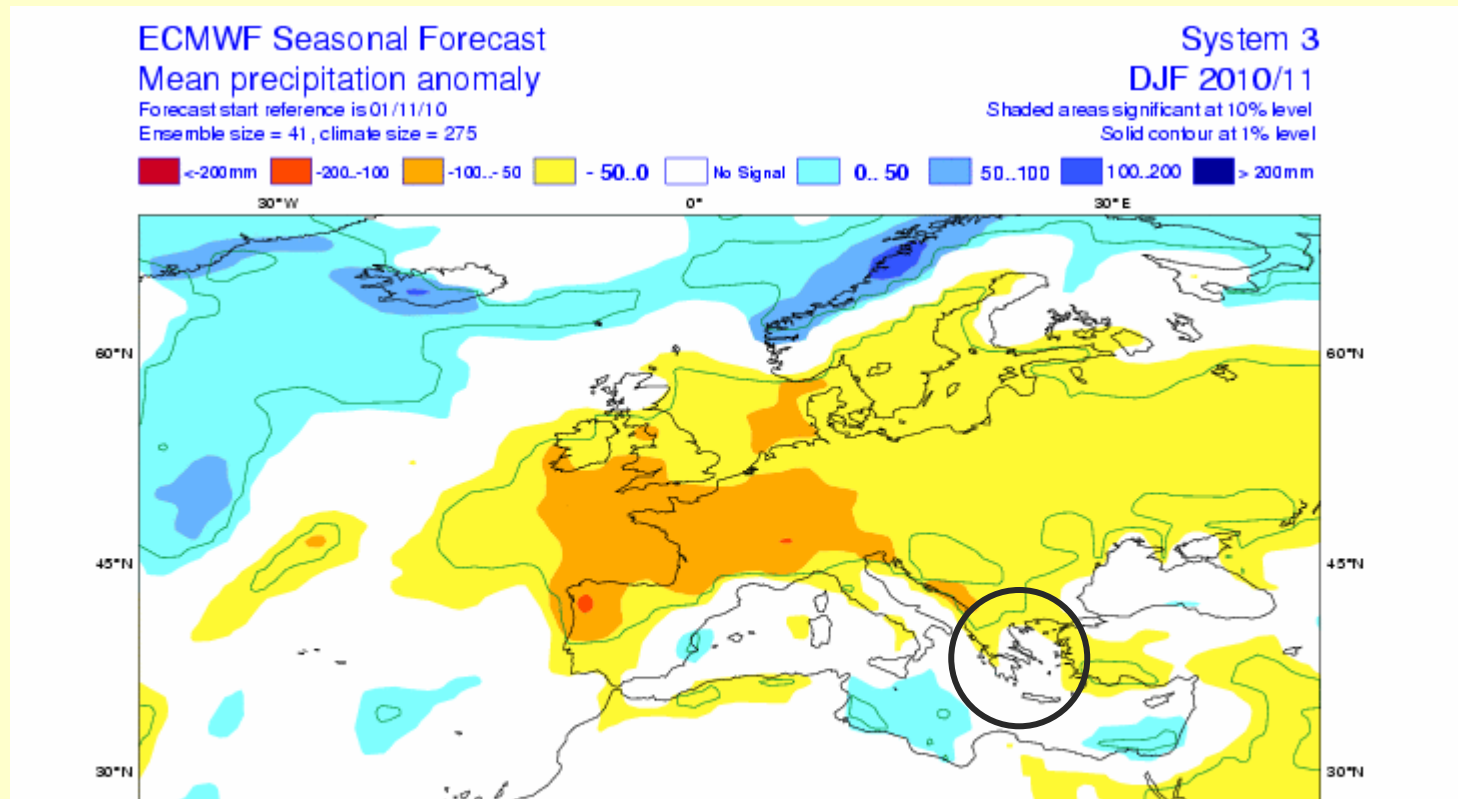


- Negative anomaly for 2m mean temperature, compared to the model climatology, over the biggest part of Greece.

# ECMWF seasonal forecast

(based on November run)

## Ensemble Mean: Shift in the predicted probability distribution, given in absolute terms



- Negative anomaly over north and north-west Greece
- No signal for the rest of the country.

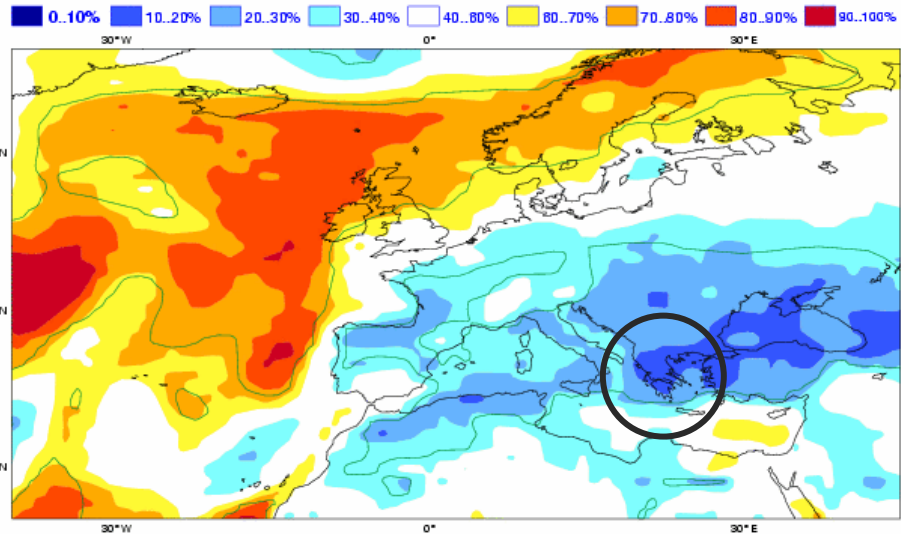
# ECMWF seasonal forecast

(based on November run)

## Probability of exceeding median: probability of being greater of model climate median

ECMWF Seasonal Forecast  
Prob (2m temperature > median)  
Forecast start reference is 01/11/10  
Ensemble size = 41, climate size = 275

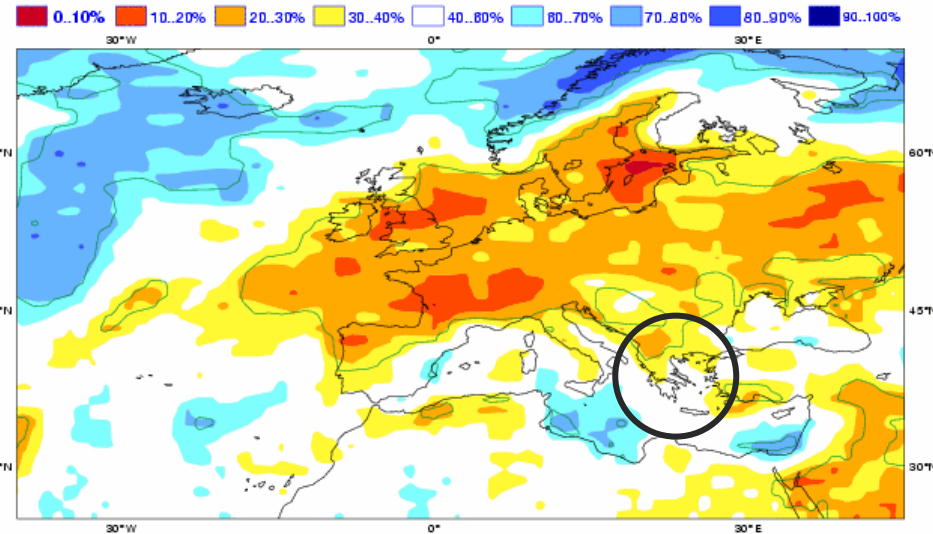
System 3  
DJF 2010/11  
Solid contour at 1% significance level



last issue date: 15/11/2010

ECMWF Seasonal Forecast  
Prob (precipitation > median)  
Forecast start reference is 01/11/10  
Ensemble size = 41, climate size = 275

System 3  
DJF 2010/11  
Solid contour at 1% significance level



last issue date: 15/11/2010

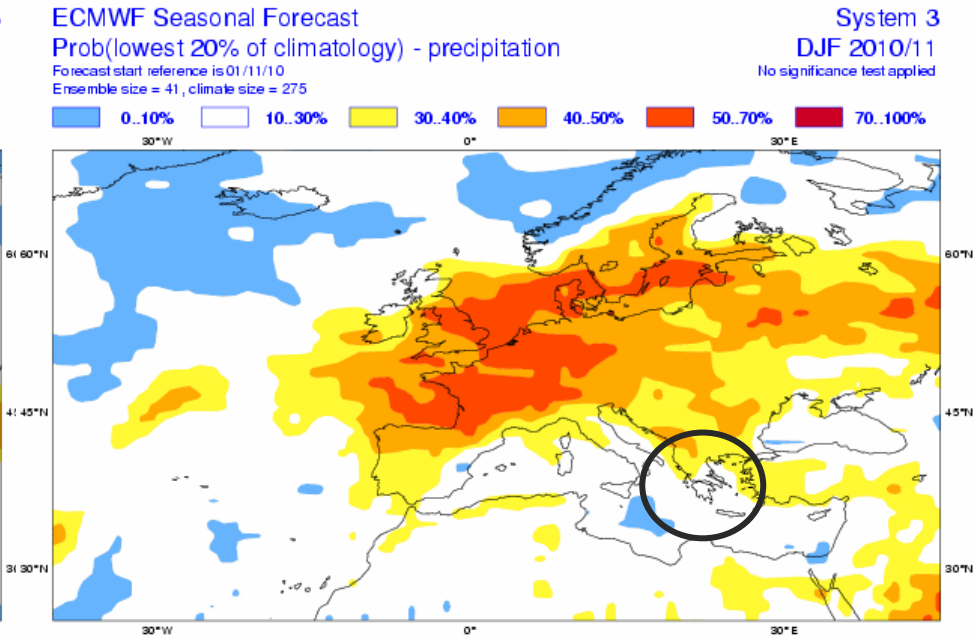
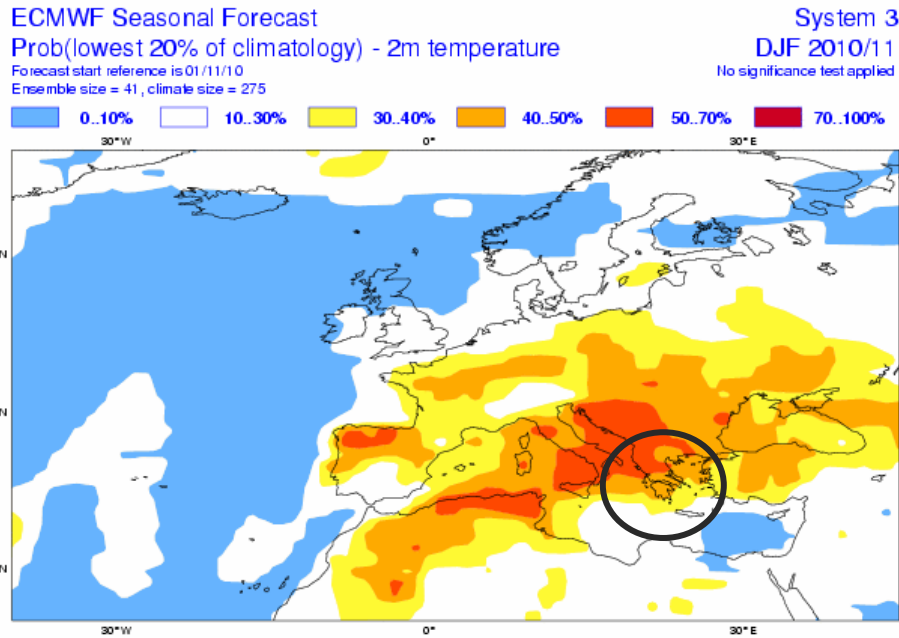
CEC

**10-20% the probability of exceeding median for temperature  
and around 30-40% for precipitation**

# ECMWF seasonal forecast

(based on November run)

**Probability of lowest 20%: Regions where the distribution of likely outcomes is substantially shifted from climatological average**



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**Temperature: 40-70% probability of values to be below the lower 20th percentile**  
**Precipitation: Smaller percentages for rainfall**

# ECMWF seasonal forecast

(based on November run)

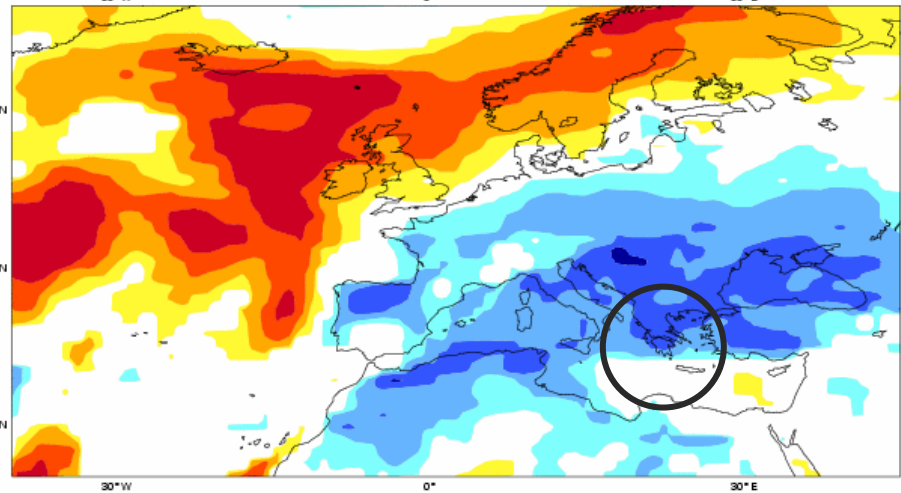
## Tercile Summary: Areas with increased probability to be above the higher tercile and below the lower one

ECMWF Seasonal Forecast  
 Prob(most likely category of 2m temperature)  
 Forecast start reference is 01/11/10  
 Ensemble size = 41, climate size = 275

System 3  
 DJF 2010/11  
 No significance test applied

← below lower tercile      above upper tercile →

70..100% 80..70% 50..80% 40..50% other 40..50% 50..80% 60..70% 70..100%



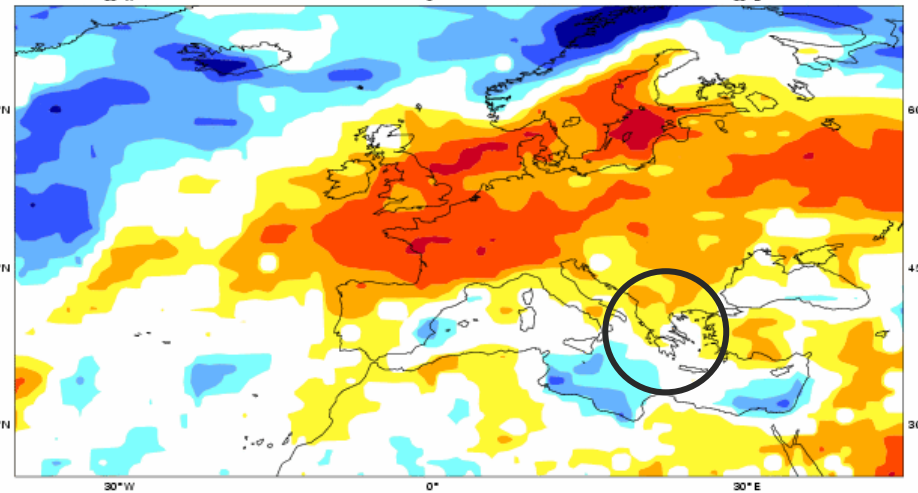
last issue date: 15/11/2010

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

← below lower tercile      above upper tercile →

70..100% 80..70% 50..80% 40..50% other 40..50% 50..80% 60..70% 70..100%



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**Below lower terciles for both temperature and precipitation but stronger signal for temperature.**

# DJF weather outlook for Greece

- Signals for the extended area around Greece mainly for average temperature that is expected to be lower than the model climatological average (**Below Normal**)
- No significant signal for the precipitation, indication that the northern part of the country could be slightly drier the coming winter season (**Normal**)





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