

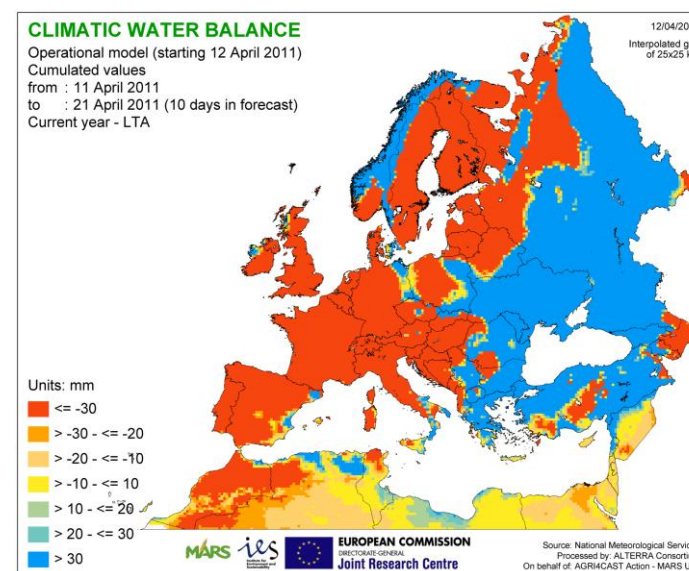
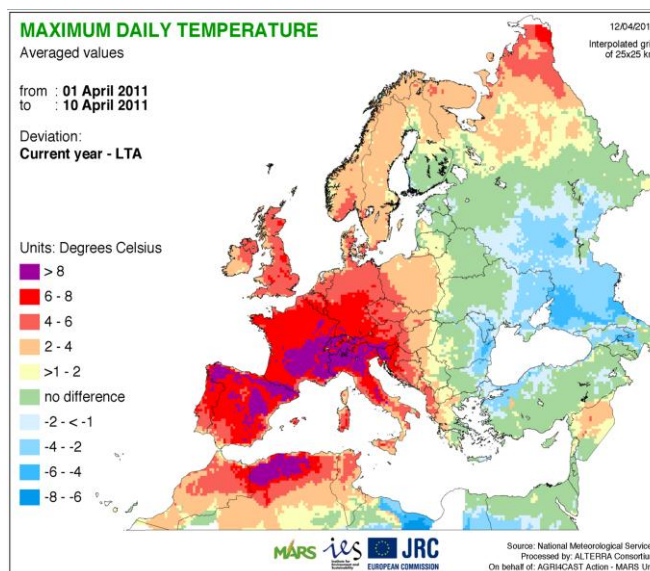
Period of analysis: 21 March 2011-10 April 2011

Issue date: 12 April 2011

HIGHLIGHT

Starting from the beginning of April the weather turned warm in almost all Europe. Thermal sums exceeded the average by +30-40% and this in conjunction with scarce rainfall and high irradiance levels led to a strong transpirative demand. On the contrary in the East (Russia especially) rainfall were abundant and the thermal anomalies rather negative.

In the next few days the Atlantic regions will be warmer than usual, whereas a relative cold air intrusion is forecast in central and eastern Europe. Large areas of Europe will experience only scarce rain whereas in the Black Sea area slightly wetter than usual conditions can be expected



1. AGROMETEOROLOGICAL ANALYSIS

ANALYSIS PERIOD : 21 March – 10 April

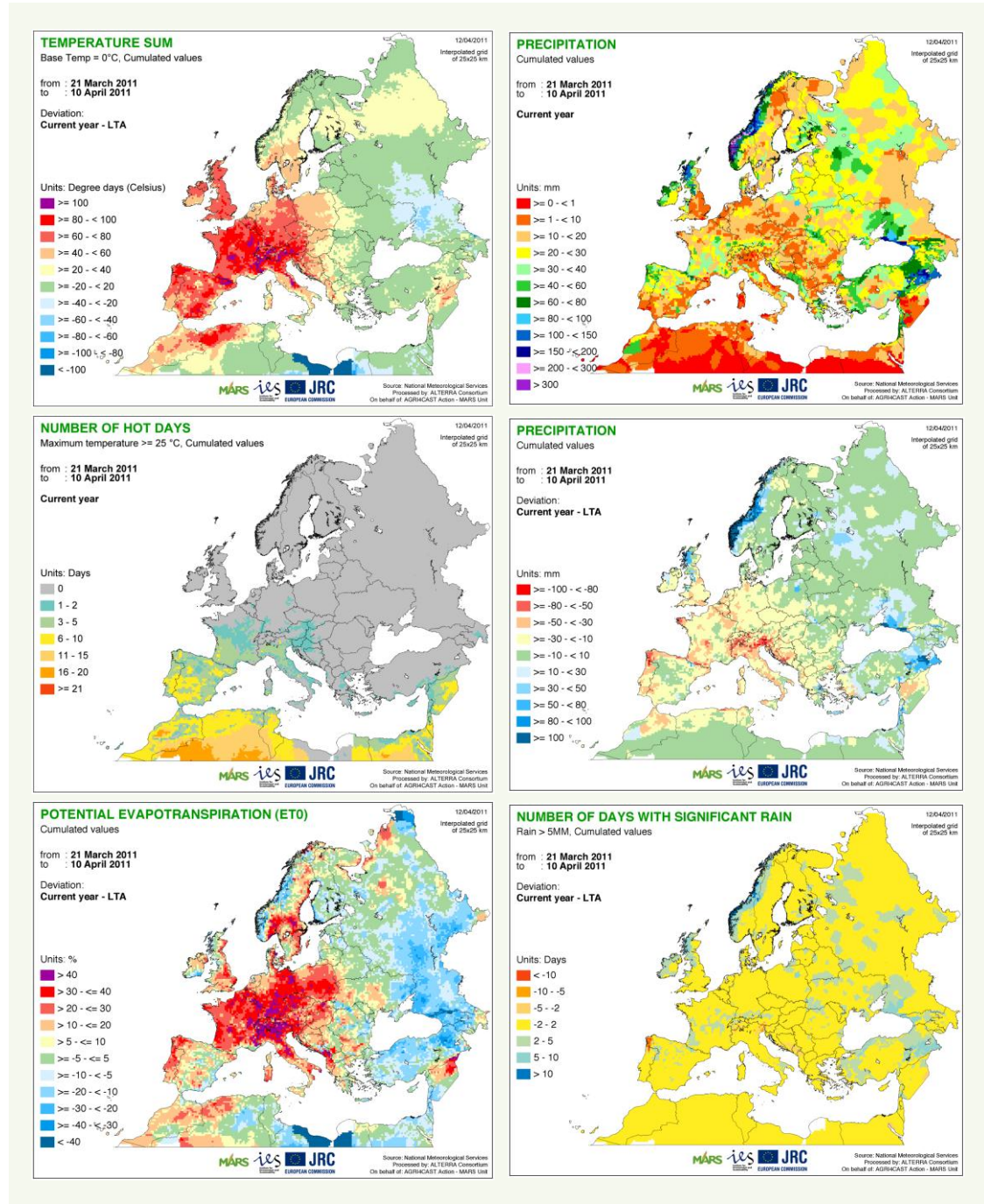
OBSERVED TEMPERATURES

The mild conditions registered starting from the beginning of March continued during the last decade especially in central and eastern countries. In fact in North-Western France, in Austria, in Czech Republic, Slovakia and in Southern Poland the average temperature was by +2 to +4 °C higher than the average mainly due to the high daily maximum temperatures. On the contrary in southern Europe, especially along the coastal areas temperatures were in line with the long term average. Colder than usual conditions were observed in Scandinavian countries where especially the minimum temperatures were by -2 to -6 °C lower. In the Volga region and in large areas of Finland the absolute minimum stayed below -25 °C.

Starting from the first of April the weather turned warmer all over Europe reaching in the South and in the West exceptionally high values for the season. Thermal anomalies were positive +1/+3 °C along the whole central and southern division of Europe however the highest values have been observed in eastern France, northern Italy and Spain where temperatures exceeded the average by +5/+8 °C. The thermal sum of the period of analysis overcame by 30-40% the LTA in Central and Southern Europe while a lower surplus of GDD was observed in eastern regions (Ukraine, Belorussia and the Baltic Republics). Russia instead shows a strong deficit in thermal accumulation which will further penalize vegetation development.

OBSERVED RAINFALL

With the exception of few isolated regions in Spain, France and Southern Italy the period of analysis was dryer than the average all over central Europe. Abundant precipitations were observed in the North of the British Isles, in Norway and in the Black Sea area. As a consequence of the lack in precipitations, France, Southern UK and especially large areas in Germany experienced high irradiance (between +30-40 % with respect to LTA) leading in conjunction with the high temperature to an unusual high evapotranspirative demand.



2. WEATHER FORECAST

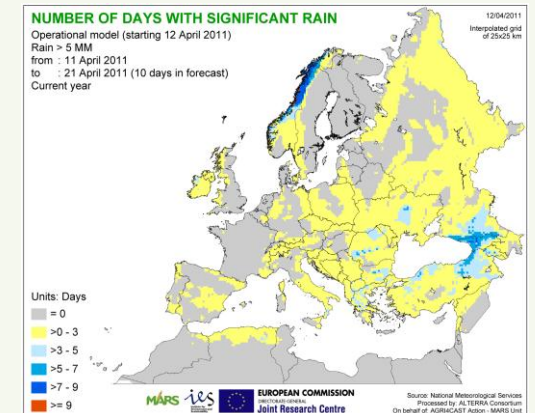
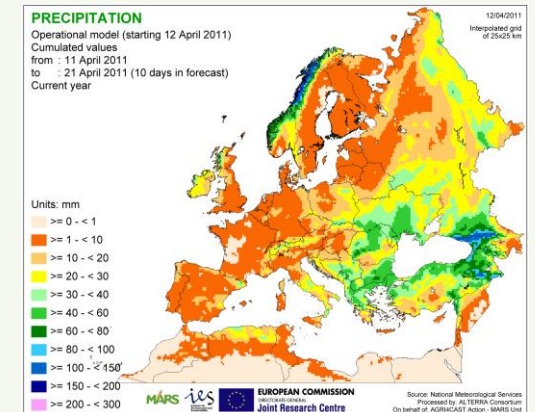
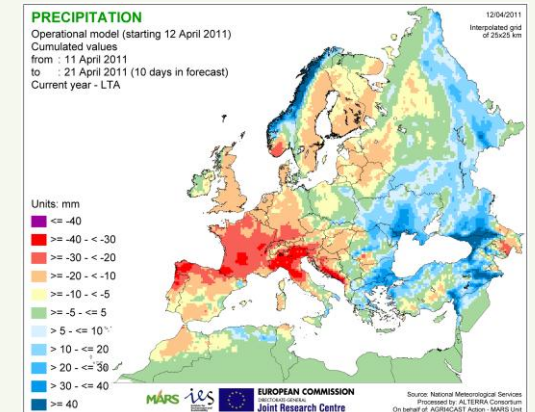
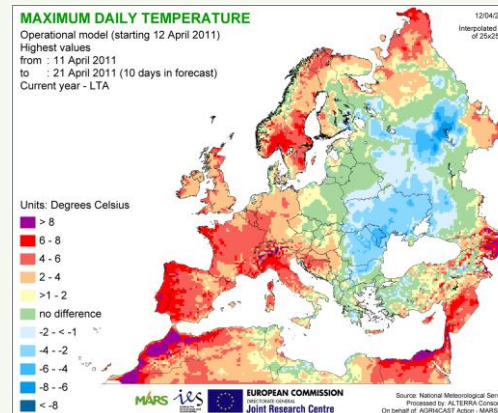
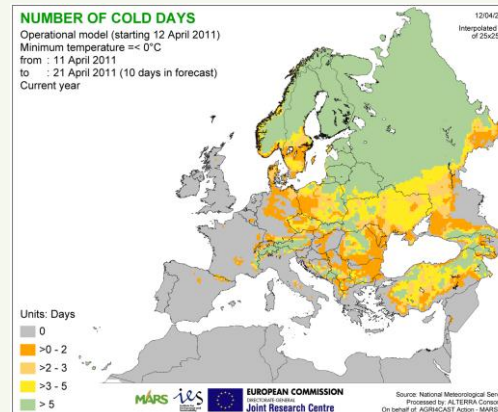
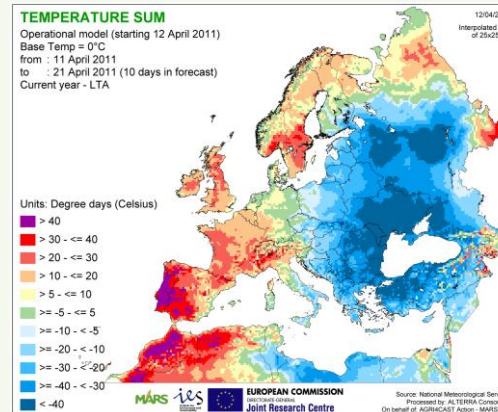
SITUATION OVER THE NEXT FEW DAYS (ECMWF weather forecast: April 11th – 21st)

TEMPERATURES and EVAPOTRANSPIRATION

Cold temperatures will prevail from central and eastern Europe. Romania, Ukraine, Russia and some areas in Bulgaria the cumulated active temperatures (GDD when Tbase = 0°C) will be 50% lower than usual. Mainly in the areas around Black Sea and Balkans the average minimum temperature will be lower by 2°C, nevertheless the absolute minimum in will not be below -3°C (except the northern and east-northern areas of Europe). In Germany, Austria, western parts of Czech and Poland, and central Italy the GDD temperatures will be average, leading to seasonal crop development. On the contrary temperatures higher than usual are expected for Portugal, western Spain and Morocco. In these areas as well in British Isles, southern Sweden and some regions of France GDD temperatures will be higher than LTA at least by 25%. Western Germany and Belgium westward and southward the maximum temperature will exceed 20°C. In these areas with maximum temperatures higher than usual by 4°C and scarce precipitation an acceleration of the crop cycle is likely.

RAINFALL and CLIMATIC WATER BALANCE

The scarce rainfall is forecast in western and north eastern parts of Europe as well as in Morocco. The highest negative departures from the seasonal values (by 25-35 mm) are expected in France, southern Germany, northern Italy and Toscana, and northern part of Iberian Peninsula. This phenomenon will cause significant climatic water deficits in agriculture areas in southern Europe which already have suffered water deficits. On the contrary rain is expected in the areas around Black Sea, but only in Caucasian region it will exceed 100 mm.



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*MARS stands for **M**onitoring **A**griculture **R**esources **S** Unit

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Special issues are planned for crop monitoring outside EU27

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