


Bulletin

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Crop Monitoring in Europe

AGROMETEOROLOGICAL ANALYSIS & WEATHER FORECAST

 Period of analysis: 21st July – 7th August

 Issue date: 9th August 2011

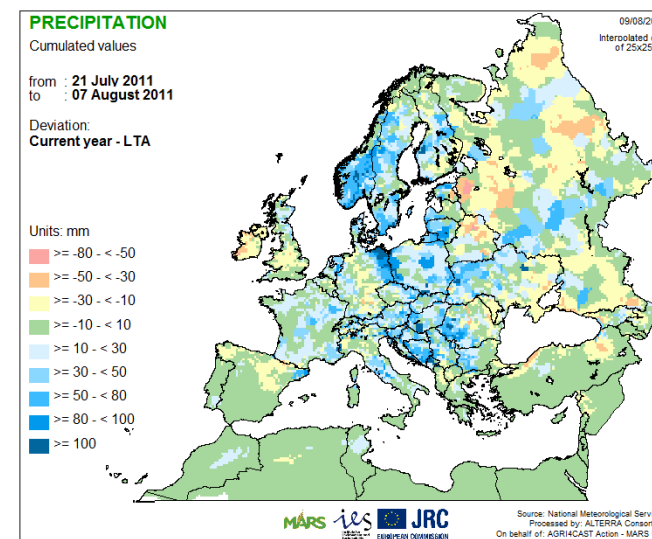
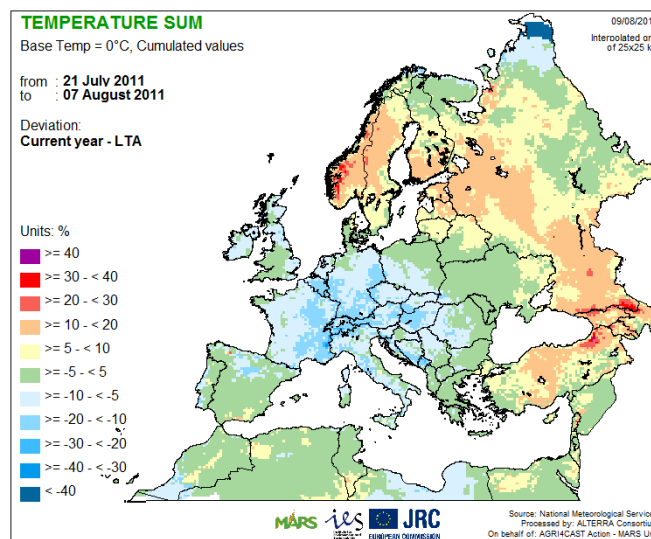
HIGHLIGHT

Lower than average active temperatures in western and central Europe, surplus in northern and eastern Europe (Sweden, Finland, Baltic States and Russia). Rainfall excess in north-eastern and eastern Germany and Poland and abundant precipitation in central Europe could have hampered harvesting activities.

The forecast for the next ten days predicts colder and wetter than usual conditions in northern, western and central Europe.

CONTENT

1. Agrometeorological analysis
2. Weather forecast



1. Agrometeorological analysis

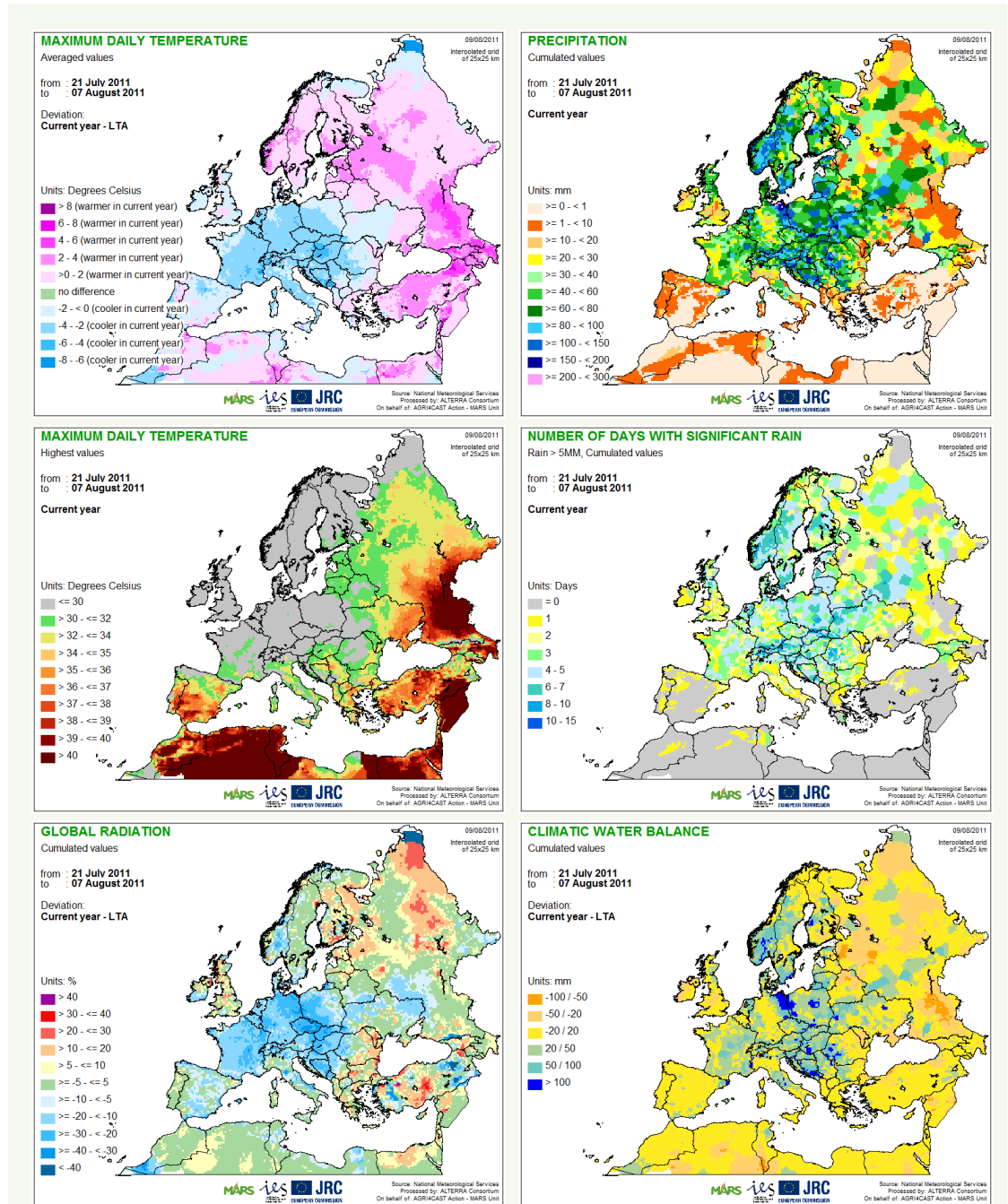
OBSERVED TEMPERATURES

The accumulation of active temperatures (base temperature = 0°C) for the considered period was below the seasonal average in western and central Europe: from Castilla y Leon in Spain and France in the west and Italy in the south across the Benelux countries, Germany, Austria Slovenia, Czech Republic to western Poland, Slovakia, Hungary, western and central Romania and along the Adriatic coastline, with the largest departures from long-term average (LTA) of up to -55 GDD in Hungary.

Some agricultural areas received cumulated active temperatures 10-15% lower than usual and maximum temperatures -3 to -5°C below LTA. These weather conditions slightly slowed down crop development being in advanced stage. On the contrary, central Sweden, southern Finland, and the Baltic States, large parts of Russia in the west, and south as well as central Turkey experienced a higher accumulation of active temperatures and solar radiation as compared to LTA. Maximum temperatures were +2°C higher than LTA in Scandinavia and +4°C higher in the region east and southeast of the Black Sea. While in southern Finland, Estonia, and central Latvia two consecutive days with a daily maximum air temperature above 30°C were recorded, hot days were absent in central and western Europe except for south France and Hungary. Minimum average temperatures were close to LTA in most of agricultural areas in Europe.

OBSERVED PRECIPITATION and CLIMATIC WATER BALANCE

Rainfall occurred predominantly in central Europe. The area on the border between Germany (Mecklenburg and Brandenburg) and Poland received with above 100mm abundant precipitation; in Mecklenburg up to 200mm were recorded locally. Over-wet conditions, with precipitation exceeding 100mm, were observed in Mazowieckie in Poland, along the border of Poland and Ukraine, in center-south Lithuania, and Slovenia, but also recorded locally in Belgium, south Sweden, central Finland, Estonia, Austria, south Hungary and western Romania. In most of these areas precipitation exceeded LTA value by 2-3 times. In the important agricultural areas these weather conditions created increased strongly soil moisture and created a large surplus in the climatic water balance of more than 100mm as compared to LTA for the considered period. Significant rainfall of more than 5mm/d for more than seven days could have negatively impacted grain quality of cereals and farmers could have faced difficulties in accessing fields for harvesting. In central Italy and central France total precipitation in the period of analysis exceeded LTA by more than 100% with a likely positive impact on crops. In contrast, little precipitation with less than 50% of LTA on the average was recorded in central and southern UK, Ireland and in the centre of Germany. Rainfall was very scarce or even absent on the Iberian Peninsula and in the eastern and southern Mediterranean region; only Catalonia in Spain, southern France, central Italy and the Dalmatian coast received up to 50mm of rain.



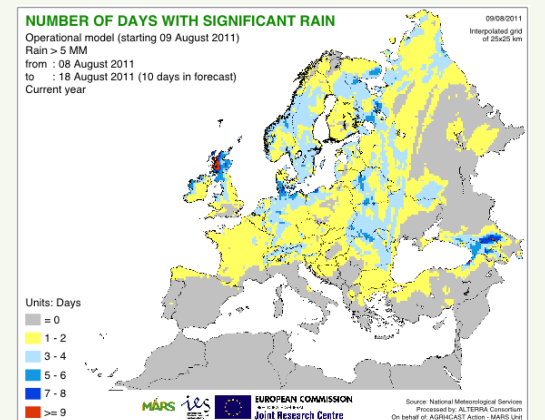
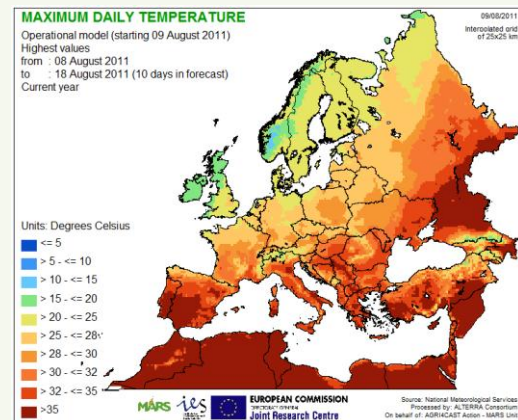
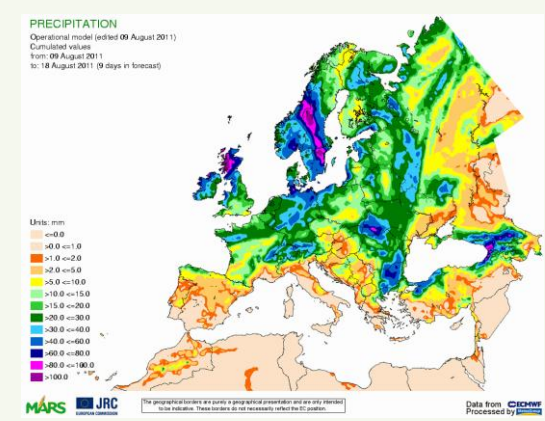
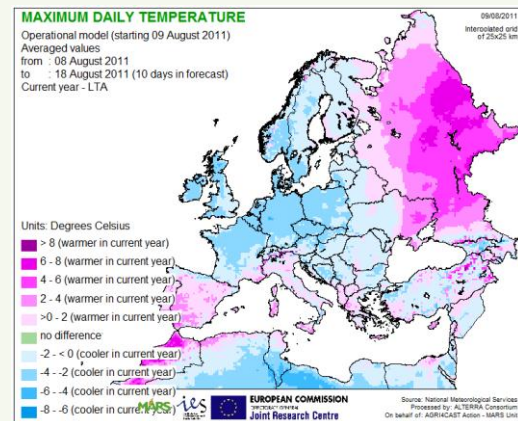
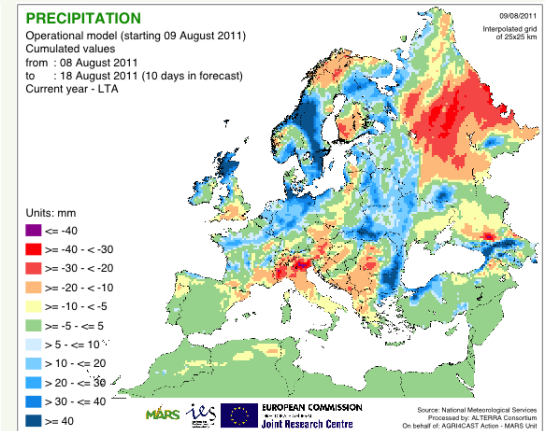
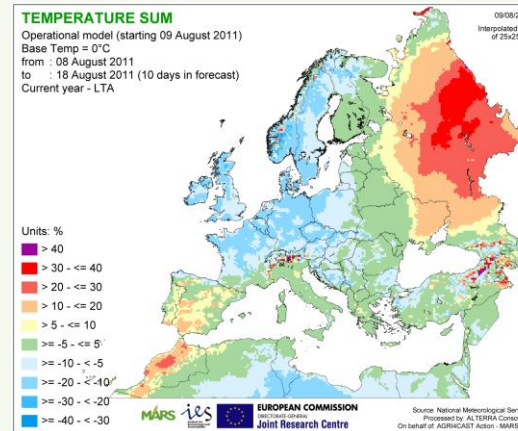
2. Weather forecast (period of analysis: 8th until 18th August)

TEMPERATURES

The low air pressure systems in the north will bring colder than usual air masses all over northern, western and central Europe. Central and northern France, Benelux countries, Denmark, Germany, Poland, Czech and Slovakia as well British Isles and southern Sweden will experience maximum average temperatures of 2.5/-3.0°C below LTA. Accumulated active temperatures across these areas will also be below LTA by 10-15%. The seasonal average conditions are expected in Italy, in the Balkan region and north-eastern Europe. Russia and eastern Ukraine are forecast to experience significantly warmer conditions with maximum temperatures being +4 to +6°C higher than usual. Warmer than usual will also be southern Spain and northern Morocco with extreme maximum temperature above 38°C. All these areas will experience continuous spell with maximum daily temperatures above 30°C.

RAINFALL

In the next few days considerable rainfall is foreseen for northern UK and south-central Sweden as well as for the region including southern Denmark, northern Germany and western Poland. Precipitation above LTA is also foreseen in the area of southern Poland and the western Ukraine. In the latter two regions, since significant rainfall with more than 5mm/d is forecast for five or more days within the next 10-days period, harvesting conditions of winter crops could be negatively affected. Significant, but for spring crops favourable precipitation is forecast in Bulgaria and Romania. Predominantly dry conditions are expected in southwest Europe, the Balkan region, along the Mediterranean coastline and in south-central Russia.



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MARS agrometeorological data and data elaboration is available at <http://www.marsop.info>.

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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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