HIGHLIGHT

The third dekad of June was warm except for the basin of the Black Sea, and wet in Ukraine and Germany. With the beginning of July Europe experienced lower temperatures and dry conditions with the exception of Denmark, Germany, Poland, Belarus and Russia. Any rain is forecasted within next 10 days for Spain, Turkey and Russia, and slightly higher temperatures are foreseen in Central and Eastern Europe. Significant water deficit in Southern Russia is expected.

CONTENT

1. Agrometeorological analysis
2. Weather forecast
1. Agrometeorological analysis

**OBSERVED TEMPERATURES**

The general circulation over Europe changed in the middle of the considered period. In consequence, the third dekad of June was hot in almost all Europe except for the cold conditions in the Black Sea basin. On the contrary the first dekad of July brought a significant cold spell over Europe. Only in Scandinavia, Russia and Maghreb temperatures remained close to the previous conditions. Temperature sums of active temperatures (TBase = 0°C) for the considered period were close to the long term average. The thermal sums were 15% lower in the zone of Turkey, Greece, Macedonia, Bulgaria, Romania, Moldova and Ukraine. Some regions accumulated slightly more temperature than the LTA such as: north part of Scandinavia (+10%), Russian Central and Northwest Districts (+10%), Andalusia (+15%) and Morocco (+20%). Warmer regions were characterized by significantly higher average maximum temperature - up to >6°C in Maghreb, Spain and Russia, whereas maximum temperature in the cooler regions remained close to the long term average. No significant heat waves around wheat ripening were observed and maximum temperatures were close to the long term average. Only Castilla Y León and central France experienced high daily maxima at wheat maturity. Conditions at rapeseed ripening and maturity were also close to the average, with a slight surplus in Ukraine.

**OBSERVED RAINFALL**

The considered period was dry in Maghreb, Spain, France, Western Germany, North Italy, Southern Hungary, Slovenia, Croatia, Northern Serbia, Greece, Turkey and Russian Southern District. Anyhow, the number of days with significant rainfall during this period was close to the long term average. The climatic water balance was up to 50 mm lower than usual. On the other hand some countries experienced higher values of rainfall than the LTA such as: Ukraine (+80%), Central District of Russia (+80%), Romania (+10%), Belarus (+60%), Lithuania (+30%), Poland (+95%), Eastern Germany (+90%), Norway (+95%), Northern Sweden and Finland (+50%), Northern England (+125%), and Ireland (+50%). Rainfalls could have been beneficial for grain filling of winter wheat. The weather conditions were prosperous for grain maize, tuber and root crops.
2. Weather forecast (period of analysis: 12th July until 21st July)

**TEMPERATURES**

In the next days Spain, France, Ireland, England and Wales will accumulate slightly less GDD’s than the average. Temperature in Benelux, Germany and Poland is expected to be close to the normal summer temperatures. Concurrently, Italy, Greece, and Eastern Europe, Ukraine and Southern Russia will experience average daily temperature 6-8°C higher than the LTA. In southern Spain, southern Italy, Greece and Russian South and Volga Districts a longer heat period is forecasted and the average maximum temperature will remain above 30°C for the whole forecasted 9-day period. Thermal conditions in Turkey and Maghreb are expected to be close to normal with a slight surplus in Western Turkey.

**RAINFALL**

Significant rain is expected in France, northern Italy, Benelux, United Kingdom and Ireland, Germany, Czech Republic, Poland, Baltic countries and Finland. Benelux, western Poland and northern Italy could receive more than 100 mm of precipitation during the coming days. The intensive rains might negatively affect the access to the fields for harvest operations. No significant rain is expected in Spain, central and southern Italy, Balkan Peninsula, Turkey, and Russian Volga and South Districts. The lack of rain in Russia can exacerbate the already dry conditions due to a long period without a sufficient rainfall. The foreseen rainfall in France should protect crops from serious water stress.
The current MARS* Bulletin is an EC publication from AGRI4CAST action (JRC/IES MARS Unit)

Analysis and reports  J. Bojanowski
Edition  M. El Aydam, B. Baruth and M. Bettio
Data production  MARS unit Agri4cast/JRC and ALTERRA (NL), Meteoconsult (NL), VITO (BE)

Further information can be found in the website. All MARS Bulletin are available under:  http://mars.jrc.it/mars/About-us/AGRI4CAST/MARS-Bulletins-for-Europe
MARS agrometeorological data and data elaboration is available at  http://www.marsop.info.

Contacts  JRC–IES-MARS / AGRI4CAST Action
I-21027 Ispra (VA)
Fax +39-0332-783033
agri4cast@jrc.ec.europa.eu

Legal Notice  Neither the European Commission nor any person acting on behalf of the Commission is responsible for the use which might be made of this publication.

Disclaimer  The geographic borders are purely a graphical representation and are only intended to be indicative. The boundaries do not necessarily reflect the official EC position.

*MARS stands for Monitoring Agriculture Resources Unit

JRC 65860– EUR 24736, Scientific and Technical Research series – ISSN 1831 - 9793  © European Union 2011