

#### Guidance on drought

<u>Area concerned:</u> France, Belgium, Luxembourg, Germany, Czech Republic, Poland, Lithuania, Latvia, Estonia, southern Finland

Initial statement issued on 12 July 2019 First update issued on 19 July 2019 Second update issued on 31 July 2019

#### Valid: Begin: on 15 July 2019 End: 13 August 2019

<u>To:</u> Climate Watch focal points of France, Belgium, Luxembourg, Germany, Czech Republic, Poland, Lithuania, Latvia, Estonia, Finland

The RA VI RCC Network Offenbach Node on Climate Monitoring (RCC-CM) is responsible for providing Climate Watch guidance information for NMHSs' own consideration for issuing climate advisories for their territory.

After having consulted the consortium partners of the RCC-CM and RCC Node-LRF (RA VI RCC Network Toulouse and Moscow Node on Long-Range Forecasting), RCC-CM issues the following guidance information:

Due to the results from monthly forecasts we expect:

"A continuation of drought conditions and below-normal precipitation in large parts of Central and Northeastern Europe. In these areas mostly only 60-80 % of normal precipitation was recorded in June, in some parts even less. There was also only scarce rainfall in July and forecasts show continued below-normal precipitation in most of the area with weekly deficits of partly 10-30mm for this week with a probability of 80% and higher. Next week, above-normal precipitation will be expected over Central Europe, but this might not be sufficient to compensate for the rain deficits during the weeks before and therefore soils will be still dry. Northeastern Europe (Baltic countries and southern Finland) will still receive not more than below-normal to normal precipitation next week and therefore drought conditions are likely to continue. Drought conditions can result in harvest losses, forest fires, lack of animal food, water restrictions, restrictions of ship traffic due to low water levels."

This information should be used as guidance for the National Meteorological and Hydrological Services (NMHS) in a pre-operational mode. It is up to the above mentioned NMHSs to closely monitor the status and evolution of the current climate conditions and to consider issuing a national Climate Watch Advisory. RCC-CM would appreciate feedback from NMHS whether this information was helpful. Also, any suggestion on further pieces of information needed by NMHSs is highly welcomed!

A template for a national climate watch advisory as agreed among the climate watch pilots and RCC-CM can be provided by RCC-CM on demand.

Please note that further information can be obtained from RCC-CM website (<u>www.dwd.de/rcc-cm</u>) concerning Climate Monitoring and from RCC-LRF websites (<u>http://seasonal.meteo.fr</u>, <u>http://neacc.meteoinfo.ru/forecast</u>) concerning Long-Range Forecast or by e-mail to <u>rcc.cm@dwd.de</u> or <u>rcc-lrf-mf@meteo.fr</u>. For ECMWF members further information on monthly forecasts after logging in is provided at <u>http://www.ecmwf.int/</u> ->Forecasts

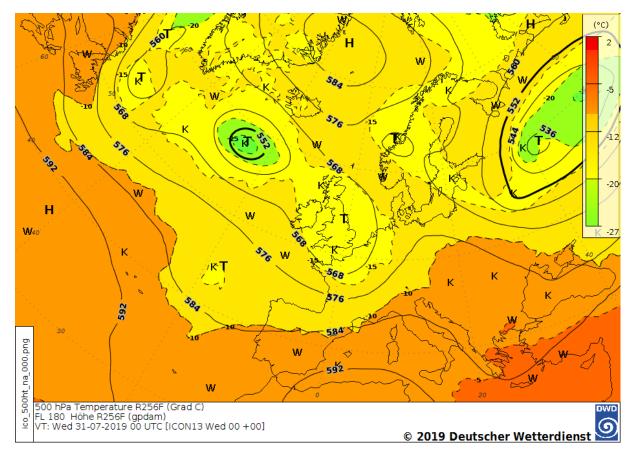
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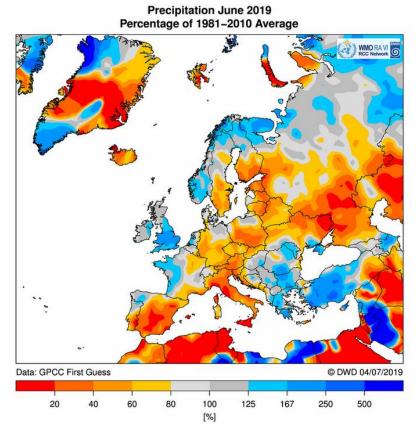
We will monitor the evolution of the anomaly, issue updates if significant change arise and close the advice when no clear signal can be detected in the forecasts.

On behalf of the RCC-CM Team

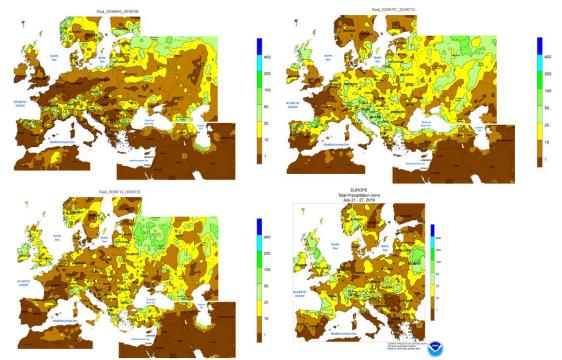


500 hPa chart, 31 July 2019, 00 UTC. Source: DWD



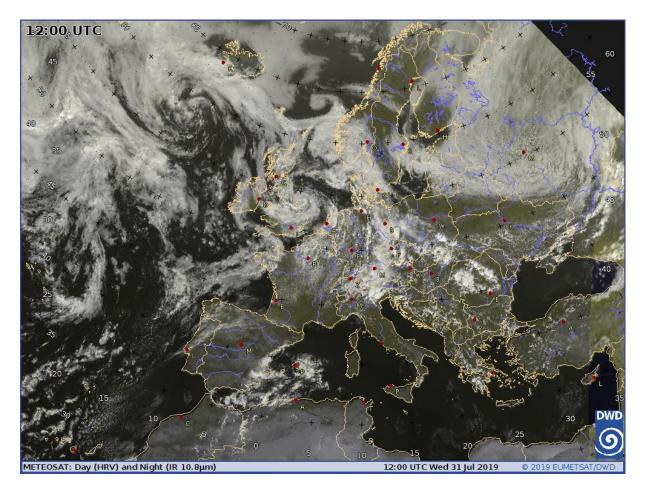


Monthly precipitation for June 2019 as percentage of the long term mean (source: DWD RCC-CM, https://www.dwd.de/rcc-cm



Weekly precipitation totals in mm for the first 4 weeks of July (source: Climate Prediction Center, USA)





Meteosat image of 31 July 2019, 12 UTC (source: DWD)

Past events taken from KRONER Database of DWD (Climate Knowledge Database on Extreme Events):

| Countries affected  | Begin            | End               | Duration<br>in days | Fatalities | Description   |
|---|------------------|-------------------|---------------------|------------|---|
| France, Spain,<br>Portugal,<br>Ireland, UK,<br>Germany,<br>Sweden,<br>Norway,<br>Finland etc. | 1 August<br>2018 | 31 August<br>2018 | 31                  | 10         | Persistence of drought with soil moisture deficit<br>caused low agricultural yields, lack of animal food,<br>water restrictions, low water levels in rivers and<br>lakes. |