

Guidance on drought, cold wave, heavy precipitation ID: 201808-u11

Area concerned:

Drought: Particularly parts of western, central and south-eastern Europe (France, Netherlands, Belgium, Luxembourg, Germany, Poland, Czech Republic, Slovakia, Hungary, Serbia, Romania, Moldova, Bulgaria, FYR of Macedonia, Albania)

Cold wave: western, central, eastern and south-eastern Europe (United Kingdom, France, Netherlands, Belgium, Luxembourg, Germany, Switzerland, Austria, Italy, Poland, Czech Republic, Slovakia, Hungary, Slovenia, Croatia, Bosnia-Herzegovina, Montenegro, Serbia, Romania, Moldova, Ukraine, Belarus, European Russia, Bulgaria, FYR of Macedonia, Albania, Greece, Turkey)

Heavy precipitation: eastern Mediterranean and Middle East (Turkey, Cyprus, Lebanon, Syria, Israel, Jordan)

Initial statement issued on 6 July 2018 First update issued on 20 July 2018 Second update issued on 3 August 2018 Third update issued on 17 August 2018 Fourth update issued on 24 August 2018 Fifth update issued on 07 September 2018 Sixth update issued on 19 September 2018 Seventh update issued on 2 October 2018 Eighth update issued on 26 October 2018 Ninth update issued on 24 October 2018 Tenth update issued on 2 November 2018 Eleventh update issued on 14 November 2018



Valid: Begin: on 14 November 2018

End: 26 November 2018

<u>To:</u> Climate Watch focal points of NMHSs: United Kingdom, France, Netherlands, Belgium, Luxembourg, Germany, Switzerland, Austria, Italy, Poland, Czech Republic, Slovakia, Hungary, Slovenia, Croatia, Bosnia-Herzegovina, Montenegro, Serbia, Romania, Moldova, Ukraine, Belarus, Russia, Bulgaria, FYR of Macedonia, Albania, Greece, Turkey, Cyprus, Lebanon, Syria, Israel, Jordan

The RA VI RCC Network Offenbach Node on Climate Monitoring (RCC Node-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 Node-CM and RCC Node-LRF (RA VI RCC Network Toulouse and Moscow Node on Long-Range Forecasting), RCC Node-CM issues the following guidance information:



Due to the results from monthly forecasts we expect:

"1. A continuation of the drought situation for at least the next two weeks for parts of western and central Europe, and also for parts of south-eastern Europe is expected. The probability is locally more than 70% that precipitation will be below the lower tercile.

This drought may be accompanied by water scarcity, low river levels and harvest losses since soil moisture is reduced. In south-eastern Europe there is also a risk of forest fires.

2. A cold wave advancing from eastern to western and south-eastern Europe for at least the next two weeks is expected. The probability for this development is estimated to more than 90%.

The cold wave will cause widespread frost even in lowlands, which might have dangerous impact on vegetation and health after a preceding long mild period.

3. A period of above-normal precipitation is expected for at least the next two weeks. The probability is estimated to more than 90%.

The enhanced precipitation can cause local flooding and landslides. "

This information should be used as guidance for the National Meteorological and Hydrological Services (NMHS) in a preoperational 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 Node-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!

On demand we provide you with a template for a national climate watch advisory as agreed among the climate watch pilots and RCC Node-CM.

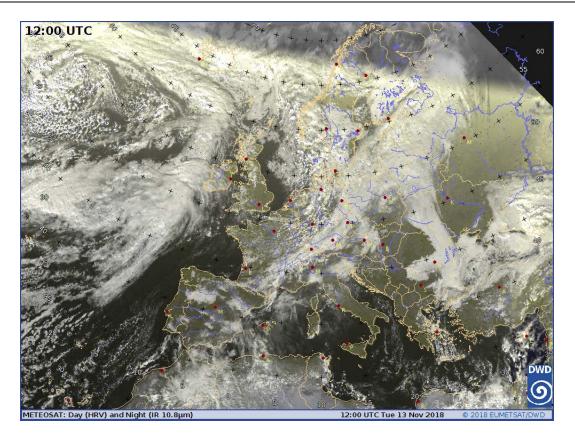
Please note that further information can be obtained from RCC Node-CM website (<u>www.dwd.de/rcc-cm</u>) concerning Climate Monitoring and from RCC Node-LRF websites (<u>http://seasonal.meteo.fr/en</u>, <u>http://neacc.meteoinfo.ru/forecast</u>) concerning Long-Range Forecast or by e-mail to <u>rcc.cm@dwd.de</u> or <u>rcc-lrf-mf@meteo.fr</u>.

For ECMWF member's further information on monthly forecasts after logging in is provided at <u>http://www.ecmwf.int/</u> - >Forecasts

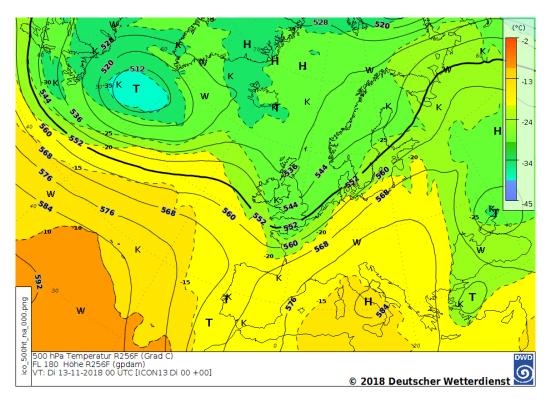
We will monitor the evolution of the anomaly, issue updates if significant change arise and close the advice when no clear signal can be detected in the forecasts.

On behalf of the RCC Node-CM Team





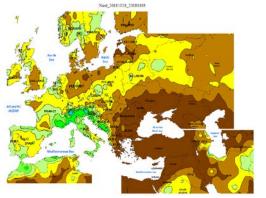
Meteosat satellite image 13 November 2018, 12 UTC. Source: DWD



500 hPa chart, 13 November 2018, 00 UTC. Source: DWD

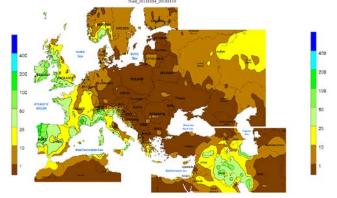


28 October – 3 November 2018

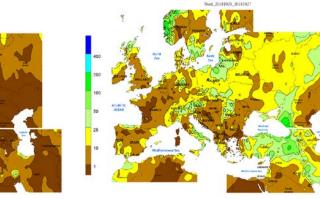


14 - 20 October 2018

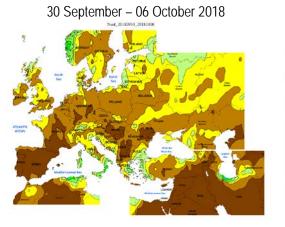
4 - 10 November 2018

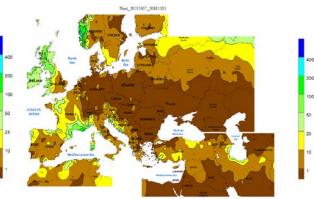


21 - 27 October 2018



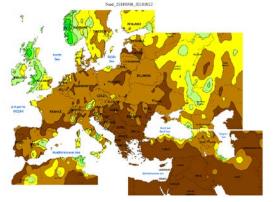
07 – 13 October 2018



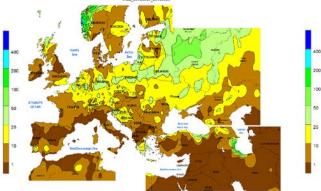




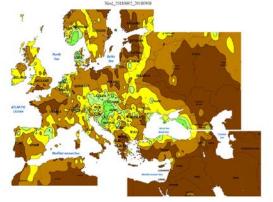
16 – 22 September 2018



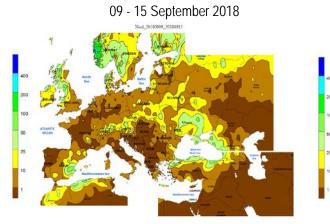
23 – 29 September 2018



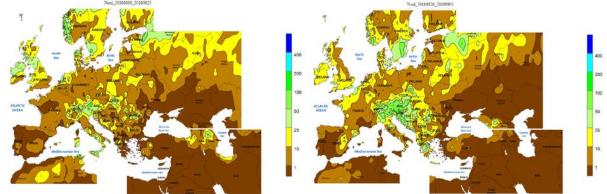
02 - 08 September 2018



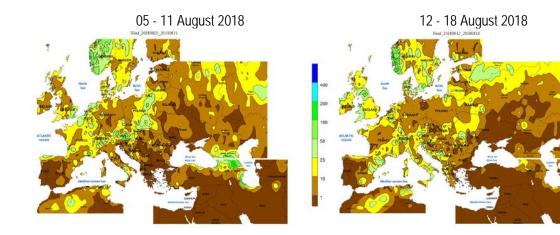
19 - 25 August 2018



26 August - 01 September 2018

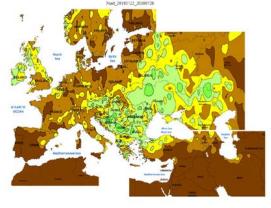


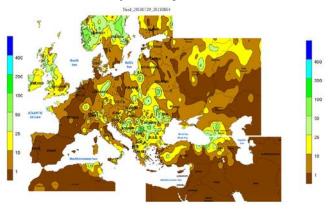




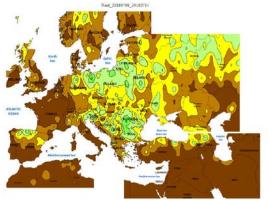
22 - 28 July 2018



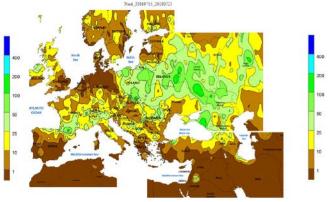




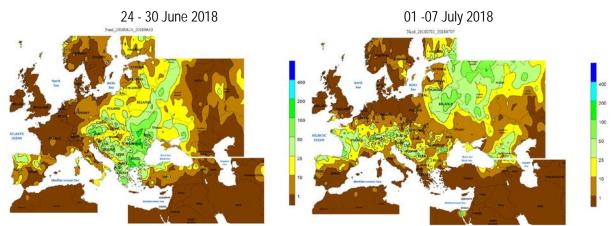
08 -14 July 2018





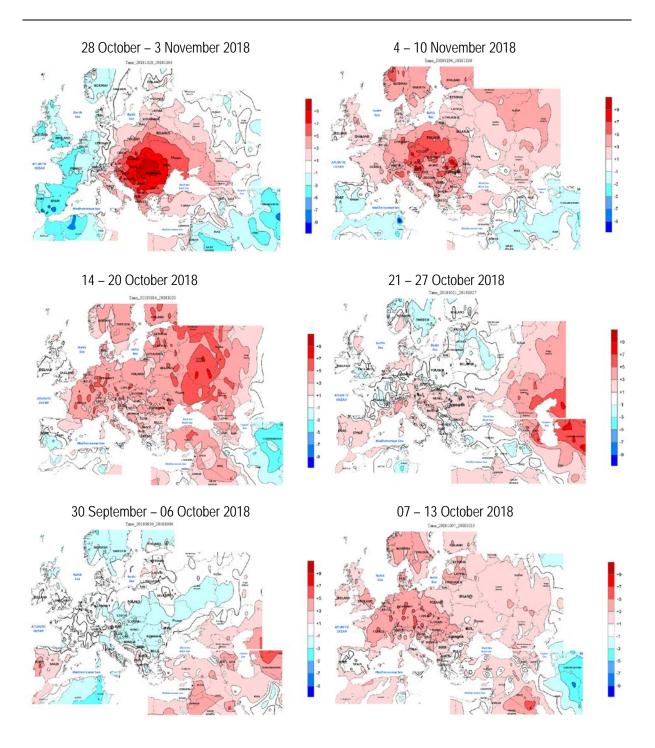






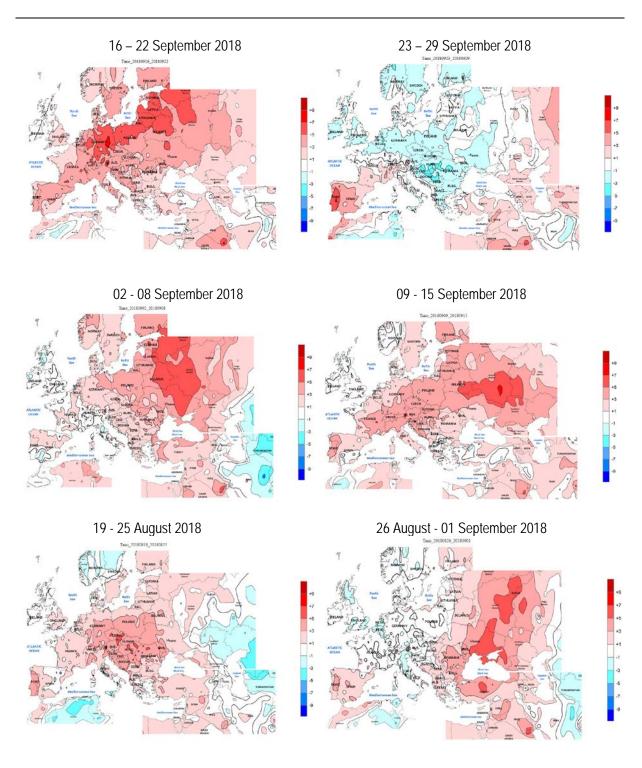
Weekly precipitation totals in mm for the last weeks (source: Climate Prediction Center, USA)





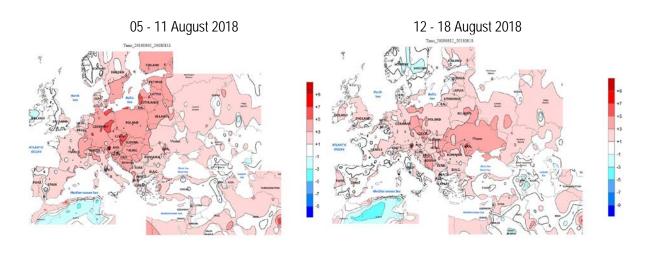




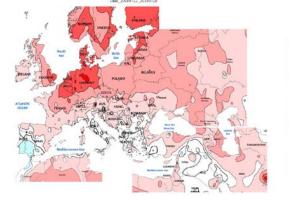






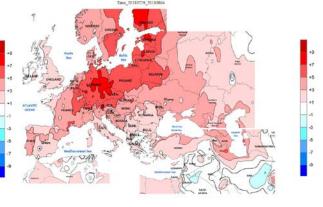


22 - 28 July 2018

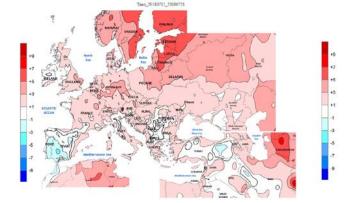


08 -14 July 2018

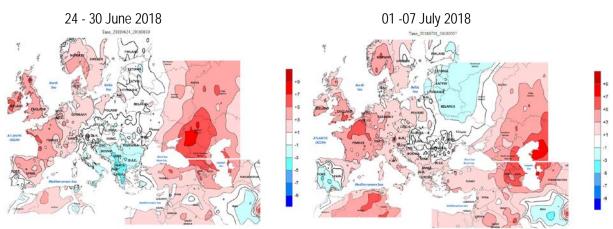




15 - 21 July 2018

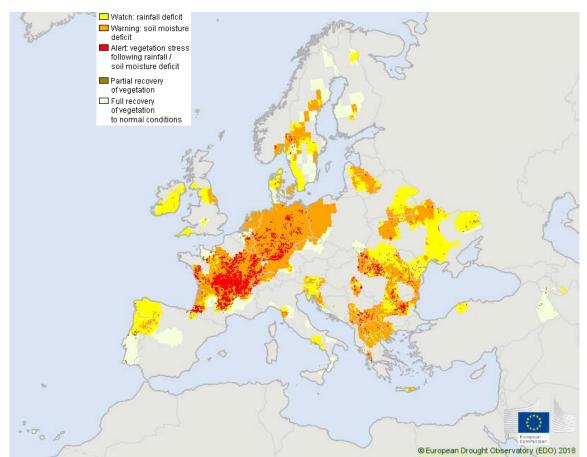




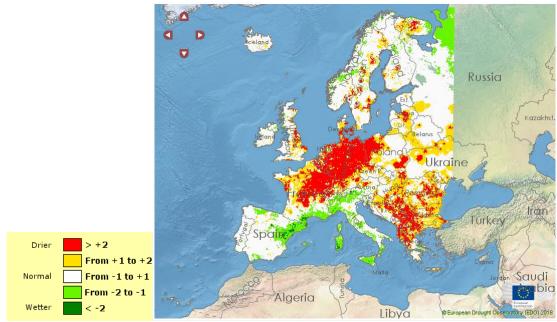


Weekly temperatures anomalies in °C for the last weeks (source: Climate Prediction Center, USA)



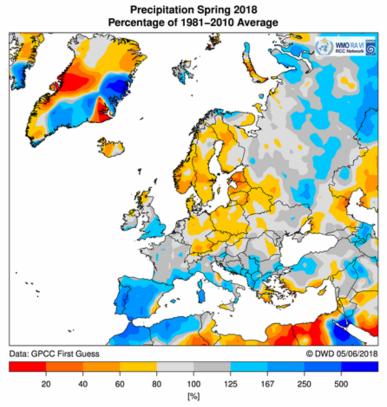


Combined Drought Indicator for Europe, 21 -31 October 2018 (Source: http://edo.jrc.ec.europa.eu/edov2/php/index.php?id=1000#)

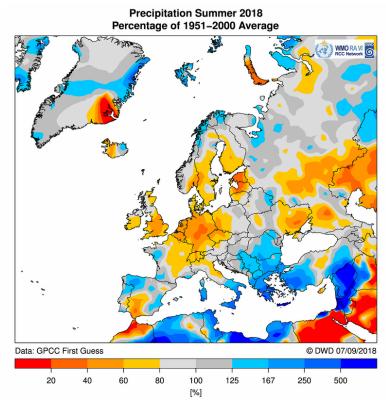


Soil Moisture Anomaly for Europe, 10 November 2018 (Source: <u>http://edo.jrc.ec.europa.eu/edov2/php/index.php?id=1111</u>)





Spring (March, April, May) 2018 precipitation anomalies as percentage of the long term mean (source: DWD RCC-CM, <u>https://www.dwd.de/rcc-cm</u>)



Summer (June, July, August) 2018 precipitation anomalies as percentage of the long term mean (source: DWD RCC-CM, <u>https://www.dwd.de/rcc-cm</u>)