

ID: 201808-u16

Climate Watch Advisory

Guidance on cold wave, heavy precipitation

Area concerned:

Cold wave: Northern, Western, Central and Eastern Europe (Iceland, Norway, Denmark, Sweden, Finland, Ireland, United Kingdom, Netherlands, Belgium, Luxemburg, France, Germany, Switzerland, Austria, Poland, Czech Republic, Slovakia, Hungary, Slovenia, Belarus, Lithuania, Latvia, Estonia, northern European Russia)

Heavy precipitation: Mediterranean and Middle East (Portugal, Spain, southern France, Monaco, Italy, Malta, Slovenia, Croatia, Bosnia-Herzegovina, Montenegro, Serbia, Albania, Former Yugoslav Republic of Macedonia, Greece, Bulgaria, Turkey, Cyprus, Lebanon, Syria, Israel, western 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 16 October 2018 Ninth update issued on 24 October 2018 Tenth update issued on 2 November 2018 Eleventh update issued on 14 November 2018 Twelfth update issued on 26 November 2018 Thirteenth update issued on 11 December 2018 Fourteenth update issued on 19 December 2018 Fifteenth update issued on 8 January 2019 Sixteenth update issued on 15 January 2019



Valid: Begin: on 15 January 2019 End: 28 January 2019

<u>To:</u> Climate Watch focal points of NMHSs: Iceland, Norway, Denmark, Sweden, Finland, Ireland, United Kingdom, Netherlands, Belgium, Luxemburg, France, Germany, Switzerland, Austria, Poland, Czech Republic, Slovakia, Hungary, Slovenia, Croatia, Bosnia-Herzegovina, Montenegro, Serbia, Albania, FYR of Macedonia, Greece, Bulgaria, Belarus, Lithuania, Latvia, Estonia, Russia, Turkey, Cyprus, Lebanon, Syria, Israel, Jordan, Portugal, Spain, Monaco, Italy, Malta

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 further cold wave in Northern, Western, Central and Eastern Europe for the next two weeks with possible extension to further two weeks. The probability for this development is estimated to more than 90%.

The cold wave will cause widespread frost even in lowlands (in Western Europe only temporarily), which might have dangerous impact on vegetation and health.

- 2. A continuation of a period of above-normal precipitation in the Eastern Mediterranean subregion and northern parts of the Middle East is expected for at least the next 1-2 weeks. In the second week only western parts of Turkey will be likely concerned. The probability is estimated to more than 90%.
- 3. The start of a period of above-normal precipitation in the Western and Central Mediterranean subregion (from Portugal to the Balkans/Greece) in the second week with possible extension to further two weeks. The probability for this development is estimated to 70- 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.

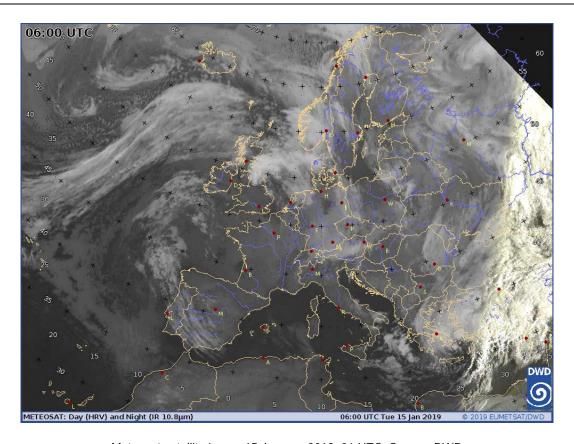
Please note that further information can be obtained from RCC Node-CM website (www.dwd.de/rcc-cm) concerning Climate Monitoring and from RCC Node-LRF websites (http://seasonal.meteo.fr/en, http://neacc.meteoinfo.ru/forecast) concerning Long-Range Forecast or by e-mail to rcc.cm@dwd.de or rcc-lrf-mf@meteo.fr.

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

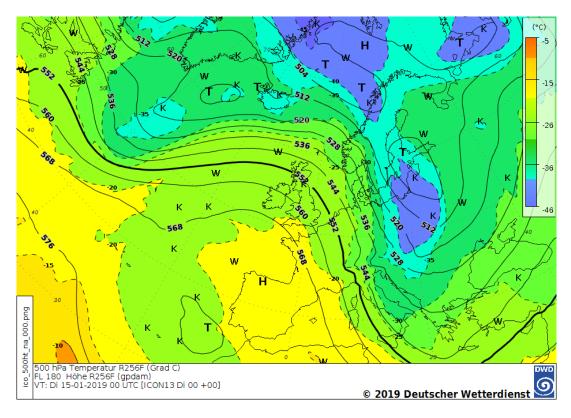
We will monitor the evolution of the anomaly, issue updates if significant change arise and close the advice when no clear signal can be detected in the forecasts.

On behalf of the RCC Node-CM Team



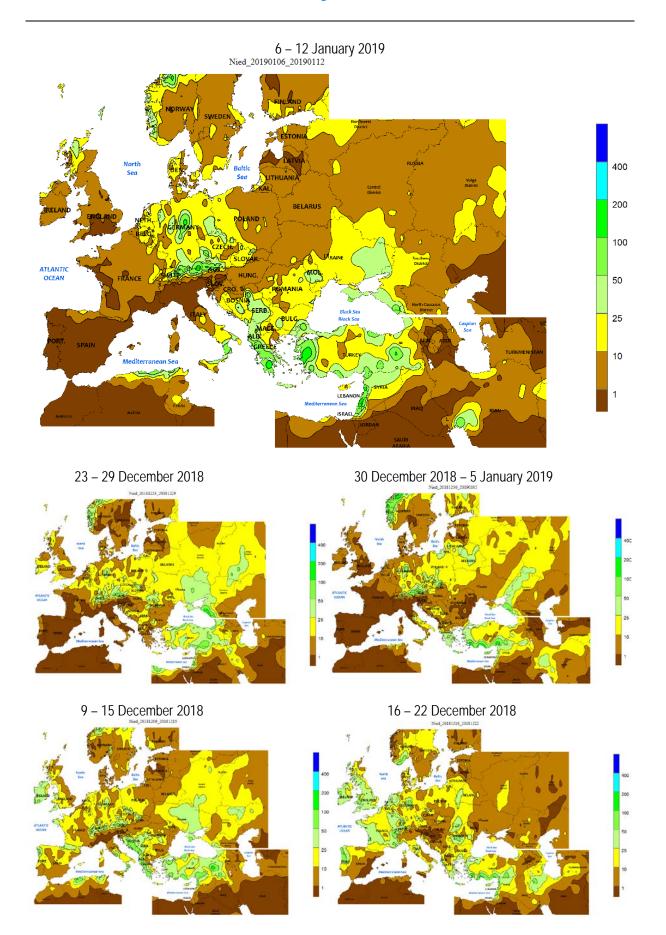


Meteosat satellite image 15 January 2019, 06 UTC. Source: DWD

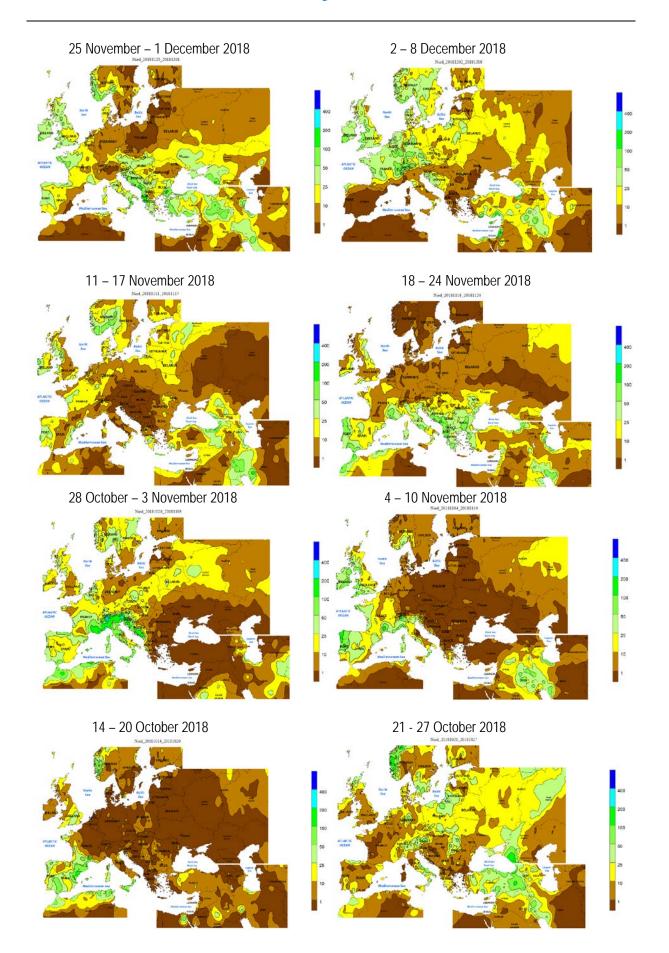


500 hPa chart, 15 January 2019, 00 UTC. Source: DWD

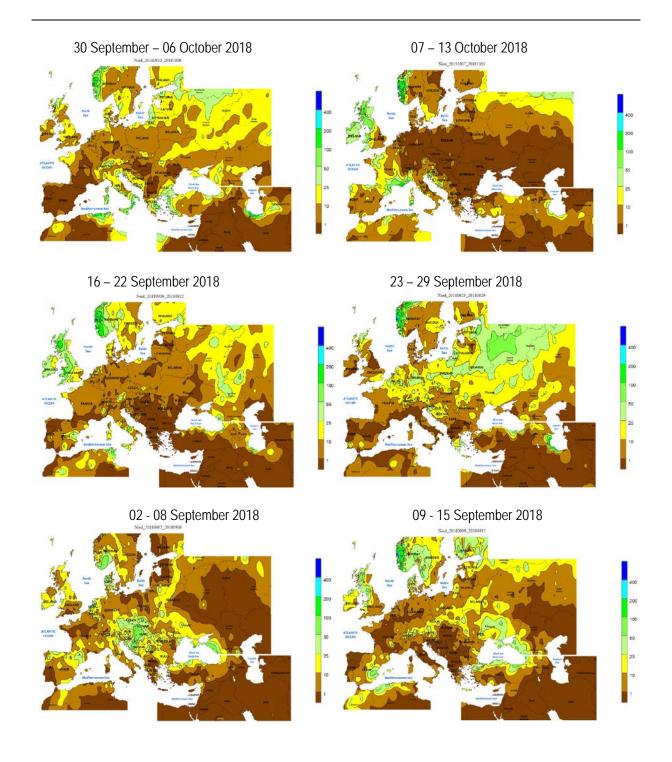




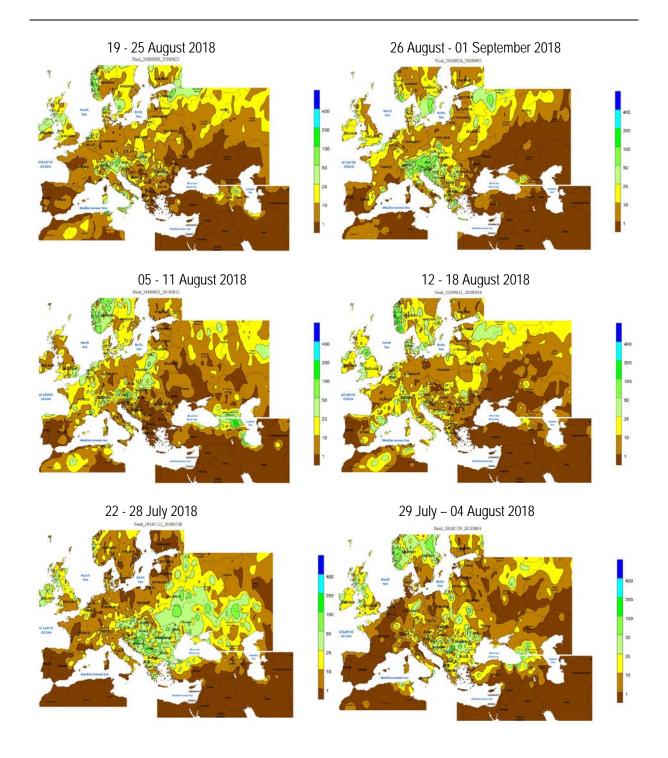




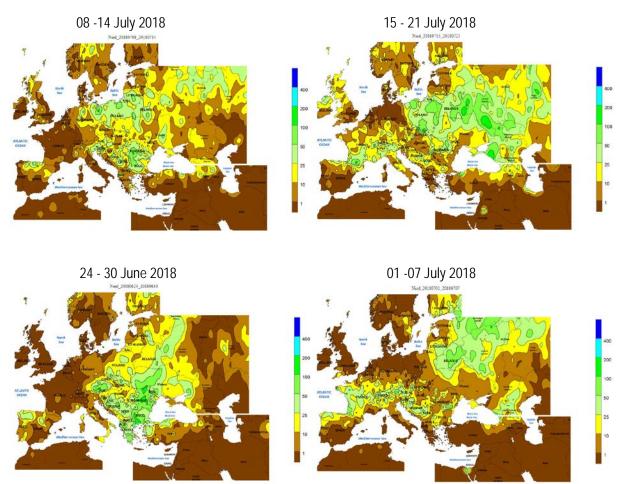






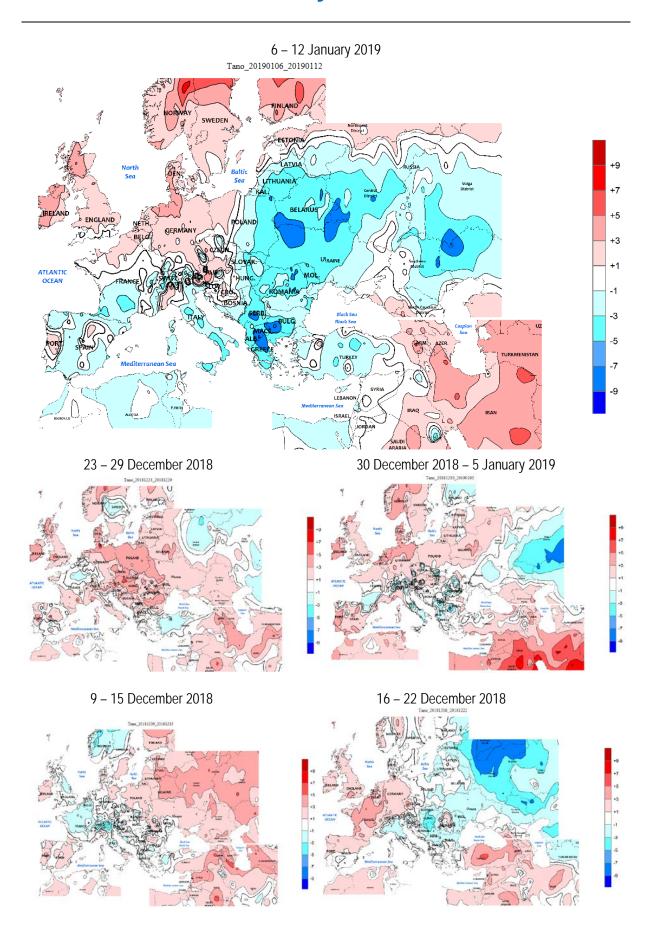




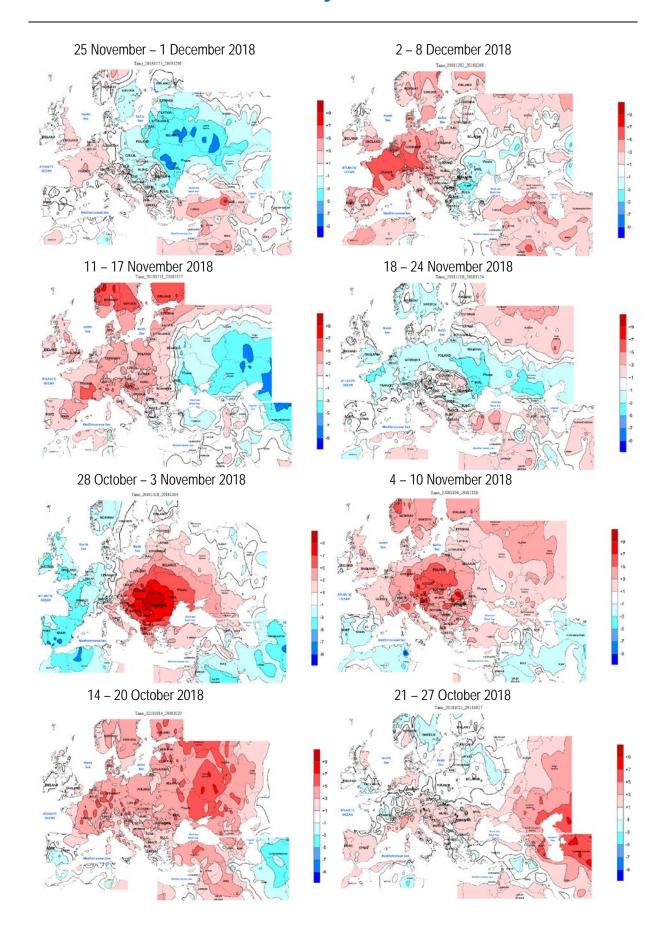


Weekly precipitation totals in mm for the last weeks (source: Climate Prediction Center, USA)

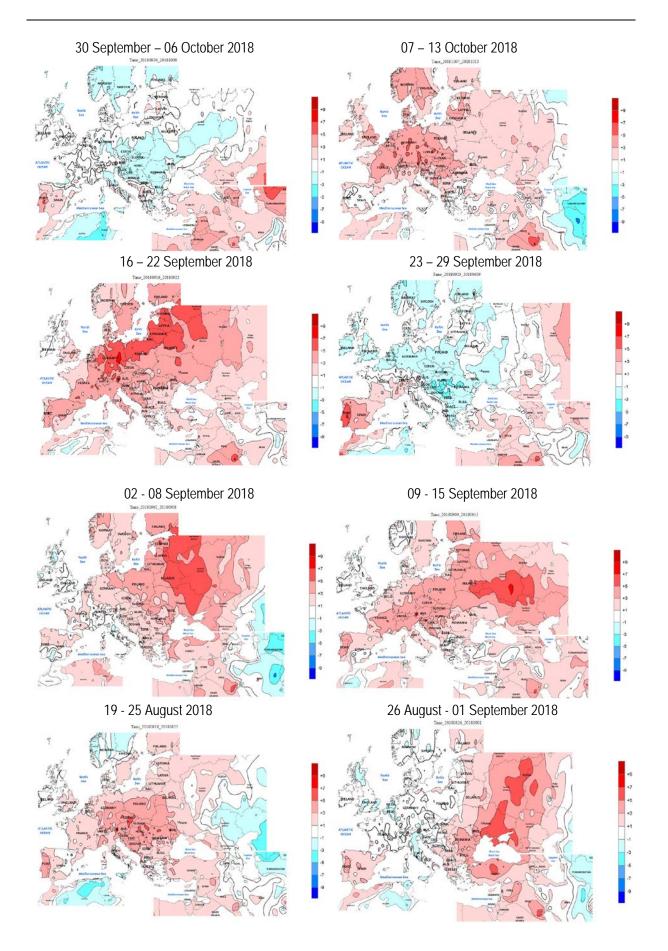




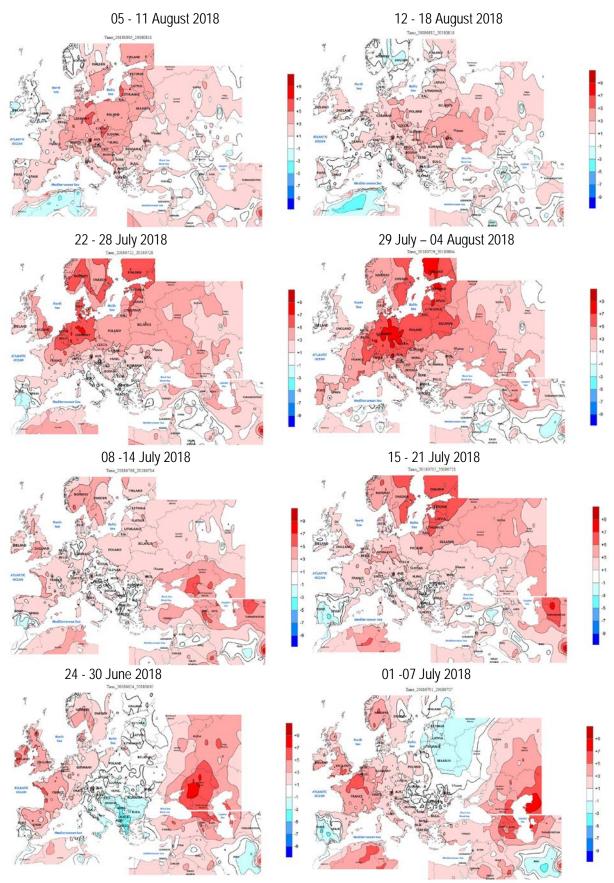






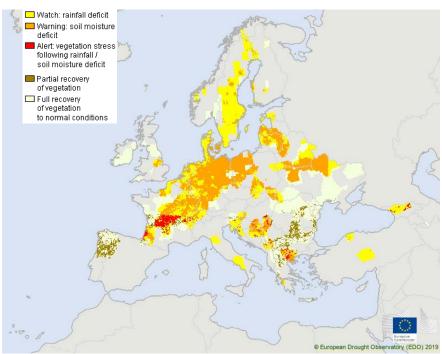




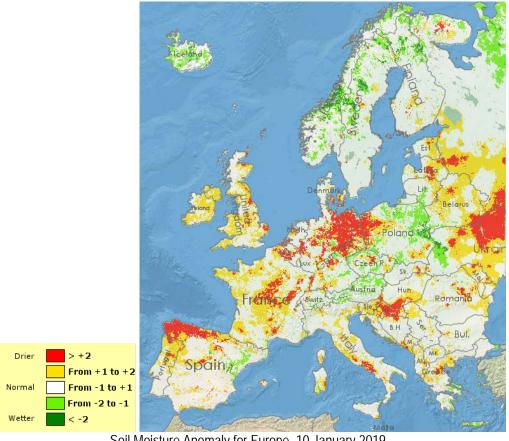


Weekly temperatures anomalies in °C for the last weeks (source: Climate Prediction Center, USA)



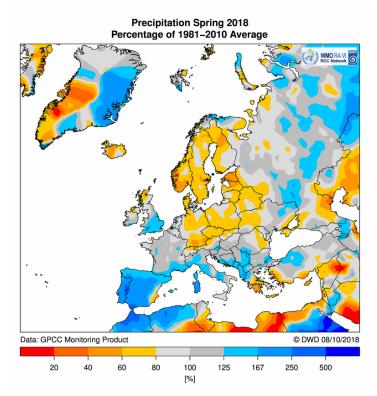


Combined Drought Indicator for Europe, 11 -20 December 2018 (Source: http://edo.jrc.ec.europa.eu/edov2/php/index.php?id=1000#)

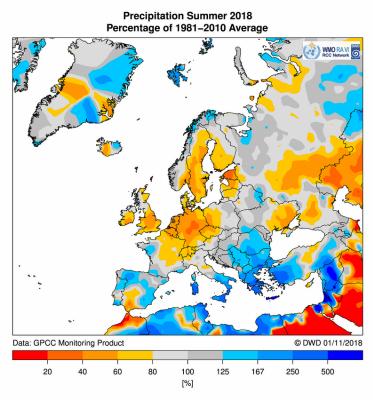


Soil Moisture Anomaly for Europe, 10 January 2019 (Source: http://edo.jrc.ec.europa.eu/edov2/php/index.php?id=1111)



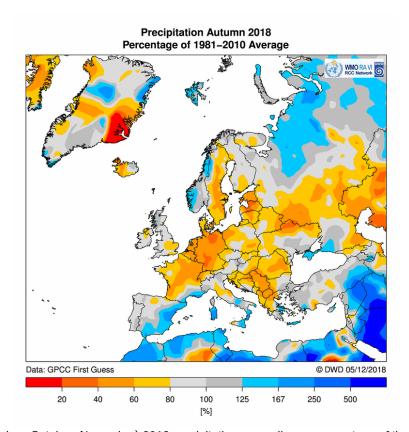


Spring (March, April, May) 2018 precipitation anomalies as percentage of the long term mean (source: DWD RCC Node-CM, https://www.dwd.de/rcc-cm)



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





Autumn (September, October, November) 2018 precipitation anomalies as percentage of the long term mean (source: DWD RCC Node-CM, https://www.dwd.de/rcc-cm)