

Guidance on cold wave, heavy precipitation

ID: 201808-u17

Area concerned:

Cold wave: Northern, Western, Central Europe (Iceland, Norway, Denmark, Sweden, Ireland, United Kingdom, Netherlands, Belgium, Luxemburg, France, Germany, Switzerland)

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, western and southern Turkey)

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 Seventeenth update issued on 29 January 2019



Valid: Begin: on 29 January 2019

End: 12 February 2019

<u>To:</u> Climate Watch focal points of NMHSs: Iceland, Norway, Denmark, Sweden, Ireland, United Kingdom, Netherlands, Belgium, Luxemburg, France, Germany, Switzerland, Slovenia, Croatia, Bosnia-Herzegovina, Montenegro, Serbia, Albania, FYR of Macedonia, Greece, Bulgaria, Turkey, 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 continuation of cold wave in Northern, Western, Central Europe for the next two weeks with tendency of weakening especially in the second week. The probability for this development is estimated to more than 90% for the first week and 60-70% for the second week.

The cold wave will cause widespread frost even in lowlands (in Western Europe only temporarily), which might have dangerous impact on vegetation and health. Occasional snowfall can occur also, particularly in the first week.

2. A continuation of a period of above-normal precipitation in the Mediterranean subregion from Portugal to western and southern Turkey is expected for at least the next 1-2 weeks. Particularly concerned will be northern Iberia, Italy with central Mediterranean, western coasts of the Balkans and Greece, the Aegean Sea region and coasts of western and southern Turkey. In the second week, the main precipitation area will move to the east, and only areas near to southern Adriatic Sea / Ionic Sea, Aegean Sea and western/southern Turkey will be likely concerned. The probability is estimated to more than 90% for the first week, 70-90% for the second week.

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.

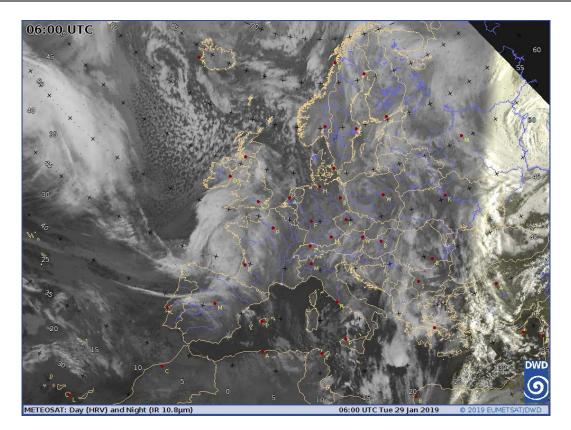
Please note that further information can be obtained from RCC Node-CM website (<u>www.dwd.de/rcc-cm</u>) concerning Climate Monitoring and from RCC Node-LRF websites (<u>http://seasonal.meteo.fr/en</u>, <u>http://neacc.meteoinfo.ru/forecast</u>) concerning Long-Range Forecast or by e-mail to <u>rcc.cm@dwd.de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

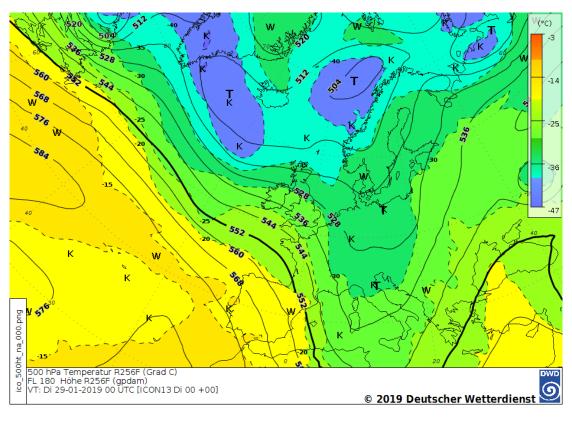
We will monitor the evolution of the anomaly, issue updates if significant change arise and close the advice when no clear signal can be detected in the forecasts.

On behalf of the RCC Node-CM Team



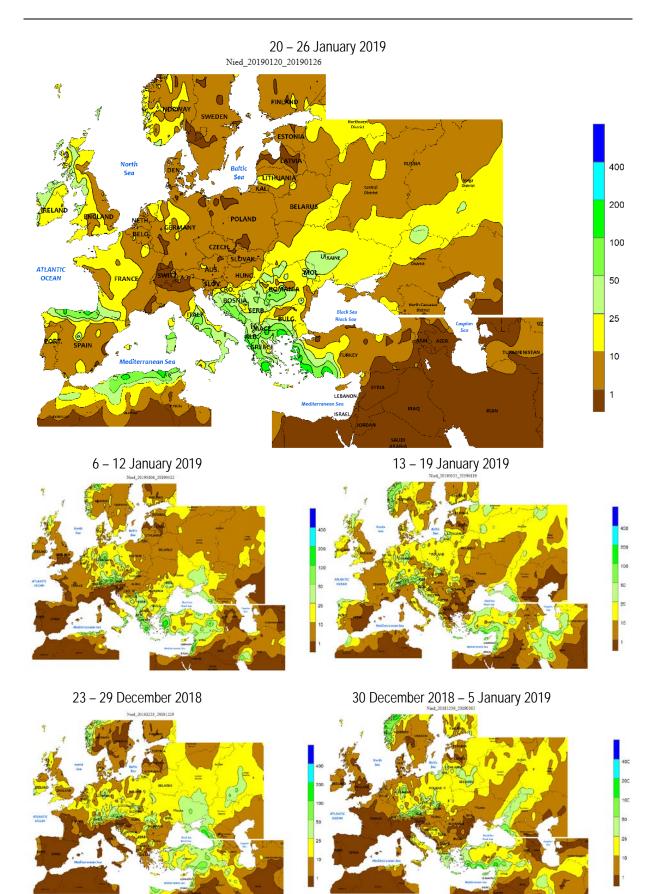


Meteosat satellite image 29 January 2019, 06 UTC. Source: DWD

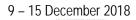


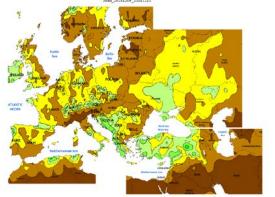
500 hPa chart, 29 January 2019, 00 UTC. Source: DWD



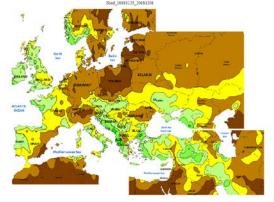








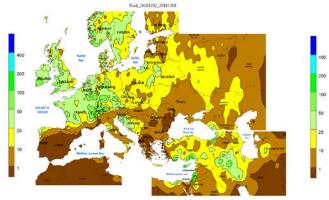
25 November – 1 December 2018



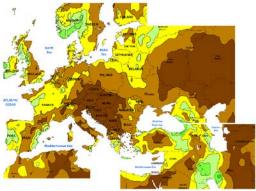
11 - 17 November 2018



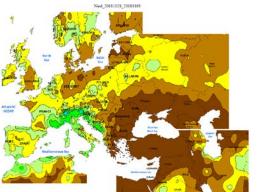
2 - 8 December 2018



18 – 24 November 2018

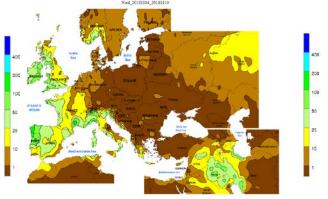


28 October – 3 November 2018

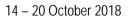


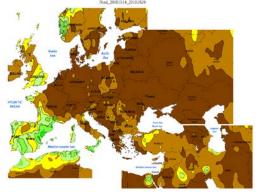


4 – 10 November 2018

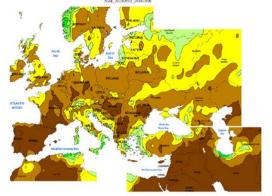






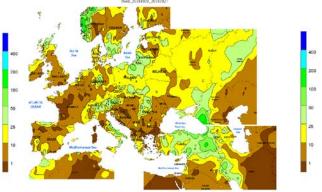


30 September – 06 October 2018

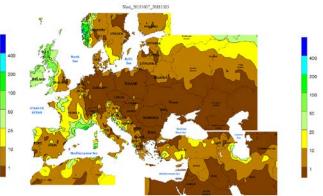


16 - 22 September 2018

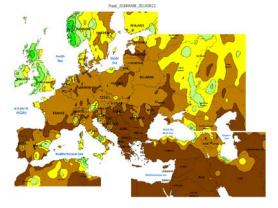
21 - 27 October 2018



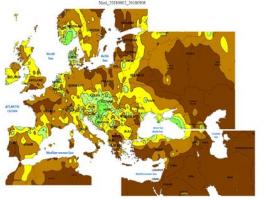
07 – 13 October 2018

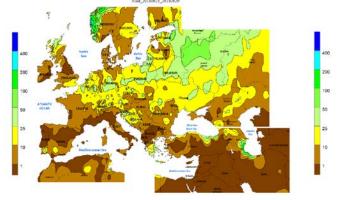


23 – 29 September 2018

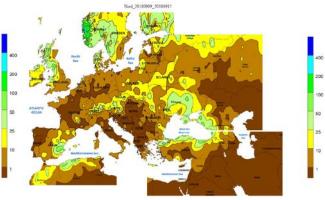


02 - 08 September 2018





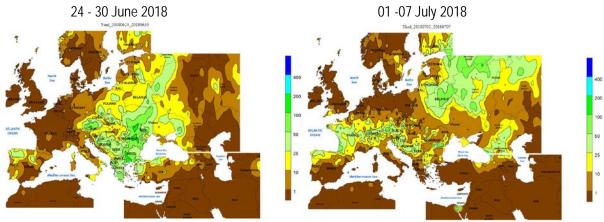
09 - 15 September 2018





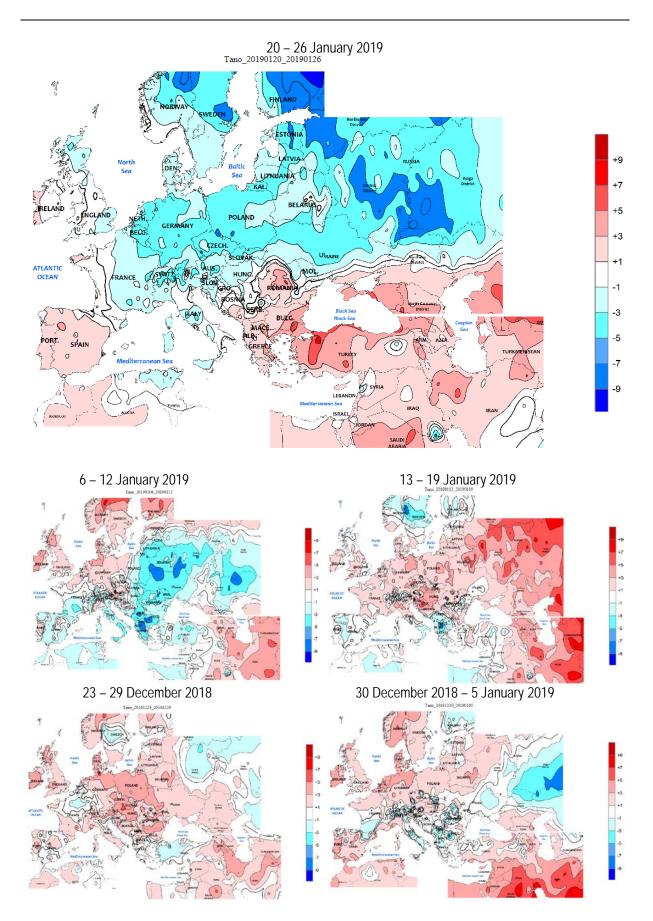
26 August - 01 September 2018 19 - 25 August 2018 05 - 11 August 2018 12 - 18 August 2018 22 - 28 July 2018 29 July - 04 August 2018 15 - 21 July 2018 08 -14 July 2018





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

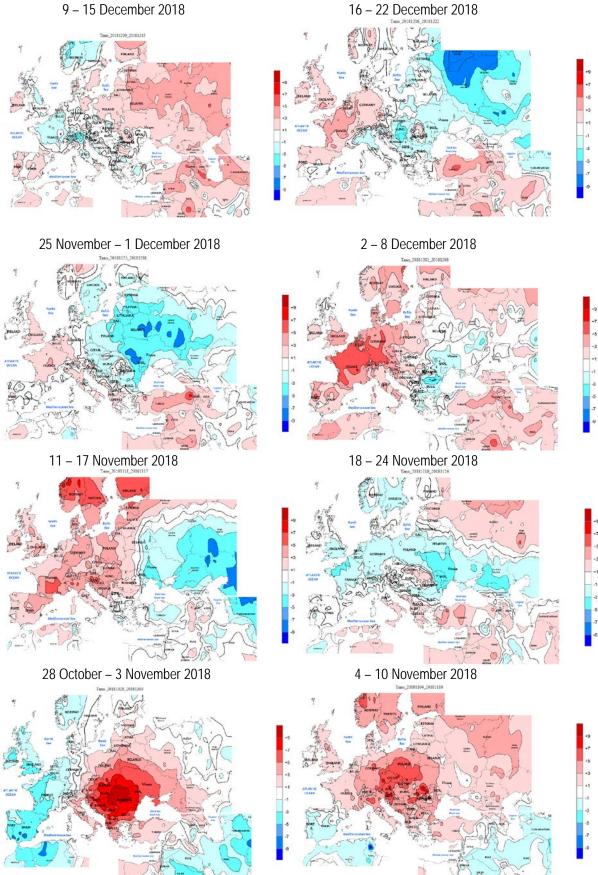




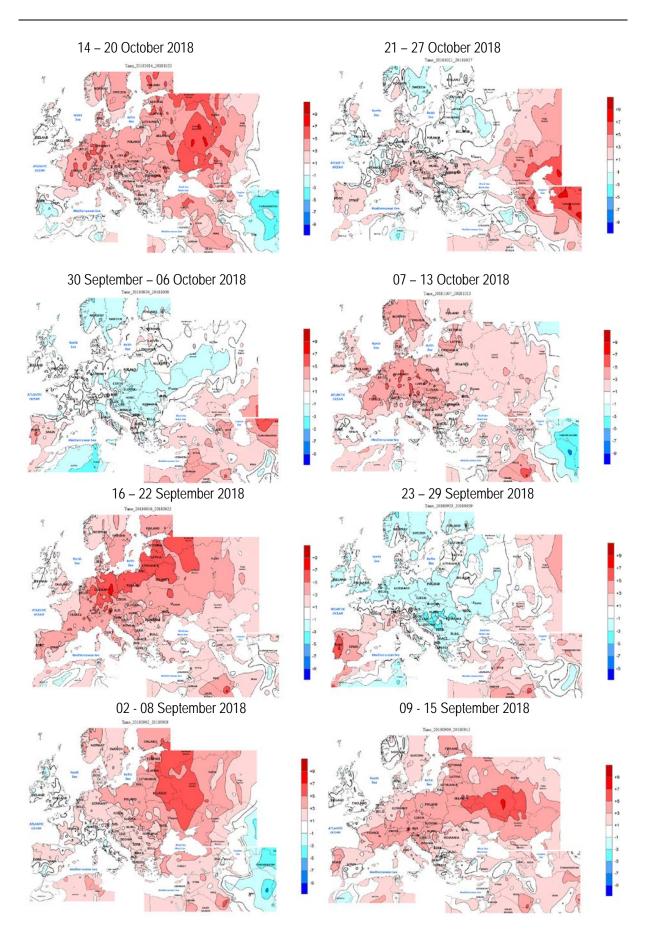




9 – 15 December 2018

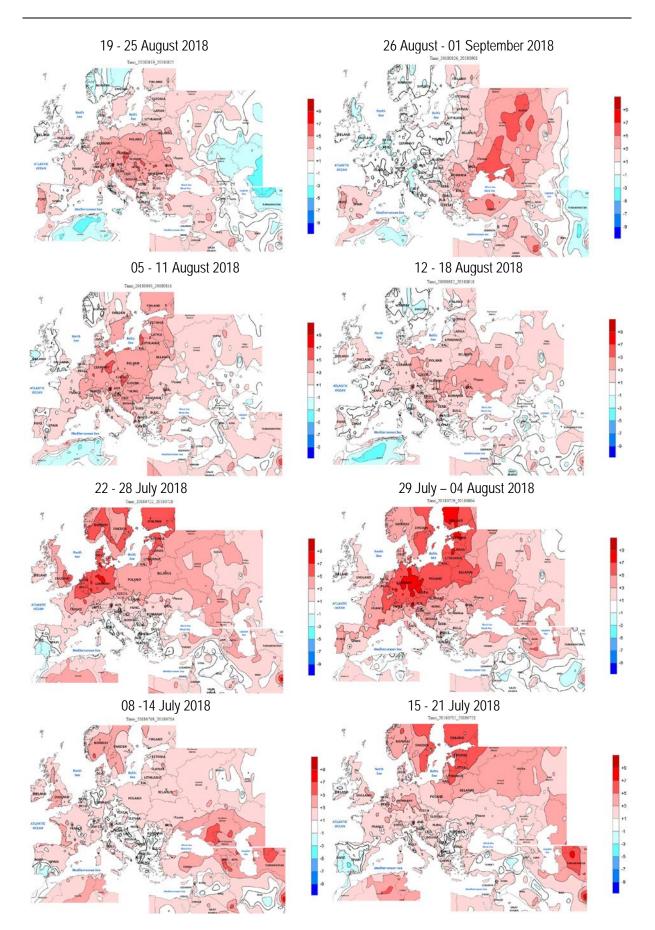




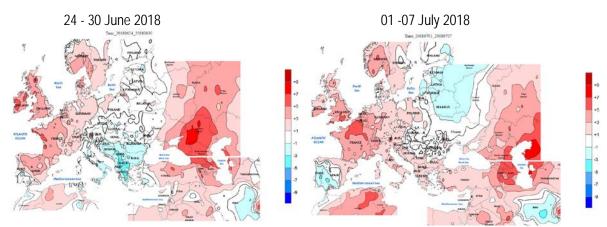






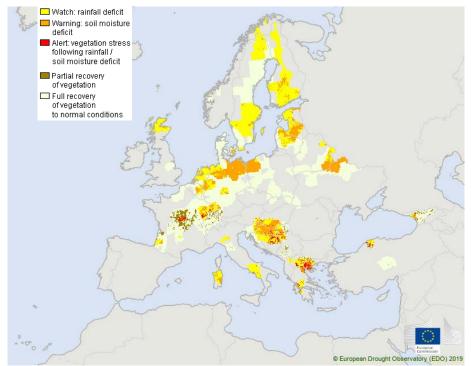




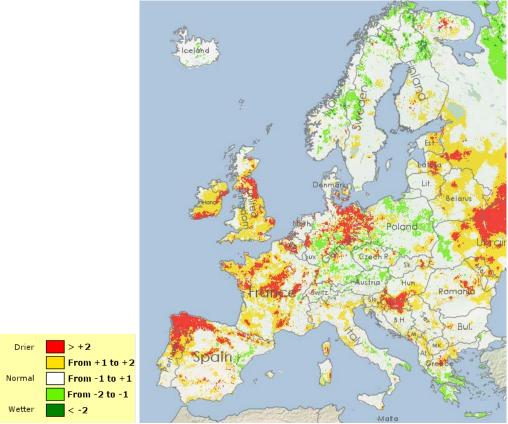


Weekly temperatures anomalies in °C for the last weeks (source: Climate Prediction Center, USA)



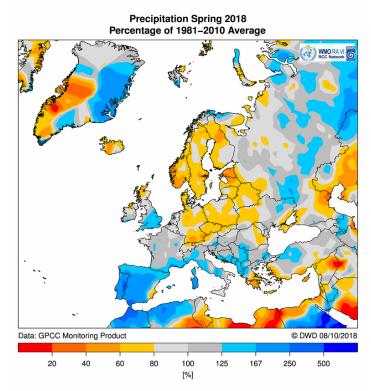


Combined Drought Indicator for Europe, 1 - 10 January 2019 (Source: <u>http://edo.jrc.ec.europa.eu/edov2/php/index.php?id=1000#</u>)

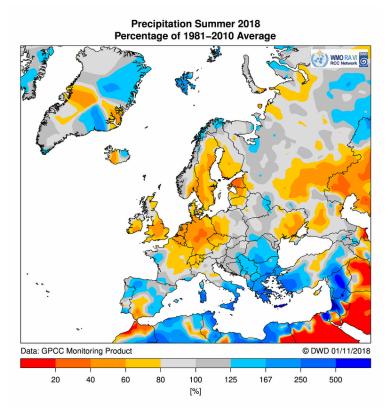






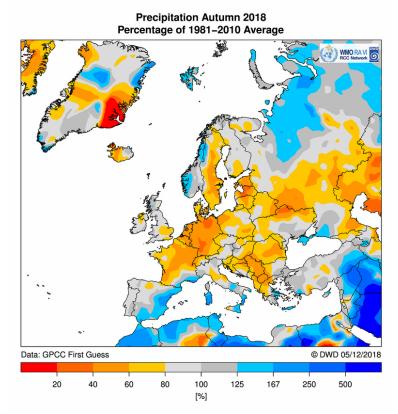


Spring (March, April, May) 2018 precipitation anomalies as percentage of the long term mean (source: DWD RCC Node-CM, <u>https://www.dwd.de/rcc-cm</u>)



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





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