

Guidance on **heat wave**

ID: 201905-i

Area concerned: Portugal, Spain, France, southern United Kingdom, Netherlands, Belgium, Luxembourg, Germany, Switzerland, Austria, Czech Republic, Poland, Slovakia, Hungary



Initial statement issued on 19 July 2019

Valid: Begin: on 19 July 2019 End: 2 August 2019

To: Climate Watch focal points of Portugal, Spain, France, United Kingdom, Netherlands, Belgium, Luxembourg, Germany, Switzerland, Austria, Czech Republic, Poland, Slovakia, Hungary

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 heat wave propagating from Southwestern Europe over Central Europe eastwards during the next two weeks. Highest temperatures for western Central Europe are expected for the middle of next week. During the second week, the intensity will decrease and the heat wave will affect mainly eastern Central Europe. Highest daily maxima above 40°C are to be expected for Southwestern Europe and above 35°C for Central Europe. Weekly temperature anomalies will be up to + 3-6°C in the first week and up to + 1-3°C (mainly in eastern Central Europe) in the second week. The probability for this development is above 90% for the first week and 60-80% for the second week. There is a risk of enhanced heat stress for vulnerable people, animals and plants. "

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.

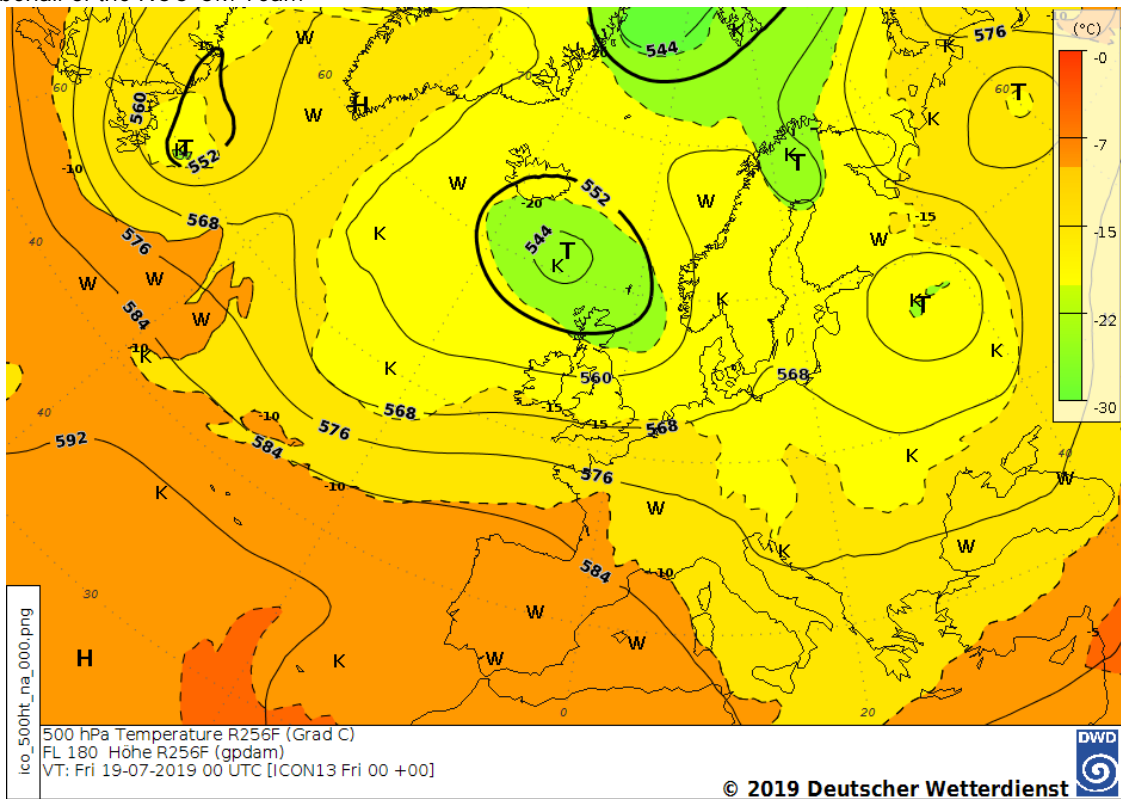
Please note that further information can be obtained from RCC-CM website (www.dwd.de/rcc-cm) concerning Climate Monitoring and from RCC-LRF websites (<http://seasonal.meteo.fr>, <http://neacc.meteoinfo.ru/forecast>) concerning Long-Range Forecast or by e-mail to rcc.cm@dwd.de or rcc-lrf-mf@meteo.fr.

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

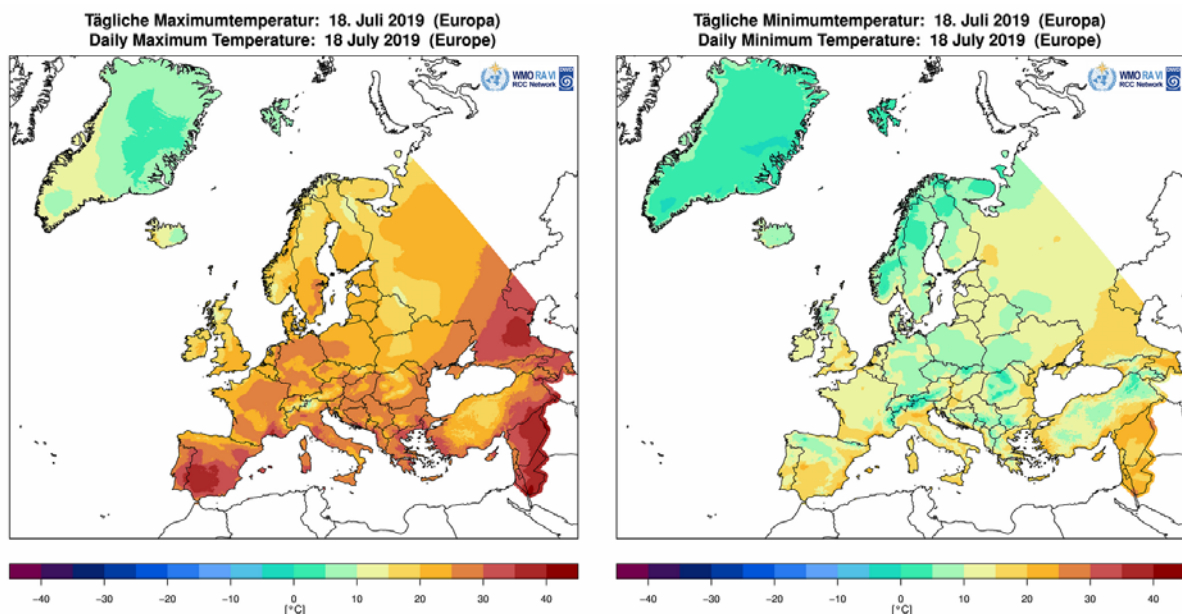
We will monitor the evolution of the anomaly, issue updates if significant change arise and close the advice when no clear signal can be detected in the forecasts.

Climate Watch Advisory

On behalf of the RCC-CM Team

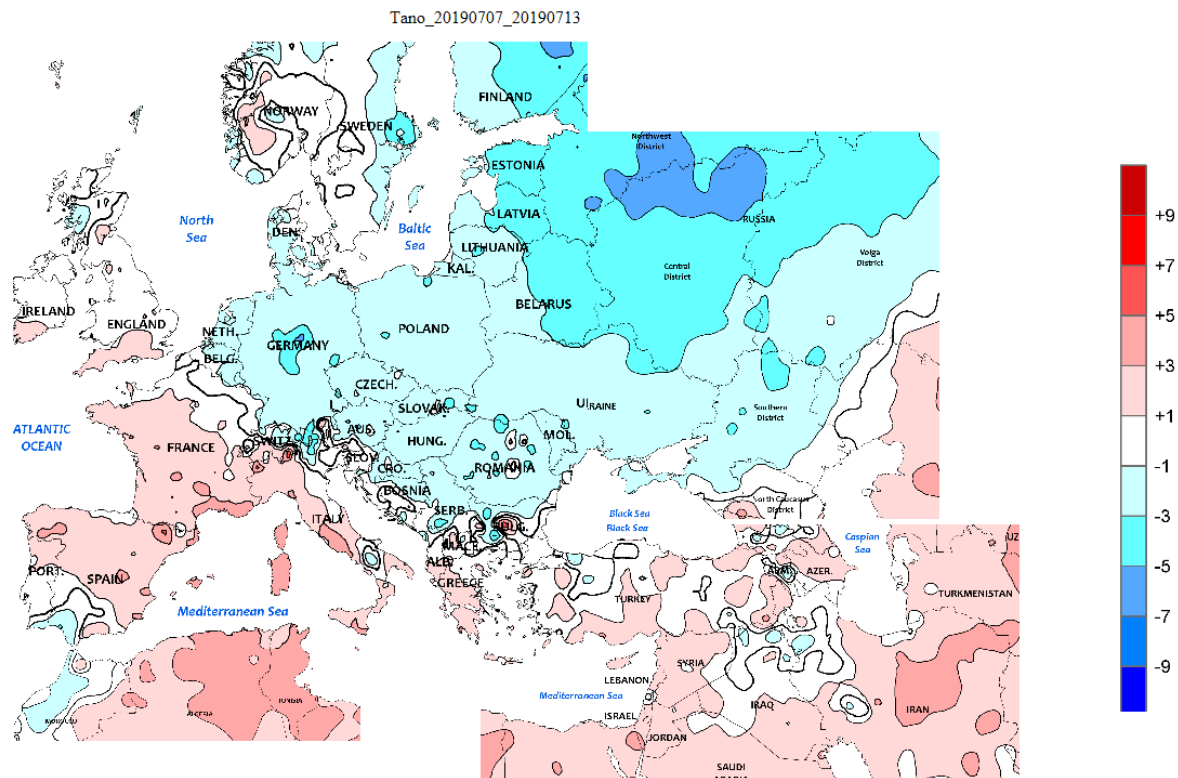


500 hPa chart, 19 July 2019, 00 UTC. Source: DWD



Daily maximum and minimum temperature on 18 July 2019 (source: DWD RCC-CM, <https://www.dwd.de/rcc-cm>)

Climate Watch Advisory



Weekly temperature anomalies in °C for 7-13 July 2019 (source: NOAA Climate Prediction Center, USA)

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

Countries affected	Begin	End	Duration in days	Fatalities	Description
Spain, Portugal, France, Germany, SW-Russia, Sweden and Latvia	1 August 2018	9 August 2018	9	10	An intense heat wave affected parts of Europe and ten people have died because of the extreme event. It sparked across the affected areas the melting mountain (Switzerland), fish dying, bad harvest and toxic algae (Baltic).