



CLIMATE WATCH ADVISORY

Предупреждения о неблагоприятных климатических явлениях

The 16th session of the CIS climate Forum on seasonal forecasts
(NEAKOF-16)

Ganieva Ekaterina

3 June 2019

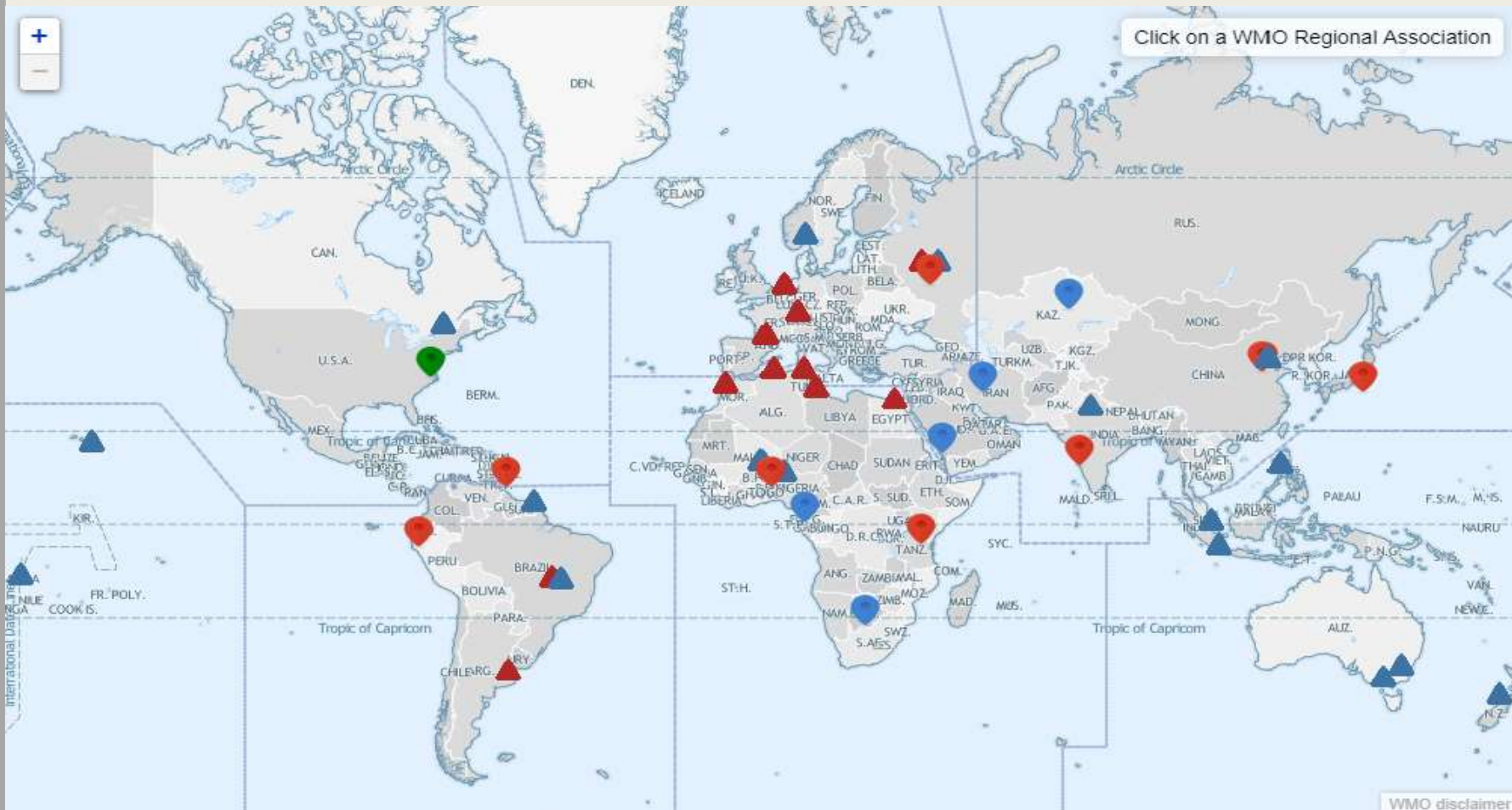
The content

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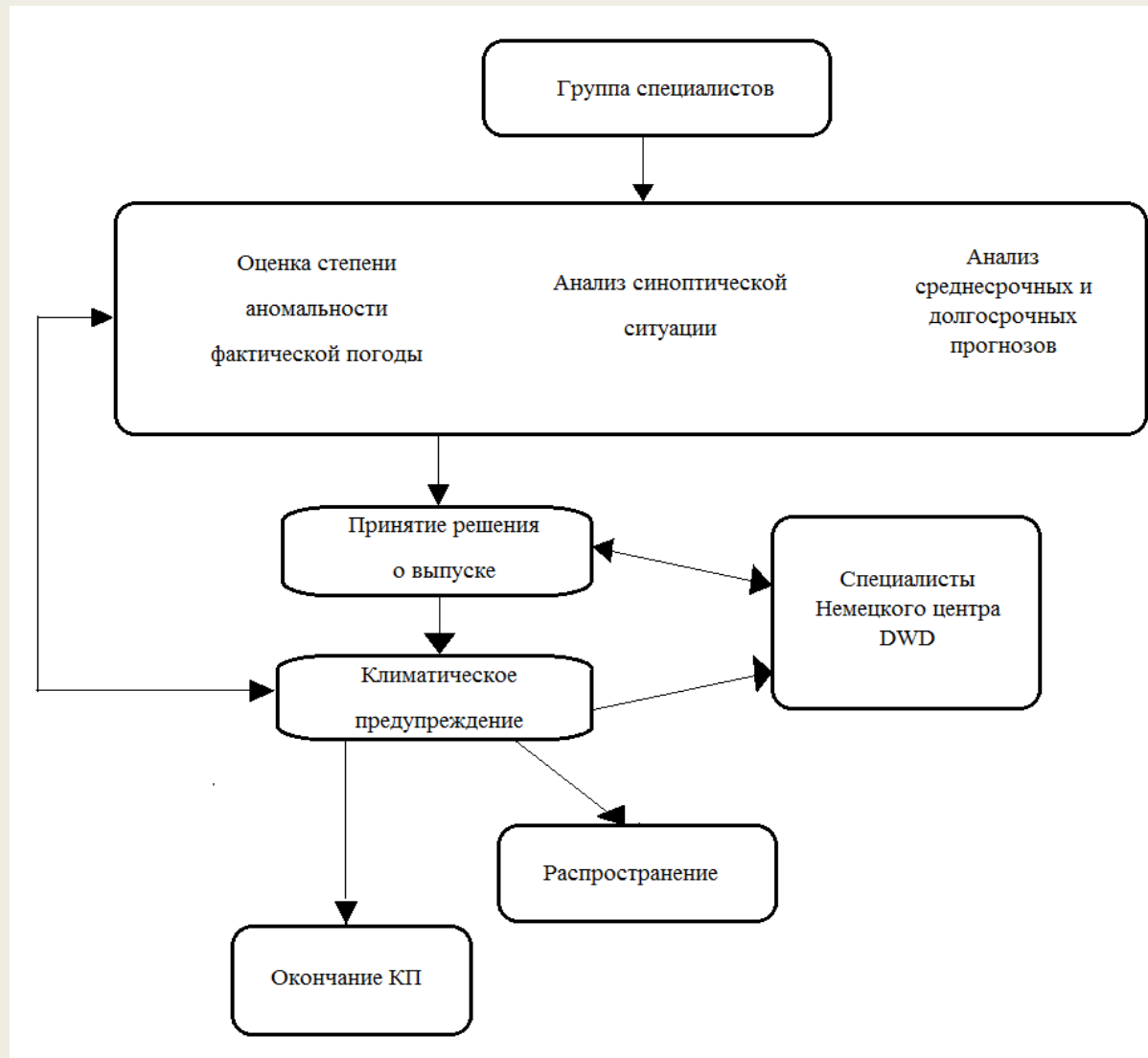
Regional Climate Centers (RCC) and RCC-network with WMO

For RA-VI Region NEACC functions as one of Long-Range Forecast nodes of the RA-VI Regional Climate Network.

For RA-II Region NEACC functions as a Multifunctional Regional Climate Center.



The process of issuing a warning



The climate watch advisory from Deutscher Wetterdienst (DWD, German Meteorological Service)

Guidance on cold spell

Area concerned: most of Europe

Initial statement issued on 20 February 2018

Valid: Begin: on 20 February 2018

End: 12 March 2018

To: Climate Watch focal points of NMHSs: Russia, Denmark, Estonia, Finland, Latvia, Lithuania, Norway, Sweden, Belarus, Ukraine, Austria, Belgium, Czech Republic, France, Germany, Hungary, Ireland, Luxemburg, Monaco, the Netherlands, Poland, Slovakia, Switzerland, United Kingdom, Slovenia, Serbia, Croatia, Bosnia and Herzegovina, Montenegro, the Former Yugoslav Republic of Macedonia, Bulgaria, Romania, Moldova, Albania, Greece, Italy, Portugal, Spain

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-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 period with significantly below-normal temperatures (cold spell) at least for this and the next 2-3 weeks is expected for most of Europe (from Spain to Greece and from Ireland to Russia). The coldest days are expected for next week with weekly temperature anomalies below -10°C in western European Russia, Belarus, Ukraine and Poland. Weekly temperature anomalies below -6°C are expected in Central Europe, northern Italy, the Balkans and the Baltic States. The weekly anomalies for southern, western and northern Europe are forecasted with -3°C to -6°C. Depending on local situations the daily anomalies can go below these limits. Daily minimum temperatures are expected to be below 0°C even in the south. The probability for this temperature anomaly is estimated to be above 90% for the first two weeks and partly in the third week. This cold period with surface frost could freeze the developing crops and fruits and could be a risk of life for vulnerable people exposed to the cold."

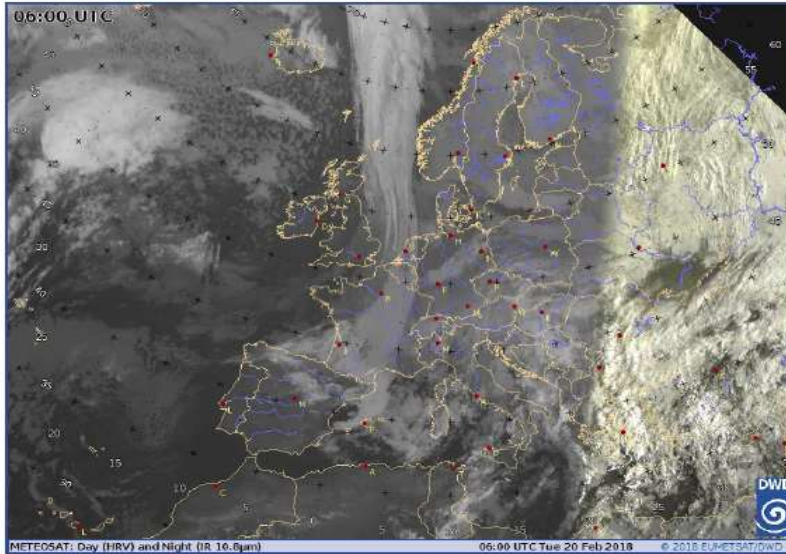
This information should be used as guidance for the National Meteorological and Hydrological Services (NMHS) in a pre-operational mode. It is up to the above mentioned NMHSs to closely monitor the status and evolution of the current climate conditions and to consider issuing a national Climate Watch 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!

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

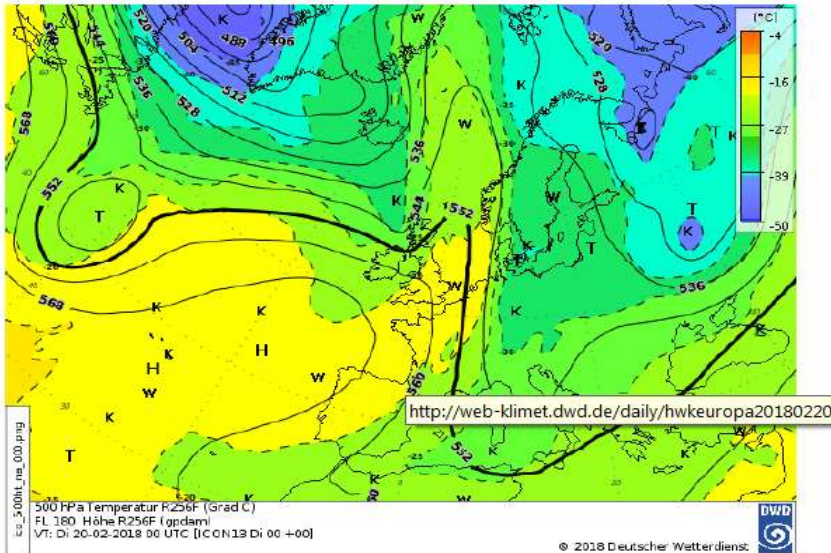
Please note that further information can be obtained from RCC-CM website (www.dwd.de/rcc-cm) concerning Climate Monitoring and from RCC-LRF websites (<http://elaboration.seasonal.meteo.fr/en/content/bienvenue>, <http://neacc.meteoinfo.ru/forecast>) concerning Long-Range Forecast or by e-mail to rcc.cm@dwd.de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

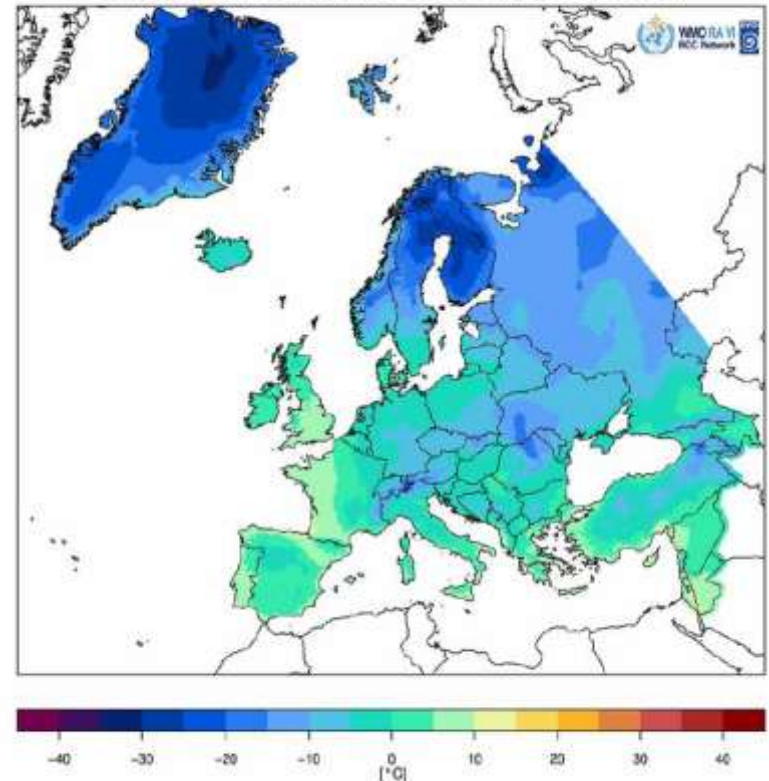


Meteosat 10 satellite image 20 February 2018, 06 UTC. Source: DWD



500 hPa chart, 20 February 2018, 00 UTC. Source: DWD

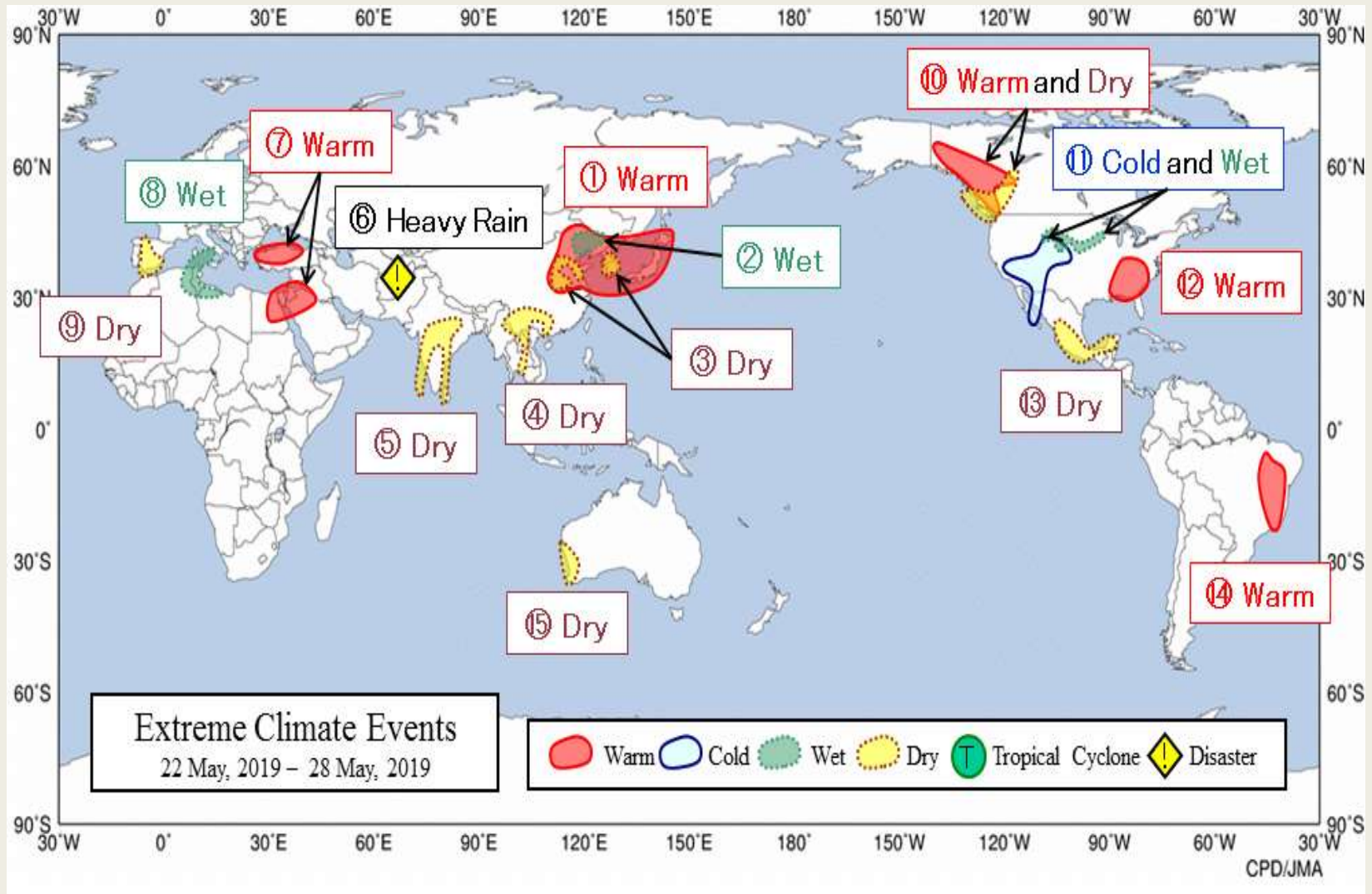
Tägliche Minimumtemperatur: 20. Februar 2018 (Europa) Daily Minimum Temperature: 20 February 2018 (Europe)



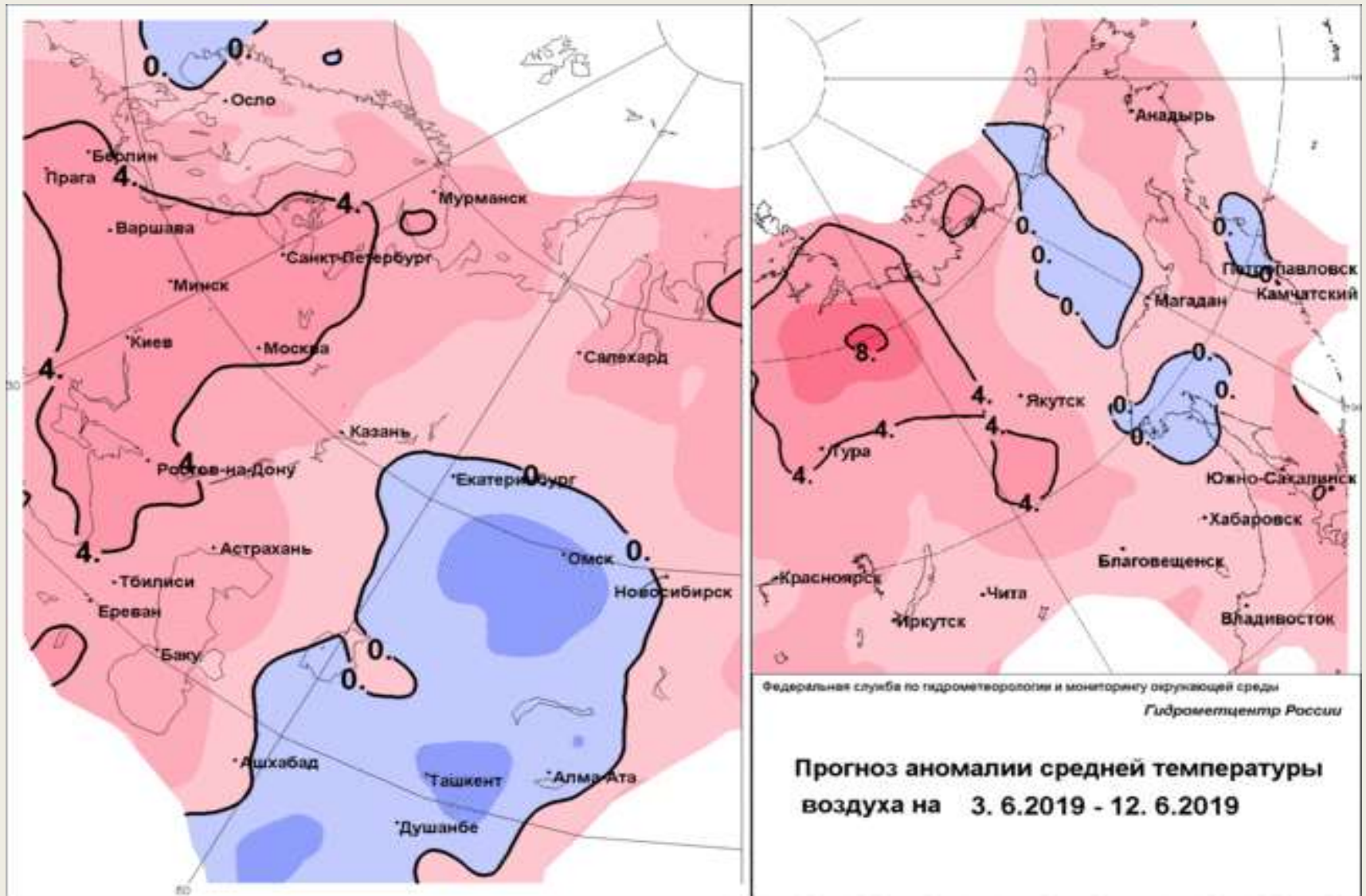
Daily minimum temperature for Europe/RA VI from 20 February 2018 (Source: <http://www.dwd.de/rcc-cm/>)

The Weekly Report on Global Extreme Climate Events

Tokyo Climate Center in the RA-II region (Asia), coordinated by the Japan Meteorological Agency.



The forecast of anomaly temperature for 10 days from Hydrometeorological centre of Russia



Федеральная служба по гидрометеорологии и мониторингу окружающей среды
Гидрометцентр России

**Прогноз аномалии средней температуры
воздуха на 3. 6.2019 - 12. 6.2019**

The climate watch advisory from NEACC

CLIMATE WATCH ADVISORY



WMO RA VI
WMO RA II
RCC-Network

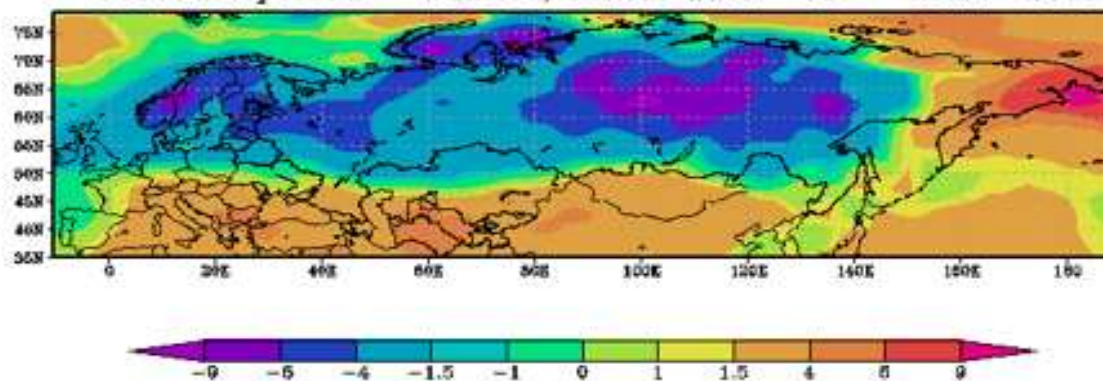


TEMPERATURE WILL BE SIGNIFICANTLY BELOW NORMAL

The new forecasts (from 01.03.2017) for the next week show anomalously cold weather for the most part of the European Russia, the Baltic States, Belarus and Ukraine. The most significant anomalies (down to 8-10°C) are forecasted in the northern and northwest regions of the European Russia.

WEEKLY DETERMINISTIC FORECASTS OF TEMPERATURE ANOMALIES (MGO MODEL)

T2m anomalies. Producer: MGO
Forecast period – WEEK 1, initial data: 01 mart 2018



Abnormal cold weather

At a period (from October to March) when the mean daily temperature anomalies are less than 7 °C during the 5 or more days.

The dangerous phenomena are the phenomena of weather which intensity, duration and time of occurrence represent threat of a security of people, as well as they can cause significant damage to branches of economy. The list of the typical dangerous phenomena which are used and specified by the local territorial hydrometeorological services of Russia Federation is located on the web site of the Hydrometeorological centre of Russia: <http://meteoinfo.ru/hazards-definitions>

Abnormal hot weather

At a period (from April to September) when the mean daily temperature anomalies are more than 7 °C during the 5 or more days.

<http://neacc.meteoinfo.ru>

<http://neacc.meteoinfo.ru>

СЕВЕРО-ЕВРАЗИЙСКИЙ КЛИМАТИЧЕСКИЙ ЦЕНТР

CLIMATE WATCH ADVISORY



WMO RA VI
WMO RA II
RCC-Network



There was the ultra polar intrusion of cold Arctic air masses from the northeast (Fig. 1) to the most part of the European Russia on the 21st of February. The weather was clear and frosty due to anticyclonic conditions (Fig.2). The temperature anomalies over the last week exceeded to 4-8°C below normal, in the west regions down to 10-12°C. The records of minimum temperature was updated in some cities. On the 27th of February, the minimum temperature dropped to -33.3°C (the previous record -28.9° C in 1963) in Rybinsk, and to -26.5°C (-25.0° C in 1963) in Vladimir.

TEMPERATURE ANOMALIES Observations (236 stations)

Аномалии температуры воздуха. Факт.
20180223-20180301

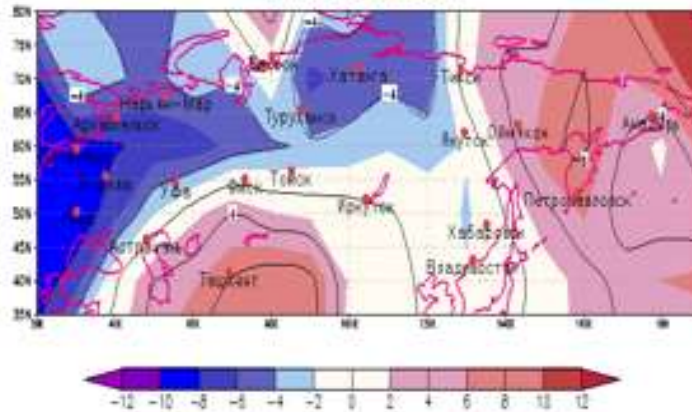


Fig.1. 500 hPa, 21-28 February 2018.

Source : Hydrometeorological centre of Russia



Fig.2. Sea level pressure, 21-28 February 2018.

Source : Hydrometeorological centre of Russia



<http://neacc.meteoinfo.ru>

<http://neacc.meteoinfo.ru>

Links

- Прогноз моделей ECMWF, ICON и GFS <https://www.windy.com/>
- ГМЦ, прогноз аномалии температуры <https://meteoinfo.ru/prognoz-na-dekadu>
- СЕАКЦ <http://seakc.meteoinfo.ru/index.php>
- Tokyo Climate Centre TCC <http://ds.data.jma.go.jp/tcc/tcc/products/climate/sokuho.html>
- Прогноз модели ICON, GFS, GEM <https://www.ventusky.com/>
- Немецкий центр DWD https://rcccm.dwd.de/DWD-RCCCM/EN/products/cwa/cwa_node.html

Thank you for your attention