

Outlook of expected conditions from January to March 2023

The outlook includes the results of long-term forecasts of the Hydrometcenter of Russia and Voeikov Main Geophysical Observatory (in the framework of NEACC project) and of other foreign centers. The outlook of expected conditions is based on the NEACC data; the forecast products of other multimodel forecast centers are reviewed in the table. The NEACC site information is of advisory character and must be applied to particular regions taking into account the predictability of meteorological processes, regional climate, and quality of state-of-the-art atmosphere and ocean general circulation models.

Temperature regime (near-surface air temperature)

According to the forecasts of the Hydrometcenter of Russia and Main Geophysical Observatory models, the forthcoming 3-month period is expected with

warmer than normal:

over most of in most of Europe, Siberia and the south of the Far East.

Note that: over most of Northern Eurasia (except for Siberia and East Europe) the models of the Hydrometcenter of Russia and of Main Geophysical Observatory predict the different categories of air temperature anomalies.

Precipitation

According to the forecasts of the Hydrometcenter of Russia and of Main Geophysical Observatory, the forthcoming 3-month period is expected with

precipitation deficit:

in the south of Western Europe..

exceeding precipitation:

in the north of Western Europe, over most of the European Russia (except for the south and northeast), in the north-west of Kazakhstan and in the south of Siberia.

Atmospheric circulation indices

According to the forecasts of the Hydrometcenter of Russia, the forthcoming 3-month period is expected with *positive values of index NAO. Positive values of index NAO are indicative of an above normal temperature in the north of Europe and below normal temperature in the south of Europe. Positive values of the index are indicative of a below (above) normal precipitation in the south (north) of Europe too.*

Comparison with the forecasts of other centers		
The forecasts of the Hydrometcenter of Russia and of Main Geophysical Observatory	The foreign forecast centers	
	Similar categories	Opposite categories
Near-surface air temperature – warmer than normal		
- Europe	APCC, ECMWF, IRI, LC MMELRF	
- Siberia	APCC, ECMWF(except south), IRI, LC MMELRF	
-Central Asia	APCC, ECMWF(except north-east), IRI,	
-Far East	APCC, ECMWF, IRI(except Yakutia), LC MMELRF	IRI (Yakutia)

Precipitation – Deficit		
-Europe	APCC (south-east), IRI(south-east), LC MMELRF(south-east)	APCC (north)
- Central Asia	APCC(†or), IRI(†or), LC MMELRF(†or)	
Precipitation – exceeding precipitation		
-Siberia	APCC, ECMWF(north), IRI(north), LC MMELRF(north)	APCC(south)
- Far East	APCC, ECMWF(north-east), IRI, LC MMELRF	

Note:

APCC – APEC Climate Center, <http://www.apcc21.net>.

EuroSIP – multi-model seasonal forecasting system (ECMWF, UK MetOffice, MeteoFrance), <https://www.ecmwf.int/>.

IRI – International Research Institute for climate and society, <http://iri.columbia.edu>.

LC MMELRF – WMO Lead Centre for MME LRF, <http://www.wmolc.org>.

The comparison is carried out only for some North Eurasia regions where the APCC, EuroSIP, IRI forecasts, and consistency maps of the WMO Lead Centre for MME LRF are informative.