

## **Local climate change in the snow period in Central Siberia**

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Climate change leads to the need to rebuild the economy of the regions. In this regard, knowledge of the dynamics of such indicators of the cold period as air temperature and precipitation, the date of formation and destruction of sustainable snow cover are of great importance.

In this paper, we used the observations data from 1961 to 2014 at the Padun meteorological station in the Bratsk city. Bratsk is located in the Irkutsk region in Central Siberia.

The number of days with snow cover is 181 days. In this paper, we calculated the anomalies of dates for the formation of a stable snow cover, the dates of destruction of a stable snow cover in Bratsk.

The average date of formation of a stable snow cover, calculated for the period adopted for the climate norm (1962-1990) is October 28. There was a trend of displacement of dates of formation of stable snow cover, which often have deadlines later than the 28-29 of October. The rate of change is about 0.7 days / 10 years in Bratsk. The average date of destruction of a stable snow cover, calculated for the period adopted for the climate norm (1962-1990) is April 14. There was a trend of displacement of dates of destruction of a stable snow cover, which often are earlier than April 14. The rate of change is approximately 0.5 days / 10 years in Bratsk. Thus, the dynamics of the dates of formation and destruction of a stable snow cover have different trends over the period 1962-2016.

As a result of studies on the dynamics of anomalies of precipitation in the cold period (October-April) in relation to the average value calculated for the period adopted for the climate norm, it was possible to establish a statistically significant rate of increase in precipitation in the cold period of the year.

As a result of studies on the dynamics of temperature in the cold period (October-April) in relation to the average value obtained in the period adopted for the climatic norm, it is found that in the cold period of the year there is an increase in air temperature at a rate of about 0.50 C / 10 years in the period 1962-2014.