



Contemporary changes of applied cold season climatological characteristics in Russia

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The results of some applied cold season characteristics investigation for 56-years period (from 1950 to 2006 year) are reported. The changes of the heating period duration (HPD), the energy consumption index (ECI), the amount of precipitation under negative air temperature and the weak, medium and extreme snowfalls number in Russia territory are explored.

The spatial distribution of HPD is latitudinal. The distribution character of the intensity of heating period (which is described by ECI) exhibits a latitudinal pattern with the longitudinal component in connection with dependence on climate continentality.

The reduction of HPD for 1950-2006 period has occurred almost on whole territory of Russia. It has ranged up to 25 days (the northwest of the country, the south of the European Russia, South Ural, the east of Yakutia and the northeast of Russia). This changes are statistically significant on the half of Russia territory. The reduction of ECI is substantial and statistically significant on the almost all Russia territory except some little areas. The most reductions of this have occurred in South Siberia, Yakutia, Kamchatka and the northeast of the European Russia. The amount of precipitation under negative air temperature more depends on the extreme snowfalls then on the weak snowfalls. Spatial distribution of the weak snowfalls number depends on the temperature factors. The distribution of the extreme snowfalls depends on precipitation factors.

The tendency of the snow amount increase in (1989-2006) as compared with (1950-1980) has been detected on almost whole area of the country. But the number of weak snowfalls increased statistically significantly on the most parts of Russia. The number of medium and heavy snowfalls increased in the east of the European Russia and the west of Siberia, reduced in the northeast of Siberia.

The case of applied climate characteristics changes for investigated period is the variation of atmosphere circulation condition, which particularly obviously occurred in the changes of ECI.