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Title: *Climate variability in the Northern Yakutia*

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During 2007 - 2012 the digital archives of the data of standard meteorological and aerological observations, executed at situated in the Northern Yakutia 18 meteorological stations for 1978 - 2010 years and 5 aerological stations for 1950 - 2011 years, had been created. Estimations of probability distributions, its moments and extremes, and multi-annual trends had been executed for air surface temperature, surface pressure, wind velocity, total and low cloudiness. The quantile analysis allowed suggesting that the influence of synoptic-scale processes on the characteristics of probability distributions and long-term trends could be significant. Strong trends in cloudiness, describing about 40% of dispersion had been detected in winter for Tiksi. It could be the reason of positive trends of surface air temperature during the same season. Radiosounding data had showed heating of troposphere and mainly cooling in upper troposphere and low stratosphere in the area under study for all seasons except winter. In low stratosphere the positive trends of air temperature in winter had been founded for all aerological stations of the Northern Yakutia.

The charts of spatial distributions of temporal variability of daily-mean meteorological parameters, trends of its monthly mean values together with charts of multi-year averaged values and coefficients of correlation are presented in conclusion.