



North Atlantic Oscillation records in Siberian tree rings

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Changes in the Eurasian subarctic like temperature increase, thawing of permafrost, changes in seasonality (shifting of the beginning of the growth period), and changes in the amount of precipitations are linked to a positive phase of North Atlantic Oscillation (NAO) in recent decades.

We report about the response of larch trees to climatic changes in the eastern Taimyr (Central Siberia) and northeastern Yakutia (Eastern Siberia) at high latitudes during the last century using tree ring width, latewood density and stable isotope wood and cellulose ($\delta^{13}\text{C}$, $\delta^{18}\text{O}$) chronologies.

Not only the summer months were related to the carbon and oxygen isotope variations. The positive relationship, which was found between February temperature and $\delta^{18}\text{O}$ of cellulose for northeastern Yakutia and the negative correlations between the temperature of February and $\delta^{13}\text{C}$ of wood and cellulose for eastern Taimyr, could be explained by the influence of North Atlantic Oscillation.

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