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Program, Abstracts
And
List of Participants

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CLIMATIC EXTREMES ON THE NORTH OF THE WEST SIBERIA DURING THE LAST MILLENNIUM INFERRED FROM TREE RINGS.

(Poster 92)

Extreme climatic events, like frosts and temperature drops during the vegetation period, have a strong effect on the functioning of subarctic ecosystems. The best tool for a long reconstruction of climatic extremes in the northern regions of Siberia is an anatomical analysis of annual rings of trees and especially shrubs. We analyzed several kinds of anatomical structures, namely frost-, false- and light-rings, in wood of junipers (*Juniperus sibirica* Burgsd.) and larches (*Larix sibirica* Ledeb.) growing in the Polar Urals and Yamal Peninsula. The chronologies of pathological structures, produced by using both living and dead stems and branches, are more than 1000-year length. Based on these relationships we have interpreted the incidence of pathological structures in terms of strong temperature abnormalities. The most severe frosts on the north of the West Siberia reflect probably both global climatic anomalies caused by major volcanic eruptions and regional temperature anomalies.

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