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Subject: Manuskript of papes
Date: Tue, 4 Jul 2000 11:30:39 +0600
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Dear Keith and Tim,

Thank you for the papers which I have received some days ago. They produced an impression on me. It is really a big job. I do not have time now to evaluate in details the results obtained. I want to make two remarks only.

First, I think, that the method of standardisation is very interesting, but it is disputable for the regions and sites where trees grow under extreme climatic conditions, for example at the polar timberline in Siberia. In such conditions the shape of age curve and the age of maximum growth are very changeable in different trees growing at the same site. It will be very interesting if you can present the age curve obtained for one such site, for example for the North Taymir Peninsula.

Second, I do not agree that in the northern Siberia the 15th century summers were warmer than those observed in the 20th century, at least in the Western and Middle Siberia. May be it is a result of stundartisation?

We suggest to inscibe in list of references the next papers:

1. Vaganov E.A., Shiyatov S.G., Mazepa V.S. Dendroclimatic study in Ural-Siberian Subarctic. - Novosibirsk "Nauka", Siberian Publishing Firm RAS, 1996. - 246 p. (in Russian).

2. Mazepa V.S. Influence of Precipitations on Tree-Ring Growth of Coniferous in Subarctic Regions of Eurasia //Lesovedenie, No. 6, 1999. - P.14-21. (in Russian).

Abstract. Influence of precipitation on tree-ring variability of coniferous trees in Subarctic regions of Eurasia has been shown. Depending on the region, significant ecological factor for tree growth are precipitation of autumn-winter, winter-spring and summer periods. Ecological explanation of such influence has been given. On the base of relationships between tree-rings and rainfall the reconstructions of precipitation in different regions of Subarctic for last 200 years have been developed.

3. Mazepa V.S. Spatial Reconstruction of Summer Air Temperature in the North of the West Siberia since 1690 on the base of Tree-Ring Data. //Siberian ecological journal, No. 2, 1999. - P.175-183. (in Russian).

Abstract. Opportunity of annual reconstruction of summer thermal conditions from Polar Urals (64-68°N, 64-68°E) up to Yenisei River (66-70°N, 86-89°E) is caused by high and sufficiently stable relationship between coniferous tree growth (Larix sibirica, Picea obovata) and corresponding climatic factors. Percent variance in tree-ring chronologies explained by climate (June-July temperature) in this extreme for growth of trees area reaches 50%. Spatial reconstruction of air summer temperature on the base of point reconstruction for 11 corresponding meteostations has been developed. Analysis of reconstructed temperatures has shown their significant changes for last 300 years. The most strong fall of temperatures was observed in XIX century, but rise in temperature was observed in XVIII and XX centuries.

4. Mazepa V.S. Dendroclimatic reconstructing air summer temperatures since 1690 in subarctic regions of siberia. //Problems of ecological monitoring and ecosystem modelling, Volume XVII. - St.Petersburg

Gidrometeoizdat, 2000. - P.170-187. (in Russian).

Abstract. The further development of many-year dendroclimatic study carried out in subarctic regions of Siberia and on the polar timberline, is given in this paper. Climatic factors determining the year-to-year and many-yeared tree-ring width variability were revealed, using multiple regression models. The spatial year-to-year reconstruction of air summer temperatures was made on the base of available dendroclimatic network. The reliability of spatial summer temperatures reconstruction in the boreal zone of the Urals and Siberia was evaluated. The temporal dendroclimatic zoning of the area investigated was carried out according to the chronology similarity. The regional border changes, depending on warm and cold periods, were shown. Five regional chronologies showing the nature of summer months thermic regime variability were developed. Extremely cold and warm periods were revealed. The coldest periods are: the first half of XVII and XIX centuries. The warmest periods are: the second half of XVII, XVIII and middle of XX centuries.

To-day R. Hantemirov and A. Surkov will go to the Yamal Peninsula for subfossil wood collecting. I and V. Mazepa will go to the Polar Ural Mountains in some days.

Best regards,

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