Special Issue

Changes of Climate and Ecology Recorded by Density and Stable Isotopes of Tree Rings

Message from the Guest Editors

As an important part of the ecosystem, especially the forest system, the radial growth of trees is significantly affected by climate changes and their growth status can also reflect ecological changes to a certain extent. Therefore, tree rings have become an important tool to study climate and ecological changes and their relationship. Tree-ring indices (such as width, density and stable isotopes) can directly record climate changes and indirectly reflect the changes in the ecological environment. In addition, tree-ring xylem anatomy (such as the size, density and wall thickness of vessels or tracheids) records climate signals different from traditional tree-ring indices and can explain the relationship between ring and climate physiologically. This Special Issue encourages the research on the changes in climate and ecology recorded by tree-ring width, density, stable isotopes and wood anatomy, and also accepts the research on the physiological analysis of the relationship between tree ring and climate, the research on the relationship among tree-ring indices, and the work on new methods of tree-ring experimental analysis and data processing.

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