

Reconstruction of paleoclimate using ^{13}C , and influence of cosmic rays on the global climate

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1. Reconstruction of paleoclimate using ^{13}C .

Various methods are used to reconstruct paleoclimate. Credibility of these methods, however, is not always high. In fact, the width and/or density of tree-rings, a common measure in the paleoclimate construction, have generated false data such as the hockey stick curves. In this talk, I show the availability of several methods for the paleoclimate reconstruction: e.g., paleo-sea level analysis, pollen-based climate reconstruction, and analysis of ^{13}C in tree samples.

2. Influence of cosmic rays on the global climate.

There has been a proposal for long time that the cosmic rays affect clouds. This mechanism attracted considerable attention when Svensmark and Friis-Christensen have shown a correlation between the cosmic ray intensity and the satellite-based data of cloud. Its detailed mechanism is, however, still unknown. In this talk, a brief discussion is made on the challenges and prospects thereof.

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