

## Variations in pollens, dissolved ions, Oxygen isotopes, and Snow algae in a shallow ice core of No.31 Glacier, Suntar-Kh

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We investigated glaciers in the Suntar-khayata mountain range located in far east Russia from July to September, 2012, and drilled two shallow ice core on the glaciers.

We analyzed pollens, dissolved ions, oxygen isotopes and snow algae to examine possibilities of dating of the ice core and of reconstruction of past environment.

There was no clear seasonal change in stable isotope. The chemical analysis showed that there was a positive correlation among Cl, Na, NH<sub>4</sub>, K and Mg and between NO<sub>3</sub> and SO<sub>4</sub>. This suggested that there is two different sources of the chemical species.

Pollen analysis showed that the ice core contained the grains of Betulaceae, Pinaceae and Artemisia, which agreed with the vegetation around the region. Their variation seemed to show annual layers, indicating that they are possible to use dating of the ice core.