

Research of annual cosmic ray events using ^{10}Be in the Dome Fuji ice core

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Cosmogenic nuclides, ^{14}C and ^{10}Be , are produced in the atmosphere by cosmic rays from outside the Earth. Carbon-14 is stored in tree-rings, and beryllium-10 is stored in ice sheets. Then, we can investigate past cosmic ray intensities by analyzing concentrations of ^{14}C or ^{10}Be . Annual cosmic ray increase events (AD 775 and AD993 or AD994) were found in ^{14}C data of tree-rings. These events were also shown in quasi-annual ^{10}Be data in the ice cores from the Antarctica and the Greenlands. We analyzed quasi-annual ^{10}Be concentration in the Dome Fuji ice core, and detected the cosmic ray events. In this presentaion, we will report the results of quasi-annual ^{10}Be measurments, and discuss a comparison with ^{14}C data.

Keywords: cosmogenic nuclide, annual cosmic ray event