

## **Chlorine-36 in the Dome Fuji shallow ice core measured by Accelerator Mass Spectrometry: preliminary results**

# Takahiro AZE[1]; Yusuke Yokoyama[2]; Hiroyuki Matsuzaki[3]; Kazuho Horiuchi[4]; Yasuyuki Shibata[5]; Hideaki Motoyama[6]

[1] Earth and Planetary Sci., The Univ. of Tokyo; [2] Dept. Earth & Planet. Sci., Univ. Tokyo; [3] RCNST, Univ. of Tokyo; [4] Fac. Sci. Tech., Hirosaki Univ.; [5] Environ. Chem. Div., Natl Inst Environ Studies; [6] NIPR

The production rate of a cosmogenic-nuclide, such as Be-10, Al-26, and Cl-36 depends on the galactic-cosmic-ray flux in the atmosphere. In the case of polar region, the Cl-36 falls with the snow, and then trapped within the ice sheet. Therefore, the cosmogenic nuclides in the ice core records the variability of the past galactic-cosmic-ray flux. In this study, the concentration of the Cl-36 in the Dome Fuji shallow ice core was measured by Accelerator Mass Spectrometry (AMS) at the Micro Analysis Laboratory, Tandem accelerator (MALT), the University of Tokyo.

The concentrations of Cl-36 were corresponding to the Maunder-minimum (1645-1715) based on the ECM (Electrical Conductivity Measurement) age, and the concentrations were changed within the range from 5000 to 12000 atoms/gICE. In our presentation, we will discuss the preliminary result of the Cl-36 concentrations in the Dome Fuji shallow ice core during the Maunder-minimum, comparing with other available records.