

## Chemical property analysis of short time scale to determine snowfall source

\*Suzuki hiromichi<sup>1</sup>, SEIKI KAWAGOE<sup>1</sup>, SHO ADACHI<sup>1</sup>, Shiho Yabusaki<sup>2</sup>

1. Fukushima University, 2. Research Institute for Humanity and Nature

Occurrence of the strange weather phenomenon is predicted from the current state depending on climate change. To ask this influence, we have to advance the match which raises the future predictability. And, we have to mark a phenomenon of the current state detail. This study targets to obtain chemically snow environment. The aim of this study was to analyse and predict the stable water isotopic composition of the snow cover at specific basin (Agano river). In addition, the dependence of short time step isotopic composition of the entire snow cover was analysed. Snow in 3 catchments was sampled at the end of the accumulation period from December 2016 to April 2018. The observed variability of short time step isotopic composition of the snow cover was analysed chemical verification. Especially, basin The Inawashiro-Lake north side of the northern upstream region indicated the low chemical feature (Suzuki et al 2018). I'm working on the investigation analysis to grasp the chemical special quality of the snow event of the short time scale at present based on this result (2016-2018). It was that a chemical analysis makes the sample which sampled and acquired it by each day the time of a snowfall at Fukushima, Hibara and Yonezawa located in an upstream region in a basin, and we tried to follow up a snowfall origin of the short time scale.

As results, a strong pressure pattern of southern high and northern low could admit January 22nd-the 25th, the result obtained from the result of analysis also reacted to the weather situation sensitively. And influence of a characteristic snowfall origin was admitted at 3 spots. The difference in the spatial time lags was done clearly.

Keywords: d-excess value, isotope, short time scale