

## A relationship between air temperature and shoot elongation of alpine dwarf pine at Mt. Kisokomagatake

HAMADA, Takashi<sup>1\*</sup>, Masaaki Ozeki<sup>1</sup>, Yoshihiro Iijima<sup>2</sup>

<sup>1</sup>Nagano Environmental Conservation Research Institute, <sup>2</sup>JAMSTEC

There are not any long time-series meteorological data around mountainous area in Japan, except for Mt. Fuji. However, it is possible to reconstruct climate in mountainous area in combination with various data.

This research was investigated that a relationship between monthly mean air temperature in July and shoot elongation of alpine dwarf pine at Mt. Kisokomagatake from 1980 to 2009. The result shows a positive correlation on the relationship, and indicates that data of shoot elongation of alpine dwarf pine can reconstruct summer air temperature. We will study climate reconstruction in mountainous area with tree width as a proxy data.

Keywords: mountainous area, air temperature, shoot elongation of alpine dwarf pine