

## On the migration of Dome Fuji summit of East Antarctica over glacial - interglacial periods

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Dome Fuji in East Antarctica is one of candidate areas for finding sites of "Oldest Ice" that has age beyond  $10^6$  years. In the Japanese Antarctic research program, this area was surveyed for long years since 1980's, focusing on glaciological study and ice core study. Two deep ice cores were drilled, once in 1990's and another in 2000's. For identification of proper sites for the oldest ice, we need to examine information of surface, internal and bottom conditions of the ice sheet. We are currently compiling data of radar sounding historically in this area. Main results are as follows. Strain pattern accumulated within the ice sheet was examined. The data was explainable if we assume that the dome summit was located somewhere in the southern direction from the present dome position in the past. In addition, snow deposition after the last glacial maximum (LGM) has steep spatial gradient; northern side has more accumulation rate. Contour map of the LGM surface of the ice sheet had highest summit in ~60 km south of present Dome Fuji, where we call the area as New Dome Fuji (NDF). We will show latest output of the data analysis.

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