

Ice core drilling and related observations by Jare57 in 2015/2016 austral summer on the coastal region of Antarctic ice sheet

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We were carried out an ice core drilling on the coastal region of Antarctic ice sheet as a part of the 57th of Japanese Antarctic Research Expeditions (2015/2016 of austral summer). We selected the H128 site for drill site (69.40S, 41.55E, 1,380m a.s.l . 100km inland from the coast). Advantages of H128 site were as below; high time resolution, few changes of annual snow accumulation rates, low annual mean temperature (10m depth ice temperature) -24 C. We finally drilled to 260m in depth. We will be able to analyze the climate changes of past 2000 years. Firn air samplings were also carried out. We also conducted the borehole logging, snow pit observation, setup of automatic weather station.

Keywords: Antarctic ice sheet, ice core drilling, firn air sampling