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REPORT ON THE FIRST WINTERING AT DOME FUJI STATION BY THE 36TH JAPANESE ANTARCTIC RESEARCH EXPEDITION IN 1995-1996 (ABSTRACT)

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The first wintering party at Dome Fuji Station (77°9′01″S, 39°42′12″E, 3810 m a.s.l.) by the 36th Japanese Antarctic Research Expedition (JARE-36), consisting of 9 personnel, started wintering at Dome Fuji Station on January 29, 1995 and continuously maintained the station until January 22, 1996. The party was succeeded by JARE-37 on January 23, 1996. The main scientific programs of the party were deep ice drilling, meteorological observations and glaciological observations at the station. We continuously recorded surface observations consisting of air temperature, wind velocity, wind direction, solar radiation and other visual observations from February 11, 1995 to January 15, 1996 when JARE-37 took over.

The details will be reported by Yoshim et al. in this volume. The glaciological studies included surface snow sampling, condensation/sublimation measurement, air sampling, aerosol sampling, pit work, snow temperature measurement and net accumulation by the stake method through one year. The details will be reported by Kameda et al. in this volume. After construction of the drill site and some drill testing we started deep drilling on August 28, 1995 using a 115 m deep pilot hole drilled by JARE-34. We always struggled against many problems in drilling arising from extreme low temperature and the liquid-confined drilling technique which had never been used before. We were able to continue the drilling and recovered excellent quality cores even in the brittle zone between 200 m and 800 m below the surface. Recovered cores were processed and electrical conductivity and stratigraphy of the cores were analyzed in a science trench next to the drill site. The drilling depth exceeded 600 m when the drilling was taken over by JARE-37. The details of this wintering will be reported in Nankyoku Shiryô (Antarctic Record) or elsewhere.

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