

JARE-35 GLACIOLOGICAL ACTIVITY AT DOME FUJI STATION,
ANTARCTICA (ABSTRACT)

Hitoshi SHOJI¹, Takashi SAITO², Takeshi SAITO³, Takayuki SHIRAIWA⁴,
Yuji TAGUCHI⁵, Kotaro YOKOYAMA⁶, Takeo HONDOH⁴, Okitsugu WATANABE⁷,
Hideaki MOTOYAMA⁷, Teruo FURUKAWA⁷, Motoaki TAKEKAWA⁵ and Yutaka AGETA⁸

¹*Kitami Institute of Technology, 165 Koen-cho, Kitami 090*

²*Disaster Prevention Research Institute, Kyoto University, Gokasho, Uji 611*

³*Cold Technology Research Institute, Higashi 1-jo, Rikubetsu 089-43*

⁴*The Institute of Low Temperature Science, Hokkaido University,
Kita-19, Nishi-8, Kita-ku, Sapporo 060*

⁵*Japan Meteorological Agency, 3-4, Otemachi 1-chome, Chiyoda-ku, Tokyo 100*

⁶*Hokuriku National Agricultural Experiment Station, Inada, Joetsu 943-01*

⁷*National Institute of Polar Research, 9-10, Kaga 1-chome, Itabashi-ku, Tokyo 173*

⁸*Institute for Hydrospheric-Atmospheric Sciences, Nagoya University, Nagoya 464-01*

Information on paleoenvironmental changes on the earth is preserved in the form of physical and chemical stratigraphic features in large polar ice sheets. Extraction of ice core signals makes it possible to evaluate and reconstruct past global variations of climate and atmospheric circulation.

A deep ice coring and analysis effort was started at Dome Fuji Station (77°19'01" S, 39°42'12" E), Antarctica by the 32nd Japanese Antarctic Research Expedition (JARE-32) in 1991 and will be completed with continuous deep core retrieval in 1997. JARE-32, -33 and -34 parties set up a traverse route from Syowa Station to Dome Fuji Station, selected the coring site considering the results from radar soundings and GPS positions, and conducted shallow ice coring to a depth of 112.6 m at the site.

JARE-35 party completed construction of a camping/drilling facility for JARE-36 and -37 wintering parties to perform deep ice coring through the ice sheet with a thickness of approximately 3 km. JARE-36 parties also conducted glaciological, meteorological and medical observations during the periods of cargo transportation and camp-construction activities both along the traverse route and at the Dome Fuji Station drilling site.

(Received November 9, 1996; Revised manuscript accepted April 27, 1996)