

Polar Meteorology and Glaciology

No. 15

CONTENTS

Scientific Papers

Preliminary validation of the GLI cryosphere algorithms with MODIS daytime data	.....	Masahiro Hori, Teruo Aoki, Knut Stamnes, Bingquan Chen and Wei Li ...	1
Sulfate depletion in snow over sea ice near Syowa Station, Antarctica, in relation to the origin of sulfate depleted sea salt aerosol particles in winter	.....	Kazuo Osada, Keiichiro Hara, Mizuka Kido, Hiroki Kai, Takashi Yamanouchi, Gen Hashida, Katsuji Matsunaga and Yasunobu Iwasaka ...	21
Behavior of externally mixed liquid and solid polar stratospheric cloud particles in a numerical box model under temperature decrease	.....	Diana Daneva and Takashi Shibata ...	32
Density, stratigraphy and accumulation at DT001 in Princess Elizabeth Land, East Antarctic Ice Sheet	.....	Jiahong Wen, Jiancheng Kang, Dali Wang, Bo Sun, Yuansheng Li, Zhongqin Li and Jun Li ...	43
Regional characteristics of chemical constituents in surface snow, Arctic cryosphere	.....	Hideaki Motoyama, Okitsugu Watanabe, Kokichi Kamiyama, Makoto Igarashi, Kumiko Goto-Azuma, Yoshiyuki Fujii, Yoshinori Iizuka, Sumito Matoba, Hideki Narita and Takao Kameda ...	55
Number-size distributions of atmospheric aerosol particles ($10 < D_p < 365$ nm) at Ny-Ålesund, Norwegian Arctic: Their relationship with air mass history	.....	Chiharu Nishita, Kazuo Osada, Keiichiro Hara, Mizuka Kido, Makoto Wada, Takashi Shibata and Yasunobu Iwasaka ...	67
Characteristics of the water cycle in the discontinuous permafrost region in interior Alaska	.....	Nobuyoshi Ishikawa, Norifumi Sato, Kunio Kawauchi, Kenji Yoshikawa and Larry D. Hinzman ...	78

- Characteristics of summer water balance in eastern Siberian tundra watershed
*. . . Norifumi Sato, Yoshiyuki Ishii, Yuji Kodama, Mutsumi Nomura,
 Nobuyoshi Ishikawa and Daiji Kobayashi . . . 91*

Scientific Notes

- The reduction of chloride ion concentration in basal ice near Hamna Icefall,
 East Antarctica
. Yoshinori Iizuka, Hiroshi Satake and Okitsugu Watanabe . . . 107
- A method of cloud field detection over Antarctica during the polar night
 using AVHRR data
*. Makoto Kuji, Nobuyuki Kikuchi, Naohiko Hirasawa
 and Takashi Yamanouchi . . . 114*
- Application of the He-microwave induced plasma atomic emission
 spectroscopy to an analysis of individual particulate matter
*. Sanae Tamura, Tadashi Kikuchi, Hisao Takahara,
 Minako Mishima and Yoshiyuki Fujii . . . 124*

Reports

- Regional distribution of chemical tracers in snow cover along the route from
 S16 to Dome Fuji Station, east Dronning Maud Land, Antarctica
*. Toshitaka Suzuki, Yoshinori Iizuka, Teruo Furukawa,
 Kenichi Matsuoka, Kokichi Kamiyama and Okitsugu Watanabe . . . 133*
- Arctic upper air observations on Chinese Arctic Research Expedition 1999
. Han Zou, Libo Zhou, Yongxiao Jian and Wei Wang . . . 141
- Note to contributors 147
- Author index 149