

CONTENTS

Scientific Paper

- Geomagnetic storms and their sources on the sun: the rising phase of the sunspot cycle (in Japanese)
*Takao Saito, Syun-Ichi Akasofu, Shinichi Watari, Natsuo Sato and Hiroaki Misawa*..... 1

Scientific Note

- A high-precision continuous measurement system for the atmospheric O₂/N₂ ratio at Ny-Ålesund, Svalbard and preliminary observational results
*Daisuke Goto, Shinji Morimoto, Shuji Aoki and Takakiyo Nakazawa*..... 17

Reports

- Activities of the summer operations of the 43rd Japanese Antarctic Research Expedition (JARE-43) in 2001–2002 (in Japanese)
*Fumihiko Nishio*..... 29
- Activity report of the 50th Japanese Antarctic Research Expedition (JARE-50) wintering party in 2009–2010 (in Japanese)
*Akira Kadokura*..... 53
- Automatic Weather Station (AWS) Program operated by the University of Wisconsin–Madison during the 2011–2012 field season
*Matthew A. Lazzara, Lee J. Welhouse, Jonathan E. Thom, John J. Cassano, Alice K. DuVivier, George A. Weidner, Linda M. Keller and Lars Kalnajs*..... 125
- Biosecurity measures being implemented at Australian Antarctic Division against non-native species introduction into Antarctica (in Japanese)
*Megumu Tsujimoto and Satoshi Imura*..... 137
- Geomagnetic survey in East Ongul Island: estimation of the geomagnetic influence of the facilities installed by JARE-51 and JARE-52 (in Japanese)
*Shin Arita, Kosuke Takahashi, Yasuhiro Minamoto and Akira Kadokura*..... 151

News

- Report of the Antarctic Place-names Committee of Japan in 2012: newly determined place-names (in Japanese)
*National Institute of Polar Research*..... 163

Note to contributors