

Polar Geoscience

No. 18

CONTENTS

Validation of grounding line of the East Antarctic Ice Sheet derived by ERS-1/2 interferometric SAR data	Tsutomu Yamanokuchi, Koichiro Doi and Kazuo Shibuya	1
Magnetic fabric analysis of deformed rocks in the Riiser-Larsen Main Shear Zone, East Antarctica	Itoyuki Nishioka, Naoto Ishikawa and Minoru Funaki	15
The first year of Antarctic VLBI observations	Takaaki Jike, Yoshihiro Fukuzaki, Kazuo Shibuya, Koichiro Doi, Seiji Manabe, David L. Jauncey, George D. Nicolson and Peter M. McCulloch	26
Calibration of the superconducting gravimeter CT#043 with an absolute gravimeter FG5#210 at Syowa Station, Antarctica	Yoichi Fukuda, Sachiko Iwano, Hiroshi Ikeda, Yoshifumi Hiraoka and Koichiro Doi	41
Installation of the superconducting gravimeter CT(#043) at Syowa Station, Antarctica	Hiroshi Ikeda, Koichiro Doi, Yoichi Fukuda, Yoshiaki Tamura and Kazuo Shibuya	49
Paleomagnetic and K-Ar dating studies of Late Cretaceous basaltic dykes intruding Late Permian sediments of the Newcastle Coal Mea- sures, Newcastle, Australia—Relationship to the opening of the Tasman Sea	Hideo Sakai, Eiichi Kikawa, Robin Offler and Horst Zwingmann	58
Polarity reversals of remanent magnetization in sedimentary core from Northwind Ridge, western Arctic Ocean	Hideo Sakai, Yasuko Banba, Masaue Horii, Takuya Itaki, Naoichi Ahagon and Eiichi Kikawa	67
A numerical study of the ocean circulation around the northern Antarctic Peninsula: Barotropic response to tidal forcing	Walter C. Dragani, Enrique E. D'Onofrio, Jorge O. Speroni, Monica E. Fiore and Rocío Borjas	83
Rb-Sr, Sm-Nd ages of the Phalaborwa Carbonatite Complex, South Africa ..	Masaki Yuhara, Yuka Hirahara, Naoko Nishi and Hiroo Kagami	101

Geochemistry of the pre/syn-metamorphic granite in the Ongul Islands, East Antarctica ...Yoshinobu Kawano, Akihiro Meno, Naoko Nishi and Hiroo Kagami...	114
Geodesy reference points within Syowa Station, Antarctica, and their local geodetic tiesKazuo Shibuya, Koichiro Doi, Yoshihiro Fukuzaki and Masao Iwata...	130
Note to contributors	162
Author index	164