

Tectonomagnetics and Local Geomagnetic Field Variations

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Tectonomagnetics and Local Geomagnetic Field Variations

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Edited by

M. Fuller

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Preface

Physical and chemical studies of the earth and planets along with their surroundings are now developing very rapidly. As these studies are of essentially international character, many international conferences, symposia, seminars and workshops are held every year. To publish proceedings of these meetings is of course important for tracing development of various disciplines of earth and planetary sciences though publishing is fast getting to be an expensive business.

It is my pleasure to learn that the Center for Academic Publications Japan and the Japan Scientific Societies Press have agreed to undertake the publication of a series "Advances in Earth and Planetary Sciences" which should certainly become an important medium for conveying achievements of various meetings to the academic as well as non-academic scientific communities. It is planned to publish the series mostly on the basis of proceedings that appear in the Journal of Geomagnetism and Geoelectricity edited by the Society of Terrestrial Magnetism and Electricity of Japan, the Journal of Physics of the Earth by the Seismological Society of Japan and the Volcanological Society of Japan, and the Geochemical Journal by the Geochemical Society of Japan, although occasional volumes of the series will include independent proceedings.

Selection of meetings, of which the proceedings will be included in the series, will be made by the Editorial Committee for which I have the honour to work as the General Editor. I and the members of the Editorial Committee will certainly welcome any suggestions that will promote the series. Whenever the convener of a meeting related to earth and planetary sciences is in a position to have to look for a medium for publishing the proceedings please contact us.

Tsuneji Rikitake
General Editor

Foreword

The fields of tectonomagnetism and tectonoelectricity have assumed an important role in the complex subjects of fault mechanics and earthquake prediction. Unfortunately, not all aspects of these measurements are well understood. A symposium on this subject was held at the I.A.G.A. Third General assembly on August 23, 1977, in Seattle, U.S.A. Eleven of the eighteen papers presented at this symposium appear in completed form in this special issue of *Journal of Geomagnetism and Geoelectricity*. Two papers were rejected. The abstracts of all papers can be found in *EOS*, **58**, 730–733, 1977.

The papers naturally fall into three main groups: (1) Observation, interpretation and limitations in the measurements of local and regional magnetic fields; (2) Magnetotelluric experiments and results; (3) Laboratory experiments of the effects of stress on the magnetic properties of rocks.

The editors of this proceedings issue would like to thank the reviewers: R.F. Butler, P.E. Davis, R. Day, T.L. Henyey, R.L. Kovach, E.R. Niblett, R.L. Parker, J. Revol, P.N. Shive, B.E. Smith, and F.D. Stacey for their prompt response and Diane Mondragon for preparing the final manuscripts of several of the papers.

Michael Fuller
Malcolm Johnston
Takeshi Yukutake
Guest Editors

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