

## Foreword

The Tenth Symposium on Polar Meteorology and Glaciology sponsored by the National Institute of Polar Research was held on December 8–9, 1987. The symposium reported on continuing efforts of Japanese polar meteorologists, glaciologists and physical oceanographers. The research areas covered by this symposium were sea ice, ice sheet and radio echo sounding, glaciological study in the Arctic region, ice core study, chemical constituents in deposited snow, boundary layer and climate, snow crystal, atmospheric constituents and aerosols, Antarctic ozone, atmospheric circulation and instrumentation. The main topics of the symposium was discussing on the ice core studies, reflecting the outcome of major research programs of the East Queen Maud Land Glaciological Project (EQGP) in 1982–1987 and the Middle Atmospheric Program (MAP) in 1982–1985.

A total of 63 papers were presented at the symposium and the present volume contains 21 full-length papers and 14 abstracts which will be published in appropriate journals; full-length papers are arranged in the order of scientific areas of meteorology, glaciology and physical oceanography.

It is hoped that this volume will contribute to the progress of research on the polar atmosphere, cryosphere and hydrosphere. Our sincere thanks are due to all of the contributors and referees who have readily cooperated to bring about this proceedings.

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