

## Foreword

This volume is the Proceedings of “the Sixth Symposium on Coordinated Observations of the Ionosphere and the Magnetosphere in the Polar Regions” which was held at the National Institute of Polar Research (NIPR) from February 28 to March 2, 1983. The NIPR annual symposia are devoted entirely to discussing significant scientific results of studies on the ionosphere and the magnetosphere in the polar regions. The sixth symposium consisted of the following eight sessions: I) Polar upper atmosphere disturbances associated with storm sudden commencement (special session in this symposium), II) Ionospheric and magnetospheric disturbances in the polar regions, III) ULF wave phenomena, IV) ELF, VLF and HF wave phenomena, V) Auroral phenomena, VI) Middle Atmosphere Project (MAP) in Antarctica, VII) Theoretical and simulation studies of polar disturbances, and VIII) Practical future plans.

The present volume contains 14 selected contributions among 83 individual scientific papers which were presented to the symposium. These 14 papers may be classified into the following four groups; *i.e.*, I) Storm sudden commencement (SSC) phenomena observed at synchronous orbit, II) ULF-VLF waves in the polar and low latitude regions by the ground-based and satellite observations, III) Results of balloon observations, carried out at Andøya, Norway and Esrange, Sweden, and IV) Practical future plan of the Syowa-Iceland conjugate observations.

It is hoped that this special issue of *Memoirs of National Institute of Polar Research* will be valuable to those who are interested in the ionospheric and magnetospheric phenomena in the polar regions and also to those who are concerned with Antarctic research activities.

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