ACKNOWLEDGEMENT

The author is extremely grateful to Prof. G.C. Asnani, Head of Department of Meteorology, University of Nairobi (formerly Assistant Director, Indian Institute of Tropical Meteorology, Pune) for the guidance and constant encouragement throughout this research work and for reading the manuscript. He is very much thankful to Dr. K.S. Raja Rao for reading the manuscript and for making useful suggestions.

He is very much grateful to Director, Indian Institute of Tropical Meteorology, Pune for having given the permission to undertake the research work and providing facilities to pursue this study. He is also thankful to Shri D.R. Sikka for his interest and encouragement. He wishes to thank Dr. R. Ananthakrishnan for valuable discussions.

The author also wishes to express his warm and sincere thanks to Dr. R.N. Keshavamurty, Shri S.K. Mishra and Dr. S. Rajamani for the benefit of many valuable discussions and useful suggestions.

Thanks are due to Shri S.M. Bawiskar, Shri V.V. Khade and Shri M.V.H. Nair for their assistance during the preparation of the thesis.

The author is also grateful to Shri M.T. Goklaney for efficient typing and Shri A.S. Gade, Shri R.N. Soni, Shri S.C. Rahalkar and V.V. Deodhar for preparing the diagrams.

(S. T. AWADE)