ACKNOWLEDGEMENTS

I am immensely grateful to Dr. M. Baba, Scientist-in-charge, Centre for Earth Science Studies, Regional Centre, for the valuable guidance, constant encouragement and critical scrutiny of the manuscript. But for his rich knowledge and vast experience, this work would have been far from complete.

I express my deep sense of gratitude to Dr. Harsh K. Gupta, Director, Centre for Earth Science Studies, for the constant encouragement and the facilities extended.

I owe much to Shri. T.S. Shahul Hameed for helping me in the various computations and for some useful and timely discussions. Thanks are due to my colleagues, S/Shri. K. V. Thomas, Joseph Mathew, S. Mohanan, K.P. Bhaskaran, D.Raju, Reji Skariah, Smt.Sreekumari Kesavan, and N.Santha, who have been of much help to me during various stages of this work. Thanks are also due to Dr.K. Premchand and Shri. C.M. Harish for some useful discussions.
The Vikram Sarabhai Space Centre (VSSC), Trivandrum provided the computer facilities for part of the work. I am greatly indebted to Dr. C.G. Sukumaran Nair, Scientist, V.S.S.C. for sparing his valuable time for helping me in the computations there.

S/Shri K.K. Varghese, A. Varkey Babu, M. Ramesh Kumar, P.P. Simon and Asokan Andy have contributed much in making the field programmes a success. S/Shri P.P. Ouseph and M.N. Muralidharan Nair helped me in the laboratory analysis. Thanks are due to the staff of the Regional Centre, Centre for Earth Science Studies, who have helped me in one way or other during this investigation.

Finally, I must thank my wife, Molly, who made it possible for me to concentrate on this research without being saddled by the household affairs.