

# Contents

Climate Change - The Background . . . . .	1
<i>A. P. Cracknell</i>	
Remote Sensing, Systems and Data . . . . .	35
<i>R. A. Vaughan</i>	
Satellite Observations in Global Ecology . . . . .	67
<i>K. Ya. Kondratyev</i>	
Satellite Data Archiving, Retrieval and Distribution . . . . .	95
<i>M. Fea</i>	
Special Sensor Microwave/Image(SSM/I): Instrument, Data Analysis and Applications . . . . .	119
<i>J. Noll, J. P. V. P. Baptista, S. Buonomo and A. Rognes</i>	
Basis and Structure of Climate Models . . . . .	135
<i>A. P. Cracknell</i>	
The Use of Satellite Data in Numerical Weather Prediction . . . . .	177
<i>A. P. McNally</i>	
Remote Sensing Input to Climatological Datasets . . . . .	207
<i>K. McGuffie</i>	
The Microwave Limb Sounder and Error Reduction: Is What You See What You Get? . . . . .	215
<i>I. Woodhouse</i>	
Atmospheric Trace Gases and Aerosols . . . . .	223
<i>S. G. Jennings</i>	
Atmospheric Ozone Concentration Measurements . . . . .	253
<i>C. Varotsos</i>	
Clouds, Cloud Observations and Cloud Feedbacks . . . . .	269
<i>A. Slingo</i>	
A Technique for Remote Sensing the Atmospheric Temperature and Pressure, Based on Fabry - Perot Interferometry of Rotational Raman Scattering Spectrum . . . . .	295
<i>I. D. Ivanova, L. L. Gurdev, and V. M. Mitev</i>	

Remote Sensing of Snow and Ice and Its Relevance to Climate Change Processes . . . . .	303
<i>P. Wadhams</i>	
The Study of Antarctica Using the ERS-1 Radar Altimeter . . . . .	341
<i>D. R. Mantripp</i>	
The NASA Space Shuttle Earth Observations Database for Global Change Science . . . . .	355
<i>K. Lulla, M. Helfert and D. Holland</i>	
Land Surface Energy Budget . . . . .	367
<i>H. Mannstein</i>	
Potential of Remote Sensing in the Thermal Band for Global Change . . . . .	393
<i>M. Ph. Stoll</i>	
Comparison Between Albedo Derived from Satellite with Different Calibration Coefficients . . . . .	405
<i>S. Zientek</i>	
Some Notes on the Oceanic Aspect of the Remote Sensing and Global Climate Change Issue . . . . .	411
<i>S. V. Victorov</i>	
Remote Sensing Applications to Environmental Monitoring of the Coastal Zone . . . . .	429
<i>M. I. Hj. Mohamed</i>	
Marine Surveillance and Information System . . . . .	439
<i>P. Singhasaneh</i>	
The State of the Problem of Ecological Monitoring in the City of St Petersburg and Its Region . . . . .	445
<i>K. Ya. Kondratyev and L. P. Bobyliov</i>	
A Second-Order Two-Scale Model for Rough Surface Scattering with Applications to Scatterometry . . . . .	459
<i>N. I. Nickolaev and M. A. Michalev</i>	
Politics and Climate Change . . . . .	465
<i>K. Ya. Kondratyev, A. P. Cracknell and R. A. Vaughan</i>	
Participants . . . . .	479
Index . . . . .	485