

Volume 8
Number 5-6
1988

Advances in Space Research

COSPAR
INTERNATIONAL
REFERENCE
ATMOSPHERE: 1986

Part I: Thermosphere Models

Edited by D. Rees



Pergamon Press

CONTENTS

Foreword	1
Introduction	5
<i>Chapter 1</i>	
The Atmospheric Model in the Region 90 to 2000 km <i>A. E. Hedin</i>	9
<i>Chapter 2</i>	
The CIRA Theoretical Thermosphere Model <i>D. Rees and T. J. Fuller-Rowell</i>	27
<i>Chapter 3</i>	
In Situ Measurements of Thermospheric Composition, Temperature and Winds by Mass Spectrometry <i>N. W. Spencer and G. R. Carignan</i>	107
<i>Chapter 4</i>	
Incoherent Scatter Radar Contributions <i>W. L. Oliver, D. Alcayd<acute>e> and P. Bauer</acute></i>	119
<i>Chapter 5</i>	
Optical Measurements of Winds and Kinetic Temperatures in the Upper Atmosphere <i>G. Hernandez and T. L. Killeen</i>	149
<i>Chapter 6</i>	
Dissipation of Solar Wind Energy in the Earth's Upper Atmosphere: the Geomagnetic Activity Effect <i>G. W. Prölss, M. Roemer and J. W. Slowey</i>	215
<i>Chapter 7</i>	
Solar EUV Irradiances and Indices <i>J. Lean</i>	263
<i>Appendices to Chapter 1</i>	
<i>Appendix A</i>	
The Semi-Empirical Model Formulations and Equations Describing the Physical Parameters	293
<i>Appendix B</i>	
A Listing of Semi-Empirical Model Fortran Code which Calculates Model Densities and Temperature	299
<i>Appendix C</i>	
Selected Tables of Atmospheric Data from the Semi-Empirical Model	315
<i>Author Index</i>	471