

1. Record Nr.	UNINA9910130913303321
Autore	Mendillo Michael
Titolo	Atmospheres in the Solar System: Comparative Aeronomy
Pubbl/distr/stampa	[Place of publication not identified], : American Geophysical Union, 2002
ISBN	1-118-66957-6
Disciplina	551.5/0999
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Machine generated contents note: Preface -- Michael Mendillo, Andrew Nagy, and H. Waiteix -- Introduction -- Michael Mendillo, Andrew Nagy, and H. Waite1 -- I. Overviews -- 1 Aeronomic Systems on Planets, Moons, and Comets -- Darrell F Strobel7 -- 2 Solar System Upper Atmospheres: Photochemistry, Energetics, and Dynamics -- G. Randall Gladstone, Roger V Yelle, and T. Majeed23 -- 3 Solar System Ionospheres -- Andrew F. Nagy and Thomas E. Cravens39 -- 4 Auroral Processes in the Solar System -- Marina Galand and Supriya Chakrabarti55 -- 5 Airglow Processes in Planetary Atmospheres -- T. G. Slanger and B. C. Wolven77 -- II. Interactions Between Planetary and Small Body Atmospheres -- with the Surrounding Plasma Medium -- 1 Magnetosphere-Ionosphere Coupling at Earth, Jupiter, and Beyond -- B. H. Mauk, B. J. Anderson, and R. M. Thorne97 -- 2 Comparison of Auroral Processes: Earth and Jupiter -- J. H. Waite and Dirk Lummerzheim115 -- 3 Numerical Techniques Associated with Simulations of the Solar Wind Interactions -- with Non-Magnetized Bodies -- Stephen H. Brecht141 -- 4 Plasma Flow Past Cometary and Planetary Satellite Atmospheres -- Michael R. Combi, Tamas 1. Gombosi, and Konstantin Kabin151 -- III. Chemistry, Energetics and Dynamics -- 1 Wave Coupling in Terrestrial Planetary Atmospheres -- Jeffrey M. Forbes 171 -- 2 Exospheres and Planetary Escape -- Donald M Hunten191 -- 3 Surface Boundary Layer Atmospheres -- R. E. Johnson203 -- 4 Solar Ultraviolet Variability Over Time Periods of Aeronomic Interest -- Thomas N. Woods and GaryJ. Rottman221 -- 5

Meteoric Material-An Important Component of Planetary Atmospheres -- Joseph M. Grebowsky, Julianne I. Moses, and W. Dean Pesnell 235 -- 6 Current Laboratory Experiments for Planetary Aeronomy -- David L. Huestis 245 -- IV. Models of Aeronomics Systems -- 1 Simulations of the Upper Atmospheres of the Terrestrial Planets -- Stephen W. Bouger, Raymond G. Roble, and Timothy Fuller-Rowell 261 -- 2 Thermospheric General Circulation Models for the Giant Planets: The Jupiter Case -- G.H. Millward, S. Miller, A.D. Aylward, I. C. F. Miller-Wodarg, and N. Achilleos 289 -- 3 Ionospheric Models for Earth -- R. W. Schunk 299 -- 4 The Application of General Circulation Models to the Atmospheres of Terrestrial-Type Moons of the Giant Planets -- I. C. F. Miller-Wodarg 307 -- 5 The Extreme Ultraviolet Airglow of N₂ Atmospheres -- Michael H. Stevens 319 -- V. Observational Applications -- 1 The Application of Terrestrial Aeronomy Groundbased Instruments to Planetary Studies -- Michael Mendillo, Fred Roesler, Chester Gardner, and Michael Sulzer 329 -- 2 Ultraviolet Remote Sensing Techniques for Planetary Aeronomy -- John T. Clarke and Larry Paxton 339 -- 3 Mass Spectrometry for Planetary Science -- David T. Young 353 -- VI. Atmospheres of Other Worlds -- 1 A Possible Aeronomy of Extrasolar Terrestrial Planets -- W. A. Traub and K. W. Jucks 369 -- 2 Can Conditions for Life be Inferred From Optical Emissions of Extra-Solar-System Planets? -- Harald U. Frey and Dirk Lummerzheim 381.
