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	<ul> <li>3.5. Model Atmospheres; Chapter 4. Occurrence of Aurorae in Space and Time; 4.1. Geographic Distribution and Periodic Variations; 4.2. Characteristics of Auroral Displays; 4.3. Aurorae and Related Phenomena; Chapter 5. Auroral Spectroscopy and Photometry</li> <li>5.1. Spectral Identifications5.2. Spectral Photometry of Aurora; Chapter 6. The Radio-Aurora; 6.1. Observed Characteristics; 6.2. Theory of Auroral Reflections; Chapter 7. Physical Processes in the Auroral Atmosphere; 7.1. Proton Bombardment; 7.2. Electron Bombardment; 7.3. Atmospheric Electrons; 7.4. Theory of the Auroral Spectrum; Chapter 8. Auroral Particles in Space; 8.1. Interplanetary Space; 8.2. Auroral Particles in the Geomagnetic Field; Chapter 9. The Airglow Spectrum; 9.1. Nightglow; 9.2. Twilight and Day Airglow; Chapter 10. Analysis of Twilight Observations for Emission Heights</li> <li>10.1. Apparent Heights zs: The Shadow of the Solid Earth10.2. Height Measurements with Atmospheric Screening; 10.3. Height and Vertical Distribution of Observed Emissions; Chapter 11. Theory of the Twilight and Day Airglow; 11.1. Resonance Scattering and Fluorescence for an Optically Thin Layer; 11.2. Excitation of N2+ First Negative Bands; 11.3. Photon Scattering by Atmospheric Sodium; 11.4. Photochemistry and Ionization of Atmospheric Sodium; 11.5. Theory of the Oxygen Red Lines; 11.6. Excitation of Other Emissions; Chapter 12. Spectral Photometry of the Nightglow</li> <li>12.1. Methods of Height Determinations12.2. Spectroscopic Temperatures; 12.3. Intensities, Polarization, and Geographic and Time Variations; Chapter 13. Excitation of the Nightglow; 13.1. Introduction: Mechanisms of Nightglow Excitation; 13.2. Excitation by Recombination in the Ionosphere; 13.3. Excitation by Particle Collisions; 13.4. Photochemical Reactions in an Oxygen-Nitrogen Atmosphere; 13.5. Excitation of Emissions from Minor Constituents; Appendixes; APPENDIX II: A Short List of Airglow-Aurora Observing Stations</li> </ul>
Sommario/riassunto	For advanced undergraduate and beginning graduate students in atmospheric, oceanic, and climate science, Atmosphere, Ocean and Climate Dynamics is an introductory textbook on the circulations of the atmosphere and ocean and their interaction, with an emphasis on global scales. It will give students a good grasp of what the atmosphere and oceans look like on the large-scale and why they look that way. The role of the oceans in climate and paleoclimate is also discussed. The combination of observations, theory and accompanying illustrative laboratory experiments sets this text apart by m