Title of Chapter in Book: Mesosphere

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Abstract: The earth is surrounded by an atmosphere which is the blanket of gases that has no definite outer edge. Over 80 percent of the gases in the atmosphere are held by gravity within 12.4 mi. (20 km.) of the earth's surface. The physical and chemical structure of the atmosphere and the interactions occurring there make the atmosphere an integral part of the earth system. It is held near the surface of the planet by the earth's gravitational attraction. Without the atmosphere there would not be life on earth. The atmosphere contains the air people breathe, protects life from harmful radiation from the Sun and helps keep the planet's heat from the Sun from escaping back into space. The atmosphere is made up of a mixture of gases, especially nitrogen, oxygen, argon and carbon dioxide. It reaches over 310 mi. (500 km.) above the surface of the planet. There is no exact boundary between the atmosphere and 640 Mesosphere outer space. Atmospheric gases, however, become thinner the higher up the space.