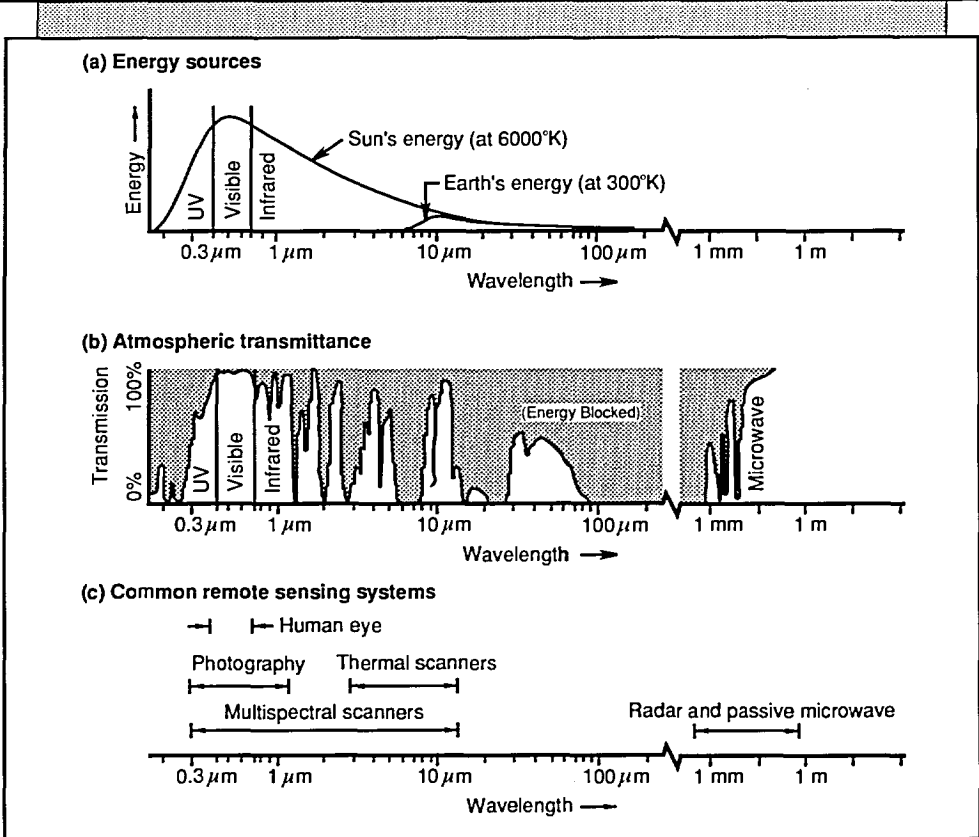


Part 1: Commercial Remote Sensing Systems

Remote sensing is the science and art of obtaining information about an object, area, or phenomenon through the analysis of data acquired by a device that is not in contact with the object, area, or phenomenon under investigation.¹

This report discusses the potential use of commercially available sensors, which create images from electromagnetic energy that is emitted or reflected from various earth surface features. These remote sensors can operate using ultraviolet, visible, reflected infrared, thermal infrared or microwave energy. Figure 1 illustrates the types of electromagnetic energy, the associated

Figure 1 Spectral Characteristics of Energy Sources, Atmospheric Transmission and Common Remote Sensing Systems



Note that the wavelength scale is logarithmic. (From Thomas M. Lillesand and Ralph W. Kiefer, *Remote Sensing and Image Interpretation* (New York: John Wiley & Sons, 1979), p. 11. © 1979 by John Wiley & Sons, Inc. Reprinted by permission of John Wiley & Sons, Inc., all rights reserved.)

