

# Thermal Remote Sensing Technology and Its Application to Phenomena Identification

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Accessing to the information in the shortest possible time and with minimum cost is considered to be an important factor influencing the decision making outcome. In recent years, the use of modern, low-cost and fast methods such as remote sensing because of its ability to identify phenomena, have always been considered by experts, managers and decision makers,. Information obtained at the thermal infrared region, help the study of various phenomena for the reason that detection of small change in temperature, may be very effective on identifying certain phenomena and understanding the environment conditions

In this paper, we have tried to discuss on the applications of thermal infrared remote sensing such as meteorology, air quality consideration, water quality, geological maps, analyzing of the urban heat island, study of volcanoes, oil pollution consideration, predict the probability of earthquake as well as the applications of thermal imagery in health science. These applications indicate the usefulness and effectiveness of this technology in a society.

**Keywords: Thermal Infrared Remote Sensing, Detection of Phenomena, Earthquake, Meteorology, Heat Island, Environmental Pollution.**

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