



# Thermal Infrared Remote Sensing

Most citations come from the main text book: Jensen, J.R., 2007, Remote Sensing of the Environment: an Earth resource perspective, 2nd ed., Prentice Hall, 592p



## Thermal Infrared Remote Sensing

- thermal infrared electromagnetic radiation: 3.0-14 $\mu$ m
- Thermal infrared remote sensing systems record thermal infrared radiation that can be used to determine
  - the type of material based on its thermal emission characteristics
  - if significant changes have taken place in the thermal characteristics of these phenomena through time



# Thermal Infrared Remote Sensing

## Thermal Infrared Radiation Properties

- Thermal infrared images



# Thermal Infrared Remote Sensing

## Thermal Infrared Atmospheric Windows

- Atmospheric Windows in the Electromagnetic Spectrum



# Thermal Infrared Remote Sensing

## Thermal Radiation Laws

- Night-time thermal infrared imagery



# Thermal Infrared Remote Sensing

## Thermal Infrared Remote Sensing

- Thermal infrared image of a large sandbar