LIDAR 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

- **digital surface models (DSM)** that contain elevation information about all features in the landscape, such as vegetation, buildings, and other structures.

- **digital terrain models (DTM)** that contain elevation information about the bare-Earth surface without influence of vegetation or man-made structures.

- Four major technologies are used to obtain elevation information
  - in situ surveying
  - photogrammetry
  - Interferometric Synthetic Aperture Radar (IFSAR)
  - Light Detection and Ranging (LIDAR)

- LIDAR Laser and Scanning System

- LIDAR Returns

- Extraction of Bare-Earth
  Digital Terrain Models (DTMs)