



#### **SNS COLLEGE OF TECHNOLOGY**

An Autonomous Institution Coimbatore – 35

Accredited by NBA – AICTE and Accredited by NACC – UGC with 'A+ Grade Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai.

#### DEPARTMENT OF AGRICULTURE ENGINEERING

19AGT302 - GIS AND REMOTE SENSING

III – YEAR V SEMESTER

**UNIT 1 - REMOTE SENSING** 

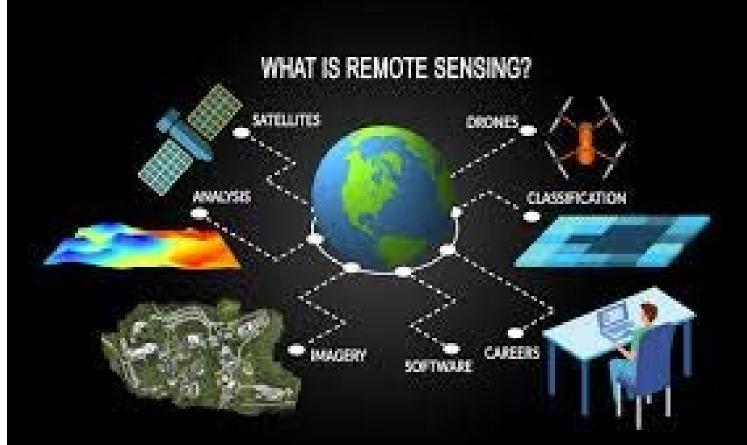
**TOPIC 1 - INTRODUCTION** 



## Remote sensing



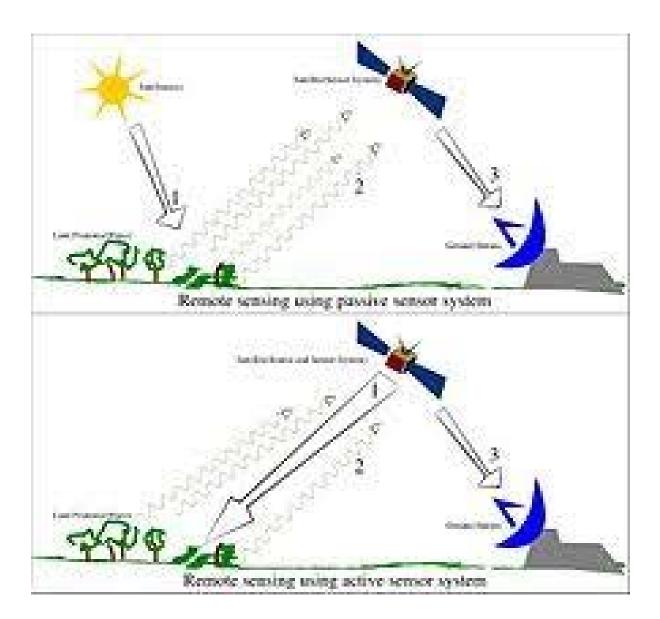
Remote sensing is the science and art of acquiring information (spectral, spatial, and temporal) about material objects, area, or phenomenon, without coming into physical contact with the objects, or phenomenon under investigation.





### What it means???



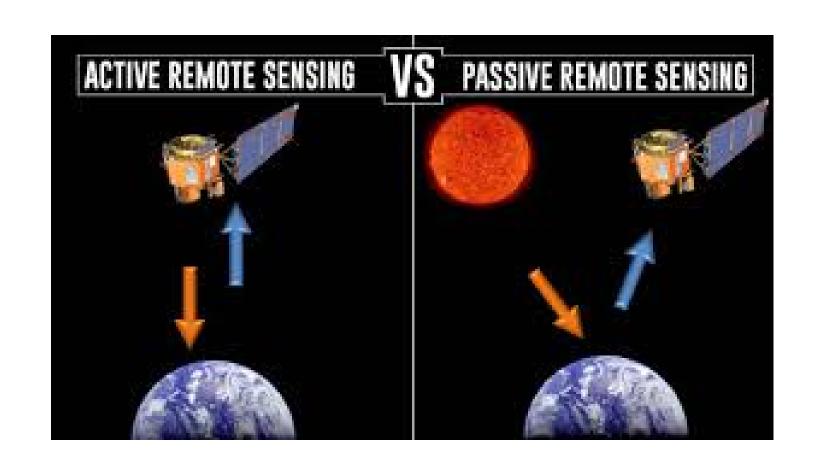


- ❖ Remote Sensing means sensing of the earth's surface from space by making use of the properties of electromagnetic wave emitted, reflected, or diffracted by the sensed objects for the purpose of improving natural resource management land and the protection of the environment.
- ❖ Without direct contact, some means of transferring information through space must be utilized. In remote sensing information transfer is accomplished by use of electromagnetic radiation (EMR).



## Concept!!!!





- ❖ Normally, if one comes across the term remote sensing, one wonders what does it mean' 'remote' means far away, and sensing means believing or observing or acquiring some information. Remote sensing means acquiring information of things from distance.
- ❖ We use remote sensing when we use sense of sight for watching a cricket match from in stadium, sense smell freshly cooked curry, and sense of hearing from a telephone ring.



### Where is it used ????



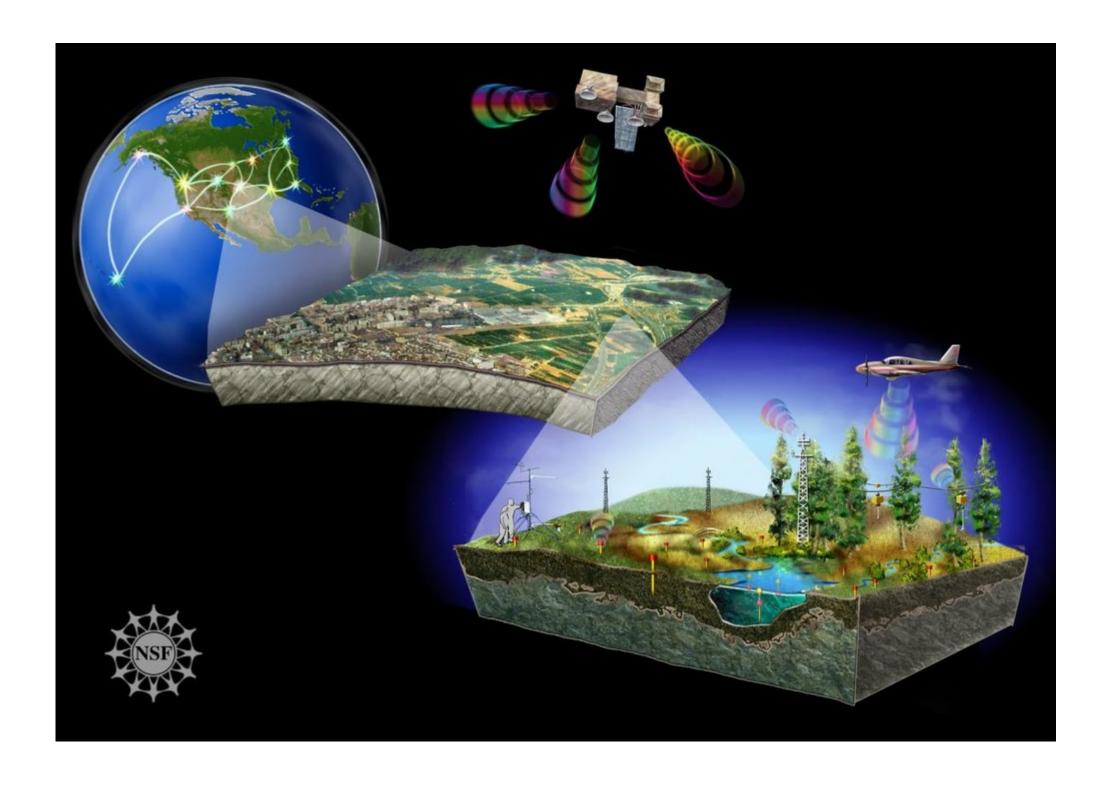
In the world of geospatial science, remote sensing, also known as the earth observation, means observing the earth with sensors from high above its surface. Sensors are like simple cameras except that they not only use visible but also other bands of the light electromagnetic spectrum such as infrared, microwaves, and ultraviolet regions. They are so high up that can make images of a very large area. Nowadays, remote sensing is mainly done from space using satellites, (Bhatta, 2008).















# Reference Videos







#### See You at Next Class!!!!