

## **GEOG 2007/3032 : Remote Sensing for Earth Observation**

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### What's this about?

#### **Remote Sensing.....?**

Involves collecting information about an object without being in physical contact with it. The instrument measure electromagnetic radiation (a source of which is the Sun) to provide information about the object. Taking a photograph is remote sensing.

#### **Why?**

Many areas of the Earth's surface are undergoing rapid change. Remote sensing provides a means to map and monitor global phenomena on an hourly and daily basis. This is fundamental for quantifying the rates of change occurring.

### Module Outline

The module introduces the history and theoretical concepts of remote sensing. Electromagnetic radiation, its interaction with objects and how we can infer information on the physical and chemical characteristics of objects as a result are discussed. Applications of remote sensing are the focus of guest lectures from people working in the Geo-informatics field. The lectures are complemented by in depth practical sessions where the theory and techniques of remote sensing is put into practice.

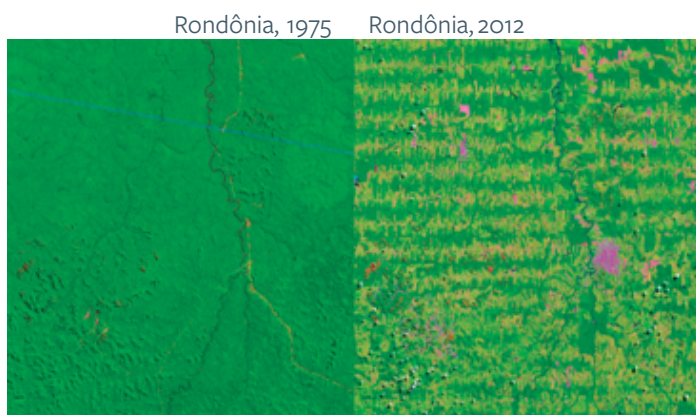
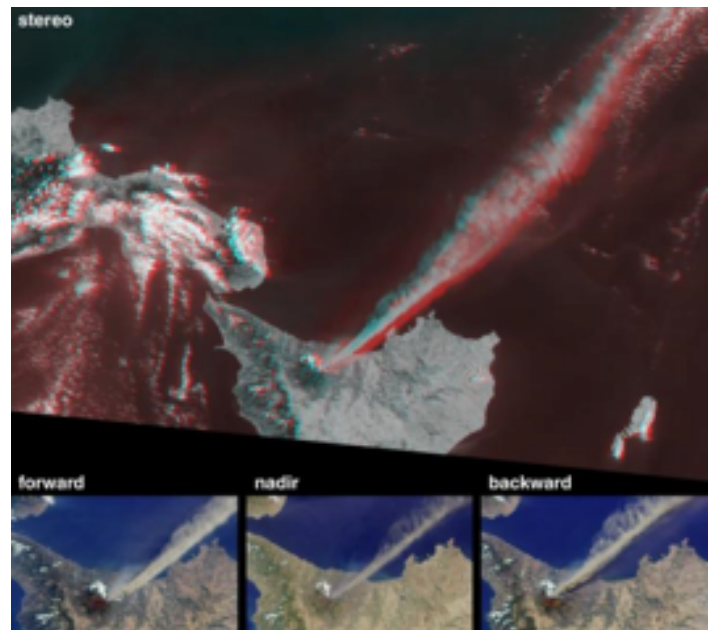


Image: NASA/Landsat

### Employment value

The module involves a number of computing sessions where students gain skills in computing, image processing and spatial analysis. Not only do students develop computational skills, which are highly sought after in many job sectors, but they develop the skills needed to relate the theory of remote sensing to its practice.



NASA/JPL Mount Etna eruption 2001

### **The Student View**

“Very good coverage of consistent material. Practical's were really useful as well as all the staff. The quizzes improved my engagement with the subject.”

“I liked how it dealt with complex information in a logical order that links in well with other modules.”