Satellite image interpretation

Intended audience
Geologists and geoscientists involved in geological or geomorphological mapping. The course is suited to professional geoscientists in industry and academia, as well as post-graduate students.

Course objectives
- To introduce participants to concepts and geological applications in remote sensing with an emphasis on satellite imagery.
- To familiarise participants with the fundamentals of interpretation of satellite imagery through laboratory practice.
- To encourage the use of satellite imagery in field mapping.

Course description
This course provides a practical introduction to satellite imagery and geomorphological interpretation using UK and overseas examples. Practical experience will be gained in the interpretation of satellite imagery as related to geological field surveying. The course covers:
- Fundamentals of satellite imagery (optical and microwave).
- Introduction to advanced basic and sensors.
- Image interpretation and landform recognition.
- Annotation of interpreted satellite imagery.
- Using imagery in ArcGIS.

Landsat 7 ETM false-colour image of the Richat structure in northern Mauritania. Once thought to be a meteorite impact structure, it is now interpreted as a periclinal dome uplifted probably by magmatic intrusion and subsequently laid bare by erosion. The ages of the rock exposed in this concentric structure range from Pre-Cambrian to Lower Palaeozoic. The features is approximately 45km diameter. Processed imagery © BGS, NERC.