



EMERGING TECHNOLOGIES TRAINING

Satellite Data and Earth Observation for Resource Management

3 day course

Classroom, online or in-house

Course overview

Satellite imagery now covers most of Africa frequently enough to monitor change rather than merely record it, and a great deal of it is free, which puts capability within reach of organisations that could never fund aerial survey. This course covers using it. Delegates work through sensor types and what optical, radar and thermal each reveal, resolution and revisit trade offs, and the free and commercial data sources available. Processing is covered practically: correction, indices and change detection. Applications are worked through for mining, agriculture, water, forestry and environmental compliance. Ground truthing and accuracy assessment follow. The course closes on integrating imagery with geographic information systems and on the limits of what it can prove.

What you will learn

- Compare optical, radar and thermal sensing and what each reveals
- Trade resolution against revisit frequency and cost
- Source free and commercial imagery for a given task
- Apply correction, indices and change detection
- Work through applications in mining, agriculture, water and environment
- Ground truth results and assess accuracy
- Integrate imagery with geographic information systems

Who should attend

- Environmental and land management staff
- Mining and exploration geologists
- Agricultural and water resource technical staff
- Geographic information systems officers
- Regulators and compliance monitoring personnel

Course outline

- 01 Monitoring change rather than recording it
- 02 Optical, radar and thermal sensing
- 03 Resolution, revisit and cost trade offs
- 04 Free and commercial data sources
- 05 Correction, indices and processing
- 06 Change detection
- 07 Applications across sectors
- 08 Ground truthing, accuracy and system integration

Upcoming dates

Dates	Venue	Format	Fee per delegate
6 to 8 January 2027	Harare, Zimbabwe	Classroom	USD 995
25 to 27 January 2027	Online	Online	R6,500
10 to 12 February 2027	Durban, South Africa	Classroom	R14,950
22 to 24 February 2027	Accra, Ghana	Classroom	USD 995



Fees and how to register

This 3 day course is **R6,500** per delegate online, **R14,950** in the classroom in South Africa, Botswana, Namibia, Lesotho and Eswatini, and **USD 995** in the classroom elsewhere in Africa. In-house training is quotation on request. Book 2 or more delegates on this course and save 10%.

To register or request an in-house proposal, visit www.afrisciencegroup.com, email info@afriscience.co.za, or WhatsApp us on **+27 63 479 1136**.

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