



SANSA Earth Observation - HCD

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SANSA Earth Observation

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SANSA' Vision

- To be the leader in ensuring that space science and technology benefits society, the environment, the economy and the global community through products and services; research and application development; **science advancement and Human Capital Development.**



Science Advancement and Public Engagement

- **Objective**
 - Promote awareness in Earth observation Technology
- **Activities**
 - Learner and teacher outreach programme
 - Science festivals
 - Schools visit
 - Earth observation benefits demonstration



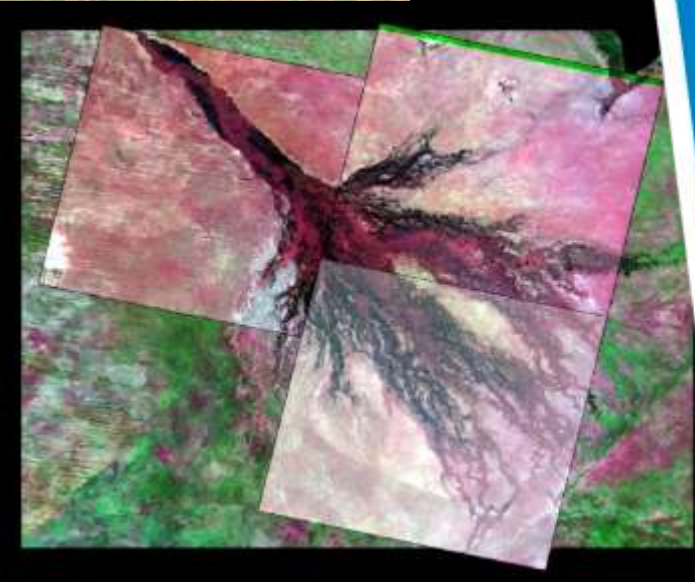
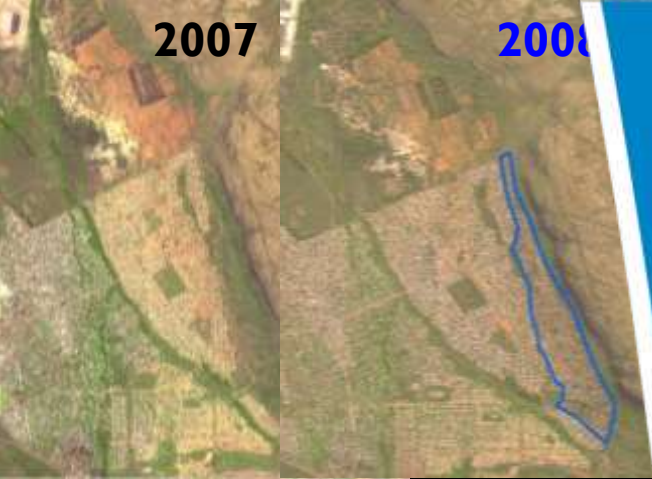
Bursary scheme

- Financial support students
 - Postgraduate degree
 - Bsc (Hons)
 - Msc
 - PhD



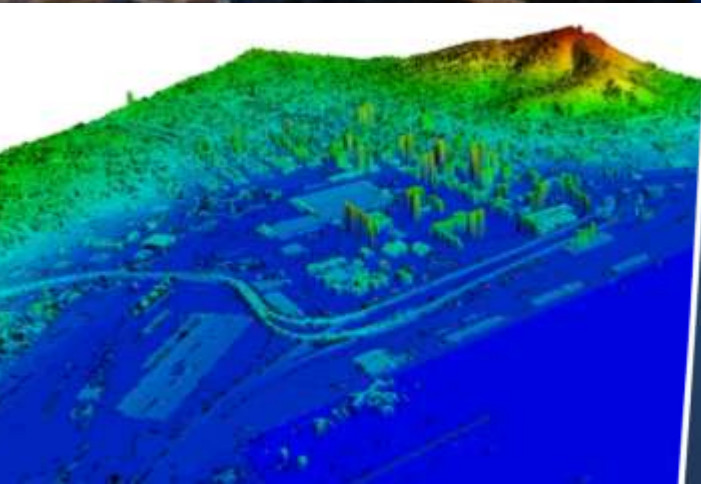
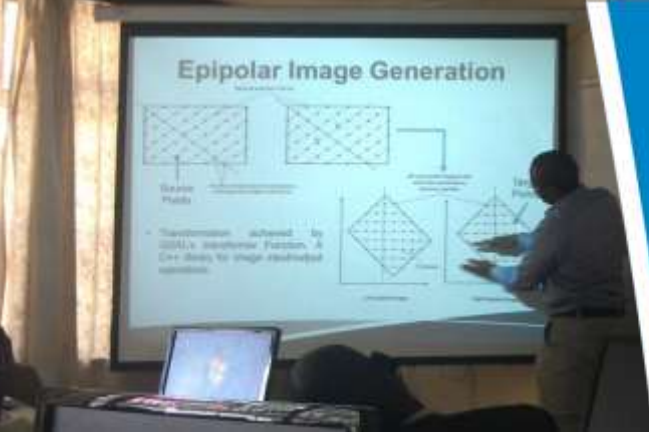
2007

2008



Internship programme

- Target postgraduate students
- A 12 month program
- Skills development areas
 - Remote sensing software
 - Image preprocessing
 - Image interpretation
 - Feature extraction techniques
 - Spatial analysis
 - Project development



Short courses

Courses delivered

- e-Cognition: staff/researchers development
- Basic disaster management: Disaster risk, reduction and response
- Hyperspectral course
- R training; and advanced spectral training in R
- Spectrometer training
- CEOS – WDCapD
 - DEM workshop
 - International e-learning course: Introduction to Remote Sensing Technology
- Tiger Training of Trainers –focusing on land cover mapping

Planned 2014

- Introductory GIS/RS
 - Teachers
 - Remote sensing/GIS end-users
- Advanced RS; Programming; Intro to RADAR – for professionals



University training & supervision

- Training to supplement curricula
 - Hyperspectral course
- Help develop RS curricula
 - Request from UniZulu, TUT, UFS
- Provide supervision to MSc and PhD students
- Examiners for thesis
- Developing links with universities for research ties

SANSA Earth Observation international projects

- EO-POWER
- TIGER/TIGER-NET
- Human settlement detection and monitoring - JRC
- CEOS WGCAPD
- SISTER- DLR

Past international projects

- AMESD
 - GEONETCAB
 - GARNET E
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The FUNDISA Disk

- An annually updated disk containing some South African Earth observation datasets, learning materials and open software packages, for
 - University students
 - Learners: Fundisa school edition
- Fundisa portal, <http://fundisa.sansa.org.za>



Research opportunities

- Astrium-SANSA SPOT 6 products development
- Collaboration with industry on development of image processing chain to product/application development

Human capital development opportunities

- Access to Sentinel 2 for South Africa and support on dissemination to SACD/Africa
 - Participation on HORIZON 2020 and other international projects focusing on capacity building
 - Take part in staff exchange/fellowship with JRC, ESA and other institutions in Europe
 - Focused training on advanced remote sensing courses at ESA and other institutions in Europe
 - Focused training in partnership with international experts
 - Support on formal Msc and PhD training at ITC and other institutions in Europe
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Thank you