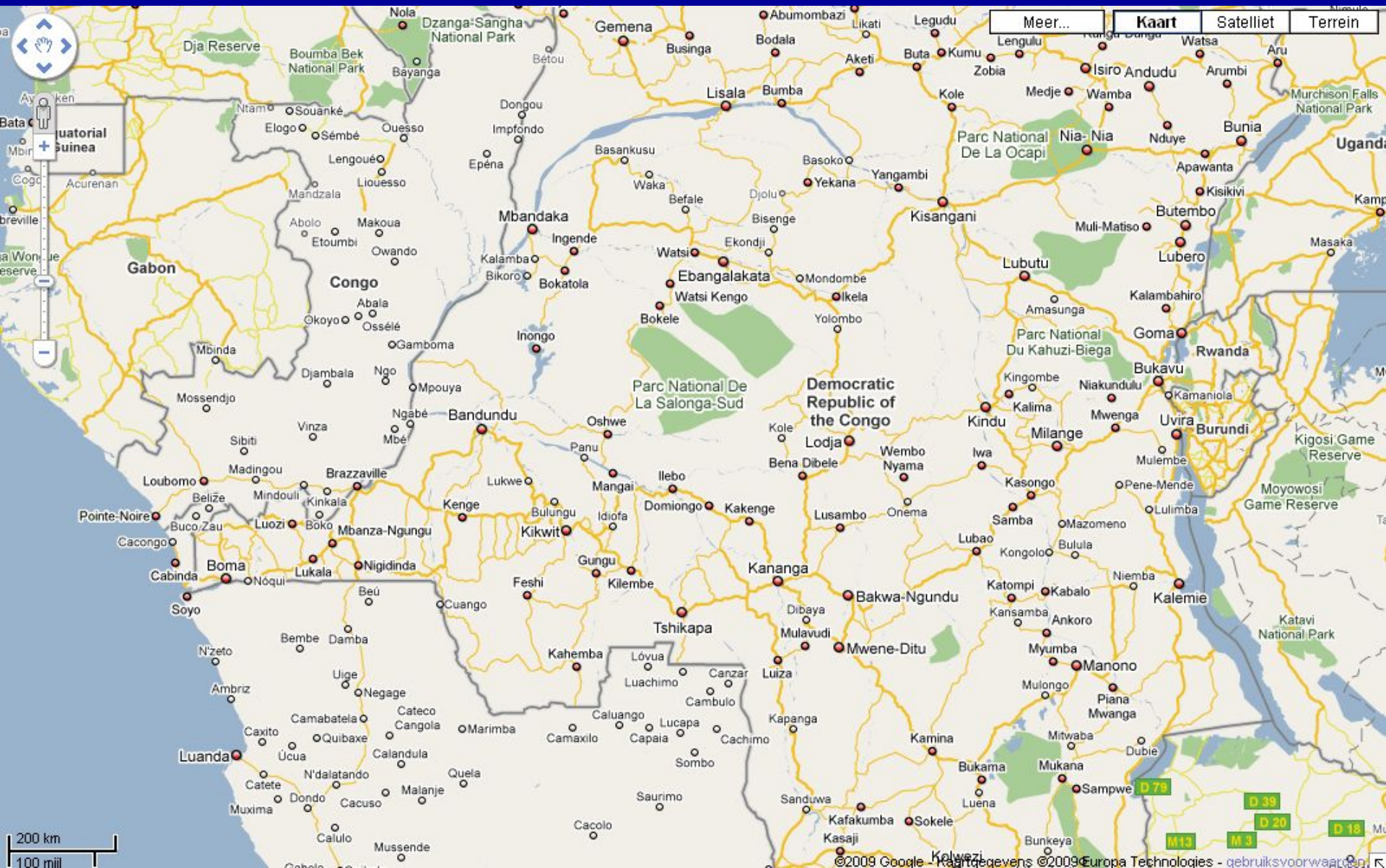


Teaching Remote Sensing for lectors at University level. A project at the University of Kisangani in Congo

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Meer... Kaart Satelliet Terrein

200 km
100 mil

Micro-project

- Sponsor: VLIR –Flemish Interuniversity Council
- Maximum amount is 100000 Euro
- Duration: 2 years
- Aim: establishing relations between Flemish and Congolese Universities.

Topic: Installing a Remote Sensing Lab at the University of Kisangani and forming lecturers in the field of Remote Sensing. Also on the longer term the project aims the start of a small Remote Sensing and cartographic laboratory at the university of Kisangani.

Projet VLIR-UOS
UNIKIS (F.S.A.)-UGENT (Dpt. of Geography)
"FORMATION DES FORMATEURS EN TELEDETECTION ET SIG"
DU 25/01 au 06/02/2009
Faculté des Sciences Agronomiques



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Projet VLEP-UÖS
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Donated materials

- 4 PC
- Fast internet connection
- Generator
- Stabilisator
- beamer
- Airconditioning
- Printer
- Camera
- 4 hand GPS
- Building materials for the renovation of the building

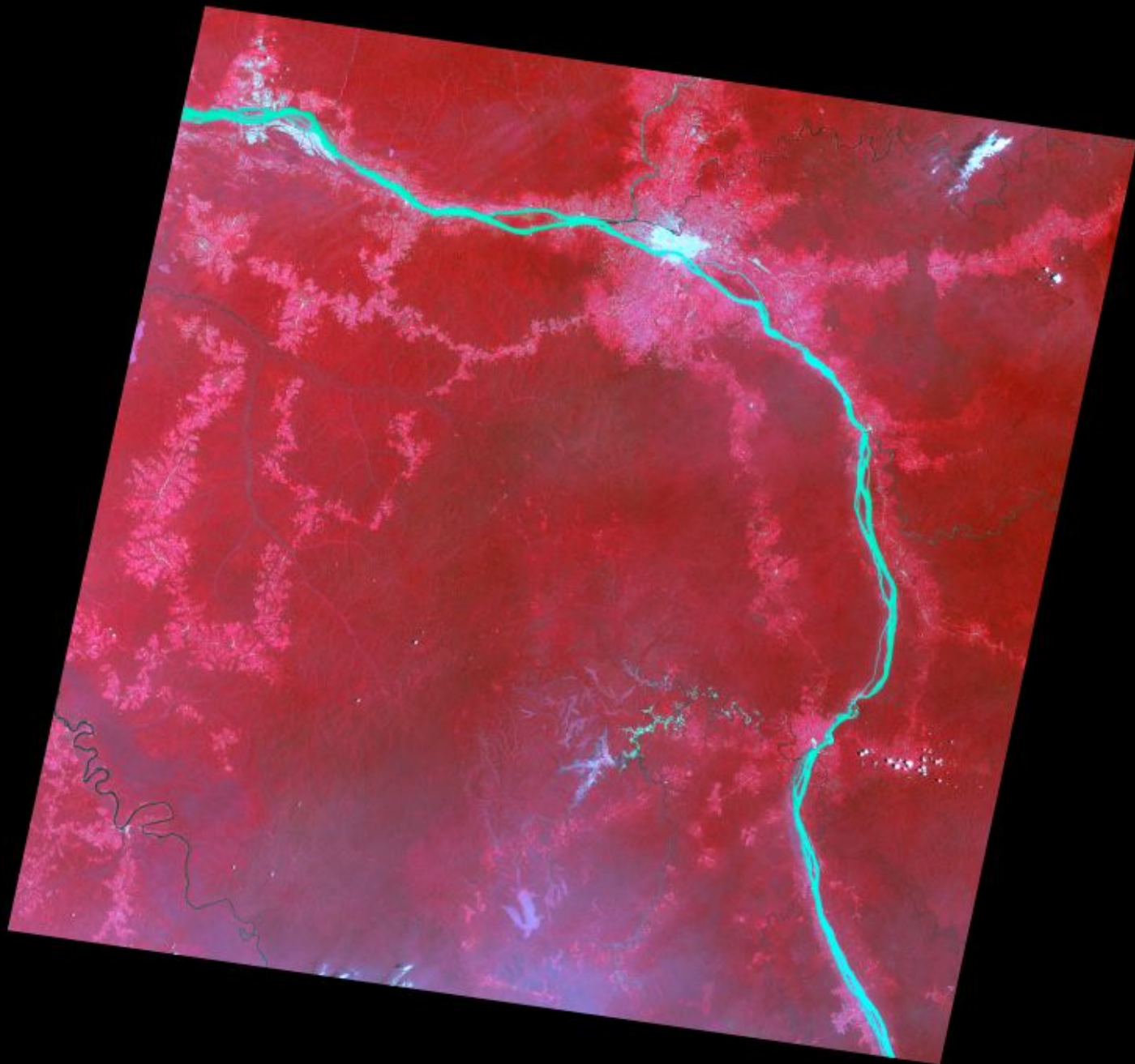


Software

- ILWIS – ITC, The Netherlands
- Free-ware

Imagery

- Low cost imagery: Landsat and Aster
- From the surroundings of Kisangani
- But also MODIS, NOAA-AVHRR, SPOT-Veg.



Lecturing Time

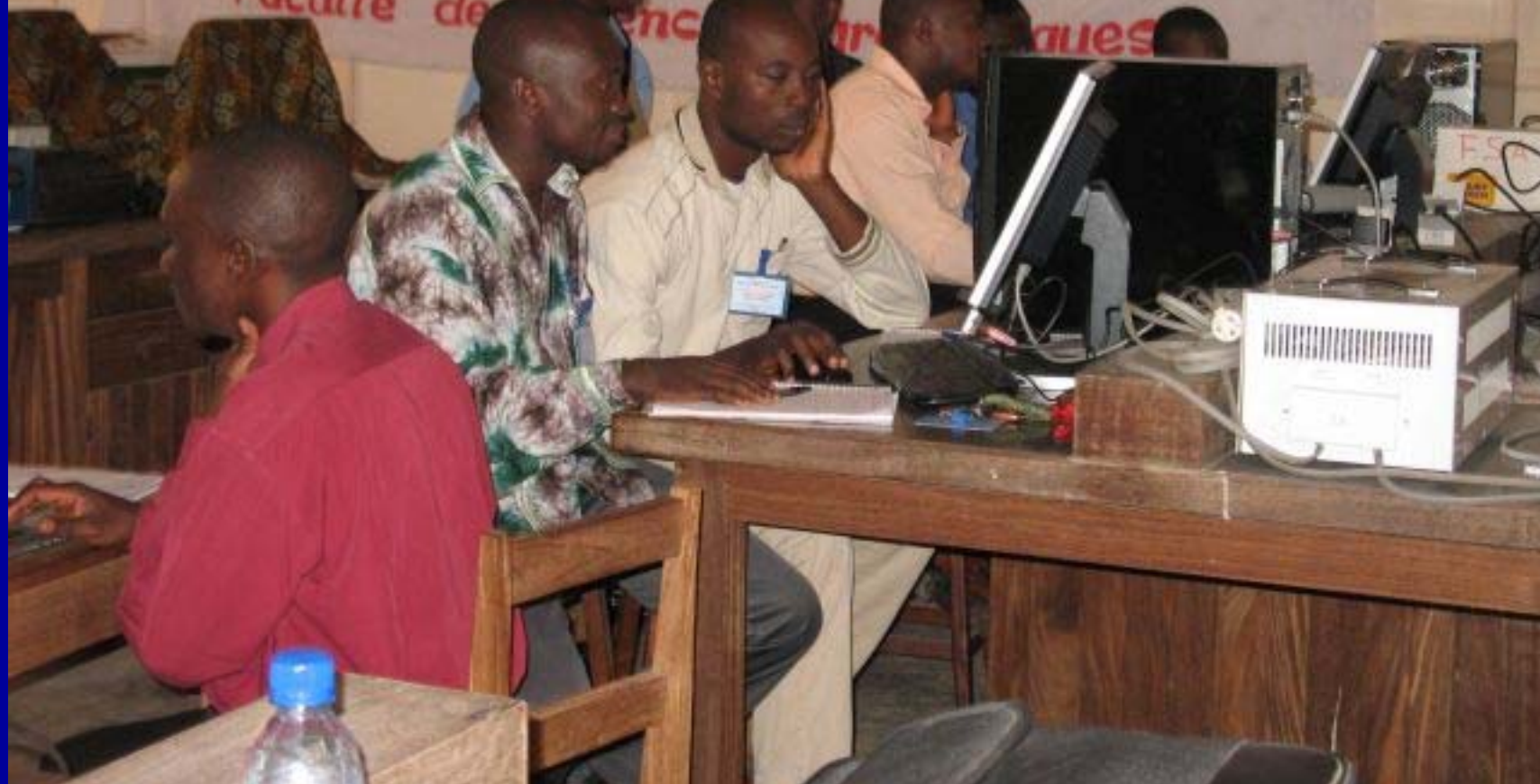
- 2 lecturing times:
 - January 2009 (2 weeks)
 - September 2009 (2 weeks)

“The Students”

- 12 young assistants were selected from the faculty of Agriculture and from the Yangambi Agricultural Research Station.
- In addition 12 other young assistants could participate coming from other faculties and administrations.
- The lectures were given in French: English is a problem, especially scientific literature, but also text books.



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Content

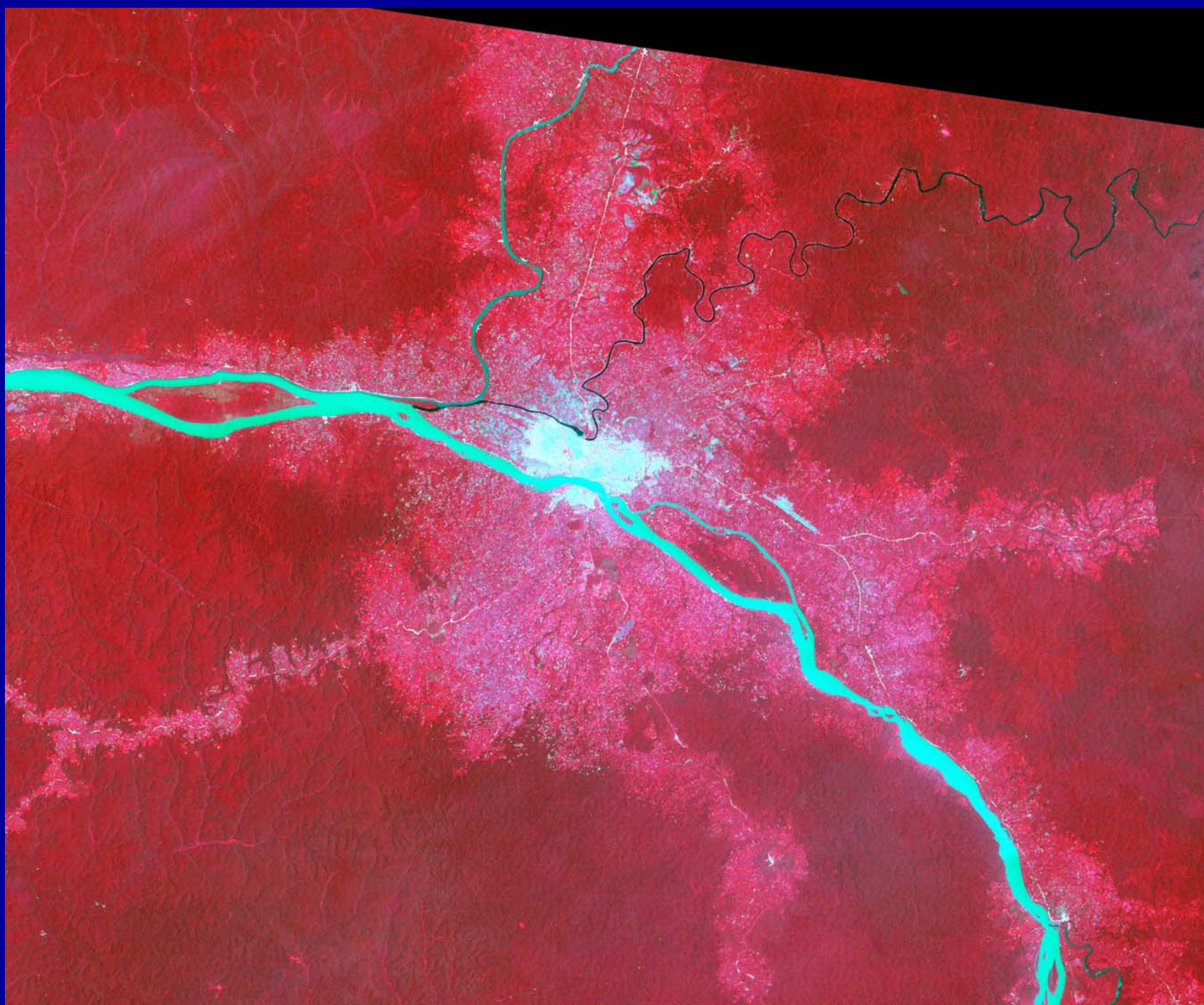
- Basics of Remote Sensing
- Sensors: Landsat, Aster, Spot, Ikonos, QB, NOAA, MODIS, Spot-Veg., Seawifs
- Image processing: RCC, FCC, NDVI, image classification, georeferencing, PCA, filtering.
- Radar: ERS and SRTM
- Field excursion: to collect data for the image classification and to collect GCP by GPS.
- Overview of the websites where satellite images can be downloaded

Exercises

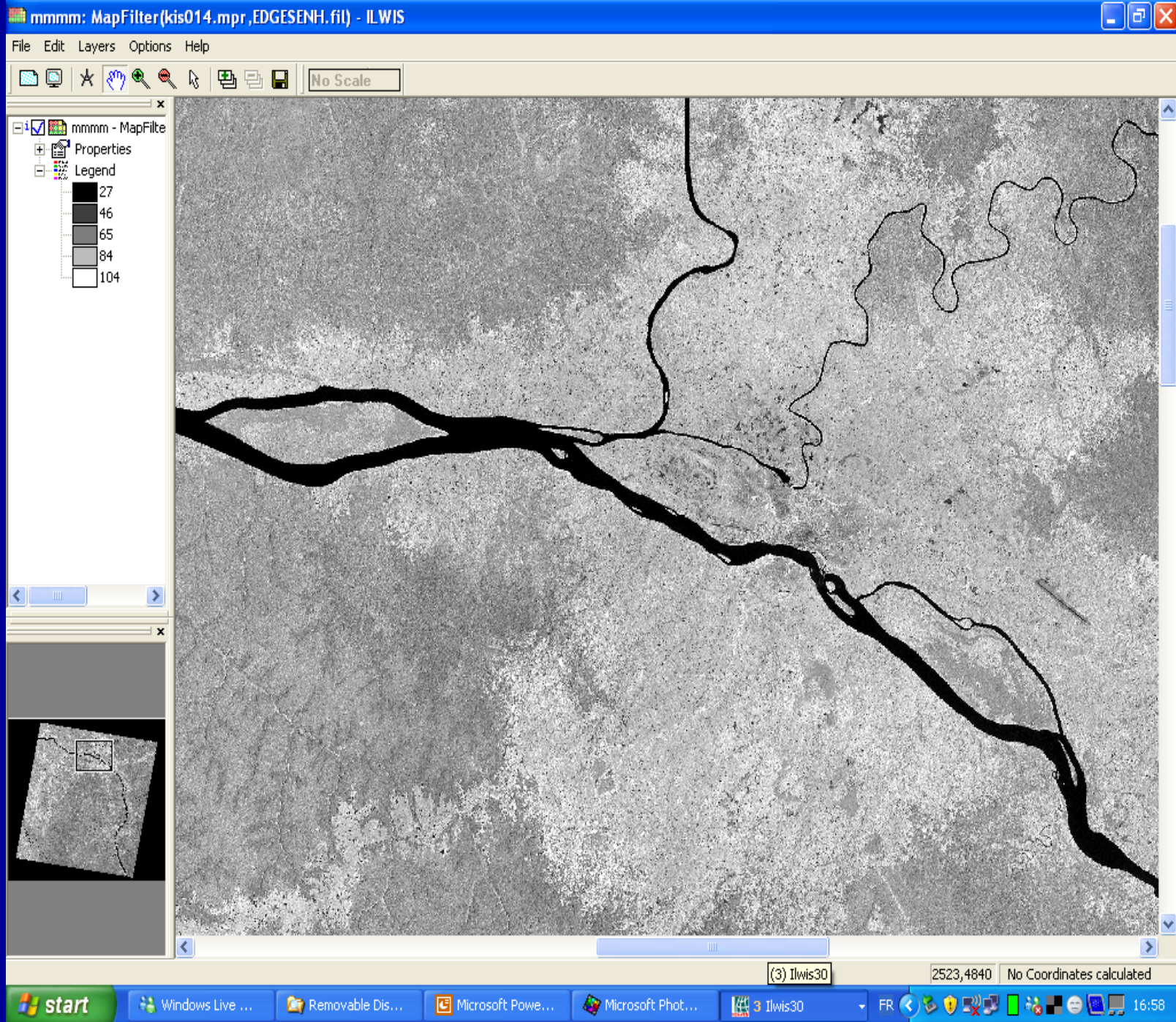
- All the exercises where done on images of the surroundings of Kisangani and Yangambi
- Topics:
 - Land Cover mapping
 - Mapping of agricultural areas (plantations)
 - Deforestation of the Tropical forest.

Lecturing time in September

- Topics:
 - Elementary photogrammetry
 - Integration of the obtained cartographic output (e.g. Image classification products)
 - Elementary GIS
 - Relation with remote sensing products and SRTM-DEM

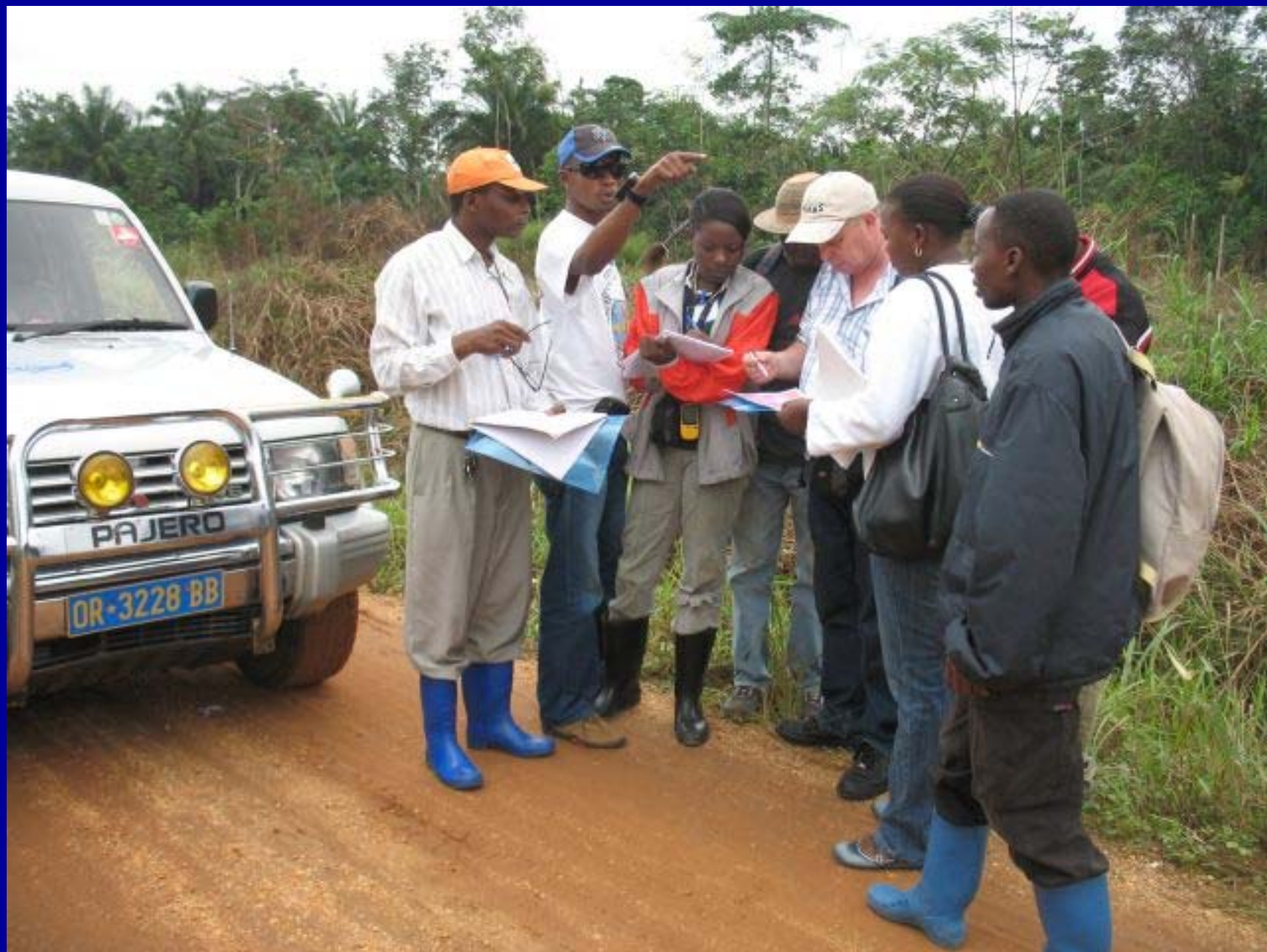


NDVI



The excursion

- Field sampling
- Measuring GCP's







Conclusions & Perspectives

- Training local staff in lecturing remote sensing
- To enable the local staff to start their own mapping unit
- To enable the local staff to perform independantly remote sensing studies.
- To enable the Univesity of Kisangani to act as an advisor for local environmental authorities.

Thank you for your attention....

Questions?