

# FIG WORKING WEEK 2019

22-26 April, Hanoi, Vietnam

Presented by the FIG Working Week 2019,  
April 22-26, 2019 in Hanoi, Vietnam

"Geospatial Information for a Smarter Life  
and Environmental Resilience"



ORGANISED BY



PLATINUM SPONSORS





# FIG WORKING WEEK 2019

22–26 April, Hanoi, Vietnam

"Geospatial Information for a Smarter Life and Environmental Resilience"



# Mapping Urban Green Space in the City of Gweru, Zimbabwe



**C. Paradzayi, F. Dewa and L. Mapungwana**

**Midlands State University**

**Survey Institute of Zimbabwe**



ORGANISED BY



PLATINUM SPONSORS





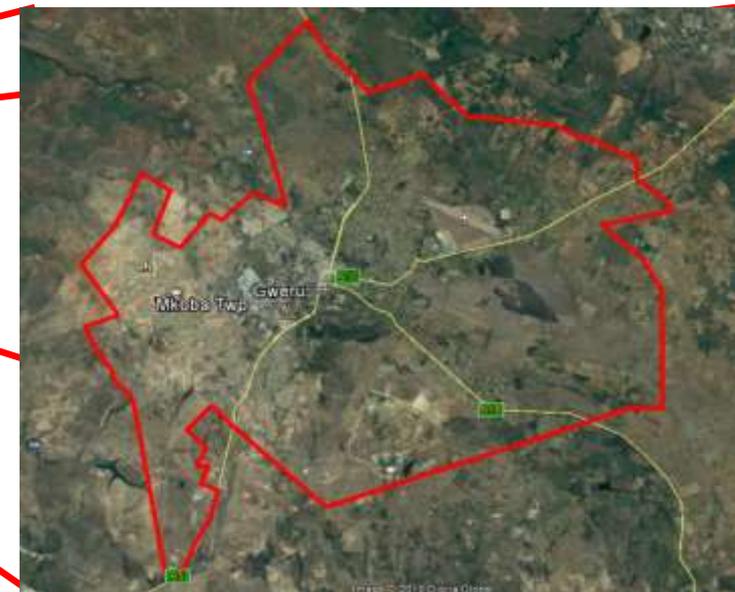
# FIG WORKING WEEK 2019

22-26 April, Hanoi, Vietnam

"Geospatial Information for a Smarter Life and Environmental Resilience"



- Population of about 300 000 inhabitants
- Municipal area covers over 20 000 Ha
- Great temperatures
- Moderate annual rainfall



ORGANISED BY



PLATINUM SPONSORS





# FIG WORKING WEEK 2019

22-26 April, Hanoi, Vietnam



"Geospatial Information for a Smarter Life and Environmental Resilience"

## SDG 11 and urban green spaces



**Smarter Life begins with a Smarter City**  
**Urban green spaces are the lungs of the every city**

ORGANISED BY



PLATINUM SPONSORS





# FIG WORKING WEEK 2019

22–26 April, Hanoi, Vietnam

"Geospatial Information for a Smarter Life and Environmental Resilience"



## Rational for this study

- **Collaboration** between Midlands State University and City of Gweru
- Introduction of a new approach to urban planning by **integrating EO and GIS technologies**
- Results aim to support
  - Master plan review and update
  - Enterprise GIS applications development (spin off)
  - Adoption of freely available datasets and processing tools

ORGANISED BY



PLATINUM SPONSORS





# FIG WORKING WEEK 2019

22–26 April, Hanoi, Vietnam

"Geospatial Information for a Smarter Life and Environmental Resilience"



## Datasets and processing tools

- Sentinel 2A
- SNAP
- QGIS

ORGANISED BY



PLATINUM SPONSORS





# FIG WORKING WEEK 2019

22-26 April, Hanoi, Vietnam

"Geospatial Information for a Smarter Life and Environmental Resilience"



## Unsupervised K-means classification based on NDVI

NDVI

K-means

Clusters

Classification

Urban Green  
Space Map

ORGANISED BY



PLATINUM SPONSORS





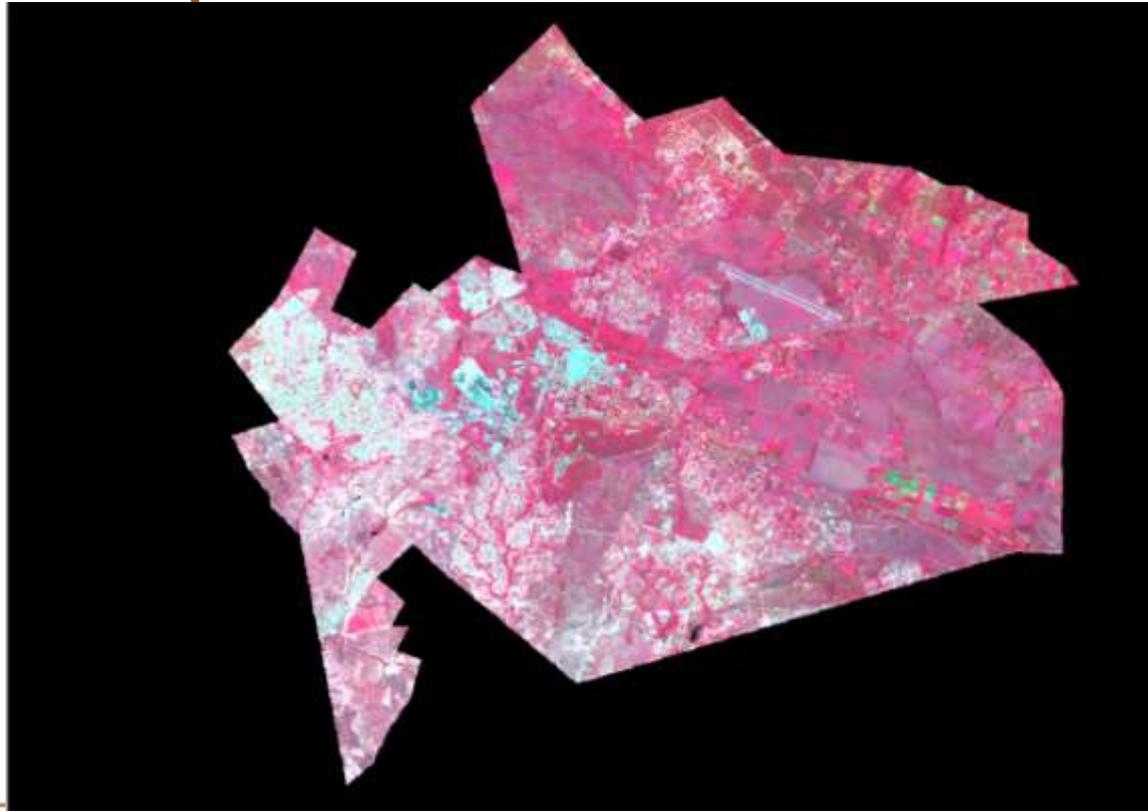
# FIG WORKING WEEK 2019

22-26 April, Hanoi, Vietnam

"Geospatial Information for a Smarter Life and Environmental Resilience"



## False Colour Composite – Sentinel 2



ORGANISED BY



PLATINUM SPONSORS





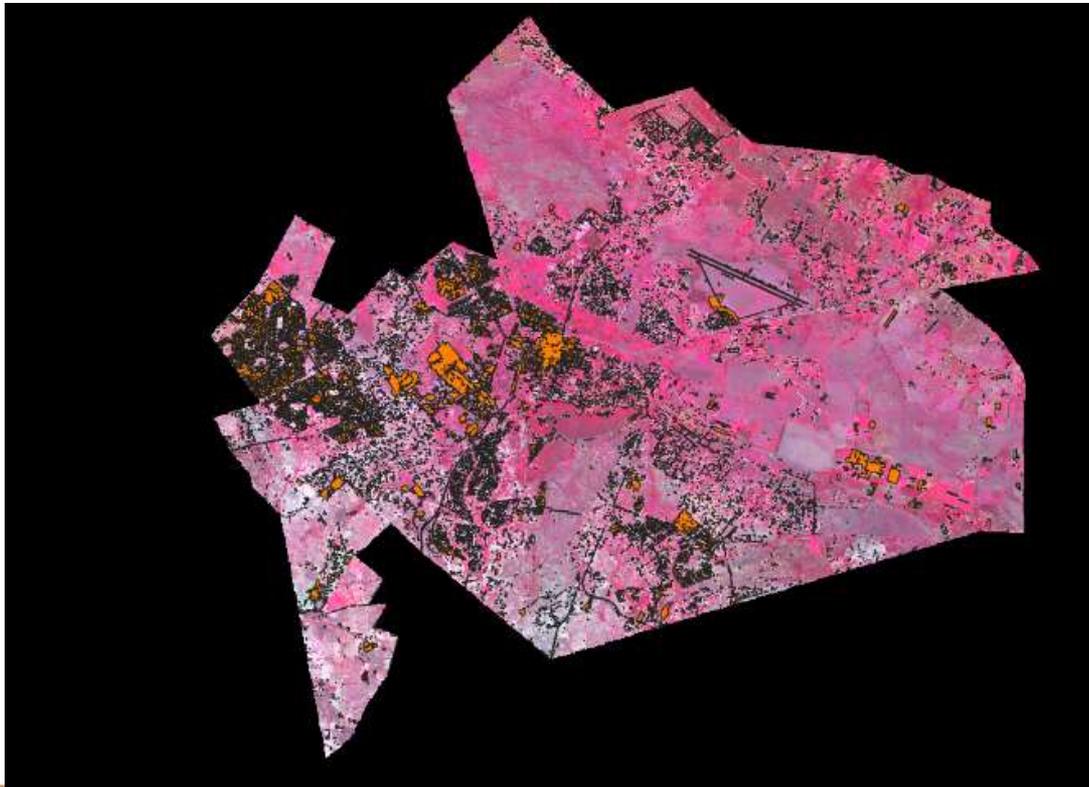
# FIG WORKING WEEK 2019

22-26 April, Hanoi, Vietnam

"Geospatial Information for a Smarter Life and Environmental Resilience"



## Bare areas



ORGANISED BY



PLATINUM SPONSORS





# FIG WORKING WEEK 2019

22-26 April, Hanoi, Vietnam

"Geospatial Information for a Smarter Life and Environmental Resilience"



## Cultivated areas



ORGANISED BY



PLATINUM SPONSORS





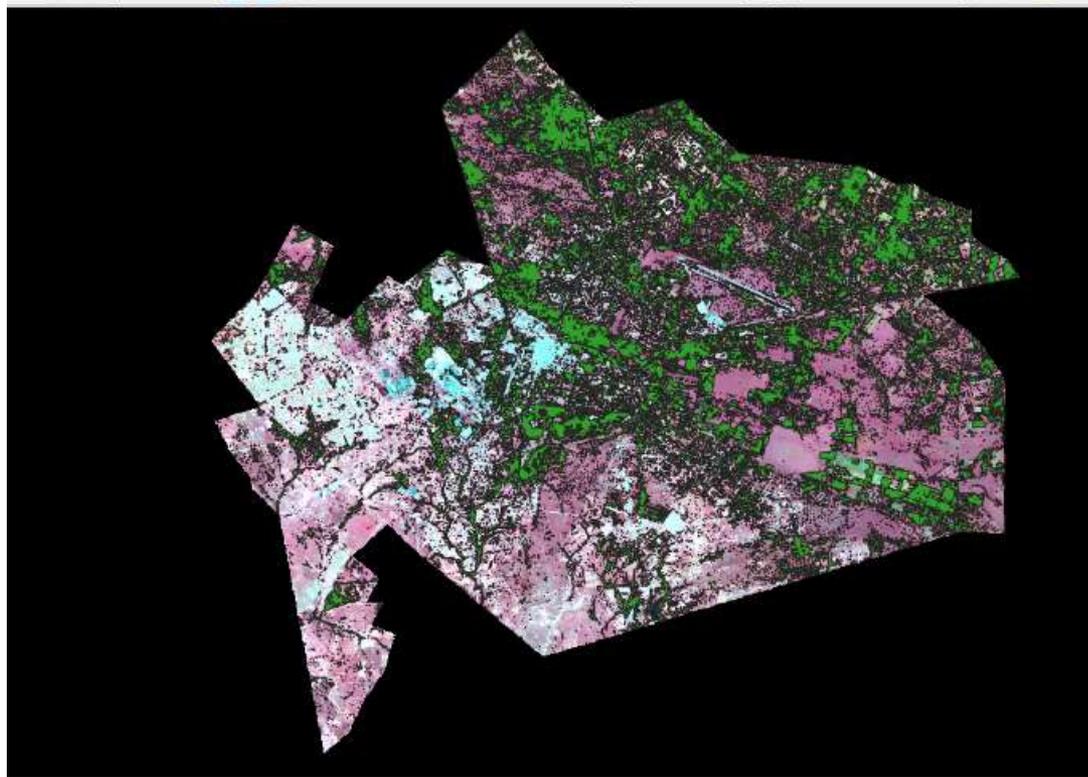
# FIG WORKING WEEK 2019

22-26 April, Hanoi, Vietnam

"Geospatial Information for a Smarter Life and Environmental Resilience"



## High vegetation urban green spaces



ORGANISED BY



PLATINUM SPONSORS





# FIG WORKING WEEK 2019

22-26 April, Hanoi, Vietnam

"Geospatial Information for a Smarter Life and Environmental Resilience"



## Urban green map



ORGANISED BY



PLATINUM SPONSORS





# FIG WORKING WEEK 2019

22–26 April, Hanoi, Vietnam

"Geospatial Information for a Smarter Life and Environmental Resilience"



## Outstanding work

- MCA yet to be developed
- City of Gweru is yet to come up with criteria for future citing of UGS

ORGANISED BY



PLATINUM SPONSORS





# FIG WORKING WEEK 2019

22–26 April, Hanoi, Vietnam

"Geospatial Information for a Smarter Life and Environmental Resilience"



## Acknowledgements

Survey Institute of Zimbabwe

Midlands State University

City of Gweru City

CopernicusEU

ORGANISED BY



PLATINUM SPONSORS





# FIG WORKING WEEK 2019

22-26 April, Hanoi, Vietnam

"Geospatial Information for a Smarter Life and Environmental Resilience"



Thank You

cảm ơn bạn

ORGANISED BY



PLATINUM SPONSORS

