

# EO4SAS Project Introduction

Project Lead  
Dr Samantha Lavender

EO4SAS is grant-funded through the UK Space Agency's International Partnership Programme, part of the Department for Business, Energy and Industrial Strategy's Global Challenges Research Fund.

**Project aim:** to demonstrate the feasibility of using Earth Observation (EO) techniques as the basis of a sand management system in Kenya together with the usability and acceptance of such a service.

The Discovery Phase (to March 2021) focuses on understanding what's needed in-country through a series of meetings and workshops.

Work will develop into a proposal for the implementation of the recommendations of the Discovery Phase.

## WP1: Project Management

Project Lead, Dr Samantha Lavender

Project Manager, Andrew (Mal) Maloney

### **WP2: Monitoring & Evaluation**

Satellite  
Applications  
Catapult &  
NIRAS

### **WP3: User Engagement**

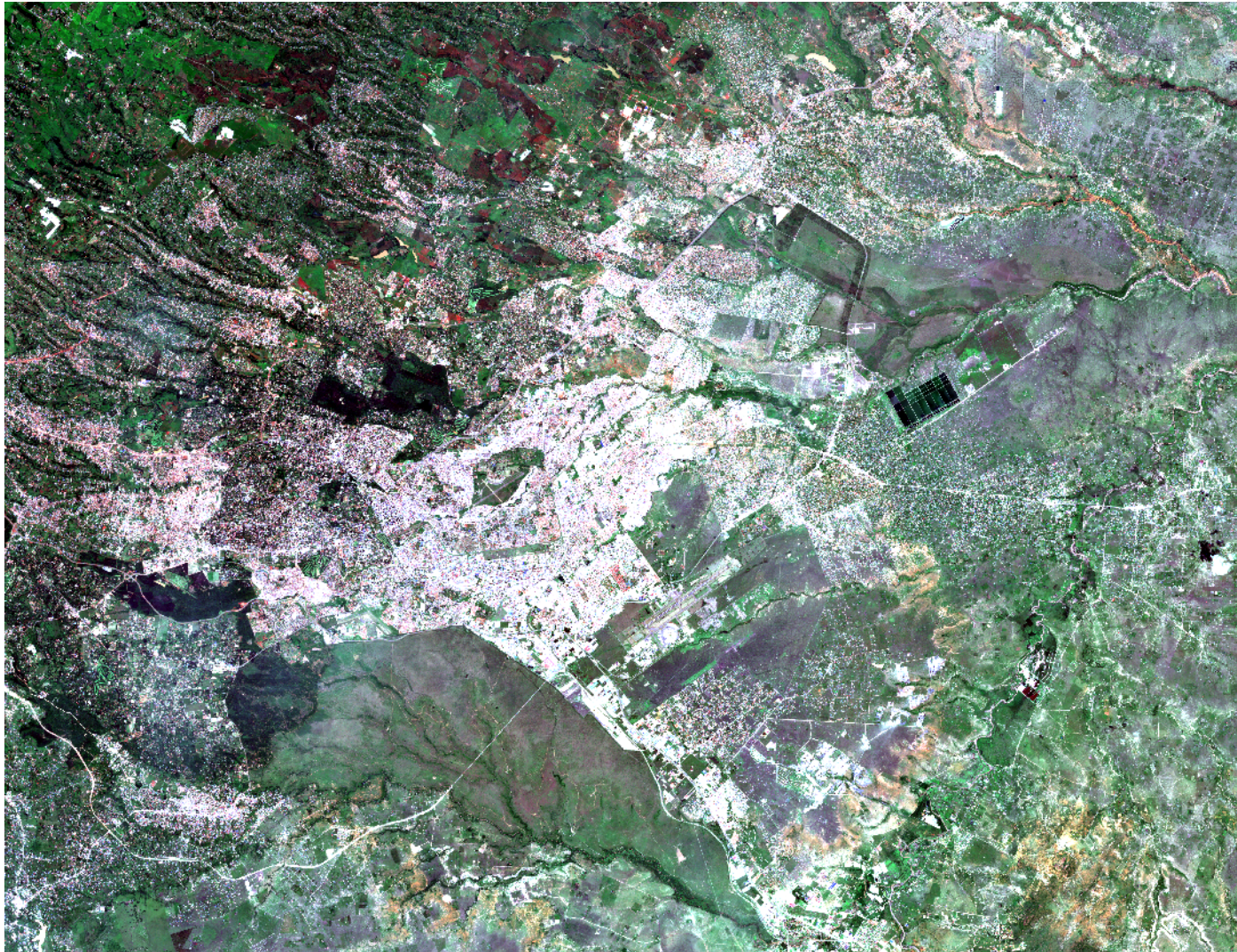
Satellite  
Applications  
Catapult &  
Nairobi Design  
Institute

### **WP4: System Requirements** Pixalytics

### **WP5: Sustainability** Pixalytics

# Satellite Capabilities

Project Lead  
Dr Samantha Lavender



Nairobi

Optical  
Imagery:  
Copernicus  
Sentinel-2, -3  
and Landsat  
plus some  
funding for  
buying  
commercial  
high-  
resolution data



Nairobi: zoomed in

Optical imagery for  
water quality, land  
cover classification  
and vegetation  
health

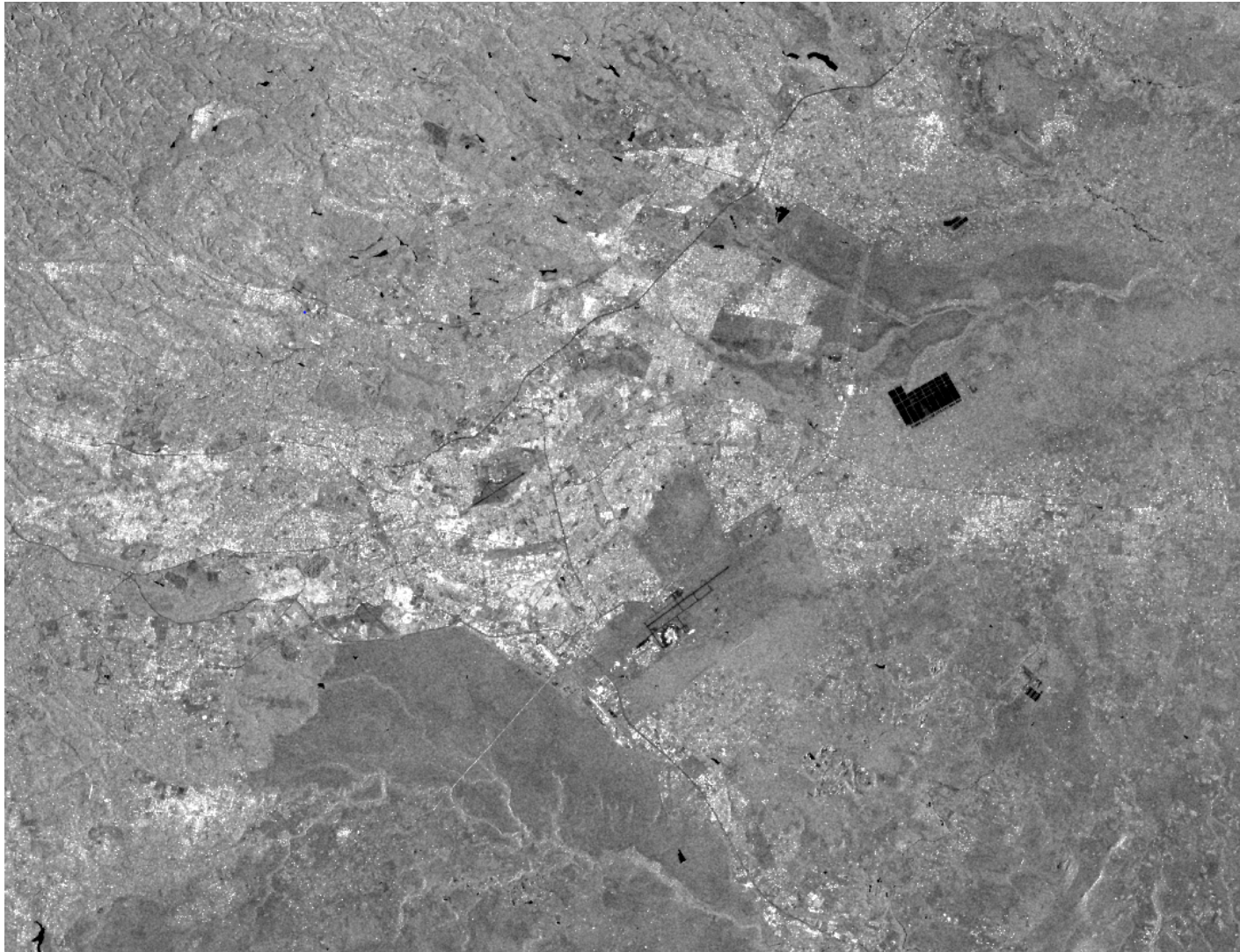


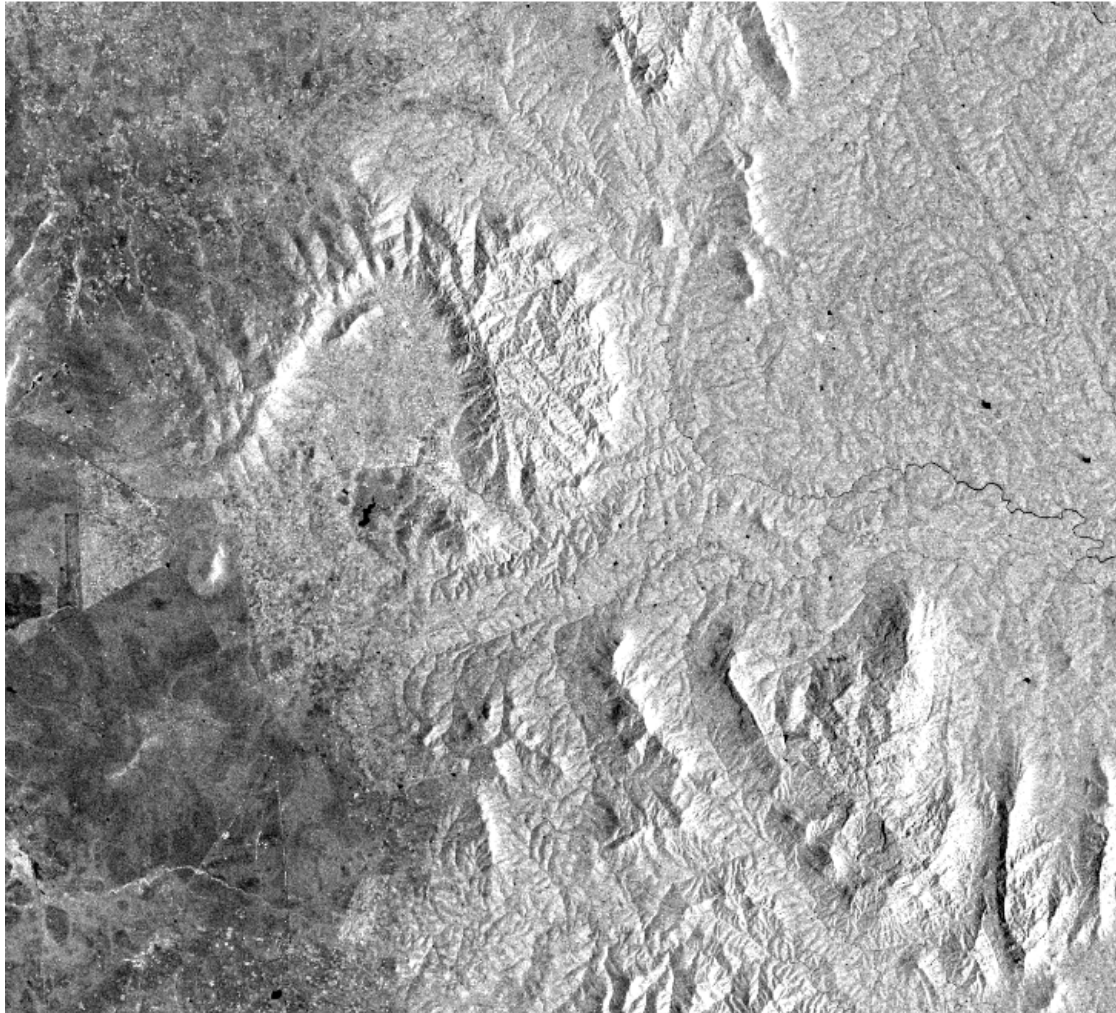
Kenya, with bright spots for populated locations

Nighttime VIIRS imagery for activity

Nairobi

Microwave  
Imagery:  
Copernicus  
Sentinel-1  
radar, sensors  
for soil  
moisture plus  
some funding  
for buying  
commercial  
high-  
resolution data





Machakos and  
Makueni border

Copernicus  
Sentinel-1 can be  
used for height  
measurements,  
useful for  
quantifying  
volumes