



Digital Earth Africa 6-Week Training Course

Week 2: Satellite products



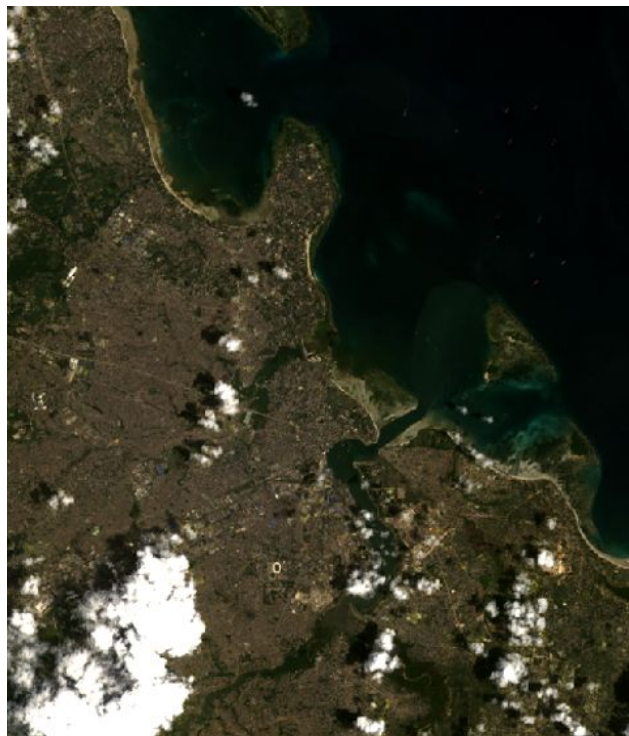
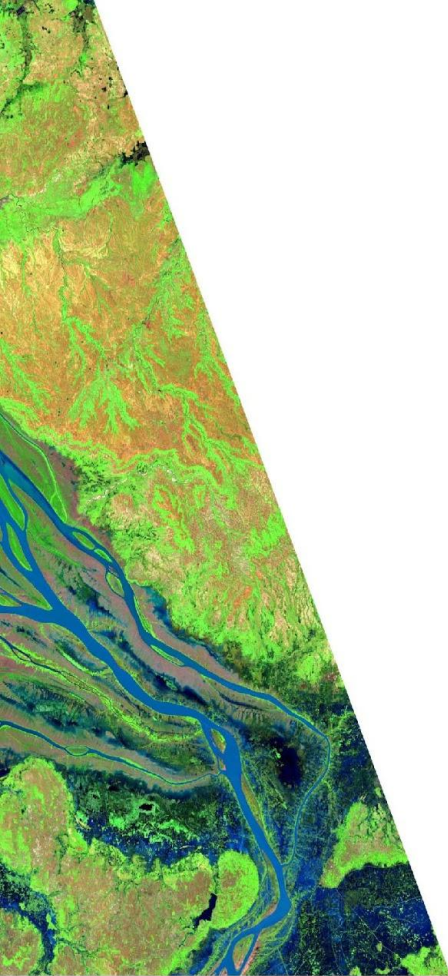
What is a product?

- A product is a comprehensive dataset of Earth observations over a region for a given time period

Key attributes:

- Data type
 - e.g. Surface reflectance
- Pixel size (spatial resolution)
 - e.g. 30 m x 30 m pixels
- Revisit time (temporal resolution)
 - e.g. One flyover every 16 days
- No. of spectral bands (spectral resolution)
 - e.g. 7
- Data timespan
 - e.g. Data collected from 2017 onwards

Landsat 8 product



Sandbox alias:

ls8_usgs_sr_scene

Available region:

Tanzania, Senegal, Sierra Leone,
Ghana, Kenya

Data type:

Surface reflectance

Pixel size:

30 m x 30 m

Revisit time:

16 days

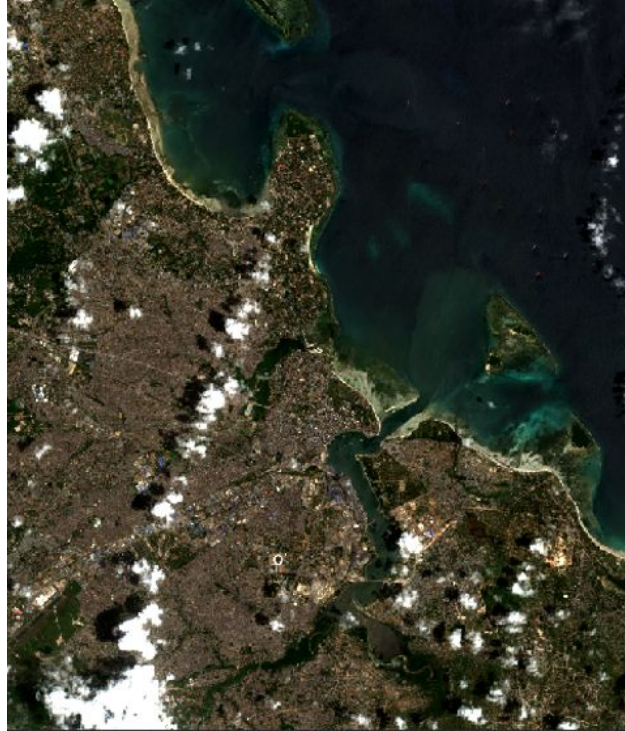
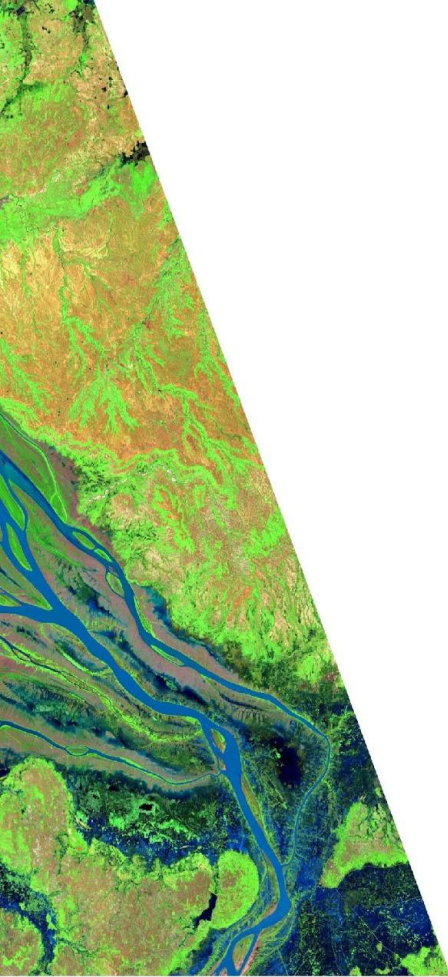
No. of spectral bands:

7

Data timespan:

March 2013 – December 2019

Sentinel-2 product



Sandbox alias:
s2_l2a

Available region:
All of Africa

Data type:
Surface reflectance

Pixel size:
10 m x 10 m – 60 m x 60 m

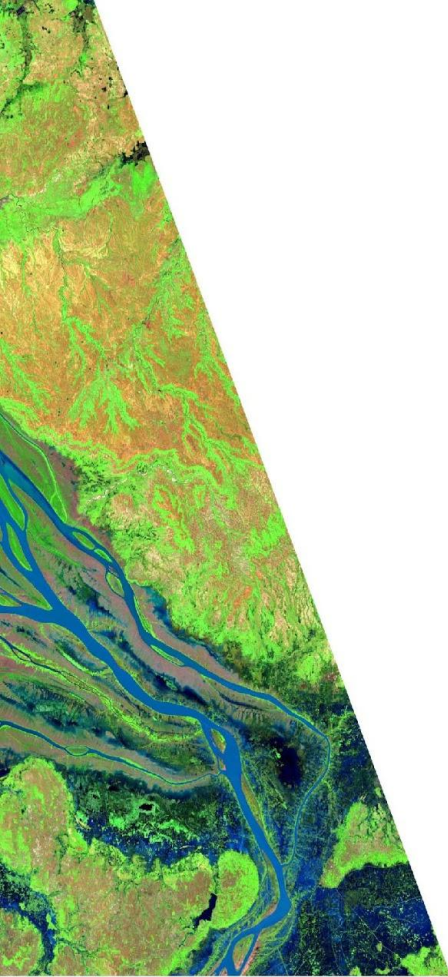
Revisit time:
5 days

No. of spectral bands:
12

Data timespan:
July 2017 – present

Which product is best?

Analysis type	Landsat 8	Sentinel-2
Short-term change (over several months)	✗	✓
Long-term change (years to decades)	✓ + Landsat 5/7	✗
Continent-wide	✗	✓
More detail (higher resolution)	✗	✓



Getting help

GitHub wiki:

github.com/digitalearthafrika/deafrica-sandbox-notebooks

Slack: opendatacube.slack.com/

Edward Boamah

Technical Manager

E: edward.boamah@digitalearthafrika.org

Kenneth Mubea, PhD

User Engagement Manager

E: kenneth.mubea@digitalearthafrika.org

