




# Digital Earth Africa 6-Week Training Course

Week 3: Time aggregation of data

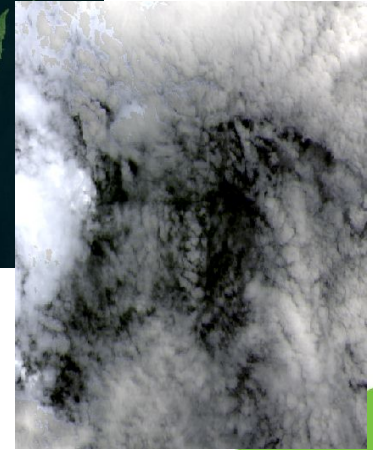
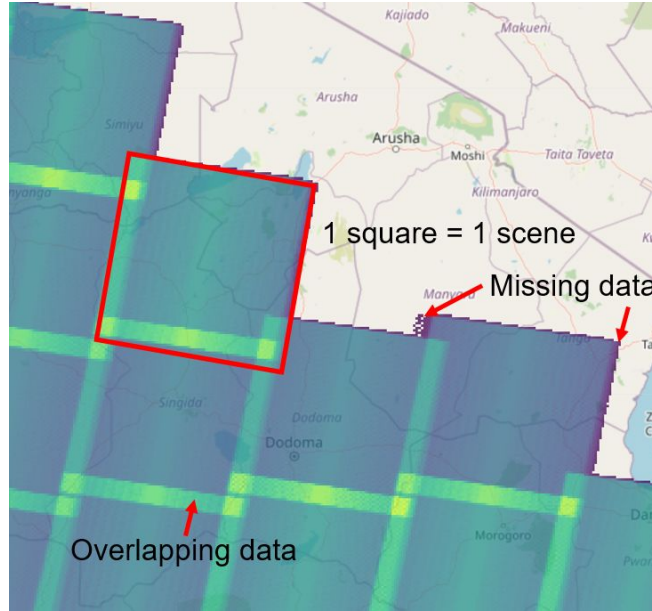


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# Gaps in data

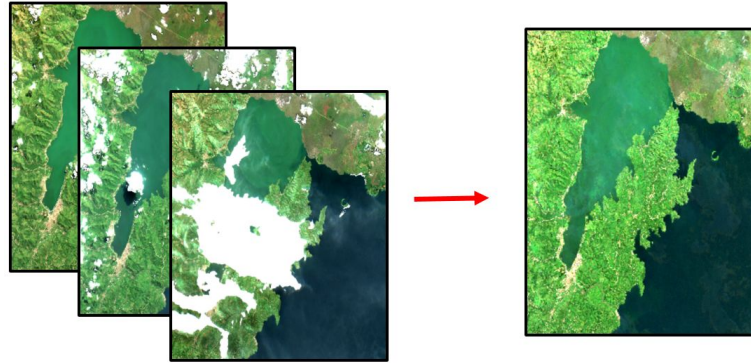
- Limited area per satellite flyover – missing data at scene edges
- Cloud cover – missing data where clouds block signal





# Time aggregation

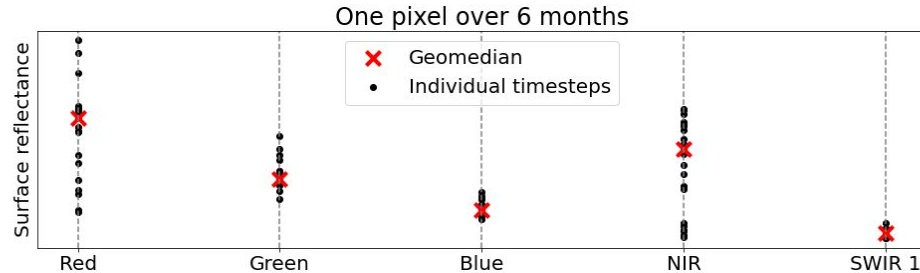
1. Identify and remove cloudy data
  - o 'Cloud masking'
2. Use data from a different time to fill in missing data
  - o Composite dataset/image



- Increases dataset usability: gives complete view of the area
- Data must be compiled using scientific statistical methods

# Geomedians

- Point-in-time scenes: not a holistic view of the area
- Instead, we use a 'geomedian'
- Geomedian:
  - Scientifically rigorous statistical value made from all datasets over a time period
  - Produces one representative image of the time period
  - Shows how an area 'usually' looks
  - Good for analysis, year-by-year comparisons



# Getting help

## GitHub wiki:

[github.com/digitalearthafrika/deafrica-sandbox-notebooks](https://github.com/digitalearthafrika/deafrica-sandbox-notebooks)

Slack: [opendatacube.slack.com/](https://opendatacube.slack.com/)

## Edward Boamah

Technical Manager

E: [edward.boamah@digitalearthafrika.org](mailto:edward.boamah@digitalearthafrika.org)

## Kenneth Mubea, PhD

User Engagement Manager

E: [kenneth.mubea@digitalearthafrika.org](mailto:kenneth.mubea@digitalearthafrika.org)

