#### **United Nations/Austria**

World Space Forum

#### 13 - 15 December 2022



Federal Ministry
Republic of Austria
Climate Action, Environment,
Energy, Mobility,
Innovation and Technology



Federal Ministry Republic of Austria European and International Affairs





Digital Earth Africa - operational EO-based insights for Africa's development challenges

World Space Week 2022

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Capacity Development Lead

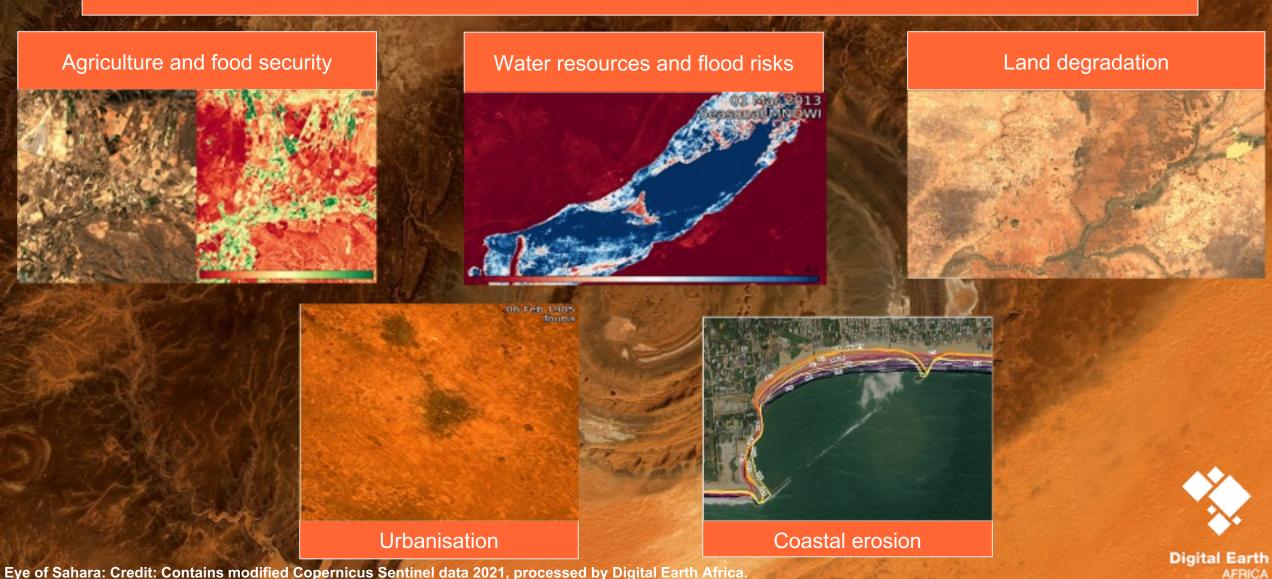
Digital Earth Africa

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#### **Our Vision**

DE Africa will provide a routine, reliable and operational service, using Earth observations to deliver decision-ready products enabling policy makers, scientists, the private sector and civil society to address social, environmental and economic changes on the continent and develop an ecosystem for innovation across sectors.



# Satellite data available through Digital Earth Africa

Space Agencies

Analysis Ready
Data







- Optimised EO data, inc. for web processing
- Complete visibility from the data to the product
- Different interfaces for different needs.
- Free online learning platform & helpdesk
- Extensive library of SDG-oriented tools
- Build complex analyses on your topic in your own environment













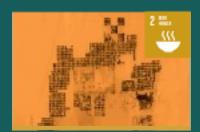






Studying the Tanzanian Coastline with GeoMAD, 2019, RGB





Monitoring crops in Egypt 2001-2020, Landsat, RGB





Monitoring Mount Nyiragongo, 2018 Sentinel-2 RGB and 2021 Sentinel-1



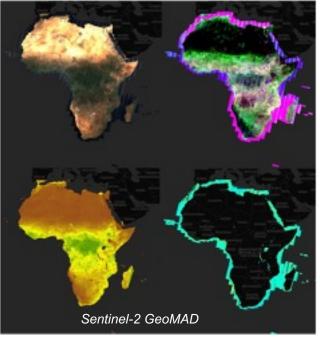


Measuring water extent on rangelands in Etosha National Park, Namibia 1992-2021. Landsat. False Colour



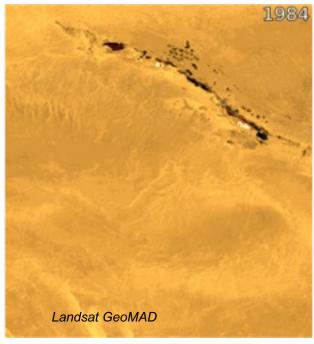
### Highlights

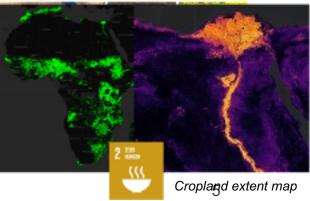
- Continental services: Water observation from space, GeoMAD, Cropland, Coastline
- Co-development of services
- Free online learning platform
  - English and French
- Diversity and Inclusion:
   YouthMappers, Africa Women in GIS
- Impact stories champions











# Sustainability through partnerships and community



- Digital Earth Africa is empowering communities with access to satellite information
- Co-design of capacity development with partners in Africa, to provide fit for purpose training
- Communities have been empowered and are sharing their impact stories such as conservation of mangroves in Zanzibar (Tanzania), rehoming of giraffes at Lake Baringo (Kenya)
- Leave no one behind

# Making an impact use cases

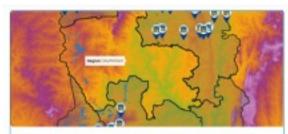
- 25 published use case studies (Kenya, Ghana, Tanzania, Botswana, Uganda), across government, industry, academic
- 7 use case studies in development (Senegal, Benin, Burkina Faso, Niger, Botswana, Kenya, Nigeria)
- 2 industry projects supported



Coastlines in Africa



Mangroves in Zanzibar

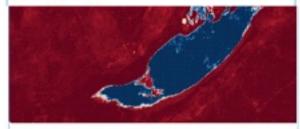


Using satellite data to monitor agriculture in Ghana - The GAIMS platform from Big Data Ghana.





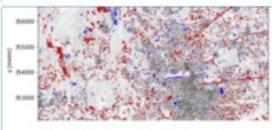
EO for conservation: rehoming giraffes on Lake Baringo, Kenya



Water Assessment and Monitoring in the Lake Ngami, Lower Okavango Delta, Botswana



Using Earth observation to protect and conserve wetlands in Kenya



Monitoring urbanisation in Gulu City, Uganda



Monitoring Fire Activity in the Table Mountain National Park, Cape Town



Monitoring Chlorophyll in Lake Elmenteita, Kenya

## **Growing user community**



- Partnerships: RCMRD Kenya, Sahara and Sahel Observatory Tunisia, Afrigist Nigeria, AGRHYMET Niger, Centre de Suivi Ecologique Senegal
- Co-development of services and validation: Product Development Task Team (PDTT)
- Online learning: co-development
- Diversity and inclusion: YouthMappers, Africa Women in GIS
- Weekly live sessions: since August 2020 (111th Session)
- Mentorships
- Impact stories: DE Africa blog
- Awareness sessions



## **Working Teams**



- Product Development Task Team: planning, design and development of continental-scale products.
- Communication Working Group: guiding engagements
- Gender Equality, Disability, and Social Inclusion (GEDSI) Working Group



## **Country engagements**



- Food security:
- Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA) to support Information for Agriculture, Food and Water Security (IFAW)
  - deliver services tailored to improve productivity and build resilience. Botswana, Uganda, Kenya, Rwanda, Ethiopia, South Africa
- Enabling Satellite-based Crop Analytics at Scale (ECAAS) collaboration with RCMRD to support Zambia
- Collaboration with FAO: Support National level Land cover and Crop Type Mapping
  - Rwanda and Mozambique

## **Connecting with stakeholders**



@GEOSEC2025 team was honoured to meet and engage with @BWPresidency, His Excellency Mokgweetsi Masisi, at the #NAPExpo, sharing on impact stories using Earth Observation and National Adapatation Planning. @BWGovernment #Okavango #DEAfrica #GEO #earthobservation









## Acknowledgements











































































Thank you Merci obrigada

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