Digital Earth
AFRICA

2025

ANNUAL REPORT

Unlocking the Promise of Tomorrow From Patterns of the Past

digitalearthafrica.org

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About This Annual Report

This Annual Report covers the period 1 January 2025 to 31 December 2025. The Annual Report has been prepared by the DE Africa Leadership Team for the DE Africa Interim Advisory Board, Technical Advisory Committee, funding partners, and other stakeholders. The Report provides a summary of progress made through 2025.

Version Date: 02 February 2026

Foreword

A Message From the Digital Earth Africa **Managing Director.**

2025 has been an important year for Digital Earth Africa, as we continued to build on the strong foundations established in recent years while preparing for the program's next phase. Throughout the year, our focus has been on maintaining steady delivery, strengthening partnerships, and ensuring we are well positioned for long-term sustainability.

We have continued to strengthen our governance, with the Interim Advisory Board and Technical Advisory Committee providing important guidance during this period. Their support has helped ensure that the program remains focused, transparent, and aligned with its strategic priorities.

Our science and technology platform continues to grow and evolve, providing reliable and accessible Earth observation data and tools for users across the continent. Encouragingly, we have seen increasing uptake of these services, with more organisations integrating them into their day-to-day work and decision-making.

Capacity development and partnerships have remained at the heart of what we do. Through training, user support, and collaboration with institutions across Africa, we have worked to build the skills and confidence needed to use Earth observation data effectively. It is particularly rewarding to see this translating into practical applications across sectors such as agriculture, water management, and environmental monitoring.

We concluded the year with a key milestone - the appointment of International Centre of Insect Physiology and Ecology *(icipe)* as the long-term owner of Digital Earth Africa. While program operations commence under *icipe* from 1 April 2026, much of 2025 has been dedicated to putting the right structures and processes in place to support a smooth and successful transition.

None of this would be possible without the continued support of the Leona M and Harry B Helmsley Charitable Trust, the Australian Government, Amazon Web Services, key partners, and the broader DE Africa community. Your collaboration and commitment are what make this program possible.

As we look ahead to 2026, our focus will be on managing the transition to long-term ownership while continuing to deliver value to our users. We are confident that Digital Earth Africa is well positioned to move into this next phase and to continue supporting better decision-making across the continent.

Dr Lisa-Maria Rebelo
Managing Director (Ag)

Digital Earth Africa at a Glance

Science and Technology

37 NEW NOTEBOOKS developed, bringing the total to **180 ANALYTICAL NOTEBOOKS**

19 NEW DATASETS indexed, increasing total to **27 ACCESSIBLE DATASETS**

73 USE CASE requests received, with **23** supported from **AFRICAN GOVERNMENTS AND INSTITUTIONS**

KEY NOTEBOOKS DEVELOPED OR ENHANCED, INCLUDE:

- Urban resilience indicators
- Flood mapping with deep learning
- Algal bloom detection
- Seasonal changes in water bodies

MAJOR WORKFLOWS ADVANCED:

- Waterbodies Monitoring Service
- Coastlines Monitoring Service
- Wetlands Monitoring Workflow
- In addition the Wetlands Monitoring Workflow was implemented to support wetland monitoring in South Africa (by SANBI), Kenya (by RCMRD), and Senegal (by CSE)

2 NEW DATA PIPELINES: Sentinel 1 monthly mosaics, Sentinel-3 (bringing the total to 7)

Capacity Development and User Support

48 LIVE TRAINING sessions delivered

391 LIVE SESSION participants

2,769 ONLINE COURSE registrations

462 CERTIFICATES of completion issued

TRAINING REACH:

480 FACE-TO-FACE TRAINEES
213 FEMALE

738 ONLINE TRAINEES
274 FEMALE

Multilingual delivery of courses in English and French

3,644 NEW SANDBOX users, bringing total to **10,452**

284 HELPDESK REQUESTS supported.

Diversity, Inclusion, and Equity

IAB gender distribution:

67% **33%**

TAC gender distribution:

88% **12%**

Platform Use and Growth

9,282 new DE Africa **MAPS USERS** during 2025.

38,353 CUMULATIVE MAPS USERS by December 2025.

Digital Earth Africa at a Glance

Communications and Visibility

CONTENT AND OUTPUTS:

34 ARTICLES AND BLOGS published
13 USER PROFILES
30 USE CASES published

MEDIA REACH:

13.1 MILLION TOTAL REACH
USD 158,613
ADVERTISING VALUE EQUIVALENT (AVE)
142 MEDIA MENTIONS

NEWSLETTER:

4 NEWSLETTERS distributed
33,787 RECIPIENTS reached
15,738 READERS ENGAGED

Partnerships & Collaborations

Maintained partnerships with **5 IMPLEMENTING PARTNERS** and signed agreements with 5 organisations, namely:

- UGAMA-Rwanda
- HYGEO-Niger
- UENR-Ghana
- Africa Space Work-Algeria
- SASSCAL

INDUSTRY / PRIVATE SECTOR:

4 NEW PARTNERSHIPS established
76 ACTIVE ENGAGEMENTS and
106 ACTIVE ENGAGEMENTS to date

AFRICAN GOVERNMENTS:

1 NEW PARTNERSHIPS formed
34 ACTIVE ENGAGEMENTS and
94 ACTIVE ENGAGEMENTS to date

LEARNING INSTITUTIONS:

No new partnerships in 2025

18 ACTIVE ENGAGEMENTS and
38 ACTIVE ENGAGEMENTS to date

DIGITAL PLATFORMS:

X (Twitter):

211 POSTS
+208 NEW FOLLOWERS
3,952 POST ENGAGEMENTS

LinkedIn:

204 POSTS
+3,921 NEW FOLLOWERS
9,863 PAGE ENGAGEMENTS

Website:

25,395 NEW USERS
6,668 RETURNING USERS
AVERAGE TIME ON SITE:
8 MIN 32 SEC

About Digital Earth Africa

Digital Earth Africa (DE Africa) aims to improve lives across Africa by providing planners and policy makers with crucial Earth observation information to support better decision making, and through enhanced access to satellite data to progress sustainable development outcomes.

Our Vision

To 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.

Our Mission

To process openly accessible and freely available data to produce decision-ready products. Working closely with the AfriGEO community, DE Africa will be responsive to the information needs, challenges and priorities of the African continent. DE Africa will leverage and build on existing capacity to enable the use of Earth observations to address key challenges across the continent.

Enhance and scale regional activities across Africa.

Empower climate action by developing in-country knowledge and skills.

Serve an audience that meets our diversity and inclusion strategy.

Ensure sustainable governance and deepen key partnerships.

About Digital Earth Africa ...continued

Our Goals

The long-term DE Africa Goal is:

DE Africa improves the lives of Africans through access to tailored information for decision making. This encompasses:

LIVELIHOOD STRENGTHENING

Enhance informed decision-making across government and sectors, delivering both direct and indirect benefits to individuals and communities.

ECONOMIC DEVELOPMENT AND JOB CREATION

Facilitate new business development and employment opportunities by providing access to data for commercial products and services.

DIGITAL TRANSFORMATION IS ADVANCED

Drive the evolution of Africa's digital economy by promoting industry uptake and fostering innovations.

DEVELOPMENT ACTIVITIES ARE MORE EFFECTIVE

Enhance understanding of development challenges and solutions to strengthen collective impact and assess progress toward national priorities, the African Union's Agenda 2063, and the UN SDGs.

Program **Outcomes**

1 OUTCOME 1: SUSTAINMENT

DE Africa is on-track to be sustained in Africa (technically, operationally and financially), with key African stakeholders invested to achieve this end-point.

STRENGTHENING GOVERNANCE & PROGRAM DELIVERY

Stakeholders maintain confidence in DE Africa's governance, operations, and transparency.

ENABLING PARTNERSHIPS

African governments and regional institutions support DE Africa's shift toward financial sustainability, recognizing its value and operational impact.

SUSTAINMENT AND BUSINESS MODEL DEVELOPMENT

Developing a cross-sector business model to diversify revenue, sustain operations, and secure funding beyond Phase III.

SCIENCE AND TECHNOLOGY

DE Africa's science and technical platform remains a robust, world-leading capability, responsive to Africa's needs.

2 OUTCOME 2: UPTAKE AND IMPACT

DE Africa information is consistently used by key stakeholders - governments, communities, private sector and individuals, to drive environmental, social and economic impacts.

USER NEEDS/IN-COUNTRY ENGAGEMENT

Customizing DE Africa services for in-country needs like food security, connecting with end-users via partners and communities.

CAPACITY DEVELOPMENT

Development of tailored training materials to support diverse users, from decision-makers to in-country specialists, in utilizing DE Africa's products.

USER ENGAGEMENT/ UPTAKE

Rapid growth in uptake of DE Africa services including the Map and the Sandbox, and direct use of DE Africa services

DEMONSTRATING IMPACT

DE Africa services empower community decision-making, improve lives, and support African governments in using data for policy and action

CROSS-CUTTING

- Diversity and Inclusion
- Communications and PR
- Monitoring, Evaluation and Learning
- Benefits Realisation
- Risk Management

Executive Summary

The period January to December 2025 represented a year of stability, consolidation, and sustained delivery for Digital Earth Africa.

Building on foundations established in earlier phases, the programme focused on strengthening governance and operational maturity, advancing the application of science and technology, deepening country engagement, and demonstrating tangible impact at continental and national scales.

A major milestone was achieved in November 2025 with the formal appointment of the International Centre of Insect Physiology and Ecology (icipe), based in Nairobi, Kenya, as the Long-Term Owner of Digital Earth Africa. While transition activities formally commence in 2026, this decision provided institutional certainty and reinforced programme stability during 2025, enabling continued delivery under strengthened governance arrangements and a clear pathway to long-term African stewardship.

Governance arrangements were further consolidated throughout the year. The Interim Advisory Board (IAB) was constituted and convened for its inaugural in-person meeting in March 2025 in Nairobi, establishing strategic direction and oversight.

The Technical Advisory Committee (TAC) was reconstituted, with new members and co-chairs appointed, and TAC-20 held in February 2025, ensuring robust technical leadership and alignment with programme priorities.

Science and technology delivery remained a core strength of the programme. By the end of 2025, Digital Earth Africa has developed **180 analytical notebooks,** supporting a wide range of thematic applications and supporting seven of the Sustainable Development Goals. Key analytical notebooks developed or enhanced during the year included near real-time burnt area mapping, algal bloom detection, advanced approaches for flood mapping, and detection of seasonal changes in water bodies. Core continental services such as the Waterbodies and Coastlines Monitoring were further refined, while the Wetlands Monitoring Workflow was prototyped and implemented through national partnerships in South Africa, Kenya, Senegal, and Uganda.

Executive Summary ...continued

Country engagement deepened during 2025, with direct engagement activities conducted across more than 10 African countries and sustained focus in priority opportunity countries, including **Kenya, South Africa, Ghana, Senegal, Nigeria and Zambia.** Engagements increasingly moved beyond awareness-raising toward institutional embedding and applied use, supporting government agencies, universities, and regional organisations in areas such as water security, climate resilience, agriculture, and ecosystem management.

Capacity development remained central to programme delivery. During 2025, Digital Earth Africa delivered **48 live training sessions,** reaching **391 participants,** recorded **2,769 online course registrations,** and issued **462 certificates of completion.** Platform usage continued to grow, with **3,644 new Sandbox registrations, 284 helpdesk requests supported,** and **9,282 new DE Africa Maps users** added, bringing the total maps user base to **38,353 cumulative users** by December 2025. Training and support were delivered in both English and French, supporting broader regional accessibility.

Digital Earth Africa also strengthened its approach to demonstrating impact and visibility. During 2025, the programme **reached over 13.1 million people** through newsletters, blogs, press announcements, media features, events, and digital engagement channels. A total of **34 publications were released,** including applied use cases, changemaker stories, and thought leadership pieces documenting how Earth observation data was applied in real-world contexts. Impact was evidenced across agriculture, water management, coastal resilience, biodiversity conservation, climate adaptation, and community-level action, with African practitioners and institutions at the centre of these outcomes.

Overall, 2025 marked a shift from building foundations to demonstrating sustained impact. With strengthened governance, a stable and scalable technical platform, deepened institutional engagement, and clear long-term ownership arrangements in place, the programme enters 2026 well positioned to commence formal transition activities and continue delivering lasting impact across the continent.

Strengthening Governance

Governance and Programme Delivery

During 2025, Digital Earth Africa continued to strengthen its governance and programme delivery arrangements to support long-term sustainability, transparency, and effective oversight. A key milestone early in the year was the completion of the Interim Advisory Board (IAB) shortlisting and appointment process, which resulted in the appointment of six new IAB members, alongside the continuation of two Governing Board members on the reconstituted board. This process ensured continuity of institutional knowledge while introducing new expertise to guide the programme through a critical transition phase.

The first in-person IAB meeting was convened in March 2025 in Kenya, marking the formal operationalisation of the reconstituted advisory body. In addition to formal governance discussions, IAB members participated in a dedicated networking and engagement session with the Digital Earth Africa team, including programme delivery, capacity development, and global science teams. The Nairobi meeting also provided an opportunity to strengthen diplomatic and strategic relationships. The session was attended by the Australian Deputy High Commissioner to Kenya, Mr Christopher Ellinger, reinforcing the importance of international collaboration and strategic partnerships in supporting DE Africa's mission and long-term sustainability.

Technical governance was similarly strengthened during 2025 through the reconstitution of the Technical Advisory Committee (TAC). In line with the TAC Terms of Reference, nine new TAC members were appointed, while two existing members continued to serve the remainder of their terms.

Representation from the five DE Africa Implementing Partners was maintained, ensuring continuity of technical insight and regional expertise. In February 2025, Dr Seydina Ousmane Sene and Professor Yashon Ouma were appointed as the new TAC Co-Chairs, providing leadership continuity and strategic direction.

IAB - 1 MEETING ATTENDEES, FROM LEFT TO RIGHT:
Mr Kuda Mukova, Oliver Chinganya, Ms Nandi Mtethwa, Dr Aggrey Agumya, Ms Farrah Naidoo, Prof Kamal Labbassi, Dr Lisa-Maria Rebelo, Dr Jane Olwoch,, Ms Alison Rose, Mr Matthew Pennels, Ms Njeri Maina, Mr Imraan Saloojee, Ms Jahla Gato and Dr Tshilidzi Madzivhandila

Transition and Long-Term Ownership

A central focus of the 2025 reporting period was preparation for long-term African ownership of Digital Earth Africa. Transition planning activities progressed alongside continued programme delivery, ensuring that operational continuity, institutional knowledge, and governance arrangements were maintained throughout the year.

A major milestone was achieved in November 2025 with the formal appointment of the International Centre of Insect Physiology and Ecology (icipe), based in Nairobi, Kenya, as the Long-Term Owner of Digital Earth Africa.

This appointment represents a critical step toward sustained African stewardship of the programme, aligned with Phase III objectives.

Throughout 2025, preparatory transition activities were undertaken to support a smooth and structured handover to long-term ownership. These activities positioned DE Africa to enter 2026 with strengthened African leadership and a clear pathway toward long-term sustainability, while maintaining uninterrupted programme delivery.

Monitoring, Evaluation, and Learning

The Monitoring, Evaluation, and Learning (MEL) framework continued to mature during 2025, strengthening the programme's ability to track progress against outcomes and demonstrate impact. Mid-term MEL reporting was completed, and indicators were refined to improve clarity, consistency, and usefulness for adaptive management.

Diversity and Inclusion (D&I)

Diversity and inclusion remained embedded across all aspects of programme delivery in 2025, with targeted activities implemented to support equitable participation in Earth observation and geospatial sciences across gender, age, disability, language, and regional dimensions.

Throughout the year, DE Africa convened quarterly D&I meetings, providing a structured forum for practitioners, implementing partners, and youth networks to share experiences, reflect on evolving global and regional contexts, and reaffirm collective inclusion priorities. These sessions also enabled peer learning and dialogue on emerging themes, including intergenerational workplace dynamics and inclusive leadership in the geospatial sector. During one such meeting, a new member organisation from the Réseau network was introduced, with Letwin Pondo presenting the organisation's mandate and contributions to inclusive geospatial practice.

In support of gender equity and visibility, DE Africa released a new video highlighting the role of women in Earth observation and GIS, featuring Nandi Mtethwa, Mpho Sadiki, and Sinethemba Mtshali. The video showcased how DE Africa empowers decision-makers, promotes sustainability, and enables real-world solutions through inclusive participation in EO and geospatial sciences. In addition, DE Africa Champion Juliet Ibenegu was profiled in a dedicated article, highlighting her advocacy for gender inclusivity within the geospatial industry and amplifying women-led leadership and expertise.

DE Africa also continued to support women-focused innovation initiatives through the AWGIS Technical Challenge, further strengthening collaboration with the Tech Tribe Accelerator. DE Africa participated in Africa's Women in Space Conference (AWiSC 2025), supporting the visibility, leadership, and professional development of women working in space science, Earth observation, and geospatial applications.

Diversity and Inclusion (D&I) ...continued

NASA SPACE APP CONFERENCE IN KENYA

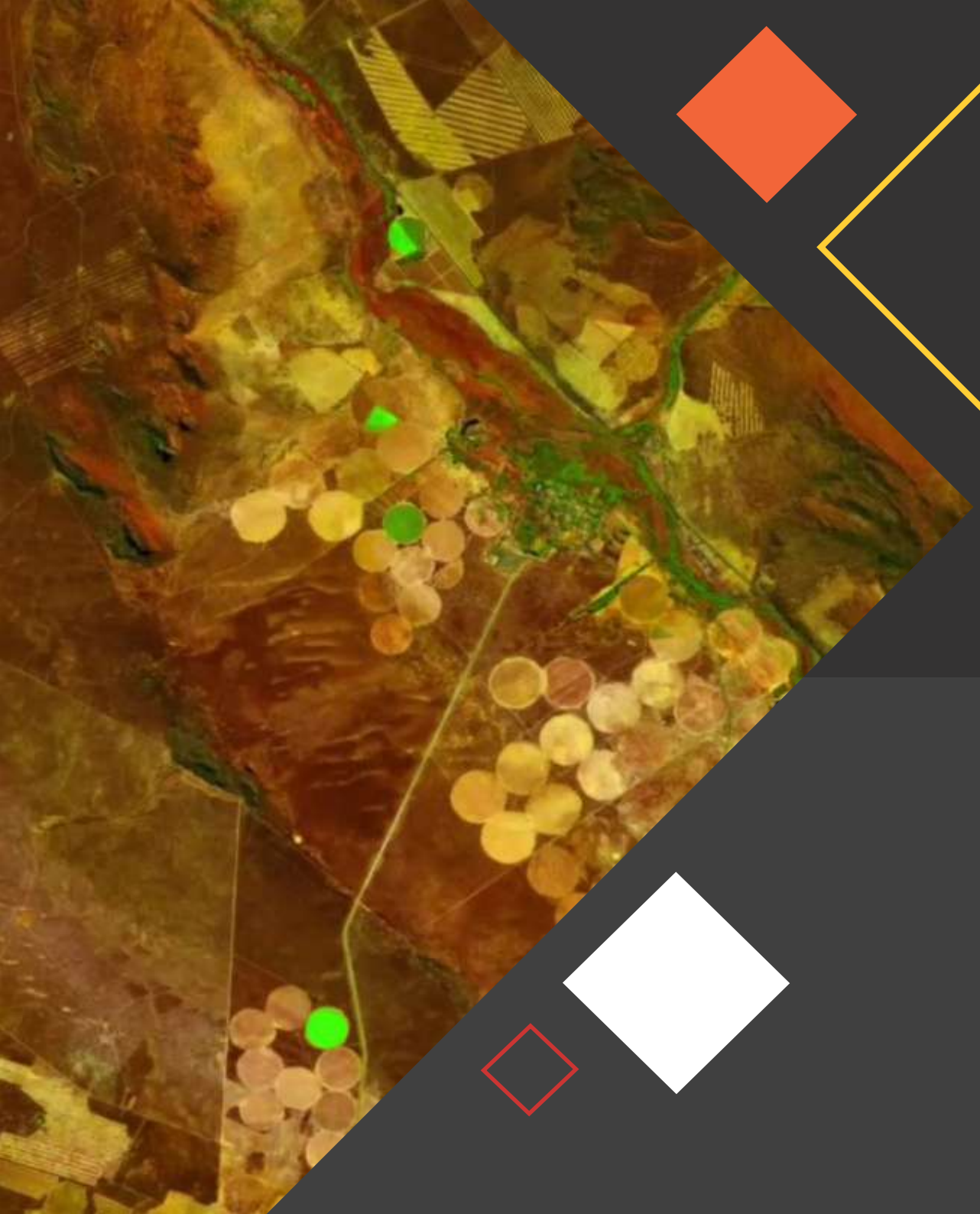
9TH AFRICAN SPACE GENERATION WORKSHOP

JULIET IBENUGU
Co-president, AWGIS

LETWIN PONDO
Co-ordinator, Reseau

Inclusive capacity development remained a key pillar of D&I delivery. Under the “Space for All” initiative during World Space Week 2025, DE Africa delivered tailored training in Kenya in partnership with the Chemichemi Foundation and RIIS. This programme provided accessible Earth observation learning materials and practical sessions for students with hearing impairment, ensuring that learners with disabilities were meaningfully included in EO capacity-building activities.

Youth and early-career engagement continued through a range of innovation and mentorship initiatives. DE Africa provided technical mentorship and participation support for NASA Space Apps Challenge 2025, and engaged with innovators and students during Nairobi Space Week. DE Africa also engaged with the Space Generation Advisory Council (SGAC) through participation in the 9th Space Generation Workshop in Nairobi, supporting skills development, leadership pathways, and inclusion of youth and early-career professionals within the African space ecosystem.



Driving African-Led **Technical Innovation**

Science and Technology

During 2025, Digital Earth Africa continued to strengthen and expand its science and technology capabilities, consolidating its role as a continental Earth observation infrastructure delivering decision-ready data, analytical tools, and decision ready services aligned with African development priorities and the Sustainable Development Goals (SDGs). By the end of 2025, DE Africa hosted over 180 analytical notebooks, enabling African governments, researchers, and practitioners to apply Earth observation data across thematic areas including water security, food security, climate action, biodiversity conservation, disaster risk reduction, and sustainable cities. These tools supported progress toward at least seven SDGs, reinforcing the platform's value as an operational and policy-relevant resource.

Notebooks

Key notebooks developed or significantly updated during the year included near real-time burnt area mapping, algal bloom detection, flood mapping using deep learning, and assessing seasonal changes in water bodies, supporting applications in fire monitoring, water quality assessment, and water resources management. Additional notebooks enabled waterbodies time-series animation, methane emissions analysis, land degradation and land cover change assessment, agricultural monitoring and irrigation water consumption, flood risk assessment, and coastal erosion and shoreline dynamics analysis.

These notebooks were made available through the DE Africa Sandbox, with increased functionality introduced enabling users to more easily export outputs for integration into national reporting, further research, and operational workflows.

Thematic Workflows and Continental Services

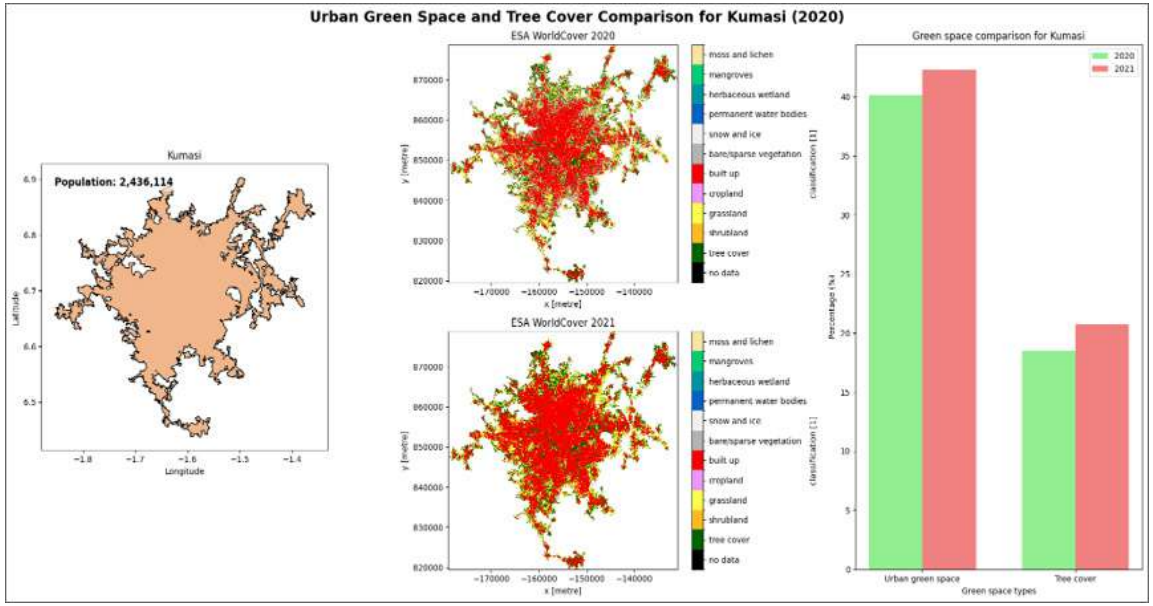
In parallel, DE Africa advanced a suite of thematic workflows and continental services. The Waterbodies Monitoring Service and Coastlines Monitoring Service continued to be refined, with improvements to time-series analysis, visualisation, and tidal modelling. Significant progress was also made on the Wetlands Monitoring Workflow, which was prototyped to support national wetland inventories and biodiversity reporting. During 2025, this workflow was implemented through national partnerships in South Africa (with the South African National Biodiversity Institute), Kenya (with the Regional Centre for Mapping of Resources for Development), and Senegal (with the Centre de Suivi Écologique), enabling partner-led implementation, validation, and adaptation to national contexts.

Core Data Pipelines

While existing pipelines were maintained, new data pipelines were further advanced and maintained throughout the year. Progress included development and release of Sentinel-1 monthly mosaic pipelines, automated processing for Sentinel-3 land surface temperature and surface reflectance products, and continued ingestion and indexing of Sentinel-5P atmospheric datasets to support air quality and climate analysis.

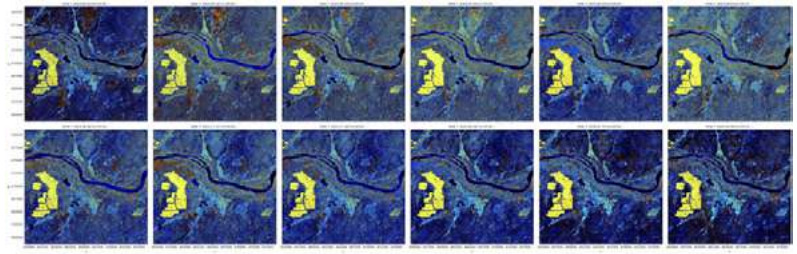
Science Engagements

The program actively participated in regional and international scientific and policy forums to share progress, gather feedback, and strengthen collaboration. DE Africa contributed to science sessions and technical discussions at AfriGEO 2025 in Senegal, the GEO Global Forum in Italy, and the RAMSAR COP15 in Zimbabwe. These engagements supported alignment with both international policy agendas and continental priorities, as well as strengthening links between research and operational use, and reinforced African leadership in applied Earth observation science.

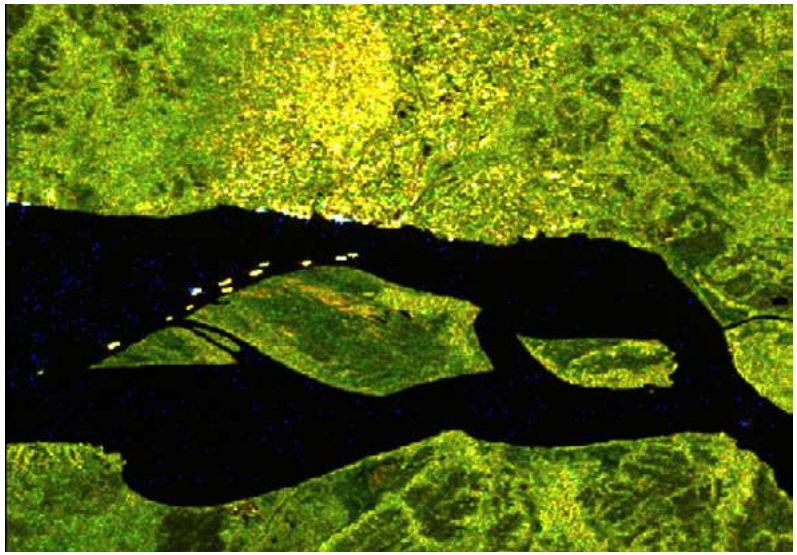


Urban green space and tree cover comparison for Kumasi (2020)

AfriGEO 2025 in Senegal



Sentinel-1 monthly mosaic over the period January 2023 - January 2024 for a section of the Volta river north of Accra, Ghana



Sentinel-1 Monthly Mosaic false colour image of the city of Boma on the Congo River

Expanding Users and Building Capacity Across Africa

Capacity Development for Government Agencies

Throughout 2025, Digital Earth Africa delivered targeted capacity development to strengthen the ability of government institutions to apply Earth observation data in policy, planning, and operational decision-making. Engagements focused on aligning DE Africa services with national mandates, reporting requirements, and sectoral priorities.

Key government-focused capacity development activities and outcomes:

- **Senegal:** Technical training and workflow demonstrations delivered in collaboration with Centre de Suivi Écologique (CSE), supporting wetlands and coastal monitoring applications relevant to national environmental reporting.
- **Kenya:** Discussions with Ministry of Environment, Climate Change and Forestry and affiliated institutions on Wetlands Monitoring delivered in collaboration with RCMRD, supporting national biodiversity and water management objectives.
- **Nigeria:** DE Africa trained the National Space Research and Development Agency (NASRDA) and technical agencies focused on applying DE Africa data for land and environmental monitoring.
- **Somalia:** Multi-ministry training sessions introducing DE Africa services for water resources, climate monitoring, and disaster risk reduction.
- **Egypt:** Engagement with national water and environmental authorities on EO applications for water management and climate analysis.

These activities supported increased institutional awareness, technical capability, and confidence in applying DE Africa services within government workflows.

Capacity development remained a core pillar of Digital Earth Africa's delivery in 2025, underpinning efforts to ensure that African institutions and users are equipped to independently apply Earth observation data and tools. Throughout the year, capacity development activities were delivered through a combination of live training sessions, self-paced online courses, in-person workshops, and collaborative initiatives with implementing partners and academic institutions.

DE Africa partnered with Senegal's Agence Nationale de la Statistique et de la Démographie (ANSD) and UN Women to deliver a two-day training session on the use of Earth observation (EO) data for national development.

Capacity Development for Academia and Research Institutions

Key academic engagements included:

- **Kenyatta University (Kenya):** Training sessions introducing DE Africa datasets and analytical notebooks for applied geospatial analysis.
- **University of Rwanda:** Capacity development supporting EO-based research and teaching.
- **University of Fort Hare (South Africa):** Training and awareness sessions focused on EO applications for land and water monitoring.
- **University of Cape Coast (Ghana):** Engagement supporting coastal and environmental research applications.
- **Digital Innovation for Water Secure Africa (DIWASA) in collaboration with the International Water Management Institute (Ethiopia):** Co-developed an online learning module focused on water balance and irrigation analysis, using International Water Management Institute datasets accessed through the Digital Earth Africa platform.

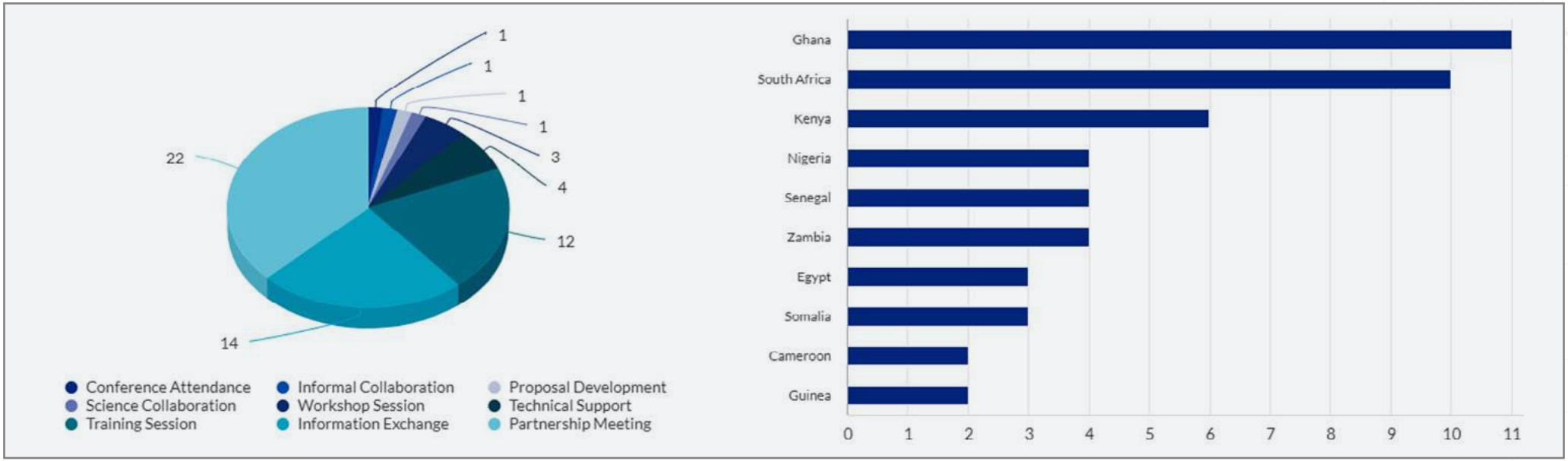
These engagements strengthened academic capacity, supported applied research, and contributed to building future pipelines of EO practitioners across the continent.

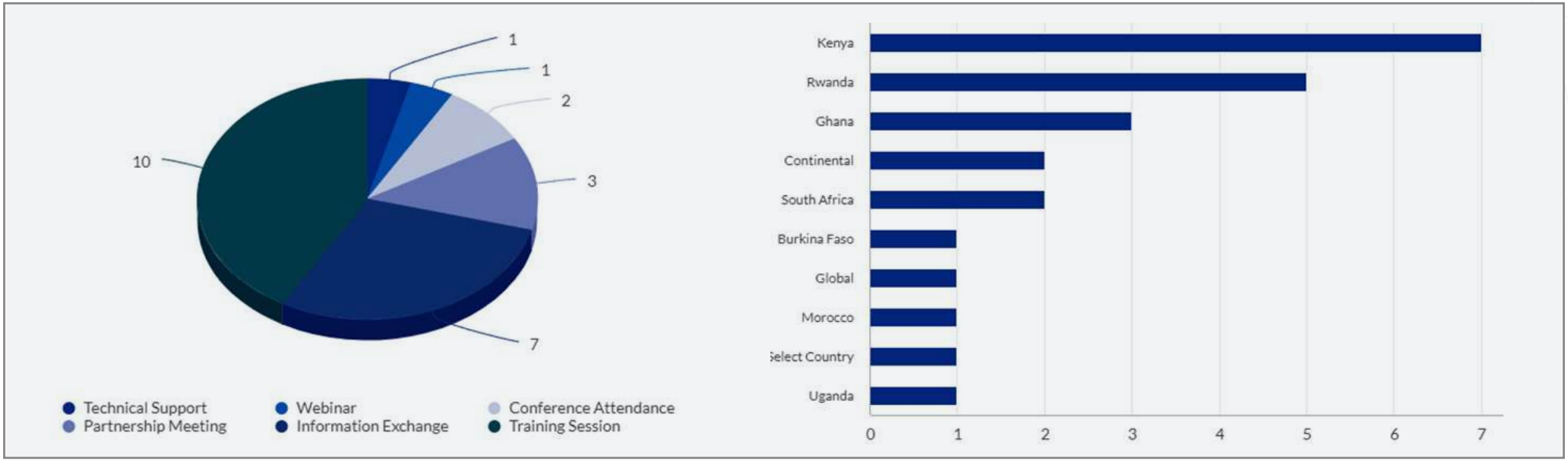
Academic engagement remained a core pathway for building long-term technical capacity and supporting research-led application of Earth observation data. During 2025, DE Africa delivered training and guest lectures aligned with university curricula and research priorities.

Students from Kenyatta University with Dr Kenneth Mubea, DE Africa's Capacity Development lead

Symposium on Earth observation and Digital Innovation for Water Secure Africa, Ethiopia

Capacity Development Statistics





Training Events and Learning Delivery

Key training highlights included:

- **48 training sessions delivered** covering core DE Africa services such as Waterbodies, Coastlines, Wetlands, and climate applications.
- **Multilingual delivery,** with live sessions and online courses offered in English and French, supporting engagement across Anglophone and Francophone regions.
- **World Space Week 2025 – "Space for All" initiative:** Inclusive training delivered in Kenya in partnership with the Chemichemi Foundation and RIIS, including tailored sessions for students with hearing impairment.
- **NASA Space Apps Challenge 2025:** Technical mentorship and EO-focused support provided to youth innovation teams.
- **Nairobi Space Week:** Capacity development and mentorship sessions engaging students, early-career professionals, and innovators.

Across all training activities, DE Africa emphasised practical, hands-on learning through the Sandbox environment, supported by ongoing technical assistance via the DE Africa Helpdesk.

In 2025, DE Africa delivered a sustained programme of training events through a combination of live sessions, online learning, and in-person workshops, ensuring broad accessibility across regions and user groups.

Participants at the DIWASA workshop in Zambia with Africa Capacity development Lead, Dr Kenneth Mubea. The participants were from the Water Resource (WARMA), Ministry of Agriculture and University of Zambia.

Participants at the GSSTI DE Africa training with Technical Manager, Mr Edward Boamah

DE Africa at RCMRD 50 years celebration represented by Dr Kenneth Mubea, DE Africa's Capacity Development Lead.

Ghana Space Conference

G20 SOUTH AFRICA 2025

Expanding users and building capacity across Africa

DE Africa at PACE offices in Senegal

DE Africa engaged with HYGEO and Agence Universitaire de la Francophonie (AUF)

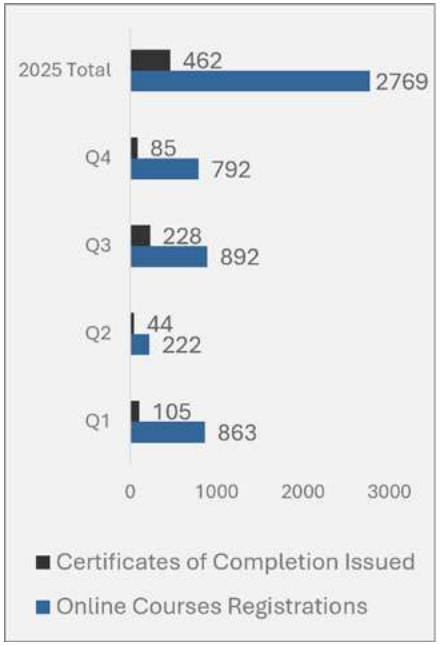
Joshua Okonya- Program Officer at ASARECA with DE Africa's User Engagement Manager Joseph Tuyishimire

User Engagement in Numbers

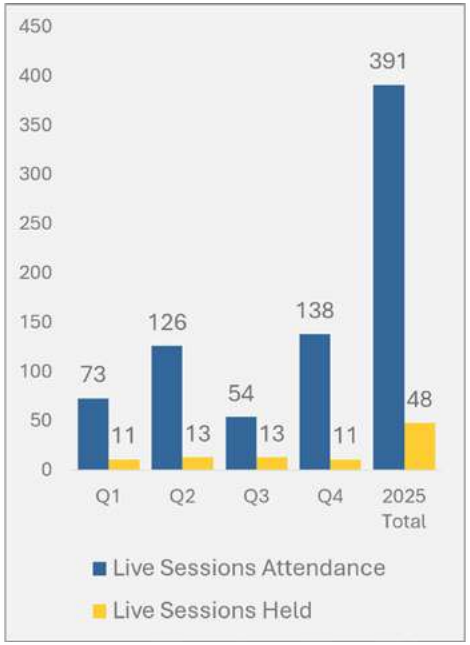
All time statistics vs 2025 increase:

Online Course Registrations	Certificates of Completion Issued	Live Sessions Held	Live Sessions Attendees	Sandbox Registrations	Helpdesk Requests	Maps Users
7,572	1,802	255	1,885	10,452	484	38,353

Online Course

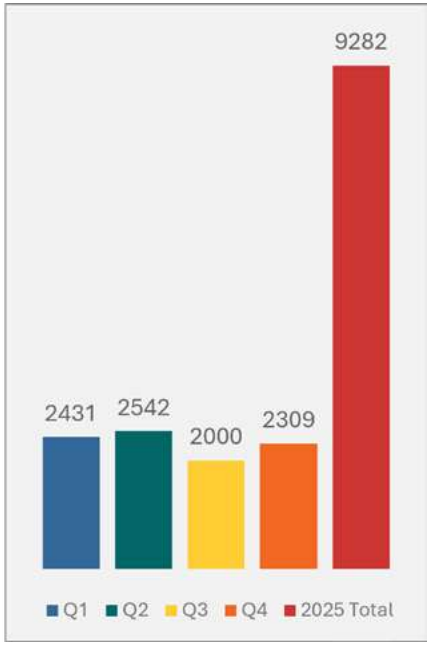


Live Sessions



Sandbox and Helpdesk

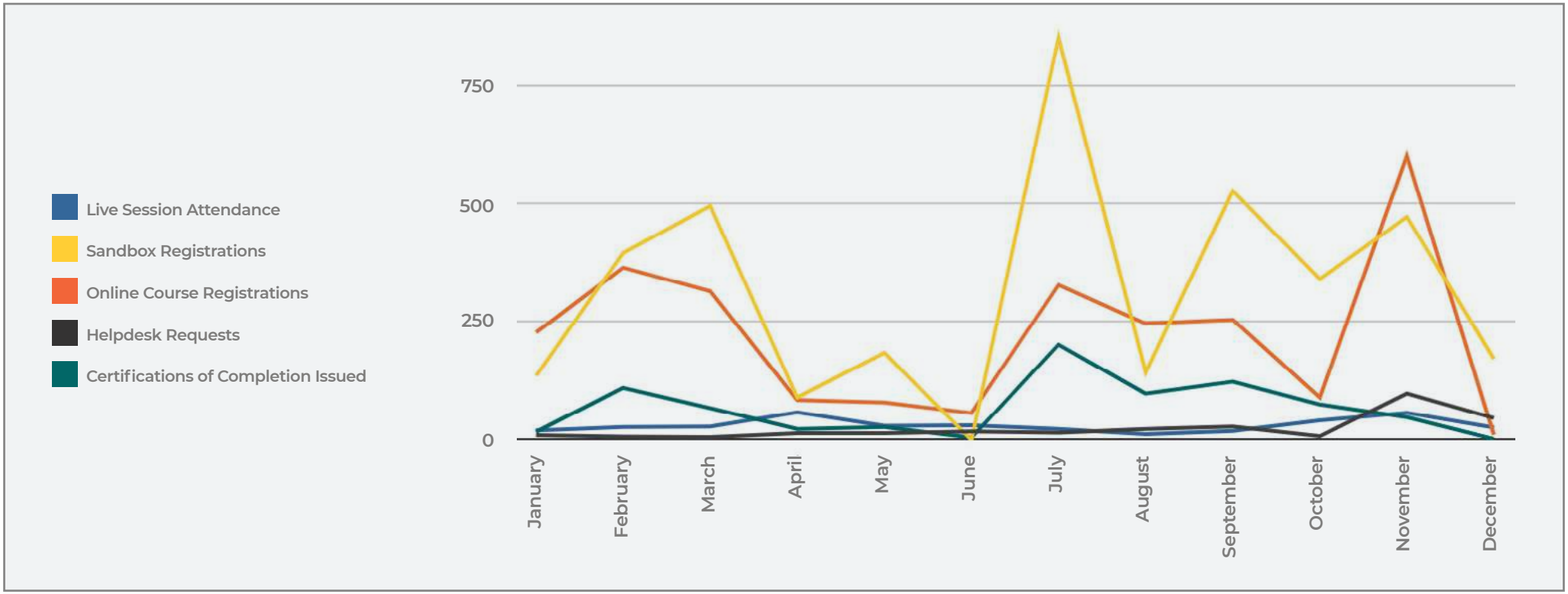
Cumulative Map Users



2025 User Engagement

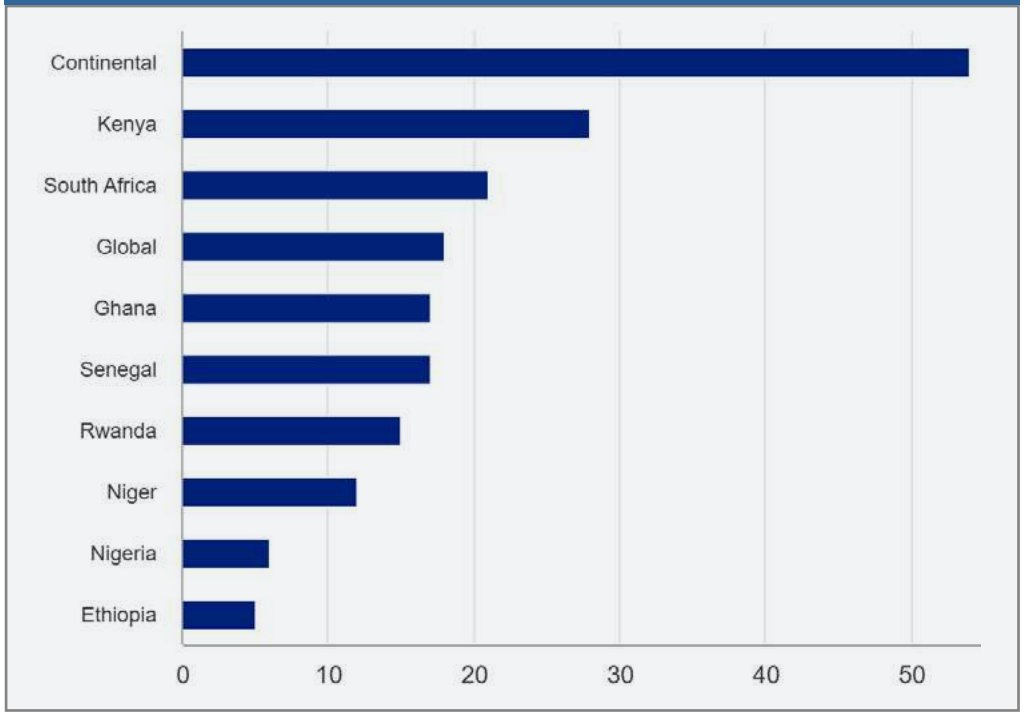
All time User Community:

Online Course Registrations	Unique DE Africa map users	Certificates of Completion Issued	Sandbox Registrations	Helpdesk Requests
7,572	38,353	1,802	10,452	484

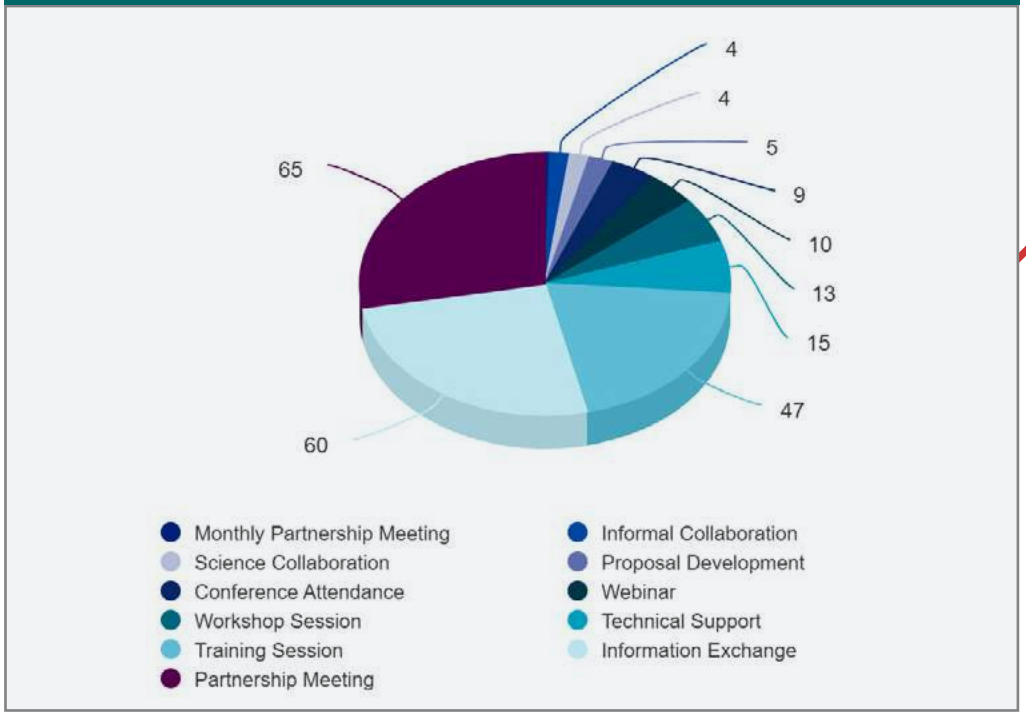


Engagements by Numbers

Top 10 Countries by Engagements



Total Engagements by Type



TECHNICAL SUPPORT

13 technical support requests attended

EVENTS & ENGAGEMENTS

48 training sessions and **56 information exchanges** undertaken

PARTNERSHIP MEETINGS

53 meetings held

PARTNERSHIPS

4 Formalised Engagements with UGAMA, HYGEO, SASSCAL and Africa Space Works

Delivering and Demonstrating **Impact**

FROM INTERNSHIP TO IMPACT:

How DE Africa training is shaping government action in Tanzania

Digital Earth Africa's sustained investment in Earth observation skills is changing how governments make decisions, and leading to the routine use of satellite-derived evidence to inform land-use planning, environmental monitoring, and resource management in Zanzibar.
In 2023, Digital Earth Africa partnered with the State University of Zanzibar to deliver an intensive Industrial Training Program, equipping young professionals with practical geospatial and Earth observation skills. Through hands-on learning, participants learned to apply analysis-ready satellite data to real development and environmental challenges.

For Ali Hamad Ali, the program marked a turning point. While working at the Zanzibar Environment Management Authority, his skills and confidence earned him a secondment to the Boosting Inclusive Growth for Zanzibar (BIG Z) Project under the Ministry of Finance, where he now works as a GIS Specialist. Ali supports major environmental and infrastructure initiatives, helping embed Earth observation across government sectors.

"The DE Africa internship was more than training," Ali says. "It gave me the confidence and technical skills to contribute meaningfully. Today, those skills are shaping projects at the national level." By building practical capacity through such programs, Digital Earth Africa is developing a new generation of professionals ready to leverage the latest Earth observation technology to drive evidence-based environmental management across Africa.

Participants from the State University of Zanzibar engage in field-based learning.

How satellite-driven coastal intelligence is shaping policy and action across Africa

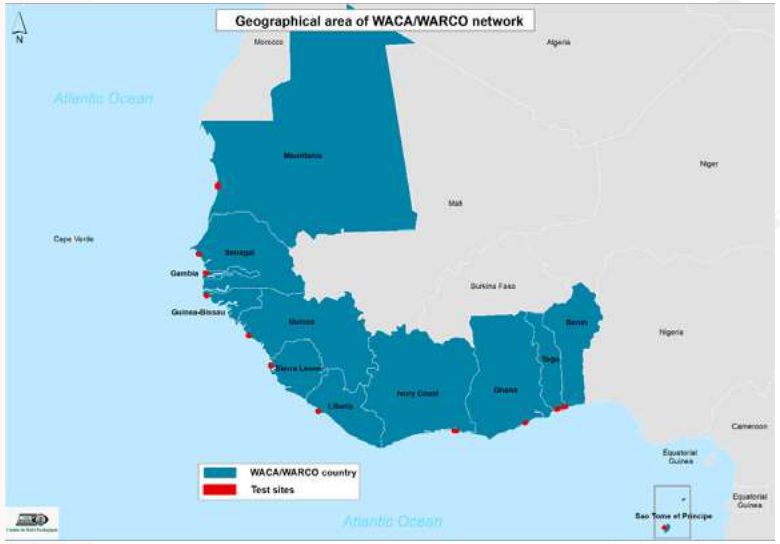
Governments across Africa are increasingly using satellite-based evidence to guide coastal management and Digital Earth Africa's Coastlines Monitoring Service is driving that shift.

In Egypt, the Ministry of Water Resources and Irrigation has integrated the Coastlines Service into its Irrigation System 2.0 strategy. By analysing shoreline change along more than 2,000 km of coastline, government teams are identifying erosion hotspots, assessing coastal protection measures, and tracking sediment movement. These insights are now embedded in the work of the Egyptian General Authority for Shore Protection, strengthening national coastal planning and risk management.

In West Africa, the Coastlines Service is being used by technical experts from 12 countries to support implementation of the West African Coastal Master Plan, a regional framework guiding long-term coastal resilience and risk reduction. By providing consistent, cross-border shoreline change data, the service enables governments to assess coastal erosion and accretion patterns at a regional scale, align national monitoring systems, and prioritise coordinated interventions. This shared evidence base strengthens policy coherence across countries and supports data-driven decisions for sustainable coastal development.

Together, these examples show how governments are moving beyond isolated responses to institutionalising satellite-derived coastal information in policy and planning. By providing open, accessible, and regularly updated data on shoreline movement and coastal risk, the Coastlines Service equips decision-makers with the evidence needed to prioritise interventions, strengthen adaptation plans, and enhance resilience against climate-driven coastal change.

Mapped shoreline along Egypt's coastline



Mapped shoreline along Egypt's coastline

How open satellite intelligence is transforming agriculture for African businesses and farmers

Across Africa, private-sector innovators are using satellite data to turn complex information into practical solutions that improve agricultural outcomes and Digital Earth Africa's open, analysis-ready datasets are proving central to that shift.

One standout example is Ground Truth Analytics, a Moroccan agritech company spun out of the University Mohammed VI Polytechnic (UM6P). The company combines satellite imagery, AI, and millions of ground-collected data points to deliver geospatial insights tailored to farmers, financial institutions, and governments. Integration of Digital Earth Africa's Sentinel-1 data has boosted model accuracy by around 5 %, a meaningful gain when monitoring millions of hectares across diverse growing conditions.

These improved insights are now being used in practical, impactful ways. In Ghana, agricultural cooperatives leverage Ground Truth Analytics' platform to remotely monitor farms, guide planting and fertilisation decisions, and deliver custom alerts to farmers throughout the season helping smallholders make data-driven choices that improve yields and sustainability. In East Africa, the company's data is helping banks assess credit risk for smallholder farmers by analysing historical land use and crop patterns, opening access to finance while reducing lending risk.

Ground Truth Analytics is using open satellite data from DE Africa to fuel AI tools that support smallholder farmers across Africa, from crop insights to credit scoring.

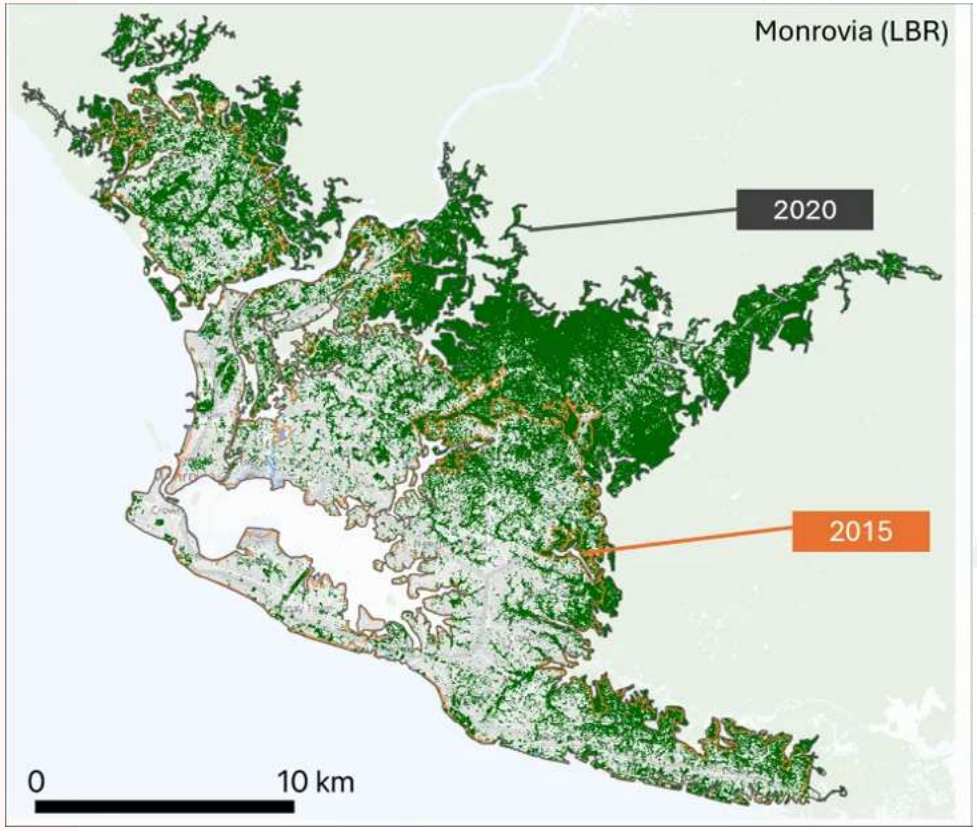
How DE Africa tools are empowering urban planning in Africa

Across Africa, accessible satellite data is becoming a cornerstone for evidence-based policy and planning and the partnership between Digital Earth Africa and the OECD Sahel and West Africa Club (SWAC) is helping to turn that potential into impact.

SWAC works with governments and regional organisations to anticipate territorial changes and guide policy on sustainable development, urbanisation, and resilience. As Africa's cities grow rapidly—projected to add nearly 900 million people by 2050 decision-makers need reliable, up-to-date data to plan for green space, heat mitigation, and urban risk.

To meet that need, Digital Earth Africa is hosting and extending SWAC's urban indicators through open, interactive tools. By integrating ready-to-use green space metrics with DE Africa's platform, policymakers, researchers, and planners can track green space availability, assess tree cover, and customise analyses for their own cities without heavy technical barriers.

These tools are already supporting urban decision-making by revealing where green space is shrinking, identifying heat-vulnerable neighbourhoods, and highlighting where investment can strengthen resilience. Through SWAC, local governments and institutions are using this data to inform planning policies, target adaptation strategies, and prioritise sustainable urban development across Africa's fast-growing cities.



Satellite derived analysis of urban expansion in Monrovia,Liberia 2015-2020.

Communicating our Impact

- Egypt Ministry of Irrigation and Water Resources interview, highlighting the application of DE Africa services for water management and coastal monitoring.
- Grassroots journalism collaboration in the Kasai Region, DRC, working with a local journalist to develop community-focused content on EO applications, designed as an ongoing narrative series to reflect local perspectives.
- New Earth observation tools set to empower wiser wetlands conservation across Africa highlighted during Ramsar COP15.

In 2025, DE Africa secured
media interviews and broadcast reach of
13.1 MILLION
with a
Advertising Value Equivalent (Ave) of
USD 158,613

Press Announcements

- Public announcement of the appointment of icipe as the Long-Term Owner of Digital Earth Africa, marking a critical milestone toward sustained African ownership.
- Additional funding secured from The Leona M. and Harry B. Helmsley Charitable Trust.
- Digital Earth Africa to launch vital new tools for wetland conservation at Ramsar COP15 received a total reach of 13,908.

Delivering and demonstrating impact for Africa

Throughout 2025, Digital Earth Africa focused on demonstrating real-world impact by documenting, communicating, and amplifying how Earth observation data is applied across Africa to support better decision-making. Impact was evidenced through a growing portfolio of use cases, changemaker and spotlight stories, media features, and institutional profiles, highlighting practical applications of DE Africa services across sectors and regions.

These outputs showcased how decision-ready EO data supported improved outcomes in agriculture, water management, biodiversity conservation, coastal resilience, climate adaptation, and statistical capacity building. Importantly, impact stories centred African practitioners, institutions, and communities, reinforcing African leadership in the application of Earth observation science.

Some of the publications picked by various print media outlets across Africa include:

Addressing Earth Observation Data Barriers In Africa With Digital Earth Africa And The Open Data Cube

READ MORE

Infrasture News, Modern Ghana, Business Ghana

Harnessing AI and satellite imagery to estimate water levels in dams

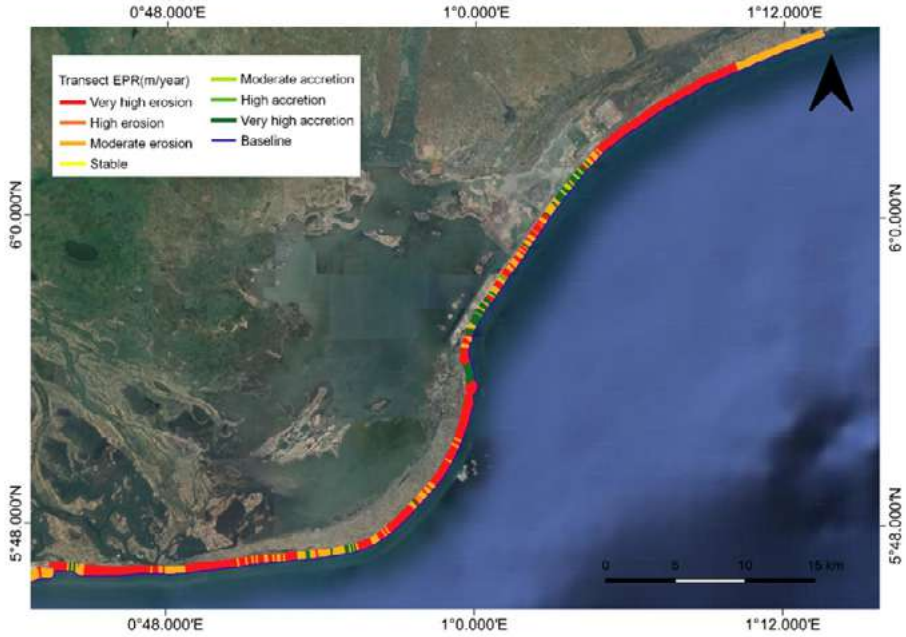
READ MORE

SABI, Business Ghana, Infrastructure News, Freshangleng, Brand Icon Image

Transforming coastal erosion in Ghana

READ MORE

SABI



Impact Stories, Partnerships and Publications from Our User Community

The time is now to leverage available data to inform annual flood risks in Koji State, Nigeria | Digital Earth Africa
Flooding is a significant and recurring disaster in Kogi State, Nigeria, which lies at the confluence of the Niger and Benue Rivers. This geographical location, coupled with the seasonal release of water from the Lagdo Dam in Cameroon, makes Kogi highly susceptible to severe flooding.

DE Africa champion Juliet Ibenegu, passionate about gender inclusivity in the geospatial industry
Juliet Ibenegu is not only the co-president of African Women in GIS, but she is an ardent supporter and user of Digital Earth Africa's platform and services.

OECD Sahel and West Africa Club and Digital Earth Africa: A Shared Vision for Data-Driven Insights for Africa
It's always exciting when two human-centered programs come together to lay the groundwork for impactful action based on a shared vision.The Sahel and West Africa Club (SWAC), part of the OECD, and Digital Earth Africa share a common goal: to provide data-driven insights that inform high-level decision-making and ultimately drive positive change for African communities.

Empowering communities with earth observation data: FarmCom's mission to preserve Kilifi's mangroves
Mangroves are an ecological treasure, thriving in coastal regions and serving as vital habitats for wildlife, natural protectors against soil erosion, and economic lifelines for communities. However, their existence is under increasing threat due to human activity, rising sea levels, and coastal erosion.

Reframing poverty and risk through satellite data
Meeting the challenges of poverty reduction and disaster response requires more than just funds and good intentions. It demands actionable insights drawn from accurate and reliable data. For Walker Kosmidou-Bradley, a Geographer with the Poverty and Equity Global Department at the World Bank, satellite data isn't merely an analytical tool but a revelatory lens.

Accessible from anywhere: How Digital Earth Africa is changing the way we use satellite data
In an era where satellite data is reshaping how we understand our world, access and usability remain the biggest hurdles for many would-be users.

A geospatial engineering student's take on urban expansion
Esther Githae is a final-year Geospatial Engineering student at the University of Nairobi, with a passion for applying mapping science to real-world challenges.

Supporting African space agencies with localised Open Data Cube deployments As timely and actionable satellite data increasingly become a powerful tool for managing land, water, and environmental resources, the ability to locally host and tailor Earth observation data infrastructures is emerging as an important consideration.

AI and satellite imagery better estimate water levels in dams
Farmers rely on water from dams to irrigate their crops through periods of drought. But how much water is stored in the dam? Farmers and water managers often do not have this critical information.

How open data is supporting more sustainable development in Africa
Earth observation (EO) data, such as satellite images, has the potential to help both people and the planet. But the data is often overwhelming and messy, making it hard to take advantage of information that could support better policy decisions and support more sustainable development.

When agronomy meets Earth observation: Partnerships pioneering a new era of farm intelligence
Across Africa, farmers make daily decisions that depend on timing: When should we plant? When is the best time to apply fertiliser? Is the crop progressing well? Did the last rains make a difference?

Satellite insights help track Africa's changing coastline and support coastal management
Africa's coasts are under pressure. Rising seas, climate change, and human development are reshaping shorelines, threatening ecosystems, infrastructure, and communities.

Strenghening **Partnerships**

Impact Stories, Partnerships and Publications from Our User Community

Partnerships remained central to Digital Earth Africa's delivery model throughout 2025, enabling the programme to operate as a collaborative, pan-African Earth observation infrastructure. Through strategic global partnerships and regionally grounded implementing partners, DE Africa strengthened platform sustainability, expanded institutional uptake, and reinforced African leadership in applied Earth observation science.

GEO GROUP ON EARTH OBSERVATIONS

During the reporting period, DE Africa continued to work closely with key global partners to support alignment, interoperability, and operational resilience. Engagement with the Group on Earth Observations (GEO) remained a cornerstone of DE Africa's international collaboration. Through alignment with GEO and AfriGEO priorities, DE Africa contributed to continental and global dialogue on open data, EO infrastructure, and capacity development. Participation in AfriGEO 2025 provided a platform to showcase African-led EO initiatives, strengthen collaboration with regional stakeholders, and reinforce Africa's role within the global Earth observation ecosystem.

aws

DE Africa's partnership with Amazon Web Services (AWS) continued to underpin the technical delivery of the Program, with renewal of DE Africa's tenure in the Open Data Sponsorship Program for a further 2 years. AWS supported the hosting of DE Africa's cloud infrastructure, ensuring reliable, secure, and scalable access to continental EO datasets and services. Throughout 2025, collaboration with AWS contributed to infrastructure optimisation, platform performance improvements, and operational resilience, and support for growing user demand across the continent.

esri

Collaboration with Esri focused on enhancing interoperability between DE Africa services and widely used GIS platforms. Engagements during 2025 supported the integration of DE Africa datasets and analytical outputs into Esri-based workflows, enabling government agencies, research institutions, and practitioners to incorporate EO data into existing decision-support systems. This interoperability strengthened institutional uptake by embedding DE Africa services within familiar geospatial environments.

IMPLEMENTING PARTNERS AND REGIONAL DELIVERY

In parallel with global partnerships, DE Africa worked closely with its implementing partners to deliver science validation, capacity development, and country engagement at regional and national levels. These partnerships ensured that continental services were adapted to local contexts and embedded within existing institutional frameworks. Through continued investment in partnerships during 2025, Digital Earth Africa strengthened the foundations for long-term sustainability, scalability, and impact, positioning the programme to deepen collaboration and institutional embedding in subsequent phases.

Strengthening Partnerships

RCMRD – Regional Centre for Mapping of Resources for Development (East Africa)

The Regional Centre for Mapping of Resources for Development (RCMRD) played a key role in East Africa, supporting the co-development and implementation of the Wetlands Monitoring Workflow in Kenya. RCMRD also contributed to regional capacity development activities aligned with AfriGEO priorities, strengthening technical capability and institutional uptake.

CSE – Centre de Suivi Écologique (West Africa)

In West Africa, the Centre de Suivi Écologique (CSE) led validation and application of wetlands and coastal monitoring services in Senegal. CSE delivered technical workshops through the West African Regional Coastal Observatory (ORLOA), supporting regional collaboration on coastal erosion, marine vulnerability, and climate resilience.

OSS – Sahara and Sahel Observatory (North Africa)

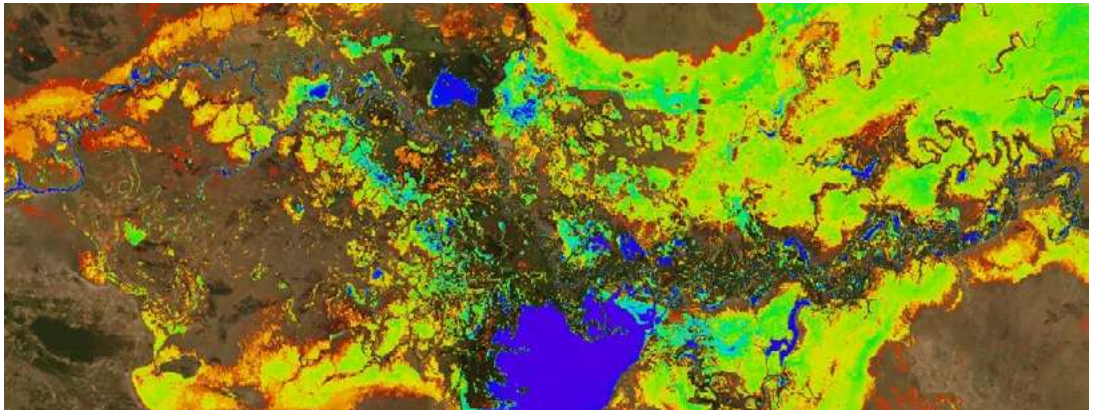
The Sahara and Sahel Observatory (OSS) supported delivery in North Africa through training and technical engagement focused on land degradation neutrality, soil organic carbon, and EO-based environmental monitoring. OSS also contributed to use-case co-development and regional dissemination of EO applications.

AGRHYMET - Agriculture, Hydrology, Meteorology Regional Centre

The AGRHYMET Regional Centre / CILSS contributed to crop monitoring and food security initiatives in the Sahel, supporting discussions on the application of EO data for agricultural monitoring and regional early warning systems. AGRHYMET also supported regional science engagement and dissemination activities.

AFRIGIST - African Regional Institute for Geospatial Information Science and Technology

AFRIGIST contributed to programme coordination and strategic engagement, maintaining representation within technical governance structures and supporting planning and coordination activities during the reporting period.



AFRIGIST training in Benin

DE Africa meeting with IPs at AfriGEO in Senegal

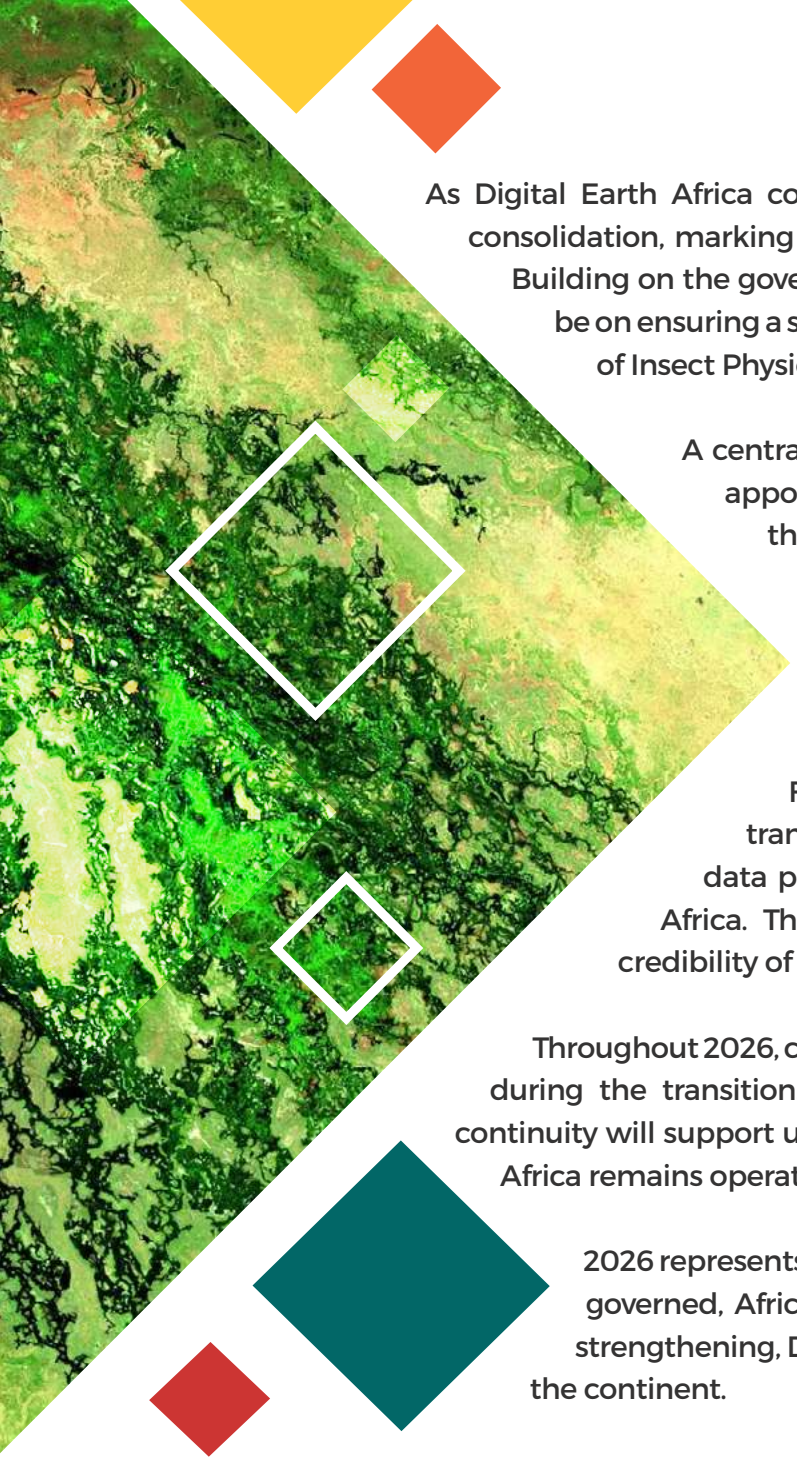
Strengthening Partnerships

OSS training workshop in Tunisia

DE Africa Crop type training at AGRHYMET

West African Regional Coastal Observatory (ORLOA) in Senegal

Outlook for 2026



As Digital Earth Africa concludes the 2025 reporting period, the programme enters 2026 as a year of transition and consolidation, marking the shift from interim programme delivery arrangements toward sustained African ownership. Building on the governance, operational, and technical foundations strengthened during 2025, the focus in 2026 will be on ensuring a stable, orderly, and accountable transition to long-term stewardship under the International Centre of Insect Physiology and Ecology (icipe).

A central priority for 2026 will be the operationalisation of long-term ownership following icipe's formal appointment as Long-Term Owner in November 2025. Transition activities will focus on completing the transfer of operational responsibility, governance oversight, and institutional knowledge, while maintaining uninterrupted delivery of DE Africa's platforms and services. Emphasis will be placed on aligning governance structures, risk management processes, financial oversight, and reporting systems with icipe's institutional frameworks to ensure continuity, transparency, and accountability.

From a programme delivery perspective, 2026 will prioritise business-as-usual continuity alongside transition activities. Core science and technology operations, including maintenance of continental data pipelines and services, will continue without disruption, ensuring reliable access for users across Africa. This continuity will be essential to maintaining stakeholder confidence and safeguarding the credibility of DE Africa as a continental public data infrastructure.

Throughout 2026, communications and stakeholder engagement will play an important role in reinforcing confidence during the transition. Transparent communication on transition progress, governance arrangements, and service continuity will support users, partners, and funders, while continued documentation of impact will demonstrate that DE Africa remains operationally effective during the transition to long-term ownership.

2026 represents a pivotal year in which Digital Earth Africa transitions from an interim programme to a sustainably governed, African-owned public data infrastructure. By prioritising continuity, accountability, and institutional strengthening, DE Africa is positioned to enter its next phase with a strong foundation for long-term impact across the continent.

Acknowledgements

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