



science & innovation

Department:  
Science and Innovation  
REPUBLIC OF SOUTH AFRICA



GEO GROUP ON  
EARTH OBSERVATIONS

COMMUNITIES OF PRACTICE (COP)  
INTEGRATED WORKSHOP AND CAPACITY BUILDING TRAINING

## Empowering National Uptake:

Leveraging Earth Observation Data and Knowledge

4 - 6 June 2024 | 08h30 – 18h00



Training  
4 & 5 June



Workshop  
6 June

# Highlights

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Manager

 SANSA  
SOUTH AFRICAN NATIONAL  
SPACE AGENCY

 Digital Earth  
AFRICA

 GEOGLAM  
GLOBAL AGRICULTURAL MONITORING

 AfriGEO

 SAOGEO  
SOUTH AFRICAN  
GROUP ON EARTH  
OBSERVATIONS

 SAOGSC  
SOUTH AFRICAN  
GROUP ON SATELLITE  
COMMUNICATIONS

 SAOGSN  
SOUTH AFRICAN  
GROUP ON SATELLITE  
NAVIGATION

 CSIR  
Touching lives through innovation

# Organisers and Partners

## 2024 INTEGRATED WORKSHOP AND CAPACITY BUILDING TRAINING

### 2024 COLLABORATORS

The organisations and initiatives which collaborated on the 2024 Capacity Development Training and Communities of Practice Integrated workshop.

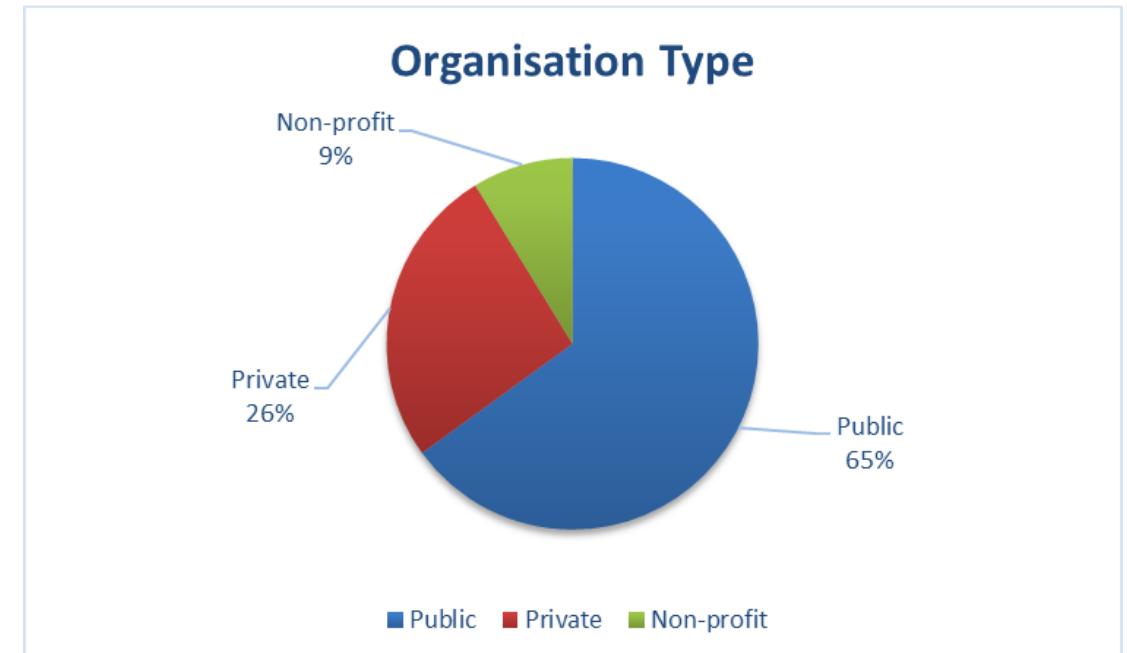


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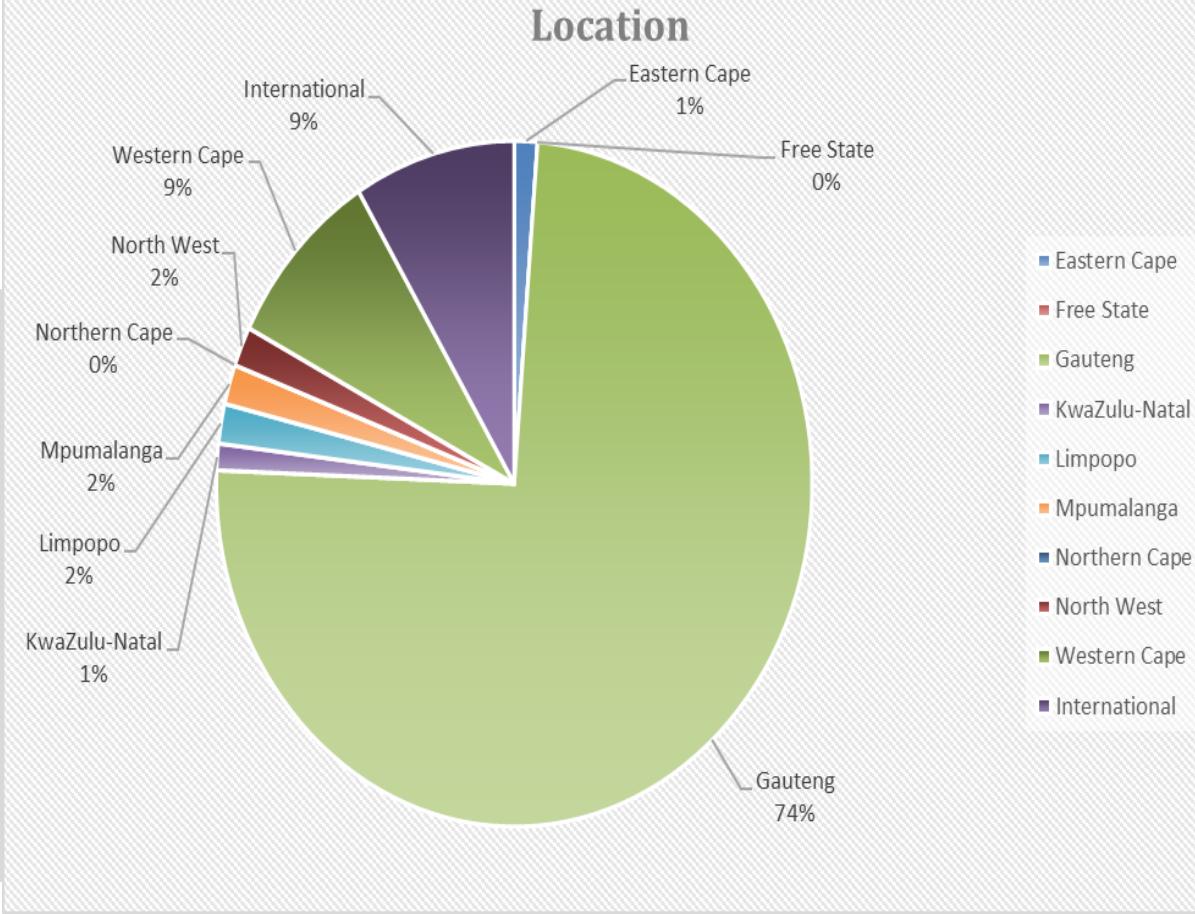
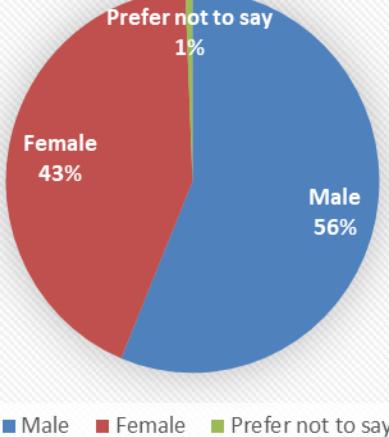
# Attendance : Organisations

Total Participants: 160

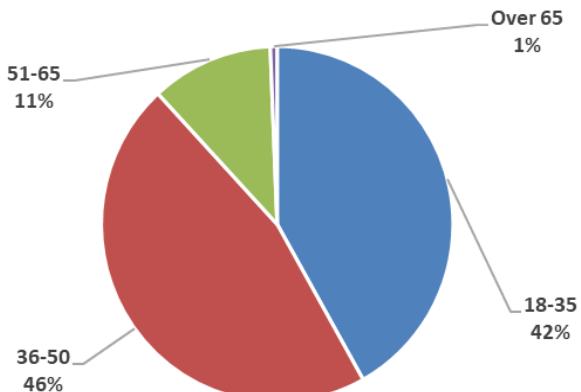




### Gender Representation

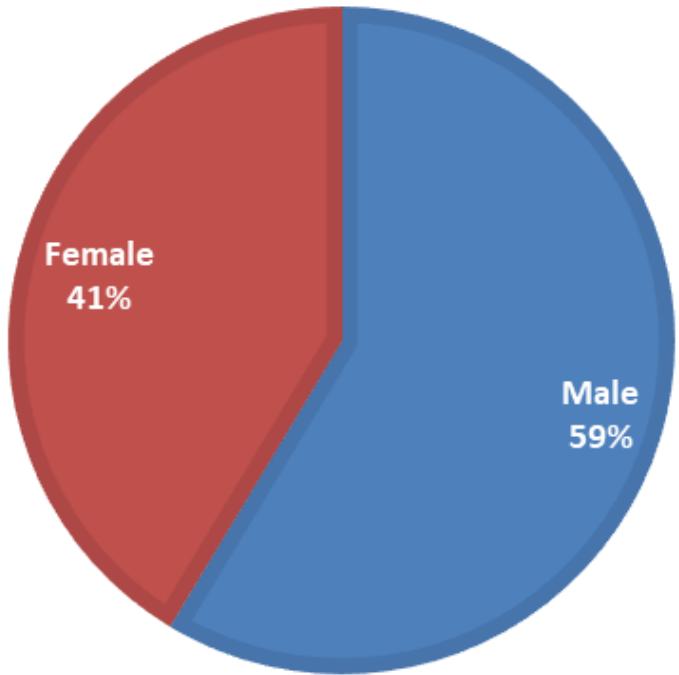


### Generation



# Attendance : (GEOGRAPHY, GENDER AND GENERATION)

## GENDER REPRESENTATION



# Programme Participation

# TRAINING -4-5 June 2024



# Day 1 Summary – Capacity Building and Training Sessions



**Date:** 4 June 2024

**Focus:** Enhancing practical knowledge and regional readiness through hands-on training in Earth Observation platforms and tools.

The first day of the workshop centred around structured training sessions aimed at strengthening the participants' ability to access, share, and apply Earth Observation (EO) data for decision-making across sectors.

- **GEO Knowledge Hub (GKH):**

The day began with an introduction to the GEO Knowledge Hub, highlighting its role in facilitating knowledge sharing within the GEO community. Participants were introduced to the platform's structure, the value of contributing resources, and examples of how GKH enables uptake of EO solutions across different use cases.

- **GEOGLAM:**

The second session provided insights into the Global Agricultural Monitoring (GEOGLAM) initiative. It showcased collaborative research approaches, monitoring frameworks, and capacity co-development pathways for improving agricultural decision-making and food security resilience through EO data.

- **Digital Earth Africa (DEA):**

The afternoon sessions explored the DEA platform, introducing participants to analysis-ready EO data products and services tailored to the African context. Use cases were presented across sectors such as land, water, agriculture, and urban planning. The session highlighted DEA's growing toolset and its application for informed, localised decision-making.

Each training module encouraged interactive engagement, allowing participants to better understand how these EO platforms could be embedded into national and community-level practices.

# Day 2 Summary – Capacity Building and Training Sessions

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NEOSS  
NATIONAL EARTH OBSERVATIONS  
AND SPACE SECRETARIAT

GEO GROUP ON  
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COMMUNITIES OF PRACTICE (COP)  
INTEGRATED WORKSHOP AND CAPACITY BUILDING TRAINING

**Empowering National Uptake:**  
Leveraging Earth Observation Data and Knowledge

4 - 6 June 2024 | 08h30 – 18h00

Training 4 & 5 June

Workshop 6 June

**SANSA** SPACE AGENCY

Digital Earth AFRICA

GEOGLAM

AfricGEO

SAUGEO

SAUGSC

SAUGSN

CSIR

**Date:** 5 June 2024

**Focus:** Enhancing national EO readiness through maturity assessments and showcasing local EO capabilities.

The second day built on foundational tools by equipping participants with methods to assess national Earth Observation (EO) capabilities and highlighting South Africa's EO offerings.

- Earth Observations Maturity Indicator (EOMI) Methodology:**  
The morning sessions introduced the GEO EOMI framework, emphasising its importance in evaluating a country's EO systems and institutional readiness. The training covered the methodology's structure, data collection and analysis processes, and featured implementation examples from different countries.
- Participatory EOMI Assessment:**  
A hands-on session allowed participants to engage directly with the EOMI survey results, promoting critical reflection and dialogue on the state of EO infrastructure, policy, and institutional capacity within their contexts.
- SANSA Earth Observation Catalogue:**  
The final technical session provided a deep dive into SANSA's EO catalogue, spotlighting South Africa's growing portfolio of EO products and services. Participants were guided through the access and application of data for use across various domains, including agriculture, water, and urban planning.
- Networking Session:**  
The day concluded with an informal networking session, fostering collaboration and dialogue among stakeholders from government, academia, and civil society.

This practical and nationally contextualised training approach reinforced the importance of coordinated EO strategies and capacity development in achieving impactful, localised solutions.

# COP Workshop 6 June 2024

Opening	Bridging	Empowering	Closing
Opening Session	Bridging the GAP between Technology and local needs	Empowering Local Capacity and Collaborating for better outcomes	Closing Session

# Day 3 Summary – WORKHOP/Reflections and Strategic Dialogue



**Date:** 6 June 2024

**Focus:** Aligning Earth Observation (EO) advancements with local needs, national priorities, and future readiness.

The final day of the workshop shifted the focus from technical training to strategic dialogue, offering a platform for reflection, thought leadership, and alignment of EO efforts across stakeholders.

- **State of EO and Future Trends:**

The morning opened with a keynote session that outlined the objectives of the workshop and provided a forward-looking overview of global EO trends. A distinguished expert delivered an insightful keynote address on the evolving EO landscape, highlighting opportunities for innovation and regional integration.

- **Technology and Local Relevance Panel:**

A panel of international experts addressed the persistent gap between advanced EO technologies and the practical needs of users in developing contexts. The session emphasised strategies for enhancing accessibility, usability, and relevance of EO tools in national and local applications.

- **Local Capacity and Collaboration:**

The afternoon session showcased successful national initiatives that have effectively used EO for impact. Speakers shared lessons on building institutional capacity and fostering meaningful community engagement to ensure EO solutions are grounded and sustainable.

- **EOMI Assessment and Closing:**

The workshop concluded with a synthesis of insights gained from the Earth Observations Maturity Indicator (EOMI) assessment exercise. Participants reflected on outcomes and identified next steps for strengthening EO governance, coordination, and implementation at both national and community levels.

• This final day reinforced the importance of aligning EO tools and governance with user needs, while strengthening partnerships to achieve inclusive and resilient EO ecosystems.

# Summary of Reflections and Key Actions: Training Component Reflections (4–5 June 2024)

Focus: Strategic Dialogue, Institutional Alignment, and EO Governance

## Reflections

- Aligning EO Trends with Local Priorities**  
The keynote and panel sessions highlighted the growing divide between rapidly evolving EO technologies and their usability in developing country contexts—underscoring the need for localisation and demand-driven design.
- Bridging the Gap between Technology and Community Needs**  
Expert discussions reinforced that meaningful uptake of EO tools requires co-design, capacity development, and trusted partnerships across stakeholder groups.
- Value of Collaborative Governance**  
National and international examples demonstrated the importance of institutional frameworks, policy alignment, and the role of CoPs in driving coordinated action.
- EO Maturity as a Governance Lens**  
Closing reflections on the EOMI exercise highlighted its usefulness in informing strategic planning, identifying data gaps, and shaping policy and funding priorities.

## Key Training Actions

- Integrate EOMI outcomes into national EO strategy and workplans.
- Identify 3–5 priority EO use cases for operational demonstration in collaboration with local stakeholders.
- Strengthen inter-agency coordination through NEOSS-led EO governance platforms.
- Disseminate workshop outcomes to GEO, AfriGEO, and national departments.
- Initiate follow-up engagements with CoPs to translate insights into action.

# Summary of Reflections and Key Actions: II. Workshop Component Reflections (6 June 2024)

**Focus:** Strengthening Technical Capacity for EO Access and Use

## Reflections

- Hands-On Learning Enhanced Practical Application**

Participants gained direct exposure to critical EO tools including the **GEO Knowledge Hub (GKH)**, **Digital Earth Africa (DEA)**, **GEOGLAM**, and the **SANSA EO Catalogue**, with sessions grounded in real-world use cases and applications.

- Introduction to the EO Maturity Indicator (EOMI)**

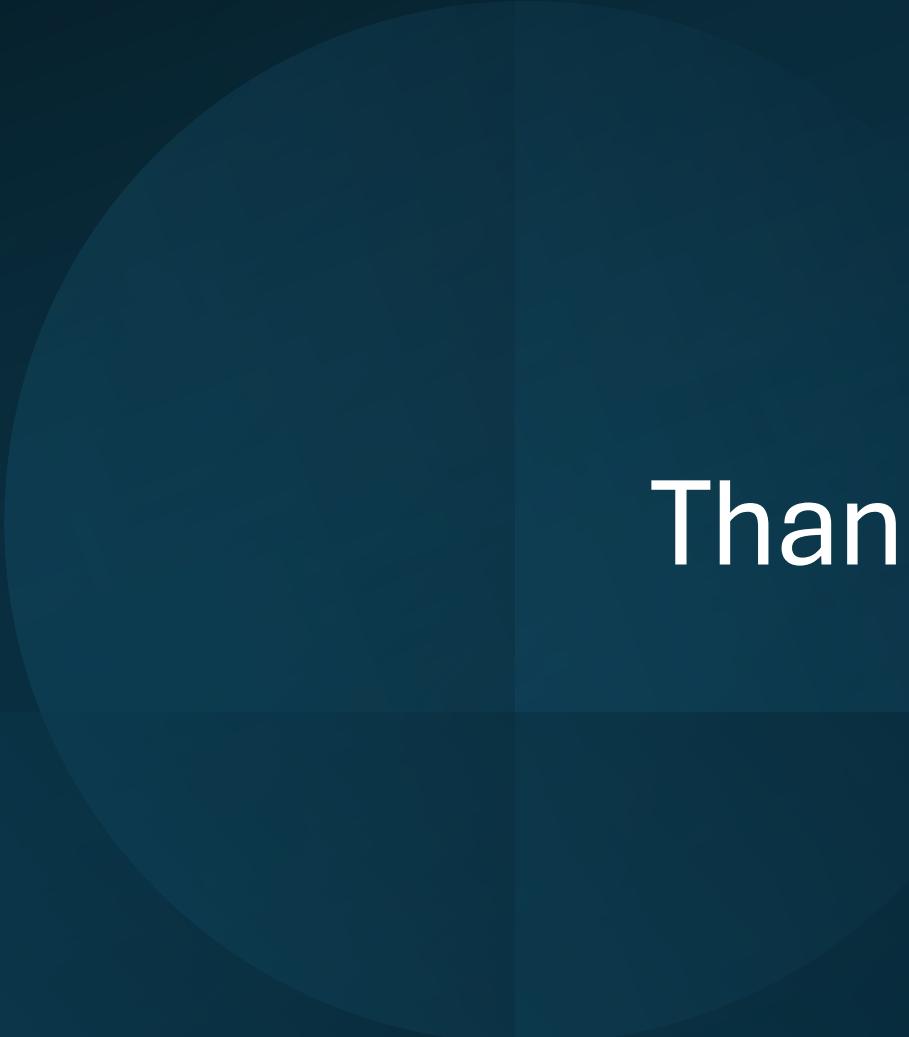
The EOMI training introduced a structured methodology for assessing national EO capabilities. The participatory session allowed countries to benchmark their institutional strengths and identify priority areas for improvement.

- Relevance of National Platforms and Regional Tools**

The training validated the importance of local platforms like SANSA's EO Catalogue, while also reinforcing the utility of regional infrastructure such as DEA in providing analysis-ready data.

## Key Training Actions

- Finalise and circulate national EOMI self-assessment reports.
- Support the national extension of the GEO Knowledge Hub (SA-GEO).
- Develop a targeted capacity-building calendar with SANSA, DEA, and GEO resources.
- Encourage more open contributions of resources and methods to the GKH.



Thank you