

AfriGEOSS: An initiative to reinforce GEOSS in Africa



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GMES and Africa: Consolidation-Validation
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**science
& technology**

Department:
Science and Technology
REPUBLIC OF SOUTH AFRICA



Africa in Context ...

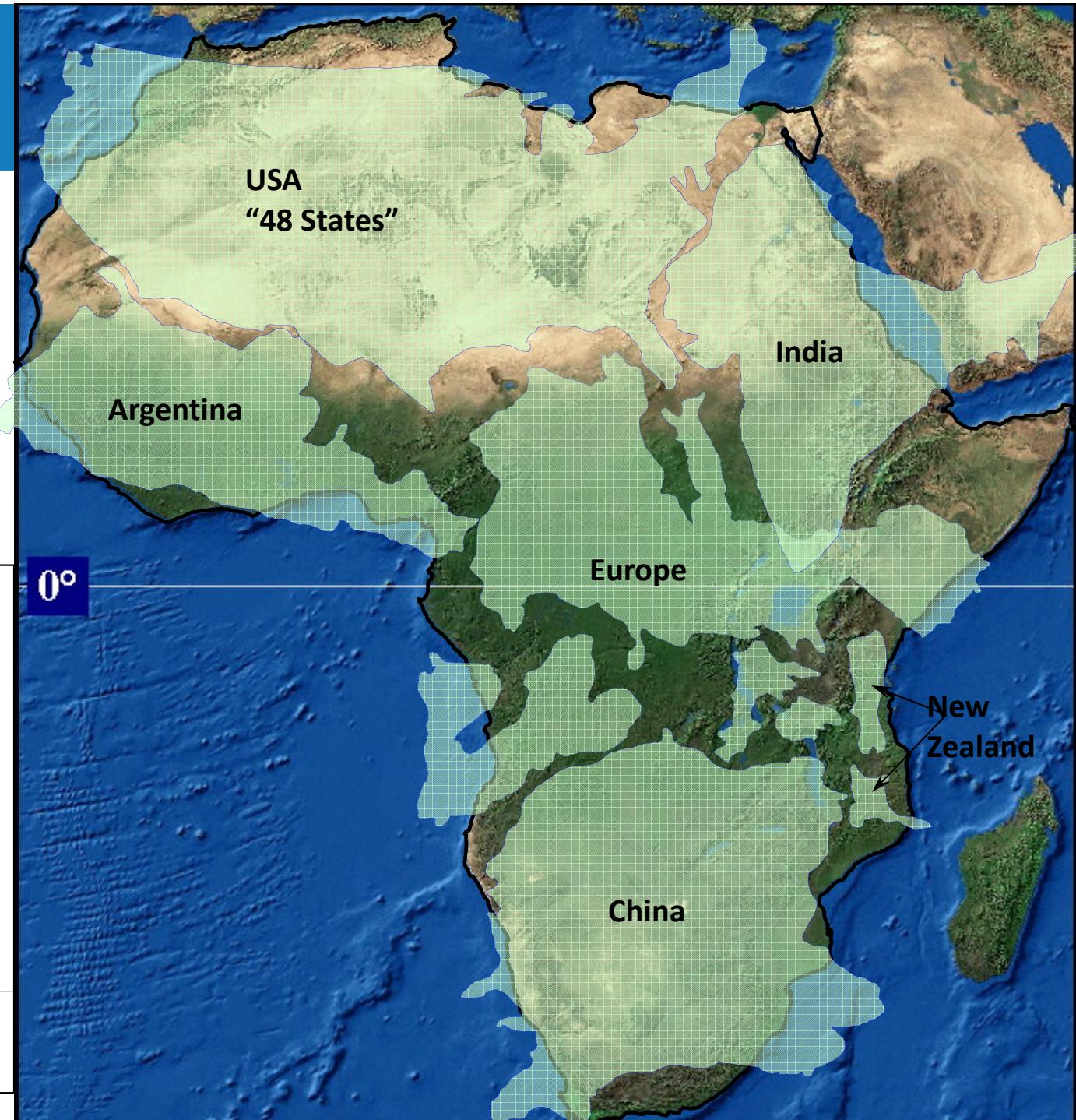
The Size of Africa

Africa covers 20% of Earth's land surface

China	9,596,960 Km ²
USA	9,363,071 Km ²
India	3,287,590 Km ²
Europe	4,936,973 Km ²
Argentina	2,766,890 Km ²
New Zealand	268,680 Km ²
TOTAL :	30,220,164 km²

Area of Africa: 30,318,830 km²

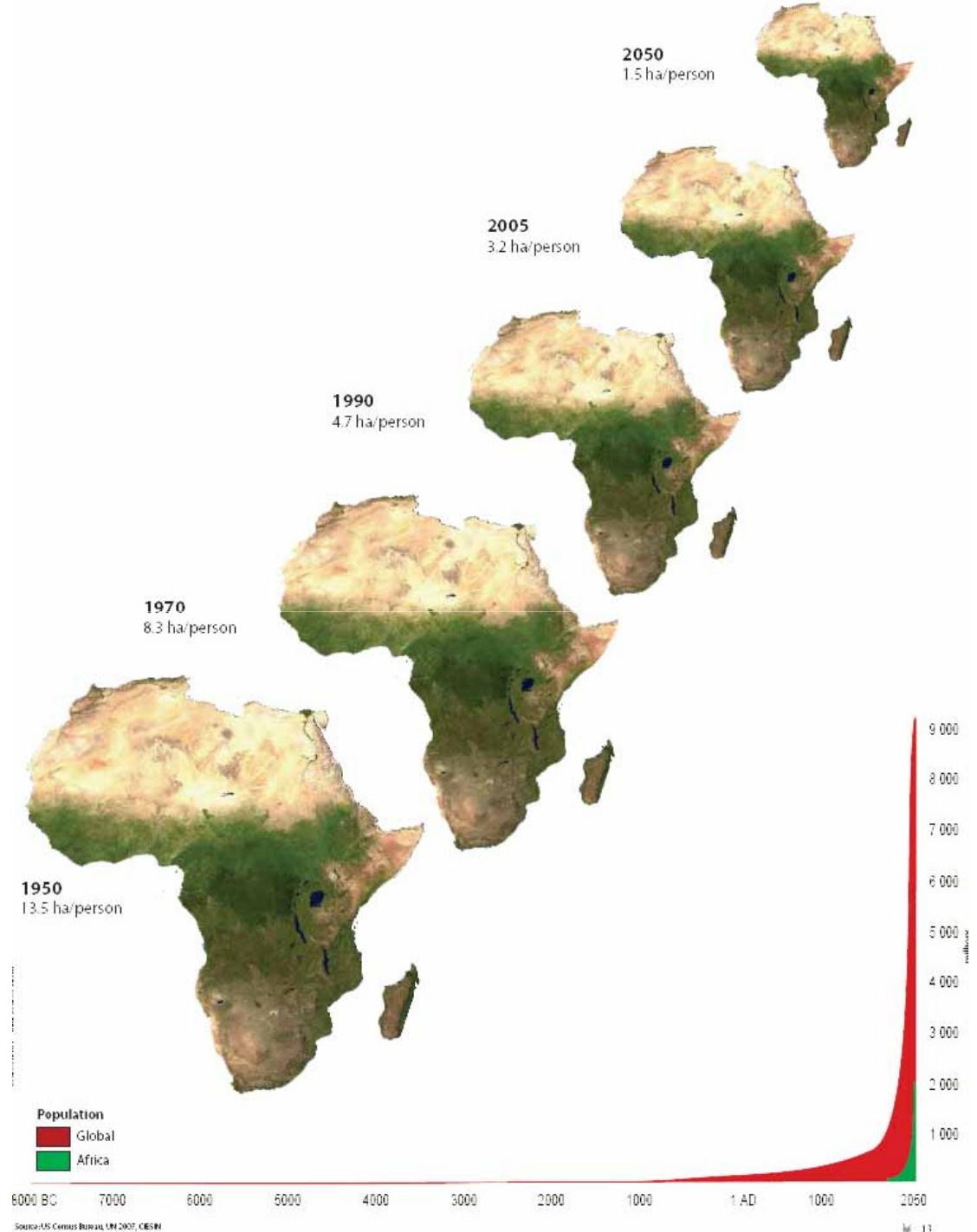
Source: World Factbook,



Africa in Context ...

Currently over 1.1 billion people

- ❖ Per capita land has fallen from 13.5Ha in 1950 to 3.2Ha in 2005
- ❖ Population expected to reach 1.9 billion in 2050
- ❖ Per capita land expected to fall to 1.5 Ha
- ❖ Average life expectancy: 52 years (Global average is 66)
- **Challenges:**
 - **Water**
 - **Energy**
 - **Food security**
 - **Health**



Source: *Africa Atlas of Our Changing Environment*



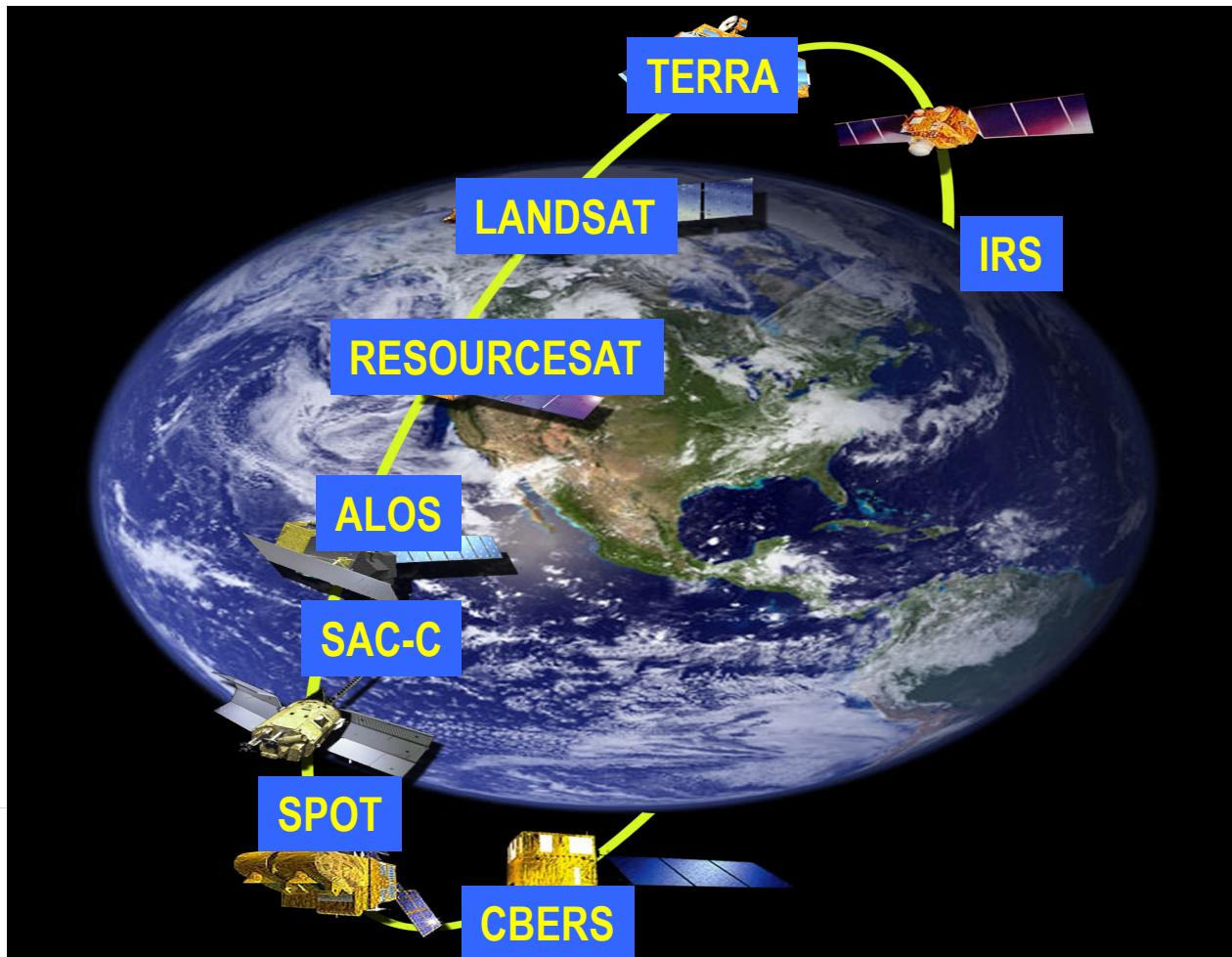
GEOSS building-up on 3 Pillars

- Coordinated Data Access
- Open Data Policy
- Political Visibility





Coordinated Access to Space and in-situ Data





Open Data Access

- Full and Open Exchange of Data, recognizing Relevant International Instruments and National Policies
- Data and Products at Minimum Time delay and Minimum Cost
- Free of Charge or minimal Cost for Research and Education





Political Visibility



▲第2回地球観測サミット参加者集合写真





G8-2008



“...we will accelerate efforts within the Global Earth Observation System of Systems (GEOSS), ... in priority areas, inter alia, climate change and water resources management, by strengthening observation, prediction and data sharing. ... capacity building for developing countries ... interoperability and linkage ...”





The G20 Agriculture Priority (2011)



G20 Final Declaration

44. We commit to improve market information and transparency in order to make international markets for agricultural commodities more effective. To that end, we launched:

- The "Agricultural Market Information System" (AMIS) in Rome on September 15, 2011, to improve information on markets ...;
- The "**Global Agricultural Geo-monitoring Initiative**" (**GEO-GLAM**) in Geneva on September 22-23, 2011. This initiative will coordinate satellite monitoring observation systems in different regions of the world in order to enhance crop production projections and weather forecasting data.



Rio+20

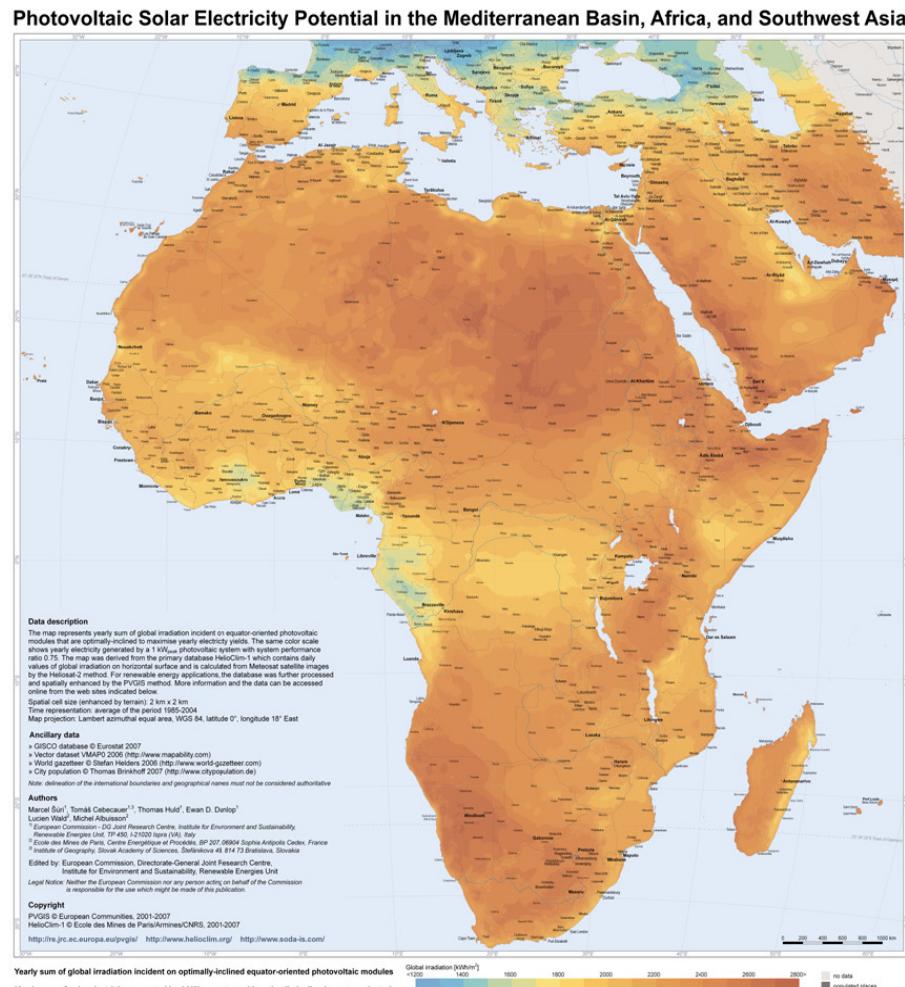
2012 UN conference on sustainable development

- In the conference resolutions the UN General Assembly recognises the role and importance of “space-technology-based data, in situ monitoring and reliable geospatial information for sustainable development policymaking, programming and project operations;
- Noted the relevance of global mapping, and recognize the efforts in developing global environmental observing systems, including by the Eye on Earth network and through the Global Earth Observation System of Systems (GEOSS); and
- Recognised the need to support developing countries in their efforts to collect environmental data





GEOSS for AFRICA



GEONETCast, CBERS Africa, SERVIR, Sand and Dust Storm Warning System, AEGOS, Wildland Fire Early Warning System, Puma, AMESD, BIOTA, TIGERNET, SoDa, MERIT, African Protected Areas, ClimDev Africa, ChlorOGIN, MESA, GMES and Africa (BRAGMA), FAO-AfriCover, MAFA, ARMC, EAMNET, WATPLAN, AFRIMASON, GARNET-E, SAGA-EO





African Participation in GEO

Member Nations:

- Algeria
- Burkina Faso
- Cameroon
- Central African Republic
- Congo, Republic of the
- Egypt
- Ethiopia
- Gabon
- Ghana
- Guinea-Bissau
- Guinea, Republic of
- Ivory Coast
- Mali
- Mauritius

- Morocco
- Niger
- Nigeria
- South Africa
- Sudan
- Tunisia
- Uganda
- Ivory Coast

Participating Organizations:

- AARSE
- ACMAD
- EIS-Africa
- RCMRD
- UNECA





AfriGEOSS objectives

- Coordinate and bring together **relevant stakeholders, institutions and agencies** across Africa that are involved in GEO and other Earth observation activities;
- Provide a **platform** for countries to participate in GEO and to contribute to GEOSS;
- Assist in **knowledge sharing** and global collaborations;





...Objectives

- Identify challenges, gaps and opportunities for African contributions to GEO and GEOSS;
- Leverage existing capacities and planned assets and resources; and
- Develop an appropriate strategy and participatory model for achieving the above goals.





Priority Actions

- **Engage with regional agencies and training centres**
- **Coordinated satellite infrastructure development**
- **Coordinated applications development**
- **Promote data democracy and data sharing**
- **Organise sessions on GEO and GEOSS at premier African conferences**
- **Organise regional workshops**





Ten Years After (Johannesburg)

...to create a world where decisions and actions are informed by coordinated, comprehensive and sustained Earth observations.





AfriGEOSS Launch at the Africa GIS and GSDI-14 Conference

**Please join us at the launch of
AfriGEOSS in Addis Ababa,
Ethiopia, Tuesday, 05
November 2013**





**Thank You
Merci**

