GLOBAL EARTH OBSERVATION SYSTEM OF SYSTEMS

CONCEPT TO REALITY

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on behalf of

GEO CO-CHAIR: SOUTH AFRICA
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About GEO/GEOSS

- Voluntary partnerships of 72 governments and EC and 52 international organizations

- Supported by a Secretariat based in Geneva

- Efforts to build a Global Earth Observation System of Systems (GEOSS)
  - Based on a 10 year implementation plan
  - Adopted a 3 year workplan 2007-2009 – 72 tasks
About GEO/GEOSS

[Diagram showing the Earth's systems and interactions, including solar radiation, atmospheric composition, water cycle, human contributions and responses, ecosystems, carbon cycle, land-use/land-cover change, and ocean circulation.]
About GEO/GEOSS

Nine Societal benefit areas:

1. Disasters
2. Health
3. Energy
4. Climate
5. Agriculture
6. Ecosystems
7. Biodiversity
8. Water
9. Weather
About GEO/GEOSS

• Four Transverse Areas
  1. User engagement
  2. Architecture
  3. Data management
  4. Capacity building
About GEO/GEOSS

• Four Committees
  1. Data and Architecture
  2. User Interface
  3. Science and Technology
  4. Capacity Building
Data Sharing Principles

• 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
Observations need to be supplemented, improved and sustained
GEOSS a Global endeavour serving users

73 Members
52 Participating Organizations
Focus on Climate change

- Develop a long term strategy to improve observation, data assimilation and modeling

- Advance the monitoring and predictability of weather and climate on a weekly, seasonal, inter-annual and decadal time scales

- Facilitate access to, and utilization of, weather and climate data and models for developing countries
Focus on Climate Change

- Implement actions called for in GCOS Implementation Plan

- Emphasize to satellite agencies the importance of satellites for long term climate monitoring

- Promote the improvement of emissions databases for aerosols, greenhouse gases and their precursors

- Enhance collaboration between observation, research and user communities
GEOSS Future Directions

• Develop GEO Data Policy Principles
• Begin Global Earth Observing Systems Inventory
• Assess global observation gaps
• Implement operational tools, e.g., GEOPORTAL, GEONETCAST
GEOSS Future Directions

- Demonstrate national, regional, global Earth observation programs in support of health, agriculture, water, capacity building
- Promote use of Earth observations in modeling, data assimilation efforts
- Explore ways to sustain successful R & D observations
- Engage academic and industrial partners
Thank you!