**AfriGEOSS Symposium 2016: Session-4 Description**

**When**  
Session 4 (Day-1, Wed. 27-April): 16.00 – 17.45

**Session Title**  
Earth observations for a Food Secure Africa

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1) **Purpose: background, topic and objectives of the session**

a) **Background:**

Food security is one of the SDG and is of special significance to this continent where climate variability, infrastructure, information, and technology constraints result in many countries experiencing food security stresses following even minor disruptive weather events. Having reliable, affordable and operational crop production and yields estimation and monitoring systems, which provide timely access to early warning information is essential for food security decision-making and mitigation planning.

b) **Theme:**

This session will address topics relating to technologies, systems and data sources available to countries on the continent for estimating, forecasting and monitoring crop yield estimation, crop growth and production.

c) **Objectives:**

1. To create awareness amongst decision-makers that operational EO based systems exist.
2. To illustrate the feasibility and cost effectiveness of these systems.
3. To alert scientists to the possibilities of adapting / adopting these systems locally.

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2) **Key questions to be addressed in the session**

- What affordable data sources exist for feeding crop estimation and forecasting systems?
- Which systems are affordable, functional and sustainable for deployment in countries in Africa?
- What capability and capacity exists for supporting implementation of such systems?
- How to coordinate food security and agriculture activities under AfriGEOSS?
3) Expected outcomes from the session

- It is hoped that participants will leave with a clear understanding of available data and systems for national crop production monitoring as well as an enthusiasm to implement an EO based system or improve their current system with EO data.
- Action plan towards coordination of food security activities in Africa through AfriGEOSS

4) Format of the session and expected audience

Panel discussion of 1 hour 45 minutes, consisting of remarks by speakers followed by a moderated session with speakers and the audience.

5) Speakers

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<th>Organisation</th>
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<td>Terry Newby</td>
<td>ARC</td>
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<td>Stuart Martin</td>
<td>GTI</td>
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<td>Farai Marumbwa,</td>
<td>MESA SADC THEMA</td>
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<td>Andreas Brink</td>
<td>JRC</td>
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<td>Benjamin Koetz</td>
<td>ESA</td>
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<td>TBD</td>
<td>University of Zimbabwe</td>
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6) Moderators and Rapporteurs

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<tr>
<th>Name</th>
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<tr>
<td>Souleye Wade</td>
<td>UCAD</td>
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<td>Linzi Lewis</td>
<td>SAEON</td>
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7) Schedule

- Introduction of the session by Moderator (Souleye Wade, UCAD) (5 min)
- Speaker remarks / presentations (5 min)
  - GEOGLAM and Early Warning Crop Monitor (Terry Newby, ARC)
  - National crop monitoring system (Stuart Martin, GTI)
  - Agriculture and food security monitoring with Earth Observation in MARS (Andreas Brink, EC-JRC)
  - TBC (Farai Marumbwa, MESA SADC THEMA)
  - Development of national capacity for agricultural monitoring (Benjamin Koetz, ESA)
  - TBD (TBD, EMA)
• 30 minute moderated panel discussion – converge on issues of collaboration (see key questions to be addressed in the session)
• 20 minutes moderated discussion with audience
• Summary of session by moderator