



Carbon-Climate-Human Interactions in Africa
23-25 August 2007, Kruger National Park, South Africa
Symposium website <http://www.globalcarbonproject.org/meetings/Africa.html>

Agenda 17 August 2007

Thursday, 23 August 2007

09:00

Introduction

10 min. talks

- Welcome and Purpose – Guy Midgley (South Africa), Michael Raupach (GCP, Australia), Riccardo Valentini (CarboAfrica, Italy)
- Global Carbon Project – Pep Canadell (Australia), Shobhakar Dhakal (Japan)
- CarboAfrica – An effort to coordinate the C-cycle research network in Africa. Riccardo Valentini, University of Tuscia (Italy)

9:30

Drivers of anthropogenic carbon emissions (fossil fuel, land use change, fire)

15 min. talk + 5 min. questions

1. Anthropogenic carbon emissions in Africa. Michael Raupach, CSIRO, (Australia)
2. Urbanization, the carbon cycle and the climate system: an African agenda. Patricia Romero-Lankao, NCAR (USA)
3. Mapping fire in Africa since 2000. Stephen Plummer, ESA (Italy)

10:30 *Break*

11:00

4. Assessment of the Wildfires in Sub-Saharan Africa Using Satellite Remote Sensing: Mapping the Burned Areas. Ilaria Palumbo, University of Leicester (UK)
5. Mechanistic modelling of fire vegetation interaction: extend and effects. Veiko Lehsten, University of Lund (Sweden)
6. The determinants of burnt area in southern Africa. Sally Archibald, CSIR (South Africa)

12:00 Session Discussion

13:00 *Lunch*

14:00

Carbon-climate mitigation and adaptation

15 min. talk + 5 min. questions

7. Linkages between land use and carbon including sustainable land management, Anand Patwadhan (India)
8. Environmental constraints on biofuels potential. Chris Field, Carnegie Institution (USA)
9. Sino-African development collaboration: Implications for carbon emission. Ye Qi, Tshinghua University (China)
10. Is carbon management relevant in an African city? Debra Roberts, Ethekewini Municipality (South Africa)

15:20 *Break*



15:50

11. Potential for carbon sequestration in the Democratic Republic of Congo forests. Nsalambi V. Nkongolo, Lincoln University, MO (USA)
12. Synthesis on the trade-offs of C sequestration with water yield and soil fertility after savannah afforestation in Congo, Laurent Saint-André, CIRAD (France) and UR2PI (Congo)
13. Mitigating climate change in Ghana: Assessing the socio-economic drivers of land use/land cover changes. Regina Sagoe, University of Ghana (Ghana)
14. The origin and stability of soil organic C in a broadleaved savanna. Implications for C sequestration in rangelands. Steve McKean, KZN Wildlife, South Africa

17:10 Session Discussion

18:00 End of the day

Friday, 24 August 2007

09:00

Carbon-biodiversity and biospheric interactions

15 min. talk + 5 min. questions

15. Biodiversity and the carbon cycle. Guy Midgley (South Africa)
16. Africa contribution to the global carbon-climate feedbacks. Pierre Friedlingstein (France)
17. Soil carbon and plant diversity distribution at the farm level in the savannah region of Northern Togo, West Africa. M. Teresa Sebastià, Forest Technology Centre of Catalonia (Spain)

10:00 Session Discussion

10:40 Break

11:10

Regional exchanges of carbon on land and oceans

15 min. talk + 5 min. questions

18. Study of the variability of the Africa carbon balance from 1950 till today. Philippe Ciais, CEA-LSCE (France)
19. Atmospheric constraints on estimates of the variability and trends in CO₂ fluxes over Africa. Corinne Le Quere, University of East Anglia/British Antarctic Survey (UK)
20. Air-sea exchanges of CO₂ in continental margins of Africa. Arthur Chen, Taiwan
21. Short and long term carbon export fluxes from the Benguela Upwelling System: is it a CO₂ sink? Pedro Monteiro, CSIR, South Africa
22. CO₂ measurements from the AMMA transect (ground, tethered balloon, large balloon, aircraft, others). Laurent Kergoat, CESBIO (France)

12:50 *Lunch*

14:00

23. Modelling carbon dynamics in southern African ecosystems. Tony Knowles (South Africa)
24. Interannual variation in NEE at the Skukuza flux site. Bob Scholes, CSIR (South Africa)
25. Seasonal and annual plasticity of African ecosystem water use. Almut Arnet, University of Lund (Sweden)



26. Seasonal variation of carbon fluxes in Sudan, Jonas Ardö, University of Lund (Sweden)

15:20 *Break*

15:50

27. Carbon Emissions from Africa fires deduced from geostationary Fire Radiative Power, Martin Wooster, King's college of London (UK)
28. Comparison of leaf and eddy scale measurements in the Kruger National Park. Werner Kutsch, Max Plank Institute (Germany)
29. CO₂ fertilization effects on trees in African Savannas. Barney Kgope, SANBI (South Africa)

16:50 Session Discussion

18:00 End of the meeting

Saturday, 25 August 2007

Field Trip – All day long: fire plots and altitudinal environmental gradient