SAHAEL CONFERENCE 2007: IMPROVING LIVES BY UNDERSTANDING WEATHER

SPONSORED BY PROGRAMME SAAGA IN BURKINA FASO, THE METEOROLOGICAL SERVICES IN MALI AND BURKINA FASO AND THE UNIVERSITY CORPORATION FOR ATMOSPHERIC RESEARCH (UCAR) AND AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE (AAAS) AFRICA INITIATIVE

2-6 APRIL 2007
OUAGADOUGOU, BURKINA FASO

AGENDA

MONDAY 2 APRIL 2007 Data and infrastructure

09:00 – 09:15 Introductions and welcome; Purpose and Overview of the workshop

09:15 – 09:45 Introduction to the UCAR/AAAS Africa Initiative and objectives (UCAR/AAAS)

09:45 – 10:30 Weather Radars: Towards a West African network of weather radars (Mali, Burkina Faso, RAL)

10:30 – 11:00 Coffee Break

11:00 – 11:45 Meteorological Satellites: Current capabilities and future enhancements in Africa with specific focus on West Africa (African countries, EUMETSAT)

11:45 – 12:30 Surface and other observations and integration of these observations with radar and satellite data (African countries, UCAR/Unidata, EUMETSAT)

12:30 – 14:00 Lunch

14:00 – 14:45 Measurements of trace gases, aerosols and clouds (surface and airborne): Application to climate change, air pollution and rainfall enhancement studies (Mali, Burkina Faso, RAL, ESSL)

14:45 – 15:30 Numerical modeling: Use of global, meso-scale and micro-scale models for understanding and predicting weather (Ghana, Mali, RAL)
15:30 – 16:00 Break

16:00 – 18:00 Demonstration of radar calibration, essential components of maintenance, data processing and archiving, and TITAN/CIDD display systems of the current radars in Mali and Burkina Faso at the Programme SAAGA offices

18:30 Cocktail reception

**TUESDAY 3 APRIL 2007  Applications, displays and visualization**

08:30 – 09:00 Radar data quality, quality control algorithms, and quantitative precipitation estimation (RAL, EOL)

09:00 – 09:30 Applications of weather radars to weather now- and forecasting with specific emphasis on general, aviation and severe weather forecasting such as flash flood forecasting (RAL, EOL)

09:30 – 10:00 Use of weather radars and other observations in climate and hydrological studies (RAL)

10:00 – 10:30 Break

10:30 – 11:00 EUMETSAT capabilities in Africa and future plans (EUMETSAT)

11:00 – 11:30 Introduction to the Unidata global data distribution network and its potential for use in Africa (Unidata)

11:30 – 12:00 Integration of surface and remote sensors (including satellite) for meteorological and other applications (EUMETSAT, Unidata, University of Wisconsin (UW)/Space Science and Engineering Center (SSEC))

12:00 – 12:30 Potential for future combined meteorological and hydrological modeling approaches for hydrological and agricultural applications (RAL)

12:30 – 13:00 Current state of rainfall enhancement programs in West Africa and future directions (Burkina Faso, Mali, Senegal, RAL)

13:00 – 14:30 Lunch

15:00 – 18:00 Hands-on exploration of data access, analysis, and visualization capabilities available from Unidata

Hands-on exploration of EUMETSAT capabilities
WEDNESDAY 4 APRIL 2007  Applications, Education and Training

08:30 – 09:00  Introduction to radar and satellite training modules for basic interpretation, thunderstorm structure, and for detection and forecasting of thunderstorm initiation and aviation hazards

09:00 – 09:30  Introduction to EUMETSAT training and modules (EUMETSAT)

09:30 – 10:00  Introduction to UCAR/COMET program modules for training of meteorologists and weather forecasters (COMET)

10:00 – 10:30  Break

10:30 – 11:00  Introduction to other training and visualization tools (PAW / VISITview UW/SSEC)

11:00 – 11:30  Introduction to numerical model training opportunities (RAL)

11:30 – 12:00  Introduction to ITC training opportunities (ITC)

12:00 – 12:45  General discussion with specific focus on needs in Africa (group)

12:45 – 14:00  Lunch

14:00 – 15:00  Hands-on exploration of the use of high-resolution NWP predictions for different applications (RAL)

15:00– 18:00  Hands-on exploration of selected radar/satellite COMET training modules and their applications to West African countries (COMET)

20:00  Conference Dinner

THURSDAY 5 APRIL 2007  Training and Outreach

09:00 – 09:30  Need for enhancing educational and scientific capabilities and university interactions utilizing the newly implemented meteorological infrastructure in West Africa

09:30 -10:00  AMMA and Beyond: Potential collaborations with West African institutions, universities and scientists in the U.S. and the world and the WMO programs
10:00 – 10:30 Rainfall enhancement programs in Africa and need for training and education in related fields such as radar, aerosol, cloud and precipitation physics with a view to objective evaluation of these programs

10:30 – 11:00 Break

11:00 – 11:30 Introduction to the UCAR/GLOBE program

11:30 – 12:00 Overview of current state of knowledge on West African meteorology as conducted at universities in Africa and potential future collaborations with U.S. and other universities

12:00 – 12:30 General discussion with specific emphasis on collaborations to enhance outreach, education and training

12:30 - 14:00 Lunch

14:00 – 17:00 Demonstration session at a school in Ouagadougou introducing the work of the GLOBE program

FRIDAY 6 APRIL 2007 Identification of pilot projects and roundtable discussions about potential funding

08:30 – 09:30 Summary of Issues and Action Items (Open Forum)

09:30 – 10:30 Working group meetings

10:30 – 11:00 Break

11:00 – 11:30 Working groups

11:30 – 12:30 Working group reports and summaries of potential pilot projects

12:30 – 14:00 Lunch

14:00 – 16:00 Round Table discussions and finalizing pilot project proposals