

Aerosol and chemistry discussion relevant to TT7

**Scientific and observational priorities for SOP0
based on AMMA WP2.4 proposal and TT7
document (version 19 august 2005)**

TT7 doc will be M12 deliverable for AMMA-EU WP2.4

WP2.4 5-yr plans

M0

Jan2005

Jan2007

Jan2008

M24

R

M2.4.1a Characterisation of the aerosol properties of the different air flows within the WAM

M36

R

M2.4.1b Interannual variability of aerosol distribution and properties over West Africa

M2.4.1c Parameterisation of optical properties in terms of aerosol composition and microphysical characteristics

M40

R

M2.4.1d Development of validated parameterisation schemes of the optical properties of the aerosol for atmospheric models

M44

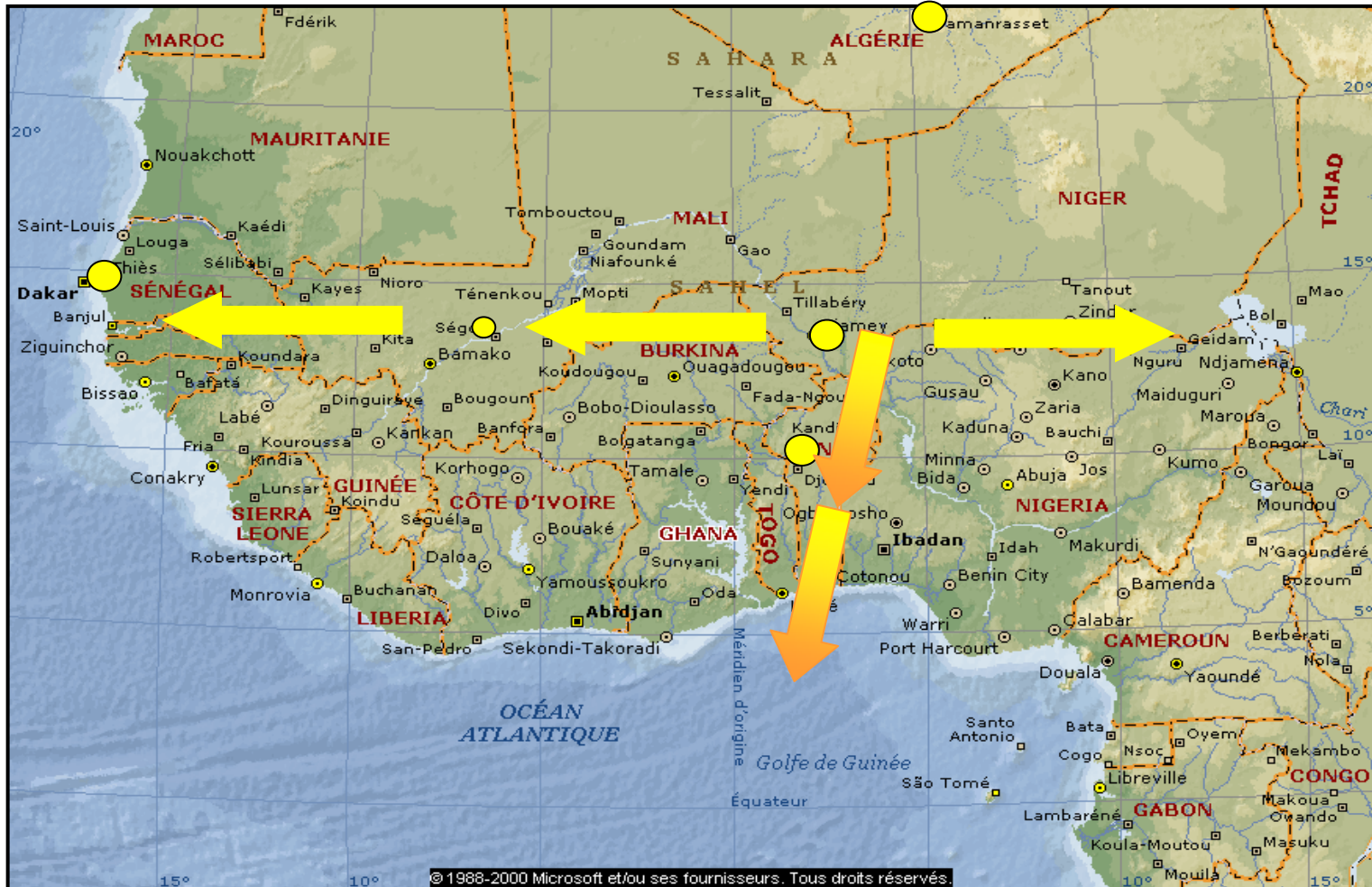
M2.4.1e Estimation of the aerosol radiative local and regional impacts over West Africa

R, P

Observations

➤ Platform / Instrument status

1. Ground-based



- The deployment of the ground-based super-sites (Banizoumbou, Djougou, M'Bour) is going ahead as planned

Observations

➤ Platform / Instrument status

1. Ground-based

- Common aerosol sampling and analytical protocols
 - i. Aerosol sampling and characterization (K. Desboeufs)
 - ii. Lidar network operations (WP2.4, TT7, but also TT8 and TT2b) (B. Heese)
 - iii. (Inter)calibration of radiation sensors (J.F. Léon)

Outcomes of the discussion

- i. Analysis of the carbonaceous aerosol fraction, including the BAe
 - ii. Lidar acquisition frequencies during SOP IOPs: ISAC-CNR lidars at Banizoumbou and M'Bour in EOP mode if the POLIS, MPL-ARM and CIMEL-LOA colocated lidars can insure more frequent acquisition. Relocating lidar in Ougadougou? (Action B. Heese / F. Fierli / F. Cairo)
 - iii. Status unknown
- New action (L. Gomes): coordinate intercalibration of all other aerosol sensors (nephelometers, aethalometers, optical counters)

Observations

➤ Platform / Instrument status

2. Airborne

- Readiness, validation and intercalibration issues
- Deployment plans
 - Scientific point of view on SOPA vs. SOPA':
People seemed happy.... (decision at the April 2006 meeting)
 - Flight plans
ATR42 flight into biomass burning plumes (action: C Liousse)
 - Who makes go/nogo decisions? (Technical deadlines late october)
 - Enhanced radio sounding in correspondence of flights
Four per day @ Niamey (ARM) and Dakar, N'Djamena, Cotonou, Parakou (?)

Observations

➤ Platform / Instrument status

2. Airborne

- New proposals for aircraft deployment in case the ATR42 would not fly in January 2006 (CALIPSO validation)
 - ULM carrying an aerosol lidar (LAUVA)
Instrument sheet and financial request sent to the API2006 and CNES
Interesting to complete the ground-based lidar observation
 - Piper Aztec carrying an aerosol sunphotometer (PLASMA)
No opinion was expressed

Aerosol modeling

- Aerosol forecasting during TT7 will rely on satellite and AERONET products (no aerosols in the dry run)
- Modeling of aerosol optical properties based on μ -physical data (talk by B. Vogel on thursday)

AOB

- Questions for / from AOC
 - Status of aerosol requirements at the airport transmitted to AOC ?
 - Flight/hotel booking
 - Vehicles
 - Communication issues